



A TETRA TECH COMPANY

Newstead, Brisbane Laboratory

Coffey Testing Pty Ltd
ABN 92 114 364 046
47 Doggett Street
Newstead QLD 4006

Phone: +61 7 3608 2500
Fax: +61 7 3852 2805

Report No: NEWS16S-00985-1

Issue No: 1

Material Test Report

Client: Coffey Testing Pty Ltd (Albury)
1/314 Kiewa Street
Albury NSW 2640

Principal:

Project No.: INFONEWS00863AA

Project Name: INTERLAB - Interlab testing (2015)

Lot No.: TRN:



Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Joseph Langley
(Laboratory Manager)
NATA Accredited Laboratory Number: 431
Date of Issue: 23/03/2016

Sample Details

Sample ID: NEWS16S-00985

Client Sample: ALBU16S-00427

Date Sampled: 19/02/2016

Source:

Material:

Specification:

Sampling Method: Submitted by client

Project Location: Albury, NSW

Sample Location: ex A P Delaney and Co

Test Results

Description	Method	Result	Limits
Los Angeles Value (%)	AS 1141.23	37	
Test Grading		B	
Date Tested		14/03/2016	
Los Angeles Value (%)	AS 1141.23	40	
Test Grading		K	
Apparent Particle Density (t/m ³)	AS 1141.5	2.65	
Particle Density Dry (t/m ³)		2.55	
Particle Density SSD (t/m ³)		2.59	
Water Absorption (%)		1.5	
Date Tested		11/03/2016	
Apparent Particle Density - Coarse (t/m ³)	AS 1141.6.1	2.62	
Particle Density Dry (t/m ³)		2.57	
Particle Density SSD (t/m ³)		2.59	
Water Absorption (%)		0.8	

Comments

N/A

CLASSIFICATION TESTS REPORT				
CIVILTEST ALBURY WODONGA 16 KANE ROAD WODONGA, VIC, 3690 PO BOX 876 WODONGA, VIC, 3689 Pn (02) 60243960		Page Report Number Date		1 of 2 18CT733 12.6.2018
Client Project Description	AP Delaney Classification Tests 20mm Class 2 Roadbase			
Material Description				
Borehole		Rockwood Class 2	Vic Roads	
Depth			20mm Class 1 or 2	
m			Specification	
Test Method AS1289.3.6.1	Sieve Analysis Passing %			
	75.00mm			
	53.00mm			
	37.50mm			
	26.50mm	100	100	
	19.00mm	98	95 - 100	
	13.20mm	79	78 - 92	
	9.50mm	63	63 - 83	
	6.70mm	52		
	4.75mm	46	44 - 64	
	2.36mm	35	29 - 48	
	1.18mm	25		
	600um	18		
	425um	15	13 - 21	
	300um	12		
	150um	8		
	75um	5	5 - 9	
AS1289.3.1.1	Liquid Limit %			
AS1289.3.1.2	Liquid Limit %			
AS1289.3.2.1	Plastic Limit %			
AS1289.3.3.1	Plasticity Index %	NP		
AS1289.3.4.1	Linear Shrinkage %	0		
AS1289.2.1.1	Moisture Content %			
AS1289.5.2.1	Max Dry Density			
AS1289.5.2.1	Opt Moist Content			
Sample History				
Grading		Washed & Dry Sieved		
Plasticity		Oven Dried & Sieved		
Sampled By: DNH		6.6.2018		
Manager Peter Vella		 12.6.2018		
The results of tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.				
Form-CT118-V1.11 Mar 16-PV-Page 1 of 1				

