284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

DATA PACKAGE

GENERAL CHEMISTRY
METALS
GC SEMI-VOLATILES
SEMI-VOLATILE ORGANICS
VOLATILE ORGANICS

PROJECT NAME : WALTER GLADWIN RECREATION CENTER, BRONX, NY

LIRO ENGINEERS, INC.

690 Delaware Ave.

Buffalo, NY - 14209

Phone No: 716-882-5476

ORDER ID : P1747

ATTENTION : Steve Frank

Laboratory Certification ID # 20012

CHEMTECH

Table Of Contents for P1747

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Cover Page

Order ID : P1747

Project ID : Walter Gladwin Recreation Center, Bronx, NY

Client : LiRo Engineers, Inc.

Lab Sample Number	Client Sample Number
P1747-01	MW-01
P1747-02	MW-01-DUP
P1747-03	MW-01
P1747-04	MW-02
P1747-05	TWP-04
P1747-06	TRIP-BLANK-1
P1747-07	MW-01
P1747-08	MW-01-DUP
P1747-09	MW-02
P1747-10	TWP-04

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:41 am, Mar 28, 2024
Date: 3/28/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOC-TCLVOA-10 was based on method 8260D..

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 15% in the Initial Calibration method (82N030524W.M) for Methylene Chloride this compound is passing on Linear Regression.

The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:42 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: VOC-NYCD

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for VOC-NYCD.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOC-NYCD was based on method 624.1.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

Trip Blank was not provided with this set of samples.

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Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:43 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_G using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 15% in the Initial Calibration method (Method 8270-BG031324.M) for 2-Nitrophenol , 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, these compounds are passing on Linear Regression.

The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

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E. Additional Comments:

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:43 am, Mar 28, 2024

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284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: SVOC-NYCD

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for SVOC-NYCD.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe samples were analyzed on instrument BNA_M using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-NYCD was based on method 625.1 and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for
MW-01 [2-Fluorophenol - 42%, Phenol-d6 - 23%],
MW-01RE [2-Fluorophenol - 40% and Phenol-d6 - 22%], All the failure samples in surrogates were reanalyzed to confirm the results as per method and reported in the data.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

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E. Additional Comments:

As per method, MS/MSD is required to be performed with sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:43 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for Pesticide-TCL.

C. Analytical Techniques:
The analysis was performed on instrument ECD_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. .The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .

E. Additional Comments:

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:44 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: PCB

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for PCB.

C. Analytical Techniques:
The analyses were performed on instrument GCECD_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 608.3,8082A and extraction was done based on method 3510.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for MW-01 [Tetrachloro-m-xylene(1) - 54%],AS per method one surrogate allowed to fail to meet the criteria per column, No further corrective action was taken.

The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .

The Continuous Calibration File ID PO102519.D met the requirements except for Aroclor-1260(Peak-05),Decachlorobiphenyl is failing in 2nd column,
The Continuous Calibration File ID PO102531.D met the requirements except for Aroclor-1260(Peak-05),Decachlorobiphenyl is failing in 2nd column,

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Above CCAL failing high in 2nd column but it is passing in 1st column therefore no corrective action taken.

E. Additional Comments:

As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:44 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: Dissolved ICP-TAL Metals,Dissolved Mercury,Mercury,Metals ICP-TAL,METALS-NYCD

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Anions Group1, CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for Dissolved ICP-TAL Metals,Dissolved Mercury,Mercury,Metals ICP-TAL,METALS-NYCD.

C. Analytical Techniques:
The analysis and digestion of METALS-NYCD was based on 200.7, The analysis and digestion of Mercury was based on 245.1, The analysis of Dissolved ICP-TAL Metals,Metals ICP-TAL was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of Dissolved Mercury,Mercury was based on method 7470A.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met criteria for all samples except for Chromium, Copper, Iron, Lead, Magnesium, Potassium, Sodium and Zinc Due to sample matrix interference.

E. Additional Comments:

LLCCV & LLICV are not required for 200.7 method.

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Signature_ N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:45 am, Mar 28, 2024

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

LiRo Engineers, Inc.
Project Name: Walter Gladwin Recreation Center, Bronx, NY
Project # N/A
Chemtech Project # P1747
Test Name: CBOD5,Chloride,Flash Point,Hexavalent Chromium,Non-Polar Material,Phenolics,TKN,Total Nitrogen,TS,TSS

A. Number of Samples and Date of Receipt:
10 Water samples were received on 03/13/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: CBOD5, Chloride, Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Flash Point, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-NYCD, METALS-TAL, Non-Polar Material, NYCDischarge, PCB, Pesticide-TCL, Phenolics, SVOC-NYCD, SVOC-TCL BNA -20, TKN, Total Nitrogen, TS, TSS, VOC-NYCD and VOC-TCLVOA-10. This data package contains results for CBOD5,Chloride,Flash Point,Hexavalent Chromium,Non-Polar Material,Phenolics,TKN,Total Nitrogen,TS,TSS.

C. Analytical Techniques:
The analysis of Flash Point was based on method 1010B, The analysis of Non-Polar Material was based on method 1664A, The analysis of Phenolics was based on method 420.1, The analysis of Total Nitrogen was based on method Cal, The analysis of TS was based on method SM2540 B, The analysis of TSS was based on method SM2540 D, The analysis of Hexavalent Chromium was based on method SM3500-Cr B, The analysis of TKN was based on method SM4500 N Org B or C, The analysis of Chloride was based on method SM4500-CL C and The analysis of CBOD5 was based on method SM5210 B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike analysis met criteria for all samples.
The Matrix Spike Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Additional Comments:
As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project.

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Signature N. N. Pandya

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:45 am, Mar 28, 2024

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers **"P"** for ICP instrument **"PM"** for ICP when Microwave Digestion is used **"CV"** for Manual Cold Vapor AA **"AV"** for automated Cold Vapor AA **"CA"** for MIDI-Distillation Spectrophotometric **"AS"** for Semi –Automated Spectrophotometric **"C"** for Manual Spectrophotometric **"T"** for Titrimetric **"NR"** for analyte not required to be analyzed
OR	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P1747

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: SOHIL JODHANI **Date:** 03/28/2024

2nd Level QA Review Signature: N. N. Pandya **Date:**

APPROVED
By Nimisha Pandya QA/QC Supervisor at 10:46 am, Mar 28, 2024

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**MW-01**							
P1747-01	MW-01	Water	Chloroform	31.0		0.26	1.00	ug/L
P1747-01	MW-01	Water	Bromodichloromethane	2.90		0.24	1.00	ug/L
			Total Voc :	33.9				
			Total Concentration:	33.9				
Client ID:	**MW-01-DUP**							
P1747-02	MW-01-DUP	Water	Acetone	2.30	J	1.40	5.00	ug/L
P1747-02	MW-01-DUP	Water	Chloroform	31.4		0.26	1.00	ug/L
P1747-02	MW-01-DUP	Water	Bromodichloromethane	2.90		0.24	1.00	ug/L
			Total Voc :	36.6				
			Total Concentration:	36.6				
Client ID:	**TWP-04**							
P1747-05	TWP-04	Water	Acetone	2.60	J	1.40	5.00	ug/L
			Total Voc :	2.60				
			Total Concentration:	2.60				

SAMPLE DATA

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081412.D	1		03/14/24 16:05	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	31.0		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	2.90		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081412.D	1		03/14/24 16:05	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.5		74 - 125	105%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		75 - 124	105%	SPK: 50
2037-26-5	Toluene-d8	52.2		86 - 113	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.9		64 - 133	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	304000	8.23			
540-36-3	1,4-Difluorobenzene	552000	9.106			
3114-55-4	Chlorobenzene-d5	484000	11.871			
3855-82-1	1,4-Dichlorobenzene-d4	192000	13.794			

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081412.D	1		03/14/24 16:05	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081413.D	1		03/14/24 16:29	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	2.30	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	31.4		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	2.90		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081413.D	1		03/14/24 16:29	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.3		74 - 125	107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	52.3		86 - 113	105%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.7		64 - 133	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	297000	8.23			
540-36-3	1,4-Difluorobenzene	548000	9.106			
3114-55-4	Chlorobenzene-d5	468000	11.871			
3855-82-1	1,4-Dichlorobenzene-d4	179000	13.794			

