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FOR GEOTECHNICAL TERMS AND  
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH122  
SHEET 1 of 4  
REFERENCE No H10891

DEPTH (m)	R.L. (m)	ALGER CASING WASH BORING CORE DRILLING	RQD ( ) %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	8.90					<b>Clayey SAND (ALLUVIAL)</b> Brown, moist, medium dense.  High plasticity fines; minor fine gravel fraction.							
1					A		(SC)					4,5,6 N=11	SPT
2	6.40					<b>Silty CLAY (ALLUVIAL)</b> Pale brown, moist, very stiff.  High plasticity; minor sand and gravel fraction.						5,8,11 N=19	SPT
3					B		(CH)						
4	4.50					<b>Silty SAND / Sandy SILT (ALLUVIAL)</b> Pale orange and brown, moist, medium dense, very stiff.						6,9,13 N=22	SPT
5					C		(SM/ML)						
6	3.20					<b>SAND (ALLUVIAL)</b> Pale grey, wet, loose to mainly medium dense, mostly fine to medium grained.  Some coarse sand to fine gravel bands with minor silt fraction.						3,3,5 N=8	SPT
7													
8					E		(SP)					5,7,6 N=13	SPT
9													
10					F							5,5,6 N=11	SPT

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# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND  
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH122  
SHEET 2 of 4  
REFERENCE No H10891

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE  
LOCATION PIER 2 - (Ch. 84547.5 on control line) COORDINATES 721540.5 E; 7654816.1 N  
PROJECT No FG5635 SURFACE R.L. 8.90m PLUNGE \_\_\_\_\_ DATE STARTED 31/10/10 GRID DATUM MGA 94  
JOB No 242/33B/6 HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 1/11/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	ALGER CASING WASH BORING CORE DRILLING	RQD ( ) %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	-1.10												
11				G	<b>SAND (ALLUVIAL)</b> (Cont'd) Becoming denser and increasing in fines with depth.							7,7,10 N=17	SPT
12				H		(SP)						5,7,9 N=16	SPT
13	-4.10			J	<b>Silty SAND (ALLUVIAL)</b> Pale grey, moist, medium dense to dense. Layers of varying grain sizes and fines content.							5,9,10 N=19	SPT
14				K		(SM)						11,15,21 N=36	SPT
15				L	<b>Silty CLAY (RESIDUAL)</b> Mottled pale grey and orange, moist, very stiff to mainly hard. High plasticity; Fe/Mn oxide nodules; some minor sandy layers.							12,18,24 N=42	SPT
16	-6.90			M		(CH)						8,11,14 N=25	SPT
17				N								12,26,28 N>50	SPT
18													
19													
20													

REMARKS \_\_\_\_\_

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# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND  
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BOREHOLE No BH122  
SHEET 3 of 4  
REFERENCE No H10891

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE  
LOCATION PIER 2- (Ch. 84547.5 on control line) COORDINATES 721540.5 E; 7654816.1 N  
PROJECT No FG5635 SURFACE R.L. 8.90m PLUNGE        DATE STARTED 31/10/10 GRID DATUM MGA 94  
JOB No 242/33B/6 HEIGHT DATUM AHD BEARING        DATE COMPLETED 1/11/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	ALUGER CASING WASH BORING CORE DRILLING	RQD (%)	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	-11.10												
21				O	Silty CLAY (RESIDUAL) (Cont'd)			(CH)				12,16,22 N=38	SPT
22													
23	-13.40			P	GRANODIORITE Intrusive, medium to coarse grained, massive, crystalline, porphyritic, acidic, igneous rock XW: Generally exhibits engineering properties of pale grey, orange and black, moist, hard, silty clay.			XW				13,29,30/120mm N>50	SPT
24				Q								16,29,30/100mm N>50	SPT
25	-16.10			R	HW: Generally exhibits the engineering properties of pale grey, orange and black, moist, hard, clayey silt.							30/120mm N>50	SPT
26													
27				S				HW				30/50mm N>50	SPT
28													
29				T								30/90mm N>50	SPT
30	-20.60				SW: (See over)			SW				Is(50) = 8.23MPa Is(50) = 11.88MPa	x o

REMARKS \_\_\_\_\_

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# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND  
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH122  
SHEET 4 of 4  
REFERENCE No H10891

PROJECT WALKERSTON BYPASS PROJECT GEOTECHNICAL INVESTIGATION - COWLEYS ROAD OVERPASS BRIDGE  
LOCATION PIER 2- (Ch. 84547.5 on control line) COORDINATES 721540.5 E; 7654816.1 N  
PROJECT No FG5635 SURFACE R.L. 8.90m PLUNGE \_\_\_\_\_ DATE STARTED 31/10/10 GRID DATUM MGA 94  
JOB No 242/33B/6 HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 1/11/10 DRILLER Cairns Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
30	-21.10												
31					<b>GRANODIORITE SW: (Cont'd)</b> Pale grey to speckled black, very high to extremely high strength.  Defects: Nil.								
32							SW					Is(50) = 11.36MPa Is(50) = 8.63MPa  Is(50) = 7.72MPa	x o  x
33	-23.65		100		Borehole terminated at 32.55m								
34													
35													
36													
37													
38													
39													
40													

REMARKS \_\_\_\_\_

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Project: **Walkerston Bypass Geotechnical Investigation**  
Borehole No: BH122 (Cowleys Road Bridge Ch. 84547.5 on control line)  
Start Depth: 29.55 m  
Finish Depth: 32.55 m  
Project No: FG5635  
H No: 10891



SCALE 1:5

F:GEOT043/1