

085

206086

2.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, carbonaceous	0.030	86.250	
SILTSTONE, grey, laminated with fine sandy lenses	0.680	86.930	
<u>COAL</u> , stony to dull with minor bright bands, broken	0.220	87.150	
CLAYSTONE, grey, fretted and crumbly, fissile, grades to underlying unit	1.350	88.500	
SILTSTONE, grey to dark grey, interbedded with fine sandy phases, bedding laminated to thin, wavy, flaggy to slabby, grades to underlying unit	5.410	93.910	
SANDSTONE, light grey, medium, lithic, bedding laminated to thick, subparallel to wavy, blocky to massive, broken at base	8.300	102.210	
CLAYSTONE, carbonaceous to coaly	0.170	102.380	
CLAYSTONE, brown, compact	0.040	102.420	
CLAYSTONE, dark brown to black, carbonaceous at top, soft and puggy in centre	0.600	103.020	

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3.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
SILTSTONE, grey, friable and crumbly due to exposure, interlaminated with fine sandy phases, grades to underlying unit	0.790	103.810	
SANDSTONE, grey, very fine, numerous silty interlaminations, soft and crumbly	3.860	107.670	
SILTSTONE, grey to dark grey, soft and crumbly, carbonaceous in places, grades to underlying unit, bedding laminated and wavy, flaggy to fissile	3.640	111.310	
MUDSTONE LAMINITE, grey to black alternating laminations, carbonaceous in part, grades to siltstone at base	0.625	111.935	
SANDSTONE, light grey, medium to coarse, lithic	0.270	112.205	
CLAYSTONE, carbonaceous	0.190	112.395	
CLAYSTONE, grey, minor carbonaceous remains	0.115	112.510	
CLAYSTONE, carbonaceous to coaly	0.075	112.585	
CLAYSTONE, grey, sporadic carbonaceous lenses and wisps, soft and fissile in part	0.450	113.035	

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4.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, carbonaceous to coaly	0.230	113.265	
CLAYSTONE, grey, sporadic carbonaceous remains	0.185	113.450	
CLAYSTONE, dark grey to black, carbonaceous and coaly in parts, broken in centre	0.725	114.175	
<u>COAL</u> , dull with minor bright bands	0.080	114.255	
CLAYSTONE, dark grey, carbonaceous in part, completely broken at top, thin coaly lenses at base	0.670	114.925	
SANDSTONE, light grey, medium, lithic, broken in centre, silty at top and base, bedding thin to medium, sub-parallel, numerous vertical and sub-vertical fractures	2.530	117.455	
SILTSTONE, grey, numerous claystone laminations, flaggy	0.745	118.200	
IGNEOUS, cream to white, fine, crystalline, moderately hard	0.770	118.970	
CLAYSTONE, carbonaceous, sporadic thin grey to dark brown claystone bands and lenses, core broken in places	4.730	123.700	

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness</u> (m)	<u>Estimated Depth to Base of Stratum</u> (m)	<u>Remarks</u>
CLAYSTONE, light brown, compact, waxy	0.310	124.010	
CLAYSTONE, carbonaceous, minor coaly lenses	0.635	124.645	
CLAYSTONE, cream to light brown, waxy, compact, broken near base, fissile to flaggy	0.385	125.030	
CLAYSTONE, carbonaceous to coaly	0.310	125.340	
CLAYSTONE, brown, waxy, compact, thin carbonaceous wisps	0.055	125.395	
<u>COAL</u> , dull with numerous bright bands	0.070	125.465	
, dull to stony, broken	0.140	125.605	
, stony to dull with minor bright bands, broken	0.170	125.775	
CLAYSTONE, grey to brown, waxy, carbonaceous lenses in centre, sandy texture at base	1.350	127.125	
CLAYSTONE, black, carbonaceous to coaly	0.425	127.550	
CLAYSTONE, interbanded carbonaceous and brown lenses, compact	0.570	128.120	
<u>COAL</u> , dull with minor bright bands	0.155	128.275	
CLAYSTONE, green, hard	0.020	128.295	

