

DATA PACKAGE

VOLATILE ORGANICS
METALS

PROJECT NAME : AMTRAK SAWTOOTH BRIDGES 2024

PORTAL PARTNERS TRI-VENTURE

c/o Gannett Fleming Inc. Transit and Rail System

207 Senate Avenue

Camp Hill, PA - 17011

Phone No: 610-650-8101

ORDER ID : P4658

ATTENTION : Joseph Krupansky



Laboratory Certification ID # 20012



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DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

1

Laboratory Name : Alliance Technical Group LLC Client : Portal Partners Tri-Venture
 Project Location : NJ Project Number : 9500000878
 Laboratory Sample ID(s) : P4658 Sampling Date(s) : 10/31/2024
 List DKQP Methods Used (e.g., 8260,8270, et Cetra) **6010D,8260-Low**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	☒ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☒ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☒ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☒ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☒ Yes ☐ No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b)Were these reporting limits met?	☒ Yes ☐ No ☒ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	☒ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☐ Yes ☒ No

Notes: For all questions to which the response was “No” (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is “No”, the data package does not meet the requirements for “Data of Known Quality.”

Cover Page

Order ID : P4658

Project ID : Amtrak Sawtooth Bridges 2024

Client : Portal Partners Tri-Venture

Lab Sample Number

P4658-01
P4658-02
P4658-03
P4658-04

Client Sample Number

B-131-1-SB02
B-131-2-SB02
B-131-3-SB02
TB

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

Signature : _____

Date: 11/11/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Portal Partners Tri-Venture

Project Name: Amtrak Sawtooth Bridges 2024

Project # N/A

Chemtech Project # P4658

Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:

3 Solid samples were received on 10/31/2024.

1 Water sample was received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Metals Group3 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 20% in the Initial Calibration method (82N103024W.M) for Methyl Acetate, Acetone, Chloroethane, Chloromethane these compounds are passing on Linear Regression while, 1,4-Dichlorobenzene this compound is passing on Quadratic Regression.

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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



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

2
2.1

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

F. Manual Integration Comments:

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

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

Signature_____



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

CASE NARRATIVE

Portal Partners Tri-Venture

Project Name: Amtrak Sawtooth Bridges 2024

Project # N/A

Chemtech Project # P4658

Test Name: Metals Group3

A. Number of Samples and Date of Receipt:

3 Solid samples were received on 10/31/2024.

1 Water sample was received on 10/31/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Metals Group3 and VOC-TCLVOA-10. This data package contains results for Metals Group3.

C. Analytical Techniques:

The analysis of Metals Group3 was based on method 6010D and digestion based on method 3050 (soils).

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

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

Signature_____

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4658

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 11/11/2024

Hit Summary Sheet
SW-846

SDG No.: P4658
Client: Portal Partners Tri-Venture

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

Client ID:

0

Total Voc :

Total Concentration:

A

B

C

D

E

F

G

H

I

J



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	10/31/24	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	10/31/24	
Client Sample ID:	TB		SDG No.:	P4658	
Lab Sample ID:	P4658-04		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084634.D	1		11/01/24 13:20	VN110124

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	10/31/24	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	10/31/24	
Client Sample ID:	TB		SDG No.:	P4658	
Lab Sample ID:	P4658-04		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084634.D	1		11/01/24 13:20	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.7		70 (74) - 130 (125)	101%	SPK: 50
1868-53-7	Dibromofluoromethane	49.3		70 (75) - 130 (124)	99%	SPK: 50
2037-26-5	Toluene-d8	47.6		70 (86) - 130 (113)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.3		70 (77) - 130 (121)	91%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	178000	8.224			
540-36-3	1,4-Difluorobenzene	313000	9.1			
3114-55-4	Chlorobenzene-d5	276000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	123000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	10/31/24	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	10/31/24	
Client Sample ID:	TB		SDG No.:	P4658	
Lab Sample ID:	P4658-04		Matrix:	Water	
Analytical Method:	SW8260		% Solid:	0	
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084634.D	1		11/01/24 13:20	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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



QC SUMMARY

Surrogate Summary

SDG No.: P4658

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P4658-04	TB	1,2-Dichloroethane-d4	50	50.6	101	70 (74)	130 (125)
		Dibromofluoromethane	50	49.3	99	70 (75)	130 (124)
		Toluene-d8	50	47.6	95	70 (86)	130 (113)
		4-Bromofluorobenzene	50	45.3	91	70 (77)	130 (121)
VN1101WBL01	VN1101WBL01	1,2-Dichloroethane-d4	50	51.6	103	70 (74)	130 (125)
		Dibromofluoromethane	50	49.8	100	70 (75)	130 (124)
		Toluene-d8	50	47.4	95	70 (86)	130 (113)
		4-Bromofluorobenzene	50	46.8	94	70 (77)	130 (121)
VN1101WBS01	VN1101WBS01	1,2-Dichloroethane-d4	50	44.3	89	70 (74)	130 (125)
		Dibromofluoromethane	50	45.1	90	70 (75)	130 (124)
		Toluene-d8	50	46.1	92	70 (86)	130 (113)
		4-Bromofluorobenzene	50	47.0	94	70 (77)	130 (121)
VN1101WBSD0	VN1101WBSD01	1,2-Dichloroethane-d4	50	45.0	90	70 (74)	130 (125)
		Dibromofluoromethane	50	46.5	93	70 (75)	130 (124)
		Toluene-d8	50	46.3	93	70 (86)	130 (113)
		4-Bromofluorobenzene	50	46.5	93	70 (77)	130 (121)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4658

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN084631.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1101WBS01	Dichlorodifluoromethane	20	19.2	ug/L	96			40 (69)	160 (116)	
	Chloromethane	20	16.4	ug/L	82			40 (65)	160 (116)	
	Vinyl chloride	20	18.9	ug/L	95			70 (65)	130 (117)	
	Bromomethane	20	18.0	ug/L	90			40 (58)	160 (125)	
	Chloroethane	20	18.2	ug/L	91			40 (56)	160 (128)	
	Trichlorofluoromethane	20	18.8	ug/L	94			40 (73)	160 (115)	
	1,1,2-Trichlorotrifluoroethane	20	19.3	ug/L	97			70 (80)	130 (112)	
	1,1-Dichloroethene	20	17.7	ug/L	89			70 (74)	130 (110)	
	Acetone	100	96.0	ug/L	96			40 (60)	160 (125)	
	Carbon disulfide	20	16.7	ug/L	84			40 (64)	160 (112)	
	Methyl tert-butyl Ether	20	19.1	ug/L	96			70 (78)	130 (114)	
	Methyl Acetate	20	16.1	ug/L	81			70 (67)	130 (125)	
	Methylene Chloride	20	19.0	ug/L	95			70 (72)	130 (114)	
	trans-1,2-Dichloroethene	20	18.5	ug/L	93			70 (75)	130 (108)	
	1,1-Dichloroethane	20	19.1	ug/L	96			70 (78)	130 (112)	
	Cyclohexane	20	18.3	ug/L	92			70 (75)	130 (110)	
	2-Butanone	100	96.7	ug/L	97			40 (65)	160 (122)	
	Carbon Tetrachloride	20	19.7	ug/L	99			70 (77)	130 (113)	
	cis-1,2-Dichloroethene	20	18.4	ug/L	92			70 (77)	130 (110)	
	Bromochloromethane	20	21.5	ug/L	108			70 (70)	130 (124)	
	Chloroform	20	19.6	ug/L	98			70 (79)	130 (113)	
	1,1,1-Trichloroethane	20	19.4	ug/L	97			70 (80)	130 (108)	
	Methylcyclohexane	20	18.4	ug/L	92			70 (72)	130 (115)	
	Benzene	20	18.8	ug/L	94			70 (82)	130 (109)	
	1,2-Dichloroethane	20	19.5	ug/L	98			70 (80)	130 (115)	
	Trichloroethene	20	18.4	ug/L	92			70 (77)	130 (113)	
	1,2-Dichloropropane	20	19.1	ug/L	96			70 (83)	130 (111)	
	Bromodichloromethane	20	19.2	ug/L	96			70 (83)	130 (110)	
	4-Methyl-2-Pentanone	100	100	ug/L	100			40 (74)	160 (118)	
	Toluene	20	20.1	ug/L	101			70 (82)	130 (110)	
	t-1,3-Dichloropropene	20	17.7	ug/L	89			70 (79)	130 (110)	
	cis-1,3-Dichloropropene	20	18.7	ug/L	94			70 (82)	130 (110)	
	1,1,2-Trichloroethane	20	20.0	ug/L	100			70 (83)	130 (112)	
	2-Hexanone	100	110	ug/L	110			40 (73)	160 (117)	
	Dibromochloromethane	20	20.3	ug/L	102			70 (82)	130 (110)	
	1,2-Dibromoethane	20	19.0	ug/L	95			70 (81)	130 (110)	
	Tetrachloroethene	20	18.6	ug/L	93			70 (67)	130 (123)	
	Chlorobenzene	20	18.3	ug/L	92			70 (82)	130 (109)	
	Ethyl Benzene	20	18.8	ug/L	94			70 (83)	130 (109)	
	m/p-Xylenes	40	38.9	ug/L	97			70 (82)	130 (110)	
	o-Xylene	20	20.0	ug/L	100			70 (83)	130 (109)	
	Styrene	20	19.4	ug/L	97			70 (80)	130 (111)	
	Bromoform	20	19.0	ug/L	95			70 (79)	130 (109)	
	Isopropylbenzene	20	18.5	ug/L	93			70 (83)	130 (112)	
	1,1,2,2-Tetrachloroethane	20	18.1	ug/L	91			70 (76)	130 (118)	
	1,3-Dichlorobenzene	20	16.8	ug/L	84			70 (82)	130 (108)	
	1,4-Dichlorobenzene	20	17.3	ug/L	86			70 (82)	130 (107)	
	1,2-Dichlorobenzene	20	17.0	ug/L	85			70 (82)	130 (109)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4658

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN084631.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1101WBS01	1,2-Dibromo-3-Chloropropane	20	17.9	ug/L	90			40 (68)	160 (112)	
	1,2,4-Trichlorobenzene	20	14.7	ug/L	74			70 (75)	130 (113)	
	1,2,3-Trichlorobenzene	20	15.3	ug/L	77			70 (76)	130 (114)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4658

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN084632.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1101WBSD01	Dichlorodifluoromethane	20	19.4	ug/L	97	1		40 (69)	160 (116)	20 (20)
	Chloromethane	20	16.8	ug/L	84	2		40 (65)	160 (116)	20 (20)
	Vinyl chloride	20	18.9	ug/L	95	0		70 (65)	130 (117)	20 (20)
	Bromomethane	20	18.4	ug/L	92	2		40 (58)	160 (125)	20 (20)
	Chloroethane	20	19.0	ug/L	95	4		40 (56)	160 (128)	20 (20)
	Trichlorofluoromethane	20	20.1	ug/L	101	7		40 (73)	160 (115)	20 (20)
	1,1,2-Trichlorotrifluoroethane	20	19.7	ug/L	99	2		70 (80)	130 (112)	20 (20)
	1,1-Dichloroethene	20	18.5	ug/L	93	4		70 (74)	130 (110)	20 (20)
	Acetone	100	110	ug/L	110	14		40 (60)	160 (125)	20 (20)
	Carbon disulfide	20	17.5	ug/L	88	5		40 (64)	160 (112)	20 (20)
	Methyl tert-butyl Ether	20	20.4	ug/L	102	6		70 (78)	130 (114)	20 (20)
	Methyl Acetate	20	18.2	ug/L	91	12		70 (67)	130 (125)	20 (20)
	Methylene Chloride	20	19.4	ug/L	97	2		70 (72)	130 (114)	20 (20)
	trans-1,2-Dichloroethene	20	19.0	ug/L	95	2		70 (75)	130 (108)	20 (20)
	1,1-Dichloroethane	20	19.9	ug/L	100	4		70 (78)	130 (112)	20 (20)
	Cyclohexane	20	19.5	ug/L	98	6		70 (75)	130 (110)	20 (20)
	2-Butanone	100	100	ug/L	100	3		40 (65)	160 (122)	20 (20)
	Carbon Tetrachloride	20	20.1	ug/L	101	2		70 (77)	130 (113)	20 (20)
	cis-1,2-Dichloroethene	20	19.6	ug/L	98	6		70 (77)	130 (110)	20 (20)
	Bromochloromethane	20	22.1	ug/L	111	3		70 (70)	130 (124)	20 (20)
	Chloroform	20	20.1	ug/L	101	3		70 (79)	130 (113)	20 (20)
	1,1,1-Trichloroethane	20	20.1	ug/L	101	4		70 (80)	130 (108)	20 (20)
	Methylcyclohexane	20	19.6	ug/L	98	6		70 (72)	130 (115)	20 (20)
	Benzene	20	19.4	ug/L	97	3		70 (82)	130 (109)	20 (20)
	1,2-Dichloroethane	20	20.4	ug/L	102	4		70 (80)	130 (115)	20 (20)
	Trichloroethene	20	19.2	ug/L	96	4		70 (77)	130 (113)	20 (20)
	1,2-Dichloropropane	20	20.1	ug/L	101	5		70 (83)	130 (111)	20 (20)
	Bromodichloromethane	20	20.1	ug/L	101	5		70 (83)	130 (110)	20 (20)
	4-Methyl-2-Pentanone	100	110	ug/L	110	10		40 (74)	160 (118)	20 (20)
	Toluene	20	20.8	ug/L	104	3		70 (82)	130 (110)	20 (20)
	t-1,3-Dichloropropene	20	19.3	ug/L	97	9		70 (79)	130 (110)	20 (20)
	cis-1,3-Dichloropropene	20	19.6	ug/L	98	4		70 (82)	130 (110)	20 (20)
	1,1,2-Trichloroethane	20	21.1	ug/L	106	6		70 (83)	130 (112)	20 (20)
	2-Hexanone	100	110	ug/L	110	0		40 (73)	160 (117)	20 (20)
	Dibromochloromethane	20	21.1	ug/L	106	4		70 (82)	130 (110)	20 (20)
	1,2-Dibromoethane	20	20.6	ug/L	103	8		70 (81)	130 (110)	20 (20)
	Tetrachloroethene	20	19.8	ug/L	99	6		70 (67)	130 (123)	20 (20)
	Chlorobenzene	20	18.9	ug/L	95	3		70 (82)	130 (109)	20 (20)
	Ethyl Benzene	20	19.4	ug/L	97	3		70 (83)	130 (109)	20 (20)
	m/p-Xylenes	40	39.8	ug/L	100	3		70 (82)	130 (110)	20 (20)
	o-Xylene	20	20.1	ug/L	101	1		70 (83)	130 (109)	20 (20)
	Styrene	20	20.2	ug/L	101	4		70 (80)	130 (111)	20 (20)
	Bromoform	20	19.5	ug/L	98	3		70 (79)	130 (109)	20 (20)
	Isopropylbenzene	20	19.2	ug/L	96	3		70 (83)	130 (112)	20 (20)
	1,1,2,2-Tetrachloroethane	20	18.7	ug/L	94	3		70 (76)	130 (118)	20 (20)
	1,3-Dichlorobenzene	20	17.3	ug/L	86	2		70 (82)	130 (108)	20 (20)
	1,4-Dichlorobenzene	20	18.5	ug/L	93	8		70 (82)	130 (107)	20 (20)
	1,2-Dichlorobenzene	20	18.2	ug/L	91	7		70 (82)	130 (109)	20 (20)

