ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº G59 Page Nº 1

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
·4		**Black carbonaceous shale w. fragments and brecciated interbeds of lt. grey siltstone.** Bulk of the rock is black carbonaceous shale containing approx. 5-10% lt. grey gen. massive siltstone clasts. These are subrounded to rounded and <1mm to 2cm; av. 3mm. They are often flattened in the cleavage and can be brecciated in nature. Also occuring are beds of lt. grey siltstone up to 30cm. These are not common and are usually well broken up by sed.? deformation. Deformation is usually in the form of brecciation. clasts are angular to rounded in these beds. Core is extremely broken to 40·5 m.
·6	5	
·5		
·8		
	10	
2·5		
	15	
1·5		
1·2		
·5		
·4	20	
·3	≈21·5	FAULT ZONE - cream coloured pug containing angular rock fragments.
·5		
·4	24·3	
	25	

VISUAL LOG | TRACE | COMMON | ABUNDANT | MASSIVE

DEPTH m	MINERALIZATION
5	Py v. rare.
10	
15	
20	
25	

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
·8		Lithology - as above							Py as above - v. rare
·6									
1·0	30							30	
·4									
·3									
·1	34·2	Cream grey to dk grey siltstones						34·2	Sp 10 in >2cm sid vein ≈ 10° to c.A.
	35	c.g. siltstones showing evidence of sed. def. in the form of slumps etc are dominant.						34·7 35	
1·4	35·7 35·9	FAULT ZONE - c. healed breccia 65° to c.A.							34·2 - Py 10 over 2cm in sid. vein.
		Med. grey to dk. grey siltstones dominate with cream grey interbeds av. few cm's.							
·5		S1/S0 av 20-30° to c.A.						37·5	
·4		34·2 - 4cm qtz-c. vein ≡ to fault?							
		34·7 - >2cm sid vein w. sp.							
	40	37·5 - 3cm c.vein 20° c.A.						40	
2·5	40·5	← core is very broken to this depth - may be associated with faulting in part.							
1·5	43·8	43·8 - 52·1m FAULT ZONE? 5cm next. sid?						44·1	
	45	Broken core & pug.						45	
·5									
·6	50							50	

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
·8	51·9	Lithology - as above.							Py as above - v. rare
1·1	52·1	Cream grey siltstone - massive siltstone - mudstone showing sed. brecciation.							
	53·4	Med grey siltstone - bedded 51/50 - 40° to C.A.							
·8	54·4	Lt. grey green tuffaceous sandstone F.g to m.g. volc.? detritus in a massive tuffaceous rock. Mainly pug in fault zone.							
	55							55	
1·2	56·3	56·3 - 73·1 - FAULT ZONE? - broken core & pug in this interval is in part (at least) due to faulting.							
·8	60							60	
·5	61·7	Interbedded lt. grey to dk. grey siltstones A sequence of generally med. to dk. grey siltstone, often massive, with thin often sed. deformed lt. grey mudstone laminations. This unit appears to grade downward into the unit below. Rounded quartzite pebbles appearing at ± 80 m.							
·8									
·5	65							65	
·9									
2·5	70							70	
	73·1							73	73 - 74·5 - q veins.
1·8								74·5	
	75							75	

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
·6	76·1	FAULT ZONE? - Broken core. Core is very broken with substantial loss.	old workings						Py as above - v. rare
·2		76·1 - 80·7m Black carbonaceous shale A very uniform highly carbonaceous rock. 77m - 78·5m - old workings including timber							
·4	80							80	
·8	80·6 80·7	Interbedded lt. grey to dk. grey siltstones Evidence of sed def. in form of cont. & bdd beds. & conglomeratic fragments (gen. rare).							
·8	82·5	FAULT ZONE?- Broken core							
	82·9								
2·5	83·6	Well laminated interbedded f.g. quartzite & dk. grey shale grading downwards to interbedded lt. grey & dk grey siltstones - A well laminated interval on the scale of ≈ 1 cm. with a good layer parallel fabric. Si/So is constant around 40°-50° to c.A. - Lt. grey f.g. micaceous quartzite bands. - Dk. grey well foliated shale, generally carbonaceous.							
1·2	85							85	
1·2									
·8									
1·9	90	lt grey f.g. quartzite replaced by lt. grey siltstone at ≈ 90·8m. →						90	
3·0									
	95							95	
3·0	95·4	Black carbonaceous conglomeratic shale. - description as below 96·0 - 5cm c vein - brecciation						96·0	
	96·22	Lt. Grey rext. bedded sid. dol. w. banded & bleb. pyrite						96·22	
	96·4	Black carbonaceous conglomeratic shale Highly carbonaceous rock w. frag (gen rounded) of lt. grey siltstone. Frag 5-10%. FAULT - Broken core - 25° to c.A.						96·4	Py. 20 as bands // to bedding av. 3mm thick. Bands are discontinuous and connect with crosscutting veins & blebs. Py is f.g.
		97·95 - 2cm sid & qa vein. 20° to c.A.						97·6 97·95	
2·0	98·2	FAULT - Broken core - 30°? c.A.						98·2	2cm Qa 20, c vein
NQ		Interbedded black carbonaceous shale & lt. grey siltstone-mudstone & minor dolomite.							
BQ ·9		lt. grey strgly sed. def. siltstone beds to 30 cm. Locally rext. dol. to 20cm.	3cm c 70°					99·4	
	100							100	