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081413.D	1		03/14/24 16:29	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081414.D	1		03/14/24 16:53	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081414.D	1		03/14/24 16:53	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.6		74 - 125	107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		75 - 124	104%	SPK: 50
2037-26-5	Toluene-d8	51.7		86 - 113	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.3		64 - 133	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	288000	8.23			
540-36-3	1,4-Difluorobenzene	536000	9.106			
3114-55-4	Chlorobenzene-d5	460000	11.871			
3855-82-1	1,4-Dichlorobenzene-d4	180000	13.794			

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081414.D	1		03/14/24 16:53	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081415.D	1		03/14/24 17:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	2.60	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081415.D	1		03/14/24 17:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.4		74 - 125	107%	SPK: 50
1868-53-7	Dibromofluoromethane	52.9		75 - 124	106%	SPK: 50
2037-26-5	Toluene-d8	51.8		86 - 113	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		64 - 133	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	294000	8.23			
540-36-3	1,4-Difluorobenzene	538000	9.106			
3114-55-4	Chlorobenzene-d5	468000	11.871			
3855-82-1	1,4-Dichlorobenzene-d4	183000	13.794			

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081415.D	1		03/14/24 17:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TRIP-BLANK-1	SDG No.:	P1747
Lab Sample ID:	P1747-06	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081410.D	1		03/14/24 15:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	0.34	U	0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
79-20-9	Methyl Acetate	0.60	U	0.60	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
74-97-5	Bromochloromethane	0.18	U	0.18	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	0.19	U	0.19	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	0.75	U	0.75	5.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TRIP-BLANK-1	SDG No.:	P1747
Lab Sample ID:	P1747-06	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081410.D	1		03/14/24 15:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.5		74 - 125	99%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		75 - 124	103%	SPK: 50
2037-26-5	Toluene-d8	52.1		86 - 113	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.4		64 - 133	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	345000	8.224			
540-36-3	1,4-Difluorobenzene	628000	9.106			
3114-55-4	Chlorobenzene-d5	533000	11.87			
3855-82-1	1,4-Dichlorobenzene-d4	206000	13.794			

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TRIP-BLANK-1	SDG No.:	P1747
Lab Sample ID:	P1747-06	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN081410.D	1		03/14/24 15:17	VN031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH
284 Sheffield Street, Mountainside, New Jersey - 07092
Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**Water**			**03/12/24**			**03/13/24**
			VOC-TCLVOA-10	8260-Low			03/14/24	
P1747-02	**MW-01-DUP**	**Water**			**03/12/24**			**03/13/24**
			VOC-TCLVOA-10	8260-Low			03/14/24	
P1747-03	**MW-01**	**Water**			**03/13/24**			**03/13/24**
			VOC-NYCD	624.1			03/14/24	
P1747-04	**MW-02**	**Water**			**03/12/24**			**03/13/24**
			VOC-TCLVOA-10	8260-Low			03/14/24	
P1747-05	**TWP-04**	**Water**			**03/12/24**			**03/13/24**
			VOC-TCLVOA-10	8260-Low			03/14/24	
P1747-06	**TRIP-BLANK-1**	**Water**			**03/12/24**			**03/13/24**
			VOC-TCLVOA-10	8260-Low			03/14/24	

CHEMTECH

Hit Summary Sheet
SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:								
				0				

Total Voc :

Total Concentration:

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-NYCD
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX040637.D	1		03/14/24 12:46	VX031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1634-04-4	Methyl tert-Butyl Ether	0.83	U	0.83	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.91	U	0.91	5.00	ug/L
67-66-3	Chloroform	0.72	U	0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.00	ug/L
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
127-18-4	Tetrachloroethene	0.94	U	0.94	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
1330-20-7	Total Xylenes	2.52	U	2.52	15.0	ug/L
106-46-7	1,4-Dichlorobenzene	0.95	U	0.95	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.6		91 - 110	102%	SPK: 30
2037-26-5	Toluene-d8	29.7		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.1		63 - 112	97%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	15500	4.897			
540-36-3	1,4-Difluorobenzene	88100	6.763			
3114-55-4	Chlorobenzene-d5	81800	10.055			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CHEMTECH
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LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-03	**MW-01**	**Water**			**03/13/24**			**03/13/24**
			VOC-NYCD	624.1			03/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Sample ID	Client ID		Parameter		Concentration	C	MDL	RDL	Units
Client ID : MW-01									
P1747-01	MW-01	WATER	1-Heptacosanol	*	2.500	J	0	0	ug/L
P1747-01	MW-01	WATER	2-(Methylmercapto)benzothiazole	*	13.900	J	0	0	ug/L
P1747-01	MW-01	WATER	3,5-Dichloro-6-cyanopyridin-2-yl	*	4.900	J	0	0	ug/L
P1747-01	MW-01	WATER	Diethyltoluamide	*	9.000	J	0	0	ug/L
P1747-01	MW-01	WATER	N-Cyclohexyl-N-methylurea, N-m	*	3.500	J	0	0	ug/L
P1747-01	MW-01	WATER	n-Hexadecanoic acid	*	2.200	J	0	0	ug/L
P1747-01	MW-01	WATER	unknown17.582	*	2.800	J	0	0	ug/L
			Total Tics :				**38.80**		
			Total Concentration:				**38.80**		
Client ID : MW-01-DUP									
P1747-02	MW-01-DUP	WATER	2-(Methylmercapto)benzothiazole	*	14.400	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	Benzamide, 3-methyl-N-methyl-N	*	9.300	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	N-Cyclohexyl-N-methylurea, N-m	*	3.400	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	n-Hexadecanoic acid	*	2.200	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	Pentadecafluorooctanoic acid, oct	*	2.100	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	unknown12.413	*	5.100	J	0	0	ug/L
P1747-02	MW-01-DUP	WATER	unknown17.853	*	3.000	J	0	0	ug/L
			Total Tics :				**39.50**		
			Total Concentration:				**39.50**		
Client ID : MW-02									
P1747-04	MW-02	WATER	n-Hexadecanoic acid	*	2.500	J	0	0	ug/L
			Total Tics :				**2.50**		
			Total Concentration:				**2.50**		
Client ID : TWP-04									
P1747-05	TWP-04	WATER	unknown16.374	*	2.200	J	0	0	ug/L
			Total Tics :				**2.20**		
			Total Concentration:				**2.20**		

