



Small Yardage Concrete

541-686-3031

Mix ID Number: Low P 55/45

Volumetric Concrete Mix Design

Mix Design Quantities

<u>Material</u>	<u>Spec #</u>	<u>Product/Source</u>	<u>Spec Grav</u>	<u>Weight</u>	<u>Volume</u>	
Cement			3.15	0 lb	0.00 ft ³	
Rapid Set Cement	2011.10	CTS	5220	3.00	658 lb	3.51 ft ³
Water		Municipal	1.00	280 lb	4.49 ft ³	
Fiber Mesh	2045.20	STRUX BT50	4741	0.91	6 lb	0.11 ft ³
Sand		20-232-3 V PIT	2.567	1230 lb	7.68 ft ³	
Rock 3/4		20-232-3 V PIT	2.694	1578 lb	9.39 ft ³	
				0 lb	0.00 ft ³	
				0 lb	0.00 ft ³	
				0 lb	0.00 ft ³	
Admixtures	2040.10	Grace	1.00	21.00 lb	0.34 ft ³	
		Air (Entrap/Entrain)	5.5%	3774 lb	1.49 ft ³	
				Total Mix Volume:	27.00 ft³	

Admixtures

<u>Product</u>	<u>Product Name/Type</u>	<u>Dosage Rate</u>	<u>%</u>	<u>Dosage</u>
Admix 1	2040.10 Daravair 1000 (AIR)	2557	4.00 oz/sk	28.00 oz/yd ³
Admix 2	2040.10 ADVA Cast 600 (HRWR)	4592	6 oz/sk	42.00 oz/yd ³
Admix 3	Low P Concentrate		20.00 oz/sk	140.00 oz/yd ³
Admix 4	Citric Acid		18.00 oz/sk	126.00 oz/yd ³
				21.00 lb

Mix Design Properties

Aggregate Properties:		<u>ODOT</u>	<u>Spec</u>		
		<u>Src #</u>	<u>Grav</u>	<u>Abs</u>	<u>FM</u>
Sand	River Bend Materials	20-232-3 V Pit	2.57	4.0	2.81
Rock 3/4	River Bend Materials	20-232-3 V Pit	2.69	2.0	

Plastic Properties:

Slump: 5 +/- 1.0 inch

Air Content: 5.5 +/- 1.5%

Unit Weight: 139.8 pcf

Design Properties:

Required Strength (f'c): 4000psi @ 28 days

Total Cementitious: 658 lbs 7 Sack

W/C Ratio: 0.46 (Incl Admix)

Project: OR18 Yamhill River Bridge Oflow Deck Rehab - 34324

Contractor: Wildish

Applications: BRDG DECK OVERLAY

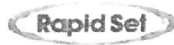
Comments: _____

Submitted By: Carley J. Schaaf

Designed By: Joshua Schaaf

Date Submitted: 6/1/2020

Reviewed by: CCT #



**MILL CERTIFICATE
RAPID SET CEMENT**
February 5, 2020

Reported To: CTS Cement Manufacturing
Corporation

Project: Bulk Cement Stock

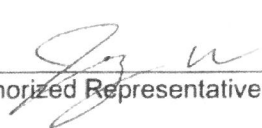
PLANT	Juarez, Plant 1
RAPID SET CEMENT, BULK	8250 tons (7484 mt)
IDENTIFICATION, lot number	J67
SPECIFIC GRAVITY	3.00
TIME OF SETTING, Minutes (ASTM C191 MODIFIED)	
INITIAL	18
FINAL	25
COMPRESSIVE STRENGTH – PSI (MPa)	
3 HOURS	6737 (46.5)
24 HOURS	8154 (54.2)

Tested in accordance with ASTM C109 as modified by CTS 101-17.

This cement was sampled from Juarez Plant 1 and test results shown herein are representative of the Rapid Set® cement identified with the above lot number.

Seller, having no control over the use of Rapid Set® cement, will not guarantee finished work in which it is used.

