# SITE OBSERVATION REPORT – RAWP Implementation – Day 66

LANGAN

| | | | | | |
|---|---|---|---|---|---|
| **PROJECT No.:** | 170390001 | **CLIENT:** | | **DATE:** | Monday, May 5, 2025 |
| **PROJECT:** | 141 3rd Street | | | **WEATHER:** | Rain, 54-63 $^{0}$F<br>Wind: SSW @ 0.4 – 3.3 mph |
| **LOCATION:** | Brooklyn, New York | | Third Street Owner LLC and 155 Third St., LLC | **TIME:** | 6:45 a.m. – 4:30 p.m. |
| **BCP SITE ID:** | C224336 | | | **MONITOR:** | Gabriella DeGennaro |

| | |
|---|---|
| **EQUIPMENT:**<br>Hyundai HX520L Excavator<br>Komatsu PC490LC Excavator<br>LB46-410 Drilling Rig<br>LRB- 355.1 Drilling Rig<br>CME LC45 Rotary Drill Rig<br>MiniRae 3000 | **PRESENT AT SITE:**<br>**Langan**: Gabriella DeGennaro, Loagan Clements<br>**Monadnock Construction (Construction Management)**: John Henry<br>**New Leaf (Development/Drilling Contractor)**: Joe Sullivan<br>**NYSDEC:** Aaron Fischer<br>**WSP:** Chris DeSclafani<br>**Roux, Inc.:** James Smyth<br>**Aquifer Drilling & Testing, Inc. (ADT):** Christopher Peters |

**OBSERVATIONS, DISCUSSIONS, TEST RESULTS, ETC.:**

Langan was onsite to document implementation of the New York State Department of Environmental Conservation (NYSDEC)-approved Remedial Action Work Plan (RAWP) dated 12 December 2024, and Remedial Design Document (RDD) for In-Situ Stabilization/Solidification (ISS) dated 5 April 2024.

**Remedial Action Work Summary:**

*Work Activities Performed Onsite*

- NYSDEC conducted a site visit. No adverse conditions were noted as a result of the site visit and no further action was required.

*ISS Work Performed Onsite*

- ADT used a CME LC45 rotary drill rig to advance core location ISS-C4 (representative of previously mixed cells ISS-19, ISS-23, and ISS-24) to about 35 feet below grade surface (bgs) (el. -28.25±) and core location ISS-C6 (representative of previously mixed cells ISS-35, ISS-37, and ISS-38) to about 15 feet bgs (el. -7.88±) to document mixture consistency in the ISS area. Cores and drilling equipment were inspected for visible non-aqueous phase liquid (NAPL), percent of core sample recovered, and NAPL coating on drilling tools.
    - **ISS-C4**: Low recovery (about 64% of the total rock core) was observed from about 0 to 35 feet bgs (el. 6.75± and -28.25±). Therefore, ADT will advance off-set core ISS-C4-R1 tomorrow.
    - **ISS-C6**: Low recovery (about 63% of the total core) was observed from about 0 to 15 feet bgs (el. 7.12± and -7.88±). Therefore, ADT will advance off-set core ISS-C6-R1 tomorrow.
    - No impacts were observed.
    - The cores demonstrated a homogenous mix in ISS cells.
    - Following completion of cores, each location was tremie-grouted from the base of the core to surface grade.
    - ISS cores were retained on site in wood core boxes and will be maintained on site through the remediation.

**Sampling**

- No samples were collected.

**Community Air Monitoring Plan (CAMP) Activities**

- Langan performed continuous air monitoring for volatile organic compounds (VOC) and particulate matter smaller than 10 microns in diameter (PM10) using two perimeter air monitoring stations at upwind and downwind locations. The PM10 and VOC action levels were not exceeded during the monitoring period. Recorded air monitoring data is presented on CAMP summary data sheet appended to the end of this Daily Field Report.

**Material Tracking**

- No material was exported from the site.
- No material was imported to site.

| Material Import Summary | | | | |
|---|---|---|---|---|
| **Facility** | **NYSDEC Approved Quantity** | **Imported** | **Today** | **Total** |
| **Tilcon - Haverstraw Haverstraw, NY ASTM #3 Virgin Stone (1.5-Inch)** | 400 CY (560 tons) | **No. Loads** | 0 | **4** |
| | | **Quantity (tons)** | 0 | **89.95** |
| **Impact Materials Jersey City (IMJC) Jersey City, NJ 0.75-inch Stone** | 2,000 CY (2,800 tons) | **No. Loads** | 0 | **0** |
| | | **Quantity (tons)** | 0 | **0** |
| **IMJC Jersey City, NJ 1.5-inch Stone** | 400 CY (560 tons) | **No. Loads** | 0 | **2** |
| | | **Quantity (tons)** | 0 | **49.65** |