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4658
Client: Portal Partners Tri-Venture
Analytical Method: SW8260-Low Datafile : VN084632.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VN1101WBSD01	1,2-Dibromo-3-Chloropropane	20	18.1	ug/L	91	1		40 (68)	160 (112)	20 (20)
	1,2,4-Trichlorobenzene	20	16.0	ug/L	80	8		70 (75)	130 (113)	20 (20)
	1,2,3-Trichlorobenzene	20	16.1	ug/L	81	5		70 (76)	130 (114)	20 (20)

() = LABORATORY INHOUSE LIMIT

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1101WBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P4658

SAS No.: P4658 SDG NO.: P4658

Lab File ID: VN084630.D

Lab Sample ID: VN1101WBL01

Date Analyzed: 11/01/2024

Time Analyzed: 11:29

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
VN1101WBS01	VN1101WBS01	VN084631.D	11/01/2024
VN1101WBSD01	VN1101WBSD01	VN084632.D	11/01/2024
TB	P4658-04	VN084634.D	11/01/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG NO.: P4658
Lab File ID: VN084569.D BFB Injection Date: 10/30/2024
Instrument ID: MSVOA_N BFB Injection Time: 10:42
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	19.5
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	1.2 (1.6) 1
174	50.0 - 100.0% of mass 95	73.5
175	5.0 - 9.0% of mass 174	5.7 (7.7) 1
176	95.0 - 101.0% of mass 174	70.1 (95.4) 1
177	5.0 - 9.0% of mass 176	4.8 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC100	VSTDICC100	VN084570.D	10/30/2024	11:46
VSTDICCC050	VSTDICCC050	VN084571.D	10/30/2024	12:09
VSTDICC020	VSTDICC020	VN084572.D	10/30/2024	12:33
VSTDICC010	VSTDICC010	VN084573.D	10/30/2024	12:57
VSTDICC005	VSTDICC005	VN084574.D	10/30/2024	13:21
VSTDICC001	VSTDICC001	VN084575.D	10/30/2024	13:45

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG NO.: P4658
Lab File ID: VN084627.D BFB Injection Date: 11/01/2024
Instrument ID: MSVOA_N BFB Injection Time: 09:48
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	19.5
75	30.0 - 60.0% of mass 95	51.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	1.1 (1.5) 1
174	50.0 - 100.0% of mass 95	74.6
175	5.0 - 9.0% of mass 174	5.4 (7.2) 1
176	95.0 - 101.0% of mass 174	71.2 (95.5) 1
177	5.0 - 9.0% of mass 176	4.9 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN084628.D	11/01/2024	10:22
VN1101WBL01	VN1101WBL01	VN084630.D	11/01/2024	11:29
VN1101WBS01	VN1101WBS01	VN084631.D	11/01/2024	12:08
VN1101WBSD01	VN1101WBSD01	VN084632.D	11/01/2024	12:32
TB	P4658-04	VN084634.D	11/01/2024	13:20

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG NO.: P4658
Lab File ID: VN084628.D Date Analyzed: 11/01/2024
Instrument ID: MSVOA_N Time Analyzed: 10:22
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	184180	8.22	299507	9.10	271207	11.87
UPPER LIMIT	368360	8.724	599014	9.6	542414	12.365
LOWER LIMIT	92090	7.724	149754	8.6	135604	11.365
EPA SAMPLE NO.						
TB	177716	8.22	313388	9.10	275782	11.87
VN1101WBL01	180035	8.22	318575	9.10	285991	11.87
VN1101WBS01	190995	8.22	320452	9.10	287801	11.87
VN1101WBSD01	179647	8.22	303928	9.10	276373	11.87

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG NO.: P4658
Lab File ID: VN084628.D Date Analyzed: 11/01/2024
Instrument ID: MSVOA_N Time Analyzed: 10:22
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	136355	13.794				
UPPER LIMIT	272710	14.294				
LOWER LIMIT	68177.5	13.294				
EPA SAMPLE NO.						
TB	122691	13.79				
VN1101WBL01	125664	13.79				
VN1101WBS01	147052	13.79				
VN1101WBSD01	139639	13.79				

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBL01		SDG No.:	P4658
Lab Sample ID:	VN1101WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084630.D	1		11/01/24 11:29	VN110124

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBL01	SDG No.:	P4658	
Lab Sample ID:	VN1101WBL01	Matrix:	Water	
Analytical Method:	SW8260	% Solid:	0	
Sample Wt/Vol:	5	Units:	mL	
Soil Aliquot Vol:			uL	
GC Column:	RXI-624	ID :	0.25	
Prep Method :		Level :	LOW	
		Final Vol:	5000	uL
		Test:	VOC-TCLVOA-10	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084630.D	1		11/01/24 11:29	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.21	U	0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
591-78-6	2-Hexanone	1.10	U	1.10	5.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	0.16	U	0.16	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
100-42-5	Styrene	0.16	U	0.16	1.00	ug/L
75-25-2	Bromoform	0.21	U	0.21	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.27	U	0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	0.24	U	0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.46	U	0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.51	U	0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.6		70 (74) - 130 (125)	103%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		70 (75) - 130 (124)	100%	SPK: 50
2037-26-5	Toluene-d8	47.4		70 (86) - 130 (113)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		70 (77) - 130 (121)	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	180000	8.224			
540-36-3	1,4-Difluorobenzene	319000	9.1			
3114-55-4	Chlorobenzene-d5	286000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	126000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBL01		SDG No.:	P4658
Lab Sample ID:	VN1101WBL01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084630.D	1		11/01/24 11:29	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	VN1101WBS01	SDG No.:	P4658
Lab Sample ID:	VN1101WBS01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084631.D	1		11/01/24 12:08	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	19.2		0.21	1.00	ug/L
74-87-3	Chloromethane	16.4		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	18.9		0.34	1.00	ug/L
74-83-9	Bromomethane	18.0		1.40	5.00	ug/L
75-00-3	Chloroethane	18.2		0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	18.8		0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.3		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	17.7		0.26	1.00	ug/L
67-64-1	Acetone	96.0		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	16.7		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	19.1		0.16	1.00	ug/L
79-20-9	Methyl Acetate	16.1		0.60	1.00	ug/L
75-09-2	Methylene Chloride	19.0		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	18.5		0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.1		0.23	1.00	ug/L
110-82-7	Cyclohexane	18.3		1.60	5.00	ug/L
78-93-3	2-Butanone	96.7		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	19.7		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	18.4		0.25	1.00	ug/L
74-97-5	Bromochloromethane	21.5		0.18	1.00	ug/L
67-66-3	Chloroform	19.6		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.4		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	18.4		0.19	1.00	ug/L
71-43-2	Benzene	18.8		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	19.5		0.24	1.00	ug/L
79-01-6	Trichloroethene	18.4		0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	19.1		0.19	1.00	ug/L
75-27-4	Bromodichloromethane	19.2		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	100		0.75	5.00	ug/L
108-88-3	Toluene	20.1		0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBS01		SDG No.:	P4658
Lab Sample ID:	VN1101WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084631.D	1		11/01/24 12:08	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	17.7		0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	18.7		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	20.0		0.21	1.00	ug/L
591-78-6	2-Hexanone	110		1.10	5.00	ug/L
124-48-1	Dibromochloromethane	20.3		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	19.0		0.16	1.00	ug/L
127-18-4	Tetrachloroethene	18.6		0.25	1.00	ug/L
108-90-7	Chlorobenzene	18.3		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	18.8		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	38.9		0.31	2.00	ug/L
95-47-6	o-Xylene	20.0		0.14	1.00	ug/L
100-42-5	Styrene	19.4		0.16	1.00	ug/L
75-25-2	Bromoform	19.0		0.21	1.00	ug/L
98-82-8	Isopropylbenzene	18.5		0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.1		0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	16.8		0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	17.3		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	17.0		0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	17.9		0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	14.7		0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	15.3		0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	44.3		70 (74) - 130 (125)	89%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		70 (75) - 130 (124)	90%	SPK: 50
2037-26-5	Toluene-d8	46.1		70 (86) - 130 (113)	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.0		70 (77) - 130 (121)	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	191000	8.224			
540-36-3	1,4-Difluorobenzene	320000	9.1			
3114-55-4	Chlorobenzene-d5	288000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	147000	13.794			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBS01		SDG No.:	P4658
Lab Sample ID:	VN1101WBS01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084631.D	1		11/01/24 12:08	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBSD01		SDG No.:	P4658
Lab Sample ID:	VN1101WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084632.D	1		11/01/24 12:32	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	19.4		0.21	1.00	ug/L
74-87-3	Chloromethane	16.8		0.35	1.00	ug/L
75-01-4	Vinyl Chloride	18.9		0.34	1.00	ug/L
74-83-9	Bromomethane	18.4		1.40	5.00	ug/L
75-00-3	Chloroethane	19.0		0.56	1.00	ug/L
75-69-4	Trichlorofluoromethane	20.1		0.34	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	19.7		0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	18.5		0.26	1.00	ug/L
67-64-1	Acetone	110		1.40	5.00	ug/L
75-15-0	Carbon Disulfide	17.5		0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	20.4		0.16	1.00	ug/L
79-20-9	Methyl Acetate	18.2		0.60	1.00	ug/L
75-09-2	Methylene Chloride	19.4		0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	19.0		0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	19.9		0.23	1.00	ug/L
110-82-7	Cyclohexane	19.5		1.60	5.00	ug/L
78-93-3	2-Butanone	100		1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	20.1		0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.6		0.25	1.00	ug/L
74-97-5	Bromochloromethane	22.1		0.18	1.00	ug/L
67-66-3	Chloroform	20.1		0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	20.1		0.19	1.00	ug/L
108-87-2	Methylcyclohexane	19.6		0.19	1.00	ug/L
71-43-2	Benzene	19.4		0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	20.4		0.24	1.00	ug/L
79-01-6	Trichloroethene	19.2		0.32	1.00	ug/L
78-87-5	1,2-Dichloropropane	20.1		0.19	1.00	ug/L
75-27-4	Bromodichloromethane	20.1		0.24	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	110		0.75	5.00	ug/L
108-88-3	Toluene	20.8		0.18	1.00	ug/L

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBSD01		SDG No.:	P4658
Lab Sample ID:	VN1101WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084632.D	1		11/01/24 12:32	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	19.3		0.21	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	19.6		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	21.1		0.21	1.00	ug/L
591-78-6	2-Hexanone	110		1.10	5.00	ug/L
124-48-1	Dibromochloromethane	21.1		0.18	1.00	ug/L
106-93-4	1,2-Dibromoethane	20.6		0.16	1.00	ug/L
127-18-4	Tetrachloroethene	19.8		0.25	1.00	ug/L
108-90-7	Chlorobenzene	18.9		0.13	1.00	ug/L
100-41-4	Ethyl Benzene	19.4		0.16	1.00	ug/L
179601-23-1	m/p-Xylenes	39.8		0.31	2.00	ug/L
95-47-6	o-Xylene	20.1		0.14	1.00	ug/L
100-42-5	Styrene	20.2		0.16	1.00	ug/L
75-25-2	Bromoform	19.5		0.21	1.00	ug/L
98-82-8	Isopropylbenzene	19.2		0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	18.7		0.27	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	17.3		0.24	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	18.5		0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	18.2		0.19	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	18.1		0.46	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	16.0		0.42	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	16.1		0.51	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.0		70 (74) - 130 (125)	90%	SPK: 50
1868-53-7	Dibromofluoromethane	46.5		70 (75) - 130 (124)	93%	SPK: 50
2037-26-5	Toluene-d8	46.3		70 (86) - 130 (113)	93%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.5		70 (77) - 130 (121)	93%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	180000	8.224			
540-36-3	1,4-Difluorobenzene	304000	9.1			
3114-55-4	Chlorobenzene-d5	276000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	140000	13.788			

