

Results of Moisture Content, Plasticity and Linear Shrinkage Tests

Client: HEALTH INFRASTRUCTURE		Project No: 72320	
Project: WAGGA WAGGA BASE HOSPITAL		Report No: S11-075 B	
Location: WAGGA WAGGA		Report Date: 27-04-11	
		Date Sampled: 04-04-11	
		Date of Test: 19-04-11	
		Page: 1 of 1	

Test Location	Depth (m)	Description	Code	W _F %	W _L %	W _P %	PI %	*LS %
BH 101	4.00 – 4.45	SILTY CLAY – Orange brown silty clay with some ironstone gravel	2,5	-	35	18	17	11.0
BH 106	2.50 – 2.95	SILTY CLAY – Orange brown silty clay with traces of ironstone gravel	2,5	-	33	18	15	10.0
BH 108	1.40 – 1.85	SILTY CLAY – Red brown silty clay	2,5	-	28	15	13	8.5
BH 109	4.00 – 4.45	SILTY CLAY – Orange brown silty clay	2,5	-	34	17	17	10.5

Legend:

W_F Field Moisture Content
 W_L Liquid limit
 W_P Plastic limit
 PI Plasticity index
 LS Linear shrinkage from liquid limit condition (Mould length 125mm)

Code:

Sample history for plasticity tests

1. Air dried
2. Low temperature (<50°C) oven dried
3. Oven (105°C) dried
4. Unknown

Test Methods:

Moisture Content: AS 1289 2.1.1
 Liquid Limit: AS 1289.3.1.2
 Plastic Limit: AS 1289 3.2.1
 Plasticity Index: AS 1289 3.3.1
 Linear Shrinkage: AS 1289 3.4.1

Method of preparation for plasticity tests

5. Dry sieved
6. Wet sieved
7. Natural

*Specify if sample crumbled CR or curled CU

Sampling Methods: Sampled by Engineering Department

Remarks:



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Tested: MO
 Checked: NW



Norman Weimann
 Laboratory Manager

Determination of Emerson Class Number of Soil

Client: HEALTH INFRASTRUCTURE		Project No: 72320	
Project: WAGGA WAGGA BASE HOSPITAL		Report No: S11-075 A	
Location: WAGGA WAGGA		Report Date: 27-04-11	
		Date Sampled: 04-04-11	
		Date of Test: 27-04-11	
		Page: 1 of 1	

Sample No.	Depth (m)	Description	Water Type	Water Temp	Class No.
BH 102	1.00 – 1.45	SILTY CLAY – Orange brown silty clay with some ironstone gravel and traces of sand	Distilled	20°C	3
BH 106	4.00 – 4.45	SILTY CLAY – Mottled orange brown and grey silty clay with traces of ironstone gravel and sand	Distilled	20°C	3

Test Methods: AS 1289 3.8.1

Sampling Methods: AS 1289.1.2.1, AS 1289.1.1

Remarks:



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Tested: MO
Checked: NW


 Norman Weimann
 Laboratory Manager

Results of Compaction Test

Client :	HEALTH INFRASTRUCTURE	Project No. :	72320
Project :	WAGGA WAGGA BASE HOSPITAL REDEVELOP	Report No. :	S11 - 063 A
Location :	EDWARD STREET - WAGGA WAGGA	Report Date :	19/04/2011
		Date of Test:	11/04/2011
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Sample Details: Location: BH 101
Depth: 0.3m

Particles > 19mm: 0%

Description: SILTY CLAY - Red orange silty clay

Maximum Dry Density:	1.80 t/m³
Optimum Moisture Content:	13.5 %

Remarks:

