Feature Bedding, Foliation, Fragment size & shape; Shearing, Fault, Vein; c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
.4		Lt. grey green bedded mudstone grading locally to lt. grey green f.g. volc. arenite.			
.1		Base of interval is arenaceous but grades rapidly to mudstone with bedding ≈ 20° to c.A.			
.9		Core is very broken.			
HW/HQ 1.1	5			5	Py rare
1.0	6.0	Dk. grey to black (cong.) shale. complexely slumped & s.sed def. rock. Round to oblate clasts of volc. arenite & mudstone. Bedding fissility ? 30° to c.A. in gen.		7.0	Py 1-2 v.f.g. dissem. & rare blebs.
1.2		Core very broken.			
1.4	9.2 10 10.2	Green brown volc. arenite. weakly bedded tuffaceous sed. w. rare frag. of/ black mudstone to 2cm. An interval of very 5° - 40° to c.A.		9.2 10	
.8		Interbedded slumped and deformed cream f.g. volc. arenite and dk. grey to black shale.			
1.2		Bulk of rock (≈60-70%) is volc. arenite rafts, fragments & deformed interbeds of dk. grey to black shale. Bedding is gen. low angle to c.A. 10-30°.			Py rare but locally to 1-2 % as v.f.g. dissem.
.8	15			15	
1.0					
1.5	17.0	↑ YOUNGING - Slumped lower contact on shale. Dk grey to black (pyritic) shale. f.g to m.g Py. localized to distinct beds.		17.0	Py 1-2 (5) f.g. to m.g. dissem. & blebs.
1.2	17.8	Cream to grey green f.g. volc. arenite w. fragments rafts & interbeds of dk. grey mudstone to shale. A tuffaceous interval showing evidence of s.sed def and current activity. Intraformational breccias common. Bedding is gen. at low angle to c.A. (0-35°).		17.8	
.8	20			20	
2.0					
.4					
1.5					
1.0	25			25	

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Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein; c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
1.2		Lithology - as above - cream to grey green f.g. volc arenite w frag. rafts & interbeds of dk. grey mudstone to shale.							
1.3									
1.7	29m.	APPROX BASE OF OXIDATION.							
	30							30	
1.2	30.7	Dk. grey to dk. grey green (cong.) mudstone. v.f.g. probably tuffaceous mudstone. no cleavage. Bedding 20-25° to c.A. Clasts to 30cm. of black mudstone.						30.4 30.6 30.9	Py 15 qtz vein stockwork. ≈ 35° c.A. 15cm Py 80 sid vein 55° to c.A.
1.4	32.2								
1.0		Bedded to massive lt. grey green f.g. volc. arenite w fragments rafts & thin (contorted & slumped) interbeds of lt. grey green to dk. grey mudstone.							
1.0									
3.0	35	A very thick unit of tuffaceous sediment. Soft sed. def. is locally intense causing rafting and slumping. Bulk of interval is lt. grey green f.g. volc. arenite gen massive but locally w. clasts of mudstone to 5cm. Bedding varies locally between 20 & 60° to c.A.						35	
3.0	40							40	
2.6	42.8								
.8		FAULT ZONE Broken core & pug. Angle to c.A. is obscure but probably ≈ 30° to c.A.							
1.0	45							45	
.9									
.8									
2.0	47.7								
	50							50	

Feature Bedding, Foliation, Fragment size & shape; Shearing, Fault, Vein; c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive >60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
2.0	50.3	--Lithology - as above - Bedded to massive --			
1.2	51.0	- lt. grey green f.g. volc arenite w. fragments - rafts & thin (contorted & slumped) interbeds of lt. grey green to dk. grey. mudstone.			
3.1	55	50.3 - 51.0 FAULT ZONE - broken core low angle to c.A. 51.8 Fault - low ∠ to c.A. broken core 53.6 Fault - Pug, 45° to c.A 54.3 Fault - Pug & broken core, 15°? c.A. 54.5 Fault - Pug 15° to c.A.?		51.8 53.6 54.3 54.5 55	
2.3		FAULT - Pug 70° to c.A. FAULT - Slickensides 11 c.A. FAULT - Pug 65° to c.A.		56.0 56.4 56.7	
1.0					
2.5	60 60.1	FAULT ZONE Broken core & pug. 20° to c.A!		60	
1.5	61.0	FAULT - Broken core - 30° to c.A.		61.7	
2.0		FAULT - Broken core - 35° to c.A.		62.5	
3.0	65			65	
2.0					
1.0	70			70	
1.3		FAULT - Broken core 30° to c.A.		70.6	
1.8					
2.5	75			75	