| Material Export Summary | | | | |
|---|---|---|---|---|
| **Facility** | **Approved Quantity** | **Imported** | **Today** | **Total** |
| **Clean Earth of Carteret (CEC) Carteret, NJ Elevated Soil/Fill** | 9,857 CY (13,800 tons) | **No. Loads** | 0 | **62** |
| | | **Quantity (CY)** | 0 | **1,240** |
| **Clean Earth of New Castle (CENC) New Castle, DE Non-Hazardous Contaminated Soil/Urban Fill** | 3,571 CY (5,000 tons) | **No. Loads** | 0 | **0** |
| | | **Quantity (CY)** | 0 | **0** |
| **Atlantic County Utilities Authority (ACUA) Egg Harbor Township, NJ Non-Hazardous Contaminated Soil/Urban Fill** | 714 CY (1,000 tons) | **No. Loads** | 0 | **0** |
| | | **Quantity (CY)** | 0 | **0** |
| **Clean Earth of North Jersey (CENJ) Kearny, NJ Hazardous Lead** | 107 CY (150 tons) | **No. Loads** | 0 | **2** |
| | | **Quantity (CY)** | 0 | **40** |

Drums

- One 55-gallon drum containing purged groundwater and dense non-aqueous phase liquid (DNAPL) is staged in the southern part of the site.
- One 55-gallon drum containing truck wash water is staged in the central part of the site.
- One 55-gallon drum containing purged groundwater is staged in the southern part of the site.

**Anticipated Activities**

- ADT will advance off-sets of the core locations.

