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

LAB CHRONICLE

OrderID:	Q3468	**OrderDate:**	10/27/2025 11:00:00 AM
Client:	LiRo Engineers, Inc.	**Project:**	RFK Bridge RMB-Randall Island
Contact:	Martin Wesolowski	**Location:**	D41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3468-01	**MW-06**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/29/25	
Q3468-02	**MW-08**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/28/25	
Q3468-02DL	**MW-08DL**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/29/25	
Q3468-03	**MW-10**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/28/25	
Q3468-04	**MW-11**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/27/25	
Q3468-05	**MW-13**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/29/25	
Q3468-06	**MW-12**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/28/25	
Q3468-06DL	**MW-12DL**	**Water**			**10/23/25**			**10/24/25**
			VOCMS Group1	8260-Low			10/29/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3468

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**MW-06**							
Q3468-01	MW-06	Water	Benzene	6.30		0.15	1.00	ug/L
Q3468-01	MW-06	Water	Toluene	1.20		0.14	1.00	ug/L
Q3468-01	MW-06	Water	Ethyl Benzene	4.80		0.13	1.00	ug/L
Q3468-01	MW-06	Water	Total Xylenes	8.60		0.36	3.00	ug/L
Q3468-01	MW-06	Water	m/p-Xylenes	4.80		0.24	2.00	ug/L
Q3468-01	MW-06	Water	o-Xylene	3.80		0.12	1.00	ug/L
Q3468-01	MW-06	Water	Isopropylbenzene	20.1		0.12	1.00	ug/L
Q3468-01	MW-06	Water	n-propylbenzene	46.8		0.13	1.00	ug/L
Q3468-01	MW-06	Water	1,3,5-Trimethylbenzene	0.87	J	0.15	1.00	ug/L
Q3468-01	MW-06	Water	tert-Butylbenzene	0.46	JQ	0.14	1.00	ug/L
Q3468-01	MW-06	Water	1,2,4-Trimethylbenzene	5.70		0.14	1.00	ug/L
Q3468-01	MW-06	Water	sec-Butylbenzene	4.00		0.13	1.00	ug/L
Q3468-01	MW-06	Water	n-Butylbenzene	4.50		0.15	1.00	ug/L
Q3468-01	MW-06	Water	Naphthalene	48.5		0.20	1.00	ug/L
			Total Voc :	152				
			Total Concentration:	152				
Client ID:	**MW-08**							
Q3468-02	MW-08	Water	Benzene	120		0.15	1.00	ug/L
Q3468-02	MW-08	Water	Toluene	9.50		0.14	1.00	ug/L
Q3468-02	MW-08	Water	Ethyl Benzene	100	Q	0.13	1.00	ug/L
Q3468-02	MW-08	Water	Total Xylenes	550	E	0.36	3.00	ug/L
Q3468-02	MW-08	Water	m/p-Xylenes	310	E	0.24	2.00	ug/L
Q3468-02	MW-08	Water	o-Xylene	240	EQ	0.12	1.00	ug/L
Q3468-02	MW-08	Water	Isopropylbenzene	10.6		0.12	1.00	ug/L
Q3468-02	MW-08	Water	n-propylbenzene	16.9		0.13	1.00	ug/L
Q3468-02	MW-08	Water	1,3,5-Trimethylbenzene	15.4		0.15	1.00	ug/L
Q3468-02	MW-08	Water	1,2,4-Trimethylbenzene	350	E	0.14	1.00	ug/L
Q3468-02	MW-08	Water	sec-Butylbenzene	1.80		0.13	1.00	ug/L
Q3468-02	MW-08	Water	p-Isopropyltoluene	1.40		0.13	1.00	ug/L
Q3468-02	MW-08	Water	n-Butylbenzene	2.50		0.15	1.00	ug/L
Q3468-02	MW-08	Water	Naphthalene	210	E	0.20	1.00	ug/L
			Total Voc :	1390				
			Total Concentration:	1390				
Client ID:	**MW-08DL**							
Q3468-02DL	MW-08DL	Water	Benzene	190	D	0.75	5.00	ug/L
Q3468-02DL	MW-08DL	Water	Toluene	14.2	D	0.70	5.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q3468

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q3468-02DL	MW-08DL	Water	Ethyl Benzene	150	D	0.65	5.00	ug/L
Q3468-02DL	MW-08DL	Water	Total Xylenes	900	D	1.80	15.0	ug/L
Q3468-02DL	MW-08DL	Water	m/p-Xylenes	500	D	1.20	10.0	ug/L
Q3468-02DL	MW-08DL	Water	o-Xylene	400	D	0.60	5.00	ug/L
Q3468-02DL	MW-08DL	Water	Isopropylbenzene	15.0	D	0.60	5.00	ug/L
Q3468-02DL	MW-08DL	Water	n-propylbenzene	25.5	D	0.65	5.00	ug/L
Q3468-02DL	MW-08DL	Water	1,3,5-Trimethylbenzene	27.5	D	0.75	5.00	ug/L
Q3468-02DL	MW-08DL	Water	1,2,4-Trimethylbenzene	580	D	0.70	5.00	ug/L
Q3468-02DL	MW-08DL	Water	p-Isopropyltoluene	2.40	JD	0.65	5.00	ug/L
Q3468-02DL	MW-08DL	Water	Naphthalene	350	D	1.00	5.00	ug/L
			Total Voc :	2250				
			Total Concentration:	2250				
Client ID:	**MW-10**							
Q3468-03	MW-10	Water	Toluene	0.21	J	0.14	1.00	ug/L
Q3468-03	MW-10	Water	Total Xylenes	1.20	J	0.36	3.00	ug/L
Q3468-03	MW-10	Water	m/p-Xylenes	1.20	J	0.24	2.00	ug/L
Q3468-03	MW-10	Water	Isopropylbenzene	2.90		0.12	1.00	ug/L
Q3468-03	MW-10	Water	n-propylbenzene	2.00		0.13	1.00	ug/L
Q3468-03	MW-10	Water	1,3,5-Trimethylbenzene	0.34	J	0.15	1.00	ug/L
Q3468-03	MW-10	Water	1,2,4-Trimethylbenzene	0.39	J	0.14	1.00	ug/L
Q3468-03	MW-10	Water	sec-Butylbenzene	1.40		0.13	1.00	ug/L
Q3468-03	MW-10	Water	p-Isopropyltoluene	0.29	J	0.13	1.00	ug/L
Q3468-03	MW-10	Water	n-Butylbenzene	1.50		0.15	1.00	ug/L
Q3468-03	MW-10	Water	Naphthalene	1.80		0.20	1.00	ug/L
			Total Voc :	12.0				
			Total Concentration:	12.0				
Client ID:	**MW-11**							
Q3468-04	MW-11	Water	Total Xylenes	0.75	J	0.36	3.00	ug/L
Q3468-04	MW-11	Water	m/p-Xylenes	0.75	J	0.24	2.00	ug/L
			Total Voc :	0.75				
			Total Concentration:	0.75				
Client ID:	**MW-13**							
Q3468-05	MW-13	Water	Benzene	1.20		0.15	1.00	ug/L
Q3468-05	MW-13	Water	Ethyl Benzene	1.30		0.13	1.00	ug/L
Q3468-05	MW-13	Water	Total Xylenes	2.65	J	0.36	3.00	ug/L
Q3468-05	MW-13	Water	m/p-Xylenes	0.95	J	0.24	2.00	ug/L
Q3468-05	MW-13	Water	o-Xylene	1.70		0.12	1.00	ug/L
Q3468-05	MW-13	Water	Isopropylbenzene	0.37	J	0.12	1.00	ug/L

