REF NO 22164

MRF-42 June 98

borehole no: BH26
sheet 1 of 3

engineering log – borehole

job no: file: 121518

project: MUSSELROE WIND FARM & PRELIMINARY GEOTECH INVESTIGATIONS

borehole location: GPS 586541 (E) 5484206 (N)

hole commenced: 6/5/05
hole completed: 5/5/05
supervised by: E.BIRCH.
log checked by: T. BOWLING.

drill model and mounting: CMV MK 600 TRACK
hole diameter: 150 mm

slope: VERT deg.
bearing: deg.

R.L. surface: ~60 m
datum: NOT SURVEYED
operator: GBAKER.

method	penetration 1 2 3	support	water	notes samples, tests, etc	R.L. depth metres	graphic log	classification symbol	material: soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer kPa 100 200 300 400	structure and additional observations
HAND AUGER					0.0			TOPSOIL; silty sand, dark brown, root matter	D	L		
							SM	SAND, fine grained, light brown with some courser grained particles sub angular	D	L		
					1.0		SM	SAND, fine grained, cemented, brown	D	MD		
								CONTINUED ONTO CORED BOREHOLE SHEET				
					2.0							
					3.0							

key

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
B – blank bit
V – "V" bit
T – TC bit
e.g. ADT

support
C casing
M mud

penetration
no resistance ranging to refusal

water
10 Oct, 73 water level on date shown
water inflow
water outflow

notes – samples and tests
U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration test: figure = result
N* – SPT + sample
Nc – cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
D – dry
M – moist
W – wet
< PL
= PL
> PL

consistency/relative density
VS – very soft
S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense
D – dense
VD – very dense

A-1316

M & R F8

borehole no: BH26

sheet 2 of 3

engineering log — cored borehole

File No.

project: MOSSELROE WIND FARM & PRELIMINARY GEOTECH INVESTIGATIONS

borehole location:

hole commenced: 5/5/05

hole completed: 5/5/05

supervised by: E. BIRCH

log checked by: T. BOWLING

drill model and mounting: CMV MK 600 TRACK slope: VERT deg.

barrel type and length: HQTT 2 6m fluid bearing: deg.

R. L. surface: ~60 m

datum: NOT SURVEYED Driller G. BAKER

drilling information				rock substance				rock mass defects	
method	case-lift	water	depth R.L. metres	graphic log / core loss	substance description: rock type: grain characteristics, colour, structure, minor components.	weathering	strength Is (50) EL VL L M H VH EH	defect spacing mm 60 200 600 2000 6000	defect description: thickness, type, inclination, planarity, roughness, coating. particular / general
					CONTINUED FROM BOREHOLE SHEET				
			1.0		DOLERITE fine grained, light grey	MW			Subvertical to vertical joints open, rough + highly weathered, iron stained.
			2.0						
			3.0			SW			Sub horizontal joints, clean, rough + iron stained.
			4.0						3.0m Weathering around joints extends 10 mm red in colour
			5.0						5.30m – 5.40 Subvertical joint highly weathered open, ironed stained.
			6.0						6.30 subvertical, laminated joint - ironed stained.
			7.0						
			8.0						

HQTT 2.6m BARREL

key

method

AS	auger screwing
AD	auger drilling
R	roller/tricone
W	washbore
NMLC	NMLC core drilling

case-lift

- casing used
- barrel withdrawn

water

- 10 Oct, 73 water level date shown
- water inflow
- partial drilling water loss
- complete drilling water loss

graphic log/core loss

- core recovered (hatching indicates material)
- no core recovered

weathering

Fr	fresh
SW	slightly weathered
MW	moderately weathered
HW	highly weathered
EW	extremely weathered

strength (Indirect tensile strength)

EL	extremely low
VL	very low
L	low
M	medium
H	high
VH	very high
EH	extremely high

M & R F8

borehole no: BH26

sheet 3 of 3

engineering log — cored borehole

File No.

project: MOSSEROE WIND FARM : PRELIMINARY GEOTECH INVESTIGATIONS

borehole location:

hole commenced: 5/5/05

hole completed: 5/6/05

supervised by: E. BIRCH

log checked by: T. BOWLING.

drill model and mounting: CMU MK600 TRACK slope: VERT deg.

barrel type and length: HQTT 2.6 fluid bearing: deg.

R. L. surface: ~60 . m

datum: NOT SURVEYED Driller G. BAKER

drilling information				rock substance				rock mass defects	
method	case-lift	water	R.L. depth metres	graphic log / core loss	substance description: rock type, grain characteristics, colour, structure, minor components.	weathering	strength Is (50) EL VL L M H VH EH	defect spacing mm 30 60 200 600 2000 6000 >6000	defect description: thickness, type, inclination, planarity, roughness, coating. particular / general
HQTT 2.6m BARREL.			9.0		DOLERITE fine grained light grey	SW			8.8 moderately fractured mostly closed joints rough surface, brown staining.
			10.0	CORE LOSS		MW			9.0m sub vertical joints infilled with fine silty black material
			11.0						9.5m vertical laminated infilled joint weathered
			12.0						10.5 horizontal joint open closed joints no separation subhorizontal
					END OF BOREHOLE 11.95m.				

key

method

AS auger screwing
AD auger drilling
R roller/tricone
W washbore
NMLC NMLC core drilling

case-lift

casing used
barrel withdrawn

water

10 Oct, 73 water level date shown
water inflow
partial drilling water loss
complete drilling water loss

graphic log/core loss

core recovered (hatching indicates material)
no core recovered

weathering

Fr — fresh
SW — slightly weathered
MW — moderately weathered
HW — highly weathered
EW — extremely weathered

strength (indirect tensile strength)

EL — extremely low
VL — very low
L — low
M — medium
H — high
VH — very high
EH — extremely high