



Borehole No.
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BOREHOLE LOG

Client: HELM PTY LTD
Project: PROPOSED RESIDENTIAL DEVELOPMENT
Location: 177 RUSSELL AVENUE, DOLLS POINT, NSW

Job No.: 29353S **Method:** SPIRAL AUGER & CASING ADVANCER **R.L. Surface:** ~1.3 m
Date: 3/5/16 **Datum:** AHD
Plant Type: JK308 **Logged/Checked By:** A.B./P.S.

Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
					N = 7 3,3,4	-6				SAND: fine to medium grained, dark grey, trace of silt. (continued)	W	L		ORGANIC ODOUR TO 7.65m
							8							
					N = 15 3,6,9	-9						MD		
							10							
							11							
							12			SAND: fine to medium grained, grey.		(MD - D)		
					N = 33 9,16,17	-12						D		
							13							
							14							
							15							
							16							
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Job No.: 29353S

Method: SPIRAL AUGER & CASING ADVANCER

R.L. Surface: ~1.3 m

Date: 3/5/16

Datum: AHD

Plant Type: JK308

Logged/Checked By: A.B./P.S.

Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/Weathering	Strength/Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
							-13			SAND: fine to medium grained, grey. (continued)	W	D		
					N = 38 17,28,10		15							
							-14							
							16		SC	CLAYEY SAND: fine to medium grained, light grey and yellow brown, trace of shell fragments.	W	(MD - D)		
							-15							
							17							
							-16							
					N = 18 3,7,11		18					MD		
							-17							
							19							
							-18							
							20							
							-19							



Borehole No.
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BOREHOLE LOG

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Job No.: 29353S **Method:** SPIRAL AUGER & CASING ADVANCER **R.L. Surface:** ~1.3 m
Date: 3/5/16 **Datum:** AHD
Plant Type: JK308 **Logged/Checked By:** A.B./P.S.

Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
						-20				CLAYEY SAND: fine to medium grained, light grey.	W	MD		ATTEMPTED CORING BUT STOPPED DUE TO LOOSE MATERIAL (NOT ROCK)
						-21								
						-22								
						-23						(D)		HIGH CASING ADVANCER RESISTANCE
						-24								
						-25				REFER TO CORED BOREHOLE LOG				
						-26								
						-27								
						-28								
						-29								
						-30								
						-31								
						-32								
						-33								
						-34								
						-35								
						-36								
						-37								
						-38								
						-39								
						-40								
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						-45								
						-46								
						-47								
						-48								
						-49								
						-50								



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CORED BOREHOLE LOG

Client: HELM PTY LTD
Project: PROPOSED RESIDENTIAL DEVELOPMENT
Location: 177 RUSSELL AVENUE, DOLLS POINT, NSW

Job No.: 29353S **Core Size:** NMLC **R.L. Surface:** ~1.3 m
Date: 3/5/16 **Inclination:** VERTICAL **Datum:** AHD
Plant Type: JK308 **Bearing:** N/A **Logged/Checked By:** A.B./P.S.

Water Level Barrel Lift	RL (m AHD)	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX I _p (50)	DEFECT DETAILS	
								DEFECT SPACING (mm)	DESCRIPTION Type, inclination, thickness, planarity, roughness, coating.
							EL-0.03 VL-0.1 L-0.3 M-1 H-3 VH-10 EH	500 300 100 50 30 10	Specific General
	-22								
		24		START CORING AT 24.04m					
	-23			CLAYEY SAND: fine to medium grained, grey.		(D)			
				SANDSTONE: fine to coarse grained, light grey.	SW	L			(24.44m) XWS, 0°, 5 mm.t
				SANDSTONE: fine to coarse grained, light grey, orange brown and red brown, trace of fine grained quartz gravel, cross bedded at 20°.		H			(25.10m) Be, 20°, P, S, CLAY INFILL
	25								
	-24								
		26							(26.03m) Be, 20°, P, S, CLAY INFILL
	-25								
				END OF BOREHOLE AT 26.60 m					
	27								
	-26								
		28							
	-27								
		29							
	-28								



JK Geotechnics

JOB No. 29353S BH2 START CORING AT 24.04m

24

25

26

EOBH AT 26.60m

18.80m



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Location: 177 RUSSELL AVENUE, DOLLS POINT, NSW

Job No.: 29353S

Method: SPIRAL AUGER & CASING ADVANCER

R.L. Surface: ~1.6 m

Date: 5/5/16

Datum: AHD

Plant Type: JK308

Logged/Checked By: A.B./P.S.

Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
					REFER TO EFCP TEST RESULTS				-	FILL: Silty sand, fine grained, brown, trace of roots and root fibres. FILL: Sand, fine to medium grained, grey brown, trace of fine grained sandstone gravel. SAND: fine to medium grained, grey.	M			GRASS COVER
							1		SP		M	VL - L		MARINE
							1				W			
							0							
							2							
							-1							
							3							
							-2					L - MD		CASING ADVANCER
							4							
							-3							
							5							
							-4							
							6							
							-5					MD		

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BOREHOLE LOG

Logged/Checked By: A.B./P.S.

[illegible]



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Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/Weathering	Strength/Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
							-13		SP	SAND: fine grained, grey, with silt. (continued)	W	D - VD		LITTLE TO NO CHANGE IN FLUSH RETURN TO 14.7m DEPTH
							15							
					N = 6 2,3,3		-14		CH	SILTY CLAY: high plasticity, grey, with fine grained sand.	MC>PL	F - St	90 70	CLAY RETURNED IN WATER FLUSH
							16							
							-15			as above, but red brown.		H		BROWN WATER FLUSH TO 16.8m DEPTH
							17		SC	CLAYEY SAND: fine to medium grained, light grey mottled yellow brown.	W	MD		
							-16							
					N = 13 3,4,9		18							
							-17							
							19							
							-18							
							20		SP	SAND: fine to medium grained, light grey, trace of clay.		D		OBSERVATION BASED ON DRILLING RESISTANCE TO 20.7m DEPTH
							-19							



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	ES	U50	DB	DS										
							-20		SP	SAND: fine to medium grained, light grey, trace of clay. <i>(continued)</i>	W	D		
							22							
							-21							
							23		-	SANDSTONE: fine to medium grained, light grey.	SW	M		
							-22			REFER TO CORED BOREHOLE LOG				NOTE THAT SOIL STRENGTHS HAVE BEEN INTERPOLATED WITH REFERENCE TO ADJACENT EFCP TEST
							24							
							-23							
							25							
							-24							
							26							
							-25							
							27							
							-26							