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Hit Summary Sheet
SW-846

SDG No.: Q3468

Client: LiRo Engineers, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q3468-05	MW-13	Water	n-propylbenzene	0.48	J	0.13	1.00	ug/L
			Total Voc :	6.00				
			Total Concentration:	6.00				
Client ID:	**MW-12**							
Q3468-06	MW-12	Water	Benzene	180	E	0.15	1.00	ug/L
Q3468-06	MW-12	Water	Toluene	140		0.14	1.00	ug/L
Q3468-06	MW-12	Water	Ethyl Benzene	600	EQ	0.13	1.00	ug/L
Q3468-06	MW-12	Water	Total Xylenes	770	E	0.36	3.00	ug/L
Q3468-06	MW-12	Water	m/p-Xylenes	330	E	0.24	2.00	ug/L
Q3468-06	MW-12	Water	o-Xylene	440	EQ	0.12	1.00	ug/L
Q3468-06	MW-12	Water	Isopropylbenzene	16.0		0.12	1.00	ug/L
Q3468-06	MW-12	Water	n-propylbenzene	31.0		0.13	1.00	ug/L
Q3468-06	MW-12	Water	1,3,5-Trimethylbenzene	4.90		0.15	1.00	ug/L
Q3468-06	MW-12	Water	1,2,4-Trimethylbenzene	390	E	0.14	1.00	ug/L
Q3468-06	MW-12	Water	p-Isopropyltoluene	1.50		0.13	1.00	ug/L
Q3468-06	MW-12	Water	n-Butylbenzene	2.20		0.15	1.00	ug/L
Q3468-06	MW-12	Water	Naphthalene	180	E	0.20	1.00	ug/L
			Total Voc :	2320				
			Total Concentration:	2320				
Client ID:	**MW-12DL**							
Q3468-06DL	MW-12DL	Water	Benzene	210	D	1.50	10.0	ug/L
Q3468-06DL	MW-12DL	Water	Toluene	160	D	1.40	10.0	ug/L
Q3468-06DL	MW-12DL	Water	Ethyl Benzene	710	D	1.30	10.0	ug/L
Q3468-06DL	MW-12DL	Water	Total Xylenes	900	D	3.60	30.0	ug/L
Q3468-06DL	MW-12DL	Water	m/p-Xylenes	390	D	2.40	20.0	ug/L
Q3468-06DL	MW-12DL	Water	o-Xylene	510	D	1.20	10.0	ug/L
Q3468-06DL	MW-12DL	Water	Isopropylbenzene	17.2	D	1.20	10.0	ug/L
Q3468-06DL	MW-12DL	Water	n-propylbenzene	34.4	D	1.30	10.0	ug/L
Q3468-06DL	MW-12DL	Water	1,2,4-Trimethylbenzene	440	D	1.40	10.0	ug/L
Q3468-06DL	MW-12DL	Water	Naphthalene	190	D	2.00	10.0	ug/L
			Total Voc :	2660				
			Total Concentration:	2660				

SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-06	SDG No.:	Q3468
Lab Sample ID:	Q3468-01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/29/25 13:03	VN102925
71-43-2	Benzene	6.30		1	0.15	1.00	ug/L	10/29/25 13:03	VN102925
108-88-3	Toluene	1.20		1	0.14	1.00	ug/L	10/29/25 13:03	VN102925
100-41-4	Ethyl Benzene	4.80		1	0.13	1.00	ug/L	10/29/25 13:03	VN102925
179601-23-1	m/p-Xylenes	4.80		1	0.24	2.00	ug/L	10/29/25 13:03	VN102925
1330-20-7	Total Xylenes	8.60		1	0.36	3.00	ug/L	10/29/25 13:03	VN102925
95-47-6	o-Xylene	3.80		1	0.12	1.00	ug/L	10/29/25 13:03	VN102925
98-82-8	Isopropylbenzene	20.1		1	0.12	1.00	ug/L	10/29/25 13:03	VN102925
103-65-1	n-propylbenzene	46.8		1	0.13	1.00	ug/L	10/29/25 13:03	VN102925
108-67-8	1,3,5-Trimethylbenzene	0.87	J	1	0.15	1.00	ug/L	10/29/25 13:03	VN102925
98-06-6	tert-Butylbenzene	0.46	JQ	1	0.14	1.00	ug/L	10/29/25 13:03	VN102925
95-63-6	1,2,4-Trimethylbenzene	5.70		1	0.14	1.00	ug/L	10/29/25 13:03	VN102925
135-98-8	sec-Butylbenzene	4.00		1	0.13	1.00	ug/L	10/29/25 13:03	VN102925
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/29/25 13:03	VN102925
104-51-8	n-Butylbenzene	4.50		1	0.15	1.00	ug/L	10/29/25 13:03	VN102925
91-20-3	Naphthalene	48.5		1	0.20	1.00	ug/L	10/29/25 13:03	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	60.3			74 - 125	121%	SPK: 50		
1868-53-7	Dibromofluoromethane	48.9			75 - 124	98%	SPK: 50		
2037-26-5	Toluene-d8	46.9			86 - 113	94%	SPK: 50		
460-00-4	4-Bromofluorobenzene	55.0			77 - 121	110%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	240000							
540-36-3	1,4-Difluorobenzene	555000							
3114-55-4	Chlorobenzene-d5	541000							
3855-82-1	1,4-Dichlorobenzene-d4	270000							

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:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-08	SDG No.:	Q3468
Lab Sample ID:	Q3468-02	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/28/25 14:40	VN102825
71-43-2	Benzene	120		1	0.15	1.00	ug/L	10/28/25 14:40	VN102825
108-88-3	Toluene	9.50		1	0.14	1.00	ug/L	10/28/25 14:40	VN102825
100-41-4	Ethyl Benzene	100	Q	1	0.13	1.00	ug/L	10/28/25 14:40	VN102825
179601-23-1	m/p-Xylenes	310	E	1	0.24	2.00	ug/L	10/28/25 14:40	VN102825
1330-20-7	Total Xylenes	550	E	1	0.36	3.00	ug/L	10/28/25 14:40	VN102825
95-47-6	o-Xylene	240	EQ	1	0.12	1.00	ug/L	10/28/25 14:40	VN102825
98-82-8	Isopropylbenzene	10.6		1	0.12	1.00	ug/L	10/28/25 14:40	VN102825
103-65-1	n-propylbenzene	16.9		1	0.13	1.00	ug/L	10/28/25 14:40	VN102825
108-67-8	1,3,5-Trimethylbenzene	15.4		1	0.15	1.00	ug/L	10/28/25 14:40	VN102825
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/28/25 14:40	VN102825
95-63-6	1,2,4-Trimethylbenzene	350	E	1	0.14	1.00	ug/L	10/28/25 14:40	VN102825
135-98-8	sec-Butylbenzene	1.80		1	0.13	1.00	ug/L	10/28/25 14:40	VN102825
99-87-6	p-Isopropyltoluene	1.40		1	0.13	1.00	ug/L	10/28/25 14:40	VN102825
104-51-8	n-Butylbenzene	2.50		1	0.15	1.00	ug/L	10/28/25 14:40	VN102825
91-20-3	Naphthalene	210	E	1	0.20	1.00	ug/L	10/28/25 14:40	VN102825
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	60.4			74 - 125	121%	SPK: 50		
1868-53-7	Dibromofluoromethane	48.3			75 - 124	97%	SPK: 50		
2037-26-5	Toluene-d8	46.7			86 - 113	93%	SPK: 50		
460-00-4	4-Bromofluorobenzene	55.4			77 - 121	111%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	281000							
540-36-3	1,4-Difluorobenzene	637000							
3114-55-4	Chlorobenzene-d5	622000							
3855-82-1	1,4-Dichlorobenzene-d4	313000							

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:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-08DL	SDG No.:	Q3468
Lab Sample ID:	Q3468-02DL	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	5.00	UD	5	0.80	5.00	ug/L	10/29/25 12:21	VN102925
71-43-2	Benzene	190	D	5	0.75	5.00	ug/L	10/29/25 12:21	VN102925
108-88-3	Toluene	14.2	D	5	0.70	5.00	ug/L	10/29/25 12:21	VN102925
100-41-4	Ethyl Benzene	150	D	5	0.65	5.00	ug/L	10/29/25 12:21	VN102925
179601-23-1	m/p-Xylenes	500	D	5	1.20	10.0	ug/L	10/29/25 12:21	VN102925
1330-20-7	Total Xylenes	900	D	5	1.80	15.0	ug/L	10/29/25 12:21	VN102925
95-47-6	o-Xylene	400	D	5	0.60	5.00	ug/L	10/29/25 12:21	VN102925
98-82-8	Isopropylbenzene	15.0	D	5	0.60	5.00	ug/L	10/29/25 12:21	VN102925
103-65-1	n-propylbenzene	25.5	D	5	0.65	5.00	ug/L	10/29/25 12:21	VN102925
108-67-8	1,3,5-Trimethylbenzene	27.5	D	5	0.75	5.00	ug/L	10/29/25 12:21	VN102925
98-06-6	tert-Butylbenzene	5.00	UDQ	5	0.70	5.00	ug/L	10/29/25 12:21	VN102925
95-63-6	1,2,4-Trimethylbenzene	580	D	5	0.70	5.00	ug/L	10/29/25 12:21	VN102925
135-98-8	sec-Butylbenzene	5.00	UD	5	0.65	5.00	ug/L	10/29/25 12:21	VN102925
99-87-6	p-Isopropyltoluene	2.40	JD	5	0.65	5.00	ug/L	10/29/25 12:21	VN102925
104-51-8	n-Butylbenzene	5.00	UD	5	0.75	5.00	ug/L	10/29/25 12:21	VN102925
91-20-3	Naphthalene	350	D	5	1.00	5.00	ug/L	10/29/25 12:21	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	54.8			74 - 125	110%	SPK: 50		
1868-53-7	Dibromofluoromethane	47.6			75 - 124	95%	SPK: 50		
2037-26-5	Toluene-d8	45.2			86 - 113	90%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.1			77 - 121	102%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	214000							
540-36-3	1,4-Difluorobenzene	486000							
3114-55-4	Chlorobenzene-d5	458000							
3855-82-1	1,4-Dichlorobenzene-d4	232000							