CTS CEMENT MANUFACTURING COMPANY


Authorized Representative

See California all-purpose
acknowledgement certificate
Attachment.

Controlled Copy – Do Not Duplicate

CTS 8-032 Rev. NC 09/13/18



EXPERIENCED | INNOVATIVE | AUTHENTIC

May 28, 2013

CTS Cement
11065 Knott Avenue
Suite A
Cypress, California 90630

REPORT OF TESTS

SUBJECT: **Physical Analysis of Concrete**

PROJECT: **CTS Cement – Rapid Set Cement**

SCOPE: **Material Submitted for Compliance to ASTM C 1600-11,
"Standard Specification for Rapid Hardening Hydraulic Cement"**

MATERIALS: Shipped to NTL on November 8, 2013

NTL PROJECT: 1245-13(A-1)

PAGE: 1 of 5

SPECIFICATION: ASTM C 1600-11, "Standard Specification for Rapid Hardening Hydraulic Cement"

TEST METHODS: ASTM C 109, "Standard Test Method for Compressive Strength of Hydraulic
Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)"

 ASTM C 151, "Standard Test Method for Autoclave Expansion of Hydraulic
Cement"

 ASTM C 186, "Standard Test Method for Heat of Hydration of Hydraulic
Cement"

 ASTM C 191, "Standard Test Methods for Time of Setting of Hydraulic
Cement by Vicat Needle"

 ASTM C 441, "Standard Test Method for Effectiveness of Pozzolans or
Ground Blast-Furnace Slag in Preventing Excessive Expansion of Concrete
Due to the Alkali-Silica Reaction"

 ASTM C 596, "Standard Test Method for Drying Shrinkage of Mortar
Containing Hydraulic Cement"

 ASTM C 1012, "Standard Test Method for Length Change of Hydraulic-
Cement Mortars Exposed to a Sulfate Solution"

 ASTM C 1038, "Standard Test Method for Expansion of Hydraulic Cement
Mortar Bars Stored in Water"



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May 28, 2013
CTS Cement – Rapid Set Cement
NTL Project #1245-13(A-1)
Page 2 of 5

TEST RESULTS

ASTM C 109 – Compressive Strength

Specimens: Average of three (2-in) cubes

Cast Date: November 20, 2013

Results:

	<u>Rapid Set Cement</u>	<i>Type VRH – Table 1 ASTM C 1600-11</i>
Compressive Strength @ 1.5 hours	2,420 psi	1,700 psi, min.
Compressive Strength @ 3 hours	3,260 psi	2,200 psi, min.
Compressive Strength @ 6 hours	4,030 psi	---
Compressive Strength @ 1 day	5,180 psi	3,500 psi, min.
Compressive Strength @ 7 days	6,910 psi	4,100 psi, min.
Compressive Strength @ 28 days	7,350 psi	5,100 psi, min.

ASTM C 596 – Drying Shrinkage

Specimens: Average of four (1 x 1 x 11-in) specimens

Cast Date: November 20, 2013

Curing: Air Cure

Results:

	<u>Rapid Set Cement</u>	<i>Type VRH – Table 1 ASTM C 1600-11</i>
Drying Shrinkage @ 7 days	0.018%	0.06%, max.
Drying Shrinkage @ 28 days	0.026%	0.07%, max.



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May 28, 2013
CTS Cement – Rapid Set Cement
NTL Project #1245-13(A-1)
Page 3 of 5

TEST RESULTS

ASTM C 191 – Set Time

Test Date: November 20, 2013

Results:

	<u>Rapid Set Cement</u>	<i>Type VRH – Table 1</i> <u>ASTM C 1600-11</u>
Final Set Time	15 minutes	10 minutes, min.

ASTM C 151 – Autoclave Expansion

Test Date: November 20, 2013

Results:

	<u>Rapid Set Cement</u>	<i>Type VRH – Table 1</i> <u>ASTM C 1600-11</u>
Autoclave Expansion	0.0%	0.8%, max.

