

LOG NO: 23-01	RD.
ACTION:	
FILE NO:	

APPENDIX D
DIAMOND DRILL HOLE
LOGS & SAMPLE LEDGERS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,861

PART 2 OF 4

ABBREVIATIONS AND CODES

LITHOLOGIES

BT - Basalt
QM - Quartz Monzonite
VL - Volcanic, undifferentiated

Flows: FP - Feldspar Porphyry DC - Dacite
RD - Rhyodacite AN - Andesite

Tuffs: AT - Ash PT - Lapilli RT - Rhyodacite
LT - Lithic XL - Crystal RH - Rhyolite
CH - Cherty DT - Dacite AX - Ash/crystal, etc.

Sediments:
SLT - Siltstone LST - Limestone
SST - Sandstone CHT - Chert

Miscellaneous:
BX - Breccia OB - Overburden
B - Brecciated NA - Not assayed
FT - Fault

MINERALIZATION

MS - Massive sulphide VZ - Vein zone Diss - disseminated
Mt - Magnetite Gn - Galena Mass - Massive
As - Arsenopyrite Py - Pyrite Mal - Malachite
Cp - Chalcopyrite Po - Pyrrhotite Sp - Sphalerite
Mo - Molybdenite

VEINS

Vn - Vein Vnlet - Veinlet (< 2 mm)
qz - Quartz-carbonate l - Calcite
q - Quartz xwk - Stockwork

ALTERATION

MnOx - Manganese oxide Ep - Epidote Prop - Propylitic
FeOx - Iron oxide Bio - Biotite Sil - Silicious
Calc Cal - Calcite Arg - Argillic
sil - Calc-silicate Qtz - Quartz Chl - Chlorite

CONDITION OF CORE

b - Broken;< 3 cm fragments g - Gouge

GANGUE

Cal - Calcite Chl - Chlorite
QC - Quartz-carbonate Q - Quartz

GRAIN SIZE

f, fgr - Fine m, mgr - Medium
c, cgr - Coarse

TEXTURE

m, mass - Massive l - Laminated
d, diss - Disseminated

COMPOSITION MODIFIERS

Si - relative silica content: Si₆₀ - not silicious to
Si₁₀₀ - very silicious, cherty

K₅, Chl₁₀, etc. - percent of K-spar, chlorite, etc.

GENERAL

g/T - Grammes/tonne Tr - Trace
opt - Ounces per ton Lt - Light
Met - Metallic Au analysis Med - Medium
Frax - Fractures Dk - Dark
CS//CT - CS interbedded with CT

ASSAYS

Where two assay results for gold are reported for a single sample, the second is the metallic Au assay.

COLUMBIA

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-43

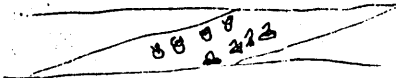
Page 2 of 11

HOLE DEPTH CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS																		
						C O M M E N T S																		% Pb	% Zn	oz/l Ag																
0						J.J.H	25/8/90																																			
5						No Recovery; Cased to 6.1m, then extended to 15.2m. after drilling ahead																																				
6.1						Edziga boulders - basalt, locally vesicular																																				
10																																										
15																																										

6.08

DIAMOND DRILL RECORD

PROPERTY SPECTRUMDDH 90-43Page 4 of 11

HOLE DEPTH CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																								ppb Au		oz/l Ag
30			py, 3% in clots + thin vns, blebs, & diss			JJH 25/8/90	Ash tuft, ocnl lithic frags, maroon beginning @ 30m, chloritic alteration along some frx (w/ py) and in patches light green chlorite, 31.9 - 31m to 2mm @c vns @ 30°-40°, at 1-5cm						Si70-80									100 30.8	30.3			
			2-3cm py clot w chl				35.0, 35.2 5mm cal ± 9° vns @ 20°															100	23007	10		
			sp-3, 10% py				35.0 py clots 35.3 8cm @c, w brown sphal on pyrite 35.5 35.7															32.3				
35																						94	23008	22		
			py, 10% ocnl				order - cal → py → sp → cal ± 9°. 35.7-36.1 crackle bx w cal. vns, 15cm @ 60° in middle, 22mm on fringes															34.1				
							36.8-37.7 local patches epidote, 1-2% overall. Tuft bleached, 37.3-37.6 37.2-37.3 3cm @c vns @ 20°, 10% py in center + in tuft @ contacts															88	31.8			
							39.4															35.7	23009	74		
			1-2% py				Change in colour from pred. pink-maroon to gray-green, locally pale green, silic. Ash ± xl tufts; xl sections 2-5cm, w/ 1-5mm irreg to equant lt. green xls, up to 15%. Pyrite as before but 1-2%. 41.6-43.3 pred pale green w/ ocnl purple to maroon patches, 1-2% py							Si80								100	36.2			
40							41.6															37.2	23010	100		
							43.3															100	37.7			
							43.6															38.7	23011	54		
							43.9															100	39.4			
			1-2% py				44.4															40.2				
							45 above, purple-maroon 43.9-vns discontinuous															94	23012	22		
																						41.8	41.4			
																						100	23013	40		
45																						43.3 100 43.6	43.6			
																						100	23014	12		

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-43

Page 5 of 11

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	COMMENTS	ppb	oz/l
45				py 3-10%			JJH 25/8/90															45.1	23014	12		
																						100	15.6			
																						46.6	23015	70		
																						100	47.6			
				15% py																		48.2	23016	43		
																						100	49.0			
																						50.0	23017	40		
																						100	51.0			
				3-5% py v fine vns																		51.2	23018	16		
																						93	52.7	53.0		
																						94	54.2	23019	24	
																						87	55.0			
				5% py																		55.8	23020	20		
				3-5% py in thin vns																		100	57.3	57.2		
																						58.8	23021	10		
																						94	59.4			
60																								41		

Box 6

Box 7

Box 8

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-43

Page 6 of 11

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JJH</u>		UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE <u>25-26/8/90</u>	COMMENTS																	ppb Au		oz/t Ag
60							59.5 -	Altered ash/xl fuff, 10-15% med grained xls (1-3mm). med patches of white silification + along frx, w/ py. 10-15% py on frx. Unalt. fuff is dk grey green.						Sl 90-100 K5-10 chl 10-20								60.4	23022	41			
				50% py 2cm	40°		61.7															93	61.7				
		shear			6		62.1															61.9					
				30% py 1cm	30°	chl	62.8															93	23023	525			
		shear		5-10% py blebs & diss. violet	55°	cal	63.4	5-10 cm Vh														63.4					
							64.0	64.0 - Extensively altered fuff - chlorite, k-spar, sil, veined w/ QC and pyrite.						Sl 100 K5-10 chl 10-30								100	64.0				
65				100% py 5mm			64.9															64.9	23024	57			
				5-10% py blebs, diss. violet			65.3	64.9-73.6 brecciation, chl + py matrix, very minor rotation - crackle br recr a. < 1mm frx generally w/ 5-10%, locally 30% py														98	66.0				
								Very sparse QC vns. between 64.0 + 77.1														66.4					
																						100	23025	36			
																						68.0	68.0				
																						100					
				10-15% py as above			69.5						chl 10-30 Sl 100 K5-10									69.5	23026	44			
70																						100	70.0				
							70.9															100	23027	22			
							71.4															71.0	71.2				
				50% py .5cm			72.3															100	23028	41			
							72.5	Ash/xl fuff, pale green, sil, mildly fractured - brecciated						Sl 100 (90) K2-5 chl 1-2								72.5	72.5				
				5-10% py as above			73.6															94	23029	25			
																						74.1	73.6				
75																						100	23030	60			

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-43

Page 7 of 11

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	C O M M E N T S		ppb
																								Au		Ag
75				5-10% py blebs dis Vnlets			JJH 26/8/90															100	75.5			
																						75.6				
																						93	23031	48		
																						77.1	77.1			
				Py chl 3cm																		100	23032	100		
				5-10% Py																		78.6				
																							79.1			
				50% py 3mm																		80.2	23033	104		
				5% py																		100	81.1			
																						81.7	23034	45		
																						100	82.2			
				3-5% py																		83.2	23035	47		
				3% py																		100				
				3-5% py diss Vns, locally to 10%																		84.7	84.7			
																						88	23036	220		
																						86.2	86.2			
																						88	23037	137		
																						87.8	87.8			
																						64	23038	80		
				1-3% py																		89.3	89.3			
																						90	89.5			

Box 11
Box 12
Box 13

LOGGED BY JJH
DATE 26/8/90

C O M M E N T S

75.5 Tuff, as above, pale green;
76.0 Maroon tuff - xl's visible
76.8 Maroon tuff - xl's visible
77.1 from 77.1, Kspar patches & on frx - same colour as maroon tuff sections, no xls. Side by side, Kspar is more pink.
Also, Qtz, white, as frx fillings, w/ or w/o py.
Sil. variable, very pale green intervals
Most sil. Ash still visible, minor xls.
88.5 - 1cm Kspar on HW 1FW
cutts 1mm py v/c @ 15°, & offsets it.
82.2 2% dk green chl in patches in pale alt. tuff
82.4 pink maroon Kspar on frx, partly replaced (bleached) patches maroon tuff, & pale alt. tuff
83.6 less bleached, 10% chl in small clots, 5-10% epidote after xls(?)
84.4 Pred. maroon ash t xl tuff, sil, marked increase in Qtz veinlets, @ 0° to 90° to core, up to 3cm thick locally, generally 1-3mm. Some have py in blebs.
From 86.2, many frx coated w/ FeOx
87.6-88.0, 1cm Qtz on
88.0 Alt. tuff, pale grey-green; marked decrease in Qtz vning, core very broken, rusty frx, 1-2 cm. gouging shears. Local 2-3% py, occn'l 2-3mm xls visible. Minor Kspar

75.90-100
86.90
86.90-100
81.80-90
K1-2

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-43

Page 8 of 11

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							<u>WJH</u>	<u>27/8/90</u>																		<u>ppb</u>	<u>opt</u>	<u>oz/t</u>
																								<u>Au</u>	<u>Au</u>	<u>Ag</u>		
90			b	1-3% py locally					As above; rusty frx, locally gougey						Sl 90 K ₅ chl 5-10									90	23039	2270	.086	
		▲▲▲▲▲		5% diss + vns					69.5-89.7, 91.0-91.4														91.4	23040	37			
			b						Ashy xl tuft, altered, pale-mud green, locally purplish, chl variable, rusty frx, less broken than above from 95.2 on.						Si 90-100 chl-5-20								80	23041	54			
			b						brown mud, gouge														93.9					
			b						1-3% py, diss + vns, locally 5%														67	94.2				
95			b						Minor Qc veining, 1-2 mm discontinuous														78	23042	27			
		▲	b																				75.1					
		▲																					89	95.6				
		▲																					96.9	23043	17			
		▲																					62	97.0				
		▲																					62	23044	40			
		▲																					78.4	98.4				
		▲							98.4 to end; ground & lost core, overdrilled?														67					
		▲																					78.8	23045	156			
		▲																					21	100.3	100.3			
		▲																					38	23046	38			
		▲							101.3-101.5 - minor epidote.														101.5					
		▲							101.8 EoH														67	101.8				

Box 14

Box 15

Box 16

DIAMOND DRILL LEDGER

DDH No. 90-43

SAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH Metres	LENGTH Feet	ppb		ppm Au		DESCRIPTION
					Au	Ag			
23001	16.2	19.2	3.0			10			Rusty O/B
002	19.2	22.3	3.1			2			" "
003	22.3	25.5	3.2			166			Fault, tuff
004	25.5	26.3	0.8			140			Tuff, 3-5% py
005	26.3	28.3	2.0			41			" , 2-7% py
006	28.3	30.3	2.0			40			" , 2-5% py
007	30.3	32.5	2.2			10			Ash tuff, 3% py
008	32.5	34.8	2.3			22			" " "
009	34.8	36.2	1.8			74			Tuff w/ QC vns, py, sp.
010	36.2	37.7	1.5			100			Ash tuff, up to 10% py locally
011	37.7	39.4	1.7			54			Sil. tuff, 1-2% py
012	39.4	41.4	2.0			22			Alt. tuff, "
013	41.4	43.6	2.2			40			" " "
014	43.6	45.6	2.0			12			Tuff, purple-maroon & pale green, 1-3% py
015	45.6	47.6	2.0			70			Alt. tuff, pale green, sil, 3-10% py
016	47.6	49.0	1.4			43			" " w/ QC veins, 15% py locally
017	49.0	51.0	2.0			40			" " " , 3-5% py
018	51.0	53.0	2.0			16			" " "
019	53.0	55.0	2.0			24			" " , sil, "
020	55.0	57.2	2.2			20			" " , " , thin vns w/ "

DIAMOND DRILL LEDGER

DDH No. 90-43

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		ppb Au	g/T Ag	opt Au		DESCRIPTION
	Metres	Feet	Metres	Feet					
02021	57.2	59.4	2.2		10				Alt tuff, sil, thin veins w/ 3-5% py
022	59.4	61.7	2.3		41				Alt ash tuff, 10-15% py on frx
023	61.7	64.0	2.3		525				Vn. zone, cal + qtz, chl, Kspar, py, 5-10% py
024	64.0	66.0	2.0		57				Alt. tuff, chl, Kspar, sil, Qc + 5-10% py
025	66.0	68.0	2.0		36				" " " " " (QCvms) "
026	68.0	70.0	2.0		44				" " " " " " "
027	70.0	71.2	1.2		22				" " " " " " 10-15% py
028	71.2	72.5	1.3		41				" " " " " " "
029	72.5	73.6	1.1		25				Ash/xl tuff, sil, (bx) 5-10% py
030	73.6	75.5	1.9		60				" " " " " "
031	75.5	77.1	1.6		48				Mixed maroon + pale alt. tuff, "
032	77.1	79.1	2.0		106				Alt. tuff w/ Kspar, sil. "
033	79.1	81.1	2.0		104				" " " " " "
034	81.1	82.2	1.1		45				" " " " " 5% py
035	82.2	84.4	2.2		47				" " , chl, epidote, 3-5% py
036	84.4	86.2	1.8		220				Maroon tuff, sil, num. Qc vms, "
037	86.2	88.0	1.8		137				" " " " " "
038	88.0	89.5	1.5		80				Alt. tuff, rusty frx 1-3% py
039	89.5	91.0	1.5		2210	2.96	.086		" " " " " "
040	91.0	92.5	1.5		37				" " " " " " bx

COLUMBIA GOLD MINES

PROPERTY <u>SPECTRUM</u>		D.D.H. <u>90-44</u>		Page <u>1</u> of <u>14</u>	
AREA	<u>CENTER ZONE</u>	SECTION	<u>90-43,44</u>	DATE	Started <u>25/8/90</u> D/S
CLAIM	<u>RED DOG 1</u>	AZIMUTH (I)	<u>050°</u>	DATE	Completed <u>26/8/90</u> D/S
GRID CO-ORDS	Line <u>9897N</u>	INCLINATION	<u>-50°</u>	CONTRACTOR	<u>J.T. Thomas</u>
	Station <u>9422E</u>	Hole	<u>121.92 m</u>	LOGGED BY	<u>J.J. Hylands</u>
SURVEY CO-ORDS	Northing _____	DEPTH Casing	<u>19.81 m</u>	LOGGED BY	_____
	Easting _____	Overburden	<u>19.0 m</u>	SCALE	<u>1:100</u>
ELEVATION	<u>1625 m</u>	CORE SIZE	<u>BQTW</u>	CORE STORED AT	<u>Property</u>
		CORE RECOVERY	<u>90.5%</u>		

COMMENTS Drilled beneath Trench #6 to intersect zone at east end of trench. One zone between 25.5-29.1 veins and breccia; second between 41.2 and 43.0, calcite veins + pyrite. Both have intrusive(?) below.

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-50°	050°	Brunton				
121 m	-50.5°	-	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES		
FROM	TO	UNIT	INT.	T.W.			oz/t
0	19.0	Casing					
19.0	25.5	AX					
25.5	29.1	VZ					
29.1	32.5	FP					
32.5	41.2	AT					
41.2	43.0	VZ					
43.0	43.5	FP					
43.5	55.1	LA					
55.1	57.3	AT					
57.3	70.6	LT					
70.6	73.6	AT					
73.6	74.3	VZ					
74.3	100.9	LA					
100.9	107.0	AT					
107.0	109.7	LA					

PROPERTY SPECTRUM

DDH 90-44

Page 2 of 14

HOLE DEPTH CORE BRECCIA COND. OF CORE MINERAL HABIT GANGUE	LOGGED BY <u>J Hylands</u>	DATE <u>27/8/90</u>	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS						
																				g/T	opt	ppm				
																				Au	Au	Cu				
15			Casing to 19.81m.																							
			18.3															83								
			19.0															60	19.0							
			19.8						Sc90									67	23047	.17	.005	154				
20			21.3															21.3	21.3							
			22.0															81								
			22.9															22.9	23048	.27	.008	210				
			23.5															40	23.5							
			24.4															24.4								
			24.6-24.65															24.6	23049	.41	.012	136				
			25.1															80								
			25.5						Sc 100									80								
			25.8															25.9								
			26.0															100	23050	.60	.018	145				
			26.9															27.4								
			27.5															27.5								
			28.4															88	23051	.40	.012	53				
			29.1															29.0	23052	.60	.018	135				
			29.1															29.1								
			29.1															93	23053	.40	.012	127				

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-44

Page 3 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							J J H	27/8/90																	g/T	opt	ppm
COMMENTS																							Au	Au	Cu		
30				10-15% diss py																			30.5	30.5			
				py vns																			67	23054	.51	.015	114
				1-3% diss py																			87	32.5			
				5-10% diss py																			62	23055	.18	.005	144
				10-15% diss py																			78	23056	5.59	.163	90
				3-5% py																			36.6	36.6			
				py/chl.																			93	23057	.41	.012	106
																							38.1	38.1			
																							93	23058	.01	.001	102
																							39.6	39.6			
																							88	23059	.17	.005	128
																							41.2	41.2			
				10-15 py																			93	23060	.32	.009	92
				3-5 py																			93	23061	.30	.009	56
				py blebs																			93	23062	.14	.004	76
				py diss																			93	23063	.02	.001	24
				py on frx																			93	23064	.01	.001	63
																							93	23065	.01	.001	123
																							93	23066	.10	.003	95
																							94.5	94.5			

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-44

Page 4 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/T Au	opt Au	ppm Cu
15				py - 5-7% diss			JJH	27/8/90															50	23067	.03	.001	108
																							45.7	46.0			
																							93	23068	.09	.003	101
																							47.2	47.5			
																							100	23069	.50	.015	102
																							48.8	49.0			
																							100	23070	.84	.025	175
																							50.3	50.3			
																							87	23071	.44	.013	129
																							51.35	51.7	29.45	.859	263
																							518	51.7			
																							93	23073	.38	.011	134
																							53.3	53.4			
																							88	23074	.42	.012	138
																							54.9	55.1			
																							100	23075	.10	.003	90
																							56.4	56.0			
																							87	23076	.39	.011	68
																							56.7	56.7	1.31	.038	85
																							57.3	57.3			
																							57.9	23078	.23	.007	148
																							93	58.6			
																							59.4	23079	.37	.011	232
																							94	59.9			

206

207

55

208

60

44.5 - lithic-ash tuff, silicified, mildly chloritized pydiss - 5-7%, w/chl in frx. Some frx rusty.

51.35 Ash tuff, highly sil, pale green 7-10% py

51.7 Lithic-ash tuff, as above, trace to 1% epidote approaching 55.1

55.1 Ash tuff, pyritic - 10-15% diss, 10% epid locally, flow texture - banding - @ N 35°

56.9 Tuff, sil, w ksp, sil, + 20% py

57.3 Lithic tuff w/ cgl ash? locally 10-15% py. Mottled grey green.

59.9

50°

35°

45°

56.00

56.90

56.90

56.90

56.90

56.90

56.100

56.70

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-44

Page 6 of 14

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	29/8/90																	g/t	opt	ppm
COMMENTS																											
75				7-10% py diss			75.0 Lithic-ash tuff, as before, med. green-grey																93	75.0 75.4	.20	.006	186
				7-10% diss py 20% py			75.4 75.0-75.4 variably silicified - Si80-Si100																93	23095	.40	.012	234
							75.9 10-15% py, diss + in blebs.																76.2	75.9			
							Altered ash tuff, silicified, mottled greenish + purple-maroon; up to 5% epidote, 21% Qc vns, 1-2 mm, @ 0°-75° Pyrite 1-20% (locally over 10cm) Qc vns cut pyrite.																100	23096	.07	.002	83
				7-10% diss py																			77.7	77.5			
																							100	23097	.27	.008	66
																							79.2	79.1			
				7-10% diss py																			94	23098	.21	.006	95
																							80.8	80.7			
							81.1 3mm aspy+py vns w/ Q																93	23099	.16	.005	56
																							82.3	82.3			
							82.3-85.2 greenish grey-oliv?																100	23100	.21	.006	202
							82.6 2mm Qtz+aspy vns, in 12cm qtz+py vns.																83.8	83.8			
																							100	23101	.20	.006	180
																							85.3	85.3			
							85.3-87.3 predominantly pinkish, mottled 7-10% py, diss + blebs																88	23102	.18	.005	33
																							86.9	86.3			
																							100	23103	.48	.014	8
																							88.4	87.3			
							87.3-87.5 gradational change to greenish grey w/ scattered xls.																100	23104	.17	.005	189
							Ash (xl) tuff, locally 3-5% white 3-5 mm xls(?) Olen/ qtz cal. vns w/ 3-5% pyrite, tr. aspy. Pred. greenish-grey, locally w/ pinkish overtones																100	88.8			
																							89.9	23105	.08	.002	145

Box 12

Box 11

Box 1

90

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-44

Page 7 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							J J H	29/8/90																	g/t Au	opt Au	ppm Cu
90				py, sp		1cm RC	As above								Si 90								90.3				
							90.45 90.6-90.7 - 2cm by w/ RC matrix, 5% py, @ 70°																93	23106	.01	.001	107
																							91.4				
																							91.8				
																							94	23107	.16	.005	113
																							93.0				
																							93.3				
																							100				
															Si 90-100								94.5	23108	.21	.006	139
							94.4-94.6 very siliceous, spongy, w/ 1-2 cm patches altered buff																91.8				
																							100				
																							94.0				
							96.1 3mm RC vn., 20% py + aspy(?), 7mm Kspar on FW.																96.0	23109	.01	.001	143
																							88	23110	.03	.001	131
																							97.5				
							97.75-97.8 RC vein, upper 3cm @ bx, lower 2cm lamm. qtz + cal																97.2				
																							98.1				
																							98.3				
							98.65-98.75 Grey qtz vn, 10% py, @ 35°, cut by 1cm RC Ven, unmin. @ 20°								Si 90-100								100				
							Litic-ash buff, clasts or bombs to 6cm, chl + pyrite between; 3-7% py in clasts. Sil of clasts variable, Si 90-100																99.1	23112	.11	.003	214
																							94				
																							100.6	23113	.03	.001	249
																							100.9				
							100.9 Ash buff w/ occul patches felds or micric xls, med. Gray, fgr. Scattered patches of chl + up to 25% py over 5-7cm. 3-5% py diss, occul violet								Si 100 (90)								100	23114	.54	.016	220
																							102.1				
																							87				
																							103.1				
							103.3-103.4 Cal/Qtz Vn, 15% py																103.6	116	.01	.001	47
																							103.4				
							103.8-104.2 int of RC veins, 1bx, 5-7% py																103.8	117	.12	.004	157
																							104.2				
							104.1 1cm qtz vn @ 55°, 60% py, cut by later Si/c																100	118	1.64	.048	159
																							23119				

500
 50
 15
 105

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-44

Page 8 of 14

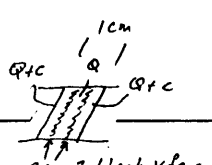
HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	opt Au	ppm Cu
105				3-5% dissipy			JJH	29/8/90	105.3 Ash tuft, as above 105.3 Frx, bleached 5mm both sides, 10% py, Tr aspy															105.2	105.6			
									107.0 Lithic-ash tuft (bombs?) silicified same as 98.3-100.9					Si ₁₀₁										100	23120	.18	.005	213
									109.7 Ash-xl tuft, pale green-grey green, fgr. pinkish east occnly. 5-7% locally 10% py diss. Occal very fine black frx, at 1cm spacing, w py. 11.6-112.5 pinkish															100	23121	.03	.001	246
				5-7% dissipy					112.6 112.8-114.3 core dropped, drilled over. 112.8- bx?														100	23122	.21	.006	167	
				10% py					115.4-115.6 rusty frx. 115.6-115.7 gouge, shear														100	23123	.36	.011	135	
				occnal py clasts + 3-5% py chl in matrix					115.7-1cm Qc un e 75° w aspy?					Si ₉₀									100	23124	.01	.001	148	
				aspy 5% 5-7% diss py					115.7-117.6 pale gray-green lithic-ash tuft, sil, epidote. 2-3% Qc vns frash frx					Si ₈₀									100	23125	.01	.001	160	
				7-10% diss py w chl					117.6-118.9 core dropped, drilled over					Si ₇₀									100	23126	.01	.001	162	
				20% py					Ash tuft, pinkish, f-ngr,					Si ₁₀₀									100	23127	.10	.003	23	
									119.1 3mm Qc, barren														100	23128	.17	.005	71	
									119.4 Lithic-ash tuft, chloritic, greenish grey														100	23129	.13	.004	125	
																							100	23130	.01	.001	185	

Box 17

Box 18

Box 19

120



DIAMOND DRILL LEDGER SPECTRUMDDH No. 90-44

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au Ag	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23047	19.0	21.3	2.3		.17	.005	154		Ash-xl-lithic tuff, 10-15% diss py
48	21.3	23.5	2.2		.27	.008	210		" " "
49	23.5	25.5	2.0		.41	.012	136		" " "
50	25.5	27.5	2.0		.60	.018	145		Bx, QC veins "
51	27.5	28.4	0.9		.40	.012	53		Vn zone, 70% QC veins, local py patches, trasp
52	28.4	29.1	0.7		.60	.018	135		Bx, py blebs
53	29.1	30.5	1.4		.40	.012	127		Intrusive? 10-15% diss py
54	30.5	32.5	2.0		.51	.015	114		" "
55	32.5	34.5	2.0		.18	.005	144		Ash-(xl) tuff? 1-3% py
56	34.5	36.6	2.1		5.59	.163	90		" " 5-15% py, variable
57	36.6	38.1	1.5		.41	.012	106		Ash tuff? 3-5% py, veins + diss
58	38.1	39.6	1.5		.01	.001	102		Ash tuff bx, tr py
59	39.6	41.2	1.6		.17	.005	128		" "
60	41.2	41.5	0.3		.32	.009	92		Tuff, minor cal. vns + py
61	41.5	41.9	0.4		.30	.009	56		" , 20% cal. vns, 10-15% py
62	41.9	42.4	0.5		.14	.004	76		" , 30% patchy cal. vns, 3-5% py
63	42.4	42.7	0.3		.02	.001	24		Calcrete + minor qtz vns, 7-10% py
64	42.7	43.0	0.3		.01	.001	63		Tuff, 40% cal. vning, 5% py
65	43.0	43.5	0.5		.01	.001	123		Intrusive? 5-10% diss py
23066	43.5	44.5	1.0		.10	.003	95		Xl-lithic-ash tuff, 3-5% py

DIAMOND DRILL LEDGER

SPECTRUMDDH No. 90-44

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu	A+L	DESCRIPTION
	Metres	Feet	Metres	Feet					
23067	44.5	46.0	1.5		.03	.001	108		Lithic-ash tuff, 5-7% py
68	46.0	47.5	1.5		.09	.003	101		" " "
69	47.5	49.0	1.5		.50	.015	102		" " "
70	49.0	50.3	1.3		.84	.025	175	.0325	" " " .336
71	50.3	51.35	1.05	"	.44	.013	129	.0137	" " " 6.1 m = 20.0 ft
72	51.35	51.7	0.35	"	29.45	.859	263	.3007	Ash tuff, very sil., 7-10% py .06/20 ft.
73	51.7	53.4	1.7		.38	.011	134	.0187	Lithic-ash tuff, 5-7% py
74	53.4	55.1	1.7		.42	.012	138	.0204	" " "
75	55.1	56.0	0.9		.10	.003	90		Ash tuff, 10-15% py
76	56.0	56.9	0.9		.39	.011	68		" "
77	56.9	57.3	1.4		1.31	.038	85		" , 20% py
78	57.3	58.6	1.3		.23	.007	148		Lithic tuff
79	58.6	59.9	1.3		.37	.011	232		" "
80	59.9	61.4	1.5		.20	.006	134		Lithic-ash tuff, alt.
81	61.4	62.9	1.5		.06	.002	127		" " " "
82	62.9	64.3	1.4		.21	.006	132		" " " "
83	64.3	64.8	0.5		.04	.001	72		70% cal ± quartz ± py, vein
84	64.8	66.4	1.6		.23	.007	159		Lithic-ash tuff, alt.
85	66.4	68.0	1.6		.10	.003	150		" " " "
3086	68.0	68.4	0.4		.19	.006	64		25% quartz ± cal, + 5% py + marcasite(?)