U = Not Detected
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Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-10	SDG No.:	Q3468
Lab Sample ID:	Q3468-03	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/28/25 13:38	VN102825
71-43-2	Benzene	1.00	U	1	0.15	1.00	ug/L	10/28/25 13:38	VN102825
108-88-3	Toluene	0.21	J	1	0.14	1.00	ug/L	10/28/25 13:38	VN102825
100-41-4	Ethyl Benzene	1.00	UQ	1	0.13	1.00	ug/L	10/28/25 13:38	VN102825
179601-23-1	m/p-Xylenes	1.20	J	1	0.24	2.00	ug/L	10/28/25 13:38	VN102825
1330-20-7	Total Xylenes	1.20	J	1	0.36	3.00	ug/L	10/28/25 13:38	VN102825
95-47-6	o-Xylene	1.00	UQ	1	0.12	1.00	ug/L	10/28/25 13:38	VN102825
98-82-8	Isopropylbenzene	2.90		1	0.12	1.00	ug/L	10/28/25 13:38	VN102825
103-65-1	n-propylbenzene	2.00		1	0.13	1.00	ug/L	10/28/25 13:38	VN102825
108-67-8	1,3,5-Trimethylbenzene	0.34	J	1	0.15	1.00	ug/L	10/28/25 13:38	VN102825
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/28/25 13:38	VN102825
95-63-6	1,2,4-Trimethylbenzene	0.39	J	1	0.14	1.00	ug/L	10/28/25 13:38	VN102825
135-98-8	sec-Butylbenzene	1.40		1	0.13	1.00	ug/L	10/28/25 13:38	VN102825
99-87-6	p-Isopropyltoluene	0.29	J	1	0.13	1.00	ug/L	10/28/25 13:38	VN102825
104-51-8	n-Butylbenzene	1.50		1	0.15	1.00	ug/L	10/28/25 13:38	VN102825
91-20-3	Naphthalene	1.80		1	0.20	1.00	ug/L	10/28/25 13:38	VN102825
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.5			74 - 125	105%	SPK: 50		
1868-53-7	Dibromofluoromethane	46.5			75 - 124	93%	SPK: 50		
2037-26-5	Toluene-d8	44.6			86 - 113	89%	SPK: 50		
460-00-4	4-Bromofluorobenzene	50.9			77 - 121	102%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	236000							
540-36-3	1,4-Difluorobenzene	530000							
3114-55-4	Chlorobenzene-d5	501000							
3855-82-1	1,4-Dichlorobenzene-d4	243000							

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-11	SDG No.:	Q3468
Lab Sample ID:	Q3468-04	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/27/25 18:41	VN102725
71-43-2	Benzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 18:41	VN102725
108-88-3	Toluene	1.00	U	1	0.14	1.00	ug/L	10/27/25 18:41	VN102725
100-41-4	Ethyl Benzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 18:41	VN102725
179601-23-1	m/p-Xylenes	0.75	J	1	0.24	2.00	ug/L	10/27/25 18:41	VN102725
1330-20-7	Total Xylenes	0.75	J	1	0.36	3.00	ug/L	10/27/25 18:41	VN102725
95-47-6	o-Xylene	1.00	U	1	0.12	1.00	ug/L	10/27/25 18:41	VN102725
98-82-8	Isopropylbenzene	1.00	U	1	0.12	1.00	ug/L	10/27/25 18:41	VN102725
103-65-1	n-propylbenzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 18:41	VN102725
108-67-8	1,3,5-Trimethylbenzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 18:41	VN102725
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/27/25 18:41	VN102725
95-63-6	1,2,4-Trimethylbenzene	1.00	U	1	0.14	1.00	ug/L	10/27/25 18:41	VN102725
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 18:41	VN102725
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/27/25 18:41	VN102725
104-51-8	n-Butylbenzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 18:41	VN102725
91-20-3	Naphthalene	1.00	U	1	0.20	1.00	ug/L	10/27/25 18:41	VN102725
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	52.6			74 - 125	105%	SPK: 50		
1868-53-7	Dibromofluoromethane	45.4			75 - 124	91%	SPK: 50		
2037-26-5	Toluene-d8	44.5			86 - 113	89%	SPK: 50		
460-00-4	4-Bromofluorobenzene	50.1			77 - 121	100%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	264000							
540-36-3	1,4-Difluorobenzene	588000							
3114-55-4	Chlorobenzene-d5	556000							
3855-82-1	1,4-Dichlorobenzene-d4	270000							

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-13	SDG No.:	Q3468
Lab Sample ID:	Q3468-05	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/29/25 18:33	VN102925
71-43-2	Benzene	1.20		1	0.15	1.00	ug/L	10/29/25 18:33	VN102925
108-88-3	Toluene	1.00	U	1	0.14	1.00	ug/L	10/29/25 18:33	VN102925
100-41-4	Ethyl Benzene	1.30		1	0.13	1.00	ug/L	10/29/25 18:33	VN102925
179601-23-1	m/p-Xylenes	0.95	J	1	0.24	2.00	ug/L	10/29/25 18:33	VN102925
1330-20-7	Total Xylenes	2.65	J	1	0.36	3.00	ug/L	10/29/25 18:33	VN102925
95-47-6	o-Xylene	1.70		1	0.12	1.00	ug/L	10/29/25 18:33	VN102925
98-82-8	Isopropylbenzene	0.37	J	1	0.12	1.00	ug/L	10/29/25 18:33	VN102925
103-65-1	n-propylbenzene	0.48	J	1	0.13	1.00	ug/L	10/29/25 18:33	VN102925
108-67-8	1,3,5-Trimethylbenzene	1.00	U	1	0.15	1.00	ug/L	10/29/25 18:33	VN102925
98-06-6	tert-Butylbenzene	1.00	UQ	1	0.14	1.00	ug/L	10/29/25 18:33	VN102925
95-63-6	1,2,4-Trimethylbenzene	1.00	U	1	0.14	1.00	ug/L	10/29/25 18:33	VN102925
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/29/25 18:33	VN102925
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/29/25 18:33	VN102925
104-51-8	n-Butylbenzene	1.00	U	1	0.15	1.00	ug/L	10/29/25 18:33	VN102925
91-20-3	Naphthalene	1.00	U	1	0.20	1.00	ug/L	10/29/25 18:33	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	54.5			74 - 125	109%	SPK: 50		
1868-53-7	Dibromofluoromethane	44.8			75 - 124	90%	SPK: 50		
2037-26-5	Toluene-d8	45.0			86 - 113	90%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.7			77 - 121	103%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	328000							
540-36-3	1,4-Difluorobenzene	751000							
3114-55-4	Chlorobenzene-d5	708000							
3855-82-1	1,4-Dichlorobenzene-d4	355000							

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-12	SDG No.:	Q3468
Lab Sample ID:	Q3468-06	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/28/25 13:59	VN102825
71-43-2	Benzene	180	E	1	0.15	1.00	ug/L	10/28/25 13:59	VN102825
108-88-3	Toluene	140		1	0.14	1.00	ug/L	10/28/25 13:59	VN102825
100-41-4	Ethyl Benzene	600	EQ	1	0.13	1.00	ug/L	10/28/25 13:59	VN102825
179601-23-1	m/p-Xylenes	330	E	1	0.24	2.00	ug/L	10/28/25 13:59	VN102825
1330-20-7	Total Xylenes	770	E	1	0.36	3.00	ug/L	10/28/25 13:59	VN102825
95-47-6	o-Xylene	440	EQ	1	0.12	1.00	ug/L	10/28/25 13:59	VN102825
98-82-8	Isopropylbenzene	16.0		1	0.12	1.00	ug/L	10/28/25 13:59	VN102825
103-65-1	n-propylbenzene	31.0		1	0.13	1.00	ug/L	10/28/25 13:59	VN102825
108-67-8	1,3,5-Trimethylbenzene	4.90		1	0.15	1.00	ug/L	10/28/25 13:59	VN102825
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/28/25 13:59	VN102825
95-63-6	1,2,4-Trimethylbenzene	390	E	1	0.14	1.00	ug/L	10/28/25 13:59	VN102825
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/28/25 13:59	VN102825
99-87-6	p-Isopropyltoluene	1.50		1	0.13	1.00	ug/L	10/28/25 13:59	VN102825
104-51-8	n-Butylbenzene	2.20		1	0.15	1.00	ug/L	10/28/25 13:59	VN102825
91-20-3	Naphthalene	180	E	1	0.20	1.00	ug/L	10/28/25 13:59	VN102825
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	54.2			74 - 125	108%	SPK: 50		
1868-53-7	Dibromofluoromethane	46.0			75 - 124	92%	SPK: 50		
2037-26-5	Toluene-d8	44.7			86 - 113	89%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.6			77 - 121	103%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	239000							
540-36-3	1,4-Difluorobenzene	532000							
3114-55-4	Chlorobenzene-d5	512000							
3855-82-1	1,4-Dichlorobenzene-d4	250000							