ASTM C 1012 - Sulfate Expansion

Specimens: Average of six (1 x 1 x 11-in) specimens

Cast Date: November 20, 2013

Results:

	<u>Rapid Set Cement</u>	<i>Type VRH – Table 2</i> <u>ASTM C 1600-11</u>
Sulfate Expansion @ 6 months	0.01%	0.05%, max.



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May 28, 2013
CTS Cement – Rapid Set Cement
NTL Project #1245-13(A-1)
Page 4 of 5

TEST RESULTS

ASTM C 441 – ASR Expansion

Specimens: Average of three (1 x 1 x 11-in) specimens

Cast Date: November 20, 2013

Results:

	<u>Rapid Set Cement</u>	<u>Type VRH – Table 2 ASTM C 1600-11</u>
Expansion @ 14 days	0.019%	0.020%, max.
Expansion @ 56 days	0.027%	0.060%, max.

ASTM C 186 – Heat of Hydration

Specimens: Average of three (3 x 6-in) specimens

Cast Date: January 3, 2014

Results:

	<u>Rapid Set Cement</u>	<u>Type VRH – Table 2 ASTM C 1600-11</u>
Heat of Hydration @ 7 days	146 kJ/kg	250 kJ/kg, max.
Heat of Hydration @ 28 days	173 kJ/kg	290 kJ/kg, max.



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May 28, 2013
CTS Cement – Rapid Set Cement
NTL Project #1245-13(A-1)
Page 5 of 5

TEST RESULTS

ASTM C 1038 – Expansion in Water

Specimens: Average of four (1 x 1 x 11-in) specimens

Cast Date: November 20, 2013

Results:	<u>Rapid Set Cement</u>	<u>Type VRH – Table 2 ASTM C 1600-11</u>
Expansion in Water @ 14 days	0.010%	0.10%, max.

SUMMARY

The test results listed above reflect compliance with the ASTM C 1600-11, Table 1 (Standard Physical Requirements) and Table 2 (Optional Requirements) for Type VRH – Very Rapid Hardening Hydraulic Cements.

Respectfully submitted,

NELSON TESTING LABORATORIES

Mark R. Nelson
President

OREGON DEPARTMENT OF TRANSPORTATION
MATERIALS LABORATORY
800 AIRPORT RD. SE SALEM, OR 97301-4792

Page 1 of 1
(503)986-3000
FAX(503)986-3096

Contract No.: C15137		EA No.: CON04198	Lab No.: 19-002344
Project: I-5: WOODBURN - SALEM			
Highway: PACIFIC	County: MARION		Data Sheet No.: F44431 121
Contractor: OREGON MAINLINE PAVING LLC	Org Unit: 2807		FA No.: S001(508)
Project Manager: VIDAL FRANCIS	Org Unit: RBM		Bid Item No.: 0820
Submitted By: SEAN CUNNINGHAM			Sample No.:
Material Source: 20-232-3 V PIT (EGGE S & G)			Qty Represented: 12 MONTHS
Sampled At: STOCKPILE	Sampled By:		Witnessed By: BRENT HUMPHRIES
DATE-Sampled: 19/ 9/16	Received: 19/ 9/16	Tested: 19/ 9/27	Date Reported: 19/ 9/27
Class/Type: COMPLIANCE		Use: FINE PCC AGGR	