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein, F, c carbonate, q quartz

Mineralization Trace 1-5% Common 5-15% Abundant 15-60% Massive >60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
2·5	75·7	FAULT - broken core & pug 25° to c.A Lithology - as above - Bedded to massive lt. grey green f.g. volc. arenite w. fragments, rafts & thin & thin (contorted & slumped) interbeds of lt.	F	75·7	Py rare
1·0	78·5	FAULT - Pug & broken core. 30°? to c.A	F	78·5	
3·0	80	FAULT - Pug 65° to c.A. FAULT - Pug 45° to c.A.	F F	80 80·3 80·7	
3·0	82·5	FAULT ZONE Broken core, pug & c. healed breccia at v. low angle to c.A. (0-10°) Contact between lithology above & below is fault.			
3·0	84·3 85 85·2	Dk. grey to black (tuffaceous) shale w. rafts frags & very numerous interbeds of lt. grey green volc. arenite. c. veins common to FAULT - Broken core 30° to c.A. FAULT - " FAULT - Broken core 30° to c.A. Thin wisps and interbeds of tuffaceous sed. are very common. S. sed. def, slumping etc locally intense. FAULT - Pug 20° to c.A. FAULT - c vein & pug 20° to c.A. Rare py. fragments. FAULT - Pug 20° to c.A.	F F F F F F	85 85·9 86·1 86·7 88·3 88·5 89·8 90	Py 1-2 (10) vein assoc. w. qtz. 3cm py 60 qtz, sid vein 50° to c.A.
3·0	91·9 92·3 92·8 93·1 93·3	lt. grey green f.g. volc arenite grading to lt. grey green tuffaceous mudstone grading to dk. grey green tuffaceous shale. A tuffaceous interval showing evidence of quiescence with lt. grey green massive to weakly bedded mudstone & sed. activity with the slumped & rafted tuffaceous shales & locally cong. volcanic arenite.		91·2 91·9	Py 40 sid vein w. rock frag. 30° to c.A. Py 1 (2-3) vein qtz assoc. w. sid.
1·7	95 95·6	Bedding where present is low to moderate to c.A. 0-30°. 92·8 - 10cm q/c. vein 90°? to c.A. Tr py. 93·1 - " 93·3 - 3 1cm q/c vein tr py.		95 95·8	1 cm py 80 c vein. 25° to c.A.
1·3				97·3 97·7	2cm cm 25 sid vein 45° to c.A. 2cm py 70 c vein 45° to c.A.
3·0	100			98·7 99·1 99·65 100·0	3cm py 90 c vein 30° to c.A. Py 25-25 f.g. to c.g & vein stockwork. assoc. w sid. Tr. Jcass. f.g. Py 10-15 vein w qtz, sid & cass. (f.g.).