Civil Test Albury Wodonga

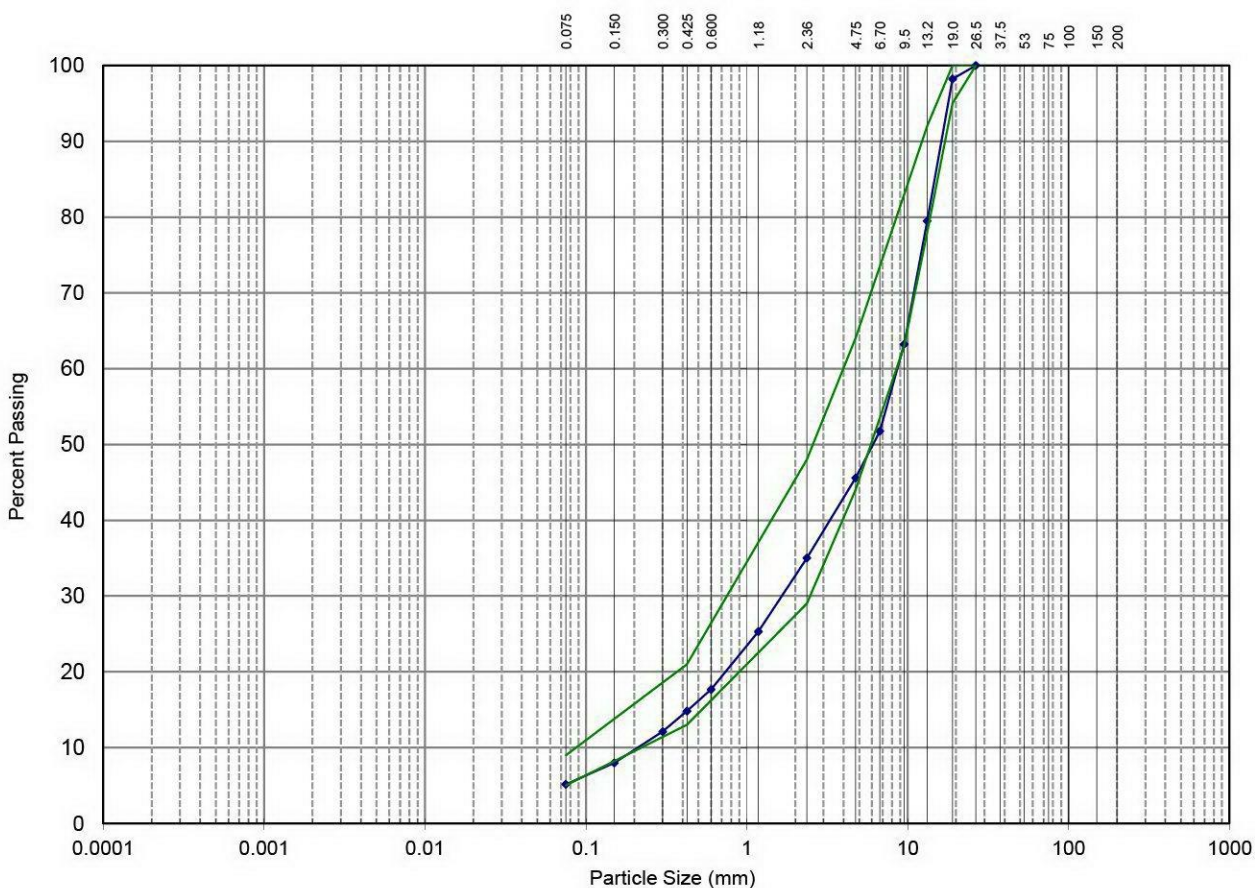
SOILS ENGINEERING LABORATORY

16 Kane Road Wodonga-Postal Address P.O Box 876 Wodonga 3689 Telephone 0260243960

Results of Particle Size Distribution & Plasticity Index

Client :	AP Delaney	Report No. :	18CT733
Project :	Quality Assurance	Report Date :	12.6.2018
Location :	Rockwood	Date Sampled:	5.6.2018
	Ettamogah	Date of Test:	5.6.2018
Classification:	Class 2 Roadbase	Page:	1 of 1

AUSTRALIAN STANDARD SIEVE APERTURES



Sieve Size (mm)	% Passing
75.0	~
53.0	~
37.5	~
26.5	100%
19.0	98%
13.2	79%
9.5	63%
6.7	52%
4.75	46%
2.36	35%
1.18	25%
0.600	18%
0.425	15%
0.300	12%
0.150	8%
0.075	5%

Plasticity Index

LL	
PL	
PI	NP
LS	0.0%

CLAY FRACTION	SILT FRACTION			SAND FRACTION			GRAVEL FRACTION			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
	0.002	0.006	0.02	0.06	0.2	0.6	2.0	6.0	20	60

Description: Class 2 Roadbase
Test Method(s): AS 1289.3.6.1, 2.1.1, 3.3.1 & 3.4.1
Sampling Method(s): AS 1289.1.2.1
Remarks: -