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	10/23/25
Project:	RFK Bridge RMB-Randall Island	Date Received:	10/24/25
Client Sample ID:	MW-12DL	SDG No.:	Q3468
Lab Sample ID:	Q3468-06DL	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	10.0	UD	10	1.60	10.0	ug/L	10/29/25 12:42	VN102925
71-43-2	Benzene	210	D	10	1.50	10.0	ug/L	10/29/25 12:42	VN102925
108-88-3	Toluene	160	D	10	1.40	10.0	ug/L	10/29/25 12:42	VN102925
100-41-4	Ethyl Benzene	710	D	10	1.30	10.0	ug/L	10/29/25 12:42	VN102925
179601-23-1	m/p-Xylenes	390	D	10	2.40	20.0	ug/L	10/29/25 12:42	VN102925
1330-20-7	Total Xylenes	900	D	10	3.60	30.0	ug/L	10/29/25 12:42	VN102925
95-47-6	o-Xylene	510	D	10	1.20	10.0	ug/L	10/29/25 12:42	VN102925
98-82-8	Isopropylbenzene	17.2	D	10	1.20	10.0	ug/L	10/29/25 12:42	VN102925
103-65-1	n-propylbenzene	34.4	D	10	1.30	10.0	ug/L	10/29/25 12:42	VN102925
108-67-8	1,3,5-Trimethylbenzene	10.0	UD	10	1.50	10.0	ug/L	10/29/25 12:42	VN102925
98-06-6	tert-Butylbenzene	10.0	UDQ	10	1.40	10.0	ug/L	10/29/25 12:42	VN102925
95-63-6	1,2,4-Trimethylbenzene	440	D	10	1.40	10.0	ug/L	10/29/25 12:42	VN102925
135-98-8	sec-Butylbenzene	10.0	UD	10	1.30	10.0	ug/L	10/29/25 12:42	VN102925
99-87-6	p-Isopropyltoluene	10.0	UD	10	1.30	10.0	ug/L	10/29/25 12:42	VN102925
104-51-8	n-Butylbenzene	10.0	UD	10	1.50	10.0	ug/L	10/29/25 12:42	VN102925
91-20-3	Naphthalene	190	D	10	2.00	10.0	ug/L	10/29/25 12:42	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	57.2			74 - 125	114%	SPK: 50		
1868-53-7	Dibromofluoromethane	48.3			75 - 124	97%	SPK: 50		
2037-26-5	Toluene-d8	46.5			86 - 113	93%	SPK: 50		
460-00-4	4-Bromofluorobenzene	52.1			77 - 121	104%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	208000							
540-36-3	1,4-Difluorobenzene	469000							
3114-55-4	Chlorobenzene-d5	447000							
3855-82-1	1,4-Dichlorobenzene-d4	226000							

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QC SUMMARY

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

Surrogate Summary

SDG No.: Q3468

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	High
Q3468-01	MW-06	1,2-Dichloroethane-d4	50	60.3	121		74	125
		Dibromofluoromethane	50	48.9	98		75	124
		Toluene-d8	50	46.9	94		86	113
		4-Bromofluorobenzene	50	55.0	110		77	121
Q3468-02	MW-08	1,2-Dichloroethane-d4	50	60.4	121		74	125
		Dibromofluoromethane	50	48.3	97		75	124
		Toluene-d8	50	46.7	93		86	113
		4-Bromofluorobenzene	50	55.4	111		77	121
Q3468-02DL	MW-08DL	1,2-Dichloroethane-d4	50	54.8	110		74	125
		Dibromofluoromethane	50	47.6	95		75	124
		Toluene-d8	50	45.3	90		86	113
		4-Bromofluorobenzene	50	51.1	102		77	121
Q3468-03	MW-10	1,2-Dichloroethane-d4	50	52.5	105		74	125
		Dibromofluoromethane	50	46.5	93		75	124
		Toluene-d8	50	44.6	89		86	113
		4-Bromofluorobenzene	50	50.9	102		77	121
Q3468-04	MW-11	1,2-Dichloroethane-d4	50	52.6	105		74	125
		Dibromofluoromethane	50	45.4	91		75	124
		Toluene-d8	50	44.5	89		86	113
		4-Bromofluorobenzene	50	50.1	100		77	121
Q3468-05	MW-13	1,2-Dichloroethane-d4	50	54.5	109		74	125
		Dibromofluoromethane	50	44.8	90		75	124
		Toluene-d8	50	45.0	90		86	113
		4-Bromofluorobenzene	50	51.7	103		77	121
Q3468-06	MW-12	1,2-Dichloroethane-d4	50	54.2	108		74	125
		Dibromofluoromethane	50	46.0	92		75	124
		Toluene-d8	50	44.7	89		86	113
		4-Bromofluorobenzene	50	51.6	103		77	121
Q3468-06DL	MW-12DL	1,2-Dichloroethane-d4	50	57.2	114		74	125
		Dibromofluoromethane	50	48.3	97		75	124
		Toluene-d8	50	46.5	93		86	113
		4-Bromofluorobenzene	50	52.1	104		77	121
VN1027WBL01	VN1027WBL01	1,2-Dichloroethane-d4	50	61.1	122		74	125
		Dibromofluoromethane	50	52.8	106		75	124
		Toluene-d8	50	49.9	100		86	113
		4-Bromofluorobenzene	50	52.0	104		77	121
VN1027WBS01	VN1027WBS01	1,2-Dichloroethane-d4	50	56.2	112		74	125
		Dibromofluoromethane	50	53.2	106		75	124
		Toluene-d8	50	51.1	102		86	113
		4-Bromofluorobenzene	50	52.6	105		77	121
VN1027WBSD0	VN1027WBSD01	1,2-Dichloroethane-d4	50	56.4	113		74	125
		Dibromofluoromethane	50	53.0	106		75	124
		Toluene-d8	50	51.0	102		86	113
		4-Bromofluorobenzene	50	52.9	106		77	121
VN1028WBL01	VN1028WBL01	1,2-Dichloroethane-d4	50	54.8	110		74	125
		Dibromofluoromethane	50	46.8	94		75	124
		Toluene-d8	50	44.8	90		86	113
		4-Bromofluorobenzene	50	48.3	97		77	121
VN1028WBS02	VN1028WBS02	1,2-Dichloroethane-d4	50	48.6	97		74	125
		Dibromofluoromethane	50	47.6	95		75	124

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Surrogate Summary

SDG No.: Q3468

Client: LiRo Engineers, Inc.

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
VN1028WBS02	VN1028WBS02	Toluene-d8	50	46.6	93		86	113
		4-Bromofluorobenzene	50	47.9	96		77	121
VN1029WBL01	VN1029WBL01	1,2-Dichloroethane-d4	50	54.5	109		74	125
		Dibromofluoromethane	50	46.6	93		75	124
		Toluene-d8	50	44.5	89		86	113
		4-Bromofluorobenzene	50	48.1	96		77	121
VN1029WBS01	VN1029WBS01	1,2-Dichloroethane-d4	50	50.6	101		74	125
		Dibromofluoromethane	50	45.9	92		75	124
		Toluene-d8	50	44.0	88		86	113
		4-Bromofluorobenzene	50	44.4	89		77	121

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3468 **Analytical Method:** SW8260-Low

Client: LiRo Engineers, Inc. **Datafile :** VN088105.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1027WBS01	Methyl tert-butyl Ether	20	21.8	ug/L	109			78	114	
	Benzene	20	21.8	ug/L	109			82	109	
	Toluene	20	21.5	ug/L	108			82	110	
	Ethyl Benzene	20	20.9	ug/L	104			83	109	
	m/p-Xylenes	40	42.1	ug/L	105			82	110	
	o-Xylene	20	21.2	ug/L	106			83	109	
	Isopropylbenzene	20	20.1	ug/L	101			83	112	
	N-propylbenzene	20	20.4	ug/L	102			83	112	
	1,3,5-Trimethylbenzene	20	20.3	ug/L	102			85	112	
	tert-Butylbenzene	20	19.5	ug/L	98			83	112	
	1,2,4-Trimethylbenzene	20	20.6	ug/L	103			85	111	
	Sec-butylbenzene	20	19.9	ug/L	100			81	114	
	p-Isopropyltoluene	20	20.5	ug/L	103			78	116	
	n-Butylbenzene	20	20.1	ug/L	101			75	115	
	Naphthalene	20	19.9	ug/L	100			78	119	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3468 **Analytical Method:** SW8260-Low

Client: LiRo Engineers, Inc. **Datafile :** VN088106.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1027WBSD01	Methyl tert-butyl Ether	20	21.8	ug/L	109	0		78	114	20
	Benzene	20	21.8	ug/L	109	0		82	109	15
	Toluene	20	21.6	ug/L	108	0		82	110	16
	Ethyl Benzene	20	21.4	ug/L	107	3		83	109	16
	m/p-Xylenes	40	42.3	ug/L	106	1		82	110	15
	o-Xylene	20	21.4	ug/L	107	1		83	109	20
	Isopropylbenzene	20	20.6	ug/L	103	2		83	112	29
	N-propylbenzene	20	21.0	ug/L	105	3		83	112	20
	1,3,5-Trimethylbenzene	20	21.3	ug/L	106	4		85	112	20
	tert-Butylbenzene	20	20.1	ug/L	101	3		83	112	20
	1,2,4-Trimethylbenzene	20	21.2	ug/L	106	3		85	111	20
	Sec-butylbenzene	20	20.5	ug/L	103	3		81	114	20
	p-Isopropyltoluene	20	21.0	ug/L	105	2		78	116	20
	n-Butylbenzene	20	20.9	ug/L	104	3		75	115	20
	Naphthalene	20	21.1	ug/L	106	6		78	119	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3468 **Analytical Method:** SW8260-Low

