

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-n	*	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-n	*	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

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

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

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
Soil Aliquot Vol:			uL
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
Prep Method :	SW3510C	Level :	LOW
		Final Vol:	1000
		Test:	SVOC-TCL BNA -20
		GPC Cleanup :	N
		PH :	

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

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

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

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

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

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
Soil Aliquot Vol:			uL
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
Prep Method :	SW3510C	Level :	LOW
		Final Vol:	1000
		Test:	SVOC-TCL BNA -20
		GPC Cleanup :	N
		PH :	

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



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	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-02	MW-01-DUP	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-03	MW-01	Water	SVOC-NYCD	625.1	03/13/24	03/14/24	03/15/24	03/13/24
P1747-03RE	MW-01RE	Water	SVOC-NYCD	625.1	03/13/24	03/14/24	03/18/24	03/13/24
P1747-04	MW-02	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24
P1747-05	TWP-04	Water	SVOC-TCL BNA -20	8270E	03/12/24	03/14/24	03/14/24	03/13/24