Tested: DNH
 Checked: PV

Peter Vella
 Peter Vella
 Laboratory Manager

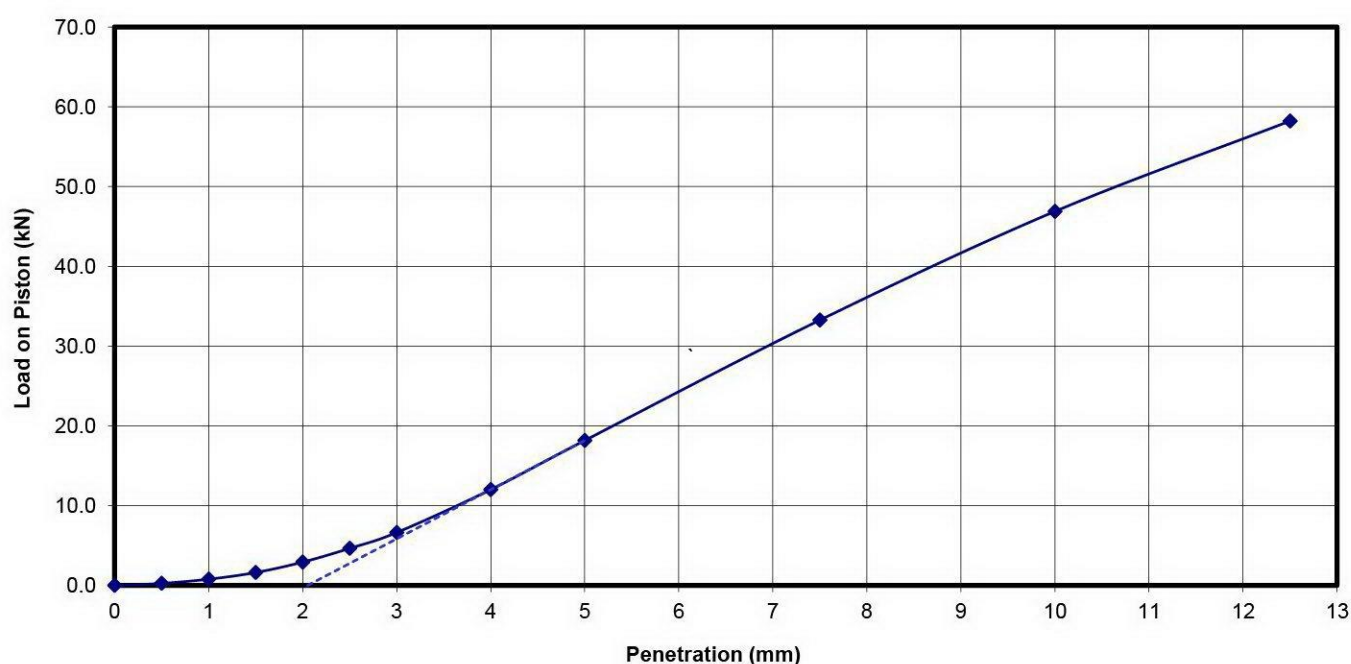
CivilTest Albury Wodonga

SOILS ENGINEERING LABORATORY

16 Kane Road Wodonga-Postal Address P.O Box 876 Wodonga 3689 Telephone 0260243960

Result of California Bearing Ratio Test

Client :	AP Delany	Project No. :	18CT733
Project :	QA	Report Date :	21.06.2018
Location :	Rockwood Quarry, Albury	Date Sampled :	05.06.2018
Depth / Layer :	-	Date of Test:	19.6.2018
		Page:	1 of 1



Description: Class 2 Roadbase

Test Method(s): AS 1289.6.1.1, AS 1289.2.1.1

Sampling Method(s): AS 1289.1.2.1

Remarks: -

Percentage > 19mm: 2.0% (Excluded)

LEVEL OF COMPACTION: 100% of MOD MDD

SURCHARGE: 4.5 kg

SWELL: 0.0%

MOISTURE RATIO: 98% of MOD OMC

SOAKING PERIOD: 4 days

CONDITION	MOISTURE CONTENT %	DRY DENSITY t/m ³
At compaction	7.4	2.22
After soaking	7.7	2.23
After test		
Top 30mm of sample	8.0	-
Remainder of sample	7.1	-
Field values	6.4	-
Modified Compaction	7.6	2.22

CBR RESULTS		
TYPE	PENETRATION	CBR (%)
TOP	5.0mm	150

Tested: PV
Checked: PV

Peter C Vella
Peter C Vella
Manager

CLASSIFICATION TESTS REPORTS

CIVILTEST ALBURY WODONGA

16 KANE ROAD WODONGA, VIC, 3689

PO BOX 876 WODONGA, VIC, 3689

P+ (02) 60243960

Page

Report Number

Date

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17CT1386

13.11.2017

Client

Project

Description

A P Delaney

Quality Assurance

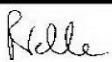
Rockwood Quarry 20mm Class 2 Gravel

Material Description		20mm Class 2 Gravel	Vic Roads	
Borehole		-	20mm Class 1 or 2	
Depth m		-	% Range	
Test Method AS1289.3.6.1	Sieve Analysis			
	Passing % 75.00mm			
	53.00mm			
	37.50mm			
	26.50mm	100	100	
	19.00mm	99	95 - 100	
	13.20mm	86	78 - 92	
	9.50mm	74	63 - 83	
	6.70mm	64		
	4.75mm	54	44 - 64	
	2.36mm	37	30 - 48	
	1.18mm	26		
	600um	18		
	425um	15	14 - 22	
	300um	12		
	150um	9		
	75um	8	7 - 11	
AS1289.3.1.1	Liquid Limit %	21		
AS1289.3.1.2	Liquid Limit %	-		
AS1289.3.2.1	Plastic Limit %	19		
AS1289.3.3.1	Plasticity Index %	2		
AS1289.3.4.1	Linear Shrinkage %	1		
AS1289.2.1.1	Moisture Content %	-		
AS1289.5.2.1	Max Dry Density	-		
AS1289.5.2.1	Opt Moist Content	-		