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024		Date Received:	
Client Sample ID:	VN1101WBSD01		SDG No.:	P4658
Lab Sample ID:	VN1101WBSD01		Matrix:	Water
Analytical Method:	SW8260		% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN084632.D	1		11/01/24 12:32	VN110124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG No.: P4658
Instrument ID: MSVOA_N Calibration Date(s): 10/30/2024 10/30/2024
Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF100 = VN084570.D	RRF050 = VN084571.D	RRF020 = VN084572.D	RRF010 = VN084573.D	RRF005 = VN084574.D	RRF001 = VN084575.D		
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD
Dichlorodifluoromethane	0.571	0.552	0.552	0.598	0.594	0.581	0.575	3.4
Chloromethane	0.658	0.672	0.725	0.871	0.995	1.789	0.952	45.2
Vinyl Chloride	0.613	0.605	0.623	0.636	0.651	0.581	0.618	4
Bromomethane	0.292	0.296	0.310	0.336	0.405		0.328	14.2
Chloroethane	0.378	0.376	0.413	0.426	0.475	0.863	0.488	38.3
Trichlorofluoromethane	0.971	0.959	1.017	1.022	1.070	1.071	1.018	4.7
1,1,2-Trichlorotrifluoroethane	0.566	0.557	0.571	0.585	0.588	0.586	0.575	2.2
1,1-Dichloroethene	0.548	0.538	0.560	0.575	0.552	0.644	0.569	6.8
Acetone	0.209	0.204	0.213	0.223	0.241	0.338	0.238	21.3
Carbon Disulfide	1.604	1.603	1.700	1.714	1.784	2.117	1.753	10.9
Methyl tert-butyl Ether	1.773	1.758	1.802	1.779	1.786	1.572	1.745	4.9
Methyl Acetate	0.731	0.749	0.954	1.044	1.266	2.291	1.172	49.7
Methylene Chloride	0.604	0.602	0.633	0.658	0.714	0.600	0.635	7.1
trans-1,2-Dichloroethene	0.565	0.563	0.596	0.600	0.584	0.601	0.585	2.9
1,1-Dichloroethane	1.067	1.066	1.114	1.127	1.203	1.033	1.102	5.5
Cyclohexane	0.956	0.938	0.956	1.043	1.093		0.997	6.8
2-Butanone	0.316	0.315	0.348	0.338	0.370	0.334	0.337	6.1
Carbon Tetrachloride	0.530	0.514	0.532	0.548	0.537	0.488	0.525	4
cis-1,2-Dichloroethene	0.675	0.662	0.697	0.685	0.705	0.673	0.683	2.4
Bromochloromethane	0.483	0.511	0.388	0.415	0.408	0.429	0.439	10.8
Chloroform	1.099	1.086	1.142	1.154	1.222	1.025	1.121	6
1,1,1-Trichloroethane	1.000	0.991	1.046	1.073	1.032	0.980	1.021	3.5
Methylcyclohexane	0.546	0.509	0.495	0.487	0.458	0.371	0.478	12.5
Benzene	1.494	1.448	1.509	1.507	1.546	1.540	1.507	2.4
1,2-Dichloroethane	0.488	0.494	0.493	0.492	0.503	0.459	0.488	3.1
Trichloroethene	0.339	0.335	0.345	0.338	0.341	0.387	0.348	5.7
1,2-Dichloropropane	0.356	0.348	0.358	0.357	0.373	0.330	0.354	4
Bromodichloromethane	0.528	0.521	0.526	0.522	0.529	0.530	0.526	0.7
4-Methyl-2-Pentanone	0.424	0.423	0.416	0.417	0.412	0.344	0.406	7.6
Toluene	0.923	0.899	0.919	0.902	0.891	0.757	0.882	7.1

* 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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG No.: P4658
Instrument ID: MSVOA_N Calibration Date(s): 10/30/2024 10/30/2024
Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN084570.D		RRF050 = VN084571.D		RRF020 = VN084572.D			
		RRF010 = VN084573.D		RRF005 = VN084574.D		RRF001 = VN084575.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
t-1,3-Dichloropropene	0.552	0.543	0.538	0.532	0.547	0.555	0.544	1.6	
cis-1,3-Dichloropropene	0.592	0.581	0.582	0.569	0.584	0.548	0.576	2.7	
1,1,2-Trichloroethane	0.336	0.329	0.334	0.342	0.342	0.309	0.332	3.7	
2-Hexanone	0.314	0.312	0.301	0.297	0.294	0.256	0.296	7.1	
Dibromochloromethane	0.404	0.394	0.391	0.393	0.377	0.312	0.378	8.9	
1,2-Dibromoethane	0.340	0.333	0.341	0.335	0.355	0.336	0.340	2.4	
Tetrachloroethene	0.326	0.313	0.333	0.347	0.351	0.325	0.333	4.3	
Chlorobenzene	1.068	1.061	1.149	1.123	1.165	1.146	1.119	3.9	
Ethyl Benzene	1.957	1.891	1.928	1.880	1.849	1.697	1.867	4.9	
m/p-Xylenes	0.737	0.728	0.737	0.701	0.683	0.654	0.707	4.8	
o-Xylene	0.703	0.690	0.701	0.679	0.645	0.550	0.661	8.9	
Styrene	1.223	1.205	1.206	1.144	1.093	1.050	1.154	6.1	
Bromoform	0.287	0.295	0.298	0.289	0.302	0.286	0.293	2.3	
Isopropylbenzene	3.558	3.570	3.701	3.605	3.402	3.188	3.504	5.2	
1,1,2,2-Tetrachloroethane	1.052	1.073	1.163	1.190	1.317	1.222	1.170	8.4	
1,3-Dichlorobenzene	1.642	1.668	1.770	1.802	1.884	2.264	1.838	12.3	
1,4-Dichlorobenzene	1.646	1.674	1.782	1.867	1.879	2.773	1.937	21.7	
1,2-Dichlorobenzene	1.601	1.618	1.748	1.732	1.879	2.021	1.766	9.1	
1,2-Dibromo-3-Chloropropane	0.204	0.217	0.229	0.226	0.274	0.272	0.237	12.3	
1,2,4-Trichlorobenzene	0.852	0.865	0.895	0.881	0.956	1.353	0.967	19.9	
1,2,3-Trichlorobenzene	0.832	0.841	0.953	0.877	0.939	1.189	0.939	14.1	
1,2-Dichloroethane-d4	0.689	0.721	0.708	0.722	0.771		0.722	4.2	
Dibromofluoromethane	0.334	0.344	0.326	0.336	0.353		0.338	3.1	
Toluene-d8	1.267	1.303	1.216	1.231	1.217		1.247	3	
4-Bromofluorobenzene	0.481	0.493	0.450	0.451	0.454		0.466	4.3	

* 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.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG No.: P4658

Instrument ID: MSVOA_N Calibration Date/Time: 11/01/2024 10:22

Lab File ID: VN084628.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.575	0.538		-6.43	20
Chloromethane	0.952	0.582	0.1	-38.87	20
Vinyl Chloride	0.618	0.566		-8.41	20
Bromomethane	0.328	0.288		-12.19	20
Chloroethane	0.488	0.364		-25.41	20
Trichlorofluoromethane	1.018	0.944		-7.27	20
1,1,2-Trichlorotrifluoroethane	0.575	0.549		-4.52	20
1,1-Dichloroethene	0.569	0.502		-11.77	20
Acetone	0.238	0.204		-14.29	20
Carbon Disulfide	1.753	1.480		-15.57	20
Methyl tert-butyl Ether	1.745	1.720		-1.43	20
Methyl Acetate	1.172	0.691		-41.04	20
Methylene Chloride	0.635	0.598		-5.83	20
trans-1,2-Dichloroethene	0.585	0.542		-7.35	20
1,1-Dichloroethane	1.102	1.047	0.1	-4.99	20
Cyclohexane	0.997	0.878		-11.94	20
2-Butanone	0.337	0.326		-3.26	20
Carbon Tetrachloride	0.525	0.514		-2.1	20
cis-1,2-Dichloroethene	0.683	0.652		-4.54	20
Bromochloromethane	0.439	0.492		12.07	20
Chloroform	1.121	1.078		-3.84	20
1,1,1-Trichloroethane	1.021	0.967		-5.29	20
Methylcyclohexane	0.478	0.490		2.51	20
Benzene	1.507	1.457		-3.32	20
1,2-Dichloroethane	0.488	0.484		-0.82	20
Trichloroethene	0.348	0.325		-6.61	20
1,2-Dichloropropane	0.354	0.356		0.56	20
Bromodichloromethane	0.526	0.522		-0.76	20
4-Methyl-2-Pentanone	0.406	0.430		5.91	20
Toluene	0.882	0.905		2.61	20
t-1,3-Dichloropropene	0.544	0.517		-4.96	20
cis-1,3-Dichloropropene	0.576	0.566		-1.74	20
1,1,2-Trichloroethane	0.332	0.331		-0.3	20
2-Hexanone	0.296	0.316		6.76	20
Dibromochloromethane	0.378	0.401		6.09	20
1,2-Dibromoethane	0.340	0.338		-0.59	20
Tetrachloroethene	0.333	0.327		-1.8	20
Chlorobenzene	1.119	1.038	0.3	-7.24	20

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4658 SAS No.: P4658 SDG No.: P4658

Instrument ID: MSVOA_N Calibration Date/Time: 11/01/2024 10:22

Lab File ID: VN084628.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.867	1.850		-0.91	20
m/p-Xylenes	0.707	0.721		1.98	20
o-Xylene	0.661	0.681		3.03	20
Styrene	1.154	1.181		2.34	20
Bromoform	0.293	0.294	0.1	0.34	20
Isopropylbenzene	3.504	3.470		-0.97	20
1,1,2,2-Tetrachloroethane	1.170	1.079	0.3	-7.78	20
1,3-Dichlorobenzene	1.838	1.617		-12.02	20
1,4-Dichlorobenzene	1.937	1.621		-16.31	20
1,2-Dichlorobenzene	1.766	1.620		-8.27	20
1,2-Dibromo-3-Chloropropane	0.237	0.209		-11.81	20
1,2,4-Trichlorobenzene	0.967	0.796		-17.68	20
1,2,3-Trichlorobenzene	0.939	0.784		-16.51	20
1,2-Dichloroethane-d4	0.722	0.644		-10.8	20
Dibromofluoromethane	0.338	0.325		-3.85	20
Toluene-d8	1.247	1.185		-4.97	20
4-Bromofluorobenzene	0.466	0.451		-3.22	20

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



SAMPLE RAW DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

Quant Time: Nov 04 04:26:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.224	168	177716	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	313388	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	275782	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	122691	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.576	65	130011	50.651	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	101.300%
35) Dibromofluoromethane	8.165	113	104651	49.334	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	98.660%
50) Toluene-d8	10.565	98	371650	47.562	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	95.120%
62) 4-Bromofluorobenzene	12.847	95	132405	45.339	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	90.680%

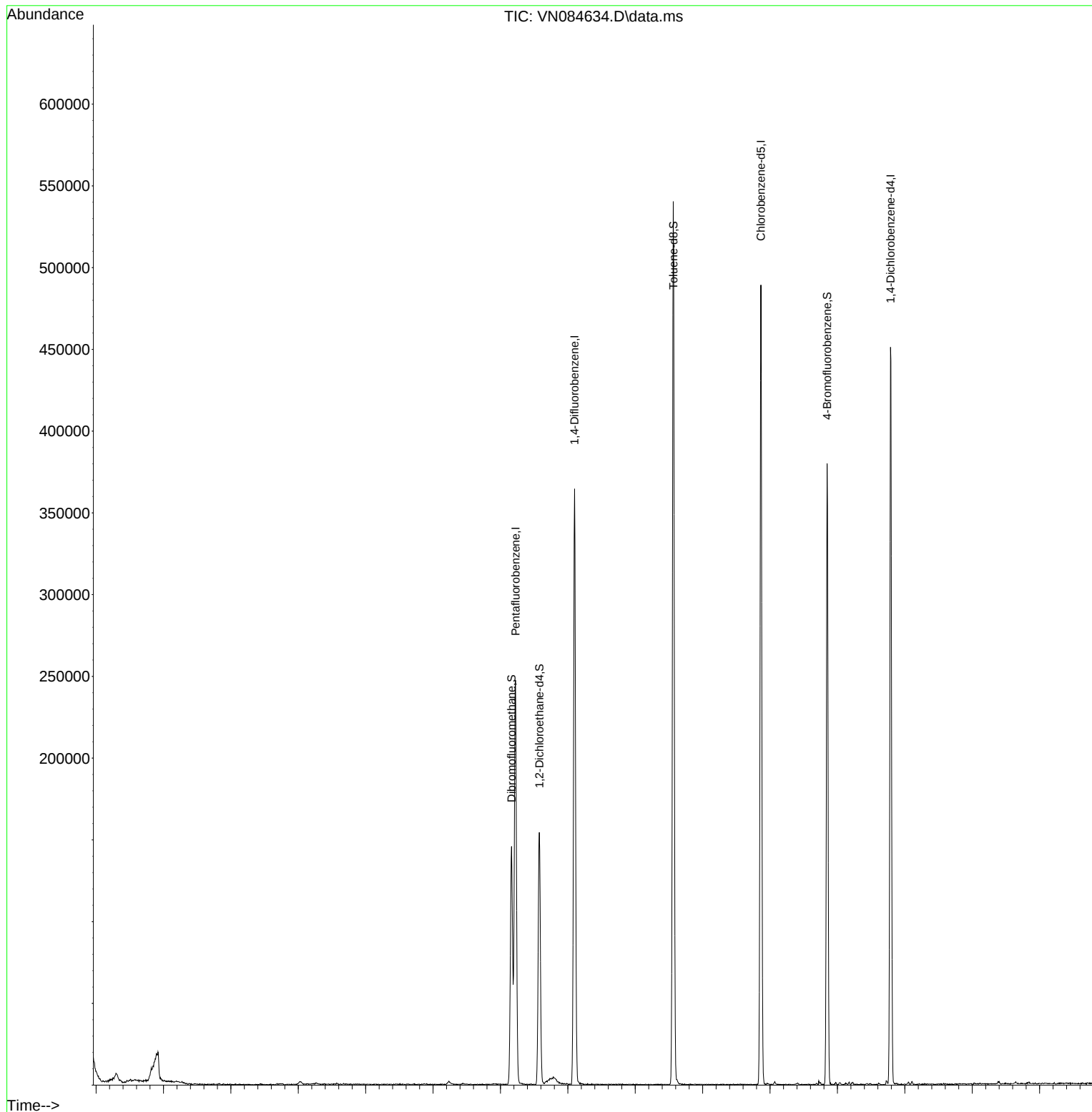
Target Compounds	Qvalue

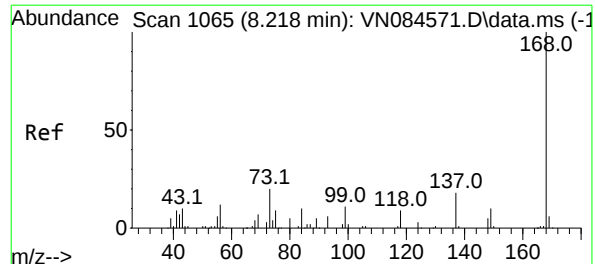
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

