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FALCONBRIDGE LIMITED 701 - 1281 West Georgia Street Vancouver, B.C. V6E 3J7

1988 INTERIM DRILLING REPORT CHEMAINUS JOINT VENTURE VOLUME 2 of 3 APPENDIX 3: DRILL LOGS AND ANALYTICAL RESULTS

SEPTEMBER, 1988

APPENDIX 3 : DRILL LOGS AND ANALYTICAL RESULTS

	PROPERTY: Chemainu	s J.V.									HOLE NO	o: Pa	age Numb	er				
				FALCONE	IN DRILL LA						CH87-23		1					
	Hole Location: 28	+00 E 1+10	N	Dimior														
			· .						Clai	m No.	CHIP1							
	NTS: 092/B13	UTM: 54171	32.2 N 430195.	7 E					Sect	ion No	.: Line 28+0	00 East	t, Chip	Group				
	Dip: -50	Length:	568.8 m						Long	ed By:	David P. Mo	nev						
									Dril	ling Co	o.: Burwash	Enter	prises					
	Started: April 18,	1988							Assa	yed By	: Bondar-Cle	egg and	d X-Ray	Assay				
	Completed: April 2	2, 1988							Core	Size	NO							
	Purpose: To extend	CHEM87-23	through the An	ita gabbro	DIP	TESTS				DILCO	μŶ							
												-						
			Lengt	AZ1- h muth	Din	Length	AZ1- muth		Din		•							
			2003		DIP	Denyen	uu ch		519									
			80.8	0 210.0	-45.0	349.30	214.0	-3	39.0									
			11/./	0 211.0 0 212 0	~42.0	416.40	216.0		18.0 18 n									
			279.2	0 212.0	~40.0	559.60	221.0	-	38.0									
							• •						-1	_	. ·	-		
/m) (m)		DESCRIPT	ION		54	npie r No.	rom (m)	10 (m)	wiath (m)	TOTAL Sulnhides	Cu (nnm)	PD (nnm)	2n (mom)	AC) (תחת)	AU (תת)	שמ (המתר) (ר	
•								(.=,	(=)	Dalphiaco	())),	(ppm)	() p p m /	(ppm)	(, (bbm)	
			•															
.0	4.9 OVERBURDEN																	
••																		
4.9	33.0 FELSIC QUA	RTZ-FELDSPA	C CRYSTAL TUFF			182	506	۹ ۵	10.0	1 0	n/a	11	75	30	(1	75	1000	
						AB2	1507 1	0.0	11.0	1.0	n/a	15	25	117	(1	. (5	1300	
						AB2	1 1 1 1 1 1	1.0	12.0	1.0	n/a	8	12	37	<1	<5	1200	
						AB1	5457 1	4.1	14.2	.1	n/a	25	n/a 5	38	n/a.	n/a (5	870	
						AB2	L509 1	6.1	16.6	.5	n/a	40	<5	198	(1	<5	350	
						AB2	1511 1	6.6	17.6	1.0	n/a	45	9	39	(1	۲5	830	
						AB1	5458 2	2.5	22.6	.1	n/a	12	n/a	42	n/a	n/a	1270	
13.0	36.0 FELDSPAR P	ORPHYRITIC N	AFIC ASH TUFF															
						AB1	5459 3	3.0	33.0	.0	n/a	82	n/a	160	n/a	n/a	1410	
						AB2	1512 3 1513 3	3.0 4 0	34.0	1.0	n/a n/a	14	5	19	21	(5)	1300	
						AB2	1514 3	5.0	36.0	1.0	n/a	4	6	34	<1	(5	1100	
6.0	126 O CHLORITIC	FELSTC OULP	7-FELDSPAR CR	VSTAL THEF	· · · · ·	1994 - C												
	20010 CREOKTIC	SPATE ANNU	S I SUDJIAR CR	ioff		AB1	5460 4	5.5	45.6	.1	n/a	19	n/a	31	n/a	n/a	910	
						AB2	1515 4	8.0	49.0	1.0	n/a	6	5	24	(1	<5	1300	2
						AB2	L516 4	9.0	50.5	1.5	n/a	15	<5	59 37	(1	<5 /5	1500	
				ан. Таралан (тарала)		AB2	5461 6	1.3	61.4	.1	n/a	5	n/a	33	n/a	n/a	960	
						AB2	518 7	2.0	73.0	1.0	n/a	9	6	27	<1	<5	1000	
						AB1	6462 7	4.0	74.1	.2	n/a	29	n/a	52	n/a n/a	n/a	1000	- ব
						ADI:	ט בטוויו	J.U	03.1	.1	u/a	44	11/dL	40.	11/ CL	41/4	OTA	

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH87-23 2 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Au Ba Zn λg (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) AB21519 97.0 ۲5 980 98.0 1.0 n/a 2 7 27 (1 AB15464 99.3 99.4 .1 n/a 23 n/a 32 n/a n/a 980 AB15465 112.6 112.7 .1 n/a 20 n/a 41 n/a n/a 980 AB15466 123.6 123.7 29 n/a 33 980 .1 n/a n/a n/a 126.0 127.0 CHLORITE SCHIST AB21520 126.0 127.0 1.0 <5 70 < 5 530 n/a 4 <1 127.0 131.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF 131.3 142.8 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF AB15467 134.4 134.6 .2 n/a 1160 n/a 72 n/a .39 n/a 142.8 155.9 CHLORITIC FELSIC OUARTZ EYE TUFF AB15468 148.6 148.7 .1 n/a 15 n/a 22 n/a n/a 1000 155.9 186.0 CHLORITIC FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF AB15472 157.1 157.3 n/a 900 .2 n/a 4 n/a 43 n/a AB15473 162.6 162.8 28 n/a 28 n/a n/a 740 . 2 n/a n/a 1000 AB15469 165.6 165.7 n/a 5 n/a 40 n/a .1 39 n/a 1040 AB15474 169.9 170.0 .1 n/a 20 n/a n/a 470 AB15475 175.6 175.8 n/a 5 n/a 24 n/a n/a .2 n/a 590 AB15470 176.0 176.1 n/a 22 n/a 55 n/a .1 AB15471 184.7 184.9 .2 n/a 28 n/a 55 n/a n/a 1690 186.0 189.5 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF 189.5 193.5 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF AB21521 189.5 190.4 75 273 2863 <1 20 1300 .9 n/a AB21522 190.4 191.3 n/a 1014 115 480 <1 20 1200 .9 AB21523 191.3 192.2 . 9 n/a 89 12 271 <1 <5 1100 15 1600 AB21524 192.5 193.5 1.0 n/a 72 48 411 <1 193.5 202.0 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF AB15476 193.9 194.0 40 n/a 1300 n/a 14 n/a n/a .1 130 n/a 960 AB15477 195.2 195.3 .1 n/a 110 n/a n/a 202.0 220.9 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF 23 n/a 980 AB15478 209.0 209.1 .1 n/a 15 n/a n/a AB15479 218.1 218.2 .1 n/a 59 n/a 81 n/a n/a 960

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٢	PROPERTY: Chemainus J.V.	FALCONBRIDGE LIMITE DIAMOND DRILL LOG	D				HOLE N CH87-23	o: P	age Num 3	ber				
From (m)	n To (m)DF	ESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm	Zn) (ppm)	Ag (ppm)	Au (pr	i Ba b) (pr	1 5 00
220.9	232.3 WEAKLY CHLORITIC FELSIC TUFF													
			AB15480	221.3	221.4	.1	n/a	60	n/a	67	n/a	n/a	660	
			AB21525	222.3	223.2	. 9	n/a	38	14	237	<1	5	860	
			AB21526	223.2	223.9	.7	. n/a	24	8	190	(1	<5	940	
			AD13461	223.9	. 224.0	•1	n/a	137	n/a	204	n/a	n/a	1190	
232.3	248.2 CHLORITIC FELSIC QUARTZ-FELDS	SPAR CRYSTAL TUFF												
	• • • • • • • • • • • • • • • • • • •	···· ····· ····· ·····	AB21527	232.9	233.9	1.0	n/a	45	8	85	(1	(5	800	
			AB15482	235.3	235.4	.1	n/a	78	n/a	73	n/a	n/a	1090	
			AB15483	247.1	247.2	.1	n/a	31	n/a	45	n/a	n/a	920	
248 2	252 3 INTERNENTATE FLOUD													
240.2	292.5 INTERNEDIATE FLOR:		AB21528	249 5	250 5	1 0	n/2	121	6	1610	/1	1.5	200	
			AB15484	250.5	250.6	.1	n/a	86	n/a	180	n/a	15 n/a	240	
			AB21529	250.6	252.8	2.2	n/a	45	6	145	(1	(5	830	
252.3	265.9 FELSIC QUARTZ-FELDSPAR CRYSTA	L TUFF												
			AB21530	252.8	254.0	1.2	n/a	5	6	45	(1	5	1300	
			AB21531 AB15485	254.0	255 0	.8	n/a	2	8 n/a	14	. (1 n/n	< 5. n/a.	1300	
			AB21532	255.0	256.0	1.0	n/a	27	8	36	(1	(5	1100	
			AB21533	256.0	257.0	1.0	n/a	1	7	25	(1	<5	1800	
			AB21534	257.0	258.0	1.0	n/a	15	9	18	. <1	<5	1100	
			AB21535	258.0	259.0	1.0	n/a	1	6	16	<1	(5	1100	
			AD21536 1821537	259.0	260.0	1.0	n/a n/a	1	5	24	(1) (71)	(5)	990	
			AB21538	261.0	262.0	1.0	n/a n/a	2	8	16		(5	1400	
			AB21539	262.0	264.0	2.0	n/a	12	7	105	(1	(5	1200	
			AB21540	264.0	264.9	.9	n/a	9	11	31	<1	10	1400	
			AB21541	264.9	266.0	1.1	n/a	86	17	52	(1	10	<20	
265.9	270.9 FAULT ZONE													
270.9	278.1 FELSIC QUARTZ-FELDSPAR CRYSTA	L TUFF												
	· · · · · · · · · · · · · · · · · · ·		AB15486	272.6	272.8	.1	n/a	33	n/a	46	n/a	n/a	830	
												•		
278.1	279.8 FELSIC TUFF													
			AB15487	278.3	278.4	.1	n/a	2	n/a	37	n/a	n/a	471	
279.8	298.3 MAFIC TO INTERMEDIATE TUFFACE	OUS SEDIMENTS												
			AB15488	284.5	284.6	.1	n/a	20	n/a	184	n/a	n/a	1520	
			AB15489	291.5	291.6	.1	n/a	68	n/a	611	n/a	n/a	913	
			A821542	296.0 297 n	297.0	1.0	n/a n/a	190	(5	130	(1)	5	870	
				23110		1.3	11/ a		0	1.41	1	10	120	

PR	OPERTY:	Chemainus	J.V.		FALCONBRIDGE LIM DIAMOND DRILL L	ITED OG					HOLE N CH87-23	o: Pa	ige Numb 4	er			
From (m)	То (m)	- 		DESCRIPTIO	N		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
200.2	330 0 5	PLOTO OULD	-														
490.3	330.8 P	PPSIC DOWN	L LIL IVE				AB21544	298.3	299.0	7	n/a	60	6	70	(1	10	730
							AB21545	299.0	300.0	1.0	n/a	106	5	57	(1	25	990
							AB21546	300.0	301.0	1.0	n/a	366	8	68	(1	55	1200
							AB21547	301.0	302.0	1.0	n/a	57	5	43	(1)	15	1500
							AB21548	302.0	303.0	1.0	n/a	36	- 6	43	<1	10	1300
							AB21549	303.0	304.0	1.0	n/a	81	7	49	<1	15	1400
							AB21550	304.0	305.0	1.0	n/a	188	16	58	<1	5	1100
							AB21557	305.0	306.0	1.0	n/a	145	55	216	<1	25	1300
							AB21558	306.0	307.0	1.0	n/a	43	40	362	(1	5	920
							AB21559	307.0	308.0	1.0	n/a	106	8	2470	(1	10	1600
							AB21560	308.0	310.0	2.0	n/a	249	17	202	(1	<5	2000
							AB21561	310.0	311.0	1.0	n/a	156	14	97	4	15	2600
							AB21562	311.0	312.0	1.0	n/a	154	28	93	(1	30	2700
							AB21563	312.0	313.0	1.0	n/a	226	16	90	0	30	2800
							AB21564	313.0	314.0	1.0	n/a	93	25	78	(1	15	2800
							AB21565	314.0	315.0	1.0	n/a	117	15	86	(1	10	3200
							AB21566	315.0	316.0	1.0	n/a	147	97	164	(1	40	2900
							AB21567	316.0	317.0	1.0	n/a	433	944	1164	2	170	2100
							AB21568	317.0	318.0	1.0	n/a	308	142	244	1	220	1700
							AB21569	318.0	319.0	1.0	n/a	280	103	199	(1	80	1900
							AB21570	319.0	320.0	1.0	n/a	326	105	274	1	100	2500
							AB21571	320.0	321.0	1.0	n/a	296	37	170	(1	75	2200
							AB21572	321.0	322.0	1.0	n/a	30	11	55	(1	25	1200
							AB21573	322.0	323.0	1.0	n/a	18	10	37	a	15	1100
							AB21574	323.0	324.0	1.0	n/a	4	12	39	(1	10	1400
							AB21575	324.0	325.0	1.0	n/a	15	16	50	<1	20	1300
							AB21576	325.0	326.0	1.0	n/a	44	432	232	(1	20	1000
							AB21577	326.0	327.0	1.0	n/a	46	167	444	(1	10	1200
							AB21578	327.0	328.0	1.0	n/a	26	100	258	<1	10	2000
							AB21579	328.0	329.0	1.0	n/a	37	95	204	(1	45	2200
							AB21580	329.0	330.0	1.0	n/a	28	121	240	(1	25	3000
							AB21581	330.0	330.8	. 8	n/a	31	32	30	(1)	25 3	2400
220.0			7.00														
330.8	449.5 M	AFIC INTRUS	TAE										_				
							AB21852	330.8	332.0	1.2	n/a	229	7	75	(1	10	50
							AB15490	339.6	339.7	.1	n/a	6	n/a	130	n/a	n/a	161
							AB15491	347.8	347.9	.1	n/a	210	n/a	140	n/a	n/a	148
							AB21583	385.0	386.0	1.0	n/a	165	,9	66	a	20	120
							AB15492	408.3	408.5	.2	n/a	135	n/a	93	n/a	n/a	125

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449.5 480.7 FELDSPAR PORPHYRITIC GABBRO

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Hole was re-entered on April 18th, plastic pipe was pulled and hole was reemed out with 0.7 m lost core and first core at 450.2.

From To

(m) (m)

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FALCONBRIDGE	LIMITED
DIAMOND DRT	LL LOG

HOLE No: Page Number CH87-23 5

<5 1500

<5 1400

<5 1200
<5 1100</pre>

<5 1200

<5 1500

n/a 1380

Sample From То Width Total Cu Pb Zn λq Au Ba Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) (m) (m)

to 4 mm, feldspars, 30 to 35 % chloritized hornblende crystals, 2 to 4 mm, 2 to 7 %, 1 to 2 mm, ilmenite grains and 5 % veins.
467.2 467.8 White bull quartz vein with minor chlorite and trace chalcopyrite.

450.2 467.2 Medium to coarse grained gabbro with weak

-----DESCRIPTION-----

local chloritization around quartz - calcite veins with trace chalcopyrite. 40 to 55 %, 2

- 467.8 472.2 Similiar to 450.2 to 467.2.
- 472.2 475.0 Fine-grained medium green plagiophyric gabbro with approximately 12 %, 2 to 3 mm, feldspar grains. There are numerous 5 to 15 cm quartz chlorite veins.
- 475.0 475.9 Quartz chlorite chalcopyrite vein with 0.5 to 1 % chalcopyrite clots.
- 475.9 479.1 Similiar to 472.2 to 475.0, becomes finer grained near the end. There is minor sphalerite or red - brown biotite in a quartz veinlet at 476.5.

Core barrel did not lock at 480.7 and 1.8 m was lost from 477.6 to 480.7.

480.7 487.0 FELSIC FELDSPAR CRYSTAL TUFF

Massive light grey to white siliceous felsic tuff with 10 to 15 %, (1 mm feldspar grains and locally from 486.2 to 486.8 there are 5 to 10 %, 2 to 3 mm, feldspars. In the upper 2 m there are up to 2 % biotite specks. The feldspars are altered to (?), light brown core, not a carbonate or sphalerite, is biotite (?) or probably a epidote group mineral. There is 1 to 2 % disseminated fine-grained pyrite and 0.5 % fracture controlled pyrite with local strong pyrite and or pyrrhotite. 0.5 to 1 cm pyrite bands at 482.2, 485.4 and 485.5. Pyrrhotite occurs as bands from 482.2 to 482.4, 1 %. There is very local fracture controlled carbonatization. Minor ash tuff beds occur. There is weak thermal biotite near the lower and upper contacts.

Structure :. Bedding :. 482.3 : 82 degrees to core axis.

Foliations :. 481.2 : 65 degrees to core axis. 486.4 : 78 degrees to core axis.

487.0 488.9 MAFIC INTRUSIVE

Fine-grained medium green mafic sill with very sharp	VA01583 487.0 488.0	1.0 n/a	349	<5	135	<1	19	80
contacts and silicified tuff at contacts. Is massive with	VA01584 488.0 488.9	.9 n/a	291	<5	127	(1)	17	70
2 to 7 to suprage 5 to diagonizated and frequence								

VA01577 480.7 482.0

VA01033 480.7 487.0

VA01578 482.0 483.0

VA01579 483.0 484.0

VA01580 484.0 485.0

VA01581 485.0 486.0

VA01582 486.0 487.0

1.3

6.3

1.0

1.0

1.0

1.0

1.0

n/a

n/a

n/a

n/a

n/a

n/a

n/a

60

23

78

30

50

43

29

<5

n/a

12

38

21

13

8

46

392

485

406

817

639

134

<1

n/a

<1

<1

<1

<1

<1

P	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH87-23	o: Pa	ige Numb 6	er		
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au Ba (ppb) (ppm)
• .		controlled pyrite. There is no visible alteration. There is a 0.5 cm thick band of epidotized feldspar laths at 488.4. Is massive with no foliation.										
488.9	491.0	FELSIC FELDSPAR CRYSTAL TUFF Similiar to 480.7 to 487.0. Is more siliceous with strongly increased thermal biotite. There is approximately 1 % total sulphides with trace fracture controlled or banded chalcopyrite with pyrite and	VA01585 VA01586	488.9 490.0	490.0 491.0	1.1 1.0	n/a n/a	238 162	<5 8	35 264	<1 <1	36 1600 <5 1700
		sphalerite, chalcopyrite and pyrrhotite with 0.5 to 1 % fracture controlled and disseminated pyrite from 490.1 to 490.4. There are trace fragments and very weak chloritization.										
		Foliation trend is at 55 degrees to core axis.										
491.0	491.9	MAFIC INTRUSIVE Fine-grained contorted medium green mafic dyke or sill with 2 % fracture controlled pyrite and moderate to strong	VA01587	491.0	491.9	.9	n/a	288	11	135	<1	<5 230
		pervasive carbonatization. Blocky, highly fractured core with foliation at approximately 0 degrees to core axis.										
401 0	F02 2	221 CT / 221 NCD12 / 224C#11 #1152										
491.9	502.2	Similiar to 480.7 to 487.0 with trace to nil thermal biotite near upper contact. 491.9 499.6 Very sericitic with 10 to 20 %, < 1 mm,	VA01588 VA01589	493.0 501.7	493.5 502.2	.5	n/a n/a	129 1110	6 (5	50 33	<1 1	6 1500 10 1300
		feldspars. Is contorted and disky with very local fracture controlled silicification. From 493.5 there is 3 to 5 % pvrite										
		parallel to foliation as bands. Average pyrite is 0.5 % up to 1 % disseminated and weakly banded parallel to foliation.										
		499.6 501.7 Very siliceous tuff, appears to be either very silicified, pervasive and fracture controlled or is a dyke. Is glassy massive white rock										
		with 3 to 5 % fine-grained feldspars. 501.7 502.2 Weakly chloritic tuff with 0.5 % chalcopyrite and 3 to 4 % pyrite, disseminated and parallel to foliation. There are very fine-grained										
		feldspars. Foliations :. 494.1 : 56 degrees to core axis.										
		495.6 : 50 degrees to core axis. 496.8 : 76 degrees to core axis. 501.8 : 83 degrees to core axis.										
502.2	502-3	HAFIC TUFF										

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Pl	ROPERT	Y: Chemainus J.V.					HOLE N	o: Pa	age Numb	er				
		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH87-23		7					
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)	
		Fine-grained schist with chlorite and biotite, is green												
		brown with strong pervasive carbonatization.												
		502.2 502.3 STRONG PERVASIVE CARBONATIZATION.												
		Foliation : 82 degrees to core axis.												
502 3	521 6	FRISTO FRINCOND COVERNI, INDILLT THEF												
502.5	541.0	Fither variably silicified felsic tuff or is lamilli tuff	VA01034	503 0	520 0	17.0	n/a	106	n/a	22	n/a	n/a	1620	
		with grev siliceous 1 to 3 cm thick, and core width +	VA01590	506.4	508.1	1.7	n/a	441	(5	25	(1	40	1300	
		wide. With a sericite and 10 %, 1 to 2 mm, feldspar	VA01591	509.0	510.5	1.5	n/a	295	<5	12	<1 ·	80	1000	
		crystal matrix. There is minor weak fracture controlled	VA01592	521.1	521.6	.5	n/a	403	<5	21	1	56	1600	
		silicification and carbonatization in the (?) lapilli.												
		There are 5 %, 1 to 4 mm, quartz eyes in sericite from												
		511.0 to 511.2, there are trace on average. There is on												
		average 0.5 % disseminated and banded pyrite, most pyrite												
		clots and bands contain chalcopyrite. There are numerous												
		quartz veins with pyrite clots, i.e. 509.9 to 510.5 with 5												
		Chalconvrite blebs occur at 507 8 507 9 516 4 506 5 and												
		521.4. At 509.5 there is 5 cm of 10 to 15 % handed or												
		parallel to foliation pyrite. At 521.4 there is a												
		stringer (?) , 1.5 cm of 60 % pyrite and 5 % chalcopyrite.												
		Foliations :.												
		505.1 : 71 degrees to core axis.												
		511.2 : 75 degrees to core axis.												
		515.2 : 67 degrees to core axis.												
		519.3 : 84 degrees to core axis.								÷				
		Fault slips :.												
		Minor at 517.8 at 25 degrees to core axis with 17 mm												
		displacement. Winor at 520 6 at 45 degrees to core avis												
		MINDI at 520.0 at 45 degrees to core axis.												
521.6	522.3	FELSIC SILL OR DYKE												
		Similiar to 499.6 to 501.7, probably is a dyke.												
522.3	524.5	FELSIC QUARTZ EYE TUFF		F 0 0 0			- 1-	74			.1	40	040	
		Schist with 1 cm of fine-grained black suiphide mud at 40	VA01593	522.3	543.4	1.1	n/a n/a	130	1/5	433	(1	20	510	
		degrees to core axis at upper contact. Is very sericitic	VA01554	545.4	544.5	1.1	11/a	130	()	433	1	20	010	
		fine-grained purite banded parallel to foliation 35 to 70												
		degrees to core axis. There are numerous local faults at												
		20 degrees to core axis, 60 degrees to core axis and												
		numerous other orientations. At 523.8 there is a 0.3 cm												
		chalcopyrite bleb with pyrite.												
		522.3 524.5 STRONG PERVASIVE SERICITIZATION.												
524.5	527.0	NAFIC LAPILLI TUFF	W101505	504 F	50C C	1 -	n / -	1 2 2	10	1 2 0	11	20	120	
		maric ture with local U./ to 1 cm quartz lapilli and 2 to	AV01232	544.5	526.0	1.5	. n/a	122	10	167	1	20	144	

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH87-23 8 DIAMOND DRILL LOG From То Sample From То Width Total Cu Pb Zn λπ Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (mgg) (DOM) (ppb) (ppm) 5 cm epidotized clasts. Has 2 to 5 % hornblende crystals VA01035 524.5 527.0 107 53 n/a 115 2.5 n/a n/a n/a with local mafic fragments, up to 1 mm. There is strong VA01596 526.0 527.0 1.0 n/a 63 <5 52 (1 31 330 fracture controlled carbonatization with 1 % fracture controlled and disseminated pyrite centred on carbonatization and epidotization. 527.0 535.4 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Bleached mafic flow with strong fracture controlled VA01036 527.0 535.0 8.0 n/a 159 n/a 67 n/a n/a 239 carbonatization and strong pervasive carbonatization. There is 30 to 65 %, 1 to 3 mm, hornblende crystals in a fine-grained white, feldspar and carbonate (?), matrix. Is blocky, highly fractured core. There is local epidotized fragments and epidote and calcite veinlets. There is no foliation. Alteration :. 527.0 535.4 STRONG PERVASIVE CARBONATIZATION. 527.0 535.4 STRONG FRACTURE CONTROLLED CARBONATIZATION. 535.4 535.5 FAULT ZONE Ground mafic flow as above. 535.5 545.6 MAFIC TUFFS WITH MINOR CHERTY SEDIMENTS Cherty sediments in mafic tuff with thermal biotite. There VA01597 535.5 537.0 1.5 n/a 47 <5 117 <1 22 980 are 20 to 30 %, < 1 mm, feldspar grains in the matrix. VA01598 537.0 538.5 1.5 n/a 56 ٢5 106 <1 14 810 The cherts are green, red, brown, cream and white. The ٢5 107 <1 800 VA01599 538.5 540.0 1.5 n/a 48 5 cherts are folded with 1 % fracture controlled pyrite, VA01600 540.0 <5 120 <1 5 890 541.5 1.5 n/a 44 There are minor faults perpendicular to bedding. At VA01601 541.5 543.0 41 ٢5 101 <1 8 900 1.5 n/a 541.6, tops is downhole and bedding is at 38 degrees to 790 VA01602 543.0 544.5 n/a 44 (5 113 (1 8 1.5 core axis. At 544.8 bedding is at 64 degrees to core VA01603 544.5 545.6 36 <5 139 <1 <5 190 1.1 n/a axis. Bedding varies throughout, foliation is constant at 65 to 70 degrees to core axis. 545.6 553.0 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Mafic flow, very similiar to 527.0 to 535.4. Hosts 40 %, 1 VA01037 546.0 553.0 7.0 n/a 188 n/a 69 n/a n/a 304 to 4 mm, hornblendes, 10 % feldspar and epidotized feldspars, up to 1 mm, in fine-grained light green matrix with local epidote spots, up to 5 mm. There is strong fracture controlled carbonatization with minor associated epidotization. At 552.4 there is chalcopyrite blebs in a carbonate - quartz - chlorite vein. There is minor local biotite in veins. There is a weak foliation at 61 degrees to core axis. The flow is light to medium green and massive. 553.0 568.8 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Green to red - brown andesitic tuffs with 3 to 5 %, up to VA01038 553.0 568.0 15.0 n/a n/a 759 n/a 188 n/a 98

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PR	OPERT	Y: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NG CH87-23	o: Pa	ge Numb 9	er			
'rom (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		1 mm, quartz eyes and	10 % , up to 1 mm, feldspar grains.	VA01604	553.6	555.1	1.5	n/a	92	<5	91	(1	7	470
		There are numerous min	for fracture controlled quartz -	VA01605	555.1	556.6	1.5	n/a	95	(5	11	(1	9	820
		calcite veinlets, up t	to 5 mm, at orientations of 0 to 90	VA01606	556.6	557.8	1.2	n/a	93	<5	104	(1	21	870
		degrees to core axis.	There are dark brown cherty	VA01607	558.7	560.0	1.3	n/a	71	<5	88	<1	< 5	790
		argillics and light br throughout. Bedding is	cown, green, and white chert beds at 60 to 70 degrees to core axis.	VA01608	566.1	568.0	1.9	n/a	84	<5	91	<1	<5 1	.300
		Beds are cross-cut but	minor faults and fracture											

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controlled quartz veinlets. There is up to 1 % fracture controlled pyrite in the beds, averages < 0.5 %. There are conclusive tops downhole at 560.1. Majority of sediments occur from 553.0 to 560.2 and from 566.0 to 568.8. Thermal biotite is strongest with sediments and weak to nil from 560.2 to 566.

End of hole 1866 feet, Friday April 22, 1988 at 1:30 p.m.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZHGO	ZNA20	ZK20	ZFE203	21102	ZP205	ZHNG	ZLOI	SUN	BA	AI	NACA
					••••••••••••••••••••••••••••••••••••••		***********		••••••••								
VA00567	487.90	488.00	50.40	14.30	3.95	5.36	3.04	0.13	12.30	2.30	0.41	0.14	6.23	98.56	113.	44.	7.
VA00568	494.10	494.20	70.70	14.10	1.14	1.31	2.90	2.39	2.86	0.31	0.07	0.03	2.62	98.43	1560.	48.	4.
VA00569	501.20	501.30	75.90	13.30	1.02	0.15	6.60	0.74	0.33	0.30	0.07	0.01	1.00	99.42	486.	10.	8.
VA00570	514.00	514.10	72.10	14.20	0.30	0.61	0.99	3.45	3.42	0.30	0.02	<0.01	3.39	98.78	1760.	76.	1.
VA00571	522.00	522.10	76.10	12.90	1.10	0.16	5.66	1.03	0.59	0.29	0.03	0.01	1.16	99.03	581.	15.	7.
VA00572	548.00	548.10	48.30	11.10	12.90	10.20	1.74	0.18	9.68	0.50	0.11	0.17	3.16	98.04	57.	-41,	15.
VA00573	563.20	563.30	54.10	17.80	5.76	3.46	3.97	0.41	8.67	0.96	0.37	0.20	2.93	98.63	220.	28.	10.
VA00574	566.00	566,10	48.10	16.40	11.30	3.54	1.64	1.69	8.69	0.98	0.39	0.20	5.62	98.55	1200.	29.	13.

Hole No. CH88-23 WHOLE ROCK SAMPLES

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Page No. 1

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SAMPLE NUMBER	FROM	TO	%S I U 2	XAL203	ZCAO	XHGO	XNA20	XK 20	XFE203	21102	XP205	ZMNO	XLOI	SUM	BA	AI	NACA
		,,,,		***********									********				
VA01033	480.70	487.00	71.90	14.10	1.81	0.92	1.02	3.46	2.12	0.30			2.54	98.17	1380.	61.	3.
VA01034	503.00	520.00	70.30	15.50	0.72	0.71	2.37	3.04	2.81	0.35			3.08	98.88	1620.	55.	з.
VA01035	524.50	527.00	46.10	17.00	9.03	5.31	3.47	0.13	12.00	1.11			3.70	97.85	115.	30.	13.
VA01036	527.00	535.00	47.10	11.90	13.60	8.74	2.17	0.33	9.44	0.51			4.31	98.10	239.	37.	16.
VA01037	546.00	553.00	48.30	11.70	12.20	9.01	2.36	0.45	9.44	0.50			4.54	98.50	304.	39.	15.
VA01038	553.00	568.00	50.60	17.70	5.71	4.45	3.41	1.20	9.87	1.02			3.77	97.73	759.	38.	9.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-23 ALTERED SAMPLES

Page No. 1

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CQ (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ppm)	MN (ppm)	CUZN	ETS	FE
												,	· . ·			_	
UA01577	480.70	482.00	1500.0	60.0	46.0	<0.5	<5.0	5.0	2.0	<5.0	9.0	<1.0	<1.0	82.0	57.	2.	1.
VA01578	482.00	483.00	1400.0	78.0	485.0	<0.5	<5.0	7.0	3.0	12.0	18.0	4.0	<1.0	77.0	14.	4.	1.
VA01579	483.00	484.00	1200.0	30.0	406.0	<0.5	<5.0	5.0	2.0	38.0	8.0	2.0	<1.0	197.0	7.	3.	1.
VA01580	484.00	485.00	1100.0	50.0	817.0	<0.5	<5.0	3.0	2.0	21.0	11.0	4.0	<1.0	202.0	6.	3.	1.
VA01581	485.00	486.00	1200.0	43.0	639.0	<0.5	<5.0	4.0	3.0	13.0	8.0	3.0	<1.0	134.0	6.	3.	1.
VA01582	486.00	487.00	1500.0	29.0	134.0	<0.5	<5.0	7.0	3.0	8.0	6.0	<1.0	<1.0	217.0	18.	3.	1.
VA01583	487.00	488.00	80.0	349.0	135.0	<0.5	19.0	32.0	21.0	<5.0	22.0	<1.0	<1.0	700.0	72.	5.	5.
VA01584	488.00	488.90	70.0	291.0	127.0	<0.5	17.0	29.0	22.0	<5.0	12.0	1.0	<1.0	697.0	70.	5.	4.
VA01585	488.90	490.00	1600.0	238.0	35.0	<0.5	36.0	6.0	2.0	<5.0	5.0	<1.0	<1.0	119.0	87.	1.	1.
VA01586	490.00	491.00	1700.0	162.0	264.0	<0.5	<5.0	3.0	2.0	8.0	<5.0	3.0	<1.0	73.0	38.	1.	1.
VA01587	491.00	491.90	230.0	288.0	135.0	<0.5	<5.0	34.0	66.0	11.0	8.0	<1.0	2.0	718.0	68.	1.	4.
VA01588	493.00	493.50	1500.0	129.0	50.0	<0.5	6.0	13.0	22.0	6.0	<5.0	<1.0	<1.0	211.0	72.	4.	2.
VA01589	501,70	502.20	1300.0	1110.0	33.0	0.8	10.0	9.0	4.0	<5.0	8.0	2.0	2.0	46.0	97.	4.	2.
VA01590	506.40	508.10	1300.0	441.0	25.0	<0.5	40.0	5.0	4.0	<5.0	<5.0	<1.0	3.0	30.0	95.	1.	2.
VA01591	509.00	510.50	1000.0	295.0	12.0	<0.5	80.0	9.0	3.0	<5.0	10.0	<1.0	2.0	31.0	96.	3.	з.
VA01592	521.10	521.60	1600.0	403.0	21.0	0.5	56.0	11.0	3.0	<5.0	7.0	<1.0	3.0	33.0	95.	2.	2.
VA01593	522.30	523.40	940.0	71.0	9.0	<0.5	49.0	6.0	3.0	<5.0	16.0	<1.0	4.0	16.0	89.	7.	2.
VA01594	523.40	524.50	610.0	130.0	433.0	<0.5	20.0	11.0	11.0	<5.0	14.0	5.0	2.0	56.0	23.	7.	2.
VA01595	524.50	526.00	120.0	133.0	129.0	<0.5	38.0	29.0	93.0	18.0	8.0	2.0	<1.0	631.0	51.	1.	-4.
VA01596	526.00	527.00	330.0	63.0	52.0	<0.5	31.0	23.0	28.0	<5.0	8.0	<1.0	<1.0	572.0	55.	1.	4.
VA01597	535.50	537.00	980.0	47.0	117.0	<0.5	22.0	14.0	13.0	<5.0	13.0	1.0	1.0	753.0	29.	· 1.	4.
VA01598	537.00	538.50	810.0	56.0	106.0	<0.5	14.0	14.0	14.0	<5.0	19.0	<1.0	<1.0	838.0	35.	1.	4.
VA01599	538.50	540.00	800.0	48.0	107.0	<0.5	5.0	13.0	14.0	<5.0	5.0	<1.0	<1.0	708.0	31.	1.	- 4.

Hole No. CH88-23

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HQ (ppm)	HH (ppm)	CUZN	ETS	FE
11001600	540.00	541 50	084 4		120.0	() E	F A	15.0	2.0	/# A	12.4	~	() ()	0.04	77	•	
VH01800	J40.00	741.70	030.0	11.0	120.0	(0.5	5.0	13.0	2.0	(3.0	13.0	(1.0	(1.0	808.0	<u> </u>	1.	1.
VA01601	541.50	543.00	900.0	41.0	101.0	<0.5	8.0	13.0	3.0	<5.0	16.0	1.0	<1.0	727.0	29.	1.	4.
VA01602	543.00	544.50	790.0	44.0	113.0	<0.5	8.0	15.0	5.0	<5.0	18.0	<1.0	<1.0	847.0	28.	1.	4.
VA01603	544.50	545.60	190.0	36.0	139.0	<0.5	<5.0	9.0	21.0	<5.0	13.0	2.0	4.0	462.0	21.	1.	2.
VA01604	553.60	555.10	470.0	92.0	91.0	<0.5	7.0	16.0	15.0	<5.0	<5.0	2.0	<1.0	563.0	50.	1.	4.
VA01605	555.10	556.60	820.0	95.0	77.0	<0.5	9.0	17.0	12.0	<5.0	21.0	1.0	<1.0	519.0	55.	1.	4.
VA01606	556.60	557.80	870.0	93.0	104.0	<0.5	21.0	21.0	10.0	<5.0	8.0	2.0	<1.0	790.0	47.	1.	5.
VA01607	558.70	560.00	790.0	71.0	88.0	<0.5	<5.0	17.0	13.0	<5.0	<5.0	1.0	<1.0	826.0	45.	1.	5.
VA01608	566.10	568.00	1300.0	84.0	91.0	<0.5	<5.0	20.0	14.0	<5.0	<5.0	2.0	<1.0	1035.0	48.	1.	5.

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Summary Log: DDH CH88-38 Location: 47+00 E, 0+38 N; Chip 1 Claim Azimuth: 210, Dip: -65 Hole Completed: April 11, 1988 Core logged by: D.P. Money

0.0 -	3.7 Ca	sing.
3.7 - 3	31.5 In	tercalated mafic and felsic ash and crystal tuffs.
31.5 - 6	59.5 Fe	lsic lapilli tuff.
69.5 - 10	02.0 In	tercalated chloritic felsic crystal tuffs and
	h	ornblende-bearing mafic tuffs.
102.0 - 13	39.7 Fe	lsic flow or coarse crystal tuff.
139.7 - 16	51.4 Fi	ne grained plagiophyric gabbro.
161.4 - 20	01.8 Ma	fic flow.
201.8 - 25	51.3 In	tercalated felsic tuffs, dacitic tuffs and mafic flows.
251.3 - 26	54.9 Fe	lsic crystal tuff, hosts two 20 to 30 cm zones of weak
	C	halcopyrite and pyrrhotite, which are the downdip
	e	xtent of the pulse E.M. anomaly.
264.9 - 26	59.4 Fi	ne grained plagiophyric gabbro.
269.4 - 28	31.4 Ma	fic ash tuff.
281.4 - 28	38.3 Fe	lsic crystal tuff.
288.3 - 31	14.5 Ma	fic ash tuff.
314.5 - 31	17.9 Ma	jor thrust fault, splay off the Fulford Fault.
317.9 - 31	19.1 Py	ritic felsic tuff with 4 % pyrite.
319.1 - 33	32.5 An	desitic crystal tuff.
332.5 - 34	46.4 In	tercalated felsic and mafic tuffs.
346.4 - 35	58.8 Py	ritic felsic tuff with 2 % pyrite.
358.8 - 37	73.0 Fi	ne grained plagiophyric gabbro.
373.0 - 39	93.4 In	tercalated felsic and mafic tuffs.
393.4 - 43	36.0 Ma	fic tuffs with numerous thin chert beds.
436.0 - 43	38.0 Ga	bbro.
438.0	En	d of hole.

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FALCONBRIDGE LINITED DIAMOND DRILL LOG

Nole Location: 47+00 E 0+38 S

 NTS:
 092B/13
 UTM:
 5416053.2 N
 431803.0 E

 Azimuth:
 210
 Elevation:
 660 m

 Dip:
 -65
 Length:
 438.0 m

Started: April 4, 1988 Completed: April 11, 1988

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Purpose: To test PEM anomaly downdip of Chem87-34 DIP TESTS

HOLE No: Page Number Ch88-38 1

Claim No. Chip 1 Section No.: Section 47+00 East, Chip Group

Logged By: D.P. Money Drilling Co.: Burwash Enterprises Assayed By: Bondar-Clegg and X-Ray Assay

Core Size: NQ

	Length	AZ1- muth	Dip	Length	Azı- muth	Dip		
	3.70	203.0	-65.0	272.50	205.0	-55.0		
	91.40	202.0	-64.0	367.30	210.0	-51.0		
	188.10	206.0	-58.0	435.90	208.0	-51.0		

 From
 To

 (m)
 -----DESCRIPTION-----

Sample From To Width Total Cu Pb Zn Ag Au Ba (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) (m)

- 3.7 OVERBURDEN Contains rounded chips of rusty silicified feldspar bearing tuff.
- 3.7 6.9 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Grey to light blue siliceous felsic tuff with 10 to 20 % feldspar grains and up to 5 % quartz eyes. Locally oxidized with minor vugs and fractures. There are trace rusty pyrite cubes, up to 1.5 mm. Feldspars are variably sausuritized. Colour variations are due to variable chlorite content, nil to up to 5 %.
 3.7 4.0 WEAK PERVASIVE CHLORITIZATION.
 4.7 6.9 WEAK PERVASIVE CHLORITIZATION. Structure:. Foliations :.
 3.8 M : 45 degrees to core axis.
 5.2 M : 46 degrees to core axis.
- 6.9 7.0 FAULT ZONE Blocky, highly fractured core with sheared rubble of underlying mafic unit.
- 7.0 7.3 MAFIC TUFF
 Strongly sheared mafic ash tuff with minor epidotized feldspar grains.
 7.0 7.3 STRONG PERVASIVE CARBONATIZATION.
 Foliation is at 40 degrees to core axis.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number Ch88-38 2

62 n/a

n/a 342

From (m)	To (m)		DESCRIF	TION	 	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

VA01001 7.5 17.2 9.7

7.3 7.5 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Same as from 4.7 to 6.9.

7.5 17.2 MAFIC TUFF

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Very strongly sheared mafic tuff with dark chloritic, up to 1 mm, layers, probably sheared lapilli or hornblende crystals. There are minor zones with feldspar crystals. Local blocky, highly fractured core with lost core of 0.3 m between 7.5 and 8.2, 1.2 m from 8.2 to 10.1, 0.3 m from 10.6 to 11.6, 0.5 m from 12.0 to 13.4, 0.7 m from 14.0 to 15.5 and 0.8 m from 16.0 to 17.4. There is minor blocky, highly fractured core from the overlying felsic tuff interspersed in this unit, maximum length of the felsic pieces is 5 cm. The mafic is strongly sheared and carbonatized. There are trace pyrite blebs and cubes. From 8.2 to 8.5 is very contorted. 7.5 17.2 STRONG PERVASIVE CARBONATIZATION. Foliation :. 11.1 M : 42 degrees to core axis. 15.0 M : 60 degrees to core axis.

17.2 17.3 FAULT ZONE

Fault gouge with unmeasurable orientation.

17.3 28.0 FELSIC FELDSPAR CRYSTAL TUFF

Light grey siliceous, possibly weakly silicified, felsic tuff with up to 10 %, < 1 mm, feldspar grains and trace 1 to 2 mm guartz eyes. Chlorite content is usually much less than 5 %, but locally exceeds 7 %, i.e. At 21.0 m. There are local calcite blebs mainly centred on the trace local guartz veinlets, which are fracture controlled. The core is locally oxidized throughout the unit and very rusty from 26.7 to 27.1. There is 10 cm fault gouge at 22.7. There appear to be local folds. Becomes weakly chloritic towards the bottom of the unit. Lost core :. 22.0 to 22.9 : 0.3 m. 25.0 to 25.8 : 0.3 m. 27.0 to 28.0 : 0.5 m. Structure :. Foliations :. 18.2 M : 41 degrees to core axis. 21.1 M : 37 degrees to core axis. 23.1 M : 40 degrees to core axis. 23.2 M : 18 degrees to core axis. 23.2 23.4 Contorted with foliations from 18 to 0 degrees to core axis.

VA01002 17.3 28.0 10.7 n/a

n/a

19

n/a

17 n/a 24 n/a n/a 1140

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number Ch88-38 3

From (m)	To (m)	DESCRIPTION	
. (m.)	(16)	DESCRIPTION	

Width Total Cu Ba Sample From To РЪ Zn λα Au . Sulphides (ppm) (ppb) (ppm) No. (m) (m) (m) . (ppm) (ppm) (ppm)

24.5 M : 33 degrees to core axis. 27.5 M : 48 degrees to core axis.

28.0 28.3 FAULT ZONE

Chloritic clay and fault gouge.

28.3 30.8 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI TUFF Siliceous grey felsic tuff with on average 20 % crystals, up to 2.5 mm, mainly 2:1 feldspar to quartz. Local sericitized lapilli. Minor quartz - chlorite veins with trace goethite - pyrite cubes. Tuff is rusty for first 20 cm. Oxidized to depth of 29.2 m. 28.3 28.8 WEAK FRACTURE CONTROLLED SILICIFICATION. 28.8 29.2 Quartz - chlorite - (calcite) vein. 29.2 30.8 WEAK FRACTURE CONTROLLED SILICIFICATION. Structure :. Foliations :. 28.5 : 60 degrees to core axis. 29.7 : 32 degrees to core axis.

- 30.8 31.5 MAFIC TUFF Strongly sheared mafic ash tuff. 30.8 31.5 STRONG PERVASIVE CARBONATIZATION. Foliation: 41 degrees to core axis.
- 31.5 44.5 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI TUFF
 - Felsic lapilli tuff with on average 7 to 10 %, 1 to 3 mm, feldspar grains and trace up to 2 mm quartz eyes. There are local siliceous lapilli in a sericite matrix, best at 37.0 m. The alteration is variable with silicification and chloritization.
 - 31.5 32.1 Dark grey to green siliceous lapilli in a sericite matrix with crosscutting fracture controlled silicification. Is moderately contorted from 31.7 to 32.1.
 - 32.1 32.5 Chlorite quartz vein. Chlorite is contorted and is 90 % from 32.2 to 32.5. Quartz is 75 % to 32.2.
 - 32.5 38.2 Similar to 31.5 to 32.1, with moderate fracture controlled silicification and more sericite matrix. Rare quartz chlorite veinlets occur parallel to foliation. Lapilli are cross-cut by (1 mm fractures filled by white quartz.
 - 38.2 44.4 Similiar to 32.5 to 38.2, with up to 10 % chlorite and very weak fracture controlled silicification.
 - 42.0 43.6 Quartz sericite vein with minor chlorite.

VA01003 33.0 44.5 11.5 n/a 11 n/a 14 n/a n/a 988

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number Ch88-38 4

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

Alteration :.

From To

(m)

(m)

31.5 32.1 STRONG FRACTURE CONTROLLED SILICIFICATION. 32.5 38.2 NODERATE FRACTURE CONTROLLED SILICIFICATION. 38.2 44.5 WEAK FRACTURE CONTROLLED SILICIFICATION. 38.2 44.5 MODERATE FRACTURE CONTROLLED CHLORITIZATION. Mineralization :. 39.3 a 6.5 mm pyrite cube. 38.2 38.3 Trace fracture controlled pyrite, associated with quartz veinlet (?). Lost core :. 39.2 to 40.8 : 0.8 m. 42.0 to 43.6 : 0.3 m. Blocky, highly fractured core :. 39.5 to 41.8. Structure :. Foliations :. 35.4 : 44 degrees to core axis. 38.2 : 45 degrees to core axis. 44.2 : 72 degrees to core axis. Bedding :. 34.5 : 55 degrees to core axis.

-----DESCRIPTION------

44.5 44.8 MAFIC TUFF

44.5 44.8 STRONG PERVASIVE CARBONATIZATION. Strongly sheared at 61 degrees to core axis.

44.8 68.7 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Variably chloritized and silicified felsic tuff with local siliceous lapilli and sericitized lapilli. Trace quartz eyes uphole to approximately 1 %, up to 3 mm, downhole. Feldspars throughout, locally altered to sericite, 5 to 15 4. up to 1.5 mm. Minor fracture controlled guartz veinlets, perpendicular to foliation and rare guartz calcite - (chlorite) veins, 1 to 25 cm, parallel to foliation. Chlorite content varies from 10 to 25 % locally. Core transitionally changes downhole from mottled tuff, as from 31.5 to 44.5 to wavy contorted interlayered sericite and chlorite tuff with minor quartz eyes. There are areas of stronger alteration, besides the general moderate chloritization, these are:. 44.8 45.7 MODERATE FRACTURE CONTROLLED SILICIFICATION. 50.1 52.6 STRONG SPOTTY SERICITIZATION. 53.0 56.0 MODERATE FRACTURE CONTROLLED SILICIFICATION. 57.6 57.7 STRONG PERVASIVE CHLORITIZATION. Lost core:. 45.7 to 46.6 : 0.3 m. 53.3 to 54.9 : 0.3 m. 59.0 to 60.0 : 0.2 m.

65.0 to 66.2 : 0.3 m.

VA01004 45.0 65.0 20.0 n/a (10 n/a (10 n/a n/a 1160

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample From

(m)

No.

To

(m)

Width

(m)

Total

Sulphides (ppm)

HOLE No: Page Number Ch88-38 5

ΡЪ

Zn

(ppm) (ppm)

λσ

(ppm)

Au Ba

(ppb) (ppm)

Cu

From	To	1.1.1		- T.		10N	
(Щ)	(111)				DESCRIP	10N	
		57.4 to 58.4 Structure : Foliations :	1 : 0.3	11.			

Foliations :.
48.5 : 47 degrees to core axis.
55.4 : 51 degrees to core axis.
62.0 : 50 degrees to core axis.
68.0 68.2 Fault gouge.
Whole rock samples :.
47.3 47.4 Felsic tuff with weak chloritization, moderate fracture controlled silicification.

- 60.8 60.9 Strong chloritization with weak carbonatization.
- 68.7 68.8 MAFIC TUFF Very chloritic fine-grained mafic ash tuff with no crystals
- 68.8 69.5 CHLORITIC FELSIC FELDSPAR CRYSTAL LAPILLI TUFF Siliceous lapilli in chloritized felsic matrix with 10 to 15 %, up to 1 mm, variably epidotized feldspar crystals. There are local calcite - quartz veinlets sub- parallel to foliation. Foliation : 33 degrees to core axis at 69.0. 68.8 69.5 WEAK PERVASIVE CHLORITIZATION.
- 69.5 70.1 MAFIC PORPHYRITIC MAFIC ASH TUFF Mafic ash tuff with local epidotized feldspar rich layers and a downhole hornblende, 3 to 5 %, up to 2 mm, rich layer. Locally sheared. Very sharp upper and lower contacts with felsic, may be a flow.
- 70.1 73.6 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Variably chloritic felsic tuff with 5 to 25 % chlorite, on average 3 to 5 % quartz eyes, more, up to 7 %, in more sericite rich zones and 10 to 15 %, 1 to 2 mm feldspar grains. Quartz eyes are up to 1.5 mm. There are minor quartz - calcite veinlets that cross-cut and are parallel to to foliation, foliation is at 50 to 55 degrees to core axis and is locally contorted. 70.1 73.6 STRONG PERVASIVE CHLORITIZATION.
- 73.6 76.2 FELSIC QUART2-FELDSPAR CRYSTAL TUFF
 Similiar to 70.1 to 73.6, but is less chloritic, there are weakly chloritized and non- chloritized bands of 1 to 30 cm. Bands are possibly representing original composition as sericite rich zones have 5 to 7 %, 1 to 2 mm, quartz eyes and chlorite rich zones have 1 to 2 %, up to 1 mm.
 10 % feldspar grains in chlorite and 5 % in sericite. From 73.6 to 74.0 there is carbonatized fault gouge and clay

From To

(m) (m)

Γ

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number Ch88-38 6

Sample from To Width Total Cu Pb Zn λά λu Ba No. (m) (m) (m) Sulphides (ppm) (mqq) (mqq) (mqq) (ppb) (ppm)

the foliation at 40 to 50 degrees to core axis and are locally weakly to moderately contorted.

76.2 77.2 FELSIC OUARTZ EYE TUFF

Weakly bleached siliceous felsic tuff with minor blocky, highly fractured core and 10 to 12 %, 2 to 4 mm, guartz eyes in a light grey to white quartz - sericite matrix with a foliation at 45 degrees to core axis. Lost core : 76.0 to 77.1 : 0.2 m.

at 60 degrees to core axis. The core is mostly blocky, highly fractured core. The compositional changes parallel

-----DESCRIPTION-----

- 77.2 78.8 CHLORITIC FELSIC QUARTZ EYE TUFF Very weakly locally chloritized felsic tuff, similiar to 76.2 to 77.2, with a colour difference and less large quartz eyes and more small ones, 1 to 2 %, 3 to 5 mm, and 10 %, up to 1 mm. Foliation is at 46 degrees to core axis with cleavage at 24 degrees to core axis in the opposite direction.
- 78.8 79.2 FAULT ZONE

Carbonatized mafic flow fault gouge and blocky, highly fractured core with minor competent pieces. Fault at approximately 66 degrees to core axis.

- 79.2 81.5 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Mafic flow, massive medium to dark green, with 15 to 20 % variably chloritized hornblende crystals, 1 to 3.5 mm in size. There are local zones of epidotization, possibly fragments. There are minor guartz - chlorite - (calcite) veinlets. The lower contact has 40 cm of blocks and fragments and may represent the base of the flow.
- 81.5 86.5 FELSIC FLOW?

Possibly a felsic flow or may be a tuff. Upper part of unit appears to be a flow and lower appears tuffaceous. Upper 1.0 m hosts 15 to 20 % sausuritized feldspar crystals and 3 %, 1 to 3 mm, quartz eyes and is massive and glassy, silicified (?). Lower 4 m is similiar to at 78.0 m. It is medium grey to light grey and siliceous with 10 to 15 %, 2 to 4 mm, guartz eyes and local epidotized feldspar 1 to 5 mm thick layers. The foliation is at 44 degrees to core axis.

86.5 99.6 WEAKLY CHLORITIC FELSIC TUFF

n/a 1030 VA01005 82.0 97.0 15.0

n/a 11 n/a <10 n/a

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number Ch88-38 7

Cu

From To (m) (m) -----DESCRIPTION-----

> Weakly chloritized quartz eye bearing felsic tuff with local 10 to 20 cm zones of strong chloritization and strong contortions. There is on average 20 % quartz eyes and feldspar grains, most are (1 mm, locally quartz eye up to 3 mm occur. There are minor guartz - calcite veinlets which mostly cross-cut. Alteration :. 86.5 99.6 WEAK PERVASIVE CHLORITIZATION. Structure :. Fault gouge :. 88.4 : 10 to 12 cm , strongly contorted. 89.8 : 2 cm , at 44 degrees to core axis. Lost core :. 92.0 to 93.6 : 0.4 m. 94.0 to 95.4 : 0.3 m. Blocky, highly fractured core :. 96.0 to 99.6. Foliations :. 87.4 : 58 degrees to core axis. 87.8 to 89.3 : strongly contorted. 94.8 : 46 degrees to core axis.

99.6 102.0 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Mafic flow with red to white ribbon chert beds, up to 5 mm thick. Mafic flow or possibly tuff hosts 5 to 7 % epidotized feldspar grains and locally up to 5 % chloritized hornblende. There is minor brecciation with quartz vein filling. Bedding is at 53 degrees to core axis.

102.0 139.7 FELSIC FLOW?

Intermixed coarse siliceous and feldspar porphyritic flow and chloritized felsic tuff with feldspar, quartz and mafic crystals. Colour ranges from white where bleached, to brown, locally caused by thermal biotite to light grey to green in the massive flow. In places the core roughly resembles Abermin's dome and is locally cross-cut by quartz - (chlorite) veins, up to 30 cm thick. 102.0 110.0 Mixed felsic tuffs and flows interlayered in

- up to 1 m thick sub-units.
- 110.0 111.4 Quartz chlorite veins in coarse bleached flow, trace chalcopyrite at 110.6.
- 111.4 117.7 Coarse siliceous light brown and green flow with 7 to 10 % epidotized feldspars.
- 117.7 119.1 Stongly bleached flows with perpendicular fracture controlled chlorite.
- 119.1 128.0 STRONG PERVASIVE CHLORITIZATION.
- 119.1 139.7 Thermal biotite throughout, mixed tuff and flow with local spotty silicification.

Foliations :.

VA01006	102.0	138.0	36.0	n/a	62	n/a	17	n/a	n/a	974
VA01501	110.1	111.4		1	87	<5	15	<1	10	720

Sample From To No. (m) (m) Width

(m)

Total

Sulphides (ppm)

Pb Zn Ag Au Ba (ppm) (ppm) (ppm) (ppb) (ppm)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

To

(m)

HOLE No: Page Number Ch88-38 8

Pb

Zn

(ppm) (ppm)

Åα

(ppm)

Au

Ba

(ppb) (ppm)

Cu

Width

(m)

Total

Sulphides (ppm)

From 1	о	e a constante	DESCRIPTION
(m) (m)	Serette e constante	
		106.7 : 40	degrees to core axis.

114.9 : 50 degrees to core axis. 120.1 : 41 degrees to core axis. 132.4 : 56 degrees to core axis. 133.4 : 60 degrees to core axis.

139.7 161.4 FELDSPAR PORPHYRITIC GABBRO

Gabbro dyke, fine-grained green matrix with 5 to 7 %, 1 to 4 mm, feldspar grains. There are local quartz veins, < 1 to 8 cm thick with minor pyrite clots, at orientations of 0 to 90 degrees to core axis. There is minor fracture controlled carbonatization. There is a 22 cm chilled margin at the upper contact and a quartz - chlorite calcite vein at the lower contact with 1 to 2 % pyrite and trace chalcopyrite over 20 cm. Some of the veins appear to have been fractured and refilled in several $\{3+\}$ events, i.e. at 149.2 m.

161.4 201.8 MAFIC FLOW

Massive green mafic flow with local alteration. Contains 20 to 30 %, 1 to 2 mm, epidotized feldspar and feldspar grains. There are local chloritized hornblende crystals, up to 3 mm, in zones of coarse epidote. There are minor rusty oxidized fractures throughout. Drill bit was lost at 165.8 and there was 0.9 m of core lost when tricone bit was used to drill through. The Driller's report water loss at this location, there may be a fault.

161.4 161.6 Strongly bleached and silicified probably by gabbro dyke.

161.6 164.4 Strongly silicified and weakly epidotized mafic flow or mixture of felsic and mafic thin flow lobes.

- 164.4 167.7 Fine-grained flow with minor fracture controlled quartz veinlets and local fracture controlled chloritized. Medium green in colour as is 167.7 to 181.8.
- 167.7 181.8 Medium to coarse grained mafic flow with approximately 30 % feldspar and epidote grains. Local spotty epidotization or trace to 0.5 % epidotized fragments, of lapilli size. Minor coarse bleached (?) zones as from 181.8 to 182.5 at 178.7 and 180.2.
- 181.8 182.5 Coarse magnetite bearing bleached (?) flow, light green to white. Up to 7 mm epidote grains, up to 5 mm magnetite crystals and trace chloritized 2 mm hornblende. Sharp lower contact and gradational upper contact.
- 182.5 198.4 Similiar to 167.7 to 181.8 with decreased epidote and feldspar, approximately 20 % and

VA01007	162.0	182.0	20.0	n/a	84	n/a	97	n/a	n/a	574
VA01502	181.8	182.5	.7	1	116	<5	32	- <1	10	220
VA01008	185.0	205.0	20.0	n/a	112	n/a	48	n/a	n/a	335
VA01503	199.3	200.8	1.5	1	141	<5	70	(1	10	390
VA01504	201.5	202.0	.5	3	471	<5	55	1	30	2190

From

(m)

То

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number Ch88-38 9

Sample From Width Total Pb To Cu Zn λg Au Ba Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppb) (ppm) (ppm)

(m) -----DESCRIPTION-----increased chloritized hornblende, approximately 3 to 5 %. There is very local pervasive silicification. 198.4 200.0 Moderate to strong pervasive epidotization with trace to 1 % disseminated pyrite blebs. 200.0 201.8 Same as 182.5 to 198.4. Mineralization :. 161.4 164.2 Trace to 1 % fine-grained disseminated pyrite. 164.2 Speck of malachite in a quartz vein. 164.2 164.4 3 to 5 % pyrite in epidotization, silicification and chloritization, pyrite as blebs. 164.4 181.8 Trace disseminated pyrite with local bleb concentrateds of up to 1.5 % over 10 cm. 181.8 182.5 Coarse and bleached with 4 to 6 % magnetite, trace to 2 % pyrite and trace chalcopyrite. 182.5 201.8 As from 164.4 to 181.8. Major alteration :. 161.8 164.2 MODERATE PERVASIVE SILICIFICATION. 198.4 200.0 STRONG PERVASIVE EPIDOTIZATION. Structure :. Lost core :. 163.0 to 163.4 : 0.2 m. Cleavages :. 171.3 : 22 degrees to core axis. 176.9 : 21 degrees to core axis. 199.9 : 52 degrees to core axis. Foliations :. 178.8 : 63 degrees to core axis. 191.1 : 36 degrees to core axis.

201.8 201.9 BLACK ARGILLITE

Very fine-grained black argillite with 7 to 10 % fracture controlled and disseminated pyrite. Bedding at 29 degrees to core axis.

Massive medium to dark green mafic flow with 3 to 7 %, 1 to 3 mm, chloritized hornblende and approximately 20 %, 2 mm, epidotized feldspars. There are rare epidotized fragments, up to 5 cm. Weak foliation varies from 30 to 45 degrees to core axis.

209.5 210.9 QUARTZ-FELDSPAR PORPHYRITIC FLOW

Very siliceous medium black to grey felsic flow with 15 to 25 %, 2 to 6 mm, quartz eyes and 3 to 7 5, 2 to 3 mm, epidotized feldspar crystals. Quartz eyes are often fractured and clear to blue. Very sharp contacts. At

VA01505 209.9 210.9 1.0 146 <5 49 (1 15 1120 1

^{201.9 209.5} MAFIC FLOW

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED Ch88~38 10 DIAMOND DRILL LOG From To Sample Width From То Total Cu Pb Zn Ag λu Ba (m) -----DESCRIPTION-----(m) Sulphides (ppm) (ppm) (ppm) No. (m) (m) (m) (ppm) (ppb) (ppm) 210.5 there is trace chalcopyrite in epidote rich band. Foliation is at 42 degrees to core axis. 210.9 211.7 MAFIC FLOW Mafic flow as from 201.9 to 209.5 with trace chalcopyrite at 211.5. 211.7 212.5 FELDSPAR PORPHYRITIC FELSIC FLOW Massive light green to yellow felsic flow with 10 %. 1 to 3 mm, epidotized feldspars. Blocky, highly fractured core. 212.5 234.0 FELDSPAR PORPHYRITIC MAFIC FLOW Mafic flow with 15 to 20 %, 1 to 4 mm, epidote and VA01009 212.5 234.0 21.5 n/a 110 n/a 59 n/a n/a 193 feldspar grains. Massive , except for 212.5 to 215.5 which is blocky, highly fractured core. May be a tuff, from 222.5 appears to be a mafic ash tuff, but upper portion is a flow with minor epidotized fragments or a lapilli tuff. Upper part is massive, lower is schistose. Medium greyish green in colour. There is minor local spotty silicification and carbonatization. There is trace local disseminated pyrite. Foliations :. 215.8 : 36 degrees to core axis. 221.1 : 34 degrees to core axis. 226.4 : 38 degrees to core axis. 229.7 : 42 degrees to core axis. 234.0 234.7 FELSIC FLOW? Massive siliceous yellow to brown felsic, flow (?), strong to moderate thermal biotite, blocky, highly fractured core with quartz veins. 234.7 235.9 MAFIC FLOW Chloritized mafic flow with local zones of thermal biotite. There are 15 %, up to 1 mm feldspar grains. Massive, , byt may be a ash tuff. 234.7 235.9 MODERATE PERVASIVE CHLORITIZATION. 235.9 238.0 FELSIC FLOW? 630 ۲5 46 (1 15 Light green siliceous massive flow with 20 to 25 %, 1 to 3 VA01506 236.0 237.0 1.0 2 33 50 <5 40 (1 10 270 mm, epidotized feldspar grains to crystals. There are VA01507 237.0 238.0 1.0 2 sharp lower and upper contacts with fine-grained 10 to 20 cm margins. There is 1 to 2 % fracture controlled pyrite. There are minor quartz weins and weak to moderate fracture controlled silicification. Probably is dacitic to

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. PI	ROPERTY: Chemainu	s J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE Ch88-3	No: Pa 18	age Numb 11	er				
From (m)	To (m)	DESCRIP	TION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphide	Cu s (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	
	rhyo-dacit 235.9 238.	ic in composition. D MODERATE FRACTURE CONT	ROLLED SILICIFICATION.												
238.0	242.6 INTERMEDIA Dacitic to local weak crystals a	TE QUARTZ FELDSPAR CRYST rhyo-dacitic massive li thermal biotite tinge. hd grains of epidotized from 5 % to 25 % with	AL TUFF ght green tuff with Contains 25 to 30 % feldspar and quartz, constant crustal total	VA01508	239.7	240.2	.5	1	326	<5	103	<1	15	460	
	There is t which at 2 quartz - { at 40 to	race local fracture cont 39.95 hosts trace chalc calcite) veinlets. The 50 degrees to core axis.	opyrite. There are minor re is a weak foliation												
242.6	248.4 FELSIC TUF. Strong the mainly blo	r mal biotite and moderat cky, highly fractured co	e chloritization in re with local brown												
	siliceous epidotized There is s axis at 24 248.2. Mor 246.2.	flow (?) material with fragments or may be sil frong band or (?) beddin 3.2. There is trace chal e tuffaceous portion is	approximately 10 % icified lapilli tuff. g at 30 degrees to core copyrite in chlorite at similiar to 238.0 to												
248.4	251.3 INTERMEDIA	TE OUARTZ FELDSPAR CRYST	AL TUFF												
	Same as 23 248.9 249.	 3.0 to 242.6. White quartz vein with hydraulic fracture spu 	1 % pyrite blebs, r (?).												
251.3	254.9 FELSIC TUF Mixed and downdip e located in	variably altered felsic ctension of the P.E.M. E the 1987 drilling prog	tuffs containing the dge type anomaly first ram.	VA01010 VA01509 VA01510	251.5 252.0 264.4	264.0 252.5 264.9	12.5 .5 .5	n/a 3 1	118 263 2428	n/a <5 <5	83 61 253	n/a <1 1	n/a 15 30	452 1210 1550	
	251,3 252.	2 Felsic tuff with moder and thermal biotite, d Contains 5 to 10 %, 1 approximately 7 % fel trace fracture control	ate to nil chloritized ecreasing downhole. to 2 mm, quartz eyes and dspar grains. There is led pyrite.						·		•				
	252.2 252.	4 18 cm of 7 % pyrrhotit in chloritic matrix. S to foliation and beddi light group folderer	e and 0.5 % chalcopyrite ulphides are parallel ng (?). ich tuff with												2
	2J4.4 2JJ.	chalcopyrite, 0.5 to 1 scale sphalerite clots chlorite rimmed quartz	% over 2 cm and 2 cm on the margin of a vein at 253.7.												
	253.7 259.	4 Thermal biotite altere fracture controlled si perpendicular to foli	d tuff with minor licification ation. There is local												٩

HOLE No: Page Number Ch88-38 12

From To

(m) (m)

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-----DESCRIPTION-----

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

Sample From То Width Total Cu РЪ Zn λg Au Ba (ppb) (ppm) (m) Sulphides (ppm) (ppm) (ppm) (ppm) No. (m) (m)

epidotization and minor bleached fragments, lapilli sized.

- 259.4 261.2 Bleached siliceous white to light green massive with fracture controlled blue chlorite and silicification, minor grey to white quartz veinlets.
- 261.2 264.6 Local thermal biotite and blue chlorite streaks, hosts approximately 15 %, < 1 mm feldspar grains and minor micro- quartz eyes. There are numerous quartz - calcite veins, up to 2 cm, at 264.4 there is minor sphalerite in the vein.
- 264.6 264.9 P.E.M. ANOMALY zone 2, 30 cm of 1.5 to 2 % chalcopyrite in a medium green siliceous matrix, with chalcopyrite surrounding lapilli, there is trace pyrrhotite.

Structure :. Lost core :. 261.2 to 262.0 : 0.1 m. Foliations :. 251.5 : 44 degrees to core axis. 256.8 : 32 degrees to core axis. 262.5 : 50 degrees to core axis. Bedding :. 257.1 : 42 degrees to core axis. Alteration :. 251.3 264.9 MODERATE SPOTTY CHLORITIZATION.

264.9 269.4 FELDSPAR PORPHYRITIC GABBRO Fine-grained medium green plagiophyric gabbro with local quartz +/- calcite veins and veinlets, approximately 5 to 7 %, 2 to 3 mm epidotized feldspar grains.

269.4 281.4 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Massive medium to dark green mafic tuff with minor felsic tuff pieces in the blocky, highly fractured core from 276.7 to 281.5. There is minor weak pervasive and fracture controlled carbonatization. Hosts 15 to 20 % epidotized feldspar grains, 1 to 2 mm. There are minor calcite clots and minor calcite in pressure shadows around the epidote grains. Minor quartz veinlets occur. There is trace pyrite associated with carbonatization. Foliations :.

> 273.2 : 57 degrees to core axis. 279.0 : 30 degrees to core axis. Lost core :. 277.0 to 278.0 : 0.4 m. 281.0 to 281.3 : 0.2 m.

VA01011 270.0 280.0 10.0 n/a 126 n/a 87 n/a n/a 376

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED Ch88-38 13 DIAMOND DRILL LOG From To Width Total Pb Sample From To Cu Ba Zn λg An (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) ----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) 281.4 288.3 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Sericite schist with 10 to 15 %, 1 to 3 mm, quartz eyes VA01012 282.0 288.0 6.0 22 n/a n/a 1230 n/a 34 n/a and 10 % 1 mm feldspar grains. There are minor ash tuff beds. There are minor rusty fracture controlled calcite veinlets. Nil sulphides were observed. There are minor weak crenulations. Structure :. Lost core :. 284.0 to 284.7 : 0.1 m. Blocky, highly fractured core :. 284.2 to 284.7. 285.2 to 285.6. 286.0 to 286.3. 287.0 to 288.5. Foliations :. 283.4 : 41 degrees to core axis. 285.8 : 32 degrees to core axis. Bedding :. 282.8 : 66 degrees to core axis. 288.3 301.1 MAFIC TUFF Mafic to andesitic light to medium green ash tuff with VA01013 290.0 314.0 24.0 40 82 n/a n/a 512 n/a n/a approximately 10 %, < 1 mm, feldspar grains. 288.3 301.1 STRONG PERVASIVE CARBONATIZATION. There is strong carbonatization with white calcite streaks, << 1 mm, throughout, strong reaction with HCl. There is trace pyrite with the calcite. Minor quartz fracture controlled veins occur which host fragments of wall rock. Weakly sheared towards bottom by Fulford fault or a major splay off it. There are minor ash tuff beds at 289.6 at 57 degrees to core axis. Foliations :. 291.2 : 28 degrees to core axis. 299.5 : 42 degrees to core axis. Lost core : 292.0 to 292.3 : 0.2 m. 301.1 302.8 FELSIC TUFF Light coloured, white to green siliceous felsic ash tuff with 5 to 10 %, < 1 mm, feldspar grains. There is local thermal biotite. There are local fracture controlled quartz veinlets. There is trace fracture controlled pyrite. Bedding :. (?) varies locally from 60 to 90 degrees to core axis.

302.8 314.5 MAFIC TUFF

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Mafic ash tuff with strong foliation (probably shearing due to fault) and strong pervasive carbonatization. 10 to

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED Ch88-38 14 DIAMOND DRILL LOG From То Sample From To Width Total Cu Рb Zn λσ λu Ba (m) (m) -----DESCRIPTION------Sulphides (ppm) (ppm) No. (m) (m) (m) (ppm) (ppm) (ppb) (ppm) 15 %, 1 mm, epidotized feldspar grains are visible. There are numerous < 1 mm fracture controlled calcite veinlets. At 308.7 there is approximately 10 cm of pyritic siliceous felsic ash tuff with 2 % pyrite. 302.8 314.5 STRONG PERVASIVE CARBONATIZATION. Foliations :. 303.5 : 42 degrees to core axis. 304.9 : 60 degrees to core axis. 310.1 : 58 degrees to core axis. 314.5 317.9 FAULT ZONE The Fulford fault or a major splay fault off it. VA01511 315.4 316.4 1.0 83 **(**5 47 <1 15 1010 314.5 315.3 Dark grey clay with pebble sized pieces of VA01512 316.4 317.4 177 ٢5 48 (1 35 1880 1.0 3 quartz and calcite, approximately 90 degrees VA01513 317.4 318.4 1.0 5 115 12 401 <1 55 2870 to core axis. 315.3 316.4 Mixed felsic and mafic rubble with minor carbonatization and approximately 2 % pyrite. Orientation at 70 to 80 degrees to core axis. 316.4 316.8 Mafic ash tuff with strong pervasive carbonatization. 316.8 316.9 Minor fault gouge at approximately 90 degrees to core axis. 316.9 317.9 Contorted active tuff at 0 to 50 degrees to core axis. Hosts 2 to 3 % fine-grained pyrite, may contain sphalerite as in overlying Chem87-34 and Chem87-36. 317.9 319.1 FELSIC QUARTZ EYE TUFF 30 2020 Active tuff. VA01514 318.4 319.1 34 55 <1 .7 3 6 Highly contorted guartz - sericite schist with 4 to 5 % fine-grained pyrite parallel to foliation, which trends at 35 degrees to core axis. There is very local weak fracture controlled carbonatization. There are minor cross faults. There is local fracture controlled sericitic alteration. 319.1 332.5 INTERMEDIATE TUFF n/a 766 Very strongly altered andesitic tuff. Tuff hosts trace to VA01014 320.0 330.0 10.0 n/a 86 n/a 50 n/a 10 1520 66 ۲5 35 <1 5 %, average 2 %, 1 mm, quartz eyes and approximately 10 VA01515 321.1 322.4 1.3 2 15 1310 * sausuritized, < 1 mm, feldspar grains. The colour VA01516 322.4 323.4 1.0 2 140 ۲5 64 <1 varies from light to dark green. There are numerous fractures filled with any combination of quartz, calcite, chlorite, and pyrite. Fractures occur at 0 to 90 degrees to core axis, cross-cut and vary from (1 mm to 2 cm thick. Foliation appears to vary almost at random from O to 70 degrees to core axis and is probably due to faulting. There are numerous minor fault slips with fault gouge trending at 35 to 65 degrees to core axis. There is

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

weakly to moderately contorted. Ash to crystal tuff beds are 5 mm to 2 cm thick and disrupted by the brecciation. There are minor HOLE No: Page Number Ch88-38 15

From To Sample From То Width Total Cu Рb Zn λσ Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) minor local fault breccia. Alteration and mineralization :. 319.1 321.1 MODERATE FRACTURE CONTROLLED CARBONATIZATION with on average 0.5 to 1 % fracture controlled pvrite. 321.1 321.9 WEAK FRACTURE CONTROLLED CARBONATIZATION and strongly bleached, S.G.E.'s early mafic dyke, intermediate tuff with 5 % guartz eves in light pistachio green siliceous rock with foliation at 0 degrees to core axis and is weakly contorted. There is 2 % fracture controlled and disseminated pyrite. 321.9 322.1 Minor piece of felsic ash tuff. 322.1 322.4 Same as 321.1 to 321.9. 322.4 332.5 Weak alteration as from 321.1 to 321.9 in combination with the fracture controlled carbonatization, on average < 1 % pyrite. 322.4 332.5 MODERATE PERVASIVE CARBONATIZATION. 332.5 332.5 FAULT ZONE Virtually invisible fault with negligible gouge, located by obvious lithological change and sharp change in foliation. 332.5 335.3 FELSIC QUARTZ EYE TUFF Felsic tuff with 3 to 5 %, 1 to 2 mm, guartz eyes and VA01015 333.0 343.0 10.0 n/a 25 n/a 1800 n/a 54 n/a minor ash tuff beds. There is minor local spotty silicification and sericitization. There is also weak fracture controlled carbonatization. Foliation and bedding varies locally from 0 to 20 degrees to core axis. There is trace pyrite. 335.3 335.7 MAFIC TUFF Dark green mafic ash tuff with 3 % 1 mm feldspar grains. Foliation is at 29 degrees to core axis. Contacts are very sharp. 335.7 346.2 FELSIC QUARTZ EYE TUFF White to light grey to light green felsic tuff with variably local siliceous and sericitic zones. Rock is quite variable, but is a consistent unit and the local sub-units are described below:. 335.7 340.4 Brecciated tuff with bedding and foliation sub-parallel to parallel to the core axis. Is

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample From

(m)

No.

Width

(m)

То

(m)

Total

Sulphides (ppm)

HOLE No: Page Number Ch88-38 16

Cu

Рb

Zn

(ppm) (ppm)

λσ

(ppm)

λu

Ba

(ppb) (ppm)

From To (m) (m)

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cross-cutting faults at 30 to 40 degrees to core axis and foliation. There are local feldspar rich tuff beds. There is trace local disseminated pyrite.

-----DESCRIPTION------

- 340.4 343.8 Very sericitic, white to light grey with 5 %, 1 to 2 mm, quartz eyes on average, locally up to 10 %. There is approximately 0.5 % disseminated pyrite. Foliation and (?) bedding is at 0 to 20 degrees to core axis and is locally weakly contorted.
- 343.8 343.9 Fault gouge, 2 cm at 33 degrees to core axis.
- 343.9 346.2 Moderate sericitic with approximately 5 % 2 mm quartz eyes and 0.5 % disseminated fine-grained pyrite, foliation is at approximately 20 degrees to core axis.

346.2 346.4 FAULT ZONE

Ground up fels tuff fault gouge at (?) degrees to core axis

346.4 358.8 FELSIC TUFF

Quartz - sericite schist to siliceous felsic ash tuff. There are local small crystals of quartz and feldspar, up to 3 %, < 1 mm. Foliation locally varies from 0 to 50 degrees to core axis. All observed beds were at 0 to 10 degrees to core axis. There is 1 to 2 % disseminated and fracture controlled pyrite, local pyrite bands of up to 50 % over 3 to 4 cm occur. There are minor cross-cutting faults at no dominant orientation.

VA01517	346.4	348.0	1.6	2	30	5	54	<1	35	1700
VA01016	347.0	358.0	11.0	n/a	66	n/a	92	n/a	n/a	2000
VA01518	348.0	349.5	1.5	2	31	12	36	<1	25	1350
VA01519	349.5	351.0	1.5	2	108	309	351	<1	110	1570
VA01520	351.0	352.5	1.5	2	51	133	438	(1	65	1560
VA01521	352.5	354.0	1.5	2	39	246	389	(1	45	1780
VA01522	354.0	355.5	1.5	2	38	97	138	<1	20	1720
VA01523	355.5	357.0	1.5	2	40	58	86	(1	45	1310
VA01524	357.0	358.8	1.8	2	53	94	168	<1	25	1630

358.8 358.8 FAULT ZONE

Chloritization clay over 3 mm at 21 degrees to core axis.

358.8 373.0 FELDSPAR PORPHYRITIC GABBRO

Fine-grained medium green gabbro with 5 to 12 %, 1 to 3 mm, feldspars locally. There are numerous fracture controlled calcite, epidote and quartz veinlets at orientations of 0 to 90 degrees to core axis. Base is marked by sheared gabbro and quartz - chlorite veins. The lower veins have trace chalcopyrite.

373.0 373.5 FAULT BRECCIA

Chloritization fault breccia with 0.3 m lower contact. Angular quartz clasts in chlorite.

From To

(m)

(m)

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FALCONBRIDGE LINITED DIAMOND DRILL LOG HOLE No: Page Number Ch88-38 17

Sample From Width Total Cu РЪ To Zn λg Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

373.5 375.0 INTERMEDIATE TUFF Chloritization intermediate tuff with quartz - pink

calcite veinlets and minor felsic tuff pieces. There is trace to 1 % fracture controlled pyrite. Foliation is variable from 0 to 50 degrees to core axis.

-----DESCRIPTION------

- 375.0 381.3 CHLORITIC FELSIC QUARTZ EYE TUFF Felsic tuff with on average 7 to 10 %, 1 to 3 mm, quartz eyes, locally up to 6 mm. Foliation and minor ash tuff beds are at 10 to 20 degrees to core axis. There are quartz - chlorite veins throughout, with trace local chalcopyrite at 378.9. There is trace to 0.5 % disseminated and fracture controlled pyrite.
- 381.3 382.5 INTERMEDIATE QUARTZ EYE TUFF Andesitic tuff with 3 %, 1 to 3 mm, quartz eyes in medium green chloritization matrix. Is strongly sheared at 47 degrees to core axis. 381.3 382.5 STRONG PERVASIVE CARBONATIZATION.

382.5 384.3 FELSIC QUARTZ EYE TUFF

Siliceous medium green to grey tuff with 5 to 7 %, 2 mm, quartz eyes. Foliation varies from 20 to 30 degrees to core axis locally. There is trace disseminated pyrite and one local chalcopyrite speck.

382.5 384.3 WEAK PERVASIVE CHLORITIZATION , chlorite visible on fractures and as weak green tint.

384.3 384.7 CHLORITE SCHIST Chlorite schist with moderate fracture controlled carbonatization. Foliation is at 50 degrees to core axis.

384.7 391.4 CHLORITIC FELSIC QUARTZ EYE TUFF Felsic tuff with 5 to 7 %, 1 to 2 mm, quartz eyes and numerous << 1 mm feldspar and quartz crystals. Is locally contorted with fracture controlled quartz veins. Medium to dark green to grey. Is locally contorted with foliation trend at 35 to 40 degrees to core axis and locally at 0 degrees to core axis. There is trace to 0.5 % disseminated and fracture controlled pyrite locally. 384.7 391.4 KODERATE PERVASIVE CHLORITIZATION.

391.4 394.3 FELSIC QUARTZ EYE TUFF

Active tuff. 3 to 5 % fracture controlled and disseminated fine-grained

VA01525	391.4	392.4	1.0	5	. 98	34	1014	1	75	2080
VA01526	392.4	393.4	1.0	4	65	142	280	1	85	1840

1	PROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N Ch88-38	o: Pa	age Numb 18	er				
From (m)	i To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	•
		pyrite in white sericite schist with no visible crystals. There are small approximately 10 cm mafic tuff or dyke inclusions, chlorite schist at 392.7, 392.9 and 393.2. Tuff is locally contorted. Foliation trend is at 50 degrees to core axis.	VA01527	393.4	394.3	.9	3	172	314	643	1	70	2890	
394.3	436.0	MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Dark green fine-grained, mafic ash tuff (?), rock with minor fragments of red, green and white chert beds, best example at 403.1 and numerous beds from 411 to 436. Bedding and foliation are at 0 to 20 degrees to core axis to 411.0. Tuff contains approximately 5 to 7 % biotite, with increase downhole. There appears to be approximately $0.4 \leq 1.00$ and $(.1)$	VA01017 VA01018 VA01528	395.0 410.0 434.7	409.0 430.0 435.1	14.0 20.0 .4	n/a n/a 2	115 78 98	n/a n/a 6	57 59 80	n/a n/a <1	n/a n/a 20	712 1140 1080	
		no 4, (1 mm relayer grains and 5 4, 5 mm long and (1 mm thick chloritized crystals or fragments. Very locally there are 5 to 10 mm epidote knots. There are minor quartz +/- calcite +/- epidote +/- biotite veins and veinlets that cross-cut and are parallel to foliation. There is trace disseminated pyrite. 391.4 436.0 MODERATE FRACTURE CONTROLLED CHLORITIZATION, green chlorite veinlets, (< 1 mm at all												
		orientations. Tops appears to be uphole, 425.3, 434.4, most beds are contorted or at too low angles to the core axis for tops to be measurable. From 411 to 436 there are numerous seemingly random changes in foliation from 0 to 50 degrees to core axis, this is likely due to faults and folding. The beds are weakly to strongly contorted and have micro- faults every 5 to 10 mm that cross-cut bedding at 90 to 60 degrees. There is minor cherty argillic with 2 % fracture controlled pyrite from 434.7 to 435.1. There is a plagiophyric fine-grained green gabbro dyke from 434.2 to 434.4.												
476 0	430 0													

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436.0 438.0 FELDSPAR PORPHYRITIC GABBRO Medium to fine-grained gabbro with 5 to 25 %, 2 to 4 mm, feldspar grains. There are minor local fracture controlled calcite - quartz - calcite veinlets.

438.0 End of hole CH88-38 at 1437 feet on April 11, 1988 at 4:30 p.m.

SAMPLE NUMBER	FROM	TO	25102	XAL203	ZCAO	ZMGO	XNA30	XK20	ZFE203	ZT I 02	ZP205	ZMNO	2L01	SUM	BA	AI	NACA
0400501	5 30	5 40	70 70	14 20	1.02	0.01	3 70	7 60	7 94	A '70	0.07	A 45	• • • •	100.15	1120	27	
VA00502	7 10	7 20	AC 20	19.30	1.73	0.01	3./9	2.60	0.00	0.29	0.07	0.03	2.11	100.15	1120.	3/.	· b.
UA00502	14 90	15 00	45 90	15.30	0.24	2.43	4.99	3.8/	0.50	0.01	0.13	0.18	8.34	100.12	1080.	38,	10.
UA00504	21 20	21 40	69 20	10.10	7.27	1.00	1.00	4.17	7.33	0.00	0.11	0.27	10.80	100.38	114.		
11000505	21.20	31 90	70 10	11.00	1.03	1.10	3.51	1.81	2.00	0.25	0.05	0.10	4.73	100.46	553.	20.	8.
	47.00	31.00	70.10	11.70	3.99	1.12	3.94	1.24	3.30	0.25	0.07	0.12	3.80	99.88	/17.	23.	8,
VH00306	47.30	47.40	76.10	3.6/	3.23	1.28	0.98	1.52	3.20	0.20	0.05	0.04	3.83	100.18	939.	40,°	1.
VAU0507	60.80	60.90	30.30	17.80	5.24	1.92	1.32	3.99	5.82	0.57	0.31	0.06	6.4/	100.00	2160.	47.	· 7.
	80.40	80 50	42.30	15.40	7 07	0.10	1.01	0.10	19.00	2.01	0.25	0.20	6.93	99.36	D1.	32.	12.
VH00303	05 (0	05 70	10.00	10.10		7.10	2.88	0.04	12.30	0.93	0.24	0.27	4.39	30.07	03.	10.	
0400510	100.00	100.20	07.70	13.60	4,11	0.78	2.05	2.79	1.91	0.24	0.05	0.02	4.02	100.09	1020.	3/.	D,
VAUUSII	100.00	100.20	49.40	16.90	10.30	4.28	2.57	0.29	9.57	0.80	0.15	0.19	5.77	100.22	135.	26.	13.
VA00512	105.30	105.50	70.80	13.60	2.84	2.04	3.13	1.77	3.21	0.31	0.07	0.04	2.31	100.12	994.	39.	· 6.
VA00513	113.30	113.40	63.60	18.10	2.15	2.37	4.05	2.94	3.80	0.41	0.08	0.05	2.39	99.94	1590.	46.	6.
VA00514	122.60	122.70	66.30	16.30	2.91	2.80	3.95	2.14	3.44	0.36	0.09	0.06	1.70	100.05	1620.	42.	7.
VA00515	130.40	130.50	71.80	13.80	1.17	2.34	5.86	0.85	2.58	0.29	0.07	0.06	1.23	100.05	847.	31.	7.
VA00516	144.10	144.20	49.20	13.70	11.10	6.02	1.93	0.36	12.40	1.79	0.17	0.20	2.16	99.03	100.	33.	13.
VA00517	170.10	170.30	52.00	18.20	5.52	5.30	5.64	0.49	8.58	0.72	0.16	0.22	2.54	99.37	286.	34.	11.
VA00518	179.80	180.00	55.90	17.60	3.70	4.47	7.14	0.40	7.54	0.69	0.12	0.14	2.08	99.78	332.	31.	11.
VA00519	189.30	189.40	54.20	17.40	4.06	5.07	6.62	0.50	8.16	0.67	0.15	0.16	2.16	99.15	344.	34.	11.
VA00520	202.90	203.00	51.60	18.10	5.98	5.28	4.09	1.57	9.52	0.69	0.15	0.17	2.39	99.54	689.	40.	10.
VA00521	209.50	209.60	74.50	12.80	1.96	0.83	4.72	1.63	2.39	0.25	0.06	0.05	0.62	99.81	1390.	27.	7.
VA00522	217.90	218.00	52.20	17.10	7.39	4.84	5.44	0.33	8.63	0.71	0.14	0.19	3.00	99 .9 7	180.	29.	13.
VA00523	229.90	230.00	55.80	17.50	4.66	3.97	6.45	0.84	6.34	0.67	0.14	0.15	2.70	99.22	231.	30.	11.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

Hole No. CH88-38 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

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SAMPLE NUMBER	FROM	TO	ZS 102	XAL203	ZCAO	XNGO	ZNA20	ZK20	ZEE203	ZT 102	ZP205	ZHNO	ZLOI	SUM	BA	AI	NACA

VA00524	238.70	238.90	53.60	17.70	5.28	5.79	4.68	1.55	6.99	0.69	0.14	0.25	2.93	99.60	503.	42.	10.
VA00525	251,40	251.50	56.40	17.90	5.06	4.38	2.57	2.20	7.38	0.69	0.13	0.16	2.93	99.80	804.	46.	8.
VA00526	258.20	258.30	54.70	17.80	6.13	4,86	2.64	2.05	7.59	0.68	0.13	0.22	2.93	99.73	591.	44.	9.
VA00527	266.50	266.60	48.30	13.60	11.60	5,55	1.13	0.17	13.00	1.88	0.17	0.21	3.23	98.84	<10.	31.	13.
VA00528	271.10	271.20	49.30	17.20	9.84	2.97	0.77	1.28	12.20	0.68	0.13	0.24	4.85	99.46	. 414.	29.	11.
VA00529	283.80	283.90	67.90	13.30	3.84	1.66	2.63	1.85	4.38	0.26	0.06	0.09	3.00	98.97	811.	35.	6.
VA00530	296.20	296.30	50.80	16.30	7.36	4.32	2.67	1.26	9.25	0.67	0.13	0.18	6.16	99.10	579.	36.	10.
VA00531	308.20	308.30	49.90	15.10	7.95	5.13	2.19	1.21	8.94	0.63	0.11	0.16	8.16	99.48	415.	38.	10.
VA00532	321.50	321.60	49.30	19.00	8.25	4.27	3.22	0.96	7.58	1.40	0.17	0.13	4.00	98.28	1630.	31.	11,
VA00533	328.50	328.60	44.80	15.70	13.30	7.24	1.82	0.35	9.60	1.04	0.13	0.18	4.00	98.16	521.	33.	15.
VA00534	334.20	334.30	72.00	14.30	1.02	1.31	2.52	3.11	2.33	0.29	0.08	0.03	1.93	98.92	2510.	56.	4.
VA00535	340.60	340.70	79.10	12.50	0.81	0.58	1.98	2.87	0.67	0.29	0.07	0.03	1.47	100.37	1480.	55.	3.
VA00536	354.30	354.40	75.00	12.80	0.64	1.32	1.03	3.31	2.47	0.26	0.07	0.05	2.31	99.26	1830.	73.	2.
VA00537	382.90	383.00	71.70	12.60	1.61	1.88	1.08	2.40	4.82	0.30	0.08	0.05	3.00	99.52	2580.	61.	3.
VA00538	437.20	437.30	46.00	14.10	12.10	6.86	2.24	0.29	10.40	1.19	0.11	0.16	4.00	97.45	4790.	33.	14.

Hole No. CH88-38 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	то	XS I 03	ZAL203	ZCAD	XHGO	XNA20	ZK20	ŹFE203	XT 102	ZP205	ZKNO	ZLOI	SUN		BA	AI	NACA
											*******		-					
VA01001	7.50	17.20	39.10	13.70	13.30	5.14	1.15	1.73	10.10	1.26	0.29	0.32	14.20	100.29		342.	32.	14.
VA01002	17.30	28.00	69.60	14.00	2.86	1.05	3.23	2.36	2.73	0.30	0.07	0.08	3.70	99.98		1140.	36.	6.
VA01003	33.00	44.50	69.30	13.40	3.68	1.09	3.19	2.20	2.65	0.29	0.07	0.08	4.08	100.03	÷ .	988.	32.	7.
VA01004	45.00	65.00	66.80	14.60	4.04	0.97	3.37	2.00	3.12	0.34	0.09	0.05	4.63	100.00		1160.	29.	7.
VA01005	82.00	97.00	64.70	14.80	4.75	1.61	2.05	2.60	3.88	0.37	0.14	0.05	5.23	100.18		1030.	38.	7.
VA01006	102.00	138.00	62.60	15.80	5.13	2.87	3.56	1.60	5.75	0.44	0.12	0.10	2.08	100.05		974.	34.	9.
VA01007	162.00	182.00	53.70	17.30	5.83	4.99	5.33	0.88	8.40	0.69	0.15	0.18	2.70	100.15		574.	34.	11.
VA01008	185.00	205.00	52.00	17.50	7.78	4.38	4.85	0.77	8.74	0.75	0.12	0.18	3.08	100.15		335.	29.	13.
VA01009	212.50	234.00	54.90	16.70	6.80	4.09	5.48	0.61	7.19	0.68	0.12	0.18	3.39	100.14		193.	28.	12.
VA01010	251,50	264.00	55.00	16.70	7.37	4.63	1.70	1.56	8.71	0.64	0.12	0.22	3.77	100.42		452.	41.	٩.
VA01011	270.00	280.00	49.60	16.60	10.30	3.32	2.12	1.24	9.57	0.85	0.14	0.22	5.85	99.81		376.	27.	12.
VA01012	282.00	288.00	70.00	14.10	2.58	1.09	3.17	2.66	3.43	0.27	0.07	0.07	2.70	100.14		1230.	39.	6.
9A01013	290.00	314.00	49.00	16.40	8.78	4.37	2.07	1.60	9.49	0.66	0.12	0.21	7.39	100.09		512.	35.	i1.
VA01014	320.00	330.00	46.50	15.90	10.20	6.76	2.96	0.36	10.10	1.16	0.14	0.18	4.00	98.26		766.	35.	13.
VA01015	333.00	343.00	68.50	15.30	2.08	1.88	2.66	2.82	2.79	0.41	0.07	0.07	2.77	99.35		1800.	50.	5.
VA01016	347.00	358.00	72.20	13.60	0.65	1.30	(0.61)	3.98	2.79	0.28	0.07	0.05	3.08	98.61		2000.	81.	1.
VA01017	395.00	409.00	48.50	15.60	6.80	8.61	2.65	2.49	9.20	0.70	0.18	0.19	3.54	98.46		712.	54.	9.
VA01018	410.00	430.00	51.40	17.30	3.81	5.85	3.72	3.60	8.73	0.84	0.24	0.15	2.47	98.11		1140.	56.	8.

Hole No. CH88-38 ALTERED SAMPLES

Page No.

SAMPLE NUMBER	FROM	IO	BA (ppm)	CU (ppm)	ZN (ppm)	AB (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	HN (ppm)	CUZN	EIS	FE
VA01501	110.10	111.40	720.0	87.0	15.0	<0.5	10.0	5.0	3.0	<5.0	6.0	<1.0	1.0	249.0	85.	1.	1.
VA01502	181.80	182.50	220.0	116.0	32.0	<0.5	10.0	14.0	9.0	(5.0	(5.0	<1.0	<1.0	281.0	78.	1.	1.
VA01503	199.30	200.80	390.0	141.0	70.0	<0.5	10.0	26.0	24.0	<5.0	6.0	<1.0	<1.0	668.0	67.	1.	4.
VA01504	201.50	202.00	2190.0	471.0	55.0	0.5	30.0	64.0	28.0	(5.0	15.0	<1.0	2.0	496.0	90.	з.	3.
VA01505	209.90	210.90	1120.0	146.0	49.0	<0.5	15.0	7.0	4.0	<5.0	11.0	<1.0	<1.0	288.0	75.	1.	1.
VA01506	236.00	237.00	630.0	33.0	46.0	<0.5	15.0	7.0	11.0	<5.0	7.0	<1.0	<1.0	553.0	42.	2.	2.
VA01507	237.00	238.00	270.0	50.0	40.0	<0.5	10.0	8.0	9.0	<5.0	16.0	<1.0	<1.0	528.0	56.	2.	2.
VA01508	239.70	240.20	460.0	326.0	103.0	<0.5	15.0	18.0	15.0	<5.0	<5.0	<1.0	<1.0	1041.0	76.	1.	3.
VA01509	252.00	252.50	1210.0	263.0	61.0	<0.5	15.0	21.0	12.0	<5.0	<5.0	<1.0	<1.0	635.0	81.	3.	4.
VA01510	264.40	264.90	1550.0	2428.0	253.0	1.3	30.0	22.0	30.0	<5.0	15.0	2.0	<1.0	802.0	91.	1.	5.
VA01511	315.40	316.40	1010.0	83.0	47.0	<0.5	15.0	15.0	22.0	<5.0	17.0	<1.0	3.0	514.0	64.	2.	3.
VA01512	316.40	317.40	1880.0	177.0	48.0	<0.5	35.0	16.0	30.0	<5.0	17.0	<1.0	2.0	478.0	79.	3.	3.
VA01513	317.40	318.40	2870.0	115.0	401.0	<0.5	55.0	4.0	3.0	12.0	8.0	2.0	2.0	152.0	22.	5.	2.
VA01514	318.40	319.10	2020.0	34.0	55.0	<0.5	30.0	7.0	13.0	6.0	<5.0	<1.0	2.0	330.0	38.	3.	2.
VA01515	321.10	322.40	1520.0	66.0	35.0	<0.5	10.0	20.0	80.0	<5.0	26.0	<1.0	<1.0	570.0	65.	2.	4.
VA01516	322.40	323.40	1310.0	140.0	64.0	<0.5	15.0	47.0	149.0	(5.0	21.0	<1.0	1.0	890.0	69.	2.	6.
VA01517	346.40	348.00 1	1700.0	30.0	54.0	<0.5	35.0	8.0	6.0	5.0	14.0	<1.0	2.0	194.0	36.	2.	1.
VA01518	348.00	349.50 105	1350.0	31.0	36.0	<0.5	25.0	4.0	5.0	12.0	12.0	<1.0	<1.0	173.0	46.	2.	1.
VA01519	349.50	351.001.5	1570.0	108.0	351.0	<0.5	110.0	3.0	2.0	309.0	13.0	2.0	2.0	152.0	24.	2.	1.
VA01520	351.00	352.50 1.5	1560.0	51.0	438.0	<0.5	65.0	4.0	2.0	133.0	17.0	2.0	2.0	134.0	10.	2.	1.
VA01521	352.50	354.00 45	1780.0	39.0	389.0	<0.5	45.0	3.0	2.0	246.0	<5.0	1.0	2.0	176.0	9.	2.	1.
VA01522	354.00	355.5015	1720.0	38.0	138.0	<0.5	20.0	5.0	2.0	97.0	12.0	<1.0	2.0	209.0	22.	2.	1.
VA01523	355.50	357.00 1.5	1310.0	40.0	86.0	<0.5	45.0	2.0	2.0	58.0	13.0	<1.0	1.0	157.0	32.	2.	1.

Hole No. CH88-38

Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CQ (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	HN (ppm)
VA01524	357.00	358.80	1630.0	53.0	168.0	<0.5	25.0	3.0	2.0	94.0	13.0	<1.0	2.0	158.0
A01525	391.40	392.40	2080.0	98.0	1014.0	0.6	75.0	6.0	4.0	34.0	17.0	5.0	2.0	423.0
A01526	392.40	393.40	1840.0	65.0	280.0	1.2	85.0	13.0	24.0	142.0	17.0	2.0	1.0	1197.0
A01527	393.40	394.30	2890.0	172.0	643.0	0.9	70.0	6.0	4.0	314.0	19.0	3.0	2.0	289.0
A01528	434.70	435.10	1080.0	98.0	80.0	<0.5	20.0	22.0	31.0	6.0	14.0	<1.0	<1.0	744.0

Hole No. CH88-38



Summary Log: DDH CH88-39 Location: 48+00 E, 1+00 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: April 11, 1988 Core logged by: J. Pattison 0.0 -3.6 Casing. 3.6 -34.6 Chloritic felsic quartz-feldspar crystal tuff 34.6 -46.9 Feldspar porphyritic gabbro 46.9 -52.7 Chloritic felsic quartz-feldspar crystal lapilli tuff 52.7 -78.1 Feldspar porphyritic gabbro 78.1 -79.2 Felsic quartz-feldspar crystal tuff Gabbro dyke 79.2 -80.8 80.8 - 102.0 Chloritic felsic quartz-feldspar crystal tuff 1-2 % disseminated pyrite over most of the interval. Feldspar porphyritic gabbro 102.0 - 117.1117.1 - 122.5 Chloritic felsic feldspar crystal tuff 122.5 - 127.6Mafic tuff 127.6 - 147.4 Chloritic felsic ash and lapilli crystal tuffs 147.4 - 160.6Mafic ash tuff 160.6 - 163.1 Felsic lapilli tuff Hosts 20 % pyrrhotite and 7 % chalcopyrite over a 1.0 m interval. The sulphides envellope felsic ash and lapilli fragments and may be syngentic. The tuffs above and below the mineralized horizon do not appear to be strongly altered. 163.1 - 167.0 Chloritic felsic feldspar crystal tuff 167.0 - 174.4Mafic tuff 174.4 - 188.0Chloritic felsic ash and crystal tuffs 188.0 - 210.0 Mafic tuff 210.0 - 223.4Gabbro with several fault gouges (Fulford fault splay) 223.4 - 255.3 Felsic quartz feldspar crystal lapilli tuff Moderately to strongly sericitic with 1 to 5 % pyrite as disseminations and thin (< 1.0 cm) bands parallel to foliation. 255.3 - 300.7 Mafic to intermediate tuffaceous sediments 300.7 - 308.8 Feldspar porphyritic gabbro

EOH @ 308.8 m

. r	OPERIT: Chemaint	15 JY		FALCONB DIAMON	RIDGE LIMITED D DRILL LOG)					CH88-39	o: P	age Numb 1	er			
H N	ble Location: 48	3+00 E 1+00 S UTM: 5415951.0	N 431863.3 E						Clai Sect	im No. (ion No.	Chip 1 .: 48+00 E						
A D	zimuth: 210 ip: -50	Elevation: 653 Length: 308.	m .8 m						Logg Dri]	red By: ling Co	J. Pattiso o.: Burwash	n Enter	prises				
C	carted: 6-April-8 ompleted: 11-Apri	1-88							Assa	iyea By:	: Bondar-Cl	egg _a k	XKAL				
P	irpose: To test e	eastern edge of H	PEM anomaly.		DIP TES	STS			LOIG	e 51ze:							
			Length	Azi- muth	Dip	Length	λ M	zi- uth	Dip		•						
	·		53.60 173.70	207.0 207.0	-47.5 -46.5	250.00	20	9.0 -	45.5								
om m)	To (m)		DESCRIPTION			Sam) No	ple 5.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ва) (ррі
D	3.6 OVERBURDEN	1															
6	7.5 FELSIC TUF Light grey Fe-carbona entire sec to core ax core the crystals i sulphides.	F with streaky br the alteration. Stion. Foliation tis. In less defc tuff is comprise n a very fine-gr Lower contact i	cown appearant Rock is bloch is well devo ormed and alt ed of 10% (1.4 cained silice is gradational	ce due ky and eloped ered se 0 mm fe ous ma 1.	to moderate broken over at 65 degrees ctions of the ldspar trix. Nil	VA02	751	5.9	17.4	11.5	n/a	<10	n/a	(10	n/a	n/a	1220
	3.6 7.5 MC	DERATE PERVASIVE	CARBONATIZA	TION.													
	5.0 5.2 Bu or	ill quartz vein. ientation.	Not possible	to mea	sure												
5	34.6 CHLORITIC Medium gre contains u epidotized lapilli-si green to b parallel t fractured contact is	FELSIC QUART2-FF ey well foliated up to 10 % (3 mm l feldspar crysta .zed light grey plack mafic (?) c co foliation. Qua appearance and a s sharp at 40 deg	LDSPAR CRYST: at 65 degree: quartz eyes ils, occasion felsic clast: clasts. Clas: rtz eyes hav re rare belo rees to core	AL TUFF s to co , 10-20 al ash s and v ts are e a cru w 16.4 axis.	re axis. Rock % ash-sized, to ery rare dark streched 8:1 shed highly m. Lower	x VA02 VA03: VA03: XA03: XA03:	752 251 252 253	17.4 32.1 33.1 33.5	34.6 33.1 33.5 34.5	17.2 1.0 .4 1.0	n/a 1 5 1	<10 49 187 51	n/a (5 (5 (5	<10 27 50 54	n/a <1 <1 <1	n/a 10 25 10	1440 1270 2630 2120
	STRUCTURE: Foliation Bedding is	is at 70 degrees at 60 degrees t	to core axis	s at 10 at 14.8	.2 m. R.												

PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-39 2

 From
 To

 (m)
 -----DESCRIPTION------

Sample From То Width Total Cu Рb Zn λq Au Ba Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) {m} (m)

axis at 20.6 m.

Bedding is at 70 degrees to core axis at 20.7 m. Foliation is at 61 degrees to core axis at 22.1 m. Bedding is at 75 degrees to core axis at 25.2 m. 1 Cm fault gouge at 60 degrees to core axis at 28.1 m. Bedding is at 65 degrees to core axis at 31.5 m. Bedding is at 60 degrees to core axis at 32.9 m.

ALTERATION:.

7.5 34.6 WEAK PERVASIVE CHLORITIZATION.

SULPHIDES:.

- 33.1 33.5 5 % fracture controlled pyrite. Pyrite fills hairline fractures and gashes most of which are oriented parallel to foliation at 60 degrees to core axis.
- 14.1 14.2 Irregular quartz vein or pod.
- 15.3 16.2 Feldspar crystal rich beds are recognizable at 70 degrees to core axis. Also, there are several light grey lapilli-sized felsic fragments.
- 16.1 16.4 Mafic ash tuff. Contacts are at 70 degrees to core axis.
- 19.5 888.8 Chlorite-carbonate rich band at 60 degrees to core axis.
- 20.6 20.7 Finely bedded interval.
- 20.7 23.7 Feldspar crystals are coaser (up to 2 mm).
- 26.3 27.1 Weak to moderate fracture controlled thermal biotite alteration gives rock brownish caste.

34.0 34.6 Weak patchy thermal biotite alteration.

34.6 46.9 FELDSPAR PORPHYRITIC GABBRO

Massive, medium green, fine-grained with 10 % (1 to 4 mm white feldspar phenocrysts. Rock is weakly magnetic due to (1-2% disseminated and fracture controlled pyrrhotite. 10 Cm chill margin at upper and lower contacts. 10 cm inclusion of quartz-feldspar crystal tuff. Broken core at lower contact.

46.9 52.7 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF

PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

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(m) (m)

Ba Sample From To Total Cu Pb Zn λg Au Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) (m) (m)

Light green with slight brownish tinge due to weak thermal biotite alteration. Up to 20 % light grey felsic clasts in a siliceous, feldspar crystal rich (15-25%) matrix with up to 5 % (4mm quartz eyes. Felsic lapilli are most common over first 0.2 m of unit and have hazy indistinct margins. Nil sulphides. Thermal biotite alteration increases towards lower contact. Lower contact is at 42 degrees to core axis.

-----DESCRIPTION-----

STRUCTURE:.

Locally, intensely microfractured. Bedding is at 60 degrees to core axis at 48.5 m.

ALTERATION:.

46.9 52.7 WEAK PERVASIVE CHLORITIZATION.

52.7 78.1 FELDSPAR PORPHYRITIC GABBRO

As 34.6 to 46.9 m. Fine-grained chill margin with quartz +/- carbonate veins and pods over first 1.0 m. Nil-1% disseminated and fracture controlled pyrrhotite. Rock is weakly magnetic. Occasional guartz-carbonate vein <1.0 cm wide. Up to 5% very finely diss ilmenite altered to leucoxene. Lower contact is at 80 degrees to core axis. A very irregular block of fine-grained gabbro runs along the core axis for 10 cm below the lower contact.

STRUCTURE:.

??.?-68.2 FAULT ZONE. Rusty rubble over entire section. 0.3 m of lost core. Not possible to measure orientation. May just be weathered out quartz-carbonate vein running parallel to core axis.

68.2 69.2 Blocky, highly fractured core. 0.3 m of lost core

53.7 53.8 Fractured guartz-carbonate vein at 60 degrees to core axis. No sulphides.

69.0 69.2 Inclusion of crystal tuff.

73.5 888.8 Spot of chalcopyrite - pyrrhotite 0.3 mm long.

- 77.0 77.3 Quartz-carbonate vein with irregular upper contact and lower contact at 45 degrees to core axis.
- 78.1 79.2 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light grey-brown and composed of 25-30% <3 mm feldspars and (5% 1-2 mm quartz eyes in a fine-grained siliceous

HOLE No: Page Number CH88-39 3

Width

VA02753 46.9 n/a 2050 52.7 5.8 n/a 21 n/a 102 n/a

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-39 DIAMOND DRILL LOG From To Width Total Pb Zn Sample From То Cu λg Au Ba (m) (m) -----DESCRIPTION-----Sulphides (ppm) (ppm) (ppb) (ppm) No. (m) (m) (m.) (ppm) (ppm) thermal biotite altered matrix. Lapilli-sized siliceous patches, which may be clasts, give rock a mottled appearance. Nil sulphides. Broken core at lower contact. ALTERATION:. 78.1 79.2 WEAK PERVASIVE SERICITIZATION. 79.2 80.8 MAFIC INTRUSIVE As 34.6 46.9 m. 20 cm chill margin at upper contact. Core is blocky over entire section. Especially between 79.4 and 80.7 m where there is 0.5 m of lost core. Fracture surfaces are rusty throughout the interval. Lower contact is irregular but appears to be at 40 degrees to core axis. 80.8 102.0 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light green-brown to grey and quite massive (no bedding VA02754 118 n/a 1300 80.8 84.2 3.4 n/a 16 n/a n/a recognizable and only weakly foliated) suggesting that it VA02755 84.2 102.0 17.8 n/a 44 n/a 30 n/a n/a 1140 may be a flow. Composed of 10% 1-4 mm anhedral to VA03254 84.5 85.5 1.0 1 98 <5 70 <1 10 750 2 45 <5 23 <1 20 720 subhedral feldspar crystals and <5% <2 mm quartz eyes in VA03255 85.5 86.5 1.0 87.5 2 45 ٢5 13 (1 30 820 a weakly to moderately thermal biotite and chlorite VA03257 86.5 1.0 (1 5 1330 altered fine-grained to very fine-grained siliceous VA03256 87.5 88.5 1.0 2 42 ٢5 32 45 <1 20 1340 matrix. Weak to moderate patchy thermal biotite VA03258 88.5 89.0 . 5 2 61 15 alteration and weak to very weak pervasive chlorite VA03259 19 <5 22 <1 5 980 89.0 90.0 1.0 1 (5 1020 alteration. Rusty patches between 80.7 and 81.2 m and VA03260 95.7 96.7 1.0 1 18 <5 40 <1 15 1020 <5 à between 82.8 and 83.5 m and between 89.8 and 90.7 m. VA03261 96.7 97.7 1.0 2 31 33 37 ٢5 35 <1 <5 1060 Lower contact is irregular but appears to be at 70 degrees VA03262 97.7 98.7 1.0 2 to core axis. VA03263 98.7 99.7 1.0 2 86 ٢5 39 <1 5 860 STRUCTURE:. VA03264 99.7 100.4 .7 2 12 ٢5 26 (1 10 1650 <5 1310 Weak foliation at 65 degrees to core axis at 89.8 m. VA03265 100.4 101.3 48 <5 15 <1 .9 4 95 <5 31 (1 5 1140 Bedding (?) is at 70 degrees to core axis at 99.8 m. VA03266 101.3 102.0 .7 2 Bedding (?) is at 60 degrees to core axis at 101.3 m. ALTERATION: . 80.6 85.7 WEAK PERVASIVE CHLORITIZATION. 85.7 88.0 WEAK PERVASIVE SERICITIZATION. 88.0 100.2 WEAK PERVASIVE CHLORITIZATION and weak to moderate patchy thermal biotite alteration. 100.2 101.4 MODERATE PERVASIVE SERICITIZATION. 101.4 102.0 WEAK PERVASIVE CHLORITIZATION. SULPHIDES:. 84.5 85.5 1% fracture controlled and disseminated pyrite. 85.5 89.0 1-2% fracture controlled pyrite. 96.7 100.4 2% disseminated and fracture controlled pyrite with minor pyrrhotite. Sulphides occur in hairline fractures. 100.4 101.3 4% pyrrhotite with minor pyrite as spots up to 4 mm long and fracture fillings rock is weakly magnetic. 101.3 102.0 2% disseminated and fracture controlled pyrite.

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HOLE No: Page Number PROPERTY: Chemainus JV FALCONBRIDGE LIMITED CH88-39 .5 DIAMOND DRILL LOG Ba Sample From 70 Width Total Cu Pb. Zn λg Au From To (ppm) (ppb) (ppm) (m) (m) ----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) 84.2 84.8 MAFIC DYKE. Light green, fine-grained and feldspar porphyritic in the centre. Upper contact is at 65 degrees to core axis and lower contact is at 60 degrees to core axis. 99.8 100.4 Feldspar crystal rich bed. Rock has distinct brownish caste due to thermal biotite alteration and contains 25-30% 2-4 mm feldspar crystals. Upper and lower bedding contacts are sharp at 70 degrees to core axis. 101.3 102.0 Brownish weathered altered section similiar to 99.0 to 100.4 m except fewer feldspar crystals 102.0 117.1 FELDSPAR PORPHYRITIC GABBRO As 34.6 46.9 m. Gabbro is bleached for approximately 1.8 m VA03267 102.0 103.0 1.0 186 <5 81 <1 5 60 1 from lower contact. Lower contact is at 86 degrees to core axis. 106.7 107.0 Irregular guartz-carbonate pod. No sulphide. 107.2 888.8 4.0 cm wide quartz-carbonate vein at 50 degrees to core axis with patchy pyrrhotite and minor chalcopyrite along vein margins. 117.1 122.5 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF n/a 1080 VA02756 117.1 122.5 5.4 n/a 32 n/a 81 n/a Light grey green with a brownish tint due to patchy, streaky thermal biotite alteration. Rock has a banded appearance. Bands are at 60 to 70 degrees to core axis. Rock is composed of 10 % epidotized feldspar crystals and an occasional lapilli-sized felsic fragment in a fine-grained felsic to intermediate matrix. For the most part the tuff is felsic in composition but locally it ranges into intermediate compositions. Nil to 1 % disseminated pyrite. Lower contact is gradational over 10 CB. STRUCTURE:. Bedding is at 65 degrees to core axis at 117.3 m. FAULT GOUGE at 65 degrees to core axis between 117.6 and 117.7 m. Foliation is at 60 degrees to core axis at 118.3 m. Bedding is at 70 degrees to core axis at 119.6 m. Bedding is at 60 degrees to core axis at 121.7 m. ALTERATION:. 117.1 122.8 WEAK PERVASIVE CHLORITIZATION and weak to moderate thermal biotite. 121.8 122.0 STRONG PERVASIVE SILICIFICATION.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

3.0

Sample From

(m)

No.

HOLE No: Page Number CH88-39 6

РЪ

Zn

(ppm) (ppm)

λg

Au

(ppm) (ppb) (ppm)

Яа

Cu

From To (m) (m)

PROPERTY: Chemainus JV

- 122.0 122.5 WEAK PERVASIVE CHLORITIZATION.
- 120.9 888.8 Felsic lapilli with 2 mm thick bleached reaction rim.
- 121.8 122.0 Very siliceous bed of crystal tuff. Upper and lower contacts are sharp at 60 degrees to core axis.

-----DESCRIPTION------

122.5 126.4 MAFIC TUFF

Medium green massive (no bedding recognizable) moderate epidotization centred on feldspar crystals (1-3 mm in diameter which comprise up to 15 % of the rock. Occasional vague, poorly defined lapilli-sized mafic clast. Lower contact is gradational into hornblende bearing tuff below and is placed where hornblende crystals become conspicuous. STRUCTURE:.

Bedding is at 42 degrees to core axis at 126.1 m.

ALTERATION:.

122.5 126.4 WEAK SPOTTY EPIDOTIZATION.

126.1 888.8 5.0 cm thick bed of thermal biotite altered felsic crystal tuff at 42 degrees to core axis.

- 126.4 127.6 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF Slightly darker green than unit above. Rock consists of 20-25% epidotized feldspars in a chloritic matrix. Up to 5 % thin, wispy chlorite spots (1.5 cm long which may be fiamme. Nil to trace disseminated pyrite. Very fine-grained for 8.0 cm at lower contact. Lower contact is sharp at 45 degrees to core axis. ALTERATION:. 126.4 127.6 WEAK SPOTTY EPIDOTIZATION.
- 127.6 139.3 CHLORITIC FELSIC FELDSPAR CRYSTAL LAPILLI TUFF Light grey to green-grey with a variable brownish tint depending on the intensity of the thermal biotite alteration. Composed of 5-10% weakly epidotized feldspar crystals < 3 mm long in a fine-grained weakly to moderately foliated siliceous matrix. Occasional light grey lapilli-sized felsic clast. Best example of these clasts is between 129.0 and 129.5 m where there are clasts up to 2 cm wide with bleached reaction rims 2-3 mm thick (see skeletal core). Nil to trace fracture controlled pyrite. 10.0 cm mafic dyke at 60 degrees to core axis at lower contact. Broken core at contact between

VA02758 127.6 139.3 11.7 n/a <10 n/a 29 n/a n/a 3120

VA02757 122.5 127.6 5.1 n/a 115 n/a 141 n/a n/a 477

Total

Sulphides (ppm)

Width

(m)

To

(m)

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-39 7 DIAMOND DRILL LOG From To Sample From Width Total РЪ To Cu Zn Ra λa Au -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) dyke and felsic ash tuff below. STRUCTURE: . Foliation is at 40 degrees to core axis at 129.8 m. Minor fault gouge at 40 degrees to core axis at 130.5 m. Bedding is at 60 degrees to core axis at 135.7 m. ALTERATION:. 127.6 130.5 WEAK PERVASIVE CHLORITIZATION and weak spotty epidotization. 130.5 139.3 WEAK PERVASIVE CHLORITIZATION and moderate thermal biotite alteration. 139.3 141.0 FELSIC TUFF Light grey fine-grained moderately well foliated at 50-55 VA02759 139.3 147.4 n/a n/a 1330 15 8.1 n/a 44 n/a degrees to core axis (foliation is often kinked). VA03268 139.3 139.8 18 30 1320 . 5 2 7 14 <1 Composed almost entirely of quartz and sericite with ash-sized feldspar crystals and minor wispy chlorite. Trace to 1 % fracture controlled pyrite-pyrrhotite. Lower contact is arbitrarily placed where feldspar crystals become conspicuous. STRUCTURE: . Foliation is at 50 degrees to core axis at 139.6 m. Foliation is at 55 degrees to core axis at 140.9 m. ALTERATION: . 139.3 141.0 WEAK PERVASIVE SERICITIZATION and very weak patchy chlorite. SULPHIDES: . 139.3 139.8 2 % fracture controlled pyrite-pyrrhotite. 141.0 143.2 CHLORITIC FELSIC FELDSPAR CRYSTAL LAPILLI TUFF Similiar to 127.6 to 139.3 m. None of the clasts have VA03270 142.3 143.2 . 9 22 <5 9 <1 10 2440 reaction rims. Trace to 1 % fracture controlled pyrrhotite-pyrite. STRUCTURE: . Foliation is at 50 degrees to core axis at 141.3 m. ALTERATION:. 141.0 143.2 WEAK PERVASIVE CHLORITIZATION and weak pervasive sericitization. SULPHIDES: . 142.3 143.0 1 % fracture controlled pyrrhotite. 142.4 143.2 Rusty fractures run parallel to core axis. 1. 143.2 147.4 FELSIC TUFF Light grey, sericitic, well foliated and rusty fractures VA03271 143.2 144.2 13 <1 50 1750 1.0 2 7 75 1410 ٢5 parallel to core axis are common. Rock is weakly magnetic VA03273 144.2 145.2 1.0 1 16 9 <1 26 9 (1 65 1810 due to weak pyrrhotite mineralization. Lower contact is VA03275 145.2 146.2 1.0 2

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P	ROPERT	Y: Chemainus JV						HOLE N	o: Pa	Ige Numb	er				
			FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-39		8					
From (m)	To (m)	DESCRI	PTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppi	Ba b) (ppi	m)
		gradational.		VA03276	146.2	147.4	1.2	2	41	9	7	(1	75	1700	
		Foliation is at 50 degrees to cor	e axis at 146.1 m.												
		LITERATION .													
		143.2 147.4 MODERATE PERVASIVE SE	RICITIZATION.					•							
		SULPHIDES:.													
		3 % fracture controlled pyrrhotit	e-pyrite.												
		144.0 144.2 Blocky, highly fracture rusty.	red core. Fractures are												
	160.6	111 DT 4 DUDT	i to see												
14/.4	100.0	Medium green with a variable brown	n tint depending on	VA02760	147.4	160.6	13.2	n/a	84	n/a	44	n/a	n/a	1210	
		bedding not recognizable, although	ration. Quite massive, h rock does have a vaque	VA03278 VA03279	156.8	157.8	1.0	1	290	(5)	74	(1	95 45	1250	
		banded appearance below 158.5 m.	Banding is defined by	VA03280	158.8	159.5	.7	2	446	<5	73	(1	30	1570	
		biotite-rich layers < 1.0 cm thic	k. Foliation is poorly	VA03282	159.5	160.2	.7	2	718	<5	70	1	60	1490	
		epidotized feldspar crystals in a	to 25 % < 3 mm fine-grained chlorite	VAU3283	160.2	160.6	.4	4	2100	() .	104	4	100	1120	
		rich thermal biotite altered matr:	ix. Upper 0.6 m of the												
		unit contains many quartz-carbona	te veins and pods and its												
		intermediate to felsic lapilli-si	ate. Vague, fine-grained zed fragments occur												
,		locally.													
		Band is at 55 degrees to core axis	s at 148.4 m.												
		Band is at 60 degrees to core axis	s at 159.8 m.												
		ALTERATION: . 147.4 160.6 WEAK PERVASIVE CHLORI'	TIZATION . weak to												
		moderate patchy therma	al biotite alteration and												
		weak epidotization ce	ntred on feldspar												
		crystals.													
		SULPHIDES:.													
		147.4 158.8 Trace to 1% disseminat	ted and fracture												
		158.8 160.2 1 to 2 % disseminated	and fracture controlled												
		pyrrhotite and pyrite	and trace very finely												
		disseminated chalcopy	cite.												
		chalcopyrite.	Notice and price and 1 4												
			a C												
160.6	163.1	FELSIC LAPILLI TUFF	Å start som												
		Medium grey, composed of 5 % ash-	sized feldspar crystals	VA03269	160.6	161.0	.4	6	1139	<5	51	(1	15	1930	
		and up to 10 % lapilli-sized fine- in a weakly sericitic fine-grain	-grained felsic fragments ed matrix. Lower contact	VA03272 VA03274	161.0	161.5	.5	11 22 1	871 2900	31	зь 618	5	45 110	2630 1670	

P	ROPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE CH88-3	No: P 9	age Num 9	ber			
From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphide	Cu s (ppm)	Pb (ppm	Zn) (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)
		is at 78 degrees to core a STRUCTURE: Foliation is kinked throug Foliation is at 60 degrees Bedding (?) is at 60 degree	axis. yh most of the unit. s to core axis at 161.3 m. ses to core axis at 162.6 m.	VA03277 VA03281	162.0 162.5	162.5 163.1	.5 .6	30 13	80700 8100	42 <5	5800 437	33 3	280 150	910 1120
		ALTERATION:. 160.6 163.1 WEAK PERVASIV	E SERICITIZATION.											
		SULPHIDES:. 160.6 161.0 5% pyrrhotite chalcopyrite. planes and as	, 1% pyrite and trace Sulphides occur along foliation fracture fillings.											
		<pre>161.0 161.5 10% pyrrhot1t(161.5 162.0 15-20% pyrrhot Sulphides are veins and pod degrees to con planes and as 162.0 162.5 20% pyrrhotit(</pre>	and 1% chaicopyrite as above. tite and 4% chalcopyrite. associated with quartz-carbonate s up to 4 cm wide at 70-90 ce axis and along foliation fracture fillings. a and 8-10% chalcopyrite.											
		Sulphides enve forming a net 162.5 163.1 10% pyrrhotite surround class planes, as fra	ellope ash and lapilli fragments texture. and 3% chalcopyrite. Sulphides ts and occur along foliation acture fillings and disseminations					• •						
163.1	167.0	CHLORITIC FELSIC FELDSPAR	CRYSTAL TUFF 3.9	WD 00761		167.0	2.0	- 1-		- 1-	50		- /-	826
		Light grey green with up to crystals. Bedding recogniz be intermediate in composi- Lower contact is at 40 deg STRUCTURE:. Bedding is at 55 degrees to Bedding is at 50 degrees to Foliation is at 50 degrees to	to 10 % ash-sized feldspar table in a couple of places. May titon over the first 0.3 m. grees to core axis. to core axis at 163.8 m. to core axis at 164.5 m. s to core axis at 165.3 m.	VA02761 VA03284 VA03285 VA03286 VA03287	163.1 163.1 165.0 166.0 166.5	167.0 169.1 166.0 166.5 167.5	3.9 6.0 1.0 .5 1.0	h/a 1 1 1	34 124 31 42 279	n/a (5 (5 (5 (5	58 68 69 107 68	n/a <1 <1 <1 <1	n/a 75 30 75 70	826 860 1120 1630 1800
		ALTERATION:. 163.1 167.0 WEAK PERVASIVE	E CHLORITIZATION.											
		SULPHIDES:. 166.0 166.5 Trace sphaleri wide band alor quartz-carbona axis.	ite. Sphalerite occurs as a 2 mm ng the edge of 2.5 cm wide ate vein at 40 degrees to core											
			1. 4											

167.0 174.4 MAFIC TUFF

Medium green, fine-grained with 10-15% 1-3 mm weakly epidotized feldspars. Very massive between 168.2 and 170.0 m and is likely a flow. Less homogenious in

76 n/a n/a 974 VA02762 167.0 174.4 7.4 n/a 280 n/a

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PROPERTY: Chemainus JV

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From

VA02763 174.4 188.0 13.6

To

Sample

HOLE No: Page Number CH88-39 10

Pb

n/a

Zn

46 n/a

λg

Au

n/a 1040

Ba

From	To	
· (m)	(m)	DESCRIPTION

appearance below 170.0 m but no firm evidence that it is tuffaceous. Foliation very poorly developed. Nil sulphides. Lower contact is gradational over 10.0 cm.

Width Cu (m) Sulphides (ppm) No. (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm)

58

Total

n/a

۷. 8 174.4 176.2 WEAKLY CHLORITIC FELSIC TUFF Grey-green fine-grained, weakly foliated at 40-50 degrees to core axis. With rare guartz eyes <1 mm in diameter. Felsic in composition throughout most of the interval but minor chloritic zones near the top may be intermediate in composition. Blocky, highly fractured core throughout. Nil sulphides. Lower contact arbitrarily placed where quartz eyes become conspicuous. ALTERATION: .

174.4 176.2 WEAK PERVASIVE CHLORITIZATION.

176.2 181.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Lighter green than above unit. Composed of 5-10% 1-2 mm feldspar crystals and 2 to 5% 1-3 mm quartz eyes in a very fine-grained, almost aphanitic matrix. Most feldspar crystals are epidotized. Rock is moderately microfractured. Microfractures filled with sericite. Rock is relatively massive bedding is not recognizable and foliation is only weakly developed at 65 degrees to core axis. Lower contact is gradational.

176.2 181.3 WEAK PERVASIVE CHLORITIZATION.

181.3 188.0 WEAKLY CHLORITIC FELSIC TUFF

Green-grey to brown due to weak to moderate thermal. biotite alteration. Unit is a mixture of ash, feldspar crystal, quartz eye and lapilli tuffs and may range into intermediate compositions. Bedding only recognized in one place. Nil sulphides. Lower contact is gradational. STRUCTURE: .

Blocky, highly fractured core between 185.4 and 185.9 m. 0.2 m of lost core. Probably a fault at a low angle to the core axis.

Bedding (?) is at 52 degrees to core axis at 186.3 m. 1.0 Cm wide fault gouge or fracture runs along core axis between 186.7 and 187.3 m. Gouge is filled with a mustard yellow clay.

ALTERATION: .

181.3 188.0 WEAK PERVASIVE CHLORITIZATION.

188.0 210.0 MAFIC TUFF

Massive medium green feldspar crystal tuff or flow.

172 n/a n/a 1290 VA02764 188.0 210.0 22.0 164 n/a n/a

PROPERTY: Chemainus JV

From To

(m)

(m)

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-39 11

Sample From To Width Total Cu Рb Zn λά Au Ba Sulphides (ppm) (mog) (dog) (mog) (mog) (mog) No. (m) (m) (m.)

-----DESCRIPTION------

Comprised of up to 15 % 1-2 mm epidotized feldspars in a fine-grained chloritic matrix. Massive non bedded nature of rock suggests that it is a flow, but the variable feldspar content and weak thermal biotite alteration indicates that it is tuffaceous. Below 198.0 m feldspars become much less conspicuous, thermal biotite alteration increases and the rock takes on a definite tuffaceous appearance. 10.0 Cm bed of massive light green cherty siltstone at lower contact. Upper contact of this bed is at 78 degrees to core axis and core is broken at lower contact.

STRUCTURE:.

1.0 Cm fault gouge at 35 degrees to core axis at 188.1 m. Gouge is filled with mustard yellow clay. 0.5 Cm fault gouge runs parallel to core axis between 190.8 and 191.0 m. Fault is filled with mustard yellow clay. Several inclusions of felsic crystal tuff up to 20 cm long. Lower contact is a 10 cm fault gouge at 70 degrees to core axis. ALTERATION:.

188.0 210.0 WEAK PERVASIVE CHLORITIZATION and weak to moderate thermal biotite alteration.

199.5 199.9 Quartz-carbonate flooded zone with associated chlorite clots. Nil sulphides.

205.5 206.0 Two fine-grained lapilli-sized felsic fragments

210.0 223.4 MAFIC INTRUSIVE

Dark green, fine-grained and crushed with up to 3 % finely disseminated ilmenite. Not feldspar porphyritic. If not for the ilmenite and hematite alteration it might be a mafic tuff or flow. STRUCTURE:.

SIRUCTURE:

20 Cm fault gouge at 60 degrees to core axis at 212.9 m. Rock is broken and blocky and there are numerous minor fault gouges for 1.0 m below the fault.

Rock has crushed tectonized appearance and there are numerous fracture and gashes filled with a milky white mineral that does not fizz in HCl between 212.9 and 219.0 m.

Fault breccia at 50 degrees to core axis between 219.8 and 220.2 m. Breccia is composed of angular clasts of quartz +/- carbonate and felsic crystal tuff $(1-40 \text{ mm wide in a grey-green clay-rich matrix.$

Minor fault gouge at 50 degrees to core axis at 222.8 m and rock is crushed from here to lower contact.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-39 12 DIAMOND DRILL LOG From To Sample From Width Total To Cu Pb Zn λg (m) -----DESCRIPTION------(m) No. (m) (m) (m.) Sulphides (ppm) (ppm) (ppm) (ppm) ALTERATION:. 210.0 214.0 WEAK PERVASIVE CHLORITIZATION and local weak fracture controlled Fe-carbonate alteration. 214.0 888.8 WEAK FRACTURE CONTROLLED HEMATIZATION and local weak fracture controlled Fe-carbonate alteration. 214.3 214.7 Inclusion of felsic crystal tuff. Upper contact is a slip at 50 degrees to core axis and lower contact is a slip at 85 degrees to core axis. 218.8 219.0 Inclusion of felsic crystal tuff. Lower contact is a slip at 65 degrees to core axis core is broken at upper contact. 223.2 223.3 Inclusion of felsic crystal tuff. Upper contact is a slip at 37 degrees to core axis and lower contact is slip at 60 degrees to core axis. 223.4 255.3 FELSIC OUARTZ FELDSPAR CRYSTAL LAPILLI TUFF Light grey moderately to strongly sericitic with < 5% 1-3 VA03288 223.4 224.4 1.0 16 ٢5 38 <1 1 mm guartz eyes, <5% ash-sized feldspar crystals and nil to VA02765 223.4 255.3 31.9 n/a 119 n/a 444 n/a n/a 2030 760 10 % ash to lapilli-sized fine-grained felsic fragments. VA03289 224.4 225.4 1.0 2 27 <5 23 <1 VA03290 225.4 226.4 Rock has a crushed, sheared appearance and foliation is 1.0 3 14 22 58 <1 contorted over the entire interval. Quartz eyes are VA03291 226.4 227.4 1.0 3 12 16 100 1 absent above 226.7 m and are rare below 230.0 m. Lower 3 10 17 33 <1 VA03292 227.4 228.4 1.0 35 <1 contact is sharp but irregular at about 62 degrees to core VA03293 228.4 229.4 .3 8 7 1.0 100 18 10 75 1 axis. VA03294 229.4 230.4 1.0 3 VA03295 230.4 231.4 17 83 1.0 4 9 1 VA03296 231.4 232.4 29 41 76 1 STRUCTURE: . 1.0 4 19 81 (1 FAULT ZONE at 30 to 80 degrees to core axis between 225.0 VA03297 232.4 233.4 1.0 3 22 (1 and 226.0 m. VA03298 233.4 234.4 3 18 17 33 1.0 130 2040 37 VA03299 234.4 235.4 1.0 3 41 14 1 43 Numerous minor fault gouges at 40 to 90 degrees to core VA03300 235.4 236.4 1.0 3 30 21 1 axis between 226.0 and 227.7 m. Largest is 10 cm wide at 18 22 50 1 VA03301 236.4 237.4 1.0 4 3 75 15 58 2 200 1650 60 degrees to core axis at 227.6 m. VA03302 237.4 238.4 1.0 VA03303 238.4 239.4 3 21 21 55 <1 1.0 Foliation is at 20 degrees to core axis at 228.3 m. VA03304 239.4 240.2 .8 3 29 43 256 1 200 1280 <1 110 1220 Foliation is at 37 degrees to core axis at 228.7 m. VA03305 240.2 241.0 . 8 4 21 32 96 192 (1 Bedding (?) is at 40 degrees to core axis at 230.0 m. 40 VA03306 241.0 242.0 1.0 4 26 3 Mm fault gouge at 60 degrees to core axis at 230.7 m. 125 1210 VA03307 242.0 243.0 43 74 319 1 1.0 5 21 370 <1 Foliation runs nearly parallel to (ie. < 25) to core axis VA03308 243.0 244.0 1.0 4 44 218 (1 between 230.7 and 236.3 m. VA03309 244.0 245.0 1.0 5 27 18 664 0.5 Cm wide bed of very fine-grained ash with tiny guartz VA03310 245.0 246.0 1.0 10 73 50 1 eyes is at 10 degrees to core axis at 235.3 m. VA03311 246.0 247.0 1.0 6 25 18 184 (1 Several minor fault gouges at 35 to 65 degrees to core VA03312 247.0 248.0 5 32 15 181 <1 1.0 axis between 236.3 and 236.6 m. 5 22 17 181 <1 VA03313 248.0 249.0 1.0 (1 5.0 Cm fault gouge at 40 degrees to core axis at 237.4 m. VA03314 249.0 250.0 7 38 59 790 1.0

Au

60 470

65 1080

50 1190

95 2340

85 2920

80 2590

710

1690

50 1070

90 1290

95 2690

90 2240

70 2200

60 1440

55 1210

85 1310

40 1360

75 1340

15 1380

25 2000

50 2650

55 3850

Ba

(ppb) (ppm)

Π

. F	ROPERT	Y: Chemainus JV							HOLE N	o: Pa	age Numi	ber			
				FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-39		13				
From (m)	To (m)	eta de la composition Tra da Alexandre de Tra d e	DESCR	IPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
		0.5 Cm thick py	rite bands or bed	ls are at 40 degrees to	VA03315	250.0	251.0	1.0	6	27	49	427	1	110	3240
		core axis at 23	7.4 m.		VA03316	251.0	252.0	1.0	8	96	81	963	1	130	2910
		Foliation is at	55 degrees to co	ore axis at 239.3 m.	VA03317	252.0	253.0	1.0	6	207	191	5200	1	130	3230
		Foliation is at	45 degrees to co	ore axis at 240.5 m.	VA03318	253.0	254.0	1.0	7	167	142	1854	1	75	2060
		Minor fault at	40 degrees to cor	e axis at 240.9 m.	VA03321	254.0	255.3	1.3	5	117	91	1269	1	60	2070
		Foliation is at	25 degrees to co	ore axis at 243.1 m.											
		5.0 Cm fault go	uge at 50 degrees	to core axis at 246.2 m.											
		Foliation at 30	degrees to core	axis at 248.0 m.											
		Foliation is at	: 38 degrees to co	ore axis at 253.3 m.											
		ALTERATION: .													
		223.4 225.0 WEA	K FRACTURE CONTRO	LLED CHLORITIZATION and					<i>,</i>						
		225.0 236.5 STR	ONG PERVASIVE SER	TCITIZATION and very weak											
		ch]	oritization plus	occasional spot of											
		mar	iposite.												
		236.5 245.0 STR	ONG PERVASIVE SER	ICITIZATION and weak											
		chl	oritization plus	occasional spot of											
		mar	iposite.												
		245.0 250.0 MOD	ERATE PERVASIVE S	SERICITIZATION WEAK											
		PED DOLLO NOD	VASIVE CHLORITIZA	TTON Several natches of											
		100	inosite un to 2 c	m long along foliation											
		nla	nes	a long thong lottetion											
		250 0 255 3 MOD	FRATE DERVICTVE S	FRICITIZATION WEAK											
		PER	VASIVE CHLORITIZA	TION.											
		SULPHIDES:.													
		223.4 224.4 1 %	fracture control	led and disseminated pyrite											
		224.4 230.0 2-3	% disseminated a	nd banded pyrite. Bands											
		are	parallel to foli	ation.											
		230.0 241.5 3-4	% pyrite as abov	'e.											
		241.5 245.0 5 %	pyrite in thin 1	-2mm bands parallel to											
		fol	iation and in ash	to lapilli-sized clasts											
		and	disseminated.												
		245.0 246.0 8 %	pyrite as above.												
		245.4 888.8 2.0	cm felsic clast	with semi-massive pyrite.											
		245.9 888.8 1.0	cm wide band (be	d?) of semi-massive pyrite											
		at	20 degrees to cor	e axis.											
		246.0 255.3 5-6	% pyrite dissemin	ated, in thin bands						· •					
		Dar	allel to foliatio	n and as ash to	e de la forte										
		lap	illi-sized clasts	•											
255.3	300.7	MAPIC TO INTERM	EDIATE TUFFACEOUS	SEDIRENTS	W100755	065 -	000 C	04 T	_ /=	100	- 1-	64	-/-		0 4 0
		rine-grained, m	oderately well fo	liated, medium green with	VAU2766	205.3	280.0	24.7	n/a	132	n/a	. 04	11/a.	n/a 20	1040
		prownish tint d	ue to moderate th	ermai blotite alteration.	VA03323	405.3	456.3	1.0	1	132	11	15		. 40	740
		kipped up beds	or light grey-gr	een slitstone (1.0 cm	VA03319	212.4	215.4	1.0		100	14	64		10	74V 600
		wide occur over	the first 0.5 m	or the unit and dark	VA03320	273.4	274.0	.6	. 1	192	72	64	u .	10	990
		green chloritic	mud clasts up to	4 mm long occur	VA03322	274.0	275.0	1.0		722	y _/-	6U E 0	~/~ (1	40	1620
		throughout the	first 1.7 m of th	e unit. Then the rock	VA02767	280.0	300.7	20.7	n/a	82	n/a	27	n/a	n/a	1010
		becomes more ma	ssive but occasi	onal beds of silt (in some											

1792. 1929 - 1929

PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-39 14

From To

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(m) (m)

-----DESCRIPTION-----

Width Sample From To Total Cu PЪ Zn λg Au Ba No. (m) (m) (m.) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

cases they are laminated) < 2.0 cm thick occur at low angles to the core axis throughout the unit. Lower contact is a slip at 20 degrees to core axis. STRUCTURE:.

Foliation is at 53 degrees to core axis at 256.9 m. Foliation is at 43 degrees to core axis at 258.2 m. Minor fault at 30 degrees to core axis at 259.0 m. Bedding is at 10 degrees to core axis at 261.3 m. Bedding is at 16 degrees to core axis at 270.0 m. Silt beddings run close to core axis (<10) between 277.5 and 278.3 m. Beds are offset by numerous microfaults at 50-60 degrees to core axis. One bed appears to FINE DOWN HOLE.

Soft sediment deformation at 277.3 m. Slip at 30 degrees to core axis at 278.5 m. Bedding parallel to core axis at 284.4 m. Minor fault gouge at 60 degrees to core axis at 285.2 m. Minor fault at 40 degrees to core axis at 288.0 m. 1.0 Cm fault gouge at 44 degrees to core axis at 290.0 m. Slip runs parallel to degrees to core axis between 291.4 292.0 m.

Bedding is parallel to core axis at 292.0 m. Bedding is at 30 degrees to core axis at 294.8 m. Scour mark on uphole margin of bed indicates TOPS DOWNHOLE. Bedding is at 37 degrees to core axis at 296.0 m. Bedding is at 60 degrees to core axis at 297.5 m. Bedding runs parallel to core axis at 299.4 m. Blocky, highly fractured core over last 50 cm of unit. 1.0 cm fault gouge 30 cm to core axis.

ALTERATION:.

255.3 WEAK PERVASIVE CHLORITIZATION and weak pervasive thermal biotite alteration.

SULPHIDES:.

273.4 274.0 0.25 % chalcopyrite and trace sphalerite in two quartz-carbonate veins (1.0 cm thick at 20 to 25 degrees to core axis. Specks of chalcopyrite in quartz-carbonate veinlet at 290.6 m.

300.7 308.8 FELDSPAR PORPHYRITIC GABBRO

Dark green, blocky fine-grained feldspar porphyritic over first 3.5 m but becomes medium-grained and massive with depth. 1-2 % disseminated ilmenite.

	SAMPLE NUMBER	FROM	TO	XS 102	ZAL203	XCAO (ZMG0	ZNA20	XK20	ZFE203	21102	ZP205	ZHNO	XLO I	SUM	ВА	AI	NACA
								-				***						*********
	VA02251	12.20	12.40	72.60	13.70	1.33	1.17	3.78	2.51	2.33	0.24	0.06	0.03	2.08	99.83	113	0. 42	. 5.
	VA02252	25.40	26.00	69.30	14.80	2.08	2.16	3.60	2.08	3.53	0.35	0.08	0.07	2.31	100.36	113	0. 43	. 6.
	VA02253	48.00	48.30	67.60	15.50	3.41	2.52	0.73	3.19	3.92	0.34	0.07	0.17	2.39	99.84	178	0. 58	. 4.
	VA02254	85.10	85.40	68.10	15.80	1.04	2.20	4.06	3.08	3.25	0.36	0.07	0.09	2.23	100.28	169	0. 51	. 5.
	VA02255	95,40	95.60	69.50	14.90	2.18	1.40	4.89	2.02	3.51	0.34	0.08	0.07	1.47	100.36	98	7. 33	. 7.
	VA02256	122.30	122.40	69.20	14.40	1.96	1.95	4.59	2.09	3.35	0.34	0.09	0.08	1.70	99.75	234	0. 38	. 7.
	VA02257	123.60	123.80	53.40	17.50	4.30	5.73	3.93	1.29	9.13	0.68	0.14	0.22	3.47	99.79	63	9. 46	. 8.
	VA02258	126.80	126.90	53.30	16.60	7.01	5.55	3.60	0.63	9.64	0.66	0.15	0.24	3.16	100.54	38	1. 37	. 11.
	VA02259	132.90	133.20	70.20	15.20	2.65	0.98	2.69	3.28	2.91	0.32	0.09	0.06	1.77	100.15	298	0. 44	. 5.
	VA02260	140.50	140.60	73.80	12.60	2.98	1.36	2.52	2.40	1.62	0.27	0.06	0.06	2.54	100.21	141	0. 41	. 6.
	VA02261	150.90	151.30	55.20	18.60	4.63	3.64	1.96	2.66	9.16	0.75	0.13	0.16	3.08	99.97	114	0. 49	. 7.
	VA02262	159.10	159.20	54.50	18.00	4.37	2.98	0.99	3.62	9.55	0.72	0.14	0.14	3.54	98.55	167	0. 55	j. 5.
	VÃ02263	164.50	165.00	74.60	11.50	2.70	1.36	2.17	1.93	3.34	0.27	0.07	0.08	2.39	100.41	138	0. 40	. 5.
	0407764	171.70	171.90	51,90	18.00	6.55	5.19	1.94	0.79	10.70	0.73	0.11	0.21	4.08	100.20	43	8. 41	. 8.
	UA02265	-180 50	180 70	70.40	13 90	2 66	1 61	2 90	7 13	3 11	0.29	0.07	0.05	2.47	99.60	102	0. 40	. 6.
	11402200	100,50	100170	56 20	17 50	6.00	3 20	2.75	1 24	0 77	0.65	0.12	0.18	3 68	99.60	75	8. 35	i. 9.
	VHV2266	133.60	173.70	J0.20	17.50	0.00	3.40	2.52	1.47	0.77		0.15	0.10	0.00	100 50		7 75	1 12
eri L	VA02267	210.60	211.00	49.80	11.30	9.08	7.00	2.16	0.14	14.60	1.83	0.15	0.24	3.70	100.30		, ou	
	VA02268	221.20	221.40	46.20	12.30	5.84	3.80	2.15	0.60	16.40	2.97	0.23	0.19	7.77	98.40	34	2. 30	
	VA02269	231.60	231.80	74.20	12.40	0.26	0.55	0.11	3.40	3.67	0.29	0.08	0.01	3.77	98.74	341	0. 91	. 0.
	VA02270	240.10	240.20	69.80	13.90	1.29	1.50	0.11	3.72	3,71	0.32	0.09	0.06	4.00	98.50	132	0. 79	. 1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major elements)

Hole No. CH88-39 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	XT 102	XP205	ZHNO	ZLOI	SUN	J	3A	AI	NACA
• • • • • • • • • • • • • • • • • • •							·	*******			•							
VA02751	5.90	17.40	72.90	12.90	1.84	1.25	2.96	2.41	2.70	0.27	0.06	0.04	2.39	99.72	. 1	220.	43.	5.
VA02752	17.40	34.60	71.30	14.20	1.47	2.01	3.91	1.81	2.82	0.33	0.07	0.07	1.77	99.76	1	440.	42.	5.
VA02753	46.90	52.70	71.90	14.10	2.30	-1.25	3.34	2.37	2.59	0.32	0.07	0.11	1.23	99.58		2050.	39.	6.
VA02754	80.80	84.20	71.00	14.30	1.19	1.00	5.43	1.91	3.20	0.33	0.07	0.07	1.77	100.27	. 1	300.	31.	7.
VA02755	64.20	102.00	70.70	13.90	3.02	0.89	3.56	2.22	2.92	0.31	0.06	0.06	2.00	99.64	1	1140.	32.	7.
VA02756	117.10	122.50	67.90	14.40	3.39	1.93	4.52	1.21	4.28	0.39	0.11	0.11	1.93	100.17	. 1	080.	28.	8.
VA02757	122.50	127.60	52.80	16.90	5.43	5.65	3.65	0.87	9.55	0.68	0.11	0.23	3.70	99.57		477.	42.	9.
VA02758	127.60	139.30	65.90	15.50	3.57	1.73	2.27	2.93	4.05	0,35	0.09	0.08	2.93	99.40	. 3	120.	44.	6.
VA02759	139.30	147.40	71.30	12.90	3.29	1.07	1,38	2.96	2.97	0.26	0.06	0.07	2.70	98.96	1	330.	46.	5.
VA02760	147.40	160.60	56.40	18.20	6.04	2.38	2,93	2.67	7.02	0.54	0.13	0.14	2.93	99.38	1	210.	36.	9.
VA02761	163.10	167.00	71.70	12.00	3.55	1.53	2,28	1.50	4.30	0.31	0.07	0.11	2.08	99.43		826.	34.	6.
VA02762	167.00	174.40	49.10	15.80	11.90	2.53	2.58	1.82	6.83	0.56	0,12	0.19	8.85	100.28		974.	23.	14.
VA02763	174.40	188.00	66.30	15.50	4.22	1.70	3.33	1.87	4.39	0.35	0.10	0.10	2.31	100.17	1	040.	32.	8.
VA02764	188.00	210.00	54.20	18.00	6.96	2.92	1.99	2.80	7.67	0.60	0.12	0.15	3.70	99.11	1	290.	39.	9.
VA02765	223.40	255.30	70.20	13.20	0.79	1.40	0.10	3.47	4.65	0.36	0.10	0.05	4.62	98.94	-	2030.	85.	1.
VA02266	255.30	280.00	47.90	16.00	5.57	9.27	2.33	2.57	9.51	0.68	0.17	0.20	4.00	98.20		848.	60.	8.
VA02767	280.00	300.70	49.10	15.80	6.39	7.60	2.20	3.69	9.56	0.80	0.18	0.19	3.85	99.36	1	1670.	57.	9.

HOLE NO. CH88-39 ALTERED SAMPLES

Page No.

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	MN (ppm)	CUZN	ETS	FE
VA03251	32.10	33.10	1270.0	49.0	27.0	<0.5	10.0	6.0	7.0	<5.0	<5.0	<1.0	<1.0	384.0	64.	1.	1.
VA03252	33.10	33.50	2630.0	187.0	50.0	<0.5	25.0	11.0	1.0	<5.0	14.0	<1.0	1.0	545.0	79.	5.	3.
VA03253	33.50	34.50	2120.0	51.0	54.0	<0.5	10.0	5.0	3.0	<5.0	<5.0	<1.0	<1.0	476.0	49.	1.	1.
VA03254	84.50	85.50	750.0	98.0	70.0	<0.5	10.0	21.0	40.0	<5.0	8.0	<1.0	<1.0	903.0	58.	1.	4.
VA03255	85.50	86.50	720.0	45.0	23.0	<0.5	20.0	5.0	4.0	<5.0	10.0	<1.0	<1.0	243.0	66.	2.	2.
VA03257	86.50	87.50	820.0	45.0	13.0	<0.5	30.0	4.0	3.0	<5.0	19.0	<1.0	1.0	230.0	78.	2.	1.
VA03256	87.50	88.50	1330.0	42.0	32.0	<0.5	5.0	4.0	3.0	<5.0	12.0	<1.0	<1.0	326.0	57.	2.	2.
VA03258	88.50	89.00	1340.0	61.0	45.0	<0.5	20.0	7.0	3.0	15.0	18.0	<1.0	<1.0	311.0	58.	2.	2.
VA03259	89.00	90.00	980.0	19.0	22.0	<0.5	5.0	3.0	2.0	<5.0	12.0	<1.0	<1.0	241.0	46.	1.	1.
VA03260	95.70	96.70	1020.0	18.0	40.0	<0.5	<5.0	6.0	3.0	<5.0	16.0	<1.0	1.0	422.0	31.	1.	2.
VA03261	96.70	97.70	1020.0	31.0	33.0	<0.5	15.0	5.0	3.0	<5.0	9.0	<1.0	<1.0	335.0	48.	2.	2.
VA03262	97.70	98.70	1060.0	37.0	35.0	<0.5	<5.0	6.0	4.0	<5.0	12.0	<1.0	1.0	398.0	51.	2.	2.
VA03263	98.70	99.70	860.0	86.0	39.0	<0.5	5.0	10.0	7.0	<5.0	8.0	<1.0	1.0	351.0	69.	2.	2.
VA03264	99.70	100.40	1650.0	12.0	26.0	<0.5	10.0	3.0	3.0	<5.0	10.0	<1.0	1.0	230.0	32.	2.	1.
VA03265	100.40	101.30	1310.0	48.0	15.0	<0.5	<5.0	5.0	3.0	<5.0	7.0	<1.0	2.0	186.0	76.	4.	1.
VA03266	101.30	102.00	1140.0	95.0	31.0	<0.5	5.0	8.0	5.0	<5.0	6.0	<1.0	1.0	220.0	75.	2.	1.
VA03267	102.00	103.00	60.0	186.0	81.0	<0.5	5.0	31.0	69.0	<5.0	13.0	<1.0	<1.0	706.0	70.	1.	4.
VA03268	139.30	139.80	1320.0	18.0	14.0	<0.5	30.0	4.0	3.0	7.0	15.0	<1.0	2.0	257.0	56.	2.	1.
4402270	142 30	143 20	2440.0	22.0	9.0	(0.5	10.0	4.0	3.0	<5.0	9.0	<1.0	3.0	185.0	71.	1.	1.
1403270	143 20	144.20	1750.0	13.0	7.0	(0.5	50.0	5.0	1.0	5.0	125.0	<1.0	1.0	144.0	65.	2.	1.
11403273	144 20	145 20	1410.0	16.0	9.0	(0.5	75.0	7.0	3.0	<5.0	226.0	<1.0	2.0	190.0	64.	1.	. 1.
VHV34/3	145 20	113120	1010 0	26.0		/0.5	65.0	4.0	2.0	9.0	14.0	<1.0	2.0	96.0	87.	2.	1.
VAU32/3	143.20	140.20	1810.0	40.V	7.0	(0.5	25.0		2.7	0.0	14.0	(1.0	v	145.0	85.	2.	. 1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

Hole No. CH88-39

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppa)	AG (ppm)	AU (ppb)	CO (ppw)	NI (ppm)	РВ (ррш)	AS (ppm)	CD (ppm)	HQ (ppm)	HN (ppm)	CUZN	ets	FE
		*********												······································			
VA03278	156.80	157.80	770.0	290.0	90.0	<0.5	95.0	22.0	16.0	<5.0	20.0	<1.0	2.0	876.0	76.	1.	4.
VA03279	157.80	158.80	1250.0	204.0	74.0	<0.5	45.0	22.0	16.0	<5.0	8.0	<1.0	<1.0	787.0	73.	1.	4.
VA03280	158.80	159.50	1570.0	446.0	73.0	<0.5	30.0	23.0	21.0	<5.0	12.0	<1.0	<1.0	790.0	86.	2.	5.
VA03282	159.50	160.20	1490.0	718.0	70.0	0.6	60.0	17.0	15.0	<5.0	11.0	<1.0	1.0	788.0	91.	2.	4.
VA03283	160.20	160.60	1120.0	5100.0	164.0	2.0	100.0	24.0	17.0	<5.0	15.0	<1.0	9.0	1045.0	97.	4.	5.
VA03269	160.60	161.00	1930.0	1139.0	51.0	<0.5	15.0	32.0	18.0	<5.0	13.0	<1.0	3.0	496.0	96.	6.	5.
VA03272	161.00	161.50	2630.0	871.0	36.0	<0.5	45.0	22.0	16.0	<5.0	13.0	<1.0	4.0	365.0	96.	11.	5.
VA03274	161.50	162.00	1670.0	12900.0	618.0	4.7	110.0	90.0	24.0	31.0	7.0	6.0	45.0	855.0	95.	22.	9.
VA03277	162.00	162.50	910.0	80700.0	5800.0	33.3	280.0	68.0	36.0	42.0	13.0	44.0	40.0	249.0	93.	30.	>10.
VA03281	162.50	163.10	1120.0	8100.0	437.0	3.1	150.0	37.0	15.0	<5.0	7.0	3.0	24.0	457.0	95.	13.	5.
VA03284	163.10	169.10	860.0	124.0	68.0	<0.5	75.0	8.0	10.0	<5.0	13.0	<1.0	2.0	602.0	65.	1.	2.
VA03285	165.00	166.00	1120.0	31.0	69.0	<0.5	30.0	4.0	2.0	<5.0	13.0	<1.0	1.0	359.0	31.	1.	1.
VA03286	166.00	166.50	1630.0	42.0	107.0	<0.5	75.0	11.0	7.0	<5.0	16.0	<1.0	1.0	624.0	28.	1.	2.
VA03287	166.50	167.50	1800.0	279.0	68.0	<0.5	70.0	12.0	8.0	(5.0	10.0	<1.0	<1.0	535.0	80.	1.	2.
VA03288	223.40	224.40	1 470.0	16.0	38.0	<0.5	60.0	1.0	<1.0	<5.0	21.0	<1.0	2.0	266.0	30.	1.	1.
VA03289	224.40	225.40	710.0	27.0	23.0	<0.5	760.0	2.0	1.0	<5.0	7.0	<1.0	2.0	267.0	54.	2.	1.
VA03290	225.40	226.40	1070.0	14.0	58.0	<0.5	50.0	3.0	2.0	22.0	13.0	<1.0	5.0	120.0	19.	3.	1.
VA03291	226.40	227.40	1080.0	12.0	100.0	0.5	65.0	2.0	<1.0	16.0	14.0	<1.0	5.0	103.0	11.	3.	1.
VA03292	227.40	228.40	1190.0	10.0	33.0	<0.5	50.0	1.0	<1.0	17.0	10.0	<1.0	4.0	96.0	23.	3.	1.
VA03293	228.40	229.40	1290.0	8.0	35.0	<0.5	90.0	3.0	1.0	7.0	18.0	<1.0	5.0	103.0	19.	з.	1.
VA03294	229.40	230.40	1690.0	18.0	75.0	0.5	100.0	3.0	2.0	10.0	17.0	<1.0	5.0	115.0	19.	3.	1.
VA03295	230.40	231.40	2340.0	17.0	83.0	0.6	95.0	4.0	2.0	9.0	14.0	<1.0	5.0	107.0	17.	4.	2.
VA03296	231.40	232.40	1 2920.0	29.0	76.0	0.8	85.0	4.0	2.0	41.0	9.0	<1.0	5.0	108.0	28.	4.	2.

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		SAMPLE NUMBER	FROM	10	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	НІ (ррв)	PB (ppm)	AS (ppm)	CD (ppm)	HŪ (ppm)	.HN (ppm)	cuz	N EIS	FE
		VA03297	232.40	233.40 /	2590.0	19.0	81.0	<0.5	80.0	6.0	1.0	22.0	8.0	<1.0	1.0	105.0	19.	. 3.	2.
		VA03298	233.40	234.40	2690.0	18.0	33.0	<0.5	95.0	6.0	2.0	17.0	14.0	<1.0	3.0	92.0	35	. 3.	2.
	1.1	VA03299	234.40	235.40]	2040.0	41.0	37.0	0.8	130.0	6.0	3.0	14.0	12.0	<1.0	3.0	94.0	53	. 3.	3.
		VA03300	235.40	236.40	2240.0	39.0	43.0	0.6	90.0	6.0	2.0	21.0	12.0	<1.0	4.0	90.0	48	з.	2.
		VA03301	236.40	237.40	2200.0	18.0	50.0	0.8	70.0	6.0	2.0	22.0	<5.0	<1.0	2.0	168.0	26	. 4.	2.
		VA03302	237.40	238.40 1	1650.0	75.0	58.0	1.6	200.0	5.0	2.0	15.0	<5.0	<1.0	2.0	254.0	56	3.	2.
	6	VA03303	238.40	239.40 1	1440.0	21.0	55.0	<0.5	60.0	4.0	<1.0	21.0	8.0	<1.0	<1.0	192.0	28	. 3.	2.
		VA03304	239.40	240.20 ,8	1280.0	29.0	256.0	0.6	200.0	5.0	5.0	43.0	<5.0	<1.0	<1.0	193.0	10	3.	2.
	12.6	VA03305	240.20	241.00 ,8	1220.0	21.0	96.0	<0.5	110.0	6.0	4.0	32.0	8.0	<1.0	<1.0	229.0	18	4.	2.
	La	VA03306	241.00	242.00 1	1210.0	26.0	192.0	<0.5	55.0	8.0	4.0	40.0	7.0	(1.0	<1.0	203.0	12	4.	2.
		VA03307	242.00	243.00	1210.0	43.0	319.0	1.0	125.0	7.0	4.0	74.0	6.0	1.0	2.0	182.0	12	. 5.	2.
		VA03308	243.00	244.00	1310.0	44.0	370.0	<0.5	85.0	8.0	7.0	21.0	11.0	2.0	<1.0	191.0	11	. 4.	3.
		VA03309	244.00	245.00 ⁱ	1360.0	27.0	218.0	<0.5	40.0	13.0	8.0	18.0	<5.0	<1.0	3.0	287.0	11	. 5.	3.
		VA03310	245.00	246.00	1340.0	73.0	664.0	0.8	75.0	18.0	11.0	50.0	13.0	5.0	3.0	262.0	10	. 10.	5.
, Ar	• •	VA03311	246.00	247.00 *	1380.0	25.0	184.0	<0.5	15.0	13.0	9.0	18.0	<5.0	<1.0	<1.0	399.0	12	. 6.	3.
		VA03312	247.00	248.00	2000.0	32.0	181.0	<0.5	25.0	10.0	6.0	15.0	<5.0	2.0	<1.0	441.0	15	. 5.	3.
		VA03313	248.00	249.00	2650.0	22.0	181.0	<0.5	50.0	11.0	8.0	17.0	<5.0	1.0	2.0	271.0	- 11	. 5.	3.
2		VA03314	249.00	250.00	3850.0	38.0	790.0	<0.5	55.0	12.0	10.0	59.0	<5.0	5.0	<1.0	221.0	5	7.	3.
		VA03315	250.00	251.00	3240.0	27.0	427.0	0.5	110.0	8.0	8.0	49.0	6.0	2.0	2.0	105.0	6	. 6.	3.
	з÷.	VA03316	251.00	252.00	2910.0	96.0	963.0	1.4	130.0	10.0	7.0	81.0	8.0	6.0	3.0	140.0	9	. 8.	3.
		VA03317	252.00	253.00	3230.0	207.0	5200.0	1.4	130.0	10.0	7.0	191.0	<5.0	16.0	5.0	186.0	. 4	. 6.	2.
5.	2,13	VA03318	253.00	254.00	2060.0	167.0	1854.0	0.9	75.0	6.0	3.0	142.0	<5.0	7.0	6.0	225.0	. 8	. 7.	2.
١Ч		VA03321	254.00	255.30 13	2070.0	117.0	1269.0	0.5	60.0	8.0	5.0	91.0	<5.0	5.0	1.0	187.0	8	. 5.	2.

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Page No. 3

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SAMPLE NUMBER FROM TO MN CUZN ETS FE BA CU ZN AG. AU CO NI PB AS CD HO (ppm) (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) VA03323 255.30 256.30 135.0 (5.0 3.0 <1.0 1157.0 64. 1. 6. 1040.0 75.0 (0.5 20.0 38.0 101.0 11.0 <1.0 1019.0 61. 6. VA03319 272.40 273.40 740.0 106.0 69.0 <0.5 <5.0 35.0 66.0 14.0 <5.0 3.0 ٥. 75. 7. <1.0 1229.0 1. VA03320 273.40 274.00 990.0 195.0 64.0 <0.5 10.0 46.0 68.0 15.0 <5.0 3.0 VA03322 274.00 275.00 910.0 159.0 <0.5 25.0 32.0 58.0 9.0 <5.0 2.0 <1.0 920.0 73. ٥. 5. 60.0

Hole No. CH88~39

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Page No. 4

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Summary Log: DDH CH88-40 Location: 46+00 E, 1+00 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: April 15, 1988 Core Logged By: D.P. Money

0.0 - 9.1	Casing.
9.1 - 22.9	Intercalated chlorite and sericite - chlorite schists.
22.9 - 56.4	Felsic crystal tuffs with minor thin gabbro dykes.
56.4 - 69.2	Fine grained plagiophyric gabbro.
69.2 - 116.1	Felsic flow or coarse crystal tuff.
116.1 - 126.3	Felsic lapilli tuff.
126.3 - 134.5	Intercalated felsic and mafic tuffs.
134.5 - 156.4	Mafic lapilli tuff.
156.4 - 173.1	Felsic tuffs. From 171.0 to 173.1 there is weak
	pyrrhotite - chalcopyrite - pyrite mineralization with
	2.5 % chalcopyrite from 172.6 to 173.1. This
	mineralization corresponds to the pulse E.M. anomaly.
173.1 - 177.5	Fine grained plagiophyric gabbro.
177.5 - 202.3	Intercalated mafic and felsic tuffs.
202.3 - 206.9	Major thrust fault, probably splay off the Fulford Fault
206.9 - 247.4	Pyritic felsic quartz eye bearing tuff with on average 4
	disseminated and banded fine grained pyrite, trace
	chalcopyrite and mariposite.
247.4 - 249.5	Mafic sill.
249.5 - 252.0	Felsic tuff.
252.0 - 263.0	Fine grained plagiophyric gabbro.
263.0 - 281.0	Mafic tuffs with minor chert interbeds.
281.0	End of hole.

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FROFERIT. Chemainus U.V.	FALCONBR DIAMONI	IDGE LINI DRILL LO	FED 3			HOLE No: Pag Ch88-40	je Number 1	
Hole Location: 46+00 E 1+00 S								
NTS: 092B/13 UTM: 5416049.6 N 431685.9	E				Claim 1 Section	No. Chip 1 n No.: Section 46+00 Ea	ist, Chip Group	
Dip: -50 Length: 281.0 m					Logged Drillin	By: D.P. Money ng Co.: Burwash Enterpr	ises	
Started: April 11, 1988 Completed: April 15, 1988					Assayed	1 By: Bondar-Clegg and	X-Ray Assay	
Purpose: To test western extent of PEM anomal	y .	DIP '	TESTS		Core S:	ize: NQ		
	Azi-			Azi-				
Length	muth	Dip	Length	muth	Dip			
			400.40		45.0			
9.10	203.0	-51.0	188.10	206.0	-43.0			

No.

(m) (m)

(m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

.0 9.1 OVERBURDEN

(m)

(m)

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9.1 15.5 FELSIC QUARTZ EYE TUFF

Quartz eye bearing, 5 to 7 %, 2 to 3 mm, with 5 to 7 %, < 1 mm epidotized feldspar grains. Tuff is sericitic with local strong spotty sericitization and very local weak to strong chloritization. Blocky, highly fractured core and oxidized with lost core : 0.9 m from 10.0 to 11.3 1.0 m from 11.3 to 14.3 and 0.5 m from 14.3 to 15.7. Foliation trend is at 46 degrees to core axis. There is trace disseminated pyrite.

-----DESCRIPTION------

15.5 16.0 CHLORITE SCHIST Chlorite schist with strong kinking. 15.5 16.0 STRONG PERVASIVE CARBONATIZATION.

16.0 19.9 CHLORITIC FELSIC QUARTZ EYE TUFF Blocky, highly fractured core, mainly chloritized felsic ash tuff to quartz - sericite - chlorite schist with locally up to 5 %, 2 mm, quartz eyes. Lost core :.
16.0 to 16.9 : 0.1 m.
18.0 to 18.6 : 0.2 m. Alteration :.
16.0 19.9 WEAK PERVASIVE CHLORITIZATION.

19.9 21.5 CHLORITE SCHIST Strongly sheared chloritic mafic with calcite veinlets. PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number Ch88-40 2

From	To				
(m)	(m)		 -DESCRIPTIO	N	

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

19.9 21.5 STRONG PERVASIVE CARBONATIZATION. Foliation : approximately 47 degrees to core axis.

- 21.5 22.9 WEAKLY CHLORITIC FELSIC TUFF Chloritic felsic tuff with minor sericitized lapilli, up to 2 cm long and 3 mm thick. Approximately 10 to 15 % chlorite. Foliation is at approximately 65 degrees to core axis. Minor up to 1 mm quartz and feldspar crystals occur. 21.5 22.9 WEAK PERVASIVE CHLORITIZATION.
- 22.9 36.4 FELSIC QUARTZ EYE TUFF
 - White to light grey quartz sericite schistose matrix hosts 5 to 12 %, 7 % average, 1 to 3 mm, quartz eyes and 7 to 10 %, 1 mm, feldspar grains. Is competent and almost massive with weak to moderate foliation at 55 to 60 degrees to core axis locally. Is rusty with fractured quartz eyes from 28.5 to 30 degrees to core axis. There are rare mafic ash tuff beds and trace local quartz calcite veinlets. Is locally blocky, highly fractured core with 0.3 m of lost core from 32.0 to 32.9.
- 36.4 36.8 MAFIC INTRUSIVE Fine-grained dark green mafic sill, probably gabbro with sharp contacts parallel to foliation, 42 degrees to core axis.
- 36.8 39.8 FELSIC QUART2-FELDSPAR CRYSTAL TUFF Felsic tuff or flow, coarse abundant crystals in quartz sericite matrix. There are approximately 10 %, 3 to 6 mm, quartz eyes and 10 %, 2 mm, feldspar grains. Is fine-grained from 39.6 to 39.8. Fractures are rusty. Foliation is at 59 to 60 degrees to core axis.
- 39.8 40.1 MAFIC INTRUSIVE Fine-grained dark green mafic, dyke (?).
- 40.1 42.7 FELSIC FELDSPAR CRYSTAL TUFF Sericitic to siliceous light grey felsic tuff, massive and fine-grained with approximately 5 %, 2 to 3 mm, feldspar crystals. Foliation is at approximately 35 to 40 degrees to core axis. There is minor crystal rich beds, no tops indicators are present.

42.7 43.3 MAFIC INTRUSIVE

VA01019 23.0 36.3 13.3 n/a 15 n/a 18 n/a n/a 1170

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number Ch88-40 3

From (m)	To (m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
	As from 39	.8 to 40.1.													

- 43.3 49.9 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF Rusty fractured feldspar crystal tuff with 10 to 15 %, 2 to 4 mm, feldspar grains and crystals. There are minor vuggy quartz veins. Foliation varies locally from 50 to 70 degrees to core axis. Locally there are up to 4 %, 1 to 2 mm, quartz eyes. There are trace 2 cm siliceous feldspar crystal tuff lapilli. No sulphides occur.
 43.3 49.9 WEAK PERVASIVE CHLORITIZATION, locally medium green, up to 3 % chlorite.
- 49.9 56.4 FELSIC TUFF

Blocky, highly fractured core. Felsic ash tuff and crystal tuffs. Highly fractured and oxidized. Nixed blocky, highly fractured core, felsic ash tuff with 3 to 5 \pm , 1 mm, quartz eyes at foliation of approximately 45 degrees to core axis from 49.9 to 51, and local pieces of massive tuff with 10 \pm , 2 mm, feldspar grains. Lost core :. 50.0 to 50.9 : 0.1 m.

50.9 to 52.0 : 0.5 m. 53.9 to 54.4 : 0.4 m. 54.4 to 55.8 : 0.9 m. 55.8 to 56.4 : 0.5 m.

56.4 69.2 FELDSPAR PORPHYRITIC GABBRO

Feldspar porphyritic gabbro with on average 10 %, 1 to 3 mm, feldspars. Is locally fine-grained and sheared, i.e. From 66.5 to 68.7 at foliation of 51 degrees to core axis. There numerous local quartz - calcite - chlorite - trace pyrite veinlets at 30 to 70 degrees to core axis. Is oxidized and locally blocky, highly fractured core, with no lost core.

- 69.2 79.0 FELDSPAR PORPHYRITIC FELSIC FLOW
 Felsic flow (?) or coarse siliceous crystal tuff. Hosts 10
 %, 3 mm, feldspar grains and up to 15 %, < 1 mm, epidote
 <p>grains. Massive with local rusty fractures.
 69.2 79.0 STRONG SPOTTY SILICIFICATION as local quartz
 - flooding and pervasive silicification. Is very locally weakly epidotized and chloritized. From 71.9 to 77.0 there is locally up to 4 % fracture controlled fine-grained pyrite over 10 cm with an average of approximately 1 % pyrite except for 71.9 to 72.2 and 72.9 to 73.8 with approximately 2 % pyrite in moderate to strongly

69.2	79.0	9.8	n/a	36	n/a	79	n/a	n/a	1300	
71.9	72.9	1.0	2	47	6	236	<1	10	1060	
72.9	74.0	1.1	2	71	6	83	<1	<5	2040	
74.0	75.0	1.0	1	23	<5	73	<1	< 5	1070	
75.0	76.0	1.0	1	21	<5	44	<1	<5	1260	
76.0	77.0	1.0	· 1	16	<5	35	(1	. <5	960	
	69.2 71.9 72.9 74.0 75.0 76.0	69.2 79.0 71.9 72.9 72.9 74.0 74.0 75.0 75.0 76.0 76.0 77.0	69.2 79.0 9.8 71.9 72.9 1.0 72.9 74.0 1.1 74.0 75.0 1.0 75.0 76.0 1.0 76.0 77.0 1.0	69.2 79.0 9.8 n/a 71.9 72.9 1.0 2 72.9 74.0 1.1 2 74.0 75.0 1.0 1 75.0 76.0 1.0 1 76.0 71.0 1 1	69.2 79.0 9.8 n/a 36 71.9 72.9 1.0 2 47 72.9 74.0 1.1 2 71 74.0 75.0 1.0 1 23 75.0 76.0 1.0 1 21 76.0 77.0 1.0 1 16	69.2 79.0 9.8 n/a 36 n/a 71.9 72.9 1.0 2 47 6 72.9 74.0 1.1 2 71 6 74.0 75.0 1.0 1 23 <5	69.2 79.0 9.8 n/a 36 n/a 79 71.9 72.9 1.0 2 47 6 236 72.9 74.0 1.1 2 71 6 83 74.0 75.0 1.0 1 23 <5	69.2 79.0 9.8 n/a 36 n/a 79 n/a 71.9 72.9 1.0 2 47 6 236 <1	69.2 79.0 9.8 n/a 36 n/a 79 n/a n/a 71.9 72.9 1.0 2 47 6 236 <1	69.2 79.0 9.8 n/a 36 n/a 79 n/a n/a 1300 71.9 72.9 1.0 2 47 6 236 (1 10 1060 72.9 74.0 1.1 2 71 6 83 (1 <5

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED Ch88-40 4 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn λg λu Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) contorted and weakly bleached flow. Weak foliation trend at 60 to 70 degrees to core axis. 79.0 87.5 FELSIC FELDSPAR CRYSTAL TUFF More fine-grained than 69.2 to 79.0, but may be part of n/a VA01021 79.0 87.5 8.5 n/a 33 29 n/a n/a 1610 the flow. 79.0 87.5 STRONG SPOTTY SILICIFICATION as local white quartz flooding over up to 10 cm locally. Is strongly fractured and oxidized from 79.0 to 80.2 and from 85.0 to 87.5. There is trace disseminated pyrite. Locally is same or similiar to 69.2 to 79.0 with 10 to 15 %, 2 to 4 mm, feldspar grains. Mainly is siliceous, medium grey, with 2 to 3 %, 1 to 2 mm, quartz eyes and 5 to 7 %, 1 to 3 mm, feldspar grains. Has weak to moderate schistosity at 50 to 52 degrees to core axis. 87.5 101.5 FELDSPAR PORPHYRITIC FELSIC FLOW Felsic flow similiar to 69.2 to 79.0. There is weak to VA01022 88.0 95.0 7.0 n/a 31 n/a 26 n/a n/a 1080 strong fracture controlled chloritized and the flow is locally massive and moderately schistose. The flow is medium to dark green - grey with 10 to 15 %, 2 to 4 mm, feldspar crystals and grains, which are locally strongly epidotized. Is rusty and fractured. There is local very spotty guartz flooding. There is nil sulphides. Alteration :. 87.5 101.5 MODERATE FRACTURE CONTROLLED CHLORITIZATION. 87.5 101.5 OUARTZ FLOODING. 87.5 101.5 WEAK PERVASIVE EPIDOTIZATION. Lost core :. 99.0 to 100.0 : 0.2 m. 100.5 to 100.9 : 0.2 m. 100.9 to 101.5 : 0.3 m. 101.5 111.6 FELDSPAR PORPHYRITIC FELSIC FLOW Similiar to 87.5 to 101.5, has no rusty fractures. There VA01023 101.5 111.6 10.1 n/a 78 n/a 20 n/a n/a 740 are 10 to 20 %, 2 to 4 mm, feldspar and completely epidotized feldspar laths and grains. Is very massive and siliceous and is medium grey to green. Could be a lapilli tuff if guartz flooding and spotty epidotized is preferential replacement of 5 to 15 cm lapilli. There is minor local fracture controlled quartz veinlets, up to 1 mm and trace disseminated and fracture controlled pyrite. Very weak foliation from 50 to 75 degrees to core axis occurs. Lost core :. 111.0 to 111.6 : 0.6 m. mis latch. Alteration :. 101.5 111.6 STRONG SPOTTY SILICIFICATION. 101.5 111.6 WEAK PERVASIVE EPIDOTIZATION.

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P	ROPERT	Y: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N Ch88-40	o: Pa	ge Numbe 5	er			
From (m)	T0 (m)	DESCRIPTI	ол	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
111 6	106.3	PRICTO INTIIT MURP												
111.6	120.3	Locally weakly chloritized felsic la approximately 5 % lapilli, 1 to 3 cm quartz or epidote rich. There are ap up to 1 mm, epidotized feldspar gra minor, < 1 %, quartz and calcite vei	pilli tuff with , lapilli are either ,proximately 7 to 10 %, ins. There are local ,ns and veinlets. There	VA01024	112.0	126.0	14.0	n/a	21	n/a	28	n/a	n/a 16	30
		is very local epidotization with tr fracture controlled pyrite. From 123 minor white siliceous papery schist	ace associated .3 to 123.5 there is with epidote grains											
		and lapilli. Is light to medium gree up to 5 %. Foliations :.	n with local chlorite											
		114.0 : 49 degrees to core axis. 116.0 : 65 degrees to core axis. 119.3 : 43 degrees to core axis. 123.5 : 50 degrees to core axis.												
		125.8 : 56 degrees to core axis. Bedding :. 122.0 : 47 degrees to core axis.						· ,						
126.3	129.1	FELDSPAR PORPHYRITIC INTERMEDIATE FL	ow	8										
		Andesitic tuff or fine-grained flow green salt and pepper texture. Ther to 30 % fine-grained feldspars and t massive with local fracture controll veinlets, < 1 mm. There is trace pyr control and up to 20 or a hore of	with medium to light e is approximately 20 race quartz. Is ed calcite - epidote ite at the lower											
		contact and up to 20 cm above it.												
129.1	130.6	FELSIC LAPILLI TUFF Felsic tuff with 1 to 3 cm epidote a lapilli in a siliceous matrix. There and 0.5 % disseminated pyrite associ	nd chloritized tuff is thermal biotite ated with epidote.											
		Bedding is at 48 to 53 degrees to co is sharp, upper is hazy.	re axis. Lower contact											
130.6	133.5	FELDSPAR PORPHYRITIC MAFIC ASH TUFF Mafic tuff with 15 to 20 %, 1 to 2 m grains. There are local 1 cm felsic thermal biotite at approximately 70 From 130.9 to 131.1 there is strong large clast. Weak foliation at 70 de	m, epidotized feldspar ash tuff beds with degrees to core axis. epidotization or a grees to core axis.											2
		pyrite.	WINITLE MICH CLECE											

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED Ch88-40 6 DIAMOND DRILL LOG From To Width Total Pb Sample From То Cu 7 n Ag An Ba (m) (m) -----DESCRIPTION-------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Siliceous felsic tuff with 7 % 1 mm epidote grains with bedding at 55 degrees to core axis. There is 30 % fracture controlled quartz - chlorite veins. 134.5 156.4 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF Massive medium to dark green lapilli tuff with 5 to 20 %. VA01025 135.0 155.6 20.6 n/a 93 n/a 131 n/a n/a 351 average 15 %, 1 to 2 mm, feldspar to epidotized feldspar grains. There are 1 to 2 % epidotized 1 cm lapilli with up to 3 % chloritized hornblende crystals. There are local quartz, calcite and chlorite veins and veinlets. There is trace chalcopyrite at 156.2 and at 142.8 in a calcite veinlet. There are trace hornblende, up to 7 mm, i.e. At 139.1, there is a 7 mm hornblende with 2 %, , 1.5 mm hornblendes, unit average < 0.5 % hornblendes. Foliations :. 139.1 : 69 degrees to core axis. 145.6 : 51 degrees to core axis. 149.6 : 64 degrees to core axis. 155.1 : 47 degrees to core axis. 16. This interval is a mixture of several tuff layers that VA01026 156.4 170.0 13.6 n/a 394 n/a 83 n/a n/a 1250 10 1680 contain the sulphide mineralization that produces the VA01534 157.1 157.6 . 5 3 273 <5 41 <1 <1 <5 1020 pulse E.M. Anomaly. VA01535 157.6 159.0 1.4 3 137 <5 63 156.4 156.6 WEAK PERVASIVE CHLORITIZATION , weakly VA01536 159.0 159.9 . 9 4 333 (5 778 <1 10 1450 chloritic felsic tuff with approximately 10 % VA01537 162.0 162.5 2 621 <5 108 1 15 1010 . 5 fine-grained feldspars and trace to 0.5 % VA01538 169.7 171.0 1 827 <5 208 1 5 1180 1.3 <5 89 10 980 fracture controlled pyrite. VA01539 171.0 171.8 .8 0 990 1 6 1218 <5 67 1 10 1920 156.6 156.9 Sericitic fine-grained siliceous light green .8 VA01540 171.8 172.6 lapilli tuff with fracture controlled quartz VA01552 172.6 173.1 .5 18 9700 16 248 4 35 850 veins perpendicular to bedding. Bedding is at approximately 65 degrees to core axis. 156.9 157.1 Fine-grained dark green mafic flow or sill. Lower contact at fault at 41 degrees to core axis. 157.1 157.5 Blocky, highly fractured core. Strongly contorted felsic tuff with minor thermal biotite and 3 % fracture controlled pyrite and trace to 0.25 % chalcopyrite. 157.5 159.9 WEAK PERVASIVE CHLORITIZATION , chloritic felsic similiar to 156.4 to 156.6 with local guartz lapilli over last 1 m and 2 % fracture controlled pyrrhotite, 1 % fracture controlled pyrite and minor sphalerite clots in a guartz vein at 158.9. Sulphides are slightly stronger from 159 to 159.9 than from 157.5 to 159.0.

159.9 160.0 Quartz vein with minor chlorite, pyrrhotite and pyrite, trace sulphides.

156.4 173.1 FELSIC TUFF

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

To

(m)

HOLE No: Page Number Ch88-40 7

Width

(m)

From To (m) (m)

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160.0 161.0 Bleached felsic tuff, light green to grey, with minor up to 5 mm chloritic grains and approximately 5 %, 2 mm, epidote grains. There is trace quartz eyes. There is trace to 0.5 % fracture controlled pyrhotite and pyrite. Fracture controlled pyrite is at approximately 0 degrees to core axis and fracture controlled pyrhotite is parallel to to foliation. There is a very strong foliation at 43 degrees to core axis.

-----DESCRIPTION-----

- 161.0 161.2 Quartz chlorite calcite fracture spur veins 161.2 162.1 As from 160 to 161, but is blocky, highly fractured core. At 162.1 there is rust and strongly contorted sericite, fault (?),
- orientation is at 57 degrees to core axis. 162.1 171.0 STRONG PERVASIVE CHLORITIZATION.
- 162.1 171.0 WEAK FRACTURE CONTROLLED CHLORITIZATION strongly chloritic felsic tuff with 15 to 20 %, 1 mm, feldspar grains and trace to 2 %, 1 mm, guartz eyes. Is brown to green due to strong chlorite and thermal biotite. May be andesitic. There are local green and tan felsic ash tuff or cherty beds locally, up to 2 %, at 50 to 60 degrees to core axis. Foliation is at 44 degrees to core axis. There is trace local disseminated pyrite and chalcopyrite. At 162.1 there is 2 cm of 60 % pyrite as 3 to 7 mm clots. At 169.5 there is minor pyrite with pyrrhotite wrapped around 1 cm guartz lapilli in a 5 mm zone with black chlorite at 73 degrees to core axis. There is a minor fault slip at 169.0 at 80 degrees to core axis. There is 0.5 to 1.5 % fracture controlled pyrrhotite and 0.5 % chalcopyrite from 169.8 to 170.1, fracture controlled (?).
- 171.0 171.1 6 cm of 25 % pyrite, 10 % pyrrhotite and 5 % chalcopyrite deformed around quartz in strong fracture controlled chloritization.
- 171.1 173.1 Dark green siliceous felsic with minor lapilli surrounded by sulphides.
- 171.1 171.8 Weak sulphides zone with 2 to 3 % pyrrhotite, 1 to 2 % pyrite and 0.5 to 1 % chalcopyrite, sulphides are wispy and possibly are fracture controlled.
- 171.8 172.6 Strongly chloritic with 4 to 5 % pyrite, 2 % pyrrhotite and trace chalcopyrite, is parallel to foliation, which is at 76 degrees to core axis. Strongest pyrite is around 1 to 1.5 cm guartz lapilli.
- 172.6 173.1 Strong sulphides. Weakly chloritic at start and becomes siliceous. Hosts 15 % pyrrhotite,

Total Cu Pb Zn Ag Au Ba Sulphides (ppm) (ppm) (ppm) (ppb) (ppm) PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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From

(m)

No.

To

(m)

Width

Total

(m) Sulphides (ppm)

HOLE No: Page Number Ch88-40 8

Pb

Zn

(ppm) (ppm)

λg

20.6 m= 39.6

Au

(ppm) (ppb) (ppm)

Ba

Cu

From To Sample -----DESCRIPTION-----(m) (m.)

2 to 3 % chalcopyrite and trace to 1 % pyrite, pyrite occurs in chlorite. Pyrrhotite is locally massive over 2 cm at 2 locations.

173.1 177.5 FELDSPAR PORPHYRITIC GABBRO

Strange gabbro, 173.1 to 173.4 has 2 to 3 % pyrrhotite and trace to 0.5 % chalcopyrite, parallel to to foliation. Locally is sheared with fine-grained 5 to 10 mm epidote layers that look like beds and there are 1 to 2 %, 1 to 2 mm, quartz eyes and local thermal biotite in these strange zones. Mostly looks like standard gabbro with 5 % 2 to 3 mm epidotized feldspars in a fine-grained green matrix with numerous quartz - chlorite veins. Foliations : 50 degrees to core axis.

177.5 182.8 FELSIC TUFF

Light green siliceous ash tuff with 5 to 15 %, < 1 mm, sausuritized feldspars throughout. There are trace local sericitic lapilli and guartz eyes. There is 1 pyrite clot at 178.4. Bedding is at approximately 55 degrees to core axis. There is minor local fracture controlled silicification.

182.8 191.8 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF Dark green mafic tuff with 15 to 25 %, 2 mm, epidotized feldspars and local epidotized lapilli. Tuff is massive with very weak local banding or bedding at 183.1 at 55 degrees to core axis. There are minor local quartz -(calcite) - (chlorite) veins. There is minor local carbonatization with trace associated pyrite. There is a weak foliation at 52 degrees to core axis.

7.5 191.8 199.3 WEAKLY CHLORITIC FELSIC TUFF Weakly chloritic felsic tuff, siliceous, light to medium green. There is minor local thermal biotite. Variable crystal content with on average 5 %, 3 to 4 mm, quartz eyes and 5 to 10 %, 1 to 2 mm, feldspar and epidotized feldspars. Is locally contorted and foliation starts at approximately 50 degrees to core axis and ends at approximately 0 degrees to core axis. There is minor local fracture controlled silicification and guartz veinlets. There is blocky, highly fractured core from 194.2 to 196.3. Lower contact is a fault.

199.3 202.3 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF 199.3 202.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION. VA01551 173.1 173.6 .5 ٢5 100 2 464 1 20 20

VA01027 182.8 191.8 9.0 n/a 520 n/a 99 n/a n/a 496

VA01028 191.8 199.3 7.5 63 33 n/a n/a 1170 n/a n/a
· P	ROPERT	Y: Chemainus J.V.					HOLE N	o: 1	Page Nu	mber				
		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					Ch88-40		9					
From (m)) To (m)	DESCRIPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (pp	Zn m) (ppm	Ag (ppm)	Au (pp	ı Ba	a pan)
		Weakly brecciated mafic tuff with moderate fracture												
		controlled carbonatization and 10 to 15 % on average, 1 to 2 mm, epidotized feldspars and local epidote lapilli.												
		There are local quartz - chlorite veins. Foliation is not developed.												
202.3	206.9	FAULT ZONE					_							
		Fulford thrust fault or splay thereof.	VA01542	202.3	203.3	1.0	0	139	130	601	(1	20	2650	
		There are kinks and showron folds in the fault Fault	VAULDAJ	203.3	204.3	1.0	3	124	122	1345	1	70	2950	
		trends at 64 degrees to core axis. Felsic fault gouge is	VA01544	204.3	205.5	1.0	3	65	110	976	1	60	1830	
		sericitic with 2 to 3 % fine-grained disseminated and	7801343	203.5	200.5	1.0	5	05	110	5.0	-		1000	
		banded pyrite.												
206.9	247.4	FELSIC QUARTZ EYE TUFF												
		ACTIVE TUFF - PYRITIC QUARTZ EYE BEARING QUARTZ - SERICITE	VA01029	210.0	230.0	20.0	n/a	211	n/a	472	n/a	n/a	1670	
		SCHIST.	VA01546	210.4	212.0	1.6	. 2	176	127	3200	1	30	1480	
		Light grey to white quartz - sericite schist with 1 to 5	VA01547	212.0	213.5	1.5	2	300	419	1085	1	20	1540	
		*, 1 mm, quartz eyes and 0 to 5 * .0 2.0 to 3 mm, quartz	VA01548	213.5	215.0	1.5	2	224	51/	1044	1	15	1750	
		eyes. Quantity and size of quartz eyes increases downnoie.	VAU1549	215.0	210.5	1.5	· · ·	6.25	139	481	1	10	1580	
		There are local siliceous feisic ash tuff beas, quartz	VAULDOU	217.5	218.5	1.0	. 4	107	01	101	/1	20	1000	
		veins, fault gouge and minor malic sills.	VAULDDJ	221.5	223.0	1.5	11	205	9	50	(1	05	1150	
		Alberalization :. 206 0 210 4 0 5 % discominated fine-grained purite	VA01554	223.0	224.0	1.0	11	109	5	16	1	65	860	
		200.9 210.4 0.5 % disseminated line-grained pyrite.	VA01555	224.0	225.0	1 0	5	79	(5	10	(1	50	700	
		210.4 210.5 1 to 1.5 % banded pyrite parallel to follation and 0.5 % disseminated pyrite fine-grained up	VA01557	226 0	220.0	1 0	4	187	16	186	1	50	1410	
		and 0.5 % disseminated pyrite, fine grained up	VA01558	220.0	228 0	1.0	4	739	25	230	1	65	1790	
		216 5 223 O Annrovimately 1 % disseminated and foliation	VA01559	227.0	229 0	1 0	4	306	32	356	1	50	1610	
		narallel fine-grained nyrite with 5 to 7 %	VA01560	229 0	230 0	1 0	4	343	32	849	1	150	1640	
		banded pyrite from 217.5 to 218.2. 221.6 to	VA01561	230.0	231.0	1.0	4	214	16	928	1	50	1800	
		222.2. and 222.5 to 222.6.	-VA01030	230.0	245.0	15.0	n/a	232	n/a	754	n/a	n/a	2240	
		223.0 223.4 3 to 5 % banded pyrite parallel to foliation.	VA01562	231.0	232.0	1.0	4	643	25	356	1	95	1580	
		bands are 1 to 3 mm.	VA01563	232.0	233.0	1.0	. 4	968	68	1077	3	260	1710	
		223.4 223.6 20 % banded fine-grained pyrite parallel to	VA01564	233.4	234.4	1.0	4	312	71	383	1	190	1650	
		the contorted bedding and foliation.	VA01565	234.4	235.4	1.0,4	ś 4	526	11	690	1	120	1820	
		223.6 225.8 Approximately 5 % disseminated and foliation	VA01566	235.4	236.9	1.5	. 4	69	7	34	(1	170	1180	
		parallel banded fine-grained pyrite.	VA01567	236.9	238.4	1.5	. 4	20	17	70	(1	25	1050	
		225.8 233.0 3 to 5 % banded fine-grained pyrite parallel	VA01568	238.4	239.9	1.5	· · · 4	93	212	407	5	200	2400	
		to foliation with local trace chalcopyrite.	VA01569	239.9	241.4	1.5	4	100	241	448	5	210	2630	
		231.2 7.0 Mm quartz veinlet parallel to foliation with on	VA0157 0	241.4	242.9	1.5	: . 4	127	358	876	6	280	1770	
		average 2 mm of chalcopyrite on uphole side.	VA01571	242.9	244.4	1.5	. 4	66	221	316	5	120	1290	
		231.7 2.0 Mm mariposite rich band.	VA01572	244.4	246.4	2.0	4	119	530	1290	5	130	1010	
		232.3 2.0 Mm chalcopyrite band parallel to foliation with minor pyrite	VA01573	246.4	247.4	1.0	2	475	64	1279	3	133	2700	
		232.5 1.0 Mm chalconvrite band narallel to foliation												
		233.0 233.4 S.G.E.'s early mafic sill, andesitic sill with									1997 - 1997 -			
		strong fracture controlled guartz veins and 1												
		to 2 % pyrite clots.												100
		222 A 246 A 1 & diggeninated purite and 2 to 3 & handed												

P	ROPERT	Y: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N Ch88-40	o: Pa	ige Numb 11	er			
From (m)	T0 (m)		DESCRIPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm
263.0	281.0	MAFIC TO INTERMED Dark to medium gr cm epidotized lap: green chert beds a	LATE TUFFACEOUS SEDIMENTS een mafic lapilli tuff with 10 %, 1 to 20 illi. There are 15 cm of 1 to 10 mm 12 263.2 with minor guartz filled faults	VA01031	263.0	281.0	18.0	n/a	156	n/a	52	n/a	n/a	259

Dark to medium green maric lapilli tur with 10 %, 1 to 20 cm epidotized lapilli. There are 15 cm of 1 to 10 mm green chert beds at 263.2 with minor quartz filled faults perpendicular to bedding with up to 0.5 mm offsets. Tops appears to be uphole. There is weak local fracture controlled carbonatization. Tuff has up to 2 %, up to 1 mm, chloritized hornblende crystals in the matrix on average. Likely has komatilitic chemistry. Foliation is not developed. From 266.0 to 266.8 there is 5 to 7 %, 1 to 2 mm, chloritized hornblendes. From 267.5 to 268.2 there are cherts similiar to at 263.2 with bedding at 58 degrees to core axis at 267.7 and at 50 degrees to core axis at 268.0. Alteration :.

263.0 281.0 STRONG SPOTTY EPIDOTIZATION. 263.0 281.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

End of hole: 922 feet, Friday April 15, 1988 at 1:30 p.m.

Total lost core: 7.7 m % recovery = 97.3 %.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number Ch88-40 10

From To (m) (m)

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Sample From То Width Total Cu Pb Zn λg Au Ba No. (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) (ppm)

parallel to foliation fine-grained pyrite with local 1 cm pyrite with trace chalcopyrite bands every 10 to 50 cm. Chalcopyrite specks at : 242.7, 244.8. Mariposite or fuchsite at 239.5. 246.4. 246.4 247.4 Chloritic with epidotized feldspars and chalcopyrite blebs at 246.5 and 2 % disseminated pyrite. Alteration :. 206.9 247.4 STRONG PERVASIVE SERICITIZATION. Structure :. Lost core : 211 to 212 : 0.3 m. Fault gouge :. 209.1 209.2 Approximately 60 degrees to core axis. 225.4 226.2 At 59 degrees to core axis. 237.1 237.2 At (?) degrees to core axis.

-----DESCRIPTION------

21.4 2.7 At (1) digrees to core axis.
215.2 : 48 degrees to core axis.
221.4 : 52 degrees to core axis.
232.2 : 38 degrees to core axis.
234.0 : 22 degrees to core axis.
243.8 : 38 degrees to core axis.
Bedding :.
226.8 : 48 degrees to core axis.

247.4 249.5 MAFIC INTRUSIVE

Strange margined mafic sill. Core of sill is fine-grained dark green with 10 %, 1 mm chloritized hornblendes and epidotized feldspars. Is 20 % quartz - yellow calcite - chlorite. Chlorite and yellow calcite persists into active tuff for 10 to 20 cm.

249.5 252.0 FELSIC QUARTZ EYE TUFF

Weakly active tuff with trace chalcopyrite, fuchsite and 1 % disseminated and banded parallel to foliation fine-grained pyrite. There are 5 to 7 %, 2 mm, quartz eyes 249.5 252.0 NODERATE PERVASIVE SERICITIZATION. Foliation : 45 to 55 degrees to core axis locally.

VA01574 VA01575	249.5 251.0	251.0 252.0	1.5 1.0	1	203 254	75 36	1140 2047	2	91 29	300 210

252.0 263.0 FELDSPAR PORPHYRITIC GABBRO

Hedium to fine-grained gabbro with 10 to 20 %, 1 to 4 mm, feldspar grains. Locally weakly magnetic due to minor ilmenite. Upper contact at 50 cm white bull quartz vein. There is spotty epidotization throughout with local moderate fracture controlled carbonatization. Is 50 % blocky, highly fractured core with 0.3 m of lost core from 253.0 to 253.9, 0.3 m from 255 to 256 and 0.4 m from 261.5 to 261.7.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	25102	ZAL203	XCAO	ZHGO	XNA20	XK20	XFE203	XT 102	ZP205	ZNNO	XLOI	SUM	BA	AI	NACA
			• ••••••••••••••••••••••••••••••••••••														
VA00539	9.10	9.20	64.20	14.60	5.50	1.25	1.46	3.32	3.19	0.26	0.06	0.04	5.31	99.19	1350.	40.	7.
VA00540	15.80	15.90	61.40	12.30	8.39	1.58	0.48	2.50	4.59	0.22	0.06	0.08	8.31	99.91	825.	32.	9.
VA00541	25.40	25.50	69.30	13.30	3.84	1.58	1.33	2.87	2.38	0.27	0.07	0.03	4.62	99.59	1160.	46.	5.
VA00542	29.30	29.40	66.90	15.70	3.02	1.17	2.91	3.31	1.66	0.29	0.06	0.02	5.00	100.04	1130.	43.	6.
VA00543	38.50	38.60	73.30	13.90	1.55	0.67	4.11	2.29	1.89	0.24	0.06	0.04	1.62	99.67	1020.	34.	6.
VA00544	39.90	40.00	50.40	17.90	6.18	4.48	2.82	0.61	12.00	0.82	0.13	0.19	4.47	100.00	229.	36.	9.
VA00545	48.20	48.30	71.20	13.50	3.33	1.20	3.75	1.38	3.56	0.31	0.07	0.04	1.70	100.04	761.	27.	7.
VA00546	76.40	76.50	70.70	14.20	1.67	0.91	5.87	1.60	2.97	0.35	0.10	0.08	1.39	99.84	1120.	25.	8.
VA00547	81.40	81.50	69.70	14.70	1.52	0.95	5.14	2.13	2.76	0.33	0.07	0.07	1.62	98.99	1300.	32.	7.
VA00548	94.70	94.80	67.50	16.60	2.68	0.95	7.14	0.91	3.06	0.34	0.08	0.09	0.93	100.28	912.	16.	10.
VA00549	107.30	107.40	70.00	15.10	2.34	0.61	6.25	1.40	2.37	0.35	0.07	0.05	1.31	99.85	1410.	19.	9.
VA00550	119.10	119.20	63.00	17.30	3.64	2.25	3.35	2.76	4.47	0.48	0.15	0.09	2.70	100.19	2130.	42.	7.
VA00552	121.60	121.70	71.60	13.60	3.03	0.64	4.26	1.77	2.61	0.33	0.12	0.06	1.23	99.25	1860.	25.	7.
VA00551	127.10	127.20	52.90	17.50	7.98	4.88	2.14	0.47	10.40	0.64	0.12	0.28	3.16	100.47	198.	35.	10.
VA00553	139.10	139.20	52.70	16.00	5.45	7.13	4.83	0.28	9.88	0.68	0.15	0.23	2.70	100.03	251.	42.	10.
VA00554	149.90	150.00	52.90	17.50	4.89	6.25	4.01	0.56	9.99	0.69	0.13	0.24	3.31	100.47	387.	43.	9.
VA00555	154.50	164.70	50.30	17.90	7.09	4.04	0.66	2.41	11.80	0.80	0.12	0.25	3.08	98.45	852.	45.	8.
VA00556	174.20	174.30	44.30	12.90	10.60	5.41	2.10	0.31	12.20	1.75	0.17	0.24	9.47	99.45	146.	31.	13.
VA00557	174.70	174.80	48.70	13.70	11.90	5.63	1.44	0.20	13.20	1.86	0.18	0.21	2.31	99.33	80.	30.	13.
VA00558	181.30	181.40	62.30	16.60	5.29	2.57	1.66	2.56	5.24	0.48	0.13	0.11	2.77	99.71	1410.	42.	7.
VA00559	183.90	184.00	55.40	16.70	5.74	3.76	3.46	0.58	9.59	0.68	0.15	0.19	3.16	99.41	311.	32.	9.
VA00560	247.80	247.90	35.30	21.20	10.60	11.50	<0.01	0.03	12.30	0.58	0.08	0.19	6.93	98.72	82.	52.	11.
VA00561	266.40	266.50	48.40	16.60	8,11	6.18	4.13	0.48	10.20	0.85	0.16	0.18	3.93	99.22	574.	35.	12.

Hole No. CH88-40 WHOLE ROCK SAMPLES

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Page No.

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SAMPLE	FROM	τn	*5102	741 203	7040	7800	78420	71/20	******		76205				 DA		
NONDER	2 KOII	10	45102	AN62VJ	ACHO		ARH2U	4640	ALEZUS	£1102	AF 20J	ANNO		SUN	DH	H1	NALA
				*********				•••••••••••••••••••••••••••••••••••••••			*****					*****	
VA01019	23.00	36.30	71.80	13.80	2.72	1.07	2.93	2.59	2.02	0.28	0.07	0.03	2.54	99.85	117	0. 39	. 6.
VA01020	69.20	79.00	70.00	14.50	1.78	0.93	5.13	1.87	3.00	0.34			1.54	99.09	130	0. 29	. 7.
VA01021	79.00	87.50	67.60	15.50	1.11	0.80	5.22	2.72	3.34	0.33			2.08	98.70	161	0. 36	. 6.
VA01022	88.00	95.00	70.40	14.90	1.78	1.11	6.20	1.04	3.22	0.36			1.16	100.17	108	0. 21	. 8.
VA01023	101.50	111.60	74.50	12.10	3.25	0.46	4.86	0.79	2.77	0.26			1.08	100.07	74	0. 13	. 8.
VA01024	112.00	126.00	69.70	14.40	3.47	1.35	3.24	1.96	3.47	0.37			1.93	99.89	163	0. 33	. 7.
VA01025	135.00	155.60	52.00	16.50	5.80	6.07	4.19	0.55	9.49	0.68			2.85	98.13	35	1. 40	. 10.
VA01036	156.40	170.00	52.30	18.10	5.93	3.53	0.85	3.06	10.30	0.68			3.39	98.14	125	o.) (19	. 7.
VA01027	182.80	191.80	53.30	16.80	7.15	3.73	2.56	1.09	9.97	0.66			3.23	98.49	49	6. 33	. 10.
VA01028	191.80	199.30	71.00	14.10	2.59	1.29	2.85	2.31	3.41	0.29			2.39	100.23	117	0. 40	. 5.
VA01029	210.00	230.00	68.10	14.60	1.63	0.74	0.85	2.52	5.54	0.35			5.23	99.56	167	0. 57	. 2.
VA01030	230.00	245.00	72.40	13.10	1.29	1.24	0.29	2.98	4.02	0.28			4.00	99.60	224	0.) 73	. 2.
VA01031	263.00	281.00	45.50	16.30	13.50	4.75	3.06	0.49	10.20	0.78			5.23	99.81	25	9. 24	. 17.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major elements)

Hole No. CH88-40 ALTERED SAMPLES

Page No. 1

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm.)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	EIS	FE
VA01529	71.90	72.90	1060.0	47.0	236.0	<0.5	10.0	6.0	3.0	6.0	9.0	2.0	<1.0	267.0	17.	2.	2.
VA01530	72.90	74.00	2040.0	71.0	83.0	<0.5	<5.0	10.0	3.0	5.0	13.0	<1.0	2.0	401.0	46.	2.	3.
VA01531	74.00	75.00	1070.0	23.0	73.0	<0.5	<5.0	4.0	3.0	<5.0	8.0	1.0	<1.0	324.0	24.	1.	1.
VA01532	75.00	76.00	1260.0	21.0	44.0	<0.5	<5.0	3.0	9.0	<5.0	<5.0	<1.0	<1.0	291.0	32.	1.	1.
VA01533	76.00	77.00	960.0	16.0	35.0	<0.5	<5.0	5.0	4.0	<5.0	9.0	<1.0	1.0	301.0	31.	1.	1.
VA01534	157.10	157.60	1680.0	273.0	41.0	<0.5	10.0	23.0	24.0	<5.0	<5.0	1.0	2.0	334.0	87.	3.	4.
VA01535	157.60	159.00	1020.0	137.0	63.0	<0.5	<5.0	26.0	25.0	<5.0	6.0	1.0	<1.0	815.0	69.	3.	5.
VA01536	159.00	159.90	1450.0	333.0	778.0	<0.5	10.0	21.0	15.0	<5.0	<5.0	9.0	15.0	377.0	30.	4.	5.
VA01537	162.00	162.50	1010.0	621.0	108.0	0.7	15.0	35.0	17.0	<5.0	<5.0	2.0	11.0	678.0	85.	2.	5.
VA01538	169.70	171.00	1180.0	827.0	208.0	0.7	5.0	27.0	20.0	<5.0	<5.0	2.0	4.0	1311.0	80.	1.	6.
VA01539	171.00	171.80	980.0	990.0	89.0	0.5	10.0	18.0	11.0	<5.0	<5.0	2.0	6.0	627.0	92.	0.	5.
VA01540	171.80	172.60	1920.0	1218.0	67.0	0.6	10.0	25.0	12.0	<5.0	<5.0	1.0	3.0	754.0	95.	6.	6.
VA01552	172.60	173.10	850.0	9700.0	248.0	3.8	35.0	39.0	37.0	16.0	<5.0	4.0	32.0	896.0	98.	18.	>10.
VA01551	173.10	173.60	20.0	464.0	100.0	0.6	20.0	32.0	63.0	(5.0	<5.0	<1.0	5.0	1017.0	82.	2.	6.
VA01542	202.30	203.30	2650.0	139.0	601.0	<0.5	20.0	22.0	64.0	130.0	32.0	4.0	2.0	1483.0	19.	0.	4.
VA01543	203.30	204.30	2950.0	140.0	1345.0	1.2	60.0	8.0	8.0	155.0	9.0	6.0	2.0	723.0	9.	3.	3.
VA01544	204.30	205.30	3160.0	124.0	1106.0	0.7	70.0	6.0	4.0	38.0	<5.0	6.0	3.0	627.0	10.	3.	2.
VA01545	205.30	206.90	1830.0	65.0	976.0	0.8	60.0	5.0	4.0	110.0	<5.0	4.0	2.0	480.0	6.	3.	2.
VA01546	210.40	212.00	1480.0	176.0	3200.0	0.7	30.0	7.0	4.0	127.0	6.0	16.0	2.0	980.0	5.	2.	2.
VA01547	212.00	213.50	1540.0	300.0	1085.0	0.6	20.0	7.0	4.0	419.0	69.0	6.0	3.0	729.0	22.	2.	2.
VA01548	213.50	215.00	1190.0	224.0	1044.0	0.9	15.0	6.0	4.0	517.0	86.0	6.0	3.0	1007.0	18.	2.	2.
VA01549	215.00	216.50	1380.0	124.0	487.0	<0.5	15.0	8.0	5.0	139.0	<5.0	3.0	3.0	1123.0	20.	2.	2.
VA01550	217.50	218.50	1550.0	635.0	751.0	1.4	85.0	9.0	5.0	61.0	16.0	3.0	4.0	165.0	46.	4.	3.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-40

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (рри)	AS (ppm)	CD (ppm)	HQ (ppm)	HN (ppm)	CUZN	ETS	FE
VA01553	221.50	223.00	1680.0	187.0	50.0	<0.5	30.0	10.0	9.0	9.0	33.0	<1.0	4.0	48.0	79.	4.	· · · 4.
VA01554	223.00	224.00	1150.0	305.0	16.0	<0.5	95.0	14.0	5.0	8.0	58.0	<1.0	3.0	38.0	95.	11.	5.
VA01555	224.00	225.00	860.0	108.0	16.0	0.6	65.0	9.0	4.0	5.0	32.0	<1.0	3.0	39.0	87.	7.	3.
VA01556	225.00	226.00	700.0	78.0	6.0	<0.5	50.0	7.0	4.0	<5.0	19.0	<1.0	3.0	38.0	93.	5.	2.
VA01557	226.00	227.00	1410.0	187.0	186.0	<0.5	50.0	9.0	8.0	16.0	22.0	1.0	4.0	130.0	50.	4.	2.
VA01558	227.00	228.00	1790.0	739.0	230.0	1.0	65.0	7.0	5.0	25.0	9.0	1.0	3.0	267.0	76.	- 4.	з.
VA01559	228.00	229.00	1610.0	306.0	356.0	0.8	50.0	6.0	3.0	32.0	<5.0	2.0	3.0	304.0	46.	4.	2.
VA01560	229.00	230.00	1640.0	343.0	849.0	1.2	150.0	5.0	4.0	32.0	<5.0	5.0	3.0	266.0	29.	4.	2.
VA01561	230.00	231.00	1800.0	214.0	928.0	0.8	50.0	5.0	2.0	16.0	<5.0	7.0	3.0	279.0	19.	4.	2.
VA01562	231.00	232.00	1580.0	643.0	356.0	1.4	95.0	10.0	6.0	25.0	15.0	3.0	3.0	312.0	64.	4.	3.
VA01563	232.00	233.00	1710.0	968.0	1077.0	2.5	260.0	12.0	8.0	68.0	<5.0	7.0	4.0	369.0	47.	4.	3.
VA01564	233.40	234.40	1650.0	312.0	383.0	1.2	190.0	6.0	5.0	71.0	<5.0	3.0	4.0	213.0	45.	4.	2.
VA01565	234.40	235.40	1820.0	526.0	690.0	0.8	120.0	5.0	4.0	11.0	16.0	3.0	4.0	140.0	43.	4.	3.
VA01566	235.40	236.90	1180.0	69.0	34.0	<0.5	170.0	3.0	3.0	7.0	13.0	<1.0	3.0	78.0	67.	4.	1.
VA01567	236.90	238.40	1050.0	20.0	70.0	<0.5	25.0	3.0	5.0	17.0	10.0	<1.0	2.0	103.0	22.	4.	1.
VA01568	238.40	239.90	2400.0	93.0	407.0	5.1	200.0	6.0	4.0	212.0	39.0	2.0	7.0	62 .0	19.	4.	2.
VA01569	239.90	241.40	2630.0	100.0	448.0	5.3	210.0	5.0	6.0	241.0	36.0	3.0	6.0	61.0	18.	4.	з.
VA01570	241.40	242.90	1770.0	127.0	876.0	5.6	280.0	4.0	5.0	358.0	17.0	3.0	9.0	60.0	13.	4.	3.
VA01571	242.90	244.40	1290.0	66.0	316.0	4.5	120.0	4.0	6.0	221.0	<5.0	1.0	8.0	77.0	17.	4.	2.
VA01572	244.40	246.40	1010.0	119.0	1290.0	4.8	130.0	4.0	5.0	530.0	15.0	6.0	7.0	86.0	8.	4.	3.
VA01573	246.40	247.40	2700.0	475.0	1279.0	2.6	133.0	11.0	7.0	64.0	23.0	6.0	7,0	118.0	27.	2.	3.
VA01574	249.50	251.00	3000.0	203.0	1140.0	1.7	91.0	4.0	4.0	75.0	6.0	5.0	5.0	36.0	15.	1.	2.
VA01575	251.00	252.00	2100.0	254.0	2047.0	0.5	29.0	6.0	3.0	36.0	15.0	8.0	2.0	197.0	11.	1.	2.

Hole No. CH88-40

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Summary Log: DDH CH88-41 Location: 28+00 E, 4+97 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: April 16, 1988 Core logged by: J. Pattison

0.0 - 3.6	Casing.
3.6 - 55.6	Gabbro
55.6 - 68.9	Chloritic felsic ash tuffs
68.9 - 98.9	Chloritic felsic guartz-feldspar crystal tuff
98.9 - 101.8	Gabbro
101.8 - 165.0	Chloritic felsic ash tuff
	Trace to 2 % disseminated pyrite over much of the interval
165.0 - 210.5	Chloritic felsic lapilli tuff
	Trace to 2 % disseminated pyrite over much of the interval
210.5 - 226.2	Chloritic felsic quartz eye tuff
226.2 - 257.8	Chloritic felsic lapilli tuff
257.8 - 258.2	Chlorite schist
258.2 - 272.0	Chloritic felsic quartz eye tuff
272.0 - 318.1	Quartz carbonate altered mafic tuffs and argillaceous
	sediments. Carbonate +/- quartz fills fractures and
	gashes which are roughly parallel to foliation.
318.1 - 321.0	Chloritic felsic ash tuff
321.0 - 325.0	Quartz-carbonate altered mafic tuffs and argillaceous
	sediments
325.0 - 327.3	Chloritic felsic quartz eye tuff
327.3 - 346.3	Quartz-carbonate altered mafic tuffs and argillaceous sediments

346.3 m EOH

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-41 1 DIAMOND DRILL LOG Hole Location: 28+00 E 4+97 N Claim No. Chip 1 NTS: 92B13 UTM: 5417474.3 N 430380.6 E Section No.: 28+00 E Azimuth: 210 Elevation: 608 m Length: 346.3 m Dip: -50 Logged By: J. Pattison Drilling Co.: Burwash Enterprises Started: 11-April-88 Assayed By: Bondar-Clegg & XRAL Completed: 16-April-88 Core Size: Purpose: Determine geology north of the Anita area. DIP TESTS Azi-Azi-Length muth Dip Length muth Dip 129.80 209.0 -48.0 239.60 208.0 -46.0

Рb

Zn

λg

(ppm) (ppm) (ppm) (ppb) (ppm)

Au

Ba

From ToSample From ToWidth TotalCu(m) (m)-----DESCRIPTION------No. (m) (m)Sulphides (ppm)

.0 3.6 OVERBURDEN

4.9

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3.6 4.9 FELSIC FELDSPAR CRYSTAL TUFF Light grey-green fine-grained. Broken and blocky over entire section. 0.5 M of lost core. Rusty fracture surfaces but no sulphides. Broken core at lower contact.

6.5 MAFIC TUFF Green-brown fine-grained with < 5 % ash to lapilli-sized black mud clasts. Moderate thermal biotite alteration. Broken and blocky over entire unit. Limonite stained

fractures thoroughout. Broken core at lower contact.

6.5 55.6 NAFIC INTRUSIVE

Grey-green to medium green fine to medium-grained with 2-4% interstitial ilmenite. Massive over most of section but upper 1.5 m is sheared, quartz+carbonate has flooded in along foliation planes and the rock is fine-grained. Occasional quartz +/- carbonate +/- chlorite veins and veinlets. Occasional speck of chalcopyrite often associated with quartz veins. Lower contact is at 50 degrees to core axis. STRUCTURE:.

Foliation is at 30 degrees to core axis at 7.4 m. Foliation is kinked, folded and contorted. Blocky, highly fractured core and 0.3 m of lost core between 34.7 and 37.2 m.

10 Cm fault zone at 40 degrees to core axis at 37.4 m. Fault between 44.2 and 44.5 m. Rock is broken and rubbly. Appears to be oriented at 90 degrees to core axis.

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FALCONBRIDGE LIMITED

HOLE No: Page Number CH88-41 2

				DIAMOND DRILL LOG						·				
From (m)	То (m))	DESCRIPTI	DN	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu Pb (ppm) (pp	Zn m) (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		48.4 - 48 49.7 - 5 At 54.5 r 15.5 16.2	3.8 m blocky, highly fracture 1.8 m blocky, highly fracture at 25 degrees to core axis 2 MAFIC TUFFACEOUS SEDIMENTS bedded near upper and low moderately to strongly the Both upper and lower contact are conformable with beddii the gabbro may actually be and lower contacts are at axis. A 1.0 cm bed of chery the lower contact.	ed core. ed core. . Sediments are finely er contacts and are rmal biotite altered. cts with the gabbro ng and suggest that e a flow. The upper 40 degrees to core y siltstone occurs at				. 4 '						
		17.9 18.3	MAFIC TUFFACEOUS SEDIMENTS but core is broken and bla not been preserved.	. Similiar to above ocky and contacts have										
		20.4 20.7	Fine-grained chloritic zon disseminated ilmenite and p	e with 10% no feldspar phenocrysts										
		21.8 22.7	Fine-grained chloritic zon disseminated ilmenite and phenocrysts. Rock is strong contact is sharp at 40 deg lower contact is at 55 deg	e with 10% no feldspar gly magnetic. Upper rees to core axis and rees to core axis.										
•		26.0 27.9	HAFIC TUFF. Minor fault at axis at upper contact. Tuf lower contact and lower con to it at 35 degrees to core	80 degrees to core f is finely bedded at ntact is parallel to e axis.										
55.6	57.9	CHLORITIC Light gre quartz ey a banded light gre thick, pa original contact b	EFELSIC QUARTZ EYE TUFF ey-green well foliated ash tu res. Chlorite alteration is appearance. Grey sericitic l en chloritic bands. The band trallel to foliation and likk bedding. Nil sulphides. Bro but it appears to be conformat	off with 1-3 % < 3 mm variable giving rock bands alternate with is are less than 10 cm ely represent oken core at lower able with bedding.	VA02768	55.6	75.0	19.4	n/a	346 n/a	21	n/a	n/a 1	700
		STRUCTURE Bedding i axis at 5	C:. s parallel to foliation at 5 6.7 m.	58 degrees to core										
		ALTERATIC	DN:.) WEAK PERVASIVE CHLORITIZAT SERICITIZATION.	ION and WEAK PERVASIVE										
57.9	68.9	9 WEAKLY CH	LORITIC FELSIC TUFF											

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HOLE No: Page Number FALCONBRIDGE LIMITED CH88-41 3 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Ag Au Ba -----DESCRIPTION-----(m) {m} No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Similiar to 55.6 to 57.9 m except quartz eyes are rare. VA03324 61.9 62.9 1.0 0 21 10 25 (1 5 2040 Rock has a banded appearance in most places due to VA03325 62.9 63.3 4 2 109 6 14 <1 5 1730 differences in chlorite content. Broken core at lower VA03326 63.3 64.5 1.2 0 33 < 5 97 <1 (5 1010 65.5 337 7 (5 750 contact. VA03327 64.5 1.0 1 98 1 <5 1440 VA03328 65.5 66.0 4 112 14 19 <1 . 5 STRUCTURE: . VA03329 66.0 67.0 1.0 1 14 6 14 <1 < 5 1310 Bedding is at 55 degrees to core axis at 62.3. Fault at 40 degrees to core axis at 68.9 m. 2.0 Cm fault gouge at 65 degrees to core axis at 62.9 m. Minor fault at 40 degrees to core axis at 68.9 m. ALTERATION . 57.9 68.9 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION. SULPHIDES:. 3 % fracture controlled pyrite-pyrrhotite from 62.9 to 63 4 m 2 % fracture controlled pyrite from 65.5 to 66.0 m. 59.6 60.0 5 % ash to lapilli-sized chlorite spots (mafic fragments ?) stretched parallel to foliation. 63.5 64.5 Very massive section, no bedding recognizable. 64.8 65.0 Bed of MAFIC TUFF at 60 degrees to core axis. 67.4 67.7 Brecciated fractured zone. Fractures are healed with guartz. 68.9 98.9 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF 10-15% (3 mm feldspar crystals and up to 5 % 1-4 mm guartz VA02769 75.0 98.9 23.9 n/a 49 n/a 49 n/a n/a 1190 25 1510 eyes in a siliceous, moderately sericitic, weakly VA03330 78.7 79.5 .8 3 150 33 61 <1 37 <1 5 1080 chloritic matrix. Rock has a banded appearance and in VA03331 79.5 80.2 . 7 2 9 12 most places bands likely represent original bedding. VA03332 80.2 81.2 24 5 27 <1 10 1040 1.0 1 Bands are generally (2.0 cm wide and are produced by VA03333 84.0 85.0 1.0 2 38 <5 21 <1 <5 1270 <1 5 1090 slight differences in chlorite and silica content. Broken VA03334 85.0 86.0 1.0 1 16 5 16 <1 <5 810 87.0 13 <5 18 core at lower contact. VA03335 86.0 1.0 1 ٢5 88.4 11 6 17 <1 690 VA03336 87.0 1 1.4 15 660 STRUCTURE:. VA03337 88.4 88.6 4 71 8 31 <1 2 89.5 61 ٢5 60 (1 10 600 Bedding is at 55-60 degrees to core axis at 72.5 m. VA03338 88.6 . 9 2 37 <1 520 Foliation is kinked between 77.7 and 78.7 m. VA03339 89.5 90.2 .7 1 25 5 - 5 27 493 (1 35 940

VA03340

VA03341

VA03342

VA03343

VA03344

94.5

95.3

95.9

96.9

97.5

95.0

95.5

96.9

97.5

98.5

.5

. 2

1.0

.6

1.0

2

3

3

2

1

341

233

382

40

(1

104

10

11

<5

569

431

47

1464

(1

(1

<1

(1

10

20 1200

٢5 1630

15 1230

760

Bedding is at 67 degrees to core axis at 78.9 m. Bedding is at 60 degrees to core axis at 81.6 m. Beds are offset 1.0 cm by a minor fault at 20 degrees to core axis. Bedding is at 60 degrees to core axis at 84.6 m. Bedding is at 58 degrees to core axis at 89.0 m. Bedding is at 57 degrees to core axis at 90.9 m. Foliation is kinked.

3 Mm fault gouge at 25 degrees to core axis at 91.1 m.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-41 4

From	То	
(m)	(m)	DESCRIPTION

Sample From Ţο Width Total Cu Рb Zn λg Au Ba No. (m) (m.) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Foliation is kinked, folded and contorted between 93.3 and 94.0 m.

Foliation is at 50 degrees to core axis at 94.7 m. 0.5 Cm fault gouge at 65 degrees to core axis at 95.3 m. Foliation is kinked and contorted between 96.5 and 98.9 m.

ALTERATION: .

68.9 98.9 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

95.3 95.5 Weak mariposite alteration.

SULPHIDES:.

