

Report of Freeze Thaw Resistance of Stone Prisms
ASTM D5312

Project: Project #08.1213 – Las Vegas Rock Quarry Quality Testing
 Attention: Mr. Chris Schulte
 Material Description: Sandstone Prisms
 Date Sampled: 09/04/2008

TEST RESULTS

<u>SAMPLE ID</u>	<u>ORIGINAL WEIGHT OF SAMPLE</u>	<u>WEIGHT AFTER 30 CYCLES</u>	<u>CUMULATIVE PERCENT WEIGHT LOSS</u>
1	2384.6	2384.4	0.008%
2	2314.3	2314.1	0.009%
3	2298.9	2298.7	0.009%
4	2266.6	2266.4	0.009%
5	2344.9	2344.5	0.018%

REVIEWED BY:

DATE:



11.4.2008

JA Cesare & Associates
106 Cassia Way
Henderson, NV 89014

REPORT OF TESTS

SUBJECT: *Freeze-Thaw Resistance of Stone Prisms*

PROJECT: *Project #08.1213 – Las Vegas Rock Quarry
JA Cesare & Associates Laboratory #08-694Y*

TEST METHOD: ASTM C 666, "Test Method for Resistance of Concrete to Rapid Freezing and Thawing", Procedure A ("modified per Cast Stone Institute Technical Bulletin #40)

NTL PROJECT #: 1149-08

MATERIALS: 6 Stone Prisms Delivered to NTL on September 4, 2008

PAGE: 1 of 6

TEST RESULTS

Material Identification: *Y-1*

Test Start Date: September 10, 2008

Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	77.13.1	-----	-----
35	77.13.1	77.13.1	0.0
70	77.13.1	77.13.1	0.0
105	77.13.1	77.13.1	0.0
140	77.13.1	77.13.1	0.0
180	77.13.1	77.13.1	0.0
220	77.13.1	77.13.1	0.0
260	77.13.1	77.13.1	0.0
300	77.13.1	77.13.1	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – 0.0%



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 ASTM C 666 – Rapid Freeze Thaw Testing
 NTL Project #1149-08
 Page 2 of 6

TEST RESULTS (Continued)

Material Identification: **Y-2**
 Test Start Date: September 10, 2008
 Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	7586.8	-----	-----
35	7586.8	7586.8	0.0
70	7586.8	7586.8	0.0
105	7586.8	7586.8	0.0
140	7586.8	7586.8	0.0
180	7586.8	7586.8	0.0
220	7586.8	7586.8	0.0
260	7586.8	7586.8	0.0
300	7586.8	7586.8	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – **0.0%**



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 ASTM C 666 – Rapid Freeze Thaw Testing
 NTL Project #1149-08
 Page 3 of 6

TEST RESULTS (Continued)

Material Identification: **Y-3**
 Test Start Date: September 10, 2008
 Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	7735.9	-----	-----
35	7735.9	7735.9	0.0
70	7735.9	7735.9	0.0
105	7735.9	7735.9	0.0
140	7735.9	7735.9	0.0
180	7735.9	7735.9	0.0
220	7735.9	7735.9	0.0
260	7735.9	7735.9	0.0
300	7735.9	7735.9	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – 0.0%



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 ASTM C 666 – Rapid Freeze Thaw Testing
 NTL Project #1149-08
 Page 4 of 6

TEST RESULTS (Continued)

Material Identification: **R-1**
 Test Start Date: September 10, 2008
 Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	7480.9	-----	-----
35	7480.9	7480.9	0.0
70	7480.9	7480.9	0.0
105	7480.9	7480.9	0.0
140	7480.9	7480.9	0.0
180	7480.9	7480.9	0.0
220	7480.9	7480.9	0.0
260	7480.9	7480.9	0.0
300	7480.9	7480.9	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – **0.0%**



JA Cesare & Associates – Joshua Williams
 ASTM C 666 – Rapid Freeze Thaw Testing
 NTL Project #1149-08
 Page 5 of 6

TEST RESULTS (Continued)

Material Identification: **R-2**
 Test Start Date: September 10, 2008
 Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	7463.5	-----	-----
35	7463.5	7463.5	0.0
70	7463.5	7463.5	0.0
105	7463.5	7463.5	0.0
140	7463.5	7463.5	0.0
180	7463.5	7463.5	0.0
220	7463.5	7463.5	0.0
260	7463.5	7463.5	0.0
300	7463.5	7463.5	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – **0.0%**



JA Cesare & Associates – Joshua Williams
 ASTM C 666 – Rapid Freeze Thaw Testing
 NTL Project #1149-08
 Page 5 of 6

TEST RESULTS (Continued)

Material Identification: **R-3**
 Test Start Date: September 10, 2008
 Prism Size: 3" x 4" x 16"

<u>Cycles</u>	<u>Original Weight (g)</u>	<u>Tested Weight (g)</u>	<u>Spalled Material Weight (g)</u>
0	7231.1	-----	-----
35	7231.1	7231.1	0.0
70	7231.1	7231.1	0.0
105	7231.1	7231.1	0.0
140	7231.1	7231.1	0.0
180	7231.1	7231.1	0.0
220	7231.1	7231.1	0.0
260	7231.1	7231.1	0.0
300	7231.1	7231.1	0.0

Cumulative Percent Weight Loss (CPWL) @ 300 Cycles – **0.0%**

