CLIENT:

FUGRO ENGINEERING SERVICES LIMITED

ENCLOSURE:

15

TITLE:

CORE

DESCRIPTION CHART

SCALE:

1:50

WELL:

C6c

TD:

39m

GLE:

-4m

SURFACE POSITION:

X:449729, Y: 4236722

INTERVAL:

0m - 39m

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REPORT NO: 7166/lb
PROJECT NO: GF721
SOFTWARE: WellCAD 4.1

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LEGEND

LITHOLOGY

- claystone
- siltstone
- sandstone
- Sand matrix supported conglomerate
- limestone

SAMPLES

- M — Micropalaeontology
- N — Nannopalaeontology
- P — Palynology

LOGGER'S DEPTH	AGE	BIOZONE	SAMPLES	GRAIN SIZE AND SEDIMENTARY STRUCTURES	LITHOLOGY	WELLSITE DESCRIPTION	CORE DESCRIPTION	BIOSTRATIGRAPHIC ANALYSIS
1m:50m				clasts/pebbles / mm / Pebbles / Granules / Very coarse / Coarse / Medium / Fine / Very fine / Coarse silt / Medium silt / Fine silt / Clay / Mudstone / Parallel/Cross				
0	PLEISTOCENE + RECENT	MNN19d				SAND: medium fine grained with rounded gravel. Ochre	UNCONSOLIDATED SAND.	
1							SAND: scattered, angular pebbles suspended in medium-grained sand. A band of pebbles is apparent at the base of this bed.	
2						SAND: coarse, slightly clayey	SAND: fining upward bed ranging from fine to silty sand. Shell fragments and pebbles are suspended throughout, with a concentration of pebbles at the base.	
3			M			SAND: fine grained with shell debris and charcoal.		M: SABN sponge spicules, shell debris, ABN Ammonia beccarii, CMN gastropods, Elphidium spp, Peneroplis planatus
4							Poorly sorted pebble bands mark the top of this unit. The rest is dominated by plant debris with an increasing abundance towards the base of the bed. A band of shell fragments occurs at 4.75m.	
5						SANDY SILTSTONE: fine grained with clay	The base of the bed is also associated with an increase in grain size, with sandy laminae visible at 6m. These sandier lags are associated with shell fragments and pebbles.	
6						CLAY: with decomposing plant material and lignite	Bivalve fragments were visible at the base of this bed.	
7						SANDY SILTSTONE: fine-grained with clay, shell debris and plant material. Dark grey, weathered (oxidised)		
8	EARLY PLEISTOCENE, CALABRIAN		N			CLAY: fine-grained with clay, dense, with shell debris. Light grey.	CLAY: shell fragments are concentrated at the top of this bed, but consistent throughout. A band of shelly debris occurs at 11.60m. No plant material present.	N: PRES Helicosphaera sellii, CMN Pseudoemiliania lacunosa and Umbilicosphaera sibogae, OCC P. lacunosa ovata, small Gephyrocapsa spp., and G. oceanica, PRES G. aperta and Sphenolithus heteromorphus (reworked), TOP Cretaceous and Paleogene reworking
9			P					P: ABN Asteraceae Cichorioideae, CMN bisaccates (Pinus diploxylon type) and Quercus deciduous type, PRES Achomosphaera spp., Lingulodinium machaerophorum, Nematosphaeropsis labyrinthus, Operculodinium centrocarpum, Operculodinium spp., Spiniferites mirabilis, Spiniferites ramosus gr.
9								M: SABN shell debris, CMN Gastropods, Ammonia beccarii, Elphidium spp, miliolids
9			N					N:TOP Discoaster asymmetricus, CMN Pseudoemiliania lacunosa and P. lacunosa ovata, OCC small Gephyrocapsa spp., PRES Ceratolithus cristatus
10			P					P: OCC Concentricystis sp., SABN bisaccates, ABN Asteraceae Cichorioideae, PRES Homotryblium floripes (reworked), Glomus spp.
11			N					N:CMN Pseudoemiliania lacunosa, P. lacunosa ovata, and small Gephyrocapsa spp., PRES Coccolithus pelagicus (w/ bar) and Sphenolithus heteromorphus (reworked)
11			P					P: SABN bisaccates, CMN Asteraceae Cichorioideae PRES OCC Concentricystis spp.
12							Scattered plant and shell fragments in silty sand.	
