

TNZ M/4 : 2006 AP20
TEST REPORT



Project : Quality Assurance
Location : Production Stock
Client : Road Metals Company Limited
Contractor : Various
Sampled by : Steve Gilbert (Road Metals)
Date sampled : 11 April 2025
Sampling method : NZS 4407: 2015 (2.4.6.3.2)
Sample description : NZTA M/4 AP20
Sample condition : Damp as received
Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
Lab Ref No : CH12736
Client Ref No : 915-173

Particle Size Distribution		
Sieve Size (mm)	Percentage Passing	Limits
63.0	-	100 - 100
37.5	-	100 - 100
19.0	100	100 - 100
9.5	64	55 - 75
4.75	45	33 - 55
2.36	33	22 - 42
1.18	24	14 - 31
0.600	19	8 - 23
0.300	15	5 - 16
0.150	10	0 - 12
0.075	7	0 - 8

% passing the finest sieve is obtained by difference

Grading Shape Control		
Fraction (mm)	% Within Fraction	Limits
9.5 - 2.36	31	20 - 46
4.75 - 1.18	21	9 - 34
2.36 - 0.600	14	6 - 26
1.18 - 0.300	9	3 - 21
0.600 - 0.150	9	2 - 17

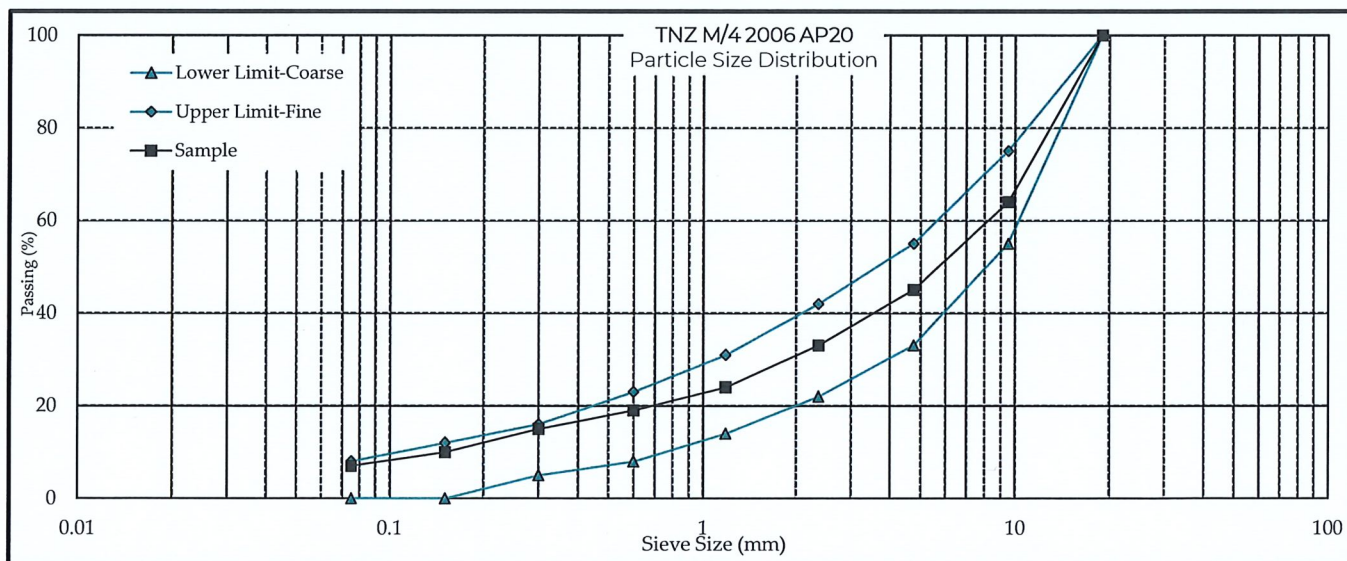
Crushing Resistance		
% Fines @ Spec. Load	-	%
Specification	-	%
Crushing Resistance	-	kN
Nom Aggregate Size	-	mm
Specified Load	-	kN

Broken Faces Content of Aggregate		
Fraction (mm)	Percentage by Weight	Lower Limit
19.0 - 9.5	74	70
9.5 - 4.75	81	70

Plasticity Index	
Sample PI	Non Plastic
Specification	<= 5

Clay Index	
Sample CI	0.7
Specification	<= 3

Sand Equivalent (Washed, Mechanical Shaking)	
Sample SE	21
Specified	>= 40



Test Methods			
Plasticity Index	NZS 4407 : 2015 : Test 3.4	Broken Faces Content of Aggregate	NZS 4407 : 2015 : Test 3.14
Sand Equivalent	NZS 4407 : 2015 : Test 3.6	Clay Index	NZS 4407 : 2015 : Test 3.5
Particle Size Distribution	NZS 4407 : 2015 : Test 3.8.1		