78.7 80.2 1-2% pyrite disseminated in discrete beds 2 to 10 mm thick at 60-70 degrees to core axis.

94.5 95.0 2 % pyrite and trace chalcopyrite disseminated along foliation planes.

95.3 95.5 4 % pyrite disseminated along foliation planes.

95.9 97.5 2 % pyrite and trace sphalerite/biotite disseminated and pyrite sometimes occurs in spots <3 mm in diameter which may be clasts. Pyrrhotite-chalcopyrite occasional in a 1.0 cm guartz vein at 50 degrees to core axis at 97.4 m.

83.1 84.0 MAFIC DYKE: massive pale green fine-grained weakly feldspar porphyritic upper contact is sharp at 70 degrees to core axis while lower contact is very irregular.

84.0 86.0 1-2% fracture controlled pyrite.

88.4 88.6 Cherty silt beds < 2.0 cm thick at 58 degrees to core axis. 2 % fracture controlled pyrite. One bed contains a 1.0 cm wide clast of felsic crystal tuff.

88.6 89.5 Felsic ash tuff, no quartz eyes. 2-3% pyrite along foliation planes.

- 90.2 90.5 MAFIC DYKE. Medium green fine-grained moderately carbonatized no feldspar phenocrysts and moderately well foliated. Upper contact is at 58 degrees to core axis and lower contact is at 60 degrees to core axis.
- 92.1 92.3 MAFIC DYKE. As above. Upper and lower contacts are conformable with bedding and foliation at 55-60 degrees to core axis.

92.3 98.9 Quartz eyes are very rare.

95.0 95.3 MAFIC DYKE. As 90.2 to 90.5 m. Upper and lower

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-41 5 DIAMOND DRILL LOG To Sample From То Width Total Pb Cu Zn Au Ba λα -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) contacts are at 55-60 degrees to core axis. 95.5 95.9 MAFIC DYKE. As 90.2 to 90.5 m. Contacts are at 62 to 67 degrees to core axis. 98.9 101.8 MAFIC INTRUSIVE Medium green, fine-grained with 1-2% finely disseminated VA03345 100.8 101.3 .5 48 <5 199 <1 25 1580 4 ilmenite and trace disseminated pyrite. May be a mafic volcanic but is logged as gabbro based on the presence of ilmenite. Lower contact is at 47 degrees to core axis. 99.4 99.5 Inclusion or bed of felsic ash tuff at 60 degrees to core axis. Upper and lower contacts are offset 3.0 cm by a fault running parallel to core axis. 100.8 101.3 Inclusion of felsic crystal tuff with 4 % pyrite concentrated on foliation planes and in hairline fractures. Upper contact is at 42 degrees to core axis and lower contact is at 52 degrees to core axis. 101.8 165.0 WEAKLY CHLORITIC FELSIC TUFF Light grey with a greenish tint fine-grained and well VA03346 101.8 102.8 1.0 568 123 945 9 220 1230 n/a 1460 foliated. Moderately to strongly sericitized and weakly VA02770 101.8 131.0 29.2 n/a 72 n/a 81 n/a chloritic. Foliation is kinked over much of the interval. VA03347 102.8 103.8 1450 157 45 686 16 1.0 3 1 1.1 M mafic dyke at the lower contact. VA03348 103.8 104.6 34 27 198 31 22 1280 . 8 2 71 VA03349 107.0 108.0 1.0 1 41 7 138 <1 2070 STRUCTURE: . VA03350 108.0 108.7 .7 633 118 507 3 104 5340 102.0-102.5 FAULT ZONE. Several fault gouges up to 5.0 cm VA03351 108.7 109.7 23 6 285 1 12 930 1.0 1 wide at 40 to 52 degrees to core axis. Foliation is VA03352 110.8 111.8 33 17 401 31 1320 1.0 1 1 27 13 1260 kinked, ptygmatically folded and contorted for 7.0 m below VA03353 111.8 112.8 1.0 13 604 1 2 24 this zone. VA03354 112.8 113.3 25 6 1335 1 1250 . 5 4 At 107.6 m 0.5 cm fault gouge at 60 degrees to core axis. 28 <1 9 1290 VA03355 113.3 114.3 1.0 12 64 1 108.7 - 109.3 m FAULT ZONE at 50-60 degrees to core axis. VA03356 128.0 128.5 17 10 290 1 37 950 .5 3 <1 15 1070 At 110.1 m bedding is at 70 degrees to core axis. VA03357 129.8 130.8 1.0 19 10 58 3 At 111.6 m FAULT ZONE at 50 degrees to core axis. 0.4 m of VA03358 130.8 132.0 28 79 <1 23 960 1.2 5 10 n/a 1180 lost core. VA02771 131.0 163.9 32.9 n/a 104 n/a 38 n/a At 112.8 m 1.0 cm fault gouge at 70 degrees to core axis. VA03359 132.0 133.0 1.0 3 88 7 67 1 24 1140 117.4-118.0 m 10.0 cm FAULT ZONE at 50 degrees to core axis VA03360 133.0 134.0 16 8 37 <1 5 1150 1.0 2 At 120.5 m foliation is at 47 degrees to core axis. 9 47 <1 <5 1050 VA03361 134.0 135.0 1.0 2 14 Bedding is at 40 degrees to core axis at 120.9 m. VA03362 135.0 136.0 2 14 9 80 1 7 1070 1.0 (1 1220 51 29 5.0 Cm fault gouge at 75 degrees to core axis at 129.8 m. VA03363 136.0 136.0 . 0 2 14 6 At 103.0 m 10 cm fault at 40 degrees to core axis. 56 25 1090 VA03364 137.0 138.0 1.0 19 9 1 1 Foliation is at 65 degrees to core axis at 134.2 m. VA03365 140.0 141.0 17 <5 88 1 26 1090 1.0 2 Foliation is at 66 degrees to core axis at 140.6 m. VA03366 141.0 142.0 18 130 <1 26 1210 1.0 2 6 FAULT ZONE at 55 degrees to core axis between 141.0 and VA03367 142.0 143.0 1.0 2 18 9 71 <1 7 1150 24 1020 17 39 (1 141.3 m. VA03368 143.0 144.0 1.0 2 6 VA03369 144.0 145.0 21 9 58 1 40 1010 Bedding is at 50 degrees to core axis at 147.9 m. 1.0 2

From

(m)

PRO	OPERTY:	Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-41	o: Pa	ige Numb 6	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba 5) (ppm)
	В	edding is at 60 degrees to core axis at 153.0 m.	VA03370	145.0	146.3	1.3	2	30	9	88	<1	30	870
	3	.0 Cm fault gouge at 70 degrees to core axis at 154.0 m.	VA03371	146.8	147.5	.7	2	45	8	42	<1	25	1000
	F	oliation is at 50 degrees to core axis 158.0 m.	VA03372	147.7	148.7	1.0	3	50	8	59	1	40	960
	F	oliation is at 40 degrees to core axis at 162.6 m.	VA03373	148.7	149.7	1.0	2	17	11	32	<1	20	1070
	3	.0 Cm fault gouge at 90 degrees to core axis at 166.3 m.	VA03374	149.7	150.7	1.0	2	21	9	60	<1	25	1020
	F	oliation is at 42 degrees to core axis at 169.0 m.	VA03375	150.7	151.7	1.0	3	16	(5	28	(1	30	1040
	B	anding (bedding?) is at 42 degrees to core axis at 169.6	VA03376	151.7	152.7	1.0	3	18	9	32	(1	35	1040
	m	. Bands are (0.5 cm wide and are the result of	VA03377	152.7	153.5	. 8	1	24	8	32	(Î	20	920
	a.	ifferences in chlorite/sericite_content.	VA03378	153.8	154.8	1.0		17	7	40	<u>.</u>	20	1100
	1	05 1-105.2 M fault gouge at 40-60 degrees to core axis.	VA03379	154.8	155.8	1.0	. 3	15	6	219	(1	25	1250
	-		VA03380	155.8	156 8	1 0		16	8	78	(1	30	1310
	2	I.TERATION	VA03381	156.8	157.8	1.0	2	6	(5	30	a l	15	990
	1	01 8 165 0 STRONG PERVASIVE SERICITIZATION and WEAK	VA03382	157 8	159 0	1 2	2	4	q	31	1	35	1020
	1	PERVASIVE CHLORITIZATION. Several spots of mariposite at 147.8 m.	1203502	157.0	133.0	1.0	. "	•	,	31	`	55	1020
	si	ULPHIDES:.											
	10	01.8 104.6 2 % pyrite, disseminated and in <2 mm bands parallel to foliation.											

- 104.6 108.0 <1% pyrite in spots (clasts ?) up to 4 mm in diameter.
- 108.0 108.7 2 % disseminated pyrite and trace chalcopyrite.
- 108.7 111.8 1 % disseminated pyrite.
- 111.8 113.3 3 % disseminated pyrite.
- 113.3 129.8 <1% disseminated pyrite.

Γ

- 129.8 130.0 2 % pyrite disseminated along foliation planes. Trace chalcopyrite associated with a 3.0 cm irregular quartz-carbonate vein at 132.6 m.
- 138.0 140.0 1 % disseminated pyrite.
- 140.0 157.0 2 % pyrite disseminated and in 1-2 mm bands parallel to foliation.
- 157.0 163.9 1 % disseminated pyrite.
- 124.3 124.4 Fine-grained MAFIC DYKE at 66 degrees to core axis.
- 128.2 128.4 Cherty beds <0.5 cm thick at 65 degrees to core axis. 5 % disseminated pyrite.
- 129.8 132.0 0.8 m of lost core due to problems with the core barrel.
- 146.3 146.8 MAFIC DYKE/TUFF/STRONGLY CHLORITIZED ZONE. Dark green, fine-grained strongly chloritic. Upper and lower contacts are parallel to to foliation at 40 degrees to core axis. Moderate fracture controlled carbonatization and trace disseminated pyrite.
- 147.5 147.7 Chlorite-carbonate alteration zone.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-41 7

From То (m)

Π

(m) -----DESCRIPTION------

From Total Cu Sample То Width Pb Zn Ag Au Ba Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm)

- 153.5 153.8 MAFIC DYKE/FLO!TUFF. As 146.3 to 146.8 m. Upper and lower contacts are conformable with bedding at 60 degrees to core axis.
- 156.8 163.9 <2% ash-sized quartz eyes.
- 160.6 888.8 0.5 cm band of finely laminated, cherty tuff at 51 c/ with lamelli of pyrite.
- 163.9 165.0 MAFIC DYKE. Medium green, fine-grained, massive with 3 % moderately magnetic ilmenite as subhedral crystals up to 3 mm in diameter and trace chalcopyrite. Broken core at upper contact. Lower contact is at 48 degrees to core axis.

165.0 210.5 CHLORITIC FELSIC LAPILLI TUFF

Similiar to 101.8 165.0 m but contains up to 10 % light grey fine-grained felsic fragments up to 4 cm long (most (1.0 cm) stretched parallel to foliation. In most cases the fragments are hazy and difficult to distinguish from the matrix except where the rock is moderately chloritic. Rock is well banded. Bands are generally < 3.0 cm wide, roughly parallel to foliation and probably represent original bedding.

Occasional ash-sized guartz eyes. Mafic ash tuff occurs at lower contact.

STRUCTURE:.

Banding (bedding?) is at 40-50 degrees to core axis at 171.5 m.

5.0 Cm fault gouge at 90 degrees to core axis. Foliation is at 50 degrees to core axis at 175 m. 175.9-179.0 FAULT ZONE at 30-60 degrees to core axis. Rock is crushed, there are many fault gouges and foliation runs nearly parallel to core axis over much of the interval. Bedding is at 50 degrees to core axis at 181.8 m. 186.0-186.3 M: fold nose (?). Foliation changes from 50 to 0 back to 50 degrees to core axis. Rock is very crushed in centre of nose (?) and similiar in appearance to what have previously been logged as fault gouges. 186.9-187.7 M: crushed zone.

At 188.0 m banding (bedding?) is at 50 degrees to core axis At 189.9 banding is sharply kinked (folded) along edge of a slip at 50 degrees to core axis. 193.4-193.9 M: fault gouge runs parallel to core axis.

At 195.0 m foliation is at 50 degrees to core axis. 195.3 195.6 M FAULT ZONE: at 20 degrees to core axis. At 205.0 m foliation is at 50 degrees to core axis.

VA02772	165.0	188.0	23.0	n/a	42	n/a	54	n/a	n/a	1200
VA03384	179.0	179.5	.5	3	19	14	87	<1	- 15	1200
VA03385	181.6	182.1	.5	2	879	20	2213	3	140	1040
VA02773	188.0	210.5	22.5	n/a	44	n/a	177	n/a	n/a	1310
VA03383	189.4	190.1	.7	3	20	12	108	(1	20	1590
VA03386	198.4	199.4	1.0	Ó	665	142	2902	2	55	1320
VA03387	199.4	200.4	1.0	0	110	21	253	<1	45	1520
VA03388	200.4	201.4	1.0	0	271	480	490	1	24	1200

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-41 8

From	То		
(m)	(m)	DESCRIPTION	

Sample From То Width Total Cu Рb Zn Âg Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

At 206.7 m bedding is at 55 degrees to core axis.

ALTERATION:.

165.0 210.5 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION to STRONG PERVASIVE SERICITIZATION.

SULPHIDES:.

- 165.0 179.0 Trace-1% pyrite.
- 179.0 179.5 2 % disseminated pyrite.
- 179.5 187.8 Trace-1 % disseminated pyrite. 5.0 cm
- silicified zone at 45 degrees to core axis.
- 187.8 189.4 1 % pyrite as spots up to 3 mm in diameter.
- 189.4 190.1 3 % pyrite in 1-2 mm bands parallel to to foliation.
- At 182.0 with 10 % pyrite and 2 % chalcopyrite.
- 190.1 198.4 1 % disseminated pyrite.
- 198.4 201.4 2 % pyrite and nil-trace chalcopyrite. Sulphides are disseminated and occur in chlorite-carbonate alteration zones and in bands up to 1.0 cm wide.
- 201.4 210.5 1 % disseminated pyrite as spots (2 mm in diameter.
- 166.3 167.0 MAFIC DYKE. Fine-grained, sheared medium green with weak spotty hematite. Core is broken and blocky throughout. Upper contact is a 3.0 cm fault gouge at 90 degrees to core axis and the lower contact is at 30 degrees to core axis.

173.6 174.0 Up to 10 % 1-5 mm quartz eyes.

- 180.4 181.3 MAFIC DYKE. Dark green, fine-grained and moderately carbonatized. Upper contact is at 58 degrees to core axis and lower contact is at 50 degrees to core axis.
- 182.0 183.0 5 % 1-5 mm quartz eyes. Quartz eyes fine downhole.

188.7 189.4 5 % 1-4 mm quartz eyes.

- 199.8 200.4 MAFIC TUFF (?). Dark green, fine-grained well banded. Banding is folded and contorted. Moderate carbonate chlorite alteration and several quartz-carbonate veins up to 2.0 cm wide.
- 210.1 210.5 MAFIC ASH TUFF. Medium green, finely bedded with 4 % pyrite. Contacts are at 45-50 degrees to core axis.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-41 9

48 n/a n/a 1190

 From
 To

 (m)
 -----DESCRIPTION-----

Sample From To Width Total Cu Pb Zn Aα Au Ba (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m)

87

n/a

210.5 226.2 CHLORITIC FELSIC QUARTZ EYE TUFF Light grey-green moderately to strongly sericitic very weakly to weakly chloritic, fine-grained with up to 5 % 1-4 mm quartz eyes. Hazy, poorly defined lapilli-sized felsic fragments are common.

n/a

VA02774 210.5 226.2 15.7

STRUCTURE:.

At 212.0 m foliation is at 40 degrees to core axis. At 214.0 m FAULT ZONE at 42 degrees to core axis. 0.3 m of lost core. At 224.1 m bedding is at 42 degrees to core axis. 225.0-226.2 M FAULT ZONE at 50 degrees to core axis. 0.8 m of lost core.

254.0-255.0 M foliation is kinked and folded.

ALTERATION:.

210.5 226.2 WEAK PERVASIVE CHLORITIZATION, MODERATE PERVASIVE SERICITIZATION to STRONG PERVASIVE SERICITIZATION and nil to very weak brown carbonate alteration.

SULPHIDES:.

210.5 226.2 Nil-trace disseminated pyrite.

210.9 211.1 MAFIC ASH TUFF. Contacts are at 45 degrees to core axis.

218.1 218.2 MAFIC ASH TUFF. Wavey banding at 30-50 degrees to core axis.

226.2 257.8 CHLORITIC FELSIC LAPILLI TUFF

As 165.0 210.5. Distinctive light brown stain along foliation planes above 242.0 m. Foliation is kinked over most of the unit. Lower contact is at 60 degrees to core axis.

STRUCTURE.

228.9 to 229.0 m fault gouge at 60 degrees to core axis.
229.7 to 230.1 m fault gouge at 50 degrees to core axis.
230.6 to 230.9 m fault gouge at 50 degrees to core axis.
236.7 238.1 Banding/foliation is kinked and folded.
Foliation runs parallel to core axis between 237.2 and 237.5 m.

At 245.1 m 1.0 cm fault gouge at 68 degrees to core axis. At 246.7 m foliation is at 57 degrees to core axis. At 252.5 m bedding is at 60 degrees to core axis. VA02775 226.2 257.8 31.6 n/a 54 n/a 40 n/a n/a 1020

(m)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-41 10

n/a

77

n/a

Pb

Zn

(ppm) (ppm)

λg

11 n/a n/a 1340

Au

(ppm) (ppb) (ppm)

Ba

From To Sample From To Width Total Cu (m) -----DESCRIPTION------No. (m) (m) (m.) Sulphides (ppm) ALTERATION:. 226.2 257.8 MODERATE PERVASIVE SERICITIZATION , WEAK PERVASIVE CHLORITIZATION and weak beige carbonate alteration. SULPHIDES:. 226.2 257.8 Nil-1 % disseminated pyrite. 252.5 253.9 2 % guartz eyes up to 5 mm in diameter. 257.8 258.2 CHLORITE SCHIST

Dark green, well foliated, chloritic mafic tuff or flow. Weak carbonatization. Nil sulphides. Broken core at lower contact.

258.2 261.6 CHLORITIC FELSIC QUARTZ EYE TUFF

More strongly chloritic than the felsic units above. Up to 7 % 2-6 mm quartz eyes. Rock is crushed over the entire interval but foliation is not contorted. Rock is silicified for 0.7 m from the lower contact. Trace chalcopyrite associated with a 2.0 cm guartz-carbonate vein along the lower contact. Lower contact is at 50 degrees to core axis. Quartz eyes are relatively rare below 268.0 m. STRUCTURE:.

At 260.5 m foliation is at 58 degrees to core axis.

ALTERATION:.

258.2 261.6 MODERATE PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

261.6 262.8 CHLORITE SCHIST

As 257.8 to 258.2 m. Nil sulphides. Lower contact is sharp but irregular at about 50 degrees to core axis.

262.8 272.0 CHLORITIC FELSIC QUARTZ EYE TUFF

 Light green-grey, moderately chloritic well foliated	VA03389	268.0	269.0	1.0	2	13	<5	30	. <1	14	1000
crushed matrix with <2 % 2-4 mm quartz eye and up to 20 %	VA03390	269.0	270.3	1.3	2	19	6	36	<1	10	960
light grey felsic fragments <2 cm wide. Lower contact is	VA03391	270.3	271.4	1.1	2	10	. <5	20	(1	25	1000
at 56 degrees to core axis.											

VA02776 257.8 272.0 14.2

STRUCTURE:.

At 263.3 m foliation is at 66 degrees to core axis. 264.0-264.3 Fault gouge at 68 degrees to core axis. 265.9-270.0 Foliation is kinked and folded. Foliation is parallel to core axis from 266.7 m to 267.1 m (fold nose?). 266.5-266.7 FAULT ZONE at 35 degrees to core axis.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-41 11 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Aσ Au Ba (m) (m) -----DESCRIPTION------Sulphides (ppm) No. (m) (m) (m.) (ppm) (ppm) (ppm) (ppb) (ppm) ALTERATION:. 262.8 272.0 MODERATE PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION. SULPHIDES:. 268.0 269.0 2 % pyrite in patches up to 1.0 cm in diameter associated with quartz-carbonate veins. 270.3 271.4 Numerous guartz-carbonate veins up to 15 cm wide at 50-60 degrees to core axis. 2 % pyrite within the veins. 272.0 318.1 MAFIC TUFFS AND ARGILLACEOUS SEDIMENTS Streaky dark green to black, strongly chloritic with many VA02777 272.0 295.0 23.0 n/a 68 n/a 67 n/a n/a 245 white carbonate +/- guartz filled fractures and gashes VA03392 278.0 279.0 1.0 - 1 15 < 5 109 <1 20 190 roughly parallel to foliation. Likely a mix of mafic ash VA02778 295.0 320.0 25.0 76 n/a 70 n/a n/a 307 n/a tuff and argillaceous sediments. Occasional <1.0 cm bed of VA03393 317.7 318.0 30 <5 117 28 690 . 3 1 <1 feldspar crystal tuff recognizable. Occasional very rare quartz eye up to 4 mm in diameter. Quite different in appearance from MAFIC TUFFACEOUS SEDIMENTS south of the Active Tuff. This rock has a high argillaceous sedimentary component but no thermal biotite alteration and cherty beds are very rare. Sediment component increases below 309.0 m, rock is finely bedded (beds < 0.5 cm) and cherty beds are common. Lower contact is a 1.0 cm fault gouge at 55 degrees to core axis. STRUCTURE: . 273.0-273.7 FAULT ZONE at 45 degrees to core axis. 0.2 m of lost core. 276.1-276.2 Foliation is folded. Fold axes are at 40 degrees to core axis. At 279.0 m foliation is at 60 degrees to core axis. 282.0-282.2 FAULT ZONE at 70 degrees to core axis. 284.5-285.3 M FAULT ZONE. Foliation is nearly parallel to core axis. 0.5 m of lost core.

At 295.2 m foliation is at 50 degrees to core axis. 299.0-299.1 M two 1.0 cm fault gouge at 50-55 degrees to core axis. At 303.4 bedding is at 58 degrees to core axis.

At 286.5 m foliation is at 60 degrees to core axis.

At 309.2 fine bedding at 45 degrees to core axis. At 312.4 foliation is at 55 degrees to core axis.

ALTERATION: .

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272.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and STRONG PERVASIVE CHLORITIZATION.

295.6 296.2 2 % <2 mm black anhedral mafic crystals

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-41 12 DIAMOND DRILL LOG Sample From То Width Total Cu Pb Zn λg Au Ba From To: -----DESCRIPTION-----No. (m) (m) (m.) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) (hornblende ?). SULPHIDES:. 278.2 888.8 Few specks of sphalerite (?) associated with quartz-carbonate alteration. 317.7 318.1 2 % pyrite associated with strong pervasive carbonate alteration. 293.5 294.7 3 % paper thin black chloritic fragments smeared along foliation planes. 303.5 304.0 3 % black lapilli-sized mud clasts stretched 1:10 parallel to foliation. 318.1 321.0 WEAKLY CHLORITIC FELSIC TUFF n/a 754 Light grey-green finely bedded ash tuff. Cherty siliceous VA02779 320.0 346.3 26.3 n/a 80 n/a 150 n/a beds of ash tuff up to 5.0 cm thick (most < 5 mm) alternate with more chloritic bands. Nil sulphides. Lower contact is at 60 degrees to core axis. STRUCTURE:. At 318.1 m bedding is at 50 degrees to core axis. ALTERATION:. 318.1 321.0 MODERATE PERVASIVE CHLORITIZATION and MODERATE FRACTURE CONTROLLED CARBONATIZATION. 318.7 319.4 MAFIC-INTERMEDIATE SEDIMENTS. As 272.0 to 318.7 m. 320.7 320.8 MAFIC ASH TUFF bed at 60 degrees to core axis. 321.0 325.0 MAFIC TUFFS AND ARGILLACEOUS SEDIMENTS As 272.0 to 318.7 m. Nil sulphides. Lower contact is gradational over 5.0 cm. ALTERATION:. 321.0 325.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and STRONG PERVASIVE CHLORITIZATION. 322.3 888.8 5.0 cm felsic ash tuff at 70 degrees to core axis. 323.6 323.8 Bedding is contorted (soft sediment deormation ?) and there are clasts of cherty tuff up to 1.0 cm wide.

325.0 325.7 WEAKLY CHLORITIC FELSIC TUFF As 318.1 to 321.0 m. Bedding is at 63 degrees to core

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-41 13

From To (m) (m)

(m) -----DESCRIPTION-----

Sample From То Width Total Cu Рb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

axis. Nil sulphides. Lower contact is at 64 degrees to core axis. 325.0 325.7 WEAK PERVASIVE CHLORITIZATION.

325.7 327.3 CHLORITIC FELSIC QUART2 EYE TUFF Medium grey-green crushed appearance with 2 % 1-3 mm quartz eyes. Interfingers with mafic ash tuff below 326.2 m and its overall composition is probably intermediate. Nil sulphides. Lower contact is sharp at 65 degrees to core axis and a 3 mm band of cherty felsic ash tuff occurs along the contact.

ALTERATION:.

325.7 327.3 MODERATE PERVASIVE CHLORITIZATION and WEAK PERVASIVE CARBONATIZATION.

327.3 346.3 MAFIC TUFFS AND ARGILLACEOUS SEDIMENTS As 272.0 to 318.1 m but contains 1-5 % disseminated magnetite above 335.0 m. . STRUCTURE:.
329.4-330.5 FAULT ZONE at 30 to 70 degrees to core axis.
334.6-334.9 Bedding is kinked and folded.
338.2-338.9 Foliation runs nearly parallel to core axis.
339.6 339.9 Foliation runs nearly parallel to core axis.
339.6 339.9 Foliation runs displayed by thin (<4 mm) cherty felsic ash tuff beds.

At 343.2 foliation is at 55 degrees to core axis.

ALTERATION:.

327.3 346.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION and MODERATE PERVASIVE CHLORITIZATION.

329.4 330.5 FELSIC ASH TUFF in a fault zone, rock is crushed over most of the interval. Lower contact is sharp at 35 degrees to core axis.

330.6 330.7 Finely bedded FELSIC ASH TUFF. Bedding is at 50-70 degrees to core axis.

342.7 344.0 Up to 10 % black lapilli-sized clasts flattened along foliation planes. This could be the BLACK LAPILLI TUFF (BLT).

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SAMPLE NUMBER	FROM	то	25102	ZAL203	ZCAO	ZHGO	XNA20	XK20	ZFE203	XT 102	XP205	ZHNO	ZLOI	SUH	В	A	AI	NACA
UA02271	1.1 00	11 40	49 00	12 70	11 20	5 59	3 47	0.45	14 20	1 91	0 16	0 77	2 16	100 16		1 30		
UA07277	56 80	57 00	75 60	14 60	A 79	0.61		V. 1J	1 24	0.76	0.06	0.22	2 20	100.10		200	92.	13.
UA02272	66.50	66.70	70 30	15.60	2 10	0.01	4 90	1.00	1.51	0.20	0.07	0.03	1 85	99 73	1	310	29	
1002275	70.00	72 94	77.40	14.50	2.10	0.72	1.00	1.75	1.05	0.JV	0.07	0.03	1.00	00.07	1.		47.	
VH02274	· 02 60	/3.00	70.50	14.50	2.10	0.73	1.95	2.99	1.36	. 0.23	0.05	0.02	2.08	99.87	21		47.	1.
VH02273	74.00	73.00	/0.30	14.00	J.14	1.11	2.09	2.73	2.41	0.24	0.00	0.08	3.34	99.88		,2/.	44.	J.
VA02277	99.20	99.40	46.50	15.70	8.25	6.10	2.61	0.04	11.80	1.22	0.14	0.21	6.62	99.53		139.	36.	11.
VA02276	106.20	106.40	67.00	12.60	4.98	1.70	0.11	2.91	3.40	0.31	0.07	0.14	5.70	98.92	12	290.	48.	5.
VA02278	126.40	126.70	65,90	12.50	6.47	1.22	0.59	2.50	2.60	0.29	0.07	0.09	7.47	99.70	10)70.	35.	7.
VA02279	144.50	144.90	66.80	13.00	4.08	2.06	0.52	2.94	3.08	0.33	0.08	0.13	6.31	99.33	10)20.	52.	5.
VA02280	171.30	171.60	67.40	13.00	4.11	1.26	1.93	2.66	2.90	0.33	0.08	0.11	5.08	98.86	. 8	387.	39.	6.
VA02281	184.20	184.60	65.00	13.10	4.80	2.53	0.20	3.32	3.63	0.35	0.08	0.14	6.54	99.69	11	150.	54.	5.
VA02282	192.60	192.80	67.20	13.70	4.01	1.39	2.01	2.48	2.85	0.32	0.08	0.10	5.31	99.45	5) 87.	39.	6.
VA02283	202.00	202.30	66.20	13.40	3.92	1.48	0.43	3.40	2.14	0.23	0.07	0.11	7.39	98.77	12	290.	53.	4.
VA02284	219.40	219.70	67.50	13.40	3.68	1.63	0.64	2.95	2.74	0.27	0.07	0.07	6.08	99.03	10	240.	51.	4.
VA02285	231.80	232.00	64.00	12.50	5.86	2.81	0.72	2.37	2.79	0.22	0.06	0.16	8.39	99.88	ŧ	329.	44.	7.
VA02286	255.00	255.20	71.10	14.30	2.52	1.21	0.60	3.23	1.61	0.21	0.06	0.06	4.85	99.75	11	130.	59.	3.
VA02287	260.00	260.30	70.60	12.90	3.35	0.91	3.15	2.01	2.59	0.25	0.06	0.10	4.23	100.15	. ç	917.	31.	7.
VA02288	274.60	274.80	52.50	16.70	7.84	1.92	2.97	1.06	7.82	0.67	0.18	0.14	8.54	100.34		280.	22.	. 11.
VA02289	295.60	295.80	45.90	15.70	8.88	4.19	3.37	0.96	8.22	0.75	0.16	0.16	12.10	100.39		279.	30.	12.
VA02290	310.80	311.00	59.30	15,10	5.85	2.04	4.49	0.98	5.43	0.47	0.17	0.12	6.08	100.03	: 	371.	23.	10.
U402291	323 00	323 20	53 30	18 70	1 65	2 22	2 72	0.74	9 98	1.11	0.43	0.13	5.54	99.64		718.	29.	7.
11102211	545.00	545.60		10.70	1.00	4.04	4.14	v./u			v		0.01					

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

Hole No. CH88-41 WHOLE ROCK SAMPLES

Page No.

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SAMPLE NUMBER	FROM	то	25102	XAL203	XCAO	ZHGO	XNA20	XK20	2FE203	XT102	ZP205	ZHNO	XLO I	SUM	B	A	AI	NACA
*************			····															
VA02768	55.60	75.00	69.40	14.10	3.62	1.37	1.52	2.56	4.20	0.33			2.70	99.80	1	700.	43.	5.
VA02769	75.00	98.90	72.10	14.00	2.62	1.04	2.07	2.65	2.43	0.28			2.70	99.88	1	190.	44.	5.
VA02770	101.80	131.00	65.70	13.30	5.08	1.23	0.33	3.12	3.59	0.32			5.39	98.06	1	460.	45.	5.
VA02771	131.00	163.90	66.20	13.10	4.95	1.74	0.56	2.96	3.04	0.29			6.23	99.07	. 1	180.	46.	6.
VA02772	165.00	188.00	69.00	13.60	3.77	1.49	0.81	3.14	2.61	0.29			5.31	100.02	1	200.	50.	5.
VA02773	133.00	210.50	68.40	13.40	3.56	1.58	0.81	2.97	2.99	0.25			5.31	99.27	1	310.	51.	4.
VA02774	210.50	335.30	69.10	12.90	3.83	1.48	0.61	2.83	2.71	0.28			5.62	99.36	1	190.	49.	4.
VA02775	226.20	257.80	67.70	13.80	3.89	1.83	0.61	2.86	2.62	0.21			6.47	99.99	. 1	020.	51.	5.
VA02776	257.80	272.00	70.60	13.40	2.70	0.69	1.96	2.56	2.78	0.25			3.39	98.33	. 1	340.	41.	5.
VA02777	272.00	295.00	46.70	14.80	11.90	2,62	1.79	1.07	7.88	0.68			12.10	99.54	* - E	245.	21.	14.
VA02778	295.00	320.00	43.30	14.40	12.60	3.48	1.72	1.08	8.99	0.76			12.90	99.23	· ;	307.	24.	14.
VA02779	320.00	346.30	43.90	14.90	12.50	3.37	1.63	1.46	8.42	0.80			11.80	98.68		754.	25.	14.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

	SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	EIS	FE
	VA03324	61.90	62.90	2040.0	21.0	25.0	<0.5	5.0	7.0	7.0	10.0	<5.0	<1.0	(1.0	239.0	46.	0.	2.
	VA03325	62.90	63.30	1730.0	109.0	14.0	<0.5	5.0	17.0	10.0	6.0	<5.0	<1.0	<1.0	164.0	89.	2.	2.
	VA03326	63.30	64.50	1010.0	33.0	97.0	<0.5	<5.0	6.0	5.0	<5.0	<5.0	<1.0	5.0	399.0	25.	0.	2.
	VA03327	64.50	65.50	750.0	337.0	98.0	0.5	<5.0	22.0	29.0	7.0	29.0	2.0	2.0	682.0	77.	1.	4.
	VA03328	65.50	66.00	1440.0	112.0	19.0	<0.5	<5.0	7.0	9.0	14.0	20.0	(1.0	<1.0	204.0	86.	4.	2.
	VA03329	66.00	67.00	1310.0	14.0	14.0	<0.5	<5.0	4.0	4.0	6.0	9.0	<1.0	<1.0	128.0	50.	1.	1.
	VA03330	78.70	79.50	1510.0	150.0	61.0	<0.5	25.0	4.0	5.0	33.0	7.0	<1.0	3.0	88.0	71.	3.	1.
	VA03331	79.50	80.20	1080.0	37.0	12.0	<0.5	5.0	2.0	4.0	9.0	<5.0	<1.0	1.0	91.0	76.	2.	1.
	VA03332	80.20	81.20	1040.0	24.0	27.0	<0.5	10.0	8.0	10.0	5.0	14.0	<1.0	<1.0	319.0	47.	1.	2.
- 5	VA03333	84.00	85.00	1270.0	38.0	21.0	<0.5	<5.0	5.0	8.0	<5.0	7.0	<1.0	<1.0	274.0	64.	2.	1.
	VA03334	85.00	86.00	1090.0	16.0	16.0	<0.5	5.0	4.0	3.0	5.0	<5.0	<1.0	<1.0	228.0	50.	1.	1.
	VA03335	86.00	87.00	810.0	13.0	18.0	<0.5	<5.0	3.0	3.0	<5.0	<5.0	<1.0	<1.0	257.0	42.	1.	1.
	VA03336	87.00	88.40	690.0	11.0	17.0	<0.5	<5.0	2.0	5.0	6.0	<5.0	<1.0	<1.0	295.0	39.	1.	1.
	VA03337	88.40	88.60	660.0	71.0	31.0	<0.5	15.0	7.0	5.0	8.0	13.0	<1.0	1.0	506.0	70.	4.	3.
	VA03338	88.60	89.50	600.0	61.0	60.0	<0.5	10.0	10.0	7.0	<5.0	13.0	<1.0	2.0	646.0	50.	2.	3.
	VA03339	89.50	90.20	520.0	25.0	37.0	<0.5	5.0	5.0	7.0	5.0	6.0	1.0	<1.0	55.0	40.	1.	0.23
	VA03340	94.50	95.00	940.0	341.0	493.0	<0.5	35.0	10.0	9.0	27.0	<5.0	3.0	4.0	493.0	41.	2.	2.
	VA03341	95.30	95.50	760.0	0.5	569.0	<0.5	10.0	3.0	26.0	104.0	<5.0	4.0	<1.0	25.0	0.1	з.	0.23
	VA03342	95.90	96.90	1200.0	233.0	431.0	<0.5	20.0	2.0	3.0	10.0	15.0	4.0	2.0	171.0	35.	3.	1.
	VA03343	96.90	97.50	1230.0	382.0	1464.0	<0.5	15.0	7.0	9.0	11.0	12.0	8.0	<1.0	173.0	21.	2.	1.
	VA03344	97.50	98.50	1630.0	40.0	47.0	<0.5	<5.0	10.0	13.0	<5.0	8.0	<1.0	1.0	478.0	46.	1.	2.
	VA03345	100.80	101.30	1580.0	48.0	199.0	<0.5	25.0	4.0	2.0	<5.0	<5.0	2.0	1.0	263.0	19.	4.	1.
	VA03346	101.80	102.80	1230.0	568.0	945.0	9.1	220.0	10.0	18.0	123.0	47.0	7.0	27.0	226.0	38.	4.	з.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-41

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppd)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CB (ppm)	H0 (ppm)	(ppm)	CUZN	ETS	FE
VA03347	102.80	103.80	1450.0	157.0	686.0	0.6	16.0	5.0	3.0	45.0	9.0	6.0	6.0	312.0	19.	3.	1.
VA03348	103.80	104.60	1280.0	34.0	198.0	<0.5	22.0	5.0	4.0	27.0	<5.0	1.0	<1.0	343.0	15.	2.	2.
VA03349	107.00	108.00	2070.0	41.0	138.0	<0.5	71.0	5.0	1.0	7.0	<5.0	1.0	2.0	504.0	23.	1.	1.
VA03350	108.00	108.70	5340.0	633.0	507.0	3.1	104.0	6.0	7.0	118.0	7.0	3.0	17.0	212.0	56.	4.	1.
VA03351	108.70	109.70	930.0	23.0	285.0	0.7	12.0	6.0	6.0	6.0	<5.0	2.0	2.0	433.0	7.	1.	1.
VA03352	110.80	111.80	1320.0	33.0	401.0	0.6	31.0	4.0	4.0	17.0	41.0	2.0	<1.0	353.0	8.	1.	1.
VA03353	111.80	112.80	1260.0	27.0	604.0	0.5	13.0	5.0	<1.0	13.0	20.0	3.0	2.0	378.0	4.	2.	1.
VA03354	112.80	113.30	1250.0	25.0	1335.0	0.8	24.0	4.0	4.0	6.0	15.0	6.0	2.0	569.0	2.	4.	1.
VA03355	113.30	114.30	1290.0	28.0	64.0	<0.5	9.0	5.0	10.0	12.0	14.0	<1.0	4.0	243.0	30.	1.	1.
VA03356	128.00	128.50	950.0	17.0	290.0	0.6	37.0	4.0	4.0	10.0	<5.0	1.0	3.0	1443.0	6.	3.	2.
VA03357	129.80	130.80	1070.0	19.0	58.0	<0.5	15.0	4.0	<1.0	10.0	<5.0	<1.0	2.0	441.0	25.	3.	1.
VA03358	130.80	132.00	960.0	28.0	79.0	<0.5	23.0	5.0	5.0	10.0	<5.0	<1.0	3.0	362.0	26.	5.	1.
VA03359	132.00	133.00	1140.0	88.0	67.0	0.6	24.0	4.0	3.0	7.0	<5.0	<1.0	2.0	459.0	57.	3.	1.
VA03360	133.00	134.00	1150.0	16.0	37.0	<0.5	5.0	4.0	2.0	8.0	<5.0	<1.0	<1.0	272.0	30.	2.	1.
VA03361	134.00	135.00	1050.0	14.0	47.0	<0.5	<5.0	4.0	3.0	9.0	6.0	<1.0	2.0	451.0	23.	2.	1.
VA03362	135.00	136.00	1070.0	14.0	80.0	1.0	7.0	4.0	3.0	9.0	<5.0	<1.0	<1.0	994.0	15.	2.	2.
VA03363	136.00	136.00	1220.0	14.0	51.0	<0.5	29.0	3.0	3.0	6.0	<5.0	<1.0	<1.0	575.0	22.	2.	1.
VA03364	137.00	138.00	1090.0	19.0	56.0	0.8	25.0	3.0	4.0	9.0	<5.0	<1.0	<1.0	569.0	25.	1.	1.
VA03365	140.00	141.00	1090.0	17.0	88.0	0.6	26.0	5.0	3.0	<5.0	10.0	<1.0	2.0	615.0	16.	2.	1.
VA03366	141,00	142.00	1210.0	18.0	130.0	<0.5	26.0	3.0	5.0	6.0	16.0	<1.0	<1.0	638.0	12.	2.	1.
VA03367	142.00	143.00	1150.0	18.0	71.0	<0.5	7.0	4.0	4.0	9.0	7.0	<1.0	1.0	734.0	20.	2.	2.
VA03368	143.00	144.00	1020.0	17.0	39.0	<0.5	24.0	7.0	4.0	6.0	8.0	<1.0	<1.0	551.0	30.	2.	1.
VA03369	144.00	145.00	1010.0	21.0	58.0	0.5	40.0	3.0	5.0	9.0	8.0	<1.0	<1.0	701.0	27.	2.	2.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-41

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE
VA03370	145.00	146.30	870.0	30.0	88.0	<0.5	30.0	10.0	49.0	9.0	11.0	<1.0	<1.0	837.0	25.	2.	2.
VA03371	146.80	147.50	1000.0	45.0	42.0	<0.5	25.0	14.0	19.0	8.0	10.0	<1.0	2.0	1041.0	52.	2.	2.
VA03372	147.70	148.70	960.0	50.0	59.0	0.6	40.0	18.0	24.0	8.0	21.0	<1.0	<1.0	1335.0	46.	3.	3.
VA03373	148.70	149.70	1070.0	17.0	32.0	<0.5	20.0	4.0	4.0	11.0	5.0	<1.0	<1.0	639.0	35.	2.	1.
VA03374	149.70	150.70	1020.0	21.0	60.0	<0.5	25.0	6.0	7.0	9.0	6.0	<1.0	4.0	534.0	26.	2.	2.
VA03375	150.70	151.70	1040.0	16.0	28.0	<0.5	30.0	4.0	5.0	<5.0	<5.0	<1.0	<1.0	539.0	36.	3.	1.
VA03376	151.70	152.70	1040.0	18.0	32.0	<0.5	35.0	4.0	5.0	9.0	<5.0	<1.0	<1.0	602.0	36.	3.	1.
VA03377	152.70	153.50	920.0	24.0	32.0	<0.5	20.0	6.0	7.0	8.0	7.0	<1.0	2.0	606.0	43.	1.	1.
VA03378	153.80	154.80	1100.0	17.0	40.0	<0.5	20.0	5.0	7.0	7.0	6.0	<1.0	<1.0	512.0	30.	3.	1.
VA03379	154.80	155.80	1250.0	15.0	219.0	<0.5	25.0	2.0	4.0	6.0	<5.0	2.0	<1.0	468.0	6.	3.	. 1.
VA03380	155.80	156.80	1310.0	16.0	78.0	<0.5	30.0	4.0	5.0	8.0	<5.0	<1.0	<1.0	639.0	17.	3.	1.
VA03381	156.80	157.80	990.0	6.0	30.0	<0.5	15.0	3.0	5.0	<5.0	<5.0	<1.0	<1.0	523.0	17.	2.	1.
VA03382	157.80	159.00	1020.0	4.0	31.0	<0.5	35.0	2.0	4.0	9.0	<5.0	<1.0	<1.0	404.0	11.	2.	1.
VA03384	179.00	179.50	1200.0	19.0	87.0	<0.5	15.0	4.0	7.0	14.0	7.0	<1.0	<1.0	412.0	18.	3.	1.
VA03385	181.60	182.10	1040.0	879.0	2213.0	2.8	140.0	8.0	8.0	20.0	7.0	21.0	2.0	839.0	28.	2.	2.
VA03383	189.40	190.10	1590.0	20.0	108.0	<0.5	20.0	4.0	6.0	12.0	<5.0	1.0	<1.0	500.0	16.	3.	1.
VA03386	198.40	199.40	1320.0	665.0	2902.0	1.5	55.0	4.0	6.0	142.0	14.0	18.0	<1.0	669.0	19.	0.	1.
VA03387	199.40	200.40	1520.0	110.0	253.0	<0.5	45.0	34.0	22.0	21.0	18.0	1.0	<1.0	1398.0	30.	0.	4.
VA03388	200.40	201.40	1200.0	271.0	490.0	0.8	24.0	5.0	2.0	480.0	19.0	3.0	3.0	861.0	36.	0.	1.
VA03389	268.00	269.00	1000.0	13.0	30.0	<0.5	14.0	6.0	2.0	<5.0	<5.0	<1.0	<1.0	413.0	30.	2.	2.
VA03390	269.00	270.30	960.0	19.0	36.0	<0.5	10.0	4.0	<1.0	6.0	<5.0	<1.0	(1.0	496.0	35.	2.	2.
VA03391	270.30	271.40	1000.0	10.0	20.0	<0.5	25.0	5.0	<1.0	<5.0	6.0	<1.0	<1.0	319.0	33.	2.	- 1.
VA03392	278.00	279.00	190.0	15.0	109.0	<0.5	20.0	29.0	26.0	<5.0	14.0	2.0	(1.0	1076.0	12.	1.	5.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

Hole No. CH88-41

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE
						•				· .							
VA03393	317.70	318.00	690.0	30.0	117.0	<0.5	28.0	14.0	8.0	<5.0	<5.0	1.0	1.0	1268.0	20.	1.	4.

Hole No. CH88-41

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Summary Log: DDH CH88-42 Location: 30+00 E, 4+80 N; Chip 1 Claim Azimuth: 030, Dip: -50 Hole Completed: April 18, 1988 Core Logged By: D.P. Money

0.0 - 4.8 Casing.
4.8 - 29.0 Intercalated felsic and mafic tuffs.
29.0 - 40.9 Felsic quartz eye tuff.
40.9 - 196.9 Gabbro, fine grained plagiophyric to coarse grained, with local occurences of 1 to 2 % chalcopyrite over intervals up to 0.7 m. There are two small, up to 1.8 m, inclusions: one of argillite and one felsic tuff.
196.9 End of hole.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 30+00 E 4+80 N

NTS: 092B/13 UTM: 5417347.1 N 430548.8 E Azimuth: 30 Elevation: 600 m Dip: -50 Length: 196.9 m

Started: April 15, 1988 Completed: April 18, 1988

From

HOLE No: Page Number ch88-42 1

(ppm) (ppm) (ppm) (ppb) (ppm)

Claim No. Chip 1 Section No.: Section 30+00 East, Chip Group

Logged By: D.P. Money Drilling Co.: Burwash Enterprises Assayed By: Bondar-Clegg and X-Ray Assay

Core Size: NQ

Purpose: Test Powerline Anomaly, combined soil geochem and I.P. anomaly

			Length	Azi- muth	Dip	Length	Azi- muth	Dip								
			11.30 105.80	29.0 29.0	-46.5 -46.0	191.10	27.0	-46.0								
То						Samp	le Fra	om To	Width	Total	Cu	Pb	Zn	Ag	Au	Ba

(m) (m) ------DESCRIPTION----- No. (m) (m) (m) Sulphides (ppm)

.0 4.8 OVERBURDEN No chit marked start of coring. Coarse grained gabbro pebbles.

- 4.8 8.3 FELSIC QUARTZ EYE TUFF Quartz - sericite schist with 5 %, 2 mm, quartz eyes. Is locally chloritic, up to 5 % chlorite. At end of unit is minor pyrite blebs and mariposite. There is 0.3 m of lost core from 5.0 to 6.1 and 1.1 m from 6.1 to 8.2. Foliation is strongly contorted.
- 8.3 10.4 MAFIC TUFF Mafic ash tuff with minor felsic tuff. Sheared at 55 degrees to core axis. There is 0.9 m of lost core from 8.2 to 10.0.
- 10.4 10.6 WEAKLY CHLORITIC FELSIC TUFF Weakly chloritic felsic tuff with approximately 7 %, 2 mm, quartz eyes.
- 10.6 12.7 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Massive dark green felsic tuff with approximately 10 to 12
 4, 1 to 2 mm, epidotized feldspars. There are local ash tuffs at 62 degrees to core axis.
- 12.7 16.4 WEAKLY CHLORITIC FELSIC TUFF Weakly chloritic quartz - sericite - chlorite schist with

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number ch88-42 2

From	То	
(m)	(m)	DESCRIPTION

10 to 15 %, 1 to 3 mm, quartz eyes and local chlorite rich bands with 10 %, 1 mm, epidote grains at 57 degrees to core axis, probably are beds. There is local strong sericitization. Foliation is at 50 to 52 degrees to core axis.

16.4 29.0 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Chloritic felsic tuff, weakly to strongly chloritized with 3 to 20 % chlorite. There are locally 3 to 7 % 1 to 3 mm quartz eyes and 10 to 20 %, 1 to 3 mm, epidote and feldspar grains. There are local fracture controlled quartz veinlets. There are minor mafic ash tuff beds and is very locally sericitic for 5 cm, lapilli (?). There is trace local disseminated pyrite from 26.7 to 27.1. There is 0.7 m of lost core from 27 to 28.7. Oxidized to 24.3. The lapilli are mainly epidotized.

29.0 40.9 FELSIC QUARTZ EYE TUFF

Variably altered felsic tuff with 5 %, 3 to 6 mm, quartz eyes and numerous, 5 to 20 %, << 1 mm, quartz eyes.
Alteration :.
29.0 31.3 WEAK PERVASIVE CHLORITIZATION.
31.3 35.0 MODERATE PERVASIVE SERICITIZATION.
35.0 40.9 MODERATE PERVASIVE CHLORITIZATION.
35.0 40.9 MODERATE PERVASIVE SERICITIZATION.
Chloritization occurs as 10 to 15 % chlorite with sericite. Silicification is characterised by glassy appearance and very siliceous tuff. Sericitic tuff is

white and 'flaky'. Tuff is locally contorted with trace fracture controlled sericite veinlets. No sulphides occur. Foliations :. 30.4 : 50 degrees to core axis.

32.4 : 46 degrees to core axis.

36.9 : 51 degrees to core axis.

38.1 : 64 degrees to core axis.

Lower contact : 41 degrees to core axis with strongly foliated fine-grained gabbro at contact.

40.9 80.2 MEDIUM TO COARSE-GRAINED GABBRO Dark green medium to fine-grained gabbro with on average 15 to 25 %, 1 to 4 mm, feldspar grains, 3 to 7 % fine-grained, up to 1.5 mm, ilmenite with purple.5 mm rims of sphene (?). Matrix is chlorite, probably after hornblende. Is massive with weak local foliations in zones of shearing and at contacts. 40.9 41.0 Fine-grained foliated gabbro at contact,

foliation is at 41 degrees to core axis. 41.0 42.8 Strong quartz - chlorite - epidote veining.

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Sample

No.

VA01032 29.0 40.0 11.0 n/a 49 n/a 24 n/a n/a 1890

Width Total Cu Pb Zn (m) Sulphides (ppm) (ppm) (ppm)

Au

(ppm) (ppb) (ppm)

Ba

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number ch88-42 3

	DINION DIVIDU LA	UG .										
From (m)	To (m)DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb) (Ba ppm)
	 41.9 42.1 1 to 2 % chalcopyrite in veins. 48.0 49.0 Blocky, highly fractured core. 68.4 80.2 Moderately foliated at 45 degrees to core ax: with strong chloritization and approximately % feldespar latbs. 	is 10										
	71.5 to 72.2 strong fracture controlled quartz veining with 1 chalcopyrite.											
80.2	82.0 BLACK ARGILLITE Argillite or greywacke, mafic with approximately 10 %	VA01576	80.2	82.0	1.8	1	44	(5	150	<1	< 5 19	0
	fine-grained calcite and 0.5 to 1 % disseminated pyrite Is black with cherty grey upper contact. Foliation at 2 degrees to core axis parallel to bedding (?).	e. 23										
		1										
82.0	99.5 MEDIUM TO COARSE-GRAINED GABBRO Fine-grained at lower and upper contacts. Hosts epidot.	e,										
	quartz and calcite veins at 0 to 80 degrees to core ax: Grains are 2 to 6 mm in size, 40 % chloritic hornblen 10 % feldspars and up to 2 % fine-grained ilmenite. I: fine-grained and sheared chlorite from 90.9 to 91.3 an 92 2 to 93.0 at 47 degrees to core axis. There is trai	is. des, s d ce										
	chalcopyrite at 87.7.											
99.5	100.1 FELSIC TUFF Dark grey contorted siliceous felsic ash tuff with min chloritic mafic ash tuff layers. Is locally contorted	or •										
	Bedding and foliation are at 32 degrees to core axis.											
100.1	127.8 MEDIUM TO COARSE-GRAINED GABBRO Multi-phased gabbro with large porphyritic feldspar crystals.											
	100.1 100.4 Fine-grained weakly carbonatized with stron foliation at 43 degrees to core axis. 100.4 101.0 Strongly magnetic gabbro with 15 to 20 %.	ng 2 to										
	4 mm, ilmenite crystals in dark matrix wi	th										

up to 3 % feldspars.

101.0 101.1 Quartz - chlorite vein with trace chalcopyrite.

101.1 102.1 Coarse grained gabbro with 30 % of both 3 to 4 mm feldspars and altered hornblendes with trace ilmenite.

- 102.1 112.2 10 to 15 %, 1 to 5 mm, feldspar laths and approximately 2 % fine-grained ilmenite, is not magnetic.
- 112.2 115.6 Fine-grained dark green non-magnetic gabbro with hornblendes and trace ilmenite and purple sphene.
- 115.6 118.3 Feldspar phyric with 10 to 15 %, 1 to 4 mm, in

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

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fine-grained medium to light green matrix with trace fine-grained ilmenite. 118.3 118.9 White bull quartz - chlorite vein. 118.9 127.8 As from 115.6 to 118.9 with minor local

-----DESCRIPTION------

- epidotization.
- 127.8 133.0 MAFIC INTRUSIVE

Strongly sheared gabbro with strong pervasive carbonatization, white calcite streaks with local brown carbonate specks. A piece of faulted felsic ash tuff occurs at 130.5. Is sheared at 45 degrees to core axis. There is 1 to 2 %, < 1 mm, fine-grained ilmenite with purple rims.

- 133.0 137.4 MEDIUM TO COARSE-GRAINED GABBRO Fine-grained gabbro with local epidote veins, at 60 to 90 degrees to core axis, 0.5 to 4 cm.
- 137.4 142.3 MEDIUM TO COARSE-GRAINED GABBRO Coarse grained gabbro with up to 1 cm chloritized hornblendes, 40 %, 5 to 10 % purple sphene rimmed ilmenite (?). Epidote is in matrix with local feldspar clots. There is trace chalcopyrite with clots at 140.0 and 141.4. There is 0.2 m lost core from 142.0 to 142.6.
- 142.3 196.9 FELDSPAR PORPHYRITIC GABBRO

Medium green gabbro with 5 to 20 %, averages 12 to 15 %, 1 to 4 mm, feldspar grains. Has trace to 2 % ilmenite and minor local fine-grained leucoxene. There are numerous local 0.5 to 2 cm fracture controlled quartz - calcite veinlets. Strongly sheared from 169.6 to 170.6 at 31 degrees to core axis. Is massive with trace blocky, highly fractured core. Minor chloritic clay fault gouge at 192.3 and 193.5. At 193.5 is at 24 degrees to core axis for the 2 cm of fault gouge. From 167 to 168 there are minor fault slips at andles near to the core axis.

End of Hole : 646 feet, 9:00 a.m. On Monday April 18, 1988.

Total Lost Core: 3.2 m % Recovery = 98.4%.

HOLE No: Page Number ch88-42 4

Sample Width Total РЪ From To Cu Zn λσ Αu Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (mqq) (mqq) (ppb) (ppm)

.

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	TCAU	XHGO	ZNA20	XK20	XFE203	XT 102	XP205	ZHNO	ZLOI	SUM	BA	AI	NACA
									•								
VA00562	14.10	14.20	73.70	13.90	1.85	1.02	2.17	2.65	2.36	0.27	0.07	0.04	2.00	100.03	1380.	48.	4.
VA00563	32.40	32.50	71.60	14.80	2,88	0.40	5.00	1.89	0.49	0.24	0.05	0.02	2.93	100.30	2880.	23.	8.
VA00564	38.00	38.10	73.10	12.60	2.68	0.79	3.70	1.43	2.27	0.23	0.06	0.03	3.00	99.89	598.	26.	6.
VA00565	81.00	81.10	53.20	13.40	6.35	2.41	4.00	1.71	11.30	1.51	0.55	0.20	5.54	100.17	218.	28.	10.
VA00566	99.50	99.60	66.80	14.60	4.03	0.74	6.24	0.78	3.76	0.22	0.03	0.07	3.08	100.35	493.	13.	10.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

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Hole No. CH88-42 WHOLE ROCK SAMPLES

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Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	20 .	ZS 102	ZAL203	ZCAO	2860	ZHA20	XK20	ZFE203	XT 102	ZP205	ZHNO	XLOI	SUM	BA	AI	NACA
VA01032	29.00	40.00	71.70	13.60	3.28	0.79	3.45	2.05	1.73	0.24			3.23	100.07	1890.	30.	7.

HOLE NO. CH88-42 ALTERED SAMPLES

Page No.
DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	.HO (ppm)	HN (ppm)	CUZN	ETS	FE
				· .	······································												
VA01576	80.20	82.00	190.0	44.0	150.0	<0.5	<5.0	17.0	6.0	<5.0	17.0	1.0	3.0	807.0	23.	1.	5.

Hole No. CH88-42

Page No. 1

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Summary Log: DDH CH88-43 Location: 28+00 E, 3+30 N; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: April 21, 1988 Core logged by: J. Pattison 0.0 -15.7 Casing. 45.3 15.7 -Weakly chloritic felsic tuffs 45.3 -85.5 Quartz-carbonate altered mafic tuffs and argillaceous sediments 85.5 - 134.2Weakly chloritic felsic quartz eye tuffs 134.2 - 146.6Argillaceous volcanic wacke Quartz-carbonate altered mafic tuffs and argillaceous 146.6 - 162.9sediments Volcanic wacke 162.9 - 173.5173.5 - 196.0Weakly chloritic felsic quartz eye tuff 196.0 - 198.1Mafic tuffaceous sediments 198.1 - 207.0Tuffaceous conglomerate Up to 20 % pebble-sized, fine-grained magnetite-rich clasts one of which contains jasper and several boulders. or beds of massive feldspar +/- quartz porphyritic felsic flow or tuff. 207.0 - 220.8Mafic tuffaceous sediments 220.8 - 222.5 Epidote-carbonate altered intermediate (?) ash tuff 5 % finely disseminated pyrite 222.5 - 232.1Mafic tuffaceous sediments Weakly chloritic felsic quartz eye tuff 232.1 - 269.8 269.8 - 291.8 Feldspar porphyritic gabbro 291.8 - 298.2 Weakly chloritic felsic quartz eye tuff 298.2 - 358.0Chloritic felsic quartz-feldspar crystal tuff 358.0 - 368.3 CHLORITIC FELSIC QUARTZ EYE TUFF 368.3 - 385.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF 385.2 - 386.2 MAFIC TUFF 386.2 - 391.0 WEAKLY CHLORITIZED FELSIC TUFF 391.0 - 391.4CHLORITIC FELSIC QUARTZ EYE TUFF 391.4 End of Hole

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 28+00 E 3+30 N

 NTS:
 92B13
 UTM:
 5417328.7
 N
 430301.5
 E

 Azimuth:
 210
 Elevation:
 568 m
 Dip:
 -50
 Length:
 391.4 m

Started: 16-April-88 Completed: 22-April-88 HOLE No: Page Number CH88-43 1

<10 n/a n/a 1040

Claim No. Chip 1 Section No.: 28+00 E

Logged By: J. Pattison Drilling Co.: Burwash Enterprises Assayed By: Bondar-Clegg & XRAL

n/a

48

n/a

Core Size: NQ

Purpose: To outline geology north of the Fulford Fault splay.P TESTS

Length	Azi- muth	Dip	Length	Azi- muth	Dip	
23.20 123.70	212.0 211.0	-51.0 -47.0	215.20 337.10	211.0 207.0	-43.0 -36.0	

From	То			Sample	From	То	Width	Total	Cu	РЪ	Zn	Ag	Au	Ba
(m)	(m)		DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm

VA02780 15.7 45.3 29.6

.0 15.7 OVERBURDEN

15.7 23.0 CHLORITIC FELSIC QUARTZ EYE TUFF

Light green moderately sericitic and weakly chloritic with $2-3 \ 1-4 \ mm$ quartz eyes. Chlorite occurs in spots and patches. Nil to trace pyrite in bands < 2 mm wide parallel to foliation. Lower contact is arbitrarily placed where quartz eyes dissappear.

STRUCTURE:.

17.2-17.6 M FAULT ZONE at 60 degrees to core axis. 0.1 m of lost core. At 18.1 foliation is at 68 degrees to core axis. 19.0-20.0 M foliation is contorted. At 21.1 m foliation is tightly folded. Fold axis is at 60 degrees to core axis.

ALTERATION:.

15.7 23.0 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

23.0 27.6 CHLORITIC FELSIC LAPILLI TUFF Similiar to 15.7 to 23.0 m but only trace ash-sized quartz eyes. Light grey lapilli-sized felsic fragments are common. Foliation is contorted over most of the interval. 3.0 Cm quartz vein at 70 degrees to core axis.

STRUCTURE: .

At 25.0 foliation is at 60 degrees to core axis. 23.0 27.6 WEAK PERVASIVE CHLORITIZATION and MODERATE

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-43 2 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn λg Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m.) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) PERVASIVE SERICITIZATION. 27.6 28.6 CHLORITE SCHIST Dark green, strongly chloritic with many carbonate +/quartz filled gashes and fractures. Occasional quartz eye < 4 mm in diameter. Nil sulphides. Broken core at lower contact. 27.6 28.6 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 28.6 30.5 WEAKLY CHLORITIC FELSIC TUFF 17 980 63 <1 Light green, fine-grained well foliated with <1 % 1-3 mm VA03395 29.7 30.5 . 8 2 85 <5 quartz eyes. Minor fault gouge at 70 degrees to core axis at the lower contact. STRUCTURE:. At 29.7 bedding is at 60 degrees to core axis. ALTERATION:. 28.6 30.5 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION. 29.7 30.5 Finely bedded cherty fine ash tuffs with 2 % pyrite in bands up to 4 mm thick. 30.5 888.8 5.0 cm band of chlorite schist at 76 degrees to core axis.

30.5 45.3 CHLORITIC FELSIC OUARTZ EYE TUFF

As 15.7 to 23.0 m. Dark green, chloritic mafic tuff occurs from 31.9 to 32.0 m and from 32.3 to 33.1 m. 4.0 cm guartz-carbonate vein at 30 degrees to core axis at the lower contact. STRUCTURE:.

33.1-36.7 FAULT ZONE. Difficult to measure orientation but it appears to be at 40-50 degrees to core axis. Foliation runs parallel to core axis for much of the interval. 1.8 M of lost core.

37.5-38.5 Blocky, highly fractured core. 0.2 m of lost core 38.5-42.4 FAULT ZONE at 20 degrees to core axis. 1.3 m of lost core.

At 45.1 2.0 cm fault gouge at 45 degrees to core axis.

ALTERATION:.

30.5 42.5 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION. 42.5 45.3 MODERATE PERVASIVE CHLORITIZATION.

. Pl	ROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-43	o: Pa	nge Numb 3	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Åg (ppm)	Au (ppt	Ba 5) (ppm
45.3	85.5	MAFIC TUFFS AND ARGILLACEOUS SEDIMENTS Streaky, dark green to black, strongly chloritic moderate fracture controlled carbonate +/- quartz alteration. Thin (< 4 mm) bands of black argillaceous material are intercalated with dark green chloritic mafic ash tuff and finely bedded light brown cherty sediment. Thin (<2 mm) black mud clasts are common. Very similiar to the MAFIC TUFFACEOUS SEDIMENTS at the bottom of hole CHEM88-41. Bedding is wavy, contorted and broken up throughout unit. Probably a slump deposit of some sort. A pale brown mineral (biotite ?) occurs throughout the unit.	VA02781 VA02782 VA03394 VA03396 VA03397	45.3 65.0 77.2 78.2 78.6	65.0 85.5 78.2 78.6 81.2	19.7 20.5 1.0 .4 2.6	n/a n/a 1 5 1	159 113 133 156 70	n/a n/a <5 <5 <5	63 64 73 71 146	n/a n/a <1 <1 <1	n/a n/a 10 39 48	249 337 190 220 460
		to core axis at lower contact.											
		STRUCTURE:. At 46.3 foliation is at 40 degrees to core axis. 59.1-59.6 M FAULT ZONE at 40 degrees to core axis. 0.4 m of loct core											
		At 62.5 m foliation is at 45 degrees to core axis. 68.5-71.0 M FAULT ZONE at 50 degrees to core axis. 0.5 m of lost core.											
		At 72.6 m bedding is at 49 degrees to core axis. 73.7-74.4 FAULT ZONE at 40 degrees to core axis. 0.1 m of lost core. 74.9-75.9 FAULT ZONE at 45 degrees to core axis. 0.5 m of	1										
		lost core. 78.7-81.2 FAULT ZONE at 35 degrees to core axis. 1.7 m of lost core. At 82.3 m foliation is at 34 degrees to core axis.											
		83.0-85.5 M FAULT ZONE at 30 degrees to core axis. 1.5 m of lost core.											
		45.3 85.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION.											
		SULPHIDES:. 78.2 78.6 5 % disseminated pyrite associated with carbonate alteration.											
		71.0 73.0 Trace to 3 % disseminated magnetite as grains up to 2 mm in diameter.											
		72.6 72.7 Bed of MAFIC ASH TUFF at 49 degrees to core axis.				÷							
		73.1 888.8 1.0 cm bed of felsic ash tuff.											
85.5	89.9	CHLORITIC FELSIC QUARTZ EYE TUFF Mottled light green-grey, well foliated, siliceous, fine-grained matrix with 2-5 % 2-5 mm clear quartz eyes and an occasional cherty lapilli-sized clast. Lower	VA02783	85.5	115.0	29.5	n/a	15	<5	70	<1	<5	1000

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-43 4

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84

17 530

 From
 To

 (m)
 (m)

Sample From То Width Total Рb Cu Zn λg Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

contact is a minor slip at 72 degrees to core axis.

STRUCTURE:.

At 85.8 m bedding is at 50 degrees to core axis. At 89.6 m 5 cm fault gouge. Not possible to measure orientation.

ALTERATION:.

85.5 89.9 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

85.6 888.8 5.0 cm bed of chloritic mafic ash at 52 degrees to core axis.

87.6 87.9 MAFIC TUFFACEOUS SEDIMENTS at 40 degrees to core axis. As 45.3 to 85.5 m.

89.8 888.8 5.0 cm band of chlorite schist (mafic ash tuff ?) at 60 degrees to core axis.

89.9 94.4 WEAKLY CHLORITIC FELSIC TUFF

Light grey-green, fine-grained well foliated. Quartz eye bearing between 91.6 and 93.0 m. Lower contact is a minor slip at 53 degrees to core axis.

STRUCTURE:.

At 93.6 m foliation is at 30 degrees to core axis.

ALTERATION:.

89.9 94.4 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

SULPHIDES:.

89.9 91.0 2 % pyrite in hairline fractures.

94.4 132.8 CHLORITIC FELSIC QUARTZ EYE TUFF

Light green-grey, composed of 1-7 % light grey 1-5 mm quartz eyes in a moderately sericitic, weakly chloritic siliceous matrix. Occasional light grey to white felsic fragments up to 1.0 cm wide are recognizable below 100.6 m and two sulphide-rich clasts occur. Quartz eyes have a crushed appearance.

Up to 5 % lapilli-sized felsic fragments below 107.5 m. Tuff becomes heterolithic (ie felsic, cherty felsic and chloritic mafic fragments) below 112.5 m. Mafic ash tuff beds up to 1.3 m thick (most $\langle 0.2 m \rangle$ occur below 123.5 m. Lower contact is at 60 degrees to core axis.

STRUCTURE:.

VA02784 115.0 135.9 20.9 n/a 51 n/a 34 n/a n/a 907

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52

55

VA03398 89.9 91.0 1.1

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-43 5

From	То	
(m)	(m)	DESCRIPTION

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

At 96.4 m foliation is at 45 degrees to core axis. At 101.1 bedding is at 50 degrees to core axis. 103.5-103.8 0.5 M fault gouge runs parallel to core axis. At 104.0 m foliation is at 30 degrees to core axis. 106.3-106.6 Fault gouge runs parallel to core axis. At 107.4 foliation is at 43 degrees to core axis. At 111.3 bedding is at 46 degrees to core axis. At 119.3 foliation is at 50 degrees to core axis. At 122.4 foliation is at 40 degrees to core axis. At 129.7 bedding is at 40 degrees to core axis.

ALTERATION:.

- 94.4 132.8 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.
- 97.2 98.0 Bands (beds ?) of light brown very fine-grained material up to 5 mm occur.
- 101.3 888.8 2.0 cm bed of felsic ash tuff with thin (1 mm) bands of pyrite.
- 107.5 112.5 Light grey, fine-grained lapilli-sized felsic fragments are common (but still comprise < 1% of the core).
- 107.7 107.9 Moderately carbonatized MAFIC ASH TUFF bed at 48 degrees to core axis.
- 108.2 888.8 4 mm thick bed or clast of very fine-grained cherty ash tuff with finely disseminated sulphides at 60 degrees to core axis.
- 112.5 119.7 Wispy chloritic patches (mafic fragments ?) and chloritic bands < 1.0 cm in diameter are common and felsic fragments are rare.
- 119.7 120.1 Fine-grained green MAFIC DYKE. Upper contact is very sharp at 60 degrees to core axis. 10 cm zone of assimilation at the lower contact.
- 123.0 123.6 Lapilli-sized chloritic mafic fragments are common.
- 123.6 125.0 MAFIC ASH TUFF. Weakly thermal biotite altered, bedding not recognizable but rock has a banded appearance. Core is broken and blocky. Upper contact is at 50 degrees to core axis. Broken core at lower contact.
- 129.7 129.9 MAFIC ASH bed at 40 degrees to core axis.

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From

(m)

To

(m)

Sample

No.

Width

Total

(m) Sulphides (ppm)

HOLE No: Page Number CH88-43 6

Pb

Zn

(ppm) (ppm)

Ag

Au

(ppm) (ppb) (ppm)

Ba

2

Cu

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PROPERTY: Chemainus JV

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 From
 To

 (m)
 (m)

130.9 132.2 MAFIC ASH TUFF / WACKE. Medium green, fine-grained bedding not recognizable, up to 5 % disseminated magnetite. Rock is strongly magnetic. Upper and lower contacts are sharp at 40 degrees to core axis.

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

132.8 134.2 IMMATURE VOLCANIC WACKE

Medium grey with medium green chloritic streaks, finely banded parallel to foliation at 40-50 degrees to core axis. 2-3 % disseminated magnetite, rock is moderately magnetic. Weak hematite alteration along fracture surfaces Lower contact is at 50 degrees to core axis.

134.2 135.9 CHLORITIC FELSIC QUARTZ EYE TUFF As 94.4 to 132.8 m. Felsic lapilli fragments are common.

Nil sulphides. Broken core at lower contact. 132.2 135.9 WEAK PERVASIVE CHLORITIZATION.

135.9 146.6 ARGILLACEOUS VOLCANIC WACKE

Dark grey with a slight green tint due weak chlorite alteration. Finely bedded and locally weakly graphitic. Trace to 3 % finely disseminated magnetite above 141.0 m. Nil sulphides.

STRUCTURE:.

138.7-139.4 Major FAULT ZONE at 30 degrees to core axis. 2.4 m of lost core. At 140.0 m 3.0 cm fault gouge at 47 degrees to core axis. At 142.0 m bedding is at 45 degrees to core axis. At 143.7 m 2.0 cm fault gouge at 57 degrees to core axis.

At 146.1 minor fault gouge at 56 degrees to core axis. ALTERATION:.

135.9 146.6 WEAK PERVASIVE CARBONATIZATION.

146.6 162.9 MAFIC TUFFS AND ARGILLACEOUS SEDIMENTS

Light to dark grey volcanic wacke beds (30-80%) alternate with green mafic tuff beds (20-60%), light green felsic ash tuff (<5%) and black argillaceous beds (<5%). Beds are generally < 4 mm thick and are often offset slightly by microfaults. Up to 20 % lapilli-sized lithic and chloritic mafic clasts. Trace-3% disseminated magnetite between 146.6 and 150.0 m. Overall composition of the rock varies from mafic to intermediate. Below 151.5 m the rock becomes strongly carbonatized, bedding is harder to recognize, argillite beds are rare and rock takes on a fragmental appearance. Nil sulphides. VA02785 135.9 162.9 27.0 n/a 155 n/a 85 n/a n/a 180

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-43 7

Pb

Zn

Cu

Au

Ba

λσ

(more) (dog) (more) (more) (more)

 From
 To

 (m)
 (m)

STRUCTURE:.

At 149.0 m bedding is at 50 degrees to core axis. At 158.9 m foliation is at 50 degrees to core axis.

ALTERATION:.

146.6 151.5 WEAK PERVASIVE CARBONATIZATION. 151.5 162.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION and MODERATE PERVASIVE SERICITIZATION. Very weak spotty epidote alteration below 153.0 m.

162.9 173.5 IMMATURE VOLCANIC WACKE

Medium green, fine-grained relatively massive (bedding is rare). Up to 10 % dark green, thin lapilli-sized wispy chloritic fragments stretched parallel to foliation. Occasional lapilli-sized felsic fragment and rare quartz eye. Trace to 1 % disseminated magnetite. Below 168.1 m rock becomes strongly carbonatized. Carbonate +/- quartz occurs in bands <4 mm wide parallel to foliation giving rock a streaky appearance. Lower contact is gradational.

STRUCTURE:.

At 167.5 m foliation is at 45 degrees to core axis.

ALTERATION:.

162.9 168.1 WEAK PERVASIVE CARBONATIZATION. 168.1 173.5 STRONG FRACTURE CONTROLLED CARBONATIZATION.

173.5 196.0 CHLORITIC FELSIC QUARTZ EYE TUFF

Light green, weakly to moderately chloritic, moderately sericitic matrix with up to 5 % 1-3 mm quartz eyes. Dark green chloritic tuff beds up to 10.0 cm thick are common over the first 5.5 m. Occasional fine cherty bed < 2.5 cm thick. Cherty lapilli-sized fragments are common. Trace very finely disseminated pyrite. Lower contact arbitarily placed where rock appears to become intermediate in composition and quartz eyes become much less conspicuous.

STRUCTURE:.

At 173.8 m 10 cm fault gouge at 60 degrees to core axis. 175.0-176.2 Blocky, highly fractured core. 0.2 m of lost core. Possible fault at 50 degrees to core axis. At 182.1 m bedding is at 46 degrees to core axis. 184.3-185.0 FAULT ZONE. Core is broken, difficult to measure orientation but appears to be at 50 degrees to core axis. 0.3 m of lost core. At 191.0 m 10 cm fault zone at 75 degrees to core axis. VA02785 162.9 173.5 10.6 n/a 116 n/a 93 n/a n/a 324

Width

(m)

То

(m)

(m)

Sample From

No.

Total

Sulphides (ppm)

VA02787 173.5 196.0 22.5 n/a 33 n/a 54 n/a n/a 936

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-43 8

Sample Width Total Au From To Cu Pb Zn λσ Ba Sulphides (ppm) No. (m) (m) (m.) (ppm) (ppm) (ppm) (ppb) (ppm)

(m) (m)

From To

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ALTERATION:. 173.5 196.0 WEAK PERVASIVE CHLORITIZATION.

- 186.1 186.6 MAFIC TUFF / WACKE with trace disseminated magnetite. Upper contact is gradational. Lower contact is at 55 degrees to core axis.
- 190.3 190.4 Band of CHLORITE SCHIST is at 50 degrees to core axis.
- 191.2 191.3 Bed of MAFIC ASH TUFF at 50 degrees to core axis.

196.0 198.1 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS

Composed of $(5-10 \ \text{k} \ \text{lapilli-sized clasts}$ (felsic tuff, quartz eye tuff and cherty tuff) and 1-3% (2mm quartz eyes in a moderately chloritic, weakly carbonatized fine-grained matrix which appears to be intermediate in composition. Fragments are stretched parallel to foliation. Locally trace disseminated magnetite. Several pyrite clasts up to 1.0 cm long and 2-3 mm wide at 196.3 m. Lower contact is irregular and crosscuts bedding.

STRUCTURE:.

At 196.7 foliation is at 50 degrees to core axis. At 198.0 3.0 cm fault gouge at 25 degrees to core axis. At 200.0 m foliation is at 30 degrees to core axis.

ALTERATION:. 196.0 198.1 WEAK PERVASIVE CARBONATIZATION.

198.1 207.0 TUFFACEOUS CONGLOMERATE

Dark grey-green fine-grained with up to 30 % sand to granule-size rounded quartz grains. Up to 20 % medium grey pebble-sized fine-grained magnetite-rich clasts supported by a moderately chloritic and carbonatized matrix. Trace to 5 % finely disseminated magnetite. A pebble-sized clast at 202.3 m contains jasper. Nil to weak hematite alteration along fractures. Several possible cobble-size clasts of massive feldspar +/- quartz porphyritic siliceous flow or tuff. The feldspars are 1-3 mm long and are very pristine. The edges of the clasts (?) are somewhat hazy, and not as sharp as might be expected suggesting they might actually be thin flows or crystal tuffs. Lower contact is a 0.5 cm fault gouge at 80 degrees to core axis.

STRUCTURE: .

At 206.1 206.6 FAULT ZONE at 70 degrees to core axis.

VA02788 196.0 220.8 24.8 n/a 123 n/a 56 n/a n/a 263

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-43 9

 From
 To

 (m)
 (m)

Blocky, highly fractured core.

Sample From То Width Total Cu РЪ Zn Àσ Au Ba No. (m) (m) (m) Sulphides (ppm) (mgg) (mgg) (mgg) (mgg) (dgg)

207.0 220.8 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Strongly carbonatized over most of the interval.

Strongly carbonatized over most of the interval. Carbonate +/- quartz has flooded rock along foliation planes forming white bands 2-5 mm wide. These bands alternate with chloritic bands. Very trace amounts of finely disseminated pyrite. Lower contact is gradational.

200.9 201.0 FELSIC FELDSPAR PORPHYRITIC FELSIC CLAST (?) at 50-60 degrees to core axis. Composed of 15 % 2-3 mm subhedral feldspar crystals in a massive very fine-grained to aphyric siliceous weakly chloritic matrix.

203.2 203.4 FELSIC FELDSPAR-QUARTZ PORPHYRITIC FELSIC CLAST (?) at 60 degrees to core axis. Similiar to 200.9 to 201.0 m except also contains an occasional quartz eye.

203.5 888.8 FELSIC FELDSPAR-QUARTZ PORPHYRITIC FELSIC CLAST at 60 degrees to core axis. As 203.2 to 203.4 m.

STRUCTURE:.

At 208.1 minor fold is clearly outlined by foliation. Fold axis is parallel to the core axis. At 208.4 minor fault gouge at 80 degrees to core axis. At 208.9 5.0 cm fault gouge at 80 degrees to core axis. At 209.5 foliation is at 40 degrees to core axis. 210.5-211.6 Foliation is kinked. 211.6-213.9 Foliation is wavey and runs nearly parallel to core axis. Several minor folds. 213.9-215.0 Foliation is very contorted and kinked. At 217.5 foliation is at 30 degrees to core axis.

ALTERATION:.

207.0 216.2 STRONG PERVASIVE CARBONATIZATION and STRONG FRACTURE CONTROLLED CARBONATIZATION.

216.2 217.6 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 217.6 220.8 STRONG PERVASIVE CARBONATIZATION and STRONG

FRACTURE CONTROLLED CARBONATIZATION.

216.2 217.7 Less carbonatized, 3 % thin black chloritic fragments up to 10 mm long flattened along foliation planes.

216.8 888.8 3.0 cm bed of cherty felsic ash tuff at 30 degrees to core axis.

VA03399 219.8 220.8 1.0 1 121 <5 78 <1 29 60

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-43 10 DIAMOND DRILL LOG From To Sample From Width Total Cu Pb То Zn Aα λu Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 219.0 219.5 CHLORITIC MAGNETITE-BEARING FELSIC TUFF at 50-60 degrees to core axis. 220.8 222.5 INTERMEDIATE FELDSPAR CRYSTAL LAPILLI TUFF Mottled grey-olive green moderately carbonatized and VA02789 220.8 222.5 n/a 337 1.7 n/a 158 n/a 74 n/a moderate pervasive epidote alteration. 3 % thin (<1.5 mm) VA03400 220.8 221.8 1.0 108 59 <1 37 380 5 < 5 dark green chloritic fragments flattened along foliation 5 123 57 50 370 VA03401 221.8 222.5 ٢5 (1 .7 planes. Several of these fragments have swallow tails which indicates they may be fiamme. 5% Finely disseminated pyrite. Foliation is at 40 degrees to core axis. Lower contact is gradational. 220.8 222.5 MODERATE PERVASIVE CARBONATIZATION and MODERATE PERVASIVE EPIDOTIZATION. 222.5 232.1 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Medium grey-green, moderately to strongly carbonatized. VA02790 222.5 232.1 76 n/a 196 9.6 n/a 121 n/a n/a 116 <1 8 300 Varies from mafic to intermediate in composition. Nil to VA03402 222.5 223.5 1.0 1 120 ۲5 3 % disseminated magnetite. Slip at 62 degrees to core VA03403 225.0 225.9 114 <5 .77 <1 11 620 . 9 1 axis at the lower contact. <1 10 510 VA03404 225.9 227.0 1 89 <5 108 1.1 STRUCTURE: . 225.8-226.3 Foliation is parallel to to degrees to core axis. 227.7-230.4 FAULT ZONE at 65 degrees to core axis. Rock is broken and blocky over the entire interval 0.5 m of lost core. ALTERATION:. 222.5 232.1 MODERATE PERVASIVE CARBONATIZATION , MODERATE FRACTURE CONTROLLED CARBONATIZATION and locally weak hematization along foliation planes. 225.3 225.6 Irregular quartz-carbonate vein with 3 % pyrite runs parallel to core axis. 225.7 888.8 1.0 cm thick ripped up cherty, carbonatized magnetite+jasper bearing sediment. 226.7 227.0 Irregular quartz-carbonate pods or veins. Trace pyrite. 232.1 251.8 CHLORITIC FELSIC QUARTZ EYE TUFF Light grey-green, fine-grained with < 2% 1-3 mm guartz VA02791 232.1 269.8 37.7 n/a 30 n/a 27 n/a n/a 1040 eyes. Occasional bed of chloritic mafic ash tuff up to VA03405 237.0 237.5 . 5 44 <5 107 <1 13 780 0.5 m thick. Rock is quite massive, only weakly foliated and bedding is rarely observed. Occasional pyrite cube up

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-43 11

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(m) -----DESCRIPTION-----

Width Total Cu Pb. Zn Au Ba Sample From Τo λg Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) (m) No.

to 4 mm in width. Nil to 1 % disseminated magnetite below 238.0 m. Very weak thermal biotite alteration. Lower contact is gradational.

STRUCTURE:.

At 241.7 bedding is at 70 degrees to core axis. At 258.1 bedding is at 52 degrees to core axis.

ALTERATION:. 232.1 258.1 WEAK PERVASIVE CHLORITIZATION and WEAK PERVASIVE SERICITIZATION.

- 234.0 234.2 Dark green mafic tuff bed at 60 degrees to core axis.
- 236.5 237.0 Dark green mafic tuff. Broken core at upper and lower contacts.
- 237.3 237.4 Quartz-chlorite-carbonate vein at 60 degrees to core axis with trace pyrite and chalcopyrite

237.4 237.6 Chloritic mafic tuff at 65 degrees to core axis

238.2 238.4 Mafic tuff bed at 65-70 degrees to core axis.

240.0 240.4 Chloritic band at 70 degrees to core axis.

246.0 888.8 Light green cherty clast 1.0 cm wide.

246.3 246.7 Several quartz-carbonate veins and pods, no sulphides.

251.8 269.8 WEAKLY CHLORITIC FELSIC TUFF

Similiar to 232.1 to 251.8 m but quartz eyes are rare. More chloritic sections may range into intermediate compostions weak thermal biotite alteration. Trace disseminated pyrite. Lower contact is a 3.0 cm fault gouge at 70 degrees to core axis.

STRUCTURE:.

At 262.0 m bedding is at 45 degrees to core axis. At 266.2 m foliation is at 40 degrees to core axis.

ALTERATION.

251.8 269.8 WEAK PERVASIVE CHLORITIZATION , MODERATE PERVASIVE SERICITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION.

From To

(m)

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					DIAMOND DRILL L	OG				
From (m)	(m)			DESCRIPTION			Sample No.	From (m)	To (m)	Widt (m)
		259.5 888.8	5.0 cm banded 50 degrees to	chlorite-car core axis.	bonate alteration	n at				
		264.0 264.4	Quartz-carbon degrees to co	ate altered M re axis.	AFIC DYKE at 60					
		261.0 261.3	MAFIC DYKE at Fine-grained, quartz-carbon	60 degrees to intruded by ate veins up	o core axis. irregular to 1.0 cm thick.					
· .		262.0 888.8	5.0 cm band of 45 degrees to magnetite.	f magnetite bo core axis. 4	earing MAFIC TUF % disseminated	Fat				
		269.2 269.4	10 % 2-10 mm . fragments.	light grey fin	ne-grained felsio	c				
		269.5 269.6	Quartz-carbon degrees to con	ate altered cl re axis. Mafic	nlorite schist af dyke (?).	t 60				
269.8	291.8	FELDSPAR PO Medium gree to 30 % 2-3 Quartz-carb 3 % dissemi altered to chalcopyrit contact. L	RPHYRITIC GABBI n, fine to medi mm white felds onate veins and nated ilmenite leucoxene. Nil e. 3.0 cm zone ower contact is	RO ium-grained an spar phenocrys d veinlets ard . Much of the to trace diss e of assimilat s at 40 degree	nd massive with tests. common. Trace ilmenite has bee seminated cion at lower es to core axis.	up to en				
291.8	298.2	CHLORITIC F Grey, moder Quartz eyes In situ bre is a minor	ELSIC QUARTZ EX ately sericitic have a crushed cciation over t fault gouge at	YE TUFF c with 2-5 % d highly fract the first 2.2 70 degrees to	2-5 mm quartz ey ured appearance. m. Lower contac o core axis.	yes. ct	VA03406	297.5	298.0	.5
		STRUCTURE:. At 295.0 fo	liation is at 4	15 degrees to	core axis.					
		ALTERATION: 291.8 298.2	MODERATE PERVA	ASIVE SERICITI	ZATION.					
		297.5 298.0	Rusty zits < 1	1 mm in diamet	er centred on					

FALCONBRIDGE LIMITED

- silver coloured metallic specks. They are likely core barrel material.
- 298.0 888.8 7.0 cm dark brown dyke (?) at 70-90 degrees to core axis. Contacts are sharp but irregular and appear to be intrusive.

1 1 ٢5 24 <1 11 980

Total Cu th Pb Zn Ag Au Ba Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

HOLE No: Page Number CH88-43 12

P	ROPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED					HOLE N CH88-43	o: Pa	ge Numb 13	er			
From	To		DIAMOND DRILL LOG	Sample	From	То	Width	Total	Cu	Pb	Zn	λσ	Au	Ba
(m)	(m)	I	DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm)
298.2	358.0	CHLORITIC FELSIC QUART2-FEL Up to 25 % 1-3 mm (most are crystals and 2-5 % 2-5 mm qu weakly to moderately sericit fine-grained (locally aphyri fault at 60 degrees to core	DSPAR CRYSTAL TUFF ash-sized) subhedral feldspar martz eyes in a grey-green tized weakly chloritized c) matrix. Lower contact is a axis.	VA03407 VA03408 VA03409 VA03410 VA03411	338.0 350.2 351.0 352.0 353.0	339.0 351.0 352.0 353.0 354.0	1.0 .8 1.0 1.0 1.0	1 1 2 2	9 9 10 22 65	<5 <5 27 9 15	17 38 169 153 427	<1 <1 <1 <1 <1 1	5 29 5 20 27	920 1200 1300 1200 1200
		STRUCTURE:. At 302.1 3.0 cm fault gouge At 304.7 bedding is at 50 de At 316.4 foliation is at 45 At 322.5 bedding is at 40 de been offset 2.5 cm by a mino axis. At 336.0 1.0 cm fault gouge At 340.7 bedding is at 65 de	at 60 degrees to core axis. grees to core axis. degrees to core axis. grees to core axis. Bed has or fault at 30 degrees to core at 50 degrees to core axis. grees to core axis.											
		At 348.6 m 1.0 cm fault goug At 351.0 m bedding is at 50- 357.5-358.0 M FAULT ZONE at of lost core.	e at 60 degrees to core axis. 60 degrees to core axis. 60 degrees to core axis. 0.2 m											
		ALTERATION:. 298.2 358.0 WEAK PERVASIVE (as discrete spot 335.1 and 340.0 312.2 358.0 Weak epidotizati	HLORITIZATION chlorite occurs s < 2 mm in diameter between m. on centred on feldspar crystals											
		SULPHIDES:. Locally trace fracture contr 338.0 339.0 Possibly trace s fractures.	olled pyrite. phalerite or biotite along											
		343.5 344.0 1-2% disseminate pyrite. 350.2 353.0 Trace to 1 % dis 353.0 354.0 2 % disseminated parallel to folj 359.0 360.0 2 % fracture con	d and fracture controlled seminated pyrite. and banded pyrite. Bands are ation and are up to 3 mm thick. trolled pyrite.											
		298.9 888.8 5 cm fine-graine degrees to core	ed mafic dyke/tuff at 50 axis.											
		300.3 300.5 Fine-grained MAH axis. Weak spott contact is offse 50 degrees to co	TC DYKE at 50 degrees to core y epidote alteration. Lower t 0.5 cm by a microfault at ore axis.											
		300.5 301.2 5 % light grey f	elsic lapilli.											
		301.4 301.8 Fine-grained MAF axis.	IC DYKE at 70 degrees to core											

From

(m)

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		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-43		14				
To (m))	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
. *	304.7 888.8	5 cm feldspar crystal rich bed at 50 degrees to core axis.											
	305.4 888.8	5.0 cm chlorite rich band at 60 degrees to core axis with trace pyrite.											
	311.8 312.0	Fine-grained MAFIC DYKE at 50 degrees to core axis with 2 % fracture controlled pyrite.											
	317.0 334.0	Vague, light grey felsic lapilli are common (5 %).											
	319.5 319.9	Fine-grained MAFIC DYKE at 50-60 degrees to core axis.											

- 331.2 333.0 MAFIC ASH TUFF / FINE-GRAINED DYKE. Medium green, moderately chloritic and moderately carbonatized with a banded appearance near the top of the unit suggesting it is tuffaceous. 1 % disseminated pyrite. Upper contact is at 40 degrees to core axis and lower contact is at 60 degrees to core axis.
- 334.0 335.1 FINE-GRAINED MAFIC DYKE / ASH TUFF. Similiar to 331.2 to 333.0 m except no banding upper contact is at 70 degrees to core axis and lower contact is at 50 degrees to core axis.
- 340.7 340.9 Several beds of fine felsic ash tuff < 1.0 cm thick. Some have been offset by minor faults.
- 349.9 350.2 FINE-GRAINED MAFIC DYKE. Upper and lower contacts are sharp but irregular.
- 358.0 368.3 CHLORITIC FELSIC QUARTZ EYE TUFF Up to 5 % 1-5 mm quartz eyes and 10 % ash-sized feldspar crystals in very fine-grained weakly chloritic siliceous matrix. Nil to trace disseminated pyrite. Irregular quartz-carbonate pod at the lower contact.

STRUCTURE:. At 366.2 foliation is at 40 degrees to core axis.

366.5 368.0 Hazy, light grey felsic fragments.

368.3 385.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF As 298.2 to 358.0 m. Lower contact is at 58 degrees to VA03412 359.0 360.0 1.0 2 5 <5 43 <1 18 1200

HOLE No: Page Number

VA03413 376.5 377.5 1.0 1 6 <5 31 <1 <5 1100

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PR	OPERT	Y: Chemainu:	S JV FALCONBRIDGE LI DIAMOND DRILL	MITED LOG					HOLE N CH88-43	o: Pa	ge Numb 15	er			
From (m)	To (m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Àg (ppm)	Au (ppb	Ba) (ppm)
	s.	core axis. STRUCTURE: At 374.7 m At 379.3 m 381.5-381.5	bedding is at 60 degrees to core axis. bedding is at 37 degrees to core axis. 9 FAULT ZONE at 40 degrees to core axis.		VA03414 VA03415 VA03416	380.8 383.1 384.1	381.5 384.1 385.2	.7 1.0 1.1	1 2 2	7 4 <1	<5 <5 <5	23 20 9		5 10 9	910 840 750
		ALTERATION 368.2 385.3	:. 2 WEAK PERVASIVE CHLORITIZATION and WEAK PERVASIVE SERICITIZATION.												
		SULPHIDES: 383.1 384. 384.1 385.2	1 1 % pyrite. 2 2 % disseminated pyrite.	• •											
		368.3 369.0	D Several dark green to black chlorite+biot rich bands at 40-50 degrees to core axis	ite											
		374.3 888.8	8 Chloritic ash tuff or mafic dyke at 42 de to core axis.	grees											
		375.0 375.5	5 Up to 5 % lapilli-sized fragments of quar feldspar porphyritic material.	tz										•	
		377.0 888.8	B Two chloritic bands (3.0 cm wide at 50 degrees to core axis. Also a carbonate-f fracture with a reddish brown mineral, possibly sphalerite.	illed											
•		380.9 383.1	l Beds and clasts of cherty salmon pink col ash tuff < 2.0 cm thick are common.	oured											

385.2 386.2 MAFIC TUFF

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Fine-grained moderately chloritic, bedding not recognized (may be a dyke). 2-3 % disseminated magnetite, nil sulphides. Lower contact is at 58 degrees to core axis. 385.2 386.2 WEAK PERVASIVE CARBONATIZATION.

386.2 391.0 WEAKLY CHLORITIC FELSIC TUFF Fine bedding, quite cherty in places, microfractured. Trace fracture controlled pyrite. Several chlorite rich bands of fine-grained chloritic magnetite-bearing mafic tuff up to 20 cm thick. Bedding is at 68 degrees to core axis at 388.6 m. 386.2 391.0 WEAK PERVASIVE CHLORITIZATION.

391.0 391.4 CHLORITIC FELSIC QUARTZ EYE TUFF Light grey-green with 5 % 2-4 mm quartz eyes and an

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-43 16

 From
 To

 (m)
 (m)

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

occasional light green cherty fragment up to 1.0 cm long. Trace disseminated pyrite. 391.0 391.4 WEAK PERVASIVE CHLORITIZATION.

SAMPLE NUMBER	FROM	TO	ZS 102	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	XT IO2	ZP205	ZHNO	TLOI	SUN	BA	AI	NACA
VA02292	18.20	18.40	74.10	14.50	1.12	0.99	0.88	2.59	1.83	0.18	0.06	0.06	3.23	99.54	1430.	64.	2.
VA02293	50.70	50.80	47,30	16.30	8.27	3.87	2.52	0.85	8.78	0.80	0.17	0.15	11.10	100.11	230.	30.	11.
VA02294	67.10	67.90	47.30	15.30	11.30	2.41	1.91	0.98	8.05	0.73	0.15	0.16	11.90	100.19	211.	20.	13.
VA02295	88.10	88.40	67.00	14.30	3.43	1.60	0.56	3.11	2.87	0.20	0.05	0.07	4.93	98.12	1210.	54.	4.
VA02296	103.00	103.40	69.80	15.60	2.26	- 1.14	2.61	2.94	1.87	0.25	0.08	0.05	3.31	99.91	1170.	46.	5.
VA02297	116.30	116.60	69.90	13.30	1.98	1.64	2.23	2.29	3.56	0.18	0.04	0.06	3.39	98.57	1010.	48.	4.
VA02298	142.30	142.60	49.20	19.80	3.39	1.79	5.61	2.86	11.10	0.99	0.56	0.05	3.54	98.89	320.	34.	9.
VA02299	149.00	149.30	46.20	20.00	5.57	2.20	2.40	4.63	9.37	1.46	0.14	0.06	6.47	98.50	663.	46.	8.
VA02300	159.40	159.70	58.80	16.00	5.06	0.90	4.21	3.54	4.99	0.33	0.22	0.11	4.77	98.93	1820.	32.	9.
VA02301	172.40	172.50	39.70	13.30	14.40	4.11	2.25	0.73	10.00	0.71	0.15	0.18	14.00	99.53	159.	23.	17.
VA02302	180.60	180.70	68.20	15.00	2.50	0.96	2.51	3.49	1.97	0.36	0.11	0.05	3.62	98.77	1420.	47.	5.
VA02303	216.40	216.70	41.20	9.84	15.40	7.34	0.89	0.48	7.59	0.54	0.06	0.16	15.30	98.80	92.	32.	16.
VA02304	236.00	236.40	67.50	14.20	3.00	1.11	2.88	3.04	2.79	0.27	0.07	0.08	3.70	98.64	1250.	41.	6.
VA02305	254.00	254.20	69.70	13.90	1.95	0.94	4.09	2.52	2.63	0.27	0.07	0.07	2.70	98.84	796.	36.	6.
VA02306	300.00	300.30	68.10	13.70	3.15	1.24	2.05	3.62	2.40	0.23	0.06	0.06	4.00	98.61	1720.	48.	5.
VA02307	314.00	314.30	71.70	11.90	3.28	0.67	3.23	3.12	1.35	0.12	0.04	0.07	2.77	98.25	863.	37.	7.
VA02308	322.20	322.70	69.60	14.40	2.65	0.77	3.47	3.01	1.84	0.24	0.06	0.06	2.54	98.64	1210.	38.	6.
VA02309	337.00	337.40	69.60	14.10	2.18	0.84	2.86	3.21	2.52	0.25	0.06	0.05	2.77	98.44	1130.	45.	5.
VA02310	347.60	347.90	69.10	14.10	2.67	0.67	3.44	3.31	2,26	0.25	0.07	0.07	2.54	98.48	1190.	39.	6.
VA02311	361.50	361.90	72.10	13.10	1.09	0.83	3.30	3.93	1.61	0.14	0.04	0.07	2.23	98.44	1370.	52.	4.
VA02312	375.00	375.40	69.40	13.60	2.91	1.81	2.13	2.87	2.84	0.24	0.06	0.07	2.93	98.86	1070.	48.	5.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-43 WHOLE ROCK SAMPLES

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Page No.

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SAMPLE NUMBER	FROM	ro	XS 102	XAL203	ZCA0	ZHGO	ZNA20	XK 20	XFE203	XT 102	XP205	ZHNO	XLO I	SUH	BA	AI	NACA
																	·
VA02780	15.70	45.30	70.70	13 50	2 47	0 99	1 71	2 40	2 44	0 22			4 00	00 50	1040		

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD

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VA02780	15.70	45.30	70.70	13.50	2.47	0.98	1.71	3.40	2.44	0.22		4.08	98.50	10	40.	45.	4.
VA02781	45.30	65.00	44.80	15.70	11.40	2.90	1.73	1.07	7.79	0.74		12.50	98.63	:	49.	23.	13.
VA02782	65.00	85.50	44.80	14.70	12.70	2.58	1.80	1.49	8.57	0.74		12.10	99.48		37.	22.	15.
VA02783	85.50	115.00	68.40	13.00	4.27	1.33	1.26	2.72	2.82	0.28		5.16	99.24	11	20.	42.	6.
VA02784	115.00	135.90	65.30	13.80	4.80	1.02	2.11	3.54	3.48	0.31		4.85	98.21	ę	07.	34.	7.
VA02785	135.90	162.90	40.90	13.70	15.10	4.38	2.80	1.79	7.47	0.78		12.40	99.32	1	80.	26.	18.
VA02786	162.90	173.50	33.30	12.40	18.80	3.18	1.27	1.73	9.65	0.62		17.50	98.45	5	24.	20.	20.
VA02787	173.50	196.00	67.20	13.90	3.78	0.98	3.19	2.74	2.94	0.23		4.39	99.35	ç	36.	35.	7.
VA02788	196.00	220.80	41.00	10.40	17.30	5.26	1,62	1.27	6.64	0.49		15.90	99.88	2	63.	26.	19.
VA02789	220.80	222.50	40.20	8.98	13.90	4.65	0.02	2.51	10.00	0.50		9.31	90.07	3	37.	34.	14.
VA02790	222.50	232.10	41.10	11.00	13.00	7.16	1.32	0.76	8.86	0.58		14.80	98.58	1	96.	36.	14.
VA02791	232.10	269.80	68.80	13.50	3.12	0.89	3.11	2.71	2.75	0.26		3.62	98.76	10	40.	37.	6.
VA02792	291.80	321.00	69.20	13.20	3.25	0.88	3.17	2.73	2.15	0.23		3.54	98.35	ç	88.	36.	6.
VA02793	321.00	351.00	69.60	13.50	3.03	0.83	3.04	2.81	2.18	0.23		3.23	98.45	10	40.	37.	6.
VA02794	351.00	371.00	69.10	13.10	3.07	1.15	3.40	3.11	2.07	0.18		3.39	98.57	10	40.	40.	6.
VA02795	371.00	391.40	69.30	13.50	2.97	1.18	3.66	2.44	2.20	0.21		3.62	99.08	9	63.	35.	7.

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Hole No. CH88-43 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррм)	AS (ppm)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
VA03395	29.70	30.50	980.0	85.0	63.0	<0.5	17.0	6.0	17.0	<5.0	48.0	<1.0	12.0	789.0	57.	2.	2.
VA03394	77.20	78.20	190.0	133.0	73.0	<0.5	10.0	31.0	63.0	<5.0	<5.0	2.0	<1.0	1395.0	65.	1.	4.
VA03396	78.20	78.60	220.0	156.0	71.0	<0.5	39.0	57.0	73.0	<5.0	<5.0	2.0	1.0	790.0	69.	5.	5.
VA03397	78.60	81.20	460.0	70.0	146.0	<0.5	48.0	22.0	29.0	<5.0	<5.0	<1.0	<1.0	1024.0	32.	1.	5.
VA03398	89.90	91.00	530.0	52.0	84.0	<0.5	17.0	12.0	13.0	55.0	19.0	<1.0	18.0	787.0	38.	1.	2.
VA03399	219.80	220.80	60.0	121.0	78.0	<0.5	29.0	35.0	162.0	<5.0	<5.0	2.0	<1.0	1248.0	61.	1.	4.
VA03400	220.80	221.80	380.0	108.0	59.0	<0.5	37.0	57.0	195.0	<5.0	9.0	2.0	3.0	903.0	65.	5.	5.
VA03401	221.80	222.50	370.0	123.0	57.0	<0.5	50.0	55.0	159.0	<5.0	<5.0	2.0	2.0	1009.0	68.	5.	4.
VA03402	222.50	223.50	300.0	120.0	116.0	<0.5	8.0	40.0	200.0	<5.0	7.0	2.0	<1.0	1080.0	51.	1.	5.
VA03403	225.00	225.90	620.0	114.0	77.0	<0.5	11.0	29.0	77.0	<5.0	<5.0	1.0	<1.0	1377.0	60.	1.	4.
VA03404	225,90	227.00	510.0	89.0	108.0	<0.5	10.0	31.0	125.0	<5.0	<5.0	2.0	2.0	1165.0	45.	1.	5.
VA03405	237.00	237.50	780.0	44.0	107.0	<0.5	13.0	26.0	89.0	<5.0	13.0	<1.0	2.0	1250.0	29.	1.	4.
VA03406	297,50	298.00	980.0	1.0	24.0	<0.5	11.0	2.0	3.0	<5.0	<5.0	<1.0	2.0	446.0	4.	1.	1.
VA03407	338.00	339.00	920.0	9.0	17.0	<0.5	5.0	2.0	<1.0	<5.0	9.0	<1.0	<1.0	290.0	35.	1.	1.
VA03408	350.20	351.00	1200.0	9.0	38.0	<0.5	29.0	4.0	2.0	<5.0	<5.0	<1.0	1.0	567.0	19.	1.	1.
VA03409	351.00	352.00	1300.0	10.0	169.0	<0.5	5.0	3.0	<1.0	27.0	<5.0	<1.0	<1.0	642.0	6.	. 1.	1.
VA03410	352.00	353.00	1200.0	22.0	153.0	<0.5	20.0	3.0	4.0	9.0	12.0	<1.0	<1.0	560.0	13.	2.	. 1.
VA03411	353.00	354.00	1200.0	65.0	427.0	1.3	27.0	4.0	3.0	15.0	<5.0	<1.0	<1.0	450.0	13.	2.	1.
VA03412	359.00	360.00	1200.0	5.0	43.0	<0.5	18.0	1.0	3.0	<5.0	11.0	<1.0	<1.0	432.0	10.	2.	1.
VA03413	376.50	377.50	1100.0	6.0	31.0	<0.5	<5.0	3.0	1.0	<5.0	<5.0	<1.0	<1.0	235.0	16.	1.	1.
VA03414	380.80	381.50	910.0	7.0	23.0	<0.5	5.0	2.0	3.0	<5.0	7.0	<1.0	2.0	303.0	23.	1.	1.
VA03415	383.10	384.10	840.0	4.0	20.0	<0.5	10.0	2.0	2.0	<5.0	7.0	<1.0	1.0	395.0	17.	2.	1.
VA03416	384.10	385.20	750.0	0.5	9.0	<0.5	9.0	2.0	1.0	<5.0	9.0	<1.0	<1.0	230.0	5.	2.	1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-43

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Page No. 1

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Summary Log: DDH CH88-44 Location: 27+90 E, 2+40 S; Chip 1 Claim Azimuth: 210, Dip: -45 Hole Completed: April 25, 1988 Core logged by: J. Pattison

0.0 - 4.3	Casing.
4.3 - 30.3	Feldspar porphyritic gabbro
30.3 - 58.7	Mafic flows
58.7 - 60.6	Mafic ash tuff
60.6 - 72.5	Mafic to intermediate tuffaceous sediments.
	A graded bed fines downhole (ie south)
72.5 - 98.2	Feldspar phorphyritic gabbro
98.2 - 110.1	Mafic to intermediate tuffaceous sediments
110.1 - 127.7	Feldspar porphyritic gabbro
127.7 - 132.1	Cherty felsic tuff/tuffite
	Several 3 mm bands of argillite and others of
	pyrite.
132.1 - 137.2	Mafic to intermediate tuffaceous sediments
137.2 - 144.0	Black argillite, cherty with 4 % fracture controlled
	pyrite.
144.0 - 150.3	Mafic to intermediate tuffaceous sediments
150.3 - 176.2	Black argillite with 5 % fracture controlled pyrite
176.2 - 184.7	Siltstone
	Several graded beds of fine downhole
184.7 - 186.0	Conglomerate
	Probably deposited at the base of a debris flow. Rip-up
	clasts are common.
186.0 - 196.6	Greywacke
196.0 - 197.9	Siltstone
197.9 - 203.3	Greywacke

PROPERTY: Chemainus JV					HOLE No: Page Number
	FALCONBR DIAMONI	DRILL LOG	ED		CH88-44 1
Hole Location: 27+90 E 2+40 S					
NTS: 92B13 UTM: 5416831.7 N 430015.0 H	2				Claim No. Chip 1 Section No.: 28+00 E
Dip: -45 Length: 203.3 m					Logged By: J. Pattison Drilling Co.: Burwash Enterprises
Started: 22-April-88 Completed: 25-April-88					Assayed By: Bondar-Clegg & XRAL
Purpose: To unravel the complex geology in the	Anita S	howing Are	aSTS		Core Size:
Length	Azi- muth	Dip	Length	Azi- muth	Dip
35.30	213.0	-46.5	203.00	217.0	-45.0

132.90 216.0 -46.0

From	То		Sample	From	То	Width	Total	Cu	РЪ	Zn	Ag	Au	Ba
(m)	(m) · ·	 DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

4.3 CASING .0

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Only several metres of overburden then into GABBRO.

4.3 30.3 FELDSPAR PORPHYRITIC GABBRO Massive medium green with up to 25 % 1-3 mm white feldspar phenocrysts. Rock is broken and blocky over most of the interval (0.2 m of lost core). Up to 4 % interstitial ilmenite. Fracture controlled quartz +/- carbonate veinlets are common difficult to pinpoint the lower contact but it appears to be a slip at 55 degrees to core axis.

STRUCTURE:.

17.6 18.0 FAULT ZONE at 50 degrees to core axis.

30.3 44.3 MAFIC FLOW

Fine-grained, medium green with epidote+calcite alteration patches up to 0.4 m long. Beds and ripped up beds of cherty tuffaceous sediments < 1.0 cm thick occur occasionally. Upper contact with the gabbro is difficult to recognize and ilmenite mineralization continues for 1.7 m below the gabbro. Locally weakly feldspar porphyritic. Lower contact is a flow contact (?) at 50 degrees to core axis.

STRUCTURE: .

At 31.4 m bedding is at 60 degrees to core axis. 40.4-40.8 M bedding runs parallel to the core axis. 47.4-47.8 M FAULT ZONE. Core is broken over entire interval, 0.1 m of lost core. Not possible to measure

30.3	57.7	27.4	n/a	148	n/a	59	n/a	n/a	121
32.5	33.5	1.0	0	58	(5	37	<1	10	90
33.5	34.0	.5	1	146	<5	35	<1	10	120
34.0	35.0	1.0	3	81	<5	54	<1	44	310
35.0	36.0	1.0	3	30	<5	38	<1	29	210
36.0	37.0	1.0	1	119	<5	66	<1	6	310
38.0	39.0	1.0	1	195	<5	55	<1	20	370
39.0	40.0	1.0	6	279	< 5	48	<1	20	240
40.0	41.0	1.0	1	254	<5	55	(1)	25	270
43.0	44.0	1.0	1	145	<5	75	<1	(5	620
44.0	45.0	1.0	1	124	<5	51	<1	< 5	200
	30.3 32.5 33.5 34.0 35.0 36.0 38.0 39.0 40.0 43.0 44.0	30.3 57.7 32.5 33.5 33.5 34.0 34.0 35.0 36.0 37.0 38.0 39.0 39.0 40.0 41.0 44.0 44.0 45.0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	30.3 57.7 27.4 n/a 32.5 33.5 1.0 0 33.5 34.0 .5 1 34.0 35.0 1.0 3 35.0 36.0 1.0 3 36.0 37.0 1.0 1 38.0 39.0 1.0 1 39.0 40.0 1.0 1 43.0 44.0 1.0 1 44.0 45.0 1.0 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-44 2 DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn Ag An Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) orientation. ALTERATION:. 30.3 44.3 MODERATE SPOTTY EPIDOTIZATION , WEAK PERVASIVE CARBONATIZATION, WEAK FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CHLORITIZATION SULPHIDES:. 33.5 36.0 2-5% fracture controlled pyrite, 1 % pyrrhotite and trace chalcopyrite and sphalerite associated with epidote+calcite alteration patches. 39.0 40.0 5 % pyrite, trace-1 % pyrrhotite and trace chalcopyrite and sphalerite associated with epidote+calcite patches. 44.3 58.7 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Similiar to 30.3 to 44.3 m but contains up to 5 % 1-3 mm 43 210 VA03427 45.0 46.0 1.0 47 ۲5 <1 6 1 anhedral to euhedral chlorite spots (chlorite replacing VA03428 46.0 47.0 1.0 1 59 ٢5 56 <1 <5 230 <5 190 hornblende/pyroxene?). VA03429 52.2 53.0 . 8 2 101 <5 40 <1 120 n/a 1290 Lower contact is a 3.0 cm fault gouge at 55 degrees to VA02797 57.7 72.5 14.8 85 n/a n/a n/a ۲5 123 <5 300 core axis. VA03430 58.0 59.0 1.0 1 178 1 STRUCTURE: . At 52.3 m flow contact at 55 degrees to core axis. Rock is fine-grained and non porphyritic (ie. Chilled) for about 1.0 m uphole of the contact. 1.0 cm thermal biotite rich band at the contact. Minor flow breccia on downhole side of the contact (flow base?). . 55.0-57.8 M blocky, highly fractured core. At 57.8 m fault gouge at 15 degrees to core axis. ALTERATION: . 44.3 58.7 WEAK SPOTTY EPIDOTIZATION and WEAK PERVASIVE CHLORITIZATION. SULPHIDES:. 45.0 46.0 (1 % biotite or sphalerite along edges of irregular quartz +/- carbonate veins <1.0 cm thick. 52.5 53.0 2 % biotite or sphalerite along edges of minor quartz veins (1.0 cm thick. 58.7 60.6 MAFIC TUFF Dark green, ash tuff. Bedding is broken up and there is VA03431 59.0 60.0 1.0 1 127 ۲5 80 <1 <5 280 abundant soft sediment deformation. Lower contact is

gradational. STRUCTURE:.

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PR	OPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-44	o: Pa	age Numb 3	er			
From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		At 58.8 m bedding is at 45	degrees to core axis.											
		ALTERATION:. 58.7 60.6 WEAK FRACTURE CON	TROLLED CARBONATIZATION.											
		SULPHIDES:. At 59.5 m trace biotite or carbonate-filled fractures.	sphalerite associated with a											
60.6	72.5	MAFIC TO INTERMEDIATE TUFFA Green with a brownish tint biotite alteration. Domina finely bedded to laminated sediments < 5 cm wide. Bec and very cherty below 71.2 degrees to core axis.	CEOUS SEDIMENTS due to moderate patchy thermal tely a mafic ash tuff with bands of light brown cherty omes medium brown below 68.0 m m. Lower contact is at 40	VA03432 VA03433 VA03434 VA03435 VA03435 VA03436 VA03437	67.0 68.0 69.0 70.0 71.0 72.0	68.0 69.0 70.0 71.0 72.0 72.5	1.0 1.0 1.0 1.0 1.0 .5	1 1 1 1 1 1	118 101 87 132 76 125	<5 5 8 <5 18 116	103 103 83 104 72 92	<1 <1 1 1 <1 1	<5 (5 14 (5 (5 194	830 1200 1800 2300 1800 1300
		STRUCTURE:. At 61.7 m bedding is at 40 At 65.2 m bedding is at 50 At 67.6 m slip or crosscutt degrees to core axis. At 70.4 m bedding is at 47 thick bed FINES DOWNHOLE.	degrees to core axis. degrees to core axis. ing erosional contact at 10 degrees to core axis. A 2.0 cm											
	•	ALTERATION:. 60.6 68.0 Moderate patchy t 68.0 72.5 Strong thermal bi	hermal biotite. otite.											x
		SULPHIDES:. At 61.7 m 2 mm bed of pyrit 68.0-72.5 M trace pyrite in	e. hairline fractures.											
		64.0 65.0 Massive MAFIC FLO biotite alteratio	W ?. Medium green, no thermal n and no bedding.											
		65.5 65.7 Unsorted bed of v core axis.	olcanic wacke at 60 degrees to											
72.5	98.2	FELDSPAR PORPHYRITIC GABBRO Massive, medium green with feldspar phenocrysts. Alth are non porphyritic trace May be a flow. Evidence for observed at 89.1 m. Broke	up to 10 % 1-3 mm white ough sections up to 2.0 m long to 3 % disseminated ilmenite. this is the possible bedding n core at the lower contact.	VA02798	92.8	110.1	17.3	n/a	34	n/a	66	n/a	n/a	1080
		79.0 81.5 Weakly carbonatiz	ed non porphyritic section.											
		89.1 89.4 Beds of fine, che	rty light green sediment ?!?!					· · ·						

PI	ROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-44	o: Pa	ge Numb 4	er				
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Àg (ppm)	Au (ppl	Ba b) (ppm))
		at 40 degrees to core axis. May be part of an xenolith.												
98.2	103.0	MAFIC TUFF												
		Medium to light green weakly to moderately cherty beds are common. Several bleached zones of quartz-carbonate flooding with up to 5 % fracture controlled pyrite. Lower contact is very irregular.	VA03438 VA03439 VA03440	99.5 100.5 101.0	100.5 101.0 102.0	1.0 .5 1.0	1 1 1	51 93 105	<5 <5 <5	48 246 52	1 1 1	<5 (5 (5	1300 410 560	
		STRUCTURE:. At 99.1 m bedding is at 50 degrees to core axis.												
		SULPHIDES:. 100.5 100.9 3 % fracture controlled pyrite, associated with a quartz-carbonate alteration zone.												
103.0	110.1	MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS As 60.6 to 72.5 m. Thermal biotite alteration occurs in discrete patches. Light brown to green 3-30 mm chert beds over the last 1.0 m of the unit. Broken core at the lower contact.	VA03441 VA03442	108.0 109.0	109.0 110.1	1.0 1.1	1 1	113 92	<5 6	67 70	1 1	9 6	830 1900	
		00011001100-												
		At 109.5 m bedding is at 45 degrees to core axis.												
		ALTERATION:. 103.0 110.1 Moderate thermal biotite alteration.												
		SULPHIDES:. 109.0-110.1 Trace fracture controlled pyrite and sphalerite												
110.1	127.7	FELDSPAR PORPHYRITIC GABBRO As 72.5 to 98.2 m. Trace pyrite in occasional calcite veinlets.												
•		Lower contact appears to be an intrusive one and is at 45 degrees to core axis. No evidence suggesting that it might be a flow.												
127 7	132 1	CHERTY FELSIC THEFT / THEFTTE												
		Well bedded cherty felsic tuffite. Beds are 2-40 mm thick (most < 10 mm). Sediments vary in colour from light grey to light grey-green to salmon pink. Bedding is wavey and is frequently microfaulted. Several beds of argillite < 3 mm thick. Bands of pyrite up to 5 mm thick parallel to bedding are common. Epidote+carbonate alteration patch at	VA03443 VA02799 VA03444 VA03445 VA03446	127.7 127.7 128.7 129.8 130.9	128.7 132.1 129.8 130.9 132.1	1.0 4.4 1.1 1.1 1.2	3 n/a 3 3 3	61 23 29 56 48	8 n/a 7 8 6	52 80 41 53 62	1 n/a {1 1	<5 n/a <5 <5 <5	3300 4750 4200 4400 6000	

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-44 5 DIAMOND DRILL LOG From To Sample From Width Total Cu РЪ Zn Ba То λα Au (m) ·(m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) STRUCTURE: . At 128.2 m bedding is at 45 degrees to core axis. At 130.6 fault at 76 degrees to core axis. At 131.8 m bedding is at 60 degrees to core axis. ALTERATION:. 132.1 127.7 Unknown. SULPHIDES:. 127.7-132.1 m 3 % pyrite in beds < 5 mm thick and in hairline fractures. 132.1 137.2 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS adjum green-grev, bedding is not as pronounced as in the VA02800 132.1 137.2 5.1 n/a 76 n/a 82 n/a n/a 418 unit above, beds are up to 0.2 m thick and the sediments VA03447 132.1 133.1 1.0 90 68 7 1300 0 <5 1 are coarser (ie sand to silt). Argillaceous beds are very VA03448 136.2 137.2 1.0 0 91 <5 60 1 <5 2000 rare. 3 % angular lapilli-sized felsic clasts throughout the last 0.7 m of the unit. Nil to trace disseminated pyrite. Lower contact is conformable at 60 degrees to core axis. . STRUCTURE:. 133.2 133.5 Cherty bed at 70 degrees to core axis with 2 % fracture controlled pyrite. 140.3-140.6 M bedding is at 50-58 degrees to core axis. Several (1.0 cm beds FINE DOWNHOLE. At 141.4 m a 5.0 cm bed FINES DOWNHOLE. 137.2 142.4 BLACK ARGILLITE VA03449 137.2 138.2 1.0 (5 4000 Very fine-grained black to dark grey, moderately cherty 4 59 12 105' · 1 over most of the interval and weakly to moderately VA03450 138.2 139.3 1.1 4 40 13. 100 1 <5 6600 graphitic. Weakly to moderately microfractured, fractures VA03451 139.3 140.4 33 11 85 1 7 3500 1.1 4 are filled with calcite+quartz and / or pyrite. Rock is VA03452 140.4 141.4 22 8 87 12 2800 1.0 4 1 33 10. 140 (5 2400 blocky over the entire interval. Lower contact is at 55 VA03453 141.4 142.4 1.0 4 1 degrees to core axis. 5.2 37.4 10.8 103 5,3 8906 STRUCTURE:. Bedding is often offset by < 3 cm by minor faults at 0-70 degrees to core axis. At 139.6 m bedding is at 50 degrees to core axis. ALTERATION:. 137.2 142.4 WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. 137.2-142.4 m 4 % fractures controlled pyrite. 142.4 144.0 WEAKLY CHLORITIC FELSIC TUFF

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	meatum green-grey, beaaing is	nou
	unit above hode are up to 0	2

HOLE No: Page Number FALCONBRIDGE LIMITED CH88-44 6 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn λq Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 20 % ash-sized feldspar crystals in a very fine-grained VA02801 142 4 144.0 cherty light green, massive siliceous matrix. Several VA03454 142.4 143.2 26 . 8 1 ٢5 63 1 <5 1700 blocks of black argillite near the upper contact. Lower VA03455 143.2 144.0 .8 1 46 <5 70 <5 100 1 contact is very sharp but irregular (errosional ?) at 1.6 36 15 16 about 30 degrees to core axis. . 65 960 ALTERATION: . 142.4 144.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. 142.4 144.0 Trace fracture controlled pyrite. 144.0 149.1 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Medium green with a brownish tint due to weak to moderate -VA02802 144.0 149 2430 w/-7 patchy thermal biotite alteration. Mafic to intermediate VA03456 144.0 145.0 1.0 2 55 5 101 1 <5 1600⁻⁷ in composition and grain size varies from sand to granule. VA03457 145.0 146.0 91 ' <5 133 <5 1.0 2 1 3300 10 to 25 % replacing subhedral 2-4 mm hornblende/pyroxene VA03458 146.0 147.0 63 <5 105 <5 2600 1.0 2 1 between 144.4 and 146.0 m. Quite massive, bedding rarely VA03459 147.0 148.0 1.0 2 88 ٢5 101 <5 2400 1 observed. Occasional ripped-up cherty bed. Lower contact VA03460 148.0 149.1 2 106 314 ٢5 1.1 8 1 2600 is sharp at 72 degrees to core axis. 511 151 45 2500 ALTERATION: . 144.0 149.1 WEAK SPOTTY EPIDOTIZATION. SULPHIDES:. 144.0 2.0 % fracture controlled pyrite. 149.1 150.3 WEAKLY CHLORITIC FELSIC TUFF (5 3107E As 142.4 to 144.0 m. Argillaceous over the first 0.1 m's. VA03461 149.1 150.3 209 1.2 0 43 33 1 Massive, no bedding. Broken core at the lower contact. 149.1 150.3 WEAK FRACTURE CONTROLLED CARBONATIZATION. 150.3 176.2 BLACK ARGILLITE Black, very fine-grained, weakly to moderately graphitic VA03462 150.3 151.3 ٢5 390 .1.0 5 42 16 106 1 and cherty. Beds of felsic ash tuff, volcanic wackes and VA03463 151.3 153.3 2.0 29 85 < 5 660 0 16 1 cherty sediments < 0.1 m thick are common. Rock is blocky VA03465 153.3 154.3 1.0 5 23 10 23 5 8400 1 throughout most of the section. Lower contact is sharp at VA03464 154.3 155.1 20 63 (5 (9100) . 8 5 14 1 10 degrees to core axis. VA03466 155.1 156.7 33 (5 2500 1.6 5 11 206 1 VA03467 156.7 159.1 2.4 5 31 11 140 1 15 2900 STRUCTURE: . VA03468 159.1 160.5 1.4 5 29 11 83 1 <5 3100 At 151.7 m bedding is at 50 degrees to core axis. VA03469 160.5 161.5 1.0 25 74 5 2600 5 11 1 151.8-153.9 M FAULT ZONE at 40-50 degrees to core axis. VA03470 161.5 162.8 1.3 5 31 16 96 8 2900 1 1.7 m of lost core. ¥A03471 162.3 162.8 75 -6-9 4100 -----€‡ 155.1-159.1 M FAULT ZONE at 20-45 degrees to core axis. VA03472 162.8 163.8 1.0 5 21 7 71 1 <5 2700 2.0 m of lost core. Moderately to strongly graphitic. <5 VA03473 163.8 164.8 1.0 5 20 5 77 1 3000 At 161.5 m bedding is at 50 degrees to core axis. VA03474 164.8 165.8 71 ٢5 2400 20 <5 1.0 5 1 162.3-162.8 M FAULT ZONE at 60 degrees to core axis. Rock VA03475 165.8 166.8 1.0 5 29 7 96 1 <5 3800

VA03476 166.8 167.8

1.0

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18

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86

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<5 3000

PROPERTY: Chemainus JV

is very broken and blocky over entire interval.

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PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-44 7 DIAMOND DRILL LOG Width Total Рb Au Ba Sample From To Cu Zn From To λσ (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) At 167.5 m 1.0 cm wacke bed is nearly parallel to the core VA03477 167.8 168.8 1.0 5 17 -5 65 1 7 2400 VA03478 168.8 170.4 37 114 5 3100 5 7 1 axis. 1.6 169.6-172.5 M FAULT ZONE at 20-40 degrees to core axis. VA03479 170.4 172.5 5 34 10 101 1 < 5 2200 2.1 Moderately graphitic. 0.6 m of lost core. VA03480 172.5 173.5 5 27 7 93 1 < 5 3400 1.0 VA03481 173.5 174.5 12 At 174.0 m bedding is at 15 degrees to core axis. 1.0 5 28 9 89 1 3500 101 3200 VA03482 174.5 175.5 1.0 5 24 8 1 6 ALTERATION: . VA03483 175.5 176.2 .7 5 20 9 53 1 13 2600 150.3 176.2 WEAK FRACTURE CONTROLLED CARBONATIZATION. 2880 28 17 10 2510 SULPHIDES:. 5 % fracture controlled, bedded and disseminated pyrite. 160.0 161.6 Beds of light green intermediate ash tuff up to 0.1 m thick comprise 50 % of the core. Bedding is often offset by brittle microfaults. 175.4 888.8 Two light grey rounded pebbles of carbonate-rich wacke. 176.2 184.7 SILTSTONE Medium to light grey with black argillite beds up to 5.0 VA03484 175.2 177.2 1.0 3 23 7 78 1 <5 3400 cm thick and light brown biotite altered greywacke beds 73 <5 4900 VA03485 177.2 178.2 1.0 3 19 5 1 65 23 1 <5 4200 up to 2.0 cm thick at low angles to the core axis. Lower VA03486 178.2 179.2 1.0 3 9 68 <5 4400 contact is sharp errosional (?) at 20 degrees to core axis. VA03487 179.2 180.2 3 21 1 1.0 7 85 <5 3100 19 1 VA03488 180.2 181.2 1.0 3 7 18 61 (5 3500 6 1 STRUCTURE:. VA03489 181.2 182.2 1.0 3 70 <5 3700 23 7 1 At 176.2 m bedding is at bedding is at 10 degrees to core VA03490 182.2 183.2 1.0 - 3 71 23 (5 4800 axis and beds appear to FINE DOWNHOLE. VA03491 183.2 184.3 1.1 3 9 1 At 179.4 m bedding is at 24 degrees to core axis. 71 At 180.0 m 1.0 cm bed of greywacke at 21 degrees to core 2) 45 axis. Bed FINES DOWNHOLE. 4000 ALTERATION: . 176.2 184.7 WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. At 176.2-184.7 m 3 % fracture controlled and bedded (<5 mm thick beds) pyrite.

184.7 186.0 CONGLOMERATE

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Probably deposited at the base of a debris flow. Comprised of 30 % angular pebble-sized clasts and rip-up clasts of argillite (40%), siltstone (15%), greywacke (15%) and carbonatized sediments (30%) in a coarse, quartz granule and biotite rich matrix. Many clasts have a ripped-up appearance. Clasts are poorly sorted but overall clast content decreases rapidly downhole (eg 40 %

At 183.0 m 5.0 cm greywacke bed with 20 % pyrite and 5 % sphalerite or biotite at 16 degrees to core axis.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-44 8

Sample From То Width Total РЪ Au Cu Zn Ag Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

clasts at 185.0 m and only 20 % at 185.9 m). Lower contact is gradational.

-----DESCRIPTION------

ALTERATION:.

184.7 186.0 Moderate thermal biotite alteration.

SULPHIDES:.

184.7 186.0 2 % pyrrhotite disseminated throughout the matrix.

186.0 196.6 GREYWACKE

From To

(m)

(m)

Medium brown, quite massive, occasional beds of argillite up to 1.0 cm thick and an occasional angular pebble of argillite or siltstone. Comprised of subrounded quartz grains and subangular volcanic and chert fragments. See thin section sample AB?????. Trace disseminated magnetite and pyrite in the matrix. Occasional dark grey cherty clasts up to 4.0 cm in diameter below 191.4 m. Clasts have distinctive light green or brown reaction rims up to 1.0 cm wide. Lower

196.6 197.9 SILTSTONE

Medium grey, massive, no bedding, very cherty but no sulphides. Lower contact is at 18 degrees to core axis.

contact is at 20 degrees to core axis.

197.9 203.3 GREYWACKE

As 186.0 to 196.6 m. Massive and quite coarse-grained with VA03492 200.3 201.3 1.0 occasional clast or bed of dark grey cherty siltstone. Trace disseminated pyrite.

STRUCTURE:.

At 201.2 m bedding is at 24 degrees to core axis.

200.3 201.2 CHERTY SILTSTONE: trace fracture controlled pyrite.

48.1 Cn : 26 Pb: 9 Zn: 101 As: 1 An 25 Ba3017

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<5 3000

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COLUMN STREET	
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FROM	то	XS 102	ZAL203	ZCAO	ZNGO	ZNA20	XK20	2FE203	XI 102	XP205	ZHNO	ZLOI	SUM		BA	AI
	-			•••			***********									
28.30	28.70	47.40	14.70	12.30	5.64	2.16	0.17	11.70	1.47	0.14	0.20	3.70	99.58		104.	29.

9.97

10.10

9.85

13.10

9.02

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

1

0.15

0.14

0.19

0.18

0.21

0.78

0.58

0.71

1.87

0.64

0.17

0.18

0.20

0.20

0.12

2.23 99.86

2.39 99.41

2.47 100.25

3.00 100.04

4.70 98.23

Hole No. CH88-44 WHOLE ROCK SAMPLES

32.10 32.30 50.10 16.50

63.00 50.20

50.90

51.20

14.00

14.90

14.00

15.60

54.70

73.50

101.40 101.60 50.80

11.00

9.79

8.50

7.61

4.44

5.13

7.67

8.69

5,82

7.81

3.72

3.33

2.01

2.47

4.00

0.11

0.33

2.53

0.59

0.89

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SAMPLE

NUMBER

VA02314

VA02315

VA02316

VA02317

VA02318

54.40

62.70

73.00

6 VA02313

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NACA

26.

38.

52.

39.

51.

75.

226.

1020.

341.

463.

14.

15.

13.

11.

10.

8.

SAMPLE NUMBER	FROM	τo	25102	2AL203	XCAO	ZHGO	XNA20	ZK20	XFE203	XT 102	ZP205	ZHNO	7101	SUN	BA	AI	NACA
							•		• • • • • • • • • • • • • • •					******			
VA02796	30,30	57.70	44.40	17.50	16.20	4.46	2.03	0.22	10.80	0.59			3.93	100.13	121.	20.	18.
VA02797	57.70	72.50	47.50	16.00	6.62	7.68	2.62	2.67	10.50	0.81			5.23	99.63	1290.	53.	9.
VA02798	92.80	110.10	43.50	14.20	19.80	5.57	0.94	1.16	7.23	0.49			6.39	99.28	1080.	25.	21.
VA02799	127.70	132.10	74.10	11.10	1.24	1.68	2.03	2.47	3.07	0.26			2.00	97.95	4750.	56,	з.
VA02800	132.10	137.20	51.90	15.60	6.57	6.05	5.42	0.24	7.55	0.61			5.47	99.41	418.	34.	12.
VA02801	142.40	144.00	42.50	15.00	7.84	8.53	3.24	0.10	11.20	1.76			7.85	98.02	99.	44.	11.
VA02802	144.00	149.10	43.50	16.30	9.98	6.91	2.13	1,37	11.60	1.98			3.47	97.24	2430.	41.	12.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-44 ALTERED SAMPLES

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Page No. 1

FROM	TO	BA (ppm)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
32.50	33.50	90.0	58.0	37.0	(0.5	10.0	17.0	23.0	(5.4	/5 A		() 0	401.0	٤١	•	•
33 50	34 00	1.20 0	146 0	25.0	(0.5	10.0	15.0	21.0	(5.0	14.4	1.0	(1.0		01.		4.
34 00	25.00	210.0	01 0	54.0	(0.5	10.0	13.0	21.0	(3.0	16.0	1.0	(1.0	514.0	81.	1.	3.
35.00	26.00	310.0	01.0	J1.V	(0.5	44.0	48.V	34.0	(3.0	9.0	2.0	<1.0	684.0	50.	3.	5.
35.00	36.00	210.0	30.0	38.0	<0.5	29.0	17.0	28.0	<5.0	6.0	<1.0	<1.0	556.0	44.	з.	3.
36.00	37.00	310.0	119.0	66.0	<0.5	6.0	26.0	34.0	<5.0	<5.0	2.0	<1.0	722.0	64.	1.	. 4.
38.00	39.00	370.0	195.0	55.0	<0.5	20.0	26.0	34.0	<5.0	<5.0	2.0	<1.0	801.0	78.	1.	4.
39.00	40.00	240.0	279.0	48.0	<0.5	20.0	49.0	37.0	<5.0	20.0	2.0	1.0	627.0	85.	6.	4.
40.00	41.00	270.0	254.0	55.0	<0.5	25.0	29.0	31.0	<5.0	7.0	1.0	<1.0	536.0	82.	1.	4.
43.00	44.00	620.0	145.0	75.0	<0.5	<5.0	31.0	36.0	<5.0	<5.0	<1.0	<1.0	835.0	66.	1.	5.
44.00	45.00	200.0	124.0	51.0	<0.5	<5.0	23.0	38.0	<5.0	<5.0	1.0	<1.0	621.0	71.	1.	4.
45.00	46.00	210.0	47.0	43.0	<0.5	6.0	28.0	38.0	<5.0	<5.0	<1.0	<1.0	728.0	52.	1.	4.
46.00	47.00	230.0	59.0	56.0	<0.5	<5.0	35.0	43.0	<5.0	<5.0	1.0	<1.0	1087.0	51.	1.	5.
52.20	53.00	190.0	101.0	40.0	<0.5	<5.0	23.0	29.0	<5.0	<5.0	<1.0	<1.0	549.0	72.	2.	3.
58.00	59.00	300.0	178.0	123.0	0.6	<5.0	37.0	58.0	<5.0	<5.0	<1.0	<1.0	1207.0	59.	1.	6.
59.00	60.00	280.0	127.0	80.0	<0.5	<5.0	36.0	62.0	<5.0	<5.0	<1.0	<1.0	1140.0	61.	1.	6.
67.00	68.00	830.0	118.0	103.0	<0.5	<5.0	26.0	27.0	<5.0	<5.0	1.0	<1.0	1079.0	53.	1.	6.
68.00	69.00	1200.0	101.0	103.0	<0.5	<5.0	21.0	20.0	5.0	<5.0	<1.0	<1.0	788.0	50.	1.	5.
69.00	70.00	1800.0	87.0	83.0	0.5	14.0	19.0	31.0	8.0	<5.0	<1.0	1.0	920.0	51.	1.	5.
70.00	71.00	2300.0	132.0	104.0	0.6	<5.0	26.0	39.0	<5.0	15.0	1.0	<1.0	1015.0	56.	1.	6.
71.00	72.00	1800.0	76.0	72.0	<0.5	<5.0	22.0	42.0	18.0	11.0	(1.0	<1.0	666.0	51.	1.	6.
72.00	72.50	1300.0	125.0	92.0	1.0	194.0	8.0	43.0	116.0	19.0	1.0	5.0	337.0	58	1.	3.
99 50	100 50	1300 0	51.0	49.0			22.0	01 0		15.0	() 0	21 Q	(12.0	50	,	· · ·
	100.00	1300.0	51.0	10.0			44.0	81.0	(3.0	(3.0	(1.0	(1.0	013.0	J		
	32.50 33.50 34.00 35.00 36.00 38.00 39.00 40.00 43.00 44.00 45.00 45.00 46.00 52.20 58.00 59.00 67.00 68.00 70.00 71.00 72.00 99.50 00.50	FROM TO 32.50 33.50 33.50 34.00 34.00 35.00 35.00 36.00 35.00 36.00 36.00 37.00 38.00 39.00 39.00 40.00 40.00 41.00 43.00 44.00 45.00 45.00 45.00 46.00 46.00 47.00 52.20 53.00 58.00 59.00 60.00 67.00 68.00 69.00 69.00 70.00 71.00 72.00 72.00 72.50 99.50 101.00	FROM TO BA (ppm) 32.50 33.50 90.0 33.50 34.00 120.0 34.00 35.00 310.0 35.00 36.00 210.0 36.00 37.00 310.0 36.00 37.00 310.0 38.00 39.00 370.0 39.00 40.00 240.0 40.00 41.00 270.0 43.00 44.00 620.0 44.00 45.00 200.0 45.00 40.0 230.0 52.20 53.00 190.0 58.00 59.00 300.0 59.00 60.00 280.0 67.00 68.00 830.0 68.00 69.00 1200.0 69.00 70.00 1800.0 71.00 72.00 1800.0 72.00 72.50 1300.0 99.50 100.50 1300.0	FROM TO BA (ppm) CU (ppm) 32.50 33.50 90.0 58.0 33.50 34.00 120.0 146.0 34.00 35.00 310.0 81.0 35.00 36.00 210.0 30.0 36.00 37.00 310.0 119.0 38.00 39.00 370.0 195.0 39.00 40.00 240.0 279.0 40.00 41.00 270.0 254.0 43.00 45.00 200.0 124.0 45.00 200.0 124.0 45.00 210.0 47.0 46.00 47.00 230.0 59.0 52.20 53.00 190.0 101.0 58.00 59.00 300.0 178.0 59.00 60.00 280.0 127.0 67.00 68.00 830.0 118.0 68.00 69.00 1200.0 101.0 69.00 70.00 1800.0 76.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) 32.50 33.50 90.0 58.0 37.0 33.50 34.00 120.0 146.0 35.0 34.00 35.00 310.0 81.0 54.0 35.00 36.00 210.0 30.0 38.0 36.00 37.00 310.0 119.0 66.0 38.00 39.00 370.0 195.0 55.0 39.00 40.00 240.0 279.0 48.0 40.00 41.00 270.0 254.0 55.0 33.00 44.00 620.0 145.0 75.0 44.00 45.00 210.0 124.0 51.0 45.00 210.0 178.0 123.0 59.00 58.00 59.00 300.0 178.0 123.0 59.00 60.00 280.0 127.0 80.0 67.00 68.00 830.0 118.0 103.0 69.00	FRDM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AAG (ppm) 32.50 33.50 90.0 58.0 37.0 (0.5 33.50 34.00 120.0 146.0 35.0 (0.5 34.00 35.00 310.0 81.0 54.0 (0.5 35.00 36.00 210.0 30.0 38.0 (0.5 36.00 37.00 310.0 119.0 66.0 (0.5 38.00 39.00 370.0 195.0 55.0 (0.5 39.00 40.00 240.0 279.0 48.0 (0.5 40.00 41.00 270.0 254.0 55.0 (0.5 43.00 44.00 200.0 124.0 51.0 (0.5 45.00 201.0 47.0 43.0 (0.5 (0.5 52.20 53.00 190.0 101.0 40.0 (0.5 58.00 59.00 300.0 178.0 123.0 0.6 <td>FROM TO BA (ppm) CU (ppm) 2N (ppm) AG (ppm) AU (ppm) AU (p</td> <td>EROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppm) CO (ppm) CO (ppm) 32.50 33.50 90.0 58.0 37.0 <0.5</td> 10.0 17.0 33.50 34.00 120.0 146.0 35.0 <0.5	FROM TO BA (ppm) CU (ppm) 2N (ppm) AG (ppm) AU (ppm) AU (p	EROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppm) CO (ppm) CO (ppm) 32.50 33.50 90.0 58.0 37.0 <0.5	FROM TD BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppm) CD (ppm) NI (ppm) 32.50 33.50 90.0 58.0 37.0 (0.5 10.0 17.0 23.0 33.50 34.00 120.0 146.0 35.0 (0.5 10.0 15.0 21.0 34.00 35.00 310.0 81.0 54.0 (0.5 29.0 17.0 28.0 36.00 37.00 310.0 119.0 66.0 (0.5 20.0 26.0 34.0 38.00 39.00 370.0 195.0 55.0 (0.5 20.0 26.0 34.0 39.00 370.0 195.0 55.0 (0.5 20.0 49.0 37.0 40.00 41.00 270.0 254.0 55.0 (0.5 25.0 29.0 31.0 43.00 44.00 620.0 145.0 75.0 (0.5 5.0 23.0 38.0 46.00 210.0	FROM TO BA (ppa) CU (ppa) ZM (ppa) AG (ppa) AU (ppa) CO (ppa) N1 (ppa) PB (ppa) 32.50 33.50 90.0 58.0 37.0 (0.5 10.0 17.0 23.0 (5.0 33.50 34.00 120.0 146.0 35.0 (0.5 10.0 15.0 21.0 (5.0 34.00 35.00 310.0 81.0 54.0 (0.5 44.0 28.0 34.0 (5.0 36.00 210.0 30.0 38.0 (0.5 29.0 17.0 28.0 (5.0 38.00 39.00 370.0 195.0 55.0 (0.5 20.0 26.0 34.0 (5.0 39.00 40.00 240.0 279.0 48.0 (0.5 20.0 49.0 37.0 (5.0 41.00 45.00 20.0 145.0 75.0 (0.5 (5.0 31.0 36.0 (5.0 44.00 45.00 210.0 47.0	FROM TD BA CU ZN AG AU CO HI PB AS 32.50 33.50 90.0 58.0 37.0 (0.5 10.0 17.0 23.0 (5.0 (5.0 33.50 34.00 120.0 146.0 35.0 (0.5 10.0 15.0 21.0 (5.0 16.0 34.00 25.00 310.0 81.0 54.0 (0.5 44.0 28.0 34.0 (5.0 6.0 35.00 36.00 210.0 30.0 38.0 (0.5 29.0 17.0 28.0 (5.0 6.0 36.00 37.00 195.0 55.0 (0.5 20.0 26.0 34.0 (5.0 (5.0 39.00 370.0 195.0 55.0 (0.5 20.0 26.0 34.0 (5.0 7.0 40.00 41.00 620.0 145.0 75.0 (0.5 25.0 23.0 38.0 (5.0 (5.0 <td< td=""><td>FROM TO 8A (pps) CU (pps) 2H (pps) A6 (pps) AU (pps) CD (pps) HI (pps) PB (pps) AS (pps) CD (pps) 32.50 33.50 90.0 58.0 37.0 <0.5</td> 10.0 17.0 23.0 <5.0</td<>	FROM TO 8A (pps) CU (pps) 2H (pps) A6 (pps) AU (pps) CD (pps) HI (pps) PB (pps) AS (pps) CD (pps) 32.50 33.50 90.0 58.0 37.0 <0.5	FROM TO BA (ppm) CU (ppm) ZM (ppm) AG (ppm) CD (ppm) H1 (ppm) PB (ppm) AS (ppm) CD (ppm) H1 (ppm) PB (ppm) AS (ppm) CD (ppm) H1 (ppm) PB (ppm) AS (ppm) CD (ppm) H0 (ppm) H0 (p	FROM TO BA (ppA) CU (ppA) ZM (ppA) AG (ppA) AU (ppA) CD (ppA) H1 (ppA) PB (ppA) AS (ppA) CD (ppA) H0 (ppA) H0 (p	FROM TO BA CU 2N AG AU CD N1 PB Age part CD N0 PN CD CD N0 PN CD N0 PN CD N0 PN CD CD N0 PN PN	FROM TO BA (pp) CU (pp) SA (pp) CU (pp) SA (pp) CU (pp) SA (pp) CU (pp) SA (pp) CU (pp) NI (pp) PB (pp) AS (pp) PD (pp) AS (pp) CU (pp) NN (pp) CUZN ETS 32.50 33.50 90.0 58.0 37.0 (0.5 10.0 17.0 23.0 (5.0 (5.0 1.0 (1.0 401.0 61. 0. 33.50 34.00 120.0 146.0 25.0 (0.5 44.0 28.0 34.0 (5.0 5.0 (1.0 61.0 60.0 3. 36.00 210.0 30.0 38.0 (0.5 20.0 76.0 34.0 (5.0 2.0 (1.0 71.0 78.0 1. 38.00 37.00 310.0 195.0 55.0 (0.5 20.0 21.0 37.0 (5.0 20.0 21.0 78.0 1. 39.00 40.00 200.0 145.0 75.0 (0.5<

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-44

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Page No. 1

SAMPLE	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	P8 (ppm)	AS (ppm)	CD (ppm)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE
UA03440	101-00	102-00	560.0	105.0	52.0	0.7	(5.0	26.0	103.0	<5.0	(5.0	<1.0	<1.0	627.0	67.	1.	5.
1002441	108.00	109 00	830.0	113.0	67 0	0.7	9 0	24.0	60.0	(5.0	6.0	<1.0	<1.0	565.0	63.	1.	5.
VA03442	109.00	110.10	1900.0	92.0	70.0	0.6	6.0	14.0	35.0	6.0	6.0	<1.0	3.0	472.0	57.	1.	3.
VA03443	127.70	128.70	3300.0	61.0	52.0	0.8	<5.0	7.0	20.0	8.0	5.0	<1.0	1.0	317.0	54.	з.	2.
VA03444	128.70	129.80	4200.0	29.0	41.0	<0.5	<5.0	4.0	14.0	7.0	<5.0	<1.0	<1.0	259.0	41.	3.	2.
VA03445	129.80	130.90	4400.0	56.0	53.0	0.7	<5.0	6.0	17.0	8.0	<5.0	<1.0	1.0	295.0	51.	3.	2.
VA03446	130.90	132.10	6000.0	48.0	62.0	0.8	<5.0	7.0	21.0	6.0	<5.0	<1.0	1.0	565.0	44.	3.	з.
VA03447	132.10	133.10	1300.0	90.0	68.0	0.7	7.0	21.0	72.0	<5.0	10.0	<1.0	2.0	764.0	57.	٥.	4.
VA03448	136.20	137.20	2000.0	91.0	60.0	0.6	<5.0	23.0	95.0	<5.0	<5.0	1.0	<1.0	1109.0	60.	٥.	4.
VA03449	137.20	138.20	4000.0	59.0	105.0	0.7	<5.0	6.0	23.0	12.0	16.0	<1.0	1.0	445.0	36.	4.	3.
VA03450	138.20	139.30	6600.0	40.0	100.0	0.7	<5.0	3.0	18.0	13.0	8.0	<1.0	2.0	317.0	29.	4.	2.
VA03451	139.30	140.40	3500.0	33.0	85.0	1.0	7.0	2.0	17.0	11.0	<5.0	<1.0	4.0	278.0	28.	4.	2.
VA03452	140.40	141.40	2800.0	22.0	87.0	0.7	12.0	<1.0	14.0	8.0	<5.0	<1.0	4.0	335.0	20.	4.	1.
VA03453	141.40	142,40	2400.0	33.0	140.0	0.8	<5.0	3.0	22.0	10.0	<5.0	<1.0	3.0	488.0	19.	4.	2.
VA03454	142.40	143.20	1700.0	26.0	63.0	0.7	<5.0	3.0	11.0	<5.0	8.0	<1.0	2.0	390.0	29.	1.	2.
VA03455	143.20	144.00	100.0	46.0	70.0	0.7	<5.0	22.0	117.0	<5.0	27.0	<1.0	2.0	777.0	40.	1.	4.
VA03456	144.00	145.00	1600.0	55.0	101.0	0.5	<5.0	35.0	227.0	5.0	8.0	<1.0	2.0	870.0	35.	2.	4.
VA03457	145.00	146.00	3300.0	91.0	133.0	0.6	<5.0	31.0	44.0	<5.0	11.0	<1.0	5.0	855.0	41.	2.	4.
VA03458	146.00	147.00	2600.0	63.0	105.0	0.5	<5.0	26.0	35.0	<5.0	5.0	<1.0	3.0	718.0	38.	2.	4.
VA03459	147.00	148.00	2400.0	88.0	101.0	0.6	<5.0	25.0	26.0	<5.0	<5.0	<1.0	5.0	870.0	47.	2.	4.
VA03460	148.00	149.10	2600.0	106.0	314.0	0.8	<5.0	29.0	54.0	8.0	<5.0	3.0	8.0	1382.0	25.	2.	5.
VA03461	149.10	150.30	310.0	43.0	209.0	0.7	<5.0	4.0	21.0	33.0	6.0	<1.0	2.0	670.0	17.	0.	2.
VA03462	150.30	151.30	390.0	42.0	106.0	0.7	<5.0	4.0	29.0	16.0	<5.0	<1.0	2.0	626.0	28.	5.	3.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-44

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (pp∎)	CD (ppm)	MO (ppm)	MN (ppm)	 CUZN	ETS	FE
VA03463	151.30	153.30	660.0	29.0	85.0	0.6	<5.0	4.0	23.0	16.0	10.0	<1.0	3.0	428.0	25.	0.	2.
VA03465	153.30	154.30	8400.0	23.0	23.0	0.9	5.0	1.0	18.0	10.0	14.0	<1.0	58.0	286.0	50.	5.	1.
VA03464	154.30	155.10	9100.0	20.0	63.0	1.1	<5.0	1.0	7.0	14.0	<5.0	<1.0	13.0	380.0	24.	5.	1.
VA03466	155.10	156.70	2500.0	33.0	206.0	0.8	<5.0	2.0	20.0	11.0	13.0	<1.0	5.0	302.0	14.	5.	2.
VA03467	156.70	159.10	2900.0	31.0	140.0	1.0	15.0	3.0	24.0	11.0	17.0	<1.0	3.0	362.0	18.	5.	2.
VA03468	159.10	160.50	3100.0	29.0	83.0	0.7	<5.0	2.0	14.0	11.0	20.0	<1.0	31.0	331.0	26.	5.	2.
VA03469	160.50	161.50	2600.0	25.0	74.0	0.6	5.0	2.0	6.0	11.0	5.0	<1.0	13.0	380.0	25.	5.	2.
VA03470	161.50	162.80	2900.0	31.0	96.0	0.9	8.0	4.0	17.0	16.0	9.0	<1.0	7.0	309.0	24.	5.	2.
VA03471	162.30	162.80	4100.0	19.0	69.0	<0.5	144.0	2.0	9.0	<5.0	(5.0	<1.0	2.0	305.0	22.	5.	. 1.
VA03472	162.80	163.80	2700.0	21.0	71.0	0.6	<5.0	2.0	11.0	7.0	<5.0	<1.0	<1.0	424.0	23.	5.	2.
VA03473	163.80	164.80	3000.0	20.0	77.0	0.5	<5.0	1.0	8.0	5.0	<5.0	<1.0	1.0	351.0	21.	5.	· 2.
VA03474	164.80	165.80	2400.0	20.0	71.0	0.7	<5.0	2.0	9.0	<5.0	<5.0	<1.0	<1.0	376.0	22.	5.	2.
VA03475	165.80	166.80	3800.0	29.0	96.0	0.B	<5.0	2.0	8.0	7.0	<5.0	<1.0	11.0	415.0	23.	5.	2.
VA03476	166.80	167.80	3000.0	18.0	86.0	0.5	<5.0	2.0	5.0	6.0	8.0	<1.0	3.0	1164.0	17.	5.	2.
VA03477	167.80	168.80	2400.0	17.0	65.0	0.6	7.0	2.0	5.0	5.0	<5.0	<1.0	1.0	391.0	21.	5.	1.
VA03478	168.80	170.40	3100.0	37.0	114.0	0.7	5.0	3.0	19.0	7.0	<5.0	<1.0	3.0	339.0	25.	5.	2.
VA03479	170.40	172.50	2200.0	34.0	101.0	1.0	<5.0	2.0	24.0	10.0	27.0	<1.0	3.0	293.0	25.	5.	2.
VA03480	172.50	173.50	3400.0	27.0	93.0	0.8	<5.0	2.0	20.0	7.0	<5.0	<1.0	2.0	206.0	23.	5.	2.
VA03481	173.50	174.50	3500.0	28.0	89.0	0.8	12.0	3.0	18.0	9.0	9.0	<1.0	1.0	253.0	24.	5.	2.
VA03482	174.50	175.50	3200.0	24.0	101.0	0.7	6.0	1.0	16.0	8.0	10.0	<1.0	3.0	381.0	19.	5.	2.
VA03483	175.50	176.20	2600.0	20.0	53.0	0.6	13.0	2.0	13.0	9.0	<5.0	<1.0	2.0	242.0	27.	5.	1.
VA03484	176.20	177.20	3400.0	23.0	78.0	0.6	<5.0	2.0	9.0	7.0	<5.0	<1.0	<1.0	373.0	23.	3.	1.
VA03485	177.20	178.20	4900.0	19.0	73.0	0.7	<5.0	1.0	8.0	5.0	<5.0	<1.0	<1.0	304.0	21.	3.	1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-44

Page No. 3

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (pp=)	A§ (pp∎)	AU (ppb)	€0 (pp∎)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	EIS	FE
VA03486	178.20	179.20	4200.0	23.0	65.0	0.5	<5.0	2.0	11.0	9.0	<5.0	<1.0	<1.0	261.0	26.	3.	2.
VA03487	179.20	180.20	4400.0	21.0	68.0	0.6	<5.0	1.0	8.0	7.0	<5.0	<1.0	4.0	398.0	24.	3.	2.
VA03488	180.20	181.20	3100.0	19.0	85.0	0.5	<5.0	3.0	11.0	7.0	<5.0	<1.0	1.0	320.0	18.	3.	2.
VA03489	181.20	182.20	3500.0	18.0	61.0	0.6	<5.0	3.0	9.0	6.0	<5.0	<1.0	<1.0	326.0	23.	з.	1.
VA03490	182.20	183.20	3700.0	23.0	70.0	0.7	<5.0	4.0	9.0	7.0	<5.0	<1.0	1.0	394.0	25.	з.	2.
VA03491	183.20	184.30	4800.0	23.0	71.0	0.6	<5.0	2.0	7.0	9.0	8.0	<1.0	1.0	389.0	24.	3.	2.
VA03492	200.30	201.30	3000.0	12.0	94.0	<0.5	<5.0	1.0	8.0	7.0	<5.0	<1.0	<1.0	326.0	11.	1.	2.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

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Summary Log: DDH CH88-45 Location: 28+00 E, 1+10 N; Chip 1 Claim Azimuth: 210, Dip: -58 Hole Completed: April 28, 1988 Core Logged By: D.P. Money 0.0 - 5.1 Casing.

0.0	cabing .
5.1 - 196.3	Chloritic felsic crystal and lapilli tuffs.
196.3 - 202.4	Fault Zone.
202.4 - 218.6	Felsic crystal tuff with 1 % pyrite and trace chalcopyrite.
218.6 - 222.5	Fault Zone.
222.5 - 250.5	Chloritic feldspar porphyritic felsic flow.
250.5 - 345.7	Intercalated felsic and mafic tuffs.
345.7 - 350.7	Mafic sill.
350.7 - 374.0	Felsic ash tuff and minor sediments with up to 5 %
	banded and disseminated pyrite over 1 m, pyrite
	content averages 1 to 2 %.
374.0 - 439.5	Gabbro.
439.5	End of hole.

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PROPERTY: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NO CH88-45	o: Pa	ige Numb 1	er			
Hole Location: 28+00 E 1+10 N				 .								
NTS: 092/B13 UTM: 5417131.9 N 430195.6 Azimuth: 210 Elevation: 545 m Dip: -58 Length: 439.5 m	E			Clai Sect Logg	am No. C ion No. ged By:	HIP1 : Line 28+(David P. Mo	00 East	, Chip	Group			
Started: April 22, 1988 Completed: April 28, 1988				Dril Assa	ling Co yed By:	Bondar-Cle	Enterp egg and	rises X-Ray	Assay			
				Core	Size:	NQ						
Purpose: To test for mineralization dyked ou the Anita Gabbro.	t by DIP TEST	S										
Length	Azi- muth Dip	A Length m	zi- uth	Dip								
185.00	210.0 -51.0	297.80 21	0.0 -	49.0								
From To (m) (m)DESCRIPTI	ON	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0 5.1 OVERBURDEN												
 5.1 14.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRY Variably chloritic tuff with 5 to 12 quartz eyes and 15 to 25 %, 1 to 2 epidotized feldspars. Chlorite is ni %. Is sericitic from 10.3 to 11.0 w mm, quartz eyes. There is trace dis pyrite cubes and weak local fracture carbonatization. There is a quartz v Is locally contorted by folds. 5.1 14.2 MODERATE SPOTTY CHLORITIZAT Foliations. 9.0 : 28 degrees to core axis. 10.5 : 48 degrees to core axis. 11.6 : 38 degrees to core axis. 	STAL TUFF % , up to 1.5 mm, mm, feldspars and 1 to 15 %, averages 10 ith up to 5 %, 3 to 4 seminated fine-grained controlled ein from 5.8 to 6.2. ION.	¥A01039	5.1	14.2	9.1	n/a	41	n/a	95	n/a	n/a	903
14.2 15.2 INTERNEDIATE QUARTZ EYE TUFF Dark green chloritic tuff with 3 to eyes. There is medium fracture contro There are minor local faults and fo orientations. There are trace 1 to 3 Foliation trend is at approximately	5 %, 2 to 4 mm, quartz olled carbonatization. lds at numerous mm pyrite cubes. 30 degrees to core axis	VA01040	15.0	35.0	20.0	n/a	24	n/a	16	n/a	n/a	997
15.2 58.7 CHLORITIC FELSIC QUARTZ-FELDSPAR CRY Variably chloritic felsic tuff with feldspar crystals and local mafic tu 15.2 58.7 MODERATE SPOTTY CHLORITIZA 15.2 17.4 Weakly chloritic with trace 10 to 15 %, 1 mm, feldspar	STAL TUFF 10 to 25 % quartz and ff beds. TION. e 3 mm quartz eyes and s. There is trace to	VA01041 VA01609 VA01610	35.0 35.4 40.7	55.0 36.0 41.0	20.0 .6 .3	n/a 1 1	27 27 85	n/a <5 <5	34 93 127	n/a <1 <1	n/a 1 <5 1 <5 1	1160 1200 1400

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-45 2

				DIANOND DAIDS LOG											
From (m)	To (m)			DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		17.4	18.5	0.5 % fine-grained disseminated pyrite. Foliation is at 37 degrees to core axis. Similiar to 15.2 to 17.4 in crystal content, but											
				is dark green with approximately 25 % chlorite.											
		18 5	20.8	There are minor quartz - calcite veinlets.											
		10.5	20.0	3, 3 mm, quartz eyes and 5 to 10 %, (1 mm,											
				feldspar and quartz grains. Foliation is at 28 degrees to core axis.											
		20.8	21.2	Thin 2 to 5 cm alternating mafic and felsic tuff											
				beds with bedding at 33 degrees to core axis.											
		21.2	21.4	Quartz - chlorite vein with trace 1 to 3 mm chalconvrite blebs											
		21.4	21.9	Sheared mafic tuff with strong pervasive					ν.						
				carbonatization. Foliation at 36 degrees to core											
		21.9	27.7	Strongly chloritic felsic tuff with on average											
				10 %, 2 mm, quartz eyes and 10 %, 1 mm,											
				feldspars. Medium green to black with 15 to 30 %											
				chlorite. Foliation is at 41 degrees to core											
				carbonatization.											
		27.7	29.6	Dark green to light black massive siliceous											
				felsic with trace pyrite cubes and on average 5											
				*, 3 to 5 mm, quartz eyes and 15 to 20 *, 2 to 3											
				nm, reidspars. There is minor quartz veins and											
		29.6	30.5	Rusty blocky, highly fractured core. Quartz -											
				feldspar crystal felsic tuff, sericitic not											
				chloritic.											
		30.5	31.2	0.2 m lost core. Overta - ghlorito - galgito vein											
		31.2	32.2	Similiar to 27.7 to 29.6, but is foliated as											
		72.4	22.2	from 29.6 to 30.5 at 36 degrees to core axis.											
		32.2	35.4	Chloritic tuff with 5 %, 1 to 2 mm, quartz eyes											
				and 10 to 20 %, < 1 mm crystals. There is nil											
				carbonatization, except as 3 to 5 mm veinlets											
				to 28 % chlorite with local nil There is trace											
				fine-grained disseminated pyrite. Dark to medium											
				light green in colour. Weakly contorted with											
				foliation from 30 to 50 degrees to core axis,											
		2E 4	<u>م</u> م	average from 35 to 45 degrees to core axis.											
		35.4	30.0	nalle with strong carbonate bands parallel to foliation lower contact at 31 degrees to core											
				axis and upper contact at 37 degrees to core											

axis and upper contact at 37 degrees to core axis. Is locally contorted with trace disseminated 3 to 5 mm pyrite cubes.
36.0 37.7 Very sericitic tuff with 2 to 3 %, 5 mm, quartz eyes. Foliation at approximately 20 degrees to core axis.



From To

(m)

(m)

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-45 3

Ba

n/a 1360

16 n/a

-----DESCRIPTION-----

- Sample From То Width Total Cu Рb Zn λα Au (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) (m) (m) Sulphides (ppm)
- 37.7 37.8 Mafic tuff bedding with strong pervasive carbonatization as bands.
- 37.8 38.6 Weakly chloritic felsic tuff with trace disseminated pyrite, weak pervasive carbonatization and 5 to 7 %, 2 to 3 mm, quartz eyes.
- 38.6 38.8 Sheared mafic at 53 degrees to core axis with 1 % carbonatization and 1 % pyrite in streaks parallel to foliation.
- 38.8 38.9 Sericitic felsic tuff with 5 %, 1 to 3 mm, quartz eyes and, 15 %, < 1 mm feldspar grains. 38.9 39.0 Same as 38.6 to 38.9.
- 39.0 40.7 Similiar to 38.8 to 38.9 with minor 5 cm mafic and medium chlorite from 40.2 to 40.7, after the mafic. Foliation is at 52 degrees to core axis.
- 40.7 41.0 Dark black to green chlorite with 10 % calcite bands and 0.5 % pyrite. 45 degrees to core axis.
- 41.0 45.2 Contorted tuff with 10 to 15 % contorted white guartz - k feldspar veins in chloritic tuff with 20 %, 1 to 3 mm, feldspars and approximately 5 %, 2 mm, quartz eyes.
- 45.2 58.7 Weakly chloritic tuff with minor chlorite carbonate mafics with 0.5 % pyrite from 48.5 to 48.6, 49.6 to 49.7, 50.3 to 50.4, 51.5 to 51.9 and from 56.2 to 56.4. Is locally sericitic with no chlorite, chlorite averages approximately 3 %. There is on average 5 %, 1 to 3 mm, quartz eyes and 10 %, up to 1 mm, feldspars. Foliation averages 50 degrees to core axis. There is trace fine-grained disseminated pyrite locally. At 56.5 there is a ash tuff bedding or lapilli at 44 degrees to core axis. There is trace mariposite (?) at 57.4.
- 58.7 63.4 FELSIC QUARTZ EYE TUFF

Siliceous light grey felsic tuff with 10 %, 1 to 2 mm, guartz eyes in a fine-grained matrix. There are numerous fracture controlled 1 to 2 cm quartz veins at 70 to 85 degrees to core axis. There is trace to nil disseminated pyrite. Is weakly contorted. Foliations. 59.0 : 62 degrees to core axis. 63.2 : 39 degrees to core axis.

63.4 94.9 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Locally weakly chloritic felsic tuff with quartz and feldspar crystals. There are local mafic tuff beds. 63.4 94.9 WEAK SPOTTY CHLORITIZATION.

31

n/a

n/a

VA01042 60.0 63.0 3.0

n/a 992 (10 n/a <10 n/a VA01043 65.0 85.0 20.0 n/a n/a 1290 22 20 n/a VA01044 85.0 105.0 20.0 n/a n/a

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From To (m) (m) ------DESCRIPTION------

SampleFromToWidthTotalCuPbZnAgAuBaNo.(m)(m)Sulphides(ppm)(ppm)(ppm)(ppm)(ppm)

63.4 63.5 Carbonatized sheared mafic with 9 cm of white quartz vein and trace pyrite.

- 63.5 66.4 Weakly chloritic with 3 to 5 % chlorite, hosts 5 %, 2 to 5 mm, and 10 %, up to 1.5 mm, quartz eyes and approximately 10 % up to 1 mm feldspars. There is a white quartz (chlorite) vein from 64.8 to 64.9. Foliation varies and trends at 45 degrees to core axis.
- 66.4 67.5 Same as from 58.7 to 63.4.
- 67.5 67.6 Carbonatized mafic chlorite shear at 44 degrees to core axis.
- 67.6 67.8 As from 66.4 to 67.5.
- 67.8 67.9 As from 63.5 to 66.4.
- 67.9 68.4 Carbonatized mafic with approximately 1 % pyrite at 36 degrees to core axis.
- 68.4 77.8 Schistose tuff with 5 to 7 %, 1 to 3 mm, quartz eyes and 10 to 15 %, up to 1 mm, feldspar grains. Is variably weakly chloritic with up to 7 % chlorite. There are 1 mm parallel to foliation pyrite bands at 72.5, 72.6, and 73.8. There is trace to nil disseminated pyrite. Foliation is at 41 to 50 degrees to core axis locally.
- 77.8 78.1 Carbonatized mafic at 47 degrees to core axis with trace to 0.5 % pyrite cubes.
- 78.1 93.0 5 cm to 2 m beds of weakly chloritic tuff and sericitic. Sericitic tuff is approximately 15 % and may locally be lapilli as bands are not continuous. There are 10 %, 1 to 4 mm, average 2 mm, quartz eyes and 10 % up to 1 mm feldspar and epidote grains. There is a 7 mm epidote knot at 87.5. There is a mafic from 90.8 to 91.1 as before. There are minor fault zones at 90 degrees to core axis. Foliation and bedding are sub-parallel at 50 degrees to core axis. 85.0 86.5 0.3 m lost core.
- 85.7 86.3 Blocky, highly fractured core with hematite on fractures.
- 93.0 94.9 MODERATE PERVASIVE SILICIFICATION along selective beds in chloritic felsic tuff with crystal content similiar to 78.1 to 93.0. Foliation is at 35 to 62 degrees to core axis, rough trend at 50 degrees to core axis. Bedding is parallel to to foliation and is locally contorted.
- 94.0 94.5 0.2 m lost core with 3.5 cm fault gouge and minor fracture controlled hematite.

94.9 97.7 CHLORITE SCHIST

Blocky, highly fractured core. Mafic ash tuff (?). Strong

From To

(m) (m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

То

(m)

HOLE No: Page Number CH88-45 5

Ph

Zn

(ppm) (ppm) (ppm)

Ag

Au

Ba

(ppb) (ppm)

Cu

Width

(m)

Total

Sulphides (ppm)

foliation at 52 to 55 degrees to core axis with weak cross-cut foliation at 31 degrees to core axis. There is minor quartz - calcite veins parallel to strong foliation. There is trace to nil pyrite cubes, up to 4 mm. There is minor felsic tuff from 95.9 to 96.1.
94.9 97.7 STRONG PERVASIVE CARBONATIZATION.
97.7 98.7 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Folgic tuff with 15 % guartz and folderer gruntals up to 15 %

-----DESCRIPTION------

Felsic tuff with 15 % quartz and feldspar crystals, up to 1.5 mm. Foliation at 55 degrees to core axis.

98.7 102.3 CHLORITE SCHIST Dark green to black chlorite with calcite streaks (10 %) and 5 % quartz - calcite veins with trace pyrite. Is contorted with foliation trend at 55 degrees to core axis. There are minor pyrite cubes, up to 6 mm, trace, throughout. Is strongly magnetic. 98.7 102.3 STRONG PERVASIVE CARBONATIZATION.

102.3 152.4 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Weakly chloritic felsic tuff with 3 to 10 % chlorite, averages 5 %. There are local sericitic tuff lapilli or beds with similiar crystal contents to the chloritic tuff. Colour varies from medium green to light grey. There are 5 to 10 %, 1 to 3 mm, quartz eyes and up to 20 %, average 5 to 10 %, 1 to 2 mm, feldspar grains and laths. There are local guartz veins, fracture controlled, and parallel to foliation, up to 2 cm thick. There are minor chlorite calcite schists, mafic tuffs (?), from 136.4 to 137.5, 142.7 to 143.8 and from 147.3 to 148.1. There is trace to nil disseminated and fracture controlled pyrite. Mafics are locally weakly magnetic. 102.3 152.4 WEAK PERVASIVE CHLORITIZATION. Structure :. Bedding :. 110.0 : 58 degrees to core axis.

122.6 : 56 degrees to core axis.
131.9 : 55 degrees to core axis.
Foliations :.
115.3 : 52 degrees to core axis.
125.3 : 49 degrees to core axis.
138.8 : 44 degrees to core axis.
140.4 : 34 degrees to core axis.
149.7 : 50 degrees to core axis, locally contorted.
Faults :.
134.9 : 45 degrees to core axis, 2 to 4 mm fault gouge.

119.2 120.0 (7) degrees to core axis, 0.3 m lost core. 152.4 Lower contact blocky, highly fractured core and VA01045 105.0 125.0 20.0 n/a 15 n/a 27 n/a n/a 1030 VA01046 125.0 150.0 25.0 n/a 30 n/a 29 n/a n/a 1190

From To Sample From To Width Total Cu РЪ Zn λg (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) minor fault gouge. 152.4 172.5 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF May be andesitic, not mafic as from 154.4 there is minor VA01047 160.0 170.0 10.0 n/a 34 n/a 58 n/a 702 n/a sericite and 3 to 7 %, 1 to 2 mm, guartz eyes and 5 to 10 %, 1 mm, feldspar grains. There is strong black chlorite with moderate pervasive carbonatization from 152.4 to 154.4. Foliation varies locally from 54 to 0 degrees to core axis. Is blocky, highly fractured core or disky. Carbonatization is pervasive as streaks parallel to foliation. There are minor quartz - calcite veins. Very chloritic zone is locally weakly magnetic, other part isn't. Lost core :. 152.2 152.7 0.2 m lost core. 152.7 153.8 0.4 m lost core. 155.0 156.5 0.3 m lost core. 164.6 165.2 0.2 m lost core. Alteration :. 152.4 172.5 WEAK PERVASIVE CARBONATIZATION. 152.4 172.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION. Foliations :. 157.9 : 37 degrees to core axis. 166.1 : 41 degrees to core axis. 171.8 : 45 degrees to core axis. There are minor kinks throughout. 172.5 175.8 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Massive dark green siliceous tuff with 5 to 7 %, 1 to 3.5 mm, guartz eyes and 10 to 20 %, 1 to 2 mm, feldspar grains. There are local chlorite lapilli, 1 to 5 mm thick

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DIAMOND DRILL LOG

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6

Au

Ba

CH88-45

and core width long. Cross-cut by numerous (1 to 7 cm quartz - feldspar veins. There is trace disseminated pyrite in the veins and tuff, up to 3 mm cubes. There is 0.4 m of lost core from 174.0 to 175.3. There is on average approximately 20 % chlorite in the tuff. 172.5 175.8 MODERATE PERVASIVE CHLORITIZATION. Foliations :. 173.5 : 43 degrees to core axis. 175.6 : 55 degrees to core axis.

175.8 180.4 WEAKLY CHLORITIC FELSIC TUFF

PROPERTY: Chemainus J.V.

Blocky, highly fractured core. Lost core of 0.7 m from 176.0 to 177.1, 0.3 m from 177.7 to 178.6 and 0.4 m from 178.6 to 180.1. There is minor intercalated mafic ash tuff. Felsic tuff is chloritic with approximately 10 %, 2 to 4 mm, quartz eyes and 15 %, 2 mm, feldspar crystals. There are minor drag folds and boudinaged guartz -

PR	OPERT	Y: Chemainus J.V.	BIT CONTRACT I THE					HOLE N	o: P	age Numb	er			
			DIAMOND DRILL LOG					CH88-45		7				
From (m)	To (m)	D	ESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm
		feldspar veins. There is a degrees to core axis.	rough foliation trend at 40											
0 1	105 C	FRICTC OUNDRY FVF THEF												
/. 4	105.0	Sericitic felsic tuff with u 7 % 4 mm, quartz eyes. There	p to 10 %, up to 6 mm, average are 10 to 15 %, 1 or 3 mm,	VA01048	180.4	185.6	5.2	n/a	14	n/a	46	n/a	n/a	825
		varies locally. There are m 30 degrees to core axis that	inor faults or crenulations at cross-cut the foliation at											
		as degrees to core axis. The parallel to foliation locall	re are very minor fault silps Y.											
.6	186.3	CHLORITE SCHIST												
		Strongly magnetic black to d minor local fracture control fracture controlled guartz -	ark green chlorite schist with led hematite, numerous feldspar veins and strong	VA01611	185.6	186.3	.7	1	23	<5	130	<1	<5 1	300
		fracture controlled carbonat fracture controlled pyrite.	ization. There is trace Jpper contact is sharp at 30 ar contact is at a fault slip											
		at 37 degrees to core axis. felsic tuff at 186.0 paralle	There is 10 cm of chloritic l to foliation.											
2														
. 3	196-3	Light grey felsic tuff with and 15 %, 1 mm, sausuritize	AL TUFF 7 %, 1 to 3 mm, quartz eyes 1 feldspar grains. There is	VA01049	187.0	196.0	9.0	n/a	17	n/a	47	n/a	n/a	734
		weak fracture controlled sil moderately schistose. There feldspar) veins parallel to	icification, tuff is are local quartz - (yellow to foliation. There are											
		local beds with bedding at 4 192.8. Foliation is at 45 to 195.9 there is trace pyrite	5 degrees to core axis at 50 degrees to core axis. At in chlorite parallel to											
		bedding.									-			
.3	202.4	FAULT ZONE												
		Chloritic felsic tuff and set breccia or lapilli tuff. From blocky, highly fractured core	ricitic felsic tuff in fault 199.2 to 202.4 there is 2. There is 2.4 m of lost core											
		from 199.6 to 202.4. There a cross-cut. There is minor loo fractured core. Approximately	are minor faults that cal 2 in the blocky, highly 7 50 to 55 degrees to core											
		axis.												
.4	218.6	FELSIC FELDSPAR CRYSTAL TUFF												
		Variable felsic tuff with loc 15 %, 1 to 2 mm, feldspar cry 202.4 203.9 White to light or	cal quartz eyes and on average ystals.	VA01612 VA01050	202.4 205.0	203.9 215.0	1.5 10.0	3 n/a	44	304 1 n/a	044 310	2 n/a	17 1 n/a	100 886

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FALCONBRIDGE LIMITED

HOLE No: Page Number CH88-45 8

Pb

Zn

(ppm) (ppm) (ppm)

Ag

Au

(ppb) (ppm)

Ba

Cu

То

(m)

Width

(m)

Total

Sulphides (ppm)

			DIAMOND DR	ILL LOG		
From (m)	To (m)		DESCRIPTION		Sample No.	From (m)
		1 to 2 mm, an There is appr disseminated pyrite bands chalcopyrite 10 % chalcopy	d 5 % up to 1 mm feldsp: oximately 1 % fine-grain pyrite. There is 1 % 1 to parallel to foliation au at 203.0. There is 4 cm d rite with pyrite at 203	ars. ed o 3 mm nd minor of 7 to .55.		
		Foliation is 203.9 208.8 Medium to lig trace to 2 %, %, 1 to 2 mm, fine-grained stringer at	at 40 degrees to core ax: ht grey - green sericition 1 to 3 mm, quartz eyes feldspars. There is trad disseminated pyrite. Mino 204.8. Foliation is at 40	is. c with and 15 ce very pr pyrite D to 55		
		degrees to co 208.8 218.6 MODERATE SPOT 208.8 218.6 Similiar to 2 of lapilli or	re axis locally. TY SILICIFICATION. 03.9 to 208.8 with silic: spotty silicification.	ification There is		
		fault gouge w and minor loc associated st There is bloc	ith at 75 degrees to core al mafic ash tuffs with rong pervasive carbonati: ky, highly fractured core	≥ axis zation. e from		
		215.5 to 218. Lost core :.	6.			
		204.0 205.0 0.2 m. 210.3 212.0 0.6 m.				
		215.0 217.0 0.7 m. 217.0 218.1 0.5 m.				
218.6	219.0	CHLORITE SCHIST Dark green chloritic mafi with 2 to 3 % magnetite.	c ash tuff, strongly magn There is 5 % calcite wit	netic th minor		

quartz and trace to 1 % pyrite. Is very contorted with foliation from 0 to 40 degrees to core axis.

219.0 222.5 FAULT ZONE

Blocky, highly fractured core and fault gouge. Units present are WEAKLY CHLORITIC FELSIC TUFF and local 2. There is one 20 cm quartz vein. Foliation is at 30 degrees to core axis and fault gouge is at 70 degrees to core axis.

222.5 250.5 FELDSPAR PORPHYRITIC FELSIC FLOW

Chloritic felsic flow with 12 to 20 %, average 15 %, 3 to 7 mm, average 5 mm feldspar crystals or weakly chloritic felsic tuff with numerous 5 to 15 cm quartz - feldspar veins. There is strong pervasive spotty silicification or selective alteration of lapilli. There is trace local disseminated pyrite. There is local medium fracture controlled carbonatization with trace associated pyrite.

VA01051 225.0 240.0 15.0 681 n/a 29 n/a 71 n/a n/a VA01052 240.0 250.0 10.0 25 99 n/a n/a 992 n/a n/a

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-45 q

РЪ

Zn

Åα

(mqq) (dqq) (mqq) (mqq)

Au

Ba

Cu

Total

Sulphides (ppm)

Width

(m)

То

(m)

Sample From

No.

(m)

From To (m) (m)

Π

There is trace local weak thermal biotite. Is dominantly massive siliceous medium to light grey - green rock. Near

upper contact chlorite is interstitial to silicification and flow appears to have siliceous lapilli in chloritic matrix. There is strong kinking above lower contact. Over the last 8 m there is minor fault gouge and carbonate veinlets at 60 to 80 degrees to core axis. There is minor dark chlorite and carbonatization at a fault at 241.5. Alteration :.

-----DESCRIPTION-----

222.5 250.5 STRONG SPOTTY SILICIFICATION. 222.5 250.5 WEAK FRACTURE CONTROLLED CARBONATIZATION. Foliations :.

- 222.5 : 36 degrees to core axis.
- 223.7 : 46 degrees to core axis.
- 224.5 : 51 degrees to core axis.
- 227.8 : 62 degrees to core axis.
- 232.4 : 46 degrees to core axis.
- 236.2 : 63 degrees to core axis.

244.0 : 67 degrees to core axis, parallel to fault slip with 1 mm fault gouge.

247.0 250.5 Strong kinks with minor mafics, in 15 cm from 250.25 to 250.40 goes from 70 degrees to core axis to 0 degrees to core axis to 70 degrees to core axis in the other direction.

Lost core :.

233.3 234.1 0.3 m. 239.0 240.0 0.3 m. 240.0 240.8 0.3 m. 240.8 242.0 0.5 m.

250.5 251.2 CHLORITE SCHIST

Dark green to black chlorite schist with strong pervasive carbonatization as white calcite streaks and 5 % brown, < 1 mm, carbonate specks. Contorted with minor faults and foliation trend at approximately 60 degrees to core axis. 250.5 251.2 STRONG PERVASIVE CARBONATIZATION.

251.2 251.7 FELSIC QUARTZ EYE TUFF

Siliceous light green schist with strong to moderate kinking and trace disseminated pyrite. There are minor fracture controlled guartz - calcite veinlets. There are up to 2 %, 2 mm, guartz eyes. Foliation trends at 66 degrees to core axis.

251.7 252.3 CHLORITE SCHIST

Very similiar to 250.5 to 251.2 with slightly lighter green. There is felsic dyke or block from 251.9 to 252.0. As above is not magnetic.

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VA01053 255.0 265.0 10.0

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From

(m)

То

(m)

FALCONBRIDGE LINITED DIAMOND DRILL LOG HOLE No: Page Number CH88-45 10

S

Sample From То Width Total Cu Pb Zn λa Ba λu No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

22

n/a

80

n/a

n/a 939

n/a

252.3 268.5 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

Siliceous contorted tuff, light to medium green to grey, with trace to 15 % crystals, averages 5 %, 3 to 5 mm, feldspars and 1 to 2 %, 3 mm, quartz eyes. There is trace to 0.5 % disseminated pyrite locally. Is darker over last 2 m. There are numerous fracture controlled quartz calcite veinlets and there is moderate to strong pervasive carbonatization. Is kinked throughout with trends at 0 and 60 degrees to core axis. Alteration :. 252.3 268.5 STRONG PERVASIVE CARBONATIZATION.

268.5 270.3 CHLORITE SCHIST

Argillic sediments or mafic ash tuff with strong pervasive carbonatization parallel to foliation. Is black chlorite with 20 % calcite. From 269.0 to 269.3 there is a felsic with 0.5 % fine-grained disseminated pyrite, similiar to mafic pyrite quantity. Upper contact at fault at 31 degrees to core axis and lower contact at fault at 63 degrees to core axis. Is very strongly contorted with numerous folds and micro-faults. Foliation trend at 56 degrees to core axis.

270.3 287.8 MAFIC LAPILLI TUFF

Mafic lapilli tuff with siliceous bleached felsic crystal tuff from 270.3 to 271.0, 272.3 to 275.2 and 283.8 to 285.0. The felsic tuff may be a strongly bleached lapilli poor zone of the mafic. The mafic is medium green with 20 4, 2 to 3 mm, epidote crystals and 10 % epidotized lapilli. There is strong pervasive carbonatization throughout both the felsic and mafics. From 271.5 to 272.2 there is strong fracture controlled silicification in a bleached and carbonatized mafic with 2 to 3 % pyrite. Rock is massive with minor fault slips and very weak foliation trend at 60 degrees to core axis. Alteration :.

270.3 287.8 STRONG PERVASIVE CARBONATIZATION. 271.5 272.2 STRONG FRACTURE CONTROLLED SILICIFICATION. Sulphides :.

- 270.3 271.4 2 % fine-grained disseminated pyrite concentrated in zones parallel to the contorted foliation.
- 271.4 272.3 Trace to 1 % disseminated pyrite in massive mafic lapilli tuff.
- 272.3 277.2 On average 3 % disseminated and fracture
- controlled pyrite in bleached carbonatized tuff

277.2 279.2 Trace to 1 % pyrite.

VA01613 270.3 271.4 1.1 2 31 99 5 990 6 <1 VA01614 271.4 272.3 133 140 5 650 .9 1 < 5 <1 VA01054 272.0 287.0 20 n/a 98 n/a 850 15.0 n/a n/a VA01615 272.3 273.3 1.0 3 13 ٢5 22 <1 <5 1500 VA01616 273.3 274.3 1.0 3 13 ٢5 15 <1 <5 1300 VA01617 274.3 275.3 1.0 3 10 5 35 <1 ٢5 1300 VA01618 275.3 276.3 46 <5 1500 1.0 3 10 9 $\langle 1 \rangle$ VA01619 276.3 277.2 ٢5 1100 22 <5 27 <1 . 9 3 VA01620 277.2 278.2 207 <5 100 116 <5 (1 1.0 1 VA01621 278.2 279.2 62 ٢5 143 (1 ٢5 470 1.0 1 VA01622 279.2 280.2 1.0 3 121 ٢5 153 (1 <5 530 VA01623 280.2 280.8 7 146 ٢5 151 ٢5 700 . 6 1 VA01624 280.8 281.8 1.0 3 122 <5 204 (1 9 430 VA01625 281.8 282.8 (5 250 1.0 3 90 <5 186 <1 VA01626 282.8 283.8 ٢5 230 1.0 3 130 ٢5 166 (1 VA01627 283.8 284.8 1.0 3 11 <5 45 <1 <5 1000 VA01628 284.8 285.8 1.0 3 32 <5 52 <1 <5 1300 VA01629 285.8 286.8 1.0 3 34 ٢5 42 <1 <5 1100 VA01630 286.8 287.8 (5 1.0 - 3 36 88 <1 (5 890

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From	То	
(m)	(m)	BESCRIPTION

Sample From То Width Total Cu Pb Zn λg Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

- 279.2 280.5 2 % fine-grained disseminated and 1 % fracture controlled in epidote lapilli.
 280.5 280.7 15 to 17 % pyrite in fracture controlled
- carbonatization.
- 280.7 287.8 Approximately 2 to 3 % disseminated and fracture controlled pyrite with minor 1 cm pyrite blebs. Pyrite is concentrated on epidotized lapilli.

287.8 298.7 FAULT ZONE

Blocky, highly fractured core and fault gouge. Core is mafic to 291.1, felsic from 291.1 to 297.8 and mafic as below lower contact to the lower contact. Strong fault gouge at 65 degrees to core axis to 289.0 with very strong local hematite. There are slips at 15 degrees to core axis within the fault zone. Lost core :. 288.0 289.9 0.2 m. 290.0 291.1 0.7 m.

291.1 292.3 0.4 m. 293.5 294.7 0.3 m. 294.7 296.0 0.9 m. 296.0 297.8 0.7 m.

298.7 300.0 CHLORITE SCHIST

Dark green to black non-magnetic chlorite schist with 10 , < 1 mm, carbonate specks and minor fracture controlled quartz, calcite and chlorite veins. Schistosity is at 51 degrees to core axis.

300.0 309.6 CHLORITIC FELSIC QUARTZ EYE TUFF Dark green tuff with on average 5 %, 3 mm, quartz eyes. There are 10 %, 2 mm, feldspar and epidote grains. There is 5 to 15 % chloritization and minor biotite. There are local quartz veins that cross-cut the foliation. There is cleavage at 30 degrees to core axis and foliation at 40 and 60 degrees to core axis. 300.0 309.6 MODERATE FERVASIVE CHLORITIZATION.

309.6 313.2 FELSIC OUARTZ EYE TUFF

Sericitic medium grey felsic tuff with 5 to 7 %, up to 7 mm, average 3 mm, quartz eyes. There are minor fracture controlled quartz - calcite veinlets. Foliation varies from 34 to 50 degrees to core axis from upper contact to lower contact.

VA01056 309.6 313.2 3.6 n/a 16 n/a 54 n/a n/a 986

VA01055 300.0 309.6 9.6 n/a 40 n/a 72 n/a n/a 663

From To

(m)

(m)

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

HOLE No: Page Number CH88-45 12

From To Width Total Cu Pb Zn Ag Au Ba (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

313.2 323.7 WEAKLY CHLORITIC FELSIC TUFF

Weakly chloritic felsic tuff. Is siliceous and has well developed foliation. Has a glassy appearance from 320.7 to 323.7 and is probably a 9 with associated silicification from approximately 318 to 320.7. There is minor fracture controlled quartz - carbonate veins at approximately 0 to 30 degrees to core axis. There is approximately 10 to 15 % mixed feldspars and quartz eyes, 1 to 4 mm. In the dyke (?) there are 10 %, 4 mm, feldspars. Foliation is at 46 degrees to core axis. There is trace pyrite. 313.2 323.7 WEAK PERVASIVE CHLORITIZATION.

-----DESCRIPTION-----

323.7 325.4 CHLORITIC FELSIC QUARTZ EYE TUFF Dark green siliceous schist with 3 or 4 to 1 sericite to chlorite ratio. Core is disky with foliation at 60 degrees to core axis. 323.7 325.4 MODERATE PERVASIVE CHLORITIZATION.

325.4 338.7 WEAKLY CHLORITIC FELSIC TUFF

Medium to light grey green silicified felsic tuff with local weak chloritization. There are numerous silicified beds and minor siliceous ash tuff beds. There is strong chloritization or mafic tuffs, chloritic schists between 330.4 and 334.4. On average there is 15 %, 1 to 2 mm, quartz, feldspar, and epidote crystals. There is weak to moderate thermal biotite. From 332.0 to 333.5 there is 0.7 m of lost core. There is trace local pyrite in the more chloritic zones. Bedding :. 327.5 : 34 degrees to core axis.

331.4 : 59 degrees to core axis.
337.2 : 49 degrees to core axis.
Foliations :.
330.0 : 40 degrees to core axis.
337.3 : 44 degrees to core axis.
Alteration :.
325.4 338.7 STRONG FRACTURE CONTROLLED SILICIFICATION.
330.4 334.4 MODERATE PERVASIVE CHLORITIZATION.
338.6 338.7 STRONG PERVASIVE SILICIFICATION , very strongly silicified lower contact.

338.7 345.2 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Andesitic to rhyo-dacitic (?) tuffaceous material mixed with chert. Unit is green with local rainbow colouring. There is local biotite rich zones and minor biotite in quartz veins. The are minor slumps and local faults. The unit may be a debris flow. Foliation and bedding average No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm

VA01057 314.0 338.0 24.0 n/a 25 n/a 66 n/a n/a 966

PI	ROPERT	Y: Chemainus J.V.						ROLE N	int P	age Numb	er			
			FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-45	0. 1	13	, er			
From (m)	To (m)		DESCRIPTION	Sample No.	From (n)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm
		about 60 degrees t	o core axis.											
345.2	350.7	MAFIC INTRUSIVE												
		Mafic sill (?) wit Is not magnetic. T epidote veins and	h sharp contacts parallel to foliation. here are numerous quartz, calcite and veinlets at all orientations. Is blocky,	VA01058 VA01631	350.5 350.5	358.8 352.0	8.3 1.5	n/a 1	78 53	n/a 73	323 464	n/a <1	n/a 15	1930 1800
		highly fractured c 347.5 and 0.2 m fr fracture controlle	ore with 0.2 m lost core from 346.6 to om 349.0 to 350.0. There is moderate d and pervasive carbonatization.											
		Alteration :. 345.2 350.7 MODERA	TE FRACTURE CONTROLLED CARBONATIZATION.											
		345.2 350.7 WEAR P.	ERVASIVE CARDONALIZATION.											
350.7	358.8	FELSIC TUFF												
		Siliceous light gr	ey felsic ash tuff with trace to 1 %, up	VA01632	352.1	354.0	1.9	1	81	23	89	(1	19	1600
		to 3 mm, average 1	.5 mm, quartz eyes and trace to 5 %, 1	VA01633	354.0	355.5	1.5	1	163	17	59	(1	18	1100
		discominated with a	minor concentrations in less siliceous	VA01634	355.5	357.0	1.5	1	40	11	51		15	1600
		heds. There is min	or thermal biotite for approximately 50	VAULUUU	557.0	220.0	1.0	1	55	10	491	1	()	2000
		cm at 355.4. There	is weak fracture controlled											
		carbonatization be	low the thermal biotite and moderate											
		fracture controlled	d silicification throughout. Pyrite											
		averages 1 %. There	e is a 10 cm quartz vein 2 cm above the											
		lower contact, which Bedding :.	ch has been disrupted by cross- faults.											
		350.6 : 50 degrees	to core axis.											
		351.8 : 52 degrees	to core axis.											
		358.6 : 69 degrees	to core axis.											
		Foliations :.												
		351.9 : 52 degrees	to core axis.											
		Alteration	to core axis.											
		350.7 358.8 MODERA	TE FRACTURE CONTROLLED SILICIFICATION.											
		356.0 358.8 WEAK FI	RACTURE CONTROLLED CARBONATIZATION.											
359 8	374 0	CHEDTY FEISTC THEF	/ "											
550.0	5/4.0	Felsic crystal lap:	illi tuff with minor cherty and sediment	VA01636	358.8	360.0	1.2	3	120	14	113	1 ·	114	4000
		beddings. There is	also mafic ash tuff or sills from	VA01637	360.0	361.0	1.0	3	340	109	549	38	718	14000
		365.1 to 367.3, and	d 367.6 to 369.5. There is minor thermal	VA01638	361.0	362.0	1.0	5	240	114	269	6	373	12000
		biotite in local be	eds. The lapilli are mainly 1 to 3 cm	VA01639	362.0	363.0	1.0	2	219	6	131	1	27	1800
		epidote clasts. Is	rainbow hued with red, green, yellow	VA01640	363.0	364.0	1.0	2	253	28	196	3	126	5000
		and while beds, (.	to 5 cm thick. There are numerous	VA01641	364.0	365.0	1.0	3	350	270	570	4	131	3000
		1 mm. feldspar grai	ins. There is 2 to 3 % pyrite in hede of	VA01643	369.0	370.0	1.0	2	114	60	129	(1	14	5000
		cubes, up to 4 mm.	, and fine-grained pyrite and locally	VA01059	370.0	382.0	12.0	n/a	129	n/a	507	n/a	n/a	2290
		there is disseminat	ted pyrite. Pyrite beds average 5 mm	VA01644	370.0	371.5	1.5	4	144	16	77	1	(5	2200
		thick and occur on	n average 30 cm apart. There are more	VA01645	371.5	373.0	1.5	3	165	20	211	1	23	1500
		above the mafic. Th	he mafic has trace to 1 % pyrite cubes,	VA01646	373.0	374.5	1.5	2	135	26	125	1	21	1500

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-45 14 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn Aα λu Ba Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) -----DESCRIPTION------No. (m) (m) (m) up to 3 mm. Bedding :. 364.2 : 31 degrees to core axis. 364.6 : 53 degrees to core axis. 369.8 : 57 degrees to core axis. Foliations :. 370.2 : 66 degrees to core axis. 372.7 : 50 degrees to core axis. Faults :. 362.0 and 363.3 with 0.5 cm fault gouge at 65 degrees to core axis. 374.0 382.3 FELSIC QUARTZ EYE LAPILLI TUFF Light grey siliceous tuff with siliceous and chloritic VA01647 374.5 376.0 1.5 65 28 108 22 1800 2 1 lapilli. There are 5 to 10 %, average 7 %, 1 to 7 mm, 18 2400 VA01648 376.0 378.0 2.0 96 20 2734 2 1 average 3 mm, guartz eyes. Feldspars and epidotized VA01649 378.0 380.0 (5 3200 19 2900 2.0 2 170 1 feldspars occur very locally. There is approximately 1 % VA01650 380.0 382.3 2.3 93 7 397 <1 14 2700 2 disseminated pyrite, fine-grained. There are fracture controlled quartz - calcite veinlets at orientations of 0 to 90 degrees to core axis. Minor local fault slips occur parallel to foliation. Foliations :. 377.0 : 59 degrees to core axis. 381.4 : 66 degrees to core axis. 382.3 439.5 FELDSPAR PORPHYRITIC GABBRO Anita Gabbro. 382.3 384.8 Sheared and fine-grained contact. 384.8 439.5 Is medium to fine-grained with trace to 20 %, 1 to 4 mm, feldspar laths in a chloritic matrix with 1 to 3 %, < 1 mm to 2 mm ilmenite grains. There are numerous, quartz, chlorite carbonatization and epidote veins, +/- each other at all orientation. No sulphides were observed. Is massive and blocky with no foliation. 439.5 End of hole, 1442 feet on Thursday April 28, 1988 at approximately 1:30 p.m.. Lack of tests due to broken Sperry-Sun and unavailibity of acid tests. Total lost core : 13.7 m % Recovery = 96.9.

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SAMPLE NUMBER	FROM	то	ZS 102	XAL203	ZCAO	XHGO	ZNA20	XK20	ZFE203	XT I02	XP205	ZHNO	ZLOI	รมห	BA	AI	NACA
VA00575	9.10	9.20	67.40	13.80	4.05	0.98	3.12	2.41	2.88	0.28	0.07	0.09	3.93	99.01	943.	32.	7.
VA00576	22.70	22.80	44.10	15.20	10.70	5.42	2.51	1.23	7.53	0.80	0.20	0.27	10.20	98.16	444.	33.	13.
VA00577	28.30	28.40	70.80	13.80	1.61	0.62	4.93	2.21	2.02	0.28	0.07	0.04	2.47	98.85	1070.	30.	7.
VA00578	41.40	41.50	69.00	13.20	2.71	1.04	4.61	2.95	2.15	0.23	0.06	0.07	2.62	98.64	1350.	35.	7.
VA00579	53.60	53.70	72.20	10.80	4.42	0.73	2.43	2.48	1.06	0.19	0.05	0.08	4.08	98.52	1010.	32.	7.
VA00580	59.10	59.20	75.10	12.90	1.29	0.39	4.41	2.44	1.03	0.13	0.04	0.03	1.62	99.38	876.	33.	6.
VA00581	68.30	68.40	56.80	15.70	6.05	1.76	3.00	2.59	7.05	0.26	0.22	0.17	6.23	99.83	698.	32.	9.
VA00582	75.70	75.80	69.50	13.00	3.94	0.54	2.71	2.93	1.68	0.22	0.06	0.07	4.39	99.04	945.	34.	7.
VA00583	86.50	86.60	72.60	12.20	3.17	0.84	1.88	2.46	2.43	0.21	0.05	0.07	2.54	98.45	1120.	40.	5.
VA00584	97.00	97.10	45.10	14.70	6.25	8.65	2.81	0.23	10.50	0.66	0.11	0.24	9.08	98.33	82.	50.	9.
VA00585	103.40	103.50	71.00	13.20	2.61	1.36	2.71	2.69	2.09	0.23	0.06	0.08	3.23	99.26	873.	43.	5.
VA00586	111.20	111.30	73.30	13.60	1.48	1.15	4.82	1.50	2.33	0.24	0.06	0.07	1.77	100.32	641.	30.	6.
VA00587	122.10	122.20	74.50	12.30	2.58	0.95	2.73	2.46	1.63	0.20	0.05	0.08	3.08	100.56	941.	39.	5
VA00588	132.10	132.20	70.30	12.80	3.46	1.16	1.87	3.19	1.56	0.22	0.06	0.08	4.23	98.93	1070.	45.	5.
VA00589	141.20	141.30	67.20	14.20	4.50	0.96	1.94	3.24	1.51	0.23	0.06	0.11	5.39	99.34	1060.	39.	6
VA00590	150.90	151.00	69.60	15.60	1.29	1.13	1.81	3.97	2.09	0.27	0.06	0.04	3.16	99.02	1280.	62.	3
VA00591	157.10	157.20	62.20	13.20	2.93	4.50	2.56	2.39	4.24	0.33	0.07	0.11	6.47	99.00	648.	56.	5
VA00592	171.10	171.20	64.30	13.30	3.05	2.88	3.99	1.86	4.45	0.31	0.07	0.08	5.39	99.68	720.	40.	7
VA00593	174.10	174.20	65.40	14.20	1.46	3.56	3.89	1.64	4.50	0.36	0.07	0.08	3.70	98.86	665.	49.	5
VA00594	185.40	185.50	73.10	13.10	1.91	0.87	3.62	2.39	1.90	0.23	0.06	0.06	3.16	100.40	879.	37.	6
VA00595	194.20	194.30	71.80	14.00	1.21	0.47	5.03	2.20	1.90	0.24	0.06	0.05	2.16	99.12	954.	30.	6
VA00596	212.60	212.70	69.40	12.30	2.75	1.41	4.34	1.64	2.52	0.22	0.06	0.14	4.23	99.01	656.	30.	7

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-45 WHOLE ROCK SAMPLES

VA00597 218.90 219.00 36.60 21.70 4.33 4.60 1.33 3.66 16.80

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1.52 0.58 0.19 8.47 99.78

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

	SAMPLE NUMBER	FROM	TO	XS102	ZAL203	XCA0	XHGO	XNA20	XK20	XFE203	XT IO2	XP205	ZHNO	ZLOI	SUN	BA	AI	NACA
										-								-
	VA00598	223.60	223.70	67.70	13.80	2.49	1.16	5.57	1.32	3.70	0.32	0.08	0.13	3.70	99.97	490.	24.	8.
	VA00599	232.30	232.40	71.50	13.50	1.53	0.76	4.88	1.70	2.56	0.33	0.07	0.07	2.70	99.60	848.	28.	6.
	VA00600	249.80	249.90	64.40	13.40	5.37	1.44	0.82	3.59	3.04	0.26	0.07	0.16	5.85	98.40	1040.	45.	6.
	VA00601	261.50	261.60	71.50	13.70	2.38	1.23	1.71	3.21	2.90	0.25	0.06	0.10	3.08	100.12	1020.	52.	4.
	VA00602	269.70	269.80	44.40	16.20	8.16	6.62	0.25	2.58	10.80	0.70	0.12	0.43	9.31	99.57	810.	52.	8.
	VA00603	274.90	275.00	72.30	12.60	3.00	1.16	4.33	1.28	2.44	0.21	0.05	0.07	2.08	99.52	1980.	25.	7.
	VA00604	283.70	283.80	54.90	14.80	7.05	5.80	2.08	0.70	8.40	0.54	0.11	0.30	4.16	98.84	1280.	42.	9.
	VA00605	298.90	299.00	43.70	18.20	2.24	5.79	2.38	2.07	16.30	3.20	0.33	0.19	5.70	100.10	500.	63.	5.
÷	VA00606	304.40	304.50	70.10	14.80	0.84	1.42	3.45	2.78	3.94	0.39	0.10	0.06	2.00	99.88	750.	49.	4.
	VA00607	316.90	317.00	68.10	15.00	0.91	1.27	3.84	2.98	3.84	0.35	0.10	0.04	2.08	98.51	1210.	47.	5.
	VA00608	321.00	321.00	74.30	12.60	1.94	0.26	5.36	1.53	1.56	0.29	0.10	0.02	1.77	99.73	635.	20.	7.
	VA00609	329.10	329.20	74.40	12.90	0.90	0.31	5.40	2.44	2.35	0.28	0.07	0.02	0.85	99.92	893.	30.	6.
	VA00610	340.60	340.70	69.00	16.10	0.59	1.99	3.71	3.04	2.53	0.35	0.09	0.03	2.16	99.59	1150.	54.	4.
	VA00611	348.20	348.30	48.40	13.80	8.42	7.50	2.44	0.31	14.60	2.04	0.18	0.22	2.23	100.14	126.	42.	11.
	VA00612	352.00	352.10	70.10	13.40	2.83	2.60	1.54	2.48	3.09	0.29	0.07	0.25	2.85	99.50	1380.	54.	4.
	VA00613	366.60	366.70	49.40	14.40	6.94	6.51	2.03	0.07	13.90	2.36	0.33	0.24	3.70	99.88	89.	42.	9.
	VA00614	370.80	370.90	67.30	14.90	3.55	1.98	2.43	1.84	3.70	0.35	0.08	0.09	2.23	98.45	1670-	39-	6.
	UA00615	381 10	381 20	73 30	13.00	1 22	1 75	A 45	2 42	0.71	0.00	0.00	0.09	2.23	00.70	2750	73	2
	1000010	501110	001120	/5.50	13.00	1.044	1./J	V.0J	3.13	4./l	V.40	V.V0	V+V7	6.//	JJ . 40	·· 27 3V .	,	~ · ·

Hole No. CH88-45 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE	FROM	то	XS102	XAL203	XCAO	ZHGO	ZNA2D	ZK20	ZFE203	XT 102	XP205	ZHNO	ZLO I	SUM	*******	BA	AI	NACA
										******								**********
VA01039	5.10	14.20	62.20	14.30	5.63	1.38	2.33	2.88	4.71	0,58			5.39	99.40		903.	35.	8.
VA01040	15.00	35.00	69.20	13.20	2.82	0.99	3.47	2.52	2.34	0.26			3.23	98.03		997.	36.	6.
VA01041	35.00	55.00	67.50	13.90	3.22	1.18	2.96	2.87	2.65	0.25			3.77	98.30		1160.	40.	6.
VA01042	60.00	63.00	70.60	14.30	1.71	0.50	2.29	4.35	1.58	0.13			2.93	98.39		1360.	55.	4.
VA01043	65.00	85.00	70.10	13.40	3.39	0.72	2.52	3.04	1.82	0.22			3.70	98.91		992.	39.	6.
VA01044	85.00	105.00	69.40	14.30	2.52	0.95	3.16	3.13	1.85	0.25			2.93	98.49		1290.	42.	6.
VA01045	105.00	125.00	69.40	14.10	2.30	1.10	4.08	2.51	2.34	0.25			2.77	98.85		1030.	36.	6.
VA01046	125.00	150.00	68.50	14.80	2.26	1.09	2.24	3.39	2.37	0.26			3.39	98.30		1190.	50.	5.
UA01047	160.00	170.00	65.00	14.20	2.21	2.44	3.55	2.60	4.03	0.32			3.93	98.28		702.	47.	6.
VA01048	180.40	185.60	68.20	13.20	2.65	1.60	2.00	3.42	2.51	0.22			4.39	98.19		825.	52.	5.
VA01049	187.00	196.00	71.60	13.00	1.94	0.79	4.63	2.05	2.06	0.23			2.70	99.00		734.	30.	7.
VA01050	205.00	215.00	68.70	13.10	2.39	1.34	3.46	2.39	2.53	0.23			3.77	97.91		886.	39.	6.
VA01051	225.00	240.00	70.80	12.80	2.27	0.80	4.73	1.64	2.61	0.29			2.77	98.71		681.	26.	7.
VA01052	240.00	250.00	67.40	13.10	4.08	1.23	1.56	3.03	2.99	0.26			4.31	97.96		992.	43.	6.
VA01053	255.00	265.00	70.80	13.70	2.52	1.30	2.02	3.01	2.87	0.25			3.00	99.47		939.	49.	5.
VA01054	272.00	287.00	59.80	16.00	5.76	2.90	2.71	1.56	6.80	0.49			3.39	99.41		850.	34.	8.
VA01055	300.00	309.60	68.00	15.60	1.64	1.32	4.44	2.56	3.46	0.41			1.85	99.28		663.	39.	6.
VA01056	309.60	313.20	72.70	13.20	0.78	0.72	3.93	3.02	2.55	0.30			1.62	98.82		986.	44.	5.
VA01057	314.00	338.00	70.70	14.10	0.93	0.76	4.64	2.57	2.71	0.31			1.70	98.42		966.	37.	6.
VA01058	350.50	358.80	72.10	13.70	1.75	1.46	2.18	2.53	2.43	0.29			2.47	98.91		1930.	50.	4.
VA01059	370.00	382.00	71.20	13.20	1.68	1.30	1.14	3.30	3.51	0.31			3.31	98.95		2290.	62.	3.

Hole No. CH88-45 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppd)	СО (ррш)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
																· .	
VA01609	35.40	36.00	1200.0	27.0	93.0	<0.5	<5.0	19.0	3.0	<5.0	<5.0	1.0	<1.0	1231.0	23.	1.	5.
VA01610	40.70	41.00	1400.0	85.0	127.0	<0.5	<5.0	32.0	19.0	<5.0	17.0	1.0	1.0	1470.0	40.	1.	5.
VA01611	185.60	185.30	1300.0	23.0	130.0	<0.5	<5.0	15.0	<1.0	<5.0	<5.0	2.0	<1.0	1122.0	15.	1.	4.
VA01612	202.40	203.90	1100.0	1522.0	1044.0	2.0	17.0	1.0	<1.0	304.0	<5.0	6.0	9.0	266.0	59.	3.	2.
VA01613	270.30	271.40	990.0	31.0	99.0	<0.5	5.0	8.0	4.0	6.0	<5.0	1.0	<1.0	646.0	24.	2.	2.
VA01614	271.40	272.30	650.0	133.0	140.0	<0.5	5.0	23.0	26.0	<5.0	<5.0	2.0	<1.0	1546.0	49.	1.	5.
VA01615	272.30	273.30	1500.0	13.0	22.0	<0.5	<5.0	3.0	<1.0	<5.0	č5.0	1.0	<1.0	112.0	37.	3.	2.
VA01616	273.30	274.30	1300.0	13.0	15.0	<0.5	<5.0	2.0	<1.0	<5.0	<5.0	<1.0	<1.0	173.0	46.	3.	2.
VA01617	274.30	275.30	1300.0	10.0	35.0	<0.5	<5.0	2.0	<1.0	5.0	<5.0	<1.0	<1.0	219.0	22.	3.	2.
VA01619	275.30	276.30	1500.0	10.0	46.0	<0.5	<5.0	6.0	<1.0	9.0	<5.0	<1.0	<1.0	424.0	18.	3.	2.
VA01619	276.30	277.20	1100.0	22.0	27.0	<0.5	<5.0	2.0	<1.0	<5.0	<5.0	<1.0	<1.0	386.0	45.	3.	2.
VA01620	277.20	278.20	100.0	116.0	207.0	<0.5	<5.0	23.0	34.0	<5.0	<5.0	2.0	<1.0	1404.0	36.	1.	4.
VA01621	278.20	279.20	470.0	62.0	143.0	<0.5	<5.0	25.0	22.0	<5.0	<5.0	2.0	<1.0	1233.0	30.	1.	4.
VA01623	279.20	280.20	530.0	121.0	153.0	<0.5	<5.0	27.0	29.0	<5.0	<5.0	2.0	<1.0	1217.0	44.	э.	5.
VA01623	280.20	280.80	700.0	146.0	151.0	0.5	<5.0	25.0	31.0	<5.0	<5.0	1.0	<1.0	1235.0	49.	7.	5.
VA01624	280.80	281.80	430.0	122.0	204.0	<0.5	9.0	26.0	35.0	<5.0	<5.0	1.0	<1.0	1711.0	37.	3.	5.
VA01625	281.80	282.80	250.0	90.0	186.0	<0.5	<5.0	25.0	34.0	<5.0	<5.0	2.0	<1.0	1553.0	33.	3.	5.
VA01626	282.80	283.80	230.0	130.0	166.0	<0.5	<5.0	26.0	31.0	<5.0	<5.0	1.0	<1.0	1750.0	44.	3.	5.
VA01627	283.80	284.80	1000.0	11.0	45.0	<0.5	<5.0	6.0	4.0	<5.0	6.0	<1.0	<1.0	504.0	20.	3.	з.
VA01628	284.80	285.80	1300.0	32.0	52.0	<0.5	<5.0	10.0	4.0	<5.0	<5.0	<1.0	<1.0	556.0	38.	3.	3.
VA01629	285.80	286.80	1100.0	34.0	42.0	<0.5	<5.0	12.0	1.0	<5.0	23.0	<1.0	<1.0	473.0	45.	3.	2.
VA01630	286.80	287.80	890.0	36.0	88.0	<0.5	<5.0	12.0	<1.0	<5.0	14.0	2.0	<1.0	752.0	29.	3.	3.
VA01631	350.50	352.00	1800.0	53.0	464.0	<0.5	15.0	3.0	<1.0	73.0	8.0	4.0	2.0	537.0	10.	1.	2.

Hole No. CH88-45

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SAMPLE	FROM	TO	BA (pp∎)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ррђ)	CO (ppm)	NI (ppm)	PB (ppm)	AS (pp∎)	CD (ppm)	HO (ppm)	НН (ррв)	CUZN	ETS	FE
VA01632	352.10	354.00	1600.0	81.0	89.0	<0.5	19.0	3.0	<1.0	23.0	6.0	<1.0	<1.0	514.0	48.	1.	2.
VA01633	354.00	355.50	1100.0	163.0	59.0	<0.5	18.0	3.0	1.0	17.0	<5.0	<1.0	2.0	422.0	73.	1.	2.
VA01634	355.50	357.00	1600.0	40.0	51.0	<0.5	15.0	3.0	<1.0	11.0	<5.0	<1.0	2.0	378.0	44.	1.	2.
VA01635	357.00	358.80	2000.0	55.0	297.0	<0.5	<5.0	4.0	4.0	18.0	<5.0	3.0	<1.0	305.0	16.	1.	1.
VA01636	358.80	360.00	4000.0	120.0	113.0	0.8	114.0	32.0	126.0	14.0	6.0	<1.0	<1.0	585.0	52.	3.	5.
VA01637	360.00	361.00	14000.0	340.0	549.0	38.4	718.0	16.0	12.0	109.0	12.0	4.0	7.0	227.0	38.	з.	4.
VA01638	361.00	362.00	12000.0	240.0	269.0	5.9	373.0	12.0	10.0	114.0	28.0	3.0	4.0	227.0	47.	5.	4.
VA01639	362.00	363.00	1800.0	219.0	131.0	0.6	27.0	25.0	13.0	6.0	<5.0	2.0	1.0	548.0	63.	2.	6.
VA01640	363.00	364.00	5000.0	253.0	196.0	2.8	126.0	16.0	9.0	28.0	7.0	2.0	2.0	420.0	56.	2.	5.
VA01641	364.00	365.00	5300.0	350.0	670.0	4.3	131.0	12.0	9.0	270.0	<5.0	5.0	3.0	305.0	34.	з.	3.
VA01642	365.00	366.10	3900.0	530.0	207.0	1.9	61.0	16.0	8.0	50.0	<5.0	2.0	4.0	242.0	72.	4.	3.
VA01643	369.00	370.00	5000.0	114.0	129.0	<0.5	14.0	12.0	28.0	60.0	16.0	<1.0	2.0	418.0	47.	2.	3.
VA01644	370.00	371.50	2200.0	144.0	77.0	0.6	<5.0	6.0	4.0	16.0	<5.0	<1.0	5.0	350.0	65.	4.	3.
VA01645	371.50	373.00	1500.0	165.0	211.0	0.8	23.0	9.0	5.0	20.0	<5.0	2.0	3.0	548.0	44.	3.	3.
VA01646	373.00	374.50	1500.0	135.0	125.0	0.7	21.0	11.0	14.0	26.0	9.0	1.0	4.0	743.0	52.	2.	3.
VA01647	374.50	376.00	1800.0	65.0	108.0	0.6	22.0	6.0	7.0	28.0	6.0	1.0	2.0	523.0	38.	2.	3.
UA01648	376.00	378.00	2400.0	96.0	2734.0	0.6	18.0	3.0	4.0	20.0	13.0	13.0	2.0	305.0	3.	2.	2.
0401649	378.00	380.00	2900.0	170.0	3200.0	0.6	19.0	3.0	4.0	<5.0	<5.0	16.0	1.0	290.0	5.	2.	. 1.
VNV1017	200.00	000.00	2700.0	02.0	207 6	() F	17.0	5.0		7 0	7.0	2.0	4.0	400.0	19.	2.	2.
VA01650	380.00	302.30	2700.0	93.0	397.0	(0.3	14.0	5.0	4.0	/.0	/.0	4.V	1.0		.,.		

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-45

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Summary Log: DDH CH88-46 Location: 29+00 E, 1+48 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: April 28, 1988 Core logged by: J. Pattison

0.0 - 19.2	Casing.
19.2 - 33.2	Nanaimo Group sediments
33.2 - 91.5	Felsic lapilli tuff
	Several 4 to 6 cm thick beds of massive pyrite over 1.9 m.
91.5 - 109.3	Felsic crystal tuffs
103.9 - 113.1	Feldspar porphyritic gabbro
113.1 - 122.5	Felsic lapilli tuff
	6 % pyrite, 2.5 % sphalerite and 1 % chalcopyrite over 1.0 m. Sulphides are disseminated and fracture controlled.
122.5 - 139.6	Mafic porphyritic flow/intrusion
139.6 - 168.9	Massive mafic flow
168.9 - 208.2	Mafic porphyritic flow/intrusion
208.2 - 219.2	Mafic porphyritic mafic lapilli tuff
219.2 - 253.1	Mafic to intermediate tuffaceous sediments
253.1 - 257.9	Feldspar porphyritic gabbro

	PROPERTY: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG		HOLE No: CH88-46	Page Number 1	
	Hole Location: 29+00 E 1+48 S NTS: 92B13 UTM: 5416852.8 N 430157.1 J Azimuth: 210 Elevation: 517 m	2		Claim No. Chip 1 Section No.: 29+00 E		
	Dip: -50 Length: 257.9 m Started: 25-April-88 Completed: 28-April-88			Logged By: J. Pattison Drilling Co.: Burwash Assayed By: Bondar-Clegg (k XRAL	
	Purpose: To test the Active Tuff 100 m along s of CHEM87-37.	strike DIP TESTS		Core Size:		
	Length	Azi- muth Dip Len	Azi- gth muth D	Dip		
	29.30	212.0 -52.0 129	.60 211.0 -46	.0		
Fro (I	om To m) (m)DESCRIPTION	I	Sample From ' No. (m)	To Width Total Cu (m) (m) Sulphides (ppm	Pb Zn 1) (ppm) (ppm)	Ag Au Ba (ppm) (ppb) (ppm)

.0 19.2 OVERBURDEN

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19.2 22.0 NANAIMO CONGLOMERATE

Subangular to rounded pebble to granule-size clasts of quartz, argillite, cherty sediments and tuffs comprise 60 to 30 % of the rock. Clast supported over most of the interval. 3-5 % pyrite in the matrix and as granule-sized clasts. Broken core at the lower contact.

STRUCTURE:.

19.8-20.0 M fault gouge at 10 degrees to core axis. 1.1 m of lost core.

ALTERATION:.

19.2 22.0 WEAK FRACTURE CONTROLLED CARBONATIZATION.

22.0 29.8 NANAIMO GREYWACKE

Medium brown, massive with 5 % granule-sized, subangular to subrounded quartz, felsic volcanics, argillite, cherty sediments and rare sulphide clasts. 3-5% disseminated pyrite. Becomes coaser below 28.3 m and could be classified as a granule conglomerate. Broken core at the lower contact.

STRUCTURE.

23.0-26.1 M FAULT ZONE. Upper contact is at 40 degrees to core axis and lower contact is at 70 degrees to core axis. 1.3 m of lost core.

At 28.3 bedding is at 60 degrees to core axis. Bed FINES UP HOLE.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

То

(m)

Width

(m)

Total

Sulphides (ppm)

HOLE No: Page Number CH88-46 2

Pb

2n

(ppm) (ppm)

Ag

(ppm)

Au

Ba

(ppb) (ppm)

Cu

From То (m)

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(m) -----DESCRIPTION-------

ALTERATION: .

22.0 29.8 WEAK FRACTURE CONTROLLED CARBONATIZATION.

29.8 31.4 NANAIMO CONGLOMERATE Locally clast supported, composed of 50 % pebble to cobble-sized subangular to subrounded felsic volcanics (35 %), cherty green sediments (40%), black argillite (15%) in a coarse quartz rich matrix. Lower contact is at 65 degrees to core axis.

31.4 33.2 NANAIMO GREYWACKE

As 22.0 to 29.8 m. Less than 5 % round pale brown clasts of approximately the same composition as the matrix above 32.0 m. The unit COARSENS DOWNHOLE, 10.0 cm PEBBLE CONGLOMERATE at the lower contact. Lower contact is an unconformity at 22 degrees to core axis.

33.2 54.9 CHLORITIC FELSIC LAPILLI TUFF

5 to 20 % dark green chloritic lapilli in a light grev moderately sericitic matrix. Occasional guartz eye. In less sericitic intervals matrix is rich in ash-sized feldspar crystals. Some lapilli have quartz-filled amygdales. Hairline fractures filled with reddish brown biotite are common. In some places difficult to tell whether the fractures are filled with biotite or sphalerite. Pyrite sometimes occurs in the fractures. Lower contact is gradational.

STRUCTURE:.

Foliation is contorted and the rock has a crushed appearance in many places.

At 34.6 foliation is at 60 degrees to core axis. At 40.9 m 5.0 cm fault gouge at 50 degrees to core axis. At 42.2 m 0.5 cm fault gouge at 45 degrees to core axis. At 44.0 m foliation is nearly parallel to the core axis. At 48.0 m 0.5 cm fault gouge at 30 degrees to core axis. At 48.3 m 0.5 cm fault gouge at 40 degrees to core axis. At 53.6 m 0.3 cm fault gouge at 35 degrees to core axis.

ALTERATION: .

- 33.2 40.8 WEAK SPOTTY CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.
- 40.8 54.9 MODERATE SPOTTY CHLORITIZATION . WEAK PERVASIVE CHLORITIZATION MODERATE PERVASIVE SERICITIZATION and weak to moderate thermal biotite alteration.

