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CLIENT	DMR	LOGGED BY	ACS
PROJECT	IPSWICH MOTORWAY UPGRADE - WACOL TO DARRA	CHECKED BY	GWB
		DRILLED DATE	19-Jul-07 to 20-Jul-07
CONTRACTOR	Terratest	ANGLE	Vertical
DRILL MODEL	Edson 3000	BEARING	-
DRILLER	Brent Ormsby	HOLE DIAMETER	100mm ( )
		GROUND LEVEL	RL 19.89m
		LOCATION	32638 E 150661 N
		ELEVATION DATUM	Australian Height Datum
		COORDINATE SYSTEM	Local Grid

DRILLING	STRATA		MATERIAL DESCRIPTION		CONDITION		OBSERVATION											
	SAMPLE, TEST, BIT, SUPPORT, ETC.	R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL TYPE Plasticity / Grain Size, Colour, Minor Components		WATER/MOISTURE	CONSISTENCY									
		m	m						VS	S	LF	ST	VST	H	VL	J	MD	D
		19.75	0.14	SM	x	silty SAND (SM) medium to coarse grained, brown, with clay and grass rootlets.												NONCO
				CI		sandy CLAY (CI) firm, brown then grey, sand medium to coarse grained, with gravel fine to medium grained, angular to sub-rounded.												COHES
		19.39	0.50	SM	x	silty SAND (SM) very dense, very fine to fine grained, grey, cemented.												NONCO
		18.89	1.00	CI	x	sandy CLAY (CI) firm, brown then grey, sand medium to coarse grained, with gravel fine to medium grained, angular to sub-rounded.												COHES
		18.59	1.30	CH		CLAY (CH) hard, brown, with a trace of sand medium grained, sub-rounded, with a trace of tree rootlets.	D											COHES
	SPT at 1.8m N 14;18,24		2															COHES
		17.09	2.80	CH		sandy CLAY (CH) very stiff to hard, brown-grey, sand fine grained.	M											COHES
		16.79	3.10	SP		SAND (SP) medium dense, fine grained, brown, with clay.												NONCO
	SPT at 3.3m N 10;12,14	16.59	3.30	SC		clayey SAND (SC) medium dense, fine grained, grey with light brown bands, clay (cl).	M											NONCO
		16.29	3.60	CI		sandy CLAY (CI-CH) very stiff, fine grained, brown-grey with a trace of quartz gravel, fine to medium grained angular.												COHES
		15.39	4.50	SC		clayey SAND (SC) dense, fine grained, grey with light brown bands, with clay (cl).	W											NONCO
	SPT at 4.8m N 12;14,18	15.19	4.70	CL		sandy CLAY (CL) very stiff, fine grained, grey with light brown bands.	W											COHES
		13.89	6.00	CH		sandy CLAY (CH) stiff, grey-white, sand fine grained, with a trace of silt.												COHES
		12.39	7.50	SC		clayey SAND (SC) dense, fine grained, mottled red-brown, light brown, grey.												NONCO
	SPT at 7.8m N 12;20,19	10.89	9.00	CI		sandy CLAY (CI) hard, mottled brown, red-brown, light brown, sand fine grained, with bands of medium dense clayey sand, fine grained.												COHES
	SPT at 9.3m N 12;23,22																	COHES

NOTES	Hole Diameter 100mm to 25.73m depth. (Solid Flight Augering to 4.5m. HW casing to 4.8m. Washboring with 100mm diameter tri-blade bit from 4.5m to 12m, 75mm diameter tri-blade bit from 24.15m to 25.5m. NMLC Coring from 12.45m to 24m. Groundwater below 4m.)	JOB	86015
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 Log : 1.0.1 AUSTRALIA GENERAL BOREHOLE LOG (rev 12Dec07 checked AB/ACP Feb 2006)  
 gINT output page 1 of 2. Made 22Jan08 10:49





CLIENT	DMR	LOGGED BY	ACS
PROJECT	IPSWICH MOTORWAY UPGRADE - WACOL TO DARRA	CHECKED BY	GWB
		DRILLED DATE	19-Jul-07 to 20-Jul-07
CONTRACTOR	Terratest	ANGLE	Vertical
DRILL MODEL	Edson 3000	BEARING	-
DRILLER	Brent Ormsby	HOLE DIAMETER	100mm ( )
		GROUND LEVEL	RL 19.89m
		LOCATION	32638 E 150661 N
		ELEVATION DATUM	Australian Height Datum
		COORDINATE SYSTEM	Local Grid

