SITE OBSERVATION REPORT – RAWP Implementation – Day 53

LANGAN

PROJECT No.:	170390001	**CLIENT:**		**DATE:**	Tuesday, April 1, 2025
PROJECT:	141 3rd Street			**WEATHER:**	Sunny, 40-59 ^{0}F Wind: ENE @ 1.3 – 8.6 mph
LOCATION:	Brooklyn, New York	Third Street Owner LLC and 155 Third St., LLC		**TIME:**	7:00 a.m. – 7:20 p.m.
BCP SITE ID:	C224336			**MONITOR:**	Pepper Greenley

EQUIPMENT:	**PRESENT AT SITE:**
Hyundai HX520L Excavator Komatsu PC490LC EXCAVATOR LB46-410 Drilling Rig LRB- 355.1 Drilling Rig	**Langan**: Pepper Greenley **Monadnock Construction (Construction Management)**: Dave Parlo **New Leaf (Development/Drilling Contractor)**: Joe Sullivan, Jose Gomez **NYSDEC:** Chris DiSclafani (WSP)

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

- New Leaf continued to remobilize/maintenance equipment and prepared the work area in the southeastern part of the site (ISS area).
- New Leaf loaded previously stockpiled soil/fill into 8 tri-axle trucks for off-site disposal. See material tracking section for details.
- A representative from WSP conducted a site visit on behalf of the NYSDEC.

ISS Work Performed Onsite

- New Leaf pre-excavated three about 20-foot-long by 10-foot-wide areas to about 1 foot below grade surface (bgs) (elevation [el] 6±) in the ISS area to temporarily place timber mats to create a level surface for the drilling rig. Excavated soil/fill was screened for odors, staining, and organic vapors using a photoionization detector (PID). Evidence of impacts was not observed, and the soil/fill was graded into the adjacent surrounding area to create a level surface for the drill rig.
- New Leaf pre-excavated two about 10-foot-long by 10-foot-wide areas to about 2 feet bgs (el 4.3±) in the ISS area in preparation for mixing ISS columns ISS-02 and ISS-08. Excavated soil/fill was screened for odors, staining, and organic vapors using a PID. Evidence of impacts was not observed, and the soil/fill was graded into the adjacent surrounding area to create a level surface for the drill rig.
- New Leaf continued ISS implementation and mixed columns ISS-05 and ISS-19 to about el -26.5±. Generated grout spoils were staged in the eastern/central part of the site on polyethylene sheeting at the end of the workday and sprayed with Atmos® AC-645 odor/vapor suppressing foam.

Sampling

- Amaracon collected 10 quality control (QC) samples of the ISS mix from column ISS-19. The samples were collected within the treatment interval at about el -16± to el -17±. The samples will be analyzed for unconfined compressive strength and hydraulic permeability.

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

- New Leaf exported 8 truckloads (about 160 CY) of soil/fill for off-site disposal at the Clean Earth of Carteret facility located in Carteret, NJ.
- 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**	8	**19**
		Quantity (CY)	160	**380**
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	**0**
		Quantity (CY)	0	**0**

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

- New Leaf will continue ISS implementation and excavated the hazardous lead hotspot for off-site disposal.

SITE PHOTOGRAPHS:

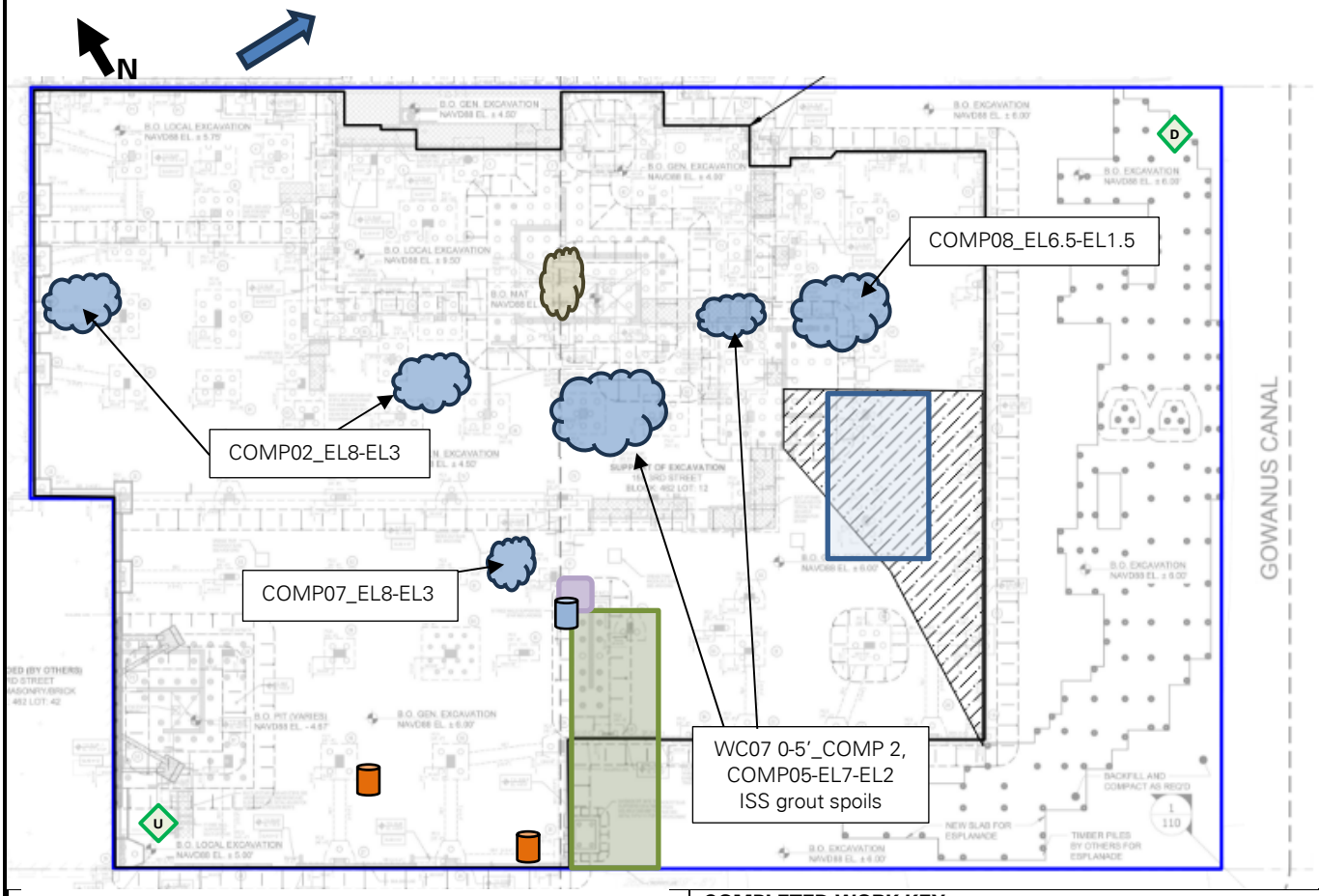


Photo 1: New Leaf mixing ISS-05 and spraying Atmos® AC-645 odor/vapor suppressing foam in the ISS area (facing northeast)



Photo 2: New Leaf exporting soil/fill for off-site disposal (facing north).

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)

