

CLIENT: DN Tanks PROJECT: Middletown CT

11 Teal Road 224 Talcott Ridge Drive

Wakefield, MA 01880 Middletown, CT

Attn: Mr. Jake Sreca

DATE: September 17, 2020 **REPORT #:** 20-07-161-007 Page 1 of 5

General Location: Exterior Wall and Dome Panels

Date Cast:8/19/2020Field Rep:Stephen SturgesContractor:DN TanksConcrete Supplier:CT Ready Mix

Concrete Admixtures: Mix B Air Temp: 76 °F

Weather: Partly Cloudy w/ Occasional Rain

Nominal Size of Aggr: 3/4"

Date Received by Lab: 8/20/2020

FIELD TEST RESULTS (Sampled in accordance with ASTM C172)

TICKET #	*# CYL	SLUMP TEST (in)	AIR CONTENT (%)	TEMPERATURE (°F)	ELAPSED TIM		1E
		(ASTM C143)	(ASTM C231)	(ASTM C1064)	Batch	Final	Total (Min)
1008246	6	5.00"	5.30%	78 °F	9:11 AM	10:35 AM	84

*Specimens molded/conditioned in accordance with ASTM C31/ASTM C1231
LABORATORY COMPRESSIVE STRENGTH TESTING (ASTM C39)

Date of	Cylinder ID	Age	Cure	Avg Measured	Cross	PSI	Max. Load	Break Type
Test				Diameter (in)	Sectional (in²)			
08/23/20	1A	4	LAB	6.00''	28.26''	3,900	110,260	2
08/26/20	1B	7	LAB	6.00''	28.26''	4,200	118,620	2
08/26/20	1C	7	LAB	6.00''	28.26''	4,400	124,230	2
09/16/20	1D	28	LAB	6.00''	28.26"	4,520	127,740	2
09/16/20	1E	28	LAB	6.00''	28.26"	4,560	128,920	2
	1F		HOLD					







Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-



Type 3
Columnar vertical crackinhrough both ends, no we formed cones



Type 4
Diagonal fracture with no cracking through ends;



Type 5
Side fractures at top or sottom (occur commonly with unbonded caps)



Type 6 Similar to Type 5 but end

Specific Sample Location: Wall Panel WA-3

Yards Placed: 40.0 yards³ Design Strength: 4000 ps

Density: Remarks:

Reviewed By: Darlene Daniels



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		(ASTM C143)	(ASTM C231)	(ASTM C1064)	Batch	Final	Total (Min)					
1008249	6	5.25"	5.50%	80 °F	10:21 AM	11:40 AM	79					

*Specimens molded/conditioned in accordance with ASTM C31/ASTM C1231
LABORATORY COMPRESSIVE STRENGTH TESTING (ASTM C39)

Date of	Cylinder ID	Age	Cure	Avg Measured	Cross	PSI	Max. Load	Break Type
Test				Diameter (in)	Sectional (in²)			
08/23/20	2A	4	LAB	6.00''	28.26''	3,600	101,800	2
08/26/20	2B	7	LAB	6.00''	28.26''	4,000	113,020	2
08/26/20	2C	7	LAB	6.00''	28.26"	4,050	114,520	2
09/16/20	2D	28	LAB	6.00''	28.26"	4,370	123,430	2
09/16/20	2E	28	LAB	6.00''	28.26"	4,530	128,000	2
	2F		HOLD					







Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-defined cope on other end



Type 3
Columnar vertical cracking through both ends, no well formed cones



Type 4
Diagonal fracture with no cracking through ends; tap with hammer to



Type 5 Side fractures at top or softom (occur commonly



Type 6 Similar to Type 5 but end

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		(ASTM C143)	(ASTM C231)	(ASTM C1064)	Batch	Final	Total (Min)
1008251	6	5.00''	4.50%	78 °F	11:22 AM	1:00 PM	98

*Specimens molded/conditioned in accordance with ASTM C31/ASTM C1231
LABORATORY COMPRESSIVE STRENGTH TESTING (ASTM C39)