33.2 38.0 1 % disseminated pyrite and possible trace

VA02803 33.2 54.9 21.7 n/a 46 n/a 60 n/a n/a 1210 VA03493 33.2 34.0 . 8 1 15 43 (5 1900 -5 1 VA03494 35.0 34.0 1.0 1 12 6 43 1 <5 1800 VA03495 35.0 36.0 19 35 <5 1.0 1 5 1 2000 VA03496 36.0 37.0 1.0 1 31 25 <1 15 1900 6 VA03497 37.0 38.0 55 53 1.0 1 (5 <1 14 1800 VA03498 39.0 37 38.0 1.0 2 11 50 1 11 890 VA03499 39.0 40.0 1.0 2 33 8 59 1 8 930 VA03500 40.0 41.0 1.0 2 32 7 60 1 5 920 VA03501 41.0 42.0 1.0 2 28 10 39 28 1300 1 VA03502 42.0 43.0 1.0 1 16 15 34 1 (5) 1300 VA03503 43.0 44.0 1.0 14 13 42 (1) 8 1100 1 VA03504 44.0 45.0 1.0 1 26 30 1 7 1100 11 VA03505 45.0 46.0 1.0 1 25 7 33 1 ٢5 970 VA03506 46.0 47.0 1.0 1 13 10 27 1 . 9 1300 VA03507 27 47.0 48.0 1.0 1 24 11 25 1 1000 VA03508 48.0 (1 49.0 1.0 1 8 8 22 39 1100 VA03509 49.0 50.0 1.0 1 22 28 1 <5 1100 6 VA03510 50.0 51.0 1.0 1 50 31 1 .9 1100 6 VA03511 51.0 52.0 76 36 19 1.0 1 <5 1 800 VA03512 73 52.0 53.0 1.0 1 37 1 6 780 6 VA03513 53.0 54.0 1.0 1 61 ٢5 30 1 10 980 VA03514 54.0 55.0 1.0 18 15 1 (5 1000 1 6

PROPERTY: Chemainus JV Page Number HOLE No: FALCONBRIDGE LIMITED CH88-46 3 DIAMOND DRILL LOG From To Sample From То Width Total ΡЪ Cu Ζn Àσ Αu Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) fracture controlled sphalerite. 38.0 42.2 2-3% disseminated pyrite and possible trace to 1 % fracture controlled sphalerite. 42.2 54.9 1 % disseminated pyrite and possible trace sphalerite. 54.0 54.7 2.0 cm barren guartz-carbonate vein runs parallel to the core axis. 54.9 91.5 FELSIC LAPILLI TUFF Similiar to 33.2 to 54.9 m but lapilli are less chloritic VA02804 54.9 74.9 20.0 n/a 45 n/a 55 n/a n/a 1720 and overall chlorite content of the rock is less. VA03515 55.0 56.0 1.0 0 96 ٢5 19 <1 <5 740 Lapilli are felsic in composition, light green to grey, VA03516 56.0 57.0 1.0 0 28 7 21 <1 <5 920 have hazy outlines and comprise 5-10 % of the rock. VA03517 57.0 58.0 1.0 ٢5 21 <1 7 950 2 20 Chloritic lapilli disappear below 60.0 m. Rock is crushed VA03518 58:0 59.0 <5 17 (1 <5 1000 1.0 2 10 and there are many fractures and gashes which cross cut VA03519 (5) 59.0 59.9 .9 19 19 (1 10 1200 8 the fabric of the rock and are filled with a milky white VA03520 59.9 60.3 45 5 17 200 . 4 1814 2 1200 medium hard mineral which does not fizz in HCl <5 VA03521 60.3 61.3 1.0 16 <1 12 1400 6 83 (anhydrite, barite ?) between 74.9 and 85.8 m. Matrix VA03522 <5 19 61.3 61.8 .5 30 437 1 66 850 contains up to 10 % < 1 mm feldspar crystals. VA03523 61.8 62.8 158 ۲5 17 <1 22 1400 1.0 6 Lower contact is arbitrarily placed where lapilli become VA03524 (1 30 1100 62.8 64.0 1.2 6 51 ٢5 24 less conspicuous and rock is less sericitic. VA03525 64.0 65.0 1.0 12 112 **(**5 15 (1 59 1400 VA03526 65.0 66.0 1.0 12 85 ٢5 25 <1 25 1500 STRUCTURE: . VA03527 66.0 67.0 35 ٢5 31 (1 9 1400 1.0 6 At 56.3 m foliation is at 35 degrees to core axis. VA03528 ٢5 20 1600 67.0 68.0 1.0 6 105 33 <1 56.7-57.0 M FAULT ZONE at 40 degrees to core axis. VA03529 68.0 69.0 83 ٢5 40 <1 11 1500 1.0 6 At 59.0 m 1.0 cm fault gouge at 30 degrees to core axis. VA03530 <5 39 1400 69.0 70 0 1.0 6 85 <1 16 At 59.7 m 1.0 cm fault gouge at 50 degrees to core axis. VA03531 70.0 71.0 10 131 ٢5 29 <1 33 1300 1.0 At 63.6 m foliation is at 20 degrees to core axis. VA03532 **(5** 17 71.0 72.0 1.0 6 68 30 <1 1200 At 67.5 m foliation is at 35 degrees to core axis. VA03533 72.0 73.0 53 <5 19 (1 12 1200 1.0 6 At 73.0 m bedding is at 35 degrees to core axis. VA03534 73.0 74.0 1.0 6 21 <5 19 <1 (5 1000 At 82.3 m foliation is at 40 degrees to core axis. VA03535 74.0 74.9 . 9 6 13 (5 11 <1 <5 1300 At 83.7 m 2.0 cm fault gouge at 40 degrees to core axis. VA02805 74.9 91.5 60 n/a 47 n/a n/a 2020 16.6 n/a At 85.3 m foliation is at 38 degrees to core axis. VA03536 74.9 76.0 13 174 5 31 <1 14 1600 1.1 At 88.6 m foliation is at 55 degrees to core axis. 77.0 95 3200 ¥A03537 76.0 1.0 13 106 14 <1 46 VA03538 77.0 77.5 12 856 35 309 40 4700 .5 1 ALTERATION:. VA03539 77.5 78.0 .5 12 4400 29 459 4 148 3800 54.9 74.9 MODERATE PERVASIVE SERICITIZATION and WEAK VA03540 78.0 79.0 <1 18 2300 1.0 2 72 9 25 SPOTTY CHLORITIZATION. VA03541 79.0 80.0 <5 <1 15 1700 1.0 2 12 10 74.9 91.5 STRONG PERVASIVE SERICITIZATION and occasional VA03542 80.0 81.0 1.0 2 18 5 13 <1 <5 1400 <5 1500 spot of mariposite. VA03543 81.0 81.7 .7 2 15 <5 15 <1 2200 VA03544 2 <5 (1 7 81.7 82.7 1.0 26 16 SULPHIDES:. VA03545 84.0 5 147 17 311 <1 88 2300 82.7 1.3 57.0-59.0 m 2 % disseminated pyrite as spots up to 3 mm in VA03546 84.0 85.0 1.0 5 12 17 47 <1 17 1800 diameter. VA03547 85.0 86.0 1.0 10 52 19 19 <1 34 2700 59.0-59.9 m 8 % pyrite as clasts up to 3 cm in diameter 2500 VA03548 86.0 87.0 1.0 3 28 8 15 <1 14 and disseminated. ٢5 13 <1 2100 VA03549 17 7 87.0 88.0 1.0 5 59.9-60.3 m 45 % pyrite concentrated in two beds 6 and 4 VA03550 88.0 89.0 1.0 32 6 17 <1 19 1800 3 cm thick at 30 degrees to core axis. Both beds are weakly VA03551 89.0 89.5 .5 <5 72 <1 13 1800 3 64 carbonatized and one contains a 1.0 cm long angular VA03552 89.5 90.2 .7 9 136 8 240 <1 153 2000

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PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-46 4 DIAMOND DRILL LOG From To Sample From Width Total Cu Рb Zn То λa Au Ba (m) -----DESCRIPTION------No. (m.) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (mgg) (dgg) felsic fragment. VA03553 90.2 90.6 241 15 <1 90 1600 .4 40 11 60.3-61.3 m 6 % pyrite disseminated and as lapilli-sized VA03554 90.6 91.5 35 9 12 1700 .9 9 <5 (1 clasts. 61.3-61.8 m 30 % pyrite and 0.5 % chalcopyrite concentrated in two massive pyrite beds 1 and 4 cm thick at 30 degrees to core axis. Beds are slightly offset by minor microfaults. 61.8-64.0 m 6 % coarsely disseminated pyrite. 64.0-66.0 m 12 % pyrite in beds up to 2.0 cm thick at 20-30 degrees to core axis and clasts up to 3.0 cm wide. 66.0-70.0 m 5-6 % pyrite and nil-trace chalcopyrite. disseminated and in bands < 1.0 cm thick at 30 degrees to core axis. 70.0-71.0 m 10 % pyrite in bands/beds up to 2.0 cm thick at 30 degrees to core axis, lapilli-sized clasts and disseminated. 71.0-74.9 m 6-7 % disseminated and fracture controlled pyrite. 74.9-77.5 m 10-15 % black, crushed, fracture controlled pyrite trace chalcopyrite and sphalerite (?) and occasional speck of galena. 77.5-78.0 m 12 % disseminated pyrite and 0.8 % chalcopyrite 78.0-82.7 m 2-3 % disseminated pyrite nil-trace sphalerite. 82.7-85.0 m 5 % pyrite, disseminated in matrix and in felsic lapilli. 85.0-86.0 m 10 % pyrite, disseminated and fracture controlled. 86.0-87.0 m 3 % pyrite as spots < 2 mm in diameter. 87.0-88.0 m 5 % pyrite in heavily mineralized lapilli and disseminated through the matrix. 88.0-89.5 m 3 % disseminated pyrite, trace chalcopyrite. 89.5-91.5 m 8-10 % pyrite in massive to semi-massive bands. Best mineralization is between 90.2 and 90.6 m where there is a 7.0 cm bed of semi-massive pyrite at 52 degrees to core axis immediately uphole of a 5 cm thick fine cherty tuff bed. 91.5 103.9 FELSIC FELDSPAR CRYSTAL TUFF Light grey with a slight green tint due to very weak VA02806 91.5 109.3 17.8 n/a 25 n/a 33 n/a n/a 1560 (5 1000 pervasive chlorite alteration. Quite massive bedding VA03555 91.5 92.5 1.0 3 13 (5 17 <1 41 <1 9 920 rarely recognizable. Comprised of 10-20 % 1-3 mm white VA03556 < 5 19 92.5 93.5 1.0 3 VA03557 94.5 25 ٢5 12 (1 <5 810 feldspar crystals in a very siliceous, weakly to 93.5 1.0 3 moderately fine-grained, sericitic matrix. Less than 5 % VA03558 94.5 95.5 1.0 3 15 <5 7 (1 16 1500 light grey lapilli frag and rare lapilli-sized sulphide <5 1100 VA03559 95.5 96.5 1.0 3 15 ٢5 7 <1 9 (1 8 1500 30 clast. VA03560 96.5 97.5 1.0 3 <5 56 <5 12 (1 21 1200 Lower contact is at 52 degrees to core axis. VA03561 97.5 98.5 1.0 3 <5 910 VA03562 98.5 99.5 1.0 3 18 (5 13 (1 16 14 (1 (5 940 STRUCTURE: . VA03563 99.5 100.5 1.0 3 ٢5 (5 At 93.0 m foliation is at 40 degrees to core axis. VA03564 100.5 101.5 1.0 3 33 <5 15 <1 990 At 103.9 m bedding is at 52 degrees to core axis. VA03565 101.5 102.5 1.0 ٦. 41 **ć**5 11 (1 5 1200

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(m)

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-46 5 DIAMOND DRILL LOG From То Width Sample From To Total Cu РЪ Zn Ag Au Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m.) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm) (ppm) VA03566 102.5 103.5 1.0 3 27 <5 10 <1 5 1500 ALTERATION. VA03567 103.5 104.5 1.0 <5 10 <1 43 1600 3 64 91.5 103.9 WEAK PERVASIVE SERICITIZATION to MODERATE PERVASIVE SERICITIZATION very rare spots of mariposite. SULPHIDES:. 91.5 103.9 3 % pyrite, disseminated and as rare lapilli-sized clasts. 103.9 109.3 FELSIC FELDSPAR CRYSTAL LAPILLI TUFF Feldspar crystal tuff with 5-10 % light green, weakly to VA03568 104.5 105.5 1.0 3 18 6 15 <1 9 1600 moderately chloritic lapilli stretched parallel to VA03569 105.5 106.5 5 1600 1.0 3 27 10 10 <1 foliation. Bedding is not recognizable. 2-4 % pyrite, VA03570 106.5 107.5 1.0 3 19 б 9 (1 <5 1600 disseminated and as rare clasts. VA03571 107.5 108.5 1.0 3 12 9 7 <1 56 1900 Lower contact is at 50 degrees to core axis. VA03572 108.5 109.3 3 16 22 <1 <5 1800 . 8 STRUCTURE:. At 105.3 foliation is at 50 degrees to core axis. ALTERATION:. 103.9 109.3 MODERATE PERVASIVE SERICITIZATION. 109.3 113.1 FELDSPAR PORPHYRITIC GABBRO Dark green fine-grained and massive with 5 % 1-3 mm feldspar and trace to 3 % interstitial ilmenite. 5.0 cm asimilation zones at the upper and lower contacts. Several irregular quartz veins and pods with pyrite+pyrrhotite +/- chalcopyrite. Trace disseminated chalcopyrite. Lower contact is at 40 degrees to core axis. 113.1 122.5 FELSIC LAPILLI TUFF 5-10 % 2-30 mm long (most <10 mm) grey felsic fragments VA03573 113.1 113.8 2 327 28 144 (1 7777 1400 .7 stretched 1:2 parallel to foliation in a sericitic VA02807 113.1 122.5 n/a 2540 9.4 n/a 387 n/a 886 n/a fine-grained matrix. Lower contact is at 40 degrees to VA03574 113.8 114.2 55 1400 304 70 . 4 0 18 11 core axis. VA03575 114.2 115.2 2 209 25 <1 10 2700 1.0 9 VA03576 115.2 116.2 1.0 ٥ 601 30 196 1 288 7500 STRUCTURE:. 601 6400 VA03577 116.2 116.8 . 6 0 9 1413 <1 260 At 115.5 m foliation is at 40 degrees to core axis. 3400 VA03578 116.8 117.8 155 2 10 (1 7 1.0 41 At 119.3 m foliation is at 50 degrees to core axis. VA03579 117.8 118.8 630 70 (1 <5 3100 1.0 2 6 VA03580 118.8 119.8 1.0 3 752 ٢5 11500 1 45 2900 ALTERATION: . VA03581 119.8 120.8 1.0 3 506 129 6000 3 316 4000 113.1 115.0 MODERATE PERVASIVE SERICITIZATION. VA03582 120.8 121.0 . 2 3 2037 14 2537 6 68 3800 115.0 122.5 STRONG PERVASIVE SERICITIZATION. VA03583 121.0 122.0 7 1299 139 2848 98 4000 1.0 4 VA03584 122.0 122.5 . 5 6 5400 1584 24200 16 522 5500 SULPHIDES:. 113.1-113.8 m 2 % disseminated pyrite.

113.8-114.2 m 10 % disseminated and fracture controlled

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HOLE No: Page Number 6

FALCONBRIDGE LIMITED CH88-46 DIAMOND DRILL LOG From То Sample From То Width Total Cu РЪ Ζn An Ba Ag -----DESCRIPTION-----(m) (m) Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) pyrite associated with an epidote+calcite alteration patch 114.2-115.2 m 2 % disseminated pyrite. 115.2-116.8 m 10 % coarsely disseminated pyrite and 0.5-1.0 % chalcopyrite. 116.8-118.8 m 2 % disseminated pyrite. 118.8-121.0 m 3 % disseminated pyrite and trace to 2 % sphalerite or biotite (?) smeared along foliation planes giving rock a slight reddish brown tint. 121.0-122.0 m 7 % pyrite, 0.5 % chalcopyrite and trace sphalerite, disseminated and fracture controlled. 122.0-122.5 M 6 % pyrite, 5 % sphalerite 2 % chalcopyrite and trace galena, disseminated and in bands < 4 mm wide roughly parallel to foliation. 116.8 117.3 Tuff has a brecciated appearance. Very siliceous angular clasts in a sericitic matrix 122.5 126.2 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Medium green very massive (ie no foliation and no VA02808 122.5 139.6 17.1 n/a 88 126 n/a n/a 225 n/a bedding), medium-grained with 20 and 40 cm chill margins at the upper and lower contacts. Up to 20 % < 3 mm anhedral chloritized mafic phenocrysts. May be a flow or dyke. No ilmenite and nil sulphide. Lower contact is very sharp and somewhat irregular at 80 degrees to core axis. 126.2 127.6 GREYWACKE Dark brown, sand to silt grainsize with (5 % granules of quartz and cherty lithics. Trace pyrite. Lower contact is at 75 degrees to core axis. 127.6 139.6 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION As 122.5 to 126.2 m. Very massive. VA03585 138.6 139.6 1.0 92 18 177 (1 (5 1600 1 10 Cm long xenolith or rip-up clast of dark brown greywacke. Margins are very sharp and irregular. Lower contact is a slip at 80 degrees to core axis. STRUCTURE:. At 129.0 m 1.0 cm fault gouge. Not possible to measure the orientation. ALTERATION: . 127.6 139.6 WEAK PERVASIVE CHLORITIZATION. 139.6 168.9 MAFIC FLOW 41 1700 The unit appears to contain several massive mafic flows VA03586 139.6 140.0 . 4 1 8800 14 500 6 n/a 223 with minor intercalated mafic tuffs and tuff breccias. VA02809 139.6 168.9 29.3 n/a 87 n/a 63 n/a

PROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-46	o: Pa	ge Numb 7	er			
From To (m) (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (p)
	Dark green fine-grained (finer grained than unit above) locally mafic porphyritic. Contorted and deformed bedding is recognizable above 140.0 m but below this depth the rock becomes very massive and only rarely contains occasional lapilli to block-sized mafic clasts. 5 % mafic lapilli between 161.8 and 163.0 m. Lower contact arbitrarily placed where rock becomes medium-grained.	VA03587 VA03588 VA03589 VA03590	140.0 155.7 156.7 158.5	141.0 156.7 157.7 159.5	1.0 1.0 1.0 1.0	1 1 2 4	207 118 178 240	38 <5 <5 <5	135 53 56 74	<1 <1 1 1	6 <5 <5 6	80 540 380 420
	STRUCTURE:. At 157.3 m possible bedding plane at 68 degrees to core axis. At 162.2 m 0.1 m fault zone at 35-42 degrees to core axis. 163.8- M locally rock is brecciated. Angular breccia clasts are separated by 2-5 mm fractures filled with slightly lighter coloured chlorite+sericite+epidote.											
	ALTERATION:. 139.6 144.7 WEAK PERVASIVE CHLORITIZATION. 144.7 161.0 MODERATE SPOTTY EPIDOTIZATION and WEAK SPOTTY CARBONATIZATION. Approximately 5 % epidote+calcite patches up to 0.2 m long. 161.0 168.9 WEAK PERVASIVE EPIDOTIZATION. 159.0 168.9 Rock is lighter in colour (slightly bleached?).											
	SULPHIDES:. At 139.9 m 1.5 cm band of massive chalcopyrite-pyrite. Mineralization surrounds dark grey lapilli but it appears to be associated with a quartz-carbonate veining.											

VA02810 168.9 208.2 39.3

58

n/a

69

n/a

n/a

Ba

(ppm)

n/a 218

168.9 208.2 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION

sphalerite and chalcopyrite.

axis.

Very massive, no bedding or clasts. Fine to medium-grained but local fine-grained with up to 20 % 2-3 mm chlorite spots (chlorite replacing pyroxene/hornblende). Quartz-carbonate veins and pods up to 4.0 cm wide are common. In areas of more intense veining rock becomes more chloritic, darker and fine-grained. Ouartz-carbonate veins often contain dark brown biotite (?). Lower contact is placed where bedding becomes recognizable. No sharp intrusive type of contact suggesting that it is likely a volcanic.

156.7-158.5 m 1-2% fracture controlled pyrite and trace

158.5-161.5 m 4 % fracture controlled pyrite and trace

167.2 888.8 5 mm black argillite bed at 65 degrees to core

ALTERATION:.

sphalerite.

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FALCONBRIDGE LIMITED CH88-46 8 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Åg Au Ra -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 168.9 208.2 WEAK PERVASIVE EPIDOTIZATION and WEAK SPOTTY EPIDOTIZATION. 192.3 193.3 Weak fractures controlled hematization associated with quartz-carbonate veinlets up to 5 mm wide. SULPHIDES: . Trace chalcopyrite in guartz-carbonate veins up to 2 cm wide at 80 to 0 degrees to core axis. 171.9 172.1 Strongly mafic porphyritic. 40 % 2-3 mm black subhedral chloritized mafic phenocrysts. 181.7 182.2 Several irregular wispy veins of biotite (?) + carbonate up to 4.0 cm wide. One contains trace disseminated pyrite. 208.2 217.2 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF Similiar to above unit but tuffaceous. Finely bedded over VA02811 208.2 219.2 11.0 n/a 83 n/a 112 n/a n/a 863 the first 0.2 m. Contains 5 % ash to lapilli-sized epidotized fragment, and cherty clasts and occ mud clasts. A cherty fragment at 209.9 m has a 2 mm reaction rim. Lower contact arbitrarily placed where amygdales first appear. STRUCTURE: . At 208.3 bedding is at 70 degrees to core axis. At 215.2 bedding is at 48 degrees to core axis. 215.3 215.4 Bed of chloritic quartz-feldspar crystal tuff at 50 degrees to core axis. 215.4 216.0 Green cherty siltstone. Finely bedded but core is too broken and blocky to measure core axis angles. 217.2 219.2 MAFIC FLOW Medium green, fine-grained with 5 % white quartz-carbonate filled amygdales up to 5 mm long. 6.0 cm ripped up bed of cherty tuffaceous siltstone with 3 % fracture controlled pyrite at 218.8 m. 219.2 253.1 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Medium green mafic ash tuffs with beds of light green, n/a 799 VA02812 219.2 239.0 19.8 n/a 107 n/a 137 n/a cherty tuffaceous siltstones and wackes up to 3.0 cm VA02813 239.0 283.1 44.1 n/a 1370 n/a 88 n/a 112 n/a thick. Some beds are graded and most fine downhole. Some sections up to 2.0 m long of massive mafic tuff or flow.

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Becomes increasingly cherty towards the lower contact. Lower contact is somewhat irregular at 45-55 degrees to

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-46 9

Total

From To (m)

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(m) -----DESCRIPTION------

core axis.

STRUCTURE: .

At 219.5 m bedding is at 40 to 25 degrees to core axis. Beds FINE DOWNHOLE and are offset by microfaults at 75-85 degrees to core axis. 219.8-220.0 Bedding is nearly parallel to the core axis

(may be a ripped-up bed). Flame structures are common but not possible to determine top direction because bedding is parallel to core axis.

At 220.7 m bedding is at 45 degrees to core axis. At 224.1 m bedding is at 50 degrees to core axis. 226.0-227.0 Well bedded interval. Beds are from 3 to 40 mm thick at 42 to 55 degrees to core axis. Graded beds FINE DOWNHOLE. This interval will be sawn. At 231.2 m bedding is at 44 degrees to core axis. At 236.6 m bedding is at 42 degrees to core axis. At 251.1 m bedding is at 70 degrees to core axis.

ALTERATION:.

219.5 221.0 WEAK PERVASIVE CHLORITIZATION. 221.0 243.1 Weak to moderate thermal biotite alteration.

SULPHIDES:.

219.2-250.8 M trace pyrite in thin bands (beds?) up to 2 mm thick and fracture controlled. Trace fracture controlled chalcopyrite at 247.7 m. 250.8-243.1 m 1 % fracture controlled py in cherty tuffaceous siltstone.

233.7 888.8 6.0 cm ripped-up bed of light green cherty siltstone.

236.6 237.2 MAFIC PORPHYRITIC MAFIC TUFF / FLOW. Weak thermal biotite alteration and 5 % 2-4 mm black, subhedral phenocrysts.

253.1 257.9 FELDSPAR PORPHYRITIC GABBRO

Massive, medium green, fine-grained with 10 % 2-4 mm white feldspar phenocrysts and 2 % finely disseminated ilmenite. Sample From To Width No. (m) (m) (m)

Cu Pb Zn λα An Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Ba

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	то	XS IO2	ZAL203	ZCAO	ZHGO	XNA20	XK20	XFE203	ZT I 02	XP205	ZMNO	XLOI	SUN	BA	AI	NACA
									, 	••••••••••••••••••••••••••••••••••••••							
VA02319	34.60	34.90	69.30	14.20	2.91	1.29	0.12	3.96	2.44	0.28	0.04	0.08	4.70	99.32	1750.	63.	3.
VA02320	47.00	47.20	65.40	15.10	2.39	2.34	2.24	2.69	4.80	0.36	0.09	0.04	3.39	98.84	1050.	52.	5.
VA02321	57.10	57.50	67.50	13.30	4.05	1.60	0.15	3.76	3.83	0.31	0.08	0.03	3.77	98.39	1120.	56.	4.
VA02322	71.20	71.50	67.00	14.20	2.40	2.19	1.69	2.65	3.97	0.33	0.08	0.05	3.77	98.33	1190.	54.	4.
VA02323	86.60	86.70	68.80	15.00	5.39	0.85	2.18	1.77	1.39	0.36	0.11	0.02	3.39	99.26	1730.	26.	8.
VA02324	96.30	96.60	68.50	16.20	4.77	1.06	1.83	1.69	1.65	0.30	0.08	0.01	3.08	99.17	1220.	29.	7.
VA02325	118.40	118.70	71.30	15.20	0.69	0.76	1.89	3.25	2.21	0.29	0.11	0.01	2.31	98.02	4720.	61.	3.
VA02326	123.20	123.50	44.40	13.80	12.00	12.70	0.89	0.13	9.67	0.42	0.07	0.17	4.31	98.56	148.	50.	13.
VA02327	143.80	144.50	48.00	14.30	8.80	7.32	2.89	0.19	14.10	1.97	0.19	0.24	2.08	100.08	153.	39.	12.
VA02328	157.30	157.50	50.00	16.60	6.53	6.48	4.24	0.52	11.10	0.92	0.18	0.17	3.08	99.82	434.	39.	11.
VA02329	168.30	168.60	50.20	14.30	10.70	8.32	2.81	0.32	10.10	0.60	0.15	0.16	2.16	99.82	169.	39.	14.
VA02330	178.00	178.30	48.30	11.20	12.90	11.20	1.73	0.17	9.55	0.50	0.11	0.15	3.23	99.04	120.	44.	15.
VA02331	187.00	187.30	49.90	13.70	11.50	8.82	2.62	0.15	10.20	0.56	0.12	0.17	2.31	100.05	130.	39.	14.
VA02332	200.70	200.90	50.50	14.60	9.69	8.47	3.22	0.15	10.40	0.59	0.13	0.16	2.31	100.22	99.	40.	13.
VA02333	211.80	212.00	46.90	17.00	5.98	7.83	3.57	0.99	10.30	0.71	0.13	0.20	4.77	98.38	539.	48.	10.
VA02334	225.00	225.40	50.00	16.10	9.30	6.56	3.25	1.04	10.50	0.83	0.20	0.20	2.08	100.06	443.	38.	13.
VA02335	246.10	246.30	52.20	17.30	3.77	6.68	5.62	0.66	8.39	0.71	0.23	0.13	3.70	99.39	511.	44.	9.

Hole No. CHBB-46 WHOLE ROCK SAMPLES

Page No.

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SAMPLE NUMBER	FROM	TO	X\$102	XAL203	XCAO	ZHGO	ZNA20	ZK 20	XEE203	XI 102	XP 205	INNO	XLO I	รบท	BA	AI	NACA
VA02803	33.20	54.90	66.60	14.30	3.15	1.77	1.84	2.87	3.77	0.33			4.08	98.71	1210.	48.	5.
VA02804	54.90	74.90	68.50	15.60	1.69	1.65	1.40	3.71	2.96	0.34			3.39	99.24	1720.	63.	з.
VA02805	74.90	91.50	72.00	13.90	3.12	1.18	1.73	1.95	2.31	0.32			3.23	99.74	2020.	39.	5.
VA02806	91.50	109.30	71.40	15.30	2.38	1.56	1.41	2.09	2.26	0.32			2.93	99.65	1560.	49.	4.
VA02807	113.10	122.50	60.40	14.00	6.73	1.25	2.16	1.62	8.59	0.42			3.23	98.40	2540.	24.	9.
VA02808	122.50	139.60	45.30	14.20	12.10	11.90	1.13	0.14	9.78	0.41			4.31	99.27	225.	48.	13.
VA02809	139.60	168.90	45.40	17.00	15.50	4.35	2.31	0.37	10.50	0.71			3.85	99.99	223.	21.	18.
VA02810	168.90	208.20	46.90	11.90	13.10	7.70	2.02	0.31	9.10	0.50			6.93	98.46	218.	35.	15.
VA02811	208.20	219.20	45.60	16.40	11.40	4.79	3.35	1.17	9.24	0.71			6.39	99.05	863.	29.	15.
VA02812	219.20	239.00	48.20	16.50	5.99	8.33	3.09	2.03	10.90	0.79			4.16	99.99	799.	53.	9.
VA02813	239.00	283.10	51.40	16.10	4.96	6.87	3.63	2.11	9.06	0.75			4.39	99.27	1370.	51.	9.

Hole No. CH88-46 ALTERED SAMPLES

Page No.



SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
VA03493	33.20	34.00	1900.0	15.0	43.0	0.6	<5.0	3.0	3.0	5.0	<5.0	<1.0	1.0	213.0	26.	1.	1.
VA03494	34.00	35.00	1800.0	12.0	43.0	0.5	<5.0	3.0	2.0	6.0	<5.0	<1.0	<1.0	270.0	22.	1.	1.
VA03495	35.00	36.00	2000.0	19.0	35.0	0.6	<5.0	2.0	1.0	5.0	<5.0	<1.0	1.0	223.0	35.	۱.	1.
VA03496	36.00	37.00	1900.0	31.0	25.0	<0.5	15.0	3.0	4.0	6.0	<5.0	<1.0	<1.0	196.0	55.	1.	1.
VA03497	37.00	38.00	1800.0	55.0	53.0	<0.5	14.0	7.0	5.0	<5.0	<5.0	<1.0	<1.0	448.0	51.	1.	1.
VA03497	37.00	38.00	1800.0	55.0	53.0	<0.5	14.0	7.0	5.0	<5.0	<5.0	<1.0	<1.0	448.0	51.	1.	1.
VA03498	38.00	39.00	890.0	37.0	50.0	0.6	11.0	14.0	10.0	11.0	<5.0	<1.0	1.0	268.0	43.	2.	1.
VA03499	39.00	40.00	930.0	33.0	59.0	0.6	8.0	8.0	5.0	8.0	<5.0	<1.0	2.0	305.0	36.	2.	2.
VA03500	40.00	41.00	920.0	32.0	60.0	0.6	5.0	8.0	6.0	7.0	<5.0	<1.0	2.0	330.0	35.	2.	2.
VA03501	41.00	42.00	1300.0	28.0	39.0	0.7	28.0	5.0	10.0	10.0	<5.0	<1.0	<1.0	265.0	42.	2.	2.
VA03502	42.00	43.00	1300.0	16.0	34.0	0.5	<5.0	9.0	10.0	15.0	<5.0	<1.0	<1.0	281.0	32.	1.	1.
VA03503	43.00	44.00	1100.0	14.0	42.0	<0.5	8.0	10.0	11.0	13.0	<5.0	<1.0	<1.0	294.0	25.	1.	2.
VA03504	44.00	45.00	1100.0	26.0	30.0	0.5	7.0	7.0	10.0	11.0	<5.0	1.0	<1.0	269.0	46.	1.	2.
VA03505	45.00	46.00	970.0	25.0	33.0	0.5	<5.0	7.0	11.0	7.0	7.0	<1.0	<1.0	244.0	43.	Ι.	2.
VA03506	46.00	47.00	1300.0	13.0	27.0	0.6	9.0	4.0	7.0	10.0	<5.0	<1.0	<1.0	229.0	33.	1.	1.
VA03507	47.00	48.00	1000.0	24.0	25.0	0.5	27.0	6.0	8.0	11.0	<5.0	<1.0	<1.0	228.0	49.	1.	2.
VA03508	48.00	49.00	1100.0	8.0	22.0	<0.5	39.0	4.0	5.0	8.0	<5.0	<1.0	<1.0	245.0	27.	1.	1.
VA03509	49.00	50.00	1100.0	22.0	28.0	0.6	<5.0	4.0	4.0	6.0	<5.0	<1.0	1.0	190.0	44.	1.	2.
VA03510	50.00	51.00	1100.0	50.0	31.0	0.8	9.0	5.0	5.0	6.0	11.0	1.0	<1.0	192.0	62.	1.	2.
VA03511	51.00	52.00	800.0	76.0	36.0	0.5	19.0	4.0	3.0	<5.0	6.0	<1.0	2.0	369.0	68.	1.	2.
VA03512	52.00	53.00	780.0	73.0	37.0	0.6	6.0	6.0	4.0	6.0	<5.0	<1.0	3.0	261.0	66.	1.	2.
VA03513	53.00	54.00	980.0	61.0	30.0	0.5	10.0	4.0	3.0	<5.0	<5.0	<1.0	2.0	215.0	67.	1.	2.
VA03514	54.00	55.00	1000.0	18.0	15.0	0.6	<5.0	2.0	3.0	6.0	16.0	<1.0	2.0	138.0	55.	1.	1.

Hole No. CH88-46

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SAMPLE NUMBER	FROM	TO	8A (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HQ (ppm)	HN (ppm)	CUZN	ETS	FE
VA03515	55.00	56.00	740.0	96.0	19.0	<0.5	<5.0	5.0	3.0	<5.0	16.0	<1.0	3.0	256.0	83.	Ŷ.	1.
VA03516	56.00	57.00	920.0	28.0	21.0	(0.5	(5.0	3.0	3.0	7.0	19.0	(1.0	2.0	134.0	57.	0.	
VA03517	57.00	58.00	950.0	20.0	21.0	<0.5	7.0	4.0	3.0	(5.0	12.0	<1.0	2.0	172.0	49.	2.	1.
VA03518	58.00	59.00	1000.0	10.0	17.0	<0.5	<5.0	3.0	2.0	<5.0	<5.0	×1.0	<1.0	134.0	37.	2.	
VA03519	59.00	59.90	1200.0	19.0	19.0	<0.5	10.0	6.0	2.0	<5.0	(5.0	(1.0	<1.0	130.0	50.	8.	1.
VA03520	59.90	60.30	1200.0	1814.0	17.0	1.7	200.0	52.0	30.0	5.0	22.0	4.0	3.0	109.0	99.	45.	>10.
VA03521	60.30	61.30	1400.0	83.0	16.0	<0.5	12.0	8.0	3.0	<5.0	<5.0	<1.0	1.0	118.0	84.	6.	2.
VA03522	61.30	61.80	850.0	437.0	19.0	0.6	66.0	18.0	11.0	<5.0	22.0	3.0	<1.0	134.0	96.	30.	>10.
VA03523	61.80	62.80	1400.0	158.0	17.0	<0.5	22.0	10.0	4.0	<5.0	<5.0	1.0	1.0	135.0	90.	6.	4.
VA03524	62.80	64.00	1100.0	51.0	24.0	<0.5	30.0	6.0	4.0	<5.0	<5.0	<1.0	1.0	134.0	68.	6.	2.
VA03525	64.00	65.00	1400.0	112.0	15.0	<0.5	59.0	9.0	7.0	<5.0	<5.0	2.0	5.0	106.0	88.	12.	3.
VA03526	65.00	66.00	1500.0	85.0	25.0	<0.5	25.0	7.0	3.0	<5.0	<5.0	1.0	2.0	124.0	77.	12.	з.
VA03527	66.00	67.00	1400.0	35.0	31.0	(0.5	9.0	5.0	1.0	<5.0	<5.0	(1.0	<1.0	122.0	53.	6.	2.
VA03528	67.00	68.00	1600.0	105.0	33.0	(0.5	20.0	6.0	4.0	(5.0	(5.0	<1.0	3.0	116.0	76.	6.	3.
VA03529	68.00	69.00	1500-0	83.0	40.0	(0.5	11 0	5.0	2.0	(5.0	(5.0	(1.0	1.0	126.0	67.	6.	2.
VA03530	69 00	70.00	1400.0	85.0	39.0	20.5	16.0			15.0	/5 0	<1.0	2.0	150.0	69	6	 2
VA03531	70.00	71.00	1300.0	131.0	29.0	20.5	22.0	11 0	4.0	25.0	X3.0	<1.0	2.0	130.0	82	10	2.
VA03532	71.00	72.00	1200.0	68.0	30.0	20.5	17 0	9.0	2.0	(5.0	25.0	(1.0	3.0	172 0	69	. 6	· 2
VA03533	.72 00	73.00	1200.0	52.0	19.0	20.5	12.0	5.0	3.0	(J.U	(5.0	(1.0	3.0	102.0	74	د.	· · ·
1003534	72.00	73.00	1000.0	21.0	10.0	(0.5	14.V	5.0	4.V	(5.0	(5.0	(1.0		103.0		0. (· ,
1000505	74 00	74 00	1200.0	12.0	19.0	(0.5	<0.0	5.0	(1.0	<5.U	<5.0	<1.0	2.0	118.0		D.	1.
VHV3J3J	74.00	/4.70	1300.0	13.0	. 11.0	<0.5	<5.0	6.0	<1.0	<5.0	(5.0	<1.0	2.0	100.0	J 4.	b. 10	1.
VA03536	74.90	76.00	1600.0	174.0	31.0	<0.5	14.0	7.0	3.0	5.0	14.0	<1.0	3.0	151.0	85.	13.	2.
VA03537	76.00	77.00	3200.0	106.0	95.0	<0.5	46.0	7.0	3.0	14.0	6.0	1.0	4.0	92.0	53.	13.	3.

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SAMPLE NUMBER	FROM	i TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррж)	МN (ррв)	CUZN	EIS	FE
VA03538	77.00	77.50	4700.0	856.0	309.0	1.0	40.0	6.0	3.0	35.0	<5.0	2.0	5.0	104 0			
VA03539	77.50	78.00	3800.0	4400.0	459.0	3.5	148.0	6.0	3.0	29.0	8 0	2.0	5.0	104.0	/3.	12.	2.
VA03540	78.00	79.00	2300.0	72.0	25.0	<0.5	18.0	5.0	(1.0			2.0	3.0	116.0	91.	12.	2.
VA03541	79.00	80.00	1700.0	12.0	10.0	<0.5	15.0	2.0	(1.0	7.0	(5.0	<1.0	2.0	154.0	74.	2.	1.
VA03542	80.00	81.00	1400.0	18.0	13.0	(0.5		2.0		(3.0	<5.0	<1.0	2.0	106.0	55.	2.	1.
VA03543	81.00	81.70	1500.0	15.0	10.0	(0.5	(5.0	2.0	<1.0	5.0	<5.0	<1.0	2.0	113.0	58.	2.	1.
VA03544	81.70	82 70	2200.0	15.0	15.0	<0.5	<5.0	2.0	<1.0	<5.0	<5.0	<1.0	2.0	128.0	50,	2.	1.
U003545	01 70	04.00	2300.0	26.0	16.0	<0.5	7.0	6.0	<1.0	<5.0	<5.0	<1.0	2.0	110.0	62.	2.	1.
11440540	84.70	84.00	2300.0	147.0	311.0	<0.5	88.0	10.0	6.0	17.0	14.0	4.0	5.0	121.0	32.	5.	3.
VH03346	84.00	85.00	1800.0	12.0	47.0	<0.5	17.0	3.0	<1.0	17.0	<5.0	<1.0	2.0	89.0	20.	5.	1
VA03547	85.00	86.00	2700.0	52.0	19.0	<0.5	34.0	7.0	4.0	19.0	14.0	<1.0	2.0	122.0	73	10	
VA03548	86.00	87.00	2500.0	28.0	15.0	<0.5	14.0	5.0	2.0	8.0	6.0	<1.0	2.0	147 0			2.
VA03549	87.00	88.00	2100.0	17.0	13.0	<0.5	7.0	3.0	2.0	<5.0	<5.0	(1.0	3.0	107 0	65.	3.	1.
VA03550	88.00	89.00	1800.0	32.0	17.0	(0.5	19.0	5.0	3.0	6.0	(E A	~~~~~	0.0	127.0	57.	5.	1.
VA03551	89.00	89.50	1800.0	64.0	72.0	<0.5	13.0	4 0	() ()		(5.0	(1.0	3.0	130.0	65.	3.	1.
VA03552	89.50	90.20	2000.0	136.0	240.0	(0.5	152 0	1.0	(1.0	(5.0	<5.0	<1.0	3.0	116.0	47.	3.	1.
VA03553	90.20	90.60	1600.0	241 0	15 0		133.0	/.0	3.0	8.0	22.0	<1.0	3.0	93.0	36.	9.	3.
VA03554	90.60	91 50	1700 0	211.0	15.0	(0.5	90.0	11.0	5.0	11.0	28.0	<1.0	4.0	110.0	94.	40.	4.
11402555		J1.JV	1700.0	35.0	9.0	<0.5	12.0	4.0	3.0	<5.0	6.0	<1.0	4.0	111.0	80.	9.	1.
VH03333	91.50	92.50	1000.0	13.0	17.0	<0.5	<5.0	2.0	2.0	<5.0	7.0	<1.0	3.0	121.0	43.	з.	1.
VA03556	92.50	93.50	920.0	41.0	19.0	<0.5	9.0	3.0	3.0	<5.0	<5.0	<1.0	6.0	141.0	68.	3	1
VA03557	93.50	94.50	810.0	25.0	12.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	().0	3.0	124 0	60		
VA03558	94.50	95.50	1500.0	15.0	7.0	<0.5	16.0	2.0	2.0	<5.0	<5.0	(1.0	2.0	121.0	60.	3.	1.
VA03559	95.50	96.50	1100.0	15.0	7.0	<0.5	<5.0	3.0	2.0	/5 0				113.0	68.	3.	1.
VA03560	96.50	97.50	1500.0	30.0	9.0	<0.5	8.0		2.0		<5.0	<1.0	2.0	101.0	68.	3.	1.
							0.0	1.0	2.0	<5.0	<5.0	<1.0	3.0	107.0	77.	3.	1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elemenis)

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (рры)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
VA03561	97.50	98.50	1200.0	56.0	12.0	<0.5	21.0	2.0	2.0	<5.0	<5.0	(1.0	3.0	117.0	82.	3.	1.
VA03562	98.50	99.50	910.0	18.0	13.0	<0.5	<5.0	3.0	2.0	<5.0	<5.0	<1.0	3.0	123.0	58.	3.	1.
VA03563	99.50	100.50	940.0	16.0	14.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	<1.0	2.0	130.0	53.	3.	1.
VA03564	100.50	101.50	990.0	33.0	15.0	<0.5	<5.0	4.0	3.0	<5.0	<5.0	<1.0	3.0	122.0	69.	3.	1.
VA03565	101.50	102.50	1200.0	41.0	11.0	<0.5	5.0	3.0	2.0	<5.0	<5.0	<1.0	4.0	115.0	79.	3.	1.
VA03566	102.50	103.50	1500.0	27.0	10.0	<0.5	5.0	2.0	1.0	<5.0	<5.0	<1.0	2.0	114.0	73.	з.	1.
VA03567	103.50	104.50	1600.0	64.0	10.0	<0.5	43.0	3.0	1.0	<5.0	6.0	<1.0	2.0	102.0	86.	з.	1.
VA03568	104.50	105.50	1600.0	18.0	15.0	<0.5	9.0	3.0	2.0	6.0	<5.0	<1.0	2.0	104.0	55.	з.	1.
VA03569	105.50	106.50	1600.0	27.0	10.0	<0.5	5.0	4.0	2.0	10.0	<5.0	<1.0	2.0	99.0	73.	3.	1.
VA03570	106.50	107.50	1600.0	19.0	9.0	<0.5	<5.0	2.0	<1.0	6.0	<5.0	<1.0	2.0	99.0	68.	3.	1.
VA03571	107.50	108.50	1900.0	12.0	7.0	<0.5	56.0	1.0	<1.0	9.0	(5.0	<1.0	2.0	103.0	63.	3.	1.
VA03572	108.50	109.30	1800.0	16.0	22.0	<0.5	<5.0	3.0	3.0	6.0	<5.0	<1.0	2.0	171.0	42.	з.	1.
VA03573	113.10	113.80	1400.0	327.0	144.0	<0.5	40.0	14.0	14.0	28.0	<5.0	<1.0	3.0	182.0	69.	2.	1.
VA03574	113.80	114.20	1400.0	304.0	70.0	0.6	55.0	65.0	51.0	18.0	45.0	1.0	2.0	578.0	81.	0.	5.
VA03575	114.20	115.20	2700.0	209.0	25.0	<0.5	10.0	5.0	4.0	9.0	7.0	<1.0	4.0	151.0	89.	2.	1.
VA03576	115.20	116.20	7500.0	601.0	196.0	0.9	288.0	7.0	8.0	30.0	14.0	<1.0	15.0	99.0	75.	0.	3.
VA03577	116.20	116.80	6400.0	601.0	1413.0	<0.5	260.0	7.0	7.0	9.0	14.0	6.0	13.0	93.0	30.	0.	2.
VA03578	116.80	117.80	3400.0	155.0	41.0	<0.5	7.0	2.0	1.0	10.0	<5.0	<1.0	3.0	112.0	79.	2.	1.
VA03579	117.80	118.80	3100.0	630.0	70.0	<0.5	<5.0	3.0	1.0	6.0	<5.0	<1.0	3.0	114.0	90.	2.	1.
VA03580	118.80	119.80	2900.0	752.0	11500.0	1.1	45.0	3.0	1.0	<5.0	<5.0	55.0	3.0	95.0	6.	3.	1.
VA03581	119.80	120.80	4000.0	506.0	6000.0	3.3	316.0	4.0	3.0	129.0	9.0	21.0	4.0	92.0	8.	3.	1.
VA03582	120.80	121.00	3800.0	2037.0	2537.0	5.8	68.0	5.0	3.0	14.0	<5.0	12.0	4.0	101.0	45.	3.	2.
VA03583	121.00	122.00	4009.0	1299.0	2848.0	4.4	98.0	3.0	3.0	139.0	14.0	12.0	4.0	117.0	31.	7.	1.

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CB (ppm)	HQ (ppm)	MN (ppm)	CUZN	ETS	FE
****																<i>**</i>	********
VA03584	122.00	122.50	5500.0	5400.0	24200.0	15.5	522.0	7.0	5.0	1584.0	<5.0	110.0	6.0	140.0	18.	6.	2.
VA03585	138.60	139.60	1600.0	92.0	177.0	<0.5	<5.0	35.0	345.0	18.0	33.0	1.0	3.0	626.0	34.	1.	3.
VA03586	139.60	140.00	1700.0	8800.0	500.0	5.8	41.0	41.0	205.0	14.0	26.0	5.0	4.0	1397.0	95.	1.	7.
VA03587	140.00	141.00	80.0	207.0	135.0	<0.5	6.0	22.0	60.0	38.0	<5.0	2.0	3.0	710.0	61.	1.	3.
VA03588	155.70	156.70	540.0	118.0	53.0	<0.5	<5.0	37.0	39.0	<5.0	13.0	5.0	<1.0	1104.0	69.	1.	6.
VA03589	156.70	157.70	380.0	178.0	56.0	0.7	<5.0	36.0	34.0	<5.0	<5.0	3.0	<1.0	757.0	76.	2.	5.
VA03592	157.70	158.50	430.0	223.0	104.0	0.5	16.0	52.0	37.0	7.0	36.0	5.0	<1.0	877.0	68.	٥.	5.
VA03590	158.50	159.50	420.0	240.0	74.0	1.1	6.0	56.0	44.0	<5.0	<5.0	4.0	<1.0	925.0	76.	4.	5.
VA03591	159.50	160.50	460.0	174.0	84.0	<0.5	19.0	36.0	39.0	<5.0	14.0	5.0	<1.0	867.0	67.	4.	5.
VA03593	160.50	161.50	290.0	155.0	65.0	1.0	18.0	30.0	35.0	<5.0	16.0	4.0	<1.0	653.0	70.	4.	4.
VA03594	181.70	182.20	550.0	201.0	46.0	0.7	<5.0	32.0	37.0	<5.0	18.0	3.0	<1.0	853.0	81.	1.	4.
VA03595	192.30	193.30	190.0	146.0	40.0	0.6	13.0	33.0	41.0	<5.0	6.0	3.0	<1.0	725.0	78.	1.	4.
VA03596	206.00	206.60	410.0	329.0	55.0	0.8	20.0	37.0	44.0	<5.0	<5.0	4.0	1.0	1059.0	86.	1.	5.
VA03597	247.00	248.00	2200.0	122.0	88.0	1.0	10.0	30.0	71.0	10.0	11.0	5.0	<1.0	1048.0	58.	1.	6.
VA03598	250.80	251.80	1000.0	126.0	62.0	0.9	<5.0	20.0	41.0	30.0	23.0	4.0	1.0	593.0	67.	1.	4.
VA03599	251.80	253.10	1700.0	68.0	72.0	0.8	45.0	36.0	85.0	7.0	28.0	5.0	1.0	1232.0	49.	1.	6.

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Summary Log: DDH CH88-47 Location: 29+00 E, 2+10 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: May 2, 1988 Core logged by: J. Pattison 0.0 -9.6 Casing. 9.6 -17.3 Feldspar porphyritic gabbro 17.3 -20.4 Mafic to intermediate tuffaceous sediments 20.4 -27.7 Massive mafic flow 27.7 -50.5 Feldspar porphyritic gabbro 62.5 50.5 -Massive mafic flow 62.5 -79.7 Mafic porphyritic mafic flow or sill 79.7 -92.4 Mafic to intermediate tuffaceous sediments 92.4 -96.0 Tuffaceous conglomerate 96.0 - 122.9 Mafic to intermediate tuffaceous sediments 122.9 - 154.8Feldspar porphyritic gabbro Mafic to intermediate tuffaceous sediments 154.8 - 170.8 170.8 - 188.0 Feldspar porphyritic gabbro 188.0 - 193.5 Cherty felsic tuffite 193.5 - 206.8Cherty black argillite with 3-5 % fracture controlled py Tuffaceous sediments 206.8 - 210.1210.1 - 214.6 Mafic porphyritic mafic flow or sill Cherty black argillite 214.6 - 236.4with 3 % fracture controlled pyrite Felsic volcanic wacke 236.4 - 247.1247.1 - 260.0Cherty felsic tuff/tuffite 260.0 - 264.0 Cherty black argillite Felsic lithic tuff with felsic ash tuff beds 264.0 - 294.4Up to 30 % ash to lapilli-sized clasts of cherty sediments, quartz and very rarely pyrite.

-	PROPE	ERTY	: Chemainu	IS J	V			FALCONE	RIDGE LIMITE	D					HOLE N CH88-47	lo: Pa	ige Numb 1	er				
· 1	Hole	Loc	ation: 29	9+00	E 2+10	S		DIANON	D DKIDD DOG													
1	NTS: Azimu	92B	13 210	UTN Ele	4: 54167 evation:	99.6 N	430125.5	E					Cl: Sec	aim No. ction No	Chip 1 .: 29+00 E							
	Dip:		-50	Ler	ngth:	294.4	m						Log Dr:	gged By: illing C	J. Pattisc o.: Burwash	on Enterp	rises					
	Start Compl	ed: ete	28-April- d: 2-May-8	-88 38									As	sayed By	: Bondar-Cl	legg & X	IRAL					
1	Purpo	se:	To outlin	ne st	tratigra	phy sou	th of the	active	tuff. DIP TE	STS				re Size:								
							Length	Azi- muth	Dip	Leng	j th	Azi- muth	Dip									
							18.60 152.70	212.0 214.0	-50.0 -50.0	294.	.40 2	15.0	-49.0									
From (m	n 1	'o m)				D	ESCRIPTIO	Y			Sample No.	From (m)	n To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	
.0		.0	UVERBORDEN	(
96	17		FFLDSDAD D	OPPH	IVETTIC	CABBRO																
5.0	1,		Medium gre	en,	medium	to fine	-grained	with up	to 25 % 1-3													
		1	mm feldspa disseminat	ir ph ied i	lenocrys Imenite	ts and . Weakl	trace to 1 v glomero	l % fin porphyri	ely tic.													
			Fine-grain	ied a	and non	porphyr	itic belo	+ 13.7 m	. Broken													
		1	core at th degrees to	e ic cor	wer con e axis.	tact bu	it it appea	ars to b	e at 50													
			11.0 12.7	brow	n-green	nodera	te spotty	chlorit	ization and													
				weak	, pervas	ive the	rmal biot	ite alte	ration.													
				Trac	e disse er conta	minated ct. Low	er contaci	Broken c t is at	ore at the 50 degrees t	o .												
				core	e axis.																	
17.3	20	.4	MAFIC TO I	NTER	RMEDIATE	TUFFAC	EOUS SEDI	MENTS														
			Light gree Generally	inte	o medium ermediat	brown, e in c	weakly to omposition	n modera n but ra	tely cherty. Inges into	V	A02814	17.3	27.1	7 10.4	n/a	128	n/a	62	n/a	n/a :	109	
			felsic com core axis.	posi	itions.	Lower	contact is	s at 55	degrees to													
			STRUCTURE:																			
			At 18.3 m 19.3-19.7	bedd M be	ling is ed is ne	at 65 d arly pa	egrees to rallel to	core ax the cor	is. e axis.													

			17.3 20.4	VEAR	K PERVAS	IVE CHL	ORITIZATI	DN.														

PROPERTY: Chemainus JV

FALCONBRIDGE LINTTED DIAMOND DRILL LOG

HOLE No: Page Number CH88-47 2

РЪ

Zn

Àσ

(ppm) (ppm) (ppm) (ppb) (ppm)

Au

Ba

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)

17.6 17.8 Finely bedded section. Beds are deformed (soft sediment deformtion?) and run at 0-60 degrees to core axis.

20.4 27.7 MAFIC FLOW

Π

Massive, medium grey-green with 5 % pale yellow epidote+carbonate alteration patches up to 15 cm wide. Lower contact is difficult to pinpoint. There appears to be some assimilation with the gabbro below.

ALTERATION: .

20.4 27.7 WEAK SPOTTY EPIDOTIZATION , WEAK SPOTTY EPIDOTIZATION, WEAK FRACTURE CONTROLLED CARBONATIZATION and weak fracture controlled hematization.

27.7 50.5 FELDSPAR PORPHYRITIC GABBRO

As 9.6 to 17.3 m. Quartz +/- carbonate filled fractures are common. Broken core at lower contact but it appears to be at 75 degrees to core axis.

STRUCTURE: .

At 32.0 m 3.0 cm fault gouge at 50 degrees to core axis. 33.3-33.5 M two fault gouges < 2.0 cm wide at 30 to 50 degrees to core axis.

45.1 45.9 Xenolith of MAFIC TUFFACEOUS SEDIMENT. Medium green-brown, fine-grained and massive. Upper contact is sharp but irregular at 50-60 degrees to core axis and lower contact is sharp at 45 degrees to core axis.

50.5 62.5 NAFIC FLOW

Similiar to 20.4 to 27.7 m. Finely bedded ash tuffs over the first 0.2 m. Locally wkly mafic porphyritic. Tuffaceous in appearance between 55.0 and 56.7 m and between 62.0 and 62.5 m. Lower contact arbitrarily placed where mafic phenocrysts become conspicuous.

STRUCTURE:.

At 50.6 m bedding is at 48 degrees to core axis. At 55.0 m bedding is at 50 degrees to core axis.

ALTERATION: .

50.5 62.5 WEAK SPOTTY EPIDOTIZATION. Epidote+carbonate patches up to 0.1 m wide.

VA02815 50.5 62.5 12.0 n/a 170 n/a 103 n/a 67 n/a



PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-47 3 DIAMOND DRILL LOG From To Width Pb Sample From To Total Cu Zn Ag Au Ba (m) -----DESCRIPTION------Sulphides (ppm) (ppm) (ppm) (ppm) (m) (m) (m) (m) (ppb) (ppm) No. 62.5 79.7 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Similiar to 50.5 to 62.5 m but slightly darker green and n/a 182 VA02816 62.5 79.9 17.4 n/a 41 n/a 87 n/a up to 25 % 1-3 mm subhedral chloritic mafic (chlorite replacing hornblende/pyroxene) phenocrysts. Lower contact is sharp at 65 degrees to core axis. STRUCTURE: . At 66.2 m bedding is at 30 degrees to core axis. At 67.0 m bedding is at 52 degrees to core axis. ALTERATION: .. 62.5 79.7 WEAK SPOTTY EPIDOTIZATION to MODERATE SPOTTY EPIDOTIZATION. 66.2 67.0 Dark brown TUFFACEOUS SEDIMENTS with 3.0 cm block of mafic flow. 79.7 92.4 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Mafic ash tuff, medium grey-green, volcanic wackes with VA02817 79.9 100.0 20.1 68 84 n/a 218 n/a n/a n/a light pinkish grey cherty beds up to 5.0 cm thick. Nil to VA03600 84.0 85.0 1.0 68 ٢5 18 1 13 <20 1 moderate thermal biotite alteration. Thermal biotite VA03601 85.0 86.0 1.0 1 22 < 5 11 (1 <5 30 92.5 2 202 <5 78 1 <5 490 alteration appears to be related to the original VA03602 92.0 . 5 composition of the rock because the intensity of alteration changes from bed to bed. Lower contact is a bedding contact at 45 degrees to core axis. STRUCTURE:. At 82.4 m bedding is at 55 degrees to core axis and is offset 1.0 cm by a microfault at 30 degrees to core axis. At 89.0 m bedding is at 25 degrees to core axis. At 92.2 m bedding is at 50 degrees to core axis. ALTERATION: . 79.7 92.4 WEAK PERVASIVE CHLORITIZATION and nil to weak thermal biotite alteration. 83.1 83.7 Broken, ripped up beds of cherty sediments throughout the interval. SULPHIDES:. 92.0-92.4 m 2 % pyrrhotite and pyrite in fractures and fine ((2 mm) bands parallel to bedding. 84.5 86.0 Bleached, silicified altered zone. Alteration appears to be fracture controlled. Trace fracture controlled pyrite. 92.4 96.0 TUFFACEOUS CONGLOMERATE

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	PROPERT	Y: Chemainus	37	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NG CH88-47	o: Pa	nge Numbe 4	er			
Fro (m	n To) (n.)		DESCRIPT	ION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		10 % subang pebble-size mafics (?) matrix. Epi contact is	ular to angular light gr d clasts of quartz, che in a grey-brown moderate dote spots are rare abov at 45 degrees to core ax	een to grey granule to rt and epidotized ly carbonatized e 93.6 m. Lower is.											
		ALTERATION: 92.4 96.0 M	ODERATE PERVASIVE CARBON	ATIZATION.											
96.0	122.9	MAFIC TO IN Intercalate intermediat 92.4 m exce green to br more common degrees to	TERMEDIATE TUFFACEOUS SE d mafic ash tuffs and ch e tuffaceous sediments. pt cherty beds are less own. Dark brown cherty b below 105.0 m. Lower core axis.	DIMENTS erty mafic to Similiar to 79.7 to common and are light eds become thicker and contact is at 70	VA02818 VA03603	100.0 117.5	122.9 118.5	22.9 1.0	n/a 1	64 99	n/a 7	93 i 73	n/a 1	n/a 1 17 9	720 990
		STRUCTURE:. 100.2-100.4 At 100.9 m is offset b At 104.8 m 109.4-111.0 all angles deformation At 111.3 bm	m 2.0 cm fault gouge at bedding is at 55 degrees y many microfaults at 20 bedding is at 55 degrees M bedding is broken up, degrees to core axis (s ?). dding is at 50 degrees t bedding is at 60 degrees	10 degrees to core axis to core axis. Bedding degrees to core axis. to core axis. contorted and runs at oft sediment o core axis. to core axis.											
		At 121.0 m SULPHIDES:. 117.5-118.5	bedding is at 54 degrees m 1 % fracture controll	to core axis. ed pyrite.											
		113.0 113.4	Cherty tuff is moderate microfractures and gash chlorite.	ly microfractured, es are filled with							•				
		117.5 118.1	Cherty, finely bedded is fracture controlled pyra	nterval with 1 % ite.											
		119.1 120.0	Bleached altered zone: a carbonate filled fractu biotite alteration.	many quartz +/~ res. Nil thermal											
		120.0 122.8	Medium brown, thermal b tuffaceous sediments up alternate with green we beds up to 22 cm thick.	iotite altered bands of to 18 cm thick akly bleached ash tuff											
122.9	154.8	FELDSPAR PO	RPHYRITIC GABBRO												

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-47 5

from	To	
(m)	(m)	DESCRIPTION

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

As 9.6 to 17.3 m. 5.0 cm zone of assimilation at the upper contact. Up to Several fine-grained non porphyritic weakly to moderately sheared zones up to 1.3 m long. Finer grained and less than 5 % feldspar phenocrysts below 138.3 m. Lower contact is vague due to assimilation.

STRUCTURE:.

131.0-132.3 M rock is weakly sheared at 30 degrees to core axis and carbonatized.

124.3 888.8 7.0 cm biotite rich band (xenolith?) at 57 degrees to core axis.

136.1 136.3 Non porphyritic moderately carbonatized zone at 65-70 degrees to core axis.

154.8 170.8 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS

Unit consists of medium green mafic ash to lapilli tuffs (above 162.5 m) and green-brown weakly to moderately thermal biotite altered weakly to moderately cherty volcanic wacke with minor amounts of pale green to brown cherty sediments.

STRUCTURE:.

At 155.3 m foliation is at 55 degrees to core axis. At 155.6 bedding is at 47 degrees to core axis. At 158.0 bedding is at 55 degrees to core axis. At 165.8 bedding is at 50 degrees to core axis. At 170.4 bedding is at 55 degrees to core axis. At 170.5 m 0.3 cm fault gouge at 25 degrees to core axis.

SULPHIDES:.

154.8 158.0 2-3% pyrite in hairline fractures. At 164.4 m few specks of chalcopyrite. 163.8-164.9 M bedding is contorted, broken up and offset up to 1.0 cm by numerous microfaults. 170.0-170.8 m 2 % pyrite in 2 mm beds and fracture controlled.

158.0 158.7 MAFIC LAPILLI TUFF: 5 % dark green, chloritic 3-30 mm fragments stretched 3:1 or more parallel to foliation. Occasional cherty clast. Upper and lower contacts are parallel to bedding at 45 degrees to core axis.

170.8 188.0 FELDSPAR PORPHYRITIC GABBRO As 9.6 to 17.3 m. Non feldspar porphyritic, weakly to moderately carbonatized zones are common. Broken core at the lower contact.

VA02819	154.8	170.8	16.0	n/a	106	n/a	102	n/a	n/a	1350
VA03604	154.8	156.0	1.2	3	101	7	80	1	27	540
VA03605	156.0	157.0	1.0	. 3	104	6	75	1	22	440
VA03606	157.0	158.0	1.0	3	101	6	65	1	47	300
VA03607	158.0	159.0	1.0	1	90	5	92	1	31	980
VA03608	159.0	160.0	1.0	1	88	<5	91	1	5	230

HOLE No: Page Number FALCONBRIDGE LIMITED CH88-47 6 DIAMOND DRILL LOG To Sample From То Width Total Cu РЪ Zn λσ λu Ba (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 172.0 174.3 Fine-grained slightly, sheared, moderately carbonatized, non feldspar porphyritic section. The zone has sharp upper and lower contacts at 60-70 degrees to core axis. 188.0 193.5 CHERTY FELSIC TUFF / TUFFITE Mottled light pink to green to brown, finely bedded cherty ~¥x02820-188.0-193.5 3130--n/a -115 n/a n/a felsic ash tuff above 190.5 m. Becomes a coarser (ie sand VA03609 188.0 189.0 5 1.0 1 60 <5 33 2900 1 to granule) volcanic wacke / tuffite below this depth. <5 3700 VA03610 189.0 190.0 43 51 (1 1.0 1 6 Bedding is less recognizable, rock is green-grey and VA03611 190.0 191.0 144 <5 102 12 2700 1.0 1 <1 ranges into intermediate compositions. Two intermediate VA03612 191.0 192.0 1.0 1 184 <5 81 1 <5 1800 feldspar crystal tuff beds < 0.2 m thick. Broken core at VA03613 192.0 193.0 152 <5 79 <1 ٢5 1900 1.0 1 the lower contact. 131 <5 86 <5 2600 VA03614 193.0 193.5 .5 1 1 5.5 86 142 <5 5 3120-STRUCTURE: . ł At 188.4 bedding is at 70 degrees to core axis. Bedding is offset an unknown ammount by slips at 15 degrees to core axis. At 192.3 bedding is at 65 degrees to core axis. 193.5 203.7 BLACK ARGILLITE Black, cherty moderately graphitic argillite with 3 % (5 2900 5 VA03615 193.5 194.5 1 0 3 88 8 110 (1 fracture controlled and disseminated pyrite. Soft VA03616 194.5 195.5 1.0 3 46 8 108 1 <5 5100 sediment deformation is common. VA03617 195.5 196.5 1.0 3 44 10 105 1 <5 5400 Light grey beds of tuffaceous sediment up to 0.1 m thick 30 108 1 14 6000 VA03618 196.5 197.5 1.0 3 7 are common. The lower contact is gradational over 5.0 cm. 3 29 7 1 <5 2900 VA03619 197.5 198.5 80 1.0 VA03620 198.5 199.5 3 39 8 124 1 9 4200 1.0 STRUCTURE:. VA03621 199.5 200.5 3 31 116 1 7 1800 1.0 8 At 193.7 m bedding is at 67 degrees to core axis. VA03622 200.5 201.5 1.0 3 32 8 114 1 64 2900 59 22 3300 At 194.0 m 0.5 cm graphitic fault gouge at 30 degrees to VA03623 201.5 202.5 1.0 3 138 1 41 18 71 <1 <5 1300 VA03624 202.5 203.7 3 6 core axis. 1.2 At 194.3 1.0 cm fault gouge at 40 degrees to core axis. 1012 15 200.1-202.0 M FAULT ZONE at 20-30 degrees to core axis. 42 q 3580 107 Rock is crushed over entire interval and there are numerous fault gouges the largest of which is 0.1 m long at 201.4 m. ALTERATION: . 193.5 203.7 WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. 193.5-203.7 m 3 % fracture controlled pyrite. At 196.3 m fracture controlled chalcopyrite. 203.7 205.5 GREYWACKE 76 50 63 Light grey-brown, massive with 30 % 1-2 mm biotite flakes. VA03625 203.7 204.7 1.0 <5 1300 1 1 <5 1600 Biotite flakes have creamy brown reaction rims. Cherty VA03626 204.7 205.7 1.0 25 1450

2.0

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From

(m)

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P	ROPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-47	o: Pa	ge Numbe 7	er			
From (m)	То (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au B (ppb) (p	a pm)
		light green siltstone o Broken core at lower com	ver the first 0.3 m. ntact.											
		ALTERATION:. 193.5 203.7 Moderate spe	otty biotite alteration.											
205.5	206.8	BLACK ARGILLITE Similiar to 193.5 to 20 Trace fracture controlle degrees to core axis.	3.7 m except somewhat more cherty. ed pyrite. Lower contact is at 30	VA03627	205.5	206.8	1.3	1	17	(5	50	(1	<5 1300	J
		At 206.0 bedding is at a offset by numerous micro	45 degrees to core axis and is ofaults at 30-40 degrees to core											
		206.0 888.8 14 mm bed of	f felsic ash tuff with 5 % pyrite.											
			• •											
		ALTERATION:. 205.6 206.8 WEAK FRACTU	RE CONTROLLED CARBONATIZATION.											•
206.8	208.8	CHERTY FELSIC TUFF / TU Light green, cherty, mod tuff. 10 % white hazy 2 Lower contact is irregul	FFITE lerately microfractured felsic 2-10 mm felsic lapilli at 208.0 m. Lar at 70-80 degrees to core axis.	VA03628	206.8	207.8	1.0	1	26	7	68	(1	<5 210	7
		STRUCTURE:. At 207.7 m bedding is at 206.8 208.8 WEAK PERVASI	: 30 degrees to core axis. IVE CHLORITIZATION.											
208.8	210 1	MAFTE TO INTERMEDIATE TO	IFFACEOUS SEDIMENTS											
		Medium green-brown coars cherty bed or rip-up cl core at the lower contact	se volcanic wacke. Occasional pale Last up to 1.0 cm thick. Broken ct.											
		STRUCTURE:. At 210.0 m bedding is at	50 degrees to core axis.											
210.1	214.6	MAFIC PORPHYRITIC MAFIC Fine to medium-grained w chloritic mafic phenocry 3.0 cm wide carbonate+ct	FLOW / INTRUSION rith up to 30 % 2-3 mm biotitic and rsts (pyroxene?). Nil sulphides. lorite+biotite vein at 40 degrees	VA03629	214.2	215.2	1.0	1	62	<5	95	(1	<5 3800)
		to core axis at the lowe	er contact.											
									1997 - 19					
214 6	215.2	GREYWACKE												
21110	44.4.4	Coarse thermal biotite a above the lower contact.	ltered greywacke. Cherty for 0.1 m Lower contact is at 45 degrees											
		to cole anib.												

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PR	ROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG				· · · ·	HOLE N CH88-47	o: Pa	age Numb 8	er			
on m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au Ba (ppb) (ppm)	
2	236.4	BLACK ARGILLITE As 193.5 to 203.7 m. Weakly to moderately microfractured and locally brecciated. Core is blocky over most of the interval. Lower contact is irregular, possibly errosional, at 10 degrees to core axis.	VA03630 VA03631 VA03632 VA03633 VA03634	215.2 216.2 217.2 218.2 219.2	216.2 217.2 218.2 219.2 220.2	1.0 1.0 1.0 1.0 1.0	3 3 3 3	27 40 54 141 53	7 7 9 41 8	79 86 105 247 105	<1 1 1 1 1	<pre><5 3300 <5 2000 <5 1600 9 2200 <5 2300</pre>	
		STRUCTURE:. 216.4-217.2 M rock is blocky, 0.2 m of lost core. At 217.6 m bedding is at 35 degrees to core axis. 219.0-219.4 m 3 mm fault gouge runs at 10 degrees to core axis. Fault breccia on downhole side of the flt. At 200.0 m 3 mm fault gouge at 30 degrees to core axis. At 222.0 m 5 mm ptygmatically folded bed of felsic ash tuff with 10 % pyrite. At 222.8 m bedding is at 50 degrees to core axis. 222.1-226.0 M blocky, highly fractured core. 0.3 m of lost core. 230.5-230.8 M bedding is nearly parallel to the core axis. 232.0-235.8 M blocky, highly fractured core, 1.4 m of lost core. At 234.0 m bedding is at 20 degrees to core axis.	VA03635 VA03636 VA03637 VA03638 VA03639 VA03641 VA03642 VA03642 VA03644 VA03646 VA03646 VA03646 VA03646	220.2 221.2 222.0 223.0 224.0 225.0 225.0 226.0 227.0 228.0 229.0 230.0 231.0 231.0 232.0 234.0	221.2 222.0 223.0 224.0 225.0 226.0 227.0 228.0 229.0 230.0 231.0 232.0 234.0 234.0 236.4	$1.0 \\ .8 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 1.0 \\ 2.0 \\ 2.4 \\ 21, 2$	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	37 36 46 40 46 48 41 32 26 40 23 38 33 17 47	6 (5 8 6 7 7 7 7 (5 7 5 7 (5 9 5 7 8	75 84 81 85 91 152 111 93 93 71 92 90 92 70 /00	$\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$	(5 2000 (5 1500 (5 2100 (5 2200 5 1500 (5 1200 (5 1200 (5 1200 (5 1200 (5 1200 (5 1200 (5 1900 (5 3300 (5 3300) (5 1843)	
		ALTERATION:. 215.2 WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. 215.2 236.4 3% pyrite fracture controlled and rarely in beds up to 3 mm thick.											
4	247.1	IMMATURE VOLCANIC WACKE Composed of 70 % sand to granule-sized subrounded quartz grains and 10% pebble-sized cherty lithic clasts in a biotite rich matrix. Massive, bedding is rare. Lower contact is at 20 degrees to core axis.	VA03649	236.4	237.4	1.0	3	9	40	83	<1	(5*****]	- Bu 2462
		ALTERATION:. 215.2 247.1 Moderate pervasive thermal biotite alteration. 238.0 888.8 Two 2-4 cm long clasts of argillite.	U	2.2		C	~ 50	f	2:8	Zn	\7 <i>F</i>		
1	260.0	CHERTY FELSIC TUFF / TUFFITE Light green felsic ash tuff with minor siltstone beds and argillaceous clasts. 5.0 Cm of argillite at the upper contact and an argillaceous sediment runs parallel to to the core axis between 248.0 and 248.6 m. Quite massive, bedding is rare. Locally microfractured.	VA02821	247.1	260.0	12.9		<u></u>	_n/a	99	.n/a	*/2 _2510]	2

215.2 236.4

From To (m) (m)

236.4 247.1

247.1 260.0

Minor fault gouge at 35 degrees to core axis at the lower

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-47 9

> Ba (ppm)

NO. (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)	From (m)	T0 (m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
---	-------------	-----------	--	-------------	--	---------------	-------------	-----------	--------------	--------------------	-------------	-------------	-------------	-------------	-------------

contact.

STRUCTURE: .

At 247.1 m bedding is at 15-20 degrees to core axis. 249.0 250.2 M blocky, highly fractured core. 0.2 m of lost core.

256.7-256.8 M fault gouge at 35 degrees to core axis.

ALTERATION: .

247.1 260.0 WEAK PERVASIVE SERICITIZATION.

260.0 264.0 BLACK ARGILLITE

Black cherty moderately graphitic argillite with 3 % fracture controlled pyrite. Black argillite and greywacke over the first 0.9 m. Bedding is nearly parallel to the core axis. Minor quartz-carbonate filled fractures. Becomes a light grey argillaceous siltstone below 162.6 m. Lower contact is at 15 degrees to core axis.

STRUCTURE:.

At 263.2 m 0.3 cm fault gouge at 40 degrees to core axis.

264.0 266.8 FELSIC TUFF

Composed of 5 % <1 mm feldspar crystals is a very fine-grained siliceous light grey-green matrix. Rock is darker grey above 265.5 m due to argillite contamination. Ripped up beds of argillite are common. Nil sulphides. Lower contact is at 30 degrees to core axis.

ALTERATION:.

264.0 266.8 WEAK PERVASIVE SERICITIZATION.

266.8 273.9 FELSIC LITHIC TUFF

30 % ash to lapilli-sized (most < 3 mm in diameter) subangular lithic fragments (cherty sediments and quartz) and epidotized feldspar crystals in light grey-green, fine-grained siliceous matrix. Felsic to intermediate in overall composition and massive (bedding rarely observered). Lower contact appears to be gradational but occurs along in a fault zone at 20 degrees to core axis.

STRUCTURE:.

273.4-273.9 M FAULT ZONE at 20 degrees to core axis.

ALTERATION: .

266.8 274.9 WEAK PERVASIVE SERICITIZATION and locally WEAK SPOTTY EPIDOTIZATION.

VA02822-264.0 278.0 14.0 n/a 19 n/a 128 n/a n/a 2950

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-47 10

 From
 To

 (m)
 -----DESCRIPTION-----

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

273.6 273.9 FELSIC ASH TUFF BED AT 15 degrees to core axis.

273.9 278.0 FELSIC TUFF

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Up to 10 % < 1 mm feldspar crystals in a massive, fine-grained light grey-green quartz rich matrix with < 2 % lapilli-sized cherty lithic clasts. Nil to trace fracture controlled pyrite. Lower contact is gradational over 0.1 m.

ALTERATION:.

273.9 278.0 WEAK PERVASIVE SERICITIZATION.

278.0 294.4 FELSIC LITHIC TUFF

Similiar to 266.8 to 273.9 m except somewhat finer grained. Up to 20 % 2-4 mm cherty, fine-grained lithic and quartz clasts and 10 % ash-sized feldspar crystals in a quartz rich fine-grained matrix. Barren of sulphides except for a 2.0 cm pyrite clast at 279.6 m. Nil to trace disseminated pyrite. 0.5 X 4.0 cm pyrite clasts at 289.0 m and 293.0 m. Grades into an ash tuff at the bottom of the hole.

STRUCTURE:.

At 292.7 1.0 cm fault gouge at 25 degrees to core axis.

ALTERATION:.

278.0 294.4 WEAK PERVASIVE SERICITIZATION.

VA02823 278.0 294.4 16:4 n/a 131 n/a n/a 1760

72.5321

Cn : 40



SAMPLE Number	FROM	то	XS 102	XAL203	ZCAO	XMGO	ZNA20	XK20	XFE203	XT102	XP205	ZHNO	XLOI	SUM	 BA	AI	NACA
VA02336	15.70	15.90	51,.90	14.10	11.30	4.97	0.24	0.03	12.30	1.50	0.15	0.16	3.47	100.12	53.	30.	12.
VA02337	23.70	24.00	47.90	17.90	6.64	6.66	4.12	0.26	11.90	0.95	0.18	0.20	3.39	100.10	208.	39.	11.
VA02338	53.20	53.50	50.00	17.80	6.02	6.59	4.61	0.61	10.10	0.94	0.18	0.19	3.08	100.12	435.	40.	11.
VA02339	64.00	64.50	49.10	14.70	11.70	7.78	2.70	0.24	10.20	0.59	0.14	0.18	2.00	99.33	93.	36.	14
VA02340	74.00	74.50	49.70	14.30	10.20	7.54	3.19	0.26	9.69	0.58	0.14	0.14	2.47	98.21	 183.	37.	13
VA02341	86.40	86.90	58.60	15.80	5.77	3.37	7.36	0.17	5.87	0.85	0.23	0.11	1.23	99.36	149.	21.	13
VA02342	94.50	95.00	48.40	17.20	8.52	6.28	4.26	0.74	8.71	0.67	0.16	0.22	4.31	99.47	805.	35.	13
VA02343	111.00	111.30	53.10	18.00	2.43	6.77	4.43	2.59	9.10	0.78	0.22	0.09	2.93	100.44	1160.	58.	7
VA02344	160.50	161.00	51.30	16.20	4.17	8.04	4.68	0.56	9.62	0.68	0.23	0.16	3.47	99.11	686.	49.	9
VA02345	208.00	208.20	68.40	9.69	6.87	1.78	4.58	0.14	2.85	0.44	0.11	0.07	5.31	100.24	178.	14.	11
VA02346	210.70	211.20	45.00	13.70	12.80	9.12	1.15	1.07	11.60	1.85	0.42	0.20	3.16	100.07	1940.	42.	14
VA02347	256.00	256.40	69.70	14.50	1.12	2.99	0.68	3.57	3.23	0.39	0.09	0.11	3.31	99.69	2710.	78.	2
VA02349	266.00	266.40	70.90	13.90	1.49	2.52	1.06	2.40	2.85	0.33	0.06	0.10	3.16	98.77	2770.	66.	· 3
VA02349	273.10	273.30	68.00	13.90	3.82	2.10	3.90	0.40	4.31	0.55	0.14	0.15	2.16	99.43	675.	24.	. 8
VA02350	277.00	277.40	68.90	15.30	1.81	2.35	1.17	2.65	3.44	0.41	0.06	0.11	2.77	98.97	3210.	63.	3
VA02351	287.70	288.00	66.50	15.90	2.79	2.29	2.00	2.01	3.83	0.51	0.09	0.14	2.77	98.83	1970.	47.	5

Hole No. CH88-47 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	EROM	то	25102	ZAL203	XCA0	ZNGO	ZNA20	XK20	ZFE203	XI 102	ZP205	ZHNO	XLO I	SUM		BA	AI	NACA
										=====					****	*****		
VA02814	17.30	27.70	47.00	17.40	13.90	3.71	2.47	0.17	11.20	0.74			3.47	100.06		109.	19.	16.
VA02815	50.50	62.50	44.30	18.70	13.30	3.48	2.52	0.30	11.20	0.78			3.54	98.12		170.	19.	16.
VA02816	62.50	79.90	49.90	14.70	9.92	7.84	3.38	0.28	9.92	0.61			3.39	99.94		182.	38.	13.
VA02817	79.90	100.00	49.40	15.80	10.70	5.80	4.18	0.32	8.99	0.82			3.77	99.78		218.	29.	15.
VA02818	100.00	122.90	47.80	15.70	9.00	6.61	2.25	2.91	8.97	0.74			4.23	98.21		1720.	46.	11.
VA02819	154.80	170.80	48.20	14.50	9.82	7.25	1.99	1.90	9.42	0.65			3.93	97.66		1350.	44.	12.
VA02820	188.00	193.50	61.90	13.10	4.26	4.74	1.74	1.63	7.22	0.62			4.39	99.60		3130.	52.	6.
VA02821	247.10	260.00	70.90	13.40	2.17	2.35	1.27	3,17	2.92	0.34			3.00	99.52		2510.	62.	3.
VA02822	264.00	278.00	66.50	15.30	2.70	2.41	2.03	2.00	3.97	0.49			3.39	98.79		2950.	48.	5.
VA02823	278.00	294.40	69.80,	13.40	2.69	2.13	2.33	1.34	3.63	0.44			2.39	98,15		1760.	41.	5.

HOLE NO. CH88-47 ALTERED SAMPLES

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SAMPLI NUMBEI	E R FROI	1 TO	BA (ppm)	CU (ppm)	2N (ppm)	AG (ppm)	AU	CO	NI	PB	AS	CD		 HN	CUZN	ETS	
									(ppm)	(ppm)	(ppm)	(ppm)	(ppm)) (ppm)			
VA03600	84.00	85.00	<20.0	68.0	18.0	0.7	13.0	10.0	18.0	<5.0	<5.0	2.0	<1.0	404 0	70		
VA03601	82.00	86.00	30.0	22.0	11.0	<0.5	<5.0	4.0	8.0	(5.0	15.0	2.0		101.0	/9.	1.	2.
VA03602	92.00	92.50	490.0	202.0	78.0	0.8	<5.0	36.0	20.0	(5.0	7.0	2.0	<1.0	170.0	67.	1.	1.
VA03603	117.50	118.50	990.0	99.0	73.0	0.9	17.0	25.0	20.0		/.0	4.0	<1.0	1090.0	72.	2.	7.
VA03604	154.80	156.00	540.0	101.0	80.0	0.0		23.0	38.0	7.0	12.0	4.0	1.0	565.0	58.	1.	5.
VA03605	156.00	157.00	440.0	104 0	75.0	v.o	27.0	25.0	43.0	7.0	42.0	5.0	1.0	692.0	56.	з.	5.
VA03606	157.00	158 00	200.0		/5.0	0.8	22.0	25.0	39.0	6.0	44.0	3.0	1.0	523.0	58.	з.	4.
VA03607	158.00	159.00	300.0	101.0	65.0	1.0	47.0	22.0	32.0	6.0	34.0	3.0	1.0	491.0	61.	3.	. 5.
903608	159.00	137.00	980.0	90.0	92.0	1.1	31.0	32.0	88.0	5.0	18.0	5.0	<1.0	959.0	49.	1.	۰. د
	109.00	160.00	230.0	88.0	91.0	1.0	5.0	16.0	37.0	<5.0	35.0	4.0	1.0	676.0	49.		
VH03609	188.00	189.00	2900.0	60.0	33.0	0.6	5.0	8.0	16.0	<5.0	18.0	2.0	1.0	462.0	45		J.
VA03610	189.00	190.00	3700.0	43.0	51.0	<0.5	<5.0	3.0	15.0	6.0	<5.0	<1.0	4:0	262.0		1.	3.
VA03611	190.00	191.00	2700.0	144.0	102.0	<0.5	12.0	23.0	32.0	(5.0	16.0	2.0	1.0	362.0	46.	1.	2.
VA03612	191.00	192.00	1800.0	184.0	81.0	0.5	<5.0	34.0	36.0	(5.0	12.0	2.0	2.0	1174.0	59.	1.	5.
VA03613	192.00	193.00	1900.0	152.0	79.0	<0.5	(5.0	21.0			13.0	3.0	2.0	1512.0	69.	1.	7.
VA03614	193.00	193.50	2600.0	131.0	86.0	0.6	<5.0	51.0	40.0	<5.0	5.0	4.0	<1.0	1371.0	66.	1.	6.
VA03615	193.50	194.50	2900.0	88 0	110.0		1.0	30.0	52.0	<5.0	23.0	3.0	1.0	1710.0	60.	1.	6.
VA03616	194.50	195.50	5100.0	46 0		(0.5	<5.0	9.0	32.0	8.0	11.0	2.0	2.0	601.0	44.	з.	4.
VA03617	195.50	196 50	5100.0	46.0	108.0	0.7	<5.0	2.0	24.0	8.0	<5.0	<1.0	3.0	250.0	30.	3.	з.
VA03618	196 50	102 50	5400.0	44.0	105.0	0.9	<5.0	2.0	23.0	10.0	27.0	1.0	4.0	349.0	30.	3.	3.
	170.30	197.50	6000.0	30.0	108.0	0.5	14.0	<1.0	18.0	7.0	10.0	<1.0	3.0	328.0	22.	3	2
VH03619	197.50	198.50	2900.0	29.0	80.0	0.6	<5.0	<1.0	20.0	7.0	7.0	<1.0	4.0	420.0			3.
A03620	198.50	199.50	4200.0	39.0	124.0	1.1	9.0	2.0	26.0	8.0	<5.0	1.0	5.0	206 0	27.	3.	2.
A03621	199.50	200.50	1800.0	31.0 1	16.0	0.7	7.0	<1.0	28.0	8.0	13.0	() 0	5.0		24.	3.	3.
A03622	200.50 2	01.50	2900.0	32.0 1	14.0	0.6	64.0	(1.0	21 0	0.0		.1.0	5.0	304.0	21.	3.	2.
									** • V	0.0	10.0	1.0	4.0	543 0	20	•	-

Hole No. CH88-47

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CAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррм)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррт)	HN (ppm)	CUZN	ETS	FE
VA03623	201.50	202.50	3300.0	59.0	138.0	1.0	41.0	10.0	40.0	22.0	24.0	<1.0	2.0	593.0	30.	3.	4.
VA03624	202.50	203.70	1300.0	18.0	71.0	<0.5	<5.0	<1.0	8.0	6.0	9.0	<1.0	1.0	360.0	20.	3.	2.
VA03625	203.70	204.70	1300.0	76.0	98.0	<0.5	<5.0	43.0	212.0	<5.0	25.0	3.0	2.0	1257.0	44.	1.	6.
VA03626	204.70	205.70	1600.0	50.0	90.0	<0.5	<5.0	48.0	216.0	<5.0	7.0	3.0	2.0	1324.0	36.	1.	6.
VA03627	205.50	206.80	1300.0	17.0	50.0	<0.5	<5.0	<1.0	9.0	<5.0	<5.0	<1.0	<1.0	381.0	25.	· 1.	2.
VA03628	206.80	207.80	210.0	26.0	68.0	<0,5	<5.0	10.0	54.0	7.0	7.0	<1.0	<1.0	654.0	28.	1.	3.
VA03629	214.20	215.20	3800.0	62.0	95.0	<0.5	<5.0	27.0	58.0	<5.0	16.0	3.0	3.0	1018.0	39.	1.	5.
VA03630	215.20	216.20	3300.0	27.0	79.0	<0.5	<5.0	<1.0	13.0	7.0	<5.0	1.0	26.0	437.0	25.	3.	2.
VA03631	216.20	217.20	2000.0	40.0	86.0	0.6	<5.0	2.0	23.0	7.0	25.0	<1.0	8.0	262.0	32.	3.	2.
VA03632	217.20	218.20	1600.0	54.0	105.0	0.7	<5.0	2.0	31.0	9.0	<5.0	<1.0	3.0	292.0	34.	3.	3.
VA03633	218.20	219.20	2200.0	141.0	247.0	1.3	9.0	6.0	28.0	41.0	11.0	1.0	2.0	318.0	36.	3.	3.
VA03634	219.20	220.20	2300.0	53.0	105.0	0.8	<5.0	6.0	26.0	8.0	<5.0	1.0	1.0	305.0	34.	3.	3.
VA03635	220.20	221.20	2000.0	37.0	75.0	0.6	<5.0	4.0	20.0	6.0	<5.0	(1.0	1.0	212.0	33.	3.	2.
VA03636	221.20	222.00	1500.0	36.0	84.0	<0.5	<5.0	2.0	17.0	<5.0	<5.0	<1.0	1.0	229.0	30.	3.	2.
VA03637	222.00	223.00	2100.0	46.0	81.0	0.6	<5.0	5.0	19.0	8.0	6.0	<1.0	<1.0	373.0	36.	3.	2.
VA03638	223.00	224.00	2200.0	40.0	85.0	0.6	<5.0	4.0	21.0	6.0	<5.0	<1.0	<1.0	235.0	32.	3.	2.
VA03639	224.00	225.00	1500.0	46.0	91.0	0.7	5.0	3.0	27.0	7.0	7.0	<1.0	2.0	223.0	34.	3.	2.
VA03640	225.00	226.00	1300.0	48.0	152.0	0.7	<5.0	3.0	36.0	7.0	<5.0	<1.0	2.0	240.0	24.	3.	2.
VA03641	226.00	227.00	1200.0	41.0	111.0	0.7	<5.0	3.0	25.0	7.0	6.0	<1.0	2.0	393.0	27.	3.	з.
A03642	227.00	228.00	1400.0	32.0	93.0	0.6	<5.0	2.0	20.0	7.0	<5.0	1.0	1.0	267.0	26.	3.	2.
JA03643	228.00	229.00	1200.0	26.0	93.0	<0.5	<5.0	<1.0	20.0	<5.0	<5.0	<1.0	1.0	279.0	32.	3.	2.
A03644	229.00	230.00	1900.0	40.0	71.0	0.7	<5.0	2.0	21.0	7:0	15.0	<1.0	2.0	387.0	36.	3.	3.
VA03645	230.00	231.00	1400.0	23.0	92.0	<0.5	<5.0	1.0	17.0	<5.0	<5.0	<1.0	1.0	308.0	20.	3.	2.

Hole No. CH88-47

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SAMPLE NUMBER FROM TO BA េប ΖN AS CD HO HN CUZN ETS PE AG AU CO NI PB (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) VA03646 231.00 232.00 720.0 38.0 90.0 <5.0 <1.0 22.0 9.0 11.0 <1.0 3.0 398.0 30. з. 2. 0.6 VA03647 232.00 234.00 1900.0 33.0 <1.0 358.0 26. 92.0 0.5 <5.0 3.0 19.0 5.0 <5.0 2.0 3. 2. VA03648 234.00 236.40 <0.5 3300.0 17.0 70.0 <5.0 2.0 7.0 7.0 <5.0 <1.0 2.0 412.0 20. 3. 2. VA03649 236.40 237.40 3500.0 9.0 83.0 <0.5 <5.0 <5.0 <1.0 562.0 10. з. 2. 3.0 10.0 40.0 3.0

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Hole No. CH88-47



Summary Log: DDH CH88-48 Location: 27+00 E, 1+61 S; Chip 1 Claim Azimuth: 210, Dip: -45 Hole Completed: May 1, 1988 Core Logged By: D.P. Money 0.0 -6.7 Casing. 6.7 -50.1 Gabbro. 50.1 -94.6 Pyritic felsic crystal lapilli tuff with 1.8 m of semi-massive to massive pyrite from 90.5 to 92.3 m. 94.6 -98.3 Gabbro. 98.3 - 109.6 Felsic crystal lapilli tuff with 1.1 m of 6 % pyrrhotite, 3 % pyrite and 1 % chalcopyrite from 106.3 to 107.4 m. 109.6 - 112.8 Gabbro. 112.8 - 128.2 Mafic crystal tuff. 128.2 - 152.1 Mafic hornblende bearing flow. 152.1 - 178.1 Andesitic tuffs and cherty sediments. 178.1 - 195.8 Mafic hornblende bearing flow. 195.8 - 242.6 Mafic crystal and lapilli tuffs with cherty sediments intercalated. 242.6 - 246.6 Gabbro. 246.6 - 256.3 Andesitic tuffs and cherty sediments. 256.3 End of hole.

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Hole Location: 27+00 E 1+61 S

 NTS:
 092/B13
 UTM:
 5416951.4
 N
 429985.6
 E

 Azimuth:
 210
 Elevation:
 473 m

 Dip:
 -45
 Length:
 256.3 m

Started: April 28, 1988 Completed: May 1, 1988 HOLE No: Page Number CH88-48 1

Claim No. CHIP1 Section No.: Line 27+00 East, Chip Group

Logged By: David P. Money Drilling Co.: Burwash Enterprises Assayed By: Bondar-Clegg and X-Ray Assay

Core Size: NQ

Purpose: To test for PEM anomaly located in CHEM87-28 DIP TESTS under the Anita Showing.

Length	Azi- muth	Dip	Length	Azi- muth	Dip	
15.20	211.0	-46.0	185.00	217.0	-44.0	
91.40	210.0	-45.0	255.10	220.0	-45.0	

ron	To		Sample	From	То	Width	Total	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

.0 6.7 OVERBURDEN

- 6.7 31.7 Medium grained gabbro with approximately 60 % chloritized hornblendes, 35 % feldspars and 3 % ilmenite. There are numerous local feldspar rich 10 cm zones. There are minor quartz, calcite, epidote and chlorite veinlets. Ilmenite is disseminated, up to 3 mm crystals, purple in colour and is not magnetic. Is blocky, highly fractured core to 8.8 and locally throughout. Is oxidized to 10.7 m.
- 14.4 14.8 45 cm quartz -(chlorite) vein with 0.5 to 1 % chalcopyrite as up to 3 cm blebs.
- 31.7 34.8 Fine-grained dark green chloritic gabbro with 3 to 5 % ilmenite and 1 to 2 % chalcopyrite disseminated and as clots, up to 7 cm. The large chalcopyrite clot also has pyrite.
- 34.8 47.6 Coarse grained gabbro with up to 8 or 9 mm crystals. There is local epidotization. There is a white bull quartz vein from 46.0 to 46.6. Ilmenite locally is up to 7 to 10 % over 10 to 20 cm.
- 47.6 50.1 Fine-grained chilled margin phase with on average 7 %, 1 to 3 mm, feldspars and local fracture controlled epidotization and calcite veinlets.

Lost core :.

6.7 8.2 0.7 m lost core.

8.2 9.0 0.4 m lost core.

^{6.7 50.1} MEDIUM TO COARSE-GRAINED GABBRO

PR	OPERT	Y: Chemainus J.V.						HOLE N	o: P	are Numb	er			
			FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-48		2	G1 .			
From (m)	То (m)	D	ESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
50.1	94.6	FELSIC QUARTZ FELDSPAR CRYST	AL LAPTLIT THEF											
	5 1 . 0	ACTIVE TUFF - PYRITIC OUARTZ	- SERICITE SCHIST.	VA01060	50 1	60.0	99	n/a	201	n/a	07	n/1	n / 1	1700
				VA01651	52.3	54.3	2.0	2	277	17	191	(1	33	1800
		Sericitic felsic tuff, medium	n grey to light grey - white	VA01652	54.3	56.3	2.0	2	517	15	378	1	27	1400
		with up to 5 to 10 % crystals	s, , 2 mm, feldspars and	VA01653	56.3	58.3	2.0	2	348	25	361	1	8	1700
		quartz eyes. Locally no crys	tals are observed. Lapilli are	VA01654	58.3	59.8	1.5	2	23	12	. 37	<1	8	1100
		up to 3 cm and are best obse	erved when surrounded by	VA01655	59.8	61.3	1.5	3	120	6	807	<1	37	2600
		pyrite or more sericitic mat	rix. Lapilli are usually	VA01061	60.0	70.0	10.0	n/a	70	n/a	50	n/a	n/a	2260
		$50 \ 1 \ to \ 52 \ 3$ the tuff is h	rown with local 1 to 6 mm		61.3	62.8	1.5	5	104	8 .	141		17	300
		highlight layers parallel to for	nliation Purite content	V101057	70 0	90 0	10.0	n / 2	14/ 50	(5 n/n	14	×(1	20	1050
		increases downhole. There a	re local sphalerite hands	VA01063	80.0	89 0	9.0	n/a	166	n/a n/a	190	n/a	11/a n/a	3700
		uphole with pyrite. Chalcopy	rite is associated with the	VA01658	81.2	82.7	1.5	1	125	46	463	2	139	3700
		strong pyrite. Minor early ma	af sills occur at 73.7, and	VA01659	82.7	83.7	1.0	15	224	53	221	1	44	4100
		79.3 and see sulphides for a	others, these are questionable	VA01660	83.7	85.2	1.5	1	87	18	34	1	62	5000
		10 cm sills.		VA01661	85.2	86.5	1.3	1	291	- 6	12	<1	51	3700
		Alteration :.		VA01662	86.5	88.0	1.5	1	52	<5	1	<1	17	3900
		56.7 61.3 MODERATE FRACTURE (CONTROLLED CARBONATIZATION.	VA01663	88.0	89.0	1.0	2	46	6	2	(1	26	3600
		58.5 60.0 MODERATE PERVASIVE	SILICIFICATION.	VA01664	89.0	90.1	1.1	2	64	8	. 1	<1	66	2400
		64.1 66.6 WEAK FRACTURE CONTI	ROLLED SILICIFICATION.	VA01665	90.1	90.5	.4	6	419	8	6	1	64	2000
		69.0 82.1 WEAK FRACTURE CONTI	ROLLED CARBONATIZATION.	VA01666	90.5	90.9	.4	40	1173	15	20	1	266	1200
		81.1 84.1 STRONG FRACTURE CON	TROLLED CARBONATIZATION.	VA01667	90.9	91.7	.8	65	1389	14	22	2	257	820
		fracture controlled carbonati	LZATION OCCURS AS White	VA01668	91.7	92.3	.6	30	1281	17	18	2	202	1600
		Fracture controlled calcite	veins and veinlets.	VA01659	92.3	92.8	.5	12	343	5		1	82	2800
		pervadive controlled Silicitie	guartz filled fractures	VA01670	94.8	93.8	1.0	12	398	10	11	< <u>1</u>	42	4/00
		throughout silicification	i quartz IIIIeu Iractures	VA01671	93.0	94.4	.4	40	3200	10	110		171	4400
		Sulphides ·		VA01072	74.4	54.0	• *	10	3300	•	0.0	4	119	1000
		50.1 52.3 Trace to nil nyrite	a											
		52.3 61.3 2 % pyrite banded of	or bedded parallel to											
		foliation with trac	ce sphalerite (?) or verv											
		fine-grained pyrit	te at 52.5, 54.1 and 56.3.											
		61.3 62.8 S.G.E.'s early mafi	c sill with moderate											
		pervasive carbonati	ization and 3 to 5 % pyrite											
		clots, probably as	sociated with carbonatization.											
		62.8 82.7 0.5 % disseminated	pyrite with local up to 5 cm											
		zones of 10 to 20 s	pyrite, comprising up to 1								•			
		t of the tuff.												
		82.7 83.7 Very strong fractur	e controlled carbonatization											
		with 12 to 15 % pyr	tte as semi- massive 5 to 10											
		cm layers paralle	to follation. There is i											
		speck of mariposite	s at 02.0. frace galena (f) in											
		83 7 83 8 Farly Mafin Sill vi	th 5 to 7 & fine-grained											
		disseminated nurite	A S CO / W IINE YEATHED											
		83.8 88.0 0.5 % disseminated	with trace 1 cm zones massive											
		pyrite parallel to	foliation.											
		88.0 90.1 Approximately 2 % of	lisseminated fine-grained											
		pyrite.	······································											
		90.1 90.5 5 % pyrite and 0.5	% chalcopyrite as stringers											
			and the second											

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

guartz veinlets throughout silicified tuff. There are

minor vuggy fracture controlled calcite veinlets. There

HOLE No: Page Number CH88-48 3

Ba

610

From To Sample From То Width Total Cu РЪ Zn λg Au (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (?). 90.5 90.9 Semi- massive pyrite, approximately 40 % pyrite in sericite, pyrite is fine-grained. 90.9 91.7 Massive pyrite, 60 to 70 % with trace to 0.5 % chalcopyrite as up to 3 mm, blebs. 91.7 92.3 Semi- massive pyrite, 25 to 30 %. 92.3 93.8 12 % fine-grained pyrite with local 3 to 4 mm cubes. 93.8 94.2 20 to 25 % fine-grained pyrite with 1 to 2 % chalcopyrite clots. 94.2 94.6 7 to 10 % pyrite and 1 % chalcopyrite in silicified tuff with 2 cm of semi- massive pyrite at lower contact with the gabbro at 20 degrees to core axis. Structure :. Faults :. 58.7 59.0 0.3 m lost core with minor fault gouge at 42 degrees to core axis. 77.4 at 85 to 90 degrees to core axis with minor dragging and 12 cm displacement. 87.8 Minor fault slip at 81 cm with minor 3 cm fault breccia. Foliations. 51.0 : 71 degrees to core axis. 66.8 : 60 degrees to core axis. 75.4 : 46 degrees to core axis. 84.0 86.0 Strongly contorted and kinked. 86.4 : 42 degrees to core axis. 92.0 : 67 degrees to core axis. Bedding :. 51.0 : 71 degrees to core axis. 67.9 : 63 degrees to core axis. 94.6 98.3 FELDSPAR PORPHYRITIC GABBRO Fine-grained medium to light green gabbro dyke with VA01673 94.6 96.0 1.4 <1 62 170 0 260 <5 80 273 73 48 irregular lower contact. Is plagiophyric with on average VA01674 97.3 98.3 1.0 0 6 1 5 to 7 %, 1 to 3 mm, feldspar to weakly epidotized feldspar laths. There is weak local fracture controlled epidotization with trace associated pyrite in core of epidote. 98.3 109.6 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI TUFF Sericitic felsic tuff with fine-grained crystals, VA01675 98.3 99.2 15 543 34 69 1400 .9 11 1 47 1400 approximately 10 %, up to 2 mm, feldspar and quartz VA01676 99.2 100.1 .9 15 392 10 20 (1 71 2000 <5 28 1 crystals. There are up to 3 %, 2 to 5 cm, lapilli (?) VA01677 100.1 101.4 1.3 6 1646 12 12200 98 8 329 1600 VA01678 101.4 101.9 9 surrounded by pyrite, or pyrite filled fractures. There .5 is local fracture controlled silicification with white VA01679 102.2 103.0 . 8 12 3800 8 87 4 116 1300

VA01064 103.0 109.0

VA01680 103.0 104.5

6.0

1.5

n/a

4

366

841

n/a

8

134

22

n/a

1

n/a 3510

96

HOLE No: Page Number PROPERTY: Chemainus J.V. FALCONBRIDGE LIMITED CH88-48 4 DIAMOND DRILL LOG Pb Zn From To Sample From Width Total Cu λg То -----DESCRIPTION------Sulphides (ppm) (ppm) (ppm) (ppm) (m) (m) No. (m) (m) (m) VA01681 104.5 105.5 7 30 are minor small fine-grained sheared gabbro sills from 1.0 7 1662 2 98.57 to 98.65 and from 101.9 to 102.2. VA01682 105.5 106.3 1 1148 7 62 2 .8 Alteration :. VA01683 106.3 107.0 .7 10 2906 10 209 4 98.3 101.6 WEAK FRACTURE CONTROLLED CARBONATIZATION. 968 435 24 <1 VA01684 107.0 107.5 . 5 10 98.3 101.0 MODERATE FRACTURE CONTROLLED SILICIFICATION. VA01685 107.5 109.0 1241 344 38 1 1.5 2 104.0 109.6 Weakly bleached with strong foliation. VA01686 109.0 110.0 2 906 10 1395 1 1.0 Sulphides :. 98.3 100.1 15 % stringer pyrite or pyrite encapsulating 4 to 5 cm lapilli, which are very similiar to the host tuff. Pyrite is as 1 to 3 mm broken cubes with trace 1 to 2 mm chalcopyrite blebs. 100.1 101.4 5% fine-grained disseminated pyrite with trace to 0.5 % chalcopyrite blebs. 101.4 101.9 Approximately 10 % stringer (?) pyrite and 1 to 1.5 % chalcopyrite as blebs concentrated with pyrite. 102.2 103.0 As from 101.4 to 101.9. 103.0 104.5 3 to 5 % fine-grained pyrite around lapilli or as stringers with 0.5 %, 1 to 2 mm, blebs. 104.5 106.3 7 % pyrite, 3 % is fine-grained disseminated and 4 % is as two 5 to 10 cm pyrite rich bands parallel to foliation. 106.3 107.4 P.E.M. Anomaly zone. Contorted tuff with moderate black chlorite and locally 10 to 15 % pyrrhotite, 10 % pyrite and 2 % chalcopyrite over 10 to 20 cm. Average sulphide content is 5 to 7 % pyrrhotite, 3 to 4 % pyrite and approximately 1 % chalcopyrite. Pyrrhotite and chalcopyrite are ductilely deformed and pyrite has suffered minor brittle failure. All sulphides are intermixed with no zoning. 107.4 109.6 2 % disseminated pyrite with 1 cm pyrite rich bed at 109.0 and 1 cm chalcopyrite rich bed at 109.3. Structure :. Foliations :. 99.7 : 46 degrees to core axis. 102.7 : 67 degrees to core axis. 105.2 : 53 degrees to core axis. 108.3 : 70 degrees to core axis. Bedding :. 108.4 : 67 degrees to core axis. 108.8 : 90 degrees to core axis.

109.6 112.8 MAFIC INTRUSIVE

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Very fine-grained aphanitic gabbro with 2 to 3 % << 1 mm ilmenite grains with (?) leucoxene or sphene rims. There is weak fracture controlled epidote and carbonate veinlets. Foliation is at 38 degrees to core axis. VA01687 110.0 111.0 1.0 0 159 <5 107 1 <5

(5 110

Au

Ba

(ppb) (ppm)

58 5100

119 5700

264 5700

60 3600

42 2000

P	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED					HOLE N CH88-48	o: P	age Numb 5	er			
		DIAMOND DRILL LOG											
From	То		Sample	From	To	Width	Total	Cu	Pb	Zn	Ag	Au	Ba
(10)	·(щ)	DE3CK1P110N	NO.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppr) (ppm)
112.8	128.2	MAFIC TUFF											
		Mafic rock with moderate fracture controlled	VA01065	114.0	128.0	14.0	n/a	140	n/a	33	n/a	n/a	509
		Carbonatization. There are up to 30 cm epidotized and	VA01688	114.5	116.0	1.5	1	71	(5	49	~1	<5	410
		breached zones with 1 to 2 * associated pyrite, matrix	VAU1089	11/.0	118.0	1.0	1	100	. (5	40	1	(5	400
		with up to 3 %. 1 mm chloritized horphlendes locally	AN01030	120.0	121.0	1.0	. 1	144	. (5	"	5 . * 1	()	480
		There are epidote beds (?) locally. From 123.0 to 126.3											
		there is weak thermal biotite and locally up to 1 %											
		fracture controlled pyrite with minor (?) sediment beds.											
		From 126.3 to 127.8 there is very strong thermal biotite											
		with brown colour and increased crystal content with											
		minor quartz eyes and fining of beds downhole.											
		Foliations :.											
		120.4 : 60 degrees to core axis.											
		124.5 : 40 degrees to core axis.											
		Bedding :											
		127.0 : 63 degrees to core axis.											
128.2	152.1	MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION											
		Mafic flow or sill. Is variably fine-grained to medium	VA01066	140.0	150.0	10.0	n/a .	227	n/a	41	n/a	n/a	464
		grained, may be sill to 133.4 and flow after 133.4. From											
		128.2 to 128.7 is fine-grained with 20 %, < 1 mm feldspars											
		and minor calcite fracture controlled veiniets. From											
		120.7 to 155.4 is medium grained with sait and pepper											
		$\cdot 2 \cdot 0.5$ to 1 ratios In sill (?) there are numerous											
		fracture controlled epidote and carbonatization veinlets											
		and trace disseminated pyrite occurs. From 133.4 to 133.7											
		there is strong biotite and calcite veinlets with 2 %, 2											
		mm, round quartz eyes. After is medium green, as opposed											
		to a darker green with up to 15 %, 2 to 4 mm, hornblendes											
		and 10 %, up to 1 mm, feldspars in a massive matrix with											
		local moderate fracture controlled epidotization.											
		Foliations are weak at 30 to 60 degrees to core axis.											
		There is weak fracture controlled chloritization, Lower											
		fault gouge											
		lault gouge.											
152.1	178.1	INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS											
		Medium to dark green to brown intermediate tuffs with	VA01067	155.0	175.0	20.0	n/a	72	n/a	68	n/a	n/a	628
		local pervasive thermal biotite. On average there is 10 to											
		15 % sediments, white to dark brown cherty sediments.											
		There are minor crystal rich and supported beds. At 162.6											
		there is a 15 cm bed with downhole tops and at 162.8											
		there is a similar IU Cm bed with tops uphole, i.e.											
		directions and bedding is very variable. There are											

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HOLE No: Page Number

		DIAMOND DRILL LOG					CH88-48					÷		
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	
		numerous quartz and calcite veinlets, often hosting red to												
		brown biotite. Intermediate tuff locally, 172.6 to 177.2,												
		hosts greater than 10 %, up to 5 mm, quartz clasts, and is												
		there probably andesitic. Average tuff matrix hosts 15 %,												
		1 to 3 mm, chloritized hornblendes and 5 % epidote grains												
		in green tuff and approximately 5 % hornblende, 10 %												
		feldspar to epidote and 5 to 7 %, 1 to 2 mm, quartz eyes												
		in thermal biotite altered tuff. Foliation is subparallel												
		or parallel to bedding. There is trace to nil												
		disseminated and fracture controlled pyrite locally.												
		Structure :.												
		Foliations :.												
		162.3 : 53 degrees to core axis.												
		165.5 : 54 degrees to core axis.												
		171.2 : 43 degrees to core axis.												
		177.2 : 47 degrees to core axis.												
		Bedding :.												
		161.0 : 57 degrees to core axis.												
		165.3 : 36 degrees to core axis.												
		174.4 : 63 degrees to core axis.												
178.1	195.8	MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION												
		Mafic flow with 15 to 20 %, 1 to 2 mm, chloritized	VA01068	180.0	195.0	15.0	n/a	16	n/a	26	n/a 👘	n/a	341	
		hornblende crystals and moderate epidotization from 188.0												
		to the lower contact. Epidotization is spotty from 189.0												
		to 190.0 with carbonatized - biotite fracture controlled												
		veins and veinlets. Enidote after 190.0 is 5 to 10 %. 1												
		to 2 mm grains (?) alteration of feldspars. Flow is												
	1	light grey at upper contact and dark green at lower												
		contact. There are minor guartz - calcite - (histite) -			1.11									
		(ablarita) waine up to 2 am thick at numerous												
		(chiorite) verns, up to 2 cm thick at numerous							•					
		foliations. Fiow is massive with no well developed												
		lollations.												
105 0	107 0	THERE ALLER ALLER UTEL WINOD CURDEN CENTWRNES												
199.0	191.9	INIERREDIATE TOTTS WITH MINOR CREATE SEDINEWIS												
		park brown tull with minor sequents and 2 to 3 % quartz												
		eyes. Follation at 65 degrees to core axis.												
107 0	202.0	WARTS DODDUVDITTS WARTS LADILLT THER												
191.9	202.9	ARTIC PORPHIRITIC MARTE DATIDDE TOPP	11301060	107 0	202.0	E 0	- /-	162	- /-	20	n/n		160	
		Malic tull of flow with 10 to 15 %, up to 1 mm,	VAULU65	197.9	202.3	5.0	11/ a	101	117 a	23	117 a	117 a	150	
		noinpiendes and 5 %, 1 to 4 mm, round epidote. There is												
		weak fracture controlled pyrite and numerous 1 to 3 mm												
		calcite - quartz veins. From 201.0 to 202.9 there are 10												
		4, 1 to 3 mm, eye to spherical calcite +/- quartz laplii												
		or amygaules. There are (1 % Chioritization Clasts or												
		Tapili, up to 2 cm long and 5 mm wide, elongation												
		parallel to ioliation. Halle is massive with weak												
		TO TRATION OF (1) BO VII GOGETOOD TO GOMO AWIG												

From To (m) (m)	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-48	o: P	age Numb 7	er				
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm
202.9	242.6	MAFIC TUFFS WITH MINOR CHERTY SEDIMENTS											
		Dark brown to green mafic ash tuff with cream to green to	VA01691	205.0	207.0	2.0	1	168	<5	105	1	<5	1000
		brown cherty sediments. There is local blue fracture	VA01070	205.0	225.0	20.0	n/a	108	n/a	62	n/a	n/a	734
		controlled chlorite and quartz - biotite veins and is	VA01692	207.0	209.0	2.0	. 1 .	112	< 5	95	1	<5	820
	4.4	locally feldspar crystal rich up to 20 %, up to 1 mm.	VA01693	209.0	211.0	2.0	. 1	138	3	72	1	12	730
		From 205.0 to 213.0 there is trace fracture controlled	VA01694	211.0	213.0	2.0	1	153	< 5	72	1 .	123	680
		pyrite with sediments. At 205.1 tops is downhole, bedding	VA01071	225.0	240.0	15.0	n/a	128	n/a	65	n/a	n/a	772
		is at 67 degrees to core axis. From 217.9 there is very	VA01695	236.5	238.0	1.5	1	105	6	72	1	103	470
		strong thermal biotite to approximately 236 with minor sediments and trace to 0.25 % fracture controlled pyrite and trace to 2 % 1 mm guartz eves locally. From 236.8 to	VA01072	240.0	256.3	16.3	n/a	155	n/a	39	n/a	n/a	716
		237.5 there is white and grey chert with 1 % fracture			·								

246.6 256.3 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Andesitic medium green to brown tuff with 10 %, 1 mm, feldspar grains and up to 5 %, 1 mm, quartz eyes locally. There are minor cherty sediment beds, at 252.7, tops is downhole with bedding at 70 degrees to core axis. There is minor quartz - biotite veining. Foliation averages approximately 60 degrees to core axis, locally 45 to 80.

Light green fine-grained gabbro dyke with fracture controlled calcite veinlets and average of 5 %, 2 mm, feldspar grains. At 246.5 there is 10 cm quartz vein with 4 mm thick chalcopyrite. Lower contact at 51 degrees to core axis and at 46 degrees to bed in underlying unit.

at 60 to 80 degrees to core axis locally.

242.6 246.6 FELDSPAR PORPHYRITIC GABBRO

End of hole : 841 feet, 256.3 m, on May 1, 1988 at 12:30 pm

controlled pyrite and bedding at 60 degrees to core axis. From 240 to 242.6 is light grey mafic with hornblende and 5 cm biotite filled fractures. At 218.7 and 219.5 tops is uphole, bedding is 58 degrees to core axis. Foliation is

Total lost core : 1.4 m % Recovery = 99.5%.

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SAMPLE NUMBER	FROM	TO	XS 102	XAL203	XCAO	ZHGO	ZNA20	ZK 20	ZFE203	XT 102	ZP205	ZMNO	ZLOI	SUM	BA	AI	NACA
VA01060	50.10	60.00	67.80	14.50	2.39	1.35	1.75	2.95	4.32	0.36			3.39	98.81	1700.	51.	4.
VA00616	51.00	51.10	70.60	13.70	2.77	1.81	1.77	3.32	1.82	0.29	0.07	0.05	3.16	99.36	1690.	53.	5.
VA00617	56,60	56.70	68.40	14.50	0.28	0.54	0.37	3.89	5.73	0.37	0.07	<0.01	4.16	98.32	1680.	87.	1.
VA01061	60.00	70.00	70.50	14.10	0.93	0.95	1.14	3.46	3.44	0.30			3.54	98.36	2260.	68.	2.
VA00618	66.70	66.80	70.90	14.70	0.94	0.99	1.44	3.35	2.88	0.31	0.05	0.01	2.70	98.27	2280.	65.	2.
VA00619	80.00	80.10	71.00	14.80	0.18	1.17	0.48	3.75	3.76	0.32	0.05	0.01	3.54	99.06	3690.	88.	1.
VA00620	103.60	103.70	80.70	8.41	0.25	0.21	0.88	1.66	4.45	0.23	0:04	<0.01	2.93	99.76	2180.	62.	1.
VA00621	111.50	111.60	49.20	13.50	8.37	7.24	3.25	0.22	14.00	2.07	0.19	0.23	1.93	100.21	225.	39.	12.
VA00622	116.40	116.50	49.80	17.00	6.19	7.55	4.32	0.59	10.60	0.93	0.17	0.16	2.70	100.01	663.	44.	11.
VA00623	127.60	127.70	48,10	16.50	6.18	8.12	2.72	2.22	11.20	0.90	0.22	0.21	2.70	99.07	1360.	54.	9.
VA00624	130.00	130.10	47.60	11.70	11.80	11.60	1.65	0.25	12.10	0.72	0.17	0.22	2.23	100.04	83.	47.	13.
VA00625	146.30	146.40	49.40	13.90	12.00	9.11	1.98	0.44	10.60	0.56	0.13	0.18	2.08	100.38	271.	41.	14.
VA00626	162.20	162.30	49.10	18.50	5.61	6.06	1.49	2.43	12.40	1.29	0.38	0.23	2.93	100.42	 1140.	54.	7.
VA00627	175.80	175.90	48.00	18.60	8.38	5.15	3.63	0.63	9.72	0.99	0.28	0.20	4.31	99.89	507.	32.	12.
VA00628	184.80	184.90	50.60	13.90	13.50	7.56	1.28	0.29	9.95	0.55	0.13	0.17	2.08	100.01	179.	35.	15.
VA00629	200.90	201.00	49.80	12.80	9.43	9.75	3.11	0.29	10.80	0.72	0.19	0.22	3.31	100.42	103.	44.	13.

Hole No. CH88-48 WHOLE ROCK SAMPLES

2.1.

Page No.

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DIAMOND	DRILL	CORE	LITHOGEOCHEMICA	L RECORD
		(MAJC	DR ELEMENTS)	

SAMPLE Number	FROM	TO	25102	XAL203	ZCAO	ZMGD	XNA20	XK 20	ZFE203	XT 102	XP205	ZHNO	2L0I	SUM	BA	AI	NACA
•••••				***********													
VA01062	70.00	80.00	71.20	13.80	0.85	0.80	1.36	3.20	3.79	0.32			3.70	99.02	1850.	64.	2.
VA01063	80.00	89.00	71.60	13.50	1.65	0.69	0.64	2.81	3.93	0.33			4.31	99.46	3700.	60.	2.
VA01064	103.00	109.00	75.20	10.90	0.28	0.32	0.72	2.29	5.41	0.33			3.62	99.07	3510.	72.	1.
VA01065	114.00	128.00	48.00	16.70	8.64	6.17	3.78	0.80	10.30	0.75			2.93	98.07	509.	36.	12.
VA01066	140.00	150.00	50.00	13.70	12.20	8.40	2.22	0.48	9.68	0.56			1.93	99.17	464.	38.	14.
VA01067	155.00	175.00	52.20	17.10	6.31	4.83	3.48	1.20	9.42	0.94			3.39	98.87	628.	38.	10.
VA01068	189.00	195.00	46.70	15.10	12.40	7.14	2.62	0.63	9.17	0.57			5.70	100.03	341.	34.	15.
VA01069	197.90	202.90	46.80	14.10	10.50	8.00	3.10	0.40	10.70	0.73			4.77	99.10	150.	38.	14.
VA01070	205.00	225.00	50.30	16.70	4.36	8.55	3.78	2.18	9.85	0.85			3.31	99.88	734.	57.	8.
VA01071	225.00	240.00	50.90	16.10	4.66	7.11	3.67	2.58	9.59	0.77			3.23	98.61	772.	54.	8.
VA01072	240.00	256.30	48.40	16.70	5.63	8.27	2.47	2.66	10.60	0.89			3.39	99.01	716.	57.	8.

Hole No. CH88-48 ALTERED SANPLES

Page No. 1

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
			н (¹														1.1
VA01651	52.30	54.30	1800.0	277.0	191.0	<0.5	33.0	11.0	6.0	17.0	<5.0	2.0	6.0	200.0	59.	2.	2.
VA01652	54.30	56.30	1400.0	517.0	378.0	0.8	27.0	10.0	10.0	15.0	<5.0	4.0	4.0	189.0	58.	2.	3.
VA01653	56.30	58.30	1700.0	348.0	361.0	0.6	8.0	4.0	4.0	25.0	8.0	3.0	4.0	129.0	49.	2.	2.
VA01654	58.30	59.80	1100.0	23.0	37.0	0.5	8.0	2.0	2.0	12.0	<5.0	<1.0	2.0	136.0	38.	2.	1.
VA01655	59.80	61.30	2600.0	120.0	807.0	<0.5	37.0	5.0	4.0	6.0	25.0	5.0	5.0	119.0	13.	3.	2.
VA01656	61.30	62.80	300.0	104.0	141.0	<0.5	17.0	33.0	14.0	8.0	<5.0	3.0	1.0	1156.0	42.	5.	6.
VA01657	62.80	64.30	2100.0	127.0	74.0	<0.5	26.0	5.0	3.0	<5.0	<5.0	2.0	5.0	152.0	63.	2.	3.
VA01658	81.20	82.70	3700.0	125.0	463.0	1.5	139.0	6.0	4.0	46.0	20.0	4.0	3.0	136.0	21.	1.	3.
VA01659	82.70	83.70	4100.0	224.0	221.0	0.5	44.0	9.0	5.0	53.0	11.0	2.0	4.0	236.0	50.	15.	4.
VA01660	83.70	85.20	5000.0	87.0	34.0	0.8	62.0	5,0	7.0	18.0	<5.0	<1.0	4.0	166.0	72.	1.	2.
VA01661	85.20	86.50	3700.0	291.0	12.0	<0.5	51.0	6.0	6.0	6.0	<5.0	<1.0	4.0	61.0	96.	1.	1.
VA01662	86.50	88.00	3900.0	52.0	1.0	<0.5	17.0	8.0	5.0	<5.0	<5.0	<1.0	3.0	65.0	98.	1.	1.
VA01663	88.00	89.00	3600.0	46.0	2.0	<0.5	26.0	10.0	6.0	6.0	22.0	<1.0	4.0	59.0	96.	2.	2.
VA01664	89.00	90.10	2400.0	64.0	1.0	<0.5	66.0	11.0	5.0	8.0	<5.0	<1.0	3.0	62.0	98.	2.	3.
VA01665	90.10	90.50	2000.0	419.0	6.0	0.6	64.0	23.0	10.0	8.0	<5.0	3.0	4.0	68.0	99.	6.	6.
VA01666	90.50	90.90	1200.0	1173.0	20.0	1.1	266.0	74.0	28.0	15.0	19.0	7.0	3.0	67.0	98.	40.	>10.
VA01667	90,90	91.70	820.0	1389.0	22.0	2.3	257.0	66.0	22.0	14.0	31.0	9.0	2.0	66.0	98.	65.	>10.
VA01668	91.70	92.30	1600.0	1281.0	18.0	1.7	202.0	24.0	10.0	17.0	35.0	6.0	1.0	70.0	99.	30.	>10.
VA01669	92.30	92.80	2800.0	343.0	7.0	0.7	82.0	11.0	5.0	6.0	<5.0	2.0	3.0	67.0	98.	12.	5.
VA01670	92.80	93.80	4700.0	398.0	11.0	<0.5	42.0	13.0	5.0	7.0	<5.0	2.0	3.0	65.0	97.	12.	6.
VA01671	93.80	94.20	4400.0	5800.0	116.0	4.9	191.0	23.0	9.0	10.0	31.0	9.0	12.0	86.0	98.	25.	>10.
VA01672	94.20	94.60	1600.0	3300.0	83.0	2.4	179.0	33.0	25.0	8.0	16.0	3.0	8.0	406.0	98.	10.	8.
VA01673	94.60	96.00	170.0	260.0	80.0	<0.5	62.0	30.0	59.0	<5.0	16.0	3.0	2.0	660.0	76.	0.	4.

Hole No. CH88-48

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Page No. 1

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU) (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррш)	HN (ppm)	CUZN	ETS	FE
VA01674	97.30	98.30	610.0	273.0	73.0	0.6	48.0	34.0	62.0	6.0	7.0	2.0	2.0	689.0	79.	0.	
VA01675	98.30	99.20	1400.0	543.0	34.0	0.7	69.0	10.0	28.0	11.0	24.0	4.0	7.0	162.0	94.	15.	8.
VA01676	99.20	100.10	1400.0	392.0	20.0	<0.5	47.0	15.0	6.0	10.0	28.0	2.0	6.0	102.0	95.	15.	6.
VA01677	100.10	101.40	2000.0	1646.0	28.0	1.1	71.0	2.0	5.0	<5.0	25.0	<1.0	6.0	88.0	98.	6.	4.
VA01678	101.40	101.90	1600.0	12200.0	98.0	8.2	329.0	4.0	9.0	9.0	12.0	4.0	7.0	111.0	99.	12.	8.
VA01679	102.20	103.00	1300.0	3800.0	87.0	3.7	116.0	14.0	75.0	8.0	48.0	3.0	3.0	261.0	98.	12.	8.
VA01680	103.00	104.50	2000.0	841.0	22.0	0.9	96.0	7.0	5.0	8.0	14.0	2.0	3.0	68.0	97.	4.	4.
VA01681	104.50	105.50	5100.0	1662.0	30.0	1.9	58.0	9.0	9.0	7.0	<5.0	4.0	3.0	68.0	98.	7.	7.
VA01682	105.50	106.30	5700.0	1148.0	62.0	1.5	119.0	2.0	4.0	7.0	8.0	2.0	2.0	60.0	95.	7.	4.
VA01683	106.30	107.00	5700.0	2906.0	209.0	3.9	264.0	5.0	3.0	10.0	12.0	5.0	2.0	62.0	93.	10.	8.
VA01684	107.00	107.50	3600.0	435.0	968.0	<0.5	60.0	3.0	4.0	24.0	11.0	6.0	6.0	84.0	31.	10.	з.
VA01685	107.50	109.00	2000.0	344.0	1241.0	0.6	42.0	12.0	24.0	38.0	<5.0	7.0	6.0	234.0	22.	2.	3.
VA01686	109.00	110.00	1200.0	906.0	1395.0	1.2	72.0	16.0	54.0	10.0	<5.0	9.0	4.0	413.0	39.	2.	4.
VA01687	110.00	111.00	110.0	159.0	107.0	0.6	<5.0	25.0	66.0	<5.0	25.0	3.0	2.0	562.0	60.	0.	4.
VA01688	114.50	116.00	410.0	71.0	49.0	<0.5	<5.0	25.0	29.0	<5.0	<5.0	2.0	2.0	618.0	59.	1.	5.
VA01689	117.00	118.00	400.0	36.0	40.0	0.6	<5.0	22.0	28.0	<5.0	19.0	3.0	<1.0	578.0	47.	1.	4.
VA01690	120.00	121.00	480.0	122.0	77.0	0.7	<5.0	28.0	60.0	<5.0	25.0	2.0	1.0	854.0	61.	1.	6.
VA01691	205.00	207.00	1000.0	168.0	105.0	0.9	<5.0	31.0	44.0	<5.0	<5.0	4.0	<1.0	1361.0	62.	1.	7.
VA01692	207.00	209.00	820.0	112.0	95.0	0.8	<5.0	29.0	54.0	<5.0	<5.0	4.0	<1.0	1305.0	54.	1.	6.
VA01693	209.00	211.00	730.0	138.0	72.0	0.9	12.0	35.0	53.0	<5.0	10.0	4.0	<1.0	1022.0	66.	1.	7.
VA01694	211.00	213.00	680.0	153.0	72.0	0.7	123.0	31.0	36.0	<5.0	37.0	3.0	<1.0	873.0	68.	1.	5.
VA01695	236.50	238.00	470.0	105.0	72.0	0.7	103.0	22.0	41.0	6.0	5.0	3.0	1.0	610.0	59.	1.	4.

Hole No. CH88-48

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Summary	Log: DD	H CH88-49
Location	: 26+98	E, 2+18 S; Chip l Claim
Azimuth:	210, D	pip: -45
Hole Com	pleted:	May 4, 1988
Core Log	ged By:	D.P. Money
0.0 -	5.2	Casing.
5.2 -	33.9	Felsic crystal lapilli tuff with 1 to 5 % pyrite,
		disseminated and banded parallel to foliation.
33.9 -	42.8	Gabbro.
42.8 -	46.7	Felsic cystal tuff with 1 to 2 % pyrite.
46.7 -	52.2	Mafic sill.
52.2 -	63.0	Altered felsic tuff with 4.9 m of strong sulphides
		averaging approximately 4 % chalcopyrite and 4 %
		sphalerite. There is 2.7 metres of semi-massive to
		massive pyrite - pyrrhotite - chalcopyrite -
		sphalerite from 56.3 to 59.0 m.
63.0 -	67.4	Gabbro.
67.4 -	84.6	Mafic tuffs with minor intercalated cherty sediments.
84.6 -	126.6	Mafic hornblende bearing flow.
126.6 -	177.5	Mafic to andesitic tuffs with intercalated cherts and
		argillites.
177.5 -	198.8	Gabbro.
198.8 -	202.2	Andesitic tuffs with minor cherty sediments.
202.2 -	203.4	Gabbro.
203.4 -	205.5	Andesitic tuffs with cherts.
205.5 -	209.1	Mafic sill
209.1 -	218.1	Andesitic tuffs with chert and argillite beds.
218.1 -	220.2	Black argillite with 4 % fracture controlled pyrite.
220.2 -	220.8	Gabbro.
220.8 -	250.6	Black argillite with 3 % fracture controlled pyrite.
250.6 -	252.1	Tuffaceous conglomerate.
252.1		End of hole.

PROPI	ERTY: Ch	emainus	J.V.			FALCONB	RIDGE LIN	ITED						HOLE N CH88-49	o: Pa	age Numb 1	er .			
Hole	Locatio	n: 26+	98 E 2+1	8 S		DIAMON	D DRILL I	JOG												
											1.1	Clai	m No. C	HIP1						
NTS:	092/B13		UTM: 5416	897.4 N	429956.0 I	5						Sect	ion No.	: Line 27+	00 East	t, Chip	Group			
Dip:	-45		Length:	252.1	m ·							Logg	red Bv:	David P. M	onev					
												Dril	ling Co	.: Burwash	Enter	prises			. •	
Stari Compl	ted: May leted: M	1, 198 av 4. 1	8 988									Assa	wed By:	Bondar-Cl	egg and	l X-Ray	Assay			
00		., ., .										Core	Size:	NQ						
Purpo	ose: To	test th	e PEM and	maly loc	ated in CH	IEM87-28	DIP 1	ESTS												
	und	er che	Anita She	"ing.		Azi-				Azi-										
					Length	muth	Dip		Length	muth	Di	ip								
					14.30	208.0	-44.0		185.00	212.0	-43	0								
					90.50	210.0	-44.0		246.00	213.0	-43.	.0								
From 1	To								Samr	la Fr		To.	Vidth	Total	Cu	Ph	7 n	١a	20	Ba
(m)	(m)			D	ESCRIPTION			•	No). (m) ((m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppt) (ppm)
.0	5.2 OVER	BURDEN																		
5.2 33	3.9 FELS	IC QUAR	TZ FELDSP	AR CRYST	AL LAPILLI	L TUFF							${\bf r}_{\rm eff} = {\bf r}_{\rm eff}$							
	Pyri	tic fel	sic tuff	with var	iable crys	stal con	tent, wit	h	VA010	573 5	5.2 2	21.0	15.8	n/a	34	n/a	<10	n/a	n/a	1360
	stro	ng alte	ration an	d approx	imately 15	5 % feld	spar and	l 	VA016	96 5	.2	7.0	1.8	5	31	6	31	<1	93	1200
	quar	tz crys	tais, ave	rage siz	e 1 to 1.: Y of gryst	omm. At	beginnin Idepar dr	ig of	VA016	197 · 1	.0	8.2	1.2	5	61	5	17	1	104	1500
	with	downho	lo transi	tion to	3 + 5 5 .	1 ratio	of guart	ains	V3016	100 C	0 1	10 5	1 5	5	17	5	2	1	102	1100
	feld	snar cr	vetals. L	anilli a	re un to 1	cm. an	nrovimate	1 v 2	Va017	100 10	5 1	2.0	1.5	2	22	5	13	(1	41	750
	\$ ar	ev sil	iceous la	pilli in	sericitio	matrix	. There i	s	VA017	102 12	.0 1	13.0	1.0	2	23	7	12	(1	42	1200
	node	rate va	riable al	teration					VA017	01 13	.0 1	14.0	1.0	2	22	6	8	(1	111	1500
	Alte	ration	:.		-				VA017	103 14	.0 1	15.0	1.0	2	108	9	14	(1	60	2100
	5.2	9.5 MOD	ERATE FRA	CTURE CO	NTROLLED S	SILICIFI	CATION ,	weak	VA017	04 15	.0 1	16.0	1.0	2	254	14	44	1	119	2300
		per	vasive si	licifica	tion centr	ed on f	racture		VA017	105 16	.0 1	17.2	1.2	5	43	<5	17	1	176	760
		con	trolled w	hite fra	cture cont	rolled	quartz		VA017	06 17	.2 2	20.2	3.0	4	49	8	. 17	<1	224	1500
		vei	nlets.						VA01	107 20).2 2	21.2	1.0	4	17	10	38	<1	147	1900
	9.5	16.0 QU	ARTZ FLOO	DING , a	s strong p	pervasiv	e fractur	e	VA010	074 21	.0 3	33.0	12.0	n/a	<10	n/a	<10	n/a	n/a	1600
		co	ntrolled	silicifi	cation, 30) to 40	% added w	hite	VA017	708 21		22.7	1.5	1	36	6	20	<1	51	1400
		qu	artz.						VA017	109 30	.0 3	32.0	2.0	2	37	<5	12	<1	77	2200
	16.0	19.8 M	ODERATE P	ERVASIVE	SILICIFIC	CATION ,	glassy													

П

- silicified tuff. 19.8 23.3 WEAK PERVASIVE SILICIFICATION , similiar to 16.0 to 19.8 with minor 1 to 2 cm fracture controlled white quartz veins.
- 23.3 25.3 WEAK PERVASIVE CHLORITIZATION , light green with 3 to 5 % chlorite. 25.3 33.9 MODERATE PERVASIVE SERICITIZATION , bleached
- tuff, is strongly bleached from 31.9 to 33.6.
- Mineralization :.

5.2 10.5 5 % banded and fine-grained disseminated pyrite, banded pyrite is parallel to foliation.

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HOLE No: Page Number CH88-49

From (m)	To (m)	DESCRIPTION
		10.5 16.0 1 to 2 % fine-grained and banded pyrite with galena (?), grey fine-grained mineral in white guartz.
		16.0 21.2 3 to 4 % pyrite with 2 % disseminated and local 1 to 10 cm semi-massive pyrite zones.

FALCONBRIDGE LIMITED

local

VA01710 42.8

VA01075 43.0

VA01711 43.8

VA01712 44.8

VA01713 45.8

43.8 1.0

46.0 3.0

44.8 1.0

45.8 1.0

. 9

46.7

2

2

2

2 1361

n/a

188

99

176

173

9

n/a

14

14

DIAMOND DRILL LOG

Sample Width Total Cu Pb Zn λq Au Ba From То No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

2

1

n/a

-1

1

5

19

<10

32

38

34 10000

293 1500

n/a 1530

445 6500

22 850

69 1800

1 to 10 cm semi-massive pyrite 21.2 33.8 Trace disseminated fine-grained pyrite with 3 to 5 % over 10 cm locally. 33.8 33.9 Thermal biotite with 5 to 7 % fracture controlled pyrite. Lost core :. 5.2 8.2 1.0 m. 14.5 16.9 0.2 m. 16.9 18.0 0.5 m. 18.0 19.8 1.5 m. 19.8 22.6 0.4 m. Foliations :. 9.2 : 68 degrees to core axis. 13.0 : 38 degrees to core axis. 18.9 : 46 degrees to core axis. 25.1 : 61 degrees to core axis. 29.2 : 63 degrees to core axis. 33.5 : 67 degrees to core axis.

33.9 42.8 FELDSPAR PORPHYRITIC GABBRO 10 to 15 %, 1 to 3 mm, feldspars in a fine-grained medium green matrix with minor quartz - chlorite veins.

42.8 46.7 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Sericitic light grey felsic tuff with 5 to 15 % crystals, up to 2 mm, average 1 mm, feldspars and guartz eyes. There 1 to 2 % fine-grained disseminated and banded parallel to foliation pyrite. There is minor compositional layering or variable weak silicification and sericitization. Bedding (?) is parallel to foliation. 42.8 46.7 MODERATE PERVASIVE CHLORITIZATION. Foliations :. 42.9 : 56 degrees to core axis. 44.7 : 61 degrees to core axis.

46.0 : 61 degrees to core axis.

46.7 52.2 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Probably sill, has fine-grained sheared contacts with the tuffs. Contacts are at approximately 60 degrees to core axis and have minor fracture controlled carbonatization. Intergrown mafic crystals, hornblende (?), and feldspar laths, up to 5 mm, average 3 to 4 mm. Is massive with no foliation.

PR	OPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE CH88-4	No: 1 9	Page Nu 3	nber				
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphide	Cu s (ppm)	Pb) (ppi	Zn n) (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppi	n)
52.2	63.0	FELSTC THEF												
	05.0	Strongly altered and mineralized rock, only recognizible	VA01714	52.2	53.1	.9	1	721	21	1321	2	145	2500	
		as felsic tuff from 58.9 to 63.0 and 52.2 to 53.1. There	VA01715	53.1	54.1	1.0	3	367	94	535	2	288	3600	
		is very strong silicification and local strong	VA01716	54.1	55.1	1.0	3	203	10	106	1	29	2300	
		epidotization and thermal biotite from 53.1 to 56.3 with	VA01717	55.1	56.3	1.2	3	4800	5600	1604	28	634	3800	
		no carbonatization. Alteration is cream to green epidote	VA01718	56.3	56.6	.3	51	15600	13800	198500	74	1954	7100	
		to red - brown in colour. There is 2 to 3 % fracture	VA01719	56.6	57.0	.4	27	19200	12000	22500	84	3051 1	0000	
		controlled pyrite and numerous minor faults in the altered	VA01720	57.0	57.4	.4	27	14300	23600	46000	146	6068	7200	
		tuff, which may be a lapilli tuff. From 52.2 to 53.1 and	VA01721	57.4	57.8	.4	33	23900	6300	38000	80	1885 2	26000	
		61.2 to 63.0 there is weak to moderate thermal biotite	VA01722	57.8	58.2	. 4	52	20400	2099	105500	68	1063 3	32000	
		and 10 to 15 %, 1 mm, feldspar and quartz crystals with	VA01723	58.2	58.6	.4	50	47500	1763	17700	119	2571 2	29000	
		weak sulphides. From 56.3 to 61.2 there is strong	VA01724	58.6	59.0	. 4	50	64000	346	26000	136	960	25000	
		sulphides in dark grey silicified tuff with fracture	VA01725	59.0	59.7	.7	8	14900	156	4900	47	688 .	30000	
		controlled white quartz veinlets. Alteration is probably	VA01726	59.7	60.1	.4	17	14300	874	12200	36	1714	19000	
		hornfelsing due to mafic dyke.	VA01727	60.1	60.8	.7	8	13600	952	12200	35	1645	20000	
		Sulphides :.	VA01728	60.8	61.2	.4	8	16000	250	1800	33.	335 1	17000	
		52.2 53.1 Trace to 0.5 % disseminated and banded pyrite	VA01729	61.2	62.0	.8	3	1200	93	1200	. 8	266 1	1000	
		and one 2 mm chalcopyrite bleb at 52.5.	VA01730	62.0	63.0	1.0	3	2400	524	700	12	540	1000	
		53.1 56.3 2 to 3 % fracture controlled pyrite,												
		concentrated on epidotization.												
		56.3 56.6 30 % pyrite, 20 % sphalerite, as two 4 cm and												
		one 2 cm bands of 65 % red brown sphalerite and												
		1 % disseminated 1 to 3 mm chalcopyrite blebs.												
		Pyrite is coarse with clots up to 12 mm and												
		cubes up to 3 mm. There is minor epidotization												
		and quartz veinlets.												
		56.6 57.4 Strong local sericitization, epidotization and												
		fracture controlled and pervasive												
		silicification. There is approximately 20 %												
		fine-grained disseminated pyrite, 5 % sphalerite												
		in local 1 to 3 cm semi- massive to massive												
		zones, and 1 to 2 % disseminated 2 to 3 mm												
		chalcopyrite blebs. Sphalerite is silica												
		encapsulated with no brown streak.												
		57.4 57.6 50 % pyrite and 5 % chalcopyrite as massive												
		sulphides encapsulating siliceous grey tuff												
		rounded clasts and with moderate epidotization.												
		57.6 57.8 5 to 7 % pyrite and 1 % chalcopyrite as blebs in												
		grey sericitic tuff.												
		57.8 58.2 30 % pyrite, 20 % sphalerite and 2 to 3 %												

chalcopyrite, sulphides form up to 7 cm bands of fine-grained massive sulphides. Sulphides encapsulate felsic lapilli and quartz crystals. There is post mineralization fracture controlled white quartz veins.

58.2 58.3 Grey sericitic tuff with trace pyrite. Blocky, highly fractured core.

58.3 59.0 Approximately 30 % pyrrhotite, 17 % chalcopyrite and 5 to 10 % pyrite. Pyrite occurs as rims on the 30 % siliceous grey felsic lapilli and as 1

From To

(m)

(m)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-49 4

Sample	From	То	Width	Total	Cu	Pb	Zn	λg	Au	Ba
No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)

to 2.5 cm clots. Chalcopyrite and pyrrhotite are intergrown and pyrrhotite is strongly magnetic. There is black chlorite on fractures. 59.0 59.7 Grey strongly silicified felsic with 2 to 3 % chalcopyrite, 5 % pyrite as fine-grained disseminated and stringers (?).

-----DESCRIPTION------

- 59.7 60.1 Siliceous felsic lapilli surrounded by 5 to 7 % chalcopyrite and 10 to 12 % pyrite. Chalcopyrite is very variable with 5 % on one side of the core and 10 to 12 % on the other.
- 60.1 60.8 Silicified with 5 to 7 % pyrite and 2 % sphalerite. Sulphides may be fracture controlled or were remobilized.
- 60.8 61.2 Sericitic tuff with 5 % chalcopyrite as stringers with 2 to 3 % disseminated pyrite.
- 61.2 63.0 Sericitic tuff with trace disseminated

chalcopyrite blebs and 3 % banded pyrite. Stucture :.

Foliations :.

53.1 : 51 degrees to core axis.

56.6 : 65 degrees to core axis.

61.9 : 57 degrees to core axis.

Lower contact (63.0) : 57 degrees to core axis.

63.0 67.4 FELDSPAR PORPHYRITIC GABBRO Fine-grained medium green gabbro with approximately 5 %, 1 to 4 mm, feldspar grains. There is weak local fracture controlled epidote and quartz - calcite veinlets at 0 to 90 degrees to core axis.

67.4 84.6 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Mafic crystal lapilli tuff with minor cherty sediment beds. There are on average 15 %, 1 to 2 mm, mafic crystals, probably hornblende and variable feldspars, < 1 to 15 % feldspar to epidotized feldspar, 1 to 2 mm. There are local 10 cm epidote alteration spots with fracture controlled calcite and biotite veinlets and trace fracture controlled pyrite. From 71.0 to 71.7 there is a mafic phyric sill. Is locally weakly silicified and weak fracture controlled chloritization occurs, to a much lesser extent than the underlying mafic flow. Structure :. Foliations :. 69.3 : 87 degrees to core axis. 72.5 : 56 degrees to core axis.

78.2 : 54 degrees to core axis. 83.7 : 84 degrees to core axis.

Bedding :.

78.4 : 57 degrees to core axis. 84.0 : 66 degrees to core axis. VA01076 68.0 84.0 16.0 n/a 141 n/a 34 n/a n/a 451

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B		W. Chempinus I V														
ب	KUPERI	I: Chemainus J.V.	F	ALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-49	o: P	ige Numb 5	er		•••		
From (m)	To (m)		DESCRIPTION-		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)	
84 6	126 6	MARTC PORPHYRITTC MA	FTC FLOW / INTRUSTO	N												
		Mafic flow, medium g	reen, massive, with	on average 30 %, 1	VA01077	85.0	105.0	20.0	n/a	95 50	n/a	19	n/a	n/a	163	
		to 5 %, average 3 %,	2 to 3 mm epidote	grains. There is	VA01731	119.8	125.0	1.0	2	68	1/a <5	92	1 1	14	2000	
		fracture controlled	chloritization. Th	ere is minor	e de la											
		shearing from 96.6 t quartz and calcite v	o 99.5 and from 115 eins and 30 to 40 c	.8 to 118.5 with m dark brown												
		siliceous sediment a fracture controlled	t end. There are nu guartz - calcite -	merous minor chlorite - biotite												
		veinlets with minor	pink calcite at 106	.8. From 119.8 to												
		silicified flow.	atsseminated bytic	e in uark												
		Alteration :. 84.6 126.6 MODERATE	FRACTURE CONTROLLED	CHLORITIZATION.												
		96.6 99.5 WEAK FRACT 115.8 118.5 WEAK FRA	URE CONTROLLED CARB CTURE CONTROLLED CA	ONATIZATION. RBONATIZATION.												
		121.3 123.0 WEAK FRA	CTURE CONTROLLED CA	REGNATIZATION.												
		Foliations :.														
		103.5 : 61 degrees to	o core axis.													
		108.0 : 68 degrees t 117.8 : 61 degrees t	o core axis. o core axis.													
		Lower contact : 49 d	egrees to core axis	•												
126 6	122 6	TYPEDUEDINE MUREC U	THU NINOD CUPDEN CP	DT V ENDO												
120.0	152.0	Andesitic crystal tu 126.6 126.7 Green ch	ffs, lapilli tuffs ert with bedding at	and cherty sediments 75 degrees to core	VA01079	127.0	137.0	10.0	n/a	268	n/a	35	n/a	n/a	634	
	-	axis. 126.7 127.2 Thermal	biotite coloured an	desitic ash tuff												
		with bed to core	ding (?) and foliat axis.	ion at 56 degrees	•											
		127.2 127.3 Green an	d white cherts with	bedding at 55												
		127.3 127.5 Andesiti	c brown crystal tuf	f with 10 %, 1 mm,												
		Ieldspar 127.5 128.5 Brown an fining d	s and 3 to 5 %, 1 m desitic lapilli tuf ownhole.	m, quartz eyes. f with strong												
		128.5 131.8 Green tu	ff with 15 %, 1 to	4 cm, epidote - (2
		131.8 132.6 Dark gre	y cherty sediments	with moderate												*
		fracture at 50 de	controlled carbona grees to core axis.	tization. Bedding												
																4
132.6	139.4	MAFIC LAPILLI TUFF Fine-grained light t	o medium green mafi	c, lapilli tuff				· ·								

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J	PROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-49	o: P	age Numb 6	er				
From (m)	n To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppl	Ba (ppm)	
		(?). There is on average 5 % mafic and 5 % epidote crystals with local carbonate, epidote and quartz lapilli, up to 2 %, up to 1 cm. There is fracture controlled quartz - calcite - chlorite veins and veinlets.												
139.4	160.7	INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Brown to green andesitic tuff with chert and argillite beds. Tuff hosts up to 25 % crystals, up to 1 mm, feldspar and quartz. There is weak fracture controlled blue chloritization. Minor fracture controlled quartz - biotite veins occur. Brown to black argillite beds with 1 % fracture controlled pyrite occur from 139.5 to 140.5, 141.1 to 142.2 152.9 to 154.6 and 158.3 to 160.2. There are minor green and white 1 to 2 cm chert beds in the argillite and tuff. Structure :. Bedding :. 140.2 : 59 degrees to core axis. 144.6 : 61 degrees to core axis. 153.0 : 63 degrees to core axis. 158.6 : 70 degrees to core axis. 158.6 : 70 degrees to core axis.	VA01732 VA01080 VA01733 VA01734 VA01735 VA01736 VA01737	139.5 140.2 141.1 152.9 153.9 158.3 159.2	140.5 160.2 142.2 153.9 154.6 159.2 160.2	1.0 20.0 1.1 1.0 .7 9 1.0	1 n/a 1 1 1 1	175 177 148 116 135 157 134	(5 n/a (5 (5 (5 7	72 59 54 52 83 104 63	1 n/a 1 1 1 1	<5 n/a <5 <5 25 12	800 622 1000 760 820 1100 2000	
		147.2 : 66 degrees to core axis. 150.3 : 70 degrees to core axis. 157.3 : 68 degrees to core axis.												
160.7	167.6	FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF Light green mafic tuff with 5 to 10 %, 1 mm, feldspar to epidotized feldspar crystals with minor chert clasts and epidotized lapilli. There are numerous minor fracture controlled guartz - red biotite veinlets. There is a 9 cm	VA01081	161.0	167.0	6.0	n/a	150	n/a	54	n/a	n/a	312	
		clast of hornblende bearing mafic flow at 162.1 near a brecciated chert bed. There is a 2 mm speck of chalcopyrite in a quartz - calcite vein at 163.6 m. Foliations :. 161.4 : 69 degrees to core axis. 163.1 : 72 degrees to core axis. 166.0 : 85 degrees to core axis.												
		160.7 167.6 WEAK FRACTURE CONTROLLED CHLORITIZATION.												
167.6	177.5	 MAFIC TO INTERHEDIATE TUFFACEOUS SEDIMENTS 167.6 168.6 Green, white and brown cherts with bedding at 63 degrees to core axis and 1 to 2 % fracture controlled pyrite with approximately 30 % mafic thermal biotite coloured tuffs. 168.6 169.6 Thermal biotite coloured tuff with very fine-grained crystals, minor cherts and 	VA01738 VA01739 VA01740 VA01741 VA01742 VA01743	167.6 168.6 169.6 170.5 171.4 173.0	168.6 169.6 170.5 171.4 173.0 174.5	1.0 1.0 .9 .9 1.6 1.5	2 1 2 2 1 1	101 77 32 26 90 18	7 12 <5 7 5 10	63 71 88 58 42 39	1 (1 (1 (1 (1 (1	15 <5 <5 <5 <5	2300 810 3200 2400 1400 1400	

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-49 7 DIAMOND DRILL LOG From To Sample From To Width Total РЪ Cu 7 n 3.11 Ba λđ (m) (m) -----DESCRIPTION------No. (m) (m.) (m) Sulphides (ppm) (ppb) (ppm) (ppm) (ppm) (ppm) fracture controlled pyrite, up to 1 %. VA01744 174.5 176.0 1.5 30 <5 1500 1 11 54 ₹1 169.6 171.4 Dark brown contorted tuff with augens of VA01745 176.0 177.6 1.6 1 108 10 43 (1 <5 1300 guartz, minor calcite and a 8 mm red - brown garnet at 170.0. There is approximately 1 to 2 % fracture controlled and fine-grained disseminated pyrite. Up to Foliation trend is at 69 degrees to core axis. 171.4 177.5 Intercalated brown cherty argillites, green and white cherts and mafic to andesitic green to brown tuffs. There is minor epidotization and local fracture controlled calcite veinlets. Trace fracture controlled pyrite occurs in the sediments. There is trace chalcopyrite in strong fracture controlled carbonatization at 177.3. Bedding is at 52 degrees to core axis at 172.0 m, and 63

198.8 202.2 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Brown andesitic tuffs with 20 to 30 %, < 1 mm, feldspars and trace to 2 %, < 1 mm, quartz eyes. There is red, brown, green and white cherts and cherty argillites. Minor quartz veins occur. Sediments constitute 40 % of the interval with 2 to 3 % fracture controlled pyrite or 1 to 1.5 % pyrite for the interval. Bedding :. 199.9 : 50 degrees to core axis. 200.7 : 60 degrees to core axis. 200.9 : 64 degrees to core axis.

177.5 198.8 FELDSPAR PORPHYRITIC GABBRO

degrees to core axis.

degrees to core axis at 176.0. Foliation is variable from 55 to 80 degrees to core axis.

Fine-grained medium green plagiophyric gabbro dyke, with 3 to 20 %, average 10 %, 2 to 4 mm, feldspar grains. From 190.9 to 192.1 there is strong shearing with strong carbonatization and hematite. Shearing is at 84 degrees to core axis. There are minor fracture controlled quartz, epidote and carbonate veinlets at orientations of 0 to 90

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201.2 : 58 degrees to core axis. Lower contact : 44 degrees to core axis.

202.2 203.4 FELDSPAR PORPHYRITIC GABBRO Fine-grained gabbro with 15 %, 1 to 4 mm, feldspars and 5 % fracture controlled quartz - calcite - chlorite veinlets.

203.4 205.5 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-49 8 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn Ag Au Ba (m) (m) -----DESCRIPTION-----No. (m) Sulphides (ppm) (ppb) (ppm) (m) (m) (ppm) (ppm) (ppm) Brown to green andesitic tuff with 30 to 40 %, < 1 mm, and VA01746 204.5 205.5 1.0 1 78 13 59 <1 < 5 80 approximately 10 to 20 % light grey, green or white cherts with minor fracture controlled pyrite. Bedding at 204.9 is at 66 degrees to core axis and at 205.34 is at 61 degrees to core axis. Foliation is variable from 70 to 80 degrees to core axis. 205.5 209.1 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION VA01082 205.5 209.1 3.6 Fine-grained medium green rock with strong quartz veins 199 n/a 37 n/a n/a 249 n/a from 205.9 to 206.2. Is probably a mafic sill. Hosts 20 to 25 %, 1 to 2 mm, average up to 1 mm, mafic crystals, (?) hornblendes. There is strong local pervasive carbonatization and minor fracture controlled guartz calcite - biotite veinlets. Trace to nil disseminated pyrite occurs. Alteration :. 205.5 209.1 STRONG PERVASIVE CARBONATIZATION. Foliations :. 208.5 : 56 degrees to core axis. 209.1 218.1 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS n/a n/a 1470 Grey - brown to grey to dark brown tuff with on average 20 VA01083 210.0 218.0 8.0 n/a 165 45 n/a to 25 % crystals, variable from 5 to 1 feldspar to quartz to 3 to 1 guartz to feldspar, crystals are from < 1 to 3 mm. There are green to black chert and cherty argillite beds. Matrix is chloritic with strong thermal biotite from 217.5 to 218.1. There is 1 % fracture controlled pyrite in the sediments. There are minor fracture controlled guartz veinlets. Sediments are less than 5 % of total interval. Bedding :. 210.8 : 53 degrees to core axis. 211.2 : 54 degrees to core axis. 212.4 : 63 degrees to core axis. 215.2 : 62 degrees to core axis. 217.9 : 60 degrees to core axis. Foliations :. 214.5 : 62 degrees to core axis. 215.5 : 52 degrees to core axis. 218.1 220.2 BLACK ARGILLITE Black argillite with minor clasts of INTERMEDIATE TUFFS VA01747 218.1 219.2 74 15 89 <1 <5 2700 1.1 WITH MINOR CHERTY SEDIMENTS to 218.6. There is 3 to 5 % VA01748 219.2 220.2 1.0 38 26 70 $\langle 1 \rangle$ (5 4200 pyrite parallel to bedding and fracture controlled. There are numerous < 1 mm fracture controlled quartz veinlets, most are perpendicular to bedding. Bedding is at 71 to 74 degrees to core axis locally. Beds are on average 3 to 5 mm thick. Tops is downhole.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-49 9 DIAMOND DRILL LOG From To Sample From Width To Total Cu Pb Zn Ag Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 220.2 220.8 FELDSPAR PORPHYRITIC GABBRO Fine-grained medium green gabbro with approximately 10 %, 3 mm, feldspars and minor fracture controlled calcite veinlets. 220.8 250.6 BLACK ARGILLITE Blocky, highly fractured core from 235 to lower contact. VA01749 220.8 222.0 1.2 3 54 28 89 <1 <5 3400 Contains minor chert beds, but is greater than 90 % VA01750 222.0 223.0 1.0 3 30 25 82 <1 (5 4800 argillite. There is numerous fracture controlled quartz VA01751 223.0 224.0 1.0 3 47 25 98 <1 <5 5500 and calcite veinlets, up to 5 % of the argillite. There is VA01752 224.0 225.0 40 28 1.0 3 92 <1 < 5 6200 2 to 3 % fine-grained fracture controlled pyrite in the VA01753 225.0 226.0 1.0 3 21 29 80 <1 <5 4300 argillite. There is fault gouge from 243.4 to 244.4 at 63 VA01754 226.0 227.0 30 75 1.0 3 19 <1 <5 3100 degrees to core axis. Is much harder than Nanaimo VA01755 227.0 228.0 18 25 69 <1 1.0 3 <5 2500 argillite with good bedding. VA01756 228.0 229.0 1.0 3 19 22 71 (1 <5 3100 VA01757 229.0 230.0 Lost core :. 1.0 3 23 28 88 <1 <5 2700 236.8 238.0 0.1 m. VA01758 230.0 232.0 2.0 3 28 29 77 <1 43 2700 232.0 234.0 238.0 239.9 0.6 m. 23 65 <1 2.0 3 29 6 3600 239.9 240.8 0.3 m. VA01760 234.0 235.0 (5 4000 1.0 3 21 25 59 <1 240.8 243.2 0.2 m. VA01761 236.0 238.0 2.0 3 28 30 86 <1 6 2800 243.2 244.4 0.3 m. VA01762 238.0 240.0 3 25 31 66 (1 11 2200 2.0 245.1 247.2 0.3 m. VA01763 240.0 242.0 22 72 (5 2600 2.0 3 31 <1 Bedding :. VA01764 242.0 244.0 2.0 3 16 29 58 (1 25 2400 221.0 : 73 degrees to core axis. VA01765 244.0 246.0 3 20 29 56 <1 <5 2300 2.0 224.0 : 62 degrees to core axis. VA01766 246.0 248.0 2.0 3 24 30 68 (1 <5 2600 226.5 : 72 degrees to core axis. VA01767 248.0 249.6 27 43 (5 3200 1.6 3 9 $\langle 1 \rangle$ 29 27 40 72 236.1 : 70 degrees to core axis. VA01768 249.6 250.6 18 (1 <5 2900 1.0 3 28 241.9 : 50 degrees to core axis. Alteration :. <5 33 55 30.9 220.8 250.6 STRONG FRACTURE CONTROLLED CARBONATIZATION. 220.8 250.6 MODERATE FRACTURE CONTROLLED SILICIFICATION.

250.6 252.1 TUFFACEOUS CONGLOMERATE

Felsic tuff with 15 to 20 %, 2 to 3 mm, quartz and feldspar grains and 5 %, 1 to 5 mm, argillite lapilli and 10 to 15 %, 5 to 20 cm, argillite angular blocks. There is minor fracture controlled calcite veinlets. Bedding is at 40 degrees to core axis and the foliation is at 65 to 70 degrees to core axis.

End of hole : 827 feet (252.1 m) on Wednesday May 4, 1988 at 9:15 a.m.

Total lost core: 5.4 m % Recovery = 97.9 %.

SAMPLE NUMBER	FROM	то	ZS 102	XAL203	ZCAO	XHGO	ZNA20	XK 20	ZFE203	XI 102	ZP 205	ZMNO	XLO I	SUM	BA	AI	NACA
								·									
VA00630	23.10	23.20	73.30	14.40	2.43	2.34	2.25	1.33	1.28	0.32	0.10	0.01	1.92	99.68	1120.	44.	5.
VA00631	33.40	33.50	71.00	15.00	2.11	1.52	1.69	3.08	1.48	0.33	0.08	0.02	3.08	99.39	2200.	55,	4.
VA00632	71.00	71.10	45.50	8.41	14.10	12.90	0.83	0.21	12.80	0.62	0.11	0.23	4.08	99.79	122.	47.	15.
VA00633	79.30	79.40	50.00	17.20	7.52	7.40	3.97	0.60	9.02	0.71	0.13	0.18	2.47	99.20	503.	41.	11.
VA00634	93.50	93.60	49.80	14.00	11.60	8.77	2.41	0.25	10.10	0.56	0.13	0.16	2.47	100.25	163.	39.	14.
VA00635	108.10	108.20	50.10	13.20	11.30	9.38	2.53	0.16	10.20	0.55	0.13	0.18	2.23	99.96	65.	41.	14.
VA00636	126.30	126.40	43.00	14.60	18.60	6.43	0.97	0.25	10.10	0.51	0.13	0.13	5.39	100.11	161.	25.	20.
VA00637	138.90	139.00	48.20	13.30	9.65	10.10	2.69	0.43	10.90	0.70	0.18	0.20	3.08	99.43	201.	46.	12.
VA00638	163.10	163.20	48.20	16.40	8.59	7.99	3.10	0.57	11.80	0.84	0.18	0.19	2.47	100.33	404.	42.	12.
VA00639	207.10	207.20	48.50	14.80	10.10	7.93	3.35	0.20	9.94	0.60	0.14	0.16	4.08	99.80	264.	38.	13.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

Hole No. CH88-49 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	то	XS 102	ZAL203	XCAO	ZMGO	2NA20	2K20	ZFE203	21102	ZP205	ZHNO	XLO I	SUM	 ва	AI	NACA
+															 		
VA01073	5.20	21.00	63.50	16.40	5.43	1.82	1.39	1.51	2.78	0.34			5.23	98.40	1360.	33.	7.
VA01074	21.00	33.00	70.40	15.70	2.39	2.49	2.17	2,11	1.60	0.37			2.70	99.93	1600.	50.	5.
VA01075	43.00	46.00	71.20	14.20	2.32	1.06	2.47	2.19	2.46	0.34			2.00	98.24	1530.	40.	5.
VA01076	68.00	84.00	44.40	17.30	14.30	5.76	2.12	0.62	10.60	0.62			3.77	99.49	451.	28.	16.
VA01077	85.00	105.00	49.20	13.80	11.10	8.60	2.68	0.30	9.84	0.56			2.62	98.70	163.	39.	14.
VA01078	105.00	125.00	45.70	14.00	10.20	8.32	2.71	0.41	10.00	0.58			7.16	99.08	257.	40.	13.
VA01079	127.00	137.00	46.00	15.00	10.80	7.75	2.38	1.09	10.50	0.81	1. S. S.		3.47	97.80	634.	40.	13.
VA01080	140.20	160.20	49.70	16.60	5.98	6.91	4.00	1.58	9.74	0.79			3.08	98.38	622.	46.	10.
VA01081	161.00	167.00	47.10	16.20	9.68	7.33	3.07	0.40	11.00	0.80			2.85	98.43	312.	38.	13.
28010AV	205.50	209.10	- 51.30	14.90	7.52	7.64	4.53	0.17	9.43	0.61			3.00	99.00	249.	39.	12.
VA01083	210.00	218.00	48.40	16.50	5.68	8.15	3.73	0.98	10.00	0.77			5.23	99.44	1470.	49.	9.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-49 ALTERED SAMPLES

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CD (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
VA01696	5.20	7.00	1200.0	31.0	31.0	<0.5	93.0	7.0	2.0	6.0	28.0	3.0	2.0	188.0	50.	5.	3.
VA01697	7.00	8.20	1000.0	61.0	17.0	0.6	104.0	10.0	<1.0	5.0	30.0	2.0	.5.0	132.0	78.	5.	3.
VA01698	8.20	9.00	1500.0	27.0	12.0	<0.5	149.0	5.0	<1.0	<5.0	13.0	2.0	4.0	110.0	69.	5.	3.
VA01699	9.00	10.50	1100.0	17.0	8.0	0.6	102.0	6.0	<1.0	5.0	18.0	2.0	4.0	72.0	68.	5.	2.
VA01700	10.50	12.00	750.0	22.0	13.0	<0.5	41.0	5.0	<1.0	<5.0	9.0	2.0	2.0	79.0	63.	2.	2.
VA01702	12.00	13.00	1200.0	23.0	12.0	<0.5	42.0	5.0	<1.0	7.0	12.0	<1.0	3.0	73.0	66.	2.	2.
VA01701	13.00	14.00	1500.0	22.0	8.0	<0.5	111.0	6.0	2.0	6.0	12.0	2.0	4.0	62.0	73.	2.	2.
VA01703	14.00	15.00	2100.0	108.0	14.0	<0.5	60.0	8.0	2.0	9.0	10.0	3.0	3.0	54.0	89.	2.	3.
VA01704	15.00	16.00	2300.0	254.0	44.0	0.9	119.0	10.0	4.0	14.0	24.0	4.0	7.0	43.0	85.	2.	8.
VA01705	16.00	17.20	760.0	43.0	17.0	0.5	176.0	9.0	5.0	<5.0	15.0	2.0	3.0	196.0	72.	5.	4.
VA01706	17.20	20.20	1500.0	49.0	17.0	<0.5	224.0	9.0	4.0	8.0	13.0	2.0	4.0	62.0	74.	4.	з.
VA01707	20.20	21.20	1900.0	17.0	38.0	<0.5	147.0	5.0	<1.0	10.0	<5.0	2.0	6.0	167.0	31.	4.	3.
VA01708	21.20	22.70	1400.0	36.0	20.0	<0.5	51.0	3.0	<1.0	6.0	20.0	<1.0	3.0	86.0	64.	1.	1.
VA01709	30.00	32.00	2200.0	37.0	12.0	<0.5	77.0	5.0	<1.0	<5.0	30.0	2.0	4.0	78.0	76.	2.	3.
VA01710	42.80	43.80	1500.0	188.0	19.0	0.7	293.0	10.0	3.0	9.0	<5.0	1.0	4.0	103.0	91.	2.	2.
VA01711	43.80	44.80	1800.0	176.0	32.0	0.8	69.0	7.0	2.0	14.0	16.0	3.0	4.0	80.0	85.	2.	2.
VA01712	44.80	45.80	850.0	173.0	38.0	0.7	22.0	17.0	12.0	14.0	20.0	2.0	3.0	261.0	82.	2.	3.
VA01713	45.80	46.70	6500.0	1361.0	10000.0	4.9	445.0	13.0	11.0	34.0	17.0	57.0	9.0	97.0	12.	2.	2.
VA01714	52.20	53.10	2500.0	721.0	1321.0	2.0	145.0	11.0	11.0	21.0	12.0	11.0	5.0	146.0	35.	1.	3.
VA01715	53.10	54.10	3600.0	367.0	535.0	1.7	288.0	17.0	3.0	94.0	29.0	6.0	2.0	415.0	41.	3.	4.
VA01716	54.10	55.10	2300.0	203.0	106.0	1.0	29.0	22.0	4.0	10.0	11.0	3.0	<1.0	595.0	66.	3.	5.
VA01717	55.10	56.30	3800.0	4800.0	1604.0	28.0	634.0	25.0	10.0	5600.0	35.0	11.0	2.0	529.0	75.	3.	5.
VA01718	56.30	56.60	7100.0	15600. 1	98500.0	73.7	1954.2	9.0	57.0	13800.0	368.0	1161.0	225.0	609.0	7.	51.	>10.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor elements)

Hole No. CH88-49

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Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (gpm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	НН (ррж)	CUZN	ETS
											010 A	143.0	32.0	150.0	46.	27
4401719	56.60	57.00	10000.0 1	9200.0 22	2500.0	83.7	3051.4	26.0	72.0	12000.0	310.0	246.0	31.0	213.0	24.	27
	57 00	57.40	7200.0 1	4300.0 46	5000.0	145.7	6068.4	15.0	37.0	23600.0	531.0	246.0		277 0	39.	3:
VA01720	57 40	57 80	26000.0	3900.0 3	8000.0	79.5	1885.7	7.0	31.0	6300.0	186.0	271.0	40.0	2//	16	5
VA01721	97 .4 V	J7.00		00400 10	5500.0	68.2	1062.8	4.0	28.0	2099.0	78.0	608.0	40.0	170.0	10.	5
VA01722	57.80	58.20	32000.0		7700 0	119.3	2571.4	3.0	38.0	1763.0	132.0	125.0	41.0	149.0	73.	
VA01723	58.20	58.60	29000.0	4/500.0 1		125 0	960.0	3.0	36.0	346.0	98.0	166.0	44.0	92.0	71.	. 5
VA01724	58,60	59.00	25000.0	64000.0 2	6000.0	133.0			15.0	156.0	83.0	27.0	23.0	60.0	75.	
VA01725	59.00	59.70	30000.0	14900.0	4900.0	46.5	688.V		10.0	874.0	71.0	56.0	20.0	53.0	54.	1
VA01726	59.70	60.10	19000.0	14300.0 1	2200.0	35.7	1714.3	10.0	10.0	052.0	84-0	66.0	24.0	76.0	53.	
VA01727	60.10	60.80	20000.0	13600.0	12200.0	35.0	1645.7	13.0	14.0	752.0		19 0	8.0	40.0	90.	
11401729	60-80	61.20	17000.0	16000.0	1800.0	32.9	335.0	26.0	6.0	250.0	136.0	10.0		31.0	50.	
VH01/20	() 20	62.00	11000.0	1200.0	1200.0	8.1	266.0	8.0	2.0	93.0	139.0	10.0	1.V	20.0	77.	
VA01729	61.30		11000 0	2400.0	700.0	12.3	540.0	7.0	3.0	524.0	86.0	5.0	4.0	36.0	42	
VA01730	62.00	63.0V	11000.0		92.0	0.7	14.0	23.0	3.0	, <5.0	23.0	3.0	<1.0	1376.0	43.	
VA01731	119.80	120.80	2000.0	68.0	92.0	•••·	(5.0	29.0	32.0	0 <5.0	22.0	5.0	1.0	1193.0	71.	
VA01732	139.50	140.50	800.0	175.0	72.0	0.8		25.0	53.0	0 <5.0	8.0	4.0	<1.0	1006.0	73.	
VA01733	141.10	142.20	1000.0	148.0	54.0	0.7	(3.0	23.0		- ^ /5 0	<5.0	5.0	1.0	896.0	69.	
VA01734	152.90	153.90	760.0	116.0	52.0	0.7	<5.0	23.0	27.		/5.0	5.0	1.0	1167.0	62.	•
VA01735	153.90	154.60	820.0) 135.0	83.0	0.8	<5.0	27.0	29.	0 (2.0		4.0	1.0	773.0	60.	
11403726	158.30	159.20	1100.0	157.0	104.0	0.6	25.0	26.0	19.	.0 <5.0) 31.0			1034-0	68	
VH01730	100100	160.20	2000	0 134.0	63.0	0.3	7 12.0	26.0	37.	.0 7.0	0 8.0	5.0	2.0	592.0	62	•
VA01737	159.20	100.20	2200	0 101-0	63.0	0.1	6 15.0	20.0	41	.0 7.	0 21.0) 4_0	2.0) <u> </u>	57	
VA01738	167.60) 168.60	2300.		71.0	<0.	5 <5.0	26.0	51	.0 12.	0 8.0	> 2.0	6.0) 463.0	<u>م</u> ل	
VA0173	168.60	169.60	810.	0 //.0			5 /5 0	33.0) 146	.0 <5.	0 (5.	0 2.0) . 8.	1235.0	27	•
VA0174	0 169.6	0 170.50	3200.	0 32.0) 88.0	,			5 A9	.0 7.	0 <5-	0 2.0) 6.	0 709.0	31	i.
VA0174	1 170.5	0 171.40	2400.	0 26.0	58.0	o <0.	5 (5.0	, 2/.0	, .,							

Hole No. CH88-49

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AÜ (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	M0 (ppm)	MN (ppm)	CUZN	ETS	FE
VA01742	171.40	173.00	1400.0	90.0	42.0	<0.5	<5.0	29.0	56.0	5.0	<5.0	2.0	4.0	511.0	68.	1.	
VA01743	173.00	174.50	1400.0	18.0	39.0	<0.5	<5.0	25.0	69.0	10.0	<5.0	2.0	4.0	837.0	32.	1.	3.
VA01744	174.50	176.00	1500.0	30.0	54.0	<0.5	<5.0	32.0	84.0	11.0	8.0	2.0	5.0	921.0	36.	1.	4.
VA01745	176.00	177.60	1300.0	108.0	43.0	<0.5	<5.0	34.0	73.0	10.0	10.0	2.0	4.0	547.0	72.	1.	4.
VA01746	204.50	205.50	80.0	78.0	59.0	<0.5	<5.0	26.0	51.0	13.0	<5.0	2.0	3.0	528.0	57.	1.	4.
VA01747	218.10	219.20	2700.0	74.0	89.0	<0.5	<5.0	24.0	54.0	15.0	14.0	2.0	6.0	772.0	45.	4.	5.
VA01748	219.20	220.20	4200.0	38.0	70.0	<0.5	<5.0	11.0	23.0	26.0	13.0	<1.0	1.0	342.0	35.	4.	з.
VA01749	220.80	222.00	3400.0	54.0	89.0	<0.5	<5.0	12.0	28.0	28.0	13.0	1.0	2.0	358.0	38.	3.	3.
VA01750	222.00	223.00	4800.0	30.0	82.0	<0.5	<5.0	7.0	16.0	25.0	10.0	<1.0	2.0	327.0	27.	3.	3.
VA01751	223.00	224.00	5500.0	47.0	98.0	<0.5	<5.0	9.0	30.0	25.0	14.0	<1.0	1.0	368.0	32.	3.	3.
VA01752	224.00	225.00	6200.0	40.0	92.0	<0.5	<5.0	7.0	29.0	28.0	13.0	<1.0	1.0	418.0	30.	3.	з.
VA01753	225.00	226.00	4300.0	21.0	80.0	<0.5	<5.0	3.0	14.0	29.0	8.0	<1.0	2.0	348.0	21.	3.	2.
VA01754	226.00	227.00	3100.0	19.0	75.0	<0.5	<5.0	3.0	18.0	30.0	11.0	<1.0	4.0	558.0	20.	3.	2.
VA01755	227.00	228.00	2500.0	18.0	69.0	<0.5	<5.0	4.0	12.0	25.0	8.0	<1.0	<1.0	557.0	21.	3.	Э.
VA01756	228.00	229.00	3100.0	19.0	71.0	<0.5	<5.0	6.0	13.0	22.0	<5.0	<1.0	<1.0	614.0	21.	3.	3.
VA01757	229.00	230.00	2700.0	23.0	88.0	<0.5	<5.0	3.0	19.0	28.0	11.0	<1.0	5.0	554.0	21.	3.	2
VA01758	230.00	232.00	2700.0	28.0	77.0	<0.5	43.0	3.0	35.0	29.0	17.0	<1.0	2.0	399.0	27.	3.	. З,
VA01759	232.00	234.00	3600.0	23.0	65.0	<0.5	6.0	2.0	16.0	29.0	5.0	<1.0	<1.0	408.0	26.	3.	2
VA01760	234.00	235.00	4000.0	21.0	59.0	<0.5	<5.0	2.0	10.0	25.0	<5.0	<1.0	<1.0	353.0	26.	3.	2
VA01761	236.00	238.00	2800.0	28.0	86.0	<0.5	6.0	2.0	23.0	30.0	6.0	<1.0	<1.0	451.0	25.	з.	2
VA01762	238.00	240.00	2200.0	25.0	66.0	<0.5	11.0	4.0	19.0	31.0	10.0	<1.0	<1.0	399.0	27.	3.	2
VA01763	240.00	242.00	2600.0	22.0	72.0	<0.5	<5.0	2.0	21.0	31.0	6.0	<1.0	<1.0	294.0	23.	3.	2
VA01764	242.00	244.00	2400.0	16.0	58.0	<0.5	25.0	2.0	11.0	29.0	13.0	<1.0	<1.0	493.0	22.	3.	2

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-49

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SAMPLE NUMBER	FROM	TO	. ВА (ррв)	CU (ppm)	ZN (ppm)	AG (ppe)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	- MQ (ppm)	MN (ppm)	CUZN	ETS	FE
VA01765	244.00	246.00	2300.0	20.0	56.0	<0.5	<5.0	3.0	14.0	29.0	17.0	<1.0	<1.0	282.0	26.	3.	2.
VA01766	246.00	248.00	2600.0	24.0	68.0	<0.5	<5.0	3.0	26.0	30.0	16.0	(1.0	1.0	403.0	26.	3.	2.
VA01767	248.00	249.60	3200.0	9.0	43.0	<0.5	<5.0	2.0	11.0	27.0	<5.0	<1.0	<1.0	603.0	17.	3.	2.
VA01768	249.60	250.60	2900.0	18.0	40.0	<0.5	<5.0	3.0	16.0	29.0	12.0	<1.0	<1.0	297.0	31.	3.	2.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-49

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Summary Log: DDH CH88-50 Location: 30+00 E, 0+95 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: May 6, 1988 Core logged by: J. Pattison 0.0 -12.7 Casing. 12.7 -39.1 Chloritic felsic ash and crystal tuffs 39.1 -42.7 Gabbro 42.7 -43.9 Nanaimo Formation argillite 43.9 -50.0 Weakly chloritized felsic tuff 50.0 -95.4 Nanaimo Formation argillite, greywacke and conglomerate 95.4 - 104.0 Chloritic felsic ash tuff 104.0 - 129.0 Chloritic felsic lapilli tuff 129.0 - 139.7 Chloritic felsic quartz eye tuff 139.7 - 147.0 Weakly chloritized felsic tuff 147.0 - 194.4Felsic lapilli tuff 10 % pyrite over 6.0 m. Pyrite is heavily disseminated in the matrix of the coarsest portion of the tuff where angular felsic fragments up to 1.5 cm wide and over 7.0 cm long occur. 194.4 - 200.5 Felsic feldspar crystal tuff 200.5 - 218.3 Felsic lapilli tuff 218.3 - 223.4Gabbro 223.4 - 234.8 Felsic lapilli tuff 7 % sphalerite, 5 % pyrite and 1.5 % chalcopyrite over 2.4 m. Sulphides are disseminated in a quartz crystal-rich matrix. The sphalerite is red-brown, finely dissminated along foliation planes and is difficult to distinguish from biotite which also occurs throughout the interval. 234.8 - 259.0 Gabbro 259.0 - 280.7Massive mafic flows or gabbro 280.7 - 286.3 Mafic to intermediate tuffaceous sediments 286.3 - 300.5 Massive mafic flow

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PR	OPERTY: Chemainus	s JV	FALCONBRIDGE LIMIT	ED				HOLE N CH88-50	o: P	age Numb 1	er			
Но	le Location: 304	+00 E 0+95 S	DIAMOND DRILL LOG											
NT Az	'S: 92B13 imuth: 210	UTM: 5416854.9 N 430278 Elevation: 533 m	1.4 E			Cla: Sec	im No. C tion No.	hip 1 : 30+00 E						
Di St	p: -50	Length: 300.5 m				Logo Dri	ged By: Lling Co	J. Pattison .: Burwash	n Enter	prises				
Co	mpleted: 6-May-88	B				A330	iyeu by.	BOlldat - ¢1	egg oc.	~~~				
Pu	rpose:		DIP T	ESTS		Core	e 51ze:							
		Leng	Azi- th muth Dip	Length	Azi- muth	Dip								
		20. 123.	10 211.0 -50.0 70 213.0 -48.5	216.70	214.0 -	46.0								
From (m)	To (m)	DESCRIP	TION	Sample No.	e From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm
.0	12.7 OVERBURDEN													
12.7	17.1 WEAKLY CHLC Medium to 1 foliated fe to 3 mm or	DRITIC FELSIC TUFF light green moderately t elsic ash tuff with an lapilli-sized felsic fr	o weakly chloritic, we occasional quartz eye u agment.	11 VA02824 up VA03656 VA03655 VA03655	1 12.7 14.1 15.1 16.1	29.3 15.1 16.1 17.1	16.6 1.0 1.0 1.0	n/a 2 2 2	121 72 12 17	n/a 16 45 47	32 204 47 32	n/a <1 <1 <1	n/a <5 <5 <5 1	661 480 970 100
	STRUCTURE:. Foliation i At 15.0 m b	s kinked over most of t bedding is at 70 degrees	he interval. to core axis.											
	ALTERATION: 12.7 17.1 M	ODERATE PERVASIVE CHLOR	ITIZATION.											
	SULPHIDES:. 15.1-17.1 m and in <2 m	a 2 % pyrite and trace s mm bands parallel to fol	phalerite disseminated iation.											
17.1	29.3 CHLORITIC F 2-10 %, 1-3 foliated, m matrix. Lo fragments.	ELSIC FELDSPAR CRYSTAL mm epidotized feldspar oderately chloritic fe bcally up to 5 % grey, p 5 % 2-4 mm white quart	TUFF crystals in a well lsic to intermediate oorly defined felsic z eyes. Trace	VA0365:	17.1	18.1	1.0	1	30	41	45	(1	<5 1	.000
	disseminate degrees to	a pyrite. Lower Contac Core axis.	U IS A MAJOR TAULT AT 4	4U										
	STRUCTURE:. Rock has a 18.8-18.9 M	crushed appearance over strongly chloritic fau	the entire interval. It breccia at 40 degree	es										

From

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

To Sample From To Width T (m) -----DESCRIPTION----- DESCRIPTION----- No. (m) (m) Sul 23.2-23.6 M FAULT ZONE at 10 degrees to core axis. 0.3 m of lost core. At 26.1 m 3.0 cm fault gouge at 60 degrees to core axis.

27.2 27.7 M FAULT ZONE at 70 degrees to core axis. 28.0-29.3 M FAULT ZONE at 40 degrees to core axis. 0.9 m of lost core.

ALTERATION: .

17.1 29.3 MODERATE PERVASIVE CHLORITIZATION.

29.3 31.6 MAFIC INTRUSIVE

Dark green, fine-grained with trace to 1 % finely disseminated ilmenite. Crushed over the entire interval. Lower contact is a fault gouge at 70 degrees to core axis.

STRUCTURE:.

Entire interval is part of a FAULT ZONE at 40-70 degrees to core axis. No lost core although there are fault gouges up to 0.5 m long.

ALTERATION: .

29.3 31.6 Weak fracture controlled hematization.

31.6 39.1 FELSIC TUFF

Crushed, light grey, moderately sericitic ash tuff. Lower contact is very irregular and intrusive in appearance.

STRUCTURE:.

32.3 33.0 M FAULT ZONE at 40 degrees to core axis. Core is broken and blocky. 0.3 m of lost core. At 34.4 m.1 m fault gouge at 60 degrees to core axis. Strongly microfractured for 0.2 m from the lower contact. Microfractures are filled with quartz + carbonate. 37.4-37.7 M fault zone at 70 degrees to core axis. 0.2 m of lost core.

ALTERATION:.

31.6 39.1 MODERATE PERVASIVE SERICITIZATION.

SULPHIDES:.

31.6-39.1 m 2 % fracture controlled pyrite. In most cases pyrite is crushed and is almost black. Trace chalcopyrite at 31.9 m.

39.1 42.7 MAFIC INTRUSIVE

As 29.3 to 31.6 m. Lower contact is sharp and appears to be an unconformity at 50 degrees to core axis. The contact is offset 1.5 cm by a microfault at 30 degrees to

VA02825	31.6	39.1	7.5	n/a	18	n/a	14	n/a	n/a	2080	
VA03654	31.6	32.6	1.0	2	124	44	28	<1	<5	2700	
VA03655	32.6	33.6	1.0	2	49	43	37	<1	< 5	2000	
VA03656	33.6	34.6	1.0	2	11	48	21	(1	<5	2300	
VA03657	34.6	35.6	1.0	2	14	51	27	<1	. (5	2700	
VA03658	35.6	36.6	1.0	2	35	28	19	<1	< 5	2600	
VA03659	36.6	37.6	1.0	2	27	28	27	(1	< 5	1900	
VA03660	37.6	38.6	1.0	2	48	24	30	<1	5	2000	
VA03661	38.6	39.1	.5	2	32	9	59	<1	<5	290	

.e From To Width Total Cu Pb Zn Ag Au Ba (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm)

HOLE No: Page Number CH88-50 2

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-50 3 DIAMOND DRILL LOG From То Sample From To Width Total Cu Pb Zn λg Au Ba (m) -----DESCRIPTION-----(m) No. (m) (m) (m) Sulphides (ppm) (mpm) (mpm) (mpm) (mqq) (mqq) core axis. STRUCTURE:. 31.2-31.4 M fault gouge at 15 degrees to core axis. 42.7 43.9 NANAIMO ARGILLITE Less than 5 % < 2 mm light grey angular fine-grained felsic clasts in a black, weakly graphitic argillite. Several rip-up greywacke clasts. Rock is crushed over the entire interval. Lower contact is a fault at 60 degrees to core axis. 43.9 50.0 WEAKLY CHLORITIC FELSIC TUFF Appears to be an ash tuff but is strongly crushed over VA02826 43.9 50.0 6.1 n/a 27 n/a 12 n/a 1980 n/a most of the interval and original textures are difficult VA03662 46.9 48.0 1.1 2 31 27 39 <1 23 1100 to recognize. Lower contact is a 0.1 m fault gouge at 30 VA03663 48.0 49.0 1.0 28 28 18 (1) (5 460 1 degrees to core axis. VA03664 49.0 50.0 1.0 1 43 17 34 (1 <5 1400 STRUCTURE. 43.9-46.9 M FAULT ZONE at 30-50 degrees to core axis. 0.4 m of lost core. At 48.8 m 5.0 cm fault gouge at 60 degrees to core axis. 48.8-49.4 M blocky, highly fractured core. 0.2 m of lost core. ALTERATION:. 43.9 46.9 MODERATE PERVASIVE SERICITIZATION. 46.9 50.0 MODERATE PERVASIVE SILICIFICATION. SULPHIDES:. 47.0 2.0 % fracture controlled pyrite. 46.9 47.5 Ripped-up argillite beds are common. 50.0 61.3 NANATMO ARGILLITE Black to dark brown weakly graphitic argillite. Up to 5 % VA03665 55.0 56.0 1.0 6 790 68 <5 100 <1 2 (2 mm felsic and occasionaly pyrite clasts < 4 mm in</pre> diameter below 55.0 m. Rock becomes coarser below 55.0 m and broken up beds and clasts of argillaceous wackes are common. Below 58.0 m clasts are up to 1.0 cm in diameter, are often sulphide rich. And comprise less than 2 % of the rock. Broken core at the lower contact. STRUCTURE:. At 50.9 m 0.5 cm fault gouge at 65 degrees to core axis. At 51.5 m 1.0 cm fault gouge at 70 degrees to core axis. 51.8-52.0 M blocky, highly fractured core. At 52.3 m foliation is at 60 degrees to core axis.

52.7-52.8 M fault zone at 70 degrees to core axis.

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(m)

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		FALCONBRIDGE LIMITED DIAMOND DRILL LOG				
From (m)	To (m)	DESCRIPTION	Sample	From	To (m)	Wid (m

CH88-50

HOLE No: Page Number

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lth Total Cn Pb Zn λα Au Sulphides (ppm) (ppm) (ppm) (ppb) (ppm) m) (ppm)

At 53.6 m 7.0 cm fault gouge at 40 degrees to core axis. 53.9-54.0 M fault gouge at 40 degrees to core axis. 52.3 888.8 0.5 cm ripped-up bed of greywacke. At 60.6 m minor fault gouge. Not possible to measure the orientation.

61.3 76.0 NANATMO GREYWACKE

Medium grev, massive greywacke with less than 5 % black mud clasts < 1.0 cm long and up to 1 % angular lithic and sulphide fragments < 4 mm in diameter. Becomes coarser and richer in guartz grains below 71.0 m (5-10 % granule-sized guartz and volcanic clasts). Grades into the next unit. The lower contact is arbitrarily placed where pebbles first appear.

STRUCTURE:.

61.1-61.7 M blocky, highly fractured core. 62.5-63.8 M blocky, highly fractured core. 65.8-66.9 M blocky, highly fractured core. At 67.0 m 1.0 cm fault gouge at 70 degrees to core axis. 67.3-68.7 M FAULT ZONE (?) at 75 degrees to core axis. Blocky, highly fractured core. 70.5-71.0 M blocky, highly fractured core. 72.1-72.9 m 1.0 cm fault gouge runs parallel to the core axis.

74.1-76.0 M FAULT ZONE. Core is broken and rubbly over the entire interval. 1.2 M of lost core. Not possible to measure the orientation of the fault but it appears to run. close to the core axis. This fault runs into the next unit

76.0 80.0 NANAIMO CONGLOMERATE

Matrix supported pebble conglomerate which coarsens downhole on a gross scale. The following clasts occur in the coarse quartz rich matrix. Cherty black argillite (5%). Light to medium green, fine-grained clasts (5%). Light grey, fine-grained felsic volcanics (5%). Light green to brown to grey cherty clasts (5%). Sulphide clasts ((1%). The lower contact is very sharp and appears to be a fault at 60 degrees to core axis.

STRUCTURE:.

76.2-76.6 M FAULT ZONE which appears to be at a very low angle to the core axis. 77.1-79.6 M FAULT ZONE. Blocky, highly fractured core. 1.0

m of lost core. Not possible to measure orientation of the fault.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-50 5

From	То	
(m)	(m)	DESCRIPTION

Width Total Sample From To Cu Pb Zn λg Au Ba (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) No. (ppb) (ppm)

80.0 83.5 NANAIMO CONGLOMERATE

As 61.3 to 76.0 m with up to 5 % angular to subrounded, granule to pebble-sized clasts of cherty sediments and felsic volcanics. Lower contact is a fault zone at 65 degrees to core axis.

STRUCTURE:.

80.4-80.8 M FAULT ZONE at 70 degrees to core axis. 0.1 m of lost core. 83.0-83.5 M FAULT ZONE at 65 degrees to core axis.

81.6 888.8 5.0 cm bed of pebble conglomerate at 60 degrees to core axis.

83.5 84.9 NANAIMO CONGLOMERATE

Similiar to 76.0 to 80.0 m except felsic clasts are somewhat more abundant and clasts are larger on average. Clasts are largest and most abundant immediately above the lower contact which is at 75 degrees to core axis.

84.9 86.6 NANAIMO GREYWACKE

As 61.3 to 76.0 m with several 10.0 cm beds of granule to pebble conglomerate. Lower contact is a fault that appears to be at 40 degrees to core axis.

STRUCTURE:.

At 85.3 m bedding is at 70 degrees to core axis. 86.4-86.6 M fault zone at 40 ? degrees to core axis.

86.6 88.3 NANAIMO CONGLOMERATE

Unsorted granule to pebble conglomerate similiar to 76.0 to 80.0 m. Lower contact is at 80 degrees to core axis.

88.3 93.6 NANAIMO GREYWACKE

Greywacke as 61.3 to 76.0 m with up to 5 % granule to pebble-sized black argillite, light green cherty sediment and light grey felsic clasts. Also, locally up to 20 % irregular rip-up clasts of slightly lighter grey greywacke. Several beds of pebble conglomerate up to 0.3 m thick. Lower contact is gradational over 5.0 cm.

STRUCTURE:.

At 91.2 m bedding is at 70 degrees to core axis. At 92.2 m bedding is at 75 degrees to core axis. At 93.2 m bedding is at 70 degrees to core axis.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-50 6

From To (m) (m)

Π

-----DESCRIPTION-----

Sample From Width То Total Cu ₽Ъ Zn λg Αu Ba No. (m) (m) (m) (ppb) (ppm)

90.9 91.2 Pebble conglomerate at 75 degrees to core axis.

92.0 92.2 Pebble conglomerate coaresens downhole.

92.4 93.2 Granule conglomerate. Similiar to other conglomerates but almost all clasts are < 5 mm in diameter. Lower contact is sharp at 70 degrees to core axis.

93.6 95.4 NANAIMO CONGLOMERATE

Generally a matrix supported conglomerate but locally is clast supported over 0.1 m intervals. Minor 1.0 cm fault gouge near the lower contact but lower contact itself appears to be an irregular erosional contact at approximately 80 degrees to core axis.

STRUCTURE: .

At 94.6 m bedding is at 79 degrees to core axis.

94.6 94.8 Greywacke.

95.4 104.0 WEAKLY CHLORITIC FELSIC TUFF

Light grey, moderately sericitic, coarse felsic ash tuff with 2 % light grey guartz eyes (3 mm in diameter. Less than 5 % light grey, hazy lapilli-sized felsic fragments. Lower contact is placed where lapilli become conspicuous.

STRUCTURE: .

95.7-96.0 M FAULT ZONE at 45 degrees to core axis. 0.1 m of lost core.

At 100.5 m foliation is at 20 degrees to core axis. At 104.4 m 3 mm fault gouge at 15 degrees to core axis.

ALTERATION: .

95.4 104.0 MODERATE PERVASIVE SERICITIZATION and WEAK SPOTTY CHLORITIZATION. Chlorite alteration increases downhole.

97.3 97.7 Moderate biotization gives rock a reddish hue.

SULPHIDES: .

95.4-96.7 m 5 % fracture controlled and disseminated pyrite 96.7-98.4 m 2 % disseminated pyrite and possibly trace disseminated sphalerite (maybe thermal biotite). 98.4-101.3 m 5 % disseminated and fracture controlled pyrite. Pyrite occurs in spots up to 3 mm in diameter. 101.3-103.3 m 2 % disseminated pyrite. 103.3-104.0 m 7 % pyrite disseminated and fracture

VA03666	95.4	96.4	1.0	5	43	28	27	<1	· <5	1700	
VA02827	95.4	104.0	8.6	n/a	17	n/a	<10	n/a	n/a	1410	
VA03667	96.4	97.4	1.0	4	39	35	39	<1	<5	1300	
VA03668	97.4	98.0	.6	4	43	24	29	(1	. <5	1300	
VA03669	98.0	99.0	1.0	5	55	26	9	<1	6	1500	
VA03670	99.0	100.0	1.0	5	28	25	14	<1	< 5	1400	
VA03671	100.0	101.3	1.3	5	47	23	37	<1	< 5	1600	
VA03672	101.3	102.3	1.0	2	42	22	54	(1	32	1800	
VA03673	102.3	103.3	1.0	2	28	25	6	1	۲5	1600	
VA03674	103.3	104.0	.7	7	65	23	9	(1	<5	2100	

Sulphides (ppm) (ppm) (ppm) (ppma)

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-50 7 DIAMOND DRILL LOG From То Sample From Ťo Width Total Cu Pb Zn λg An Ba (m) (m) -----DESCRIPTION------Sulphides (ppm) No. (m.) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) controlled and possibly 1 % fracture controlled dark brown sphalerite (or biotite). Much of the pyrite is within a light brown alteration patch (epidote+biotite ?). 104.0 129.0 CHLORITIC FELSIC LAPILLI TUFF 5-20 % dark green chloritic fragments up to 1.0 cm wide VA02828 104.0 129.0 25.0 20 n/a 1610 n/a n/a 16 n/a (5 2000 and 8.0 cm long stretched parallel to foliation in a grey VA03675 104.0 105.0 22 (1 1.0 2 24 6 sericitic felsic matrix. The larger fragments below 113.0 VA03676 105.0 106.0 9 22 7 <1 <5 1600 1.0 2 m are similiar to the chloritic fiamme exposed in the < 5 1500 VA03677 106.0 107.0 1.0 2 15 23 5 (1 (1 ٢5 1900 Anita Excavation. VA03678 107.0 108.0 1.0 2 43 22 6 26 12 <1 ٢5 1700 Locally up to 5 % (3 mm guartz eyes. Quartz eyes sometimes VA03679 108.0 109.0 1.0 2 24 occur within the chloritic lapilli. VA03680 109.0 110.0 1.0 2 3 29 15 <1 <5 1400 Lower contact is placed where chloritic lapilli become rare VA03681 110.0 111.0 1.0 2 49 38 28 (1 8 1300 <1 12 1400 VA03682 111.0 112.0 1.0 2 22 30 16 (1 <5 1100 STRUCTURE: . VA03683 126.0 127.0 45 1.0 4 18 21 At 106.1 m foliation is at 20 degrees to core axis. VA03684 127.0 128.0 18 20 44 (1 <5 940 4 1.0 108.4-108.6 M crushed fault zone at 55-70 degrees to core axis. Several fault gouges up to 5.0 cm wide. At 110.4 m foliation is at 30 degrees to core axis. At 116.0 m foliation is at 40 degrees to core axis. At 122.4 m foliation is at 20 degrees to core axis. At 126.9 m 1.0 cm fault gouge at 20 degrees to core axis. At 127.6 m foliation is at 20 degrees to core axis. ALTERATION:. 104.0 123.7 WEAK SPOTTY CHLORITIZATION. 123.7 125.0 MODERATE PERVASIVE SILICIFICATION. 125.0 128.0 WEAK SPOTTY CHLORITIZATION. SULPHIDES:. 104.0-112.0 m 1-2 % disseminated pyrite and possibly trace sphalerite. 112.0-126.0 M trace disseminated and fracture controlled pyrite. 126.0-129.0 m 3-4% disseminated pyrite as spots up to 2 mm in diameter. 108.6 109.0 40 % chloritic lapilli (fiamme ?) up to 5 mm wide stretched parallel to foliation. Gives rock a green striped appearance. 129.0 139.7 CHLORITIC FELSIC OUARTZ EYE TUFF Up to 10 % 1-4 mm clear guartz eyes and up to 5 % poorly VA02829 129.0 139.7 10.7 n/a 31 n/a <10 n/a n/a 1430 12 <1 <5 1400 defined, hazy light grey to green felsic lapilli in a VA03685 133.0 134.0 1.0 3 2 26 23 <1 <5 1500 VA03686 134.0 135.2 3 2 21 sericitic fine-grained, siliceous matrix which contains up 1.2 to 15 % (0.5 mm feldspar crystals. Quite massive, only weakly foliated. Weak patchy chloritization gives rock a

nottled appearance. Weakly to moderately microfractured,

fractures are filled with quartz.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-50 DIAMOND DRILL LOG From То Sample From То Width Total Cu Ph Zn Ag Au Ba (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Lower contact is placed where quartz eyes dissapear. STRUCTURE:. At 138.7 m bedding is at 45 degrees to core axis. ALTERATION: . 129.0 135.4 WEAK PERVASIVE SILICIFICATION and WEAK PERVASIVE SERICITIZATION. 135.4 138.7 MODERATE PERVASIVE SILICIFICATION and WEAK SPOTTY CHLORITIZATION. 138.7 139.7 WEAK PERVASIVE SILICIFICATION and WEAK SPOTTY CHLORITIZATION. SULPHIDES:. 129.0-133.0 m 1 % disseminated pyrite. 133.0-135.2 m 3 % disseminated pyrite. Pyrite occurs as spots 1-3 mm in diameter. 135.2-139.7 M nil to trace disseminated pyrite. 139.7 147.0 WEAKLY CHLORITIC FELSIC TUFF As 129.0 to 139.7 m except no guartz eyes. VA02830 139.7 147.0 7.3 n/a n/a 1420 <10 n/a <10 n/a STRUCTURE: . 143.2-143.9 M FAULT ZONE at 40-60 degrees to core axis. 0.5 m of lost core. At 145.2 m foliation is at 46 degrees to core axis. ALTERATION:. 139.7 147.0 WEAK SPOTTY CHLORITIZATION. SULPHIDES:. 143.9-147.0 m 2-3 % disseminated pyrite. 147.0 194.4 FELSIC LAPILLI TUFF Up to 30 % light to dark grey fine-grained rounded felsic VA02831 147.0 177.0 30.0 n/a 46 n/a <10 n/a n/a 2460 lapilli in a siliceous, moderately sericitic, fine-grained VA03687 147.0 148.0 1:0 4 43 21 18 (1 <5 1500 matrix. Locally weak, patchy chlorite alteration gives VA03688 148.0 149.0 1.0 2 15 23 11 <1 <5 1500 rock a mottled appearance. Lower contact is a bedding VA03689 149.0 150.0 2 17 23 14 <1 <5 1300 1.0 contact at 50 degrees to core axis. VA03690 150.0 151.0 233 <1 10 1900 1.0 2 23 16 <5 1300 VA03691 151.0 151.3 4 75 19 27 <1 . 3 STRUCTURE:. 192 470 VA03692 151.3 151.8 5 4300 32 169 6 . 5 At 148.8 m foliation is at 30 degrees to core axis. VA03693 151.8 153.0 3 49 24 15 (1 <5 1400 1.2 At 151.8 m bedding is at 35 degrees to core axis. VA03694 153.0 154.0 1.0 3 187 20 30 <1 12 1700 1200 107 24 <1 156.0-156.6 M slip runs parallel to the core axis. Blocky, VA03695 154.0 155.0 1.0 3 6 9 highly fractured core. VA03696 155.0 156.0 1.0 20 8 19 <1 <5 1100 2 27 19 5 1800 At 161.6 m foliation is at 33 degrees to core axis. VA03697 156.0 157.0 1.0 4 8 <1 At 173.5 m 0.5 cm fault gouge at 40 degrees to core axis. VA03698 157.0 158.0 17 10 11 <1 5 1700 1.0 4 <5 1500 At 180.7 m bedding is at 30 degrees to core axis. VA03699 158.0 159.0 1.0 4 18 8 14 <1 <5 1400 At 183.0 m foliation is at 30 degrees to core axis. VA03700 159.0 160.0 1.0 4 21 5 15 <1

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PR	OPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-50	o: P	age Numb 9	er				
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	ь) (Ba ppm)
		At 185.1 m 5.0 cm fault gouge at 30 degrees to core axis.	VA03701	160.0	161.0	1.0	4	22	5	19	(1	۲5	150	0
		At 186.1 m 4.0 cm lault gouge at 35 degrees to core axis.	VA03702	161.0	162.0	1.0	4	100	7	54	<1	< 5	100/	0
		At 190.1 m foliation is at 50 degrees to core axis.	VA03703	162.0	163.0	1.0	4	86	6	390	<1	5	180	0
		** #****	VA03704	163.0	164.0	1.0	4	69	<5	25	<1	5	150	0
		ALTERATION:	VA03705	164.0	165.0	1.0	4	67	5	15	<1	5	140	0
		147.0 MODERATE PERVASIVE SERICITIZATION and WEAK PERVASIVE	VA03706	165.0	166.0	1.0	5	27	14	19	<1	6	140	0
		CHLORITIZATION.	VA03707	166.0	167.0	1.0	5	15	14	29	(1	< 5	1500	0
		169.5 175.0 WEAK FRACTURE CONTROLLED SILICIFICATION.	VA03708	167.0	167.7	.7	5	15	25	34	<1	<5	3000	0
			VA03709	167.7	168.2	.5	8	4300	133	3700	5	247	4800	0
		SULPHIDES:.	VA03710	168.2	169.0	.8	8	945	32	128	- <1	55	4800	0
· .		147.0-148.0 m 4 % pyrite, disseminated and in two large	VA03711	169.0	170.0	1.0	4	300	7	39	(1)	18	2400	0
		lapilli.	VA03712	170.0	171.0	1.0	4	49	8	24	<1	5	2100	0
		148.0-151.0 m 1-2 % disseminated pyrite.	VA03713	171.0	172.0	1.0	4	66	. 7	22	<1	8	1900	0
		151.0-151.5 M pyrite in clumps up to 5 mm in diameter.	VA03714	172.0	173.0	1.0	4	46	< 5	22	<1	< 5	1500	0
		151.5-151.8 M bed of massive pyrite with trace	VA03715	173.0	173.5	.5	4	46	9	17	<1	<5	2800	0
		chalcopyrite and sphalerite at 35 degrees to core axis.	VA03716	173.5	174.0	. 5	15	25	43	25	<1	22	3500	0
		151.8-155.0 m 3 % disseminated pyrite.	VA03717	174.0	175.0	1.0	5	20	13	20	(1	6	2900	0
		155.0-156.0 m 2 % disseminated pyrite.	VA03718	175.0	176.0	1.0	5	48	36	20	(1	8	2800	0
		156.0-162.0 m 3-4 % disseminated pyrite.	VA03719	176.0	177.0	1.0	5	41	45	19	<1	10	320(Ó
		162.0-165.0 m 4 % pyrite disseminated in lapilli and matrix	VA02832	177.0	194.4	17.4	n/a	146	n/a	629	n/a	n/a	3720	ō
		165.0-167.7 m 5 % pyrite concentrated in lapilli.	VA03720	177.0	178.0	1.0	8	148	61	615	(1)	37	2400	0
		167.7-169.0 m 8 % disseminated pyrite 1 % chalcopyrite and	VA03721	178.0	179.0	1.0	25	523	24	80	1 .	96	1500	0
		trace to 1 % sphalerite. Sulphides occur as lapilli-sized	VA03722	179.0	179.5	5	25	466	22	45	â	56	1500	Ő.
		clasts and disseminated in the matrix.	V103723	179 5	180 0	5		116	15		1	27	2000	ó
		169.0-173.5 m 3-4% disseminated pyrite.	VA03724	180 0	191 0	1 0	á	145	5	35	1	27	1600	ń
		173.5-174.0 m 15 % fracture controlled and disseminated	VA03725	181 0	192 0	1 0	á	60	10	25	11	-55	1200	<u>.</u>
		nvrite	VA03725	102.0	102.0	2.0	9	. 00	12	215	/1	102	1500	ń
		174.0-177.0 m 5 % nyrite disseminated and in hands/heds (VX03720	19/ 0	195 0	1.0	. , , , , , , , , , , , , , , , , , , ,	160	240	313	11	100	1000	<u>,</u>
		3 mm thick	VA03720	105 0	100.0	1.0	4	117	240	1046	1	100	2000	, ,
		177 0-178 0 m 8 % fracture controlled and disceminated	VR03723	105.0	100.0	1.0		117	290 55	2040	N.	120	2000	,
		nurita	VA03730	100.0	100.0	1.0	, -	105	20	304	1	150	3700	
		178 0-179 5 m 25 k purite and trace to pil chalgeonumite.	VA03731	107.0	100.0	1.0	5	67	20	40	a d	91	4400	2
		Durito is boavily disconinated in the matrix and	VA03732	188.0	189.0	1.0	5	41	19	<u>, (1</u>	< <u>1</u>	141	4600	,
		surrounde legilli fragmente forming a net texture	VAU3/33	189.0	190.0	1.0	5	164	43	44	(1	95	2700	J .
		170 5 184 0 m 0 10 th sumits of lands is in the second sec	VA03/34	190.0	191.0	1.0	5	119	34	22	a	182	3200):):
		1/9.5-184.0 m 8-10 % pyrite as lapilli-sized clasts and	VA03735	191.0	192.0	1.0	5	57	31	15	<1	433	4400	3
		disseminated in matrix.	VA03736	192.0	193.0	1.0	5	75	32	- 9	<1	388	3400	3
		184.0-187.0 m 7 % pyrite as clasts < 5 mm wide, bands/beds < 3 mm thick and disseminated.	VA03737	193.0	194.0	1.0	3	19	19	9	<1	7	2000) .
		187.0-193.0 m 5 % pyrite, disseminated and as												
		lapilli-sized clasts.												
		193.0-194.4 m 3 % pyrite, disseminated and in bands $<$ 3 mm wide parallel to foliation.												

180.5 184.0 Several beds of medium brown cherty sediment up to 0.1 m thick at 30-40 degrees to core axis. Beds contain 5 % disseminated pyrite and trace chalcopyrite and possibly sphalerite.

177.0 180.0 Lapilli are quite large (up to 2 cm wide and over 7 cm long) and angular. They stand out well in the sulphide-rich matrix.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-50 9 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Åσ An (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (mog) (mgg) (mgg) (mgg) (dgg) At 185.1 m 5.0 cm fault gouge at 30 degrees to core axis. VA03701 160.0 161.0 1.0 22 5 (1) <5 1500 4 19 At 186.1 m 4.0 cm fault gouge at 35 degrees to core axis. VA03702 161.0 162.0 1.0 4 100 7 54 <1 ٢5 1000 At 190.1 m foliation is at 50 degrees to core axis. VA03703 162.0 163.0 1.0 4 86 6 390 <1 5 1800 VA03704 163.0 164.0 <5 25 1500 1.0 4 69 <1 5 ALTERATION: . VA03705 164.0 165.0 67 1.0 4 5 15 (1 5 1400 147.0 MODERATE PERVASIVE SERICITIZATION and WEAK PERVASIVE VA03706 165.0 166.0 1.0 5 27 14 19 <1 6 1400 CHLORITIZATION. VA03707 166.0 167.0 1.0 5 15 14 29 <1 <5 1500 169.5 175.0 WEAK FRACTURE CONTROLLED SILICIFICATION. VA03708 167 0 167 7 5 34 <1 <5 3000 7 15 25 VA03709 167.7 168.2 .5 8 4300 133 3700 247 4800 5 SULPHIDES: . VA03710 168.2 169.0 55 4800 . 8 8 945 32 128 <1 147.0-148.0 m 4 % pyrite, disseminated and in two large VA03711 169.0 170.0 1.0 300 7 39 <1 18 2400 4 lapilli. VA03712 170.0 171.0 1.0 4 49 8 24 <1 5 2100 148.0-151.0 m 1-2 % disseminated pyrite. VA03713 171.0 172.0 22 (1 1900 1.0 66 7 8 4 151.0-151.5 M pyrite in clumps up to 5 mm in diameter. VA03714 172.0 173.0 1.0 46 ٢5 22 <1 <5 1500 4 151.5-151.8 M bed of massive pyrite with trace VA03715 173.0 173.5 . 5 4 46 9 17 (1 <5 2800 chalcopyrite and sphalerite at 35 degrees to core axis. 22 VA03716 173.5 174.0 . 5 15 25 43 25 <1 3500 VA03717 174.0 151.8-155.0 m 3 % disseminated pyrite. 175.0 1 0 5 20 13 20 <1 6 2900 155.0-156.0 m 2 % disseminated pyrite. VA03718 175.0 176.0 1.0 5 48 36 20 <1 8 2800 156.0-162.0 m 3-4 % disseminated pyrite. VA03719 176.0 177.0 45 19 <1 10 3200 1.0 5 41 162.0-165.0 m 4 % pyrite disseminated in lapilli and matrix VA02832 177.0 194.4 17.4 n/a 146 629 n/a n/a 3720 n/a 165.0-167.7 m 5 % pyrite concentrated in lapilli. VA03720 177.0 178.0 148 <1 37 2400 1.0 8 61 615 167.7-169.0 m 8 % disseminated pyrite 1 % chalcopyrite and VA03721 178.0 179.0 25 523 96 1500 1.0 80 24 1 trace to 1 % sphalerite. Sulphides occur as lapilli-sized VA03722 179.0 179.5 25 466 22 45 (1 56 1500 . 5 clasts and disseminated in the matrix. 27 VA03723 179.5 180.0 .5 9 116 15 8 <1 2000 169.0-173.5 m 3-4% disseminated pyrite. VA03724 180.0 181.0 27 1500 1.0 9 145 6 35 <1 173.5-174.0 m 15 % fracture controlled and disseminated VA03725 181.0 182.0 1.0 9 60 10 25 <1 55 1300 pyrite. VA03726 182.0 184.0 2.0 9 93 13 315 <1 103 1500 VA03728 184.0 174.0-177.0 m 5 % pyrite disseminated and in bands/beds (185.0 1.0 7 160 240 1525 (1 188 1900 3 mm thick. VA03729 185.0 186.0 7 117 290 1046 (1 135 2000 1.0 177.0-178.0 m 8 % fracture controlled and disseminated VA03730 150 3700 186.0 187.0 1.0 7 165 55 384 1 pyrite. VA03731 187.0 188.0 5 67 26 46 <1 91 4400 1.0 178.0-179.5 m 25 % pyrite and trace to nil chalcopyrite. VA03732 188.0 189.0 1.0 5 27 19 <1 (1 141 4600 Pyrite is heavily disseminated in the matrix and 2700 VA03733 189.0 190.0 1.0 5 164 43 44 <1 95 surrounds lapilli fragments forming a net texture. VA03734 190.0 191.0 119 <1 182 3200 1.0 5 34 22 179.5-184.0 m 8-10 % pyrite as lapilli-sized clasts and 433 4400 VA03735 191.0 192.0 1.0 5 57 31 15 <1 disseminated in matrix. VA03736 192.0 193.0 5 75 32 (1 388 3400 1.0 9 184.0-187.0 m 7 % pyrite as clasts < 5 mm wide, bands/beds VA03737 193.0 194.0 1.0 3 19 19 9 <1 7 2000 < 3 mm thick and disseminated.

Ba

187.0-193.0 m 5 % pyrite, disseminated and as lapilli-sized clasts.

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193.0-194.4 m 3 % pyrite, disseminated and in bands < 3 mm wide parallel to foliation.

- 180.5 184.0 Several beds of medium brown cherty sediment up to 0.1 m thick at 30-40 degrees to core axis. Beds contain 5 % disseminated pyrite and trace chalcopyrite and possibly sphalerite.
- 177.0 180.0 Lapilli are guite large (up to 2 cm wide and over 7 cm long) and angular. They stand out well in the sulphide-rich matrix.

PI	ROPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-50	o: P	age Numbe 10	er				
From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)	
194.4	200.5	FELSIC FELDSPAR CRY	STAL TUFF												
		10-15 %, 1-2 mm fel	dspar crystals, nil to 2 % light grey	VA02833	194.4	200.5	6.1	n/a	20	n/a	<10	n/a	n/a	1160	
		quartz eyes up to 3	mm in diameter and up to 5 % light	VA03738	194.4	195.0	.6	0	6	8	7	(1	<5 / E	1700	
		fine-grained to aph	anitic massive siliceous matrix.	VA03739 VA03740	195.0	197.0	1.0	2	23	6	12	(1	7	1300	
		Foliation is very p	oorly developed and if not for the	VA03741	197.0	198.0	1.0	1	5	<5	10	<1	<5	1100	
		presence of hazy la	pilli it might be a flow. Lower	VA03742	198.0	199.0	1.0	1	4	9	8	<1	<5	1200	
		contact is gradatio	nal over 5.0 cm.	VA03743	199.0	199.7	.7	1	15	(5)	12	(1	<5 /5	1200	
		STRUCTURE:		VAU3/44	199.7	200.5	.0	1	12	0	'	1	15	1100	
		At 195.5 m foliatio	n is at 30 degrees to core axis.												
		ALTERATION:.	PUACTUE SEPTCITIZATION and UPAV												
		PERVASI	VE CHLORITIZATION.												
		198.5 200.0 MODERAT	E FRACTURE CONTROLLED SILICIFICATION.												
		200.0 200.5 WEAK PE PERVASI	RVASIVE SERICITIZATION and WEAK VE CHLORITIZATION.												
		CHI DUTDEC .	e												
		194.4-195.0 M nil s	ulphides.												
		195.0-197.0 m 1-2 %	disseminated and fracture controlled												
		pyrite.													
		197.0-200.5 M trace	disseminated and fracture controlled												
		pyrite.													
200.5	218.3	FELSIC LAPILLI TUFF					÷								
		10-30 % medium grey	, fine-grained rounded felsic lapilli	VA03745	200.5	201.0	.5	4	8 -	8	14	<1	- 15	1300	
		up to 1.0 cm wide at	nd over 5.0 cm long stretched parallel	VA02834	200.5	218.3	1/.8	n/a	43	n/a 19	10	n/a <1	n/a 5	1700	
		fine-grained felsic	matrix. Locally up to 5 % < 3 mm	VA03747	202.0	203.0	1.0	4	34	24	7	(1	<Š	1500	
		light grey quartz e	yes. Lower contact is at 50 degrees to	VA03748	203.0	204.0	1.0	4	119	20	14	<1	7	1600	
		core axis.		VA03749	204.0	205.0	1.0	4	69	28	8	<1	9	1400	
				VA03750	205.0	206.0	1.0	4	63	17	13	(1)	5	1100	
		STRUCTURE:.	n is at 45 degrees to core avis	VA03751	206.0	207.0	1.0	4	96 16	13	16	(1	(5	1400	
		At 211.5 m foliation	n is at 26 degrees to core axis.	VA03753	208.0	209.0	1.0	4	29	17	19	< <u>1</u>	<5	1500	
				VA03754	209.0	210.0	1.0	- 4	86	27	12	<1	10	1700	
		ALTERATION:.		VA03755	210.0	211.0	1.0	4	334	21	23	<1	11	1300	
		200.5 218.3 MODERAT	E PERVASIVE SERICITIZATION.	VA03756	211.0	212.0	1.0	. 4	82	24	15	(1	26	2000	
		arohahl	v associated with the gabbro intrusion	VAORTSA	213.0	214.0	1.0	5	97	27	15	(1	45	3500	
		below.	Weak thermal biotite alteration for 0.2	VA03759	214.0	215.0	1.0	5	40	30	8	(1	19	3000	
		m from	lower contact.	VA03760	215.0	216.0	1.0	5	54	31	12	<1	48	3100	
		SULPHIDES:.		VA03761	216.0	217.0	1.0	5	121	34	158	<1	42	2800	
		200.5-212.0 m 4 * p	yrite concentrated in lapilli	VA03762	217.0	218.3	1.3	5	144	37	79	(1	21	1900	
		cm long.	ar pyrice clast up to 0.5 cm wide and Z												
			1 A A A A A A A A A A A A A A A A A A A												

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PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-50 11 DIAMOND DRILL LOG From To Width Total Sample From To Ċu РЪ Zn Åα Au Ba (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (mpg) (mpg) (ppm) (ppb) (ppm) 212.0-218.3 m 5 % pyrite disseminated and in lapilli fragments as above. 204.8 205.2 Several fine ash beds up to 6.0 cm thick at 25 to 40 degrees to core axis. 218.3 223.4 FELDSPAR PORPHYRITIC GABBRO Massive, medium green, fine-grained with 5 % 1-3 mm VA03764 218.3 218.9 . 6 6 549 9 62 <1 16 20 feldspar phenocrysts. 5.0 cm assimilation zone at the upper contact. Lower contact is at 40 degrees to core axis 218.3 218.9 Ouartz-carbonate epidote flooded zone with 3 % pyrrhotite, 2 % pyrite and 1 % chalcopyrite. 222.5 223.0 5 % fracture controlled pyrite. 223.4 234.8 FELSIC LAPILLI TUFF Ash tuff above 224.5 m. Below this depth it is a lapilli VA02835 223.4 234.8 11.4 n/a 935 200 n/a 4660 n/a n/a tuff with 5-40 % guartz grains and 5-10% grev felsic VA03763 223.4 224.2 . 8 1 154 57 38 <1 9 2500 fragments up to 1.0 cm long (most < 0.5 cm) in a VA03765 224.2 225.0 .8 5 1542 41 2097 <1 51 2300 fine-grained grey felsic matrix. Felsic fragments VA03766 225.0 225.4 10 7300 809 13300 20 582 5500 .4 3600 20 1337 12000 predominate above 225.8 m and below 227.7 m. Between 225.8 VA03767 225.7 226.2 .5 12 81 32000 and 227.7 m (where the economic sulphides occur) quartz 5500 26 3154 20000 VA03768 226.2 226.7 12 28600 .5 74 fragments predominate. Lower contact is at 52 degrees to VA03769 226.7 227.2 13 4200 278 55600 27 1954 25000 5 core axis. VA03770 227.2 227.7 .5 15 4300 1764 41600 45 1782 25000 VA03771 227.7 228.7 1.0 5 200 122 606 <1 52 5800 47 4900 154 STRUCTURE:. VA03772 228.7 229.7 1.0 5 99 293 <1 At 224.4 m foliation is at 50 degrees to core axis. <1 23 4200 VA03773 229.7 230.7 1.0 -5 80 59 258 At 231.1 m bedding is at 50 degrees to core axis. VA03774 230.7 231.2 195 184 <1 24 6100 .5 10 59 VA03775 231.2 231.7 . 5 5 31 67 39 **{1** 13 5700 ALTERATION:. VA03776 231.7 232.7 1.0 5 98 49 37 <1 16 4200 223.4 225.4 MODERATE PERVASIVE SERICITIZATION. 43 (1 16 2400 VA03777 232.7 233.7 1.0 5 <5 45 225.7 227.7 MODERATE PERVASIVE BIOTIZATION. 81 41 <1 18 3200 VA03778 233.7 234.8 5 11 1.1 227.7 234.8 WEAK PERVASIVE SILICIFICATION and WEAK PERVASIVE SERICITIZATION. SULPHIDES:. N.B. The SPHALERITE noted below is red-brown and is finely disseminated along foliation planes and some of it may be BIOTITE. 223.4-224.2 M trace disseminated pyrite. 224.2-225.0 m 5 % disseminated pyrite and 1 % chalcopyrite and sphalerite. 225.0-225.4 m 3 % chalcopyrite, 5 % sphalerite and 2 % pyrite. Sulphides are disseminated. 225.7-226.2 m 8 % finely disseminated sphalerite, 4 % pyrite and 1 % chalcopyrite. 226.2-226.7 m 6 % sphalerite, 5 % pyrite and 3 % chalcopyrite.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-50 12

From To (m)

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-----DESCRIPTION------(m)

Width Sample From To Total Cu Pb 7.n λg λn Ba No. (m) (m.) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

226.7-227.2 m 8 % sphalerite, 5 % pyrite and 1.5 % chalcopyrite. 227.2-227.7 m 8 % sphalerite. 3 % pyrite and 1 %

chalcopyrite. 227.7-230.7 m 4-5 % pyrite as spots up to 3 mm in diameter.

230.7-231.2 m 10 % pyrite in semi-massive bands (beds?) up to 1.0 cm thick at 50 degrees to core axis. 231.2-234.8 m 4-5 % pyrite disseminated and as clasts up to 1.0 cm in diameter.

225.4-225.7 M fine-grained MAFIC DYKE. Upper contact is at 25 degrees to core axis and lower contact is at 40 degrees to core axis.

234.8 280.7 FELDSPAR PORPHYRITIC GABBRO

Massive, medium green, fine to medium-grained and locally feldspar porphyritic (< 5 %, 1-3 mm feldspar phenocrysts). 1-3 % disseminated ilmenite and trace chalcopyrite. Ilmenite is surrounded by a white alteration mineral (leucoxene ?). Core is blocky throughout the interval. Becomes fine-grained and epidote+calcite patches up to 5.0 cm wide are common below 259.0 m. Below 259.0 m it is difficult to tell if the rock is intrusive or extrusive. It is logged as gabbro because occasionaly trace ammounts of ilmenite can be seen. Check the WRA samples for TiO2.

SIRUCTURE:. 238.6-239.0 m; 1.0 cm fault gouge runs parallel to the X Anipe Fault? core axis.

- 237.3 237.8 Xenolith of FELSIC TUFF. Light grey moderately sericitic ash (?) tuff with 4 % disseminated pyrite. Lower contact is at 60 degrees to core axis.
- 264.0 280.7 5 % dark grey-green patches up to 2.5 cm wide with relatively sharp but jagged margins. They are probably abrasions caused by the drill bit.
- 280.7 286.3 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Pale to medium green fine-grained mafic ash tuffs intercalated with coarser, guartz eye, bearing intermediate tuffs and light brown cherty tuffaceous sediments. 1-3 % fracture controlled pyrite. Lower contact is difficult to pinpoint.

STRUCTURE:.

VA03779 237.3 237.8 . 5 665 103 1449 <1 313 5500 5

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-50 13

From (m)	To (m)		DESCRIPTION	Samp No	le From . (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm

At 283.5 m bedding is at 40 degrees to core axis.

286.3 300.5 MAFIC FLOW

Massive fine-grained medium green locally weakly feldspars and or mafic porphyritic, feldspar are epidotized. May be gabbro but no ilmenite observered.

ALTERATION:.