**SITE PHOTOGRAPHS:**

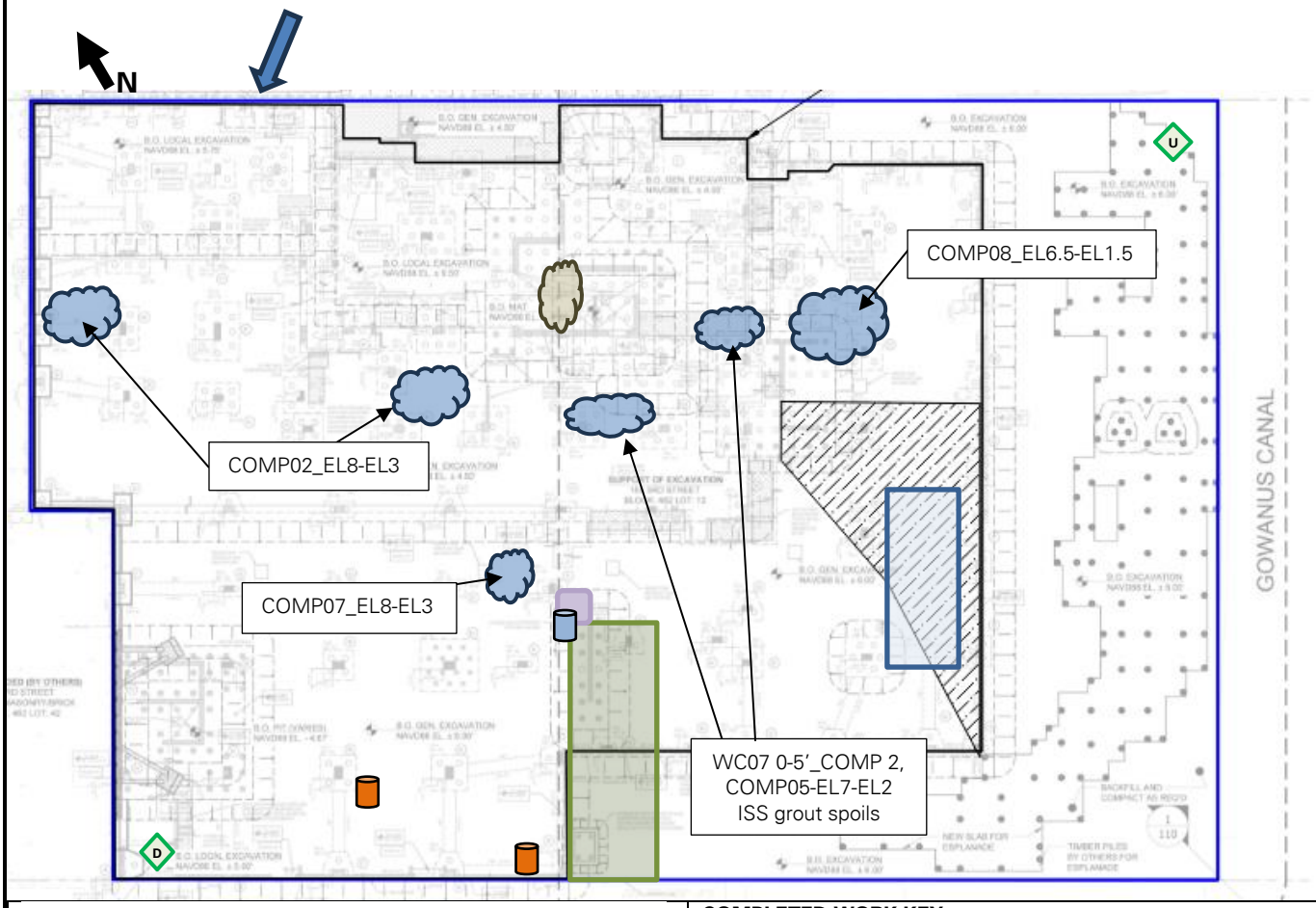


**Photo 1:** ADT advancing core location ISS-C4 (facing west)




**Photo 2:** ADT advancing core location ISS-C6 (facing east)

**FIGURE 1 - SITE MAP:**




**LEGEND:**

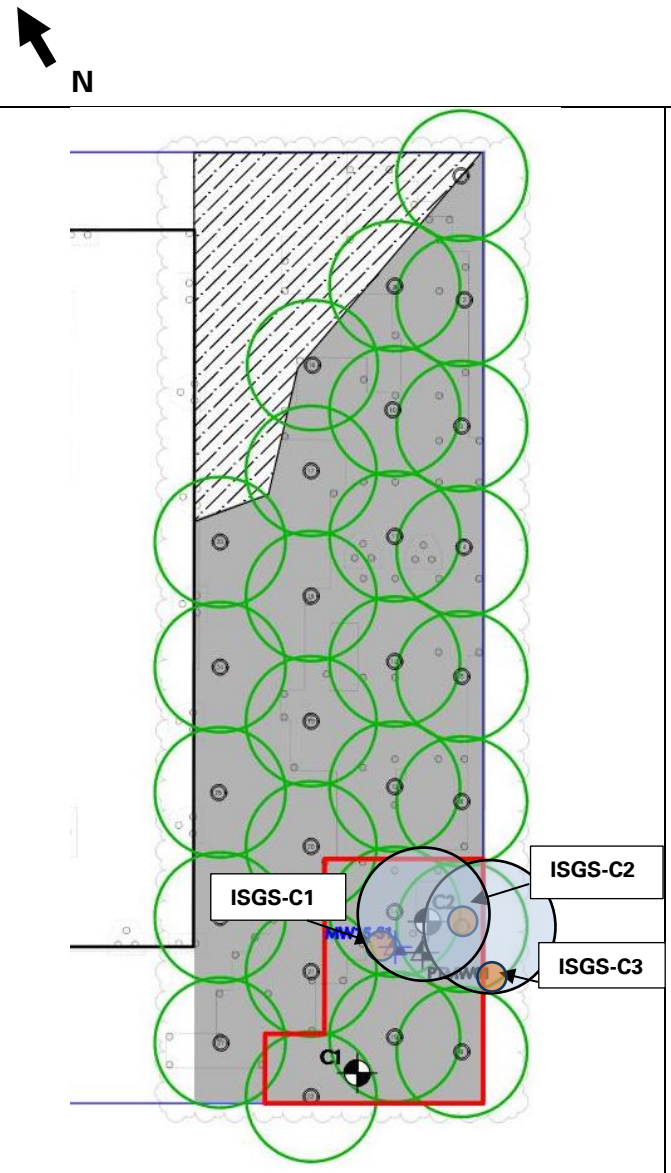
- APPROXIMATE SITE BOUNDARY
- PROPOSED BUILDING FOOTPRINT
- APPROXIMATE PROPOSED EXTENT OF ISS AREA TO BE EXCAVATED TO 4 FEET BGS (EL. 3.5± FEET NAVD88)

**COMPLETED WORK KEY**

- Approximate work area
- Approximate location of upwind CAMP station
- Approximate location of downwind CAMP station
- Approximate location of drum
- Approximate location of truck wash drum
- Approximate wind direction
- Stockpiled soil/fill
- Stockpiled C&D debris
- Stockpiled imported stone
- Temporary stabilized construction entrance
- Truck wash catch basin

Base map includes Figure 5 – Pre-ISS Excavation Plan from the NYSDEC-approved RDD for ISS, prepared by Langan Engineering, dated 4/5/2024

