ABERFOYLE

# DIAMOND DRILL LOG

HOLE Nº 967 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 | VISUAL LOG | TRACE | COMMON | ABUNDANT | MASSIVE | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|---|---|---|---|
| ·1 | | No core – HW through tailings pile & swamp. | | | | | | | |
| HW HQ ·3 | 3.0 | Black carbonaceous shale. A homogeneous rock with a locally well developed cleavage; gen // to c.A. No definite bedding is observed. Core very broken. | | | | | | | Py rare |
| ·5 | | | | | | | | | |
| ·7 | 5 | | | | | | | 5 | |
| ·8 | 7.5 | Lt. to med grey cong. tuffaceous greywacke. A bedded highly tuffaceous rock w. oblate black shale clasts // to bedding forming to 15% of rock. Core very broken. | | | | | | | |
| ·4 | 10 | | | | | | | 10 | |
| 1.0 | 10.5 | Lt. grey to dk. grey shale. A gen. homogeneous interval. Cleavage is weak & parallel to weak bedding where present. Rock is locally cong. w oblate black shale clast forming a minor component. Core is very broken. Bedding 30° to c.A.? | | | | | | | |
| ·3 | | | | | | | | | |
| ·3 | | | | | | | | | |
| ·5 | | | | | | | | | |
| ·5 | | | | | | | | | |
| 1.0 | 15 | | | | | | | 15 | |
| ·6 | | | | | | | | | |
| 1.2 | 17.5 | Med. grey cong. tuffaceous greywacke Description as for 7.5 – 10.5 m. Bedding 0 – 20° to c.A. | | | | | | | |
| ·4 | 18.9 | | | | | | | | |
| 1.2 | | Lt. grey green f.g. tuff. Transitional contact over 20cm. w. unit above. A gen massive to locally bedded rock. Highly sericitic rock w. minor flecks of dk. green chlorite. Texture is gen. homogeneous f.g. to m.g. volc. material. Local bedding is in finer material & is 45° to c.A. Irregular fracture surfaces low to mod. angle to c.A. show min p.o. lineation low angle to c.A. Core is badly broken. 20.0 2cm c vein 30° c.A. | | | | | | | |
| 1.1 | 20 | | | | | | | 20 | |
| 1.5 | | | | | | | | | |
| ·8 | | | | | | | | | |
| ·5 | 25.0 | | | | | | | 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 |
|---|---|---|---|---|---|---|---|---|---|
| 2.1 | 30 | Cream grey to lt. grey to lt. grey green to dk. grey well laminated (slumped) interbedded mudstones.<br>An extremely well bedded interval of interbedded mudstones of varying colour. Lt. grey green is the dominant colour above 53m cream grey below 53m.<br>Slumping rafting & s. sed. faulting are common, whilst convolute bedding occurs rarely. eg 49.8m.<br>Bedding.<br>32m – 25° to c.A.<br>35m – 50° " "<br>40m – 40° " "<br>45m – 35° " "<br>50m – 20° " "<br>55m – 50° " "<br>60m – 15° " "<br>65m – 40° " " | | | | | | 30 | |
| 1.0 | | | | | | | | | |
| 2.0 | | | | | | | | | |
| 2.0 | | | | | | | | | |
| 1.0 | | | | | | | | | |
| 1.2 | 35 | | | | | | | 35 | Py rare |
| 1.7 | | | | | | | | | |
| 3.0 | 40 | | | | | | | 40 | |
| 3.0 | | | | | | | | | |
| .4 | | FAULT – fng 25° to c.A. | F | | | | | 44.2 | |
| 2.2 | 45 | | | | | | | 45 | |
| 3.0 | | | | | | | | | |
| | 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 (TRACE / COMMON / ABUNDANT / MASSIVE) | DEPTH m | MINERALIZATION |
|---|---|---|---|---|---|
| 1·5 | | Lithology - as above - interbedded well laminated mudstones. | | | |
| 1·5 | | | | | |
| 1·7 | | | | | |
| 1·2 | 55 | | | 55 | |
| 3·0 | | | | | |
| 3·0 | 60 | | | 60 | Py rare |
| 1·9 | | | | | |
| 1·3 | | | | | |
| 2·0 | 65 / 65·25 | Lt. grey to dk. grey lithic arenite - massive dominantly tuffaceous rock. | | 65 | |
| | 66·2 | | | | |
| 1·0 | | Lt. grey green massive to bedded volcanic arenite. A tuffaceous rock. bedding 25° to c.A. | | | |