286.3 300.5 WEAK SPOTTY EPIDOTIZATION and locally WEAK FRACTURE CONTROLLED CARBONATIZATION. 287.6 288.0 Quartz-carbonate flooded zone at 40 degrees to core axis.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major elements)

SAMPLE NUMBER	FROM	TO	XS 102	ZAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	XT 102	XP205	ZHNO	XLOI	SUN	BA	AI	NACA
														· .		5 	
VA02352	12.70	13.00	50.40	16.70	5.63	5.22	2.67	1.79	8.88	0.64	0.14	0.25	7.16	99.48	592.	46.	8.
VA02353	34.00	34.40	69.80	14.20	1.56	1.59	2.56	4.78	1.95	0.24	0.08	0.04	1.85	98.65	2500.	61.	4.
VA02354	97.00	97.30	72.10	14.00	1.25	0.98	1.63	3.42	2.10	0.29	0.08	0.03	2.23	98.11	1830.	60.	з.
VA02355	107.10	170.20	71.70	15.20	0.63	1.43	1.07	3.77	1.91	0.34	0.07	0.02	2.47	98.61	2110.	75.	2.
VA02356	116.30	116.60	68.90	17.10	0.36	2.09	0.63	3.75	2.29	0.38	0.10	0.03	3.70	99.33	1780.	86.	1.
VA02357	127.20	127.40	69.60	14.00	2.17	2.03	1.63	2.88	2.86	0.28	0.07	0.03	2.62	98.17	1050.	56.	4.
VA02358	139.00	139.20	74.80	14.50	1.58	0.74	3.72	2.12	0.44	0.30	0.07	0.01	1.54	99.82	1380.	35.	5.
VA02359	147.00	147.30	70.50	15.40	2.55	1.63	5.68	1.12	0.87	0.32	0.07	0.02	2.00	100.16	630.	25.	8.
VA02360	160.10	160.30	71.90	14.90	2.25	1.44	2.63	2.04	1.47	0.36	0.10	0.02	2.08	99.19	1440.	42.	5.
VA02361	176.40	176.60	72.40	13.60	1.59	0.94	1.25	2.94	2.56	0.29	0.07	0.02	2.77	98.43	3160.	58.	з.
VA02362	185.30	185.50	71.70	13.80	0.29	0.56	0.49	3.60	4.42	0.35	0.06	<0.01	3.93	99.20	1850.	84.	1.
VA02363	197.20	197.50	71.60	15.80	5.27	1.24	2.38	0.75	1.07	0.33	0.09	0.01	1.77	100.31	966.	21.	8.
VA02364	211.10	211.50	73.60	14.90	2.29	0.77	2.06	2.17	1.29	0.31	0.07	0.02	2.00	99.48	1920.	40.	4.
VA02365	229.90	230.10	59.90	21.00	2.61	1.43	2.09	4.38	2.76	0.37	0.12	0.03	3.70	98.39	6930.	55.	5.
VA02366	254.00	254.50	48.80	13.40	11.00	7.18	2.60	0.30	11.80	1.37	0.14	0.19	1.77	98.55	285.	35.	14.
VA02367	260.70	261.00	49.10	15.60	8.24	6.67	4.39	0.31	10.30	0.85	0.17	0.17	2,93	98.73	255.	36.	13.
VA02368	270.10	270.40	45.20	17.70	12.30	5.19	2.46	0.27	13.10	0.92	0.11	0.13	2.16	99.54	185.	27.	15.
U402369	279.00	279.20	49.10	13.90	11.40	8 09	2 75	0.31	9.84	0.55	0.13	0.16	2.39	98.62	135.	37.	14.
WA00000	277100	202 20	57 96	17 50	C 46	4 50	1 76	2 25	0.55	1 02	0.26	0.11	3 31	98.69	1430.	49.	7.
VAU2370	282.00	482.20	34.80	17.30	J.43	4.38	1.75	2.20	7.33	1.02	0.30	0.17	2.00	99 99	106	38	15.
VA02371	291.10	291.40	48.10	12.30	13.40	9.34	2.05	0.19	9.63	0.51	0.12	0.1/	3.00	20.07	140.		

Hole No. CH88-50 WHOLE ROCK SAMPLES

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Page No.

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SAMPLE NUMBER	FROM	то	XS 102	ZAL203	ZCAO	ZMGO	ZNA30	XK20	ZFE203	21102	ZP205	ZHNO	ZLOI	SUM	ВА	AI	NACA
	••••••					******											·
VA02824	12.70	29.30	57.10	15.00	6.01	3.75	2.42	1.53	7.21	0.53			5.00	98.55	661.	39.	8.
VA02825	31.60	39.10	70.40	13.90	1.85	1.12	2.74	4.91	1.65	0.23			1.77	98.57	2080.	57.	5.
VA02826	43.90	50.00	69.10	13.30	2.93	1.43	3.69	2.40	2.64	0.25			2.70	98.44	1980.	37.	7.
VA02827	95.40	104.00	68.80	15.70	1.55	0.89	1.77	3.64	2.22	0.36			3.00	97.93	1410.	58.	з.
VA02828	104.00	129.00	72.20	15.80	0.86	1.44	1.29	3.44	1.62	0.37			2.77	99.79	1610.	69.	2.
VA02829	129.00	139.70	71.40	14.20	2.25	1.01	3.62	2.15	1.58	0.30			1.93	93.44	1430.	35.	6.
VA02830	139.70	147.00	68.60	16.00	1.62	1.62	3.18	2.85	1.65	0.33			2.23	98.08	1420.	48.	5.
VA02831	147.00	177.00	69.50	14.30	1.60	1.12	1.16	3.16	3.48	0.32			3.62	98.26	2460.	61.	3.
VA02832	177.00	194.40	64.30	16.90	0.54	0.72	0.66	4.30	5.34	0.42			5.08	98.26	3720.	81.	1.
VA0:2833	194.40	200.50	72.10	15.10	3.61	1.63	2.15	1.12	1.30	0.31			2.23	99.55	1160.	32.	6.
VA02834	200.50	218.30	67.40	17.00	2.32	0.95	1.96	2.68	3.16	0.37			3.00	98.84	2590.	46.	4.
VA02835	223.40	234,80	61.30	20.10	2.53	1.32	2.15	4.17	2.53	0.37			3.31	97.78	4660.	54.	5.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-50 ALTERED SAMPLES

Page No. 1

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	ВА (ррж)	CU (ppm)	ΖΝ (ppm)	AG (ppm)	AU (ppb)	CD (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	М Н (ррж)	CUZN	ETS	FE
VA03650	14.10	15.10	480.0	72.0	204.0	<0.5	<5.0	19.0	53.0	16.0	9.0	2.0	8.0	1634.0	26.	2.	4.
VA03651	15.10	16.10	970.0	12.0	47.0	<0.5	<5.0	7.0	11.0	45.0	<5.0	<1.0	1.0	743.0	20.	2.	2.
VA03652	16.10	17.10	1100.0	17.0	32.0	<0.5	<5.0	7.0	6.0	47.0	<5.0	<1.0	1.0	631.0	35.	2.	2.
VA03653	17.10	18.10	1000.0	30.0	45.0	<0.5	<5.0	8.0	19.0	41.0	<5.0	<1.0	2.0	622.0	40.	1.	2.
VA03654	31.60	32.60	2700.0	124.0	28.0	<0.5	<5.0	7.0	9.0	44.0	<5.0	. <1.0	2.0	392.0	82.	2.	2.
VA03655	32.60	33.60	2000.0	49.0	37.0	<0.5	<5.0	9.0	13.0	43.0	<5.0	<1.0	3.0	380.0	57.	2.	2.
VA03656	33.60	34.60	2300.0	11.0	21.0	<0.5	<5.0	4.0	3.0	48.0	<5.0	<1.0	<1.0	228.0	34.	2.	1.
VA03657	34.60	35.60	2700.0	14.0	27.0	<0.5	<5.0	4.0	5.0	51.0	<5.0	<1.0	<1.0	211.0	34.	2.	1.
VA03658	35.60	36.60	2600.0	35.0	19.0	<0.5	<5.0	3.0	4.0	28.0	<5.0	<1.0	1.0	238.0	65.	2.	1.
VA03659	36.60	37.60	1900.0	27.0	27.0	<0.5	<5.0	3.0	5.0	28.0	<5.0	<1.0	1.0	229.0	50.	2.	1.
VA03660	37.60	38.60	2000.0	48.0	30.0	<0.5	5.0	5.0	8.0	24.0	<5.0	<1.0	1.0	230.0	62.	2.	1.
VA03661	38.60	39.10	290.0	32.0	59.0	<0.5	<5.0	24.0	84.0	9.0	16.0	<1.0	7.0	755.0	35.	2.	3.
VA03662	46.90	48.00	1100.0	31.0	39.0	<0.5	23.0	3.0	5.0	27.0	<5.0	<1.0	1.0	288.0	44.	2.	1.
VA03663	48.00	49.00	460.0	28.0	18.0	<0.5	<5.0	3.0	20.0	28.0	<5.0	<1.0	1.0	275.0	61.	1.	1.
VA03664	49.00	50.00	1400.0	43.0	34.0	<0.5	<5.0	9.0	21.0	17.0	<5.0	<1.0	3.0	349.0	56.	1.	2.
VA03665	55.00	56.00	790.0	68.0	100.0	<0.5	6.0	26.0	67.0	<5.0	29.0	1.0	8.0	537.0	40.	2.	5.
VA03666	95.40	96.40	1700.0	43.0	27.0	<0.5	<5.0	6.0	9.0	28.0	<5.0	<1.0	1.0	208.0	61.	5.	1.
VA03667	96.40	97.40	1300.0	39.0	39.0	<0.5	<5.0	6.0	11.0	35.0	<5.0	<1.0	1.0	398.0	50.	4.	1.
VA03668	97.40	98.00	1300.0	43.0	29.0	<0.5	<5.0	5.0	12.0	24.0	<5.0	<1.0	3.0	359.0	60.	4.	2.
VA03669	98.00	99.00	1500.0	55.0	9.0	<0.5	6.0	5.0	6.0	26:0	<5.0	<1.0	1.0	195.0	86.	5.	1.
VA03670	99.00	100.00	1400.0	28.0	14.0	<0.5	<5.0	4.0	5.0	25.0	<5.0	<1.0	1.0	144.0	67.	5.	1.
VA03671	100.00	101.30	1600.0	47.0	37.0	<0.5	<5.0	5.0	6.0	23.0	<5.0	<1.0	1.0	149.0	56.	5.	1.
VA03672	101.30	102.30	1800.0	42.0	54.0	<0.5	32.0	3.0	6.0	22.0	<5.0	<1.0	<1.0	110.0	44.	2.	1.

Hole No. CH88-50

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Page No. 1
DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (pp=)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	₽B (ppw)	AS (ppm)	CD (ppm)	HO (ppm)	ńN (ppm)	CUZN	EIS	FE
	•													. 1			
VA03673	102.30	103.30	1600.0	28.0	6.0	<0.5	<5.0	3.0	4.0	25.0	<5.0	<1.0	<1.0	59.0	82.	2.	0.
VA03674	103.30	104.00	2100.0	65.0	9.0	<0.5	<5.0	16.0	9.0	23.0	<5.0	<1.0	<1.0	97.0	80.	7.	2.
VA03675	104.00	105.00	2000.0	22.0	6.0	<0.5	<5.0	4.0	7.0	24.0	<5.0	<1.0	<1.0	74.0	79.	2.	1.
VA03676	105.00	106.00	1600.0	9.0	7.0	<0.5	<5.0	3.0	5.0	22.0	<5.0	<1.0	1.0	92.0	56.	2.	1.
VA03677	106.00	107.00	1500.0	15.0	5.0	<0.5	<5.0	3.0	5.0	23.0	<5.0	<1.0	1.0	83.0	75.	2.	1.
VA03678	107.00	108.00	1900.0	43.0	6.0	<0.5	<5.0	6.0	6.0	22.0	<5.0	<1.0	1.0	78.0	88.	2.	1.
VA03679	108.00	109.00	1700.0	26.0	12.0	<0.5	<5.0	4.0	3.0	24.0	<5.0	<1.0	<1.0	60.0	68.	2.	1.
VA03680	109.00	110.00	1400.0	3.0	15.0	<0.5	<5.0	2.0	5.0	29.0	<5.0	<1.0	<1.0	31.0	17.	2.	٥.
VA03681	110.00	111.00	1300.0	49.0	28.0	<0.5	8.0	5.0	3.0	38.0	<5.0	<1.0	1.0	67.0	64.	2.	1.
VA03682	111.00	112.00	1400.0	22.0	16.0	<0.5	12.0	3.0	4.0	30.0	<5.0	<1.0	<1.0	43.0	58.	2.	1.
VA03683	126.00	127.00	1100.0	18.0	45.0	<0.5	<5.0	6.0	8.0	21.0	<5.0	<1.0	2.0	169.0	29.	4.	2.
VA03684	127.00	128.00	940.0	18.0	44.0	<0.5	<5.0	5.0	9.0	20.0	<5.0	<1.0	1.0	183.0	29.	4.	1.
VA03685	133.00	134.00	1400.0	2.0	12.0	<0.5	<5.0	4.0	4.0	26.0	<5.0	<1.0	1.0	113.0	14.	3.	1.
VA03686	134.00	135.20	1500.0	2.0	23.0	<0.5	<5.0	6.0	11.0	21.0	<5.0	<1.0	1.0	123.0	8.	3.	2.
VA03687	147.00	148.00	1500.0	43.0	18.0	<0.5	<5.0	10.0	15.0	21.0	<5.0	<1.0	1.0	147.0	70.	4.	2.
VA03688	148.00	149.00	1500.0	15.0	11.0	<0.5	<5.0	7.0	6.0	23.0	<5.0	<1.0	1.0	116.0	58.	2.	1.
VA03689	149.00	150.00	1300.0	17.0	14.0	<0.5	<5.0	3.0	4.0	23.0	<5.0	<1.0	<1.0	151.0	55.	2.	1.
VA03690	150.00	151.00	1900.0	233.0	16.0	<0.5	10.0	7.0	9.0	23.0	<5.0	<1.0	1.0	150.0	94.	2.	2.
VA03691	151.00	151.30	1300.0	75.0	27.0	<0.5	<5.0	14.0	14.0	19.0	<5.0	<1.0	1.0	168.0	74.	4.	2.
VA03692	151.30	151.80	470.0	4300.0	169.0	5.5	192.0	84.0	93.0	32.0	127.0	7.0	6.0	210.0	96.	5.	+10.
VA03693	151.80	153.00	1400.0	49.0	15.0	<0.5	<5.0	8.0	8.0	24.0	<5.0	<1.0	1.0	153.0	77.	3.	2.
VA03694	153.00	154.00	1700.0	187.0	30.0	<0.5	12.0	15.0	16.0	20.0	<5.0	<1.0	1.0	111.0	86.	3.	э.
VA03695	154.00	155.00	1200.0	107.0	24.0	<0.5	9.0	9.0	9.0	6.0	<5.0	<1.0	2.0	70.0	82.	3.	1.

Hole No. CH88-50

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	АU (ррБ)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррт.)	HN (ppm)	CUZN	EIS	FE
		• .															
VA03696	155.00	156.00	1100.0	20.0	19.0	<0.5	<5.0	4.0	5.0	8.0	<5.0	<1.0	1.0	77.0	51.	2.	1.
VA03697	156.00	157.00	1800.0	27.0	19.0	<0.5	5.0	9.0	9.0	8.0	<5.0	<1.0	3.0	99.0	59.	4.	3.
VA03698	157.00	158,00	1700.0	17.0	11.0	<0.5	5.0	5.0	2.0	10.0	<5.0	<1.0	1.0	67.0	61.	4.	2.
VA03699	158.00	159.00	1500.0	18.0	14.0	<0.5	<5.0	5.0	3.0	8.0	<5.0	<1.0	1.0	75.0	56.	4.	1.
VA03700	159.00	160.00	1400.0	21.0	15.0	<0.5	<5.0	5.0	4.0	5.0	<5.0	<1.0	1.0	105.0	58.	4.	1.
VA03701	160.00	161.00	1500.0	22.0	19.0	<0.5	<5.0	4.0	3.0	5.0	<5.0	<1.0	2.0	96.0	54.	4.	1.
VA03702	161.00	162.00	1000.0	100.0	54.0	<0.5	<5.0	4.0	4.0	7.0	<5.0	<1.0	1.0	118.0	65.	4.	1.
VA03703	162.00	163.00	1800.0	86.0	390.0	<0.5	5.0	6.0	4.0	6.0	<5.0	6.0	2.0	81.0	18.	4.	2.
VA03704	163.00	164.00	1500.0	69.0	25.0	<0.5	5.0	9.0	10.0	<5.0	<5.0	<1.0	5.0	93.0	73.	4.	з.
VA03705	164.00	165.00	1400.0	67.0	15.0	<0.5	5.0	4.0	3.0	5.0	<5.0	<1.0	3.0	74.0	82.	4.	1.
VA03706	165.00	166.00	1400.0	27.0	19.0	<0.5	6.0	6.0	4.0	14.0	<5.0	<1.0	3.0	109.0	59.	5.	2.
VA03707	166.00	167.00	1500.0	15.0	29.0	<0.5	<5.0	6.0	9.0	14.0	<5.0	<1.0	3.0	135.0	34.	5.	2.
VA03708	167.00	167.70	3000.0	15.0	34.0	<0.5	<5.0	5.0	1.0	25.0	<5.0	<1.0	2.0	123.0	31.	5.	2.
VA03709	167.70	168.20	4800.0	4300.0	3700.0	5.2	247.0	12.0	14.0	133.0	7.0	13.0	4.0	111.0	54.	8.	4.
VA03710	168.20	169.00	4800.0	945.0	128.0	<0.5	55.0	9.0	13.0	32.0	<5.0	1.0	4.0	80.0	88.	8.	4.
VA03711	169.00	170.00	2400.0	300.0	39.0	<0.5	18.0	4.0	3.0	7.0	<5.0	<1.0	3.0	68.0	89.	4.	1.
VA03712	170.00	171.00	2100.0	49.0	24.0	<0.5	5.0	4.0	2.0	8.0	<5.0	<1.0	2.0	54.0	67.	4.	1.
VA03713	171.00	172.00	1900.0	66.0	22.0	<0.5	8.0	5.0	1.0	7.0	<5.0	<1.0	2.0	54.0	75.	4.	2.
VA03714	172.00	173.00	1500.0	46.0	22.0	<0.5	<5.0	4.0	5.0	(5.0	<5.0	<1.0	3.0	98.0	68.	4.	1.
VA03715	173.00	173.50	2800.0	46.0	17.0	<0.5	<5.0	5.0	7.0	9.0	<5.0	<1.0	3.0	79.0	73.	4.	1.
VA03716	173.50	174.00	3500.0	25.0	25.0	<0.5	22.0	6.0	10.0	43.0	11.0	<1.0	2.0	87.0	50.	15.	4.
VA03717	174.00	175.00	2900.0	20.0	20.0	<0.5	6.0	6.0	3.0	13.0	<5.0	<1.0	2.0	91.0	50.	5.	2.
VA03718	175.00	176.00	2800.0	48.0	20.0	<0.5	8.0	6.0	4.0	36.0	<5.0	<1.0	2.0	91.0	71.	5.	2.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (pp∎)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	NO (ppm)	MN (ppm)	CUZN	EIS	FE
																_	· , _
VA03719	176.00	177.00	3200.0	41.0	19.0	<0.5	10.0	7.0	4.0	45.0	<5.0	<1.0	1.0	82.0	68.	5.	2.
VA03720	177.00	178.00	2400.0	148.0	615.0	<0.5	37.0	6.0	5.0	61.0	<5.0	3.0	1.0	73.0	19.	8.	3.
VA03721	178.00	179.00	1500.0	523.0	80.0	0.5	96.0	20.0	31.0	24.0	56.0	2.0	3.0	31.0	87.	25.	+10.
VA03722	179.00	179.50	1500.0	466.0	45.0	<0.5	56.0	12.0	20.0	22.0	41.0	2.0	3.0	17.0	91.	25.	+10.
VA03723	179.50	180.00	2000.0	116.0	8.0	<0.5	27.0	4.0	2.0	15.0	<5.0	<1.0	<1.0	16.0	94.	9.	2.
VA03724	180.00	181.00	1500.0	145.0	35.0	<0.5	27.0	15.0	12.0	6.0	10.0	<1.0	6.0	332.0	81.	9.	4.
VA03725	181.00	182.00	1300.0	60.0	25.0	<0.5	55.0	18.0	14.0	10.0	9.0	<1.0	3.0	233.0	71.	9.	4.
VA03726	182.00	184.00	1500.0	93.0	315.0	<0.5	103.0	10.0	12.0	13.0	12.0	2.0	3.0	141.0	23.	9.	4.
VA03728	194.00	185.00	1900.0	160.0	1525.0	<0.5	188.0	6.0	7.0	240.0	11.0	6.0	1.0	37.0	10.	7.	3.
VA03729	185.00	186.00	2000.0	117.0	1046.0	<0.5	135.0	6.0	5.0	290.0	6.0	4.0	1.0	48.0	10.	7.	з.
VA03730	186.00	187.00	3700.0	165.0	384.0	0.5	150.0	8.0	19.0	55.0	27.0	3.0	5.0	58.0	30.	7.	7.
VA03731	187.00	188.00	4400.0	67.0	46.0	<0.5	91.0	5.0	5.0	26.0	5.0	<1.0	2.0	47.0	59.	5.	3.
VA03732	188.00	189.00	4600.0	27.0	0.5	<0.5	141.0	6.0	2.0	19.0	<5.0	<1.0	1.0	57.0	98.	5.	2.
VA03733	189.00	190.00	2700.0	164.0	44.0	<0.5	95.0	11.0	12.0	43.0	16.0	1.0	2.0	71.0	79.	5.	5.
UA03734	190.00	191.00	3200.0	119.0	22.0	(0.5	182.0	13.0	9.0	34.0	13.0	<1.0	2.0	62.0	84.	5.	4.
11403725	191 00	192 00	4400 0	57 0	15.0	(0.5	433.0	13.0	15.0	31.0	9.0	<1.0	5.0	36.0	79.	5.	4.
UA02726	197.00	102 00	2400.0	25 0		20.5	299 0	9.0	9.0	32.0	6.0	(1.0	1.0	18.0	89.	5.	3.
VH03730	192.00	123.00	2000 0			(V.J		2.0	2.0	19.0	/5 0	<1 A	4 0	57.0	68.	3.	1.
VA03/3/	193.00	194.00	2000.0	19.0	9.0	(0.5	7.0	3.0	3.0	17.0		() ()	5.0	52.0	46	. 0	1
VA03738	194.40	195.00	1700.0	6.0	7.0	<0.5	<5.0	2.0	2.0	8.0	(5.0	(1.0	5.0	00.0	10.	v.	2
VA03739	195.00	196.00	1300.0	25.0	17.0	<0.5	<5.0	7.0	5.0	<5.0	(5.0	(1.0	7.0	80.0	ev.	<u>.</u>	
VA03740	196.00	197.00	1300.0	28.0	12.0	<0.5	7.0	5.0	4.0	6.0	<5.0	<1.0	8.0	77.0	70.	2.	1.
VA03741	197.00	198.00	1100.0	5.0	10.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	<1.0	7.0	74.0	33.	1.	1.
VA03742	198.00	199.00	1200.0	4.0	8.0	<0.5	<5.0	2.0	3.0	9.0	<5.0	<1.0	5.0	61.0	33.	1.	1.

Hole No. CH88-50

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
	••••••••••••••••••••••••••••••••••••••																
VA03743	199.00	199.70	1200.0	15.0	12.0	<0.5	<5.0	3.0	3.0	<5.0	<5.0	<1.0	6.0	73.0	56.	1.	1.
VA03744	199.70	200.50	1100.0	12.0	7.0	<0.5	<5.0	2.0	1.0	8.0	<5.0	<1.0	6.0	62.0	63.	1.	1.
VA03745	200.50	201.00	1300.0	8.0	14.0	<0.5	<5.0	3.0	4.0	8.0	<5.0	<1.0	7.0	78.0	36.	4.	1.
VA03746	201.00	202.00	1700.0	22.0	10.0	<0.5	5.0	7.0	5.0	19.0	<5.0	<1.0	4.0	69.0	69.	4.	2.
VA03747	202.00	203.00	1500.0	34.0	7.0	<0.5	<5.0	9.0	7.0	24.0	<5.0	<1.0	2.0	41.0	83.	4.	2.
VA03748	203.00	204.00	1600.0	119.0	14.0	<0.5	7.0	8.0	5.0	20.0	<5.0	<1.0	4.0	65.0	89.	4.	1.
VA03749	204.00	205.00	1400.0	69.0	8.0	<0.5	9.0	5.0	6.0	28.0	<5.0	<1.0	1.0	36.0	90.	4.	1.
VA03750	205.00	206.00	1100.0	63.0	13.0	<0.5	5.0	8.0	6.0	17.0	<5.0	<1.0	6.0	80.0	83.	4.	2.
VA03751	206.00	207.00	1700.0	96.0	16.0	<0.5	7.0	13.0	5.0	16.0	<5.0	<1.0	9.0	91.0	86.	4.	2.
VA03752	207.00	208.00	1400.0	16.0	16.0	<0.5	<5.0	4.0	2.0	13.0	<5.0	<1.0	8.0	118.0	50.	4.	1.
VA03753	208.00	209.00	1500.0	29.0	19.0	<0.5	<5.0	6.0	6.0	17.0	<5.0	<1.0	6.0	116.0	60.	4.	2.
VA03754	209.00	210.00	1700.0	86.0	12.0	<0.5	10.0	6.0	7.0	27.0	<5.0	<1.0	1.0	61.0	88.	4.	2.
VA03755	210.00	211.00	1300.0	334.0	23.0	<0.5	11.0	8.0	4.0	21.0	<5.0	<1.0	4.0	146.0	94.	4.	2.
VA03756	211.00	212.00	1600.0	82.0	15.0	<0.5	<5.0	5.0	3.0	24.0	<5.0	<1.0	3.0	116.0	85.	4.	1.
VA03757	212.00	213.00	2000.0	120.0	11.0	<0.5	26.0	10.0	6.0	24.0	<5.0	<1.0	6.0	84.0	92.	5.	2.
VA03758	213.00	214.00	3500.0	97.0	15.0	<0.5	45.0	7.0	5.0	27.0	<5.0	<1.0	6.0	72.0	87.	5.	2.
VA03759	214.00	215.00	3000.0	40.0	8.0	<0.5	19.0	6.0	4.0	30.0	<5.0	<1.0	3.0	36.0	83.	5.	2.
VA03760	215.00	216.00	3100.0	54.0	12.0	<0.5	48.0	5.0	3.0	31.0	<5.0	<1.0	6.0	41.0	82.	5.	2.
VA03761	216.00	217.00	2800.0	121.0	158.0	<0.5	42.0	5.0	4.0	34.0	<5.0	<1.0	1.0	61.0	43.	5.	2.
VA03762	217.00	218.30	1900.0	144.0	79.0	<0.5	21.0	14.0	17.0	37.0	<5.0	1.0	2.0	390.0	65.	5.	3.
VA03764	218.30	218.90	20.0	549.0	62.0	<0.5	16.0	47.0	82.0	9.0	13.0	2.0	7.0	495.0	90.	6.	4,
VA03763	223.40	224.20	2500.0	154.0	38.0	<0.5	9.0	4.0	3.0	57.0	<5.0	<1.0	<1.0	65.0	80.	1.	1.
VA03765	224.20	225.00	2300.0	1542.0	2097.0	<0.5	51.0	8.0	5.0	41.0	5.0	10.0	1.0	42.0	42.	5.	3.

Hole No. CH88-50

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (pp=)	CD (ppm)	HQ (ppm)	HN (ppm)	CUZN	EIS	FE

VA03766	225.00	225.40	5500.0	7300.0	13300.0	19.7	582.0	15.0	44.0	809.0	17.0	46.0	7.0	143.0	35.	10.	3.
VA03767	225.70	226.20	12000.0	3600.0	32000.0	19.7	1337.1	7.0	23.0	81.0	7.0	107.0	7.0	102.0	10.	12.	з.
VA03768	226.20	226.70	20000.0	5500.0	28600.0	26.0	3154.2	10.0	12.0	74.0	8.0	98.0	5.0	45.0	16.	12.	з.
VA03769	226.70	227.20	25000.0	4200.0	55600.0	26.7	1954.2	8.0	16.0	278.0	8.0	175.0	4.0	81.0	7.	13.	3.
VA03770	227.20	227.70	25000.0	4300.0	41600.0	45.3	1782.8	7.0	13.0	1764.0	19.0	119.0	5.0	76.0	9.	15.	3.
VA03771	227.70	228.70	5800.0	200.0	606.0	<0.5	52.0	7.0	12.0	122.0	<5.0	3.0	5.0	83.0	25.	5.	2.
VA03772	228.70	229.70	4900.0	154.0	293.0	<0.5	47.0	13.0	8.0	99.0	<5.0	2.0	9.0	195.0	34.	5.	2.
VA03773	229.70	230.70	4200.0	80.0	258.0	<0.5	23.0	4.0	3.0	59.0	<5.0	1.0	7.0	77.0	24.	5.	1.
VA03774	230.70	231.20	6100.0	195.0	184.0	<0.5	24.0	5.0	4.0	59.0	<5.0	1.0	5.0	103.0	51.	10.	2.
VA03775	231.20	231.70	5700.0	31.0	39.0	<0.5	13.0	5.0	6.0	67.0	<5.0	<1.0	14.0	154.0	44.	5.	1.
VA03776	231.70	232.70	4200.0	98.0	37.0	<0.5	16.0	6.0	12.0	49.0	<5.0	<1.0	9.0	132.0	73.	5.	1.
VA03777	232.70	233.70	2400.0	43.0	45.0	<0.5	16.0	7.0	14.0	<5.0	6.0	<1.0	6.0	180.0	49.	5.	1.
VA03778	233.70	234.80	3200.0	81.0	41.0	<0.5	18.0	6.0	16.0	11.0	<5.0	<1.0	4.0	117.0	66.	5.	1.
VA03779	237.30	237.80	5500.0	665.0	1449.0	<0.5	313.0	11.0	12.0	103.0	<5.0	7.0	3.0	112.0	31.	5.	2.

Hole No. CH88-50

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Summary Log: DDH CH88-51 Location: 26+92 E, 3+10 S; Chip 1 Claim Azimuth: 210, Dip: -45 Hole Completed: May 6, 1988 Core Logged By: D.P. Money 0.0 -4.0 Casing. 4 0 -25.4 Gabbro. 25 4 -44.4 Black argillite with 4 % fracture controlled pyrite. 44.4 -50.6 Tuffaceous conglomerate with argillite clasts in a felsic tuffaceous matrix. 50.6 - 101.7 Felsic crystal tuffs with minor 1 to 2 m argillite beds. 101.7 - 104.4Volcanic wacke with argillite clasts. 104.4 - 117.1Felsic ash tuff. 117.1 - 118.7 Black argillite with intercalated cherts. 118.7 - 131.4Felsic ash tuff with minor chert beds. 131.4 - 132.5Black argillites and cherts with 2 % fracture controlled pyrite. 132.5 - 136.2Tuffaceous conglomerate. 136.2 - 147.6Mafic lapilli tuff with strong carbonatization, 2 % fracture controlled pyrite and trace pyrrhotite. 147.6 - 159.7Mafic tuffs and intercalated cherty sediments. End of hole. 159.7

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	PROPERTY: Chemain	us J.V.		FALCONBRIDGE DIAMOND DRI	LIMITED LL LOG			HOLE No: CH88-51	Page Numbe 1	er			
	Hole Location: 2 NTS: 092/B13 Azimuth: 210	6+92 E 3+10 S UTM: 5416817 Elevation: 5	5 7.7 N 429904.4 E 510 m				Claim No. C Section No.	HIP1 : Line 27+00	East, Chip (Froup			
	Dip: -45 Started: May 4, 1 Completed: May 6,	Length: 1 988 1988	159.7 m				Logged By: Drilling Co Assayed By:	David P. Mone .: Burwash En Bondar-Clegg	y terprises and X-Ray A	lssay			
	Purpose: To test	the strong sou	thern IP anomal	У	DIP TESTS		Core Size:	NQ		- -			
			Length	Azi- muth D:	ip Length	Azi- muth	Dip						
			14.30	220.0 -44	.0 93.60	218.0 -4	2.0						
F	from To (m) (m)		DESCRIPTION		San	nple From No. (m)	To Width (m) (m)	Total C Sulphides (p	u Pb pm) (ppm)	Zn Ag (ppm) (ppm	Au n) (ppb)	Ba (ppm)	

4.0 OVERBURDEN .0

4.0 25.4 FELDSPAR PORPHYRITIC GABBRO

Fine-grained medium green gabbro with on average 10 to 15 *, 1 to 3 mm, feldspar grains. There is moderate local shearing at 76 degrees to core axis with moderate fracture controlled carbonatization. There are minor fracture controlled calcite, epidote and hematite veinlets. There is blocky, highly fractured core from 5.4 to 5.8, 13.0 to 14.8, and 24.0 to 25.0. Is oxidized throughout with rust on fractures. Lost core :. 20.4 23.5 : 0.3 m. 23.5 24.7 : 0.7 m.

25.4	44.4 BLACK ARGILLITE						\mathbf{v}	V	V			
	Black argillite with up to 2 % white and grey - green	VA01769	25.4	26.9	1.5	3	29	27	156	×ĭ	<5 (6100 }	
	cherty sediment beds. Core is mostly blocky, highly	VA01770	26.9	28.4	1.5	3	28	29	247	(1	<5 5200	
	fractured core with 20 cm of fault gouge at 31.0. There is	VA01771	28.4	30.4	2.0	4	18	27	61	(1	<5 2700 ·	
	strong fracture controlled carbonatization. Fracture	VA01772	30.4	33.1	2.7	- 5	15	28	61	<1	(5 2400	
	controlled pyrite is fine-grained and averages 3 to 5 %.	VA01773	33.1	35.7	2.6	5	19	26	63	<1	(5 2600	
	Beds are variable in thickness from up to 1 mm to greater	VA01774	35.7	37.0	1.3	5	21	30	60	(1	(5 2700	
	than 10 cm.	VA01775	37.0	39.0	2.0	5	. 38	30	390	1	<5 3800	
	Bedding :.	VA01776	39.0	40.5	1.5	5	39	59	71	(1	(5 2960	
	25.7 : 40 degrees to core axis.	VA01777	40.5	42.0	1.5	5	18	53	89	<1	10 3900	
	28.0 : 71 degrees to core axis.	VA01778	42.0	43.0	1.0	4	14	52	21	(1	(5 3000	
	29.0 : 72 degrees to core axis.	VA01779	43.0	44.4	1.4	3	14	45	47	<1	(5 4200	
	34.9 : 60 degrees to core axis.							25	110	11	15 5	
	39.1 : 58 degrees to core axis.				19		23	\$3	115	41		٠
	41.6 : 46 degrees to core axis.				111						5,0-	-
	AA O + AB dogroop to goto swig											

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-51 2 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Αđ Au Ba (m) -----DESCRIPTION-----(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Lost core :. 26.4 28.3 : 0.4 m. 28.3 29.6 : 0.2 m. 30.4 32.0 : 0.3 m. 32.0 33.1 : 0.6 m. 33.1 35.7 : 0.7 m. Alteration :. 25.4 44.4 STRONG FRACTURE CONTROLLED CARBONATIZATION. 44.4 50.6 AUFFACEOUS CONGLOMERATE 33 n/a n/a 4930 Tuffaceous conglomerate to wacke. There is 30 to 40 %, 1 VA01084 44.4 50.0 5.6 n/a 13 n/a to 3 mm, average 1 mm, quartz and feldspar grains. Feldspar grains are laths or angular. There are up to 1 %, approximately 5 to 10 mm, argillite clasts and one block or bed from 48.4 to 48.9. There is strong thermal biotite from 44.4 to 45.2 and moderate thermal biotite after 45.2. There is minor fracture controlled chlorite and strong quartz - chlorite - (pyrite) from 47.4 to 47.9 and from 49.2 to 49.3. There is weak fracture controlled silicification as quartz veinlets with very weak associated pervasive silicification. Foliations :. 45.2 : 61 degrees to core axis. 46.6 : 61 degrees to core axis. 47.0 : 62 degrees to core axis. . Lost core :. 50.0 50.6 : 0.5 m. 50.6 51.8 BLACK ARGILLITE Black argillite with minor brown beds. Beds are variable <5 2500 VA01780 50.6 51.8 1.2 37 (1 3 12 44 from < 1 to 20 mm thick. There is 2 to 3 % fine-grained fracture controlled pyrite. Is blocky, highly fractured core from 50.7 to 51.2. Beading :. 50.6 : 38 degrees to core axis. 51.8 55.8 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI TUFF n/a 38 n/a n/a 4960 Light grey - green to brown felsic tuff with 10 %, 1 mm, VA01085 51.8 55.8 4.0 n/a <10 feldspar crystals and 5 %, 1 to 2 mm, quartz eyes and approximately 1 %, 1 cm, cherty lapilli. There is a very strong foliation at 61 degrees to core axis. There are minor fracture controlled quartz and chlorite veinlets. Schist is papery with weak kinking. From 54.05 to 54.1 there is a martz - biotite vein. 55.8 57 & ALACZ ARGILLITE 80 <1 <5 2700 C Blocky, highly fractured core with 0.2 m lost core from VA01781 55.8 57.3 1.5 1 12 41

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PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-51 3

DIAMOND DRILL 100

From To

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(m) (m)

56.0 to 57.0. Black cherty argillite with minor fracture controlled pyrite.

-----DESCRIPTION------

57.3 61.7 FELSIC TUFF

Felsic tuff or siliceous cherty tuffite with minor green chert and black argillite beds at approximately 40 degrees to core axis, is weakly contorted. Foliation is strong at 30, 45 and 70 degrees to core axis. There is minor fine-grained feldspar crystals, < 1 mm and approximately 5 %. There is weak brown colour.

61.7 100.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

98.6 : 71 degrees to core axis.

87.6 : 40 degrees to core axis.

Light green to medium grey - green coarse crystal tuff with weak to moderate chlorite, 5 to 12 %. Is crystal rich with on average 5 to 7 %, 1 to 3 mm, guartz eyes and 20 %, 1 to 2 mm, feldspars. From 86.4 to 86.5 and 87.6 to 88.0 there is 20 % epidote instead of feldspar, and locally there are up to 1 % epidote grains. Tuff is massive with trace chert lapilli, up to 1 cm, and a 2 cm pyrrhotite clast at 79.4 and a 1 cm pyrite clast at 98.6. There are minor guartz veins. up to 4 cm with minor biotite. There is minor sediment beds, green chert, with minor pyrite at 0 degrees to core axis from, 61.7 to 61.2. There is approximately 0.5 % fracture controlled guartz - (calcite) veinlets with trace pyrite. There is weak to moderate thermal biotite to approximately 64 m and very weak spotty thermal biotite after. At 93.2 there is a minor fault slip at 71 degrees to core axis. There is blocky, highly fractured core from 72.7 to 76.0. 61.7 100.2 WEAK PERVASIVE CHLORITIZATION. Structure :. Foliations :. 64.3 : 74 degrees to core axis. 70.2 : 84 degrees to core axis. 78.3 : 61 degrees to core axis. 83.4 : 78 degrees to core axis. 91.7 : 68 degrees to core axis.

100.2 101.7 BLACK ARGILLITE

Bedding :.

Cherty black argillite with minor felsic tuffite and wacke beds, beds are up to 3 cm and average 1 cm. There is moderate to strong fracture controlled carbonatization. There is trace to 1 % fracture controlled pyrite. Is blocky, highly fractured core. Tops appears to be downhole, (to the south), based on fining direction.

VA01086	65.0	80.0	15.0	n/a	<10	n/a	107	n/a	n/a	2010	6
VA01087	80.0	100.0	20.0	n/a	<10	n/a	131	n/a	n/a	1440	E
			35		216						

Width Total Cu

(m) Sulphides (ppm)

Pb Zn Ag Au Ba (ppm) (ppm) (ppm) (ppb) (ppm)

Sample From To

(m)

(m)

No.

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

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From To (m) (m) -----DESCRIPTION----- Sample From To Width Total Cu Pb Ζn Aα Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Beds are cross-cut by minor faults at approximately 0 degrees to core axis with up to 2 mm displacements. Bedding averages 40 degrees to core axis.

101.7 104.4 ARGILLACEOUS VOLCANIC WACKE

Felsic tuffite to 102.8 with minor argillite clasts, up to 3 mm, hosts approximately 20 %, < 1 mm, feldspar and quartz grains. Tuffite is light grey, fine-grained and paperv. To 103.6 is argillic tuffite, black with minor fracture controlled carbonatization and pyrite. There are good argillite beds to 104.0. There is breccia to 104.3 with very angular argillite and chert clasts, up to 3 cm. From 104.3 to 104.4 there is 10 cm of fault gouge at 36 degrees to core axis. Foliations :. 102.4 : 62 degrees to core axis. 103.4 : 50 degrees to core axis. Bedding :. 103.4 : 25 degrees to core axis. 104.0 : 42 degrees to core axis.

104.4 117.1 FELSIC TUFF

Felsic tuff or tuffite with cherty ash tuff beds and fine-grained ash crystal beds with 15 to 20 %, < 1 mm feldspar and quartz grains. From 111.1 to 111.5 there are black cherty argillite beds or clasts up to 25 cm. From 113.7 to 114.3 and 114.8 to 115.0 there is moderate fracture controlled carbonatization and bleached tuff with approximately 10 % pyrite. There is weak fracture controlled carbonate - guartz veinlets at 0 to 90 degrees to core axis. Tuff beds are variable in colour from weak light green to medium grey and in thickness from 1 mm to 50 + cm. Bedding :. 104.9 : 51 degrees to core axis. 110.6 : 53 degrees to core axis. Foliations :. 105.0 : 56 degrees to core axis. 110.5 : 58 degrees to core axis. 115.0 : 59 degrees to core axis. Faults :. 110.4 : 61 degrees to core axis, 1 to 2 mm fault gouge. Lost core :.

VA01088 105.0 115.0 10.0 <10 n/a 49 n/a n/a 1620 n/a VA01783 113.6 115.1 1.5 24 37 52 <1 39 720 6

117.1 118.7 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) Very contorted black argillite, green chert and felsic

111.9 114.0 0.6 m.

HOLE No: Page Number CH88-51

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-51 5 DIAMOND DRILL LOG From To. Width Total Sample From То Cu Рb Zn λg Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) tuffite beds with strong folding and minor cross faults along fold axis. Bedding is very variable. There is trace to 1 % fracture controlled pyrite. 118.7 118.8 FAULT ZONE 5 Cm zone of fault slips with fault gouge at 36 degrees to core axis. 118.8 131.4 FELSIC TUFF Felsic tuff or tuffite with weak thermal biotite and or VA01089 120.0 130.0 10.0 <10 n/a <10 n/a n/a 2570 n/a chlorite, is papery with approximately 20 % feldspar VA01784 122.7 123.2 12 71 20 57 <1 15 210 .5 crystals. There are minor red chert beds throughout and VA01785 123.2 123.7 2 21 12 71 <5 820 .5 <1 strong chert from 121.2 to 122.2, and 124.2 to 125.2. <5 490 VA01786 124.3 125.1 . 8 1 39 16 44 <1 Sulphides and alteration :. ٢5 83 VA01787 125.8 126.3 60 **{1** 16 340 .5 1 121.2 121.3 3 to 5 % fracture controlled pyrite in chert or cherty sediments. 122.7 123.1 Weak pervasive epidote, carbonatization and over 71.5 m Cu: 15 Pbi 14 Zni 42 Ag 21 An 25 Cu: 15 Pbi 14 Zni 42 Ag 21 An 25 chloritization with 10 to 15 % fracture controlled fine-grained pyrrhotite and pyrite. 123.3 123.4 Approximately 5 to 7 % sulphides as from 122.7 to 123.1. 124.3 125.1 Approximately 1 % fracture controlled pyrite in cherty sediments. 125.9 126.0 2 to 3 % pyrite in moderate chloritization and weak carbonatization. Foliations :. 119.2 : 62 degrees to core axis. 129.8 : 43 degrees to core axis. Bedding :. 124.5 : 16 degrees to core axis. Lower contact :. 1 Cm fault gouge at 54 degrees to core axis. 131.4 132.5 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) <5 1300 (5 Cherty black argillite, brown wacke and red and green VA01788 131.4 132.5 1.1 31 20 45 (1 3 cherts with 2 to 3 % fracture controlled pyrite. Bedding averages 60 degrees to core axis. There is a 2 cm bleb of pyrrhotite in green chert at 132.5. 2 \mathbf{V} \mathbb{V} \mathbf{V} 132.5 136.2 TUFFACEOUS CONGLOMERATE 20 % round thermal biotite brown coloured cobbles and VA01789 132.5 134.0 1.5 3 115 26 37 <1 <5 2600 <5 2600 boulders, up to 10 cm, in a brown, feldspar rich, matrix. VA01790 134.0 135.0 126 36 33 1.0 3 <1 There is 3 % disseminated pyrite, coarse pyrite 155 40 42 (1 (5 3900 VA01791 135.0 136.2 3 1.2 concentrated on clast margins and fine-grained in matrix. 33 37 130.9 21 15 3022

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FALCONBRIDGE LIMITED CH88-51 6 DIAMOND DRTLL LOG Ta Sample Width From То Total Cu Ph Zn λσ Δ., Ba -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (mgg) (dgg) (mgg) (mgg) (mgg) Variably carbonatized and bleached mafic tuff with epidote VA01090 136.2 147.6 II.4 n/a (10 11 150 n/a n/a 17-2spots or lapilli. There is strong fracture controlled VA01792 136.2 138.0 1.8 2 62 41 10 1 (5 470 carbonatization and moderate pervasive carbonatization. VA01793 138.0 139-3 1.3 2 35 5 <1 ٢5 240 VA01794 139.5 141.0 There is 2 % fracture controlled pyrite with a 1 cm 1.5 54 58 49 <1 <5 940 pyrrhotite clot at 142.0. There are approximately 15 %, 3 VA01795 141.0 142.5 1.5 2 47 24 (1 (5 1500 60 to 10 mm. lapilli, probably after feldspar, now are VA01796 142.5 144.0 1.5 78 51 11 <5 1100 calcite and epidote. Massive with no foliation. There are VA01797 144.0 145.5 1 5 30 44 11 (1 18 (20 3 numerous fracture controlled guartz veins and veinlets at VA01798 145.5 147.5 2.1 2 17 41 16 (1 36 1560 numerous orientations. Alteration :. 136.2 147.6 STRONG FRACTURE CONTROLLED CARBONATIZATION. 136.2 147.6 MODERATE PERVASIVE CARBONATIZATION. 136.2 147.6 MODERATE SPOTTY EPIDOTIZATION. 147.6 159.7 MAFIC TUFFS WITH MINOR CHERTY SEDIMENTS Dark brown mafic tuff with approximately 20 %. < 1 mm. VA01799 151.5 152.7 1.2 5 107 41 20 <1 42 640 feldspars and red and green cherts. Most beds are at 0 VA01800 152.7 153.7 1.0 5 85 45 16 (1 6 1000 degrees to core axis. From 151.5 to 153.7 there is mafic VA01801 157.0 158.0 0 59 23 37 <1 < 5 3900 1.0 tuffs and green cherts with 5 % fracture controlled VA01802 158.0 159.0 1 129 7 55 <1 36 2200 1.0 pyrite and one speck of chalcopyrite at 151,55. From 158.0 VA01803 159.0 159.7 77 52 (1 . 7 1 6 (5 2500 the mafic is fine-grained brown and argillaceous with trace to 0.5 % fine-grained fracture controlled pyrite.

From (m) '(m)

PROPERTY: Chemainus J.V.

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136.2 147.6 MAFIC LAPILLI TUFF

Foliation is questionable with good cleavages at 35, 45 and 50 degrees to core axis. Lost core : 148.4 to 149.0 : 0.2 m.

End of hole : 524 feet (159.7 m) on Friday May 6, 1988 at 1:29 p.m.

Total lost core = 4.7 m % Recovery = 97.1 %.

HOLE No: Page Number

SAMPLE NUMBER	FROM	TO	ZS 102	ZAL203	ZCAD	ZNGO	ZNA20	ZK 20	XFE203	XT 102	XP205	ZHNO	ZLOI	SUM	BA	AI	NACA
				· • • • • • • • • • • • • • • • • • • •						•••••••••••			.		·	·····	
VA00640	46.90	47.00	66.30	15.40	2.48	1.90	2.29	3.66	4.81	0.47	0.13	0.11	1.93	99.48	2710.	54.	5.
VA00641	53.70	53.80	71.40	12.90	2.24	1.98	1.61	2.77	3.47	0.37	0.07	0.12	2.47	99.40	3180.	55.	4.
VA00642	63.40	63.50	72.00	14.00	2.26	2.04	1.21	2.55	2.85	0.36	0.20	0.10	2.08	99.65	2400.	57.	3.
VA00643	79.10	79.20	67.70	15.80	3.05	2.15	3.15	1.66	3.52	0.60	0.13	0.15	1.93	99.84	1760.	38.	6,
VA00644	92.10	92.20	65.60	14.90	5.61	2.00	2.25	1.24	4.80	0.62	0.11	0.17	2.47	99.77	1180.	29.	- 8,
VA00645	139.10	139.20	46.40	13.40	22.20	4.24	0.32	0.08	6.87	0.53	0.37	0.21	5.39	100.01	50.	16.	23.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

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Hole No. CH88-51 WHOLE ROCK SAMPLES

Page No.

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SAMPLE NUMBER	FROM	TO	XS102	XAL203	XCA0	XHGO	ZNA20	ZK20	XFE203	ZT 102	ZP205	ZHNO	2L01	SUN	 BA	AI	NACA
						***				**********		***-****			 		
VA01084	44.40	50.00	63.20	15.10	2.74	1.98	2.15	3.82	5.70	0.45			2.62	97.76	4930.	54.	5.
VA01085	51.80	55.80	69.90	14.70	1.96	1.90	1.14	3.49	3.15	0.38			2.23	98.85	4960.	63.	3.
VA01086	65.00	80.00	67.30	15.30	2.76	2.33	2.47	2.10	3.73	0.52			2.31	98.82	2010.	46.	5.
VA01087	80.00	100.00	67.30	14.90	3.39	2.36	2.58	1.43	4.20	0.59			2.23	98.98	1440.	39.	6.
VA01088	105.00	115.00	69.40	13.90	1.98	3.50	0.61	2.37	3.61	0.42			3.00	98.79	1620.	69.	3.
VA01089	120.00	130.00	63.10	16.60	2.86	3.39	1.77	2.80	4.02	0.67			2.77	97.98	2570.	57.	5.
VA01090	136.20	147.60	46.10	14.50	18.50	3.77	0.11	0.37	11.60	0.58			2.47	98.00	150.	18.	19.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA	CU	ZN	AG	ΒŪ	CO	NI	PB	AS	CD	KO	HN	CUZN	ETS	FE
			(ppm)	(ppm)	(ppm)	(ppm)	(ррЪ)	(ppm)			·						
VA01792	136.20	138.00	470.0	62.0	10.0	<0.5	<5.0	21.0	57.0	41.0	<5.0	<1.0	1.0	257.0	86.	2.	2.
VA01793	138.00	139.30	240.0	35.0	5.0	<0.5	<5.0	15.0	35.0	44.0	<5.0	<1.0	<1.0	270.0	88.	2.	1.
VA01794	139.50	141.00	940.0	54.0	49.0	<0.5	<5.0	15.0	42.0	58.0	<5.0	<1.0	<1.0	244.0	52.	2.	1.
VA01795	141.00	142.50	1500.0	92.0	24.0	<0.5	<5.0	26.0	55.0	47.0	<5.0	<1.0	1.0	349.0	79.	2.	2.
VA01796	142.50	144.00	1100.0	78.0	8.0	<0.5	<5.0	23.0	54.0	51.0	<5.0	<1.0	<1.0	295.0	91.	3.	2.
VA01797	144.00	145.50	<20.0	30.0	11.0	<0.5	18.0	22.0	46.0	44.0	<5.0	<1.0	1.0	347.0	73.	3.	2.
VA01798	145.50	147.60	1560.0	17.0	16.0	<0.5	36.0	17.0	25.0	41.0	<5.0	<1.0	1.0	507.0	52.	2.	3.
VA01799	151.50	152.70	640.0	107.0	20.0	<0.5	42.0	28.0	26.0	41.0	22.0	<1.0	3.0	504.0	84.	5.	5.
VA01800	152,70	153.70	1000.0	85.0	16.0	<0.5	6.0	28.0	22.0	45.0	<5.0	<1.0	1.0	362.0	84.	5.	4.
VA01801	157.00	158.00	3900.0	59.0	37.0	<0.5	<5.0	22.0	32.0	23.0	9.0	<1.0	8.0	416.0	61.	٥.	4.
VA01802	158.00	159.00	2200.0	129.0	55.0	<0.5	36.0	32.0	39.0	7.0	17.0	2.0	11.0	541.0	70.	1.	7.
VA01803	159.00	159.70	2500.0	77.0	52.0	<0.5	<5.0	25.0	32.0	6.0	10.0	2.0	9.0	472.0	60.	1.	5.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

Hole No. CH88-51

Page No. 2

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Summary Log: DDH CH88-52 Location: 31+00 E, 1+90 S; Chip 1 Claim Azimuth: 210, Dip: -60 Hole Completed: May 9, 1988 Core Logged By: D.P. Money

0.0 -	7.7	Casing.
7.7 -	30.0	Cherty felsic tuff with minor interbedded argillite and cherty sediments.
30.0 -	66.4	Gabbro.
66.4 -	70.1	Chert.
70.1 -	79.0	Gabbro with minor argillite beds or blocks.
79.0 -	95.1	Black argillites with minor interbedded cherts. The argillite hosts 2 % fracture controlled pyrite.
95.1 -	122.4	Black argillites with 2 to 3 % pyrite and minor intercalated mafic tuffs and cherts.
122.4 -	129.4	Hornblende phyric mafic dyke.
129.4 -	131.5	Andesitic tuffs with minor interbedded cherts.
131.5 -	151.5	Hornblende phyric mafic dyke.
151.5 -	185.9	Intercalated argillites, mafic tuffs and cherts, locally intruded by minor mafic dykes.
185.9 -	203.3	Black argillites with 3 to 5 % fracture controlled pyrite and very minor chert and greywacke beds.
203.3		End of hole.

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PROPERTY: Chemainus J.V.	FALCONBRIDGE LIMITED) .				HOLE No ch88-52	: Pa	ge Numbe 1	er			
Hole Location: 31+00 E 1+90 S	DIAMOND DRILL LOG											
NTS: 092B/13W UTN: 5416718.7 N 430307.3 Azimuth: 210 Elevation: 538 m Dip: -60 Length: 203.3 m	Ε			Clai Sect Logg	m No. (ion No. red By:	hip 1 : Section 3 D.P. Money	1+00 E	ast, Chi	ip Claim	Group		
Started: May 6, 1988 Completed: May 9, 1988				Dril Assa	ling Co yed By:	.: Burwash Bondar-Cle	Enterp gg and	rises X-Ray I	lssay		· .	
Purpose:	DIP TES	STS		Core	Size:	NQ						
	Azi-	λ	zi-									
Length	muth Dip	Length m	uth	Dip								
17.40 99.70	210.0 -60.0 212.0 -60.0	185.00 21	6.0 -	59.5								
n To (m)DESCRIPTIO	N	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
7.7 OVERBURDEN 30.0 FELSIC TUFF			н 									
Felsic tuff, tuffite and minor cherty Dominantly medium grey felsic ash tuf biotite. Foliation and bedding are pa Is blocky, highly fractured core. Fro are 50 % black cherty argillites with controlled pyrite. No lapilli or crys	sediments. f with weak thermal rallel to core axis. m 14.5 to 15.5 there trace fracture tals occur in the	V A01091. VA01804	- 10.0- 14.5			n/a 1	-12 58	n/a 6		/a <1	n /a 59 <5 55	100 200 ~
tuff. There is 2 cm pyrite clot at 26 Lost core :.	.8 in grey chert.											
16.8 18.0 : 0.1 m. 18.0 18.6 : 0.2 m. 18.6 19.2 : 0.2 m.												
19.5 20.3 : 0.3 m. 20.4 21.3 : 0.3 m. 21.3 22.4 : 0.8 m.												
22.4 23.5 : 0.2 m. 25.3 26.2 : 0.2 m. 28.0 28.7 : 0.6 m.												
28.7 29.3 : 0.4 m. 29.3 30.5 : 0.5 m.												
43.6 MAFIC INTRUSIVE Mafic tuff (?) or gabbro. With minor quartz beds or veins, (?) sediments. epidote veins and veinlets with assoc	epidote - sericite - There are minor iated	V &01092 -	30.5		12.5	n/a	197	n/a	41 n	/a	n/a 3	49
carbonatization. There are 3 %, up to probably leucoxene, some appear to ha	1 mm, white spots, ve ilmenite core, are	2 2										

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number ch88-52 2

Sample From To Width Total Cu РЪ Zn Au Ba Àσ No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

From To

(m) (m)

fracture controlled carbonatization and minor quartz carbonate veinlets at orientation of 0 to 90 degrees to core axis. Is dark green and massive with (?) 3 to 5 %, (1 mm chloritized hornblendes in the matrix. Probably is gabbro, whole rock sample taken to verify this. Lost core :. 30.5 32.3 : 0.2 m.

-----DESCRIPTION------

43.6 66.4 FELDSPAR PORPHYRITIC GABBRO

Plagiophyric gabbro with on average 5 %, 1 to 2 mm, feldspar grains. Part of same gabbro body as 30.0 to 43.6 with similiar epidotization locally. There are numerous minor fracture controlled quartz, calcite and epidote veinlets at orientations of 0 to 90 degrees to core axis. 52.1 52.2 3 % chalcopyrite in fracture controlled 1 to 3 mm calcite veinlet.

52.9 53.3 Strong fracture controlled carbonatization with trace chalcopyrite.

61.0 61.2 Fault at 18 degrees to core axis with 2 cm of fault gouge along slip.

Blocky, highly fractured core :.

44.5 to 46.3, 46.9 to 47.2, 50.0 to 51.0, 56.1 to 57.2, 60.0 to 60.2, 60.7 to 61.9 and 64.9 to 66.4.

Lost core :.

50.9 52.9 : 0.2 m.

54.3 54.5 : 0.1 m.

56.4 57.0 : 0.2 m.

64.9 66.4 : 0.3 m.

66.4 70.1 CHERT

Weakly brown, thermal biotite (?), to grey chert. Fractured and blocky, highly fractured core with weak fracture controlled carbonatization. No sulphides occur. Bedding is variable, is at 43 degrees to core axis at 66.5 and is at 24 degrees to core axis at 69.1. There is weak kinking of the beds. Lost core :. 66.4 67.2 : 0.3 m. 67.2 68.0 : 0.3 m.

70.1 74.5 FELDSPAR PORPHYRITIC GABBRO

Fine-grained medium green gabbro with approximately 7 %, 2 mm, feldspars and 5 % boudinaged quartz - calcite veinlets with trace pyrite and chalcopyrite. There is a weak foliation or moderate cleavage at 70 degrees to core axis.

PR	OPERT	Y: Chemainus J.V.					HOLE N	lo: Pa	ge Numl	ber		· •	
		FALCONBRIDGE LIMITED					ch88-52	2	3				,
		DIAMOND DRILL LOG											
*			A A .		-				- 1	~	• • • •	· · · · · ·	
from (-)	10		Sample	From	TO (m)	Width (m)	Totai	Cu ()	2D ()	Zn	Ag	AU Ba	
(81)	(101)	DESCRIPTION	NO.	(m)	(m)	· (m)	Sulphiaes	s (ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm)	
74 5	75 A	CHERTY SEDIMENTS (BLACK ARCTILITE AND STUTSTONE WITH MINOR					· · · ·						
/4.5	 Sample From To Vidth Total Cu Pb Zn No. (m) (m) (m) (m) Total Cu Pb Zn No. (m) (m) (m) (m) (m) (m) (m) (m) (m) (m)												
		Red and green folded cherts with up to 10 % thermal											
	<pre>GRETWACKE) Red and green folded cherts with up to 10 % thermal biotite coloured quartz eye tuff. Upper contact at 37 degrees to core axis and lower contact at 56 degrees to core axis. There is trace fracture controlled pyrite and allow fracture controlled quartz and calcite winkeds by the gabbro. 79.0 FELDSPAR PORPHYRITIC GABBRO Gabbro. as from 70.1 to 74.5 with folded chert blocks (?) from 76.7 to 78.0 and 77.9 to 78.3. Cherts have thermal biotite moderate fracture controlled quartz and calcite veinlets and are weakly bleached. Gabbro has numerous quartz +/- biotite veinlets with trace local pyrite. 91.3 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) Black cherty argillites and brown to white cherts. Is controlled quartz veintes, from 88 to 89 there is minor controlled quartz veintes. From 88 to 89 there is minor chert from 79.0 to 81.4, 85.0 to 85.5 and from 86.0 to 86.5. 10.1 an 13.1 & 81.8 : 0.5 m. 81.7 : 0.4 m. 84.4 & 50.0 to 2.1 m. 83.9 90.5 : 0.3 m. 90.5 : 0.3 m. 90.5 : 0.1 degrees to core axis. 80.5 : 11 degrees to core axis. 81.7 : 36 degrees to core axis. 81.7 : 3</pre>												
	 GREYWACKE) Red and green folded cherts with up to 10 % thermal biotite coloured quartz eye tuff. Upper contact at 37 degrees to core axis and lower contact at 56 degrees to core axis. There is trace fracture controlled pyrite and minor fracture controlled quartz and calcite veinlets. Bedding is approximately 45 degrees to core axis at edges and 80 degrees to core axis in core. May be a block plucked by the gabbro. 79.0 FELDSPAR PORPHYRITIC GABBRO Gabbro, as from 70.1 to 74.5 with folded chert blocks (?) from 76.7 to 78.0 and 77.9 to 78.3. Cherts have thermal biotite, moderate fracture controlled quartz and calcite veinlets and are weakly bleached. Gabbro has numerous quartz +/- biotite veinlets with trace local pyrite. 91.3 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) Black cherty argillites and brown to white cherts. Is mostly blocky, highly fractured core. There is on average 2 % fracture controlled pyrite with strong local fracture controlled quartz veinlets. From 88 to 89 there is minor fault brecciation. Is dominantly argillite with strong chert from 79.0 to 81.4, 85.0 to 85.5 and from 86.0 to 86.5. Lost core :. 81.4 83.1 : 0.3 m. 83.1 83.8 : 0.6 m. 83.8 84.4 : 0.4 m. 84.4 85.0 : 0.2 m. 85.0 87.2 : 0.5 m. 88.9 90.5 : 0.3 m. 90.5 91.7 : 0.6 m. Bedding :. 79.3 : 48 degrees to core axis. 79.3 : 48 degrees to core axis. 												
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1.1		minor fracture controlled quartz and calcite veinlets.											
		Bedding is approximately 45 degrees to core axis at edges											
		and 80 degrees to core axis in core. May be a block											
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	 75.4 CHERTY SEDIMENTS (BLACK ARGILLITE AND GREVWACKE) Red and green folded cherts with up to biotite coloured quartz eye tuff. Upp degrees to core axis and lower contact core axis. There is trace fracture co- minor fracture controlled quartz and Bedding is approximately 45 degrees to and 80 degrees to core axis in core. plucked by the gabbro. 79.0 FELDSPAR PORPHYRITIC GABBRO Gabbro, as from 70.1 to 74.5 with fol from 76.7 to 78.0 and 77.9 to 78.3. biotite, moderate fracture controlled veinlets and are weakly bleached. Ga quartz +/- biotite veinlets with trace 91.3 CHERTY SEDIMENTS (BLACK ARGILLITE AND GREYWACKE) Black cherty argillites and brown to mostly blocky, highly fractured core. 2 % fracture controlled pyrite with controlled quartz veinlets. From 88 to fault brecciation. Is dominantly arg chert from 79.0 to 81.4, 85.0 to 85.5 86.5. Lost core :. 81.4 83.1 : 0.3 m. 83.1 83.8 : 0.6 m. 83.8 84.4 : 0.4 m. 84.4 85.0 : 0.2 m. 85.0 87.2 : 0.5 m. 88.9 90.5 : 0.3 m. 90.5 91.7 : 0.6 m. Bedding :. 79.3 : 48 degrees to core axis. 80.5 : 31 degrees to core axis. 81.7 : 36 degrees to core axis. 												
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70 0	01 3	CHERTY CENTHENES (DI SCH SDOTLITER SND STITCHONE HIMH MINOD											
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	2	THEREY SEDIMENTS (BLACK ARGILLITE AND SILISTOME WITH HINGR HEWYARED HEWYA	11 6000										
		2 % fracture controlled purite with strong local fracture	LACK ARGILLITE AND SILTSTONE WITH MINOR d cherts with up to 10 % theraal art zeve toff. Upper contact at 37 s and lower contact at 36 degrees to trace fracture controlled yrite and rolled quartz and calcite veinlets. atley 45 degrees to core axis at edges ore axis in core. May be a block ro. C GABBRO 1 to 74.5 with folded chert blocks (?) and 77.9 to 72.3. Cherts have theraal racture controlled quartz and calcite teskly bleached. Gabbro has numerous valiates with trace local pyrite. LACK ARGILLITE AND SILTSTONE WITH MINOR ites and brown to white cherts. Is 10 racture core. There is on average valiates from 68 to 89 there is anion 10 store axis. o core axis.										
		a controlled guartz voiplate. From 28 to 29 there is minor	The totack and share and pure contact at 37 e axis and lower contact at 56 degrees to re is trace fracture controlled pyrite and controlled quartz and calcite values is core axis in core. May be a block gabbro. TVXITIC GABBRO WTXITIC GABBRO WTXIII GABRO WTXIII GABBRO WTXIII GABBRO WTXIIII GABBRO WTXIII GABBRO WTTYIII										
		fault brecciation Is dominantly argillite with strong	ts with up to 10 % thereal ye tuff. Upper contact at 37 lower controlled gyrite and i quartz and calcite veinlets. 45 degrees to core axis at edges is in core. May be a block 180 4.5 with folded chert blocks (?) /.9 to 78.3. Cherts have thereal te controlled quartz and calcite bleached. Gabbro has numerous ts with trace local pyrite. 180 180 180 180 180 180 180 180										
		chert from 79 B to 81 4 85 B to 85 5 and from 86 B to	K ARCILLITE AND SILISTONE WITH HINOR herts with up to 10 % thermal t syse tuff. Upper contact at 37 ad lower contract at 56 degrees to ace fracture controlled pryrise and led quartz and calcite veinlets. 19 45 degrees to core axis at edges axis in core. May be a block ABBRO 0 74.5 with folded chert blocks (?) 77.9 to 78.3. Cherts have thermal ture controlled quartz and calcite 19 bleached. Gabbro has numerous nets with trace local pyrite. K ARGILLITE AND SILTSTONE WITH NINOR s and brown to white cherts. Is tractured core. There is on average VA01805 79.0 80.0 1.0 1 35 5 46 1 11 66000 10 1 35 5 46 1 11 66000 10 1 35 5 46 1 11 66000 9 110 1 9 130000 10 1 6 9 110 1 9 130000 10 10 1 6 9 110 1 9 130000 10 10 1 1 5 5 10 1 5 5 10 1 5 5 10 1 5 5 10 1 5 5 10 1 5 5 10 0 10 10 10 10 1 5 5 4000 10 10 10 1 5 1 5 5 10 9 128 1 6 4000 10 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 1 9 128 1 6 4000 10 10 1 5 5 24 8 75 51 10 1 1 5 5 24 8 75 51 10 10 10 1 1 5 5 24 8 75 51 10 10 10 1 1 5 5 24 8 75 51 10 10 10 1 5 5 24 8 75 51 10 10 10 1 1 5 5 10 1 1 5 5 10 1 1 5 5 10 1 1 5 5 10 1 1 5 5 10 1 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 24 8 75 51 1 5 5 52 51 51 1 5 5 52 51 51 51 51 51 51 51 51 51 51 51 51 51										
		86.5.	folded cherts with up to 10 4 thermal red quartz ye toff. Upper contact at 57 re axis and lower controlled yrite and e controlled guartz and calcite veinlets. proximately 87 degrees to core axis at edges s to core axis in core. Nay be a block e gabbro. HYRITIC GABBRO on 70.1 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded chert blocks (?) 78.0 and 77.9 to 74.5 with folded cherts. Is while with strace local pyrite. NTS (BLACK ARGILLITE AND SILTSTONE WITH HINOR argillites and brown to white cherts. Is while 80.0 81.0 1.0 1 35 5 46 1 11 6000 voltes veinlets. From 88 to 89 there is anor tion. Is dominantly argillite with strong volt808 82.0 81.0 1.0 1 55 46 1 0 1 9 12000 attr veinlets. From 86 to 89 there is anor volt808 82.0 81.0 1.2 2 58 5 98 (1 45 9700 volt810 83.0 87.0 2.0 2 48 15 15 0 1 45 6600 volt811 87.0 89.0 2.0 2 24 15 15 0 1 45 6600 volt811 87.0 89.0 2.0 2 24 15 15 0 1 45 6600 volt811 87.0 89.0 2.0 2 24 15 15 0 1 45 6600 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt812 90.5 92.4 1.9 2 51 9 98 (1 45 14000 volt81 83.5 0 to 85.5 1.2 2 10 10 108 1 45 14000 volt81 83.5 0 to 85.5 1.2 2 10 10 108 1 45 14000 volt81 83.5 0 to 85.5 1.2 2 10 10 108 1 45 14000 volt81 83.5 0 to 85.5 1.1 5 31 9 128 1 6 4100 volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81 83.5 0 to 1 1.6 5 32 9 7 (1 5 5 4000) volt81										
		res to core axis and lower controlled pyrite and r fracture controlled quartz and calcite veinlets. ing is approximately 45 degrees to core axis at edges 30 degrees to core axis in core. May be a block ted by the gabbro. SPAR PORPHYRITIC GABBRO tor, as from 70.1 to 74.5 with folded chert blocks (?) 76.7 to 78.0 and 77.9 to 78.3. Cherts have thermal ite, moderate fracture controlled quartz and calcite lets and are weakly bleached. Gabbro has numerous tz +/- blotite veinlets with trace local pyrite. YSEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR WACKE) k cherty argillites and brown to white cherts. IS y block, highly fractured core. Three is on average fracture controlled pyrite with strong local fracture volled quartz veinlets. From 88 to 89 there is minor to from 79.0 to 81.4, 85.0 to 85.5 and from 86.0 to 33.8 to 6 m. 83.1 to 3 m.	(5 4000										
		81.4 83.1 : 0.3 m.	is approximately 45 degrees to core axis at edges degrees to core axis. R PORPHYRITIC GABBRO as from 70.1 to 74.5 with folded chert blocks (?) 6.7 to 78.0 and 77.9 to 78.3. Cherts have thermal , moderate fracture controlled quartz and calcite s and are weakly bleached. Gabbro has numerous 4/- biotite veinlets with trace local pyrite. SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR KE) herty argillites and hown to white cherts. Is VA01805 79.0 80.0 1.0 3 46 7 70 (1 17 6500 blocky, highly fractured core. There is on average VA01806 80.0 81.0 1.0 1 35 5 46 1 11 6000 acture controlled pyrite with strong local fracture VA01807 81.0 82.0 1.0 1 60 9 110 1 9 12000 led quartz veinlets. From 88 to 89 there is minor VA01808 82.0 83.8 1.8 2 41 6 65 (1 <5 3000 rom 79.0 to 81.4, 85.0 to 85.5 and from 86.0 to VA01810 85.0 87.0 2.0 2 48 15 150 1 (5 6600 VA01811 89.0 90.5 1.5 2 30 10 108 1 (5 4000 VA01812 90.5 92.4 1.9 2 51 9 98 (1 $\leq 5 1000$ 11 0.1 an. 4 : 0.4 m. 0 : 0.2 m. 12 : 0.5 m. 13 : 0.5 m. 13 : 0.6 m. 14 : 0.4 m. 13 : 0.5 m. 14 : 0.5 m. 15 : 0.3 m. 7 : 0.6 m. 14 : 0.4 m. 15 : 0.3 m. 7 : 0.6 m. 15 : 0.3 m. 7 : 0.6 m. 16 : 0.5 m. 17 : 0.6 m. 18 : 0.5 m. 19 : 0.5 m. 10 : 0.5 m. 10 : 0.5 m. 10 : 0.5 m. 11 : 0.3 m. 7 : 0.6 m. 11 : 0.3 m. 7 : 0.6 m. 12 : 0.5 m. 13 : 0.5 m. 14 : 0.5 m. 15 : 0.3 m. 7 : 0.6 m. 15 : 0.3 m. 7 : 0.6 m. 16 : 0.5 m. 17 : 0.6 m. 17 : 0.6 m. 18 : 0.5 m. 19 : 0.5 m. 19 : 0.5 m. 10 : 0.5 m. 10 : 0.5 m. 10 : 0.5 m. 11 : 0.5 m. 11 : 0.5 m. 12 : 0.5 m. 13 : 0.5 m. 14 : 0 : 0.5 m. 15 : 0.3 m. 7 : 0.6 m. 16 : 0.5 m. 17 : 0.6 m. 17 : 0.6 m. 17 : 0.6 m. 18 : 0.5 m. 19 : 0.5 m. 19 : 0.5 m. 10 : 0.5	(5 14000)									
		83.1 83.8 : 0.6 m.	BRO 74.5 with folded chert blocks (?) 7.9 to 78.3. Cherts have thermal re controlled quartz and calcite bleached. Gabbro has numerous ets with trace local pyrite. ARGILLITE AND SILTSTONE WITH MINOR and brown to white cherts. Is actured core. There is on average the stis. From 88 to 89 there is minor S5.0 to 85.5 and from 86.0 to Woll805 79.0 80.0 1.0 3 46 7 70 (1 17 6500 VA01805 79.0 80.0 1.0 1 35 5 46 1 11 6000 VA01806 80.0 81.0 1.0 1 35 5 46 1 11 6000 VA01808 82.0 83.8 1.8 2 41 6 65 (1 (5 33000) VA01809 83.8 85.0 1.2 2 58 5 98 (1 (5 9700) VA01809 83.8 85.0 1.2 2 58 5 98 (1 (5 9700) VA01811 87.0 89.0 2.0 2 48 15 150 1 (5 6600) VA01811 87.0 89.0 2.0 2 28 32 130 (1 (5 19000) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000)) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000)) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000)) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000)) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000)) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 14000))) VA01812 90.5 92.4 1.9 2 51 9 9 8 (1 (5 1400))) VA0180 20 00 00 00 00 00 00 00 00 00 00 00 00										
		83.8 84.4 : 0.4 m.	rt blocks (?) have thermal and calcite is numerous pyrite. 'ONE WITH MINOR therts. Is VA01805 79.0 80.0 1.0 3 46 7 70 (1 17 6500 is on average VA01806 80.0 81.0 1.0 1 35 5 46 1 11 6000 local fracture VA01807 81.0 82.0 1.0 1 60 9 110 1 9 12000 vA01808 82.0 83.8 1.8 2 41 6 65 (1 (5 33000) VA01808 83.0 83.0 1.2 2 58 5 98 (1 (5 9700) VA01810 85.0 87.0 2.0 2 48 15 150 1 (5 6600) VA01811 87.0 89.0 2.0 2 28 32 130 (1 (5 19000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) 474 11 977 < 1 5.5 12311										
		84.4 85.0 : 0.2 m.	The exist of the formation of the forma										
		85.0 87.2 : 0.5 m.	ILTSTONE WITH MINOR ite cherts. Is VA01805 79.0 80.0 1.0 3 46 7 70 (1 17 6500 here is on average VA01806 80.0 81.0 1.0 1 35 5 46 1 11 6000 rong local fracture VA01807 81.0 82.0 1.0 1 60 9 110 1 9 12000 89 there is minor VA01808 82.0 83.8 1.8 2 41 6 65 (1 (5 33000) lite with strong VA01809 83.8 85.0 1.2 2 58 5 98 (1 (5 9700) VA01810 85.0 87.0 2.0 2 48 15 150 1 (5 6600) VA01811 87.0 89.0 2.0 2 28 32 130 (1 (5 19000) VA01813 89.0 90.5 1.5 2 30 10 108 1 (5 4000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) 4741177615.512311										
		88.9 90.5 : 0.3 m.	ACK ARGILLITE AND SILTSTONE WITH MINOR tes and brown to white cherts. IS y fractured core. There is on average VA01805 79.0 80.0 1.0 3 46 7 70 (1 17 6500 YA01806 80.0 81.0 1.0 1 35 5 46 1 11 6000 10 1 9 12000 VA01807 83.0 82.0 83.8 1.8 2 41 6 65 (1 (5 33000 VA01809 83.8 85.0 1.2 2 58 5 98 (1 (5 9700) VA01810 85.0 87.0 2.0 2 48 15 150 1 (5 6600) VA01811 87.0 89.0 2.0 2 28 32 130 (1 (5 19000) VA01811 87.0 89.0 90.5 1.5 2 30 10 108 1 (5 19000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 14000) VA01812 90.5 92.4 1.9 2 51 9 98 (1 (5 12 3/1)) VA0180 20 (1 (5										
		90.5 91.7 : 0.6 m.											
		Bedding :.											
		79.3 : 48 degrees to core axis.											
		80.5 : 31 degrees to core axis.											
		81.7 : 36 degrees to core axis.											
		87.5 : 18 degrees to core axis.											
													_
													2
91.3	95.1	FAULT ZONE			<u> </u>		-		^	100	· .	6 4100 7	
	·	Black argilite fault gouge with 5 % fracture controlled	VA01814	92.4	93.5	1.1	5	11	9	128	1	6 26000	
		pyrite and moderate fracture controlled carbonatization.	VAU1815	93.5	95.1	1.6	5	24	8	15	17	0 (30000)	
		Graphitic rubble. Fault motion at approximately 60				J ")			4	101	J .		۵
		degrees to core axis.				2.1		21	0	101	I.	6 Irma	
		LOST CORE :.										0 18040	
		91.7 92.4 C U.D M.											

I	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE No ch88-52	o: Pag	je Numb 4	er				
From (m)	n To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	
		92.4 93.5 : 0.2 m. 93.5 95.1 : 0.7 m.												
95.1	96.7	MAFIC INTRUSIVE May be bleached and carbonatized gabbro. Fine-grained tan schist with 1 %, 2 mm, feldspars and very strong pervasive carbonatization. Upper contact is at 7 degrees to core axis from 95.1 to 95.55. Foliation is at 28 degrees to core axis.						•						
96.7	100.8	BLACK ARGILLITE												
÷		Black graphitic argillite with weak to moderate fracture controlled quartz - calcite veinlets and 5 to 7 % fracture controlled pyrite. Is blocky, highly fractured core with strong fractures parallel to bedding, approximately 20 to 25 degrees to core axis. Lost core :. 96.6 97.2 : 0.1 m.	VA01816 VA01817 VA01818	96.7 98.1 99.4	98.1 99.4 100.8	1.4 1.3 1.4 4.1	6 6 6	34 24 24 27	10 10 9 10	125 116 98	1 1 <1	(5 (5 5	3500 2500 5300 376) 2
100.8	102.0	97.2 97.8 : 0.1 m. 99.4 100.0 : 0.2 m. 100.0 102.0 : 0.2 m. TUFFACEOUS CONGLOMERATE Argillaceous tuffite with minor feldspar and guartz	VA01819	100.8	102.0	1 2	A	17	6	81	(1	(5	4100].
		crystals and 5 to 10 % pebble to cobble sized argillite clasts. There is minor kink bands, quartz veinlets and 3 to 4 % fracture controlled and disseminated fine-grained pyrite. Foliation : 102.2 : 35 degrees to core axis.			102.0)
102.0	119.9	BLACK ARGILLITE Graphitic to cherty black argillite with moderate fracture controlled carbonatization and 2 to 3 % fine-grained fracture controlled pyrite. Foliation or cleavage at 0 and approximately 45 degrees to core axis. Blocky, highly fractured core :. 103.5 110.1 0. 113.7 114.0 0. 116.1 119.9 0. Lost core :. 102.0 104.1 : 0.2 m. 104.9 105.8 : 0.2 m. 105.8 106.4 : 0.3 m. 106.4 107.3 : 0.6 m. 107.6 107.9 : 0.1 m.	VA01820 VA01821 VA01822 VA01823 VA01825 VA01825 VA01825 VA01827 VA01828 VA01829 VA01830 VA01831 VA01832	102.0 103.0 104.1 104.9 105.8 107.3 109.0 110.5 112.0 113.5 115.0 116.5 118.4	103.0 104.1 104.9 105.8 107.3 109.0 110.5 112.0 113.5 115.0 116.5 118.4 119.9	$1.0 \\ 1.1 \\ .8 \\ .9 \\ 1.5 \\ 1.7 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.5 \\ 1.9 \\ 1.5 \\ 1.7 \\ 1.5 \\ 1.7 \\ 1.5 \\ 1.9 \\ 1.5 \\ 1.7 \\ 1.5 \\ 1.7 \\ 1.5 \\ $	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	37 17 30 33 19 16 29 15 26 29 34 29 36 29 36	11 5 8 10 7 8 (5 7 7 12 10 28 9	140 81 102 130 88 90 110 95 130 148 142 135 117	$ \begin{array}{c} 1 \\ (1 \\ 1 \\ 1 \\ 1 \\ (1 \\ (1 \\ (1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ $	5556556555555 5	3400 3900 2200 1500 3500 2900 2900 5400 7100 6400 3000 2700	

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample From To

No.

(m)

(m)

Width

(m)

HOLE No: Page Number ch88-52 5

Pb

Zn

λσ

(ppm) (ppm) (ppm) (ppb) (ppm)

An

Ba

Total Cu

Sulphides (ppm)

From To
(m) (m) -----DESCRIPTION----108.2 109.0 : 0.5 m.
117.0 118.4 : 0.2 m.
118.4 119.0 : 0.3 m.
119.0 119.8 : 0.3 m.
Bedding :.
106.3 : 23 degrees to core axis.
112.6 : 54 degrees to core axis.

119.5 : 37 degrees to core axis.

- 119.9 122.4 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Mafic tuff and grey to green cherts with minor quartz carbonate veinlets. Blocky, highly fractured core with 0.3 m lost core from 119.9 to 120.4.
- 122.4 129.4 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Mafic dyke or sill. Coarse to medium grained with on average 10 to 15 %, 2 to 4 mm, biotite crystals after mafic crystals and 5 to 15 %, up to 5 mm, average 1 to 2 mm, feldspar grains in a green to locally brown matrix. There are numerous fracture controlled chlorite and fracture controlled calcite veinlets. At 128.5 there is trace chalcopyrite and pyrite in a fracture controlled calcite veinlet. Is massive with no foliation. Alteration :.
 - 122.4 129.4 MODERATE FRACTURE CONTROLLED CARBONATIZATION.
- 129.4 131.5 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Light green cherts with fracture controlled silicification and medium green andesitic tuffs with 20 %, < 1 mm, crystals. Bedding at 130.3 is at 41 degrees to core axis.

131.5 151.5 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION As from 122.4 to 129.4, with fine-grained zone from 140.5 to 143. There is minor red to brown biotite in the calcite - quartz veinlets. Biotite crystal size and quantity varies locally from 25 %, 3 to 5 mm, to 20 %, 1 to 2.5 mm, and to 15 %, << 1 mm. Is massive with no foliation as above. There is minor pyrite with fracture controlled calcite veinlets at 141.4 and 151.2. Biotite crystals appear to be after pyroxenes not hornblendes. Lower contact is at a fault at 47 degrees to core axis with 0.1 m fault gouge. 131.5 151.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

191.9 191.9 HODERALD TRECTORE CONTROLLED CARDONATIERTICA.

151.5 166.3 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE)

VA01093-123.0 129.0 6.0 n/a 10 n/a 47 n/a n/a 2670

VA01094 132.0 151.0 19.0 n/a (10 n/a 43 n/a n/a 2820

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calcite veinlets with trace pyrite.

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HOLE No: Page Number FALCONBRIDGE LIMITED ch88-52 6 DIAMOND DRILL LOG From To Sample From Width Τo Total Cu Pb Zn λσ Au Ba -----DESCRIPTION------(m) (m) Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) Black argillite with minor brown greywacke from 155.3 to VA01833 151.5 153.0 1.5 37 29 142 1 <5 3300 155.4, 156.5 to 156.6 and 166.1 to 166.2 and conglomerate VA01834 153.0 154.5 1.5 7 25 8 122 <1 <5 2000 with argillite clasts from 156.8 to 156.9. There is VA01835 154.5 156.0 1.5 7 28 18 <5 2400 132 1 moderate to strong fracture controlled calcite veinlets VA01836 156.0 157.5 1.5 7 34 26 138 1 <5 2100 and 7 % fracture controlled pyrite. There is minor local VA01837 157.5 159.0 1.5 36 7 20 152 1 6 2000 blocky, highly fractured core and fault gouge. Lost core : VA01838 159.0 160.2 37 1.2 7 23 110 <1 < 5 2900 157.0 159.6 : 0.4 m. VA01839 160.2 161.5 1.3 7 32 8 118 1 <5 4100 10 161.5 163.4 : 0.3 m. VA01840 161.5 163.4 33 1.9 7 8 140 1 (5 3000 151.5 166.3 STRONG FRACTURE CONTROLLED CARBONATIZATION. VA01841 163.4 165.0 1.6 7 32 6 130 1 < 5 2800 Bedding :. VA01842 165.0 166.3 1.3 7 34 13 130 <1 <5 2200 155.4 : 61 degrees to core axis. ----16 33 131 157.8 : 56 degrees to core axis. 14.8 45 2680 ł 166.3 171.2 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Weak thermal biotite in mafic tuff with minor clast of VA01843 166.3 168.0 1.7 1 37 ζ5 170 <1 <5 2400 chert. Local quartz - calcite - chlorite veinlets in VA01095 167_0 171.0 4.0 53 45 n/a n/2 4830 n/a bleached tuff with trace to 1 % fracture controlled VA01844 168.0 169.6 1.6 1 60 <5 93 <1 <5 4000 pyrite. Weak hematite on fractures. VA01845 169.6 171.2 1.6 1 90 ٢5 110 <1 < 5 4300 Foliations :. 168.3 : 49 degrees to core axis. 171.0 : 23 degrees to core axis. 171.2 177.3 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Medium grained biotite phyric intrusive, medium to dark VA01096 171.3 177.3 6.0 15 n/a n/a 60 n/a n/a 549 green, with 20 to 25 %, 2 to 3 mm, dark brown biotite after pyroxene crystals. Massive with no foliation as before. Lower contact at fault at 31 degrees to core axis with 0.1 m fault gouge of mafic sill. Alteration :. 171.2 177.3 WEAK FRACTURE CONTROLLED CARBONATIZATION. 171.2 177.3 WEAK FRACTURE CONTROLLED CHLORITIZATION , dark green chlorite on fractures. 177.3 181.9 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) Black argillite with cherts and minor greywacke. There is VA01846 177.3 179.0 1.7 2 27 <5 140 <1 <5 990 weak to moderate fracture controlled carbonatization and 3 VA01847 179.0 180.5 1.5 2 32 ٢5 85 <1 <5 2700 % fracture controlled pyrite. Bedding varies locally from 5 25 VA01848 180.5 181.9 1.4 2 25 128 (1 39 970 22 to 52 degrees to core axis. 118 15 1553 <1 181.9 185.9 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Fine-grained medium green sill as before. Massive rock VA01097 181.9 185.9 4.0 n/a 33 n/a 84 n/a n/a 1630with approximately 5 %, < 1 mm, biotites and 5 to 10 % feldspars, < 1 mm. There is minor fracture controlled

FI	KOLEKI	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					ch88-52	o: Pa	ige Numb 7	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)
185.9	203.3	CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE)				E							
		Cherty black argillite with moderate fracture controlled	VA01849	185.9	187.0	1.1	3	35	14	100	(1	<5	1100
		carbonatization and 3 to 5 % fracture controlled pyrite	VA01850	187.0	188.0	1.0	3	27	12	65	<1	< 5	540
		with minor other sediments. There are green cherts with	VA01851	188.0	189.5	1.5	3	30	10	150	1	< 5	1800
		weak fracture controlled silicification from 187.1 to	VA01852	189.5	191.0	1.5	3	35	8	140	1	<5	2000
		187.5. There is minor wacke to conglomerate with	VA01853	191.0	192.5	1.5	3	24	б.	110	(1 .	<5	2200
		argillite clasts from 187.7 to 188.4, 195.5 to 196.0 and	VA01854	192.5	194.0	1.5	- 3	17 -	7	96	· (1	۲5	3500
		from 192.4 to 192.7.	VA01855	194.0	195.5	1.5	- 3	23	6	110	<1	13	3500
		Bedding :.	VA01856	195.5	197.0	1.5	3	30	10	113	<1	<5	1700
		188.5 : 52 degrees to core axis.	VA01857	197.0	198.5	1.5	3	40 .	8	88	. (1	۲5	2200
		192.8 : 60 degrees to core axis.	VA01858	198.5	200.0	1.5	3	44	10	96	<1	۲5	3000
. *		195.0 : 48 degrees to core axis.	VA01859	200.0	201.5	1.5	3	37	7	90	<1	<5	2600
		200.6 : 61 degrees to core axis.	VA01860	201.5	203.3	1.8	3	48	10	105	1	<5	2700
						In Li			6.00		, 		· , , , , ,
		End of hole 667 feet (203.3 m) on Monday May 9, 1988 at 2:30 p.m.				17.4		32.5	8.25	105	<i>4</i> 1.	<5	2237

Total lost core = 14.2 m % Recovery = 93.0 %.

2460

77.1 m Chi32 PS 10. Zn; 111 Ag 21 Au 25 Ba 4839



DIAMOND	DRILL	CORE LITHOGEOCHEMICAL	RECORD
		(MAJOR ELEMEN T8)	

SAMPLE NUMBER	FROM	TO	ZS 102	XAL203	ZCAO	ZNGO	ZNA20	XK20	ZEE203	ZT 102	XP205	ZHNO	7L0 I	SUM	BA	AI	NACA
VA00646	35.30	35.40	48.80	14.70	10.10	6.52	2.61	0.19	13.00	1.78	0.17	0.20	1.93	100.00	294.	35.	13.
VA00647	54.60	54.70	48.70	13.70	10.80	6.39	2.20	0.33	13.30	1.86	0.18	0.20	1.70	99.36	407.	34.	13.
VA00648	95.80	95.90	45.50	12.40	12.10	5.24	1.16	0.60	10.70	1.51	0.14	0.21	10.30	99.86	1820.	31.	13.
VA00649	124.30	124.40	46.30	14.10	7.96	10.90	2.48	0.96	10.40	1.62	0.33	0.17	3.08	98.30	1440.	53.	10.
VA00650	135.80	135.90	46.10	13.60	9.47	10.60	2.30	1.12	10.10	1.60	0.29	0.16	3.08	98.42	1880.	50.	12.
VA00651	141.20	141.30	45.10	14.70	8.98	8.96	3.03	0.96	10.20	1.64	0.33	0.20	5.77	99.87	1900.	45.	12.
VA00652	148.20	148.30	42.90	11.70	10.20	13.30	1.03	1.31	11.40	1.51	0.29	0.19	4.16	97.99	2140.	57.	11.
VA00653	172.50	172.60	42.90	9.49	11.00	17.10	0.48	0.49	10.60	1.51	0.31	0.20	4.70	98.78	807.	61.	11.
VA00654	183.80	183.90	43.00	13.70	6.53	13.00	1.91	1.04	12.30	1.73	0.34	0.22	4.47	98.24	1550.	62.	8.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE	FROM	ro	XS 102	1AL203	ZCAD	2HGD	ZNA20	XK20	XFE203	XT 102	XP205	ZHNO	XLOI	SUM	ВА	AI	NACA
		·····			• += = + + + = = = = = = .						· · · · · · · · · · · · · · · · · · ·					,	
VA01091	10.00	30.00	74.70	8.82	2.28	2.00	0.91	1.85	4.78	0.31			2.08	97.73	5900.	55.	3.
VA01092	30.50	43.00	48.50	13.30	12.00	5.86	1.98	0.26	11.70	1.55			3.70	98.85	349.	30.	14.
VA01093	123.00	129.00	45.10	13.50	9.68	10.40	2.08	1.41	10.40	1.807			4.23	98.60	2670.	50.	12.
VA01094	132.00	151.00	45.00	12.60	9.76	11.00	1.85	1.33	9.98	1.58)		4.54	97.64	2820.	52.	12.
VA01095	167.00	171.00	41.90	16.50	14.40	3.79	2.36	2.04	8.09	1.54			7.39	98.01	4830.	26.	17.
VA01096	171.30	177.30	42.20	8.76	11.10	16.80	0.41	0.35	11.20	1.41			5.70	97.93	549.	60.	12.
VA01097	181.90	185.90	43.90	14.10	7.31	12.60	1.91	0.86	11.90	1.75			5.31	99.64	1630.	59.	9.

Hole No. CH88-52 ALTERED SAMPLES

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN. (ppm)	CL	JZN	ETS	FE
			······································				******											
VA01804	14.50	15.50	5500.0	58.0	49.0	<0.5	<5.0	5.0	24.0	6.0	9.0	<1.0	2.0	287.0		54.	1.	3
VA01805	79.00	80.00	6500.0	46.0	70.0	<0.5	17.0	8.0	18.0	7.0	8.0	<1.0	1.0	432.0		40.	з.	. 4
VA01806	80.00	81.00	6000.0	35.0	46.0	1.3	11.0	6.0	20.0	5.0	10.0	<1.0	1.0	378.0	· .	43.	1.	3
VA01807	81.00	82.00	12000.0	60.0	110.0	0.8	9.0	7.0	28.0	9.0	10.0	<1.0	1.0	490.0		35.	1.	4
VA01808	82.00	83.80	33000.0	41.0	65.0	<0.5	<5.0	5.0	17.0	6.0	20.0	<1.0	2.0	251.0		39.	2.	2
VA01809	83.80	85.00	9700.0	58.0	98.0	<0.5	<5.0	7.0	22.0	5.0	30.0	<1.0	2.0	676.0		37.	2.	5
VA01810	85.00	87.00	6600.0	48.0	150.0	0.6	<5.0	6.0	28.0	15.0	20.0	<1.0	3.0	330.0		24.	2.	3
VA01811	87.00	89.00	19000.0	28.0	130.0	<0.5	<5.0	3.0	14.0	32.0	17.0	<1.0	2.0	234.0		18.	2.	2
VA01813	89.00	90.50	4000.0	30.0	108.0	0.5	<5.0	3.0	20.0	10.0	13.0	<1.0	5.0	542.0		22.	2.	2
VA01812	90.50	92.40	14000.0	51.0	98.0	<0.5	<5.0	5.0	24.0	9.0	18.0	<1.0	1.0	.336.0		34.	2.	3
VA01814	92.40	93.50	4100.0	31.0	128.0	0.8	6.0	4.0	20.0	9.0	16.0	<1.0	6.0	385.0		20.	5.	2
VA01815	93.50	95.10	36000.0	24.0	75.0	<0.5	6.0	3.0	14.0	8.0	12.0	<1.0	2.0	265.0		24.	5.	2
VA01816	96.70	98.10	3500.0	34.0	125.0	0.8	<5.0	2.0	24.0	10.0	11.0	<1.0	4.0	384.0		21.	6.	2
VA01817	98.10	99.40	2500.0	24.0	116.0	0.6	<5.0	1.0	18.0	10.0	11.0	<1.0	3.0	372.0		17.	6.	2
VA01818	99.40	100.80	5300.0	24.0	98.0	<0.5	5.0	4.0	9.0	9.0	8.0	<1.0	3.0	637.0		20.	6.	2
VA01819	100.80	102.00	4100.0	17.0	81.0	<0.5	<5.0	3.0	8.0	6.0	9.0	<1.0	2.0	309.0		17.	4.	2
VA01920	102.00	103.00	3400.0	37.0	140.0	1.0	<5.0	3.0	28.0	11.0	13.0	<1.0	8.0	371.0		21.	2.	3
VA01821	103.00	104.10	3900.0	17.0	81.0	<0.5	<5.0	2.0	10.0	5.0	5.0	<1.0	2.0	226.0		17.	2.	2
VA01822	104.10	104.90	2200.0	30.0	102.0	0.6	<5.0	2.0	24.0	8.0	21.0	<1.0	2.0	285.0		23.	2.	2
VA01823	104.90	105.80	1500.0	33.0	130.0	0.6	6.0	2.0	24.0	8.0	30.0	<1.0	2.0	266.0		20.	2.	2
VA01824	105.80	107.30	3500.0	19.0	88.0	0.6	<5.0	3.0	9.0	10.0	<5.0	<1.0	2.0	386.0		18.	2.	2
VA01825	107.30	109.00	4000.0	16.0	90.0	<0.5	<5.0	1.0	9.0	7.0	<5.0	<1.0	13.0	486.0		15.	2.	2
VA01826	109.00	110.50	1900.0	29.0	110.0	<0.5	6.0	<1.0	26.0	8.0	<5.0	<1.0	3.0	377.0		21.	2.	1

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-52

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DIAMOND	DRILL	CORE	L ITHOGEOCHEMICAL	RECORD
		(MINO	R ELEMENTS)	

FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN ES
														-
10.50	112.00	2900.0	15.0	90.0	<0.5	5.0	<1.0	8.0	<5.0	5.0	2.0	2.0	354.0	14.
12.00	113.50	5400.0	26.0	95.0	<0.5	<5.0	7.0	9.0	7.0	8.0	<1.0	11.0	572.0	21.
13.50	115.00	7100.0	29.0	130.0	0.5	<5.0	6.0	14.0	7.0	10.0	<1.0	2.0	496.0	18.
15.00	116.50	6400.0	34.0	148.0	0.8	5.0	4.0	28.0	12.0	9.0	<1.0	36.0	370.0	19.
16.50	118.40	3000.0	29.0	142.0	0.8	5.0	6.0	37.0	10.0	14.0	<1.0	12.0	356.0	17.
18.40	119.90	2700.0	36.0	135.0	0.7	<5.0	6.0	10.0	28.0	<5.0	<1.0	2.0	406.0	21.
51.50	153.00	3300.0	37.0	142.0	0.8	<5.0	5.0	7.0	29.0	<5.0	<1.0	1.0	390.0	21.
53.00	154.50	2000.0	25.0	122.0	<0.5	<5.0	2.0	22.0	8.0	13.0	<1.0	3.0	571.0	17.
154.50	156.00	2400.0	28.0	132.0	0.5	<5.0	3.0	10.0	18.0	<5.0	<1.0	2.0	335.0	18.
156.00	157.50	2100.0	34.0	138.0	0.6	<5.0	1.0	9.0	26.0	5.0	<1.0	2.0	277.0	20.
157.50	159.00	2000.0	36.0	152.0	0.7	6.0	1.0	24.0	20.0	11.0	<1.0	3.0	360.0	19.
159.00	160.20	2900.0	37.0	110.0	<0.5	<5.0	6.0	18.0	23.0	5.0	<1.0	1.0	422.0	25.
60.20	161.50	4100.0	32.0	118.0	0.6	<5.0	2.0	22.0	8.0	50.0	<1.0	2.0	261.0	21.
161.50	163.40	3000.0	33.0	140.0	0.5	<5.0	3.0	28.0	8.0	12.0	<1.0	2.0	246.0	19.
63.40	165.00	2800.0	32.0	130.0	0.6	<5.0	3.0	24.0	6.0	12.0	<1.0	3.0	250.0	20.
65.00	166.30	2200.0	34.0	130.0	<0.5	<5.0	6.0	35.0	13.0	11.0	<1.0	3.0	361.0	21.
66.30	168.00	2400.0	37.0	170.0	<0.5	<5.0	28.0	98.0	<5.0	<5.0	<1.0	4.0	970.0	18.
68.00	169.60	4000.0	60.0	93.0	<0.5	<5.0	20.0	32.0	<5.0	<5.0	<1.0	3.0	730.0	39.
69.60	171.20	4300.0	90.0	110.0	<0.5	<5.0	23.0	54.0	<5.0	5.0	<1.0	4.0	823.0	45.
77.30	179.00	990.0	27.0	140.0	(0.5	<5.0	4.0	20.0	<5.0	5.0	<1.0	4.0	617.0	16.
179.00	180.50	2700.0	32.0	85.0	<0.5	<5.0	6.0	24.0	<5.0	5.0	<1.0	4.0	537.0	27.
80.50	181.90	970 0	25.0	128.0	<0.5	39.0	5.0	25.0	5.0	(5.0	<1.0	3.0	466.0	16.
05 00	197 00	1100 0	25.0	100.0	(0.5		7.0	24.0	14.0	5.0	(1.0	2.0	431 0	26
	10.50 12.00 13.50 15.00 16.50 18.40 51.50 54.50 54.50 54.50 57.50 59.00 60.20 61.50 63.40 65.00 65.00 65.00 65.00 65.00 68.00 69.60 77.30 79.00 80.50 85.90	10.50 112.00 12.00 113.50 13.50 115.00 13.50 115.00 15.00 116.50 16.50 118.40 18.40 119.90 51.50 153.00 54.50 156.00 57.50 159.00 59.00 160.20 60.20 161.50 61.50 163.40 63.40 165.00 65.00 166.30 66.30 166.00 68.00 169.60 69.60 171.20 77.30 179.00 79.00 180.50 80.50 181.90	IO IO <thio< th=""> IO IO IO<!--</td--><td>IO IO ID IO ID IO ID IO ID IO ID <thid< th=""> ID ID ID<!--</td--><td>ICO ICO <thico< th=""> <thico< th=""> <thico< th=""></thico<></thico<></thico<></td><td>LKONLO$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$10.50112.002900.015.090.0(0.5)12.00113.505400.026.095.0(0.5)13.50115.007100.029.0130.00.515.00116.506400.034.0148.00.816.50118.403000.029.0142.00.818.40119.902700.036.0135.00.751.50153.003300.037.0142.00.853.00154.502000.025.0122.0(0.5)54.50156.002400.028.0132.00.556.00157.502100.034.0138.00.657.50159.002000.036.0152.00.759.00160.202900.037.0110.0(0.5)60.20161.504100.032.0118.00.661.50163.403000.033.0140.00.563.40165.002800.032.0130.0(0.5)64.30166.302200.034.0130.0(0.5)69.60171.204300.090.0110.0(0.5)77.30179.00990.027.0140.0(0.5)79.00180.502700.032.085.0(0.5)80.50181.90970.025.0128.0(0.5)</td><td>I.C. (I) I.C. (ppm) (ppm)</td><td>L.K.D.L.G.(ppm)</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>Lexin Lo (pps) (p</td><td>Lab Lab <thlab< th=""> <thlab< th=""> <thlab< th=""></thlab<></thlab<></thlab<></td><td>Lab Lab (ppm) (pp</td><td>A.B. Lo (pps) (pp</td></thid<></td></thio<>	IO ID IO ID IO ID IO ID IO ID ID <thid< th=""> ID ID ID<!--</td--><td>ICO ICO <thico< th=""> <thico< th=""> <thico< th=""></thico<></thico<></thico<></td><td>LKONLO$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$$(ppm)$10.50112.002900.015.090.0(0.5)12.00113.505400.026.095.0(0.5)13.50115.007100.029.0130.00.515.00116.506400.034.0148.00.816.50118.403000.029.0142.00.818.40119.902700.036.0135.00.751.50153.003300.037.0142.00.853.00154.502000.025.0122.0(0.5)54.50156.002400.028.0132.00.556.00157.502100.034.0138.00.657.50159.002000.036.0152.00.759.00160.202900.037.0110.0(0.5)60.20161.504100.032.0118.00.661.50163.403000.033.0140.00.563.40165.002800.032.0130.0(0.5)64.30166.302200.034.0130.0(0.5)69.60171.204300.090.0110.0(0.5)77.30179.00990.027.0140.0(0.5)79.00180.502700.032.085.0(0.5)80.50181.90970.025.0128.0(0.5)</td><td>I.C. (I) I.C. (ppm) (ppm)</td><td>L.K.D.L.G.(ppm)</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>Lexin Lo (pps) (p</td><td>Lab Lab <thlab< th=""> <thlab< th=""> <thlab< th=""></thlab<></thlab<></thlab<></td><td>Lab Lab (ppm) (pp</td><td>A.B. Lo (pps) (pp</td></thid<>	ICO ICO <thico< th=""> <thico< th=""> <thico< th=""></thico<></thico<></thico<>	LKONLO (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) 10.50112.002900.015.090.0 (0.5) 12.00113.505400.026.095.0 (0.5) 13.50115.007100.029.0130.00.515.00116.506400.034.0148.00.816.50118.403000.029.0142.00.818.40119.902700.036.0135.00.751.50153.003300.037.0142.00.853.00154.502000.025.0122.0 (0.5) 54.50156.002400.028.0132.00.556.00157.502100.034.0138.00.657.50159.002000.036.0152.00.759.00160.202900.037.0110.0 (0.5) 60.20161.504100.032.0118.00.661.50163.403000.033.0140.00.563.40165.002800.032.0130.0 (0.5) 64.30166.302200.034.0130.0 (0.5) 69.60171.204300.090.0110.0 (0.5) 77.30179.00990.027.0140.0 (0.5) 79.00180.502700.032.085.0 (0.5) 80.50181.90970.025.0128.0 (0.5)	I.C. (I) I.C. (ppm) (ppm)	L.K.D.L.G. (ppm)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Lexin Lo (pps) (p	Lab Lab <thlab< th=""> <thlab< th=""> <thlab< th=""></thlab<></thlab<></thlab<>	Lab Lab (ppm) (pp	A.B. Lo (pps) (pp

Hole No. CH88-52

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Pa

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ppm)	нн (ррт)	CUZN	EIS	FE
		·															
VA01850	187.00	188.00	540.0	27.0	65.0	<0.5	<5.0	9.0	36.0	12.0	6.0	<1.0	2.0	452.0	29.	3.	3.
VA01851	188.00	189.50	1800.0	30.0	150.0	0.5	<5.0	2.0	24.0	10.0	30.0	<1.0	3.0	270.0	17.	3.	2.
VA01852	189.50	191.00	2000.0	35.0	140.0	0.6	<5.0	3.0	26.0	8.0	19.0	<1.0	3.0	214.0	20.	3.	3.
VA01853	191.00	192.50	2200.0	24.0	110.0	<0.5	<5.0	4.0	14.0	6.0	6.0	<1.0	2.0	430.0	18.	3.	3.
VA01854	192.50	194.00	3500.0	17.0	96.0	<0.5	<5.0	3.0	11.0	7.0	7.0	a. 0	5.0	407.0	15.	3.	з.
VA01855	194.00	195.50	3500.0	23.0	110.0	<0.5	13.0	3.0	16.0	6.0	6.0	<1.0	6.0	335.0	17.	3.	2.
VA01856	195.50	197.00	1700.0	30.0	113.0	<0.5	<5.0	3.0	20.0	10.0	5.0	<1.0	3.0	453.0	21.	3.	2.
VA01857	197.00	198.50	2200.0	40.0	88.0	<0.5	<5.0	5.0	23.0	8.0	6.0	<1.0	2.0	296.0	31.	3.	3.
VA01858	198.50	200.00	3000.0	44.0	96.0	<0.5	<5.0	5.0	24.0	10.0	6.0	<1.0	2.0	371.0	31.	3.	3.
VA01859	200.00	201.50	2600.0	37.0	90.0	<0.5	<5.0	5.0	24.0	7.0	5.0	<1.0	2.0	220.0	29.	з.	3.
VA01860	201.50	203.30	2700.0	48.0	105.0	0.6	<5.0	8.0	26.0	10.0	28.0	<1.0	1.0	225.0	31.	з.	з.

Hole No. CH88-52

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Page No. 3

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Summary Log: DDH CH88-53 Location: 30+00 E, 1+95 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: May 10, 1988 Core logged by: J. Pattison 0.0 -12.6 Casing. 12.6 -15.1 Mafic to intermediate tuffaceous sediments 15.1 -35.0 Massive mafic flow 35.0 -37.1 Mafic to intermediate tuffaceous sediments 37.1 -79.5 Gabbro 79.5 - 80.6 Volcanic wacke 80.6 - 125.8 Black cherty argillite with 3-5 % fracture controlled pyrite 125.8 - 128.5 Cherty felsic tuff/tuffite 128.5 - 130.0Black argillite 130.0 - 133.0 Greywacke 133.0 - 247.1 Reworked felsic tuff Very massive quartz grain-rich coarse to fine felsic tuff. Bedding is rare but appears to be at a very low angle to the core axis. 247.1 - 250.0 Mafic tuff 250.0 - 255.5 Cherty sediments (argillite and siltstone) 255.5 - 267.3 Reworked felsic tuff 267.3 - 268.6 Mafic tuff 268.6 - 272.5 Black argillite

PROPERT	Y: Chemainus JV									HOLE N	or P	are Numh	or			
	it chemical of		FALCONBE	RIDGE LIN	ITED					CH88-53	U. I	age Mamb 1				
Hole Lo	cation: 30+02 E 1+9	5 S	DIAMONI	D DRILL I	10G											
			 					Cla	im No. C	thip 1						
Azimuth	EBI3 UTM: 5416 A: 210 Elevation	751.1 N 430229.8 : 532 m	E					Sec	tion No.	: 30+00 E						
Dip:	-50 Length:	272.5 m						Log	ged By:	J. Pattiso	n					
Started	1: 6-May-88							Dri Ass	ayed By:	Bondar-Cl	egg &	prises XRAL				
Complet	ed: 10-May-88							Cor	a Cirat							
Purpose				DIN	TEST	rs		cor	e 512e.							
			Azi-			1	zi-									
		Length	muth	Dip		Length m	uth	Dip								
		23.20	210.0	-50.0		135.90 21	0.0	-50.0								
						Sample	From	To	Vidth	Total	Cu	Ph	7 n	ha	211	Ba
n) (m)		DESCRIPTIO	N		•	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
0 12.6	OVERBURDEN															
		·														
6 15.1	. MAFIC TO INTERMEDIATI Dark brown, strongly	E TUFFACEOUS SEDI. thermal biotite	MENTS altered.													
	fine-grained, locally	y cherty mafic tu	ffaceous	sediment	5.											
	lower contact.	blied pyrite. Br	oken core	e at the												
	At 13.3 m bedding is	at 35 degrees to	core axi	is.												
	N MED MICH.															
	12.6 15.1 STRONG PERV	ASIVE BIOTIZATIO	N.													
1 35.0	MAFIC FLOW	mafic flows wit	h occasio	onal		V102836	15 1	37 1	22.0	n/2	172	n/a	91	n/a	n/a 1	160
	ripped-up beds of massive	afic tuffaceous s	ediments	and beds	of	1402050	12.1	57.1	22.0	п/ а	114	117 u		<i>,</i> a	.,	100
	cherty fragment rich	mafic tuff up to	0.1 cm w	wide												
	32.3-33.5 M FAULT ZON	NE at 45 (?) degr	ees to co	ore axis.	0.1											
				4 m of 1d	st											
	m of lost core. 34.2-35.0 M blockv. 1	nighly fractured	core. 0.4		-											
	m of lost core. 34.2-35.0 M blocky, 1 core.	highly fractured	core. 0.4													
	m of lost core. 34.2-35.0 M blocky, 1 core. ALTERATION:.	highly fractured	core. 0.4													
	<pre>m of lost core. 34.2-35.0 M blocky, l core. ALTERATION:. 12.6 35.0 WEAK SPOTT</pre>	highly fractured	core. 0.4 nd WEAK S	SPOTTY												

PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-53 2

From To (m) (m)

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-----DESCRIPTION------

Medium green, mafic tuff with beds and ripped-up beds of cherty very fine-grained tuffaceous sediments. Broken core at lower contact but it appears to be at 37 degrees to core axis.

STRUCTURE:.

At 36.2 bedding is at 50 degrees to core axis.

ALTERATION: .

32.3 37.1 WEAK PERVASIVE CHLORITIZATION.

37.1 79.5 MAFIC INTRUSIVE

Medium green, fine-grained with nil to 20 % 1-4 mm feldspar phenocrysts and trace to 3 % disseminated ilmenite. Ilmenite is often rimmed with leucoxene. Weakly to moderately carbonatized. Moderately carbonatized zones are non feldspar porphyritic and weakly sheared. Calcite +/- quartz veinlets are common. Blocky zones and minor fault gouges are common throughout. 5.0 Cm assimilation zone at the lower contact. Lower contact is at 55 degrees to core axis.

STRUCTURE:.

39.8-40.0 M FAULT ZONE at 50 degrees to core axis. 0.1 m of lost core.

43.2-44.5 M FAULT ZONE. Rock is broken and blocky the over entire interval. 0.6 M of lost core. Not possible to measure the orientation of the fault. 47.1-47.2 M fault gouge at 70 degrees to core axis. At 63.8 m 1.0 cm fault gouge at 60 degrees to core axis. At 66.3 m 0.5 cm fault gouge at 30 degrees to core axis. 69.3-69.5 M fault gouge at 33 degrees to core axis.

79.5 80.6 IMMATURE VOLCANIC WACKE

Grey-brown massive volcanic wacke above 80.2 m. Below this depth there are several 2-3 mm black argillite beds. At 80.3 m there two subangular clasts of felsic guartz feldspar porphyritic flow or tuff. Tightly packed guartz-rich pebble conglomerate for 5.0 cm from the lower contact. Lower contact is a 1.0 cm fault gouge at 70 degrees to core axis.

80.6 125.8 BLACK ARGILLITE

Black, weakly cherty, weakly to moderately graphitic argillite (95 % of unit) with beds of light green-grey cherty siltstone 1-10 mm thick and rare chert beds < 3 cm thick. Massive to finely bedded. Lower contact is a bedding contact at 15 degrees to core axis.

VA03780	80.6	81.4	.8	3	50	7	100	<1	< 5	4400	
VA03781	81.4	82.0	.6	3	66	13	115	<1	< 5	4700	1
VA03782	82.0	83.0	1.0	3	45	8	110	<1	<5	4200	
VA03783	83.0	84.0	1.0	3	40	11	110	(1	< 5	5600	- 1
VA03784	84.0	85.7	1.7	3	48	17	145	<1	<5	5300	1

Sample From

> No. (m)

To

(m)

Width Total Cu РЪ Zn Åσ Au Ba (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

PR	OPERT	TY: Chemain	is JV	FALCONBRIDGE LINTTED					HOLE N	o: Pa	ige Numb	er			
				DIAMOND DRILL LOG					000-55		J				
From	То				Sample	From	То	Width	Total	Cu	Pb	7.n	ha	Au	Ba
(m)	(m)			DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm)
		92.4-92.7	M a bed of wacke	FINES DOWNHOLE. Ripped-up	VA03785	85.7	86.3	.6	5	113	7	225	(1	<5	2900
		argillite	clasts occur at t	he base of the bed. Bedding is	VA03786	86.3	87.0	.7	5	56	10	140	<1	< 5	5900
		at 65 degi	rees to core axis.		VA03787	87.0	88.0	1.0	- 5	40	7	108	<1	< 5	5300
		96.9-97.5	M FAULT ZONE at 6	0-30 degrees to core axis.	VA03788	88.0	89.0	1.0	5	17	8	102	K1	<5	3700
		97.5-103.0) M blocky, highly	fractured core. 0.6 m of lost	VA03789	89.0	90.0	1.0	5	37	10	132	3	<5	4600
		core. Mode	erately to strongi	y graphitic.	VA03790	90.0	91.0	1.0	5	44	41	460	1	8	4100
		CTDUCTURE			VA03/91	91.0	92.0	1.0	5	32	11	118	<u>(1</u>	· (5 /5	5800
		AF 91 1 m	10 cm fault brocc	is at 70 degrees to gove avis	VA03792	92.0	93.0	1.0	5	20	11	1.02	1	(5)	4600
		AL 01.1 IL	M hedding is wave	a at 70 degrees to core axis.	VAU3793	93.0	94.0	1.0	5	.30	0	102	1	(5) /5	4000
		61.2-82.0	h beauing is wave	y and heatry parallel to the	VA03794	94.0	95.0	1.0	5	24	0	20	1	(5)	6200
		A+ 82 7 m	bedding is at 60	degrees to core avis Bode are	VA03796	96.0	97.0	1 0	5	35	11	150	1	25	5200
		kinked and	i offset by a matt	er of mm's by numerous	VA03797	97.0	98.0	1 0	5	36	6	122	1	25	2800
		microfault	ts at low angles t	the core axis.	VA03798	98.0	99.0	1.0	5	31	12	110	î	(5	4500
		At 83 6 m	9.0 cm fault zone	at 60-70 degrees to core axis.	VA03799	99 0	100 0	1 0	5	20	- 0	100	1	25	3900
		At 83.9 m	bedding is at 88	degrees to core axis.	VA03800	100.0	101.0	1.0	5	31	10	130	1 .	<5	2100
		At 86.8 m	10.0 cm fault gou	ge at 78 degrees to core axis.	VA03801	101.0	102.0	1.0	5	20	8	90	(1	<5 .	2100
		At 88.0 m	bedding is at 75	degrees to core axis.	VA03802	102.0	103.0	1.0	5	19	8 .	88	(1	< 5	1800
		90.3-90.4	M bed of cherty s	ediments that grades from a	VA03803	103.0	104.0	1.0	5	23	10	80	<1	<5	1200
		coarse wad	ke with ripped-u	p argillite clasts to a	VA03804	104.0	105.0	1.0	5	30	6	157	<1	<5	1500
		siltstone	downhole.		VA03805	105.0	105.7	.7	5	30	6	118	1	< 5	2000
		At 101.6 m	n foliation is at	35 degrees to core axis.	VA03806	105.7	106.0	.3	5	27	<5	198	1	٢5	1000
		At 102.5 m	n bedding is at 30	degrees to core axis. 0.5 cm	VA03807	106.0	106.4	. 4	5	19	<5	166	<1	13	1700
		bed FINES	UPHOLE.		VA03808	106.4	107.5	1.1	5	27	< 5	190	<1	<5	730
		107.7-110.	.9 M blocky, highl	y fractured core. Foliation is	VA03809	107.5	108.0	.5	5	21	<5	70	<1 .	<5	4900
		at < 30 de	egrees to core axi	s. 0.2 m of lost core.	VA03810	108.0	109.0	1.0	5	26	8	100	<1	٢5.	4700
		At 113.0 🛛	n bedding is nearl	y parallel to the core axis.	VA03811	109.0	110.0	1.0	5	15	< 5	95	· (1	<5	4000
		113.1-113.	.6 M FAULT ZONE at	40 degrees to core axis. 0.5 m	VA03812	110.0	111.0	1.0	- 5 -	27	. 9	110	<1	<5	2800
		of lost co	ore.		VA03813	111.0	112.0	1.0	5	20	7	90	1	< 5	4200
		115.4-116.	.1 M fault at 15 d	egrees to core axis. 0.8 m of	VA03814	112.0	113.0	1.0	- 5	21	6	100	<1	< 5	3000
		lost core.	•		VA03815	113.0	114.0	1.0	5	27	10	100	(1	<5	8100
		118.1-125.	8 M FAULT ZONE (?). Blocky, highly fractured	VA03816	114.0	116.0	2.0	5	20	6	90	(1	<5	4900
		core, foli	iation is nearly p	arallel to the core axis. 4.3	VA03817	116.0	118.0	2.0	5	22	7	90	(1	<5	3400
		m of lost	core.		VA03818	118.0	120.0	2.0	5	25	8	115	4	. 5	4500
					VA03819	120.0	121.0	1.0	5	29	8	140	1 .	< 5	4000
			•		VA03820	121.0	125.0	4.0	5	21	5	110	CI .	(5)	2700
		ALTERATION		WINDOW DI GIRDONIATTANTAN AN U	VA03821	125.0	125.8	.8		40	22	65	(1	(5	3600
		80.6 125.8	WEAK FRACTURE CO	ATROLLED CARBONATIZATION. Some 7				Cardin-		-	2	4	****	Sugar.	
			of the wacke bed	s are strongly carbonatized.				UF-2		30	ð	126	١	15	
		CUI DUTDEC.						151-					•	e	7794
		SOLPHIDES:		sture controlled discominated											24.41
		au. 6-65.0	.m 3 % pyrrue, rra) mm bande naralle	to bedding											
		85 0-85 7	m 5 % fracture co	ntrolled nurite											
		85.7-86 3	m 3 % fracture co	ntrolled pyrite.											
		86.3-125.8	m 4-5 % fracture	controlled pyrite.											
				FJ											
		85 7 86 3	Pale green strong	ly carbonatized MAFIC TO											

INTERMEDIATE TUFF. Upper contact is at 60 degrees to core axis and the lower contact is at 85 degrees to core axis.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-53 4 DIAMOND DRILL LOG From То Sample Width Total Cu Ph Zn Ba From To Aσ An (m) (m) ----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 105.7 106.0 Pale green, fine-grained MAFIC DYKE. Upper and lower contacts are sharp at 30 degrees to core axis. 5 % fracture controlled pyrite. 106.4 107.5 MAFIC DYKE: as 105.7 to 106.0 m. 125.8 128.5 FELSIC TUFF Massive, pale green, fine-grained, cherty felsic VA03822 125.8 126.8 1.0 1 7 3800 <5 3800 tuff/tuffite. Rock is weakly microfractured and fractures VA03823 127.5 128.5 1 1.0 are filled with quartz. Lower contact is at 40 degrees to Y.7 1800 core axis. 2.0 ALTERATION: . 125.8 128.5 WEAK SPOTTY EPIDOTIZATION and WEAK FRACTURE CONTROLLED SILICIFICATION. 126.5 126.7 BLACK ARGILLITE. Soft sediment deformation along the lower contact which is at 40 degrees to core axis. Broken core at the upper contact. 128.5 130.0 BLACK ARGILLITE 35 <u>31</u> 33 12 58 35 <5 3600 As 80.6 to 125.8 m with occasional clasts of cherty felsic VA03824 128.5 129.0 .5 2 53 <1 $\frac{290}{172} \frac{(1)}{.5}$ tuff up to 1.0 cm wide. 2 % fracture controlled pyrite. 2 38 3300 VA03825 129.0 130.0 1.0 Lower contact is gradational over 0.1 m. 2500 STRUCTURE: . At 128.8 m bedding is at 43 degrees to core axis. 130.0 133.0 GREYWACKE Light grey, fine-grained greywacke with many broken beds VA03826 130.0 131.0 38 3000 1.0 1 <5 88 <1 2 1 <5 58 <1 <5 3000 of chert up to 1.0 cm wide. Argillite beds and rip-up VA03827 131.0 132.0 1.0 2 73 2 <5 clasts occur over the first 0.3 m. Trace fracture 21 20 controlled pyrite. Lower contact is relatively sharp but 2000 not possible to measure the orientation due to broken core. . STRUCUTRE: . At 130.7 m bedding is at 32 degrees to core axis. ALTERATION:. 130.0 133.0 WEAK FRACTURE CONTROLLED SILICIFICATION. 133.0 247.1 REWORKED FELSIC TUFF

Very massive (no bedding or foliation), pale green, quartz rich, coarse felsic tuff. Composed of $50-60 \times 1-3$ mm angular quartz grains, up to $5 \times ash-sized$ feldspar


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PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-53 5

From To (m) (m)

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-----DESCRIPTION-----

crystals in a very fine-grained siliceous, weakly sericitic and chloritic matrix intercalated with lesser ammounts of pale green, fine felsic ash tuff. Locally up to 20 % 2-3 mm epidotized feldspars. Quartz grain rich nature of the tuff suggests that most of the unit has been reworked to some extent. The tuff becomes coarser grained below 145.5 m (average grainsize is 3 mm). Quartz filled fractures and gashes up to 0.5 cm wide are common. Nil to 5 % 2-4 mm angular light grey cherty fragments above 200 m and up to 10 % below 200 m. Nil sulphides. Trace to 1 % magnetite or ilmenite as black grains (0.5 mm in diameter with a submetallic lustre. Lower contact is at 15 degrees to core axis.

STRUCTURE:.

145.1-145.5 M fault gouge at 20 degrees to core axis. At 161.4 m slip at 40 degrees to core axis. At 188.2 m weak foliation at 60 degrees to core axis. At 217.4 m weak foliation at 45 degrees to core axis. At 227.5 m foliation is at 37 degrees to core axis. At 30.8 m bedding is parallel to the core axis. At 246.0 m foliation is at 20 degrees to core axis.

ALTERATION:.

133.0 247.1 WEAK FRACTURE CONTROLLED SILICIFICATION , WEAK PERVASIVE SERICITIZATION and WEAK PERVASIVE CHLORITIZATION. Locally very weakly thermal biotite altered.

SULPHIDES: .

168.0-169.5 m 2 % disseminated and fracture controlled pyrite.

174.0-175.0 m 3 % pyrite; fracture controlled, disseminated and as clasts to 1.0 cm. Trace fracture controlled sphalerite.

192.0-192.5 M trace fracture controlled sphalerite. Pyrite and trace chalcopyrite and sphalerite occur in an epidote alteration patch associated with a 0.5 cm quartz filled fracture at 30 degrees to core axis. 218.5-219.5 M trace fracture controlled pyrite and trace sphalerite or biotite associated with quartz-carbonate filled fractures.

219.0 220.0 INTERMEDIATE QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF. Composed of 30 % quartz and feldspar crystals 2-4 mm in diameter in a fine-grained intermediate chlorite+sericite matrix. Upper and lower contacts are at 62 degrees to core axis.

230.7 230.8 A bed of cherty BLACK ARGILLITE at 0 degrees

Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	
VA03829	169.0	170.0	1.0	2	10	5	100	<1	<5	2000 1	
VA03830	174.0	175.0	1.0	3	12	12	580	<1	< 5	2100	
VA03831	192.0	192.5	.5	1	90	18	2000	3	7	90	
¥A02839	193.0	223.0-	- 30.0	n/a		…n∕a	- 324	n/a	n/a	1000	1.1
VA03832	194.0	194.5	.5	1	20	17	142	<1	<5	2000	
VA03833	218.5	219.5	1.0	1	10	6.	93	<1	۲5	370	
VA02840	223.0	247-1-	-24-1	p/a	(10	n/a	150		n/a	1370	
			5,0		28	10	502	<1	25	12	77
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PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-53 6 DIAMOND DRILL LOG From To Sample From Width Total То Cu РЪ Zn Ag Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) Sulphides (ppm) (m) (ppm) (ppm) (ppm) (ppb) (ppm) to core axis. 247.1 250.0 MAFIC TUFF Medium green, fine-grained somewhat cherty over the first VA03834 247.1 248.0 .9 16 72 0.7 m. 5 %, 2-3 mm quartz +/- carbonate filled amygdales VA03835 2480 248.0 1.0 27 and angular 2-5 mm guartz rich clasts are common. 3 to 4 VA03836 249 0 250.0 1.0 27 % fracture controlled pyrite. Lower contact is at a very 23 2.9 low angle to the core axis (<20 degrees to core axis). 86 25 <1 250.0 255.5 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE). Pale green-grey very cherty siltstone with beds and broken up, ripped-up beds of black argillite. Bedding is at a very low angle to the core axis. Mafic tuff, identical to the unit above, occasionally runs along the edge of the core. Lower contact is at 8 degrees to core axis. STRUCTURE: . At 254.0 m bedding is at 20 degrees to core axis and sediments, appear to FINE DOWNHOLE, 255.5 264.7 REWORKED FELSIC TUFF As 133.0 to 247.1 m with beds of cherty sediments up to VA03837 263.7 264.7 1.0 19 420 <1 <5 3100 5.0 cm thick at very low angles to the core axis. STRUCTURE:. At 259.8 m bedding is at 20 degrees to core axis. Cherty siltstone with broken and ripped-up beds of argillite below 264.0 m. 264.7 265.5 MAFIC TUFF Medium green, massive mafic ash tuff with 5 %, 2-20 mm, VA03838 264.7 265.5 .8 83 200 <5 2400 angular clasts of cherty siltstone. 5 % disseminated and fracture controlled pyrite. 0.3 m guartz-carbonate flooded zone at 30 degrees to core axis at the lower contact. 265.5 266.5 SILTSTONE Pale green, cherty finely bedded siltstone. Bedding is at VA03839 265.5 266.5 100 <5 2000 1.0 1 19 9 1 40 degrees to core axis. 266.5 267.3 REWORKED FELSIC TUFF As 133.0 to 247.1 m. Lower contact is gradational over 5.0 VA03840 266.5 267.3 . 8 <5 102 <1 CB.

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P	ROPERT	Y: Chemainus JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE No CH88-53): F	age Numb 7	er				
From (m)	To (m)	DESCRIPTI	on	Sample No.	From (m)	ТО (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	
267.3	268.6	MAFIC TUFF Massive, mafic ash tuff with 5 %, 3- fragments. 4 % disseminated pyrite. 45 degrees to core axis.	10 mm angular cherty Lower contact is at	VA03841	267.3	268.6	1.3	4	15	5	122	(1	<5	1500	
268.6	272.5	BLACK ARGILLITE Cherty black argillite with light gr wacke and felsic feldspar crystal t degrees to core axis. A bed FINES DO 4-5 % fracture controlled and bedded thick) pyrite.	ey cherty siltstone, uff beds at 0-15 WNHOLE at 269.5 m. (beds are < 3 mm	VA03842 VA03843 VA03844 VA03845	268.6 269.4 270.7 271.7	269.4 270.7 271.7 272.5	.8 1.3 1.0 .8	4 4 4	34 25 27 4	7 7 5 (5	83 70 62 39	1 <1 <1	<5 <5 <5 <5	1200 990 1500 <u>3600</u>	
		STRUCTURE:. 269.6-271.0 M blocky, highly fractur core.	ed core. 0.2 m of lost						r.L.	•	65	<	< 5	1822	•

64.5m Cu: 28 Pbill 2n 157 Ag 21 A. 25 1

Ba: 3393.

SAMPLE	FROM	то	25102	ZAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	21102	XP205	ZHNO	ZLOI	SUN	BA	AI	NACA
					· · · · · ·												
VA02372	18.60	18.90	48.10	16.10	6.87	8.01	3.64	0.63	11.10	0.85	0.18	0.25	3.16	98.89	1300.	-45.	11.
VA02373	29.50	29.80	47.00	16.50	7.33	7.82	3.07	0.97	11.40	0.85	0.18	0.23	3.08	98.43	1190.	46.	10.
VA02374	134.30	134.70	74.00	11.40	2.37	1.99	2.90	1.33	3.42	0.38	0.08	0.11	1.77	99.75	1270.	39.	5.
VA02375	147.70	148.10	67.40	15.00	2.59	2.27	2.74	2.03	3.95	0.59	0.11	0.17	2.23	99.08	2130.	45.	5.
VA02376	159.00	159.40	67.30	14.50	5.38	1.96	3.29	0.52	4.55	0.61	0.13	0.19	1.85	100.28	531.	22.	9.
VA02377	170.40	170.70	65.70	16.00	2.21	2.30	2.63	2.38	3.93	0.60	0.11	0.12	2.54	98.52	2630.	49.	5.
VA02378	182.40	182.70	67.40	16.00	1.65	2.33	2.11	2.75	3.74	0.58	0.10	0.13	2.39	99.18	3310.	57.	4.
VA02379	191.00	191.50	67.40	16.60	2.19	2.39	2.65	2.33	3,50	0.61	0.11	0.13	2.47	100.38	2400.	49.	5.
VA02380	202.00	202.60	65.90	16.80	2.56	2.35	2.45	2.39	3.69	0.71	0.13	0.16	2.39	99.53	2870.	49.	5.
VA02381	215.00	215.40	67.20	15.90	2.82	2.23	2.87	1.85	3.57	0.72	0.13	0.16	2.00	99.45	2120.	42.	6.
VA02382	228.00	228.40	69.70	14.80	1.54	2.78	1.17	2.65	3.54	0.47	0.08	0.12	2.62	99.47	2440.	67.	э.
VA02383	243.00	243.40	69.40	14.30	1.95	2.82	1.12	2.28	4.43	0.35	0.05	0.10	2.47	99.27	2920.	62.	3.
VA02384	249.50	249.70	46.80	15.10	14.00	3.23	1.32	0.11	11.80	2.50	1.04	0.28	2.77	98.95	101.	18.	15.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

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Hole No. CH88-53 WHOLE ROCK SAMPLES

Page No.



SAMPLE NUMBER	FROM	то	XS 102	XAL203	ZCAO	ZHGO	ZNA20	ZK20	XFE203	XT 102	XP205	ZMNO	ZLO I	SUM	BA	AI	NACA

VA02836	15.10	37.10	46.10	15.10	10.00	7.21	2.99	1.00	10.70	0.74			4.54	98.38	1160.	39.	13.
VA02837	133.00	163.00	65.80	14.30	3.72	2.29	1.83	2.36	3.88	0.48			3.08	97.74	2090.	46.	6.
VA02838	163.00	193.00	65.50	15.90	. 2.62	2.26	2.54	2.15	3.80	0.59			2.62	97.98	2370.	46.	5.
VA02839	193.00	223.00	63.40	14.80	5.89	2.12	2.76	0.75	4.49	0.67			2.77	97.65	1000.	25.	9.
VA02840	223.00	247.10	66.50	14.00	4.76	2.51	1.92	1.27	3.88	0.45			2.62	97.91	1370.	36.	7.
VA02840	223,00	247.10	66.50	14.00	4.76	2.51	1.92	1.27	3.88	0.45			2.62	97.91	1370.	36.	

Hole No. CH88-53 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU {ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррж)	AS (ppm)	CD (ppm)	НО (рря)	MN (ppm)	CUZN	ETS	FE
			·······					*_****	*********	*==**=							
VA03780	80.60	81.40	4400.0	50.0	100.0	<0,5	<5.0	5.0	16.0	7.0	11.0	<1.0	2.0	292.0	33.	3.	3.
VA03781	81.40	82.00	4700.0	66.0	115.0	<0.5	<5.0	6.0	17.0	13.0	9.0	<1.0	2.0	328.0	36.	э.	3.
VA03782	82.00	83.00	4200.0	45.0	110.0	<0.5	<5.0	6.0	18.0	8.0	6.0	<1.0	2.0	305.0	29.	3.	3.
VA03783	83.00	84.00	5600.0	40.0	110.0	<0.5	<5.0	4.0	15.0	11.0	10.0	<1.0	2.0	298.0	27.	з.	3.
VA03784	84.00	85.70	5300.0	48.0	145.0	<0.5	<5.0	5.0	20.0	17.0	18.0	<1.0	2.0	355.0	25.	з.	3.
VA03785	85.70	86.30	2900.0	113.0	225.0	<0.5	<5.0	25.0	56.0	7.0	35.0	<1.0	3.0	1370.0	33.	5.	δ.
VA03786	86.30	87.00	5900.0	56.0	140.0	<0.5	<5.0	5.0	24.0	10.0	14.0	<1.0	1.0	353.0	29.	5.	3.
VA03787	87.00	88.00	5300.0	40.0	108.0	<0.5	<5.0	4.0	19.0	7.0	21.0	<1.0	3.0	336.0	27.	5.	2.
VA03788	88.00	89.00	3700.0	17.0	102.0	<0.5	<5.0	2.0	11.0	8.0	10.0	<1.0	2.0	231.0	14.	5.	2.
VA03789	89.00	90.00	4600.0	37.0	132.0	3.2	<5.0	3.0	22.0	10.0	16.0	<1.0	3.0	432.0	22.	5.	2.
VA03790	90.00	91.00	4100.0	44.0	460.0	1.1	8.0	5.0	20.0	41.0	27.0	2.0	3.0	459.0	9.	5.	3.
VA03791	91.00	92.00	5800.0	32.0	118.0	<0.5	<5.0	3.0	22.0	9.0	11.0	<1.0	3.0	289.0	21.	5.	2.
VA03792	92.00	93.00	4600.0	26.0	128.0	<0.5	<5.0	3.0	17.0	11.0	12.0	<1.0	5.0	535.0	17.	5.	3.
VA03793	93.00	94.00	4600.0	30.0	102.0	0.5	<5.0	3.0	20.0	7.0	20.0	<1.0	3.0	309.0	23.	5.	2.
VA03794	94.00	95.00	4200.0	32.0	120.0	0.6	<5.0	2.0	22.0	8.0	13.0	<1.0	5.0	311.0	21.	5.	2.
VA03795	95.00	96.00	6200.0	23.0	90.0	0.7	<5.0	2.0	14.0	8.0	13.0	<1.0	7.0	821.0	20.	5.	2.
VA03796	96.00	97.00	5200.0	35.0	150.0	1.2	<5.0	3.0	26.0	11.0	18.0	<1.0	7.0	344.0	19.	5.	з.
VA03797	97.00	98.00	2800.0	36.0	122.0	0.8	<5.0	2.0	26.0	9.0	15.0	<1.0	5.0	457.0	23.	5.	2.
VA03798	98.00	99.00	4500.0	31.0	110.0	0.8	<5.0	2.0	20.0	12.0	10.0	<1.0	2.0	217.0	22.	5.	2.
VA03799	99.00	100.00	3900.0	20.0	100.0	0.5	<5.0	<1.0	14.0	9.0	9.0	<1.0	2.0	472.0	17.	5.	1.
VA03800	100.00	101.00	2100.0	31.0	130.0	0.7	<5.0	1.0	22.0	10.0	58.0	<1.0	4.0	277.0	19.	5.	3.
VA03801	101.00	102.00	2100.0	20.0	90.0	<0.5	<5.0	2.0	10.0	8.0	80.0	<1.0	2.0	332.0	18.	5.	2.
VA03802	102.00	103.00	1800.0	19.0	88.0	<0.5	<5.0	1.0	14.0	8.0	11.0	<1.0	3.0	511.0	18.	5.	2.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-53

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SAMPLE NUMBER FROM TO CU (nom) BA (ppm) ZN AG AU 03 HI PB AS CD (and) нн (поп) CUZN ETS FE

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VA03803	103.00	104.00	1200.0	23.0	80.0	<0.5	<5.0	1.0	18.0	10.0	10.0	<1.0	3.0	684.0	22.	5.	1.
VA03804	104.00	105.00	1500.0	30.0	157.0	<0.5	<5.0	<1.0	26.0	6.0	12.0	<1.0	4.0	1070.0	16.	5.	2.
VA03805	105.00	105.70	3000.0	30.0	118.0	0.5	<5.0	2.0	22.0	6.0	9.0	<1.0	4.0	872.0	20.	5.	2.
VA03806	105.70	106.00	1000.0	27.0	198.0	0.5	<5.0	17.0	9.0	<5.0	9.0	<1.0	5.0	1041.0	12.	5.	9.
VA03807	106.00	106.40	1700.0	19.0	166.0	<0.5	13.0	6.0	18.0	<5.0	10.0	<1.0	6.0	818.0	10.	5.	з,
VA03808	106.40	107.50	730.0	27.0	190.0	<0.5	<5.0	20.0	6.0	<5.0	42.0	<1.0	5.0	911.0	12.	5.	8.
VA03809	107.50	108.00	4900.0	21.0	70.0	<0.5	<5.0	3.0	8.0	<5.0	9.0	<1.0	3.0	419.0	23.	5.	4.
VA03810	108.00	109.00	4700.0	26.0	100.0	<0.5	<5.0	4.0	16.0	8.0	19.0	<1.0	3.0	300.0	21.	5.	з.
VA03811	109.00	110.00	4000.0	15.0	95.0	<0.5	<5.0	3.0	9.0	<5.0	12.0	<1.0	2.0	233.0	14.	5.	3.
VA03812	110.00	111.00	2800.0	27.0	110.0	<0.5	<5.0	3.0	16.0	9.0	11.0	<1.0	2.0	316.0	20.	5.	з.
VA03813	111.00	112.00	4200.0	20.0	90.0	0.5	<5.0	5.0	8.0	7.0	16.0	<1.0	4.0	398.0	18.	5.	4.
VA03814	112.00	113.00	3000.0	21.0	100.0	<0.5	<5.0	3.0	12.0	6.0	19.0	<1.0	2.0	298.0	17.	5.	2.
VA03815	113.00	114.00	8100.0	27.0	100.0	<0.5	<5.0	7.0	8.0	10.0	12.0	<1.0	3.0	406.0	21.	5.	з.
VA03816	114.00	116.00	4900.0	20.0	90.0	<0.5	<5.0	5.0	7.0	6.0	10.0	<1.0	2.0	408.0	18.	5.	з.
VA03817	116.00	118.00	3400.0	22.0	90.0	<0.5	<5.0	5.0	6.0	7.0	7.0	<1.0	2.0	471.0	20.	5.	3.
VA03818	118.00	120.00	4500.0	25.0	115.0	<0.5	5.0	4.0	15.0	8.0	10.0	<1.0	2.0	382.0	18.	5.	3.
VA03819	120.00	121.00	4000.0	29.0	140.0	0.6	<5.0	4.0	24.0	8.0	13.0	<1.0	2.0	281.0	17.	5.	з.
VA03820	121.00	125.00	2700.0	21.0	110.0	<0.5	<5.0	2.0	20.0	5.0	18.0	<1.0	3.0	740.0	16.	5.	1.
VA03821	125.00	125.80	3600.0	40.0	65.0	<0.5	<5.0	4.0	18.0	22.0	9.0	<1.0	10.0	391.0	38.	5.	з.
VA03822	125.80	126.80	3800.0	12.0	55.0	<0.5	7.0	1.0	5.0	10.0	<5.0	<1.0	1.0	367.0	18.	1.	2.
VA03823	127.50	128.50	3800.0	2.0	42.0	<0.5	<5.0	<1.0	4.0	12.0	<5.0	<1.0	2.0	430.0	5.	1.	2.
VA03824	128.50	129.00	3600.0	35.0	53.0	<0.5	<5.0	4.0	13.0	12.0	11.0	<1.0	3.0	418.0	40.	2.	2.
VA03825	129.00	130.00	3300.0	31.0	290.0	<0.5	38.0	3.0	12.0	58.0	8.0	2.0	4.0	501.0	10.	2.	2.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-53

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (рряа)	HN (ppm)	CUZN	ETS	FE
VA03826	130.00	131.00	3000.0	2.0	88.0	(0.5	38.0	<1.0	4.0	(5.0	(5.0	(1.0	1.0	A32 0	Э.	1	
VA03827	131.00	132.00	3000.0	2.0	58.0	(0.5	< 5.0	<1.0	2.0	<5.0	(5.0	<1.0	1.0	411.0	3.	1.	2.
VA03828	168.00	169.00	1700.0	26.0	100.0	<0.5	<5.0	3.0	2.0	<5.0	<5.0	<1.0	1.0	501.0	21.	2.	2.
VA03829	169.00	170.00	2000.0	10.0	100.0	<0.5	<5.0	2.0	4.0	5.0	<5.0	<1.0	1.0	504.0	9.	2.	3.
VA03830	174,00	175.00	2100.0	12.0	580.0	<0.5	<5.0	5.0	4.0	12.0	<5.0	2.0	2.0	519.0	2.	3.	2.
VA03831	192.00	192.50	90.0	90.0	2000.0	2.5	7.0	5.0	4.0	18.0	6.0	6.0	2.0	925.0	4.	1.	2.
VA03832	194.00	194.50	2000.0	20.0	142.0	<0.5	<5.0	2.0	4.0	17.0	<5.0	<1.0	1.0	723.0	12.	1.	3.
VA03833	218.50	219.50	370.0	10.0	93.0	<0.5	<5.0	9.0	6.0	6.0	6.0	<1.0	2.0	801.0	10.	1.	з.
VA03834	247.10	248.00	290.0	16.0	72.0	<0.5	<5.0	10.0	5.0	<5.0	5.0	<1.0	9.0	845.0	18.	4.	5.
VA03835	248.00	249.00	250.0	27.0	106.0	0.6	<5.0	19.0	5.0	<5.0	<5.0	<1.0	4.0	1200.0	20.	4.	7.
VA03836	249.00	250.00	130.0	27.0	79.0	<0.5	<5.0	14.0	6.0	<5.0	<5.0	<1.0	3.0	926.0	25.	4.	5.
VA03837	263.70	264.70	3100.0	8.0	420.0	<0.5	<5.0	4.0	5.0	19.0	<5.0	1.0	7.0	639.0	2.	1.	2.
VA03838	264.70	265.50	2400.0	83.0	200.0	2.2	<5.0	20.0	6.0	5.0	10.0	<1.0	7.0	1850.0	29.	5.	7.
VA03839	265.50	266.50	2000.0	19.0	100.0	0.5	<5.0	6.0	10.0	9.0	18.0	<1.0	16.0	1450.0	16.	1.	з.
VA03840	266.50	267.30	6900.0	4.0	102.0	<0.5	<5.0	2.0	4.0	<5.0	<5.0	<1.0	3.0	1130.0	4.	2.	3.
VA03841	267.30	268,60	1500.0	15.0	122.0	<0.5	<5.0	14.0	4.0	5.0	5.0	<1.0	3.0	1830.0	11.	4.	6.
VA03842	268.60	269.40	1200.0	34.0	83.0	1.0	<5.0	5.0	14.0	7.0	<5.0	<1.0	2.0	549.0	29.	4.	. 4.
VA03843	269.40	270.70	990.0	25.0	70.0	<0.5	<5.0	5.0	10.0	7.0	5.0	<1.0	2.0	448.0	26,	4.	3.
VA03844	270.70	271.70	1500.0	27.0	62.0	0.5	<5.0	5.0	15.0	5.0	<5.0	<1.0	2.0	376.0	30.	4.	з.
VA03845	271.70	272.50	3600.0	4.0	39.0	<0.5	<5.0	2.0	9.0	<5.0	<5.0	<1.0	2.0	213.0	9.	4.	2.

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Summary Log: DDH CH88-54 Location: 32+00 E, 0+49 S; Chip 1 Claim Azimuth: 210, Dip: -45 Hole Completed: May 13, 1988 Core Logged By: D.P. Money

0.0 -20.2 Casing. 20.2 -56.0 Intercalated chloritic felsic tuffs and chlorite schists. 68.5 56.0 -Feldspar porphyritic felsic flow. 68.5 -99.1 Gabbro. 99.1 - 104.5 Quartz porphyritic felsic flow. 104.5 - 107.9Major thrust fault. 107.9 - 115.6Nanaimo Group argillite. 115.6 - 152.5 Nanaimo Group, Benson Formation basal conglomerate. Hornblende phyric mafic lapilli tuff. 152.5 - 194.9194.9 - 235.3Intercalated andesitic tuffs and chert beds. 235.3 - 244.3 Mafic ash tuff. 244.3 - 250.0 Cherty felsic tuffite. 250.0 - 257.2Andesitc tuffs with interbedded chert and argillite. 257.2 - 258.6Gabbro. 258.6 - 291.7Mafic to andesitic tuffs with interbeds of chert and argillite, with up to 2 % fracture controlled pyrite in the sediments. 291.7 End of hole.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-54 1 DIAMOND DRILL LOG Hole Location: 32+00 E 0+49 S Claim No. Chip 1 NTS: 092B/13W UTM: 5416783.6 N 430468.2 E Section No.: Section 32+00 East, Chip Claim Group Azimuth: 210 Elevation: 549 m Length: 291.7 m Dip: -45 Logged By: D.P. Money Drilling Co.: Burwash Enterprises Started: May 9, 1988 Assayed By: Bondar-Clegg and X-Ray Assay Completed: May 13, 1988 Core Size: NQ Purpose: To test for 'active tuff' north of the fault. DIP TESTS Azi-Azimuth Length Dip Length muth Dip 29.60 211.0 -42.0 188.10 216.0 -41.0 215.0 93.60 -41.0 275.50 216.0 -36.0 From То Width Total Pb Sample From То Cu Zn Aσ Au Ba (m) -----DESCRIPTION------(m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) No. (m) (m.) .0 20.2 OVERBURDEN 20.2 23.9 CHLORITE SCHIST Medium to dark green chlorite schist with 2 to 3 % n/a 506 VA01098 20.2 23.9 3.7 n/a 109 n/a 88 n/a fracture controlled and parallel to foliation carbonatization. There are approximately 3 % calcite epidote grains, up to 5 mm. There is felsic tuff from 23.5 to 23.8. 20.2 23.9 WEAK FRACTURE CONTROLLED CARBONATIZATION. Lost core :. 20.4 23.5 : 0.5 m. Foliation :. 20.4 : 60 degrees to core axis. 23.3 : 57 degrees to core axis. 23.9 24.7 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Chlorite - sericite schist with 10 %, 2 mm, quartz eyes and 10 to 15 %, 2 to 3 mm, epidote grains. Foliation and lower contact are at 68 degrees to core axis. 24.7 42.5 WEAKLY CHLORITIC FELSIC TUFF n/a 1100 Chloritic felsic tuff, weakly to moderately chloritic with VA01099 24.7 42.5 17.8 <10 n/a n/a (10 n/a 3 to 15 % chlorite. Is fine-grained with up to 15 %, up to 1 mm, epidote to feldspar grains and up to 5 %, 3 mm, guartz eyes. Average crystal content is approximately 10 *. Is locally contorted with moderate kinking and minor chlorite schist with strong carbonatization. Is very disky and broken into 'poker chips'. There is trace disseminated pyrite locally.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-54 2 DIAMOND DRILL LOG Width Total From To Sample From То Cu Pb Zn Ag Au (m) (m) -----DESCRIPTION-----(m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. 24.7 42.5 WEAK PERVASIVE CHLORITIZATION. Lost core :. 32.6 34.7 : 0.5 m. 34.7 36.3 : 0.6 m. 36.3 37.7 : 0.3 m. Foliations :. 26.3 : 73 degrees to core axis. 30.1 : 65 degrees to core axis. 32.6 : 84 degrees to core axis. 37.8 : 72 degrees to core axis. 41.9 : 54 degrees to core axis. 42.5 47.2 CHLORITE SCHIST Strongly contorted and kinked chlorite schist with minor VA01100 42.5 47.2 4.7 n/a 48 n/a 76 n/a n/a local sericite - chlorite schist. There weak fracture VA01861 42.5 44.0 1.5 1 88 <5 143 <1 <5 controlled carbonatization and trace to 0.25 % VA01862 44.0 45.5 1.5 93 8 118 <1 5 1 disseminated pyrite, as up to 1 cm cubes. VA01863 45.5 47.2 1.7 45 <5 52 <1 <5 1100 1 42.5 47.2 WEAK FRACTURE CONTROLLED CARBONATIZATION. 47.2 55.5 INTERMEDIATE FELDSPAR CRYSTAL TUFF Andesitic ash tuff to chlorite schist with on average 15 % VA01101 47.2 55.5 8.3 n/a n/a 256 89 n/a 40 n/a epidotized feldspars, 1 to 3 mm. Is locally very contorted with moderate pervasive carbonatization as white streaks. On average there is 3 %, 3 mm, quartz eyes. There is local trace disseminated pyrite cubes, up to 3 mm. Folds are primarily 'Z' folds. Foliation trend varies from approximately 50 to 70 degrees to core axis. Alteration :. 47.2 55.5 MODERATE PERVASIVE CARBONATIZATION. 55.5 56.6 FAULT ZONE Felsic and mafic fault gouge and grey clay at 80 to 90 degrees to core axis. Lost core :. 55.5 57.9 : 0.2 m. 56.6 68.5 FELDSPAR PORPHYRITIC FELSIC FLOW n/a 655 Light grey to green massive and blocky siliceous felsic VA01102 56.6 68.5 11.9 n/a 11 <10 n/a n/a flow with 5 to 7 %, 2 to 4 mm, feldspar to epidotized feldspar grains. There is minor fault gouge throughout. From 65.1 to 68.5, there is weak thermal biotite and weak schistosity at approximately 65 to 70 degrees to core axis. There is trace to nil disseminated pyrite as < 1 mm cubes.

Ba

828

900

670

Lost core :. 57.9 58.5 : 0.3 m.

58.5 60.0 : 0.6 m.

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-54 з DIAMOND DRILL LOG From To Sample From Width Total РЪ To Cu Zn Aα Au Ba (m) -----DESCRIPTION------(m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m) 61.9 63.1 : 0.2 m. 63.1 64.5 : 0.6 m. 66.4 66.8 : 0.2 m. 66.8 68.9 : 0.3 m. 68.5 99.1 MAFIC INTRUSIVE Gabbro (?). Blocky and massive. Is medium green with 3 % VA01103 68.5 99.1 30.6 n/a 225 n/a55 n/a n/a 140 fracture controlled calcite veinlets at all orientations. There is on average 1 to 2 %, 2 mm, feldspars and 5 to 7 %, < 1 mm, chlorite after (?). There is approximately 2 to 3 % leucoxene. Upper contact at fault at 46 degrees to core axis and lower contact at blocky, highly fractured core. There is minor fault gouge at 76.8, 81.2 and 82.6. Lost core :. 68.9 70.4 : 0.2 m. 73.2 74.4 : 0.3 m. 74.4 75.3 : 0.2 m. 75.6 76.8 : 0.3 m. 81.2 82.9 : 0.3 m. 82.9 83.4 : 0.3 m. 83.4 84.4 : 0.6 m. 84.4 85.3 : 0.2 m. 85.3 86.6 : 0.3 m. 94.2 95.1 : 0.2 m. 97.5 99.1 : 0.1 m. 99.1 104.5 QUARTZ PORPHYRITIC FELSIC FLOW Felsic flow or silicified felsic tuff with 5 to 7 %, 3 to VA01104 99.1 104.5 5.4 n/a 1360 n/a <10 <10 n/a n/a 4 mm, quartz eyes. There is moderate fracture controlled quartz veinlets. Is blocky, highly fractured core. Weak foliation at 55 degrees to core axis. Lost core :. 101.8 103.5 : 0.1 m. 104.5 107.9 FAULT ZONE Mafic blocky, highly fractured core with minor fault gouge to 106.7 and Nanaimo argillite after. Fault gouge is at 75 degrees to core axis. Lost core :. 104.5 105.2 : 0.3 m. 105.8 107.0 : 0.5 m. 107.0 107.9 : 0.7 m. 107.9 115.6 NANAIMO ARGILLITE n/a 733 4 Soft brown argillite with fault gouge to 113.5. Is very VA01105 108.0 115.6 7.6 n/a 977 n/a 1050 n/a fine-grained with 3 to 5 % fracture controlled calcite veinlets. There is foliation at 50 degrees to core axis

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PROPERTY: Chemainus J.V.

From То

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-54 4

Sample From Τo Width Total Cu Ph Zn λg Δn Ra No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

at 115.2, may be bedding. Lost core :. 107.9 109.6 : 0.2 m.

115.6 152.5 NANAIMO CONGLOMERATE

Namaimo conglomerate to locally greywacke to sandstone. Clasts vary locally in size and quantity. To 136.0 there are trace clasts except for minor local 10 cm zones, probably minor stream channels. Clasts to 136 are rounded pebbles, up to 2 cm of white chert and black argillite. Matrix is medium to dark grey and siliceous. From 136.0 to 146.0 there are numerous 0.5 to 1 m clast rich beds with 40 % argillite, 40 % chert and 20 % gabbro and mafic tuff clasts. To 150.3 is all clast rich with similiar % as from 136 to 146 with pebble to cobble sized clasts, rounded up to 5 cm. From 150.3 to 152.5 is a dark green to black chloritic matrix with mafic tuff and minor gabbro large pebbles and cobbles. There is trace to 1 % fracture controlled calcite veinlets in the matrix. Argillite clasts have trace to 2 % fracture controlled pvrite. Bedding :. 122.3 : 45 degrees to core axis. 147.5 : 51 degrees to core axis. Foliation :. 140.6 : 48 degrees to core axis. Fault slippage :.

-----DESCRIPTION-----

151.1 : 56 degrees to core axis. 152.5 : 41 degrees to core axis with 4 cm fault gouge. Lost core :. 151.5 153.3 : 0.3 m.

152.5 194.9 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF

Bark to medium green mafic tuff with on average 7 %, mafic crystals, < 1 mm, hornblende (?). Locally there are up to 20 %, average 3 to 5 %, concretionary epidote lapilli, round and 2 to 4 mm. There is local spotty epidotization or selective alteration of clasts. There is moderate fracture controlled carbonatization and strong local pervasive chloritization. There are minor fault slips and guartz - calcite veinlets. Is massive with no observable bedding, debris flow (?). Nil to trace disseminated pyrite occurs. Lapilli are up to 1.5 cm. Alteration :.

163.5 173.0 STRONG SPOTTY EPIDOTIZATION. 183.4 185.2 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 191.5 194.9 WEAK FRACTURE CONTROLLED CARBONATIZATION. 152.5 169.5 STRONG SPOTTY CHLORITIZATION. Faults :.

VA01106	152.5	165.0	12.5	n/a	988	n/a	2050	n/a	n/a	391
VA01107	165.0	180.0	15.0	n/a	331	n/a	129	n/a	n/a	239
VA01108	180.0	194.9	14.9	n/a	231	n/a	56	n/a	n/a	406

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-54 5 DIAMOND DRILL LOG From То Sample Width Total Cu From То Ph Zn λq Au Ba (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 184.2 185.0 3 cm fault gouge at 0 to 21 degrees to core axis. Lost core :. 162.0 163.7 : 0.2 m. 192.3 194.2 : 0.3 m. Foliations :. 156.0 : 56 degrees to core axis. 168.4 : 64 degrees to core axis. 173.6 : 60 degrees to core axis. 180.7 : 47 degrees to core axis. 185.4 : 39 degrees to core axis. 188.3 : 59 degrees to core axis. Whole rock samples :. 161.2 161.4 Epidotized lapilli or epidotization with minor hornblende and epidotized feldspar crystals. 168.3 168.4 8 % epidote concretionary lapilli and 5 % hornblendes in green chloritic matrix. 179.0 179.1 10 to 15 %, chloritized hornblendes in fine-grained medium green matrix. 186.9 187.0 Fine-grained dark green with approximately 15 %, << 1 mm, hornblendes and trace disseminated pyrite. 194.9 235.3 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Fine-grained medium green to brown andesitic tuff with n/a 1550 VA01109 200.0 230.0 30.0 n/a 224 n/a -58 n/a ۲5 minor 1 to 4 mm green and white chert beds. There are VA01864 224.0 225.0 1.0 1 80 <5 85 <1 750 trace minor fracture controlled calcite veinlets. Upper VA01865 225.0 226.0 1.0 1 87 ٢5 148 <1 <5 300 contact is at guartz - biotite vein. There is on average 2 VA01866 226.0 227.0 3200 5 740 <1 24 630 1.0 1 7 240 <5 390 to 3 %, up to 1 mm, quartz eyes and locally up to 5 %, 1 VA01867 227.0 228.0 1.0 1 128 4 1 5 118 <1 7 500 mm, epidotized feldspars and or chlorite after hornblende. VA01868 231.0 232.0 1.0 140 <5 1900 Thermal biotite occurs locally and is strong from 232.2 VA01869 232.0 233.0 1 97 <5 140 <1 1.0 VA01870 233.0 234.0 1.0 120 <5 1700 to 235.3. There is local weak fracture controlled 1 95 8 <1 silicification and chloritization. There is local fracture VA01871 234.0 235.9 (5 100 <1 <5 1500 1.9 1 118 controlled pyrite in the sediments. Bedding :. 194.9 Tightly folded bed with fold axis at 76 degrees to core axis. 197.5 : 21 degrees to core axis. 212.7 : 24 degrees to core axis. 222.0 : 36 degrees to core axis. 226.3 : 46 degrees to core axis. 230.4 : 49 degrees to core axis. Lost core :. 213.0 214.0 : 0.2 m. 235.3 244.3 MAFIC PORPHYRITIC MAFIC ASH TUFF Variably bleached light to medium green mafic tuff with 5 VA01110 235.3 244.3 9.0 n/a 122 n/a 46 n/a n/a 736 to 20 %, average approximately 12 %, 1 to 2 mm, VA01873 241.5 242.0 135 <5 72 <1 (5 1400 . 5 1 chloritized hornblendes. There are minor local fracture VA01872 243.8 244.3 1 400 <5 90 1 <5 1200

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PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-54

From То Sample From To Width Total Cu Рb Zn λġ Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppb) (ppm) (ppm) (ppm) (ppm) controlled calcite and fracture controlled biotite veinlets. At 244.3 there is chalcopyrite in a quartz veinlets, 2 to 3 % over 5 to 7 cm. Is massive with weak foliation at 51 to 52 degrees to core axis. At 241.8 there is a 7 to 10 mm quartz veinlet with 30 % sphalerite and 10 % chalcopyrite. 244.3 250.0 CHERT Grey to brown cherty felsic tuffite or chert. Hosts nil to VA01111 244.3 250.0 5.7 n/a 172 n/a 21 n/a n/a 717 25 %, 1 to 2 mm, quartz eyes locally, average 5 %. There are trace local quartz lapilli, up to 2 cm. There is trace local fracture controlled pyrite. Foliations :. 247.0 : 37 degrees to core axis. 248.1 : 43 degrees to core axis. 249.6 : 52 degrees to core axis. Bedding :. 245.8 : 63 degrees to core axis. 249.5 : 58 degrees to core axis. 250.0 257.2 INTERMEDIATE TUFFS WITH MINOR CHERTY SEDIMENTS Brown to green andesitic tuff, brecciated with argillite VA01112 250.0 257.0 7.0 n/a 86 76 n/a n/a 1730 n/a and chert beds. Foliation and bedding vary from 0 to 60 degrees to core axis. There are up to 25 % crystals. feldspar and quartz. 257.2 258.6 FELDSPAR PORPHYRITIC GABBRO Dark green gabbro with 5 to 10 %, 3 mm, feldspars and 3 %, < 1 mm, leucoxene. There is minor fracture controlled calcite veinlets. 258.6 261.6 MAFIC LAPILLI TUFF Brecciated mafic with minor brown carbonate spots and VA01113 258.6 261.6 n/a 431 3.0 n/a 215 n/a 46 n/a strong fracture controlled guartz and calcite veins. VA01874 258.6 260.0 1.4 1 106 <5 80 <1 <5 150 Lapilli are up to 4 cm. Is brown to green tuff with minor, VA01875 260.0 261.6 1.6 1 132 <5 82 <1 <5 57.0 up to 3 %, mafic crystals. There is trace to 1 % fracture controlled pyrite. There is no structure, in situ

261.6 266.8 CHERT

brecciation probably.

Grey chert and cherty tuffite. Locally up to 5 %, 1 mm, quartz eyes. There is very weak local fracture controlled sericitization and quartz veinlets. Bedding :. 264.5 : 49 degrees to core axis. 266.3 : 48 degrees to core axis.

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PROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-54	o: Pa	age Numb 7	er				
From To (m) (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
266.8 291.7	MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Brown to green andesitic to mafic crystal to ash tuffs	VA01114	267.0	291.7	24.7	n/a	127	n/a	50	n/a	n/a	1390	
	with cherty argillite and green to white cherts. Variable crystal content in tuff, averages 5 %, feldspars, hornblende and minor quartz eyes. Is approximately 30 % sediments, equal chert and argillite. Thermal biotite is	VA01876 VA01877 VA01878 VA01879	279.0 280.0 281.0 282.0	280.0 281.0 282.0 283.0	1.0 1.0 1.0	1 2 2	132 90 102	<5 5 32 24	162 130 173	<1 <1 1	8 5 5	360 740 2100	
	strong locally and dominantly absent. There is up to 2 % fracture controlled pyrite in the sediments. Sediment beds vary from < 1 cm to approximately 50 cm.	VA01880 VA01881	288.6 290.0	289.1 291.7	.5 1.7	0	119 70	13 13	95 107	<1 <1 <1	<5 <5	1000 1400	
	275.6 : 53 degrees to core axis. 278.4 : 58 degrees to core axis.												
	290.0 : 54 degrees to core axis. Faults :.												
	Locally at 0 to 20 degrees to core axis with up to 20 cm displacements perpendicular to bedding. Lost core :.					.*							
	270.4 271.3 : 0.3 m. Tops :. 275.0 277.0 Fining in up to 5 mm green chert beds												
	indicates tops uphole. 290.0 290.5 Chert beds with fining and thus tops uphole.												
	End of hole: 957 feet (291.7 m) on Friday May 13, 1988 at 12:00 p.m.												

Total lost core: 10.2 m % Recovery = 96.5%.

DIAMOND	DRILL	CORE LITHOGEOCHEMICAL	RECURD
		(MAJOR ELEMENTS)	

SAMPLE NUMBER	FROM	то	XS 102	XAL203	XCA0	XHG0	XNA20	ZK20	XFE203	XT 102	ZP205	ZHNO	ZLOI	รมห	BA	AIH
																
VA00655	23.40	23.50	47.50	17.30	8.20	4.92	2.88	0.96	10.30	0.80	0.14	0.23	6.23	99.46	460.	35.
VA00656	24.60	24.70	64.20	12.40	6.28	1.87	0.18	2.57	5.78	0.24	0.06	0.13	5200	98.71	1290.	41.
VA00657	26.20	26.30	67.90	13.80	4.37	1.09	0.35	3.94	2.91	0.26	0.06	0.08	4.85	99.61	1100.	52.
VA00658	37.90	38.00	69.00	13.30	2.68	1.97	4.01	1.53	2,99	0.34	0.08	0.10	2.85	98.85	821.	34.
VA00659	48.90	49.00	48.00	17.30	5.60	6,16	4.67	0.20	9.69	0.70	0.12	0.20	5.93	98.57	130.	38.
VA00660	61.00	61.10	65.30	16.70	3.05	1.90	6.68	0.42	2.73	0.38	0.30	0.06	1.47	98.99	352.	19.
VA00661	79.50	79.60	44.80	12.30	11.40	6.21	2.00	0.29	13.10	1.62	0.16	0.19	6.00	98.27	83.	33.
VA00662	100.90	101.00	71.00	13.90	1.34	1.01	3.85	4.00	1.60	0.26	0.08	0.03	1.54	98.61	1300.	49.
VA00663	161.20	161.40	41.80	20.40	11.30	5.23	1.22	0.49	12.10	1.01	0.12	0.22	4.23	98.12	153.	31.
VA00664	168.30	168.40	44.20	16.70	7.05	8.02	3,39	0.05	10.90	0.86	0.23	0.22	6.39	98.01	101.	44.
VA00665	179.00	179.10	41.90	14.40	11.30	10.90	0.87	0.10	15.30	0,98	0.27	0.25	3.62	99.89	79.	47.
VA00666	186.90	187.00	48.50	16.90	4.51	7.63	4.61	0.28	11.40	1.00	0.17	0.21	3.08	98.29	283.	46.
VA00667	195.80	195.90	49.30	15.90	7.48	7.64	3.45	1.02	9.99	0.78	0.17	0.19	2.62	98.54	919.	44.
VA00668	242.00	242.10	44.90	16.80	8.66	8.23	2.58	0.52	12.50	0.90	0.18	0.24	3.08	98.59	938.	44.
VA00669	257.60	257.70	46.00	12.40	11.80	5.66	1.94	0.66	10.90	1.56	0.15	0.16	8.77	100.00	639.	32.
VA00670	266.30	266.40	55.20	18.00	1.52	6.90	5.74	0.56	7.13	0.73	0.24	0.08	3.54	99.64	960.	51.

Hole No. CH88-54 WHOLE ROCK SAMPLES

Page No.

SAMPLE NUMBER	FROM	TO	25102	ZAL203	ZCAO	ZNGO	ZNA20	XK20	%7FE203	XT 102	XP205	ZHNO	XLOI	SUK	BA	AI	NACA
				·•••••						·••····							********
VA01098	20.20	23.90	48.40	16.90	7.22	4.71	3.06	1.42	9.68	0.73			6.23	98.35	506.	37.	10.
VA01099	24.70	42.50	68.10	13.30	3.43	1.41	2.44	2.61	3.01	0.28			3.70	98.28	1100.	41.	6.
VA01100	42.50	47.20	49.20	16.80	6.34	5.03	1.75	2.59	9.05	0.67			7.54	98.97	828.	49.	8.
VA01101	47.20	55.50	47.40	15.70	7.70	5.96	3.31	0.50	9.91	0.66			7.47	98.61	256.	37.	11.
VA01102	56.60	68.50	69.60	13.60	3.20	1.46	4.25	1.32	2.95	0.29			2.54	99.21	655.	27.	7.
VA01103	68.50	99.10	46.80	12.90	10.50	6.73	2.07	0.36	13.50	1.85			3.62	98.33	140.	36.	13.
VA01104	99.10	104.50	71.10	13.40	2.12	1.11	3.40	3.87	1.67	0.22			2.39	99.28	1360.	47.	6.
VA01105	108.00	115.60	52.00	16.40	5.59	3.17	1.61	2.32	8.01	0.83			8.00	97.93	733.	43.	7.
VA01106	152.50	165.00	42.40	22.10	8.66	4.49	1.57	1.46	11.90	0.95			4.77	98.30	391.	37.	10.
VA01107	165.00	180.00	45.40	17.50	6.72	7.28	3.22	0.52	11.60	0.93			4.62	97.79	239.	44.	10.
VA01108	180.00	194.90	45.60	12.80	11.50	7.88	2.68	0.47	10.30	0.68			8.00	99.91	406.	37.	14.
VA01109	200.00	230.00	49.90	16.30	5.93	6.94	3.66	2.21	9.51	0.80			2.62	97.87	1550.	49.	10.
VA01110	235.30	244.30	44.10	15.60	13.30	6.90	1.90	0.51	11.10	0.77			3.54	97.72	736.	33.	15.
VA01111	244.30	250.00	58.40	15.80	2.24	6.66	4.90	0.69	7.06	0.63			2.93	99.31	717.	51.	7.
VA01112	250.00	257.00	47.00	13.70	13.90	6.22	1.48	2.25	7.97	0.55			5.54	98.61	1730.	36.	15.
VA01113	258.60	261.60	46.20	15.60	6.36	6.88	3.07	1.00	10.60	0.83			8.16	98.70	431.	46.	9.
VA01114	267.00	291.70	48.60	16.10	6.19	7.00	3.13	2.53	9.85	0.82			3.54	97.76	1390.	51.	9.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

Hole No. CH88-54 ALTERED SAMPLES

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Page No.

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SAMPLE	FROM	то	BA (ppm)	CU (ppm.)	Z.№ (ррав)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	СД (ррм)	НО (ррм)	HN (ppm)	CUZN	ETS	FE

VA01861	42.50	44.00	900.0	88.0	143.0	<0.5	<5.0	18.0	16.0	<5.0	13.0	<1.0	3.0	1420.0	38.	1.	5.
VA01862	44.00	45.50	670.0	93.0	118.0	<0.5	5.0	22.0	18.0	8.0	5.0	<1.0	3.0	1460.0	44.	1.	6.
VA01863	45.50	47.20	1100.0	45.0	52.0	<0.5	<5.0	13.0	10.0	<5.0	<5.0	<1.0	3.0	690.0	46.	1.	3.
VA01864	224.00	225.00	750.0	80.0	85.0	<0,5	<5.0	19.0	34.0	<5.0	<5.0	<1.0	2.0	653.0	48.	1.	4.
VA01865	225.00	226.00	300.0	87.0	148.0	<0.5	<5.0	17.0	28.0	<5.0	5.0	<1.0	2.0	550.0	37.	1.	5.
VA01866	226.00	227.00	630.0	3200.0	740.0	<0.5	24.0	23.0	30.0	5.0	<5.0	8.0	2.0	769.0	81.	1.	6.
VA01867	227.00	228.00	390.0	128.0	240.0	4.3	<5.0	21.0	26.0	7.0	9.0	1.0	2.0	1140.0	35.	1.	6.
VA01868	231.00	232.00	500.0	140.0	118.0	<0.5	7.0	25.0	22.0	5.0	8.0	<1.0	2.0	926.0	54.	1.	6.
VA01869	232.00	233.00	1900.0	97.0	140.0	<0.5	<5.0	22.0	32.0	<5.0	5.0	<1.0	2.0	974.0	41.	1.	6.
VA01870	233.00	234.00	1700.0	95.0	120.0	<0.5	<5.0	25.0	40.0	8.0	5.0	<1.0	2.0	850.0	44.	1.	7.
VA01871	234.00	235.90	1500.0	118.0	100.0	<0.5	<5.0	26.0	30.0	<5.0	<5.0	<1.0	2.0	870.0	54.	1.	6.
VA01873	241.50	242,00	1400.0	135.0	72.0	<0.5	<5.0	25.0	26.0	<5.0	<5.0	<1.0	1.0	849.0	65.	1.	5.
VA01872	243.80	244.30	1200.0	400.0	90.0	0.8	<5.0	28.0	28.0	<5.0	6.0	<1.0	1.0	817.0	82.	1.	6.
VA01874	258.60	260.00	150.0	106.0	80.0	<0.5	<5.0	28.0	44.0	<5.0	12.0	<1.0	2.0	1170.0	57.	1.	7.
VA01875	260.00	361.60	570.0	132.0	82.0	<0.5	<5.0	30.0	32.0	<5.0	6.0	<1.0	2.0	1290.0	62.	1.	7.
VA01876	279.00	280.00	360.0	132.0	162.0	<0.5	8.0	22.0	20.0	<5.0	<5.0	<1.0	2.0	967.0	45.	1.	6.
VA01877	280.00	281.00	740.0	90.0	130.0	<0.5	5.0	21.0	32.0	5.0	5.0	<1.0	2.0	818.0	41.	2.	6.
VA01878	281.00	282.00	2100.0	102.0	173.0	0.5	5.0	37.0	34.0	32.0	6.0	<1.0	8.0	1200.0	37.	2.	7.
VA01879	282.00	283,00	2100.0	100.0	123.0	<0.5	<5.0	32.0	30.0	24.0	5.0	<1.0	<1.0	950.0	45.	1.	6.
VA01880	288.60	289.10	1000.0	119.0	95.0	<0.5	<5.0	37.0	23.0	13.0	12.0	<1.0	<1.0	840.0	56.	0.	5.
1001983	280.00	291 70	1400 0	70.0	107 0	/0 F	< F . 0	00 A		12.0	< F 0	<u>.</u>	<1 A	400.0	40	1	٨

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-54

Page No. 1



Summary Log: DDH CH88-55 Location: 30+00 E, 3+60 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: May 13, 1988 Core logged by: J. Pattison

0.0 - 3.7 3.7 - 59.7 59.7 - 71.9	Casing Feldspar porphyritic gabbro Granophyric coarse-grained gabbro 10 to 15 % ilmenite in clumps up to 5 mm in diameter. A 2.5 m interval contains 3-4 % disseminated chalco-
71.9 - 79.1	Feldspar porphyritic gabbro
79.1 - 82.2	Granophyric ilmenite-rich gabbro
82.2 - 215.5	Feldspar porphyritic gabbro

PROPERTY: Chem	ainus JV		FALCONB	RIDGE LIMI	red				HOLE CH88-5	No: Pag 5	je Numb 1	er		
Hole Location:	30+00 E 3+60 S		DIMION	D DRIDD DO										
NTS: 92B13 Azimuth: 210	UTM: 5416632.4 N Elevation: 538 m	430152.7 1	6				Cla Sec	im No. Ch tion No.:	ip 1 30+00 E					
Dip: -45	Length: 215.5	m					Log	ged By: J	. Pattis	on				
Started: 10-Ma Completed: 13-	Y-88 Mav-88						Dri Ass	lling Co. ayed By:	: Burwas Bondar-C	h Enterpr legg & XF	rises RAL			
···· ·	• • •						Cor	e Size: N	Q .					
Purpose: To te	st 44 msec IP anomaly	at 4+40 S		DIP	TESTS									
		Length	Azi- muth	Dip	Length	Azi- muth	Dip							
		12.20	212.0	-45.0	215.50	217.0	-45.0							
		111.90	213.0	-45.0										
rom To					Sam	ole Fra	om To	Width	Total	Cu	Pb	Zn	λα	Au

No.

VA03846

VA03847

VA03848

VA03849

VA03850

VA03851

VA03852

VA03853

65.2

66.2

66.8

68.1

69.0

70.0

70.6

71.1

66.2

66.8

68.1

69.0

70.0

70.6

71.1

71.9

1.0

.6

. 9

1.0

.6

.5

. 8

1.3

(m)

(m)

(m)

Sulphides (ppm)

1

1

1

4

4

4

1

1

400

840

5800

6300

2900

2600

725

2000

Ba

(ppb) (ppm)

(ppm) (ppm) (ppm)

<5

٢5

<5

<5

<5

٢5

<5

(5

120

130

116

170

170

132

118

108

(1

1

<1

3

3

1

1

<1

12

50

6 210

236

112

41

45

13

280

<20

290

400

310

60

30

.0 3.7 CASING

(m)

(m)

Π

0.3 M of overburden then into GABBRO.

3.7 59.7 FELDSPAR PORPHYRITIC GABBRO

Massive dark green, fine to medium-grained gabbro with 10 % feldspar phenocrysts and 2 % interstitial ilmenite. Ilmenite is partially altered to leucoxene. Occasional guartz +/- carbonate fracture.

-----DESCRIPTION-----

STRUCTURE:.

42.9-43.2 M fault zone at 55 degrees to core axis.

59.7 71.9 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO Massive, coarse to medium-grained granophyric gabbro, all mafic minerals have gone to chlorite. 10-15% interstitial ilmenite as anhedral patches up to 0.5 cm in diameter partially altered to leucoxene and 0.5 to 1 % disseminated chalcopyrite and pyrite often associated with the ilmenite. Weak fracture controlled and pervasive carbonatization. Lower contact is sharp at 55 degrees to core axis.

> 66.2 66.8 Intrusive breccia zone; angular breccia fragments up to 5.0 cm in diameter sit in a white, carbonate-rich matrix. 1 % disseminated chalcopyrite.

66.8 68.1 0.5 % disseminated chalcopyrite.

PROPERTY: Chemainus JV

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-55 2

> Ba (ppm)

From (m)	То (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)
		68.1 70.6 3-4 % disseminated chalcopyrite associated with carbonate-filled fractures. There are several barren quartz +/- carbonate veins up to 10 cm wide at 40-50 degrees to core axis.										
		70.6 71.9 Becomes finer grained, moderately carbonatized and chloritized and there is weak epidote alteration centred on feldspar phenocrysts. 1 % disseminated chalcopyrite.								·		
71.9	- 79.1	FELDSPAR FORPHYRITIC GABBRO Fine-grained massive gabbro with 10 %, 2-5 mm feldspars and 3 % interstitial ilmenite partially altered to leucoxene. Locally weakly glomeroporphyritic. Lower contact is gradational.	VA03854	71.9	72.9	1.0	1	155	<5	61	<1	40
		STRUCTURE .										
		74.0-74.6 M blocky, highly fractured core. 0.2 of lost core At 77.2 1.0 cm fault gouge at 25 degrees to core axis.										
79.1	82.2	MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO Medium to coarse-grained gabbro with 10 % coarse interstitial ilmenite and 0.25 % chalcopyrite. Weak patchy epidote alteration. 0.2 m quartz vein at 60 degrees to core axis at the lower contact.							•			
82.2	131.0	FELDSPAR PORPHYRITIC GABBRO As 71.9 to 79.1 m. 5 % disseminated ilmenite. Ilmenite occurs in patches < 4 mm in diameter. Quartz-carbonate filled fractures are common and often contain biotite along their margins. Ilmenite rich coarse-grained interval (>10% ilmenite) between 87.8 and 88.1 m.										
		STRUCTURE:										
		 101.0 101.7 Xenolith (?) of mafic feldspar crystal tuff. Composed of 20% 2-4 mm feldspar crystals in a fine-grained dark grey-brown mafic matrix. No ilmenite. Upper and lower contacts are sharp at 65-70 degrees to core axis. 	· · ·					•				
		108.6 109.5 Quartz vein with trace disseminated chalcopyrite at 50-60 degrees to core axis.										
		119.6 120.3 Fine-grained non feldspar porphyritic phase of										

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-55 ٦ DIAMOND DRILL LOG Sample From To Width Total Cu Рb Zn λg Au Ba (m) -----DESCRIPTION------Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) 129.6 130.1 Many guartz +/- carbonate filled fractures and gashes up to 5.0 cm wide. Nil sulphides. 131.0 132.3 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO As 79.1 to 82.2 m. 10 % ilmenite and 1 % chalcopyrite. VA03855 131.2 132.3 1.1 1 843 <5 90 Ċ1 7 60 Upper and lower contacts are gradational. 132.3 162.7 FELDSPAR PORPHYRITIC GABBRO As 71.9 to 79.1 m. 0.2 m weakly sheared quartz-carbonate flooded zone at 55 degrees to core axis at the lower contact. STRUCTURE:. At 156.6 m slip at 60 degrees to core axis. 137.8 138.3 COARSE-GRAINED GRANOPHYRIC ILMENITE RICH GABBRO with 10 % ilmenite and 0.5 % chalcopyrite. 148.4 150.6 0.4 m of lost core. The core is somewhat blocky but no obvious reason for the core loss 152.6 888.8 1.0 cm wide quartz-carbonate vein at 36 degrees to core axis with 5 % sphalerite (?) or possibly biotite. 152.6 153.5 Blocky, highly fractured core. 156.2 156.3 Quartz vein at 80 degrees to core axis with chlorite filled fractures. 162.7 165.4 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO As 79.1 to 82.2 m. 10 % ilmenite and 0.5 to 1 % disseminated chalcopyrite. Lower contact is gradational. 165.4 215.5 FELDSPAR PORPHYRITIC GABBRO Fine to medium-grained feldspar porphyritic gabbro. Locally weakly glomeroporphyritic. 3-5% Interstitial fine

medium-grained ilmenite. Quartz-carbonate healed fractures and gashes are common. Becomes medium to coarse-grained below 213.6 m.

STRUCTURE: .

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From To

(m)

At 210.0 1.0 cm brittle fault zone at 65 degrees to core axis. Core is blocky for 0.5 m on downhole side of fault. 0.1 m of lost core.

PROPERTY: Chemainus JV

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-55 4

From To (m) (m) -----DESCRIPTION-----

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm)

202.9 203.3 Blocky, highly fractured core. 0.2 m of lost core.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (major elements)

SAMPLE NUMBER	FROM	TO	XS 102	2AL203	ZCAO	XNGO	ZNA20	XK20	ZFE203	XT 102	XP205	ZMNO	XLOI	SUH	BA	AI	NACA
VA02385	50.20	50.40	48.60	14.90	11.10	6.62	2.07	0.39	12.30	1.60	0.15	0.19	1.54	99.46	187.	35.	13.
VA02386	65.60	65.80	48.20	11.30	7.58	3.68	2.24	0.35	19.50	3.98	0.38	0.30	2.23	99.74	438.	29.	10.

Hole No. CH88-55 WHOLE ROCK SAMPLES

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Page No. 1

SAMPLE	FROM	то	BA	CU	ZN	AG	AU	co	NI	PB	AS	CD	MO	MN	 CUZN	ETS	FE
			(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	 								
VA03846	65.20	66.20	280.0	400.0	120.0	<0.5	12.0	23.0	15.0	<5.0	<5.0	<1.0	3.0	453.0	77.	1.	7.
VA03847	66.20	66.80	<20.0	2000.0	130.0	1.0	50.0	28.0	19.0	<5.0	11.0	1.0	4.0	511.0	94.	1.	7.
VA03848	66.80	68.10	210.0	840.0	116.0	<0.5	6.0	22.0	12.0	<5.0	8.0	<1.0	3.0	437.0	88.	1.	7.
VA03849	68.10	69.00	290.0	5800.0	170.0	3.2	236.0	33.0	20.0	<5.0	<5.0	3.0	4.0	567.0	97.	4.	8.
VA03850	69.00	70.00	400.0	6300.0	170.0	3.4	112.0	36.0	24.0	<5.0	<5.0	3.0	4.0	543.0	97.	4.	7.
VA03851	70.00	70.60	310.0	2900.0	132.0	1.4	41.0	34.0	36.0	<5.0	<5.0	2.0	3.0	690.0	96.	4.	7.
VA03852	70.60	71.10	60.0	2600.0	118.0	1.4	45.0	29.0	20.0	<5.0	<5.0	2.0	4.0	424.0	96.	1.	7.
VA03853	71.10	71.90	30.0	725.0	108.0	<0.5	13.0	30.0	32.0	<5.0	5.0	<1.0	3.0	509.0	87.	1.	7.
VA03854	71.90	72.90	60.0	155.0	61.0	<0.5	40.0	20.0	40.0	<5.0	5.0	<1.0	3.0	453.0	72.	1.	4.
VA03855	131.20	132.30	60.0	843.0	90.0	<0.5	7.0	18.0	23.0	<5.0	<5.0	<1.0	7.0	420.0	90.	1.	5.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

Hole No. CH88-55

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Page No. 1



Summary Log: DDH CH88-56 Location: 31+00 E, 0+01 N; Chip 1 Claim Azimuth: 210, Dip: -55 Hole Completed: May 20, 1988 Core Logged By: D.P. Money 0.0 - 15.8Casing. 15.8 - 104.5Chloritic felsic crystal tuffs with minor chlorite schists, up to 1 m. 104.5 - 121.0Mafic ash tuff. 121.0 - 139.3 Feldspar phyric felsic flow. 139.3 - 147.6Gabbro. 147.6 - 148.5 Major thrust fault. 148.5 - 182.8Nanaimo Group argillite, greywacke and conglomerate. 182.8 - 186.6 Andesitic flow with 2 % disseminated pyrite. 186.6 - 210.6 Gabbro. 210.6 - 234.4Felsic crystal tuffs with tr to 7 % pyrite locally concentrated on fractures. 234.4 - 255.6 Gabbro. 255.6 - 314.7Felsic crystal and lapilli tuffs with on average 1 % disseminated pyrite. 314.7 - 329.1 Gabbro. 329.1 - 432.7Felsic crystal and lapilli tuffs with weak disseminated pyrite throughout and 20 % pyrite from 357.2 to 360.5. From 425.9 to 432.7 there is 1 to 30 % sphalerite, trace to 10 % galena, trace to 5 % chalcopyrite and on average 10 % pyrite. The sulphides are banded with up to 30 cm locally of semi-massive to massive spalerite and galena, and pyrite and chalcopyrite. 432.7 - 443.9Mafic tuffs. 443.9 - 454.3 Hornblende phyric mafic tuff or flow. 454.3 - 485.3 Mafic crystal to ash tuffs with minor interbedded green ribbon cherts. 485.3 - 486.8 Cherty greywacke. 486.8 End of hole.

PROPERT	Y: Chemain	us J.V.		FALCONB	RIDGE LIMITE	D					HOLE N CH88-56	o: Pa	ige Numbe 1	er			
Hole Lo	ocation: 3	1+00 E 0+01	N	DIAMON	D DKITP POG				01 of	- No. (1						
NTS: 09 Azimuth Dip:	2B/13W 1: 210 -55	UTM: 54168 Elevation: Length:	79.1 N 430407.7 1 539 m 486.8 m	5					Logg	ion No. C	D.P. Money	31+00 1	East, Chi	ip Cla	im Grou	?	
Started Complet	l: May 13, ed: May 20	1988 , 1988							Assa	yed By:	Bondar-Cl	egg and	l X-Ray i	Assay			
Purpose	: To test	'active tuff	' downdip from Cl	nem 87-24	DIP TE	STS			COLE	5176:	μŲ						
			Length	Azi- muth	Dip	Length	Az mu	i- ith	Dìp								
			26.50 99.70 184.40	212.0 209.0 211.0	-52.0 -48.0 -48.0	279.50 367.90	214 220	.0 - .0 -	46.0 49.0			1					
om To n) (m)			DESCRIPTIO	V		Sam N	ple 0.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
) 15.8	OVERBURDE	N															
3 23.0	CHLORITIC Medium gr feldspar pervasive feldspar	FELSIC QUAR een and whit lapilli or a silicificat and quartz g	TZ-FELDSPAR CRYS e spotty lapilli lteration. Is gla ion. There are 10 rains. There is	TAL LAPI tuff wi assy wi to 12 on aver	LLI TUFF th 10 % k th spotty %, 1 to 2 mm age 10 to 12	VA01	115	15.8	23.0	7.2	n/a	<10	n/a	39	n/a	n/a	684
	% chlorit with maxi	e in the mat mum length c	rix. Is blocky, l f core of 20 cm	nighly f	ractured cor	e											

23.0 23.5 CHLORITE SCHIST

Foliations :.

Lost core :. 15.8 17.1 : 0.2 m. 17.1 18.2 : 0.2 m. 20.7 23.2 : 1.4 m. Alteration :.

16.2 : 61 degrees to core axis. 19.0 : 41 degrees to core axis. 20.7 : 44 degrees to core axis.

From

(m)

.0

15.8

Dark green chlorite schist with calcite veinlets and veins parallel to foliation. Foliation is at 45 degrees to core axis.

23.5 62.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Variably chloritic felsic tuff with 3 to 15 % chlorite.

15.8 23.0 MODERATE SPOTTY SILICIFICATION. 15.8 23.0 WEAK PERVASIVE CHLORITIZATION.

> VA01116 24.0 39.0 15.0 <10 n/a n/a 977 n/a 69 n/a

PROPERTY: Chemainus J.V.

(m)

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HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 2 DIAMOND DRILL LOG From To Width Total Sample From То Cu Рb Zn λg Âυ Ba (m) -----DESCRIPTION-----No. (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) Hosts on average 5 %, 1 to 3 mm guartz eyes and 10 %, 1 VA01117 44.0 59.0 15.0 n/a <10 n/a 23 n/a n/a 1060 mm, feldspar grains. There is minor biotite and pyrite exposed on core fractures. Core is very disky and is blocky, highly fractured core. There are trace minor local guartz veins and fracture controlled calcite veinlets. 23.5 62.3 MODERATE PERVASIVE CHLORITIZATION. Faults :. 36.7 : minor chlorite fault gouge. 38.1 : minor brown fault gouge, < 2 mm, at approximately 55 degrees to core axis. 55.0 55.5 Fault gouge at 65 degrees to core axis. 61.0 61.9 Blocky, highly fractured core with minor fault gouge at 75 degrees to core axis. Lost core :. 26.8 29.4 : 0.9 m. 29.9 34.1 : 0.4 m. 46.5 47.4 : 0.3 m. 47.4 48.8 : 0.4 m. 49.2 50.7 : 0.2 m. 52.7 55.5 : 0.3 m. 55.5 56.4 : 0.2 m. 56.4 57.9 : 0.6 m. 59.4 61.9 : 1.3 m. Foliations :. 25.4 : 51 degrees to core axis. 32.7 : 46 degrees to core axis. 40.4 : 56 degrees to core axis. 46.1 : 69 degrees to core axis. 55.9 : 66 degrees to core axis. 58.7 : 61 degrees to core axis. 62.3 62.9 CHLORITE SCHIST Dark green chlorite schist with moderate carbonatization 149 <1 <5 610 VA01882 62.3 62.9 .6 1 66 12 as 5 % calcite and trace to 0.5 %. 1 to 2 mm. pyrite cubes. Foliation is at 68 degrees to core axis. 62.3 62.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 62.9 95.4 WEAKLY CHLORITIC FELSIC TUFF Very locally very chloritic to on average very weakly VA01118 65.0 80.0 15.0 <10 43 n/a n/a 1260 n/a n/a chloritic felsic tuff with minor local mafic tuff beds. VA01119 80.0 95.0 15.0 25 93 n/a n/a 886 n/a n/a 62.9 95.4 WEAK SPOTTY CHLORITIZATION. 62.9 64.3 Sheared and gungy chloritic felsic with approximately 5 % chlorite, 7 %, 1 to 2.5 mm, quartz eyes and 15 % feldspars. There are numerous fracture controlled quartz veinlets. 64.3 67.7 Moderately siliceous felsic with weak pervasive chloritization as green tinged grev tuff with 5 %, 1 to 5 mm, guartz eyes. There is 0.5 %

fine-grained disseminated pyrite.

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From To

(m)

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-56 3

Cu

Sample From No. (m) Pb Zn Ag Au Ba (ppm) (ppm) (ppm) (ppm)

67.7 67.9 Blocky, highly fractured core. Chlorite schist with white quartz veins.

-----DESCRIPTION------

- 67.9 71.3 MODERATE PERVASIVE SILICIFICATION in chloritic felsic with 15 %, 2 to 4 mm, quartz eyes and 7 %, 1 mm, epidote grains. Is blocky, highly fractured core and schistose from 69.3 to 69.7 with minor fault gouge. There is 0.25 to 0.5 % fine-grained disseminated pyrite.
- 71.3 73.1 Chlorite to sericite chlorite schist with minor local fault gouge and weak to moderate fracture controlled carbonatization. There is approximately 0.5 % very fine-grained disseminated pyrite.
- 73.1 74.3 Sericitic to weakly chloritic felsic schist with 5 to 7 %, 1 to 2 mm, and 3 %, 4 to 5 mm, quartz eyes and 7 to 15 %, 1 to 2 mm, epidotized feldspars. There is trace fine-grained disseminated pyrite.
- 74.3 83.6 MODERATE PERVASIVE SILICIFICATION, with weak to moderate chloritization. Siliceous and massive with moderate schistosity and cleavage. Crystal content is variable from trace to 15 %, up to 3 mm, quartz eyes and feldspar grains. There is 1 to 1.5 % disseminated pyrite, some is associated with the weak fracture controlled quartz calcite veinlets. There is minor bedding, 1 cm compositional banding of chlorite and sericite at 77.7. At 76.4 there is 2 cm of fault gouge at 74 degrees to core axis.
- 83.6 95.4 More schistose and sericitic with minor kinks from 87.0. There are locally minor mafic tuff beds and quartz veins, up to 10 cm. There is on average < 0.5 % pyrite, locally over 10 cm is up to 2 %. There is local blocky, highly fractured core up to 20 cm and minor fault slips parallel to foliation and at 94.3 at 56 degrees to core axis and 117 degrees to bedding with a 15 mm displacement. Crystals average 5 % with up to 7 mm quartz eyes and up to 2 mm feldspars.

Lost core :. 62.9 64.2 : 0.3 m. 64.2 66.4 : 0.3 m. 66.4 68.1 : 0.2 m. 70.1 72.2 : 0.2 m. 74.7 76.2 : 0.3 m. 77.6 78.5 : 0.2 m. 78.5 79.4 : 0.3 m. 79.4 81.2 : 0.3 m. 81.2 83.2 : 0.4 m. 84.4 86.3 : 0.5 m.

То

(m)

Width

Total

(m) Sulphides (ppm)

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LINITED CH88-56 A. DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Ba Åα Au (m) (m) -----DESCRIPTION-------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 89.0 90.2 : 0.6 m. Foliations :. 65.4 : 74 degrees to core axis. 68.1 : 45 degrees to core axis. 72.7 : 69 degrees to core axis. 74.0 : 56 degrees to core axis. 80.6 : 51 degrees to core axis. 83.6 : 62 degrees to core axis. 84.6 : 53 degrees to core axis. 91.5 : 66 degrees to core axis. 95.4 101.0 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Andesitic crystal tuff to chlorite - sericite schist with VA01120 95.4 101.0 5.6 n/a 154 n/a 379 n/a n/a 509 moderate pervasive carbonatization. From 98.0 to 99.2 is not sheared and hosts 5 to 10 %, 1 to 2 mm, guartz eyes. Is locally contorted with minor 'S' drag folds. There are minor boudinaged fracture controlled white quartz veins. Alteration :. 95.4 101.0 MODERATE PERVASIVE CARBONATIZATION. Foliations :. 96.0 : 68 degrees to core axis. 99.9 : 56 degrees to core axis. Faults :. 99.2 99.7 Fault gouge at 61 degrees to core axis. Lost core :. 96.3 97.8 : 0.4 m. 97.8 99.7 : 0.3 m. 101.0 101.1 FAULT ZONE Brecciated felsic tuff with interstitial grey fault gouge VA01121 101.0 104.5 3.5 n/a 1170 n/a 27 n/a <10 n/a at approximately 70 degrees to core axis. VA01883 101.0 102.7 1.7 2 45 10 69 <1 <5 1100 101.1 104.5 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Contorted sericite schist with on average 15 %, 1 to 2 mm, VA01884 102.7 104.1 1.4 1 24 (5 72 (1 <5 980 feldspar and quartz crystals. There is minor quartz veins and 1 to 2 % disseminated and banded pyrite. Is blocky, highly fractured core with minor fault gouge from 102.7 to 104.5. 101.1 104.5 WEAK PERVASIVE CHLORITIZATION. 104.5 117.4 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Medium green mafic tuff with 30 to 40 %, 1 to 2 mm. VA01122 104.5 117.4 12.9 n/a 119 n/a 48 n/a n/a 435 epidote grains and crystal laths after feldspar. From 112.5 to 114.4 and 114.9 to 115.0 there are tan coloured

siliceous dykes with minor fracture controlled silicification and pyrite. There is minor local fault gouge and is very contorted from 116.1 to 117.4. Is

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

No.

From To -----DESCRIPTION------(m) (m)

locally blocky, highly fractured core and there is trace fracture controlled hematite. Is massive with no foliation. From 116.5 there is trace fracture controlled pyrite associated with weak fracture controlled carbonatization.

117.4 121.0 FAULT ZONE

Mafic fault gouge, contorted clay with rotated mafic tuff and quartz pieces, up to 5 cm. Trend is at 55 to 60 degrees to core axis.

121.0 139.3 FELDSPAR PORPHYRITIC FELSIC FLOW

Dominantly siliceous glassy grey felsic with 3 to 5 %, 2 to 4 mm, feldspars and from 121.3 to 123.minor emerald green wisps. Is blocky, highly fractured core from 117.4 to 125.3 and from 129.7 to 132. Is contorted from 130.2 to 139.3 and is schistose. There is very weak local biotite and local brown to pink tinges in the lower more siliceous flow. There is 0.5 to 1 % fracture controlled and disseminated fine-grained pyrite locally. Numerous minor faults occur locally. There are numerous fracture controlled guartz - calcite veinlets. Lost core :. 121.3 123.0 : 0.8 m.

123.4 124.4 : 0.5 m. 128.9 131.1 : 0.2 m. 136.2 138.5 : 0.3 m.

138.5 139.3 : 0.2 m.

139.3 147.6 FELDSPAR PORPHYRITIC GABBRO

139.3 144.6 Fine-grained and locally sheared with moderate to weak fracture controlled calcite veinlets. There is on average 3 %, 1 to 3 mm, feldspars and 1 % very fine-grained leucoxene. 144.6 146.8 Medium grained with weak fracture controlled hematite and 20 to 25 %, 2 to 4 mm, feldspars.

There is spotty epidotization from 146.2 to 146.8 and local quartz veins occur. 146.8 147.6 Sheared and faulted with brecciated calcite

veinlets and minor fault gouge.

147.6 148.5 FAULT BRECCIA

Quartz, chert and argillite clasts in green and grey clay to fault gouge.

148.5 155.9 NANAIMO ARGILLITE

Sample From То Width Total Cu РЬ Zn Αg Au Ba (m) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m.) Sulphides (ppm)

VA01123 121.0 139.0 18.0 <10 n/a n/a 1070 n/a (10 n/a

HOLE No: Page Number CH88-56 5

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 6 DIAMOND DRILL LOG Sample From Ťο Width Total Cu Pb Zn Ag -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Brown to black soft argillite with minor fault gouge from 149.2 to 149.7 and minor fault breccia from 149.7 to 150.1. There are minor fracture controlled calcite veinlet. Is very fine-grained. 155.9 169.6 NANAIMO GREYWACKE Grey greywacke, quartz rich with trace up to 1 cm black argillite clasts. There are minor fracture controlled calcite veinlets. 169.6 182.8 NANAIMO CONGLOMERATE Benson Formation basal conglomerate. VA01885 182.0 182.8 . 8 25 1 (5 82 (1 169.6 172.7 Dominantly pebble conglomerate with 50 % quartz grains, 20 % argillite clasts, clasts up to 5 mm on average with average of 2 mm. and mud matrix. 172.7 180.7 Pebble to cobble conglomerate with up to 10 cm clasts. Clasts are 30 to 40 % green to grey chert, 15 to 25 % argillite, approximately 3 % gabbro and 2 % felsic tuff. There is a 10 cm clast with pyrite at 180.0. 180.7 181.9 Greywacke with 3 %, up to 1 cm, argillite clasts. 181.9 182.5 Pebble conglomerate with 35 % chert and 25 %. up to 2 cm clasts. 182.5 182.8 Fine-grained pebble conglomerate with up to 3 mm clasts and minor sulphide mud. Unconformity in sulphide mud and clay at 51

VA01886 182.8 184.0 1.2

VA01887 184.0 185.0 1.0

VA01124 182.8 186.6

VA01888 185.0 186.6

2

2

2

n/a

3.8

1.6

162

392

273

218

22

n/a

30

28

124

136

135

84

<1

<1

<1

n/a

7 100

16

<5

n/a 120

60

<20

An

16 1000

Ra

182.8 186.6 QUARTZ PORPHYRITIC INTERMEDIATE FLOW

Π

From To

(m)

(m)

(?). Probably andesitic flow or tuff. Massive and dark green with 10 to 15 %, 3 to 4 mm, quartz grains. There is 3 % fracture controlled purple to pink carbonate. Hosts 2 % disseminated or fracture controlled fine-grained pyrite clots. Is massive and dark to medium green with no foliation, except sheared above gabbro for 0.5 m at approximately 30 degrees to core axis. May be a boulder in the conglomerate.

degrees to core axis.

186.6 210.6 FELDSPAR PORPHYRITIC GABBRO

186.6 191.3 Fine-grained medium green gabbro with on average 7 to 10 %, 2 to 3 mm, feldspars and 3 *, 1 to 2 mm, ilmenite grains with purple hematitic crusts.

191.3 205.4 Medium to coarse grained gabbro with 20 to 50 %, up to 5 mm, feldspar grains and laths.
PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 7 DIAMOND DRILL LOG From То Sample From То Width Total Cu Pb Ζn λđ Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Ilmenite averages approximately 2 %. There is minor fracture controlled epidote, calcite and quartz veinlets. 205.4 210.6 Fine-grained gabbro with trace feldspar and ilmenite grains in fine-grained chloritic matrix. 210.6 234.4 FELSIC QUARTZ EYE TUFF Light grey siliceous felsic tuff with on average 10 %, 1 VA01125 211.0 226.0 15.0 n/a <10 n/a (10 n/a 1530 n/a to 2 mm, quartz eyes and minor fragments, up to 2 cm, VA01889 213.0 214.0 1.0 1 60 ٢5 65 <1 <5 1400 brown to white with weak fracture controlled VA01890 214.0 215.0 1.0 5 106 6 58 <1 <5 1400 carbonatization. There is local weak fracture controlled VA01891 215.0 216.0 1.0 2 77 <5 43 <1 <5 1400 chloritization and calcite veinlets. Is locally kinked VA01892 216.0 217.0 1.0 1 ٢5 <5 1200 7 30 <1 and contorted. Pyrite occurs locally. VA01893 217.0 218.0 1.0 3 60 <5 <5 1500 30 <1 Sulphides :. VA01894 218.0 219.0 1.0 1 36 <5 25 <1 (5 1200 211.9 212.0 5 % pyrite in 'early mafic sill' and minor VA01895 219.0 220.0 1.0 2 31 ٢5 22 (5 1400 <1 fracture controlled pyrite below. VA01896 222.0 223.0 41 <5 1.0 3 28 <1 10 1400 213.7 215.7 3 to 4 % fracture controlled pyrite. VA01897 223.0 224.5 1.5 1 20 ٢5 34 <1 <5 1300 217.0 217.8 2 % fracture controlled pyrite. VA01126 226.0 234.0 n/a 8.0 n/a <10 n/a <10 n/a 1540 219.2 219.8 1 % fracture controlled and disseminated fine-grained pyrite. 222.2 222.4 5 to 7 % fracture controlled fine-grained pyrite. 222.6 224.2 1 % fracture controlled and disseminated fine-grained pyrite. Foliations :. 214.1 : 12 degrees to core axis. 216.7 : 25 degrees to core axis. 220.6 : 26 degrees to core axis. 224.0 : 25 degrees to core axis. 227.8 : 31 degrees to core axis. 233.6 : 43 degrees to core axis. Bedding :. 211.5 : 34 degrees to core axis. Lost core :. 225.0 226.0 : 0.5 m. 234.4 255.6 FELDSPAR PORPHYRITIC GABBRO Fine-grained medium green gabbro with 12 to 17 %, 2 to 5 mm. feldspars and there is local quartz, calcite and epidote veinlets and veins. Quartz veins are up to 18 cm thick. Upper contact at blocky, highly fractured core and lower contact at 48 degrees to core axis with strong thermal biotite in tuff for 8 cm and weak to approximately 258 m. 255.6 268.8 WEAKLY CHLORITIC FELSIC TUFF Very weakly chloritic felsic tuff, chloritization is local VA01127 256.0 269.0 13.0 n/a <10 n/a 1770 n/a 41 n/a

From

(m)

To

(m)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG Sample From Width Total To -----DESCRIPTION------No. (m) (m) (m) as fracture controlled and pervasive alteration. Tuff is VA01898 268.5 269.5 1.0 1 dominantly sericitic with thermal biotite to approximately 258. Colour varies from light grev to medium grey - green. On average there is 7 %. (1 mm. guartz eyes and 5 %, 2 to 3 mm, feldspar and guartz grains. There is trace fine-grained pyrite with fracture controlled chloritization from 259.0 to 259.6. From 263 to 268.8 there are white up to 1 cm siliceous or sericitic lavers with chloritic zones surrounding them. From 264.0 to 268.0 there are approximately 1 % milky white fracture controlled guartz veinlets. 255.6 268.8 WEAK SPOTTY CHLORITIZATION. Foliations : 257.0 : 50 degrees to core axis. 261.3 : 54 degrees to core axis. 267.9 : 26 degrees to core axis. Bedding :. 261.3 : 32 degrees to core axis. 266.8 : 51 degrees to core axis. Lost core :. 261.2 262.6 : 0.3 m. 264.3 266.0 : 0.3 m. 268.8 271.8 FAULT ZONE 268.8 270.5 Contorted sericitic tuff with approximately 30 VA01899 269.5 270.5 1.0 1 % white fault gouge. There is 2 to 3 %

fracture controlled chlorite locally and 0.5 to 1 % fine-grained disseminated pyrite. 270.5 271.2 Mafic with guartz veins and shearing at 41 degrees to core axis. There are trace pyrite cubes. Late fracture controlled silicification occured resulting in fracture controlled quartz veinlets in the quartz veins.

271.2 271.8 Felsic with fault gouge at 9 degrees to core axis, approximately 4 cm thick.

271.8 282.2 FELSIC TUFF

Felsic lapilli tuff (?). Siliceous beds or lapilli, up to 2 cm, are in matrix of sericite and chlorite. Is blocky, highly fractured core with minor local fault gouge. Crystal content is variable with up to 10 % feldspars and guartz eves. From 278.5 there is approximately 0.5 to 1 % fine-grained disseminated and fracture controlled pyrite in contorted sericitic tuff. There is minor fracture controlled quartz veinlets. Lost core :.

273.4 274.2 : 0.6 m. 274.2 275.2 : 0.4 m. 275.2 276.5 : 0.6 m. 37 8 32 <1 5 1600

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Ph 2n Cu λσ 211 Ra Sulphides (ppm) (mgg) (mgg) (mgg) (nnb) (nnm)

30 12 19 <1 <5 1600

HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 9 DIAMOND DRILL LOG Sample From То Width Total Cu Pb Zn Aα -----DESCRIPTION-----(m) (m) (m) Sulphides (ppm) No. (ppm) (ppm) (ppm) Sheared and brecciated felsic tuff with 10 to 15 % fault VA01900 282.2 283.7 1.5 62 21 30 <1 1 gouge interstitial to tuff and as fault slips, which are VA01128 283.0 293.0 10.0 n/a 80 n/a 21 n/a at 23 to 45 degrees to core axis. There is approximately 1 VA01901 283.7 284.7 1.0 1 62 (5 34 <1 % fine-grained disseminated pyrite with minor local up to

Au

Ba

(ppb) (ppm)

<5 2000

<5 1600

30 2000

10 2000

n/a 1910

284.0 314.7 FELSIC LAPILLI TUFF

PROPERTY: Chemainus J.V.

276.5 277.1 : 0.1 m. 278.4 279.5 : 0.3 m. 281.0 282.5 : 0.3 m. Foliations :.

From To

(m)

282.2 284.0 FAULT ZONE

(m)

Π

Contorted medium to locally sericitic f material, lapilli with weak chlorite. and possibly the ma Crystal content var feldspars and 5 % q kinking and blocky, Sulphides :.

284.0 285.7 0.5 to

- 285.7 286.2 5 to 7 the mat
- 286.2 287.7 1 % dis addítio 5 to 15 fine-gr sphaler
- 287.7 289.1 Minor FAULT BRECCIA with 0.5 to 1 % disseminated fine-grained pyrite and pyrite clots, up to 5 mm.
- 289.1 291.0 Approximately 0.5 % disseminated in siliceous grey tuff.
- 291.0 291.5 3 to 4 % fine-grained fracture controlled and banded pyrite.
- 291.5 296.0 0.25 to 0.5 % fine-grained pyrite in matrix around lapilli.
- 296.0 298.2 Trace to 0.25 % in chloritic matrix.
- 298.2 298.8 3 to 5 % fine-grained sulphide mud in fault breccia matrix.
- 298.8 302.7 Trace to nil disseminated pyrite, with minor sphalerite in quartz vein at 301.4.
- 302.7 308.1 2 % fine-grained disseminated and banded pyrite
- 308.1 308.6 5 to 7 % fine-grained pyrite to grey sulphide

1 cm clots.

273.3 : 26 degrees to core axis. 277.3 : 29 degrees to core axis. 278.5 : 30 degrees to core axis.

P												
b light grey moderately siliceous to	VA01902	284.7	285.7	1.0	1	93	- 8	60	(1	9	1600	
felsic tuff with more siliceous	VA01903	285.7	286.2	. 5	6	837	11	95	1	59	1800	
(?), surrounded by sericite to sericite	VA01904	286.2	287.7	1.5	1	83	26	64	<1	<5	1600	
Lapilli are 70 to 80 % of the tuff	VA01905	287.7	289.0	1.3	1	60	54	123	<1	7	1600	
atrix (?) is a product of alteration.	VA01906	289.0	290.0	1.0	1	9	16	34	<1	< 5	1400	
ries from nil to approximately 10 %	VA01907	290.0	291.0	1.0	1	50	- 11	62	<1	<5	1400	
quartz eyes, < 1 mm. There is local	VA01908	291.0	291.5	.5	4	193	17	2353	<1	32	2000	
highly fractured core.	VA01909	291.5	293.0	1.5	1	85	<5	55	<1	14	1500	
	VA01129	294.0	314.0	20.0	n/a	319	n/a	62	n/a	n/a	2050	
1 % fine-grained disseminated pyrite.	VA01910	298.2	298.8	.6	4	51	21	90	(1	5	1400	
% pyrite as bands of 1 to 3 mm cubes in	VA01911	302.7	304.0	1.3	2	80	20	49	<1	<5	2000	
rix around siliceous grey lapilli.	VA01912	304.0	305.5	1.5	2	101	13	149	(1	28	1400	
sseminated 2 mm pyrite cubes with	VA01913	305.5	307.0	1.5	2	118	48	194	<1	53	1500	
onal 1 to 2 % fine-grained pyrite over	VA01914	307.0	308.1	1.1	2	143	(5	1430	<1	65	1400	
cm in minor fault zones. The	VA01915	308.1	308.6	.5	6	330	9	160	(1	26	1400	
ained pyrite may also include trace	VA01916	308.6	310.0	1.4	3	140	6	40	(1)	<5	1600	
ite.	VA01917	310.0	311.5	1.5	3	39	29	100	(1	5	1900	

3

3

61

68

10

8

105

85

<1

(1

VA01918 311.5 313.0 1.5

VA01919 313.0 314.7 1.7

FALCONBRIDGE LINITED CH88-56 10 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn Åσ Au Ba (m) · (m) -----DESCRIPTION------No. (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) mud in breccia matrix. 308.6 314.7 2 to 3 % pyrite in chloritic lapilli tuff matrix and < 1 mm cubes disseminated. Foliations :. 285.6 : 44 degrees to core axis. 291.1 : 44 degrees to core axis. 295.0 : 38 degrees to core axis. 299.0 : 23 degrees to core axis. 303.9 : 30 degrees to core axis. 310.9 : 36 degrees to core axis. 313.8 : 36 degrees to core axis. Faults :. 286.4 : 5 to 10 cm of FAULT BRECCIA at 26 degrees to core axis. 287.0 287.8 : 7 degrees to core axis with approximately 1 cm displacement, is at 70 degrees to the foliation. 296.0 296.6 Fault gouge at 31 degrees to core axis. 311.8 313.4 Minor local fault gouge. 314.3 314.7 Clay fault gouge. Lost core :. 299.3 301.0 : 0.2 m. 302.2 302.7 : 0.3 m. 304.6 306.0 : 0.2 m. 314.7 329.1 FELDSPAR PORPHYRITIC GABBRO n/a 1470 n/a 112 Variably coarse to fine-grained plagiophyric gabbro. VA01130 315.0 329.0 14.0 n/a 111 n/a VA01920 320.9 322.4 1.5 52 (20 314.7 315.7 Medium grained with 5 to 7 %, brown mineral, 1 1790 ٢5 195 1 not carbonate, sphene (?) and approximately 5 % hematized ilmenite. There is 10 % quartz grains in matrix of chloritized hornblendes. There is 2 to 3 % chalcopyrite in white quartz vein from 315.2 to 315.5. 315.7 320.9 Coarse grained gabbro with up to 5 mm grains. There is approximately 10 % hematized ilmenite 320.9 322.4 Fine-grained sheared gabbro with minor calcite veinlets. Hosts approximately 1 % chalcopyrite and 2 % sphene. 322.4 326.8 80 % white quartz with minor chlorite, chalcopyrite clots and gabbro up to 20 cm. 326.8 329.1 Fine-grained gabbro with 2 % ilmenite and average 10 %, 2 mm, feldspars and 50 % quartz - (chlorite) - (chalcopyrite) veins. There is on average 0.5 to 1 % chalcopyrite throughout the whole gabbro interval, mostly hosted by quartz veins. Appears to be TiO2 rich. 314.7 329.1 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 329.1 355.0 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

HOLE No: Page Number

PROPERTY: Chemainus J.V.

	P	ROPERI	Y: Chemainus	J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-56	o: Pa	ge Numb 11	er			
	From (m)	To (m)		DESCRI	PTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au {pp]	Ba b) (ppm)
			329.1 331.0	Fine-grained micaceou chlorite. There are a mm, feldspars. There	s tuff with 3 to 7 % pproximately 10 %, < 1 are minor up to 2 cm	VA01131 VA01921 VA01132	330.0 337.1 340.0	340.0 338.1 355.0	10.0 1.0 15.0	n/a 1 n/a	62 171 144	n/a 10 n/a	64 200 564	n/a <1 n/a	n/a 34 n/a	2270 2400 1840
			331.0 336.3	white quartz veins. MODERATE FRACTURE CON	TROLLED SILICIFICATION as	VA01922 VA01923	341.7 346.0	342.7 347.7	1.0 1.7	2	118 66	35 5	70 135	<1 <1	10 (5	1700 1600
:				spotty silicification weak local chlorite. quartz eyes and appro	. Is sericitic with very There are 10 %, 1 mm, ximately 7 %, 1 mm,	VA01924 VA01925 VA01926	347.7 348.3 349.8	348.3 349.8 351.0	.6 1.5 1.2	3 1 3	108 55 93	7 <5 <5	230 70 70	(1 (1 (1	<5 <5 6	2000 1900 1900
				feldspars. There is c bedding. There is tra fracture controlled p	ompositional banding or ce to 0.5 % local yrite.	VA01927 VA01928	351.0 354.0	352.4 355.0	1.4	3	128 61	(5 (5	35 65	<1 <1	10 <5	1800 1800
			336.3 352.4	Sericitic tuff with m lapilli and 10 %, $<$ 1 up to 1 mm, quartz ev	inor up to 1 cm quartz mm, feldspars and 7 %, es. There is weak											
				fracture controlled c approximately 2 % ass 337.1 to 338.2 342.1	hloritization with ociated pyrite from to 342.7 and 347.7 to											
			352.4 355.0	348.3. Siliceous light grey	to white tuff with trace											
			Sulphides ·	Sausurreized retuspar	3.											
			329.1 337.1	Trace fracture contro pyrite.	lled and disseminated											
			337.1 341.7	0.5 to 2 %, average 1 disseminated pyrite.	%, fine-grained											
			341.7 342.7 342.7 347.7	1.5 to 2 % banded pyr Trace to 1 %, average	ite, up to 3 mm cubes. 0.5 %, fine-grained											
			347.7 348.3	disseminated pyrite. 2 to 4 % fine-grained controlled chlorite o	pyrite in fracture r chloritic matrix to											
			348.3 349.8	felsic lapilli. Trace to nil dissemin	ated pyrite.											
			349.8 352.4	On average 2 to 3 % f pyrite, (?) in lapill	ine-grained disseminated i matrix.											
			352.4 355.0 Foliations	Trace disseminated py: 	rite, up to 0.5 % locally.											
			341.7:41	legrees to core axis. legrees to core axis.												
			345.9 : 40 348.5 : 28	legrees to core axis. legrees to core axis.												
			351.5 : 27 (Faults :.	legrees to core axis.												
			339 : paral 344.2 : app	lel to core axis. coximately 5 cm fault (gouge at approximately 60											
			Lost core : 339.2 341.7	: 0.3 m.												

355.0 370.8 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI TUFF

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 12 DIAMOND DRILL LOG From То Sample From Ťο Width Total Cu Рb Zn λg Au Ba (m) (m) -----DESCRIPTION------No. (m) Sulphides (ppm) (ppb) (ppm) (m) (m) (ppm) (ppm) (ppm) Light to medium grey felsic lapilli tuff with 70 % VA01929 355.0 356.1 1.1 ٢5 60 1800 3 119 35 <1 siliceous whitish lapilli in sericitic to weakly VA01930 356.1 357.2 1.1 3 44 9 30 (1 9 1700 chloritic matrix with strong pyrite. There are minor VA01931 357.2 357.7 88 20 10 75 75 1100 .5 <1 fracture controlled quartz - calcite veinlets. Crystals VA01932 357.7 358.2 .5 20 162 ٢5 25 <1 12 1200 average 7 to 12 %, and are on average 7 %, 1 mm, quartz VA01933 358.2 358.7 . 5 20 109 <5 20 <1 21 1100 eyes and 5 %, < 1 mm, feldspars. VA01934 358.7 359.2 ۲) .5 20 66 25 <1 9 1200 Sulphides :. VA01935 359.2 359.7 20 59 <5 20 18 1000 .5 <1 355.0 357.2 2 to 3 % pyrite with trace mariposite at 355.2. VA01936 359.7 360.5 15 148 ٢5 25 . 8 <1 17 1000 357.2 360.5 15 to 20 %, < 1 to 3 mm, pyrite with minor VA01133 360.0 370.0 10.0 n/a 43 n/a <10 n/a n/a 2500 chalcopyrite in guartz vein or lapilli at VA01937 360.5 361.4 . 9 5 31 ٢5 35 <1 17 1600 358.0. VA01938 361.4 362.3 . 9 3 42 **ξ**5 50 <1 27 2000 360.5 362.3 3 to 5 % pyrite, banded or encapsulating VA01939 362.3 364.0 1.7 1 21 < 5 35 <1 7 2300 lapilli. VA01940 364.0 366.0 2.0 1 39 <5 420 <1 6 2300 362.3 370.8 Trace to 2 %, disseminated and banded, VA01941 366.0 368.0 2.0 34 <5 45 ٢5 2100 1 <1 averages 1 %. VA01942 368.0 369.5 20 7 40 <5 2200 1.5 <1 1 Foliations :. VA01943 369.5 370.8 1.3 1 69 7 115 <1 7 2500 355.9 : 36 degrees to core axis. 357.2 : 32 degrees to core axis. 358.7 : 28 degrees to core axis. 359.3 : 53 degrees to core axis. 361.2 : 48 degrees to core axis. 364.5 : 21 degrees to core axis. 365.5 : 45 degrees to core axis. Faults :. 369.9 370.2 Blocky, highly fractured core with minor fault doude. 370.8 372.2 MAFIC INTRUSIVE Early mafic sill. VA01944 370.8 372.2 1.4 175 23 750 7 64 17 <1 Medium green sill with moderate epidotization and carbonatization and 7 % pyrite. 372.2 432.7 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Light to medium grev felsic tuff with on average 3 %. 1 to VA01945 372.2 373.7 1.5 2 48 25 185 <1 11 2100 3 mm, quartz eyes and 7 to 10 %, 1 to 2 mm, feldspars. VA01946 373.7 375.2 <5 2800 1.5 2 60 14 35 <1 There are locally up to 5 % siliceous medium to dark grey VA01134 375.0 400.0 25.0 238 134 n/a 3570 n/a n/a n/a elongated lapilli. There are early mafic sills from 380.1 3000 VA01947 375.2 376.7 1.5 2 37 13 65 <1 9 to 380.4, 387.5 to 388.7, 389.7 to 390.0, and 423.0 to VA01948 376.7 378.2 23 35 <1 27 2900 1.5 2 6 423.4. The mafic sills are epidote green, carbonatized and VA01949 378.2 379.7 45 17 2500 1.5 2 68 5 (1)host 5 % disseminated pyrite blebs. VA01950 379.7 381.2 1.5 2 30 7 110 <1 <5 2000 Sulphidess and alteration :. VA01951 381.2 382.7 1.5 2 108 ٢5 70 <1 9 2800 372.2 384.2 1 to 2 % disseminated very fine-grained pyrite VA01952 382.7 384.2 13 3000 1.5 2 82 15 40 <1 with trace banded or stringer pyrite in VA01953 384.2 385.3 32 21 3300 5 226 250 1.1 1 crystal rich schistose tuff. VA01954 385.3 386.4 1.1 5 62 13 195 <1 7 3900 384.2 387.5 3 to 4 % banded or stringer pyrite, VA01955 386.4 387.5 4100 1.1 5 175 50 100 1 8 78 fine-grained pyrite in up to 5 mm bands and 2 VA01956 387.5 388.7 5 170 50 365 1 1000 1.2 % fine-grained disseminated in sericitic tuff VA01957 388.7 390.2 3 812 152 110 2 68 3800 1.5 with minor fracture controlled guartz and / or VA01958 390.2 391.7 31 124 3300 1.5 3 162 105 1 calcite veinlets parallel to core axis with 103 2800 VA01959 391.7 393.2 1.5 3 74 61 50 1

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PR	OPERT	FY: Chei	mainus	5 J.V.					HOLE	No:	Page Num	ber				
				FALCONBRIDGE LIMITED					CH88-5	6	13					
				DIAMOND DRIGE LOG												
From	To				Sample	From	То	Width	Total	Cu	Pb	Zn	Αα	Av	Ba	A
(m)	(m))		DESCRIPTION	No.	(m)	(m)	(m)	Sulphide	s (ppm) (ppm) (ppm)	(ppm)	(pp	b) (pr)m)
				minor up to 1 cm displacements. There appears	VA01960	393.2	394.7	1.5	3	86	27	70	1	43	3200	
				to be trace chalcopyrite in the pyrite.	VA01961	394.7	396.0	1.3	· · 3	40	13	25	(1	39	5600	
		387.5	388.7	STRONG PERVASIVE CARBONATIZATION in early	VA01962	396.0	397.5	1.5	3	45	20	30	(1	33	3100	
				mafic sill with 50 % white quartz vein and 5 %	VA01963	397.5	399.0	1.5	3	38	10	30	<1	17	2200	
				disseminated pyrite.	VA01964	399.0	400.5	1.5	3	53	8	35	<1	8	1600	
		388.7	394.7	Sericitic with 2 % disseminated and 1 to 2 %,	VA01135	400.0	425.0	25.0	n/a	579	n/a	109	n/a	n/a	2670	
				1 to 2 mm, fine-grained banded, pyrite.	VA01965	400.5	401.7	1.2	1	22	6	30	<1	< 5	2000	
		394.7	400.5	WEAK FRACTURE CONTROLLED CARBONATIZATION ,	VA01966	401.7	402.9	1.2	1	36	6	30	<1	<5	1700	
				weak silicification (?) and is weakly	VA01967	402.9	404.2	1.3	1	35	5	30	<1	<5	1800	
				bleached. There is approximately 3 %	VA01968	404.2	406.0	1.8	2	50	11	30	<1	<5	2000	
		400 5	101 3	disseminated pyrite blebs.	VA01969	406.0	408.0	2.0	- 2	33	7	. 25	(1	(5	2100	
		400.5	404.4	bloophid officient white films huff (2) with	VA01970	408.0	410.0	2.0	2	40	6	40	(1	(5	2500	
				breached siliceous while reisic turr (?) with	VA01971	410.0	412.0	2.0	. 2	19	6	225	<1	(5	2500	
		404 2	A13 6	Light grow coriginia tuff with 1 to 2 %	VA01972	412.0	413.0	1.5	4	1000	(5)	1075	<1	8	2000	
		404.2	413.0	discominated and fine-grained handed surite	VA01973	413.0	414.9	1.3	5	1068	(5)	/5	1	41	1700	
				Derallel to foliation	VA01974	414.9	410.4	1.5	5	454	(5	30	(1	19	1900	
		413 6	116 2	A to 5 % fine-grained to 2 mm numits in guests	VA01975	410.2	410.7		20	469	5	50	1	84	1800	
		415.0	410.2	gruttal to lapilli tuff with minor manipagite	VA01976	410.1	417.4		20	249	(5)	30	1	35	1/00	
		415 2	A17 7	20 to 25 % fine-grained handed purits	VA01977	411.4	41/./		20	455	(5	1102	. 1	87	1400	
		410.2	411.1	20 to 25 % line-grained banded pyrice.	VA01978	41/./	419.0	1.3	4	90	. (5	. 15.	< <u>1</u> .	116	1300	
		41/./	443.3	banded purite as from 416 2 to 417 2 from	VA01979	419.0	420.0	1.0	. 4	/1	(5)	15	(1 (1	305	1300	
				422.8 to 423.0 and 423.5 to 424.2 . There is a	VAUL980	420.0	421.0	1.0	2	58	(5	10	(1	87	1500	
				delegenurite blob in a guarte voin at 423.4	VA01981	421.0	422.0	1.0	2	1164		40	1	256	2700	
		125 9	126 7	30 % fine-grained punits 5 % ghalgenumits 1	VA01982	422.0	443.0	1.0		697		5600	1	83	5200	
		443.5	420.1	so a fine-grained pyrice, 5 a charcopyrice, 1	VA01983	423.0	424.0	1.0		010	9	11000	4	101	6100	
				mineral galena (2) en tetrahodenita an ami	VA01964	424.0	425.0	1.0	5	1003		500	- 4	124	4900	
				maneral, galena (:/ of tetranederite as semi-	VA01985	425.0	440.9		40	114	120	670	1	210	1300	
		426 7	426 9	5 & discominated purits in tuff with 15 % 2	VA01980	443.9	420.1	.8	40	10700	136	2400	9	210	9900	
		4,2011	420.5	mm guartz evec and minor maniposito	VA01907	420-/	427.0	. 9	10	2000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2010	-	416	1 2 0 0 0	
		426.9	427 2	Early maf sill with strong perussive	VX01988	427.0	420.0		10	3600	200	22000	10	660	15000	
		140.5	461.6	carbonatization and 5 % disseminated purite	VI01909	420.0	449.4	1.2	, ,	1960	577	9000	12	3/0	10000	
		427 2	427 6	Blocky bighly fractured core as from 425.7 to	VX01991	4427.4	421 0	1.4	25	3000	075	26500	25	2000	12000	
		40710		A26 9	VN01002	400.4	431.0	.0	25	7400	10100	50100	20	2000	11000	
		427.6	427 7	20 % fine-grained honey enhalorite and 10 %	VA01992	431.0	431.3		55	5400	631	3700	1 2	103	0000	
		12/10		fine-grained purite in grev siliceous and (2)	VA01993	431.3	432.3			12600	5400	19000	13	1271	12000	
				silicified tuff	VA01994	432.3	436.6		25.	2000	1622	14000	15	217	10000	
		427.7	430.4	Grev quartz eve tuff with 5 % fine-grained	VAULJJJ	434.4	434.1	• • •	1	2020	1044	14000	15	517	10000	
				disseminated purite and 1 to 2 % sphalerite												
				and trace to 0.5 % chalconvrite with minor												
				pyrite as bands or stringers narallel to												
				foliation.												
		430.4	431.5	12 % sphalerite, 3 % galena, 0.5 %												
			0	chalcopyrite and 10 % pyrite as fine-grained												
				hands up to 8 cm with strong enhalowite 20												

- bands up to 8 cm with strong sphalerite, 30 %, and galena, 10 %, from 431.1 to 431.4. 431.5 431.9 Blocky, highly fractured core with approximately 5 % pyrite, 0.5 % chalcopyrite in sericitic schist.
- 431.9 432.2 7 to 10 % sphalerite, 4 to 5 % chalcopyrite, 2 to 3 % galena in grey siliceous rock with

Foliations :.