DIAMOND DRILL LEDGER SPECTRUMDDH No. 90-44

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au Ag	ppm Au		DESCRIPTION
	Metres	Feet	Metres	Feet					
23087	68.4	69.5	1.1		.10	.003	113		Lithic-ash tuff, alt
88	69.5	70.6	1.1		.32	.009	151		" "
89	70.6	72.1	1.5		.10	.003	137		Ash tuff, 1-2% py
90	72.1	73.6	1.5		.18	.005	146		" "
91	73.6	74.0	0.4		.23	.007	69		Lithic tuff + 0.7 cm Qtz vn
92	74.0	74.3	0.3		.43	.013	26		Qtz vn, 3-5% py
93	74.3	75.0	0.7		.90	.026	194		Lithic-ash tuff, 7-10% py
94	75.0	75.4	0.4		.20	.006	186		Sil. tuff + py
95	75.4	75.9	0.5		.40	.012	234		Lithic-ash tuff, 10-15% py
96	75.9	77.5	1.6		.07	.002	83		Ash tuff, alt, 7-10% py
97	77.5	79.1	1.6		.27	.008	66		" " "
98	79.1	80.7	1.6		.21	.006	95		" " "
99	80.7	82.3	1.6		.16	.005	56		" " "
100	82.3	83.8	1.5		.21	.006	202		" " 5-7% py, greenish-gray
101	83.8	85.3	1.5		.20	.006	180		" " " "
102	85.3	86.3	1.0		.18	.005	33		" " , pinkish
103	86.3	87.3	1.0		.49	.014	8		" " "
104	87.3	88.8	1.5		.17	.005	189		Ash (x1) tuff, 3-5% py
105	88.8	90.3	1.5		.08	.002	145		" " " "
23106	90.3	91.8	1.5		.01	.001	107		" " " "

DIAMOND DRILL LEDGER SPECTRUM

DDH No. 90-44

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au Ag	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23107	91.8	93.3	1.5		.16	.005	113		Ash-(x1) tuft, 3-5% py
108	93.3	94.8	1.5		.21	.006	139		u u u u
109	94.8	96.0	1.2		.01	.001	143		u u u u
110	96.0	97.2	1.2		.03	.001	131		u u u u
111	97.2	98.3	1.1		.01	.001	121		u u u u
112	98.3	99.6	1.3		.11	.003	214		Lithic tuft, variable py to 7%
113	99.6	100.9	1.3		.03	.001	244		u u u u u
114	100.9	102.0	1.1		.54	.016	220		Ash tuft, 3-5% py
115	102.0	103.1	1.1		.36	.011	114		u u u
116	103.1	103.4	0.3		.01	.001	47		Cal/qtz vn, 15% py
117	103.4	103.8	0.4		.12	.004	157		Ash tuft, 3-5% py
118	103.8	104.2	0.4		1.64	.048	159		Irreg Q/c veining, bk, 5-7% py
119	104.2	105.6	1.4		.01	.001	188		Ash tuft, 3-5% py
120	105.6	107.0	1.4		.18	.005	213		u u u
121	107.0	108.3	1.3		.03	.001	246		Lithic-ash tuft, 3-5% py w/ chl
122	108.3	109.7	1.4		.21	.006	167		u u u u u
123	109.7	111.2	1.5		.36	.001	135		Ash-x1 tuft, sil., pinkish, 5-7% py
124	111.2	112.7	1.5		.01	.001	148		u u u u u
125	112.7	114.2	1.5		.01	.001	160		u u u u u
23126	114.2	115.7	1.5		.01	.001	162		u u u u u

COLUMBIA GOLD MINES

PROPERTY SPECTRUM D.D.H. 90-45 Page 1 of 12

AREA RED DOG ZONE SECTION 90-45

CLAIM REDDOG1 AZIMUTH (T) 230° DATE Started 27/8/90 2/5

GRID CO-ORDS Line 9745 N INCLINATION -45° Completed 28/8/90 2/5

Station 9704E Hole 108.20 CONTRACTOR J.T. Thomas

SURVEY CO-ORDS Northing _____ DEPTH Casing 21.30 LOGGED BY J.J. Hylands

Easting _____ Overburden 21.30 LOGGED BY _____

ELEVATION 1617 m (site DDH 13) CORE SIZE 8QTW SCALE 1:100

CORE RECOVERY 82.2% CORE STORED AT Property

COMMENTS Drilled to test "intersection" between 500 Colour Zone & western QC

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-45°	230°	Brunton.				
108 m	-46.5°	—	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES		
FROM	TO	UNIT	INT.	T.W.			Au oz/t
0	21.3	Casing					
21.3	33.5	1. AT					
33.5	36.9	QM					
36.9	40.4	1. AT					
40.4	50.3	1. AT, b.					
50.3	55.9	1. AT					
55.9	66.0	QM					
66.0	74.7	1. AT					
74.7	82.3	1. AN?					
82.3	83.8	1. AT					
83.8	87.3	1. AN?					
87.3	100.0	1. AT					
100.0	103.5	1. AT					
103.5	108.2	1. AT?					
63.9	66.0		2.1				1.061

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-45

Page 3 of 12

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																									g/t Au	opt Au	ppm Cu
30				7-10% py 15-20% py			JVH 30/8/90	As above															30.5	23138	.53	.015	759
																							31.0				
																							53	23139	.26	.008	1110
																							32.0				
																							40	23140	.29	.008	1160
																							33.5				
																							33.5				
																							54	23141	.32	.009	1300
																							34.8				
																							100	23142	.33	.010	1350
																							35.4				
																							56				
																							36.3				
																							89	23143	.30	.009	1360
																							37.2				
																							50	23144	.52	.015	2150
																							37.8				
																							67				
																							38.4				
																							83	23145	.28	.008	1350
																							39.6				
																							100	23146	.20	.006	1025
																							40.6				
																							41.2				
																							67	23147	.22	.006	1000
																							41.5				
																							42				
																							42.1				
																							42.7				
																							93	23148	.22	.006	815
																							43.6				
																							44.2				
																							87	23149	.14	.004	693
																							45.0				

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-45

Page 4 of 12

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/t Au	opt Au	ppm Cu
45			b	10% py			JJH				f											45.0				
				7-10% py			31/8/90															23150	.59	.017	1475	
			b				As above, fgr, med greenish gray,															100				
				5-7% py			47.7 lithic frags - clasts 7 to 48.0 med gr, fgr epidote, 5-7% diss + vn py; Chlorite. some bands (beds?) of pinkish fgr. sil tuff - v fgr diss py.				m		5190 (100)									47.2				
							Ash tuff? 49.7 shears 49.4 @ 55°															81				
50			g				50.3 gouge Ash tuff, variably altered - some frags chlorite, Si 80, green, mg py diss - 5-7%; most are Si 100, greenish to pinkish, fgr chl - kspan, fgr diss py, 5-7%?				f		5100									48.8				
				5-7% diss py			51.8 52.2 52.7															43				
			b																			23153	.58	.017	1100	
																						50.3				
			g				55.7 55.9															87				
				1% - 2% py + cp			Q.M, mg, pinkish-orange, matrix chloritized, felds barium-uritized. Very fine veinlets w/ py + cp - 1% - 2%															23154	.54	.016	1010	
			b																			51.8				
																						78				
																						52.7				
			b																			23155	.16	.005	1125	
																						78				
																						53.6				
			g																			92				
																						54.2				
																						23156	.17	.005	1200	
			b																			92				
																						54.9				
																						23157	.26	.008	1375	
55			g																			87				
																						56.4				
																						23158	.44	.013	1040	
			b																			87				
																						57.4				
																						23159	.32	.009	810	
																						87				
																						59.1				
			b																			23160	.50	.015	631	
																						59.1				
60																						81				

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-45

Page 5 of 12

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	81T Au	opt Au	ppm Cu	
60							<u>VH</u>																603				
							DATE <u>31/9/90</u>																23161	.50	.015	1410	
							61.0-61.1 drilled over																93	61.5			
							61.4-61.5 gouge																23162	.49	.014	650	
							62.4-62.5 gouge																60	62.7			
							62.9-63.8 -sericite gouge? 0.3m rec. 10% py																60	63.9			
							63.9-64.0 gouge +py																640	64.3	7.08	.207	130
							64.25-64.7 gouge +bx +10-15%p																81	64.7	7.09	.207	130
65																							81	64.7	.83	.024	227
																							655	65.5			
							66.0																88	66.0			
				2% py			Ash tuff? massive, generally greenish grey, chloritic, patchy epidote (2%?)																67.1	67.1	.20	.006	1200
				py bleb			Deck ^o pink patches Kspar. Variable py -																100	67.5			
				2% py			1-2 mm veins, scattered patches of 10-15% w/ or w/o dk green-black chlorite																686	68.6	.18	.005	1225
				py			10-12% irreg, discontinuous qc vns, +py																93	69.0			
				2m py			69.2-69.3 - 30% py in irreg qc + chl.																70.1	70.1	.34	.010	1230
70																							93	70.5			
				2-3% py			Tuff is generally mgc., very chloritic, looks like a flow - andesite?, particularly from 72.0 on.																716	71.6	.34	.010	1300
																							81	72.0			
																							73.2	73.2	.10	.003	700
																							100	73.3			
				3-5% py																			100	74.7	.10	.003	625
75				1m py																			100	74.7			
							74.7 Num. py vns, 2-10 mm. epidote, associated.																100	74.7			

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-45

 Page 6 of 12

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																							g/T Au	opt Au	ppm Cu
75				2mm py	30° ep		JJH	Andesite flow? numerous py veinlets, 1-10mm. Chlorite, w/ patchy epidote													100	23173	.15	.004	640
				2mm py	30° chl		31/8/90	n 3%. Few q/c veinlets & patches													76.2	76.2			
				1cm py	30° epid			Also num. fine frx w/ 2-5% py, reddish stain, c. 45°-50° & 130°-140°													100	23174	.88	.026	610
				30% py	100% chl			77.5-77.6 1cm @ c. 60°													77.7	77.7			
				2mm py	30°			77.9-78.1 2mm py n/c conc.													100	23175	.48	.014	840
				1mm py	30°			78.2 - 3 x 2mm py @ 30°-35°													79.2	79.2			
				2mm py	30°			78.9 2mm py @ 45°, 1mm @ 20°, 1mm @ 30°													94	23176	.09	.003	645
				3-5% py	30°			79.3 Very marked reddish-purple stain on frx													80.8	80.8			
				3-5% py	30°			80.2-80.3 - 2 x 2mm py @ 15° & 165°													80	23177	.08	.002	595
				3-5% py	30°			82.3 Ash juff, mg, fgr matrix, light grey, sil epid clots (replaced xls?)													82.3	82.3			
				40% py	30°			83.5-83.8 Kspar 3-5% py. No red stain on frx													93	23178	.01	.001	575
				10% py	30°			83.8 Flow? f-mgr, equigranular, grey to greenish grey, reddish stain on frx & py, not as pronounced as above (75-82)													83.8	83.8			
				3-5% py	30°			85.0 patches of epidote & py. 3-7% py overall													80	23179	.26	.008	471
				10% py	30°			87.3 4cm epid + Kspar + 10% py													88	23180	.06	.002	473
				3-5% py	30°			88.0-88.1 shear													86.9	86.9			
				3-5% py	30°			88.5 Ash juff, altered, patchy Kspar, spotty epidote, variegated - pinkish med grey dk grey, fgr, local reddish frx, py 3-5% overall, locally conc.													100	23181	.18	.005	405
																					88.4	88.4			
																					93	23182	.06	.002	299
																					89.9	89.9			

DIAMOND DRILL RECORD

PROPERTY

SPECTRUM

DDH

90-45

Page

7

of 12

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JJH</u>		UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE	COMMENTS																	g/t Au	opt Au	ppm Cu
90				30% py	45	8mm ep																87	23183	0.12	.004	391	
				5-7% py																		91.4	91.4				
																						88	23184	.10	.003	387	
																						93.0	92.9				
																						100	23185	.57	.017	850	
																						94.5	94.7				
95			8																			95.1	23186	.13	.004	444	
				3- py																		67	95.5				
				5-7% py																		96.6	23187	.118	.005	456	
																						56	97.0				
																						97.5	97.5				
				5-7% py																		97.6	23188	.14	.004	561	
																						98.4	98.5				
																						62	99.7	23189	.08	.002	321
				5-7% py																		100	100.0				
100				3-5% py																		100.6	23190	.106	.002	302	
																						100.9	101.5				
																						101.1	23191	.12	.004	252	
																						102.4	102.5				
																						92	23192	.08	.002	342	
																						103.6	103.5				
																						69	23193	.06	.002	306	
105																						105.0					

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-45

Page 8 of 12

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	A S S A Y S													
																									g/t Au	opt Au	ppm Cu											
105							JJH																															
105.8				2mm py		1mm cal 25°	3/18/90	As above, 2-3% py, minor epidote 105.0-105.2 shear, gauge 1mm cal @ 105.8 cuts 2mm py 106.9-107.0 30% dis. py															87	22994	.08	.002	296											
																							1067	1066														
																							93	22995	.20	1006	355											
																							1082															
								108.20																														

18 box 17

110

DIAMOND DRILL LEDGER

SPECTRUMDDH No. 90-45

DAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met g/T opt	g/T Au	opt Au	ppb Au	ppm Cu	DESCRIPTION
23132	21.3	22.6	1.3		.32	.009	320	1075	Ash (?) tuft, alt, 7-10% py
133	22.6	24.1	1.5		.18	.005	180	842	" " " "
134	24.1	25.6	1.5		.36	.011	362	779	" " " "
135	25.6	26.8	1.2	17.37/507	21.50	.627	19,000	1350	" " " "
136	26.8	28.0	1.2		.28	.008	285	1200	" " " "
137	28.0	29.6	1.6		.63	.018	630	1000	" " " "
138	29.6	31.0	1.4		.53	.015	527	759	" " " "
139	31.0	32.2	1.2		.26	.008	260	1110	" " " "
140	32.2	33.5	1.3		.29	.008	290	1160	" " " "
141	33.5	34.6	1.1		.32	.009	320	1300	QM, tr py
142	34.6	35.8	1.2		.33	.010	328	1350	" " "
143	35.8	36.9	1.1		.30	.009	300	1360	" " "
144	36.9	38.4	1.5		.52	.015	522	2150	Ash tuft, 5-15% py
145	38.4	39.6	1.2		.28	.008	280	1350	" " "
146	39.6	40.6	1.0		.20	.006	200	1025	" " "
147	40.6	42.1	1.5		.22	.006	222	1000	" " , sil, 10% py
148	42.1	43.6	1.5		.22	.006	220	815	" " " "
149	43.6	45.0	1.4		.14	.004	142	693	" " " "
150	45.0	46.5	1.5		.59	.017	590	1475	" " " "
3151	46.5	48.0	1.5		.30	.009	300	1200	" " " 7-10% py

DIAMOND DRILL LEDGER

SPECTRUMDDH No. 90-45

DAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met		g/T Au	opt Au	ppb Au	ppm Cu	DESCRIPTION
				g/T	opt					
3152	48.0	49.2	1.2			.24	.007	242	696	Ash tuft, mgr, chl, 5-7% py
153	49.2	50.3	1.1			.58	.017	580	1100	" " " " "
154	50.3	51.8	1.5			.54	.016	540	1010	" " , variably alt-epid, sil, chl, 5-7% py
155	51.8	53.1	1.3			.16	.005	160	1125	" " " "
156	53.1	54.4	1.3			.17	.005	170	1200	" " " "
157	54.4	55.9	1.5			.26	.008	260	1375	" " " "
158	55.9	57.4	1.5			.44	.013	442	1040	QM, pinkish, tr-2% py tepy on very thin frx
159	57.4	58.9	1.5			.32	.009	327	810	" " " "
160	58.9	60.3	1.4			.50	.015	500	631	" " " "
161	60.3	61.5	1.2			.50	.015	498	1410	" " " "
162	61.5	62.7	1.5			.44	.014	440	650	" " " "
163	62.7	63.9	1.2			.66	.019	660	700	" " ser ^{ic} gouge, 10% py
164	63.9	64.3	0.4	7.09	207	7.08	.207	7000	130	" " " " 30% py
165	64.3	64.7	0.4	.061	2.1	.83	.024	830	227	Gouge & bx, 10-15% py
166	64.7	66.0	1.3			.97	.028	970	374	QM, pinkish, tr-2% py tepy
167	66.0	67.5	1.5			.20	.006	200	1200	Tuff? flow? massive, chl, epid, 2-3% py
168	67.5	69.0	1.5			.18	.005	180	1225	" " " "
169	69.0	70.5	1.5			.34	.010	340	1280	" " " "
170	70.5	72.0	1.5			.34	.010	338	1330	" " " "
3171	72.0	73.3	1.3			.10	.003	102	700	" " " "

DIAMOND DRILL LEDGER

SPECTRUMPage No. 11DDH No. 90-45

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T	opt	ppb	ppm	DESCRIPTION
	Metres	Feet	Metres	Feet	Au	Au	Au	Cu	
23172	73.3	74.7	1.4		.10	.003	103	625	Tuff? flow? massive, chl, epid, 2-3% py
173	74.7	76.2	1.5		.15	.004	154	640	Andesite flow? chl, epid, num fine frx, 2-5% py
174	76.2	77.7	1.5		.88	.026	882	610	" _____ "
175	77.7	79.2	1.5		.48	.014	480	840	" _____ "
176	79.2	80.8	1.6		.09	.003	90	645	" _____ "
177	80.8	82.3	1.5		.08	.002	80	595	" _____ ", sil
178	82.3	83.8	1.6		.01	.001	9	575	Ash tuff, alt, sil, 3-5% py
179	83.8	85.3	1.5		.26	.008	260	477	Flow? epid, 3-7% py
180	85.3	86.9	1.6		.06	.002	60	473	" _____ "
181	86.9	88.4	1.5		.18	.005	176	405	Ash tuff, alt, 3-5% py
182	88.4	89.9	1.5		.06	.002	61	299	" _____ "
183	89.9	91.4	1.5		.12	.004	118	391	" _____ "
184	91.4	92.9	1.5		.10	.003	97	387	" _____ "
185	92.9	94.4	1.5		.57	.017	570	850	" _____ "
186	94.4	95.5	1.1		.13	.004	129	444	" _____ "
187	95.5	97.0	1.5		.18	.005	180	456	Ash tuff? 5-7% py on thin frx
188	97.0	98.5	1.5		.14	.004	140	501	" _____ "
189	98.5	100.0	1.5		.08	.002	80	321	" _____ "
190	100.0	101.5	1.5		.06	.002	59	302	Ash tuff, 3-5% py
191	101.5	102.5	1.0		.12	.004	117	252	" _____ "

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 3 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/T	opt	ppm
																							Au	Au	Cu		
30							JSH	1/9/90															30.3	30.3			
																							26	23146	.40	.012	1160
																							30.5	30.8			
																							27	23197	.30	.009	1025
																							32.0	32.0			
																							13	23198	.36	.011	65
																							33.5	33.5			
																							12	23199	.28	.008	1250
																							35.0	35.3			
																							67	23200	.84	.025	2300
																							36.25	36.25			
																							36.6	36.55	.201	.002	156
																							47	23202	.20	.006	950
																							37.2	37.2			
																							37.5	23203	.30	.009	1300
																							47	37.7			
																							38.1	38.1			
																							83	23204	.16	.005	1300
																							38.7	38.7			
																							87	38.2			
																							40.2	23205	.24	.007	1100
																							81	40.6			
																							41.8	23206	.24	.007	1200
																							78	42.0			
																							42.7	23207	.24	.007	1150
																							100	43.4			
																							44.2	23208	.32	.009	4200
																							43	44.6			

Box 1

Box 2

broken & mixed

asp? 3% py

5-7% py

2-5% diss py

py

py

5-7% py

30% py

QC

QC

30.3 QM, weathered, clay, rusty
30.8 QM, rusty weathered, FeOx + MnOx

low recovery

35.3 QM, weathered, soft, textures preserved
35.5 Spotty mal.

36.25 Basalt, barren
36.5 QM; soft,

37.2 Ash-xl text, dk maroon, 5-7% diss py

37.7 QM, gray, mgr, siliceous.
Rusty frx to 40.5. Occal py vnlets.
2-5% diss py. Upper contact fgr

42.6-43.1 - py vnlet w/ qc

43.4 Ash tuff? mgr, dk gray-black,
20% Q veins at varied orientations
5-7%, locally 10% diss py, 3-5% diss py

60°
35°
35°

30°

5680

5680

5690-100

5680-90

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 4 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY NO. and INTERCEPT	ASSAYS						
							JJH	1/9/90																	g/T	opt	ppm				
COMMENTS																							Au	Au	Cu						
45				30% cpy																			93	23209	2.80	.082	3425				
				70% py			45.3	As above, becomes med grey															45.7	45.7							
				asp. cpy			45.7	qc, sm + 2% sp, 5% py. 45.4, blebs 50% py w/ qc																23210	6.97	1.203	12000				
				asp. cpy			46.3	Mixed QM fuff, QM assimilated tuff?																100	46.3	115.51	3.369				
				2-4% py, asp. cpy			47.1	py vns, cpy diss - 3% QM, locally felsic; med gr, med grey																23211	13.60	.397	3600				
							47.1	Locally min. w/ asp. cpy - 46.3 - 47.1; 5-7% combined in felsic section. 2% py, tr sp																47.2	47.1						
							48.6	5cm bx @ contact																94	23212	.40	.012				
							48.6	Ash tuff, mgr, greenish grey, local																	94	23212	1.66	10.69	1750		
							49.4	lithic frag. 5% py, diss, blebs, 2% cpy, tr																	488	48.6					
							49.7	sp to 49.7																	23213	1.44	10.42	2350			
							50.2	49.4 rusty frx w/ asp. 49.9-50.0 = VG 5% 49.8-50.0 am dyke, min cpy, py 20% 49.03																	93	49.7	1.56	10.45			
							50.2	Core very broken - 10-15% pyrite in vns w/ tr w/ qc, blebs f diss. Some xl ghosts locally <u>Massive Ash tuff.</u> 1% cpy, 1% po, 5% py locally; ocnly 10% pyrite oval 5-10 um. 3-5% py overall																		50.3	23214	51.00	1.488	1610	
																									50.2	23214	60.30	1.759			
																									67	23215	1.37	10.40			
																									51.8	51.8	4.31	11.26	1800		
																										80	23216	5.60	.163		
																										80	23216	10.85	13.16	2100	
																										81	23217	.51	.015	1270	
																										81	23217	1.43	.042		
																										54.9	54.9				
																										100	23218	.50	.015		
																										100	23218	4.48	.131	1050	
																										57.4	57.4				
																											100	23219	.56	.016	
																										100	23219	.39	.011	1450	
																										57.9	57.9				
																											93	23220	5.20	.152	
																											93	23220	2.52	10.73	1200
																											59.4	59.4			
																											94	23221	.17	.005	1025

Box 3
 Box 4
 Box 5
 Box 6

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 5 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	-MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	-MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/T	opt	ppm
																							Au	Au	Cu		
60				3-5% py			JJH	1/9/90						SL100									94	23221	.17	.005	1025
							Ash tuff, massive, med gray, 3-5% py, local trace - 1% cpy, po. up to 10% py over 3-6cm intervals																61.0	61.0			
				3-5% py			63.9-66.5 Rusty frx																93	23222	.06	.002	800
				Fe ox			65.2 Basalt, blackamygetaloidal, rusty frx																62.5	62.5			
65				2.4% py locally 5%			65.7 Basalt, blackamygetaloidal, rusty frx																93	23223	.12	.004	910
							66.0 65.8-66.0 White calcite bx matrix, 15% clasts																64.0	64.0			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																75	23224	.21	.006	810
							65.2 Basalt, blackamygetaloidal, rusty frx																65.5	65.2			
							65.7 Basalt, blackamygetaloidal, rusty frx																65.5	23225	.07	.002	650
							66.0 65.8-66.0 White calcite bx matrix, 15% clasts																80	23226	.08	.002	533
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																67.0	67.0			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																100	23227	.16	.005	826
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																68.6	68.6			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																100	23228	.08	.002	920
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																70.1	70.1			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																70.1	70.1			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																93	23229	.10	.003	485
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																70.3	70.3			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																70.7	70.7			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																93	23230	.08	.002	354
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																71.6	71.5			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																81	23231	.15	.004	681
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																73.2	73.2			
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																93	23232	.42	.012	470
							66.4-66.5 Basalt, as above. upper contact @ 65; also lower																74.7	74.7			

Box 6
 Box 7
 Box 8
 Box 9

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 6 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	1/9/90																	C O M M E N T S	g/t Au	opt Au
75				1-2% py																			100	23233	.12	.004	553
				1mm py 3mm py																			76.2	76.2			
				3-5% py																			107	23234	.32	.009	549
																							77.7	77.7			
																							93	23235	.12	.004	512
																							79.2	79.2			
80				5-10% py																			86	23236	.08	.002	560
																							79.8	80.4			
																							100	23237	.28	.008	481
																							81.4	81.6			
																							78	23238	.12	.004	570
																							82.3	82.9			
				1-3% py																			80	23239	.08	.002	588
																							83.8	84.4			
																							93	23240	.04	.001	520
																							85.3	85.9			
																							93	23241	.07	.002	499
																							86.9	87.5			
																							88	23242	.06	.002	538
				5-7% py																			88.4	89.0			
																							100	23243	.62	.018	344
																							89.0	89.1			
																							89.9	23244	.05	.001	535
																							100	23244	.05	.001	535

Box 9
Box 10
Box 11
Box 12

See below, 1-2% py

77.0 3mm py vns, minor cal, @ 45° & 25°

Ash tuft, massive, mg, purplish grey, num. frx @ 15° to 90°. Pyrite - 1-3% diss, 3-5% in blebs, ~5% on frx. DeenL grains to 2mm blebs epy. Some frx are rusty, some have 1mm Qc.

Colour med grey. Minor chlorite.

Very minor Qc veinlets.

82.9

Ash tuft, variegated cream & maroon splotchy; cream sections bleached, sericite(?). Minor py in vns & blebs (1-3%)

87.5

Ash tuft, maroon to med grey, sil, 5-7% py in vns, blebs, diss

89.0-89.4 bleached, sil.

89.3-89.4 5cm Qc @ 45°

5400

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 8 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	1/9/90																	COMMENTS	g/t Au	opt Au
105				2-3% PY																			73 105.1	23255	.08	.002	357
																							56 106.7				
																							93 108.2	23256	.12	.004	470
																							93 109.7	23257	.08	.002	398
																							94 111.2	23258	.30 .180	.009 .053	372
																							80 112.8	23259 23260	.11 .58	.003 .017	550 433
																							93 114.3	23261	.38	.011	432
																							81 115.8	23262	10.60 3.73	.309 .109	497
																							100 117.3	23263 23264	.164 .26	.159 .008	850 423
																							100 118.4	23265	.24	.007	485
																							100 118.4	23266	.26	.009	501
																							100 119.4	23267	.27	.008	391
																							100	23268	.13	.004	504

Box 15

Box 16

Box 17

Ash tuff, malloou, w grey patches, 1-2% clots
py + py in scattered 1-3 mm veins,
Rusty fra from 105.0 - 119.0

Ash tuff, f-mgr, grey, massive, sil,
1-3% clotty diss. py, locally
5-7%. Local sections w lithic frags?

112.0-112.7 Fault or bx zone, w/ non-cal
vening.
114.4-114.7 lt. grey to white irreg
116.8-116.4 patches in grey tuff, non-cal.
116.1-116.3 15% qtz + 15% py + 5% sp + 1% py
in tuff

116.8 Bx, ankeritic? matrix.
116.9 - 1cm bx @ 45°
117.1

118.0 118.0-118.1 irreg Fe carb? vns
118.4-118.1-118.4 cal + qtz + tuff + 10% py, 1% sph
Ash ± lithic tuff, malloou w grey
119.4 patches & vice versa. Pyrite variable
1-2% predominately, locally 5-7%

2-3%
PY

py, sp, cp

1-3%
PY

5690
-100

5690
-100

56100

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 9 of 20

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
																									g/t Au	opt Au	ppm Cu		
120				2-3% PY	80°	QC	JJH 1/9/90	Ash tuff, as above; most pyrite in narrow, 21mm, seams, 2-3%?																120.4					
				PY	25°			121.1 3mm															100	23269	.12	1004	487		
				PY	25°			121.7-121.9 7-10% py 122.0-123.5 7-10% irreg QC veins.																121.9					
				PY	25°			Tuff, fine-gr																93	23270	.08	1002	470	
				PY	25°			123.7 7% py																123.4					
				PY	25°			124.3-124.5 5-7% py 124.5-124.6 20% irreg QC + 10% py blebs 124.8-125.0 5-7% py																88	23271	118.00 17.99	3.1442 .525	352	
				PY	25°			125.4, 1mm 125.8-125.9 Kspar																	23272	.67 .53	.020 .015	490	
				PY	30°			126.5, 2mm 126.7, u																	125.0				
				PY	35°			127.1 1-2mm, 250°-80°																	100	23273	.104 .06	1001 1002	476
				PY	35°			127.8/cm Tuff mgr																	126.5				
				PY	10°			128.8-129.0 2mm 129.2-129.3 3x5mm @ 45°																	93	23274	.26 .35	.008 .010	600
				PY	40°			129.5 - Vn zone, light to med grey w/ 15-20% QC irreg veins, patches of py+sp; 130.0-130.1 qtz + 40% py + 20% aspy																	128.0				
				PY	70°			131.2-135.1 pred. grey tuff, massive mgr 131.3-135cm 1-2% py																	100	23275	1.19 .72	1035 .021	550
				PY	45°			132.5 1-2cm 132.7 2mm																	129.5				
				PY	20°			133.5 5mm 134.0 15% sp on 1mm fr																	81	23276	4.95 3.31	.144 .096	362
				PY	45°																				131.1				
				PY	45°																				100	23277	.03 .03	1001 1001	255
				PY	45°																				132.6				
				PY	45°																				100	23278	2.08 1.59	1061 1046	232
				PY	20°																				132.9				
				PY	20°																				100	23279	.06 .06	1002 1002	417
				PY	20°																				134.1				
				PY	20°																				93	23280	.03	1001	392

Box 18

Box 19

Box 20

Box 20

Box 20

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 10 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/t Au	opt Au	ppm Cu
135				1-3% py			J J H															23280	103	.001	392	
							2/19/90															155.6				
							136.1 predominantly purple-maroon tuff, sil 1-3% py															81	23281	.03	.001	345
				py			137.8															100	23282	.03	.001	307
							139.3 vein zone, 5cm cc + 30% py, 10% asp, 1% sp 139.5 in bleached tuff															138.9	23283	.20	.006	327
				py, asp, sp			140.5 } 5-10% xls. 141.0 }															78	23284	7.00	.204	415
140							142.1 Ash tuff, massive, mgr. pred. grey 1-2% py															139.5	23285	.17	.005	244
				1-2% py			144.7 144.9 shear															140.2	23286	.12	.004	333
							Ash/litic ± xl tuff, purple maroon & grey patchy - plotchy. Grey sections vary from confined to frx. borders to 5-10cm. Majority of py in grey sections. Grey - Si 90-100; Maroon - Si 80-90															141.7	23287	.04	.001	432
				3-5% py			147.5 py increases with depth, from 1-2% to 5-7%, locally 10%.															142.3	23288	.64	.019	402
				5-7% py			148.4 1/2cm pink cal. 148.75 1cm pink cal.															144.8	23289	.04	.001	363
																						146.3	23290	.20	.006	427
																						147.8	23291	.32	.009	426
																						149.3	23292	.11	.003	507
150																						100				

Box 21

Box 22

Si 80-90
Si 90-100

68 2cm cal.
75 cal.
78 cal.

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 11 of 20

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																									g/T Au	opt Au	ppm Cu	
150						Gal	JJH 2/9/90	veined section, qtz + qc, Fe carb?, minor py															92 150.9	160.0 23293 150.6	.08	.002	347	
				5-7% py 100% py 40% py 5-7% op		Sil		151.7-152.4 w/10% py in gray zones															87 152.4	23294 151.7 23295 152.4	.13	.004	493	
								152.2 5cm sil, 40% py															100	23296 153.7	.66	.019	479	
								153.5-153.7 sil, Kaper, 15% py															151.0	23297 154.9	.98	.029	268	
155				1-2% py				154.9 Ash tuff, grey to tan-buff, small purple sections; 2-5cm xl sections; many <1 mm to 3mm Q.C. veins, most at 40°-50° 1-2% py															93 154.4	23298 156.1	.24	.007	348	
																							94 157.0	23299 157.3	.36	.011	314	
																							93 158.5	23300 158.5	.19	.006	271	
																							100 160.0	23301 160.0	.04	.001	292	
160																							100 161.5	23302 161.5	.24	.007	370	
								161.3-161.4 shear, gouge, upper @ 40°, lower @ 20°																88 163.1	23303 163.2	.15	.004	400
								161.9															100 164.6	233.04 164.9	.07	.002	312	
165								164.9																				

Box 25
Box 26

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 12 of 20

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/t	opt	ppm
							COMMENTS																Au	Au	Cu	
165			b s b s b b	21% py			JJH 21/9/90															80 1661	23305 1661	.28	.008	448
			b b				164.9-167.9 Ash tuff, as before, faulted. Broken core and short gouge zones. 21% py No purple sections in fault zone.															73 1676	23306 1676	.104	.001	225
			b b	py		cal	167.9 168.2 - 2cm bx, pink cal, 5% py on upper															94 169.2	23307 169.2	.115	.004	339
170			b b b	10% py			169.2 170.2															87 170.7	23308 170.7	.108	.002	275
			b b				172.0 172.6-172.8, shear, 2% py on lower															80 172.2	23309 172.2	.124	.007	325
			b s b b	10% py		qc	172.8 - 3cm qc, 10% py on upper															80 173.7	23310 173.7	.138	.011	375
175			b	1% py			175.2 Ash-xl tuff, greenish xls, 6% py															87 175.2	23311 175.2	.16	.005	282
			b b				176.6 Fault Ash tuff, grey, 1% py															67 176.6	23312 176.6	.12	.004	208
			b				177.3 BX, py clasts + discont. vns, 1% total															93 178.3	23313 178.3	.12	.004	237
			b				178.2 Fault															93 179.8	23314 179.8	.101	.001	177
180							179.8-180.4 - Vn zone, bx, 3-5% py															23315	23315	.01	.001	169

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-46

Page 13 of 20

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/t Au	opt Au	pp Cu
180							J J H	2/9/90																180.1			
				*py			Ash tuff, gray, sil, 5% Qc vns, trace py							Si ₁₀₀									100	23316	.01	.001	120
																							87	23317	.01	.001	14
								182.88															182.9				
185																											

for 2029

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH Met		g/t Au	opt Au	ppm Cu	DESCRIPTION
			g/t	opt				
23196	30.3	30.8	0.5		.40	.012	1160	QM, clay
197	30.8	32.0	1.2		.30	.009	1025	QM, rusty, FeOx, MnOx
198	32.0	33.5	1.5		.36	.011	650	" " " "
199	33.5	35.3	1.8		.28	.008	1250	" " " "
200	35.3	36.25	0.95		.84	.025	2300	QM, weathered, soft
201	36.25	36.55	0.3		.08	.002	156	Basalt
202	36.55	37.2	0.65		.20	.006	950	QM, soft
203	37.2	37.7	0.5		.30	.009	1300	Ash-x1 tuff, 5-7% diss. py
204	37.7	39.2	1.5		.16	.005	1300	QM, gray, mgr, 2-5% diss. py
205	39.2	40.6	1.4		.24	.007	1100	" " " "
206	40.6	42.0	1.4		.24	.007	1200	" " " "
207	42.0	43.4	1.4		.24	.007	1150	" " " "
208	43.4	44.6	1.2		.32	.009	4200	Ash tuff (?), mgr, 20% Qc vns, 5-7% diss py
209	44.6	45.7	1.1		2.80	.082	3425	" " " "
210	45.7	46.3	0.6	115.51/3.269	6.97	.203	12000	QM + tuff, py in vns, 3% cp diss
211	46.3	47.1	0.8	9.64/0.281	13.60	.397	3600	QM, felsic, 5-7% cp + as py, 2% py
212	47.1	48.6	1.5	1.66/0.049	0.40	0.012	1750	QM, mgr, 2-4% py + as py + cp
213	48.6	49.7	1.1	1.56/0.045	1.44	.042	2350	Ash tuff, 5% py, 2% cp
214	49.7	50.2	0.5	60.30/1.759	51.00	1.488	1610	" " " + 0.2m QM, 20% py, 5% cp
215	50.2	51.8	1.6	4.31/0.126	1.37	.040	1800	Ash-(x1) tuff, 10-15% py