Q or G: GRAVEL			AGGREGATE LABORATORY REPORT - FPCCAG		Size: #4-0
Test	Field	Lab	T 84 F. Grav.	T 85 C. Grav.	
T 176 S.E.			Bulk: 2.469	Bulk:	
T 89 L.L.			S.S.D.: 2.567	S.S.D.:	
T 90 P.I.			Appar.: 2.738	Appar.:	
Fineness Modulus		2.81 FM	Absorp.: 3.98 %	Absorp.:	
TM 226 Dust/Clay			T 104 Soundness	TM 208 Degrade	
TM 227 Cleanness			C A: F A: 7%		
TM 229 Elong pcs			1.5-3/4:		
308 Incin/Ga A/C			3/4-3/8:		
Total A/C			3/8- #4: 0.1 %	Crse Ht:	
Retention			#4- #8: 1.3 %	P20:	
T 329 Moisture			#8-#16: 1.2 %	Fine Ht:	
			#16-#30: 1.3 %	P20:	
			#30-#50: 2.6 %		
T 27/11			T 96 Abrasion	T 21 Impurity	
Sieve	Passing	Passing		Plate #: 1	
2.5			T 335 Fracture	T 112 Friables	
2			3/4:	Wt'd Avg :	
1.5			1/2:	1.5-3/4:	
1			3/8:	3/4-3/8:	
3/4			1/4:	3/8- #4:	
1/2			#10:	#4-#16:	
3/8		100 %	T 113 Lightweight	TM 225 Woodwaste	
1/4		98 %	Coarse:	Lab:	
# 4		81 %	Fine: 0.2 %	Field:	
# 8			AASHTO T 288/289	AASHTO T 267	
# 10			Resist: Ω	Organic:	
# 16		67 %	pH:		
# 30		49 %	AASHTO T 291	AASHTO T 290	
# 40		19 %	Chloride:	Sulfate:	
# 50		5 %			
#100		1.1 %			
#200					

T 327 Micro Deval ==> Grading: Loss: %

1 @ t27	=\$ 61.00	NSM = Not Sufficient Material	TOTAL CHARGES: \$ 0.00
1 @ t11	= 30.00	REMARKS: Material represented by sample DOES comply with specifications.	
1 @ t21	= 21.00		
1 @ t84	= 74.00		
5 @ t104	= 38.00		
1 @ t113	= 44.00		

KEVIN BROPHY - LABORATORY SERVICES MANAGER

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

OREGON DEPARTMENT OF TRANSPORTATION
MATERIALS LABORATORY
800 AIRPORT RD. SE SALEM, OR 97301-4792

Page 1 of 1
(503) 986-3000
FAX (503) 986-3096

Contract No.: C15137		EA No.: CON04198	Lab No.: 19-002343
Project: I-5: WOODBURN - SALEM			
Highway: PACIFIC	County: MARION		Data Sheet No.: F44431 120
Contractor: OREGON MAINLINE PAVING LLC	Org Unit: 2807		FA No.: S001(508)
Project Manager: VIDAL FRANCIS	Org Unit: RBM		Bid Item No.: 0820
Submitted By: SEAN CUNNINGHAM			Sample No.:
Material Source: 20-232-3 V PIT (EGGE S & G)			Qty Represented: 12 MONTHS
Sampled At: STOCKPILE	Sampled By:		Witnessed By: BRENT HUMPHRIES
DATE-Sampled: 19/ 9/16	Received: 19/ 9/16	Tested: 19/ 9/27	Date Reported: 19/ 9/27
Class/Type: COMPLIANCE		Use: COARSE PCC AGGR	