**FIGURE 2 - ISGS PROGRESS MAP**




**LEGEND:**

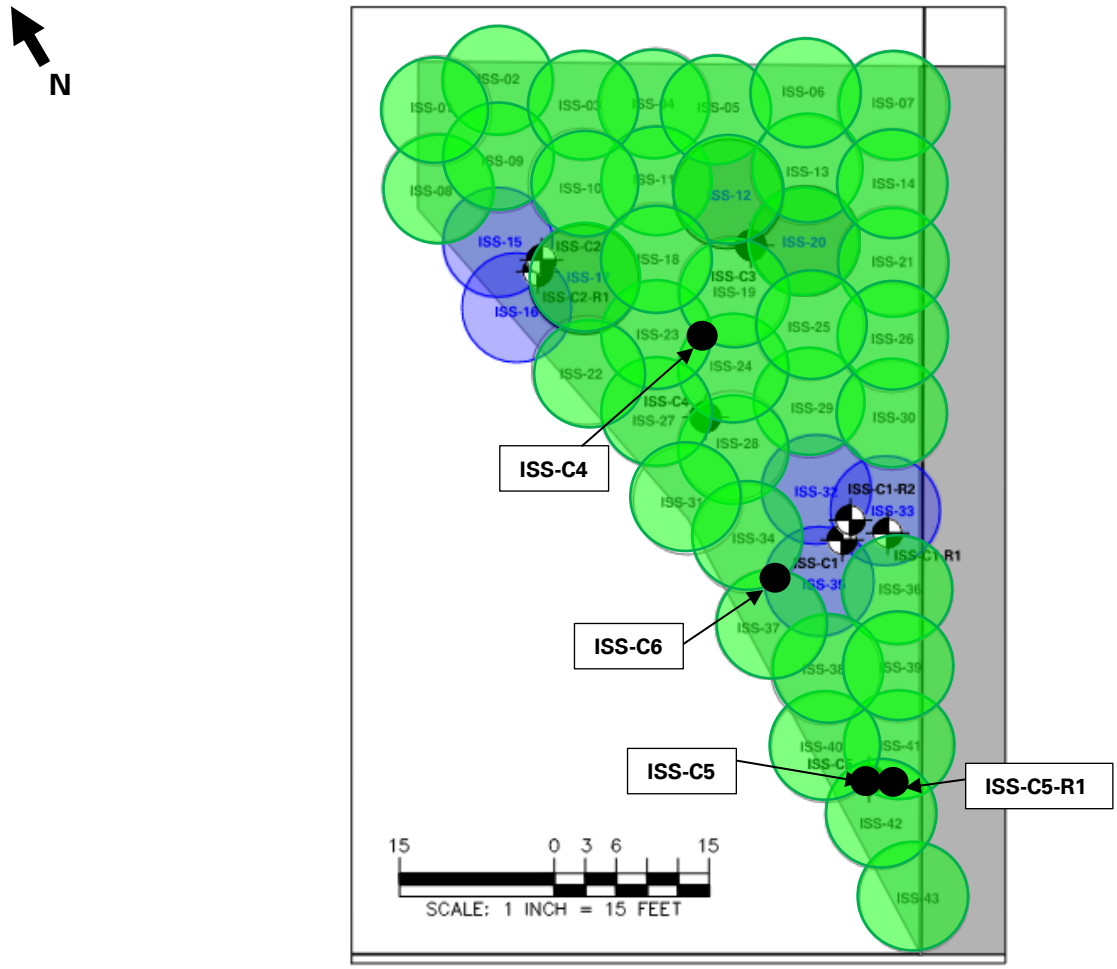
- APPROXIMATE SITE BOUNDARY
- PROPOSED BUILDING FOOTPRINT
- APPROXIMATE PROPOSED EXTENT OF ISGS AREA BETWEEN EL. -19± TO EL. -23±
- APPROXIMATE PROPOSED EXTENT OF ISGS SUPPORT/LAYDOWN AREA
- APPROXIMATE PROPOSED TEMPORARY DIRECT-PUSH INJECTION POINT LOCATION
- APPROXIMATE ROI (13-FOOT RADIUS, 25-FOOT SPACING)
- C1 — APPROXIMATE PROPOSED PILOT TEST QA/QC CORE LOCATION
- APPROXIMATE ISGS PILOT TEST AREA
- MW15-S1 — EXISTING MONITORING WELL LOCATION
- PTWM01 — PROPOSED MONITORING WELL LOCATION

**COMPLETED WORK KEY**

- ISGS injection point completed today
- ISGS injection point previously completed
- Core location completed today
- Core location previously completed

Base map includes Figure 2 – Project Implementation Plan In-Situ Stabilization/Solidification, prepared by Roux Environmental and Geology, D.P.C, dated October 2024

**FIGURE 3 - ISS PROGRESS MAP:**




**LEGEND:**

- APPROXIMATE SITE BOUNDARY
- PROPOSED BUILDING FOOTPRINT
- APPROXIMATE EXTENT OF ISS SUPPORT/LAYDOWN AREA
- APPROXIMATE EXTENT OF ISS IMPLEMENTATION AREA
- ISS-C1 APPROXIMATE COMPLETED CORE LOCATION
- ISS-C3 APPROXIMATE PROPOSED CORE LOCATION

**COMPLETED WORK KEY**

- Completed ISS Pilot Test Columns
- Columns to be re-mixed
- Completed Full-Scale ISS Columns
- ISS Columns mixed today
- Columns to be mixed tomorrow
- Collected core today
- Previously collected sample location