Test Methods: AS1289.5.1.1, AS1289.2.1.1

Sampling Methods: By Engineering Dept



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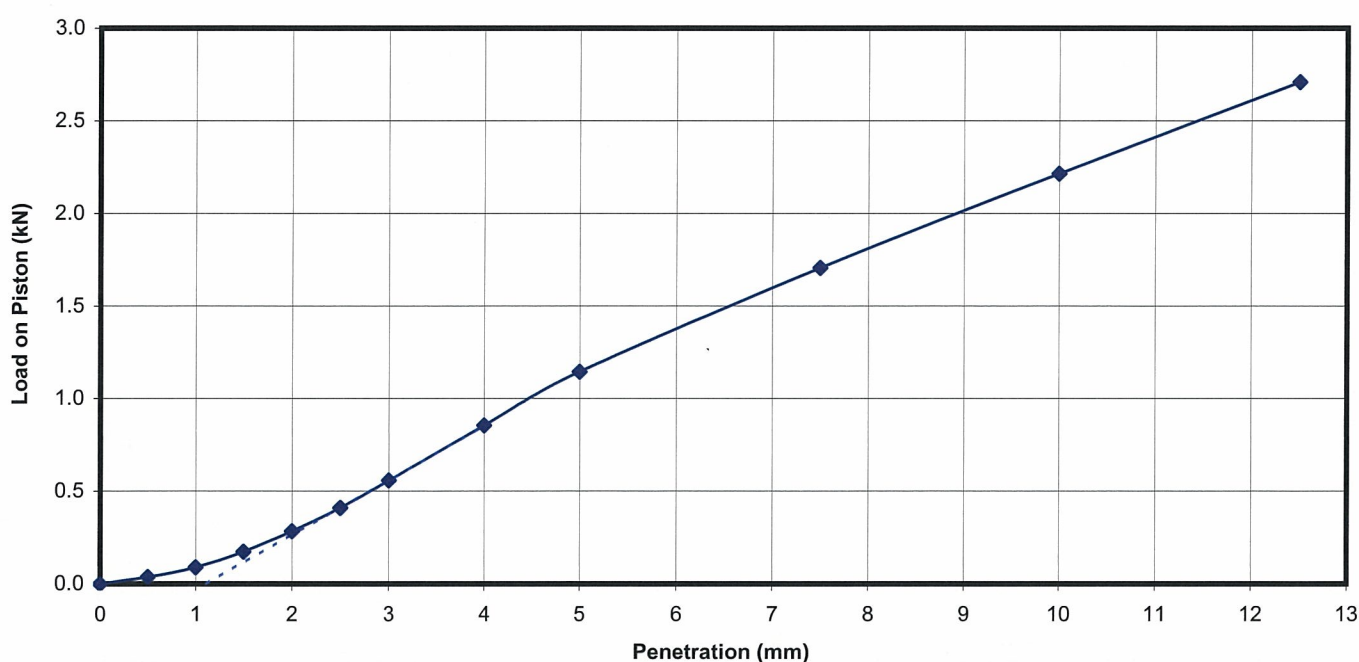
Tested:	RA
Checked:	NW

Norman Weimann

Norman Weimann
Laboratory Manager

Result of California Bearing Ratio Test

Client :	HEALTH INFRASTRUCTURE	Project No. :	72320
Project :	WAGGA WAGGA BASE HOSPITAL	Report No. :	S11 - 063 B
Location :	EDWARD STREET - WAGGA WAGGA	Report Date :	19/04/2011
Test Location :	BH101	Date Sampled :	1-7/04/2011
Depth / Layer :	0.3	Date of Test:	14/04/2011
		Page:	1 of 1



