Gowanus Canal Site
Vapor Intrusion/Indoor Air
Sampling Report for the 2025/2026
Heating Season
Site No. 224133
Brooklyn, New York
Volume 2
Part 3

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Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
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Building Identifier and Data Usability Summary Report (DUSR) Number Association Table

Part	Building Identifier	Laboratory Report Number
3	GC017	26A0961
3	GC055	26C1200
3	GC112B	26B0612
3	GC112C	26B0614
3	GC112D	26B0613
3	GC141	410-253868
3	GC162	410-256936
3	GC179	26C1581
3	$GC179_{GW}$	410-272797
3	GC207	26B0364
3	GC245	26A0957
3	GC275	410-265716-1
3	GC281	26C1414
3	GC303	26A1285
3	GC303	26C1416
3	GC306	26A1281
3	GC306	26C1417
3	GC311	26A1283
3	GC311	26C1418
3	GC314	26B0830
3	GC329	410-265716-2
3	GC340	410-268696
3	$GC340_{GW}$	410-269189
3	GC351	26B1095
3	GC351	JE31332
3	GC355	26B0306
3	$GC355_{GW}$	410-263981
3	GC369	26A0802
3	GC386	410-260305
3	GC387	26C1575
3	$GC387_{GW}$	410-272795
3	GC388	26C1583
3	$GC388_{GW}$	410-272790
3	GC391	410-260933
3	GC421	410-265443
3	GC426	26A1134
3	GC428	26C0823
3	GC431	26C1579
3	GC439	26B0832
3	GC446	410-269022
3	GC451	410-263993
3	GC454	410-253363
3	GC457	410-254602
3	GC457	26C1576
3	GC459	410-256236
3	GC460	410-253886
3	GC461	26B0528
3	GC461	JE31328
3	GC463	410-253364
3	GC465	410-258838
3	GC466	410-253365
3	$GC466_{GW}$	460-339591
3	GC466	26D0205
4	GC467	410-254962
4	GC467	410-268698
4	GC468	410-256232
4	GC469	410-268695
4	GC470	410-263069
4	GC470	JE31330
4	GC471	410-256267
4	GC472	26B1096
4	GC473	26B0304
4	GC476	410-269023
4	GC477	26A0529
4	GC480	410-262882
4	GC480	26D0204
4	GC482	25L0615
4	GC483	410-253367
4	GC485	410-256273
4	GC486	26B0006
4	GC487	410-256244
4	GC489	26B1091
4	GC490	410-254597
4	GC491	410-256272
4	GC491	26C1106
4	GC493	25L1344
4	GC494	26B0829
4	GC495	26A0959
4	GC496	26C0081
4	GC498	25L0614
4	$GC498_{GW}$	410-256846
4	GC499	410-256247
4	GC500	410-256288
4	GC502	25L1494
4	$GC502_{GW}$	460-342360
4	GC503	410-260974
4	GC504	410-258856
4	GC505	410-262001-3
4	GC506	410-256941
4	GC508	26C1573
4	GC509	26B0307
4	GC510	26B0187
4	GC511	26B0191
4	GC512	410-260972
4	GC513	26C1207
4	GC513	JE31451
4	GC514	410-262001-1
4	GC515	410-262001-2
4	GC517	26A1291
4	GC518	JE31452
4	GC520	JE31449
4	GC521	JE31798

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 2, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A0961	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A0961	AS	GC017-SV01-0126	26A0961-01	1/20/2026 10:23		
26A0961	AI	GC017-FA01-0126	26A0961-02	1/20/2026 10:27		
26A0961	AO	GC017-OA01-0126	26A0961-03	1/20/2026 10:24		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A0961	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A0961	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A0961	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BA61597-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections in associated samples were greater than 2x the blank contamination; therefore, no qualifications were made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BA61597-BLK1	MB	Isopropanol	0.147	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BA61597	GC017-SV01-0126	26A0961-01	All Analytes	2.19x Dilution
TO-15	BA61597	GC017-FA01-0126	26A0961-02	All Analytes	1.05x Dilution
TO-15	BA61597	GC017-OA01-0126	26A0961-03	All Analytes	0.80x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 2, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 9, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1200	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1200	AI	GC655-FA01-0326	26C1200-01	3/19/2026 12:30		
26C1200	AI	GC655-BA01-0326	26C1200-02	3/19/2026 12:31		
26C1200	AO	GC655-OA01-0326	26C1200-03	3/19/2026 12:32		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1200	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1200	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Several compounds were recovered above acceptance criteria in LCS BD60489-BS1. Sample non-detections were not qualified and all sample 4-methyl-2-pentanone detections were J qualified as estimated. Carbon tetrachloride was recovered below acceptance criteria in LCS BD60489-BS1. Sample detections were J qualified and non-detects were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCV S6D0807-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride were J qualified in all samples due to low LCS recovery.
- 2-Hexanone was J qualified in sample GC055-BA01-0326 due to high LCS and CCV recovery.
- 2-Hexanone was UJ qualified in samples GC055-FA01-0326 and GC055-OA01-0326 due to high CCV recovery.
- 1,2-Dichloropropane and 4-methyl-2-pentanone were UJ qualified in all samples due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD60489-BS1	LCS	1,2-Dichloropropane	132	70	130	All Samples	None – High and ND
			4-Methyl-2-pentanone	145	70	130		None – High and ND
			Carbon Tetrachloride	69.7	70	130		J
			2-Hexanone	150	70	130	GC055-FA01-0326 GC055-OA01-0326	None – High and ND
							GC055-BA01-0326	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None - ND
			Naphthalene	38.5	30		None - ND
TO-15	S6D0807-CCV1	CCV	1,2-Dichloropropane	38.8	30	All Samples	UJ
			4-Methyl-2-pentanone	48.5	30		UJ
			2-Hexanone	50.4	30	GC055-FA01-0326 GC055-OA01-0326	UJ
						GC055-BA01-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD60489	GC655-FA01-0326	26C1200-01	All Analytes	1.45x Dilution
TO-15	BD60489	GC655-BA01-0326	26C1200-02	All Analytes	0.82x Dilution
TO-15	BD60489	GC655-OA01-0326	26C1200-03	All Analytes	0.76x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 9, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0612	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0612	AS	GC112B-SV01-0226	26B0612-01	2/13/2026 11:25		
26B0612	AI	GC112B-BA01-0226	26B0612-02	2/13/2026 11:25		
26B0612	AS	GC112B-SV02-0226	26B0612-03	2/13/2026 11:19		
26B0612	AI	GC112B-BA02-0226	26B0612-04	2/13/2026 11:20		
26B0612	AS	GC112B-SV03-0226	26B0612-05	2/13/2026 9:42		
26B0612	AI	GC112B-BA03-0226	26B0612-06	2/13/2026 9:43		
26B0612	AS	GC112B-SV04-0226	26B0612-07	2/13/2026 11:17		
26B0612	AI	GC112B-BA04-0226	26B0612-08	2/13/2026 11:17		
26B0612	AO	GC112B-OA01-0226	26B0612-09	2/13/2026 11:10		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0612	AS	TO-15	Volatile Organic Compounds by GC/MS	4	N
26B0612	AI	TO-15	Volatile Organic Compounds by GC/MS	4	N
26B0612	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene and carbon tetrachloride were recovered outside acceptance criteria in LCS BB61485-BS1. When recovery was low, sample detections were J qualified and non-detects were UJ qualified as estimated non-detect. When recovery was high, non-detects were not qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene and carbon tetrachloride were recovered outside the acceptance criteria in CCV S6B2706-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
• Carbon tetrachloride was UJ/J qualified in all samples due to low LCS and CCV recovery. • 1,2,4-Trichlorobenzene was UJ qualified in all samples due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB61485-BS1	LCS	1,2,4-Trichlorobenzene	134	70	130	All Samples	None – High and ND
			Carbon Tetrachloride	53.2	70	130	GC112B-SV01-0226 GC112B-SV02-0226 GC112B-SV03-0226 GC112B-SV04-0226	UJ
							GC112B-BA01-0226 GC112B-BA02-0226 GC112B-BA03-0226 GC112B-BA04-0226 GC112B-OA01-0226	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B2504-CCV1	CCV	1,2,4-Trichlorobenzene	35.0	30	All Samples	UJ
			Carbon Tetrachloride	-43.2	30	GC112B-SV01-0226 GC112B-SV02-0226 GC112B-SV03-0226 GC112B-SV04-0226	UJ
						GC112B-BA01-0226 GC112B-BA02-0226 GC112B-BA03-0226	J

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
						GC112B-BA04-0226 GC112B-OA01-0226	

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61485	GC112B-SV01-0226	26B0612-01	All Analytes	2.32x Dilution
TO-15	BB61485	GC112B-BA01-0226	26B0612-02	All Analytes	0.88x Dilution
TO-15	BB61485	GC112B-SV02-0226	26B0612-03	All Analytes	2.52x Dilution
TO-15	BB61485	GC112B-BA02-0226	26B0612-04	All Analytes	0.99x Dilution
TO-15	BB61485	GC112B-SV03-0226	26B0612-05	All Analytes	1.57x Dilution
TO-15			26B0612-05 RE1	Cyclohexane	15.69x Dilution
TO-15	BB61485	GC112B-BA03-0226	26B0612-06	All Analytes	0.85x Dilution
TO-15	BB61485	GC112B-SV04-0226	26B0612-07	All Analytes	2.26x Dilution
TO-15	BB61485	GC112B-BA04-0226	26B0612-08	All Analytes	0.90x Dilution
TO-15	BB61485	GC112B-OA01-0226	26B0612-09	All Analytes	0.80x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0614	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0614	AS	GC112C-SV01-0226	26B0614-01	2/13/2026 10:37		
26B0614	AS	GC112C-SV02-0226	26B0614-02	2/13/2026 10:44		
26B0614	AS	GC112C-SV03-0226	26B0614-03	2/13/2026 10:39		
26B0614	AI	GC112C-BA01-0226	26B0614-04	2/13/2026 10:38		
26B0614	AI	GC112C-BA01-0226-D	26B0614-05	2/13/2026 10:38	FD	
26B0614	AI	GC112C-BA02-0226	26B0614-06	2/13/2026 10:44		
26B0614	AI	GC112C-BA03-0226	26B0614-07	2/13/2026 10:39		
26B0614	AI	GC112C-BA04-0226	26B0614-08	2/13/2026 10:42		
26B0614	AO	GC112C-OA01-0226	26B0614-09	2/13/2026 10:56		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0614	AS	TO-15	Volatile Organic Compounds by GC/MS	3	N
26B0614	AI	TO-15	Volatile Organic Compounds by GC/MS	4	N
26B0614	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
26B0614	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. One field duplicate collected per 8 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene was recovered above acceptance criteria in LCS BB61485-BS1. All associated samples were non-detect for 1,2,4-trichlorobenzene and did not require qualification. Carbon tetrachloride was recovered below acceptance criteria in LCSs BB61485-BS1 and BC60005-BS1. Sample detections were J qualified and non-detects were UJ qualified. Several compounds were recovered above acceptance criteria in LCS BC60005-BS1. These compounds were non-detect in sample GC112C-OA01-0226 and were not qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCVs S6B2504-CCV1 and S6C0201-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Ethylbenzene and o-xylene were outside QC criteria of 50% RPD between sample GC112C-BA01-0226 and its field duplicate GC112C-BA01-0226-D. The difference between results was <2x the PQL; therefore, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride was UJ/J qualified in all samples due to low LCS and CCV recovery.
- 1,2,4-Trichlorobenzene was UJ qualified in all samples due to poor CCV recovery.
- Several compounds were UJ qualified in sample GC112C-OA01-0226 due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB61485-BS1	LCS	1,2,4-Trichlorobenzene	134	70	130	GC112C-SV01-0226 GC112C-SV02-0226 GC112C-SV03-0226 GC112C-BA01-0226 GC112C-BA01-0226-D GC112C-BA02-0226 GC112C-BA03-0226 GC112C-BA04-0226	None – High and ND
			Carbon Tetrachloride	53.2	70	130	GC112C-SV01-0226 GC112C-SV02-0226 GC112C-SV03-0226	UJ
							GC112C-BA01-0226 GC112C-BA01-0226-D GC112C-BA02-0226 GC112C-BA03-0226 GC112C-BA04-0226	J
TO-15	BC60005-BS1	LCS	1,2,4-Trichlorobenzene	170	70	130	GC112C-OA01-0226	None – High and ND
			1,4-Dichlorobenzene	132	70	130		None – High and ND
			Benzyl Chloride	133	70	130		None – High and ND
			Carbon Tetrachloride	56.7	70	130		J
			Naphthalene	155	70	130		None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B2706-CCV1	CCV	1,2,4-Trichlorobenzene	35.0	30	GC112C-SV01-0226 GC112C-SV02-0226 GC112C-SV03-0226 GC112C-BA01-0226 GC112C-BA01-0226-D GC112C-BA02-0226 GC112C-BA03-0226 GC112C-BA04-0226	UJ
			Carbon Tetrachloride	-53.2	30	GC112C-SV01-0226 GC112C-SV02-0226 GC112C-SV03-0226	UJ
						GC112C-BA01-0226 GC112C-BA01-0226-D GC112C-BA02-0226 GC112C-BA03-0226 GC112C-BA04-0226	J
TO-15	S6C0201-CCV1	CCV	1,2,4-Trichlorobenzene	74.6	30	GC112C-OA01-0226	UJ
			1,2-Dichlorobenzene	35.5	30		UJ
			1,3-Dichlorobenzene	38.3	30		UJ
			1,4-Dichlorobenzene	45.6	30		UJ
			2-Hexanone	41.7	30		UJ
			Benzyl Chloride	41.7	30		UJ
			Carbon Tetrachloride	-49.2	30		J
			Hexachlorobutadiene	31.5	30		UJ
			Naphthalene	63.5	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61485	GC112C-SV01-0226	26B0614-01	All Analytes	1.63x Dilution
	BC60005		26B0614-01 RE1	Acetone	8.13x Dilution
TO-15	BB61485	GC112C-SV02-0226	26B0614-02	All Analytes	2.04x Dilution
TO-15	BB61485	GC112C-SV03-0226	26B0614-03	All Analytes	1.75x Dilution
	BC60005		26B0614-03 RE1	Acetone	3.51x Dilution
TO-15	BB61485	GC112C-BA01-0226	26B0614-04	All Analytes	0.84x Dilution
TO-15	BB61485	GC112C-BA01-0226-D	26B0614-05	All Analytes	0.90x Dilution
TO-15	BB61485	GC112C-BA02-0226	26B0614-06	All Analytes	0.92x Dilution
TO-15	BB61485	GC112C-BA03-0226	26B0614-07	All Analytes	0.99x Dilution
TO-15	BB61485	GC112C-BA04-0226	26B0614-08	All Analytes	1.05x Dilution
TO-15	BC60005	GC112C-OA01-0226	26B0614-09	All Analytes	0.81x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC112C-BA01-0226	GC112C-BA01-0226-D	RPD	RPD Rating	Qualifier
TO-15	Acetone	ug/m3	AI	10.0	8.58	6.16	32.8%	Good	None
TO-15	Benzene	ug/m3	AI	0.270	0.539	0.664	20.8%	Good	None
TO-15	Carbon Tetrachloride	ug/m3	AI	0.159	0.265	0.284	6.9%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.174	1.15	1.33	14.5%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.417	1.88	2.19	15.2%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.366	0.366	ND	NC	Poor	None - <2xPQL
TO-15	Isopropanol	ug/m3	AI	1.24	1.91	2.11	10.0%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.733	1.28	0.981	26.4%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	12.4	0.797	0.560	34.9%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	1.76	0.469	0.534	13.0%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.366	0.513	ND	NC	Poor	None - <2xPQL
TO-15	Toluene	ug/m3	AI	0.318	1.46	1.12	26.4%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.474	1.09	1.17	7.1%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0613	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0613	AI	GC112D-BA01-0226	26B0613-01	2/13/2026 10:11		
26B0613	AS	GC112D-SV01-0226	26B0613-02	2/13/2026 10:12		
26B0613	AI	GC112D-BA02-0226	26B0613-03	2/13/2026 10:12		
26B0613	AS	GC112D-SV02-0226	26B0613-04	2/13/2026 10:11		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0613	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26B0613	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BB61359-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene and naphthalene were recovered above acceptance criteria in LCS BB61359-BS1. All samples were non-detect for 1,2,4-trichlorobenzene and did not require qualification. Naphthalene was detected in all samples and was J qualified as estimated. Carbon tetrachloride was recovered below acceptance criteria in LCS BB61359-BS1. This compound was detected in sample GC112D-BA01-0226; therefore, result was J qualified. This compound was non-detect in all other samples and was UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCV S6B2504-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride was J qualified in sample GC112D-BA01-0226 and was UJ qualified in all other samples due to low LCS and CCV recovery.
- Naphthalene was J qualified in all samples due to high LCS and CCV recovery.
- 1,2,4-Trichlorobenzene and bromoform were J qualified in all samples due to poor CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BB61359-BLK1	MB	Isopropanol	0.246	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB61359-BS1	LCS	1,2,4-Trichlorobenzene	148	70	130	All Samples	None – High and ND
			Carbon Tetrachloride	51.2	70	130	GC112D-SV01-0226 GC112D-BA02-0226 GC112D-SV02-0226	UJ
							GC112D-BA01-0226	J
			Naphthalene	141	70	130	All Samples	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B2504-CCV1	CCV	1,2,4-Trichlorobenzene	54.3	30	All Samples	UJ
			Bromoform	-33.1	30		UJ
			Naphthalene	44.3	30		J
			Carbon Tetrachloride	-53.2	30	GC112D-SV01-0226 GC112D-BA02-0226 GC112D-SV02-0226	UJ
						GC112D-BA01-0226	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61359	GC112D-BA01-0226	26B0613-01	All Analytes	1.34x Dilution
TO-15	BB61359	GC112D-SV01-0226	26B0613-02	All Analytes	2.07x Dilution
TO-15	BB61359	GC112D-BA02-0226	26B0613-03	All Analytes	0.97x Dilution
TO-15	BB61359	GC112D-SV02-0226	26B0613-04	All Analytes	0.84x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 11, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-253868-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-253868-1	AS	GC141-SV01-1125	410-253868-1	11/19/2025 10:38		
410-253868-1	AI	GC141-FA01-1125	410-253868-2	11/19/2025 10:38		
410-253868-1	AI	GC141-FA02-1125	410-253868-3	11/19/2025 10:46		
410-253868-1	AO	GC141-OA01-1125	410-253868-4	11/19/2025 10:42		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-253868-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253868-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-253868-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 11, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 11, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Tetrachloroethene exhibited high %RSD in calibration curve 77476. Sample GC141-SV01-1125 was non-detect for this compound; therefore, no qualification was made. When this compound was detected in samples, results were J qualified as estimated.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC141-FA02-1125 was diluted to bring acetone concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 11, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