Lost core :.

flow. Alteration :.

From

(m)

Τo

(m)

HOLE No: Page Number FALCONBRIDGE LIMITED CH88-56 14 DIAMOND DRILL LOG Width Sample From To Total Cu Pb Zn Ag Au Ba -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) minor fracture controlled quartz veinlets. 432.2 432.7 5 % pyrite and 1 to 2 % sphalerite in blocky, highly fractured core sericitic crystal tuff. 374.4 : 41 degrees to core axis. 383.8 : 41 degrees to core axis. 390.8 : 41 degrees to core axis. 405.0 : 48 degrees to core axis. 414.9 : 39 degrees to core axis. 415.6 : 22 degrees to core axis. 418.8 : 43 degrees to core axis. 421.8 : 37 degrees to core axis. 428.5 : 31 degrees to core axis. 432.7 443.9 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Blocky, highly fractured core. Medium to dark green mafic VA01136 432.7 443.9 11.2 n/a 172 n/a 48 n/a 394 n/a with epidote spots and strong fracture controlled VA01996 432.7 434.0 1.3 1 125 40 385 19 1600 1 carbonatization and epidotization. From 436.5 to 440.0 VA01997 437.0 439.0 2.0 130 17 225 1 <1 8 640 there is 2 % brown fine-grained spots, probably carbonatization. There are minor chert beds and weak fault gouge 442.6 to 443.9 and minor fault slips at 7 degrees to core axis. There is weak foliation at 32 degrees to core axis. 432.7 443.9 STRONG FRACTURE CONTROLLED CARBONATIZATION. 436.2 436.5 : 0.2 m. 439.8 441.4 : 0.2 m. 443.9 454.3 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF Light to medium green mafic tuff with 20 to 25 %, 1 to 3 VA01137 443.9 454.3 10.4 n/a 229 n/a 46 n/a n/a 390 mm, chloritized hornblende crystals. There is local pervasive epidotization and 1 to 5 %, 1 to 3 mm, epidote grains locally. There is strong fracture controlled carbonatization as white calcite veinlets and minor fracture controlled chloritization. Is massive, may be a 443.9 454.3 STRONG FRACTURE CONTROLLED CARBONATIZATION. 443.9 454.3 MODERATE FRACTURE CONTROLLED CHLORITIZATION. 454.3 485.3 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS VA01138 454.3 485.3 31.0 642

Dark green to locally brown, due to biotite content with moderate fracture controlled carbonatization and chlorite. Tuff is is a ash tuff with locally up to 20 %, < 1 mm, feldspars. There are numerous up to 1 cm green chert beds. There is trace local pyrite, disseminated and fracture controlled. There are numerous quartz - chlorite veinlets from 459.5 to 466.0.

n/a 393 58 n/a n/a n/a

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-56 15

4

From (m)	To (m)DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	
	Bedding :.												
	468.3 : 34 degrees to core axis.												
	476.8 : 37 degrees to core axis.												
	480.8 : 55 degrees to core axis, with tops downhole.												
	483.7 : 31 degrees to core axis.												
	Foliations :.												
	465.6 : 59 degrees to core axis.												
	481.0 : 50 degrees to core axis.												
	Alteration :.												
	454.3 485.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION.												
	454.3 485.3 WEAK FRACTURE CONTROLLED CHLORITIZATION.												
485.3	486.8 GREYWACKE												
i j	Locally cherty greywacke, grey in colour with trace to 1 % fracture controlled pyrite. There is weak fracture	VA01998	485.3	486.8	1.5	1	80	29	230	<1	27	200	

fracture controlled pyrite. There is weak fracture controlled carbonatization. Bedding is at (?) degrees to core axis.

End of hole: 1597 feet (486.8 m) on Friday May 20, 1988 at 12:15 p.m.

Total lost core: 17.5 m, % Recovery = 96.4 %.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	25102	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	XT 102	XP205	ZMNO	ZLOI	SUN	ВА	AI	NACA
				· · · · · ·						·							
VA00671	18.80	19.00	71.10	11.80	2.61	1.14	4.32	1.27	2.43	0.30	0.06	0.10	3.08	98.21	661.	26.	7.
VA00672	23.20	23.40	40.00	18.60	8.53	4.30	2.28	3.76	8.55	0.87	0.14	0.25	11.80	99.08	1010.	43.	
VA00673	53.20	53.70	69.40	13.20	3.73	0.88	1.93	2.88	2.24	0.23	0.06	0.08	4.00	98.63	1000.	40.	6.
VA00674	68.10	68.20	68.60	14.80	1.78	1.77	3.64	2.31	2.81	0.26	0.05	0.07	2.23	98.33	1050.	43.	5.
VA00675	72.20	72.30	71.20	13.20	2.94	1.19	0.17	3.77	2.43	0.30	0.07	0.13	3.62	99.02	983.	61.	3.
VA00676	76.50	76.60	68.40	15.50	1.14	1.27	2.12	3.75	3.95	0.39	0.10	0.06	2.77	99.45	1360.	61.	3.
VA00677	105.60	105.80	51.90	16.40	6.62	5.44	3.85	0.13	9.35	0.65	0.12	0.21	5.16	99.83	125.	35.	10.
VA00678	112.50	112.70	54.70	17.00	14.70	0.66	2.74	0.20	6.04	0.29	0.33	0.12	2.85	99.63	166.	5.	17.
VA00679	127.60	127.70	74.70	12.20	2.47	0.88	5.54	0.36	1.11	0.20	0.06	0.03	1.39	98.94	435.	13.	8.
VA00680	133.50	133.70	71.50	15.30	1.26	1.52	4.22	2.07	1.85	0.27	0.08	0.03	1.85	99.95	1160.	40.	5.
VA00681	221.50	221.60	73.10	14.60	0.78	1.42	1.27	3.67	1.07	0.34	0.09	0.02	2.00	98.36	1630.	71.	2.
VA00682	230.70	230.80	72.90	14.50	0.53	1.37	2.22	3.49	0.91	0.35	0.08	0.01	1.85	98.21	1300.	64.	3.
VA00683	297.50	297.60	69.40	12.60	2.63	2.77	1.28	2.48	3.06	0.30	0.07	0.04	3.23	97.86	1620.	57.	4.
VA00684	318.00	318.50	47.20	10.90	8.64	4.42	1.84	0.26	20.00	5.05	0.25	0.29	1.62	100.47	248.	31.	10.
VA00685	333.60	333.70	69.30	12.80	1.92	2.97	1.85	1.53	5.81	0.31	0.09	0.04	3.77	100.39	1160.	54.	4.
VA00686	346.50	346.60	71.40	14.20	3.34	1.78	2.83	2.15	1.16	0.30	0.07	0.05	2.54	99.82	1440.	39.	6.
VA00687	363.10	363.20	73.50	14.10	0.19	0.93	0.62	3.66	2.86	0.33	0.07	<0.01	3.16	99.43	2670.	85.	1.
VA00688	375.50	375.60	75.60	13.40	0.17	0.62	0.43	3.64	2.25	0.31	0.06	0.01	2.70	99.19	3380.	88.	1.
VA00689	387.00	387.10	72.90	14.40	0.89	1.11	1.23	3.22	2.00	0.38	0.03	0.02	2.39	98.57	6470.	67.	2.
VA00690	389.30	388.40	32.10	21.80	10 40	7 43	0.48	1.29	14.70	0.94	0.24	0.16	9,16	98.70	1130.	44.	11.
1000691	294 10	294 20	45 90	17 70	0.41	0.94	0.49	4 60	2 59	0 46	0.08	<0 01	3 77	98.07	3390.	83.	1.
11000000	ADC AA	406 20	70 00	16 10		0.90	1 47	7.00	0.07	0.10	0.10	0 01	2 00	97 85	2370	60.	3.
VA00692	405.00	405.20	10.80	16.40	1.15	0.71	1.67	3.60	0.92	0.41	0.10	0.01	4.08	7/.03	23/0.		· · ·
VA00693	416.00	416.10	59.90	18.70	0.52	0.36	1.91	4.34	7.13	0.56	0.05	<0.01	2.33	98.8/	2030.		. 4 •

Hole No. CHB8-56 WHOLE ROCK SAMPLES

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VA00694 447.50 447.70 47.70 12.00 13.40 9.09 2.50 0.28 9.31 0.50 0.11 0.16 4.85 99.90

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

						*********		*********					****		 *******		
SAMPLE																	
NUMBER	FROM	то	XS I 02	XAL203	ZCAO	ZHGO	ZNA20	XK20	ZFE203	XT 102	ZP205	ZHNO	XLOI	SUH	BA	AI	NACA
						********									 ********		

Hole No. CH88-56 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

	SAMPLE NUMBER	FROM	TO	2\$102	XAL203	XCA0	ZHGO	XNA20	ZK20	XFE203	XT 102	ZP205	ZHNO	ZLOI	SUM	BA	AI	NACA	• -
	1403315	15 80	22 00	69 90	12 50	2 60	1 14	A EQ.	1 70	2 6 2	0.20			2.54	00 00	694	29	,	
	VNOTTE	13.00	23.00	67.50	13.30	2.00	1.14	9.00	1.70	4.64	0.30			3.37		077			
	VA01116	24.00	39.00	67.00	14.10	3.64	1.12	2.96	2.72	3.50	0.31			4.39	39./4	7//.	37.	/.	
	VAUIII/	44.00	59.00	/0.60	13.50	3.39	0.75	2.17	2.88	2.28	0.24			3.//	39.56	1060.	40.	b.	•
	VA01118	65.00	80.00	65.80	14.90	3.51	1.60	1.85	3.35	3.76	0.32			3.85	98.94	1260.	48.	5.	'
	VA01119	80.00	95.00	63,80	13.80	3.97	2.46	2.32	2.44	5.06	0.33			4.08	98.26	886.	44.	b. 	•
	VA01120	95.40	101.00	48.80	16.50	6.71	5.57	3.03	1.32	9.18	0.67			7.39	99.17	509.	41.	10.	•
	VA01121	101.00	104.50	68.10	14.30	3.34	1.33	2.29	2.99	3.17	0.35			3.31	99.18	1170.	43.	6.	•
	VA01122	104.50	117.40	52.10	16.40	6.50	5.10	2.97	0.79	9.15	0.65			5.47	99.13	435.	38.	9.	•
	VA01123	121.00	139.00	70.90	15.10	2.08	1.30	4.97	1.70	1.56	0.26			2.08	99.95	1070.	30.	7.	•
	VA01124	182.80	186.60	49.80	14.10	4.55	4.42	3.50	0.14	14.00	2.75			5.00	98.26	120.	36.	8.	• 2
	VA01125	211.00	226.00	71.80	15.50	1.29	1.70	1.47	3.50	1.71	0.38			2.31	99.66	1530.	65.	3.	•
	VA01126	226.00	234.00	70.10	16.20	1.84	1.90	1.84	3.50	1.64	0.47			2.54	100.03	1540.	59.	4.	•
	VA01127	256.00	269.00	71.20	15.10	2.23	1.80	1.86	3.20	1.88	0.39			2.47	100.13	1770.	55.	4.	•.
	VA01128	283.00	293.00	68.90	15.00	1.41	1.59	1.20	3.53	3.58	0.35			3.23	98.79	1910.	66.	3,	•
	VA01129	294.00	314.00	66.90	14.80	1.55	1.71	1.24	3.60	4.86	0.37			3.62	98.65	2050.	66.	3.	•
	VA01130	315.00	329.00	43.60	13.70	7.45	4.82	2.40	0.23	15.80	3.64			6.70	98.34	112.	34.	10.	•
	VA01131	330.00	340.00	70.90	14.70	1.76	1.72	1.55	3.42	2.33	0.33			2,70	99.41	2270.	61.	3.	•
	VA01132	340.00	355.00	69.50	14.80	1.25	1.30	1.38	3.31	3.85	0.36			3.16	98.91	1840.	64.	3.	•
	VA01133	360.00	370.00	74.50	14.60	0.46	0.63	1.41	3.40	1.91	0.33			2.39	99.63	2500.	68.	2.	•
	VA01134	375.00	400.00	69.90	15.40	0.83	1.00	0.87	3.70	3.41	0.38			3.39	98.88	3570.	73.	2.	
er.	VA01135	400.00	425.00	69.40	16.50	0.87	0.55	1.22	3.80	3.25	0.42			3.23	99.24	2670.	68.	2	•
	VA01136	432.70	443.90	49.00	14.70	8.09	5.75	3.76	0.45	8.97	0.99			7.47	99.18	394.	34.	12	
	VA01137	443.90	454.30	46.50	13.00	10.40	8.64	2.78	0.30	9.60	0.56			8.39	100.17	390.	40.	13.	

Hole No. CH88-56 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	25102	XAL203	ZCAO	ZHGO	XNA20	XK20	XFE203	XT 102	XP205	ZMNO	XLO I	SUN	BA	AI	NACA
VA01138	454.30	485.30	45.30	15.30	6.78	7.92	3.20	0.99	10.30	0.98	•		7.85	98.62	642.	47.	10.

Hole No. CH88-56 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррж)	NI (ppm)	РВ (ррм)	AS (ppm)	CD (ppm)	НО (рря)	Н <u>М</u> (ррм)	CUZN	ETS	FE
VA01882	62.30	62.90	610.0	66.0	149.0	<0.5	<5.0	34.0	47.0	12.0	<5.0	<1.0	<1.0	1300.0	31.	1.	6.
VA01883	101.00	102.70	1100.0	45.0	69.0	<0.5	<5.0	7.0	1.0	10.0	140.0	2.0	2.0	630.0	39.	2.	2.
VA01884	102.70	104.10	980.0	24.0	72.0	<0.5	<5.0	9.0	11.0	<5.0	55.0	1.0	<1.0	850.0	25.,	1.	2.
VA01885	182.00	182.80	1000.0	25.0	82.0	<0.5	16.0	11.0	18.0	<5.0	50.0	<1.0	2.0	830.0	23.	1.	з.
VA01886	182.80	184.00	100.0	162.0	124.0	<0.5	7.0	39.0	49.0	22.0	36.0	<1.0	<1.0	1100.0	57.	2.	8.
VA01887	184.00	185.00	60.0	273.0	136.0	<0.5	16.0	49.0	43.0	30.0	17.0	<1.0	<1.0	880.0	67.	2.	9.
VA01888	185.00	186.60	<20.0	218.0	135.0	<0.5	<5.0	47.0	42.0	28.0	18.0	<1.0	<1.0	780.0	62.	2.	8.
VA01889	213.00	214.00	1400.0	60.0	65.0	<0.5	<5.0	12.0	1.0	<5.0	30.0	1.0	<1.0	370.0	48.	1.	2.
VA01890	214.00	215.00	1400.0	106.0	58.0	<0.5	<5.0	9.0	4.0	6.0	16.0	1.0	1.0	150.0	65.	5.	з.
VA01891	215.00	216.00	1400.0	77.0	43.0	<0.5	<5.0	6.0	5.0	<5.0	8.0	<1.0	2.0	150.0	64.	2.	3.
VA01892	216.00	217.00	1200.0	7.0	30.0	<0.5	<5.0	<1.0	2.0	<5.0	<5.0	<1.0	<1.0	135.0	19.	1.	1.
VA01893	217.00	218.00	1500.0	60.0	30.0	<0.5	<5.0	8.0	<1.0	<5.0	<5.0	<1.0	<1.0	140.0	67.	3.	2.
VA01894	218.00	219.00	1200.0	36.0	25.0	<0.5	<5.0	5.0	<1.0	<5.0	<5.0	<1.0	<1.0	120.0	59.	1.	1.
VA01895	219.00	220.00	1400.0	31.0	22.0	<0.5	<5.0	4.0	<1.0	<5.0	<5.0	<1.0	<1.0	85.0	58.	2.	1.
VA01896	222.00	223.00	1400.0	41.0	28.0	<0.5	10.0	5.0	<1.0	<5.0	<5.0	<1.0	<1.0	70.0	59.	з.	1.
VA01897	223.00	224.50	1300.0	20.0	34.0	<0.5	<5.0	3.0	<1.0	<5.0	<5.0	<1.0	<1.0	85.0	37.	1.	1.
VA01898	268.50	269.50	1609.0	30.0	19.0	<0.5	<5.0	4.0	2.0	12.0	<5.0	<1.0	24.0	120.0	61.	1.	1.
VA01899	269.50	270.50	1600.0	37.0	32.0	<0.5	5.0	10.0	2.0	8.0	<5.0	<1.0	8.0	190.0	54.	1.	2.
VA01900	282.20	283.70	2000.0	62.0	30.0	<0.5	<5.0	9.0	<1.0	21.0	<5.0	<1.0	6.0	115.0	67.	1.	2.
VA01901	283.70	284.70	1600.0	62.0	34.0	<0.5	<5.0	4.0	2.0	<5.0	<5.0	<1.0	3.0	80.0	65.	1.	2.
VA01902	284.70	285.70	1600.0	93.0	60.0	<0.5	9.0	7.0	<1.0	8.0	<5.0	<1.0	6.0	100.0	61.	1.	3.
VA01903	285.70	286.20	1800.0	837.0	95.0	0.6	59.0	20.0	10.0	11.0	13.0	<1.0	6.0	150.0	90.	6.	7.
VA01904	286.20	287.70	1600-0	83.0	64.0	<0.5	<5.0	5.0	<1.0	26.0	(5.0	<1.0	5.0	140.0	56.	1.	3.
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Hole No. CH88-56

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (pom)	CU (ppm.)	2.N (ppar)	AG (ppm)	AU (ppb)	СО (ррв.)	N I (ppan)	PB (ppm)	AS (ppm.)	CD (ppm)	MO (ppm)	ММ (ррм)	CUZN	ETS	FE
VA01905	287.70	289.00	1600.0	60.0	123.0	<0.5	7.0	7.0	<1.0	54.0	5.0	<1.0	3.0	90.0	33.	1.	2.
VA01906	289.00	290.00	1400.0	9.0	34.0	<0.5	<5.0	<1.0	<1.0	16.0	<5.0	<1.0	2.0	110.0	21.	1.	1.
VA01907	290.00	291.00	1400.0	50.0	62.0	<0.5	<5.0	9.0	11.0	11.0	<5.0	<1.0	1.0	190.0	45.	Ι.	2.
VA01908	291.00	291.50	2000.0	193.0	2353.0	<0.5	32.0	7.0	7.0	17.0	10.0	12.0	3.0	140.0	8.	4.	4.
VA01909	291.50	293.00	1500.0	85.0	55.0	<0.5	14.0	4.0	<1.0	<5,0	<5.0	<1.0	1.0	90.0	61.	1.	2.
VA01910	298.20	298.80	1400.0	51.0	90.0	<0.5	5.0	12.0	17.0	21.0	8.0	<1.0	2.0	210.0	36.	4.	3.
VA01911	302.70	304.00	2000.0	80.0	49.0	<0.5	<5.0	8.0	2.0	20.0	<5.0	<1.0	<1.0	150.0	62.	2.	2.
VA01912	304.00	305.50	1400.0	101.0	149.0	<0.5	28.0	7.0	5.0	13.0	9.0	<1.0	2.0	95.0	40.	2.	3.
VA01913	305.50	307.00	1500.0	118.0	194.0	<0.5	53.0	4.0	<1.0	48.0	20.0	<1.0	<1.0	60.0	38.	2.	з.
VA01914	307.00	308,10	1400.0	143.0	1430.0	<0.5	65.0	6.0	3.0	<5.0	8.0	6.0	1.0	50.0	9.	2.	4.
VA01915	308.10	308.60	1400.0	330.0	160.0	<0.5	26.0	60.0	20.0	9.0	8.0	<1.0	3.0	210.0	67.	6.	4.
VA01916	308.60	310.00	1600.0	140.0	40.0	<0.5	<5.0	6.0	10.0	6.0	<5.0	<1.0	1.0	140.0	78.	3.	1.
VA01917	310.00	311.50	1900.0	39.0	100.0	<0.5	5.0	5.0	10.0	29.0	<5.0	<1.0	1.0	115.0	28.	3.	2.
VA01918	311.50	313.00	2000.0	61.0	105.0	<0.5	30.0	6.0	5.0	10.0	7.0	<1.0	3.0	125.0	37.	3.	3.
VA01919	313.00	314.70	2000.0	68.0	85.0	<0.5	10.0	5.0	10.0	8.0	5.0	<1.0	2.0	160.0	44.	3.	2.
VA01920	320,90	322.40	<20.0	1790.0	195.0	1.3	52.0	39.0	40.0	<5.0	10.0	1.0	4.0	700.0	90.	1.	10.
VA01921	337.10	338.10	2400.0	171.0	200.0	<0.5	34.0	12.0	15.0	10.0	10.0	<1.0	8.0	160.0	46.	1.	4.
VA01922	341.70	342.70	1700.0	118.0	70.0	<0.5	10.0	8.0	10.0	35.0	6.0	<1.0	2.0	100.0	63.	2.	3.
VA01923	346.00	347.70	1600.0	66.0	135.0	<0.5	<5.0	6.0	15.0	5.0	5.0	<1.0	2.0	95.0	33.	1.	2.
VA01924	347.70	348.30	2000.0	108.0	230.0	<0.5	<5.0	12.0	15.0	7.0	7.0	<1.0	6.0	90.0	32.	3.	з.
VA01925	348.30	349.80	1900.0	55.0	70.0	<0.5	<5.0	6.0	10.0	<5.0	<5.0	<1.0	4.0	50.0	44.	1.	1.
VA01926	349.80	351.00	1900.0	93.0	70.0	<0.5	6.0	10.0	15.0	<5.0	6.0	<1.0	7.0	40.0	57.	3.	з.
VA01927	351.00	352.40	1800.0	128.0	35.0	<0.5	10.0	7.0	10.0	<5.0	<5.0	<1.0	4.0	25.0	79.	з.	2.

Hole No. CH88-56

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (opmi)	CU (ppm)	ZŇ (ppan)	AG (ppai)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррм)	MN (ppm)	CUZN	ETS	FE
VA01928	354.00	355.00	1800.0	61.0	65.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	4.0	20.0	48.	0.	2.
VA01929	355.00	356.10	1800.0	119.0	35.0	<0.5	60.0	7.0	5.0	<5.0	<5.0	<1.0	6.0	30.0	77.	3.	2.
VA01930	356.10	357.20	1700.0	44.0	30.0	<0.5	9.0	7.0	10.0	9.0	6.0	<1.0	4.0	20.0	59.	3.	3.
VA01931	357.20	357.70	1100.0	88.0	75.0	<0.5	75.0	20.0	15.0	10.0	56.0	<1.0	10.0	15.0	54.	20.	+10.
VA01932	357.70	358,20	1200.0	162.0	25.0	<0.5	12.0	15.0	15.0	<5.0	16.0	<1.0	7.0	10.0	87.	20.	8.
VA01933	358.20	358.70	1100.0	109.0	20.0	<0.5	21.0	20.0	10.0	<5.0	22.0	<1.0	5.0	10.0	85.	20.	+10.
VA01934	358.70	359.20	1200.0	66.0	25.0	<0.5	9.0	10.0	10.0	<5.0	14.0	<1.0	8.0	5.0	73.	20.	8.
VA01935	359.20	359.70	1000.0	59.0	20.0	<0.5	18.0	6.0	10.0	<5.0	24.0	<1.0	5.0	5.0	75.	20.	+10.
VA01936	359.70	360.50	1000.0	148.0	25.0	<0.5	17.0	13.0	10.0	<5.0	15.0	<1.0	9.0	15.0	86.	15.	6.
VA01937	360.50	361.40	1600.0	31.0	35.0	<0.5	17.0	4.0	5.0	<5.0	<5.0	<1.0	2.0	15.0	47.	5.	2.
VA01938	361.40	362.30	2000.0	42.0	50.0	<0.5	27.0	4.0	5.0	<5.0	6.0	<1.0	4.0	10.0	46.	3.	з.
VA01939	362.30	364.00	2300.0	21.0	35.0	<0.5	7.0	3.0	10.0	<5.0	<5.0	<1.0	3.0	10.0	38.	1.	1.
VA01940	364.00	366.00	2300.0	39.0	420.0	<0.5	6.0	3.0	4.0	<5.0	<5.0	<1.0	5.0	15.0	9.	1.	1.
VA01941	366.00	368.00	2100.0	34.0	45.0	<0.5	<5.0	3.0	5.0	<5.0	<5.0	<1.0	5.0	20.0	43.	1.	1.
VA01942	368.00	369.50	2200.0	20.0	40.0	<0.5	<5.0	2.0	10.0	7.0	<5.0	<1.0	3.0	25.0	33.	1.	1.
VA01943	369.50	370.80	2500.0	69.0	115.0	<0.5	7.0	3.0	5.0	7.0	<5.0	<1.0	4.0	40.0	38.	1.	2.
VA01944	370.80	372.20	750.0	64.0	175.0	<0.5	23.0	29.0	25.0	17.0	21.0	<1.0	7.0	920.0	27.	7.	9.
VA01945	372.20	373.70	2100.0	48.0	185.0	<0.5	11.0	8.0	10.0	25.0	14.0	<1.0	3.0	350.0	21.	2.	3.
VA01946	373.70	375.20	2800.0	60.0	35.0	<0.5	<5.0	3.0	5.0	14.0	5.0	<1.0	4.0	60.0	63.	2.	1.
VA01947	375.20	376.70	3000.0	37.0	65.0	K0.5 .	9.0	5.0	5.0	13.0	10.0	<1.0	5.0	50.0	36.	2.	2.
VA01948	376.70	378.20	2900.0	23.0	35.0	<0.5	27.0	4.0	5.0	6.0	6.0	<1.0	4.0	15.0	40.	2.	2.
VA01949	378.20	379.70	2500.0	68.0	45.0	<0.5	17.0	4.0	5.0	5.0	6.0	<1.0	3.0	20.0	60.	2.	3.
VA01950	379.70	381.20	2000.0	30.0	110.0	<0.5	<5.0	8.0	15.0	7.0	5.0	<1.0	4.0	105.0	21.	2.	з.

Hole No. CH88-56

SAMPLE NUMBER	FROM	то	BA (ppm.)	CU (ppm.)	ZN (ppas)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
													÷				
VA01951	381.20	382.70	2800.0	108.0	70.0	<0.5	9.0	4.0	5.0	<5.0	6.0	<1.0	4.0	20.0	61.	2.	2.
VA01952	382.70	384.20	3000.0	82.0	40.0	<0.5	13.0	4.0	5.0	15.0	6.0	<1.0	5.0	15.0	67.	2.	2.
VA01953	384.20	385.30	3300.0	226.0	250.0	0.7	21.0	7.0	9.0	32.0	8.0	1.0	5.0	40.0	47.	5.	4.
VA01954	385.30	386.40	3900.0	62.0	195.0	<0.5	7.0	7.0	6.0	13.0	5.0	<1.0	6.0	30.0	24.	5.	2.
VA01955	386.40	387.50	4100.0	175.0	100.0	0.6	8.0	6.0	6.0	50.0	5.0	<1.0	6.0	75.0	64.	5.	3.
VA01956	387.50	388.70	1000.0	170.0	365.0	0.8	78.0	27.0	37.0	50.0	34.0	<1.0	6.0	870.0	32.	5.	4.
VA01957	388.70	390.20	3800.0	812.0	110.0	1.7	68.0	12.0	14.0	152.0	24.0	<1.0	5.0	320.0	88.	3.	3.
VA01958	390.20	391.70	3300.0	31.0	105.0	0.6	124.0	9.0	8.0	162.0	6.0	<1.0	7.0	155.0	23.	3.	2.
VA01959	391.70	393.20	2800.0	74.0	50.0	0.5	103.0	10.0	8.0	61.0	7.0	<1.0	7.0	90.0	60.	3.	2.
VA01960	393.20	394.70	3200.0	86.0	70.0	0.5	43.0	6.0	6.0	27.0	14.0	<1.0	7.0	65.0	55.	3.	2.
VA01961	394.70	396.00	5600.0	40.0	25.0	<0.5	39.0	4.0	4.0	13.0	8.0	<1.0	6.0	40.0	62.	3.	1.
VA01962	396.00	397.50	3100.0	45.0	30.0	<0.5	33.0	6.0	7.0	20.0	6.0	<1.0	7.0	115.0	60.	3.	3.
VA01963	397.50	399.00	2200.0	38.0	30.0	<0.5	17.0	6.0	6.0	10.0	5.0	<1.0	9.0	120.0	56.	3.	3.
VA01964	399.00	400.50	1600.0	53.0	35.0	<0.5	8.0	8.0	10.0	8.0	8.0	<1.0	8.0	180.0	60.	3.	4.
VA01965	400.50	401.70	2000.0	22.0	30.0	<0.5	<5.0	4.0	6.0	6.0	<5.0	<1.0	8.0	90.0	42.	1.	2.
VA01966	401.70	402.90	1700.0	36.0	30.0	<0.5	<5.0	4.0	6.0	6.0	<5.0	<1.0	8.0	105.0	55.	1.	1.
VA01967	402.90	404.20	1800.0	35.0	30.0	<0.5	<5.0	5.0	7.0	5.0	5.0	<1.0	7.0	75.0	54.	1.	2.
VA01968	404.20	406.00	2000.0	50.0	30.0	<0.5	<5.0	6.0	11.0	11.0	<5.0	<1.0	9.0	110.0	63.	2.	1.
VA01969	406.00	408.00	2100.0	33.0	25.0	<0.5	<5.0	3.0	5.0	7.0	<5.0	<1.0	7.0	40.0	57.	2.	1.
VA01970	408.00	410.00	2500.0	40.0	40.0	<0.5	<5.0	4.0	5.0	6.0	<5.0	<1.0	7.0	30.0	50.	2.	1.
VA01971	410.00	412.00	2500.0	79.0	225.0	<0.5	<5.0	4.0	5.0	6.0	<5.0	1.0	7.0	30.0	26.	2.	1.
VA01972	412.00	413.60	2000.0	745.0	1075.0	<0.5	8.0	4.0	5.0	<5.0	<5.0	3.0	7.0	20.0	41.	2.	2.
VA01973	413.60	414.90	1700.0	1068.0	75.0	0.7	27.0	7.0	8.0	<5.0	<5.0	<1.0	7.0	25.0	93.	5.	3.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-56

1

DIAMOND	DRILL	CORE	LITHOGEOCH	IEMICAL	RECORD
		(MINC	DR ELEMENTS)		

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm.)	АU (ррб)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
UA01974	414 90	416 20	1900 0	252 0	30.0	<i>(</i> 0 5	19.0	7 0	9 0	25 0	9 0	 (1) 0 	9 A	15.0	99	5	
UA01975	A16 70	416 70	1900.0	460 A	60.0		17.0	7.V	0.0	<j.v 5 A</j.v 	0.0	<1.0	0.V	5.0		20	· .
UA01975	416 20	417 70	1500.0	240 0	00.0	V.0	04.0	3.0	0.0	3.0	10.0	(1.0	0.0	5.0	07.	20.	р.
11003977	417 20	A17 70	1400.0	455 0	1165 0	0.5	07.0	4.0		(5.0	12.0	.1.0	0.0	J. 0	- 07. 30	3 V.	J. 7
UAA1070	417.40	419 00	1900.0	00.0	1103.0	0.6	87.0		11.0	(5.0	20.0	4.0	11.0	10.0	20.	20.	
VH01778	410.00	417.00	1300.0	90.0	15.0	(0.5	116.0	10.0	9.0	<5.0	18.0	<1.0	9.0	5.0	86.	4.	3.
VA01979	419.00	420.00	1300.0	/1.0	15.0	(0.5	306.0	10.0	11.0	<5.0	18.0	<1.0	9.0	10.0	83.	4.	3.
VA01980	420.00	421.00	1500.0	58.0	10.0	<0.5	87.0	10.0	10.0	<5.0	20.0	<1.0	8.0	10.0	85.	2.	3.
VA01981	421.00	422.00	2700.0	1164.0	40.0	1.0	256.0	4.0	6.0	<5.0	8.0	<1.0	9.0	15.0	97.	2.	2.
VA01982	422.00	423.00	5200.0	697.0	5600.0	1.3	83.0	10.0	17.0	7.0	18.0	13.0	14.0	120.0	11.	5.	4.
VA01983	423.00	424.00	6100.0	816.0	11600.0	1.9	101.0	16.0	28.0	9.0	26.0	42.0	19.0	260.0	7.	7.	6.
VA01984	424.00	425.00	4900.0	1063.0	555.0	1.5	124.0	10.0	13.0	7.0	6.0	2.0	17.0	80.0	66.	5.	5.
VA01985	425.00	425.90	7300.0	714.0	670.0	1.3	63.0	8.0	11.0	6.0	18.0	2.0	16.0	30.0	52.	2.	4.
VA01986	425.90	426.70	9900.0	10900.0	5400.0	8.6	318.0	5.0	8.0	136.0	64.0	20.0	16.0	15.0	67.	40.	9.
VA01987	426.70	427.60	9000.0	1071.0	2670.0	1.3	84.0	14.0	82.0	9.0	26.0	13.0	9.0	230.0	29.	5.	4.
VA01988	427.60	428.00	13000.0	3800.0	22000.0	7.0	416.0	4.0	6.0	13.0	97.0	111.0	14.0	30.0	15.	10.	4.
VA01989	428.00	429.20	15000.0	3600.0	9600.0	12.0	562.0	5.0	10.0	209.0	50.0	40.0	12.0	10.0	27.	7.	4.
VA01990	429.20	430.40	19000.0	1860.0	8400.0	12.0	349.0	5.0	14.0	577.0	45.0	33.0	15.0	5.0	18.	7.	4.
VA01991	430.40	431.00	13000.0	3900.0	26500.0	25.0	2879.9	3.0	7.0	935.0	50.0	124.0	13.0	20.0	13.	25.	4.
VA01992	431.00	431.50	11000.0	7400.0	59400.0	89.5	3119.9	3.0	11.0	10100.0	10.0	241.0	14.0	135.0	11.	35.	4.
VA01993	431.50	431.90	8800.0	5400.0	3700.0	13.0	403.0	3.0	9.0	631.0	10.0	15.0	11.0	30.0	59.	6.	4.
VA01994	431.90	432.20	13000.0	12600.0	48000.0	42.5	1371.4	3.0	10.0	5400.0	38.0	204.0	14.0	60.0	21.	25.	4.
VA01995	432.20	432.70	10000.0	2028.0	14000.0	15.0	317.0	9.0	16.0	1622.0	13.0	65.0	12.0	145.0	13.	7.	5.
VA01996	432.70	434.00	1600.0	125.0	385.0	0.7	19.0	16.0	20.0	40.0	20.0	<1.0	8.0	760.0	25.	1.	6.

Hole No. CH88-56



DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	ԸՍ (ppm-)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррm)	NI (ppm)	РВ (ррш)	AS (ppm.)	CD (ppm)	HO (ppw)	МN (ррв)	CUZN	ETS	FE
VA01997	437.00	439.00	640.0	130.0	225.0	<0.5	8.0	25.0	51.0	17.0	22.0	<1.0	7.0	900.0	37.	1.	7.
VA01998	485.30	486.80	200.0	80.0	230.0	<0.5	27.0	15.0	35.0	29.0	90.0	<1.0	5.0	560.0	26.	1.	5.

Hole No. CH88-56

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Page No. 6

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Summary Log: DDH CH88-57 Location: 40+00 E, 1+90 S; Chip 1 Claim Azimuth: 210, Dip: -50 Hole Completed: May 20, 1988 Core logged by: J. Pattison 10.5 0.0 -Casing 10.5 -21.0 Gabbro Felsic and intermediate tuffs 21.0 -50.0 50.0 -51.0 Gabbro Core is broken and blocky due to the Fulford Fault splay which occurs at the lower contact. 53.0 Nanaimo sediments 51.0 -53.0 -61.6 Quartz-sericite schist Up to 7 % disseminated pyrite and trace chalcopyrite. Mafic to intermediate tuffaceous sediments 61.6 -68.5 68.5 - 83.8 Nanaimo Conglomerate 83.8 - 202.2 Feldspar porphyritic gabbro Cherty felsic tuff / tuffite 202.2 - 236.1 236.1 - 262.0Feldspar porphyritic gabbro Cherty felsic tuff / tuffite 262.0 - 270.0 270.0 - 313.3 Cherty argillite and greywacke

	PROPERTY: Chema	iinus JV			FALCONDI	RIDGE LIMI D DRILL LO	TED G				HOLE NO: CH88-57	Page Numb 1	er			
	Hole Location:	40+00 E 1+9	0 S						61 •	in No. (1. j					
	NTS: 92B13 Azimuth: 210	UTM: 5416 Elevation	242.3 N 43 : 558 m	31130.2 I	5				Sect	tion No. (: 40+00 E					
	Dip: -50	Length:	313.3 m						Log Dri	ged By: lling Co	J. Pattison .: Burwash Entr	prises				
	Started: 14-May Completed: 20-M	-88 lay-88							Ass	ayed By:	Bonadar-Clegg	& XRAL				
	Purpose: To tes	t updip of Ch	em87-31.			DIP	TESTS		Core	e Size:	NQ					
				Length	Azi- muth	Dip	Length	Azi- muth	Dip							
				30.80 122.20	209.0 208.0	-52.0 -52.0	216.70 305.10	211.0 211.0	-52.0							
Fr.	om To m) (m)		DES	SCRIPTION	(Samı No	ole Fro o. (m	om To a) (m)	Width (m)	Total Cu Sulphides (ppr	Pb n) (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)

.0 10.5 OVERBURDEN

Π

10.5 21.0 MAFIC INTRUSIVE

Dark green, fine-grained and locally feldspar porphyritic. Weak pervasive and fracture controlled carbonatization and weak fracture controlled hematization. Specks < 2 mm in diameter of a light brown soft alteration mineral (Fe carbonate ?) occur throughout the rock. Quartz-carbonate healed fractures are common. The core is broken and blocky throughout the interval and lost core intervals are listed below. 10.7-12.2 m; 1.0 m lost core. 12.2-14.0 m; 0.4 m lost core. 14.0-17.1 m; 1.5 m lost core. 20.4-23.2 m; 0.3 m lost core.

STRUCTURE:.

17.6-18.0 M fault gouge at 60 degrees to core axis.

21.0 23.8 WEAKLY CHLORITIC FELSIC TUFF

Mottled green-grey altered chloritic felsic to intermediate tuffs. Rock has a brecciated appearance throughout. Becomes quite siliceous and very fine-grained below 22.8 m. 1-2 % fracture controlled pyrite.

STRUCTURE:.

At 22.8 m bedding is at 35 degrees to core axis.

22.0 22.8 Alteration patch or mafic dyke. Rock is green-brown, chloritic moderately pervasively

VA02841 21.0 50.0 29.0 n/a 89 n/a 43 n/a n/a 854

PR	OPERT	Y: Chemain	us JV			1					HOLE	No: P	age Numb	er				
					FALCONBRIDGE LIM DIAMOND DRILL L	ITED OG					CH88-5	7	2					
From (m)	To (m)			DESCRIPT	10N		Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphide:	Cu s (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba 5) (pp:	n)
			carbonatize contact is axis and lo 10-50 degree	d and mafic in fault breccia wer contact is es to core axi	composition. Upper at 60 degrees to con very irregular at s.	r re												
23.8	31.5	INTERMEDI/	ATE TUFF											÷.,				
		Medium gre ash-sized observered	een intermed quartz grain 1. Lower con	iate to mafic ns. Relativel tact is at 65	tuff with up to 5 % y massive, bedding r degrees to core axis	not s.	VA03856 VA03857 VA03858	25.6 26.6 27.1	26.6 27.1 28.1	1.0 .5 1.0	1 4 1	65 64 42	7 5 <5	105 80 115	<1 <1 <1	<5 7 14	730 440 <20	
		STRUCTURE: 27.1-28.7 29.5-30.2	m 0.2 m of M blocky, h	lost core for ighly fracture	no obvious reason. d core.													
		ALTERATION 23.8 31.9	I:. MODERATE PE FRACTURE CO	RVASIVE CHLORI NTROLLED CARBO	FIZATION and WEAK NATIZATION.												۰,	
		SULPHIDES: 26.6-27.1 trace spha	m 4 % fractu lerite.	ire controlled	pyrite and possibly	ł												
31.5	40.0	CHLORITIC Composed o fragments quartz eye moderately foliated m 60 degrees	FELSIC LAPIN f 5-10% beig 2-5 mm long es in a fine- chloritic a latrix. Lowe to core axi	LI TUFF ge to light gr and 2-5%, 2 grained silic and moderately er contact is s.	ey rounded felsic to 4 mm grey-blue eous, weakly to sericitic well a 1.0 cm fault gouge	e at	VA03859 VA03860 VA03861 VA03862 VA03863 VA03864	31.5 33.0 33.5 35.0 36.0 39.0	33.0 33.5 35.0 36.0 39.0 40.0	1.5 .5 1.5 1.0 3.0 1.0	4 7 4 5 3	227 137 115 139 142 10	117 57 40 32 21 <5	420 335 340 65 55 35	1 1 (1 (1 1 (1	29 70 22 14 15 <5	4300 4000 2900 1500 1500 1200	
		31.7-32.1 m of lost At 33.5 m	M fault goug core. foliation is	e at 50-60 de at 50 degree	rees to core axis.	0.3												
		of lost co 35.7-38.4 core.	re. M blocky, hi	ghly fracture	core. 0.3 m of los	m . st												
		38.6-39.1 of lost co	n fault goug re.	e at 52 degre	es to core axis. 0.4	l n.												
		ALTERATION 31.5 40.0	:. WEAK PERVASI PERVASIVE SE	VE CHLORITIZA RICITIZATION.	TION , MODERATE										. *			
		SULPHIDES: 31.5-33.0 33.0-33.5 at 50 degr	m 4 % dissem m 7 % pyrite ees to core	inated pyrite , disseminated axis.	l and in a 0.5 cm ba	Ind												

t N	OPERT	FY: Chemainus JV					HOLE N		ane Numb	or .		
		FALCONBRIDGE LIMI DIAMOND DRILL LO	ITED OG				CH88-57	. re	iye numb 3			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au Ba (ppb) (ppm)
		33.5-38.4 m 4 % disseminated and fracture controlled py 38.4-39.0 m 7 % disseminated pyrite. 39.0-40.0 m 3 % disseminated pyrite.	rite									
		35.1 888.8 Chloritic mafic dyke or tuff at 55 degrees t core axis.	:0									
40.0	50.0) FELSIC TUFF Light grey sericitic felsic tuff with occasional white	VA03865	40.0	41.0	1.0	5	46	47	45	(1	7 1000
		quartz eye up to 5 mm in diameter. 5 % 1 to 3 mm feldspar crystals between 44.2 and 45.3 m Feldspars have a pinkish caste due to hematzation. Bro core at the lower contact.	VAU3866 VA03867 VA03868 VA03869 VA03869 VA03870	41.0 42.0 43.2 43.6 44.0	42.0 43.2 43.6 44.0 45.0	1.0 1.2 .4 .4	5 5 3 3	33 354 102 43	56 47 11 21 19	50 45 90 70	<1 <1 <1	22 1100 25 1400 18 550 5 1900 27 1500
		STRUCTURE:. 41.1-42.7 M blocky, highly fractured core 0.6 m of lost core.	VA03870 VA03871 VA03872 VA03873	45.0 46.0 47.0	46.0	1.0 1.0 1.0	3 3 3	31 17 27	14 7 <5	70 50 60	<1 <1 <1	525 1700 29 1700 17 1600
		At 41.5 m foliation is at 70 degrees to core axis. 46.3-50.0 M blocky, highly fractured core. Fault zone (1.7 m of lost core.	VA03874 ?).	48.0	50.0	2.0	3	34	8	90	<1	17 1600
		ALTERATION:. 40.0 50.0 STRONG PERVASIVE SERICITIZATION and locally w FRACTURE CONTROLLED CHLORITIZATION.	TEAK									
		SULPHIDES:. 40.0-43.2 m 5 % pyrite in bands (stringers/fractures) (mm thick roughly parallel to foliation.	2									
		43.2-43.6 m 3 % pyrite, trace sphalerite and chalcopyri in irregular quartz veins and pods up to 2.0 cm wide. 43.6-50.0 m 3 % disseminated and fracture controlled pyrite. Dark green to black chlorite sometimes occurs along the fractures.	te									
		40.0 41.1 Dark green fine-grained chloritic mafic dyke. Upper and lower contacts are slips at 60 degr to core axis.	ees									
		42.7 43.0 MAFIC DYKE at 75 degrees to core axis.										
		43.2 43.6 MAFIC DYKE at 65 degrees to core axis. Severa quartz-carbonate veins with pyrrhotite and	1									

Dark green, fine-grained mafic dyke. Weak fracture controlled carbonate alteration and very weak hematization. Light brown alteration mineral (Fe carbonate ?) occurs as 1-3 mm specks throughout the unit.

(m)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

То

(m)

Vidth

(m)

Total

Sulphides (ppm)

HOLE No: Page Number CH88-57 4

Pb

7.n

(ppm) (ppm) (ppm)

Aσ

۸n

Ra

(ppb) (ppm)

Cu

From To (m) -----DESCRIPTION-----

> Core is broken and blocky over the entire interval and there is 0.2 m of lost core. Broken core at lower contact.

51.0 52.5 NANAIMO ARGILLITE Dark brown, massive argillite. Core is broken and blocky throughout, 0.9 M of lost core. Lower contact is at 50 degrees to core axis.

52.5 53.0 NANAIMO CONGLOMERATE

Matrix supported pebble to cobble conglomerate. Clasts are rounded and occur in a matrix which grades from a dark brown argillite to a coarse wacke with depth. The following clast types occur .. Feldspar porphyritic gabbro (60 %. Fine-grained light grey pyrite-bearing felsic tuff (40%). Lower contact is a slip at 70 degrees to core axis.

53.0 61.6 FELSIC OUARTZ EYE TUFF

Light grey, fine-grained strongly sericitic felsic tuff. Rock is crushed and strongly foliated (poker chipped). In a few places light grey felsic lapilli can be recognized. Broken core (fault) at the lower contact.

STRUCTURE: .

At 53.5 m 5.0 cm fault gouge at 80 degrees to core axis. 53.6-54.9 M blocky, highly fractured core. 1.0 m of lost COTP.

At 55.3 m foliation is at 60 degrees to core axis. 57.7-59.4 M FAULT ZONE at 40 to 55 degrees to core axis. 1.4 m of lost core. 60.7-61.0 M fault gouge at 30 degrees to core axis. 61.3-61.6 M fault zone. Not possible to measure orientation. 0.3 m of lost core.

ALTERATION.

53.0 54.9 STRONG PERVASIVE SERICITIZATION. Occasional spot. of mariposite.

54.9 61.6 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

SULPHIDES:.

53.0-57.0 m 4 % disseminated and fracture controlled pyrite 57.0-58.0 m 7 % pyrite and 0.25 % chalcopyrite. Sulphides occur in bands <2 mm wide parallel to foliation. 58.0-61.6 m 4 % disseminated pyrite and trace chalcopyrite.

61.6 68.5 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS

VA0. 42 2600 VA02 n/a 1740 VA03876 55.0 56.0 1.0 4 168 108 415 30 1900 1 755 74 1200 VA03877 56.0 57.0 1.0 4 281 91 <1 47 VA03878 57.0 1.0 70 (1 980 58.0 1401 10 7 VA03879 58.0 60.0 2.0 4 86 11 50 (1 35 1200 VA03880 60.0 61.0 1.0 4 159 10 40 <1 15 1200 VA03881 61.0 61.6 .6 4 70 9 70 (1 13 1500

3875	53.0	55.0	2.0	4	118	48	165	(1	
2842	53.0	61.6	8.6	n/a	121	n/a	325	n/a	

PROP	ERTY: Chemainu	IS JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-57	o: Pa	ige Numb 5	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
	Green, fir ripped-up Rock is b to trace d	ne-grained locally cherty mafic tuff with beds, beds and blocks of pale brown cherty sediments. oroken and blocky over most of the interval. Nil disseminated pyrite. Lower contact is a 2.0 cm	VA03882 VA02843	61.6 61.6	62.6 68.5	1.0 6.9	1 n/a	83 307	<5 n/a	65 50	<1 n/a	14 n/a	580 840

STRUCTURE: .

Π

At 68.5 m 2.0 cm fault gouge at 60 degrees to core axis.

fault gouge at 60 degrees to core axis.

68.5 83.8 NANAIMO CONGLOMERATE Clast supported, unsorted pebble to cobble conglomerate. The clasts are subangular to subrounded. The following clast types occur:. Feldspar porphyritic gabbro (80 %). Felsic volcanics/volcaniclastics (10%). Cherty fine-grained sediments (5 %). Quartz pebbles (5%). Core is broken and blocky over the entire interval. Lower contact is irregular but appears to be an errosional unconformity.

STRUCTURE: .

72.2-73.0 M blocky, highly fractured core. 0.2 m of lost core.

74.3 82.9 Large boulder of FELDSPAR PORPHYRITIC GABBRO. Dark green fine-grained with 5-10%, 2-3 mm feldspar phenocrysts and up to 4 % ilmenite as anhedral spots 1-2 mm in diameter often rimmed by leucoxene.

STRUCTURE: .

Core is broken and blocky over most of the interval. 75.0-75.6 M blocky, highly fractured core. 0.1 m of lost core.

77.0-78.0 M blocky, highly fractured core. Several slips at 60-80 degrees to core axis. 0.3 m of lost core. 79.0-82.7 M FAULT ZONE at 60-70 degrees to core axis. 1.3 m of lost core.

83.8 202.2 FELDSPAR PORPHYRITIC GABBRO

Dark green, fine-grained, massive with 5-10% white 1-3 mm feldspar phenocrysts and 2-3% finely diss ilmenite rimmed by white leucoxene. Varies from a fine-grained feldspar porphyritic gabbro to a medium-grained equigranular gabbro. All mafic minerals have gone to chlorite. Locally weakly glomeroporphyritic. Weak to moderate fracture controlled guartz-carbonate alteration. Unoriented quartz-carbonate veinlets and veins up to 1.0



FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-57 6

Au

Ba

Sample From Width Total Cu То Рb Zn λg No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

cm thick are common throughout the unit. Lower contact is at 35 degrees to core axis. STRUCTURE:.

-----DESCRIPTION-----

84.0-87.5 M blocky FAULT ZONE. Not possible to measure orientation of the fault. 1.1 m of lost core. 91.0-93.0 M blocky, highly fractured core. 1.2 m of lost core.

95.7-96.8 M blocky, highly fractured core. 0.2 m lower contact. Slip at 15 degrees to core axis at 96.7 m. 100.9-102.4 M blocky, highly fractured core.

113.8-115.7 M blocky, highly fractured core. 0.2 m of lost core.

122.5-135.6 M blocky, highly fractured core. 1.3 m of lost core. Fault gouge runs close to the core axis between 134.7 and 135.0 m.

138.5-141.7 M blocky, highly fractured core. 0.3 m of lost core.

145.1-145.6 M blocky, highly fractured core. 0.2 m of lost core.

148.3-148.5 M fault zone at 25 degrees to core axis. 153.2-153.5 M blocky, highly fractured core. 0.2 m of lost core.

163.2-163.4 M blocky, highly fractured core. 0.1 m of lost core.

At 163.6 m slip at 15 degrees to core axis.

167.0-169.0 M foliation is almost parallel to the core axis At 196.0 m 1.0 cm fault gouge at 50 degrees to core axis.

- 103.0 106.2 Occasional epidote+/-calcite veins and patches up to 1.0 cm wide.
- 111.6 125.6 Quartz-carbonate veinlets and veins up to 0.5 cm thick are common.
- 133.8 134.3 Coarse-grained granophyric phase of the gabbro.
- 142.1 149.8 Specks of a soft light brown clay alteration mineral throughout the rock (2 %) does not fizz in HCl.
- 154.9 155.4 Weakly sheared and carbonatized zone at 30 degrees to core axis.
- 159.2 159.4 Coarse-grained ilmenite rich granophyric phase of the gabbro. Upper and lower contacts with the medium-grained gabbro are at 35-40 degrees to core axis.
- 159.4 160.0 Quartz-carbonate veins up to 3.0 cm wide at 0-30 degrees to core axis with 0.5 % chalcopyrite.

From To (m)

Π

(m)

PROPERTY: Chemainus JV

P	ROPERT	Y: Chemainus	JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NO CH88-57	o: Pag	e Numb 7	er			
rom (m)	T0 (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		163.6 164.5	Fine-grained non feldspar porphyritic section. Many quartz-carbonate veins and pods and dark green to black chlorite spots are common.											
		166.4 170.0	Carbonate+/-quartz altered zone. Many carbonate-filled fractures and locally rock is brecciated. Carbonate veins are cut by quartz-carbonate veins up to 2.0 with trace chalcopyrite up to 3.0 cm wide at 30-40 degrees to core axis.											
		174.7 175.9	Coarse-grained granophyric phase of gabbro. 10-15 % coarse-grained ilmenite almost entirely altered to leucoxene. Broken core at the upper contact. 0.4 cm quartz filled fracture at 50 degrees to core axis at the lower contact.											
		188.3 188.5	Quartz-carbonate vein with minor hematite at 20 degrees to core axis.											
. 2	236.1	CHERTY FELS Very fine-g mottled, fi argillite b Occasional	IC TUFF / TUFFITE rained cherty light grey to green to brown, nely bedded to laminated felsic tuffite. Black eds up to 4 mm thick are common above 206.0 m. bed of mafic to intermediate tuff (1.5 cm	VA03883 <u>VA02844</u> VA03884 VA03885	202.2 202.2 203.2 204.0	202.6 236.1 204.0 205.0	.4 <u>-33.9</u> .8 1.0	2 n/a 2 2	95 41 49 27	10 n/a 6 <5	65 (10) 55 50	<1 n/a <1 <1	10 2 n/a 5 6 2 <5 7	500 260 1900 7600
		thick. Mode Microfractu gabbro dyke blocky over and intrusi	rately to intensely microfractured. res are healed with quartz+carbonate. Two s near the upper contact. Rock is broken and most of the interval. Lower contact is sharp ve looking at 30 degrees to core axis.	VA03886 VA03887 VA03888 VA03889 VA03890 VA03891	205.0 206.0 207.0 208.0 209.0 210.0	206.0 207.0 208.0 209.0 210.0 211.0	1.0 1.0 1.0 1.0 1.0	2 2 2 2 2 2 2	39 59 45 36 57 38	7 6 (5 (5)	55 65 55 55 55	<1 1 <1 <1 <1 <1	55 64 64 53 65	700 100 100 800 200
		STRUCTURE:. At 204.6 be 208.2-208.5 core. At 209.0 m J	dding is at 43 degrees to core axis. M blocky, highly fractured core. 0.2 m of lost bedding is at 30 degrees to core axis.	VA03892 VA03893 VA03894 VA03895 VA03896	211.0 212.0 214.0 215.0 216.0	212.0 214.0 215.0 216.0 217.7	1.0 2.0 1.0 1.0 1.7	2 2 2 2 2 2	20 23 35 30 11	6 6 7 6 (5	45 85 135 50 70	<1 <1 <1 <1 <1	8 5 <5 2 <5 3 <5 3 <5 1	100 800 900 000 200
		209.0-209.4 core. 211.0-217.7 core. At 215.3 m 1	M blocky, highly fractured core. 0.2 m of lost M blocky, highly fractured core. 1.3 m of lost bedding is at 15 degrees to core axis.	VA03897 VA03898 VA03899 VA03899 VA03900 VA03901	217.7 218.0 219.0 221.3 223.1	218.0 219.0 221.3 223.1 224.0	.3 1.0 2.3 1.8 .9	2 1 1 1 1	57 14 8 21 10	<5 <5 <5 15 6	65 45 45 110 90	<1 <1 <1 <1 <1	<pre><5 <5 1 <5 1 <5 1 <5 2 <5 1 <5 1</pre>	270 500 900 000 700
		218.8-224.6 core. Most of 221.3 m. At 224.5 bed 225 9-226 2	M blocky, highly fractured core. 2.1 m of lost core loss (1.2 m) occurs between 220.1 and dding is at 20 degrees to core axis.	VA03902 VA03903 VA03904 VA03905 VA03905	224.0 225.0 226.2 227.0	225.0 226.2 227.0 228.0	1.0 1.2 .8 1.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 30 28 50	7 7 6 9	120 100 155 100	<1 <1 <1 <1	<pre><5 6 <5 8 <5 5 <5 3 <5 1</pre>	700 700 400 800 700
		core. 226.6-227.7	M blocky, highly fractured core.	VA03907 VA03908	229.0	230.0 232.0	1.0	1	13 39	6 5	55 65	(1 (1	<pre></pre>	100

Fr

202.

P	ROPERI	Y: Chemainus	JV FALCONBRIDGE LIMI DIAMOND DRILL LO	TED G					HOLE N CH88-57	o: Pa	age Numb 8	er			
From (m)	To (m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppł	Ba) (ppm)
		229.0-232.8 core.	M blocky, highly fractured core. 1.4 m of lo	ost	VA03909 VA03910	232.0 233.0	233.0 234.0	1.0 1.0	1 1	60 23	(5 (5	90 105	<1 (1	<5 <5	350 970
		At 235.5 m	bedding is at 25 degrees to core axis.	°ڊ	VA03911 VA03912	234.0 235.0	235.0	$1.0 \\ 1.1$	1 1	29 20	12 32	160 111	<1 <1	<5 <5	140 190
		ALTERATION: 202.2 233.1	WEAK FRACTURE CONTROLLED CARBONATIZATION and WEAK FRACTURE CONTROLLED SILICIFICATION.	đ				33.	N .	30	6	59	21	<5	3161
		SULPHIDES:. 202.2-202.6 chalcopyrit	m 1.5 % fracture controlled pyrite and trace	e											
	2 	203.2-218.0 218.0-233.1	m 2 % fracture controlled pyrite. M trace to 1 % fracture controlled pyrite.												
		202.6 203.2	Fine-grained feldspar porphyritic mafic dyk, with a 10 cm xenolith of cherty siltstone. Unper contact is at 60 degrees to core axis	e											
			and lower contact is at 30 degrees to core a	axis											
		205.2 205.3	Rhythmically banded cherty siltstone and bla argillite. Beds are 1 to 4 mm thick.	ack			•								
		205.8 207.4	Intensely microfractured and brecciated zone fractures are filled with quartz+/-carbona 2 % fracture controlled pyrite.	e te.											
		217.7 218.0	Carbonate-chlorite-epidote alteration zone a 40 degrees to core axis.	at ,											
		224.6 225.0	Carbonate altered mafic tuff beds up to 2.0 thick.	Cm											
		223.1 224.0	Grainsize increases to sand. Moderate pervasive carbonatization.												
		232.0 232.2	Massive green MAFIC TUFF. Broken core at upp and lower contacts.	per											
		230.1 234.0	Massive green MAFIC TUFF. Upper contact is a mm fault gouge at 60 degrees to core axis. Lower contact is at 50 degrees to core axis.	a 5											
		235.0 236.1	Tuff becomes a coarse-grained mafic tuff.												
236.1	262.0	FELDSPAR POF Medium green 1-3 % finely the upper co to 10 mm this generations	RPHYRITIC GABBRO i fine-grained feldspar porphyritic gabbro wi y disseminated ilmenite. 0.3 m chill margin ontact. Quartz-carbonate veinlets and veins ick are common. There are at least two of guartz-carbonate veining. In zones of	ith at up			- - - 1								

Sample From To

(m)

(m)

No.

Width

8.0

1.0

.3

.7

1.0

1.0

1.0

1.0

1.0

1.0

8.0

263.3

VA03919 267.0 268.0

VA03920 268.0 269.0

VA03921 269.0 270.0

(m)

Total

Sulphides (ppm)

PROPERTY: Chemainus JV

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-57 9

Рb

Zn

-85-

185

650

74

159

154

106

30

36

163

73

 π/a

<1

<1

<1

<1

 $\langle 1 \rangle$

<1

<1

<1

<1

41

(ppm) (ppm)

Αg

(ppm)

Au

Ba

(ppb) (ppm)

n/a 5170

(5 4300

<5 2600

15 1600

5 3300

<5 2400

(5 1500

<5 2200

<5 2000

5 4211

6(18000)

Cu

38

21

28

12

35

24

27

35

33

34

24

n/a

25

17

21

22

20

22

27

30

23

26

m/a

1

2

2

4

4

4

From To (m) (m) -----DESCRIPTION-----

> moderate quartz-carbonate veining rock is non feldspar porphyritic. Lower contact is at 40 degrees to core axis.

STRUCTURE: .

250.1-250.5 M fault gouge at 60 degrees to core axis. 0.3 m of lost core. 251.4-251.5 M fault gouge at 40 degrees to core axis.

- 244.2 245.0 Non feldspar porphyritic zone. Epidote filled microfractures.
- 245.6 252.5 Up to 2 % flakes of a light brown clay mineral < 2 mm in diameter throughout the rock.
- 254.0 888.8 Few specks of hematite in quartz-carbonate veinlets.

262.0 270.0 CHERTY FELSIC TUFF / TUFFITE

Similiar to 202.2 to 236.1 except has more pyrite (2-4 %). VA02845 262.0 270.0 bedding much less recognizable. Becomes argillaceous and VA03913 262.0 263.0 turns dark grey towards its lower contact. Up to 5 % VA03914 263.0 feldspar crystals << 1 mm occur locally. Rock has a pale VA03915 263.3 264.0 pinkish-brown caste over the first 1.3 m. Due to very Q VA03916 264.0 265.0 finely disseminated biotite. Lower contact is gradational. \ VA03917 / 265.0 266.0 VA03918 266.0 267.0

STRUCTURE:.

At 262.8 m bedding is at 38 degrees to core axis. At 264.6 m bedding is at 25 degrees to core axis.

ALTERATION:.

SULPHIDES:. 262.0-263.3 m 1 % fracture controlled pyrite. 263.3-270.0 m 3-4% fracture controlled pyrite.

270.0 313.3 BLACK ARGILLITE

Massive, dark grey to black cherty weakly graphitic argillite. Locally moderately graphitic. Blocky, broken core throughout. Quartz-carbonate filled fractures throughout.

STRUCTURE: .

269.8-270.3 M slip runs nearly parallel to the core axis. 274.9-279.6 M blocky, highly fractured core. 3.3 m of lost core.

281.2-282.2 M fault gouge runs parallel to the core axis. 281.2-284.1 M blocky, highly fractured core. 0.5 m of lost core.

At 284.2 m bedding is at 20 degrees to core axis.

VA03922	270.0	271.0	1.0	4	56	23	46	1	25	3600
VA03923	271.0	272.0	1.0	4	40	25	65	1	18	2000
VA03924	272.0	273.0	1.0	4	49	26	45	1	<5	2400
VA03925	273.0	274.0	1.0	4	35	23	80	1	(5	2000
VA03926	274.0	275.0	1.0	4	39	25	56	(1	<5	1500
VA03927	275.0	278.0	3.0	4	19	24	87	(1	<5	1700
VA03928	278.0	279.5	1.5	2	40	28	87	1	<5	1800
VA03929	279.5	280.4	.9	2	14	28	49	(1	(5	1300
VA03930	280.4	282.4	2.0	2	16	25	87	(1	۲5	1600
VA03931	282.4	284.1	1.7	2	14	24	61	(1	<5	1300
VA03932	284.1	285.1	1.0	2	28	26	76	<1	(5)	4500
VA03933	285.1	286.1	1.0	2	14	20	73	<1	< 5	3000
VA03934	286.1	287.1	1.0	2	19	18	69	<1	< 5	4700

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-57 10

From (m)	То (m)	DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm.)
		At 288.0 m bedding is at 13 degrees to core axis.		VA03935	287.1	288.1	1.0	2	18	18	97	(1	(5.33	300
		288.7-308.0 M blocky, highly fractured core. 10.8 m of		VA03936	288.1	289.1	1.0	2	18	21	88	(1	(5 47	100
		lost core.		VA03937	289.1	290.1	1.0	2	14	21	93	(1	(5 42	200
		At 312.2 m bedding is at 12 degrees to core axis.		VA03938	290.1	294.7	4.6	2	32	34	99	1	(5 17	700
		309.0-311.5 m. 1.3 m of lost core.		VA03939	294.7	299.0	4.3	2	50	38	80	(1	<5 11	100
			73	VA03940	299.0	302.0	3.0	2	16	26	75	<1	<5 18	300
		ALTERATION:.	~	VA03941	302.0	308.0	6.0	2	24	26	70	(1	< 5 23	300
		270.0 313.3 WEAK FRACTURE CONTROLLED CARBONATIZATION.		VA03942	308.0	309.0	1.0	4	46	30	90	<1	6 29	300
				VA03943	309.0	312.0	3.0	4	22	26	83	<1	< 5 21	100
		SULPHIDES:.		VA03944	312.0	313.3	1.3	4	15	22	74	<1	< 5 35	500
		270.0-278.0 m 4 % fracture controlled pyrite.												
		278.0-308.0 m 2 % disseminated and fracture controlled pyrite.					47		24	25	75	<1	25 7	2565
		308.0-313.3 m 4 % fracture controlled pyrite.					45.5							

279.6 888.8 Angular clast of coarse felsic tuff 4.0 cm wide

- 280.4 281.2 Reworked, coarse quartz grain rich felsic tuff. Broken core at the upper and lower contacts.
- 284.1 285.2 Medium grey coarse-grained greywacke. Bedding is common and beds are 0.5 to 2.0 cm thick at 20-25 degrees to core axis. Rock has a crushed appearance and locally bedding is very contorted. 2 % disseminated pyrite. Broken core at upper contact and lower contact is at 25 degrees to core axis.
- 285.5 288.9 Greywacke as 284.1 to 285.2 m with intervals of black argillite up to 0.4 m long. Bedding is at 10-30 degrees to core axis. 3 % disseminated and fracture controlled pyrite 0.5 cm thick band of carbonate+biotite at 30 degrees to core axis at the upper contact. Lower contact is at 20 degrees to core axis.

2421.

85.2 Eu:28 Pb 17, Zn:84, Ag <1, Au<5, Ba, 2935

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	то	ZS 102	XAL203	XCAO	XMG0	XNA20	XK20	XFE203	XT 102	XP205	ZNNO	ZLOI	SUM	BA	AI	NACA
									•••••••••••••								
VA02387	27.30	27.80	51.60	15.60	3.99	5.33	4.76	0.60	9.40	0.89	0.29	0.17	6.47	99.10	140.	40.	9.
VA02388	40.50	40.80	77.50	12.90	0.49	0.76	1.09	3.49	1.24	0.27	0.06	0.01	1.85	99.66	1250.	73.	2.
VA02389	126.10	126.30	48.30	13.40	10.50	6.73	1.85	0.20	13.90	1.94	0.16	0.21	2.47	99.66	187.	36.	12.
VA02390	144.00	145.00	42.70	13.90	11.10	5.07	2.64	0.42	11.10	1.74	0.17	0.16	10.20	99.20	379.	29.	. 14.
VA02391	161.00	161.20	47.00	12.50	9.62	6.59	1.75	0.19	15.40	2.40	0.25	0.23	3.39	99.32	130.	37.	11.
VA02392	177.80	178.20	48.10	13.40	10.80	7.66	1.83	0.69	12.30	1.44	0.12	0.20	2.85	99.39	707.	40.	13.
VA02393	206.60	206.90	81.90	5.73	0.65	1.51	1.10	0.98	4.55	0.29	0.07	0.06	1.54	98.38	4880.	59.	2.
VA02394	218.40	218.60	72.20	9.05	4.73	1.46	3.09	0.95	3.35	0.30	0.52	0.08	3.39	99.12	1410.	24.	8.
VA02395	229.30	239.60	84.60	4.07	3.19	0.83	1.57	0.15	1.79	0.15	0.10	0.06	2.54	99.05	562.	17.	5.
VA02396	262.50	262.60	79.00	9.11	1.84	0.78	2.60	1.30	2.19	0.20	0.04	0.05	1.93	99.04	2430.	32.	4.
VA02397	268.30	268.50	82.50	5.31	2.21	0.83	0.07	1.44	3.34	0.19	0.04	0.05	1.95	97.83	2250.	50.	2.

Hole No. CH88-57 WHOLE ROCK SAMPLES

Page No.

DIAMOND	DRILL	CORE LITHOGEOCHEMICAL RECORD	
		(MAJOR ELEMENTS)	

SAMPLE NUMBER	FROM	TO	25102	ZAL203	ZCAO	ZHGO	ZNA20	ZK 20	XFE203	XI 102	XP205	ZHNO	ZLO1	SUN	BA	AI	NACA
				••••••••••					****	······				······	 		
VA02841	21.00	50.00	55.20	13.90	5.80	2.93	1.73	2.97	6.20	0.83			8.47	98.03	854.	44.	8.
VA02842	53.00	61.60	68.70	15.30	1.19	1.69	0.57	3.89	3.89	0.35			3.39	98.97	1740.	76.	2.
VA02843	61.60	68.50	51.40	16.20	5.21	6.52	4.06	2.05	9.81	0.82			3.08	99,15	840.	48.	9.
VA02844	202.20	236.10	74.20	8.68	2.89	1.70	2.52	0.98	4.12	0.31			2.23	97.63	5260.	33.	5.
VA02845	262.00	270.00	72.80	8.78	3.91	1.14	1.54	1.72	3.86	0.26			3.39	97.40	5170.	34.	5.

Hole No. CH88-57 ALTERED SAMPLES

Page No. 1



SAMPLE NUMBER	FROM	TO	BA (ppm)	ԸՍ (րթառ)	Z₩ (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm)	РВ (ррм)	AS (ppm)	CD (ppm)	M0 (ppm)	ММ (ррв)	CUZN	ETS	FE
11002056	75 40	26 60	720.0		105 0	(a. 5											
VH03836	23.80	20.0V	/30.0	63.0	105.0	<0.5	<5.0	14.0	12.0	7.0	<5.0	<1.0	4.0	830.0	38.	1.	6.
VA03857	26.60	27.10	440.0	64.0	80.0	<0.5	7.0	14.0	16.0	5.0	14.0	.<1.0	4.0	760.0	44.	4.	5.
VA03858	27.10	28.10	<20.0	42.0	115.0	<0.5	14.0	14.0	12.0	<5.0	22.0	<1.0	3.0	750.0	27.	1.	6.
VA03859	31.50	33.00	4300.0	227.0	420.0	1.0	29.0	10.0	10.0	117.0	20.0	3.0	8.0	425.0	35.	4.	4.
VA03860	33.00	33.50	4000.0	137.0	335.0	0.6	70.0	11.0	11.0	57.0	33.0	1.0	8.0	475.0	29.	7.	4.
VA03861	33.50	35.00	2900.0	115.0	340.0	<0.5	22.0	10.0	17.0	40.0	14.0	2.0	7.0	570.0	25.	4.	4.
VA03862	35.00	36.00	1500.0	139.0	65.0	<0.5	14.0	12.0	15.0	32.0	12.0	<1.0	5.0	275.0	68.	4.	з.
VA03863	36.00	39.00	1500.0	142.0	55.0	0.8	15.0	7.0	7.0	21.0	9.0	<1.0	6.0	150.0	72.	5.	3.
VA03864	39.00	40.00	1200.0	10.0	35.0	<0.5	<5.0	4.0	7.0	<5.0	<5.0	<1.0	4.0	220.0	22.	з.	1.
VA03865	40.00	41.00	1000.0	46.0	45.0	<0.5	7.0	8.0	18.0	47.0	5.0	<1.0	5.0	225.0	51.	5.	з.
VA03866	41.00	42.00	1100.0	.33.0	50.0	<0.5	22.0	4.0	7.0	56.0	12.0	<1.0	4.0	100.0	40.	5.	1.
VA03867	42.00	43.20	1400.0	354.0	45.0	0.7	25.0	16.0	9.0	47.0	9.0	<1.0	11.0	350.0	89.	5.	з.
VA03868	43.20	43.60	550.0	102.0	90.0	<0.5	18.0	16.0	11.0	11.0	16.0	<1.0	9.0	550.0	53.	з.	6.
VA03869	43.60	44.00	1900.0	43.0	70.0	<0.5	5.0	10.0	6.0	21.0	6.0	<1.0	8.0	280.0	38.	з.	2.
VA03870	44.00	45.00	1500.0	14.0	30.0	<0.5	27.0	3.0	4.0	19.0	<5.0	(1.0	5.0	120.0	32.	3.	1.
VA03871	45,00	46.00	1700.0	31.0	70.0	<0.5	525.0	4.0	5.0	14.0	8.0	<1.0	5.0	210.0	31.	з.	2.
VA03872	46.00	47.00	1700.0	17.0	50.0	<0.5	29.0	4.0	6.0	7.0	<5.0	<1.0	5.0	310.0	25.	3.	1.
VA03873	47.00	48.00	1600.0	27.0	60.0	<0.5	17.0	4.0	6.0	<5.0	5.0	<1.0	5.0	330.0	31.	3.	1.
VA03874	48.00	50.00	1600.0	34.0	90.0	<0.5	17.0	6.0	14.0	8.0	12.0	<1.0	5.0	400.0	27.	з.	2.
VA03875	53.00	55.00 1	2600.0	118.0	165.0	<0.5	42.0	6.0	8.0	48.0	84.0	<1.0	5.0	70.0	42.	4.	3.
VA03876	55.00	56.00	1900.0	168.0	415.0	0.5	30.0	4.0	5.0	108.0	18.0	2.0	5.0	270.0	29.	4.	2.
VA03877	56.00	57.00	1200.0	281.0	755.0	<0.5	74.0	5.0	7.0	91.0	18.0	3.0	5.0	290.0	27.	4.	3.
VA03878	57.00	58.00	980.0	1401.0	70.0	<0.5	47.0	6.0	13.0	10.0	18.0	<1.0	5.0	190.0	95.	7.	3.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-57

DIAMOND	DRILL	CORE I	.ITHOGEOCHEMICAL	RECORD
		(MINOR	ELEMENTS)	

SAMPLE NUMBER	FROM	то	ВА (рряя)	CU (ppm)	ZN (ppm)	AG (ppan)	AU (ppb)	. CO (ppm)	N I (рры)	P8 (ppm)	AS (ppm)	CD (ppm)	НО (ppm)	(ppm)	CUZN	ETS	FE
VA03879	58.00	60.00 3	1200.0	86.0	50.0	<0.5	35.0	12.0	36.0	11.0	18.0	<1.0	9.0	335.0	63.	4.	4.
VA03880	60.00	61.00	1200.0	159.0	40.0	<0.5	15.0	4.0	6.0	10.0	8.0	<1.0	6.0	210.0	80.	4.	2.
VA03881	61.00	61.60	1500.0	70.0	70.0	<0.5	13.0	8.0	17.0	9.0	8.0	<1.0	7.0	380.0	50.	4.	3.
VA03882	61.60	62.60	580.0	83.0	65.0	<0.5	14.0	22.0	57.0	<5.0	<5.0	<1.0	4.0	700.0	56.	1.	4.
VA03883	202.20	202.60	2500.0	95.0	65.0	<0.5	10.0	8.0	27.0	10.0	10.0	<1.0	4.0	400.0	59.	2.	4.
VA03884	203.20	204.00	2900.0	49.0	55.0	<0.5	6.0	6.0	19.0	6.0	10.0	<1.0	1.0	380.0	47.	2.	3.
VA03885	204.00	205.00	7600.0	27.0	50.0	<0.5	<5.0	4.0	15.0	<5.0	7.0	<1.0	2.0	350.0	35.	2.	3.
VA03886	205.00	206.00	5700.0	39.0	55.0	<0.5	5.0	5.0	18.0	7.0	20.0	<1.0	2.0	380.0	41.	2.	з.
VA03887	206.00	207.00	4100.0	59.0	65.0	0.5	6.0	5.0	29.0	6.0	21.0	<1.0	3.0	320.0	48.	2.	3.
VA03888	207.00	208.00	4100.0	45.0	55.0	<0.5	6.0	5.0	26.0	6.0	17.0	<1.0	2.0	410.0	45.	2.	4.
VA03889	208.00	209.00	3800.0	36.0	55.0	<0.5	5.0	5.0	24.0	<5.0	12.0	<1.0	2.0	300.0	40.	2.	3.
VA03890	209.00	210.00	5200.0	57.0	55.0	<0.5	6.0	6.0	22.0	<5.0	20.0	<1.0	4.0	450.0	51.	2.	3.
VA03891	210.00	211.00	4400.0	38.0	40.0	<0.5	5.0	5.0	20.0	<5.0	8.0	<1.0	3.0	360.0	49.	2.	з.
VA03892	211.00	212.00	5100.0	20.0	45.0	<0.5	8.0	3.0	15.0	6.0	5.0	<1.0	3.0	320.0	31.	2.	2.
VA03893	212.00	214.00	2800.0	23.0	85.0	<0.5	<5.0	2.0	16.0	6.0	6.0	<1.0	8.0	330.0	21.	2.	з.
VA03894	214.00	215.00	3900.0	35.0	135.0	<0.5	<5.0	3.0	22.0	7.0	11.0	<1.0	7.0	550.0	21.	2.	3.
VA03895	215.00	216.00	3000.0	30.0	50.0	<0.5	<5.0	6.0	18.0	6.0	11.0	<1.0	6.0	410.0	38.	2.	3.
VA03896	216.00	217.70	1200.0	11.0	70.0	<0.5	<5.0	5.0	14.0	<5.0	<5.0	<1.0	5.0	600.0	14.	2.	3.
VA03897	217.70	218.00	370.0	57.0	65.0	<0.5	<5.0	13.0	14.0	<5.0	8.0	<1.0	6.0	2200.0	47.	2.	6.
VA03898	218.00	219.00	1500.0	14.0	45.0	(0.5	(5.0	4.0	16.0	<5.0	(5.0	<1.0	22.0	520.0	24.	1.	2.
VA03899	219.00	221.30	1900.0	8.0	45.0	<0.5	<5.0	4.0	11.0	<5.0	<5.0	<1.0	7.0	260.0	15.	1.	2.
VA03900	221.30	223 10	2000.0	21.0	110.0	20.5	25.0	2.0	14.6	15 0	2 0	(1.0	73.0	280.0	16	1	2.
1002001	222.00	224 00	1700 0	21.0	110.0	. U. J	(J.V	0.0	14.0	10.0		(1.0	/3.0	40V.V	10,		.ت ۸
A03201	423.10	224.00	1100.0	10.0	90.0	<0.5	<2.0	9.0	64.0	6.0	19.0	<1.0	40.0	320.0	. 10.	1.	4.

Hole No. CH88-57

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SAMPLE	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	АU (ррь)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	NN (ppm)	CUZN	ETS	FE
VA03902	224.00	225.00	6700.0	8.0	120.0	<0.5	<5.0	6.0	10.0	7.0	<5.0	<1.0	17.0	630.0	6.	1.	з.
VA03903	225.00	226.20	8700.0	30.0	100.0	<0.5	<5.0	6.0	10.0	7.0	<5.0	<1.0	6.0	450.0	23.	1.	3.
VA03904	226.20	227.00	5400.0	28.0	155.0	<0.5	<5.0	8.0	24.0	6.0	10.0	<1.0	8.0	550.0	15.	1.	з.
VA03905	227.00	228.00	3800.0	50.0	100.0	<0.5	<5.0	10.0	24.0	9.0	10.0	<1.0	3.0	450.0	33.	1.	з.
VA03906	228.00	229.00	1700.0	52.0	65.0	<0.5	<5.0	6.0	27.0	10.0	18.0	<1.0	8.0	440.0	44.	1.	2.
VA03907	229.00	230.00	1100.0	13.0	55.0	<0.5	<5.0	5.0	27.0	6.0	11.0	<1.0	6.0	330.0	19.	1.	2.
VA03908	230.00	232.00	2100.0	39.0	65.0	<0.5	5.0	8.0	35.0	5.0	18.0	<1.0	7.0	600.0	38.	1.	з.
VA03909	232.00	233.00	350.0	60.0	90.0	<0.5	<5.0	14.0	57.0	<5.0	48.0	<1.0	4.0	700.0	40.	1.	3.
VA03910	233.00	234.00	970.0	23.0	105.0	<0.5	<5.0	28.0	158.0	<5.0	34.0	<1.0	4.0	1250.0	18.	1.	6.
VA03911	234.00	235.00	140.0	29.0	160.0	<0.5	<5.0	8.0	17.0	12.0	8.0	<1.0	2.0	420.0	15.	1.	2.
VA03912	235.00	236.10	190.0	20.0	111.0	<0.5	<5.0	18.0	31.0	32.0	23.0	1.0	4.0	610.0	15.	1.	3.
VA03913	262.00	263.00	4300.0	21.0	185.0	<0.5	<5.0	7.0	5.0	25.0	21.0	<1.0	4.0	430.0	10.	1.	2.
VA03914	263.00	263.30	18000.0	28.0	650.0	<0.5	6.0	9.0	13.0	17.0	28.0	2.0	<1.0	690.0	4.	2.	з.
VA03915	263.30	264.00	2600.0	12.0	74.0	<0.5	<5.0	4.0	13.0	21.0	10.0	<1.0	28.0	340.0	14.	2.	1.
VA03916	264.00	265.00	1600.0	35.0	159.0	<0.5	15.0	8.0	28.0	22.0	28.0	<1.0	16.0	550.0	18.	4.	3.
VA03917	265.00	266.00	3300.0	24.0	154.0	<0.5	5.0	7.0	14.0	20.0	34.0	1.0	7.0	670.0	13.	4.	4.
VA03918	266.00	267.00	2400.0	27.0	73.0	<0.5	<5.0	5.0	21.0	22.0	30.0	<1.0	1.0	400.0	27.	4.	3.
VA03919	267.00	268.00	1500.0	35.0	106.0	<0.5	<5.0	6.0	22.0	27.0	25.0	<1.0	<1.0	290.0	25.	4.	з.
VA03920	268.00	269.00	2200.0	33.0	30.0	<0.5	<5.0	6.0	24.0	30.0	24.0	<1.0	<1.0	380.0	52.	4.	2.
VA03921	269.00	270.00	2000.0	34.0	36.0	<0.5	<5.0	6.0	24.0	23.0	29.0	<1.0	1.0	330.0	49.	4.	2.
VA03922	270.00	271.00	3600.0	56.0	46.0	1.1	25.0	9.0	33.0	23.0	626.0	4.0	2.0	390.0	55.	4.	3.
VA03923	271.00	272.00	2000.0	40.0	65.0	0.8	18.0	8.0	27.0	25.0	595.0	4.0	1.0	290.0	38.	4.	2.
VA03924	272.00	273.00	2400.0	49.0	45.0	0.8	<5.0	7.0	29.0	26.0	64.0	<1.0	<1.0	250.0	52.	4.	3.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

Hole No. CH88-57

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FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррж)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррм)	ММ (ррж)	· .	CUZN	ETS	FE
273.00	274.00	2000.0	35.0	80.0	0.5	<5.0	6.0	20.0	23.0	30.0	<1.0	<1.0	370.0		30.	4.	2.
274.00	275.00	1500.0	39.0	56.0	<0.5	<5.0	6.0	23.0	25.0	24.0	<1.0	3.0	360.0		41.	4.	2.
275.00	278.00	1700.0	19.0	87.0	<0.5	<5.0	6.0	22.0	24.0	19.0	<1.0	4.0	300.0		18.	4.	2.
278.00	279.50	1800.0	40.0	87.0	0.6	<5.0	8.0	30.0	28.0	18.0	<1.0	2.0	320.0		32.	2.	з.
279.50	280.40	1300.0	14.0	49.0	<0.5	<5.0	5.0	12.0	28.0	18.0	<1.0	9.0	360.0		22.	2.	1.
280.40	282.40	1600.0	16.0	87.0	<0.5	<5.0	7.0	12.0	25.0	33.0	<1.0	<1.0	440.0		16.	2.	2.
282.40	284.10	1300.0	14.0	61.0	<0.5	<5.0	4.0	16.0	24.0	16.0	<1.0	2.0	350.0		19.	2.	1.
284.10	285.10	4500.0	28.0	76.0	<0.5	<5.0	12.0	12.0	26.0	32.0	2.0	31.0	560.0		27.	2.	4.
285.10	286.10	3000.0	14.0	73.0	<0.5	<5.0	8.0	7.0	20.0	42.0	<1.0	19.0	490.0		16.	2.	з.
286.10	287.10	4700.0	19.0	69.0	<0.5	<5.0	7.0	9.0	18.0	28.0	<1.0	51.0	470.0		22.	2.	з.
287.10	288,10	3300.0	18.0	97.0	<0.5	<5.0	9.0	8.0	18.0	33.0	<1.0	14.0	460.0		16.	2.	з.
288.10	289.10	4700.0	18.0	88.0	<0.5	<5.0	7.0	10.0	21.0	33.0	<1.0	43.0	470.0		17.	2.	з.
289.10	290.10	4200.0	14.0	93.0	<0.5	<5.0	7.0	5.0	21.0	30.0	<1.0	6.0	400.0		13.	2.	3.
290.10	294.70	1700.0	32.0	99.0	0.5	<5.0	7.0	23.0	34.0	35.0	<1.0	1.0	510.0		24.	2.	з.
294.70	299.00	1100.0	50.0	80.0	<0.5	<5.0	7.0	28.0	38.0	14.0	<1.0	2.0	240.0		38.	2.	3.
299.00	302.00	1800.0	16.0	75.0	<0.5	<5.0	4.0	16.0	26.0	20.0	<1.0	2.0	370.0		18.	2.	2.
302.00	308.00	2300.0	24.0	70.0	<0.5	<5.0	5.0	17.0	26.0	14.0	<1.0	1.0	370.0		26.	2.	2.
308.00	309.00	2900.0	46.0	90.0	<0.5	6.0	12.0	25.0	30.0	29.0	<1.0	<1.0	290.0		34.	4.	3.
309.00	312.00	2100.0	22.0	83.0	<0.5	<5.0	5.0	18.0	26.0	19.0	<1.0	2.0	390.0		21.	4.	2.
312.00	313.30	3500.0	15.0	74.0	<0.5	<5.0	7.0	9.0	22.0	36.0	<1.0	<1.0	380.0		17.	4.	2.
	FROM 273.00 274.00 275.00 278.00 279.50 280.40 284.10 285.10 285.10 286.10 287.10 288.10 289.10 290.10 290.10 294.70 299.00 302.00 308.00 309.00 312.00	FROMTO273.00274.00274.00275.00275.00278.00275.00278.00279.50280.40280.40282.40281.10284.10284.10285.10285.10286.10287.10288.10288.10289.10290.10290.10290.10290.10294.70299.00302.00308.00309.00312.00312.00313.30	FROM TO BA (ppm) 273.00 274.00 2000.0 274.00 275.00 1500.0 275.00 278.00 1700.0 275.00 278.00 1700.0 279.50 1800.0 279.50 280.40 1300.0 280.40 282.40 1600.0 280.40 282.40 1600.0 281.10 285.10 4500.0 285.10 286.10 3000.0 285.10 287.10 4700.0 287.10 289.10 4700.0 289.10 290.10 4200.0 290.10 294.70 1700.0 294.70 299.00 1100.0 299.00 302.00 300.0 302.00 308.00 2300.0 308.00 309.00 290.0 308.00 309.00 200.0 309.00 312.00 2100.0	FROM TO BA (ppm) CU (ppm) 273.00 274.00 2000.0 35.0 274.00 275.00 1500.0 39.0 275.00 278.00 1700.0 19.0 278.00 279.50 1800.0 40.0 279.50 280.40 1300.0 14.0 280.40 282.40 1600.0 16.0 282.40 284.10 1300.0 14.0 284.10 280.0 28.0 28.0 285.10 285.10 4500.0 28.0 285.10 287.10 4700.0 19.0 287.10 288.10 3000.0 14.0 289.10 289.10 4700.0 18.0 289.10 289.10 4700.0 18.0 289.10 290.10 4200.0 14.0 290.10 294.70 1700.0 32.0 294.70 299.00 1100.0 50.0 302.00 308.00 2300.0 24.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) 273.00 274.00 2000.0 35.0 80.0 274.00 275.00 1500.0 39.0 56.0 275.00 278.00 1700.0 19.0 87.0 278.00 279.50 1800.0 40.0 87.0 279.50 280.40 1300.0 14.0 49.0 280.40 282.40 1600.0 16.0 87.0 280.40 282.40 1600.0 14.0 61.0 281.10 285.10 4500.0 28.0 76.0 285.10 287.10 4700.0 19.0 69.0 287.10 287.10 4700.0 18.0 88.0 287.10 289.10 300.0 14.0 93.0 289.10 290.10 4200.0 14.0 93.0 290.10 294.70 1700.0 32.0 99.0 294.70 299.00 1100.0 50.0 80.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) 273.00 274.00 2000.0 35.0 80.0 0.5 274.00 275.00 1500.0 39.0 56.0 <0.5	FROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppm) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppb) CU (ppm) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA (ppn) CU (ppn) ZN (ppn) AG (ppn) AU (pph) CO (ppn) NI (ppn) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA (pp=) CU (pp=) ZN (pp=) AG (pp=) AU (ppb) CU (pp=) NI (pp=) PB (pp=) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppb) CO (ppm) NI (ppm) PB (ppm) AG (ppm) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA (ppm) CU (ppm) ZN (ppm) AG (ppm) AU (ppm) CO (ppm) NI (ppm) PB (ppm) AS (ppm) CD (ppm) 273.00 274.00 2000.0 35.0 80.0 0.5 <5.0	FROM TO BA CU ZN AG PP CO PI PP AS CD PP AS CD PP PP AS CD PP 279.00	FROM TO BA CU ZN AG AU CO PP PP AS CD PP P	FROM TO BA CU ZN AG AU CD PB PB AS CD PB PB AS CD PB PB AS CD PB P	FROM TO BA CU ZN AG AU CO NI PB AS CD MO PD P	FROM TO BA (ppn) CU (ppn) ZM (ppn) AG (ppn) CU (ppn) PB (ppn) AG (ppn) PB (ppn) AG (ppn) CD (ppn) PD (ppn) PB (ppn) AG (ppn) CD (ppn) PD (ppn) AG (ppn) CD (ppn) PB (ppn) AG (ppn) CD (ppn) PD (ppn) AG (ppn) CD Z SD AG (PD) CD Z SD AG (PD) AG (CD) CD Z SD (D) AG (PD) CD Z CD Z SD (D) AG (CD) CD Z CD Z SD (D) AG (CD) CD Z CD Z SD (D) AG (CD) CD Z CD Z CD Z CD Z CD Z <thcd< th=""></thcd<>

Hole No. CH88-57

Fage No. 4



Summary Log: D Location: 39+0 Azimuth: 210, Hole Completed Core logged by	DH CH88-58 SURJEYED = 44203 , etc. 5400 0 E, $4+10$ S; Chip 1 Claim Dip: -50 : May 24, 1988 : J. Pattison
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Casing Gabbro Felsic tuffs, tuffites and reworked tuffs Feldspar porphyritic gabbro Medium to coarse grained granophyric, ilmenite-rich gabbro and feldspar porphyritic gabbro
114.7 - 153.9	Feldspar porphyritic gabbro
153.9 - 210.0	Medium to coarse-grained granophyric ilmenite-rich gabbro and feldpsar porphyritic gabbro
210.0 - 224.9	Medium grained gabbro with minor ammounts of leucocratic gabbro
224.9 - 238.6 238.6 - 248.7	Leucocratic gabbro with 10-15 % ilmenite Feldspar porphyritic gabbro

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	PROPERT	Y: Chemainus J	IV .		ENCONER		יח					HOLE	No: Pa	age Numb	er				
					DIAMOND	DRILL LOG	10					C100-0	· o	1					
	Hole Lo	cation: 39+00	E 4+10 S																
	NEC. 001		W. E416000 1	N 430033 6 D						Clai	m No. C	Chip 1							
	Azimuth	: 210 E1	evation: 540	M 430933.8 E						Sect	ion No.	.: 39+00 E							
	Dip:	-50 Le	ngth: 248.	.7 m						Logg	ed By:	J. Pattis	on						
										Dril	ling Co	.: Burwas	h Enter	prises					
	Complete	: 20-may-88 ed: 24-Mav-88								Assa	yed By:	Bondar-C	legg & :	XRAL					
										Core	Size:	NQ							
	Purpose	: Coincident d	leep and shall	low IP anomal	ies	DIP TE	STS												
		at 5+00 5.			Azi-			Az	zi-										
				Length	muth	Dip	Length	mu	lth	Dip									
				12 20	211 0	-52 0	247 20	211		53.0									
				114.60	211.0	-52.0	447.20			55.0									
-	-						-	-	_	-			-						
Fro (m	n To) (m)			-DESCRIPTION			San	iple Io	From (m)	TO (m)	Width (m)	Total Sulnhide	Cu s (nnm)	Pb (mmm)	Zn (nnm)	Ag (nnm)	Au (nph	Ba) (nnm'	\
,	.,,			22000111100			•		((417	(14)	Sulphiuc	3 (ppm)	(P.Dur)	(ppm)	(ppm)	(164%	, (ppu)	,
- 0	3.7	OVERBÜRDEN																	
	11 0	VIETO TURDUCT																	
51	11.2	Fine to mediu	.v⊾ um∼σrained. ma	assive. dark	green ga	bbro with													
		trace to 3 %	disseminated	ilmenite. Br	oken and	blocky													
		above 6.8 m a	nd fractures	s are limonit	e staine	d. Lower				1									
		contact is at	ov degrees (.o core axis.															
		7.4 8.8 Mediu	m-grained, we	akly bleache	d and ca	rbonatized													
		zone	with 4-5 % fr	acture contr	olled py	rite.													
11.2	14.0	CHERTY FELSIC	TUFF / TUFFI	TE															
		Green to ligh	t pinkish bro	own (biotite	alterati	on?) very	VA02	846	11.2	18.5	7.3	n/a	24	n/a	53	n/a	n/a	1300	
		tuffite or si	ltstone.	inery bedded	chercy	TEISIC	VAO	946	12.2	13.2	1.0	2	42	11	102	<1	<5	2500	
		· · · ·					VAOS	947	13.2	14.0	. 8	2	19	17	74	<1	9	2300	
		STRUCUTRE:.	ding is at 35	degrees to	core avi	•													
		At 13.9 m bed	ding is at 35	degrees to	core axi	.s.													
		ALTERATION:. 11 2 14 0 VEA	K FRACTURE CO	NTROLLED CAR	BONATTZA	אסדיד													
		13.0 ADA	I KACIOND CC																
		SULPHIDES:.																	2
		11.2 1.5 % fr	acture contro	orreg båige.															
14.0	18.5	REWORKED FELS	IC TUFF	6.1		1 6	a .												e
		ash-sized whi	een, massive, te feldspar d	rvstals and	2 % lia	n up to 20 ht to dark	*												
					- • •••														

1.2% 1.2% 1.2% 2.2% 2.2% 2.2%

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-58 2

2

From	To	
(m)	(m)	DESCRIPTION

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

grey, cherty, rounded lithic clasts up to 10 mm long (most < 5 mm). Nil sulphides. Lower contact is sharp at 55 degrees to core axis.

STRUCTURE:.

14.3-14.8 M blocky, highly fractured core. 0.1 m of lost core.

ALTERATION:.

14.0 18.5 WEAK FRACTURE CONTROLLED CARBONATIZATION.

16.5 888.8 Band or bed of strongly carbonatized+epidotized mafic tuff (?) 7.0 cm wide at 25 degrees to core axis.

18.5 59.7 FELDSPAR PORPHYRITIC GABBRO

Medium green, massive and fine-grained with 10 % 1-4 mm plagioclase phenocrysts and up to 4 % interstitial ilmenite partially altered to leucoxene. Becomes medium-grained below 53.3 m. Quartz-carbonate filled fractures are common. Fine-grained, non feldspar porphyritic chilled margin for 15 cm at the upper contact.

STRUCTURE:.

52.9-53.1 M weak shearing at 60-70 degrees to core axis. 57.3-57.4 M fault zone at 20 degrees to core axis. Blocky, highly fractured core. 58.0-58.4 M slip runs nearly parallel to the core axis. Blocky, highly fractured core. 59.2-59.7 M FAULT 20NE at 20 to 50 degrees to core axis. 0.2 m of lower contact.

23.8 24.7 M quartz-carbonate vein with 1 % chalcopyrite at 40-50 degrees to core axis.

30.4 31.0 Quartz-carbonate flooded zone. Several minor fault gouges at 60-70 degrees to core axis.

59.7 79.5 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO Medium-grained and locally coarse-grained, almost pegmatitic, granophyric gabbro. Composed of 20 % subhedral to anhedral plagioclase, 60 % chlorite replacing needles of pyroxene up to 5 mm long, 10-15 % ilmenite in patches 1-4 mm in diameter, up to 3 % quartz and trace to 2 % pyrite and chalcopyrite. Core is blocky throughout most of the unit. Very weak fracture controlled carbonatization

STRUCTURE:.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-58 3

 From
 To

 (m)
 (m)

Sample From To Width Total Cu ΡЬ Zn λσ Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm) (ppm)

Blocky zones up to 0.2 m long are common and are the result of minor faults at $\langle 20 \text{ degrees to core axis.}$ 61.6-63.1 M blocky, highly fractured core. 0.2 m of lost core.

75.5-76.0 M slip runs parallel to the core axis. At 79.0 m minor fault gouge at 50 degrees to core axis. 79.3-79.5 M fault at 40 degrees to core axis.

- 79.5 85.0 FELDSPAR PORPHYRITIC GABBRO Medium to fine-grained gabbro with 10-20 % white feldspar phenocrysts and 4-5% interstitial ilmenite. Several barren quartz-carbonate veins up to 7.0 cm thick at 35 degrees to core axis. Medium brown biotite sometimes occurs along the vein margins. Lower contact is a slip at 35 degrees to core axis.
- 85.0 92.8 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO As 59.7 to 79.5 m. Trace to 1 % disseminated chalcopyrite. Broken, blocky core for 0.1 m at the lower contact but it appears to be gradational.

STRUCTURE:.

85.1-86.6 Fault zone. Blocky, highly fractured core. Not possible to measure the orientation.

92.8 96.9 FELDSPAR PORPHYRITIC GABBRO As 79.5 to 85.0 m. Lower contact is gradational.

STRUCTURE:.

At 96.0 m slip at 15 degrees to core axis.

96.9 114.7 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO As 59.7 to 79.5 m. Trace to 1 % disseminated chalcopyrite and 5 to 12 % ilmenite. Lower contact is gradational.

> STRUCTURE:. 104.5-105.5 m 0.2 m of lost core. Somewhat blocky.

- 106.4 107.1 Feldspar porphyritic gabbro. Fine-grained with 20 % white, 1-3 mm, euhedral feldspar laths. Trace ilmenite.
- 114.7 153.9 FELDSPAR PORPHYRITIC GABBRO Fine to medium-grained gabbro with 10-15 % feldspar phenocrysts. Locally weakly glomeroporphyritic. 5 %

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

(m) (m)

-----DESCRIPTION-----

Sample From То Width Total Cu Рb Zп Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

CH88-58

HOLE No: Page Number

4

disseminated ilmenite and trace chalcopyrite. Lower contact is gradational.

STRUCTURE:.

121.0-121.6 M blocky, highly fractured core. At 127.5 m 2.0 cm fault gouge at 67 degrees to core axis. 135.0-135.3 M blocky, highly fractured core. At 137.0 minor fault gouge at 30 degrees to core axis. 138.0-138.4 M FAULT ZONE. Blocky, highly fractured core. Not possible to measure orientation of the fault but it appears to be at at a very low angle to the core axis. 149.1-149.4 M slip runs nearly parallel to the core axis. Blocky, highly fractured core. 153.6-153.7 M slip runs nearly parallel to the core axis. Blocky, highly fractured core.

118.2 120.6 M NEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO. 8 to 10 % ilmenite.

124.4 128.0 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO with 10 % ilmenite.

133.5 134.8 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO with 10 % ilmenite. Lower contact is relatively sharp at 10 degrees to core axis.

139.4 140.0 Epidote+carbonate alteration patch at 30 degrees to core axis.

146.7 147.5 Coarse-grained ilmenite-rich gabbro runs parallel to the core axis. 15 % coarsely disseminated ilmenite. Trace disseminated chalcopyrite.

153.9 175.0 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO As 59.7 to 79.5 m except finer grained on average. 8-10 % ilmenite and 1 % chalcopyrite. .

> 154.4 154.6 Irregular carbonate veins up to 1.0 cm thick at 0-30 degrees to core axis with massive brown biotite along their margins and 3 % chalcopyrite.

175.0 187.5 FELDSPAR PORPHYRITIC GABBRO

Massive, medium-grained gabbro with 5 to 20% 1-3 mm plagioclase phenocrysts and up to 5 % interstitial ilmenite in grains and aggregates up to 4 mm in diameter.

VA03948 187.2 188.2 1.0 1 744 11 64 (1 25

80

184.3 184.8 Coarse-grained phase of the gabbro with 5-10 %

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-58 -5 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn Ag Au Ba (m) (m) -----DESCRIPTION------(m) Sulphides (ppm) No. (m) (m) (ppm) (ppm) (ppm) (ppm) ilmenite up to 5 mm in diameter and trace disseminated pyrite and chalcopyrite. Upper and lower contacts are relatively sharp at 10-35 degrees to core axis. 187.5 191.6 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO Medium-grained, locally coarse-grained gabbro with 10% VA03949 188.2 189.0 . 8 3 1942 .11 84 23 190 1 ilmenite partially altered to leucoxene and trace VA03950 189.0 190.0 1.0 1 636 13 70 (1 16 340 chalcopyrite. 188.2 189.0 Coarse-grained gabbro with 8 % ilmenite and 3 % disseminated chalcopyrite. 191.6 210.0 MAFIC INTRUSIVE Medium-grained massive gabbro. Feldspars are weakly VA03951 197.9 198.9 1.0 63 6 300 1 231 5 <1 sauseritized and mafic minerals have gone to chlorite. VA03952 198.9 200.3 1.4 3 500 10 70 (1 24 70 4-5 % ilmenite as grains 2-4 mm in diameter rimmed by VA03953 200.3 201.3 1.0 1 229 15 60 <1 10 470 leucoxene and trace finely disseminated chalcopyrite. Occasional guartz-carbonate filled fractures. Lower contact is gradational over 5.0 cm. 199.0 200.3 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO. 10-15 % ilmenite, 2 % disseminated pyrite and up to 1 % finely disseminated chalcopyrite. 210.0 211.7 LEUCOCRATIC GABBRO Fine to medium-grained cream coloured, plagioclase-rich (70-80 %) gabbro. 7 % ilmenite as grains to 4 mm. Locally rock has a pinkish tint probably due to weakly hematized feldspars. A light green soft alteration mineral comprises up to 5 % of the rock and is replacing mafic minerals. Fault gouge at 70 degrees to core axis at the lower contact. STRUCTURE: . 210.7-210.9 M crushed fault zone. Two fault gouges at 70 degrees to core axis. 210.6 211.6 Intrusive breccia. More than 80 % cream coloured angular breccia clasts in a dark green chlorite-rich matrix. 211.7 214.3 MAFIC INTRUSIVE Fine to medium-grained gabbro. Somewhat lighter in colour than average gabbro. Blocky over the entire interval.

Quartz-carbonate veins and veinlets are common throughout and in one place are cut by two 5 mm thick chloritic

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P	ROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-58	o: Pa	age Numb 6	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		veins. Weak fracture controlled carbonatization. STRUCTURE:.											
		213.3-214.3 FAULT ZONE. Broken blocky core throughout. Not possible to measure the orientation.			•								
214 3	215 0	I FUCACEATTC CARREN											
214.5	213.3	As 210.0 to 211.7 m. Brecciated over the first metre. Quartz-albite veins are common. Lower contact is gradational over 0.1 m.											
215.8	224.9	MAFIC INTRUSIVE											
		Starts off as a feldspar porphyritic gabbro. Becomes leucocratic between 217.0 and 217.9m. Below 218.9 m medium and locally coarse-grained gabbro contains 5-8 % ilmenite and trace chalcopyrite. Nil to weak fracture controlled hematization. Lower contact is gradational over 0.4 m											
224.9	238.6	LEUCOCRATIC GABBRO Light grey to cream coloured medium to fine-grained leucogabbro. Composed of 70-80 % subhedral to euhedral sauseratized and fresh plagioclase, 10-15% ilmenite as subhedral grains up to 4 mm in diameter, 5-10% light to dark green chloritized mafic minerals and 5 % light green	VA03954 VA03955 VA03956 VA03957	225.0 226.0 232.0 233.0	226.0 227.0 233.0 234.0	1.0 1.0 1.0 1.0	1 1 1	272 369 126 123	17 22 26 25	109 125 63 84	<1 <1 <1 <1	11 1 8 <5 <5	.000 980 990 610
		soft translucent mineral (see thin section sample from ?m). Weak to moderate fracture controlled											
		cm wide are common. Ilmenite is often altered to a soft, brown mineral. Lower contact is gradational over 0.15 cm.											
		STRUCTURE:											
		225.6-225.8 M fault at 28 degrees to core axis. 236.0-238.5 M FAULT ZONE. Blocky, highly fractured core. There are numerous fault gouges and fault breccias at 20-40 degrees to core axis. Light grey angular felsic clasts, some with pyrite, occur									. ·		
		in the breccia zones.											
		233.6 233.9 Quartz-carbonate flooded, brecciated zone. Nil sulphides.										•	
238.6	248.7	FELDSPAR PORPHYRITIC GABBRO Massive, dark green, fine to medium-grained gabbro speckled with 10-15% plagioclase laths up to 5 mm long (most 1 mm)											
	1.	trace chalcopyrite.											

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE Number	FROM	то	ZS 102	XAL203	ZCAO	ZHGO	ZNA20	X K20	XEE203	ZT 102	ZP205	ZHNO	XLO I	SUN	BA	AI	NACA
					************										******		* <u>-</u> *
VA02398	17.40	17.60	60.50	17.80	2.60	4.48	2.80	1.88	5.92	0.50	0.19	0.07	3.08	99.82	1700.	54.	5.
VA02399	49.00	49.40	49.00	14.20	10.40	6.39	2.39	0.65	12.60	1.75	0.16	0.19	1.70	99.43	777.	36.	13.
VA02400	64.70	65.10	51.60	11.60	7.06	3.06	2.38	0.48	17.20	3.39	0.46	0.27	1.23	98.73	509.	27.	9.
VA02401	86.90	87.00	49.60	11.10	8,53	3.57	2.02	0.42	18.30	3.53	0.39	0.26	1.93	99.65	588.	27.	11.
VA02402	107.30	107.80	47.90	12.10	9.47	5.96	2.09	0.39	15.40	2.31	0.18	0.24	3.16	99.20	286.	35.	12.
VA02403	126.30	126.40	49.60	12.80	10.00	4.78	2.48	0.26	15.00	2.14	0.23	0.22	2.00	99.51	71.	29.	12.
VA02404	199.00	199.10	49.40	11.50	7.14	3.39	2.80	0.30	18.40	4.16	0.49	0.29	1.23	99.10	236.	27.	10.
VA02405	226.70	226.90	39.70	15.50	9.47	3.91	0.15	3.79	9.51	2.82	0.27	0.22	15.10	100.44	1070.	44,	10.
VA02406	235.00	235.60	34.70	12.20	12,90	5.28	0.50	2.77	10.20	1.65	0.16	0.21	19.20	99.77	800.	38.	13.

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Page No. 1

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

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SAMPLE NUMBER	FROM	TO	XS I 0 2	XAL203	XCAO	2HGO	XNA20	XK20	XFE203	21 102	XP205	XHNO	XLO I	SUM	BA	AI	NACA
VA02846	11.20	18.50	68.50	7.24	8.23	2.16	1.80	0.32	4.04	0.25			5.62	98.16	1300.	20.	10.

Hole No. CH88-58 ALTERED SAMPLES

Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppas)	СU (ррт)	2.N (ppm)	АG (ррм)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	<i>Н</i> О (ррж)	НН (ррм)	CUZN	ETS	FE
											*********					*********	
VA03945	11,20	12.20	2700.0	28.0	47.0	<0.5	<5.0	17.0	40.0	18.0	26.0	<1.0	4.0	410.0	37.	2.	4.
VA03946	12.20	13.20	2500.0	42.0	102.0	<0.5	<5.0	19.0	41.0	11.0	35.0	1.0	<1.0	390.0	29.	2.	4.
VA03947	13.20	14.00	2300.0	19.0	74.0	<0.5	9.0	10.0	24.0	17.0	19.0	<1.0	7.0	280.0	20.	2.	з.
VA03948	187.20	188.20	80.0	744.0	64.0	<0.5	25.0	30.0	28.0	11.0	51.0	<1.0	<1.0	450.0	92.	1.	5.
VA03949	188.20	189.00	190.0	1942.0	84.0	0.5	23.0	36.0	16.0	11.0	56.0	1.0	2.0	490.0	96.	3.	6.
VA03950	189.00	190.00	340.0	636.0	70.0	<0.5	16.0	24.0	9.0	13.0	33.0	<1.0	1.0	400.0	90.	1.	5.
VA03951	197.90	198.90	300.0	231.0	63.0	<0.5	6.0	29.0	43.0	5.0	49.0	<1.0	<1.0	560.0	79.	1.	5.
VA03952	198.90	200.30		500.0	70.0	<0.5	24.0	28.0	19.0	10.0	40.0	<1.0	<1.0	400.0	88.	З.	5.
VA03953	200.30	201.30	470.0	229.0	60.0	<0.5	10.0	22.0	24.0	15.0	41.0	<1.0	<1.0	350.0	79.	1.	4.
VA03954	225.00	226.00	1000.0	272.0	109.0	<0.5	11.0	49.0	43.0	17.0	142.0	2.0	<1.0	1420.0	71.	1.	6.
VA03955	226.00	227.00	980.0	369.0	125.0	<0.5	8.0	46.0	43.0	22.0	142.0	1.0	<1.0	1390.0	75.	1.	5.
VA03956	232.00	233.00	990.0	126.0	63.0	<0.5	<5.0	40.0	68.0	26.0	140.0	<1.0	<1.0	1420.0	67.	۱.	6.
VA03957	233.00	234.00	610.0	123.0	84.0	<0.5	<5.0	32.0	58.0	25.0	193.0	1.0	<1.0	1430.0	59.	1.	6.

Page No. 1



Summary Log: DDH CH88-59 Location: 50+00 W, 7+72 N; Holyoak 3 Claim Azimuth: 210, Dip: -50 Hole Completed: May 26, 1988 Core logged by: M. Vande-Guchte 0.0 -7.1 Casing 7.1 -9.8 Mafic intrusive, probable boulder 9.8 -21.9 Felsic quartz eye tuff 21.9 -24.4 Chloritic felsic quartz-feldspar crystal tuff 24.4 -30.1 Intermediate tuff 30.1 -52.5 Mafic to intermediate tuffaceous sediments 52.5 -63.1 Mafic tuff 63.1 -82.3 Chloritic felsic quartz eye tuff 82.3 -83.3 Mafic tufff 83.3 - 148.7 Felsic quartz eye tuff with interbedded mafic tuffs 148.7 - 249.7Mafic tuff with interbedded felsic and intermediate tuffs 249.7 - 251.5Felsic tuff 251.5 - 258.5 Intermediate tuff 258.5 - 262.0Felsic tuff 262.0 - 288.5 Mafic tuff with with minor interbedded lapilli tuff 288.5 - 297.3Intermediate tuff 297.3 - 306.2 Chloritic felsic quartz eye tuff 306.2 - 310.8 Chloritic felsic lapilli tuff 310.8 - 313.2 Intermediate tuff 313.2 - 322.0 Chloritic felsic quartz eye tuff Mafic tuff 322.0 - 328.7 328.7 - 336.8 Chloritic felsic quartz eye tuff 336.8 - 338.4 Mafic tuff 338.4 - 340.5 Chloritic felsic quartz eye tuff Е.О.Н. @ 340.5

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	PROPERT	Y: Chemainu	s J.V.			FALCONB DIAMON	RIDGE LIMIT D DRILL LOG	'ED				HOLE I CH88-59	No: Pa	ige Numb 1	er			
1	Hole Loo	cation: 50+	00' ₩ 7+72	N														
· 1	NTS: 092 Azimuth:	2/B13 : 210	UTM: Elevation:	919 m 340 5 m						S	laim No. ection N	Holyoak 3 Io.: Line 504	+00'					
:	Started: Complete	: May 21, 1 ed: May 26,	988 1988	J40.5 II	· · · · · · · · · · · · · · · · · · ·					D A	rilling ssayed H	Co.: Burwash Sy: Bondar-Cl	Entern Entern Legg and	orises X-Ray	Assay			
	•									c	ore Size	NQ .						
1	Purpose	: Stratigra	phic sectio	n			DIP 7	ESTS										· ·
					Length	Azi- muth	Dip	Length.	Azi- muth	Dip								
					32.60 127.10	215.0 218.0	-50.0 -47.5	274.30 340.50	216.0 210.0	-46.0 -43.0								
Fron (m)	n To (m)			DE	SCRIPTIO	Y		Sam N	ple fr o.	com To (m) (m	Widt) (m)	h Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	7.1	OVERBURDEN																
7.1	9.8	MAFIC INTR Dark green quartz vei	USIVE to grey, f n marking l	ine-grai ower con	ned mafie tact. Pi	c intrus: robable	ive. 3 cm boulder.											
		Structure. 7.4 : poss	ible fault,	fault g	ouge with	no orie	entation.											
		Lost core 7.7 9.8 : (:. 0.6 m.				•											
											-							

9.8 21.9 FELSIC QUARTZ EYE TUFF

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Light grey to white, limonite stained (rusty-brown) sericitic felsic tuff with 5 to 7%, 2 to 3 mm quartz eyes. Fine grained, medium to dark brown platy mineral weathered chlorite ?, throughout. Moderate to strongly pitted core. Blocky, highly fractured core which is moderate to strongly weathered.

12.5 16.8 : variable chloritic felsic quartz- feldspar crystal tuff. With 5 to 7 %, 1 to 2 mm quartz eyes and 2 to 3%, 1 to 2 mm feldspar crystals. Weak to moderately chloritic. 2.35 m lost core.

13.1 13.4 : fine grained, foliated intermediate to mafic dyke.

Structure. Foliations :. 10.0 : 85 degrees to core axis.

VA01139 9.9 21.2 11.3 n/a <10 n/a <10 n/a n/a 1540

FALCONBRIDGE LINITED

HOLE No: Page Number CH88-59 2

				DIAMOND DRILL LOG					C100-33		2					
From (m)	To (m)		DESCRI	PTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)	
		14.0 : 55 degre 18.0 : 65 degre 21.0 : 55 degre	es to core axis. es to core axis. es to core axis.													
		Faults :. 12.4 12.5 : fau 13.1 : fault go 14.1 : fault go	lt gouge with no o uge with no orient uge with no orient	rientation. ation. ation.												
		Alteration :. 9.8 21.9 MODERA Lost core :. 10.0 12.0 : 0.6	TE PERVASIVE SERIC	ITIZATION.												
		12.5 13.4 : 0.1 14.0 16.8 : 2.2 20.1 21.9 : 0.8	5 m. m. m.				·									
21.9	24.4	CHLORITIC FELSI	C QUARTZ-FELDSPAR	CRYSTAL TUFF										- / -	1(70	
		Light green to sericite schist 4 to 7 %, 1 to pervasive chlor highly fracture weathered.	grey, fine-grained with 3 to 4 %, 2 2 mm feldspar crys ite. Moderate to s d core which is mo	Variable chioritic to 3 mm quartz eyes and tals. Weak to moderate trongly pitted. Blocky, derate to strongly	VA01140	22.0	24.0	2.0	n/a	13	n/a	33	n/a	n/a	1670	
		Structure. Foliations :. 23.0 : 55 degre	es to core axis.													
		Alteration :. 21.9 24.4 MODER Lost core :. 22.0 23.5 : 0.4	ATE PERVASIVE SERI	CITIZATION.												
													N			
24.4	30.1	INTERMEDIATE TU Fine-grained, m quartz and feld	FF edium green interm spar phyric with p e foliation and lo	ediate ash tuff. Weakly henocryst up to 1.5 mm. cally kinked Blocky	VA01141	24.6	30.0	5.4	n/a	57	n/a	65	n/a	n/a	1060	
		highly fracture weathered. 28.0 28.3 : fra	d core, which is m	arbonate.												
		Structure. Foliation :. 28.0 : 60 degre	es to core axis.													
		Alteration :. 24.4 30.1 WEAK	PERVASIVE SERICITI	ZATION.												

PR	OPERT	Y: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-59	o: Pa	ige Num) 3	ber			
From (m)	To (m)	DESCR	IPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb) (Ba ppm)
		Lost core :.												
		24.0 26.0 : 0.6 m.												
		28.0 29.0 : 0.6 m.			· .									
		29.0 29.9 : 0.7 m.												
30.1	52.5	MAFIC TO INTERMEDIATE TUFFACEOUS	SEDIMENTS											
	·	Fine-grained, medium grey tuffac	eous sediments with minor	VA01142	30.2	51.0	20.8	n/a	84	n/a	57	n/a	n/a 110	0
		interpeds of black argillite wit	n aceous sediments Veakly	VA01999 VA02000	32.0	33.0	1.0	n/a n/a	89 72	34 28	230	(1	22 280	0
		chloritic. Fracture controlled c	arbonate veins and	VA02000	34.0	35.0	1.0	n/a	63	8	120	<1	10 140	0
		stringers (generally parallel to	foliaton) to pervasive	VA02002	46.0	47.0	1.0	n/a	61	7	120	<1	(5 73	0
		carbonate giving banded appearan	ce, minor quartz-carbonate	VA02003	47.0	48.0	1.0	n/a	58	9	135	(1	34 160	0
		veins. Gradational upper and low	ver contacts. 2 to 3 %	VA02004	48.0	49.0	1.0	n/a	71	(5	115	<1	<5 180	0
		Interbeds of argillite show shar	to slightly gradational											
		upper and lower contact at 45 de	grees to core axis.											
		30.1 33.4 Blocky, highly fractur	ed core which is											
		moderately weathered.												
		33.4 33.8 Black argillite with 1	nterlaminated tuffaceous											
		40 7 41.1 Interbedded, weakly ha	nded, fine-grained highlite											
		44.5 44.8 1 to 2%, up to 1.5 mm	quartz eye.											
		47.3 47.7 Black argillite, moder	ately siliceous, 2 to 3%											
		fracture controlled an	d disseminated pyrite.											
		48.8 49.4 Interlaminated Siliceo	with intercalated											
		tuffaceous sediments.	Fith Intercarated											
		Structure.												
		Follations :.												
		42.0 : 50 degrees to core axis.												
		51.0 : 45 degrees to core axis.												
		Faults :.												
		36.3 36.6 : fault gouge with no	orientation.											
		59.7 59.9 : Tault gouge with no	orientation.											
		Alteration :.												
		30.1 52.5 MODERATE PERVASIVE CAR	BONATIZATION.											
52.5	63.1	MAFIC TUFF	•											
		Medium green, fine-grained mafic	tuff with finely	VA01143	53.0	63.0	10.0	n/a	11	n/a	46	n/a	n/a 86	4
		interlaminated black argillite n	ear lower contact (62.4 m											
		to 63.1 m). Weak to moderatly ma	gnetic. Fracture		-									
		controlled to weakly pervasive C pervasive chlorite and local (s	neurale. Weak to moderate											
		Presenter and food (b	Leeel, obverseeven											

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

From

To

HOLE No: Page Number CH88-59 4

Cu

Рb

Zn

λg

Au Ba

From	То		
(m)	(m)	DESCRIPTION	

No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Total

Width

Moderate to well foliation with banded appearance. Minor (<1.0 cm) quartz-carbonate veins. 1 to 2% disseminated pyrite.

Structure. Foliations :. 53.0 : 55 degrees to core axis. 60.0 : 50 degrees to core axis. Faults. 61.5 : 55 degrees to core axis.

Alteration : MODERATE FRACTURE CONTROLLED CARBONATIZATION to weakly pervasive carbonate. 52.5 63.1 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

63.1 82.3 CHLORITIC FELSIC QUARTZ EYE TUFF

White to light green, variable chloritic quartz phyric sericite schist with 3 to 5 %, 1 to 2 mm quartz eye. Fracture controlled to weakly pervasive carbonate. Moderately sericitic. Weak to moderately chloritic with localized areas showing little to no chlorite (possible interbeds ?). These areas are seperated by relatively sharp upper and lower contacts at approximately 45 degrees to core axis. Minor quartz-carbonate veins generally parallel to to foliation. Wavy locally kinked foliation. 1 to 2 % finely disseminated pyrite.

68.6 69.0 : very weakly chloritic quartz phyric sericite schist.

69.6 71.8 : very weakly chloritic quartz phyric sericite schist.

Structure.

Foliations :. 68.0 : 55 degrees to core axis. 76.0 : 45 degrees to core axis. 82.0 : 45 degrees to core axis.

Alteration : MODERATE PERVASIVE SERICITIZATION with moderate fracture controlled to weakly pervasive carbonatization. 63.1 82.3 MODERATE PERVASIVE SERICITIZATION.

82.3 83.3 MAFIC TUFF

Medium to dark, fine grained mafic tuff. Weak to moderately magnetic. Fracture controlled carbonate with pink to white carbonate clots. Sharp upper and lower contact parallel to to foliation at approximately 45 degrees to core axis. 1 to 2 % disseminated pyrite. VA01144 64.0 81.6 17.6 n/a 26 n/a <10 n/a n/a 916

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PI	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NO CH88-59	o: P	age Numb 5	er			
From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		Structure. Foliations :.											
		83.0 : 55 degrees to core axis.											
		Alteration :. 82.3 83.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION.											
83.3	148.7	FELSIC QUARTZ EYE TUFF											
		White to light grey, fine-grained quartz phyric sericite schist with interbedded mafic tuffs. 6 to 8 %, up to 6 mm, quartz phenocrysts and localized 2 to 3%, up to 2 mm, mattled buff felderar benerrusts towards lower contract	VA01145 VA01146 VA02005	84.0 94.0 108.0	94.0 113.0 109.0	10.0 19.0 1.0	n/a n/a n/a	<10 <10 7	n/a n/a <5	<10 <10 30	n/a n/a <1	n/a n/a 1 (5 1	920 140 100
		Weak to moderately pervasive sericite. Weak to very weak fracture controlled carbonate. Minor quartz veins and ctripeorg. Overall method series and becoming	VA02007 VA02007 VA01147	112.0 114.0	112.0 113.1 130.0	1.1	n/a n/a n/a	4 29	5 n/a	15 15 23	<1 n/a	<5 n/a 1	970 040
		increasingly more siliceous below 113.0 m to lower contact. Strongly quartz veined from 94.0 to 113.0 m.	VAUII48	13010	140.0	10.0	n/a	10	n/a	44	n/a	n/a 1	1100
		Weak to moderately chloritic from 94.0 to 113.0 m with locally weak, spotty epidotization. Moderately chloritic from 140.0 m to lower contact. Very weak pervasive											
		carbonate. 3 to 4 % disseminated pyrite.											
		MAFIC TUFF INTERBEDS are fine-grained, medium to dark green with fracture controlled to pervasive carbonate and											
		occasional, up to 2.0 mm, carbonate clots. Moderate to strongly chloritic. Weakly magnetic and 1 to 2 %											
4		disseminated pyrite. Contacts vary from sharp to weakly gradational.											
		83.7 84.0 : mafic tuff, sharp upper and lower contact at 45 degrees to core axis.											
		85.3 85.8 : mafic tuff, relatively sharp upper and lower contact at 50 degrees to core axis.				·							
		105.5 105.7 : trace mariposite, moderately chloritic. 108.2 110.2 : strongly qtz veined.											
		113.1 114.2 : mafic tuff, sharp upper and lower contact at 60 degrees to core axis, weak foliation at 50											
		121.9 122.2 : mafic tuff, gradational upper contact and sharn lower contact.											
		122.7 122.9 : matic tuff, sharp contacts. 124.6 124.9 : strong alteration band, sharp upper contact											
		(variable orientation), trace mariposite. 127.7 128.2 : mafic tuff, sharp upper and lower contacts at 65 and 30 degrees to come arise											
		136.2 136.3 : mafic tuff, weakly to moderately magnetic, sharp contacts.											
		136.5 136.9 : mafic tuff, sharp upper and lower contacts											

at 65 and 45 degrees to core axis. 137.3 138.0 : mafic tuff, sharp upper and lower contacts

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-59 6

From To

Π

(m) (m) -----DESCRIPTION------

Sample From То Width Total Cu РЪ Zn Àα Au 8a No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (mqq) (ppb) (ppm)

at 45 and 30 degrees to core axis. 139.7 139.9 : mafic tuff, gradational upper and lower contacts, strongly chloritic. 140.5 140.6 : mafic tuff. 140.7 140.9 : mafic tuff. 141.1 141.7 : mafic tuff.

142.0 142.4 : mafic tuff, sharp upper and lower contacts at 40 and 30 degrees to core axis.
146.0 146.5 : mafic tuff, sharp upper and lower contacts at 60 and 55 degrees to core axis.

146.7 147.0 : mafic tuff.

Structure.

Foliation :. 95.0 : 60 degrees to core axis. 128.0 : 55 degrees to core axis. 138.0 : 35 degrees to core axis. 146.0 : 50 degrees to core axis. Fault :. 94.5 : fault slip at 60 degrees to core axis. 95.8 : fault slip at 55 degrees to core axis. 148.7 : fault gouge with no orientation.

Alteration :.

82.3 113.0 MODERATE PERVASIVE SERICITIZATION and, weak fracture controlled carbonatization.
113.0 148.7 WEAK PERVASIVE SERICITIZATION and, weak fracture controlled carbonatization.

148.7 249.7 MAFIC TUFF

Medium green, fine-grained mafic tuff with interbedded fine-grained, medium green intermediate to felsic tuffs with highly gradational contacts. Moderate to strongly chloritic. Fracture controlled to weakly pervasive carbonate. Quartz-carbonate veins and stringers becoming locally strong. Light brown colored mineral - possible fe-carbonate, locally pervasive and commonly associated with carbonate and quartz-carbonate veins / stringers. Weak, locally magnetic and 1 to 2 % disseminated pyrite.

- 148.7 163.2 : strongly chloritic, locally quartz phyric up to 2%, up to 2 mm. Locally pervasive light brown mineral.
- 163.2 165.2 : interlaminated to intercalated black argillite, no visible bedding, foliation 55 degrees to core axis.
- 165.2 171.5 : numerous quartz-carbonate veins with light brown mineral - ?. Trace, quartz associated chalcopyrite at 166.8 m, 169.4 m and 170.1 m.

VA01149 149.0 168.0 19.0 n/a 606 n/a 51 n/a 51 n/a VA01154 162.0 290.0 128.0 n/a 169 n/a 54 n/a n/a 771 VA01150 168.0 198.0 30.0 n/a 13 n/a 51 n/a n/a 670 VA02008 168.0 169.0 1.0 n/a 7 <5 90 <1 <5 960 <5 VA02009 169.0 170.0 1.0 n/a 163 5 80 <1 710 VA02010 170.0 171.0 1.0 (1 <5 620 n/a 15 ٢5 75 67 VA01151 198.0 228.0 30.0 31 n/a n/a n/a 639 n/a VA01152 228.0 248.0 20.0 37 61 n/a n/a 827 n/a n/a VA01153 248.0 262.0 14.0 39 n/a 1260 n/a n/a 44 n/a

From

(m)

Γ

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-59 7

Рb

Zn

λσ

(ppm) (ppm) (ppm) (ppb) (ppm)

Au Ba

Total Cu

(m) Sulphides (ppm)

To (m) ------DESCRIPTION------171.5 176.2 : weak, locally magnetic. Minor quartz-carbonate veins. 176.2 176.5 : moderately chloritic intermediate to felsic tuff, weakly up to 4 % quartz phyric. Slightly gradational contacts. 176.5 196.9 : bedding observed at 180.1 m at 80 and 65

degrees to core axis. Locally intercalated black argillite, dark green to black, from 191.0 to 193.0 m.

- 196.9 197.1 : weak to moderately chloritic intermediate tuff.
- 197.1 213.3 : moderate to strong chloritic mafic tuff.
- 213.3 216.5 : spotty up to 1.0 mm clots carbonate, minor quartz phenocrysts and weakly pervasive light brown mineral - ?.
- 216.5 228.4 : intermediate to felsic tuff at 224.5 to 225.0 m. Locally weak to moderately pervasive light brown mineral. Gradational contacts.
- 228.4 229.8 : intermediate to felsic tuff, siliceous horizon from 228.4 to 229.0 m minor felsic fragments. Locally strong quartz-carbonate veining. Siliceous gradational upper and lower contacts.
- 229.8 248.6 : intermediate to mafic composition, local spotty carbonate.
- 248.6 249.7 : strongly quartz-carbonate viened.

Structure :. Foliation :.

155.0 : 55 degrees to core axis.
165.5 : 50 degrees to core axis.
167.5 : parallel to degrees to core axis.
168.0 : 50 degrees to core axis.
175.0 : 60 degrees to core axis.
188.0 : 50 degrees to core axis.
195.0 : 55 degrees to core axis.
208.0 : 45 degrees to core axis.
222.0 : 45 degrees to core axis.

Faults :.

152.5 : fault slip 40 degrees to core axis. 166.2 : fault gouge with no orientation. 207.3 : fault gouge at 40 degrees to core axis.

Alteration :.

148.7 200.0 HODERATE FRACTURE CONTROLLED CARBONATIZATION.
200.0 234.0 WEAK FRACTURE CONTROLLED CARBONATIZATION.
234.0 247.0 HODERATE FRACTURE CONTROLLED CARBONATIZATION.
247.0 249.7 WEAK FRACTURE CONTROLLED CARBONATIZATION.

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Sample From To

(m)

(m)

No.

Width

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

No.

HOLE No: Page Number CH88-59 8

From To (m) (m) -----DESCRIPTION-----

249.7 251.5 FELSIC TUFF

Light to medium grey, fine-grained tuff. Weak moderately chloritic with wispy chlorite. Lower contact gradational into intermediate tuff. Weak fracture controlled carbonate. Weak wavy foliation 50 at degrees to core axis.

Alteration :.

249.7 251.5 WEAK FRACTURE CONTROLLED CARBONATIZATION.

251.5 258.5 INTERMEDIATE TUFF

Grey to medium green, fine-grained tuff, weak to moderately chloritic with wispy chlorite. Weak fracture controlled carbonate and abundant guartz-carbonate veins. Weak wavy foliation at 55 degrees to core axis. 1 to 2% disseminated pyrite.

252.3 : fault gouge at 60 degrees to core axis.

Alteration :. 251.5 258.5 WEAK FRACTURE CONTROLLED CARBONATIZATION.

258.5 262.0 FELSIC TUFF

Light to medium grey, fine-grained tuff, very weakly chloritic with occasional wispy chlorite. Weak fracture controlled carbonate. Gradational upper and lower contact. Wavy variable foliation and 1 to 2 % disseminated pyrite.

Alteration :. 258.5 262.0 WEAK FRACTURE CONTROLLED CARBONATIZATION.

262.0 288.5 MAFIC TUFF

Medium to dark green, weakly foliation fine-grained tuff. Moderate to strong pervasive chlorite. Fracture controlled carbonate and quartz-carbonate veining. Gradational upper and lower contact. 1 to 2 % disseminated pyrite. 262.0 263.0 : intermediate to mafic composition

gradational contact weakly foliation at 60 degrees to core axis.

- 263.0 272.8 : strongly chloritic, up to 80 % blocky, highly fractured core, quartz vein associated chalcopyrite (15%) at 170.5 m.
- 272.8 280.7 : moderately chloritic, variable composition from mafic to intermediate, minor felsic fragments throughout and up to 80 % felsic fragments from 273.4 to 274 m.
- 280.7 282.1 : massive, mafic dyke.

VA02011 269.5 270.4 .9 n/a 28 ۲) 170 <1 < 5 300 VA02012 270.4 270.9 n/a 28000 617 620 .5 8 130 23 VA02013 270.9 271.8 n/a .9 161 <5 100 <1 (5 700

Sample From Width Total То Cu ₽Ь Zn (m) (m) (m) Sulphides (ppm)

λq Au Ba (ppm) (ppm) (ppm) (ppb) (ppm)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number 9

Ph

Zn

λα

(ppm) (ppm) (ppm) (ppb) (ppm)

Au

Ba

Cu

From To

Π

(m) (m)

> 282.1 288.5 : moderately chloritic, variable composition from mafic to intermediate, minor felsic fragments.

-----DESCRIPTION-----

Foliation :.

284.0 : 60 degrees to core axis. Alteration :. 262.0 272.0 WEAK FRACTURE CONTROLLED CARBONATIZATION. 272.0 288.5 WEAK FRACTURE CONTROLLED CARBONATIZATION.

288.5 297.3 INTERMEDIATE TUFF

Light to medium grey green, fine-grained tuff with interbedded to intercalated fine-grained intermediate to felsic tuffs. Weak to moderately chloritic. Minor quartz-carbonate veins. Minor fracture controlled to weakly pervasive carbonate. 1 to 2% disseminated pyrite. Strongly gradational upper and lower contact.

Structure.

Foliation :. 294.0 : 55 degrees to core axis.

Alteration :.

288.5 297.3 WEAK FRACTURE CONTROLLED CARBONATIZATION.

297.3 306.2 CHLORITIC FELSIC QUARTZ EYE TUFF

Light to medium green, weakly quartz phyric sericite schist. 1 to 2 %, up to 2 mm guartz phenocrysts. Weak to moderately chloritic and moderately sericitic. Minor guartz-carbonate veins.

297.5 298.8 : ripped up siliceous, cherty fragments, and minor argillic fragments.

299.5 299.8 : light to medium grey, felsic ash tuff. Strong upper and lower contact at 70 and 50 degrees to core axis.

302.8 303.3 : dark to medium green, fine-grained mafic tuff, moderately gradational contacts.

305.9 306.2 : dark to medium green, fine-grained mafic tuff, gradational upper and sharp lower contact

Foliation :. 302.0 : 55 degrees to core axis.

Alteration :. 297.3 306.2 MODERATE PERVASIVE SERICITIZATION. VA01155 290.0 320.0 30.0 n/a 14 n/a 42 n/a n/a 1080

CH88-59

Total

(m) Sulphides (ppm)

Width

Ťο

(m)

(m)

Sample From

No.

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

No.

From То -----DESCRIPTION------(m) (m)

306.2 310.8 CHLORITIC FELSIC QUARTZ EYE LAPILLI TUFF Light to medium green, weakly guartz phyric sericite schist. 1 to 2%, up to 2 mm quartz phenocrysts. Weak to moderately chloritic and moderately sericitic. Variable

size felsic, argillite, and chert fragments up to 3.0 cm. Fragments are concentrated locally but individual. fragments found throughout. Overall weakly foliated at approximately 60 degrees to core axis.

Alteration :. 306.2 310.8 MODERATE PERVASIVE SERICITIZATION.

310.8 313.2 INTERMEDIATE TUFF

Medium green, fine-grained intermediate tuff. Moderate to strongly chloritic with minor fracture controlled carbonate and quartz-carbonate veins. Gradational upper and lower contacts. Weakly foliated.

Foliation :. 313.0 : 60 degrees to core axis.

Alteration :. 310.8 313.2 WEAK FRACTURE CONTROLLED CARBONATIZATION.

313.2 322.0 CHLORITIC FELSIC QUARTZ EYE TUFF

Light to medium green, weak to moderate chloritic, fine-grained , weakly quartz phyric sericite schist. 1 to 2%, up to 2 mm quartz phenocrysts. Quartz-carbonate veins increasing towards lower contact. Gradational upper contact and sharp lower contact. Minor intebedded, medium green, moderate chloritic, fine-grained intermediate tuffs. 314.1 314.3 : fine-grained intermediate tuff, sharp upper

and gradational lower contacts.

318.4 318.5 : fine-grained intermediate tuff, sharp upper and lower contact parallel to to foliation.

318.6 319.2 : fine-grained intermediate tuff, sharp upper and lower contact at 70 and 85 degrees to core axis.

Foliation :. 318 : 45 degrees to core axis.

Alteration :. 313.2 322.0 MODERATE PERVASIVE SERICITIZATION.

322.0 328.7 MAFIC TUFF

Medium to dark green, fine-grained tuff becoming

VA01156 320.0 340.0 20.0 n/a <10 n/a 39 n/a n/a 1090

HOLE No: Page Number CH88-59 10

Sample From Width. Total Ph То Cu Ζn Àσ Δ... Ba (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-59 11

 From
 To

 (m)
 ------DESCRIPTION-----

Sample From Width Total To Cu Рb Zn λg Αu Ba No. (m) (m) (m) Sulphides (ppm) (ppb) (ppm) (ppm) (ppm) (ppm)

intermediate in composition towards lower contact. Moderate to strongly chloritic. Weakly magnetic. Fracture controlled carbonate and quartz-carbonate veins and stringers throughout. Light brown mineral associated with quartz-carbonate veins. Weak to moderately foliation.

Foliation :. 322.8 : 25 degrees to core axis. 328.0 : 45 degrees to core axis.

Alteration :. 322.0 328.7 WEAK FRACTURE CONTROLLED CARBONATIZATION.

328.7 336.8 CHLORITIC FELSIC QUARTZ EYE TUFF Light to medium green, variable chloritic, weakly quartz phyric sericite schist. 1 to 2%, up to 2 mm quartz phenocrysts. Quartz-carbonate veins. Minor siliceous

fragments near gradational upper contact, sharp lower contact.

Foliation :. 334.0 : 45 degrees to core axis.

Alteration :. 328.7 336.8 MODERATE PERVASIVE SERICITIZATION.

336.8 338.4 MAFIC TUFF

Medium to dark green, fine-grained tuff becoming intermediate in compostion towards lower contact. Moderate to strongly chloritic. Locally weakly magnetic. Fracture controlled carbonate and minor guartz-carbonate veins. Sharp upper and lower contact.

Foliation :. 338.0 : 70 degrees to core axis.

Alteration :. 336.8 338.4 WEAK FRACTURE CONTROLLED CARBONATIZATION.

338.4 340.5 CHLORITIC FELSIC QUARTZ EYE TUFF

Light to medium green, variable chloritic, weakly quartz phyric sericite schist. 1 to 2%, up to 2 mm quartz phenocrysts. Minor quartz-carbonate veins and fracture controlled carbonate.

Foliation :. 339.0 : 65 degrees to core axis.

From To

(m) (m)

Π

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-59 12

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

Alteration :. 338.4 340.5 MODERATE PERVASIVE SERICITIZATION. E.O.H. = 340.5 m.

-----DESCRIPTION------

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	2 \$ 102	XAL203	ZCAO	ZHGO-	XNA20	ZK20	ZFE203	ZT 102	ZP205	ZHNO	XL0 I	SUN	BA	AI	NACA
					······································	· · · · · ·				**********	**********		~~~ ~~~			·	
VA00695	17.30	17.60	78.00	12.30	0.14	0.26	3.41	2.08	0.67	0.15	0.05	0.04	1.23	98.33	993.	40.	4.
VA00696	22.90	23.10	78.10	13.00	0.22	0.62	2.68	2.32	1.47	0.18	0.05	0.05	1.47	100.16	1500.	50.	3.
VA00697	27.60	27.85	64.20	16.90	0.49	0.62	3.95	2.89	5.87	0.75	0.24	0.18	2.62	98.71	891.	. 44.	à.
VA00698	42.20	42.50	40.00	13.80	12.30	6.41	0.62	2.12	12.90	0.70	0.34	0.28	11.10	100.57	511.	40.	13.
VA00699	54.10	54.50	54.50	16.50	4.83	2.23	3.43	2.63	8.61	0.80	0.21	0.14	5.08	98.96	683.	37.	в.
VA00700	67.80	68.20	71.00	13.00	3.05	0.63	2.08	2.92	1.52	0.20	0.05	0.04	3.62	98.11	1210.	41.	5.
VA00701	70.50	70.80	70.20	13.40	3.66	0.45	3.21	2.59	0.77	0.18	0.04	0.06	3.93	98.49	1100.	31.	7.
VA00702	82.60	82.90	49.00	17.10	6.89	2.82	1.98	3.26	8.35	0.55	0.43	0.17	8.47	99.02	1040.	41.	9.
VA00703	89.60	90.00	73.20	12.60	2.45	0.75	3.36	2.17	1.63	0.18	0.05	0.04	2.85	99.28	880.	33.	6.
VA00704	110.50	110.80	71.00	12.30	2.45	0.96	3.24	2.21	2.03	0.18	0.04	0.07	4.00	98.48	872.	36.	6.
VA00705	120.00	120.50	70.50	14.10	2.59	0.92	3.61	2.52	1.67	0.19	0.05	0.06	3.77	99.98	1000.	36.	6.
VA00706	130.00	130.30	72.90	13.30	2.23	0.79	3.65	2.38	1.64	0.21	0.04	0.06	3.23	100.43	977.	35.	6.
VA00707	147.10	147.40	70.70	13.20	3.61	0.90	1.97	2.77	2.21	0.20	0.05	0.08	4.08	99.77	1040.	40.	6.
VA00708	152.00	152.40	50.90	18.30	6.02	2.78	2.86	1.61	8.85	0.90	0.17	0.18	6.85	99.42	571.	33.	9.
VA00709	163.20	163.50	43.10	16.60	10.40	3.13	2.37	1.80	11.00	0.85	0.32	0.21	10.50	100.28	546.	28.	13.
VA00710	172.70	173.00	54.50	16.00	5.57	2.07	2.70	1.55	9.52	0.87	0.21	0.23	5.62	98.84	503.	30.	8.
VA00711	176.20	176.50	55.00	14.60	6.62	2.41	2.65	1.45	7.67	0.79	0.25	0.23	7.00	98.67	397.	29.	9.
VA00712	182.60	183.00	53.70	19.00	4.45	2.82	2.29	1.36	9.00	0.88	0.25	0.15	6.08	99 .98	697.	38.	7.
VA00713	194.10	194.50	52.30	17.60	7.36	1.82	2.44	1.92	7.36	0.95	0.24	0.18	8.00	100.17	768.	28.	10.
VA00714	204.00	204.50	52.70	17.10	6.98	2.25	2.69	1.62	7.75	0.93	0.24	0.15	7.70	100.11	693.	29.	10.
VA00715	210.00	210.50	53.50	15.80	6.56	2.56	2.37	1.73	8.55	0.86	0.25	0.30	7.54	100.02	553.	32.	9.
VA00716	214.20	214.60	53.50	17.90	5.37	2.51	2.67	2.45	6.85	0.97	0.28	0.28	7.39	100.17	748.	38.	8.
VA00717	223.80	224.10	52.10	18.40	5.08	2.59	3.10	1.86	8.99	1.02	0.26	0.18	6.47	100.05	612.	35.	8.

Hole No. CH88-59 WHOLE ROCK SAMPLES

Page No.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAŪ	XNGO	ZNA20	ZK20	XFE203	XT 102	XP205	ZHNO	ZLOI	รบห	BA	AI	NACA
											·				-		
VA00718	239.60	239.90	51.30	17.30	7.54	2.09	2.77	1.91	7.87	0.81	0.22	0.14	8.39	100.34	988.	28.	10.
VA00719	246.40	246.80	51.80	18.30	5.72	2.94	2.04	1.91	8.84	0.91	0.20	0.17	7.31	100.14	954.	38.	8.
VA00720	249.80	250.10	51.00	21.90	3.27	2.75	4.17	2.41	8.05	1.06	0.34	0.15	5.16	100.26	1240.	41.	7.
VA00721	256.10	256.50	55.40	16.80	5.42	2.38	2.59	1.28	8.98	0.87	0.25	0.30	6.16	100.43	792.	31.	8.
VA00722	260.50	260.80	53.40	20.40	4.30	2.31	2.16	3.17	7.03	0.95	0.33	0.18	5.54	99.77	1770.	46.	6.
VA00723	269.30	269.60	46.40	13.60	8.98	5.31	1.82	0.55	11.90	1.54	0.12	0.20	10.00	100.42	279.	35.	11.
VA00724	276.80	277.10	54.10	18.10	6.36	2.26	2.13	3.32	6.31	0.91	0.28	0.10	6.16	100.03	958.	40.	8.
VA00725	284.00	284.40	62.50	16.60	2.59	1.59	5.72	0.90	7.07	0.80	0.26	0.08	2.00	100.11	638.	23.	8.
VA00726	294.40	294.80	49.70	19.00	5.98	2.43	3.31	1.85	9.05	1.04	0.32	0.24	7.00	99.92	727.	32.	9.
VA00727	300.80	301.10	73.10	13.80	2.08	1.47	2.20	1.67	1.92	0.20	0.04	0.06	3.39	99.93	1430.	42.	4.
VA00728	311.30	311.70	54.50	17.20	5.81	2.67	2.20	2.49	7.67	0.55	0.44	0.15	6.54	100.22	1180.	39.	8.
VA00729	315.10	315.50	70.80	13.10	2.74	1.60	2.16	2.21	2.19	0.25	0.14	0.11	4.54	99.84	925.	44.	5.
VA00730	323.80	324.10	49.40	17.10	7.98	2.13	2.68	2.54	8.97	0.67	0.63	0.26	8.08	100.44	869.	30.	11.
VA00731	335.20	335.50	71.90	13.30	3.22	1.07	2.23	1.94	1.82	0.22	0.06	0.08	3.85	99.69	1060.	36.	5.
VA00732	337.30	337.70	70.40	14,40	2.50	1.50	2.17	2.18	2.36	0.24	0.10	0.08	3.85	99.78	1110.	44.	5.

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Page No. 2

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE	FROM	то	15102	IAL203	ZCAD	ZHGO	ZNA20	XK20	XFE203	XT 102	ZP205	ZMNO	ZLOI	SUM	BA	AI	NACA
	9 90	21 20	75 90	14 00	- <u> </u>	A (7			1 02					00.15	1540		
UA01140	22.00	24 00	69 20	14.00	0.22	1 21	2.20	3.4/	1.03	V-17			1.//	97.13	1.570	57	4.
VH01140	22.00	29.00	50.40	10.70	0.34	1.01	3.02	3.04	3.36	0.27			4.01	77.70	10/0.		3.
VA01141	24.60	30.00	38.40	17.70	1.28	2.20	3.84	2.72	8.43	0.81			3.62	99.00	1050.	49.	э.
VA01142	30.20	51.00	44.00	14.80	8.49	6.31	1.72	2.34	10.50	0.72			9.77	98.65	1100.	46.	10.
VA01143	53.00	63.00	53.60	17.30	5.18	2.29	3.06	2.97	8.76	0.76			5.23	99.15	864.	39.	8.
VA01144	64.00	81.60	72.60	12.80	3.46	0.54	2.82	2.47	1.57	0.18			3.70	100.14	916.	32.	6.
VA01145	84.00	94.00	72.30	12.90	2.72	0.79	3.10	2.35	1.74	0.18			3.47	99.55	920.	35.	6.
VA01146	94.00	113.00	71.90	13.50	2.40	0.82	2.57	2.90	1.98	0.18			3.62	99.87	1140.	43.	5.
VA01147	114.00	130.00	66.60	13.90	3.64	1.34	2.68	2.97	2.86	0.25			5.16	99.40	1040.	41.	6.
VA01148	130.00	148.00	65.90	14.30	3.79	1.40	3.11	2.72	3.34	0.30			4.93	99 . 79	1100.	37.	7.
VA01149	149.00	168.00	51.00	17.30	6.55	2.85	2.87	1.55	8.68	0.81			7.54	99.15	606.	32.	9.
VA01154	162.00	290.00	54.90	16.80	5.34	2.66	3.55	1.85	7.71	0.95			5.39	99.15	771.	34.	9.
VA01150	168.00	198.00	52.70	17.10	6.41	2.26	2.65	1.82	8.36	0.86			7.16	99.32	670.	31.	9.
VA01151	198.00	228.00	53.00	16.70	5.79	2.51	2.66	1.82	8.73	0.94			6.62	98.77	639.	34.	8.
VA01152	228.00	248.00	50.70	17.40	6.40	2.96	2.58	1.84	8.78	0.83			7.62	99.11	827.	35.	9.
VA01153	248.00	262.00	52.80	18.70	5.25	2.37	2.60	2.21	7.86	0.86			6.16	98.81	1260.	37.	8.
VA01155	290.00	320.00	61.20	15.50	4.64	2.10	2.67	2.03	5.15	0.46			5.70	99.45	1080.	36.	7.
VA01156	320.00	340.00	62.80	15.60	4.08	1.77	2.23	2.39	5.00	0.40			4.93	99.20	1090.	40.	6.

Hole No. CH88-59 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (pp#)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE
VA01999	32.00	33.00	910.0	89.0	230.0	<0.5	14.0	22.0	29.0	34.0	46.0	<1.0	4.0	850.0	28.	2.	6.
VA02000	33.00	34.00	2800.0	72.0	210.0	<0.5	22.0	20.0	32.0	28.0	38.0	<1.0	5.0	590.0	26.	2.	6.
VA02001	34.00	35.00	1400.0	63.0	120.0	<0.5	10.0	27.0	32.0	8.0	38.0	<1.0	6.0	1000.0	34.	2.	8.
VA02002	46.00	47.00	730.0	61.0	120.0	<0.5	<5.0	28.0	31.0	7.0	46.0	<1.0	6.0	1100.0	34.	2.	8.
VA02003	47.00	48.00	1600.0	58.0	135.0	<0.5	34.0	20.0	24.0	9.0	30.0	<1.0	7.0	1000.0	30.	2.	6.
VA02004	48.00	49.00	1800.0	71.0	115.0	<0.5	<5.0	26.0	25.0	<5.0	56.0	<1.0	6.0	1000.0	38.	2.	7.
VA02005	108.00	109.00	1100.0	7.0	30.0	<0.5	<5.0	2.0	5.0	<5.0	28.0	<1.0	4.0	235.0	19.	2.	1.
VA02006	111.00	112.00	840.0	7.0	15.0	<0.5	<5.0	2.0	4.0	12.0	<5.0	<1.0	2.0	250.0	32.	2.	1.
VA02007	112.00	113.10	970.0	4.0	15.0	<0.5	<5.0	2.0	4.0	5.0	<5.0	<1.0	2.0	330.0	21.	2.	1.
VA02008	168.00	169.00	960.0	7.0	90.0	<0.5	<5.0	7.0	6.0	<5.0	<5.0	<1.0	2.0	790.0	7.	2.	з.
VA02009	169.00	170.00	710.0	163.0	80.0	<0.5	<5.0	11.0	7.0	5.0	<5.0	<1.0	2.0	900.0	67.	1.	3.
VA02010	170.00	171.00	620.0	15.0	75.0	<0.5	<5.0	10.0	6.0	<5.0	<5.0	<1.0	3.0	950.0	17.	1.	з.
VA02011	269.50	270.40	300.0	28.0	170.0	<0.5	<5.0	21.0	44.0	<5.0	<5.0	<1.0	3.0	950.0	14.	1.	4.
VA02012	270.40	270.90	620.0	28000.0	130.0	22.9	617.1	17.0	15.0	8.0	<5.0	3.0	2.0	540.0	100.	2.	5.
VA02013	270.90	271.80	700.0	161.0	100.0	<0.5	<5.0	13.0	8.0	<5.0	<5.0	<1.0	2.0	480.0	62.	- 1.	4.

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Summary Log: DDH CH88-60 Location: 50+00 W, 10+38 N; Holyoak 3 Claim Azimuth: 210, Dip: -50 Hole Completed: May 27, 1988 Core logged by: J. Pattison

0.0 - 20.7	Casing
20.7 - 23.0	Gabbro
23.0 - 41.4	Weakly chloritized felsic tuff
41.4 - 42.4	Felsic to intermediate tuffaceous sediments
42.4 - 59.2	Weakly chloritized felsic tuff
59.2 - 78.2	Weakly chloritized felsic tuff
78.2 - 93.9	Chloritic felsic tuff and intercalated argillaceous sediments
93.9 - 233.5	Chloritic felsic quartz eye tuff Includes a 12.0 m interval with 5 % disseminated and
	and possibly stringer pyrite. A 0.5 m interval contains 5 % very pale yellow sphalerite (?)

EOH @ 233.5 m

PROPERTY: Chemainus JV		FALCONBRIDGE LIMI DIAMOND DRILL LO	LTED DG			HOLE No CH88-60	: Page Number 1	er		
Hole Location: 50+00' W 10+3 NTS: 92B13 UTM: Azimuth: 210 Elevation: Dip: -50 Length:	8 N 909 m 233.5 m				Cla Sec Log	im No. Holyoak 3 tion No.: 39+00 E ged By: J. Pattison				
Started: 24-May-88 Completed: 27-May-88 Purpose: Test IP anomalies		סזת	TESTS		Dri Ass Cor	lling Co.: Burwash ayed By: Bondar-Cle e Size: NQ	Enterpríses gg & XRAL			
	Length	Azi- muth Dip	Length	Azi- muth	Dip					
	30.80 122.20	210.0 -50.0 210.0 -45.5	232.00	210.0	-45.0					
From To (m) (m)	DESCRIPTIO	N	Sam	ple From b. (m)	n To (m)	Width Total (m) Sulphides	Cu Pb (ppm) (ppm)	Zn Àg (ppm) (ppm)	Au (ppb)	Ba (ppm

.0 20.7 OVERBURDEN

20.7 23.0 MAFIC INTRUSIVE

Dark green, fine-grained, massive gabbro. Carbonate filled gashes are common and carbonate is completely weathered away in many places. Weak fracture controlled hematization. Fault at 30-40 degrees to core axis at the lower contact.

STRUCTURE:. 21.8-23.0 M FAULT ZONE at 30-40 degrees to core axis. 0.4 m of lost core.

23.0 41.4 WEAKLY CHLORITIC FELSIC TUFF

Up to 40 % light grey to green-grey felsic lapilli in a fine-grained, moderately sericitic and weakly to moderately chloritic, well foliated, light green-grey felsic matrix with up to 10 % (1mm feldspar crystals. Lapilli are relatively well defined above 26.0 m. Below 26.0 m the rock has a mottled, vaguely fragmental appearance. Bands and patches of light brown sericite or biotite occur throughout and give the rock a mottled appearance. Lower contact is a bedding contact at 30 degrees to core axis.

STRUCTURE:.

Foliation is wavey throughout. At 26.3 m bedding is at 40 degrees to core axis. At 28.0 m foliation is at 32 degrees to core axis. 28.5-28.6 M fault gouge at 40-50 degrees to core axis.

VA02847	23.0	41.4	18.4	n/a	<10	n/a	25	n/a	n/a	1740
VA03958	35.0	36.0	1.0	1	6	8	90	<1	< 5	1300
VA03959	36.0	36.5	.5	2	39	50	470	1	38	1400
VA03960	36.5	37.5	1.0	1	19	28	370	1>	8	1100
VA03961	37.5	38.5	1.0	2	7	<5	72	<1	< 5	1100
VA03962	38.5	39.5	1.0	2	6	6	64	<1	< 5	1100
VA03963	39.5	40.5	1.0	2	4	5	55	<1	` < 5	1200
VA03964	40.5	41.4	.9	0	14	5	50	<1	. <5	1200

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

No

From To (m) (m) -----DESCRIPTION------

Sample From Τo Width Total Cu Pb Zn Ag (m) (m) Sulphides (ppm) (mqq) (mqq) (mqq) (mqq) (m)

At 33.0 m foliation is at 25-30 degrees to core axis. At 35.8 m foliation is at 18 degrees to core axis. At 39.0 m foliation is at 28 degrees to core axis. At 40.5 m 3 mm fault gouge at 55 degrees to core axis.

ALTERATION: .

- 23.0 24.0 MODERATE PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.
- 24.0 24.1 WEAK PERVASIVE CHLORITIZATION . WEAK FRACTURE CONTROLLED CARBONATIZATION to MODERATE FRACTURE CONTROLLED CARBONATIZATION and MODERATE PERVASIVE SERICITIZATION. Light brown sericite bands 2-5 mm wide parallel to foliation are common.

26.2 26.5 Finely bedded interval. Beds are 2-4 mm thick and are at 40 degrees to core axis.

SHLPHIDES:

36.5-41.4 m 1-2% disseminated pyrite.

36.1 36.3 Quartz flooded zone with 5 % pyrite.

41.4 42.4 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS

Well bedded intermediate to felsic cherty sediments over the first 0.5 m. Beds are 2-5 mm thick and are parallel to foliation at 38 degrees to core axis. A tight minor fold occurs at 41.5 m and the fold axis is nearly parallel to the core axis.

Dark green moderately carbonatized mafic tuffaceous sediments or tuffs occur below 42.0 m. Lower contact is a bedding contact at 30 degrees to core axis.

42.4 59.2 CHLORITIC FELSIC QUARTZ EYE LAPILLI TUFF

10-50% Light grey, fine-grained sericitic, lapilli-sized felsic fragments, stretched parallel to foliation in a dark green chloritic felsic (?) matrix gives the rock a streaky appearance. 3-6% grey 2 to 4 mm quartz eyes. In most places quartz eyes have a highly fractured and crushed appearance. Lower contact is parallel to foliation at 30 degrees to core axis.

STRUCTURE: .

Foliation is wavey throughout. At 44.5 m foliation is at 40 degrees to core axis. At 47.5 m foliation is at 35 degrees to core axis. At 49.1 m foliation is at 24 degrees to core axis. At 50.6 m bedding is at 28 degrees to core axis. At 54.1 m foliation is at 32 degrees to core axis. At 57.4 m foliation is at 20 degrees to core axis.

VA02848 42	.4 59.2	16.8	n/a	33	n/a	12	n/a	n/a	1200	
VA03965 50	.0 51.0	1.0	2	21	7	48	<1	< 5	1000	
VA03966 51	.0 52.0	1.0	2	30	(5	58	<1	. (5	750	
VA03967 56	.0 57.0	1.0	1	22	11	95	(1	<5	1300	
VA03968 57	.0 58.0	1.0	5	26	16	380	<1	14	1300	
VAD3969 58	0 60 7	1 1 2	. 1	37	8	90	(1	5	790	

HOLE No: Page Number CH88-60 2

Au

Ba

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-60 3

From To -----DESCRIPTION------(m) (m)

Sample From To Width Total Cu РЪ Zn Au Ba Ad (m) No (m) Sulphides (ppm) (m) (ppm) (ppm) (ppm) (ppb) (ppm)

At 59.0 m 3 mm fault gouge at 30 degrees to core axis.

ALTERATION: .

- 41.4 59.2 MODERATE PERVASIVE CHLORITIZATION , MODERATE PERVASIVE SERICITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION. Chlorite bands 1-5 mm thick, parallel to foliation occur throughout the rock.
- 50.1 50.3 Chlorite bands parallel to foliation, up to 5.0 cm wide.
- 50.6 888.8 Fine bedded felsic ash tuff over 3.0 cm. A 1.0 cm bedding of semi-massive pyrite occurs in the centre and FINES UP HOLE. Bedding is at 28 degrees to core axis.

SULPHIDES:.

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50.0-52.0 m 1-2% disseminated pyrite. 57.0-58.0 m 5 % pyrite, disseminated and in semi-massive bands up to 1.0 cm wide.

- 52.8 53.6 Local 2. Moderately carbonatized. Upper contact is at 46 degrees to core axis. Broken core at the lower contact.
- 56.9 57.0 Two 2.0 cm bands of carbonatized chlorite schist parallel to foliation.
- 57.0 58.0 Rock is more sericitic and less chloritic but still has a mottled appearance. 5 % pyrite in quartz-chlorite altered bands parallel to foliation.
- 58.4 58.7 Local 2. MODERATE FRACTURE CONTROLLED CARBONATIZATION. Upper contact is at 30 degrees to core axis and the lower contact is at 15 degrees to core axis. Trace disseminated pyrite.

59.2	78.2 WEAKLY CHLORITIC FELSIC TUFF											
	Weakly chloritic (much less than unit above) ash to	VA02849	59.2	78.2	19.0	n/a	30	n/a	60	n/a	n/a	1310
	lapilli tuff. Rock has a steaky, mottled, fragmental	VA03970	59.2	60.0	. 8	2	. 8	5	45	<1	< 5	1400
	appearance. Occasional white, strongly sericitic band	VA03971	60.0	61.0	1.0	2	8	5	70	<1	. 7	1300
	2-20 cm wide parallel to foliation. Locally up to 20 % <1	VA03972	61.0	62.0	1.0	2	12	5	120	<1	7	1500
	mm feldspar crystals	VA03973	62.0	63.0	1.0	2	43	5	124	<1	11	1500
	STRUCTURE: .	VA03974	63.0	64.0	1.0	2	44	6	300	1	16	1200
	At 64.1 m foliation is at 28 degrees to core axis.	VA03975	64.0	65.0	1.0	0	21	9	100	(1	. 9	1100
	At 72.7 m bedding is at 45 degrees to core axis.	VA03976	65.0	66.0	1.0	2	9	7	80	<1	<5	1100
		VA03977	66.0	67.0	1.0	2	6	5	44	<1	<5	920
	ALTERATION:	VA03978	67.0	68.0	1.0	2	- 4	<5	52	<1	< 5	1100

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-60 DIAMOND DRILL LOG From To Width. Sample From To Total Рb Ċu Zn λq λu Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm) (ppm) 59.2 78.2 MODERATE PERVASIVE SERICITIZATION to STRONG VA03979 68.0 69.0 1.0 2 6 6 50 <1 <5 1200 PERVASIVE SERICITIZATION, WEAK PERVASIVE VA03980 69.0 70.0 1.0 2 5 5 65 <1 (5 1200 CHLORITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION. Streaky very pale brown sericite or biotite throughout. 71.0-78.2 M very soft orange-brown micaceous mineral occurs along foliation planes and in veins up to 3 mm wide SULPHIDES:. 59.2-70.0 m 1-2% disseminated pyrite. 71.7 71.8 Grey sericitic wacke bed at 58 degrees to core axis. Several black mud clasts < 5 mm long. 73.1 73.6 Broken up, contorted beds of grey to black argillaceous sediments intruded by quartz-carbonate veins and pods. 5 % light orange-brown micaceous alteration mineral. 78.2 93.9 CHLORITIC FELSIC TUFF AND INTERCALATED ARGILLACEOUS SEDIMENTS Light grey to green-grey felsic tuffs (with a variable VA02850 78.2 93.9 15.7 29 20 n/a 3590 n/a n/a n/a sedimentary component) are intercalated with beds of grey VA03981 84.9 85.9 1.0 102 75 <1 14 1800 4 9 to black argillaceous wackes and argillites 1-10 mm VA03982 85.9 56 7 1700 86.9 1.0 4 60 8 <1 thick. The sediment beds constitute 5-60 % of the unit. VA03983 86.9 88.0 1.1 4 5 .5 25 <1 (5 6500 The felsic tuff varies from a well bedded ash tuff above 22 <1 <5 5800 VA03984 88.0 88.5 7 . 5 2 5 87.0 m to a coarse ash to lapilli tuff below 87.0 m. VA03985 88.5 89.5 20 7 40 <1 7 4200 1.0 2 Above 87.0 m beds are 2-5 mm thick on average. The felsic VA03986 89.5 28 <1 (5 4200 90.5 1.0 2 4 6 <5 3500 tuff contains up to 15 % (1 mm feldspar crystals. Lower VA03987 90.5 91.5 1.0 2 4 <5 29 (1 contact is a bedding contact at 25 degrees to core axis. <1 12 3300 VA03988 91.5 92.6 1.1 2 -51 7 34 VA03989 92.6 93.9 1.3 2 70 15 84 (1 24 1800 STRUCTURE: . Foliation is well developed throughout. At 79.0 m bedding is parallel to foliation at 50 degrees to core axis. At 88.8 m foliation is at 45 degrees to core axis. At 92.6 m bedding is at 40 degrees to core axis. At 92.6 m 1.5 cm fault gouge at 35-40 degrees to core axis. ALTERATION:. 78.2 93.9 MODERATE PERVASIVE SERICITIZATION. 88.5-89.0 m 2 bands of soft, orange-brown alteration mineral 3 and 10 cm thick parallel to foliation. SULPHIDES:. 78.2-85.9 M trace to 1 % disseminated pyrite. 85.9-88.5 m 4 % disseminated pyrite.

88.5-92.6 m 1-2% disseminated pyrite. 92.6-93.9 m 6 % disseminated pyrite.
FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

VA08028 148.0 149.0

1.0

To

(m)

Width

(m)

Total

Sulphides (ppm)

From То (m) (m)

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-----DESCRIPTION-----

85.9 86.9 Broken up pyritic, black argillite beds constitute 30 % of the core. 4 % pyrite overall.

92.6 93.9 Greywacke (80%) and black argillite (20%). Greywacke is massive and argillite occurs as rip-up clasts and finely bedded to laminated deposits < 5.0 cm thick. 6 % disseminated pyrite

93.9 233.5 CHLORITIC FELSIC OUARTZ EYE TUFF

Light grey sericitic felsic tuff (coarse ash to lapilli) with a slight green tint in places due to very weak chlorite alteration with 2-8%, 2 to 5 mm clear guartz eyes and locally up to 15 % (2 mm feldspar crystals. Moderate patchy, spotty and streaky chlorite occurs below 110.6 m. Patchy chlorite alteration gives rock a fragmental appearance. Quartz eyes increase in abundance (5-10%) and size (3-6 mm) below 120.0 m.

STRUCTURE: .

Foliation is wavey throughout and locally strongly kinked. At 96.7 foliation is at 35 degrees to core axis. 99.8-100.4 M slip runs parallel to the core axis. 101.7-102.3 M FAULT ZONE at 17-30 degrees to core axis. 102.7-103.0 M fault gouge at 15 degrees to core axis. 103.3-105.3 M FAULT ZONE. Blocky, highly fractured core. Not possible to measure orientation but appears to be at (30 degrees to core axis. 108.7-109.4 M fault zone. Rock is crushed and there are several fault gouges at 0-50 c/a at 116.1 m foliation is at 40 degrees to core axis. At 114.5 slip at 19 degrees to core axis. 117.1-119.2 M FAULT ZONE at 25 degrees to core axis. Fault gouge and crushed rock over the entire interval 0.9 m of lost core At 120.2 m foliation is at 35 degrees to core axis. At 124.6 m foliation is at 34 degrees to core axis. 125.1-126.2 M FAULT ZONE at 30 degrees to core axis. 0.3 m of lost core. 126.6-126.8 Fault gouge at 25 degrees to core axis. At 135.0 m foliation is at 30 degrees to core axis. At 136.0 m 3.0 cm fault gouge at 42 degrees to core axis. 136.8-136.9 M fault gouge at 30 degrees to core axis. 137.5-138.0 M FAULT ZONE at 30 degrees to core axis. At 139.0 m minor fault. Not possible to measure orientation 139.5-140.0 M slip runs parallel to the core axis. 140.1-140.3 M fault gouge at 20 degrees to core axis. At 141.4 m foliation is at 20 degrees to core axis. At 141.8 m 5.0 cm fault gouge at 26 degrees to core axis. 142.0-143.3 M FAULT ZONE at 35 degrees to core axis. 0.5 m of lost core.

VA02851 93.9 123.0 29.1 <10 n/a 1610 n/a n/a 11 n/a VA03990 93.9 94.9 1.0 q 44 <1 6 1300 2 8 VA03991 108.7 109.7 1.0 1 6 ٢5 72 <1 <5 2000 VA03992 109.7 111.0 <5 1300 1.3 2 6 (5 26 <1 VA01991 111.0 112.0 42 < 5 1 0 2 9 5 <1 1100 VA03994 112.0 113.0 2 70 <1 <5 1200 1.0 16 <5 VA03995 113.0 114.0 1.0 2 7 <5 36 <1 5 1400 VA03996 114.0 115.0 1.0 2 12 (5 53 <1 ٢5 1300 VA03997 115.0 116.0 1.0 2 14 (5 30 <1 <5 1200 VA03998 116.0 117.0 25 <5 71 14 1500 1.0 2 <1 VA03999 117.0 119.2 2.2 2 7 <5 13 (1 9 1500 ٢5 VA04000 119.2 120.0 . 8 2 7 ٢5 16 (1 900 VA08001 120.0 121.0 1.0 2 <5 24 <1 <5 1300 6 VA08002 121.0 122.0 1.0 2 4 <5 12 <1 (5 1400 VA08003 122.0 123.0 ٢5 25 <1 ٢5 1200 1 0 2 3 VA02852 123.0 153.0 30.0 n/a <10 n/a <10 n/a n/a 1690 VA08004 123.0 124.0 1.0 2 2 <5 32 <1 <5 1200 VA08005 124.0 125.0 1.0 33 <1 6 1300 2 6 5 VA08006 125.0 126.2 1.2 2 3 ٢5 34 <1 <5 1200 VA08007 126.2 127.0 1300 <5 27 <1 (5 . 8 2 4 VA08008 127.0 128.0 <5 32 <1 ٢5 1600 1.0 2 6 VA08009 128.0 129.0 1.0 <5 42 <1 (5 1500 VA08010 129.0 130.0 1.0 <5 36 (1 < 5 1700 2 4 VA08011 130.0 131.0 ٢5 20 1600 1.0 2 5 <1 13 VA08012 131.0 132.0 1.0 2 15 <5 20 <1 12 1600 VA08013 132.0 133.0 1.0 4 16 <5 17 1 11 1800 VA08014 133.0 134.0 1.0 n/a 260 <5 36 <1 18 1600 VA08015 134.0 135.0 1.0 5 9 ٢5 24 (1 25 1800 VA08016 135.0 136.0 37 2100 1.0 5 10 ٢5 17 1 VA08017 136.0 137.0 1.0 30 <5 33 (1 15 2300 3 VA08018 137.0 138.0 1 0 19 <5 10 <1 10 1900 3 VA08019 138.0 139.0 1.0 14 ٢5 46 (1 10 1500 3 1400 VA08020 139.0 140.0 12 <5 25 <5 1.0 3 <1 VA08021 140.0 141.0 1.0 15 <5 34 (1 ٢5 1300 3 ٢5 VA08022 141.0 142.0 1.0 3 8 ٢5 44 (1 1300 VA08023 142.0 144.0 2.0 8 <5 40 <1 <5 1300 - 3 VA08024 144.0 145.0 1.0 11 <5 35 (1 (5 1300 VA08025 145.0 146.0 ٢5 16 44 1100 1.0 9 <1 VA08026 146.0 147.0 <5 20 144 950 1.0 12 1 VA08027 147.0 148.0 1.0 15 < 5 64 1 78 860 4

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30 1000

HOLE No: Page Number CH88-60 5

Cu

Ph

2n

(ppm) (ppm)

Àσ

(ppm)

An

Ba

(ppb) (ppm)

PRO	OPERT	Y: Chemainus JV					HOLE N	o: P	age Numl	ber				
		DIAMOND DRILL LOG					CH88-60		6					
From	To (m)		Sample	From	To	Width	Total	Cu	Pb	Zn (mmm)	Ag	Au	Ba	
()		Discutition	NO.	(111)	(111)	(in <i>)</i> .	Sarburdez	(ppm)	(ppm)	(ppm)	(ppm)	(pp))) (ppm)
		At 144.0 m 5.0 cm fault gouge at 30 degrees to core axis.	VA08029	149.0	150.0	1.0	4	14	5	108	1	41	1100	
		At 146.0 m foliation is at 40 degrees to core axis.	VA08030	150.0	151.0	1.0	4	10	<5	194	<1	23	940	
		148.4-149.149.4 M FAULT ZONE at 25 degrees to core axis.	VA08031	151.0	152.0	1.0	2	10	<5	43	<1	24	1300	
		U.6 m of lost core.	VA08032	152.0	153.0	1.0	2	24	6	200	1 (1	15	1100	
		At 152.9 m foliation is at 14 degrees to core axis.	VA08033	153.0	154.0	1.0	,2	8	<5 ,	34	<1	· 7	1300	
		At 164.5 m foliation is at 14 degrees to core axis.	VA02853	153.0	183.0	30.0	n/a	(10	n/a	937	n/a	n/a	1320	
		185 2~185 5 M slip at 13 degrees to core avis	VA08034	165 0	155.0	1.0	6	12		30		(5)	1300	
		At 185.7 m bedding is at 38 degrees to core axis	VA08035	156 0	157 0	1 0	. 2	10	6	22		2	1400	
		At 191.9 m foliation is at 45 degrees to core axis	VA08037	157 0	158 0.	1 0	2	q	. (5	30	(1)	16	1500	
		192.2-192.7 m 3 mm fault gouge at a very low angle to the	VA08038	158.0	159.0	1.0	2	7	5	50	<1	19	1600	
		core axis.	VA08039	159.0	160.0	1.0	2	6	(5	39	(1	(5)	1600	
		At 199.2 m foliation is at 30 degrees to core axis.	VA08040	160.0	161.0	1.0	2	14	<5	45	(1	8	1500	
		214.5-215.2 M fault zone at 10 degrees to core axis.	VA08041	161.0	162.0	1.0	2 .	7	<5	32	(1	<5	1400	
		215.5-217.8 M blocky, highly fractured core. 0.2 m of lost	VA08042	162.0	163.0	1.0	2	12	<5	32	(1	<5	1500	
		core.	VA08043	163.0	164.0	1.0	2	10	5	34	(1	<5	1300	
		At 219.5 m foliation is at 30 degrees to core axis.	VA08044	164.0	165.0	1.0	2	42	5	50	<1	5	1500	
		227.0-228.0 m 3 mm fault gouge runs parallel to the core	VA08045	165.0	166.0	1.0	2	10	5	30	<1	9	1200	
		axis.	VA08046	166.0	167.0	1.0	2	26	< 5	95	<1	7	1200	
		At 231.3 m foliation is at 30 degrees to core axis.	VA08047	167.0	168.0	1.0	3	18	(5)	50	<1	13	1300	
		230.4-233.5 m 0.2 m of lost core for no obvious reason.	VA08048	168.0	169.0	1.0	3	13	< 5	20	<1	7	1300	
			VA08049	169.0	170.0	1.0	3	12	< 5	25	<1	23	1200	
		ALTERATION:.	VA08050	170.0	171.0	1.0	3	16	<5	42	<1	15	1300	
		Weak streaky, pale orange-brown biotite or sericite	VA08051	171.0	172.0	1.0	3	19	<5	1200	(1	6	1300	
		alteration throughout.	VA08052	172.0	173.0	1.0	3	30	6	54	<1	6	1300	
		93.9 98.4 MODERATE PERVASIVE SERICITIZATION to STRONG	VA08053	173.0	174.0	1.0	2	10	< 5	40	<1	< 5	1100	
		PERVASIVE SERICITIZATION.	VA08054	174.0	175.0	1.0	2	7	< 5	48	<1	<5	1000	
		98.4 105.3 STRONG FRACTURE CONTROLLED SILICIFICATION.	VA08055	175.0	176.0	1.0	2	4	<5	60	<1	(5	970	
		105.3 110.6 MODERATE PERVASIVE SERICITIZATION and locally	VA08056	176.0	177.0	1.0	2	15	. 5	45	(1)	< 5	1000	
		moderate pale, orange-brown thermal biotite	VA08057	177.0	178.0	1.0	2	10	<5	39	<1	۲5	1200	
		(?) alteration.	VA08058	178.0	179.0	1.0	2	12	< 5	36	<1	<5	1100	
		110.6 131.0 MODERATE SPOTTY CHLORITIZATION and MODERATE	VA08059	179.0	180.0	1.0	2	10	<5	35	<1	<5	1000	
		PERVASIVE SERICITIZATION to STRONG PERVASIVE	VA08060	180.0	181.0	1.0	. 2	10	< 5	46	(1	<5	1100	
		SERICITIZATION.	VA08061	181.0	182.0	1.0	2	12	<5	140	(1	11	1000	
		151.0 150.5 NUDERALE PERVASIVE SERICITIZATION and WEAK	VA08052	182.0	183.0	1.0	2	16	(5	50	0	(5	1200	
		sporte chokilization. Locally weak pale	VAUSU63	183.0	184.0	10.0	. 2	10	(5	34	9	10	1200	
		LINEIMAI DIVLICE.	VA02854	183.0	195.3	12.3	n/a	10	n/a	59	n/a	n/a	1030	
÷		DEBUNCTUE SEDICITIZATION	VAU8064	105 0	185.0	1.0	4	10	. (5	40	. (1	20	1200	
		145 0 155 0 WODEDITE DEDUNCTIVE CEDICITITIANTON and HEAV	VAUSU65	105.0	100.0	1.0	4	380	(5)	90	1	49.	1000	
		SPOTTY CULORITIZATION	VAUSUGD	197 0	100 0	1.0	2	14	(5	124	<u>(1</u>)	15	1100	
		155 0 195 0 WODEDITE SDOTTY CULODITIZATION and WODEDITE	VA00007	107.0	100.0	. 1 0	2	40	с , г	70	1	10	1100	
		DERVISIVE SEDICITIZATION AND NODERALE	V100000	1.00.0	100.0	1.0	2	0	()	39	(1	10	1000	
		185.0 187.5 STRONG PERVASIVE CHIORITIZATION and MODERATE	V109009	190 0	191 0	1 0	2	o F	() /E	444 50	21 2	15	970	
		PERVASIVE SERICITIZATION and HODERALE	V108070	191 0	192.0	1.0	2	6	(D) (E)	33 70	(1	15	970	
		187.5 195.3 MODERATE SPOTTY CHLORITIZATION and MODERATE	VADROTO	192.0	193 0	1.0	2	р.	(5	110	21	(J) (5)	870	
		PERVASIVE SERICITIZATION.	VA08073	193.0	194.0	1.0	2	5	6	75	(1	(5	1000	
		195.3 197.9 STRONG PERVASIVE SERICITIZATION and WEAK	VA08074	194.0	195.3	1.3	2	17	5	170	ä	(5	930	
		SPOTTY CHLORITIZATION.	VA02855	195.3	225.0	29.7	n/a	(10	n/a	21	n/a	n/a	1270	
		197.9 233.5 MODERATE PERVASIVE SERICITIZATION and WEAK	VA08075	195.3	196.3	1.0	5	68	5	1750	(1	51	1100	
		SPOTTY CHLORITIZATION.	VA08076	196.3	197.9	1.6	5	8	(5	95	(1	15	1400	

From To (m)

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	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-60		7					
To		Sample	From	To	Width	Total	Cu	Pb	Zn	Ag	Au	Ba	
(10)	DESCRIPTION	NO.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(pp)	תקק) (כ	(נ
		VA08078	197.4	197.9	.5	13	260	6 3	20400	. 1	103	1200	
	SULPHIDES:.	VA08077	197.9	199.0	1.1	4	7	(5	84	(1	23	1400	·
	93.9-109.7 M trace to 1 % disseminated pyrite.	VA08079	199.0	200.0	1.0	4	14	6	210	(1	30	1300	
	109.7-132.0 m 2 % disseminated pyrite. Pyrite is often	VA08080	200.0	201.0	1.0	4	14	5	164	1	49	1100	
	associated with chloritic bands (stringers?).	VA08081	201.0	202.0	1.0	4	18	× 5	64	â	28	1300	
	132.0-134.0 m 3 % pyrite in 1-4 mm chloritic stringers	VA08082	202.0	203.0	1.0	4	11	(5	38	(1	79	1300	
	parallel to foliation and disseminated.	VA08083	203.0	204.0	1.0	4	26	6	40	(1		1400	
	134.0-136.0 m 6 % pyrite in 1-4 mm chloritic stringers	VA08084	204.0	205.0	1.0	4	46	6	38	2 1	27	1500	
	parallel to foliation and disseminated.	VA08085	205.0	206.0	1.0	4	10	5	32	(1	24	1200	
	136.0-145.0 m 3 % pyrite as above.	VA08086	206.0	207.0	1.0	4	16	5	95	(Î	18	1400	
	145.0-151.0 m 4 % pyrite in well defined dark grey	VA08087	207.0	208.0	1.0	4	15	5	67	(1	7	1200	
	siliceous bands 2-5 mm wide parallel to foliation.	VA08088	208.0	209.0	1.0	3	12	6	54	(1	8	1100	
	151.0-167.0 m 2 % disseminated pyrite.	VA08089	209.0	210.0	1.0	3	7	(5	47	1	7	1200	
	167.0-173.0 m 3 % disseminated pyrite.	VA08090	210.0	211.0	1.0	š	10	5	48	<1	5	1100	
	173.0-195.3 m 1-2% disseminated pyrite.	VA08091	211.0	212.0	1.0	3	7	6	36	(1	5	780	
	195.3-197.4 m 5 % pyrite in dark grey, siliceous 1-5 mm	VA08092	212.0	213.0	1.0	, ,		Š	36	(1	(5	970	
	bands (stringers?) parallel to foliation.	VA08093	213.0	214.0	1 0		5	(5	32	(1	25	1200	
	197.4-197.9 m 8 % pyrite and 5 % pale cream-brown mineral	VA08094	214.0	215.0	1.0		7	5	32	(1	15	1000	
	(sphalerite?).	VA08095	215.0	216 0	1 0	3	, 7	ŝ	52	1	/5	1800	
	197.9-208.0 m 4 % pyrite, disseminated and in 2-3mm bands	VA08096	216.0	217.0	1 0	. 3	18	ě	45	(1	. 5	420	
	parallel to foliation.	VA08097	217.0	218.0	1 0	3	6	Š	45		15	1000	
	208.0-233.5 m 2-3% disseminated pyrite.	V108098	218 0	219 0	1 0	3	7	ĸ.	45	1	ć	1100	
		V108099	219 0	220 0	1 0	3	16	5	40	21	5	1200	
	98.4 114.1 Quartz flooded zone. Irregular guartz veins and	V108100	220 0	221 0	1 0	3	10	6	40		 	1100	
	pods 1-70 cm in thick with variable amounts of	VN08101	221 0	222 0	1.0	3	10	6	42	1	14	1000	
	chlorite, carbonate and below 102.6 m. albite	V108102	222 0	223 0	1 0	. 3	7	· 6	34	11		1100	
	Interval is also moderately tectonized and is	V108103	222.0	224 0	1.0	2	ć	ŝ	20	~ ~	, E	1100	
	broken and blocky throughout.	VEORIOA	221.0	224.0	1.0	3	17	0	20	(1)	10	750	
	and stoowl ouroughout	V302856	225 0	223.0	1.0	, j	(10	· 0	230	1	14	1150	
	108 D 108 2 Carbonatized chloritic mafic tuff at 13-25	VA02050	225.0	233.5	1 0	11/4	(10	n/a	20	n/a	n/a	1150	
	degrees to core avis	VA00105	225.0	227 0	1.0	2	8	2	30	(1	. /	1000	
	acylecs to core axis.	VX00100	220.0	227.0	1.0	3	9	Ď	40	CI	. 8	1000	
	165 2 115 A Two hands of carbonatized matic tuff (ablarity	VAUBIU/	221.0	228.0	1.0	3	10	6	36	(1		950	
	echiet) 3 to 5 cm wide at 30-50 degrees to	VA06108	228.0	229.0	1.0	2	12	1	42	< <u>(</u> 1	(5	1200	
	schist, J to J cm wide at JO-JO degrees to	VA08109	229.0	230.0	1.0	3	8	< 5	28	· (1	(5	1200	
	CUTE AXIS.	VAUSI10	230.0	231.0	1.0	3	8	5	27	(1	12	1100	
	110.2.120.0 Quanta flooded game Quanta wains to the	VAUSIII	231.0	232.0	1.0	3	9	<5	32	(1	<5	1100	
	wide at 15 degrees to gere twistight to 15 cm	VAU8112	232.0	233.5	1.5	3	8	5	-30	(1	<5	1100	
	mide at is degrees to core axis with up to 5 % pyrite.												
	F W												

FALCONBRIDGE LIMITED

HOLE No: Page Number

- 148.0 148.2 Dark green, carbonatized chlorite schist (mafic tuff?) at 30-35 degrees to core axis.
- 150.0 150.2 Strongly carbonatized mafic tuff or dyke at 30 degrees to core axis.
- 152.3 150.6 Strongly carbonatized mafic tuff or dyke at 60 degrees to core axis.
- 165.5 888.8 Dark green chloritic mafic tuff or dyke at 30 degrees to core axis.

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		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-60	. ra	ige numb 8	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	2n (ppm)	Ag (ppm)	Àu B (ppb) (p	a pm)
	166.	0 166.2 Dark green, carbonatized mafic tuff or dyke at 20-25 degrees to core axis.											

HOLE No: Page Number

- 167.2 888.8 Light green, 4.0 cm wide chlorite-sericite band at 25-35 degrees to core axis.
- 187.0 187.1 Dark grey argillaceous sediments at 30 degrees to core axis.
- 204.3 204.6 Altered, carbonatized tuffaceous sediments at 60 degrees to core axis.
- 211.7 212.0 Barren guartz vein at 90 degrees to core axis.
- 224.1 224.6 Bleached quartz-carbonate flooded zone with 5 % pyrite.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	XCAO	ZHGO	ZNA20	XK20	XFE203	XT I02	XP205	ZHNO	ZLOI	SUM	BA	AI	NACA
	· · · · ·							······				********					
VA02407	27.60	28.00	62.80	13.50	5.68	2.00	0.79	2.18	4.51	0.37	0.14	0.20	7.77	99.94	1350.	39.	6.
VA02408	38,90	39.30	69.40	15.50	2.48	1.58	1.41	1.36	3.78	0.44	0.14	0.11	3.77	99.97	1050.	43.	4.
VA02409	46.10	46.50	70.30	13.60	3.82	1.36	1.03	2.71	2.80	0.28	0.07	0.09	4.39	100.45	833.	46.	5.
VA02410	54.60	55.00	71.00	14.00	2.78	1.69	0.54	2.50	2.93	0.28	0.07	0.06	3.93	99.78	1220.	56.	Э.
VA02411	65.20	65.50	70.50	15.50	1.92	1.64	0.88	1.84	3.65	0.42	0.14	0.11	3.47	100.07	1180.	55.	3.
VA02412	87.30	87.60	66.70	13.90	3.88	1.85	0.48	2.27	2.80	0.23	0.07	0.14	5.00	97.32	7430.	49.	4.
VA02413	96.00	96.30	72.50	13.20	2.89	1.55	0.32	2.09	2.97	0.26	0.07	0.14	4.16	100.15	1430.	53.	3.
VA02414	106.00	107.00	78.10	14.60	0.30	0.10	0.68	2.65	1.12	0.18	0.04	<0.01	2.47	100.25	1400.	74.	1.
VA02415	122.00	122.70	75.80	13.70	1.31	0.77	0.28	2.79	2.02	0.23	0.06	0.05	2.70	99.71	1340.	69.	2.
VA02416	134.30	134.60	78.00	11.50	1.26	0.80	0.14	2.70	1.67	0.17	0.04	0.06	2.70	99.04	2110.	71.	1.
VA02417	147.60	147.80	76.30	11.40	1.05	0.54	0.24	2.63	2.97	0.21	0.06	0.04	2.85	98.29	1180.	71.	1.
VA02418	162.00	162.40	71.00	13.60	2.78	1.62	0.47	2.33	2.60	0.26	0.07	0.10	4.08	98.91	1530.	55.	3.
VA02419	178.30	178.60	71.60	13.10	2.86	1.64	0.25	2.67	2.18	0.24	0.06	0.11	4.54	99.25	1130.	58.	3.
VA02420	198,50	198.90	74.50	12.20	1.67	1.08	0.19	2.76	2.80	0.23	0.06	0.10	3.08	98.67	1340.	67.	2.
VA02421	219.10	219.50	70.40	13.70	3.45	1.76	0.27	2.71	2.25	0.25	0.06	0.10	5.23	100.18	1120.	55.	4.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

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SAMPLE NUMBER	FROM	то	ZS 102	ZAL203	XCA0	ZNGO	ZNA20	XK20	2FE203	21102	ZP 205	ZHNO	ZLOI	SUM	BA	AI	NACA

VA02847	23.00	41.40	67.50	15.30	3.79	1.30	1.49	1.84	3.79	0.42			4.70	100.13	1740.	37.	5.
VA02848	42.40	59.20	71.20	14.80	2.13	1.31	0.93	2.62	2.88	0.30			3.47	99.64	1200.	56.	3.
VA02849	59.20	78.20	69.80	15.10	2.53	1.69	1.08	1.58	3.67	0.42			3.85	99.72	1310.	48.	4.
VA02850	78.20	93.90	63.60	14.90	4.41	2.19	0.58	2.17	3.91	0.36			5.54	97.66	3590.	47.	5.
VA02851	93.90	123.00	73.50	14.70	1.30	0.71	0.41	2.82	2.45	0.26			3.00	99.15	1610.	67.	2.
VA02852	123.00	153.00	74.80	13.70	1.50	0.98	0.22	2.81	2.70	0.27			3.08	100.16	1690.	68.	2.
VA02853	153.00	183.00	70.40	13.30	3.37	1.62	0.35	2.57	2.59	0.25			4.31	98.76	1320.	53.	4.
VA02854	183.00	195.30	69.40	14.20	3.25	2.02	0.25	2.51	3.01	0.29			5.00	99.93	1030.	56.	. 4.
VA02855	195.30	225.00	70.90	13,80	2.71	1.47	0.26	2.71	2.44	0.25			4.08	98.62	1270.	58.	3.
VA02856	225.00	233.50	74.90	13.10	1.85	0.87	0.18	2.85	1.92	0.23			3.23	99.13	1150.	65.	2.

Hole No. CH88-GO ALTERED SAMPLES

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Page No.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm.)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррж)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррм)	HN (ppm)	 CUZN	ETS	FE
0403958	35.00	36.00	1300 0	6.0	90.0	/0 5	/5 A	5 0		0.0			2.0	1050 0			
11002050	36.00	26 50	1400.0	20.0				3.0	0.0	5.0	(3.0	(1.0	3.0	1030.0	 · ·	1.	4.
1003959	36.00	30.00	1400.0	37.0	4/0.0	1.0	38.0	10.0	9.0	50.0	14.0	2.0	5.0	760.0	8.	2.	3.
VH03960	38.30	37.30	1100.0	.19.0	370.0	.<0.5	8.0	3.0	7.0	28.0	7.0	2.0	4.0	500.0	5.	1.	2.
VA03961	37.50	38.50	1100.0	7.0	72.0	<0.5	<5.0	5.0	6.0	<5.0	7.0	<1.0	3.0	910.0	9.	2.	2.
VA03962	38.50	39.50	1100.0	6.0	64.0	<0.5	<5.0	4.0	5.0	6.0	<5.0	<1.0	3.0	530.0	9.	2.	2.
VA03963	39.50	40.50	1200.0	4.0	55.0	<0.5	<5.0	4.0	7.0	5.0	<5.0	<1.0	4.0	630.0	7.	2.	2.
VA03964	40.50	41.40	1200.0	14.0	50.0	<0.5	<5.0	3.0	7.0	5.0	<5.0	<1.0	4.0	450.0	22.	1.	2.
VA03965	50,00	51.00	1000.0	21.0	48.0	<0.5	<5.0	9.0	10.0	7.0	<5.0	<1.0	4.0	570.0	30.	2.	2.
VA03966	51.00	52.00	750.0	30.0	58.0	<0.5	<5.0	13.0	68.0	<5.0	<5.0	<1.0	4.0	750.0	34.	2.	2.
VA03967	56.00	57.00	1300.0	22.0	95.0	<0.5	<5.0	12.0	27.0	11.0	<5.0	<1.0	4.0	500.0	19.	1.	2.
VA03968	57.00	58.00	1300.0	26.0	380.0	<0.5	14.0	18.0	19.0	16.0	13.0	4.0	4.0	90.0	6.	5.	2.
VA03969	58.00	59.20	790.0	37.0	90.0	<0.5	5.0	18.0	80.0	8.0	7.0	<1.0	4.0	1100.0	29.	1.	3.
VA03970	59.20	60.00	1400.0	8.0	45.0	<0.5	<5.0	7.0	14.0	5.0	<5.0	<1.0	4.0	210.0	15.	2.	2.
VA03971	60.00	61.00	1300.0	8.0	70.0	<0.5	7.0	7.0	14.0	5.0	<5.0	<1.0	5.0	295.0	10.	2.	2.
VA03972	61.00	62.00	1500.0	12.0	120.0	<0.5	7.0	5.0	12.0	5.0	<5.0	<1.0	3.0	310.0	9.	2.	2.
VA03973	62.00	63.00	1500.0	43.0	124.0	<0.5	11.0	3.0	6.0	5.0	8.0	<1.0	2.0	500.0	26.	2.	2.
VA03974	63.00	64.00	1200.0	44.0	300.0	0.5	16.0	5.0	6.0	6.0	8.0	2.0	3.0	920.0	13.	2.	2.
VA03975	64.00	65.00	1100.0	21.0	100.0	<0.5	9.0	5.0	6.0	9.0	10.0	<1.0	3.0	660.0	17.	2.	2.
VA03976	65.00	66.00	1100.0	9.0	80.0	<0.5	<5.0	4.0	5.0	7.0	5.0	<1.0	3.0	575.0	10.	2.	2.
VA03977	66.00	67.00	920.0	6.0	44.0	<0.5	<5.0	8.0	5.0	5.0	7.0	<1.0	3.0	580.0	12.	2.	2.
VA03978	67.00	68.00	1100.0	4.0	52.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	3.0	550.0	7.	2.	2.
VA03979	68.00	69.00	1200.0	6.0	50.0	<0.5	<5.0	5.0	6.0	6.0	11.0	<1.0	4.0	1000.0	11.	2.	2.
VA03980	69.00	70.00	1200.0	5.0	65.0	<0.5	<5.0	5.0	5.0	5.0	6.0	<1.0	3.0	550.0	7.	2.	2.

Hole No. CH88-60

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE																	
NUMBER	FROM	TO	ВА (ррв.)	CU (ppm)	ZN (ppm.)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррв)	AS (ppm)	CD (ppm)	МО (ррж)	HN (ppm)	CUZN	* ETS	FE
VA03981	84.90	85.90	1800.0	102.0	75.0	<0.5	14.0	12.0	16.0	9.0	18.0	<1.0	3.0	900.0	58.	4.	2.
VA03982	85.90	86.90	1700.0	60.0	56.0	<0.5	7.0	9.0	17.0	8.0	15.0	<1.0	4.0	1500.0	52.	4.	3.
VA03983	86.90	88.00	6500.0	5.0	25.0	<0.5	<5.0	3.0	7.0	5.0	6.0	2.0	5.0	1000.0	17.	4.	2.
VA03984	88.00	88.50	5800.0	5.0	22.0	<0.5	<5.0	2.0	6.0	7.0	<5.0	<1.0	3.0	900.0	19.	2.	2.
VA03985	88.50	89.50	4200.0	20.0	40.0	<0.5	7.0	9.0	19.0	7.0	18.0	<1.0	3.0	1000.0	33.	2.	2.
VA03986	89.50	90,50	4200.0	4.0	28.0	<0.5	<5.0	4.0	5.0	6.0	<5.0	<1.0	2.0	680.0	13.	2.	2.
VA03987	90.50	91.50	3500.0	4.0	29.0	<0.5	<5.0	2.0	4.0	<5.0	<5.0	<1.0	2.0	520.0	12.	2.	1.
VA03988	91.50	92.60	3300.0	5.0	34.0	<0.5	12.0	2.0	5.0	7.0	12.0	<1.0	3.0	700.0	13.	2.	2.
VA03989	92.60	93.90	1800.0	70.0	84.0	<0.5	24.0	9.0	21.0	15.0	38.0	<1.0	4.0	1800.0	45.	2.	3.
VA03990	93.90	94.90	1300.0	8.0	44.0	<0.5	6.0	3.0	5.0	9.0	15.0	<1.0	2.0	1000.0	15.	2.	
VA03991	108.70	109.70	2000.0	6.0	72.0	<0.5	<5.0	5.0	38.0	<5.0	<5.0	<1.0	3.0	570.0	8.	1.	2.
VA03992	109.70	111.00	1300.0	6.0	26.0	<0.5	<5.0	<1.0	4.0	<5.0	6.0	<1.0	3.0	50.0	19.	2.	1.
VA03993	111.00	112.00	1100.0	9.0	42.0	<0.5	<5.0	2.0	24.0	5.0	5.0	<1.0	3.0	265.0	18.	2.	1.
VA03994	112.00	113.00	1200.0	16.0	70.0	<0.5	<5.0	5.0	35.0	<5.0	8.0	<1.0	4.0	580.0	19.	2.	2.
VA03995	113.00	114.00	1400.0	7.0	36.0	<0.5	5.0	5.0	7.0	<5.0	<5.0	<1.0	3.0	400.0	16.	2.	2.
VA03996	114.00	115.00	1300.0	12.0	53.0	<0.5	<5.0	3.0	7.0	<5.0	12.0	<1.0	3.0	550.0	18.	2.	1.
VA03997	115.00	116.00	1200.0	14.0	30.0	<0.5	<5.0	3.0	6.0	<5.0	<5.0	<1.0	3.0	480.0	32.	2.	1.
VA03998	116.00	117.00	1500.0	25.0	71.0	<0.5	14.0	6.0	7.0	<5.0	<5.0	<1.0	3.0	450.0	26.	2.	2.
VA03999	117.00	119.20	1500.0	7.0	13.0	<0.5	9.0	<1.0	5.0	<5.0	<5.0	<1.0	4.0	170.0	35.	2.	1.
VA04000	119.20	120.00	900.0	7.0	16.0	<0.5	<5.0	3.0	6.0	<5.0	<5.0	<1.0	3.0	390.0	30.	2.	1.
VA08001	120.00	121.00	1300.0	6.0	24.0	<0.5	<5.0	1.0	4.0	<5.0	<5.0	<1.0	5.0	155.0	20.	2.	1.
VA08002	121.00	122.00	1400.0	4.0	12.0	<0.5	<5.0	2.0	4.0	<5.0	<5.0	<1.0	3.0	50.0	25.	2.	1.
VA08003	122.00	123.00	1200.0	3.0	25.0	<0.5	<5.0	1.0	4.0	<5.0	<5.0	<1.0	5.0	350.0	11.	2.	1.

Hole No. CH88-60

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	E FROM	i TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррм)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	НО (ррм)	МN (ррњ)	CUZN	ETS	FE
VA08004	123.00	124 00	1200 0	2.4	BO A												
	125.00	134.00	1200.0	2.0	32.0	<0.5	<5.0	2.0	4.0	<5.0	<5.0	<1.0	3.0	510.0	6.	2.	1.
VA08003	124.00	125.00	1300.0	6.0	33.0	<0.5	6.0	4.0	6.0	5.0	<5.0	<1.0	4.0	620.0	15.	2.	2.
VA08006	125.00	126.20	1200.0	3.0	34.0	<0.5	<5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	410.0	8.	2.	1.
VA08007	126.20	127.00	1300.0	4.0	27.0	<0.5	<5.0	3.0	5.0	<5.0	<5.0	<1.0	4.0	100.0	13.	2.	1.
VA08008	127.00	128.00	1600.0	6.0	32.0	<0.5	<5.0	2.0	5.0	<5.0	<5.0	<1.0	6.0	180.0	16.	2.	2.
VA08009	128.00	129.00	1500.0	5.0	42.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	4.0	780.0	11.	2.	1.
VA08010	129.00	130.00	1700.0	4.0	36.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	3.0	465.0	10.	2.	1
VA08011	130.00	131.00	1600.0	5.0	20.0	<0.5	13.0	2.0	4.0	<5.0	<5.0	<1.0	5.0	55.0	20.	2.	,
VA08012	131.00	132.00	1600.0	15.0	20.0	<0.5	12.0	4.0	4.0	<5.0	8.0	<1.0	4.0	70.0	43	 2	· •
VA08013	132.00	133.00	1800.0	16.0	17.0	0.5	11.0	5.0	4.0	<5.0	14.0	<1.0	6.0	30.0	40.	· .	<u>,</u> 2.
VA08014	133.00	134.00	1600.0	260.0	36.0	<0.5	18.0	3.0	5.0	<5.0	14-0	(1.0	5 0	220.0		••	4.
VA08015	134.00	135.00	1800.0	9.0	24.0	<0.5	25.0	4.0	5.0	<5.0		(1.0	5.0	270.0	88.	3.	2.
VA08016	135.00	136.00	2100.0	10.0	17.0	0.8	37.0	5.0	6.0	(5.0	5.0	<1.0	J.V .	200.0	27.	5.	2.
VA08017	136.00	137.00	2300.0	30.0	33.0	<0.5	15.0	11.0	7.0	45.0	5.0	×1.0	6.0	125.0	37.	5.	2.
VA08018	137.00	138.00	1900.0	19.0	10.0	/0.5	10.0		7.0	(5.0	11.0	<1.0	5.0	275.0	48.	3.	2.
UA08019	138.00	139.00	1500 0	14 0	46 0	(V.J	10.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	40.0	66.	з.	1.
VA08020	139 00	140.00	1400.0	14.0	46.0	<0.5	10.0	5.0	7.0	<5.0	7.0	<1.0	5.0	540.0	23.	3.	2.
11000021	105.00	140.00	1400.0	12.0	25.0	<0.5	<5.0	3.0	5.0	<5.0	8.0	<1.0	4.0	500.0	32.	3.	1.
VA00022	140.00	141.00	1300.0	15.0	34.0	<0.5	<5.0	2.0	6.0	<5.0	<5.0	<1.0	4.0	530.0	31.	з.	1.
VH08022	141.00	142.00	1300.0	8.0	44.0	<0.5	<5.0	2.0	6.0	<5.0	<5.0	<1.0	3.0	650.0	15.	з.	1.
VA08023	142.00	144.00	1300.0	8.0	40.0	<0.5	<5.0	3.0	6.0	<5.0	<5.0	<1.0	5.0	530.0	17.	з.	1.
VA08024	144.00	145.00	1300.0	11.0	35.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	3.0	440.0	24.	3.	. 1.
VA08025	145.00	146.00	1100.0	9.0	16.0	<0.5	44.0	2.0	7.0	<5.0	8.0	<1.0	5.0	250.0	36.	4.	2.
VA08026	146.00	147.00	950.0	12.0	20.0	0.7	144.0	3.0	5.0	<5.0	12.0	<1.0	3.0	150.0	38.	4.	2.

Hole No. CH88-60

Page No. 3

SAMPLE NUMBER	FROM	то	ВА (ррш)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm.)	РВ (ррв)	AS (pp:)	CD (ppm)	НО (рря)	<u>ММ</u> (рря)	CUZN	ETS	FE
VA08027	147.00	148.00	860.0	15.0	64.0	0.6	78.0	5.0	11.0	<5.0	9.0	<1.0	4.0	270.0	19.	4.	2.
VA08028	148.00	149.00	1000.0	21.0	220.0	<0.5	30.0	9.0	23.0	5.0	8.0	<1.0	4.0	430.0	9.	4.	2.
VA08029	149.00	150.00	1100.0	14.0	108.0	0.5	41.0	7.0	13.0	5.0	18.0	<1.0	6.0	250.0	11.	4.	2.
VA08030	150.00	151.00	940.0	10.0	194.0	<0.5	23.0	7.0	18.0	<5.0	15.0	<1.0	3.0	440.0	5.	4.	2.
VA08031	151.00	152.00	1300.0	10.0	43.0	<0.5	24.0	5.0	14.0	<5.0	11.0	<1.0	5.0	255.0	19.	2.	1.
VA08032	152.00	153.00	1100.0	24.0	200.0	<0.5	15.0	14.0	24.0	6.0	8.0	<1.0	5.0	520.0	11.	2.	2.
VA08033	153.00	154.00	1300.0	8.0	34.0	<0.5	7.0	2.0	6.0	<5.0	<5.0	<1.0	4.0	560.0	19.	2.	1.
VA08034	154.00	155.00	1300.0	7.0	30.0	<0.5	<5.0	2.0	5.0	<5.0	15.0	<1.0	4.0	450.0	19.	2.	1.
VA08035	155.00	156.00	1200.0	13.0	33.0	<0.5	5.0	3.0	6.0	<5.0	15.0	<1.0	5.0	570.0	28.	2.	1.
VA08036	156.00	157.00	1400.0	60.0	37.0	<0.5	<5.0	2.0	5.0	6.0	13.0	<1.0	3.0	550.0	62.	2.	1.
VA08037	157.00	158.00	1500.0	9.0	30.0	<0.5	16.0	3.0	6.0	<5.0	5.0	<1.0	7.0	600.0	23.	2.	2.
VA08038	158.00	159.00	1600.0	7.0	50.Ö	<0.5	19.0	7.0	7.0	5.0	7.0	<1.0	8.0	400.0	12.	2.	2.
VA08039	159.00	160.00	1600.0	6.0	39.0	<0.5	<5.0	4.0	8.0	<5.0	5.0	<1.0	5.0	500.0	13.	2.	1.
VA08040	160.00	161.00	1500.0	14.0	45.0	<0.5	8.0	5.0	9.0	<5.0	7.0	<1.0	5.0	930.0	24.	2.	2.
VA08041	161,00	162.00	1400.0	7.0	32.0	<0.5	<5.0	4.0	6.0	<5.0	<5.0	<1.0	4.0	560.0	18.	2.	1.
VA08042	162.00	163.00	1500.0	12.0	32.0	<0.5	<5.0	5.0	5.0	<5.0	5.0	<1.0	5.0	360.0	27.	2.	1.
VA08043	163.00	164.00	1300.0	10.0	34.0	<0.5	<5.0	4.0	6.0	5.0	5.0	<1.0	5.0	550.0	23.	2.	1.
VA08044	164.00	165.00	1500.0	42.0	50.0	<0.5	5.0	6.0	7.0	5.0	16.0	<1.0	8.0	750.0	46.	2.	2.
VA08045	165.00	166.00	1200.0	10.0	30.0	<0.5	9.0	4.0	6.0	5.0	10.0	<1.0	4.0	600.0	25.	2.	1.
VA08046	166.00	167.00	1200.0	26.0	95.0	<0.5	7.0	10.0	11.0	<5.0	<5.0	<1.0	5.0	590.0	21.	2.	2.
VA08047	167.00	168.00	1300.0	18.0	50.0	<0.5	13.0	7.0	12.0	<5.0	9.0	<1.0	2.0	870.0	26.	з.	1.
VA08048	168.00	169.00	1300.0	13.0	20.0	<0.5	7.0	3.0	6.0	<5.0	<5.0	<1.0	5.0	560.0	39.	3.	1.
VA08049	169.00	170.00	1200.0	12.0	25.0	<0.5	23.0	4.0	5.0	<5.0	6.0	<1.0	8.0	680.0	32.	3.	1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88~GO

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CÚ (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HQ (ppm)	HN (ppm)	CUZN	ETS	FE
			·												· .		
VA08050	170.00	171.00	1300.0	16.0	42.0	<0.5	15.0	3.0	5.0	<5.0	17.0	<1.0	8.0	590.0	28.	3.	2.
VA08051	171.00	172.00	1300.0	19.0	1200.0	<0.5	6.0	2.0	5.0	<5.0	6.0	11.0	4.0	720.0	2.	3.	1.
VA08052	172.00	173.00	1300.0	30.0	54.0	<0.5	6.0	3.0	5.0	6.0	<5.0	<1.0	5.0	650.0	36.	3.	1.
VA08053	173.00	174.00	1100.0	10.0	40.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	3.0	420.0	20.	2.	1.
VA08054	174.00	175.00	1000.0	7.0	48.0	<0.5	<5.0	4.0	6.0	<5.0	<5.0	<1.0	5.0	460.0	13.	2.	1.
VA08055	175.00	176.00	970.0	4.0	60.0	<0.5	<5.0	2.0	5.0	<5.0	<5.0	<1.0	4.0	600.0	6.	2.	1.
VA08056	176.00	177.00	1000.0	15.0	45.0	<0.5	<5.0	4.0	6.0	5.0	<5.0	<1.0	5.0	600.0	25.	2.	1.
VA08057	177.00	178.00	1200.0	10.0	39.0	<0.5	<5.0	2.0	4.0	<5.0	6.0	<1.0 ·	4.0	480.0	20.	2.	1.
VA08058	178.00	179.00	1100.0	12.0	36.0	<0.5	<5.0	4.0	4.0	<5.0	7.0	<1.0	3.0	480.0	25.	2.	1.
VA08059	179.00	180.00	1000.0	10.0	35.0	<0.5	<5.0	4.0	7.0	<5.0	<5.0	<1.0	3.0	480.0	22.	2.	1.
VA08060	190.00	181.00	1100.0	10.0	46.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	5.0	620.0	18.	2.	1.
VA08061	181.00	182.00	1000.0	12.0	140.0	<0.5	11.0	7.0	62.0	<5.0	11.0	<1.0	5.0	730.0	8.	2.	2.
VA08062	182.00	183.00	1200.0	16.0	50.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	4.0	560.0	24.	2.	1.
VA08063	183.00	184.00	1200.0	10.0	34.0	<0.5	10.0	6.0	5.0	<5.0	<5.0	<1.0	4.0	470.0	23.	2.	1.
VA08064	184.00	185.00	1200.0	10.0	46.0	<0.5	7.0	6.0	9.0	<5.0	5.0	<1.0	5.0	480.0	18.	2.	1.
VA08065	185.00	186.00	1200.0	380.0	90.0	0.6	29.0	10.0	10.0	<5.0	36.0	<1.0	7.0	680.0	81.	2.	2.
VA08066	186.00	187.00	1000.0	14.0	124.0	<0.5	8.0	12.0	9.0	<5.0	<5.0	<1.0	4.0	870.0	10.	2.	2.
VA08067	187.00	188.00	1100.0	40.0	70.0	<0.5	15.0	13.0	9.0	5.0	9.0	<1.0	10.0	600.0	36.	2.	2.
VA08068	188.00	189.00	1100.0	7.0	39.0	<0.5	<5.0	5.0	4.0	<5.0	5.0	<1.0	4.0	500.0	15.	2.	1.
VA08069	189.00	190.00	1000.0	8.0	44.0	<0.5	<5.0	5.0	5.0	<5.0	<5.0	<1.0	3.0	510.0	15.	2.	1.
VA08070	190.00	191.00	970.0	5.0	59.0	<0.5	<5.0	7.0	5.0	<5.0	10.0	<1.0	7.0	410.0	8.	2.	1.
VA08071	191.00	192.00	970.0	6.0	70.0	<0.5	<5.0	6.0	5.0	<5.0	34.0	<1.0	4.0	420.0	8.	2.	1.
UA08072	192.00	193.00	870.0	8.0	110.0	(0.5	(5.0	5.0	5.0	<5 A	25 0	(1.0)	5.0	430.0	7	2.	1
VHVOV/2	172.00	193.00	0/0.0	0.0	110.0	(0.0	10.0	3.0	0.0	1.0	V.1.V	V1.V	5.0	1.3V+V		. .	1.

Hole No. CH88-60

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm.)	AG (ppos)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррт)	AS (ppm)	CD (ppm)	MC (ppm)	HN (ppm)	CUZN	ETS	FE
VA08073	193.00	194.00	1000.0	5.0	75.0	<0.5	<5.0	5.0	5.0	6.0	<5.0	<1.0	5.0	410.0	6.	2.	1.
VA08074	194.00	195.30	930.0	17.0	170.0	<0.5	<5.0	7.0	11.0	5.0	<5.0	<1.0	6.0	350.0	9.	2.	2.
VA08075	195.30	196.30	1100.0	68.0	1750.0	<0.5	51.0	3.0	5.0	5.0	36.0	19.0	6.0	240.0	4.	5.	2.
VA08076	196.30	197.90	1400.0	8.0	95.0	<0.5	15.0	3.0	5.0	<5.0	7.0	<1.0	4.0	30.0	8.	5.	2.
VA08078	197.40	197.90	1200.0	260.0	20400.0	1.3	103.0	4.0	5.0	6.0	120.0	186.0	8.0	100.0	1.	13.	3.
VA08077	197.90	199.00	1400.0	7.0	84.0	<0.5	23.0	5.0	5.0	<5.0	<5.0	<1.0	6.0	650.0	8.	4.	2.
VA08079	199.00	200.00	1300.0	14.0	210.0	<0.5	30.0	4.0	4.0	6.0	6.0	1.0	5.0	620.0	6.	4.	1.
VA08080	200.00	201.00	1100.0	14.0	164.0	0.5	49.0	4.0	5.0	5.0	7.0	<1.0	6.0	620.0	8.	4.	2.
VA08081	201.00	202.00	1300.0	18.0	64.0	<0.5	28.0	5.0	4.0	<5.0	8.0	<1.0	5.0	440.0	22.	4.	1.
VA08082	202.00	203.00	1300.0	11.0	38.0	<0.5	79.0	4.0	4.0	<5.0	7.0	<1.0	5.0	370.0	22.	4.	2.
VA08083	203.00	204.00	1400.0	26.0	40.0	<0.5	8.0	3.0	6.0	6.0	21.0	<1.0	7.0	770.0	39.	4.	2.
VA08084	204.00	205.00	1500.0	46.0	38.0	<0.5	27.0	11.0	17.0	6.0	22.0	<1.0	4.0	970.0	55.	4.	3.
VA08085	205.00	206.00	1200.0	10.0	32.0	<0.5	24.0	4.0	5.0	5.0	6.0	<1.0	5.0	670.0	24.	4.	2.
VA08086	206.00	207.00	1400.0	16.0	95.0	<0.5	18.0	6.0	7.0	5.0	5.0	<1.0	4.0	700.0	14.	4.	2.
VA08087	207.00	208.00	1200.0	15.0	67.0	<0.5	7.0	5.0	6.0	5.0	<5.0	<1.0	7,0	530.0	18.	4.	1.
VA08088	208.00	209.00	1100.0	12.0	54.0	<0.5	8.0	5.0	6.0	6.0	<5.0	<1.0	3.0	720.0	18.	з.	1.
VA08089	209.00	210.00	1200.0	7.0	47.0	<0.5	7.0	5.0	5.0	<5.0	<5.0	<1.0	4.0	450.0	13.	з.	1.
VA08090	210.00	211.00	1100.0	10.0	48.0	<0.5	5.0	5.0	5.0	5.0	<5.0	<1.0	4.0	670.0	17.	з.	1.
VA08091	211.00	212.00	780.0	7.0	36.0	<0.5	5.0	5.0	6.0	6.0	<5.0	<1.0	7.0	900.0	16.	з.	1.
VA08092	212.00	213.00	970.0	7.0	36.0	<0.5	<5.0	5.0	5.0	5.0	15.0	<1.0	4.0	700.0	16.	з.	1.
VA08093	213.00	214.00	1200.0	5.0	32.0	<0.5	<5.0	5.0	5.0	<5.0	<5.0	<1.0	5.0	520.0	14.	3.	1.
VA08094	214.00	215.00	1000.0	7.0	32.0	<0.5	<5.0	4.0	4.0	5.0	74.0	<1.0	3.0	420.0	18.	3.	1.
VA08095	215.00	216.00	1800.0	7.0	52.0	<0.5	<5.0	3.0	5.0	6.0	<5.0	<1.0	4.0	530.0	12.	3.	1.

Hole No. CH88-60

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm.)	Z.N. (ррва)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (pp≊)	CD (ppm)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE
VA08096	216.00	217.00	920.0	18.0	45.0	<0.5	5.0	3.0	6.0	6.0	11.0	<1.0	26.0	800.0	29.	3.	1.
VA08097	217.00	218.00	1000.0	6.0	45.0	<0.5	<5.0	2.0	5.0	5.0	<5.0	<1.0	5.0	600.0	12.	3.	1.
VA08098	218.00	219.00	1100.0	7.0	45.0	<0.5	6.0	3.0	5.0	5.0	12.0	<1.0	3.0	560.0	13.	з.	1.
VA08099	219.00	220.00	1200.0	16.0	40.0	<0.5	5.0	3.0	4.0	6.0	16.0	<1.0	3.0	500.0	29.	з.	1.
VA08100	220.00	221.00	1100.0	10.0	45.0	<0.5	6.0	4.0	5.0	6.0	5.0	<1.0	3.0	580.0	18.	3.	1.
VA08101	221.00	222.00	1000.0	18.0	42.0	<0.5	14.0	4.0	6.0	6.0	19.0	<1.0	3.0	740.0	30.	з.	2.
VA08102	222.00	223.00	1100.0	7.0	34.0	<0.5	8.0	3.0	5.0	5.0	8.0	<1.0	2.0	600.0	17.	з.	1.
VA08103	223.00	224.00	1100.0	6.0	38.0	<0.5	<5.0	4.0	5.0	5.0	<5.0	<1.0	3.0	520.0	14.	3.	1.
VA08104	224.00	225.00	750.0	17.0	230.0	<0.5	12.0	2.0	9.0	8.0	18.0	<1.0	46.0	1700.0	7.	3.	2.
VA08105	225.00	226.00	1000.0	8.0	36.0	<0.5	7.0	2.0	5.0	5.0	8.0	<1.0	4.0	560.0	18.	3.	1.
VA08106	226.00	227.00	1000.0	9.0	45.0	<0.5	8.0	3.0	5.0	6.0	8.0	<1.0	3.0	680.0	17.	3.	1.
VA08107	227.00	228.00	950.0	10.0	36.0	<0.5	7.0	3.0	5.0	6.0	14.0	<1.0	6.0	560.0	22.	з.	1.
VA08108	228.00	229.00	1200.0	15.0	42.0	<0.5	<5.0	5.0	5.0	7.0	6.0	<1.0	3.0	430.0	26.	3.	1.
VA08109	229.00	230.00	1200.0	8.0	28.0	<0.5	<5.0	2.0	4.0	<5.0	5.0	<1.0	4.0	370.0	22.	3.	1.
VA08110	230.00	231.00	1100.0	8.0	27.0	<0.5	12.0	3.0	6.0	5.0	9.0	<1.0	4.0	610.0	23.	з.	1.
VA08111	231.00	232.00	1100.0	9.0	32.0	<0.5	<5.0	2.0	5.0	<5.0	8.0	<1.0	4.0	480.0	22.	3.	1.
VA08112	232.00	233.50	1100.0	8.0	30.0	<0.5	<5.0	3.0	5.0	5.0	8.0	<1.0	3.0	520.0	21.	3.	1.

