



97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-4919

Client

Nova Scotia Transportation And Infrastructure Renewal

PO Box 186, 1672 Granville Street

Halifax, Nova Scotia

**B3J 2N2** 

OurProject No.

02000061.000.001

**Client Contract No.:** 4600019710

Client P.O.:

**Contractor:** 

Marco Maritimes

CC:

Fax

ATTENTION: Krista Ranahan, P.Eng.

PHONE: (902) 722-1207

FAX:

Email:

krista.ranahan@no

Project: FO1-55-02-01 - JL IIsley High School Concrete Testing

Mix No:

C30F100

**Date Placed:** 

06-Feb-20

Supplier: Casey Metro

Formwork:

25 MPa,

Wood

Method Of Placing:

80 +/- 20 mm

Pump

Weather: Light Snow

Specified Properties: Strength, @28 Days:

Vibrators: Whip **Method Of Curing:** 

Slump:

Tarps Air:

No AEA %

		Truck Time Record No. Batch Tested Unload Elapsed			A:- (0()	Slump	Temp (C)				#Cylds		
No.	No.	No.	Batch <sup>-</sup>	estea	Unioad	⊨lapsed	Air (%)	(mm)	Conc	Air	Load	Cum.	Cast
1	104085	39CM	12:19	13:00	13:20	1:01	2.4	90	21.3	-4	7.07	7.07	0
2	104086	38CM	12:28	13:20	13:30	1:02	2.3	100	22.5	-4	7.07	14.14	3
3	104088	34CM	12:51	13:45	14:00	1:09	2.4	95	21.8	-4	7.07	21.21	2
4	104089	37CM	13:13	14:00	14:40	1:27	1.9	100	20.0	-4	7.29	28.5	0

Section: Footings

Location: 14(y4, y5, y6), 11(y7)

**Comments** 

Field Test results reported on site.

Record No: 29559

Standby:

Englobe Tech: Jamie Abraham

For testing conducted by this company, procedures are carried out in accordance with CSA-A23.2. Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on request.





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Email:

krista.ranahan@no

Project: FO1-55-02-01 - JL IIsley High School Concrete Testing

Mix No:

C30F100

**Date Placed:** 

06-Feb-20

Supplier: Casey Metro

Formwork:

Wood

Method Of Placing:

Pump

Weather: Light Snow

Vibrators:

Whip

**Method Of Curing:** 

Tarps

Specified Properties: Strength, @28 Days:

30 MPa,

Slump:

80 +/- 20 mm

No AEA % Air:

Load	Ticket Truck		Time Record				Slump	Temp (C)		Volume		#Cylds	
No.	No.	No.	Batch	Γested	Unload	Elapsed	Air (%)	(mm)	Conc	Air	Load	Cum.	Cast
1	104090	22CM	13:34	14:15	14:45	1:11	1.8	90	20.3	-4	2	2	3
2	104091	37CM	14:50	15:40	16:00	1:10	1.4	100	19.3	-4	2	4	2

Section:

Piers

Location:

5b, 5c, 6b, 6c, w2/z2, w3/z2

Comments

Field Test results reported on site.

Record No: 29560

Standby:

Englobe Tech: Jamie Abraham

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Contractor:

Marco Maritimes

CC:

Fax

ATTENTION: Krista Ranahan, P.Eng.

PHONE: (902) 722-1207

FAX:

Email:

krista.ranahan@no

Project: FO1-55-02-01 - JL IIsley High School Concrete Testing

Mix No:

C30F100

Date Placed:

07-Feb-20

Supplier: Casey Metro

Formwork: Wood

Method Of Placing:

Pump

Weather: FrzDrz

Vibrators:

Whip

**Method Of Curing:** 

Tarps

Specified Properties: Strength, @28 Days:

25 MPa.

Slump:

80 +/- 20 mm

Air:

6 +/- 1 %

Load	Ticket	Truck	Time Record				Slump	Temp (C)		Volume		#Cylds
No.	No.	No.	Batch	Tested	Unload Elapse	d Air (%)	(mm)	Conc	Air	Load	Cum.	Cast
1	104092	37CM	10:00	10:50		5.7	95	28	-2	6	6	5

Section:

Foundation Wall

Location:

A(10-12)

Comments

Field Test results reported on site.

Record No: 29561

Standby:

Englobe Tech: Jamie Abraham

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**B3J 2N2** 

OurProject No.

