Diamond Drill Log DDH 3-01

Dip 45, Azi: 270, North 6160528 +/- 8m East 348033 +/- 8m T.D. 224.9 m

Date: May 23 Logged By: J. Oliver Page 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3																				**CASING**
																					3
3	17.95	CA																			**CHERTY ARGILLITE**
				4.5	S1 28								0,5								Strongly transposed, cherty argillite. May contain minor grey limestone interbeds.
					S0 5																Abundant foliation parallel slip planes.
																					Net sulphide content low; < 0.5%, euhedral pyrite.
															0,5						Minor mm scale quartz veins, irregular in form, no alteration envelopes.
				12.5	S1/S0 25																Note limestone interbed at 7.5 to 8.4.
																					No skarn assemblages. Pyrite content elevated in mm - cm scale clastic layers. Non-magnetic.
																					17.95
																					LIMESTONE
17.95	52.7	L		19	S1 40																Light grey to medium grey, medium grained limestone.
																					Sporadic hints of bioclastic debris, pellets, crinoids. Generally heavy re-cyrstallization. Locally well developed stylolitic and presure solution cleavages.
																					Distinctive gradational contact from 17.95 - 18.2, 15% black clastic matrix.
																					No development of skarn or hydrothermal alteration products.
				37.95	S1 35																No significant structural zones
																					Sporadic irregular non-sulphidic, quartz veinlets
																					Net sulphide content, pyrite, very low < 0,2 %.
																					52.7
52.7	54.8	Pl											0,5								**LIMY-CHLORITIC PHYLLITE**
				53.85	60																Pale green-grey, moderately compositionally layered limy phyllite.
																					Calcite content decreases, increased dolomite, weak A-red response.
				54.85	45																Matrix pyrite slightly increased, 0,5%. No base metal phases.
																					No skarn development, no vein development.
																					54.8
54.8	72.7	L																			**LIMESTONE**
																					Homogeneous light grey limestone, felted re-crystalized matrix.
													Tr								No significant development of internal compositional layers, sporadic stylolitic cleavages.
																					No significant vein development, no skarn assemblages.
																					Intact core, no brittle-ductile failures.
																					Net sulphide content low, pyrite < 0,2%

																				72.7	
72.7	75.9	Pl											0,5							**LIMY-CHLORITIC PHYLLITE**	
																				Distinctive grey-green well compositionally laminated matrix	
				74.25	S1/S0	35														30-40% calcite matrix, 10% dolomite, locally well defined dark grey compositional layers.	
									Note: This unit may be receiving tuffaceous input.											Net sulphide content slightly elevated, pyrite 0,5 - 0,75 %, no base metal phases.	
																				No significant structural zones.	
				75.9	S1/S1	85														No skarn or hydrothermal related minerals.	
																				75.9	
75.9	84.8	L																		**LIMESTONE**	
																				Felted texture, re-crystalized limestone with sporadic black clastic input.	
				84.8	SoS0															Minor, non-sulphidic, white calcite veins.	
																				No skarn assemblages, no hydrothermal mineral phases.	
																				Net sulphide content, pyrite, <.2 %	
																				84.8	
84.8	106.3	CA	X																	**CHERTY ARGILLITE**	
																				Dark grey, sporadically compositionally laminated cherty argillite.	
													,75%							Abundant cuspate to oval pale grey Fragments, probably depositional in origin.	
				97	S1/S0	30														Non-calcareous, non-magnetic.	
																				Generally intact cone, no significant structural zones.	
																				No skarn assemblages, or base metal phases.	
				103.8	S1/S1	26														Pyrite commonly as minor oval to framboidal aggregates, averaging 0.75%.	
																				Sporadic mm scale extensional quartz veinlests forming orthogonal to compositional layers.	
				106.3	S0	35														106.3	
106.3	109.7	L	*q										tr	tr						**LIMESTONE**	
																				Minor dark grey limestone interbed.	
																				Unit is cut by abundant crackle breccia calcite veinlets.	
																				No skarn or sulphide veins.	
																				Net pyrite content very lov, Py: tr, pyrrohtite tr.	
																				109.7	
109.7	115.2	CA	x																	**CHERTY ARGILLITE BRECCIAS**	
																				Dark grey moderately compositionally laminated unit,	
				111	S1/S0	24														with abundant cuspate to oval chart fragments.	
																				Sporadic mm to sub-mm aggregates of pyrite, ^ 1.01, no other sulphide phases.	
																				No discordant veins or sulphide related rock alterations.	
																				115.2	
115.2	160.1	AP																		**ARGILLACEOUS PHYLLITE**	
				115.3	Sh:	15														Well compositionally laminated medium to dark grey argillaceous phyllite.	
				116.5	S1/S0	35														Rock matrix much softer, chert component significantly decreased.	
																				Compositional lamella's average 3-5 cm in thickness.	

				135.5	S1/S0	35														Minor brittle failure zone at upper contact between 115.2 - 116.1;	
				141.9	S0	45														blockly broken cone, no vein injection.	
																				Net sulphide, Py content low, 0,5%, usually as compositionally parallel lamella.	
																				Minor green-grey limy phyllite interbed between 141.9 and 142.9.	
																				No skarn assemblages, no high sulphide veins.	
				160.1	S0 39															160.1	
160.1	165.4	L																		**LIMESTONE**	
																				Blue-grey felted matrix, medium grained Sporadic pressure solution cleavages.	
																				Increasing black clastic input toward the basal contact, 163.9-165.4.	
																				Py < 0,5%, no sulphide vein or skarn assemblages.	
				167	S1=S0	53														165.4	
165.4	171.8	AP																		**ARGILLACEOUS PHYLLITE**	
									DH: 167.0, S1/S0											Medium grey to grey green and well compositionally layered argillaceous phyllite.	
									Near orthogonal clevage set.											No sulphide veins or skarn assemblages. Pyrite averages 0,5% largely as narrow lamella.	
																				Rock compositional layers average 1,0 -3,0 cm.	
																				171.8	
171.8	179.1	CA																		**CHERT-RIBBON BANDED CHERT**	
																				Abundant cm scale, highly contorted chert lamella (80%) separated	
																				by narrow, mm scale black clastic lamella (20%).	
				178.8	0S0															Contorted lamella but no major faults indentified.	
																				Net sulphide content low, minor < 0,5% disseminted pyrite.	
																				Note minor 20 cm gouge zone towards the lower contact.	
																				Elevated sulphide content, 2-3% pyrite in clay rich gouge.	
																				179.1	
179.1		Fpd											0,25						0,25	**FELDSPAR PORPHYRITIC DYKE**	
																				Apple green non-foliated feldspar porphyritic dyke.	
																				Feldspar are clouded and moderately sericitized, by volume 60% plagioclase.	
																				Homogeneous, no internal stockworks, no compositional differences.	
			187.8	Si	35															Finely disseminated matrix pyrite 0,25%, Finely disseminated matrix magnetite 0,25%.	
																				188.9	
188.9	196.5	C-A																		**CHERT MINOR ARGILLITE**	
																				Well compositionally laminated ribbon chert (85%) with lesser (15%)	
			192.4	S1	O50%															black graphitic argillite compositional layers.	
																				Non-calcareous, non-magnetic.	
																				Low net sulphide content, pyrite < ,5%.	
																				No sulphide veins or skarn assemblages.	
																				196.5	
196.5	215.9	AP																		**ARGILLACEOUS PHYLLITE**	

																					Strong S1 fabric with abundant transposed bedding features within
													O,75								this dark to medium grey argillaceous phyllite.
				196.7	Sh	50															Non-calcareous, and non-magnetite.
																					Pyrite averages O.75%, largely as mm scale foliation parallel lamella.
				199.9	S1 50																No sulphide veins or skarn assemblages, no hornfels development.
				213.6	S1-S0	35															Definitive brittle-failure, fault at upper contact, 196.5-197.5, shear
																					surfaces parallel S1 at 050.
																					215.9
215.9	218.8																				**FELDSPAR PORPHYRITIC DYKE**
				215.9	Sdi	28						,25						,25			Light grey-green Feldspar porphyritic dyke.
																					Probable matrix silification, feldspar less distinct than in previous dyke.
																					Disseminated pyrite O,25%. No magnetic.
																					No-calcareous, non-magnetic.
				218.8	Sd	45															No developments of stockwork veins.
																					Tight upper and lower contacts.
																					218.8
218.8	221.4	CA/L																			**CHERTY ARGILLITE - LIMESTONE INTERBEDS**
													,75								Thinly, cm scale, ribbon chert lamella are separated by narrow mm
																					scale argillaceous lamella.
																					The interval contains a single grey limestone interbed between
																					217.0 and 221.4 m's
																					No significant structures, veins or sulphides are noted in this interval.
																					Pyrite, disseminated in CA, at O,75% 221.4.
																					221.4
221.4	224,8	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Bleached light grey-green Feldspar porphyritic dykes.
																					Most joint surfaces contain minor slip planes.
				224.8	Sd	45															Disseminated pyrite 0,5% +/- grey sulphide phase.
																					No stockwork veins or high sulphide veins.
																					224.8
224.8	224.9	CA																			**CHERTY ARGILLITE**
																					Blocky broken dark grey black cherty argillite.
																					Disseminated pyrite, 1,0%.
																					Non-calcareous, non-magnetic.
																					224.9
224.9	EOH																				
											Note: All down hole surverys in this										
											drill hole fail. Camera insertion was										
											inverted.										

Assay Sample Log DDH 3-01

Date: May 24, 2003 Page: 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17501	178.1	179.1	B						
O17502	179.1	180.1	B						
O17503	215.9	217.3	B						
O17504	217.3	218.8	B						
O17505	221.4	224.8	B						
O17506	224.8	224.9	B						


3.0
6.4
7.9
11.0
14.0
17.1
18.6
19.0
23.2
24.0
26.2


3-01-BOX 34 166.8
166.8
169.5
3-01-BOX 35 171.4
171.4
172.5
175.6
3-01-BOX 36 176.9
176.9
178.6
181.7
3-01-BOX 37 182.0
182.0
187.8


3-01-BOX 26
3-01-BOX 29
3-01-BOX 30
3-01-BOX 31
3-01-BOX 32


3-01 BX 24
3-01 BX 25
3-01 BX 26
3-01-BOX 27
3-01-BOX 28


3-01 BOX 21
3-01-BOX 22
3-01 BX BX 23
3-01 BX 24


3-01 BX 23
3-01 BX 24


3-01-BOX 16
3-01-BOX 17
3-01-BOX 18
3-01-BOX 19
1024
3-01-BOX 20
3-01-BOX 21


3-01-BOX 12 62.4
3-01-BOX 13 67.4
3-01-BOX 14 72.4
3-01-BOX 15 78.0


3-01-BOX 12 62.4
3-01-Box 13 67.4


29.0
29.3
34.8
384
40.5
46.1

Diamond Drill Log DDH 3-02

Dip: 45, Azi: 270, T.D.: 151.2 m. North 6160598 +/-10 m, East 347945 +/- 10 m

Date:May 26,03 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	0,9	CASE																			**CASING**
																					0.9
0.9	20.7	CA-X											3								**CHERTY ARGILLITES MINOR DEPOSITIONAL BRECCIAS**
																					Intercalated dark grey black argillites with slightly gritty cherts.
				9.5S2	O80																Interbeds of cuspate oval chert breccias common.
																					Blocky broken core at upper contact, but no significant faults.
				20.5	S1S0																Disseminated pyrite high, 3-4%, no base metal phases; non-magnetic.
																					No high sulphide weins or skarn assemblages.
																					Minor feldspar porphyritic dykelet between 16.5 and 17.5
																					20.7
20.7	21.3	L																			**LIMESTONE**
																					Felted texture, strongly re-crystalized limestone.
																					Sporadic discordant white calcite veins.
																					Very low net sulphide density, Py < .5 %
																					21.3
21.3	43.6	Fdp																			**FELDSPAR PORPHYRITIC DYKE**
				21.3	Sd:55																Crowded, weakly altered feldspar porphyritc dyke.
																					Abundant blurred, but recognizable white plagioclase phenocrysts.
													0,5							1,0	Amphibole lathes, weakly altered.
																					Low disseminated pyrite, but good, 0.5 - 0,75% disseminated magnatite, 1 -1.5%
																					Clean intact core, no significant structures and no stockwork development.
																					Well developed chill margins at both upper and lower contacts.
				43.6	Sd:20																43.6
43.6	46.5	L																			**LIMESTONE**
																					Medium grained blue-grey limestone. May contain minor tuffaceou
																					and sulphide rich inclusions at the upper contact.
																					Sporadic pressure solution textures, massive, non-bedded.
																					Disseminated pyrite from 43.6 to 44.6 10-12% elsewhere <.5%.
																					No stockwork veins no skarn development.
																					46.5

46.5	51.1	CAX																		**CHERTY ARGILLITES - MINOR BRECCIAS**
				47.8	Si35								2							Dark grey argillite with 60% compositional layers and boudinaged layers of chert
				51.1	Sd:25															Blocky broken core at upper contact, but no significant offsetts identified.
																				Disseminated pyrite content 2-3%, no base metals.
																				No skarn or high sulphide vein assemblages.
																				Lower dyke contact tight, no alteration.
																				51.1
51.1	54.9	Fpd																		**FELDSPAR PORPHYRITIC DYKE**
													0,25						1,0	Medium grained, grey-green, feldspar porphyritic dyke.
																				Light rock alteration all feldspars sharple defined, albite twin planes recognizable
																				Good chill margin, both contacts.
																				Non-mineralized, 1% disseminated magnetite, pyrite < 0.25%.
																				54.9
54.9	62.8	CA-X																		**CHERTY ARGILLITE MINOR BRECCIAS**
																				Dark grey black moderately to strongly foliated cherty argillite, each
				61.3	Si:30															unit represented in equal , 50% by volume, parts within this interval.
																				Stron graphite-carbon development along slip surfaces, "poker chip"
																				core common.
																				No significant structural zones or zones of rock alteration.
																				Net sulphide development, low pyrite <1%, no base metals, no sulphide
																				veins or skarn assemblages.
																				62.8
62.8	65.4	Fdp																		**FELDSPAR PORPHYRITIC DYKE**
				65.4	Sd: 46															Distinctly greener grey dyke rock than noted at the previous interval.
																				Limited rock alteration no stockwork or vein development, feldspar,
																				blurred, but clearly visible.
																				Pyrite 1-1.5%, magnetite, trace. Magnetite -> Pyrite (?).
																				No alteration changes at rock contacts.
																				64.5
64.5	72.1	Fdp																		**FELDSPAR PORPHYRITIC DYKE**
													<,5%						Tr	Pale grey to apple green, Feldspar porphyritic dyke.
				72.1	Sd:25															Slightly higher bleaching levels than the immediately preceding dyke.
																				Amphiboles still visible.
																				Pyrite, low, < 0.5%, trace magnetite.
																				No stockwork veins, no skarn assemblages.
																				72.1
72.1	78.6	CA																		**CHERTY ARGILLITE**

																					Well developed cm scale compositional chert lamella (50%) separated
				75.8	Si:60																by dark grey black argillite.
																					Locally chert lamella crumpled and rotated.
																					Pyrite averages 1.5% as disseminations, minor aggregates and lamella.
																					No base metals, skarn or sulphide vein assemblages.
																					Blocky core 72.1-74.0, minor fault?
																					78.6
78.6	92	L-CA																			**LIMESTONE, MINOR CHERT ARGILLITE INTERBEDS**
				78.6	So:55																Dark grey limestone, locally with well developed stylolites.
																					Weak shearing at upper CA contact.
																					Unit contains 10-15% by volume, <1.0 m wide, cherty argillite interbeds,
																					interbeds are often highly contorted and strained.
																					External to secondary vein zones, sulphide contents within the limestone
																					average 1.5% typocally as dissemination.
																					Abundant black organics are noted with this interval.
																					Breccias within CA unit may be tectonic.
																					Black elastic gouge-brittle ductile failure between 91.5 and 92.0.
																					92
92,0	95.6	MZ																			**MINERALIZED ZONE**
																					Carbonate hosted high sulphide veins and breccias are noted within the interval.
												Py 1-10 Apy 2-3 Sph 1-2%									Two narrow, high sulphide veins are cored, these are noted at 92.0-92.5
				92.1	Sv	SO															and 95.1-95.6 Veins contain stibuite, arsenopyrite, pyrite, red brown
																					sphalevite, sooty tetrahedrite and galena.
																					Combined vein sulphide content in these intervals ranges: 20-30%
																					The interval between the veins is characterized by an anastomosing
				95.3	Sv	SO															stockwork of off white calcite veins.
																					Open spaces dos-tooth calcite is common within this interval.
																					Dominant sulphide within high sulphide veins/veinlets is arsenopyrite.
																					95.6
95.6	137.9	L-Ac																			**LIMESTONE WITH MINOR CALCAREOUS ARGILLITE INTERBEDS**
																					Interbedded cream limestone with dark grey micritic limestone. Minor
				97.6	So=S125																calcareous argillite interbeds are also noted within this interval.
																					Locally, sheaving may be localized to calcereous argillite interbeds.
				104.3	S0=S1	35															Locally blocky broken core but significant faults are unlikely. Strongest
																					shearing within a moderately sulphidic and clay rich interbed at 97.1-97.4.
																					Second zone of elevated fine grained clastics significantly elevated
																					sulphides between 103.9 - 105.0.

				106.9	So	20															Net sulphide content within 97.1 - 97.4 and 103.9 - 105.0, 5%, chiefly
											Note: 104.9-106.9 grey L, 113.1-120.6 greyL										pyrite, trace arsenopyrite.
				112.2	So	45															Net sulphide content within the main limestone mass, 0.5% largely
				125.2	Si	47															on black graphitic fracture surfaces.
																					Limestone are typically dirty limestones.
																					No development of skarn assemblages, no high sulphide veins
																					Both light cream and dark grey limestones are cut by many white
																					calcite veinlets.
																					137.8
132.8	151.2	Fpd-x																			**FELDSPAR PORPHYRITIC DYKE-MINOR BRECCIAS**
																					Medium to light grey-green, bleached Feldspar porphyritic dyke
				137.8	Sd	55															Moderate clay-sericite alteration no stockwork vein development
				141.6	Sdx	45															Upper content, clean and tight, no sulphide development.
																					Well developed intrusion breccia, black clastic matrix between 140.4 and 142.1
																					Pyrite within intrusion breccia 1%, elsewhere 2%, likely after magnetite
151.2	EOH																				151.2

Assay Sample Log DDH 3-02

Date: May 26, 2003 Page: 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17507	42.1	43.6	B						
O17508	43.6	44.6	B						
O17509	44.6	46.5	B						
O17510	89.9	91.5	B						
O17511	91.5	92.O	B						
O17512	92.O	92.5	B	3.57					
O17513	92.5	93.5	B						
O17514	93.5	94.5	B						
O17515	94.5	95.1	B						
O17516	95.1	95.6	B						
O17517	95.6	96.6	B						
O17518	96.6	97.1	B						
O17519	97.1	98.6	B						
O17520	STANDARD PM 906								
O17521	98.6	100.O	B	2.68					
O17522	102.4	103.9	B						
O17523	103.9	105.O	B						
O17524	105.O	106.9	B						
O17525	140.4	142.1	B						


DDH 3-02 BOX 1
10.5
3-02-BOX 2 10.5
11.0
11.9
3-02-BOX 3 16.9
20.1
21.2
3-02-BOX 4 21.2
23.2
3-02-BOX 5 25.7
26.2
29.3
30.1
3-02-BOX 6 30.1


3-02 BX 20 110.2
110.7
3-02 BX 21 115.5
115.5
121.1
3-02 BX 22 121.1
3-02 BX 23 126.3
131.8
3-02 BX 24 131.8


3-02-Box 16
87.3
93.3
99.2
104.9


3-DZ-BOX 16
87.3
93.3
99.2
104.9


3-01-BOX 10 52.5
57
58.0
3-01-BOX 11 58.0
62.8
64.2
3-01-BOX 12 64.2
70.0
3-01-BOX 13 70.0
75.0
73.6
75.6
78.6
81.8


3-01-BOX 10 52.5
52.5
3-01-BOX 11 58.0
58.0
3-01-BOX 12 64.2
64.2
3-01-BOX 13 70.0
70.0
75.6
81.8


30.1
35.8
41.7
47.4
52.5


3-02 Bx 25 136.5
3-02 Bx 26 142.0
3-02 Bx 27 147.7
136.5
142.0
147.7
151.2


3-02
123.0

Diamond Drill Log DDH 3-03

Dip: -62.5 Azi: 270, North 6160598 East: 347945 E T. D. 176.2

Date: May 28 Logged By: J.Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	5.2	CASE																			**CASING**
																					5.2
5.2	24.7	CA																			**CHERTY ARGILLITE**
				9.9	S140								<,25								Well developed grey black compositional laminations, distinctive
																					cherty versus argillite compositional layers.
				19	S137																Sporadic blocky broken core but no significant fault structures.
																					Bedding compositional layers generally consistent orientation to
				24.7	So43																CA, at 40-45, parallels S1.
																					Net sulphide content very low, Py <0.25%, no other sulphide phases.
																					Non-magnetic.
																					Very sporadic white extensional quartz veins.
																					Good early or depositional breccias between 21.6 and 24.7.
																					24.7
24.7	40.2	L																			**LIMESTONE**
																					Medium to dark grey organic rich dirty limestone.
																					Abundant discordant anastomosing white calcite veinlets.
																					Very low sulphide content, pyrite <0.25%, usually with black
				34.3	S1060																organic rich layers.
																					No skarn assemblages, lower contact with Feldspar porphyritic
																					dyke has no skarn assemblages.
																					Generally comptent intact core, no significant structural zones.
																					40.2
40.2	42.9	Fpd	USE																		**FELDSPAR PORPHYRITIC DYKE**
				40.2	Sd	15															Pale grey-green, bleached, fine grained Feldspar porphyritic dyke.
				42.9	Sd	15															Locally black argillite/organic veinlets, crackle breccias are best
																					developed toward the lower structural contact.
																					Net sulphide content within crackle breccias is very low.
																					< 0.5% pyrite.
																					Both contacts are highly oblique to CA.
																					42.9