13			M				CLAY: shell fragments scattered throughout.	M: SABN shell debris, OCC small planktonics, RARE Cibicides spp.
13			N					N: ABN Pseudoemiliania lacunosa, CMN P. lacunosa ovata, PRES Coccolithus miopelagicus (reworked)
14			P					P: ABN Asteraceae Cichorioideae and bisaccates
15						SILTSTONE, with sand and shell debris. Grey-brown	Scattered plant and shell fragments in silty sand.	
16			N					N: SABN small Gephyrocapsa spp., CMN Pseudoemiliania lacunosa ovata, OCC P. lacunosa, PRES Sphenolithus heteromorphus (reworked)
16			N				CLAY: with no shell fragments apparent.	N: CMN Pseudoemiliania lacunosa and P. lacunosa ovata, PRES Gephyrocapsa spp.and Sphenolithus abies, BASE Paleogene reworking
17			P			CLAY: with fine grained, rounded gravel. Light grey, weathered (oxidised)		P: SABN Asteraceae Cichorioideae, ABN Asteraceae Asteroideae, CMN bisaccates
18			M				CLAY: with shell fragments and a coral stem at the top of the bed.	
18			P					P: SABN Asteraceae Cichorioideae, ABN remains of woody and herbaceous fragments
19			M			GRAVEL: sandy, slightly clayey. White-light brown	BIOCLASTIC GRAINSTONE: poorly sorted pebbles throughout a fine-grained bed.	
20							Sand, silty clay with a shell lag at 20.50m and brachiopod (11m) found locally.	
21						BIOCLASTIC GRAINSTONE: with clay, fine gravel and shell debris, becoming more gravelly from 24.7m. Beige-ochre.		
22								
23								
24	EARLY PLEISTOCENE, GELASIAN	MNN19b - MNN19e	M				Clay with scattered shell fragments interbedded with shell free clay beds.	N: CMN Gephyrocapsa spp., Pseudoemiliania lacunosa, and P. lacunosa ovata, PRES small Gephyrocapsa spp. and Sphenolithus heteromorphus (reworked). M: ABN Ammonia beccarii and Elphidium crispum, CMN Globigerina falconensis, gastropods (high-spired), echinoid fragments and scaphopods
24			N					
24			P					M: ABN Ammonia beccarii, Elphidium spp.
25			M				Limestone (possible a fallen block) containing cemented shell fragments and well rounded pebbles.	M: ABN Globigerina spp., CMN G. falconensis, Ammonia beccarii, gastropods and echinoid fragments
25						BIOCLASTIC GRAINSTONE: slightly clayey, becoming cemented from 27.3m and with gravel from 28.6m. Ochre.		M: CMN Elphidium spp, small planktonics, OCC Ammonia beccarii
26			M					
26			M					
27							BIOCLASTIC GRAINSTONE with poorly sorted, scattered pebbles. A faint fining upward sequence was observed. Plant debris was identified at the base of the bed.	
28								
29								
30								
31								
32			M				BIOCLASTIC GRAINSTONE: very fine bioclast debris.	M: SABN shell debris, Ammonia beccarii, ABN Elphidium spp, CMN echinoid debris, Cibicides lobatulus
33								
33			N			BIOCLASTIC GRAINSTONE, sandy with white concretions between 33.6 and 34m. White to yellowish.	Limestone clasts. Grainstone, pebble sized grains, cemented shell fragments, intraclasts with foraminifera and skeletal debris. Pebbles are also cemented by the calcite.	N: CMN Psuedoemiliania lacunosa ovata and small Gephyrocapsa spp., CMN Psuedoemiliania lacunosa PRES Gephyrocapsa oceanica, G. oceanica (large), G. spp., Sphenolithus abies, and S. heteromorphus (reworked)
33			M				These clasts are supported by a very fine carbonate sand.	M: CMN bivalve debris, ostracods, OCC echinoid debris
34								
35							BIOCLASTIC GRAINSTONE: fine-grained. Shell fragments and large cemented clasts, with gastropod fragments visible. Suspended in a fine.	
36								
37								
38			M				Isolated, scattered shell fragments in a very fine BIOCLASTIC GRAINSTONE.	M: ABN Ammonia beccarii, CMN Elphidium spp, echinoid debris, OCC Planulina spp, miliolids, ostracods
38								
39			N					N: Impoverished assemblage, PRES Gephyrocapsa oceanica, BASE