



97 TROOP AVE., DARTMOUTH, N.S. B3B 2A7 - TEL (902) 468-6486 FAX 468-49

**Client:** NOVA SCOTIA DEPARTMENT OF PUBLIC WORKS  
1672 Granville St, 3rd Floor  
PO Box 186  
Halifax, NS B3J 3Z8

**Our Project No.:** 02102531.169.0100.0101  
**Contract No.:** 2023-166  
**Client PO.:** 4600021503  
**Contractor:**

**Attn:** Matthew O'Brien

**Email:** matthew.oblenis@novascotia.ca

**Project:** NSPW - 2023-166 Thumb Hill Creek Bridge (HAN135A)

| Set No: 1 |             | No. Of Specimens: 8 |               |               |                   | Date Cast: 18 Dec 2023 |                            |              |               |
|-----------|-------------|---------------------|---------------|---------------|-------------------|------------------------|----------------------------|--------------|---------------|
| Cyl       | Date Tested | Age (Days)          | Avg Diam (mm) | Cyl Mass (kg) | Cyl Density kg/m³ | Max Load (kN)          | Compressive Strength (MPa) | Failure Type | Failure Types |
| A         | 21 Dec 2023 | 3                   | 102           | 3.701         | 2269              | 234                    | 28.6                       | 1            | 1             |
| B         | 24 Dec 2023 | 6                   | 102           | 3.801         | 2271              |                        |                            |              | 2             |
| C         | 27 Dec 2023 | 9                   | 102           | 3.688         | 2275              |                        |                            |              | 3             |
| D         | 15 Jan 2024 | 28                  | 102           | 3.806         | 2271              |                        |                            |              | 4             |
| E         | 15 Jan 2024 | 28                  | 102           | 3.699         | 2260              |                        |                            |              | 5             |
| F         | 12 Feb 2024 | 56                  | 102           | 3.575         |                   |                        |                            |              | 6             |
| G         | 12 Feb 2024 | 56                  | 102           | 3.695         |                   |                        |                            |              |               |
| H         |             | AV                  | 102           |               |                   |                        |                            |              |               |

  

| Specified Properties   |          | Test Information                      |       | Sample pickup at Site : |          |
|------------------------|----------|---------------------------------------|-------|-------------------------|----------|
| 28-day Strength (MPa): | 35       | Conc Temp°C                           | 24    | Slump (mm):             | 150      |
| Slump (mm):            | 180+/-30 | Air Temp°C :                          | 12    | Air(%) :                | 6.0      |
| Air (%) :              | 5 - 8    | Cast Time:                            | 11:32 | Cast By:                | Englobe  |
| Max Agg Size (mm):     | 20       | Truck No.:                            | 52102 | Ticket No.:             | 22023684 |
|                        |          | Initial curing Temp (CSA: 15 - 25 °C) |       | Rec'd Sample at Lab :   |          |
|                        |          | Minimum: 18.0 Maximum: 23.5           |       | Date : 19 Dec 2023      |          |
|                        |          | Cure Type: Standard Std. Cure?: No    |       | Time : 9:00             |          |
|                        |          |                                       |       | Date : 19 Dec 2023      |          |
|                        |          |                                       |       | Time : 10:00            |          |

  

| Supplier Information                            |  | Section: Abutments |  |
|---|--|--------------------|--|
| Supplier:                                       | OSCO   | Location:          |  |
| Batch Time:                                     | 10:52  | Deviations: I- RCP |  |
| Strength Delivered:                             | 35 (MPa)   |                    |  |
| Mix No:   |  |                    |  |
| Load Vol:                                       | 7 m³   |                    |  |
| Cum Vol:  | 7 m³   |                    |  |
| Additives:                                      |  |                    |  |
| Heat  | <input checked="" type="checkbox"/> Superplasticizer <input checked="" type="checkbox"/> |                    |  |
| Silica fume                                     | <input type="checkbox"/> Flyash <input type="checkbox"/>                                 |                    |  |
| Set Retarder                                    | <input type="checkbox"/> Air Entrainment <input checked="" type="checkbox"/>             |                    |  |
| Water Reducer                                   | <input checked="" type="checkbox"/> Accelerators <input type="checkbox"/>                |                    |  |
| Fibers  | <input type="checkbox"/> CNI <input type="checkbox"/>                                    |                    |  |
| Extra Additives                                 |  |                    |  |
| H2O Added <input type="checkbox"/> Authorized B |  |                    |  |

Set Tag Label: Tm1

Placement Tech: Travis MacKenzie

Record No 66832

Lab Tech: Pat McNamara

Reviewer Signature:

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.

N/A - Not Applicable or Not Available

Project manager : Peter Salah