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060643.D	1	03/14/24 10:06	03/14/24 17:55	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.10	U	4.10	10.2	ug/L
108-95-2	Phenol	0.95	U	0.95	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	1.20	U	1.20	5.10	ug/L
95-57-8	2-Chlorophenol	0.72	U	0.72	5.10	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.40	U	1.40	5.10	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.60	ug/L
67-72-1	Hexachloroethane	1.00	U	1.00	5.10	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.10	ug/L
78-59-1	Isophorone	1.20	U	1.20	5.10	ug/L
88-75-5	2-Nitrophenol	2.00	U	2.00	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.50	U	1.50	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1.00	U	1.00	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.90	U	0.90	5.10	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.10	ug/L
106-47-8	4-Chloroaniline	1.30	U	1.30	5.10	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.10	ug/L
105-60-2	Caprolactam	1.70	U	1.70	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	0.86	U	0.86	5.10	ug/L
91-57-6	2-Methylnaphthalene	1.20	U	1.20	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	5.10	U	5.10	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	0.91	U	0.91	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.10	ug/L
92-52-4	1,1-Biphenyl	0.93	U	0.93	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.99	U	0.99	5.10	ug/L
88-74-4	2-Nitroaniline	1.40	U	1.40	5.10	ug/L
131-11-3	Dimethylphthalate	0.95	U	0.95	5.10	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	1.30	U	1.30	5.10	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060643.D	1	03/14/24 10:06	03/14/24 17:55	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1.40	U	1.40	5.10	ug/L
83-32-9	Acenaphthene	0.83	U	0.83	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.60	U	6.60	10.2	ug/L
100-02-7	4-Nitrophenol	2.00	U	2.00	10.2	ug/L
132-64-9	Dibenzofuran	0.95	U	0.95	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.60	U	1.60	5.10	ug/L
84-66-2	Diethylphthalate	1.10	U	1.10	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1.00	U	1.00	5.10	ug/L
86-73-7	Fluorene	0.98	U	0.98	5.10	ug/L
100-01-6	4-Nitroaniline	2.10	U	2.10	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.10	U	3.10	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	0.91	U	0.91	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.97	U	0.97	5.10	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.10	ug/L
1912-24-9	Atrazine	1.30	U	1.30	5.10	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.2	ug/L
85-01-8	Phenanthrene	0.91	U	0.91	5.10	ug/L
120-12-7	Anthracene	1.10	U	1.10	5.10	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.10	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.10	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.10	U	2.10	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	1.30	U	1.30	10.2	ug/L
56-55-3	Benzo(a)anthracene	0.96	U	0.96	5.10	ug/L
218-01-9	Chrysene	0.88	U	0.88	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.60	U	2.60	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.10	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.10	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.00	U	1.00	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.10	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060643.D	1	03/14/24 10:06	03/14/24 17:55	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10	U	1.10	5.10	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.81	U	0.81	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	63.7		10 - 139	42%	SPK: 150
13127-88-3	Phenol-d6	38.1		10 - 134	25%	SPK: 150
4165-60-0	Nitrobenzene-d5	93.5		49 - 133	93%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.6		52 - 132	91%	SPK: 100
118-79-6	2,4,6-Tribromophenol	149		32 - 145	99%	SPK: 150
1718-51-0	Terphenyl-d14	92.3		36 - 145	92%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	87900	8.322			
1146-65-2	Naphthalene-d8	407000	11.166			
15067-26-2	Acenaphthene-d10	278000	14.95			
1517-22-2	Phenanthrene-d10	593000	17.693			
1719-03-5	Chrysene-d12	504000	22.012			
1520-96-3	Perylene-d12	579000	25.567			
TENTATIVE IDENTIFIED COMPOUNDS						
1000305-58-3	3,5-Dichloro-6-cyanopyridin-2-yl d	4.90	J		12.4	ug/L
031468-12-9	N-Cyclohexyl-N-methylurea, N-met	3.50	J		15.1	ug/L
000134-62-3	Diethyltoluamide	9.00	J		15.7	ug/L
000615-22-5	2-(Methylmercapto)benzothiazole	13.9	J		16.2	ug/L
	unknown17.582	2.80	J		17.9	ug/L
000057-10-3	n-Hexadecanoic acid	2.20	J		18.5	ug/L
002004-39-9	1-Heptacosanol	2.50	J		23.1	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060643.D	1	03/14/24 10:06	03/14/24 17:55	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060644.D	1	03/14/24 10:06	03/14/24 18:36	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.10	U	4.10	10.2	ug/L
108-95-2	Phenol	0.95	U	0.95	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	1.20	U	1.20	5.10	ug/L
95-57-8	2-Chlorophenol	0.72	U	0.72	5.10	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.40	U	1.40	5.10	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.60	ug/L
67-72-1	Hexachloroethane	1.00	U	1.00	5.10	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.10	ug/L
78-59-1	Isophorone	1.20	U	1.20	5.10	ug/L
88-75-5	2-Nitrophenol	2.00	U	2.00	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.50	U	1.50	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1.00	U	1.00	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.90	U	0.90	5.10	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.10	ug/L
106-47-8	4-Chloroaniline	1.30	U	1.30	5.10	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.10	ug/L
105-60-2	Caprolactam	1.70	U	1.70	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	0.86	U	0.86	5.10	ug/L
91-57-6	2-Methylnaphthalene	1.20	U	1.20	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	5.10	U	5.10	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	0.91	U	0.91	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.10	ug/L
92-52-4	1,1-Biphenyl	0.93	U	0.93	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.99	U	0.99	5.10	ug/L
88-74-4	2-Nitroaniline	1.40	U	1.40	5.10	ug/L
131-11-3	Dimethylphthalate	0.95	U	0.95	5.10	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	1.30	U	1.30	5.10	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060644.D	1	03/14/24 10:06	03/14/24 18:36	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1.40	U	1.40	5.10	ug/L
83-32-9	Acenaphthene	0.83	U	0.83	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.60	U	6.60	10.2	ug/L
100-02-7	4-Nitrophenol	2.00	U	2.00	10.2	ug/L
132-64-9	Dibenzofuran	0.95	U	0.95	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.60	U	1.60	5.10	ug/L
84-66-2	Diethylphthalate	1.10	U	1.10	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1.00	U	1.00	5.10	ug/L
86-73-7	Fluorene	0.98	U	0.98	5.10	ug/L
100-01-6	4-Nitroaniline	2.10	U	2.10	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.10	U	3.10	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	0.91	U	0.91	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.97	U	0.97	5.10	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.10	ug/L
1912-24-9	Atrazine	1.30	U	1.30	5.10	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.2	ug/L
85-01-8	Phenanthrene	0.91	U	0.91	5.10	ug/L
120-12-7	Anthracene	1.10	U	1.10	5.10	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.10	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.10	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.10	U	2.10	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	1.30	U	1.30	10.2	ug/L
56-55-3	Benzo(a)anthracene	0.96	U	0.96	5.10	ug/L
218-01-9	Chrysene	0.88	U	0.88	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.60	U	2.60	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.10	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.10	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.00	U	1.00	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.10	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060644.D	1	03/14/24 10:06	03/14/24 18:36	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10	U	1.10	5.10	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.81	U	0.81	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	60.5		10 - 139	40%	SPK: 150
13127-88-3	Phenol-d6	35.7		10 - 134	24%	SPK: 150
4165-60-0	Nitrobenzene-d5	92.7		49 - 133	93%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.1		52 - 132	90%	SPK: 100
118-79-6	2,4,6-Tribromophenol	137		32 - 145	92%	SPK: 150
1718-51-0	Terphenyl-d14	86.1		36 - 145	86%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	95400	8.323			
1146-65-2	Naphthalene-d8	446000	11.167			
15067-26-2	Acenaphthene-d10	305000	14.945			
1517-22-2	Phenanthrene-d10	669000	17.695			
1719-03-5	Chrysene-d12	584000	22.007			
1520-96-3	Perylene-d12	663000	25.562			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown12.413	5.10	J		12.4	ug/L
031468-12-9	N-Cyclohexyl-N-methylurea, N-met	3.40	J		15.1	ug/L
1000421-46-2	Benzamide, 3-methyl-N-methyl-N-pr	9.30	J		15.7	ug/L
000615-22-5	2-(Methylmercapto)benzothiazole	14.4	J		16.2	ug/L
	unknown17.853	3.00	J		17.9	ug/L
000057-10-3	n-Hexadecanoic acid	2.20	J		18.5	ug/L
1000406-04-8	Pentadecafluorooctanoic acid, octa	2.10	J		23.1	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060644.D	1	03/14/24 10:06	03/14/24 18:36	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060645.D	1	03/14/24 10:06	03/14/24 19:17	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.00	U	4.00	10.1	ug/L
108-95-2	Phenol	0.94	U	0.94	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	1.20	U	1.20	5.10	ug/L
95-57-8	2-Chlorophenol	0.72	U	0.72	5.10	ug/L
95-48-7	2-Methylphenol	1.10	U	1.10	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.40	U	1.40	5.10	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.1	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.50	ug/L
67-72-1	Hexachloroethane	1.00	U	1.00	5.10	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.10	ug/L
78-59-1	Isophorone	1.20	U	1.20	5.10	ug/L
88-75-5	2-Nitrophenol	2.00	U	2.00	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.50	U	1.50	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1.00	U	1.00	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.89	U	0.89	5.10	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.10	ug/L
106-47-8	4-Chloroaniline	1.30	U	1.30	5.10	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.10	ug/L
105-60-2	Caprolactam	1.70	U	1.70	10.1	ug/L
59-50-7	4-Chloro-3-methylphenol	0.85	U	0.85	5.10	ug/L
91-57-6	2-Methylnaphthalene	1.10	U	1.10	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	5.10	U	5.10	10.1	ug/L
88-06-2	2,4,6-Trichlorophenol	0.90	U	0.90	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.10	ug/L
92-52-4	1,1-Biphenyl	0.92	U	0.92	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.98	U	0.98	5.10	ug/L
88-74-4	2-Nitroaniline	1.40	U	1.40	5.10	ug/L
131-11-3	Dimethylphthalate	0.94	U	0.94	5.10	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	1.30	U	1.30	5.10	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060645.D	1	03/14/24 10:06	03/14/24 19:17	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1.40	U	1.40	5.10	ug/L
83-32-9	Acenaphthene	0.82	U	0.82	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.50	U	6.50	10.1	ug/L
100-02-7	4-Nitrophenol	2.00	U	2.00	10.1	ug/L
132-64-9	Dibenzofuran	0.94	U	0.94	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.50	U	1.50	5.10	ug/L
84-66-2	Diethylphthalate	1.10	U	1.10	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.99	U	0.99	5.10	ug/L
86-73-7	Fluorene	0.97	U	0.97	5.10	ug/L
100-01-6	4-Nitroaniline	2.10	U	2.10	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.10	U	3.10	10.1	ug/L
86-30-6	n-Nitrosodiphenylamine	0.90	U	0.90	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.96	U	0.96	5.10	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.10	ug/L
1912-24-9	Atrazine	1.30	U	1.30	5.10	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.1	ug/L
85-01-8	Phenanthrene	0.90	U	0.90	5.10	ug/L
120-12-7	Anthracene	1.10	U	1.10	5.10	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.10	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.10	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.10	U	2.10	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	1.30	U	1.30	10.1	ug/L
56-55-3	Benzo(a)anthracene	0.95	U	0.95	5.10	ug/L
218-01-9	Chrysene	0.87	U	0.87	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.50	U	2.50	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.10	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.10	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.00	U	1.00	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.10	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	990 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060645.D	1	03/14/24 10:06	03/14/24 19:17	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10	U	1.10	5.10	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.80	U	0.80	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	49.2		10 - 139	33%	SPK: 150
13127-88-3	Phenol-d6	28.4		10 - 134	19%	SPK: 150
4165-60-0	Nitrobenzene-d5	90.1		49 - 133	90%	SPK: 100
321-60-8	2-Fluorobiphenyl	85.2		52 - 132	85%	SPK: 100
118-79-6	2,4,6-Tribromophenol	103		32 - 145	69%	SPK: 150
1718-51-0	Terphenyl-d14	90.3		36 - 145	90%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	92600	8.322			
1146-65-2	Naphthalene-d8	433000	11.166			
15067-26-2	Acenaphthene-d10	306000	14.944			
1517-22-2	Phenanthrene-d10	647000	17.694			
1719-03-5	Chrysene-d12	547000	22.012			
1520-96-3	Perylene-d12	624000	25.561			
TENTATIVE IDENTIFIED COMPOUNDS						
000057-10-3	n-Hexadecanoic acid	2.50	J		18.5	ug/L

