

TNZ M/4 : 2006 AP20
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 AP20
 Sample condition : Damp as received
 Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
 Lab Ref No : CH12155
 Client Ref No : 915-161

Particle Size Distribution		
Sieve Size (mm)	Percentage Passing	
	Sample	Limits
63.0	-	100 - 100
37.5	-	100 - 100
19.0	100	100 - 100
9.5	63	55 - 75
4.75	40	33 - 55
2.36	28	22 - 42
1.18	20	14 - 31
0.600	16	8 - 23
0.300	13	5 - 16
0.150	9	0 - 12
0.075	7	0 - 8

% passing the finest sieve is obtained by difference

Grading Shape Control		
Fraction (mm)	% Within Fraction	
	Sample	Limits
9.5 - 2.36	35	20 - 46
4.75 - 1.18	20	9 - 34
2.36 - 0.600	12	6 - 26
1.18 - 0.300	7	3 - 21
0.600 - 0.150	7	2 - 17

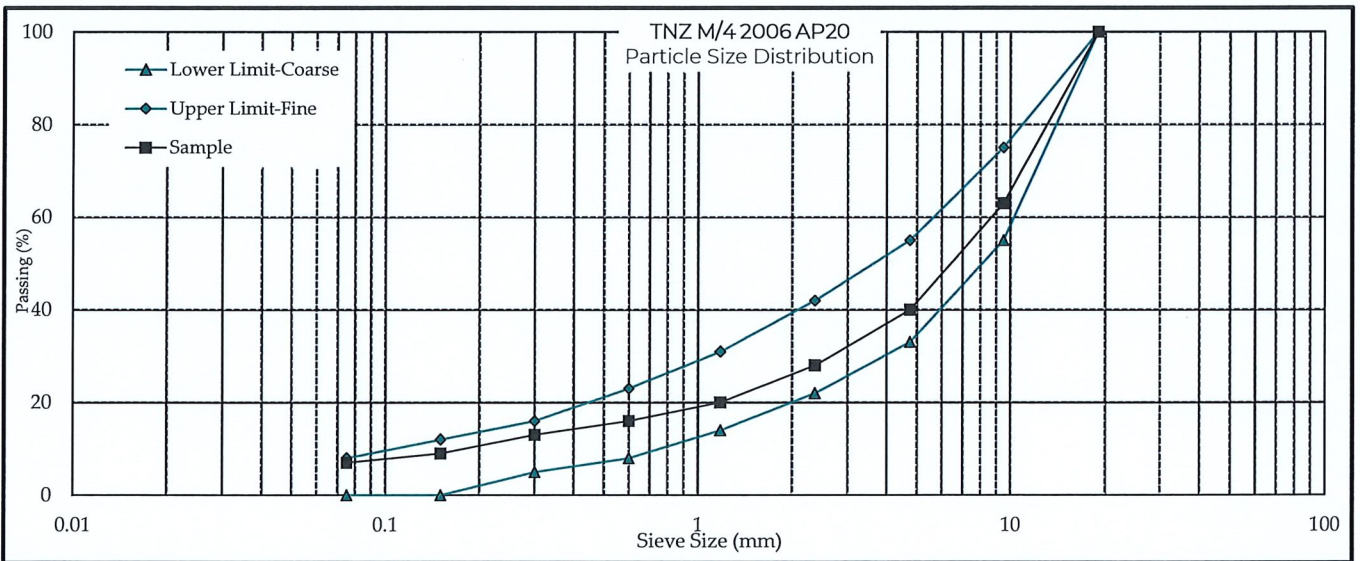
Crushing Resistance		
% Fines @ Spec. Load	-	%
Specification	-	%
Crushing Resistance	-	kN
Nom Aggregate Size	-	mm
Specified Load	-	kN

Broken Faces Content of Aggregate		
Fraction (mm)	Percentage by Weight	
	Sample	Lower Limit
19.0 - 9.5	85	70
9.5 - 4.75	78	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 : 17 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
 Designation : Senior Civil Engineering Technician
 Date : 17 December 2024