Client: LiRo Engineers, Inc. **Datafile :** VN088131.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1028WBS02	Methyl tert-butyl Ether	20	21.2	ug/L	106			78	114	
	Benzene	20	21.7	ug/L	109			82	109	
	Toluene	20	21.5	ug/L	108			82	110	
	Ethyl Benzene	20	22.0	ug/L	110		*	83	109	
	m/p-Xylenes	40	43.2	ug/L	108			82	110	
	o-Xylene	20	22.1	ug/L	111		*	83	109	
	Isopropylbenzene	20	21.3	ug/L	106			83	112	
	N-propylbenzene	20	21.7	ug/L	109			83	112	
	1,3,5-Trimethylbenzene	20	21.9	ug/L	110			85	112	
	tert-Butylbenzene	20	21.1	ug/L	106			83	112	
	1,2,4-Trimethylbenzene	20	22.0	ug/L	110			85	111	
	Sec-butylbenzene	20	21.6	ug/L	108			81	114	
	p-Isopropyltoluene	20	22.5	ug/L	113			78	116	
	n-Butylbenzene	20	21.5	ug/L	108			75	115	
	Naphthalene	20	20.8	ug/L	104			78	119	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3468 **Analytical Method:** SW8260-Low

Client: LiRo Engineers, Inc. **Datafile :** VN088150.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VN1029WBS01	Methyl tert-butyl Ether	20	19.6	ug/L	98			78	114	
	Benzene	20	19.2	ug/L	96			82	109	
	Toluene	20	18.6	ug/L	93			82	110	
	Ethyl Benzene	20	18.2	ug/L	91			83	109	
	m/p-Xylenes	40	35.7	ug/L	89			82	110	
	o-Xylene	20	18.3	ug/L	92			83	109	
	Isopropylbenzene	20	17.1	ug/L	86			83	112	
	N-propylbenzene	20	17.0	ug/L	85			83	112	
	1,3,5-Trimethylbenzene	20	17.8	ug/L	89			85	112	
	tert-Butylbenzene	20	16.2	ug/L	81		*	83	112	
	1,2,4-Trimethylbenzene	20	17.8	ug/L	89			85	111	
	Sec-butylbenzene	20	16.3	ug/L	81			81	114	
	p-Isopropyltoluene	20	17.2	ug/L	86			78	116	
	n-Butylbenzene	20	16.6	ug/L	83			75	115	
	Naphthalene	20	17.3	ug/L	86			78	119	

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN1027WBL01

Lab Name: Alliance | Contract: LIRO01

Lab Code: ACE | SDG NO.: Q3468

Lab File ID: VN088104.D | Lab Sample ID: VN1027WBL01

Date Analyzed: 10/27/2025 | Time Analyzed: 11:34

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1027WBS01	VN1027WBS01	VN088105.D	10/27/2025
VN1027WBSD01	VN1027WBSD01	VN088106.D	10/27/2025
MW-11	Q3468-04	VN088124.D	10/27/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN1028WBL01

Lab Name: Alliance | Contract: LIRO01

Lab Code: ACE | SDG NO.: Q3468

Lab File ID: VN088129.D | Lab Sample ID: VN1028WBL01

Date Analyzed: 10/28/2025 | Time Analyzed: 11:17

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1028WBS02	VN1028WBS02	VN088131.D	10/28/2025
MW-10	Q3468-03	VN088135.D	10/28/2025
MW-12	Q3468-06	VN088136.D	10/28/2025
MW-08	Q3468-02	VN088138.D	10/28/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

Client ID: VN1029WBL01

Lab Name: Alliance | Contract: LIRO01

Lab Code: ACE | SDG NO.: Q3468

Lab File ID: VN088149.D | Lab Sample ID: VN1029WBL01

Date Analyzed: 10/29/2025 | Time Analyzed: 11:06

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN1029WBS01	VN1029WBS01	VN088150.D	10/29/2025
MW-08DL	Q3468-02DL	VN088152.D	10/29/2025
MW-12DL	Q3468-06DL	VN088153.D	10/29/2025
MW-06	Q3468-01	VN088154.D	10/29/2025
MW-13	Q3468-05	VN088170.D	10/29/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: LIRO01
Lab Code: ACE
SDG NO.: Q3468
Lab File ID: VN088077.D
BFB Injection Date: 10/23/2025
Instrument ID: MSVOA_N
BFB Injection Time: 09:09
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 60.0% of mass 95	56
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (0.6) 1
174	50.0 - 100.0% of mass 95	64.7
175	5.0 - 9.0% of mass 174	5.8 (8.9) 1
176	95.0 - 101.0% of mass 174	62.6 (96.8) 1
177	5.0 - 9.0% of mass 176	4.5 (7.2) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN088078.D	10/23/2025	09:42
VSTDICC005	VSTDICC005	VN088079.D	10/23/2025	10:38
VSTDICC020	VSTDICC020	VN088080.D	10/23/2025	10:59
VSTDICCC050	VSTDICCC050	VN088081.D	10/23/2025	11:20
VSTDICC100	VSTDICC100	VN088082.D	10/23/2025	11:41
VSTDICC150	VSTDICC150	VN088083.D	10/23/2025	12:02

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: LIRO01

Lab Code: ACE | SDG NO.: Q3468

Lab File ID: VN088101.D | BFB Injection Date: 10/27/2025

Instrument ID: MSVOA_N | BFB Injection Time: 09:58

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.7
75	30.0 - 60.0% of mass 95	57.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.4 (0.6) 1
174	50.0 - 100.0% of mass 95	68.6
175	5.0 - 9.0% of mass 174	5.1 (7.4) 1
176	95.0 - 101.0% of mass 174	65.3 (95.2) 1
177	5.0 - 9.0% of mass 176	4.2 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN088102.D	10/27/2025	10:40
VN1027WBL01	VN1027WBL01	VN088104.D	10/27/2025	11:34
VN1027WBS01	VN1027WBS01	VN088105.D	10/27/2025	11:55
VN1027WBSD01	VN1027WBSD01	VN088106.D	10/27/2025	12:29
MW-11	Q3468-04	VN088124.D	10/27/2025	18:41

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A B C D E F G

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: LIRO01

Lab Code: ACE | SDG NO.: Q3468

Lab File ID: VN088126.D | BFB Injection Date: 10/28/2025

Instrument ID: MSVOA_N | BFB Injection Time: 09:26

GC Column: RXI-624 ID: 0.25 (mm) | Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.1
75	30.0 - 60.0% of mass 95	57.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.7 (1.1) 1
174	50.0 - 100.0% of mass 95	66.3
175	5.0 - 9.0% of mass 174	5 (7.6) 1
176	95.0 - 101.0% of mass 174	65 (98) 1
177	5.0 - 9.0% of mass 176	4.2 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN088127.D	10/28/2025	10:23
VN1028WBL01	VN1028WBL01	VN088129.D	10/28/2025	11:17
VN1028WBS02	VN1028WBS02	VN088131.D	10/28/2025	12:14
MW-10	Q3468-03	VN088135.D	10/28/2025	13:38
MW-12	Q3468-06	VN088136.D	10/28/2025	13:59
MW-08	Q3468-02	VN088138.D	10/28/2025	14:40

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: LIRO01
Lab Code: ACE
SDG NO.: Q3468
Lab File ID: VN088146.D
BFB Injection Date: 10/29/2025
Instrument ID: MSVOA_N
BFB Injection Time: 09:07
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.7
75	30.0 - 60.0% of mass 95	59.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.8 (1.2) 1
174	50.0 - 100.0% of mass 95	67.6
175	5.0 - 9.0% of mass 174	5 (7.4) 1
176	95.0 - 101.0% of mass 174	66.9 (99) 1
177	5.0 - 9.0% of mass 176	4.6 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN088147.D	10/29/2025	10:24
VN1029WBL01	VN1029WBL01	VN088149.D	10/29/2025	11:06
VN1029WBS01	VN1029WBS01	VN088150.D	10/29/2025	11:27
MW-08DL	Q3468-02DL	VN088152.D	10/29/2025	12:21
MW-12DL	Q3468-06DL	VN088153.D	10/29/2025	12:42
MW-06	Q3468-01	VN088154.D	10/29/2025	13:03
MW-13	Q3468-05	VN088170.D	10/29/2025	18:33

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088102.D Date Analyzed: 10/27/2025

Instrument ID: MSVOA_N Time Analyzed: 10:40

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	321965	8.21	587119	9.08	522069	11.84
UPPER LIMIT	643930	8.706	1174240	9.582	1044140	12.341
LOWER LIMIT	160983	7.706	293560	8.582	261035	11.341
EPA SAMPLE NO.						
MW-11	263533	8.21	588016	9.08	556110	11.84
VN1027WBL01	198801	8.21	446179	9.08	422679	11.84
VN1027WBS01	300941	8.21	563874	9.08	505093	11.85
VN1027WBSD01	293635	8.21	537984	9.08	482887	11.85