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH Metres		g/T Au	opt Au	ppm Cu		DESCRIPTION
			gt	opt					
23216	51.8	53.3	1.5	10.85/0.316	5.60	.163		2100	Ash-(x1)tuff, 10-15% py
217	53.3	54.9	1.6	1.43/0.042	.51	.015	AB	1240	" " , 5% py, trsp
218	54.9	56.4	1.5	4.48/0.131	.50	.015		1050	" " " "
219	56.4	57.9	1.5	0.39/0.011	.56	.016		1450	" " " "
220	57.9	59.4	1.5	2.52/0.073	5.20	.152	↓	1200	" " " "
221	59.4	61.0	1.6		.17	.005		1025	Ash tuff, massive, 3-5% py
222	61.0	62.5	1.5		.06	.002		800	" " " "
223	62.5	64.0	1.5		.12	.004		910	" " " "
224	64.0	65.2	1.2		.21	.006		810	" " " " , FeOx
225	65.2	65.7	0.5		.07	.002		650	Basalt, FeOx on frx
226	65.7	67.0	1.3		.08	.002		533	Ash tuff, massive, 3-5% py + 0.1m basalt
227	67.0	68.6	1.6		.16	.005		826	" " " "
228	68.6	70.3	1.7		.08	.002		920	" " " "
229	70.3	70.7	0.4		.10	.003		485	Bx, calcite, 10% py
230	70.7	71.5	0.8		.08	.002		354	" " 2% py
231	71.5	73.2	1.7		.15	.004		681	Ash (?) tuff, purple-maroon, sil, 1-2% py
232	73.2	74.7	1.5		.42	.012		470	" " , purplish-gray, mag, "
233	74.7	76.2	1.5		.12	.004		553	" " " "
234	76.2	77.7	1.5		.32	.009		549	" " " " 3-5% py
23235	77.7	79.2	1.5		.12	.004		512	" " " "

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH Metres		g/T Au	opt Au	ppm Cu	DESCRIPTION
			Met	opt				
23236	79.2	80.4	1.2		.08	.002	560	Ash(?) tuff, purple-maroon, 5-10% py
237	80.4	81.6	1.2		.21	.006	481	" " "
238	81.6	82.9	1.3		.12	.004	570	" " "
239	82.9	84.4	1.5		.08	.002	588	Ash tuff, variegated, 1-3% py
240	84.4	85.9	1.5		.04	.001	520	" " "
241	85.9	87.5	1.6		.07	.002	499	" " "
242	87.5	89.0	1.5		.06	.002	538	" , maroon-gray, sil, 5-7% py
243	89.0	89.4	0.4		.62	.018	344	" , bleached, " , qc, "
244	89.4	90.4	1.0		.05	.001	535	" , maroon grey, " , 5-7% py
245	90.4	91.4	1.0		.12	.004	466	" , med. gray, maroon patches, 1-2% py
246	91.4	93.0	1.6		.08	.002	380	" " " "
247	93.0	94.5	1.5		.20	.006	421	" " " "
248	94.5	96.0	1.5		.74	.022	558	" " " 2-3% py
249	96.0	97.5	1.5		.08	.002	587	" " " 2-5% py
250	97.5	99.1	1.6		.07	.002	509	" " " 2-3% py, FeOx
251	99.1	100.6	1.5	1.44/0.042	1.21	.035	511	Ash tuff, maroon + gray, 2-3% py
252	100.6	102.1	1.5		.12	.004	445	" " "
253	102.1	103.6	1.5		.07	.002	430	" , maroon w/ gray patches, 2-3% py
254	103.6	105.1	1.5		.08	.002	456	" " "
23255	105.1	106.7	1.6		.08	.002	357	" " "

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met	g/T Au	opt Au	PPM Cu	DESCRIPTION
23256	106.7	108.2	1.5		.12	1004	470	Ash tuft, maroon w/ gray patches, 2-3% py
257	108.2	109.7	1.5		.08	1002	398	" " "
258	109.7	111.2	1.5	1.80/0.053	0.30	.009	372	" " "
259	111.2	112.0	0.8		.11	1003	550	" , grey, 2-3% py
260	112.0	112.8	0.8		.58	.017	433	" , " , bx or fault w/ non-cal m, 1% py
261	112.8	114.3	1.5		.38	.011	432	" , massive, 1-3% py
262	114.3	115.8	1.5	3.73/0.109	10.60	.309	447	" " "
263	115.8	116.4	0.6	5.47/0.159	1.48	.043	850	Tuff + qtz + 15% py + 5% sp + 1% cp
264	116.4	116.9	0.5		.26	.008	423	Bx, onkerite (?) matrix
265	116.9	118.0	1.1		.24	.007	485	Ash tuft, massive, 1-3% py
266	118.0	118.4	0.4		.31	.009	501	Tuff + cal. + qtz + 10% py + 1% sp
267	118.4	119.4	1.0		.27	.008	391	Ash ± lithic tuft, maroon + gray, 1-3% py
268	119.4	120.4	1.0		.13	.004	504	" " "
269	120.4	121.9	1.5		.12	.004	487	" " "
270	121.9	123.4	1.5		.08	1002	470	" " "
271	123.4	124.3	0.9	17.99/0.525	118.00	3.442	352	" " "
272	124.3	125.0	0.7	0.53/0.015	.67	.020	490	" " " Qc + 5-7% py
273	125.0	126.5	1.5	0.06/0.002	.04	.001	476	" " " 1-3% py
274	126.5	128.0	1.5	0.35/0.010	.26	.008	600	" " "
23275	128.0	129.5	1.5	0.72/0.021	1.19	.035	550	" " "

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Metres	g/T Au	opt Au		ppm Cu	DESCRIPTION
23276	129.5	130.5	1.0	3.31/0.096	4.95	.144		362	Vn zone w/ qtz, py, aspy, sp.
277	130.5	131.7	1.2	0.03/0.001	.03	.001		255	Ash ± lithic tuft, gray, 1-2% py
278	131.7	132.9	1.2	1.59/0.046	2.08	.061	↓	232	" " "
279	132.9	134.1	1.2		.06	.002		417	" " "
280	134.1	135.6	1.5		.03	.001		392	" , gray to purple, "
281	135.6	137.2	1.6		.03	.001		345	Ash tuft, pred. purple-maroon, 1-3% py
282	137.2	138.4	1.2		.03	.001		307	" " "
283	138.4	139.2	0.8		.20	.006		327	" " "
284	139.2	139.5	0.3	5.00/0.146	7.00	.204		415	Vn zone, py, aspy, sp
285	139.5	140.8	1.3		.17	.005		244	Ash tuft, purple-maroon, "
286	140.8	142.1	1.3		.12	.004		333	" " "
287	142.1	143.3	1.1		.04	.001		432	Ash tuft, massive, grey, sil., 1-2% py
288	143.3	144.8	1.5		.64	.019		402	" " " "
289	144.8	146.0	1.2		.04	.001		363	Ash-lithic ± xl tuft, maroon & grey, 1-2% py
290	146.0	147.2	1.2		.20	.006		427	" " "
291	147.2	148.6	1.4		.32	.009		426	" , pred. grey, 3-5% py
292	148.6	150.0	1.4		.11	.003		507	" " , 5-7% py
293	150.0	150.6	0.6		.08	.002		347	Veined section, ~1% py
294	150.6	151.7	1.1		.13	.004		493	Ash-lithic ± xl tuft, maroon & grey, 1-2% py
295	151.7	152.4	0.7		.79	.023		1200	" " " 10% py

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/t Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
23296	152.4	153.7	1.3		.66	.019	479	Ash-lithic ± xl tuft, maroon, 1-2% py
297	153.7	154.9	1.2		.198	.029	268	" " 5-7% py
298	154.9	156.1	1.2		.24	.007	348	" " 1-2% py
299	156.1	157.3	1.2		.136	.011	314	" " "
300	157.3	158.5	1.2		.19	.006	271	" " "
301	158.5	160.0	1.5		.104	.001	292	" " "
302	160.0	161.5	1.5		.24	.007	370	" " "
303	161.5	163.2	1.7		.15	.004	400	" " "
304	163.2	164.9	1.7		.07	.002	312	" " "
305	164.9	166.1	1.2		.128	.008	448	Ash tuft, grey, broken & faulted, ~1% py
306	166.1	167.6	1.5		.04	.001	225	" " " "
307	167.6	169.2	1.6		.115	.004	339	" " " "
308	169.2	170.7	1.5		.108	.002	275	" " " "
309	170.7	172.2	1.5		.24	.007	325	" " " "
310	172.2	173.7	1.5		.138	.011	375	" " " "
311	173.7	175.2	1.5		.16	.005	282	" " " "
312	175.2	176.8	1.6		.12	.004	208	Ash-xl tuft, 1% py
313	176.8	178.2	1.4		.12	.004	237	Ash tuft, grey, broken & faulted, "
314	178.2	179.8	1.6		.01	.001	177	Ash tuft, grey, brecciated, 1% py
315	179.8	180.1	0.3		.01	.001	169	Vn zone, bx, qc, 3-5% py

PROPERTY SPECTRUM D.D.H. 90-47 Page 1 of 21

AREA RED DOG SECTION 9550N

CLAIM RED DOG 1 AZIMUTH (T) 090°

GRID CO-ORDS Line 9554N INCLINATION -070°

Station 9741E Hole 182.88

SURVEY CO-ORDS Northing _____ DEPTH Casing 9.14

Easting _____ Overburden 9.30

ELEVATION 1677m CORE SIZE BQTW

CORE RECOVERY 94.4%

DATE Started 31/8/90 N/S

Completed 2/9/90 D/S

CONTRACTOR J.T.Thomas

LOGGED BY J.V. Hylands

LOGGED BY _____

SCALE 1:100

CORE STORED AT Property

COMMENTS Drilled to determine extent of high grade intersection in DDH 5-4 (1973, 20.9 g/t, 9.0m).

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-70°	090°	Brunton				
181m	-67°	-	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES			
FROM	TO	UNIT	INT.	T.W.				oz/t
0	9.3	CEING						
9.3	10.5	AT						
10.5	11.5	QM						
11.5	24.3	AX						
24.3	36.0	QM						
36.0	44.8	MAX						
44.8	83.3	QM						
83.3	85.1	BT						
85.1	91.4	AT						
91.4	93.6	LA						
93.6	104.5	CS						
104.5	117.2	CS/CT						
117.2	118.1	MS						
118.1	121.3	CS						
121.3	123.2	CT						

DIAMOND DRILL RECORD

PROPERTY

SPECTRUM

DDH

90-47

Page 3 of 21

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANJUE	LOGGED BY		UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																		BIT Au	opt Au	ppm Cu
15				5-7% py	30° oc			JH															23322	.06	.002	1250	
				py	70° oc			3/9/90														87	.160				
				py	40° oc																	16.8	23323	.15	.004	825	
					60° oc																	88	.175				
					40° oc																	18.3	23324	.05	.001	850	
																						92	.18.7				
				3-5% py																		17.5	23325	.24	.007	1600	
				dis																		17.5	23325				
				tr opy																		17	23326	.22	.006	2000	
20																						20.1	23326				
																						20.3					
																						83	23327	.30	.009	2100	
																						21.3	23327				
				5-7% py																		87	23328	.28	.008	1950	
																						22.8	23328				
																						88	23329	.28	.008	2050	
																						24.4	23329				
																						100	23330	.08	.002	416	
																						25.9					
																						100	23331	.10	.003	629	
																						27.4					
																						100	23332	.10	.003	791	
																						28.4					
				1% opy																		29.0	23333	.08	.002	660	
																						93	24.5				
																						24.8	2334	.44	.013	8950	

Box 2
 Box 3
 Box 4

15
 20
 25
 30

LOGGED BY JH
 DATE 3/9/90

C O M M E N T S

As above, ocnl patches to 3 cm of Kspar alt. Few xls after 15.3m. Py on very thin frx, < 1mm. 5-7% total py. 7-10% QC venslets. All frx rusty to 16.5m. QC to 2mm Kspar in middle. 17.15mm with Kspar selvages. Tuff becomes mottled greenish to 16.

18.3 shear -
 18.7-19.3 gouge, fault

19.5-20.1 10cm core, mismatch.

Core very broken, ocnl 2-3 mm QC vns @ 50°-70°? 3-5% diss py, tr opy. 2.5mm grains within red mineral - emerald?? also on frx to 21.3m, and 24.0-24.1m

21.6 Ash tuff, dk grey green, chloritic, ocnl epidote patches, 5-7% diss py

24.3 QM, fine-mgdg, generally greenish - matrix chloritized, felds saussuritized. Ocnl irreg vein or patch of QC. Approx 1% diss py, in QM & QC & qtz vns; tr opy? very ocnl spect. Greenish-orange after 27m

28.3-28.4

29.5-29.8 QMs very deep salmon colour, 2% py in blebs, 1% opy, tr. mic.

UNIT

CONTACT

MAJOR ROCK TYPE

GRAIN SIZE

TEXTURE

COMPOSITION MODIFIERS

THICKNESS

MINOR ROCK TYPE

GRAIN SIZE

TEXTURE

COMPOSITION MODIFIERS

THICKNESS

% MINOR

COLOUR

% RECOVERY

ASSAY No. and INTERCEPT

BIT Au

opt Au

ppm Cu

DIAMOND DRILL RECORD

PROPERTY

SPECTRUM

DDH

90-47

Page 4 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																			g/t Au	opt Au
30				2-3% py 2-3% as 5% pl 3% qs	60° QC 45°/15° AC		<u>WJH</u>	<u>3/9/90</u>															30.5	23335	.12	.004	435
																							30.8				
																							100	23336	.09	.003	346
																							32.0				
																							100	23337	.19	.006	280
																							33.5				
																							100	23338	.14	.004	3088
																							35.0				
																							93	23339	.12	.004	1125
																							36.0				
				3-5% diss py																			36.6	23340	.18	.005	1500
																							167				
																							36.9				
																							107				
																							38.4	23341	.14	.004	1525
																							75				
																							39.6	23342	.20	.006	1580
																							94				
																							41.2	23343	.18	.005	1450
																							93				
																							42.7	23344	.20	.006	1525
				5-7% py pl																			93				
																							42.2	23345	.12	.004	2075
																							44.8				
45																							100				

Box 5

Box 6

Box 7

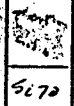
QM, Pred, greenish
1% diss py, tr opy. Scattered 1mm
py seams @ 0° to 70°

35.0 - 36.0 sheared + brecciated QM

36.0 brecciated contact @ 20°
Ash-xl with dk gray to black, 3-5%
diss py, locally to 7%, numerous
1-5mm QC veins @ 15-20°, some with
bleached tuff up to 1cm on each side

Microfractured. 10-15% QC, tension
gas and discontinuous vns. @ 15-70°
Dark QC has red-salmon mineral.
40.5, 42.2, 42.6-42.7.

42.2 3mm @ 45° to 0°, 5-7% blebby py



45°

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-47

 Page 5 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																									g/T Au	opt Au	ppm Cu	
15				1% diss py			JJH	319/90																45.7	23346	.26	.008	845
							44.8- QM, basically light greenish w orange felds locally; K sparl borders some frx, 1% diss py Ksparl frx have minor py, asp, epd																					
50				py	8° Q																			160	23347	1.34	.039	1050
							47.3 - N 5% sul.																					
55				asp, sp, cp, py, aspy	45° Q																			94	23348	.71	.021	910
							48.8																					
60				1-2% py	20° Q																			100	23349	.40	.012	564
							QM, advanced saussureite.																					
60				py	30° Q																			100	23350	.22	.006	1125
							51.9 crush zone																					
60				py	30° Q																			100	23351	1.29	.038	672
							52.1																					
60				py	30° Q																			94	23352	.80	.023	749
							53.1 5mm, 50% sul.																					
60				py	30° Q																			100	23353	.45	.013	645
							53.8 2mm, cut off by micro frx																					
60				py	30° Q																			100	23354	1.08	.031	749
							54.1-54.3 Salmon alt ^a , 3% py & fr ep.																					
60				py	30° Q																			100	23355	.14	.004	1000
							54.4-54.6 micro bx, w/ py clasts (?)																					
60				py	30° Q																			94	23356	.18	.005	648
							54.6-54.8 shear, w frst py above & below																					
60				py	30° Q																			94	23356	1.92	.056	1400
							59.4																					
60				py	30° Q																			94	23356	2.19	.064	1400
							59.6																					

 Box 8
 Box 9
 Box 10

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 6 of 21

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/t Au	opt Au	ppm Cu
60							JJH	3/9/90															23356	1.92	.056	1400	
														5680									94	61.0	2.19	.064	
																							93	.30	.009	1110	
																							89	.31	.009		
																							62.5	1.94	.057		
																							83.1	1.66	.049	1550	
																							78	.43	.013		
																							100	.49	.014	1510	
																							65.0	6.98	.204	4510	
																							23360	8.57	.250		
																							65.5				
																							81	8.03	.234	1375	
																								67.0	6.45	.188	
																							100	4.82	.141	1475	
																								68.6	5.54	.161	
																							100	0.30	.009	1100	
																								70.1			
																							100	23364	0.30	.009	1050
																								71.6			
																							94	23365	.34	.010	960
																								72.8			
																							73.2	23366	.28	.008	680
																								73.6			
																							100	23367	.38	.011	1450
																								74.7			

Box 11
Box 12
Box 13

QM, orange-green, secondary Kspar?
1-2% diss py

pyrite increases to 3%, 3-5%
occ only
tr-1% cpy, wqtz.

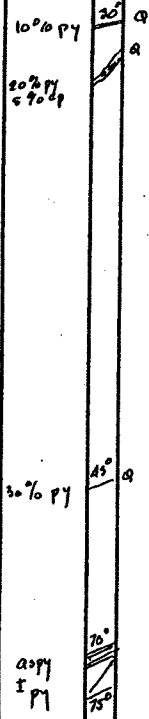
64.6-65.0
64.6-65.0
65.0-65.5
65.5

64.6 1.5cm
1.5cm Qtz un flcore, 20% py, 5% cpy
also aspy in x-trx

65.5-
micro fax w/ 1mm qtz + aspy @ 20-50 cm intervals.

70.3-70.4 - Frx w/ rusty gouge.
70.7 3mm

72.8 } Pale green, alt, 6 2mm vns w/ aspy @ 75-80°
73.5 } 3mm w/ py @ 80°



DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-47

 Page 7 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS					
							JJH	31/9/90																	g/t	opt	ppm			
							COMMENTS										Au	Au	Cu											
75				PY 1-3% trasp			WM, as before, Kspar patchy & adj. to some narrow qtz vns - 77.5 Pyrite max 3% tr. opy w/ Kspar					560											87	23368	.61	.018	860			
							76.2 } 76.7 } broken, bxd																	76.2						
							77.0-77.2 Kspar																	93	23369	.63	.018	1525		
							77.5 } 77.7 } broken, bxd 78.03 }																		77.7					
							79.0 - sheared @ 20° - fault zone to 83.3																		93	23370	.36	.011	1240	
							80.7 Kaolinite? white clay w/ QM fragments.						Soft												79.2					
																									87	23371	1.38	.040	1000	
																									80.8					
																									88	23372	.68	.020	940	
																									82.3					
																										94	23373	.52	.015	610
																									83.9					
																										86	23374	.02	.001	86
																									85.3					
																										88	23375	1.62	.047	799
																										86.6				
																										100	23376	.11	.003	842
																										88.4				
																										100	23377	.12	.004	621
																										89.9				
90																														

 Box 14
80
Box 15

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 8 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/t Au	opt Au	ppm Cu
90							JJH	3/9/98															23378				
							Ash tuft bx, as above.																93	.40	.012	1025	
							91.4 Lithic-ash tuft, buff brown, black for last 30 cm. 3-5% py in ash matrix																94	.86	.011	506	
																							930	.31	.009	254	
																							100	5.40	.158		
																							945	4.20	.122	1250	
																							100	5.80	.169		
																							23382	5.73	.167	2300	
																							96.0	4.97	.145		
																							93	23383	5.20	.152	2500
																								97.5	3.20	.093	
																							100	23384	2.85	.083	2100
																								99.1	4.00	.117	
																							100	23385	4.10	.120	1800
																								100.6	3.22	.094	
																							117	23386	2.65	.077	2600
																								101.8	2.01	.059	
																							100	23387	2.55	.074	2100
																								103.3	0.19	.006	
																							84	23388	0.28	.008	1350
																								104.5	0.17	.015	
																							23389	0.50	.018	1240	
																								105			

Box 17

Box 18

Box 19

Box 20

Box 21

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 9 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							JJH	4/9/90																	g/t Au	opt Au	ppm Cu	
105				2-3% py																			23389					
				10-15 py																			1055					
				2-3% py																			100	23390	.67	.020	1310	
																							1066	106.4	.53	.015	2675	
																							100	107.3	.53	.015		
				2-3% py																			100	23342	.24	.007	600	
																							107.8	.21	.006			
				10-15 py																			108.2		1.76	.051	1450	
																							93	23393	1.64	.048		
				2-3% py																			109.2					
																							109.8		1.27	.035	1975	
				10% aspy																			81	23394	1.15	.034		
																							110.7	110.7	1.87	.008	1125	
																							111.0		20.00	.583		
																							93	23396	15.77	.460	1525	
																							112.5					
				1-2% opy																			112.8					
				fr opy																			100	23397	.28	.008	489	
																							113.9					
				7-10 py																			114.3					
				2-3% py																			100	23398	.16	.005	1360	
				fr aspy																			115.0					
																							115.8					
																							116.1					
																							93	23400	.69	.020	1510	
																							117.3					
				mass py, mag																			117.2					
				epy																			88	23401	11.30	.330	23000	
				7-10 py																			118.1					
				2-3% py																			88	118.1		9.77	.285	23000
				fr aspy																			118.9					
																							107	23402	1.20	.035	2750	
																							119.7					

Box 1
 Box 20
 Box 21
 Box 22
 120

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 12 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH																			5/9/90	g/t Au	opt Au
120									skarn, as above															23403	.94	.027	2100	
				2-3% py	X				Cherty tuff, pale cream grey, micro frx, 2-3% py some frx have qc															121.3				
				7-10% py tr. cp4	X				Skarn, dk green, sil, chl., 7-10% py, tr. cp4															23404	.12	.004	262	
				2-3% py	X				Cherty tuff, as above															122.2				
				10-15% py	X				Skarn, as above, 10-15% py pred w/ dk green chl patches, tr. cp4, aspy															23405	.38	.011	309	
					X																			123.2				
					X																			23406	.41	.012	700	
					X																			124.2				
					X																			23407	1.66	.048	550	
					X																			125.0				
					X																			125.3				
					X																			23408	0.96	.028	314	
					X																			126.9				
					X																			100	.32	.009	281	
					X																			128.0				
					X																			23409	0.41	.012	700	
					X																			128.5				
					X																			100	3.40	.099	700	
					X																			129.5				
					X																			23410	1.25	.036	900	
					X																			129.8				
					X																			94	1.22	.036	900	
					X																			131.1				
					X																			23411	3.93	.115	1650	
					X																			100	2.40	.070	1650	
					X																			132.6				
					X																			23412	2.53	.074	1550	
					X																			93	.37	.011	1550	
					X																			134.1				
					X																			23413	.05	.001	463	
					X																			93	23414	.05	.001	463

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 11 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	5/9/90																	g/t Au	opt Au	ppm Cu
C O M M E N T S																											
135				10-15% Py 1% cpy traspv	35° R		135.3 Starn, as above, 5-10% epidote, 1% cpy, traspv 1cm @, 30% py+ epidote either side for 1-2 cm.																23414	.05	.001	463	
					50° ac		135.3-135.6 Cherty, dull, 10% epid.																83				
				5% Py	20° ac		136.9 + 136.8 - 4 & 2-5mm Qtz vns																136.2				
					30° ac		137.2 5mm @																80	.05	.001	700	
					30° ac		138.2 1cm, 1% earthy red min in short vthin vns-																				
					60° ac		139.0 5cm patch epidote, qtz + py center																100	.05	.001	850	
							Epidote 50-60% over 5-10cm intervals																				
				1% Py	60° ac		141.6 4cm banded qtz/carb																138.7				
				10-15% Py 1% cpy traspv																			93	.06	.002	600	
					35° ac		148.9-146.1 H grey silica, 2-3% py, cut by RC, 1.5cm																100	.02	.001	700	
							146.6 mismatch, 0.6m ground																				
					20° ac		147.7 5cm H grey silica																81	.08	.002	800	
					20° ac		149.5 6cm H grey silica, 1cm RC cutting @ 25°																				
																							100				
																							146.6				
																							50	2.81	.082	560	
																							93	0.56	.016	725	
																							147.8				
																							23423	0.76	.022		
																							149.3				
																							94	7.80	.228	360	
																							23429	6.92	.202		

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-47

 Page 12 of 21

 Box 28
 Box 29
 Box 30
 Box 30

 LOGGED BY J J H
 DATE 5/9/90

C O M M E N T S

skarn

150.9 - 151.1 Lt gray silica - to talcy sil. tuft, w/ 5-10% Kspar
 151.1 - Kspar (1/3, 3.5cm. 2-3% ppy on microfrx

152.0
 152.4-152.6 Fgr green sil. chloritic tuft
 152.3 Limon. spinels in skarn (py of earthy red mineral)

152.9 9cm QC

153.5
 skarn - chl; lesser epidote, increasing
 tremulate, appearance of
 garnet patches. Occur H grey
 silica patches, to 2-3 cm.
 Mio. py - diss + coarsen's, variable
 over 10-15' cm from 2% to 50%,
 probably 10-15% overall.
 hem - earthy red in veins, up to 10%
 mag - ocul. blib.
 cpy, aspy - scattered grains

154.4
 Pinkish to lt gray silica, 1-2% lopy

158.1
 Predominantly greenish to greenish gray,
 "cherty" tuft, microfractured/brecciated.
 Scattered small patches pink Kspar
 dk green chl. Occur white QC veins
 in frx. 2-3% ppy in microfrx
 Intermittent sections of dk green skarn,
 as above. - 158.8-159.3, 159.5-159.6, 160.7-
 160.9, 161.5-161.6, 161.8-162.0, 162.9-163.2,
 163.8-164.0, 164.6-164.8

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																							g/t Au	opt Au	ppm Cu	
150																					94	23424	7.80	.228	360	
																							150.9	6.92	.202	
																						93	23425	.12	.004	122
																						152.0				
																						80	23426	.58	.017	447
																						153.5				
																						153.9	23427	.04	.001	93
																						93	154.4			
																							23428	.12	.004	650
																						155.4				
																						94	23429	.21	.006	675
																						157.0				
																						93	23430	.56	.016	660
																						158.1				
																						158.5	23431	.08	.002	192
																						158.8				
																						100	23432	.44	.013	650
																						159.3				
																						160.0	23433	.20	.006	180
																						160.7				
																						161.5	23434	.05	.001	330
																						162.0				
																						163.0	23435	.08	.002	256
																						163.3				
																						93	23436	.07	.002	190
																						164.6				
																						100	164.6			

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-47

 Page 13 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/T Au	opt Au	ppm Cu
COMMENTS																										
Box 31 165				2-3% PY	X		Green sil "cherty" tuff, as above.							5.00								100	23437	.07	.002	199
				10-15 PY			Skarn, as before															100	23438	.08	.002	495
				2-3 PY	X		Cherty tuff															100	23439	.12	.004	875
				10-15 PY			Skarn, as before															100	23440	.04	.001	178
				2-3 PY	X		Cherty tuff															100	23441	.28	.008	626
				10-15 PY			Skarn, as before															100	23442	.01	.001	643
				2-3 PY	X		Cherty tuff 5% thin RC inlets.															100	23443	.08	.002	99
				10-15 PY			Skarn															100	23444	.01	.001	385
				10% PY			173.4 rusty frx.															100	23445	.08	.002	382
				1-2 PY	X		Cherty tuff.															100	23446	.04	.001	221
				7-10 PY			Skarn															100	23447	.04	.001	435
				1-2 PY	X		Cherty tuff															100	23448	.03	.001	198
			10% PY			Skarn															100	23449	.04	.001	376	
			2-2 PY	X		Cherty tuff, green → buff, gray @ 181.1															100	23450	.12	.004	318	

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-47

Page 14 of 21

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/t Au	opt Au	ppm Cu
180				2-3% Py			JJH	5/9/90						5-100 Cl									23450	.12	.004	318	
								Zoned po xls w/epq, minor mag, in gray quartz															100	1814	.101	.001	220
				10-15% opy	25' cal 50' cal			181.6						5-100 Cl									100	1816	.03	.001	347
								182.87															23452	1829			
185																											

Box 34

SAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH	g/T	opt.	ppm	DESCRIPTION
					Au	Au		
23318	9.3	10.5	1.2		.16	.005	1350	Ash-xl tuff, 7-10% py
319	10.5	11.5	1.0		.106	.002	393	QM, tr py
320	11.5	13.0	1.5		.20	.006	1400	Ash-xl tuff, chl, 5-7% py
321	13.0	14.5	1.5		.11	.003	1050	" " " "
322	14.5	16.0	1.5		.106	.002	1250	" " " "
323	16.0	17.5	1.5		.15	.004	825	" " " "
324	17.5	18.7	1.2		.05	.001	850	" " " " , broken core
325	18.7	19.3	0.6		.24	.007	1600	Gouge
326	19.3	20.3	1.0		.22	.006	2000	Ash-xl " " " "
327	20.3	21.3	1.0		.30	.009	2100	" " " "
328	21.3	22.8	1.5		.28	.008	1950	Ash " " "
329	22.8	24.3	1.5		.28	.008	2050	" " " "
330	24.3	25.9	1.6		.08	.002	416	QM, alt, 1% py
331	25.9	27.4	1.5		.10	.003	629	" " "
332	27.4	28.4	1.0		.10	.003	791	" " "
333	28.4	29.5	1.1		.08	.002	660	" " "
334	29.5	29.8	0.3		.44	.013	3950	" , salmon, 2% py, 1% cpy, tr mag
335	29.8	30.8	1.0		.12	.004	435	" , greenish, 1% py
336	30.8	32.0	1.2		.09	.003	346	" " " + tr aspy
23337	32.0	33.5	1.5		.19	.006	280	" " "

DIAMOND DRILL LEDGER

DDH No. 90-47

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met		g/t Au	opt Au	ppm Cu	DESCRIPTION
				g/t	opt				
23338	33.5	35.0	1.5			.14	.004	3088	QM, greenish, 1% py
339	35.0	36.0	1.0			.12	.004	1125	" " "
340	36.0	37.5	1.5			.18	.005	1500	Ash-xl tuft, 3-5% py, 10-15% QC
341	37.5	39.0	1.5			.14	.004	1525	" " "
342	39.0	40.5	1.5			.20	.006	1580	" " "
343	40.5	42.0	1.5			.18	.005	1450	" " "
344	42.0	43.5	1.5			.20	.006	1525	" " "
345	43.5	44.8	1.3			.12	.004	2075	" " "
346	44.8	46.0	1.2			.26	.008	845	QM, altered, 1% diss py, tr aspy, cpy, sp
347	46.0	47.2	1.2	1.18	.034	1.34	.039	1050	" " " "
348	47.2	48.8	1.6	0.55	.016	.71	.021	910	" " " "
349	48.8	50.3	1.5	0.42	.012	.40	.012	564	" " " "
350	50.3	51.8	1.5	0.41	.012	.22	.006	1125	" " " "
351	51.8	53.3	1.5	1.27	.037	1.29	.038	672	" " 1-2% diss py
352	53.3	54.9	1.6	1.08	.031	.80	.023	749	" " " "
353	54.9	56.4	1.5	0.39	.011	.45	.013	645	" " " "
354	56.4	57.9	1.5	0.18	.005	.14	.004	1000	" " " "
355	57.9	59.4	1.5	0.17	.005	.18	.005	648	" " " "
356	59.4	61.0	1.6	2.19	.064	1.92	.056	1400	" orange-green, " "
23357	61.0	62.5	1.5	0.31	.009	.30	.009	1110	" " " "

DIAMOND DRILL LEDGER

DDH No. 90-47

SAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met		g/t Au	opt Au	ppm Cu	DESCRIPTION
				g/t	opt				
23358	62.5	64.0	1.5	1.66	1.049	1.94	.057	1550	QM, orange-green, 3-5% py, tr aspy, cpy, sp
359	64.0	65.0	1.0	0.49	0.014	.43	.013	1510	" " " "
360	65.0	65.5	0.5	8.57	.250	6.98	.204	4510	" , 1.5cm qtz vn, 20% py, 5% cpy, aspy m cross frx
361	65.5	67.0	1.5	6.45	.188	8.03	.234	1375	" , orange-green, 3-5% py, tr aspy " "
362	67.0	68.6	1.6	5.54	.161	4.82	.141	1475	" " " " "
363	68.6	70.1	1.5			.30	.009	1100	" " " " "
364	70.1	71.6	1.5			.30	.009	1050	" " " " "
365	71.6	72.8	1.2			.34	.010	960	" " " " "
366	72.8	73.6	0.8			.28	.008	680	" pale green, 7 microfrx w/ aspy ± py
367	73.6	74.7	1.1			.38	.011	1450	" orange-green, 3-5% py, tr aspy
368	74.7	76.2	1.5			.61	.018	860	" Kspar, py to 3%, tr cpy
369	76.2	77.7	1.5			.63	.018	1525	" " " " "
370	77.7	79.2	1.5			.36	.011	1240	" " " " "
371	79.2	80.8	1.6			1.38	.040	1000	" " " " faulted
372	80.8	82.3	1.5			.68	.020	940	" " " " "
373	82.3	83.3	1.0			.52	.015	610	" " " " "
374	83.3	85.1	1.8			.02	.001	86	Basalt
375	85.1	86.8	1.7			1.62	.047	799	Ash tuft bx, Sil, QC veining, 3-5% py, cpy, aspy
376	86.8	88.4	1.6			.11	.003	842	" " " " "
23377	88.4	89.9	1.5			.12	.004	621	" " " " "