42.9	50.2	Cax																		**CHERTY ARGILLITE DEPOSITIONAL (?) BRECCIAS**
																				Abundant cuspate oval fragments, either transposed and boudinaged
																				chert lamella or, primary depositional breccias.
				49.8	Si40															Net sulphide content low, Py 0.75-1.0 % trace (?) arsenopyrite.
													0,5							Abundant shear surfaces at upper contact.
																				Very minor sulphide development toward the lower contact, pyrite 0.5%
																				Minor quartz +/- carbonate, Foliation parallel veins, without sulphides.
																				50.2
50.2	54.9	Fpd																		**FELDSPAR PORPHYRITIC DYKE**
													0,25						Tr	Relative to the immediate preceding dyke, alteration levels have
																				significantly decreased.
				50.2	Sd82															Crowded white feldspars, clearly visible.
																				Pyrite < 0.25%, trace magnetite.
				54.9	Sd70															No stuckwork veins and no skarn (endo) assemblages.
																				Upper and lower intrusive contacts are tight no sulphide vein development.
																				54.9
54.9	56.4	CA-X																		**CHERTY ARGILLITE MINOR BRECCIAS**
																				A narrow, cherty argillite unit is embayed between two Feldspar
				55,0	Si30															porphyritic dykes.
																				Net sulphide content low, pyrite about 0.5-1.0%
																				No sulphide vein development at either contact.
																				56.4
56.4	74.3	Fpd																		**FELDSPAR HORNBLENDE PORPHYRITC DYKE**
																				A weekly altered crowded feldspar hornblend porphyritic dyke.
																				The dyke also contains minor biotite. All mafic phases are clearly
				56.5	Sd	25							0,5						0,75	defined, only weak rock alterations.
																				Light sericitization of Feldspar. Composition Quartz Diorite.
																				Weak to trace calcite-epidule.
				74.3	Sd	35														Magnetite 0.75%-1%, pyrite <0.5
																				No stockwork veins.
																				Upper and lower contact defined by a superb chilled margin.
																				74.3
74.3	87	CA																		**CHERTY +/- ARGILLITE**
													1,0							Moderately compositionally laminated chert to ribbon banded cherty argillite.
				84.4	Si=So	15														Compositional layers are frequently contorted and most often are
																				noted at low angles to CA about 15
																				Pyrite present as minor incomplete sub-cm lamella or as minor

																					disseminationsm ^ 1.0%. No other sulphide phases are identified.
																					Sporadic blocky broken core but no significant faults.
																					NOTE: 83.7-84.1: Minor intrusion breccia. Evhedral pyrite increases to 10%.
																					87
87	90	L																			**LIMESTON**E
													0,5								Medium to dark grey limestone, cut by many white calcite veinlets.
																					No sulphide association with veinlets.
																					Black organic inclusions commun, very minor < 5% by volume
																					cherty-argillite interbeds.
																					Net sulphides, pyrite :<0,5%.
																					Red brown garnets developed over a 10 cm interval at the lower
																					intrusive contact.
																					90
90,0	114.6	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
																					Light grey green, crowded Feldspar porphyritic dyke. Uniform matrix
				90,0	Sd:50								0,5							0,5	sericitization. Both feldspars and mafic minerals altered.
																					Low pyrite, <0,5%, hematite 2% as disseminated magnetite < 0.5%
																					Slight increase in bleaching towards the upper and lower contacts.
				92.2	Si:35																Homogeneous, no stockwork development, no contact effects.
																					Sporadic promary igneous foliation, trachyitic feldspar alignment.
																					114.6
114.6	117,0	CA-Ix																			**CHERTY ARGILLITE AND CONTACT INTRUSION BRECCIA**
				117,0	Sd:60								z								Narrow intrusive bounded cherty argillite and intrusion breccias.
																					Net sulphide content cherty argillite 1.0%, net sulphide phases
																					dominated by pyrite
																					No major faults, locally strongly rotated fabrics.
																					117
117,0	137,0	Fpd	Kse																		**SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					Apple green, moderately sericitized feldspar porphyritic dyke
				125,0	Si:25																Locally soft clay altered clay rich incompetant zones, without
																					significant movement.
				133.8	Si:25																No development of stockwork veins.
				137,0	Sd: 50																Net pyrite content low < 0.5%, weak magnetite, hematite 2-3%.
																					Marked bleaching from 136.0 to 137.0
																					137
137,0	140.4	MZ																			**MINERALIZED ZONE**
													0,5					0,25			Major fault, localized in part by intensely sheared bleak clastics at

																					the intrusive contact.
																					Strong ribbon banded quartz vein development over 1,0 m from
																					138.4-139.4.
																					Abundant well rounded quartz vein fragments are identified in the
			140,0	Si 20																	incompetant gouge in the immediate hanging wall and footwall to
																					this mineralized zone.
																					Sulphide content within the main vein is low. Fracture controlled
																					arsenopyrite is noted at low 0.25% levels, evhedral pyrite is also
																					noted, about 0.5%.
																					No realiable vein orientations are possible within this badly fractured
																					rock mass.
																					140.4
140.4	152.3	A	Fo																		**SHEARED ARGILLITE**
																					A jet black weakly compositionally laminated highly sheared argillite
				144.2	Sh 40																forms the interval. Very minor limestone interbeds are noted at the
																					base of the interval.
																					Boudinaged and rotated quartz vein fragments are also identified.
				150.3	So 50																Relavant sub-intervals include:
																					140.4-144.3 Intense gouge +/- broken vein fragments.
				152.3	Sd 30																144.3-150.3 Sheared argillite vein fragments and gouge
																					development weakens.
																					150.3-150.8 Minor limestone interbed
																					150.8-152.1 Sheared argillite
																					152.1-152.3 Sheared felsic dyke
																					152.3
152.3	157.7	C-Fpd																			**CHERT MINOR FELSIC DYKES**
																					Onset of massive to locally ribbon banded chert cut by minor
				154.6	Si 15																sericitized fine grained felsic dykes.
																					Localized gouge sones, and minor discordant white quartz veins.
																					Low net sulphide content, pyrite 0.5%, no arseno-pyrite identified.
																					Bleached and sericitized feldspar porphyritic dyke between 153.2-154.1.
																					157.7
157.7	176.2	A																			**ARGILLACEOUS PHYLLITE**
																					Well compositionally layered light to dark grey argillaceous phyllite.
																					Locally minor blocky gouge zones increasing down hole.
				161.4	Si=So=20																Minor foliation parallel quartz veins without sulphides or alteration selvedges.
																					Non-calcareous no high sulphide veins.

				168.7	Si=So-30																Net sulphide content ow, disseminated pyrite 0.5%.
																					Gouge zones identified at: 157.8 - 157.9, 159.0 - 159.8, 171.8 - 173.1, 175.2 - 17
																					Most gouge zones are forming sub-parallel to Si generally at 20-30 degrees to C
																					176.2
176.2	EOH																				**END OF HOLE**
																					Down Hole Surveys:
																					81.4 m: Dip: 61.5 Azi: 271
																					176.2 m: Dip: 61, Azi: 272

Assay Sample Log DDH 3-03

Date May 28, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17526	41.4	42.9	B						
O17527	42.9	45,0	B						
O17528	115.5	117,O	B						
O17529	135.8	137,0	B						
O17530	137,0	138.4	B						
O17531	138.4	139.4	B						
O17532	139.4	140.4	B						
O17533	140.4	142,0	B						
O17534	142,0	144,0	B						
O17535	144,0	145.4	B						
O17536	145.4	147.4	B						
O17537	147.4	149.4	B						
O17538	149.4	151.4	B						
O17539	151.4	153.2	B						
O17540	174.6	176.2	B						


3-03-BOX 1 5.2
3-03-BOX 2 10.2
3-03-BOX 3 14.3
18.7
3-03-BOX 5 23.2
3-03-BOX 6 27.5


3-03- BOX 29
3-03- BOX 30
3-03- BOX 31 148.7
3-03- BOX 32 153.2
3-03 151.6


3-03-BOX 25
3-03-BOX 26
130.7
3-03-BOX 29 139.6


3-03-BOX 24 118.2
3-03-BOX 25 121.5
3-03-BOX 26


S-03 BX 19
S-03 BX 19
S-02 BX 18
S-03 BX 19
S-03 BX 20


3-03 BX 12 54.7
60.8
3-03 BX 13 60.8
66.5
3-03 BX 14 66.5
72.2
3-03 BX 15
3-03 BX 16


3-03-BOX 6 27.5
31.8
3-03-BOX 7 31.8
36.4
3-03-BOX 8 36.4
41.1
3-03-BOX 9 41.1
44.7
3-03-BOX 10 44.7
49.2
3-03 BX11 49.2


3-03 Bx 34 164.7
3-03 Bx 35 166.0
166.0
170.5
3-03 Bx 36 170.5
3-03 Bx 37 174.0
176.2


133.2
136.2
139.3
142.3


017931
BOX 29 139.6


142.3
145.4


139.5

Diamond Drill Log DDH 3-04

Dip: 55, Azi: 280, North 6160527 +/- 6m, East 347949 East +/- 6 m. T.D. 178.0 m.

Date: May 30 Logged By: J Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0	CASE																			**CASING**
																					3
3,0	40.2	Fpd	_Sek																		**FELDSPAR PORPHYRITIC DYKE**
																					Moderately clay altered and sericitzed Feldspar porphyritic dyke.
				11.2	Si: 30																Numerous 30-75% incompetant gouge and brittle failure zones throughout.
																					Minor discordant Cac veins, no skarn assemblages at lower contact.
																					Light matrix calcite, distict Feldspar phenocrysts, sporadic leucoxene,
				40.2	Sd: 20																mafic ghosts probably hornblend present.
																					Pyrite as disseminated, 1.5% no magnetite.
																					Lower contact defined by a 10 cm gouge zone.
																					40.2
40.2	55.9	L																			**LIMESTONE**
																					Dark grey, to medium grey limestone.
				51.4	Sh:30																Matrix is cut by numerous white calcite veinlets.
																					Blocky broken core, onset of sheaving toward the lower contact at
				55.9	So:30																51-4 - 52.3.
																					Homogeneous, no internal beds.
																					Net sulphide content low pyrite 0,25-0.5 %, usually with black
																					organic inclusions.
																					55.9
55.9	63.5	CA																			**CHERTY ARGILLITE**
																					Moderately sheaved ribbon banded chert or cherty argillite.
				63.5	Sh:30																Strong graphite development on shear surfaces.
																					Strong sheer development, parallel to bedding at the upper and lower contacts.
																					No development of high sulphide veins or skarn assemblages.
																					Disseminated evhedral pyrite, 0.75-1.0%.
																					63.5
63.5	66.3	L																			**LIMESTONE**
																					Medium grey homogeneous limestone interbed.
																					Relative to the preceeding limestone, density of discordant calcite

				66.3	So:31																veinlets diminishes.
																					Clean, conformable lower contact.
																					Net sulphide development low, pyrite present at trace levels only.
																					66.3
66.3	67.7	CA-sh																			**CHERTY ARGILLITE - MODERATELY SHEARED**
																					A moderately sheared cherty argillite interbed.
				67.1	Si:51																Abundant composition parallel slip planes.
																					Rock may locally be grading into one argillaceous phllite.
																					67.7
67.7	80.2	Fpd	K																		**CLAY ALTERED FELDSPAR PORPHYRY DYKE**
																					Both the upper and the lower contacts of this unit are strongly clay
																					altered felsic dykes.
																					Blocky, broken core throughout but no stockwork or high sulphide
																					vein assemblages.
				80.2	Sd:20																Rock matrix contains significant disseminated calcite.
																					Rock is non-magnetic, contains 2-3% finely disseminated hematite,
																					< 0.5% pyrite.
																					80.2
80.2	84,0	AP	Flt																		**SHEAVED ARGILLACEOUS PHYLLITES**
																					Semi-intact core, heavy breakage acrozz foliation surfaces.
					80.5	Si/Shi 25															No evidence of cherty laminations.
																					No vein or skarn development, no calcareous.
																					Note: 80.3-82.4 Significant gouge development.
																					Pyrite <1.0%, about 0.5
																					84
84,0	86.5	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Narrow moderately sericitized feldspar porphyritic dyke.
				86.5	Sd:25																Lower contact becomes significantly bleached, minor bleaching
																					at upper contact.
																					No carbonate, hematite 2-5%, Py < 0.25%
																					86.5
86.5	89.6	Fpd-x																			**FELDSPAR PORPHYRITIC DYKE INTRUSION BRECCIA**
																					Most of the interval consists of a monolithologic intrusion breccia.
																					Breccia consists of 30% angular to sub-angular feldspar dyke
																					fragments, 30% cherty fragments all in a black clastic matrix.
																					Single dyke contact from 88.7 - 89.3.
																					Matrix pyrite 0.75%.

																					89.6
89.6	95.8	CA-sn																			**SHEARED CHERTY ARGILLITES**
																					Grey black, clay rich gouge zone within a cherty argillite.
			90.1	Si=So=30																	Light disseminated pyrite, no high sulphide veins.
																					Arsenopyrite trace, possible chalky alunite Pyrite 0.5 - 0.75%
																					95.8
95.8	99,0	MZ/Fpd	Se																		**SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					Light grey green strongly sericitized feldspar porphyritic dyke.
													3			Tr					Shattered fractured feldspar prophyritic dyke contains numerous
				99,0	Sd:35																hairline to mm fractures.
																					Grey sulphides are commonly identified on fracture sets, translucent
																					yellow brown sphalocite in trace tetrahedrite.
																					Pyrite 3%
																					99
99,0	103.5	MZ																			**NUMBER 1 VEIN ZONE**
													3			0,5		3,0			Two very high sulphide veins are identified including:
																					99.0-99.5 Realgar vein, black argillite host.
				99.2	j/50																101.55-102.3 Very high sulphide vein. Arsenopyrite 10%,
																					pyrite 10-15%, tetrahedrite 0.75%.
				102.4	Si=So=5																Veins appear to be hosted by an argillaceous phyllite. Phyllite bands
																					are locally sub-parallel to CA, veins at 50 to Ca.
																					All core has abundant slip planes, and may have either a calcite +/-
																					alunite gargue.
																					No discrete vein textures per se, rather high sulphide replacements
																					appear to be the norm.
																					External to the principal veins the rock is either:
																					99.5 - 99.8: Bleached sericitic dykes or:
																					99.8 - 101.55: Sheared argillaceous phyllite, minor stockwork
																					veins common, arsenopyrite persistant at low 0.5% levels.
																					Boudinaged chert +/- vein (?) fragments are frequently noted in this interval.
																					102.3 - 103.5 2-3% disseminated arseno within the footwall contact.
																					103.5
103.5	114.9	AP	Sh																		**SHEARED ARGILLACEOUS PHYLLITES**
													0,75					Tr			Dark grey, extremely incomportent argillaceous phyllites.
																					The interval is a foliation parallel brittle ductile zone, 70% of the
				107.2	Si=10																interval is a completely incompetant gouge zone.
																					Very poorly defined compositional layers, no chert component.

																					Sporadic small scale, sub-mm, calcite veinlets.
																					Pyrite averages 0.75%, trace arsenopyrite.
																					114.9
114.9	138.4	AP																			**ARGILLACEOUS PHYLLITE**
													0,5								Light grey on black compositional layers, with very
				123.5	Si=So=25																Definitive changes in compositional layer orientation to CA, hole
																					cuts a synform or antiformal closure.
				131,0	Si=So=50																Sulphide levels are generally low, pyrite about 0.5%.
																					Numerous small scale slip planes, frequently graphitic.
																					138.4
138.4	150.5	A-P	Sh																		**ARGILLACEOUS PHYLLITE - SHEARED**
													0,5								Heavy gouge development across much of this interval.
				143,0	Si=S0=88																Relative to the preceeding interval, pale grey compositional layers
																					have significantly decreased, probably increase in argillite member.
																					Sporadic broken and rotated quartz vein fragments, significant
																					sulphides are not associated with these zones.
																					Net sulphide content low, pyrite 0.5%
																					150.5
150.5	156,0	C-A																			**CHERT, MINOR ARGILLITE**
																					Relatively thick, 2-4 cm cherty lamella define the interval.
				151.2	S0:55																Narrow, 0.25-0.5 cm argillite lamella highlight chert compositional layers.
																					Pyrite as minor <mm scale aggregates 0.25-0.5%
																					No stockwork veins, no high sulphide assemblages.
																					156
156,0	171.5	AP																			**ARGILLACEOUS PHYLLITE**
													0,5								Moderately thick greenish grey beds, 5-10 cm's, locally with diffuse
				164.5	Si=So=45																margins are interbedded with dark grey clastic rich interbeds.
																					Sporadic blocky broken core but no significant fault zones.
																					Compositional layers consistent at 45 to CA
																					Non-calcareous, sporadic pyrite aggregates, < 0.5 %.
																					No skarn or high sulphide vein assemblages.
																					171.5
171.5	178,0	CA																			**CHERTY ARGILLITE**
																					Cuspate chert lamella common, minor intervals may grade into
													0,75								argillaceous phyllites.
																					Occaissional blocky, broken core but no major faults.
																					No development of high sulphide, or stockwork or skarn assemblages.

																				Net sulphide content Pyrite as disseminations and aggregates,
																				0,75 - 1.0 %
																				178
178,0	EOH																			

Assay Sample Log DDH 3-04

Date: May 31, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17541	84.4	86.5	B	84.4 -> 2.63					
O17542	86.5	89.6	B						
O17543	89.6	90.5	B						
O17544	90.5	93.6	B						
O17545	93.6	95.8	B	96.2 ->2.43					
O17546	95.8	97.8	B						
O17547	97.8	99,0	B						
O17548	99,0	99.5	B	99.2-> 1.74					
O17549	99.5	100.7	B						
O17550	100.7	101.5	B						
O17551	101.5	102.3	B	102.0-> 2.49					
O17552	102.3	103.5	B						
O17553	103.5	105.8	B						
O17554	105.8	107.6	B						
O17555	107.6	109.4	B						
				109.5-> 2.50					


3-04 BX1 3.0
5.2
8.2
10.7
3-04 BX2 10.7
15.0
3-04 BX3 15.0
17.4
20.7
3-04 BX4 20.7
23.4
26.5
26.8
3-04 BX5 26.8
30.9


131.7
137.1
142.6
147.7
152.7
159.0

113.9
3-04-BOX 118.6
118.6
3-04-BOX 24 122.9
122.9
3-04-BOX 25 127.6
127.6
03-4 BX 26 131.7
131.7


95.8
101.6
102.3
106.6
110.6


3-04-BOX 6
30.9
3-04-BOX 7 36.0
36.0
3-04-BOX 8 40.3
40.3
41.8
45.4
3-04-BOX 9 45.4
50.8
3-04-BOX 10 50.8
56.9
3-04-BOX 11 56.9


3-04-BOX 33 168.0
3-04-BOX 34 172.0
175.7
3-04-BOX 35 175.7


3-04
99.2 M


3-04
102.0 M

Diamond Drill Log DDH 3-05

Dip: 45, Azi 270 T.D. 148.7 m, North 6160465 East 347935

Date: June 1, 2003 Logged By: J. Oliver

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	6.1	CASE																			Casing
																					6.1
6.1	44.7	Fpd	_Se																		**FELDSPAR PORPHYRITIC DYKE**
																					Medium to bleached cream, Feldspar porphyritic dyke.
				11,0	Si: 60																Rock lightens - bleaches to pale cream green from 24.2 - 44.7
																					Abundant 2-2.5% disseminated hematite, virtually no pyrite.
																					No significant matrix carbonated, principle alteration sericite clay.
																					Sporadic clay filled fractures, no significant stockwork veins, no high
																					sulphide veins.
																					Surface oxidation to 8.9 m.
																					44.7
44.7	46.5	CA/Fpd	Se																		**CHERTY ARGILLITES - SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					Strongly kualinized and bleached feldspar porphyritic dykes (50%
				46,0	Sd:45																by volume) cut thinly compositionally laminated cherty argillites.
																					Cherts are cut by small, cm scale white quartz veinlets.
																					Low net sulphide density, pyrite < 0,5%.
																					46.5
46.5	62.7	Fpd	*as																		**FELDSPAR PORPHYRITIC DYKE**
																					Feldspar porphyritic dyke cut by increasing density of pyrite grey
																					sulphide veinlets down-hole.
													2,5					Tr			Sub- intervals within this interval include:
																					46.5-52.7 Bleached feldspar porphyritic dyke with limited
																					stockwork vein development.
																					52.7-61.9 Shattered,pale green sericitized and clay altered
																					feldspar porphyritic dyke.
																					61.9-62.7 Slightly more feldspar crowded andesitic appearing
																					intermediate (?) dyklet. Stockwork vein density decreases
																					within this interval.
				62.7	Sd:28																Sulphide distribution is as follows:
																					pyrite 2-3%, arsenopyrite 0.25%, sphalerite - trace.

																					All sulphide valves generally increase towards the lower contact and
																					decrease towards the upper contact.
																					62.7
62.5	65.9	Ap																			**ARGILLACEOUS PHYLLITE**
													0,5					Tr			Soft, dark grey, well compositionally laminated argillaceous phyllite.
																					Stockwork densitiy markedly decreases, minor early stage non-
			63.4	S0=Si=45																	sulphidic veins.
																					Pyrite as irregular disseminations and aggregated, trace arsenopyrite.
																					65.9
65.9	77,0	MZ/Fpd																			**MINERALIZED ZONE - FELDSPAR PORPHYRITIC DYKE HOST**
													3			0,25		1			Light cream-green, bleached and sericitized feldspar porphyritic dyke.
			Se																		Heavy quartz-sulphide stockworks are encountered between 65.9-70.6
																					Vein/veinlets are characterized by stibnite (2-5%); arsenopyrite
																					1-2%, sphalevite < 0.25%; tetrahydrite/tennatite trace. Realgar-
																					cinnabar is not identified.
																					Stockwork vein density diminishes from 70.6-77.0.
				70.6	J/	0,80															Note: 68.5-69.0 Heavy stibrite filled fractures envelope a high sulphide
																					quartz vein from 68.5-69.1.
																					No calcite ar a gangue, veins are dominantly quartz-sulphide
				72.9	J/	55															Note at 72.9 superb cm scale stibnite-sphalevite veinlet.
																					77
77,0	83,0	AP	sh																		**SHEAVED ARGILLACEOUS PHYLLITE**
				77	Sd:	35												Tr			Moderately sheaved and locally vein injected argillaceous phyllite.
																					Net sulphide content diminishes, trace arsenopyrite, 0.75-1.0% pyrite.
																					No intact guartz veins, all veins are sheaved, moderate increase in
				82,0	Si=So-60																sulphides associated with these fractured veins.
																					Note minor cherty lamella
																					83
83,0	90.4	L																			**LIMESTONE**
													0,5								Medium grained, re-crystalized, grey, carbonaceous limestone.
				So=Si=42																	Abundant carbonaceous opaques, and well developed pressure
																					solution cleavages.
																					Net sulphide content low, pyrite < 0.5%.
																					No significant skarn or sulphide development at the lower contact.
																					90.4
90.4	94.5	Fpd	Se																		**SERITIZED FELDSPAR PORPHYRITIC DYKE**
																					Apple green, felsic dyke cut by significant fine grained pyritic veinlets.

																					Vein matrix is dominantly calcite not silica.
																					Pyrite content 1.5%, no other sulphide phases identified.
																					94.5
94.5	108,0	CA-AP																			**CHERTY ARGILLTE WITH MINOR ARGILLACEOUS PHYLLITE INTERBEDS**
																					Moderate bleaching near upper contact, shattered quartz vein
																					between 95,0 and 95.7.
																					Quartz vein contains < 0.5% pyrite.
				97.5	Si:35																Most of the interval, 85%, is dominated by a thinly compositionally
																					laminated cherty argillite.
																					Net sulphide content is low, pyrite 0.25-0.75%, largely as small mm
																					scale aggregates.
																					No development of skarn assemblages or high sulphide veins.
																					Beds/composiitonal layers relatively constant at about 30-35 degrees.
																					108
108,0	121.1	Fpd-Ca																			**FELDSPAR POPHYRY DYKE - MINOR CHERTY ARGILLITE INCLUSIONS**
																					Alteration levels within the dyke rock decrease.
																					Cream coloured feldspar clearly visible.
																					Minor calcite lines microfractures, containing slightly elevated pyrite
																					levels, 1.0%, uniformly disseminated hematite 2%, rock is non-magnetic.
				111.5	Sd:25																Minor cherty argillite inclusion from 109.7-111.5.
																					Slight increase in pyritic microfractures, between 116.8 and 119.3,
																					pyrite 1.5% in this interval.
																					121.1
121.1	127.7	CA																			**CHERTY ARGILLITE**
																					Slightly gritty cherty compositional bans, 80% grey to off white silica
																					20% fine grained clastic lamella.
																					Chert bands average 3-5 cm's
																					Compositional layers generally consistant to CA at about 30 degrees.
																					No major structural zones.
																					Pyrite 1-1.5% largely as compositional layer parallel aggregates.
																					121.7
127.7	135.4	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Lightly altered, weakly sericitized feldspar porphyritic dyke.
				135.4	Sd	35															No significant fractures or stockwork development.
																					Light disseminated pyrite, 0.5%
																					Weak matrix clay's +/- sericite.
																					Tight upper and lower contacts without significant gouge development.

