

CLIENT:

FUGRO ENGINEERING SERVICES LIMITED

ENCLOSURE:

11

TITLE:

CORE DESCRIPTION CHART

SCALE:

1:50

WELL:

C5d2

GLE:

171m

INTERVAL:

0m - 24m

TD:

24m

SURFACE POSITION:

X:452791, Y: 4236597

ADDRESS:

Fugro Robertson Limited
Llandudno, North Wales LL30 1SA
United Kingdom
Telephone: +44(0)1492 581811
Facsimile: +44(0)1492 583416
Telex: 61595 (ROBRES G)
E-mail: info@fugro-robertson.com
Website: www.fugro-robertson.com

DETAILS:

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AUTHORS: O. DAVIS
REPORT NO: 7166/lb
PROJECT NO: GF721
SOFTWARE: WellCAD 4.1

fugro

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LEGEND

LITHOLOGY

claystone

sandy mudstone

siltstone

Mud matrix supported conglomerate

limestone

SAMPLES

M

 Micropalaeontology

N

 Nanopalaeontology

P

 Palynology

LOGGER'S DEPTH	AGE	BIOZONE	CORE CONDITION	SAMPLES	GRAIN SIZE AND SEDIMENTARY STRUCTURES	LITHOLOGY	WELLSITE DESCRIPTION	CORE DESCRIPTION	BIOSTRATIGRAPHIC ANALYSIS
1m:50m					<div><div>cobbles/boulders</div><div>Pebbles</div><div>Gravels</div><div>Coarse sand</div><div>Medium sand</div><div>Fine sand</div><div>Very fine sand</div><div>Mudstone</div><div>Very fine sand</div><div>Mudstone</div><div>Anthracite Coal</div></div>				
0.0	RECENT			P			HUMUS with sand and gravel	Modern day soil, roots and plant material present.	P: SABN fungal spores, CMN Asteraceae Cichorioideae. Presence of Zygnema type
0.5									
1.0							CLAY: weathered with angular limestone-gravel. Brown-Grey		
1.5									
2.0								CLAY: homogeneous with localised clast-rich layers (clasts vary in size up to several cm across) and carbonate gravel scattered throughout.	
2.5									
3.0				N				Clay is dark brown to yellowish brown in colour.	N: CMN Sphenolithus neoabies, OCC small Gephyrocapsa spp
3.5				P			CLAY: with angular limestone-gravel. Yellowish-Brown		P: Very impoverished palynoflora
4.0									
4.5								Concentrated gravel and plant material at 4.50m.	
5.0									
5.5									
6.0				M				CLAY: homogeneous with sporadic gravel scattered throughout.	M: Moderately diverse assemblage including OCC Globigerina decoraperta.
6.5								Lignite, organic matter, and concretions are concentrated at the base of the bed.	
7.0				P					P: ABN Asteraceae Cichorioideae, CMN bisaccates
7.5									
8.0									
8.5				N			CLAY: sandy with weathering oxidation / Limestone and charcoal concretions rich (centimetre- scale). Stiff. Red to chestnut brown with grey patches		N: Impoverished assemblage
9.0									
9.5								CLAY: with sand horizons. Rich in organic matter in the form of pellets and lignite concretions. Black (degrading) root systems were observed at 9.40-9.50m.	P: Very impoverished in palynomorphs, PRES Chomotriletes (Concentricystes)
10.0				P					
10.5									
11.0									
11.5				M					M: Very poor microfossil recovery
12.0									
12.5									
13.0									
13.5				P					P: Very impoverished in palynomorphs
14.0									
14.5				N					N: OCC Cyclicargolithus floridanus
15.0									
15.5									
16.0									
16.5							CLAY: slightly sandy with weathering oxidation, with rounded very fine gravel and charcoal concretions (millimetre- scale). Stiff. Red-Brown.	CLAY: with suspended gravel. A concentrated sandy horizon occurs at 13m. Although rich in organic material, there is less observed between 6-10m.	P:Very impoverished in palynomorphs
17.0				P					
17.5				M					M: RARE Globigerinoides trilobus, OCC Cenosphaera spp. (radiolaria)
18.0									
18.5									
19.0									
19.5									
20.0				M				LIMESTONE: large clasts, possibly brecciated, and a high clay content which could be matrix or fracture fill. This horizon marks the boundary between clay organic-rich section and the limestone unit at the base of the borehole.	M: ABN rudist debris, PRES Orbitoides spp.; Rudist packstone; late Campanian-Maastrichtian; F4 of Accordi et al. (1998)
20.5				N					N: PRES Gephyrocapsa spp.
21.0				M				LIMESTONE: vuggy, with local stylolites. Vugs are filled by clay and clasts. There is a faint lamination visible in the rubbled pieces.	M: CMN planktonic foraminifera, Acarinina spp. and Globigerinatheka spp, PRES Acarinina bullbrooki, Acarinina topilensis and Hantkenina spp.; planktonic foraminiferal wackestone; Middle Eocene (P12-P10 zones); F15 of Accordi et al. (1998)
21.5				P					P: Very impoverished in palynomorphs
22.0								The lower section is considerably whiter, and is believed to be chalky. Local shell fragments occur in the rubbled core. The base of the core appears to more heavily brecciated than the limestone above. The fractures are filled with calcite cements, with abundant manganese mottling (mineralisation).	M: CMN planktonic foraminifera, Acarinina spp., Acarinina topilensis and Globigerinatheka spp, PRES Morozovella spp., Morozovella spinulosa, Acarinina bullbrooki and Hantkenina spp.; planktonic foraminiferal wackestone; Middle Eocene (P12-P10 zones); F15 of Accordi et al. (1998)
22.5				M					
23.0									
23.5									
24.0	MIDDLE EOCENE, LUTETIAN - ?BARTONIAN			M					M: CMN planktonic foraminifera, Acarinina spp., Acarinina topilensis and Globigerinatheka spp, PRES Morozovella spp., Morozovella spinulosa, Acarinina bullbrooki and Hantkenina spp.; planktonic foraminiferal wackestone; Middle Eocene (P12-P10 zones); F15 of Accordi et al. (1998)