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060646.D	1	03/14/24 10:06	03/14/24 19:57	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.10	U	4.10	10.2	ug/L
108-95-2	Phenol	0.95	U	0.95	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	1.20	U	1.20	5.10	ug/L
95-57-8	2-Chlorophenol	0.72	U	0.72	5.10	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.40	U	1.40	5.10	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.50	U	1.50	2.60	ug/L
67-72-1	Hexachloroethane	1.00	U	1.00	5.10	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.10	ug/L
78-59-1	Isophorone	1.20	U	1.20	5.10	ug/L
88-75-5	2-Nitrophenol	2.00	U	2.00	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.50	U	1.50	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	1.00	U	1.00	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.90	U	0.90	5.10	ug/L
91-20-3	Naphthalene	1.00	U	1.00	5.10	ug/L
106-47-8	4-Chloroaniline	1.30	U	1.30	5.10	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.10	ug/L
105-60-2	Caprolactam	1.70	U	1.70	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	0.86	U	0.86	5.10	ug/L
91-57-6	2-Methylnaphthalene	1.20	U	1.20	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	5.10	U	5.10	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	0.91	U	0.91	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.10	ug/L
92-52-4	1,1-Biphenyl	0.93	U	0.93	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.99	U	0.99	5.10	ug/L
88-74-4	2-Nitroaniline	1.40	U	1.40	5.10	ug/L
131-11-3	Dimethylphthalate	0.95	U	0.95	5.10	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	1.30	U	1.30	5.10	ug/L

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060646.D	1	03/14/24 10:06	03/14/24 19:57	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
99-09-2	3-Nitroaniline	1.40	U	1.40	5.10	ug/L
83-32-9	Acenaphthene	0.83	U	0.83	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.60	U	6.60	10.2	ug/L
100-02-7	4-Nitrophenol	2.00	U	2.00	10.2	ug/L
132-64-9	Dibenzofuran	0.95	U	0.95	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.60	U	1.60	5.10	ug/L
84-66-2	Diethylphthalate	1.10	U	1.10	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	1.00	U	1.00	5.10	ug/L
86-73-7	Fluorene	0.98	U	0.98	5.10	ug/L
100-01-6	4-Nitroaniline	2.10	U	2.10	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	3.10	U	3.10	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	0.91	U	0.91	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.97	U	0.97	5.10	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.10	ug/L
1912-24-9	Atrazine	1.30	U	1.30	5.10	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.2	ug/L
85-01-8	Phenanthrene	0.91	U	0.91	5.10	ug/L
120-12-7	Anthracene	1.10	U	1.10	5.10	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.10	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.10	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.10	U	2.10	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	1.30	U	1.30	10.2	ug/L
56-55-3	Benzo(a)anthracene	0.96	U	0.96	5.10	ug/L
218-01-9	Chrysene	0.88	U	0.88	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.60	U	2.60	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.10	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.10	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.00	U	1.00	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.10	ug/L

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG060646.D	1	03/14/24 10:06	03/14/24 19:57	PB159586

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	1.10	U	1.10	5.10	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.81	U	0.81	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	60.7		10 - 139	40%	SPK: 150
13127-88-3	Phenol-d6	35.4		10 - 134	24%	SPK: 150
4165-60-0	Nitrobenzene-d5	94.5		49 - 133	94%	SPK: 100
321-60-8	2-Fluorobiphenyl	89.7		52 - 132	90%	SPK: 100
118-79-6	2,4,6-Tribromophenol	126		32 - 145	84%	SPK: 150
1718-51-0	Terphenyl-d14	88.3		36 - 145	88%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	92400	8.325			
1146-65-2	Naphthalene-d8	426000	11.169			
15067-26-2	Acenaphthene-d10	303000	14.947			
1517-22-2	Phenanthrene-d10	646000	17.69			
1719-03-5	Chrysene-d12	578000	22.009			
1520-96-3	Perylene-d12	656000	25.564			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown16.374	2.20	J		16.4	ug/L

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-02	**MW-01-DUP**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-03	**MW-01**	**Water**			**03/13/24**			**03/13/24**
			SVOC-NYCD	625.1		03/14/24	03/15/24	
P1747-03RE	**MW-01RE**	**Water**			**03/13/24**			**03/13/24**
			SVOC-NYCD	625.1		03/14/24	03/18/24	
P1747-04	**MW-02**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-05	**TWP-04**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :								
				0.000				
			Total Svoc :			**0.00**		
			Total Concentration:			**0.00**		