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

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE / COMMON / ABUNDANT / MASSIVE	DEPTH m	MINERALIZATION
2·0	100·6	FAULT ZONE - begins approx - 99·3m - broken core. Lithology - as above				Py as above - v. rare
	102·3	102·3 - 102·5 - c, sp vein 45°?			102·3 102·5	sp 10 c.g. in c vein
	102·7	FAULT ZONE? - Broken core.				
·5	≈104	med grey coarsely crystalline siderite rock - grades down into siltstone.				
	104·9 105	Fissure lode material? Coarsely crystalline siderite with approx 10-15% sp and 2-5 Ga as blebs & veins. Very poor core recovery.			104·9 105	sp 10-15 blebs & veins, Ga 2-5 assoc. w. sp. Cream siderite (coarse grained) is the host material.
·02						
·06						
	107·5				107·5	
1·4	107·7	Lt. green grey to dk green grey sericitic and carbonate rich lithic tuff. The basal 50cm of this unit grade from fine lithic tuff downwards to f.g. bedded tuff. Fragments - angular to subrounded, 80-90% of rock, 1mm to 3cm, sericitic and vesicular (weakly) matrix - ≈10% often locally siderite rich. - gen. sericitic. No fabric. Rock contains numerous thin unoriented c. veins, not? siderite - white crosscutting cream siderite veins.				
·8						
	110				110·0 110·1 110·2	Ga 5-10 blebs in c vein 10cm.
2·1					110·75	
2·0						
	114·15	114·15 - 10cm ga. c vein			114·15	10cm Ga 5-10 c vein sp trace.
·8						
	115				115	
	115·75	115·8 - 1cm c vein 20° to CA				
3·0		lt grey bedded f.g. silty quartzite with minor thin lt. grey siltstone interbeds - bulk of the interval is a close to massive quartzite.				
	117·8	med. grey silty lithic tuff. - f.g. lithic tuff w. silty matrix - si/s - 5%				
	118·2	10cm silty lithic tuff. →				Py trace < 1% as v.f.g. (syn?) diss and py rich beds. also as occasional frag. in QS.
3·0		Well laminated interbedded lt. grey f.g. micaceous quartzite and lt. grey to dk. grey siltstone / shale. Well laminated QS				
	120				120	
2·0						
	122·9	FAULT ZONE? Broken core				
·3						
	124					
	125				125	

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

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
2.5									Py trace - as above
3.0		c vein 60° to c.A. 1cm						127.95	
.85	130							130	
3.0		c vein 30° to c.A. 1cm. 130.5 - Fault - broken core	F					130.3 130.5	
		c vein 90° to c.A 1cm						132.3	
3.0	135							135	
.8								136.4	
.9									
.7		c vein 30° to c.A. 1cm.						138.4	
.6	139.0 139.2 140	FAULT ZONE - Broken core						140	
1.0		c. vein 50° to c.A. 1cm.						140.9	
2.8									
.4	145	2cm c vein 20° to c.A. 1cm c. vein 30° to c.A.						144.8 145 145.35	
.8	145.9	FAULT ZONE Broken core & qtz. veins.							
2.4	147.7 150	3cm c, ga, sp. vein 40° to c.A.						148.9 150	3cm ga 30 sp 30 c vein