Hole No. CH88-60

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Summary Log: DDH CH88-61 Location: 50+00' W, 5+87 N; Holyoak 3 Claim Azimuth: 210, Dip: -50 Hole Completed: June 1, 1988 Core Logged By: D.P. Money 0.0 -6.4 Casing. 6.4 -14.2 Felsic crystal tuff with 4 % disseminated pyrite and trace mariposite. 14.2 -24.8 Mafic to andesitic crystal tuffs. 24.8 -26.8 Felsic crystal tuff. 26.8 -55.8 Mafic crystal lapilli tuff. 55.8 -77.1 Chloritic felsic and interbedded intermediate crystal tuffs. 77.1 -86.6 Chlorite schist. 86.6 -95.7 Intermediate crystal tuff. 95.7 - 105.4 Chlorite schist. 105.4 - 123.3 Intercalated chloritic felsic and intermediate crystal tuffs. 123.3 - 132.1 Chlorite schist. 132.1 - 166.6Intercalated chloritic felsic and andesitic to mafic crystal tuffs. 166.6 - 189.5 Chlorite schist. 189.5 - 195.2 Chlorite schist with argillic sections and argillite interbeds 195.2 - 213.9Chloritic felsic crystal tuffs. 213.9 - 227.0 Mafic tuff. 227.0 - 228.8 Felsic crystal tuff. 228.8 - 237.5 Chlorite schist. 237.5 - 242.4Intercalated chloritic felsic crystal tuffs and chlorite schists. 242.4 - 331.4Weakly chloritic felsic crystal tuff to volcanic wacke with very minor mafic tuff beds or mafic sills. 331.4 - 335.5 Andesitic crystal tuff. 335.5 - 336.0 Black calcareous argillite. Weakly chloritic felsic tuff to volcanic wacke. 336.0 - 363.0 363.0 End of hole.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 1 DIAMOND DRILL LOG Hole Location: 50+00' W 5+77 N Claim No. Holvoak 3 NTS: 092B/13W UTM: 5415536 N, 434672 E Section No.: Section 50+00' West, Holyoak Claim Group Azimuth: 210 Elevation: 873 m Dip: -50 Length: 363.0 m Logged By: D.P. Money Drilling Co.: Burwash Enterprises Started: May 26, 1988 Assayed By: Bondar-Clegg and X-Ray Assay Completed: June 1, 1988 Core Size: NQ DIP TESTS Purpose: To develop a stratigraphic section Azi-Azi-Length muth Dip Length muth Dip 11.90 210.0 -50.0 276.50 212.0 -48.0 99.10 -48.0 361.80 210.0 -48.0 182.00 212.5 -48.5 From To Sample From To Width Total Cu РЪ Zn Au Ba Αq (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 6.4 OVERBURDEN .0 Large gabbro boulder from 5.8 to 6.4 with no chit marking start of coring. 6.4 14.2 WEAKLY CHLORITIC FELSIC TUFF White to light grey felsic tuff with 2 to 3 % wispy or VA01157 6.4 14.2 7.8 n/a 1540 n/a 106 <10 n/a n/a fracture controlled chlorite. There are 15 to 20 %, up to VA02014 6.4 7.6 1.2 4 151 <5 30 <1 6 1400 2 mm, feldspars and locally up to 5 %, < 1 mm, quartz VA02015 7.6 8.8 1.2 4 240 <5 30 <1 13 1500 eyes. There are < 1 % minor quartz and calcite veinlets VA02016 11.3 12.3 1.0 4 93 8 18 <1 <5 1500 parallel to foliation. There is weak local calcite spots. VA02017 12.3 13.3 1.0 120 <5 17 <1 <5 1500 4 There is 3 to 5 % disseminated pyrite with numerous local VA02018 13.3 14.2 34 (5 20 (1 (5 1300 .9 4 mariposite specks and a mariposite stringer at 11.4. 6.4 14.2 WEAK SPOTTY CHLORITIZATION. Foliations :. 6.6 : 54 degrees to core axis. 12.8 : 60 degrees to core axis. Lost core :. 8.8 11.3 : 2.5 m, core barrel mislatched. 14.2 16.0 INTERMEDIATE OUARTZ FELDSPAR CRYSTAL TUFF Medium green chloritic schist with approximately 20 %, 1 to 3 mm, feldspars and trace to 1 %, 2 mm, quartz eyes locally. There is weak to moderate fracture controlled carbonatization and trace associated disseminated, < 1 mm, pyrite cubes. Foliation is at 54 degrees to core axis. 16.0 24.8 CHLORITE SCHIST Chlorite schist with 5 to 10 %, < 1 mm, feldspars and up VA01158 16.0 24.0 8.0 n/a 174 n/a 84 n/a n/a 514

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 2 DIAMOND DRILL LOG From То Sample From To Width Total Cu Pb Zn Ag Au Ba (m) -----DESCRIPTION-----· (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) to 3 % disseminated pyrite, averages 1 to 2 % pyrite. Is VA02019 18.0 19.5 1.5 3 80 6 112 <1 (5 540 not magnetic. Alteration :. 16.0 24.8 STRONG FRACTURE CONTROLLED CARBONATIZATION. Foliations :. 16.2 : 51 degrees to core axis. 18.4 : 42 degrees to core axis. 24.1 : 48 degrees to core axis. Lost core :. 19.0 19.5 : 0.2 m. 21.0 22.0 : 0.3 m. 24.8 26.8 WEAKLY CHLORITIC FELSIC TUFF Felsic tuff, white to light green with 3 to 10 % fracture VA01159 24.8 26.8 2.0 n/a <10 n/a 44 n/a n/a 948 controlled chlorite and approximately 7 to 10 %, 1 to 2 VA02020 24.8 25.8 1.0 3 34 37 53 <1 <5 1400 mm, feldspars. There is trace to 1 %, up to 1.5 mm, quartz VA02021 25.8 26.8 1.0 3 68 10 84 **<**1 < 5 800 eyes. There are minor fracture controlled quartz and calcite veinlets. 3 % disseminated pyrite occurs. Foliation is at 45 degrees to core axis. 24.8 26.8 WEAK PERVASIVE CHLORITIZATION. 26.8 55.8 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF Dominantly mafic tuff with very local felsic to andesitic VA01160 26.8 55.8 29.0 n/a 89 n/a 52 n/a 447 n/a zones. Is dark green with white calcite streaks, VA02022 26.8 28.0 1.2 2 106 15 186 <1 <5 460 epidotized lapilli and guartz - yellow carbonate, calcite VA02023 28.0 30.0 2.0 68 62 1 7 1> < 5 480 (?), - (chlorite) veinlets. VA02024 54.3 55.8 1.5 2 71 5 76 <1 (5 870 26.8 30.8 STRONG PERVASIVE CARBONATIZATION as white streaks in medium green chlorite with trace to 1 % disseminated fine-grained pyrite. 30.8 31.2 MODERATE PERVASIVE CARBONATIZATION in dark green chlorite. 31.2 31.6 Massive tuff with 30 cm quartz - sericite epidote - chlorite vein. 31.6 40.5 STRONG PERVASIVE CARBONATIZATION as white streaks with 5 to 50 %, average 15 %, epidote as 2 mm to 15 cm clasts. From 35.8 to 38.1 there are large epidote lapilli with up to 20 % 5 mm hornblende crystals. There is minor fracture controlled pyrite associated with calcite splotchs. 35.8 38.1 MODERATE PERVASIVE EPIDOTIZATION. 40.5 43.3 Bleached mafic to felsic tuff with 50 to 60 % guartz - chlorite veins. 43.3 44.2 Blocky, highly fractured core. 44.2 46.5 Very chloritic felsic or andesitic tuff with local quartz eyes, up to 10 %, up to 1.5 mm. There is moderate calcite streaks. 46.5 48.5 Similiar to 44.2 to 46.5 with less guartz and darker green.

felsic and mafic tuffs.

Foliations :.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG From То Sample From To Width Total Cu Pb Zn λq Au -----DESCRIPTION-----(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 48.5 49.0 Quartz - yellow carbonate - sericite vein. 49.0 51.2 Mafic tuff with minor felsic clasts and quartz carbonate veinlets. 51.2 55.8 Monotonous medium green chlorite rich rock with MODERATE PERVASIVE CARBONATIZATION as white streaks with locally up to 10 % quartz eyes and on average 1 %. There is up to 1.5 % fracture controlled pyrite, averages < 1 %. Foliations :. 30.0 : 46 degrees to core axis. 32.4 : 41 degrees to core axis. 35.2 : 50 degrees to core axis. 39.3 : 46 degrees to core axis. 47.4 : 52 degrees to core axis. 52.8 : 60 degrees to core axis. 53.1 : 47 degrees to core axis. Lost core :. 44.2 45.7 : 0.2 m. 55.8 58.5 CHLORITIC FELSIC OUARTZ EYE TUFF Grey to green tuff with on average 7 %, 1 to 2 mm, quartz VA01161 55.8 58.5 2.7 n/a n/a 65 n/a 11 n/a eyes. Is locally siliceous or moderately silicified. VA02025 55.8 57.2 1.4 6 47 7 53 1 <5 VA02026 57.2 58.5 1.3 56 7 45 <1 <5 There is 5 to 12 % disseminated pyrite, average 7 %. Local 8 mariposite specks occur. There are minor quartz chlorite veinlets. 55.8 58.5 WEAK PERVASIVE CHLORITIZATION. Foliations :. 55.9 : 53 degrees to core axis. 58.3 : 48 degrees to core axis. 58.5 59.0 FAULT ZONE Blocky, highly fractured core. Mafic tuff from 58.5 to 58.7 and felsic from 58.8 to 59. Fault gouge at approximately 90 degrees to core axis from 58.7 to 58.8. 59.0 65.1 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Chloritic andesitic tuff with strong carbonatization and VA01162 59.0 64.0 5.0 n/a 71 n/a n/a 733 n/a 80 approximately 10 % feldspar grains, local siliceous spots and trace local guartz eyes. Dominantly is andesitic to mafic with 5 to 20 % white calcite parallel to foliation and fracture controlled. There are numerous minor carbonate - quartz veinlets. Trace to 0.5 % disseminated pyrite occurs, mainly associated with carbonatization. Alteration :. 59.0 64.0 STRONG FRACTURE CONTROLLED CARBONATIZATION. 64.0 65.1 Quartz - carbonate - chlorite veins with minor

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 4 DIAMOND DRILL LOG From To Width Total Sample From То Cu Рb Zn Àσ Au Ba -----DESCRIPTION------(m) (m) (m) No. (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) 59.6 : 50 degrees to core axis. 60.4 : 48 degrees to core axis. 62.3 : 64 degrees to core axis. 65.1 68.6 FELSIC OUARTZ EYE TUFF Light green to grey felsic tuff with 7 to 10 %, 1 mm, VA02027 65.1 66.1 1.0 2 50 5 172 <1 <5 1100 guartz eyes. Tuff is very sericitic. There is 2 % 68.6 126 VA01163 65.1 3.5 n/a n/a 1740 n/a n/a 940 disseminated pyrite and 5 to 7 % very fine-grained pyrite VA02028 66.1 67.1 1.0 55 < 5 42 <5 1200 2 2 in white calcite with galena (?). VA02029 67.1 68.6 1.5 5 78 25 4000 77 1000 1 Alteration :. 67.1 68.6 STRONG FRACTURE CONTROLLED CARBONATIZATION . strong white calcite veins with 7 % sulphides. pyrite and (?) galena. Foliations :. 66.1 : 37 degrees to core axis. 67.2 : 39 degrees to core axis. 68.6 77.1 INTERMEDIATE OUARTZ EYE TUFF Medium green chloritic tuff with strong carbonatization VA01164 68.6 77.1 8.5 n/a 87 n/a 79 n/a n/a 150 and 3 to 5 %, 1 mm, quartz eyes. Tuff is 60 % chlorite, VA02030 68.6 70.0 1.4 3 22 9 144 <1 < 5 130 30 % calcite, 4 % crystals, 3 % pyrite and 3 % quartz -<5 70.0 71.5 90 94 <20 VA02031 1.5 3 6 <1 calcite - chlorite veinlets. Is locally contorted. There 97 < 5 20 VA02032 71.5 73.0 3 6 88 <1 1.5 is chalcopyrite in a calcite veinlet at 71.4. <5 VA02033 73.0 74.5 69 9 100 <1 (20 1.5 3 68.6 77.1 STRONG FRACTURE CONTROLLED CARBONATIZATION. VA02034 74 20 170 <5 <20 74.5 76.0 1.5 3 1 62 180 <1 ٢5 Foliations :. VA02035 76.0 77.1 1.1 3 16 340 74.2 : 37 degrees to core axis. 75.6 : 24 degrees to core axis. Lost core :. 72.2 74.1 : 0.2 m. 77.1 86.6 CHLORITE SCHIST Dark to medium green chlorite schist with 20 to 25 % white VA01165 77.1 86.6 9.5 n/a 17 n/a 62 n/a n/a 867 quartz - yellow carbonate veins, up to 20 cm. Schist is VA02036 83.5 84.5 1.0 1 600 20 90 1 <5 1000 strongly contorted with numerous kinks, folds and minor fault slips. There is 5 to 10 % white calcite streaks in the schist. There is local minor disseminated pyrite. A 1 to 2 mm chalcopyrite seam occurs at 84.1 on the margin of a calcite veinlet. Structure :. 78.3 : foliation at 70 degrees to core axis. 78.9 : strong kinking with axis at 46 degrees to core axis, kink is 25 degrees wide. 80.9 : foliation at 72 degrees to core axis. 81.0 : fault slip at 26 degrees to core axis. Alteration :. 77.1 86.6 STRONG FRACTURE CONTROLLED CARBONATIZATION. Lost core :. 81.7 84.4 : 0.4 m.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 5 DIAMOND DRILL LOG From To Sample From То Width Total Pb Cu Zn Åσ Au - 8a (m) -----DESCRIPTION-----(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 84.4 85.4 : 0.2 m. 86.6 95.7 INTERMEDIATE TUFF Silicified andesitic or green felsic tuff. Siliceous with 95.7 9.1 n/a 895 VA01166 86.6 n/a <10 n/a 34 n/a strong chlorite and very weak local sericite. There are 3 VA02037 93.0 94.5 1.5 2 -30 8 52 <1 <5 1400 to 7 %, 1 to 2 mm, quartz eyes. Is locally bleached or cherty, associated with guartz - calcite veins. There is weak to moderate local fracture controlled calcite and pyrite. Minor biotite occurs in veins. Foliations :. 86.9 : 53 degrees to core axis. 91.2 : 45 degrees to core axis. 93.6 : 62 degrees to core axis. 95.7 105.4 CHLORITE SCHIST Medium to dark green chlorite schist with very local minor VA01167 95.7 105.4 9.7 n/a 26 n/a 96 n/a n/a 961 chlorite - sericite schist zones. Crystal content varies locally with up to 3 %, 1 mm, guartz eyes and up to 7 %, 1 mm, feldspars. Is locally weakly contorted. There is trace to 0.5 % disseminated, < 1 mm, pyrite cubes locally. There are trace local guartz and calcite veinlets. Alteration :. 95.7 105.4 MODERATE FRACTURE CONTROLLED CARBONATIZATION . as white calcite streaks parallel to foliation. Foliations :. 96.8 : 61 degrees to core axis. 99.8 : 50 degrees to core axis. 105.1 : 71 degrees to core axis. Lost core :. 102.7 104.5 : 0.7 m. 104.5 106.1 : 0.4 m. Faults :. 104.0 Minor fault gouge. Blocky, highly fractured core :. 102.7 106.7 With lost core and very disky. 105.4 109.3 FELSIC TUFF VA01168 105.4 109.3 3.9 105.4 106.7 Blocky, highly fractured core. Disky core. n/a 1350 n/a <10 n/a (10 n/a Sericitic tuff with foliation at approximately VA02038 106.7 107.3 25 <5 1400 2 12 5 (1 .6 90 degrees to core axis and minor quartz veins 106.7 109.3 STRONG FRACTURE CONTROLLED SERICITIZATION as yellow to white fracture filling to siliceous lapilli and guartz eyes. There are numerous guartz - calcite - chlorite veins. From 106.7 to 107.3 there is 2 % fine-grained banded pyrite parallel to foliation, 14 degrees to core axis, with (?) sphalerite.

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		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-61		6				
From	To		Sample	From	To	Width	Total	Cu	Ph	2.n	λπ	Au	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(pp	b) (ppm)
109.3	118.8	INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF	V301169	110.0	117 0	7 0	n/a	16	n/a	69	n/a	n/a	1940
		felsic tuff interbeds. Is moderately contorted. Crystals have locally been removed by strong shearing. Average	WALL OF	110.0	117.0	,	117 4	10	11 <i>1</i> G	05	117 a	n/a	1940
		crystal content is 2 to 3 %, 1 to 2 mm, quartz eyes and 5 % 1 mm feldspars Foliation varies locally from 0 to 70											
		degrees to core axis. There is weak to strong fracture controlled carbonatization as white calcite streaks.											•
		Felsics occur from 110.5 to 111.1 and 118.3 to 118.4 and are sericitic, contorted and host large guartz eyes.											
		There is trace to 2 %, average < 1 %, fine-grained fracture controlled pyrite.											
		Lost core :.											
		115.0 116.0 : 0.1 m.											
118.8	123.3	FELSIC FELDSPAR CRYSTAL LAPILLI TUFF											
		Sericitic light grey to white felsic tuff with 10 to 20 %,	VA01170	119.0	123.2	4.2	n/a	<10	n/a	(10	n/a	n/a	1960
		2 mm, feidspars and 15 %, up to 2 cm long and 4 mm wide grey siliceous lapilli. Locally quartz eye bearing. There	VAUI1/1	123.2	132.1	8.9	n/a	(10	n/a	50	n/a	n/a	824
		There is trace local disseminated pyrite.											
		follations :. 119.0 : 60 degrees to core axis.											
		120.2 : 40 degrees to core axis.											
		121.6 : 62 degrees to core axis.											
		125.2 . 56 degrees to tore axis.											
123.3	132.1	CHLORITE SCHIST Medium green very conterted schict with strong fracture											
		controlled carbonatization as 10 to 25 % white calcite											
		with the carbonatization. There is fracture controlled hematice at 124.6											
		123.3 132.1 STRONG FRACTURE CONTROLLED CARBONATIZATION.											
132.1	138.6	CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Very weakly chloritic felsic tuff with local moderate	VA01172	132.2	138.0	5.8	n/a	<10	n/a	12	n/a	n/a	1230
		chiofitization. May be a volcanic watter. nosts 10 to 15 %, 2 to 3 mm, feldspars and up to 10 %, average 7 %, 1 to 2 mm. duartz eves. There are minor local elongate, up to											
		2 cm, cherty felsic tuff fragments. There is trace pyrite and minor guartz veins.				· · ·							
		Alteration :.											
		134.5 136.1 HODERATE PERVASIVE CHLORITIZATION. 137.5 138.6 HODERATE SPOTTY CHLORITIZATION.											
		132.3 : 48 degrees to core axis.											

From To

(m.)

(m)

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DIAMOND DRILL LOG Sample From То Width Total Cu Pb Zn -----DESCRIPTION------(m) No. (m) (m) Sulphides (ppm) (mqq) (mqq) (mqq) (mqq) 133.6 : 49 degrees to core axis. 137.4 : 50 degrees to core axis. 138.6 140.0 CHLORITE SCHIST Medium to dark green chlorite schist with 5 to 10 % white calcite parallel to foliation. There is trace to nil fine-grained pyrite associated with calcite veinlets. Foliations :. 139.0 : 56 degrees to core axis. Alteration :. 138.6 140.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION. Lost core :. 138.7 140.5 : 0.4 m. 140.0 143.1 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Very similiar to 132.1 to 138.6. Blocky, highly fractured core. Strong foliation and (?) bedding at 20 to 30 degrees to core axis.

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140.0 143.1 MODERATE SPOTTY CHLORITIZATION. Lost core :. 142.2 143.1 : 0.2 m. 143.1 144.3 CHLORITE SCHIST

Dark green with 10 to 15 % calcite and local quartz eyes. Foliation at 40 degrees to core axis.

144.3 155.6 WEAKLY CHLORITIC FELSIC TUFF

Weakly to strongly chloritic and contorted felsic tuff. In VA02039 144.3 145.2 <5 1200 . 9 2 28 15 95 · (1 more brecciated and carbonatized zones there is 20 to 40 VA01173 145.0 155.0 10.0 n/a 1850 <10 34 n/a n/a n/a * pyrite, these occur from 145.2 to 145.7, 151.2 to VA02040 145.2 145.7 25 69 55 2 8 1300 . 5 62 151.6, and 152.0 to 152.1. There is 1 to 2 % fracture VA02041 145.7 147.0 17 58 <5 1160 1.3 2 12 <1 controlled pyrite elsewhere. There are numerous quartz -< 5 1140 VA02042 147.0 148.5 1.5 2 26 7 69 <1 VA02043 148.5 150.0 sericite - chlorite veins and veinlets. <1 (5 2000 1.5 20 15 156 2 Alteration :. VA02044 150.0 151.2 1.2 7 14 120 <1 <5 2400 2 144.3 155.6 MODERATE SPOTTY CHLORITIZATION. VA02045 151.2 152.1 83 (1 <5 2600 .9 10 8 15 VA02046 152.1 153.6 <5 2100 Foliations :. 1.5 2 5 6 100 <1 VA02047 153.6 155.6 2.0 5 <1 <5 2200 145.1 : 47 degrees to core axis. 2 7 44 147.6 : 43 degrees to core axis. 155.1 : 64 degrees to core axis. Lost core :. 143.1 145.4 : 0.2 m. 152.4 153.0 : 0.3 m.

155.6 161.2 INTERMEDIATE QUARTZ EYE TUFF

Dark to light green chlorite schist with 3 to 5 %, < 1 mm, guartz eyes and variable weak to strong fracture

n/a 1350 VA01174 155.6 161.2 5.6 n/a <10 n/a 30 n/a

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Aα

Au

Ba

CH88-61

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-61 8

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From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		controlled carbonatization. There is trace pyrite											
		associated with the carbonatization. Is locally contorted.											
		Is andesitic or mafic in composition.								· •			
		Alteration :.											
		155.6 161.2 MODERATE SPOTTY CARBONATIZATION.											
		Foliations :.											
		156.0 : 56 degrees to core axis.											
		158.0 : 52 degrees to core axis.											
		162.0 : 63 degrees to core axis.											
		Lost core :.											
		At 159.4 : 0.2 m.											
		Faults :.											
		157.0 157.2 : blocky, highly fractured core.											
		157.4 : 5 mm clay fault slip at 64 degrees to core axis.											
161 2	166 6	CHLORITIC FELSIC OUARTZ-FELDSPAR CRYSTAL THEF											1.1
101.2	100.0	Variably chloritic, weakly to moderately chloritic, felsic,	VA01175	161 2	166 6	5 4	n/2	/10	n/n	33	n/2	n/a	1010
		tuff to volcapic wacks Cruetal content varies with on	TROIL /J	101.0	100.0	3.4		10	117 a	22	11/a	11/04	1010
		average 5 % 1 to 2 mm guarty even and 10 % 1 to 3 mm											
		average 5 %, 1 to 2 mm, quartz eyes and 10 %, 1 to 5 mm,											
		reidspars. There are minor quartz and carcicle fracture											
		controlled verniets. There are minor local sericitic											
		iragments, up to 1 cm and yellow. At 165.4 there is a 3											
		cm rounded chert clast. There is minor bedding or											
		compositional banding or local selective alteration. Is											
		strongly follated and disky core. There is trace to 0.5 %											
		disseminated pyrite from 162.0 to 163.4.											
		161.2 166.6 MODERATE SPOTTY CHLORITIZATION.											
		Structure :.											
		Foliations :.											
		162.5 : 53 degrees to core axis.											
		165.2 : 59 degrees to core axis.											
		Bedding :.											
		163.7 : 54 degrees to core axis.											
		165.2 : 58 degrees to core axis.											
166.6	189.5	CHLORITE SCHIST											
		Medium to dark green chlorite schist, moderate fracture	VA01176	169.0	179.0	10.0	n/a	49	n/a	61	n/a	n/a	291
		controlled carbonatization, non-magnetic.	VA02048	172.5	173.5	1.0	1	71	6	65	(1	(5	600
		166.6 167.5 Variably mafic to very chloritic felsic with	VA01177	180.0	188.0	8.0	n/a	18	n/a	41	n/a	n/a	451
		weak to moderate fracture controlled		10000									
		carbonatization Strong foliation at 61											
		degrees to core axis and is locally strongly											
		contorted											
		167 5 168 2 Dark green chlorite with 50 \$ 1 to 8 cm white											
		duartz - vellow calcite veine											
		quarte yearer calcute verns. 169 2 169 8 White guarte - dark groon chlorite - vollow											
		calcite - mustard soricite voin											
		160 0 179 8 Dark green chlorite schiet with numerous											
		103.0 173.0 Dain green chiorice schist with humerous											
		quartz - calcite veins, quartz is crystalline											

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-61 ٩

Cu

Рb

Zn

(ppm) (ppm) (ppm)

λα

Au

Ba

(ppb) (ppm)

Total

Sulphides (ppm)

From То

(m) (m)

-----DESCRIPTION------

Sample

No.

From

(m)

To

(m)

Width

(m)

and the veins are < 1 cm up to approximately 10 cm. Is locally contorted with strong carbonate veining. There are 5 to 20 %. average 12 to 15 %, 1 to 4 mm, dark green

- elongated chloritic crystals or fiame (?).
- 173.0 Speck of chalcopyrite in calcite veinlet. 169.0 179.8 MODERATE FRACTURE CONTROLLED CARBONATIZATION
- as white calcite streaks parallel to foliation.
- 179.8 188.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION in medium green chloritic schist with trace to 2 %, 1 mm, guartz eves and up to 5 %, 1 to 2 mm, epidote grains. Is finely mottled, Locally contorted.
- 188.0 189.5 Weakly to moderately argillaceous contorted chlorite schist with weak to moderate fracture controlled carbonatization.
- Foliations :.
- 169.5 : 74 degrees to core axis.
- 175.5 : 60 degrees to core axis.
- 181.3 : 59 degrees to core axis.
- 188.4 : 60 degrees to core axis.
- 189.5 189.7 FAULT ZONE

Contorted fault gouge with argillite, chlorite schist and white calcite. Fault at approximately 80 degrees to core axis.

189.7 191.4 BLACK ARGILLITE

Intercalated black cherty argillite and dark to medium green chlorite schist. Approximately 60 % argillite, 35 % chlorite schist and 5 % fracture controlled white calcite. At 190.2 there is minor jasper in the argillite as a 1 to 2 mm bed. There are minor faults and kinks with bedding and foliation at approximately 75 degrees to core axis. No sulphides occur.

191.4 195.2 CHLORITE SCHIST

Dark to medium green chlorite schist with approximately 20 % intercalated argillite beds. Is locally contorted with strong kink bands at 25 and 48 degrees to core axis. Most foliations and bedding trend at approximately 80 degrees to core axis. There is minor fault gouge from 193.2 to 194.5. Fracture controlled carbonatization is spot and varies from weak to moderate. Alteration :. 191.4 195.2 MODERATE SPOTTY CARBONATIZATION. Foliations :. 192.3 : 86 degrees to core axis.

VA02049 189.7 191.4 1.7 (5 350 ۵ 5 120 1

VA01178 191.4 195.2 3.8 n/a 20 n/a 96 n/a

n/a 357

P	ROPERT	Y: Chemainus J.V.						HOLE N	o: Pa	ge Numb	er			
			FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-61		10				
From (m)	To (m)	DESCRI	PTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		194.9 : 77 degrees to core axis.												
195.2	199.2	CHLORITIC FELSIC QUARTZ-FELDSPAR Blocky, highly fractured core wit Contorted medium to light green s trace to 10 %, \langle 1 to 2 mm, feld of sausuritization and up to 5 % to 196.0 there is chlorite schist carbonatization. Fault gouge occu locally and from 199.0 to 199.2.	CRYSTAL TUFF h minor fault gouge. iliceous felsic tuff with spars, in various stages quartz eyes. From 195.5 with fracture controlled rs from 196.3 to 197.2											
		Lost core :. 196.0 197.2 : 0.3 m. 197.2 197.8 : 0.2 m. 197.8 198.4 · 0.1 m	1112A11UN.											
		198.4 199.3 : 0.3 m.												
199.2	213.9	CHLORITIC FELSIC QUART2 EYE TUFF Medium grey to green tuff, chlori intermediate tuff, locally changes %, < 1 mm, quartz eyes. There is in controlled carbonatization. 199.2 213.9 MODERATE SPOTTY CHLOR 199.2 200.0 Medium green with 15 eyes and 5 % to 15 % insper	tic felsic to (?) s. Hosts on average 10 weak to moderate fracture ITIZATION. to 20 %, 1 mm, quartz locally of hematite to	VA02050 VA01179 VA01180 VA01181 VA02051	199.2 201.2 204.6 210.0 213.0	200.0 204.5 210.0 213.9 213.9	.8 3.3 5.4 3.9 .9	0 n/a n/a 0	3 <10 66 15 22	<5 n/a n/a n/a <5	94 58 34 43 60	<1 n/a n/a n/a <1	<5 n/a n/a n/a (5	590 689 534 449 500
		200.0 202.1 Similiar to 199.2 to and weak local argill	200.0 with minor hematite ite.											
		202.1 204.5 Siliceous, weakly mot chloritic matrix and controlled carbonatiz. %, < 1 mm, light brown controlled carbonatiz.	tled felsic with very weak fracture ation. There are 1 to 2 n to tan specks, not a											
		carbonate, sericite (204.5 204.6 Fault gouge, parallel 204.6 210.0 Intermediate (?) or v medium green tuff with quartz eyes. There is calcite snots and str	<pre>to to foliation. ery chloritic felsic h 10 %, < 1 to 1 mm, approximately 5 % white eaks.</pre>											
		210.0 213.9 9 light green quartz schist with 5 to 7 %, 1 to local black chlorite wisps is minor zones of light brow biotite (?). From 212.7 to	- sericite - chlorite 3 mm, quartz eyes and . From 212 to 213.9 there wn mica, sericite or .213.2 there are trace 2											
		to 5 mm pyrite cubes. At 21. grey - green chert beds at 1 Foliations :. 203.1 : 67 degrees to core axis. 205.8 : 68 degrees to core axis. 210.0 : 68 degrees to core axis.	J.5 there is 5 cm of 68 degrees to core axis.											

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 11 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Ag Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) Sulphides (ppm) (m) (ppm) (ppm) (ppm) (ppb) (ppm) 213.9 220.7 MAFIC TUFF Chlorite schist to massive mafic tuff. Locally hosts VA02052 213.9 215.0 1.1 3 42 ٢5 92 <1 8 1100 cherty lapilli. There is chlorite and sericite alteration VA01182 214.0 220.0 6.0 n/a 47 61 n/a n/a n/a 504 from 213.9 to 214.3 with 5 % fine-grained pyrite. There VA02053 215.0 217.0 2.0 2 33 75 ۲5 810 5 <1 is 1 to 2 % fine-grained disseminated pyrite throughout. VA02054 217.0 219.0 2.0 2 6 < 5 49 87 <1 830 There are 5 to 10 % white calcite veins and veinlets. Is 73 < 5 330 VA02055 219.0 220.7 1.7 2 70 <5 <1 locally contorted. Alteration :. 213.9 220.7 STRONG SPOTTY CARBONATIZATION. Foliations :. 215.7 : 61 degrees to core axis. 217.1 : 74 degrees to core axis. 220.3 : 45 degrees to core axis. 220.7 222.8 FAULT ZONE Very contorted chlorite - calcite schist with fault gouge VA02056 220.7 221.7 1.0 89 78 <1 < 5 650 0 6 at numerous orientations. 222.8 226.9 CHLORITE SCHIST Dark green chlorite schist with minor felsic to cherty VA01183 222.8 226.9 4.1 115 81 n/a n/a n/a 341 n/a tuff beds from 224.4 to 225. Is locally weakly to strongly contorted with minor local fault slips. Alteration :. 222.8 226.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION as white calcite streaks. 226.9 227.0 FAULT ZONE Fault gouge at approximately 80 degrees to core axis. 227.0 228.8 FELSIC QUARTZ EYE TUFF Contorted massive grey siliceous felsic with approximately 7 %, 4 mm, quartz eyes. There is chlorite schist with moderate carbonatization from 228.2 to 228.5. 227.0 228.8 MODERATE SPOTTY CARBONATIZATION. 228.8 237.5 CHLORITE SCHIST Dark green non-magnetic chlorite schist with strong to VA01184 229.0 237.5 8.5 n/a 75 65 n/a 538 n/a n/a very strong fracture controlled carbonatization. There is trace to nil fine-grained disseminated pyrite cubes. Locally there are (?) guartz eyes, << 1 mm, and up to 10

to the s

cm of up to 10 %, 1 mm epidote grains. Calcite averages 20 %, from 234.3 to 234.6 calcite exceeds 50 %. There are minor local kinks perpendicular to foliation and fault

slips parallel to foliation.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-61 12

Рb

Zn

Åg

Au. Ba

From To
(m) (m)Sample From To
No. (m) (m)

No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

Total Cu

Width

Foliations :. 230.0 : 40 degrees to core axis. 232.8 : 55 degrees to core axis. 234.3 : 54 degrees to core axis. 237.2 : 58 degrees to core axis. Alteration :. 228.8 237.5 STRONG FRACTURE CONTROLLED CARBONATIZATION.

237.5 237.9 FAULT ZONE

Fault gouge with contorted sericite and rotated pieces of white quartz vein. Upper contact at approximately 73 degrees to core axis and lower contact at 61 degrees to core axis with very contorted sericitic tuff. There is 0.1 m of lost core.

237.9 239.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Contorted weakly to moderately chloritic felsic tuff with 3 to 5 %, 1 to 2 mm, quartz eyes and approximately 7 %, 1 mm, feldspars. There are local lapilli, up to 10 %, siliceous grey with numerous fine-grained feldspars. There is 2 to 3 % brown mica, sericite or biotite (?). There is moderate local quartz - calcite veining with trace associated pyrite. There are minor grey chert or cherty tuff beds, foliation locally changes to parallel these competent < 1 cm beds which have mnr fractures perpendicular to bedding. There is gentle 'S' folding throughout.

237.9 239.3 MODERATE PERVASIVE CHLORITIZATION. Bedding :. 239.0 : 59 degrees to core axis.

239.1 : 57 degrees to core axis.

239.3 240.1 CHLORITE SCHIST

Weakly contorted chlorite schist with 15 % calcite and 3 % light brown mica. Foliation is trending at 45 degrees to core axis.

240.1 241.2 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF

Siliceous grey lapilli or beds alternating with chloritic layers. Contorted with 5 % quartz - calcite veins parallel to foliation. There are numerous minor << 1 mm tension gashes filled with calcite. There are trace local pyrite bands. 240.1 241.2 MODERATE SPOTTY CHLORITIZATION.

241.2 241.5 CHLORITE SCHIST

<pre>PROFERT: Clearaines J.Y. TAXCOMMENTS LINTED JANGON BILL GOS Prove To fo</pre>	•																
 HOPENTY: Chaminos J.Y. There To (18) (a)																	
 PROPARTY CAMERING OFF. PROPARTY CLUTTER TO TO WIGH TO LINE CONTACT TO TO UNDER THE LINE TO TO TO UNDER THE LINE CONTACT TO UNDER THE LINE CONTACT TO /li>	T		V. Chompinus I V														
Prom To Sample From To Width Total Cu Pb In Ag Au ship Charits exist will strome to mederate fracture controlled castinitation. Charits exist will strome to mederate fracture controlled castinitation. Sample From To Width Total Cu Pb In Ag Au ship 241.5 241.5 241.5 241.5 241.5 241.5 241.5 241.6 CHARITS COUNT Ar from 241.2 to 241.5. 241.4 271.0 CHARITS CHART CHARTS CHART CHARTS CHART CHARTS CHART CHARTS CHARTS CHARTS 241.4 271.0 CHARTS CHARTS CHARTS LITTY VADIES 243.0 251.0 2.0 n/a 1.4		KOF EK I	r, Chemathus J.Y.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-61	IO: Pa	ige Numb 13	er					
Chlories schist wich strong to noderste fracture controlled actionalisation. Locally contorted. Foliation trend at 50 degrees to core axis. 241.5 241.9 CHLORITE SCUIST As from 241.2 to 241.5. 241.4 273.0 CHLORITE SCUIST As from 241.2 to 241.5. 241.4 273.0 CHLORITE SCHIST As from 241.2 to 241.5. 241.4 273.0 CHLORITE SCHIST As from 241.2 to 241.5. 241.4 273.0 CHLORITE SCHIST As from 241.2 to 241.5. 242.4 273.0 CHLORITE SCHIST As from 241.2 to 241.5. 242.4 273.0 CHLORITE SCHIST 243.6 Schift periodorited. 244.6 Schift Schift Schift Chlorite Schift With up to 245.7 247.6 CHLORITE SCHIFT CHLORITE SCHIFT 241.6 247.5 CHLORITE SCHIFT CHLORITE SCHIFT 241.6 Schift Schift Schift Schift Chlorite Schift Schi	From (m)	To (m)	DES(CRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)		
 241.5 241.9 CHLORITIC FELSIC QUARTE-FELSEAR CRYSTAL TUFF Very similar to 237.9 to 239.3. 241.9 22.4 CHLORITE SCHITT AS from 241.2 to 241.5. 242.4 271.0 CHLORITE FELSIC QUARTE-FELSEAR CRYSTAL TUFF Very weakly to moderately chloritic filsic tuff with up to 201.8 243.0 251.0 8.0 m/a (10 m/a 14 m/a m/a 855 average 1mm, feldspars, locally epidoxized. YA01185 243.0 251.0 8.0 m/a (10 m/a 17 m/a m/a 855 average 1mm, feldspars, locally epidoxized. YA01185 243.0 251.0 8.0 m/a (10 m/a 17 m/a m/a 855 average 1mm, feldspars, locally epidoxized. YA01187 259.0 268.0 9.0 m/a (10 m/a 17 m/a m/a 926 224.2 420.0 KOMENTE FORTY CAUGHTELINGOM. YA01187 259.0 268.0 9.0 m/a (10 m/a 17 m/a m/a 926 224.2 420.0 KOMENTE FORTY CAUGHTELINGOM. YA01187 259.0 268.0 9.0 m/a (10 m/a 17 m/a m/a 926 244.2 420.0 KOMENTE FORTY CAUGHTELINGOM. YA01187 259.0 268.0 9.0 m/a (10 m/a 14 m/a m/a 16 /li>			Chlorite schist with strong to controlled carbonatization. Loc trend at 50 degrees to core ax:	moderate fracture cally contorted. Foliation is.									· · ·				
241.9 242.4 CHLORITE SCHIST As from 241.2 to 241.5. 242.4 273.0 CHLORITIC FELSIC QUARTZ-FELOSPAR CHYSTAL TUPY Wery weakly to moderately chloritic felsic tuff with up to average i mm, fusiopars, locally opidarized. Y401185 243.0 251.0 5.0 n/a (10 n/a 14 s/a b/a 55 Y401185 251.0 259.0 5.0 n/a (10 n/a 17 n/a b/a 55 Y401185 251.0 259.0 5.0 n/a (10 n/a n/a 17 n/a b/a 55 Y401185 251.0 259.0 5.0 n/a (10 n/a n/a 1990) 242.4 273.3 0 MOREART SPOTTY CHLORITIZATION. Y401188 268.0 273.0 5.0 n/a (10 n/a n/a 1099) 242.4 24.3 24.5 fedily bandd sericitic to light green with 15 r (10 % 1 mm, quartz gree and local calcite veinles. 247.5 247.6 Quartz - chlorite vin. 247.5 250.8 Keekly handd with yellow sericitic beds and locally up to 10 cm of up to 3 % greater than l an guartz gree. There are specimately 12 to 18.0 green. There are specimately 12 to 18.0 green. There are specimately 12 to 18.0 green. There are specimately 12 to 15 % quart and 3 to 5 %, ju to 5 cm epidore it create dissentiate dyrice. 217.7 273.0 Weakly calculate utfur with 5 to creater for the control weak to and 1 to 5 %, ju m, quartz gree. There is trace dissentiated pyrice. 217.7 273.0 Weakly active controlicit utfur with 5 to creater for the control weak to and 3 to 5 %, ju m, quartz gree. There is trace dissentiated pyrice. 217.7 273.0 Weakly greated to create and and 3 to 2 % greate and feldapar crystals. 18 254.4 : 66 degrees to create and. 255.3 : 50 degrees to create and. 255.3 : 50 degrees to create and. 255.3 : 50 degrees to create and.	241.5	241.9	CHLORITIC FELSIC QUARTZ-FELDSP/ Very similiar to 237.9 to 239.	AR CRYSTAL TUFF 3.	• •												
241.9 22.4 CHUORITI SCHIET As from 241.2 to 241.5. As from 241.2 to 241.5. The from 241.2 to 241.5. As from 241.2 to 241.5. The provided and the provided from the provided																	
 242.4 273.0 CHLORITIC FELSIC QUART-FELDEPAR GRYSTAL TUFF Yery weakly to moderately chloritic felsic tuff with up to XAUI85 243.0 251.0 8.0 n/a (10 n/a 14 n/a n/a 855 242.4 273.0 MOREATE STOTY CHLORITIZATION. YAUI86 251.0 259.0 8.0 n/a (11 n/a 16 n/a n/a 764 242.4 273.0 MOREATE STOTY CHLORITIZATION. YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 764 242.4 243.6 Moderate structure CHLORITIZATION. YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 160 YAUI2 eyes. all nm. YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 764 YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 764 YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 1690 YAUI2 eyes. all nm. YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a 16 n/a n/a 1690 YAUI2 eyes. There are minor fracture controlled Calcite veinlets. YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a n/a 16 n/a n/a 1690 YAUI86 271.0 YAUI88 268.0 273.0 5.0 n/a (10 n/a 14 n/a n/a 16 n/a 1/a 16 n/a n/a 1600 YAUI2 eyes. There are minor fracture controlled Calcite veinlets. YAUI88 268.0 YAUI88 YAUIA YAUI88 268.0 YAUI88 268.0 YAUI88 268.0 YAUI88 268.0 YAUI88 YAU	241.9	242.4	CHLORITE SCHIST As from 241.2 to 241.5.														
 242.4 273.0 CHLORITIC FELSICE QUART-FELDEPAR CRYSTAL TUPF 242.4 273.0 CHLORITIC FELSICE QUART-FELDEPAR CRYSTAL TUPF 242.4 273.0 toolearately toolearately chloritic felsice tuff with up to VAUL88 243.0 251.0 8.0 n/a (10 n/a 11 n/a n/a 865 242.4 243.6 holden grees tool 11 0 m felsions and 12 t VAUL88 251.0 259.0 5.0 n/a (10 n/a 11 n/a n/a n/a 764 242.4 243.6 holden grees tool 11 0 m felsions and 12 t VAUL88 251.0 273.0 5.0 n/a (10 n/a 11 n/a n/a n/a 16 n/a 176 n/a 764 242.4 243.6 holden grees tool 11 0 m felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a n/a 1090 242.4 243.6 holden grees tool 11 0 m felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 241.6 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a 11 n/a n/a 16 n/a n/a 1090 241.5 felsions and 12 t VAUL88 241.5 felsions and 12 t VAUL88 268.0 273.0 5.0 n/a (10 n/a n/a 10 n/a n/a 1090 241.5 felsions and 12 t VAUL88 /li>																	
<pre>20 %, average 7 %, 1 to 1 m., quartz eyes and 10 to 15 %, VA01186 2510 255.0 8:0 m/s i10 m/s 17 m/s n/s 926 average 1 m. feldepars. locally spiked sericit: to light green with 12 % quartz eyes, all 1 m. 242.4 243.6 Weakly banded sericit: to light green with 15 to 20 %, 1 m., quartz eyes and local feldepars. There are minor fracture controlled calcite veinlets. 247.5 247.6 Quartz - follow sericitic beds and i.coally up to 10 co of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 * feldepars. 250.8 259.0 Finely badded with 5 %, up to 5 m epidote rich beds. More silicous beds and rich weakly child to the sericitic beds and i.coally up to 10 co of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 * feldepars. 250.8 259.0 Finely badded with 5 %, up to 5 m epidote rich beds. More silicous beds alternate with chloritic and sericitic tuff. 262.2 217.0 Dominately sericitic tuff. 263.2 217.0 Dominately sericitic tuff. 271.7 273.0 Meakly and feldspar crystals. Is mediany :. 234.2 : 66 degrees to core axis. 243.2 : 60 degrees to core axis. 243.2 : 61 degrees to core axis. 243.2 : 61 degrees to core axis. 244.3 : 61 degrees to core axis. 245.5 : 61 degrees to core axis. 245.5 : 61 degrees to core axis. 246.5 : 61 degrees to core axis. 246.5 : 61 degrees to core axis. 247. 247. 247. 247. 247. 247. 247. 247.</pre>	242.4	273.0	CHLORITIC FELSIC QUARTZ-FELDSPA	AR CRYSTAL TUFF	VA01185	243 0	251 0	. 8.0	n/a	(10	n/a	14	n/2	n/a	865		
 average 1 mm. fedgapars. locally epidotised. VA01187 259.0 268.0 9.0 n/a 11 n/a 16 n/a n/a 764 242.4 273.0 MoDERATE SPOTY CHURCHTAINTON. VA0188 268.0 273.0 5.0 n/a 50 n/a (10 n/a n/a 1090) 242.4 243.6 Medium green with 10 % feldspars and 12 % quart eyes, 111 mm. 243.6 24.5 250.8 Weakly banded sericitic to light green with 15 to 20 %, 1 mm, quart eyes and local feldspars. There are minor fracture controlled 247.5 247.6 Optime - fold of 0 is 9 greater than 3 mm quart eyes. There are approximately 12 % 4 feldspars. 250.8 259.0 Finely bedded with 5%, up to 5 m epidote rich beds and 10 for selicitic modes and sericitic more solicitor beds or layers. Crystal content varies locally from 5 to 15% quartz and 3 to 20 % 1 mm, find 16 for selicitic modes and sericitic tuff. 250. 268.2 Moderately to veakly chloridit off with 5 to 20 content for solicitic modes and to 15% quartz and 10 to 15% greater than a nodes at fracture controlled carbonatization and 1 to 5% 1 mm, the total sericitic tuff. 250. 268.2 Moderately to veakly chloridit off with 5 to 20 content for the set /li>			20 %, average 7 %, 1 to 3 mm,	quartz eyes and 10 to 15 %,	VA01186	251.0	259.0	8.0	n/a	(10	n/a	17	n/a n/a	n/a	926		
 242.4 243.6 Medium green with 10 % feldspars and 12 % mark for the first fi			average 1 mm, feldspars, local 242.4 273.0 MODERATE SPOTTY CHI	ly epidotized. JORITIZATION.	VA01187 VA01188	259.0 268.0	268.0	9.0 5.0	n/a n/a	11 50	n/a n/a	16	n/a n/a	n/a n/a '	764 1090		
<pre>quartz eyes, all 1 mm. 2416: 247.5 Veakly banded sericitic to light green with 15 to 20 %, 1 mm, quartz eyes and local feldspars. There are hinor fracture controlled calcite veinLets. 247.5 247.6 Quartz - chlorite vein. 247.5 247.6 Quartz - chlorite vein. 247.5 27.6 Veakly banded with yellow sericitic beds and locally up to 10 c or of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 t feldspars. 250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More shilceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 2017. Dominately sericitic tuff with 5 to 20 cm beds of sericitic tuff. 266.2 271.7 Dominately sericitic tuff with weak to mediates 5 % use controlled carbonatization and the series in a degree to core axis. 271.7 273.0 Veakly argillic and more chloritic tuff with soderately contorted. 5 tructure : 26.4.4 : 66 degrees to core axis. 26.4.2 : 60 degrees to core axis. 26.4.2 : 61 degrees to core axis. 26.5.2 : 61 degrees to core axis. 26.5.2 : 61 degrees to core axis.</pre>			242.4 243.6 Medium green with 1	10 % feldspars and 12 %		20010	2,010	5.0	, u	50		(10	, u		2050		
 Lick and the set of the			quartz eyes, all 1 243 6 247 5 Weakly banded serie	mm.													
<pre>feldspars. There are minor fracture controlled calcite veinlets. 247.5 247.6 Quartz - chlorite vein. 247.6 250.8 Weakly banded with yellow sericitic beds and locally up to 10 cm of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 % feldspars. 250.8 255.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More siliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 286.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff in tweak to moderate fracture controlled carbonatization and 3 to 5 % juma, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Veakly arguillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. 27. 284.4 : 66 degrees to core axis. 256.3 : 51 degrees to core axis. 260.5 : 61 degrees to core axis. 260.5 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.</pre>			to 20 %, 1 mm, quar	rtz eyes and local													
 247.5 247.6 Quartz - chlorite vein. 247.5 247.6 Quartz - chlorite vein. 247.6 250.8 Weskly banded with yellow sericitic beds and locally up to 10 cm of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 % feldspars. 250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More silicous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to veskly chloritic tuff with 5 to 20 cm beds of sericitic tuff with vesk to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weskly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately controlled. 274.7 273.6 degrees to core axis. 264.3 : 66 degrees to core axis. 265.2 : 61 degrees to core axis. 			feldspars. There an	re minor fracture controlled													
<pre>247.6 250.8 Weakly banded with yellow sericitic beds and locally up to 10 cm of up to 3 & greater than 3 mm quartz eyes. There are approximately 12 & feldspars. 250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More siliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with veak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly arguillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderate :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. 261.2 : 60 degrees to core axis. 262.3 : 61 degrees to core axis.</pre>			247.5 247.6 Quartz - chlorite v	vein.													
<pre>locally up to 10 cm of up to 3 % greater than 3 mm quartz eyes. There are approximately 12 % feldspars. 250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More siliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to veakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with weak to moderatel fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Veakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. 27.284.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. 261.4 : 66 degrees to core axis. 263.6 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.</pre>			247.6 250.8 Weakly banded with	yellow sericitic beds and													
 x feldspars. 250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More soliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 21.7 Dominately sericitic tuff. 268.2 21.7 Dominately sericitic tuff. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. 271.7 273.0 Weakly argillic and feldspar crystals. Is moderately contorted. 272.84.4 : 66 degrees to core axis. 264.8 : 55 degrees to core axis. 264.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis. 			locally up to 10 cm	n of up to 3 % greater than There are approximately 12													
250.8 259.0 Finely bedded with 5 %, up to 5 cm epidote rich beds. More siliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. 76.1 id degrees to core axis. 260.5 : 61 degrees to core axis.			<pre>% feldspars.</pre>	incre are approximately 12													
<pre>rich beds. More siliceous beds alternate with chloritic and sericitic more schistose beds or layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 0 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff. 268.2 271.7 Dominately sericitic tuff weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. Foliations :. 241.2 : 60 degrees to core axis. 260.5 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.</pre>			250.8 259.0 Finely bedded with	5 %, up to 5 cm epidote													
<pre>layers. Crystal content varies locally from 5 to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. 27.8 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. 26.8 : 55 degrees to core axis. 26.9 : 60 degrees to core axis. 26.5 : 61 degrees to core axis.</pre>			chloritic and serie	liceous beds alternate with													
to 15 % quartz and 3 to 20 % feldspar. 259.0 268.2 Moderately to weakly chloritic tuff with 5 to 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. 266.8 : 55 degrees to core axis. 261.3 : 60 degrees to core axis. 261.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			layers. Crystal cor	ntent varies locally from 5													
 20 cm beds of sericitic tuff. 268.2 271.7 Dominately sericitic tuff with weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 24.2 : 60 degrees to core axis. 264.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis. 			to 15 % quartz and 259 0 268 2 Moderately to weak	3 to 20 % feldspar.													
268.2 271.7 Dominately sericitic tuff with weak to moderate fracture controlled carbonatization and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. 2 Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 260.5 : 61 degrees to core axis.			20 cm beds of serie	sitic tuff.													
and 3 to 5 %, 3 mm, quartz eyes. There is trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 260.5 : 61 degrees to core axis.			268.2 271.7 Dominately sericiti	ic tuff with weak to													
trace disseminated pyrite. 271.7 273.0 Weakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 243.2 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			and 3 to 5 %, 3 mm.	. guartz eves. There is													
 271.7 273.0 Veakly argillic and more chloritic tuff with 20 to 25 % quartz and feldspar crystals. Is moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis. 			trace disseminated	pyrite.													
moderately contorted. Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 243.2 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			271.7 273.0 Weakly argiling and 20 to 25 % guartz a	1 more chloritic tuff with and feldspar crystals. Is													
Structure :. Bedding :. 254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			moderately contorte	ed.													
254.4 : 66 degrees to core axis. 256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			Structure :.													2	• •
256.8 : 55 degrees to core axis. Foliations :. 243.2 : 60 degrees to core axis. 254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			254.4 : 66 degrees to core axis	5.													
rollations :. 243.2 : 60 degrees to core axis. 254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			256.8 : 55 degrees to core axis	5.													
254.3 : 61 degrees to core axis. 260.5 : 61 degrees to core axis.			243.2 : 60 degrees to core axis	3.				-								¢	
26U.5 : 61 degrees to Core axis.			254.3 : 61 degrees to core axis	5.													
			260.5 : 61 degrees to core axis	3.													

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 14 DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn λg Au Ba (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 268.6 : 64 degrees to core axis. 273.0 : 68 degrees to core axis, lower contact. 273.0 273.2 MAFIC INTRUSIVE Dark green chloritic sill, weak symmetric chilled margins, with trace pyrite cubes and very weak fracture controlled carbonatization. 273.2 284.2 CHLORITIC FELSIC QUARTZ EYE TUFF Variably moderately chloritic to sericitic tuff with 1 to VA01189 273.3 284.2 10.9 n/a 40 <10 n/a n/a 1200 n/a 2 %, 2 mm, quartz eyes and approximately 10 to 15 %, < 1. mm crystals, guartz and feldspar. Is weakly contorted. From 277 to 284.2 there are minor 10 to 20 cm white sericitic zones with minor < 1 mm pyrite stringers or bands constituting < 1 % of the tuff. 273.2 284.2 WEAK SPOTTY CHLORITIZATION. 273.2 284.2 MODERATE SPOTTY CARBONATIZATION as fracture controlled calcite and in pressure shadows around quartz eyes. Foliations :. 276.1 : 74 degrees to core axis with minor fault slip with 1 mm fault gouge. 279.3 : 62 degrees to core axis. 284.2 284.4 MAFIC INTRUSIVE As from 273.0 to 273.2. 284.4 287.4 FELSIC QUARTZ EYE TUFF Massive white to grey weakly schistose felsic tuff or VA01190 284.4 287.4 3.0 n/a 43 n/a <10 n/a n/a 996 volcanic wacke. There are 10 to 15 %, 1 to 2 mm, rounded guartz grains and approximately 15 % fine-grained feldspars. Weakly mottled appearance. There is trace disseminated pyrite cubes, < 1 mm and trace calcite. There may be weak spotty silicification and there are minor fracture controlled quartz veins. Foliations :. 285.1 : 64 degrees to core axis. 286.5 : 63 degrees to core axis. 287.4 287.9 MAFIC TUFF Dark green chloritic mafic with trace quartz eyes and VA01191 287.4 287.9 .5 n/a 143 n/a 739 n/a 32 n/a moderate pervasive to fracture controlled carbonatization. 287.9 310.5 CHLORITIC FELSIC QUARTZ EYE TUFF Similiar to 284.4 to 287.4, but gradually becomes VA01192 288.0 295.0 7.0 n/a n/a 1030 25 n/a 16 n/a

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(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

VA01193 295.0 298.0

(m)

VA01194 298.0 308.0 10.0

То

(m)

HOLE No: Page Number

(m)

3.0

CH88-61 15 Width Total Çu Pb Zn λq

77

78

(ppm) (ppm)

184

47

n/a

n/a

Sulphides (ppm)

n/a

n/a

Au

(ppb) (ppm)

n/a 1080

n/a 1070

(ppm)

n/a

n/a

Ba

From To -----DESCRIPTION-----(m)

chloritic as from 273.2 to 284.2.

- 287.9 288.2 As from 284.4 to 287.4.
- 288.2 289.0 As from 284.4 to 287.4 with 1.5 cm mafic at 288.2, 4 cm mafic at 288.5 1.0 cm at 288.6, 10 cm at 288.9. Mafics are medium green and carbonatized.
- 289.0 295.0 Similiar to 284.4 to 287.4 with 15 % quartz and same textures.
- 295.0 310.5 Weakly to moderately chloritic with decrease in quartz eyes to approximately 10 % and appearance of approximately 5 to 7 %, 1 to 2 mm, feldspars. There is very minor local compositional banding. Transition from above subunit to quartz eye depleted unit takes approximately 3.5 m, 295 is where green colour starts. There is trace local pyrite and weak fracture controlled carbonatization. Minor guartz veins occur and cross-cut and are parallel to foliation.

Alteration :.

287.9 309.3 WEAK FRACTURE CONTROLLED CARBONATIZATION. Structure :.

Foliations :.

292.1 : 66 degrees to core axis.

294.8 : 65 degrees to core axis.

301.2 : 70 degrees to core axis. 307.3 : 63 degrees to core axis.

Bedding :.

298.8 : 70 degrees to core axis.

310.5 311.7 MAFIC TUFF

Moderately to strongly magnetic dark green chloritic tuff with 2 to 3 %, < 1 mm, magnetite grains. There are minor calcite veinlets, up to 3 %, up to 1 cm. There are foliations and cleavages at 30 to 70 degrees to core axis.

311.7 324.7 CHLORITIC FELSIC QUARTZ EYE TUFF Variably chloritic felsic tuff with very local strong chloritic or andesitic zones. There are up to 15 %, < 1 to 2 mm, guartz eyes, average 7 %. Calcite is spotty and mainly occurs as trace to 5 %, with increase downhole and local veinlets. There is trace disseminated pyrite with weak up to 1 % banded pyrite from 315.2 to 315.3. There is blocky, highly fractured core from 319.0 to 320.1 and 322.1 to 322.6. Is very weakly contorted locally. Alteration :. 311.7 324.7 MODERATE SPOTTY CHLORITIZATION. 311.7 324.7 WEAK SPOTTY CARBONATIZATION.

Foliations :.

VA01195 313.0 323.0 10.0 114 n/a 671 n/a n/a 40 n/a

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-61 16 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Aα Au Ba (m) -----DESCRIPTION------(m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 315.2 : 65 degrees to core axis. 316.2 : 60 degrees to core axis. 321.7 : 57 degrees to core axis. 322.8 : 71 degrees to core axis. 324.7 331.4 FELSIC TUFF Light grey siliceous very disky felsic ash tuff with very VA01196 325.0 329.0 4.0 n/a 11 n/a <10 n/a n/a 709 contorted chlorite - carbonate schist from 328.8 to 330.1. There are approximately 10 % fine-grained feldspars and quartz eyes. There are local quartz - chlorite veins that cross-cut the foliation. Is weakly contorted with foliation from approximately 60 to 75 degrees to core axis. 331.4 335.5 INTERMEDIATE TUFF Fine-grained andesitic tuff, light to medium green with VA01197 331.4 335.5 4.1 n/a 38 n/a 48 n/a n/a 588 weak fracture controlled carbonatization as white calcite streaks. Last 1 m is bleached above contact with argillite. There is approximately 7 to 10 % fine-grained quartz eyes with trace up to 3 mm eyes and minor local zones with epidotized crystals. There is trace fracture controlled pyrite from 335.3 to the lower contact. Is massive, may be a sill. Foliations :. 331.6 : 64 degrees to core axis. 332.8 : 74 degrees to core axis. 334.1 : 71 degrees to core axis. 335.5 336.0 BLACK ARGILLITE Grey to black argillite with 8 cm green sericitic zone VA02057 335.6 336.0 <5 900 46 18 88 <1 from 335.80 to 335.88. Hosts approximately 2 to 3 % fracture controlled pyrite. There are minor sericitic and argillic clasts. There is strong pervasive carbonatization. Beds are weakly contorted and bedding trends at 70 degrees to core axis. 336.0 363.0 WEAKLY CHLORITIC FELSIC TUFF VA01198 336.0 337.4 1.4 n/a 1270 Locally weakly chloritic felsic tuff to volcanic wacke. 120 n/a 57 n/a n/a 336.0 337.4 Light green moderately chloritic tuff with VA02058 336.0 337.4 1.4 3 48 17 60 <1 <5 1100 n/a 1120 weak pervasive carbonatization and 3 % VA01199 339.5 350.0 10.5 n/a 26 n/a 16 n/a fracture controlled pyrite, similiar to 335.0 VA01200 350.0 363.0 13.0 n/a 992 34 11 n/a n/a n/a to 335.5. 337.4 339.1 Light grey volcanic wacke with approximately 30 %, up to 1.5 mm, quartz grains and approximately 30 % white quartz - green chlorite veins, massive with no foliation. 339.1 340.2 Mottled felsic tuff with weakly chloritic

matrix and siliceous grey lapilli (?), there

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-61 17

PROPERTY: Chemainus J.V.

From To

(m) (m)

-----DESCRIPTION-----

Sample From To Width Total Cu Pb Zn Ag Au Ba No. {m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm)

are approximately 7 %, < 1 mm, feldspar crystals and 3 to 5 %, 1 to 2 mm, quartz eyes. 340.2 340.3 Medium green mafic dyke or tuff with moderate

fracture controlled carbonatization.

340.3 340.5 As from 339.1 to 340.2.

340.5 341.0 Mafic to andesitic tuff with trace fine-grained quartz eyes, 0.5 % pyrite cubes and 5 % carbonate veinlets.

- 341.0 355.3 Medium to light grey felsic with local sericitic beds or bands, averages 7 %, 1 mm, quartz eyes and 15 %, < 1 mm, white feldspars. There is weak fracture controlled carbonatization and minor quartz - chlorite veins. There are minor fault slips parallel to foliation.
- 355.3 356.3 Dominantly guartz chlorite calcite vein.
- 356.3 358.6 Possibly light grey up to 4 cm elongated felsic lapilli in chloritic matrix. There are quartz eyes in the matrix, up to 15 % 2 mm.
- 358.6 361.1 Blocky, highly fractured core, mainly quartz vein with fault gouge.
- 361.1 363.0 Moderately chloritic and contorted with approximately 15 % feldspar and quartz crystals

Foliations :.

339.8 : 77 degrees to core axis. 346.1 : 76 degrees to core axis. 349.8 : 63 degrees to core axis.

356.7 : 47 degrees to core axis.

- 362.2 : 45 degrees to core axis.
- Lost core :. 358.0 358.7 : 0.2 m.
- 359.0 360.6 : 0.4 m.

End of hole: 1191 feet (363.0 m) on Wednesday June 1, 1988 at 10:00 a.m.

Total lost core = 8.0 m : % recovery = 97.8 %.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	XCA0	ZHGO	ZHA20	XK20	XFE203	XT 102	XP205	ZHNO	XLO I	SUN	BA	AI	NACA
VA00733	14.50	15.00	56.80	15.30	6.79	2.51	0.98	3.63	5.24	0.38	0.24	0.20	8.16	100.23	1280.	44.	8.
VA00734	33.50	34.00	50.60	15.00	9.46	3.70	5.09	0.19	8.99	0.63	0.21	0.24	5.93	100.04	533.	21.	15.
VA00735	36.50	37.00	50.00	13.90	11.40	7.26	3.48	0.09	9.58	0.77	0.14	0.33	3.00	99.95	364.	33.	15.
VA00736	49.00	49.50	55.70	15.10	6.39	2.64	5.27	1.18	6.23	0.51	0.21	0.16	6.54	99.93	448.	25.	12.
VA00737	56.60	56.80	55.90	16.20	4.85	2.48	4.31	2.27	6.91	0.44	0.32	0.12	4.54	98.34	480.	34.	9.
VA00738	62.00	62.50	52.10	14.60	6.80	4.24	4.07	1.15	7.68	0.57	0.21	0.23	8.54	100.19	520.	33.	11.
VA00739	75.70	76.00	47.90	13.00	7.93	7.42	2.77	0.02	10.60	0.64	0.19	0.17	7.85	98.49	51.	41.	11.
VA00740	88.00	88.50	61.40	16.90	3.45	1.12	5.25	2.19	5.11	0.29	0.25	0.06	3.93	99.95	960.	28.	9.
VA00741	99.20	99.30	56.50	16.00	3.23	2.45	3.07	1.43	11.90	0.67	0.26	0.21	4.70	100.42	479.	38.	6.
VA00742	108.30	108.80	67.60	12.70	5.66	1.06	0.61	3.03	2.60	0.22	0.09	0.18	6.08	99.83	1330.	39.	6.
VA00743	113.30	113.90	60.00	16.60	2.59	1.95	2.67	2.24	8.92	0.93	0.25	0.13	3.70	99.98	1100.	44.	5.
VA00744	120.50	120.70	71.70	14.50	2.79	0.50	1.94	3.28	1.81	0.21	0.05	0.13	3.23	100.14	1790.	44.	5.
VA00745	127.00	127.50	49.10	18.20	6.73	2.33	2.95	2.54	9.22	0.75	0.55	0.28	7.31	99.96	931.	33.	10.
VA00746	133.50	134.00	69.90	13.80	2.63	1.42	1.69	3.25	2.69	0.18	0.08	0.08	4.23	99.95	1240.	52.	. 4-
VA00747	139.00	139.00	47.30	18.90	6.91	2.72	2.05	3.35	9.01	0.84	0.51	0.31	7.93	99.83	2260.	40.	9.
VA00748	158.00	158.40	60.00	16.60	3.57	1.57	3.16	3.21	5.99	0.27	0.23	0.19	4.23	99.02	1430.	42.	7.
VA00749	163.80	164.30	71.50	13.00	3.81	0.81	1.87	2.98	1.58	0.21	0.05	0.09	4.47	100.37	941.	40.	6.
VA00750	173.70	174.00	41.50	14.60	11.00	6.86	2.34	0.60	10.40	0.73	0.37	0.23	11.70	100.33	161.	36.	13.
VA00751	183,50	183.80	45.80	15.20	11.20	7.87	2.11	0.32	10.90	0.77	0.39	0.24	5.08	99.88	309.	38.	13.
VA00752	196.00	196.10	65.70	16.20	3.49	1.35	3.51	1.67	3.53	0.47	0.13	0.07	4.16	100.28	660.	30.	7.
VA00753	201.40	201.90	66.00	16.10	1.54	2.31	4.41	1.76	4.45	0.45	0.11	0.07	2.85	100.05	991.	41.	6.
VA00754	209.80	210.00	55.40	14.70	8.10	2.61	3.27	0.81	6.05	0.47	0.17	0.15	8.16	99.90	388.	23.	11.
VA00755	227.60	227.80	67.60	14.60	4.82	1.06	2.55	1.21	2.18	0.23	0.08	0.07	5.47	99.87	524.	24.	7.

Hole No. CH88-61 WHOLE ROCK SAMPLES

Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE	FROM	то	25102	XAL203	ZCAO	ZHGO	ZNA20	XK20	ZFE203	XT 102	XP205	ZHNO	ZLOI	SUM	 ва	AI	NACA
VA00756	233.00	233.50	52.70	12.30	9.60	2.87	1.10	0.99	10.10	0.47	0.16	0.15	9.70	100.14	349.	27.	11.
VA00757	240.60	240.75	66.30	13.60	4.92	1.30	2.68	1.50	4.23	0.38	0.11	0.07	5.08	100.17	761.	27.	8.
VA00758	241.30	241.40	46.00	16.20	10.10	2.72	2.48	1.21	10.40	0.94	0.32	0.19	9.54	100.10	519.	24.	13.
VA00759	242.50	243.00	66.00	16.20	2.87	1.84	3.48	2.47	3.56	0.28	0.09	0.06	3.54	100.39	928.	40.	6.
VA00760	253.10	253.60	68.50	15.50	3.66	1.21	3.21	2.28	2.79	0.27	0.08	0.07	2.62	100.19	1350.	34.	7.
VA00761	260.50	261.00	70.60	14.00	3.38	1.22	3.16	2.18	2.40	0.25	0.08	0.06	3.00	100.33	676.	34.	7.
VA00762	266.00	265.30	71.70	13.40	2.28	0.84	4.59	1.41	3.15	0.36	0.09	0.06	2.47	100.35	742.	25.	7.
VA00764	268.40	268.90	65.80	14.90	5.17	0.75	1.68	2.99	2.41	0.28	0.07	0.05	5.31	99.41	1150.	35.	7.
VA00763	273.05	273.25	39.80	18.90	4.19	4.56	3.57	0.35	17.50	3.34	1.13	0.19	5.39	98.92	196.	39.	8.
VA00765	279.20	279.30	68.30	13.60	4.95	0.69	1.16	3.45	2.03	0.26	0.06	0.06	4.85	99.41	1210.	40.	6.
VA00766	280.30	280.40	70.30	13.60	3.68	0.79	2.06	3.05	2.44	0.25	0.07	0.05	4.23	100.52	1040.	40.	6.
VA00767	291.00	291.50	70.90	13.90	2.46	0.82	4.19	2.87	2.13	0.27	0.07	0.05	2.77	100.43	1010.	36.	7.
VA00768	305.90	306.40	68.10	15.30	3.67	1.29	3.12	2.69	2.17	0.28	0.07	0.08	3.62	100.39	1120.	37.	7.
VA00769	311.00	311.50	47.40	17.60	7.02	3.48	4.38	1.77	10.00	0.98	0.37	0.28	6.85	100.13	418.	32.	11.
UA00770	325.80	326.30	72.70	14-00	1.05	0.87	5 35	2 18	1.94	0.20	0.06	0.04	1.62	100.01	752.	32.	6.
UA00771	333 60	334 10	45 00	16 70	10.00	2 45	2 92	1 93	10.30	0.92	0 44	0.22	9.39	100.08	667	25	13.
1000772	247 20	347 70	49.00	14.10	2 26	1 27	2.76	2.00	7 74	0.02	0.07	0.09	2 54	99.86	1180	47	
VHV0772	397,20	31/./0	07.30	14.10	3.26	1.2/	4,15	3.08	4.40	0.24	0.07	0.09	0.04	27.00	707	-/- 2)	
VA00773	357.00	358.00	71.50	12.50	2.76	1.27	4.10	1.88	2.62	0.23	0.05	0.09	2.77	99.87	/9/.	31.	/.

Hole No. CH88-61 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	21102	XP205	ZHNO	ZLOI	SUH	BA	AI	NACA
VA01157	6.40	14.20	57.70	15.90	4.65	1.94	1.71	3.90	5.52	0.34			5.93	97.59	1540.	48.	6.
VA01158	16.00	24.00	48.70	14.70	7.57	6.18	2.40	1.19	9.19	0.65			7.54	98.12	514.	43.	10.
VA01159	24.80	26.80	55.90	14.80	6.90	2.80	1.97	3.04	5.54	0.42			5.62	96.99	948.	40.	9.
VA01160	26.80	55.80	50.60	15.10	8.10	4.44	3.88	1.42	7.67	0.71			6.31	98.23	447.	33.	12.
VA01161	55.80	58.50	52.40	15.70	6.37	2.38	3.41	2.77	6.60	0.47			5.23	95.33	614.	34.	10.
VA01162	59.00	64.00	50.10	14.40	8.44	3.66	3.60	1.61	7.24	0.55			8.47	98.07	733.	30.	12.
VA01163	65.10	68.60	56.10	12.60	9.69	1.49	1.69	2.90	4.41	0.24			7.16	96.28	940.	28.	ii.
VA01164	68.60	77.10	47.80	13.30	7.97	6.07	3.28	0.32	9.51	0.59			7.31	96.15	150.	36.	11.
VA01165	77.10	86.60	50.90	16.30	5.61	3.20	2.17	3.06	8.83	0.74			7.23	98.04	867.	45.	8.
VA01166	86.60	95.70	60.50	16.20	3.59	1.49	4.86	1.91	7.14	0.37			3.93	99.99	895.	29.	8.
VA01167	95.70	105.40	57.30	16.20	4.23	1.88	3.13	2.39	8.01	0.50			5.00	98.64	961.	37.	7.
VA01168	105.40	109.30	71.90	12.70	3.27	0.83	2.05	2.57	2.37	0.25			3.62	99.46	1350.	39.	5.
VA01169	110.00	117.00	56.90	16.80	3.92	1.92	2.35	2.77	7.88	0.82			4.23	97.59	1940.	43.	6.
VA01170	119.00	123.20	72.50	12.60	3.06	0.61	2.35	2.59	1.93	0.22			3.47	99.33	1960.	37.	5.
VA01171	123.20	132.10	49.50	17.00	7.51	2.17	2.62	2.63	9.39	0.68			7.85	99.35	824.	32.	10.
VA01172	132.20	138.00	71.00	13.30	2.65	1.13	2.23	2.84	2.63	0.18			3.93	99.89	1230.	45.	5.
VA01173	145.00	155.00	64.20	15.50	3.18	1.19	3.40	2.90	4.45	0.38			3.23	98.43	1850.	38.	7.
VA01174	155.60	161.20	63.20	16.50	2.65	1.45	3.95	3.01	5.05	0.27			3.47	99.55	1350.	40.	7.
VA01175	161.20	166.60	65.40	14.00	4.74	1.26	1.99	3.21	3.14	0.23			5.47	99.44	1010.	40.	7.
VA01176	169.00	179.00	44.00	16.00	9.60	5.85	2.78	0.99	10.30	0.72			9.16	99.40	291.	36.	12.
VA01177	180.00	188.00	48.20	15.30	10.40	5.09	2.26	1.03	9.66	0.67			6.77	99.38	451.	33.	13.
VA01178	191.40	195.20	49.80	18.80	6.14	2.11	2.90	2.29	10.70	1.12			5.93	99.79	357.	33.	9.
VA01179	201.20	204.50	68.30	14.00	2.75	1.71	4.36	1.26	4.06	0.39			3.23	99.96	689.	30.	7.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

Hole No. CH88-G1 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBEE	FROM	TO	ZS 102	XAL203	ZCAO	XHGO	XNA20	XK20	2FE203	XT 102	XP205	ZHNO	101	SUN	BA	AI	NACA

VA01180	204.60	210.00	57.00	15.00	7.97	2.44	3.39	1.02	5.02	0.49			7.31	99.64	534.	23.	11.
VA01181	210.00	213.90	61.60	14.30	6.21	2.12	3.60	0.89	4.53	0.46			6.16	99.87	449.	23.	10.
VA01182	214.00	220.00	46.40	15.30	12.70	2.43	1.68	1.17	7.63	0.64			11.90	99.85	504.	20.	14.
VA01183	222.80	226.90	44.00	16.80	10.30	2.78	1.58	1.02	11.90	0.86			10.80	100.04	341.	24.	12.
VA01184	229.00	237.50	44.30	17.70	11.00	2.88	1.29	1.77	9.27	0.87			11.30	100.38	538.	27.	12.
VA01185	243.00	251.00	69.30	14.20	3.15	1.34	3.39	2.17	2.71	0.24			3.23	99.73	865.	35.	7.
VA01186	251.00	259.00	70.60	14.50	3.30	1.48	2.63	2.22	2.68	0.25			2.39	100.05	926.	38.	6.
VA01187	259.00	268.00	70.10	13.80	3.50	1.28	2.61	2.05	2.95	0.27			3.16	99.72	764.	35.	6.
VA01188	268.00	273.00	70.20	14.80	2.61	0.82	1.58	2.81	2.56	0.30			3.47	99.15	1090.	46.	4.
VA01189	273.30	284.20	69.30	14.80	3.57	0.70	1.61	3.41	2.17	0.29			4.16	100.01	1200.	44.	5.
VA01190	284.40	287.40	72.00	14.00	2.44	0.70	3.39	2.98	1.87	0.26			2.70	100.34	996.	39.	6.
VA01191	287.40	287.90	44.70	12.80	10.10	9.23	1.95	0.40	8.45	0.60	. •		10.50	98.73	739.	44.	12.
VA01192	288.00	295.00	70.10	13.80	2.51	0.94	3.37	2.97	2.33	0.26			3.00	99.28	1030.	40.	6.
VA01193	295.00	298.00	70.10	14.80	2.19	1.02	3.21	3.04	2.37	0.27			2.77	99.77	1080.	43.	5.
VA01194	298.00	308.00	70.40	14.20	2.58	1.09	3.33	2.45	2.25	0.27			2.85	99.42	1070.	37.	6.
VA01195	313.00	323.00	61.70	15.20	3.24	3.11	3.99	2.02	5.81	0.43			3.77	99.27	671.	42.	7.
VA01196	325.00	329.00	72.10	14.00	1.46	0.70	5.14	2.14	1.80	0.20			1.93	99.47	709.	30.	7.
VA01197	331.40	335.50	47.90	16.00	9.69	2.59	3.68	1.53	8.86	0.59			8.77	99.61	588.	24.	13.
VA01198	336.00	337.40	71.30	9.30	6.16	1.23	0.53	2.28	4.16	0.40			3.47	98.83	1270.	34.	7.
VA01199	339.50	350.00	67.60	13.90	3.91	1.19	2.51	3.38	2.61	0.28			3,77	99.15	1120.	42.	6.
VA01200	350.00	363.00	71.90	12.90	2.23	1.36	2.94	2.80	2.37	0.23			2.93	99.66	992.	45.	5.

Hole No. CH88-61 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	то	ВА (ррм)	CU (ppm)	ZN (ppm)	AG (ppm.)	AU (ppb)	CO (ppm)	NI (ррж)	(ppm) PB	AS (ppm)	CD (ppm)	. HO (ppm)	ММ (ррж)	CUZN	ETS	FE
VA02014	6.40	7.60	1400.0	151.0	30.0	<0.5	6.0	10.0	9.0	<5.0	<5.0	<1.0	3.0	680.0	83.	4.	3.
VA02015	7.60	8.80	1500.0	240.0	30.0	<0.5	13.0	8.0	7.0	<5.0	<5.0	<1.0	4.0	690.0	89.	4.	2.
VA02016	11.30	12.30	1500.0	93.0	18.0	<0.5	<5.0	9.0	10.0	8.0	<5.0	<1.0	3.0	625.0	84.	4.	2.
VA02017	12.30	13.30	1500.0	120.0	17.0	<0.5	<5.0	10.0	14.0	<5.0	5,0	<1.0	3.0	620.0	88.	4.	3.
VA02018	13.30	14.20	1300.0	34.0	20.0	<0.5	<5.0	10.0	12.0	<5.0	<5.0	<1.0	6.0	830.0	63.	4.	2.
VA02019	18.00	19.50	540.0	80.0	112.0	<0.5	<5.0	25.0	25.0	6.0	16.0	<1.0	4.0	900.0	42.	3.	4.
VA02020	24.80	25.80	1400.0	34.0	53.0	<0.5	<5.0	10.0	7.0	37.0	12.0	<1.0	4.0	800.0	39.	3.	2.
VA02021	25.80	26.80	800.0	68.0	84.0	<0.5	<5.0	21.0	31.0	10.0	14.0	<1.0	4.0	1400.0	45.	3.	4.
VA02022	26.80	28.00	460.0	106.0	186.0	<0,5	<5.0	25.0	66.0	15.0	12.0	<1.0	3.0	1600.0	36.	2.	4.
VA02023	28.00	30.00	480.0	68.0	62.0	<0.5	<5.0	21.0	38.0	7.0	10.0	<1.0	3.0	1400.0	52.	1.	4.
VA02024	54.30	55.80	870.0	71.0	76.0	<0.5	<5.0	14.0	17.0	5.0	<5.0	<1.0	5.0	850.0	48.	2.	з.
VA02025	55.80	57.20	720.0	47.0	53.0	0.5	<5.0	13.0	13.0	7.0	<5.0	<1.0	6.0	790.0	47.	6.	4.
VA02026	57.20	58.50	480.0	56.0	45.0	<0.5	<5.0	11.0	13.0	7.0	<5.0	<1.0	8.0	750.0	55.	8.	з.
VA02027	65.10	66.10	1100.0	50.0	172.0	<0.5	<5.0	18.0	8.0	5.0	<5.0	2.0	5.0	450.0	23.	2.	2.
VA02028	66.10	67.10	1200.0	55.0	42.0	1.6	<5.0	8.0	7.0	<5.0	<5.0	<1.0	8.0	350.0	57.	2.	2.
VA02029	67.10	68.60	1000.0	78.0	4000.0	0.6	77.0	2.0	10.0	25.0	8.0	26.0	17.0	890.0	2.	5.	1.
VA02030	68.60	70.00	130.0	22.0	144.0	<0.5	<5.0	19.0	39.0	9.0	<5.0	<1.0	5.0	670.0	13.	з.	4.
VA02031	70.00	71.50	<20.0	90.0	94.0	<0.5	<5.0	17.0	41.0	6.0	7.0	<1.0	5.0	700.0	49.	3.	4.
VA02032	71.50	73.00	20.0	97.0	88.0	<0.5	<5.0	11.0	30.0	6.0	8.0	<1.0	6.0	660.0	52.	3.	4.
VA02033	73.00	74.50	<20.0	69.0	100.0	<0.5	<5.0	11.0	32.0	9.0	10.0	<1.0	4.0	680.0	41.	3.	4.
V402034	74.50	76.00	<20.0	74.0	170.0	0.7	<5.0	28.0	39.0	20.0	8.0	<1.0	8.0	850.0	30.	3.	4.
VA02035	76.00	77.10	340.0	62.0	180.0	<0.5	<5.0	19.0	25.0	16.0	6.0	<1.0	5.0	810.0	26.	3.	4.
VA02036	83.50	84.50	1000.0	600.0	90.0	0.9	<5.0	18.0	9.0	20.0	5.0	<1.0	3.0	1000.0	87.	1.	5.

Hole No. CH88-61

SAMPLE NUMBER	FROM	TO	BA (ppma)	CU (ppm.)	ZN (ppm)	AG (pp∎)	AU (ppb)	C() (ppm)	NI (pp=)	PB (ppm)	AS (ppm)	CD (ppm)	НО (рряк)	нн (рра)	CUZN	ETS	FE
VA02037	93.00	94.50	1400.0	30.0	52.0	<0.5	<5.0	6.0	5.0	8.0	<5.0	<1.0	2.0	760.0	37.	2.	. 3.
VA02038	106.70	107.30	1400.0	12.0	25.0	<0.5	<5.0	8.0	7.0	5.0	<5.0	<1.0	5.0	500.0	32.	2.	1.
VA02039	144.30	145.20	1200.0	28.0	95.0	<0.5	<5.0	10.0	9.0	15.0	88.0	<1.0	31.0	1000.0	23.	2.	з.
VA02040	145.20	145.70	1300.0	69.0	62.0	1.6	8.0	20.0	16.0	55.0	500.0	<1.0	138.0	550.0	53.	25.	6.
VA02041	145.70	147.00	1160.0	17.0	58.0	<0.5	<5.0	10.0	8.0	12.0	15.0	<1.0	6.0	800.0	23.	2.	2.
VA02042	147.00	148.50	1140.0	26.0	69.0	<0.5	<5.0	15.0	13.0	7.0	18.0	<1.0	5.0	1200.0	27.	2.	3.
VA02043	148.50	150.00	2000.0	20.0	156.0	<0.5	<5.0	19.0	23.0	15.0	150.0	<1.0	8.0	910.0	11.	2.	4.
VA02044	150.00	151.20	2400.0	7.0	120.0	<0.5	<5.0	7.0	9.0	14.0	33.0	<1.0	18.0	760.0	6.	2.	2.
VA02045	151.20	152.10	2600.0	8.0	83.0	<0.5	<5.0	11.0	13.0	15.0	160.0	<1.0	8.0	510.0	9.	10.	3.
VA02046	152.10	153.60	2100.0	5.0	100.0	<0.5	<5.0	3.0	6.0	6.0	31.0	<1.0	5.0	900.0	5.	2.	2.
VA02047	153.60	155.60	2200.0	5.0	44.0	<0.5	<5.0	4.0	4.0	7.0	11.0	<1.0	3.0	710.0	10.	2.	1.
VA02048	172.50	173.50	600.0	71.0	65.0	<0.5	<5.0	12.0	24.0	6.0	<5.0	<1.0	4.0	730.0	52.	1.	3.
VA02049	189.70	191.40	350.0	4.0	120.0	0.5	<5.0	7.0	11.0	5.0	<5.0	<1.0	3.0	520.0	3.	0.	4.
VA02050	199.20	200.00	590.0	3.0	94.0	<0.5	<5.0	4.0	7.0	<5.0	<5.0	<1.0	3.0	190.0	3.	0.	2.
VA02051	213.00	213.90	500.0	22.0	60.0	<0.5	<5.0	5.0	14.0	<5.0	<5.0	<1.0	7.0	550.0	27.	0.	2.
VA02052	213.90	215.00	1100.0	42.0	92.0	<0.5	8.0	15.0	25.0	<5.0	5.0	<1.0	4.0	730.0	31.	3.	3.
VA02053	215.00	217.00	810.0	33.0	75.0	<0.5	<5.0	16.0	20.0	5.0	<5.0	<1.0	3.0	795.0	31.	2.	3.
VA02054	217.00	219.00	830.0	49.0	87.0	<0.5	<5.0	25.0	53.0	6.0	<5.0	<1.0	7.0	1320.0	36.	2.	6.
VA02055	219.00	220.70	330.0	70.0	73.0	<0.5	<5.0	19.0	26.0	<5.0	<5.0	<1.0	6.0	940.0	49.	2.	6.
VA02056	220,70	221.70	650.0	78.0	89.0	<0.5	<5.0	20.0	19.0	6.0	<5.0	<1.0	8.0	760.0	47.	0.	7.
VA02057	335.60	336.00	900.0	46.0	88.0	<0.5	<5.0	5.0	18.0	18.0	21.0	1.0	19.0	800.0	34.	3.	2.
VA02058	336.00	337.40	1100.0	48.0	60.0	<0.5	<5.0	7.0	19.0	17.0	120.0	<1.0	12.0	900.0	44.	3.	3.

Hole No. CH88-61



Summary Log: DDH CH88-62 Location: 50+00 W, 9+85 N; Holyoak 3 Claim Azimuth: 210, Dip: -50 Hole Completed: May 30, 1988 Core logged by: J. Pattison

0.0 - 6.4	Casing
6.4 - 17.2	Chloritic felsic tuff
17.2 - 24.2	Cherty sediments (black argillite and siltstone)
24.2 - 37.2	Chloritic felsic quartz eye tuff
37.2- 41.8	Cherty argillaceous sediments and felsic tuffite
41.8 - 125.1	Chloritic felsic quartz eye tuff
	5 % pyrite, 1 % sphalerite and trace galena over 2.0 m
125.1 - 127.1	Chlorite schist
127.1 - 191.3	Chloritic felsic quartz eye tuff
191.3 - 199.0	Cherty argillaceous sediments and felsic tuffite
199.0 - 221.2	Chloritic felsic lapilli tuff
221.2 - 222.6	Black argillite
222.6 - 224.2	Felsic quartz eye tuff
224.2 - 228.1 228.1 - 229.1	Cherty sediments (black argillite and siltstone) Felsic tuff
229.1 - 237.7	Cherty argillaceous sediments and felsic tuffite

	PROPERT	Y: Chemain	is JV			FALCONBI	RIDGE LIMIT	ED			-		HOLE I CH88-62	No: P 2	age Numb 1	er				
	Hole Lo	cation: 504	00' ¥ 9+85	N		DIAMON	D DRILL LOG													
	NTS: 92 Azimuth	B13 : 210	UTM: Elevation:	917 m							Cla: Sect	im No. 1 tion No.	Holyoak 3 .: 50+00 W							
	Dip: Started	-50 : 27-May-88	Length:	237.7 m							Logo Dril Assa	ged By: Lling Co ayed By:	J. Pattisc D.: Burwash : Bondar-Cl	on Enter Legg &	prises XRAL					
	Dunnage	. The book I	D sharraahi]; •			570 m	Dome			Core	e Size:	NQ							
	Furpose	: To test 1	r charyeabi	IICY anos	alles.		DIP I	2515												
					Length	Azi- muth	Dip	Length	A: m:	zi- uth	Dip									
					14.00 123.70	211.0 214.0	-51.0 -45.0	221.30	21	7.0 -	41.0									
Fr (om To m) (m)			DES	SCRIPTION	I		Sar	nple Mo.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)	
	0 6.4	OVERBURDEN	1																	
6.	4 17.2	WEAKLY CHL Light grey up to 20 % chlorite-c to foliati	ORITIC FELS -green weak (1 mm feld arbonate ri on above 9.	IC TUFF ly chlori spar crys ch banđs 0 m. < 1	tized fe tals. S 4 to 80 % disse	elsic as Several f cm wide eminated	h tuff with brown rusty parallel t pyrite.	VA0.	2857	6.4	17.4	11.0	n/a	12	n/a	37	n/a	n/a 1	790	
		STRUCTURE:	•																	
		At 13.0 m	3 mm fault	gouge at	30 degre	es to co	ore axis.													
		ALTERATION 6.4 17.2 M P	CODERATE PER ERVASIVE CH	VASIVE SE LORITIZAT	RICITIZA ION.	TION and	I WEAK													
		6.5 888.8	4.0 cm wide to core axi:	rusty ch s.	loritic	band at	30 degrees													
		6.8 6.9 Ru de	sty chlorit grees to com	e-carbona re axis.	te alter	ed zone	at 30													
		7.9 8.9 Ru de th	sty chlorit grees to con roughout. O	e-carbona re axis. .2 m of l	te alter Broken, ost core	ed zone blocky	at 35 core													

14.9 15.9 Medium grey cherty tuffite. Upper and lower contacts are gradational.

17.2 24.2 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR

PROPERTY: Chemainus JV

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PR	OPERT	Y: Chemainus JV FALCONBRIDGE LIMIT DIAMOND DRILL LOC	ED				HOLE N CH88-62	o: Pa	age Numb 2	er			
From (m)	То (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm
		GREYWACKE)											
		Medium to dark grey cherty siltstones (90%) intercalated	VA08113	17.4	18.4	1.0	4	48	6 .	110	(1	10	1900
		with beds of black argillite < 4 mm thick.	VA08114	18.4	19.0	.6	4	47	<5	108	· d	<5	1900
		Sediments are finely bedded to massive. 4 % disseminate	d VA08115	19.0	20.0	1.0	4	55	5	80	(1	5	1500
		pyrite.	VA08116	20.0	21.0	1.0	4	52	(5	80	(1)	7	1200
			VA08117	21.0	22.0	1.0	4	74	5	98	d	≺5	700
		STRUCTURE:.	VA08118	22.0	23.0	1.0	4	47	< 5	128	<1	<5	1300
		At 21.0 m bedding is at 60 degrees to core axis.	VA08119	23.0	24.2	1.2	4	61	5	136	<1	10	1400
21 2	37 2	CULODITIC PRISTC OUNDT PVP THER											
24.2	57.2	Composed of 2-5 % 2-5 mm gloar guarts over in a	11300050			11.0	. 1		,		,		
		composed of 2-5 %, 2-5 mm clear quartz eyes in a	VAU2858	24.2	37.2	13.0	n/a	23	n/a	(10	n/a	n/a	1020
		moderately to strongly sericitle and weakly chloritic,	VA08120	24.2	26.0	1.8	4	6	(5	10	<1	5	1100
		STRICEOUS Matrix. Broken core at the lower contact.	VA08121	26.0	27.0	1.0	4	2	<5	3	<1	5	770
		CTP11CT11PE+	VAU8122	21.0	28.0	1.0	4	4	. 6	٤	<1	10	770
		DA ANDE O ENHIT TONE 1 2 m of lost same Net marchine t	VA08123	28.0	29.0	1.0	4	3	. 7	3	<1	6	790
		24.4-25.9 FAULI ZONE. 1.5 M OL 10St COFE. NOT POSSIBLE t	0 VAU8124	29.0	30.0	1.0	4	3	<5	10	<1	<5	910
		Measure the orientation.	VAU8125	30.0	31.0	1.0	4	20	<5	90	<1	<5	1100
		At 29.0 m follation is at 28 degrees to core axis.	VA08126	31.0	32.0	1.0	4	4	<5	15	<1	<5	950
		31 0PD 307 011-	VA08127	32.0	33.0	1.0	- 4	2	(5	5	<1	5	970
		ADIERALIUN:.	VA08128	33.0	34.0	1.0	4	3	5	10	<1	12	770
		24.2 27.8 MODERATE SPOTTY CHEORITIZATION and MODERATE	VA08129	34.0	34.4	.4	4	80	50	680	<1	9	740
		PERVASIVE SERICITIZATION.	VA08130	34.4	34.6	.2	. 8	95	74 :	200	1	53	1100
		27.8 37.2 MODERATE PERVASIVE SERICITIZATION and WEAK	VA08131	34.6	35.6	1.0	8	39	54	800	<1	62	880
		SPOTTY CHLORITIZATION. Light pale brown	VA08132	35.6	36.5	9	4	8	9	68	<1	6	1100
		micaceous aiteration mineral (biotite?) is common below 31.5 m.	VA08133	36.5	37.2	.7	4	19	9	158	<1	7	1400
		CUI DUIDEC.											

SULPHIDES:.

24.2-34.4 m 4 % pyrite, disseminated and in chloritic bands/stringers < 4 mm wide. 34.4-35.6 m 8 % fracture controlled and disseminated pyrite

- 30.5 31.0 Medium grey cherty siltstone. Upper and lower contacts are sharp at 40 and 17 degrees to core axis respectively.
- 34.3 34.6 Dark grey argillaceous siltstone and black argillite. Finely bedded (< 5 mm) with 8 % pyrite in quartz filled microfractures. Upper and lower contacts are bedding contacts at 30 degrees to core axis.
- 34.8 35.6 Dark grey argillaceous siltstone and black argillite intercalated with cherty, felsic tuffite. 6 % disseminated and fracture controlled pyrite. Upper contact is a sharp bedding contact at 42 degrees to core axis while lower contact is gradational over 0.2 m suggesting TOPS DOWNHOLE.

HOLE No: Page Number FALCONBRIDGE LIMITED CH88-62 3 DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn Ag Au Ba (m) (m) -----DESCRIPTION-----No. Sulphides (ppm) (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) 37.2 41.8 CHERTY ARGILLACEOUS SEDIMENTS AND FELSIC TUFFITE Medium to dark grey cherty volcanic wackes with a variable VA08134 37.2 40.0 2.8 5 45 40 900 <1 122 720 argillaceous component. Most argillaceous between 38.2 VA08135 40.0 41.8 1.8 5 79 7 152 <1 22 1400 and 39.0 m. 5 % disseminated and fracture controlled pyrite. Core is broken and blocky throughout, 1.9 m of lost core. Lower contact is a sharp bedding contact at 25 degrees to core axis. STRUCTURE:. At 37.3 m foliation is at 22 degrees to core axis. At 41.1 bedding is at 40 degrees to core axis. 41.8 43.0 CHLORITIC FELSIC QUARTZ EYE TUFF As 24.2 to 37.2 m. 2 % pyrite concentrated in two 2 mm VA08136 41.8 43.0 1.2 2 -5 <5 20 <1 6 1100 stringers (?) parallel to foliation. Weak light brown VA02859 41.8 71.0 29.2 n/a 14 n/a 31 n/a n/a 1710 biotite alteration gives rock a mottled appearance. 0.3 m of lost core for no obvious reason. Broken core at the lower contact. 43.0 44.5 FELSIC TUFF Olive green epidotized and carbonatized felsic ash tuff VA08137 43.0 44.5 1.5 5 26 <5 250 <1 < 5 890 with up to 30 % (1 mm feldspars. 5 % disseminated pyrite. Broken core at the lower contact. 44.5 125.1 CHLORITIC FELSIC OUARTZ EYE TUFF 5 %, 2-5 mm clear quartz eyes in a fine-grained moderately VA08138 44.5 45.0 . 5 3 5 ۲5 12 10 1400 <1 to strongly sericitic, well foliated siliceous matrix. VA08139 45.0 46.0 1.0 3 7 <5 18 1400 40 <1 Locally weak streaky pale orange-brown biotite alteration VA08140 46.0 47.0 1.0 3 3 ٢5 22 <1 7 1300 gives rock a mottled appearance. Lower contact is at 33 VA08141 47.0 48.0 1.0 3 ٢5 5 1400 2 42 <1 degrees to core axis. VA08142 48.0 49.0 1.0 3 16 <5 340 <1 6 1600 VA08143 49.0 50.0 1.0 3 3 < 5 36 (1 6 1400 STRUCTURE: . VA08144 50.0 51.0 1.0 3 3 ٢5 55 (1 1400 6 At 46.0 m foliation is at 28 degrees to core axis. VA08145 51.0 53.0 2.0 3 6 <5 200 <1 5 1400 At 49.1 m foliation is at 40 degrees to core axis. VA08146 53.0 54.0 1.0 <5 3 4 70 <1 (5 1600 51.0-52.4 M FAULT ZONE. Blocky, highly fractured core and VA08147 54.0 55.0 20 1.0 3 ٢5 180 <1 7 1700 1.0 m of lost core. Not possible to measure orientation VA08148 55.0 56.0 1.0 3 21 ٢5 100 39 1400 2 but appears to be at a very low angle to the core axis. VA08149 56.0 57.0 1.0 3 16 <5 82 (1 12 1900 At 53.5 m foliation is at 33 degrees to core axis. VA08150 57.0 58.0 3 45 1.0 **ć**5 12 2400 342 <1 At 58.5 m 1.0 cm fault gouge at 40 degrees to core axis. VA08151 58.0 59.0 1.0 3 5 ٢5 48 (1 16 2800 59.7-60.2 M fault zone at 15 degrees to core axis. 0.1 m VA08152 59.0 60.0 1.0 3 204 <5 40 <1 20 2300 of lost core. VA08153 60.0 61.0 1.0 3 938 ٢5 52 2 22 1700 At 62.2 m foliation is at 30 degrees to core axis. VA08154 61.0 62.0 1.0 3 5 (5 30 <1 14 1200 At 73.6 m foliation is at 18 degrees to core axis. VA08155 62.0 63.0 1.0 7 9 (5) 40 $\langle 1 \rangle$ 24 1400 At 81.5 m foliation is at 30 degrees to core axis. VA08156 63.0 64.0 1.0 ٢5 16 1700 3 -5 60 (1 At 83.5 m bedding is at 50 degrees to core axis. VA08157 64.0 65.0 1.0 3 15 ٢5 85 (1 24 1700

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At 92.5 m bedding is at 54 degrees to core axis.

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65.0

66.0

1.0

3

<5

2

20

<1

14 1900

VA08158

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-62 4 DIAMOND DRILL LOG From То Sample From То Width Total Cu Pb Zn Aσ Αu Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) At 98.2 m foliation is at 50 degrees to core axis. VA08159 66.0 67.0 1.0 ٢5 13 1700 3 5 30 **(1** 110.1-111.7 M rock is crushed and there are several fault VA08160 67.0 68.0 1.0 3 2 <5 20 <1 12 1500 gouges at 20 degrees to core axis. VA08161 68.0 69.0 1.0 3 7 < 5 13 <1 14 1700 At 121.6 m foliation is at 30 degrees to core axis. VA08162 69.0 70.0 1.0 3 <5 30 1700 5 <1 10 VA08163 70.0 71.0 1.0 5 18 < 5 48 <1 13 1400 ALTERATION . VA08164 71.0 72.0 1.0 5 <5 21 5 <1 13 1600 44.5 48.0 MODERATE PERVASIVE SERICITIZATION and very weak VA02860 71.0 101 0 30.0 n/a 23 n/a <10 n/a n/a 1220 to weak pervasive chloritization and fracture VA08165 72.0 73.0 1.0 5 17 <5 38 < 5 1400 <1 controlled carbonatization. VA08166 73.0 74.0 53 1.0 5 5 <5 <1 10 1300 48.0 63.5 MODERATE PERVASIVE SERICITIZATION and WEAK VA08167 74.0 75.0 1.0 8 20 5 80 1 65 1100 PERVASIVE CHLORITIZATION. VA08168 75.0 76.0 1.0 5 15 <5 31 1 33 970 63.5 67.7 MODERATE PERVASIVE SILICIFICATION and MODERATE VA08169 76.0 77.0 1.0 <5 31 41 910 -5 11 1 PERVASIVE SERICITIZATION. VA08170 77.0 77.5 .5 5 6 < 5 40 1 47 900 67.7 81.5 MODERATE PERVASIVE SERICITIZATION and WEAK VA08171 77.5 78.0 .5 8 42 6 148 2 231 960 SPOTTY CHLORITIZATION. Chlorite occurs in weak VA08172 78.0 79.0 1 0 3 16 < 5 130 1 98 870 bands < 5 mm wide parallel to foliation. VA08173 79.0 80.0 1 0 ৾৾ঽ 45 <5 40 (1 35 990 81.5 97.3 MODERATE SPOTTY CHLORITIZATION and MODERATE VA08174 80.0 81.0 1.0 3 48 <5 46 <1 25 1000 PERVASIVE SERICITIZATION. Chlorite occurs in VA08175 81.0 82.0 1.0 3 13 <5 26 <1 51 930 bands and patches < 5 mm wide parallel to VA08176 82.0 83.0 3 18 <5 65 17 1000 1.0 <1 foliation giving rock a streaky, mottled VA08177 83.0 84.0 1.0 3 14 (5 78 (1 9 1200 appearance. VA08178 84 0 85 0 1.0 <5 26 93 1300 3 13 <1 97.3 125.1 MODERATE PERVASIVE SERICITIZATION and WEAK VA08179 85.0 86.0 1.0 3 ٢5 25 <1 8 1200 6 SPOTTY CHLORITIZATION. VA08180 86.0 87.0 1.0 3 <5 41 (5 1100 12 (1 VA08181 87.0 88.0 1.0 3 12 ٢5 60 <1 (5 1100 SULPHIDES: . VA08182 88.0 89.0 1.0 3 6 <5 48 <1 <5 1100 44.5-70.0 m 3 % pyrite, disseminated and in VA08183 89.0 90.0 1.0 3 10 <5 34 <1 7 1100 fractures/stringers roughly parallel to foliation. VA08184 90.0 91.0 3 9 <5 38 1 0 <1 Q 1 2 0 0 70.0-74.0 4-5% Pyrite concentrated in dark grey siliceous VA08185 91.0 92.0 7 < 5 42 < 5 1200 1.0 3 <1 bands/stringers < 3 mm wide roughly parallel to foliation. VA08186 92.0 93.0 1.0 3 13 <5 75 <1 9 1600 74.0-75.0 m 8 % pyrite as above but bands are up to 5 mm VA08187 93.0 94.0 1.0 3 5 <5 50 <1 8 1400 wide. VA08188 .94.0 95.0 1.0 3 6 <5 48 $\langle 1 \rangle$ <5 1100 75.0-77.5 m 4-5% disseminated pyrite. VA08189 95.0 96.0 1.0 3 4 <5 55 <1 < 5 1000 77.5-78.0 m 8 % pyrite concentrated in a 0.1 m wide 96.0 97.0 4 VA08190 1.0 ิจ <5 43 <1 (5 990 chlorite altered zone at 35 degrees to core axis. VA08191 97.0 98 0 1 0 ર <5 26 (1 <5 1100 - 6 78.0-116.0 m 2-3% pyrite disseminated and in 2 mm VA08192 98.0 99.0 1 0 3 <5 15 (1 6 1000 6 stringers (?) parallel to foliation. VA08193 99.0 100.0 1.0 3 5 <5 20 <1 16 910 116.0-117.0 m 4 % disseminated pyrite and trace galena. VA08194 100.0 101.0 <5 20 29 1.0 3 4 <1 800 117.0-119.0 m 4-5 % disseminated pyrite and trace to 1 % VA02861 101.0 125.1 24.1 n/a <10 22 n/a n/a 965 n/a disseminated sphalerite. Sphalerite is very pale yellow in VA08195 101.0 102.0 1.0 3 9 <5 20 <1 13 820 colour and is associated with pyrite. VA08196 102.0 103.0 3 6 <5 31 <1 9 800 1.0 119.0-121.0 m 4-5 % disseminated pyrite associated with VA08197 103.0 104.0 <5 35 (1 13 800 1.0 3 6 moderate patchy silicification. 18 12 VA08198 104.0 105.0 1.0 3 3 ٢5 (1 840 121.0-125.1 m 2 % pyrite disseminated and in 2 mm VA08199 105.0 106.0 1.0 3 3 <5 13 <1 20 830 stringers (?) parallel to foliation. VA08200 106.0 107.0 1.0 3 4 ٢5 13 <1 23 900 VA08201 107.0 108.0 <5 12 (1 17 850 1.0 3 2 48.5 48.7 Light pinkish brown, cherty sediments. Broken VA08202 108.0 109.0 (5 13 (1 33 1000 1.0 ٦ 3 core at the upper contact and lower contact is VA08203 109.0 110.0 <5 12 21 900 1.0 3 3 <1 at 35 degrees to core axis. VA08204 110.0 111.0 10 960 1.0 3 3 <5 12 <1 28 780 VA08205 111.0 112.0 <5 <1 1.0 3 3 12 51.0 52.4 Light brown cherty sediments/felsic tuffite. VA08206 112.0 113.0 ٢5 13 <1 22 830 1.0 ٦ 4 VA08207 113.0 114.0 1.0 3 <5 20 <1 24 830

PF	OPERT	Y: Chemain	us JV	FALCONBRIDGE LIMITED DIAMOND DRILL LOG	i.				HOLE I CH88-6	No: Pa 2	age Numb 5	er				
From (m)	T0 (m)		DESCRIPTI	ON	Sample No.	From (m)	To (m)	Width (m)	Total Sulphide:	Cu s (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm))
		54.0 54.4	Medium green, cherty silts upper and lower contacts.	stone. Broken core at	VA08208 VA08209	114.0 115.0	115.0 116.0	1.0	3	4	<5 <5 13	29 51	<1 <1	43 39 36	750 630 700	
		57.0 57.4	Dark green-brown cherty se is at 45 degrees to core a is at 30 degrees to core a	ediments. Upper contact axis and lower contact axis.	VA08211 VA08211 VA08212 VA08213 VA08214	117.0 118.0 119.0 120.0	118.0 119.0 120.0 121.0	1.0 1.0 1.0 1.0	5 5 5 5	150 24 6 21	129 226 7 6	3300 1300 120 110	1 1 (1 1	45 31 42 58	460 590 610 840	
		63.0 888.	8 Dark green-brown carbonat rich band 3.0 cm wide at axis. 5 % fracture control	ce-chlorite-biotite t 30 degrees to core blled pyrite.	VA08215 VA08216 VA08217 VA08218	121.0 122.0 123.0 124.0	122.0 123.0 124.0 125.1	1.0 1.0 1.0 1.1	2 2 2 2	9 9 7 5	<5 <5 <5 <5	70 95 100 113	<1 <1 <1 <1	10 6 17 8	1000 1000 1100 1200	
		70.0 888.	8 2X4 mm dark green cherty	sediment clast.												
		80.5 80.7	Band of grey-green to oliv carbonatized intermediate sediments at 35-40 degrees	ve green epidotized and e to mafic tuffaceous s to core axis.												
		83.6 83.8	Two 3.0 to 5.0 cm bands of tuff at 45~50 degrees to c occurs in gashes and fract	f carbonatized mafic core axis. Carbonate tures up to 3 mm wide.												
		86.1 86.3	Three 1.0 to4.0 cm bands of tuff at 50 degrees to core	of carbonatized mafic e axis.												
		92.4 92.5	Light green, strongly carl intermediate tuffaceous se to core axis.	bonatized mafic to ediments at 54 degrees												
											•					
25.1	127.1	CHLORITE Medium gr with many and gashe	SCHIST een, fine-grained chloritic (20% of rock) white, carl s up to 4 mm wide subparall	c mafic rock (tuff?) bonate-filled fractures lel to foliation.	VA08219 VA08220	125.1 126.0	126.0 127.1	.9 1.1	1	129 165	6 5	730 760	(1 (1	6 7	120 120	
		Trace to degrees t	1 % disseminated pyrite. I o core axis.	Lower contact is at 40		•								· .		
		STRUCTURE At 125.6	:. m foliation is at 35 degree	es to core axis.												
		ALTERATIO 125.1 127	N:. .1 STRONG FRACTURE CONTROLI	LED CARBONATIZATION.												
	101 2	0.00 00 1010														
61.1		Mottled 1 variable foliated which are Occasiona	ight grey to pale green to sericite, chlorite and bic with 3-5 %, 2 to 5 mm clean often stretched parallel l quartz-carbonate vein or	pale brown due to otite alteration. Well r grey quartz eyes to foliation. veinlet subparallel to ded appearance bards	VA02862 VA08221 VA08222 VA08223 VA08223 VA08224 VA08225	127.1 127.1 128.0 129.0 130.0	157.0 128.0 129.0 130.0 131.0 132.0	29.9 .9 1.0 1.0 1.0	n/a 2 2 2 2 2	26 16 9 16 14 23	n/a <5 <5 <5 <5 <5	17 105 85 52 56 39	n/a <1 <1 <1 <1 <1 <1	n/a 5 13 <5 8	1120 1100 1400 1300 990 920	
		are gener	ally (2.0 cm wide and are	due to slight	VA08226	132.0	133.0	1.0	2	7	<5	30	(1	9	1100	

12

12

foliation. Rock has a distinct banded appearance, bands are generally (2.0 cm wide and are due to slight

PRO	OPERT	Y: Chemainus JV F	ALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NO CH88-62	o: Pa	age Numbo 6	er			
From (m)	То (m)	DESCRIPTION-		Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
		differences in chlorite content. In le	ss sericitic mlaces	V108227	133.0	134 0	1 0	2	7	75	20	11	•	1100
		there are up to 15 % (1 mm feldspar cr	vstals Lower	V308229	134 0	134.0	1.0	2	0	. ()	10	/1	2 E	1100
		contact is at 30 degrees to core axis.	locato: Dower	VA08229	135.0	136.0	1 0	2	Å	75	40	1	() ()	1100
				V108230	136 0	137 0	1 0	2		(5	20	/1	16	840
		STRUCTURE: .		VA08231	137 0	138 0	1 0	2	3	(5	22	(1	14	790
		At 128.3 m foliation is at 17 degrees t	o core axis.	VA08232	138 0	139.0	1.0	2	จั	(5	20		14	860
		At 139.2 m foliation is at 60 degrees t	o core axis.	VA08233	139 0	140 0	1 0	2	2	25	23	(1	11	910
		149.7-151.2 M FAULT ZONE. 1.2 m of lost	core. Not possible	VA08234	140.0	141.0	1.0	2	3	(5	13	(1	20	820
		to measure orientation of the fault.		VA08235	141.0	142.0	1.0	4	12	6	30	(1	73	650
		151.7-152.0 M FAULT ZONE at 10-20 degre	es to core axis.	VA08236	142.0	143.0	1.0	4	10	(5	33	(1	64	630
		153.3-153.9 M FAULT ZONE at 10 degrees	to core axis. 0.3 m	VA08237	143.0	144.0	1.0	4	14	7	28	(1	34	720
		of lost core.		VA08238	144.0	145.0	1.0	4	11	6	24	(1	18	870
		163.0 163.3 M slip runs parallel to the	core axis.	VA08239	145.0	146.0	1.0	4	11	8	34	(1	-5	950
		At 167.5 m foliation is at 50 degrees t	o core axis.	VA08240	146.0	147.0	1.0	4	11	12	65	(1	12	700
		At 178.6 m foliation is at 44 degrees t	o core axis.	VA08241	147.0	148.0	1.0	4		- 7	46	i di li		830
		At 190.7 m foliation is at 43 degrees t	o core axis.	VA08242	148.0	149.0	1.0	4	16	10	42	1	8	840
		At 189.2 m minor slip at 20 degrees to	core axis.	VA08243	149.0	150.0	1.0	2	9	7	41	(1	<Š	940
		•		VA08244	150.0	152.0	2.0	2	9	6	42	(1	(5	890
		ALTERATION: .		VA08245	152.0	153.0	1.0	2	Ŕ	×5	32	(1)	<5 ·	880
		127.1 163.5 MODERATE PERVASIVE SERICITI	ZATION . MODERATE	VA08246	153 0	154.0	1.0	2	10	11	30	1	6	770
		PERVASIVE SERICITIZATION an	d weak streaky pale	VA08247	154.0	155.0	1.0	2	ŝ	6	17	(1	Š	830
		brown biotite (?) alteratio	n. Locally weak	VA08248	155.0	156.0	1.0	2	7	(5	18	(1	. 7	820
		pervasive silicification.	Moderate	VA08249	156.0	157.0	1.0	2	6	8	25	-(1	27	730
		guartz-carbonate flooding b	etween 162.5 and	VA08250	157.0	158.0	1.0	2	6	6	24	(1	12	750
		165.3 m. Moderate pale brow	n biotite (?)	VA02863	157.0	191.3	34.3	n/a	51	n/a	54	n/a	n/a	2180
		appears to be associated w	ith the	VA08251	158.0	159.0	1.0	2	8	6	24	(1	16	720
		guartz-carbonate alteration		VA08252	159.0	160.0	1.0	2	4	. <u>5</u>	31	<u>d</u>	3	810
		163.5 170.0 MODERATE SPOTTY CHLORITIZAT	ION	VA08253	160.0	161.0	1.0	2	28	8	76	(1	20	870
		guartz-carbonate veins up t	o 1.0 cm wide	VA08254	161.0	162.0	1.0	2	4	5	34	(1	< 5	810
		roughly parallel to foliation	on and moderate	VA08255	162 0	163 0	1.0	2	17	10	40	(1	<5	820
		streaky pale brown biotite	alteration.	VA08256	161 0	164.0	1.0	2	11	(5	29	(1	5	710
		170.0 191.3 MODERATE PERVASIVE SERICITI	ZATION and WEAK	VA08257	164.0	165.0	1.0	2	7	7	32	<1	19	800
		SPOTTY CHLORITIZATION.	· · · · · · ·	VA08258	165.0	166.0	1.0	2	6	5	41	(1	5	880
				VA08259	166.0	167.0	1.0	2	6	6	39	0	<5	940
		SULPHIDES:.		VA08260	167.0	168.0	1.0	2	4	<5	44	(1	<5	940
		127.1-141.0 m 1-2% disseminated pyrite.		VA08261	168.0	169.0	1.0	2	5	6	42	(1	<5	1200
		141.0-149.0 m 3-4 % pyrite concentrated	in < 2 mm	VA08262	169.0	170.0	1.0	2	6	6	142	(1	6	1100
		chlorite-filled fractures roughly paral	lel to foliation.	VA08263	170.0	171.0	1.0	2	10	7	93	<1	7	1100
		149.0-191.3 m 1-2% disseminated pyrite.		VA08264	171.0	172.0	1.0	2	9	<5	55	(1	9	1700
				VA08265	172.0	173.0	1.0	2	21	6	38	(1	9	2100
		Often associated with weak pervasive sil	licification.	VA08266	173.0	174.0	1.0	2	6	(5	44	<1	<5	1300
				VA08267	174.0	175.0	1.0	2	9.	10	45	<1	5	1200
		160.2 160.3 Carbonatized chlorite schist	t (mafic tuff?) at	VA08268	175.0	176.0	1.0	2	8	7	38	<1	11	1300
		50 degrees to core axis.		VA08269	176.0	177.0	1.0	1	6	<5	52	<1	<5	1600
				VA08270	177.0	178.0	1.0	2	6	<5	52	<1	6	1900
		169.6 169.9 Dark green, mafic porphyrit:	ic, flow or dyke at	VA08271	178.0	179.0	1.0	2	25	9	87	(1	16	3100
		65 degrees to core axis. 20) % dark green	VA08272	179.0	180.0	1.0	2	32	7	106	1	28	3000
		anhedral chlorite spots < 2	mm in diameter.	VA08273	180.0	181.0	1.0	2	70	10	113	<1	19	5900
		Quartz-carbonate filled frac	ctures and gashes	VA08274	181.0	182.0	1.0	2	11	6	46	<1	9	1900
		throughout. 4.0 Cm chilled	margin at the	VA08275	182.0	183.0	1.0	2	9	<5	72	<1	5	1700
		unner contact.		V308276	193 0	194 0	1 0	2	6	6	47	11	ĸ	2000

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Р	ROPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-62	o: P	age Numb 7	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	То (т)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
			V108277	184 0	185 0	1.0	2	6	5	45	71	7 5	1500
		170.8 171.8 Dark green, mafic porphyritic flow or dyke at	VA08278	185.0	186.0	1.0	2	15	5	43	(1	13	1800
		45 degrees to core axis.	VA08279	186.0	187.0	1.0	2	15	7	40	<1	<5	2000
			VA0 8280	187.0	188.0	1.0	2	13	8	47	(1	13	2200
		172.5 183.0 <2 % quartz eyes.	VA08281	188.0	189.0	1.0	2	9	5	35	<1	17	2100
			VA08282	189.0	190.0	1.0	2	18	16	107	1	55	1500
			VA08283	190.0	191.0	1.0	2	32	38	172	1	33	1700
191.3	199.0	CHERTY ARGILLACEOUS SEDIMENTS AND FELSIC TUFFITE											
		Varies from a light grey, felsic tuffite with up to 10 % (VA02865	191.3	199.0	7.7	n/a	81	n/a	48	n/a	n/a	1080
		1 mm feldspar crystals to a medium grey volcanic wacke	VA08284	191.3	192.8	1.5	1	94	10	172	<1	< 5	980
		which is felsic to intermediate in composition. Felsic	VA08285	192.8	194.0	1.2	2	73	8	57	(1	5	1200
		lapilli fragments occur throughout (up to 50 %). Wispy	VA08286	194.0	195.0	1.0	2	80	13.	51	(1	14	960
		pare yellow-prown sericite (?) occurs in patches up to 0.4	VA0828/	195.0	196.0	1.0	4	60		64	(1		1000
		a long. Ripped-up beds and clasts of black argillite	VA08288	195.0	197.0	1.0	4	54	10	60	1	117	950
		194 A and 194 9 m	V108289	199.0	199.0	1.0	4	10	10	407	2	77	880
		195.5 and 195.6 m.	1400200	190.0	1)).0	1.0	.	10	1	50	4		000
		And occasionally between 196.0 197.0 m.											
		Above 192.8 m it is a weakly to moderately carbonatized											
		(fracture controlled) tuffite. Lower contact is a bedding contact at 45 degrees to core axis.											
		STRUCUTRE:.											
		At 194.5 m foliation is at 40 degrees to core axis.											
		At 198.0 m bedding (?) is at 50 degrees to core axis.											
		31 TED 3 TT AN.											
		ADIDKAILON:. 101 3 100 A WARFDIME CRAMMY SERICIMIZIMIAN and NEIV											
		FRACTURE CONTROLLED CARBONATIZATION Locally											
		trace apple green mariposite (?)											
		cruce appre green marrpostee (.).											
		SULPHIDES:.											
		191.3-192.8 M trace disseminated pyrite.											
		192.8-194.4 m 2 % disseminated pyrite.											
		194.4-199.0 m 3-5 % pyrite heavily disseminated in the											
		more argillaceous wacke beds and to a lesser extent in											
		fractures within the fesic tuffite.											
100 0	221 2												
199.0	441.4	Light grow conjuitic felsic tuff with chloritic bands and	V102964	100 0	221 2		- 1-	20	- /-	24	n/n	- 1-	074
		snots up to 1.0 cm wide with 10-40 % pyrite roughly	VA08291	199.0	200 0	1 0	11/a A	16	117a 7	54	2	.11/d 48	810
		parallel to foliation which constitute 1-5% of the rock	VA08292	200.0	201.0	1.0	. 4	13	(5	51	2	42	730
		Up 40 % felsic lapilli. Lapilli are difficult to	VA08293	201.0	202.0	1.0	4	Ĩ3	<5	51	ĩ	64	800
		distinguish from the matrix because they are of the same	VA08294	202.0	203.0	1.0	4	13	<5	63	ī	15	860
		composition. Nil to 2 % 2-4 mm clear quartz eyes.	VA08295	203.0	204.0	1.0	4	11	<5	42	<1	<5	810
		Lower contact is at 50 degrees to core axis.	VA08296	204.0	205.0	1.0	4	25	6	302	1	42	820
			VA08297	205.0	206.0	1.0	4	26	<5	64	1	10	690
		STRUCUTRE: .	VA08298	206.0	207.0	1.0	4	25	< 5	73	1	10	590

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-62 8 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn λg Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppb) (ppm) (ppm) (ppm) (ppm) At 202.9 m banding/bedding is at 48 degrees to core axis. VA08299 207.0 208.0 1.0 6 ٢5 48 <1 <5 910 4 At 210.5 m foliation is at 35 degrees to core axis. VA08300 208.0 209.0 <5 <5 1100 1.0 4 20 115 <1 At 215.3 m 1.0 cm fault gouge at 45 degrees to core axis. VA08301 209.0 210.0 Q ٢5 1.0 4 66 <1 (5 980 217.7-218.5 M fault gouge at 55 degrees to core axis. 0.5 VA08302 210.0 211.0 1.0 4 46 < 5 115 (1 (5 1100 m of lost core VA08303 211.0 212.0 1.0 8 ٢5 920 4 36 <1 <5 218.5-221.2 M rock is crushed and foliation is contorted. VA08304 212.0 213.2 <5 < 5 1.2 4 10 30 <1 950 At 219.6 m 2.0 cm fault gouge at 60 degrees to core axis. VA08305 213.2 214.2 77 <5 109 (1 1.0 4 < 5 960 ALTERATION:. VA08306 214.2 215.7 11 ٢5 31 <5 1100 1.5 4 <1 199.0 221.2 MODERATE PERVASIVE SERICITIZATION , WEAK VA08307 216.3 217.0 12 <5 .7 4 44 <1 <5 1000 SPOTTY CHLORITIZATION and locally moderate VA08308 217.0 218.0 <5 9 30 <1 < 5 950 1.0 4 wispy pale to bright orange-brown sericite VA08309 218.0 219.0 <5 24 <1 <5 980 1.0 4 6 (does not look like biotite here). 5 % VA08310 219.0 220.0 13 <5 27 900 1.0 4 <1 <5 pinhead-sized chlorite spots between 214.2 and VA08311 220.0 221.2 1.2 4 16 ٢5 31 (1 <5 870 215.1 m. SULPHIDES: . 199.0-221.2 m 3-4% pyrite, disseminated and in chloritic bands < 2.0 cm wide parallel to foliation which are particularly prevalent between 201.5 and 203.0 m. 206.0 206.7 Light grey felsic tuffite with 5 % pyrite. 208.8 208.9 Medium brown altered mudstone bed at 55 degrees to core axis. 210.1 210.4 Medium brown altered mudstone bed at 50 degrees to core axis. 213.2 214.2 Medium brown to green volcanic wacke with 2 % 2-5 mm rounded cherty felsic clasts. . 215.6 216.3 Medium green, fine-grained, massive chloritic mafic dyke at 40 degrees to core axis. 221.2 222.6 BLACK ARGILLITE Black, weakly graphitic argillite with 4-5% fracture VA08312 221.2 222.6 1.4 5 80 <5 197 34 1200 1 controlled pyrite associated with weak fracture controlled carbonate alteration. Rock is crushed, broken and blocky throughout and foliation is contorted. Lower contact is at 40 degrees to core axis. STRUCTURE:. 221.3-222.0 M FAULT ZONE at 10 degrees to core axis. 0.3 m of lost core. 222.6 224.2 FELSIC QUARTZ EYE TUFF VA08313 222.6 224.2 1.6 Light grey, sericitic felsic tuff with 2-5% 2 to 4 mm, 3 20 <5 61 <1 20 830 clear quartz eyes. Streaks of pale brown sericite/biotite are common. 2-3% pyrite disseminated and in chloritic

bands < 2 mm wide parallel to foliation. Lower contact is

	PROPERTY: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-62	o: Pa	ge Number 9			
	From To (m) (m)DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm) (Zn Ag ppm) (ppm	Au n) (ppb) (g
	a slip at 55 degrees to core axis.										
	224.2 228.1 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE)										
	Dark grey to weakly graphitic argillite and cherty siltstones/tuffite. Generally quite massive, bedding is rarely recognizable. 2-3% Pyrite smeared along foliation planes. Rock is broken and blocky throughout. Broken core at the lower contact.	VA08314 VA08315 VA08316 VA08317	224.2 225.0 226.0 227.0	225.0 226.0 227.0 228.1	.8 1.0 1.0 1.1	3 3 3 3	65 42 81 53	<5 <5 <5 <5 2	35 <1 56 <1 55 <1 30 <1	9 <5 <5 <5	490 1000 830 550
	STRUCUTRE:. At 226.5 m foliation is at 63 degrees to core axis.										
	228.1 229.1 FELSIC TUFF Light grey, well foliated, sericitic felsic tuff. Foliation is wavey throughout. Moderate streaky pale brown sericite/biotite alteration. Broken core at the lower contact.	VA08318	228.1	229.1	1.0	3	23	<5	42 <1	<5	89
	228.5 228.6 Finely banded (bedded?) cherty, argillaceous tuffites. Bedding is at 38 degrees to core axis.		•								5.
	229.1 237.7 CHERTY ARGILLACEOUS SEDIMENTS AND FELSIC TUFFITE Medium grey, cherty siliceous volcanic wacke/tuffite (90%) intercalated with fine beds and rip-up clasts of black argillite (10%). 4-5% Disseminated and fracture controlled pyrite.	VA08319 VA08322 VA08320 VA08321	229.1 230.0 231.0 232.0	230.0 231.0 232.0 233.0	.9 1.0 1.0 1.0	5 5 5 5	74 66 58 63	<5 <5 <5 <5	53 <1 76 <1 74 <1 75 <1	<5 <5 <5 <5	66ଶ 47ଶ 27ଶ 47ଶ
•	STRUCUTRE:. Core is broken and blocky throughout. At 233.1 bedding is at 45 degrees to core axis.	VA08323 VA08324 VA08325 VA08326 VA08327	233.0 234.0 235.0 236.0 237.0	234.0 235.0 236.0 237.0 237.7	1.0 1.0 1.0 1.0 .7	5 5 5 5 5 5	76 71 76 61 53	<5 <5 <5 <5 <5 <5 40	12 (1 37 (1 38 (1 52 (1 08 (1	<5 <5 <5 <5 6	423 631 1404 1001 604

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZHGO	ZNA20	XK20	ZFE203	21102	XP205	ZHNO	2101	SUM	BA	AI	NACA
VA02422	29.00	29.60	78.50	13.90	0.32	0.23	0.27	2.93	1.16	0.17	0.04	<0.01	2.31	99.83	1030.	84.	1.
VA02423	46.30	46.70	79.70	10.50	0.70	0.33	0.15	2.45	2.03	0.15	0.04	0.03	2.31	98.39	1330.	77.	1.
VA02424	65.00	65.50	77.40	13.00	0.75	0.53	0.15	3.08	1.13	0.19	0.04	0.04	2,16	98.47	2090.	80.	1.
VA02425	82.30	82.60	70.80	15.00	2.21	1.02	0.33	3.19	2.37	0.27	0.07	0.07	3.70	99.03	1240.	62.	з.
VA02426	101.10	101.50	73.80	12.70	2.06	1.24	0.19	3.02	1.60	0.18	0.04	0.10	4.77	99.70	938.	65.	2.
VA02427	122.30	122.60	70.80	13.40	3.08	1.65	0.14	3.01	2.27	0.24	0.06	0.11	4.47	99.23	1150.	59.	3.
VA02428	125.60	126.00	44.50	11.90	11.10	6.26	<0.01	0.25	12.10	1.77	0.15	0.22	11.20	99.35	106.	37.	11.
VA02429	138.50	138.80	73.90	12.90	1.93	1.19	0.15	3.06	1.57	0.19	0.04	0.09	4.00	99.02	978.	67.	2.
VA02430	158.50	158.90	72.90	13.40	2.28	1.25	0.20	3.10	1.52	0.19	0.04	0.10	3.85	98.83	918.	64.	2.
VA02431	177.10	177.50	74.00	11.60	2.20	1.35	0.05	2.97	2.15	0.22	0.06	0.17	3.77	98.54	1650.	66.	2.
VA02432	205.30	205.60	65.50	13.90	4.96	2.02	0.28	1.93	5.12	0.37	0.12	0.37	4.85	99.42	640.	43.	5.
VA02433	212.40	212.70	70.20	13.70	3.91	1.60	0.28	2.37	2.17	0.18	0.05	0.14	5.31	99.91	1110.	49.	· 4.

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Hole No. CH88-62 WHOLE ROCK SAMPLES

Page No.

SAMPLE NUMBER	FROM	то	ZS 102	XAL203	XCAO	ZMGO	XNA20	XK20	XFE203	XI 102	ZP205 ZHNO	XLO I	SUM	BA	AI	NACA
VA02857	6.40	17.40	64.80	14.70	4.28	1.70	0.96	2.33	4.00	0.42		6.23	99.42	1790.	43.	5.
VA02858	24.20	37.20	79.10	13.50	0.23	0.17	0.26	2.77	1.45	0.17		2.54	100.19	1020.	86.	0.
VA02859	41.80	71.00	76.00	12.40	1.64	0.82	0.21	2.82	2.33	0.21		2.62	99.05	1710.	66.	2.
VA02860	71.00	101.00	71.70	12.90	2.64	1.39	0.31	2.84	2.39	0.24		3.93	98.34	1220.	59.	3.
VA02861	101.00	125.10	73.00	13.00	2.33	1.34	0.16	3.13	2.11	0.20		3.70	98.97	965.	64.	2.
VA02862	127.10	157.00	71.10	13.60	2.51	1.49	0.20	3.02	2.50	0.24		4.08	98.74	1120.	62.	з.
VA02863	157.00	191.30	69.80	13.80	2.93	1.46	0.21	3.39	2.60	0.24		4.39	98.82	2180.	61.	з.
VA02865	191.30	199.00	53.40	14,80	6.93	3.45	0.47	2.52	6.81	0.49		8.77	97.64	1080.	45.	7.
VA02864	199.00	221.20	70.80	13.50	2.82	1.38	0.28	2.39	3.13	0.24		4.16	98.70	934.	55.	З.

Hole No. CH88-62 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C0 (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррм)	MN (ppm)	CUZN	ETS	FE
VA08113	17,40	18.40	1900.0	48.0	110.0	<0.5	10.0	11.0	19.0	6.0	28.0	<1.0	2.0	1300.0	30.	4.	3.
VA08114	18.40	19.00	1900.0	47.0	108.0	<0.5	<5.0	10.0	14.0	<5.0	21.0	<1.0	2.0	1000.0	30.	4.	2.
VA08115	19.00	20.00	1500.0	55.0	80.0	<0.5	5.0	5.0	16.0	5.0	26.0	<1.0	3.0	1100.0	41.	4.	2.
VA08116	20.00	21.00	1200.0	52.0	80.0	<0.5	7.0	9.0	14.0	<5.0	10.0	<1.0	2.0	915.0	39.	4.	3.
VA08117	21.00	22.00	700.0	74.0	98.0	<0.5	<5.0	9.0	17.0	5.0	13.0	<1.0	1.0	1200.0	43.	4.	Э.
VA08118	22.00	23.00	1300.0	47.0	128.0	<0.5	<5.0	14.0	21.0	<5.0	14.0	<1.0	2.0	835.0	27.	4.	5.
VA08119	23.00	24.20	1400.0	61.0	136.0	<0.5	10.0	14.0	24.0	5.0	37.0	<1.0	2.0	1200.0	31.	4.	5.
VA08120	24.20	26.00	1100.0	6.0	10.0	<0.5	5.0	3.0	5.0	<5.0	28.0	<1.0	3.0	35.0	38.	4.	1.
VA08121	26.00	27.00	770.0	2.0	3.0	<0.5	5.0	3.0	4.0	<5.0	15.0	<1.0	1.0	15.0	40.	4.	- 1.
VA08122	27.00	28.00	770.0	4.0	3.0	<0.5	10.0	3.0	4.0	6.0	20.0	<1.0	2.0	18.0	57.	4.	2.
VA08123	28.00	29.00	790.0	3.0	3.0	<0.5	6.0	4.0	3.0	7.0	22.0	<1.0	1.0	15.0	50.	4.	2.
VA08124	29.00	30.00	910.0	3.0	10.0	<0.5	<5.0	4.0	3.0	<5.0	13.0	<1.0	1.0	143.0	23.	4.	1.
VA08125	30.00	31.00	1100.0	20.0	90.0	<0.5	<5.0	12.0	6.0	<5.0	22.0	<1.0	2.0	390.0	18.	4.	з.
VA08126	31.00	32.00	950.0	4.0	15.0	<0.5	<5.0	3.0	4.0	<5.0	33.0	<1.0	1.0	235.0	21.	4.	1.
VA08127	32.00	33.00	970.0	2.0	5.0	<0.5	5.0	1.0	3.0	<5.0	17.0	<1.0	1.0	19.0	29.	4.	1.
VA08128	33.00	34.00	770.0	3.0	10.0	<0.5	12.0	2.0	4.0	5.0	30.0	<1.0	1.0	40.0	23.	4.	1.
VA08129	34.00	34.40	740.0	80.0	680.0	<0.5	9.0	2.0	5.0	50.0	20.0	4.0	2.0	400.0	11.	4.	1.
VA08130	34.40	34.60	1100.0	95.0	1200.0	0.8	53.0	15.0	26.0	74.0	160.0	6.0	5.0	22.0	7.	8.	5.
VA08131	34.60	35.60	880.0	39.0	800.0	<0.5	62.0	12.0	20.0	54.0	150.0	4.0	4.0	210.0	5.	8.	3.
VA08132	35.60	36.50	1100.0	8.0	68.0	<0.5	6.0	4.0	9.0	9.0	31.0	<1.0	2.0	320.0	11.	4.	1.
VA08133	36.50	37.20	1400.0	19.0	158.0	<0.5	7.0	5.0	5.0	9.0	20.0	<1.0	2.0	645.0	11.	4.	2.
VA08134	37.20	40.00	720.0	45.0	900.0	<0.5	122.0	7.0	18.0	40.0	210.0	4.0	3.0	215.0	5.	5.	2.
VA08135	40.00	41.80	1400.0	79.0	152.0	<0.5	22.0	19.0	14.0	7.0	57.0	<1.0	2.0	415.0	34.	5.	5.

Hole No. CH88-62

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm).	CD (ppm)	МО (ррж)	MN (ppm)	CUZN	ETS	FE
VA08136	41.80	43.00	1100.0	5.0	20.0	<0.5	6.0	1.0	5.0	<5.0	10.0	<1.0	3.0	100.0	20.	2.	1.
VA08137	43.00	44.50	890.0	26.0	250.0	<0.5	<5.0	29.0	163.0	<5.0	11.0	<1.0	6.0	1400.0	9.	5.	4.
VA08138	44.50	45.00	1400.0	5.0	12.0	<0.5	10.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	30.0	29.	3.	1.
VA08139	45.00	46.00	1400.0	7.0	40.0	<0.5	18.0	4.0	5.0	<5.0	7.0	<1.0	3.0	38.0	15.	з.	1.
VA08140	46.00	47.00	1300.0	3.0	22.0	<0.5	7.0	3.0	3.0	<5.0	5.0	<1.0	2.0	60.0	12.	3.	1.
VA08141	47.00	48.00	1400.0	2.0	42.0	<0.5	5.0	3.0	3.0	<5.0	<5.0	<1.0	2.0	130.0	5.	3.	1.
VA08142	48.00	49.00	1600.0	16.0	340.0	<0.5	6.0	8.0	6.0	<5.0	<5.0	<1.0	2.0	375.0	4.	з.	3.
VA08143	49.00	50.00	1400.0	3.0	36.0	<0.5	6.0	4.0	4.0	<5.0	5.0	<1.0	3.0	645.0	8.	з.	1.
VA08144	50.00	51.00	1400.0	3.0	55.0	<0.5	6.0	7.0	5.0	<5.0	<5.0	<1.0	3.0	520.0	5.	3.	1.
VA08145	51.00	53.00	1400.0	6.0	200.0	<0.5	5.0	10.0	7.0	<5.0	5.0	<1.0	2.0	490.0	з.	3.	3.
VA08146	53.00	54.00	1600.0	4.0	70.0	<0.5	<5.0	7.0	5.0	<5.0	<5.0	<1.0	2.0	500.0	5.	3.	1.
VA08147	54.00	55.00	1700.0	20.0	180.0	<0.5	7.0	8.0	6.0	<5.0	6.0	<1.0	2.0	320.0	10.	3.	2.
VA08148	55.00	56.00	1400.0	21.0	100.0	1.9	39.0	6.0	5.0	<5.0	6.0	<1.0	2.0	320.0	17.	3.	2.
VA08149	56.00	57.00	1900.0	16.0	82.0	<0.5	12.0	6.0	4.0	<5.0	9.0	<1.0	2.0	240.0	16.	3.	1.
VA08150	57.00	58.00	2400.0	45.0	342.0	<0.5	12.0	8.0	6.0	<5.0	9.0	<1.0	2.0	770.0	12.	3.	3.
VA08151	58.00	59.00	2800.0	5.0	48.0	<0.5	16.0	3.0	4.0	<5.0	5.0	<1.0	3.0	415.0	9.	3.	2.
VA08152	59.00	60.00	2300.0	204.0	40.0	<0.5	20.0	4.0	5.0	<5.0	13.0	<1.0	4.0	740.0	84.	3.	1.
VA08153	60.00	61.00	1700.0	938.0	52.0	2.0	22.0	3.0	4.0	<5.0	75.0	<1.0	4.0	420.0	95.	3.	1.
VA08154	61.00	62.00	1200.0	5.0	30.0	<0.5	14.0	3.0	4.0	<5.0	5.0	<1.0	3.0	340.0	14.	3.	1.
VA08155	62.00	63.00	1400.0	9.0	40.0	<0.5	24.0	4.0	5.0	<5.0	<5.0	<1.0	4.0	770.0	18.	3.	1.
VA08156	63.00	64.00	1700.0	5.0	60.0	<0.5	16.0	6.0	5.0	<5.0	8.0	<1.0	4.0	390.0	8.	3.	2.
VA08157	64.00	65.00	1700.0	15.0	85.0	<0.5	24.0	4.0	5-0	(5.0	<5.0	<1.0	3.0	690.0	15.	3.	1.
VA08158	65.00	66.00	1900 0	2.0	20.0	20.5	14 0	2.0	2 0		5.0	21.0	2.0	135.0	9	3	1
1100100	00.00	v	1300.0	2.0	4V.V		14.0		3.0	NO.0	J.V	VI.V	4 • V	19914	9.		••

Hole No. CH88-62

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррм)	A5 (ppm.)	CD (ppm)	НО (ррж)	HN (ppm)	CUZN	ETS	FE
				· .													
VA08159	66.00	67.00	1700.0	5.0	30.0	<0.5	13.0	3.0	4.0	<5.0	<5.0	<1.0	3.0	370.0	14.	з.	1.
VA08160	67.00	68.00	1500.0	2.0	20.0	<0.5	12.0	3.0	3.0	<5.0	<5.0	<1.0	3.0	320.0	9.	з.	ï.
VA08161	68.00	69.00	1700.0	7.0	13.0	<0.5	14.0	5.0	4.0	<5.0	5.0	<1.0	1.0	200.0	35.	з.	1.
VA08162	69.00	70.00	1700.0	5.0	30.0	<0.5	10.0	5.0	4.0	<5.0	<5.0	<1.0	1.0	740.0	14.	3.	1.
VA08163	70.00	71.00	1400.0	18.0	48.0	<0.5	13.0	5.0	5.0	<5.0	10.0	<1.0	3.0	840.0	27.	5.	2.
VA08164	71.00	72.00	1600.0	5.0	21.0	<0.5	13.0	4.0	4.0	<5.0	<5.0	<1.0	3.0	205.0	19.	5.	1.
VA08165	72.00	73.00	1400.0	17.0	38.0	<0.5	<5.0	4.0	4.0	<5.0	8.0	<1.0	2.0	695.0	31.	5.	1.
VA08166	73.00	74.00	1300.0	5.0	53.0	<0.5	10.0	3.0	4.0	<5.0	9.0	<1.0	3.0	690.0	9.	5.	2.
VA08167	74.00	75.00	1100.0	20.0	80.0	0.8	65.0	4.0	5.0	5.0	24.0	<1.0	3.0	510.0	20.	8.	3.
VA08168	75.00	76.00	970.0	15.0	31.0	0.5	33.0	4.0	4.0	<5.0	19.0	<1.0	3.0	550.0	33.	5.	2.
VA08169	76.00	77.00	910.0	11.0	31.0	0.6	41.0	2.0	4.0	<5.0	13.0	<1.0	3.0	530.0	26.	5.	2.
VA08170	77.00	77.50	900.0	6.0	40.0	0.6	47.0	2.0	4.0	<5.0	12.0	<1.0	2.0	560.0	13.	5.	1.
VA08171	77.50	78.00	960.0	42.0	148.0	1.8	231.0	16.0	14.0	6.0	52.0	<1.0	4.0	415.0	22.	8.	4.
VA08172	78.00	79.00	870.0	16.0	130.0	1.0	98.0	5.0	6.0	<5.0	21.0	1.0	4.0	205.0	11.	з.	2.
VA08173	79.00	80.00	990.0	45.0	40.0	<0.5	35.0	4.0	6.0	<5.0	18.0	<1.0	2.0	775.0	53.	3.	2.
VA08174	80.00	81.00	1000.0	48.0	46.0	<0.5	25.0	12.0	18.0	<5.0	17.0	<1.0	2.0	660.0	51.	з.	2.
VA08175	81.00	82.00	930.0	13.0	26.0	<0.5	51.0	3.0	5.0	<5.0	11.0	<1.0	2.0	690.0	33.	з.	1.
VA08176	82.00	83.00	1000.0	18.0	65.0	<0.5	17.0	5.0	8.0	<5.0	9.0	<1.0	3.0	710.0	22.	з.	· · 1.
VA08177	83.00	84.00	1200.0	14.0	78.0	<0.5	9.0	8.0	11.0	ʻ<5.0 [°]	6.0	<1.0	3.0	620.0	15.	3.	2.
VA08178	84.00	85.00	1300.0	13.0	26.0	<0.5	93.0	4.0	5.0	<5.0	7.0	<1.0	4.0	640.0	33.	з.	. 1.
VA08179	85.00	86.00	1200.0	6.0	25.0	<0.5	8.0	2.0	4.0	<5.0	5.0	<1.0	2.0	495.0	19.	з.	1.
VA08180	86.00	87.00	1100.0	12.0	41.0	<0.5	<5.0	6.0	12.0	<5.0	<5.0	<1.0	2.0	580.0	23.	3.	2.
VA08181	87.00	88.00	1100.0	12.0	60.0	<0.5	<5.0	9.0	15.0	<5.0	6.0	<1.0	3.0	585.0	17.	3.	2.

Hole No. CH88-62

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (pp∎)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ррм)	HN (ppm)	CUZN	ETS	FE
VA08182	88.00	89.00	1100.0	6.0	48.0	<0.5	<5.0	6.0	5.0	<5.0	5.0	<1.0	2.0	775.0	11.	3.	1.
VA08183	89.00	90.00	1100.0	10.0	34.0	<0.5	7.0	5.0	5.0	<5.0	<5.0	<1.0	2.0	505.0	23.	3.	1.
VA08184	90.00	91.00	1200.0	9.0	38.0	<0.5	9.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	520.0	19.	3.	1.
VA08185	91.00	92.00	1200.0	7.0	42.0	<0.5	<5.0	3.0	5.0	<5.0	5.0	<1.0	3.0	590.0	14.	3.	1.
VA08186	92.00	93.00	1600.0	13.0	75.0	<0.5	9.0	6.0	9.0	<5.0	<5.0	<1.0	2.0	550.0	15.	3.	1.
VA08187	93.00	94.00	1400.0	5.0	50.0	<0.5	8.0	4.0	5.0	<5.0	<5.0	<1.0	2.0	520.0	9.	3.	1.
VA08188	94.00	95.00	1100.0	6.0	48.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	2.0	650.0	11.	3.	1.
VA08189	95.00	96.00	1000.0	4.0	55.0	<0.5	<5.0	5.0	6.0	<5.0	<5.0	<1.0	2.0	890.0	7.	3.	1.
VA08190	96.00	97.00	990.0	4.0	43.0	<0.5	<5.0	4.0	5.0	<5.0	<5.0	<1.0	1.0	740.0	9.	3.	1.
VA08191	97.00	98.00	1100.0	6.0	26.0	<0.5	<5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	540.0	19.	3.	1.
VA08192	98.00	99.00	1000.0	6.0	15.0	<0.5	6.0	2.0	4.0	<5.0	<5.0	<1.0	2.0	580.0	29.	3.	1.
VA08193	99.00	100.00	910.0	5.0	20.0	<0.5	16.0	3.0	4.0	<5.0	6.0	<1.0	2.0	860.0	20.	3.	1.
VA08194	100.00	101.00	800.0	4.0	20.0	<0.5	29.0	3.0	5.0	<5.0	11.0	<1.0	2.0	1000.0	17.	3.	1.
VA08195	101.00	102.00	820.0	9.0	20.0	<0.5	13.0	2.0	4.0	<5.0	8.0	<1.0	2.0	850.0	31.	з.	1.
VA08196	102.00	103.00	800.0	6.0	31.0	<0.5	9.0	4.0	7.0	<5.0	12.0	<1.0	2.0	580.0	16.	з.	1.
VA08197	103.00	104.00	800.0	6.0	35.0	<0.5	13.0	5.0	30.0	<5.0	15.0	<1.0	2.0	800.0	15.	3.	1.
VA08198	104.00	105.00	840.0	3.0	18.0	<0.5	12.0	2.0	4.0	<5.0	5.0	<1.0	2.0	860.0	14.	3.	1.
VA08199	105.00	106.00	830.0	3.0	13.0	<0.5	20.0	2.0	4.0	<5.0	11.0	<1.0	2.0	695.0	19.	3.	1.
VA08200	106.00	107.00	900.0	4.0	13.0	<0.5	23.0	3.0	4.0	<5.0	10.0	<1.0	2.0	430.0	24.	3.	1.
VA08201	107.00	108.00	850.0	2.0	12.0	<0.5	17.0	3.0	4.0	<5.0	7.0	<1.0	2.0	735.0	14.	3.	1.
VA08202	108.00	109.00	1000.0	3.0	13.0	<0.5	33.0	3.0	4.0	<5.0	8.0	<1.0	2.0	830.0	19.	3.	1.
VA08203	109.00	110.00	900.0	3.0	12.0	<0.5	21.0	2.0	4.0	<5.0	7.0	<1.0	2.0	570.0	20.	3.	1.
VA08204	110.00	111.00	960.0	3.0	12.0	<0.5	10.0	3.0	3.0	<5.0	6.0	<1.0	2.0	500.0	20.	3.	1.

Hole No. CH88-62

SAMPLE NUMBER	FROM	то	BA (ppm)	СU (ррм)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррв.)	AS (ppm)	CD (ppm)	НО (ррм)	НN (ррм)	CUZN	ETS	FE
VA08205	111.00	112.00	780.0	3.0	12.0	<0.5	28.0	2.0	5.0	<5.0	11.0	<1.0	2.0	1000.0	20.	3.	1.
VA08206	112.00	113.00	830.0	4.0	13.0	<0.5	22.0	2.0	4.0	<5.0	10.0	<1.0	2.0	815.0	24.	з.	1.
VA08207	113.00	114.00	830.0	3.0	20.0	<0.5	24.0	3.0	4.0	<5.0	10.0	<1.0	1.0	550.0	13.	3.	1.
VA08208	114.00	115.00	750.0	4.0	29.0	<0.5	43.0	2.0	4.0	<5.0	16.0	<1.0	1.0	590.0	12.	3.	1.
VA08209	115.00	116.00	630.0	4.0	51.0	<0.5	39.0	2.0	5.0	<5.0	10.0	<1.0	1.0	910.0	7.	з.	1.
VA08210	116.00	117.00	700.0	16.0	1000.0	<0.5	36.0	4.0	5.0	13.0	13.0	9.0	2.0	1300.0	2.	4.	1.
VA08211	117.00	118.00	460.0	150.0	3300.0	0.9	45.0	2.0	6.0	129.0	55.0	27.0	5.0	1200.0	4.	5.	2.
VA08212	118.00	119.00	590.0	24.0	1300.0	0.6	31.0	1.0	3.0	226.0	22.0	11.0	3.0	1100.0	2.	5.	2.
VA08213	119.00	120.00	610.0	6.0	120.0	<0.5	42.0	1.0	4.0	7.0	15.0	<1.0	2.0	1100.0	5.	5.	1.
VA08214	120.00	121.00	840.0	21.0	110.0	0.9	58.0	2.0	5.0	6.0	17.0	<1.0	6.0	640.0	16.	5.	2.
VA08215	121.00	122.00	1000.0	9.0	70.0	<0.5	10.0	2.0	4.0	<5.0	8.0	<1.0	1.0	570.0	11.	2.	1.
VA08216	122.00	123.00	1000.0	9.0	95.0	<0.5	6.0	3.0	4.0	<5.0	<5.0	<1.0	1.0	750.0	9.	2.	1.
VA08217	123.00	124.00	1100.0	7.0	100.0	<0.5	17.0	2.0	5.0	<5.0	5.0	<1.0	1.0	550.0	7.	2.	1.
VA08218	124.00	125.10	1200.0	5.0	113.0	<0.5	8.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	450.0	4.	2.	1.
VA08219	125,10	126.00	120.0	129.0	730.0	<0.5	6.0	33.0	81.0	6.0	<5.0	<1.0	2.0	1200.0	15.	1.	7.
VA08220	126.00	127.10	120.0	165.0	760.0	<0.5	7.0	28.0	83.0	5.0	9.0	<1.0	2.0	1200.0	18.	1.	7.
VA08221	127.10	128.00	1100.0	16.0	105.0	<0.5	5.0	4.0	7.0	<5.0	5.0	<1.0	1.0	840.0	13.	2.	1.
VA08222	128.00	129.00	1400.0	9.0	85.0	<0.5	5.0	4.0	6.0	<5.0	5.0	<1.0	1.0	640.0	10.	2.	1.
VA08223	129.00	130.00	1300.0	16.0	52.0	<0.5	13.0	3.0	5.0	<5.0	6.0	<1.0	1.0	520.0	24.	2.	1.
VA08224	130.00	131.00	990.0	14.0	56.0	<0.5	<5.0	2.0	5.0	<5.0	5.0	<1.0	3.0	750.0	20.	2.	1.
VA08225	131.00	132.00	920.0	23.0	39.0	<0.5	S.0	3.0	5.0	<5.0	<5.0	<1.0	1.0	650.0	37.	2.	1.
VA08226	132.00	133.00	1100.0	7.0	30.0	<0.5	9.0	2.0	4.0	<5.0	10.0	<1.0	6.0	450.0	19.	2.	1.
VA08227	133.00	134.00	1100.0	7.0	38.0	<0.5	8.0	4.0	5.0	<5.0	<5.0	(1.0	2.0	570.0	16.	2.	1.

Hole No. CH88-62

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррж)	MN (ppm)	CUZN	ETS	FE
			x	 											er al Maria		
VA08228	134.00	135.00	1100.0	8.0	40.0	<0.5	<5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	660.0	17.	2.	1.
VA08229	135.00	136.00	1100.0	4.0	42.0	<0.5	6.0	2.0	5.0	<5.0	8.0	<1.0	4.0	730.0	9.	2.	1.
VA08230	136.00	137.00	840.0	3.0	20.0	<0.5	16.0	2.0	4.0	<5.0	6.0	<1.0	3.0	750.0	13.	2.	1.
VA08231	137.00	138.00	790.0	3.0	22.0	<0.5	14.0	2.0	5.0	<5.0	5.0	<1.0	3.0	935.0	12.	2.	1.
VA08232	138.00	139.00	860.0	3.0	20.0	<0.5	14.0	2.0	4.0	<5.0	5.0	<1.0	4.0	670.0	13.	2.	1.
VA08233	139.00	140.00	910.0	2.0	23.0	<0.5	11.0	2.0	3.0	<5.0	5.0	<1.0	3.0	390.0	8.	2.	1.
VA08234	140.00	141.00	820.0	3.0	13.0	<0.5	20.0	<1.0	4.0	<5.0	11.0	<1.0	4.0	590.0	19.	2.	1.
VA08235	141.00	142.00	650.0	12.0	30.0	<0.5	73.0	2.0	4.0	6.0	32.0	<1.0	7.0	1560.0	29.	4.	2.
VA08236	142.00	143.00	630.0	10.0	33.0	<0.5	64.0	2.0	3.0	<5.0	24.0	<1.0	9.0	1680.0	23.	4.	2.
VA08237	143.00	144.00	720.0	14.0	28.0	<0.5	34.0	3.0	3.0	7.0	24.0	<1.0	6.0	940.0	33.	4.	2.
VA08238	144.00	145.00	870.0	11.0	24.0	<0.5	18.0	3.0	3.0	6.0	15.0	<1.0	3.0	765.0	31.	4.	2.
VA08239	145.00	146.00	950.0	11.0	34.0	<0.5	5.0	3.0	3.0	8.0	6.0	<1.0	4.0	710.0	24.	4.	1.
VA08240	146.00	147.00	700.0	11.0	65.0	<0.5	12.0	2.0	4.0	12.0	21.0	<1.0	6.0	970.0	14.	4.	2.
VA08241	147.00	148.00	830.0	9.0	46.0	<0.5	5.0	2.0	3.0	7.0	14.0	<1.0	4.0	880.0	16.	4.	2.
VA08242	148.00	149.00	840.0	16.0	42.0	<0.5	8.0	2.0	4.0	10.0	20.0	<1.0	4.0	960.0	28.	4.	2.
VA08243	149.00	150.00	940.0	9.0	41.0	<0.5	<5.0	3.0	3.0	7.0	<5.0	<1.0	4.0	530.0	18.	2.	1.
VA08244	150.00	152.00	890.0	9.0	42.0	<0.5	<5.0	2.0	3.0	6.0	5.0	<1.0	4.0	715.0	18.	2.	2.
VA08245	152.00	153.00	880.0	8.0	32.0	<0.5	<5.0	3.0	3.0	<5.0	6.0	<1.0	3.0	615.0	20.	2.	1.
VA08246	153.00	154.00	770.0	10.0	30.0	<0.5	6.0	3.0	4.0	11.0	28.0	<1.0	4.0	740.0	25.	2.	1.
VA08247	154.00	155.00	830.0	5.0	17.0	<0.5	5.0	2.0	3.0	6.0	16.0	<1.0	4.0	740.0	23.	2.	1.
VA08248	155.00	156.00	820.0	7.0	18.0	<0.5	7.0	1.0	3.0	<5.0	12.0	<1.0	4.0	550.0	28.	2.	1.
VA08249	156.00	157.00	730.0	6.0	25.0	<0.5	27.0	2.0	4.0	8.0	11.0	<1.0	4.0	810.0	19.	2.	2.
VA08250	157.00	158.00	750.0	6.0	24.0	<0.5	12.0	2.0	4.0	6.0	9.0	<1.0	3.0	900.0	20.	2.	1.

Hole No. CH88-62

Page No. 6



DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO - (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
VA08251	158.00	159.00	720.0	8.0	24.0	<0.5	16.0	2.0	4.0	6.0	10.0	<1.0	4.0	930.0	25.	2.	2.
VA08252	159.00	160.00	830.0	4.0	31.0	<0.5	<5.0	2.0	3.0	5.0	<5.0	<1.0	4.0	570.0	11.	2.	1.
VA08253	160.00	161.00	870.0	28.0	76.0	<0.5	20.0	9.0	15.0	8.0	7.0	<1.0	3.0	855.0	27.	2.	2.
VA08254	161.00	162.00	810.0	4.0	34.0	<0.5	<5.0	3.0	3.0	5.0	<5.0	<1.0	3.0	590.0	11.	2.	1.
VA08255	162.00	163.00	820.0	17.0	40.0	<0.5	<5.0	5.0	7.0	10.0	11.0	<1.0	4.0	750.0	30.	2.	2.
VA08256	163.00	164.00	710.0	11.0	29.0	<0.5	5.0	3.0	5.0	<5.0	9.0	<1.0	6.0	600.0	28.	2.	2.
VA08257	164.00	165.00	800.0	7.0	32.0	<0.5	19.0	3.0	4.0	7.0	11.0	<1.0	5.0	1200.0	18.	2.	2.
VA08258	165.00	166.00	880.0	6.0	41.0	<0.5	5.0	3.0	4.0	5.0	15.0	<1.0	3.0	840.0	13.	2.	2.
VA08259	166.00	167.00	940.0	6.0	39.0	<0.5	<5.0	4.0	4.0	6.0	6.0	<1.0	4.0	770.0	13.	2.	2.
VA08260	167.00	168.00	940.0	4.0	44.0	<0.5	<5.0	3.0	3.0	<5.0	5.0	<1.0	3.0	920.0	8.	2.	1.
VA08261	168.00	169.00	1200.0	5.0	42.0	<0.5	<5.0	3.0	3.0	6.0	<5.0	<1.0	4.0	960.0	11.	2.	1.
VA08262	169.00	170.00	1100.0	6.0	142.0	<0.5	6.0	5.0	4.0	6.0	6.0	<1.0	4.0	1200.0	4.	2.	з.
VA08263	170.00	171.00	1100.0	10.0	93.0	<0.5	7.0	5.0	3.0	7.0	6.0	<1.0	4.0	1440.0	10.	2.	3.
VA08264	171.00	172.00	1700.0	9.0	55.0	<0.5	9.0	3.0	3.0	<5.0	9.0	<1.0	3.0	1200.0	14.	2.	2.
VA08265	172.00	173.00	2100.0	21.0	38.0	<0.5	9.0	3.0	3.0	6.0	10.0	<1.0	3.0	1200.0	36.	2.	1.
VA08266	173.00	174.00	1300.0	6.0	44.0	<0.5	<5.0	3.0	2.0	<5.0	<5.0	<1.0	3.0	765.0	12.	2.	1.
VA08267	174.00	175.00	1200.0	9.0	45.0	<0.5	5.0	3.0	3.0	10.0	5.0	<1.0	4.0	1320.0	17.	2.	2.
VA08268	175.00	176.00	1300.0	8.0	38.0	<0.5	11.0	3.0	3.0	7.0	7.0	<1.0	3.0	1260.0	17.	2.	2.
VA08269	176.00	177.00	1600.0	6.0	52.0	<0.5	<5.0	2.0	3.0	<5.0	7.0	<1.0	4.0	1320.0	10.	1.	2.
VA08270	177.00	178.00	1900.0	6.0	52.0	<0.5	6.0	3.0	3.0	<5.0	7.0	<1.0	2.0	935.0	10.	2.	1.
VA08271	178.00	179.00	3100.0	25.0	87.0	<0.5	16.0	3.0	3.0	9.0	8.0	<1.0	5.0	1440.0	22.	2.	2.
VA08272	179.00	180.00	3000.0	32.0	106.0	0.6	28.0	2.0	2.0	7.0	14.0	<1.0	3.0	1560.0	23.	2.	1.
VA08273	180.00	181.00	5900.0	70.0	113.0	<0.5	19.0	3.0	3.0	10.0	21.0	<1.0	3.0	950.0	38.	2.	2.

Hole No. CH88-62

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppa⊧)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (pp∎)	AS (ppm)	CD (ppm)	HO (ppm)	НN (ррв.)	CUZN	ETS	FE
UA08274	181 00	182 00	1900 0	11 0		/0.5	9.0	2.0	2 0	٤ ٨	12.0	<1.0	2 0	1300 0	19	2	1
1100274	197.00	102.00	1700.0	9.0	72 0	(0.J	5.0	2.0	3.0	/5 A	13.0	<1.0	2.0	995 0	· 11	· · ·	
VH06273	102.00	103.00	1700.0	7.0	/2.0	(0.5		2.0	3.0	(3.0	(5.0	<1.0	3.0	893.0		<u>*</u> .	
VAU8276	183.00	184.00	2000.0	6.0	47.0	<0.5	5.0	2.0	2.0	6.0	6.0	<1.0	2.0	890.0	11.	4.	1.
VA08277	184.00	185.00	1500.0	6.0	45.0	<0.5	<5.0	1.0	2.0	5.0	10.0	<1.0	3.0	730.0	12.	2.	1.
VA08278	185.00	186.00	1800.0	15.0	43.0	<0.5	13.0	2.0	2.0	5.0	9.0	<1.0	3.0	1100.0	26.	2.	2.
VA08279	186.00	187.00	2000.0	15.0	40.0	<0.5	<5.0	2.0	2.0	7.0	10.0	<1.0	3.0	725.0	27.	2.	1.
VA08280	187.00	188.00	2200.0	13.0	47.0	<0.5	13.0	3.0	2.0	8.0	32.0	<1.0	2.0	830.0	22.	2.	1.
VA08281	188.00	189.00	2100.0	9.0	35.0	<0.5	17.0	3.0	2.0	5.0	20.0	<1.0	3.0	670.0	20.	2.	1.
VA08282	189.00	190.00	1500.0	18.0	107.0	0.5	55.0	3.0	2.0	16.0	53.0	<1.0	3.0	350.0	14.	2.	2.
VA08283	190.00	191.00	1700.0	32.0	172.0	0.6	33.0	3.0	2.0	38.0	12.0	1.0	4.0	240.0	16.	2.	2.
VA08284	191.30	192.80	980.0	94.0	172.0	<0.5	<5.0	20.0	14.0	10.0	170.0	<1.0	3.0	1200.0	35.	1.	7.
VA08285	192.80	194.00	1200.0	73.0	57.0	<0.5	5.0	16.0	32.0	8.0	85.0	<1.0	3.0	1320.0	56.	2.	4.
VA08286	194.00	195.00	960.0	80.0	51.0	<0.5	14.0	20.0	28.0	13.0	290.0	<1.0	3.0	1920.0	61.	2.	5.
VA08287	195.00	196.00	1000.0	60.0	64.0	<0.5	7.0	16.0	27.0	6.0	64.0	<1.0	3.0	1920.0	48.	4.	4.
VA08288	196.00	197.00	950.0	54.0	60.0	1.3	31.0	12.0	10.0	16.0	60.0	<1.0	3.0	1440.0	47.	4.	3.
VA08289	197.00	198.00	860.0	18.0	407.0	2.3	117.0	5.0	5.0	16.0	72.0	2.0	3.0	1440.0	4.	4.	2.
VA08290	198.00	199.00	880.0	12.0	38.0	1.5	77.0	6.0	6.0	7.0	75.0	<1.0	2.0	770.0	24.	4.	3.
VA08291	199.00	200.00	810.0	16.0	55.0	1.6	48.0	6.0	6.0	7.0	200.0	<1.0	4.0	560.0	23.	4.	2.
VA08292	200.00	201.00	730.0	13.0	51.0	1.9	42.0	5.0	6.0	<5.0	75.0	<1.0	2.0	795.0	20.	4.	2.
VA08293	201.00	202.00	800.0	13.0	51.0	1.0	64.0	6.0	5.0	<5.0	28.0	<1.0	2.0	935.0	20.	4.	2.
VA08294	202.00	203.00	860.0	13.0	63.0	0.9	15.0	7.0	6.0	<5.0	35.0	<1.0	2.0	910.0	17.	4.	2.
VA08295	203.00	204.00	810.0	11.0	42.0	<0.5	<5.0	6.0	4.0	<5.0	13.0	<1.0	1.0	1200.0	21.	4.	2.
VA08296	204.00	205.00	820.0	25.0	302.0	1.0	42.0	5.0	7.0	6.0	32.0	1.0	5.0	1200.0	8.	4.	3.

Hole No. CH88-62

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррв)	AS (pp∎)	CD (ppm)	HO (ppa)	MN (ppm)	CUZN	ETS	FE
VA08297	205.00	206.00	690.0	26.0	64.0	0.5	10.0	6.0	5.0	<5.0	17.0	<1.0	4.0	2160.0	29.	4.	2.
VA08298	206.00	207.00	590.0	25.0	73.0	0.5	10.0	7.0	8.0	<5.0	26.0	<1.0	9.0	2640.0	26.	4.	3.
VA08299	207.00	208.00	910.0	6.0	48.0	<0.5	<5.0	4.0	5.0	<5.0	6.0	<1.0	2.0	910.0	11.	4.	1.
VA08300	208.00	209.00	1100.0	20.0	115.0	<0.5	<5.0	6.0	7.0	<5.0	8.0	<1.0	3.0	950.0	15.	4.	2.
VA08301	209.00	210.00	980.0	9.0	66.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	<1.0	3.0	1200.0	12.	4.	1.
VA08302	210.00	211.00	1100.0	46.0	115.0	<0.5	<5.0	7.0	7.0	<5.0	9.0	<1.0	2.0	815.0	29.	4.	2.
VA08303	211.00	212.00	920.0	8.0	36.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	<1.0	3.0	920.0	18.	4.	2.
VA08304	212.00	213.20	950.0	10.0	30.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	950.0	25.	4.	2.
VA08305	213.20	214.20	960.0	77.0	109.0	<0.5	<5.0	23.0	22.0	<5.0	22.0	<1.0	3.0	1440.0	41.	4.	6.
VA08306	214.20	215.70	1100.0	11.0	31.0	<0.5	<5.0	4.0	5.0	<5.0	5.0	<1.0	2.0	670.0	26.	4.	1.
VA08307	216.30	217.00	1000.0	12.0	44.0	<0.5	<5.0	1.0	4.0	<5.0	<5.0	<1.0	3.0	570.0	21.	4.	1.
VA08308	217.00	218.00	950.0	9.0	30.0	<0.5	<5.0	1.0	3.0	<5.0	<5.0	<1.0	3.0	835.0	23.	4.	1.
VA08309	218.00	219.00	980.0	6.0	24.0	<0.5	<5.0	1.0	3.0	<5.0	9.0	<1.0	3.0	860.0	20.	4.	1.
VA08310	219.00	220.00	900.0	13.0	27.0	<0.5	<5.0	1.0	4.0	<5.0	<5.0	<1.0	3.0	510.0	33.	4.	1.
VA08311	220.00	221.20	870.0	16.0	31.0	<0.5	<5.0	3.0	6.0	<5.0	5.0	<1.0	3.0	690.0	34.	4.	2.
UA08312	221.20	222.60	1200.0	80.0	197.0	0.5	34.0	8.0	18.0	<5.0	68.0	1.0	4.0	1260.0	29.	5.	3.
0408313	222 60	224 20	830 0	20.0	61.0	20.5	20.0	5.0	5.0	(5.0	12.0	(1.0	2.0	400-0	25.	3.	2.
UA00313	222.00	227.20	490.0	45.0	05.0	(0.5	G 0	9.0	14.0	/5 0	120.0	<1.0	4.0	1440 0	43	3.	4
VA08314	224.20	225.00	490.0	63.0	85.0	(0.5	9.0	8.0	16.0	<5.V	130.0	(1.0	*.V	1110.0	40. 40		··· 2
VA08315 ·	225.00	226.00	1000.0	42.0	56.0	<0.5	<5.0	6.0	15.0	<5.0	14.0	<1.0	5.0	1200.0	43.	3.	3.
VA08316	226.00	227.00	830.0	81.0	55.0	<0.5	<5.0	12.0	23.0	<5.0	17.0	<1.0	4.0	815.0	60.	3.	3.
VA08317	227.00	228.10	550.0	53.0	230.0	<0.5	<5.0	13.0	63.0	<5.0	130.0	1.0	4.0	1320.0	19.	3.	4.
VA08318	228.10	229.10	890.0	23.0	42.0	<0.5	<5.0	8.0	7.0	<5.0	20.0	<1.0	3.0	820.0	35.	3.	3.
VA08319	229.10	230.00	660.0	74.0	63.0	<0.5	<5.0	9.0	17.0	<5.0	40.0	<1.0	4.0	1680.0	54.	5.	4.

Hole No. CH88-62

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DIAMOND	DRILL	CORE L	ITHOGEOCHEMICAL	RECORD
		(MINOR	ELEMENTS)	

SAMPLE NUMBER	FROM	то	BA (ppan)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	ИМ (ррт)	CUZN	ETS	FE
VA08322	230.00	231.00	470.0	66.0	76.0	<0.5	<5.0	9.0	19.0	<5.0	44.0	<1.0	3.0	1320.0	46.	5.	з.
VA08320	231.00	232.00	270.0	58.0	74.0	<0.5	<5.0	9.0	20.0	<5.0	34.0	<1.0	3.0	1500.0	44.	5.	4.
VA08321	232.00	233,00	470.0	63.0	75.0	<0.5	<5.0	6.0	15.0	<5.0	48.0	<1.0	2.0	940.0	46.	5.	4.
VA08323	233.00	234.00	420.0	76.0	72.0	<0.5	<5.0	10.0	25.0	<5.0	190.0	<1.0	3.0	1200.0	51.	5.	4.
VA08324	234.00	235.00	630.0	71.0	57.0	<0.5	<5.0	10.0	20.0	<5.0	130.0	<1.0	3.0	1440.0	55.	5.	4.
VA08325	235.00	236.00	1400.0	76.0	88.0	<0.5	<5.0	11.0	18.0	<5.0	22.0	<1.0	3.0	1200.0	46.	5.	5.
VA08326	236.00	237.00	1000.0	61.0	152.0	<0.5	<5.0	8.0	20.0	<5.0	40.0	<1.0	3.0	980.0	29.	5.	3.
VA08327	237.00	237.70	600.0	53.0	408.0	<0.5	6.0	7.0	19.0	<5.0	40.0	4.0	2.0	1200.0	12.	5.	3.

Hole No. CH88-62



Summary Log: DDH CH88-63 Location: 50+00'W, 9+25N; Holyoak 3 Claim Azimuth: 210, Dip: -50 Hole Completed: June 2,1988 Core Logged By: S.G. Clemmer

3.0 Overburden .0 -3.0 -21.6 Chloritic felsic quartz eye tuff 21.6 -26.6 Mafic tuff 47.5 Chloritic felsic quartz eye tuff 26.6 -49.4 Chloritic felsic ash tuff 46.5 -49.4 -53.6 Chloritic felsic quartz eye tuff 53.6 -98.6 Chloritic felsic quartz eye tuff -30cm 1% sphalerite 98.3 to 98.6 98.6 - 108.2 Chloritic felsic lapilli tuff 108.2 - 113.3 Chloritic felsic quartz eye tuff 113.3 - 120.9 Felsic lapilli tuff 120.9 - 124.0 Fault breccia 124.0 - 126.9 Mafic porphyritic mafic flow / intrusion 126.9 - 170.0 Chloritic felsic quartz eye tuff 171.6 - 181.5 Cherty argillaceous sediments and felsic tuffite 181.5 - 230.6 Chloritic felsic quartz eye tuff 230.6 - 233.5 Mafic ash tuff 233.5 - 236.9 Chloritic felsic quartz eye tuff 236.9 - 239.9 Mafic ash tuff 239.9 - 246.3 Chloritic felsic quartz-feldspar crystal tuff 246.3 End of hole.

Р	PROPERTY: Chemainus J.V. Hole Location: 50+00' W 9+25 N					FALCONB DIAMON	RIDGE LIMIT	ED				HOLE N CH88-63	o: Pa	ge Numbe 1	er			
H	ole Locat	ion: 50+	00'¥ 9+25	N														
N A D	TS: 092B/ zimuth: 2 ip: -	13W 10 50	UTM: Elevation: Length:	925 m 246.3 m						C S	laim No. H ection No. ogged By:	Holyoak 3 : Section S.G. Clemm	50+00' er	West, Ho	olyoak	Claim G	roup	
S	tarted: M ompleted:	lay 31, 1 June 2,	988 1988							D A	rilling Co ssayed By:	Bondar-Cl	Enterp egg and	rises X-Ray A	Assay			
Р	urpose: T	'o develo	p a stratig	raphic s	ection an	nd test	IP DIP TH	ESTS		C	ore Size:	NQ						
	• • • • • •		•			Azi-			7									
					Length	muth	Dip	Length	muth	Dip								
					17.10 126.80	210.0 215.0	-52.0 -46.0	218.20 243.80	218.0 219.0	-41.5 -41.0								
From (m)	To (m)			DE:	SCRIPTION	1		Sam N	ple F o.	rom To (m) (m	Width) (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
.0	3.0 OV	ERBURDEN																
3.0	21.6 CH	LORITIC	FELSIC OUAR	IZ EYE TU	JFF													

Light grey quartz porphyritic sericitic-chloritic felsic tuff, with 2 to 5% <1 to 3mm locally 5mm rounded guartz crystals, in a sericite- quartz matrix. The matrix is foliated and schitose with 5% light brown micaceous layers that are 1 to 3mm thick and stretched in cleavage and 10 to 20% light green relatively chlorite rich layers that are 1 to 3 mm , locally up to 15mm thick, and also streched. The chloritic layers are often dicontinuous and contain <1 to 1mm 10 to 15 %, white rounded guartz and white mineral areas that may be crystalssts, amygdules, or spherulites, all suggests chloritic areas are fragments. Cleavage is weakly contorted by a crenulation cleavage Carbonate as <1 to 2mm wide irregular white patchs in cleavage makes up 0 to 3% of rock locally 5%. There is 2 to 4 % pyrite, most as <1 to 3mm layers in cleavage. and as (1 to 2mm disseminated grains.

5.0 6.6 Fault zone or fracture zone, 70cm lost core, core broken and quartz veined. Quartz veins 1 to 4cm weakly folded and 10 to 30 degrees to core; 10 to 20 % carbonate in quartz and enclosing tuff looks silicified and contains 5 to 10% pyrite.

8.5 8.5 Light grey felsic ash layer, 30 degrees to core. Foliations :.

7.50 : 30 degrees to core axis. 13.50 : 40 degrees to core axis. 14.50 : 35 degrees to core axis. 15.95 : 35 degrees to core axis. 17.65 : 60 degrees to core axis.

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VA02866 21.6 18.6 n/a 1240 3.0 n/a 25 n/a 36 n/a VA08328 3.0 5.0 2.0 2 16 ₹5 49 <1 23 1100 VA08329 5.0 7.0 2.0 2 17 ٢5 61 <1 57 830 VA08330 9.0 2 13 <5 30 <1 25 1000 7.0 2.0 VA08331 ٢5 56 <1 9 1100 9.0 10.0 1.0 2 14 6 VA08332 10.0 12.0 2.0 2 15 56 <1 9 1000 (5 82 <1 12 1100 VA08333 12.0 14.0 2.0 2 21 VA08334 14.0 16.0 2.0 2 18 5 93 <1 9 1100 7 107 <5 1100 VA08335 16.0 18.0 2.0 2 15 <1 46 116 <1 10 1100 VA08336 18.0 20.0 2.0 2 6 12 111 <5 1300 VA08337 20.0 21.6 1.6 2 30 <1

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-63 2

			DIAMOND DRI	LL LOG												
From (m)	То (m)		DESCRIPTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppl	Ba) (ppm)
		20.00 : 40 degree 10.1 10.7 Fractur veins 1 to 3mm) 15.0 16.5 Rock co	es to core axis. e zone, 20cm lost core, 10 % 1cm 0 to 30 degrees to core, minor go ntains 25% chlorite localized in	quartz uge (<1 2 to												
		10mm r layers Alteration	elatively chlorite rich dicontinu which may be fragments.	ous												
		3.0 21.6 STRONG F Lost core 0.7m fr Lost core 0.2m fr	PERVASIVE SERICITIZATION. om 6.1 to 7.3. om 10.0 to 10.4.										•			
21.6	26.6	DAFIC TUFF Dark green fine of texture of 20% of	rained mafic tuff, with fine gran	ular 5%	VA02867	21.6	26.6	5.0	n/a	43	n/a	101	n/a	n/a	234	
		chlorite, 20 % fe mineral. Rock cor	eldspar 5% disseminated <1mm ligh tains 15% white carbonate as <1 t	t brown o 15mm,												
		irregular areas t that varies from contact is sharp	hat generally follow a weak folia 40 to 50 degrees to core axis. at 45 degress to core and mafic i	tion Upper s												
		altered to epidot sharp 45 degrees	e for 2cm at contact. Lower cont to core.	act												
		23.1 23.3 2cm qua tetrahe malachi	rtz vein 35 degrees to core, 2% drite as 1 to 2 mm grains, mínor te stain													
		26.0 26.6 Rock we Alteration :.	akly fractured, 20cm quartz vein.			•										
		21.6 26.6 MODERAT Lost core 20cm fr	E FRACTURE CONTROLLED CARBONATIZA om 26.2 to 27.0.	TION.	· •											
26.6	47.5	CHLORITIC FELSIC Light grey quartz tuff, with 1 to 3	QUARTZ EYE TUFF porphyritic sericitic-chloritic % <1 to 3mm locally 5mm rounded	felsic quartz	VA02868 VA08338	27.0	46.5	19.5 2.0	n/a 2	15 30	n/a 6	30 97	n/a <1	n/a 9	1130 1100	
		foliated and schi layers that are 1	to 3mm thick and stretched in c	x is caceous leavage	VA08339 VA08340 VA08341	29.0 31.0 33.0	31.0 33.0 35.0	2.0 2.0 2.0	2 2 2	12 6 11	5 6 10	51 51 48	<1 <1 <1	19 12 14	1200 1100	
		and 10% light gre are 1 to 3 mm , 1 streched. After	en relatively chlorite rich laye ocally up to 15mm thick, and als 35.0 there is no more light brown	rs that o layers	VA08342 VA08343 VA08344	35.0 37.0 39.0	37.0 39.0 41.0	2.0 2.0 2.0	2 2 2	10 10 9	<5 <5 <5	25 44 46	<1 <1 <1	10 5 7	1200 1100 1100	
		and the pyrite co 5% carbonate as < foliation There	ntent drops to $\langle 1 $ to $1 $ %. There 1 to 5mm irregular elaongate pat is 1 to 2% (1 to 1mm disseminated	is 1 to chs in	VA08345 VA08346	41.0 43.0	43.0 45.0	2.0	2 2 2	6 10	<5 <5	53 49 61	<1 (1	<5 6	1100 1000	
		to 2mm fracture p 30.2 30.6 40% qua	yrite. rtz veins 30 to 50 degrees to cor	e 1 to	VA02869 VA08348	46.5	49.4 49.0	2.9	n/a 2	12 6	n/a <5	43 47	n/a <1	n/a (5	1060 1100	
		∠ cm. 31.3 33.3 40% qua 20 cm.	rtz veins 30 to 50 degrees to cor 10% white 1 to 10mm white carbona	e 1 to te in												

quartz. Foliations :. \bigcirc

PROPERTY: Chemainus J.V.		FALCONBRIDGE LIMITED DIAMOND DRILL LOG							HOLE N CH88-63	lo: P	age Numb 3	ber				
From (m)	To (m)		DESCRIF	PTION		Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		29 00 · 45 degrees	to core avis							· ·						
		31 00 · 35 degrees	to core axis.													
		34 70 · 45 degrees	to core axis.													
		43.50 : 55 degrees	to core axis.													
		46.30 · 60 degrees	to core axis.													
		Alteration :														
		26.6 47.5 STRONG PI	ERVASIVE SERICIT	FIZATION.												
46.5	49.4	WEAKLY CHLORITIC FI	ELSIC TUFF					· ·								
		Light grey-green qu relatively homogene	artz-sericite-ceous, with littl	chlorite felsic tuf le banding, 3%, <1m	f, m	VA08349	49.0	50.0	1.0	2	18	10	57	<1	<5 1	.100
		round quartz eyes.	Occasional 5x30	Omm stretched fragm	ent											
		of quartz porphyri	cic (10% Smm qua	artz eyes) felsic t	urr.											
		Upper and lower con	ntacts relative	iy sharp but in par	τ											
		gradational 50 degi	rees to core.													
		Alteration :.		***												
		46.5 47.4 STRONG PI	ERVASIVE SERICI	FIZATION.												
		Follations :.														
		47.00 : 50 degrees	to core axis.													
49.4	53.6	CHLORITIC FELSIC OU	JARTZ EYE TUFF													
		Light grey weakly I	banded guartz-se	ericite felsic guar	tz eve	VA02870	49.4	75.5	26.1	n/a	121	n/a	135	n/a	n/a 1	160
		tuff with minor cl	nlorite, certair	nlv less than surro	unding	VA08350	50.0	51.5	1.5	5	3100	860	3600	7	49	950
		units which have o	reen bands or f	fragments of more		VA08351	51.5	53.0	1.5	5	17	10	40	<1	14	750
		chlorite rich area	as. Upper contac	t relatively sharp		VA08352	53.0	55.0	2.0	5	18	8	56	<1	30	900
		lower contact grad	lational and som	newhat arbitrary. T	, here											
		are 5% 1 to 4mm di	artz eves in a	finely banded matr	ix of											
		quartz-sericite-	blorite (50% se	ericite. 40 % quart	7 5%											
		chlorite): handing	is 1 to 3mm in	hickness. There	is 2%											
		(1 to 2mm dissemin	ated nyrite.													
		Mineralization	itted pjiliter													
		50 2 50 2 Quartz-cz	arbonate vein wi	ith 10% chalconvrit	e. 5%											
		Jight gr	-v-brown sphaler	ite and 5% pyrite.	45											
		degrees (to core vein 4	1cm wide.												
		50 3 50 3 Quartz-cz	arbonate vein wi	ith 5% chalconvrite	5%											
		light gr	ev-brown sphaler	rite and 5% pyrite.	45											
		degrees 1	to core minor	(1% galena, Vein 2	cm.											
		wide		i yaronar ban b												
		50 6 50 7 Quartz-cz	arbonate vein wi	ith 5% chalconvrite	1%											
		dalena ar	nd 5% nyrite Ve	ein os 9cm wide. V	ein is											
		70% guart	tz and 30% carbo	onate 50 degrees to	core.											
		50.8 50.8 Ouartz-cz	rbonate vein wi	ith 1% chalcopyrite	. 5%											
		light gr	ev-brown schales	rite. 1% galena and	5%											
		nvrite	Vein is 60 dem	rees to core. Vein	is 3cm											
		wide	is of acyl													
		50 9 51 1 Carbonate	e-quartz vein wi	ith 60% white carbo	nate											
		35% mari	ta 3% chalconv	rite (1% enhalorit	e and											
		5% nurit	 Vein is 75 / 	learnes to core Vo	in is											
		14cm wide		augroup to tores (C												
		- ARGM PAG														

DIAMOND DRILL LOG Vidth Total Cu Рb From To Sample From TO Zn Ag (ppm) (ppb) (ppm) -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) 53.3 53.4 25% pyrite in a 3cm wide quartz-carbonate vein zone 60 degrees to core. Foliations :. 53.00 : 55 degrees to core axis. Alteration :. 49.4 53.6 STRONG PERVASIVE SERICITIZATION. 53.6 98.6 CHLORITIC FELSIC QUARTZ EYE TUFF Grey-green sericite-chlorite-guartz, guartz porphyritic VA08354 55.0 57.0 .11 6 21 2.0 n/a <1 felsic tuff, with 5 to 10%, 1 to 6mm guartz crystals in VA08355 57.0 59.0 2.0 11 30 n/a(5 <1 in a banded (1 to 10mm bands) chlorite-sericite-quartz VA08356 59.0 61.0 2.0 n/a 9 <5 26 <1 matrix. Banding is caused by relatively sericite rich VA08353 69.6 71.0 1.4 3 13 6 50 <1 layers, more siliceous layers, relatively chlorite rich VA08357 71.0 73.0 2.0 5 24 11 54 <1 layers and less common light brown mica layers that occur VA08358 73.0 75.0 2.0 2 10 6 50 <1 locally. The bands are often discontinuous and in VA08359 75.0 77.0 2.0 2 9 7 51 <1 particular the chlorite rich ones look like flattened VA02871 75.5 98.6 23.1 n/a <10 n/a 66 n/a 79.0 43 <1 fragments (pumice?). There is 5% white carbonate in 1 to VA08360 77.0 2.0 2 - 5 9 VA08361 81.0 2.0 6 39 <1 3mm dicontinuous bands and patchs and 1 to 3% pyrite as 79.0 2 Δ disseminated (1 to 2mm grains and masses, and as 1 to 2mm 37 VA08362 81.0 83.0 2.0 2 7 7 <1 pyrite fragments. There are 0 to 5%, 5 to 20mm 85.0 11 51 <1 VA08363 83.0 2.0 2 6 quartz-carbonate veins, generally in foliation plane VA08364 85.0 87.0 2.0 2 7 6 61 <1 VA08365 32 (1 88.3 16 throughout unit. 87.0 1.3 2 6 64.3 64.4 Folded cleavage varies from 10 to 50 degrees to VA08366 91.0 14 8 37 <1 88.9 2.1 2 core and there is a 3cm carbonate vein. 46 VA08367 91.0 93.0 2.0 2 14 11 <1 95.0 12 44 <1 65.6 66.1 Light yellow green fine grained epidotized tuff. VA08368 93.0 2.0 2 < 5 68.7 68.8 Fault zone 3cm white gouge 45 degrees to core. 48 <1 VA08369 95.0 97.0 2.0 4 12 7 70.3 71.8 Zone of rock has more banding, light brown VA08370 97.0 98.0 1.0 4 71 66 174 1 VA08371 98.0 98.7 105 730 1517 1 mineral 5% pyrite, 20% quartz-carbonate . 7 5 veining. Pyrite locally as 1cm 50% pyritic layers 45 degrees to core. 88.4 88.8 Mafic dyke, 10% (1mm mafic crystals in a fine grained chloritic matrix, 20% 1 to 8mm irregular carbonate patches; contacts wavy 25 degrees to core. 95.7 97.1 Tuff is light grey with 25% 2 to 8mm guartz eyes, 5% pyrite. 98.3 98.6 1% disseminated light brown sphalerite, as 1mm bands in foliation and adjacent to a 2cm quartz carbonate vein 55 degrees to core. Foliations :. 54.50 : 40 degrees to core axis. 57.00 : 40 degrees to core axis. 68.00 : 30 degrees to core axis. 72.50 : 45 degrees to core axis. 75.50 : 30 degrees to core axis. 79.00 : 35 degrees to core axis. 82.00 : 50 degrees to core axis. 85.20 : 30 degrees to core axis. 88.20 : 45 degrees to core axis. 92.00 : 50 degrees to core axis.

FALCONBRIDGE LIMITED

HOLE No: Page Number

4

Au

23 1400

6 1400

11 1100 22 1700

13 1300

n/a 1870

950

940

7 1000 <5 1100

< 5 870

10

10

18 1300

(5 1400

16 1900

33 1500

10 1900

16 1700

37 2000

95 4200

51 5600

Ba

CH88-63

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-63 5

РЪ

Zn

(ppm) (ppm) (ppm)

Aσ

Au

Ba

(ppb) (ppm)

Cu

From To (m) (m) -----DESCRIPTION-----

------DESCRIPTION------ No. (m) (m) (m) 98.00 : 60 degrees to core axis.

Sample

From

To

Width

Alteration :. 53.6 98.6 STRONG PERVASIVE SERICITIZATION. Lost core 71.9 75.0 35cm.

98.6 108.2 CHLORITIC FELSIC LAPILLI TUFF

- Grey-green conglomerate or lapilli tuff with 40%, 5 to 30mm stretch fragments of light grey-green quartz crystal tuff in a fine grained foliated chloritic matrix, in part argillaceous. The felsic fragments contain 5 to 10%, (1 to 2mm locally 5mm quartz crystals in a fine light grey green micaceous matrix. Fragments are calcareous. 1 to 2% disseminated pyrite. Unit may be felsic debris caught up in a mafic tuff.
- 102.7 102.9 Mafic dyke, upper contact wavy 30 degrees to core lower contact wavy 45 degrees to core. 5% <.5mm feldspar crystals.
- 103.6 104.7 Calcareous mafic tuff with 15% irregular patches of white carbonate in a chloritic matrix that may be composed of 2 to 10mm chloritic fragments.
- 103.8 104.0 Mafic tuff layer or large fragment.
- 105.6 105.9 Mafic dyke with 3%, 1 to 3mm, one 8mm clino-pyroxene phenocryst in a dark chloritic matrix.
- 105.9 107.9 Rock is more mafic and only contains 0 to 20% felsic to intermediate fragments in a 10% carbonate patchy chlorite dark green matrix.
- 107.9 108.2 Mafic dyke as at 105.64 to 105.93 Contacts sharp and 45 degrees to core.
- Foliations :.

100.50 : 60 degrees to core axis.

- 105.15 : 45 degrees to core axis.
- 106.70 : 35 degrees to core axis.

Alteration :.

98.6 108.2 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

108.2 113.3 CHLORITIC FELSIC QUARTZ EYE TUFF

Light grey to light grey green very weakly to chloritic quartz eye felsic tuff with 5 to 10%, 1 to 6mm rounded quartz crystals. 1 to 2% disseminated pyrite. Lower contact sharp 50 degrees to core. 109.7 110.2 Mafic dyke, contacts sharp 45 degrees to core, chilled 2cm, 3%, 1 to 8mm pyroxene phenocrysts, 15% <.5mm feldspar crytals. 111.0 112.3 Mafic dyke, contacts sharp 35 degrees to core, chilled 2cm, 3%, 1 to 3mm pyroxene phenocrysts, 15% <.5mm feldspar crytals.

Foliations :.

VA02872 99.0 108.0 9.0 n/a 91 n/a 122 n/a n/a 581

Total

Sulphides (ppm)

VA02873 108.2 111.0 2.8 n/a 12 n/a <10 n/a n/a 809

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-63 6 DIAMOND DRILL LOG From To Sample From Width To Total Cu Ph Zn Ag Au · Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 109.00 : 45 degrees to core axis. Alteration :. 108.2 113.3 MODERATE PERVASIVE SILICIFICATION. 113.3 120.9 FELSIC LAPILLI TUFF Light grey-brown, felsic to intermediate lapilli tuff with VA02874 116.0 120.9 4.9 n/a 182 n/a 125 559 n/a n/a 40%, 3 to 15mm thick stretched fragments of felsic tuff that contain 15%, <1mm quartz crystals in a matrix of similar composition. 1% disseminated fine pyrite and fracture pyrite. 113.3 114.0 Finely foliated soft light brown felsic tuff. 114.0 114.2 Mafic dyke. 114.2 115.5 Rock is grey-green and chloritic and may be due to added mafic material or chloritization. Foliations :. 115.00 : 45 degrees to core axis. 119.00 : 35 degrees to core axis. Alteration :. 114.2 115.5 MODERATE PERVASIVE CHLORITIZATION. 120.9 124.0 FAULT BRECCIA Silica healed fracture zone with 70% 2 to 10cm fragments of chloritic felsic to intermediate volcanic and mafic dyke material in 30% quartz as 1 to 3cm veins with 2% pyrite. Last 2 metres of interval less brecciated. Quartz veins vary from 20 to 35 degrees to core. Lost core 40cm 122.5 to 124.7. 124.0 126.9 MAFIC PORPHYRITIC MAFIC FLOW / INTRUSION Dark green mafic dyke, lower contact sharp and sheared at 35 degrees to core, with 20cm hornfelsing, rock has 15%, locally weakly epidotized.5mm feldspar crystals and locally 3% 1 to 4mm pyroxene crystals. 126.9 170.0 CHLORITIC FELSIC QUARTZ EYE TUFF Grey-green sericite-chlorite-quartz, quartz porphyritic VA02875 127.0 136.5 9.5 33 29 n/a 1050 n/a n/a n/a felsic tuff, with 1 to 5%, 1 to 4mm quartz crystals in in VA08372 136.4 137.6 57 82 <1 10 490 1.2 1 8 a banded (1 to 10mm bands) chlorite-sericite-quartz VA02876 137.6 157.5 19.9 308 32 n/a n/a n/a 1850 n/a matrix. Banding is caused by relatively sericite rich VA08373 137.6 139.0 2 5 23 <1 <5 1300 1.4 6 layers, more siliceous layers, relatively chlorite rich VA08374 139.0 141.0 (5 52 <1 <5 1200 2.0 2 19 layers and less common light brown mica layers that occur VA08375 141.0 143.0 330 25 2.0 3 23 (5 <1 1400 locally. The bands are often discontinuous and in 17 1700 VA08376 143.0 143.9 5 11 <1 . 9 3 5 particular the chlorite rich ones look like flattened VA08377 145.1 146.7 2 9 112 1300 1.6 <5 <1 9 fragments (pumice?). This section of the unit contains VA08378 148.0 148.8 2 5 <5 30 <1 <5 1400 . 8 only minor chlorite and more silica than the unit near VA08379 149.8 151.0 18 <5 63 <1 1500 1.2 2 8 the top of the hole. There is 2% white carbonate in 1 to VA08380 151.0 153.0 2.0 1 21 <5 81 <1 23 1800 3mm dicontinuous bands and patchs and (1 to 1% pyrite as VA08381 153.0 155.0 2.0 1 17 (5 288 <1 47 1700

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-63 7

T0 (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
	disseminated (1 to 2mm grains and masses, and as 1 to 2mm pyrite fragments Lower contact gradational and arbitrary. 128.2 128.4 Intermediate tuff layer, contacts sharp upper is 40, lower 50 degrees to core, feldspar and quartz crystals <5%, up to 7mm. Bed at 128.75 to 128.90 also.	VA08382 VA08383 VA08384 VA08385 VA02877 VA08386	155.0 157.0 157.8 158.8 159.0 160.0	157.0 157.8 158.8 160.0 171.6 162.0	2.0 .8 1.0 1.2 12.6 2.0	1 2 1 n/a 1	23 43 40 35 <10 18	<5 5 5 9 n/a <5	56 35 65 162 54 106	<1 <1 <1 <1 n/a <1	19 13 20 21 n/a 10	1500 1800 1200 1000 1190 1300	
	 136.4 137.6 Felsic is darker grey and weakly argillaceous contacts are sharp and 60 degrees to core. 139.0 143.9 Rock has 3% pyrite, and is locally shered with 1% gauge in 1 to 1mm zones 65 degrees to 	VA08387 VA08388 VA08389 VA08390	162.0 164.0 166.4 168.0	164.0 165.0 168.0	2.0 1.0 1.6 2.0	1 1 1 1	5 7 9 61	<5 36 53 32	71 60 112 210	<1 <1 <1	5 5 7	1300 1400 1200 850	
	core. 143.9 144.1 Mafic dyke. 144 7 145.0 Mafic dyke.					· · · · ·					.		
	to core. 146.9 147.9 Mafic dyke, lost core and minor gouge at												
	148.3 148.3 2cm white gouge 70 degrees to core. 148.9 149.7 Mafic dyke, 10% felsic in dyke interval. Contact sharp 75 degrees to core ((Imm mafic												
	crystals visible. 153.1 153.4 Fracture zone minor gouge, 50cm lost core; sharing 45 degrees to core												
	157.1 157.4 Minor gouge 30cm lost core, shearing 30 degrees to core.												
	157.8 158.9 Argillite(20%) and cherty argillaceous felsic. Argillite runs 35 degrees to core as 1 to 5mm bands, there is one 15cm band of argillite at 157.80 to 157.95 and its contact is sharp and coursets there may be to better of belo								•				
	159.4 160.0 Foliation contorted and 10 to 30 degrees to core.												
	165.1 166.4 Green carbonatized (30% carbonate) mafic tuff. 167.7 167.9 Quartz-carbonate vein, 1cm gouge 50 degrees to core.												
	168.3 168.4 Fine grained felsic tuff bed,50 degrees to core.												
	170.7 171.6 Fracture or fault zone, core and rock shattered 60cm lost core, shearing 45 degrees to core.												
	Foliations :.												

From

(m)

159.20 : 35 degrees to core axis. 161.00 : 55 degrees to core axis. 168.00 : 45 degrees to core axis.

129.00 : 55 degrees to core axis. 130.00 : 60 degrees to core axis. 133.50 : 50 degrees to core axis. 139.00 : 60 degrees to core axis. 143.00 : 65 degrees to core axis. 146.00 : 70 degrees to core axis. 155.00 : 60 degrees to core axis. 158.00 : 45 degrees to core axis.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-63 8 DIAMOND DRILL LOG From To Sample From То Width Total Cu Pb Zn Ag Au Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Alteration :. 126.9 171.6 MODERATE PERVASIVE SILICIFICATION. Lost core 40cm 145.1 148.1. Lost core 50cm 151.2 153.9. Lost core 30cm 157.0 158.5. Lost core 50cm 163.4 166.4. Lost core 60cm 170.7 171.6. 171.6 181.5 CHERTY ARGILLACEOUS SEDIMENTS AND FELSIC TUFFITE Grey to black banded argillite and felsic tuff. Banding is VA08391 170.0 172.0 68 157 14 2.0 1 12 <1 840 on the scale of 2 to 10mm, with 25% argillite. 3% VA08392 172.0 173.0 71 165 <5 940 1.0 2 24 <1 fracture pyrite as <1 to 1mm banded and irregular masses VA08393 173.0 174.0 88 359 10 710 1.0 2 125 1 15 Lower contact sheared 75 degrees to core. VA08394 174.0 175.0 1.0 0 90 100 265 (1 610 47 <1 173.1 174.7 Core broken 60cm lost core, guartz veining VA08395 175.0 176.0 1.0 2 60 96 6 960 and shearing 70 degrees to core. VA08396 176.0 177.0 1.0 1 19 63 169 <1 17 990 175.1 175.1 Folded banding in argillite 10 degrees to core. VA08397 177.0 179.0 2.0 2 60 162 205 1 37 980 175.9 177.4 Felsic tuff interval no argillite. VA08398 179.0 181.0 2.0 2 43 44 68 <1 18 880 178.3 178.4 Quartz-dolomite vein. 45 degrees to core. 945 106 VA08399 181.0 181.5 .5 2 104 800 2 520 179.1 179.2 Cherty layer segmented by cleavage but trends 15 degrees to core. Foliations :. 175.00 : 60 degrees to core axis. 180.00 : 50 degrees to core axis. Lost core 60cm 173.1 174.7. 181.5 230.6 CHLORITIC FELSIC QUARTZ EYE TUFF <5 900 Light grey weakly chloritic to grey-green chloritic VA08400 181.5 183.0 1.5 1 17 33 54 <1 VA02878 181.6 203.4 21.8 <10 n/a 1040 quartz eye sericitic felsic tuff with 5 to 10%, 1 to 6mm 12 n/a n/a n/a rounded quartz crystals. Rock is moderately foliated. VA08401 183.0 185.0 26 26 <1 <5 960 2.0 -5 1 Tuff is relatively homogeneous in contrast to banded VA02879 203.4 230.6 27.2 100 n/a (10 n/a n/a 953 n/a chloritic tuffs at start of hole. Less than 1% VA08402 205.0 206.0 10 19 <1 9 890 1.0 1 7 disseminated pyrite. VA08403 206.0 208.0 2.0 7 14 23 (1 5 1000 1 25 1100 195.4 196.0 Weak shear 30 degrees to core minor gouge. VA08404 208.0 210.0 2.0 1 9 <5 20 <1 7 12 <1 ٢5 1100 196.0 204.0 Tuff grey-green and chloritic. VA08405 210.0 212.0 2.0 1 5 <5 980 204.0 204.5 Mafic tuff layer, contacts sharp 60 degrees to VA08406 212.0 214.0 2.0 1 6 < 5 8 <1 VA08407 214.0 215.4 1.4 1 9 <5 4 (1 <5 870 core. 205.0 215.4 Tuff light grey, no chlorite 1 to 2% pyrite, VA08408 226.4 228.0 1.6 1 7 ٢5 7 <1 6 960 larger quartz eyes, up to 6mm. 226.4 228.0 Rock bleahed light grey no chlorite. 228.0 228.4 Mafic tuff bed. Foliations :. 184.20 : 50 degrees to core axis. 187.00 : 45 degrees to core axis. 192.50 : 30 degrees to core axis. 194.00 : 45 degrees to core axis. 196.00 : 60 degrees to core axis. 207.00 : 55 degrees to core axis. 221.00 : 60 degrees to core axis. 227.50 : 60 degrees to core axis.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-63 9 DIAMOND DRILL LOG Width Total Рb Ba From To Sample From Τo Cu Zn Ag Αu (m) -----DESCRIPTION------Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) No. (m) (m) (m) Alteration :. 181.5 195.0 MODERATE PERVASIVE SILICIFICATION. 181.5 195.0 MODERATE PERVASIVE SERICITIZATION. 205.0 215.4 MODERATE PERVASIVE SILICIFICATION. 226.4 228.0 MODERATE PERVASIVE SERICITIZATION. 230.6 233.5 MAFIC TUFF Dark green carbonatized mafic tuff, 25% white carbonate VA02880 230.6 233.5 2.9 n/a 34 84 n/a n/a 1020 n/a as irregular patches following a weak foliation. Rock is magnetic. Lower contact sharp 75 degrees to core. One percent disseminated pyrite. 232.8 232.9 1cm gouge 30 degrees to core. Foliations :. 231.00 : 55 degrees to core axis. Alteration :. 230.6 233.5 MODERATE SPOTTY CARBONATIZATION. 233.5 236.9 CHLORITIC FELSIC QUARTZ EYE TUFF VA02881 233.5 236.9 3.4 20 n/a n/a 954 Light grey weakly chloritic to grey-green chloritic n/a (10 n/a guartz eye sericitic felsic tuff with 5%, 1 to 5mm rounded quartz crystals. Rock is moderately foliated. Tuff is relatively homogeneous in contrast to banded chloritic tuffs at start of hole. Less than 1% disseminated pyrite. 231.4 231.9 Rock bleached and silicified 45 degrees to core. 235.4 235.7 Core broken, core sheared 30 degrees to core, minor gouge. Foliations :. 234.00 : 70 degrees to core axis. 236.00 : 45 degrees to core axis. Alteration :. 233.5 236.9 MODERATE PERVASIVE SERICITIZATION. 236.9 239.9 MAFIC TUFF n/a 1050 Dark grey-green fine grained magnetic, chloritic, VA02882 236.9 239.9 3.0 n/a 61 n/a 70 n/a calcareous mafic tuff. Rock has 25% 2 to 5mm darker bands in foliation that are more magnetic; darker colour may be due to an argillaceous. Component. 10 to 15% 3 to 5mm wide elongated patches of white carbonate in foliation. 1% disseminated pyrite. 237.40 1cm Black gouge, some lost core. Foliations :. 238.00 : 45 degrees to core axis. Alteration :. 236.9 239.9 MODERATE SPOTTY CARBONATIZATION.
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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m) -----DESCRIPTION------239.9 246.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light grou work with chloritie to provide the state of the st

Light grey weakly chloritic to grey-green chloritic quartz eye sericitic felsic tuff with 5%, 1 to 5mm rounded quartz crystals and 5% 1 to 2mm felspar crystals. Rock is moderately foliated. Tuff is relatively homogeneous in contrast to banded chloritic tuffs at start of hole. Less than 1% disseminated pyrite. Foliations :. 243.00 : 45 degrees to core axis. Alteration :. 239.9 246.3 WEAK PERVASIVE SERICITIZATION. HOLE No: Page Number CH88-63 10

Sample From To Width Total Cu Pb 2n Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

VA02883 239.9 246.3 6.4 n/a 11 n/a 30 n/a n/a 1270

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	то	25102	XAL203	ZCAO	ZHGO	ZNA20	XK 20	ZFE203	XT 102	ZP205	ZMNO	XLOI	SUM	BA	AI	NACA
																	-
VA02434	14.60	14.80	70.90	13.20	2.92	1.55	0.22	3.06	2.48	0.26	0.07	0.11	4.39	99.16	1260.	59.	3.
VA02435	23.40	23.60	43.70	13.00	9.68	6.78	<0.01	0.08	13.60	2.03	0.17	0.19	11.30	100.54	93.	42.	10.
VA02436	37.70	37.90	68.90	14.10	3.46	1.75	0.25	3.17	2.24	0.26	0.06	0.12	5.62	99.93	1270.	57.	4.
VA02437	79.80	79.90	75.30	13.30	1.30	1.00	0.16	3.41	1.41	0.26	0.06	0.08	3.31	99.59	1130.	75.	1.
VA02438	96.15	96.30	76.40	11.90	1.19	0.93	0.19	2.95	2.20	0.15	0.04	0.07	2.77	98.79	2070.	74.	1.
VA02439	101.25	101.45	43.30	15.00	11.50	3.91	0.70	1.11	10,70	0.87	0.14	0.17	12,90	100.30	449.	29.	12.
VA02440	107.70	107.90	48.80	17.00	7.26	4.43	0.29	3.24	8.14	0.95	0.14	0.41	8.16	98.82	729.	50.	8.
VA02441	116.60	116.90	47.00	15.80	7.90	3.83	0.63	1.71	10.30	0.85	0.12	0.21	11.50	99.85	549.	39.	9.
VA02442	126.40	126.60	48.50	16.70	8.92	6.52	1.81	0.16	9.67	0.78	0.14	0.24	6.62	100.06	510.	38.	11.
VA02443	133.10	133.30	63.20	13.90	5.84	2.57	0.30	1.28	4.71	0.37	0.12	0.34	7.00	99.63	644.	39.	6.
VA02444	154.15	154.30	75.70	13.30	1.05	0.60	0.49	2.32	2.08	0.23	0.06	0.05	2.85	98.73	2060.	65.	2.
VA02445	187.30	187.50	73.20	12.80	2.64	1.21	0.59	3.22	1.54	0.18	0.04	0.04	4.23	99.69	1070.	58.	3.
VA02446	200.00	200.20	74.20	13.10	1.39	2.04	2.66	0.88	1.74	0.20	0.04	0.03	3.23	99.51	940.	42.	4.
VA02447	222.20	222.40	78.20	11.00	1.65	0,36	2.07	2.29	1.55	0.15	0.04	0.05	1.77	99.13	1260.	42.	4.
VA02448	231.80	231.95	53.20	17.30	6.18	1.69	3.76	2.83	7.29	0.52	0.43	0.20	5.85	99.25	883.	31.	10.
VA02449	244.20	244.40	73.40	13.80	1.63	2.19	2.02	2.16	1.88	0.18	0.05	0.05	2.08	99.44	1470.	54.	4.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	ZS 102	XAL203	ZCAO	XHGO	ZNA20	XK20	XFE203	XT 102	ZP205	ZHNO	1101	SUN	BA	AI	NACA
								······									
VA02866	3.00	21.60	71.00	13.50	2.33	1.35	0.27	3.22	2.59	0.27			3.54	98.07	1240.	64.	3.
VA02867	21.60	26.60	44.80	12.20	10.70	6.35	<0.01	0.15	12.50	1.80			11.40	99.90	234.	38,	11.
VA02868	27.00	46.50	69.50	12.70	3.75	1.77	0.13	2.83	2.52	0.25			5.31	98.76	1130.	54.	4.
VA02869	46.50	49.40	69.20	12.70	3.94	2.08	0.15	2.79	2.69	0.23			5.95	99.63	1060.	54.	4.
VA02870	49.40	75.50	69.00	12.80	3.50	1.79	0.20	2.86	2.84	0.24			4.93	98.16	1160.	56.	4.
VA02871	75.50	98.60	71.50	13.40	2.18	1.27	0.15	3.34	2.74	0.27			3.54	98.39	1870.	66.	2.
VA02872	99.00	108.00	46.30	16.00	8.11	4.77	0.41	2.10	10.60	0.92			10.30	99.51	581.	45,	9.
VA02873	108.20	111.00	75.10	13.90	1.15	0.72	0.36	3.39	2.00	0.17			2.62	99.41	809.	73.	2.
VA02874	116.00	120.90	47.60	15.90	8.02	3.92	0.34	1.69	11.20	0.87			10.10	99.64	559.	40.	8.
VA02875	127.00	136.50	66.00	15.60	3.63	1.83	0.46	1.68	4.53	0.42			4.77	98.92	1050.	46.	4.
VA02876	137.60	157.50	72.70	15.60	1.37	0.86	0.62	2.42	2.88	0.27			2.70	99.42	1850.	62.	2.
VA02877	159.00	171.60	69.10	12.70	4.75	1.56	0.54	2.37	2.88	0.19			5.70	99.79	1190.	43.	5.
VA02878	181.60	203.40	74.30	12.80	2.69	1.18	1.72	2.26	1.40	0.19			3.70	100.24	1040.	44.	4.
VA02879	203.40	230.60	73.80	11.90	3.01	0.81	1.76	2.73	1.35	0.18			3.23	98.77	953.	43.	5.
VA02880	230.60	233.50	52.20	17.80	6.09	1.94	3.29	3.18	8.08	0.55			6.16	99.29	1020.	35.	9.
VA02881	233.50	236.90	75.80	12.60	2.07	0.69	3.06	2.14	0.90	0.19			2.47	99.92	954.	36.	5.
VA02882	236.90	239.90	51.90	17.30	6.31	1.92	3.51	3.88	7.53	0.53			5.77	98,55	1050.	37.	10.
VA02883	239.90	246.30	71.70	13.70	2.53	1.68	2.18	2.38	2.13	0.20			2.47	98.97	1270.	46.	5.

Hole No. CH88-63 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

	SAMPLE NUMBER	FROM	TO	BA (ppm)	СU (ррж.)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррм)	NI (ppm)	РВ (рр m)	AS (ppm)	Ը D (թ.թ.ա.)	НО (ррм)	MN (ppm)	CUZN	ETS	FE
																		2
-	VA08328	3.00	5.00	1100.0	16.0	49.0	<0.5	23.0	4.0	11.0	<5.0	12.0	<1.0	1.0	750.0	25.	2.	2.
	VA08329	5.00	7.00	830.0	17.0	61.0	<0.5	57.0	8.0	28.0	<5.0	22.0	<1.0	3.0	800.0	22.	2.	2.
	VA08330	7.00	9.00	1000.0	13.0	30.0	<0.5	25.0	4.0	4.0	<5.0	13.0	<1.0	2.0	675.0	30.	2.	2.
	VA08331	9.00	10.00	1100.0	14.0	56.0	<0.5	9.0	4.0	3.0	<5.0	12.0	<1.0	2.0	790.0	20.	2.	2.
	VA08332	10.00	12.00	1000.0	15.0	56.0	<0.5	9.0	4.0	4.0	6.0	12.0	<1.0	2.0	870.0	21.	2.	2.
	VA08333	12.00	14.00	1100.0	21.0	82.0	<0.5	12.0	4.0	14.0	<5.0	12.0	<1.0	3.0	760.0	20.	2.	2.
	VA08334	14.00	16.00	1100.0	18,0	93.0	<0.5	9.0	3.0	4.0	5.0	5.0	<1.0	2.0	740.0	16.	2.	2.
	VA08335	16.00	18.00	1100.0	15.0	107.0	<0.5	<5.0	4.0	3.0	7.0	9.0	<1.0	3.0	880.0	12.	2.	2.
	VA08336	18.00	20.00	1100.0	46.0	116.0	<0.5	10.0	4.0	3.0	6.0	28.0	<1.0	2.0	750.0	28.	2.	2.
	VA08337	20.00	21.60	1300.0	30.0	111.0	<0.5	<5.0	3.0	4.0	12.0	21.0	<1.0	1.0	680.0	21.	2.	1.
	VA08338	27.00	29.00	1100.0	30.0	97.0	<0.5	9.0	3.0	4.0	6.0	15.0	<1.0	2.0	775.0	24.	2.	· 1.
	VA08339	29.00	31.00	1100.0	12.0	51.0	<0.5	19.0	3.0	4.0	5.0	17.0	<1.0	2.0	900.0	19.	2.	2.
	VA08340	31.00	33.00	1209.0	6.0	51.0	<0.5	12.0	2.0	4.0	6.0	5.0	<1.0	3.0	915.0	11.	• 2.	1.
	VA08341	33.00	35.00	1100.0	11.0	48.0	<0.5	14.0	3.0	4.0	10.0	6.0	<1.0	2.0	725.0	19.	2.	1.
	VA08342	35.00	37.00	1200.0	10.0	25.0	<0.5	10.0	3.0	4.0	<5.0	18.0	<1.0	3.0	430.0	29.	2.	1.
	VA08343	37.00	39.00	1100.0	10.0	44.0	<0.5	5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	770.0	19.	2.	1.
	VA08344	39.00	41.00	1100.0	9.0	46.0	<0.5	7.0	3.0	5.0	<5.0	<5.0	<1.0	3.0	615.0	16.	2.	2.
	VA08345	41.00	43.00	1100.0	6.0	53.0	<0.5	<5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	625.0	10.	2.	1.
	VA08346	43.00	45.00	1000.0	10.0	49.0	<0.5	6.0	3.0	5.0	<5.0	7.0	<1.0	7.0	780.0	17.	2.	1.
	VA08347	45.00	47.00	1000.0	10.0	61.0	<0.5	60	4.0	7.0	6.0	<5.0	<1.0	2.0	860.0	14.	2.	2.
	VA08348	47.00	49.00	1100.0	6.0	47.0	<0.5	<5.0	2.0	4.0	<5.0	<5.0	<1.0	2.0	580.0	11.	2.	1.
	VA08349	49.00	50.00	1100.0	18.0	57.0	<0.5	<5.0	2.0	4.0	10.0	<5.0	<1.0	2.0	700.0	24.	2.	1.
	VA08350	50.00	51.50	950.0	3100.0	3600.0	7.2	49.0	2.0	6.0	860.0	33.0	30.0	4.0	1560.0	46.	5.	2.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (minor elements)

SAMPLE NUMBER	FROM	то	BA (ppms)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	АS (ррж.)	CD (ppm)	H0 (ppm)	Н№ (ррж)	CUZN	ETS	FE
VA08351	51.50	53.00	750.0	17.0	40.0	<0.5	14.0	1.0	4.0	10.0	8.0	<1.0	2.0	815.0	30.	5.	1.
VA08352	53.00	55.00	900.0	18.0	56.0	<0.5	30.0	3.0	4.0	8.0	18.0	<1.0	5.0	1000.0	24.	5.	2.
VA08354	55.00	57.00	1400.0	11.0	21.0	<0.5	23.0	3.0	4.0	6.0	17.0	<1.0	5.0	1200.0	34.	3.	2.
VA08355	57.00	59.00	1400.0	11.0	30.0	<0.5	6.0	3.0	3.0	<5.0	5.0	<1.0	1.0	660.0	27.	з.	1.
VA08356	59.00	61.00	1100.0	9.0	26.0	<0.5	11.0	3.0	3.0	<5.0	14.0	<1.0	3.0	810.0	26.	3.	1.
VA08353	69.60	71.00	1700.0	13.0	50.0	<0.5	22.0	6.0	7.0	6.0	12.0	<1.0	2.0	895.0	21.	3.	2.
VA08357	71.00	73.00	1300.0	24.0	54.0	<0.5	13.0	10.0	15.0	11.0	35.0	<1.0	11.0	1250.0	31.	5.	3.
VA08358	73.00	75.00	1000.0	10.0	50.0	<0.5	7.0	3.0	5.0	6.0	13.0	<1.0	4.0	900.0	17.	2.	2.
VA08359	75.00	77.00	1100.0	9.0	51.0	<0.5	<5.0	3.0	4.0	7.0	5.0	<1.0	3.0	620.0	15.	2.	1.
VA08360	77.00	79.00	870.0	5.0	43.0	<0.5	<5.0	3.0	4.0	9.0	5.0	<1.0	3.0	730.0	10.	2.	1.
VA08361	79.00	81.00	950.0	4.0	39.0	<0.5	10.0	3.0	3.0	6.0	7.0	<1.0	3.0	780.0	9.	2.	1.
VA08362	81.00	83.00	940.0	7.0	37.0	<0.5	10.0	3.0	4.0	7.0	15.0	<1.0	2.0	755.0	16.	2.	2.
VA08363	83.00	85.00	1300.0	11.0	51.0	<0.5	18.0	3.0	4.0	6.0	13.0	<1.0	2.0	950.0	18.	2.	2.
VA08364	85.00	87.00	1400.0	7.0	61.0	<0.5	<5.0	4.0	4.0	6.0	9.0	<1.0	2.0	950.0	10.	2.	1.
VA08365	87.00	88.30	1900.0	16.0	32.0	<0.5	16.0	4.0	5.0	6.0	13.0	<1.0	2.0	820.0	33.	2.	2.
VA08366	88.90	91.00	1500.0	14.0	37.0	<0.5	33.0	4.0	5.0	8.0	16.0	<1.0	2.0	950.0	27.	2.	2.
VA08367	91.00	93.00	1900.0	14.0	46.0	<0.5	10.0	4.0	4.0	11.0	15.0	<1.0	2.0	1200.0	23.	2.	1.
VA08368	93.00	95.00	1700.0	12.0	44.0	<0.5	16.0	3.0	3.0	<5.0	14.0	<1.0	3.0	885.0	21.	2.	1.
VA08369	95.00	97.00	2000.0	12.0	48.0	<0.5	37.0	2.0	3.0	7.0	30.0	<1.0	2.0	515.0	20.	4.	1.
VA08370	97.00	98.00	4200.0	71.0	174.0	1.3	95.0	3.0	5.0	66.0	70.0	<1.0	3.0	325.0	29.	4.	з.
VA08371	98.00	98.65	5600.0	105.0	1517.0	1.4	51.0	6.0	5.0	730.0	49.0	10.0	6.0	190.0	6.	5.	2.
VA08372	136.45	137.60	490.0	57.0	82.0	<0.5	10.0	9.0	14.0	8.0	46.0	<1.0	3.0	1800.0	41.	1.	3.
VA08373	137.60	139.00	1300.0	5.0	23.0	<0.5	<5.0	4.0	5.0	6.0	9.0	<1.0	4.0	110.0	18.	2.	1.

Hole No. CH88-63

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Page No. 2

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	СU (ррж)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррм)	NI (ppm)	РВ (ррт)	AS (ppm)	CD (ppm.)	йО (ррм)	MN (ppm)	CUZN	ETS	FE
VA08374	139.00	141.00	1200.0	19.0	52.0	<0.5	<5.0	7.0	7.0	<5.0	9.0	<1.0	2.0	1200.0	27.	2.	2.
VA08375	141.00	143.00	1400.0	23.0	330.0	<0.5	25.0	8.0	7.0	<5.0	33.0	2.0	2.0	1200.0	7.	3.	2.
VA08376	143.00	143.90	1700.0	5.0	11.0	<0.5	17.0	3.0	4.0	5.0	12.0	<1.0	2.0	60.0	31.	з.	1.
VA08377	145.10	146.70	1300.0	9.0	112.0	<0.5	9.0	4.0	6.0	<5.0	17.0	<1.0	3.0	695.0	7.	2.	2.
VA08378	148.00	148.80	1400.0	5.0	30.0	<0.5	<5.0	2.0	2.0	<5.0	<5.0	<1.0	2.0	640.0	14.	2.	1.
VA08379	149.80	151.00	1500.0	18.0	63.0	<0.5	8.0	2.0	7.0	<5.0	16.0	<1.0	4.0	950.0	22.	2.	2.
VA08380	151.00	153.00	1800.0	21.0	81.0	<0.5	23.0	12.0	53.0	<5.0	98.0	<1.0	4.0	1300.0	21.	1.	з.
VA08381	153.00	155.00	1700.0	17.0	288.0	<0.5	47.0	3.0	4.0	<5.0	27.0	2.0	2.0	490.0	6.	1.	2.
VA08382	155.00	157.00	1500.0	23.0	56.0	<0.5	19.0	10.0	11.0	<5.0	22.0	<1.0	2.0	515.0	29.	1.	3.
VA08383	157.00	157.80	1800.0	43.0	35.0	<0.5	13.0	5.0	7.0	5.0	48.0	<1.0	3.0	870.0	55.	1.	2.
VA08384	157.80	158.80	1200.0	40.0	65.0	<0.5	20.0	5.0	11.0	<5.0	42.0	<1.0	3.0	495.0	38.	2.	2.
VA08385	158.80	160.00	1000.0	35.0	162.0	<0.5	21.0	6.0	8.0	9.0	17.0	1.0	3.0	1050.0	18.	1.	2.
VA08386	160.00	162.00	1300.0	18.0	106.0	<0.5	10.0	4.0	5.0	<5.0	8.0	<1.0	3.0	760.0	15.	1.	2.
VA08387	162.00	164.00	1300.0	5.0	71.0	<0.5	5.0	1.0	3.0	<5.0	<5.0	<1.0	2.0	710.0	7.	1.	1.
VA08388	164.00	165.00	1400.0	7.0	60.0	<0.5	5.0	2.0	4.0	36.0	8.0	<1.0	4.0	690.0	10.	1.	2.
VA08389	166.40	168.00	1200.0	9.0	112.0	<0.5	7.0	2.0	4.0	53.0	10.0	<1.0	4.0	830.0	7.	1.	1.
VA08390	168.00	170.00	850.0	61.0	210.0	<0.5	12.0	15.0	21.0	32.0	210.0	<1.0	3.0	1320.0	23.	1.	4.
VA08391	170.00	172.00	840.0	68.0	157.0	<0.5	14.0	20.0	22.0	12.0	90.0	<1.0	3.0	2160.0	30.	1.	6.
VA08392	172.00	173.00	940.0	71.0	165.0	<0.5	<5.0	12.0	16.0	24.0	230.0	<1.0	3.0	1560.0	30.	2.	5.
VA08393	173.00	174.00	710.0	88.0	359.0	0.5	10.0	12.0	18.0	125.0	230.0	2.0	3.0	1560.0	20.	2.	5.
VA08394	174.00	175.00	610.0	90.0	265.0	<0.5	15.0	10.0	18.0	100.0	320.0	1.0	3.0	1920.0	25.	2.	4.
VA08395	175.00	176.00	960.0	47.0	96.0	<0.5	6.0	8.0	13.0	60.0	26.0	<1.0	3.0	1920.0	33.	2.	4.
VA08396	176.00	177.00	990.0	19.0	169.0	<0.5	17.0	16.0	32.0	63.0	450.0	<1.0	3.0	1440.0	10.	1.	4.

Hole No. CH88-63

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SAMPLE NUMBER	FROM	то	BA (ppm.)	CU (ppmi)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HC (ppm)	HN (ppm)	CUZN	ETS	FE
VA08397	177.00	179.00	980.0	60.0	205.0	0.6	37.0	15.0	19.0	162.0	400.0	<1.0	8.0	1680.0	23.	2.	4.
VA08398	179.00	181.00	880.0	43.0	68.0	<0.5	18.0	9.0	14.0	44.0	130.0	<1.0	3.0	1440.0	39.	2.	3.
VA08399	181.00	181.50	520.0	104.0	945.0	1.9	106.0	14.0	22.0	800.0	300.0	4.0	3.0	1560.0	10.	2.	6.
VA08400	181.50	183.00	900.0	17.0	54.0	<0.5	<5.0	3.0	8.0	33.0	10.0	<1.0	2.0	500.0	24.	1.	1.
VA08401	183.00	185.00	960.0	5.0	26.0	<0.5	<5.0	2.0	3.0	26.0	<5.0	<1.0	14.0	235.0	16.	1.	1.
VA08402	205.00	206.00	890.0	10.0	19.0	<0.5	9.0	2.0	3.0	7.0	<5.0	<1.0	2.0	440.0	34.	1.	1.
VA08403	206.00	208.00	1000.0	7.0	23.0	<0.5	5.0	3.0	3.0	14.0	8.0	<1.0	1.0	350.0	23.	1.	1.
VA08404	208.00	210.00	1100.0	9.0	20.0	<0.5	25.0	2.0	2.0	<5.0	8.0	<1.0	5.0	500.0	31.	1.	1.
VA08405	210.00	212.00	1100.0	5.0	12.0	<0.5	<5.0	2.0	3.0	7.0	<5.0	<1.0	3.0	410.0	29.	1.	0.
VA08406	212.00	214.00	980.0	6.0	8.0	<0.5	<5.0	4.0	4.0	<5.0	8.0	<1.0	4.0	550.0	43.	1.	1.
VA08407	214.00	215,40	870.0	9.0	4.0	<0.5	<5.0	4.0	4.0	<5.0	5.0	<1.0	7.0	450.0	69.	1.	0.
VA08408	226.40	228.00	960.0	7.0	7.0	<0.5	6.0	6.0	4.0	<5.0	7.0	<1.0	3.0	380.0	50.	1.	1.
VA08408	226.40	228.00	960.0	7.0	7.0	<0.5	6.0	6.0	4.0	<5.0	7.0	<1.0	3.0	380.0	50.	1.	