DIAMOND DRILL LEDGER

DDH No. 90-47

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met	g/T Au	opt Au	ppm Cu	DESCRIPTION				
								g/T	opt			
23378	89.9	91.4	1.5		.40	.012	1025	Ash tuff dx, sil, Qc veining, 3-5% py, tr cpy, aspy				
379	91.4	92.5	1.1		.36	.011	506	Lithic-ash tuff, 3-5% py				
380	92.5	93.6	1.1		.31	.009	254	" "				
381	93.6	94.8	1.2	4.20/.122	5.40	.158	1250	Skarn, dk green, 10-15% py, 1% cpy, 1% po?				
382	94.8	96.0	1.2	5.73/.167	5.80	.169	2300	"	"	"	"	?
383	96.0	97.5	1.5	5.20/.152	4.97	.145	2500	"	"	"	"	
384	97.5	99.1	1.6	2.85/.083	3.20	.043	2100	"	"	"	"	
385	99.1	100.6	1.5	4.10/.120	4.00	.117	1800	"	"	"	"	
386	100.6	101.8	1.2	2.65/.077	3.22	.044	2600	"	"	"	"	
387	101.8	103.3	1.5	2.55/.074	2.01	.059	2100	"	"	"	"	
388	103.3	104.5	1.2	0.28/.008	.19	.006	1350	"	"	"	"	+0.3m cherty tuff
389	104.5	105.5	1.0	.50/.015	.61	.018	1240	Cherty tuff, microtrx, 2-3% py, tr cpy				
390	105.5	106.4	0.9	.87/.025	.67	.020	1310	Skarn, tr. garnet, 10-15% py, 2-3% cpy				
391	106.4	107.3	0.9	.53/.015	.53	.015	2675	"	"	"	"	
392	107.3	107.8	0.5	.21/.006	.24	.007	600	Cherty tuff, 2-3% py in microtrx				
393	107.8	109.2	1.4	1.64/.048	1.76	.051	1450	Skarn, 10-15% py, 2-3% cpy				
394	109.2	110.7	1.5	1.15/.034	1.21	.035	1975	"	"	"	"	
395	110.7	111.0	0.3	3.00/.088	1.82	.053	1125	Qtz vein, 10% aspy in coarse xl clusters				
396	111.0	112.5	1.5	15.77/.460	20.00	.583	1525	Skarn, 10-15% py, 2-3% cpy				
23397	112.5	113.9	1.4		.28	.008	489	Cherty tuff, minor epidote, 1-2% py on microtrx				

DIAMOND DRILL LEDGER

DDH No. 90-47

SAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met. g/T opt	g/T	opt	ppm Cu	DESCRIPTION
					Au	Au		
23398	113.9	115.0	1.1		.14	.005	1360	Skarn, chl, epid, garnet, 7-10% py, 2-3% cpy, tr aspy
399	115.0	116.1	1.1		.16	.005	1550	" " " " "
400	116.1	117.2	1.1		.69	.020	1510	" " " " "
401	117.2	118.1	0.9	9.77/.285	11.30	.330	23000	Mass. min ² - 50% py, 30% mag, 5-10% cpy, 1% aspy
402	118.1	119.7	1.6	1.19/.035	1.20	.035	2750	Skarn, 7-10% py, 2-3% cpy, tr aspy
403	119.7	121.3	1.6		.94	.027	2100	" " " "
404	121.3	122.2	0.9		.12	.004	262	Cherty sulf, 2-3% py on microfrx
405	122.2	123.2	1.0		.38	.011	309	" " "
406	123.2	124.2	1.0		.41	.012	700	Skarn, 7-10% cpy, tr cpy
407	124.2	125.3	1.1	1.30/.038	1.66	.048	550	" " "
408	125.3	126.9	1.6	.96/.028	1.58	.017	314	Cherty sulf, 2-3% py on microfrx
409	126.9	128.5	1.6	.41/.012	.32	.009	281	" " " "
410	128.5	129.8	1.3	1.25/.036	3.40	.099	700	Skarn, 10-15% py w/ chl, tr cpy, aspy
411	129.8	131.1	1.3	3.98/.115	1.22	.036	900	" " " " "
412	131.1	132.6	1.5	2.53/.074	2.40	.070	1650	" " " " "
413	132.6	134.1	1.5		.37	.011	1550	" " " " "
414	134.1	135.6	1.5		.05	.001	463	Skarn, 40% chl, 5-10% epidote, 10-15% py, tr cpy, aspy
415	135.6	137.2	1.6		.05	.001	700	" " " " "
416	137.2	138.7	1.5		.05	.001	850	" " " " "
23417	138.7	140.2	1.5		.06	.002	600	" " 15-20% " " "

DIAMOND DRILL LEDGER

Page No. 20

DDH No. 90-41

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met		g/T Au	opt A	ppm Cu	DESCRIPTION
				g/T	opt				
23418	140.2	141.7	1.5			.02	.001	700	Skarn, 40% chl, 15-20% epid, 10-15% py, trcp, aspy
419	141.7	143.2	1.5			.08	.002	800	" " " " "
420	143.2	144.8	1.6	2.37	.069	2.41	.070	960	" " " " "
421	144.8	146.3	1.5	1.22	.036	1.96	.057	550	" " " " "
422	146.3	147.8	1.5	3.13	.091	2.81	.082	560	" " " " "
423	147.8	149.3	1.5	.76	.022	.56	.016	725	" " " " "
424	149.3	150.9	1.6	6.92	.202	7.80	.228	360	" " " " "
425	150.9	152.0	1.1			.12	.004	122	Lt grey silica, cherty tuft?, 2-3% py
426	152.0	153.5	1.5			.58	.017	447	Skarn, 10-15% py, w/mag hem, cp, aspy
427	153.5	154.4	0.9			.04	.001	93	Pinkish to lt grey cherty tuft, 2-3% py on microfr
428	154.4	155.4	1.0			.12	.004	650	Skarn, 10-15% py
429	155.4	157.0	1.6			.21	.006	675	" "
430	157.0	158.1	1.1			.56	.016	660	" "
431	158.1	158.8	0.7			.08	.002	192	Green cherty tuft, 2-3% py on microfr
432	158.8	159.3	0.5			.44	.013	650	Skarn, 10-15% py
433	159.3	160.7	1.4			.20	.006	180	Cherty tuft, 2-3% py, + 0.3m Skarn
434	160.7	162.0	1.3			.05	.001	330	" " " + 0.5m "
435	162.0	163.3	1.3			.08	.002	256	" " " + 0.3m "
436	163.3	164.6	1.3			.07	.002	190	" " " + 0.2m "
23437	164.6	166.1	1.5			.07	.002	199	" " " "

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-48 & 90-48A

Page 3 of 4

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							DATE																	g/t Au	opt Au	ppm Cu		
15			b	5-7% py diss violet			JJA 6/9/90															15.2						
			b				Ash? tuft, chlorite, trace epidote starting ~ 15m. Incipient skarn? Samples 23458, 459 from 90-48A. Better recovery, Ash? tuft, epidote, 2-3% py; 5-10% ksp in very local veins or patches? 2-5cm wide?															56	23456	.16	.005	1080		
			b																					16.8				
			b				Samples 23458, 459 from 90-48A. Better recovery, Ash? tuft, epidote, 2-3% py; 5-10% ksp in very local veins or patches? 2-5cm wide?																53	23457	.14	.004	1180	
			b																					18.3				
			b				Samples 23458, 459 from 90-48A. Better recovery, Ash? tuft, epidote, 2-3% py; 5-10% ksp in very local veins or patches? 2-5cm wide?																20	23458	.23	.007	1260	
			b																					19.8				
			b				Samples 23458, 459 from 90-48A. Better recovery, Ash? tuft, epidote, 2-3% py; 5-10% ksp in very local veins or patches? 2-5cm wide?																7	23459	.06	.002	900	
			b																					21.3 23460 21.9	.10	.003	1040	
			b				21.8-23.5 Gray gouge w/ 1-2cm clasts of QM. ± ~1% py.																27	23461	.28	.008	1000	
			b				23.5 END OF 48A																	23.5				
			b				24.4 START OF 48B QM, pink ksp & green ground mass, mgr 1-2% py, diss																	24.4 23462 25.0	.45	.013	720	
			b	1-2% py			25.0 Ash-(x1) tuft, dark green, 3-5% py 2-3% Qc in 2-4mm veins & gashes																60	23463 25.9	.22	.006	1110	
							27.4 Rusty orange frx, malachite on one frx																	87	23464 27.4	.43	.013	1000
							28.4 Rusty brown frx																	30	23465 28.4	.26	.008	1520
																								38	23466 30.48	.04	.001	760

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Feet	g/T Au	opt Au	ppb Au	ppm Cu	DESCRIPTION
23453	10.7	12.2	1.5	} 48A	.69	.020	686	2770	Ash (?) tuff, 5-7% diss py, tr. mag
454	12.2	13.7	1.5		.65	.019	650	2720	" "
455	13.7	15.2	1.5		.34	.010	340	1820	" "
456	15.2	16.8	1.6		.16	.005	160	1080	" " tr. epidote
457	16.8	18.3	1.5		.14	.004	140	1180	
458	18.3	19.8	1.5	} 48B	.23	.007	228	1260	" 2-3% py " 5% Kspcr
459	19.8	21.3	1.5		.06	.002	65	900	" " " "
460	21.3	21.8	0.5	} 48A	.10	.003	103	1040	" " "
461	21.8	23.5	1.7		.28	.008	276	1000	Gouge, QM, ~1% py
462	24.4	25.0	0.6	} 48	.45	.013	448	720	QM, 1-2% diss py
463	25.0	25.9	0.9		.22	.006	220	1110	Ash-(x1) tuff, 2-5% py
464	25.9	27.4	1.5		.43	.013	426	1000	" "
465	27.4	28.4	1.0		.26	.008	260	1520	" "
466	28.4	30.5	2.1		.04	.001	42	760	" "



PROPERTY SPECTRUM D.D.H. 90-49 Page 1 of 14

AREA	<u>SOUTH RED DOG</u>	SECTION	<u>90-49</u>	DATE	Started	<u>5/9/90</u>	<u>D/S</u>
CLAIM	<u>RED DOG 2</u>	AZIMUTH (T)	<u>060°</u>		Completed	<u>6/9/90</u>	<u>D/S</u>
GRID CO-ORDS	Line	<u>9380N</u>	INCLINATION	CONTRACTOR	<u>J. T. Thomas</u>		
	Station	<u>9850E</u>					
SURVEY CO-ORDS	Northing	_____	DEPTH	LOGGED BY	<u>J. Hylands</u>		
	Easting	_____					
ELEVATION	<u>1606m</u>	CORE SIZE	<u>BQTW</u>	LOGGED BY	_____		
		CORE RECOVERY	<u>87.8%</u>	SCALE	<u>1:100</u>		
				CORE STORED AT	<u>Property</u>		

COMMENTS Drilled to determine depth extent of gold-bearing zone found at collar of DDH 89-33

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-46°	060°	Brunton				
122m	-41.5°	—	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES		
FROM	TO	UNIT	INT.	T.W.			oz/t
0	29.9	Casing					
29.9	31.0	AX					
31.0	40.7	QM					
40.7	44.9	AT					
44.9	50.6	AX					
50.6	73.3	AT					
73.3	74.6	BT					
74.6	78.2	AT					
78.2	90.0	AT, s					
90.0	95.1	PA					
95.1	105.2	AT					
105.2	106.4	BX					
106.4	108.5	AX					
108.5	115.1	PA					
115.1	117.0	BX					

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-49

Page 2 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS														
							COMMENTS																		g/t Au	opt Au	ppm Cu												
0							<u>J. Hylands</u>	<u>7/9/90</u>																															
5																																							
10																																							
15																																							

Casing - 0 - 30.48
 o/B - 0 - 29.9?

9.14-18.29 - pebbles & boulders of buff clay (soil?). Rock fragments are sil lithic-ash tuff, lithic clasts - chl/epidote; sil ash tuff, mgr; ash tuff, greenish, mgr; minor pyrite, occul cal/qty veins to 1 cm.

ASSAY No. and INTERCEPT	g/t Au	opt Au	ppm Cu
9.1			
16 23467	.01	.001	122
12.2			
20 23468	.01	.001	210
13.7			
27 23469	.01	.001	263

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-49

 Page 4 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							COMMENTS																		g/t Au	opt Au	ppm Cu
30	b		b	1-2% py	/		29.9 -	Ash-xlfuff, dk gray, 1-2% py in veins w/ QC	3				Si100										23474	.02	.001	515	
				31.0			5cm gouge @ contact	60															31.0	.01	.001	404	
35	b		b	2-3% diss py	/		31.0	QM, green- altered, chlorite, epidote, w/ orange-pink Kspar; 2-3% fine diss. py, somewhat chalky looking	3				Si70 chl epid										23475	.01	.001	404	
				32.9-35.0			.6m ground core @ 34.4	73															31.9	.02	.001	427	
40	b		b	2-3% diss py	/		32.9-35.0	.6m ground core @ 34.4	3														23476	.02	.001	427	
				35.0			occn patches of calcite + QC	78															32.9	.03	.001	402	
45	b		b	2-3% diss py	/		35.7	4mm 35.7-36.4 patchy salmon Kspar assoc. within frx	3														23477	.01	.001	304	
				36.1			36.1-5cm, pred. Kspar w/ sericite, 3-5% py	100															36.6	.23	.007	302	
45	b		b	1-3% py	/		36.1	DM - calcareous? ground mass	3														23478	.01	.001	199	
				40.7			Ash xlfuff, dark gray, to purple gray, non-sil, 3-5% QC veins, discontinuous red hem. in some QC vns - i.e. 41.15-41.25. Patchy epidote, assoc. w/ QC frx	100															38.1	.01	.001	308	
45	b		b	1-3% py	/		40.7	Minor Kspar w/ same 1-3% py, diss; vns w/ or w/o QC; imm blebs, etc.	3				Si70										23479	.20	.006	790	
				43.4			43.4 - 1cm Epidote, 3% py, 1% hem, trcpy Kspar? borders	100															41.7	.01	.001	522	
45	b		b	1-3% py	/		43.4	43.4 - 1cm Epidote, 3% py, 1% hem, trcpy Kspar? borders	3														23480	.01	.001	388	
				44.9				100															42.7	.03	.001	381	

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-49

Page 5 of 14

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JNH	7/9/90																		g/T	opt	ppm
																							Au	Au	Cu			
45				1-3% py tr epy					44.9 - Ash-xl tuff, variably altered & silicified. Xls replaced by epidote. Xls-44.9-50, 46.7-47.0, xls replaced by chl typ														45.7	23486	.61	.018	700	
				5% py 30% py	chl				44.9-46.7, 47.2 - salmon pink to pinkish green alt. tuff w/ patchy epidote, chlorite, QC, Si 80-100.														100	46.7				
				1-3% py tr epy					47.0-47.2 sil. Kspar, etc. 30% py in blebs, 1-2% cpy; 47.1 - fluorite, tr.														100	23487	.26	.008	770	
				3% py	chl				Pinkish green tuff looks vaguely intrusive.														100	48.4				
				1-3% py																			100	23488	.18	.005	600	
																							93	49.5				
									50.3 Rusty frx appear														50.3	23489	.10	.003	725	
									50.6 Ash tuff, f-ugr, massive, med. green to gray green; 2-3% diss py, +1-2% py in veins w/ or w/o red hematite(?). Local epidote ± Kspar. 5-10% QC, discontinuous veins & gashes. Tr fluorite to 55.0m															87	23490	.02	.001	440
																							51.8	87	23491	.03	.001	545
																							53.3					
									54.3-54.4 calcite vein, shear above														88	23492	.02	.001	395	
									54.5 2x3mm														54.9					
									55.5 - decrease in QC veining to 3-5%														80	23493	.10	.003	400	
									56.0 3mm x 3, @ 45°-50°														56.4					
									57.2 } Salmon Kspar on frx, + flooding from															93	23494	.07	.002	142
									57.5-57.6, py. 7-10%, vns, blebs, diss														57.9					
									57.9-58.0 7-10% py														100	23495	.34	.010	275	
									58.2 2mm, 1mm, 40° & 30°														59.4					
									59.4 4cm calcite														81					

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-49

 Page 6 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/T Au	opt Au	ppm Cu
60		Δ Δ Δ Δ					JJH	7/9/90	As above, brecciated															81	23496	.28	.008	380
									2cm pink cal. @ contact		20'													81.0				
				3-5% PY					Ash tuft, mgr, massive, pinkish (Kspar) 1-2% Epidote in patches (1-3cm) 3-5% Pt, diss + blebs, veinlets; siliceous orange-rusty trx					Si ₁₀₀										87	23497	.08	.002	365
				5-7% PY					Ash tuft, far-up, sil, variegated-dark green, buff, gray; 5-7% Qc in tear trx - slump features?					Si ₁₀₀ Ep ₁										87	63.2			
65				3-5% PY					Tr - 1% epidote in small patches, minor chlomite. 3-5% py in blebs, diss + veinlets. Increasing Kspar w/ depth, pinkish. Rusty trx															64.0	23498	.17	.005	640
									65.2 - broken core, → pebbles + gouge = fault zone. Rusty trx + orange rusty gouge. 64.6 Qc decreases to 1-3%															93	23499	.05	.001	410
																								65.5	65.5			
																								69	23500	.04	.001	555
																								67.0	67.0			
																								53	23501	.03	.001	235
				3-5% PY																				68.6	68.6			
				Rusty trx																				53	23502	.05	.001	650
70																								70.1	70.1			
																								53	23503	.06	.002	430
																								71.6	71.6			
																								31	23504	.02	.001	320
																								73.2	73.3			
									Basalt						Si ₇₀									87	23505	.01	.001	97
75																								74.7	74.6			

Box 8

Box 9

Box 10

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-51

Page 4 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																									g/t Au	opt Au	ppm Cu
30				1% py			JH 10/9/90	Felds, Porphyry, as above						Sil100									23622 30.5				
								Porphyry is weakly tuffaceous.															100	23623	.23	.007	35
								34.8-34.9 patch of hbl (50%) + py (80%)															87	23624	.18	.005	49
								34.8-35.0															94	23625	.56	.016	71
35				40% py				Xl - ash tuff, sil. med. gray, fgr, rusty frx + joints															93	23626	.82	.024	111
								35.9 patch of py + black min - hbl. 4cm x 5cm joints @ 65°, Frx @ 20°-30°															93	23627	.42	.012	70
								36.4 min ^o on joints tends to be thicker - up to 1mm.															100	23628	.80	.023	118
								36.4-38.2 broken core, rusty frx															94	23629	.96	.028	82
				15% py				38.2 3cm Qc + py + black mineral (hbl)															100	23630	.34	.010	62
				with py				38.6 Rusty frx end															100	23631	.18	.005	112
				py				39.8 2mm py - 40.0 xl quantity varies from															94	23632	.22	.006	34
				py				40.2 3mm py															100	23633	.34	.010	62
								40.3 qtz pad w/ hbl 20% to 80% "por ^o "															100	23634	.18	.005	112
								Sections have 50%-80% xls = xlash tuff															100	23635	.34	.010	62
								41.5 py blebs															100	23636	.34	.010	62
								42.2-42.4 - 3x1mm joints w/ py, trasp															100	23637	.34	.010	62
								43.4 - Frx @ 15° w/ py (6mm cubes)															100	23638	.18	.005	112
								43.5 3mm py, qtz, trasp, py, icm bleached above & below															100	23639	.18	.005	112
								44.1 6mm, hbl + xl ^{me} py															93	23640	.22	.006	34

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-51

Page 5 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	JD	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																									g/t Au	opt Au	ppm Cu	
45							JJH 10/9/90	Xl-ash tuff, xl conc. variable from 20% to 80% sil. Xl-ash grades to ash-xl & back.				F	S ₁₀₀										43	23632 45.8	.22	.006	34	
								47.6 rusty frx & joints, to 52.5				B										30	100	23633 47.2	.32	.009	33	
								47.7-51.8 very rusty frx & joints														25	81	23634 48.8	.40	.012	46	
50																							87	23635 50.3	.22	.006	53	
																							100	23636 51.8	.35	.010	50	
																							100	23637 53.3	.30	.009	80	
																							45	81	23638 54.9	.58	.017	68
55																							93	23639 56.0	.22	.006	84	
								56.0 Ash xl tuff, very sil, fine textured, unjointed, frx @ 90-45° w/ 1-2mm QC					S ₁₀₀										84	23640 57.1	.04	.001	71	
								57.1-57.2 30% QC vns, @ 85° & irreg															93	57.1				
								57.6 57.5-57.6 30% py in blebs to 1cm & 1mm vns															57.9	23641 58.3	.02	.001	166	
								57.2-59.4 5-7% py in blebs & irreg vns.															100	23642 59.4	1.04	.030	98	
								59.4 Ash tuff, med, med. gray sil.															94	23643 1.46	1.33	.039	113	

60

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-51

Page 7 of 14

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/T Au	opt Au	ppm Cu
75				7-10% py	QC	QC	JJH	11/9/90	75.5-76.2 50% Qc vns, bx, patch of epidote, 7-10% py,						5.100									23654 75.5	.62	.018	250	
				1-3% opy					Interbedded tufts, as above, sil, locally chl, pyrite generally 1-3%, locally greater, to 20%, over 5-10cm intervals, w/chl.															23655 76.2	.120	.006	124	
				7-10% py		chl			77.7 Scattered Qc vns, @ 25°-75°, 1mm-5mm. Deeph 4-6mm patch of epidote. Tufts generally fgr.															23656 77.7	.101	.001	129	
				3-5% py		QC			79.2															23657 79.2	.73	.021	281	
				1-3%					80.1 2mm 80.3 5mm 80.8 2mm @ 50°, 3mm @ 25°															23658 80.8	1.02	.030	228	
				7-10% py					81.6 82.0															23659 82.3	.44	.013	191	
				1-3% py		QC			83.6 2mm, 8mm															23660 83.8	.30	.009	135	
				10% py		chl			84.3 84.5															23661 85.3	.36	.011	192	
				1-3% py		QC			86.3 2.3cm															23662 86.4	.21	.006	200	
				1-3% py					86.9 Ash tuft, mgr, greenish gray, locally mauve, minor py, 1-3%, occasional Qc vns															23663 88.4	.32	.009	138	
																								23664 89.9	.20	.006	180	

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-51

Page 8 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																										g/T Au	opt Au	ppm Cu	
90				1-3% py			JJH	11/9/90	Ash cut, as before															100	23665	.61	.018	183	
																									914				
																									100	23666	.51	.015	147
																									93	928			
				1-3% py					Ash, xl & lapilli tufts, inter-bedded, sil, med grey to greenish grey. Py 1-3%																100	23667	.24	.007	167
				7% py					92.8 - 94.4 - QC veins, @ 35°, 5mm - 3cm, 15% overall.																	945			
95									93.2 - 3cm, w/ 1cm Fe carb in contact.																100	23668	1.05	.031	190
				1-3% py																						960			
																									100	23669	1.01	.029	200.
																										975			
																									100	23670	.03	.001	103.
																										991			
100				3-5% py & po																					100	23671	.01	.001	50
																									100.6	100.6			
																									93	23672	.02	.001	127
																										102.1	102.1		
																									100	23673	.41	.012	120
																										103.6			
105																									100	23674	.12	.004	94

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-51

Page 9 of 14

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	11-12/9/90																	COMMENTS	g/T Au	opt Au
105				3-5% py+po																			105.2				
				2-4% py+po																			100	23675	.62	.018	80
																							100	23676	160	.018	76
				3-5% po																			100	23677	.21	.006	61
110				3-5% po																			94	23678	.10	.003	47
				3-5% po+py																			100	23679	.20	.006	77
																							100	23680	.01	.001	68
115																							100	23681	104	.001	92
																							93	23682	.02	.001	74
				5-7% py+po																			100	23683	.01	.001	104
																							88	23684	.25	.007	60
				TP. v+po																			100	26385	.86	.005	34

Lapilli-ash tuff, as above

107.7 Frx zone? leached, pale green, 2 v. micaceous.

109.8 1-2% epidote

Predominantly po, minor py
112-113 - vaguely intrusive texture, bleached w/ 2mm chl

Ash tuff, f-mgr, ocell xl or lapilli, sil, gray; 3-5% po+py, po diss + mchl clots, py diss + veinlets, locally one predominates over other. 1-2% fine QC veinlets @ 25°-35°

45.7-115.8 Bx, looks like orange concrete

117.1 1cm
117.3 Bx zone, w/ 10cm "rusty concrete"

117.8 Ash tuff, as above, splotchy light greenish grey + purple mauve. Py - diss + veinlets, po - diss, 5-7%
119.0 Lapilli-ash tuff, mgr, trace sulphides, except 120.55-120.6 = 7% po

DIAMOND DRILL LEDGER

DDH No.

90-51

RANGE NO. 11

TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Feet	g/T Au	opt Au	ppm Cu	DESCRIPTION
613	15.2	16.8	1.6		.04	.001	30	Felds Por ^y , py on joints + frx, Joint density = 25-30/m
614	16.8	18.3	1.5		.19	.006	47	" " " JD = 25-30/m
615	18.3	19.8	1.5		.22	.006	34	" " " "
616	19.8	21.3	1.5		.25	.007	30	" " " 30-35
617	21.3	22.9	1.6		.16	.005	50	" " " "
618	22.9	24.4	1.5		.03	.001	90	" " " "
619	24.4	25.9	1.5		.62	.018	49	" " " 35-40
620	25.9	27.4	1.5		.41	.012	34	" " " 40-50
621	27.4	29.0	1.6		.01	.001	26	" " " "
622	29.0	30.5	1.5		.02	.001	19	" " " "
623	30.5	32.0	1.5		.23	.007	35	" " " 35-40
624	32.0	33.5	1.5		.18	.005	49	" " " "
625	33.5	35.0	1.5		.56	.016	71	" " " "
626	35.0	36.6	1.6		.82	.024	111	" " " 30-35
627	36.6	38.1	1.5		.42	.012	70	" " " "
628	38.1	39.6	1.5		.80	.023	118	" " " "
629	39.6	41.2	1.6		.96	.028	82	X1-ash tuft " " + Vns
630	41.2	42.7	1.5		.34	.010	62	" " " " " 25-30 "
631	42.7	44.2	1.5		.18	.005	112	" " " " " "
632	44.2	45.8	1.6		.22	.006	34	" " " " " "

DIAMOND DRILL LEDGER

DDH No.

90-51

Page No. 12

Y TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	PPM Cu	DESCRIPTION
	Metres	feet	Metres	feet				
633	45.8	47.2	1.4		.32	.009	33	xl-ash tuft, J.D. = 25-30
634	47.2	48.8	1.6		.40	.012	46	" "
635	48.8	50.3	1.5		.22	.006	53	" " rusty, broken
636	50.3	51.8	1.5		.35	.010	50	" " " "
637	51.8	53.3	1.5		.30	.009	80	" " 25
638	53.3	54.9	1.6		.58	.017	68	" " 35
639	54.9	56.0	1.1		.22	.006	84	" " 45
640	56.0	57.1	1.1		.04	.001	71	Ash tuft, sil, 1-2% py
641	57.1	58.3	1.2		.02	.001	166	" " " 5-7% py in blebs & vns
642	58.3	59.4	1.1		1.04	.030	98	" " " " "
643	59.4	61.0	1.6		1.33	.039	113	" " , mag, 1-3% py
644	61.0	62.0	1.0		1.43	.042	127	" " " 2-4% py + po
645	62.0	62.9	0.9		.82	.024	82	" " " 1-3% py, broken core
646	62.9	64.3	1.4	.021 / 10.3	.39	.011	50	Ash + xl tuft, 1-2% py, broken, rusty frx
647	64.3	65.8	1.5		.16	.005	76	" " " 1-3% py
648	65.8	67.3	1.5		.01	.001	115	" " " "
649	67.3	68.6	1.3		.94	.027	297	Interbedded sil. tufts, tr-1% py, tr opy
650	68.6	70.1	1.5		.40	.012	625	" " " " "
651	70.1	71.6	1.5		.03	.001	216	" " " " "
652	71.6	73.2	1.6		.11	.003	224	" " " " "

DIAMOND DRILL LEDGER

DDH No.

90-51

Page No. 13

Y TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Au	DESCRIPTION
	Metres	feet	Metres	feet				
653	73.2	74.4	1.2		.15	.004	227	Interbedded sil. tufts, tr-1% py
654	74.4	75.5	1.1		.62	.018	250	Ash tuft, sil, 15% Qc vns, 3-20% py
655	75.5	76.2	0.7		.20	.006	124	" " " 50% " , 7-10% p (box)
656	76.2	77.7	1.5		.01	.001	129	Interbedded sil. tufts, 1-3% py
657	77.7	79.2	1.5		.73	.021	281	" " " 7-10% py
658	79.2	80.8	1.6		1.02	.030	228	" " " 3-5% py
659	80.8	82.3	1.5		.44	.013	191	" " " 5-7% py
660	82.3	83.8	1.5		.30	.009	135	" " " 1-3% py
661	83.8	85.3	1.5		.36	.011	192	" " " 3-5% py
662	85.3	86.9	1.6		.21	.006	200	" " " 1-3% py
663	86.9	88.4	1.5		.32	.009	138	Ash tuft, sil, mgr, 1-3% py
664	88.4	89.9	1.5		.20	.006	180	" " " "
665	89.9	91.4	1.5		.61	.018	183	" " " "
666	91.4	92.8	1.4		.51	.015	147	" " " "
667	92.8	94.5	1.7		.24	.007	167	Interbedded sil tufts, 1-3% py
668	94.5	96.0	1.5		1.05	.031	190	" " " "
669	96.0	97.5	1.5		1.01	.029	200	" " " "
670	97.5	99.1	1.6		1.03	.001	103	" " " "
671	99.1	100.6	1.5		1.01	.001	50	Lapilli-ash tuft, sil, 3-5% py + po
672	100.6	102.1	1.5		1.02	.001	127	" " " "

DIAMOND DRILL LEDGER

DDH No.

90-51

Page No. 14

Y TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH Metres	g/T Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet					
673	102.1	103.6	1.5	.41	.012	120	Lapilli-ash tuft, sil, 3-5% py+po
674	103.6	105.2	1.6	.12	.004	94	" " "
675	105.2	106.7	1.5	.62	.018	80	" " "
676	106.7	108.2	1.5	.60	.018	76	" " "
677	108.2	109.7	1.5	.21	.006	61	" " "
678	109.7	111.6	1.9	.10	.003	47	" " 3-5% po
679	111.6	112.8	1.2	.20	.006	77	Ash tuft, sil, 3-5% potpy
680	112.8	114.3	1.5	.01	.001	68	" " "
681	114.3	115.8	1.5	.04	.001	92	" " "
682	115.8	116.8	1.0	.02	.001	74	" " "
683	116.8	117.8	1.0	.01	.001	104	" " " + bx
684	117.8	119.0	1.2	.25	.007	60	" " variegated, 5-7% py+po
685	119.0	120.6	1.6	.86	.025	34	Lapilli-ash tuft, sil, tr py+po
686	120.6	122.0	1.4	.22	.006	160	Calc-sil alt mafic vol ^{ic} , 5-7% potpy
687	122.0	123.4	1.4	.42	.012	200	" " "
688	123.4	125.0	1.6	.63	.019	147	" " "
689	125.0	126.5	1.5	.53	.015	190	" " "

PROPERTY SPECTRUM D.D.H. 90-52 Page 1 of 16

AREA NOREX SECTION 90-52
CLAIM RED 0061 AZIMUTH (T) 042°
DATE Started 10/19/90 DIS
Completed 12/19/90 DIS
GRID CO-ORDS Line 9945 N INCLINATION -60° CONTRACTOR J.T. Thomas
Station 9814 E Hole 169.5 LOGGED BY J.J. Hylands
SURVEY CO-ORDS Northing _____ DEPTH Casing 35.05 LOGGED BY _____
Easting _____ Overburden 39.6 SCALE 1:100
ELEVATION 1510 m CORE SIZE B&TW CORE STORED AT Property
CORE RECOVERY 88.4%

COMMENTS First attempt @ -45° for 70ft casing. Steepened to -60°. Target was QM/Volcanic contact on east side of Norex.
QM + volcanics with multiple quartz veins intersected to 80.1 m, variable pyrite thereafter

SURVEY DATA

DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-60°	042°	Brunton				

GEOLOGY

SIGNIFICANT ASSAY AVERAGES

FROM	TO	UNIT	INT.	T.W.	As oz/t	% Cu
0	39.6	Casing				
39.6	75.7	QM				
75.7	80.8	QA±PT				
80.8	86.9	QM				
86.9	92.7	AP				
92.7	103.2	AT				
103.2	105.6	AP				
105.6	130.4	PA/AT				
130.4	140.9	AP				
140.9	145.5	APB				
145.5	153.2	BX/FT				
153.2	169.5	QM				
64.0	79.2	Qtz vns, py, sp				
140.9	151.8	Py, aspy				
45.5	150.9		5.4		5	.08

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 2 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS								
							C O M M E N T S																		g/T Au	g/T Au	ppm Cu						
30							<u>J. Hylands</u>	<u>12/9/90</u>																									
							CASING TO 35.05M.																										
35																																	
40																																	
45																																	

35.0
OVERBURDEN - Brown-orange sandy soil, clayey QM + basalt boulders.

39.6
QM, mgr, qtz, felds, bio(?) 3-5% py in small blebs + diss. QM is chalky weathered. Local malachite. colour is pinkish-white. minor = tr aspy

40.8
41.1
41.4
41.9
42.5 to 44.2 sandy gouge

42.0 - rock becomes rusty orange stained.

