REF No 765

MRF-42 June 98

borehole no: BH 8
sheet 1 of 3

engineering log – borehole

job no: 121522 file: 121518

project: WOOLNORTH STAGE 3: PRELIMINARY GEOTECH INVESTIGATIONS.

borehole location: GPS: 307820E; 5483128N

hole commenced: 19/3/05
hole completed: 19/3/05
supervised by: B TAYLOR
log checked by: T. BOWLING

drill model and mounting: CMV 600 TRACK.
hole diameter: 150 mm
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, minor organic	D	L		
							SM	AEOLIAN SAND; grey.	m	L.		
				N*=41 (22,22,19)	1.0		SM	; compacted (hardpan) Fe rich ; dark red brown.	m	D.		moderately compacted @ 0.8m
			▽	21/3/05					m	MD		
				N*=25 (9,13,12)	2.0		SM	; dark grey brown	m	MD		
				N*=16 (4,4,12)	3.0							
				N*=28 (6,11,17)	4.0							
					5.0				W	MD.		
				N*=19 (5,9,10)	6.0							
				N*=16 (6,7,9	7.0							
					8.0							

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

MRF-42 June 98

borehole no: BH 8
sheet 2 of 3

engineering log – borehole

job no: 121522 file: 121518

project: WOOLNORTH STAGE 3: PRELIMINARY GEOTECH INVESTIGATIONS.
borehole location: GPS: 307820E; 5483128 N

hole commenced: 18/3/05
hole completed: 19/3/05
supervised by: B. TAYLOR
log checked by: T. BOWLING.

drill model and mounting: CMV 600 TRACK
hole diameter: 150 mm
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
HOLLOW FLIGHT AUGER		H		N*=16 (3,5,11)		9.0			AEOLIAN SAND	W/M	L.		
									MUDSTONE; clay rich, grey green.	HW			
						10			MUDSTONE SILTSTONE grey green.	MW			Strong cleavage fissile very weak along cleavage/bedding
		H		N*760 (22,30,-)									
									CONTINUED ON 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
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< 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: BH8
sheet 3 of 3

engineering log — cored borehole

File No. 121518

project: WOOLNORTH STAGE 3 & PRELIMINARY GEOTECH INVESTIGATIONS.

borehole location: GPS: 307820 E; 5483128 N

hole commenced: 18/3/05
hole completed: 19/3/05
supervised by: B. TAYLOR
log checked by: T. BOWLING.

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

barrel type and length: HQTT 2.6 fluid

R. L. surface: ~50 m
datum: NOT SURVEYED

Driller G. BAKER/ 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 2000 6000	defect description (thickness, type, inclination, planarity, roughness, coating.) particular	general
HOLLOW FLIGHT AUGER			9.0							
			10.0			m/SW				
					CONTINUED FROM BOREHOLE SILEY					
HQTT 2.6			11.0		LAMINATED SILTSTONE / MUDSTONE, lesser fine grained sandstone grey green.	SW			10.6 → 11.1 RQD = 56% intense cleavage rock weakness mainly along cleavage. Fault to along cleavage same breakage along bedding as well	
			12.0						11.1 → 12.0 RQD = 73%	
					END OF BOREHOLE 12m.					

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