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)



Summary Log: DDH CH88-64 Location: 31+00 W, 1+30 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 5, 1988 Core Logged By: D.P. Money

0.0 -	10.2	Casing.
10.2 -	14.4	Gabbro.
14.4 -	30.8	Weakly chloritic felsic tuff with 3 to 5 % fracture controlled
		pyrrhotite from 23.0 to 25.2 m.
30.8 -	35.1	Gabbro.
35.1 -	39.0	Felsic crystal tuff with minor collapsed pumice and scoria.
		Quartz eyes display lineation and may be welded.
39.0 -	39.8	Gabbro.
39.8 -	47.3	Felsic crystal tuff as from 35.1 to 39.0 m.
47.3 -	195.1	Gabbro. Hosts trace to 0.5 % disseminated chalcopyrite from
		104.0 to 122.0 m. From 125 to 134 m there is 15 % ilmenite.
		From 136.1 to 138.0 m 5 to 7 % pyrite, 1 to 2 % pyrrhotite,
		and trace chalcopyrite occur as fracture fillings.
195.1		End of hole.

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L	PROPERIT: Chemain	us 5.v.	FALCONBRIDGE LIMITED					HOLE NO	o: Pa	ge Numb 1	er			
			DIAMOND DRILL LOG					0						
	Hole Location: 31	+00 W 1+30 S												
		11mbl -				Clai	m No. H	olyoak 2						
	NTS: 0928/13 Azimuth: 180	urn: Elevation: 797 m				Sect	10h No.	: Section .	31+00 W	est, Ho	iyoak C	iaim G	roup	
	Dip: -50	Length: 195.1 m				Logg	ed By:	D.P. Money						
	•	· · · · · · · · · · · · · · · · · · ·				Dril	ling Co	.: Burwash	Enterp	rises				
	Started: June 2,	1988				Assa	yed By:	Bondar-Cle	egg and	X-Ray	Assay			
	Completed: June 5	, 1988				Core	Sizar	NO						
	Purpose: To test	Chem85-10 mineralization down	ndip DIP TEST:	S			5120.	•••¥						
		Length	AZI- muth Din I	Làngth m	Azi-	nin								
		Dengen	mach pip	bengen a	luch	DID.								
		146.30	178.0 -52.0											
	Pass We				D	.		M++-1		7 4	7	1-	1	D -
	from 10 (m) (m)	DESCRIPTION	N	Sample	From (m)	TO (m)	width (m)	TOTAL Sulphides	(nnm)	(nnm)	(nnm)	AG (nnm)	Au (nnh'	ba) (nnm)
	(10)				(()	()	Parphraes	(ppm)	(pp)	(ppm)	(ppm)	(PP-)	(PPm)
	A 10 2 OVERBURDE	N												
	Gabbro, W	hite guartz and felsic tuff r	pebbles and cobbles.											
	No chit m	arked start of coring.												
	10 2 14 4 FFLDSDAR	POPPHYRITIC CIRBO										. •		
	Fine-grai	ned medium green gabbro with	trace to 10 %. 2 to											
	4 mm, ave	rage 5 to 7 %, feldspars. The	ere are minor quartz											
	- chlorit	e veins with trace pyrite. Th	here is approximately											
	2 % leuco	xene.												
	14.4 30.8 WEAKLY CH	LORITIC FELSIC TUFF												
	Weakly ch	loritic felsic tuffs.		VA01201	14.4	30.8	16.4	n/a	80	n/a	104	n/a	n/a 1	1130
	14.4 18.9	Medium to light grey to gree	en schistose tuff	VA02059	22.0	23.0	1.0	1	60	22	820	(1	(5)	1100
		approximately 5 % 1 to 3 mm	re are and up	VA02060 VA02061	23.0	24.0	1.0	4	36	11	28 41	(1	(5	870
		to 1 % (?) feldspars, with n	reaction rims. Very	VA02062	25.2	26.0	.8	1	37	24	605	<1	<5	890
		local compositional banding.	. Locally weakly											
		contorted. There is trace ba	inded and											
	18 9 20 1	Very similiar to 14.4 to 18	9 with local					·						
	10.7 20.3	epidotized and silicified zo	ones. From 19.8 to											
		19.9 there is 2 % pyrrhotite	e in a quartz vein.											
	20.3 23.0	Very siliceous banded tuff white bande	with dark green and											
		multe bands. There are approved to 3 mm. quartz and folder	DAIMATELY D TO / %, Dar crystals. There											
		are rare trace pyrrhotite st	tringers.											
	23.0 24.0	Light green sericitic massiv	re tuff with 3 to 5 %											
		fracture controlled pyrrhoti	ite and very											
		Inc-grained grey mineral, g	Jalena (/) as											
		controlled calcite veinlets.	ace isacluie											

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE NO: CH88-64 Page Number 2

Pb

Zn

Ag

(ppm) (ppm) (ppm) (ppb) (ppm)

Au

Ba

From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)
		24.0 25.2	2 Same as 23.0 to 24.0 without the grey mineral,						
			but with 0.5 %, 2 to 4 mm, pyrite cubes.						
		25.2 30.8	B Very siliceous medium green tuff with locally up						
			to 5 % guartz eyes, 2 to 4 mm, and up to 5 %, 3						
			mm, epidote grains. Locally there is strong						
			pervasive silicification. There are minor						
			siliceous lapilli and beds (?) with strong						
			epidotization. There are rare kink bands						
			approximately perpendicular to the foliation.						
			From 29.9 to 30.8 there is strong hematite on						
			fractures.						
		Alteratio	on :.						
		14.4 30.8	B WEAK PERVASIVE CHLORITIZATION.						
		20.3 22.2	2 STRONG PERVASIVE SERICITIZATION.						
		27.4 27.7	MODERATE PERVASIVE EPIDOTIZATION , very bleached.						
		Foliation	15 :.						
		14.7 : 68	B degrees to core axis.						
		16.8 : 76	degrees to core axis.						
		24.0 : 60) degrees to core axis.						
		26.8 : 71	degrees to core axis.						
		29.7 : 56	degrees to core axis.						
		Lost core	a :.						
		20.6 22.3	3 : 0.5 m.						
		28.5 29.4	I : 0.2 m.						
30.8	35.1	MAFIC INT	TRUSIVE						
		30.8 32.1	Fine-grained green gabbro with 2 %, 2 to 5 mm,						
			feldspars and approximately 10 % fine-grained						
			mafic crystals.						
		32.1 32.8	Fine-grained with approximately 2 % leucoxene,						
			minor mafic and feldspar crystals.						
		32.8 33.0) Epidotized and silicified light green with 5 %						
			mafic crystals, up to 3 mm.						
		33.0 35.1	Similiar to 32.1 to 32.8 with green epidote from						
			34.1 to 34.4 and 34.6 to 34.8 with minor spots						
			similiar to 32.8 to 33.0.						
		There are	e local calcite veinlets, hydraulic fracture						
		controlle	ed with a speck of chalcopyrite at 32.1. There is						
		a minor b	preccia hosted by a guartz vein from 33.75 to 33.85						
35.1	39.0	FELSIC QU	ARTZ-FELDSPAR CRYSTAL TUFF						
		Variably	welded tuff, hot ash pyroclastic surge deposit ?.	VA01202	35.1	39.0	3.9	n/a	149
		Light gr	een siliceous tuff, massive. There are						
		approxima	tely 10 % feldspar crystals, laths up to 3 mm,						
		with mino	r reaction rims. There is approximately 10 to 12						

* rounded and stretched quartz eyes, 2 to 5 mm, average approximately 3 mm. From 37.5 to 38 is grey with 0.5 to 1 * disseminated pyrrhotite. There is approximately 0.5 to 1

* quartz - chlorite veins. There is very local

n/a

46 n/a

n/a 1730

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Sample

No.

From

(m)

To

(m)

Width

(m)

Total

Sulphides (ppm)

HOLE No: Page Number CH88-64 3

Cu

₽ħ

Zn

Ag

(ppm) (ppm) (ppm) (ppb) (ppm)

λu

Ba

 From
 To

 (m)
 (m)

epidotization at the lower gabbro contact. Foliations :. 39.4 : 62 degrees to core axis. 37.6 : 34 degrees to core axis. 38.2 : 47 degrees to core axis.

39.0 39.8 MAFIC INTRUSIVE Fine-grained green mafic sill with trace calcite, and epidote veins. At 39.2 there is minor pyrrhotite in a calcite vein.

39.8 47.3 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF

Light to medium grey, with local greenish tinge. Is massive and siliceous. Hosts 15 to 20 %, 2 to 4 mm, quartz eyes, which are elongated and rounded. Locally there are up to 3 % feldspars, 1 to 2 mm, mostly rounded, some with reaction rims and locally as laths. There are collapsed pumice lapilli, notably at 42.7 which are lighter green with stretched quartz grains in the lapilli. There is minor local epidotization and local quartz chlorite and epidote fracture controlled veinlets. Rock is a hot ash flow, surge deposit (?), and fragments are welded to various degrees. Foliations :. 40.6 : 66 degrees to core axis.

44.4 : 38 degrees to core axis. 45.8 : 62 degrees to core axis. Upper contact : 63 degrees to core axis. Bleached mafic sill from 40.7 to 41.2.

47.3 195.1 FELDSPAR PORPHYRITIC GABBRO

- 47.3 47.6 Fine-grained medium green chilled margin with fracture controlled epidote veinlets.
- 47.6 52.6 Fine-grained medium green with 5 to 10 %, 1 to 5 mm, feldspar clots to grains. There is minor epidote and calcite veinlets. There is approximately 3 % ilmenite and leucoxene.
- 52.6 54.6 Strongly epidotized with minor fracture controlled epidote, quartz and calcite veinlets with trace pyrrhotite and chalcopyrite at 53.6 and trace chalcopyrite at 54.5 and 54.6. There is approximately 5 %, 2 to 3 mm, leucoxene and 1 to 2 %, up to 1 mm, ilmenite.
- 54.6 55.8 Medium grained with approximately 20 to 30 %, 1 to 2 mm, feldspar laths and approximately 3 % leucoxene - ilmenite. There are minor guartz chlorite veins at 55.1, 55.2 and 55.6.

55.8 58.0 STRONG PERVASIVE EPIDOTIZATION , epidote and

VA01204	48.0	58.0	10.0	n/a	177	n/a	77	n/a	n/a	85	
VA01205	59.0	92.0	33.0	n/a	329	n/a	99	n/a	n/a	123	
VA01206	93.0	104.0	11.0	n/a	334	n/a	122	n/a	n/a	272	
VA02063	102.6	103.5	.9	1	530	< 5	98	<1	10	180	
VA01207	104.0	120.0	16.0	n/a	548	n/a	145	n/a	n/a	335	
VA02064	104.0	106.0	2.0	. 0	520	< 5	101	<1	5	210	
VA02065	106.0	108.0	2.0	0	460	<5	125	<1	. 9	280	
VA02066	108.0	110.0	2.0	-0	560	(5	111	<1	22	310	
VA02067	110.0	112.0	2.0	0	380	(5)	97	<1	9	140	
VA02068	112.0	114.0	2.0	0	520	<5	93	<1	11	280	
VA02069	114.0	116.0	2.0	. 0	490	<5	105	<1	49	270	
VA02070	116.0	118.0	2.0	0	580	< 5	98	. (1	31	280	
VA02071	118.0	120.0	2.0	0	580	< 5	112	(1	25	280	
VA02072	120.0	122.0	2.0	0	760	< 5	115	<1	44	270	
VA01208	120.0	145.0	25.0	n/a	611	n/a	142	n/a	n/a	521	
VA02073	136.0	137.0	1.0	- 8	420	< 5	110	(1)	< 5	390	
VA02074	137.0	138.0	1.0	8	376	<5	158	. <1	< 5	360	

VA01203 39.8 47.3 7.5 n/a 84 n/a 25 n/a n/a 1490

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HOLE No: Page Number CH88~64

From То -----DESCRIPTION------(m) (m)

quartz flooded with minor medium grained and chloritic zones. There is trace chalcopyrite at 57.5 in chlorite.

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

- 58.0 59.5 Medium grained, similiar to 54.6 to 55.8 with chalcopyrite speck at 58.8 and 58.9, associated with minor fracture controlled epidote. There are 3 < 1 mm pyrite cubes at 59.5.
- 59.5 92.5 Coarse grained gabbro with on average 40 to 50 %, 1 to 5 mm, feldspar laths to clots of intergrown crystals, 50 to 55 % mafic crystals and 5 % ilmenite, 1 to 4 mm crystals, average 2 mm, often associated with leucoxene rims. Variably feldspar or mafic dominated, usually mafics dominate groundmass with feldspars in clots. Sulphides occur as trace locally. Chalcopyrite and pyrite occur as < 1 mm blebs associated with fracture controlled chloritization or fracture controlled < 3 mm calcite veinlets. Chloritization and guartz or calcite veins constitute less than 1 % of the interval and are concentrated around 79.0 and 81.8.
- 92.5 102.6 Dark green siliceous (?), slightly glassy and approximately 7 %, 3 to 4 mm, feldspar laths. There are approximately 10 to 15 % light purple to brown grains, appear to be sphene rimming ilmenite. Is not magnetic. There are up to 5 % zones with 20 % feldspar clots locally, Mafic crystals are altered to chlorite, with some retaining elongate hornblende crystal forms. There is trace chalcopyrite throughout, some appears to be interstitial to crystals, but most is associated with fracture controlled calcite and quartz veinlets.
- 102.6 103.5 Coarse grained gabbro with 0.25 to 0.5 % magmatic chalcopyrite, 2 to 3 %, 2 to 3 mm, ilmenite and equal mix of 2 to 5 mm feldspar and mafic crystals.
- 103.5 104.0 Fine-grained greyish medium green with 3 %, 1 to 2 mm, epidote to feldspar grains. There is weak fracture controlled carbonatization.
- 104.0 122.0 Variable coarse grained gabbro, similiar to 92.5 to 102.6. There is approximately 10 to 12 %, 1 to 3 mm, purple non- to strongly magnetic ilmenite grains. Is locally 'glassy'. Feldspars vary from 10 to 20 %, 2 to 6 mm, clots and laths. There is trace to 0.5 % chalcopyrite locally, average approximately 0.25 %. Most chalcopyrite is magmatic, i.e. interstitial to mafic and feldspar grains and some is associated with minor chlorite and

Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba b) (ppm)	
VA01209	145.0	164.0	19.0	n/a	673	n/a	161	n/a	n/a	1660	
VA01210	164.0	174.0	10.0	n/a	798	n/a	128	n/a	n/a	974	
VA01211	174.0	195.0	21.0	n/a	572	n/a	115	n/a	n/a	327	
VA02075	190.2	191.4	1.2	0	250	< 5	107	<1	5	110	

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-64 5

From То (m) (m) -----DESCRIPTION-----calcite veins and veinlets. 122.0 145.8 Medium to coarse grained gabbro with 5 to 25 % variably epidotized feldspar laths, up to 4 mm. From approximately 125 to 134 there is 15 % ilmenite and is strongly to moderately magnetic. Averages 3 %, 1 to 5 % locally, ilmenite thru the rest of the interval. There is local strong epidotization of feldspar laths with minor associated fracture controlled epidote veinlets from approximately 127 to 128 and 139.6 to 140.6. From 136.1 to 138.0 there is 5 to 7 % pyrite, 1 to 2 % pyrrhotite and trace to 0.5 % chalcopyrite, appears to be fracture controlled. There is strong hematite locally on fractures. Trace chalcopyrite in minor quartz and calcite veinlets locally. 145.8 164.0 Medium to coarse grained with trace to 20 % feldspars, average 5 to 7 %, 1 to 2 mm, thin laths. Dominated by mafic and ilmenite crystals. Weakly to moderately magnetic with on average 3 to 5 % ilmenite. There are approximately 25 to 35 %, 2 to 4 mm, mafic crystals, probably chloritized hornblendes, in light green matrix. There is minor fracture controlled hematite. 164.0 190.2 Medium to fine-grained with approximately 60 %, 1 to 2 mm, chloritized mafic crystals in light green matrix with approximately 3 to 5 %, approximately 1 mm, ilmenite grains and trace very fine-grained pyrite and chalcopyrite. There are minor guartz chlorite - calcite veinlets and fracture controlled epidote veinlets with small, < 1.5 mm chalcopyrite blebs. There is minor fracture controlled hematite. From 177 to 190 there are minor < 1 m zones with 5 to 10 %, 1 to 2 mm feldspars, locally epidotized, epidotization

> associated with fracture controlled epidote veinlets. 190.2 191.4 Shear zone, non-magnetic dark green chlorite with 10 % white guartz veins and approximately 5 % white calcite streaks. Shearing is at 60 degrees to core axis. 191.4 195.1 Same as 164.0 to 190.2.

Gabbro is locally blocky with no long runs of competent core.

Lost core :. 72.8 74.7 : 0.2 m. Sample From No.

То Width Total Cu Рb Zn Ag Au Ва (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m)

FALCONBRIDGE LIMITED
DIAMOND DRILL LOG

Sample From To Width

(m) (m)

No.

HOLE No: Page Number CH88-64 6

Pb Zn

(m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm)

Ag

Au

Ba

Total Cu

From (m)	To (m)		 DESC	RIPTIC)N	

74.7 78.5 : 0.1 m. 120.0 120.4 : 0.3 m. 130.0 131.0 : 0.2 m. 142.0 143.0 : 0.3 m. 143.9 144.8 : 0.1 m. 149.5 150.6 : 0.2 m.

End of hole: 640 feet (195.1 m) on Sunday June 6, 1988 at 4:00 p.m.

Total lost core: 2.1 m; % Recovery = 98.9 %.

Lack of dip tests due to breakdown of Sperry-Sun single shot.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	ZS 102	ZAL203	ZCAO	ZHGO	ZNA20	ZK20	XFE203	21102	XP205	ZMNO	XLO I	SUM	 BA	AI	NACA
					······										 		
VA00774	11.60	12.00	47.20	13.90	10.30	5.28	1.41	0.06	12.10	1.84	0.17	0.17	6.08	98.51	49.	31.	12.
VA00775	15.70	16.20	62.20	14.50	1.98	4.90	3.22	1.31	6.97	0.42	0.08	0.11	3.62	99.31	736.	54.	5.
VA00776	21.00	22.00	61.10	13.10	7.57	3.25	2.01	2.12	3.48	0.36	0.08	0.25	6.39	99.71	1450.	36.	10.
VA00777	29.50	30.00	62.50	14.30	5.72	3.46	4.20	1.03	4.91	0.42	0.08	0.10	3.23	99.95	629.	31.	10.
VA00778	32.30	32.60	45.20	15.10	9.73	6.33	1.63	0.17	13.70	2.06	0.20	0.21	5.08	99.41	143.	36.	11.
VA00779	40.20	40.50	64.90	14.40	2.94	3.20	4.75	1.75	3.75	0.42	0.09	0.07	2.62	98.89	1610.	39.	8.
VA00780	45.00	46.00	60.90	14.80	7.09	3.77	2.82	1.87	5.63	0.42	0.09	0.10	1.93	99.42	928.	36.	10.
VA00781	49.50	50.00	48.00	14.00	10.50	5.66	2.40	0.27	13.40	2.05	0.21	0.23	2.08	98.80	119.	31.	13.
VA00782	60.00	60.50	48.20	14.20	9.75	4.31	2.25	0.38	14.70	2.42	0.23	0.23	2.00	98.67	139.	28.	12.
VA00783	83.80	84.30	48.40	13.60	8.84	4.35	2.78	0.27	15.00	2.50	0.22	0.21	2.54	98.71	122.	28.	12.
VA00784	98.00	98.50	51.80	11.70	7.27	2.85	3.31	0.53	16.00	2.55	0.44	0,23	1.93	98.61	369.	24.	11.
VA00785	115.00	115.50	47.80	11.00	7.51	3.08	2.42	0.51	18.90	3.73	0.38	0.27	2.70	98.30	275.	27.	10.
VA00786	128.00	129.00	55.80	11.20	6.03	1.53	3.02	0.71	17.10	2.05	0.62	0.27	1.62	99.95	400.	20.	9.
VA00787	147.00	148.00	50.30	10.70	6.72	1.96	1.90	0.50	20.20	2.33	1.05	0.31	3.70	99.67	1550.	22.	9.
VA00788	168,00	168.60	47.30	10.90	7.98	2.63	2.30	0.48	18.10	3.52	0.41	0.29	5.39	99.30	1190.	23.	10.
VA00789	187.00	189.00	49.30	10.70	9.33	4.13	2.76	0.34	17.90	3.39	0.30	0.26	2.00	100.41	167.	27.	12.

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SAMPLE NUMBER	FROM	то	XS I 02	XAL203	XCA0	ZHGO	ZNA20	XK 20	XFE203	XT 102	ZP205	ZHNO	ZLOI	SUM	ВА	AI	NACA
VA01201	14.40	30.80	61.10	14.20	5.49	3.02	3.00	2.06	4.66	0.42			3.70	97.65	1130.	37.	8.
VA01202	35.10	39.00	64.20	14.70	4.41	3.19	3.94	1.64	5.61	0.45			1.62	99.76	1730.	37.	8.
VA01203	39.80	47.30	62.60	14.90	6.55	3.36	3.02	2.22	5.14	0.43			2.31	100.53	1490.	37.	10.
VA01204	48.00	58.00	49.00	13.70	11.10	4.62	1.81	0.27	13.50	1.90			3.16	99.06	85.	27.	13.
VA01205	59.00	92.00	48.40	13.70	9.43	4.54	2.58	0.31	15.60	2.58			2.00	99.14	123.	29.	12.
VA01206	93.00	104.00	46.80	11.40	8.86	3.29	2.96	0.53	17.10	3.14			4.93	99.01	272.	24.	12.
VA01207	104.00	120.00	48.90	11.10	7.69	3.03	2.62	0.59	18.90	3.94			2.08	98.85	335.	26.	10.
VA01208	120.00	145.00	54.10	11.30	6.48	1.59	3.12	0.64	17.40	2.08			2.62	99.33	521.	19.	10.
VA01209	145.00	164.00	50.60	10.90	6.88	2.20	2.52	0.67	19.00	2.60			2.54	97.91	1660.	23.	9.
VA01210	164.00	174.00	47.40	10.80	7.62	3.16	2.23	0.44	18.10	3.70			3.31	96.76	974.	27.	10.
VA01211	174.00	195.00	50.20	10.70	8.25	3.85	2.68	0.39	17.70	3.42			2.31	99.50	327.	28.	11.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

SAMPLE			************					**********					**********		 	**********	
NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррм)	AS (ppm)	CD (ppm)	HD (ppm)	HN (ppm)	CUZN	ETS	FE

VA02059	22.00	23.00	1100.0	60.0	820.0	<0.5	<5.0	25.0	15.0	22.0	8.0	3.0	10.0	1320.0	7.	1.	2.
VA02060	23.00	24.00	840.0	47.0	58.0	<0.5	<5.0	20.0	6.0	11.0	130.0	<1.0	5.0	590.0	45.	4.	6.
VA02061	24.00	25.20	870.0	36.0	41.0	<0.5	<5.0	21.0	5.0	18.0	190.0	<1.0	4.0	580.0	47.	4.	6.
VA02062	25.20	26.00	890.0	37.0	605.0	<0.5	<5.0	8.0	10.0	24.0	8.0	9.0	7.0	580.0	6.	1.	2.
VA02063	102.60	103.50	180.0	530.0	98.0	<0.5	10.0	20.0	9.0	<5.0	6.0	<1.0	5.0	480.0	84.	1.	6.
VA02064	104.00	106.00	210.0	520.0	101.0	<0.5	5.0	22.0	8.0	<5.0	<5.0	<1.0	5.0	620.0	84.	0.	7.
VA02065	106.00	108.00	280.0	460.0	125.0	<0.5	9.0	27.0	10.0	<5.0	<5.0	<1.0	5,0	820.0	79.	0.	10.
VA02066	108.00	110.00	310.0	560.0	111.0	<0.5	22.0	23.0	8.0	<5.0	<5.0	<1.0	4.0	645.0	83.	ο.	8.
VA02067	110.00	112.00	140.0	380.0	97.0	<0.5	9.0	19.0	6.0	<5.0	<5.0	<1.0	4.0	560.0	80.	0.	6.
VA02068	112.00	114.00	280.0	520.0	93.0	<0.5	11.0	18.0	6.0	<5.0	<5.0	<1.0	4.0	510.0	85.	0.	6.
VA02069	114.00	116.00	270.0	490.0	105.0	<0.5	49.0	20.0	6.0	<5.0	<5.0	<1.0	4.0	540.0	82.	0.	7.
0402020	116 00	118 00	280.0	580.0	98.0	<0.5	31.0	18.0	5.0	<5.0	<5.0	<1.0	3.0	550.0	86.	0.	6.
VA02071	118.00	120.00	280.0	580.0	112.0	<0.5	25.0	20.0	5.0	<5.0	<5.0	<1.0	4.0	535.0	84.	0.	7.
VA02072	120.00	122.00	270.0	760.0	115.0	<0.5	44.0	23.0	6.0	<5.0	<5.0	<1.0	4.0	605.0	87.	0.	8.
VA02073	136.00	137.00	390.0	420.0	110.0	<0.5	<5.0	16.0	8.0	<5.0	<5.0	<1.0	3.0	900.0	79.	8.	8.
VA02074	137.00	138.00	360.0	376.0	158.0	<0.5	<5.0	20.0	8.0	<5.0	<5.0	<1.0	3.0	800.0	70.	8.	9.
VA02075	190.20	191.40	110.0	250.0	107.0	<0.5	5.0	32.0	21.0	<5.0	6.0	<1.0	4.0	950.0	70.	0.	9.

Hole No. CH88-64

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Summary Log: DDH CH88-65 Location: 25+00 W, 4+50 N; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 17, 1988 Core logged by: J. Pattison 0.0 -18.9 Overburden 18.9 -64.7 Equigranular gabbro 64.7 -85.5 Intermediate volcanic wacke 85.5 -91.8 Siltstone 91.8 -92.6 Black argillite Fault at the lower contact. 92.6 - 141.7 Mafic tuff; moderately carbonatized. 141.7 - 177.0 Mafic porphyritic mafic tuff Dark green to black chloritized pyroxene cyrstals are smeared out along foliation planes. 177.0 - 182.6Mafic lapilli tuff Mafic porphyritic tuff 182.6 - 207.9207.9 - 277.6 Gabbro 277.6 - 318.0 Weakly chloritized felsic feldspar crystal tuff 318.0 - 324.3 Felsic feldspar crystal tuff 324.3 - 352.3 Chloritic felsic feldspar crystal tuff 352.3 - 357.4 Felsic tuff 357.4 - 430.7 Weakly chloritized felsic tuff 430.7 - 436.9 Felsic tuff 436.9 - 437.7 Black argillite 437.7 - 441.1 Felsic tuff 441.1 - 453.4 Chloritic felsic quartz eye tuff 453.4 - 458.7 Mafic tuff

E.O.H. @ 458.7 m

F	ROPERI	"Y: Chemainu	s JV		FALCONB	RIDGE LIMITEN D. DRILL LOG)					HOLE N CH88-65	o: Pa	ige Numbe 1	≥r' '			
ł	iole Lo	ocation: 25+	00 W 4+50 N		DIANON	D DRIDE 600												
. 1	TS: 92	2B13	UTM:							Clai Sect	m No. H ion No.	olyoak 2 : 25+00 W						
I	lip:	-50	Length: 458.	m 7 m						Logg Dril	ed By: ling Co	J. Pattiso	n Enterr	rises				
S	Started Complet	1: 7-June-88 ted: 17-June	-88							Assa	yed By:	Bondar-Cl	egg & X	RAL				
F	Purpose	e: Stratig	raphy.			DIP TE:	STS			Core	Size:	NQ						
				Length	Azi- muth	Dip	Lenath	Azi- muth	Di	in								
				39.60	174.0	-52.0	274.30	179.0	-54.	.0								
				91.40 182.90	174.0 177.0	-53.0 -54.0	365.80 458.70	183.0 189.0	-50. -48.	0.0								
From (m)	n To (m)			-DESCRIPTIO	· •		Samı No	ple Fr	om 17 m) (°o (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb]	Ba (ppm)
														(FFm)		(PP-0)		1.6.6.001
18.9	64.7	7 MEDIUM TO Massive me Composed o epidote an biotite. Below 60.0 appears to The lower	COARSE-GRAINED G ium to coarse-gi f 60 % mafic mini d 40 % plagiocli Possibly < 5 % qi m rock becomes : have assimilate contact is sharp	ABBRO rained equi(erals alter ase with a r uartz below intermediate d some of th at 20 degre	granular ed to ch ninor am 41.3 m. e in com ne sedim ees to c	gabbro. lorite and mount of fing position and ents below. ore axis.	VA084 VA084 VA084 VA084	409 38 410 39 411 40 412 63	.53 .54 .74 .76	39.5 10.7 11.7 54.7	1.0 1.2 1.0 1.0	1 1 1	60 190 26 72	<5 <5 <5 <5	71 19 65 78	<1 <1 <1 <1 <1	206 <5 <5 <5	900 930 730 560
		STRUCTURE:	•															
		18.9-30.8 27.4 m. 1.	f extremely block f m of lost core f blocky bigbly	ky. Casing	had to b	e pushed to												
		Core.	1.0 cm fault gou	tractored .	rees to	core axis												
		ALTERATION	•	,	,													
		18.9 64.7	Very weak fractu and locally weak	re controlle fracture co	ed carbo ontrolle	natization d												
			nematization.															
		SULPHIDES: 60.0-64.7 39.5 40.7	n 1-2% finely di: Feldspar quartz n with 5-10% chlor:	sseminated p rich, altere ite-biotite	oyrite. ed, leuc spots	ocratic zone and needles.												
		47.2 49.0	1.2 m of lost concorre barrel.	re due to a	problem	with the												

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-65 2 DIAMOND DRILL LOG From To Sample From Width To Total Cu Pb Zn Αq Au Ва -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 64.7 85.5 INTERMEDIATE VOLCANIC WACKE Grey-brown, coarse, unsorted moderately biotite altered VA03413 64.7 66.0 1.3 2 118 <5 77. <1 < 5 120 intermediate (locally felsic) volcanic wacke. Locally up VA02884 64.7 85.5 20.8 132 n/a n/a 80 n/a n/a 185 to 5 % (2 mm feldspar crystals. Rock has an altered VA08414 66.0 67.0 1.0 144 2 < 5 80 (5 $\langle 1 \rangle$ 120 appearance and in places it is difficult to distinguish VA08415 67.0 68.0 1.0 2 68 ٢5 98 <1 12 70 from the gabbro assimilation zone above. Massive, VA08416 69.0 116 68.0 2 <5 84 < 5 1.0 <1 20 bedding is not recognizable. VA08417 69.0 69.8 ... 8 2 60 (5) 113 <1 (5 160 VA08418 70.7 20 <5 <5 69.8 . 9 1 74 <1 1400 STRUCTURE:. VA08419 70.7 72.0 1.3 2 84 < 5 121 <1 <5 160 -72.7-72.9 M fault zone. Blocky, highly fractured core. Not VA08420 73.0 100 108 72.0 1.0 2 <5 <1 <5 100 possible to measure orientation. VA08421 73.0 74.0 1.0 2 108 < 5 114 16 200 <1 76.0-76.5 M fault zone at 20 degrees to core axis. Blocky, VA08422 74.0 75.0 1.0 2 122 73 < 5 220 ٢5 <1 highly fractured core. VA08423 75.0 76.0 1.0 2 140 < 5 96 <1 <5 160 77.1-77.6 Blocky, highly fractured core. VA08424 76.0 77.0 1.0 2 140 <5 92 <1 <5 180 At 79.5 m rock cleaves parallel to the core axis. VA08425 77.0 78.0 1.0 2 136 ٢5 77 <1 (5 100 VA08426 78.0 79.0 1.0 150 <5 96 < 5 230 2 <1 ALTERATION: . VA08427 80.0 140 79.0 1.0 2 <5 64 <1 6 180 64.7 85.5 WEAK FRACTURE CONTROLLED CARBONATIZATION. VA08428 80.0 81.0 1.0 2 140 5 97 <1 7 230 SULPHIDES:. 64.7-85.5 m 2-3% fracture controlled pyrite tr-1% pyrrhotite and locally, trace chalcopyrite. 3 % very finely disseminated purple mineral with a submetallic lustre, non magnetic between 75.0 and 76.0 m. 65.5 65.8 Angular dark green mafic pophyritic fragments up to 5.0 cm long. 69.8 70.7 Medium-grained carbonatized mafic dyke. Upper contact is sharp at 15 degrees to core axis. Lower contact is sharp at 40 degrees to core axis 79.0 81.0 5-10% 4 to 30 mm wide angular light grey-green to grey-brown fine-grained cherty fragments. Some have a light grey alteration rims 3 mm wide. 85.5 91.8 SILTSTONE Very pale green-grey cherty, siliceous, moderately VA02885 85.5 90.1 4.6 58 n/a 37 n/a n/a 497 n/a microfractured siltstone. Nil to trace disseminated VA08429 89.0 90.0 78 44 < 5 510 1.0 1 5 <1 pyrite. Quite massive, bedding is not recognizable. Core is broken and blocky throughout and there are many fault gouges. Lower contact is a fault zone at 33 degrees to core axis. STRUCTURE: . At 86.6 m 1.0 cm fault gouge at 65 degrees to core axis. 89.4-91.8 M FAULT ZONE. Rock is crushed over the entire interval. Core is rubble between 90.2 and 90.8 and there

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88~65 3

512

5.60

n/a

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From To

(m)

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(m) -----DESCRIPTION------ Sample From То Width Total Cu Рb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

n/a

1

47

70

n/a

8

95

116

n/a

<1

VA02886 92.6 112.0 19.4

VA08430 111.0 112.0 1.0

is 0.7 m of lost core. Many minor fault gouges throughout at 30 to 60 degrees to core axis. Largest fault gouge is between 91.5 and 96.8 m and is at 33 degrees to core axis.

ALTERATION: .

85.8 91.8 WEAK FRACTURE CONTROLLED CARBONATIZATION.

91.8 92.6 BLACK ARGILLITE

Crushed very soft and graphitic black argillite. Entire unit is part of a fault gouge. Contains deformed, stretched clasts of chloritic felsic tuff. Argillite is intercalated with carbonatized mafic tuffs. For 0.1 m at the lower contact. The lower contact is at 40 degrees to core axis.

92.6 112.0 MAFIC TUFF

Medium green, massive, coarse to fine mafic tuff. Locally up to 5 % white anhedral feldspars and rare quartz eyes < 3 mm in diameter. Occasional ripped-up bed of felsic tuff < 1.5 cm thick. Spots of wispy, black chlorite are often smeared along foliation planes (altered pyroxenes?). Foliation is only weakly developed. Lower contact is at 50 degrees to core axis.

STRUCTURE:.

At 92.5 m weak foliation is at 40 degrees to core axis. 100.1-102.0 M FAULT ZONE. Core is broken and blocky throughout and there are several < 1 cm fault gouges at < 30 degrees to core axis. 0.3 m of lost core. 102.5-105.0 M FAULT ZONE at 38 degrees to core axis. Core is broken and rubbly throughout. 0.7 m of lost core. At 106.9 m foliation is at 34 degrees to core axis. At 108.6 m bedding is at 35 degrees to core axis. At 111.9 m bedding is at 40 degrees to core axis.

ALTERATION:.

92.6 112.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CARBONATIZATION. Weak fracture controlled hematization between 97.6 and 98.0 m and between.

108.5 and 110.0 m.

97.5 98.1 5-10% mafic lapilli < 2.0 cm long and 0.5 cm wide, some with quartz eyes.

102.0 102.5 Tuff is intermediate in composition. Many irregular quartz-carbonate veins and pods (0.5 cm wide.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LINITED CH88-65 4 DIAMOND DRILL LOG From To Sample From To Width Total . Cu Рb Zn Ag Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 108.6 888.8 10.0 cm bed of very fine chlorite schist with very finely disseminated magnetite at 35 degrees to core axis. Rock is strongly magnetic. 112.0 113.9 FELSIC TUFF Light grey sericitic felsic tuff with an occasional guartz VA08431 112.0 113.0 1.0 5 32 63 12 720 8 <1 eve. Rock has a crushed, tectonized appearance and VA08432 113.0 113.9 .9 64 5 34 13 <1 670 9 foliation is wavey and contorted. Bands of carbonatized chlorite schist < 1.0 cm to 20 cm occur throughout. The largest are between 112.4 and 112.6 m and between. 112.7 and 112.9 m. Lower contact is at 43 degrees to core axis. STRUCTURE: . At 112.6 m foliation is strongly kinked and folded. ALTERATION:. 112.0 113.9 WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES: . 112.0-113.9 m 5 % finely disseminated subhedral. 113.9 141.7 MAFIC TUFF As 92.6 to 112.0 m. Intercalated with ripped up beds of VA08433 113.9 114.9 1.0 5 30 16 369 (1 14 550 felsic tuff over the first 1.0 m. Occasional guartz eve (VA02887 113.9 141.7 27.8 57 76 n/a n/a 647 n/a n/a 4 mm in diameter below 137.0 m. Lower contact is VA08434 114.9 116.1 1.2 2 126 7 99 <1 15 1200 arbitrarily placed where black chlorite wisps become conspicuous. STRUCTURE: . 116.3-116.8 M fault gouge at 50 degrees to core axis. Gouge contains 5 % angular guartz-carbonate clasts < 0.5 cm diameter. 117.3-118.6 M blocky, highly fractured core. At 126.1 m foliation is at 35 degrees to core axis. 130.0-132.6 M foliation is kinked and folded. 136.5-137.8 M rock is finely banded (bedded) at 45 degrees to core axis. ALTERATION: . 113.9 128.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and weak fracture controlled hematization

between 123.7 and 125.0 m.

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128.0 133.0 STRONG FRACTURE CONTROLLED CARBONATIZATION.

133.0 141.7 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-65 5 DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn Au Ba Àσ (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) SULPHIDES:. 113.9-114.9 m 3 % disseminated pyrite concentrated in felsic tuff rip-up beds. 138.1 140.0 10 % 2-10 mm epidote+calcite spots, some of which may be altered lapilli. 141.7 177.0 MAFIC PORPHYRITIC MAFIC ASH TUFF Darker green and somewhat more chloritic than unit above. VA02888 141.7 160.0 18.3 66 n/a n/a 821 n/a 93 n/a Moderately carbonatized (fracture controlled) chlorite VA02889 160.0 177.0 17.0 n/a 62 n/a 69 n/a n/a 831 schist with up to 5 % wispy dark green to black chorite (replacing pyroxene ?) smeared along foliation planes. Chlorite spots are < 1.5 cm in diameter. Up to 5 % <4 mm carbonate altered fragments. Occasional quartz eye < 4 mm in diameter. Lower contact placed where mafic lapilli become conspicuous STRUCTURE: . At 144.8 foliation is at 35 degrees to core axis. At 149.9 3 mm fault gouge at 25 degrees to core axis. At 151.1 foliation is at 30 degrees to core axis. 157.3-157.4 M fault gouge at 20 degrees to core axis. 164.0-164.2 M fault gouge. Not possible to measure the orientation but it appears to be at a very low angle to the core axis. At 167.7 m foliation is at 37 degrees to core axis. At 168.6 m foliation is at 40 degrees to core axis. At 173.6 m 1.0 cm fault gouge at. 175.8 176.0 M fault gouge at 55-60 degrees to core axis. ALTERATION:. 138.9 151.4 STRONG FRACTURE CONTROLLED CARBONATIZATION. 151.4 160.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION , and locally very weak spotty epidote alteration. Weak fracture controlled hematization below 155.5 m. 160.0 168.5 WEAK SPOTTY EPIDOTIZATION and very weak spotty and fracture controlled carbonatization. 168.5 173.9 STRONG FRACTURE CONTROLLED CARBONATIZATION. 173.9 STRONG PERVASIVE CARBONATIZATION. 177.0 182.6 MAFIC LAPILLI TUFF

Roughly 30 % grey-green carbonatized and in many cases epidotized mafic to intermediate fragments 0.5 to 5.0 cm and up to 1.5 cm wide stretched parallel to foliation in a green, moderately chloritized mafic matrix. Lower contact is a fault gouge at 8 degrees to core axis. VA02890 177.0 182.0 5.0 n/a 35 n/a 70 n/a n/a 590

STRUCTURE:.

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-65 6 DIAMOND DRILL LOG From То Sample From To Width Total Cu Pb Zn Au Ag Ва (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) At 178.3 foliation is at 50 degrees to core axis. 182.3-182.6 M fault gouge at 8 degrees to core axis. ALTERATION: . 177.0 182.6 STRONG PERVASIVE CARBONATIZATION. Locally weak fracture controlled hematization. 182.6 206.2 MAFIC PORPHYRITIC MAFIC ASH TUFF Similiar to 141.7 to 177.0 m except chlorite wisps are VA02891 182.6 207.9 25.3 n/a 40 n/a 59 n/a n/a 129 less conspicuous (2-3%) and strongly carbonatized. May be a lapilli tuff. Lapilli are strongly carbonatized and it is difficult to determine whether they are fragments or carbonate-filled gashes. Lower contact is gradational. STRUCTURE:. At 186.5 m foliation is at 40 degrees to core axis. At 194.5 m foliation is at 55 degrees to core axis. 204.0-204.5 M blocky, highly fractured core. Possibly a fault at 40 degrees to core axis. ALTERATION:. 182.6 206.2 STRONG FRACTURE CONTROLLED CARBONATIZATION. Weak fracture controlled hematization between 202.0 and 206.2 m. Moderate spotty epidotization between 203.8 and 205.8 m. 206.2 207.9 INTERMEDIATE LAPILLI TUFF Light grey-green strongly carbonatized tuff with up to 30 % strongly carbonatized lapilli. Difficult to determine original composition of the tuff because of the strong pervasive carbonate alteration. Lower contact is at 55 degrees to core axis. 207.9 262.7 FELDSPAR PORPHYRITIC GABBRO Massive , fine to medium-grained gabbro with 1-2 % finely VA08491 257.0 258.0 1.0 <5 <5 490 2 12 73 (1 disseminated ilmenite and 5 to 15 % 2-4 mm feldspar VA08435 258.4 259.4 1.0 1 82 <5 76 (1 5 <20 phenocrysts. Lower contact is arbitrarily placed where VA08436 259.4 259.8 <5 55 .4 3 2400 <1 <5 <20 gabbro becomes ilmenite-rich. VA08437 259.8 260.8 <5 83 1.0 1 260 <1 <5 <20 STRUCTURE: . 206.2-211.6 M blocky, highly fractured core. 225.3-226.0 M blocky, highly fractured core. At 226.5 m minor fault at 55 degrees to core axis. 229.0-231.6 M blocky, highly fractured core. 0.2 m of lost

core.

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232.3-233.6 M FAULT ZONE. Blocky, highly fractured core. Difficult to measure the orientation but it appears to be

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-65 7

From	То								
(m)	(m)					DESCRI	PTION-		
		>65	degrees	to core	axis.	0.5 m o	f lost	core.	

Width Sample From To Total Cu Рb Zn Au Ba Ag (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No. (m)

>65 degrees to core axis. 0.5 m of lost core. 234.0-234.5 M FAULT ZONE. Blocky, highly fractured core. Not possible to measure the orientation. At 241.0 m 1.0 cm fault gouge at 50 degrees to core axis. 249.3-250.5 M blocky, highly fractured core. Related to a

slip which runs parallel to the core axis. 0.2 m of lost core. 257.9-258.0 M fault gouge. Not possible to measure

orientation.

207.9 262.7 MODERATE FRACTURE CONTROLLED CARBONATIZATION, locally WEAK SPOTTY EPIDOTIZATION and WEAK FRACTURE CONTROLLED HEMATIZATION.

- 224.6 225.3 Dark grey granophyric phase of the gabbro with 5 % ilmenite.
- 259.4 259.8 Quartz-carbonate-chlorite vein at 30-50 degrees to core axis with 4 % finely disseminated pyrite and chalcopyrite.
- 262.7 276.0 MEDIUM TO COARSE-GRAINED GRANOPHYRIC ILMENITE-RICH GABBRO Medium to coarse-grained gabbro with 8-10% ilmenite as grains to 1 cm (most <0.5 cm) in diameter rimmed by leucoxene. STRUCTURE:

At 268.5 m slip at 60 degrees to core axis. 273.6-276.0 M blocky, highly fractured core, several fault gouges at 50-60 degrees to core axis.

ALTERATION:.

262.7 265.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 265.5 276.0 WEAK FRACTURE CONTROLLED CARBONATIZATION.

264.4 264.7 Xenolith of massive, fine-grained felsic tuff. Upper and lower contacts are at 55-60 degrees to core axis.

276.0 277.6 MAFIC INTRUSIVE

Fine-grained, non feldspar porphyritic, chill margin phase of the gabbro. Lower contact is at 47 degrees to core axis

STRUCTURE:.

276.3-276.8 M several fault gouges at 40-60 degrees to core axis. Rock is crushed, broken and blocky throughout.

277.6 283.0 WEAKLY CHLORITIC FELSIC TUFF

From To (m)

(m)

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-65 8

DESCRIPTION	Sample	From	To	Width	Total	Cu	Pb	Zn	Ag	Au	Ba
	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
ely to strongly chloritized felsic to intermediate ocally, fine bedding is recognizable. Occasional	VA02892	277.6	307.0	29.4	n/a	29	n/a	37	n/a	n/a 11	100

Moderate tuff. Lo quartz eye <4 mm in diameter. . STRUCTURE: .

Foliation is wavey and contorted throughout. At 278.5 m bedding is at 40 degrees to core axis. At 279.0 m 1.0 cm fault gouge at 50 degrees to core axis. At 281.4 m foliation is at 50 degrees to core axis.

281.5-281.8 M crushed, fault zone several fault gouges at 40-60 degrees to core axis.

ALTERATION: .

277.6 283.0 MODERATE PERVASIVE CHLORITIZATION and MODERATE FRACTURE CONTROLLED CARBONATIZATION.

283.0 286.0 MAFIC TUFF

Fine-grained weakly carbonatized mafic tuff. Rock is broken and blocky throughout. Broken core at the lower contact.

STRUCTURE: .

284.4-284.6 M crushed fault zone. Not possible to measure the orientation.

285.4-285.9 M fault zone at 25 degrees to core axis.

ALTERATION:.

283.0 286.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and WEAK FRACTURE CONTROLLED HEMATIZATION.

286.0 318.0 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF

Light green-grey, fine-grained, massive, felsic tuff with 5-10%, (1 mm, weakly epidotized feldspar crystals. Rare quartz eye < 4 mm in diameter. Weakly to moderately microfractured. Microfractures are filled with calcite +/- epidote.

STRUCTURE:.

At 287.0 m bedding is at 30 degrees to core axis. At 288.3 m foliation is at 45 degrees to core axis. At 292.3 m bedding is at 38 degrees to core axis. At 295.2 m 0.5 cm fault gouge at 20 degrees to core axis. At 296.8 m foliation is at 25 degrees to core axis. 304.8-308.5 M FAULT ZONE. Blocky, highly fractured core. Difficult to measure orientation but appears to be at a very low angle to the core axis. 0.6 m of lost core. At 308.7 m foliation is at 15 degrees to core axis. 308.9-311 M blocky, highly fractured core because foliation is at a very low angle to core axis. 313.3-314.0 M minor slip nearly parallel to the core axis.

VA08438	290.0	291.0	1.0	1	114	<5	49	- <1	< 5	1200
VA08439	291.0	292.0	1.0	- 1	. 36	< 5	44	<1	< 5	1500
VA08440	292.0	293.0	1.0	1	50	<5	42	<1	< 5	1100
VA08442	293.0	294.0	1.0	. 1	16	< 5	41	<1	< 5	1200
VA08443	301.0	302.0	1.0	1	4	< 5	25	<1	< 5	1600
VA08441	302.0	303.0	1.0	1	6	< 5	29	<1	< 5	1800
VA02893	307.0	324.3	17.3	n/a	32	n/a	41	n/a	n/a	1230
VA08444	309.0	310.0	1.0	2	14	< 5	37	<1	< 5	1700
VA08445	310.0	311.0	1.0	2	56	< 5	32	<1	< 5	1300
VA08446	311.0	312.0	1.0	2	76	< 5	33	<1	<5	900
VA08447	315.0	316.0	1.0	1	60	<5	31	<1	<5	730
VA08448	316.0	317.0	1.0	2	41	< 5	46	<1	< 5	1000
VA08449	317.0	318.0	1.0	2	10	(5	50	<1	< 5	900

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-65 9 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Au Ba ħσ (m) (m) -----DESCRIPTION------Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) At 314.0 m foliation is at 19 degrees to core axis. 316.9-317.0 M fault gouge at 50 degrees to core axis. At 318.4 m foliation is at 30 degrees to core axis. ALTERATION: . 236.0 318.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION . MODERATE PERVASIVE SERICITIZATION and weak to moderate pervasive chloritization. SULPHIDES: . 286.0-309.0 M trace to 1 % disseminated pyrite. 309.0-312.0 m 1-2% fracture controlled pyrite. 312.0-315.0 M trace disseminated pyrite. 315.0-318.0 m 1-2% fracture controlled and disseminated pyrite and nil-trace disseminated chalcopyrite. 295.8 297.1 Up to 5 % dark green, chloritic fragments, some with quartz-filled amygdales, < 1.0 cm thick and up to 3.0 cm long streched parallel to foliation. 318.0 324.3 FELSIC FELDSPAR CRYSTAL TUFF Fine-grained sericitic felsic tuff with 5 % < 1 mm VA08450 318.0 319.0 1.0 2 56 ٢5 49 <1 <5 1100 feldspar crystals. As the unit above but almost no VA08451 319.0 320.0 1.0 2 16 (5 67 <1 < 5 630 chlorite. . VA08452 320.0 321.0 1.0 2 8 <5 56 <1 <5 540 STRUCTURE:. VA08453 321.0 322.0 1.0 2 6 <5 51 (1 5 440 At 321.0 m foliation is at 31 degrees to core axis. VA08454 322.0 323.0 1.0 8 (5 59 <1 <5 400 2 VA08455 323.0 324.0 1.0 12 <5 71 <1 680 2 7 ALTERATION: . VA08456 324.0 325.0 1.0 1 20 <5 77 <1 5 730 318.0 324.3 MODERATE PERVASIVE SERICITIZATION. SULPHIDES:. 318.0-324.3 m 1-2 % fracture controlled and disseminated pyrite. 324.3 352.3 CHLORITIC FELSIC FELDSPAR CRYSTAL TUFF As 286.0 to 318.0 m. Locally may be intermediate in VA02894 324.3 337.0 12.7 812 n/a <10 n/a 51 n/a n/a composition. . VA02895 337.0 353.0 16.0 26 n/a 68 n/a 671 n/a n/a STRUCTURE:. VA08457 352.0 353.0 1.0 2 6 <5 62 <1 6 990 At 328.8 m foliation is at 18 degrees to core axis. At 331.1 m foliation is at 35 degrees to core axis. At 337.0 m foliation is at 35 degrees to core axis. 341.0-343.3 M blocky, highly fractured core. Foliation strongly developed at 45-55 degrees to core axis. At 342.6 m 2.0 cm fault gouge at 50 degrees to core axis. 344.3-344.7 M crushed, blocky, highly fractured core. 345.1-345.6 M fault gouge at 30 degrees to core axis. 346.8-350.8 M blocky, highly fractured core. Rock is crushed throughout. 0.5 m of lost core. Foliation is at

PROPERT	ΓΥ: Chemainus	JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NO CH88-65	o: Pag	e Number 10	•			
From To (m) (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm) (Zn ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
	10-40 degree	es to core axis.											
	ALTERATION:	• • • • • • • • • • • • • • • • • • •											
	324.3 332.3	MODERATE PERVASIVE CHLORITIZATION to MODERATE PERVASIVE CHLORITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION.											
	331.1 332.0	Several carbonate veins up to 1.0 cm wide with a light brown soft alteration mineral (Fe-carbonate ?).											
	336.0 888.0	Chlorite+carbonate band (mafic tuff) at 40 degrees to core axis.											
	344.0 888.8	8.0 cm thick band of carbonate and a soft, olive green alteration mineral at 20 degrees to core axis. Similiar to the early mafic dyke of S.G.E.											
352.3 357.4	I FELSIC TUFF Light grey, Composed of STRUCTURE:. At 3527 m fc At 353.0 m 2 At 353.5 m 3 ALTERATION:. 332.3 STROMONY	strongly foliated, sericitic felsic tuff. quartz+sericite with very minor chlorite. pliation is at 35 degrees to core axis. 0.0 cm fault gouge at 35 degrees to core axis. 0.0 cm fault gouge at 35 degrees to core axis. 5 PERVASIVE SERICITIZATION and VEAK FRACTURE	VA02896 VA08458 VA08459 VA08460 VA08461	353.0 353.0 354.3 355.0 356.0	383.0 354.3 355.0 356.0 357.4	30.0 1.3 .7 1.0 1.4	n/a 5 2 2 2	17 12 4 6 10	n/a 10 6 <5 5	42 51 36 36 76	n/a <1 <1 <1 <1	n/a 14 6 11 <5 13 15 11 <5 11	.30 .00 .00 .00
	CONTROLLED C CHLORITIZATI	CARBONATIZATION. Locally WEAK PERVASIVE											
	SULPHIDES:. 332.3-353.0 planes.	m 1.5 % pyrite concentrated along foliation											
	353.0-354.3 foliation. 354.3-357.4	m 5 % pyrite in (3 mm stringers parailel to m 2 % pyrite as above.											
357.4 405.8	WEAKLY CHLOR Green-grey, schist. Prob tuff. In pl intermediate discrete wis Locally tuff wide. In pl which may be	TTIC FELSIC TUFF strongly foliated quartz-sericite-chlorite wably a weakly to moderately chloritized felsic aces the more chlorite-rich schist may be in composition. Chlorite often occurs in sps, smeared out along foliation planes. contains up to 10 % felsic fragments < 0.5 cm laces the rock has a fragmental appearance e due to chlorite microfractures. Rock is	VA08462 VA08463 VA08464 VA08465 VA08465 VA08467 VA08468 VA08468	357.4 359.7 362.7 364.0 365.0 366.0 369.8 371.0	358.4 360.7 364.0 365.0 366.0 367.0 371.0 372.0	1.0 1.0 1.3 1.0 1.0 1.0 1.2 1.0	2 5 1 1 2 1 4	10 30 12 6 10 10 8 12	<5 <5 7 3 <5 <5 5 <5 5 5	97 71 74 59 71 59 52 37		8 14 8 7 7 7 8 6 8 7 8 10 <5 25 <5 11	100 160 190 100 100 100 100

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-65 11

From (m)	T0 (m)	DESCRIPTION	Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		bleached for 0.2 m from the lower contact. Lower contact is sharp at 30 degrees to core axis.	VA08470 VA02897 VA02898	375.0 383.0 403.0	376.0 403.0 430.7	1.0 20.0 27.7	2 n/a n/a	4 <10 13	<5 n/a n/a	49 42 47	<1 n/a n/a	<5 n/a n/a	570 840 666
		STRUCTURE:. At 359.9 m foliation is at 35 degrees to core axis.	inogoso				., -			.,	, .		

At 360.3 m bedding is at 50 degrees to core axis. 361.6-362.3 M crushed fault zone at 30 degrees to core axis 362.3-363.1 M foliation is wavey and nearly parallel to foliation.

At 364.9 m foliation is at 40 degrees to core axis. At 373.0 m foliation is at 40 degrees to core axis. 376.0-376.4 M fault zone at 40 degrees to core axis. 0.4 m of lost core.

At 378.9 m 1.3 m of lost core due to a problem with the core barrel.

At 380.0 m foliation is at 37 degrees to core axis. At 387.0 m 1.0 cm fault gouge at 40 degrees to core axis. At 392.7 m bedding is at 40 degrees to core axis. 393.6-393.9 M fault gouge at 40 degrees to core axis. 394.9-395.5 M fault gouge at 20-40 degrees to core axis upper half is dominantly mafic tuff while lower half is dominantly chloritic felsic tuff.

395.5-396.7 M foliation is very contorted and is nearly parallel to the core axis.

396.7-397.8 M blocky, highly fractured core. At 402.7 m foliation is at 40 degrees to core axis.

ALTERATION: .

 357.4 362.7 MODERATE PERVASIVE CHLORITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION.
 362.7 363.9 MODERATE PERVASIVE SERICITIZATION.
 371.0 MODERATE PERVASIVE CHLORITIZATION.
 371.0 372.0 MODERATE PERVASIVE SERICITIZATION.

372.0 405.8 MODERATE PERVASIVE CHLORITIZATION.

SULPHIDES:.

362.7-364.0 m 5 % pyrite as 1-3 mm stringers (?) parallel to foliation associated with carbonate alteration. 364.0-366.0 m 1 % disseminated pyrite. 366.0-367.0 m 2 % pyrite concentrated along foliation planes. 367.0-369.8 M trace disseminated pyrite. 369.8-371.0 m 1 % disseminated pyrite. 371.0-372.0 m 4 % pyrite in 1-3 mm stringers (?) parallel

371.0-372.0 m 4 % pyrite in 1-3 mm stringers (?) paralle to foliation.

367.7 360.7 Dark green strongly chloritic zone. 0.5 cm bed of medium brown silty sediments with finely disseminated pyrite at 50 degrees to core axis at 360.3 m.

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FALCONBRIDGE LIMITED

DIAMOND DRILL LOG From To Sample From Width To Total Cu Рb Zn λq Au (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) 370.4 370.5 Carbonatized chloritic mafic dyke. Upper and lower contacts are sharp but irregular at approximately 20 degrees to core axis. 374.0 376.0 Strongly chloritic zone, may be intermediate in composition. 386.5 386.7 Dark grey-brown-green argillaceous (?), carbonatized tuffite bed at 50 degrees to core axis. 386.9 387.2 M dark grey-brown-green, chlorite+carbonate band at 45-50 degrees to core axis. Very similiar to 386.5 to 386.7 m. 390.0 390.3 Dark green, strongly chloritic and moderately carbonatized band at 25 degrees to core axis. 392.0 392.7 Medium green, mafic tuff with 2 % < 3 mm clear quartz eyes. Weak pervasive and fracture controlled carbonate alteration and weak fracture controlled hematization. Upper contact is at 35 degrees to core axis and lower contact is at 40 degrees to core axis. 400.9 400.1 Dark grey chloritic mafic tuffite. Upper contact is a 3 mm fault gouge at 50 degrees to core axis. Lower contact is at 40 degrees to core axis. 405.8 408.9 MAFIC TUFF Massive, fine-grained, medium green mafic tuff. Lower contact is sharp at 40 degrees to core axis. Weak pervasive carbonatization and weak fracture controlled and spotty epidote alteration. Locally, weak fracture controlled hematite. Nil sulphides. 408.9 430.7 WEAKLY CHLORITIC FELSIC TUFF As 357.4 to 405.8 m. Locally intermediate in composition. VA08471 419.0 420.0 (5 700 1.0 1 22 < 5 53 (1 Lower contact is relatively sharp at 40 degrees to core VA08472 420.0 421.0 1.0 2 32 <5 56 (1 ۲5 840 axis. (5 VA08473 421.0 422.0 740 35 < 5 1.0 1 1 <1 VA08474 429.7 430.7 39 <5 970 1.0 3 4 ٢5 <1 STRUCTURE: . Foliation is strongly contorted throughout. 414.4-415.2 N fault gouge and breccia at < 20 degrees to core axis.

At 419.2 m foliation is at 40 degrees to core axis.

At 426.0 m foliation is at 44 degrees to core axis.

HOLE No: Page Number

CH88-65 12

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-65 13

From (m)	То (m)	DESCRIPTION	Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
		ALTERATION:. 408.9 430.7 MODERATE PERVASIVE CHLORITIZATION.											
		<pre>SULPHIDES:. 420.0-421.0 m 2 % pyrite concentrated in 2-3 mm stringers (?) parallel to foliation. 411.0 411.5 Strongly chloritic zone, mafic to intermediate in composition, at 20-40 degrees to core axis.</pre>											·
		419.6 420.1 Strongly chloritic zone. Mafic in composion and moderate fracture controlled carbonatization.				•							
430.7	436.9	FELSIC TUFF											
		Light grey-green very weakly chloritic (much less than unit above) felsic tuff. Well foliated, bedding not recognizable. Occasional clear quartz eye < 3 mm in	VA08475 VA02899 VA08476	430.7 430.7 431.3	431.3 441.1 432.0	.6 10.4 .7	3 n/a 5	12 34 8	<5 n/a <5	23 58 16	<1 n/a <1	<pre><5 2 n/a 1 <5 2</pre>	200 220 2600
нт. 11		diameter. Lower contact is a sharp bedding contact at 50 degrees to core axis.	VA08477 VA08478 VA08479	432.0 433.0 434.0	433.0 434.0 435.0	1.0 1.0 1.0	3 3 5	4 8 11	<5 <5 <5	41 44 34	<1 1 2	<5 1 9 1 47 1	.800 1600 1400
		STRUCTURE: .	VA08480	435.0	436.0	1.0	3	15	<5 ·	48	1	206 1	1200

VA08481 436.0 436.9

At 431.0 m foliation is at 42 degrees to core axis. At 434.3 m 4.0 cm fault gouge at 38 degrees to core axis. Rock is crushed and foliation is kinked for 0.5 m below the fault gouge. 435.7-236.9 M foliation is wavey and varies from 0 to 40

degrees to core axis.

ALTERATION: .

430.7 436.9 MODERATE PERVASIVE SERICITIZATION and WEAK PERVASIVE CHLORITIZATION.

SULPHIDES:.

430.7-431.3 m 3 % pyrite concentrated in 2-3 mm stringers parallel to foliation. 431.3-432.0 m 5 % pyrite concentrated in stringers up to 4 mm in thick parallel to foliation. Stringers have narrow < 5 mm dark grey siliceous alteration envelopes. 432.0-434.0 m 3 % pyrite as above. 434.0-435.0 m 5 % pyrite as above. 435.0-436.9 m 3 % pyrite as above.

436.9 437.7 BLACK ARGILLITE

Black, moderately cherty, argillite with 3 % disseminated pyrite. Quite siliceous and cherty over the first 0.2 m. Broken and blocky over the entire interval. Broken core due to faulting at the lower contact. VA08482 436.9 437.7 .8 3 16 7 78 1 22 1000

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PROPERTY: Chemainus		Y: Chemainus JV	FALCONBRIDGE L DIAMOND DRILL					HOLE No: Page Number CH88-65 14							
From (m)	To (m)		DESCRIPTION		Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm
437.7	441.1	FELSIC TUFF As 430.7 to 436.9 439.0 m. Lower co conspicuous.	m. Finely bedded between 438.9 an ontact placed where quartz eyes bec	d ome	VA08483 VA08484 VA08485	437.7 439.0 440.0	439.0 440.0 441.1	1.3 1.0 1.1	2 2 2	33 33 18	7 13 9	64 73 69	1 1 <1	12 21 19	730 760 910
		STRUCTURE:. At 438.9 m beddin	g is at 45 degrees to core axis.												
		ALTERATION:. 437.7 441.1 MODER consp miner paral	ATE PERVASIVE SERICITIZATION. A icuous soft yellow-brown alteration al occurs in wispy bands (5 mm wi lel to to foliation above 440.0 m.	de											
		SULPHIDES:. 437.7-441.1 m 2 %	disseminated pyrite.												
441.1	453.4	CHLORITIC FELSIC Green-grey quartz with 5 % 2-5 mm g Several chlorite- parallel to folia Slip at 15 degree	QUARTZ EYE TUFF -sericite-chlorite schist (felsic t rey quartz eyes. carbonate rich bands 1-10 cm thick tion. s to core axis at the lower contact	uff)	VA08486 VA02900 VA08487 VA08488 VA08489 VA08490	441.1 441.1 445.6 446.6 447.2 448.0	442.0 453.4 446.6 447.2 448.0 449.0	.9 12.3 1.0 .6 .8	1 n/a 1 4 4	12 14 8 12 12	<5 n/a <5 <5 <5 <5	40 43 38 75 35 55	<1 n/a <1 1 <1 <1	8 n/a 6 26 23 (5	910 1210 810 870 980 1000
		STRUCTURE:. At 443.0 m foliat: At 449.0 m foliat: At 451.8 m bedding	ion is at 45 degrees to core axis. ion is at 55 degrees to core axis. g is at 45 degrees to core axis.									-			· .
		ALTERATION:. 431.1 453.4 WEAK	PERVASIVE CHLORITIZATION.												
		SULPHIDES:. 446.6-448.0 m 4 % foliation associa	pyrite in 2-3 mm stringers paralle ted with strong pervasive sericitiz	l to ation.											
		448.4 448.6 Chlor: to con	ite-carbonate rich band at 50-55 de re axis.	grees											
		449.2 449.5 Chlor tuff and v	ite-carbonate rich band, probably m intruded by many quartz-carbonate v einlets roughly parallel to foliat	afic eins ion.											
		449.6 449.7 Chlor:	ite-carbonate rich band as above.												
453.4	458.7	MAFIC TUFF Medium green, chl altered (sericite Almost equal ammo	oritic schist intercalated with ban -chlorite) quartz eye felsic tuff. unts of each.	ds of	VA02901	453.4	458.7	5.3	n/a	54	n/a	106	n/a	n/a	277

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-65 15

From To Sample From To -----DESCRIPTION-----(m) No. (m) (m)

Width Total Cu Pb Zn Au Ba Ag (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

STRUCTURE:.

(m)

453.4-453.8 M fault at 40 degrees to core axis. Blocky, highly fractured core.

ALTERATION:.

453.4 458.7 MODERATE PERVASIVE CARBONATIZATION and MODERATE FRACTURE CONTROLLED CARBONATIZATION.

SULPHIDES:.

457.0 2.0 % disseminated pyrite.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZHGO	XNA20	ZK20	XFE203	XT 102	XP205	ZHNO	XLO I	SUM	 ВА	AI	NACA
	· · · ·						*******	**********							 		
VA02450	33.00	33.30	53.20	17.20	6.04	3.74	3.16	1.05	8.05	0.79	0.28	0.15	6.47	100.13	548.	34.	9.
VA02451	60.10	60.50	46.10	17.50	9.06	4.22	2.59	1.13	9.75	0.88	0.46	0.18	8.31	100.18	740.	31.	12.
VA02452	68.60	68.90	46.30	13.40	9.55	5.80	1.54	0.11	11.80	1.49	0.14	0.21	7.62	97.96	141.	35.	11.
VA02453	88.90	89.00	83.30	3.57	3.50	1.91	<0.01	0.30	3.02	0.20	0.10	0.06	3.23	99.19	215.	39.	3.
VA02454	99.80	100.10	46.90	15.10	6.67	8.00	3.09	0.42	10.40	0.75	0.31	0.21	7.93	99.78	234.	46.	10.
VA02455	112.50	112.70	55.80	15.50	8.02	0.81	1.67	3.25	5.10	0.53	0.31	0.11	4.31	95.41	840.	30.	10.
VA02456	124.40	124.70	49.00	18.00	6.23	4.78	2.72	1.73	9.48	0.84	0.26	0.17	6.62	99.83	1010.	42.	9.
VA02457	136.70	136.90	45.40	15.80	11.00	3.80	2.11	0.69	10.10	0.72	0.22	0.21	9.93	99.98	350.	26.	13.
VA02458	154.10	154.30	43.60	16.80	5.01	10.00	2.39	1.38	12.40	0.87	0.30	0.24	6.16	99.15	829.	61.	7.
VA02459	166.10	166.60	46.70	15.90	7.37	8.11	2.86	0.83	11.30	0.80	0.31	0.22	5.62	100.02	486.	47.	10.
VA02460	179.10	179.40	47.60	15.00	11.10	4.16	1.96	1.18	8.68	0.70	0.24	0.19	9.39	100.20	674.	29.	13.
VA02461	194.50	194.90	44.80	14.10	10.20	7.52	1.54	0.09	9.91	0.68	0.22	0.19	10.20	99.45	92.	39.	12.
VA02462	206.50	207.00	47.80	15.80	10.60	6.09	5.42	0.11	4.53	0.73	0.29	0.11	8.31	99.79	114.	28.	16.
VA02463	280.00	280.50	62.40	14.40	5.88	2.18	1.57	0.69	4.59	0.43	0.14	0.09	6.93	99.30	306.	28.	7.
VA02464	292.60	292.80	63.60	15.00	5.90	0.82	1.44	2.91	3.75	0.44	0.16	0.06	5.77	99.85	1160.	34.	7.
VA02465	303.10	303.50	64.60	15.50	4.24	1.10	4.67	1.23	5.37	0.45	0.17	0.08	2.85	100.26	1460.	21.	9.
VA02466	316.20	316.60	62.80	14.10	4.77	1.45	1.21	1.72	6.78	0.42	0.15	0.13	5.23	98.76	811.	35.	6.
VA02467	327.70	328.00	63.50	14.40	3.19	0.93	3.73	1.67	3.22	0.41	0.13	0.07	3.54	99.79	744.	27.	7.
VA02468	338.00	338.50	67.50	14.30	3.74	0.82	3.42	1.85	3.95	0.39	0.13	0.09	4.00	100.19	639.	27.	7.
0402469	355.30	355 50	68 30	14 80	2 54	0.74	4 97	1 76	2 74	0 42	0.13	0.04	2.39	98.73	1260.	25.	7.
UA02470	372.00	372.50	67.00	14 90	7 94	0.79	2.93	1 67	3 27	0 42	0.14	0 08	3,31	98.66	943	29.	7.
UA02471	202.00	202 50	67 24	19.70	6.70 0 10	1.00	3.02	1.7/	3.27	0.92	0.13	0.00	2.54	20.00	(3)	30	7
VHV24/1	373.00	112 00	07.30	14.60	J.1J	1.02	3.75	1.86	4.01	0.40	0.13	0.03	3.34	77.83	636	30.	· •
VAU2472	412.30	913.00	68.80	14.50	2.72	0.95	4.12	1.71	3.71	0.40	0.13	0.09	3.16	100.38	636.	28.	/.

Hole No. CH88-65 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	X S102	ZAL203	ZCAO	XMGO	XNA20	XK20	ZFE203	XI 102	XP205	ZHNO	XLO I	SUM	BA	AI	NACA
· · · · · · · · · · · · · · · · · · ·	• <u></u>										•*********						*******
VA02473	425.20	425.60	67.90	14.40	2.55	1.18	3.38	1.89	4.00	0.41	0.14	0.10	3.54	99.48	620.	34.	6.
VA02475	433.70	434.00	66.60	14.70	2.60	1.20	0.31	3.63	3.48	0.41	0.14	0.19	4.62	97.88	1870.	62.	з.
VA02474	448.60	448.80	68.20	13.90	3.53	1.26	0.39	3.21	2.69	0.28	0.07	0.09	4.93	98.55	1130.	53.	. 4.
VA02476	458.00	458.30	59.00	14.50	5.35	2.76	3.83	1.36	5.65	0.49	0.13	0.17	5.70	98.94	492.	31.	9.

Hole No. CH88-65 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	то	X\$102	XAL203	ZCAO	ZHGO	2NA20	XK20	2FE203	XT 102	XP205	ZHNO	XLO I	SUN	 BA	AI	NACA
													•				·
VA02884	64.70	85.50	44.90	13.40	10.60	5.59	1.68	0.22	11.20	1.52			9.85	98.96	185.	32.	12.
VA02885	85.50	90.10	72.40	5.83	7.90	1.78	0.23	0.83	3.36	0.31			6.77	99.41	497.	24.	8.
VA02886	92.60	112.00	46.00	15.30	9.79	4.50	2.51	1.41	9.70	0.71			8.77	98.69	512.	32.	12.
VA02887	113.90	141.70	46.70	16.70	7.65	4.63	2.51	1.31	10.70	0.80			7.93	98.93	647.	37.	10.
VA02888	141.70	160.00	45.30	15.90	5.65	7.76	2.68	1.98	10.50	0.80			7.54	98.11	821.	54.	8.
VA02889	160.00	177.00	45.70	15.70	8.84	5.95	1.94	2.03	10.10	0.75			7.39	98.40	831.	43.	11.
VA02890	177.00	182.00	43.50	15.20	12.00	4.49	1.80	1.21	10.00	0.69			10.50	99.39	590.	29.	14.
VA02891	182.60	207.90	44.80	13.80	11.30	6.99	2.19	0.15	8.90	0.68			10.80	99.61	129.	35.	13.
VA02892	277.60	307.00	60.60	16.10	5.71	1.41	2.03	2.39	4.87	0.51			5.93	99.55	1100.	33.	8.
VA02893	307.00	324.30	66.60	13.50	4.31	1.22	1.74	1.91	5.05	0.40			4.62	99.35	1230.	34.	6.
VA02894	324.30	337.00	63.40	17.10	3.04	1.21	4.26	2.00	3.90	0.49			3.54	98.94	812.	31.	7.
VA02895	337.00	353.00	64.70	15.00	3.95	1.05	3.41	1.94	4.41	0.42			4.47	99.35	671.	29.	7.
VA02896	353.00	383.00	65.90	14.20	4.31	0.77	3.69	1.86	3.39	0.39			4.16	98.67	1430.	25.	8.
VA02897	383.00	403.00	66.70	14.40	3.64	0.96	3.27	1.91	3.76	0.41			4.16	99.21	840.	29.	7.
VA02898	403.00	430.70	66.90	14.40	3.11	1.14	3.29	1.94	3.98	0.40			3.77	98.93	666.	32.	6.
VA02899	430.70	441.10	61.30	15.30	3.36	1.83	0.96	3.07	5.81	0.50			4.16	96.29	1220.	53.	4.
VA02900	441.10	453.40	69.50	13.60	2.40	1.30	0.32	3.19	2.98	0.29			4.23	97.81	1210.	62.	3.
VA02901	453.40	458.70	39.40	11.20	15.10	4.83	0.03	1.64	9.83	0.54			11.10	93.67	277.	30.	15.

Hole No. CH88-65 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	E FROM	I TO	BA (ppm)	CU () (ppm)	ZN) (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррж)	HN (ppm)	CUZN	ETS	FE
VA08409	38.50	39.50	900.0	60.0	71 0												
UA08410	29 50	40 70			/1.0	<0.5	206.0	16.0	19.0	<5.0	<5.0	<1.0	2.0	720.0	46.	1.	4.
UADRALL	40.70	40.70	930.0	190.0	19.0	<0.5	<5.0	4.0	6.0	<5.0	<5.0	<1.0	1.0	360.0	91.	1.	1.
	40.70	41./0	730.0	26.0	65.0	<0.5	<5.0	16.0	18.0	<5.0	<5.0	<1.0	2.0	700.0	29.	1.	4.
VA08412	63.70	64.70	560.0	72.0	78.0	<0.5	<5.0	18.0	26.0	<5.0	10.0	<1.0	4.0	1000.0	48.	1.	5.
VA08413	64.70	66.00	120.0	118.0	77.0	<0.5	<5.0	28.0	74.0	<5.0	16.0	<1.0	4.0	850.0	61.	2.	6
VA08414	66.00	67.00	120.0	144.0	80.0	<0.5	<5.0	28.0	72.0	<5.0	20.0	<1.0	4.0	875.0	64.	2	
VA08415	67.00	68.00	70.0	68.0	98.0	<0.5	12.0	24.0	64.0	<5.0	42.0	<1.0	4.0	1140-0	- A1	· · ·	· ·
VA08416	68.00	69.00	20.0	116.0	84.0	<0.5	<5.0	24.0	67.0	<5.0	27.0	<1.0	4.0	860.0	59	4. 2	
VA08417	69.00	69.80	160.0	60.0	113.0	<0.5	<5.0	30.0	68.0	<5.0	27.0	<1.0	4.0	1160.0		4.	b.
VA08418	69.80	70.70	1400.0	20.0	74.0	<0.5	<5.0	14.0	16.0	<5.0	5.0	<1.0	7.V 2.A	1160.0	35.	2.	7.
VA08419	70.70	72.00	160.0	84.0	121.0	<0.5	<5.0	30.0	75.0		05.0	(1.0	3.0	980.0	21.	1.	5.
VA08420	72.00	73.00	100.0	100.0	108.0	<0.5	(5.0	22.0	90.0	<5.0	33.0	<1.0	4.0	1380.0	41.	2.	7.
VA08421	73.00	74.00	200.0	108.0	114 0	10 5	16.0	52.0	80.0	(3.0	20.0	<1.0	4.0	1150.0	48.	2.	7.
VA08422	74.00	75.00	220.0	172.0			10.0	32.0	84.0	<5.0	13.0	<1.0	5.0	1110.0	49.	2.	7.
0408423	75 00	76.00	160.0	122.0	73.0	<0.5	<5.0	32.0	66.0	<5.0	14.0	<1.0	6.0	820.0	63.	2.	6.
	75.00	/6.00	160.0	140.0	96.0	<0.5	<5.0	30.0	69.0	<5.0	22.0	<1.0	4.0	960.0	59.	2.	7.
VHU84.4	76.00	77.00	180.0	140.0	92.0	<0.5	<5.0	32.0	78.0	<5.0	29.0	<1.0	5.0	900.0	60.	2.	7.
VA08425	77.00	78.00	100.0	136.0	77.0	<0.5	<5.0	32.0	74.0	<5.0	24.0	<1.0	5.0	880.0	64.	2.	7.
VA08426	78.00	79.00	230.0	150.0	96.0	<0.5	<5.0	30.0	76.0	<5.0	42.0	<1.0	5.0	900.0	61.	2	
VA08427	79.00	80.00	180.0	140.0	64.0	<0.5	6.0	28.0	60.0	<5.0	22.0	<1.0	5.0	680 0	49	~.	· ·
VA08428	80.00	81.00	230.0	140.0	97.0	<0.5	7.0	30.0	68.0	5.0	31.0	<1.0	5.0	900 0	52	4.	
VA08429	89.00	90.00	510.0	78.0	44.0	<0.5	<5.0	8.0	42.0	5.0	8.0		5.v		37.	2.	7.
JA08430	111.00	112.00	560.0	70.0	116.0	<0.5	6.0	32.0	24.0	0.0	11.0	VI.V	6.0	600.0	64.	1.	2.
A08431	112.00	113.00	720.0	32.0	63 0	20.5	12.0	24.0	24.0	8.0	11.0	<1.0	4.0 1	060.0	38.	1.	6.
						. V. • J	12.0	34.0	14.0	8.0	15.0	<1.0	5.0	700.0	34 .	5	

Hole No. CH88-65

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ррм)	HN (ppm)	CUZN	ETS	FE
V408432	113.00	113.90	670-0	74.0	64.0	70 5	9 0	26 0	12.0	12.0	14.0	<1.0	5 0		25	· .	
U408433	113.90	114.90	550.0	30.0	360 0	20.5	14.0	20.0	19.0	13.0	9.0	2.0	2.0	760 0		, J.	
UA08434	114 90	116 10	1200.0	126 0	99.0	10.5	14.0	20.0	24.0	7 0	9.V	2.0	3.0	700.0	54	J.	J. E
VA08435	258.40	259.40	<20.0	82.0	76.0	(0.5	5.0	26.0	36.0	(5.0	8.0	(1.0	2.0	820.0	52	2. 1	. ل د
VA08436	259.40	259.80	<20.0	2400.0	55.0	<0.5	(5.0	28.0	28.0	(5.0	20.0	(1.0	3.0	480 0	98	3	5
VA08437	259.80	260.80	<20.0	260.0	83.0	(0.5	(5.0	28.0	35.0	<5.0	10.0	(1.0	2.0	620.0	76.	1.	5.
VA08438	290.00	291.00	1200.0	114.0	49.0	(0.5	<5.0	18.0	18:0	(5.0	(5.0	<1.0	3.0	710.0	70-	1.	4
A08439	291.00	292.00	1500.0	36.0	44.0	<0.5	<5.0	16.0	16.0	<5.0	5.0	<1.0	4.0	650.0	45.	1.	4.
VA08440	292.00	293.00	1100.0	50.0	42.0	<0.5	<5.0	16.0	12.0	<5.0	<5.0	<1.0	4.0	575.0	54.	1.	4.
A08442	293.00	294.00	1200.0	16.0	41.0	<0.5	<5.0	14.0	8.0	<5.0	<5.0	<1.0	2.0	510.0	28.	1.	3.
VA08443	301.00	302.00	1600.0	4.0	25.0	<0.5	<5.0	6.0	6.0	<5.0	<5.0	<1.0	3.0	370.0	14.	1.	3.
A08441	302.00	303.00	1800.0	6.0	29.0	<0.5	<5.0	8.0	8.0	<5.0	<5.0	<1.0	2.0	370.0	17.	1.	3.
A08444	309.00	310.00	1700.0	14.0	37.0	<0.5	<5.0	8.0	10.0	<5.0	<5.0	<1.0	2.0	520.0	27.	2.	4.
A08445	310.00	311.00	1300.0	56.0	32.0	<0.5	<5.0	10.0	8.0	<5.0	<5.0	<1.0	2.0	650.0	64.	2.	4.
A08446	311.00	312.00	900.0	76.0	33.0	<0.5	<5.0	12.0	10.0	<5.0	<5.0	<1.0	2.0	630.0	70.	2.	4
A08447	315.00	316.00	730.0	60.0	31.0	<0.5	<5.0	8.0	8.0	<5.0	<5.0	<1.0	2.0	635.0	66.	1.	4.
A08448	316.00	317.00	1000.0	41.0	46.0	<0.5	<5.0	8.0	8.0	<5.0	<5.0	<1.0	4.0	670.0	47.	2.	4
A08449	317.00	318.00	900.0	10.0	50.0	<0.5	<5.0	6.0	10.0	<5.0	<5.0	<1.0	2.0	725.0	17.	2.	3.
A08450	318.00	319.00	1100.0	56.0	49.0	<0.5	<5.0	12.0	18.0	<5.0	12.0	<1.0	3.0	520.0	53.	2.	2.
A08451	319.00	320.00	630.0	16.0	67.0	<0.5	<5.0	6.0	6.0	<5.0	<5.0	<1.0	3.0	660.0	19.	2.	4.
A08452	320.00	321.00	540.0	8.0	56.0	<0.5	<5.0	6.0	4.0	<5.0	<5.0	<1.0	2.0	580.0	13.	2.	з.
A08453	321.00	322.00	440.0	6.0	51.0	<0.5	5.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	510.0	11.	2.	3.
A08454	322.00	323.00	400.0	8.0	59.0	<0.5	<5.0	6.0	5.0	<5.0	<5.0	<1.0	2.0	520.0	12.	2.	З,

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CQ (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	MO (ppm)	HN (ppm)	CUZN	EIS	FE
VA08455	323.00	324.00	680.0	12.0	71.0	<0.5	7.0	6.0	5.0	<5.0	<5.0	<1.0	1.0	550.0	14.	2.	3.
VA08456	324.00	325.00	730.0	20.0	77.0	<0.5	5.0	6.0	6.0	<5.0	<5.0	<1.0	2.0	610.0	21.	1.	3.
VA08457	352.00	353.00	990.0	6.0	62.0	<0.5	6.0	8.0	4.0	<5.0	<5.0	<1.0	2.0	200.0	9.	2.	2.
VA08458	353.00	354.30	1100.0	12.0	51.0	<0.5	6.0	12.0	8.0	10.0	24.0	<1.0	5.0	230.0	19.	5.	4.
VA08459	354.30	355.00	1300.0	4.0	36.0	<0.5	<5.0	8.0	6.0	6.0	6.0	<1.0	4.0	270.0	10.	2.	1.
VA08460	355.00	356.00	1100.0	6.0	36.0	<0.5	15.0	10.0	4.0	<5.0	5.0	<1.0	3.0	250.0	14.	2.	1.
VA08461	356.00	357.40	1100.0	10.0	76.0	<0.5	<5.0	10.0	4.0	5.0	8.0	<1.0	4.0	310.0	12.	2.	2.
VA08462	357.40	358.40	1400.0	10.0	97.0	<0.5	8.0	10.0	5.0	<5.0	<5.0	<1.0	3.0	470.0	9.	2.	2.
VA08463	359.70	360.70	760.0	30.0	71.0	<0.5	8.0	10.0	16.0	<5.0	<5.0	<1.0	4.0	660.0	30.	2.	3.
VA08464	362.70	364.00	760.0	12.0	374.0	<0.5	7.0	14.0	8.0	7.0	15.0	2.0	4.0	390.0	3.	5.	з.
VA08465	364.00	365.00	690.0	6.0	59.0	<0.5	8.0	6.0	4.0	<5.0	<5.0	<1.0	2.0	410.0	9.	1,	3.
VA08466	365.00	366.00	700.0	10.0	71.0	<0.5	8.0	8.0	6.0	<5.0	<5.0	<1.0	2.0	540.0	12.	1.	з.
VA08467	366.00	367.00	1000.0	10.0	59.0	<0.5	8.0	14.0	4.0	5.0	<5.0	<1.0	2.0	520.0	14.	2.	2.
VA08468	369.80	371.00	2500.0	8.0	52.0	<0.5	<5.0	12.0	4.0	<5.0	<5.0	<1.0	2.0	710.0	13.	1.	з.
VA08469	371.00	372.00	1100.0	12.0	37.0	<0.5	<5.0	14.0	8.0	5.0	6.0	<1.0	3.0	480.0	24.	4.	2.
VA08470	375.00	376.00	570.0	4.0	49.0	<0.5	<5.0	4.0	6.0	<5.0	<5.0	<1.0	3.0	1020.0	8.	2.	з.
VA08471	419.00	420.00	700.0	22.0	53.0	<0.5	<5.0	14.0	12.0	<5.0	<5.0	<1.0	3.0	1150.0	29.	1.	4.
VA08472	420.00	421.00	840.0	32.0	56.0	<0.5	<5.0	14.0	10.0	<5.0	<5.0	<1.0	3.0	1000.0	36.	2.	4.
VA08473	421.00	422.00	740.0	1.0	35.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	800.0	з.	1.	з.
VA08474	429.70	430.70	970.0	4.0	39.0	<0.5	<5.0	6.0	4.0	<5.0	<5.0	<1.0	3.0	940.0	9.	з.	3.
VA08475	430.70	431.30	2200.0	12.0	23.0	<0.5	<5.0	12.0	8.0	<5.0	5.0	<1.0	3.0	720.0	34.	3.	з.
VA08476	431.30	432.00	2600.0	8.0	16.0	<0.5	<5.0	10.0	8.0	<5.0	6.0	<1.0	3.0	505.0	33.	5.	3.
VA08477	432.00	433.00	1800.0	4.0	41.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	2.0	1200.0	9.	3.	2.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	្ត (ពុទ្ធ)	ZN (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm)	PB (ppm)	AS (pp=a)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE

VA08478	433.00	434.00	1600.0	8.0	44.0	0.5	9.0	6.0	4.0	<5.0	6.0	<1.0	3.0	1200.0	15.	з.	3.
VA08479	434.00	435.00	1400.0	11.0	34.0	1.7	47.0	10.0	4.0	<5.0	26.0	<1.0	4.0	790.0	24.	5.	з.
VA08480	435.00	436.00	1200.0	15.0	48.0	0.8	206.0	6.0	6.0	<5.0	17.0	<1.0	2.0	950.0	24.	3.	2.
VA08481	436.00	436.90	380.0	72.0	99.0	2.4	20.0	12.0	28.0	15.0	430.0	<1.0	5.0	800.0	42.	3.	5.
VA08482	436.90	437.70	1000.0	16.0	78.0	1.0	22.0	6.0	6.0	7.0	50.0	<1.0	3.0	290.0	17.	3.	2.
VA08483	437.70	439.00	730.0	33.0	64.0	0.7	12.0	16.0	20.0	7.0	36.0	<1.0	3.0	1000.0	34.	2.	4.
VA08484	439.00	440.00	760.0	33.0	73.0	1.1	21.0	12.0	12.0	13.0	39.0	<1.0	3.0	380.0	31.	2.	3.
VA08485	440.00	441.10	910.0	18.0	69.0	<0.5	19.0	4.0	4.0	9.0	20.0	<1.0	5.0	345.0	21.	2.	2.
VA08486	441.10	442.00	910.0	12.0	40.0	<0.5	8.0	4.0	4.0	<5.0	7.0	<1.0	4.0	700.0	23.	1.	2,
VA08487	445.60	446.60	810.0	8.0	38.0	<0.5	6.0	4.0	4.0	<5.0	5.0	<1.0	3.0	710.0	17.	1.	2.
VA08488	446.60	447.20	870.0	12.0	75.0	0.8	26.0	8.0	20.0	<5.0	14.0	<1.0	4.0	750.0	14.	4.	3.
VA08489	447.20	448.00	980.0	12.0	35.0	<0.5	23.0	6.0	4.0	<5.0	<5.0	<1.0	3.0	800.0	26.	4.	з.
VA08490	448.00	449.00	1000.0	16.0	55.0	<0.5	<5.0	8.0	24.0	<5.0	<5.0	<1.0	3.0	800.0	23.	1.	2.
VA08491	457.00	458.00	490.0	12.0	73.0	<0.5	<5.0	12.0	18.0	<5.0	5.0	<1.0	3.0	1400.0	14.	2.	4.

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Summary Log: DDH CH88-66 Location: 29+50 W, 5+01 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 10, 1988 Core Logged By: D.P. Money

0.0 -7.9 Casing. 7.9 - 128.5 Gabbro. 128.5 - 149.5 Epidote spotted mafic tuff. 149.5 - 152.8 Andesitic ash tuff. 152.8 - 198.3 Epidote spotted mafic tuff. 198.3 - 215.0 Tuffaceous conglomerate. 215.0 - 220.6 Cherty argillites. 220.6 - 224.0 Mafic ash tuff. Chloritic felsic lapilli tuff. 224.0 - 228.0 228.0 End of hole.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-66 1 DIAMOND DRILL LOG Hole Location: 29+50 W 5+01 S Claim No. Holyoak 2 NTS: 0928/13 UTM: Section No.: Section 29+50 West, Holyoak Claim Group Azimuth: 180 Elevation: 806 m Dip: -50 Length: 228.0 m Logged By: D.P. Money Drilling Co.: Burwash Enterprises Started: June 5, 1988 Assayed By: Bondar-Clegg and X-Ray Assay Completed: June 10, 1988 Core Size: NO Purpose: To develop a stratigraphic section. DIP TESTS Azi-Azi-Length muth Dip Length muth Dip 15.20 ~50.5 228.00 -52.0 106.70 -50.5 From To Sample From To Width Total Cu Рb Zn Ag Au Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 7.9 OVERBURDEN .0 Gabbro pebbles and very oxidized blocky, highly fractured core. No chit to mark start of coring, bedrock probably starts at 7.5 m. 7.9 128.5 FELDSPAR PORPHYRITIC GABBRO 7.9 19.4 Medium grained with approximately 35 to 40 %, 1.5 VA01212 9.0 39.0 30.0 318 n/a 58 85 n/a n/a n/a to 4 mm, feldspars and 3 to 5 %, < 2 mm, VA02076 22.8 24.0 1.2 0 155 < 5 85 <1 <5 100 ilmenite with leucoxene and sphene rims in VA02077 25.5 24.0 1.5 0 158 ٢5 79 <1 <5 70 fine-grained medium to light green matrix. Is VA02078 27.0 26.0 <5 77 ٢5 250 1.0 0 190 <1 oxidized to depth of 12.8 m. There is moderate VA02079 27.0 28.5 1.5 0 180 <5 70 <1 ٢5 80 very local fracture controlled epidote veinlets. VA01213 40.0 75.0 35.0 345 n/a 69 n/a 147 n/a n/a Locally there is fine-grained gabbro with 3 to 5 VA02080 64.6 65.3 270 32 <1 <5 .7 0 ٢5 20 % brown sphene. At 17.0 there are up to 1 cm VA02081 77.6 78.6 1.0 0 150 <5 75 <1 <5 30 chalcopyrite clots in a 10 cm quartz - calcite VA02082 78.6 80.2 1.6 0 190 ٢5 70 $\langle 1 \rangle$ <5 250 80.0 vein. VA01214 95.0 15.0 n/a 310 n/a 70 n/a n/a 97 19.4 19.8 STRONG PERVASIVE EPIDOTIZATION as strong VA01215 100.0 125.0 25.0 318 n/a 73 72 n/a n/a n/a replacement of feldspars in rock same as from 7.9 to 19.4. 19.8 22.8 Similiar to 7.9 to 19.4 with slightly more local fracture controlled and pervasive weak to moderate epidotization from 19.8 to 21.0. 22.8 26.6 Dark to locally light green siliceous gabbro with 5 to 25 % dark to reddish brown sphene (?), with average approximately 15 to 17 %. There are numerous fracture controlled calcite and quartz veins and veinlets. Sphene has no crystal shape and averages 3 to 4 mm clots. 26.6 27.6 Similiar to 19.8 to 22.8 with trace to 1 % hematite and approximately 5 % sphene.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) -----DESCRIPTION-----

Sample From To Width Total Cn Ph An Zn λα Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

CH88-66

HOLE No: Page Number

27.6 28.0 Similiar to 22.8 to 26.6 with strong lineation at 70 to 90 degrees to core axis.

- 28.0 28.5 As from 26.6 to 27.6, but with lineation.
- 28.5 85.8 Medium grained with 35 to 40 %, 1 to 3 mm
 - feldspars in up to 5 mm clusters. Averages 2 to 3 % ilmenite with approximately 3 % sphene (?). purple mineral rimming ilmenite. Matrix is chloritic and fine-grained to equigranular to the feldspars with less developed crystals than the moderately developed feldspar laths. There is weak local pervasive epidotization associated with minor fracture controlled epidote veins and veinlets.
- 33.7 20.0 Cm zone occupying 33 % of the core of same as 22.8 to 26.6 with minor sphene persisting into gabbro for 1 cm.
- 49.9 50.1 Approximately 5 cm fault slip to breccia at 20 degrees to core axis.
- 61.9 62.0 Minor fine-grained glassy zone.
- 63.4 63.5 Same as 61.9 to 62.0.
- 63.5 63.8 Medium grained gabbro with minor approximately 1 cm chloritic shears at 42 degrees to core axis.
- 64.6 65.3 STRONG SPOTTY EPIDOTIZATION as coarse epidotized feldspars as 10 to 20 cm zones in minor fine-grained zone with 1 to 2 % chalcopyrite from 64.7 to 64.8.
- 70.4 70.8 Locally bleached and fine-grained with feldspar - carbonate vein, 3 to 5 % brown sphene and trace chalcopyrite.
- 77.6 80.2 Medium to fine-grained gabbro with trace to 5 % brown sphene and approximately 2 % yellow feldspar - carbonate veinlets with trace local brecciation. Is bleached at veinlets.
- 85.1 85.6 Locally fine-grained with minor zones of strong epidote.
- 85.8 86.0 Fine-grained with feldspar calcite veins and approximately 15 to 20 % brown sphene.
- 66.0 87.3 Fine-grained medium green to grey with moderate fracture controlled epidote. There is minor sphene, leucoxene and ilmenite, total aprx 4 %.
- 87.3 96.4 Medium grained medium green to grey with approximately 30 % 2 to 4 mm feldspar clots and on average 1.5 % ilmenite, locally with up to 1 % leucoxene as rims to the ilmenite. There is 1 to 2 % fracture controlled epidote and calcite as veinlets at orientations of 0 to 80 degrees to core axis.
- 96.4 97.3 Fine-grained glassy with spotty epidotization and minor quartz veins.
- 97.3 115.6 Medium to fine-grained with 15 to 20 %. 2 to 3 mm, feldspar clots and 1 % ilmenite with 2 %

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

leucoxene in fine-grained light to medium grevish green matrix.

-----DESCRIPTION-----

- 112.5 112.8 4 cm thick white calcite quartz sericite (?) vein, folded.
- 115.6 126.4 Fine-grained with minor up to 1 m medium grained zones as from 97.3 to 115.6. There is weak fracture controlled epidotization with minor up to 10 cm zones of moderate pervasive epidotization. Feldspars average 3 to 5 %, 1 to 3 mm clots. There is approximately 1 to 2 % combined ilmenite and leucoxene.
- 126.4 126.6 Brown strongly altered gabbro with fracture controlled yellow feldspar and carbonate veinlets.
- 126.6 128.1 Gabbro (?) with approximately 3 %, 1 to 2.5 mm feldspars, and approximately 7 %, 1 to 2 mm, mafic crystals. There is weak fracture controlled epidotization.
- 128.1 128.5 Brown alteration, similiar to 126.4 to 126.6.

Lost core :. 11.0 14.0 : 0.1 m. 14.0 16.5 : 0.4 m. 18.0 18.9 : 0.2 m. 23.2 : 0.2 m prior to chit. 25.5 : 0.3 m prior to chit. 30.8 33.4 : 0.2 m. 39.2 40.5 : 0.3 m. 51.8 53.0 : 0.5 m. 53.0 54.3 : 0.4 m. 63.4 : 0.3 m prior to chit. 72.2 74.4 : 0.2 m. 101.3 102.7 : 0.3 m. 115.5 117.3 : 0.2 m.

128.5 149.5 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF

Medium to dark green to brown mafic tuff with approximately 25 % epidotized lapilli and variable crystals in the matrix, average approximately 10 %, up to 1 mm, mafic crystals and approximately 10 % feldspar crystals. There is moderate to strong fracture controlled carbonatization associated with the epidote. Is contorted with moderate epidotization and carbonatization from 130.0 to 132.5 with trace chalcopyrite specks associated with the alteration. In 10 cm alteration spot at 144.7 there is pink mineral, zoisite (?) in core of epidote -(calcite) altered lapilli. From 144.85 to 145.05 there is light brown sediments. At upper contact there is blocky, highly fractured core with fracture controlled hematite

VA01216	128.5	149.5	21.0	n/a	245	n/a	23	n/a	n/a	230
VA02083	130.0	131.2	1.2	0	340	< 5	42	(1	<5	90
VA02084	131.2	132.5	1.3	0	780	<5	46	<1	<5	260

HOLE No: Page Number CH88-66 3

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm)

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VA01217 149.5 152.8 3.3

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-66 4

From	То	
(m)	(m)	DESCRIPTION

Sample From То Width Total Cu Pb Zn Aα Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

and very strong epidotization for approximately 0.5 m. Epidote locally fills round < 1 cm cavities, vesicles or amygdules (?). Calcite in epidote is locally very angular as if replacing fragments. Foliations :. 129.3 : 37 degrees to core axis. 136.7 : 38 degrees to core axis. 142.5 : 31 degrees to core axis. 145.4 : 39 degrees to core axis. Lost core :. 137.7 138.0 : 0.2 m in blocky, highly fractured core. Alteration :. 128.5 149.5 STRONG SPOTTY EPIDOTIZATION. 128.5 149.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

149.5 152.8 INTERMEDIATE TUFF

Fine-grained light green andesitic rock with trace to 0.5 % quartz eyes, approximately 2 % epidote grains to (?) vesicles and weak to moderate fracture controlled epidotization and carbonatization. Is very massive with calcite filled tension gashs perpendicular to the fracture controlled epidote veinlets. Locally there are up to 3 % chloritic grains, probably after mafic crystals.

152.8 162.7 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF

Similiar to 128.5 to 149.5. Massive dense mafic. Locally crystal rich, approximately 25 % mafic crystals and 30 % epidotized feldspar crystals, all < 1 mm to massive epidote. Strong spotty epidotization or epidotized lapilli constitute approximately 30 % of the core. Epidote is associated with trace local pink zoisite and fracture controlled white calcite veinlets. Matrix is dark green black to medium green in colour. From 160.4 to 161.0 there is approximately 1.5 % chalcopyrite in fractures in strongly epidotized tuff with fracture controlled black chlorite. There is trace chalcopyrite in the rest of the interval. Locally, up to 10 cm thick, occurences of magnetite exist in calcite in strongly altered and veined zones throughout the unit, most notably at 158.5 and 162.7. There is approximately 30 % magnetite over 10 cm at 162.7 and over 5 cm at 158.5. Chalcopyrite occurs in trace amounts with the magnetite, except at 162.7, where there is aprx 5 % chalcopyrite from 162.5 to 162.7. Fracture controlled quartz veinlets occur locally in the strongly epidotized areas. Is not foliated. Alteration :.

152.8 162.7 STRONG SPOTTY EPIDOTIZATION.

152.8 162.7 STRONG FRACTURE CONTROLLED CARBONATIZATION. 152.8 162.7 WEAK FRACTURE CONTROLLED SILICIFICATION.

VA01218 153.0 162.0 9.0 n/a 144 22 n/a 10 n/a n/a VA02085 159.0 160.4 0 30 < 5 56 (1 ٢5 60 1.4 1820 <5 54 <1 20 VA02086 160.4 161.0 .6 2 120 VA02087 161.0 162.3 0 23 <5 42 (1 ٢5 30 1.3 <5 42 VA02088 162.3 162.8 . 5 3 2600 $\langle 1 \rangle$ 27 120

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n/a

n/a

37 n/a

77

n/a

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To

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(m) (m)

152.8 162.7 MODERATE SPOTTY CHLORITIZATION.

162.7 164.0 MAFIC TUFF

Fine-grained massive medium green tuff with approximately 15 % very fine-grained mafic crystals and 30 % fine-grained feldspar crystals. There local fracture controlled epidote and calcite veinlets. Trace to 2 % chloritized 1 to 3 mm hornblendes (?) occur.

-----DESCRIPTION------

164.0 198.3 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUFF Similiar to previous mafic lapilli tuffs. Grev to dark green to black matrix with on average 15 % lapilli or alteration spots. Is massive and may locally be pervasively silicified. There are on average 20 % crystals in the matrix, mostly up to 1 mm epidotized feldspars with locally up to 1 m of up to 7 % mafic. crystals. Locally there are 25 % (?) vesicles from 164.4 to 164.9, and very locally between 193.5 and 196. There is weak to moderate fracture controlled carbonatization, chloritization and silicification associated with the epidotized lapilli or epidotization. From 171.7 to 172.8 there is approximately 1 % chalcopyrite and 5 % magnetite associated with fracture controlled veinlets and carbonatization as before. From 188.7 to 189.4 there is approximately 1.5 % chalcopyrite blebs in calcite and epidote spots in moderately silicified grey fine-grained tuff. At 194.6 there is trace chalcopyrite in a quartz vein. There is minor pink zoisite (?) in the epidote clots from 164 to 169. There is minor chalcopyrite blebs associated with epidotization at 191.1 and 192.9. There is weak variable foliation at 45 to 90 degrees to core axis locally with weak fracture controlled hematite.

Alteration :.

164.0 198.3 STRONG SPOTTY EPIDOTIZATION. 164.0 198.3 WEAK FRACTURE CONTROLLED CARBONATIZATION. 188.7 190.0 MODERATE PERVASIVE SILICIFICATION.

Lost core :. 182.0 184.4 : 0.2 m.

198.3 215.0 TUFFACEOUS CONGLOMERATE

Felsic to locally mafic matrix with small pebble to cobble sized clasts. From upper contact to approximately 200 m there are approximately 15 to 20 % 2 cm long and 0.5 cm wide grey cherty clasts, 10 % up to 1.5 cm rounded epidote clasts and minor sand sized quartz grains in felsic matrix. From approximately 200 to 210 m there are

VA01219	164.0	184.0	20.0	n/a	131	n/a	25	n/a	n/a	160
VA02089	170.7	171.7	1.0	0	92	< 5	51	(1	(5	190
VA02090	171.7	172.8	1.1	1	360	< 5	55	<1	7	150
VA02091	172.8	174.0	1.2	0	80	< 5	50	<1	< 5	110
VA01220	184.0	198.0	14.0	n/a	346	n/a	49	n/a	n/a	123
VA02092	187.7	188.7	1.0	0	460	< 5	82	<1	< 5	260
VA02093	188.7	189.4	.7	2	1080	< 5	35	<1	<5	40
VA02094	189.4	190.4	1.0	0.	63	· <5	20	<1	< 5	90

HOLE No: Page Number

Cu

5

Рb

Zn

(ppm) (ppm)

Ag

(ppm)

An

Ba

(ppb) (ppm)

CH88-66

Total .

Sulphides (ppm)

Sample From

(m)

No.

То

(m)

Width

(m)

VA01221 199.0 215.0 16.0 n/a 177 n/a 22 n/a n/a 142

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-66 6 DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn Aα An Ba (m) (m) -----DESCRIPTION-----(m) Sulphides (ppm) No. (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) large cobbles or brecciated felsic and mafic ash tuffs with fracture controlled chlorite, calcite and hematite. From 210 to 215 is similiar to from the upper contact to 200 m with addition of argillite clasts and epidotized cobbles. Bedding :. 213.1 : 69 degrees to core axis. 213.4 : 62 degrees to core axis. 215.0 220.6 CHERTY SEDIMENTS (BLACK ARGILLITE AND SILTSTONE WITH MINOR GREYWACKE) Dark grey to brown to black cherty argillaceous sediments VA02095 215.0 216.0 1.0 0 18 <5 34 <1 <5 1000 with approximately 20 % tuffaceous material interbedded VA02096 216.0 217.5 1.5 0 88 <5 30 <5 290 (1 and as clasts. At 216.0 there is strong fracture VA02097 217.5 219.0 1.5 0 120 (5 25 <1 (5 240 controlled hematite, which is locally weakly fracture VA02098 219.0 220.6 1.6 0 124 11 175 (1 <5 360 controlled. From 215.0 to 215.8 there is strong fracture controlled carbonatization, moderate to weak from 215.8 to 219.5. Tops is unclear with fining and load structures indicating both up- and down-hole. Bedding :. 216.2 : 31 degrees to core axis. 217.1 : 37 degrees to core axis. 218.8 : 31 degrees to core axis. Lost core :. 219.5 220.4 : 0.4 m. 220.6 224.0 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Epidote spotted mafic tuff with approximately 15 % VA01222 221.0 224.0 3.0 n/a 139 n/a 13 n/a n/a 397 average, 5 to 25 %, 1 to 2 mm, epidote grains in the matrix. There are minor fracture controlled hematite and quartz veinlets. From 223.6 to 224.0 there is approximately 2 % fracture controlled pyrite and a chalcopyrite bleb occurs at 221.8 in epidote. Blocky, highly fractured core. Massive with negligible foliation. Lost core :. 220.4 221.6 : 0.4 m. 221.6 223.1 : 0.7 m. 223.1 226.5 : 0.6 m. 224.0 228.0 CHLORITIC FELSIC LAPILLI TUFF VA01223 224.0 228.0 4.0 Siliceous grey to weakly pink and brown tinged felsic n/a 103 n/a (10 n/a n/a 1460 lapilli in chloritic matrix with approximately 10 %, 1 to

2 mm, quartz eyes and 5 %, 1.5 mm, feldspars in the matrix. Approximately 80 % lapilli. There are

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PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

No.

From To

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om	то	
(m)	(m)	DESCRIPTION

approximately 2 % brown micaceous (< 1 mm specks in the lapilli. There is weak to moderate local fracture controlled carbonatization in lapilli and matrix.

Foliations :.

225.6 : 52 degrees to core axis. 225.8 : 25 degrees to core axis. 226.8 : 30 degrees to core axis. 227.1 : 28 degrees to core axis. 227.5 : 49 degrees to core axis. Bedding :. 224.1 : 23 degrees to core axis.

End of hole: 748 feet (228.0 m) on Friday June 10, 1988 at 12:45 p.m.

Total lost core = 6.3 m; % Recovery = 97.2 %.

Acid tests taken as Sperry-Sun replacement single-shot did not arrive in time.

HOLE No: Page Number CH88-66 7

Sample From Width То Total Cu Pb Zn Ag Au (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb)

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	TO	25102	XAL203	ZCAO	XKGO	XNA20	XK20	ZFE203	XT 102	ZP205	ZHNO	XLO I	SUM	 BA	AI	NACA
VA00790	16.00	16.50	48.60	15.00	11.10	5.05	2.24	0.57	12.90	2.44	0.22	0.19	2.00	100.31	180.	30.	13.
VA00791	25.50	26.00	47.80	15.00	7.20	2.94	1.34	1.03	11.30	2.57	0.22	0.12	10.80	100.32	126.	32.	9.
VA00792	39.00	39.50	49.10	15.20	11.10	4.87	2.69	0.19	12.30	2.31	0.21	0.17	2.23	100.37	57.	27.	14.
VA00793	56.50	57.00	49.80	14.30	11.00	5.11	2.84	0.14	12.20	2.26	0.21	0.17	2.16	100.19	56.	28.	14.
VA00794	90.00	90.50	48.70	13.70	10.70	6.07	2.62	0.26	13.20	2.42	0.21	0.20	1.93	100.01	104.	32.	13.
VA00795	112.00	112.50	48.00	13.40	10.70	6.01	2.25	0.22	13.30	2.42	0.22	0.19	3.23	99.94	117.	32.	13.
VA00796	127.00	127.50	48.30	13.50	9.73	5.70	2.34	0.05	14.30	2.76	0.26	0.20	3.08	100.22	68.	32.	12.
VA00797	128.10	128.20	47.70	14.00	5.06	2.98	2.26	0.57	12.20	2.90	0.26	0.17	12.10	100.20	212.	33.	7.
VA00798	143.00	144.00	47.20	17.60	8.07	4.72	4.52	0.91	11.60	0.84	0.25	0.20	4.08	99.99	229.	31.	13.
VA00799	150.00	150.50	45.90	17.00	13.70	5.37	2.62	0.12	12.00	0.72	0.15	0.17	2.23	99.98	43.	25.	16.
VA00800	181.10	182,10	46.40	17.20	7.82	4.73	4.28	1.25	12.10	0.72	0,19	0.15	5.08	99.92	295.	33.	12.
VA00801	225.40	225.60	63.30	19.10	3.40	0.85	8.73	1.20	0.42	0.36	0.07	0.02	2.54	99.99	1180.	14.	12.

Hole No. CH88-66 WHOLE ROCK SAMPLES

Page No.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	то	X S I 02	XAL203	XCA0	ZHGO	ZNA20	XK20	ZFE203	XT 102	ZP205	ZMNO	XLOI	SUM	BA	AI	NACA
				······································													
VA01212	9.00	39.00	47.00	14.60	11.10	4.69	2.20	0.32	12.30	2.33			5.00	99.54	85.	27.	13.
VA01213	40.00	75.00	48.30	14.60	10.70	5.14	2.40	0.32	12.40	2.29			3.47	99.62	147.	29.	13.
VA01214	80.00	95.00	47.00	13.30	10.80	6.03	2.22	0.24	12.90	2.29			4.31	99.09	97.	33.	13.
VA01215	100.00	125.00	47.90	13.70	11.10	6.05	2.14	0.19	13.40	2.45			2.54	99.47	72.	32.	13.
VA01216	128.50	149.50	45.80	17.40	10.30	3.80	3.68	0.68	11.70	0.74			5.16	99.26	230.	24.	14.
VA01217	149.50	152.80	47.00	16.60	12.00	5.34	3.15	0.15	10.60	0.71			2.16	97.71	77.	27.	15.
VA01218	153.00	162.00	42.20	17.10	18.40	3.21	0.78	0.34	13.40	0.58			3.85	99.86	10.	16.	19.
VA01219	164.00	184.00	45.00	16.40	10.90	4.51	3.21	0.90	12.30	0.68			5.39	99.29	160.	28.	14.
VA01220	184.00	198.00	42.80	16.00	13.30	4.77	2.09	0.39	13.00	0.70			6.31	99.36	123.	25.	15.
VA01221	199.00	215.00	44.70	15.70	16.40	4.41	0.94	0.38	12.00	0.53			4.23	99.29	142.	22.	17.
VA01222	221.00	224.00	60.30	17.60	3.98	1.91	6.82	0.41	5.73	0.30			2.54	99.59	397.	18.	11,
VA01223	224.00	228.00	67.50	16.90	2.87	1.28	6.22	1.76	0.66	0.35			2.62	100.16	1460.	25.	9.

Hole No. CH88-G6 ALTERED SAMPLES

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			DIAN	10ND	DR	ILL	COR (M)	E L Inor	ITHC Elemi)GEO Ents)	СНЕІ	IICA	LF	ECO
SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	M0 (ppm)	NN (ppm)
11402026	22 60	34.00	100.0	155 0	05 A	(A 5	···							
VH02078	22.00	24.00	100.0	133.0	80.0	(0.5	<5.0	24.0	36.0	<5.0	<5.0	<1.0	3.0	1340.0
VA02077	24.00	25.50	70.0	158.0	79.0	<0.5	<5.0	24.0	52.0	<5.0	7.0	<1.0	3.0	1320.0
VA02078	26.00	27.00	250.0	190.0	77.0	<0.5	<5.0	24.0	52.0	<5.0	<5.0	<1.0	3.0	710.0
VA02079	27.00	28.50	80.0	180.0	70.0	<0.5	<5.0	22.0	48.0	<5.0	<5.0	<1.0	2.0	595.0

VA02076	22.80	24.00	100.0	155.0	85.0	<0.5	<5.0	24.0	56.0	<5.0	<5.0	<1.0	3.0	1340.0	65.	0.	6.
VA02077	24.00	25.50	70.0	158.0	79.0	<0.5	<5.0	24.0	52.0	<5.0	7.0	<1.0	3.0	1320.0	67.	0.	6.
VA02078	26.00	27.00	250.0	190.0	77.0	<0.5	<5.0	24.0	52.0	<5.0	<5.0	<1.0	3.0	710.0	71.	٥.	5.
VA02079	27.00	28.50	80.0	180.0	70.0	<0.5	<5.0	22.0	48.0	<5.0	<5.0	<1.0	2.0	595.0	72.	0.	5.
VA02080	64.60	65.30	20.0	270.0	32.0	<0.5	<5.0	10.0	36.0	<5.0	<5.0	<1.0	2.0	245.0	89.	٥.	2.
VA02081	77.60	78.60	30.0	150.0	75.0	<0.5	<5.0	24.0	62.0	<5.0	5.0	<1.0	3.0	1000.0	67.	0.	6.
VA02082	78.60	80.20	250.0	190.0	70.0	<0.5	<5.0	26.0	60.0	<5.0	<5.0	<1.0	3.0	820.0	73.	0.	6.
VA02083	130.00	131.20	90.0	340.0	42.0	<0.5	<5.0	30.0	43.0	<5.0	<5.0	<1.0	2.0	650.0	89.	0.	5.
VA02084	131.20	132.50	260.0	780.0	46.0	<0.5	<5.0	28.0	44.0	<5.0	<5.0	<1.0	3.0	850.0	94.	0.	6.
VA02085	159.00	160.40	60.0	30.0	56.0	<0.5	<5.0	20.0	23.0	<5.0	<5.0	<1.0	1.0	1150.0	35.	0.	З.
VA02086	160.40	161.00	120.0	1820.0	54.0	<0.5	20.0	22.0	28.0	<5.0	<5.0	<1.0	2.0	1280.0	97.	2.	4.
VA02087	161.00	162.30	30.0	23.0	42.0	<0.5	<5.0	24.0	28.0	<5.0	<5.0	<1.0	3.0	1220.0	35.	0.	4.
VA02088	162.30	162.80	120.0	2600.0	42.0	<0.5	27.0	26.0	32.0	<5.0	<5.0	<1.0	2.0	1150.0	98.	3.	6.
VA02089	170.70	171.70	190.0	92.0	51.0	<0.5	<5.0	30.0	37.0	<5.0	<5.0	<1.0	2.0	750.0	64.	0.	6.
VA02090	171.70	172.80	150.0	360.0	55.0	<0.5	7.0	32.0	40.0	<5.0	<5.0	<1.0	3.0	1000.0	87.	1.	6.
VA02091	172.80	174.00	110.0	80.0	50.0	<0.5	<5.0	22.0	26.0	<5.0	<5.0	<1.0	2.0	730.0	62.	0.	5.
VA02092	187.70	188.70	260.0	460.0	82.0	<0.5	<5.0	32.0	30.0	<5.0	<5.0	<1.0	2.0	900.0	85.	0.	5.
VA02093	188.70	189.40	40.0	1080.0	35.0	<0.5	<5.0	12.0	20.0	<5.0	<5.0	<1.0	2.0	410.0	97.	2.	2.
VA02094	189.40	190.40	90.0	63.0	20.0	<0.5	<5.0	4.0	16.0	<5.0	5.0	<1.0	19.0	310.0	76.	0.	1.
VA02095	215.00	216.00	1000.0	18.0	34.0	<0.5	<5.0	6.0	26.0	<5.0	<5.0	(1.0	5.0	210.0	35.	0.	2.
VA02096	216.00	217.50	290.0	88.0	30.0	<0.5	<5.0	6.0	32.0	(5.0	(5.0	<1.0	4.0	150.0	75.	0.	2.
VA02097	217.50	219.00	240.0	120.0	25.0	<0.5	<5.0	2.0	20.0	<5.0	(5.0	<1.0	76.0	95.0	83.	0.	1.
VA02098	219.00	220.60	360.0	124.0	175.0	<0.5	<5.0	24.0	26.0	11.0	20.0	<1.0	3.0	0.004	4]	0.	4.
			00049	10.10				2 J I V	2010	11.0	2v . v	· · · · ·	3.V	100000		••	

Hole No. CH88-66

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Summary Log: DDH CH88-67 Location: 29+50 W, 3+50 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 15, 1988 Core Logged By: D.P. Money 0.0 -16.3 Casing. 16.3 -Chloritic felsic crystal tuff. 18.6 18.6 -24.0 Mafic ash tuff. 24.0 -41.5 Variably chloritic felsic crystal tuff. 41.5 -46.9 Fault zone. 55.7 46.9 -Felsic crystal tuff. 55.7 -59.8 Mafic sill. 59.8 -88.0 Felsic quartz-feldspar phyric intrusive with trace disseminated pyrite. 88.0 - 159.6 Variably chloritic felsic crystal tuffs with minor < 2 m mafic tuff beds and mafic sills. There is 3 % disseminated pyrite from 112.3 to 115.3. 159.6 - 178.5 Hornblende phyric epidote spotted mafic tuff. 178.5 - 205.5Intercalated thin (< 1 to 7.2 m thick) felsic and mafic ash, crystal and lapilli tuffs. 205.5 - 208.7Fault zone. 208.7 - 219.9Felsic crystal tuff. 219.9 - 248.2Dominantly andesitic, (minor mafic and chloritic felsic component), crystal tuffs. 248.2 - 251.7 Chloritic felsic crystal tuff. 251.7 - 267.0 Mafic ash tuff. 267.0 - 268.2Fault zone. 268.2 - 297.4Chloritic felsic crystal tuff. 297.4 - 302.6 Intercalated thin mafic ash and felsic crystal tuffs. 302.6 - 306.3 Hornblende phyric mafic ash tuff. 306.3 - 317.0 Chloritic felsic crystal tuff. 317.0 End of hole.

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p	ROPERTV. Chemain	I V						NOLE N						
	KOFERTI. CHEMAIN	15 0	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-67	o: P	age Numb	er			
Н	lole Location: 294	+50 ₩ 3+50 S												
N	TS: 092B/13	UTM:				Cla: Sect	im No. H tion No.	lolyoak 2 : Section	29+50	West, Ho	lyoak	Claim (roup	
A	zimuth: 180	Elevation: 816 m												
	1p: -50	Length: 317.0 m				Logo Dril	ged By: Lling Co	D.P. Money .: Burwash	Enter	prises				
S	tarted: June 10,	1988				Assa	ayed By:	Bondar-Cl	egg and	d X-Ray	Assay			
C	Completed: June 15	5, 1988				Core	size.	NO						
P	urpose: To develo	pp a stratigraphic section.	DIP TESTS			COL	DILC.	112						
			Azi-		Azi-									
		Length	muth Dip L	ength	muth	Dip								
		317.00	186.0 -47.0											
From	To			Comple	. Prom	T ~	Videb	mate 1	Cu		<i></i>			D =
(m)	(m)	DESCRIPTIC	N	No.	(m)	(m)	(m)	Sulphides	(ppm)	PD (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	b) (ppm)
.0	16.3 OVERBURDEN	l whod start of soring												
	NO CHIE MA	irked Start of Coring.												
16.3	18.6 CHLORITIC	FELSIC QUARTZ-FELDSPAR CRYS	TAL TUFF	VIUSUOO	163	18 6	2 2	· · ·	40	/5	30	11	75	1100
	eyes and 1	5 % epidote grains. There i	s 1 to 2%	VR02099	10.5	10.0	2.5	4	40	()		(1		1100
	disseminat	ed pyrite. Minor fracture c	ontrolled calcite											1.
	veinlets c	occur. Foliation and possibl	y bedding are											
	16.3 18.6	WEAK PERVASIVE CHLORITIZATI	ON.											
	Lost core	:.												
	16.8 18.6	: 1.0 m.												
18.6	24.0 FELDSPAR P	ORPHYRITIC MAFIC ASH TUFF												
	Blocky, hi	ghly fractured core with mi	nor fault gouge.	VA01224	18.6	23.8	5.2	n/a 2	153	n/a (5	64 38	n/a /1	n/a (5	1120
	due to los	t core. Is locally massive	to foliated and	1402100	43.0	20.5	6.1	. 4	40		20	1	()	1100
	kinked wit	h approximately 20 %, 1 to	2 mm, epidotized											
	feldspar g Foliations	rains and on average 5 % c	alcite veinlets.											
	degrees to	core axis.	bbrowrwarerl to ro lo											
	Lost core	··												
	18.6 20.4 21.9 23 8	: 1.1 m. : 0.9 m.												
	22.5 45.0													
24 0														
44. 0	⊿8.0 CHLORITIC Weaklv chl	TELSIC QUAKTS EYE TUFF oritic felsic tuff with ann	roximately 7 %. 1 to											
	3 mm, quar	tz eyes and 2 % fracture co	ntrolled pyrite. Very											
	blocky, h 60 to 80 d	ighly fractured core. Folia egrees to core axis.	tion at approximately											

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No.

(m)

(m)

(m)

Ba

(ppm) (ppm) (ppm) (ppb) (ppm)

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

 From
 To

 (m)
 (m)

24.0 28.0 WEAK PERVASIVE CHLORITIZATION. Lost core : 23.8 26.5 : 2.0 m. 26.5 29.9 : 3.0 m.

28.0 41.5 FELSIC QUARTZ EYE TUFF

Sericitic felsic with approximately 7 %, 3 to 7 mm, average 3 to 4 mm, quartz eyes. Is brittlely deformed with numerous local 1 to 20 cm zones of fault gouge. There is trace to 1 % disseminated pyrite. Foliations and fault gouge vary from approximately 45 to 90 degrees to core axis locally. There is very weak local fracture controlled carbonatization. Lost core :. 29.9 31.4 : 0.8 m. 35.7 38.7 : 0.3 m. 38.7 39.9 : 0.5 m.

41.5 46.9 FAULT ZONE

Blocky, highly fractured core and fault gouge. Fault slips average 45 to 50 degrees to core axis. Sericitic felsic to approximately 43 m and weakly chloritic felsic guartz eye tuff with foliation at 80 to 90 degrees to core axis to 47 m. Fault gouge is locally pyrite rich. Lost core :.

42.1 44.5 : 1.1 m. 44.5 45.4 : 0.2 m. 45.4 46.9 : 0.3 m.

39.9 41.5 : 0.4 m.

46.9 55.7 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF

Sericitic felsic, moderately schistose, probably tuff. Hosts 10 to 12 %, 1 to 5 mm, clear quartz eyes and approximately 3 %, 1 to 2 mm, feldspars. There is 2 % disseminated pyrite from 46.9 to 47.7 and trace after 47.7. There is blocky, highly fractured core from 48.6 to 49.4, 50.3 to 51.2 and 52.5 to 55.2. Foliations :. 47.5 : 23 degrees to core axis. 49.6 : 26 degrees to core axis. 52.4 : 25 degrees to core axis. Lost core :. 49.4 51.2 : 0.2 m. 53.6 54.3 : 0.2 m.

VA02101	46.9	47.7	.8	2	5	۲5	8	(1	< 5	1400
VA01226	47.7	55.7	8.0	n/a	99	n/a	<10	n/a	n/a	1590

4 120

9

Sample From To Width Total Cu Pb 2n Ag Au

HOLE No: Page Number

2

VA01225 29.9 41.5 11.6 n/a 109 n/a <10 n/a n/a 1510

CH88-67

Sulphides (ppm)

55.7 59.8 MAFIC INTRUSIVE Early mafic sill.

VA02102 55.7 57.3 1.6

19 1 <5 2900

HOLE No: Page Number PROPERTY: Chemainus J.V. FALCONBRIDGE LIMITED CH88-67 3 DIAMOND DRILL LOG Width Total Cu Pb Zn Aσ Au Ba Τo Sample From То From (ppb) (ppm) -----DESCRIPTION------(m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) No. (m) (m) 13 3900 <5 17 <1 Mustard yellow tinged green mafic sill with strong VA02103 59.0 4 260 57.3 1.7 16 2300 170 6 15 <1 VA02104 59.0 59.8 . 8 5 pervasive carbonatization and approximately 3 % fine-grained disseminated pyrite. Occurs with weakly chloritized quartz eye felsic from 55.7 to 56.4 and 58.1 to 59.8 with approximately 5 to 7 % pyrite in the felsic. Upper contact at approximately 10 degrees to core axis. Lower contact at approximately 15 degrees to core axis. Minor fault slips occur sub- parallel to the contacts and foliation, which averages 15 degrees to core axis, 5 to 20 degrees to core axis locally. Alteration :. 56.0 59.0 STRONG PERVASIVE CARBONATIZATION. Lost core :. 57.3 59.7 : 0.3 m. 59.8 86.8 FELSIC INTRUSIVE 5 <5 5 <1 < 5 2800 Massive light grey siliceous felsic with on average 10 %. VA02105 59.8 62.0 2.2 1 n/a 2550 74.0 14.0 n/a 97 n/a <10 n/a VA01227 60.0 1.5 mm to 8 mm, average approximately 4 mm, quartz eyes. (5 1700 <1 VA02106 62.0 64.0 2.0 1 4 13 3 There is approximately 5 %, < 1 mm, white feldspars and <5 1400 77 clear quartz eyes. The large quartz eyes are dark grey to 4 4 <1 VA02107 64.0 66.0 2.0 1 59 5 (1 <5 2400 4 locally weakly bluish. There is trace to 1 %, average VA02108 66.0 68.0 2.0 1 <5 1900 4 35 4 <1 approximately 0.5 %, fine-grained disseminated and VA02109 68.0 70.0 2.0 1 <1 6 2600 35 5 VA02110 70.0 72.0 2.0 - 1 4 fracture controlled pyrite from 59.8 to 74.6 and trace to <1 <5 2400 4 47 4 nil after 74.6. There is minor local weak fracture VA02111 72.0 74.6 2.6 1 <5 2500 0 4 67 7 <1 76.0 1.4 controlled silicification and sericitization. Quartz eye VA02112 74.6 n/a 3940 n/a n/a (10 n/a 102 content increases and the rock becomes more siliceous VA01228 75.0 86.0 11.0 (5. 4300 6 63 5 <1 83.0 1.0 0 VA02113 82.0 downhole as the pyrite content decreases. Alteration :. 59.8 86.8 WEAK FRACTURE CONTROLLED CARBONATIZATION , very weak. Lost core :. 76.0 77.1 : 0.2 m. 84.4 85.3 : 0.2 m. 86.8 87.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Tan and green alteration zone or lapilli tuff. 80 % light brown sericitic lapilli with quartz eyes in dark green chloritic matrix with trace mariposite. Probably alteration of felsic as contacts are mainly at fractures. 87.2 88.0 FELSIC INTRUSIVE Very similiar to 59.8 to 86.8, weakly sericitic, may be tuff, very weak fracture controlled carbonatization.

88.0 90.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light green to brown altered felsic tuff with minor quartz - carbonatization veins and approximately 5 % quartz eyes

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VA01229 88.0 90.3 2.3 n/a 125 n/a (10 n/a n/a 3450

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-67 4 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Au Ba Aσ -----DESCRIPTION-----(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) in the matrix. There is minor fault gouge and blocky, highly fractured core. Foliation averages approximately 60 degrees to core axis. There is on average 1 % fracture controlled pyrite. 90.3 104.8 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Light white - yellow to locally grey felsic with 7 to 10 VA01230 91.0 104.0 13.0 n/a 103 n/a <10 n/a n/a 2010 %, 2 to 5 mm, grey quartz eyes. There is spotty local VA02114 98.4 100.0 1.6 1 4 < 5 9 <1 <5 1500 weak carbonatization. Hosts trace disseminated pyrite. Probably is tuff, similiar to (?) dome, but is much more sericitic. Weakly chloritic from 103 to lower contact. Alteration :. 90.3 104.3 WEAK SPOTTY CARBONATIZATION. Foliations :. 96.1 : 23 degrees to core axis. 96.9 : 45 degrees to core axis. 103.5 : 50 degrees to core axis. Lost core :. 102.1 104.7 : 0.2 m. 104.8 112.3 QUARTZ - SERICITE - CHLORITE SCHIST <5 1600 Sericite - chlorite to chlorite - sericite schist with VA02115 104.8 106.4 1.6 136 6 62 <1 1 approximately 3 % fine-grained quartz eyes and locally up VA01231 104.8 112.3 7.5 206 21 n/a n/a 1440 n/a n/a <5 1400 to 2 % fine-grained magnetite. There is strong pervasive VA02116 106.4 108.2 1.8 1 196 6 61 <1 and fracture controlled carbonatization. Trace fracture VA02117 108.2 110.0 1.8 1 48 6 50 <1 6 910 44 <5 1200 1 24 5 <1 controlled pyrite occurs. Is dominantly blocky, highly VA02118 110.0 112.3 2.3 fractured core. Foliations :. 106.5 : 20 degrees to core axis. 109.4 : 21 degrees to core axis. Lost core :. 104.9 106.4 : 0.4 m. 106.4 107.3 : 0.6 m. 110.3 111.9 : 0.5 m. Alteration :. 104.8 112.3 STRONG PERVASIVE CARBONATIZATION. 112.3 118.6 WEAKLY CHLORITIC FELSIC TUFF <5 1100 Variable siliceous dark grey to green felsic tuff with < 5 VA02119 112.3 113.8 1.5 3 92 <5 32 <1 % feldspar and quartz crystals. There is approximately 5 VA01232 112.3 118.6 6.3 n/a 136 n/a 14 n/a n/a 1400 % chlorite. From 112.3 to 115.3 there is 2 to 3 % VA02120 113.8 115.3 1.5 9 <5 25 <1 (5 2300 3 disseminated and fracture controlled pyrite. Locally there is weak to moderate fracture controlled carbonatization. 112.3 118.6 WEAK FRACTURE CONTROLLED CARBONATIZATION. 112.3 118.6 WEAK PERVASIVE CHLORITIZATION. Lost core :. 113.4 114.3 : 0.2 m. Foliations :.

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PROPE	SRTY: Chemainus J.V.					HOLE N	o: Pi	age Numb	er			
	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					СН88-67		5				
'rom 1	°o	Sample	From	To	Width	Total	Cu	Pb	Zn	Ag	Au	Ba
(m) ((m)DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)
	115.2 : 12 degrees to core axis.											
18.6 125	.4 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF											
	Light grey siliceous felsic tuff with variable quartz eyes	VA01233	118.6	125.4	6.8	n/a	122	n/a	<10	n/a	n/a 1	560
	and epidotized feldspars. Averages 8 % quartz eyes, up to											
	4 mm, average 2 mm, and 5 %, 2 mm, feldspars. From 123.9											
	chlorite associated with chloritic fault gouge at 22 and											
	35 degrees to core axis. There is on average 0.5 to 1 %											
	disseminated pyrite, except in the fault zone where											
	approximately 5 % occurs. There is weak to strong											
	Foliations											
	121.3 : 48 degrees to core axis.											
	123.6 : 26 degrees to core axis.											
	124.8 : 34 degrees to core axis.											
												. `
25.4 125	5.9 MAFIC TUFF											
	Mafic tuff or dyke with fine-grained margins and 15 %	VA02121	125.4	125.9	.5	5	344	<5	68	<1	< 5 2	290
	mafic and 10 % epidote crystals, up to 3 mm in the core.											
	There is strong pervasive carbonatization, fracture											
	conclutied nemacice and approximately 5 % pyrice clocs.											
5.9 133	3.2 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF											
	Coarse to fine-grained felsic crystal tuff with on average	VA01234	125.9	133.2	7.3	n/a	122	n/a	(10	n/a	n/a b	326
	epidotized feldspars. There is weak to moderate fracture											
	controlled chloritization associated with epidote rich											
	zones, possibly more mafic tuff beds. There is minor											
	fracture controlled calcite veinlets locally with											
	associated hematite.											
	127.9 : 2 cm clay fault gouge at 26 degrees to core axis.											
	Foliations :.											
	126.5 : 34 degrees to core axis.											
	130.8 : 38 degrees to core axis.											
	Lost core :. 127 0 128 3 • 0 4 m											
	121.V 120.V . 0.7 M.											
3.2 134	1.3 FELDSPAR PORPHYRITIC MAFIC ASH TUFF					_	21.0	/ F	20		· · ·	000
	TUII, (/) maile, with approximately 40 %, I to 3 mm, emidotized feldsnars in dark groon to light grow mafig to	VAU2122	133.2	134.3	1.1	2	210	(5)	28	(1	0 14	00
	felsic matrix with locally up to 3 % guartz eves. There is											
	1 to 1.5 % disseminated pyrite. Similiar to epidote rich											
	zones of 125.9 to 133.2.											

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-67 6 DIAMOND DRILL LOG From To Sample From Τo Width Total Cu Pb Zn Ag Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 134.3 144.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Medium grey weakly contorted weakly siliceous felsic tuff VA01235 135.0 144.0 9.0 n/a 108 12 n/a n/a n/a 3220 with on average 7 % epidote grains and 5 % quartz eyes. Foliation is at approximately 55 degrees to core axis. There are epidote rich zones associated with large white quartz veins, which constitute 70 % of the zones from 134.4 to 135.5 and from 137.8 to 139.3. There is on average trace to 0.5 % disseminated pyrite. Alteration :. 134.3 144.2 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 134.3 144.2 WEAK PERVASIVE CHLORITIZATION. Foliations :. 136.1 : 48 degrees to core axis. 139.5 : 31 degrees to core axis. 143.0 : 28 degrees to core axis. 144.2 144.8 FAULT ZONE Fault gouge at approximately 70 degrees to core axis. 144.8 152.6 FELSIC OUARTZ EYE TUFF Light grey to white sericitic schist with on average 10 %. VA01236 145.0 152.0 7.0 n/a 111 n/a <10 n/a n/a 1600 2 to 3 mm guartz eyes with calcite pressure shadows. There are approximately 3 % chlorite wisps. Foliation averages 17 degrees to core axis. There is trace disseminated pyrite. 152.6 152.8 MAFIC INTRUSIVE Fine-grained light green mafic sill with 40 % quartz -(chlorite) veins and 4 % disseminated pyrite. 152.8 159.6 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Variable felsic tuff, siliceous grey to very chloritic VA01237 153.0 159.6 6.6 n/a 132 n/a 17 n/a 1250 n/a green. Averages approximately 20 %, 2 mm, crystals, VA02123 156.0 157.0 1.0 3 12 <5 24 <1 22 1200 locally epidotized feldspar to quartz eye rich. From VA02124 157.0 158.0 1.0 3 156 <5 31 <1 24 1900 156.5 to 157.0 and 157.6 to 158.1 is epidote rich with VA02125 158.0 159.6 1.6 3 20 24 <5 (1 12 910 approximately 5 % disseminated and fracture controlled pyrite and may be mafic in these intervals. 152.8 159.6 MODERATE SPOTTY CHLORITIZATION. Foliations :. 154.4 : 38 degrees to core axis. 158.1 : 21 degrees to core axis. 159.6 178.5 MAFIC PORPHYRITIC MAFIC LAPILLI TUFF Light to dark green chloritic mafic with on average 20 %, VA02126 159.6 161.0 1.4 3 246 <5 49 7 890 <1 < 1 cm to 15 cm, epidote - calcite lapilli, 5 to 7 %, 1 VA01238 160.0 178.0 18.0 273 n/a n/a 42 n/a n/a 537 to 2 mm, chloritized hornblendes and 5 % epidotized VA02127 161.0 163.0 2.0 3 86 9 43 <1 7 890

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P	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-67	lo: Pi	age Numb 7	er			
From (m)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba c) (ppm)
		feldspar grains, up to 2 mm. There is moderate fracture controlled carbonatization locally with associated hematite. To 167 there is approximately 2 % disseminated and fracture controlled numite. There is trace	VA02128 VA02129 VA02130	163.0 165.0 173.0	165.0 167.0 174.0	2.0 2.0 1.0	3 3 0	76 1000 154	<5 <5 <5	48 86 65	<1 1 <1	6 6 <5	700 70 1200
		disseminated pyrite after with 10 cm of 1 % chalcopyrite at 173.4. Is massive with weak foliation trend from 30 to 45 degrees to core axis. From 177.3 to 177.5 there is 3 % chalcopyrite clots.	VAUZIJI	177.0	1/8.0	1.0	1	1020	5	44	1	34	1200
		Alteration :. 159.6 178.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION.											
178.5	180.1	FELSIC QUARTZ EYE TUFF											
		Siliceous dark to medium grey to green felsic with approximately 10 %, 2 to 3 mm, quartz eyes, weak to moderate fracture controlled carbonatization and trace fine-grained discompated purity. Folicion supergrap 30											
		degrees to core axis.											
180.1	181.6	MAFIC PORPHYRITIC MAFIC LAPILLI TUFF As from 159.6 to 178.5. Upper contact at 21 degrees to core axis and lower contact irregular.											
191 6	197 1	FRISTC MIRPTO FVF THEF											
101.0	107.1	Dirty felsic tuff with approximately 5 % wisps of argillaceous material. There are approximately 2 to 3 %, 1 to 2 mm, quartz eyes. There is trace disseminated pyrite	VA01239	182.0	187.0	5.0	n/a	132	n/a	<10	n/a	n/a	1530
		and minor local moderate fracture controlled carbonatization as calcite veinlets. Is cherty and siliceous with strong foliation, parallel to bedding (?),											
		at 20 to 25 degrees to core axis.											
187.1	194.2	FELDSPAR PORPHYRITIC MAFIC ASH TUFF	V802132	197 1	189 0	1 0	. 1	70	/5	50	/1	٩	1 800
		fine-grained with on average 20 to 25 %, < 1 mm, epidote grains and up to 5 % calcite grains locally. There is on average 2 % disseminated pyrite.	VA01240 VA02133 VA02134	187.1 187.1 189.0 191.0	194.1 191.0 192.0	7.0 2.0 1.0	n/a 1 2	127 150 30	n/a 6 (5	58 91 95	n/a (1 (1	n/a <5 <5	1970 1700 1700
		Alteration :. 187.1 194.2 STRONG PERVASIVE CARBONATIZATION. Lost core :. 188.1 191.1 - 0.4 m.	VA02135 VA02136	192.0 193.0	193.0 194.1	1.0 1.1	3 3	50 52	(5 6	77 63	<1 <1	<5 <5	2300 1800
		Foliations :. 188.7 : 12 degrees to core axis. 193.3 : 22 degrees to core axis.			25 1								
													ан 199
194.2	201.4	FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Medium grey to green felsic crystal tuff with on average 5	VA01241	194.2	201.4	7.2	n/a	143	n/a	<10	n/a	n/a	1030

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-67 8 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Ag Au Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) %, 1 mm, feldspars and 10 %, 1 to 3 mm, guartz eyes. Is massive and siliceous. There is weak local fracture controlled carbonatization and trace to nil disseminated pyrite. 201.4 203.0 FELDSPAR PORPHYRITIC MAFIC ASH TUFF VA02137 201.4 203.0 1.6 Medium to dark green mafic with on average 15 %. 1 mm. <5 1200 3 156 <5 91 <1 feldspars, 2 % pyrite and trace chalcopyrite. Is layered with one bed hosting 5 % magnetite. There is minor kinking and foliation is sub- parallel to the core axis. There is strong pervasive and fracture controlled carbonatization. 203.0 205.5 CHLORITIC FELSIC QUARTZ EYE TUFF Dirty cherty felsic with weak green colour, due to chlorite, and 7 %, < 1.5 mm, guartz eyes. There is weak fracture controlled carbonatization and calcite in the pressure shadows around the quartz eyes. 203.0 205.5 WEAK FRACTURE CONTROLLED CARBONATIZATION. 205.5 208.7 FAULT ZONE Blocky, highly fractured core, fault gouge and chloritic felsic tuff. Motion is sub-parallel or parallel to the core axis. Lost core :. 206.3 208.2 : 0.1 m. 208.7 219.9 FELSIC OUARTZ EYE TUFF Light grey to locally very weakly chloritized green with VA01242 209.0 219.9 10.9 n/a 110 n/a 29 n/a n/a 905 on average 7 %, 1 to 3 mm, quartz eyes. There is minor epidote rich zones towards local with mafic. There is trace disseminated pyrite. Foliations :. 209.0 : 23 degrees to core axis. 210.3 : 18 degrees to core axis. 211.5 : 18 degrees to core axis. 214.2 : 17 degrees to core axis. Lost core :. 212.0 213.7 : 0.3 m. 217.0 220.1 : 0.4 m. Alteration :. 208.7 219.9 MODERATE SPOTTY CARBONATIZATION. 219.9 248.2 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Light green quartz - chlorite - sericite schist to tuff VA01243 220.0 245.0 25.0 n/a 120 n/a 31 n/a n/a 2180 <5 1200 VA02138 228.0 229.5 1.5 <5 69 with up to 2 %, 2 mm, quartz eyes and 10 %, 1 to 2 mm, 1 6 · <1 6 <5 62 <1 11 1500 epidote grains. May be intermixed chloritic felsic and VA02139 232.0 233.0 1.0 1

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-67 9 DIAMOND DRILL LOG From То Sample From To Width Total Cu Pb Zn Ag Au Ba -----DESCRIPTION-----(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) mafic tuffs. There is variable carbonatization from weak VA02140 240.2 241.4 1.2 <5 15 <1 < 5 5300 1 6 fracture controlled to strong pervasive. There is local ٢5 VA02141 244.4 245.4 1.0 1 4 31 <1 <5 3100 fracture controlled chlorite associated with trace pyrite <5 42 - (1-<5 3000 VA02142 246.3 248.2 1.9 1 4 cubes. Carbonatization is stronger in the more mafic zones. There are minor local crystal rich beds. Pyrite occurs as trace disseminations. Bedding :. 226.7 : 16 degrees to core axis. 244.4 : 17 degrees to core axis. Foliations :. 231.2 : 38 degrees to core axis. 232.9 : 15 degrees to core axis. 244.6 : 14 degrees to core axis. 248.2 : 19 degrees to core axis. Lost core :. 238.0 239.0 : 0.2 m. 243.5 244.4 : 0.5 m. Alteration :. 219.9 248.2 MODERATE SPOTTY CARBONATIZATION. 248.2 251.7 CHLORITIC FELSIC FELDSPAR CRYSTAL THEF Chloritic felsic tuff with minor andesitic to mafic VA01244 248.2 251.7 3.5 n/a 113 n/a <10 n/a n/a 3420 interbeds. Weakly contorted with local white and pink calcite layers up to 4 mm, and up to 3 % of the rock. There is trace to 0.5 % pyrite associated with the carbonatization. Foliation and bedding average approximately 25 degrees to core axis. From 250 to 251.5 there is 0.8 m lost core in zone of blocky, highly fractured core. 248.2 251.7 MODERATE PERVASIVE CHLORITIZATION. 251.7 267.0 MAFIC TUFF Locally magnetic variably schistose mafic tuff with VA01245 252.0 267.0 15.0 n/a 136 n/a 64 n/a n/a 1340 locally up to 1 %, 1.5 mm, mafic crystals and trace to 2 %, 1 mm, feldspars. Is weakly contorted near upper contact and strongly from 257.6. There is very strong pervasive and strong fracture controlled carbonatization. No pyrite was observed. Lost core :. 252.0 253.0 : 0.3 m. 256.0 258.0 : 0.7 m. 260.6 264.0 : 0.4 m. 264.0 266.7 : 0.2 m. 266.7 268.2 : 0,3 m. Fault gouge :. Minor at 252.3 and 265.8. Foliations :. 253.5 : 25 degrees to core axis. Alteration :.

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PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-67 10

From	То		
(m)	(m)		DESCRIPTION

Sample From Width Total То Cu Pb Zn Aσ Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

251.7 267.0 STRONG PERVASIVE CARBONATIZATION.

267.0 268.2 FAULT ZONE Fault gouge and very blocky, highly fractured core. Half mafic and half felsic.

0.3 M lost core.

268.2 297.4 CHLORITIC FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Variably chloritic felsic tuff with on average approximately 3 %, 1 to 2 mm, quartz eyes and trace to 2 %, 1 mm, feldspar grains. Chloritization is fracture controlled or siliceous lapilli occur in a chloritic matrix. Locally weakly contorted. There is trace pyrite associated with fracture controlled veinlets. There is moderate fracture controlled carbonatization and calcite in pressure shadows. Both contacts at blocky, highly fractured core. Becomes more massive downhole, possibly weakly silicified. There are trace white guartz - calcite veins that cross-cut foliation. Foliations :. 270.2 : 15 degrees to core axis. 276.6 : 30 degrees to core axis. 278.1 : 21 degrees to core axis. 288.8 : 17 degrees to core axis. 293.4 : 23 degrees to core axis. Lost core :. 269.7 271.4 : 0.3 m. 296.3 298.4 : 0.8 m. Alteration :.

268.2 297.4 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 268.2 297.4 MODERATE FRACTURE CONTROLLED CHLORITIZATION.

297.4 298.4 MAFIC TUFF

Fine-grained mafic tuff to green chlorite schist with weak to moderate fracture controlled carbonatization and a 8 mm pyrite cube at 297.6 in a fracture controlled black chlorite - calcite vein. Is blocky, highly fractured core with clay fault gouge from 298.1 to 298.4. Foliation is at 72 degrees to core axis.

298.4 300.4 FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Light grey felsic tuff with approximately 5 %, 1 mm, feldspars and 3 %, 1 mm, quartz eyes. Foliation at 60 degrees to core axis. There is 0.6 m lost core between 299 and 300. There is weak fracture controlled carbonatization. VA01246 269.0 296.0 27.0 n/a 123 n/a 51 n/a n/a 1170

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Pl	ROPERT	Y: Chemainus J.V.						HOLE N	o: Pa	ge Numb	er			
			FALCONBRIDGE LIMIT DIAMOND DRILL LOG	ED				CH88-67		11				
From (m)	To (m)		DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au Ba (ppb) (ppr	n)
200 4	301 0	WIRIC MURP									•••			
300.4	301.0	Contorted carbonatize	d mafic with white quartz woing											
		contorted carbonatizes	a matte with white quartz verns.											
301.0	302.6	CHLORITIC FELSIC QUAR	TZ EYE TUFF											
		Medium green chloriti	c felsic tuff with approximately 9 ^s	€,										
		1 mm, fractured quart	z eyes with calcite and	•										
		fracture controlled a	uspars. Unioritization is strong and	3										
		301.0 302.6 WEAK PERV.	ASIVE CHLORITIZATION.											
		Foliation :.												
		302.4 : 44 degrees to	core axis.											
														•
200 6	206.2	NARTA DODDUUDINTA NAR												
302.0	306.3	Light to dark green s	IC ASH TUFF chistoge matig tuff with	1000143	202 6	204 0	1.4	1	5.0	F	204		10 1000	
		approximately 3 % maf	ic crystals. (black chlorite	VA02143 VA02143	304.0	304.0	1.4	1	24	5	204	(1	10 1800	
		specks) and trace feld	dspars and up to 1 cm epidotized	VA02145	305.0	306.3	1.3	1	16	5	207	(1	(5 1900	
		lapilli. Is strongly	sheared. Locally moderately to not					- ·		-		-		
		magnetic with nil to	2 % weakly hematized magnetite, <											
		2.5 mm crystals. There	e are 2 cm pyrite cubes at 302.9,											
		SU4.3 and SU4.5. There	e are trace minor smaller pyrite											
		chlorite veins. There	e is weak to moderate pervasive											
		carbonatization.	- 15 work to more the periods for											
		Alteration :.	· · · · · ·											
		302.6 306.3 MODERATE 1	PERVASIVE CARBONATIZATION.											
		Foliations :.												
		303.0: 57 degrees to	core axis.											
		504.2 : 55 degrees to	core axis.											
306.3	317.0	CHLORITIC FELSIC QUART	TZ EYE TUFF											
		Similiar to 268.2 to 2	297.4, but is darker in colour.	VA01247	307.0	317.0	10.0	n/a	143	n/a	62	n/a	n/a 1290	
		Glassy medium grey to	green felsic with approximately 5	*			4							
		chlorite and 5 % dark	quartz eyes. There is trace											
		with very weak local i	fracture controlled carbonatization											
		At 311.3 there is a 5	mm chalcopyrite clot in a 1 cm	•										
		quartz vein that cross	s-cuts the foliation.											
		306.3 317.0 WEAK PERVA	ASIVE CHLORITIZATION.											
		Foliations :.												
		307.8 : 35 degrees to	core axis.											
		$315.5 \div 50$ degrees to	COTE AXIS.											
		Lost core :.	COLE BAID.											
		306.7 309.1 : 0.3 m.												
		309.1 311.8 : 0.6 m.		1										
			· / · · · · · · · · · · · · · · · · · ·											
		End of hole : 1040 fee	et (317.0 m) on Wednesday June 15,											
		1988 at 1:00 p.m.												

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PROPERTY: Chemainus J.V. FALCONBRIDGE LIMITED DIAMOND DRILL LOG From To (m) (m) -----DESCRIPTION-------DESCRIPTION-------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppm) (ppm) (ppm)

Total lost core : 22.5 m, % recovery = 92.9 %.

TV. Chomainus I V

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	25102	XAL203	XCA0	ZHGO	ZNA20	ZK20	2FE203	XT 102	XP205	ZHNO	ZLOI	SUM	BA	AI	NACA
VA00802	35.00	35.50	77.60	11.40	1.10	0.41	1.11	3.11	1.12	0.23	0.07	<0.01	2.23	98.39	2320.	61.	2.
VA00803	48.20	48.60	69.30	15.40	3.28	0.76	0.57	4.70	0.64	0.30	0.07	0.01	4.39	99.42	2070.	59.	4.
VA00804	57.50	58.00	40.00	20.50	8.38	2.23	<0.01	6.95	8,20	0.83	0.56	0.05	10.00	97.70	3760.	52.	8.
VA00805	67.00	67.50	73.30	15.80	0.73	0.39	3.44	3.21	0.39	0.31	0.06	<0.01	1.62	99.26	2890.	46.	· 4.
VA00806	77.50	78.00	73.50	13.90	1.78	0.38	3.81	2.49	0.29	0.26	0.07	<0.01	2.08	98.56	3440.	34.	6.
VA00807	85.50	86.00	77.90	11.40	2.00	0.31	3.69	1.79	0.24	0.23	0.05	<0.01	2.08	99.70	1840.	27.	6.
VA00808	86.80	87.20	54.30	25.40	2.17	1.27	4.54	5.77	0.99	0.94	0.22	<0.01	4.39	99.99	2990.	51.	7.
VA00809	96.00	96.50	72.90	12.80	3.04	0.89	1.65	3.03	0.90	0.25	0.07	0.01	4.31	99.85	1440.	46.	5.
VA00810	122.00	122.40	72.50	13.50	1.82	0.76	6.63	1.16	1.65	0.27	0.05	0.02	1.39	99.75	1300.	19.	8.
VA00811	129.50	130.00	71.80	13.10	2.53	1.25	5.05	1.76	1.63	0.25	0.07	0.03	2.08	99.55	1290.	28.	8.
VA00812	148.50	149.00	64.30	15.70	5.64	1.02	<0.01	5.28	1.14	0.28	0.07	0.03	6.31	99.77	1680.	53.	6.
VA00813	154.10	154.30	69.50	13.90	2.56	2.01	2.92	2.45	3.56	0.26	0.07	0.04	3.08	100.35	1320.	45.	5.
VA00814	171.00	172.00	41.60	17.20	12.10	4.06	2.80	0.84	11.80	0.81	0.18	0.23	8.31	99.93	724.	25.	15.
VA00815	179.50	180.00	67.70	12.70	5.45	1.42	1.18	3.37	2.02	0.23	0.06	0.05	5.54	99.72	1710.	42.	7.
VA00816	197.30	198.00	71.00	12.40	2.80	2.30	4.12	1.39	2.11	0.23	0.06	0.04	3.16	99.61	1050.	35.	7.
VA00817	224.00	224.50	61.50	16.80	3.09	2.90	3.33	2.51	5.81	0.40	0.32	0.09	3.08	99.83	1390.	46.	6.
VA00818	237.50	238.00	54.20	17.10	7.13	1.58	0.04	5.31	6.04	0.46	0.38	0.09	7.23	99.56	2950.	49.	7.
VA00819	260.00	260.50	57.00	15.90	4.59	2.06	0.90	3.68	9.40	0.44	0.35	0.14	5.62	100.08	1680.	51.	5.
VA00820	274.00	274.50	64.70	18.00	0.96	1.18	1.51	4.73	4.64	0.53	0.20	0.04	3.16	99.65	1680.	71.	2.
VA00821	282.00	282.50	72.20	13.40	2.50	1.14	2.76	2.62	1.83	0.24	0.06	0.09	3.08	99.92	1080.	42.	5.
VA00822	293.00	293.50	71.30	13.40	2.22	2.03	2.26	2.59	2.01	0.24	0.06	0.10	3.47	99.68	1130.	51.	4.
VA00823	303.00	303.30	42.80	15.60	10.90	3.95	0.14	3.51	9.99	0.73	0.43	0.32	11.60	99.97	1440.	40.	11.
VA00824	311.30	311.80	73.80	11.70	2.09	1.35	2.40	2.17	2.66	0.31	0.08	0.09	2.62	99.27	1120.	44.	4.

Hole No. CH88-67 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	то	XS 102	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	21102	29205	ZHNO	ZLO I	รบห	BA	AI	NACA
VA01224	18.60	23.80	49.70	16.90	7.93	2.87	2.63	1.83	8.91	0.70			4.39	95.86	1120.	31.	11.
VA01225	29.90	41.50	73.40	13.20	1.73	0.52	1.54	3.41	1.71	0.25		-	2.47	98.23	1510.	55.	3.
VA01226	47.70	55.70	72.50	14.00	2.79	0.68	1.22	3.75	0.86	0.27			3.62	99.69	1590.	52.	4.
VA01227	60.00	74.00	74.20	13.30	2.37	0.35	3.12	2.58	0.58	0.25			2.47	99.22	2550.	35.	5.
VA01228	75.00	86.00	76.60	12.10	1.30	0.32	3.65	2.05	0.54	0.24			1.77	98.57	3940.	32.	5.
VA01229	88.00	90.30	51.40	23.70	2.58	1.75	0.04	7.75	3.51	0.86			6.00	97.59	3450.	78.	3.
VA01230	91.00	104.00	67.90	14.00	3.39	1.19	1.48	3.50	2.15	0.30			4.93	98.84	2010.	49.	5.
VA01231	104.80	112.30	49.50	18.30	6.19	2.81	1.58	3.93	8.37	0.67			7.00	98.35	1440.	46.	8.
VA01232	112.30	118.60	59.90	17.40	2.53	2.39	6.84	1.55	4.72	0.31			2.62	98.26	1400.	30.	9.
VA01233	118.60	125.40	70.30	13.10	2.45	1.18	4.57	1.83	2.83	0.26			2.08	98.60	1560.	30.	7.
VA01234	125.90	133.20	71.00	13.00	2,53	1.50	4.69	1.73	2.57	0.26			2.08	99.36	826.	31.	7.
VA01235	135.00	144.00	59.20	18.40	3.57	1.94	1.88	5.04	4.47	0.35			3.85	98.70	3220.	56.	5.
VA01236	145.00	152.00	66.90	15.30	4.05	1.17	<0.01	5.20	1.49	0.28			5.16	99.56	1600.	61.	4.
VA01237	153.00	159.60	67.90	14.10	2.91	1.70	4.29	1.88	3.84	0.31			2.54	99.47	1250.	33.	7.
VA01238	160.00	178.00	45.50	16.50	10.80	3.14	2.82	1.02	10.90	0.72			6.16	97.56	537.	23.	14.
VA01239	182.00	187.00	66.10	12.80	5.92	1.97	0.95	3.49	1.96	0.23			6.16	99.58	1530.	44.	7.
VA01240	187.10	194.10	40.80	20.60	7.04	6.29	0.40	4.64	9.89	0.68			8.70	99.04	1970.	60.	7.
VA01241	194.20	201.40	70.90	13.00	2.47	2.26	4.22	1.41	2.49	0.23			2.77	99.75	1030.	35.	7.
VA01242	209.00	219.90	68.30	13.40	3.55	1.57	0.93	3.75	2.60	0.25			4.39	98.74	905.	54.	4.
VA01243	220.00	245.00	57.70	17.60	4.58	2.49	1.64	3.84	6.39	0.47			4.93	99.64	2180.	50.	6.
VA01244	248.20	251.70	64.40	17.80	1.22	1.25	<0.01	5.71	4.31	0.50			3.00	98.19	3420.	85.	. 1.
VA01245	252.00	267.00	56.60	16.60	5.03	2.14	1.49	3.65	7.78	0.43			5.77	99.49	1340.	47.	7.
VA01246	269.00	296.00	67.60	14.40	2.66	1.76	1.91	3.21	3.00	0.29			3.85	98.68	1170.	52.	5.

HOLE NO. CH88-67 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	то	XS 102	7AL203	XCA0	ZHGO	ZNA20	XK 20	ZFE203	XT 102	ZP205	ZMNO	XLO I	SUM	BA	AI	NACA
														•			
VA01247	307.00	317.00	68.10	14.40	2.29	1.62	3.45	2.41	3.14	0.36			3.00	98.77	1290.	41.	6.

Hole No. CH88-67 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppas)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C0 (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	НН (ppm)	CUZN	ETS	FE

VA02099	16.30	18.60	1100.0	40.0	39.0	<0.5	<5.0	20.0	14.0	<5.0	<5.0	<1.0	4.0	590.0	51.	2.	4.
VA02100	23.80	26.50	1100.0	40.0	38.0	<0.5	<5.0	20.0	12.0	<5.0	<5.0	<1.0	4.0	560.0	51.	2.	4.
VA02101	46.90	47.70	1400.0	5.0	8.0	<0.5	<5.0	20.0	6.0	<5.0	<5.0	<1.0	2.0	130.0	38.	2.	1.
VA02102	55.70	57.30	2900.0	120.0	19.0	0.8	<5.0	16.0	8.0	9.0	<5.0	<1.0	2.0	310.0	86.	4.	з.
VA02103	57.30	59.00	3900.0	260.0	17.0	<0.5	13.0	20.0	8.0	<5.0	<5.0	<1.0	1.0	320.0	94.	4.	2.
VA02104	59.00	59.80	2300.0	170.0	15.0	<0.5	16.0	38.0	9.0	6.0	<5.0	<1.0	2.0	220.0	92.	5.	2.
VA02105	59.80	62.00	2800.0	5.0	5.0	<0.5	<5.0	8.0	7.0	<5.0	<5.0	<1.0	4.0	60.0	50.	1.	1.
VA02106	62.00	64.00	1700.0	4.0	3.0	<0.5	<5.0	4.0	4.0	13.0	<5.0	<1.0	6.0	50.0	57.	1.	0.
VA02107	64.00	66.00	1400.0	4.0	4.0	<0.5	<5.0	2.0	2.0	77.0	<5.0	<1.0	7.0	40.0	50.	1.	0.
VA02108	66.00	68.00	2400.0	4.0	5.0	<0.5	<5.0	<1.0	2.0	59.0	<5.0	<1.0	16.0	20.0	44.	1.	0.
VA02109	68.00	70.00	1900.0	4.0	4.0	<0.5	<5.0	<1.0	2.0	35.0	<5.0	<1.0	16.0	30.0	50.	1.	0.
VA02110	70.00	72.00	2600.0	4.0	5.0	<0.5	6.0	<1.0	2.0	35.0	<5.0	<1.0	19.0	25.0	44.	1.	0.
VA02111	72.00	74.60	2400.0	4.0	4.0	<0.5	<5.0	<1.0	4.0	47.0	<5.0	<1.0	15.0	30.0	50.	1.	0.
VA02112	74.60	76.00	2500.0	4.0	7.0	<0.5	<5.0	<1.0	4.0	67.0	<5.0	<1.0	5.0	20.0	36.	0.	0.
VA02113	82.00	83.00	4300 0	6.0	5.0	<0.5	<5.0	10.0	7.0	63.0	<5.0	<1.0	11.0	50.0	55.	0.	0.
VA02114	98.40	100.00	1500.0	4.0	9.0	<0.5	<5.0	20.0	4.0	<5.0	<5.0	<1.0	1.0	175.0	31.	1.	1.
VA02115	104.80	106.40	1600.0	136.0	62.0	<0.5	<5.0	20.0	11.0	6.0	<5.0	<1.0	3.0	540.0	69.	1.	3.
VA02116	106.40	108.20	1400.0	196.0	61.0	<0.5	<5.0	20.0	16.0	6.0	<5.0	<1.0	2.0	600.0	76.	1.	5.
VA02117	108.20	110.00	910.0	48.0	50.0	<0.5	6.0	14.0	12.0	6.0	<5.0	<1.0	2.0	740.0	49.	1.	4.
VA02118	110.00	112.30	1200.0	24.0	44.0	<0.5	<5.0	52.0	10.0	5.0	<5.0	<1.0	2.0	410.0	35.	1.	4.
VA02119	112.30	113.80	1100.0	92.0	32.0	<0.5	<5.0	54.0	8.0	<5.0	<5.0	<1.0	2.0	270.0	74.	3.	3.
VA02120	113.80	115.30	2300.0	9.0	25.0	<0.5	<5.0	30.0	7.0	<5.0	<5.0	<1.0	1.0	240.0	26.	3.	2.
VA02121	125.40	125.90	290.0	344.0	68.0	<0.5	<5.0	46.0	72.0	<5.0	7.0	<1.0	3.0	730.0	84.	5.	9.

Hole No. CH88-67

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
																	•
VA02122	133.20	134.30	1200.0	216.0	28.0	<0.5	6.0	12.0	8.0	<5.0	<5.0	<1.0	2.0	310.0	89.	2.	2.
VA02123	156.00	157.00	1200.0	12.0	24.0	<0.5	22.0	20.0	10.0	<5.0	6.0	<1.0	1.0	250.0	33.	3.	з.
VA02124	157.00	158.00	1900.0	156.0	31.0	<0.5	24.0	28.0	12.0	<5.0	9.0	<1.0	2.0	260.0	83.	3.	3.
VA02125	158.00	159.60	910.0	20.0	24.0	<0.5	12.0	10.0	8.0	<5.0	<5.0	<1.0	2.0	215.0	45.	з.	2.
VA02126	159.60	161.00	890.0	246.0	49.0	<0.5	7.0	50.0	26.0	<5.0	21.0	<1.0	2.0	505.0	83.	3.	7.
VA02127	161.00	163.00	890.0	86.0	43.0	<0.5	7.0	46.0	28.0	9.0	15.0	<1.0	2.0	470.0	67.	з.	5.
VA02128	163.00	165.00	700.0	76.0	48.0	<0.5	6.0	24.0	22.0	<5.0	5.0	<1.0	1.0	530.0	61.	з.	4.
VA02129	165.00	167.00	70.0	1000.0	86.0	0.7	6.0	32.0	26.0	<5.0	<5.0	<1.0	4.0	1230.0	92.	3.	5.
VA02130	173.00	174.00	1200.0	154.0	65.0	<0.5	<5.0	36.0	20.0	<5.0	<5.0	<1.0	3.0	1400.0	70.	٥.	7.
VA02131	177.00	178.00	1200.0	1050.0	42.0	0.7	34.0	22.0	18.0	5.0	<5.0	<1.0	3.0	920.0	96.	1.	4.
VA02132	187.10	189.00	1800.0	78.0	50.0	<0.5	9.0	46.0	34.0	<5.0	9.0	<1.0	5.0	580.0	61.	1.	4.
VA02133	189.00	191.00	1700.0	150.0	91.0	<0.5	<5.0	58.0	48.0	6.0	8.0	<1.0	3.0	810.0	62.	1.	7.
VA02134	191.00	192.00	1700.0	30.0	95.0	<0.5	<5.0	90.0	80.0	<5.0	16.0	<1.0	4.0	810.0	24.	2.	7.
VA02135	192.00	193.00	2300.0	50.0	77.0	<0.5	(5.0	92.0	69.0	<5.0	11.0	<1.0	4.0	600.0	39.	з.	6.
0402136	193.00	194.10	1800.0	52.0	63.0	(0.5	(5.0	48.0	56 0	6.0	9.0	<1.0	6.0	620.0	45.	3.	5.
11402100	301 40	202.00	1200.0	156 0		(01.5 /0 E	10.0 /E 0	(2.0	40.0	/5 A	6.0	<1 A		650 0	63	3	6
VH02137	201.40	203.00	1200.0	138.0	71.0	(0.5	(3.0	02.0	40.0	(J.)	0.0	(1.0	1.0	630.0			
VAV2138	228.00	229.50	1200.0	6.0	69.0	(0.5	<5.0	12.0	10.0	K 0. 0	<0.0	<1.V	1.0	64V.V	o.		
VA02139	232.00	233.00	1500.0	6.0	62.0	<0.5	11.0	42.0	10.0	<5.0	<5.0	<1.0	2.0	630.0	9.	1.	4.
VA02140	240.20	241.40	5300.0	6.0	15.0	<0.5	<5.0	16.0	7.0	<5.0	<5.0	<1.0	2.0	275.0	29.	1.	1.
VA02141	244.40	245.40	3100.0	4.0	31.0	<0.5	<5.0	90.0	8.0	<5.0	<5.0	<1.0	2.0	540.0	11.	1.	3.
VA02142	246.30	248.20	3000.0	4.0	42.0	<0.5	<5.0	24.0	8.0	<5.0	<5.0	<1.0	2.0	700.0	9.	. 1.	3.
VA02143	302.60	304.00	1800.0	52.0	204.0	<0.5	10.0	20.0	20.0	5.0	<5.0	<1.0	3.0	2000.0	20.	1.	5.
VA02144	304.00	305.00	1800.0	37.0	192.0	<0.5	<5.0	32.0	18.0	6.0	<5.0	<1.0	3.0	1900.0	16.	. 1.	5.

Hole No. CH88-67

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CB (ppm)	НО (ррв)	MN (ppm)	CUZN	ETS	FE
			· .										· · · ·				
VA02145	305.00	306.30	1900.0	16.0	207.0	<0.5	<5.0	16.0	20.0	5.0	<5.0	<1.0	2.0	1740.0	7.	1.	5.

Hole No. CH88-67

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Summary Log: DDH CH88-68 Location: 29+50 W, 0+05 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 18, 1988 Core Logged By: D.P. Money

C

0.0 -	4.2	Casing.
4.2 -	54.8	Mafic ash tuff.
54.8 -	69.5	Chloritic felsic crystal tuff with trace disseminated pyrite
69.5 -	118.1	Mafic to andesitic ash tuffs with minor argillaceous rich zones from 69.5 to 74.0 m and 96.7 to 106.7 m.
118.1 -	119.5	Fault zone.
119.5 -	129.6	Thin intercalated chloritic felsic and mafic tuff beds.
129.6 -	134.0	Greywacke.
134.0 -	139.8	Chloritic felsic tuffs.
139.8 -	141.0	Andesitic tuff with thin intercalated argillites.
141.0 -	141.1	Fault zone.
141.1 -	146.6	Variably chloritic felsic tuffs.
146.6 -	147.8	Mafic ash tuff with 5 % disseminated pyrite.
147.8 -	171.6	Felsic crystal tuff with trace pyrite and azurite.
171.6 -	214.9	Gabbro.
214.9		End of hole.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-68 1 DIAMOND DRILL LOG Hole Location: 29+50 W 0+05 S Claim No. Holyoak 2 NTS: 092B/13 UTM: Section No.: Section 29+50 West, Holyoak Claim Group Azimuth: 180 Elevation: 836 m Dip: -50 Length: 214.9 m Logged By: D.P. Money Drilling Co.: Burwash Enterprises Started: June 15, 1988 Assayed By: Bondar-Clegg and X-Ray Assay Completed: June 18, 1988 Core Size: NQ Purpose: To develop a stratigraphic section. DIP TESTS Azi-Azi-Length muth Dip Length muth Dip 6.10 -50.0 214.30 183.0 -46.0 97.50 179.0 -48.0 From To Sample From To Width Total Cu РЪ Zn Ag Au Ba (m) (m) -----DESCRIPTION-----No. (m) Sulphides (ppm) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) .0 4.2 OVERBURDEN No chit to mark start of coring. 4.2 54.8 MAFIC TUFF Dark to medium green fine-grained schistose mafic tuff VA01248 4.2 29.0 24.8 n/a 127 n/a 63 n/a n/a 831 with variable carbonatization, weak fracture controlled to VA01249 29.0 54.8 25.8 n/a 120 n/a 73 n/a n/a 821 moderate fracture controlled and pervasive alteration. Is VA02146 48.0 49.0 1.0 3 14 5 108 <1 <5 830 not magnetic. Very locally may be andesitic as rare quartz VA02147 49.0 50.0 1.0 3 12 5 101 (5 <1 840 eyes occur. There are minor quartz - chlorite veins at VA02148 50.0 51.8 1.8 3 13 6 90 <1 (5 950 5.8, 9.0, 36.6 and 36.9. There is trace to nil disseminated pyrite, mainly < 2 mm, pyrite cubes. Is mostly disky due to strong foliation. There is minor fault gouge, 10 to 20 cm of chloritic clay, at 26.8, 44.9, 45.2 and 52.4. From 48.0 to 51.8 is banded with minor sericitic bands and 2 to 3 % pyrite parallel to foliation. Foliations :. 8.2 : 68 degrees to core axis. 14.8 : 62 degrees to core axis. 18.9 : 50 degrees to core axis. 21.4 : 62 degrees to core axis. 25.5 : 51 degrees to core axis. 29.9 : 54 degrees to core axis. 31.1 : 60 degrees to core axis. 35.3 : 72 degrees to core axis. 39.8 : 62 degrees to core axis. 42.7 : 59 degrees to core axis. 47.4 : 60 degrees to core axis. 49.9 : 56 degrees to core axis. 51.8 54.8 Strongly contorted and kinked.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-68 2 DIAMOND DRILL LOG From To Sample From То Width Total Cu РЬ Zn Ag Au Ba -----DESCRIPTION-----(m) Sulphides (ppm) (m) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) Lost core :. 5.5 8.1 : 1.0 m. 11.6 13.4 : 0.2 m. 16.2 17.1 : 0.2 m. 18.0 19.5 : 0.3 m. 20.4 21.0 : 0.15 m. 21.0 22.6 : 0.15 m. 26.2 29.0 : 0.3 m. 32.9 34.4 : 0.4 m. 42.4 45.4 : 0.1 m, probably at 45 m in fault gouge. 45.4 47.2 : 0.2 m. 48.5 50.9 : 0.2 m. 50.9 51.8 : 0.5 m. 51.8 55.2 : 0.2 m, probably in fault gouge at 52.4. Alteration :. 4.2 54.8 MODERATE SPOTTY CARBONATIZATION. 44.0 47.2 Local weak fracture controlled hematite. 54.8 69.5 WEAKLY CHLORITIC FELSIC TUFF Variably chloritic felsic crystal to locally lapilli tuff. VA02149 54.8 56.1 1.3 16 < 5 49 <1 <5 860 1 There is weak to moderate fracture controlled VA01250 54.8 69.5 14.7 n/a 118 n/a 14 n/a n/a 882 < 5 870 VA02150 64 104 carbonatization. There are minor shear zones with late 56.1 56.6 . 5 3 5 1> 8 48 <5 1100 VA02151 58.0 ۲) <1 quartz - sericite - chlorite veins at 64.4 and 67.5. There 56.6 1.4 -1 is a contorted carbonatized mafic tuff from 64.2 to 64.4. VA02152 58.0 59.0 1.0 1 16 <5 47 <1 <5 940 <5 Becomes more chloritic downhole. From 56.1 to 56.6, 60.3 VA02153 59.0 60.3 1.3 1 52 <5 36 <1 800 53 ٢5 940 to 60.8 and 61.7 to 62.4 is strongly carbonatized with VA02154 60.3 60.8 . 5 3 5 73 <1 ٢5 920 weak biotite and 2 to 3 % fine-grained disseminated VA02155 60.8 61.7 .9 1 24 6 52 <1 VA02156 61.7 62.4 104 9 78 <1 (5 780 pyrite. There is trace disseminated pyrite elsewhere. From .7 3 VA02157 62.4 64.0 1 6 8 36 <1 <5 840 62.4 to 62.7 there is minor fault gouge and fine-grained 1.6 sulphide mud in fractures. Locally trace to 2 %, 1 to 3 mm, clear quartz eyes occur. Foliations :. 56.2 : 45 degrees to core axis. 57.3 : 42 degrees to core axis. 58.7 : 27 degrees to core axis. 59.1 : 51 degrees to core axis. 63.3 : 45 degrees to core axis. 67.1 to 45 degrees to core axis. Weakly contorted throughout interval. Alteration :. 54.8 69.5 WEAK FRACTURE CONTROLLED CARBONATIZATION. 54.8 69.5 WEAK PERVASIVE CHLORITIZATION. 69.5 74.0 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Dark black to green argillaceous tuffs with minor mafic VA02158 69.5 71.0 72 <5 77 <1 ٢5 680 1.5 2 76 6 720 104 <5 tuff component, moderate fracture controlled VA02159 71.0 72.0 1.0 2 <1

VA02160

72.0

73.0

1.0

carbonatization and approximately an average of 10 %

72

2

<5

88

<1

5 680

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PRO	PERT	Y: Chemainu	s J.V.						HOLE NO	o: Pa	ge Numb	er .			
				FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-68		4				
From	To				Sample	From	То	Width	Total	Cu	Pb	Zn	Ag	Au	Ba
(m)	(m)		DES	CRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb) (ppm)
			light grey micaceou	s (?) matrix. Strongly	VA02163	100.0	100.9	.9	1	6	(5	130	{1	31	240
			stretched parallel	to foliation. Has minor	VA02164	100.9	102.0	1.1	1	20	< 5	131	(1	19	420
			calcite veinlets th	at cross-cut (?) lapilli. Is	VA02165	102.0	103.0	1.0	1	10	(5	128	(1	٢5	480
			not magnetic. May	have weak argillite component	VA02166	103.0	104.0	1.0	. 1	4	< 5	144	<1	6	510
		100.9 104.	3 Similiar to 96.7 t	o 101.4 with argillite beds	VA02167	104.0	105.0	1.0	1	6	<5	130	<1	12	210
			or lapilli in medi	um green chlorite and	VA02168	105.0	106.0	1.0	1	2.	< 5	150	<1	8	480
			magnetic and inclu	do approximatoly 20 %	VA02169	106.0	106.7	. /	1	4	<5	143	<1	5	600
			magnetite locally	de approximatery 20 %											
		104.3 106.	7 Similiar to above	with 5 % bematite and are											
			more magnetic.												
		There is t	race disseminated py	rite cubes throughout,											
		mainly ass	ociated with the wea	k to moderate fracture											
		controlled	carbonatization.												
		Foliations	· · ·												
		97.2:47	degrees to core axis	• .											
		99.9 : 59	degrees to core axis	:											
		Lost core	degrees to core axi	5.											
		103 9 106	 1 • 0 2 m												
		20015 2001	- · · · · · · ·												
106.7 1	18.1	MAFIC TUFF													
		Mafic to a	ndesitic crystal tuf	f with on average 5 %, < 1	VA02170	106.7	108.0	1.3	1	62	<5	153	<1	10	560
		mm, mafic	crystals and 5 % fel	dspars. Locally up to 0.5 m	VA01255	107.0	118.0	11.0	n/a	173	n/a	84	n/a	n/a	465
		of 20 % fe	ldspars and locally	up to 3 %, 1 to 2 mm, quartz											
		eyes. iner	e is weak iracture	Controlled Carbonatization											
		strongly d	associated pyrite.	white guarta - pink											
		calcite -	dark green to black	chlorite veine Becomes more											
		intermedia	te downhole.	enfolite veins. Becomes more											
		Lost core	:.												
		110.4 112.	3 : 0.2 m.												
		112.3 115.	5 : 0.2 m.												
		116.7 118.	1 : O.3 m.												
		Foliations													
		108.1 : 40	degrees to core axis	S.											
		114 0 - 42	degrees to core axis	5. e											
		116.6 : 57	degrees to core avi	ə. S.											
		Alteration	The second second ave	•••											
		107.6 118.	WEAK FRACTURE CONT	ROLLED CARBONATIZATION.											
118.1 1	19.5	FAULT ZONE		· · · · · · · · · · · · · · · · · · ·											

Blocky, highly fractured core and fault gouge. Sheared mafic tuff and quartz veins. Motion appears to be parallel to foliation, at approximately 60 degrees to core axis. There is 0.4 m of lost core.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m) -----DESCRIPTION------

- 119.5 121.6 MAFIC TUFF Dark green to black contorted chlorite schist to mafic ash tuff with 5 % feldspar crystals. There is moderate to strong fracture controlled carbonatization. There are trace disseminated up to 2 mm pyrite cubes.
- 121.6 122.2 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Contorted chloritic felsic tuff with on average 5 % crystals, quartz and feldspar. There is trace very fine-grained pyrite.
- 122.2 123.7 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Chlorite schist with trace to 1 %, 3 mm, quartz eyes and 7 %, 2 to 4 mm, epidotized feldspars. There is minor fault gouge at the upper contact and lower contact. There is strong pervasive carbonatization with 3 % calcite specks. Foliation trends at 50 degrees to core axis. Lost core :.

122.0 124.1 : 0.5 m, probably at fault gouge at lower contact.

123.7 127.4 WEAKLY CHLORITIC FELSIC TUFF

Light to medium grey siliceous felsic tuff with trace quartz eyes. Is silicified from 125.4 to 127.4 with alteration centre at 126.5 m. In zone of pervasive silicification there are minor fracture controlled quartz - sericite veins with trace pyrite. At 124.7 there is 10 cm of fault gouge at approximately 35 degrees to core axis. Alteration : 125.4 127.4 STRONG PERVASIVE SILICIFICATION. 123.7 127.4 WEAK PERVASIVE CHLORITIZATION.

Foliations :. 124.2 : 66 degrees to core axis. 125.5 : 76 degrees to core axis. 126.9 : 48 degrees to core axis. Lost core :. 124.1 125.3 : 0.2 m.

 $124.1 125.3 \pm 0.2 \text{ m}.$ $125.3 127.1 \pm 0.2 \text{ m}.$

127.4 129.6 FELSIC QUARTZ EYE TUFF

Bleached pale brown sericitic schist with 20 to 25 % white VA02171 127.4 129.6 2.2 quartz veins. Locally there are up to 10 % crystals, quartz and feldspar. Weak fracture controlled silicification occurs. Foliation is at approximately 50 degrees to core axis.

HOLE No: Page Number CH88-68 5

Sample From To Width Total Cu Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

VA01256 124.0 127.0 3.0 n/a 116 n/a 64 n/a n/a 704

YA02171 127.4 129.6 2.2 0 15 5 86 <1 <5 1100

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	Р	ROPERT	Y: Chemainus J.V.		FALCONBRIDGE DIAMOND DRIL	LIMITED L LOG					HOLE N CH88-68	io: Pa	age Numb 6	er				
	From (m)	To (m)		DESCRIPTI	ON		Sample No.	From (m)	То (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
•	129.6	134.0	GREYWACKE Medium brown cherty to s. Predominantly biotite or % pervasive carbonatizat: controlled calcite veins fracture controlled pyr: minor fault gouge at 130 Lost core :. 133.0 134.0 : 0.4 m.	oft tuffaceo another bro ion and 5 to . There is a ite. There a .4, 131.1 and	us sediments. own mica with 5 7 % fracture pproximately 1 re numerous kin. d 132.9.	to 10 % ks and	VA02172 VA01257 VA02173 VA02174 VA02175	129.6 129.6 131.0 132.0 133.0	131.0 134.0 132.0 133.0 134.0	1.4 4.4 1.0 1.0 1.0	1 n/a 1 1 1	56 153 42 36 38	<5 n/a 5 <5 <5	100 74 107 104 96	<1 n/a <1 <1 <1	5 n/a 8 (5 25	1000 773 850 900 940	
e • Veto turo e u	134.0	139.8	WEAKLY CHLORITIC FELSIC 134.0 135.0 Medium grey chlorite and	TUFF - green tuff biotite alte	with moderate eration. There :	is on	VA01258 VA02176	134.0 134.0	139.0 135.0	5.0 1.0	n/a 3	111 · 34	n/a 5	40 109	n/a <1	n/a 5	844 1200	
	•		average 3 % and pyrite wi 135.0 136.0 Similiar to 3 weak chloriti	fracture con ith trace spl 134 to 135 w ization. The	ntrolled pyrrho halerite (?). ith no biotite a re is trace to f	tite and 1 %	VA02177 VA02178	135.0 136.0	136.0 137.0	1.0 1.0	1 1	8 6	<5 <5	45 43	<1 <1	<5 <5	L100 L000	
•			pyrite. is v 136.0 136.6 Quartz - seri alternating s Is moderately discominated	sericite - chlor contorted w contorted w	rted. rite schist with chlorite rich h with trace	h beds.												
•			136.6 139.8 Black lapilli 2 mm, in ligh trace to 0.5 fracture cont	i, chlorite, t grey silic % disseminat crolled jaspe	average 20 %, a ceous matrix wit ted pyrite, 2 to er or jasper lap	average th o 3 % pilli.												
•			Foliations :. 135.6 : 61 degrees to con 137.3 : 60 degrees to con Faults : 139.3 139.5 15 c	ce axis. ce axis. cm clay slip.	•									•				
•	139.8	141.0	MAFIC TO INTERMEDIATE TUP Carbonatized andesitic ch argillite beds and approx eyes. Foliation and bedd core axis.	FFACEOUS SEDI Norite schis ximately 7 %, ling average	INENTS st with 5 to 10 , 2 to 4 mm, qua 65 to 70 degree	% artz es to												
	141.0	141.1	FAULT ZONE Fault gouge and clay.															
•	141.1	143.5	WEAKLY CHLORITIC FELSIC T	UFF	tibly grov silis													. 2

Contorted chloritic felsic tuff, possibly grey siliceous lapilli in 20 % chlorite matrix or chloritization is fracture controlled. Carbonatized mafic tuffs occur from 141.95 to 142.2 and 143.3 to 143.5. Foliation trend averages 70 to 75 degrees to core axis with weak kinking

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-68 7 DIAMOND DRILL LOG From To Sample From To Width Total Cu Pb Zn Aq Au Ba (m) (m) -----DESCRIPTION------No. (m) Sulphides (ppm) (ppm) (ppm) (m) (m) (ppm) (ppb) (ppm) to strong locally. There are minor < 1 mm fault slips parallel to foliation. 141.1 143.5 MODERATE FRACTURE CONTROLLED CHLORITIZATION. 143.5 146.6 FELSIC FELDSPAR CRYSTAL TUFF Light to medium grey felsic tuff with on average 5 % VA02179 143.5 145.0 1.5 1 2 <5 14 <1 15 710 epidotized feldspars. There is 0.5 % disseminated pyrite. VA01259 143.5 146.3 2.8 n/a 113 n/a <10 n/a n/a 790 Is locally weakly contorted. Minor layering occurs with VA02180 145.0 146.3 1.3 1 36 < 5 25 <1 5 720 grey and white tuff and minor quartz veins parallel to VA02181 146.3 146.6 .3 10 1400 <5 22 2 53 600 foliation. There is a 5 cm carbonatized mafic at 145.9. From 146.3 to 146.6 there is guartz vein and sericite with 7 % pyrite and 3 % chalcopyrite in the guartz. Tuff may have been pervasively silicified. Foliation averages 60 degrees to core axis, is from 40 to 75 degrees to core axis. 146.6 147.8 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Strongly contorted mafic tuff with 5 % very fine-grained VA02182 146.6 147.8 1.2 87 15 520 -5 118 <5 <1 disseminated pyrite and strong fracture controlled carbonatization as 10 % calcite. There is approximately 20 %, < 1.5 mm, feldspar grains. 147.8 171.6 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Similiar to welded tuff in CH88-64. Variable colour, light VA01260 147.8 153.0 n/a 192 21 n/a n/a 280 5.2 n/a to medium green to white. Feldspars occur in 1 to 15 cm <5 <1 (5 220 VA02183 147.8 149.0 1 126 79 1.2 feldspar rich bands with up to 75 % feldspars in variable <5 54 < 5 270 VA02184 149.0 151.0 80 <1 2.0 1 states of epidotization. Feldspar content averages 20 %. VA02185 151.0 152.0 68 (5 52 <1 (5 650 1.0 1 There are on average 10 to 12 %, 2 to 5 mm, guartz eyes, VA02186 152.0 153.0 1.0 1 92 <5 46 <1 8 530 they are stretched with a lineation parallel to foliation. VA01261 153.0 159.0 6.0 n/a 120 n/a 24 n/a n/a 1510 147.8 152.9 Epidotized feldspar rich light grey tuff with VA02187 156.5 157.5 1.0 4 28 <5 258 <1 15 1300 0.5 % fracture controlled pyrite in epidotized VA02188 157.5 158.0 .5 2 28 < 5 188 <1 6 1300 <5 1300 339 zones with guartz eyes. VA02189 158.0 159.0 1.0 2 44 7 <1 n/a 1130 21 152.9 156.5 Light green sericitic tuff with feldspar rich VA01262 159.0 171.6 12.6 n/a 110 n/a n/a lapilli and beds. There are minor fracture 79 < 5 1200 VA02190 159.0 160.0 13 <1 1.0 2 60 controlled guartz veins and kink bands. Trace VA02191 160.0 161.0 2 20 12 56 <1 (5 1500 1.0 fracture controlled pyrite occurs. 18 56 <1 <5 1200 VA02192 161.0 162.0 2 24 1.0 156.5 157.5 Strongly contorted sericitic with 3 to 5 % fracture controlled pyrite. 157.5 171.2 Light grey to white, very similiar to welded tuff in ch88-64. There are on average 15 %, 2 to 5 mm, clear quartz eyes and trace lapilli. Minor possible collapsed pumice (?) occur. At 157.7 there is 1 cm with strong azurite. At 161.2 there is a 5 mm band of pyrrhotite. From 157.5 to 162 there is trace to 0.5 % banded sulphides, mostly pyrrhotite with

trace chalcopyrite at 159.1 and pyrite. 171.2 171.6 Silicified with minor fracture controlled

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-68 8 DIAMOND DRILL LOG From То Sample From Width Total То Cu Pb Zn λg Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) guartz, epidote and calcite. Foliations :. 148.6 : 68 degrees to core axis. 152.9 : 60 degrees to core axis. 158.3 : 59 degrees to core axis. 163.1 : 57 degrees to core axis. 167.3 : 67 degrees to core axis. 171.3 : 65 degrees to core axis. Bedding :. 154.4 : 66 degrees to core axis. 161.6 : 66 degrees to core axis. 164.8 : 60 degrees to core axis. 171.6 214.9 FELDSPAR PORPHYRITIC GABBRO 171.6 174.9 Fine-grained chilled margin phase with VA01263 171.6 184.0 12.4 83 n/a 454 n/a 97 n/a n/a approximately 10 to 12 %, 1 to 4 mm, feldspars VA02193 183.4 183.8 400 <5 104 <1 15 60 . 4 1 and trace ilmenite with approximately 2 % n/a VA01264 185.0 214.9 29.9 343 93 n/a 158 n/a n/a fine-grained leucoxene. 174.9 178.7 Medium grained with 30 % feldspars and approximately 3 to 5 %, 2 mm, ilmenite grains. 178.7 184.2 Fine-grained to medium grained with trace disseminated chalcopyrite throughout. There are numerous fracture controlled chlorite and quartz veinlet. From 183.5 to 183.7 there is approximately 1 % chalcopyrite in coarse silicified zone. 184.2 214.9 Coarse grained with 5 to 12 %, average 7 %, 2 to 5 mm, ilmenite grains. Feldspar to chloritized mafic crystal ratio is variable from 1.5 to 1 to 1 to 2. There are trace chalcopyrite specks locally. There are numerous chlorite, calcite and guartz veinlets. There is local 10 cm zones of strong chloritization and strong epidotization. End of hole : 705 feet (214.9 m) on Saturday June 18, 1988 at 12:30 p.m. Total lost core: 7.2 m; % Recovery = 96.6 %.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	то	XS 102	XAL203	ZCAO	ZHGO	ZNA20	ZK 20	ZFE203	ZT 102	XP205	ZHNO	ZLOI	SUM	В	A '	AI	NACA
····			· · · · · ·															
VA00825	15.00	15.50	57.10	16.60	4.99	1.32	3.08	3.52	7.14	0.28	0.26	0.26	5.39	99.94	· 1	338.	37.	8.
VA00826	28.00	28.50	57.40	16.60	5.32	1.39	3.30	3.35	6.62	0.32	0.29	0.21	5.54	100.34) 30.	35.	9.
VA00827	42.50	43.00	53.00	16.80	6.87	1.47	2.77	3.26	7.72	0.40	0.34	0.28	7.08	99.99		3 61.	33.	10.
VA00828	53.50	54.00	60.50	16.20	5.03	1.40	2.92	2.45	5.75	0.24	0.21	0.19	5.39	100.28		916.	33.	8.
VA00829	57.00	57.30	72.60	12.80	3.21	1.22	2.47	1.77	2.22	0.19	0.08	0.07	3.70	100.33	1)30.	34.	6.
VA00830	67.00	67.30	71.80	12.40	4.75	1.02	2.30	1.08	1.66	0.20	0.33	0.05	4.62	100.21		635 .	23.	7.
VA00831	79.00	79.20	44.30	17.10	13.80	2.62	1.46	0.94	11.00	0.76	0.34	0.18	7.16	99.66		306.	19.	15.
VA00832	87.00	87.30	46.50	18.20	7.44	5.87	3.62	0.55	11.40	0.87	0.37	0.19	4.39	99.40		282.	37.	11.
VA00833	94.00	94.30	47.60	18.70	7.72	1.66	3.84	3.28	9.21	1.09	0.39	0.18	6.16	99.83	!	590.	30.	12.
VA00834	109.30	109.50	44.40	18.30	7.96	3.85	3.50	0.84	12.90	1.09	0.35	0.23	6.31	99.73	:	387.	29.	. 11.
VA00835	113.70	114.00	44.00	17.90	10.40	2.67	3.00	1.53	11.00	0.86	0.36	0.22	8.16	100.10	·	398.	24.	13.
VA00836	122.50	123.00	42.50	16.20	12.00	2.65	1.68	1.48	12.40	1.08	0.36	0.26	9.54	100.15	. :	307.	23.	14.
VA00837	135.00	135.30	65.40	15.00	4.72	1.75	3.05	1.47	3.30	0.31	0.09	0.08	4.93	100.10		960.	29.	8.
VA00838	144.60	144.80	72.50	14.00	1.99	0.46	6.22	1.67	1.38	0.21	0.05	0.03	2.00	100.51	1	621.	21.	8.
VA00839	148.70	148.90	51.60	18.50	9.31	3.92	3.28	0.21	8.29	0.69	0.25	0.13	3.93	100.11		153.	25.	13.
VA00840	160.60	160.80	72.60	14.90	3.17	0.92	2.53	2.28	1.62	0.28	0.07	0.05	1.62	100.04	1	480.	36.	6.
VA00841	169.70	169.90	72.90	13.00	2.97	1.79	3.21	1.11	2.75	0.24	0.07	0.10	1.54	99.68	- 	761.	32.	6.
VA00842	186.00	186.40	48.80	13.90	10.00	4.46	1.83	0.31	15.20	2.47	0.23	0.24	2.31	99.75		105.	29.	12.
1100012	212 50	313 54	47 60	11 20	7 43	3 65	2 54	0 41	19 90	3 83	0.30	0.27	2.31	99.45		225.	29.	10.
VHVVOID	00.00	213-30	1/.00	11.30	1.74	3.03	2.30	V. 41	11.00	5.00								

Hole No. CH88-68 WHOLE ROCK SAMPLES

Page No. 1

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SAMPLE NUMBER	FROM	то	25102	ZAL203	ZCA0	ZMGO	ZNA20	ZK20	XFE203	XT 102	XP205	ZHNO	XLO I	SUH	 BA	AI	NACA
								· · · · · · · · · · · ·									
VA01248	4.20	29.00	58,10	16.50	4.58	1.42	3.21	3.40	6.53	0.32			5.23	99.29	831.	38.	8.
VA01249	29.00	54.80	56.50	16.60	5.50	1.45	2.92	3.18	6.96	0.32			5.85	99.28	821.	35.	8.
VA01250	54.80	69.50	67.90	14.40	4.26	1.53	2.28	1.68	2.83	0.30			4.70	99.88	882.	33.	7.
VA01251	74.00	78.00	39.20	13.40	17.10	3.62	2.26	1.27	7.43	0.69			14.50	99.47	341.	20.	19.
VA01252	78.00	83.00	46.00	17.80	9.59	4.76	2.22	0.85	11.60	0.84			5.62	99.28	384.	32.	12.
VA01253	83.00	96.00	46.20	18.00	7.56	4.77	3.69	1.27	11.00	0.88			5.77	99.14	400.	35.	11.
VA01254	97.00	106.00	47.80	19.00	5.77	2.26	2.91	4.00	10.40	1.11			5.77	99.02	357.	42.	9.
VA01255	107.00	118.00	43.80	17.80	8.22	4.90	2.09	1.50	12.20	0.91			7.85	99.27	465.	38.	10.
VA01256	124.00	127.00	69.70	15.10	1.29	1.78	4.59	1.23	3.44	0.39			2.23	99.75	704.	34.	6.
VA01257	129.60	134.00	45.20	17.00	9.96	2.49	2.13	0.85	10.90	1.27			9.77	99.57	773.	22.	12.
VA01258	134.00	139.00	59.20	15.90	6.35	1.86	1.85	2.04	5.47	0.37			6.08	99.12	844.	32.	8.
VA01259	143.50	146.30	73.10	14.30	1.49	0.62	5.00	2.19	1.37	0.19			1.85	100.10	790.	30.	6.
VA01260	147.80	153.00	51.00	18.20	10.40	3.65	2.67	0.65	7.87	0.61			4.70	99.75	280.	25.	13.
VA01261	153.00	159.00	72.00	15.30	2.28	0.84	1.25	3.29	1.48	0.29			2.54	99.27	1510.	54.	4.
VA01262	159.00	171.60	70.70	14.90	3.44	1.36	3.34	1.80	2.11	0.29			1.70	99.64	1130.	32.	7.
VA01263	171.60	184.00	47.60	13.40	10.10	4.97	2.18	0,18	15.00	2.53			3.23	99.19	83.	30.	12.
VA01264	185.00	214.90	48.70	13.10	9.46	4.52	2.20	0.39	15.30	2.68			3.31	99.66	158.	30.	12.

Hole No. CH88-68 ALTERED SAMPLES

SAMPLE NUMBER	FROM	то	BA (ppm.)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррв)	AS (ppm)	CD (ppm)	HO (ppm)	НН (ррм)	CUZN	EIS	FE
VA02146	48.00	49.00	830.0	14.0	108.0	<0.5	<5.0	10.0	12.0	5.0	<5.0	<1.0	3.0	1860.0	11.	з.	4.
VA02147	49.00	50.00	840.0	12.0	101.0	<0.5	<5.0	14.0	10.0	5.0	<5.0	<1.0	3.0	1480.0	11.	3.	4.
VA02148	50.00	51.80	950.0	13.0	90.0	<0.5	<5.0	12.0	10.0	6.0	<5.0	<1.0	3.0	1610.0	13.	3.	4.
VA02149	54.80	56.10	860.0	16.0	49.0	<0.5	<5.0	18.0	15.0	<5.0	<5.0	<1.0	5.0	410.0	25.	1.	2.
VA02150	56.10	56.60	870.0	64.0	104.0	<0.5	<5.0	26.0	16.0	5.0	16.0	<1.0	3.0	1280.0	38.	з.	5.
VA02151	56.60	58.00	1100.0	8.0	48.0	<0.5	<5.0	6.0	10.0	<5.0	<5.0	<1.0	3.0	440.0	14.	1.	2.
VA02152	58,00	59.00	940.0	16.0	47.0	<0.5	<5.0	6.0	8.0	<5.0	5.0	<1.0	4.0	530.0	25.	1.	з.
VA02153	59.00	60.30	800.0	52.0	36.0	<0.5	<5.0	4.0	8.0	<5.0	5.0	<1.0	4.0	460.0	59.	1.	2.
VA02154	60.30	60.80	940.0	53.0	73.0	<0.5	<5.0	22.0	20.0	5.0	23.0	<1.0	5.0	1810.0	42.	3.	6.
VA02155	60.80	61.70	920.0	24.0	52.0	<0.5	<5.0	10.0	9.0	6.0	22.0	<1.0	5.0	640.0	32.	1.	з.
VA02156	61.70	62.40	780.0	104.0	78.0	<0.5	<5.0	16.0	14.0	9.0	13.0	<1.0	5.0	1300.0	57.	3.	5.
VA02157	62.40	64.00	840.0	6.0	36.0	<0,5	<5.0	4.0	6.0	8.0	<5.0	<1.0	18.0	280.0	14.	1.	2.
VA02158	69.50	71.00	680.0	72.0	77.0	<0.5	<5.0	12.0	20.0	<5.0	<5.0	<1.0	3.0	590.0	48.	2.	5.
VA02159	71.00	72.00	720.0	104.0	76.0	<0.5	6.0	12.0	18.0	<5.0	<5.0	<1.0	з.0	480.0	58.	2.	4.
VA02160	72.00	73.00	680.0	72.0	88.0	<0.5	5.0	14.0	26.0	<5.0	<5.0	<1.0	4.0	630.0	45.	2.	5.
VA02161	73.00	74.00	460.0	108.0	83.0	<0.5	6.0	28.0	30.0	<5.0	<5.0	<1.0	4.0	1290.0	57.	2.	4.
VA02162 .	74.00	75.00	580.0	106.0	78.0	<0.5	5.0	20.0	22.0	<5.0	<5.0	<1.0	3.0	740.0	58.	0.	4.
VA02163	100.00	100.90	240.0	6.0	130.0	<0.5	31.0	16.0	10.0	<5.0	<5.0	<1.0	3.0	1040.0	4.	1.	6.
VA02164	100.90	102.00	420.0	20.0	131.0	<0.5	19.0	10.0	12.0	<5.0	<5.0	<1.0	2.0	470.0	13.	1.	5.
VA02165	102.00	103.00	480.0	10.0	128.0	<0.5	<5.0	10.0	14.0	<5.0	<5.0	<1.0	2.0	380.0	7.	1.	5.
VA02166	103.00	104.00	510.0	4.0	144.0	<0.5	6.0	10.0	12.0	<5.0	<5.0	<1.0	2.0	540.0	З.	1.	5.
VA02167	104.00	105.00	210.0	6.0	130.0	<0.5	12.0	20.0	13.0	<5.0	<5.0	<1.0	2.0	1120.0	4.	1.	5.
VA02168	105.00	106.00	480.0	2.0	150.0	<0.5	8.0	10.0	14.0	<5.0	<5.0	<1.0	2.0	550.0	1.	1.	6.

Hole No. CH88-68

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SAMPLE NUMBER	FROM	TO	BA (pp∎)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm)	PB (ppm)	AS (ppa)	CD (ppm)	НО (ppm)	ИN (ppm)	CUZN	ETS	FE
VA02169	106.00	106.70	600.0	4.0	143.0	<0.5	5.0	10.0	10.0	<5.0	<5.0	<1.0	2.0	480.0	3.	1.	5.
VA02170	106.70	108.00	560.0	62.0	153.0	<0.5	10.0	28.0	20.0	<5.0	<5.0	<1.0	3.0	1020.0	29.	1.	6.
VA02171	127.40	129.60	1100.0	15.0	86.0	<0.5	<5.0	4.0	10.0	5.0	<5.0	<1.0	3.0	455.0	15.	٥.	з.
VA02172	129.60	131.00	1000.0	56.0	100.0	<0.5	5.0	30.0	14.0	<5.0	27.0	<1.0	4.0	1080.0	36.	1.	6.
VA02173	131.00	132.00	850.0	42.0	107.0	<0.5	8.0	28.0	10.0	5.0	28.0	<1.0	3.0	1420.0	28.	1.	7.
VA02174	132.00	133.00	900.0	36.0	104.0	<0.5	<5.0	24.0	12.0	<5.0	25.0	<1.0	3.0	1600.0	26.	1.	7.
VA02175	133.00	134.00	940.0	38.0	96.0	<0.5	25.0	30.0	10.0	<5.0	36.0	<1.0	4.0	1510.0	28.	1,	7.
VA02176	134.00	135.00	1200.0	34.0	109.0	<0.5	5.0	14.0	16.0	5.0	29.0	<1.0	4.0	970.0	24.	з.	4.
VA02177	135.00	136.00	1100.0	8.0	45.0	<0.5	<5.0	2.0	9.0	<5.0	<5.0	<1.0	2.0	420.0	15.	1.	2.
VA02178	136.00	137.00	1000.0	6.0	43.0	<0.5	<5.0	<1.0	8.0	<5.0	<5.0	<1.0	2.0	420.0	12.	1.	2.
VA02179	143.50	145.00	710.0	2.0	14.0	<0.5	15.0	<1.0	4.0	<5.0	<5.0	<1.0	2.0	140.0	13.	1.	1.
VA02180	145.00	146.30	720.0	36.0	25.0	<0.5	5.0	<1.0	4.0	<5.0	<5.0	<1.0	2.0	230.0	59.	1.	1.
VA02181	146.30	146.60	600.0	1400.0	22.0	1.5	53.0	32.0	20.0	<5.0	5.0	<1.0	3.0	260.0	98.	10.	з.
VA02182	146.60	147.80	520.0	118.0	87.0	<0.5	15.0	28.0	32.0	<5.0	7.0	<1.0	3.0	830.0	58.	5.	5.
VA02183	147.80	149.00	220.0	126.0	79.0	<0.5	<5.0	26.0	24.0	<5.0	10.0	<1.0	3.0	700.0	61.	1.	4.
VA02184	149.00	151.00	270.0	80.0	54.0	<0.5	<5.0	24.0	34.0	<5.0	33.0	<1.0	2.0	580.0	60.	1.	з.
VA02185	151.00	152.00	650.0	68.0	52.0	<0.5	<5.0	24.0	30.0	<5.0	29.0	<1.0	2.0	520.0	57.	1.	4.
VA02186	152.00	153.00	530.0	92.0	46.0	<0.5	8.0	20.0	30.0	<5.0	47.0	<1.0	2.0	550.0	67.	1.	з.
VA02187	156.50	157.50	1300.0	28.0	258.0	<0.5	15.0	8.0	6.0	<5.0	6.0	1.0	2.0	145.0	10.	4.	1.
VA02188	157.50	158.00	1300.0	28.0	188.0	<0.5	6.0	8.0	8.0	<5.0	7.0	<1.0	2.0	210.0	13.	2.	1.
VA02189	158.00	159.00	1300.0	44.0	339.0	(0.5	(5.0	4.0	4.0	7.0	6.0	2.0	2.0	160.0	11-	2.	1.
VA02190	159 00	160.00	1200 0	60.0	79.0	20.5	<5 0	2.0	6.0	13.0	30.0	<1:0	1.0	160-0	43	2.	1.
VA02191	160 00	161 00	1500.0	20.0	56.0	×v.5	(J.V (5 A	4 0	6 0	12 0	47 0	<1 A	2 0	210.0	26	2.	1

Hole No. CH88-68

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (pp∎)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	НО (ррая)	HN (ppm)	CUZN	ETS	FE
					,												
VA02192	161.00	162.00	1200.0	24.0	56.0	<0.5	<5.0	12.0	8.0	18.0	<5.0	<1.0	1.0	290.0	30.	2.	1.
VA02193	183.40	183.80	60.0	400.0	104.0	<0.5	15.0	30.0	28.0	<5.0	17.0	<1.0	2.0	800.0	79.	1.	6.

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Summary Log: I	DDH CH88-69
Location: 25+0	00 W, 2+20 N; Holyoak 2 Claim
Azimuth: 180,	Dip: -50
Hole Completed	1: June 23, 1988
Core logged by	7: J. Pattison
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Overburden Mafic tuff Gabbro Weakly chloritized felsic tuff Gabbro
97.6 - 102.7	Weakly chloritized felsic tuff
102.7 - 148.9	Chlorite schist
148.9 - 153.7	Intermediate tuff (quartz-sericite-chlorite schist)
153.7 - 162.4	Quartz-Sericite Schist with several argillite bands
162.4 - 164.3	Gabbro
164.3 - 173.8	Felsic quartz eye tuff with 1-4 % disseminated pyrite.
173.8 - 179.9	Gabbro
179.9 - 193.0	Felsic quartz eye tuff with 1-3 % disseminated pyrite.
193.0 - 210.6	Chlorite schist
210.6 - 220.8	Felsic quartz eye tuff, nil sulphides.
220.8 - 247.8	Mafic to intermediate tuffaceous sediments
247.8 - 249.2	Felsic quartz eye tuff
249.2 - 254.7	Mafic tuff
254.7 - 286.7	Weakly chloritized felsic tuff
286.7 - 315.2 315.2 - 331.0 331.0 - 337.5	Locally up to 5 % disseminated and fracture controlled pyrite. Quartz-feldspar porphyritic felsic flow Weakly chloritic felsic quartz eye tuff
337.5 - 340.7	Black argillite
340.7 - 347.3	Mafic tuff
347.3 - 350.7	Weakly chloritic felsic tuff
350.7 - 419.5	Mafic volcanics
419.5 - 423.4	Weakly chloritic felsic quartz eye tuff

E.O.H. @ 423.4 m

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HOLE No: Page Number CH88-69 1

Claim No. Holyoak 2 Section No.: 25+00 W

Logged By: J. Pattison Drilling Co.: Burwash Enterprises Assayed By: Bondar-Clegg & XRAL

Core Size: NQ (thin wall)

Length	Azi- muth	Dip	Length	Azi- muth	Dip
12.20	178.0	-50.5	367.30	192.0	-51.0
91.40	183.0	-52.0	423.40	194.0	-50.0
182.90	187.0	-53.0			

DIP TESTS

FALCONBRIDGE LIMITED

DIAMOND DRILL LOG

Width Рb Zn Au Ba From To Total Cu Àσ From To Sample (ppm) (ppm) (ppm) (ppb) (ppm) ----DESCRIPTION------(m) (m) Sulphides (ppm) (m) (m) No. ('n)

.0 7.3 OVERBURDEN

7.3 53.6 MAFIC TUFF

Medium green, weakly to moderately carbonatized mafic tuff. Locally rock takes on a dark grey tint due to moderate carbonatization. In many places the tuff is finely banded (bedded ?) parallel to foliation. Occasional rounded, deep red, hematitic clasts (4 mm in diameter.

Lower contact is sharp at 50 degrees to core axis.

STRUCTURE:.

Foliation is wavey throughout.

7.3-22.9 M blocky, highly fractured core, many fault gouges at 30-40 degrees to core axis. 4.2 m of lost core. At 11.1 m foliation is at 45 degrees to core axis. At 11.7 m 1.5 cm fault gouge at 60 degrees to core axis. At 28.8 m foliation is at 60 degrees to core axis. 41.4-41.5 M fault gouge at 30 degrees to core axis. At 45.7 m foliation is at 30 degrees to core axis.

ALTERATION: .

7.3 53.6 WEAK FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CARBONATIZATION. Locally weak hematite alteration associated with carbonate alteration.

SULPHIDES:.

34.0-35.0 m 2 % disseminated pyrite.

13.0 17.0 2-5% < 5 mm cherty green to grey clasts.

VA02902	7.3	37.0	29.7	n/a	29	n/a	76	n/a	n/a	365
VA08493	34.0	35.0	1.0	0	69	< 5	94	<1	< 5	160
VA02903	37.0	63.9	26.9	n/a	51	n/a	78	n/a	n/a	205

PROPERTY: Chemainus J.V.

Hole Location: 25+00 W 2+20 N

Purpose:

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 NTS:
 92B13
 UTM:

 Azimuth:
 180
 Elevation:
 905 m

 Dip:
 -50
 Length:
 423.4 m

Started: 17-June-88 Completed: 23-June-88

HOLE No: Page Number PROPERTY: Chemainus J.V. FALCONBRIDGE LIMITED CH88-69 2 DIAMOND DRILL LOG Sample From То Width Total Cu РЪ Zn Ag Au Ba From То (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) -----DESCRIPTION------No. (m) (m) 27.1 27.3 Barren guartz-carbonate vein at 60-70 degrees to core axis. 40.0 42.0 2-5% < 10 mm cherty clasts and guartzz eyes. 53.6 55.0 WEAKLY CHLORITIC FELSIC TUFF Massive light green, felsic tuff with 1-2% disseminated VA08492 53.6 55.0 1.4 ٥ 15 < 5 52 <1 <5 390 pyrite. Well foliated at 55 degrees to core axis. Lower contact is sharp and appears to be unconformable at 55 degrees to core axis. Carbonate-epidote alteration patch 15 cm in diameter at the lower contact. 53.6 55.0 WEAK PERVASIVE CHLORITIZATION. 55.0 63.9 MAFIC TUFF As 7.3 to 53.6 m. STRUCTURE:. At 58.6 m foliation is at 35 degrees to core axis. ALTERATION:. 55.0 61.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 61.9 63.5 STRONG PERVASIVE SERICITIZATION. 63.5 63.9 WEAK FRACTURE CONTROLLED CARBONATIZATION. 63.9 76.0 MAFIC INTRUSIVE Massive fine to medium-grained gabbro or possibly a mafic flow, with trace very finely disseminated ilmenite. Gabbro has a bleached, altered appearance. Weak to moderate fracture controlled hematization below 72.5 m. Below 70 m becomes fine-grained and there is moderate patchy epidote+calcite alteration. Lower contact is at 55 degrees to core axis. STRUCTURE:. 74.4-74.8 M fault. Broken rubbly core, not possible to measure the orientation. 76.0 88.6 WEAKLY CHLORITIC FELSIC TUFF Light grey-green weakly chloritic quartz-sericite schist. VA02904 76.0 88.6 12.6 13 n/a 59 n/a n/a 1090 n/a VA08495 87.0 ۵ 41 <5 46 <1 <5 1000 In less schistose areas the rock is composed of 10 % (1 88.6 1.6 mm feldspar crystals in a very fine, siliceous, sericitic matrix. Lower contact is at 50 degrees to core axis. STRUCTURE: .

PROPERTY: Chemainus J.V.

From To

(m)

(m)

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-69 3

Sample From Width Total Cu То РЪ Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

At 76.5 m bedding is at 30 degrees to core axis. 76.8-77.4 M blocky, highly fractured core. 0.2 m of lost core.

-----DESCRIPTION------

78.2-78.3 M minor fault at 40 degrees to core axis. At 84.9 m 5 mm fault gouge at 40 degrees to core axis. At 85.1 m 1.0 cm fault gouge at 50 degrees to core axis. 87.4-88.0 M chlorite-carbonate rich shear zone at 50 strong degrees to core axis.

ALTERATION: .

- 76.0 88.5 WEAK PERVASIVE CHLORITIZATION , MODERATE PERVASIVE SERICITIZATION and WEAK PERVASIVE CARBONATIZATION.
- 77.4 77.7 Finely bedded (<4 mm) cherty felsic ash tuff.

SULPHIDES:.

87.0--88.6~M several pyrite stringers < 3 mm thick parallel to foliation.

88.6 97.6 MAFIC INTRUSIVE

Pale green moderately carbonatized mafic dyke. Medium-grained with 1 % finely disseminated ilmenite between 89.1 and 96.3 m. Fine-grained and moderately to strongly carbonatized chill margins for 0.5 m from the upper and lower contacts. Lower contact is at 40 degrees to core axis.

97.6 102.7 WEAKLY CHLORITIC FELSIC TUFF

Light green weakly chloritic quartz-sericite schist. Medium brown tint over the first 0.3 m due to moderate biotite alteration. 2 % 2-4 mm clear quartz eyes below 101.0 m. Broken core at the lower contact.

STRUCTURE:.

At 98.1 m foliation is at 50 degrees to core axis.

ALTERATION:.

97.6 102.7 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION.

SULPHIDES:.

At 99.1 m 1.0 cm wide carbonate-pyrite-sphalerite band at 50 degrees to core axis.

99.5 100.2 M moderately carbonatized mafic to intermediate tuff with 2 % disseminated. Pyrite. Upper contact is at 40 degrees to core axis and lower contact is at 60 degrees to core axis.

VA02905	97.6	102.7	5.1	n/a	40	n/a	57	n/a	n/a	1350
/A08494	98.0	99.0	1.0	1	28	5	260	<1	. <5	1000
VA08496	99.0	99.5	.5	1	71	16	2600	<1	13	960
VA08497	99.5	100.2	.7	2	45	. 8	130	<1	5	720
VA08498	100.2	101.2	1.0	1	57	< 5	60	<1	< 5	1400

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 4 DIAMOND DRILL LOG Width Total From То Sample From То Cu Рb Zn Ag Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 100.3 100.5 Mafic tuff as 99.5 to 100.2 m. 102.7 148.9 CHLORITE SCHIST Medium green chlorite schist speckled with white calcite VA02906 102.7 132.0 29.3 n/a 73 n/a 166 n/a 10 n/a spots up to 5 mm in diameter. In places the calcite spots 450 VA08499 104.0 105.0 1.0 2 30 9 92 <1 23 are eye shaped and may be amygdales. In some cases (e.g. VA08500 105.0 106.0 26 84 <1 12 360 1.0 2 7 Between 107.4 and 108.0 m and below 139.0 m) spots contain VA08501 106.0 107.0 <5 80 <1 <5 210 1.0 2 41 weakly manetic, deep red jasper. Many irregular VA08502 107.0 108.0 1.0 23 < 5 74 <1 <5 260 1 64 n/a n/a 282 carbonate+/-quartz veins. Streaks of a fine-grained, dark VA02907 132.0 148.9 16.9 n/a 62 n/a grey, purplish argillaceous material (?) occur above 120.0 m and below 128.0 m. Locally up to 5 % dark green to black chlorite spots (altered pyroxene crystals?) < 5 mm in diameter smeared along foliation planes. Lower contact is a 0.5 cm thick fault gouge at 80 degrees to core axis. STRUCTURE:. At 105.7 m foliation is at 40 degrees to core axis. At 121.5 m foliation is at 40 degrees to core axis. At 131.3 m foliation is at 35 degrees to core axis. At 141.3 m foliation is at 40 degrees to core axis. At 145.5 m bedding is at 40 degrees to core axis. ALTERATION: . 102.7 148.9 MODERATE SPOTTY CARBONATIZATION , MODERATE FRACTURE CONTROLLED CARBONATIZATION and locally MODERATE PERVASIVE CARBONATIZATION. SULPHIDES:. 104.0-107.0 m 2 % disseminated pyrite. 130.0 131.0 Several guartz eyes up to 5 mm in diameter. 131.0 131.8 Rock has a finely banded (bedded ?) appearance. Banding is at 30 degrees to core axis. 148.9 153.7 INTERMEDIATE TUFF 559 Grey-green, moderately carbonatized VA02908 148.9 153.7 n/a 79 n/a n/a 4.8 n/a 64 520 64 <1 8 guartz-sericite-chlorite schist with streaks of apple VA08503 149.0 150.0 1.0 1 44 9 ٢5 210 green mariposite. Overall, the schist is intermediate in VA08504 152.7 153.7 1.0 42 56 (1) 1 6 composition although there are several intervals < 0.2 m long which may be felsic. Rock has a crushed, tectonized appearance throughout. Fault at 35 degrees to core axis at the lower contact. STRUCTURE:. At 150.5 m foliation is at 45 degrees to core axis.

153.3-153.7 M crushed fault zone 35 degrees to core axis.

Р	ROPERT	Y: Chemainus	J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE N CH88-69	o: Pa	age Numb 5	er			
From (m)	T0 (m)		DESCRIPT	ION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm
		ALTERATION: 148.9 153.7	WEAK PERVASIVE CARBONAT CONTROLLED CARBONATIZAT alteration over the fir pervasive epidotization	IZATION , WEAK FRACTURE ION. Weak mariposite st 0.5 m and weak below 151.9 m.									· · ·		
		149.3 149.6	Irregular quartz-carbon hematite and mariposite vein margins.	ate vein. Moderate alteration along the											
153.7	162.4	FELSIC QUAR Light grey, bands of bl Rock has a appearance. Lower conta STRUCTURE:.	TZ EYE TUFF crushed quartz-sericite ack, crushed argillite mylonitic texture which Locally, up to 5 %, 3- ct is sharp at 70 degree	schist with several 1.0 to 40 cm wide. gives it a fragmental 5 mm quartz eyes. s to core axis.	VA08505 VA02909 VA08506 VA08507 VA08508 VA08508 VA08509 VA08510	153.7 153.7 154.7 155.7 157.0 158.0 159.0	154.7 173.8 155.7 157.0 158.0 159.0 160.0	1.0 20.1 1.0 1.3 1.0 1.0 1.0	5 n/a 5 5 4 4 4	75 30 12 77 12 16 9	34 n/a 10 168 6 5 5	180 34 230 346 86 12 12	<1 n/a <1 <1 <1 <1 <1 <1	54 n/a 16 10 8 14 5	640 2070 950 1800 1100 1700 1700
		156.6-157.1 At 157.8 m At 161.0 m	M fault gouge at 55-60 foliation is at 45 degre foliation is at 60 degre	degrees to core axis. es to core axis. es to core axis.	VA08511 VA08512	160.0 161.0	161.0 162.4	1.0 1.4	4	15 8	5 9	36 20	<1 <1	13 13	1600 1600
		ALTERATION: 153.7 162.4	MODERATE PERVASIVE SERI PERVASIVE SERICITIZATIO sericite (?) between 15	CITIZATION to STRONG N. Wispy light brown 7.2 and 159.0 m.											
		SULPHIDES:. 153.7-157.0 157.0-162.4 thick paral	m 4-5% disseminated pyr m 3-4% pyrite concentra lel to foliation.	ite. ted in bands < 3 mm											
		154.1 154.6	Medium brown, clay-rich	zone.											
		154.4 154.6	Black, finely bedded ch Bedding runs parallel t	erty black argillite. o the core axis.											
		156.1 888.8	1.0 cm band of cherty b degrees to core axis.	lack argillite at 35											
		156.3 888.8	1.0 cm band of black ch	erty argillite.											
		156.6 157.0	Black, argillaceous fau degrees to core axis.	lt gouge at 55-60											
		157.1 157.6	Several pale olive green rich bands < 5.0 cm wid	n carbonate-epidote e parallel to foliation.											

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From То

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

-----DESCRIPTION-----(m) (m) 162.4 164.3 MAFIC INTRUSIVE Medium green, fine-grained weakly foliated mafi Weak fracture controlled carbonatization and hematization. Foliation is at 50 degrees to con Fault gouge, 10 cm thick at 65-75 degrees to co the lower contact. 164.3 173.8 FELSIC QUARTZ EYE TUFF Light grey quartz-sericite schist with 3-5 %, quartz eyes. Lower contact is sharp at 40 degrees to core a STRUCTURE:. 164.3-164.4 M fault gouge at 65-75 degrees to ALTERATION: . 164.3 173.8 MODERATE PERVASIVE SERICITIZATION. 167.6 167.7 Pale olive green strongly epidotize carbonatized band at 60 degrees to with a few specks of mariposite. SULPHIDES:. 164.3-169.0 m 1-2% disseminated pyrite. 169.0-170.0 m 4 % disseminated pyrite. 170.0-173.8 m 1-2% disseminated pyrite. 173.8 179.9 MAFIC INTRUSIVE As 162.4 to 154.3 m. Occasional quartz grain 2diameter suggesting that this may be a massive or tuff (check whole rock sample). Lower conta at 55-60 degrees to core axis.

179.9 193.0 FELSIC QUARTZ EYE TUFF

As 164.3 to 173.8 m except locally very weakly Several fine-grained carbonatized mafic dykes thick that are identical to the unit above. Be cherty and is intercalated with mafic tuffaceou for 1.3 m from the lower contact. Lower contadegrees to core axis.

STRUCTURE: .

At 181.8 m foliation is at 60 degrees to core At 181.9 m 2.0 cm fault gouge at 70 degrees to At 183.1 m 1.0 cm fault gouge at 65 degrees to At 191.5 m foliation is at 50 degrees to core

ALTERATION:.

179.9 185.2 MODERATE PERVASIVE SERICITIZATION.

