

- 1278'11" - 1279'10" Conglomerate with fragments rather finer than below.  
Two quarter inch bands of dark silty material half inch  
apart at 1279 4'. Very uneven top.
- 1279'10" - 1280'11" Conglomerate with fragments up to 1" across and angular  
pods of quartz, some finer grained bands dipping at 10°. Scattered larger fragments.
- 1280'11" - 1281'1 $\frac{1}{2}$ " Conglomerate with fragments up to 1" across and angular  
pods of quartz in matrix of light grey clay possibly incorporated shale. Base of Carboniferous sequence at 1281'1 $\frac{1}{2}$ ".

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1281'12" - 2649'3"

WEARDALE GRANITE

1281'12" - 1291'6"	Pale grey-green mottled white quartz-microcline-albite-muscovite-granite with foliation dipping at 3°. Upper 5' has darker green groundmass than rest. At 1285' and 1289' crush zones, dip 15°.
1291'6" - 1291'9"	Pegmatite without mica.
1291'9" - 1299'3"	Dark foliated granite.
1299'3" - 1299'5"	Pegmatite dip 30° thin dark parting in centre.
1299'5" - 1299'8"	Granite.
1299'8" - 1299'9"	Pegmatite with quartz centre.
1299'9" - 1306'10"	Granite, foliation dip 15°.
1306'10" - 1307'3"	Pegmatite dip 15° oblique to foliation which cuts it.
1307'3" - 1309'8"	Granite.
1309'8" - 1309'10"	Pegmatite, flat.
1309'10" - 1310'6"	Granite.
1310'6" - 1312'	Pegmatite. Top dips 5°, feldspars up to 2", some augen-like.
1312' - 1325'5"	Granite; at 1317'4" impersistent stringer of galena up to $\frac{1}{4}$ " thick; at 1325'5" quartz, tourmaline, feldspar, vein dip 45°. Joints at 1347' (45°), 1349' (60°), 1321'6" (45°).
1325'5" - 1331'	Granite with three thin pegmatites, dip 5°.
1331' - 1336'	Thin fluorite vein, in unaltered granite.
1336' - 1339'9"	Granite.
1339'9" - 1340'	Pegmatite, quartz, feldspar, dip 20°.
13408 - 1345'2"	Granite, with occasional vertical and oblique strings of small cavities.
1345'2" - 1345'8"	Aplite, nearly flat.
1345'8" - 1346'6"	pegmatite, cut by siderite veinlets dip 75°.
1346'6" - 1348'3"	Granite.
1348'3" - 1349'9"	Pegmatite.
1349'9" - 1360'	Quartz-pyrrhotite-pyrite-marcasite vein with calcite, ankerite, fluorite, quartz, and traces of galena. Adjacent granite altered.
1360' - 1361'	Granite.
1361' - 1366'	Altered and darker granite with $1\frac{1}{2}$ " vein of quartz, fluorite, pyrrhotite, pyrite, reddened with hematite at margin.
1366' - 1374'10 $\frac{1}{2}$ "	Granite with thin red veinlets and $\frac{1}{2}$ " pyrite veinlet at 1374'4". Joints at 1368'6" (50°) and 1371' (45°).
1374'10 $\frac{1}{2}$ " - 1376'	Irregular pegmatite.

1376'	- 1378'	Granite.
1378'	- 1378'6"	Aplite.
1378'6"	- 1379'	Granite.
1379'	- 1381'2"	Granite.
1381'2"	- 1383'2"	Aplite with pegmatite margins.
1383'2"	- 1385'	Granite, foliation dip 10-15°.
1385'	- 1385'3"	Pegmatite.
1385'3"	- 1389'6"	Granite.
1389'6"	- 1389'7½'	Pegmatite, dip 20°.
1389'7½'	- 1393'6"	Slightly darker granite.
1393'6"	- 1394'	Augen of feldspar in granite.
1394'	- 1399'	Granite, a few crystals of chalcopyrite. Joint at 1397' (60°).
1399'	- 1399'3"	Quartz band, dip 40°.
1399'3"	- 1409'	Granite, many joints dip 80°.
1409'3"	- 1410'	Granite.
1410'	- 1411'5"	Pegmatite.
1411'5"	- 1412'	Granite.
1412'	- 1412'6"	Pegmatite, flat.
1412'6"	- 1417'6"	Granite.
1417'6"	- 1418'6"	Coarse pegmatite vein with mica <sup>3</sup> / <sub>4</sub> " across, little pyrite.
1418'6"	- 1422'	Granite; at 1422' crush (45°).
1422'	- 1430'	Granite cut by steep quartz vein 2½" thick.
1430'	- 1436'	Granite.
1436'	- 1437'	Pegmatite, irregular.
1437'	- 1440'4"	Granite.
1440'4"	- 1443'10"	Coarse pegmatite with mica.
1443'10"	- 1453'	Aplite, veneer of galena on joint at 1446' (61° rock bit drilling).
1453'	- 1457'	Pegmatite.
1457'	- 1459'	Granite; at 1459' molybdenite crystals in granite.
1459'	- 1460'6"	Granite; at 1460'6" pegmatite veinlet, dip 70°.
1460'6"	- 1480'	Granite, foliation dip 20°.
1480'	- 1482'6"	Pale green altered granite with 1½" quartz-purple fluorite veinlet.

