CLIENT:

FUGRO ENGINEERING SERVICES LIMITED

ENCLOSURE:

8

TITLE:

CORE

DESCRIPTION CHART

SCALE:

1:50

WELL:

C5b

TD:

23.7m

GLE:

174m

SURFACE POSITION:

X:452886, Y: 4236474

INTERVAL:

0m - 23.7m

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DETAILS:

DATE:	**APRIL, 2012**
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REPORT NO:	**7166/lb**
PROJECT NO:	**GF721**
SOFTWARE:	**WellCAD 4.1**

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LEGEND

LITHOLOGY

- claystone
- Mud matrix supported conglomerate
- marl
- limestone

SAMPLES

- M — Microplaeontology
- N — Nannopalaeontology
- P — Palynology

LOGGER'S DEPTH	AGE	BIOZONE	CORE CONDITION	SAMPLES	WELLSITE DESCRIPTION	CORE DESCRIPTION	BIOSTRATIGRAPIC ANALYSIS
1m:50m							
0.0	RECENT			P	CLAY, humus rich with gravel	Modern day soil, sandy clay, with several modern roots.	P: ABN fungi and algal cysts, CMN bisaccates, Chenopodiaceae and Asteraceae Cichorioideae, PRES Hystrichosphaeropsis obscura
1.5				P			P: Impoverished in palynomorphs, PRES fungi, PRES ?Mendicodinium robustum
2.0					CLAY, calcareous with angular limestone gravel. Beige with white patches	Large carbonate clast horizon	
2.5							
3.0				P			P: Impoverished in palynomorphs PRES fungi
3.5						CLAY SUPPORTING CONGLOMERATE: 1mm-7cm large carbonate clasts suspended sporadically in a yellowish clay. No apparent lamination/horizons apart from a concentration of clasts at 1.50m, 2.75m, 5.50m.	
4.0							
4.5						Density of clasts increases in between 3.40-4.60 it can be classed as mud-supporting conglomerate.	
5.0				P			P: Very impoverished in palynomorphs
5.5							M: OCC Orbulina universa
6.0							
6.5		N21		M N			M: Moderately diverse assemblage including OCC Sphaeroidinellopsis sphaeroides and CMN Globigerina decoraperta N: TOP small Gephyrocapsa spp.
7.0							ABN Reticulofenestra spp., Calcidiscus leptoporus and Coccolithus pelagicus. CMN small Gephyrocapsa spp. PRES Pseudoemiliana lacunosa, Sphenolithus heteromorphus (reworked)
7.5							M: OCC shell debris, RARE Cibicides lobatulus
8.0						CLAY: homogeneous, calcareous, with a concentration of clasts at 8.60m.	
8.5				N	CLAY, calcareous, very stiff, with decimeter scale bedding inclined at 60°. Beige grey with ochre patches.		N: CMN Discoaster variabilis, TOP Paleocene reworking
9.0				M		Plant material was identified at the base of this bed. This is associated with convoluted bed contact.	M: moderately diverse assemblage including CMN Orbulina suturalis and Globigerina decoraperta
9.5				N			N: CMN Discoaster variabilis, PRES Sphenolithus neoabies, Top Cretaceous reworking
10.0				M			M: impoverished assemblage with RARE Globigerina decoraperta
10.5				P			P: SABN bisaccates, CMN Spiniferites ramosus gr., Operculodinium spp., PRES Mendicodinium robustum
11.0					MARL, dark grey	MARL: the convoluted bed contact at the top of the Marl unit marks a switch from calcareous claystone to marls, with evidence of lamination.	
11.5						Mottling was visible at the top of this unit.	
12.0							
12.5					LIMESTONE, beige grey	LIMESTOE: 0.2m thick 'bed' is believed to be a fallen limestone block which has been cored.	
13.0							
13.5							
14.0							M: Barren
14.5							
15.0							
15.5							
16.0							
16.5							
17.0							
17.5							
18.0					MARL, indurated, decimeter scale bedding at ? 60°. Fracture planes (also 60°) are smooth - ?shear planes	MARL: unit with little variation in grain size (clay locally silt) and few sedimentary structures, evidence of silty laminae and scour surfaces.	
18.5							M: Barren
19.0							
19.5							
20.0							
20.5							
21.0							
21.5							
22.0	EARLY - LATE PLIOCENE, ZANCLEAN - PIACENZIAN			N			"N: ABN Reticulofenestra spp.,Coccolithus pelagicus, and Calcidiscus leptoporus. PRES small Gephyrocapsa spp., Discoaster variabilis, BASE Paleocene reworking, BASE Cretaceous reworking
22.5				M			
23.0							
23.5							

GRAIN SIZE AND SEDIMENTARY STRUCTURES: cobbles/boulders; Pebbles; Granules; Coarse sand; Medium sand; Fine sand; Very fine sand; Argillaceous siltstone; Siltstone; Anhydrite/Coal