Sample History

Grading Washed & Sieved
Plasticity Dry Sieved

Sampled By: Client 03.11.2017

Manager Peter Vella  08.11.2017

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Civil Test Albury Wodonga

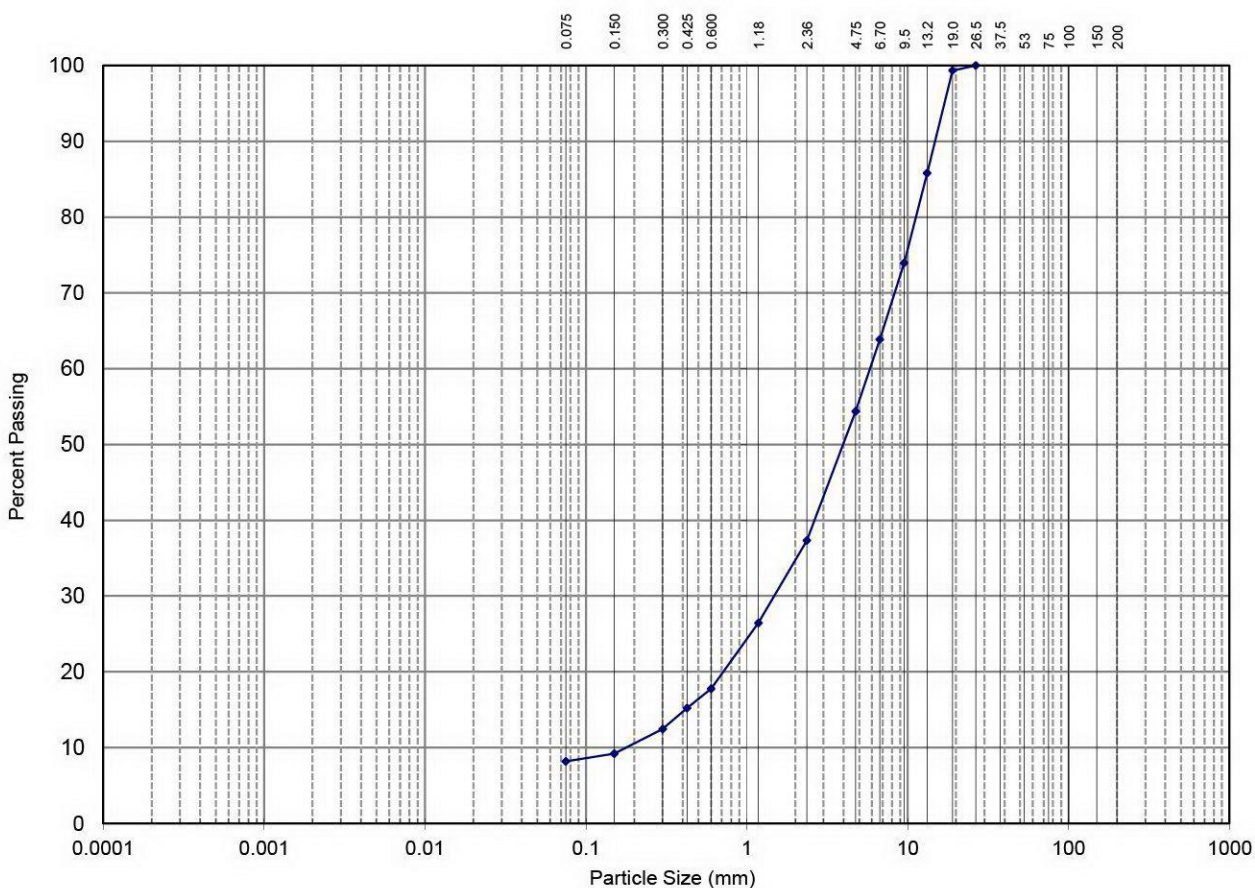
SOILS ENGINEERING LABORATORY

16 Kane Road Wodonga-Postal Address P.O Box 876 Wodonga 3689 Telephone 0260243960

Results of Particle Size Distribution & Plasticity Index

Client :	A P Delaney	Report No. :	17CT1386
Project :	QA	Report Date :	10.11.2017
Location :	Rockwood Quarry	Date Sampled:	03.11.2017
Classification:	-	Date of Test:	08.11.2017
		Page:	1 of 1