02000061.000.001

Client Contract No.:

4600019710

Client P.O.:

Contractor:

Able Equipment

CC:

Fax

**ATTENTION:** Krista Ranahan, P.Eng.

**PHONE:** (902) 722-1207

FAX:

Email:

krista.ranahan@no

Project: FO1-55-02-01 - JL IIsley High School Concrete Testing

Mix No:

C25F1D1

**Date Placed:** 

10-Feb-20

Supplier: Casey Metro

Formwork:

Wood

Method Of Placing: **Method Of Curing:** 

Chute

Insulated Tarps

Weather: Snowing

Specified Properties: Strength, @28 Days:

Vibrators:

Whip

25 MPa,

Slump:

80 +/- 20 mm

Air:

6 +/- 1 %

Load Ticket		Truck				A1 (04)	Slump	Temp (C)		Volume		#Cylds	
No.	No.	No.	Batch	rested l	Unload	Elapsed	Air (%)	(mm)	Conc	Air	Load	Cum.	Cast
1	104117	39CM	12:43	13:42	13:53	1:10	6.4	100	19	0	6.5	6.5	4
2	104119	33CM	13:05	13:55	14:20	1:15	5.7	100	16	0	6.5	13.0	2

Section:

Location:

Wall on line 1 A to D and line d from 1 to 3.1 m towards line 2.

Comments

Field Test results reported on site.

Record No: 29571

Standby:

Englobe Tech: Tristan Pye

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**B3J 2N2** 

OurProject No.

02000061.000.001

**Client Contract No.:** 4600019710

Client P.O.:

Contractor:

Able Equipment

CC:

Fax

ATTENTION: Krista Ranahan, P.Eng.

PHONE:

(902) 722-1207

FAX:

Email:

krista.ranahan@no

Project: FO1-55-02-01 - JL IIsley High School Concrete Testing

Mix No:

C25F100 **Date Placed:**  10-Feb-20

Supplier: Casey Metro

Specified Properties: Strength, @28 Days:

Formwork:

Wood

Method Of Placing: **Method Of Curing:** 

Chute Insulated Tarps

Weather: Snowing

Vibrators:

Whip 25 MPa,

Slump:

80 +/- 20 mm

No AEA % Air:

Time Record Slump Temp (C) Volume #Cylds Truck Load **Ticket** Batch Tested Unload Elapsed No. Air (%) (mm) Cast No. No. Conc Air Cum. Load 1 104120 20CM 13:45 14:45 14:53 1:08 1.7 100 14.0 0 2.0 2.0 5

Section:

Location:

Two sections of strip footing on line 14. A short section between Y5 and Y6, another short section between

Y4 and Y5.

Comments

Field Test results reported on site.

Record No: 29572

Standby:

Englobe Tech: Tristan Pye

PER

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## CONCRETE **TEST** REPORT

97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-4919

Пe	

Nova Scotia Transportation And Infrastructure Renewal

PO Box 186, 1672 Granville Street

Halifax, Nova Scotia

**B3J 2N2** 

Attn: Krista Ranahan, P.Eng.

Fax

Project: FO1-55-02-01 - JL IIsley High School Concrete

Our Project No.:

02000061.000.001

**Client Contract No.:** 

4600019710

Client PO.:

Contractor:

CC:

Marco Maritimes

**Fax** 

**Email** krista.ranahan@novascotia.ca

T	esting			Eman	Krista.ranan	ian@novasco	otia.ca	а	
Set No:	2 <b>No.</b>	Of Specimens	s: 5			Date Cast: 1	0 Jar	n 2020	
Specimen	Date Tested	Age At Test (Days)	Average Diameter(mm)	Cyl Density kg/m <sup>3</sup>	Maximum Load (kN)	Compress Strength (N		Failure Type	
Α	17 Jan 2020	7	102		232	28.4		А	AX
В	07 Feb 2020	28	102	2356	307	37.6		A	BU
С	07 Feb 2020	28	102	2352	302	37.0		A	
D	06 Mar 2020	AP	102					^	可
Ε	06 Mar 2020	AP	102						EM
S	pecified Proper	rties		Test Informat	ion		Sam	ple pickup	
Strength @	28 days(MPa):	28			mp (mm) 115	5			an 2020
Slump (mm	):	80 +/- 20	Air Temp C:						
Air (%):		6 +/- 1	Cast Time:	13:45 Cas	t By: MTL			'd Sample	
Max Agg Si	ze (mm):	20	   Initial curi	ng Temp (CS	A: 15 - 25 C\				an 2020
Sı	upplier Informa	tion	Initial curing Temp (CSA: 15 - 25°C)  Minimum: 8.3 Maximum: 20.2						
Supplier:	Casey Metro		Initial Curing Conditions :						
Batch Time	12:53		Inside curing I	box inside traile	г				
Truck No.: Ticket No.:	38CM 103494		Test samples cas		d plastic moulds	i.			
Strength De	elivered: 28	(MPa)	Section: Duct	t Bank					
Mix No:	C27F101I	, ,	Location: Para	allel to walkwa	y on west sid	le of site			
Load Vol:	3.5	3							
Cum Vol:	3.5	3	Comments:	25					
	Additives:		Comments.						
Heat Silica fume	Superplast Flyash	icizer 🗹	Field	d Test results r	reported on s	site.			
Set Retarder	Air Entrainr	ment 🗸							
Water Reduce	er 🗌 Accelerator	s							
H2O Added	☐ Authorized B	3							