																					135.4
135.4	148.7	CA-AP																			**CHERTY ARGILLITE WITH MINOR ARGILLACEOUS PHYLLITE INTERBEDS**
																					Onset of well compositionally layered cherty argillites containing
																					20-25% argillite and or phyllite compositional layers.
																					Major fault, complete gouge zone with elevated sulphide development,
																					pyrite about 2% as disseminations.
				141.5	Si=So=35																No fault shear orientation identified.
																					External to this fault, pyrite averages 0.5%
148.7	EOH																				148.7
																					Down Hole Surveys:
																					96.6 m Azi: 274, Dip: 43.

Assay Sample Log DDH 3-05

Date: June 1, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17556	52.6	55,0	B						
O17557	55,0	56.7	B						
O17558	56.7	58.7	B						
O17559	58.7	59.7	B						
O17560	59.7	61.9	B						
O17561	61.9	62.7	B						
O17562	62.7	65.9	B						
O17563	65.9	67.3	B						
O17564	67.3	68.5	B						
O17565	68.5	69.7	B	69.2-> 2.60					
O17566	69.7	70.6	B						
O17567	70.6	72,0	B						
O17568	72,0	73.5	B	72,0-> 2.64					
O17569	73.5	75,0	B						
O17570	75,0	77,0	B						
O17571	77,0	77.9	B						
O17572	STANDARD PM 169								
O17573	77.9	79.6	B						
O17574	79.6	82.3	B						
O17575	82.3	83,0	B						
O17576	90.4	92.5	B						
O17577	92.5	94.5	B						
O17578	94.5	95.7	B						
O17579	136.4	137,0	B						
O17580	137,0	139,0	B						
O17581	139,0	140.9	B						

DDH 3-05 BOX 1
6.1
7.9
11.0
11.2
11.2
14.0
16.8
20.1
23.2
3-05 Bx 4 23.2
29.3
29.3
323


3-05-BOX 18 106.6
106.6
112.3
117.9
122.2
126.7


3-05-BOX 16 94.9
3-05-BOX 17 100.9
105.4
106.6
3-05-BOX 18 106.6
108.5
111.6
112.3
114.6
117.9


3-05-BOX 11 63.4
70.3
3-05-BOX 12 70.3
75.8
3-05-BOX 13 75.8
81.2
3-05-BOX 14 81.2
86.7
3-05-BOX 15 86.7
94.9


3-05 BX 8 45.7
3-05 BX 9 51.2
3-05 BOX 10 57.0
62.7
634


3-05 BX 7 40.0
3-05 BX 8 45.7
3-05 BX 9 51.2
3-05 BX 10 57.0
40.0
45.7
51.2
57.0
62.7
63.4


3-05 BOX 22 126.7
131
3-05 BOX 23 131
135.6
3-05 BOX 24 135.6
140.1
3-05 BX 25 140.1
145.8
3-05 BX 26 145.8
148.7


3-05
@ 69.2 m


3-05
@ 69.2 m

Diamond Drill Log DDH 3-06

Dip: 65, Azi: 270, T.D. 121.9 m, North: 6160465 N 347935 E

Date: June 3, 2003 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0																				CASE
																					3
3,0	14.3	C-x																			**CHERT +/- CORED OVERBURDEN?**
																					An extremely competant blue-grey chert forms most of the interval.
																					The borhole pierces either an oxidized fault zone or cored overburden
																					between 8.2 and 14.3 m
																					Net sulphide content is low throughout the interval, pyrite averages < 0.5%
																					About 2.5 m of core loss between 11.3 and 14.3 m
																					14.3
14.3	17.4	Fpd	K-Se																		**FELDSPAR PORPHYRITIC DYKE**
													2,5								Strongly clay altered and sericitized feldspar pophyritic dyke.
																					Well developed chill margin at upper contact.
																					Elevated sulphide and pyrite content within small mm scale fractures,
				17.4	Sd-20																pyrite 2.5%
																					17.4
17.4	20.6	C-A																			**CHERT**
																					Blue grey very competent chert, phyllite lamella may be weathering
				18.2	Si: 20																rust tan.
																					Compositional layers 15-20 degrees to CA
																					Net sulphide content low, pyrite < 0.25%
				20.6	Sd: 17																Both upper and lower contacts are tight and un-faulted.
																					20.6
20.6	45.7	Fpd	Se-CaC																		**FELDSPAR PORPHYRITIC DYKE**
																					Light grey green, very homogeneous Feldspar porphyritic dyke.
																					Feldspar phenocrysts to 1.0 cm, matrix supported.
																					Good disseminated hematite (2%), pyrite rare, <2%
																					Light matrix carbonitization, moderate matrix sericite.
				45.7	Sdi: 10																No stockwork or high sulphide veins, lower contact tight, no shearing
																					or sulphide development.
																					45.7

45.7	53.4	C																			**CHERT**
																					Black chert with limited black clastic input.
																					Compositional layers commonly sub-parallel to CA.
				52,0	Si=So=10																Sporadic broken blocky core but no significant sulphide development.
																					Both contacts tight, no gouge or sulphide development.
																					Net sulphide content, pyrite, 1.0% as compositional parallel aggregates.
																					53.4
53.4	76.5	Fpd											Tr								**FELDSPAR PORPHYRITIC DYKE**
																					Two significant sub-intervals are identified on this section: those are:
(53.4	68,2)	Fpd																			53.4-68.2 Weakly altered Feldspar porphyritic dyke. No
																					significant stockwork development, limited joint and fracture sets.
																					very low pyrite contents, <0.25% -Tr hematite dominant oxide
																					phase 3%
																					weak matrix carbonization
(68.2	76.5)	Fpd																			68.2-76.5 Bleached and shattered feldspar porphyritic dyke.
																					matirc silica, secondary increases, silica veins post-date
																					matrix calcite.
																					matrix calcite, 10-15%
																					sulphide phases, pyrite 1.5%, no other sulphides identified.
																					76.5
76.5	83.1	SMZ																			**MINERALIZED ZONE - CHERTY ARGILLITE HOST**
																					Strongly sulphidic veins and replacement bodies are noted within
																					the interval.
																					Mineralization is of two types:
																					@ Realgar, cinnabar, stibrite, arsenopyrite sulphide replacement
																					zones, note between 77.4 and 78.7 m's Net sulphide content > 30%
																					@ Vuggy, corroded to sucrosic black silica veins, hosted by
				77.7	J/ 30																a competant chert member which has been extensibely brecciated,
																					noted at 81.4 - 83.1
				78,0	Sh: 30																- Veggy silica veins contain arsenopyrite microliths which are
				79,0	Si: 10																scarsely identifiable under 20x magnification.
																					- Textural these veins are analogous to high sulphidation veins.
				79.8	Si/Sh=15																The intervening interval (78.7 to 80.25) consists of a sheared cherty argillite.
																					Note: compostional layers are sub-paralled to CA Cross-sectional
				83	J/ 45																information strongly suggests the zome has shallowed, dipping east.
																					The mineralized zone is the locus of a significant fault structure,
																					extensive shearing occurs throughout the interval, shear primatati.

																					83.1
83.1	109.2	CA/																			**CHERTY ARGILLITE**
																					Slightly gritty cherty argillite with sporadic argillaceous phyllite input.
																					Significant brittle failure zones throughout this interval. Brittle failure
																					zones are located at:
				87.9	Si: 15																- 84.4 - 86.4 Blocky broken core, no definitive orientation.
				94,0	Sh: 25																- 93.6 - 95.4 Brittle failure
				97,0	Si= So=10																- 97.7 - 98.9 Ground core
				104.1	Si=So=5		So transposed onto Si														Unit is non-calcareous and has a moderate net sulphide content,
				109.2	So: 30																pyrite averages 2-2.5% largely as minor disseminations and aggregates.
																					Note: suberb contact at 109.2 with the underlying limestone.
																					109.2
109.2	121.9	L																			**LIMESTONE**
																					Massive, non bedded, blue grey, re-crystalized limestone.
																					Very sporadic stylolotic cleavages, relatively clean limestone.
																					Slightly blocky core but no significant structural zones.
																					Net sulphide content low, pyrite < 0.5 %
																					No skarn, manto, or high sulphide vein assemblage
																					Weak mm scale calcite veinlets without significant sulphides.
121.9	EOH																				121.9
																					Down Hole Surveys:
																					122.0 m Azi: 274, Dip: 64.

Assay Sample Log DDH 3-06

Date June 2, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17582	11,0	14.3	B						
O17583	14.3	17.4	B						
O17584	68.2	69.9	B						
O17585	69.9	72.7	B						
O17586	72.7	74.7	B						
O17587	74.7	76.5	B	76.3 -> 2.58					
O17588	76.5	77.4	B						
O17589	77.4	78.7	B	78.1 ->2.80					
O17590	STANDARD PM 906								
O17591	78.7	80.25	B						
O17592	80.25	81.4	B	81.1 ->2.54					
O17593	81.4	83.1	B						
O17594	83.1	84.4	B						
O17595	84.4	86.4	B						
O17596	86.4	88.4	B	87.6 -> 2.63					
O17597	88.4	90,0	B						
O17598	90,0	92,0	B						
O17599	92,0	94,0	B						
O17600	94,0	96,0	B						
O17601	96,0	97.7	B						
O17602	97.7	100,O	B						


DDH 3-06
3-06 BX3 20.3
3-06 BX 4 25.8
3-06 BX5 31.4
117
37.3


3-06-BOX 15 89.0
93.6
94.4
3-06-BOX 16 94.4
96.2
99.7
100.1
3-06-BOX 17 100.1
105.6
3-06-BOX 18 105.6
108.8
111.4


3-06 Bx 11 65.7
72.0
3-06 Bx 12 72.0
77.8
3-06 Box 13 77.8
83.6


3-06 BX 7 43.1
49.1
3-06 BX 8 49.1
54.5
54.5
60.1
3-06 BX 10 60.1
65.7


108.8
111.4
3·01· BOX 19 111.4
111.9
116.5
3·06· BOX 20 116.5
118.0
121.0
121.9


3-06
76.2m


3-06
81.1 m


3-06
78.1 m


3-06
78.3

Diamond Drill Log DDH 3-07

Dip: 78.5, Azi: 270, T.D. 159.7 m North: 6160465 East 347935

Date: June 3 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
O	6.1																				**CASE**
																					6.1
6.1	16,0																				**LIMESTONE**
																					Blue grey massive, homogeneous limestone.
					38,0	So:	So:														No internal beds, weak stylolitic cleavages.
																					Net sulphide density, very low disseminated pyrite < 0.25%
																					16
16,1	38,1	CA-x																			**CHERTY ARGILLITE, MINOR DEPOSITIONAL BRECCIAS**
																					Well compositionally layered cherts with minor argillaceous
					22.9	So	So														compostional layers. Sporadic depostional breccias.
																					Generally competant core with only minor brittle failures.
					33.1	Su:18, Si 30															Sulphide levels are low, typically 1-1.5% pyrite as small disseminations
																					and layer parallel aggregates.
					34.8	So	38														Very minor, < 20cm, limestone interbed.
																					No high sulphide veins or skarn assemblages.
																					38,0
38,0	57.1	AP-sh																			**SHEARED ARGILLACEOUS PHYLLITE**
																					Significant brittle failure zone corresponds to the onset of argillaceous
				50,0	So 35																phyllites.
																					Locally heavy core loss, less than 15% recovery between 41.8 and 47.9
																					Heavy fault development between 39,0 and 46.5
																					Typically moderate net sulphide development, pyrite and pyritic
																					aggregates 2%, no other sulphide phases identified.
				53.4	Sh: 28																Major fault at 50.9-57.1, blocky locally ground core.
																					Net pyrite content within this fault significantly increases, pyrite now
																					averages 8-10%, as lamella and disseminations. Minor quartz vein
																					injection near upper contact at 50.9.
																					57.1
57.1	119.7	CA/AP																			**CHERTY ARGILLITE INTERBEDDED ARGILLACEOUS PHYLLITES**
																					Intact cherty argillite. Silky foliation surface, abundant aligned fine

				58.4	S1=So=40																grained micas.
																					Minor < 15% chert input, compositional layers average 2-4 cm in width.
																					No significant fault structures identified in this interval.
				63.1	S1: 20																Compositional layers and S1 fabric varies between
																					Persistant sub micacaeous foliation surface, but greater than 70%
				69.2	S1: 0																of the rock is silica.
																					Minor washes or interbeds of a more argillaceous phylliute member
				81.4	S1=So=10																are also noted.
				92,0	S1	30															Net sulphide content, pyrite only is moderate, pyrite averages 1-2%
				102.8	S1	35															as disseminations and incomplete foliation parallel aggregates.
				108.8	S1	35															Exceptionally homogeneous, no significant rock changes, abundant
																					transpostion features, drill bit sub-parallel to So??
				119.7	S0=S1=25																Fabric becomes more consistant at about 30 to CA as the lower
																					content at 119.7 is approached.
																					119.7
119.7	132.4	C-CA																			**CHERTY-CHERTY ARGILLITE**
																					Marked increase in matrix silica, cream to white compositional
																					layers, 80-90% (volume); separated by
				123.3	O20=Su=Si																Generally intact, limited brittle-ductile failures, although slightly blocky core.
				132.4	Su=S=45																No stockwork vein development, no high sulphide veins.
																					Net sulphide development decreased relative to preceeding argillaceous
																					phyllites, disseminated pyrite 0.5%
																					132.4
132.4	138.4	Fpd	Kje																		**FELDSPAR PORPHYRITIC DYKE STRONGLY CLAY-SERICITE ALTERED**
																					A bleached cream-green, soft clay altered dyke forms the interval.
																					Both upper and lower contacts are tight, lack significant shearing
																					or sulphide development.
				138.4	Sd:38																Net sulphide development is high, 3% disseminated euhedral pyrite,
																					trace grey sulphide phases.
																					A small xenolithic argillite inclusion is noted between 137.4 -138.0
																					138.4
138.4	141.6	AP sL																			**SHEARED ARGILLACEOUS PHYLLITE**
													2,5								Incompetant strongly sheared argillaceous clastic.
																					Very limited chert input.
				139.8	Si: 50																Gouge and shear development increases towards the upper dyke contact.
																					Net sulphide development, pyrite 2-3%
																					No significant high sulphide zones or veins.

																					141.6
141.6	145,0	L																			**LIMESTONE**
																					Blue-grey, re-crystalized limestone.
																					Massive homogeneous, non-bedded
																					Moderate stylolitic cleavage
																					No skarn or high sulphide vein assemblages.
																					Low net sulphide content.
																					145
145,0	159.7	C-CA																			**CHERT-CHERTY ARGILLITE**
																					Very competant chert with limited argillaceous compositional layers.
				147,0	Si=So=50																Locally cuspate transposed chert inclusions.
				153,0	Si=So=5																Rapid rotation of compositional layers common.
				159.1	Si=15																Minor zones of blocky core
																					Net sulphide development, pyrite only consistently low, pyrite about 0.5%
159.7	EOH																				
																					Downhole Surveys:
																					118.0 m Dip: 81 Azi: 260

Assay Sample Log DDH 3-07

Date: June 3, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17603	50.9	53.9	B						
O17604	53.9	57,0	B						
O17605	130.1	132.4	B						
O17606	132.4	135,0	B						
O17607	135,0	137.2	B						
O17608	137.2	138.3	B						
O17609	138.3	140.5	B						
O17610	140.2	141.6	B						


3-07 BX 10 64.3
3-07 BX 11 69.9
3-07 BX 12 75.7
3-07-13BX 13 81.8


3-07 BX2 11.3
3-07 BX3 16.9
22.6
28.2


3-07-BOX 11 126.7
133.8
3-07-BOX 12 133.8
134.5
3-07-BOX 13 134.5
145.4


3-07-BOX 17 104.7
110.3
3-07-BOX 18 110.3
116.0
3-07 BX 19 116.0
121.1
3-07 BX 20 121.0
126.7

3-07-Box 14 87.1

90.5

3-07-Box 15 93.4

93.74

96.6

3-07-Box 16 98.9

98.9

102

104.7


3-07 BX6 38.8
38.7
38.7
41.8
3-07 BX7 41.8
44.8
47.8
50.9
3-07 BX8 50.9
53.4
56.0
58.6


3-07-BOX 24 145.4
148.4
151.1
3-07-BOX 25 151.1
151.5
156.3
3-07-BOX 26 156.3
157.6
157.7
159.7

Diamond Drill Log DDH 3-08

Dip 50, Azi: 270, T.D. 96.6 m. North 6160394 East 347952

Date: June 4 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	1.8	CASE																			**CASE**
																					1.8
1.8	11.6	L																			**LIMESTONE**
													<.5								Dark grey, re-crystalized limestone, sporadic discordant white
																					calcite-silica veinlets, no sulphides,
																					Light weathering and oxidation along fracture surfaces to 8.2 m
																					No skarn assemblages, no sulphidid veins.
																					Limestone becomes increasingly organic rich toward the lower contact.
																					Low sulphide, pyrite < 0.5%.
																					11.6
11.6	31.2	CA-x																			**CHERTY ARGILLITE-MINOR BRECCIAS**
				15.8	Si=So=60																A representative cherty argillite forms the interval approximately 30%
																					of the unit is comprised of and argillaceous material. The remaining
				17.5	Sd=55																20 % is a slightly silty chert.
																					Chert lamella are frequently boudinaged, and form cuspate ovals.
				30.1	Si=Sa=20																There are no signinficant structural zone in this interval.
																					Net sulphide content averages 1.0% pyrite as minor disseminations and lamella.
																					Note minor felsic dykelet between 17.5 18.1
																					31.2
31.2	41.8	L											Tr								**LIMESTONE**
																					Homogeneous, medium grained, blue-grey, carbon rich limestone.
				31.2	So	20															No internal beds.
				35.3	Si	30 - faint															Both upper and lower contacts are tight, no significant fault structures.
																					Pyrite noted only in trace levels.
																					No skarn assemblages.
																					41.8
41.8	72.5	CA																			**CHERTY ARGILLITE**
				42.1	Si=20																Generally homogeneous, well laminated cherty argillite.
																					Compositional variation only based on the volume of grey silica
				50,0	Si=So=35																lamella (80=60%) versus argillite lamella.

																					Compositional layers generally transposed to Si.
					60.7	Si=18															No skarn or high sulphide veins, minor quartz veinlets which are
						Su=30															discordant to foliation.
																					Non-calcareous, no limy interbeds.
					63.7	So=35															Pyrite 0.25% within mm scale extensional quartz veinlets and lesser
																					foliation parallel aggregates.
																					Note: 67.6 - 68.6 Increasingly clay altered feldspar porphyritic dyke.
				72.4	So:45																Pyrite increases to 3% disseminated.
																					Note: from 68.6 - 72.5 Cherty argillite member becomes increasingly
																					blocky and broken. Slight increase in disseminate pyrite and pyritic
																					aggregates.
																					72.5
72.5	75.3	MZ-Cash																			**MINERALIZED ZONE SHEARED CHERTY ARGILLITE HOST**
																					Onset of heavy sulphide veins and replacements.
				72.5	S	25															Strong sheaving; frequently exceptionaly incompetent core.
																					Very limite development of a calcite gouge, most of the mineralized
				73.5	J/	40															zone consists of loosely aggregated sulphide grains within a black
																					clay-rock flour gouge.
				75.3	Sd	30															Sulphide content is high. Recognizable sulphide phases include:
																					arsenopyrite 10=12%
																					Stibnite: 3-5%
																					pyrite: 15%
																					red brown sphalerite: 1-25
																					tetrahedrite/tennantite: 1-2%
																					galena < 0.5%
																					Note: No realgar-cinnabar, rapid vertical zonation??
																					75.3
75.3	82.5	MZ/Fpd																			**FELDSPAR PORPHYRITIC DYKE-MINERALIZED ZONE**
			K-Se																		Two major sub- intervals may be identified including:
																					75.3 - 79.3 Extensively clay-sericite altered feldspar porphyritic
				78.1	J/	30															dyke, Mineralized interval. Rock is cut by numerous cm scale
																					stibnite-arsenopyrite-pyrite veins and the matrix contains
																					abundant disseminated pyrite (7-8%) and lesser arsenopyrite
																					(<1%).
				82.4	Sd	45			Note: Lower dyke contact tight, non faulted.												79.3 - 82.4 Pale cream-green sericitized and weakly carbonized
																					Feldspar porphyritic dyke. Stockwork vein density markedly
																					decreases. Disseminated pyrite 5-6%, no arsenopyrite or other

																					sulphide phases recognized.
																					82.5
82.5	96.6	AP-SL																			**SHEARED ARGILLACEOUS PHYLLITES**
																					Chert lamella noted up-hole are absent. The rock is a moderately
																					well laminated, slightly talcose argillaceous phyllite.
																					Anastomosing brittle ductile zones and gouge zones are well
																					developed at 83.8 - 85.0, 86.9-87.6 and 92.8 - 93.1.
																					No shear orientations are possible within thses zones of heavy clay
																					development.
				92.3	Si=So=20																A single 20 cm arsenopyrite-pyrite veins is noted at 85.6-
																					Background, matrix sulphide is generally low, 1-1.5% pyrite as
																					small compositional parallel aggregates.
																					96.6
96.6	EOH																				
																					Downhole Surveys:
																					96.6 m Dip: 47.75, Azi: 275.5

Assay Sample Log DDH 3-08

Date June 4, 2003 Page 1

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17611	66,0	67.6	B						
O17612	67.6	68.6	B	67.9-> 2.51					
O17613	68.6	70.2	B						
O17614	70.2	71.5	B						
O17615	71.5	72.5	B						
O17616	72.5	73.8	B	72.8 -> 2.76					
O17617	Standard PM 906								
O17618	73.8	75.3	B						
O17619	75.3	77,0	B						
O17620	77,0	78.2	B	78,0-> 2.94					
O17621	78.2	79.3	B						
O17622	79.3	81,0	B						
O17623	81,0	82.5	B						
O17624	82.5	84,0	B						
O17625	84,0	85.6	B						
O17626	85.6	86,0	B						
O17627	86,0	87.5	B						
O17628	87.5	90.5	B						
O17629	90.5	93.6	B						
O17630	93.6	96.6	B						
LEAD				9.2					


3-08 BOX #1 DDH 3-08
5.7
9.4
3-08 BOX #2 9.4
14.2
3-08 BOX #3 14.2
18.9
3-08 BOX #4 18.9
24.3


B-08 Box 9 43.6
47.5
49.0
B-08 Box 10 49.0
50.9
54.7
B-08 Box 11 54.7
60.2
B-08 Box 12
64.1
66.0


3-08 BX 5 24.3
28.6
3-08 BOX 6 28.6
29.6
34.1
3-08 BOX 7 34.1
38.7
3-08 BOX 8
43.6


3-08-BOX 13 66.0
66.1
67.2
71.8
3-08-BOX 14 71.8
75.2
77.9
3-08-BOX 15 77.9
78.2
81.4
83.6
3-08-BOX 16 83.6
84.4
90.5
90.5
3-08-BOX 17 90.5
96.6


3-08
72.7 m


3-08
79.0 ft.