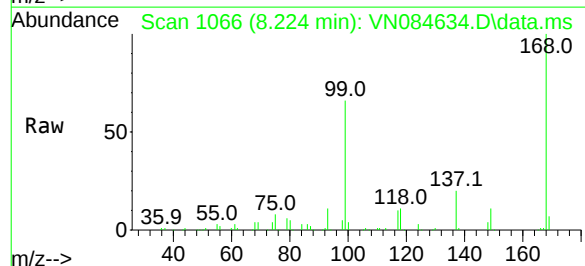
Quant Time: Nov 04 04:26:43 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration



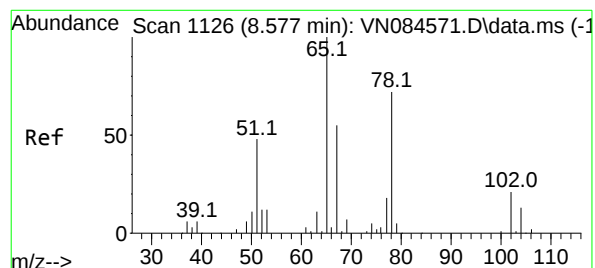
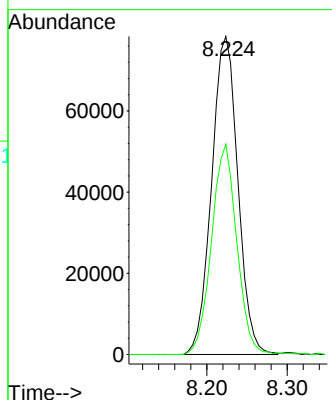
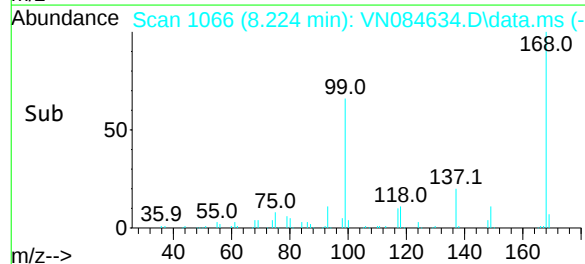


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.000 min
Lab File: VN084634.D
Acq: 01 Nov 2024 13:20

Instrument :
MSVOA_N
ClientSampleId :
TB

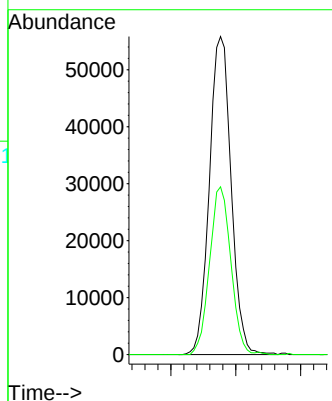
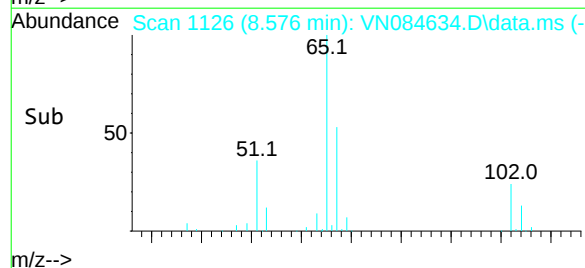
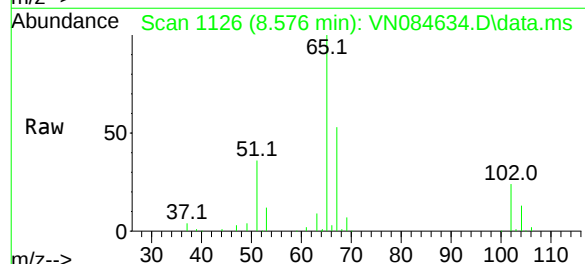


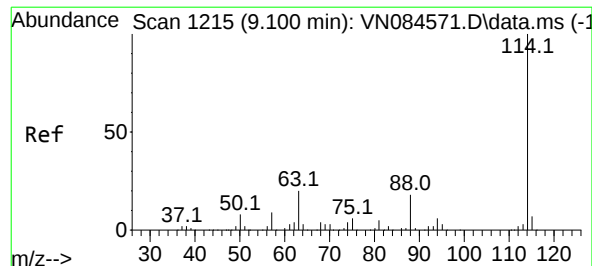
Tgt Ion:168 Resp: 177716
Ion Ratio Lower Upper
168 100
99 66.1 54.2 81.2



#33
1,2-Dichloroethane-d4
Concen: 50.651 ug/l
RT: 8.576 min Scan# 1126
Delta R.T. -0.001 min
Lab File: VN084634.D
Acq: 01 Nov 2024 13:20

Tgt Ion: 65 Resp: 130011
Ion Ratio Lower Upper
65 100
67 51.6 0.0 102.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

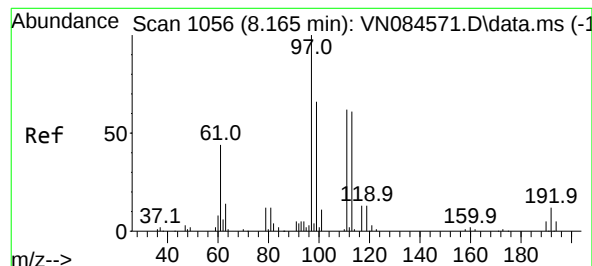
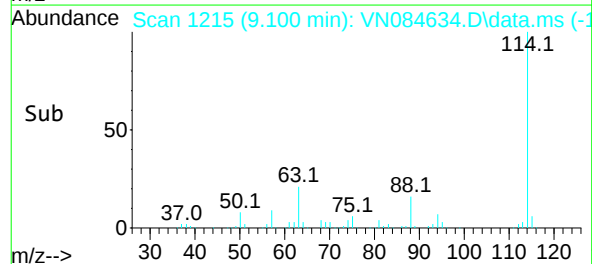
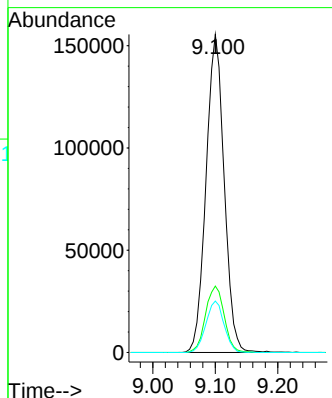
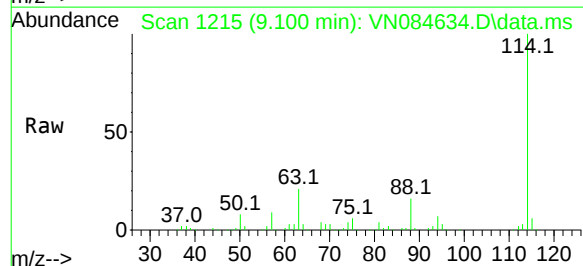
Instrument :

MSVOA_N

ClientSampleId :

TB

Tgt Ion:	114	Resp:	313388
Ion	Ratio	Lower	Upper
114	100		
63	20.9	0.0	43.8
88	16.2	0.0	31.6



#35

Dibromofluoromethane

Concen: 49.334 ug/l

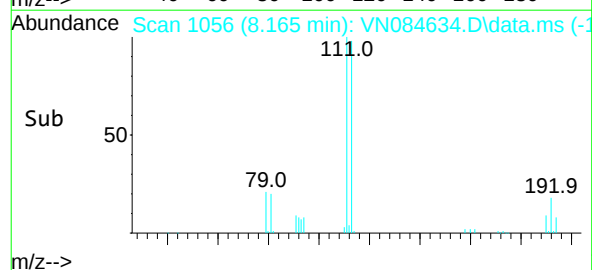
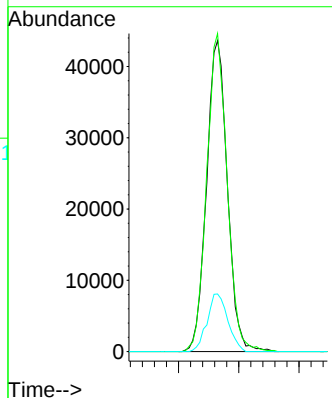
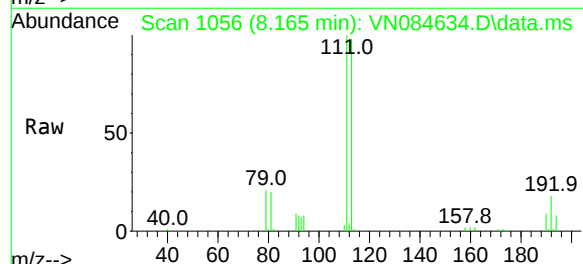
RT: 8.165 min Scan# 1056

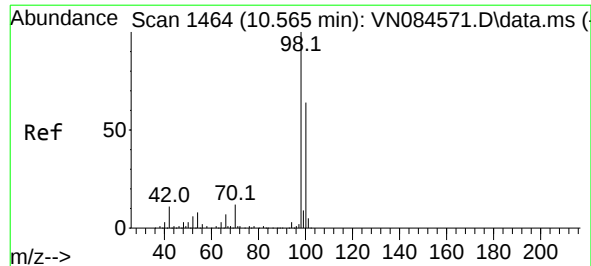
Delta R.T. -0.000 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

Tgt Ion:	113	Resp:	104651
Ion	Ratio	Lower	Upper
113	100		
111	100.4	83.3	124.9
192	18.4	13.5	20.3





#50

Toluene-d8

Concen: 47.562 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

Instrument :

MSVOA_N

ClientSampleId :

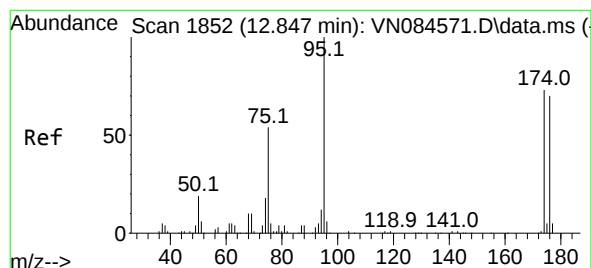
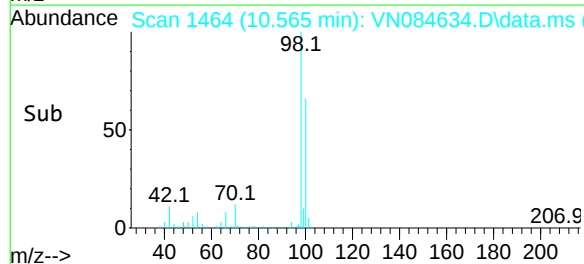
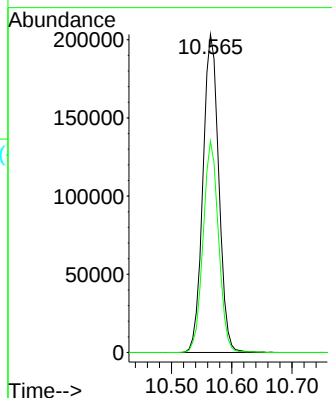
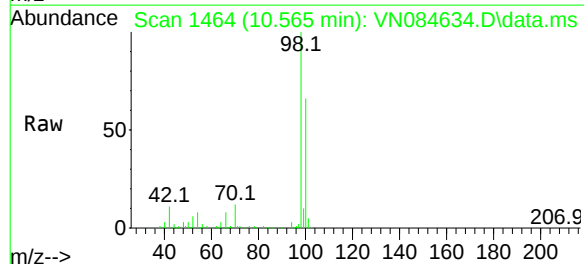
TB