AUSTRALIAN STANDARD SIEVE APERTURES



Sieve Size (mm)	% Passing
75.0	~
53.0	~
37.5	~
26.5	100%
19.0	99%
13.2	86%
9.5	74%
6.7	64%
4.75	54%
2.36	37%
1.18	26%
0.600	18%
0.425	15%
0.300	12%
0.150	9%
0.075	8%

Plasticity Index

LL	21%
PL	19%
PI	2%
LS	1.0%

CLAY FRACTION	SILT FRACTION			SAND FRACTION			GRAVEL FRACTION			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
	0.002	0.006	0.02	0.06	0.2	0.6	2.0	6.0	20	60

Description: 20mm Class 2 Gravel
Test Method(s): AS 1289.3.6.1, 3.1.1, 3.2.1, 3.4.1
Sampling Method(s): Sampled by Client
Remarks: -

Tested: TL
 Checked: PV

Peter Vella
 Peter Vella
 Laboratory Manager

Civil Test Albury Wodonga

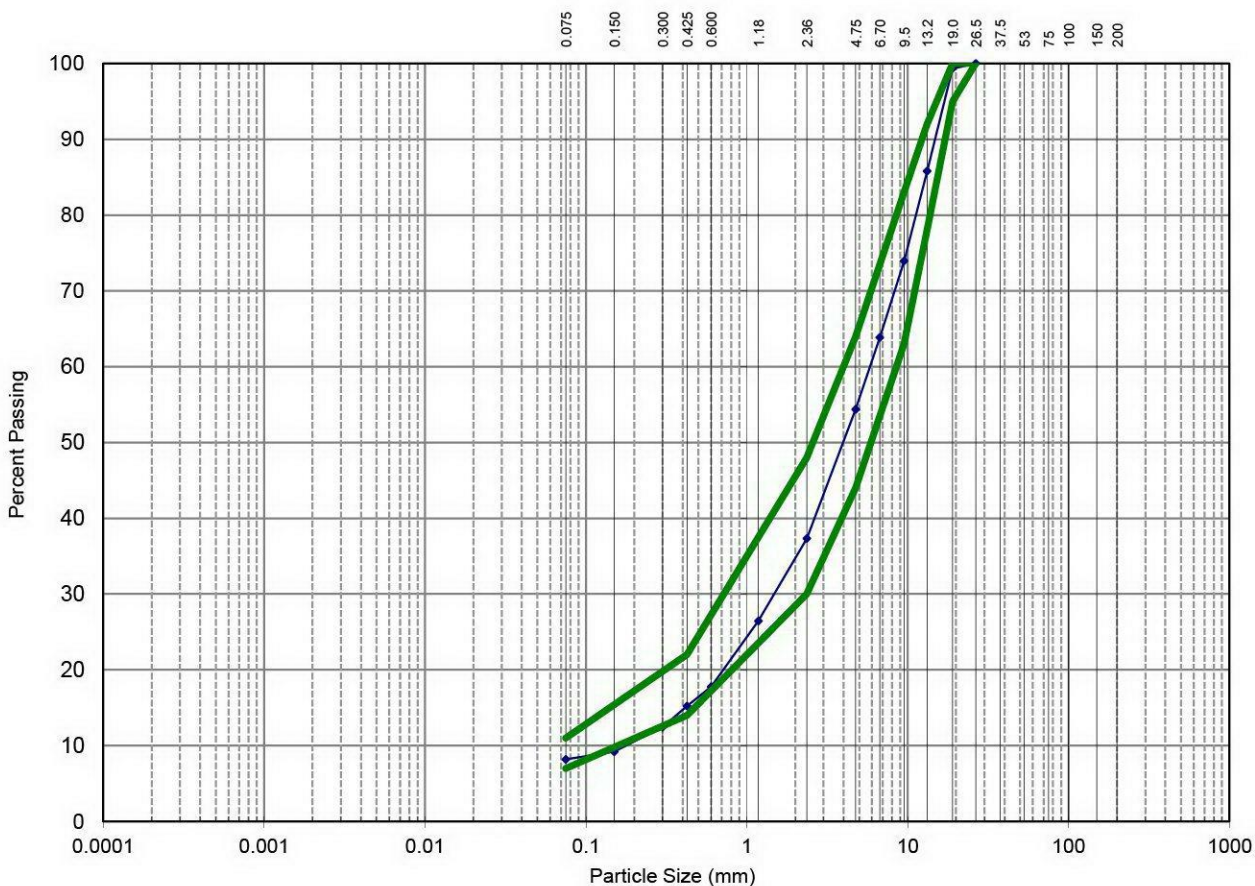
SOILS ENGINEERING LABORATORY

16 Kane Road Wodonga-Postal Address P.O Box 876 Wodonga 3689 Telephone 0260243960

Results of Particle Size Distribution & Plasticity Index

Client :	A P Delaney	Report No. :	17CT1386
Project :	QA	Report Date :	10.11.2017
Location :	Rockwood Quarry	Date Sampled:	03.11.2017
Classification:	Vic Roads 20mm Class 1 or 2	Date of Test:	08.11.2017
		Page:	1 of 1

AUSTRALIAN STANDARD SIEVE APERTURES



Sieve Size (mm)	% Passing
75.0	~
53.0	~
37.5	~
26.5	100%
19.0	99%
13.2	86%
9.5	74%
6.7	64%
4.75	54%
2.36	37%
1.18	26%
0.600	18%
0.425	15%
0.300	12%
0.150	9%
0.075	8%

Plasticity Index

LL	21%
PL	19%
PI	2%
LS	1.0%

CLAY FRACTION	SILT FRACTION			SAND FRACTION			GRAVEL FRACTION			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
	0.002	0.006	0.02	0.06	0.2	0.6	2.0	6.0	20	60

Description: 20mm Class 2 Gravel
Test Method(s): AS 1289.3.6.1, 3.1.1, 3.2.1, 3.4.1
Sampling Method(s): Sampled by Client
Remarks: -

Tested: TL
 Checked: PV

Peter Vella
 Peter Vella
 Laboratory Manager



A TETRA TECH COMPANY

South Nowra Laboratory

Coffey Testing Pty Ltd
ABN 92 114 364 046
43 Quinns Lane
South Nowra NSW 2541

Phone: +61 2 4429 5000
Fax: +61 2 4429 5099

Report No: SNOW16S-00449-1

Issue No: 1

Material Test Report

Client: Coffey Testing Pty Ltd (Albury)
1/314 Kiewa Street
Albury NSW 2640

Principal: AP Delaney & Co Pty Ltd

Project No.: INFOSNOW00502AA

Project Name: INTERLAB - INFOALBU01431AA - Quality Assurance Testing (2016)