Q or G: GRAVEL			AGGREGATE LABORATORY REPORT - CPCCAG		Size: 3/4"-#4	
Test	Field	Lab				
T 176 S.E.			T 84 F. Grav.		T 85 C. Grav.	
T 89 L.L.			Bulk:		Bulk: 2.641	
T 90 P.I.			S.S.D.:		S.S.D.: 2.694	
T 335 Ttl Frac.			Appar.:		Appar.: 2.788	
TM 226 Dust/Clay			Absorp.:		Absorp.: 2.00 %	
TM 227 Cleanness			T 104 Soundness		TM 208 Degrade	
TM 229 Elong pcs			C A: 6% F A:			
308 Incin/Ga A/C			1.5-3/4: 0.2 %			
Total A/C			3/4-3/8: 3.0 %			
Retention			3/8- #4: 3.0 %		Crse Ht: 0.8 in	
T 329 Moisture			#4- #8:		P20: 14.4 %	
			#8-#16:		Fine Ht:	
T 27/11			#16-#30:		P20:	
Sieve	Passing	Passing	#30-#50:			
2.5			T 96 Abrasion		T 21 Impurity	
2			16.3 %		Plate #:	
1.5			Type B			
1		100 %	T 335 Fracture		T 112 Friables	
3/4		95 %	1.5:		Wt'd Avg :	
1/2		61 %	1.0:		1.5-3/4:	
3/8		38 %	3/4:		3/4-3/8:	
1/4		13 %	1/2:		3/8- #4:	
# 4		6 %	3/8:		#4-#16:	
# 8		3 %	T 113 Lightweight		TM 225 Woodwaste	
# 10			Coarse: 0.0 %		Lab:	
# 16		2 %	Fine:		Field:	
# 30		2 %	AASHTO T 288/289		AASHTO T 267	
# 40			Resist: Ω		Organic:	
# 50		2 %	pH:			
#100		2 %	AASHTO T 291		AASHTO T 290	
#200		1.2 %	Chloride:		Sulfate:	
			T 327 Micro Deval ==> Grading:		Loss: %	

2 @ t27	=\$ 61.00	NSM = Not Sufficient Material	TOTAL CHARGES: \$ 0.00
2 @ t11	= 30.00	REMARKS: Material represented by sample DOES comply with specifications.	
1 @ t85	= 58.00		
1 @ t96	= 125.00		
4 @ t104	= 38.00		
1 @ t113	= 44.00		
1 @ tm208	= 96.00		

KEVIN BROPHY - LABORATORY SERVICES MANAGER

REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF THIS LABORATORY.

Carlson Testing, Inc.

Bend Office (541) 330-9155
Geotechnical Office (503) 601-8250
Eugene Office (541) 345-0289
Salem Office (503) 589-1252
Tigard Office (503) 684-3460

REPORT OF MOLDED FLEX BEAMS TEST SPECIMENS

Test Methods: ASTM C31/C172/C192/C78/C1064/C231

Date Molded: 11/14/2017

Job Number: E1701432.

Permit #: X

Client: NATIONS MINI MIX - CARLEY SCHAAF

Project: I-5 ANLAUF TO ELKHEAD - TRIAL BATCH

Address: 811 53RD ST SPRINGFIELD OR

Jurisdiction: ODOT

Contractor: NATIONS MINI MIX - CARLEY SCHAAF

Subcontractor:

Cast By: B. HUMPHRIES

Concrete Supplier: NATIONS MINI MIX

Truck #:

Load #:

Ticket#:

Weather: SUNNY AND COOL

Test Time: 10:30 AM

Air Temp. at Sampling Time: 52

Flex Beams were cast for the following locations:

TRIAL BATCH

Total Concrete Placement Location:

TRIAL BATCH

Strength Requirement: 650 psi @ 29 Days Slump: N/T % Air: 6.10%

Mix Number: 55/45 Conc. Temp: 59 Cement Type: Max Agg: 3/4"

Admix/Amt: Cubic Yards: 0.5

Specimens were prepared for testing using: Caps Grinding X Leather Shims

Register Number: 0018579

Lab Location: SALEM

Set No.	Test @ Days	Date Rec'd	Test Date	Avg Width	Avg Depth	Span Length	Total Load	Unit PSI	Tested By
1	7	11/15/2017	11/21/2017	6.00	6.05	18.00	10325	845	DK
	7	11/15/2017	11/21/2017	6.00	6.05	18.00	9670	795	DK
	28	11/15/2017	12/12/2017	6.00	6.00	18.00	10865	905	DK
	28	11/15/2017	12/12/2017	6.00	6.00	18.00	10775	900	DK
	28	11/15/2017	12/12/2017	6.05	6.00	18.00	11075	915	DK

☐ Distribute attachments.

Please see reverse side for additional information.