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
<u>COAL</u> , stony to dull with minor bright bands	0.250	128.545	
CLAYSTONE, greenish grey, waxy, compact, soft and puggy at base, flaggy	0.270	128.815	
CLAYSTONE, carbonaceous to coaly, sporadic bright wisps	0.820	129.635	
CLAYSTONE, brown to grey interbanded with carbonaceous lenses, minor coaly bands, broken, flaggy	2.160	131.795	
MUDSTONE, grey to dark grey, laminated, bedding wavy, silty bands in places, flaggy to slabby	4.835	136.630	
CLAYSTONE, brown, minor carbonaceous bands near top, puggy at basal 0.100m, plant remains on partings, waxy	0.850	137.480	
CLAYSTONE, carbonaceous, soft	0.215	137.695	
CLAYSTONE, brown	0.090	137.785	
CLAYSTONE, carbonaceous	0.335	138.120	
CLAYSTONE, coaly	0.185	138.305	
<u>COAL</u> , stony, broken	0.185	138.490	
CLAYSTONE, greenish grey	0.055	138.545	

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CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness</u> (m)	<u>Estimated Depth to Base of Stratum</u> (m)	<u>Remarks</u>
<u>COAL</u> , stony, minor bright bands	0.170	138.715	
, dull with numerous bright bands, broken	0.105	138.820	
CLAYSTONE, dark grey to black, carbonaceous in part	0.155	138.975	
<u>COAL</u> , stony to dull with minor bright bands, broken	0.430	139.405	
SILTSTONE, grey, laminated, bedding wavy to sub-parallel, sandy in places, flaggy to slabby, thin coaly band (0.100m thick) at 140.55 m	4.850	144.255	
CLAYSTONE, brown to dark brown, carbonaceous at base, broken	0.300	144.555	
<u>COAL</u> , stony, broken	0.250	144.805	
CLAYSTONE, carbonaceous, broken at top, sporadic fissile brown lenses, minor coaly bands	1.170	145.975	
CLAYSTONE, brown, fissile	0.220	146.195	
CLAYSTONE, carbonaceous to coaly, sporadic thin brown bands	0.640	146.835	
CLAYSTONE, brown, fissile	0.240	147.075	
CLAYSTONE, black to brown, coaly at top and base	0.260	147.335	

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, grey to black, carbonaceous bands in places, flaggy to fissile	0.645	147.980	
<u>COAL</u> , stony to dull with minor bright bands, broken	0.220	148.200	
CORE LOSS	0.160	148.360	
CLAYSTONE, brownish grey, compact, waxy	0.035	148.395	
<u>COAL</u> , stony to dull with minor bright bands	0.190	148.585	
CLAYSTONE, brown, waxy, compact, interbedded with carbonaceous bands	0.380	148.965	
<u>COAL</u> , dull with minor bright bands, broken	0.140	149.105	
CORE LOSS	0.150	149.255	
CLAYSTONE, speckled brown	0.035	149.290	
<u>COAL</u> , stony to dull with minor bright bands	0.170	149.460	
CLAYSTONE, brown to black, interbanded carbonaceous and coaly lenses with wavy and compact bands, broken in places	0.670	150.130	

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CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, grey, silty at base, grades to underlying unit	0.610	150.740	
SANDSTONE, light grey, medium to coarse, minor fine phases, lithic, sporadic coaly inclusions mostly on partings, bedding thin to very thick, subparallel to wavy, blocky to massive	21.790	172.530	
CLAYSTONE, black, carbonaceous, broken	0.080	172.610	
SANDSTONE, light grey, medium to coarse, lithic, siltstone blebs at base, bedding very thick, massive, irregular basal contact with coal	4.725	177.335	
<u>COAL</u> , dull	0.020	177.355)
)
CLAYSTONE, dark brown, compact, hard	0.030	177.385)
)
<u>COAL</u> , dull, bright wisps, pyrite on fracture	0.180	177.565)
)
CLAYSTONE, carbonaceous	0.045	177.610	) BLUE UPPER SEAM
)
<u>COAL</u> , dull with minor bright bands	0.055	177.665)
			) Thickness:
CLAYSTONE, carbonaceous	0.040	177.705	) 2.720m
)
CLAYSTONE, brown, waxy, fissile	0.060	177.765)
)
<u>COAL</u> , dull with minor bright bands, slickensided upper surface	0.230	177.995)