Base map includes Figure 2 – ISS Plan from the ISS Pilot Test Results Letter, prepared by Langan, dated March 5, 2025

LANGAN

**TABLE 1 - ISS PROGRESS TABLE:**

| ISS Column ID | Coordinates (N, E) | Column Diameter (ft) | No. of Column Passes | Bottom Elevation of Column | Approximate Volume Treated (CY) | Mixing Time Per Interval (min/ft) | Reagent Additional Per Interval (kg) | Injection Pressure (psi) | Injection Rate (gal/min) | Rotational Speed (rpm) | Advance Rate (ft/min) | Sampled |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pilot Study** | | | | | | | | | | | | |
| ISS-20 | 98.87, 221.23 | 10.6 | N/A | -26.5± | N/A | N/A | N/A | 50 | 6.5 | 30 | 3.75 | Yes |
| ISS-12 | 103.418, 213.788 | 10.6 | N/A | -21.5± | N/A | N/A | N/A | N/A | N/A | 15 | 1.4 | Yes |
| ISS-16 | 92.59, 193.29 | 10.6 | 1 | -26.5± | 93 | 5 | 948.78 | N/A | N/A | 17 | 0.1 | Yes |
| ISS-17 | 95.14, 199.81 | 10.6 | 1 | -26.5± | 105 | 10 | 841.75 | N/A | N/A | 18 | 0.19 | Yes |
| ISS-15 | 98.75, 191.97 | 10.6 | 1 | -26.5± | 105 | 5 | 765.22 | N/A | N/A | 16 | 0.28 | Yes |
| ISS-35 | 65.47, 222.59 | 10.6 | 2 | -26.5± | 101 | 7 | 871.43 | N/A | N/A | 16 | 0.36 | Yes |
| ISS-32 | 74.47, 222.33 | 10.6 | 2 | -26.5± | 105 | 4 | 841.75 | N/A | N/A | 16 | 0.25 | Yes |
| ISS-33 | 74.47, 229.01 | 10.6 | 2 | -26.5± | 105 | 11 | 765.22 | N/A | N/A | 16 | 0.17 | Yes |
| **Full-Scale Implementation** | | | | | | | | | | | | |
| ISS-01 | 110.99, 185.10 | 10.6 | 2 | -26.5± | 100 | 5.3* | 800* | 22* | 21* | 13* | 0.2* | No |
| ISS-02 | 113.11, 190.95 | 10.6 | 2 | -26.5± | 109 | 4.3* | 809* | 24* | 34* | 14* | 0.2* | No |
| ISS-03 | 112.32, 199.07 | 10.6 | 2 | -26.5± | 99 | 7.8* | 886* | 19* | 37* | 14* | 0.1* | Yes |
| ISS-04 | 114.11, 206.99 | 10.6 | 2 | -26.5± | 109 | 9.1* | 956* | 21* | 24* | 13* | 0.1* | No |
| ISS-05 | 111.93, 214.38 | 10.6 | 2 | -26.5± | 101 | 8.6* | 874* | 25* | 21* | 13* | 0.1* | No |
| ISS-06 | 113.45, 221.56 | 10.6 | 2 | -26.5± | 102 | 8.0* | 938* | 22* | 27* | 13* | 0.1* | Yes |
| ISS-07 | 111.72, 229.09 | 10.6 | 2 | -26.5± | 101 | 9.5* | 1,027* | 24* | 22* | 13* | 0.1* | Yes |
| ISS-08 | 103.02, 187.19 | 10.6 | 2 | -26.5± | 100 | 5.6* | 964* | 22* | 41* | 13* | 0.2* | No |
| ISS-09 | 107.17, 192.43 | 10.6 | 2 | -26.5± | 100 | 6.6* | 964* | 21* | 24* | 14* | 0.2* | No |
| ISS-10 | 103.57, 199.17 | 10.6 | 2 | -26.5± | 100 | 5.8* | 803* | 21* | 29* | 14* | 0.2* | No |
| ISS-11 | 107.82, 206.44 | 10.6 | 2 | -26.5± | 101 | 6.8* | 869* | 19* | 27* | 13* | 0.2* | No |
| ISS-12 | 103.42, 213.80 | 10.6 | 2 | -26.5± | 100 | 9.1* | 964* | 21* | 30* | 14* | 0.1* | No |
| ISS-13 | 106.26, 221.37 | 10.6 | 2 | -26.5± | 102 | 6.0* | 861* | 20* | 28* | 14* | 0.2* | No |
| ISS-14 | 104.02, 228.87 | 10.6 | 2 | -26.5± | 100 | 9.8* | 961* | 19* | 40* | 13* | 0.1* | No |
| ISS-17 | 95.14, 199.81 | 10.6 | 2 | -26.5± | 109 | 8.8* | 877* | 19* | 28* | 13* | 0.1* | No |
| ISS-18 | 99.32, 206.56 | 10.6 | 2 | -26.5± | 101 | 5.9* | 790* | 25* | 35* | 13* | 0.2* | No |
| ISS-19 | 94.57, 213.51 | 10.6 | 2 | -26.5± | 104 | 9.2* | 1081* | 20* | 31* | 13* | 0.1* | Yes |
| ISS-20 | 98.37, 221.23 | 10.6 | 2 | -26.5± | 98 | 9.9* | 1,221* | 17* | 28* | 13* | 0.1* | No |
| ISS-21 | 96.47, 229.17 | 10.6 | 2 | -26.5± | 100 | 6.0* | 876* | 18* | 21* | 13* | 0.2* | No |
| ISS-22 | 86.23, 199.71 | 10.6 | 2 | -26.5± | 109 | 6.2* | 804* | 23* | 27* | 13* | 0.2* | No |
| ISS-23 | 90.11, 206.59 | 10.6 | 2 | -26.5± | 100 | 5.7* | 882* | 23* | 35* | 14* | 0.2* | No |
| ISS-24 | 86.32, 213.53 | 10.6 | 2 | -26.5± | 101 | 5.6* | 875* | 19* | 35* | 14* | 0.2* | Yes |
| ISS-25 | 91.32, 221.3 | 10.6 | 2 | -26.5± | 110 | 6.6* | 799* | 17* | 21* | 12* | 0.2* | No |
| ISS-26 | 88.63, 229.16 | 10.6 | 2 | -26.5± | 109 | 7.1* | 807* | 30* | 28* | 13* | 0.1* | No |
| ISS-27 | 81.32, 206.11 | 10.6 | 2 | -26.5± | 109 | 6.6* | 735* | 24* | 32* | 13* | 0.2* | Yes |
| ISS-28 | 78.50, 215.04 | 10.6 | 2 | -26.5± | 100 | 5.4* | 880* | 23* | 37* | 13* | 0.3* | No |
| ISS-29 | 83.08, 221.62 | 10.6 | 2 | -26.5± | 100 | 5.5* | 878* | 21* | 47* | 13* | 0.2* | No |