DRILLING			STRATA		MATERIAL DESCRIPTION	DISCONTINUITIES									
TOR % (Drill rate)	SCR / (ROD)	FLUSH RETURN % (TYPE)	R.L.	DEPTH		WEATHERING	ESTIMATED ROCK STRENGTH	Is 50 (MPa)	FREQUENCY (per m)	SPECIFIC	GENERAL DESCRIPTION				
SAMPLING (CaCO <sub>3</sub> , SPT, UCS, etc)			m	m	ROCK TYPE Grain Size, Texture/Fabric, Colour, Minor Components	EL	VL	LI	MI	VI	HE	TYPE	ANGLE	THICKNESS (mm)	Planarity, Roughness, Coating, Infill
7( )	7(7)		-1.11	21	CORE LOSS: 2.66m. (sand, medium grained in drilling mud return). (continued)										
			-1.29	21.18	SAND (SP) very dense, medium to coarse grained, grey-white and black, gravel fine to medium grained, angular to sub-rounded, with clay. CORE LOSS: 2.82m. (sand, medium to coarse grained in drilling mud return).										
0(0)	0(0)			22											
				23											
			-4.11	24	SAND and GRAVEL (SP) very dense, fine to coarse grained, grey, white, black, red (multicoloured), gravel fine to medium grained, angular to sub-rounded with bands of clay in matrix, (poorly cemented sands and gravels).										
		(Tuff polymer + water) 100 %		25											
			-5.84	25.73	.... 25.70m - 25.73m very fine to fine grained sand End of Borehole at 25.73m										
				26											
				27											
				28											
				29											

NOTES Hole Diameter 100mm to 25.73m depth. (Solid Flight Augering to 4.5m. HW casing to 4.8m. Washboring with 100mm diameter tri-blade bit from 4.5m to 12m, 75mm diameter tri-blade bit from 24.15m to 25.5m. NMLC Coring from 12.45m to 24m. Groundwater below 4m.)

JOB  
**86015**

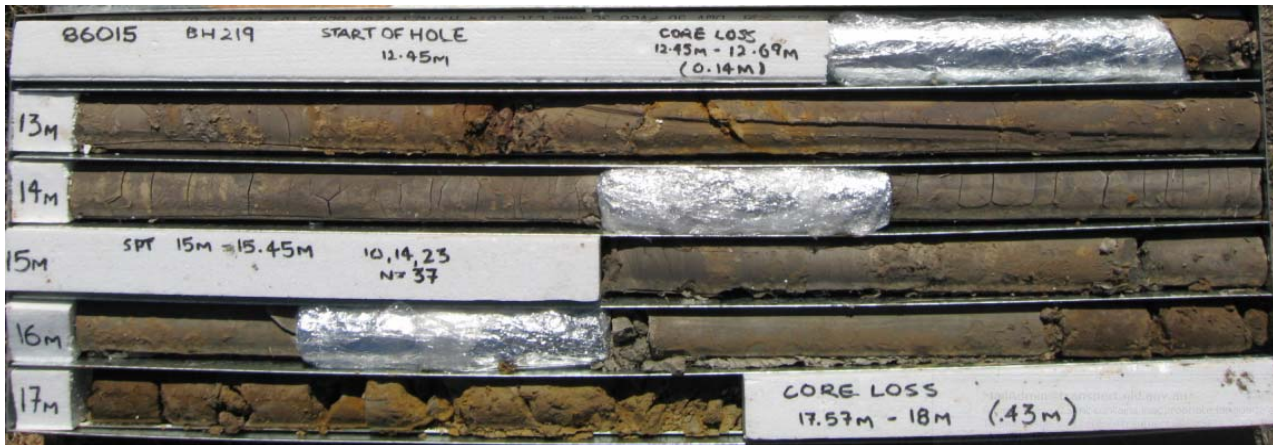
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 gINT output page 2 of 2. Made 22-Jan-08 10:47

BOREHOLE PHOTOGRAPHS

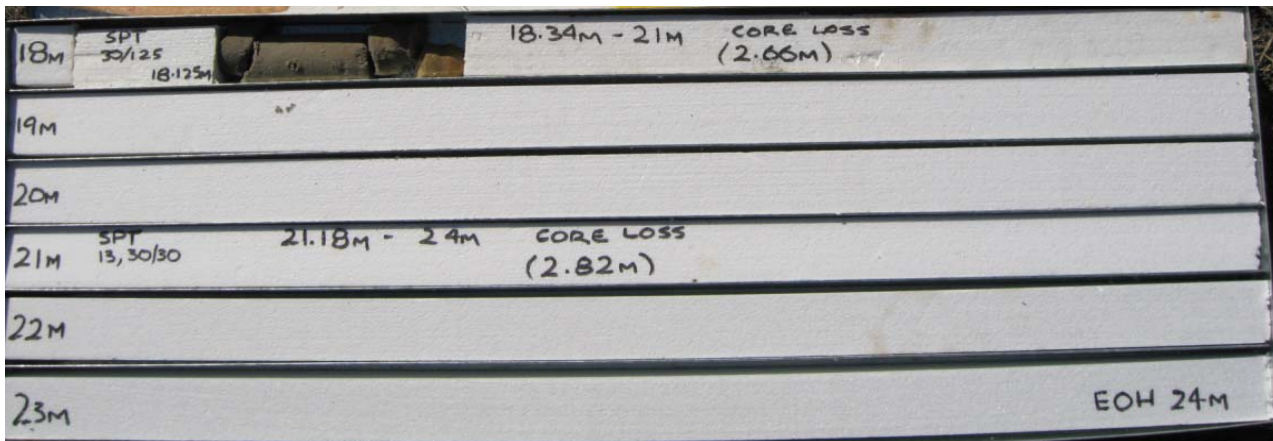


PROJECT:	Ipswich Motorway and Centenary Highway Upgrade	CLIENT:	Department of Main Roads	PROJECT NUMBER:	86015
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Hole: BH 219



Depth: 12.45m - 18m



Depth: 18m - 24m