SAMPLE DATA SHEET FOR CONCRETE CYLINDERS

E

English (E) or Metric (M)

CON NO. & EA		DATA SHEET NUMBER		LABORATORY REPORT NUMBER	
		F - -		18578	
PROJECT NAME (SECTION)					CONTRACT NUMBER
I-5 ANLAUF TO ELKHEAD RD					
CONTRACTOR			PROJECT MANAGER		BID ITEM NUMBER
CONCRETE PLACING COMPANY					
CONCRETE SUPPLIER			SUBMITTED BY		QUANTITY REPRESENTED
NATIONS MINI-MIX			BRENT HUMPHRIES		0.68 yd ³
CONCRETE FOR USE IN (LOCATION OR PLACEMENT)			BRIDGE NUMBER		SPECIFIED STRENGTH
TRIAL BATCH					4000 PSI DAYS
REPRESENTED BY	SET NUMBER	DATE CAST	DATE SHIPPED	CYLINDER SIZE	INVOICE NUMBER
NO. OF CYLS. 13	1	11/14/17	11/15/17	4" X 8"	#20
TEST SPECIMENS AT DAYS INDICATED					YIELD
A. 2HR B. 2HR C. 3HR D. 3HR E. 4HR F. 4HR G. 1 H. 1					##### yd ³
MIX DESIGN	ODOT LAB / MIX DESIGN NUMBER	CONCRETE SUPPLIER MIX DESIGN NUMBER	DESIGN CEMENTITIOUS MATERIAL CONTENT	FREE (SURFACE) MOISTURE	
		55/45	658 lb/yd ³	COARSE #1 %	COARSE #2 %
AMBIENT TEMP. 52 °F		CONCRETE TEMP. 59 °F	SUMP	AIR CONTENT 6.1 %	UNIT WEIGHT 139.7 lb/ft ³
CEMENT		FLYASH	SILICA	WATER BATCHED	NET WEIGHT 34.68
AGGREGATE #1		AGGREGATE #2	AGGREGATE #3	FINE AGG (SAND)	WATER AT JOB
PROJECT CONTACT PERSON			CONTACT PHONE NUMBER		TIME CYL CAST
JON BERGER WITH CPC					10:20AM
FIELD REMARKS					
☒ QUALITY CONTROL ☐ VERIFICATION ☐ INFO * PHONE No. FAX No.					
T 23 CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER			COMPANY NAME		SIGNATURE
BRENT HUMPHRIES #49628			CARLSON TESTING		11/14/17

LAB USE ONLY BELOW

CYLINDER ID	DATE OF BREAK	AGE DAYS	MAXIMUM LOAD	CYLINDER AREA	STRENGTH PSI	COMPOUND TYPE / PAD DUROMETER	BREAK TYPE	REMARKS
A	11/14/17	2HR	54730	12.56	4360	60D	A	
B	11/14/17	2HR	52925	12.56	4210	60D	D	
C	11/14/17	3HR	58935	12.56	4690	60D	C	
D	11/14/17	3HR	59175	12.56	4710	60D	C	
E	11/14/17	4HR	61245	12.56	4880	60D	D	
F	11/14/17	4HR	66260	12.56	5280	60D	A	
G	11/15/17	1	78390	12.56	6240	60D	C	
H	11/15/17	1	76855	12.56	6120	60D	E	

AVE _____ DAY _____ PSI

☒ PASS☐ FAIL

COMMENTS (WHEN MATERIAL, CYLINDERS OR DATA RECEIVED)

☒ QUALITY CONTROL	☐ VERIFICATION	CYLINDERS REC'D	11/14/2017	DATA SHEET RECD	11/14/2017
T 22 CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER		COMPANY NAME		SIGNATURE	DATE
DANIEL KELLEY #49913		CARLSON TESTING INC			11/15/2017

Note: * Required information. If this information is missing, testing will be delayed.