Summary of Findings
• Tetrachloroethene was J qualified in several samples due to poor initial calibration. See Table 5 for list of samples.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	77476	ICAL	Tetrachloroethene	33.8	30	GC141-SV01-1125	None - ND
						GC141-FA01-1125 GC141-FA02-1125 GC141-OA01-1125	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	738069	GC141-FA02-1125	410-253868-3	Acetone	2x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 11, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 29, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-256936-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-256936-1	AI	GC162-BA01-1225	410-256936-1	12/9/2025 8:39		
410-256936-1	AI	GC162-FA01-1225	410-256936-2	12/9/2025 8:38		
410-256936-1	AO	GC162-OA01-1225	410-256936-3	12/9/2025 8:36		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-256936-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-256936-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 29, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 29, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,1-Dichloroethene was recovered above acceptance criteria in LCS 410-748905/4. All samples were non-detect for this compound; therefore, no qualification was made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 29, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	410-748905/4	LCS	1,1-Dichloroethene	132	70	131	All Samples	None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 29, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 30, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1581	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1581	AI	GC179-FA01-0326	26C1581-01	3/26/2026 9:54		
26C1581	AI	GC179-FA02-0326	26C1581-02	3/26/2026 11:57		
26C1581	AI	GC179-BA01-0326	26C1581-03	3/26/2026 12:00		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1581	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61390-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61390-BS1. Sample detections were J qualified as estimated and non-detects were not qualified. Carbon tetrachloride was recovered below acceptance criteria in LCS BD61390-BS1. All samples were non-detect for this compound; therefore, results were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2232-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in samples GC179-FA01-0326 and GC179-BA01-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC179-FA01-0326 and GC179-FA02-0326 due to high LCS and CCV recovery.
- Carbon Tetrachloride was UJ qualified in all samples due to low LCS and CCV recovery.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in non-detect samples due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61390-BLK1	MB	Isopropanol	0.295	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61390-BS1	LCS	Carbon Tetrachloride	69.5	70	130	All Samples	UJ
			2-Hexanone	157	70	130	GC179-FA02-0326	None – High and ND
							GC179-BA01-0326 GC179-FA01-0326	J
			4-Methyl-2-pentanone	160	70	130	GC179-BA01-0326	None – High and ND
							GC179-FA01-0326 GC179-FA02-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30	GC179-BA01-0326	None – ND
						GC179-FA01-0326 GC179-FA02-0326	J
TO-15	S6D2232-CCV1	CCV	Carbon Tetrachloride	-34.6	30	All Samples	UJ
			2-Hexanone	44.2	30	GC179-FA02-0326	UJ
						GC179-BA01-0326 GC179-FA01-0326	J
			4-Methyl-2-pentanone	49.5	30	GC179-BA01-0326	UJ

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
						GC179-FA01-0326 GC179-FA02-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61380	GC179-FA01-0326	26C1581-01	All Analytes	0.98x Dilution
TO-15	BD61380	GC179-FA02-0326	26C1581-02	All Analytes	0.89x Dilution
	BD61380		26C1581-02 RE1	Acetone	6.66x Dilution
TO-15	BD61380	GC179-BA01-0326	26C1581-03	All Analytes	1.51x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 30, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 21, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-272797-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-272797-1	WG	GC179-WG01-0326	410-272797-1	3/25/2026 14:15		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-272797-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	1	N
410-272797-1	WG	SW8270E	Semi-volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 21, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. A trip blank was included in the cooler but not listed on the chain of custody however, the laboratory case narrative noted that the trip blank was logged in with data package 410-272790-1.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set of samples per day for perfluorinated compounds and 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. 1 Trip blank per cooler. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 5)
- Internal Standards Outside Limits (Table 6)
- Reanalysis Results (Table 7)

Go to Tables List

Volatile and Semivolatile Organic Compounds by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	No. VOC – Chloromethane, vinyl chloride, and acetone were recovered outside acceptance criteria in CCV 410-796556/3. Sample GC179-WG01-326 was non-detect for chloromethane and vinyl chloride; therefore, results were UJ qualified. Acetone detection was J qualified as estimated. SVOC – Several compounds were recovered outside acceptance criteria in CCV 410-793673/2. All samples were non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 7)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC179-WG01-0326 was diluted to bring VOC concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

VOCs

- Chloromethane and vinyl chloride were UJ qualified in sample GC179-WG01-0326 due to low CCV recovery.
- Acetone was J qualified in sample GC179-WG01-0326 due to high CCV recovery.

SVOCs

- Several compounds were UJ qualified in sample GC179-WG01-0326 due to poor CCV recovery. See Table 5B for list of analytes.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8260D	410-796556/3	CCV	Chloromethane	-40.0	20	GC179-WG01-0326	UJ
			Vinyl Chloride	-28.0	20		UJ
			Acetone	29.0	20		J
8270E	410-793673/2	CCV	2-Chloronaphthalene	30.0	20	GC179-WG01-0326	UJ
			2,4-Dinitrophenol	-21.0	20		UJ
			Butyl benzyl phthalate	32.0	20		UJ
			3,3-Dichlorobenzidine	36.0	20		UJ
			Bis(2-ethylhexyl) phthalate	26.0	20		UJ
			Di-n-octyl phthalate	30.0	20		UJ

Table 6 – Internal Standards Outside Control Limits
None.

Table 7 –Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	796556	GC179-WG01-0326	410-272797-1	All VOC compounds	10x Dilution

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 21, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0364	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0364	AS	GC421-SV01-0226	26B0364-01	2/6/2026 8:36		
26B0364	AI	GC421-BA01-0226	26B0364-02	2/6/2026 8:36		
26B0364	AI	GC421-BA02-0226	26B0364-03	2/6/2026 8:52		
26B0364	AI	GC421-FA01-0226	26B0364-04	2/6/2026 8:40		
26B0364	AI	GC421-FA02-0226	26B0364-05	2/6/2026 8:41		
26B0364	AO	GC421-OA01-0226	26B0364-06	2/6/2026 8:42		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0364	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26B0364	AI	TO-15	Volatile Organic Compounds by GC/MS	4	N
26B0364	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blanks BB61000-BLK1 and BB61081-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene, carbon tetrachloride, and naphthalene were recovered outside acceptance criteria in LCSs BB61000-BS1 and BB61081-BS1. When recovery was low, all samples were non-detects; therefore, results were UJ qualified as estimated non-detect. When recovery was high, non-detects were not qualified and all sample naphthalene detections were J qualified as estimated.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCVs S6B1817-CCV1 and S6B1910-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride was UJ qualified in all samples due to low LCS and CCV recovery.
- Naphthalene was J qualified in several samples due to high LCS and low CCV recovery. See Table 3 and Table 5 for list of samples.
- 1,2,4-Trichlorobenzene was UJ qualified in all samples due to high CCV recovery.
- Bromoform was UJ qualified in several samples due to low CCV recovery. See Table 5 for list of samples.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BB61000-BLK1	MB	Isopropanol	0.369	J	ug/m3	0.059	1.47
TO-15	BB61081-BLK1	MB	Isopropanol	0.295	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB61000-BS1	LCS	1,2,4-Trichlorobenzene	138	70	130	GC207-SV01-0226 GC207-BA01-0226	None – High and ND
			Carbon Tetrachloride	41.3	70	130		UJ
			Naphthalene	136	70	130		J
TO-15	BB61081-BS1	LCS	1,2,4-Trichlorobenzene	138	70	130	GC207-BA02-0226 GC207-FA01-0226	None – High and ND
			Carbon Tetrachloride	45.5	70	130	GC207-FA02-0226 GC207-OA01-0226	UJ
			Naphthalene	132	70	130	GC207-FA01-0226 GC207-OA01-0226	None – High and ND
							GC207-BA02-0226 GC207-FA02-0226	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B1817-CCV1	CCV	1,2,4-Trichlorobenzene	36.3	30	GC207-SV01-0226 GC207-BA01-0226	UJ
			Carbon Tetrachloride	-58.6	30		UJ

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
			Naphthalene	32.2	30		J
TO-15	S6B1910-CCV1	CCV	1,2,4-Trichlorobenzene	36.3	30	GC207-BA02-0226 GC207-FA01-0226 GC207-FA02-0226 GC207-OA01-0226	UJ
			Bromoform	-35.9	30		UJ
			Carbon Tetrachloride	-53.6	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61000	GC421-SV01-0226	26B0364-01	All Analytes	1.92x Dilution
			26B0364-01 RE1	Acetone	7.7x Dilution
TO-15	BB61000	GC421-BA01-0226	26B0364-02	All Analytes	1.22x Dilution
TO-15	BB61081	GC421-BA02-0226	26B0364-03	All Analytes	1.39x Dilution
TO-15	BB61081	GC421-FA01-0226	26B0364-04	All Analytes	0.84x Dilution
TO-15	BB61081	GC421-FA02-0226	26B0364-05	All Analytes	0.98x Dilution
TO-15	BB61081	GC421-OA01-0226	26B0364-06	All Analytes	1.23x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 2, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A0957	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A0957	AS	GC245-SV01-0126	26A0957-01	1/20/2026 12:10		
26A0957	AS	GC245-SV02-0126	26A0957-02	1/20/2026 12:17		
26A0957	AI	GC245-FA01-0126	26A0957-03	1/20/2026 12:11		
26A0957	AI	GC245-FA02-0126	26A0957-04	1/20/2026 12:16		
26A0957	AO	GC245-OA01-0126	26A0957-05	1/20/2026 12:23		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A0957	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
26A0957	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26A0957	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes Isopropanol was detected below the reporting limit in method blank BA61572-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol was detected in sample GC245-SV01-0126 greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below acceptance criteria in LCS BA61570-BS1. All associated samples were non-detect for these compounds; therefore, results were UJ qualified as estimated biased low. 2-Hexanone was recovered above acceptance criteria in LCS BA61572-BS1. Associated sample GC245-SV01-0126 was non-detect for this compound; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered outside the acceptance criteria in CCV S6A2809-CCV1. All associated samples were non-detect for these compounds; therefore, results were UJ qualified.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed. Isopropanol was recovered above the calibration range for sample GC245-FA01-0126 and GC245-FA02-0126. The laboratory qualified this as E for estimated. Samples were qualified J as estimated.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were UJ qualified in samples GC245-FA01-0126, GC245-FA02-0126, GC245-OA01-0126, and GC245-SV02-0126 due to poor LCS and CCV recovery.
- Isopropanol was J qualified in samples GC245-FA01-0126 and GC245-FA02-0126 due to exceeding calibration range.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BA61572-BLK1	MB	Isopropanol	0.221	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BA61572-BS1	LCS	1,2,4-Trichlorobenzene	50.4	70	130	GC245-FA01-0126 GC245-FA02-0126 GC245-OA01-0126 GC245-SV02-0126	UJ
TO-15		LCS	Hexachlorobutadiene	42.1	70	130		UJ
TO-15		LCS	Naphthalene	56.9	70	130		UJ
TO-15	BA61572-BS1	LCS	2-Hexanone	132	70	130	GC245-SV01-0126	None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6A2809-CCV1	CCV	1,2,4-Trichlorobenzene	-50.5	30	GC245-FA01-0126 GC245-FA02-0126 GC245-OA01-0126 GC245-SV02-0126	UJ
			Hexachlorobutadiene	-60.6	30		UJ
			Naphthalene	-46.5	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BA61572	GC245-SV01-0126	26A0957-01	All Analytes	2.09x Dilution
	BA61570		26A0957-01 RE1	Acetone	20.89 Dilution
TO-15	BA61570	GC245-SV02-0126	26A0957-02	All Analytes	2.38x Dilution
TO-15	BA61570	GC245-FA01-0126	26A0957-03	All Analytes	0.90x Dilution
TO-15	BA61570	GC245-FA02-0126	26A0957-04	All Analytes	0.90x Dilution
TO-15	BA61570	GC245-OA01-0126	26A0957-05	All Analytes	0.84x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 2, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-265716-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-265716-1	AI	GC275-FA01-0226	410-265716-1	2/10/2026 11:41		
410-265716-1	AS	GC275-SV01-0226	410-265716-2	2/10/2026 11:42		
410-265716-1	AI	GC275-BA01-0226	410-265716-3	2/10/2026 11:45		
410-265716-1	AO	GC275-OA01-0226	410-265716-4	2/10/2026 11:49		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-265716-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-265716-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-265716-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1414	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1414	AS	GC281-SV01-0326	26C1414-01	3/24/2026 8:48		
26C1414	AI	GC281-BA01-0326	26C1414-02	3/24/2026 8:56		
26C1414	AI	GC281-FA01-0326	26C1414-03	3/24/2026 8:58		
26C1414	AO	GC281-OA01-0326	26C1414-04	3/24/2026 8:58		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1414	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26C1414	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1414	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
-

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61218-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCSs BD61218-BS1. Sample detections were J qualified as estimated and non-detects were not qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in sample GC281-FA01-0326 due to high LCS recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC281-BA01-0326 and GC281-SV01-0326 due to high LCS recovery.
- Naphthalene was J qualified in samples GC281-BA01-0326, GC281-FA01-0326, and GC281-SV01-0326 due to poor initial calibration.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61218-BLK1	MB	Isopropanol	0.270	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61218-BS1	LCS	2-Hexanone	137	70	130	GC281-SV01-0326 GC281-BA01-0326 GC281-OA01-0326	None – High and ND
							GC281-FA01-0326	J
			4-Methyl-2-pentanone	137	70	130	GC281-FA01-0326 GC281-OA01-0326	None – High and ND
							GC281-SV01-0326 GC281-BA01-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30	GC281-OA01-0326	None - ND
						GC281-SV01-0326 GC281-BA01-0326 GC281-FA01-0326	J

Table 5 – Internal Standard Outside Control Limits

None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61218	GC281-SV01-0326	26C1414-01	All Analytes	1.56x Dilution
TO-15	BD61218	GC281-BA01-0326	26C1414-02	All Analytes	0.78x Dilution
TO-15	BD61218	GC281-FA01-0326	26C1414-03	All Analytes	1.33x Dilution
TO-15	BD61218	GC281-OA01-0326	26C1414-04	All Analytes	1.20x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 23, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1416	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1416	AO	GC303-OA01-0326	26C1416-01	3/24/2026 11:57		
26C1416	AS	GC303-SV01-0326	26C1416-02	3/24/2026 11:57		
26C1416	AI	GC303-FA02-0326	26C1416-03	3/24/2026 11:56		
26C1416	AI	GC303-FA01-0326	26C1416-04	3/24/2026 11:56		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1416	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26C1416	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1416	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 23, 2026	Completed by: Sayward Gohman-Kramer

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61218-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCSs BD61218-BS1. Sample detections were J qualified as estimated and non-detects were not qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in sample GC303-OA01-0326 due to high LCS recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC303-OA01-0326 and GC303-SV01-0326 due to high LCS recovery.
- Naphthalene was J qualified in samples GC303-FA01-0326 and GC303-FA02-0326 due to poor initial calibration.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61218-BLK1	MB	Isopropanol	0.270	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61218-BS1	LCS	2-Hexanone	137	70	130	GC303-SV01-0326 GC303-FA02-0326 GC303-FA01-0326	None – High and ND
							GC303-OA01-0326	J
			4-Methyl-2-pentanone	137	70	130	GC303-FA02-0326 GC303-FA01-0326	None – High and ND
							GC303-SV01-0326 GC303-OA01-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30	GC303-OA01-0326 GC303-SV01-0326	None - ND
						GC303-FA02-0326 GC303-FA01-0326	J

Table 5 – Internal Standard Outside Control Limits

None.

Table 6 – Samples that were Re-analyzed/Diluted

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 23, 2026	Completed by: Sayward Gohman-Kramer

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61218	GC303-OA01-0326	26C1416-01	All Analytes	0.81x Dilution
TO-15	BD61218	GC303-SV01-0326	26C1416-02	All Analytes	1.64x Dilution
	BD61221		26C1416-02 RE1	Acetone	6.57x Dilution
TO-15	BD61218	GC303-FA02-0326	26C1416-03	All Analytes	0.87x Dilution
TO-15	BD61218	GC303-FA01-0326	26C1416-04	All Analytes	0.96x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 23, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 5, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A1285	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A1285	AS	GC303-SV01-0126	26A1285-01	1/29/2026 15:58		
26A1285	AI	GC303-FA01-0126	26A1285-02	1/29/2026 15:57		
26A1285	AI	GC303-FA02-0126	26A1285-03	1/29/2026 16:00		
26A1285	AO	GC303-OA01-0126	26A1285-04	1/29/2026 15:58		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A1285	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A1285	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26A1285	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate samples were collect as part of this data package. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below 10% in LCS BB60288-BS1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below the acceptance criteria in CCV S6B0521-CCV1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed. Isopropanol was recovered above the calibration range for sample GC303-FA02-0126. The laboratory qualified this as E for estimated. Samples were qualified J as estimated.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UR – The analyte was analyzed for but due to quality control anomalies, sample is considered unusable.