SAMPLE DATA

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-NYCD
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF137615.D	1	03/14/24 11:40	03/15/24 18:08	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	0.96	U	0.96	5.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	41.9	*	60 - 140	42%	SPK: 100
13127-88-3	Phenol-d6	22.8	*	60 - 140	23%	SPK: 100
4165-60-0	Nitrobenzene-d5	87.3		60 - 140	87%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.6		60 - 140	87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	98.9		60 - 140	99%	SPK: 100
1718-51-0	Terphenyl-d14	62.4		60 - 140	62%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	122000	6.722			
1146-65-2	Naphthalene-d8	481000	8.004			
15067-26-2	Acenaphthene-d10	272000	9.757			
1517-22-2	Phenanthrene-d10	476000	11.239			
1719-03-5	Chrysene-d12	380000	13.874			
1520-96-3	Perylene-d12	326000	15.298			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01RE	SDG No.:	P1747
Lab Sample ID:	P1747-03RE	Matrix:	Water
Analytical Method:	625.1	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-NYCD
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BM044656.D	1	03/14/24 11:40	03/18/24 13:12	PB159613

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
108-95-2	Phenol	0.96	U	0.96	5.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	40.2	*	60 - 140	40%	SPK: 100
13127-88-3	Phenol-d6	22.4	*	60 - 140	22%	SPK: 100
4165-60-0	Nitrobenzene-d5	94.8		60 - 140	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.0		60 - 140	96%	SPK: 100
118-79-6	2,4,6-Tribromophenol	98.4		60 - 140	98%	SPK: 100
1718-51-0	Terphenyl-d14	84.2		60 - 140	84%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	203000	7.698			
1146-65-2	Naphthalene-d8	773000	10.475			
15067-26-2	Acenaphthene-d10	429000	14.339			
1517-22-2	Phenanthrene-d10	831000	17.098			
1719-03-5	Chrysene-d12	797000	21.297			
1520-96-3	Perylene-d12	944000	23.544			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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J = Estimated Value
B = Analyte Found in Associated Method Blank
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* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
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LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-02	**MW-01-DUP**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-03	**MW-01**	**Water**			**03/13/24**			**03/13/24**
			SVOC-NYCD	625.1		03/14/24	03/15/24	
P1747-03RE	**MW-01RE**	**Water**			**03/13/24**			**03/13/24**
			SVOC-NYCD	625.1		03/14/24	03/18/24	
P1747-04	**MW-02**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	
P1747-05	**TWP-04**	**Water**			**03/12/24**			**03/13/24**
			SVOC-TCL BNA -20	8270E		03/14/24	03/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bı

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :								

Total Concentration: 0.000

SAMPLE DATA

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088618.D	1	03/14/24 10:51	03/14/24 19:02	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0063	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.016	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.0051	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.0056	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.0045	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.0093	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.0052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.0048	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.0046	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.0044	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.0077	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.0095	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.0036	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.0045	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.010	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.010	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.0062	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.0062	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.4		27 - 142	82%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.2		35 - 148	101%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088618.D	1	03/14/24 10:51	03/14/24 19:02	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088619.D	1	03/14/24 10:51	03/14/24 19:16	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0063	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.016	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.0051	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.0056	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.0045	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.0093	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.0052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.0048	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.0046	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.0044	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.0077	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.0095	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.0036	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.0045	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.010	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.010	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.0062	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.0062	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	12.2		27 - 142	61%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.3		35 - 148	97%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088619.D	1	03/14/24 10:51	03/14/24 19:16	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088620.D	1	03/14/24 10:51	03/14/24 19:30	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0062	U	0.0062	0.051	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.051	ug/L
319-86-8	delta-BHC	0.015	U	0.015	0.051	ug/L
58-89-9	gamma-BHC (Lindane)	0.0050	U	0.0050	0.051	ug/L
76-44-8	Heptachlor	0.0055	U	0.0055	0.051	ug/L
309-00-2	Aldrin	0.0045	U	0.0045	0.051	ug/L
1024-57-3	Heptachlor epoxide	0.0092	U	0.0092	0.051	ug/L
959-98-8	Endosulfan I	0.0051	U	0.0051	0.051	ug/L
60-57-1	Dieldrin	0.0048	U	0.0048	0.051	ug/L
72-55-9	4,4-DDE	0.0046	U	0.0046	0.051	ug/L
72-20-8	Endrin	0.0044	U	0.0044	0.051	ug/L
33213-65-9	Endosulfan II	0.0077	U	0.0077	0.051	ug/L
72-54-8	4,4-DDD	0.0094	U	0.0094	0.051	ug/L
1031-07-8	Endosulfan Sulfate	0.0036	U	0.0036	0.051	ug/L
50-29-3	4,4-DDT	0.0045	U	0.0045	0.051	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.051	ug/L
53494-70-5	Endrin ketone	0.0099	U	0.0099	0.051	ug/L
7421-93-4	Endrin aldehyde	0.010	U	0.010	0.051	ug/L
5103-71-9	alpha-Chlordane	0.0061	U	0.0061	0.051	ug/L
5103-74-2	gamma-Chlordane	0.0061	U	0.0061	0.051	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	15.6		27 - 142	78%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		35 - 148	111%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088620.D	1	03/14/24 10:51	03/14/24 19:30	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088621.D	1	03/14/24 10:51	03/14/24 19:44	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0063	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.016	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.0051	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.0056	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.0045	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.0093	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.0052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.0048	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.0046	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.0044	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.0077	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.0095	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.0036	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.0045	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.010	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.010	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.0062	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.0062	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.8		27 - 142	94%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.0		35 - 148	110%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	Pesticide-TCL
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL088621.D	1	03/14/24 10:51	03/14/24 19:44	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

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D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-02	**MW-01-DUP**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-03	**MW-01**	**WATER**			**03/13/24**			**03/13/24**
			PCB	608.3		03/14/24	03/15/24	
P1747-04	**MW-02**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-05	**TWP-04**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	

Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bı

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :								

Total Concentration: 0.000

SAMPLE DATA

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	WATER
Analytical Method:	SW8082A	% Solid:	0 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO102515.D	1	03/14/24 10:51	03/14/24 20:04	PB159587

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.51	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.51	ug/L
11141-16-5	Aroclor-1232	0.38	U	0.38	0.51	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.51	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.51	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.51	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.51	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.51	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.51	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	19.2		21 - 155	96%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.8		10 - 173	99%	SPK: 20

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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() = Laboratory InHouse Limit

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	WATER
Analytical Method:	SW8082A	% Solid:	0 Decanted:
Sample Wt/Vol:	970 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO102516.D	1	03/14/24 10:51	03/14/24 20:21	PB159587

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.52	ug/L
11104-28-2	Aroclor-1221	0.24	U	0.24	0.52	ug/L
11141-16-5	Aroclor-1232	0.38	U	0.38	0.52	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.52	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.52	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.52	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.52	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.52	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.52	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	19.6		21 - 155	98%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.5		10 - 173	98%	SPK: 20

Comments:

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	WATER
Analytical Method:	608.3	% Solid:	0 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	5030		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO102530.D	1	03/14/24 10:05	03/15/24 01:03	PB159600

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.015	U	0.015	0.051	ug/L
11104-28-2	Aroclor-1221	0.024	U	0.024	0.051	ug/L
11141-16-5	Aroclor-1232	0.038	U	0.038	0.051	ug/L
53469-21-9	Aroclor-1242	0.016	U	0.016	0.051	ug/L
12672-29-6	Aroclor-1248	0.012	U	0.012	0.051	ug/L
11097-69-1	Aroclor-1254	0.011	U	0.011	0.051	ug/L
11096-82-5	Aroclor-1260	0.015	U	0.015	0.051	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	10.8	*	60 - 140	54%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.1		60 - 140	111%	SPK: 20

Comments:

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	WATER
Analytical Method:	SW8082A	% Solid:	0 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO102517.D	1	03/14/24 10:51	03/14/24 20:38	PB159587

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.51	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.51	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.51	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.51	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.51	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.51	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.51	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.51	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.51	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	19.7		21 - 155	98%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.5		10 - 173	103%	SPK: 20

Comments:

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	WATER
Analytical Method:	SW8082A	% Solid:	0 Decanted:
Sample Wt/Vol:	980 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO102518.D	1	03/14/24 10:51	03/14/24 20:55	PB159587