| ISS Column ID | Coordinates (N, E) | Column Diameter (ft) | No. of Column Passes | Bottom Elevation of Column | Approximate Volume Treated (CY) | Mixing Time Per Interval (min/ft) | Reagent Additional Per Interval (kg) | Injection Pressure (psi) | Injection Rate (gal/min) | Rotational Speed (rpm) | Advance Rate (ft/min) | Sampled |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ISS-30 | 80.66, 229.01 | 10.6 | 2 | -26.5± | 101 | 5.5* | 948* | 19* | 35* | 13* | 0.3* | No |
| ISS-31 | 73.77, 209.56 | 10.6 | 2 | -26.5± | 105 | 7.3* | 842* | 23* | 30* | 13* | 0.2* | No |
| ISS-34 | 69.19, 215.20 | 10.6 | 2 | -26.5± | 104 | 5.9* | 850* | 17* | 34* | 14* | 0.3* | No |
| ISS-36 | 64.95, 229.19 | 10.6 | 2 | -26.5± | 102 | 6.8* | 782* | 24* | 27* | 13* | 0.3* | No |
| ISS-37 | 61.04, 216.20 | 10.6 | 2 | -26.5± | 105 | 6.2* | 837* | 25* | 33* | 13* | 0.3* | No |
| ISS-38 | 56.31, 222.47 | 10.6 | 2 | -26.5± | 105 | 6.0* | 759* | 19.3* | 32* | 14* | 0.3* | No |
| ISS-39 | 57.46, 228.81 | 10.6 | 2 | -26.5± | 103 | 5.7* | 853* | 16* | 33* | 13* | 0.3* | No |
| ISS-40 | 49. 31, 222.87 | 10.6 | 2 | -26.5± | 104 | 5.5* | 848* | 28* | 33* | 13* | 0.4* | Yes |
| ISS-41 | 49.74, 229.96 | 10.6 | 2 | -26.5± | 99 | 8.1* | 890* | 19* | 30* | 13* | 0.2* | Yes |
| ISS-42 | 42.22, 228.29 | 10.6 | 2 | -26.5± | 103 | 5.4* | 851* | 16.4* | 31* | 13* | 0.3* | No |
| ISS-43 | 35.19, 230.66 | 10.6 | 2 | -26.5± | 102 | 8.1* | 781.47* | 8* | 45* | 14* | 0.3* | No |

1. Coordinates were measured in northing and eastings from the project datum.
2. * = Estimated parameters based on field observations. Exact parameters will be updated (as needed) once received.