SAMPLE DATA SHEET FOR CONCRETE CYLINDERS

E

English (E) or Metric (M)

CON NO. & EA		DATA SHEET NUMBER		LABORATORY REPORT NUMBER	
		F -		18578	
PROJECT NAME (SECTION)					CONTRACT NUMBER
I-5 ANLAUF TO ELKHEAD RD					
CONTRACTOR			PROJECT MANAGER		BID ITEM NUMBER
CONCRETE PLACING COMPANY					
CONCRETE SUPPLIER			SUBMITTED BY		QUANTITY REPRESENTED
NATIONS MINI-MIX			BRENT HUMPHRIES		0.68 yd ³
CONCRETE FOR USE IN (LOCATION OR PLACEMENT)			BRIDGE NUMBER	SPECIFIED STRENGTH	
TRIAL BATCH				4000 PSI 28 DAYS	
REPRESENTED BY NO. OF CYLS.	SET NUMBER	DATE CAST	DATE SHIPPED	CYLINDER SIZE	INVOICE NUMBER
13	1	11/14/17	11/15/17	4" X 8"	#20
TEST SPECIMENS AT DAYS INDICATED					YIELD
A. 7	B. 7	C. 28	D. 28	E. 28	F. G. H. ##### yd ³
MIX DESIGN	ODOT LAB / MIX DESIGN NUMBER	CONCRETE SUPPLIER MIX DESIGN NUMBER	DESIGN CEMENTITIOUS MATERIAL CONTENT	COARSE #1	FREE (SURFACE) MOISTURE
		55/45	658 lb/yd ³	%	COARSE #2 COARSE #3 SAND %
AMBIENT TEMP.	CONCRETE TEMP.	SUMP	AIR CONTENT	UNIT WEIGHT	CEMENTITIOUS MAT. CONTENT
52 °F	59 °F	in	6.1 %	139.7 lb/ft ³	lb/yd ³
ADDITIONS	CEMENT	FLYASH	SILICA	WATER BATCHED	NET WEIGHT
oz	lb	lb	lb	lb	34.68
AGGREGATE #1	AGGREGATE #2	AGGREGATE #3	FINE AGG (SAND)	WATER AT JOB	POT CALIBRATION
lb	lb	lb	lb	lb	0.248300
PROJECT CONTACT PERSON			CONTACT PHONE NUMBER		FIELD W/C RATIO
JON BERGER WITH CPC					BY WT.
FIELD REMARKS					
☒ QUALITY CONTROL ☐ VERIFICATION ☐ INFO * PHONE No. FAX No.					
T 23 CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER			COMPANY NAME		SIGNATURE DATE
BRENT HUMPHRIES #49628			CARLSON TESTING		11/14/17

LAB USE ONLY BELOW

CYLINDER ID	DATE OF BREAK	AGE DAYS	MAXIMUM LOAD	CYLINDER AREA	STRENGTH PSI	COMPOUND TYPE / PAD DUROMETER	BREAK TYPE	REMARKS
A	11/21/17	7	92860	12.56	7390	60D	E	
B	11/21/17	7	90520	12.56	7210	60D	B	
C	12/12/17	28	100780	12.56	8020	Sulfur	C	
D	12/12/17	28	99745	12.56	7940	Sulfur	E	
E	12/12/17	28	102385	12.56	8150	Sulfur	E	
F								
G								
H								

AVE 28 DAY 8040 PSI

☒ PASS ☐ FAIL

COMMENTS (WHEN MATERIAL, CYLINDERS OR DATA RECEIVED)

☒ QUALITY CONTROL	☐ VERIFICATION	CYLINDERS REC'D	11/14/2017	DATA SHEET REC'D	11/14/2017
T 22 CERTIFIED TECHNICIAN (PLEASE PRINT) AND CARD NUMBER		COMPANY NAME		SIGNATURE DATE	
Daniel Kelley #49913		CARLSON TESTING INC		12-Dec	

Note: * Required information. If this information is missing, testing will be delayed.