| 1·3 | 67·85 | Interbedded med to dk. grey mudstone & lt. grey green volc. arenite. | | | |
| HQ / NQ 1·5 | 70 | Gen well bedded mudstones containing oblate clasts of black mudstone av. 1cm x 2mm. // to bedding. Bedding is consistantly low angle to c.A. (0-20°) | | 70 | |
| ·7 | | Interbeds of volc arenite (ie tuffaceous greywacke) (50%) to 60 cm. Boundaries are gen. conformable to bedding & may show sed. brecciation of the tuff & local slumping. | | | |
| 2·0 | | | | | |
| 3·0 | 74·8 / 75 | | | 75 | |

**Feature** Bedding, Foliation, Fragment (size & shape), Shearing, Fault (F), 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 |
|---|---|---|---|---|---|---|---|---|---|
| | | Lt. grey green volc arenite - A massive interval of homogeneous f.g. tuffaceous greywacke. Weak fining towards base. | | | | | | | |
| 3.0 | 77.4 | Lt. grey to dk. grey bedded dolomite. - Bedding at low angle to c.A. 5-20°. Local interfingering & rafting of beds. Rare syn. py. beds. weakly py. dolomite locally. Common white to cream c. veins at various angles. | | | | | | | |
| 1.0 | 80 | | | | | | | 80 | |
| 2.0 | | | | | | | | | |
| 3.0 | | 20cm c vein 20° to c.A. | c | | | | | 83.4 | Py rare |
| | 85 | | | | | | | 85 | |
| 3.0 | 86.9 | Dk. grey mudstone to siltstone - well bedded mudstone to massive siltstone. So 20° to c.A. is locally disrupted by c. veins. | | | | | | | |
| | 88.8 | 20cm c vein 350 to c.A. | | | | | | 88.4 88.6 | |
| 3.0 | 90 | Lt. grey green f.g. volc. arenite - Homogeneous f.g. tuffaceous greywacke w. rare bedded siltstone 35° to c.A. Common white c veinlets at all angles. (folded) | | | | | | 90 | |
| | 91.7 | | | | | | | | |
| 3.0 | | Med. grey volc. arenite w. frag. & rafts of black mudstone. Sed. fragments in a tuffaceous matrix. Extensive veining by carbonate. Bedding? 5° to c.A. | | | | | | 92.6 | 3cm py 40 sid vein. 40° to c.A. |
| | 93.7 | FAULT ZONE c healed breccia, very common white c veins 35° to c.A. | | | | | | | |
| | 94.5 | | | | | | | | |
| 3.0 | 95 | Lt. grey to M. grey green f.g. volc. arenite Massive homogeneous tuffaceous greywacke. 97.5m - 20cm QS interbed 20° to c.A. | | | | | | 95 | |
| 3.0 | | | | | | | | | |
| | 100 | | | | | | | 100 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 101.2 | Interbedded cream to lt. grey to black mudstone to siltstone and cream to lt. grey f.g. to m.g. volcanic arenite ; slumped & (contorted)<br>A thick interval of gen. well bedded mudstone to siltstone associated w. thin to thick (1mm to 2m) interbeds of massive tuffaceous greywacke. Slumping & rafting and s. sed. faulting are common features. Thin mudstone beds may be very contorted.<br>Bedding is gen. constant through the interval at low to mod. angles to c.A.<br>102 m - 40°<br>105 m - 45°<br>110 m - 15°<br>115 - 30°<br>120 - 45°<br>125 - 45°<br>130 - 10°<br>135 - 30°<br>140 - 35°. | | | | | | | | |
| 3.0 | 105 | | | | | | | 105 | |
| 3.0 | | | | | | | | | |
| 3.0 | 110 | | | | | | | 110 | Py rare |
| 3.0 | | | | | | | | | |
| 3.0 | 115 | | | | | | | 115 | |
| 3.0 | | | | | | | | | |
| 3.0 | 120 | | | | | | | 120 | |
| 3.0 | | 2cm c vein 20° c.A. | | | | | | 123.5 | |
| | 125 | | | | | | | 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 |
|---|---|---|
| 3.0 | | Lithology – as above – Interbedded cream to lt. grey to black mudstone to siltstone and cream to lt. grey f.g. to m.g. volc. arenite ; slumped & (contorted). |
| 3.0 | 130 | |
| 3.0 | | |
| 3.0 | 135 | |