44.2

39.6						
50	23690	.30	.009	1260		
40.8						
68	23691	.40	.012	1780		
42.3						
47	23692	.74	.022	1050		
44.2						
67	23693	.62	.018	1220		

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 3 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS					
							DATE																	g/t	opt	ppm			
							COMMENTS																				Au	Au	Cu
45				3-5% py 1-2% bc py P1. py	20° P1. py		J J H															45.7							
				P4. py	40° P4. py		12/19/90															100	23694	140	.012	2730			
				P1. py P1. py	20° 25° 43° P1. py P1. py		<p style="text-align: center;">COMMENTS</p> <p>QM, med grained, orange, weathered, varied with quartz + py, py; py + py diss</p> <p>46.1 0mm</p> <p>46.2-46.4 2 x 2-4mm, @ 0°/10°</p> <p>46.4 1cm @ 5°</p> <p>47.1 mal on fr-x, 1cm qtz</p> <p>46.0-49.5 5-10% mal + az in split core</p> <p>48.7 1cm</p> <p>48.9 mal + az, 0mm @ 25°</p> <p>49.2 4mm</p> <p>49.5 az on fr-x 49.4 4mm @ 45°, P4. py</p> <p>49.8</p> <p>50.3</p> <p>50.5 3 x 5mm @ 40°/35°</p> <p>51.1 2cm 54.2-54.3 10cm</p> <p>51.7 2 x 5mm @ 30°</p> <p>51.9 1cm @ 30°, mal.</p> <p>53.5 5mm</p> <p>54.4</p> <p>54.6 5mm x 2</p> <p>55.6 5mm</p> <p>56.1, 56.2, 56.3 7-10mm</p> <p>56.4</p> <p>56.6 4 x 5mm - 1cm</p>																		94	23695	.42	.012	1510
				P4	30° P4																			47.2					
				P4	30° P4																			48.8					
50				P4	30° P4																			87	23696	.56	.016	2430	
																								50.3					
																								87	23697	.21	.006	1320	
																								51.8					
																								73	23698	.40	.012	1200	
																								53.3					
				P1. py	20° P1. py																			62	23699	.81	.024	1650	
																							54.9						
				3-5% py P1. py	40° P1. py																		87	23700	.41	.012	1110		
				P4	30° P4																		56.4						
				P4	30° P4																		73	23701	.60	.018	1680		
																							57.9						
				P4	30° P4																		67	23702	.41	.012	1120		
																							59.4						
60				P1. py	40° P1. py																		62	23703	.20	6	825		

Core is generally well fractured, with fr. fr.
 preservation from 1cm to 10cm max.
 Mafic mineral is chlorite. Fragments have 1/2-1cm pyrox

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 5 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	opt Au	ppm Cu
75				py, cry hem	Q	75.5-75.7 Qtz, 10% py, 5% cp, 2% hem?	JH	13/9/90															93	23713	.95	.028	3200	
																							76.2	75.7	23714	.39	.011	2210
80				3-5% py tr cp 10% py 1-2% mag hem.	80% Qtz Vns	Ash & lapilli tuff, mgr, extensively chloritized. 30% Qtz Vns @ 20-30° 3-5% py, 1-2% mag, 1-2% hem, tr cp 76.1 sem Qtz, 10% py																	100	77.2				
																							77.7	23715	.36	.011	2170	
				1-2% py	5% Qtz																		93	78.7				
																							79.2	79.2	23716	.41	.012	2340
				b b b 1-3% py	b b b b	80.1 80.8 82.4 82.6 83.7-83.8 sp?	Tuff? Dk grey, vfg, sil, 15-20% irreg Qtz+Vns 1-2% py qm, mgr, grey, locally silicified. 80.8-82.1 - very low recov, sil. 82.6-84.5 - sil. Pyrite generally low, 1-3%, locally 3-5% in very sil. sections																38	80.1				
																							80.8	23717	.52	.015	505	
				3-5% py	b b b b	82.4 82.6 83.7-83.8 sp?																	27	23718	.20	.006	750	
																							82.3	82.1				
				1% py	b b b b	82.6 83.7-83.8 sp?																	82.3	82.1				
																							83	82.6	23719	.19	.006	900
				2-4% py tr cp	shear b b b b	83.7-83.8 sp? 84.2 84.5 86.9 87.3	Pyrite generally low, 1-3%, locally 3-5% in very sil. sections Ash-lapilli (?) tuff, alt, dk purplish grey, 15-20% irreg patch (tension gashes?) and vn Qc; 1-3% diss py, tr cp + vn py																17	83.8				
																							83.8	81.8	23720	.27	.008	1710
				1% py	b b b b	84.2 84.5 86.9 87.3																	93	84.5				
																							85.3	23721	.34	.010	1000	
				2-4% py tr cp	shear b b b b	86.9 87.3																	94	85.7				
																							87	23722	.40	.012	1800	
				2-4% py tr cp	shear b b b b	87.3																	67	23723	1.04	.030	7400	
																							88.4					
90																								87	23724	.51	.015	4420
																									89.4			

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 8 of 16

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	COMMENTS	BIT Au	opt Au	ppm Cu
120				40% py 7-10% py	20	QC	JJH 13/9/90							5690-100								120.4					
																						100	23746	.20	.006	1280	
																							121.9				
																						100	23747	.10	.003	1200	
																							123.4				
				5-7% py																		88	23748	.08	.002	1840	
125																							125.0				
																						100	23749	.04	.001	1000	
																							126.5				
				80% py 5-7% py	20	Q																100	23750	1.01	.029	955	
																							128.0				
																						100	23751	.01	.001	625	
																							129.2				
																							130.0				
																						88	23752	.21	.006	1370	
130																							130.4				
				1-3%										5690-100								131.1	23753	.22	.006	1000	
																							131.5				
																						100	23754	.58	.017	1470	
																							132.6				
																								133.3			
				1-3%																		100	23755			885	
																							134.1				
135																						100	23756	.17	.005	665	

Box 15

Box 16

Box 17

130.4
130.7 Ash-lapilli tuff, altered, sil locally;
Locally bleached: 132.0-132.2, 133.7-133.8
QC vns nll core, bx vns @ 133.9 extends
intermittently to 134.7, woclasts.
Pyrite is variable, say 1-3%, but up to 10%
132.6 Bx w calcite vns 15% over 5-10cm, dics
7 14 vns.
133.3
133.9 Bx vns w cal. matrix, 2cm wide, nll core
134.1

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 9 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE	UNIT															g/t Au	opt Au	ppm Cu
135				1-3% py 5-7% py	QC		JJH															23756 -135.6	.17	.005	665
				5-7% py			14/9/90															94 -137.2	.58	.017	910
				5-7% py																		107 -138.7	109	1003	970
																						100 -139.7	110	1003	1120
																						140.2 -139.8			
																						100 -140.9	.01	.001	429
140																						141.7 -140.9	.87	.025	598
																						100 -141.9	.51	.015	
																						100 -142.9	102	1001	970
																						143.2 -142.9			
																						100 -144.2	107	1002	675
																						144.8 -144.2			
																						100 -145.5	119	.006	628
145																						146.3 -145.5			
																						100 -147.0	.85	.025	800
																						147.8 -147.0	2.38	.064	1060
																						100 -148.5	3.20	.093	
																						148.3 -148.5	4.75	.139	
																						100 -149.3	3.48	.102	820
																						150.0 -149.3			

LOGGED BY JJH
DATE 14/9/90

C O M M E N T S

Ash - (lapilli) tuff, as above. 10-15% QC vns evenly, over 20-30 cm. Pyrite 1-3%, increasing to 5-7% in 10-15cm bleached intervals - approx one each 1.5m. Bleached intervals are sil, purple are not.

138.6-139.7 5-7% py

shear

140.9
141.2 2.5cm QC, in bx

Tuff is bleached, pale, altered, sheared, brecciated 3 QC vns/patches; 5-7% py, dis, blobs, veinlets.

142.1 - 4cm

142.6 - 3.5cm

145.5

Fault, breccia, shear zone, variably min. w py + aspy - 7-10% (?) combined Clasts of altered tuff + QC, + oconl QC vns @ 65°-80°

147.5
147.6

10x 18

10x 19

10x 20

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 10 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/T Au	opZ Au	ppm Cu
150				7-10% Py aspy			JJH 14/9/90															150.0 100	23768	2.10 4.58	.061 .137	669
							Fault/bx gouge; Tuff + RC clasts.															150.9 100	23769	101	.001	750
				3-5% Py			Gouge															151.8 100	23770	102	.001	740
				3-5% Py			Qm, light greenish grey, mafics + chl + pyr, propylite. Occhl 5-7mm qtz vns, 0°-90° to core axis. 3-5% py in															153.2 100	23771	101	.001	201
				3-5% Py			blebs, diss + accul. vnlts, + tr aspy. Generally bleached adj. to qtz vns.															153.9 93	23772	102	.001	388
				3-5% Py																		155.0 100	23773	101	.001	222
				pyraspy																		157.0 100	23774	101	.001	187
							Sericite, w/ qtz vns, 1mm py-aspy vnl															158.6 100	23775	101	.001	107
																						159.5 100	23776	101	.001	99
																						161.0 100	23777	105	.001	176
																						161.5 100	23778	102	.001	148
																						162.5 100	23779	102	.001	170

150x20
155
150x21
155
150x22
160
165

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-52

Page 11 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																											g/T Au	opt Au
165							JJH	14/9/90																23779	.02	.001	170	
																								160-165				
									166.9 OM is pale green, argillic alteration - minor sericite, epidote, saussurite, Malas gone															23780	.04	.001	201	
									168.2 multi stage qtz + carb vn below shaa. 1% aspy, 168.5 1% py															100-166.9				
																								23781	.02	.001	112	
																								168.2				
																								100-168.2	.01	.001	36	
																								169.2	.01	.001	138	
																								120-169.5				
170																												

core 23

10°
1% aspy
py
10°
R

DIAMOND DRILL LEDGER

DDH No. 90-52

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23690	39.6	40.8	1.2		.30	.009	1260		QM, weathered, 3-5% py, tr-asp, cpy
691	40.8	42.3	1.5		.40	.012	1780		" " " " "
692	42.3	44.2	1.9		.74	.022	1050		Sandy QM gouge
693	44.2	45.7	1.5		.62	.018	1220		QM, rusty-orange, 3-5% py, 1% (?) asp
694	45.7	47.2	1.5		.40	.012	2730		" , orange, 3-5% py, 1-2% cpy, qtz veins
695	47.2	48.8	1.6		.42	.012	1510		" " " " "
696	48.8	50.3	1.5		.56	.016	2430		" " " " "
697	50.3	51.8	1.5		.21	.006	1320		" " " " "
698	51.8	53.3	1.5		.40	.012	1200		" " " " "
699	53.3	54.9	1.6		.81	.024	1650		" " " " "
700	54.9	56.4	1.5		.41	.012	1110		" " " " "
701	56.4	57.9	1.5		.60	.018	1680		" , mgr. " " tr-1% cpy "
702	57.9	59.4	1.5		.41	.012	1120		" " " " " " "
703	59.4	61.0	1.6		.20	.006	825		" " " " " " "
704	61.0	62.5	1.5		.19	.006	535		" " " " " " "
705	62.5	64.0	1.5		.23	.007	785		" " " " " " "
706	64.0	65.5	1.5		.20	.006	800		" " " " " " "
707	65.5	67.0	1.5		.24	.007	980		" " " " " " "
708	67.0	68.6	1.6		.05	.001	835		" " " " " " "
23709	68.6	70.1	1.5		.06	.002	1100		" " " " " " "

DIAMOND DRILL LEDGER

DDH No. 90-52

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23710	70.1	71.6	1.5		.21	.006	1190		QM, mgr, 3-5% py, tr-1% cpy, Qtz veins
711	71.6	73.2	1.6		.26	.008	1440		Lapilli-ash tuff, 7-10% py, 1% mag, 50% qtz
712	73.2	74.7	1.5		.32	.009	3070		" " " "
713	74.7	75.7	1.0		.95	.028	3200		" " " "
714	75.7	77.2	1.5		.39	.011	2210		Ash ± lapilli tuff, 3-5% py, 1-2% mag, tr cpy, 30% qtz
715	77.2	78.7	1.5		.36	.011	2170		" " " "
716	78.7	80.1	1.4		.41	.012	2340		" " " "
717	80.1	80.8	0.7		.52	.015	505		Tuff(?), sil, 15-20% qtz, 1-2% py
718	80.8	82.1	1.3		.20	.006	750		QM, sil, 1-3% py
719	82.1	83.8	1.7		.19	.006	900		" , " , 3-5% py, low recovery
720	83.8	84.5	0.7		.27	.008	1710		" ? , mostly qtz, 3-5% py
721	84.5	85.7	1.2		.34	.010	1000		" , mgr, 1% py
722	85.7	86.9	1.2		.40	.012	1800		" " "
723	86.9	88.4	1.5		1.04	.030	7400		Ash-lapilli(?) tuff, 2-4% py, tr cpy, 15-20% QC
724	88.4	89.9	1.5		.51	.015	4420		" " " "
725	89.9	91.4	1.5		.20	.006	2210		" " " "
726	91.4	92.7	1.3		.18	.005	1790		" 3-5% py " "
727	92.7	94.1	1.4		.21	.006	2410		Ash tuff 7-10% py " qtz veins
728	94.1	95.9	1.8		.22	.006	2140		" 3-5% py "
23729	95.9	97.5	1.6		.20	.006	2290		" 10-12% py "

DIAMOND DRILL LEDGER

DDH No. 90-52

SAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH MET	g/T Au	opt Au	ppm Au		DESCRIPTION
				g/T opt					
23730	97.5	98.9	1.4		.37	.011	2280		Ash tuft, variably sil, 10-12% py
731	98.9	100.6	1.7		.20	.006	2310		" " 7-10% py
732	100.6	101.9	1.3		.21	.006	1720		" " " + QC veins
733	101.9	103.2	1.3		.20	.006	1960		" " " "
734	103.2	104.4	1.2		.22	.006	1300		Ash-lapilli tuft, 7-10% py, 5-7% QC vns
735	104.4	105.6	1.2		.05	.001	1120		" " "
736	105.6	106.9	1.3		.21	.006	1560		Interbedded lapilli-ash & ash tufts, 5-7% py
737	106.9	108.2	1.3		.24	.007	1150		" " " "
738	108.2	109.7	1.5		.21	.006	1610		" " " "
739	109.7	111.2	1.5		.20	.006	1110		" " " "
740	111.2	112.8	1.6		.25	.007	1200		" " " " alt, 1% py,
741	112.8	114.3	1.5	38/.011	.67	.020	1310		" " " " " "
742	114.3	115.8	1.5		.10	.003	1560		" " " " " "
743	115.8	117.3	1.5		.05	.001	1300		Ash tuft, 7-10% py, QC
744	117.3	118.9	1.6		.22	.006	920		" " "
745	118.9	120.4	1.5	2.99/.087	1.31	.038	1000		" " "
746	120.4	121.9	1.5		.20	.006	1280		" " "
747	121.9	123.4	1.5		.10	.003	1200		" " "
748	123.4	125.0	1.6		.08	.002	1840		" 5-7% py
23749	125.0	126.5	1.5		.04	.001	1000		" "

DIAMOND DRILL LEDGER

DDH No. 90-52

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH MET	g/T Au	opt Au	ppm Cu		DESCRIPTION
				g/T opt					
23750	126.5	128.0	1.5	.55/.016	1.01	.024	955		Ash tuft, 5-7% py
751	128.0	129.2	1.2		.01	.001	625		Ash tuft, variegated, 5-7% py
752	129.2	130.4	1.2		.21	.006	1370		" " "
753	130.4	131.5	1.1		.22	.006	1000		Ash-lapilli tuft, alt, sil, 1-3% py
754	131.5	132.6	1.1		.58	.017	1470		" " " "
755	132.6	134.1	1.5		1.06	.031	885		" " " "
756	134.1	135.6	1.5		.17	.005	665		Ash-(lapilli) tuft, "
757	135.6	137.2	1.6		.58	.017	910		" "
758	137.2	138.7	1.5		.09	.003	970		" "
759	138.7	139.8	1.1		.10	.003	1120		" "
760	139.8	140.9	1.1		.01	.001	424		" "
761	140.9	141.9	1.0	.51/.015	.87	.025	598		Alt. tuft 5-7% py
762	141.9	142.9	1.0		.02	.001	970		" "
763	142.9	144.2	1.3		.07	.002	675		" "
764	144.2	145.5	1.3		.19	.006	628		" "
765	145.5	147.0	1.5		.85	.025	800	↑ 0.75/ 5.4 ↓	Fault zone, bx, 7-10% py ± aspy
766	147.0	148.5	1.5	3.20/.093	2.38	.069	1060		" " "
767	148.5	150.0	1.5	3.48/.102	4.75	.139	820		" " "
768	150.0	150.9	0.9	4.58/.134	2.10	.061	669	" " "	
23769	150.9	151.8	0.9		.01	.001	750		" " "

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-53

Page 2 of 4

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JJH</u> DATE <u>14/9/90</u>	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS																
																									g/t Au	opt Au	ppm Cu														
15								CASING TO 25.91 m, Reamed to 36.88 m. Core to 44.20 broken, weathered, with gouge/sand sections.																																	
20																																									
25								24.4 overburden, SM, tuff, basalt bed																																	
								25.9 QM, very broken, mgr, rusty orange, locally pink, greenish-propylitic, chl.																																	
30																																									

Box 1

DIAMOND DRILL RECORD

PROPERTY

SPECTRUM

DDH 90-54

Page 3 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																										g/t Au	opt Au	ppm Cu	
15				5% py 3% py tr mag epi	30° 30°	30° 30°	JJH	15/9/90	QM less weathered; pink quartz veins - aplite? matrix chloritized. 3-5% diss py, 1% mag. locally, tr apy. Weak propylitic.						56.90									15.2	94	23800	102	.001	312
				2% py	20°	20°			"pink qtz"															16.8	93	23801	.02	.001	331
				3-5% py																				18.3					
				20% mo 5% py	30°	30°			18.8 7mm															19.8	100	23802	.01	.001	261
				2-3% py " mag	40°	40°			19.5 1.2cm apite															19.8					
				Tr mo	20°	20°			20.5 3mm															21.3	100	23803	.01	.001	151
					80°	80°			21.0 Aplite															21.3					
				2-3% py " mag	20°	20°			22.5 QM is greenish-propylitic saussurite															21.3	88	23804	.02	.001	155
					45°	45°			22.8 2cm															22.9					
									22.9 1.5cm															21.3	100	23805	.01	.001	85
					15°	15°			24.7 Pink apite															24.4					
				3-5% py py	70°	70°			25.2 QM is argillically altered - pale green w/ sericite, chl, epidote?, over short intervals - 30-50m, cut by 1mm black vns. 3-5% py in both															24.7	100	23806	.01	.001	14
									25.8															25.2					
									26.5															25.9	100	23807	.03	.001	257
									26.8 2mm															25.9	100	23808	.01	.001	305
									29.6															27.4	100	23809	.02	.001	407
									29.6															28.1	100	23810	.01	.001	374
									29.6															29.6	100	23811	.03	.001	341

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-54

Page 4 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY												ASSAYS																				
							DATE	C O M M E N T S												BIT Au	opt Au	pp. Cu																	
							UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT																	
30				3-5% PY			JJH	<p>QM, orange to greenish orange, mgr; locally argillically altered, sericite, chlorite, epidote?, pale green, with black microfrx containing aspy? and py.</p> <p>31.4-33.0 QM is pink</p> <p>33.0 - QM is greenish</p> <p>34.5-34.7 3aplite, 2-4mm @ 70°, w/py</p> <p>5-7% py-diss, blebs, microfrx uns.</p> <p>QM is greenish grey w/ orange felds.</p> <p>40.8 Kspar alt^o, decreasing downwards from 100% to 50%</p> <p>44.1-44.2 shear</p> <p>QM is pink from ~ 44.4</p>																											30.5	23811	.03	.001	34
																																100	31.4						
																																32.0	23812	.01	.001	27			
																																100	33.0						
																																33.5	23813	.01	.001	311			
																																100	34.5						
																																35.0	23814	.01	.001	26			
																																100	36.0						
																																36.6	23815	.02	.001	28			
																																100	37.2						
																					38.1	23816	.02	.001	324														
																						38.4																	
																					100	23817	.01	.001	359														
																						39.6																	
																					88	23818	.01	.001	263														
																						41.2																	
																					100	23819	.01	.001	265														
																						42.7																	
																					71																		
																					43.3	23820	.03	.001	251														
																					67	44.2																	
																					107	23821	.02	.001	240														

Dors

35

Dors

40

Dors

45

150

10 Ap

70 Ap

30 Ap

55 Ap

80 Ap

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-54

Page 5 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							JJH	15/9/90																	COMMENTS	g/t Au	opt Au	ppm Cu	
45				7-10% py tr qtz																				23821 45.7	.02	.001	24.		
																							100	23822	.01	.001	161		
																								47.2					
																							81	23823	.01	.001	173		
																							48.8	48.7					
				5-7% py tr qtz asp																				43	23824	.01	.001	159	
																							50.3	50.0					
																								43	23825	.02	.001	197	
																								51.8	51.4				
				7-10% py tr qtz																				100	23826	.02	.001	219	
																								53.3	52.8				
																									23827	.01	.001	262	
																								94	54.0				
																								54.9	23828	.01	.001	238	
																									55.2				
																								100	23829	.01	.001	171	
																									56.4				
				3-5% py																					93	23830	.01	.001	163
																									57.4				
																									57.1	23831	.01	.001	192
				5-7% py																					100	58.7			
																									59.4	23832	.01	.001	207
																									81				
																									60.0				

Box 8

Box 9

Box 10

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-54

Page 6 of 13

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							COMMENTS																		GT Au	opt Au	ppm Cu
60				5-7% PY			JH	15/9/90								Arg							81	23833	.02	.001	18.
																							61.0				
				7-10% diss PY																			92	23834	.01	.001	5.
																							62.2				
																							67	62.5			
																							62.8				
																							33	23835	.02	.001	10E
																							67	63.7			
																							64.3	23836	.01	.001	176
																							87	64.7			
																							87	23837	.01	.001	27.
																							65.8				
				5-7% PY																			83	23838	.02	.001	180
																							67.1				
																							100	23839	.01	.001	24.
																							68.6				
				3-5% PY 1% mag																			93	23840	.02	.001	111
																							70.1				
																							100	70.4			
																							100	23841	.01	.001	176
																							72.1				
				2-4% py tr opy 1% mag	70° Q																		94	23842	.04	.001	591
					70° Q																		73.2	73.0			
																							93	23843	.02	.001	186
																							73.9	73.9			
				2-3% py 1% mag																			93	73.9			
																							74.7	23844	.02	.001	157

Box 10
 Box 11
 Box 12
 Box 13

LOGGED BY JH
 DATE 15/9/90

C O M M E N T S

Q M, argillic
 61.2
 QM, pink to greenish pink, porphyritic, local epidote blebs; matrix chloritized.
 7-10% diss py, locally 12-15%.
 Some frx stained brick red.
 Mismatch 62.8, very low recovery
 py assoc. w/ bio & chloritized bio

65.2 2% epidote
 65.7

72.1
 72.1-72.3 decreasing pink; 72.3-1cm g/f/vn
 73.1 5mm

72.1
 73.9

Arg

Arg

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-54

Page 7 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	opt Au	ppm Cu
75				3-5% Pt 1% mag			JH	16/9/90	Qm, pink, por ^{ls} 1-2mm py vns core: 77.2-77.7, 77.4-78.1, 78.2-78.4															75.2				
				py vns core																				93	23845	.01	.001	75
																								100	23846	.01	.001	161
																								77.7	77.7			
																								87	23847	.14	.004	261
																									79.2			
80				3-5% py 1% mag					81.5-81.9 1mm py core															94	23848	.02	.001	92
																									80.8			
																								100	23849	.01	.001	103
																									82.3			
																								100	23850	.02	.001	185
																								83.8	83.5			
																								93	23851	.02	.001	244
																									84.8			
																								85.3	23852	.01	.001	248
																								100	86.1			
																								86.9	23853	.01	.001	226
																									87.0			
																								100	23854	.02	.001	170
																									88.4			
																								100	23855	.02	.001	125
																								89.9	90.0			

Box 13

Box 14

Box 15

90

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-54

Page 8 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	opt Au	ppm Cu
90				7-10% py			JJH	16/9/90	QM?, grey, biotite slightly chloritized, slightly porphyritic, mgr, 7-10% py															90.0				
																								67	23856	102	.001	40.
																								91.4				
																								100	23857	101	.001	373
																								92.9				
																								100	23858	101	.001	22.
																								94.5				
95				7-10% py																				100	23859	101	.001	348
																								96.0				
																								100	23860	.01	.001	238
																								97.5				
				7-10% py																				100	23861	.03	.001	253
																								99.1				
																								100	23862	.01	.001	304
																								100.6				
																								93	23863	.02	.001	373
																								102.1				
																								100	23864	.01	.001	154
																								103.6				
																								100	23865	.01	.001	260

Box 16

Box 17

Box 18

99.1 QM becomes pale green - argillitic?
pyrite more obvious. Up to 1% QSPY
Mo in some qtz vns.
7-10% py

101/6 1cm

103.5 - 103.7 shear

103.9 1cm qtz

103.6 - 105.2 QM becomes grey fresh, as before (pepper + salt)

Arg 2?

1% mo

30° Q

80% py
10% Mo

35° Q

DIAMOND DRILL RECORD

PROPERTY SPECTRUMDDH 90-54Page 9 of 13

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>NH</u>	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE <u>16/9/90</u>	C O M M E N T S																	ASSAY No. and INTERCEPT	g/T Au	opt Au
105				1-2% py 2-3% po 1% mag tr. epf																			105.2				
																							93	23866	.01	.001	318
																							106.7				
																							100	23867	.09	.003	580
																							108.2				
																							100	23868	.01	.001	179
																							109.7				
																							100	23869	.01	.001	61
				25% sul.																			110.6				
				1% mag																			111.0	23870	.80	.023	73
			8	10-15% sul.																			111.2	23871	.24	.007	203
			2																				111.6				
				1-2% py tr mag.																			100	23872	.44	.013	183
																							112.4				
																							112.8				
																							100	23873	.14	.004	80
																							114.3	114.1			
																							93	23874	.02	.001	54
																							115.8				
																							94	23875	.01	.001	51
																							117.4				
																							87	23876	.02	.001	40
																							118.9				
																							118.87				

DM, grey, mgc, slightly por.
py decreases to 1-2%, po increases
to 2-3%, magnetic reappears - w/ %
tr. epf w/ po

110.6 Shear. w/ py, sp, aspy 110.7-110.9 = 50% mm.

111.0
111.6 Fault zone w/ py, aspy
py mixts, aspy vtgr, black.

114.4
114.6

Colour changes from grey
to greenish grey to
pink & green. Biotite.

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres						
23796	9.4	10.8	1.4		.06	.002	535		QM, weathered, rusty frx, tr-1% py, tr aspy
797	10.8	12.2	1.4		.18	.005	456		" " " " "
798	12.2	13.7	1.5		.05	.001	464		" " " " "
799	13.7	15.2	1.5		.01	1	210		" " " " "
800	15.2	16.8	1.6		.02	"	312		" greenish grey, occn aplite + py vms, 3-5% py
801	16.8	18.3	1.5		.02	1	337		" " " "
802	18.3	19.8	1.5		.01	"	264		" " " "
803	19.8	21.3	1.5		.01	"	157		" pinkish grey 2-3% py 2-3% mag
804	21.3	22.9	1.6		.02	"	155		" " " "
805	22.9	24.7	1.8		.01	"	85		" propylitic " "
806	24.7	25.2	0.5		.01	"	14		Aplite dyke, pink, 1% py in blebs, 1cm qtz v. in mm
807	25.2	25.8	0.6		.03	"	257		QM, pinkish, 3-5% py
808	25.8	26.5	0.7		.01	"	305		" argillitic, "
809	26.5	28.1	1.6		.02	"	407		" " "
810	28.1	29.6	1.5		.01	"	374		" " "
811	29.6	31.4	1.8		.03	"	341		" " "
812	31.4	33.0	1.6		.01	"	273		" pink "
813	33.0	34.5	1.5		.01	"	311		" greenish "
814	34.5	36.0	1.5		.01	"	263		" " "
23815	36.0	37.2	1.2		.02	"	282		" " 5-7% py

DIAMOND DRILL LEDGER

DDH No. 90-54

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres						
23016	37.2	38.4	1.2		.02	.001	324		QM, greenish, 5-7% py
817	38.4	39.6	1.2		.01	"	359		" " "
818	39.6	41.2	1.6		.01	"	263		" " "
819	41.2	42.7	1.5		.01	"	265		" " 7-10% py
820	42.7	44.2	1.5		.03	"	251		" " "
821	44.2	45.7	1.5		.02	"	240		" pinkish "
822	45.7	47.2	1.5		.01	"	161		" " "
823	47.2	48.7	1.5		.01	"	173		" " "
824	48.7	50.0	1.3		.01	"	154		" argillia 5-7% py tr aspy, cpy
825	50.0	51.4	1.4		.02	"	147		" " " "
826	51.4	52.8	1.4		.02	"	219		" " " "
827	52.8	54.0	1.2		.01	"	263		" 50% " 7-10% py
828	54.0	55.2	1.2		.01	"	238		" pinkish, por ^{ls} , "
829	55.2	56.4	1.2		.01	"	171		" " " "
830	56.4	57.4	1.0		.01	"	163		Gouge, qtz clasts, 3-5% py
831	57.4	58.7	1.3		.01	"	192		QM, argillia, 5-7% py
832	58.7	60.0	1.3		.01	"	207		" " "
833	60.0	61.2	1.2		.02	"	184		" " "
834	61.2	62.5	1.3		.01	"	55		" , pink, por ^{ls} , 7-10% py
23035	62.5	63.7	1.2		.02	"	108		" " " " low recovery

DIAMOND DRILL LEDGER

DDH No. 90-54

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23836	63.7	64.7	1.0		.01	.001	176		QM, pink, por ^{ls} , 7-10% py
837	64.7	65.8	1.1		.01	"	213		" " " 5-7% py minor epidote
838	65.8	67.1	1.3		.02	"	180		" " " "
839	67.1	68.6	1.5		.01	"	244		" " " 3-5% py, 1% mag.
840	68.6	70.4	1.8		.02	"	111		" " " " "
841	70.4	72.1	1.7		.01	"	176		" " " " "
842	72.1	73.0	0.9		.04	"	591		" argillic, trcpy, 2-4% py, "
843	73.0	73.9	0.9		.02	"	186		" " " " "
844	73.9	75.2	1.3		.02	"	157		" , pink, por ^{ls} , 2-3% py, "
845	75.2	76.5	1.3		.01	"	75		" " " " "
846	76.5	77.7	1.2		.01	"	161		" " " " "
847	77.7	79.2	1.5		.14	.004	267		" " " " "
848	79.2	80.8	1.6		.02	.001	92		" " " " "
849	80.8	82.3	1.5		.01	"	103		" " " " "
850	82.3	83.5	1.2		.02	"	185		" " " " "
851	83.5	84.8	1.3		.02	"	244		" " " 3-5% py "
852	84.8	86.1	1.3		.01	"	248		" " " " "
853	86.1	87.0	0.9		.01	"	226		" argillic, " "
854	87.0	88.4	1.4		.02	"	170		" pink, por ^{ls} " "
23855	88.4	90.0	1.6		.02	"	125		" pink → grey " ends in shear

DIAMOND DRILL LEDGER

DDH No. 90-54

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
23856	90.0	91.4	1.4		.02	.001	404	QM? grey, mag, sl. por ^{ls} , 7-10% py
857	91.4	92.9	1.5		.02	"	373	" " " " "
858	92.9	94.5	1.6		.01	"	224	" " " " "
859	94.5	96.0	1.5		.01	"	348	" " " " "
860	96.0	97.5	1.5		.01	"	238	" " " " "
861	97.5	99.1	1.6		.03	"	253	" " " " "
862	99.1	100.6	1.5		.01	"	304	" , argillic, 1% aspy max, tr mo, 7-10% py
863	100.6	102.1	1.5		.02	"	373	" " " " "
864	102.1	103.6	1.5		.01	"	154	" " " " "
865	103.6	105.2	1.6		.01	"	260	" → fresh " " "
866	105.2	106.7	1.5		.01	"	318	QM, grey, 2-3% po, 1-2% py, 1% mag, tr. cpy
867	106.7	108.2	1.5		.09	.003	580	" " " " "
868	108.2	109.7	1.5		.01	.001	179	" " " " "
869	109.7	110.6	0.9		.01	"	61	" " " " "
870	110.6	111.0	0.4		.80	.023	73	Shear, 20 cm sp, py, aspy (50% sulphides)
871	111.0	111.6	0.6		.24	.007	203	QM, argillic, 1% mag.
872	111.6	112.4	0.8		.44	.013	183	Fault zone, gouge, py, aspy, 10-15% sulphides
873	112.4	114.1	1.7		.14	.004	80	QM, grey, 1-2% py, tr. mag
874	114.1	115.8	1.7		.02	.001	54	" " " " "
875	115.8	117.4	1.6		.01	"	51	" " " " " greenish
23876	117.4	118.9	1.5		.02	"	40	" pink green " "