Summary of Findings
• 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were UR qualified as rejected in all samples due to poor LCS and CCV recovery. • Isopropanol was J

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB60228-BS1	LCS	1,2,4-Trichlorobenzene	8.7	70	130	All Samples	UR
			Hexachlorobutadiene	8.7	70	130		UR
			Naphthalene	9.5	70	130		UR

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B0521-CCV1	CCV	1,2,4-Trichlorobenzene	-88.4	30	All Samples	UR
			Hexachlorobutadiene	-88.9	30		UR
			Naphthalene	-87.4	30		UR

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB60288	GC303-SV01-0126	26A1285-01	All Analytes	1.7x Dilution
	BB60288		26A1285-01 RE1	Acetone	3.39x Dilution
TO-15	BB60288	GC303-FA01-0126	26A1285-02	All Analytes	0.84x Dilution
TO-15	BB60288	GC303-FA02-0126	26A1285-03	All Analytes	0.98x Dilution
TO-15	BB60288	GC303-OA01-0126	26A1285-04	All Analytes	0.79x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 5, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 28, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1417	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1417	AS	GC306-SV01-0326	26C1417-01	3/24/2026 11:08		
26C1417	AO	GC306-OA01-0326	26C1417-02	3/24/2026 10:50		
26C1417	AI	GC306-FA01-0326	26C1417-03	3/24/2026 11:05		
26C1417	AI	GC306-FA02-0326	26C1417-04	3/24/2026 11:04		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1417	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26C1417	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1417	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 28, 2026	Completed by: Sayward Gohman-Kramer

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61221-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61221-BS1. Sample detections were J qualified as estimated and non-detects were not qualified
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. All samples were non-detect for these compounds; therefore, no qualifications were made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2020-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in sample GC306-FA02-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC306-SV01-0326 and GC306-OA01-0326 due to high LCS and CCV recovery.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in all non-detects due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61221-BLK1	MB	Isopropanol	0.270	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61221-BS1	LCS	2-Hexanone	134	70	130	GC306-SV01-0326 GC306-OA01-0326 GC306-FA01-0326	None – High and ND
							GC306-FA02-0326	J
			4-Methyl-2-pentanone	139	70	130	GC306-FA02-0326 GC306-FA01-0326	None – High and ND
							GC306-SV01-0326 GC306-OA01-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30		None – ND
TO-15	S6D2020-CCV1	CCV	2-Hexanone	37.5	30	GC306-SV01-0326 GC306-OA01-0326 GC306-FA01-0326	UJ
						GC306-FA02-0326	J
			4-Methyl-2-pentanone	34.5	30	GC306-FA02-0326 GC306-FA01-0326	UJ
						GC306-SV01-0326 GC306-OA01-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61221	GC306-SV01-0326	26C1417-01	All Analytes	1.54x Dilution
TO-15	BD61221	GC306-OA01-0326	26C1417-02	All Analytes	0.78x Dilution
TO-15	BD61221	GC306-FA01-0326	26C1417-03	All Analytes	0.90x Dilution
TO-15	BD61221	GC306-FA02-0326	26C1417-04	All Analytes	1.32x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 28, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 5, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A1281	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A1281	AS	GC306-SV01-0126	26A1281-01	1/29/2026 12:06		
26A1281	AI	GC306-FA01-0126	26A1281-02	1/29/2026 9:42		
26A1281	AI	GC306-FA02-0126	26A1281-03	1/29/2026 9:50		
26A1281	AI	GC306-FA02-0126-D	26A1281-04	1/29/2026 9:51	FD	
26A1281	AO	GC306-OA01-0126	26A1281-05	1/29/2026 9:53		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A1281	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A1281	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26A1281	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
26A1281	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 4 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 5, 2026	Completed by: Sayward Gohman-Kramer

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below 10% in LCS BB60288-BS1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below the acceptance criteria in CCV S6B0521-CCV1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC306-FA02-0126 and its field duplicate GC306-FA02-0126-D. When the difference between samples was >2x the PQL, results were UJ/J qualified as estimated. When the difference between results was <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

UR – The analyte was analyzed for but due to quality control anomalies, sample is considered unusable.

Summary of Findings

- 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were UR qualified as rejected in all samples due to poor LCS and CCV recovery.
- 2,2,4-Trimethylpentane and methyl isobutyl ketone were UJ qualified in sample GC306-FA02-0126 and was J qualified in GC306-FA02-0126-D due to poor field duplicate RPD.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB60228-BS1	LCS	1,2,4-Trichlorobenzene	8.7	70	130	All Samples	UR
			Hexachlorobutadiene	8.7	70	130		UR
			Naphthalene	9.5	70	130		UR

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B0521-CCV1	CCV	1,2,4-Trichlorobenzene	-88.4	30	All Samples	UR
			Hexachlorobutadiene	-88.9	30		UR
			Naphthalene	-87.4	30		UR

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB60288	GC306-SV01-0126	26A1281-01	All Analytes	2.57x Dilution
TO-15	BB60288	GC306-FA01-0126	26A1281-02	All Analytes	0.79x Dilution
TO-15	BB60288	GC306-FA02-0126	26A1281-03	All Analytes	0.95x Dilution
TO-15	BB60288	GC306-FA02-0126-D	26A1281-04	All Analytes	1.27x Dilution

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB60288	GC306-OA01-0126	26A1281-05	All Analytes	0.77x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC306-FA02-0126	GC306-FA02-0126-D	RPD	RPD Rating	Qualifier
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.222	ND	1.01	NC	Poor	UJ/J Flag
TO-15	Acetone	ug/m3	AI	11.3	5.64	7.20	24.3%	Good	None
TO-15	Benzene	ug/m3	AI	0.303	0.849	0.935	9.6%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.196	1.20	1.24	3.3%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.469	1.83	1.89	3.2%	Good	None
TO-15	Isopropanol	ug/m3	AI	1.40	1.31	2.22	51.6%	Poor	None - <2xPQL
TO-15	m,p-Xylene	ug/m3	AI	0.824	0.659	0.940	35.1%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	14.0	ND	0.864	NC	Poor	None - <2xPQL
TO-15	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/m3	AI	0.389	ND	0.887	NC	Poor	UJ/J Flag
TO-15	Methylene Chloride	ug/m3	AI	1.98	0.396	0.442	11.0%	Good	None
TO-15	N-Hexane	ug/m3	AI	0.334	0.769	0.763	0.8%	Good	None
TO-15	Toluene	ug/m3	AI	0.358	1.61	1.58	1.9%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.533	1.12	1.14	1.8%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 5, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 28, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1418	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1418	AI	GC311-FA01-0326	26C1418-01	3/24/2026 11:13		
26C1418	AS	GC311-SV01-0326	26C1418-02	3/24/2026 11:13		
26C1418	AS	GC311-SV02-0326	26C1418-03	3/24/2026 11:15		
26C1418	AI	GC311-FA02-0326	26C1418-04	3/24/2026 11:13		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1418	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1418	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61221-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61221-BS1. Sample detections were J qualified as estimated and non-detects were not qualified
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. All samples were non-detect for these compounds; therefore, no qualifications were made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2020-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in samples GC311-SV01-0326 and GC311-FA01-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in sample GC311-SV01-0326 due to high LCS and CCV recovery.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in all non-detects due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61221-BLK1	MB	Isopropanol	0.270	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61221-BS1	LCS	2-Hexanone	134	70	130	GC311-SV02-0326 GC311-FA02-0326	None – High and ND
							GC311-FA01-0326 GC311-SV01-0326	J
			4-Methyl-2-pentanone	139	70	130	GC311-SV02-0326 GC311-FA02-0326 GC311-FA01-0326	None – High and ND
							GC311-SV01-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30		None – ND
TO-15	S6D2020-CCV1	CCV	2-Hexanone	37.5	30	GC311-SV02-0326 GC311-FA02-0326	UJ
						GC311-FA01-0326 GC311-SV01-0326	J
			4-Methyl-2-pentanone	34.5	30	GC311-SV02-0326 GC311-FA02-0326 GC311-FA01-0326	UJ
						GC311-SV01-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61221	GC311-FA01-0326	26C1418-01	All Analytes	1.13x Dilution
TO-15	BD61221	GC311-SV01-0326	26C1418-02	All Analytes	1.72x Dilution
			26C1418-02 RE1	Acetone	6.88x Dilution
TO-15	BD61221	GC311-SV02-0326	26C1418-03	All Analytes	1.64x Dilution
TO-15	BD61221	GC311-FA01-0326	26C1418-04	All Analytes	0.91x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 28, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 26, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A1283	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A1283	AS	GC311-SV01-0126	26A1283-01	1/29/2026 11:50		
26A1283	AS	GC311-SV02-0126	26A1283-02	1/29/2026 11:51		
26A1283	AI	GC311-FA01-0126	26A1283-03	1/29/2026 11:50		
26A1283	AI	GC311-FA02-0126	26A1283-04	1/29/2026 11:51		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A1283	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
26A1283	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Upon receipt, the laboratory noted that they did not receive sample GC311-OA01-0126 as noted on the COC. The field team clarified that no outdoor sample was collected at GC311. The outdoor air associated with this location was collected at the building next door.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below 10% in LCS BB60288-BS1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were recovered below the acceptance criteria in CCV S6B0521-CCV1. All samples were non-detect for these compounds; therefore, results were UR qualified as rejected and considered unusable.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

UR – The analyte was analyzed for but due to quality control anomalies, sample is considered unusable.

Summary of Findings
• 1,2,4-Trichlorobenzene, hexachlorobutadiene, and naphthalene were UR qualified as rejected in all samples due to low LCS and CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB60228-BS1	LCS	1,2,4-Trichlorobenzene	8.7	70	130	All Samples	UR
			Hexachlorobutadiene	8.7	70	130		UR
			Naphthalene	9.5	70	130		UR

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B0521-CCV1	CCV	1,2,4-Trichlorobenzene	-88.4	30	All Samples	UR
			Hexachlorobutadiene	-88.9	30		UR
			Naphthalene	-87.4	30		UR

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB60288	GC311-SV01-0126	26A1283-01	All Analytes	1.33x Dilution
TO-15	BB60288	GC311-SV02-0126	26A1283-02	All Analytes	1.70x Dilution
TO-15	BB60288	GC311-FA01-0126	26A1283-03	All Analytes	0.80x Dilution
TO-15	BB60288	GC311-FA02-0126	26A1283-04	All Analytes	1.38x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 26, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0830	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0830	AS	GC314-SV01-0226	26B0830-01	2/18/2026 14:35		
26B0830	AI	GC314-BA01-0226	26B0830-02	2/18/2026 14:42		
26B0830	AO	GC314-OA01-0226	26B0830-03	2/18/2026 14:32		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0830	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26B0830	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
26B0830	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trimethylbenzene and trichlorofluoromethane were recovered above acceptance criteria in LCS BC60203-BS1. All sample detections were J qualified as estimated and non-detects were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCV S6C0431-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Trichlorofluoromethane was J qualified in all samples due to high LCS and CCV recovery.
- Several compounds were UJ qualified in all samples due to poor CCV recovery. See Table 4 for list of compounds.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BC60203-BS1	LCS	1,2,4-Trichlorobenzene	136	70	130	All Samples	None – High and ND
			Trichlorofluoromethane	133	70	130		J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	S6C0431-CCV1	CCV	1,2,4-Trichlorobenzene	42.9	30	All Samples	UJ
			1,3-Dichlorobenzene	35.7	30		UJ
			1,4-Dichlorobenzene	42.7	30		UJ
			Benzyl Chloride	32.0	30		UJ
			Trichlorofluoromethane	34.3	30		J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BC60203	GC314-SV01-0226	26B0830-01	All Analytes	0.74x Dilution
TO-15	BC60203	GC314-BA01-0226	26B0830-02	All Analytes	0.74x Dilution
TO-15	BC60203	GC314-OA01-0226	26B0830-03	All Analytes	0.74x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-2605716-2	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-2605716-2	AI	GC329-BA01-0226-D	410-2605716-6	2/10/2026 10:36	FD	
410-2605716-2	AI	GC329-OA01-0226	410-2605716-7	2/10/2026 10:36		
410-2605716-2	AI	GC329-FA01-0226	410-2605716-8	2/10/2026 10:36		
410-2605716-2	AI	GC329-BA01-0226	410-2605716-9	2/10/2026 10:36		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-2605716-2	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-2605716-2	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
410-2605716-2	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 3 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC329-BA01-0226 and its field duplicate GC329-BA01-0226-D. When the difference between carbon tetrachloride and tetrachloroethene results were >2x the PQL, results were J qualified as estimated. When the difference between isopropanol and heptane results were <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride and tetrachloroethene were J qualified in sample GC329-BA01-0226 and were UJ qualified in sample GC329-BA01-0226-D due to poor field duplicate RPD.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC329-BA01-0226	GC329-BA01-0226-D	RPD	RPD Rating	Qualifier
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	1.0	0.89	11.6%	Good	None
TO-15	Acetone	ug/m3	AI	12	13	11	16.7%	Good	None
TO-15	Benzene	ug/m3	AI	0.64	1.2	1.2	0.0%	Good	None
TO-15	Carbon Tetrachloride	ug/m3	AI	0.20	0.44	ND	NC	Poor	J/UJ Flag
TO-15	Cyclohexane	ug/m3	AI	0.69	0.55	0.61	10.3%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	2.5	2.3	2.4	4.3%	Good	None
TO-15	Isopropanol	ug/m3	AI	12	ND	5.6	NC	Poor	None - <2xPQL
TO-15	m,p-Xylene	ug/m3	AI	2.2	1.2	1.2	0.0%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	1.7	0.65	0.93	35.4%	Good	None
TO-15	N-Heptane	ug/m3	AI	0.82	0.60	ND	NC	Poor	None - <2xPQL
TO-15	N-Hexane	ug/m3	AI	1.8	1.1	1.0	9.5%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.87	0.43	0.45	4.5%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	1.4	4.7	ND	NC	Poor	J/UJ Flag

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC329-BA01-0226	GC329-BA01-0226-D	RPD	RPD Rating	Qualifier
TO-15	Toluene	ug/m3	AI	0.75	2.0	2.0	0.0%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	1.1	1.3	1.3	0.0%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	1.0	0.89	11.6%	Good	None
TO-15	Acetone	ug/m3	AI	12	13	11	16.7%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-268696-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-268696-1	AI	GC340-BA01-0326	410-268696-1	3/4/2026 12:30		
410-268696-1	AO	GC340-OA01-0326	410-268696-2	3/4/2026 12:30		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-268696-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-268696-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 22, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-269189-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-269189-1	WG	GC340-WG01-0326	410-269189-1	3/3/2026 14:45		
410-269189-1	WG	Trip Blank	410-269189-2	3/3/2026 00:00		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-269189-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	1	N
410-269189-1	WG	SW8270E	Semi-volatile Organic Compounds by GC/MS	1	N
410-269189-1	WQ	SW8270D	Volatile Organic Compounds by GC/MS	1	TB

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 22, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. A trip blank was included in the cooler but not listed on the chain of custody however, the laboratory case narrative noted that the trip blank was logged in with data package 410-269189-1.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set of samples per day for perfluorinated compounds and 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. 1 Trip blank per cooler. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	Yes. Due to a shipping error, the samples were received at the laboratory on the last day of holding time. The samples were extracted by method 8260D two days past holding time. Sample detections were J qualified and non-detects were UJ qualified.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 5)
- Internal Standards Outside Limits (Table 6)
- Reanalysis Results (Table 7)

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Volatile and Semivolatile Organic Compounds by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	No.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	No. VOC – Carbon disulfide was recovered outside acceptance criteria in CCV 410-781636/3. All samples were non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect. SVOC – Di-n-octyl phthalate was recovered outside acceptance criteria in CCV 410-784784/2. Sample GC340-WG01-0326 was non-detect for this compound; therefore, result was UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 7)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

VOCs

- Carbon disulfide was UJ qualified in all samples due to poor CCV recovery.

SVOCs

- Detections were J qualified and non-detects were UJ qualified in sample GC340-WG01-0326 due to holding time exceedance.
- Di-n-octyl phthalate was UJ qualified in sample GC340-WG01-0326 due to poor CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8260D	410-781636/3	CCV	Carbon Disulfide	-23.0	20	All Samples	UJ
8270E	410-784784/2	CCV	Di-n-octyl Phthalate	37.0	20	GC340-WG01-0326	UJ

Table 6 – Internal Standards Outside Control Limits
None.

Table 7 –Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 22, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 17, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	JE31332	SGS North America – Dayton

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
JE31332	AI	GC351-FA01-0325	JE31332-1	3/31/2025 12:41		
JE31332	AO	GC351-OA01-0325	JE31332-2	3/31/2025 12:20		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
JE31332	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
JE31332	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 17, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4)
- CCV/ICV Outside Limits (Table 5)
- Internal Standard Outside Limits (Table 6)
- Reanalysis/Dilution Results (Table 7)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks, LCS, and samples within limits? (see Table 3)	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Bromoform and dibromochloromethane were recovered above acceptance criteria in LCSs V7W718-BS1 and V7W718-BSD1. All samples were non-detect for these compounds; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 5)	No. Bromoform exhibited high %RSD in calibration curve V7W709-ICC709. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 5)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 5)	No. Bromoform and dibromochloromethane were recovered outside the acceptance criteria in CCV V7W718-CC709. All samples were non-detect for these compounds; therefore, results were UJ qualified.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
• Bromoform and dibromochloromethane were UJ qualified in all samples due to poor CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of Samples with Surrogates outside Control Limits
None.

Table 4 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	V7W718-BS1 V7W718-BSD1	LCS	Bromoform	136 133	70	130	All Samples	None – High and ND
			Dibromochloromethane	139 138	70	130		None – High and ND

Table 4A – List of LCS RPD outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	V7W709-ICC709	CAL	Bromoform	34.31	30	All Samples	None – ND
TO-15	V7W718-CC709	CCV	Dibromochloromethane	-39.1	30	All Samples	UJ
			Bromoform	-34.4	30		UJ

Table 6 – Internal Standard Outside Control Limits
None.

Table 7 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 17, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B1095	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B1095	AI	GC351-FA01-0226	26B1095-01	2/26/2026 11:03		
26B1095	AI	GC351-FA02-0226	26B1095-02	2/26/2026 11:15		
26B1095	AO	GC351-OA01-0226	26B1095-03	2/26/2026 11:15		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B1095	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26B1095	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BC60508	GC351-FA01-0226	26B1095-01	All Analytes	1.79x Dilution
TO-15	BC60508	GC351-FA02-0226	26B1095-02	All Analytes	1.77x Dilution
TO-15	BC60508	GC351-OA01-0226	26B1095-03	All Analytes	2.36x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 26, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0306	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0306	AS	GC355-SV01-0226	26B0306-01	2/3/2026 10:09		
26B0306	AI	GC355-BA01-0226	26B0306-02	2/3/2026 10:26		
26B0306	AI	GC355-FA01-0226	26B0306-03	2/3/2026 10:29		
26B0306	AI	GC355-FA02-0226	26B0306-04	2/3/2026 10:29		
26B0306	AO	GC355-OA01-0226	26B0306-05	2/3/2026 10:31		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0306	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26B0306	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
26B0306	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. 1,2,4-Trichlorobezene and isopropanol detected below the reporting limit in method blank BB60911-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made. 1,2,4-Trichlorobenzene was non-detect in all samples; therefore, no qualifications were made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene and naphthalene were recovered above acceptance criteria in LCS BB60911-BS1. All samples were non-detect for these compounds; therefore, no qualifications were made. Carbon tetrachloride was recovered below acceptance criteria in LCS BB60911-BS1. All samples were non-detect for this compound; therefore, results were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 1,2,4-Trichlorobenzene and carbon tetrachloride were recovered outside the acceptance criteria in CCV S6B1704-CCV1. All samples were non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed. Isopropanol was recovered above the calibration range for sample GC355-FA02-0226. The laboratory qualified this as E for estimated. Samples were qualified J as estimated.