Diamond Drill Log DDH 3-09

Dip 67.75, Azi: 270, T.D. 154.5 m North 6160394 East 347952 East

Date: June 6 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	1.5																				**CASE**
																					1.5
1.5	2.7	Pl																			**LIMY PHYLLITE**
													0,5%								Narrow band of well laminated calcareous phyllite.
																					Rock contains unusual 1-3 cm ovals fo a yellow-cream quartz
				2.7	So 35																porphyritic inclusion.
																					Net sulphide content is low, pyrite 0.5%.
																					2.7
2.7	11,0	L																			**LIMESTONE**
																					Grey to tan grey, homgeneous, massive, re-crystalized limestone.
				11,0	So 35 -> superb contact.																Rock is cut by small mm scale, sulphide deficient calcite veinlets.
																					There are no skarn assemblages and no high sulphide veins.
																					Disseminated pyrite <0.25%, no other sulphide phases recognized.
																					11
11,0	17.2	CA-x																			**CHERTY ARGILLITE MINOR BRECCIAS**
																					Well compostionally laminated cherty argillite. Abundant oval chert
																					forms, +/- grey cm scale chert compositional layers.
													1,0								Weak shearing at upper contact, elesewhere core is intact.
				14.3	Si/So=50																Non-calcereous, non-magenetic.
																					Pyrite 1.0% as compostional layer parallel aggregates and disseminations.
																					17.2
17.2	18.1	Fpd											0,5								**FELDSPAR PORPHYRY DYKE**
																					Fine grained, narrowm weakly altered feldspar porphyry dyke.
																					Non-calcereous, no stockwork vein development, 0.5% pyrite no
																					hematite.
																					18.1
18.1	68.7	CA/AP																			**CHERTY ARGILLITE - INTERBEDDED ARGILLACEOUS PHYLLITE**
																					The rock unit grades between being a well defined ribbon banded
				27.4	Si=So=55																chert and a moderately siliceous argillaceous phyllite.
																					Contacts between the Ca and AP emebers are gradational, and

				41.6	Si=S0=25																not consistently mappable in drill core.
																					Minor blocky zones occur throughout this interval, but significant
				59.8	So	35															structural zones are noted within this interval < 0.25%
																					Pyrite ranges between 0.5 and 1.0% as foliation parallel lamella
				68.7	Sd	38															and disseminations.
																					No skarn assemblages, no high sulphide veins.
																					68.7
68.7	80.8	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Tan to grey-green feldspar porphyritic dyke.
				78.7	Si	32															Well developed chill margin for about 50 cm into the upper contact.
																					No stockwork vein development , no sulphides development at
				80.8	Si	25															upper contact.
																					3-4% hematite, trace pyrite.
																					Broad chill margin from 78.0 - 80.8 lower contact, lower contact
																					tight, not faulted.
																					Pyrite (1.0%) sericite and clay material assemblages increse towards
																					the lower contact.
																					80.8
80.8	88.4	CA-lx																			**CHERTY ARGILLITE MINOR INTRUSION BRECCIAS**
																					Well developed monolithologic intrusion breccias are noted at the
																					upper contact, 80.8 - 81.3
				84.4	Si: 0 parallels So																Representative ribbon chert across this interval, no significant fault
																					development.
				88.4	Sd: 30																Non-calcareous, pyrite 1.0% associated with small quartz fractures.
																					No other sulphides, non-magnetic.
																					Slightly elevated sulphides, pyrite 2%, trace arsenopyrite, 86.9-87.5
																					88.4
88.4	95.9	Fpd	k-Se																		**SERICITIZED - CLAY ALTERED FELDPAR PORPHYRITIC DYKE**
													0,5								Light tan to grey-green feldspar porphyritic dyke.
																					Plagioclase converted to apple-green sericite, +/- clays, no
					95.9	Sd:35							2								significant matrix calicite.
																					No stockwork veins, no high sulphide veins.
																					Both upper and lower contacts are tight.
																					Hematite and pyrite are present in approximately equal (0.5 + 0.5%)
																					amounts.
																					95.9
95.9	106.9	CA-sh																			**CHERTY ARGILLTE - WEAK SHEARING**

																					Thinly compositionally laminated cherty argillite occurs in this interval.
																					No significant failures within the zone, but strongest shear
				101.2	Si=So=15																development occurs at the lower contact, 106.3 - 106.9.
																					Compositional layers generally consistant to CA at about 15 to CA.
																					Sulphide development across most of the interval is consistant at
																					1.5-2.0% as disseminations and foliation parallel aggregates.
																					Arsenopyrite 0.5% between 106.3 and 106.9.
																					106.9
106.9	116.2	Fpd	K-Se																		**CLAY ALTERED FELDSPAR PORPHYRITIC DYKE**
																					A soft clay altered feldspar porphyritic dyke forms the interval.
				106.9	Sd: 68																A strong chill margin is noted at the upper contact, which although
																					strongly sheared remains tight with the overlying cherty argillites.
																					Small, very fine sulphidic veins - veinlets. Veinlets contain calcite
				116.2	Sd: 20																as the principle gangue mineral.
																					Net sulphide content; disseminated pyrite 2-5%, grey sulphide or
																					hematite 0.25%, hematite increases towards the lower contact.
																					116.2
116.2	123.4	CA-L	sh																		**SHEARED CHERTY ARGILLITE - MINOR LIMESTONE**
																					Well compositionally laminated cherty argillites form the interval
																					two small limestone interbeds at 117.4-118.6 and 119.2-119.5
				118.7	Si	30															are also noted.
																					Net sulphide content is slightly elevated, pyrite 2-2.5 % as disseminations.
																					and foliation parallel aggregates.
																					Shearing typically parallel to Si-So
																					123.4
123.4	135,0	Fpd	K-Se																		**SERICITIZED CLAY ALTERED FELDSPAR PORPHYRITIC DYKE**
																					Light gre-green feldspar porphyritic dyke.
																					Good development of matrix sericite +/- clays. No matrix calcite.
																					Disseminated pyrite 1.5%, hematite also stable 0.5%, no other
																					sulphide or oxide phases identified.
																					Weak onset of calcite lined fractures, 133.5-135.0, and elevated
																					clay content at 134.9 - 135.0
																					No significant structural zones.
																					135
135,0	136,2	L/MZ																			**LIMESTONE: SPHALEVITE STRINGERS AND DISSEMINATIONS**
																					Massive medium grained limestone bed is cut by numerous
																2,%					stringers and disseminations.

																					Within this unit: sphalerite 2-2.5%, arsenopyrite 0.25%, pyrite 1.0%
																					Rock is cut by numerous pre-mineralization calcite veinlets.
																					Blocky, broken core, significant faults not recognized.
																					No contact or orientations of sulphides to CA possible.
																					136.2
136.2	140	MZ-MS																			**MINERALIZED ZONE - MASSIVE SULPHIDE REPLACEMENT ZONE**
																					Onset of heavy sulphide mineralization, 50-70% sulphides supported
																					by 50-30% fine grained crystalline quartz.
																					Sulphides include:
																					sphalevite: 10-12%
																					stibnite: 4-5%
																					arsenopyrite 25%
																					tetrahedrite - tennite 2%
																					jamesonite 1-2%
																					pyrite 10-12%
				140,0	So:	35															galena 1%
																					Core is intact, well preserved, no oxidation of sulphides.
																					Contact and orientation of sulphide body likely follows Si-So, clean
																					lower contact at abou 35 degrees /CA
																					Sulphide zonation: sphalerite only at up hole contact, sphalerite plus
																					other sulphide phases, lower contact.
																					Strongest sulphide development at 137.8-140.0, > 70% sulphides.
																					140
140,0	145.3	CA																			**CHERTY ARGILLITE**
																					Abrupt cessation of sulphide development, corresponds to the
																					onset of a deformed, boudinaged, flattened, and rotated ribbon chert.
				143.7	Si=So=25								2								Rock contains a few minor gouge zones but typically is intact.
																					Rapid rotation in Si-So marked near the lower 1.0 m interval of
				145.3	So:	35															the unit.
																					Net sulphide content, disseminated pyrite 2%, minor base metal
																					vein between 143.0 and143.2.
																					145.3
145.3	153.2	AP																			**ARGILLACEOUS PHYLLITE - DUCTILE "E" ZONE**
																					Strong flattening and ductile strain fabrics.
																					Grey-tan compositional layers, talcose phyllitic foliation surface.
																					Cherty compositional layers significantly reduced, < 10% bu volume.
																					Consistent planear fabric, Si at 30 CA=So

																					Non- calcareous, non-magnetic
																					Net sulphide content, pyrite: 1.5%
																					153.2
153.2	154.5	CA	sh																		**SHEARED CHERTY ARGILLITE**
																					Strong gouge development at upper contact.
				153.2	sh:	30															Slight increase in pyrite 2% trace arsenopyrite.
																					Locally rotated and boudinaged calcite fragments.
																					154.5
154.5	EOH																				
																					Downhole Surverys:
																					154.5 m Dip: 68.25, Azi: 279

Assay Sample Log DDH 3-09

Date June 6 Page 1

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17632	103,0	105,0	B						
O17633	105,0	106.3	B						
O17634	106.3	106.9	B						
O17635	106.9	109,0	B						
O17636	109,0	111,0	B						
O17637	111,0	112.5	B						
Lead				10.1					
O17638	127.5	129.5	B						
O17639	129.5	131.5	B						
O17640	131.5	133.5	B						
O17641	133.5	135,0	B	134.1-> 2.65					
O17642	135,0	136.2	B						
O17643	136.2	137.2	B	136.3-> 3.14					
O17644	Standard PM 906								
O17645	137.2	137.8	B						
O17646	137.8	139,0	B	138.4-> 3.72					
O17647	139,0	140,0	B						
O17648	140,0	141.5	B						
O17649	141.5	142.8	B	142.1-> 2.66					
O17650	142.8	143.3	B						
O17651	143.3	144.3	B						
O17652	144.3	145.3	B						
O17653	145.3	147,O	B	146.6-> 2.82					
Lead				9.63					

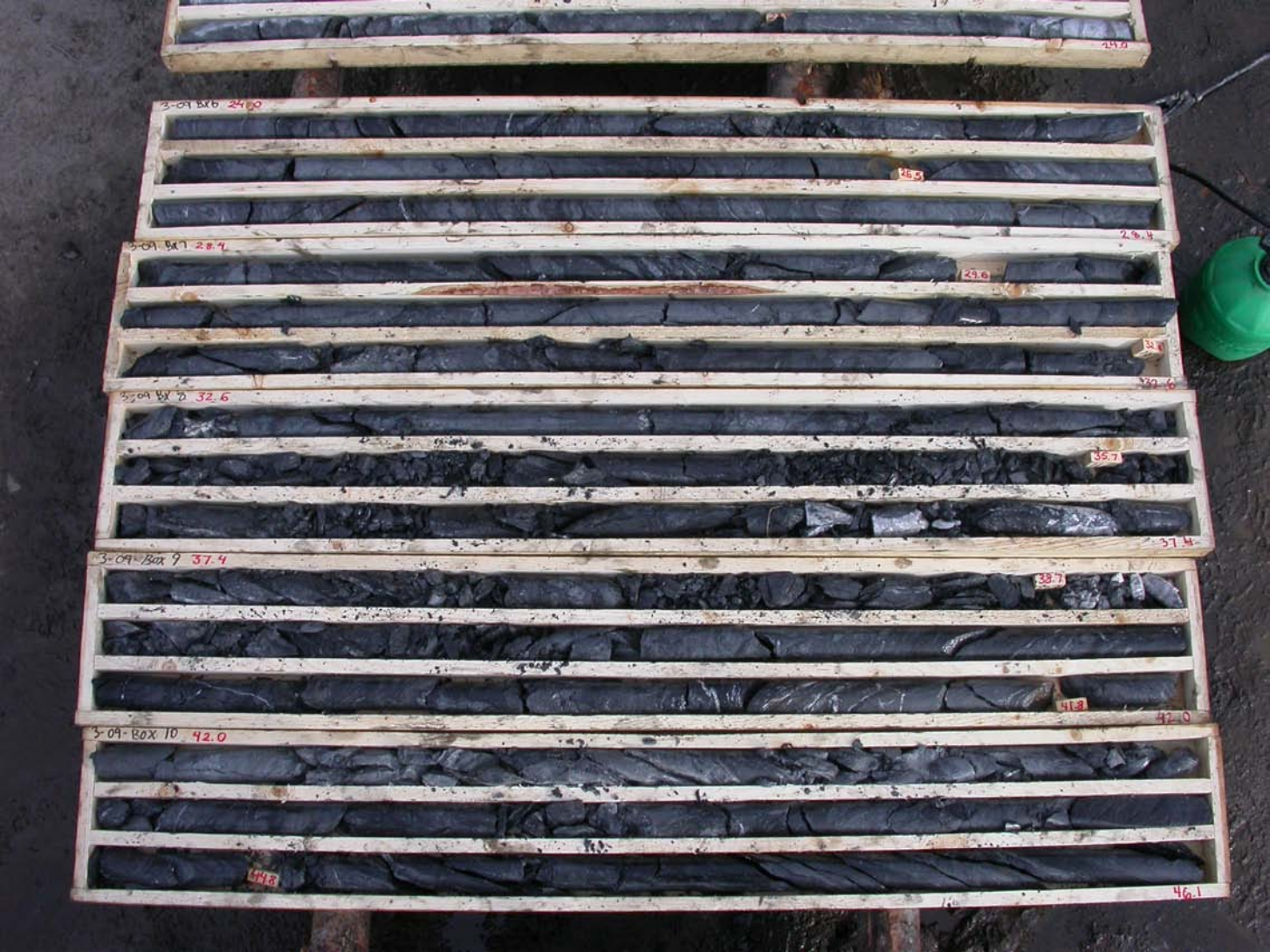

3-08-BOX 1 1.5 DDH 3-08
1.5
2.1
5.2
3-08-BOX 2 7.4
11.3
11.9
3-08-BOX 3 11.9
15.7
3-08-BOX 4 15.7
17.4
19.7
3-08-BOX 5 19.7
20.4
23.5
24.0


95.3
99.7
100.6
102.7
105.8
106.2
108.8
111.7


3-09-BOX 16 72.9
73.3
78.7
3-09-BOX 17 78.7
81.4
83.9
3-01-BOX 18 83.9
84.4
87.5
89.6
3-09-BOX A 89.6
90.5
93.8
95.3


3-08-BOX 1 1.5 DDH 3-0 9
21
3-08-BOX 2 7.4


3-09-BOX 11 46.1
47.8
50.4
51.8
3-09-BOX 12 51.8
53.9
56.7
3-09-BOX 13 56.7
57.0
60.0
61.7
3-09-BOX 14 61.7
63.1
66.1
3-09-BOX 15 67.3
69.2
72.3
72.9


24.0
3-09 Box 6 24.0
26.5
29.4
3-09 Box 7 28.4
29.6
32.6
3-09 Box 8 32.6
35.7
37.4
3-09- Box 9 37.4
38.7
41.8
42.0
3-09- Box 10 42.0
44.8
46.1


144.5
144.5
148.8
148.8
153.9
153.9
154.5


3-09
139.

Diamond Drill Log DDH 3-10

Dip: 45, Azi: 274 T.D. 86.9 m. North: 6160351 East: 347939

Date: June 7 Logged By: J.Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
O	3,0																				**CASE**
																					3
																					FELDSPAR PORPHRY DYKE
3,0	4,0	Fpd											2								Rock has weathered buff due to surface oxidation.
																					All joint sets are oxidized.
																					2-3% matrix hematite, no pyrite
																					No stockwork vein, no high sulphide veins.
																					4
4	24.25	CA-x																			**CHERTY ARGILLITE - BRECCIA'S**
				8.2	Si=So=35																Strained, boudinaged chert fragments are more common than cm
																					scale lamella.
				20.7	Su	60 -> 50 cm limestone interbed at 20.4-20.9															Core generally intact, no significant structural zones.
				20.8	Si	40															Minor calcite extensional veinlets
				24.25	So:	50															Pyrite 0.5-0.75%, disseminations and small foliation parallel aggregates.
																					No skarn or high sulphide vein assemblages.
																					24.25
24.25	26.2	L																			**LIMESTONE**
																					Medium to light grey carbonaceous limestone.
																					Very low sulphide content, pyrite < 0.5%
																					Homogeneous, to amorphous, dolomite? Inclusions
																					Low contact 12 to CA and slightly sheared.
																					26.2
26.2	32.5	CA	sh																		**WEAKLY SHEARED CHERTY ARGILLITE**
																					Partial coarse gouge and rock flour zones repeatedly developed
				28,0	Sh:	12															within a silty cherty argillite.
																					Rock fabric rotated sub-parallel to CA:
				29.4	Si	5															Matrix is no calcareous and contains 1-2% pyrite as uniform disseminations.
																					No stockwork or high sulphide veins.
																					32.5
32.5	35.9	L	Mn																		**MANGANIFEROUS TO DOLOMITIC LIMESTONE**

													Tr								Unusual mottled light brown matrix on cored surface.
																					Fracture surfaces are lined with discordant brown oxide and are
																					definitively lined by a rhombohedral ankoritic carbonated.
																					Very low sulphide content, pyrite - trace, no other base metal phases.
																					Sporadic argillite-cherty argillite inclusions toward the lower contact.
																					35.9
38.7	46.2	Fpd	Se-K	(-MZ)																	**WEAK MINERALIZED ZONE - SHEARED CHERTY ARGILLITE**
																					Strong development of rock flour matrix supporting well rounded
													3					Tr			cherty argillite fragments.
																					Shear orientation roughly parallels Si as 30
																					Abundant quartz vein fragments and matrix sulphide appears elevated
																					pyrite approaches 3-4%, trace (?) arsenopyrite.
																					38.7
38.7	46.2	Fpd	Se-K	(-MZ)									3			Tr	Tr				**BLEACHED CHALKY GREEN- FELDSPAR PORPHYRITIC DYKE**
																					Persistant clay-calcite sphalerite-arsenopyrite fractures towards the
																					upper fault contact.
																					The interval 38.7-43.5 likely correlates with the structural zone
																					cored in DDH 3-08 and 3-09.
																					Matrix pyrite significantly elevated 3-4%, and often coated by a grey
				45.2	Sd	34															sulphide or oxide
																					Lower contact is tight at 34 degrees.
																					45.2
46.2	73.3	AP																			**ARGILLACEOUS PHYLLITE**
																					Strongly sheared, incompetant argillaceous phyllite.
																					Chert lamella forms less than 10% by volume of the unit.
			51,0	Si=So=25																	Shearing occurs dominantly sub-parallel to Si/So
																					No skarn assemblages, no high sulphide veins.
			57,0	Si	15																Non-calcareous, low sulphide content, pyrite as disseminations
																					and foliation parallel aggregates, 0.75-1.0%.
			68.7	Si=So=35																	Distinct yellow tan-silky compositional layers and foliations surface.
																					Persistant gouge and fault zone from 62.5-65.7.
																					73.3
73.3	74.3	Fpd	Se																		**SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					Minor pale grey, sericitized feldspar porphyritic dykelet.
				14.3	Sd	20															Disseminated pyrite 2%, no hematite.
																					Contacts tight and not sheared
																					74.3

74.3	82.4	AP	sh																		**SHEARED ARGILLACEOUS PHYLLITE**
																					Jet black argillaceous phyllite, strong, foliation parallel shearing
				80.9	Si	15															common throughout the interval.
																					Interval is non-calcareous.
																					Net sulphide content is low, pyrite <1.0%.
																					An exceptionally friable incompetent argillite.
																					82.4
82.4	83.9	Fpd	Se																		**FELDSPAR PORPHRITIC DYKE: SERICITIZED**
																					Bleached light cream-grey, feldspar porphyritic dyke.
				82.4	Sd:	25							1								Both contacts clay altered but not strongly sheaved.
																					Sporadic calcite - veinlets +/- disseminted pyrite, 1.0%.
																					83.9
83.9	86.9	L/A	SL																		**LIMESTONE - ARGILLACEOUS PHYLLITE INTERBEDS**
																					Blocky, blue grey limestone forms the interval, interbedded with
																					limestone are dark grey strongly sheared argillite interbeds.
				86.4	Si=So=25																No evidence of dissalution features or Karsted surfaces.
																					No maganiferous coatings.
																					Low sulphide content, foliation parallel pyrite aggregates in phyllite
																					0.75%.
	86.9	EOH																			86.9
																					Downhole Surverys:
																					86.8 m Dip: 45.5 Azi: 275

Assay Sample Log DDH 3-10

Date June 7, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17654	30.5	32.5	B						
O17655	32.5	34,0	B						
O17656	34,0	35.9	B						
O17657	35.9	36.5	B						
O17658	36.5	40.3	B						
O17659	40.3	42,0	B						
O17660	42,0	44,0	B						
O17661	44,0	46.3	B						
O17662	82.4	83.9	B						
O17663	83.9	86.9	B						

14.3
17.4
19.1
20.4
23.5
25.0

3-10 Bx 10 54.6
53.9
60.0
60.7
66.1
66.5


3-10-BOX 5 25.0
29.6
30.5
3-10-BOX 6 30.5
32.6
36.4
3-10-BOX 7 36.4
36.5
38.7
40.3
41.8
42.6
3-10-BOX 8 42.6
44.8
47.9
48.3


5.2
8.1
13.5
14.3
17.4
19.1
20.4
23.5
25.0


DDH 3-11

Diamond Drill Log DDH 3-11

North: 6160351 East: 347939 Elevation:
Dip: -67.5 Azimuth: 274 Total Distance: 105.5 m
Date: June 8, 2003 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	4.3																				**CASE**
																					4.3
4.3	12.8	Fpd																			**FELDSPAR PORPHYRY DYKE**
																					Homogeneous, weakly altered feldspar porphyritic dyke.
			12.8	Sd:	20																Light to moderate matrix clays +/- sericite.
																					Sporadic iron-oxide joints-fractures.
																					1-2% hematite, virtually no pyrite, non-magnetic.
																					12.8
12.8	21,0	CA-x																			**CHERTY ARGILLITE - EARLY BRECCIAS**
																					Laminated to strongly boudinaged cherty argillite; cuspate oval
																					chert forms common.
			19.8	Si=So=35																	Approxinately 40% argillite as an irregular matrix infill.
																					Non-calcareous, no development of stringer mineralized zones, no high sulphide veins.
																					Low sulphide content, pyrite 1%, as small foliation parallel aggregates.
																					21
21,0	45.8	L																			**LIMESTONE**
																					Blue grey, homogeneous medium grey limestone cut by abundant
			27.5	So	40																chocolate brown, manganese (?) fractures.
																					Oxide zones are associated with vuggy open space textures.
			45.8	So	45																Cavities are lined by euhedral calcite.
																					Locally very weak fabric development, Si formed by aligned calcite rhombs.
																					Very small tuffaceous or limy tuffaceous interbeds, eg 27.5-27.7,
																					carry slightly higher, 1%, disseminated pyrite contents.
																					45.8
45.8	49.1	Pl/k	oxid.																		**OXIDIZED LIMY PHYLLITES - " CALCITE KNOT LIMESTONE**
																					AND INTERBEDDED CHERTY ARGILLITE"
																					Muddy brown green limy phyllites have a boxwork texture, all
																					sulphide phases may be leached.
				48.5	Si:	10															Relevant sub-intervals are:
				49.1	So:	70															45.8-46.4: Limy phyllite, irregular oxidized quartz calcite knots.
																					Dolomitic grains common.
																					46.4-46.8: Blocky broken cherty argillite.
																					46.8-47.5: Limestone, dolomitic crystals common.
																					47.5-49.1: Cherty argillite. Si.So fabric parallel to CA; but
																					L-CA contact forms at: 70 degrees to CA.