Description: SILTY CLAY - Red orange silty clay

Test Method(s): AS 1289.6.1.1, AS 1289.2.1.1

Sampling Method(s): Sampled by Engineering Dept

Percentage > 19mm: 0.0%

LEVEL OF COMPACTION: 100% of STD MDD
MOISTURE RATIO: 102% of STD OMC

SURCHARGE: 4.5 kg
SOAKING PERIOD: 4 days

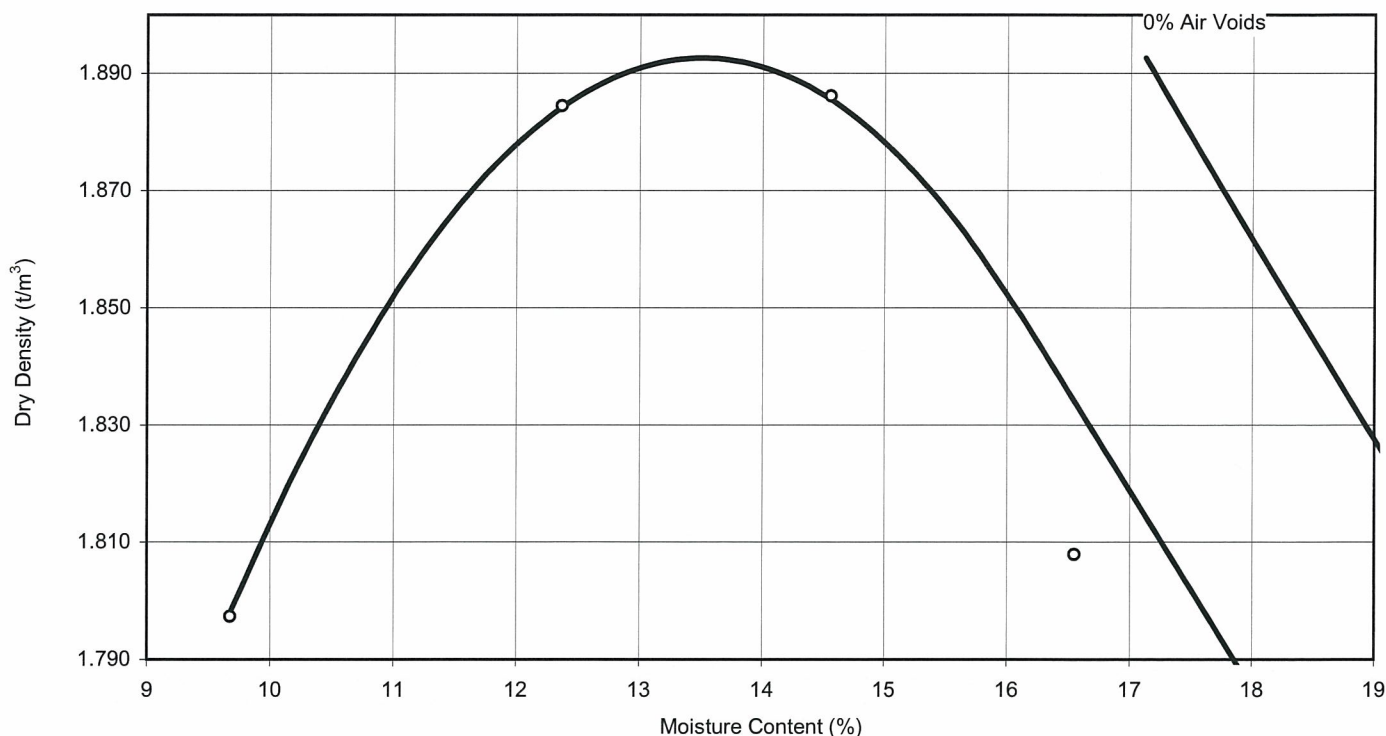
SWELL: 0.8%

CONDITION	MOISTURE CONTENT %	DRY DENSITY t/m ³
At compaction	13.6	1.79
After soaking	17.1	1.78
After test		
Top 30mm of sample	16.6	-
Remainder of sample	15.2	-
Field values	9.7	-
Standard Compaction	13.3	1.80

RESULTS		
TYPE	PENETRATION	CBR (%)
BOTTOM	2.5 mm	6
	5.0 mm	7

Results of Compaction Test

Client :	HEALTH INFRASTRUCTURE	Project No. :	72320
Project :	WAGGA WAGGA BASE HOSPITAL REDEVELOP	Report No. :	S11 - 063 C
Location :	EDWARD STREET - WAGGA WAGGA	Report Date :	19/04/2011
		Date of Test:	11/04/2011
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Sample Details: Location: BH 103
Depth: 0.5m

Particles > 19mm: 0%

Description: CLAY - Red orange clay with some gravel

Maximum Dry Density:	1.89 t/m³
Optimum Moisture Content:	13.5 %

Remarks:

Test Methods: AS1289.5.1.1, AS1289.2.1.1

Sampling Methods: By Engineering Dept



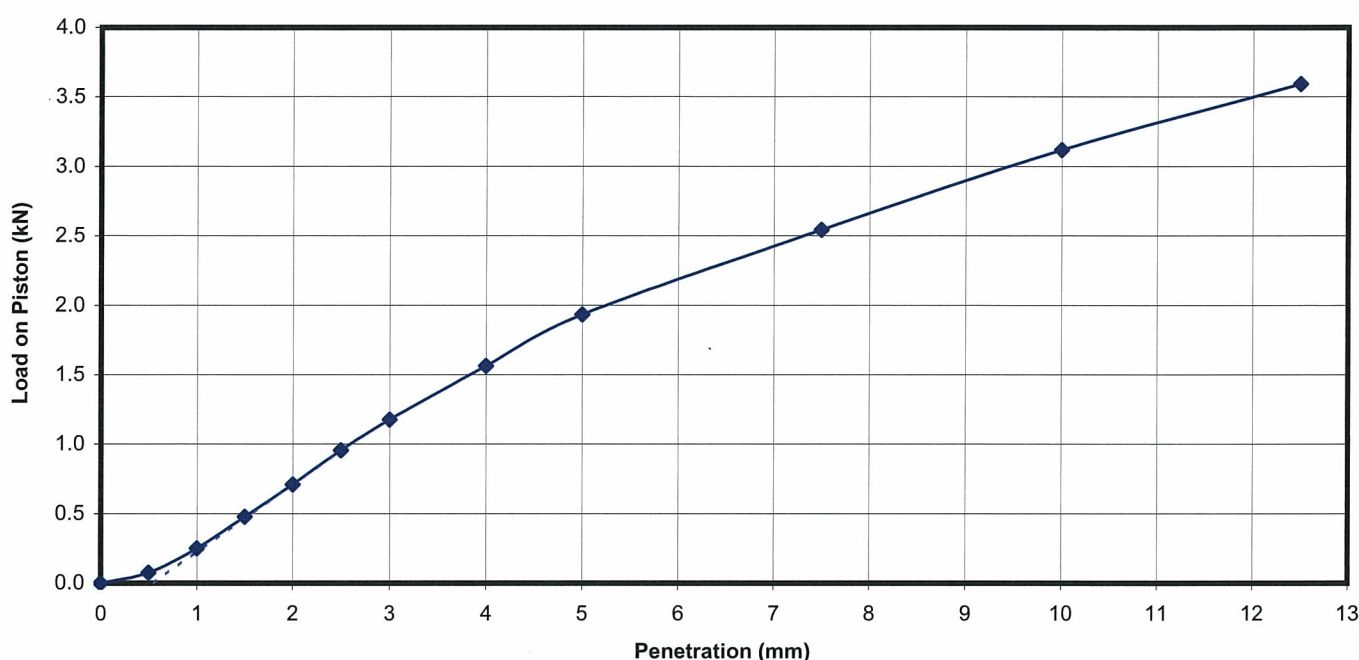
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Tested:	RA
Checked:	NW

Norman Weimann
Laboratory Manager

Result of California Bearing Ratio Test

Client :	HEALTH INFRASTRUCTURE	Project No. :	72320
Project :	WAGGA WAGGA BASE HOSPITAL	Report No. :	S11 - 063 D
Location :	EDWARD STREET - WAGGA WAGGA	Report Date :	19/04/2011
Test Location :	BH103	Date Sampled :	1-7/04/2011
Depth / Layer :	0.5	Date of Test:	14/04/2011
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Description: CLAY - Red orange clay with some gravel