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088102.D Date Analyzed: 10/27/2025

Instrument ID: MSVOA_N Time Analyzed: 10:40

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	267876	13.77				
UPPER LIMIT	535752	14.27				
LOWER LIMIT	133938	13.27				
EPA SAMPLE NO.						
MW-11	269618	13.77				
VN1027WBL01	199580	13.77				
VN1027WBS01	256562	13.77				
VN1027WBSD01	241641	13.77				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088127.D Date Analyzed: 10/28/2025

Instrument ID: MSVOA_N Time Analyzed: 10:23

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	299407	8.21	575460	9.08	507990	11.85
UPPER LIMIT	598814	8.706	1150920	9.582	1015980	12.347
LOWER LIMIT	149704	7.706	287730	8.582	253995	11.347
EPA SAMPLE NO.						
MW-08	280779	8.21	636841	9.08	622260	11.85
MW-10	236497	8.21	529671	9.08	500860	11.85
MW-12	238860	8.21	531874	9.08	512440	11.85
VN1028WBL01	231261	8.21	516618	9.08	484454	11.85
VN1028WBS02	325166	8.21	590689	9.08	518318	11.85

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088127.D Date Analyzed: 10/28/2025

Instrument ID: MSVOA_N Time Analyzed: 10:23

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	256667	13.77				
UPPER LIMIT	513334	14.27				
LOWER LIMIT	128334	13.27				
EPA SAMPLE NO.						
MW-08	313348	13.77				
MW-10	243219	13.77				
MW-12	250379	13.77				
VN1028WBL01	238378	13.77				
VN1028WBS02	257534	13.77				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088147.D Date Analyzed: 10/29/2025

Instrument ID: MSVOA_N Time Analyzed: 10:24

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	276791	8.21	513941	9.08	450607	11.85
UPPER LIMIT	553582	8.706	1027880	9.583	901214	12.347
LOWER LIMIT	138396	7.706	256971	8.583	225304	11.347
EPA SAMPLE NO.						
MW-06	239807	8.21	555035	9.08	540568	11.85
MW-08DL	214217	8.21	486300	9.08	458325	11.85
MW-13	328066	8.21	750626	9.08	708184	11.85
MW-12DL	208467	8.21	468936	9.08	447110	11.85
VN1029WBL01	220088	8.21	494622	9.08	463889	11.85
VN1029WBS01	234631	8.21	449642	9.08	401244	11.85

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG NO.: Q3468

Lab File ID: VN088147.D Date Analyzed: 10/29/2025

Instrument ID: MSVOA_N Time Analyzed: 10:24

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	235546	13.77				
UPPER LIMIT	471092	14.27				
LOWER LIMIT	117773	13.27				
EPA SAMPLE NO.						
MW-06	270083	13.77				
MW-08DL	232108	13.77				
MW-13	354853	13.77				
MW-12DL	226296	13.77				
VN1029WBL01	222427	13.77				
VN1029WBS01	206462	13.77				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

QC SAMPLE DATA

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1027WBL01	SDG No.:	Q3468
Lab Sample ID:	VN1027WBL01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/27/25 11:34	VN102725
71-43-2	Benzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 11:34	VN102725
108-88-3	Toluene	1.00	U	1	0.14	1.00	ug/L	10/27/25 11:34	VN102725
100-41-4	Ethyl Benzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 11:34	VN102725
179601-23-1	m/p-Xylenes	2.00	U	1	0.24	2.00	ug/L	10/27/25 11:34	VN102725
1330-20-7	Total Xylenes	3.00	U	1	0.36	3.00	ug/L	10/27/25 11:34	VN102725
95-47-6	o-Xylene	1.00	U	1	0.12	1.00	ug/L	10/27/25 11:34	VN102725
98-82-8	Isopropylbenzene	1.00	U	1	0.12	1.00	ug/L	10/27/25 11:34	VN102725
103-65-1	n-propylbenzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 11:34	VN102725
108-67-8	1,3,5-Trimethylbenzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 11:34	VN102725
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/27/25 11:34	VN102725
95-63-6	1,2,4-Trimethylbenzene	1.00	U	1	0.14	1.00	ug/L	10/27/25 11:34	VN102725
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/27/25 11:34	VN102725
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/27/25 11:34	VN102725
104-51-8	n-Butylbenzene	1.00	U	1	0.15	1.00	ug/L	10/27/25 11:34	VN102725
91-20-3	Naphthalene	1.00	U	1	0.20	1.00	ug/L	10/27/25 11:34	VN102725
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	61.1			74 - 125	122%	SPK: 50		
1868-53-7	Dibromofluoromethane	52.8			75 - 124	106%	SPK: 50		
2037-26-5	Toluene-d8	49.9			86 - 113	100%	SPK: 50		
460-00-4	4-Bromofluorobenzene	51.9			77 - 121	104%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	199000							
540-36-3	1,4-Difluorobenzene	446000							
3114-55-4	Chlorobenzene-d5	423000							
3855-82-1	1,4-Dichlorobenzene-d4	200000							

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

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1028WBL01	SDG No.:	Q3468
Lab Sample ID:	VN1028WBL01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/28/25 11:17	VN102825
71-43-2	Benzene	1.00	U	1	0.15	1.00	ug/L	10/28/25 11:17	VN102825
108-88-3	Toluene	1.00	U	1	0.14	1.00	ug/L	10/28/25 11:17	VN102825
100-41-4	Ethyl Benzene	1.00	U	1	0.13	1.00	ug/L	10/28/25 11:17	VN102825
179601-23-1	m/p-Xylenes	2.00	U	1	0.24	2.00	ug/L	10/28/25 11:17	VN102825
1330-20-7	Total Xylenes	3.00	U	1	0.36	3.00	ug/L	10/28/25 11:17	VN102825
95-47-6	o-Xylene	1.00	U	1	0.12	1.00	ug/L	10/28/25 11:17	VN102825
98-82-8	Isopropylbenzene	1.00	U	1	0.12	1.00	ug/L	10/28/25 11:17	VN102825
103-65-1	n-propylbenzene	1.00	U	1	0.13	1.00	ug/L	10/28/25 11:17	VN102825
108-67-8	1,3,5-Trimethylbenzene	1.00	U	1	0.15	1.00	ug/L	10/28/25 11:17	VN102825
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/28/25 11:17	VN102825
95-63-6	1,2,4-Trimethylbenzene	1.00	U	1	0.14	1.00	ug/L	10/28/25 11:17	VN102825
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/28/25 11:17	VN102825
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/28/25 11:17	VN102825
104-51-8	n-Butylbenzene	1.00	U	1	0.15	1.00	ug/L	10/28/25 11:17	VN102825
91-20-3	Naphthalene	1.00	U	1	0.20	1.00	ug/L	10/28/25 11:17	VN102825
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	54.8			74 - 125	110%	SPK: 50		
1868-53-7	Dibromofluoromethane	46.8			75 - 124	94%	SPK: 50		
2037-26-5	Toluene-d8	44.8			86 - 113	90%	SPK: 50		
460-00-4	4-Bromofluorobenzene	48.3			77 - 121	97%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	231000							
540-36-3	1,4-Difluorobenzene	517000							
3114-55-4	Chlorobenzene-d5	484000							
3855-82-1	1,4-Dichlorobenzene-d4	238000							

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A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1029WBL01	SDG No.:	Q3468
Lab Sample ID:	VN1029WBL01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	1.00	U	1	0.16	1.00	ug/L	10/29/25 11:06	VN102925
71-43-2	Benzene	1.00	U	1	0.15	1.00	ug/L	10/29/25 11:06	VN102925
108-88-3	Toluene	1.00	U	1	0.14	1.00	ug/L	10/29/25 11:06	VN102925
100-41-4	Ethyl Benzene	1.00	U	1	0.13	1.00	ug/L	10/29/25 11:06	VN102925
179601-23-1	m/p-Xylenes	2.00	U	1	0.24	2.00	ug/L	10/29/25 11:06	VN102925
1330-20-7	Total Xylenes	3.00	U	1	0.36	3.00	ug/L	10/29/25 11:06	VN102925
95-47-6	o-Xylene	1.00	U	1	0.12	1.00	ug/L	10/29/25 11:06	VN102925
98-82-8	Isopropylbenzene	1.00	U	1	0.12	1.00	ug/L	10/29/25 11:06	VN102925
103-65-1	n-propylbenzene	1.00	U	1	0.13	1.00	ug/L	10/29/25 11:06	VN102925
108-67-8	1,3,5-Trimethylbenzene	1.00	U	1	0.15	1.00	ug/L	10/29/25 11:06	VN102925
98-06-6	tert-Butylbenzene	1.00	U	1	0.14	1.00	ug/L	10/29/25 11:06	VN102925
95-63-6	1,2,4-Trimethylbenzene	1.00	U	1	0.14	1.00	ug/L	10/29/25 11:06	VN102925
135-98-8	sec-Butylbenzene	1.00	U	1	0.13	1.00	ug/L	10/29/25 11:06	VN102925
99-87-6	p-Isopropyltoluene	1.00	U	1	0.13	1.00	ug/L	10/29/25 11:06	VN102925
104-51-8	n-Butylbenzene	1.00	U	1	0.15	1.00	ug/L	10/29/25 11:06	VN102925
91-20-3	Naphthalene	1.00	U	1	0.20	1.00	ug/L	10/29/25 11:06	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	54.5			74 - 125	109%	SPK: 50		
1868-53-7	Dibromofluoromethane	46.6			75 - 124	93%	SPK: 50		
2037-26-5	Toluene-d8	44.5			86 - 113	89%	SPK: 50		
460-00-4	4-Bromofluorobenzene	48.1			77 - 121	96%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	220000							
540-36-3	1,4-Difluorobenzene	495000							
3114-55-4	Chlorobenzene-d5	464000							
3855-82-1	1,4-Dichlorobenzene-d4	222000							