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Carbon tetrachloride was UJ qualified in all samples due to low LCS and CCV recovery.
- 1,2,4-Trichlorobenzene was UJ qualified in all samples due to low CCV recovery.
- Isopropanol was J qualified in sample GC355-FA02-0226 due to exceeding calibration range.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BB60911-BLK1	MB	1,2,4-Trichlorobenzene	0.371	J	ug/m3	0.283	37.1
			Isopropanol	0.393	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB60911-BS1	LCS	1,2,4-Trichlorobenzene	141	70	130	All Samples	None – High and ND
			Carbon Tetrachloride	47	70	130		UJ
			Naphthalene	135	70	130		None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B1704-CCV1	CCV	1,2,4-Trichlorobenzene	33.4	30	All Samples	UJ
			Carbon Tetrachloride	-56.2	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB60911	GC355-SV01-0226	26B0306-01	All Analytes	1.56x Dilution
TO-15	BB60911	GC355-BA01-0226	26B0306-02	All Analytes	0.92x Dilution
TO-15	BB60911	GC355-FA01-0226	26B0306-03	All Analytes	1.36x Dilution
TO-15	BB60911	GC355-FA02-0226	26B0306-04	All Analytes	1.11x Dilution
TO-15	BB60911	GC355-OA01-0226	26B0306-05	All Analytes	0.87x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 26, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: February 19, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-263981-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-263981-1	WG	GC355-WG01-0226	410-263981-1	2/2/2026 10:45		
410-263981-1	WG	GC355-WG02-0226	410-263981-2	2/2/2026 11:05		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-263981-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	2	N
410-263981-1	WG	SW8270E	Semi-volatile Organic Compounds by GC/MS	2	N

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: February 19, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Cooler Receipt Form?	Yes. Cooler temperature was 0.8℃ upon receipt at the laboratory. Sample was properly preserved using HCl and had a pH outside the required criteria upon receipt. Sample was analyzed within the 7-day hold time for unpreserved samples. Using professional judgement, no qualification was made based on these.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set of samples per day for perfluorinated compounds and 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. No trip blank included. No qualification is made however the end user is alerted to possible contamination. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 5)
- Internal Standards Outside Limits (Table 6)
- Reanalysis Results (Table 7)

Go to Tables List

Volatile Organic Compounds by GC/MS – Method 8260C	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	VOC – Yes. SVOC – No. 4-Chloroaniline and 3,3-dichlorobenzidine were recovered with high RPD between the LCS and LCSD 410-764995/2-A and 410-764995/3-A. Sample GC355-WG01-0226 was non-detect for these compound; therefore, results were UJ qualified as estimated non-detect.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	VOC – Yes. SVOC – No. Several compounds were recovered outside acceptance criteria in CCV 410-766222/2. Sample GC355-WG01-0226 was non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 7)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
VOCs • No data quality issues were observed. SVOCs • Several compounds were UJ qualified in sample GC355-WG01-0226 due to poor CCV recovery. See Table 5B for list of analytes.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits

Method	Sample ID	Analyte	RPD	RPD Limit	Sample Qualifier
8270E	410-764995/2-A 410-764995/3-A	4-Chloroaniline	37	30	UJ
8270E	410-764995/2-A 410-764995/3-A	3,3-Dichlorobenzidine	33	30	UJ

Table 5 – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8270E	410-766222/2	CCV	Benzaldehyde	-23	20	All Samples	UJ
			2-Nitrophenol	23	20	All Samples	UJ
			2,4-Dichlorophenol	21	20	All Samples	UJ
			3,3-Dichlorobenzidine	21	20	All Samples	UJ

Table 6 – Internal Standards Outside Control Limits
None.

Table 7 –Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: February 19, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 6, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A0802	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A0802	AS	GC369-SV01-0126	26A0802-01	1/13/2026 14:08		
26A0802	AI	GC369-BA01-0126	26A0802-02	1/13/2026 14:09		
26A0802	AO	GC369-OA01-0126	26A0802-03	1/13/2026 14:13		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A0802	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A0802	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
26A0802	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No. Isopropanol was detected below the reporting limit in method blanks BA61226-BLK1 and BA61385-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichloroethene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BA61226-BLK1	MB	Isopropanol	0.320	J	ug/m3	0.059	1.47
TO-15	BA61385-BLK1	MB	Isopropanol	0.221	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	ICAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BA61226	GC369-SV01-0126	26A0802-01	All Analytes	0.74x Dilution
TO-15	BA61385	GC369-BA01-0126	26A0802-02	All Analytes	0.74x Dilution
TO-15	BA61385	GC369-OA01-0126	26A0802-03	All Analytes	0.74x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 6, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: January 30, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-260305-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-260305-1	AS	GC386-SV01-0126	410-260305-1	1/6/2026 12:25		
410-260305-1	AI	GC386-BA01-0126	410-260305-2	1/6/2026 12:24		
410-260305-1	AS	GC386-SV02-0126	410-260305-3	1/6/2026 12:26		
410-260305-1	AI	GC386-BA02-0126	410-260305-4	1/6/2026 12:25		
410-260305-1	AI	GC386-FA01-0126	410-260305-5	1/6/2026 12:30		
410-260305-1	AO	GC386-OA01-0126	410-260305-5	1/6/2026 12:31		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-260305-1	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-260305-1	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
410-260305-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: January 30, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 22, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-272795-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-272795-1	WG	GC387-WG01-0326	410-272795-1	3/25/2026 11:45		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-272795-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	1	N
410-272795-1	WG	SW8270E	Semi-volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. A trip blank was included in the cooler but not listed on the chain of custody however, the laboratory case narrative noted that the trip blank was logged in with data package 410-272790-1.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set of samples per day for perfluorinated compounds and 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. 1 Trip blank per cooler. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	Yes. Sample GC387-WG01-0326 was collected in a properly preserved vial however, upon verification by the laboratory, the pH was outside the required criteria for method 8260D. The sample was analyzed outside the 7-day holding time for unpreserved samples but within the 14-day holding time for preserved samples. Using professional judgement, sample detections were J qualified and non-detects were UJ qualified as estimated.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 5)
- Internal Standards Outside Limits (Table 6)
- Reanalysis Results (Table 7)

Go to Tables List

Volatile Organic Compounds by GC/MS – Method 8260C	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	No. Several surrogates were recovered below acceptance criteria for sample GC111-WG01-0324. Non-detected analytes associated with surrogates that were recovered less than 10% were rejected and considered unusable. Detected analytes associated with surrogates that were recovered less than 10% were qualified J- as estimates, biased low.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	No. VOC – Chloromethane, vinyl chloride, and acetone were recovered outside acceptance criteria in CCV 410-796556/3. Sample GC179-WG01-326 was non-detect for chloromethane and vinyl chloride; therefore, results were UJ qualified. Acetone detection was J qualified as estimated. SVOC – Several compounds were recovered outside acceptance criteria in CCV 410-793552/2. Sample GC387-WG01-0326 was non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 7)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

UR – The analyte was rejected and considered unusable due to quality control anomalies.

Summary of Findings

VOCs

- All detections were J qualified and non-detects were UJ qualified in sample GC387-WG01-0326 due to holding time exceedance.
- Chloromethane and vinyl chloride were UJ qualified in sample GC387-WG01-0326 due to low CCV recovery.
- Acetone was J qualified in sample GC387-WG01-0326 due to high CCV recovery.

SVOCs

- 4-Nitrophenol, 4-nitroaniline, and pentachlorophenol were UJ qualified in sample GC387-WG01-0326 due to poor CCV recovery.
- Several compounds were J- or UR qualified in sample GC387-WG01-0326 due to extremely poor surrogate recovery. See Table 3 for list of compounds.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits

Method	Sample Name	Sample Type	Surrogate	%R	Low Limit	High Limit	Dilution Factor	Associated Compounds	Qualifier
8270E	GC387-WG01-0326	N	2,4,6-Tribromophenol	0.1	72	172	1	Acenaphthene Acenapthylene 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Dibenzofuran Diethylphthalate Dimethylphthalate 2,4-Dinitrophenol 2,4-Dinitrotoluene Fluorene Hexachlorocyclopentadiene 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline 4-Nitrophenol 1,2,4,5-Tetrachlorobenzene 2,3,4,6-Tetrachlorophenol 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 1,1-Biphenyl	UR/J-
8270E	GC387-WG01-0326	RA	2,4,6-Tribromophenol	0.04	72	172	1		UR/J-
8270E	GC387-WG01-0326	N	2-Fluorophenol	0.05	33	120	1	Bis(2-chloroethyl)ether Bis(2-chloroisopropyl)ether 2-Chlorophenol Hexachloroethane 2-Methylphenol 4-Methylphenol N-Nitrosodi-n-propyl amine Phenol 1,4-Dioxane	UR/J-
8270E	GC387-WG01-0326	RA	2-Fluorophenol	0.02	33	120	1		UR/J-
8270E	GC387-WG01-0326	N	Phenol-d6	0.6	13	120	1		UR/J-
8270E	GC387-WG01-0326	RA	Phenol-d6	0.5	13	120	1		UR/J-

								Benzaldehyde	

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8260D	410-796556/3	CCV	Chloromethane	-40.0	20	GC387-WG01-0326	UJ
			Vinyl Chloride	-28.0	20		UJ
			Acetone	29.0	20		J
8270E	410-739552/2	CCV	4-Nitrophenol	22.0	20	GC387-WG01-0326	UJ
			4-Nitroaniline	27.0	20		UJ
			Pentachlorophenol	33.0	20		UJ

Table 6 – Internal Standards Outside Control Limits
None.

Table 7 –Samples that were Re-analyzed/Diluted
None.

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1575	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1575	AI	GC387-FA01-0326	26C1575-01	3/25/2026 9:35		
26C1575	AI	GC387-FA02-0326	26C1575-02	3/25/2026 9:45		
26C1575	AI	GC387-BA01-0326	26C1575-03	3/25/2026 9:40		
26C1575	AO	GC387-OA01-0326	26C1575-04	3/25/2026 12:10		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1575	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26C1575	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1575	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61221-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61221-BS1. Sample detections were J qualified as estimated and non-detects were not qualified
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2020-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in all samples due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC387-FA01-0326, GC387-FA02-0326, and GC387-BA01-0326 due to high LCS and CCV recovery.
- Naphthalene was J qualified in samples GC387-BA01-0326 and GC387-FA01-0326 due to poor initial calibration.
- 4-Methyl-2-pentanone was UJ qualified in sample GC387-OA01-0326 due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61221-BLK1	MB	Isopropanol	0.270	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61221-BS1	LCS	2-Hexanone	134	70	130	All Samples	J
			4-Methyl-2-pentanone	139	70	130	GC387-OA01-0326	None – High and ND
							GC387-FA01-0326 GC387-FA02-0326 GC387-BA01-0326	J

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	J
			Naphthalene	38.5	30	GC387-OA01-0326 GC387-FA02-0326	None – ND
						GC387-FA01-0326 GC387-BA01-0326	J
TO-15	S6D2020-CCV1	CCV	2-Hexanone	37.5	30	All Samples	J
			4-Methyl-2-pentanone	34.5	30	GC387-OA01-0326	UJ
						GC387-FA01-0326 GC387-FA02-0326 GC387-BA01-0326	J

Table 5 – Internal Standard Outside Control Limits

None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61221	GC387-FA01-0326	26C1575-01	All Analytes	0.86x Dilution
TO-15	BD61221	GC387-FA02-0326	26C1575-02	All Analytes	1.34x Dilution
TO-15	BD61221	GC387-OA01-0326	26C1575-04	All Analytes	1.09x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 30, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1583	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1583	AI	GC388-FA01-0326	26C1583-01	3/26/2026 12:02		
26C1583	AI	GC388-BA01-0326	26C1583-02	3/26/2026 12:04		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1583	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61390-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61390-BS1. Sample detections were J qualified as estimated and non-detects were not qualified. Carbon tetrachloride was recovered below acceptance criteria in LCS BD61390-BS1. All samples were non-detect for this compound; therefore, results were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2232-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in sample GC388-BA01-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in all samples due to high LCS and CCV recovery.
- Carbon Tetrachloride was UJ qualified in all samples due to low LCS and CCV recovery.
- 2-Hexanone were UJ qualified in sample GC388-FA01-0326 due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61390-BLK1	MB	Isopropanol	0.295	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61390-BS1	LCS	Carbon Tetrachloride	69.5	70	130	All Samples	UJ
			2-Hexanone	157	70	130	GC388-FA01-0326	None – High and ND
							GC388-BA01-0326	J
			4-Methyl-2-pentanone	160	70	130	All Samples	None – High and ND

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30		None – ND
TO-15	S6D2232-CCV1	CCV	Carbon Tetrachloride	-34.6	30	All Samples	UJ
			2-Hexanone	44.2	30	GC388-FA01-0326	UJ
						GC388-BA01-0326	J
			4-Methyl-2-pentanone	49.5	30	All Samples	J

Table 5 – Internal Standard Outside Control Limits

None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61380	GC388-FA01-0326	26C1583-01	All Analytes	0.94x Dilution
			26C1583-01 RE1	Acetone	7.08x Dilution
TO-15	BD61380	GC388-BA01-0326	26C1583-02	All Analytes	0.87x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 30, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 21, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-272790-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-272790-1	WG	GC359-WG01-0326	410-272790-1	3/25/2026 14:05		
410-272790-1	WQ	Trip Blank	410-272790-2	3/25/2026 00:00		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-272790-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	1	N
410-272790-1	WG	SW8270E	Semi-volatile Organic Compounds by GC/MS	1	N
410-272790-1	WQ	SW8270D	Volatile Organic Compounds by GC/MS	1	TB

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: May 21, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. A trip blank was included in the cooler but was not included on the chain of custody. The laboratory logged it in as part of this data package.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set of samples per day for perfluorinated compounds and 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. 1 Trip blank per cooler. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 5)
- Internal Standards Outside Limits (Table 6)
- Reanalysis Results (Table 7)

Go to Tables List

Volatile Organic Compounds by GC/MS – Method 8260C	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Chloroform was detected above the MDL in method blank 410-797010/7.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Chloroform was detected greater than 2x the blank concentration in GC388-WG01-0326 and did not require qualification.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	No. VOC – Several compounds were recovered outside acceptance criteria in CCV 410-797010/3. Sample GC388-WG01-326 was non-detect for these compounds; therefore, results were UJ qualified. SVOC – Several compounds were recovered outside acceptance criteria in CCV 410-793552/2. Sample GC388-WG01-326 was non-detect for these compounds; therefore, results were UJ qualified
Were any samples reanalyzed or diluted (see Table 7)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC388-WG01-0326 was diluted to bring VOC concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

VOCs

- Several compounds were UJ qualified in sample GC388-WG01-0326 due to poor CCV recovery. See Table 5B for list of analytes.

SVOCs

- Several compounds were UJ qualified in sample GC388-WG01-0326 due to poor CCV recovery. See Table 5B for list of analytes.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	410-797010/7	MB	Chloroform	0.540	J	ug/m3	0.3	1

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8260D	410-797010/3	CCV	Chloromethane	-40.0	20	GC388-WG01-0326	UJ
			Vinyl Chloride	-28.0	20		UJ
			Acetone	29.0	20		UJ
			2-Butanone	27.0	20		UJ
			4-Methyl-2-pentanone	28.0	20		UJ
			2-Hexanone	35.0	20		UJ
			Chlorodibromomethane	21.0	20		UJ
			Bromoform	26.0	20		UJ
8270E	410-793552/2	CCV	Acenaphthene	21.0	20	GC388-WG01-0326	UJ
			4-Nitrophenol	22.0	20		UJ
			4-Nitroaniline	27.0	20		UJ
			Pentachlorophenol	33.0	20		UJ

Table 6 – Internal Standards Outside Control Limits
None.

Table 7 –Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	797010	GC359-WG01-0326	410-272790-1	All compounds	20x Dilution

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-260933-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-260933-1	AS	GC391-SV01-0126	410-260933-1	1/8/2026 8:34		
410-260933-1	AI	GC391-FA01-0126	410-260933-2	1/8/2026 8:34		
410-260933-1	AO	GC391-OA01-0126	410-260933-3	1/8/2026 8:42		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-260933-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-260933-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-260933-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

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Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Completed by: Sayward Gohman-Kramer

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Benzene was detected below the reporting limit in method blank 410-759395/7.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Benzene detections in samples GC391-FA01-0126 and GC391-SV01-0126 were greater than 2x the blank contamination; therefore, no qualification was made. Benzene was detected less than 4x the blank contamination in sample GC391-OA01-0126; therefore, result was qualified U and reported at the sample concentration.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Naphthalene exhibited high %RSD in calibration curve 80188. Samples GC391-FA01-0126 and GC391-OA01-0126 were non-detect; therefore, no qualification was made. Naphthalene was detected in sample GC391-SV01-0126; therefore, result was J qualified as estimated.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC391-SV01-0126 was diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	Yes.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

U – The analyte was analyzed for, but due to blank contamination was flagged as non-detect (U). The result is usable as a non-detect.