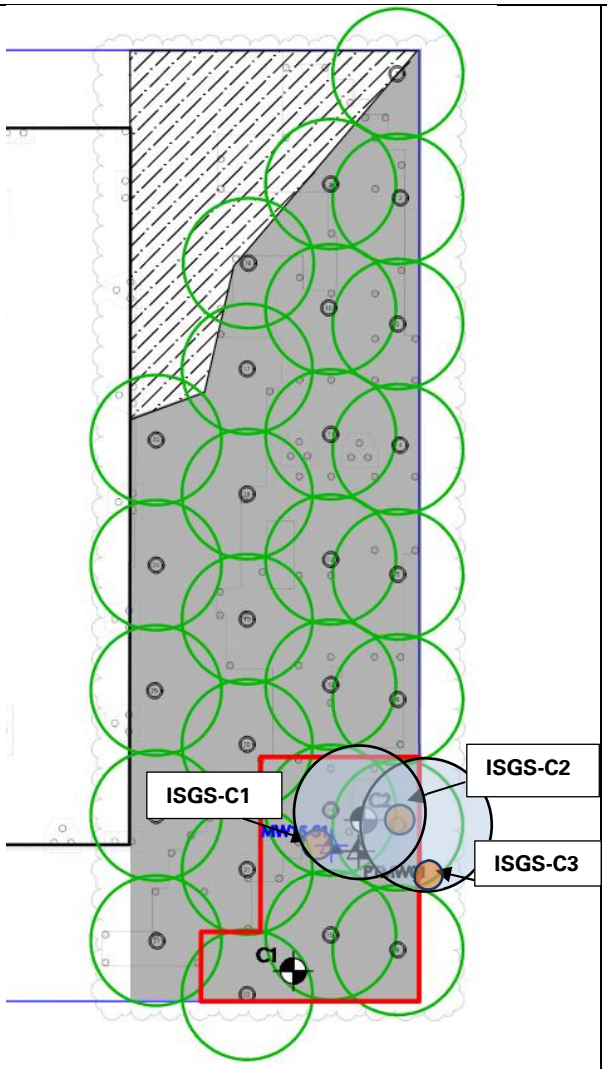
COMPLETED WORK KEY

- 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

N



LEGEND:

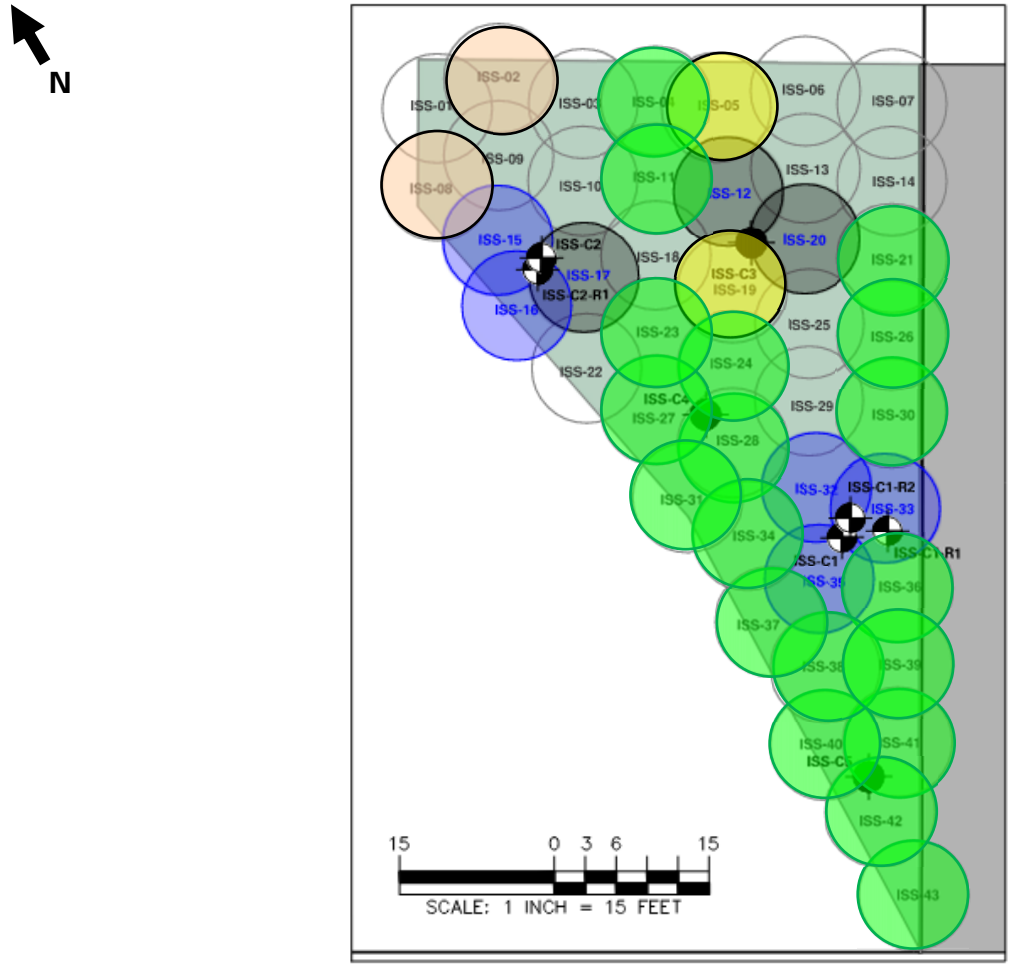
- APPROXIMATE SITE BOUNDARY
- PROPOSED BUILDING FOOTPRINT
- APPROXIMATE PROPOSED EXTENT OF ISGS AREA BETWEEN EL. -19± TO EL. -23±
- APPROXIMATE PROPOSED EXTENT OF ISGS SUPPORT/LAYDOWN AREA
- APPROXIMATE PROPOSED TEMPORARY DIRECT-PUSH INJECTION POINT LOCATION
- APPROXIMATE ROI (13-FOOT RADIUS, 25-FOOT 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-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-11	107.82, 206.44	10.6	2	-26.5±	101	6.8*	869*	19*	27*	13*	0.2*	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-21	96.47, 229.17	10.6	2	-26.5±	100	6.0*	876*	18*	21*	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-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-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