179.9	193.0	13.1	n/a	36	n/a	43	n/a	n/a	997	
179.9	181.0	1.1	3	17	20	70	<1	10	1900	
181.0	182.0	1.0	3	16	12	46	(1	11	1300	
182.0	183.0	1.0	. 3	19	11	44	(1	19	1400	
183.0	184.0	1.0	3.	15	11	74	<1	14	1300	
184.0	185.0	1.0	3	14	11	54	(1	17	1300	
185.0	186.0	1.0	2	15	9	60	<1	<5	830	
186.0	187.0	1.0	2	9	7	48	<1	(5	950	
187.0	188.0	1.0	2	12	5	28	<1	< 5	950	
188.0	189.0	1.0	2	10	.7	32	<1	< 5	1000	
189.0	190.0	1.0	2	9	. 8	60	(1	< 5	710	
190.0	191.0	1.0	2	5	5	44	<1	(5	830	
191.0	192.0	1.0	2	10	6	36	(1	8	890	
192.0	193.0	1.0	2	34	12	64	(1	21	720	
	179.9 179.9 181.0 182.0 183.0 184.0 185.0 186.0 186.0 188.0 189.0 189.0 190.0 191.0	179.9 193.0 179.9 181.0 181.0 182.0 182.0 183.0 183.0 184.0 185.0 186.0 185.0 186.0 185.0 187.0 187.0 188.0 189.0 190.0 190.0 191.0 192.0 193.0	179.9 193.0 13.1 179.9 181.0 1.1 181.0 182.0 1.0 182.0 1.0 183.0 183.0 184.0 1.0 184.0 1.85.0 1.0 185.0 186.0 1.0 185.0 187.0 1.0 186.0 187.0 1.0 186.0 187.0 1.0 188.0 189.0 1.0 189.0 190.0 1.0 190.0 190.0 1.0 191.0 192.0 1.0 192.0 13.0 1.0	179.9 193.0 13.1 n/a 179.9 181.0 1.1 3 181.0 182.0 1.0 3 182.0 183.0 1.0 3 182.0 183.0 1.0 3 183.0 184.0 1.0 3 184.0 185.0 1.0 3 185.0 186.0 1.0 2 186.0 187.0 1.0 2 187.0 188.0 1.0 2 188.0 190.0 1.0 2 190.0 190.0 1.0 2 191.0 192.0 1.0 2 192.0 193.0 1.0 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

HOLE No: Page Number CH88-69 Б

	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp)	Ba o) (ppm)	
ic dyke.												
re axis. ore axis at												
ore unit at												
			A 6 7 0	2	2		0	50	<i>(</i> 1	7	2500	
2-4 mm clear	VA08513 VA08514	164.3	165.0	1.0	2	12	5	52 52	<1	(5	2500	
vis	VA08515	166.0	167.0	1.0	2	12	7	48	<1	< 5	2100	
	V108516	167 0	168 0	1 0	2	22	6	40	<1	< 5	2400	
	V100510	107.0	160.0	1 0	2	7	7	46	(1	< 5	1800	
	VR00517	100.0	170 0	1.0	4	16	10	4.4	(1	20	1600	
core axis.	VA08518	169.0	170.0	1.0	4	24	10	47	/1	5	1900	
	VA08519	170.0	1/1.0	1.0	4	24	°	42	11	10	1500	
	VA08520	171.0	172.0	1.0	2	1	9	68	(1	10	1500	
	VA08521	172.0	173.0	1.0	2	15	10	46	(1	(5	3500	
ed and	VA08522	173.0	173.8	. 8	2	20	14	62	(1	1	2500	
core axis												
-4 mm 1n												
matic flow												
act is sharp												
chloritic.	VA02910	179.9	193.0	13.1	n/a	36	n/a	43	n/a	n/a	997	
(0.2 m	VA08523	179.9	181.0	1.1	3	17	20	70	<1	10	1900	
ecomes	VA08524	181.0	182.0	1.0	3	16	12	46	(1	11	1300	
us material	VA08525	182.0	183.0	1.0	3	19	11	44	(1	19	1400	
ct is at 40	VA08526	183.0	184.0	1.0	3	15	11	74	<1	14	1300	
	VA08527	184.0	185.0	1.0	3	14	11	54	(1	17	1300	
	VA08528	185.0	186.0	1.0	2	15	9	60	<1	<5	830	
	V108529	186.0	187.0	1.0	2	9	7	48	<1	< 5	950	
avie	V108520	187 0	188 0	1 0	2	12	5	28	<1	< 5	950	
av12.	VILOUESI	100.0	190 0	1 0	2	10	7	12	(1	< 5	1000	
core axis.	VAU8531	100.0	107.0	1.0	2	Ĩ	8	60	(1	<5	710	
core axis.	VAU8532	189.0	190.0	1.0	. 4	5	. U	A A	21	(5	830	
axıs.	VA08533	190.0	191.0	1.0	4	3	2	94	/1	, J 8	890	
	VA08534	191.0	192.0	1.0	2	10	- b	30	. (1	21	720	

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 7 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Åσ Au Ba (m) (m) -----DESCRIPTION-----No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 185.2 187.0 WEAK SPOTTY CHLORITIZATION. Chlorite occurs in discrete < 2 mm spots and comprises < 2 % of the rock. SULPHIDES:. 179.9-185.0 m 2-3% disseminated pyrite and in < 3 mm bands/stringers parallel to foliation. 185.0-193.0 m 1-2% pyrite as above. 185.8 185.9 Fine-grained carbonatized mafic dyke or massive volcanic at 70 degrees to core axis. As 162.4 to 164.3 m. 189.2 189.4 Fine-grained carbonatized mafic dyke or massive volcanic at 40 degrees to core axis. 193.0 210.6 CHLORITE SCHIST As 102.7 to 148.9 m. Lower contact is at 60 degrees to VA02911 193.0 210.6 17.6 81 n/a 86 n/a n/a 273 n/a 580 core axis. VA08536 193.0 194.0 1.0 1 30 6 132 <1 6 STRUCUTRE:. At 195.5 m foliation is at 50 degrees to core axis. ALTERATION: . 193.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and locally weak thermal biotite alteration. Locally weak fracture controlled hematite. 210.1 210.2 Quartz-sericite schist band at 55 degrees to core axis. 210.6 220.8 FELSIC QUARTZ EYE TUFF VA02912 210.6 220.8 10.2 33 n/a n/a 1230 As 164.3 to 173.8 m. Becomes weakly to moderately n/a 21 n/a chloritic below 212.7 m. Lower contact is at 60 degrees to core axis. STRUCTURE:. At 212.0 m foliation is at 43 degrees to core axis. At 219.0 m foliation is at 57 degrees to core axis. ALTERATION: . 210.6 212.7 MODERATE PERVASIVE SERICITIZATION. 212.7 220.8 WEAK PERVASIVE CHLORITIZATION and MODERATE PERVASIVE SERICITIZATION. 213.7 215.0 Moderately chloritic, may be intermediate in composition.

PRO	PERTY	: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NC CH88-69	o: Pa	age Numb 8	er			
From (m)	To (m)	DESCRI	PTION	Sample No.	From (m)	T0 (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppr
20.8 2	31.0	MAFIC TO INTERMEDIATE TUFFACEOUS Dirty, grey-green, schistose, maf tuffaceous sediments. Locally, u	SEDIMENTS ic to intermediate p to 5 % 1-3 mm quartz	VA02913	220.8	231.0	10.2	n/a	65	n/a	85	n/a	n/a	403
		grains and subangular, cherty cla chlorite+biotite altered fragment parallel to foliation. Fault at 50 degrees to core axis	sts and dark green-brown s stretched >10:1 at the lower contact.											
		STRUCTURE:. At 223.3 m foliation is at 35 deg 231.6-232.0 M crushed fault zone	rrees to core axis. at 50 degrees to core axis											
		ALTERATION:. 220.8 231.0 WEAK FRACTURE CONTROI HODERATE PERVASIVE CH light brown alteratic	LED CARBONATIZATION and LORITIZATION and a wispy on mineral is common.											
231.0 2	35.2	WEAKLY CHLORITIC FELSIC TUFF Light green-grey weakly to modera chloritized felsic tuff. Lower of	tely pervasively contact is at 40 degrees	VA08537 VA02914	231.0	232.0	1.0	1 n/a	6 31	<5 n/a	32 41	<1 n/a (1	8 n/a (5	480 608 480
		to core axis. STRUCTURE:. At 234 5 m foliation is at 50 dec	rrees to core axis.	VA08538 VA08539 VA08540	232.0 233.0 234.0	233.0 234.0 235.2	1.0 1.2	4 4	6 19	5	32 24	<1 <1	16 27	600 570
		ALTERATION:. 231.0 235.2 WEAK PERVASIVE CHLORI	TIZATION.											
		ALTERATION:. 232.0-235.2 m 3-4% disseminated p	byrite.											
235.2 2	47.8	MAFIC TO INTERMEDIATE TUFFACEOUS Similiar to 220.8 to 231.0 m. An 3.0 cm long, 0.2 cm wide chloriti	SEDIMENTS pproximately 5 %, 0.5 to c fragments stretched	VA02915	235.2	254.7	19.5	n/a	76	n/a	70	n/a	n/a	518
		parallel to foliation. Bands/bee parallel to foliation contain up eyes (2 % quartz eyes overall). degrees to core axis.	is up to 0.1 m thick to 8 %, 2-4 mm quartz Lower contact is at 45											
		STRUCTURE:. At 237.7 m foliation is at 40 dec	rees to core axis.											
		ALTERATION: . 235.2 247.8 WEAK FRACTURE CONTROL	LLED CARBONATIZATION.											
		237.9 238.2 Medium green, fine-gr	rained mafic dyke at.											
		238.9 240.3 Rock is felsic in con sericitic.	mposition and moderately											

PROPERTY: Chemainus J.V.

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-69 9

 From
 To

 (m)
 (m)

Sample From Width Total To Cu РЪ Zn Aσ Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm)

247.8 249.2 FELSIC QUARTZ EYE TUFF

Light grey, well foliated, sericitic felsic tuff with 5-10%, 2-5 mm round quartz eyes. Trace disseminated pyrite. Lower contact is at 45 degrees to core axis.

STRUCTURE:.

At 248.0 m foliation is at 40 degrees to core axis.

249.2 254.7 MAFIC TUFF

Medium green, chloritic mafic tuff. Quite massive over the first 0.7 m and it may be a flow. Below 250.2 m it has a bedded appearance. The beds are 0.5 to 10 cm thick and are parallel to foliation. Lower contact is at 55 degrees to core axis.

SRUCTURE:.

At 250.6 m bedding is at 55 degrees to core axis.

ALTERATION: .

249.2 252.2 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

252.1 254.4 Very massive dark green chloritic section. The presence of up to 5 %, < 2 mm quartz grains indicates that it is tuffaceous.</p>

254.7 273.4 WEAKLY CHLORITIC FELSIC TUFF

Light green-grey weakly to moderately chloritic and moderately sericitic well foliated coarse (1-2 mm grain-size) felsic tuff chlorite is pervasive and also occurs as discrete wisps < 2 mm thick and 1.0 cm long which may be altered fragments. Lower contact is at 50 degrees to core axis.

STRUCTURE:.

At 255.4 m foliation is at 40 degrees to core axis. At 269.0 m foliation is at 35 degrees to core axis.

ALTERATION: .

254.7 271.0 WEAK PERVASIVE CHLORITIZATION , MODERATE PERVASIVE SERICITIZATION and locally WEAK PERVASIVE CARBONATIZATION.

SULPHIDES:.

254.7-256.0 m 2% disseminated pyrite. 261.0-265.0 m 2 % pyrite concentrated in hairline fractures parallel to foliation. 266.0-267.0 m 4-5% disseminated and fracture controlled

VA02916	254.7	273.4	18.7	n/a	(10	n/a	57	n/a	n/a	559
VA08547	254.7	256.0	1.3	2	7	11	55	<1	19	530
VA08541	261.0	262.0	1.0	2	3	13	70	<1	5	590
VA08542	262.0	263.0	1.0	2	4	29	100	<1	12	610
VA08543	263.0	264.0	1.0	2	5	38	80	(1	22	490
VA08544	264.0	265.0	1.0	2	7	19	78	<1	21	590
VA08545	265.0	266.0	1.0	2	3	14	72	1	11	560
VA08546	266.0	267.0	1.0	5	- 4	23	52	1	22	660
VA08548	267.0	268.0	1.0	2	3	31	82	1	18	650
VA08549	268.0	269.0	1.0	2	2	13	64	1	30	770
VA08550	269.0	270.0	1.0	2	3	6	82	(1	19	730
VA08551	270.0	271.0	1.0	2	5	7	66	<1 -	23	740
VA08552	271.0	272.0	1.0	1	5	5	56	<1	8	1000

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 10 DIAMOND DRILL LOG From То Width Sample From То Total Cu Рb Zn λq Au Ba (m) -----DESCRIPTION------(m) Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) pyrite. 267.0-271.0 m 1-2% disseminated pyrite. 273.4 278.9 MAFIC FLOW Dark green, massive, moderately carbonatized, chloritic VA02917 273.4 278.9 5.5 n/a 140 n/a 105 n/a n/a 68 mafic flow. 1 Mm flakes of a light brown, soft alteration mineral is disseminated throughout. Lower contact is at 60 degrees to core axis. ALTERATION:. 273.4 278.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 278.9 286.7 CHLORITIC FELSIC QUARTZ EYE TUFF Light green-grey weakly chloritic and moderately sericitic VA02918 278.9 291.3 12.4 n/a 1380 n/a 20 n/a 35 n/a felsic tuff with 2-3%, 2-4 mm quartz eyes. No quartz VA08553 284.7 285.0 7 9 24 <1 <5 850 . 3 8 eyes and strongly altered (sericite+lightbrown clay VA08554 285.0 286.0 1.0 4 7 < 5 34 <1 <5 1300 alteration mineral) above 280.0 m. VA08555 286.0 286.7 .7 4 4 <5 32 <1 <5 1200 Lower contact is placed where feldspars become conspicuous. STRUCTURE: . 279.8-280.3 M crushed fault zone at 55 degrees to core axis At 282.4 m bedding is at 65 degrees to core axis. 284.2-284.7 M fault gouge at 60-70 degrees to core axis. ALTERATION: . 278.9 286.7 WEAK PERVASIVE CHLORITIZATION. SULPHIDES:. 284.7-285.0 m 8 % fracture controlled pyrite. 285.0-286.7 m 3-4% pyrite in < 3 mm stringers parallel to foliation. 281.9 282.0 Dark green chloritic mafic tuff bed at 60 degrees to core axis. 286.7 291.3 QUARTZ-FELDSPAR PORPHYRITIC FLOW Comprised of 3-5 % round guartz eyes up to 5 mm in VA08556 286.7 288.0 1.3 6 <5 28 (1 8 1600 1 diameter and 5 %, 1 to 5 mm white feldspar crystals in a VA08557 288.0 289.0 ٢5 24 6 2700 1.0 1 2 <1 massive light green, weakly chloritic, siliceous matrix. VA08558 289.0 290.0 <5 25 . (1 <5 1300 1.0 2 1 4.0 Cm of finely bedded ((0.5 cm) felsic tuff at the lower VA08559 290.0 291.0 <5 28 (1)11 1200 1.0 6 1 contact. Lower contact is a slip or erosional contact at 60 degrees to core axis. STRUCTURE:. 286.9-287.2 M crushed fault zone at 40 degrees to core axis 288.9-289.0 M crushed fault zone at 50 degrees to core axis At 289.8 m foliation is at 40 degrees to core axis. At 291.2 m 0.5 cm fault gouge at 60 degrees to core axis.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 11 DIAMOND DRILL LOG Sample From To Width Total Cu Pb Zn Ag -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) ALTERATION:. 286.7 291.3 WEAK PERVASIVE CHLORITIZATION. SULPHIDES:. 289.0-291.0 M trace to 1 % disseminated pyrite. Rock has a reddish hue, possibly due to very finely disseminated sphalerite. 291.3 293.6 MAFIC FLOW As 273.4 to 278.9 m. Lower contact is at 55 degrees to core axis. ALTERATION:. 291.3 293.6 WEAK FRACTURE CONTROLLED CARBONATIZATION. Weak fracture controlled hematite alteration near the lower contact. 293.6 315.2 QUARTZ-FELDSPAR PORPHYRITIC FLOW n/a 1320 36 n/a As 286.7 to 291.3 m. Quite massive, foliation is not well VA02919 293.6 315.2 21.6 n/a 14 n/a VA08560 293.6 295.0 1.4 <5 30 <1 developed. 1 3 VA08561 295.0 296.0 <5 22 <1 1.0 1 3 STRUCTURE:. VA08562 296.0 297.0 1.0 1 3 <5 24 <1 At 309.8 m 2.0 cm fault gouge at 75 degrees to core axis. VA08563 297.0 298.0 1.0 1 3 < 5 20 <1 At 314.0 m foliation is at 50 degrees to core axis. ALTERATION:. 293.6 315.2 WEAK PERVASIVE CHLORITIZATION. SULPHIDES:. 293.6-298.0 M trace disseminated pyrite. Core has a spotty

reddish appearance possibly due to finely disseminated sphalerite or weak hematite alteration centred on guarz phenocrysts.

307.0 307.5 Barren guartz vein with moderate fracture controlled chlorite at 50 degrees to core axis.

310.2 310.4 Dark green carbonatized mafic flow or dyke at 70 degrees to core axis.

315.2 331.0 CHLORITIC FELSIC QUARTZ EYE TUFF

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From To

(m)

(m)

Similiar to unit above but much fewer feldspar crystals <2 mm long (1%) and more guartz eyes. Angular to subrounded quartz eyes 2-5 mm in diameter comprise 5-10% of the rock. Quite massive but hazy, lighter grey patches and bands up to 4 cm thick may represent felsic lapilli. Nil to trace disseminated pyrite. Quartz flooding obscures the lower contact.

21 n/a n/a 1290 VA02920 315.2 331.0 15.8 n/a <10 n/a

Au

<5 1100

<5 960

<5 1100

<5 1100

Вa

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 12 DIAMOND DRILL LOG From То Sample Width Total Cu ΡЪ Ba From То Zn Ag Au (m) -----DESCRIPTION------(m) No. (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) STRUCTURE:. At 323.6 m foliation is at 45 degrees to core axis. At 325.0 m fault gouge at 60 degrees to core axis. ALTERATION:. 315.2 331.0 WEAK PERVASIVE CHLORITIZATION. 320.6 321.1 Moderately chloritic zone, intermediate in composition. 321.1 321.8 Dark green, chloritic weakly carbonatized mafic tuff. Upper and lower contacts are gradational. 331.0 336.6 MAFIC TUFF Massive, coarse, mafic-intermediate tuff, comprised of 5 VA02921 331.0 336.6 5.6 n/a 30 98 n/a n/a 571 n/a %, 1-2 mm light grey subrounded clasts (most of which VA08564 336.0 337.5 1.5 3 107 177 128 <1 6 1700 appear to be quartz) and up to 10 %, <1 mm white feldspar crystals in a dark green, chloritic, fine-grained mafic to intermediate matrix. Bleached and quartz-carbonate flooded for 0.7 m from the upper contact. Lower contact is at 30 degrees to core axis. ALTERATION:. 331.0 336.6 WEAK FRACTURE CONTROLLED CARBONATIZATION and MODERATE PERVASIVE CHLORITIZATION. 335.3 335.6 Mafic porphyritic (?). Black chlorite (replacing pyroxene) is smeared along foliation planes. 336.6 337.5 FELSIC TUFF Light to dark grey felsic ash tuff. Moderately sericitic over first 0.4 m but becomes progresively more argillaceous and carbonatized below 337.0 m. 3 % fracture controlled pyrite. Lower contact is gradational. 337.5 340.7 BLACK ARGILLITE Crushed moderately graphitic, black argillite. Moderate VA08565 337.5 338.6 1.1 110 324 19 1700 3 88 1 75 12 1100 fracture controlled quartz-carbonate alteration. 3 % VA08566 338.6 340.0 1.4 3 81 324 <1 pyrite associated with quartz-carbonate alteration. 163 300 800 18 1400 VA08567 340.0 340.7 .7 ٥ 1 Intercalated with felsic tuff over the last 0.7 m. Lower contact is at 30 degrees to core axis. STRUCTURE:. At 337.6 m bedding is at 45 degrees to core axis. 338.3-339.9 M FAULT ZONE at 5-15 degrees to core axis.

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PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 13 DIAMOND DRILL LOG From To Sample From Τo Width Total Cu Pb Zn Aσ Au Ba (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) Blocky, highly fractured core, 0.5 m of lost core. 340.7 347.3 MAFIC TUFF 27 Varies from a massive coarse mafic tuff +/- feldspar VA02922 340.7 347.3 6.6 n/a n/a 74 n/a n/a 721 crystals to a fine dacitic tuff, although it is generally basaltic to andesitic in composition. Lower contact is at 50 degrees to core axis. STRUCTURE:. At 342.3 m foliation is at 50 degrees to core axis. ALTERATION:. 340.7 WEAK FRACTURE CONTROLLED CARBONATIZATION to MODERATE FRACTURE CONTROLLED CARBONATIZATION. Local weak hematite alteration where rock becomes feldspar porphyritic. 344.7 888.8 Splotches of purple carbonate up to 0.5 cm in diameter. 347.3 350.7 WEAKLY CHLORITIC FELSIC TUFF n/a .85 n/a 1510 Light grey-green, fine dacitic to rhyolitic tuff. VA02923 347.3 350.7 3.4 n/a 62 n/a Generally quite massive but locally finely bedded. 2-3% VA08568 347.6 348.0 . 4 3 34 8 90 <1 <5 800 Pyrite concentrated in hairline fratures roughly parallel VA08569 348.0 349.0 1.0 3 29 9 116 <1 <5 1100 71 . 7 78 <1 <5 1200 to foliation. 10.0 cm guartz vein at 40-60 degrees to VA08570 349.0 350.0 1.0 3 23 9 48 <1 6 1100 core axis at the lower contact. VA08571 350.0 350.7 .7 3 STRUCTURE:. At 347.9 m bedding is at 50 degrees to core axis. At 350.3 m foliation is at 50 degrees to core axis. 347.6 348.1 Finely bedded (0.5 cm) section. 350.7 353.2 MAFIC TUFF n/a 442 53 n/a Pale to dark green massive moderately carbonatized, fine VA02924 350.7 369.0 18.3 n/a n/a 69 mafic tuff. Varies from andesitic in composition above 352.0 m to basaltic below this depth. The lower contact is sharp at 20 degrees to core axis. 353.2 365.5 FELDSPAR PORPHYRITIC MAFIC FLOW Very massive medium green mafic rock with 20-30%, 1-3 mm olive green, epidotized, subhedral feldspars. Similiar in appearance to gabbro but no ilmenite recognized: check whole rock samples. . ALTERATION:. 353.2 365.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION .

365.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION WEAK PERVASIVE CARBONATIZATION and locally weak fracture controlled hematization.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-69 14 DIAMOND DRILL LOG Width Total Cu Рb Zn λq Au Ba Sample From To From To -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) 365.5 369.0 MAFIC TUFF Medium green moderately carbonatized and chloritized mafic tuff. Locally mafic (<2 %) porphyritic, pyroxene crystals have been altered chlorite and are smeared out along foliation planes. Nil to trace disseminated pyrite. Lower contact is at 40 degrees to core axis. STRUCTURE:. At 368.0 m bedding is at 40 degrees to core axis. ALTERATION: . 365.2 369.0 MODERATE FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CARBONATIZATION. 369.0 371.9 WEAKLY CHLORITIC FELSIC TUFF 70 <1 6 1200 Grey-green fine weakly chloritic felsic tuff. Locally VA08572 370.0 370.5 . 5 4 43 13 quite cherty and finely bedded. Up to 2 % (2 mm clear quartz eyes. Lower contact is at 40 degrees to core axis. STRUCTURE:. At 369.3 m bedding is at 40 degrees to core axis. At 370.0 m bedding is at 40 degrees to core axis. ALTERATION: . 369.0 370.5 WEAK PERVASIVE CHLORITIZATION and WEAK FRACTURE CONTROLLED CARBONATIZATION. SULPHIDES:. 370.0-370.5 m 4 % fracture controlled pyrite. 370.5 371.2 Moderately carbonatized mafic tuff intercalated with a couple of beds of felsic quartz eye tuff <2.0 cm thick. 371.9 419.5 MAFIC TUFF n/a 832 Medium green, moderately carbonatized mafic tuff (chlorite VA02925 371.9 400.0 28.1 n/a 35 n/a 74 n/a VA08573 373.6 374.6 1.0 910 schist) with up to 3 % < 5 mm wispy chlorite smeared 1 55 <5 64 <1 6 510 along foliation planes (altered pyroxenes ?). Occasional VA08574 374.6 375.6 1.0 85 6 88 <1 6 4 <5 890 VA08575 375.6 376.4 101 5 68 <1 light grev to green fine-grained intermediate to felsic . 8 4 VA08576 376.4 377.4 1.0 59 5 88 . (1 5 680 1 bands parallel to foliation. Up to Locally, up to 3 % (3 75. n/a 663 VA02926 400.0 419.5 19.5 n/a 28 n/a n/a mm chlorite wisps up to 1.0 cm long which are either chloritized fiamme or pyroxene crystals. Lower contact is at 30 degrees to core axis. STRUCTURE:.

At 376.4 m foliation is at 20 degrees to core axis. At 379.2 m foliation is at 35 degrees to core axis.

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG HOLE No: Page Number CH88-69 15

From To

(m) (m)

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(m) -----DESCRIPTION-----

Sample From То Width Total Cù Рb Zn Ba λα Αu Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm)

At 386.4 m foliation is at 40 degrees to core axis. At 397.1 m foliation is at 40 degrees to core axis. At 402.2 m 2.0 cm fault gouge at 35 degrees to core axis. 406.3-409.0 m 0.2 m of lost core for no apparent reason. At 409.5 m foliation is at 40 degrees to core axis. 417.1-417.3 M fault gouge at 20-40 degrees to core axis.

ALTERATION: .

371.9 419.5 MODERATE FRACTURE CONTROLLED CARBONATIZATION and WEAK PERVASIVE CARBONATIZATION. Weak to moderate fracture controlled hematization below 407.0 m. .

SULPHIDES:.

374.6-376.4 m 3 % pyrrhotite, 1 % pyrite and trace chalcopyrite. Sulphides occur in microfractures and as disseminations.

- 378.5 379.5 Several clasts of light grey fine-grained felsic volcanics up 1.0 cm wide and 4.0 cm long stretched parallel to foliation.
- 379.7 382.3 Tuff is intermediate (ie andesitic to dacitic in composition).
- 386.6 387.3 MAFIC TUFF BRECCIA. As 353.2 to 365.5 m. Moderate fracture controlled hematitization. May be a gabbro. Upper and lower contacts are gradational.
- 399.1 399.3 Irregular barren quartz-carbonate vein with fracture controlled chlorite at 35-45 degrees to core axis.

419.5 423.4 CHLORITIC FELSIC QUARTZ EYE TUFF

Light grey-green, coarse, felsic tuff with up to 15 %, 2-6 mm quartz eyes and locally 5 % feldspar crystals up to 4 mm in diameter and up to 5 % angular, light brown cherty clasts up to 10 mm in diameter. Locally trace disseminated pyrite. Rock has a very slight red tint in places which may be due to very finely disseminated sphalerite. VA08577 422.0 423.4 1.4 1 3 <5 28 <1 7 1100

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major elements)

SAMPLE NUMBER	FROM	TO	XS I 02	XAL203	ZCAO	ZHGO	ZNA20	XK20	XFE203	11102	XP205	ZHNO	XLOI	SUN	BA	AI	NACA
**********									· · ·								
VA02477	31.90	32.20	50.60	16.90	7.62	1.86	3.09	1.14	9.45	0.80	0.21	0.20	8.39	100.26	305.	22.	11.
VA02478	38.10	38.50	54.80	18.10	3.93	2.61	3.00	1.03	9.84	0.77	0.26	0.16	5.62	100.12	285.	34.	7.
VA02479	54.00	54.50	65.40	16.10	3.52	1.63	4.10	0.72	2.76	0.56	0.14	0.07	4.16	99.16	399.	24.	8.
VA02480	67.70	68.00	47.40	14.90	12.50	6.98	1.87	0.06	10.70	1.27	0.11	0.17	4.08	100.04	52.	33.	14.
VA02481	82.10	82.30	64.80	14.40	3.61	1.65	1.02	2.19	4.25	0.41	0.13	0.14	5.77	98.37	1280.	45.	5.
VA02482	94.70	95.00	47.00	14.70	12.00	7.87	2.24	0.05	11.10	1.31	0.12	0.18	3.23	99.80	44.	36.	14.
VA02483	101.20	101.50	72.40	13.90	1.66	1.25	0.43	2.66	2.53	0.29	0.07	0.07	3.47	98.73	1930.	65.	2.
VA02484	113.00	113.30	41.20	16.20	9.13	6.17	2.07	0.61	10.20	0.89	0.11	0.17	13,70	100.45	224.	38.	11.
VA02485	131.00	132.00	41.10	14.80	10.20	5.39	1.84	0.95	9.78	0.71	0.12	0.14	15.20	100.23	234.	34.	12.
VA02486	160.30	160.70	74.00	13.70	0.33	0.50	0.21	3.10	2.65	0.31	0.10	<0.01	3.39	98.29	1840.	87.	1.
VA02487	175.40	176.00	50.30	17.60	6.89	4.20	3.41	0.80	8.90	0.73	0.19	0.19	6.47	99.68	466.	33.	10.
VA02488	187.50	187.80	67.00	13.70	4.05	1.54	0.27	2.99	2.05	0.26	0.06	0.14	6.47	98.53	907.	51.	4.
VA02489	201.00	201.90	43.80	17.50	9.42	3.39	1.30	1.38	10.00	0.80	0.14	0.16	12.40	100.29	296.	31.	11.
VA02490	216.70	217.00	74.00	11.80	1.19	0.58	1.01	1.83	1.61	0.20	0.06	0.04	6.62	98.94	969.	52.	2.
VA02491	224.00	224.30	50.60	14.60	7.66	3.20	1.51	1.38	7.70	0.66	0.17	0.18	12.90	100.56	413.	33.	9.
VA02492	234.10	234.30	61.50	14.20	5.38	2.05	1.81	1.29	3.70	0.43	0.16	0.13	8.39	99.04	606.	32.	7.
VA02493	241.00	241.70	51.10	15.40	7.26	3.15	1.59	1.38	7.65	0.67	0.21	0.22	10.80	99.43	501.	34.	9.
VA02494	248.30	248.80	74.90	12.70	1.72	0.82	1.61	1.27	2.15	0.17	0.04	0.08	3.39	98.85	701.	39.	3.
VA02495	253.30	254.00	51.20	17.20	6.92	4.15	3.24	1.05	8.09	0.64	0.16	0.17	7.16	99.98	550.	34.	10.
VA02496	259.00	259.40	63.40	14.80	3.59	1.85	2.64	1.67	5.17	0.44	0.16	0.13	5.39	99.24	569.	36.	6.
VA02497	277.30	277.50	43.10	11.50	9.93	7.20	0.66	0.03	13.20	1.63	0.14	0.23	12.20	99.82	37.	41.	11.
VA02498	288.50	288.80	74.20	13.20	1.31	2.11	2.29	1.12	1.36	0.18	0.05	0.04	3.08	98.94	1130.	47.	4.
0407499	300.70	301.00	74.70	12.70	1.34	2.00	2.08	2.24	1.46	0.16	0.04	0.05	2.08	98.85	1290.	55.	э.

Hole No. CH88-69 WHOLE ROCK SAMPLES

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DIAMOND	DRILL	CORE J	LITHOGEOCHEN	1ICAL	RECORD
		(MAJOR	ELEMENTS)		

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	ZKGO	XNA20	XK20	ZFE203	XT102	XP205	ZHNO	XLOI	SUM	BA	AI	NACA
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VA02501	322.00	322.90	74.90	11.50	2.41	0.90	3.01	1.94	1.71	0.19	0.05	0.05	2.62	99.28	1270.	34.	5.
VA02500	322.90	323.60	69.00	14.80	2.16	1.31	3.59	2.64	2.14	0.24	0.06	0.05	3.00	98.99	1470.	41.	6.
VA02502	352.10	352.50	49.00	14.40	9.36	2.69	4.34	0.52	9.98	0.69	0.45	0.21	8.23	99.87	213.	19.	14.
VA02503	356.60	357.00	42.90	16.20	12.20	5.05	1.48	0.75	12.00	0.84	0.30	0.21	7.39	99.32	325.	30.	14.
VA02504	369.40	369.60	64.80	14.80	3.95	0.98	4.43	2.18	3.78	0.25	0.17	0.10	4.00	99.44	1190.	27.	8.
VA02505	388.00	388.70	60.50	16.30	4.19	1.18	3.41	2.64	6.04	0.25	0.22	0.21	4.77	99.71	835.	33.	8.
VA02506	409.10	409.50	61.50	15.40	2.33	2.74	2.43	0.63	9.18	0.52	0.23	0.13	4.16	99.25	575.	41.	5.
VA02507	421.30	421.70	74.30	12.50	1.54	1.76	2.25	1.54	1.55	0.16	0.17	0.04	2.47	98.28	794.	47.	4.

Hole No. CH88-69 WHOLE ROCK SAMPLES

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Page No. 2

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	то	25102	XAL203	XCA0	XHGO	ZNA20	ZK 20	ZFE203	XT 102	XP205	ZHNO	ZLOI	รบพ	BA	AI	NACA

VA02902	7.30	37.00	53.20	16.90	6.78	2.12	2.26	1.43	8.55	0.74			7.62	99.60	365.	28.	9.
VA02903	37.00	63.90	50.90	16.40	7.00	3.06	2.30	0.96	10.50	0.94			7.47	99.53	205.	30.	9.
VA02904	76.00	88.60	66.00	14.50	4.48	1.67	1.48	1.78	3.83	0.41			5.85	100.00	1090.	37.	6.
VA02905	97.60	102.70	68.40	14.30	3.85	1.51	0.54	2.64	3.10	0.37			4.93	99.64	1350.	49.	4.
VA02906	102.70	132.00	40.80	14.80	12.20	4.45	1.32	0.82	10.10	0.82			14.10	99.41	166.	28.	14.
VA02907	132.00	148.90	44.70	15.40	9.86	3.89	1.85	0.98	10.30	0.86			11.60	99.44	282.	29.	12.
VA02908	148.90	153.70	48.00	10.90	11.40	4.93	0.73	1.21	6.61	0.38			15.70	99.86	559.	34.	12.
VA02909	153.70	173.80	76.20	12.50	1.15	0.63	0.07	2.82	1.93	0.24			2.85	98.39	2070.	74.	1.
VA02910	179.90	193.00	68.10	12.40	4.16	1.42	0.23	2.57	4.04	0.30			4.54	97.76	997.	48.	4.
VA02911	193.00	210.60	43.80	15.40	11.60	3.44	1.10	1.28	9.21	0.72			13.60	100.15	273.	27.	13.
VA02912	210.60	220.80	72.30	12.50	2.53	1.05	1.00	1.97	2.51	0.20			4.23	98.29	1230.	46.	4.
VA02913	220.80	231.00	46.90	15.30	8.11	3.58	1.41	1.24	9.67	0.77			12.80	99.78	403.	34.	10.
VA02914	231.00	235.20	61.00	15.10	5.17	2.07	1.82	1.30	3.98	0.45			8.54	99.43	608.	33.	7.
VA02915	235.20	254.70	47.30	15.60	8.14	3.74	1.44	1.38	9.11	0.80			12.50	100.01	518.	35.	10.
VA02916	254.70	273.40	60.80	14.50	4.83	1.99	2.35	1.87	4.78	0.43			6.23	97.78	559.	35.	7.
VA02917	273.40	278.90	44.30	11.90	9.84	6.59	0.90	0.06	13.30	1.67			11.40	99.96	68.	38.	11.
VA02918	278.90	291.30	71.90	13.20	2.40	1.81	1.89	1.61	1.99	0.25			3.70	98.75	1380.	44.	4.
VA02919	293.60	315.20	71.60	14.10	1.46	1.78	2.82	2.63	1.81	0.18			2.62	99.00	1320.	51.	4.
VA02920	315.20	331.00	72.70	12.60	2 09	0.99	 	2 44	1:61	0.21			2.85	98.38	1290.	41.	5.
11002921	321 00	226 60	54 70	16 50	A 49	2 53	5 05	1 19	7 95	0.74			5 62	31 99	571	33.	10.
	001.00	330.00	EA 00	10.00		2.00	0.00	1.17	/.UJ	0.74			5.02	99.45	721	30	11.
VH02922	340.70	34/.30	50.90	16.20	1.13	3.49	2.93	1.12	9.39	0.76			5.93	70.1J	1510	50	· · ·
VA02923	347.30	350.70	55.10	17.10	4.06	3.78	1.12	3.78	7.47	0.77			5.16	98.34	1510.	54.	J.
VA02924	350.70	369.00	44.20	16.80	9.51	4.80	2.16	1.23	11.40	0.84			7.39	98.33	442.	34.	12.

Hole No. CH88-69 ALTERED SAMPLES

Page No.



DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major elements)

SAMPLE NUMBER	FROM	то	ZS102	XAL203	XCA0	ZNGO	ZNA20	XK20	XFE203	XT 102	XP205	ZMNO	XL01	SUM	BA	AI	NACA
VA02925	371.90	400.00	52.20	17.00	6.20	2.76	2.59	2.05	8.71	0.73			7.08	99.32	832.	35.	9.
VA02926	400.00	419.50	56.60	16.00	5.46	2.09	2.97	1.79	7.39	0.54			6.00	98.84	663.	32.	8.

Hole No. CH88-69 ALTERED SAMPLES

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Page No.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm.)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
VA08493	34.00	35.00	160.0	69.0	94.0	<0.5	<5.0	24.0	16.0	<5.0	<5.0	<1.0	4.0	1190.0	42.	0.	6.
VA08492	53.60	55.00	390.0	15.0	52.0	<0.5	<5.0	11.0	12.0	<5.0	8.0	<1.0	4.0	360.0	22.	0.	2.
VA08495	87.00	88.60	1000.0	41.0	46.0	<0.5	<5.0	8.0	4.0	<5.0	<5.0	<1.0	7.0	700.0	47.	0.	3.
VA08494	98.00	99.00	1000.0	28.0	260.0	<0.5	<5.0	8.0	8.0	5.0	7.0	1.0	3.0	570.0	10.	1.	3.
VA08496	99.00	99.50	960.0	71.0	2600.0	<0.5	13.0	8.0	12.0	16.0	8.0	11.0	5.0	880.0	3.	1.	3.
VA08497	99.50	100.20	720.0	45.0	130.0	<0.5	5.0	38.0	100.0	8.0	29.0	<1.0	4.0	1350.0	26.	2.	7.
VA08498	100.20	101.20	1400.0	57.0	60.0	<0.5	<5.0	18.0	22.0	<5.0	17.0	<1.0	4.0	650.0	49.	1.	3.
VA08499	104.00	105.00	450.0	30.0	92.0	<0.5	23.0	33.0	16.0	9.0	12.0	<1.0	5.0	1200.0	25.	2.	5.
VA08500	105.00	106.00	360.0	26.0	84.0	<0.5	12.0	28.0	16.0	7.0	<5.0	<1.0	5.0	1020.0	24.	2.	5.
VA08501	106.00	107.00	210.0	41.0	80.0	<0.5	<5.0	27.0	14.0	<5.0	<5.0	<1.0	5.0	1180.0	34.	2.	5.
VA08502	107.00	108.00	260.0	23.0	74.0	<0.5	<5.0	24.0	10.0	<5.0	<5.0	<1.0	3.0	900.0	24.	1.	5.
VA08503	149.00	150.00	520.0	44.0	64.0	<0.5	8.0	20.0	56.0	9.0	27.0	<1.0	8.0	1800.0	41.	1.	4.
VA08504	152.70	153.70	210.0	42.0	56.0	<0.5	<5.0	28.0	60.0	6.0	8.0	<1.0	5.0	1080.0	43.	1.	4.
VA08505	153.70	154.70	640.0	75.0	180.0	<0.5	54.0	32.0	20.0	34.0	96.0	<1.0	5.0	1280.0	29.	5.	6.
VA08506	154.70	155.70	950.0	12.0	230.0	<0.5	16.0	4.0	4.0	10.0	24.0	1.0	5.0	160.0	5.	5.	1.
VA08507	155.70	157.00	1800.0	77.0	346.0	<0.5	10.0	11.0	12.0	168.0	32.0	2.0	5.0	390.0	18.	5.	3.
VA08508	157.00	158.00	1100.0	12.0	86.0	<0.5	8.0	8.0	10.0	6.0	6.0	<1.0	5.0	580.0	12.	. 4.	2.
VA08509	158.00	159.00	1700.0	16.0	12.0	<0.5	14.0	5.0	5.0	5.0	10.0	<1.0	2.0	30.0	57.	4.	2.
VA08510	159.00	160.00	1700.0	9.0	12.0	<0.5	5.0	5.0	16.0	5.0	6.0	<1.0	2.0	10.0	43.	4.	1.
VA08511	160.00	161.00	1600.0	15.0	36.0	<0.5	13.0	8.0	54.0	5.0	20.0	<1.0	2.0	100.0	29.	4.	2.
VA08512	161.00	162.40	1600.0	8.0	20.0	<0.5	13.0	4.0	5.0	9.0	11.0	<1.0	4.0	120.0	29.	4.	1.
VA08513	164.30	165.00	3500.0	29.0	52.0	<0.5	7.0	2.0	4.0	8.0	7.0	<1.0	4.0	400.0	36.	2.	1.
VA08514	165.00	166.00	2500.0	12.0	52.0	<0.5	<5.0	2.0	4.0	5.0	6.0	<1.0	3.0	420.0	19.	2.	1.

Hole No. CH88-G9

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (pp#)	NI (ppm)	PB (ppas)	AS (ppæ)	CD (ppm)	HC (ppm)	HN (ppm)	CUZN	ETS	FE
HADDELE	166 00	167 00	2100 0	12 0	40.0	(0 E .	(5 0	2.0			7 0	() ()	2 0	550 0	20	2	• •
VH06515	168.00	187.00	2100.0	12.0	40.0	(0.5	(5.0	5.0	7.0	/ . V	/.V	<1.0	2.0	630.0	25	2.	1
VA08515	167.00	168.00	2400.0	22.0	40.0	<0.5	(5.0	5.0	/.U	5.0	(J.V	(1.0	3.0	590.0	33.	4. ว	. 1
VAU8517	168.00	169.00	1800.0	7.0	40.0	<v.a< td=""><td>(3.0</td><td>4.0</td><td>J.V</td><td></td><td>5.0</td><td>(1.0)</td><td>2.0</td><td>570.0</td><td></td><td>2.</td><td></td></v.a<>	(3.0	4.0	J.V		5.0	(1.0)	2.0	570.0		2.	
VA08518	169.00	170.00	1600.0	16.0	44.0	<0.5	20.0	3.0	4.0	10.0	10.0	<1.0	6.0	520.0	27.	4.	2.
VA08519	170.00	171.00	1900.0	24.0	42.0	<0.5	5.0	4.0	4.0	8.0	5.0	<1.0	4.0	510.0	36.	2.	1.
VA08520	171.00	172.00	1500.0	7.0	68.0	<0.5	10.0	5.0	5.0	9.0	8.0	<1.0	4.0	750.0	9.	2.	2.
VA08521	172.00	173.00	3500.0	15.0	46.0	<0.5	<5.0	4.0	8.0	10.0	9.0	<1.0	5.0	720.0	25.	2.	2.
VA08522	173.00	173.80	2500.0	20.0	62.0	<0.5	7.0	5.0	6.0	14.0	9.0	<1.0	4.0	340.0	24.	2.	2.
VA08523	179.90	181.00	1900.0	17.0	70.0	<0.5	10.0	3.0	4.0	20.0	9.0	<1.0	3.0	520.0	20.	з.	1.
VA08524	181.00	182.00	1300.0	16.0	46.0	<0.5	11.0	3.0	4.0	12.0	19.0	<1.0	1.0	510.0	26.	з.	2.
VA08525	182.00	183.00	1400.0	19.0	44.0	<0.5	19.0	3.0	4.0	11.0	19.0	<1.0	4.0	420.0	30.	3.	2.
VA08526	183.00	184.00	1300.0	15.0	74.0	<0.5	14.0	3.0	4.0	11.0	19.0	<1.0	4.0	640.0	17.	3.	2.
VA08527	184.00	185.00	1300.0	14.0	54.0	<0.5	17.0	3.0	3.0	11.0	15.0	<1.0	5.0	780.0	21.	з.	2.
VA08528	185.00	186.00	830.0	15.0	60.0	<0.5	<5.0	5.0	4.0	9.0	<5.0	<1.0	4.0	770.0	20.	2.	2.
VA08529	186.00	187.00	950.0	9.0	48.0	<0.5	<5.0	2.0	4.0	7.0	<5.0	<1.0	4.0	500.0	16.	2.	1.
UA08530	187 00	188 00	950 0	12.0	28.0	(0.5	(5.0	2.0	4.0	5.0	(5.0	<1.0	3.0	680.0	30.	2.	1.
04005531	198 00	189 00	1000 0	10:0	32.0	(0.5	(5.0	4.0	4.0	7.0	6.0	<1.0	6.0	650.0	24.	2.	1.
VH00001	100.00	100.00	1000.0	10.0		(V.J	(C A				/5 0	(1.0		770 0	13	. 2	2.
VA08532	189.00	190.00	/10.0	9.0	60.0	(0.5	(3.0	4.0	4.0	0.V	CU.U	(1.0	0.0		10.		,
VA08533	190.00	191.00	830.0	5.0	44.0	<0.5	<5.0	2.0	4.0	5.0	<5.0	<1.0	8.0	680.0	10.	2.	1.
VA08534	191.00	192.00	890.0	10.0	36.0	<0.5	8.0	4.0	4.0	6.0	7.0	<1.0	5.0	780.0	22.	2.	4.
VA08535	192,00	193.00	720.0	34.0	64.0	<0.5	21.0	13.0	13.0	12.0	32.0	<1.0	6.0	840.0	35.	2.	3.
VA08536	193.00	194.00	580.0	30.0	132.0	<0.5	6.0	24.0	26.0	6.0	11.0	<1.0	5.0	1050.0	19.	1.	6.
VA08537	231.00	232.00	480.0	6.0	32.0	<0.5	8.0	5.0	4.0	<5.0	11.0	<1.0	5.0	640.0	16.	1.	3.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	BA (ppmi)	CU (ppm)	2N (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	МО (ррв)	HN (ppm)	CUZN	ETS	FE
VA08538	232.00	233.00	480.0	36.0	74.0	<0.5	<5.0	12.0	12.0	5.0	7.0	<1.0	5.0	1060.0	33.	4.	4.
VA08539	233.00	234.00	600.0	6.0	32.0	<0.5	16.0	6.0	4.0	5.0	9.0	<1.0	5.0	660.0	16.	4.	3.
VA08540	234.00	235.20	570.0	19.0	24.0	<0.5	27.0	9.0	4.0	<5.0	12.0	<1.0	4.0	700.0	44.	4.	3.
VA08547	254.70	256.00	530.0	7.0	55.0	<0.5	19.0	5.0	4.0	11.0	8.0	<1.0	5.0	800.0	11.	2.	3.
VA08541	261.00	262.00	590.0	3.0	70.0	<0.5	5.0	6.0	4.0	13.0	10.0	<1.0	5.0	800.0	4.	2.	з.
VA08542	262.00	263.00	610.0	4.0	100.0	<0.5	12.0	5.0	4.0	29.0	135.0	<1.0	4.0	1070.0	4.	2.	э.
VA08543	263.00	264.00	490.0	5.0	80.0	<0.5	22.0	6.0	4.0	38.0	95.0	<1.0	4.0	1100.0	6.	2.	3.
VA08544	264.00	265.00	590.0	7.0	78.0	<0.5	21.0	6.0	3.0	19.0	28.0	<1.0	5.0	660.0	8.	2.	з.
VA08545	265.00	266.00	560.0	3.0	72.0	<0.5	11.0	6.0	4.0	14.0	50.0	<1.0	4.0	810.0	4.	2.	з.
VA08546	266.00	267.00	660.0	4.0	52.0	0.6	22.0	6.0	8.0	23.0	77.0	<1.0	4.0	930.0	7.	5.	3.
VA08548	267.00	268.00	650.0	3.0	82.0	0.7	18.0	5.0	5.0	31.0	49.0	<1.0	5.0	880.0	4.	2.	з.
VA08549	268.00	269.00	770.0	2.0	64.0	0.7	30.0	5.0	4.0	13.0	150.0	<1.0	5.0	930.0	з.	2.	2.
VA08550	269.00	270.00	730.0	3.0	82.0	<0.5	19.0	5.0	4.0	6.0	105.0	<1.0	4.0	900.0	4.	2.	3.
VA08551	270.00	271.00	740.0	5.0	66.0	<0.5	23.0	5.0	4.0	7.0	55.0	<1.0	8.0	910.0	7.	2.	з.
VA08552	271.00	272.00	1000.0	5.0	56.0	<0.5	8.0	5.0	4.0	5.0	10.0	<1.0	4.0	720.0	8.	1.	.3.
VA08553	284.70	285.00	850.0	7.0	24.0	<0.5	<5.0	4.0	6.0	9.0	6.0	<1.0	5.0	270.0	23.	8.	5.
VA08554	285.00	286.00	1300.0	7.0	34.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	3.0	250.0	17.	4.	2.
VA08555	286.00	286.70	1200.0	4.0	32.0	<0.5	<5.0	4.0	4.0	<5.0	<5.0	<1.0	5.0	230.0	11.	4.	1.
VA08556	286.70	288.00	1600.0	6.0	28.0	<0.5	8.0	2.0	3.0	<5.0	<5.0	<1.0	3.0	270.0	18.	1.	1.
VA08557	288.00	289.00	2700.0	2.0	24.0	<0.5	6.0	2.0	4.0	<5.0	<5.0	<1.0	э.0	280.0	8.	1.	1.
VA08558	289.00	290.00	1300.0	2.0	25.0	<0.5	<5.0	3.0	4.0	<5.0	<5.0	<1.0	2.0	250.0	7.	1.	1.
VA08559	290.00	291.00	1200.0	6.0	28.0	<0.5	11.0	2.0	3.0	<5.0	<5.0	<1.0	4.0	270.0	18.	1.	1.
VA08560	293.60	295.00	1100.0	3.0	30.0	<0.5	<5.0	3.0	3.0	<5.0	<5.0	<1.0	5.0	370.0	9.	1.	1.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

SAMPLE	EROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NІ (ррш)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	ИН (ррв)	CUZN	ETS	FE
				· · · · · · ·													
VA08561	295.00	296.00	960.0	3.0	22.0	<0.5	<5.0	1.0	3.0	<5.0	<5.0	<1.0	4.0	320.0	12.	1.	1.
VA08562	296.00	297.00	1100.0	3.0	24.0	<0.5	<5.0	1.0	3.0	<5.0	<5.0	<1.0	3.0	310.0	11.	1.	1.
VA08563	297.00	298.00	1100.0	3.0	20.0	<0.5	<5.0	2.0	2.0	<5.0	<5.0	<1.0	2.0	240.0	13.	1.	1.
VA08564	336.00	337.50	1700.0	107.0	128.0	<0.5	6.0	12.0	23.0	177.0	50.0	2.0	5.0	540.0	46.	3.	3.
VA08565	337.50	338.60	1700.0	88.0	324.0	0.7	19.0	8.0	30.0	110.0	40.0	5.0	5.0	560.0	21.	3.	5.
VA08566	338.60	340.00	1100.0	81.0	324.0	<0.5	12.0	10.0	36.0	75.0	89.0	4.0	7.0	520.0	20.	3.	5.
VA08567	340.00	340.70	1400.0	163.0	800.0	0.8	18.0	16.0	58.0	300.0	80.0	16.0	8.0	560.0	17.	3.	5.
VA08568	347.60	348.00	800.0	34.0	90.0	<0.5	<5.0	18.0	10.0	8.0	18.0	<1.0	3.0	850.0	27.	3.	4.
VA08569	348.00	349.00	1100.0	29.0	116.0	<0.5	<5.0	10.0	14.0	9.0	10.0	<1.0	6.0	610.0	20.	3.	4.
VA08570	349.00	350.00	1200.0	71.0	78.0	<0.5	<5.0	12.0	16.0	7.0	96.0	<1.0	4.0	430.0	48.	3.	4.
VA08571	350.00	350.70	1100.0	23.0	48.0	<0.5	6.0	8.0	12.0	9.0	29.0	<1.0	13.0	380.0	32.	з.	3.
VA08572	370.00	370.50	1200.0	43.0	70.0	<0.5	6.0	12.0	9.0	13.0	66.0	<1.0	6.0	580.0	38.	4.	2.
VA08573	373.60	374.60	910.0	55.0	64.0	<0.5	6.0	18.0	30.0	<5.0	50.0	<1.0	4.0	1180.0	46.	1.	4.
VA08574	374.60	375.60	510.0	85.0	88.0	<0.5	6.0	30.0	86.0	6.0	40.0	<1.0	4.0	1150.0	49.	4.	6.
VA08575	375.60	376.40	890.0	101.0	68.0	<0.5	<5.0	26.0	44.0	5.0	76.0	<1.0	4.0	1020.0	60.	4.	5.
VA08576	376.40	377.40	680.0	59.0	88.0	<0.5	5.0	32.0	73.0	5.0	40.0	<1.0	5.0	1320.0	40.	1.	6.
UA08577	422.00	423.40	1100-0	3.0	28.0	(0.5	7.0	2.0	4.0	<5.0	<5.0	<1.0	2.0	400.0	10.	1.	1.
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Summary Log: DDH CH88-70 Location: 25+00 W, 0+04 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 25, 1988 Core Logged By: D.P. Money

0.0 - 4.1	Casing.
4.1 - 82.7	Mafic ash to locally lapilli tuffs with minor sediments.
82.7 - 110.9	Thin intercalated felsic, intermediate and mafic crystal
	tuff beds.
110.9 - 125.0	Mafic ash tuffs with rare cherty beds.
125.0 - 127.9	Gabbro dyke.
127.9 - 176.3	Mafic ash tuff with local chert beds from 127.9 to 129.0 m.
176.3 - 180.4	Chloritic felsic crystal tuff.
180.4 - 192.6	Mafic tuff with minor intercalated cherty sediments.
192.6 - 199.4	Fault gouge.
199.4 - 210.1	Mafic feldspar phyric flow.
210.1 - 213.0	Quartz - sericite schist with 10 % fine grained sulphides.
213.0 - 236.1	Mafic ash tuff.
236.1 - 238.0	Fault breccia.
238.0 - 247.0	Chloritic felsic ash tuff.
247.0 - 257.2	Mafic crystal lapilli tuff.
257.2 - 279.8	Chloritic felsic to intermediate crystal tuff with about
	3 to 5 % sulphides, pyrite - pyrrhotite - sphalerite -
	(chalcopyrite), from 267.0 to 279.8 m.
279.8 - 292.5	Mafic lapilli tuff.
292.5 - 306.1	Weakly chloritic felsic tuff.
306.1 - 348.7	Andesitic to mafic crystal lapilli tuff.
348.7 - 377.3	Felsic ash tuff with 1 to 2 % fracture controlled pyrite.
377.3 - 395.7	Gabbro.
395.7 - 403.1	Felsic crystal tuff to cherty tuffite.
403.1	End of hole.

Kenner									AN CORPORT				a.					(-
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	PR	OPERTY	: Chemain	us J.V.			FALCONB	RIDGE LIMITE	D				HOLE No CH88-70	o: Paq	ge Numbe 1	r			
	Но	le Loc	ation: 25	+00 ¥ 0+0	4 S		DIAMON	D DRILL LOG											
	NT	'S: 092	B/13	UTM:							Cla Sec	im No. H tion No.	olyoak 2 : Section 2	25+00 We	est, Hol	yoak C	laim Gro	up	
	Az Di	imuth: p:	180 -50	Elevatio Length:	n: 901 m 403.1	m					Log Dri	ged By: lling Co	D.P. Money	Enterp	rises				
	St	arted:	June 18,	1988							Ass	ayed By:	Bondar-Cle	egg and	X-Ray A	ssay			
	Co	mplete	d: June 2	5, 1988							Cor	e Size:	NO						
	Pu	rpose:	To devel	op a strat	igraphic	section.		DIP TE	STS										
							Azi-			Azi-									
						Length	muth	Dip	Length	muth	Dip								
						14.00	176.0	-50.0	273.10	186.0	-46.0								
						90.50 203.30	179.0 182.0	-50.0 -48.0	366.70	189.0	-45.5								
	From (m)	To (m)			D	ESCRIPTIC)N	·	Sam N	ple Frc o. (m	om To 1) (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb) (Ba (ppm)
						•													
	.0	4.1	OVERBURDE	:N															
		. 1	No chit t	o mark sta	irt of cor	ing.													
	4.1	12.4	MAFIC LAP	ILLI TUFF	*** ****			maan lenilli	¥301	265 4	1 12 /	1 Q 3	n/a	174	n/a	49	n/a n	/a 60	10
			medium gr elongate controlle	and up to d carbonat	2 cm. The ization a	ere is mod and trace	lerate f dissemin	racture ated up to 2	, 7401	205 4.	.1 12.4	. 0.5	117 a	114	117 a	4)	n/u n	, u 00	Ū
		. 1	mm pyrite	cubes. Mi	nor fract	ure contr	colled qu	artz veinlet	S										
		1	becur. Th to 11.9 π	ere is up	10 5 8, 1	. LO Z MI	n, reiasp	ars. Uxiqize	u .										
			Alteratio	n :.			CIPROVI	TTTTTTT											
			4.1 12.4 Lost core	MODERATE F	RACTURE C	ONTROLLEI	CARBONA	TILATION.											

Lost core :. 5.9 7.3 : 0.4 m. 7.3 8.7 : 0.3 m. 10.1 10.7 : 0.2 m. Foliations :. 4.5 : 64 degrees to core axis. 9.0 : 45 degrees to core axis. 10.7 : 37 degrees to core axis.

12.1 : 45 degrees to core axis.

12.4 13.4 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Mafic tuff with approximately 20 % argillite component, minor brown chert beds and a jasper clast at 12.5. There is approximately 3 % banded pyrite parallel to foliation. Foliation and bedding average 45 degrees to core axis.

VA02194 12.4 13.4 1.0 3 32 6 63 <1 <5 730

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		V: Chamainus IV						NOLEN	o. Do	ro Numb				
	r KOF EK I	r. chemarnus o.v.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-70	0. ra	2				
Fro (m	n To) (m)	DES	CRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
13.4	16.9	MAFIC LAPILLI TUFF As from 4.1 to 12.4, with mino Alteration :. 13.4 16.9 MODERATE FRACTURE CO	or quartz - chlorite veins. NTROLLED CARBONATIZATION.	VA01266	13.4	16.9	3.5	n/a	159	n/a	46	n/a	n/a	628
		Foliations :. 16.6 : 47 degrees to core axis Lost core :. 14.8 16.5 : 0.6 m.												
16.9	17.0	CHERTY SEDIMENTS (BLACK ARGILL	ITE AND SILTSTONE WITH MINOR											
		GREYWACKE) Purple cherty sediment with 5 pyrite. Bedding at approximate	% fracture controlled ly 55 degrees to core axis.											
17.0	30.8	MAFIC TUFF Variable mafic ash to crystal 17.0 19.7 MODERATE FRACTURE CC fine-grained chlorit quartz - chlorite ve	tuffs. NTROLLED CARBONATIZATION in e schist with numerous ins and trace pyrite.	VA01267	17.0	29.0	12.0	n/a	147	n/a	40	n/a	n/a	900
		19.7 21.4 Tuff with on average trace to 5 %, 1 to 2 21.4 21.9 Medium green massive controlled carbonati controlled hematite.	5 %, 1 mm, feldspars and mm, light green lapilli. with strong fracture zation and weak fracture											
		 21.9 27.0 Strong veining of qu tuff with 2 to 3 %, 27.0 30.8 Very fine-grained, n controlled carbonati locally contorted. P 	artz and calcite in mafic 1 to 2 mm, mafic crystals. o crystals, weak fracture zation, trace pyrite, ossibly weak chert component											1. *
		Foliations :. 18.6 : 46 degrees to core axis 20.2 : 41 degrees to core axis 29.0 : 47 degrees to core axis	• • • • • • • • • • • • • • • • • • •											
		Blocky, highly fractured core 20.7 to 21.5. 23.4 to 25.6. 26.1 to 28.1												
		Lost core :. 17.1 18.3 : 0.2 m, probably at 18.3 19.2 : 0.2 m.	fault gouge at 18.2.											
		23.8 25.6 : 1.2 m. 25.6 27.4 : 0.6 m. 27.4 28.3 : 0.5 m. 29.6 31.4 : 0.9 m.												
30.8	46.5	MAFIC TO INTERMEDIATE TUFFACED	US SEDIMENTS			·								
50.0		Fine-grained mafic brown to gr dark brown argillaceous zone f	een mafic ash tuffs with rom 32.8 to 39.9. There are	VA02195 VA01268	30.8 31.0	33.0 46.0	2.2 15.0	2 n/a	42 159	_6 n/a	122 86	<1 n/a	7 n/a	860 856

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-70 3 DIAMOND DRILL LOG From To Sample From То Width Total Cu Рb Zn Ag (m) (m) ----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) numerous thin chert and cherty beds throughout. There is VA02196 33.0 35.4 9 218 <1 < 5 910 2.4 2 55 2 % fracture controlled pyrite, mostly parallel to the VA02197 35.4 37.0 1.6 2 50 9 179 <1 (5 foliation, which is strong producing blocky, highly VA02198 37.0 39.3 2.3 2 52 29 130 <1 ٢5 fractured core from 34.1 to 44.8. There is moderate to VA02199 40.8 39.3 1.5 2 40 6 80 <1 <5 strong fracture controlled carbonatization. VA02200 40.8 42.5 75 <5 1.7 2 40 6 <1 Alteration :. VA02201 99 42.5 44.0 1.5 2 36 5 <1 <5 30.8 46.6 MODERATE FRACTURE CONTROLLED CARBONATIZATION. VA02202 69 44.0 45.0 1.0 2 40 7 <1 <5 Foliations :. VA02203 45.0 46.6 2 <5 81 (1 <5 1700 1.6 36 31.2 : 53 degrees to core axis. 33.0 : 47 degrees to core axis. 38.2 : 44 degrees to core axis. 42.1 : 54 degrees to core axis. 45.0 : 53 degrees to core axis. Bedding :. 42.3 : 48 degrees to core axis. 43.6 : 44 degrees to core axis. Lost core :. 34.1 35.4 : 0.8 m. 35.4 36.6 : 0.6 m. 36.6 38.1 : 0.4 m. 38.1 39.3 : 0.7 m. 39.3 40.8 : 0.5 m. 40.8 41.8 : 0.4 m. 46.6 46.9 FAULT ZONE 20 Cm of green fault gouge at approximately 70 degrees to core axis. Lost core : 0.2 m from 46.0 to 46.9.

VA01269

VA01270

48.0

65.0

65.0 17.0

82.0 17.0

n/a

n/a

n/a

n/a

132

134

67

70 n/a

n/a

n/a

n/a

986

991

An

Ba

1200

1100

920

870

710

980

46.9 82.7 MAFIC TUFF

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Medium to dark green mafic to andesitic tuff with on average 0.5 to 1 %, 2 mm, quartz eyes, and 5 % fine-grained feldspars. There are minor local calcite veinlets parallel to and cross-cutting foliation, locally with epidote or hematite. There are approximately 2 %, 1 to 15 cm, white guartz - pink calcite - chlorite veins. Locally there are 3 % 3 mm long flattened dark chlorite wisps parallel to foliation. There is weak fracture controlled carbonatization. Trace pyrite occurs as up to 2 mm cubes and in fracture controlled calcite veinlets. Is locally contorted with minor fault gouge at 54.4, 60.6 and 78.9, probably parallel to foliation. Lower contact is gradational over approximately 50 cm.

Foliations :. 47.7 : 53 degrees to core axis. 49.6 : 46 degrees to core axis. 52.0 : 47 degrees to core axis. 59.2 : 42 degrees to core axis.

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-70 Δ DIAMOND DRILL LOG From To Sample From To Width Total Cu Рb Zn Αg Au Ba -----DESCRIPTION------(m) (m) No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) 62.0 : 46 degrees to core axis. 68.3 : 47 degrees to core axis. 72.6 : 46 degrees to core axis. 76.7 : 48 degrees to core axis. 82.1 : 53 degrees to core axis. Lost core :. 46.9 47.5 : 0.3 m. 47.5 49.7 : 0.4 m. 53.6 54.6 : 0.2 m. 54.6 56.1 : 0.3 m. 63.7 64.9 ; 0.2 m. Alteration :. 46.9 82.7 WEAK FRACTURE CONTROLLED CARBONATIZATION. 82.7 90.2 FELSIC OUARTZ-FELDSPAR CRYSTAL TUFF Locally weakly chloritic with moderate fracture controlled VA01271 82.7 90.2 7.5 137 72 n/a 1150 n/a n/a n/a sericitization. There are on average 15 % crystals, up to VA02204 84.0 85.0 1.0 1 4 6 34 <1 <5 1100 33 1100 1.5 mm, quartz eyes and feldspar grains, ratio variable VA02205 85.0 86.0 1.0 3 38 14 67 <1 from 1 guartz to 1 feldspar to 1 guartz to 4 feldspar. VA02206 86.0 87.0 1.0 0 20 ٢5 80 (1 31 1000 Locally contorted with 3 % white guartz veins. Trace disseminated pyrite and 3 % fracture controlled pyrite from 85.3 to 85.7. Alteration :. 82.7 90.2 MODERATE SPOTTY SERICITIZATION. Foliations :. 83.6 : 45 degrees to core axis. 85.1 : 52 degrees to core axis. 88.7 : 78 degrees to core axis. 90.2 95.4 INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF Weakly contorted chlorite - sericite with 7 to 10 % VA01272 90.2 95.4 5.2 n/a 136 n/a 37 n/a n/a 655 fracture controlled calcite parallel to the sericite and chlorite layers. There is approximately 10 %, < 1 to 2 mm, quartz eyes and approximately 5 %, 1 mm, feldspars. There is minor calcite in the pressure shadows. Trace local hematite. Minor local fault slips parallel to foliation. There are trace mafic crystals above the lower contact. Foliations :. 91.0 : 46 degrees to core axis. 92.4 : 68 degrees to core axis. 94.0 : 61 degrees to core axis. 95.4 100.3 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Weakly chloritic contorted felsic tuff with 3 %, 2 to 5 VA01273 95.4 100.3 4.9 n/a 120 n/a 22 n/a n/a 915 mm, guartz eyes and trace to 2 %, 3 to 4 mm, feldspars. There is weak to moderate pale yellow fracture controlled sericitization. Approximately 1 % guartz - chlorite veins

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P	ROPERT	Y: Chemainus J.V. FALCONBRIDGE LIMITED					HOLE N CH88-70	lo: Pa	ge Numb 5	er			
		DIAMOND DRILL LOG					0100 70		5				
From	То		Sample	From	To	Vidth	Total	Cu	Ph	7n	۵a	3.11	Ba
(m)	(m)	DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)) (pp]	b) (ppm)
		occur. There is trace to nil disseminated pyrite. There is weak to moderate fracture controlled carbonatization, mostly as calcite veinlets. Foliation trends at roughly 50 degrees to core axis. Alteration											
		95.4 100.3 WEAK PERVASIVE CHLORITIZATION. 95.4 100.3 MODERATE FRACTURE CONTROLLED SERICITIZATION. 95.4 100.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION.											
100.3	101.1	INTERMEDIATE QUARTZ EYE TUFF											
		Andesitic to mafic tuff with approximately 10 %, up to 2 mm, quartz eyes and strong fracture controlled calcite veinlets. There are 0.5 % greater than 1 cm purite cubes.	VA02207	100.3	101.1	. 8	0	38	5	75	<1	45	1000
		Foliation averages approximately 45 degrees to core axis. 100.3 101.1 STRONG FRACTURE CONTROLLED CARBONATIZATION.											
101.1	103.3	CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Slightly silicified version of 95.4 to 100.3. Foliation at 47 degrees to core axis											
		101.1 103.3 WEAK FRACTURE CONTROLLED CARBONATIZATION. 101.1 103.3 MODERATE FRACTURE CONTROLLED SERICITIZATION. 101.1 103.3 WEAK PERVASIVE SILICIFICATION.											
103.3	103.8	CHLORITE SCHIST Black to dark green magnetic chlorite schist with foliation at 57 degrees to core axis and weak local											
		fracture controlled calcite veiblets.											
103.8	104.5	FAULT ZONE											
		felsic tuff as from 95.4 to 100.3. Fault slips at 56 degrees to core axis and not parallel to foliation.											
104.5	106.7	CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Lower contact location uncertain due to lost core. Variably carbonatized, contorted and chloritic felsic	VA01274	104.5	106.7	2.2	n/a	134	n/a	35	n/a	n/a	944
		tuff with trace chert lapilli and minor fracture controlled quartz and calcite veinlets. Foliation is variable.											
		Lost core :.											
		105.5 107.6 : 0.5 m.											
100 7	100 5												
100.1	103.2	Similiar to 90.2 to 95.4 with 1 to 2 % quartz eyes in	VA01275	106.7	109.5	2.8	n/a	144	n/a	54	n/a	n/a	764

Similiar to 90.2 to 95.4 with 1 to 2 % quartz eyes in contorted green chlorite, yellow sericite and white

HOLE No: Page Number PROPERTY: Chemainus J.V. FALCONBRIDGE LIMITED CH88-70 6 DIAMOND DRILL LOG Width Total Cu Рb Zn Aσ Ân Ba Sample From То From To Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) (m) (m) (m) -----DESCRIPTION------No. (m) (m) calcite. 109.5 110.9 FELSIC QUARTZ EYE TUFF VA01276 109.5 110.9 1.4 n/a 116 n/a <10 n/a n/a 990 Light grey to weakly yellow sericitic tuff with 10 to 15 %, < 1 mm, quartz eyes. Foliation averages 50 degrees to core axis. There is trace disseminated fine-grained pyrite grains. 110.9 121.3 MAFIC TUFF VA01277 112.0 121.3 9.3 n/a 137 n/a 64 n/a n/a 774 Medium to dark green mafic tuff with approximately 10 % fracture controlled calcite and trace to 0.5 % associated pyrite. There are trace grey angular quartz clasts, < 5 mm. There is strong fracture controlled sericitization and carbonatization over the first 50 cm of the unit. Is weakly contorted. Alteration :. 110.9 121.3 STRONG FRACTURE CONTROLLED CARBONATIZATION. 110.9 111.4 STRONG FRACTURE CONTROLLED SERICITIZATION. Foliations :. 113.2 : 54 degrees to core axis. 114.8 : 53 degrees to core axis. 117.4 : 63 degrees to core axis. 119.1 : 60 degrees to core axis. 120.9 : 71 degrees to core axis. Lost core :. 120.0 120.4 : 0.2 m. 121.3 125.0 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Fine-grained dark green mafic tuffs with minor cherty and epidote beds. Blocky core with minor fracture controlled hematite. Locally weakly contorted. Foliation and bedding average approximately 50 degrees to core axis.

Lost core :.

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121.0 121.9 : 0.3 m. 122.8 124.1 : 0.3 m.

125.0 127.9 FELDSPAR PORPHYRITIC GABBRO

Medium green massive mafic rock, probably gabbro dyke. There is 10 to 20 % fine-grained epidotized feldspars. Local quartz - chlorite veins occurs along fractures parallel to the core axis. There is moderate local fracture controlled hematite. Lost core :. 125.0 125.9 : 0.3 m. PROPERTY: Chemainus J.V.

From To

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Width Total Pb То Cu Zn Ag

CH88-70

HOLE No: Page Number

7

Au Ba

591

630

(m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) Mafic tuff with 50 % beds of green cherty material and epidote beds. Bedding averages approximately 55 degrees to core axis. Weak fracture controlled hematite occurs. 129.0 131.6 FELDSPAR PORPHYRITIC MAFIC ASH TUFF Medium to dark green variably epidotized mafic tuff with on average 20 %, 1 to 2 mm, epidotized feldspars. There is weak local fracture controlled hematite. 131.6 157.9 MAFIC TUFF Medium green to black dark chloritic mafic tuff with VA01278 132.0 157.0 25.0 n/a 138 n/a 78 n/a n/a moderate fracture controlled carbonatization and 1 to 2 % VA02208 143.3 144.2 . 9 2 20 <5 93 <1 29 white and pink 3 mm to 1.5 cm calcite veins, locally with VA02209 152.3 152.8 126 5 93 <1 14 390 . 5 1 guartz, that cross-cut and that are parallel to foliation. Trace guartz grains, up to 3 mm, occur locally. Is locally blocky, highly fractured core with minor fault gouge at 134.7, 146.9 and 151.3. There is trace chalcopyrite in a calcite veinlet at 152.5 and 1 to 2 % fracture controlled pyrite from 143.3 to 144.2. Trace to nil disseminated pyrite, including cubes up to 3.5 mm, occur locally. There may be up to 15 % very fine-grained mafic crystals in the matrix. Is locally weakly magnetic. Minor fracture controlled hematite occurs very locally. Foliations :. 134.9 : 64 degrees to core axis. 138.7 : 66 degrees to core axis. 141.4 : 66 degrees to core axis. 147.2 : 64 degrees to core axis. 150.1 : 54 degrees to core axis. 152.4 : 51 degrees to core axis. 153.8 to 157.9 : weakly to strongly contorted with trend at 55 to 65 degrees to core axis. Lost core :. 132.0 134.3 : 0.3 m. 134.3 136.1 : 0.2 m. 142.3 143.3 : 0.3 m. 151.0 152.3 : 0.3 m. 153.7 155.3 : 0.2 m. Alteration :. 131.6 159.9 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 147.8 149.1 WEAK FRACTURE CONTROLLED SILICIFICATION. 153.8 153.9 STRONG FRACTURE CONTROLLED SERICITIZATION , strong yellow sericite.

Sample From

157.9 158.0 FAULT ZONE

9 Cm of fault gouge at 64 degrees to core axis.



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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	То (m)	DESCRIPTION	

158.0 159.9 MAFIC TUFF As from 131.6 to 157.9. Lost core :. 157.3 159.9 : 0.8 m.

159.9 163.8 CHLORITIC BLACK LAPILLI MAFIC TUFF

Mafic to andesitic locally weakly sericitic tuff with approximately 20 %, 3 to 8 mm, black lapilli. Is variably contorted and locally is similiar to 158.0 to 159.9. There is moderate fracture controlled white calcite veinlets, with minor pink calcite. Is blocky, highly fractured core from 162.8 to lower contact with 2 % jasper lapilli or veins. Foliation averages 55 degrees to core axis. Is very locally magnetic. Lost core :. 159.9 163.2 : 0.6 m. 163.2 165.8 : 0.4 m. Alteration :.

159.9 163.8 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

163.8 176.3 MAFIC TUFF

Possibly weakly pervasively silicified mafic tuff, black to green, with moderate fracture controlled carbonatization and trace disseminated pyrite and quartz eyes. There are from 169.9 to 170.4 and from 173.7 to 174.0 minor beds of sericitic quartz eye tuff. May have minor argillaceous component. Lower contact at minor fault slip parallel to foliation. Foliations :. 165.7 : 60 degrees to core axis. 166.8 : 62 degrees to core axis. 172.2 : 57 degrees to core axis. Alteration :. 163.8 176.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION.

176.3 180.4 CHLORITIC FELSIC QUARTZ-FELDSPAR CRYSTAL TUFF Contorted tuff with 15 %, 2 to 4 mm, feldspars and trace to 10 %, 1 mm, quartz eyes. There is minor carbonatized mafic from 177.4 to 178.0. Minor fault gouge occurs at 178.9 and 179.9 with 0.2 m of lost core at 178.9. There is trace fracture controlled pyrite parallel to foliation. There is trace to nil fracture controlled carbonatization. 176.3 180.4 WEAK PERVASIVE CHLORITIZATION.

180.4 192.6 MAFIC TO INTERMEDIATE TUFFACEOUS SEDIMENTS Contorted mafic tuff to sediments with minor light green chert beds. Minor epidote and jasper grains occur HOLE No: Page Number CH88-70 8

Width Pb Zn Au Ba From To Total Cu Åσ Sample (m) (m) (m) -Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) No.

VA01279 164.0 176.0 12.0 n/a 123 n/a 43 n/a n/a 961

VA01280 181.0 192.0 11.0 n/a 11 n/a 75 n/a n/a 1050

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-70 9 DIAMOND DRILL LOG From To Sample From Τo Width Total Cu Pb 2 n Aα An Ba (m) (m) -----DESCRIPTION-----Sulphides (ppm) No. (m) (m) (m) (ppm) (ppm) (ppm) (ppb) (ppm) locally. There are numerous kink bands. Similiar to CHLORITIC BLACK LAPILLI MAFIC TUFF locally. There is weak fracture controlled hematite from 187.8 to 192.0. There is weak fracture controlled carbonatization. Minor quartz and epidote veins occur locally. At 184.0 there is minor fault gouge at blocky, highly fractured core. Foliation is variable and averages approximately 60 degrees to core axis. Trace to nil disseminated pyrite occurs. Alteration :. 180.4 192.6 WEAK FRACTURE CONTROLLED CARBONATIZATION. Lost core :. 182.6 183.8 : 0.5 m. 192.6 199.4 FAULT ZONE 192.6 194.7 Chloritic felsic with approximately 20 %, 2 to VA02210 192.6 193.6 1.0 n/a 20 5 49 (1 8 880 3 mm, feldspars, minor chert lapilli and VA02211 193.6 194.7 14 <5 47 <1 12 700 1.1 n/a trace disseminated pyrite. Possibly a fault VA02212 194.9 196.0 n/a <5 44 242 940 1.1 8 <1 breccia. VA02213 196.0 196.4 20 14 100 <1 870 . 4 n/a 9 194.7 194.9 Grey fault gouge. б 94 $\langle 1$ VA02214 195.4 197.4 1.0 n/a 10 24 740 194.9 195.7 Chloritic felsic as before. VA02215 197.4 198.4 1.0 n/a 18 6 93 <1 60 700 195.7 195.8 Contorted mafic. VA02216 198.4 199.4 1.0 n/a 22 6 87 <1 25 730 195.8 195.9 Chloritic felsic. 195.9 196.0 Contorted mafic. 196.0 196.4 Dark grey clay with minor mafic tuff. 196.4 199.0 Light green to grey weakly carbonatized sheared tuff with local fault breccia with calcite and quartz clasts. 199.0 199.3 Contorted cherty mafic. 199.3 199.4 Black fault gouge to clav. Fine-grained pyrite occurs in the fault gouge and from 196.4 to 199.0 as (?) %. Foliations and orientations :. 194.2 : 43 degrees to core axis. 196.8 : 30 degrees to core axis, locally 0 to 40. 199.4 210.1 FELDSPAR PORPHYRITIC MAFIC FLOW Mafic flow or tuff, massive light green, with 20 to 30 %, VA02217 199.4 201.0 1.6 2 76 7 275 <1 < 5 930 1 to 2 mm, epidotized feldspar grains and 3 to 5 % VA01281 200.0 210.0 10.0 n/a 26 n/a 71 n/a n/a 975 epidote - calcite clots or altered clasts. There is VA02218 201.0 202.5 1.5 3 124 8 99 <1 41 1100 approximately 1 % fracture controlled guartz - calcite 31 1100 VA02219 202.5 204.0 1.5 3 64 14 367 <1 chlorite veinlets. From 199.4 to 205.0 there is 1 to 3 %, 107 <5 2000 VA02220 204.0 205.0 1 36 8 <1 1.0 average approximately 2 %, fracture controlled pyrite. VA02221 205.0 207.0 1 24 <5 68 <1 13 1100 2.0 210.1 213.0 FELSIC QUARTZ EYE TUFF Very contorted and moderately carbonatized sericitic VA02222 210.1 211.0 52 18 67 1500 .9 10 46 2 felsic with approximately 10 % fine-grained sulphides. VA02223 211.0 212.0 10 76 6 115 9 840 1.0 1 Minor fault gouge occurs. 140 14 VA02224 212.0 213.0 1.0 10 173 1 17 900

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HOLE No: Page Number CH88-70 10

PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From (m)	TO (m)	DESCRIPTION	Sample No.	from (m)	10 (m)	Width (m)	Total Sulphides	Cu (maa)	פע ומס)	מבי (תסמ) (ח	Ag (תסמ)	Au (pph	שם שם שם (תוכוכו) (ו
	,												
213.0	218.2	FELDSPAR PORPHYRITIC MAFIC ASH TUFF	·										
		Strongly altered mafic tuff with approximately 25 %, 1 mm,	VA01282	213.0	218.2	5.2	n/a	143	n/a	1070	n/a	n/a	191
		are 50 to 70 % up to 2 cm epidotized lapilli. Is massive											
		with trace fracture controlled and disseminated pyrite.								,			
		Alteration :.											
		213.0 218.2 STRONG SPOTTY EPIDOTIZATION.											
		213.0 218.2 MODERATE FRACTURE CONTROLLED CARBONATIZATION ,											
		nairine fractures with calcite and minor up											
		217.5 218.2 STRONG FRACTURE CONTROLLED SILICIFICATION .											
		quartz flooded with 50 % strongly siliceous										,	
		adjacent to fractures.											
		213.0 218.2 WEAK SPOTTY CHLORITIZATION , minor fracture											
		controlled chlorite with trace associated											
		pyrite.											
218.2	218.5	FAULT ZONE											
		Chloritic fault gouge with strong sulphides at upper	VA02225	218.2	218.5	.3	15	48	11	327	<1	6	1900
		contact and lower contact, average approximately 15 %											
		pyrite. Orientation averages 60 degrees to core axis.											
218.5	230.3	MAFIC TUFF											
		Chlorite - biotite - calcite - (sericite) schist. Very	VA01283	219.0	230.0	11.0	n/a	115	n/a	66	n/a	n/a	482
		strongly carbonatized tuff, probably mafic. Contorted	VA02226	224.0	225.0	1.0	4	90	<5	104	1	233	660
		with foliation from 0 to 45 degrees to core axis locally.	VA02227	228.2	229.2	1.0	7.	72	5	88		(5)	510 700
		disseminated purite Calcite clasts in fault breccia with	VA02228	227.2	230.3	1.1		20		00			100
Ц		moderate very fine-grained sulphides in matrix from 228.2											
		to 230.3.											
		218.5 230.3 STRONG FRACTURE CONTROLLED CARBONATIZATION.											
	226 1	PERDEDAD DODDUVDITIC MARTE ACU THER											
230.3	230.1	Mafic tuff with on average 3 to 7 % 1 to 5 mm enidotized	V101284	230 3	236 1	5.8	n/a	23	n/a	65	n/a	n/a	1480
		feldspars in weakly to moderately brecciated matrix with	1101204	20010		510							
		weak to moderate fracture controlled silicification and 3											
		% quartz - chlorite veins. There is trace fracture											
		controlled pyrite. Weak carbonatization is fracture											
		controlled and associated with epidotization. Massive with											
		Alteration :											
		230.3 236.1 MODERATE FRACTURE CONTROLLED SILICIFICATION.											
		230.3 236.1 MODERATE SPOTTY EPIDOTIZATION.											
0.00		D1/// # DD7///11											
236.1	238.0	FRUDI BREALLA Breecia and contorted chloritic felsic to andesitic tuff	V102220	236 1	237 0	9	20	41	7	56	(1	(5	820
		preceia and concorcea entoricic reisic to andesitic full	1992223	230.1	231.0	• •	20		,		•		

											· .			
											•			
PROP	PERTY: Chemainus J.V.	FALCOMBRIDGE LIMITED					HOLE No	o: Pa	ge Numbe	er				
		DIAMOND DRILL LOG					CH86-70							
			•											
From		·	Sample	From	To	Width	Total	Cu (nnm)	Pb	Zn (nnm)	Ag (nnm)	Au (ppb)	Ba (ppm)	
(10)		• • • • • • • • • • • • • • • • • • • •	NO.	(111)	(11)	(ш)	Sulphiues	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(թթայ	(ៃសំពា)	(ppm)	(144)	(ppm)	
	with 15 %, up to 16 cm zones of sulphi	ides mud. Slip trend	VA02230	237.0	238.0	1.0	10	47	< 5	64	<1	< 5	810	
	at approximately 30 degrees to core av	dis.												
238.0 24	47.0 WEAKLY CHLORITIC FELSIC TUFF													
	Fine-grained siliceous green tuff, pro all crystals (1 mm, feldspars and gua	bably felsic with	VA01285	238.0	247.0	9.0	n/a	25	n/a	62	n/a	n/a	799	
	trace lapilli, which are mafic with a	approximately 25 %												
	feldspars, lapilli up to 2 cm. Minor o	quartz, calcite and												
	controlled pyrite. Foliation averages	approximately 40												
	degrees to core axis.													
247.0 25	57.2 FELDSPAR PORPHYRITIC MAFIC LAPILLI TUR	F												
	Mafic tuff with gradual transition to	lower felsic tuff.	VA01286	247.0	257.0	10.0	n/a	<10	n/a	60	n/a	n/a	805	
	Is epidote spotted with on average 15 altered feldspars and lamilli. There a	o to 20 % epidote as												
	mafic lapilli. There is trace to 2 %	quartz - chlorite												
	fracture controlled veinlets and weak	to moderate fracture												
	controlled carbonatization associated	with the epidote												
	Is massive with weak foliation at appr	controlled pylite.												
	to core axis.													
	Alteration :.	JH .												
	247.0 257.2 STRONG SPOTTE EPIDOTIZATIO	JR .												
257.2 26	57.0 FELSIC QUARTZ FELDSPAR CRYSTAL LAPILLI	[TUFF	V101297	257 5	267 0	05	n/a	25	n/2	220	n/a	n/a 1	070	
	mafic tuff with 25 %, 0.5 to 2 cm epid	lote lapilli from	VA01287 VA02231	257.5	259.6	.8	3	67	24	320	.<1	<pre> // 4 // 1</pre>	600	
	257.2 to 262.8. From 261.0 to 261.5 th	nere are pink zoisite												
	lapilli. There is on average 7 %, 1 t	to 2 mm, quartz eyes												
	% fracture controlled pyrite. From 25	58.8 to 259.6 is												
	fine-grained and sheared with 2 to 3 %	fracture controlled												
	pyrite, orientation is at 43 degrees	to core axis.												
	257.2 267.0 STRONG SPOTTY EPIDOTIZATIO	DN.												
			1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -											
267 0 27	2 O INTERMEDIATE OHART? EVE THEE													
201.0 21	Dark grey to medium green intermediate	e to felsic tuff,	VA02232	267.0	267.5	.5	6	178	13	64	<1	<5	770	
	probably andesitic to dacitic, with an	proximately 15 %, 1	VA01288	267.0	272.0	5.0	n/a	114	n/a	166	n/a	n/a 1	130	2
	mm, quartz grains and 5 % epidote - c lapilli, up to 3 cm. Possibly silicifi	calcite spots or ied. Minor fracture	VAU2233 VA02234	267.5	268.5	1.0	2	102 58	ь 6	54 72	<1 <1	(5)	960	
	controlled quartz veinlets occur. Mas	ssive with no	VA02235	269.5	270.5	1.0	2	33	< Š	132	<1	<5	930	
	foliation.		VA02236	270.5	271.5	1.0	2	54	<5	172	(1	(5 1	400	
	<pre>mineral :. 267.0 267.5 3 to 5 % fracture control)</pre>	led pyrite and 1 to 2	VAU2237	2/1.5	272.0	.5	7	311	5	10	<t .<="" td=""><td>. (5 1</td><td>400</td><td>~</td></t>	. (5 1	400	~
	% fracture controlled pyr	chotite as (?)												

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hina								أمنعت										1005	1
																•			
	PI	OPERT	Y: Chemainus	J.V.								HOLE N	o: Pa	age Numl	ber				
						FALCONBRIDGE LIM DIAMOND DRILL 1	ITED JOG					CH88-70		12					
	From	То						Sample	From	То	Width	Total	Cu	Pb	Zn	Ag	Au	Ba	
	(m)	(m)			-DESCRIPTION		•	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	
			267.5 271.5	stringers. 1 to 2 % disser	ninated and	fracture control	led												
			271.5 272.0	5 % fracture co	ontrolled py	rite and 1 to 2	*												
				associated with	n frac ture o	ontrolled quartz	:												
				veins.															
	272.0	275.7	CHLORITIC FE	LSIC QUARTZ-FEI	LDSPAR CRYST	AL TUFF													
			Variably chl 1 to 4 mm, f	oritic felsic (eldspars and 5	tuff with or %, 2 to 4	average 10 to 1 mm, quartz eyes.	.2 %,	VA02238 VA02239	272.0 273.3	273.3 274.0	1.3	7 3.	94 46	9 21	12 1200	<1 <1	334 2 7	2100 710	
			There is weat silicification	k to moderate i on and chlorit:	fracture con ization.	trolled		VA02240 VA02241	274.0 275.0	275.0 275.7	1.0	5 5	177	13 8	4000 440	<1 <1	<5 <5 1	840 .000	
			272.0 275.7	WEAK SPOTTY CHI Medium grev sei	LORITIZATION	1. 7 to 10 % guart	7												
				eyes and 3 to 5	5 % dissemin	ated pyrite and	1												
			273.3 275.7	Approximately	to 5 % sul	phides as 1 to 3	*												
			. 1	and trace chal	lcopyrite, i	fractures in	e												
				epidotized turi feldspars and :	t with 15 to 3 to 5 % qua) 20 % epidotized rtz eyes.	l												
				Sphalerite is 1	red to brown	l . -													
	275.7	276.3	MAFIC TUFF																
			Sheared mafie	c tuff and quar	rtz veins wi	th 2 to 3 %		VA02242	275.7	276.3	.6	3	294	7	220	(1	<5 1	.300	
	276.3	279.8	CHLORITIC FE	LSIC QUARTZ EY	C TUFF	ovimatolu 2 % 1	**	111000040	276 2	077 E	1 3	,		52	150	/1	15 7	100	
			3 mm, quartz	eyes and 1 to	2 % fractur	e controlled pyr	ite	VA02243	270.5	278.7	1.2	3	164	75	160	(1)	11 2	200	
			local fracture 276.3 279.8 V	racture control re controlled o WEAK PERVASIVE	carbonatizat CHLORITIZAT	ite. There is we ion. ION.	aĸ	VAU2245	218.1	219.8	1.1	. 3	195	13	44	(1	(21	900	
			Foliations :. 277.0 : 48 de	egrees to core	axis.														
			278.5 : 28 de 279.3 : 28 de	egrees to core egrees to core	axis. axis.														
	279.8	292.5	MAFIC LAPILLI	I TUFF t uncertain due	e to lost co	re.		VA02246	279.8	281.3	1.5	0	44	۲5	210	(1	(5 1	200	?
			Medium green %, 0.5 to 3 d	crystal lapill cm, epidotized	li tuff with lapilli, 3	on average 20 t to 5 %, 1 to 2	o 35 mm,	VA01289	280.0	292.0	12.0	n/a	19	n/a	101	n/a	n/a 1	150	
			mafic crystal epidotized fe	ls and 7 to 12 eldspars. Core	<pre>%, 1 to 2 m is locally</pre>	m, strongly very blocky, hi	ghly												د
			fractured con fracture cont	re from 284.5 t trolled calcite	o 292.5. Th associated	ere is weak loca with the	1												

PROPERTY: Chemainus J.V. HOLE No: Page Number FALCONBRIDGE LIMITED CH88-70 13 DIAMOND DRILL LOG From To Sample From Width Total Τo Cu Рb Zn Ag Au Ba (m) (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) epidotization. There is trace pyrite clots locally in the epidotization lapilli with strongly pyrite near lower contact. Is massive with no foliation. Alteration :. 279.8 292.5 STRONG SPOTTY EPIDOTIZATION. 292.5 306.1 WEAKLY CHLORITIC FELSIC TUFF Weakly chloritic felsic tuff with on average 20 %, 1 to 2 VA01290 293.0 306.1 13.1 n/a 18 n/a 230 n/a n/a 986 mm, epidotized feldspars and 5 to 7 %, 1 to 2 mm, guartz eyes. There is trace to moderate fracture controlled carbonatization and epidotization. Calcite occurs in the pressure shadows around crystals. Trace is trace disseminated pyrite. Is blocky, highly fractured core from 300.5 to 306.1. 292.5 306.1 WEAK PERVASIVE CHLORITIZATION. Foliations :. 293.4 : 26 degrees to core axis. 295.6 : 26 degrees to core axis. 298.3 : 24 degrees to core axis. 302.0 : 23 degrees to core axis. Lost core :. 291.2 293.2 : 0.4 m. 294.7 297.8 : 0.2 m. 301.8 303.6 : 1.0 m. 303.6 304.8 : 0.3 m. 304.8 306.0 : 0.2 m. 306.1 348.7 INTERMEDIATE QUARTZ EYE LAPILLI TUFF Andesitic to mafic crystal lapilli tuff. Medium green to VA01291 307.0 327.0 20.0 n/a 39 n/a 71 n/a n/a 1530 brown in colour. Brown due to local biotite alteration. VA02247 310.0 310.5 .5 3 72 < 5 88 <1 <5 1500 Lapilli vary from trace to 50 %, average 15 to 20 %. VA01292 327.0 348.0 21.0 n/a 18 n/a 69 n/a n/a 1230 Lapilli are 0.5 up to 4 cm in size and consist of epidote, calcite and chlorite and are commonly zoned. Matrix hosts up to 10 %, 1 mm, quartz eyes and trace to 3 %, 1 mm, epidotized feldspars. There are numerous fracture controlled epidote and quartz veinlets, which comprise 1 to 1.5 % of the unit. There is 3 % fracture controlled pyrite and pyrrhotite from 310.0 to 310.5 and trace pyrite elsewhere in epidotized lapilli cores, fracture controlled and disseminated. Alteration :. 306.1 348.7 MODERATE SPOTTY EPIDOTIZATION. 316.0 330.0 MODERATE PERVASIVE BIOTIZATION. 306.1 316.0 WEAK PERVASIVE BIOTIZATION. 330.0 348.7 WEAK PERVASIVE BIOTIZATION. Foliations :. 308.0 : 45 degrees to core axis. 311.4 : 48 degrees to core axis. 316.8 : 35 degrees to core axis. 311.2 : 32 degrees to core axis.

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/: Chemainus J.V.	FALCONBRIDGE LIMITED DIAMOND DRILL LOG					HOLE NG CH88-70	o: Pa	ge Numbe 14	er			
DES	SCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
322.1 : 38 degrees to core axi 327.2 : 32 degrees to core axi From 330 to end of unit is blo	is. is. ocky with negligible foliation											

VA02248 348.7 350.0 1.3

348.7 377.3 FELSIC TUFF

From

(m)

То

(m)

Π

Massive fine-grained bleached light grey to medium green to brown rock. Biotite is variable fracture controlled to pervasive weak to strong. Biotite increases downhole. possible reaction to gabbro. Matrix hosts approximately 10 % guartz and 10 to 15 % feldspar grains, all < 1 mm. There are numerous fractures, which host epidote, calcite, and pyrite. Pyrite is weakly brown and fine-grained. which indicates possible occurence of pyrrhotite and / or sphalerite. Fractures cross-cut foliation and have no dominant orientation. Trace mafic and epidotized lapilli occur, they are up to 1.5 cm and are very rounded. From 367.3 to 367.5 there is brecciation. There is minor fault gouge at 376.3. Quartz - chlorite veins occur at 363.0 to 363.3 and 363.5 to 363.6, which have 1 % associated pyrite clots. From 371.3 to 376.4 there is strong biotite, possible more mafic content. Is siliceous and blocky, highly fractured core from 376.4 to the lower contact. Fracture controlled sulphides average 1.5 % and locally are variable from 1 to 2 % over short intervals. There may be weak to moderate fracture controlled silicification.

Lost core :. 354.0 356.0 : 0.7 m, ground core, chit was probably mislocated. 369.1 370.6 : 0.5 m. 370.6 373.7 : 0.5 m. 375.2 376.4 : 0.3 m. 376.4 377.3 : 0.2 m, blocky, highly fractured core. Foliations :. Usually massive with jagged fractures, good schistosity locally :. 348.8 : 45 degrees to core axis. 354.2 : 38 degrees to core axis. 356.4 : 51 degrees to core axis. 360.8 : 34 degrees to core axis. 371.4 : 46 degrees to core axis. 374.8 : 37 degrees to core axis. Alteration :. 348.7 377.3 Few. 348.7 377.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION. 371.3 376.4 MODERATE PERVASIVE BIOTIZATION.

377.3 395.7 FELDSPAR PORPHYRITIC GABBRO 377.3 379.5 Fine-grained sheared gabbro with strong

VA01295 377.3 395.7 18.4 n/a 171 n/a 82 n/a n/a 109

6 60 <1 <5 1300 VA01293 349.0 371.3 22.3 n/a 52 n/a 49 n/a n/a 1490 VA02249 350.0 352.0 2.0 2 70 < 5 56 <1 <5 1200 VA02250 352.0 354.0 2.0 2 71 ·<5 66 <1 (5 1300 VA08751 354.0 356.0 2.0 2 58 <5 50 <1 <5 1400 VA08752 356.0 358.0 2.0 2 80 <5 50 <1 <5 1400 VA08753 358.0 360.0 2.0 2 83 <5 40 < 5 <1 1800 VA08754 360.0 362.0 2.0 2 26 <5 48 <1 < 5 1900 VA08755 362.0 364.0 2.0 2 82 <5 52 <1 <5 1400 VA08756 364.0 366.0 2.0 2 64 <5 58 <1 <5 1300 VA08757 366.0 368.0 2.0 2 87 10 56 <1 < 5 1400 VA08758 368.0 370.0 2.0 2 125 29 60 <1 17 1500 VA08759 370.0 371.3 1.3 60 $\langle 1 \rangle$ 1200 2 19 40 < 5 VA01294 371.3 377.3 6.0 21 59 n/a n/a 1020 n/a n/a VA08760 371.3 373.3 2.0 2 40 < 5 72 $\langle 1 \rangle$ (5 1400 VA08761 373.3 375.3 2.0 2 19 < 5 78 <1 <5 1200 VA08762 375.3 377.3 2.0 2 61 <5 76 <1 <5 1200

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PROPERTY: Chemainus J.V.

FALCONBRIDGE LIMITED DIAMOND DRILL LOG

HOLE No: Page Number CH88-70 15

From	То			Sample	From	То	Width	Total	Cu	Pb	Zn	Āσ	Au	Ba	
(m)	(m)		DESCRIPTION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppm)	
								•							
			foliation at 50 degrees to core axis. There												
			are approximately 5 % quartz - chlorite and												
			epidote veins and veinlets. There is moderate												
			fracture controlled carbonatization and trace												
			pyrite cubes. Trace to 5 %, 1 to 3 mm,												
			epidotized feldspars occur.												
		379.5 394.	7 Fine-grained with on average 5 %, 2 to 5 mm,												
			epidotized feldspar clusters. There is very												
			minor local strong pervasive epidotization.												
			There are approximately 3 % calcite and quartz												
			veinlets with minor chlorite. There is trace												
			pyrite and no chalcopyrite. At 388.7 there are												
			minor fault slips at 57 degrees to core axis.												
			Trace brown sphene occurs in the fine-grained												
			medium green groundmass. There is strong												
			fracture controlled hematite associated with												
			calcite veinlets from 386.6 to 386.9.												
		394.7 395.	7 Fine-grained and sheared at 50 degrees to core												
			axis with minor calcite veinlets.												
395.7	403.1	FELSIC QUA	RTZ-FELDSPAR CRYSTAL TUFF												
		Light grey	to medium brownish grey siliceous, but very	VA01296	395.7	403.1	7.4	n/a	26	n/a	50	n/a	n/a 24	100	
		schistose	felsic tuff with 3 to 5 %, 2 to 9 mm, quartz	VA08763	396.2	397.2	1.0	0	3	< 5	18	<1	<5 20	000	
		eyes and u	p to 15 %, < 1 mm, feldspars. There is moderate	VA08764	397.2	397.7	,5	0	8	<5	28	<1	5 21	100	
		biotite fr	om the upper contact to 396.5, probably	VA08765	397.7	398.6	. 9	0	5	< 5	34	<1	5 23	300	
		alteration	due to gabbro emplacement. Weak local biotite	VA08766	400.4	401.4	1.0	0	3	<5	36	<1	(5 26	500 ·	
		also occur	s. There is weak to moderate fracture controlled	VA08767	401.4	402.4	1.0	0	56	< 5	3000	<1	37 27	/00	
		carbonatiz	ation as micro-fractures that react with HCl	VA08768	402.4	402.9	. 5	0	7	<5	94	<1	<5 25	500	
		and up to	1 cm calcite veins. Carbonatization cross-cuts												
		foliation	and is parallel to foliation. There are minor												
		sulphides	associated with fracture controlled							•					
		carbonatiz	ation. There is 3 to 5 mm of pyrite at 397.45												
		with trace	chalcopyrite and (?) sphalerite. At 402.0												
		there is t	race red to brown sphalerite as a 1 to 3 mm zone												
		in a fract	ure controlled calcite veinlet. At 402.3 there												
		is a 1.5 t	o 2 cm quartz - calcite - chlorite veinlet with												
		two 1 to 3	mm sphalerite and one 1 to 2 mm pyrite zone.												
		There is n	il disseminated sulphides. Foliation is weakly												
		contorted.	At 402.5 there is 1 to 2 mm of fault gouge												
		parallel t	o foliation and the tuff below is similiar to a												
		cherty tuf	fite with bedding or possibly a strong cleavage.	· · ·											
		Foliations	•••												
		397.1 : 51	degrees to core axis.												
		398.7 : 39	degrees to core axis.												
		399.6 : 42	degrees to core axis.												
		401.0 : 42	degrees to core axis.												
		402.2 : 26	degrees to core axis.												
		402.8 : 36	degrees to core axis.												

Bedding :.



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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

From To (m) (m)

Sample From To Width Total Cu: Pb Zn Ag Au Ba No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppb) (ppm)

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402.9 : 29 degrees to core axis.

End of hole: 1322.5 feet (403.1 m) on Saturday June 25, 1988 at 8:30 a.m.

-----DESCRIPTION------

Total lost core : 19.4 m; % Recovery = 95.2 %.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	ZCAO	XKGO -	XNA20	XK20	XFE203	21102	ŽP205	ZHNO	XLO I	SUM	BA	AI	NACA
VA00844	33.50	34.00	51.60	17.30	3.10	4.12	4.81	3.69	8.83	0.71	0.39	0.19	3.54	98.28	896.	50.	8.
VA00845	68.10	62.20	53.00	17.30	6.82	2.00	2.93	2.90	8.28	0.51	0.51	0.25	5.31	99.81	1010.	33.	10.
VA00846	71.10	71.50	55.90	17.30	5.56	2.15	4.73	1.75	7.64	0.53	0.51	0.19	3.70	99.96	895.	27.	10.
VA00847	79.20	79.60	54.60	15.30	6.80	1.86	2.21	2.74	7.94	0.80	0.32	0.18	7.39	100.14	793.	34.	9.
VA00848	83.50	84.30	72.00	12.50	4.06	0.62	0.77	3.33	1.22	0.18	0.04	0.09	4.70	99.51	1250.	45.	5.
VA00849	91.00	91.50	45.00	14.70	11.20	3.24	0.90	2.95	8.40	0.73	0.19	0.20	12.90	100.41	532.	34.	12.
VA00850	98.70	99.00	71.90	13.10	2.90	1.01	1.74	2.71	1.86	0.21	0.05	0.06	4.00	99.54	1080.	45.	5.
VA00851	115.00	116.00	49.50	17.50	5.72	3.64	2.54	2.71	10.20	0.92	0.44	0.24	6.31	99.72	688.	43.	8.
VA00852	127.00	127.50	46.60	14.10	11.00	6.58	1.70	0.18	13.60	1.76	0.16	0.21	3.70	99.59	138.	35.	13.
VA00853	131.20	131.60	60.20	17.10	3.62	1.75	4.64	2.81	6.50	0.29	0.26	0.18	2.08	99.43	1400.	36.	8.
VA00854	137.50	138.00	47.10	16.40	7.43	3.20	2.83	2.27	11.10	0.90	0.42	0.23	8.00	99.88	638.	35.	10.
VA00855	148.30	148.50	46.70	16.60	8.00	2.85	3.09	2.03	10.60	0.88	0.43	0.25	8.23	99.66	567.	31.	11.
VA00856	155.60	156.10	47.90	17.80	6.69	2.91	1.99	2.95	10.20	0.70	0.55	0.24	7.93	99.86	687.	40.	9.
VA00857	162.00	163.00	53.80	17.10	4.97	2.59	2.35	3.00	8.49	0.68	0.42	0.18	6.31	99.89	751.	43.	7.
VA00858	179.20	179.60	72.70	13.30	1.75	1.93	2.63	1.29	2.08	0.20	0.05	0.05	3.23	99.21	777.	42.	4.
VA00859	207.00	208.00	57.00	15.50	7.98	1.85	3.50	1.63	6.55	0.42	0.32	0.19	4.08	99.02	927.	23.	11.
VA00860	215.50	216.00	52.90	15.50	8.23	4.29	3.01	0.22	8.67	0.77	0.16	0.36	5.08	99.19	139.	29.	11.
VA00861	221.00	221.40	30.70	10.40	24.30	4.77	1.19	0.75	6.53	0.49	0.14	0.26	21.20	100.73	129.	18.	25.
VA00862	232.00	232.50	55.10	15.70	7.34	2.44	2.76	2.41	7.66	0.48	0.36	0.21	4.93	99.39	960.	32.	10.
VA00863	243.10	243.60	54.10	16.70	6.58	2.86	3.21	2.44	7.46	0.49	0.38	0.20	4.54	98.96	842.	35.	10.
VA00864	255.00	256.00	56.70	16.70	6.33	1.80	3.17	2.63	6.96	0.42	0.34	0.20	3.39	98.64	1110.	32.	10.
VA00865	261.00	262.00	62.00	13.70	6.82	2.91	2.31	1.07	5.60	0.38	0.08	0.27	3.39	98.53	644.	30.	9.
VA00866	283.00	284.00	58.00	16.80	6.59	1.44	3.54	2.90	6.58	0.42	0.33	0.20	2.23	99.03	1040.	30.	10.

Hole No. CH88-70 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	TO	29102	XAL203	XCAO	ZHGO	ZNA20	XK20	XFE203	XT 102	ZP205	ZMNO	XLOI	SUM	BA	AI	NACA
							****	19 40 10 10 10 10 10 10 10 10 10									
VA00867	294.50	295.00	60.10	13.30	9.63	1.98	3.16	0.97	4.40	0.38	0.08	0.30	5.23	99.53	550.	19.	13.
VA00868	311.50	312.00	56.10	16.80	7.17	1.82	3.19	2.30	6.66	0.44	0.34	0.23	3.47	98.52	1130.	28.	10.
VA00869	319.60	320.00	55.10	16.80	6.75	2.07	2.74	2.69	7.71	0.46	0.35	0.23	3.62	98.52	1500.	33.	9.
VA00870	329.00	329.50	53.80	16.70	7.21	2.39	3.17	2.67	7.29	0.45	0.35	0.24	4.54	98.81	1320.	33.	10.
VA00871	337.00	337.50	55.80	16.90	6.54	2.49	3.17	2.76	7.21	0.45	0.35	0.18	2.70	98.55	1420.	35.	10.
VA00872	351.50	352.00	56,50	17.20	6,12	2.17	2.79	2.76	7.28	0.46	0.37	0.17	2.31	98.13	1410.	36.	9.
VA00873	367.20	367.70	54.40	16.30	7.51	2.48	3.29	1.91	7.12	0.42	0.33	0.17	4.23	98.16	1130.	29.	11.
VA00874	396.00	396.20	71.30	12.80	1.61	1.68	0.20	4.06	1.58	0.22	0.06	0.04	4.39	97.94	2160.	76.	2.
VA00875	398.60	398.90	74.80	12.10	1.48	1.21	0.13	3.84	1.30	0.23	0.06	0.03	2.70	97.88	2390.	76.	2.
VA00876	402.90	403.10	73.50	14.00	0.49	1.13	0.08	4.56	1.66	0.29	0.08	0.03	2.31	98.13	2960.	91.	1.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

Hole No. CH88-70 WHOLE ROCK SAMPLES

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SAMPLE NUMBER	FROM	то	25102	ZAL203	ZCAO	ZHGO	ZNA20	2K20	XFE203	21102	XP205	ZHNO	XL01	รมห	 BA	AI	NACA

VA01265	4.10	12.40	46.40	17.80	6.81	5.87	1.33	2.26	11.60	0.91			6.23	99.21	600.	50.	8.
VA01266	13.40	16.90	43.50	18.70	6.84	6.55	0.87	2.83	11.90	0.94			6.70	98.83	628.	55.	8.
VA01267	17.00	29.00	46.40	16.30	8.17	5.30	2.47	2.17	10.20	0.80			7.31	99.12	900.	41.	11.
VA01268	31.00	46.00	52.20	17.00	4.48	4.08	3.73	3.86	8.73	0.76			4.77	99.61	856.	49.	8.
VA01269	48.00	65.00	52.70	18.00	6.35	2.58	2.67	2.82	8.54	0.60			4.85	99.11	986.	37.	9.
VA01270	65.00	82.00	53.70	17.50	5.67	2.45	3.56	2.30	8.66	0.60			4.62	99.06	991.	34.	9.
VA01271	82.70	90.20	68.10	13.70	3.47	1.15	0,92	3.23	3.86	0.34			4.16	98.93	1150.	50.	4.
VA01272	90.20	95.40	52.50	14.40	9.33	2.30	0.89	2.82	6.82	0.55			9.62	99.23	655.	33.	10.
VA01273	95.40	100.30	64.20	13.40	5.46	1.82	1.33	2.74	3.71	0.31			6.77	99.74	915.	40.	7.
VA01274	104.50	106.70	\$9.00	15.10	6.72	1.78	1.29	2.82	5.36	0.55			7.23	99.85	944.	36.	8.
VA01275	106.70	109.50	46.40	15.20	11.00	2.98	1.23	2.38	8.76	0.71			11.20	99.86	764.	30.	12.
VA01276	109.50	110.90	69.70	12.90	5.20	0.49	1.11	3.14	1.46	0.18			5.31	99.49	990.	37.	6.
VA01277	112.00	121.30	49.20	16.30	7.73	3.11	2.53	2.75	8.60	0.68			8.39	99.29	774.	36.	10.
VA01278	132.00	157.00	48.00	17.20	6.95	3.05	3.02	2.33	10.60	0.87			7.39	99.41	591.	35.	10.
VA01279	164.00	176.00	56.80	17.10	4.93	1.56	3.27	3.53	6.57	0.42			5.39	99.57	961.	38.	8.
VA01280	191.00	192.00	60.00	16.40	4.38	1.18	4.75	2.28	5.75	0.27			3.77	98.78	1050.	27.	9.
VA01281	200.00	210.00	56.40	17.10	6.72	2.12	3.24	1.88	7.27	0.45			3.16	98.34	975.	29.	10.
VA01282	213.00	218.20	53.00	14.50	7.62	3.93	3.07	0.41	9.57	0.62			5.08	97.80	191.	29.	11.
VA01283	219.00	230.00	42.00	13.80	15.00	3.46	1.70	1.88	6.88	0.55			13.20	98.47	482.	24.	17.
VA01284	230.30	236.10	54.70	16.40	6.80	2.22	3.36	3.02	7.02	0.44			4.23	98.19	1480.	34.	10.
VA01285	238.00	247.00	54.00	16.50	6.98	2.77	3.10	2.39	7.55	0.47			4.85	98.61	799.	34.	10.

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD

Hole No. CH88-70 ALTERED SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MAJOR ELEMENTS)

SAMPLE NUMBER	FROM	TO	XS 102	XAL203	XCAO	ZKGO	ZNA20	2K20	ZFE203	21102	ZP205	ZHNO	ZLOI	SUM	BA	AI	NACA
VA01288	267.00	272.00	54.10	18.10	5.02	2.20	2.38	3.50	8.26	0.47			3.31	97.34	1130.	-44.	7.
VA01289	280.00	292.00	57.90	16.80	6.33	1.69	3.75	2.77	6.84	0.42			2.16	98.66	1150.	31.	10.
VA01290	293.00	306.10	55.00	14.90	9.39	2.93	2.85	1.65	5.93	0.42			5.85	98.92	986.	27.	12.
VA01291	307.00	327.00	57.00	16.60	6.06	2.01	3.16	2.71	6.58	0.43			3.77	98.32	1530.	34.	9.
VA01292	327.00	348.00	55.10	16.80	7.28	2.52	2.99	2.68	7.55	0.46			3.16	98.54	1230.	34.	10.
VA01293	349.00	371.30	57.10	16.80	6.44	2.34	2.96	2.45	6.46	0.44			3.16	98.15	1490.	34.	۶.
VA01294	371.30	377.30	56.40	16.50	6.10	2.64	3.82	2.03	6.98	0.45			3.23	98.15	1020.	32.	10.
VA01295	377.30	395.70	46.90	14.20	11.00	5.67	2.07	0.26	12.30	1.82			4.77	98.99	109.	31.	13.
VA01296	395.70	403.10	73.70	12.60	1.46	1.28	<0.01	4.11	1.82	0.24			2.93	98.14	2400.	79.	1.

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	₩I (ррм)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
																2	
VA02194	12.40	13.40	730.0	32.0	63.0	<0.5	<5.0	16.0	10.0	6.0	<5.0	<1.0	3.0	370.0	34.	3.	
VA02195	30.80	33.00	860.0	42.0	122.0	<0.5	7.0	18.0	20.0	6.0	18.0	1.0	6.0	700.0	26.	2.	5.
VA02196	33.00	35.40	910.0	55.0	218.0	<0.5	<5.0	16.0	18.0	9.0	16.0	3.0	5.0	900.0	20.	2.	5.
VA02197	35.40	37.00	1200.0	50.0	179.0	<0.5	<5.0	16.0	18.0	9.0	18.0	2.0	3.0	1000.0	22.	2.	5.
VA02198	37.00	39.30	1100.0	52.0	130.0	<0.5	<5.0	18.0	16.0	29.0	14.0	2.0	5.0	1000.0	29.	2.	5.
VA02199	39.30	40.80	920.0	40.0	80.0	<0.5	<5.0	18.0	12.0	6.0	16.0	<1.0	3.0	1100.0	33.	2.	6.
VA02200	40.80	42.50	870.0	40.0	75.0	<0.5	<5.0	16.0	10.0	6.0	7.0	<1.0	4.0	900.0	35.	2.	5.
VA02201	42.50	44.00	710.0	36.0	99.0	<0.5	<5.0	20.0	14.0	5.0	5.0	<1.0	4.0	1000.0	27.	2.	6.
VA02202	44.00	45.00	980.0	40.0	69.0	<0.5	<5.0	20.0	10.0	7.0	10.0	<1.0	3.0	1020.0	37.	2.	5.
VA02203	45.00	46.60	1700.0	36.0	81.0	<0.5	<5.0	18.0	12.0	<5.0	86.0	<1.0	4.0	1000.0	31.	2.	5.
VA02204	84.00	85.00	1100.0	4.0	34.0	<0.5	<5.0	2.0	2.0	6.0	<5.0	<1.0	2.0	420.0	11.	1.	1.
VA02205	85.00	86.00	1100.0	38.0	67.0	<0.5	33.0	6.0	16.0	14.0	8.0	<1.0	5.0	580.0	36.	з.	2.
VA02206	86.00	87.00	1000.0	20.0	80.0	<0.5	31.0	10.0	12.0	<5.0	12.0	(1.0	3.0	1060.0	20.	0.	4.
VA02207	100.30	101.10	1000.0	38.0	75.0	<0.5	45.0	24.0	17.0	5.0	<5.0	<1.0	4.0	1100.0	34.	0.	4.
VA02208	143.30	144.20	630.0	20.0	93.0	<0.5	29.0	24.0	6.0	<5.0	<5.0	<1.0	3.0	1200.0	18.	2.	6.
UA02209	152.30	152,80	390.0	126.0	93.0	<0.5	14.0	18.0	4.0	5.0	<5.0	<1.0	3.0	2000.0	58.	1.	6.
UA02210	192 60	193.60	880.0	20.0	49.0	<0.5	8.0	6.0	6.0	5.0	<5.0	<1.0	2.0	480.0	29.	1.	2.
14402211	192 60	194 70	700 0	14.0	47 0	(0.5	12.0	6.0	6.0	(5.0.	(5.0	(1.0	2.0	320.0	23.	1.	2.
VH02211	173.00	174.70	700.0	14.0	47.0	(0.5	242.0	5.0			/5 0	<1.0	1.0	520 0	15.	1.	3.
VA02212	194.90	196.00	940.0	8.0	44.0	(0.5	444.V	0.0	1.V	14.0	17.0	<1.0	2.0	1230 0	17	1.	6.
VA02213	196.00	196.40	870.0	20.0	100.0	<0.5	9.0	20.0	8.0	14.0	17.0		3.0	1250.0			5
VA02214	196.40	197.40	740.0	10.0	94.0	<0.5	24.0	16.0	4.0	6.0	10.0	<1.0	3.0	1240.0	10.	1.	J.
VA02215	197.40	198.40	700.0	18.0	93.0	<0.5	60.0	14.0	17.0	6.0	34.0	<1.0	4.0	900.0	16.	1.	4.
VA02216	198.40	199.40	730.0	22.0	87.0	<0.5	25.0	14.0	10.0	6.0	76.0	<1.0	3.0	1000.0	20.	1.	4.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-70

Page No. 1

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Minor Elements)

LE ER	FROM	то	BA (ppm.)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C() (ppm)	NI (ppm)	РВ (ррв.)	AS (ppm)	CD (ppm)	НО (ррм)	MN (ppm)	CUZN	ETS	FE
217	199.40	201.00	930.0	76.0	275 0	20.5	25 0	12 0		7 0	10.0	1.0	2.0	1000 0		2	2
019	201 00	202 50	1100.0	124.0	2/3.0		41 0	12.0		0.0	10.0	(1.0	2.0	725 0	54	2. 3	
	201.00	202.30	1100.0	147.V	267.0	(0.5	41.V	12.0	. 4.0		14.0	1.0	2.0	/20.0		з. э	
20	202,00	201.00	2000.0	04.0	307.0	(0.5	31.0	12.0	4.0	14.0	9.0	1.0	3.0	910.0	13.		1.
.20	204.00	203.00	2000.0	36.0	107.0	(0.5	<5.0	14.0	4.0	8.0	8.0	(1.0	2.0	1000.0	43.		3.
. 121	203.00	207.00	1100.0	24.0	68.0	<0.5	13.0	12.0	4.0	<5.0	<5.0	<1.0	3.0	820.0	25.	1.	3.
22	210.10	211.00	1500.0	52.0	46.0	1.8	67.0	16.0	20.0	18.0	130.0	<1.0	5.0	880.0	53.	10.	4.
23	211.00	212.00	840.0	76.0	115.0	0.6	9.0	36.0	49.0	6.0	120.0	<1.0	3.0	2700.0	40.	10.	6.
24 :	212.00	213.00	900.0	140.0	173.0	1.3	17.0	36.0	40.0	14.0	105.0	<1.0	4.0	1900.0	45.	10.	6.
25	218.20	218.50	1900.0	48.0	327.0	<0.5	6.0	20.0	16.0	11.0	40.0	1.0	4.0	1140.0	13.	15.	5.
26 2	224.00	225.00	660.0	90.0	104.0	0.7	233.0	36.0	50.0	<5.0	8.0	<1.0	4.0	2100.0	46.	4.	5.
27 :	228.20	229.20	610.0	72.0	88.0	<0.5	<5.0	25.0	22.0	5.0	6.0	<1.0	5.0	1450.0	45.	7.	4.
28 3	229.20	230.30	700.0	58.0	66.0	<0.5	<5.0	25.0	20.0	5.0	12.0	<1.0	6.0	1100.0	47.	7.	4.
29 3	236.10	237.00	820.0	41.0	56.0	<0.5	<5.0	19.0	20.0	7.0	16.0	<1.0	4.0	910.0	42.	20.	з.
30 3	237.00	238.00	810.0	47.0	64.0	<0.5	<5.0	18.0	13.0	<5.0	7.0	<1.0	4.0	1100.0	42.	10.	4.
31 :	258.80	259.60	1600.0	67.0	320.0	<0.5	<5.0	29.0	26.0	24.0	20.0	1.0	3.0	1140.0	17.	з.	з.
32 2	267.00	267.50	770.0	178.0	64.0	<0.5	<5.0	18.0	4,0	13.0	9.0	<1.0	2.0	950.0	74.	6.	5.
33 2	267.50	268.50	970.0	102.0	54.0	<0.5	<5.0	14.0	4.0	6.0	11.0	<1.0	2.0	840.0	65.	2.	4.
34 2	268.50	269.50	960.0	58.0	72.0	<0.5	<5.0	12.0	6.0	6.0	8.0	<1.0	4.0	860.0	45.	2.	3.
35 2	269.50	270.50	930.0	33.0	132.0	<0.5	<5.0	12.0	4.0	<5.0	7.0	<1.0	3.0	840.0	20.	2.	3.
36 3	270 50	271 50	1400 0	54 0	172 0	20 5	<u> </u>	12.0	5.0	(5.0	10.0	(1.0	3 0	980.0	24.	2.	3.
37 2	271 50	272 00	1400.0	311 0	76 0	20.5		27 0	6.0	5.0	36 0	<1.0	3.0	960.0	80	7.	5
	272.00	4/4.VV	2100.0	311.0	10.0	(0.5	NJ.V	47.V	0.0	0.0	JU.V	×1•v		100.0		7	
38 2	2/2.00	4/3.30	2100.0	94.0	12.0	(0.5	334.0	20.0	20.0	9.0	34.0	<1.0	4.0	100.0	07.		
38 2 39 2	271.30 272.00 273.30	272.00 273.30 274.00	2100.0	94.0 46.0	76.0 12.0 1200.0	<0.5 <0.5 <0.5	<5.0 334.0 7.0	27.0 20.0 8.0	20.0 12.0	9.0 21.0	36.0 54.0 <5.0	<1.0 <1.0 5.0	4.0 5.0	100.0 2800.0	89. 4.		7. 3.

Hole No. CH88-70

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

ETS FE	ZN	cu	MN (ppm)	HO (ppm)	CD (ppm)	AS (ppm)	PB (pp∎)	NI (ppm)	CO (ppm)	AU (ppb)	AG (ppm)	ZN (ppm)	CU (ppa)	BA (ppm)	то	FROM	SAMPLE NUMBER
5.	4.		2600.0	4.0	18.0	<5.0	13.0	12.0	11.0	<5.0	<0.5	4000.0	177.0	840.0	275.00	274.00	VA02240
5.	2.	2	1220.0	3.0	2.0	5.0	8.0	12.0	16.0	<5.0	<0.5	440.0	124.0	1000.0	275.70	275.00	VA02241
3.	7.	5	1680.0	5.0	<1.0	6.0	7.0	20.0	27.0	<5.0	<0.5	220.0	294.0	1300.0	276.30	275.70	VA02242
3.	6.	3	1240.0	4.0	<1.0	8.0	56.0	16.0	15.0	<5.0	<0.5	150.0	85.0	2100.0	277.50	276.30	VA02243
3.	1.	.5	560.0	2.0	<1.0	15.0	75.0	20.0	24.0	11.0	<0.5	160.0	164.0	2200.0	278.70	277.50	VA02244
3.	2.		640.0	3.0	<1.0	<5.0	13.0	20.0	32.0	<5.0	<0.5	44.0	195.0	1900.0	279.80	278.70	VA02245
0.	7.	1	1000.0	3.0	<1.0	<5.0	<5.0	4.0	12.0	<5.0	<0.5	210.0	44.0	1200.0	281.30	279.80	VA02246
3.	5.	. 4	1360.0	3.0	<1.0	14.0	<5.0	20.0	28.0	<5.0	<0.5	88.0	72.0	1500.0	310.50	310.00	VA02247
2.	7.	5	820.0	4.0	<1.0	<5.0	6.0	4.0	14.0	<5.0	<0.5	60.0	80.0	1300.0	350.00	348.70	VA02248
2.	6.	5	820.0	5.0	<1.0	<5.0	<5.0	5.0	16.0	<5.0	<0.5	56.0	70.0	1200.0	352.00	350.00	VA02249
2.	2.	5	1100.0	5.0	<1.0	<5.0	<5.0	5.0	14.0	<5.0	<0.5	66.0	71.0	1300.0	354.00	352.00	VA02250
2.	4.	5	820.0	3.0	<1.0	<5.0	<5.0	4.0	14.0	<5.0	<0.5	50.0	58.0	1400.0	356.00	354.00	VA08751
2.	2.	6	830.0	3.0	<1.0	<5.0	<5.0	4.0	13.0	<5.0	<0.5	50.0	80.0	1400.0	358.00	356.00	VA08752
2.	7.	6	620.0	2.0	<1.0	<5.0	<5.0	3.0	12.0	<5.0	<0.5	40.0	83.0	1800.0	360.00	358.00	VA08753
2.	5.	3	820.0	2.0	<1.0	<5.0	<5.0	5.0	10.0	<5.0	<0.5	48.0	26.0	1900.0	362.00	360.00	VA08754
2.	1.	6	820.0	3.0	<1.0	<5.0	<5.0	5.0	15.0	<5.0	<0.5	52.0	82.0	1400.0	364.00	362.00	VA08755
2.	j2 .	5	920.0	3.0	<1.0	<5.0	<5.0	5.0	14.0	<5.0	<0.5	58.0	64.0	1300.0	366.00	364.00	VA08756
2.	1.	6	840.0	3.0	(1.0	5.0	10.0	5.0	13.0	(5.0	<0.5	56.0	87.0	1400-0	368.00	366.00	UA08757
2.	.8.	6	790.0	3.0	<1.0	5.0	29.0	5.0	14.0	17.0	<0.5	60.0	125.0	1500.0	370.00	368.00	UA08758
2.	15.	4	900.0	3.0	<1.0	5.0	40.0	5.0	11.0	<5.0	<0.5	60.0	49.0	1200.0	371 30	370.00	UA09759
2.	16.		900.0	3.0	<1.0	9.0	<5.0	6.0	14.0	(5.0	<0.5	72.0	40.0	1400-0	373.30	371.30	UA08760
2.	20.	2	840.0	3.0	<1.0	5.0	<5.0	6.0	12.0	<5.0	(0.5	78.0	19.0	1200.0	375.30	373.30	UA08761
2.	15.		820.0	3.0	<1.0	<5.0	<5.0	28.0	14.0	(5.0	<0.5	76 0	61 0	1200-0	377:30	375 30	UA08762
	4. 2. 5. 1. 2. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 1. 5. 5. 1. 5. 5. 1. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	5	820.0 830.0 620.0 820.0 920.0 840.0 790.0 900.0 900.0 840.0 840.0 820.0	3.0 3.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	<pre>(1.0 (1.0) (1.0) (1.0) (1.0) (1.0) (1.0) (1.0) (1.0) (1.0) (1.0) (1.0)</pre>	<5.0 <5.0 <5.0 <5.0 <5.0 5.0 5.0 5.0 5.0 5.0 5.0	<5.0 <5.0 <5.0 <5.0 <5.0 <5.0 29.0 40.0 <5.0 <5.0 <5.0	4.0 4.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 6.0 6.0 28.0	14.0 13.0 12.0 10.0 15.0 14.0 13.0 14.0 11.0 14.0 12.0	<5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0	<pre><0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5</pre>	50.0 50.0 40.0 48.0 52.0 58.0 56.0 60.0 60.0 72.0 78.0 76.0	58.0 80.0 83.0 26.0 82.0 64.0 87.0 125.0 49.0 40.0 19.0 61.0	1400.0 1400.0 1800.0 1900.0 1400.0 1300.0 1400.0 1200.0 1200.0	356.00 358.00 362.00 364.00 366.00 368.00 370.00 371.30 373.30 375.30	354.00 356.00 358.00 360.00 362.00 364.00 366.00 368.00 370.00 371.30 373.30	VA08751 VA08752 VA08753 VA08754 VA08755 VA08756 VA08757 VA08758 VA08759 VA08760 VA08761 VA08761

Hole No. CH88-70

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (pp∎)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	MN (ppm)	CUZN	ETS	FE
VA08763	396.20	397.20	2000.0	3.0	18.0	<0.5	<5.0	2.0	3.0	<5.0	<5.0	(1.0	6.0	280.0	14.	0.	1.
VA08764	397.20	397.70	2100.0	8.0	28.0	<0.5	5.0	1.0	3.0	<5.0	<5.0	<1.0	4.0	220.0	22.	0.	1.
VA08765	397.70	398.60	2300.0	5.0	34.0	<0.5	5.0	2.0	3.0	<5.0	<5.0	<1.0	3.0	380.0	13.	0.	1.
VA08766	400.40	401.40	2600.0	3.0	36.0	<0.5	<5.0	2.0	2.0	<5.0	5.0	<1.0	5.0	220.0	8.	0.	1.
VA08767	401.40	402.40	2700.0	56.0	3000.0	<0.5	37.0	3.0	4.0	<5.0	190.0	15.0	8.0	300.0	2.	0.	2.
VA08768	402.40	402.90	2500.0	7.0	94.0	(0.5	(5.0	2.0	1.0	(5.0	7.0	(1.0	6.0	100.0	7.	0.	0.

DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (MINOR ELEMENTS)

Hole No. CH88-70

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Summary Log: DDH CH88-71 Location: 25+00 W, 2+25 S; Holyoak 2 Claim Azimuth: 180, Dip: -50 Hole Completed: June 26, 1988 Core logged by: J. Pattison

0.0 - 12.8	Overburden
12.8 - 72.4	Mafic tuff
72.4 - 82.2	Intermediate tuff
82.2 - 90.1	Mafic tuff
90.1 - 115.0	Intermediate quartz-feldspar crystal tuff
	3-5 % disseminated pyrite
115.0 - 117.4	Felsic quartz-feldspar crystal tuff
117.4 - 184.7	Intermediate quartz-feldspar crystal lapilli tuff
	2-5 % disseminated pyrite. Traces of chalcopyrite
	sometimes occur within the pyrite grains. There
	are several bands of semi-massive to massive magnetite
	less than 0.1 m thick.
184.7 - 254.8	Mafic tuff

Е.О.Н. @ 254.8 m

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Nole Location: 25+00 V 2+25 S Difference of the second	1	PROPERT	Y: Chemainu	s JV			FALCONB	RIDGE LIMITED					HOLE N CH88-71	io: P	age Numb 1	er				
MTS: 9231 UTS: Claim Mo. Holyow 2 settion Mo.: 25000 w MTS: 9231 UTS: Settion Mo.: 25000 w Dip: -50 Length: 254.8 m Settion Mo.: 25000 w Started: 23-June-88 Completed: 26-June-88 Assayed BY: Bondar-Cleage 4 XRL Completed: 26-June-88 Core Size: NQ (thin wall) Purpose: To test IP anomaly DIP TESTS Core Size: NQ (thin wall) 19.800 181.0 -51.0 251.50 183.80 186.0 -45.5 93.00 181.0 -51.0 251.50 180.6 -45.5 183.80 186.0 -45.5 91.00 181.0 -51.0 251.50 180.6 -45.5 180.6 (m) (m) 50.0 (m) <	,		antion: 25+	00 12 2+25	e ·		DIAMON	D DEIDT FOG												
MTS: 2213 UTM: Call Mr. No. No. 22400 V Mtimuth: 100 Length: 254.8 m Section No. : 25400 V Dip: -50 Length: 254.8 m Section No. : 25400 V Started: 23-June=83 Completed: 25-June=83 Core Size: NQ (thin wall) Purpose: To test IP anomaly DIP TESTS Core Size: NQ (thin wall) 19:00 12.0 0:10:10:0 19:00 12.0 DIP TESTS Azi- Azi- Azi- 19:00 12.0 -51.0 251.50 188.0 -50.0 From To (a) (a) (a) (a) (a) (a) Sulphies (ppm) (pm) (,	1016 10	cation. 25	00 # 2:25	J .					1917 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 -	C 1-	in No.	Volucet 2							
Ariunth 180 Elevation: 881 m Dip: -50 Length: 254.8 m Completed: 26-June-88 Completed: 26-June-88 Purpose: To test IP anomaly Ari- Ari- Length muth J9.00 18.0 J12.8 0YERBURDEW 2.8 72.4 Main oreen locally feldspar porphyritic tuff. Up to 20 Molessing YA02927 J12.8 0YERBURDEW 2.8 72.4 Main oreen locally feldspar porphyritic tuff. Up to 20 Molessing YA02927 J12.8 42.0 29.2 n/a 62 n/a 00 n/a 10 10 10 10 10 10 10 10 <td>1</td> <td>vmc • 921</td> <td>R13</td> <td>117'M •</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CI4 Soc</td> <td>tin NO.</td> <td>. 25+00 V</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1	vmc • 921	R13	11 7'M •							CI4 Soc	tin NO.	. 25+00 V							
Dip: -50 Length: 254.8 m Started: 23-June-88 Completed: 25-June-88 Completed: 25-June-88 Completed: 25-June-88 Completed: 25-June-88 Purpose: To test IP anomaly Purpose: To test IP an	÷	azimuth	: 180	Elevation:	881 m						sec	.cron No	.: 25400 ₩							
Started: 32-June-88 Completed: 26-June-88 Completed: 26-June-88 Diff 111100 Co.: Buryesh Exterprises Assayed By: Bondar-Clegg & XRL Purpose: To test IP anomaly DIF TESTS Core Size: NQ (thin wall) Azi- Length muth Dip 19.80 178.0 -50.5 183.80 186.0 -49.5 93.00 181.0 -51.0 251.50 188.0 -50.0 Azi- Size: NQ (thin wall) From To (m)	i	Dip:	-50	Length:	254.8 1						Log	and Bu.	T Pattice							
Started: 23-June-88 Completed: 26-June-88 Purpose: To test IP anomaly Azi- Length auth Dip TESTS Core Size: NQ (thin wall) Azi- Length auth Dip TESTS Azi- Length auth Dip Length auth Dip Core Size: NQ (thin wall) 19.80 178.0 -50.5 183.80 186.0 -50.0 188.0 -50.0 From To (m) Sample From To Vidth Total Cu Pb Zn Ag Au Ba (m) (m) Ag Au Ba (m) (m) .0 12.8 OVERBURDEH 2.8 72.4 HAFIC TUFF Matu Galing and chloritic VA03578 20.0 21.0 1.0 4 82 cs 100 cl cs 5100 Az 2.0 m Aeding not recomizable. Locally feldspar porphyritic tuff. Up to 20 Az 2.0 m Aeding not recomizable. Locally up to 10 auto 10			• -								Dri	lling C	o : Burwash	. Enter	nrises					
Purpose: To test IP anomaly Purpose: To test IP anomaly Azi- Length muth Dip 19.80 178.0 -50.5 183.80 186.0 -49.5 9.00 181.0 -51.0 2251.50 188.0 -50.0 From To (m) (m)	(Started Complete	: 23-June-8 ed: 26-June	8 -88							Ass	ayed By	: Bondar-Cl	egg &	XRAL					
Ati- Length Ati- auth Dip Length Ati- muth Dip 19.80 178.0 -50.5 133.80 186.0 -49.5 93.00 181.0 -51.0 251.50 188.0 -50.0 From To width Total Cu Pb Zn Ag Au Ba (m) (m)			. To toot T	D anomalır					7.0		Cor	e Size:	NQ (thin w	all)						
Ati- Length Ati- auth Dip Ati- Length Ati- Length Ati- Length Dip 19.00 178.00 -50.5 183.00 186.0 -50.0 From To 231.50 183.00 186.0 -50.0 From To (m) (m) Sample From To Vidth Total Cu Pb 2n Ag Au Ba .0 12.8 OVERBURDEN Sample From To Width Total Cu Pb 2n Ag Au Ba 2.8 72.4 MAFIC TUFF Medium green locally feldspar porphyritic tuff. Up to 20 VA02527 12.8 42.0 29.2 n/a 62 n/a 80 n/a n/a 708 2.8 72.4 MAFIC TUFF Medium green locally feldspars in a fine-grained chloritic VA06573 21.0 1.0 4 63 c5 68 (1 5 100 (1 51 100 (1 52 10 (1 62 n/a 80 n/a n/a 708 <td>1</td> <td>ar pose</td> <td>. To test I</td> <td>r anomaly</td> <td></td> <td></td> <td></td> <td>DIF 165</td> <td>15</td> <td></td>	1	ar pose	. To test I	r anomaly				DIF 165	15											
Length muth Dip Length muth Dip 19.80 178.0 -50.5 133.80 186.0 -49.5 33.00 181.0 -51.0 251.50 188.0 -50.0 From To (m) (m)							Azi-			Azi-										
19.80 178.0 -50.5 191.80 181.0 -49.5 93.00 181.0 -51.0 251.50 188.0 -50.0 From To (m)						Length	muth	Dip	Length	muth	Din									
19.80 178.0 -50.5 183.80 186.0 -49.5 93.00 181.0 -51.0 251.50 188.0 -50.0 From To (m)								2-1	Dungen	and ch	bip									
93.00 181.0 -51.0 251.50 188.0 -50.0 From To (m)						19.80	178.0	-50.5	183.80	186.0	-49.5									
From To (m) Sample (m) From To (m) Sample (m) From To (m) Vidth Total Cu (m) Pb Zn Ag (ppm) Au (ppm) Ba (ppm) Pb (ppm) Ag (ppm) Au (ppm) Pb (ppm) Au (ppm) Pb (ppm) Pb (ppm) Ag (ppm) Pb (ppm)						93.00	181.0	-51.0	251.50	188.0	-50.0									
From To Sample From To Width Total Cu Pb Zn Ag Au Ba (m)																				
(m)	From	n To							Sampl	le From	i To	Width	Total	Cu	РЪ	Zn	Ag	Au	Ba	
.0 12.8 OVERBURDEN 2.8 72.4 MAFIC TUFF Medium green locally feldspar porphyritic tuff. Up to 20 4. 2-3 mm epidotized feldspars in a fine-grained chloritic matrix (similiar in appearance to gabbro but no ilmenite VA08578 20.0 21.0 1.0 4 63 (5 68 (1 (5 710)) 1. Trace to 2 & disseminated magnetite except between 18.0 Norman 22.0 m. Bedding not recognizable. Locally up to 3 & VA08581 27.0 28.0 1.0 1 4 10 (5 100) and 22.0 m. Bedding not recognizable. Locally up to 3 & VA08581 27.0 28.0 1.0 4 55 (5 110) (1 (5 280)) hazy dark green, angular, chloritic fragments up to 10 mm in diameter. Basalit to andesilic in composition, Quite massive, foliation not well developed. Lower contact is gradational over 0.1 m. STRUCTURE:. 12.8-13.2 H blocky, highly fractured core. 41.3-41.9 H blocky, highly fracture	(m)	(m)			DI	ESCRIPTIO	4		No.	. (m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(pph) (ppm	1)
.0 12.8 OVERBURDEN 2.8 72.4 MAFIC TUFF Medium green locally feldspars in a fine-grained chloritic matrix (similar in appearance to gabbro but no ilmenite matrix (similar in appearance to gabbro but no ilmenite massive, foliation not well developed. Lower contact is gradational over 0.1 m. VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a n/a 708 VA02579 21.0 1.0 4 82 (5 100 (5 310 and 22.0 m. Bedding not recognizable. Locally up to 3 % VA08580 22.0 23.0 1.0 1 41 (5 160 (5 220 massive, foliation not well developed. Lower contact is gradational over 0.1 m. VA08587 31.0 31.0 1.0 1 106 (5 100 (5 420 X005878 31.0 32.0 1.0 1 106 (5 106 (5 220 X005867 31.0 31.0																				
 12.8 OVERBURDEN 72.4 MAFIC TUFF Medium green locally feldspar porphyritic tuff. Up to 20 X-2 me pidotized feldspars in a fine-grained chloritic VA02527 X-2 me pidotized feldspars in a fine-grained chloritic VA08578 20.0 21.0 22.0 1.0 4 23																				
.0 12.8 OVERBURDEN 2.8 72.4 MAFIC TUFF Medium green locally feldspars in a fine-grained chloritic in appearance to gabbro but no ilmenite). Trace to 2 % disseminated magnetite except between 18.0 VA02927 12.8 42.0 29.2 n/a 62 n/a 30 n/a n/a 708 . 72.4 MAFIC TUFF Medium green locally feldspars in a fine-grained chloritic in appearance to gabbro but no ilmenite J. Trace to 2 % disseminated magnetite except between 18.0 VA08579 20.0 21.0 1.0 4 82 (5 100 (1 (5 310 and 22.0 magnetite except between 18.0 VA08580 22.0 23.0 1.0 1 41 (5 160 (1 (5 128 (1 (5 280 hazy dark green, angular, chloritic fragments up to 10 mm in diameter. Basaltic to andesitic in composition. Quite gradational over 0.1 m. VA08580 22.0 30.0 1.0 1 58 (5 100 (1 (5 280 STRUCTURE:. Ku0586 31.0 32.0 1.0 1 100 (5 52 (1 (5 110 At 20.1 m minor slip at 40 degrees to core axis. VA08589 <	-		· · · · · · · · · · · · · · · · · · ·																	
2.8 72.4 MAFIC TUFF Medium green locally feldspar porphyritic tuff. Up to 20 VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a n/a 708 %, 2-3 mm epidotized feldspars in a fine-grained chloritic VA08578 20.0 21.0 1.0 4 82 (5 100 (1 (5 310 . Trace to 2 % diseminated magnetite except between 18.0 VA08579 21.0 22.0 1.0 4 63 (5 68 (1 (5 710 . Trace to 2 % diseminated magnetite except between 18.0 VA08581 27.0 28.0 1.0 1 41 (5 160 (1 (5 280 hazy dark green, angular, chloritic fragments up to 10 mm VA08581 27.0 28.0 1.0 1 58 (5 110 (1 (5 280 massive, foliation not well developed. Lower contact is VA08581 30.0 1.0 1 100 (5 92 (1 (5 5100 (1 (5 5100 (1 (5 5100 (1 (5 5100 (1	.0	12.8	OVERBURDEN																	
2.8 72.4 MAFIC TUFF Medium green locally feldspar porphyritic tuff. Up to 20 VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a n/a 708 %, 2-3 mm epidotized feldspars in a fine-grained chloritic VA08578 20.0 1.0 4 82 (5 100 (1 (5 310 matrix (similiar in appearance to gabbro but no ilmenite VA08578 21.0 1.0 4 62 n/a 66 (1 (5 100 (1 (5 310 . Trace to 2 % disseminated magnetite except between 18.0 VA08580 22.0 23.0 1.0 1 41 (5 160 (1 (5 1100 and 22.0 m. Bedding not recognizable. Locally up to 3 % VA08581 27.0 28.0 1.0 4 203 (5 101 (1 (5 220 in diameter. Basaltic to andesitic in composition. Quite VA08583 31.0 31.0 1.0 1 100 (5 510 (1 (5 280 gradational over 0.1 m. K VA08584 <																				
2.2.8 72.4 Marlt Totr Medium green locally feldspar porphyritic tuff. Up to 20 VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a n/a 708 Medium green locally feldspars in a fine-grained chloritic VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a 708 Medium green locally feldspars in a fine-grained chloritic VA08578 20.0 21.0 1.0 4 63 (5 68 (1 (5 710 Mark (similiar in appearance to gabbro but no ilmenite VA08580 22.0 21.0 1.0 4 63 (5 68 (1 (5 710 Anzy dark green, angular, chloritic in composition. Quite VA08580 22.0 23.0 1.0 4 55 (5 110 (1 (5 220 in diameter. Basaltic to andesitic in composition. Quite VA08581 27.0 28.0 1.0 1 20 (5 100 (1 (5 720 gradational over 0.1 m. VA08586 31.0 32.0 1.0 1 106		70 4	VIDIA MURD																	
A, 2-3 mm epidotized feldspars in a fine-grained chloritic VA02927 12.8 42.0 29.2 n/a 62 n/a 80 n/a 1/a 1/a <t< td=""><td>12.8</td><td>12.4</td><td>MAFIC TUFF</td><td> 111.</td><td>faldanas</td><td></td><td></td><td>f 11= h= 00</td><td>****</td><td>. 10 0</td><td></td><td></td><td></td><td>~ ~</td><td>,</td><td></td><td></td><td>,</td><td></td><td></td></t<>	12.8	12.4	MAFIC TUFF	111.	faldanas			f 11= h= 00	****	. 10 0				~ ~	,			,		
x, 2-3 mm billed tellspars in a fine-grained underlife VA08578 20.0 21.0 1.0 4 82 (5) 100 (1) (5) 510 matrix (similiar in appearance to gabbro but no ilmenite VA08579 21.0 22.0 1.0 4 63 (5) 68 (1) (5) 1100 and 22.0 m. Bedding not recognizable. Locally up to 3 % VA08581 27.0 28.0 1.0 4 203 (5) 128 (1) (5) 120 100 1 41 (5) 160 (1) (5) 1100 nardiare recognizable. Locally up to 3 % VA08581 27.0 28.0 1.0 4 203 (5) 128 (1) (5) 120 110 106 100 110 106 (5) 136 (1) (5) 220 100 110 100			Prediction gre	en locally	foldenas	t porphyr.	icic tui.	r. op to zu	VAU292	20 12.8	42.0	29.2	n/a	62	n/a	80	n/a	n/a	708	
and trik (Similar in appearate to galation but nomenite VA08580 22.0 1.0 4 63 (5) 68 (1) (5) 100 and 22.0 m. Bedding not recognizable. Locally up to 3 % VA08580 22.0 23.0 1.0 4 403 (5) 128 (1) (5) 280 hazy dark green, angular, chloritic fragments up to 10 mm VA08582 28.0 29.0 1.0 4 45 (5) 110 (1) (5) 280 in diameter. Basaltic to andesitic in composition. Quite VA08582 29.0 1.0 1 516 (1) (5) 720 gradational over 0.1 m. VA08583 30.0 31.0 1.0 1 100 (5) 504 (1) (5) 720 gradational over 0.1 m. VA08583 32.0 31.0 1.0 1 100 (5) 66 (1) (5) 510 STRUCTURE:. VA08586 32.0 33.0 1.0 1.0 1 100 (5) 66 (1) (5) 100 At 20.1 m minor slip at 40 degrees to core axis. <td< td=""><td></td><td></td><td>a, 2-3 mm</td><td>epidocized miliar in a</td><td>nnoaran</td><td>co to gab</td><td>hro but</td><td>neu chioritic</td><td>VAUSSI</td><td>18 20.0</td><td>21.0</td><td>1.0</td><td>4</td><td>82</td><td>(5)</td><td>100</td><td>(1</td><td>(5)</td><td>310</td><td></td></td<>			a, 2-3 mm	epidocized miliar in a	nnoaran	co to gab	hro but	neu chioritic	VAUSSI	18 20.0	21.0	1.0	4	82	(5)	100	(1	(5)	310	
And 22.0 m. Bedding not recognizable. Locally up to 3 % YA08580 22.0 23.0 1.0 1 41 (5) 160 (1) (5) 128 (1) (1) (5) 128 (1) (1) (5) 128 (1) (1) (5) 128 (1) (1) (5) 220 in diameter. Basaltic to andesitic in composition. Quite YA08581 27.0 28.0 1.0 4 55 (5) 110 (1) (5) 220 in diameter. Basaltic to andesitic in composition. Quite YA08583 29.0 30.0 1.0 1 58 (5) 136 (1) (5) 220 gradational over 0.1 m. YA08585 31.0 32.0 1.0 1 106 (5) 104 (1) (5) 510 STRUCTURE: YA08585 31.0 32.0 1.0 1 106 (5) 104 (1) (5) 100 At 20.1 m minor slip at 40 degrees to core axis. YA08583 34.0 35.0 1.0 1 103 (5) 82 (1) (5) 100 <td></td> <td></td> <td>Macrix (Si</td> <td>miliat in a</td> <td>minstod</td> <td>nagnotit</td> <td></td> <td>hotmon 19 0</td> <td>VAUGDI</td> <td>21.0</td> <td>22.0</td> <td>1.0</td> <td>4</td> <td>63</td> <td>() (F</td> <td>58</td> <td></td> <td>(5)</td> <td>1100</td> <td></td>			Macrix (Si	miliat in a	minstod	nagnotit		hotmon 19 0	VAUGDI	21.0	22.0	1.0	4	63	() (F	58		(5)	1100	
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In drameter. basarite to andesite in composition. Quite vk08535 29.0 30.0 1.0 1 58 (5) 160 (1) (5) 720 massive, foliation not well developed. Lower contact is Vk08585 31.0 1.0 1 20 (5) 100 (1) (5) 720 gradational over 0.1 m. Vk08585 31.0 32.0 1.0 1 106 (5) 104 (1) (5) 870 STRUCTURE:. Vk08586 32.0 33.0 1.0 1 106 (5) 104 (1) (5) 610 At 20.1 m minor slip at 40 degrees to core axis. Vk08588 34.0 35.0 1.0 1 100 (5) 62 (1) (5) 100 At 20.1 m minor slip at 40 degrees to core axis. Vk08589 35.0 36.0 1.0 4 103 (5) 72 (1) (5) 100 At 20.5 m3 mm fault gouge at 60 degrees to core axis. Vk08591 37.0 38.0 1.0 1 53 (5) 72 (1) (5) 100			nazy dark	green, angu m Bacalti	lar, chi	foritic i	agments	ition Ouito	· VAU850	2 28.0	29.0	1.0	4	55	(5)	110	(1	(5)	220	
massive, ionation not well developed. Howel contact is vacasa 30.0 31.0 1.0 1 20 (5 100 (1 (5 720 gradational over 0.1 m. Vacasa 30.0 31.0 1.0 1 110 (5 92 (1 (5 870 Vacasa Vacasa 32.0 30.0 1.0 1 106 (5 104 (1 (5 510 STRUCTURE:. Vacasa Vacasa 30.0 30.0 1.0 1 100 (5 96 (1 (5 110 At 20.1 m minor slip at 40 degrees to core axis. Vacasa 30.0 36.0 1.0 4 103 (5 82 (1 (5 100 At 20.1 m minor slip at 40 degrees to core axis. Vacasa 36.0 37.0 1.0 4 103 (5 82 (1 (5 100 At 20.4 8 M fault at 40 degrees to core axis. Vacasa 37.0 38.0 1.0 1 55 84 (1 (5 100 At 2.1 3-41.9 M blocky, highly fractured core. Vacasa			In diamete	c. Dasaili	t uoll a	developed	t compos.	contact is	VAUSDO	29.0	30.0	1.0	1	28	(5)	135	(1 -	(5)	280	
yradiational over 0.1 m. vradssos 31.0 32.0 1.0 1 110 (5 92 (1 (5 870 Vradssos 31.0 32.0 1.0 1 106 (5 104 (1 (5 510 STRUCTURE:. Vradssos 31.0 30.0 1.0 1 106 (5 104 (1 (5 510 12.8-13.2 M blocky, highly fractured core. Vradssos 31.0 30.0 1.0 1 106 (5 104 (1 (5 510 At 20.1 m minor slip at 40 degrees to core axis. Vradssos 31.0 35.0 1.0 1 100 (5 96 (1 (5 110 At 21.5 m 3 mm fault gouge at 60 degrees to core axis. Vradssos 37.0 1.0 4 103 (5 82 (1 (5 100 40.55-40.8 M fault at 40 degrees to core axis. Blocky, Vradssos 31.0 1.0 1 55 5 84 (1 (5 100 highly fractured core. Vradssos 39.0 37.0 1.0 1 53 (5 72 (1 (5 820			massive, i	l over 0 1	. *CII (reveroped	Lower	contact is	VAUGJO	94 JU.U	31.0	1.0	1	110	(5)	100		(5)	120	
STRUCTURE:. YA03500 32.0 33.0 1.0 1 100 (5 104 (1 (5 310 12.8-13.2 M blocky, highly fractured core. YA08587 33.0 34.0 1.0 1 154 (5 76 (1 (5 100 At 20.1 m minor slip at 40 degrees to core axis. YA08588 34.0 35.0 1.0 1 100 (5 96 (1 (5 110 At 20.1 m minor slip at 40 degrees to core axis. YA08589 35.0 36.0 1.0 4 103 (5 82 (1 (5 100 At 21.5 m 3 mm fault gouge at 60 degrees to core axis. YA08590 36.0 37.0 1.0 4 77 5 72 (1 (5 100 40.5-40.8 M fault at 40 degrees to core axis. Blocky, YA08591 37.0 1.0 4 77 5 72 (1 (5 100 highly fractured core. YA08593 39.0 1.0 1 53 (5 72 (1 (5 100 core. YA08595 40.0 41.0			gradationa	1 0001 0.1	ш.				VA0050	2 22.0	32.0	1.0	1	100	. (5).	.94	(1		610	
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At 20.1 m minor slip at 40 degrees to core axis. VA08588 34.0 35.0 1.0 1 100 (5 86 (1 (5 100 At 20.1 m minor slip at 40 degrees to core axis. VA08589 35.0 36.0 1.0 4 103 (5 82 (1 (5 100 At 20.1 m minor slip at 40 degrees to core axis. VA08599 35.0 36.0 1.0 4 103 (5 82 (1 (5 100 At 21.5 m 3 mm fault gouge at 60 degrees to core axis. VA08599 36.0 37.0 1.0 4 77 5 72 (1 (5 190 40.5-40.8 M fault at 40 degrees to core axis. Blocky, VA08591 37.0 38.0 1.0 1 53 (5 72 (1 (5 100 highly fractured core. VA08592 38.0 39.0 1.0 1 53 (5 72 (1 (5 980 57.3-58.7 M blocky, highly fractured core. 0.2 m of lost VA08595 41.0 1.0 1 51 (5 71 (1 6 860			12 0-12 2	• Viblooker b	i - 61	a a tunad			VAUSDO	57 . 33.0	34.0	1.0	1	154	(5	16	(1 (1	(5)	400	
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At 21.5 m 3 mm lattrig goige at 60 degrees to core axis. VA08390 36.0 37.0 1.0 4 77 5 72 (1 (5 190 40.5-40.8 M fault at 40 degrees to core axis. Blocky, VA08590 37.0 38.0 1.0 1 85 (5 84 (1 (5 100 highly fractured core. VA08593 39.0 1.0 1 53 (5 72 (1 (5 820 41.3-41.9 M blocky, highly fractured core. VA08593 39.0 40.0 1.0 1 52 (5 62 (1 (5 980 57.3-58.7 M blocky, highly fractured core. VA08594 40.0 41.0 1.0 1 51 (5 71 (1 6 860 71.8-72.3 M blocky, highly fractured core. VA08595 41.0 72.4 30.4 n/a 47 n/a 44 n/a 1/a 742 VA08596 42.0 72.4 30.4 n/a 47 1 16 1000 0.4 VA08596 42.0 43.0 1.0 1 53 </td <td></td> <td></td> <td>AC 20.1 m</td> <td>allor silb</td> <td>at 40 ut</td> <td>egrees to</td> <td>core ax.</td> <td>15.</td> <td>VAU858</td> <td>35.0</td> <td>36.0</td> <td>1.0</td> <td>4</td> <td>103</td> <td>. < 5</td> <td>84</td> <td></td> <td>5</td> <td>100</td> <td></td>			AC 20.1 m	allor silb	at 40 ut	egrees to	core ax.	15.	VAU858	35.0	36.0	1.0	4	103	. < 5	84		5	100	
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$\begin{array}{c} \text{Core.} \\ \text{VA08595} & 41.0 & 42.0 & 1.0 & 1 & 51 & (5 & 72 & (1 & (5 & 1100 \\ \text{core.} \\ \text{VA08595} & 41.0 & 42.0 & 1.0 & 1 & 51 & (5 & 71 & (1 & 6 & 860 \\ \text{VA02928} & 42.0 & 72.4 & 30.4 & n/a & 47 & n/a & 44 & n/a & n/a & 742 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 1 & 53 & (5 & 74 & (1 & 16 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 1 & 53 & (5 & 74 & (1 & 16 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 1 & 53 & (5 & 74 & (1 & 16 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 1 & 53 & (5 & 74 & (1 & 16 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 82 & 1 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 40.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08596} & 42.0 & 43.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 40.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 40.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 40.0 & 1.0 & 2 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ \text{VA08597} & 100 & 20 & 24 & (5 & 85 & 1000 \\ V$			57 2-50 7	M blocky, n	ighty if	actured (LOIE.	2 m of lost	VAU859	1 10 0 1 12 12 0	40.0	1.0	1	54	10	10Z	1	(5)	980	
Core VA00575 41.0 42.0 1.0 1 51 (5) $/1$ (1) 6 860 71.8-72.3 M blocky, highly fractured core. VA02928 42.0 72.4 30.4 n/a 47 n/a 44 n/a <td></td> <td></td> <td>07.3-00.7</td> <td>a brocky, n</td> <td>TAUTA IT</td> <td>actured</td> <td>.ore. 0.,</td> <td>a m or lost</td> <td>VA0055</td> <td>40.0</td> <td>41.0</td> <td>1.0</td> <td>1</td> <td>51</td> <td>(D) /E</td> <td>74</td> <td>с<u>і</u> /1</td> <td></td> <td>1100</td> <td></td>			07.3-00.7	a brocky, n	TAUTA IT	actured	.ore. 0.,	a m or lost	VA0055	40.0	41.0	1.0	1	51	(D) /E	74	с <u>і</u> /1		1100	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			71 8-72 2	thlocky b	ighly fr	actured .	ore		VAUGDD	41.U א אייי	44.0	30 4	1 n/n	17	. (5	11	×1	0 . n / n	740	
			11.0-14.3	a procky, a	routh II	accured a	.016.		VAU292 VANSEG	6 42.0	14.4	1 1 0	11/a 1	41/ 53	11/4	44 .	4/a 21	1/0	1000	
			ALTERATION	:.					VA0859	7 43 0	44 0	1.0	2	34	(5)	82	1	(5	950	

45.0 1.0

49.0 1.0

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VA08603 49.0 50.0 1.0

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VA08597 43.0 12.8 29.0 WEAK FRACTURE CONTROLLED CARBONATIZATION and VA08598 44.0 WEAK SPOTTY EPIDOTIZATION. VA08599 45.0 29.0 37.4 MODERATE PERVASIVE EPIDOTIZATION and MODERATE VA08600 46.0 PERVASIVE CARBONATIZATION. Rock has a pale VA08601 47.0 green, bleached appearance. VA08602 48.0

37.4 49.3 MODERATE FRACTURE CONTROLLED CARBONATIZATION and

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PR	OPERT	Y: Chemainus JV FALCONBRIDGE LIMITED DIAMOND DRILL LOG		•			HOLE N CH88-71	o: P	age Numb 2	er			
om n)	To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (mgg)	Au (pp	Bab) (p
		WEAK PERVASIVE EPIDOTIZATION.	VA08604	50.0	51.0	1.0	2	53	<5	34	<1	7	1200
		49.3 55.8 MODERATE SPOTTY EPIDOTIZATION , MODERATE SPOTTY	VA08605	51.0	52.0	1.0	2	58	< 5	39	<1	1	1200
		CARBONATIZATION and locally weak to moderate	VA08606	52.0	53.0	1.0	2	220	< 5	44	<1	< 5	790
		pervasive silicification. Rock takes on a light	VA08607	53.0	54.0	1.0	2	45	<5	68	<1	<5	1100
		grey, bleached colour.	VA08608	54.0	55.0	1.0	2	28	< 5	71	<1	<5	. 850
		55.8 72.4 MODERATE FRACTURE CONTROLLED SILICIFICATION ,	VA08609	55.0	56.0	1.0	2	85	5	50	<1	10.	810
		WEAK FRACTURE CONTROLLED CARBONATIZATION and	VA08610	56.0	57.0	1.0	2	81	< 5	80	<1	7	910
		WEAK SPOTTY CARBONATIZATION.	VA08611	57.0	58.0	1.0	2	165	< 5	82	<1	8	850
			VA08612	58.0	59.0	1.0	2	56	< 5	42	<1	11	14000
		MINERALIZATION: .	VA08613	59.0	60.0	1.0	2	19	< 5	58	<1	5	1000
		21.0-22.0 m 4 % very finely disseminated pyrite and trace	VA08614	60.0	61.0	1.0	2	14	< 5	58	<1	7	540
		pyrrhotite.	VA08615	61.0	62.0	1.0	2	26	5	51	<1	6	570
		27.0-29.0 m 4 % disseminated pyrite in a bleached zone due	VA08616	62.0	63.0	1.0	2	59	< 5	72	<1	. 7	710
		to moderate quartz-carbonate veining. Moderate spotty	VA08617	63.0	64.0	1.0	2	113	<5	65	<1	9	740
		epidote alteration.	VA08618	64.0	65.0	1.0	4	66	<5	59	<1	7	1100
		29.0-34.0 m 3-5% magnetite in bands parallel to foliation	VA08619	65.0	66.0	1.0	4	47	< 5	63	<1	7	950
		up to 1.0 cm thick and patches up to 3.0 cm in diameter.	VA08620	66.0	67.0	1.0	4	52	< 5	67	<1	- 14	1100
		Tr-1% disseminated pyrite and possibly some sphalerite	VA08621	67.0	68.0	1.0	4	15	<5	65	<1	16	810
		with the magnetite.	VA08622	68 0	69 0	1.0	4	73	(5	52	(1	15	540
		34 0-35 0 m 1 % finely disseminated nurite	V108623	69.0	70.0	1 0	1	99	(5	64	(1	q	940
		35 0-37 0 m 3-4%	VA08624	70.0	71 0	1 0		52		55	(1	17	630
		37.0-42.2 M trace to 1.% discominated purite	V109625	71 0	72 4	1 1		0		34	. /1	15	500
		DITO 44.2 IL LIACE LO I O AISSEMIMALEM PYTICE.	YAU0043	11.0	14.4	1.4	4 .	•		74	1	10	500

64.0-72.4 m 3-4% disseminated pyrite. 18.0 22.0 Possible feldspar porphyritic flow. 15-20%, 1-3

42.2-42.8 M trace chalcopyrite and pyrite hosted by quartz+carbonate+chlorite filled fractures. 42.8-44.0 m 1-2 % disseminated pyrite. 44.0-64.0 m 2 % disseminated pyrite.

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From

(m)

- mm epidotized feldspars and no magnetite.
- 32.9 888.8 1.0 cm band of massive purplish magnetite at 50 degrees to core axis.
- 41.0 43.1 Massive, medium-grained mafic flow or intrusion (?). Comprised of 20 % pale, green-grey sauseritized anhedral 2-4 mm feldspars. Upper contact is sharp at 30 degrees to core axis. Lower contact is gradational over 0.1 m.
- 42.2 42.8 Many fracture controlled irregular quartz+carbonate+chlorite veins which host trace to 1 % chalcopyrite.
- 43.1 50.0 5-10 %, 2-5 mm angular light grey cherty fragments, chloritic mafic fragments and quartz grains.
- 72.4 76.4 INTERMEDIATE TUFF Medium grey-green chlorite+sericite+quartz schist

n/a 887 VA02929 72.4 82.2 9.8 18 n/a n/a 34 n/a

Ba

(ppm)
PF	OPERTY	: Chemainus JV FALCONB DIAMON	RIDGE LIMITED					HOLE No CH88-71	o: Pa	ge Numbe 3	er			
From (m)	T0 (m)	DESCRIPTION	· · · · · · · · · · · · · · · · · · ·	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb	Ba) (ppm)
		(andesitic to dacitic in composition). Broke lower contact.	n core at the	VA08626 VA08627 VA08628	72.4 73.0 74.0	73.0	.6 1.0	5 5 5	10 35	<5 <5 (5	36 38	<1 <1	14 6	810 970 960
		STRUCTURE:. Foliation runs almost parallel to the core ax	is.	VA08629 VA08630	75.0	76.0	1.0	5	10 32	<5 <5 <5	36 68	<1 <1	12 9	1100 730
		ALTERATION:. 72.4 76.6 WEAK PERVASIVE EPIDOTIZATION.												
		SULPHIDES:. 72.4-76.6 m 4-5% disseminated pyrite.	1											
76.4	ר. דד	MAFIC INTRUSIVE Dark green, massive, fine-grained chloritic m Nil sulphides. Lower contact is sharp and cr 70 degrees to core axis.	afic dyke. osscutting at											
77.7	82.2	INTERMEDIATE TUFF As 72.4 to 76.6 m. May be just a silicified the mafic tuff. Lower contact is gradational	equivalent of	VA08631 VA08632	77.7 79.0	79.0 80.0	1.3 1.0	5	30 21	<5 <5	28 38	<1 <1	7 14	950 710
		STRUCTURE:. At 81.0 m foliation is at 20 degrees to core	axis.	VA08633 VA08634	80.0 81.0	81.0 82.2	1.0 1.2	5 5	29 14	<5 <5	39 49	<1 <1	7 17	610 820
		ALTERATION:. 77.7 82.2 WEAK PERVASIVE EPIDOTIZATION.												
		SULPHIDES:. 77.7-82.2 M.												
82.2	90.1	MAFIC TUFF Massive, medium-grained chloritic mafic tuff. basaltic but ranges into andesitic compositio Foliation is not well developed.	Dominantly ns.	VA02930 VA08635 VA08636	82.2 82.2 83.2	90.1 83.2 84.0	7.9 1.0 .8	n/a 2 2	52 144 21	n/a <5 <5	46 57 44	n/a <1 <1	n/a 10 19	888 330 420
		ALTERATION:. 83.2 90.1 WEAK SPOTTY EPIDOTIZATION and local	ly weak	VA08637 VA08638 VA08639	84.0 85.0 86.0	85.0 86.0 87.0	$1.0 \\ 1.0 \\ 1.0$	2 2 2	41 112 24	<5 <5 <5	64 56 82	<1 <1 <1	11 8 15	610 600 200
	н 1	fracture controlled hematization.		VA08640 VA08641 VA08642	87.0 88.0 89.0	88.0 89.0 90.1	1.0 1.0 1.1	2 2 2	45 24 88	<5 <5 <5	61 71 83	<1 <1 <1	12 8 9	2500 330 480
		82.3 2.0 % very finely disseminated pyrite.												

VA02931

VA08643

VA08644

VA08645

90.1 120.0 29.9

91.0

92.0 93.0 1.0

92.0 1.0

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90.1 115.0 INTERMEDIATE QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF Mottled, medium grey-green to dark green, moderately sercitic, chloritic and weakly epidotized and carbonatized tuff. Dominantly intermediate-felsic based on silica content but some more altered intervals range into mafic

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HOLE No: Page Number

PROPERTY: Chemainus JV

		FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-71		4					
From (m)	n To (m)	DESCRIPTION	Sample No.	From (m)	To (m)	Width (m)	Total Sulphides	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (pp	Ba b) (ppm)
		compositions.	VA08646	93.0	94.0	1.0	5	53	<5	49	<1	14	1000	
		Trace to 5 % 2-4 mm quartz eyes and locally, up to 5 % 1-3	VA08647	94.0	95.0	1.0	3 .	160	< 5	42	(1	11	720	
		mm feldspar crystals most of which are epidotized.	VA08648	95.0	96.0	1.0	3	343	< 5	54	<1	18	630	
		Locally up to 10 % altered (occasional rare clast with	VA08649	96.0	97.0	1.0	-3	53	<5	33	<1	10	860	
		well defined reaction rim), lapitil-sized clasts of feisic	VA08650	97.0	98.0	1.0	3	46	. <5	32	(1)	8	1000	
		material +/- feldspar crystals.	VAUSEDI	98.0	100.0	1.0	3	115	(5	55		14	1100	
		STRUCTURE -	VAUGOSZ	100 0	100.0	1.0	2	52	(5)	45	1	10	920	
		Core is broken and blocky throughout and foliation is not	VA08654	101.0	101.0	1.0		16	(5	64	1	19	2000	
		well developed.	VA08655	102.0	103.0	1 0	3	128	25	53	<1	28	1500	
		At 90.4 m foliation is at 27 degrees to core axis.	VA08656	103.0	104.0	1.0	5	26	6	50	(1)	50	850	
		At 91.0 m 1.0 cm fault gouge at 30-35 degrees to core axis.	VA08657	104.0	105.0	1.0	5	83	< 5	60	<1	43	1700	
		At 96.8 m foliation is at 17 degrees to core axis.	VA08658	105.0	106.0	1.0	3	273	< 5	66	<1	28	1400	
		At 99.1 m slip at 35 degrees to core axis.	VA08659	106.0	107.0	1.0	- 3	83	< 5	56	(1	17	1200	
		101.8-102.4 M blocky, highly fractured core. 0.1 m of lost	VA08660	107.0	108.0	1.0	3	34	6	60	<1	33	710	
		core.	VA08661	108.0	109.0	1.0	3	5	22	72	<1	33	630	
			VA08662	109.0	110.0	1.0	3	11	10	63	<1	21	670	
		ALTERATION: .	VA08663	110.0	111.0	1.0	- 3	73	<5	90	<1	17	620	
		90.1 115.0 WEAK SPOTTY EPIDOTIZATION , WEAK PERVASIVE	VA08664	111.0	112.0	1.0	3	164	<5	106	<1	17	760	
		CHLORITIZATION and MODERATE PERVASIVE	VA08665	112.0	113.0	1.0	3	56	5	60	<1	13	1400	
		SERICITIZATION. Streaky, dark green to black	VAU8666	113.0	114.0	1.0	3	134	(5	98	(1	22	610	
		chiorite is associated with the disseminated	VA08667	114.0	115.0	1.0	3	192	5	69	(1	20	410	
		alteration below 97 0 m												
		SULPHIDES: .												
		90.1-94.0 m 5 % disseminated pyrite.												
		94.0-103.0 m 3 % disseminated pyrite associated with dark												
		green to black chlorite alteration. Pyrite usually occurs												
		in euhedral to subhedral grains up to 3 mm in diameter.												
		103.0-105.0 m 5 % disseminated pyrite as above.												
		105.0-115.0 m 3 % disseminated pyrite as above and as												
		aggregates to 1.0 cm in diameter.												
		90.7 888.8 5.0 cm thick band of chlorite schist at.										•		
		101.2 101.6 Fracture controlled quartz veins and pods up												
		to 2 cm thick comprise 50% of the rock.												
		Strong chlorite and epidote alteration												
		associated with the quartz verning.												
		114 3 888 8 285 cm clast of massive quartz porphyritic												
		flow/tuff.												
115.0	117.4	INTERMEDIATE QUARTZ FELDSPAR CRYSTAL TUFF												
		Composed of 15-20 %, 2-5 mm, rounded, clear quartz eyes	VA08668	115.0	116.0	1.0	3	11	< 5	31	<1	22	1200	
		and 15-20%, 1-3 mm feldspar crystals in a massive, very	VA08669	116.0	117.4	1.4	. 3	8	7	17	<1	13	1900	
		síliceous, very fine-grained, weakly sericitic, felsic												
		matrix. Broken core at the lower contact.												

PROPERTY: Chemainus JV HOLE No: Page Number FALCONBRIDGE LIMITED CH88-71 5 DIAMOND DRILL LOG То Sample From Width To Tota] Cu Рb ZD Ba Àσ An (m) -----DESCRIPTION------No. (m) (m) (m) Sulphides (ppm) (ppm) (ppm) (ppm) (ppb) (ppm) ALTERATION: . 115.0 117.4 WEAK PERVASIVE SERICITIZATION. SULPHIDES:. 115.0-117.4 m 2-3% disseminated pyrite. 117.4 184.7 INTERMEDIATE QUARTZ-FELDSPAR CRYSTAL LAPILLI TUFF As 90.1 to 115.0 m. Up to 20 % (average 10%) unsorted, VA08670 117.4 119.0 1.6 3 143 < 5 80 <1 12 1100 subangular to rounded, light to dark grey, fine-grained VA08671 119.0 120.0 34 < 5 1 0 3 81 <1 20 410 felsic to intermediate lapilli-sized clasts. Dark green VA08672 120.0 121.0 3 7 <5 77 13 250 1.0 <1 fine mafic ash beds up to 0.3 m thick are common. Lower VA02932 120.0 150.0 30.0 n/a 53 n/a 76 n/a n/a 579 contact placed where quartz eyes disappear. VA08673 121.0 122.0 35 3 91 670 1.0 < 5 <1 13 VA08674 122.0 123.0 1 0 3 65 <5 59 (1 13 960 STRUCTURE: . VA08675 123.0 117 97 124.0 1.0 3 < 5 <1 12 960 At 124.1 m foliation is at 25 degrees to core axis. VA08676 124.0 125.0 3 185 <5 112 890 1.0 <1 14 At 128.2 m bedding is at 20-30 degrees to core axis. VA08677 125.0 126.0 1.0 3 56 9 100 <1 10 840 At 130.0 m foliation is at 20 degrees to core axis. VA08678 126.0 127.0 1.0 3 113 8 80 <1 18 11:00 VA08679 127.0 128.0 129.1-129.7 M fault gouge at 50 degrees to core axis. 0.5 114 <1 810 1 0 3 < 5 99 .27 m of lost core. VA08680 128.0 129.0 1.0 3 45 ٢5 57 (1 11 910 At 138.6 m foliation is at 15 degrees to core axis. VA08681 129.0 130.0 1.0 3 44 24 86 <1 15 1100 137.1-138.2 M fault zone at 30 degrees to core axis. 0.5 m VA08682 130.0 131.0 3 75 27 107 <1 17 730 1.0 of lost core. VA08683 131.0 132.0 142 <5 141 720 1.0 3 (1 11 At 141.0 m foliation is at 35 degrees to core axis. VA08684 132.0 133.0 1.0 3 114 ٢5 102 <1 10 760 147.5-148.0 M foliation is at a very low angle to the core VA08685 133.0 134.0 3 117 ٢5 109 <1 12 580 1.0 axis (<20 degrees to core axis). VA08686 134.0 135.0 1.0 3 140 <5 104 <1 18 660 157.8-161.0 M foliation is at a very low angle to the core VA08687 135.0 136.0 280 107 <1 110 1.0 4 (5 10 axis (<20 degrees to core axis). VA08688 136.0 137.0 1.0 5 52 <5 104 <1 7 380 At 159.0 m distinct set of guartz-filled microfractures at VA08689 137.0 138.0 1.0 3 23 ٢5 101 <1 10 730 45 degrees to core axis. VA08690 138.0 139.0 1 0 3 568 8 145 1 13 600 At 162.5 m foliation is at 15 degrees to core axis. VA08691 139.0 140.0 1.0 3 394 54 104 1 13 860 VA08692 140.0 141.0 1.0 3 462 69 115 1 11 510 ALTERATION: . VA08693 141.0 142.0 3 175 5 (1 680 1.0 114 6 117.4 155.0 WEAK SPOTTY EPIDOTIZATION and WEAK PERVASIVE VA08694 142.0 143.0 1.0 .3 105 5 132 <1 6 130 CHLORITIZATION. VA08695 143.0 144.0 9 1.0 3 20 8 108 <1 160 155.0 157.8 MODERATE PERVASIVE CARBONATIZATION and STRONG VA08696 144.0 145.0 18 87 <1 8 540 1 0 3 ٢5 PERVASIVE CHLORITIZATION. VA08697 145.0 146.0 1.0 3 12 <5 85 <1 ٢5 560 157.8 166.3 WEAK SPOTTY EPIDOTIZATION and WEAK PERVASIVE VA08698 146.0 147.0 1 0 3 13 < 5 57 <1 8 820 CHLORITIZATION. VA08699 147.0 148.0 1.0 3 8 <5 58 <1 10 920 166.3 167.3 STRONG PERVASIVE CHLORITIZATION and MODERATE VA08700 148.0 149.0 1.0 3 12 <5 80 <1 9 1100 PERVASIVE CARBONATIZATION. VA08701 149.0 150.0 199 <5 80 <1 8 980 1.0 3 167.3 184.7 WEAK SPOTTY EPIDOTIZATION and MODERATE VA08702 150.0 151.0 239 <5 78 <1 5 940 1.0 3 PERVASIVE CHLORITIZATION. VA02933 150.0 184.7 34.7 42 n/a 65 n/a n/a 931 n/a VA08703 151.0 152.0 1.0 3 54 <5 63 (1 6 790 SULPHIDES: . 8 660 VA08704 152.0 153.0 1.0 - 3 15 < 5 50 <1 117.4-135.0 m 2-3% disseminated pyrite. Locally trace VA08705 153.0 154.0 ٢5 66 (1) 9 980 3 14 1.0 chalcopyrite intergrown with the pyrite. VA08706 154.0 155.0 1.0 3 120 < 5 191 <1 10 790 135.0-136.0 m 3-4% pyrite associated with patchy VA08707 155.0 156.0 223 13 110 1.0 5 5 340 <1 chlorite+carbonate alteration. VA08708 156.0 157.0 1.0 5 87 ٢5 353 <1 9 140 136.0-137.0 m 5 % coarsely disseminated pyrite and trace VA08709 157.0 158.0 113 < 5 244 <1 12 40 1.0 - 5 chalcopyrite. VA08710 158.0 159.0 46 ٢5 74 (1 20 1800 1.0 2

From

(m)

PROPERTY: Chemainus JV

PROPE	RTY: Chemainus	s JV						HOLE N	o: P	age Numb	er				
			FALCONBRIDGE LIMITED DIAMOND DRILL LOG					CH88-71		6					
From T	o		*	Sample	From	То	Width	Total	Cu	Pb	Zn	Ag	Au	Ва	
(m) (1	n)	DESCRIPT	ION	No.	(m)	(m)	(m)	Sulphides	(ppm)	(ppm)	(ppm)	(ppm)	(pp	b) (pp	.m)
	137.0-155.0	0 m 3 % disseminated pyri	te and trace	VA08711	159.0	160.0	1.0	2	63	16	46	<1	37	1500	
	chalcopyrit	te.		VA08712	160.0	161.0	1.0	2	18	21	45	<1	14	1400	
	155.0-157.8	3 m 4-5% disseminated pyr	ite as euhedral to	VA08713	161.0	162.0	1.0	2	17	22	40	<1	15	1100	
	subhedral g	grains up to 4 mm in diam	eter associated with	VA08714	162.0	163.0	1.0	2	4	24	40	<1	13	1600	
	strong perv	vasive chlorite and carbo	nate alteration. Also,	VA08715	163.0	164.0	1.0	2	26	20	34	<1 .	6	1300	
	locally mas	ssive, fracture controlle	d (?) bands of massive	VA08716	164.0	165.0	1.0	2	143	21	54	<1	8	960	
	magnetite	up to 2.0 cm thick. 8 %	magnetite overall.	VA08717	165.0	166.3	1.3	2	99	18	47	(1	8	1200	
	157.8-166.3	5 m 2 % disseminated and	fracture controlled	VA08718	166.3	167.3	1.0	2	98	5	46	<1	14	1000	
	pyrite asso	clated with dark green t	o black chlorite.	VA08719	167.3	168.0	.7	3	89	<5	29	<1	16	1400	
	100.3-10/.3	3 m 8 % iracture controll	ed pyrite and trace	VA08720	168.0	169.0	1.0	3	231	< 5	23	<1	12	1200	
	cnalcopyrit	ce concentrated in two ca	rbonatized bands of	VA08721	169.0	170.0	1.0	3	90	6	23	<1	10	1400	
	massive mag	netite 10 and 5 cm thick	(true thickness)	VA08722	170.0	171.0	1.0	3	10	11	49	<1	14	770	
	coughry par	allel to follation at 5-	20 degrees to core	VAU8723	171.0	172.0	1.0	3	4	<5	61	<1	12	610	
	4X15. 20 4	s magnetite overall.		VA08724	172.0	173.0	1.0	3	2	< 5	42	<1	7	1900	
	107.5 104.7	/ H 1-2% disseminated pyr	ite.	VA08725	173.0	174.0	1.0	. 3	3	5	43	<1	23	2300	
	124 2 126 6	Poak is motis in sommon	itian () i munta and	VAUS /25	174.0	1/5.0	1.0	3	19	- 11	.47	(1	13	900	
	124.2 120.0	o ROCK IS MALLE IN COMPOS	ition, (2 % quartz eyes	VAU8727	175.0	176.0	1.0	3	4	6	40	(1	13	1200	
	176 9 144 1	Strongly ablaniting pana		VA08728	176.0	177.0	1.0	2	. 3	18	31	<1	<5	1400	
	130.0 144.1	and guarta avea are way	, maile in composition	VA08729	177.0	178.0	1.0	2	518	14	91	(1	12	- 930	
		and quartz eyes are ver	y fale.	VA08730	178.0	1/9.0	1.0	2	361	(5	104	<1	11	840	
	167 3 170 0	Tuff broggin 40 % list		VA08/31	1/9.0	180.0	1.0	2	267	(5	86	(1		520	
	107.5 172.2	cilizonus rounded sloet	c grey, line-grained	VAU8732	180.0	181.0	1.0	2	231	(5	74	<1	11	.550	
		Siliceous rounded clast	sup to 5 cm long	VAU8/33	181.0	182.0	1.0	2	49	(5	74	(1	8	160	
		oriented parallel to ro	liation, 15 %	VA08734	182.0	183.0	1.0	2	82	5	87	<1	7	440	
		epidotized clasts up to	2.0 cm in diameter and	VA08735	183.0	184.0	1.0	2	198	5	65	<1	9	880	
		5 % quartz eyes up to 4	mm in diameter.	VA08735	184.0	184.7	• /	2	126	<5	75	(1	5	780	
184 7 254	8 MARTO THEF														
104.1 204.	Massive co	arse $(arain size = 2 mm)$	epidote spotted medium	VX02024	104 7	210 0	າຮ່າ	- 1-	1 4 5	-1-	(7 ⁾	- 1-	- /-	100	
	green ANDES	TTIC tuff Epidote spot	comprise 10-25 % of	VR02334	104.1	106 0	1 3	11/4	145	n/a	00	n/a	n/a 7	140	
	the rock an	d are generally (3 mm i	n diameter and most	VAUGIJI	104.1	100.0	1.0	. 4	21	5	98	(1		140	
	represent a	ltered feldsnar crystals	and aggregates but	VA00730	197 0	107.0	1 0	2	170	(5)	99	(1	11	160	
	some ((5%)	may be altered lamilli	In to 2 % light grey	VA08739	107.0	100.0	1.0	2	145	() 2	88	<1 ·	11	100	
	fine-graine	d lanilli-sized felsic	clasts oriented	VA08740	100.0	100.0	1 0	2	150	15	92	(1) (1)	10	320	
	<pre>narallel to</pre>	foliation	clusts offented	VN00741	100.0	101 0	1.0	. 4	132	15	00	/1	10	920	
	STRUCTURE	torrecton.		VA08742	191.0	192.0	1.0	2	122	(5)	70	1	·)	210	
	Verv massiv	e, bedding not observed.	and foliation is not	VA08744	192 0	193 0	1 0		125	5	79		7 5	140	
	well develo	ned. Where foliation is	nronounced it is at (VA08745	192.0	191 0	1.0	2	120	5	113	×1	(5)	710	
	20 degrees	to core axis	pronounced it is at v	VA08745	193.0	194.0	1.0	2	103	15	112		、J 0	120	
	At 204.9 m	3.0 cm fault gouge at 25	degrees to core aris	VL08747	195.0	196 0	1 0	. 2	211	7	71	1	25	730	
	203 2-205 4	M blocky highly fracts	red core	V108749	195.0	197.0	1.0	2	170	12	74	1	7	130	
	At 204.0 m	minor slip nearly narall	al to the core avid	V308740	197 0	198 0	1 0	2	172	20	79	21	15	150	
	215.0-217.3	M foliation is kinked a	ad contorted	VA08750	198 0	199 0	1 0	2 2	255	39	79	(1	15	(20	
	222.3-224.2	M foliation is kinked a	nd contorted.	VA09001	199.0	200.0	1.0	2	135	25	78	(1	15	(20	
	221.8-223.1	M slip runs parallel to	the core axis.	VA09002	200.0	201.0	1.0	1	166	14	87	<1 ×1	25	50	
	At 223.7 m	minor slip at 45 degrees	to core axis.	VA02935	210.0	230.0	20.0	n/a	116	n/a	87	n/a	n/a	316	
	227.0-228.0	M foliation is kinked a	nd contorted.	VA02936	230.0	254.8	24.8	n/a	102	n/a	116	n/a	n/a	544	
	At 236.0 m	fault or irregular erosio	onal surface at 60		20010		2310	n/ 4	100		110		/ ч	233	
	degrees to	core axis. Rock on the	uphole side has a												
	breciated,	contorted appearance whil	le the rock on the												

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FALCONBRIDGE LIMITED DIAMOND DRILL LOG

Total Cu From To Sample From To Width РЪ Zn Ag Au (m) Sulphides (ppm) (m) (m) -----DESCRIPTION-----(ppm) (ppm) (ppm) (ppb) (No. (m) (m) downhole side is massive. 237.5-239.4 M blocky, highly fractured core. At 238.6 m 3 mm fault gouge at 15 degrees to core axis. At 243.1 m bedding is at 15 degrees to core axis.

HOLE No: Page Number

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237.5-239.4 M blocky, highly fractured core. At 238.6 m 3 mm fault gouge at 15 degrees to core axis. At 243.1 m bedding is at 15 degrees to core axis. At 243.3 m 2.0 cm fault gouge at 40 degrees to core axis. At 245.0 m foliation is at 8 degrees to core axis. 246.8-247.8 M foliation is kinked and contorted. At 248.1 m 6.0 cm fault gouge at 30 degrees to core axis. 248.1-254.8 M blocky, highly fractured core. At 249.4 m 5.0 cm fault gouge at 40 degrees to core axis.

ALTERATION: .

183.8 254.8 MODERATE SPOTTY EPIDOTIZATION and WEAK PERVASIVE CARBONATIZATION. Moderate fracture controlled chlorite alteration between 192.0 and 194.0 m.

SULPHIDES:.

183.8-200.0 m 2 % disseminated pyrite mostly as cubes < 2 mm in diameter.

200.0-254.8 M trace to 1 % disseminated and very rarely, trace very finely disseminated chalcopyrite.

228.0 230.5 10 % light grey-green, fine-grained intermediate to felsic fragments 10.0 cm long and 1.0 cm wide stretched parallel to foliation at <10 degrees to core axis.

243.1 244.4 As 228.0 to 230.5 m.

SAMPLE	FROM	то	ZS 102	XAL203	ZCAO	ZHGO	XNA20	XK 20	ZFE203	XT 102	XP205	ZHNO	ZLOI	SUN	BA	AI	NACA
VA02508	20.40	20.90	48.80	18.80	9.11	3,11	3.46	0.97	9.58	0.83	0.22	0.20	3.77	98.85	308.	25.	13.
VA02509	44.20	44.60	50,10	19.60	7.89	2.96	2.62	2.03	9.53	0.79	0.44	0.13	3.16	99.25	750.	32.	11.
VA02510	66.20	66.50	50.20	19.80	5.27	2.80	2.39	3.69	9.77	0.82	0.48	0.09	3.93	99.24	1440.	46.	8.
VA02511	81.20	81.80	52.70	19.10	3.78	2.14	6.38	2.39	7.89	0.66	0.43	0.04	4.00	99.51	995.	31.	10.
VA02512	91.50	91.90	48.20	17.40	4.40	3.50	3.28	3.59	9.97	0.85	0.31	0.05	5.31	96.86	991.	48.	8.
VA02513	97.40	97.90	64.70	14.00	4.28	1.47	2.32	2.93	5.53	0.32	0.09	0.04	2.47	98.15	1060.	40.	7.
VA02514	116.30	116.80	71.10	14.00	0.86	1.12	3.30	3.58	2.66	0.25	0.08	0.01	2.47	99.43	2180.	53.	4.
VA02515	130.10	130.40	51.70	17.90	5.07	4.06	4.28	2.18	7.31	0.63	0.19	0.14	3.62	97.08	767.	40.	9.
VA02516	146.10	146.60	49.90	15.40	7.35	3.35	2.66	2.83	8.40	0.54	0.17	0.11	3.93	94.64	698.	38.	10.
VA02517	153.50	153.90	48.80	17.90	6.75	4.88	2.97	2.25	8.65	0.74	0.43	0.13	4.08	97.58	1060.	42.	10.
VA02518	170.40	170.90	55.80	13.20	8.23	3.90	3.34	0.60	6.93	0.44	0.19	0.13	3.77	96.53	376.	28.	12.
VA02519	180.50	180.90	44.10	15.40	10.70	4.10	3.45	0.70	10.30	0.69	0.18	0.18	4.47	94.27	344.	25.	14.
VA02521	188.50	188.80	50.10	19.20	5.56	5.01	5,78	0.20	8.87	0.91	0.12	0.13	4.00	99.88	167.	31.	11.
VA02520	199.30	199.70	44.90	17.50	11.40	4.58	3.38	0.12	10.90	0.75	0.16	0.18	5.77	99.64	109.	24.	15.
VA02522	225.00	225.60	46.00	15.90	7.66	6.09	2.93	0.69	11.40	0.80	0.11	0.20	7.62	99.40	214.	39.	11.
VA02523	246.40	246.70	41.70	15.10	13.80	3.58	3.21	1.14	9.11	0.69	0.13	0.30	11.50	100.26	435.	22.	17.

Hole No. CH88-71 WHOLE ROCK SAMPLES

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DIAMOND DRILL CORE LITHOGEOCHEMICAL RECORD (Major Elements)

SAMPLE NUMBER	FROM	то	XS102	ZAL203	ZCAO	ZHGD	2NA20	XK20	XFE203	XT 102	XP205	ZHNO	XLOI	SUN	BA	AI	NACA
			••••••••••••••••••••••••••••••••••••••		••••••			· · · · · · · · · · · · · · · · · · ·	•••••	*******	•••••••						
VA02927	12.80	42.00	49.40	17.60	8.71	3.19	2.94	1.83	9.48	0.69			4.16	98.00	708.	30.	12.
VA02928	42.00	72.40	50.70	19.00	7.86	2.10	3.69	2.00	8.58	0.67			3.31	97.91	742.	26.	12.
VA02929	72.40	82.20	52.60	19.40	4.73	2.25	5.58	2.15	7.61	0.71			3.23	98.26	887.	30.	10.
VA02930	82.20	90.10	50.20	18.80	5.20	3.71	4.52	1.84	10.10	0.86			3.47	98.70	888.	36.	10.
VA02931	90.10	120.00	50.60	17.60	6.26	3.18	3.73	2.01	10.30	0.78			4.00	98.46	701.	34.	10.
VA02932	120.00	150.00	44.80	16.90	10.10	4.07	1.77	1.96	12.00	0.67			5.30	97.57	579.	34.	12.
VA02933	150.00	184.70	55.60	13.80	8.03	3.65	2.47	1.49	8.44	0.47			4.08	98.03	931.	33.	11.
VA02934	184.70	210.00	43.40	16.10	12.00	4.93	2.56	0.40	10.90	0.73			7.31	98.33	180.	27.	15.
VA02935	210.00	230.00	42.80	15.60	11.70	4.70	2.48	1.33	9.60	0.71			9.93	98.85	316.	30.	14.
VA02936	230.00	254.80	49.10	15.90	9.21	4.16	3.81	1.25	7.84	0.65			7.09	99.00	544.	29.	13.

Hole No. CH88-71 ALTERED SAMPLES

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	C0 (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	₩0 (ppm)	HN (ppm)	CUZN	ETS	FE
								· .				2					
VA08578	20.00	21.00	310.0	82.0	100.0	<0.5	<5.0	25.0	25.0	<5.0	<5.0	<1.0	3.0	830.0	45.	4.	4.
VA08579	21.00	22.00	710.0	63.0	68.0	<0.5	<5.0	24.0	16.0	<5.0	<5.0	<1.0	2.0	710.0	48.	4.	з.
VA08580	22.00	23.00	1100.0	41.0	160.0	<0.5	<5.0	13.0	6.0	<5.0	<5.0	<1.0	3.0	1080.0	20.	1.	3.
VA08581	27.00	28.00	280.0	203.0	128.0	<0.5	<5.0	40.0	28.0	<5.0	9.0	<1.0	4.0	940.0	61.	4.	3.
VA08582	28.00	29.00	220.0	55.0	110.0	<0.5	<5.0	30.0	26.0	<5.0	<5.0	<1.0	3.0	920.0	33.	4.	3.
VA08583	29.00	30.00	280.0	58.0	136.0	<0.5	<5.0	26.0	24.0	<5.0	<5.0	<1.0	2.0	950.0	30.	1.	5.
VA08584	30.00	31.00	720.0	20.0	100.0	<0.5	<5.0	20.0	18.0	<5.0	<5.0	<1.0	2.0	810.0	17.	1.	5.
VA08585	31.00	32.00	870.0	110.0	92.0	<0.5	<5.0	24.0	16.0	<5.0	5.0	<1.0	2.0	800.0	54.	1.	6.
VA08586	32.00	33.00	510.0	106.0	104.0	<0.5	<5.0	32.0	22.0	<5.0	5.0	<1.0	2.0	880.0	50.	1.	7.
VA08587	33.00	34.00	460.0	154.0	76.0	<0.5	<5.0	25.0	20.0	<5.0	<5.0	<1.0	2.0	810.0	67.	1.	4.
VA08588	34.00	35.00	110.0	100.0	96.0	<0.5	<5.0	32.0	48.0	<5.0	<5.0	<1.0	2.0	1140.0	51.	1.	5.
VA08589	35.00	36.00	100.0	103.0	82.0	<0.5	<5.0	30.0	23.0	<5.0	<5.0	<1.0	2.0	740.0	56.	4.	3.
VA08590	36.00	37.00	190.0	77.0	72.0	<0.5	<5.0	32.0	22.0	5.0	<5.0	<1.0	3.0	1030.0	52.	4.	4.
VA08591	37.00	38.00	1000.0	85.0	84.0	<0.5	<5.0	19.0	7.0	<5.0	<5.0	<1.0	2.0	720.0	50.	1.	4.
VA08592	38.00	39.00	820.0	53.0	72.0	<0.5	<5.0	26.0	4.0	<5.0	7.0	<1.0	2.0	660.0	42.	1.	4.
VA08593	39.00	40.00	980.0	52.0	62.0	<0.5	<5.0	16.0	4.0	<5.0	<5.0	<1.0	2.0	660.0	46.	1.	4.
VA08594	40.00	41.00	1100.0	51.0	72.0	<0.5	<5.0	16.0	2.0	<5.0	10.0	<1.0	3.0	660.0	41.	1.	4.
VA08595	41.00	42.00	860.0	51.0	71.0	<0.5	6.0	17.0	9.0	<5.0	6.0	<1.0	2.0	740.0	42.	1.	4.
VA08596	42.00	43.00	1000.0	53.0	74.0	<0.5	16.0	13.0	7.0	<5.0	5.0	<1.0	2.0	870.0	42.	1.	4.
VA08597	43.00	44.00	950.0	34.0	82.0	0.7	<5.0	14.0	8.0	<5.0	5.0	<1.0	2.0	680.0	29.	2.	4.
VA08598	44.00	45.00	770.0	54.0	73.0	<0.5	<5.0	15.0	9.0	<5.0	7.0	<1.0	3.0	640.0	43.	2.	4.
VA08599	45.00	46.00	710.0	49.0	65.0	<0.5	5.0	13.0	8.0	<5.0	5.0	<1.0	2.0	590.0	43.	2.	4.
VA08600	46.00	47,00	760.0	91.0	60.0	<0.5	6.0	13.0	5.0	<5.0	5.0	<1.0	2.0	570.0	60.	2.	4.

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (pp∎)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
VA08601	47.00	48.00	930.0	106.0	47.0	<0.5	9.0	19.0	7.0	<5.0	9.0	<1.0	2.0	420.0	69.	2.	4.
VA08602	48.00	49.00	930.0	87.0	47.0	<0.5	<5.0	15.0	6.0	<5.0	7.0	<1.0	2.0	440.0	65.	2.	3.
VA08603	49.00	50.00	1000.0	82.0	47.0	<0.5	9.0	17.0	8.0	<5.0	6.0	<1.0	2.0	400.0	64.	2.	4.
VA08604	50.00	51.00	1200.0	53.0	34.0	<0.5	7.0	17.0	6.0	<5.0	7.0	<1.0	3.0	300.0	61.	2.	з.
VA08605	51.00	52.00	1200.0	58.0	39.0	<0.5	7.0	13.0	6.0	<5.0	5.0	<1.0	2.0	400.0	60.	2.	3.
VA08606	52.00	53.00	790.0	220.0	44.0	<0.5	<5.0	13.0	5.0	<5.0	5.0	<1.0	6.0	480.0	83.	2.	3.
VA08607	53.00	54.00	1100.0	45.0	68.0	<0.5	<5.0	7.0	7.0	<5.0	<5.0	<1.0	3.0	620.0	40.	2.	з.
VA08608	54.00	55.00	850.0	28.0	71.0	<0.5	<5.0	8.0	6.0	<5.0	<5.0	<1.0	6.0	650.0	28.	2.	4.
VA08609	55.00	56.00	810.0	85.0	50.0	<0.5	10.0	28.0	5.0	5.0	8.0	<1.0	2.0	490.0	63.	2.	4.
VA08610	56.00	57.00	910.0	81.0	80.0	<0.5	7.0	15.0	7.0	<5.0	<5.0	<1.0	4.0	660.0	50.	2.	3.
VA08611	57.00	58.00	850.0	165.0	82.0	<0.5	8.0	11.0	10.0	<5.0	<5.0	<1.0	4.0	870 .0	67.	2.	4.
VA08612	58.00	59.00	14000.0	56.0	42.0	<0.5	11.0	19.0	7.0	<5.0	<5.0	<1.0	4.0	500.0	57.	2.	з.
VA08613	59.00	60.00	1000.0	19.0	58.0	<0.5	5.0	17.0	8.0	<5.0	<5.0	<1.0	3.0	520.0	25.	2.	4.
VA08614	60.00	61.00	540.0	14.0	58.0	<0.5	7.0	17.0	10.0	<5.0	<5.0	<1.0	4.0	560.0	19.	2.	3.
VA08615	61.00	62.00	570.0	26.0	51.0	<0.5	6.0	17.0	7.0	5.0	<5.0	<1.0	4.0	460.0	34.	2.	3.
VA08616	62.00	63.00	710.0	59.0	72.0	<0.5	7.0	25.0	6.0	<5.0	<5.0	<1.0	3.0	660.0	45.	2.	4.
VA08617	63.00	64.00	740.0	113.0	65.0	<0.5	9.0	17.0	7.0	<5.0	5.0	<1.0	5.0	510.0	63.	2.	4.
VA08618	64.00	65.00	1100.0	66.0	59.0	<0.5	7.0	22.0	6.0	<5.0	<5.0	<1.0	2.0	430.0	53.	4.	4.
VA08619	65.00	66.00	950.0	47.0	63.0	<0.5	7.0	20.0	7.0	<5.0	<5.0	<1.0	2.0	520.0	43.	4.	4.
VA08620	66.00	67.00	1100.0	52.0	67.0	<0.5	14.0	31.0	8.0	<5.0	<5.0	<1.0	3.0	430.0	44.	4.	4.
VA08621	67.00	68.00	810.0	15.0	65.0	<0.5	16.0	24.0	7.0	<5.0	<5.0	<1.0	2.0	540.0	19.	4.	4.
VA08622	68.00	69.00	540.0	73.0	52.0	<0.5	15.0	26.0	6.0	<5.0	<5.0	<1.0	3.0	460.0	58.	4.	4.
VA08623	69.00	70.00	940.0	99.0	64.0	<0.5	9.0	16.0	9.0	<5.0	<5.0	<1.0	3.0	600.0	61.	4.	4.

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	РВ (ррщ)	AS (pp∎)	CD (ppm)	НО (ррњ)	HN (ppm)	CUZN	ETS	FE
VA08624	70.00	71.00	630.0	52.0	55.0	<0.5	17.0	19.0	7.0	<5.0	<5.0	<1.0	3.0	510.0	49.	4.	. 4.
VA08625	71.00	72.40	500.0	8.0	34.0	<0.5	15.0	16.0	6.0	<5.0	<5.0	<1.0	3.0	330.0	19.	4.	4.
VA08626	72.40	73.00	810.0	10.0	36.0	<0.5	14.0	13.0	6.0	<5.0	<5.0	<1.0	2.0	340.0	22.	5.	3.
VA08627	73.00	74.00	970.0	35.0	38.0	<0.5	6.0	13.0	6.0	<5.0	<5.0	<1.0	2.0	310.0	48.	5.	3.
VA08628	74.00	75.00	960.0	16.0	35.0	<0.5	10.0	12.0	6.0	<5.0	<5.0	<1.0	3.0	380.0	31.	5.	3.
VA08629	75.00	76.00	1100.0	10.0	36.0	<0.5	12.0	12.0	4.0	<5.0	<5.0	<1.0	2.0	320.0	22.	5.	3.
VA08630	76.00	76.60	730.0	32.0	68.0	<0.5	9.0	19.0	13.0	<5.0	<5.0	<1.0	4.0	660.0	32.	5.	4.
VA08631	77.70	79.00	950.0	30.0	28.0	<0.5	7.0	16.0	8.0	<5.0	<5.0	<1.0	3.0	220.0	52.	5.	4.
VA08632	79.00	80.00	710.0	21.0	38.0	<0.5	14.0	16.0	5.0	<5.0	<5.0	<1.0	5.0	290.0	36.	5.	4.
VA08633	80.00	81.00	610.0	.29.0	39.0	<0.5	7.0	12.0	6.0	<5.0	<5.0	<1.0	2.0	260.0	43.	5.	4.
VA08634	81.00	82.20	820.0	14.0	49.0	<0.5	17.0	15.0	7.0	<5.0	<5.0	<1.0	2.0	260.0	22.	5.	4.
VA08635	82.20	83.20	330.0	144.0	57.0	<0.5	10.0	17.0	6.0	<5.0	<5.0	<1.0	3.0	370.0	72.	2.	5.
VA08636	83.20	84.00	420.0	21.0	44.0	<0.5	19.0	17.0	4.0	<5.0	<5.0	<1.0	2.0	300.0	32.	2.	4.
VA08637	84.00	85.00	610.0	41.0	64.0	<0.5	11.0	20.0	7.0	<5.0	<5.0	<1.0	3.0	490.0	39.	2.	6.
VA08638	85,00	86.00	600.0	112.0	56.0	<0.5	8.0	23.0	6.0	<5.0	<5.0	<1.0	3.0	510.0	67.	2.	6.
VA08639	86.00	87.00	200.0	24.0	82.0	<0.5	15.0	38.0	16.0	<5.0	<5.0	<1.0	3.0	580.0	23.	2.	8.
VA08640	87.00	88.00	2500.0	45.0	61.0	<0.5	12.0	20.0	9.0	<5.0	<5.0	<1.0	4.0	510.0	42.	2.	6.
VA08641	88.00	89.00	330.0	24.0	71.0	<0.5	8.0	26.0	8.0	<5.0	<5.0	<1.0	4.0	710.0	25.	2.	7.
VA08642	89.00	90.10	480.0	88.0	83.0	<0.5	9.0	26.0	19.0	<5.0	<5.0	<1.0	4.0	600.0	51.	2.	7.
VA08643	90.10	91.00	940.0	91.0	56.0	<0.5	15.0	24.0	20.0	<5.0	<5.0	<1.0	3.0	370.0	62.	5.	5.
VA08644	91.00	92.00	1000.0	78.0	39.0	<0.5	13.0	25.0	21.0	<5.0	<5.0	<1.0	4.0	300.0	67.	5.	5.
VA08645	92.00	93.00	660.0	23.0	41.0	<0.5	16.0	24.0	13.0	5.0	5.0	<1.0	2.0	280.0	36.	5.	6.
VA08646	93.00	94.00	1000.0	53.0	49.0	(0.5	14.0	24.0	12.0	(5.0	6.0	<1.0	5.0	310.0	52.	5.	6.

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppm)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
VA08647	94.00	95.00	720.0	160.0	42.0	<0.5	11.0	7.0	6.0	<5.0	7.0	<1.0	4.0	290.0	79.	3.	4.
VA08648	95.00	95.00	630.0	343.0	54.0	<0.5	18.0	12.0	9.0	<5.0	<5.0	<1.0	4.0	380.0	86.	з.	5.
VA08649	96.00	97.00	860.0	53.0	33.0	<0.5	10.0	20.0	14.0	<5.0	<5.0	<1.0	5.0	290.0	62.	з.	4.
VA08650	97.00	98.00	1000.0	46.0	32.0	<0.5	8.0	12.0	13.0	<5.0	8.0	<1.0	3.0	280.0	59.	3.	3.
VA08651	98.00	99.00	1100.0	115.0	55.0	<0.5	14.0	17.0	15.0	<5.0	<5.0	<1.0	4.0	410.0	68.	з.	5,
VA08652	99.00	100.00	1200.0	62.0	45.0	<0.5	24.0	13.0	10.0	<5.0	<5.0	<1.0	6.0	280.0	58.	3.	3.
VA08653	100.00	101.00	920.0	52.0	47.0	<0.5	18.0	25.0	11.0	6.0	7.0	<1.0	6.0	300.0	53.	з.	4.
VA08654	101.00	102.00	2000.0	16.0	64.0	<0.5	19.0	15.0	15.0	<5.0	5.0	<1.0	5.0	440.0	20.	3.	5.
VA08655	102.00	103.00	1500.0	128.0	53.0	<0.5	28.0	27.0	32.0	<5.0	12.0	<1.0	5.0	400.0	71.	3.	4.
VA08656	103.00	104.00	850.0	26.0	50.0	<0.5	50.0	48.0	41.0	6.0	21.0	<1.0	7.0	350.0	34.	5.	6.
VA08657	104.00	105.00	1700.0	83.0	60.0	<0.5	43.0	40.0	27.0	<5.0	18.0	<1.0	8.0	390.0	58.	5.	5.
VA08658	105.00	106.00	1400.0	273.0	66.0	<0.5	28.0	24.0	11.0	<5.0	9.0	<1.0	5.0	420.0	81.	з.	5.
VA08659	106.00	107.00	1200.0	83.0	56.0	<0.5	17.0	30.0	14.0	<5.0	12.0	<1.0	9.0	350.0	60.	з.	4.
VA08660	107.00	108.00	710.0	34.0	60.0	<0.5	33.0	31.0	21.0	6.0	23.0	<1.0	6.0	340.0	36.	з.	5.
VA08661	108.00	109.00	630.0	5.0	72.0	<0.5	33.0	33.0	19.0	22.0	41.0	<1.0	5.0	420.0	6.	з.	6.
VA08662	109.00	110.00	670.0	11.0	63.0	<0.5	21.0	28.0	20.0	10.0	16.0	<1.0	5.0	420.0	15.	з.	6.
VA08663	110.00	111.00	620.0	73.0	90.0	<0.5	17.0	29.0	18.0	<5.0	10.0	<1.0	6.0	500.0	45.	3.	5.
VA08664	111.00	112.00	760.0	164.0	106.0	<0.5	17.0	30.0	13.0	<5.0	10.0	<1.0	7.0	560.0	61.	3.	6.
VA08665	112.00	113.00	1400.0	56.0	60.0	<0.5	13.0	18.0	10.0	5.0	8.0	<1.0	6.0	410.0	48.	з.	4.
VA08666	113.00	114.00	610.0	134.0	98.0	<0.5	22.0	34.0	21.0	<5.0	10.0	<1.0	8.0	600.0	58.	3.	6.
VA08667	114.00	115.00	410.0	192.0	69.0	<0.5	20.0	25.0	14.0	<5.0	13.0	<1.0	7.0	440.0	74.	3.	5.
VA08668	115.00	116.00	1200.0	11.0	31.0	<0.5	22.0	9.0	7.0	<5.0	5.0	<1.0	5.0	170.0	26.	3.	3.
VA08669	116.00	117.40	1900.0	8.0	17.0	<0.5	13.0	10.0	7.0	7.0	<5.0	<1.0	3.0	120.0	32.	з.	2.

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm.)	AU (ppb)	CO (ppm)	NI (ppm)	₽B (ppm)	AS (ppm.)	CD (ppm)	НО (ррж)	HN (ppm)	CUZN	ETS	FE
VA08670	117.40	119.00	1100.0	143.0	80.0	<0.5	12.0	24.0	27.0	< 5 -0	8.0	<1.0	3.0	540.0	64.	3.	5.
VA08671	119.00	120.00	410.0	34.0	81.0	<0.5	20.0	33.0	21.0	<5.0	14.0	<1.0	4.0	550.0	30.	3.	5.
VA08672	120.00	121.00	250.0	7.0	77.0	(0.5	13.0	24.0	20.0	(5.0	8.0	<1.0	3.0	550 0		3.	5
VA08673	121.00	122.00	670.0	35-0	91.0	(0.5	13.0	28.0	34.0	(5.0	9.0	(1.0	5.0	680.0	28.	3.	6.
VA08674	122.00	123.00	960.0	65.0	59.0	<0.5	13.0	20.0	12.0	<5.0	(5.0	<1.0	5.0	520.0	52.	3.	4.
VA08675	123.00	124.00	960.0	117.0	97.0	<0.5	12.0	24.0	20.0	<5.0	7.0	<1.0	5.0	700.0	55.	3.	.5.
VA08676	124.00	125.00	890.0	185.0	112.0	<0.5	14.0	21.0	26.0	<5.0	5.0	<1.0	5.0	960.0	62.	3.	6.
VA08677	125.00	126.00	840.0	56.0	100.0	<0.5	10.0	18.0	15.0	9.0	<5.0	<1.0	4.0	900.0	36.	3.	4.
VA08678	126.00	127.00	1100.0	113.0	80.0	<0.5	18.0	32.0	22.0	8.0	<5.0	<1.0	4.0	750.0	59.	з.	5.
VA08679	127.00	128.00	810.0	114.0	99.0	<0.5	27.0	22.0	12.0	<5.0	<5.0	<1.0	4.0	820.0	54.	3.	5.
VA08680	128.00	129.00	910.0	45.0	57.0	<0.5	11.0	17.0	11.0	<5.0	<5.0	<1.0	3.0	640.0	44.	3.	3.
VA08681	129.00	130.00	1100.0	44.0	86.0	(0.5	15.0	27.0	26.0	24.0	<5.0	<1.0	5.0	830.0	34.	3.	4.
VA08682	130.00	131.00	730.0	75.0	107.0	(0.5	17.0	39.0	29.0	27.0	<5.0	<1.0	4.0	940.0	41.	3.	4.
VA08683	131.00	132.00	720.0	142.0	141.0	(0.5	11.0	22.0	20.0	(5.0	(5.0	<1.0	5.0	1300.0	50.	3.	5.
VA08684	132.00	133.00	760.0	114.0	102.0	<0.5	10.0	24_0	29.0	(5.0	<5.0	(1.0	4.0	960.0	53.	3.	4.
VA08685	133.00	134.00	580.0	117.0	109.0	(0.5	12.0	29.0	26.0	(5.0	<5.0	(1.0	4.0	1100.0	52.	3.	5.
VA08686	134.00	135.00	660-0	140.0	104 0	<0.5	18 0	37 0	18.0	(5.0	(5.0	< (1.0	4 0	1000.0	57.	3.	5.
VA08687	135.00	136.00	110.0	280.0	107.0	<0.5	10.0	33.0	21.0	(5.0	(5.0	21.0	5.0	1250.0	72.	4.	5.
VA08688	136.00	137.00	380.0	52.0	104.0	<0.5	7.0	39.0	20.0		(5.0	(1.0	4.0	1200.0	33.	5.	6.
VA08689	137.00	138.00	730.0	23.0	101 0	<0.5	10.0	40.0	26.0	(5.0	(5.0	<1.0	4.0	1040.0	19.	3.	6.
UA08690	138 00	139 00	600.0	568 0	145 0	0.6	13.0	34 0	37 0	8 0		(1.0	5.0	1560 0	80	3.	6
1100010	120.00	140.00	960 0	294 0	104 0	Δ.7	12.0	34.0	37.10	54.0	15.0	<u>, , , , , , , , , , , , , , , , , , , </u>	J.V	1100 0	79		5
AN00000	137.00	140.00	510.0	374.V	109.0	v./	13.0	30.0	20.V	54.0	(3.0	(1.0	4.0	1170.0	/7.		

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	AU (ppb)	СО (ррт)	NI (ppm)	PB (ppm)	AS (ppm.)	CD (ppm)	НО (ррш)	MN (ppm)	CUZN	ETS	FE
VA08693	141.00	142.00	680.0	175.0	114.0	<0.5	6.0	38.0	32.0	5.0	<5.0	<1.0	5.0	1320.0	61.	3.	5.
VA08694	142.00	143.00	130.0	105.0	132.0	<0.5	6.0	35.0	39.0	5.0	<5.0	<1.0	4.0	1280.0	44.	3.	6.
VA08695	143.00	144.00	160.0	20.0	108.0	<0.5	9.0	50.0	31.0	8.0	<5.0	<1.0	3.0	1080.0	16.	3.	6.
VA08696	144.00	145.00	540.0	18.0	87.0	<0.5	8.0	40.0	39.0	<5.0	<5.0	<1.0	4.0	1020.0	17.	3.	5.
VA08697	145.00	146.00	560.0	12.0	85.0	<0.5	<5.0	29.0	35.0	<5.0	<5.0	<1.0	3.0	830.0	12.	3.	5.
VA08698	146.00	147.00	820.0	13.0	57.0	<0.5	8.0	30.0	20.0	<5.0	<5.0	<1.0	4.0	620.0	19.	3.	4.
VA08699	147.00	148.00	920.0	8.0	58.0	<0.5	10.0	18.0	13.0	<5.0	<5.0	<1.0	5.0	700.0	12.	з.	з.
VA08700	148.00	149.00	1100.0	12.0	80.0	<0.5	9.0	32.0	14.0	<5.0	<5.0	<1.0	4.0	700.0	13.	з.	5.
VA08701	149.00	150.00	980.0	199.0	80.0	<0.5	8.0	29.0	30.0	<5.0	6.0	<1.0	4.0	680.0	71.	з.	5.
VA08702	150.00	151.00	940.0	239.0	78.0	<0.5	5.0	23.0	18.0	<5.0	<5.0	<1.0	4.0	600.0	75.	3.	5.
VA08703	151.00	152.00	790.0	54.0	63.0	<0.5	6.0	21.0	21.0	<5.0	5.0	<1.0	4.0	520.0	46.	3.	5.
VA08704	152.00	153.00	660.0	15.0	50.0	<0.5	8.0	20.0	23.0	<5.0	<5.0	<1.0	3.0	380.0	23.	3.	4.
VA08705	153.00	154.00	980.0	14.0	66.0	<0.5	9.0	15.0	8.0	<5.0	<5.0	<1.0	4.0	500.0	18.	з.	3.
VA08706	154.00	155.00	790.0	120.0	191.0	<0.5	10.0	13.0	12.0	<5.0	<5.0	<1.0	4.0	1040.0	39.	3.	4.
VA08707	155.00	156.00	110.0	223.0	340.0	<0.5	13.0	9.0	16.0	5.0	9.0	<1.0	6.0	1880.0	40.	5.	+10.
VA08708	156.00	157.00	140.0	87.0	353.0	<0.5	9.0	4.0	13.0	<5.0	<5.0	<1.0	7.0	1820.0	20.	5.	9.
VA08709	157.00	158.00	40.0	113.0	244.0	<0.5	12.0	4.0	10.0	<5.0	<5.0	<1.0	7.0	1770.0	32.	5.	7.
VA08710	158.00	159.00	1800.0	46.0	74.0	<0.5	20.0	14.0	11.0	<5.0	<5.0	<1.0	4.0	670.0	38.	2.	з.
VA08711	159.00	160.00	1500.0	63.0	46.0	<0.5	37.0	17.0	7.0	16.0	<5.0	<1.0	4.0	360.0	58.	2.	3.
VA08712	160.00	161.00	1400.0	18.0	45.0	<0.5	14.0	9.0	7.0	21.0	<5.0	<1.0	2.0	400.0	29.	2.	з.
VA08713	161.00	162.00	1100.0	17.0	40.0	<0.5	15.0	12.0	6.0	22.0	<5.0	<1.0	5.0	380.0	30.	2.	з.
VA08714	162.00	163.00	1600.0	4.0	40.0	<0.5	13.0	10.0	10.0	24.0	5.0	<1.0	2.0	420.0	9.	2.	3.
VA08715	163.00	164.00	1300.0	26.0	34.0	<0.5	6.0	8.0	6.0	20.0	5.0	<1.0	4.0	410.0	43.	2.	2.

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SAMPLE NUMBER	FROM	то	BA (ppm)	CU (ppm)	ZN (ppma)	AG (ppm)	AU (ppb)	CO (ppm)	NI (ppm)	PB (ppm)	AS (ppm)	CD (ppan)	HO (ppm)	HN (ppm)	CUZN	ETS	FE
11009716	164 00	165 00	0(0.0						· .				*****		 *****		
	104.00	163.00	960.0	143.0	54.0	<0.5	8.0	18.0	10.0	21.0	8.0	<1.0	3.0	540.0	73.	2.	. 4.
VAU8717	165.00	166.30	1200.0	99.0	47.0	<0.5	8.0	22.0	10.0	18.0	5.0	<1.0	5.0	580.0	68.	2.	4.
VH08/18	166.30	167.30	1000.0	98.0	46.0	<0.5	14.0	39.0	11.0	5.0	14.0	<1.0	3.0	700.0	68.	2.	+ 10.
VA08719	167.30	168.00	1400.0	89.0	29.0	<0.5	16.0	12.0	8.0	<5.0	<5.0	<1.0	6.0	540.0	75.	3.	4.
VA08720	168.00	169.00	1200.0	231.0	23.0	<0.5	12.0	22.0	13.0	<5.0	<5.0	<1.0	4.0	560.0	91.	3.	3.
VA08721	169.00	170.00	1400.0	90.0	23.0	<0.5	10.0	12.0	10.0	6.0	<5.0	<1.0	4.0	440.0	80.	3.	3.
VA08722	170.00	171.00	770.0	10.0	49.0	<0.5	14.0	13.0	15.0	11.0	<5.0	<1.0	4.0	600.0	17.	3.	3.
VA08723	171.00	172.00	610.0	4.0	61.0	<0.5	12.0	12.0	13.0	<5.0	<5.0	<1.0	4.0	800.0	6.	3.	3.
VA08724	172.00	173.00	1900.0	2.0	42.0	<0.5	7.0	4.0	9.0	<5.0	<5.0	<1.0	3.0	600.0	5.	з.	2.
VA08725	173.00	174.00	2300.0	3.0	43.0	<0.5	23.0	10.0	8.0	5.0	<5.0	<1.0	3.0	380.0	7.	3.	з.
VA08726	174.00	175.00	900.0	19.0	47.0	<0.5	13.0	11.0	11.0	11.0	<5.0	<1.0	5.0	420.0	29.	3.	3.
VA08727	175.00	176.00	1200.0	4.0	40.0	<0.5	13.0	13.0	9.0	6.0	<5.0	<1.0	3.0	340.0	9.	3.	2.
VA08728	176.00	177.00	1400.0	3.0	31.0	<0.5	<5.0	7.0	5.0	18.0	<5.0	<1.0	3.0	260.0	9.	2.	2.
VA08729	177.00	178.00	930.0	518.0	91.0	<0.5	12.0	24.0	18.0	14.0	10.0	<1.0	4.0	840.0	85.	2.	5.
VA08730	178.00	179.00	840.0	361.0	104.0	<0.5	11.0	54.0	20.0	<5.0	15.0	<1.0	7.0	950.0	78.	2.	6.
VA08731	179.00	180.00	520.0	267.0	86.0	<0.5	7.0	42.0	22.0	<5.0	10.0	<1.0	6.0	950.0	76.	2.	5.
VA08732	180.00	181.00	550.0	231.0	74.0	<0.5	11.0	40.0	21.0	<5.0	12.0	<1.0	6.0	940.0	76.	2.	5.
VA08733	181.00	182.00	160.0	49.0	74.0	<0.5	8.0	25.0	25.0	<5.0	13.0	<1.0	4.0	1040.0	40.	2.	5.
VA08734	182.00	183.00	440.0	82.0	87.0	<0.5	7.0	47.0	19.0	5.0	13.0	<1.0	11.0	920.0	49.	2	5
VA08735	183.00	184.00	880.0	198.0	65.0	<0.5	9.0	37.0	16.0	5.0	12.0	(1.0	10.0	660.0	75.	2.	4
VA08736	184.00	184.70	780.0	126.0	75.0	<0.5	5.0	30.0	20.0	<5.0	9.0	<1.0	5.0	760 0	63	2	۰۰ ج
VA08737	184.70	186.00	140.0	21.0	98.0	<0.5	7.0	27.0	28.0	5.0	8 0	(1.0	2.0	920 0	10	- - •	J.
VA08738	186.00	187.00	280.0	245.0	99.0	<0.5	9.0	26.0	24.0	/5 A	7.0	×1.0	2.0	000 0	10.	<i>4</i> .	
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Hole No. CH89-71

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SAMPLE NUMBER	FROM	TO	BA (ppm)	CU (ppm)	ZN (ppm)	AG (ppm)	АU (ррь)	CD (ppm)	NI (ppm)	РВ (ррж)	AS (ppm)	CD (ppm)	H0 (ppm)	HN (ppm)	CUZN	ETS	FE

VA08739	187.00	188.00	150.0	132.0	88.0	<0.5	11.0	34.0	21.0	<5.0	7.0	<1.0	4.0	820.0	60.	2.	5.
VA08740	188.00	189.00	520.0	145.0	92.0	<0.5	9.0	32.0	23.0	5.0	7.0	<1.0	4.0	820.0	61.	2.	5.
VA08741	189.00	190.00	320.0	158.0	88.0	<0.5	10.0	41.0	24.0	15.0	8.0	<1.0	3.0	810.0	64.	2.	5.
VA08742	190.00	191.00	830.0	133.0	86.0	<0.5	5.0	42.0	20.0	<5.0	8.0	<1.0	4.0	900.0	61.	2.	5.
VA08743	191.00	192.00	210.0	93.0	79.0	<0.5	8.0	37.0	21.0	<5.0	9.0	<1.0	4.0	800.0	54.	2.	5.
VA08744	192.00	193.00	140.0	125.0	79.0	<0.5	<5.0	27.0	21.0	5.0	7.0	<1.0	5.0	970.0	61.	2.	4.
VA08745	193.00	194.00	710.0	189.0	113.0	<0.5	<5.0	62.0	30.0	5.0	10.0	<1.0	4.0	880.0	63.	2.	7.
VA08746	194.00	195.00	120.0	65.0	96.0	<0.5	8.0	22.0	23.0	<5.0	<5.0	<1.0	7.0	1100.0	40.	2.	6.
VA08747	195.00	196.00	730.0	211.0	71.0	<0.5	<5.0	23.0	25.0	7.0	6.0	<1.0	5.0	900.0	75.	2.	5.
VA08748	196.00	197.00	130.0	179.0	74.0	<0.5	7.0	29.0	23.0	12.0	6.0	<1.0	4.0	920.0	71.	2.	5.
VA08749	197.00	198.00	150.0	172.0	79.0	<0.5	<5.0	30.0	20.0	20.0	7.0	<1.0	6.0	1000.0	69.	2.	5.
VA08750	198,00	199.00	<20.0	255.0	78.0	<0.5	<5.0	46.0	18.0	39.0	11.0	<1.0	5.0	950.0	77.	2.	6.
VA09001	199.00	200.00	<20.0	135.0	78.0	<0.5	<5.0	15.0	20.0	25.0	<5.0	<1.0	4.0	900.0	63.	2.	5.
VA09002	200.00	201.00	50.0	166.0	87.0	<0.5	<5.0	17.0	23.0	14.0	7.0	<1.0	5.0	800.0	66.	1.	4.

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