LANGAN

**TABLE 2 - ISS QC RESULTS TABLE**

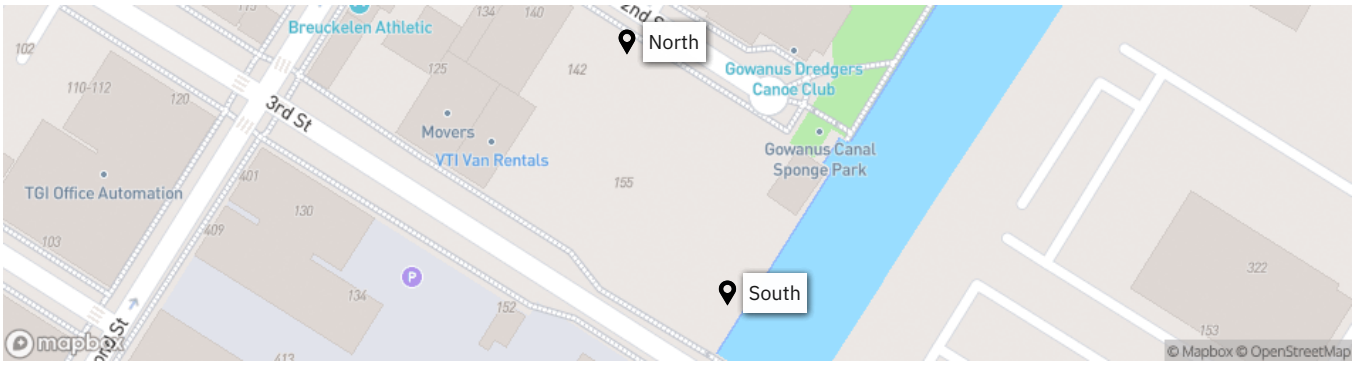
| ISS Cell | Sample Depth (elevation) | 7-day | | 14-day | | 21-day | | 28-day | | 56-day | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | UCS (psi) | HC (cm/sec) | UCS (psi) | HC (cm/sec) | UCS (psi) | HC (cm/sec) | UCS (psi) | HC (cm/sec) | UCS (psi) | HC (cm/sec) |
| **Pilot Study** | | | | | | | | | | | |
| ISS-15 | -18.5± to -20.5± | 40 | $1.3 \times 10^{-6}$ | **80** | **$8.6 \times 10^{-7}$** | **90** | **$4.6 \times 10^{-7}$** | **90** | **$4.7 \times 10^{-7}$** | **100** | **$4.2 \times 10^{-7}$** |
| ISS-16 | -18.5± to -20.5± | 30 | $3.6 \times 10^{-6}$ | **50** | $1.1 \times 10^{-6}$ | **60** | **$9.8 \times 10^{-7}$** | **70** | **$7.4 \times 10^{-7}$** | **70** | **$7.2 \times 10^{-7}$** |
| ISS-17 | -18.5± to -20.5± | 20 | $1.6 \times 10^{-6}$ | 30 | $3.0 \times 10^{-6}$ | 40 | $2.8 \times 10^{-6}$ | **50** | $2.7 \times 10^{-6}$ | **60** | $2.6 \times 10^{-6}$ |
| ISS-32 | -18.5± to -20.5± | 30 | **$8.8 \times 10^{-7}$** | **60** | **$7.5 \times 10^{-7}$** | **70** | **$6.0 \times 10^{-7}$** | **90** | **$5.5 \times 10^{-7}$** | **100** | **$5.3 \times 10^{-7}$** |
| ISS-33 | -18.5± to -20.5± | **50** | **$2.3 \times 10^{-7}$** | **80** | **$2.0 \times 10^{-7}$** | **90** | **$2.0 \times 10^{-7}$** | **100** | **$2.2 \times 10^{-7}$** | **100** | **$1.9 \times 10^{-7}$** |
| ISS-35 | -18.5± to -20.5± | 30 | $1.3 \times 10^{-6}$ | **60** | **$8.1 \times 10^{-7}$** | **80** | **$5.9 \times 10^{-7}$** | **90** | **$5.0 \times 10^{-7}$** | **100** | **$4.9 \times 10^{-7}$** |
| **Full-Scale Implementation** | | | | | | | | | | | |
| ISS-03 | -14± to -15± | **150** | **$1.1 \times 10^{-7}$** | **150** | **$9.9 \times 10^{-8}$** | **340** | **$8.7 \times 10^{-8}$** | *Pending* | *Pending* | *Pending* | *Pending* |
| ISS-06 | -13± to -14± | **170** | **$3.8 \times 10^{-7}$** | **220** | **$2.0 \times 10^{-7}$** | *Pending* | *Pending* | *Pending* | *Pending* | *Pending* | *Pending* |
| ISS-07 | -17± to -18± | **130** | **$1.2 \times 10^{-7}$** | **210** | **$1.7 \times 10^{-7}$** | **330** | **$9.6 \times 10^{-8}$** | *Pending* | *Pending* | *Pending* | *Pending* |
| ISS-19 | -16± to -17± | **110** | **$2.0 \times 10^{-7}$** | **200** | **$1.6 \times 10^{-7}$** | **220** | **$1.9 \times 10^{-7}$** | **230** | **$1.7 \times 10^{-7}$** | *Pending* | *Pending* |
| ISS-24 | -17± to -18± | **100** | **$1.1 \times 10^{-7}$** | **230** | **$1.8 \times 10^{-7}$** | **190** | **$2.0 \times 10^{-7}$** | **420** | **$1.3 \times 10^{-7}$** | *Pending* | *Pending* |
| ISS-27 | -16± to -17± | **120** | **$1.2 \times 10^{-7}$** | **230** | **$9.9 \times 10^{-8}$** | **170** | **$1.5 \times 10^{-7}$** | **260** | **$9.1 \times 10^{-8}$** | *Pending* | *Pending* |
| ISS-40 | -19± to -21± | **210** | **$3.1 \times 10^{-7}$** | **250** | **$3.5 \times 10^{-7}$** | **400** | **$1.0 \times 10^{-7}$** | **420** | **$2.1 \times 10^{-7}$** | *Pending* | *Pending* |
| ISS-41 | -15.3± to -16.3± | **190** | **$4.7 \times 10^{-7}$** | **150** | **$4.4 \times 10^{-7}$** | **220** | **$3.5 \times 10^{-7}$** | **220** | **$3.9 \times 10^{-7}$** | *Pending* | *Pending* |