Summary of Findings

- Benzene was U qualified as non-detect in sample GC391-OA01-0126 due to method blank contamination.
- Naphthalene was J qualified in sample GC391-SV01-0126 due to poor initial calibration.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	410-759395/7	MB	Benzene	0.301	J	ug/m3	0.14	0.64

Table 2A - List of Samples Qualified for Method Blank Contamination

Method	Blank Sample	Blank Type	Analyte	Blank Result	Sample Result	Lab Qualifier	Units	MDL	PQL	Affected Sample	Qualifier
TO-15	410-759395/7	MB	Benzene	0.301	0.58	BJ	ug/m3	0.14	0.64	GC391-OA01-0126	U

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	80188	ICAL	Naphthalene	35.6	30	GC391-OA01-0126 GC391-FA01-0126	None – ND
						GC391-SV01-0126	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	759395	GC391-SV01-0126	410-260933-1	Acetone m,p-Xylenes o-Xylene Toluene	10x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC391-FA01-0126	410-260933-2 DU	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.98	5.1	5.23	2.5%	Good	None
TO-15	1,3,5-Trimethylbenzene	ug/m3	AI	0.98	1.9	1.93	1.6%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	17	16.8	1.2%	Good	None
TO-15	2-Hexanone	ug/m3	AI	2.1	0.70	0.675	3.6%	Good	None
TO-15	4-Ethyltoluene	ug/m3	AI	0.98	5.3	5.36	1.1%	Good	None
TO-15	Acetone	ug/m3	AI	12	17	17.5	2.9%	Good	None
TO-15	Benzene	ug/m3	AI	0.64	9.1	9.34	2.6%	Good	None
TO-15	Carbon Tetrachloride	ug/m3	AI	0.22	0.52	0.539	3.6%	Good	None
TO-15	Chloromethane	ug/m3	AI	1.0	1.1	1.19	7.9%	Good	None
TO-15	Cyclohexane	ug/m3	AI	0.69	13	13.0	0.0%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	2.5	2.5	2.47	1.2%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.87	6.0	6.01	0.2%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	2.2	15	15.5	3.3%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	1.5	1.8	1.75	2.8%	Good	None
TO-15	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/m3	AI	2.1	0.83	0.859	3.4%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	1.7	99	99.5	0.5%	Good	None
TO-15	N-Heptane	ug/m3	AI	0.82	12	12.4	3.3%	Good	None
TO-15	N-Hexane	ug/m3	AI	1.8	26	25.7	1.2%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.87	5.2	5.39	3.6%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	1.4	1.7	1.72	1.2%	Good	None
TO-15	Toluene	ug/m3	AI	0.75	45	44.8	0.4%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	1.1	1.3	1.27	2.3%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 23, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-265443-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-265443-1	AS	GC421-SV01-0226	410-265443-1	2/10/2026 10:38		
410-265443-1	AI	GC421-BA01-0226	410-265443-2	2/10/2026 10:37		
410-265443-1	AS	GC421-SV02-0226	410-265443-3	2/10/2026 10:37		
410-265443-1	AI	GC421-BA02-0226	410-265443-4	2/10/2026 10:36		
410-265443-1	AI	GC421-BA02-0226-D	410-265443-5	2/10/2026 10:36	FD	
410-265443-1	AS	GC421-SV03-0226	410-265443-6	2/10/2026 10:36		
410-265443-1	AI	GC421-BA03-0226	410-265443-7	2/10/2026 10:36		
410-265443-1	AS	GC421-SV04-0226	410-265443-8	2/10/2026 10:39		
410-265443-1	AI	GC421-BA04-0226	410-265443-9	2/10/2026 10:38		
410-265443-1	AI	GC421-BA05-0226	410-265443-10	2/10/2026 10:37		
410-265443-1	AI	GC421-BA06-0226	410-265443-11	2/10/2026 10:35		
410-265443-1	AI	GC421-OA01-0226	410-265443-12	2/10/2026 11:05		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-265443-1	AS	TO-15	Volatile Organic Compounds by GC/MS	4	N
410-265443-1	AI	TO-15	Volatile Organic Compounds by GC/MS	6	N
410-265443-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
410-265443-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 11 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Chloroethane and vinyl chloride were recovered above acceptance criteria in LCS 410-769191/4. All associated samples were non-detect for these compounds; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Vinyl chloride and 1,3-butadiene were recovered outside the acceptance criteria in CCVs 410-768926/3 and 410-769191/3. All associated samples were non-detect for these compounds; therefore, results were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Samples GC421-SV01-0226 and GC421-SV02-0226 were diluted to bring acetone concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC421-BA02-0226 and its field duplicate GC421-BA02-0226. When the difference between carbon tetrachloride, tetrachloroethene, and trichloroethene were >2x the PQL, results were J qualified as estimated. When the difference between results was <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
• Vinyl chloride and 1,3-butadiene were UJ qualified in several samples due to high CCV recovery. See Table 4 for list of samples. • Carbon tetrachloride, tetrachloroethene, and trichloroethene was UJ qualified in sample GC421-BA02-0226 and was J qualified in sample GC421-BA02-0226-D due to poor field duplicate RPD.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	410-769191/4	LCS	Vinyl Chloride	136	70	130	GC421-BA05-0226 GC421-BA06-0226 GC421-OA01-0226	None – High and ND
			Chloroethane	134	70	130		None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	410-768926/3	CCV	Vinyl Chloride	38	30	GC421-BA02-0226 GC421-BA02-0226-D GC421-BA04-0226 GC421-SV01-0226 GC421-SV02-0226 GC421-SV03-0226	UJ
			1,3-Butadiene	37	30		UJ
TO-15	410-769191/3	CCV	Vinyl Chloride	33	30	GC421-BA05-0226 GC421-BA06-0226 GC421-OA01-0226	UJ
			1,3-Butadiene	31	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	768926	GC421-SV01-0226	410-265443-1	Acetone	2x Dilution
TO-15	768926	GC421-SV02-0226	410-265443-3	Acetone	2x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC421-BA02-0226	GC421-BA02-0226-D	RPD	RPD Rating	Qualifier
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	AI	1.5	ND	0.58	0.58	NC	None - <2xPQL
TO-15	1,4-Dichlorobenzene	ug/m3	AI	1.2	ND	0.75	0.75	NC	None - <2xPQL
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	ND	0.47	0.47	NC	None - <2xPQL
TO-15	Acetone	ug/m3	AI	12	9.2	18	8.8	64.7%	None - <2xPQL
TO-15	Benzene	ug/m3	AI	0.64	ND	0.96	0.96	NC	None - <2xPQL
TO-15	Carbon Tetrachloride	ug/m3	AI	0.20	ND	0.51	0.51	NC	J Flag
TO-15	Chloroform	ug/m3	AI	0.98	ND	0.37	0.37	NC	None - <2xPQL
TO-15	Chloromethan	ug/m3	AI	1.0	0.56	0.49	0.07	13.3%	None
TO-15	Cyclohexane	ug/m3	AI	0.69	ND	0.36	0.36	NC	None - <2xPQL
TO-15	Dichlorodifluoromethane	ug/m3	AI	2.5	2.1	2.8	0.7	28.6%	None
TO-15	Isopropanol	ug/m3	AI	12	4.5	7.7	3.2	52.5%	None - <2xPQL
TO-15	m,p-Xylene	ug/m3	AI	2.2	ND	0.64	0.64	NC	None - <2xPQL
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	1.5	ND	2.3	2.3	NC	None - <2xPQL
TO-15	Methylene Chloride	ug/m3	AI	1.7	1.2	1.5	0.3	22.2%	None
TO-15	N-Heptane	ug/m3	AI	0.82	ND	0.51	0.51	NC	None - <2xPQL
TO-15	N-Hexane	ug/m3	AI	1.8	ND	0.87	0.87	NC	None - <2xPQL
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	1.4	ND	3.3	3.3	NC	J Flag
TO-15	Toluene	ug/m3	AI	0.75	ND	1.1	1.1	NC	None - <2xPQL
TO-15	Trichloroethene (TCE)	ug/m3	AI	0.20	ND	0.72	0.72	NC	J Flag
TO-15	Trichlorofluoromethane	ug/m3	AI	1.1	0.83	1.3	0.47	44.1%	None

Method	Analyte	Unit	Matrix	PQL	GC421-BA01-0226	410-265443-2 DU	RPD	RPD Rating	Qualifier
TO-15	1,3-Butadiene	ug/m3	AI	0.40	0.422	0.022	5.4%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	1.3	1.20	0.1	8.0%	Good	None
TO-15	2-Hexanone	ug/m3	AI	27	26.7	0.3	1.1%	Good	None
TO-15	Acetone	ug/m3	AI	1.2	1.17	0.03	2.5%	Good	None
TO-15	Benzene	ug/m3	AI	0.39	0.431	0.041	10.0%	Good	None
TO-15	Chloroform	ug/m3	AI	2.3	2.31	0.01	0.4%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	10	10.2	0.2	2.0%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 23, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC421-BA01-0226	410-265443-2 DU	RPD	RPD Rating	Qualifier
TO-15	Isopropanol	ug/m3	AI	6.1	6.16	0.06	1.0%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	0.87	0.840	0.03	3.5%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	0.60	0.541	0.059	10.3%	Good	None
TO-15	N-Hexane	ug/m3	AI	1.2	1.10	0.1	8.7%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.81	0.794	0.016	2.0%	Good	None
TO-15	Toluene	ug/m3	AI	1.3	1.28	0.02	1.6%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.40	0.422	0.022	5.4%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 23, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26A1134	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26A1134	AI	GC426-BA01-0126	26A1134-01	1/23/2026 12:13		
26A1134	AI	GC426-BA02-0126	26A1134-02	1/23/2026 12:14		
26A1134	AI	GC426-BA03-0126	26A1134-03	1/23/2026 13:02		
26A1134	AI	GC426-BA04-0126	26A1134-04	1/23/2026 12:16		
26A1134	AI	GC426-FA01-0126	26A1134-05	1/23/2026 12:18		
26A1134	AO	GC426-OA01-0126	26A1134-06	1/23/2026 12:18		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26A1134	AI	TO-15	Volatile Organic Compounds by GC/MS	5	N
26A1134	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. 1,2,4-Trichlorobenzene and isopropanol were detected below the reporting limit in method blank BA61693-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	1,2,4-Trichlorobenzene was non-detect in all samples; therefore, no qualification was made. Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BA61693-BLK1	MB	1,2,4-Trichlorobenzene	0.445	J	ug/m3	0.283	37.1
			Isopropanol	0.197	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BA61693	GC426-BA01-0126	26A1134-01	All Analytes	1.3x Dilution
TO-15	BA61693	GC426-BA02-0126	26A1134-02	All Analytes	0.95x Dilution
TO-15	BA61693	GC426-BA03-0126	26A1134-03	All Analytes	0.90x Dilution
TO-15	BA61693	GC426-BA04-0126	26A1134-04	All Analytes	0.94x Dilution
TO-15	BA61693	GC426-FA01-0126	26A1134-05	All Analytes	1.46x Dilution
TO-15	BA61693	GC426-OA01-0126	26A1134-06	All Analytes	0.96x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 8, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C0823	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C0823	AS	GC428-SV01-0326	26C0823-01	3/13/2026 10:13		
26C0823	AI	GC428-FA01-0326	26C0823-02	3/13/2026 10:13		
26C0823	AS	GC428-SV02-0326	26C0823-03	3/13/2026 9:20		
26C0823	AI	GC428-FA02-0326	26C0823-04	3/13/2026 9:22		
26C0823	AS	GC428-SV03-0326	26C0823-05	3/13/2026 10:28		
26C0823	AI	GC428-FA03-0326	26C0823-06	3/13/2026 10:28		
26C0823	AS	GC428-SV04-0326	26C0823-07	3/13/2026 9:52		
26C0823	AI	GC428-FA04-0326	26C0823-08	3/13/2026 10:23		
26C0823	AI	GC428-FA05-0326	26C0823-09	3/13/2026 10:40		
26C0823	AO	GC428-OA01-0326	26C0823-10	3/13/2026 10:10		
26C0823	AI	GC428-FA02-0326-D	26C0823-11	3/13/2026 9:22	FD	

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C0823	AS	TO-15	Volatile Organic Compounds by GC/MS	4	N
26C0823	AI	TO-15	Volatile Organic Compounds by GC/MS	5	N
26C0823	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
26C0823	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 10 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blanks BD60165-BLK1 and BD60243-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Associated sample detections for naphthalene were J qualified as estimated. All samples non-detects did not require qualification.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed. Isopropanol was recovered above the calibration range for sample GC428-SV02-0326. The laboratory qualified this as E for estimated. Samples were qualified J as estimated.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC428-FA02-0326 and its field duplicate GC428-FA02-0326-D. When the difference between samples was >2x the PQL, results were J qualified as estimated. When the difference between results was <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Naphthalene was J qualified in several samples due to poor initial calibration
- Isopropanol was J qualified in sample GC428-SV02-0326 due to exceeding calibration range.
- Acetone, methyl isobutyl ketone, and tetrahydrofuran were J qualified in samples GC428-FA02-0326 and GC428-FA02-0326-D due to poor field duplicate RPD.
- Carbon disulfide was UJ qualified in sample G428-FA02-0326 and was J qualified in sample GC428-FA02-0326-D due to poor field duplicate RPD.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD60165-BLK1	MB	Isopropanol	0.246	J	ug/m3	0.059	1.47
TO-15	BD60243-BLK1	MB	Isopropanol	0.246	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None - ND
			Naphthalene	38.5	30	GC428-FA04-0326 GC428-OA01-0326 GC428-SV04-0326	None - ND
						GC428-FA01-0326 GC428-FA02-0326 GC428-FA02-0326-D GC428-FA03-0326 GC428-FA05-0326 GC428-SV01-0326 GC428-SV02-0326 GC428-SV03-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD60165	GC428-SV01-0326	26C0823-01	All Analytes	1.76x Dilution
TO-15	BD60165		26C0823-01 RE1	Acetone	6.64x Dilution
TO-15	BD60165	GC428-FA01-0326	26C0823-02	All Analytes	0.97x Dilution
TO-15	BD60165	GC428-SV02-0326	26C0823-03	All Analytes	1.85x Dilution
TO-15	BD60243		26C0823-03 RE1	Acetone	7.42x Dilution
TO-15	BD60165	GC428-FA02-0326	26C0823-04	All Analytes	1.32x Dilution
TO-15	BD60165	GC428-SV03-0326	26C0823-05	All Analytes	1.65x Dilution
TO-15	BD60243		26C0823-05 RE1	Acetone	3.31x Dilution
TO-15	BD60165	GC428-FA03-0326	26C0823-06	All Analytes	0.93x Dilution
TO-15	BD60165		26C0823-06 RE1	Acetone	1.75x Dilution
TO-15	BD60165	GC428-SV04-0326	26C0823-07	All Analytes	15.61x Dilution
TO-15	BD60243		26C0823-07 RE1	Acetone	31.22x Dilution
TO-15	BD60165	GC428-FA04-0326	26C0823-08	All Analytes	0.86x Dilution
TO-15	BD60165	GC428-FA05-0326	26C0823-00	All Analytes	0.98x Dilution
TO-15	BD60165	GC428-OA01-0326	26C0823-10	All Analytes	0.83x Dilution
TO-15	BD60165	GC428-FA02-0326-D	26C0823-11	All Analytes	0.84x Dilution
TO-15	BD60165		26C0823-11 RE1	Acetone	1.57x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC428-FA02-0326	GC428-FA02-0326-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.649	ND	0.617	NC	Poor	None - <2xPQL
TO-15	1,3-Butadiene	ug/m3	AI	0.877	0.380	0.389	2.3%	Good	None
TO-15	4-Ethyltoluene	ug/m3	AI	0.649	ND	0.576	NC	Poor	None - <2xPQL
TO-15	Acetone	ug/m3	AI	15.7	22.7	85.4	116.0%	Poor	J Flag
TO-15	Benzene	ug/m3	AI	0.422	1.56	1.52	2.6%	Good	None
TO-15	Carbon Disulfide	ug/m3	AI	0.411	ND	1.41	NC	Poor	UJ/J Flag
TO-15	Chloromethane	ug/m3	AI	0.273	1.36	1.33	2.2%	Good	None
TO-15	Cyclohexane	ug/m3	AI	0.455	ND	0.375	NC	Poor	None - <2xPQL
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.653	1.89	1.74	8.3%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.574	1.26	1.09	14.5%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 8, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC428-FA02-0326	GC428-FA02-0326-D	RPD	RPD Rating	Qualifier
TO-15	Isopropanol	ug/m3	AI	1.95	44.8	39.1	13.6%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	1.15	4.47	3.96	12.1%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	19.5	3.51	10.3	98.3%	Poor	None - <2xPQL
TO-15	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/m3	AI	0.541	2.54	4.49	55.5%	Poor	J Flag
TO-15	Methylene Chloride	ug/m3	AI	2.75	0.734	0.669	9.3%	Good	None
TO-15	Naphthalene	ug/m3	AI	6.92	0.900	1.05	15.4%	Good	None
TO-15	N-Hexane	ug/m3	AI	0.466	1.49	1.39	6.9%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.574	1.72	1.53	11.7%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.896	1.70	1.48	13.8%	Good	None
TO-15	Tetrahydrofuran	ug/m3	AI	0.779	0.662	2.35	112.1%	Poor	J Flag
TO-15	Toluene	ug/m3	AI	0.498	4.33	4.07	6.2%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.742	0.965	0.893	7.8%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 8, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: May 18, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1579	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1579	AI	GC431-BA01-0226	26C1579-01	3/26/2026 10:07		
26C1579	AI	GC431-FA01-0226	26C1579-02	3/26/2026 10:04		
26C1579	AO	GC431-OA01-0226	26C1579-03	3/26/2026 10:02		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1579	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1579	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61390-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCSs BD61390-BS1 and BD61390-BS1. Sample detections were J qualified as estimated and non-detects were not qualified Carbon tetrachloride was recovered below acceptance criteria in LCS BD61390-LCS. Sample GC431-OA01-0326 was non-detect for this compound and was UJ qualified as estimated.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCVs S6D2206-CCV1 and S6D2232-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect. Carbon tetrachloride was recovered below acceptance criteria in CCV S6D2232-CCV1. Sample GC431-OA01-0326 was non-detect for this compound and was UJ qualified as estimated.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone and 4-methyl-2-pentanone were J qualified in sample GC431-OA01-0326 due to high LCS and CCV recovery.
- Carbon tetrachloride was UJ qualified in sample GC431-OA01-0326 due to low LCS and CCV recovery.
- Naphthalene was J qualified in samples GC431-BA01-0326 and GC431-FA01-0326 due to poor initial calibration.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in samples GC431-BA01-0326 and GC431-FA01-0326 due to high CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61380-BLK1	MB	Isopropanol	0.295	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61380-BS1	LCS	1,2-Dichlorotetrafluoroethane	132	70	130	GC431-BA01-0326 GC431-FA01-0326	None – High and ND
			2-Hexanone	157	70	130		None – High and ND
			4-Methyl-2-pentanone	160	70	130		None – High and ND
TO-15	BD61390-BS1	LCS	2-Hexanone	148	70	130	GC431-OA01-0326	J
			4-Methyl-2-pentanone	151	70	130		J
			Carbon Tetrachloride	69.5	70	130		UJ

Table 3A – List of LCS RPD outside Control Limits

None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30	GC431-OA01-0326	None – ND
						GC431-BA01-0326 GC431-FA01-0326	J
TO-15	S6D2206-CCV1	CCV	2-Hexanone	60.2	30	GC431-BA01-0326 GC431-FA01-0326	UJ
			4-Methyl-2-pentanone	54.3	30		UJ
TO-15	S6D2232-CCV1	CCV	2-Hexanone	44.2	30	GC431-OA01-0326	J
			4-Methyl-2-pentanone	49.5	30		J