																					Note: the majority of the sulphide phases have been oxidized - leached.
																					49.1
49.1	52.1	Pl-L-CA	oxid																		**OXIDiZED LIMY PHYLLITES, LIMESTONE AND CHERTY ARGILLITES**
																					The sequence is similar to the preceeding interval, but inverted.
																					Relevant sub-intervals are:
				52.1	So	35															40.9-50.6: Limestones, increasing development of brown
																					vugs and cavities toward the sub contact.
																					50.6-51.6: Chocolate brown, extremely buggy limestone.
																					No preserved sulphide grains, abundant opaque coatings.
																					51.6-52.1: Black - dark grey, oxidized limy phyllite.
																					No preserved sulphide phases.
																					52.1
52.1	58.2	CA																			**CHERTY ARGILLITE - EARLY BRECCIAS**
																					Well developed narrow, cm scale, cherty lamella separated by a
				57.3	Si=So=30																narrow dark grey argillaceous lamella.
																					Locally crumpled lamella but generally consistent orientation to CA.
																					Sulphide content, pyrite only about 0.75%, as disseminations and
																					foliation parallel aggregates.
																					Trace stibrite veinlets.
																					58.2
58.2	64.3	P	Ser																		**SERICITIC PHYLLITE**
																					Fine grained well foliated, sericitized phyllite. No black argillaceous
				61.8	Si	28							3					0,5			layers.
																					Rock is cut by numerous foliation discordant pyrite +/- stibnite -
																					arsenopyrite cm scale veinlets generally at 20-30 to CA.
																					Foliation consistent to CA @: about 20 degrees.
																					Net sulphide content:
																					pyrite 3-4% within discordant veins.
																					arsenopyrite 0,5%
																					stibnite trace
																					The rock does have a moderately tuffaceous appearance.
																					64.3
64.3	74.3	CA																			**CHERTY ARGILLITE**
																					Blocky broken core, well compositionally laminated cherty argillite.
													0,75								Foliations parallel delaminations and slip planes common.
																					Non-calcareous, 60% by volume chert, 40% by volume argillite.
																					Net sulphide content light, 0.75-1.0% disseminated pyrite.
																					Elevated quartz carbonate without sulphides towards the lower contact.
																					74.3
74.3	81.7	MZ/CA																			**MINERALIZED ZONE: CHERTY ARGILLITE HOST**
																					Mineralization is in the form of an anesotomosing array of cm scale
				74.5	J/	10															stibuite - arsenopyrite - pyrite - red brown sphalerite stringers.
				78,0	J/	15															Note stibnite veins are flanked by arsenopyrite +/- pyrite and red
				80,0	J/	25															brown sphalerite.
				81.7	J/	55															Approximate estimates:

																					sphalevite: 2%
				80.5	Si	15															pyrite 8-10%
																					arsenopyrite 2%
																					stibrite 2-3
																					Note: Veinlets are generally forming sub-parallel to Si-So, but are
																					also discordant.
																					81.7
81.7	91.3	AP	sh																		**ARGILLACEOUS PHYLLITE - SHEARED**
																					Strongly sheared argillaceous phyllite, minor <15% by volume
																					cherty argillite interbeds.
				85.7	Si=So=5																Frequent complete loss of competancy, failures parallel Si: 5-15% CA
																					Non-calcareous, no high sulphide veins or veinlets.
																					Beds - compositional layers have rotated sub-parallel to CA.
				91.2	Si=So=15																Net sulphide content is low, 0.5-0.75% pyrite.
																					88.0-91.3: Complete loss of competancy, innumerable shear parallel
																					slip planes.
																					91.3
91.3	105.5	Fpd	Se-K																		**FELDSPAR PORPHYRITIC DYKE**
			91.3	Sd:	20																Moderately to strongly clay - sericite altered dyke.
																					Development of clay assemblages may be increasing down hole.
																					No stockwork mineralized zones, no high sulphide veins.
																					Good disseminated pyrite 2-3%, euhedral, no vein association.
																					Blocky broken core 87.0-99.4. High level fault likely.
																					105.5
105.5	EOH																				
																					Downhole Surveys:
																					105. 5 m Dip: 67.25, Azi: 335 (magnetic rock?, use 274)

Assay Sample Log DDH 3-11

Date June 8, 2003 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17664	27.5	30,0	B						
O17665	30,0	32.5	B						
O17666	45.8	47.5	B						
O17667	47.5	49.1	B						
O17668	49.1	50.6	B						
O17669	50.6	51.6	B						
O17670	51.6	52.1	B						
O17671	Standard PM 169								
O17672	58.2	60.2	B						
O17673	60.2	62.2	B						
O17674	62.2	64.2	B						
O17675	72.3	74.3	B						
O17676	74.3	75.7	B						
O17677	75.7	78,0	B						
O17678	78,0	79.2	B						
O17679	79.2	80.5	B						
O17680	Standard PM 906								
O17681	80.5	81.7	B						
O17682	81.7	83,0	B						
O17683	83,0	84.3	B						
O17684	84.3	85.8	B						


BOX 5 26.2


3-11-BOX 11 61.1
3-11-BOX 12 66.9
3-11-BOX 13 72.3
3-11-BOX 14 78.4


3-11-BOX 6 33.3
38.2
3-11-BOX 7 38.2
43.3
3-11-BOX 8 43.3
49.9
3-11-BOX 9 49.9
55.4
3-11-BOX 10 55.4
61.1


3-11-BOX 16 89.6
3-11-BOX 17 94.4
3-11-BOX 18 99.4
3-11-BOX 19 104.8


3-11
80.2 m


3-11
80.2 m

Diamond Drill Log DDH 3-12

North: 6160275 East: 347970 Elevation:
Dip: -45 Azimuth: 274 Total Distance:111.9 m
Date: June 9, 2003 Logged By: J. Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0																				**CASE**
																					3
3,0	17.6	L																			**LIMESTONE**
																					Blue grey felted texture limestone.
													Tr								Minor manganiferous choclate brown weathering patches, eg at
																					9.4-10.9 m, no visible sulphides.
																					Rock is homogeneous and non-bedded.
																					Net sulphide content very low, disseminated pyrite <0.25%
																					17.6
17.6	29.2	CA-x																			**CHERTY ARGILLITE - MINOR BRECCIAS**
																					Well compositionally laminated cherty argillite, abundant cuspate
				22.5	Si:	35															oval chert fragments.
																					Both upper and lower contacts are tight no shear or gouge development.
				29.2	So:	35															Compositionally, 70% chert, 30% argillite compositional layers.
																					Pyrite 1.0% as small foliation.
																					29.2
29.2	33.5	L																			**LIMESTONE**
																					Light to dark grey medium grained limestone.
													Tr								The interval contains a few small 10-20 cm limy phyllite or
																					tuffaceous inclusions.
				33.5	So:	25															Net sulphide content remains low.
																					Weak stylolite - pressure solution layers.
																					Trace pyrite.
																					33.5
33.5	44.6	CA																			**CHERTY ARGILLITE**
																					Distinctive black on white cm scale compositional layers.
																					Compositional layers frequently crumpled - broken sporadic

				35.7	Si=So=40																cuspate fragments.
																					Interval is cut by early, non-sulphidic quartz fragments.
																					Net sulphide content, pyrite 1%, usually associated with black
																					clastic aggregates.
																					44.6
44.6	50.9	Fpd	Se																		**SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					Apple green, clay and sericite altered feldspar porphyritic dyke.
																					Narrow, 3.0 cm chill margins at 44.6
					446	Sd															No calcite development within the matrix.
																					0.5% disseminated pyrite, 1.5% disseminated hematite.
																					50.9
50.9	60,0	CA	sl																		**CHERTY ARGILLITE: WEAKLY SHEARED**
												0,5									Average silica compositional layer 1-2 cm's, 70%rock volume.
																					Argillaceous partings, 30% rock volume.
				53,0	Si=So=15																Blocky "gougy" core common from 50.9-52.4, upper dyke contact
																					lower dyke contact less well developed gouge zone.
				59.5	Si=So=52																Minor phyllitic compositional layers.
																					Net sulphide levels remain weak, pyrite as disseminations and mm
																					scale aggregates 0.5%.
																					Increasing percentage of slip planes with talcose foliation surfaces.
																					60
60,0	63.1	Fpd	Se																		**FELDSPAR PORPHYRY DYKE: TRACE OF MINERALIZED ZONE**
																					A narrow feldspar porphyritic dyke forms the interval.
																					The dyke contains several small sulphide veins-veinlets containing
																					red brown sphalerite and a minor grey sulphide phase.
																					1.7 m of lost core is noted at lower dyke contact.
																					The dyke is moderately serixirized but not carbonitized.
																					No reliable contact orientations were obtained.
																					63.1
63.1	66.1	Fault																			**MAJOR FAULT**
																					Ground core, significant core loss, major structural zone.
																					Fault gouge contains slightly elevated but overall modest sulphide
																					development.
																					Pyrite averages 3-4%, no arsenopyrite recognized.
																					No structural orientations are possible within the gouge and ground
																					core forming this zone.
																					66.1

66.1	88.3	A-AP	Sh																	**SHEARED ARGILLITES AND ARGILLACEOUS PHYLLITES**
																				Ninety percent of the interval is an argillite.
					68,0	Si=So=15														Cherty argillite zones are very sporadically developed.
																				Multiple gouge and failure zones occur across this interval.
					76.8	Si=So=0														Failure surfaces appear to be orientated parallel to Si-So.
																				Calcite is not significantly present within the matrix or as minor
					84.4	Si=So=110														extensional veinlets.
																				Gouge zones at:
																				69.2-72.2
																				75.0-76.6
																				80.3-80.9
																				Pyrite averages 1%, foliation parallel aggregates
																				88.3
88.3	94.2	CA																		**CHERTY ARGILLITE**
																				Minor cherty argillite interbed, distinctive cm scale cherty beds
				90.5	Si:	10														form approximately 50-60% rock volume.
																				Generally intact core, shear development decreases.
				94.2	Si=So=18															No vein development, low net sulphide content, pyrite < 0.5%
																				94.2
94.2	111.9	AP-Pse																		**ARGILLACEOUS PHYLLITE - LESSER INTERBEDDED SERICITIC**
																				PHYLLITE - (TUFFACEOUS MEMBER?)
																				Distinctly compositionally layered argillaceous phyllites and non-
																				calcareous, tan-yellow sericitic phyllites.
																				Relevant sub-intervals for each unit are:
																				94.2-95.1: Argillaceous phyllites, highly planear "silky"
				102.5	Si:	20														foliation surface.
																				95.1-100.5: Sericitic Phyllite grading downward to a black
																				chert member. Intense flattening fabric, 5-6% disseminated
																				pyrite. "Tuffaceous like, ashy, matrix."
																				100.5 - 109.3: Chert, sericitic phyllite minor limestone.
																				The general sequence appears as:
																				Chert
																				Sericitic phyllite
																				Limestone
																				Minor quartz-calcite vein at 108.9
																				109.3-111.9: Argillaceous phyllite, strong planar foliation, relatively
																				competant. Non-calcareous, < 15% chert lamella.

																					Net pyrite content: 0.75-1.0%
																					111.9
111.9	EOH																				
																					Downhole Surveys:
																					111.8 m Dip: 44.25, Azi: 274.

Assay Sample Log DDH 3-12

Date: June 9 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17685	55.4	57,0	B						
O17686	57,0	60,0	B						
O17687	60,0	61.8	B						
O17688	61.8	63.1	B						
O17689	63.1	64.6	B						
O17690	64.6	66.1	B						
O17691	66.1	68.3	B						


3-12-BOX 1 3.0 DUP 3-12
3-12-BOX 2 11.1
3-12-BOX 3 17.0
3-12-BOX 4 25.6
3-12-BOX 5 29.7
11.3
14.3
20.4
23.5
26.5
27.6
32.6
36.6


3-12-BOX 12 74.0
3-12-BOX 13 79.3


3-12-BOX 6 366
387
419
442
3-12-BOX 7 422
448
479
497
3-12-BOX 8 497
509
554
3-12-BOX 9 525.4
570
600
631
632


3-12-BOX 14 87.3
3-12-BOX 15 92.7
3-12-BOX 16 96.3
3-12-BOX 17 103.7
3-12-BOX 18 110.4

Diamond Drill Log DDH 3-13

North: 6160275 East: 34790 Elevation:
Dip: - 67.75 Azimuth: 274 Total Distance: 114.6 m
Date: June 10, 2003 Logged By: J.Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3.7	Case																			**CASE**
																					3.7
3.7	21.5	L																			**LIMESTONE**
																					Homogeneous blue-grey re-crystalized limestone.
													Tr								Core has only minor fractures, exceptionally clean, no stockwork
																					or veinlets.
				21,0	So 70																Minor washes of dolomite-iron carbonate are noted across this
																					interval, sulphides trace pyrite.
																					A single chocolate weathering manganiferous dolomite band is
				21.5	So: 45																located at 7.4-8.1 m.
																					Note: very small, 10 cm phyllite interbed at 21.0 m has a suberb
																					So @ 70 to CA.
																					Clean lower contact, no shearing at: 45 CA.
																					21.5
21.5	28.7	CA																			**CHERTY ARGILLITE**
																					Dark grey to black irregularly bedded cherty argillite.
													1,07								Disseminated pyrite 0.75-1.0%, very fine grained.
																					Minor extensional veins orthogonal to bedding, trace calcite.
																					Both upper and lower contacts are tight, no significant shearing.
																					28.7
28.7	36.9	AP																			**ARGILLACEOUS PHYLLITE**
													0,75								Laminated black-cream to pale green-grey argillaceous phyllite.
				29,0	Si=So=20																Locally knotted, irregular foliation surfaces.
																					A chloritic phyllite interbed consisting of flattened sericitic-chloritic
				33.2	So:	50															porphyroblasts within a weakly calcareous matrix is noted between
																					33.2-35.7. Pyrite increases to 1.0%
																					Base of the interval is a knotted black to cream moderately

																					siliceous argillaceous phyllite.
																					No stockwork or high sulphide veins.
																					36.9
36.9	47.8	L																			**LIMESTONE**
																					Blue grey homogeneous, massive, no internal beds.
				45.3	"So"	35															Iron carbonate content noted in the first interval is absent.
																					Rare hints of bioclastic debris.
																					Low net sulphide content; pyrite < 0.25%.
																					No significant structural zones, no evidence of distal alteration
																					assemblages.
																					47.8
47.8	57,0	CA-AP																			**CHERTY ARGILLITE / MINOR ARGILLACEOUS PHYLLITE INTERBEDS**
																					Dark black to laminated cream cherty argillite, crumpled phygmatic
																					folds common.
				49,0	Si=So=20																One internat argillaceous phyllite interbed is noted at 53.6-55.1.
																					Compositional layers typically oblique to CA: @ about 20 degrees.
																					No stockwork or high sulphide veins, net sulphide content low:
				57,0	So	40															pyrite about 0.5-0.75**%** as fine grained foliation parallel aggregates.
																					Tight relatively compact core. No significant structural zones.
																					57
57,0	58.6	L																			**LIMESTONE**
																					Minor limestone interbed.
																					No vein development, un-sheared.
																					Faint compositional layers towards the lower contact.
																					No significant sulphides.
																					58.6
58.6	88.9	CA-Ap																			**CHERTY ARGILLITE MINOR ARGILLACEOUS PHYLLITE**
																					Distinctive cm scale cherty compositional layers dominate this interval.
																					(85%). Argillaceous phyllite interbeds form <15% of the section,
																					and are often in gradational contact with cherty argillite members.
																					A single narrow 20 cm limestone bed is located near the upper
																					contact with the overlying limestone bed.
																					Elsewhere the unit is non calcareous.
				70,0	Si/So:	20															Sporadic zones of slightly broken blocky core are identified at
																					62.8-63.8, 83.5-84.6.
				81.1	Si:	0															Major displacements across these zones are unlikely.
				88.6	Si/So:	20															Si/So generally at consistently low angles to CA.

																					Low sulphide content, disseminated pyrite 0.75-1.0%
																					88.9
88.9	89.45	MZ																			**MINERALIZED ZONE**
																					A narrow and weak mineralized zone is noted in this interval.
																					Significantly elevated pyrite (4-5%) arsenopyrite (0.75-1.0%) and
				89.6		35															pale to mid yellow sphalerite is noted within this interval.
																					Mineralization is localized at a brittle ductile gouge zone adjacent
																					to a feldspar porphyritic dyke.
																					Shear orientation about 35 degrees.
																					89.45
89.45	100.6	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
																					Weakly sericitized and clay altered feldspar porphyritic dyke.
																					No development of stockwork mineralized zones, no disseminated
																					mineralization.
				100.6	Sd	28															Good to moderate matrix calcite, persistent disseminated hematite
																					(3%) pyrite (0.75-1.0%)
																					Both upper and lower contacts are tight at 35 degrees.
																					100.6
100.6	114.6	AP-CA																			**ARGILLACEOUS PHYLLITE - LESSER CHERTY ARGILLITES**
																					Well compositionally laminated cherty argillite (60-70%) with 30-40% a
																					In competant core and good gouge development near the dyke
				110,0	Si=So=5																contact. (100.6-102.5).
																					Pyrite elevated to 3% in this zone.
																					No carbonate reaction.
																					Average background values of pyrite, about 0.5%.
																					Rock at its terminal point, very papery fissilitz, good transition to argillite.
114.6	EOH																				
																					Downhole Surveys:
																					114.6 m Dip: 67.25, Azi: 278

Assay Sample Log DDH 3-13

Date June 10 Page 1

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17692	7.4	8.1	B						
O17693	86,0	87.5	B						
O17694	87.5	88.9	B						
O17695	88.9	89.5	B						
O17696	89.5	91,0	B						
O17697	91,0	93.3	B						
O17698	99.4	100.6	B						
O17699	100.6	102.4	B						


3-13-BOX 6 31.9
33.4
36 37.0
3-13-BOX 7 37.0
38.4
41.5
42.3
3-13-BOX 8 42.3
44.5
47...
3-13-BOX 9 47.1
47.5
50.6
52.4
3-13-BOX 10 52.4
53.6
57.9


3-13-BOX 15 80.7
86.0
3-13-BOX 16 86.0
91.7
3-13-BOX 17 91.7
97.3
3-13-BOX 18 97.3
102.5


3-13-BOX 12
3-13-BOX 13
3-13-BOX 14


3-13-Box 1 3.7
3.7
9.2
3-13-Box 2 9.2
14.0
14.9
3-13-Box 3 14.9
17.1
20.1
20.1
3-13-Box 4 20.1
23.2
26.0
3-13-Box 5 26.0
26.6
29.3
31.3


102.5
107.4
112.2
114.6


3-13-BOX 15 80.7
86.0
3-13-BOX 16 86.0
91.7
3-13-BOX 17 91.7
97.3
3-13-BOX 18 97.3
102.5

Diamond Drill Log DDH 3-14

North: 6160345 East: 348000 Elevation:
Dip: -44 Azimuth: 271 Total Distance:194.5
Date: June 11, 2003 Logged By: J.Oliver Page: 2

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0																				**CASE**
																					3
3,0	23.3	L																			**LIMESTONE**
													Tr								Blue-grey, moderately carbonaceous limestone.
				8.9 So	22																Weak oxidation levels at the upper contact, buff to tan limestone
																					from 3.0-9.4, bounded below by a narrow < 15 cm chert horizon.
																					From 9.4-23.3, homogeneous blue grey medium grained limestone.
																					Very low net sulphide content, twice pyrite.
																					No significant structural zones.
																					23.3
23.3	36.6	CA																			**CHERTY ARGILLITE**
													0,75								Exceptionally well compositionally laminated ribbon chert-cherty
				23.2	So	45															argillite.
																					Locally cuspate or boudinaged chert forms, chert component
				26.2	Si	30															80-89%, argillaceous lamella <15%
																					No development of high sulphide veins, stockworks or significant
				33	Si	30															alterations.
																					Net sulphide content: pyrite about 0.75%.
				36.6	So:	45															Note minor feldspar porphyritic dyke contact at 36.0-36.5.
																					Tight, non-sheared contacts.
																					36.6
36.6	46.6	L																			**LIMESTONE**
													Tr								Homogeneous blue-grey limestone with minor dolomitic patches.
				46.6	So	15															No significant rock alteration, no vein or sulphide development.
																					Pyrite present in trace levels only.
																					Rare, internal black clastic inclusions.
																					Tight, competant, no faults.
																					46.6
46.6	49.9	CA																			**CHERTY ARGILLITE**
													0,75								Well laminated chert (80-85%) and lesser argillite compositional
					Si	30															layers.
																					Both upper and lower contacts tight, non-faulted.
				49.9	So	50															Disseminated foliation parallel euhedral pyrite 0,75%, no other

																					sulphide phases.
																					49.9
49.9	63.1	L																			**LIMESTONE**
																					Consistently homogeneous re-crystalized blue-grey limestone.
																					Very minor buff to brown, dolomitic rhombs.
			61.5	So	40																Minor interval of grey-green clay with limy interbed at 60.3-61.5.
																					External to clay layers, net sulphide content in limestone low,
																					< 0.25%, pyrite content is clay layers 1.0-1.5%
																					63.1
63.1	82.2	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
				63.1	Sd	38							Tr								Green grey feldspar prophyritic dyke, homogeneous.
																					Light matrix sericite, light matirx clays.
				82.2	Sd:	30															Pyrite present only in trace levels, but note abundant disseminated
																					hematite.
																					From 80.1-82.2, abundant sub-rounded cherty argillite clasts and
																					embayments.
																					Well developed chill margins at upper and lower contacts.
																					No stockwork veins, no high sulphide veins.
																					No significant structural zones.
																					Note: Pyrite is noted within the xenolithic rich chilled contact at 82.2.
																					82.2
82.2	87.1	CA																			**CHERTY ARGILLITE**
																					Hard, very competant cherty argillite.
																					Compositional layers are poorly developed. No significant development
				85.5	Si:	25							1,0								of boudinaged textures.
																					Pyrite levels are slightly elevated disseminated aggregates average
																					1.0%. No other identified sulphide phases.
																					Rock is cut by contorted, non-sulphidic veins at its lower contact.
																					87.1
87.1	95.4	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Light green to apple green moderately sericitized feldspar
																					porphyritic dyke.
																					Dyke contact becomes increasingly clay altered; shift from
																					hematite to pyrite at 94.6-95.4.
																					Hematite averages 2%, pyrite 1.0% but only near the lower contact.
																					Minor breccia development at the lower supracrustal contact.
																					95.4
95.4	119.3	CA																			**CHERTY ARGILLITE**
																					Dark grey, moderately compositionally laminated cherty argillite.
				98.6	Si=So=20																Cherty compositional layers, 70%, argillite about 30%.
																					Slightly enhanced development of foliation parallel shears.
				110	Si=So=30																Average compositional lyers, 1-2 cm.
																					Locally 0.5-1.0 m presence of argillaceous phyllite compositional layers.