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

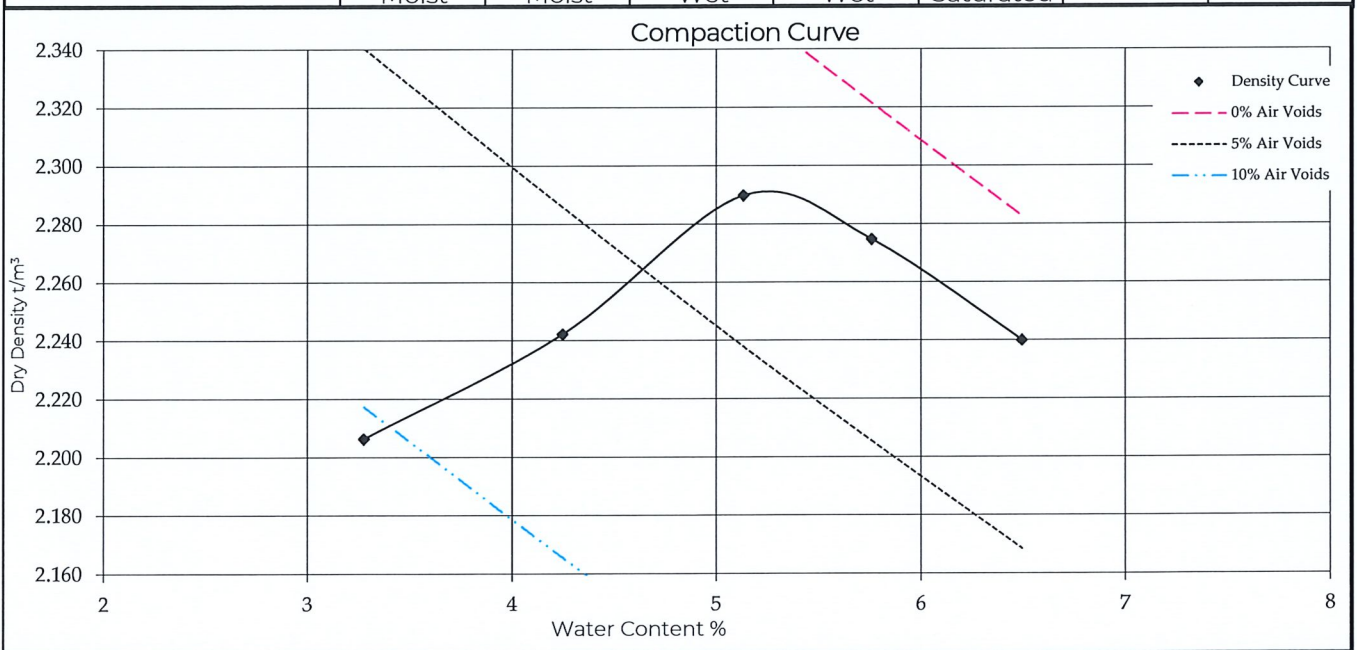
**DRY DENSITY / WATER CONTENT RELATIONSHIP
VIBRATING COMPACTION**



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 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 : CH12155
 Client Ref No : 915-161

Test Results								
Maximum dry density	2.28	t/m ³				Natural water content	3.3	%
Optimum water content	5	%				Fraction tested	Whole	
Sample ID	Nat	+1%	+2%	+3%	+4%			
Bulk density t/m ³	2.279	2.338	2.407	2.406	2.386			
Water content %	3.3	4.2	5.1	5.8	6.5			
Dry density t/m ³	2.206	2.242	2.290	2.275	2.240			
Sample condition	Firm Moist	Hard Moist	Hard Wet	Hard Wet	Firm Saturated			



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

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

Sampling is not covered by IANZ Accreditation. Results apply only to sample tested.
 This report may only be reproduced in full

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

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 AP20
 Sample condition : Damp as received
 Source : Rolleston Quarry

Project No : 6-JRMCO.16/6LC
 Lab Ref No : CH12155
 Client Ref No : 915-161

Test Results	
Client Ref No :	915-161
Cone penetration limit :	21
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 : 12 December 2024
 Date reported : 17 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 

Designation : Senior Civil Engineering Technician
 Date : 17 December 2024



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