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.51	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.51	ug/L
11141-16-5	Aroclor-1232	0.38	U	0.38	0.51	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.51	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.51	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.51	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.51	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.51	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.51	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	20.7		21 - 155	104%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.7		10 - 173	113%	SPK: 20

Comments:

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LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-02	**MW-01-DUP**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-03	**MW-01**	**WATER**			**03/13/24**			**03/13/24**
			PCB	608.3		03/14/24	03/15/24	
P1747-04	**MW-02**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-05	**TWP-04**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bronx,

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : MW-01								
P1747-01	MW-01	Water	Aluminum	123		28.3	50.0	ug/L
P1747-01	MW-01	Water	Barium	15.8	J	6.28	50.0	ug/L
P1747-01	MW-01	Water	Calcium	21300		33.0	1000	ug/L
P1747-01	MW-01	Water	Chromium	0.73	J	0.66	5.00	ug/L
P1747-01	MW-01	Water	Iron	337		18.5	50.0	ug/L
P1747-01	MW-01	Water	Magnesium	3080		39.4	1000	ug/L
P1747-01	MW-01	Water	Manganese	113		1.46	10.0	ug/L
P1747-01	MW-01	Water	Nickel	1.14	J	0.85	20.0	ug/L
P1747-01	MW-01	Water	Potassium	1840		685	1000	ug/L
P1747-01	MW-01	Water	Sodium	18100		237	1000	ug/L
P1747-01	MW-01	Water	Zinc	64.2		1.75	20.0	ug/L
Client ID : MW-01-DUP								
P1747-02	MW-01-DUP	Water	Aluminum	377		28.3	50.0	ug/L
P1747-02	MW-01-DUP	Water	Barium	19.3	J	6.28	50.0	ug/L
P1747-02	MW-01-DUP	Water	Calcium	23000		33.0	1000	ug/L
P1747-02	MW-01-DUP	Water	Chromium	1.47	J	0.66	5.00	ug/L
P1747-02	MW-01-DUP	Water	Copper	7.27	J	7.07	10.0	ug/L
P1747-02	MW-01-DUP	Water	Iron	866		18.5	50.0	ug/L
P1747-02	MW-01-DUP	Water	Magnesium	3400		39.4	1000	ug/L
P1747-02	MW-01-DUP	Water	Manganese	126		1.46	10.0	ug/L
P1747-02	MW-01-DUP	Water	Nickel	1.50	J	0.85	20.0	ug/L
P1747-02	MW-01-DUP	Water	Potassium	1940		685	1000	ug/L
P1747-02	MW-01-DUP	Water	Silver	0.60	J	0.58	5.00	ug/L
P1747-02	MW-01-DUP	Water	Sodium	18300		237	1000	ug/L
P1747-02	MW-01-DUP	Water	Zinc	67.9		1.75	20.0	ug/L
Client ID : MW-01								
P1747-03	MW-01	Water	Copper	2.30	J	1.52	10.0	ug/L
P1747-03	MW-01	Water	Mercury	0.77		0.022	0.20	ug/L
P1747-03	MW-01	Water	Nickel	17.6	J	1.28	20.0	ug/L
P1747-03	MW-01	Water	Zinc	25.7		1.44	20.0	ug/L
Client ID : MW-02								
P1747-04	MW-02	Water	Aluminum	184		28.3	50.0	ug/L
P1747-04	MW-02	Water	Barium	93.1		6.28	50.0	ug/L
P1747-04	MW-02	Water	Calcium	82300		33.0	1000	ug/L
P1747-04	MW-02	Water	Chromium	2.09	J	0.66	5.00	ug/L
P1747-04	MW-02	Water	Iron	112		18.5	50.0	ug/L
P1747-04	MW-02	Water	Magnesium	12800		39.4	1000	ug/L

Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bronx,

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
P1747-04	MW-02	Water	Manganese	4.47	J	1.46	10.0	ug/L
P1747-04	MW-02	Water	Nickel	1.08	J	0.85	20.0	ug/L
P1747-04	MW-02	Water	Potassium	5590		685	1000	ug/L
P1747-04	MW-02	Water	Selenium	7.04	J	5.88	10.0	ug/L
P1747-04	MW-02	Water	Sodium	22600		237	1000	ug/L
P1747-04	MW-02	Water	Zinc	6.28	J	1.75	20.0	ug/L
Client ID : TWP-04								
P1747-05	TWP-04	Water	Aluminum	1860		28.3	50.0	ug/L
P1747-05	TWP-04	Water	Barium	300		6.28	50.0	ug/L
P1747-05	TWP-04	Water	Beryllium	0.37	J	0.13	3.00	ug/L
P1747-05	TWP-04	Water	Calcium	105000		33.0	1000	ug/L
P1747-05	TWP-04	Water	Chromium	5.81		0.66	5.00	ug/L
P1747-05	TWP-04	Water	Cobalt	1.36	J	0.50	15.0	ug/L
P1747-05	TWP-04	Water	Iron	18000		18.5	50.0	ug/L
P1747-05	TWP-04	Water	Magnesium	30200		39.4	1000	ug/L
P1747-05	TWP-04	Water	Manganese	895		1.46	10.0	ug/L
P1747-05	TWP-04	Water	Nickel	3.13	J	0.85	20.0	ug/L
P1747-05	TWP-04	Water	Potassium	6920		685	1000	ug/L
P1747-05	TWP-04	Water	Silver	1.76	J	0.58	5.00	ug/L
P1747-05	TWP-04	Water	Sodium	61300		237	1000	ug/L
P1747-05	TWP-04	Water	Vanadium	5.60	J	3.06	20.0	ug/L
P1747-05	TWP-04	Water	Zinc	16.4	J	1.75	20.0	ug/L
Client ID : MW-01								
P1747-07	MW-01	Water	Aluminum	157		28.3	50.0	ug/L
P1747-07	MW-01	Water	Barium	16.2	J	6.28	50.0	ug/L
P1747-07	MW-01	Water	Calcium	21600		33.0	1000	ug/L
P1747-07	MW-01	Water	Chromium	7.73		0.66	5.00	ug/L
P1747-07	MW-01	Water	Iron	415		18.5	50.0	ug/L
P1747-07	MW-01	Water	Magnesium	3210		39.4	1000	ug/L
P1747-07	MW-01	Water	Manganese	116		1.46	10.0	ug/L
P1747-07	MW-01	Water	Nickel	4.36	J	0.85	20.0	ug/L
P1747-07	MW-01	Water	Potassium	1780		685	1000	ug/L
P1747-07	MW-01	Water	Sodium	18000		237	1000	ug/L
P1747-07	MW-01	Water	Zinc	64.5		1.75	20.0	ug/L
Client ID : MW-01-DUP								
P1747-08	MW-01-DUP	Water	Aluminum	369		28.3	50.0	ug/L
P1747-08	MW-01-DUP	Water	Barium	19.4	J	6.28	50.0	ug/L
P1747-08	MW-01-DUP	Water	Calcium	21600		33.0	1000	ug/L
P1747-08	MW-01-DUP	Water	Chromium	3.45	J	0.66	5.00	ug/L
P1747-08	MW-01-DUP	Water	Iron	927		18.5	50.0	ug/L

Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bronx,

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
P1747-08	MW-01-DUP	Water	Magnesium	3250		39.4	1000	ug/L
P1747-08	MW-01-DUP	Water	Manganese	121		1.46	10.0	ug/L
P1747-08	MW-01-DUP	Water	Nickel	2.23	J	0.85	20.0	ug/L
P1747-08	MW-01-DUP	Water	Potassium	1870		685	1000	ug/L
P1747-08	MW-01-DUP	Water	Silver	0.59	J	0.58	5.00	ug/L
P1747-08	MW-01-DUP	Water	Sodium	18200		237	1000	ug/L
P1747-08	MW-01-DUP	Water	Zinc	69.8		1.75	20.0	ug/L
Client ID :	**MW-02**							
P1747-09	MW-02	Water	Aluminum	489		28.3	50.0	ug/L
P1747-09	MW-02	Water	Barium	88.9		6.28	50.0	ug/L
P1747-09	MW-02	Water	Calcium	79300		33.0	1000	ug/L
P1747-09	MW-02	Water	Chromium	3.13	J	0.66	5.00	ug/L
P1747-09	MW-02	Water	Iron	345		18.5	50.0	ug/L
P1747-09	MW-02	Water	Magnesium	12500		39.4	1000	ug/L
P1747-09	MW-02	Water	Manganese	5.63	J	1.46	10.0	ug/L
P1747-09	MW-02	Water	Nickel	1.71	J	0.85	20.0	ug/L
P1747-09	MW-02	Water	Potassium	5300		685	1000	ug/L
P1747-09	MW-02	Water	Selenium	6.50	J	5.88	10.0	ug/L
P1747-09	MW-02	Water	Silver	1.49	J	0.58	5.00	ug/L
P1747-09	MW-02	Water	Sodium	21500		237	1000	ug/L
P1747-09	MW-02	Water	Zinc	4.90	J	1.75	20.0	ug/L
Client ID :	**TWP-04**							
P1747-10	TWP-04	Water	Aluminum	1820		28.3	50.0	ug/L
P1747-10	TWP-04	Water	Barium	284		6.28	50.0	ug/L
P1747-10	TWP-04	Water	Beryllium	0.40	J	0.13	3.00	ug/L
P1747-10	TWP-04	Water	Calcium	102000		33.0	1000	ug/L
P1747-10	TWP-04	Water	Chromium	8.29		0.66	5.00	ug/L
P1747-10	TWP-04	Water	Cobalt	1.40	J	0.50	15.0	ug/L
P1747-10	TWP-04	Water	Iron	17500		18.5	50.0	ug/L
P1747-10	TWP-04	Water	Magnesium	29300		39.4	1000	ug/L
P1747-10	TWP-04	Water	Manganese	861		1.46	10.0	ug/L
P1747-10	TWP-04	Water	Nickel	3.32	J	0.85	20.0	ug/L
P1747-10	TWP-04	Water	Potassium	6560		685	1000	ug/L
P1747-10	TWP-04	Water	Silver	1.61	J	0.58	5.00	ug/L
P1747-10	TWP-04	Water	Sodium	58300		237	1000	ug/L
P1747-10	TWP-04	Water	Vanadium	5.20	J	3.06	20.0	ug/L
P1747-10	TWP-04	Water	Zinc	17.6	J	1.75	20.0	ug/L

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	123		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-39-3	Barium	15.8	J	1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-70-2	Calcium	21300		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-47-3	Chromium	0.73	J	1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7439-89-6	Iron	337		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7439-95-4	Magnesium	3080		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7439-96-5	Manganese	113		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:46	SW7470A	
7440-02-0	Nickel	1.14	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-09-7	Potassium	1840		1	685	1000	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-22-4	Silver	0.58	U	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-23-5	Sodium	18100		1	237	1000	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010
7440-66-6	Zinc	64.2		1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 21:51	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	377		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-39-3	Barium	19.3	J	1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-70-2	Calcium	23000		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-47-3	Chromium	1.47	J	1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-50-8	Copper	7.27	J	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7439-89-6	Iron	866		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7439-95-4	Magnesium	3400		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7439-96-5	Manganese	126		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:48	SW7470A	
7440-02-0	Nickel	1.50	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-09-7	Potassium	1940		1	685	1000	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-22-4	Silver	0.60	J	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-23-5	Sodium	18300		1	237	1000	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010
7440-66-6	Zinc	67.9		1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 21:55	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-43-9	Cadmium	0.21	U	1	0.21	3.00	ug/L	03/14/24 11:07	03/21/24 13:43	EPA 200.7	
7440-50-8	Copper	2.30	J	1	1.52	10.0	ug/L	03/14/24 11:07	03/21/24 13:43	EPA 200.7	
7439-92-1	Lead	1.57	U	1	1.57	6.00	ug/L	03/14/24 11:07	03/21/24 13:43	EPA 200.7	
7439-97-6	Mercury	0.77		1	0.022	0.20	ug/L	03/20/24 12:11	03/20/24 15:19	E245.1	
7440-02-0	Nickel	17.6	J	1	1.28	20.0	ug/L	03/14/24 11:07	03/21/24 13:43	EPA 200.7	
7440-66-6	Zinc	25.7		1	1.44	20.0	ug/L	03/14/24 11:07	03/21/24 13:43	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	NYCDischarge				

U = Not Detected
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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	184		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-39-3	Barium	93.1		1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-70-2	Calcium	82300		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-47-3	Chromium	2.09	J	1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7439-89-6	Iron	112		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7439-95-4	Magnesium	12800		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7439-96-5	Manganese	4.47	J	1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:51	SW7470A	
7440-02-0	Nickel	1.08	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-09-7	Potassium	5590		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7782-49-2	Selenium	7.04	J	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-22-4	Silver	0.58	U	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-23-5	Sodium	22600		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010
7440-66-6	Zinc	6.28	J	1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:00	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	1860		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-39-3	Barium	300		1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-41-7	Beryllium	0.37	J	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-70-2	Calcium	105000		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-47-3	Chromium	5.81		1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-48-4	Cobalt	1.36	J	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7439-89-6	Iron	18000		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7439-95-4	Magnesium	30200		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7439-96-5	Manganese	895		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:53	SW7470A	
7440-02-0	Nickel	3.13	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-09-7	Potassium	6920		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-22-4	Silver	1.76	J	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-23-5	Sodium	61300		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-62-2	Vanadium	5.60	J	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010
7440-66-6	Zinc	16.4	J	1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:04	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
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J = Estimated Value
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N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-07	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	157		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-39-3	Barium	16.2	J	1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-70-2	Calcium	21600		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-47-3	Chromium	7.73		1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7439-89-6	Iron	415		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7439-95-4	Magnesium	3210		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7439-96-5	Manganese	116		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:55	SW7470A	
7440-02-0	Nickel	4.36	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-09-7	Potassium	1780		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-22-4	Silver	0.58	U	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-23-5	Sodium	18000		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010
7440-66-6	Zinc	64.5		1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:36	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-08	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	369		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-39-3	Barium	19.4	J	1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-70-2	Calcium	21600		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-47-3	Chromium	3.45	J	1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7439-89-6	Iron	927		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7439-95-4	Magnesium	3250		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7439-96-5	Manganese	121		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 13:58	SW7470A	
7440-02-0	Nickel	2.23	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-09-7	Potassium	1870		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-22-4	Silver	0.59	J	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-23-5	Sodium	18200		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010
7440-66-6	Zinc	69.8		1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:40	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-09	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	489		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-39-3	Barium	88.9		1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-41-7	Beryllium	0.13	U	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-70-2	Calcium	79300		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-47-3	Chromium	3.13	J	1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-48-4	Cobalt	0.50	U	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7439-89-6	Iron	345		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7439-95-4	Magnesium	12500		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7439-96-5	Manganese	5.63	J	1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 14:00	SW7470A	
7440-02-0	Nickel	1.71	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-09-7	Potassium	5300		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7782-49-2	Selenium	6.50	J	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-22-4	Silver	1.49	J	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-23-5	Sodium	21500		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-62-2	Vanadium	3.06	U	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010
7440-66-6	Zinc	4.90	J	1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:44	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-10	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	1820		1	28.3	50.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-36-0	Antimony	2.06	U	1	2.06	25.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-38-2	Arsenic	3.48	U	1	3.48	10.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-39-3	Barium	284		1	6.28	50.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-41-7	Beryllium	0.40	J	1	0.13	3.00	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-43-9	Cadmium	0.094	U	1	0.094	3.00	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-70-2	Calcium	102000		1	33.0	1000	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-47-3	Chromium	8.29		1	0.66	5.00	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-48-4	Cobalt	1.40	J	1	0.50	15.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-50-8	Copper	7.07	U	1	7.07	10.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7439-89-6	Iron	17500		1	18.5	50.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7439-92-1	Lead	3.51	U	1	3.51	6.00	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7439-95-4	Magnesium	29300		1	39.4	1000	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7439-96-5	Manganese	861		1	1.46	10.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	03/15/24 13:50	03/19/24 14:02	SW7470A	
7440-02-0	Nickel	3.32	J	1	0.85	20.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-09-7	Potassium	6560		1	685	1000	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7782-49-2	Selenium	5.88	U	1	5.88	10.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-22-4	Silver	1.61	J	1	0.58	5.00	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-23-5	Sodium	58300		1	237	1000	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-28-0	Thallium	2.32	U	1	2.32	20.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-62-2	Vanadium	5.20	J	1	3.06	20.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010
7440-66-6	Zinc	17.6	J	1	1.75	20.0	ug/L	03/14/24 11:07	03/18/24 22:49	SW6010	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**Water**			**03/12/24**			**03/13/24**
			Mercury	7470A		03/15/24	03/19/24	
			Metals ICP-TAL	6010D		03/14/24	03/18/24	
P1747-02	**MW-01-DUP**	**Water**			**03/12/24**			**03/13/24**
			Mercury	7470A		03/15/24	03/19/24	
			Metals ICP-TAL	6010D		03/14/24	03/18/24	
P1747-03	**MW-01**	**Water**			**03/13/24**			**03/13/24**
			Mercury	245.1		03/20/24	03/20/24	
			METALS-NYCD	200.7		03/14/24	03/21/24	
P1747-04	**MW-02**	**Water**			**03/12/24**			**03/13/24**
			Mercury	7470A		03/15/24	03/19/24	
			Metals ICP-TAL	6010D		03/14/24	03/18/24	
P1747-05	**TWP-04**	**Water**			**03/12/24**			**03/13/24**
			Mercury	7470A		03/15/24	03/19/24	
			Metals ICP-TAL	6010D		03/14/24	03/18/24	
P1747-07	**MW-01**	**Water**			**03/12/24**			**03/13/24**
			Dissolved ICP-TAL Metals	6010D		03/14/24	03/18/24	
			Dissolved Mercury	7470A		03/15/24	03/19/24	
P1747-08	**MW-01-DUP**	**Water**			**03/12/24**			**03/13/24**
			Dissolved ICP-TAL Metals	6010D		03/14/24	03/18/24	
			Dissolved Mercury	7470A		03/15/24	03/19/24	
P1747-09	**MW-02**	**Water**			**03/12/24**			**03/13/24**
			Dissolved ICP-TAL Metals	6010D		03/14/24	03/18/24	
			Dissolved Mercury	7470A		03/15/24	03/19/24	
P1747-10	**TWP-04**	**Water**			**03/12/24**			**03/13/24**