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness</u> (m)	<u>Estimated Depth to Base of Stratum</u> (m)	<u>Remarks</u>
CLAYSTONE, brown, waxy, fissile	0.060	178.055)	
)	
<u>COAL</u> , dull	0.025	178.080)	
)	
CLAYSTONE, brown, waxy, fissile	0.030	178.110)	
)	
<u>COAL</u> , dull with minor bright bands, thin claystone partings at top, minor calcite on cleat	0.600	178.710)	
)	
CLAYSTONE, brown, waxy, fissile, minor carbonaceous wisps	0.070	178.780)	BLUE UPPER
		)	SEAM
<u>COAL</u> , dull with minor bright bands	0.180	178.960)	
)	
CLAYSTONE, dark brown, soft, fissile	0.025	178.985)	
)	
<u>COAL</u> , dull with numerous bright bands, broken	0.080	179.065)	
)	
CLAYSTONE, brown	0.030	179.095)	
)	
<u>COAL</u> , dull with minor bright bands, sporadic thin claystone partings	0.960	180.055)	
)	
CLAYSTONE, dark grey to dark brown, carbonaceous in part, sporadic bright coaly lenses	0.430	180.485	
<u>COAL</u> , dull with numerous bright bands	0.080	180.565	
CLAYSTONE, carbonaceous to coaly, broken at base	0.135	180.700	

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11.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, grey, waxy, compact, coaly lens near base	0.875	181.575	
<u>COAL</u> , stony, broken	0.070	181.645	
CLAYSTONE, grey	0.440	182.085	
<u>COAL</u> , stony	0.120	182.205	
, dull with numerous bright bands	0.045	182.250	
CLAYSTONE, grey, waxy, compact	0.625	182.875	
CLAYSTONE, dark grey to black, carbonaceous to coaly	0.205	183.080	
CLAYSTONE, grey, waxy, compact	0.295	183.375	
CLAYSTONE, white to cream, hard and soft wavy laminae, ? igneous remnant	0.070	183.445	
MUDSTONE, grey to dark grey, carbonaceous in parts, numerous fine sandy phases, bedding laminated to thin, subparallel, flaggy	3.390	186.835	
<u>COAL</u> , dull with minor bright bands, broken	0.125	186.960	
MUDSTONE, as for 3.390 m unit above	1.000	187.860	
CLAYSTONE, carbonaceous to coaly, semi conchoidal fracture	0.520	188.480	

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12.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
<u>COAL</u> , stony	0.350	188.830	
MUDSTONE, grey to dark grey, carbonaceous at top and base, numerous fine sandy phases, mostly flaggy	2.170	191.000	
<u>COAL</u> , dull with minor bright bands, broken at top	0.440	191.440	) ) BLUE) LOWER
CLAYSTONE, dark brownish-grey, waxy, compact	0.075	191.515	) COAL) MEMBER
<u>COAL</u> , stony, broken	0.450	191.965	) PLY 2)
CORE LOSS	0.120	192.085))
<u>COAL</u> , stony, broken	0.060	192.145)
MUDSTONE, grey, carbonaceous at top, broken at top, grades to fine grained sandstone at base, flaggy	1.000	193.145	
SANDSTONE, light grey, fine at top grading to medium and coarse, lithic, bedding laminated to thick, parallel to subparallel, blocky to massive, sporadic lenses of carbonaceous debris, rough subvertical fracture near base	12.840	205.985	
CLAYSTONE, black, carbonaceous, thin coaly laminae at top, grades to underlying laminite	0.840	206.825)) PLY 3)

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13.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
SANDSTONE AND SILTSTONE LAMINITE, ratio 50:50. Sandstone, grey to dark grey, fine, lithic; siltstone, dark grey to black, carbonaceous, bedding subparallel, flaggy	0.550	207.375	) ) ) ) ) PLY 3
<u>COAL</u> , dull with minor bright bands, broken at base	0.295	207.670))
SILTSTONE, grey to dark grey, carbonaceous and coaly bands at top, sporadic slickensided surfaces, flaggy to slabby, numerous very fine sandy phases in centre, subvertical fracture at base, irregular slickensided contact with underlying coal	2.920	210.590)
<u>COAL</u> , stony	0.065	210.655	) ) CORNWALL
CLAYSTONE, brown, soft	0.020	210.675	) SEAM)
<u>COAL</u> , stony to dull with minor bright bands	0.500	211.175	) PLY 4
, stony	0.065	211.240)
, dull and bright	0.035	211.275))
CLAYSTONE, carbonaceous	0.015	211.290))
<u>COAL</u> , dull with minor bright bands	0.560	211.850)
CLAYSTONE, grey, carbonaceous lenses in top half, slickensided surfaces at top	1.120	212.970)