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
			Carbon Tetrachloride	-34.6	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61380	GC431-BA01-0226	26C1579-01	All Analytes	0.98x Dilution
TO-15	BD61380	GC431-FA01-0226	26C1579-02	All Analytes	1.02x Dilution
TO-15	BD61390	GC431-OA01-0226	26C1579-03	All Analytes	0.83x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: May 18, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0832	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0832	AI	GC439-BA01-0226	26B0832-01	2/18/2026 10:41		
26B0832	AI	GC439-BA02-0226	26B0832-02	2/18/2026 10:39		
26B0832	AI	GC439-BA02-0226-D	26B0832-03	2/18/2026 10:39	FD	
26B0832	AI	GC439-BA03-0226	26B0832-04	2/18/2026 10:40		
26B0832	AI	GC439-FA01-0226	26B0832-05	2/18/2026 10:33		
26B0832	AI	GC439-FA02-0226	26B0832-06	2/18/2026 10:36		
26B0832	AI	GC439-FA03-0226	26B0832-07	2/18/2026 10:50		
26B0832	AI	GC439-FA04-0226	26B0832-08	2/18/2026 10:51		
26B0832	AI	GC439-FA05-0226	26B0832-09	2/18/2026 10:52		
26B0832	AI	GC439-FA06-0226	26B0832-10	2/18/2026 10:53		
26B0832	AO	GC439-OA01-0226	26B0832-11	2/18/2026 10:46		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0832	AI	TO-15	Volatile Organic Compounds by GC/MS	9	N
26B0832	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
26B0832	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 10 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

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Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene and trichlorofluoromethane were recovered above acceptance criteria in LCS BC60203-BS1. Associated samples were non-detect for 1,2,4-trichlorobenzene and did not require qualification. Trichlorofluoromethane was detected in sampled GC439-BA02-0226 and GC439-BA02-0226-D and was J qualified as estimated. Several compounds were recovered above acceptance criteria in LCS BC60255-BS1. All associated samples were non-detect for thee compounds; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCVs S6C0431-CCV1 and S6C505-CCV1. Associated sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. 2-Hexanone and 4-ethyltoluene were outside QC criteria of 50% RPD between samples GC439-BA02-0226 and its field duplicate GC439-BA02-0226-D. The difference between samples for 2-hexanone was >2x the PQL; therefore, results were J qualified as estimated. The difference between 4-ethyltoluene results was <2x the PQL; therefore, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Trichlorofluoromethane was J qualified in samples GC439-BA02-0229 and GC439-BA02-0226 due to high LCS and CCV recovery.
- Several compounds were UJ qualified in all samples due to poor CCV recovery. See Table 4 for list of compounds and samples.
- 2-Hexanone was J qualified in sample GC439-BA02-0226 and was UJ qualified in sample GC439-BA02-0226-D due to poor field duplicate RPD.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BC60203-BS1	LCS	1,2,4-Trichlorobenzene	136	70	130	GC439-BA02-0226 GC439-BA02-0226-D	None – High and ND
			Trichlorofluoromethane	133	70	130		J
TO-15	BC60255-BS1	LCS	1,2,4-Trichlorobenzene	171	70	130	GC439-BA01-0226 GC439-BA03-0226 GC439-FA01-0226 GC439-FA02-0226 GC439-FA03-0226 GC439-FA04-0226 GC439-FA05-0226 GC439-FA06-0226 GC439-OA01-0226	None – High and ND
			1,3-Dichlorobenzene	133	70	130		None – High and ND
			1,4-Dichlorobenzene	136	70	130		None – High and ND
			Benzyl Chloride	136	70	130		None – High and ND
			Hexachlorobutadiene	144	70	130		None – High and ND
			Naphthalene	147	70	130		None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6C0431-CCV1	CCV	1,2,4-Trichlorobenzene	42.9	30	GC439-BA02-0226 GC439-BA02-0226-D	UJ
			1,3-Dichlorobenzene	35.7	30		UJ
			1,4-Dichlorobenzene	42.7	30		UJ

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
			Benzyl Chloride	32.0	30		UJ
			Trichlorofluoromethane	34.3	30		J
TO-15	S6C0505-CCV1	CCV	1,2,4-Trichlorobenzene	65.8	30	GC439-BA01-0226 GC439-BA03-0226 GC439-FA01-0226 GC439-FA02-0226 GC439-FA03-0226 GC439-FA04-0226 GC439-FA05-0226 GC439-FA06-0226 GC439-OA01-0226	UJ
			1,4-Dichlorobenzene	35.8	30		UJ
			Hexachlorobutadiene	39.6	30		UJ
			Naphthalene	40.6	30		UJ

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BC60255	GC439-BA01-0226	26B0832-01	All Analytes	0.88x Dilution
TO-15	BC60203	GC439-BA02-0226	26B0832-02	All Analytes	0.90x Dilution
TO-15	BC60203	GC439-BA02-0226-D	26B0832-03	All Analytes	0.94x Dilution
TO-15	BC60255	GC439-BA03-0226	26B0832-04	All Analytes	1.32x Dilution
TO-15	BC60255	GC439-FA01-0226	26B0832-05	All Analytes	0.90x Dilution
TO-15	BC60255	GC439-FA02-0226	26B0832-06	All Analytes	0.81x Dilution
TO-15	BC60255	GC439-FA03-0226	26B0832-07	All Analytes	1.37x Dilution
TO-15	BC60255	GC439-FA04-0226	26B0832-08	All Analytes	0.90x Dilution
TO-15	BC60255	GC439-FA05-0226	26B0832-09	All Analytes	0.90x Dilution
TO-15	BC60255	GC439-FA06-0226	26B0832-10	All Analytes	0.85x Dilution
TO-15	BC60255	GC439-OA01-0226	26B0832-11	All Analytes	0.87x Dilution

Table 7 – Summary of Duplicate Results

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC439-BA02-0226	GC439-BA02-0226-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.442	0.796	0.836	4.9%	Good	None
TO-15	1,3-Butadiene	ug/m3	AI	0.597	0.577	0.502	13.9%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.210	1.64	1.63	0.6%	Good	None
TO-15	2-Hexanone	ug/m3	AI	0.737	1.70	ND	NC	Poor	J/UJ Flag
TO-15	4-Ethyltoluene	ug/m3	AI	0.442	ND	0.650	NC	Poor	None - <2xPQL
TO-15	Acetone	ug/m3	AI	10.7	16.7	18.4	9.7%	Good	None
TO-15	Benzene	ug/m3	AI	0.288	1.18	1.21	2.5%	Good	None
TO-15	Carbon Tetrachloride	ug/m3	AI	0.170	0.340	0.357	4.9%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.186	1.04	1.05	1.0%	Good	None
TO-15	Cyclohexane	ug/m3	AI	0.310	1.21	1.20	0.8%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.445	2.05	2.15	4.8%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.391	0.664	0.657	1.1%	Good	None
TO-15	Isopropanol	ug/m3	AI	1.33	3.85	4.04	4.8%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.782	2.03	2.17	6.7%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	13.3	1.38	1.67	19.0%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	1.88	0.782	0.788	0.8%	Good	None
TO-15	N-Heptane	ug/m3	AI	0.369	1.18	1.28	8.1%	Good	None
TO-15	N-Hexane	ug/m3	AI	0.317	2.41	2.40	0.4%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.391	1.09	1.11	1.8%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.610	2.08	2.05	1.5%	Good	None
TO-15	Toluene	ug/m3	AI	0.339	10.8	10.9	0.9%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.506	1.31	1.38	5.2%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-269022-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-269022-1	AS	GC446-SV01-0326	410-269022-1	3/5/2026 9:43		
410-269022-1	AI	GC446-BA01-0326	410-269022-2	3/5/2026 9:43		
410-269022-1	AI	GC446-FA01-0326	410-269022-3	3/5/2026 9:43		
410-269022-1	AO	GC446-OA01-0326	410-269022-4	3/5/2026 9:44		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-269022-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-269022-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-269022-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Bromomethane exhibited high %RSD in calibration curve 82965. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	82965	CAL	Bromomethane	31.5	30	All Samples	None

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 24, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 20, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-263993-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-263993-1	AS	GC451-SV01-0126	410-263993-1	1/23/2026 11:10		
410-263993-1	AS	GC451-SV01-0126	410-263993-2	1/23/2026 11:08		
410-263993-1	AI	GC451-BA01-0126	410-263993-3	1/23/2026 11:13		
410-263993-1	AI	GC451-BA02-0126	410-263993-4	1/23/2026 11:07		
410-263993-1	AI	GC451-FA01-0126	410-263993-5	1/23/2026 11:32		
410-263993-1	AO	GC451-OA01-0126	410-263993-6	1/23/2026 11:30		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-263993-1	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-263993-1	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
410-263993-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 20, 2026	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: February 20, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Prepared by: Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-253363-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-253363-1	AO	GC454-OA01-1125	410-253363-1	11/11/2025 16:08		
410-253363-1	AI	GC454-FA01-1125	410-253363-2	11/11/2025 16:07		
410-253363-1	AI	GC454-BA01-1125	410-253363-3	11/11/2025 16:06		
410-253363-1	AS	GC454-SV01-1125	410-253363-4	11/11/2025 16:05		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-253363-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253363-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-253363-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	**Prepared by:** **Reviewed by:**

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Sample GC454-SV01-1125 was initially named incorrectly on the COC. The laboratory revised the report and EDD to reflect the change.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Prepared by: Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Tetrachloroethene exhibited high %RSD in calibration curve 77476. This compound was detected in all samples; therefore, results were J qualified as estimated.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Prepared by: Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

Summary of Findings
• Tetrachloroethene was J qualified in all samples due to poor initial calibration.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	77476	ICAL	Tetrachloroethene	33.8	30	All Samples	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed:	Prepared by: Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 12, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-254602-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-254602-1	AI	GC457-BA01-1125	410-254602-4	11/21/2025 11:58		
410-254602-1	AI	GC457-BA02-1125	410-254602-5	11/21/2025 12:06		
410-254602-1	AI	GC457-BA03-1125	410-254602-6	11/21/2025 12:49		
410-254602-1	AO	GC457-OA01-1125	410-254602-7	11/21/2025 12:02		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-254602-1	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
410-254602-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. During collection of the 3 soil vapor samples, dust clogged the orifice, limiting sample collection. The laboratory was unable to analyze the samples and cancelled analysis.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2,4-Trichlorobenzene was recovered above acceptance criteria in LCS 410-738069/4. All samples were non-detect for this compound; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Tetrachloroethene exhibited high %RSD in calibration curve 77476. Sample GC141-SV01-1125 was non-detect for this compound; therefore, no qualification was made. When this compound was detected in samples, results were J qualified as estimated.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

U – The analyte was analyzed for, but due to blank contamination was flagged as non-detect (U). The result is usable as a non-detect.

UR – The analyte was analyzed for but due to quality control anomalies, sample is considered unusable.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	410-738069/4	LCS	1,2,4-Trichlorobenzene	146	70	130	All Samples	None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	77476	ICAL	Tetrachloroethene	33.8	30	GC141-SV01-1125	None - ND

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 12, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26C1576	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26C1576	AI	GC457-BA01-0326	26C1576-01	3/25/2026 9:10		
26C1576	AI	GC457-BA02-0326	26C1576-02	3/25/2026 9:25		
26C1576	AI	GC457-BA03-0326	26C1576-03	3/25/2026 9:13		
26C1576	AO	GC457-OA01-0326	26C1576-04	3/25/2026 9:25		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26C1576	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26C1576	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
26C1576	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,2-Dichloropropane, 2-hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61380-BS1. Sample detections were J qualified as estimated and non-detects were not qualified
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. 2-Hexanone and 4-methyl-2-pentanone were recovered outside the acceptance criteria in CCV S6D2206-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed. Isopropanol was recovered above the calibration range for sample GC457-BA01-0326. The laboratory qualified this as E for estimated. Samples were qualified J as estimated.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in samples GC457-BA02-0326 and GC457-OA01-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in samples GC457-OA01-0326 and GC457-BA01-0326 due to high LCS and CCV recovery.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in non-detect samples due to high CCV recovery.
- Isopropanol was J qualified in sample GC457-BA01-0326 due to exceeding calibration range.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61380-BS1	LCS	1,2-Dichloropropane	132	70	130	All Samples	None – High and ND
			2-Hexanone	157	70	130	GC457-BA01-0326 GC457-BA03-0326	None – High and ND
							GC457-BA02-0326 GC457-OA01-0326	J
			4-Methyl-2-pentanone	160	70	130	GC457-BA02-0326 GC457-BA03-0326	None – High and ND
							GC457-BA01-0326 GC457-OA01-0326	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30		None – ND
TO-15	S6D2206-CCV1	CCV	2-Hexanone	37.5	30	GC457-BA01-0326 GC457-BA03-0326	UJ
						GC457-BA02-0326 GC457-OA01-0326	J
			4-Methyl-2-pentanone	34.5	30	GC457-BA02-0326 GC457-BA03-0326	UJ
						GC457-BA01-0326 GC457-OA01-0326	J

Table 5 – Internal Standard Outside Control Limits

None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61380	GC457-BA01-0326	26C1576-01	All Analytes	1.21x Dilution
TO-15	BD61380	GC457-BA02-0326	26C1576-02	All Analytes	1.28x Dilution
TO-15	BD61380	GC457-BA03-0326	26C1576-03	All Analytes	1.16x Dilution
TO-15	BD61380	GC457-OA01-0326	26C1576-04	All Analytes	1.27x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 29, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 23, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-256236-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-256236-1	AS	GC459-SV01-1225	410-256236-1	12/3/2025 12:32		
410-256236-1	AI	GC459-BA01-1225	410-256236-2	12/3/2025 12:32		
410-256236-1	AI	GC459-FA01-1225	410-256236-3	12/3/2025 12:33		
410-256236-1	AO	GC459-OA01-1225	410-256236-4	12/3/2025 12:34		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-256236-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-256236-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-256236-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 23, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Sample GC459-OA01-1225 canister ID label did not match the ID noted on the COC.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 23, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC459-SV01-1225 was diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 23, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	746591	GC459-SV01-1225	410-256236-1	All Analytes	2x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 23, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-253886-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-253886-1	AS	GC460-SV01-1125	410-253886-1	11/18/2025 11:05		
410-253886-1	AI	GC460-BA01-1125	410-253886-2	11/18/2025 11:08		
410-253886-1	AO	GC460-OA01-1125	410-253886-3	11/18/2025 11:06		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-253886-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253886-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253886-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Tetrachloroethene exhibited high %RSD in calibration curve 77476. This compound was non-detect in all samples; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	77476	ICAL	Tetrachloroethene	33.8	30	All Samples	None - ND

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26B0528	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26B0528	AS	GC461-SV01-0226	26B0528-01	2/11/2026 12:38		
26B0528	AI	GC461-FA01-0226-D	26B0528-02	2/11/2026 12:36	FD	
26B0528	AI	GC461-FA01-0226	26B0528-03	2/11/2026 12:36		
26B0528	AS	GC461-SV02-0226	26B0528-04	2/11/2026 12:39		
26B0528	AI	GC461-FA02-0226	26B0528-05	2/11/2026 12:36		
26B0528	AI	GC461-FA02-0226-D	26B0528-06	2/11/2026 12:36	FD	
26B0528	AS	GC461-SV03-0226	26B0528-07	2/11/2026 12:45		
26B0528	AI	GC461-FA03-0226-D	26B0528-08	2/11/2026 12:38	FD	
26B0528	AI	GC461-FA03-0226	26B0528-09	2/11/2026 12:39		
26B0528	AO	GC461-OA01-0226	26B0528-10	2/11/2026 12:33		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26B0528	AS	TO-15	Volatile Organic Compounds by GC/MS	3	N
26B0528	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
26B0528	AI	TO-15	Volatile Organic Compounds by GC/MS	3	FD
26B0528	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 3 Field Duplicate per 7 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BB61284-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone was recovered above acceptance criteria in LCS BB61284-BS1. Several samples were non-detect for this compound; therefore, no qualification was necessary. This compound was detected in samples GC461-FA02-0226-D and GC461-SV03-0226; therefore, results were J qualified as estimated. Carbon tetrachloride was recovered below acceptance criteria in LCS BB61284-BS1. Sample detections were J qualified as estimated and non-detects were UJ qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and benzyl chloride exhibited high %RSD in calibration curve SL50019. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCV S6B2416-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC461-FA01-0226 and its field duplicate GC461-FA01-0226-D, GC461-FA02-0226 and its field duplicate GC461-FA02-0226-D, and GC461-FA03-0226 and its field duplicate GC461-FA03-0226-D. When the difference between samples was >2x the PQL, results were J qualified as estimated. When the difference between results was <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
• 2-Hexanone was J qualified in samples GC461-FA02-0226-D and GC461-SV03-0226 due to high LCS recovery. • Carbon tetrachloride was UJ/J qualified in all sample due to low LCS recovery. • Several compounds were UJ/J qualified in several samples due to poor field duplicate RPD. See Table 7 for list of compounds and samples.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BB61284-BLK1	MB	Isopropanol	0.221	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BB61284-BS1	LCS	2-Hexanone	131	70	130	GC461-FA01-0226 GC461-FA01-0226-D GC461-FA02-0226 GC461-FA03-0226 GC461-FA03-0226-D GC461-OA01-0226 GC461-SV01-0226 GC461-SV02-0226	None – High and ND
							GC461-FA02-0226-D GC461-SV03-0226	J
			Carbon Tetrachloride	49.8	70	130	GC461-FA01-0226 GC461-FA01-0226-D GC461-FA02-0226 GC461-FA02-0226-D GC461-FA03-0226 GC461-FA03-0226-D GC461-OA01-0226 GC461-SV01-0226 GC461-SV02-0226	UJ
							GC461-SV03-0226	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SL50019	CAL	1,2,4-Trichlorobenzene	33.3	30	All Samples	None - ND
			Benzyl Chloride	37.6	30		None - ND
TO-15	S6B2416-CCV1	CCV	1,1-Dichloroethylene	30.5	30	All Samples	UJ
			1,2,4-Trichlorobenzene	44.2	30		UJ
			Carbon Tetrachloride	-30.5	30	GC461-FA01-0226 GC461-FA01-0226-D GC461-FA02-0226 GC461-FA02-0226-D GC461-FA03-0226 GC461-FA03-0226-D GC461-OA01-0226 GC461-SV01-0226 GC461-SV02-0226	UJ
						GC461-SV03-0226	J
			Naphthalene	35.3	30	GC461-FA01-0226 GC461-OA01-0226 GC461-SV01-0226 GC461-SV02-0226 GC461-SV03-0226	UJ
						GC461-FA01-0226-D GC461-FA02-0226 GC461-FA02-0226-D GC461-FA03-0226 GC461-FA03-0226-D	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61284	GC461-SV01-0226	26B0528-01	All Analytes	1.75x Dilution
	BB61284		26B0528-01 RE1	Acetone	17.54x Dilution
TO-15	BB61284	GC461-FA01-0226-D	26B0528-02	All Analytes	1.29x Dilution
TO-15	BB61284	GC461-FA01-0226	26B0528-03	All Analytes	0.94x Dilution