				114	So=Si=35																Sporadic quartz vein injection. No high sulphide vein development.
																					Net sulphide content; 1.0-1.5% largely as foliation parallel aggregates.
																					119.3
119.3	131.5	AP																			**ARGILLACEOUS PHYLLITE**
																					Chert component in this interval significantly reduced.
				120,0	Si=30																Chert lamella < 20% by volume.
																					Increased density of foliation parallel slip planes, partial gouge
			131,0	Si=So=35																	development, 121.0-125.0
																					So/Si surfaces coplainar and consistently orientated at 30-35%
																					Unit is non-calcareous, net sulphide content is generally low 1.0%
																					Foliation parallel pyrite aggregates.
																					131.5
131.5	134.4	MZ																			**MINERALIZED ZONE**
																					Strongly fractured sheaved, quartz injected mineralized zone.
																					Host lithology appears to be a sheaved argillaceous phyllite.
																					Relevant sub-intervals include:
					J/	55															131.5-132.7: Abundant clay gouge finely disseminated
																					arsenopyrite, 1-3%, pyrite 3%
																					132.7-134.4: Well developed crack and seal vein.
																					Pre-dominantly argillaceous phyllite host.
																					Trace to 5% stibnite, sphalerite,
																					Note: Chert interbed hosts veins from 133.9-134.4.
																					134.4
134.4	141.9	Fpd	Se																		**MODERATELY SERICITIZED CROWDED FELDSPAR**
													1,0								**PORPHYRITIC DYKE**
																					Variations in feldspar content, from crowded crystal supported to
																					matrix supported are gradational no different intrusive phases
																					appear likely.
																					Both hematite (1,0-1,5%) and pyrite (1,0-1,5%) appear in this interval.
																					No stockwork or high sulphide veins are developed.
																					Note increasing matrix clays and bleaching, including black clastic
																					inclusions fron 140.1-141.9, trace arsenopyrite within this zone.
																					141.9
141.9	149.5	CA	sh																		**SHEARED CHERTY ARGILLITES**
														1,5				Tr			Dark grey black, moderately laminated cherty argillites form the interval.
				143,0	So:	55															Argillite matrix averages, 30-40%, chert lamellas, 60-70%
																					Broken quartz vein fragments, and heavy clay gouge from 141.9-142.4
				147,0	42																Trace arsenopyrite.
																					Net sulphide levels low and dominated by pyrite, 1-1.5%
																					Minor feldspar porphyritic dyke 145.8-146.4
																					146.4-147.1 Heavy gouge development, complete failure.
																					149.1
149.5	158.5	CA-AP																			**CHERTY ARGILLITE MINOR ARGILLACEOUS PHYLLITE INTERBEDS**

																					Intensity of shear development significantly decreases.
				154.2	So:30																Intact well defined cm scale compositional layers consistently
																					orientated at 30 degrees to CA.
				157,0	Si=So=60																Approximately 60-70% chert lamella, 30-40% argillite compositional
																					layers.
																					No development of discordant stockwork or high sulphide veins.
																					Low net sulphide content, compositional parallel pyrite 1.0%.
																					No other sulphide phases.
																					158.5
158.5	163.6	AP																			**ARGILLACEOUS PHYLLITE**
																					Well developed black to yellow grey narrow, 1-4 cm compositional
																					bands.
			160.2	So=Si=35																	Chert lamella, <30% by volume.
																					Very consistent compositional layer orientation at 30-40 to CA.
																					Very fine grained, foliation surface, with a well developed fine grained
																					micaceous surface.
																					No discordant veins, no high sulphide assemblages.
																					No significant structural zones.
																					163.6
163.6	174.5	Pl																			**YELLOW GREEN LIMY DOLOMITIC PHYLLITES**
																					Distinctive clay rich, yellow-tan dolomitic (sericite) compositional
				166,0	So=Si=50																layers.
																					Exceptionally planar fabric, no brittle failures.
				173,0	So	55															Good reaction to hot HCl and ferro-dolomite stain.
																					Sporadic blue-grey "calcite knots".
																					Pyrite 2 % within yellow-green lamella, note abundant oval, sub-
																					mm quartz (silt?) grains.
																					Chert: dark grey-black, poorly compositionally layered chert.
	165.5	C																			No structural zones or vein development.
																					174.5
174.5	176.9	C-CA																			**CHERT - CHERTY ARGILLITE**
													0,75								Moderately compositonally laminated cherty argillite interbed.
				176.7	So=Si=45																Unit becomes increasingly cherty towards the limestone contact.
																					The interval also contains minor yellow green dolomitic or limy
																					phyllite interbeds.
																					Net sulphide content about 0.75-1.0% pyrite.
																					177.9
177.9	179.9	L																			**LIMESTONE**
																					Medium grained, re crystalized, blue grey, organic rich limestone.
				178,0	So:	28															Unit contains one interval argillite interbed.
																					No significant alteration or sulphide development.
																					Tight contacts, no shear or fault development.
																					No significant sulphides, pyrite trace.

																					179.9
179.9	194.5	AP																			**ARGILLACEOUS PHYLLITE**
																					Well compositionally banded, argillaceous phyllite. Interval contains
				186.2	So=Si=35																< 10% chert lamella.
																					Compositional layers consistent orientated at 35 to CA
																					Repeated compositonal parallel shear failures between 190,0 and
																					194.5; papery foliation surface.
																					Net sulphide content, pyrite 1.0% as foliation parallel aggregates.
																					194.5
194.5	EOH																				
																					Downhole Surveys:
																					193.9 m Dip: 42, Azi: 266.5

Assay Sample Log DDH 3-14

Date June 13 Page 1

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17700	120.7	123.1	B						
O17701	123.1	125.2	B						
O17702	125.2	127.1	B						
O17703	127.1	129,0	B						
O17704	129,0	130.5	B						
O17705	130.5	131.5	B						
O17706	131.5	132.7	B						
O17707	132.7	134.4	B						
O17708	Standard PM 169								
O17709	134.4	136,0	B						
O17710	136,0	138,0	B						
O17711	138,0	140.6	B						
O17712	140.6	141.9	B						
O17713	141.9	142.4	B						
O17714	142.4	143.5	B						
O17715	143.5	145,0	B						
O17716	145,0	147.1	B						
O17717	147.1	148.5	B						
O17718	148.5	149.5	B						


3-14-BOX 1 3.0 DDH 3-14
3-14-BOX 2 8.8
3-14-BOX 3 13.8
3-14-BOX 4 19.3


3-14 BX 29 157.4
160.3
162.8
3-14 BX 30 162.8
163.4
165.9
166.8
3-14 BX 31 169.3
167.4
172.5
174.0
3-14 BX 32 174.0
179.0


3-14-Box 21
3-14-Box 22 117.1
3-14-Box 23 123.1
3-14-Box 24 128.8


3-14-BOX 17 88.7
3-14-BOX 18 94.6
3-14-BOX 19
3-14-BOX 20 105.5


3-14 BX 11 61.5
66.5
3-14 BX 13 66.5
72.2
77.8
3-14 BX 15 77.8
78.0
83.4
3-14-BX 16 83.4
88.7


39.9
45.0
50.6
57.4
61.3


17
19.3
3-14-BOX 4 19.3
20.1
22.3
3-14-BOX 5 23.7
23.7
28.9
3-14-BOX 6 28.9
29.3
32.3
34.4


3-14 Box 32 174.0
174.0
179.0
3-14 Box 33 179.0
184.7
184.7
185.4
3-14-Box 34
191.5
3-14-Box 35 191.5
194.5
194.5


3-14
134.0

Diamond Drill Log DDH 3-15

North: 6160390 East: 348004 Elevation:
Dip: - 56 Azimuth: 272 Total Distance:227.7 m
Date: June 15, 2003 Logged By: J.Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0																				**CASE**
																					3
3,0	131.9	L																			**LIMESTONE: MINOR CLASTIC INTERBEDS**
																					The major unit within this interval is a blue-grey re-crystalised
																					homogeneous limestone.
																					The unit contains either black organic rich, fetid (?) interbeds or
																					matrix supported depositional breccias.
																					Relevant sub-intervals are:
																					3.0-14.4: Blue-grey, medium grained re-crystalized limestone.
				14.6	So	52															Sporadic buff dolomite.
																					Pyrite: 0%
																					Rare preserved crinoids.
																					14.4-16.4: Fragment rich, yellow-green dolomitized fragmental
																					Weak evidence for up-hole youngins, based on fragment
																					gradation. ("calcite knot limestone")
																					Pyrite remains low.
																					16.4-21.3: Homogeneous, re-crystalized weakly dolomitic
																					limestone, no internal planar fabric, color darkens towards the
																					graphitic limestone contact.
				23.9	So	33															21.3-24.9: Graphitic, moderately calcareous mudstone with
																					minor limestone interbeds. Jet black, sooty soft graphitic
																					matrix, locally dissolution textures. No sulphides identified in
				28.1	So=Si=32					Note: 26.1=26.5: banded crack and seal quartz vein.											this interval.
										J/ 60 to CA. Trace arsenopyrite.											24.9-54.4: Blue-grey moderately carbonaceous limestone.
																					Well defined compositional layers near the upper contact.
																					Net sulphide levels remain non-existent, no sulphides I.D.
				57.5	Si=30																54.4-57.6: Slightly vuggy textures, increase in buff brown
																					matrix dolomite. No significant development of sulphide
																					phases. Si surface defined by elevated pressure solution fabric.
																					57.6-98.5: Massive extremely homogeneous, blue-grey l
				70.7	So=Si=25																limestone. No significant fracture development. Locally

																					very faint internal fabrics. No significant veins or sulphide
																					development. No significant alteration.
				100.4	J/40																98.5-103.5: Minor calcite vein development with weakly
																					oxidized joint-fracture surfaces.
				108,0	Si: 45 (weak)																Limestone host, no significant sulphide development.
				112.5	Si:	35															103.5-131.9: Homogeneous, medium to fine grained limestone
				120.3	Si:	29															No significant vein development.
				131.9	Si:	30-> superb contact															No significant structural zones.
																					No sulphides identified.
																					Locally faint penetration fabric.
																					131.9
131.9	163.2	CA-x																			**CHERTY ARGILLITE: MINOR BRECCIAS**
																					Dark grey black, moderately compositionally banded cherty argillites
				139.1	So=Si=35																with minor rounded to cuspate boudinaged and flattened chert fragments.
																					Trace calcite, largely within limestone clasts or fragments, minor
				147.1	So=29																limestone bed at 146.9-147.1.
																					Net sulphide content: disseminated pyrite 3 %, also noted as
				150.3	So=Si=35																coarse euhedral aggregates.
																					Trace euhedral arsenopyrite.
				158.1	Si=So=20																All sulphides appear early phase, pre or syn Si.
																					No stockwork vein development, no high sulphide veins.
																					Towards the lower contact at 153.2 the rock becomes an extremely
																					hard competatn black chert.
																					163.2
163.2	164.2	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Narrow pale cream to green feldspar porphyritic dyke.
				163.2	Si:22																Narrow dark grey silica veins are noted in this interval.
				164.2	Si:18																Both upper and lower contacts are tight.
																					164.2
164.2	172.7	CA	(Sh)																		**CHERTY ARGILLITE - MODERATELY SHEARING**
																					Dark grey cherty argillite, fractures and gouge density increases
																					downhole.
				164.5	Si:	30															External to gouge zones net sulphide content averages 1.5-2,0 %.
																					No arsenopyrite identified.
				168.5	Sh:38																Moderate gouge zone from 167.7-168.5, elevated pyrite 2-2.5. No
																					other sulphide phases identified.
				172.3	Si	10															Elevated shearing near lower dyke contact.
				172,7	Sd	32															Note tace red-brown sphalerite-arsenopyrite 172.5-172.7.
																					172.7
172.7	180.9	Fpd	Se-K																		**FELDSPAR PORPHYRITIC DYKE**
																					Moderately clay sericite altered feldspar porphyritic dyke.
																					No significant development of stockwork veins or high sulphide veins.

																					Disseminated pyrite, 2-3%, no visible hematite, no grey sulphide
				180.9	Sd	30															phases.
																					Increasing clay contents and partial failure zones, 178,0-180.9.
																					180.9
180.9	185.8	A-CA/Sh-MZ																			**FAULTED CHERTY ARGILLITE - WEAK MINERALIZED ZONE**
																					Extensive sheaving and gouge development occurs across this interval.
																					From 182.8-185.8 near complete loss of competancy within a
																					brittle-ductile strain zone, localized within an argillite member.
				185.6	Si	30															Note: Probably weak mineralized, partially healed breccia zone
																					from 180.9-181.6. Trace to 0.25% arsenopyrite 3-4% py. Rotated
																					quartz fragments common.
																					Shear foliation sub-parallel to Si, 30 to CA.
																					185.8
185.8	192.3	AP	sh																		**ARGILLACEOUS PHYLLITES - SHEARED**
																					Well compositionally laminated argillaceous phyllites. The interval
																					contains < 15% chert interbeds.
																					Numerous failure and gouge development parallel to Si, strongest
				188.1	Si=So=42																at: 190.0-190.8 with minor quartz vein injection.
																					Compositional layers generally consistent at 042 degrees.
																					Net sulphide content: pyrite 1% as foliation parallel aggregates.
																					192.3
192.3	195.1	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
																					Weakly sericitized, medium green feldspar porphyritic dyke.
																					Slightly more polished surface than the preceeding dyke, decrease
																					in clay alteration.
																					Disseminated pyrite < 0.5%, trace sphalevite, no grey sulphides.
																					Both contacts tight, no significant fault development.
																					195.1
195.1	227.7	CA-Ap																			**CHERT ARGILLITES - LESSER ARGILLACEOUS PHYLLITES**
																					Gradation contacts between both chert and argillite members occur
				199.6	So=Si=30																throughout the interval.
																					Ribbon banded well compositionally laminated chert are predominant.
				203.9	So=Si=25																Relevant sub-intervals are:
																					195.1-199.8: Cherty argillite, intact core, down-hole rubble
																					from bit change noted at 199.9 m
				206.2	Si: 30																199.8-203.9: Argillaceous phyllite, soft green-grey compositional
																					bands. Strong Si-So transpostion.
				209.1	Sd:	30															203.9-209.1: Well compositionally laminated ribbon chert.
																					Abundant moderately planear cm scale beds.
																					209.1-209.5: Minor feldspar porphyry dyke. Trace arsenopyrite.
				212.8	So	35															209.5-212.8: Cherty argillite. No significant alteration or vein
																					development. Very consistent 30=35 compositional layers.

				218.5	Si=So=45																212.8=213.6: Limestone interbed.
																					213.6-219.8: Argillaceous phyllite, locally weakly sericitic clay
				220,0	Si=So=35																rich foliation surface.
																					219.8-222.8: Cherty argillite, individual lamella thicken to 5.0
				227.7	Si=	27															cm's. No stockwork or discordant veins.
																					222.8-227.1: Argillaceous phyllite, soft light grey, clay sericite
																					rich interbeds.
																					Note: Pyrite content argillaceous phyllites: 2%
																					Pyrite content in cherty argillites < 0.%%
																					227.7
227.7	EOH																				Downhole Surveys:
																					130.2 m, Dip: 56, Azi: 277
																					224.7 m, Dip: 53, Azi: 270

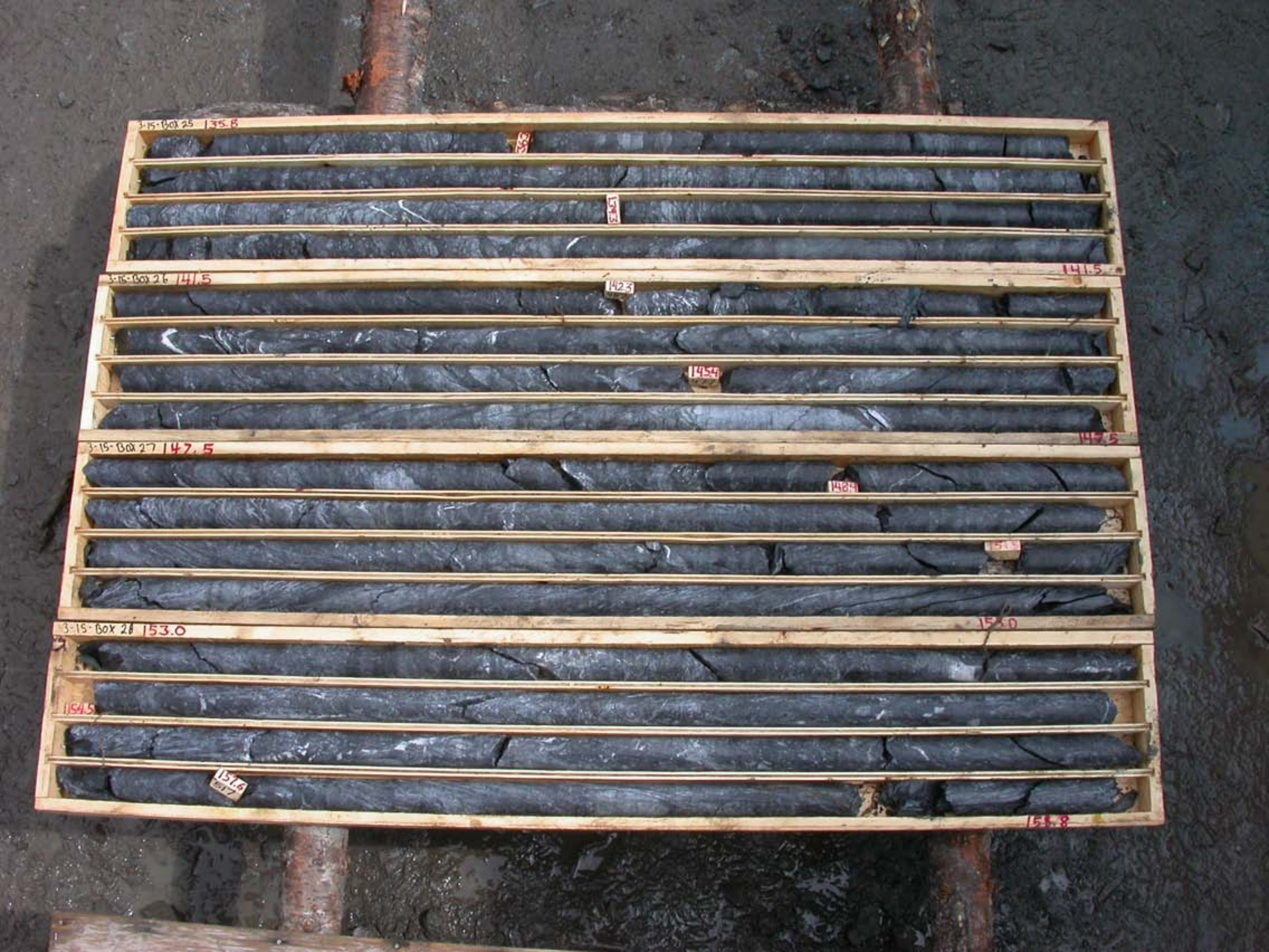
Assay Sample Log DDH 3-15

Date June 14   Page 1   of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17719	131.9	132.9	B						
O17720	132.9	136.1	B						
O17721	163.2	164.2	B						
O17722	164.2	166.2	B						
O17723	166.2	167.7	B						
O17724	167.7	169,0	B						
O17725	169,0	171,0	B						
O17726	171,0	172.7	B						
O17727	172.7	174,0	B						
O17728	174,0	176,0	B						
O17729	176,0	178,0	B						
O17730	178,0	180,0	B						
O17731	180,0	180.9	B						
O17732	180.9	181.6	B						
O17733	181.6	182.8	B						
O17734	182.8	185.8	B						
O17735	185.8	187.8	B						
O17736	187.8	190,0	B						
O17737	190,0	190.8	B						
O17738	190.8	192.3	B						
O17739	Standard PM 169								


DDH 3-15
3.0
5.2
8.2
9.3
11.7
15.0
17.4
20.4
20.8
23
26.5


3-15-Box 37 202.8



3-15-Box 25 135.8
141.5
3-15-Box 26 141.5
147.5
3-15-Box 27 147.5
153.0
3-15-Box 28 153.0
158.8


3-15-Box 21 114.9
3-15-Box 22 119.6
3-15-Box 23 124.9
3-15-Box 24 130.3


3-15 BOX 16
3-15 BOX 17
92.5
3-15 BOX 18
92.1
99.7
3-15 BOX 19
103.5
105.8
108.1
3-15 BOX 20
108.8
111.9


3-15 BX 11
3-15 BX 12
3-15 BX 13
66.1
69.2
72.2
75.3
76.6
78.3
81.4


31.5
37.1
42.8
48.4


3-15-BOX 37
3-15-BOX 38 208.4
214.0
3-15-BOX 39 214.0
219.7
3-15 BX 40 219.7
225.3
3-15 BX 41 225.3
227.7


3-lb
Vol-5


3-16
101-5


3-16
104

Diamond Drill Log DDH 3-16

North: 6161045 East: 347912 Elevation:
Dip: -45 Azimuth: 270 Total Distance:169.5 m
Date: June 16, 2003 Logged By: J. Oliver Page:1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	6.1																				**CASE**
																					6.1
6.1	28.2	L																			**LIMESTONE**
																					Massive, homogeneous, blue-grey limestone.
																					Good reaction to Alizorin-red, dolomitic re-crystalization.
																					Persisitently blocky core, but no significant oxidation on joint surfaces.
																					Abundant mm to hairline non-sulphidic calcite fractures
																					Net sulphide content extremely low.
																					28.2
28.2	28.9	Md																			**MAFIC DYKE - MONZODIORITE**
				28.2	35	Sd														2%	Exceptionally crowded feldspar lathes.
																					Apharitic grey (potassic matrix), weakly to moderately magnetic.
																					Oxidized contacts but no vein development.
																					28.9
28.9	89.6	L																			**LIMESTONE**
																					Homogeneous medium grey- limestone.
				43	Si	35															Locally weak pressure solution fabric defines Si.
																					Sporadic irregularly defined darker grey mottled surface.
																					Blocky broken core throughout, very light development of brown
				65,0	Si:	28															oxides along fracture surfaces.
																					Net sulphide development extremely low, pyrite present in trace
				82.5	Si	31															amounts and always associated with discordant calcite veins.
																					89.6
89.6	91.2	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE, MODERATELY SERICITIZED**
																					Light yellow-cream fine grained sericitized matrix.
													2								Abundant disseminated pyrite, 2% trace light grey sulphide-oxide,
				89.6	Sd:																locally forming radiating lathes.
																					No stockwork veins, no high sulphide veins both contacts tight.
																					91.2
91.2	97.5	L																			**LIMESTONE**
																					Blue-grey medium grained carbonaceous limestone.
				97.5	So:	40															Unit is cut by many white calcite veinlets, veinlets have no sulphide
																					association.

																					Net sulphide content remains extremely low, < trace pyrite.
																					No skarn assemblages at dyke contact.
																					97.5
97.5	106.6	Pl-S																			**LIMY PHYLLITES - SULPHIDIC PHYLLITES - "BEDDED"**
																					Rock unit is characterized by exceptionally well defined
																					compositional layers, a strong calcareous matrix and by strongly
													5								aligned sericite +/- biotite (?) compositional layers.
			98,0	Si:30																	The unit is well stratified and two significant compositional intervals
																					are defined.
																					97.5-102.4: Sulphidic Limy Phyllite Foliation parallel pyrite
			104,0	So:38																	averages 5-7% rock volume. Compostional bands or sericite
																					calcite are vagged and locally display mm scale isoclinal offsets.
																					102.4-106.6: Limy Phyllite, Grey-green to khaki, strongly
																					compositionally layered clast rich- clast deficiant compositional
																					layers. Sulphide levels dramatically decrease, pyrite:
																					Note: No incipietant skarn assemblages, no evidence of hydrothermal
																					biotite.
																					106.6
106.6	121.1	L																			**LIMESTONE**
																					Massive, re-crystalized, blue grey dolomitic limestone.
																					Core develops an increasing density of discordant fracture surfaces
																					towards the lower structural contact.
																					Sporadic arsenopyrite - pyrite noted on black lined fracture surfaces.
																					Minor structural zone at: 114.3-115,0: Moderate gouge development.
				114.3		35															About 0.25% pyrite.
																					Overall sulphide levels are low, trace pyrite.
																					Abundant stockwork calcite veins do not carry sulphides
																					121.1
121.1	125	Lc																			**POORLY STRATIFIED CLASTIC RICH LIMESTONE ("CALCITE KNOT")**
																					Abundant bio-clastic, crinoids, and coarser clastic debris.
				123.6	Si=So=55																Cm scale blue-grey limestone fragements common.
																					Muddy green, non-stratified matrix
				121.1	J/	50															May include < 20% limestone interbeds.
																					Coarse grained black-sphalerite arsenopyrite vein at 121.1-121.3.
																					125
125,0	126.3	Fault																			**MAJOR FAULT - SULPHIDIC**
																					Strong brittle ductile zone localized to a fine grained calcareous mudstone.
				125.1	J/	50															Significantly elevated pyrite +/- arsenopyrite.
																					Strongest sulphide pyrite (4%) arsenopyrite (2%) in a clay sulphide
																					gouge zone.
																					126.35
126.3	129.8	L																			**LIMESTONE**
																					Massive re-crystalized blue-grey limestone.