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein, F, c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
3.0		Lithology - as above - Lt. grey green f.g. volc. arenite grading to lt. grey green tuffaceous mudstone grading to dk. grey green tuffaceous shale.	TRACE COMMON ABUNDANT MASSIVE	100.9	Py 5 veinlets assoc. w sid gen 15-20° c.A.
				102.0	Py 1-2 veinlets assoc. w. sid 20° c.A.
				102.6	3cm Py 90, qtz, sid vein 25° to c.A.
					25cm py 90, qtz 1, cavities 10% vein 60° c.A.
					Py rare (veinlet & blebs)
	104.1			104.2	
3.0	105	Dk. grey to black (tuffaceous) mudstone. . A massive to well bedded (conglomeratic) rock. Rare rounded frag. to 3cm of green tuffaceous sed. Bedding 10-25° to c.A. C veins to 2cm, 20-50° to c.A. are common after 106 m.		105	10 cm py 60, sid 39, qtz 1 vein 55° c.A. Py 1-2 f.g. diss. and uncommon py-sid veinlets 0-90° to c.A.
3.0					
	108.8 / 108.9	FAULT ZONE Broken core & pug 35°? to c.A.		108.8	
	109.6			110	Py rare.
	110 / 110.2	FAULT ZONE Broken core & pug 25° to c.A.			
2.5	111.2			111.2 / 111.3	Py 30 veinlets 25° to c.A. (Stringer)
		Gen. massive lt. grey green volc. arenite and tuffaceous mudstone. Massive to bedded tuffaceous sediment of varying grainsize. Grit to mudstone. Bedding where present 20° to c.A.			Py rare
1.5					
2.0	115			114.7 / 115	5cm py 10 c. vein 40° to c.A.
				115.3	Py, as f.g. in q/c veins gen // c.A.
				116.0	
3.0	117.5	2cm c. vein 45° c.A.		117.7	
		FAULT - slickensides 0° to c.A. Complexely interbedded slumped rafted & deformed lt. grey green f.g. volc. arenite & dk grey to black (cong.) mudstone to shale. Top ½ of interval is dominated by tuff bottom ½ by mudstone. A well bedded interval but slumping & rafting assoc. w. the mudstone is common. FAULT - Pug 20° to c.A. Bedding gen constant at 35-45° to c.A.		118.5	Py rare.
3.0	120			120	
2.7				122.5	
	124.6 / 125	FAULT ZONE - Broken core & pug 30°? to c.A		125	

Feature Bedding, Foliation, Fragment size & shape; Shearing, Fault, Vein; c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive >60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
		FAULT ZONE - As above.			
1.6	126.4	Lithology - as above.	Py	127.2	Py rare.
				127.5	2cm py $^{90}_{A}$ sid vein // c.A.
			Py	128.0	Py 5 f.g. & veinlet // c.A.
3.0				128.3	2cm py 90 sid vein // c.A.
	130			130	Py rare
3.0			C	131.2	5cm py 30 sid vein 30° to c.A.
				132.1	Py 2-3 f.g. & vein assoc. w. sid & qtz.
				132.4	Py 15-17 f.g. diss & aggreg // bedding
					Py 1-2 veinlet
3.0	135	FAULT - Pug 50° to c.A.	F Py	134.5	3cm py 90 vein 65° to c.A.
				134.7	Py 10 f.g. to c.g. & veinlet.
				135	
				135.05	Py rare
	136.5			136.3	Py 50 vein assoc. w. sid. 50° c.A.
				136.4	
1.5		Cream to lt. grey green tuffaceous mudstone. Massive tuffaceous sediment. Mottled alteration between cream and green rel. to F.2.			
	137.8	FAULT ZONE Broken core pug & Py veining 40° to c.A.		137.7	Py 15 vein (stockworks) & f.g.
1.0					
	139.7			139.7	
	140		Py	140	
				140.1	10cm py 99 q. vein 7° to c.A.
2.0	140.9			140.8	Py 1 veinlet.
		FAULT - Pug & c vein 30° to c.A.	F	141.3	
		FAULT - ? to c.A. Broken core.	F	142.0	
2.1	143.0	FAULT ZONE - Pug & breccia 40°? to c.A.			
	143.5				
		Interbedded dk. grey to black shale & lt. grey siltstone to F.g. quartzite			
1.4	145	Extremely well bedded interval of finely interlaminated arenaceous and pelitic rocks. on the mm & cm scale. Slumping is present but not common. Rock has a good layer // cleavage.		145	
3.0		Si/So 144 - 50° c.A.	Py	148.0	1 cm py 95 c vein 15° c.A.
	150			150	