Tgt Ion: 98 Resp: 371650

Ion Ratio Lower Upper

98 100

100 64.9 52.7 79.1



#62

4-Bromofluorobenzene

Concen: 45.339 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

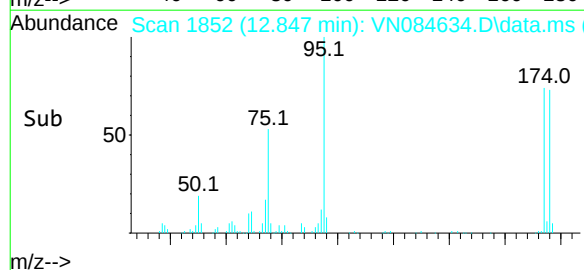
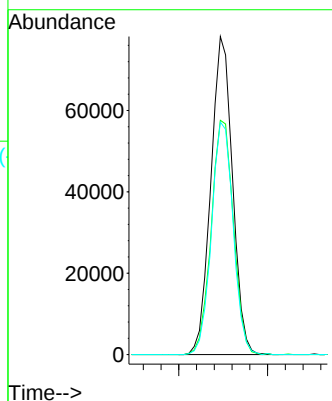
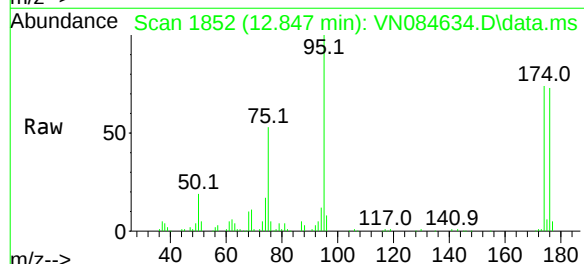
Tgt Ion: 95 Resp: 132405

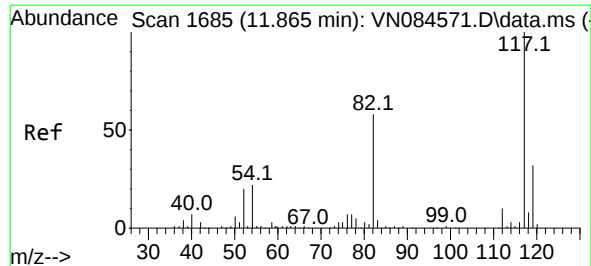
Ion Ratio Lower Upper

95 100

174 75.6 0.0 145.2

176 73.0 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.001 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

Instrument :

MSVOA_N

ClientSampleId :

TB

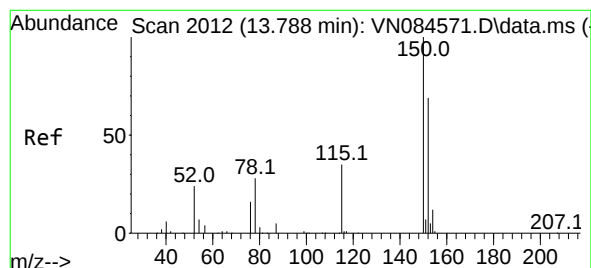
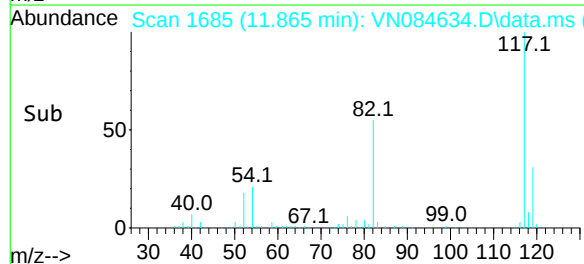
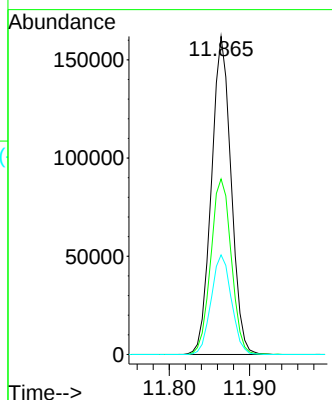
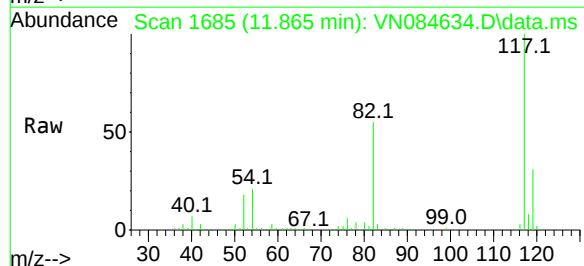
Tgt Ion:117 Resp: 275782

Ion Ratio Lower Upper

117 100

82 55.2 47.2 70.8

119 31.3 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN084634.D

Acq: 01 Nov 2024 13:20

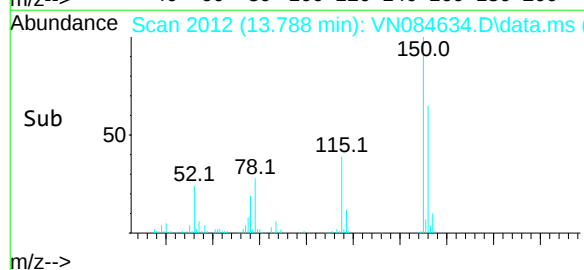
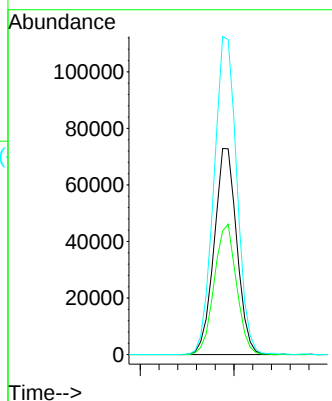
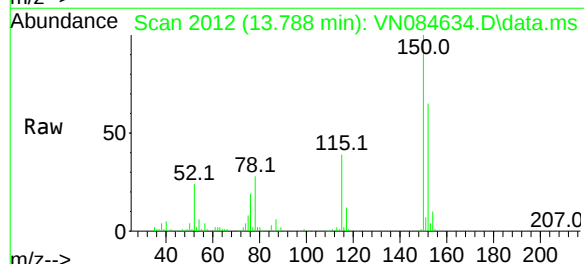
Tgt Ion:152 Resp: 122691

Ion Ratio Lower Upper

152 100

115 62.0 31.3 93.9

150 156.3 0.0 349.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M

Title : SW846 8260

Signal : TIC: VN084634.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.295	53	58	67	rVB4	4513	12527	1.28%	0.239%
2	2.818	139	147	148	rBV3	7859	12821	1.31%	0.245%
3	8.165	1046	1056	1060	rBV	145508	332051	33.85%	6.338%
4	8.224	1060	1066	1077	rVB	246621	560785	57.18%	10.703%
5	8.576	1117	1126	1135	rBV2	154259	351686	35.86%	6.712%
6	9.100	1207	1215	1224	rBV	364155	742737	75.73%	14.176%
7	10.565	1454	1464	1472	rBV	540087	980805	100.00%	18.720%
8	11.865	1677	1685	1698	rVB	489011	851304	86.80%	16.248%
9	12.847	1844	1852	1860	rBV	379887	638017	65.05%	12.177%
10	13.788	2005	2012	2022	rVB	450588	756611	77.14%	14.441%

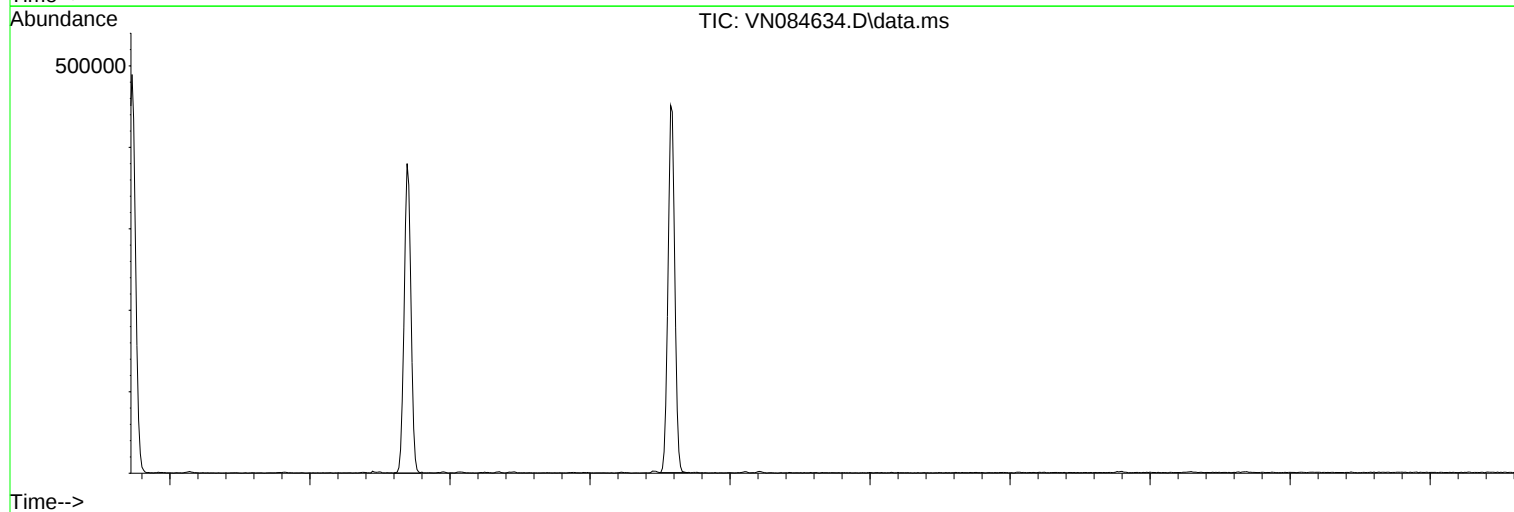
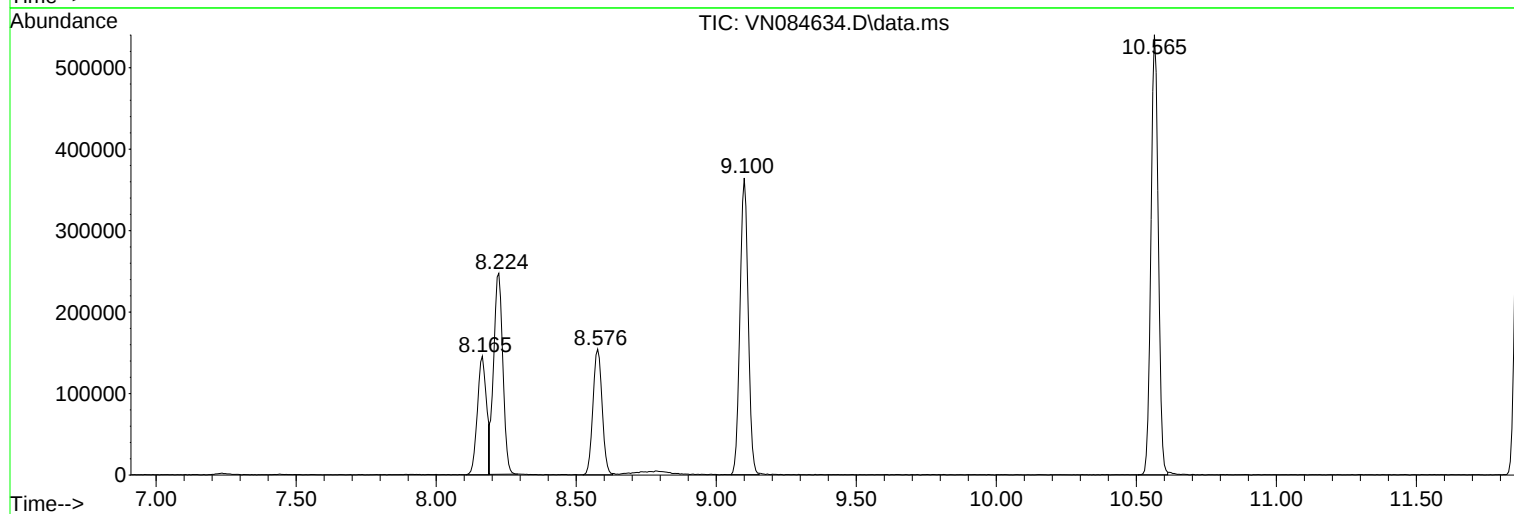
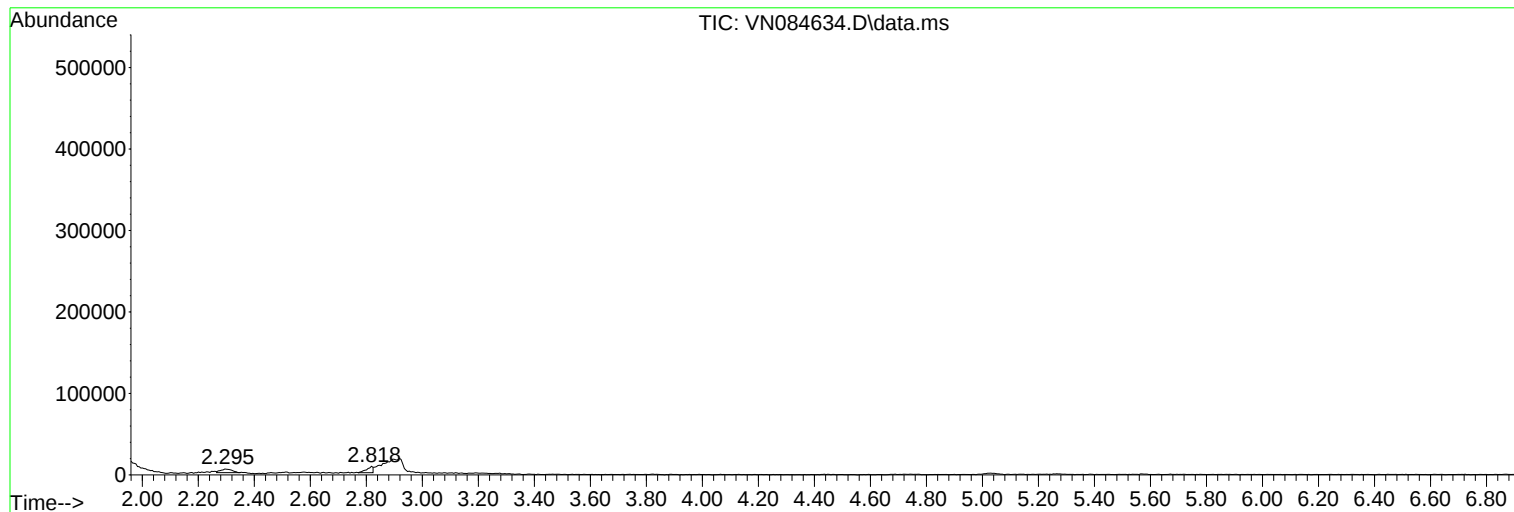
Sum of corrected areas: 5239344