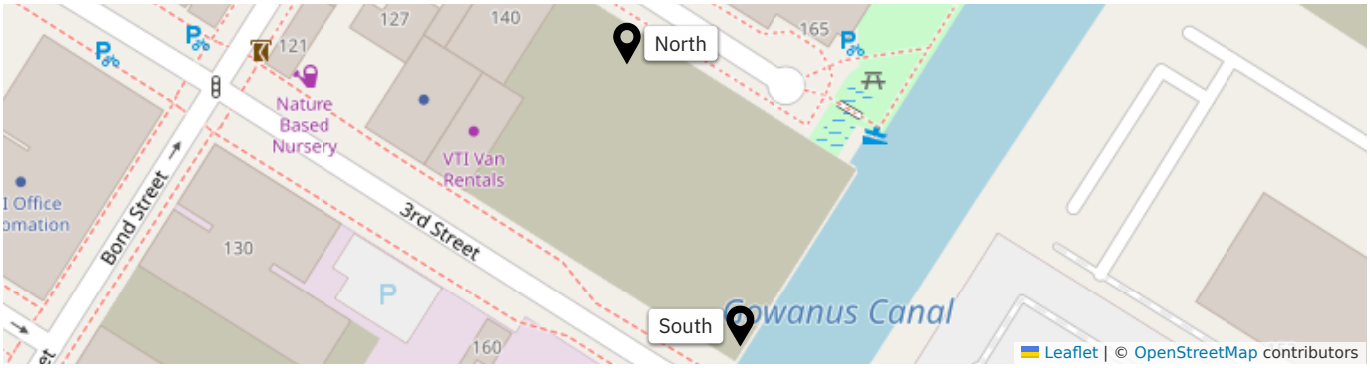
ISS Cell	Sample Depth (elevation)	7-day		14-day		21-day		28-day		56-day	
		UCS (psi)	HC (cm/sec)	UCS (psi)	HC (cm/sec)	UCS (psi)	HC (cm/sec)	UCS (psi)	HC (cm/sec)	UCS (psi)	HC (cm/sec)
Pilot Study											
ISS-15	-18.5± to -20.5±	40	1.3×10^{-6}	**80**	**8.6×10^{-7}**	**90**	**4.6×10^{-7}**	**90**	**4.7×10^{-7}**	**100**	**4.2×10^{-7}**
ISS-16	-18.5± to -20.5±	30	3.6×10^{-6}	**50**	1.1×10^{-6}	**60**	**9.8×10^{-7}**	**70**	**7.4×10^{-7}**	**70**	**7.2×10^{-7}**
ISS-17	-18.5± to -20.5±	20	1.6×10^{-6}	30	3.0×10^{-6}	40	2.8×10^{-6}	**50**	2.7×10^{-6}	**60**	2.6×10^{-6}
ISS-32	-18.5± to -20.5±	30	**8.8×10^{-7}**	**60**	**7.5×10^{-7}**	**70**	**6.0×10^{-7}**	**90**	**5.5×10^{-7}**	**100**	**5.3×10^{-7}**
ISS-33	-18.5± to -20.5±	**50**	**2.3×10^{-7}**	**80**	**2.0×10^{-7}**	**90**	**2.0×10^{-7}**	**100**	**2.2×10^{-7}**	**100**	**1.9×10^{-7}**
ISS-35	-18.5± to -20.5±	30	1.3×10^{-6}	**60**	**8.1×10^{-7}**	**80**	**5.9×10^{-7}**	**90**	**5.0×10^{-7}**	**100**	**4.9×10^{-7}**
Full-Scale Implementation											
ISS-19	-16± to -17±	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*
ISS-24	-17± to -18±	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*
ISS-27	-16± to -17±	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*
ISS-40	-19± to -21±	**210**	**3.1×10^{-7}**	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*
ISS-41	-15.3± to -16.3±	**190**	**4.7×10^{-7}**	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*
ISS-19	-16± to -17±	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*	*Pending*