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BB61284	GC461-SV02-0226	26B0528-04	All Analytes	1.55x Dilution
TO-15	BB61284	GC461-FA02-0226	26B0528-05	All Analytes	0.97x Dilution
TO-15	BB61284	GC461-FA02-0226-D	26B0528-06	All Analytes	1.01x Dilution
TO-15	BB61284	GC461-SV03-0226	26B0528-07	All Analytes	1.42x Dilution
TO-15	BB61284	GC461-FA03-0226-D	26B0528-08	All Analytes	0.77x Dilution
TO-15	BB61284	GC461-FA03-0226	26B0528-09	All Analytes	0.82x Dilution
TO-15	BB61284	GC461-OA01-0226	26B0528-10	All Analytes	0.96x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC461-FA01-0226	GC461-FA01-0226-D	RPD	RPD Rating	Qualifier
TO-15	1,4-Dichlorobenzene	ug/m3	AI	0.565	11.6	31.8	93.1%	Poor	J Flag
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.219	ND	1.09	200.0%	Poor	UJ/J Flag
TO-15	Acetone	ug/m3	AI	11.2	36.7	18.4	66.4%	Poor	None - <2xPQL
TO-15	Benzene	ug/m3	AI	0.300	1.62	1.45	11.1%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.194	1.16	1.15	0.9%	Good	None
TO-15	cis-1,2-Dichlorethene	ug/m3	AI	0.186	ND	0.616	200.0%	Poor	UJ/J Flag
TO-15	Cyclohexane	ug/m3	AI	0.323	0.485	0.490	1.0%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.464	2.04	2.11	3.4%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.408	0.530	0.674	23.9%	Good	None
TO-15	Isopropanol	ug/m3	AI	1.38	14.5	14.8	2.0%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.815	1.30	2.02	43.4%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	13.8	2.63	2.10	22.4%	Good	None
TO-15	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/m3	AI	0.385	0.462	2.54	138.4%	Poor	J Flag
TO-15	Methylene Chloride	ug/m3	AI	1.96	0.554	0.584	5.3%	Good	None
TO-15	Naphthalene	ug/m3	AI	4.92	ND	0.814	200.0%	Poor	None - <2xPQL
TO-15	N-Hexane	ug/m3	AI	0.331	1.29	1.32	2.3%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.408	0.489	0.730	39.5%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.637	7.96	16.7	70.9%	Poor	J Flag
TO-15	Toluene	ug/m3	AI	0.354	2.80	2.97	5.9%	Good	None
TO-15	Trichloroethene (TCE)	ug/m3	AI	0.151	1.06	1.74	48.6%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC461-FA02-0226	GC461-FA02-0226-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.477	0.621	ND	NC	Poor	None - <2xPQL
TO-15	1,4-Dichlorobenzene	ug/m3	AI	0.584	27.1	25.2	7.3%	Good	None
TO-15	2-Hexanone	ug/m3	AI	0.796	ND	0.665	NC	Poor	None - <2xPQL
TO-15	Acetone	ug/m3	AI	11.5	20.0	15.2	27.3%	Good	None
TO-15	Benzene	ug/m3	AI	0.310	1.27	1.26	0.8%	Good	None
TO-15	Chloroform	ug/m3	AI	0.474	0.474	0.545	13.9%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.201	1.00	1.03	3.0%	Good	None
TO-15	cis-1,2-Dichlorethene	ug/m3	AI	0.192	1.58	0.764	69.6%	Poor	J Flag
TO-15	Cyclohexane	ug/m3	AI	0.334	0.434	0.454	4.5%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.480	1.82	1.86	2.2%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.422	0.675	0.616	9.1%	Good	None
TO-15	Isopropanol	ug/m3	AI	1.43	11.5	11.3	1.8%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.843	2.07	1.85	11.2%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	14.3	1.66	1.50	10.1%	Good	None
TO-15	Methylene Chloride	ug/m3	AI	2.02	0.540	0.528	2.2%	Good	None
TO-15	Naphthalene	ug/m3	AI	5.09	0.662	0.744	11.7%	Good	None
TO-15	N-Hexane	ug/m3	AI	0.342	1.16	1.22	5.0%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.422	0.759	0.660	14.0%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.659	13.2	18.6	34.0%	Good	None
TO-15	Toluene	ug/m3	AI	0.366	2.93	2.79	4.9%	Good	None
TO-15	Trichloroethene (TCE)	ug/m3	AI	0.157	0.939	1.80	62.9%	Poor	J Flag
TO-15	Trichlorofluoromethane	ug/m3	AI	0.546	0.927	ND	NC	Poor	None - <2xPQL

Method	Analyte	Unit	Matrix	PQL	GC461-FA03-0226	GC461-FA03-0226-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.403	0.605	ND	NC	Poor	None - <2xPQL
TO-15	1,3-Butadiene	ug/m3	AI	0.544	0.290	ND	NC	Poor	None - <2xPQL
TO-15	1,4-Dichlorobenzene	ug/m3	AI	0.493	11.5	22.1	63.1%	Poor	J Flag
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.192	8.08	ND	NC	Poor	UJ/J Flag
TO-15	Acetone	ug/m3	AI	9.74	22.3	8.70	87.7%	Poor	None - <2xPQL

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: March 6, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC461-FA03-0226	GC461-FA03-0226-D	RPD	RPD Rating	Qualifier
TO-15	Benzene	ug/m3	AI	0.262	1.57	0.661	81.5%	Poor	J Flag
TO-15	Chloromethane	ug/m3	AI	0.169	1.46	0.585	85.6%	Poor	J Flag
TO-15	Cyclohexane	ug/m3	AI	0.282	0.282	ND	NC	Poor	None - <2xPQL
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.406	2.64	0.947	94.4%	Poor	J Flag
TO-15	Ethylbenzene	ug/m3	AI	0.356	0.605	0.366	49.2%	Good	None
TO-15	Isopropanol	ug/m3	AI	1.21	13.3	9.30	35.4%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.712	1.89	1.06	56.3%	Poor	None - <2xPQL
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AI	12.1	2.01	0.768	89.4%	Poor	None - <2xPQL
TO-15	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/m3	AI	0.336	1.21	ND	NC	Poor	UJ/J Flag
TO-15	Methylene Chloride	ug/m3	AI	1.71	0.855	0.293	97.9%	Poor	None - <2xPQL
TO-15	Naphthalene	ug/m3	AI	4.30	1.12	0.482	79.7%	Poor	None - <2xPQL
TO-15	N-Hexane	ug/m3	AI	0.289	1.30	0.648	66.9%	Poor	J Flag
TO-15	o-Xylene	ug/m3	AI	0.356	0.676	0.366	59.5%	Poor	None - <2xPQL
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.556	4.00	6.44	46.7%	Good	None
TO-15	Toluene	ug/m3	AI	0.309	5.99	1.73	110.4%	Poor	J Flag
TO-15	Trichloroethene (TCE)	ug/m3	AI	0.132	ND	0.617	NC	Poor	UJ/J Flag
TO-15	Trichlorofluoromethane	ug/m3	AI	0.461	ND	0.516	NC	Poor	None - <2xPQL

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	JE31328	SGS North America – Dayton

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
JE31328	AS	GC461-SV01-0326	JE31328-1	4/1/2026 9:24		
JE31328	AS	GC461-SV02-0326	JE31328-2	4/1/2026 9:24		
JE31328	AS	GC461-SV03-0326	JE31328-3	4/1/2026 9:38		
JE31328	AI	GC461-FA01-0326	JE31328-4	4/1/2026 9:36		
JE31328	AI	GC461-FA01-0326-D	JE31328-5	4/1/2026 9:36	FD	
JE31328	AI	GC461-FA02-0326	JE31328-6	4/1/2026 9:37		
JE31328	AI	GC461-FA02-0326-D	JE31328-7	4/1/2026 9:37	FD	
JE31328	AI	GC461-FA03-0326	JE31328-8	4/1/2026 9:38		
JE31328	AI	GC461-FA03-0326-D	JE31328-9	4/1/2026 9:39	FD	
JE31328	AO	GC461-OA01-0326	JE31328-10	4/1/2026 9:47		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
JE31328	AS	TO-15	Volatile Organic Compounds by GC/MS	3	N
JE31328	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
JE31328	AI	TO-15	Volatile Organic Compounds by GC/MS	3	FD
JE31328	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 3 Field Duplicate per 7 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4)
- CCV/ICV Outside Limits (Table 5)
- Internal Standard Outside Limits (Table 6)
- Reanalysis/Dilution Results (Table 7)
- Duplicate Results (Table 8)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks, LCS, and samples within limits? (see Table 3)	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. Bromoform and dibromochloromethane were recovered above acceptance criteria in LCSs V7W718-BS1 and V7W718-BSD1. All samples were non-detect for these compounds; therefore, no qualifications were made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 5)	No. Benzyl chloride exhibited high %RSD in calibration curve V2W3191-IC3191. All associated samples were non-detect; therefore, no qualification was made. Bromoform exhibited high %RSD in calibration curve V7W709-ICC709. All associated samples were non-detect; therefore, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 5)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 5)	No. Bromoform and dibromochloromethane were recovered outside the acceptance criteria in CCV V7W718-CC709. Associated samples were non-detect for these compounds; therefore, results were UJ qualified.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Several samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Do duplicate results show good precision for all compounds except TICs (see Table 8)?	No. 1,4-Dioxane was outside QC criteria of 50% RPD between samples GC461-FA02-0326 and its field duplicate GC461-FA02-0326-D. The difference between results was <2x the PQL; therefore, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
• Bromoform and dibromochloromethane were UJ qualified in several compounds due to poor CCV recoveries. See Table 5 for list of samples.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of Samples with Surrogates outside Control Limits
None.

Table 4 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	V7W718-BS1 V7W718-BSD1	LCS	Bromoform	136 133	70	130	GC461-OA01-0326 GC461-SV01-0326	None – High and ND
			Dibromochloromethane	139 138	70	130	GC461-SV02-0326 GC461-SV03-0326	None – High and ND

Table 4A – List of LCS RPD outside Control Limits
None.

Table 5 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	V2W3191-IC3191	CAL	Benzyl Chloride	36.37	30	GC461-FA01-0326 GC461-FA01-0326-D GC461-FA02-0326 GC461-FA02-0326-D GC461-FA03-0326 GC461-FA03-0326-D	None - ND
TO-15	V7W709-ICC709	CAL	Bromoform	34.31	30	GC461-OA01-0326 GC461-SV01-0326 GC461-SV02-0326 GC461-SV03-0326	None - ND
TO-15	V7W718-CC709	CCV	Dibromochloromethane	-39.1	30	GC461-OA01-0326 GC461-SV01-0326	UJ
			Bromoform	-34.4	30	GC461-SV02-0326 GC461-SV03-0326	UJ

Table 6 – Internal Standard Outside Control Limits
None.

Table 7 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	V2W3232	GC461-FA03-0326	JE31328-8	All Analytes	1.52x Dilution
TO-15	V2W3232	GC461-FA03-0326-D	JE31328-9	All Analytes	1.52x Dilution
TO-15	V7W718	GC461-OA01-0326	JE31328-10	All Analytes	1.48x Dilution

Table 8 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC461-FA01-0326	GC461-FA01-0326-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.98	0.93	0.98	5.2%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	0.79	0.79	0.0%	Good	None
TO-15	Acetone (2-Propanone)	ug/m3	AI	0.48	43.2	42.5	1.6%	Good	None
TO-15	Benzene	ug/m3	AI	0.64	0.73	0.73	0.0%	Good	None
TO-15	Chloroform	ug/m3	AI	0.98	0.78	0.78	0.0%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.41	1.5	1.6	6.5%	Good	None
TO-15	Cyclohexane	ug/m3	AI	0.69	0.41	0.45	9.3%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.99	2.1	2.1	0.0%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.87	1.2	1.3	8.0%	Good	None
TO-15	Heptane	ug/m3	AI	0.82	1.8	1.7	5.7%	Good	None
TO-15	Hexane	ug/m3	AI	0.70	2.2	1.8	20.0%	Good	None
TO-15	Isopropyl Alcohol	ug/m3	AI	0.49	214	223	4.1%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.87	4.3	4.3	0.0%	Good	None
TO-15	Methyl ethyl ketone	ug/m3	AI	0.59	2.2	2.2	0.0%	Good	None
TO-15	Methylene chloride	ug/m3	AI	0.69	1.3	1.0	26.1%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.87	1.6	1.6	0.0%	Good	None
TO-15	p-Dichlorobenzene	ug/m3	AI	0.60	4.3	6.0	33.0%	Good	None
TO-15	Tetrachloroethylene	ug/m3	AI	0.27	0.42	0.47	11.2%	Good	None
TO-15	Toluene	ug/m3	AI	0.75	5.3	5.7	7.3%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.56	1.1	1.2	8.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	GC461-FA02-0326	GC461-FA02-0326-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.98	0.98	0.98	0.0%	Good	None
TO-15	1,4-Dioxane	ug/m3	AI	0.72	0.65	ND	NC	Poor	None - <2x PQL
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	0.79	0.70	12.1%	Good	None
TO-15	Acetone (2-Propanone)	ug/m3	AI	0.48	47.7	43.0	10.4%	Good	None
TO-15	Benzene	ug/m3	AI	0.64	0.77	0.77	0.0%	Good	None
TO-15	Chloroform	ug/m3	AI	0.98	0.78	0.78	0.0%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.41	1.5	1.4	6.9%	Good	None
TO-15	Cyclohexane	ug/m3	AI	0.69	0.45	0.45	0.0%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.99	2.1	2.1	0.0%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.87	1.3	1.3	0.0%	Good	None
TO-15	Heptane	ug/m3	AI	0.82	1.7	1.7	0.0%	Good	None
TO-15	Hexane	ug/m3	AI	0.70	2.4	2.1	13.3%	Good	None
TO-15	Isopropyl Alcohol	ug/m3	AI	0.49	227	225	0.9%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.87	4.3	4.3	0.0%	Good	None
TO-15	Methyl ethyl ketone	ug/m3	AI	0.59	2.4	2.7	11.8%	Good	None
TO-15	Methylene chloride	ug/m3	AI	0.69	1.4	1.1	24.0%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.87	1.6	1.6	0.0%	Good	None
TO-15	p-Dichlorobenzene	ug/m3	AI	0.60	4.7	5.8	21.0%	Good	None
TO-15	Tetrachloroethylene	ug/m3	AI	0.27	0.41	0.45	9.3%	Good	None
TO-15	Toluene	ug/m3	AI	0.75	5.7	5.7	0.0%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.56	1.2	1.1	8.7%	Good	None

Method	Analyte	Unit	Matrix	PQL	GC461-FA03-0326	GC461-FA03-0326-D	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AI	0.98	1.2	1.1	8.7%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.93	0.98	0.84	15.4%	Good	None
TO-15	Acetone (2-Propanone)	ug/m3	AI	0.48	60.3	50.4	17.9%	Good	None
TO-15	Benzene	ug/m3	AI	0.64	0.96	0.80	18.2%	Good	None
TO-15	Chloroethane	ug/m3	AI	0.53	0.32	0.26	20.7%	Good	None
TO-15	Chloroform	ug/m3	AI	0.98	1.0	0.88	12.8%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.41	1.9	1.6	17.1%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 17, 2026	Completed by: Sayward Gohman-Kramer

Method	Analyte	Unit	Matrix	PQL	GC461-FA03-0326	GC461-FA03-0326-D	RPD	RPD Rating	Qualifier
TO-15	Cyclohexane	ug/m3	AI	0.69	0.59	0.52	12.6%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.99	2.8	2.3	19.6%	Good	None
TO-15	Ethylbenzene	ug/m3	AI	0.87	1.7	1.4	19.4%	Good	None
TO-15	Heptane	ug/m3	AI	0.82	2.2	1.9	14.6%	Good	None
TO-15	Hexane	ug/m3	AI	0.70	3.5	2.9	18.8%	Good	None
TO-15	Isopropyl Alcohol	ug/m3	AI	0.49	288	242	17.4%	Good	None
TO-15	m,p-Xylene	ug/m3	AI	0.87	6.1	5.2	15.9%	Good	None
TO-15	Methyl ethyl ketone	ug/m3	AI	0.59	3.2	2.4	28.6%	Good	None
TO-15	Methylene chloride	ug/m3	AI	0.69	2.7	1.9	34.8%	Good	None
TO-15	o-Xylene	ug/m3	AI	0.87	2.1	1.9	10.0%	Good	None
TO-15	p-Dichlorobenzene	ug/m3	AI	0.60	7.8	6.6	16.7%	Good	None
TO-15	Tetrachloroethylene	ug/m3	AI	0.27	0.60	0.46	26.4%	Good	None
TO-15	Toluene	ug/m3	AI	0.75	7.2	6.0	18.2%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AI	0.56	1.5	1.3	14.3%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: April 17, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-253364-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-253364-1	AS	GC463-SV01-1125	410-253364-1	11/11/2025 8:59		
410-253364-1	AI	GC463-BA01-1125	410-253364-2	11/11/2025 8:58		
410-253364-1	AI	GC463-FA01-1125	410-253364-3	11/11/2025 9:01		
410-253364-1	AO	GC463-OA01-1125	410-253364-4	11/11/2025 9:02		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-253364-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253364-1	AI	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-253364-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 1,4-Dioxane was recovered above acceptance criteria in LCS 410-734317/4. All samples were non-detect for this compound; therefore, no qualification was made.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve 78254. Naphthalene was detected in sample GC463-SV01-1125 and therefore, qualified J as estimated. When results were non-detect, no qualification was made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Tetrachloroethene was outside QC criteria of 50% RPD between samples GC463-OA01-1125 and its laboratory duplicate GC463-OA01-1125LR. The difference between samples was >2x the PQL; therefore, results were J qualified as estimated.

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

Summary of Findings

- Naphthalene was J qualified in sample GC463-SV01-1125 due to poor initial calibration.
- Tetrachloroethene was J qualified in sample gC463-OA01-1125 due to poor laboratory duplicate RPD.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	410-734317/4	LCS	1,4-Dioxane	143	70	130	All Samples	None – High and ND

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	78254	ICAL	1,2,4-Trichlorobenzene	32.6	30	All Samples	None - ND
			Naphthalene	33.6	30	GC463-BA01-1125 GC463-FA01-1125 GC463-OA01-1125	None – ND
						GC463-SV01-1125	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted
None.