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084634.D
Acq On : 01 Nov 2024 13:20
Operator : JC\MD
Sample : P4658-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
TB

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084630.D
Acq On : 01 Nov 2024 11:29
Operator : JC\MD
Sample : VN1101WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

Quant Time: Nov 04 04:23:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.224	168	180035	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	318575	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	285991	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	125664	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.576	65	134085	51.565	ug/l	0.00
Spiked Amount	50.000	Range 74 - 125	Recovery	=	103.120%	
35) Dibromofluoromethane	8.159	113	107465	49.836	ug/l	0.00
Spiked Amount	50.000	Range 75 - 124	Recovery	=	99.680%	
50) Toluene-d8	10.565	98	376240	47.365	ug/l	0.00
Spiked Amount	50.000	Range 86 - 113	Recovery	=	94.740%	
62) 4-Bromofluorobenzene	12.847	95	139006	46.824	ug/l	0.00
Spiked Amount	50.000	Range 77 - 121	Recovery	=	93.640%	

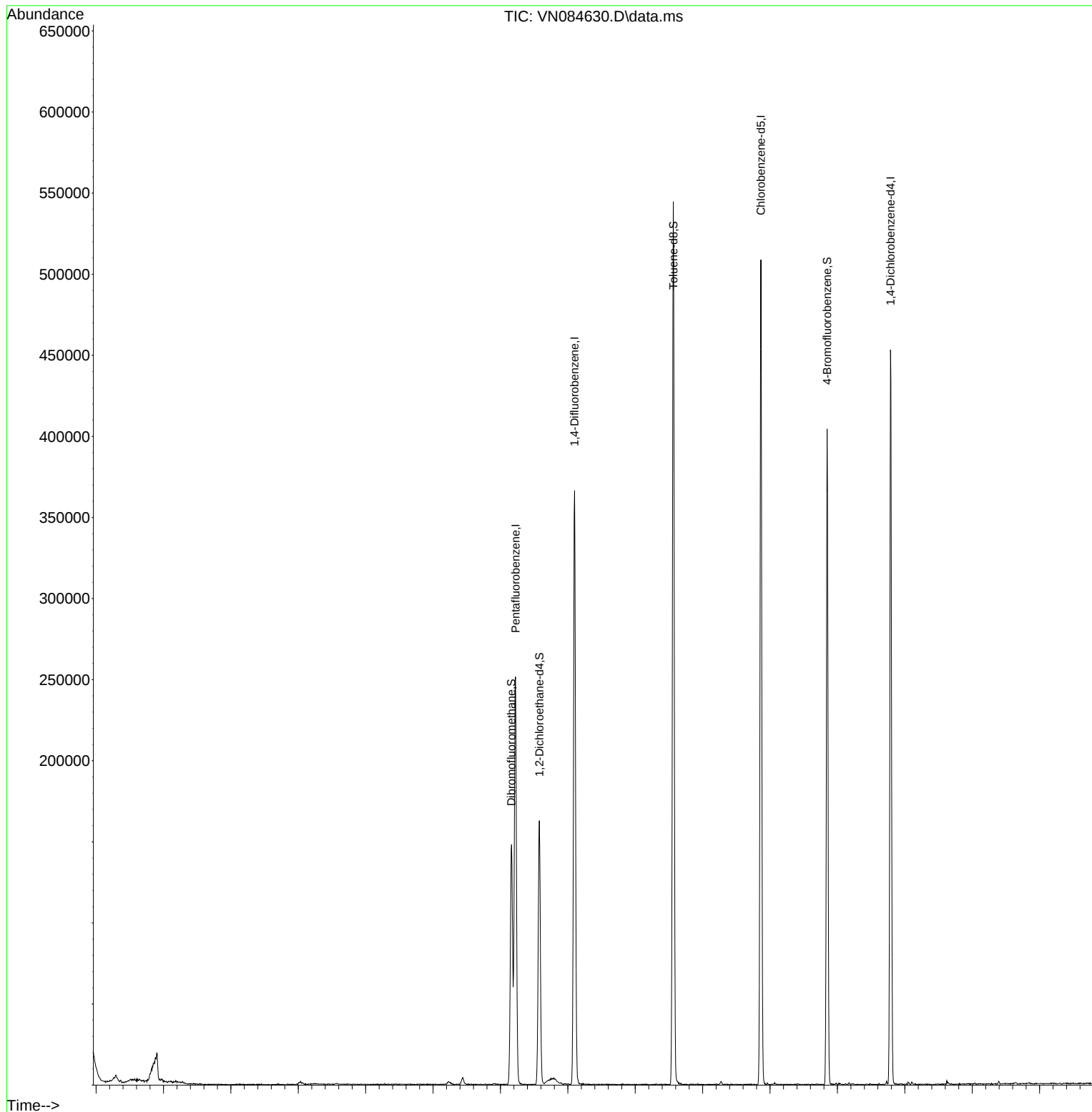
Target Compounds	Qvalue

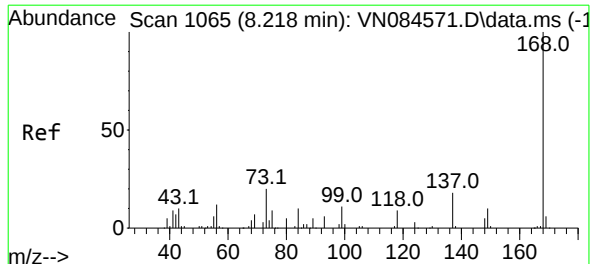
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084630.D
Acq On : 01 Nov 2024 11:29
Operator : JC\MD
Sample : VN1101WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

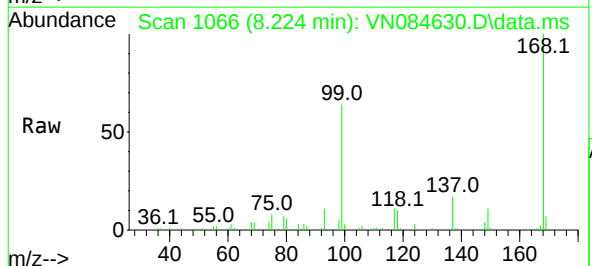
Quant Time: Nov 04 04:23:48 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration



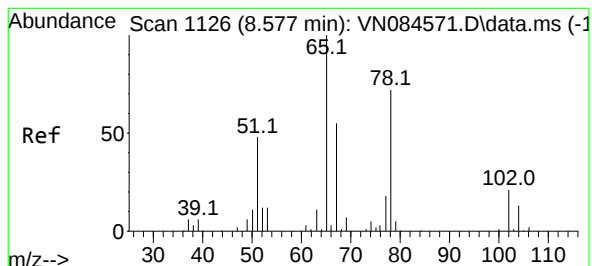
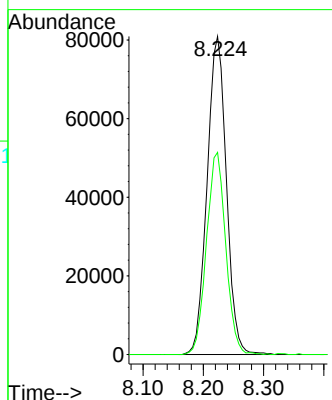
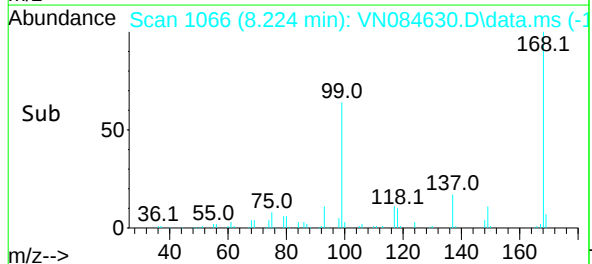


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1065
Delta R.T. -0.000 min
Lab File: VN084630.D
Acq: 01 Nov 2024 11:29

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

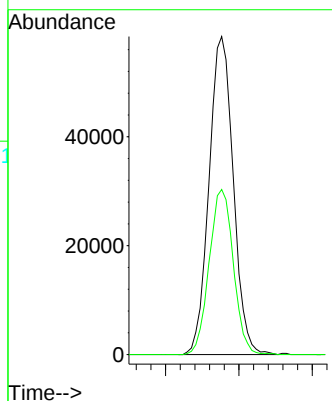
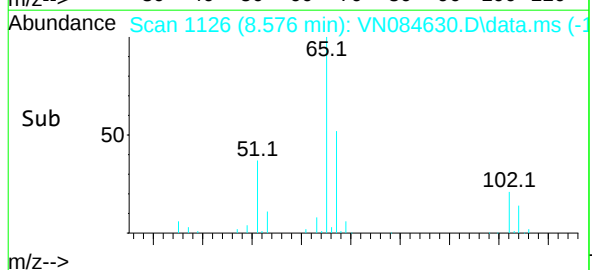
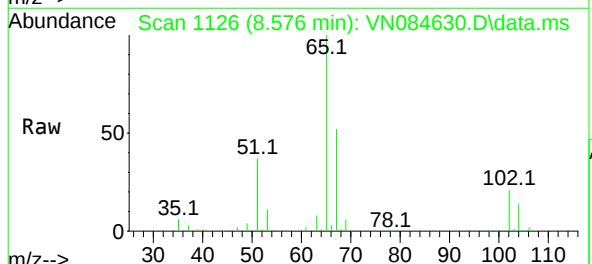


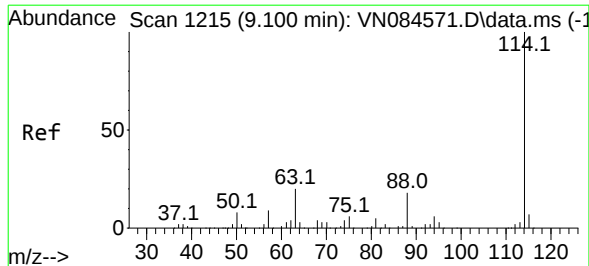
Tgt Ion: 168 Resp: 180035
Ion Ratio Lower Upper
168 100
99 63.5 54.2 81.2



#33
1,2-Dichloroethane-d4
Concen: 51.565 ug/l
RT: 8.576 min Scan# 1126
Delta R.T. -0.001 min
Lab File: VN084630.D
Acq: 01 Nov 2024 11:29

Tgt Ion: 65 Resp: 134085
Ion Ratio Lower Upper
65 100
67 51.8 0.0 102.0

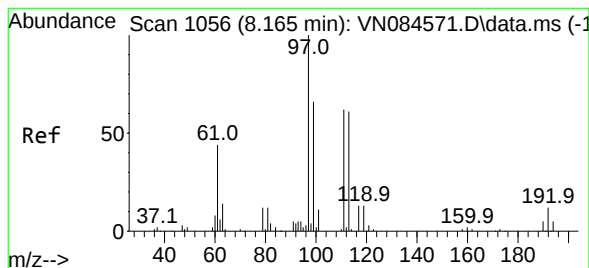
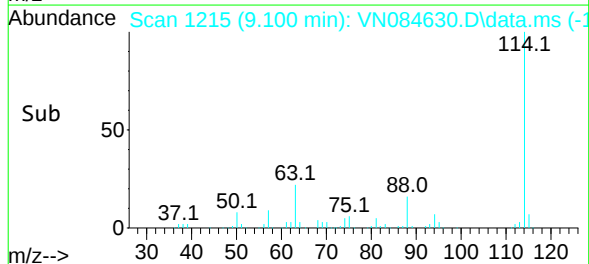
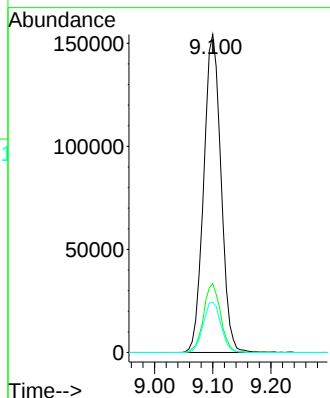
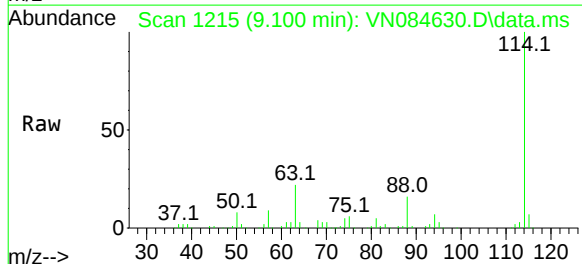




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN084630.D
Acq: 01 Nov 2024 11:29