| | 135.6 | FAULT ZONE Broken core & pug. 20°? to c.A. |
| | 135.85 | FAULT – pug 25° to c.A. |
| 3.0 | | |
| 1.4 | 139.9 | |
| | 140 | Interbedded dkc. grey to black (carbonaceous) shale & lt. grey mudstone to f.g. arenite. (slumped & contorted) |
| | 140.5 | FAULT ZONE Broken core & local pug. 35°? to c.A. |
| 8 | 141.7 | FAULT – pug 25° to c.A. |
| | 142.6 | FAULT ZONE Broken core & local pug 30°? to c.A. |
| 2.3 | 143.3 | |
| | 143.4 | Interbed dkd cream to lt. grey to black mudstone to siltstone and cream to lt. grey f.g. to m.g. volc. arenite ; slumped & contorted. |
| | 145 | Description as for 101.2 – 139.9 m. |
| 3.1 | 145.3 | lt. grey to cream dolomite<br>A gen. well bedded interval though massive dolomite is present.<br>From 148–152.5 much evidence of resohn including stylolites. |
| | | FAULT – Pug 45° to CA. |
| 2.8 | 150 | |

| DEPTH m | MINERALIZATION |
|---|---|
| 130 | |
| 135 | |
| | py rare |
| 136.2 | |
| 140 | |
| 142.0 | |
| 145 | |
| 150 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| | | Lithology - as above - lt. grey to cream to dk grey dolomite. | | | | | | | |
| | | Bedding: 149 - 40° | | | | | | | |
| | | 152 - 40° | | | | | | | |
| 3.2 | | 155 - 45° | | | | | | | |
| | 155 | | | | | | | 155 | |
| 3.1 | | From 157.3 to 161.0m the rock has been pervaded by white to dk. grey qtz veins ave. 1cm. which locally form a stockworks. The veins have a selvage of recrystallized dolomite. Toward the base of this zone brecciation of the dolomite is associated with the veining | q | | | | | | Py rare |
| 3.0 | 160 | | | | | | | 160 | |
| | 161.9 | Black mudstone - massive - gradational from above. | | | | | | | |
| 3.0 | 162.1 | Interbedded pink to grey mudstone & yellow green f.g. to c.g. (lithic) tuff. so 35° to c.A. Dropped pebbles ⇒ younging down hole. Finely laminated rock. | | | | | | | |
| | 163.1 | Pink to grey green grading downwards to grey bedded mudstone. Very uniform rock. gradational colour changes and contact with dolomite below. | | | | | | | |
| 3.0 | 165 165.15 | Lt. grey dolomite rapidly grading to lt. grey mudstone. Well bedded unit (so 45° c.A.) upper 40cm dolomitic Gradational with unit below. | | | | | | 165 | |
| 1.7 | 166.65 | Interbedded lt. grey to black mudstone, cong. lithic arenite & pyritic mudstone. Interbeds to 15cm of the above rock types. Very well bedded, so 50° c.A. Frags. of white qtz/silt in arenite. | | | | | | 166.8 | Py 1-2 v.f.g. bedded in brown Py. mudstone laminae & beds. |
| | 168.25 | | | | | | | 168.2 | 3cm sp 20 sid vein - 35° c.A. |
| 1.0 | | Dk. grey to black (carbonaceous) massive to bedded mudstone to shale. | | | | | | | |
| 3.0 | 170 | An interval of gen. dk. mudstones locally weakly pyritic & often graphitic esp. near faults. Bedding where evident is gen. low to mod. angle to c.A. | | | | | | 170 | Py rare |
| | 171.7 171.9 | FAULT ZONE - Fug - 45° to c.A. | | | | | | | |
| 2.0 | 173.4 173.8 | FAULT ZONE - Broken core & graphite. ?° to c.A. | | | | | | | |
| | 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 | 175.3 | Lithology - as above - Dk. gray to black (carbonaceous) massive to bedded mudstone & shale. | sid | 175.3 | 5cm Gn 2-3, Sp 2-3 sid vein 65° to c.A. |
| 2.6 | 178.4 | Lt. gray well bedded siltstone to mudstone. A very uniform well laminated rock. Bedding is constant at 60-70° throughout the interval. A very weak layer parallel cleavage is present. | | 180 | |