Lot No.: TRN: ALBU16W00166



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Approved Signatory: Warren O'Connor
(Laboratory Manager)

NATA Accredited Laboratory Number: 431
Date of Issue: 11/03/2016

Sample Details

Sample ID: SNOW16S-00449

Client Sample: ALBU16S-00427

Date Sampled: 19/02/2016

Source:

Material: Sandy Gravel

Specification: No Specification

Sampling Method: Submitted by client

Project Location: Submitted Sample

Sample Location: Sample 1
ALBU16S-00427

Test Results

Description	Method	Result	Limits
Maximum Dry Compressive Strength (MPa)	RMS T114	3.8	
Moisture Content at MDCS (%)		5.5	
Straddling		Achieved	
Date Tested		3/03/2016	

Comments

Specimen at +6% Moisture Content - Moisture running out of mould during compaction.



A TETRA TECH COMPANY

Newstead, Brisbane Laboratory

Coffey Testing Pty Ltd
ABN 92 114 364 046
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Report No: NEWS16S-00985-1

Issue No: 1

Material Test Report

Client: Coffey Testing Pty Ltd (Albury)
1/314 Kiewa Street
Albury NSW 2640

Principal:

Project No.: INFONEWS00863AA

Project Name: INTERLAB - Interlab testing (2015)

Lot No.: TRN:



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Approved Signatory: Joseph Langley
(Laboratory Manager)
NATA Accredited Laboratory Number: 431
Date of Issue: 23/03/2016

Sample Details

Sample ID: NEWS16S-00985

Client Sample: ALBU16S-00427

Date Sampled: 19/02/2016

Source:

Material:

Specification:

Sampling Method: Submitted by client

Project Location: Albury, NSW

Sample Location: ex A P Delaney and Co

Test Results

Description	Method	Result	Limits
Los Angeles Value (%)	AS 1141.23	37	
Test Grading		B	
Date Tested		14/03/2016	
Los Angeles Value (%)	AS 1141.23	40	
Test Grading		K	
Apparent Particle Density (t/m ³)	AS 1141.5	2.65	
Particle Density Dry (t/m ³)		2.55	
Particle Density SSD (t/m ³)		2.59	
Water Absorption (%)		1.5	
Date Tested		11/03/2016	
Apparent Particle Density - Coarse (t/m ³)	AS 1141.6.1	2.62	
Particle Density Dry (t/m ³)		2.57	
Particle Density SSD (t/m ³)		2.59	
Water Absorption (%)		0.8	