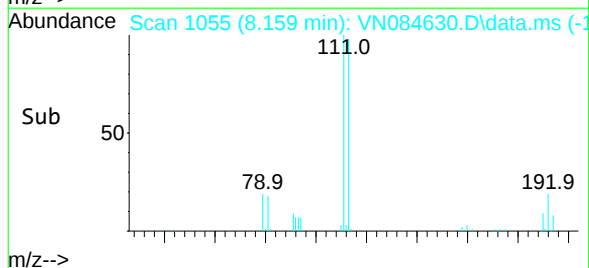
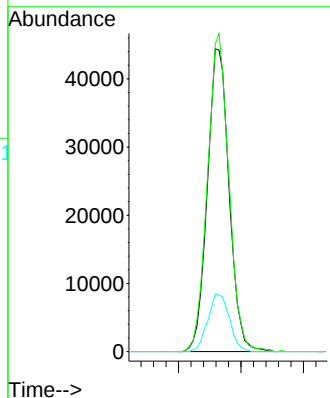
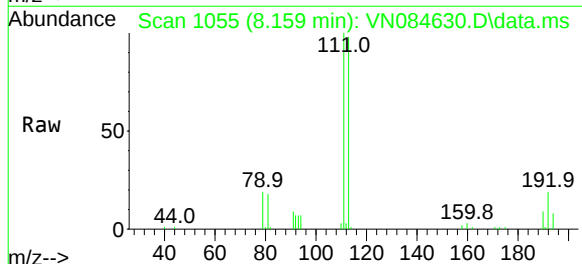
Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

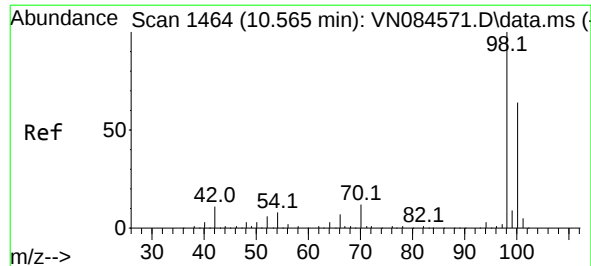
Tgt Ion:	114	Resp:	318575
Ion	Ratio	Lower	Upper
114	100		
63	21.7	0.0	43.8
88	15.7	0.0	31.6



#35
Dibromofluoromethane
Concen: 49.836 ug/l
RT: 8.159 min Scan# 1055
Delta R.T. -0.006 min
Lab File: VN084630.D
Acq: 01 Nov 2024 11:29

Tgt Ion:	113	Resp:	107465
Ion	Ratio	Lower	Upper
113	100		
111	103.2	83.3	124.9
192	18.8	13.5	20.3





#50

Toluene-d8

Concen: 47.365 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084630.D

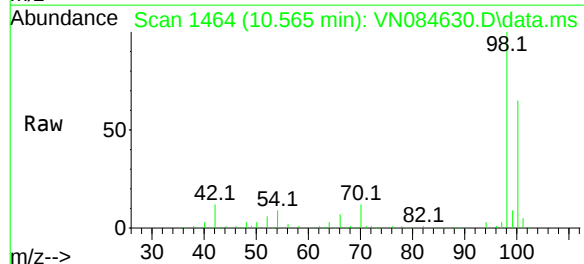
Acq: 01 Nov 2024 11:29

Instrument :

MSVOA_N

ClientSampleId :

VN1101WBL01

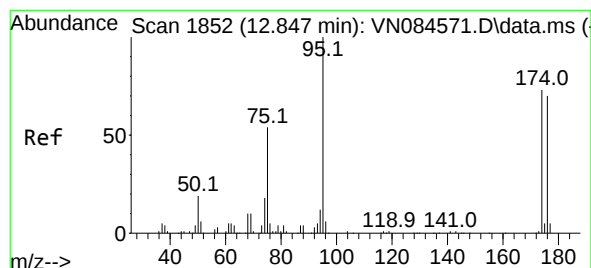
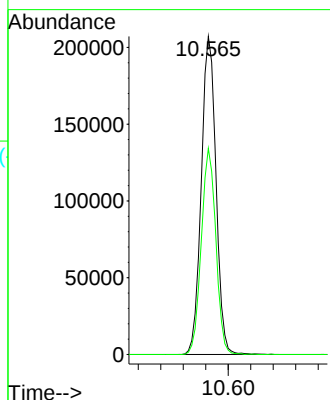
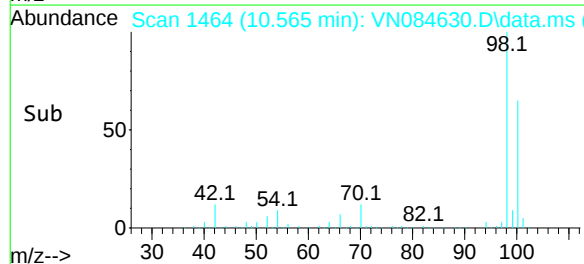


Tgt Ion: 98 Resp: 376240

Ion Ratio Lower Upper

98 100

100 64.0 52.7 79.1



#62

4-Bromofluorobenzene

Concen: 46.824 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN084630.D

Acq: 01 Nov 2024 11:29

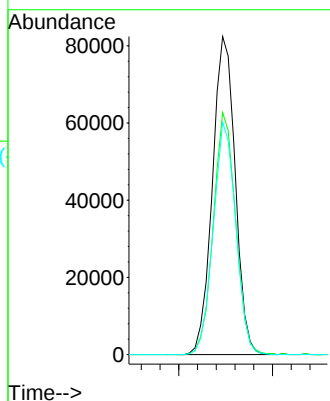
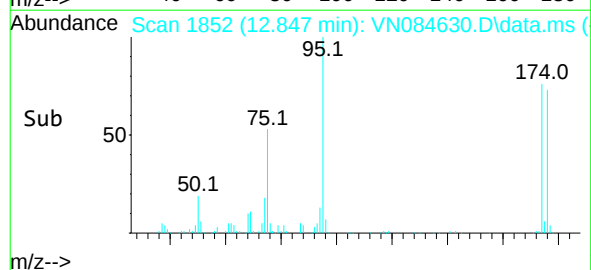
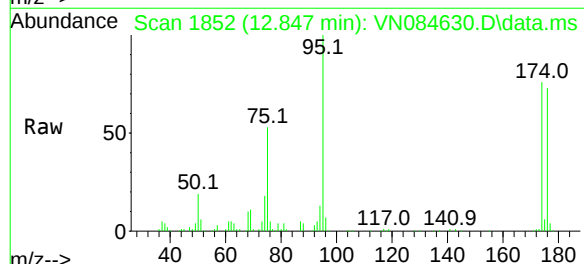
Tgt Ion: 95 Resp: 139006

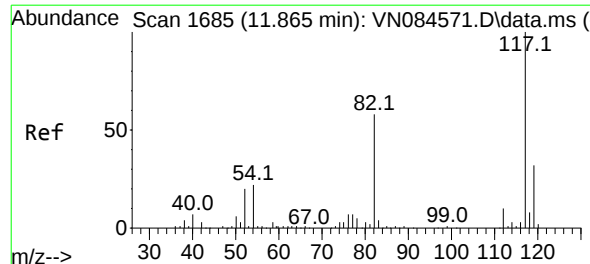
Ion Ratio Lower Upper

95 100

174 74.7 0.0 145.2

176 72.2 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN084630.D

Acq: 01 Nov 2024 11:29

Instrument :

MSVOA_N

ClientSampleId :

VN1101WBL01

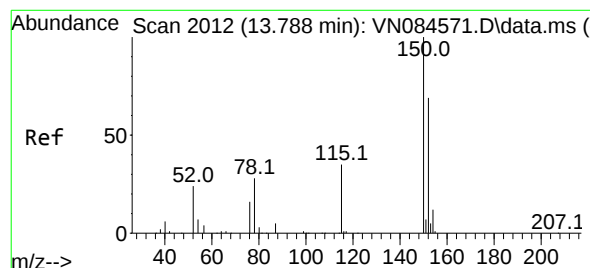
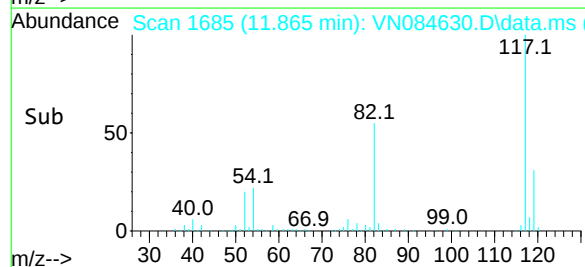
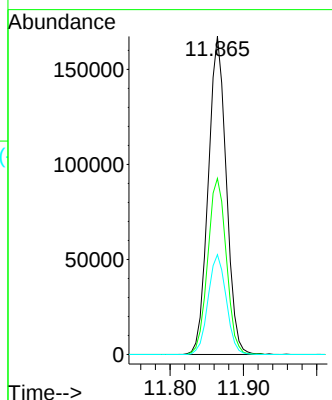
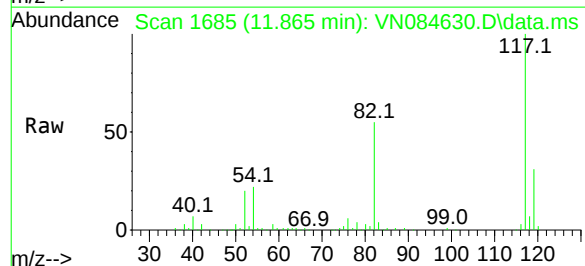
Tgt Ion:117 Resp: 285991

Ion Ratio Lower Upper

117 100

82 55.4 47.2 70.8

119 31.4 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN084630.D

Acq: 01 Nov 2024 11:29

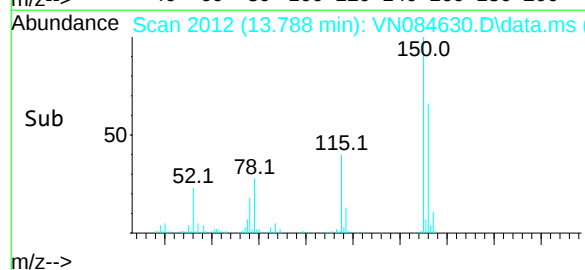
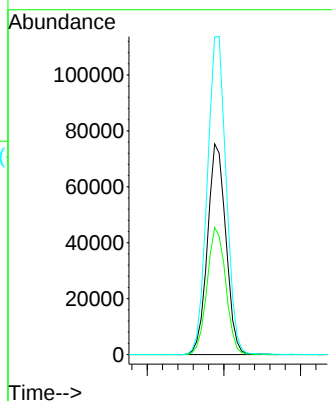
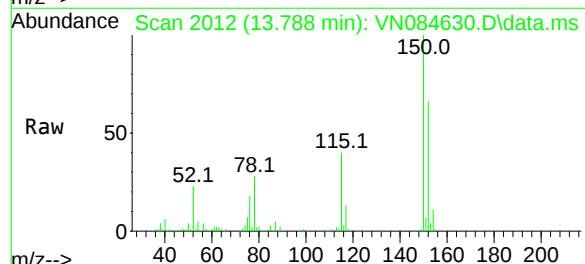
Tgt Ion:152 Resp: 125664

Ion Ratio Lower Upper

152 100

115 60.9 31.3 93.9

150 154.9 0.0 349.8



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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084630.D
 Acq On : 01 Nov 2024 11:29
 Operator : JC\MD
 Sample : VN1101WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Title : SW846 8260

Signal : TIC: VN084630.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.900	159	161	167	rVB2	16708	23699	2.40%	0.443%
2	7.441	924	933	940	rBV2	4311	10250	1.04%	0.191%
3	8.165	1046	1056	1060	rBV	148145	346437	35.10%	6.469%
4	8.224	1060	1066	1077	rVB	250837	566865	57.43%	10.586%
5	8.576	1116	1126	1139	rBV	162571	362771	36.76%	6.774%
6	9.100	1205	1215	1225	rBV	366220	754715	76.47%	14.093%
7	10.565	1455	1464	1477	rBV	544611	986986	100.00%	18.431%
8	11.865	1677	1685	1696	rBV	508549	878010	88.96%	16.396%
9	12.847	1845	1852	1862	rBV	404332	664162	67.29%	12.402%
10	13.788	2005	2012	2023	rVB	452800	761197	77.12%	14.214%