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
SANDSTONE, light grey, fine at top grading to medium and coarse, sporadic very coarse to granular phases, minor carbonaceous and coaly lenticules bedding thin to thick, subparallel, massive	20.840	233.810	
CLAYSTONE, brown, hard, ? sideritic	0.080	233.890	
MUDSTONE, greenish-grey, moderately soft, hard ? sideritic bands at 236 m and 237 m	4.820	238.710	
SANDSTONE, light grey, fine to medium, lithic	1.790	240.500	
SANDSTONE, as for 1.790 m unit above,	5.140	245.640	Hole cleaned out & continued beyond original
CLAYSTONE, black, coaly	0.030	245.670	TD - 240.5m - coring commenced
CLAYSTONE, brown, carbonaceous	0.015	245.685	On 21/1/85
CLAYSTONE, black, coaly	0.060	245.745	
MUDSTONE, grey to grey/brown, sandy in part	0.865	246.610	
SANDSTONE, fine grained, grey, lithic, with numerous dark grey mudstone bands up to 4 cm thick	0.810	247.420	

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15.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
<u>COAL</u> , dull with minor bright bands	0.230	247.650	
MUDSTONE, grey to grey/green - parts readily along bedding planes and breaks up readily	4.670	252.320	
<u>COAL</u> , dull with minor bright bands	0.180	252.500	) Top of Millbrook Coal Membe
, dull	0.090	252.590)
)
CLAYSTONE, dark brown to black, coaly in part - carbonaceous throughout	0.220	252.810)
)
CLAYSTONE, grey, hard	0.010	252.820)
)
<u>COAL</u> , dull	0.005	252.825)
)
CLAYSTONE, grey, hard, ? tuffaceous	0.025	252.850)
)
CLAYSTONE, black, coaly	0.035	252.885	) MILLBROOK) COAL MEMBEI
<u>COAL</u> , dull	0.045	252.930)
			) PLY 11
CLAYSTONE, brown	0.030	252.960)
			) Thickness
<u>COAL</u> , dull	0.040	253.000	) 1.175 m
)
CLAYSTONE, black, carbonaceous	0.085	253.085)
)
<u>COAL</u> , dull	0.160	253.245)
)
CLAYSTONE, brown, hard	0.010	253.255)
)
<u>COAL</u> , dull	0.240	253.495)

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16.

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, black, carbonaceous	0.020	253.515	
MUDSTONE, grey to grey/brown	0.215	253.730	
SANDSTONE, grey, fine grained, lithic with minor siltstone bands	1.000	254.730	
MUDSTONE, grey/green	0.080	254.810)
)
CLAYSTONE, black, coaly	0.100	254.910)
)
<u>COAL</u> , dull	0.210	255.120	) FENTON
			) SEAM
CLAYSTONE, brown, hard	0.040	255.160	) PLY 12
)
<u>COAL</u> , dull	0.080	255.240)
, dull with numerous bright bands	0.260	255.500)
, dull	0.070	255.570)
)
CLAYSTONE, grey, hard	0.025	255.595)
)
<u>COAL</u> , dull	0.040	255.635)
)
MUDSTONE, grey, hard	0.056	255.690	) Drilling rate
			) slow due to
			) water loss.
			) 2-4 m per
<u>COAL</u> , dull	0.380	256.070	) 1000 gallons
			) of water.
			) 6-7 loads
CLAYSTONE, grey to grey/brown	0.035	256.105	) per day
			) possible due
			) to poor road
<u>COAL</u> , dull	0.270	256.375	) conditions.
, dull with numerous bright bands	0.470	256.845)

CORNWALL COAL MT NICHOLAS D.D.H. 17

	<u>Estimated Thickness (m)</u>	<u>Estimated Depth to Base of Stratum (m)</u>	<u>Remarks</u>
CLAYSTONE, brown, soft	0.010	256.855 )	) FENTON
<u>COAL</u> , dull with numerous bright bands	0.095	256.950 )	) SEAM
SILTSTONE, grey, hard, with minor claystone bands (good floor)	0.670	257.620	Hole terminated on 23/1/85 at 11.35 am.
MUDSTONE, grey, soft	0.280	257.900	Drilling further would have been very diffi- cult due to tight mud- stones.

BASE OF HOLE