Date of	Cylinder ID	Age	Cure	Avg Measured	Cross	PSI	Max. Load	Break Type
Test				Diameter (in)	Sectional (in²)			
08/23/20	3A	4	LAB	6.00''	28.26''	3,850	108,940	3
08/26/20	3B	7	LAB	6.00''	28.26''	4,130	116,700	2
08/26/20	3C	7	LAB	6.00''	28.26"	4,450	125,630	2
09/16/20	3D	28	LAB	6.00''	28.26"	4,830	136,580	2
09/16/20	3E	28	LAB	6.00''	28.26"	5,150	145,620	2
	3F		HOLD					







Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-defined cope on other end



Type 3
Columnar vertical cracking through both ends, no well formed cones



Type 4
Diagonal fracture with no cracking through ends; tap with hammer to



Type 5 Side fractures at top or bottom (occur common)



Type 6 Similar to Type 5 but end

Specific Sample Location: Wall Panel WB-3

Yards Placed: 40.0 yards³ Design Strength: 4000 ps

Density: Remarks:

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		(ASTM C143)	(ASTM C231)	(ASTM C1064)	Batch	Final	Total (Min)
1008252	6	6.00''	5.50%	76 °F	12:47 PM	1:52 PM	65

*Specimens molded/conditioned in accordance with ASTM C31/ASTM C1231
LABORATORY COMPRESSIVE STRENGTH TESTING (ASTM C39)

Date of	Cylinder ID	Age	Cure	Avg Measured	Cross	PSI	Max. Load	Break Type
Test				Diameter (in)	Sectional (in²)			
08/23/20	4A	4	LAB	6.00''	28.26''	3,530	99,850	3
08/26/20	4B	7	LAB	6.00''	28.26''	3,640	102,830	2
08/26/20	4C	7	LAB	6.00''	28.26"	3,730	105,470	2
09/16/20	4D	28	LAB	6.00''	28.26"	4,100	115,950	2
09/16/20	4E	28	LAB	6.00''	28.26"	4,220	119,190	5
	4F		HOLD					



Type 1 Reasonably well-formed cories on both ends, less than 1 in. [25 mm] of



Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-



Type 3
Columnar vertical cracking irough both ends, no wel formed cones



Type 4
Diagonal fracture with no cracking through ends; tap with hammer to



Type 5 Side fractures at top or bottom (occur common



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Specific Sample Location: Wall Panel WB-3

Yards Placed: 40.0 yards³ Design Strength: 4000 ps

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		(ASTM C143)	(ASTM C231)	(ASTM C1064)	Batch	Final	Total (Min)
1008255	6	5.50''	5.10%	76 °F	2:34 PM	3:26 PM	52

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LABORATORY COMPRESSIVE STRENGTH TESTING (ASTM C39)

Date of	Cylinder ID	Age	Cure	Avg Measured	Cross	PSI	Max. Load	Break Type
Test				Diameter (in)	Sectional (in²)			
08/23/20	5A	4	LAB	6.00''	28.26"	3,150	89,100	5
08/26/20	5B	7	LAB	6.00''	28.26"	3,460	97,710	2
08/26/20	5C	7	LAB	6.00''	28.26"	3,510	99,120	2
09/16/20	5D	28	LAB	6.00''	28.26"	4,050	114,370	2
09/16/20	5E	28	LAB	6.00''	28.26"	4,050	114,590	2
	5F		HOLD					



Type 1
Reasonably well-formed ones on both ends, less than 1 in [25 mm] of



Type 2
Well-formed cone on one end, vertical cracks running through caps, no well-defined cope on other end



Type 3

Columnar vertical cracking through both ends, no well formed cones



Type 4
Diagonal fracture with no cracking through ends;



Type 5
Side fractures at top or bottom (occur commonly with unbounded cases)



Type 6 Similar to Type 5 but end

Specific Sample Location: Panel DA-3 and DB-3

Yards Placed: 40.0 yards³ Design Strength: 4000 ps

Density: Remarks:

Reviewed By: Darlene Daniels