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC463-OA01-1125	GC463-OA01-1125LR	RPD	RPD Rating	Qualifier
TO-15	1,2,4-Trimethylbenzene	ug/m3	AO	0.45	0.82	0.740	10.3%	Good	None
TO-15	2,2,4-Trimethylpentane	ug/m3	AO	0.76	0.34	0.403	17.0%	Good	None
TO-15	Acetone	ug/m3	AO	1.4	21	19.3	8.4%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Method	Analyte	Unit	Matrix	PQL	GC463-OA01-1125	GC463-OA01-1125LR	RPD	RPD Rating	Qualifier
TO-15	Benzene	ug/m3	AO	0.48	1.5	1.70	12.5%	Good	None
TO-15	Chloroform	ug/m3	AO	0.092	0.26	0.265	1.9%	Good	None
TO-15	Chloromethane	ug/m3	AO	0.42	1.1	1.10	0.0%	Good	None
TO-15	Cyclohexane	ug/m3	AO	0.46	5.5	4.61	17.6%	Good	None
TO-15	Dichlorodifluoromethane	ug/m3	AO	0.99	2.3	2.32	0.9%	Good	None
TO-15	Ethylbenzene	ug/m3	AO	0.45	1.1	1.14	3.6%	Good	None
TO-15	Isopropanol	ug/m3	AO	0.27	29	25.3	13.6%	Good	None
TO-15	m,p-Xylene	ug/m3	AO	0.38	4.1	3.93	4.2%	Good	None
TO-15	Methyl Ethyl Ketone (2-Butanone)	ug/m3	AO	0.64	6.2	5.26	16.4%	Good	None
TO-15	Methylene Chloride	ug/m3	AO	0.38	21	18.3	13.7%	Good	None
TO-15	N-Heptane	ug/m3	AO	0.4	0.83	0.814	1.9%	Good	None
TO-15	N-Hexane	ug/m3	AO	0.39	12	10.7	11.5%	Good	None
TO-15	o-Xylene	ug/m3	AO	0.33	1.4	1.49	6.2%	Good	None
TO-15	Styrene	ug/m3	AO	0.63	1.3	1.36	4.5%	Good	None
TO-15	Tetrachloroethene (PCE)	ug/m3	AO	0.35	0.86	ND	NC	Poor	J Flag
TO-15	Toluene	ug/m3	AO	0.42	16	13.7	15.5%	Good	None
TO-15	Trichlorofluoromethane	ug/m3	AO	0.12	1.1	1.33	18.9%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: January 8, 2026	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-258838-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-258838-1	AS	GC465-SV01-1225	410-258838-1	12/19/2025 11:31		
410-258838-1	AI	GC465-PA01-1225	410-258838-2	12/19/2025 11:31		
410-258838-1	AS	GC465-SV02-1225	410-258838-3	12/19/2025 11:33		
410-258838-1	AI	GC465-FA02-1225	410-258838-4	12/19/2025 11:33		
410-258838-1	AI	GC465-SA01-1225	410-258838-5	12/19/2025 11:39		
410-258838-1	AO	GC465-OA01-1225	410-258838-6	12/19/2025 11:30		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-258838-1	AS	TO-15	Volatile Organic Compounds by GC/MS	2	N
410-258838-1	AI	TO-15	Volatile Organic Compounds by GC/MS	3	N
410-258838-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: January 8, 2026	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Sample GC465-FA01-1225 was named incorrectly as GC465-PA01-1225 at the laboratory during sample login. Sample name was revised throughout DUSR and EDD.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	Yes.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Several samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Summary of Findings
• No data usability issues were observed.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits
None.

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	752267	GC465-SV01-1225	410-258838-1	Acetone	2x Dilution
TO-15	752267	GC465-SV02-1225	410-258838-3	All Analytes	2x Dilution
TO-15	752267	GC465-SA01-1225	410-258838-5	Isopropyl Alcohol	4x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: January 8, 2026	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	410-253365-1	Eurofins – Lancaster

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
410-253365-1	AS	GC466-SV01-1125	410-253365-1	11/13/2025 9:48		
410-253365-1	AO	GC466-OA01-1125	410-253365-2	11/13/2025 10:09		
410-253365-1	AI	GC466-BA01-1125-D	410-253365-3	11/13/2025 10:11	FD	
410-253365-1	AI	GC466-BA01-1125	410-253365-4	11/13/2025 10:11		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
410-253365-1	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253365-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
410-253365-1	AI	TO-15	Volatile Organic Compounds by GC/MS	1	FD
410-253365-1	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. Sample GC466-SV01-1125 was initially named incorrectly on the COC. The laboratory revised the report and EDD to reflect the change.
Did coolers arrive at lab between 2 and 6ºC and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	However, 1 per 20 field QC frequency will be evaluated at end of sampling event. 1 Field Duplicate per 3 samples.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)
- Duplicate Results (Table 7)

Go to List

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. Tetrachloroethene exhibited high %RSD in calibration curve 77476. This compound was detected in samples GC466-BA01-1125-D and GC466-SV01-1125; therefore, results were J qualified as estimated. Samples GC466-BA01-1125 and GC466-OA01-1125 were non-detect for this compound; therefore, no qualifications were made.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	Yes.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Sample GC466-SV01-1115 was diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.
Do duplicate results show good precision for all compounds except TICs (see Table 7)?	No. Multiple analytes were outside QC criteria of 50% RPD between samples GC466-BA01-1125 and its field duplicate GC466-BA01-1125-D. When the difference between samples was >2x the PQL, results were J qualified as estimated. When the difference between results was <2x the PQL, results were not qualified.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- Tetrachloroethene was J qualified in samples GC466-BA01-1125-D and GC466-SV01-1125 due to poor initial calibration.
- Several compounds were UJ qualified in sample GC466-BA01-1125 and were J qualified in sample GC466-BA01-1125-D. See Table 7 for list of compounds.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits
None.

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	77476	ICAL	Tetrachloroethene	33.8	30	GC466-OA01-1125 GC466-BA01-1125	None – ND
						GC466-SV01-1125 GC466-BA01-1125-D	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	735911	GC466-SV01-1125	410-253365-1	All Analytes	2x Dilutions
				m,p-Xylene o-Xylene	10x Dilution

Table 7 – Summary of Duplicate Results

Method	Analyte	Unit	Matrix	PQL	GC466-BA01-1125	GC466-BA01-1125-D	RPD	RPD Rating	Qualifier
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	AI	0.41	ND	0.51	NC	Poor	None - <2x PQL
TO-15	2,2,4-Trimethylpentane	ug/m3	AI	0.18	ND	0.99	NC	Poor	J Flag
TO-15	Acetone	ug/m3	AI	3.8	19	12	45.2%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Method	Analyte	Unit	Matrix	PQL	GC466-BA01-1125	GC466-BA01-1125-D	RPD	RPD Rating	Qualifier
TO-15	Benzene	ug/m3	AI	0.14	ND	0.47	NC	Poor	J Flag
TO-15	Carbon Disulfide	ug/m3	AI	0.41	ND	0.74	NC	Poor	None - <2x PQL
TO-15	Carbon Tetrachloride	ug/m3	AI	0.14	ND	0.50	NC	Poor	J Flag
TO-15	Chloroform	ug/m3	AI	0.20	0.72	1.1	41.8%	Good	None
TO-15	Chloromethane	ug/m3	AI	0.31	ND	4.2	NC	Poor	J Flag
TO-15	Cyclohexane	ug/m3	AI	0.11	ND	0.62	NC	Poor	J Flag
TO-15	Dichlorodifluoromethane	ug/m3	AI	0.54	2.5	2.3	8.3%	Good	None
TO-15	Isopropanol	ug/m3	AI	3.9	5.6	8.4	40.0%	Good	None
TO-15	N-Hexane	ug/m3	AI	0.39	ND	0.80	NC	Poor	J Flag
TO-15	Tetrachloroethene (PCE)	ug/m3	AI	0.14	ND	1.3	NC	Poor	J Flag
TO-15	Toluene	ug/m3	AI	0.16	ND	0.48	NC	Poor	J Flag
TO-15	Trichlorofluoromethane	ug/m3	AI	0.28	1.2	1.2	0.0%	Good	None

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: December 10, 2025	Prepared by: Sayward Gohman-Kramer Reviewed by:

Acronym List and Table Key:

AI	=	indoor ambient air
AO	=	outdoor ambient air
AS	=	sub slab soil vapor
Abs Diff	=	absolute difference
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
EPA	=	Environmental Protection Agency
FD	=	field duplicate
GC/MS	=	gas chromatography / mass spectrometry
ICAL	=	initial calibration
ICV	=	initial calibration verification
LCS	=	laboratory control sample
MB	=	method blank
MDL	=	method detection limit
N	=	normal (field) sample
NC	=	not calculated
ND	=	not detected
NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
QC	=	quality control
RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: November 25, 2025	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs
  - *SOP NO. HW-34A, Rev. 1, Trace Volatile Data Validation*
  - *SOP NO. HW-35A, Rev. 1, Semivolatile Data Validation*

The data validation was performed under Category B guidelines all analysis. Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	460-339591-1	Eurofins – Edison

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
460-339591-1	WG	GC466-GW01-1125	460-339591-1	11/12/2025 10:30		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
460-339591-1	WG	SW8260D	Volatile Organic Compounds by GC/MS	1	N

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: November 25, 2025	Completed by: Sayward Gohman-Kramer

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	No. SVOC analysis was requested on the COC however there was not enough sample volume to collect. Per client request, analysis was canceled.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs Equipment Blank - 1/ set per location for all other samples?	Field QC frequency will be evaluated at end of the sampling event. No trip blank included. No equipment blank included.
Case narrative present and complete?	Yes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Blank Results (Table 2)
- Samples Qualified for Blank Contamination (Table 2A and 2B)
- Surrogates Outside Limits (Table 3)
- LCS Outside Limits (Table 4 and 4A)
- ICV/CCV Outside Limits (Table 4B)
- Internal Standards Outside Limits (Table 5)

Go to Tables List

Volatile Organic Compounds by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	No.
For samples, if results are < PQL or < 2 times the PQL for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Not applicable.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch per 20 samples?	Yes.
Is LCS within QC criteria (see Table 4)? If out, and the recovery is high with no positive values, then no data qualification is required.	Yes.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <20 %RSD or curve fit?	Yes.
Is %D in the initial and continuing calibration for target compounds less than method specifications?	No. Freon 113 was recovered below acceptance criteria in CCV 460-1076271/2. Sample was non-detect for this compound; therefore, result was UJ qualified.
Were any samples reanalyzed or diluted? For any sample reanalysis or dilutions, is only one reportable result flagged?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the analyses. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings
VOCs • Freon 113 was UJ qualified in sample GC466-GW01-1125 due to low CCV recovery.

Table 2 - List of Positive Results for Blank Samples
None.

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 - List of Samples with Surrogates outside Control Limits
None.

Table 4 - List of LCS Recoveries outside Control Limits
None.

Table 4A – List of LCS/LCSD RPDs outside Control Limits
None.

Table 4B – List of ICAL/ICV/CCV Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	Rec.	%D Limit	Associated Samples	Sample Qualifier
8260D	CCV 460-1076271/2	CCV	Freon 113	-31.0	20	GC466-GW01-1125	UJ

Table 6 – Internal Standards Outside Control Limits
None.

Data Usability Summary Report	Project: Gowanus Canal Groundwater
Date Completed: November 25, 2025	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

CCB = continuing calibration blank
CCV = continuing calibration verification
COC = chain of custody
DUSR = data usability summary report
FB = field blank
FD = field duplicate
GC/MS = gas chromatography / mass spectrometry
ICAL = initial calibration standard
ICV = initial calibration verification
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MB = method blank
MDL = method detection limit
µg/L = micrograms per liter
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate
ng/L = nanograms per liter
N = normal (field) sample
NC = not calculated
ND = not detected
NP = not provided
NYSDEC = New York State Department of Environmental Conservation
PQL = practical quantitation limit
QA = quality assurance
QAPP = quality assurance project plan
QC = quality control
RPD = relative percent difference
SIM = selective ion monitoring
SDG = sample delivery group
SVOC = semi-volatile organic compounds
TIC = tentatively identified compounds
TB = trip blank
TRG = target compound
VOC = volatile organic compounds
WG = groundwater
WH = rinsate
WQ = water quality control matrix
%D = percent difference
%RSD = percent relative standard deviation

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: May 18, 2026	Completed by: Sayward Gohman-Kramer

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation
    - SOP NO. HW-31, Revision 6, Volatile Organic Compounds in Air Contained in Canisters by Method TO-15

This validation was performed under Category B guidelines. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory Report
EE1705007.0028	26D0205	York Analytical Laboratories – Richmond Hill, NY

Table 1 Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Field QC	ID Corrections
26D0205	AS	GC466-SV01-0326	26D0205-01	3/26/2026 14:01		
26D0205	AO	GC466-OA01-0326	26D0205-02	3/26/2026 14:18		
26D0205	AI	GC466-BA01-0326	26D0205-03	3/26/2026 14:01		

Table 1A Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
26D0205	AS	TO-15	Volatile Organic Compounds by GC/MS	1	N
26D0205	AI	TO-15	Volatile Organic Compounds by GC/MS	1	N
26D0205	AO	TO-15	Volatile Organic Compounds by GC/MS	1	N

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Receipt Form?	Thermal preservation is not required.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples	No field duplicate associated with this SDG was collected. However, 1 per 20 field QC frequency will be evaluated at end of sampling event.
Case narrative present and complete?	Yes. The air canisters were batched certified to be below the reporting limit for all target analytes.
Any holding time violations?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- LCS Outside Limits (Table 3)
- CCV/ICV Outside Limits (Table 4)
- Internal Standard Outside Limits (Table 5)
- Reanalysis/Dilution Results (Table 6)

Go to List

Volatile Organic Compounds by Method TO-15	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or field blanks (see Table 2)?	Yes. Isopropanol was detected below the reporting limit in method blank BD61489-BLK1.
For samples, if results are < 2 times the blank or < 4 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	Isopropanol detections were greater than 2x the blank contamination; therefore, no qualification was made.
Is Laboratory QC frequency at least one blank and LCS with each batch?	Yes.
Is LCS within QC criteria (see Table 3)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. 2-Hexanone and 4-methyl-2-pentanone were recovered above acceptance criteria in LCS BD61489-BS1. Sample detections were J qualified and non-detects were not qualified.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 5)?	Yes.
Is initial calibration for target compounds <30 %RSD or curve fit? (see Table 4)	No. 1,2,4-Trichlorobenzene and naphthalene exhibited high %RSD in calibration curve SC60034. Sample detections were J qualified as estimated and non-detects were not qualified.
Is the initial calibration verification for target compounds between laboratory limits or 70-130%? (see Table 4)	Yes.
Is continuing calibration for target compounds <30 %D? (see Table 4)	No. Several compounds were recovered outside the acceptance criteria in CCV S6D2319-CCV1. All sample detections were qualified J as estimated and non-detects were UJ qualified as estimated non-detect.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	All samples were diluted to bring concentrations within the calibration range. The reporting limits have been adjusted accordingly. No qualification was made based on dilutions. No data usability issues were observed.
For TICs are there any system related compounds that should not be reported?	No.

Quantitation Limits and Data Assessment: Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the TO-15 analysis. These results were qualified as estimated (J) by the laboratory.

Data Validation Qualifiers Definitions:

J – The analyte QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. The 'J' qualified data may be biased high (+) or low (-) or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. The analyte QC analysis fails outside the primary acceptance limits. The "UJ" qualified data are not excluded from further review or consideration. The 'UJ' qualified data may be biased low.

Summary of Findings

- 2-Hexanone was J qualified in samples GC466-OA01-0326 and GC466-BA01-0326 due to high LCS and CCV recovery.
- 4-Methyl-2-pentanone was J qualified in sample GC466-SV01-0326 due to high LCS and CCV recovery.
- 2-Hexanone and 4-methyl-2-pentanone were UJ qualified in non-detect samples due to poor CCV recovery.
- Naphthalene was J qualified in sample GC466-SV01-0326 due to poor initial calibration.
- 1,2-Dichlorotetrachloroethane was UJ qualified in all samples due to poor CCV recovery.

Table 2 - List of Positive Results for Blank Samples

Method	Sample Name	Sample Type	Analyte	Result	Qualifier	Units	MDL	PQL
TO-15	BD61489-BLK1	MB	Isopropanol	0.344	J	ug/m3	0.059	1.47

Table 2A - List of Samples Qualified for Method Blank Contamination
None.

Table 3 – List of LCS Recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	LCS(D) R%	Low Limit	High Limit	Associated Samples	Qualifier
TO-15	BD61489-BS1	LCS	2-Hexanone	135	70	130	GC466-SV01-0326	None – High and ND
							GC466-OA01-0326 GC466-BA01-0326	J
			4-Methyl-2-pentanone	136	70	130	GC466-OA01-0326 GC466-BA01-0326	None – High and ND
							GC466-SV01-0326	J

Table 3A – List of LCS RPD outside Control Limits
None.

Table 4 – List of ICAL/ICV/CCV recoveries outside Control Limits

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
TO-15	SC60034	CAL	1,2,4-Trichlorobenzene	31.2	30	All Samples	None – ND
			Naphthalene	38.5	30	GC466-OA01-0326 GC466-BA01-0326	None – ND
						GC466-SV01-0326	J
TO-15	S6D2319-CCV1	CCV	1,2-Dichlorotetrafluoroethane	-30.1	30	All Samples	UJ
			2-Hexanone	38.2	30	GC466-SV01-0326	UJ
						GC466-OA01-0326 GC466-BA01-0326	J
			4-Methyl-2-pentanone	32.9	30	GC466-OA01-0326 GC466-BA01-0326	UJ

Method	Sample Name	Sample Type	Analyte	RRF, %RSD or %D	RRF, %RSD or %D Limit	Associated Samples	Qualifier
						GC466-SV01-0326	J

Table 5 – Internal Standard Outside Control Limits
None.

Table 6 – Samples that were Re-analyzed/Diluted

Method	Batch	Sample	Laboratory ID	Analyte	Reason
TO-15	BD61489	GC466-SV01-0326	26D0205-01	All Analytes	1.81x Dilution
	BD61503		26D0205-01 RE1	Ethylbenzene o-Xylene m,p-Xylene	18.08x Dilution
TO-15	BD61489	GC466-OA01-0326	26D0205-02	All Analytes	1.27x Dilution
TO-15	BD61489	GC466-BA01-0326	26D0205-03	All Analytes	1.27x Dilution

Data Usability Summary Report	Project: Gowanus Canal SVI
Date Completed: May 18, 2026	Completed by: Sayward Gohman-Kramer

Acronym List and Table Key:

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NYSDEC	=	New York State Department of Environmental Conservation
PQL	=	practical quantitation limit
QA	=	quality assurance
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RPD	=	relative percent difference
RRF	=	relative response factor
RSD	=	relative standard deviation
SDG	=	sample delivery group
TRG	=	target compound
%D	=	percent difference
%RSD	=	percent relative standard deviation
ug/m^3	=	microgram per cubic meter