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

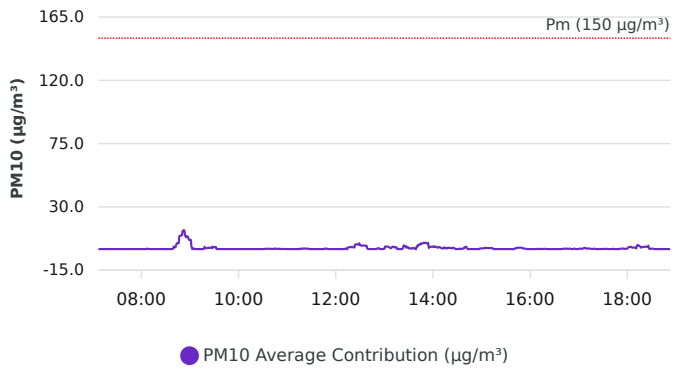
LANGAN	Air Monitoring Report	170390002 - 155 3rd St Brooklyn	
		Report Period	
		From:	4/1/2025 06:00
		To:	4/1/2025 22:00
		PM10 Action Level:	150 µg/m³
		VOC Action Level:	5 ppm

Daily Environmental Summary	Temp (°F)	Relative Humidity (%)	Barometer (hPa)	Windspeed (mph)	Prevailing wind direction
4/1/2025	-	-	-	1.3-8.6	WSW

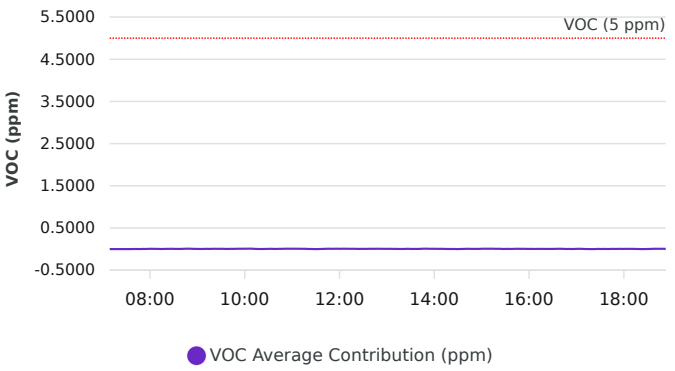
Daily Monitoring Summary	PM10 (µg/m³)	Time	VOC (ppm)	Time
Min Contribution (15 min avg.) - 4/1/2025	0.0	07:07	0.0000	07:09
Max Contribution (15 min avg.) - 4/1/2025	13.4	08:52	0.0100	08:47



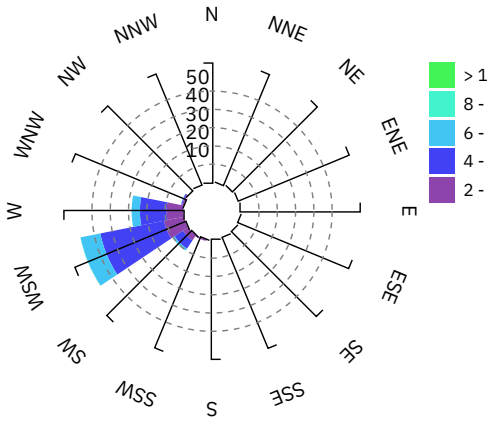
PM10 Average Contribution (µg/m³)



VOC Average Contribution (ppm)



Contribution wind rose (mph)



170390002 - 155 3rd St Brooklyn
Report date: 04/01/2025
A PM10 and VOC negative number filter has been applied to the averaged contribution data

Generated by OneView v1.146.2

aeroqual