

SOUTHERN NORTH SEA STRATIGRAPHY



| ERA / PERIOD | SUPER GROUP | GROUP | FORMATION | MEMBER | LITHOLOGY | DESCRIPTION | AGI Ma |
|-----------------|----------------|--------------|---------------------------------------|--------------------------------|---------------------|---|-----------|
| PLEISTOCENE | | | UNDIFFERENTIATED | | | Dark grey glutinous clay containing pebbles and/or bands of chert, igneous rock, loose sand grains, coal, limestone, shell fragments etc. | 0.0 |
| TERTIARY | | NORTH SEA | UNDIFFERENTIATED | | | Soft grey clay with occasional sand horizons, shell fragments, glauconite, the clays can be micromicaceous. | 1.6 |
| CRETACEOUS | | CHALK | UNDIFFERENTIATED | | | White to pale grey Chalk, becoming pink to red near the base. Often with abundant chert. | 65.0 |
| | _ | | PLENUS MARL | | | Dark grey/black carbonaceous Claystone. | |
| | | | HIDRA RED CHALK | | | White to light grey Chalk, becoming pink towards base. Minor Chert. Pink Chalk to red-brown Marls and calcareous Claystones. | |
| | | CROMER KNOLL | SPEETON CLAY | | | Medium to dark grey Claystones and Shales | |
| | | | SPILSBY SANDSTONE | | | Very fine to medium grained, unconsolidated Sandstone. | |
| JURASSIC | | HUMBER | KIMMERIDGE CLAY | | | Grey to dark grey Claystone. | 152.1 |
| | | | CORALLIAN LIMESTONE | | | Pale grey and colitic Limestone. | |
| | | WEST SOLE | OXFORD CLAY UNDIFFERENTIATED | | | Grey Claystone with ironstone nodules. Grey Claystone with beds of Siltstone and thin Sandstone. | |
| | | LIAS | UNDIFFERENTIATED | | | Variably light grey, grey, dark grey and greyish green, micromicaceous and pyritic Claystones. | 209. |
| PERMAN | | RHAETIC | WINTERTON | | | Typically red or grey-green non-calcareous Claystones. | |
| | | | | RHAETIC SANSTONE | | Fine to medium grained Sandstone often with Dolomite or Dolomitic Limestone stringers. | |
| | H | | | | | Typically red or grey-green non-calcareous Claystones. | <u> </u> |
| | | HAISBOROUGH | TRITON ANHYDRITIC DUDGEON SALIFEROUS | UPPER KEUPER KEUPER ANHYDRITIC | | Red-brown Claystone with subordinate amounts of grey-green Claystone. Traces of Anhydrite | |
| | | | | MIDDLE KEUPER | | and Dolomite may occur throughout. | |
| | | | | KEUPER HALITE | | Halite, colourless or pale yellow orange. | |
| | | | | LOWER KEUPER | | Red-brown Claystones with nodules and thin beds of anhydrite. | |
| | | | | UPPER DOWSING | | Red-brown Claystones with nodules and thin anhydrites. Slightly more Dolomitic than above. | |
| | | | DOWSING DOLOMITIC | MUSCHELKALK HALITE | | Colourless or pale yellow orange Halite. | |
| | | | | LOWER DOWSING | | Red-brown Claystone with grey-green Claystone and Siltstone. Dolomite and Anhydrite beds. | |
| | | | | ROT HALITE ROT CLAYSTONE | | Colourless or pale yellow orange Halite. Thin red-brown silty Claystones. | |
| | | | BUNTER SANDSTONE | NOT CENTOTONE | | Red brown, fine to medium grained, often friable Sandstone, interbedded with red brown | - |
| | | | BUNTER SHALE | ROGENSTEIN | | claystones. Red-brown claystone, often silty or associated with minor amounts of grey-green siltstone and | |
| | | BACTON | | BUNTER CLAYSTONE | | anhydrite. Red-brown claystones predominate and in places may be silty. Traces of dolomite and | |