Test Method(s): AS 1289.6.1.1, AS 1289.2.1.1

Sampling Method(s): Sampled by Engineering Dept

Percentage > 19mm: 0.0%

LEVEL OF COMPACTION: 100% of STD MDD
MOISTURE RATIO: 98% of STD OMC

SURCHARGE: 4.5 kg
SOAKING PERIOD: 4 days

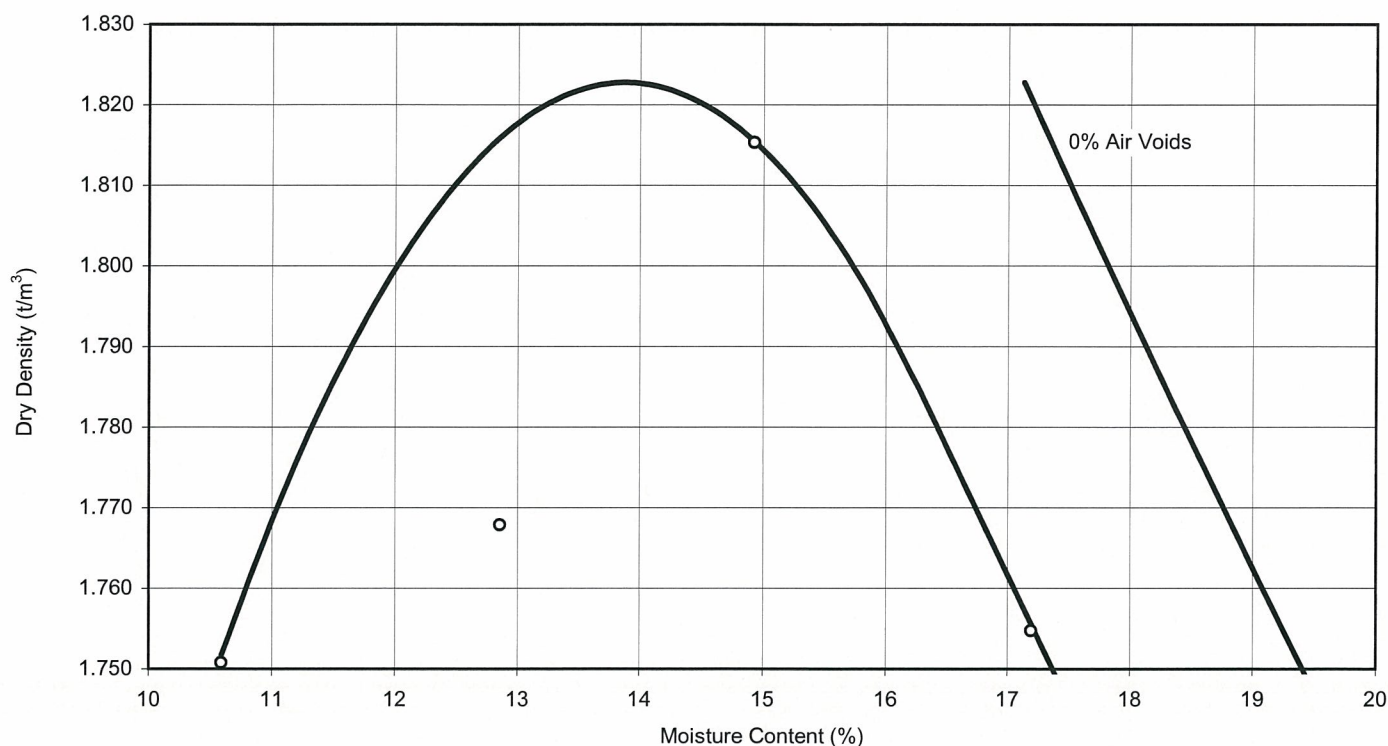
SWELL: 0.3%

CONDITION	MOISTURE CONTENT %	DRY DENSITY t/m ³
At compaction	13.2	1.90
After soaking	14.8	1.89
After test		
Top 30mm of sample	14.3	-
Remainder of sample	13.7	-
Field values	12.4	-
Standard Compaction	13.5	1.89

RESULTS		
TYPE	PENETRATION	CBR (%)
BOTTOM	2.5 mm	9
	5.0 mm	10

Results of Compaction Test

Client :	HEALTH INFRASTRUCTURE	Project No. :	72320
Project :	WAGGA WAGGA BASE HOSPITAL REDEVELOP	Report No. :	S11 - 063 E
Location :	EDWARD STREET - WAGGA WAGGA	Report Date :	19/04/2011
		Date of Test:	11/04/2011
		Page:	1 of 1



Sample Details: Location: BH 106
Depth: 0.3m

Particles > 19mm: 0%

Description: SILTY CLAY - Brown silty clay

Maximum Dry Density:	1.82 t/m³
Optimum Moisture Content:	14.0 %

Remarks:

Test Methods: AS1289.5.1.1, AS1289.2.1.1

Sampling Methods: By Engineering Dept



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