Standb	y:
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0

Record No 50479

Englobe Tech:

Jamie Abraham

**CSA CERTIFIED** LABORATORY FOR TESTING



Client:

### CONCRETE TEST REPORT

02000061.000.001

97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-4919

	a Transportation 5, 1672 Granville		cture Renewal	Client Con		4600019710	)		
Halifax, Nov	•	; Sireet		Contractor		Marco			
B3J 2N2			СС	:			Fax		
Attn: Krist	a Ranahan, P.E	ng.							
Fax									
	O1-55-02-01 - J esting	IL IIsley High \$	School Concrete	Email	krista.ranah	an@novasco	tia.ca	l	
Set No:	16 <b>No.</b>	Of Specimens	s: 3			Date Cast: 3	1 Jan	2020	
Specimen	Date Tested	Age At Test (Days)	Average Diameter(mm)	Cyl Density Maximum Load (kN)		Compressive Strength (MPa)		Failure Type	
Α	07 Feb 2020	7	102	2271	171	20.9		A	AX
В	28 Feb 2020	28	102	2286					BU
С	28 Feb 2020	28	102	2277					C
								÷	
									EM
		4.0000							F
_	pecified Proper 28 days(MPa):	25	Conc Temp <sup>o</sup> C	Test Informati 19.0 Slur	<u>ion</u> np (mm) 100	,		ple pickup	at Site :
Slump (mm		25 80 +/- 20	1 -	Air Temp C: 3 Air(%): 6.9 Date:					
Air (%):	<i>/-</i> 2	6 +/- 1	Cast Time: 14:30 Cast By: MTL Rec'd Sample					d Sample	at Lab :
Max Agg Si	ze (mm):	20m						ite:	
S	upplier Informa	tion	Initial curing Temp (CSA: 15 - 25 C)  Minimum: Maximum:						
Supplier:	Casey metro		Initial Curing Conditions :						
Batch Time	: 13:43		Inside curing I	box inside traile	r				
Truck No.: Ticket No.:	21		Test samples cas	st in reusable hard	d plastic moulds				
	103950 elivered: 25	(MPa)	Section: Strip	footing and fo	ooting pads			0	
Mix No:	C25F1D1	` '	Location: Strip			Footing pads	(Y6 )	(1.5) (Y6	X2)
Load Vol:	7.26	m <sup>3</sup>	(Y6)	X5) (X2 Y7) (X	(3 Y7)				
Cum Vol:	7.26	m <sup>3</sup>	Comments:						
	Additives:		Comments.						
Heat	Superplast	icizer	Field	d Test results r	eported on s	site.			
Silica fume	☐ Flyash								
Set Retarder Water Reduce	Air Entraini er								
H2O Added									
Standby:	0			ă.	01 /1	/ CSA	CERT	IFIED	
Record No 5	50610 Engl	obe Tech: .	JD	PER	The Salat			ORY FOR T	ESTING

Our Project No.:

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N/A - Not Applicable or Not Available

Project manager: Peter Salah



Client:

# CONCRETE **TEST REPORT**

02000061.000.001

4600019710

97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-4919

Nova Scotia	a Transportation	And Infrastru	cture Renewal	Client Con		4600019710	0			
PO Box 186	6, 1672 Granville	Street		Client PO.:						
Halifax, Nov	/a Scotia			Contractor	•	Marco				
B3J 2N2			CC	:			Fax			
Attn: Krist	a Ranahan, P.E	ng.								
Fax										
	O1-55-02-01 - J esting	IL IIsley High \$	School Concrete	Email	krista.ranah	an@novasco	otia.ca	а		
Set No:	17 <b>No.</b>	Of Specimens	s: 5	Date Cast: 3	1 Jar	2020				
Specimen	Date	Age At Test	Average	Cyl Density	Maximum	Compress	ive	Failure		
	Tested	(Days)	Diameter(mm)	kg/m <sup>3</sup>	Load (kN)	Strength (N	lPa)	Туре		
Α	07 Feb 2020	7	102	2298	191	23.4		А	AX	
В	28 Feb 2020	28	102	2296				^	ВЦ	
c	28 Feb 2020	28	102	2295					C	
D	27 Mar 2020	AP	102						面	
E	27 Mar 2020	AP	102						EM	
_									F	
S	pecified Proper	rties	<u> </u>	Test Informat	ion		Sam	nple pickup	FO = 20 NJ	
	28 days(MPa):	 25	1						at oite.	
Slump (mm	):	80 +/- 20	Air Temp <sup>o</sup> C :	3 Air(	<b>%):</b> 7.0		Т	ime :		
Air (%):		6 +/- 1	Cast Time: 16:10 Cast By: MTL Rec'd Sample at Lab:							
Max Agg Si	ze (mm):	20m	Date:							
S	upplier Informa	tion	Initial curing Temp (CSA: 15 - 25 C) Time : Minimum: Maximum:							
Supplier:	Casey metro		Initial Curing Co	onditions :		*0				
Batch Time	: 15:26		Inside curing	Inside curing box inside trailer						
Truck No.:	21		Test samples cas	st in reusable hard	f plastic moulds	i				
Ticket No.:	103958	(MAD - )	Section: Strip	footing and fo	ooting pads					
_	elivered: 25	(MPa)	Location: Strip	footing G/L 1	4 - (B - Y6),	Footing pads	(Y6.	X1.5) (Y6	X2)	
Mix No: Load Vol:	C25F1D1	3	(Y6	X5) (X2 Y7) (X	(3 Y7)					
Cum Vol:	7.26 50.82	m m								
	Additives:		Comments:							
Heat	✓ Superplast	ticizer	Field	d Test results	renorted on s	sito 4				
Silica fume	Flyash			a restresuits i	cported on a	iio.				
Set Retarder	Air Entrain	ment 🗸								
Water Reduce	er 🗌 Accelerato	rs $\square$								
H2O Added	☐ Authorized	В								
Standby:	0				H 11.	CCIL CSA	CER	TIFIED		
Record No	50612 E <b>ngl</b>	obe Tech:	3G	PER 4	the Sold	LAB	ORAT	ORY FOR 1	ESTING	

Our Project No.:

**Client Contract No.:** 



Client:

## CONCRETE **TEST REPORT**

02000061.000.001

97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-4919

	a Transportation		cture Renewal	Client Con		4600019710	0			
	6, 1672 Granville	Street		Client PO.:		Marco				
Halifax, Nov	va Scotia			Contractor	:	Marco				
B3J 2N2			CC	:			Fax			
	a Ranahan, P.E	ng.								
Fax										
	O1-55-02-01 - J esting	IL IIsley High S	School Concrete	Email	krista.ranah	an@novasco	otia.ca	<b>a</b>		
Set No:	18 <b>No.</b>	Of Specimens	s: 3	Date Cast: 0:	3 Feb	2020				
Specimen	Date Tested	Age At Test (Days)	Average Diameter(mm)			Compressive Strength (MPa)		Failure Type		
A	10 Feb 2020	7	102	2306	207	25.3			AX	
В	02 Mar 2020	28	102	2303	20,	20.0		Α	B	
c	02 Mar 2020	28	102	2300						
	02 Mai 2020	20		2000						
							- II		F	
S	pecified Proper	rties	<u> </u>	Test Informati	ion			191 - 48 - 97		
V	28 days(MPa):	25	Conc Temp <sup>o</sup> C		np (mm) 85			ple pickup ate :	at Site :	
Slump (mm		80 +/- 20	Air Temp C: 0 Air(%): 6.8 Time:							
Air (%):		6 +/- 1	Cast Time: 13:35 Cast By: MTL Rec'd Sample at Lab:							
Max Agg Si	ze (mm):		Date :							
S	upplier Informa	tion	Initial curing Temp (CSA: 15 - 25 C)  Minimum: Maximum:  Time:							
Supplier:	Casey Metro		Initial Curing Conditions :							
Batch Time	: 12:56		Inside curing box inside trailer							
Truck No.:	39		Test samples cas	t in reusable hard	l plastic moulds	,				
Ticket No.:	103994		Section: Foot							
_	elivered: 25	(MPa)	Location: (X3	Y6) (X4 Y6) (Y	<b>′</b> 6 14+)					
Mix No: Load Vol:	C25F1D1	3		, , , , ,	,					
Cum Vol:	7.07 7.07	m 3 m								
	Additives:		Comments:							
Heat	✓ Superplast	icizer	Eigle	l Test results r	oported on a	ito				
Silica fume	Flyash		Field	i restresuits i	eported on s	oile.				
Set Retarder	Air Entrainr	ment 🗸								
Water Reduce	ater Reducer  Accelerators									
H2O Added	☐ Authorized E	3			25					
Standby:	0			0	1 / //	CCIL CSA	CERT	TFIED		
Record No 5	50624 Engl	obe Tech: E	3G 1	PER#	+ Klah	LABO	ORATO	ORY FOR T	ESTING	

**Our Project No.:**