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LAB CHRONICLE

Dissolved ICP-TAL Metals	6010D	03/14/24	03/18/24
Dissolved Mercury	7470A	03/15/24	03/19/24

SAMPLE DATA

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24 10:00
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
CBOD5	19.0		1	0.17	2.00	mg/L		03/14/24 10:30	SM 5210 B-16
Chloride	61.2		1	0.54	5.00	mg/L		03/14/24 15:22	SM 4500-Cl C-11
Flash Point	>212		1	0	0	o F		03/14/24 13:15	1010B
Dissolved Hexavalent Chromium	0.0020	U	1	0.0020	0.010	mg/L		03/14/24 11:14	SM 3500-Cr B-11
Non-Polar Material	0.53	U	1	0.53	5.00	mg/L		03/15/24 15:00	1664A
Phenolics	0.012	U	1	0.012	0.050	mg/L	03/15/24 11:30	03/15/24 14:29	420.1
TKN	1.00		1	0.13	0.50	mg/L	03/18/24 12:40	03/19/24 11:26	SM4500-N Org C-11 plus NH3 B plus G-11
Nitrogen	1.04		1	0.15	0.60	mg/L		03/18/24 00:00	Cal
TS	576		1	1.00	5.00	mg/L		03/14/24 11:00	SM 2540 B-15
TSS	57.2		1	1.00	4.00	mg/L		03/18/24 09:30	SM 2540 D-15

Comments: Other method reference for flash point : Pensky-Martens Closed Cup Flash Point ASTM D 93 - IP 34

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time
J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-03	**MW-01**	**WATER**			**03/13/24 10:00**			**03/13/24**
			CBOD5	SM5210 B			03/14/24 10:30	
			Chloride	SM4500-CL C			03/14/24 15:22	
			Flash Point	1010B			03/14/24 13:15	
			Hexavalent Chromium	SM3500-Cr B			03/14/24 11:14	
			Non-Polar Material	1664A			03/15/24 15:00	
			Phenolics	420.1		03/15/24	03/15/24 14:29	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11		03/18/24	03/19/24 11:26	
			Total Nitrogen	Cal			03/18/24 00:00	
			TS	SM2540 B			03/14/24 11:00	
			TSS	SM2540 D			03/18/24 09:30	

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. P1747
QUOTE NO.
COC Number 2043853

13
13.1

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: LiRo Engineers, Inc.
ADDRESS: 703 Fourimer street
CITY Brooklyn STATE: NY ZIP: 11211
ATTENTION: Steve Frank / Amy Hewson
PHONE: 716 882-5476 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Walter Gladwin Park Rec. Center
PROJECT NO.: 19-294-0265.01 LOCATION: Bronx, NY
PROJECT MANAGER: Steve Frank
e-mail: franks@liro-hill.com
PHONE: 716 882-5476 FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS: Same
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: 5 day TAT DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☒ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other
☐ EDD FORMAT

ANALYSIS

1 TCL VOCs
2 SVOCs
3 PCBs
4 Pesticides
5 TAL metals *
6
7 NYCDEP Sanitary or Combined Sewer Discharge Parameters
8
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A	D	B							← Specify Preservatives: A-HCl, B-HN03, C-H2SO4, D-NaOH, E-ICE, F-OTHER
1.	MW-01	GW		X	3/12/24	0800	7	X	X	X	X	X					
2.	MW-01 DUP	GW		X	↓	0830	7	X	X	X	X	X					
3.	MW-01	GW		X	3/13/24	1000	14							X	X		
4.	MW-02	GW		X	3/12/24	1200	7	X	X	X	X	X					
5.	TWP-04	GW		X	↓	1100	7	X	X	X	X	X					
6.	Trip Blank #1	DI Water		X	—	—	2	X									
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Eva Hu	3/13/24 1220	1. 3-13-24
2.		2.
3.	3-13-24 1630	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.4 °C
Comments: * TAL Metals (Filtered & Unfiltered)

Page 1 of 1
CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☒ Picked Up ☐ Field Sampling
Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16

CHEMTECH

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P1747 LIRO01
Client Name : LiRo Engineers, Inc.
Client Contact : Steve Frank
Invoice Name : LiRo Engineers, Inc.
Invoice Contact : Steve Frank

Order Date : 3/13/2024 12:28:00 PM
Project Name : Walter Gladwin Recreation
Receive DateTime : 3/13/2024 ~~12:00:00 AM~~ 16:30
Purchase Order :

Project Mgr :
Report Type : NYS ASP A
EDD Type : NYSDEC EDD V-3
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P1747-01	MW-01	Water	03/12/2024	08:00					
					VOC-TCLVOA-10		8260-Low		5 Bus. Days
P1747-02	MW-01-DUP	Water	03/12/2024	08:30					
					VOC-TCLVOA-10		8260-Low		5 Bus. Days
P1747-03	MW-01	Water	03/13/2024	10:00					
					VOC-NYCD	NYCDischarge	624.1		5 Bus. Days
P1747-04	MW-02	Water	03/12/2024	12:00					
					VOC-TCLVOA-10		8260-Low		5 Bus. Days
P1747-05	MW-04	Water	03/12/2024	11:00					
					VOC-TCLVOA-10		8260-Low		5 Bus. Days
P1747-06	TRIP-BLANK	Water	03/12/2024	00:00					
					VOC-TCLVOA-10		8260-Low		5 Bus. Days

Relinguished By :
Date / Time : 3-14-24 0903

Received By :
Date / Time : 3/14/24 09:03

Storage Area : VOA Refridgerator Room

Ref #4
Ref #5