

FIELD DENSITY & HILF COMPACTION TEST REPORT

Client	Newbold Bulk Haulage Pty Ltd	Job No.	D20-012
Address	Po Box 67 Coonamble 2829	Report No.	03-CT
Project	Knox & Downs Building Wilcania	Lot	Cellar Pad

Test Procedure: ☒ AS 1289.5.8.1 - Field density and field moisture content of a soil (Nuclear gauge - direct transmission)
☒ AS 1289.5.7.1 - Compaction control test - Hilf density ratio and Hilf moisture variation (Rapid method)
☒ AS 1289.2.1.1 - Moisture content of a soil - Oven drying method (Standard method).

Sampling: AS 1289.1.2.1 - 6.4b (Compacted layers) **Date Sampled:** 4/02/2020

Preparation: AS 1289.1.1

FIELD TESTS

Date Tested	4/02/2020	4/02/2020	4/02/2020	4/02/2020	
Time of Test	1250	1305	1315	1325	
Test No.	7	8	9	10	
Test Depth	300mm	300mm	300mm	300mm	
Test Location	0.2m from South Boundary	3m from South Boundary	3m from West Boundary	10m from West Boundary	
Offset	3m from West Boundary	5m from East Boundary	1m from North Boundary	8m from North Boundary	
Layer / Reduced Level	Layer 3	Layer 3	Layer 3	Layer 3	
Material Description	silty sandy CLAY	silty sandy CLAY	silty sandy CLAY	silty sandy CLAY	
Wet Density (t/m ³)	2.09	2.13	2.08	2.12	
Dry Density (t/m ³)	1.89	1.87	1.86	1.89	
Moisture Content (%)	10.2	13.8	11.9	12.5	

LABORATORY DATA

Peak Converted Wet Density (t/m ³)	2.03	2.11	2.03	2.08	
Adj. Peak Converted Wet Density (t/m ³)	-	-	-	-	
Peak Converted Dry Density (t/m ³)	1.84	1.85	1.81	1.85	
Optimum Moisture Content (%)	14.6	13.8	14.8	14.6	
Max. Moisture Adjustment (%)	6	2	4	4	
Peak Added Moisture (%)	4.0	0.0	2.7	1.9	
Retained Oversize (%)	0.0	0.0	0.0	0.0	
Oversize Sieve	19.0mm	19.0mm	19.0mm	19.0mm	
Compactive Effort	Standard	Standard	Standard	Standard	

COMPACTION & MOISTURE

Hilf Density Ratio / DR (%)	102.5	101.0	102.5	102.0	
Moisture Ratio / MR (%)	70	100	80	86	
Moisture Variation (%)	4.5	0.0	3.0	2.0	
	DRY	WET	DRY	DRY	

Notes



Accredited for compliance with ISO/IEC 17025 - Testing.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. This document shall not be reproduced, except in full.

NATA Accredited Laboratory Number: 14874

Authorised Signatory:

7/02/2020

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