

TNZ M/4 : 2006 AP40
TEST REPORT



Project : Quality Assurance
 Location : Production Stock
 Client : Road Metals Company Limited
 Contractor : Various
 Sampled by : Steve
 Date sampled : 28 November 2024
 Sampling method : NZS 4407:2015 (2.4.6.3.2)
 Sample description : NZTA M/4 AP40
 Sample condition : Damp as received
 Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
 Lab Ref No : CH12159
 Client Ref No : 915-163

Particle Size Distribution		
Sieve Size (mm)	Percentage Passing	
	Sample	Limits
63.0	-	100 - 100
37.5	100	100 - 100
19.0	81	66 - 81
9.5	50	43 - 57
4.75	37	28 - 43
2.36	25	19 - 33
1.18	18	12 - 25
0.600	14	7 - 19
0.300	11	3 - 14
0.150	8	0 - 10
0.075	6	0 - 7

% passing the finest sieve is obtained by difference

Grading Shape Control		
Fraction (mm)	% Within Fraction	
	Sample	Limits
19.0 - 4.75	44	28 - 48
9.5 - 2.36	25	14 - 34
4.75 - 1.18	19	7 - 27
2.36 - 0.600	11	6 - 22
1.18 - 0.300	7	5 - 19
0.600 - 0.150	6	2 - 14

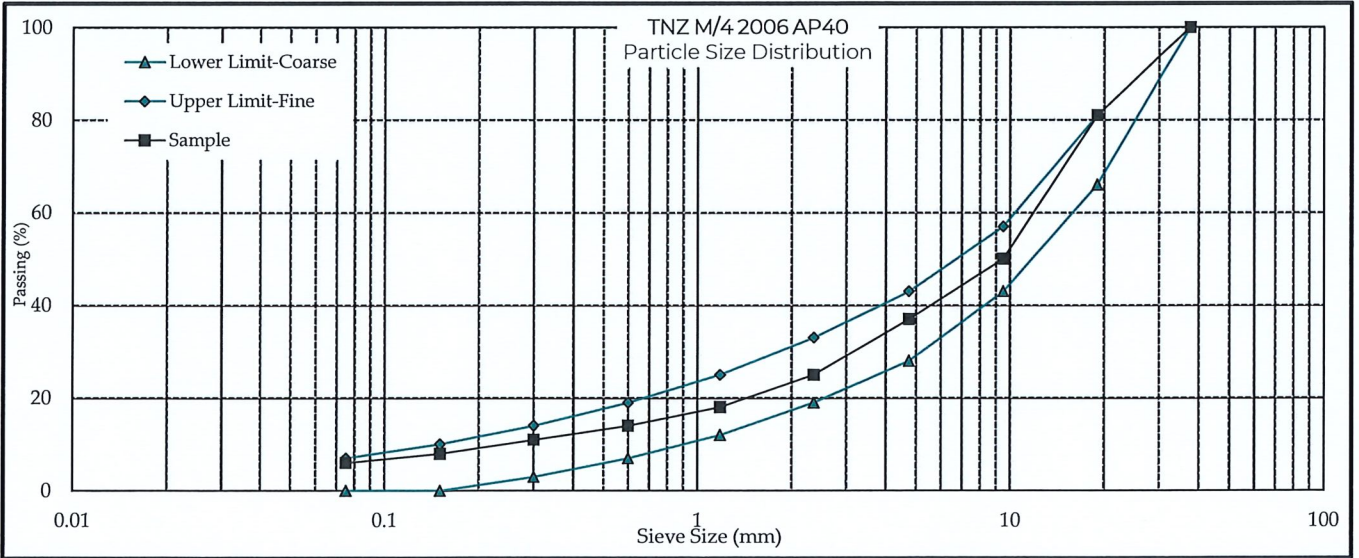
Crushing Resistance		
% Fines @ Spec. Load	-	%
Specification	-	%
Crushing Resistance	-	kN
Nom Aggregate Size	-	mm
Specified Load	-	kN

Broken Faces Content of Aggregate		
Fraction (mm)	Percentage by Weight	
	Sample	Lower Limit
37.5 - 19.0	77	70
19.0 - 9.5	82	70
9.5 - 4.75	79	70

Plasticity Index	
Sample PI	Non Plastic
Specification	<= 5

Clay Index	
Sample CI	1.0
Specification	<= 3

Sand Equivalent (Washed, Mechanical Shaking)	
Sample SE	-
Specified	>= 40



Test Methods			
Plasticity Index	NZS 4407 : 2015 : Test 3.4	Broken Faces Content of Aggregate	NZS 4407 : 2015 : Test 3.14
Particle Size Distribution	NZS 4407 : 2015 : Test 3.8.2	Clay Index	NZS 4407 : 2015 : Test 3.5

Date tested : 3 December 2024
 Date reported : 19 December 2024
 Sampling is not covered by IANZ Accreditation. Results apply only to sample tested.
 This report may only be reproduced in full
 All information supplied by Client

Approved Signatory *RPA*
 Designation : Senior Civil Engineering Technician
 Date : 19 December 2024



Test results indicated as not accredited are outside the scope of the laboratory's accreditation