- 1482'6" - 1509' Granite, joints at 1485' (50°); at 1509' veinlet with tourmaline (45°).
- 1509 - 1512'4" Granite.
- 1512'4" - 1514'7" Aplite, dip 45°-50°.
- 1514'7" - 1524'8" Granite with traces of calcite, fluorite, chalcopryrite. 1524'8" veinlet of deep purple fluorite.
- 1524'8" - 1527'11" Granite.
- 1527'11" - 1530'7" Aplite with pale purple fluorite veinlet (bottom 11" rock bit drilling).
- 1530'7" - 1531'3" Granite.
- 1531'3" - 1532'10" Aplite. Dip 10° at top, 40° at bottom.
- 1532'10" - 1535'1" Aplite, enclosing granite band, dip 20°.
- 1535'1" - 1536'5" Granite.
- 1536'5" - 1547'2" Aplite with some large foldspores, dip of base 70° to 80°.
- 1547'2" - 1558'2" Granite, foliation dip 15-20°.
- 1558'2" - 1568'5" Pale green granite with thin veinlets up to 1", dip 60-70°, containing green fluorite with pyrite, pyrrhotite and quartz.
- 1568'5" - 1575' Granite.
- 1575' - 1577'6" Granite, dark purple fluorite coating on joint.
- 1577'6" - 1577'9" Pegmatite.
- 1577'9" - 1579'6" Granite.
- 1579'6" - 1582' Irregular pegmatite.
- 1582' - 1585'4" Granite.
- 1585'4" - 1643'9" Granite, pale and altered,  $\frac{1}{2}$ " veinlets with quartz, green fluorite, traces of galena. (Rock bit drilling 39 1").
- 1643'9" - 1651'8" Pale altered granite with strong complex development of veinlets of reddish brown quartz, fluorite, pyrite, calcite.
- 1651'8" - 1653'4" Granite.
- 1653'4" - 1672'9" Granite, altered, becoming darker; cut by occasional reddish brown quartz veinlets dip 50-70° and some flat; up to  $\frac{3}{4}$ " thick but usually less than  $\frac{1}{2}$ ". Below 1655' a veinlet with pale green fluorite, quartz and stringers of galena.
- 1672'9" - 1675'8" Granite. Foliation, dip 15°.
- 1675'8" - 1708'6" Pale granite, veined by quartz and subsidiary purple and green fluorite, some pyrite and chalcopryrite, little epidote. (13'8" rock bit drilling from 1680'7").

British Geological Survey	1708'6"	- 1746'2"	Pale granite with occasional thin quartz veinlets, one 10" wide at 1736'2". Thin quartz veinlets with fluorite, pyrite, pyrrhotite (28'2" rock bit drilling).
	1746'2"	- 1815'8"	Granite, much broken up, with patches of chlorite and some tourmaline at 1769' (33' rock bit drilling).
	1815'8"	- 1820'	Granite.
	1820'	- 1825'	Granite with 5" aplite band, dip 65°.
	1825'	- 1871'	Granite with tendency to break into thin horizontal layers owing to jointing. (Rock bit drilling 24'1").
	1871'	- 1872'	Aplite, dip 70-80°.
British Geological Survey	1872'	- 1891'	Granite, with horizontal joints. (Rock bit drilling 4'11").
British Geological Survey	1891'	- 1903'2"	Granite, traces of ore minerals at 1895'-1898'6". Joints at 1001'-1902' (45°).
	1903'2"	- 1933'	Aplite, micaceous, dip at top 70-80°. (Rock bit drilling 13'1").
	1933'	- 1944'3"	Granite, some horizontal joints.
	1944'3"	- 1954'	Aplite.
	1954'	- 1978'	Granite, foliation dip 30°.
	1978'	- 1978 ½'	Pegmatite, irregular.
British Geological Survey	1978 ½'	- 1980'	Veinlets with quartz, siderite, sulphides, dip 60-80°.
British Geological Survey	1980'	- 1984'	Granite, small veinlets.
	1984'	- 1986'8"	Quartz vein 1½" in granite.
	1986'8"	- 1999'9"	Granite, with horizontal joints, 1' to 2' apart. Quartz-pyrite vein at 1996'10".
	1999'9"	- 2004'	Granite, at 2001' joint (30°). Quartz-pyrite vein at 2002'5", 3" thick.
	2004'	- 2004'2"	Pegmatite.
	2004'2"	- 2005'8"	Granite with vertical fractures.
British Geological Survey	2005'8"	- 2016'2"	Granite; joints at 2008' (50°), 2011' (45°), 2013' (50°), foliation dip 15°.
British Geological Survey	2016'2"	- 2016'7"	Pegmatite with thick muscovite wads.
	2016'7"	- 2032'7"	Somewhat darker granite with a few pegmatite and aplite veinlets up to 1½"; foliation dip 30°. Joints at 2018'½" (50°), 2021' (30°), 2028' (80°).
	2032'7"	- 2038'6"	Pale green granite beneath joint (45°) at 2032'9", grading down to normal granite. Joint 2033'6" (40°), 2036-7' (horizontal).
	2038'6"	- 2039'3"	Pegmatite, coarse, with occasional thick muscovite plates and a dark mineral. Dip, top and base, 20°.