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 2 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY											ASSAYS																						
							DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	g/t Au	opt Au	ppm Cu													
0							JJH	CASING TO 9.75 m.																																
5																																								
10				10-15% sul.				9.5	Ash tuff, chloritized, sil, well mineralized, occul short (15cm) bx. 7-10% py, 3-5% sp, tr-1% espy, local op, med-dk grey, black chl spots to 2-3 cm.																															
				py, sp, as				10.1-11.2	10cm QC w/ 10-15% py, 5% sp, 1% espy																															
									min ^o dros, veinlets, blebs																															
				10-15% sul				13.7-13.9	colour changes to purple.																															
15																																								

Box 1

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 3 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							C O M M E N T S																		glt Au	dpe Au	ppm Cu		
15				10-15% sul	50% Epid	15.2-15.3	J J H	17/9/90						5-7%									15.4	23882	.07	1002	795		
				5-7% py		16.4	Ash tuff, purple to dk grey, greenish 5-7% diss py, mgr.																107	23883	5.90	.172	620		
					50% Cal.	18.3 Acn																			16.4	23884	.21	1006	464
						20	Fault? very low recovery																	33	23885	.10	1003	591	
				50% py 50% po 50% py	150 chl 100 chl	21.3 21.7, 21.8 22.1 1cm	Ash tuff, purple, minor grey patches & streaks. 21.3-22.2 num. py & po vns, 1-5 mm, @ 30°-60°, w/ chl or qtz.																	88	23886	2.97	1087	919	
				5-7% py 1-2% po		22.9 23.1	5-7% py, diss & veinlets, 1-2% po																	22.1	23887	5.20	1152	463	
				25% sul		24.4	Silicified, 50% silica; 15% opy, 10% po, 1-2% cpy																	93	23888	.16	1005	545	
				7-10% po 5-7% py 1-2% cpy		24.8	Ash tuff, purple																		24.4	23889	.24	1007	878
						25.9	7-10% po, 5-7% py, 1-2% cpy																		100	23890	.15	1004	1220
					10-15% gm sil 1/2-3cm bands	28.8																			93	23891	.01	1001	763
				3-5% py + po																					27.4	23892	102	1001	602
																									100	23893	103	1001	447

Box 2

Box 3

Box 4

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 4 of 13

HOLE DEPTH	CORE V	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	COMMENTS	g/t Au	opt Au
30				3-5% py+po			J J H 17/9/90															100	23893	.03	.001	44
																						100	30.5			
																						30.8	23894	.01	.001	399
																						94	31.7			
																						32.3	23895	.02	.001	467
																						100	32.9			
																						33.5	23896	.01	.001	463
																						100	34.1			
35				3-5% py+po																		35.0	23897	.10	.003	430
																							36.3			
																						100	23898	.01	.001	427
																						36.6	36.6			
																						100	23899	.05	.001	514
																							38.1			
																						100	23900	.01	.001	687
																							39.6			
																						100	23901	.12	.004	419
																						41.2	41.2			
																						100	23902	.10	.003	435
																							42.0			
																						100	23903	2.58	.075	385
																							42.7			
																						100	23904	.04	.001	293
																							44.2			
45				3-5% po+py																		93	23905	.18	.005	466

Box 5

Box 6

Box 7

Ashyuff, purple

34.1 Ash & lapilliuff variegated purple & light greenish grey. Sulphides variable 5-7% po &/or py over 5-10cm intervals, 1-3% between

41.3 2mm
42.0 2mm
42.1-42.2 9tz w/ 30% py, 10% sp.
42.3 2mm pl, sp, 9tz
42.6 1.5cm 40% sp, 40% 9tz, 20% py

Silico (aq)

3-5% py+po

py 30°

py 60°

py 65°

3-5% po+py

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 5 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	COMMENTS	g/t Au	opt Au
45							JJH															23905	.18	.005	466	
																						45.7	45.5			
																						93	23906	1.04	.030	413
																						47.2	46.8			
																						100	23907	.38	.011	459
																						48.8	48.0			
																						488	23908	.95	.028	754
																						100	23909	.57	.017	455
																						50.3	50.2			
																						43	23910	1.02	1.001	378
																						51.8	51.8			
																						100	23911	1.50	.015	423
																						53.3	53.0			
																						100	23912	1.10	1.003	388
																						54.2	54.2			
																						54.8	23913	.03	1.001	408
																						100	23914	1.05	1.001	365
																						56.4	56.4			
																						93	23915	1.02	1.001	396
																						57.9	57.9			
																						100	23916	.04	1.001	493
																						58.2	58.2			
																						59.4	59.4			
60																						94	23917			

60x7
 60x8
 50
 60x9
 55
 60

potsppt cp
 5-7% po+py
 1% pot po
 5-7% po+py
 5-7% po+py
 7-10% py+po
 3-5% pot po

46.9 4x2-10mm vns, potsp+py+cp, over 4cm
 48.0 Ash-xl tuff, 5-7% po+py, in patches vns, diss tr cp
 49.4 Ash tuff variegated purple & gray, ochl py vns+1% diss py+po, increasing to 5-7%, pred. po.
 51.7 2mm v2, qtz, py
 52.0 4mm
 52.2 2.1mm
 52.6 1.1mm
 52.8-52.9 3x1-3mm
 53.4 2cm 50% py, 5-10% asp
 55.3 5mm, 30% po+py+sp
 55.5 Bleached, brecciated
 57.2-57.4 1x2-5mm @ 40-80°
 58.0-58.1 1x2 qtz
 58.4-58.3 4x1-3mm py, 60-80°
 60.0 2mm

54.00
 54.00

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 6 of 13

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS										
																										g/T Au	opt Au	ppm Cu								
60				3-5% Pt+po			JJH	18/9/90	Ash tuff, variegated purple & grey, sil, variable pt+po, local to spy, aspy, sp. Pt+po in 1-5mm veins @ 2cm to 1m intervals, with chl or qtz. 62.2 62.5 1mm fl core, py+chl 62.9 py+chl 64.0 65.5 2mm py+aspy @ 35°, cuts off qtz+py @ 70° 68.9 71.9 sheet + clasts w/ po + Qcveining; py + aspy? in gouge (correlates w/ Tf #31?) 72.6 Lapilli - ash tuff, light-med grey, sil. 1/2-1mm micro frx ± py. No po, minor diss py.																94	23917	102	.001	414							
65				5-1% Pt+po																																
70				7-10% py																																
75				1-3% py in vns																																

Box 10

Box 11

Box 12

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 7 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							C O M M E N T S																		g/t Au	opt Au	ppm Cu	
75				1-3% py			JJH	18/9/90						Si100									23928	103	.001	252		
				3-5% py										Si100									75.5					
																							76.2	104	.001	496		
																							76.7					
				5-5% py frx										Si100									100	77.7	23930	.02	.001	173
																							100	78.0				
																							78.6	23931	.01	.001	199	
																							100	79.2				
																								81	23932	.01	.001	249
																								80.8				
																								100	23933	.02	.001	155
																								82.3				
																								100	23934	.01	.001	163
																								83.8	83.9			
																								100	23935	.01	.001	190
																								85.3	85.5			
				5% py aspy? po																				100	23936	.01	.001	175
																								86.4	86.4			
				50% py																				86.9	23937	.18	.005	176
				3-5% py																				100	87.6			
																								88.4	23938	.01	.001	167
				py, po																				100	88.8			
																								89.9	23939	.66	.019	208
90																												

Bar 13

Bar 14

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 8 of 15

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							C O M M E N T S																		g/t Au	opt Au	pp Cu
90				5-7% py aspy?			JJH	18/9/90															90.4 23940				
							Xl-ash tuff, altered, greenish grey, Black microtra w py, aspy? @ 1-5 cm intervals.																91.4	.02	.001	9	
																									94	.01	.001
																							93.0				
																							100	.02	.001	8	
																							94.5				
95																							93	.01	.001	7	
																							96.0				
																							100	.01	.001	75	
																							97.5				
				1% py in vms po																			100	.01	.001	102	
																							99.1				
																							100	.02	.001	101	
																							100.6				
				5-7% py aspy																			100	.01	.001	83	
																							102.1				
																							102.3	.34	.010	125	
																							103.6				
																							104.2	.02	.001	60	

Box 15
Box 16
Box 17

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-55

Page 9 of 13

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	COMMENTS	g/t Au	opt Au
105							JJH															105.2				
				py	70°		18/9/90						Si ₁₀₀									100	23950	.10	1003	6.
				py	60°																	100	23951	.21	1006	5.
				py	20°	chl																100	23952	105	1001	78
				po + py	25°																	100	23952	105	1001	78
																						94	23953	101	1001	61
																						107	23954	102	1001	41
																						93	23955	101	1001	54
				py	45°																	100	23956	105	1001	88
																						100	23956	105	1001	88
																						100	23956	105	1001	88
																						100	23956	105	1001	88

17
 105
 110
 115
 120
 box 18
 box 19

DIAMOND DRILL LEDGER

DDH No. 90-55

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Feet	glt	opt	ppm		DESCRIPTION
					Au	Au	Cu		
23877	9.5	10.7	1.2		.01	.001	660		Ash tuff, sil, 7-10% po, 3-5% py, tr% cp, tr sp.
878	10.7	11.2	0.5		.30	.009	847		Bx, w/ 10 cm Qc w/ 10-15% py, 5% sp, 1% asp,
879	11.2	12.4	1.2		.10	.003	749		see 23877
880	12.4	13.7	1.3		.04	.001	946		"
881	13.7	15.0	1.3		.03	.001	876		" , purplish
882	15.0	16.4	1.4		.07	.002	795		" " , sil. decreases to 5-7%
883	16.4	18.3	1.9		5.90	.172	620		Ash tuff, purple, 5-7% disc py
884	18.3	20.0	1.7		.20	.006	464		" " " , bx, minor gtz un
885	20.0	21.3	1.3	.085 69	.10	.003	591		Fault? very low recovery - pebbles
886	21.3	22.2	0.9		2.97	.087	919		Ash tuff, purple w/ grey streaks 5-7% py, 1-2% cp
887	22.2	23.3	1.1		5.20	.152	463		" " " " "
888	23.3	24.4	1.1		.16	.005	545		" " " " "
889	24.4	24.8	0.4		.24	.007	878		50% silica, 15% py, 10% po, 1-2% cp
890	24.8	25.9	1.1		.15	.004	1220		Ash tuff, purple, 7-10% po, 5-7% py, 1-2% cp
891	25.9	27.4	1.5		.01	.001	763		" " " " "
892	27.4	28.8	1.4		.02	"	602		" " " " "
893	28.8	30.5	1.7		.03	"	447		" " 3-5% py+po
894	30.5	31.7	1.2		.01	"	399		" " "
895	31.7	32.9	1.2		.02	"	467		" " "
23896	32.9	34.1	1.2		.01	"	463		" " "

DIAMOND DRILL LEDGER

DDH No. 90-55

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH		g/t Au	opt Au	ppm Cu		DESCRIPTION
			Metres	Feet					
23897	34.1	35.3	1.2		.10	.003	430		Ash tuft, variegated, sil, 3-5% py+po
898	35.3	36.6	1.3		.01	.001	427		" " " "
899	36.6	38.1	1.5		.05	.001	514		" " " "
900	38.1	39.6	1.5		.01	.001	687		" " " "
901	39.6	40.8	1.2		.12	.004	419		" " " "
902	40.8	42.0	1.2		.10	.003	435		" " " "
903	42.0	42.7	0.7		2.58	.075	385		" " " "
904	42.7	44.2	1.5		.04	.001	293		" " " " + 1% ⁺ py, 5% ⁺ po
905	44.2	45.5	1.3		.18	.005	466		" " " "
906	45.5	46.8	1.3		1.04	.030	413		" " " "
907	46.8	48.0	1.2		.38	.011	459		" " " " + 4 vns pot+sp+py+tc
908	48.0	49.4	1.4		.95	.028	754		Ash-x1 tuft, 5-7% po+py
909	49.4	50.6	1.2		.57	.017	455		Ash tuft, purple & gray, 9% [±] py vns, 1% py+po
910	50.6	51.8	1.2		.02	.001	378		" " " "
911	51.8	53.0	1.2		.50	.015	423		" " " , num. py veinlets, 5-7% pot
912	53.0	54.2	1.2		.10	.003	388		" " " " tra.
913	54.2	55.5	1.3		.03	.001	408		" " " " trsf
914	55.5	56.8	1.3		.05	"	365		Ash tuft, bleached, bx, 7-10% py+po
915	56.8	58.2	1.4		.02	"	396		Ash tuft, variegated, 7-10% po+py, 1-2% sp
23916	58.2	59.7	1.5		.04	"	493		" " " 3-5% py+po

DIAMOND DRILL LEDGER

DDH No. 90-55

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23917	59.7	61.0	1.3		.02	.001	414		Ash tuff, variegated, sil, 3-5% py+po.
918	61.0	62.4	1.4		.01	.001	259		" " " "
919	62.4	64.0	1.6		.03	.001	493		" " " "
920	64.0	65.5	1.5		.21	.006	460		" " " 5-7% py+po
921	65.5	66.6	1.1		.18	.005	469		" " " "
922	66.6	67.7	1.1		.02	.001	630		" " " 5-7% po, 1-2% py
923	67.7	68.9	1.2		.01	.001	365		" " " " "
924	68.9	70.4	1.5		.02	.001	448		" " bx 7-10% py
925	70.4	71.9	1.5		.10	.003	490		" " " "
926	71.9	72.6	0.7		.38	.011	334		Shear, DC, clasts w/ po, py+aspy? in gouge zone? (Tr #81)
927	72.6	74.0	1.4		1.14	.033	209		Lapilli-ash tuff, grey, sil, 1-3% py in vns.
928	74.0	75.5	1.5		.03	.001	252		" " " " "
929	75.5	76.7	1.2		.04	"	496		Shear, rusty frx + gouge, 3-5% py
930	76.7	78.0	1.3		.02	"	173		Xl-ash tuff (por 4), lt. grey, sil, 3-5% py microfrax ^{tr} aspy
931	78.0	79.2	1.2		.01	"	199		" " " " "
932	79.2	80.8	1.6		.01	"	249		" " " " "
933	80.8	82.3	1.5		.02	"	155		" " " " "
934	82.3	83.9	1.6		.01	"	163		" " " " "
935	83.9	85.5	1.6		.01	"	190		" " " " "
23936	85.5	86.4	0.9		.01	"	175		" , altered, greenish, 5-7% py+aspy in microfrax

DIAMOND DRILL LEDGER

DDH No. 90-55

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
23937	86.4	87.6	1.2		.18	.005	176		Xl-ash tuft (por) sil, 3-5% py tasp in microfrx
938	87.6	88.8	1.2		.01	.001	167		" " "
939	88.8	90.4	1.6		.66	.019	208		" " "
940	90.4	91.7	1.3		.02	.001	98		" , altered, 5-7% py ± aspy
941	91.7	93.0	1.3		.01	"	119		" " "
942	93.0	94.5	1.5		.02	"	84		" " "
943	94.5	96.1	1.6		.01	"	71		" " "
944	96.1	97.7	1.6		.01	"	75		" " "
945	97.7	99.2	1.5		.01	"	102		" grey, 1% py
946	99.2	100.6	1.4		.02	"	101		" " "
947	100.6	102.3	1.7		.01	"	83		" " "
948	102.3	103.6	1.3		.34	.010	125		" " " (± po)
949	103.6	105.2	1.6		.02	.001	60		" " "
950	105.2	106.7	1.5		.10	.003	65		" " "
951	106.7	108.2	1.5		.21	.006	51		" " "
952	108.2	109.7	1.5		.05	.001	78		" " "
953	109.7	111.2	1.5		.01	"	61		" " "
954	111.2	112.8	1.6		.02	"	40		" " "
955	112.8	114.3	1.5		.01	"	54		" " "
23956	114.3	115.8	1.5		.05	"	88		" " "

PROPERTY SPECTRUM D.D.H. 90-56 Page 1 of 16

AREA RED DOG SECTION 9820 N
CLAIM RED DOG 1 AZIMUTH (T) 090°
DATE Started 16/9/90 N/S
Completed 17/9/90 N/S
GRID CO-ORDS Line 4817 N INCLINATION -55° CONTRACTOR J.T. Thomas
Station 9833E LOGGED BY J.J. Hylands
SURVEY CO-ORDS Northing _____ DEPTH Hole 137.16
Easting _____ Casing 10.67 LOGGED BY _____
Overburden 11.00 SCALE 1:100
ELEVATION 1559m CORE SIZE BQTW CORE STORED AT Property
CORE RECOVERY 95.4%

COMMENTS Drilled to test QM/volcanic contact in area between 1979/80 drilling and 90-46. A well mineralized zone (py, aspy, cpy, po) was found between 45.7-51.8 m, in fgr. unaltered ash tuff.

SURVEY DATA

DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-55°	090°	Brunton				
137m	-51°	-	Acid.				

GEOLOGY

FROM	TO	UNIT	INT.	I.W.	SIGNIFICANT ASSAY AVERAGES	
					Au oz/t	%Cu
0	10.7	Casing				
10.7	11.0	OB				
11.0	34.3	QM				
34.3	57.9	AT, fgr				
57.9	92.6	AT, mgr				
92.6	98.8	AT, fgr				
98.8	114.3	AT, mgr				
114.3	117.4	ATB.				
117.4	135.1	AT, mgr				
135.1	137.2	FT				
45.7	51.8	Py, Aspy, Cpy, Po				
64.0	67.0		3.0		.085	0.07
88.4	106.7		18.3		.095	0.06

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 2 of 16

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JJ Hylands</u> DATE <u>19/9/90</u>	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS																				
																									g/t	opt	ppm																		
0 5 10 11.0								CASING TO 10.67m.																																					
				tr-1% py tr opy			Qm, mgr, porphyritic, greenish gray, propylitic tr-1% py, unss + discs, tr opy diss Rusty trx					5680- 90											87	23957	.39	.011	1610																		
																						100	23958	.58	.017	1330																			
																						100	23959	.54	.016	1110																			

Bar 1

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 3 of 16

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS														
							C O M M E N T S																		g/T Au	opt Au	ppm Cu												
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30				3-5% Py tr-1% cpy			JH	19/9/90																	15.2	23960	.22	.006	1210										
							Qm, as above, matrix chloritized.																		6290-100					100	16.8								
							secondary bio?																							100	23961	.58	.017	740					
							Tr-1% cpy																							100	23962	.27	.008	1230					
							sericite developed - argillic?																							100	23963	.74	.022	1710					
							Pale green.																							88	23964	.99	.029	1730					
							Frx rusty																							93	23965	.21	.006	1105					
							argillic																							100	23966	.36	.011	1185					
																														100	23967	.08	.002	1070					
																														100	23968	.40	.012	1125					
								93	23969	10.91	.318	1430																											
										6.20	.181																												

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 4 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							COMMENTS																		g/T Au	opt Au	ppm Cu		
30				1% py tr cpy po asp?	35		JJH	19-20/9/90						50-90									23969						
							30.5 2mm	Q M, mg, pale green, argillie py disc & incls - 1%, trace cpy, po, asp(?)															100	23970	.25 .26	.007 .008		1250	
32.5 32.8																							32.0						
																							32.5 2mm to 1cm v fgr light gray aplite vns @ 30° to 32.8 @ 5° 1% opy I po	100	23971	.20	.006		1150
																								33.5	33.2				
34.3				3-5% py										50-90 (100)									23972	.18	.005	670			
																							contact not far, irregular.	100	34.3				
																							Ash tuff, pur-plant, maroon, fgr, sil, 3-5% diss py, locally 5-7%, toccol veins, 1-5mm, @ 30°-45°, w/ 40 qtz. Q + Qlc vns, 2-5mm, @ 1-2 m intervals, @ 30°-90°. 41-1mm vns, in tension frx & irreg, at more frequent intervals, locally coinc. oval 5-10 cm.	350	23973	.17	.005		1680
35																							35.5						
																								100	23974	.04	.001		1730
																								36.6					
40																							100	23975	.02	.001	1320		
																								38.1					
																								100	23976	.02	.001		865
45				5-7% py																			94	23977	.07	.002	760		
																								41.2					
																								100	23978	.02	.001		890
45				3-5% py 3-5% qpy	45																		100	23979	.04	.001	1710		
																								42.7					
																								44.2					
																						100	23980	.32	.009	2100			

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 5 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	g/t Au	opt Au	ppm Cu	
45				5-7% py			JJH															23980					
				5-7% py			20/9/90															45.7					
				tr-1% qz																		100	23981	.09	1003	1050	
				7-10% py																		47.2					
				3-5% asp																		47.5					
				tr-1% po																		47.8	94	23982	.21	1006	1210
				asp																		47.4					
																						47.6					
				20% py																		49.6					
				20% py																		50.2					
				asp op.																		50.3					
				3-5% py																		51.8					
				1-3% asp																		51.8	100	23984	1.01	1029	925
				tr-1% po																		51.8					
																						53.3					
				1-3% py																		53.3	100	23985	.13	1004	805
				tr-asp																		53.3					
																						54.2					
				1-3% py																		54.2	94	23986	.09	1003	820
				tr-2% po																		54.2					
				1-3% po																		54.9					
				1-3% po																		54.9	107	23987	.01	1001	885
				tr-asp																		54.9					
																						56.4					
				tr-1% py																		56.4					
				1-3% po																		57.9					
																						57.9	100	23988	.09	1003	660
																						57.9					
				1-3% py																		57.9	100	23989	.11	.003	830
				tr-po-asp																		57.9					
																						59.4					
																						59.4	100	23990	.02	1001	690

Box 7
Box 8
Box 9
Box 10

Ash tuff, maroon, fgr, sil.

Slight paling or graying of tuff. Pyritic to 5-7%, locally 7-10%, then locally 10-15% Asp increases quickly; qtz, asp, py, tr po. Asp in palest sections = med. grey

cone of asp, py

47.6-50.3 Angular purple-maroon lithic clasts, 1/2-1 cm.

Tuff becomes variegated - variably purplish maroon, grey, locally greenish or buff-cream over 5-10 cm. Also locally mgr.

54.2 - po appears

Ash tuff, mgr, grey, sil, 1-3% py, tr po, asp

5290

52100

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 6 of 16

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	COMMENTS	g/t Au	opt Au	ppm Cu
60				1-3% py 3-5% po tr'ep			JJH 20-21/9/90															100	23990	.02	.001	690	
																							100	61.0			
				py, ep, po	70 qc																	100	23991	.02	.001	685	
																							100	62.5			
				py	10 qc																		100	23992	.41	.062	550
					cal.																		100	61.0			
65																							100	23993	8.52	.103	845
																							100	65.5	3.35	.098	
																							100	23994	2.30	.067	655
				3-5% py, po tr'ep																			100	67.0	8.13	.237	
																							100	23995	.20	.006	595
																							100	68.6			
																							100	23996	.22	.006	745
																							100	70.1			
																							100	23997	.59	.017	605
																							100	71.6			
																							94	23998	.23	.007	770
																							100	73.2			
																							100	23999	.26	.008	605
																							100	74.7			

20x10
 30x11
 50x12
 20x10

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 8 of 16

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							JH	21/9/90																	g/t Au	opt Au	ppm Cu	
COMMENTS																												
90				5-7% py																			100	25010	.47	.014	567	
				py+mo																			91.5	91.2	2.38	.069		
				5-7% py																			100	25011	1.47	.043	520	
																							92.6	92.6	1.14	.033		
				3-5% py																			93	25012	4.93	.144	596	
																							94.3	94.3	.82	.024		
																							93	25013	.93	.027	640	
																								96.0	96.0	3.70	.108	
																							100	25014	3.46	.101	445	
																								97.5	97.5	2.23	.065	
																							62	25015	1.88	.055	460	
																								98.8	98.8	4.77	.139	
																							67	25016	5.11	.149	665	
																								100.2	100.2	14.70	.429	
																							45	25017	10.23	.298	567	
																								101.1	101.1	.37	.011	
																								82	25018	.30	.009	615
																								102.4	102.4	6.66	.194	
																								136	25019	4.40	.128	890
																								103.5	103.5	1.72	.050	
																								94	25020	1.42	.041	660

Cox 16

Cox 17

Cox 18

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 9 of 16

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
																									g/t Au	opt Au	ppm Cu	
105				n1% py diss py+po	30 4.13 QC		JJH 22/9/90	Ash tuff, med-dark grey, f-mgr, sil. n1% diss.py+po						5.90-100										105.2				
								106.3 2,21cm QC															100	25021	6.04	.176	646	
								108.2															100	25022	1.44	.013	452	
								109.4 altered, pale grey															83	25023	.12	.004	420	
				1-3% py				109.6															109.4 100	109.7				
								110.1 py increases, po variable, tr-1%															80	25024	.07	.002	530	
				3-5% py				111.2															43	11.2				
								112.9-113.6 ground core															112.2 83	25025	.28	.008	760	
				py+sp py	6.5 QC			113.9-114.0 1cm QC, 1cm py, 2x4mm QC w/ py, sp.															67	25026	.40	.012	510	
					6.5 QC			114.2 2cm QC																				
		△		7-10% py	6.5 QC			Ash tuff, mgr, brecciated, 7-10% py in chl. matrix, surrounding clasts. Ruofy orange frx stain particularly 115.4-115.9																87	25027	.29	.008	694
		△																										
		△																										
		△																										
				3-5% py	4.5 QC			117.4 Ash tuff, light gray, mgr, sil, 3-5% py overall, cona. over 3-5cm., w/or w/o chl.						5.90-100										100	25029	.44	.013	610
								118.0 4mm																				
								118.4-118.9 1-3mm QC, // core																				
								colour darkens to med. gray															100	25030	.31	.009	520	

Box 18

Box 19

Box 20

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-56

Page 11 of 16

Box 23

HOLE DEPTH CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
						JJH	22/9/90																		gT Au	opt Au	ppm Cu		
135		a b b	1-3% + 5-7% over locn.					Fault,																135.1 135.6 137.16	135.1 135.6 137.2	2504)	.22	.006	424

DIAMOND DRILL LEDGER

DDH No. 90-56

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE LENGTH Met		g/T Au	opt Au	ppm Cu		DESCRIPTION
			Met	g/T opt					
23957	11.0	12.2	1.2		.39	.011	1610		QM, propylitic, tr-1% py, tr opy
958	12.2	13.7	1.5		.58	.017	1330		" " " "
959	13.7	15.2	1.5		.54	.016	1110		" " " "
960	15.2	16.8	1.6		.22	.006	1210		" " 3-5% opy, tr-1% opy, 2 nd dery bio?
961	16.8	18.3	1.5		.58	.017	740		" argillic? " "
962	18.3	19.8	1.5		.27	.008	1230		" " " "
963	19.8	21.3	1.5		.74	.022	1710		" " " "
964	21.3	22.9	1.6		.99	.029	1730		" argillic " "
965	22.9	24.4	1.5		.21	.006	1105		" " " "
966	24.4	25.9	1.5		.36	.011	1185		" " " tr opy, po
967	25.9	27.4	1.5		.08	.002	1070		" " " "
968	27.4	29.0	1.6	.34/.010	.40	.012	1125		" " 1% opy, tr opy, po, aspx(?)
969	29.0	30.5	1.5	6.20/.181	10.91	.318	1430		" " " " " "
970	30.5	32.0	1.5	0.26/.008	.25	.007	1250		" " " " " "
971	32.0	33.2	1.2		.20	.006	1155		" " " " " "
972	33.2	34.3	1.1		.18	.005	675		" " " " " "
973	34.3	35.5	1.2		.17	.005	1680		Ash tuft, maroon, 3-5% py
974	35.5	36.6	1.1		.04	.001	1730		" " " "
975	36.6	38.1	1.5		.02	.001	1320		" " " "
23976	38.1	39.6	1.5		.02	.001	865		" " " "

DIAMOND DRILL LEDGER

DDH No. 90-56

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met	g/T Au	opt Au	ppm Cu		DESCRIPTION
				8/T opt					
23977	39.6	41.2	1.6		.07	.002	760		Ash tuff, maroon, 3-5% py
978	41.2	42.7	1.5		.02	.001	890		" " 5-7% py
979	42.7	44.2	1.5		.04	.001	1710		" " " tr cpy
980	44.2	45.7	1.5		.32	.009	2100		" " " "
981	45.7	47.2	1.5		.09	.003	1050		" " , locally alt ^a , 5-7% py, tr-1% aspy
982	47.2	48.8	1.6		.21	.006	1210		" " " , 7-10% py, 3-5% as, tr cpy, po
983	48.8	50.3	1.5		.29	.008	1200		" " " " " "
984	50.3	51.8	1.5		1.01	.029	925		" " " 3-5% py, 1-3% as, "
985	51.8	53.3	1.5		.13	.004	805		" , variegated, 1-3% py, tr. aspy
986	53.3	54.9	1.6		.09	.003	820		" " " , tr-1% po
987	54.9	56.4	1.5		.01	.001	885		" " " , 1-3% po, tr. cpy
988	56.4	57.9	1.5		.09	.003	660		" " " , 1-3% po, tr-1% py
989	57.9	59.4	1.5		.11	.003	830		" , grey, mgr, sil, 1-3% py, tr po, cpy
990	59.4	61.0	1.6		.02	.001	690		" " " " " 3-5% po, tr cpy
991	61.0	62.5	1.5		.02	.001	685		" " " " " " "
992	62.5	64.0	1.5		.41	.012	550		" ————— " " " "
993	64.0	65.5	1.5	335/.098	3.52	.103	845	↓ .085 / 3.0	" ————— " " " "
994	65.5	67.0	1.5	8.13/.237	2.30	.067	655	↓	" ————— " " " "
995	67.0	68.6	1.6		.20	.006	595		" , pinkish grey, mgr, sil, 3-5% py + po "
23996	68.6	70.1	1.5		.22	.006	745		" ————— " " "

DIAMOND DRILL LEDGER

DDH No. 90-56

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met	g/T Au	opt Au	ppm Cu			DESCRIPTION
23997	70.1	71.6	1.5		.59	.017	605			Ash tuff, variegated, 3-5% py+po, tr epy
998	71.6	73.2	1.6		.23	.007	770		"	" " "
999	73.2	74.7	1.5		.26	.008	605		"	" " "
24000	74.7	76.2	1.5		.29	.008	490		"	" " "
25001	76.2	77.7	1.5		2.33	.068	405		"	" " "
002	77.7	79.2	1.5		.94	.027	560		"	" 5-7% py+po
003	79.2	80.8	1.6		.34	.010	490		"	" 7-10% "
004	80.8	82.3	1.5		.83	.024	560		"	" "
005	82.3	83.8	1.5		.36	.011	570		"	" 5-7% py
006	83.8	85.3	1.5		.19	.006	531		"	" 3-5% py
007	85.3	86.9	1.6		.41	.012	652		"	" 1-3% py
008	86.9	88.4	1.5		.28	.008	602		"	" "
009	88.4	89.9	1.5		.68	.020	427		"	" "
010	89.9	91.2	1.3		.47	.014	567		"	" 5-7% py
011	91.2	92.6	1.5	1.47/.043	2.38	.069	520		"	alter ed " tr mo
012	92.6	94.3	1.7	4.93/.144	1.14	.033	596		"	med. grey, sil 3-5% py
013	94.3	96.0	1.7	0.93/.027	.82	.024	640		"	" "
014	96.0	97.5	1.5	3.44/.101	3.70	.108	445	.095/18.3	"	" , 10% QC vns
015	97.5	98.8	1.3	1.88/.055	2.23	.065	460		"	" ~1% py diss, 1-5% vns gouge, broken
25016	98.8	100.2	1.4	5.11/.149	4.77	.139	665		"	" , 3-5% in vns

DIAMOND DRILL LEDGER

DDH No. 90-56

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Met	g/T Au	opt Au	ppm Cu			DESCRIPTION
25017	100.2	101.3	1.1	10.23/.248	14.70	.429	567			Ash tuff, med gray, ~1% dss py, 3-5% py vns broken
018	101.3	102.4	1.1	.80/.009	.37	.011	615			" " " "
019	102.4	103.5	1.1	4.40/.128	6.66	.194	890			" " 3-5% py mvns.
020	103.5	105.2	1.7	1.42/.041	1.72	.050	660			" " 1% py, 1% po
021	105.2	106.7	1.5	7.00/.204	6.04	.176	646	✓		" m-dk grey ~1% py+po
022	106.7	108.2	1.5		.44	.013	452			" " "
023	108.2	109.7	1.5		.12	.004	420			" " "
024	109.7	111.2	1.5		.07	.002	530			" " 1-3% py, tr-1% po
025	111.2	112.8	1.6		.28	.008	760			" " 3-5% py, tr po
026	112.8	114.3	1.5		.40	.012	510			" " " , tr sp.
027	114.3	115.8	1.5		.29	.008	694			" , breccated, 7-10% py in matrix w/ chl
028	115.8	117.4	1.6		.21	.006	652			" " " "
029	117.4	118.9	1.5		.44	.013	610			" light grey, sil, 3-5% py
030	118.9	120.4	1.5		.31	.009	520			" med. grey, " "
031	120.4	121.9	1.5		.24	.007	305			" " " 1-3% py
032	121.9	123.4	1.5		.07	.002	299			" " " "
033	123.4	124.9	1.5		.26	.008	317			" " " "
034	124.9	126.5	1.6		.02	.001	379			Ash tuff, br, 7-10% py
035	126.5	128.0	1.5		.04	.001	318			" , med gray, 1-3% py
25036	128.0	129.5	1.5		.01	.001	267			" " "

AREA	<u>RED DOG</u>	SECTION	<u>10010N</u>	DATE	Started <u>19/9/90</u> D/S
CLAIM	<u>RED DOG 1</u>	AZIMUTH (T)	<u>090°</u>	Completed	<u>20/9/90</u> N/S
GRID CO-ORDS	Line	<u>10010N</u>	INCLINATION	CONTRACTOR <u>J.T. Thomas</u>	
	Station	<u>9838 E</u>		Hole	<u>149.35</u>
SURVEY CO-ORDS	Northing		DEPTH	Casing	<u>30.48</u>
	Easting			Overburden	<u>15.20 ?</u>
ELEVATION	<u>1479 m</u>	CORE SIZE	<u>B&TW</u>	SCALE	<u>1:100</u>
		CORE RECOVERY	<u>84.4%</u>	CORE STORED AT	<u>Property</u>

COMMENTS Drilled below trenches #27-30. Ended in fault zone beyond basalt dyke. Tested area not reached by 90-52.

