REF NO 764

MRF-42 June 98

borehole no: BH1
sheet 1 of 2

engineering log – borehole

job no: 121522 file: 121518

project: WOOLNORTH STAGE 3 : PRELIMINARY GEOTECH INVESTIGATIONS

hole commenced: 20/3/05
hole completed: 21/3/05
supervised by: B. TAYLOR
log checked by: T. BOWLING

borehole location: GPS : 308735E, 5484176N

drill model and mounting: CMV 600 TRACK.
hole diameter: 150 mm HOLLOW FLIGHT AUGER.
slope: VERT deg.
bearing: deg.
R.L. surface: 50 m
datum: NOT SURVEYED
operator: G. BAKER / R. STACPOOLE

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
150mm HOLLOW FLIGHT AUGER								TOPSOIL; sand and minor organics	D	L		
							SM	aeolian SANDS; grey	D/M	L		
				N* = 10 (4,4,6)	1.0							
			21/3/05					AEOLIAN SANDS; pale yellow grey	D	L		
				N* = 16 (3,5,11)	2.0							no sample taken
								AEOLIAN SANDS; dark grey brown	M/W	L		Water at 3.0m.
				N* = 19 (3,8,11)	3.0							
				N* = 43 (9,18,25)	4.0				W	D.		
				N* > 60 (18,40,-) bouncing	5.0							40 blows for 12cm only - bouncing.
					6.0							
				N* = 25 (6,9,16)	7.0							
					8.0			CONTINUED ONTO CORED BOREHOLE SHEET.				

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: BH1

sheet 1 of 2

engineering log — cored borehole

121522 File No. 121518

project: WOOLNORTH STAGE 3 : PRELIMINARY GEOTECH INVESTIGATIONS

borehole location: GPS : 308735E , 5484176N

hole commenced: 20/3/05

hole completed: 21/3/05

supervised by: B. TAYLOR

log checked by: T BOWLING

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

barrel type and length: 150 HOLLOW FLIGHT AUGER fluid bearing: deg.

R. L. surface: 50 m

datum: NOT SURVEYED Driller G BARKER R STACPOOLE

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 60 200 600 >3000	defect description (thickness, type, inclination, planarity, roughness, coating.) particular / general
HOLLOW FLIGHT AUGER			7.0		CONTINUED FROM BOREHOLE LOG.				
HOLLOW FLIGHT AUGER → HQTT 2.6 BARREL →			8.0		SILTSTONE/MUDSTONE, grey green	EW HW MW			crumbly. relict planer fabric.
			(N*>60) (19,-,-)						(19,22 blows for 12cm only) 8.77m → moderately siliceous (hard) sediments with bulk filled fractures. JOINTS on cleavage planes overall strength of rock is Low → medium
			9.0		interbeded fine grained SANDSTONE, SILTSTONE, MUDSTONE, sandstone is very hard → quartzite.				
			10.0		SILTSTONE, and lesser fine grained sandstone minor mudstone, grey green				weakness along bedding plane ie mudstone horizontal 10 → 10.6 RQD 58%
			11.0		SANDSTONE/SILTSTONE and lesser MUDSTONE interbedded fine grained & medium grained grey green.				weakness along bedding planes within fine grained units bedding dips approx 45° pitting and cleavage dips vertical to sub vertical
			12.0						

key

method

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

case-lift

casing used
H 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