- 2039'3" - 2039'11" Granite.
- 2039'11" - 2041'2" Pegmatite, similar to previous one, dip at top 10°, base 30°.
- 2041'2" - 2061'1" Granite, biotite becoming visible as additional constituent. Joints at 2048' (45°), 2050'6" (50°), 2052' (40°, slickensided down dip), 2054' (35-40°, brown coating), 2058' (45°), 2265'6" (45°).
- 2061'1" - 2067'8" Aplite with pegmatitic top and bottom; base dip 45°.
- 2067'8" - 2094'1" Darker granite with horizontal joints near top and base. Near vertical veinlets, 5/8". 2084'-2087'2" and 2089'2"-2090'10" of dark purple fluorite and hematite. Horizontal joints pass through veinlets.
- 2094'1" - 2109'11" Granite broken up and altered, numerous low-dipping joints.
- 2109'11" - 2110'3" Aplite with coarse feldspar at top, dip 5-10°.
- 2110'3" - 2135' Dark granite, solid, 2" quartz vein at 2113'10" (20°), at 2118'1" cavity with quartz, calcite, pyrite; 3" pegmatite at 2120'7", en echelon aplite veinlets 2130-2135'.
- 2135' - 2138'8" Granite with veinlet of deep purple fluorite, hematite, pyrite (70°).
- 2138'8" - 2150' Granite, joints at 2143' (45°), 2148-9' (55°).
- 2150' - 2150'8" Pegmatite, flat.
- 2150'8" - 2157' Granite with biotite, foliation near horizontal.
- 2157' - 2180' Dark granite, 2180' irregular pegmatite clot.
- 2180' - 2185' Granite.
- 2185' - 2185'2" Pegmatite.
- 2185'2" - 2190'1" Granite.
- 2190'1" - 2190'3" Pegmatite.
- 2190'3" - 2200' Granite, joints widely spaced, horizontal.
- 2200' - 2201'8" Dark coarse granite, pegmatite clots at base with tourmaline.
- 2201'8" - 2209'10" Dark granite.
- 2209'10" - 2234'6" Granite slightly lighter, finer grained. Joints at 2210' (45°). Purple fluorite patch at 2222'7" with chalcocopyrite.
- 2234'6" - 2267'11" Granite, with minor variations in colour and texture. Joints at 2257' (50°), 2259' (30°). Horizontal joints at 1-3 intervals.
- 2267'11" - 2269'9" Coarse pegmatite, large pink feldspars, finely micaceous groundmass, thick micas. Cavities with quartz. Dip at top 5°, base 15°. Horizontal joints.

2269'9"	- 2271'4"	Pale granite with some chlorite.
2271'4"	- 2272'1"	Pegmatite.
2272'1"	- 2278'	Pale granite with chlorite, joint with slickensides.
2278'	- 2282'3"	Normal granite, junction with plae granite dips 40°.
2282'3"	- 2282'8"	Pegmatite.
2282'8"	- 2297'7"	Pale granite, somewhat altered.
2297'7"	- 2320'9"	Granite, many horizontal joints; at 2300'5", tourmaline; at 2315' quartz-tourmaline vein (35°).
2320'9"	- 2321'6"	Aplite with tourmaline (35°)
2321'6"	- 2333'11"	Granite; joints at 2323'6" (45°), 2331' (45°), 2332'3" (45°).
2333'11"	- 2335'2"	Aplite, with pegmatite margins, flat.
2335'2"	- 2336'6"	Granite.
2336'6"	- 2344'11"	Quartz vein with little fluorite in altered granite (60°).
2344'11"	- 2396'1"	Normal biotite-bearing granite, rare aplite and hematite veinlets. Many joints at 2345'-75' (45°); 2375'-2377'6" (horizontal), 2381'-2383' (45°, 60°).
2396'1"	- 2470'6"	Paler granite, becoming darker. Pyrite at 2403'5". (Rock bit drilling 6'7"). Pegmatite veinlets rare.
2470'6"	- 2572'6"	Biotite-bearing granite, some diagonal joints with traces of chloritic alteration. 2572'6" coarse biotite schieve enclosed in granite. (Rock bit drilling 23').
2572'6"	- 2599'	Biotite-bearing granite, numerous horizontal joints, foliation still apparent but less obvious than near top.
2599'	- 2600'	Granite, pyrrhotite veneer on joint.
2600'	- 2605'8"	Granite, horizontal joints. 2605'8" pegmatite, 3/4".
2605'8"	- 2649'3"	Granite, with a few thin pegmatite and aplite veinlets.