																					Rare fine grained clastic input.
																					No significant sulphide development, pyrite trace throughout the matrix.
																					129.8
129.8	134.9	Pl-																			**CLAST RICH WEAKLY STRATIFIED PALE GREEN DEBRIS STONE**
																					Calcareous clast rich limestone.
																					Weak stratification, no development of parallel beds.
																					Net sulphide development low.
			134.9	So:	60																Strong yellow-green sericitic foliation surface.
																					Pyrite, trace.
																					134.9
134.9	140.1	L																			**LIMESTONE**
																					Two limestone varieties are noted in this interval:
																					@: Blue-grey re-crystalized dolomitic limestone.
																					@ Dark grey-black fine grained micritic limestone. Micritic
																					limestones are cut by numerous phygmatic calcite-quartz-veins.
																					Minor 15-20 cm limy sericitic phyllite beds are also noted.
				140.1	So:37																Net sulphide content is low, pyrite averages < 1.0%
																					Tight contacts, no significant structural zones.
																					140.1
140.1	143.6	Pl																			**CALCAREOUS PHYLLITE - CLASTIC**
				140.3	Si=So=45								0,5%								Well compositionally laminated yellow-green calcareous phyllite.
																					Abundant isoclined folds parallel to Si fabrics.
																					Cm scale compositional layers common.
																					Clastic fragments common.
																					Net sulphide content low, pyrite < 0,5%.
																					143.6
143.6	157,0	L-x																			**LIMESTONE**
																					Blue-grey medium grained limestone with minor darker grey interbeds.
																					Rock is massive, with sporadic pressure solution cleavages.
																					No micritic interbeds are noted.
																					Note: Potential Mineralized Zone:
													0,5			Tr					146.3-147.6: Strong development of angular matrix supported
																					open space breccias. Micro-fractures lined with euhedral
																					pyrite and traces of red-brown sphalite. The primary interval
		152.8	Si=So=40																		of brecciation is flanked by 2-3 m's of anastomosing calcite
																					veins and stockworks.
																					Net sulphide content pyrite 0.5%, trace sphalerite.
																					Narrow well compositionally layered limy phyllite interbed from
																					152.6-153.3.
																					157
157,0	169.5	Pl-cl																			**LIMY PHYLLITES - CLAST RICH LIMESTONE**
																					A moderately compositionally layered very clast rich limestone
																					interbed forms this interval.

				162.1	So:45																Clasts increase in size down-hole, commonly exceeding 3-4 cm's,
																					irregular in form and not extensively flattened.
																					A narrow, medium green, non-calcareous, foliated, possible mafic
																					dyke is noted from 162.1-164.5.
																					Net sulphide content is low, pyrite < 0.5%.
																					Note: Mafic content of the matrix increases down hole, clastic
																					near EOH have high chlorite content matrices. Tuffaceous input.
																					No significant structural zones.
																					169.5
169.5	EOH																				Downhole Surveys:
																					179.0 m Dip: 42, Azi: 270

Assay Sample Log DDH 3-16

Date June 16 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17740	89.6	91.2	B						
O17741	97.5	99.5	B						
O17742	99.5	101,0	B						
O17743	101,0	102.4	B						
O17744	114.3	115,0	B						
O17745	119.3	121.1	B						
O17746	121.1	121.7	B						
O17747	121.7	123.4	B						
O17748	123.4	125,0	B						
O17749	125,0	125.8	B						
O17750	Standard PM 169								
O17751	125.8	126.4	B						
O17752	126.4	127.8	B						
O17753	127.8	129.7	B						
O17754	145.1	146.3	B						
O17755	146.3	147.1	B						
O17756	147.1	147.6	B						
O17757	147.6	148.6	B						
O17758	148.6	150.1	B						


7.9
11.8
11.9
17.0
22.1
23.2
26.2
27.9
29.3
33.9


Box 27 135.2
1359
1395
Box 28 139.5
1420
1436
Box 29 143.7
1481
1482
Box 30 148.1
1512
1527


3-16-BQ-21 109.8
3-16-BQ-22 114.0
3-16-BQ-23 118.0
3-16-BQ-24 122.1
3-16-BQ-25 126.3
3-16-BQ-26 130.4


86.8
92.6
96.4
100.9
105.4
109.8


60.2
65.1
70.2
75.7
81.2
86.8


38.4
38.9
44.1
49.2
54.7
60.2


3-16 Bx 31 152.7
154.2
157.3
158.3
3-16 Bx 32 158.3
160.3
163.4
164.1
3-16 Bx 33 164.1
166.4
169.5
3-17 BOX 130DDH 3-17


3-lb
Vol-5


3-16
104


3-16
101-5


3-16
168.3

Diamond Drill Log DDH 3-17

North: 6161140 East: 347840 Elevation:
Dip: -45 Azimuth: 270 Total Distance: 154.3 m
Date: June 17, 2003 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0	Case																			**CASING**
																					3
3,0	21.5	L																			**LIMESTONE**
																					Mottled brown to grey, dolomitic limestone.
																					Sporadic vugs and cavities near the onset of coring.
																					Note: From 3.0-7.9, manganiferous stain, frequent fracture surfaces
																					Locally "cobbles" of feldspar porphyritic dyke fragements.
																					Net sulphide content is low, from 7.9-21.5 no significant sulphides.
																					No significant structural zones.
																					21.5
21.5	22.7	Fpd	Se																		**SERICITIZED FELDSPAR PORPHYRITIC DYKE**
																					A grey-green sericitized Feldspar porphyritic dyke is noted within
																					this interval.
				22.7	Sd:	67							2								The dyke is cut by numerous mm scale quartz-sericite fractures.
																					which have strong pyritic envelopes.
																					Net sulphide content averages 2% pyrite, other sulphide phases
																					are not identified.
																					22.7
22.7	100.5	L																			**LIMESTONE**
																					Homogeneous blue-grey re-crystalized dolomitic limestone.
																					Weakly oxidized fractures below the dyke contact from 22.7-26.2m
				38.7	Si:	35															Lithology is cut by abundant discordant white calcitic veins.
																					No sulphides are associated with these veins.
				55,0	So:	20															Sulphides are present in extremely low levels, and trace pyrite.
																					A weak penetration fabric is identified in drill core, usually formed
				75.2	So:	75															by aligned opaques and pressure solution cleavages.
				75.3	Si:	35															Note: 58.7-58.8: Minor angular breccia, no damage envelope.
																					Note: 75.2-75,5: Minor limy phyllite interbed. Pyrite increases to
				94.8	Si:	35															11. No structural zone.
																					Very sporadic chocolate brown dolomite-mangeuse, no sulphide
				100.5	Sd:	30															association.
																					Lower dyke contact is tight, not faulted.
																					100.5

100.5	110.9	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
																					Fine grained pale green-grey feldspar porphyritic dyke.
				103,0	J/:	31															Moderate matrix carbonitization, +/- sericite.
																					Persistant disseminated pyrite at 2-3% levels.
				104.5	J/:	27															Small calcite - clay shears and veins form at:
																					102.9-102.3 and 104.2-104.5
																					Veins contain minor stibnite, black sphalerite and 8-10% euhedral
				110.9	Sd:	42															pyrite.
																					Persistant small scale clay-calcite stibnite arsenopyrite fractures
																					throughout this interval.
																					110.9
110.9	142.1	L																			**LIMESTONE**
																					Return to homogeneous moderately fractured grey limestone.
				120.9	So:	30															No significant compositional layers.
																					Rare oval clast or fragments/
				142.1	Sd:	24															No identifiable sulphides.
																					No recognizable bioclasts.
																					No significant structural zones.
																					Lower contact with dyke rock tight un-faulted.
																					142.1
142.1	145.4	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE**
													2								Moderately carbonitized light grey-green feldspar porphyritic dyke.
																					Disseminated pyrite 2%, very weakly developed fractures, sporadic
																					clay pyritic lined joints towards the lower contact.
																					Both contacts tight, unsheaved.
																					145.4
145.4	154.3	L																			**LIMESTONE**
																					No change in carbonate stratigraphy throughout this borehole,
				147.7	Si:	40															sequence is again a massive, homogeneous, blue-grey
																					re-crystalized limestone.
																					Faint Si fabrics, no primary compositional layers.
																					Mottled light tan matrix locally cut by dark grey-black opaque
																					(organic) fractures.
																					No significant structures.
																					No significant rock alteration, mineralization or sulphide development.
																					Net sulphide content extremely low, none recognized.
154.3	EOH																				154.2
																					Downhole Surveys:
																					154.3 m Dip: -43.5, Azi: 273.5

Assay Sample Log DDH 3-17

Date June 17 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17759	3,0	6,0	B						
O17760	6,0	8,0	B						
O17761	20.4	21.5	B						
O17762	21.5	22.7	B						
O17763	22.7	24.7	B						
O17764	24.7	26.2	B						
O17765	100.5	101.4	B						
O17766	101.4	102.9	B						
O17767	102.9	103.4	B						
O17768	103.4	104.2	B						
O17769	104.2	104.7	B						
O17770	104.7	106.9	B						
O17771	106.9	108.9	B						
O17772	108.9	110.9	B						


3-17-BOX 2 10.5
16.2
3-17-BOX 4 21.9
3-17-BOX 5 27.9


3-17-Box 20 112.5
1146
118.0
3-17-Box 21 118.0
120.7
123.4
3-17-Box 22 123.4
1265
1282
129.2
3-17-Box 23 129.2
1329
134.7
3-17-Box 24 134.7
1357
1370
140.4


3-17-Box 15 84.1
90.0
3-17-Box 16 90.0
95.7
3-17-Box 17 95.7
101.4
3-17-Box 18 101.4
106.9
3-17-Box 19 106.9
112.5


61.6
62.8
67.4
68.9
71.9
72.9
75.0
78.0
78.4
84.1


3-17-BOX 7 38.7
38.7
3-17-BOX 8 44.3
44.3
3-17-BOX 9 50.1
50.1
3-17-BOX 10 58.8
58.8
61.6


140.4
S-17 Bx 25 140.4
145.1
145.9
S-17 Bx 26 145.9
148.1
151.2
151.6
S-17 Bx 27 151.6
154.2

Diamond Drill Log DDH 3-18

North: 6160945 East: 347930 Elevation: 178.6 m
Dip: -45 Azimuth: 270 Total Distance: 178.6 m
Date: June 18, 2003 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0																				**CASE**
																					3,0
3,0	21.7	L																			**LIMESTONE**
																					Medium grained re-crystalized limestone.
																					Sporadic manganese lined fracture surfaces.
				8.9	So:	35															No significant internal fabric.
																					Single phyllitic interbed between 8.9-9.2 m.
																					No sulphides noted.
																					21.7
21.7	57.3	Md																			**GABBROIE DYKE**
																					An early, weakly foliated mafic dyke has been coved.
																					The intrusive nature of this early dyke is strongly suggested by the
																					development of carbonitized chill margins on both the upper and
																					lower contacts.
				21.8	Sd:	45															The unit is cut by abundant cm scale calcite veins and irregular
				40.1	Si:	22															calcite aggregates.
				53.5	Si:	25															The unit is weakly magnetic.
				57,0	Sd:	25															Rock matrix is weakly carbonitized.
																					Mafic minerals appear to be hornblends not pyroxene, the dyke
				32,0	Sd:	32															may lie closer to a dioritic field.
																					Sulphides, pyrite, is noted at trace levels in association with small,
																					cm scale calcite-chlorite veinlets.
																					Upper contact, defined by oxide alignement at 45 degrees.
																					Lower contact approximate.
																					Colour change to yellow tan near contact zone at 54.1-57.3,
																					pyrite increases to 1.5% within this zone.
																					A mafic flow or tuffaceous origin is strongly suggested by
																					isoclinally folded foliation-chlorite compositional layers at 32.0,
																					aligned vesicles at 33.5 and occaisional sericite phyllite inclusions
																					57.3
57.3	58.4	L																			**LIMESTONE**
																					Blue grey re-crystalized limestone, no contact or thermal effects
				58.4	So	75															adjacent to mafic contact.
																					Sporadic white calcite veins, without a sulphide association.
																					Trace pyrite, no other sulphides
																					58.4
58.4	68.6	Pl																			**CALCAREOUS PHYLLITE - ABUNDANT CLASTIC FRAGMENTS**
																					Texturally this unit is defined by its dull mustard yellow color, by
																					strong planar compositional layering composed of sericite and clays and by the presence of abundant blue-black limestone clasts.
				59.75	So:	35															A minor yellow-cream felsic dyke is noted at 65.8-66.9.
																					Note: Phyllite matrix is clay-sericite not calcite rich; HCl response
				66.9	Sd:	55															only to fragments and discordent veins etc.
																					Net sulphide content is low: trace amount only.
																					68.6
68.6	80.8	Le																			**LIMESTONE - DEBRIS STONE**
																					Generally poorly stratified polylithic debris stone.

				20.4	So:	50														Abundant, 20% by volume, 1.0-4.0 cm clasts of mixed origin.
													1							The upper portion of this unit is strongly sulphidic and carries 5-6%
				78.7	So	55 (superb)														foliation parallel euhedral pyrite.
																				Clasts are often cuspate to irregular in form.
																				Unlike the preceeding interval, the rock matrix is highly clacareous.
																				Exceptionally well stratified beds toward the lower contact.
																				Highest pyrite content 70.4-71,0, about 10%
																				80.8
80.8	125.2	Mt																		**MAFIC TUFFS: MINOR CALCAREOUS INTERBEDS**
				86.5	So	33														A medium to dark green non-calcareous mafic tuff carrying sporadic
																				limestone fragments.
				90.6	So	25														Internal carbonate beds are also noted within this unit.
																				No thermal effects are noted on the overlying (structural) limestone.
				102.3	Si	25														Actinolite may be a stable metamorphic phase.
																				Approximately 0.5% disseminated pyrite is noted within this interval.
				112.8	Si	40(p)														The rock is non-magnetic although occaisional magnetite veins and
																				aggregates are noted.
																				Mafic matrix is weakly carbonitized.
																				Many, 10-15% by volume calcite veinlets cut this sequence.
																				At 112.9, angular partially sericitized clasts.
																				Note 121.2 vague darker grey mafic "rinds"; possible pillowed rinds.
																				Tight lower contact. No significant structurla zones in this interval.
																				125.2
125.2	151.2	L																		**LIMESTONE**
																				Variably fine to medium grey limestone.
																				Alinor internal sericitic phyllite beds provide good markers.
				130,0	So	53														Abundant white, low sulphide calcite veinlets.
																				Enhanced calcite vein injection at 136.0-136.6 but no increase in
				142.6	Si	45														sulphide development.
																				Minor sericitic phyllite interbed at 129.1-130.0.
																				Finer grained darker grey limestones may be increasingly dolomitic.
																				Net sulphide content extremely low, pyrite not identified above trace
																				levels, typically on black clay-graphite fracture sets.
																				151.2
151.2	163.3	Mt-Pl																		**NON-CALCAREOUS MAFIC TUFFS - LESSER CALCAREOUS**
																				PHYLLITES
																				Dull green, massive poorly stratified mafic tuffs form much of this interval.
				157.9	So=Si=48															The unit contains two, 30 cm wide calcareous phyllite interbeds.
																				Abundant discordant calcitic veins cut the section.
				160.4	So=Si=42															Marked bleaching to tan grey occurs between 160.8-163.3.
																				Small discordant mm scale pyritic stringers are also noted in this
																				interval.
																				Net sulphide content, 0.75% pyrite.
																				163.3
163.3	166.7	MZ	F/t																	**MINERALIZED ZONE: MAJOR FAULT**
													3			1		2		Onset of complete gouge development, fragment rotation, and loss
																				of competancy also coincides with the onset of mineralization.
				166.5		45														At least five sulphide phases are identified: pyrite (3-5%)
																				arsenopyrite (2%) red-brown sphalerite (2%) tetrahedrite-tennatite
																				(1%), pyarganite (1%).
																				Sulphide grains and fragments are often sub-rounded. Brittle ductile
																				deformation continues post-mineralization.
																				Heaviest sulphide development occurs in the interval 163.3-165.5,
																				approximately 10% combined sulphides.
																				Between 165.5-166.7, heavy jet black clays, argillite protolith (?)
																				and strong shearing.

																				Structural zone contains limestone fragment and potentially feldspar
																				prophyritic dyke fragments.
																				166.7
166.7	178.6	CA-A																		**CHERTY ARGILLITE- MINOR ARGILLITE INTERBEDS**
																				A well compositionally banded cherty argillite forms approximately
				168,0	Si=45								0,75							70% of the interval. Argillite beds are particularly common toward
																				the upper fault contact.
				175.7	Si=35															Two rough sub-intervals are defined:
																				166.7-171.0: Argillite dominant
																				171.0-178.6: Cherty argillite - ribbon banded chert.
																				Compositional layers in both units are consistent at about 25-40 to
																				CA.
																				Pyrite averaged 0.5-0.75% in both units. No other sulphide phases
																				are identified.
																				178.6
178.6	EOH																			
																				Downhole Surveys:
																				160.4 m, Dip: 43.25, Azi: 277.

Assay Sample Log DDH 3-18

Date June 18 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17773	70.4	71,0	B						
O17774	71,0	72.5	B						
O17775	157.5	159.4	B						
O17776	159.4	160.8	B						
O17777	160.8	162,0	B						
O17778	162,0	163.3	B						
O17779	163.3	164.3	B						
O17780	164.3	165.5	B						
O17781	165.5	166.7	B						
O17782	166.7	168,0	B						
O17783	168,0	169.5	B						
O17784	169.5	171,0	B						
O17785	171,0	172.5	B						
O17786	Standard PM 169								


3-18-BOX 2 8.8
3-18-BOX 3 14.4
3-18-BOX 4 20.1
3-18-BOX 5 25.5


3-18 Bx 26 143.6
145.
148.1
149.1
3-18 Bx 27 149.1
151.2
154.7
3-18 Bx 28 154.7
157.3
160.6
160.8
3-18 Bx 29 160.8
163.4
166.1
3-18 Bx 30 166.1
166.9


121.0
126.8
132.5
138.0
143.6


3-18 BOX 19 104.1
105.5
108.5
109.4
3-18 BOX 20 109.4
115.2
3-18 BX 21 115.2
121.0
3-18 BX 22 121.0


3-18-BOX 15 81.9
87.1
3-18-BOX 16 87.1
90.2
92.1
3-18-BOX 17 93.1
98.3
98.5
3-18-BOX 18 98.5
99.4
102.5
104.1


3-18-Box 10 53.5
3-18-Box 11 59.3
3-18-Box 12 65.0
70.4
3-18-Box 13 70.4
76.1


3-18-Box 7
384
3-18-Box 8 42.5
463
475
3-18-Box 9 48.0
3-18-Box 10 533


1634
166.1
3-18-Box 30 166.1
1684
1695
171.7
3-18-Box 31 171.7
1725
1756
177.4
3-18-Box 32 177.4
178.6
178.6


3-18 Bx 29 160.8
1634
3-18 Bx 30 166.1
1664
1695


157.3
160.6
160.8
166.1
169.5
171.7

Diamond Drill Log DDH 3-19

North: 6160795 East: 347930 Elevation:
Dip: - 45 Azimuth: 270 Total Distance: 157.3 m
Date: June 19, 2003 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0	CASE																			**CASE**
																					3
3,0	10,0	Fpd-L																			**FELDSPAR PORPHYRITIC DYKE - MINOR LIMESTONE HORST**
													0,5			Tr					Blurred moderately sericitized matrix, but in general, a hard
				6.4	Sd:	30															competant dyke.
																					Disseminated pyrite averages 0.5%, minor hairline pyritic veinlets,
																					trace sphalerite
																					A limestone bed is trapped within the dyke between 6.4-7.3 m's
																					10
10,0	16.5	L																			**LIMESTONE**
																					Massive, homogeneous, medium grained limestone.
																					Locally mottled irregular light brown dolomitic or oxide washes.
																					Light development or discordant white non-sulphidic calcite veins.
				16.2	Si=So=35																No sulphides are identified.
																					16.5
16.5	21.2	Mt																			**MAFIC TUFF**
																					Poorly compositionally laminated mafic tuff. Matrix is generally
				20.5	Si:35																non-calcareous.
																					Sporadic wispy calcite inclusions increasing down-hole.
																					Tuffaceous unit is non-magnetic, and carries very low < 0.5%
																					disseminated pyrite.
																					21.2
21.2	30.4	Lc																			**LIMESTONE - CLASTIC RICH - DEBRIS STONE**
													0,25								Hallmark polylithic cm scale fragments are again noted throughout
				26.2	Si:45																this interval.
																					Abundant cuspate vugged edges of alternating mafic-calcic inclusions
				30.4	So:	34 -> excellent															No significant development of planar beds.
																					Locally elevated early phase euhedral pyrite; no other sulphide
																					phases recognized, but overall very low < 0.25% pyrite.
																					No significant structural zones, generally intact core.
																					30.4

30.4	59,0	L																			**LIMESTONE**
																					Medium grained, blue-grey, weakly carbonaceous limestone.
				41.9	So:	45															Massive, homogeneous without significant internal beds.
																					Weakly developed mm-cm scale discordant calcite veinlets, without
				43,0	Si:	30															a sulphide association.
																					Slightly blocky broken core, but no significant structural zones.
				59,0	So:	50															Note: 56.4-56.7, minor quartz-calcite vein, < 1% euhedral pyrite.
																					Clean lower contact at 50 degrees CA.
																					59
59,0	64.7	P	Se																		**SERICITIC WEAKLY CALCAREOUS PHYLLITE**
													0,5								Distintive yellow cream compositionaly layers, minor limestone interbeds.
				63,0	Si=So=50																Rare blue-black clasts.
																					Weak matrix calcite development.
																					Net sulphide content low pyrite < 0.5%.
																					Distintive broad open warp in Si fabric central axis at 62.5 m.
																					No structural zones; intact competant core.
																					64.7
64.7	121.5	L																			**LIMESTONE**
																					Homogeneous blue-grey re-crystalized dolomitic limestone.
																					Sporadic darker grey bands or inclusions, but no complete beds.
				106,0	So:	75															Slightly blocky broken core, but no significant structural zones or
																					vein development.
				121.5	So:70																Light to moderate response to A-R stain.
																					No significant structural zones, lower contact is tight at 70 degrees.
																					121.5
121.5	123.7	CA																			**CHERTY ARGILLITE**
																					Well compositionally layered cherty argillite.
				122,0	So=Si=45																Weak shearing at upper contact, generally tight until the lower contact.
																					Compositional layers do not rotate.
																					Pyrite remains at about 1.0% levels virtually to the fault contact at 123.7
																					123.7
123.7	129.1	MZ																			**MINERALIZED ZONE: SHEARED, BRECCIATED AND SULPHIDIZED**
																					CHERTY ARGILLITE AND FELDSPAR PORPHYRITIC DYKES
																					Mineralized defined by the onset of strong shearing, brecciation and
																					sulphide development.
																					Sulphides are in the form of semi-massive stringers and replacements,
																					breccia fault infill and are hosted by both sheared cherty argillite
																					and sericitized feldspar porphyritic dykes.
																					Relevant sub-intervals include:
																					123.7-125.3: Sheaved and sulphized cherty argillites,
																					disseminated pyrite 3%, trace sphalerite, stibnite - arsenopyrite
																					veins parallel compositional layers at 35 to CA. Low grade

																					mineralized zone.
																					125.3-126.2: Heavy sulphide replacement, high grade vein
																					Black clay +/- sulphides including: pyrajorite 3-5%,
																					sphalerite 5-6%, arsenopyrite 5%, stibnite 3%, tennantite-tetrah
																					1%. This is a higher grade mineralized zone. > 30 oz Ag?
				126.5	So=Si=35																Intact core but no protolith recognizable.
																					126.2-126.8: Cherty argillite host, combined sulphide levels
																					significantly reduced Pyrite 4%, trace sphalerite-stibnite.
																					126.8-128,0: Intrusion hosted sulphidized tectonic breccia
																					infill. 30% cherty argillite clasts. Heavy matrix stibnite (5-6%)
																					tetrah-tennet 4%, proustrite (?), sphalerite (2%). This is a
																					higher grade MZ, > 100 oz Ag (?).
				128.8	25																128.0-129.1: Cherty argillite. Shear parallel to compositional
																					layers persist but sulphide density markedly decreases.
																					Pyrite 2-3%, other sulphide phases not identified.
																					129.1
129.1	131.2	Fpd	Se																		**FELDSPAR PORPHYRY DYKE- SERICITIZED**
																					Light cream-green, clay and sericite altered feldspar porphyry dyke.
				129.1	Sd:	50							3					Tr			Euhedral disseminated pyrite: 3%, trace arsenopyrite.
																					Note: strong shearing and clay development 130.6-131.6, crossing
																					the contact at 131.2
																					131.2
131.2	140	CA																			**CHERTY ARGILLITE**
																					Distinctly compositionally laminated cherty argillite.
				135.3	Si:	40															Strongly sheared at upper contact (131.2-131.5)
																					Compositional layers generally consistent at about 40 degrees.
																					Net sulphide concentration slighly above background at 1.5-2.0%.
																					Minor shearing and increased clay development at the lower contact.
																					140
140	142.2	Fpd	K-Se																		**FELDSPAR PORPHYRY DYKE - CLAY SERICITE ALTERED**
																					Chalky grey-green feldspar porphyritic dyke.
																					Hematite not pyrite is the predominant FE phase, hematite ~ 3%
				142.2	Sd:	45															No significant stockwork development, minor clay lined fractures
																					noted.
																					142.2
142.2	152.7	AP/CA																			**ARGILLACEOUS PHYLLITES - CHERTY ARGILLITES**
																					The percentage of soft, fine grained black clastics increases,
				149.6	Si=So=60																60-70% argillite, 30-40% cherty argillite.
																					Homogeneous slighly blocky core, no significant fault structures.
																					Sulphide levels are low, pyrite ~ 0.25%.
																					No significant structural zones, bottom contact tight at 50 degrees,
																					parallels compositional layering.