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Fax : 908 789 8922

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1027WBS01	SDG No.:	Q3468
Lab Sample ID:	VN1027WBS01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	21.8		1	0.16	1.00	ug/L	10/27/25 11:55	VN102725
71-43-2	Benzene	21.8		1	0.15	1.00	ug/L	10/27/25 11:55	VN102725
108-88-3	Toluene	21.5		1	0.14	1.00	ug/L	10/27/25 11:55	VN102725
100-41-4	Ethyl Benzene	20.9		1	0.13	1.00	ug/L	10/27/25 11:55	VN102725
179601-23-1	m/p-Xylenes	42.1		1	0.24	2.00	ug/L	10/27/25 11:55	VN102725
1330-20-7	Total Xylenes	63.3		1	0.36	3.00	ug/L	10/27/25 11:55	VN102725
95-47-6	o-Xylene	21.2		1	0.12	1.00	ug/L	10/27/25 11:55	VN102725
98-82-8	Isopropylbenzene	20.1		1	0.12	1.00	ug/L	10/27/25 11:55	VN102725
103-65-1	n-propylbenzene	20.4		1	0.13	1.00	ug/L	10/27/25 11:55	VN102725
108-67-8	1,3,5-Trimethylbenzene	20.3		1	0.15	1.00	ug/L	10/27/25 11:55	VN102725
98-06-6	tert-Butylbenzene	19.5		1	0.14	1.00	ug/L	10/27/25 11:55	VN102725
95-63-6	1,2,4-Trimethylbenzene	20.6		1	0.14	1.00	ug/L	10/27/25 11:55	VN102725
135-98-8	sec-Butylbenzene	19.9		1	0.13	1.00	ug/L	10/27/25 11:55	VN102725
99-87-6	p-Isopropyltoluene	20.5		1	0.13	1.00	ug/L	10/27/25 11:55	VN102725
104-51-8	n-Butylbenzene	20.1		1	0.15	1.00	ug/L	10/27/25 11:55	VN102725
91-20-3	Naphthalene	19.9		1	0.20	1.00	ug/L	10/27/25 11:55	VN102725
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	56.2			74 - 125	112%	SPK: 50		
1868-53-7	Dibromofluoromethane	53.2			75 - 124	106%	SPK: 50		
2037-26-5	Toluene-d8	51.1			86 - 113	102%	SPK: 50		
460-00-4	4-Bromofluorobenzene	52.6			77 - 121	105%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	301000							
540-36-3	1,4-Difluorobenzene	564000							
3114-55-4	Chlorobenzene-d5	505000							
3855-82-1	1,4-Dichlorobenzene-d4	257000							

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1028WBS02	SDG No.:	Q3468
Lab Sample ID:	VN1028WBS02	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	21.2		1	0.16	1.00	ug/L	10/28/25 12:14	VN102825
71-43-2	Benzene	21.7		1	0.15	1.00	ug/L	10/28/25 12:14	VN102825
108-88-3	Toluene	21.5		1	0.14	1.00	ug/L	10/28/25 12:14	VN102825
100-41-4	Ethyl Benzene	22.0		1	0.13	1.00	ug/L	10/28/25 12:14	VN102825
179601-23-1	m/p-Xylenes	43.2		1	0.24	2.00	ug/L	10/28/25 12:14	VN102825
1330-20-7	Total Xylenes	65.3		1	0.36	3.00	ug/L	10/28/25 12:14	VN102825
95-47-6	o-Xylene	22.1		1	0.12	1.00	ug/L	10/28/25 12:14	VN102825
98-82-8	Isopropylbenzene	21.3		1	0.12	1.00	ug/L	10/28/25 12:14	VN102825
103-65-1	n-propylbenzene	21.7		1	0.13	1.00	ug/L	10/28/25 12:14	VN102825
108-67-8	1,3,5-Trimethylbenzene	21.9		1	0.15	1.00	ug/L	10/28/25 12:14	VN102825
98-06-6	tert-Butylbenzene	21.1		1	0.14	1.00	ug/L	10/28/25 12:14	VN102825
95-63-6	1,2,4-Trimethylbenzene	22.0		1	0.14	1.00	ug/L	10/28/25 12:14	VN102825
135-98-8	sec-Butylbenzene	21.6		1	0.13	1.00	ug/L	10/28/25 12:14	VN102825
99-87-6	p-Isopropyltoluene	22.5		1	0.13	1.00	ug/L	10/28/25 12:14	VN102825
104-51-8	n-Butylbenzene	21.5		1	0.15	1.00	ug/L	10/28/25 12:14	VN102825
91-20-3	Naphthalene	20.8		1	0.20	1.00	ug/L	10/28/25 12:14	VN102825
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	48.6			74 - 125	97%	SPK: 50		
1868-53-7	Dibromofluoromethane	47.6			75 - 124	95%	SPK: 50		
2037-26-5	Toluene-d8	46.6			86 - 113	93%	SPK: 50		
460-00-4	4-Bromofluorobenzene	47.9			77 - 121	96%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	325000							
540-36-3	1,4-Difluorobenzene	591000							
3114-55-4	Chlorobenzene-d5	518000							
3855-82-1	1,4-Dichlorobenzene-d4	258000							

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A = Aldol-Condensation Reaction Products

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

Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1029WBS01	SDG No.:	Q3468
Lab Sample ID:	VN1029WBS01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	19.6		1	0.16	1.00	ug/L	10/29/25 11:27	VN102925
71-43-2	Benzene	19.2		1	0.15	1.00	ug/L	10/29/25 11:27	VN102925
108-88-3	Toluene	18.6		1	0.14	1.00	ug/L	10/29/25 11:27	VN102925
100-41-4	Ethyl Benzene	18.2		1	0.13	1.00	ug/L	10/29/25 11:27	VN102925
179601-23-1	m/p-Xylenes	35.7		1	0.24	2.00	ug/L	10/29/25 11:27	VN102925
1330-20-7	Total Xylenes	54.0		1	0.36	3.00	ug/L	10/29/25 11:27	VN102925
95-47-6	o-Xylene	18.3		1	0.12	1.00	ug/L	10/29/25 11:27	VN102925
98-82-8	Isopropylbenzene	17.1		1	0.12	1.00	ug/L	10/29/25 11:27	VN102925
103-65-1	n-propylbenzene	17.0		1	0.13	1.00	ug/L	10/29/25 11:27	VN102925
108-67-8	1,3,5-Trimethylbenzene	17.8		1	0.15	1.00	ug/L	10/29/25 11:27	VN102925
98-06-6	tert-Butylbenzene	16.2		1	0.14	1.00	ug/L	10/29/25 11:27	VN102925
95-63-6	1,2,4-Trimethylbenzene	17.8		1	0.14	1.00	ug/L	10/29/25 11:27	VN102925
135-98-8	sec-Butylbenzene	16.3		1	0.13	1.00	ug/L	10/29/25 11:27	VN102925
99-87-6	p-Isopropyltoluene	17.2		1	0.13	1.00	ug/L	10/29/25 11:27	VN102925
104-51-8	n-Butylbenzene	16.6		1	0.15	1.00	ug/L	10/29/25 11:27	VN102925
91-20-3	Naphthalene	17.3		1	0.20	1.00	ug/L	10/29/25 11:27	VN102925
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	50.6			74 - 125	101%	SPK: 50		
1868-53-7	Dibromofluoromethane	45.9			75 - 124	92%	SPK: 50		
2037-26-5	Toluene-d8	44.0			86 - 113	88%	SPK: 50		
460-00-4	4-Bromofluorobenzene	44.4			77 - 121	89%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	235000							
540-36-3	1,4-Difluorobenzene	450000							
3114-55-4	Chlorobenzene-d5	401000							
3855-82-1	1,4-Dichlorobenzene-d4	206000							

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:	
Project:	RFK Bridge RMB-Randall Island	Date Received:	
Client Sample ID:	VN1027WBSD01	SDG No.:	Q3468
Lab Sample ID:	VN1027WBSD01	Matrix:	Water
Analytical Method:	8260D	Level : LOW	% Solid: 0
Sample Wt/Vol:	5 mL	Final Vol: 5000 uL	Test: VOCMS Group1