Comments

N/A

CIVILTEST ALBURY - WODONGA

16 Kane Road, Wodonga Vic 3690

NATA Accreditation No 9900

Report No: 14CT388

Date: 12.5.2014

Page: 1 of 1

CALIFORNIA BEARING RATIO/COMPACTION REPORT SHEET

Client: AP Delaney

Project: QA, Rockwood Quarry, Albury

Date Sampled: April 2014

Date Tested : April 2014

Material Type: Silty GRAVEL

Source of Material:

Stockpile

SAMPLE No		14CT388		
Sampled By:		Client		
Depth	m			
Percentage Coarse Material .19mm. Sieve	%	0		
Additive				
Additive content	%	Water		
Compaction Type		Modified		
Test Method No	AS1289	5.2.1		
Surcharge	kg	4.5		
Compactive Effort		MOD		
Maximum Dry Density	t/m ³	2.18		
Optimum Moisture Content	%	5		
Moisture Ratio	%	96		
Condition of Test Specimen		Soaked		
Soaking Time	days	4		
Swell	%	0		
Initial Dry Density	t/m ³	2.18		
Initial Relative Density	%	100.5		
Dry Density after Soaking	t/m ³	2.18		

Moisture Content

Initial	%	4.7		
After Soaking	%	6.7		
Top 30mm after Test	%	5.2		
Full Depth after Test	%	6.6		

CALIFORNIA BEARING RATIO	%	330		
Penetration CBR obtained at	mm	5		

Test Methods Used

AS1289.1.1, 2.1.1, 5.2.1, 6.1.1



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NATA Accreditation No : 9900

Name of Signatory: P C Vella

Approved Signatory:

Date: 12.5.2014

Form: CT179/5

CLASSIFICATION TESTS REPORTS

CIVILTEST ALBURY WODONGA

16 KANE ROAD WODONGA, VIC, 3689
PO BOX 876 WODONGA, VIC, 3689
Ph (02) 60243960 Mobile: 0407 572489
Fax (02) 60567017

Page
Report Number
Date

1 of 1
14CT388
12.5.2014

Client
Project
Description

AP Delaney
QA
Rockwood Quarry

Material Description		20mm Roadbase		
Sampled From		Stockpile		
DBSL mm				
Test Method	Sieve Analysis			
AS1289.3.6.1	Passing % 75.00mm			
	53.00mm			
	37.50mm			
	26.50mm	100		
	19.00mm	99		
	13.20mm	82		
	9.50mm	71		
	6.70mm	60		
	4.75mm	51		
	2.36mm	41		
	1.18mm	31		
	600um	23		
	425um	20		
	300um	16		
	150um	12		
	75um	9		
AS1289.3.1.1	Liquid Limit %	25		
AS1289.3.1.2	Liquid Limit %			
AS1289.3.2.1	Plastic Limit %	21		
AS1289.3.3.1	Plasticity Index %	4		
AS1289.3.4.1	Linear Shrinkage %	2		
AS1289.2.1.1	Moisture Content %			
AS1289.5.2.1	Max Dry Density			
AS1289.5.2.1	Opt Moist Content			