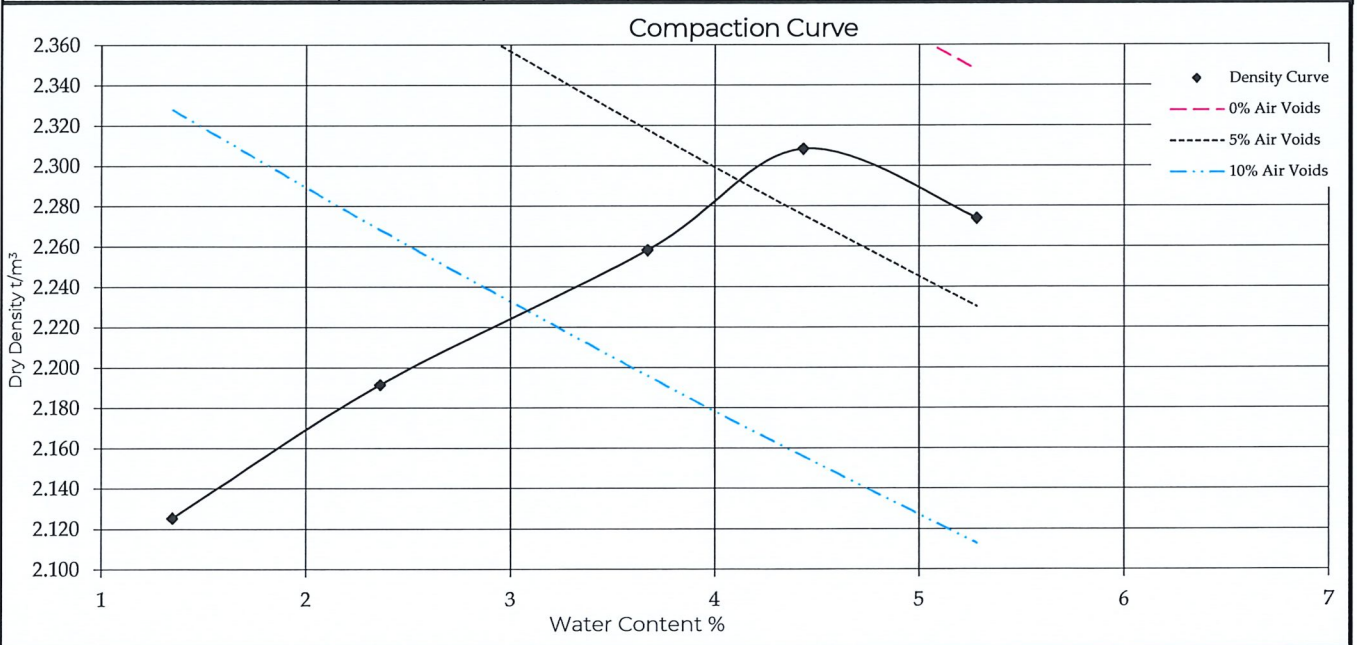
**DRY DENSITY / WATER CONTENT RELATIONSHIP
VIBRATING COMPACTION**



Project : Quality Assurance
 Location : Production Stock
 Client : Road Metals Company Limited
 Contractor : Various
 Sampled by : Steve
 Date sampled : 28 November 2024
 Sampling method : NZD 4407:2015 (2.4.6.3.2)
 Sample description : NZTA M/4 AP40
 Sample condition : Damp as received
 Solid density : 2.68 t/m³ (Assumed)
 Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
 Lab Ref No : CH12159
 Client Ref No : 915-163

Test Results							
Maximum dry density	2.30	t/m ³	Natural water content		-	%	
Optimum water content	4.4	%	Fraction tested		Whole		
Sample ID			+1%	+2%	+3%	+4%	+5%
Bulk density	t/m ³		2.154	2.243	2.341	2.411	2.394
Water content	%		1.3	2.4	3.7	4.4	5.3
Dry density	t/m ³		2.125	2.192	2.258	2.309	2.274
Sample condition			Firm	Hard	Firm	Hard	Hard
			Saturated	Wet	Moist	Moist	Wet



Test Methods	Notes
Compaction NZS 4402 : 1986 : Test 4.1.3	All information supplied by Client

Date tested : 9 December 2024
 Date reported : 19 December 2024

Sampling is not covered by IANZ Accreditation. Results apply only to sample tested.
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Approved Signatory *R.P.*

Designation : Senior Civil Engineering Technician
 Date : 19 December 2024



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PLASTICITY INDEX FOR AGGREGATES
TEST REPORT



Project : Quality Assurance
 Location : Production Stock
 Client : Road Metals Company Limited
 Contractor : Various
 Sampled by : Steve
 Date sampled : 28/11/24
 Sampling method : NZS 4407:2015 (2.4.6.3.2)
 Sample description : NZTA M/4 AP40
 Sample condition : Damp as received
 Source : Rolleston Quarry

Project No :	6-JRMCO.16/6LC
Lab Ref No :	CH12159
Client Ref No :	915-163

Test Results	
Client Ref No :	915-163
Cone penetration limit :	22
Plastic limit :	Unable to Roll Threads
Plasticity index :	NP
Sample fraction :	Fraction passing 425µm test sieve

Test Methods	
Cone Penetration	NZS 4407 : 2015 : Test 3.2
Plastic Limit	NZS 4407 : 2015 : Test 3.3
Plasticity Index	NZS 4407 : 2015 : Test 3.4

Date tested : 4 December 2024
 Date reported : 17 December 2024

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 All information supplied by Client

Approved Signatory

Designation : Senior Civil Engineering Technician
 Date : 17 December 2024



Test results indicated as not accredited are outside the scope of the laboratory's accreditation