																					152.7
152.7	157.3	Fpd +/- CA																			**FELDSPAR PORPHYRITIC DYKE: MINOR CHERTY ARGILLITE**
													1,5								**INCLUSIONS**
					153.4	Sd:	35														A pale apple green feldspar porphyritic dyke contains cherty
																					argillite inclusions at 153.4-154.3 and 156.3-156.5.
					156.3	Sd:	25														Pyrite ~ 1.5%, usually mantled by hematite.
																					No significant structural zones or rock alteration/sulphide development.
157.3	EOH																				
																					Downhole Surveys:
																					152.4 m: Dip: 43.5, Azi: 269

Assay Sample Log DDH 3-19

Date June 20 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
Lead				10.21					
O17787	117.4	119,0	B	117.5 -> 2.72					
O17788	119,0	120.5	B						
O17789	120.5	121.5	B						
O17790	121.5	122.5	B	122,0 -> 2.67					
O17791	122.5	123.8	B						
O17792	123.8	124.5	B						
O17793	124.5	125.3	B						
O17794	125.3	126.2	B						
O17795	Standard PM 906								
O17796	126.2	126.8	B	126.5 -> 2.72					
O17797	126.8	128,0	B	127,0 -> 3.12					
O17798	128,0	129.1	B						
O17799	129.1	131.2	B	129.7 -> 2.59					
O17800	131.2	132.9	B	132.8 -> 2.65					
O17801	132.9	134.5	B						
O17802	134.5	135.9	B						
Lead				10.23					


3-19-BOX 1 3.0
3.0
9.0
3-19-BOX 2 9.0
14.0
14.4
3-19-BOX 3 14.4
17.1
20.1
3-19-BOX 4 20.1
20.1
23.2
25.9
3-19-BOX 5 25.9
25.2


86.1
87.2
90.2
91.4
96.9
99.4
101.8
102.4
105.5
107.2


48.4
53.6
58.8
67.6
75.5


25.2
29.3
31.5
32.3
35.4
37.2
41.5
42.9
44.5


S-19-BOX 25 | 138.8
S-19-BOX 26 | 143
144.8
148.1
S-19-BOX 28 | 150.2
151.2
154.8
S-19-BOX 29 | 154.8
157.3


3-19 Bx 22 117.3
3-19 Bx 23 122.5
3-19 Bx 24 128.4
129.8
132.7


117.3
122.5
126.8
128.4
132.4
133.8

Diamond Drill Log DDH 3-20

North: 6160795 East: 347930 Elevation:
Dip: -57.5 Azimuth: 270 Total Distance: 166.7 m
Date: June 20, 2003 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	1.8	CASE																			**CASING**
																					1.8
1.8	7.6	Fpd	Se																		**FELDSPAR PORPHYRY DYKE**
																					Lightly sericitized feldspar prophyry dyke.
				7.6 Sd: 25																	Crowded slightly blurred plagioclase feldspars.
																					50% oxidized down to 7.6 m.
																					Pyrite as euhedral disseminations, 1.5-2.0%.
																					7.6
7.6	23,0	L																			**LIMESTONE**
																					Blue grey, recrystalized moderately dolomitic limestone.
				12.1	Si:	25															Patchy irregular manganiferous dolomitic and heavier chocolate
																					brown manganiferous veins without a sulphide association.
																					Locally very faint Si fabric, usually defined by wispy serictic lamella.
																					Increasing oxide content, 22.3-23.0, the mafic tuff contact.
																					Sulphides not identified.
				23,0	So:40																No structural zones.
																					23
23,0	31.8	Mt																			**MAFIC TUFF**
																					Medium green, moderately foliated mafic tuff.
				28,0	Si:	30															Matrix is non-calcareous, although coarse irregular calcite knots
																					and aggregates occur throughout the interval.
																					23.0-27.1: Light tan bleached, enhanced calcite vein injection
																					near the upper limestone contact.
																					Pyrite ~ 0.25% along fractures.
																					Unit is non-magnetic.
																					Lower contact tight, no shearing.
																					31.8
31.8	62.7	L																			**LIMESTONE**
																					Blue grey, weakly dolomitic limestone.
				33,4	So:	60															Locally felted dark grey calcite - dolomite rhombs.
																					Extremely low sulphide content, pyrite or other sulphide phases
				44.3	Si:	30															not identified.
																					Locally weak Si fabric.

				59.2	So	50															Short transition from clastic rich limestone to homogeneous member
																					near the upper contact, 31.8-33.4.
																					62.7
62.7	70.2	Fpd	Si																		**SILICIFIED FELDSPAR PORPHYRITIC DYKE**
													0,5		Tr						Light cream green, moderately silicified feldspar porphyry dyke.
																					Fine, mm scale quartz fractures.
																					Sulphides include pyrite 0.5% disseminated and as a vein infill.
																					Traces of chalcopyrite are also identified.
				70.2	Sd: 10																Lower contact tight, no faults.
																					70.2
70.2	83.9	P/Lc																			**SERICITIC PHYLLITES AND CLASTIC RICH LIMESTONES -**
																					DEBRIS STONE
			70.4	Si=So	55																Throughout the interval, non-calcareous planar compositionally
																					layered sericitic phyllites are interbedded with clast rich limestones.
																					Sulphide content in both units is low, pyrite ~ 0.5% in sericitic
			81.2	So	60																phyllites and trace in limestone.
																					Sporadic small < cm clasts within phyllite member.
																					Si and compositional layers are parallel.
																					Note: Pyrite content significantly increases at the lower contact.
																					From 83.4-83.9 weak shearing and the development of 1.0% coarser
																					grained euhedral pyrite. No other sulphide phases.
																					83.9
83.9	113.5	L																			**LIMESTONE**
																					Homogeneous blue-grey limestone, massive non-bedded.
																					Weak Si fabric, largely due to aligned opaques.
																					Pyrite is noted at trace to 0.25% levels, always in association with
				104.4	So: 40																black opaques flanking clacite veins.
																					Rare black clastic inclusions, < 1.0% by volume.
				113.5	So:85																No significant rock alteration, sulphide development or brittle ductile
																					strain zones.
																					113.5
113.5	135.5	CA	sh																		**CHERTY ARGILLITE: MODERATE SHEARING**
													0,25					Tr			Well developed white-black compositional layers.
																					Compositional layers are frequently boudinaged cuspate oval chert
																					fragments common.
				117.3	So 30=Si																Argillite interbeds represent < 10% rock volume.
																					Minor limestone interbeds 115.1-117.3 near the upper contact.
				127.1	Si:	45															Sulphide levels low, pyrite 0.25-0.5% as foliation parallel aggregates,
																					trace arsenopyrite.
				131.1		30															Brittle-ductile zones located at: 129.8-130.1 Black argillite gouge,
																					pyrite 0.5%,
																					132.3-135.5: Sheared and quartz injected black clastics. Pyrite 1.0-
																					1.5%. No other sulphide phases identified.

																					135.5
135.5	152.4	L																			**LIMESTONE**
																					Medium grey, medium grained limestone.
				135.7	Si:	65															Slight stylolitic cleavage.
													0,25								No internal beds.
				137.7	So:	42															Discordant calcite veins are non-sulphidic.
																					Note: Cherty argillite interbed at 136.5-137.7.
																					Note: 145.4-152.4: increasingly blocky, broken core, Significantly
																					elevated calcitic vein injection but no significant changes in
																					sulphide content, pyrite < 0.25%.
																					152.4
152.4	153.9	CA-Sh	Flt																		**MAJOR FAULT: SHEARED CHERTY ARGILLITE HOST**
																					Strong brittle-ductile fabrics, fragment rotation and complete loss
																					of competancy defines this zone.
				153,0	35																Host lithology cherty argillite.
																					Sulphide content slightly elevated, fine grained disseminated pyrite,
				153.9	Sd:40																0.75-1.0%, no other sulphide phases.
																					153.9
153.9	160,0	MZ	Flt																		**MINERALIZED ZONE: FELDSPAR PORPHYRITIC DYKE HOST**
																					A pale green, sericitized +/- silicified feldspar porphyritic dyke
				159	J/35																host two styles of mineralization:
																					1. Stockwork sulphide rich joints within the dyke
																					2. A high sulphide vein along the lower contact.
																					Relevant sub-intervals are:
																					153.9-159,0: Shattered, feldspar porphyritic dyke hosting
																					numerous sulphide rich joints and veinlets. Percentage of
																					sulphide rich veins and joints increases towards the lower
																					contact. Net sulphide distribution: pyrite 3%, arsenopyrite tr,
																					sphalerite 0.25, tetrahedrite-tennantite: 0.25, stibnite trace.
																					159,0-160.0: Massive sulphide vein. Greater than 60% sulphides,
																					within a minor quartz-calcite gouge.
																					Principle phases include: pyrite 8%, arsenopyrite 6%, red
																					brown sphalerite: 1.0%, stibnite 10%, tennatite-tetrahedrite: 1.0%
																					pyargaryite 0.5%.
																					Note: Abundant black clay gouge within the sulphide rich vein.
																					160
160	166.7	CA-A	En																		**SHEARED CHERTY ARGILLITES - MINOR ARGILLITE INTERBEDS**
													1,5								Well compositionally laminated ribbon cherts dominate the interval.
																					Sequence becomes increasingly argillaceous down hole, from
																					165.8-166.7, sheared clay with argillites predominant.
																					Sulphide content rapidly diminishes below the vein contact, pyrite
																					averages 1-1.5% other sulphide phases are not identified.
				161.6	So=Si=5																Throughout the interval compositional layers have rotated sub-parallel

																				to the core axis.
																				Note: 165.8-166.1 Complete gouge development, no elevated sulphide
																				content.
																				166.7
166.7	EOH																			
																				Downhole Surveys:
																				166.7 m Dip: 56.25, Azi: 271.

Assay Sample Log DDH 3-20

Date June 21 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17803	132.3	133.7	B						
O17804	133.7	135.5	B						
O17805	148.1	150,0	B						
O17806	150,0	151.5	B						
O17807	151.5	152.4	B						
O17808	152.4	153.9	B						
O17809	153.9	155.6	B						
O17810	155.6	157,0	B						
O17811	157,0	158,0	B						
O17812	158,0	159,0	B						
O17813	159,0	160,0	B						
O17814	Standard PM 906								
O17815	160,0	161,0	B						
O17816	161,0	162,0	B						
O17817	162,0	163.5	B						
O17818	163.5	165,0	B						
O17819	165,0	166.7	B						


3-20 Bx 1 1.8
5.2
8.3
3-20 Bx 2 8.3
11.3
13.6
3-20 Bx 3 13.6
14.3
17.4
19.0
3-20 Bx 4 19.0
20.4
23.5
24.8
3-20 Bx 5 24.8
26.5
29.6
30.4


3-20-Bx 26 136.5
139.3
142.3
142.4
3-20 Bx 27 142.4
145.4
148.1
3-20 Bx 28 148.1
148.4
151.5
152.7
3-20 Bx 29 152.7


3-20-Box 21 109.0
111.9
3-20-Box 22 114.1
114.9
118.9
120.8
3-20-Box 23 120.8
124.1
125.5
3-20-Box 24 125.5
127.1
130.1
130.9
3-20-Box 25 130.9
136.2
136.5


3-20-BOX 16 82.9
87.5
87.9
3-20-BOX 17 87.9
90.5
93.3
3-20-BOX 18 93.3
93.6
96.6
99.3
3-20-BOX 19 98.3
102.7
105.8
3-20-BOX 20 103.8
105.8
108.8
109.0


3-20 Bx 11 56.2
57.0
60.0
3-20 Bx 12 61.5
63.1
66.1
66.5
3-20-Bx 13 66.5
69.2
71.9
3-20 Bx 14 71.9
72.2
76.8
3-20-Box 15 76.8
78.3
81.4
82.9
3-20-Box 16 82.9


30.4
36.0
38.7
41.4
41.8
44.8
45.7
47.9
50.7
51.2
53.9
56.2


152.7
S-20 B# 29 152.7
158.0
S-20 B#30 158.0
160.6
163.1
S-20 B# 31 163.1
547
166.7


3-20 Bx 29 152.7
154.5
3-20 Bx 30 158.0
160.6
3-20 Bx 31 163.1
163.7


158.0
163.1

Diamond Drill Log DDH 3-21

North: 6160725 East: 347930 Elevation:
Dip: - 45 Azimuth: 270 Total Distance: 139.0 m
Date: June 22, 2003 Logged By: J. Oliver Page: 1

From	To	Rock	Mod	Stuct	CA	Alteration							Mineralization								Comments
						Hfs	Sk	Mar	Ret	Y-Gar	Br-Gar	Si	Py	Po	Cpy	Sp	Gn	Asp	Bn	Mag	
0	3,0	CASE																			**CASING**
																					3
3,0	26.85	Fpd	Se																		**FELDSPAR PORPHYRITIC DYKE - MODERATELY SERICITIZED**
																					Light grey green crowded feldspar porphyry dyke.
																					Based on alteration and sulphide development three principle
				23.2	J/	15															sub-intervals are defined:
																					3.0-16.1: Feldspar porphyry dyke with light disseminated
				26.85	Sd:	47															pyrite ~ 0.75%, and no significant sulphide filled joint sets.
																					16.1-24.4: Fractured clay-calcite-pyrite-arsenopyrite filled
																					joint sets. Pyrite 2%, arsenopyrite 0.25 %.
																					24.4-26.85: Weakly altered pale green moderately sericitized
																					feldspar porphyritic dyke.
																					Lower contact tight, no skarn development between dyke and limestone.
																					26.85
26.85	33.9	L																			**LIMESTONE**
																					Massive blue-grey re-crystalized moderately dolomitic limestone.
				28.4	Si:	40															No compositional layers but locally weak internal fabric development.
																					Low sulphide content, pyrite < 0.25%
																					33.9
33.9	45.9	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
																					Weakly to moderately altered feldspar porphyritic dyke.
																					Light matrix carbonization - +/- sericite.
				45.9	Sd:	15															0.75-1.0% fine grained disseminated pyrite.
																					Hematite present in trace amounts.
																					Sporadic clay-calcite filled joint sets.
																					Both upper and lower contacts tight, non-faulted.
																					45.9
45.9	50.5	L																			**LIMESTONE**
																					Blue grey, moderately re-crystalized massive limestone.
			48.3	So=Si=30																	Sporadic, incomplete, darker grey beds.
																					Weak calcite vein injection.
																					No pyrite recognized, trace sphalerite lining, mm scale calcite fractures.
																					Lower dyke contact tight, no significant alteration.

																					50.5
50.5	53.6	Fpd																			**FELDSPAR PORPHYRITIC DYKE**
													0,5								Blurred off-white equant feldspars are embayed within a fine grained
																					kakhi matrix.
						53,6	Sd:	10													Minor hairline fractures noted, but no significant vein or joint sets.
																					Net sulphide content: pyrite 0.5%, trace grey sulphides.
																					Lower contact tight and unaltered.
																					53.4
53.6	78,0	L																			**LIMESTONE**
													0,25								Medium to fine grained blue-grey re-crystalized limestone.
				56,0	Si:35																Texturally variable from massive, to sporadically bedded to
																					moderately carbonaceous with a well developed stylolitic cleavage.
																					Blocky core, but no major structural zones.
				64,0	Si:25																No development of high sulphide veins, skarn or stockwark assemblages.
																					Net sulphide content: pyrite : 0.25-0.5%, always with black carbon
																					rich pressure solution cleavages.
																					78
78,0	89.3	CA-AP																			**CHERTY ARGILLITE LESSER ARGILLACEOUS PHYLLTE INTERBEDS**
																					Well compositionally laminated cherty argillite forms 60-70 % of
																					the interval.
																					This unit is interelated with argillaceous phyllte beds (30-40%)
				81.1	Si=So=35																which seldom exceed 1.0-1.5 m's in thickness.
																					Compositional layers have a highly consistent orientation to CA.
				89,0	So:50																No significant structural zones are noted
																					Net sulphide content averages 0.5% as compositional layers parallel
																					aggregates.
																					89.3
89.3	98.4	Fpd	(Q) ?																		**FELDSPAR PORPHYRY DYKE (QUARTZ DIORITE)**
																					Medium green, very weakly altered feldspar porphyry dyke.
													0,5		Tr					0,75	Rock contains very sporadic, < 5% free quartz.
																					Abundant matrix chlorite.
																					Disseminated pyrite 0.5%, magnetite 0.75 %, trace chalcopyrite.
																					No fracture development, tight lower contact.
																					98.4
98.4	106,0	CA/AP																			**CHERTY ARGILLITE / ARGILLACEOUS PHYLLITES**
																					Approximnately equal volumes of diffusely compositionally layered
			98.4	Sd:	45																ribbon banded chert and laminated light green-grey argillaceous phyllites.
																					Compositional layers have a consistent orientation to CA at ~ 30.
				103,0	Si=So=30								0,75								The unit is non-calcareous.
																					Fine grained pyrite is associated with dark black lamella and
				105,0		46															averages 0.5-0.75%.
																					Note: Increased shear fabric +/- weak damage envelope at 104.9-
																					106,0. Slightly elevated pyrite, 2% and trace sphalerite within

																					this interval.
																					106
106,0	112.1	MZ/Fpd																			**MINERALIZED ZONE: FELDSPAR PORPHYRITIC DYKE HOST**
			Flt																		Complete gouge development carrying significant sulphides flanks
																					the upper and lower contacts of a bleached and shattered feldspar
																					porphyritic dyke.
																					Relevant sub-intervals include: 106.0-106.6: Dark grey sulphide
																					rich gouge. All rock fragments 50% dyke, 50% clastic and all
																					sulphide fragments are well rounded-melled. Net sulphides 6-8%,
																					no estimate of distribution.
			109.2		30																106.6-111.7: Feldspar porphyry dyke. Shattered sulphide lined.
																					Joint sets common. Sulphides include: pyargyarite 0.5-1.0%,
																					red-brown sphalerite 0.5%, pyrite 3%, tetrahedrite-tennantite 0.25%.
																					111.7-112.1: Black gouge, elevated arsenopyrite 3-4%, pyrite 3%,
																					stibrite < 0.5%, native silver (?) 0.25%. Calcite gouge 30-40%.
																					112.1
112.1	139,0	CA/AP																			**CHERTY ARGILLITES - INTERBEDDED ARGILLACEOUS PHYLLITES**
																					Slightly "gritty", silica rich (< chert) interbeds - compositional layers
																					occur throughout this sequence.
			120.3	47																	Equal split by volume between argillite and chert members.
																					Narrow limestone bed near the top of the sequence. 115.8-117.3.
																					Compositional layers generally at consistent orientations to CA ~
			133.5	So=Si=60																	40-55 to CA.
																					Partial boudinage of competant beds scattered minor brittle - ductile
																					zones, no major faults.
																					Note: Strongest shearing localized to an argillite member at 112.1-115.8.
																					Net sulphide content: 1.0% pyrite as foliation parallel aggregates.
																					139
139,0	EOH																				
																					Downhole Surveys:
																					139.0 m Dip: 40.75 Azi: 266.5

Assay Sample Log DDH 3-21

Date June 22 Page 1 of

Sample No.	From	To	Sample Type	S.G	Sample No.	From	To	Sample Type	S.G
O17820	16.1	18.1	B						
O17821	18.1	20.1	B						
O17822	20.1	22.1	B						
O17823	22.1	24.4	B						
O17824	24.4	26.9	B						
O17825	100,0	101.4	B						
O17826	101.4	102.8	B						
O17827	102.8	104.8	B						
O17828	104.8	106,0	B						
O17829	106,0	106.6	B						
O17830	106.6	108,0	B						
O17831	Standard PM 169								
O17832	108,0	109.5	B						
O17833	109.5	110,0	B						
O17834	110,0	111.7	B						
O17835	111.7	112.1	B						
O17836	112.1	113.1	B						
O17837	113.1	114.6	B						
O17838	114.6	115.6	B						
O17839	115.6	117.5	B						


5-21-Box 1: 3.0
4.0
9.4
5-21-Box 2: 9.4
11.0
14.0
5-21-Box 3: 14.0
20.1
5-21-Box 4: 20.1
25.8
5-21-Box 5: 25.8
26.2
29.3
31.0


3-21 Bx 20 105.5
111.1
3-21 Bx 21 111.1
114.6
3-21 Bx 22 115.9
117.7
120.7
3-21 Bx 23 121.6
127.1
3-21 Bx 24 127.1


3-21-Bx 17 88.5
3-21 Bx 18 94.0
3-21 Bx 19 100.0


3-21-BOX 11
3-21-BOX 12 62.1
3-21-BOX 13 67.4
3-21-BOX 14 72.5
3-21-BOX 15 77.3


3-21-BOX 8 31.0
35.4
3-21-BOX 7 36.6
36.6
41.5
42.1
42.1
3-21-BOX 8 42.1
44.5
40.7
3-21-BOX 9 46.7
47.5
50.6
52.2
3-21-BOX 10 52.2
52.
56.
50.5


3-21 Bx 24 127.1
127.1
3-21 Bx 25 132.9
132.9
138.4
3-21 Bx 26 138.4
139.0
139.0 138.4