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SHEET 1 **BOREHOLE RECORD BH216** OF 2 LOGGED BY ACS DMR CLIENT **CHECKED BY** PROJECT IPSWICH MOTORWAY UPGRADE - WACOL TO DARRA DRILLED DATE 05-Sep-07 to 19-Sep-07 RL 24.09m CONTRACTOR ANGLE **GROUND LEVEL** Terratest Vertical 32636 E 151272 N **DRILL MODEL** Edson 3000 BEARING LOCATION **DRILLER Brent Ormsby** HOLE DIAMETER 100mm () **ELEVATION DATUM** Australian Height Datum COORDINATE SYSTEM Local Grid DRILLING **STRATA** MATERIAL DESCRIPTION **OBSERVATION** CONDITION SYMBOL CONSISTENCY WATER/ MOISTURE SAMPLE, TEST. EGEND DEPTH SOIL ORIGIN, R.L SOIL TYPE NON BIT. SUPPORT. STRUCTURE, Plasticity / Grain Size, Colour, Minor Components COHESIVE GROUP COHESIVE ETC. ETC. S S T S m m ASPHALT 23.99 0.10 NEHLO GΡ Sandy GRAVEL (GP) fine to medium grained, blue-grey. 23.89 0.20 CL Sandy CLAY (CL) grey and brown, sand fine to medium grained, gravel medium to coarse grained sub-rounded. **COHES** 23.59 0.50 CL CLAY (CL) red-brown, with gravels medium to coarse grained sub-angular to sub-rounded (crushed rock) and sand fine to coarse grained sub-angular, with a trace of silt. 1.50 encountered steel wire around auger head (possible dead **COHES** service) SPT at 1.8m 21.28 2.81 CLAY (CL) grey mottled red-brown, light brown, ironstone sand, medium grained, ironstone gravel, fine to medium grained, with a trace CL SPT at 3.11m N 2;3,4 **COHES** 19.34 4.75 CL CLAY (CL) mottled, red, brown and grey, with sand fine to coarse grained, gravel ironstone. SPT at 5.05m N 2:6.8 **COHES** SPT at 6.3m 17.75 6.34 N 4:5.18 SP SAND (SP) fine to coarse grained sub-angular, grey, with a trace of foreign material (fine grained rubber gravel/elastic). 6.95 grey and brown, clay fines with sand medium to coarse grained in drilling mud return NONCO 15.09 9.00 CL CLAY (CL) mottled red-brown, light brown, grey, ironstone sands fine to SPT at 9.3m N 4;8,10 .... 9.45 ironstone gravel fine to medium grained at base of SPT shoe (possible lens), brown clayey fines with ironstone sands fine to coarse **COHES** grained sub-angular in drilling mud return **NOTES** JOB Hole Diameter 100mm to 19.71m depth. (Solid Flight Augering to 6m. HW casing to 6.2m. Washboring with 100mm diameter tri-blade bit from 6m to 18m, 75mm diameter tri-blade bit from 18m to 19.3m. No free groundwater observed 86015 during drilling.)

	JP					HOLE LOGGED BY ACS		OF 2		
CLIENT PROJECT	DMR IPSWIC	СН МОТО	MOTORWAY UPGRADE - WACOL TO DARRA			CHECKED BY		ep-07 to 19-Sep-0		
CONTRACTOR	Tei	ratest			ANGLE Vertical		ROUND LEVE	L F	L 24	ł.09m
DRILL MODEL DRILLER		son 3000 ent Ormsb	V		BEARING - HOLE DIAMETER 100mm ()	1	OCATION EVATION DATU			SE 151272 N lian Height Datum
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DRILLING		STRA	TA		MATERIAL DESCRIPTION		CONDITION			OBSERVAT
			1BOL			_ W	CONSIS	TENCY		
SAMPLE, TEST, BIT, SUPPORT, ETC.	R.L.	DEPTH	NAS c	LEGEND	SOIL TYPE Plasticity / Grain Size, Colour, Minor Components	WATER/ MOISTURE	COHESIVE	NOI		SOIL ORK
	m	m	GROUP SYMBOL	"		ÌŞ₫	S S S T S T S T S T S T S T S T S T S T	COHE:		ETC
_		- "	CL	<del> </del>	CLAY (CL) mottled red-brown, light brown, grey, ironstone sands fine to coarse grained sub-angular. (continued)		> O II O > I	> _ ≥		
		Ī			- coarse gramed sub-angular. ( <i>continued)</i>					
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-	-	† - 11			_					COHES
		-				-				CONES
		-			11.50 less sands in drilling mud return, brown coloured					
		Ī			, ,					
	12.05	- <b>12</b> <sub>12.04</sub>	CL			ł	1114			
SPT at 12.3m N 11;13,20		Ţ			coarse grained 12.04 ironstone gravels medium to coarse grained					
		+				1				
		13			12.80 brown coloured washout return (0% water loss)					
		'								
		+				1				COHES
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-	-	14			-	-				
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_	9.09 -	<b>15</b> 15.00		<u> </u>						
SPT at 15.3m	3.03	1313.00	CI		CLAY (CI) grey, ironstone nodules present 15.00m - 15.10m - a trace or rootlets					COHES
N 7;12,18	8.70	15.39	CI		CLAY (CI) grey-brown 15.50 brown coloured clayey fines in wash return, (0% water loss)	1				
		Ī		<u> </u>	13.30 blown coloured dayey lines in wash return, (076 water 1033)	]				
	-	16			-					
		<u> </u>			16.20 very slow drilling penetration					
		<u> </u>								COHES
		17								33.120
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-	6.09 -	<b>18</b> 18.00	СН		CLAY (CH) grey-brown, possible mudstone.	1				
SPT at 18.3m N 10;23,30		<u> </u>								
		-			18.50 brown coloured wash return, clayey fines	-				
		19				1				COHES
		'3			-	-				
SPT at 19.58m		1			19.30 practical refusal of 75mm diameter tri-blade bit in mudstone					
N 8;52/260	4.38	19.71			19.63 20mm thick ironstone lens (appears as ironstone gravel fine to coarse grained, angular)	4				
	L.	L			Borehole completed at 19.71m depth					