Date tested : 27 May 2025
Date reported : 31 May 2025

Sampling is covered by IANZ Accreditation
This report may only be reproduced in full
All information supplied by Client

Approved Signatory

Designation : Laboratory Manager
Date : 31 May 2025



All tests reported herein
have been performed in
accordance with the
laboratory's scope of
accreditation

PF-LAB-040 (19/01/2022)

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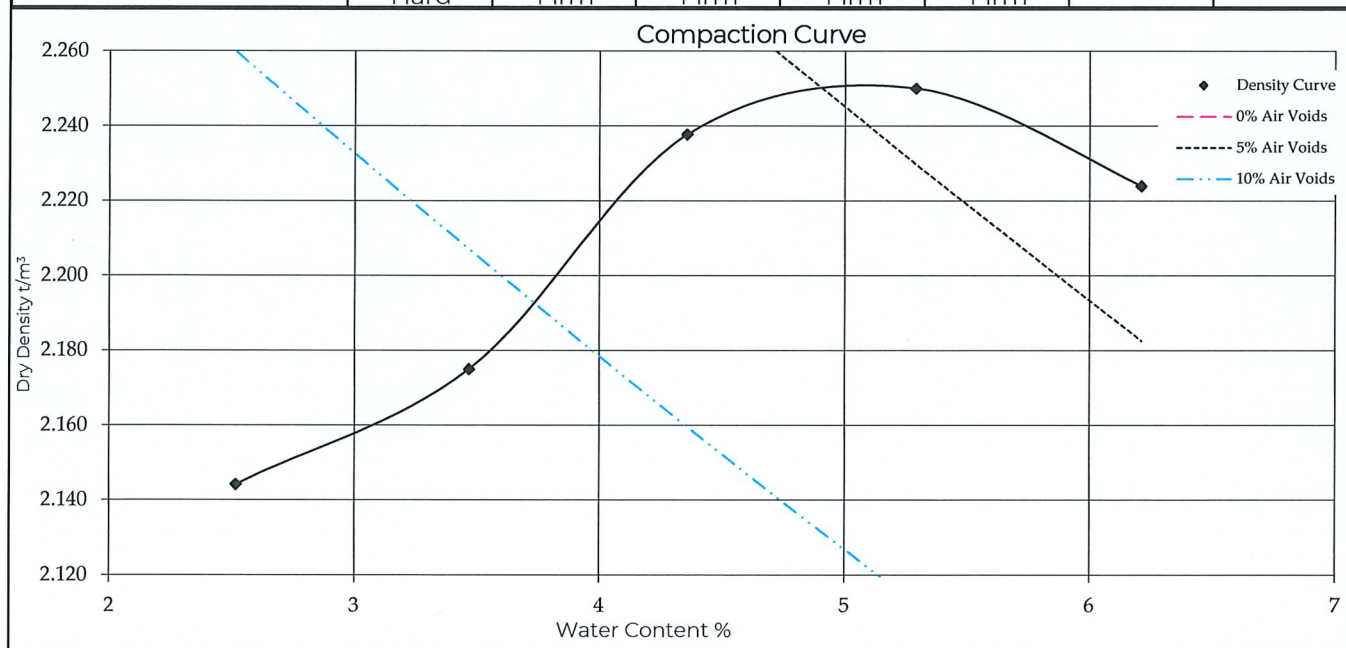
DRY DENSITY / WATER CONTENT RELATIONSHIP
VIBRATING COMPACTION



Project : Quality Assurance
Location : Production Stock
Client : Road Metals Company Limited
Contractor : Various
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Date sampled : 11 April 2025
Sampling method : NZS 4407: 2015 (2.4.6.3.2)
Sample description : NZTA M/4 AP20
Sample condition : Damp as received
Solid density : 2.68 t/m³ (Assumed)
Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
Lab Ref No : CH12736
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Test Results							
Maximum dry density	2.26	t/m³	Natural water content			3.5	%
Optimum water content	5.2	%	Fraction tested			Whole	
Sample ID	-1%	NAT	+1%	+2%	+3%		
Bulk density t/m³	2.198	2.250	2.335	2.369	2.362		
Water content %	2.5	3.5	4.4	5.3	6.2		
Dry density t/m³	2.144	2.175	2.238	2.250	2.224		
Sample condition	Moist	Wet	Wet	Wet	Saturated		
	Hard	Firm	Firm	Firm	Firm		



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

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