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

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
2·3	152·3	Lithology - as above - well laminated interbedded lt. grey f.g. micaceous quartzite and lt. grey to black siltstone/shale.						150·6	Py trace - as above
·3		FAULT ZONE? Broken core, loss & qtz veinlets							
	153·4								
3·0	155	1cm. q vein 25° to c.A. 1cm q vein 60° to c.A.						154·5 155	
MISSING CORE BLOCK ??		20cm q veins 1cm q vein 45° to c.A. 1cm q vein. 2cm q vein 45° to c.A. 2cm q vein // to c.A. Fault - pug - 50° to c.A.	F					157·6 157·9 158·1 158·5 158·7 159·05	
1·5									
·7	160							160	
·8									
1·5									
·8									
·3									
1·2	165							165	
	165·3	FAULT ZONE - Broken core & qtz veining							
·5									
·5									
·3									
·4									
	168·5								
1·0		Numerous thin quartz veins. unoriented							
3·0	170	Thin qtz veins. unoriented c vein ~2cm.						170 171·1	Trace ga, sp in c. vein.
3·0		1cm q vein 60° to c.A. 3cm q vein. 50° to c.A.						173·2 173·6	
	175							175	

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

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
2·0		Lithology - as above - Well laminated interbedded lt. grey f.g. quartzite and lt. grey to black siltstone - shale.							Py trace - as above
1·2	177·9	Grey fragmented dolomite assoc. with dk. grey siltstone and f.g. grey quartzite beds.						177·9	177·9 - 182·0 - Py v. rare.
1·1	179·6	Lt. grey bedded dolomite w. minor lt. grey qtzite blebs. S1/S0 45° to c.A. ·5cm Py. mudstone at top.							
	180	Lt. grey c.g. tuff. - sericitic & carbonate rich.						180	
	180·3								
3·0	181·0	Lt. grey bedded dolomite w. minor black siltstone. S1/S0 45° to c.A.							
	181·6	Cream grey fine lithic tuff. - sericitic, weakly vesicular fragments.							
	182·0	Interbedded f.g. grey qtzite & dk. grey siltstone. w. minor dolomite						182·0	
·6		Lt. grey green sericitic lithic tuff with rare fine agglomerate							Py trace (<1%) as f.g. & rare flecks.
3·0	185	80-90% of rock composed of grey green vesicular lava fragments. These are angular irregular in general and av. 1cm. (1mm to >5cm). Vesicles gen. filled with dk. green chlorite or cream carbonate. Matrix of similar composition, locally very carbonate rich. Weak fabric defined by the p.o. of inequant fragments. Primary compaction or def?						184·6 185 184·9	
								185·7	
3·0	187·7	FAULT Fault // to c.A. causing broken core							
	188·6	1cm q/c ~20° to c.A.						189·0	
	190							189·9 190	
3·0									
1·4		1cm q vein ~25° to c.A.						193·6	
2·9	195	Fault - broken core Fault - broken core						195 195·8 196·3	
	197·5	1cm q/z - 30° to c.A.						197·4	
1·5		FAULT ZONE - Broken core & pug							
	199·5								
	200	qveins to 200Z not persistent.						200	

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CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
		Lithology – as above – lithic tuff & rare qggl.						200.2	Py trace as above
		Fault – 20°? to c.A. broken core						201.1	
2.2	201.4	FAULT ZONE – broken core & pug 30-40° to c.A.?							
	201.8								
	202.8	FAULT ZONE – broken core & pug.							
	203.7								
2.5	204.3	FAULT ZONE – broken core + much fracturing & pug.							
	205							205	
	205.2								
	205.7	FAULT ZONE – Broken core & pug.							
	205.9	Grey green coarsely vesicular lava.						206.0	
1.0		Interval bounded above by fault & below by qtz. ven. Massive lava containing local tuff intervals to 10 cm.						206.8	
3.0		The interval contains numerous unoriented qtz-k. veinlets.							
		Fault – pug – 10° to c.A.						208.7	
	209.2	2 cm qtz ven – 40° to c.A.						209.2	
		Fault – pug – 10° to c.A.						209.4	
	210	Fault – pug – 5° to c.A.						209.8	
1.1		Fault – pug – 5-0° to c.A.						210	
	210.8	FAULT ZONE – pug						210.5	
	210.95								
1.7									
2.6									
	215	1cm q/c ven 45° to c.A.						215.0	
	215.6	END OF HOLE							
	220							220	
	225							225	