| | | | | BROCKELSCHIEFER | | anhydrite present. Overall, less silty than the Rogenstein. Red-brown clays and siltstones with occasional fine grained sandstones. Claystones often | |
| | | Z5 | GRENZANHYDRIT | | | grade to silt. White to light grey, hard Anhydrite. | 250 |
| | | Z4 | ALLER HALITE | | | Halite and various other salts such as carnalite, sylvite and polyhalite. Variably colourless, yellow, pink, red and orange. | - |
| | | | | ALLER POTASH | | Potassium and magnesium salts. | |
| | | | PEGMATITANHYDRIT | | | White to light grey, hard Anhydrite. | |
| | | | ROTER SALZTON | | | Red or red-brown Claystones. | |
| | | Z3 | LEINE HALITE | | | Halite with various other potassium and magnesium salts such as Carnalite, Sylvite and Polyhalite. Variably colourless, yellow, pink, red and orange. | |
| | TEIN | | HAUPTANHYDRIT | | | Off white to cream, light grey Anhydrite. | |
| | HST | | PLATTENDOLOMIT | | | Light brownish grey to dark grey, dark grey-brown Dolomite and Dolomitic Limestone. | |
| | ZECHS. | | GRAUER SALZTON | | ((((((())) | Thin grey Claystone / Siltstone. | |
| | | | DECKANHYDRIT | | | Thin white to off white, cream Anhydrite. Colourless to pale pink and orange Halite. | |
| | | Z 2 | STASSFURT HALITE | STASSFURT POTASH | ************ | Potassium and magnesium salts, especially polyhalite. | |
| | | | BASALANHYDRIT | | | White to off white, pale cream to pale grey Anhydrite. | |
| | | | HAUPTDOLOMIT | | | Grey/dark grey, tan, argillaceous Dolomite, Dolomitic Limestone or Limestone | |
| | | Z1 | WERRAANHYDRIT | | | White to cream, pale grey, hard Anhydrite with occasionally Dolomite interbeds and lenses. | |
| | | | ZECHSTEINKALK | | | Dark grey, brown black Dolomite with thin Anhydrite stringers and nodules. | 4 |
| | | ROTLEIGENDES | KUPFERSCHIEFER UPPER LEMAN SANDSTONE | | | Black, carbonaceous, micaceous, pyritic Shale. Thin red-brown and greenish-grey, fine to medium and occasionally coarse grained Sandstone. Neighbor to green process. | 268.8 |
| | | | SILVERPIT | | . * . * . * . * . * | Variably poor to good porosity. Red-brown Claystones and Siltstones. | |
| | | | | SILVERPIT HALITE | | Halite, colourless or pale yellow orange. Thin red-brown and greenish-grey, fine to medium and occasionally coarse grained Sandstone. | |
| | | | LOWER LEMAN SANDSTONE | ZONE 3 | | Variably poor to good porosity. | 295.1 |
| CARBONIFEROUS | UPPER | STEPHANIAN | BARREN RED BEDS | ZONE 2 ZONE 1 | | Interbedded red-brown Sandstones, Siltstones and Shales. Occasional Gravel and Pebble beds. | |
| | | WESTPHALIAN | COAL MEASURES | D COAL MEASURES | | Typically white to grey in colour with finer sediments being darker. Thin Coal seams, Sandstones and Siltstones. | 304 |
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| | | | | A COAL MEASURES | | | |
| 75 | | | MILL STONE GRIT | NAMURIAN B | | Interbedded Sandstones, Siltstones and Shale cyclothems. Medium to dark grey, dark blue- | 313.0 |
| δ | | NAMURIAN | MILLSTONE GRIT | 10 010101010 | | grey, hard, blocky, silty, carbonaceous and micromicaceous Claystones. Very pale grey to pale yellow-brown, very fine to medium, rarely coarse grained Sandstones. Non or very rare Coal | |