| 3.0 | 181.3 | Lt. grey brecciated weakly to extensively silicified dolomite. Weak brecciation grades rapidly at 182.2 to extensive brecciation. Subrounded to angular moderately silicified dol. frag. 1mm to 3cm (dolicm) are pervaded by a highly siliceous matrix. Tectonic breccia? | | 185 | Py rare |
| 3.0 | 185.85 | Cream sideritic dolomite breccia 185.85 m marks the rapid gradational incoming of intense siderite alteration of the dolomite breccia lithology above. The alteration overprints the fragments but may leave the siliceous to silty intra fragment material unaltered. This sideritic alteration is assoc. with minor amounts of resinous sphalerite & f.g. galena & possible cassiterite?? which occur as f.g. diss. & rare veins. 186.3-186.7 - 10% soln cavities | | 190 | Sp 1-2 (5) f.g. diss. & aggreg. Gn 1-2 (5) " " both also assoc w. rare qtz. veinlets. Py rare |
| .6 | 192.3 | 191.6-192.1 50cm cavity w. carbo. growth on walls. | | 192.1 | |
| .6 | | Py - siderite - qtz lode. A gen massive lode though a local weak layering on cm scale defined by Py & sid rich bands may occur; 50-60° to c.A. Consists of py 20-80% av. 60% as f.g. to m.g. aggreg. & often bladed xtals ⇒ xtalization in a stressed env. Cream siderite 5-70% gen 20% occurs as irreg. f.g. aggreg. to anhedral c.g. white qtz. 5-20% as irreg. blebs & wisps & rare irreg. & discont. veins (brecciating py.) Ground is broken with only % core recovery. 194.3 FAULT - pug ?° to c.A. | | 192.3 | Py 25 f.g. aggreg. assoc. w. qtz & siderite. |
| 1.7 | 195 | | | 192.7 | Py 70 f.g. assoc. w. sid 20 & qtz 10 Tr. Gn. f.g. to m.g. |
| | | | | 194.3 | |
| | | | | 195 | Py 50 (30-60) f.g. to m.g. aggreg. & diss assoc. w. sid. & lesser qtz. Tr. Gn f.g. to m.g. diss. |
| .8 | | | | 196.1 | Py as above. Gn 2-3 f.g. to m.g. aggreg. & veins. 25° to c.A. |
| 1.7 | | | | 196.7 | Py as above. |
| | | | | 197.7 | Py 70 f.g. to m.g. aggreg. assoc. w. qtz & sid. |
| | 200.0 | | | 200.0 | |

**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 |
|---|---|---|---|---|---|
| 1·5 | | Cream sideritic dolomite (breccia) An interval of completely sideritized dolomite. Brecciation is not as extensive as for 185·85 – 192·3. However white chalcedonic silica veins, veinlets & blebs (to 25%) pervade the rock ⇒ local breccia textures. These veinlets have a general p.o. 45° to c.A. Core is very broken. Possible relict stylolites are evident | | | Py rare f.g. Sp 1-2 f.g. to m.g. Cn " " |
| ·5 | | | | | |
| ·5 | | | | | |
| ·5 | | | | | |
| ·5 | | | | | |
| ·5 | | | | 204·2 204·35 204·55 | Py 80 qtz vein. 45°? to c.A. Py 80 qtz vein 1cm. 25° to c.A. |
| ·7 | 205 | | | 205 | Py rare f.g. |
| ·3 | | | | | Sp 1-2 f.g. to c.g. |
| ·55 | | FAULT – Rug ?° to c.A. | F | 206·5 | Cn " " |
| ·1 | | | | | |
| ·4 | 207·9 | | | 207·9 | |
| ·4 | | FAULT ZONE? Broken core & rug. ?° to c.A. | | | |
| ·6 | | Well laminated interbedded lt. grey to black mudstone to shale. | | | Py rare. |
| ·6 | | | | | |
| 1·4 | 210 | V. finely interlaminated pelitic rock (on the scale of mm's) Bedding constant between 40 & 60° (av 45°) to c.A. | | 210 | |
| ·7 | | A weak layer ∥ cleavage is present – bedding fissility or tectonic? Also a weaker crosscutting cleavage ≈ 45° to c.A. | | | |
| ·1 | | Core is locally v. broken. c veinlets no. p.o. are common. | | | |
| ·3 | | | | | |
| ·3 | | | | | |
| 1·6 | 215 | | | 215 | |
| 1·5 | | | | | |
| 1·4 | | | | | |
| ·5 | 220 | | | 220 | |
| ·6 | | 8cm sid vein 65° to c.A. | sid | 220·6 | |
| ·7 | | | | | |
| 1·9 | | | | | |
| | 223·5 | END OF HOLE | | | |
| | 225 | | | 225 | |