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-60°	090°	Brunton				
116 m	-55°	—	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES			
FROM	TO	UNIT	INT.	T.W.			Ag oz/t	%Cu
0	15.2	Casing						
15.2	52.9	QM						
52.9	61.0	AT						
61.0	70.2	A(P)						
70.2	84.4	AT						
84.4	94.8	A(P)						
94.8	129.2	AT						
129.2	131.8	ATa						
131.8	136.7	FT+8x						
136.7	139.9	AP						
139.9	141.7	FT						
141.7	145.7	AT						
145.7	149.4	BT						
130.8	141.1		2.3				.039	0.05

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 2 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							C O M M E N T S																		g/t Au	g/t Au	ppm Cu		
15							J. J. Hylands	22/9/90																15.2					
							CASING to 15.2; drilled ahead & reamed casing to 30.48																	21	25042	.38	.011	492	
							15.2-18.3 - highly weathered QM grüss or mush																		18.3				
							18.3-21.3 similar to above, with a few pieces of oxidized QM																		27	25043	.37	.011	1190
20							21.3-29 QM, highly oxidized, weathered & rust stained. Most fragments have 1-5mm qtz veins.																		19	25044	.65	.019	1180
							23.7? Mal staining																		27	25045	.91	.027	1750
							25.8-25.9 Mal. staining																		20	25046	.43	.013	4670
							27.4 MnOx on frx in pieces above & below																		33	25047	.22	.006	613
							29.0 QM, mgr, orange, 2mm semi qtz vns @ 45° to 60°; at 1/2-1cm intervals; Py diss in qtz vns																		25	25048	.24	.007	625
							1-3% Py																		60	25049	.40	.012	1380

Box 1

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 3 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	22/9/90																	g/t Au	opt Au	ppm Au
C O M M E N T S																											
30				1-3% py											50-70-80									30.5			
			b																				27	25050	.57	.017	810
			b																					32.0			
			b																				87	25051	.21	.006	532
			b																					33.5			
			b																				88	25052	.19	.006	875
			b																					35.0			
			b																				67	25053	.48	.014	1900
																								36.6			
																							83	37.2			
																							84	25054	.19	.006	425
																								38.1			
				1-3% py tr opy											50-90-100								67	25055	.50	.015	1120
																								39.6			
																							88	25056	.52	.015	665
																								41.2			
																							87	25057	.48	.014	910
																								42.7			
																							87	25058	.09	.003	595
																								44.2			
																							53	25059	.16	.005	568
																								43.4			

Box 2

Box 3

Box 4

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 4 of 15

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							JJH	23/9/90																	g/t Au	opt Au	ppm Cu	
45			b	1-3% py																			53	45.3				
																							45.7	25060	.22	1006	1200	
																							93	46.4	3.30	.096	1170	
																							47.2	25061	46.9	.19	1006	
				1% py + occal vns.																			25062	48.0			642	
																							94	48.0				
																							48.8	25063	.20	1006	765	
																								49.1				
																							100	25064	.97	1005	605	
																								50.3				
																								67	25065	.36	.011	650
																							51.8	51.6				
																								100	25066	.19	.006	648
																								52.9	52.9			
				7-10% py + 1% cp																			53.3	25067	.71	.021	5230	
																								88	54.0			
																							54.9	25068	.60	.018	4060	
																								55.1	55.1			
																								100	25069	.60	.018	5370
																								56.2	56.2			
				7-10% py																				100	25070	.61	.018	4010
																									57.9			
																								100	25071	.27	.008	2880
																									59.4			
																								59.4	59.4			

Box 4
Box 5
Box 6
Box 7

QM, mgr, greenish grey, 1-3% py + ocal vns

46.4 shear, min py, a py

46.9 QM, pale green-grey, chl, epid, locally bred. mgr chl in 2-4 cm patches. minor qtz veins @ 45-60°. 1% diss py + ocal 2-3 mm veins.

Less altered.

52.9 contact abrupt, QM not fgr, py vns cross contact

Ash tuft, f-mgr, dark grey, locally alt-pale grey to greenish - over 10-15 cm intervals, 5-7% irreg qtz + qc vns to 5mm 5-7% diss py, 2-3% in vns + blebs, tr-1% cp

59.4 Scheelite in vns of calcite

52 80-90

54 80-90

50

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 5 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JH																			g/t Au	opt Au	ppm Cu
60				7-10% PY																			100	25072	.16	.005	1480	
				5-7% PY	65	QC			61.0 Ash± lapilli tuff, locally to totally alt-pale green. Bx-61.6-61.8; shear-61.8-62.0 1.5cm QC above shear.														100	25073	.20	.006	1830	
				3-5% PI					62.6 Ash± lapilli tuff, dk grey, locally alt-pale greenish grey - propylitic? Bedded QC vns, 1-5mm, @ 45°-60°. Rare scheelite vns. Pyrite variable from 3-5% diss to 7-10% diss + vns over 15-20 cm.															62.5	25074	.18	.005	1800
65									65.6 zmscheelite														93	25075	.19	.006	1330	
				5-7% PY					67.5 Ash± lapilli tuff, sheared, altered, 5-7% in dLss, blebs, vns Shear box, w/ QC, qtz, scheelite(?), pyrite.															93	25076	.16	.005	985
									67.5 Pale lapilli tuff, altered, 5-7% in dLss, blebs, vns															100	25077	.47	.014	997
									70.2 Ash tuff, w/ lapilli, med grey-greenish grey (chl), 7-10% py diss, blebs, vns. sil. 5-10% QC vns															100	25078	.30	.009	905
									73.4 50% QC core, 10% py															100	25079	1.95	.057	1560
									74.8															100	25080	.50	.015	1540
																								94	25081	1.76	.051	955
																								100	25082	.44	.013	560
																								100	25082	.44	.013	560

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 6 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS									
							DATE																	g/t Au	opt Au	ppm Cu							
75				5-7% PY			JJH															93	25083	.17	.005	689							
				3-5% PY																				76.2									
				5-7% PY																			100	25084	.20	.006	748						
																									77.7	77.5							
																										87	25085	.58	.017	1430			
																											78.7						
																											79.2	25086	.44	.013	422		
																											94	25087	.19	.006	449		
																											80.8	80.8					
				7-10% PY																								100	25088	.42	.012	635	
																												82.3					
																												87	25089	.18	.005	582	
				10% PY																									83.6				
																													83.8	25090	2.82	.082	1150
																													84.2				
				5-7% PY																									93	25091	.35	.010	790
																													85.3				
																													100	25092	.18	.005	540
																													86.9				
																													93	25093	.19	.006	580
																													88.4				
																													73	25094	.22	.006	605
																													89.9				

Box 10

Box 11

Box 12

LOGGED BY JJH
DATE 24/9/90

C O M M E N T S

Ash tuff, locally maroon - hornfelsed?, locally bleached - propylitic?
Sheared, bleached areas (10-20cm) have 3-5% py, rest is 5-11%, diss, blebs, uns. locally 7-10%.

71.5
77.7 4mm RC core

76.4
76.7

78.3
78.7 sheared, bleached

minor hornfelsing, locally grey

cal. 82.6 5cm cal.

83.6
84.2
84.4 1cm RC

Tuff pred. gray, Ash ± lapilli, locally pinkish, 3-4% thin RC

Rusty frx

89.6
89.8 2x10m RC

Sl₉₀
(100)

Sl₁₀₀
(100)

DIAMOND DRILL RECORD

PROPERTY

SPECTRUM

DDH 90-58

Page 7 of 15

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGLUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY NO. and INTERCEPT	ASSAYS		
							JJH	24/9/90																	g/t Au	g/t Au	ppm Cu
90				5-7% py																			100	25095	.16	.005	625
																							91.4				
																							100	25096	.21	.006	725
																							92.9				
																							93.1				
				5-7% py																			Q3	25097	.15	.004	704
																							94.5				
																							94.8				
95																							100	25098	.14	.004	672
																							96.0	95.9			
																							Q3	25099	.14	.004	745
																							96.9				
				10-15% py 5-7% aspy		5-10% qc																	97.5	25100	1.30	.038	1160
																							98.1				
				7-10% py																			100	98.1			
																							99.1	25101	.18	.005	750
																							99.4				
100				py + trsp																			100	25102	.04	.001	759
																							100.6				
																							100	25103	106	.002	684
																							102.1				
																							100	25104	.31	.009	905
																							103.6				
																							94	25105	.20	.006	730
																							105.0				

Box 13

Box 14

Box 15

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 8 of 15

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JH</u>	DATE <u>2/19/90</u>	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																									g/t Au	opt Au	ppm Cu
105				7-10% py																		105.2	105.0				
				7-10% py	15° 10cm 40° 5cm Q																	100	25106	.22	.006	915	
																						106.7	106.3				
																						100	25107	.70	.020	775	
																						100	107.7				
																						108.2	25108	.21	.006	865	
				py, sp 5-7% py	60° Q																	100	109.0				
110																						109.7	25109	.20	.006	1060	
																						94	110.1				
																						111.2	25110	.36	.011	673	
																							111.5				
																						93	25111	.50	.015	595	
				py, asp 3-5%	60° Q																	112.8	113.0				
																						100	25112	.15	.004	545	
																							114.3				
																						93	25113	.12	.004	655	
																						114.8	115.1	114.96	.145	393	
																						93	25115	.03	.001	561	
																							115.8				
																						88	25116	.02	.001	408	
																							117.4				
																						93	25117	.02	.001	496	
																							118.9				
																						92	25118	1.59	.046	540	
																							119.8				
120																						92					

Box 16

Box 17

Box 18

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 9 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	A S S A Y S			
							J J H	24/9/90																		g/t Au	opt Au	ppm Cu	
120				3-5% py locally 5-7%					Ash tuff, variegated maroon & gray, local Qc or py vns, sil. 3-5% py disc + blebs, locally 5-7%															120.1 100 121.0 100	120.4	25119	.10	.003	435
																								121.9 100	121.9	25120	.140	.012	478
																								123.4 94	123.4	25121	.105	.001	522
																								125.0 93	125.0	25122	.14	.004	730
																								126.5 94	126.5	12123	.132	.009	604
																								128.0 100	127.8	25124	.116	.005	496
				3-5% py 1-3% aspy					Tuff, bleached, altered, pale green, partially sheared, 3-5% py in blebs lam. & e. 10% py + aspy?						SL70									129.2 88	129.2	25125	.118	.005	455
																								130.8 100	130.5	25126	.03	.001	529
																								131.8 100	131.8	25127	.04	.001	537
				5-7% py					Fault zone, altered tuff + gouge. Qtz fragments, 5-7% py.						SL80									132.3 100	132.3	25128	.04	.001	537
				7-10% py					Bx in gouge, with 7-10% py overall local conc. to 20-30%, over 5m															133.8 80	133.4	25128	.15	.004	344
																								134.5 80	134.5	25129	.122	.006	770

Box 18

Box 19

Box 20

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-58

Page 10 of 15

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	COMMENTS	glt Au	opt Au	ppm Cu
135				7-10% py			JJH															135.3	25127	.22	.006	770	
																						135.6					
				3-5% py																		94	25130	.21	.006	672	
																						86.8	136.7				
																						93	25131	.03	.001	735	
																						132.4	137.7				
																						132.4	25132	.02	.001	648	
																							138.8				
																						100	25133	.80	.023	387	
																							139.9				
				7-10% py + aspy																		87	25134	.74	.022	655	
				10-12% py																			140.7				
																							135	3.94	.115	620	
																							141.1				
																							141.4	25136	.18	.005	1270
																							141.7				
				5-7% py																			100				
																							142.9	25137	.02	.001	649
																								143.0			
																							81	25138	.19	.006	670
																							144.5	144.3			
																							78	25139	.02	.001	748
																								145.7			
																							146.3				
																							78				
																							147.8				
																							87				
																							149.4				
150																								149.4			

Box 21

Box 22

Box 23

Box 24

DIAMOND DRILL LEDGER

Page No. 11

DDH No. 90-58

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	ppt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25042	15.2	18.3	3.1		.38	.011	492 QM gneiss, highly weathered	
043	18.3	21.3	3.0		.37	.011	1190 " " + few pees oxid QM	
044	21.3	22.9	1.6		.65	.019	1180 QM, highly oxid., num. qtz. vns	
045	22.9	24.4	1.5		.91	.027	1750 " " " tr. mal	
046	24.4	25.9	1.5		.43	.013	4670 " " " "	
047	25.9	27.4	1.5		.22	.006	613 " " " tr MnOx	
048	27.4	29.0	1.6		.24	.007	625 " " " "	
049	29.0	30.5	1.5		.40	.012	1380 " orange, " 2mm-5cm, 1-3% py	
050	30.5	32.0	1.5		.57	.017	810 " " tr mal + MnO ₂ , " " rusty frx	
051	32.0	33.5	1.5		.21	.006	532 " " " " " "	
052	33.5	35.0	1.5		.19	.006	875 " " " " " "	
053	35.0	36.6	1.6		.48	.014	1900 " " " " " "	
054	36.6	38.1	1.5		.19	.006	425 " " " " " "	
055	38.1	39.6	1.5		.50	.005	1120 QM, chl, sil, 1-3% py, locally 7-10%, tr epy	
056	39.6	41.2	1.6		.52	.015	665 " " " " "	
057	41.2	42.7	1.5		.48	.014	910 " " " " "	
058	42.7	44.2	1.5		.09	.003	595 " " " " "	
059	44.2	45.3	1.1		.16	.005	568 " " " " "	
060	45.3	46.4	1.1		.22	.006	1200 " " " " "	
5061	46.4	46.9	0.5		3.30	.096	1170 Shear + broken QM, 5-7% py, 5-7% aspy	

DIAMOND DRILL LEDGER

DDH No. 90-58

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	PPM Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25062	46.9	48.0	1.1		.19	.006	642	QM, alt, minor qtz, vns, 1% diss py + occul py vns
063	48.0	49.1	1.1		.20	.006	765	" " "
064	49.1	50.3	1.2		.17	.005	605	" " "
065	50.3	51.6	1.3		.36	.011	650	" " "
066	51.6	52.9	1.3		.19	.006	648	" " "
067	52.9	54.0	1.1		.71	.021	5230	Ash tuff, dk. grey, locally alt., 7-10% diss + vn py, tr-1% cp
068	54.0	55.1	1.1		.60	.018	4060	" " " " "
069	55.1	56.2	1.1		.60	.018	5370	" , alt, 10% QC vns, 10-15% py
070	56.2	57.9	1.7		.61	.018	4010	Ash tuff, dk. grey, locally alt, 7-10% py, tr-1% cp
071	57.9	59.4	1.5		.27	.008	2880	" " " " "
072	59.4	61.0	1.6		.16	.005	1480	" " " " "
073	61.0	62.6	1.6		.20	.006	1830	Ash ± lapilli tuff, alt. locally, 5-7% py
074	62.6	64.0	1.4		.18	.005	1800	" , dk grey, occul QC vns, 3-5% py
075	64.0	65.5	1.5		.19	.006	1330	" " " " "
076	65.5	66.5	1.0		.16	.005	985	" " " " " tr schwa
077	66.5	67.5	1.0		.47	.014	997	" " " " "
078	67.5	68.8	1.3		.30	.009	905	Tuff, sheared, alt, propylitic, 5-7% py, QC, qtz + scheelite? vns
079	68.8	70.2	1.4		1.95	.057	1560	" " " " " " " "
080	70.2	71.7	1.5		.50	.015	1540	Ash tuff, sil. grey, 7-10% py, 5-10% QC vns.
5081	71.7	73.2	1.5		1.76	.051	955	" " " " "

DIAMOND DRILL LEDGER

DDH No. 90-58

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Feet	g/T	opt	ppm	DESCRIPTION
					Au	Au		
25082	73.2	74.8	1.6		.44	.013	560	Ash tuft, sil, grey, 7-10% py, 5-10% Qc vns
083	74.8	76.2	1.4		.17	.005	689	" , locally alt, 5-7% py
084	76.2	77.5	1.3		.20	.006	748	" " " , 30 cm shear
085	77.5	78.7	1.2		.58	.017	1430	" " "
086	78.7	79.7	1.0		.44	.013	422	" " " , 40 cm shear
087	79.7	80.8	1.1		.19	.006	499	" " "
088	80.8	82.3	1.5		.42	.012	635	" , locally gray, 7-10% py
089	82.3	83.6	1.3		.18	.005	582	" " "
090	83.6	84.2	0.6		2.82	.082	1150	" " 10% py
091	84.2	85.3	1.1		.85	.010	780	Ash ± lapilli tuft, sil, pred. grey, 5-7% py, 3-4% Qc vns
092	85.3	86.9	1.3		.18	.005	540	" " " " "
093	86.9	88.4	1.5		.19	.006	580	" " " " "
094	88.4	89.9	1.5		.22	.006	605	" " " " , rusty frx, "
095	89.9	91.4	1.5		.16	.005	625	" , maroon, unalt., 5-7% py
096	91.4	93.1	1.7		.21	.006	725	" " " "
097	93.1	94.8	1.7		.15	.004	704	" " " "
098	94.8	95.9	1.1		.14	.004	672	Ash tuft, variegated, 5-7% py
099	95.9	96.9	1.0		.14	.004	745	" " "
100	96.9	98.1	1.2		1.30	.088	1160	Sheared, 10-15% py, 5-7% aspy, 5-10% Qc
25101	98.1	99.4	1.3		.18	.005	750	Ash tuft, variegated, 7-10% py

DIAMOND DRILL LEDGER

DDH No.

90-58

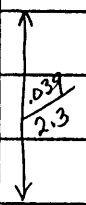
Page No. 17

SSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25102	99.4	100.6	1.2		.04	.001	759	Ash tuff, Variegated, 7-10% py, sil
103	100.6	102.1	1.5		.06	.002	684	" " " "
104	102.1	103.6	1.5		.31	.009	905	" " " "
105	103.6	105.0	1.4		.20	.006	730	" " " "
106	105.0	106.3	1.3		.22	.006	915	" " " "
107	106.3	107.7	1.4		.70	.020	775	" , var. propylitic alt., py 7-10%
108	107.7	109.0	1.3		.21	.006	865	" " "
109	109.0	110.1	1.1		.20	.006	1060	" , variegated, 5-7% py
110	110.1	111.5	1.4		.36	.011	673	" , bleached & altered
111	111.5	113.0	1.5		.50	.015	595	" " + 4cm Qz w/ py, aspy
112	113.0	114.3	1.3		.15	.004	545	" , variegated, sil, 3-5% py
113	114.3	114.8	0.5		.12	.004	655	" " " "
114	114.8	115.1	0.3		4.96	.145	393	" " " " + 6cm Qz-py-aspy vA
115	115.1	115.8	0.7		.03	.001	561	" " " "
116	115.8	117.4	1.6		.02	"	408	" " " "
117	117.4	118.9	1.5		.02	"	496	" " " "
118	118.9	120.4	1.5		1.59	.046	540	" " " "
119	120.4	121.9	1.5		.10	.003	435	" " " "
120	121.9	123.4	1.5		.40	.012	478	" " " "
25121	123.4	125.0	1.6		.05	.001	522	" " " "

DIAMOND DRILL LEDGER

DDH No. 90-58

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/t Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25122	125.0	126.5	1.5		.14	.004	730	Ash tuff, variegated, 3-5% py, sil
123	126.5	127.8	1.3		.32	.009	604	" " " "
124	127.8	129.2	1.4		.16	.005	496	" " " "
125	129.2	130.5	1.3		.18	.005	455	Tuff, sheared? pale green, 3-5% py, 1-3% aspy
126	130.5	131.8	1.3		.03	.001	529	" " " "
127	131.8	133.4	1.6		.04	.001	537	Fault zone, altered tuff + gouge, 5-7% py
128	133.4	134.5	1.1		.15	.004	344	" " " 7-10% py
129	134.5	135.6	1.1		.22	.006	770	" " " "
130	135.6	136.7	1.1		.21	.006	672	" " " "
131	136.7	137.7	1.0		.03	.001	735	Ash-lapilli tuff, sil, alt, sheared, 3-5% py
132	137.7	138.8	1.1		.02	.001	648	" " " "
133	138.8	139.9	1.1		.80	.023	387	" " " "
134	139.9	140.7	0.8		.74	.022	655	Gouge + sil, tuff, 7-10% py, tr. aspy?
135	140.7	141.1	0.4		3.94	.115	620	Tuff, sil, alt, 10-12% py, tr. sp.
136	141.1	141.7	0.6		.18	.005	1270	Gouge + alt. tuff, 10-12% py
137	141.7	143.0	1.3		.02	.001	649	Ash tuff, unalt, 5-7% py, 5-7% iron py & constr. tr. py
138	143.0	144.3	1.3		.19	.006	670	" " " " " "
139	144.3	145.7	1.4		.02	.001	748	" " " " " "
—	145.7	148.2	2.5		—	—		Basalt dyke
—	148.2	149.4	1.2		—	—		" gouge



AREA	<u>RED DOG</u>	SECTION	<u>9850 N</u>	DATE	Started <u>22/9/90</u> D/S
CLAIM	<u>RED DOG 1</u>	AZIMUTH (I)	<u>090°</u>	Completed	<u>23/9/90</u> D/S
GRID CO-ORDS	Line <u>9845 N</u>	INCLINATION	<u>-55°</u>	CONTRACTOR	<u>J.T.Thomas</u>
	Station <u>9805 E</u>	Hole	<u>152.40</u>	LOGGED BY	<u>J.J. Hylands</u>
SURVEY CO-ORDS	Northing	DEPTH Casing	<u>13.72</u>	LOGGED BY	
	Easting	Overburden	<u>12.20</u>	SCALE	<u>1:100</u>
ELEVATION	<u>1560 m</u>	CORE SIZE	<u>BQTW</u>	CORE STORED AT	<u>Property</u>
		CORE RECOVERY	<u>91.1%</u>		

COMMENTS Drilled to test hanging wall zone of QM beneath DDH 89-36. Intersected QM and hornfelseduffs, with well mineralized sections - arsenopyrite, visible gold - between 76.0-78.5, 111.0-111.8, & 117.1-118.5

SURVEY DATA							
DEPTH	INCL.	AZ (T)	TYPE	DEPTH	INCL.	AZ. (T)	TYPE
0	-55°	090°	Brunton				
122m	-53°	-	Acid				

GEOLOGY					SIGNIFICANT ASSAY AVERAGES			
FROM	TO	UNIT	INT.	T.W.			Av opt	% Cu
0	12.2	Casing						
12.2	32.0	QM						
32.0	37.5	QM, prop.						
37.5	44.2	QM, alt.						
44.2	44.7	B.T.						
44.7	55.8	QM						
55.8	59.2	AX-1						
59.2	88.4	AT						
88.4	115.8	P.A.T. (alt.)						
115.8	120.1	AT						
120.1	121.0	QZ.						
121.0	152.4	P.A.T.						
32.0	44.2		12.2				.025	0.25
76.0	78.5		2.5				.600	0.09
100.6	126.2		25.6				.271	0.06

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 3 of 18

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS			
							DATE																	COMMENTS	g/t Au	opt Au	ppm Cu
15							JH															15.2					
							26/9/90																87	25142	.82	.024	1550
																							16.7				
																							69	25143	1.73	.050	1720
																							18.0				
																							88	25144	.43	.013	600
																							19.6				
20																							88	25145	.35	.010	800
																							21.3				
				1-3% py tr qtz																			88	25146	.22	.006	660
							22.0																22.9				
																							100	25147	.37	.011	650
																							24.4				
25																							83	25148	.36	.011	810
																							25.9				
																							100	25149	.41	.012	805
																							27.4				
																							100	25150	.38	.011	495
																							29.0				
																							83	25151	.48	.014	750
30																											

qm, as above.

1-3% py
tr qtz

22.0 qm, colour pred. greenish grey to pale green, chlorite. Locally brecciated, minor shears w/ grey gouge. Qtz vns as above. 1-3% py, locally 3-5%, tr qtz propylitic alteration
Qtz vein stock works developed.

py, sp.

27.0 1cm qtz

27.9 } rusty frx

28.8

29.3 } rusty frx
29.7

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 4 of 18

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JJH</u>	DATE <u>27/9/90</u>	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	g/t Au	ppm Cu
30									QM, as above.														93					
									31.0 } chloritic w salmon felds. 31.5 }														43	25152	.59	.017	1110	
									32.0 } QM, propylitically altered, pale green, sericite, sil, Kspar, epidote, qtz vn stockwork; 1-3% diss py + tr cpy (in qtz vns) 33.5-35.0 20cm core recovered 36.6-37.5 10cm core " (8cm)															87	25153	.76	.022	1210
35				1-3% diss py tr cpy																			12	25154	1.40	.012	790	
																							53	25155	.80	.023	1620	
																							9	25156	.86	.025	3000	
				3-5% diss py					QM, locally argillie → propylitic alt 2 over 10-15 cm, qtz vns to 7mm @ 5-10 cm intervals @ 30°-40°. 3-5% diss py, locally 5-7% w/ vns														100	38.1				
																							73	25157	.77	.022	2475	
40																							89	39.6				
																							100	40.5	25158	1.00	.029	2700
																							69	41.1				
																							42.1	25159	1.56	.046	5700	
																							100	42.7				
																							42.7					
																							93	25160	.75	.022	2475	
																							100	44.2				
									43.7 } sheared 44.2 }														73	25161	.19	.006	510	
45									Basalt dyke														100	44.7				

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-59

 Page 5 of 18

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							JJH	27/9/90																	g/t Au	opt Au	ppm Cu		
45				5-7% diss py																			73 457	25162	.20	.006	1040		
																							100	45.9					
																							406	25163	.19	.006	1070		
																							94	47.1					
																								25164	.136	.011	1660		
																								48.2					
																							93	25165	.140	.012	1860		
																								49.2					
																							49.7	25166	.42	.012	1560		
																								50.2					
				5-7% diss py																			93	25167	.174	.022	1555		
																								51.2	.27	.008			
																								100	25168	.30	.009	1100	
																									52.7				
																								100	25169	.23	.007	990	
																									54.2				
																								100	25170	.37	.011	790	
																									55.8				
																									55.8				
				1-3% py																				43	25171	.28	.008	300	
																									57.3				
																									87	25172	.17	.005	1045
																									58.8				
																									87	25173	.18	.005	1840

Qm, mgr, grey, matrix slightly chlorite.
5-7% diss py and occul 1-2mm vns @ 60-70°;

48.3 2mm py
48.4 " "
48.8 5mm Qtz + 3mm py
49.3 Speck of scheelite.
49.7 speck of scheelite

50.2 Qm is mildly porphyritic, w/ white felds laths. Py 5-7% diss. Matrix chloritized, greenish grey colour. Few specks scheelite

55.8 Contact abrupt, uneven, Qm not fgr
Ash-x1 buff, x1's vague; maroon, horn felds? Locally bleached, propylitic?, over 5-15 cm, 1-3% py in blebs + vns. 5-7% irreg Qtz and QC vns, 2-5mm wide

59.2 Ash tuff, as above

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 7 of 18

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY											UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS																		
							DATE	g/t	opt	ppm																																										
								Au	Au	Cu																																										
75				5-7% py tr. aspy			JJH	Ash duff, bifurc, variegated, py dross, blebs & vns, tr aspy																									100	25184	.04	.001	665															
				7-10% opy 3-5% aspy 1-2% cpy				76.0	Aspy & cpy & scheelite.																									76.2	76.0	4.23	.123	985														
				VG				77.5 77.7 78.2 78.5	77.2-78.5 Num specks VG in aspy aspy, py, cpy, sch. vns // core, 3-10mm																									100	25185	2.43	.071															
				7-10% py tr. aspy																															77.7	77.2	35.83	1.045	840													
																																				25186	8.44	.246														
																																				93	78.5															
																																					79.2	25187	.14	.004	1025											
																																						79.6														
																																						100	25188	.120	.006	640										
																																							80.8													
																																								100	25189	.19	.006	545								
																																										82.3										
																																										100	25190	.102	.001	700						
																																												83.8								
																																												93	25191	.01	.001	420				
																																													85.3							
																																													93	25192	.02	.001	540			
																																															86.9					
																																															100	25193	.01	.001	650	
																																																	88.4			
																																																100	25144	.01	.001	1040
																																																	89.9			

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 8 of 18

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
							JH																		891 28/9/90	3/T	g/E	ppm	
																							A4	Au	Cu				
90				3-5% py																			100	25195	.04	1001	850		
																								91.4					
				3-5% py																			100	25196	.01	1001	730		
																							93.0						
				7-10% py																			93	25197	.07	1002	680		
																								93.8					
																								25198	.02	1001	660		
				3-5% py																				94.5					
95																							100	25199	.14	1004	670		
																								96.0					
				3-5% py + cpy																				80	25200	1.80	1053	600	
																									97.5				
																									97.5				
				5-7% py																				81	25201	.16	1005	700	
																									99.1				
																									87	25202	.20	1006	645
																									100.6				
																									93	25203	94.67	2.761	640
																									102.1				
																									25204	2.85	1083	605	
																									100	25204	2.52	1074	
																									103.3				
				1-3% py																					103.6				
																									25205	.54	1016	660	
																									104.3				
																									94	25205	.22	1006	
105																									104.3				
																									25206	.21	1006	650	

DIAMOND DRILL RECORD

 PROPERTY SPECTRUM

 DDH 90-59

 Page 9 of 18

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANJUE	LOGGED BY												ASSAYS																				
							DATE	C O M M E N T S												g/t	opt	ppm																	
									UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	Au	Au	Cu												
105				cpy	qc		JJH	Ash tuff, greyish & greenish maroon, mottled, 5-7% py, locally up to 10% over 5cm. diss & thin vns. 15.2-15.4 = White qtz, cgr, bx matrix? tr o py																												105.2			
				5-7% py			29/9/90												100																25207	.10	.003	900	
																			100																25208	.06	.002	730	
																			108.2																25209	6.05	.176	735	
																			100																25209	5.45	.159		
																			107.7																25210	.09	.003	680.	
																			110.0																25211	3.10	.090	530	
				3-5% py	30°														111.0																25212	2.51	.073		
				1-3% py	25°														111.8																25212	50.88	1.484	650	
																			111.8																25213	.58	.017	545	
				1-3% py				112.8																25213	.78	.023													
								113.0																25214	6.00	.175	500												
				1-3% py				114.1																25214	7.14	.208													
								115.4																25214	7.03	.205	400												
								115.5																25215	5.16	.150													
				1-3% py				115.8																25215	11.5														
				1-3% py				115.8																25216	.39	.011	465												
				tr. aspy				117.1																25216	.22	.006													
				aspy				117.1																25217	3.46	.101	370												
				1-3% py				117.8																25217	6.56	.191													
				aspy				118.3																25217	118.5														
				VG				118.5																25218	4.21	.123	440												
				1-3% py				118.5																25218	3.98	.116													
				tr. aspy				119.7																25219	119.7														
				3-5% py				119.7																25219	210/151	.06/.02	650												
120								119.7																25219	210/151	.06/.02	650												

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 10 of 18

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY DATE	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS				
																									g/t	opt	ppm		
																									Au	Au	Cu		
120				tr py			JH 29/9/90 - 1/10/90																	120A	120.1	4.85	.141	270	
																								25220	121.0	3.31	.097		
				1-3% py tr opy aspy				Ash tuff, grey, 1-3% py, tr opy, tr aspy																93	121.0	.68	.020	550	
				5-7% py				Ash tuff, maroon tan																121.9	122.0	.74	.021		
				py + mo	cal			123.1 } Calcite vein // core, w/ py + mo vn to 5mm null to vn 123.4 } Ash tuff, mgr, gray, 7-10% py in vns to 1cm + blebs																113	122.2	3.53	.103	590	
				7-10% py tr-2% aspy																				25222	123.4	6.64	.194		
					50 cal			125.1 } 1.5cm pinkish calcite. 125.7 } 1-2% aspy																	88	124.8	1.02	.030	640
125				1-3% py				Ash tuff, mottled maroon,																	125.0	124.8	1.24	.036	610
				10-15% py				Ash tuff, tan + gray, tan section = 10-15% py, gray section = 1-3% py, 5-7% aspy																	93	126.2	.62	.018	710
				5-7% aspy																					126.5	127.1	.54	.016	980
								128.4 } Fault, 60% recovery 128.9 }																	127.0	127.6	.71	.021	395
				5-7% py				Ash tuff, maroon to green (chl) py varies over 10-15cm from 3-5% to 7-10%; higher conc. in blebs w/ chl.																	80	128.9	.12	.004	495
130																									129.5	130.0	.08	.002	700
																									75	131.1	1.28	.037	800
																									93	132.6	.29	.008	580
																									93	134.1	.40	.012	470
135																									25232	134.1	.40	.012	470

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-59

Page 11 of 18

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANJUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/t Au	opt Au	ppm Cu
COMMENTS																										
135			b	5-7% py			JJH															93	25232	.40	.012	470
			b	asp _{py}	45° cal		11/10/90															88	25233	.17	.005	440
				7-10% py 1% po tr. opy			136.7															93	25234	.88	.026	560
				3-5% py tr. asp _{py}			137.2															138.7	138.6			
							138.6															93	25235	2.15	.063	455
140																						100	25236	.10	.003	630
																						100	25237	.12	.006	455
																						143.2	142.8			
																						100	25238	.109	.003	505
																						144.8	143.9			
																						100	25239	.05	.001	515
145																						144.8	145.1			
																						100	25240	.102	.001	680
																						146.3	146.2			
																						93	25241	.106	.002	530
																						147.8	147.6			
																						88	25242	.02	.001	450
																						149.1	149.1			
																						149.1	25243	.110	.003	610
150																										

135
140
145
150
 136.7
137.2
138.6
141.7
142.8
143.9
144.8
146.2
147.6
149.1

DIAMOND DRILL LEDGER

DDH No.

