

borehole no:
BH25
 sheet 1 of 3.

engineering log - borehole

job no: 121522

file: 121518

project: **WOOLNORTH STAGE 38 PRELIMINARY GEOTECH INVESTIGATIONS.**
 borehole location: **GPS: 306999 E 5481043N**
 hole commenced: **17/3/05**
 hole completed: **18/3/05**
 supervised by: **B. TAYLOR**
 log checked by: **T. BOWLING.**

drill model and mounting: **CMV 600 TRACK** slope: **VERT** deg. R.L. surface: **~10** m
 hole diameter: **150** mm bearing: deg. datum: operator: **G. BAKER R. STICKPOOLE**

method	penetration	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 penetro- meter	structure and additional observations
123													
HOKKAIW FLIGHT AUGER						1.0		SM	TOPSOIL, aeolian sand, fine grained dark brown, root matter. Aeolian sand; fine grained dark brown, some root matter	M	L		
				N ₄ =4 (1,2,2) 20/3/05		2.0			fine grained dark brown	M-W	VL		
				N ₃ =3 (3,1,2)		3.0				W	VL		
				N _{>60} (13,28,)					CONTINUED ONTO CORED BOREHOLE SHEET				bouncing

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 VSI - very stiff H - hard Fb - friable VL - very loose L - loose MD - moderately dense D - dense VD - very dense

borehole no:

BH 25

sheet 2 of 3

engineering log - cored borehole

File No. 121518

project: **WOOLNORTH STAGE 3 & 4 REFINERY**
GEOTECH INVESTIGATIONS
 borehole location: **GPS: 306999E 5481043N**
 hole commenced: **17/3/05**
 hole completed: **18/3/05**
 supervised by: **B TAYLOR**
 log checked by: **T BOWLING**

drill model and mounting: **CMV 600 TRACK** slope: **VERT** deg.
 barrel type and length: **HQT 2.6** fluid bearing: deg.
 R. L. surface: **~10** m
 datum: **NOT SURVEYED** Driller: **G BAKER R. STACPOOL**

drilling information			rock substance			rock mass defects		
method	case-lift	water	depth (metres)	substance description rock type: grain characteristics, colour, structure, minor components.	weathering	strength ls (50)	defect spacing mm	defect description thickness, type, inclination, planarity, roughness, coating. particular general
			1.0					
			2.0					
				(CONTINUED FROM BOREHOLE SPLIT)				
			3.0	MUDSTONE, minor Sandstone very clay rich, some relict cleavage	HW EW HW			
			4.0					
			5.0	Sharp transition into MW/SW MUDSTONE, variably fissile pale green grey weakly siliceous	MW			5.3 - 6.3 RQD = 33%
			6.0					6.3 -> 6.9 RQD = 44%
			7.0					6.9 -> 7.6 RQD = 33%
			8.0					

key method AS auger screwing AD auger drilling R roller/tricone W washbore NMLC NMLC core drilling	case-lift [Symbol] casing used [Symbol] barrel withdrawn water [Symbol] 10 Oct, 73 water level date shown [Symbol] water inflow [Symbol] partial drilling water loss [Symbol] complete drilling water loss	graphic log/core loss [Symbol] core recovered (hatching indicates material) [Symbol] 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
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borehole no:
BH25
sheet 3 of 3

engineering log — cored borehole

File No.

project: **WOOLNORTH STAGE 3: PRELIMINARY
GEDTECH INVESTIGATIONS**
borehole location: **GRS 306999E, 5481043N**
hole commenced: **17/8/05**
hole completed: **18/3/05**
supervised by: **B. TAYLOR**
log checked by: **T. BOWLING**

drill model and mounting: **CMV 600 TRACK** slope: **VERT** deg.
barrel type and length: **HOTT 2.6** fluid bearing: deg.
R. L. surface: **210** m
datum: **NOT SURVEYED** Driller: **B. TAYLOR
R. STACPOOLE**

drilling information			rock substance			rock mass defects			
method	case-lift	water	L depth R metres	graphic log core loss	substance description rock type: grain characteristics, colour, structure, minor components.	weathering	strength ts (50)	defect spacing mm	defect description thickness, type, inclination, planarity, roughness, coating. particular general
					MUDSTONE, pale grey green sericite clay along cleavage				variously mod → strongly broken fissile broken along cleavage plane
			9.0		MUDSTONE, minor sandstone more competent pale grey green.				9.15 - 10.3 RQD = 77% cleavage @ 45°/60° to core
			10.0		SANDSTONE, fine grained interbedded with minor siltstone + mudstone moderately strongly siliceous (quartzite) minor carbonate pale grey				Mostly massive.
			11.00		MUDSTONE, strongly cleaved, pale grey green				fissile very weak along cleavage planes.
			12.0		END OF BOREHOLE @ 12m.				fractured → fractured

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
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