Sample History

Grading Washed & Sieved
Plasticity Dry Sieved

Sampled By: Client Date: 4.4.2014

Approved Signatory: Peter Vella Date: 12.5.2014



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CT118/10

CIVIL TEST ALBURY WODONGA

16 Kane Road, Wodonga, Vic, 3690

AP DELANEY - ROCKWOOD QUARRY

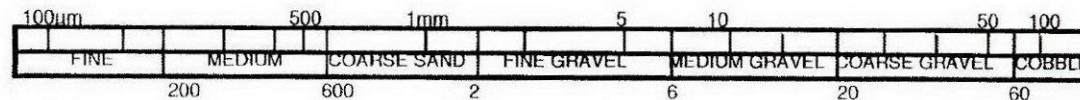
VICROADS CLASS 1 OR 2

LA 25- OR NON-GRANITIC SOURCE ROCK

MATERIALS - SIEVE ANALYSIS TABLE & CHART

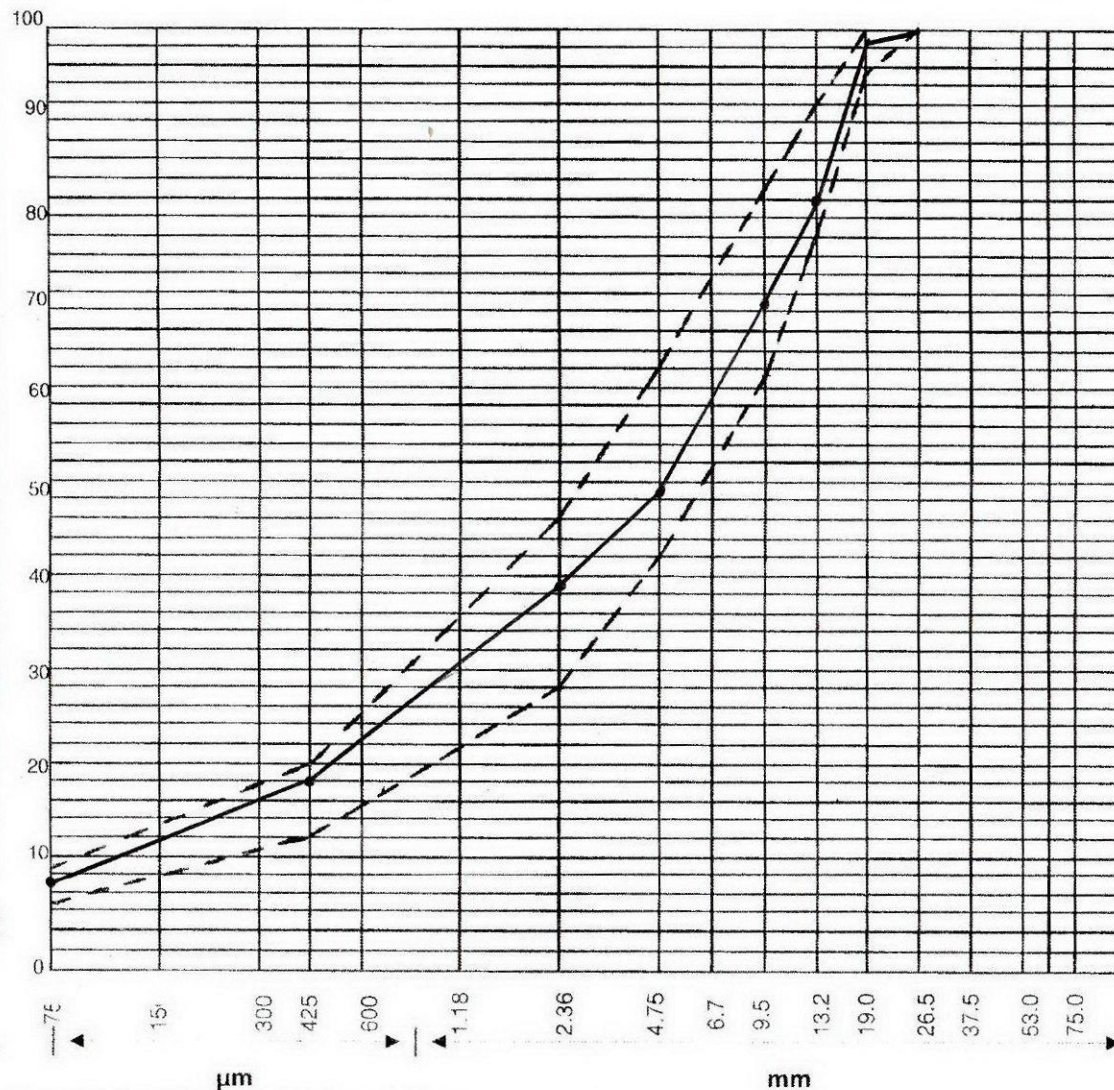
FORM : CT153/8

Test Methods 1141.11 ☐ 1141.30 ☐ 1289.1 ☒ 3.6.1 ☒ 3.1.1 ☒
Australian Standard 3.1.2 ☐ 3.2.1 ☒ 3.3.1 ☒ 3.4.1 ☒ 2.1.1 ☒



SIEVE ANALYSIS

Percentage Passing Sieve	Report No. 14CT388	Page 2 of 2
Specification 812-071		
75.0 mm		
53.0 mm		
37.5 mm		
26.5 mm	100	100
19.0 mm	95-100	99
13.2 mm	78-92	82
9.50 mm	63-83	71
6.70 mm		60
4.75 mm	44-64	51
2.36 mm	30-48	41
1.18 mm		31
600 µm		23
425 µm	14-22	20
300 µm		16
150 µm		12
75 µm	7-11	9



Australian Standard Sieve Sizes

LIQUID LIMIT % = 25
PLASTICITY INDEX % = 4
MOISTURE CONTENT % =
PLASTIC LIMIT % = 21
LINEAR SHRINKAGE % = 2
CRUSHED PARTICLES % =

APPROVED SIGNATORY: *helle*

DATE : 10.4.2014