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
1634-04-4	Methyl tert-butyl Ether	21.8		1	0.16	1.00	ug/L	10/27/25 12:29	VN102725
71-43-2	Benzene	21.8		1	0.15	1.00	ug/L	10/27/25 12:29	VN102725
108-88-3	Toluene	21.6		1	0.14	1.00	ug/L	10/27/25 12:29	VN102725
100-41-4	Ethyl Benzene	21.4		1	0.13	1.00	ug/L	10/27/25 12:29	VN102725
179601-23-1	m/p-Xylenes	42.3		1	0.24	2.00	ug/L	10/27/25 12:29	VN102725
1330-20-7	Total Xylenes	63.7		1	0.36	3.00	ug/L	10/27/25 12:29	VN102725
95-47-6	o-Xylene	21.4		1	0.12	1.00	ug/L	10/27/25 12:29	VN102725
98-82-8	Isopropylbenzene	20.6		1	0.12	1.00	ug/L	10/27/25 12:29	VN102725
103-65-1	n-propylbenzene	21.0		1	0.13	1.00	ug/L	10/27/25 12:29	VN102725
108-67-8	1,3,5-Trimethylbenzene	21.3		1	0.15	1.00	ug/L	10/27/25 12:29	VN102725
98-06-6	tert-Butylbenzene	20.1		1	0.14	1.00	ug/L	10/27/25 12:29	VN102725
95-63-6	1,2,4-Trimethylbenzene	21.2		1	0.14	1.00	ug/L	10/27/25 12:29	VN102725
135-98-8	sec-Butylbenzene	20.5		1	0.13	1.00	ug/L	10/27/25 12:29	VN102725
99-87-6	p-Isopropyltoluene	21.0		1	0.13	1.00	ug/L	10/27/25 12:29	VN102725
104-51-8	n-Butylbenzene	20.9		1	0.15	1.00	ug/L	10/27/25 12:29	VN102725
91-20-3	Naphthalene	21.1		1	0.20	1.00	ug/L	10/27/25 12:29	VN102725
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	56.4			74 - 125	113%	SPK: 50		
1868-53-7	Dibromofluoromethane	53.0			75 - 124	106%	SPK: 50		
2037-26-5	Toluene-d8	51.0			86 - 113	102%	SPK: 50		
460-00-4	4-Bromofluorobenzene	52.9			77 - 121	106%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	294000							
540-36-3	1,4-Difluorobenzene	538000							
3114-55-4	Chlorobenzene-d5	483000							
3855-82-1	1,4-Dichlorobenzene-d4	242000							

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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E = Value Exceeds Calibration Range
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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
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG No.: Q3468

Instrument ID: MSVOA_N Calibration Date(s): 10/23/2025 10/23/2025

Heated Purge: (Y/N) N Calibration Time(s): 09:42 12:02

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN088078.D RRF005 = VN088079.D RRF020 = VN088080.D
RRF050 = VN088081.D RRF100 = VN088082.D RRF150 = VN088083.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Methyl tert-butyl Ether	2.356	2.498	2.493	1.790	2.370	2.342	2.308	11.4
Benzene	1.621	1.577	1.609	1.216	1.372	1.566	1.494	10.9
Toluene	0.971	0.958	0.991	0.755	0.862	0.989	0.921	10.2
Ethyl Benzene	2.069	2.066	2.123	1.649	1.873	2.177	1.993	9.9
m/p-Xylenes	0.733	0.774	0.804	0.635	0.708	0.827	0.747	9.4
o-Xylene	0.670	0.742	0.764	0.604	0.684	0.784	0.708	9.6
Isopropylbenzene	4.189	3.857	4.067	3.173	3.580	4.272	3.856	10.8
n-propylbenzene	4.874	4.855	4.930	3.925	4.436	5.217	4.706	9.7
1,3,5-Trimethylbenzene	3.329	3.254	3.385	2.669	3.028	3.551	3.203	9.8
tert-Butylbenzene	3.154	2.876	3.002	2.358	2.646	3.131	2.861	10.8
1,2,4-Trimethylbenzene	3.242	3.316	3.465	2.700	3.012	3.491	3.204	9.4
sec-Butylbenzene	4.578	4.273	4.382	3.490	3.881	4.616	4.203	10.4
p-Isopropyltoluene	3.269	3.541	3.602	2.866	3.170	3.783	3.372	9.9
n-Butylbenzene	3.396	3.438	3.493	2.827	3.158	3.730	3.340	9.3
Naphthalene	3.451	3.110	3.437	2.732	3.203	3.987	3.320	12.6
1,2-Dichloroethane-d4		0.914	0.915	0.799	0.822	0.872	0.865	6.1
Dibromofluoromethane		0.343	0.344	0.315	0.327	0.350	0.336	4.3
Toluene-d8		1.283	1.298	1.224	1.283	1.384	1.294	4.4
4-Bromofluorobenzene		0.435	0.457	0.439	0.466	0.488	0.457	4.8

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: LIRO01
Lab Code: ACE
SDG No.: Q3468
Instrument ID: MSVOA_N
Calibration Date/Time: 10/27/2025 10:40
Lab File ID: VN088102.D
Init. Calib. Date(s): 10/23/2025 10/23/2025
Heated Purge: (Y/N) N
Init. Calib. Time(s): 09:42 12:02
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	2.308	2.427		5.16	20
Benzene	1.494	1.599		7.03	20
Toluene	0.921	0.975		5.86	20
Ethyl Benzene	1.993	2.130		6.87	20
m/p-Xylenes	0.747	0.796		6.56	20
o-Xylene	0.708	0.768		8.48	20
Isopropylbenzene	3.856	4.002		3.79	20
n-propylbenzene	4.706	4.968		5.57	20
1,3,5-Trimethylbenzene	3.203	3.432		7.15	20
tert-Butylbenzene	2.861	2.988		4.44	20
1,2,4-Trimethylbenzene	3.204	3.458		7.93	20
sec-Butylbenzene	4.203	4.388		4.4	20
p-Isopropyltoluene	3.372	3.664		8.66	20
n-Butylbenzene	3.340	3.566		6.77	20
Naphthalene	3.320	3.431		3.34	20
1,2-Dichloroethane-d4	0.865	0.876		1.27	20
Dibromofluoromethane	0.336	0.332		-1.19	20
Toluene-d8	1.294	1.241		-4.1	20
4-Bromofluorobenzene	0.457	0.460		0.66	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG No.: Q3468

Instrument ID: MSVOA_N Calibration Date/Time: 10/28/2025 10:23

Lab File ID: VN088127.D Init. Calib. Date(s): 10/23/2025 10/23/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:42 12:02

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	2.308	2.786		20.71	20
Benzene	1.494	1.602		7.23	20
Toluene	0.921	0.978		6.19	20
Ethyl Benzene	1.993	2.129		6.82	20
m/p-Xylenes	0.747	0.796		6.56	20
o-Xylene	0.708	0.779		10.03	20
Isopropylbenzene	3.856	3.984		3.32	20
n-propylbenzene	4.706	4.889		3.89	20
1,3,5-Trimethylbenzene	3.203	3.442		7.46	20
tert-Butylbenzene	2.861	2.928		2.34	20
1,2,4-Trimethylbenzene	3.204	3.555		10.95	20
sec-Butylbenzene	4.203	4.256		1.26	20
p-Isopropyltoluene	3.372	3.599		6.73	20
n-Butylbenzene	3.340	3.444		3.11	20
Naphthalene	3.320	3.767		13.46	20
1,2-Dichloroethane-d4	0.865	0.954		10.29	20
Dibromofluoromethane	0.336	0.330		-1.79	20
Toluene-d8	1.294	1.205		-6.88	20
4-Bromofluorobenzene	0.457	0.461		0.88	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: LIRO01

Lab Code: ACE SDG No.: Q3468

Instrument ID: MSVOA_N Calibration Date/Time: 10/29/2025 10:24

Lab File ID: VN088147.D Init. Calib. Date(s): 10/23/2025 10/23/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:42 12:02

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	2.308	2.670		15.69	20
Benzene	1.494	1.622		8.57	20
Toluene	0.921	0.998		8.36	20
Ethyl Benzene	1.993	2.204		10.59	20
m/p-Xylenes	0.747	0.817		9.37	20
o-Xylene	0.708	0.796		12.43	20
Isopropylbenzene	3.856	4.049		5.01	20
n-propylbenzene	4.706	5.001		6.27	20
1,3,5-Trimethylbenzene	3.203	3.418		6.71	20
tert-Butylbenzene	2.861	2.965		3.63	20
1,2,4-Trimethylbenzene	3.204	3.544		10.61	20
sec-Butylbenzene	4.203	4.348		3.45	20
p-Isopropyltoluene	3.372	3.656		8.42	20
n-Butylbenzene	3.340	3.566		6.77	20
Naphthalene	3.320	3.695		11.3	20
1,2-Dichloroethane-d4	0.865	0.988		14.22	20
Dibromofluoromethane	0.336	0.354		5.36	20
Toluene-d8	1.294	1.288		-0.46	20
4-Bromofluorobenzene	0.457	0.482		5.47	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.