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein, F, c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
3.0		Lithology - as above - Interbedded dk. grey to black shale & lt. grey siltstone to f.g. quartzite.		150.8	1 cm Py 50 sid vei 35° to c.A.
		Si/So 150 - 50° c.A. 155 - 60° 160 - 50°			
3.0					
	155			155	
3.0	156.3	Qs as above but much more finely interbedded		156.3	2cm py 60 sid vein 40° to c.A. Py 1-2 (5) v.f.g. diss & bedded in qtzite. & bleb & rare veinlet.
3.0				158.6	5cm py 90 sid vei 35° to c.A.
	160	← x bedding ⇒ younging		160	
3.0				161.8	2cm py 20 veinlets. 30° to c.A.
					Py rare
				163.7	Py 1 veinlet no p.o.
3.0	165	FAULT - Pug - 40° to c.A. FAULT - Pug 35° to c.A.	F F	165.1 165.6 165.9 166.0 166.2	Py 40 vei stockwork 45° c.A. 165.2 - 2 cm Stn 50 massive. Py rare Py 10 veinlets assoc w sid.
					Py rare (2-3) veinlets.
				167.3	2cm Py 60 sid vei 35° to c.A.
3.0				168.0	8cm Py 90 qtz vei 40° to c.A.
				168.8	Py 80 qtz sid vein w. lithic inclusions 50° to c.A.
	170			170 170.1	
3.0					Py rare
				171.85	1 cm py 50 sid vein 50° c.A.
				172.1	2cm py 90 sid vein 40° c.A.
3.0	173.4 174.0	Dk. grey shale w. wisps & interbeds of lt. grey green tuffaceous mudstone & rare f.g. quartzite. - Slumped			
	175			175	

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein (c carbonate, q quartz)

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
3.0		Lt. grey to black interbedded finely laminated slumped & (cong.) shales. A very well bedded interval of pelitic rock w. rare thin lt. grey f.g. quartzite wisps & interbeds. Slumping & rafting is weak to intense.		178.1	Py rare veinlet 1cm py 90 sid vein · 50° to c.A.
				178.8	3cm py 95 sid vein 35° to c.A.
		FAULT - Pug & py vein 20° to c.A.	F	179.3	1cm py 70 sid vein 20° c.A.
3.0	180	Cream grey carbonate (siderite?) fragments & fragmented beds? are locally common esp in top few metres of interval.		180	
3.0				182.5	15 cm py 80 sid vein 45° to c.A. Tr. Py
		FAULT - Pug & py vein 35° c.A.	F	183.7	
	185			185	
3.0					Py rare veinlet.
	187.6	Med grey massive to (bedded) shale w. minor interbedded black shale. Gradational interval between unit above and below. 4mm c vein 45° to c.A. Where bedded the unit is slumped.			
3.0			C	189.5	
	190	FAULT - Broken core ?° to c.A.	F	190	
2.3		Si/So gen 45° to c.A.		190.6	
		FAULT - Pug 50° to c.A. FAULT - Pug ?° to c.A.	F F	192.3 192.3	
	192.9 193.2	FAULT ZONE - Broken core & Pug 50° to c.A.			
3.1		Lt. grey massive to bedded shale w. minor interbeds of lt. grey f.g. quartzite. Highly sericitic shale, gen well bedded w. layer // cleavage 50°-60° to c.A. Rare slumping.			
	195			195	
3.1		195.8 - 30cm lt. grey shale w. clasts of cream grey carbonate to 2-3cm.			
	200			200	

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº G69 Page Nº 9

Feature Bedding, Foliation, Fragment size & shape; Shearing, Fault, Vein; F; c carbonate, q quartz

Mineralization Trace 1-5%, Common 5-15%, Abundant 15-60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
3.1		Lithology - as above.							
3.1	202.8	Lt. grey F.g. (micaceous) quartzite w. occasional interbeds of lt. grey shale. Qtzite gen. massive & saccharoidal in texture. Shale interbeds to 5cm give bedded nature 50-60° to C.A.						205	
3.0	205								
	208.5	END OF HOLE						210	
	210								
	215							215	
	220							220	
	225							225	