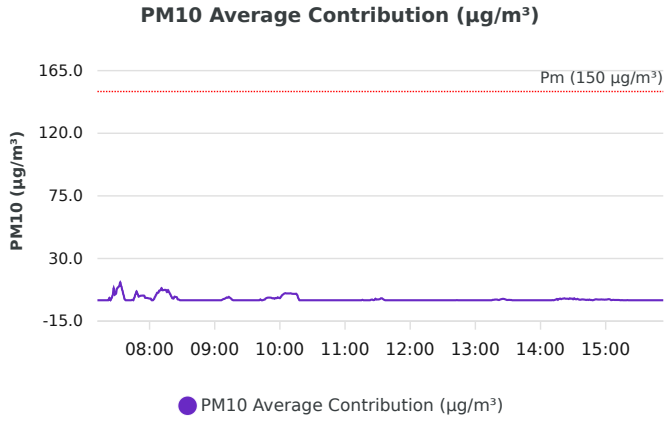
1. Results meeting or exceeding field performance criterion (50 pounds per square inch [psi] for unconfined compressive strength [UCS] and $1 \times 10^{-6}$ centimeters per second [cm/s] for hydraulic conductivity [HC]) are shown in bold.
2. Elevation recorded in North American Vertical Datum of 1988

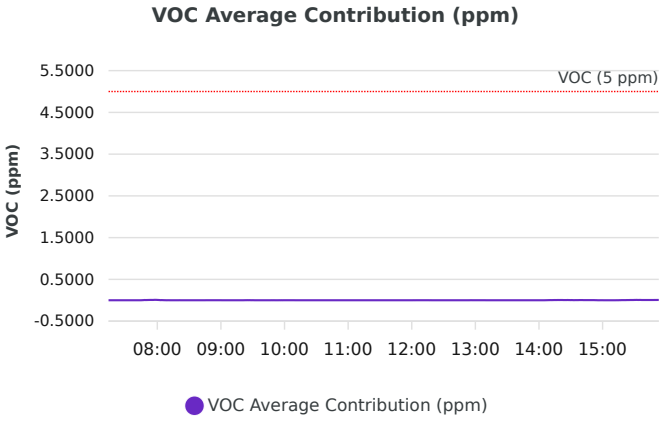
| LANGAN | 155 3rd St Report | 170390002 - 155 3rd St Brooklyn | |
|---|---|---|---|
| | | Report Period | |
| | | From: | 5/5/2025 06:00 |
| | | To: | 5/5/2025 22:00 |
| | | PM10 Action Level: | 150 µg/m³ |
| | | VOC Action Level: | 5 ppm |

| Daily Environmental Summary | Temp (°F) | Relative Humidity (%) | Barometer (inHg) | Windspeed (mph) | Prevailing wind direction |
|---|---|---|---|---|---|
| 5/5/2025 | - | - | - | 0.4-3.3 | NNE |

| Daily Monitoring Summary | PM10 (µg/m³) | Time | VOC (ppm) | Time |
|---|---|---|---|---|
| Min Contribution (15 min avg.) - 5/5/2025 | 0.0 | 07:12 | 0.0000 | 07:14 |
| Max Contribution (15 min avg.) - 5/5/2025 | 12.9 | 07:33 | 0.0100 | 07:58 |




170390002 - 155 3rd St Brooklyn
Report date: 05/05/2025
A PM10 and VOC negative number filter has been applied to the averaged contribution data

Generated by OneView v1.153.1

aeroqual