Page No. 13

90-59

ASSAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		g/T Au	opt Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25140	12.2	13.7	1.5	1	.59	.017	3450	QM, weathered, qtz. vns, 3-5% py, tr-1% apy, tr mal.
141	13.7	15.2	1.5		.78	.023	1520	" " " " " "
142	15.2	16.7	1.5		.82	.024	1550	" " " " " "
143	16.7	18.0	1.3		1.73	.050	1720	" " " " " "
144	18.0	19.6	1.6		.43	.013	600	" " " " " "
145	19.6	21.3	1.7		.35	.010	800	" " " " " "
146	21.3	22.9	1.6		.22	.006	660	QM, chloritic, 1-3% py, tr apy propylitic
147	22.9	24.4	1.5		.37	.011	650	" " " " w/ qtz vn swks "
148	24.4	25.9	1.5		.36	.011	810	" " " " " "
149	25.9	27.4	1.5		.41	.012	805	" " " " " "
150	27.4	29.0	1.6		.38	.011	495	" " " " " & rusty fox "
151	29.0	30.5	1.5		.48	.014	750	" " " " " "
152	30.5	32.0	1.5		.59	.017	1110	" " " " " "
153	32.0	33.5	1.5		.76	.022	1210	" , propylitic, qtz vn swk, 1-3% diss py, tr apy
154	33.5	35.0	1.5		.40	.012	790	" " " " " (20cm max)
155	35.0	36.6	1.6		.80	.023	1620	" " " " " "
156	36.6	38.1	1.5		.86	.025	3000	" " " " " "
157	38.1	39.6	1.5		1.77	.022	2475	" , locally alt, qtz. vns, 3-5% diss py
158	39.6	41.1	1.5		1.00	.029	2700	" " " " " "
25159	41.1	42.7	1.6		1.56	.046	5700	" " " " " "

DIAMOND DRILL LEDGER

DDH No.

90-59

LAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH MET		g/T Au	opt Au	Metallic 62/100 Au	ppm Cu	DESCRIPTION
				g/T	opt					
25160	42.7	44.2	1.5			.75	.022	↓	2475	QM, locally alt, qtz vns, 3-5% diss py, sheared ^{43.7-44.2}
161	44.2	44.7	0.5			.19	.006		510	Basalt dyke
162	44.7	45.9	1.2			.20	.006		1040	QM, mgr, grey, 5-7% diss py
163	45.9	47.1	1.2			.19	.006		1070	" — " " "
164	47.1	48.2	1.1			.36	.011		1660	" — " " "
165	48.2	49.2	1.0			.40	.012		1860	" — " " " + py veins
166	49.2	50.2	1.0	.27/.008	*	.42	.012	.008	1560	" — " " " + tr. schaalite
167	50.2	51.2	1.0	.27/.008	*	.74	.022	.008	1555	QM, por ^{ts} , 5-7% diss py " "
168	51.2	52.7	1.5			.30	.009		1100	" " " "
169	52.7	54.2	1.5			.23	.007		990	" " " "
170	54.2	55.8	1.6			.37	.011		790	" " " "
171	55.8	57.3	1.5			.28	.008		300	Ash-xl tuff, h flsed? 5-7% qtz + qe vns, + 3% py
172	57.3	58.8	1.5			.17	.005		1045	" " " "
173	58.8	60.4	1.6			.18	.005		1840	Ash tuff, " " 3-5% py
174	60.4	61.9	1.5			.07	.002		1025	" " " " , broken
175	61.9	63.4	1.5			.16	.005		780	" " " "
176	63.4	64.9	1.6			.26	.008		800	" " " "
177	64.9	66.4	1.5	.28/.008	*	.84	.025	.008	1525	" " " "
178	66.4	67.7	1.3	.28/.008	*	.34	.010	.008	3000	" " " "
25179	67.7	68.9	1.2	.11/.003	*	.27	.008	.003	1020	" " " "

DAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH MET		g/T Au	opt Au	ppm Cu	DESCRIPTION
				g/T	opt				
25180	68.9	70.1	1.2			*.46	.013	1160	Ash buff, hflsed? 3-5% py, 5-7% Qc vns
181	70.1	71.6	1.5			.15	.004	1045	" " " , 5cm Qc vns
182	71.6	73.2	1.6			.09	.003	745	" " " , tr aspy, epy
183	73.2	74.6	1.4			.06	.002	870	" " " 5-7% py, locally 7-10%, tr. aspy
184	74.6	76.0	1.4			.04	.001	665	" " " " "
185	76.0	77.2	1.2	2.43/.071		*4.23	.123	0.60/985	" " " 7-10% py, 3-5% aspy, 1-2% epy
186	77.2	78.5	1.3	8.44/.246		*35.83	1.045	2.5/840	" " " " " , tr-1% sch.
187	78.5	79.6	1.1			.14	.004	1025	" " " " tr aspy
188	79.6	80.8	1.2			.20	.006	640	" " " " "
189	80.8	82.3	1.5			.19	.006	545	" " " " , locally 5-7%, 5cm Qc/box
190	82.3	83.8	1.5			.02	.001	700	" " " " , tr. mo
191	83.8	85.3	1.5			.01	.001	420	" " " 5-7% py
192	85.3	86.9	1.6			.02	.001	540	" " " " "
193	86.9	88.4	1.5			.01	.001	650	" " " " "
194	88.4	89.9	1.5			.01	.001	1040	" " , altered, 3-5% py
195	89.9	91.4	1.5			.04	.001	850	" " " " "
196	91.4	92.6	1.2			.01	.001	780	" " hflsed " "
197	92.6	93.8	1.2			.07	.002	680	" " " " "
198	93.8	94.5	0.7			.02	.001	660	" " " " "
5199	94.5	96.0	1.5			.14	.004	670	" " variegated, " , 3-5% Qc, tr. fluorite

DIAMOND DRILL LEDGER

DDH No. 90-59

ASSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH MET	g/T Au	opt Au		ppm Cu	DESCRIPTION
5200	96.0	97.5	1.5	.28/.008	* 1.80	.053		600	Ash tuff, grey, sil, 5-7% QC, 3-5% py, tr qtz
201	97.5	99.1	1.6		.16	.005		700	" , hftsed, 5-7% py
202	99.1	100.6	1.5		.20	.006		645	" " "
203	100.6	102.0	1.4	35.83/1.045	* 94.67	2.761	↑	640	" " "
204	102.0	103.3	1.3	2.52/.074	* 2.85	.083		605	" " "
205	103.3	104.3	1.0	.22/.006	* .54	.016		660	" , grey, 1-3% py
206	104.3	105.2	0.9		.21	.006		650	" , variegated, 5-7% py
207	105.2	106.7	1.5		.10	.003		900	" , " , " , 20cm QC
208	106.7	107.8	1.1		.06	.002		780	" " "
209	107.8	108.9	1.1	5.43/.159	* 6.05	.176		735	" " "
210	108.9	110.0	1.1		.09	.003		680	" " "
211	110.0	111.0	1.0	2.51/.073	* 3.10	.090		530	" , tan grey, bx? , 3-5% py
212	111.0	111.8	0.8	50.88/1.484	59.25	1.728		650	Veined & bxd zone, 40% QC, 1-3% py
213	111.8	113.0	1.2	.78/.023	.58	.017		545	Ash tuff, variegated, 1-3% py
214	113.0	114.1	1.1	7.14/.208	6.00	.175		500	" " "
215	114.1	115.8	1.7	5.14/.150	7.03	.205	211/256	400	Sheared & veined, 10cm QC vns, tan grey, 1-3% py
216	115.8	117.1	1.3	.22/.006	.39	.011		465	Ash tuff, grey, sil, 1-3% vfg py, tr aspy
217	117.1	118.5	1.4	6.56/.191	3.46	.101		370	" " , 1-3% py, 5-7% aspy, tr. sch., V.G.
218	118.5	119.7	1.2	3.98/.116	4.21	.123		440	" " " " , tr aspy
5219	119.7	120.1	0.4	1.51/.044	2.10	.061		650	" , hftsed, 3-5% py

DIAMOND DRILL LEDGER

Page No. 17DDH No. 90-59

SSAY TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH		g/T Au	opt Au	ppm Cu	DESCRIPTION
				g/T	opt				
23220	120.1	121.0	0.9	3.31	.047	*4.85	.141	270	Calcrete un, sheared, Tr py
221	121.0	122.0	1.0	.74	.021	.68	.020	550	Ash tuff, grey, 1-3% py, tr aspy, cpy
222	122.0	123.4	1.4	6.64	.194	*3.53	.103	590	" , maroon + tan, 5-7% py, tr. mo
223	123.4	124.8	1.4			1.02	.030	640	" , grey, m-gr, 7-10% py, tr-2% aspy
224	124.8	126.2	1.4			1.24	.036	610	" " " " " "
225	126.2	127.1	0.9			.62	.018	710	" , mottled, 1-3% py
226	127.1	127.6	0.5			.54	.016	980	" , tan, 10-15% py, tr. aspy?
227	127.6	128.9	1.3			.71	.021	395	" , grey, 1-3% py, 5-7% aspy, includes fault.
228	128.9	130.0	1.1			.12	.004	445	" , maroon to green, 5-7% py
229	130.0	131.1	1.1			.08	.002	700	" " " "
230	131.1	132.6	1.5			1.28	.037	800	" " " "
231	132.6	134.1	1.5			.29	.008	580	" " " "
232	134.1	135.6	1.5			.40	.012	470	" " " "
233	135.6	137.2	1.6			.17	.005	490	" " " "
234	137.2	138.6	1.4			.88	.026	560	" , grey, sil, 7-10% py, 1% po, tr cpy
235	138.6	140.2	1.6			2.15	.063	455	" , variegated, chl, 3-5% py, tr. aspy
236	140.2	141.7	1.5			.10	.003	630	" " " " " "
237	141.7	142.8	1.1			.20	.006	455	" " " " " , sp
238	142.8	143.9	1.1			.09	.003	305	" " " " " "
239	143.9	145.1	1.2			.05	.001	515	" , grey-green, m-cgr, 10% chl, 3-5% py

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-60

Page 4 of 13

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	ASSAYS			% RECOVERY	ASSAY No. and INTERCEPT	g/T Au	opt Au	ppm Cu														
							DATE																						
COMMENTS							UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOR									
45				1-3% py tr-1% cpy			JJH															100	25260	1.07	.031	2700			
																							45.7						
																							100	25261	.64	.019	1545		
																								47.2					
																								88	25262	1.42	.041	2400	
																								48.8					
																								93	25263	.80	.023	2400	
																									50.3				
																								100	25264	.41	.012	1500	
																									51.8				
																								100	25265	.40	.012	2850	
																									53.3				
																									94	25266	.41	.012	1745
																									54.9				
																								100	25267	.25	.007	1725	
																									56.4				
																									100	25268	.62	.018	3900
																									57.9				
																									100	25269	1.13	.033	2625
																									59.4				
60																									81	25270	.45	.013	1560

100x5
100x6
100x7
100x1
100x0

LOGGED BY JJH
DATE 2/10/90

C O M M E N T S

QM, slightly por^{ls}, greenish grey, argillie alt²,
1-3% py, diss + occul vns (1-3mm, @10° to
70°), tr-1% cpy

Secondary (brown) biotite after
hbl.

48.8
3-5% aspy over 10cm.

53.3
Aspy is diss, thin vns w/ py, cpy
cpy is diss, " " " " , aspy

56.4 1mm @0°, w/ aspy, py, cpy, mo

57.1 Qtz w/ 3 x 1 mm cpy vns

3-5% py
1-3% cpy
tr aspy

3-5% py
1-3% cpy
tr aspy

3-5% py
1-3% cpy,
aspy
cpy
tr mo.

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-60

Page 8 of 13

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							DATE																	g/t Au	opt Au	ppm Cu
105				7-10% py			JJH															105.1				
				Cal			105.7															106.1	25300	.20	1006	650
							105.7-105.8															107.6	25301	.40	.012	760
																						108.1				
																						109.1	25302	.32	1009	810
																						109.7				
																						88	25303	.19	1006	730
																						111.2				
							112.8-114.3															93	25304	.12	1004	600
																						112.8				
							114.3															107	25305	.21	1006	520
																						114.3				
																						93	25306	.22	1006	570
																						115.8				
																						100	25307	.26	1008	625
							117.4															117.4				
																						100	25308	.74	.022	575
																						118.9				
																						100	25309	1.34	1.039	465
																							1.47	.043		

Box 17

Box 18

Box 19

DIAMOND DRILL LEDGER

Page No. 10

DDH No. 90-60

DAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		OZ/T Au	MET OZ/T Au	PPM Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
25246	22.9	24.1	1.2	↑	.033		2700		QM, mgr, locally sheared, 2% py, cpy, rusty frx
247	24.1	25.6	1.5		.024		1410		" " " "
248	25.6	27.1	1.5		.035	.034	2250		" " " "
249	27.1	28.6	1.5		.155	.095	360		" " " "
250	28.6	30.2	1.6		.033	.034	2550		" " " "
251	30.2	31.7	1.5		.018		1620		" " " "
252	31.7	33.3	1.6		.029		1530		" " " "
253	33.3	35.0	1.7		.022		2025		" " " "
254	35.0	36.6	1.6		.033		1725		" " " "
255	36.6	38.1	1.5		.039		3075		" " " "
256	38.1	39.6	1.5	.034 27.4	.023		2625		" " " "
257	40.0	41.2	1.2	.9206	.035		3900		" " " "
258	41.2	42.7	1.5		.030		1230		" " " "
259	42.7	44.2	1.5		.033		1340		" " " "
260	44.2	45.7	1.5		.031		2700		" sl. por ^{ls} , 1-3% py, tr-1% epy, argillic
261	45.7	47.2	1.5		.019		1545		" " " "
262	47.2	48.8	1.6		.041		2400		" " " "
263	48.8	50.3	1.5	↓	.023		2400		" " " "
264	50.3	51.8	1.5		.012		1500		" " 3-5% py, 1-3% epy
265	51.8	53.3	1.5		.012		2850		" " " "

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		oz/T Au	MET oz/T Au	Ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25266	53.3	54.9	1.6		.012		1745	Q.M. sl. por ^{ic} , argillic alt ^a , 3-5% py, 1-3% cpy, tr aspy
267	54.9	56.4	1.5		.007		1725	" " " " " "
268	56.4	57.9	1.5		.018		3900	" " " " " " tr mo 1-3% aspy
269	57.9	59.4	1.5		.033		2625	" " " " " "
270	59.4	61.0	1.6		.013		1560	" " " " " "
271	61.0	62.5	1.5		.026		2700	" " " " " "
272	62.5	64.0	1.5	0.039 15.2	.063	.042	1780	" " " " " "
273	64.0	65.5	1.5		.063	.072	2175	" " " " " "
274	65.5	67.0	1.5		.073	.045	1620	" " " " " " +tr po 4
275	67.0	68.6	1.6		.013	.012	1400	" " " " " " tr-2% aspy, cpy, tr mo
276	68.6	70.1	1.5		.041	.035	2175	" " " " " "
277	70.1	71.6	1.5		.030	.030	2400	" " " " " " tr-1% cpy, tr aspy, mo
278	71.6	73.2	1.6		.012		500	" " " " " "
279	73.2	74.7	1.5		.009		760	" " " " " "
280	74.7	76.2	1.5		.006		1030	" " " " " "
281	76.2	77.6	1.4		.011		1740	" " " " " "
282	77.6	79.0	1.4		.015		2400	" " " " " "
283	79.0	80.5	1.5		.034	.026	3375	Ash duff, brown-meson, mgr, 1-3% py, tr. cpy, aspy
284	80.5	82.0	1.5		.050	.051	2700	" " " " " "
25285	82.0	83.6	1.6	0.058 9.4	.200	.231	2975	" " grey, fat oil, 5-7% py, tr. cpy, aspy

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		oz/T Au	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet			
25286	83.6	85.3	1.7		.018	4200	Ashy tuff, gray, fgr. sil, 5-7% opy, tr. opy, aspy
287	85.3	86.9	1.6		.022	3150	" " " " 1-3% aspy, tr. 1% op
288	86.8	88.4	1.5		.021	2550	" " " " " "
289	88.4	89.9	1.5		.011	1240	" " " " 1-3% aspy, tr. 1% opy
290	89.9	91.4	1.5		.013	810	" " " " , tr opy, aspy
291	91.4	93.0	1.6		.012	1160	" " " " " "
292	93.0	94.5	1.5		.011	1300	" chloritic " tr. 2% aspy, tr opy
293	94.5	96.0	1.5		.006	990	" " " " " "
294	96.0	97.6	1.6		.006	160	" " " " " "
295	97.6	99.1	1.5		.001	1560	" hflsed? 7-10% opy tr opy
296	99.1	100.6	1.5		.002	840	" " " " " "
297	100.6	102.1	1.5		.006	1090	" " " " " "
298	102.1	103.6	1.5		.004	845	" " " " " "
299	103.6	105.1	1.5		.007	650	" " " " " "
300	105.1	106.6	1.5		.006	650	" " " " " "
301	106.6	108.1	1.5		.012	760	" " " " " "
302	108.1	109.7	1.6		.009	810	" " " " " "
303	109.7	111.2	1.5		.006	730	" " " " " "
304	111.2	112.8	1.6		.004	600	" " " " " "
25305	112.8	114.3	1.5		.006	520	" " " " , tr sp, aspy

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-61

Page 7 of 11

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY NO. and INTERCEPT	ASSAYS			
							DATE																	COMMENTS	g/t Au	opt Au	ppm Cu
90	8			3-5% py			JJH															25355	90.5	.01	.001	96	
													Si 100 Ep tr-1%										25356	91.4	.04	.001	47
																							25357	93.0	.02	.001	70
																							25358	94.5	.09	.003	170
													Si 100 Ep 1-3% K tr-1%										25359	96.0	.07	.002	113
																							25360	97.5	.02	.001	94
				5-7% py									Si 100 Ep 3-5% K 1-3%										25361	99.1	.04	.001	118
																							25362	100.6	.05	.001	184
													Si 100 Ep 5-7% K 20-30%										25363	102.1	.04	.001	139
													Si 90 Ep 1-3% K tr										25364	104.9	.01	.001	121
																							25365	103.6	.02	.001	101
													Si 90 g Ep 7-10% K 30-40%										25366	104.4	.07	.002	120

Box 9

Box 10

Box 11

90.5 Fault
Ash tuff, fs, greenish gray to gray, sil.
3-5% py, tr-1% epid, increasing w/depth
Tr Ksp on accul fr x. Crackle bx.

K 30-40%

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-61

Page 8 of 11

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY <u>JH</u>	DATE <u>3/10/90</u>	COMMENTS	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/t Au	opt Au	ppm Cu
105		XXXX		5-7% py					Ash stuff? fgr, epidote, chlorite, Kspar Crackle bx						Si 90 Ep 7-10% K 30% 4%									105.2	25366	.07	.002	120
																								81	105.9			
																								106.7	25367	.16	.005	147
				3-5% py					Ash stuff, f-gr, greenish gray, chlorite Minor epidote, tr Kspar, to 108.2, 3-5% diss. py						Si 90									81	107.4			
																								108.2	25368	.01	.001	113
																								80	108.6			
																								80	25369	.02	.001	90
																								88	109.7			
																								88	25370	.01	.001	75
																									111.2			
																								93	25371	.05	.001	110
																									112.8			
				5-7% py																				93	25372	.02	.001	183
																									114.3			
																								93	25373	.01	.001	132
																									115.8			
																								75	25374	.01	.001	76
																									117.3			
									No core															0	117.3			
																									118.3			

Box 12

Box 13

Box 14

DIAMOND DRILL LEDGER

stage No. 9DDH No. 90-61

DAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		oz/t Au	Ag	ppm Cu	DESCRIPTION
	Metres	Feet	Metres	Feet				
25316	26.2	27.4	1.2		.006		153	Ash-lapilli tuff, sil, 1-3% py, tr mal.
317	27.4	29.0	1.6		.006		170	" " " " bxd, rusty
318	29.0	30.5	1.5		.006		171	" " " " " "
319	30.5	32.0	1.5		.001		190	" " " " " "
320	32.0	33.5	1.5		.001		202	" " " " " "
321	33.5	36.6	3.1		.006		190	" " " " " "
322	36.6	38.1	1.5		.001		142	" " 3-5% py, 1-3% po, "
323	38.1	39.7	1.6		.002		165	" " " " " "
324	39.7	42.7	3.0		.020		232	Fault zone, gouge (No core 42.7-47.9)
325	47.9	49.2	1.3		.006		260	Ash-lapilli tuff, bxd, 7-10% py
326	49.2	50.3	1.1		.002		85	Ash tuff, maroon-greenish grey, 7-10% diss py
327	50.3	51.8	1.5		.005		180	" " " " bxd
328	51.8	53.3	1.5		.012		212	" " " 3-5% py, "
329	53.3	54.9	1.6		.006		245	" " " 1-3% py, "
330	54.9	56.4	1.5		.003		218	" " " " "
331	56.4	57.7	1.3		.002		195	" " " " "
332	57.7	59.0	1.3		.003		143	" " " " "
333	59.0	61.0	2.0		.007		186	" grey, sil, 3-5% py
334	61.0	62.5	1.5		.003		140	" " " " "
25335	62.5	64.0	1.5		.006		137	" " " " "

DIAMOND DRILL LEDGER

Page No. 10

DDH No. 90-61

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		OZ/T Au	Ag	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
25336	64.0	65.5	1.5		.001		80		Ash tuff, gray, sil, 3-5% py
337	65.5	67.0	1.5		.001		149		" " " "
338	67.0	68.6	1.6		.001		150		" " " "
339	68.6	70.1	1.5		.001		134		" greenish-gray, faulted, 3-5% py
340	70.1	71.6	1.5		.002		56		" " " "
341	71.6	73.2	1.6		.002		91		" " " "
342	73.2	74.7	1.5		.001		95		" mottled, argillic, bxd, "
343	74.7	76.2	1.5		.001		58		" " " "
344	76.2	77.7	1.5		.001		335		" " " "
345	77.7	79.2	1.5		.001		170		" " " "
346	79.2	80.8	1.6		.001		241		Fault zone, gouge
347	80.8	82.3	1.5		.001		272		" "
348	82.3	83.2	0.9		.001		131		Ash tuff, m-ear, argillic, bxd, 3-5% py
349	83.2	84.1	0.9		.001		63		" " " "
350	84.1	85.3	1.2		.001		142		" " " "
351	85.3	86.2	0.9		.001		151		" " " "
352	86.2	87.2	1.0		.001		90		" " " "
353	87.2	88.3	1.1		.001		178		" " " "
354	88.3	89.6	1.3		.001		93		" " " "
25355	89.6	90.5	0.9		.001		96		Fault zone, gouge

DIAMOND DRILL LEDGER

DDH No. 90-61Page No. 4

SAY TAG No.	SAMPLE INTERVAL		SAMPLE LENGTH		oz/T Au	Ag	ppm Cu		DESCRIPTION
	Metres	Feet	Metres	Feet					
25356	90.5	91.4	0.9		.001		47		Ash tuff, greenish, brecc, 3-5% py, tr-1% epid.
357	91.4	93.0	1.6		.001		70		" " " " "
358	93.0	94.5	1.5		.003		170		" " " " "
359	94.5	96.0	1.5		.002		113		" " " " 1-3% epid, tr-1% Kspar
360	96.0	97.5	1.5		.001		94		" " " " "
361	97.5	99.1	1.6		.001		118		" " " " 5-7% py, 3-5% epid, 1-3% Kspar
362	99.1	100.6	1.5		.001		184		" " " " " " "
363	100.6	102.1	1.5		.001		139		" " " " 5-7% epid, 20-30% Kspar
364	102.1	103.3	1.2		.001		121		" " " " 3-5% py, 1-3% epid, tr-1% Kspar
365	103.3	104.4	1.1		.001		101		" " " " " " "
366	104.4	105.9	1.5		.002		120		" " " " 7-10% epid, 30-40% Kspar
367	105.9	107.4	1.5		.005		147		" " " " " " "
368	107.4	108.6	1.2		.001		113		Ash tuff, f-mgr, chl ^{ic} , 3-5% drss py
369	108.6	109.7	1.1		.001		90		" " " " " "
370	109.7	111.2	1.5		.001		75		" " " " " "
371	111.2	112.8	1.6		.001		110		" " " " " "
372	112.8	114.3	1.5		.001		183		" " " " " broken
373	114.3	115.8	1.5		.001		132		" " " " " "
374	115.8	117.3	1.5		.001		76		" " " " " "

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-62

Page 3 of 10

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							COMMENTS																		g/t Au	opt Au	ppm Cu
30				5-7% py			JJH	4/10/90															30.0				
							Ash tuff, mottled maroon + pale green, 5-10% epidote in 15-2 cm clots, py varies from 3-5% to 7-10% Epidote usually accompanied by py.																25382	101	1001	102	
																								31.7			
																							32.0				
																							25383	107	1002	364	
																							33.5				
																							25384	124	1007	227	
																							35.0				
																							25385	128	1008	132	
																							36.6				
																							25386	122	1006	81	
																							38.1				
																							25387	126	1037	144	
																							39.6				
																							56	25388	148	1014	157
																							41.2				
																							100	25389	110	1003	164
																							42.7				
																							25390	108	1002	171	
																							44.2				
																							25391	117	1005	132	

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-62

Page 5 of 10

HOLE DEPTH	CORE #	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	C O M M E N T S	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
																										g/T Au	opt Au	ppm Cu
60				5-7% Py			JJH	4/10/90	Ash tuff, gray to greenish-gray, sil mgrs				Si 90-100											81	25401	.11	.003	102
									60.8-61.0 brick red mineral w/ qc vns.														61.0	60.8				
									62.2 Ash tuff, m-egr, greenish grey w/ salmon-pink cast, variable from weak to strong, 5-50% Kspar, tr-3% epidote.				Si 100 K-50											93	25402	.12	1004	80
				3-5% Py																			62.5	62.2				
																							100	25403	.15	1004	71	
													Si 100 K-5-10										100	63.4				
																							64.0	25404	.10	1003	59	
																							100	64.5				
65																							100	25405	.105	.001	110	
																								65.5	65.5			
													Si 100 K 10-20%											94	25406	.03	1001	46
																							67.1	66.7				
																							100	25407	.02	1001	70	
																							100	68.0				
													Si 90 K 5-10%										68.6	25408	.03	.001	79	
																							100	69.5				
																							70.1	25409	.02	1001	63	
				5-7% Py					70.9 Ash tuff, mgr, gray, sil (cherty); 5-7% diss py.				Si 100										100	70.9				
																							71.6	25410	.01	1001	61	
																							88	72.4				
																							73.2	25411	.02	1001	70	
																							107	74.0				
				3-5% chss Py					74.0 Ash tuff, mgr, chl + epid + Kspar				Si 100-90											71.7	25412	.01	1001	96
75																							93	93				

60
65
70
75

DIAMOND DRILL RECORD

PROPERTY SPECTRUM

DDH 90-62

Page 6 of 10

HOLE DEPTH	CORE	BRECCIA	COND. OF CORE	MINERAL	HABIT	GANGUE	LOGGED BY	DATE	UNIT	CONTACT	MAJOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	MINOR ROCK TYPE	GRAIN SIZE	TEXTURE	COMPOSITION MODIFIERS	THICKNESS	% MINOR	COLOUR	% RECOVERY	ASSAY No. and INTERCEPT	ASSAYS		
							JJH	4/10/90																	COMMENTS	g/t Au	opt Au
75				3-5% diss py																			75.3				
				3-5% diss py								5.90											93	25413	.07	1002	50
				3-5% diss py								5.80											76.2	25414	.16	1005	61
				5-7% diss py								5.70											87	25415	.02	1001	82
				5-7% py								5.90											77.9	25416	.01	1001	185
				tr py								7.00											88	25417	.03	1001	121
				3-5% py																			79.2	25418	.02	1001	114
																							80.8	25419	.02	1001	130
																							93	25420	.01	1001	144
																							86.9	25421	.01	1001	58
																							87.6	25422	.02	1001	97
																							88.4	25423	.02	1001	90
																							100	89.9			

DRILL TAG No.	SAMPLE Metres	INTERVAL Feet	SAMPLE Metres	LENGTH Feet	oz/T Au	Ag	ppm Cu	DESCRIPTION
25375	19.8	21.3	1.5		.005		141	Ash tuff, gray, sil, 3-5% py, 3-5% Qc vns
376	21.3	22.9	1.6		.007		357	" " 5-7% py "
377	22.9	24.0	1.1		.001		184	" " " " , broken
378	24.0	25.0	1.0		.001		162	" " " " "
379	25.0	26.8	1.8		.001		338	" , mottled maroon-pale green, 3-5% py
380	26.8	28.4	1.6		.001		334	" " 5-7% py
381	28.4	30.0	1.6		.001		136	" " " , 5-10% epid.
382	30.0	31.7	1.7		.001		102	" " " "
383	31.7	33.5	1.8		.002		364	" " " "
384	33.5	35.0	1.5		.007		227	Ash tuff, as above, broken
385	35.0	36.6	1.6		.008		132	" " " "
386	36.6	38.1	1.5		.006		81	" " 5-7% py, 5-10% epidote
387	38.1	39.6	1.5		.037		144	" , greenish gray, " , 3-5% "
388	39.6	41.2	1.6		.014		157	" " " tr "
389	41.2	42.7	1.5		.003		164	" " " "
390	42.7	44.2	1.5		.002		171	" tan-gray, " "
391	44.2	45.7	1.5		.005		132	" greenish-gray, " "
392	45.7	47.2	1.5		.001		140	" " " , sil
393	47.2	48.8	1.6		.008		200	" " " "
394	48.8	50.3	1.5		.018		182	" " " "

AG	SAMPLE Metres	INTERVAL feet	SAMPLE Metres	LENGTH feet	g/T Au	Ag	Ppm Cu	DESCRIPTION
5	50.3	51.8	1.5		1005		141	Ash tuff, greenish-gray, 5-7% py, tr epidote
6	51.8	53.3	1.5		1002		139	" " " "
7	53.3	54.9	1.6		1004		150	" " " " + 80 cm gauge
8	54.9	56.4	1.5		1002		94	" " " "
9	56.4	57.9	1.5		1005		135	" " " "
10	57.9	59.4	1.5		1003		126	" " " "
401	59.4	60.8	1.4		1003		102	" " " " , mgr, sil
402	60.8	62.2	1.4		1004		80	" " " " , brick red min m ^{QC vns}
403	62.2	63.4	1.2		1004		71	Ash tuff, m-cgr, greenish-gray to salmon, 3-5% py, tr 3% epid ^{50% Kspar}
404	63.4	64.5	1.1		1003		59	" , as above, 5-10% Kspar
405	64.5	65.5	1.0		1001		110	" " " "
406	65.5	66.7	1.2		1001		86	" " 10-20% Kspar
407	66.7	68.0	1.3		1001		70	" " " "
408	68.0	69.5	1.5		1001		79	" " 5-10% Kspar
409	69.5	70.9	1.4		1001		63	" " " "
40	70.9	72.4	1.5		1001		61	" , mgr, gray, sil, 5-7% py
411	72.4	74.0	1.6		1001		70	" " " "
412	74.0	75.3	1.3		1001		96	" , mgr, chl + epid + Kspar, 3-5% py
413	75.3	76.6	1.3		1002		50	" " " "
414	76.6	77.9	1.3		1005		61	" , chl ¹⁶ , "spotted", "