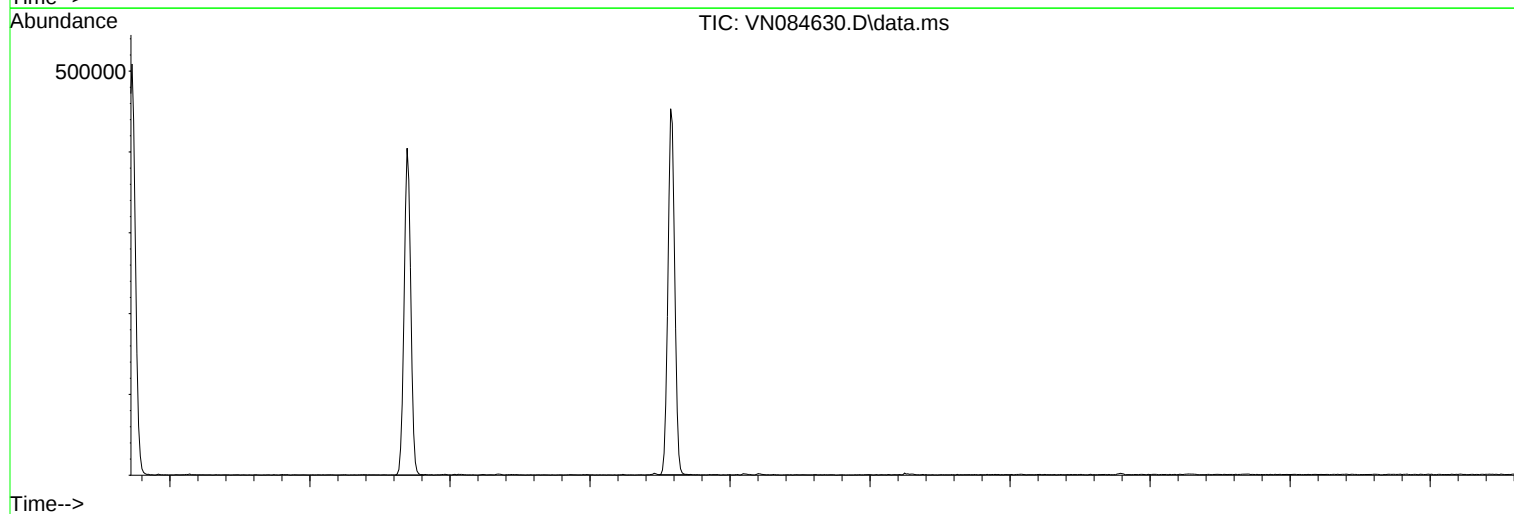
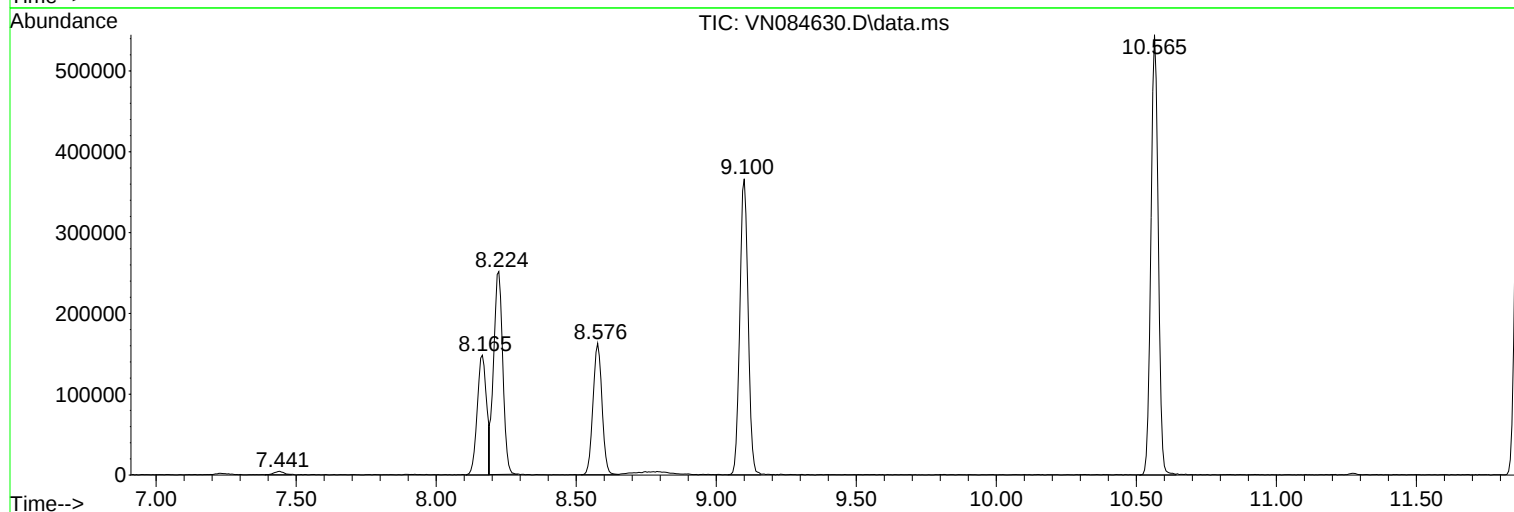
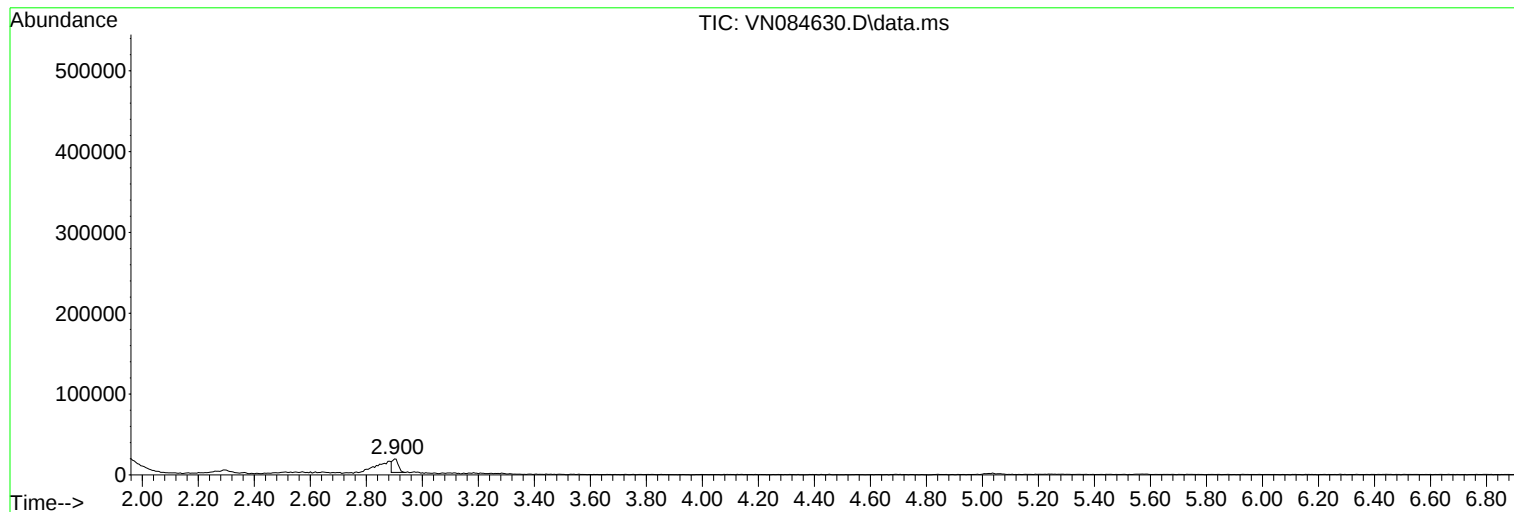
Sum of corrected areas: 5355092

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084630.D
Acq On : 01 Nov 2024 11:29
Operator : JC\MD
Sample : VN1101WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084630.D
Acq On : 01 Nov 2024 11:29
Operator : JC\MD
Sample : VN1101WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084630.D
Acq On : 01 Nov 2024 11:29
Operator : JC\MD
Sample : VN1101WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--		
					#	RT	Resp Conc

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084631.D
 Acq On : 01 Nov 2024 12:08
 Operator : JC\MD
 Sample : VN1101WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
 Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:24:13 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 31 18:45:38 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.224	168	190995	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	320452	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	287801	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.794	152	147052	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.577	65	122248	44.315	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	88.640%
35) Dibromofluoromethane	8.165	113	97927	45.147	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	90.300%
50) Toluene-d8	10.565	98	368236	46.086	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	92.180%
62) 4-Bromofluorobenzene	12.847	95	140490	47.047	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	94.100%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.124	85	42141	19.193	ug/l	100
3) Chloromethane	2.359	50	46710	16.439	ug/l	100
4) Vinyl Chloride	2.507	62	44544	18.862	ug/l	97
5) Bromomethane	2.901	94	22475	17.963	ug/l	97
6) Chloroethane	3.077	64	27854	18.166	ug/l	99
7) Trichlorofluoromethane	3.471	101	73135	18.800	ug/l	91
8) Diethyl Ether	3.959	74	24492	17.848	ug/l	95
9) 1,1,2-Trichlorotrifluo...	4.359	101	42530	19.348	ug/l	97
10) Methyl Iodide	4.583	142	53226	18.118	ug/l	96
11) Tert butyl alcohol	5.542	59	31560	86.672	ug/l	97
12) 1,1-Dichloroethene	4.330	96	38487	17.695	ug/l	98
13) Acrolein	4.177	56	36832	101.438	ug/l	98
14) Allyl chloride	5.018	41	65987	18.707	ug/l	91
15) Acrylonitrile	5.718	53	103209	97.908	ug/l	98
16) Acetone	4.436	43	77869	95.962	ug/l	97
17) Carbon Disulfide	4.700	76	112044	16.728	ug/l	98
18) Methyl Acetate	5.024	43	54615	16.052	ug/l	99
19) Methyl tert-butyl Ether	5.789	73	127569	19.135	ug/l	94
20) Methylene Chloride	5.271	84	46004	18.961	ug/l	82
21) trans-1,2-Dichloroethene	5.777	96	41275	18.481	ug/l	96
22) Diisopropyl ether	6.671	45	136454	19.469	ug/l	98
23) Vinyl Acetate	6.600	43	469366	97.108	ug/l	97
24) 1,1-Dichloroethane	6.565	63	80215	19.063	ug/l	98
25) 2-Butanone	7.477	43	124468	96.713	ug/l	98
26) 2,2-Dichloropropane	7.489	77	70266	19.185	ug/l	100
27) cis-1,2-Dichloroethene	7.483	96	48039	18.421	ug/l	98
28) Bromochloromethane	7.806	49	36023	21.487	ug/l	93
29) Tetrahydrofuran	7.836	42	84907	99.446	ug/l	97
30) Chloroform	7.965	83	83941	19.599	ug/l	97
31) Cyclohexane	8.253	56	69789	18.324	ug/l	98
32) 1,1,1-Trichloroethane	8.165	97	75478	19.362	ug/l	98
36) 1,1-Dichloropropene	8.365	75	54975	18.275	ug/l	99
37) Ethyl Acetate	7.559	43	55210	20.228	ug/l	97
38) Carbon Tetrachloride	8.359	117	66382	19.742	ug/l	98
39) Methylcyclohexane	9.600	83	56415	18.434	ug/l	98
40) Benzene	8.606	78	181197	18.756	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084631.D
 Acq On : 01 Nov 2024 12:08
 Operator : JC\MD
 Sample : VN1101WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
 Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:24:13 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 31 18:45:38 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	30555	20.818	ug/l	97
42) 1,2-Dichloroethane	8.665	62	60923	19.472	ug/l	100
43) Isopropyl Acetate	8.688	43	91436	17.507	ug/l	97
44) Trichloroethene	9.347	130	41099	18.446	ug/l	100
45) 1,2-Dichloropropane	9.618	63	43224	19.073	ug/l	99
46) Dibromomethane	9.706	93	30391	19.005	ug/l	96
47) Bromodichloromethane	9.888	83	64821	19.230	ug/l #	96
48) Methyl methacrylate	9.677	41	42680	20.092	ug/l	98
49) 1,4-Dioxane	9.694	88	15461	410.740	ug/l #	79
51) 4-Methyl-2-Pentanone	10.447	43	272747	104.826	ug/l	99
52) Toluene	10.630	92	113778	20.137	ug/l	99
53) t-1,3-Dichloropropene	10.835	75	61679	17.677	ug/l	97
54) cis-1,3-Dichloropropene	10.312	75	69008	18.686	ug/l	98
55) 1,1,2-Trichloroethane	11.018	97	42540	19.987	ug/l	95
56) Ethyl methacrylate	10.877	69	62329	20.246	ug/l	97
57) 1,3-Dichloropropane	11.159	76	71264	19.510	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	137645	95.550	ug/l	99
59) 2-Hexanone	11.194	43	201434	106.361	ug/l	99
60) Dibromochloromethane	11.359	129	49329	20.336	ug/l	100
61) 1,2-Dibromoethane	11.465	107	41441	19.014	ug/l	100
64) Tetrachloroethene	11.106	164	35660	18.628	ug/l	99
65) Chlorobenzene	11.888	112	117685	18.278	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.959	131	42403	18.934	ug/l	99
67) Ethyl Benzene	11.965	91	202367	18.829	ug/l	98
68) m/p-Xylenes	12.071	106	158415	38.934	ug/l	99
69) o-Xylene	12.394	106	75949	19.953	ug/l	98
70) Styrene	12.412	104	128771	19.394	ug/l	99
71) Bromoform	12.576	173	31965	18.968	ug/l #	97
73) Isopropylbenzene	12.694	105	190126	18.450	ug/l	99
74) N-ethyl acetate	12.494	43	79438	18.112	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.935	83	62261	18.101	ug/l	100
76) 1,2,3-Trichloropropane	12.994	75	49964m	16.997	ug/l	
77) Bromobenzene	12.982	156	48929	17.662	ug/l	93
78) n-propylbenzene	13.035	91	220072	18.224	ug/l	98
79) 2-Chlorotoluene	13.123	91	145506	18.441	ug/l	98
80) 1,3,5-Trimethylbenzene	13.171	105	164177	19.222	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	24782	20.001	ug/l #	84
82) 4-Chlorotoluene	13.218	91	146733	17.670	ug/l	98
83) tert-Butylbenzene	13.435	119	138949	19.657	ug/l	99
84) 1,2,4-Trimethylbenzene	13.482	105	169251	19.200	ug/l	99
85) sec-Butylbenzene	13.618	105	185297	18.558	ug/l	100
86) p-Isopropyltoluene	13.729	119	157950	19.288	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	91095	16.849	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	89211	17.266	ug/l	99
89) n-Butylbenzene	14.059	91	126030	16.453	ug/l	99
90) Hexachloroethane	14.335	117	31832	17.431	ug/l	98
91) 1,2-Dichlorobenzene	14.106	146	88346	17.005	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.717	75	12487	17.920	ug/l	95
93) 1,2,4-Trichlorobenzene	15.394	180	41786	14.695	ug/l	98
94) Hexachlorobutadiene	15.500	225	19729	15.799	ug/l	98
95) Naphthalene	15.641	128	130709	15.357	ug/l	99
96) 1,2,3-Trichlorobenzene	15.841	180	42159	15.273	ug/l	99

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084631.D
Acq On : 01 Nov 2024 12:08
Operator : JC\MD
Sample : VN1101WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBS01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:24:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

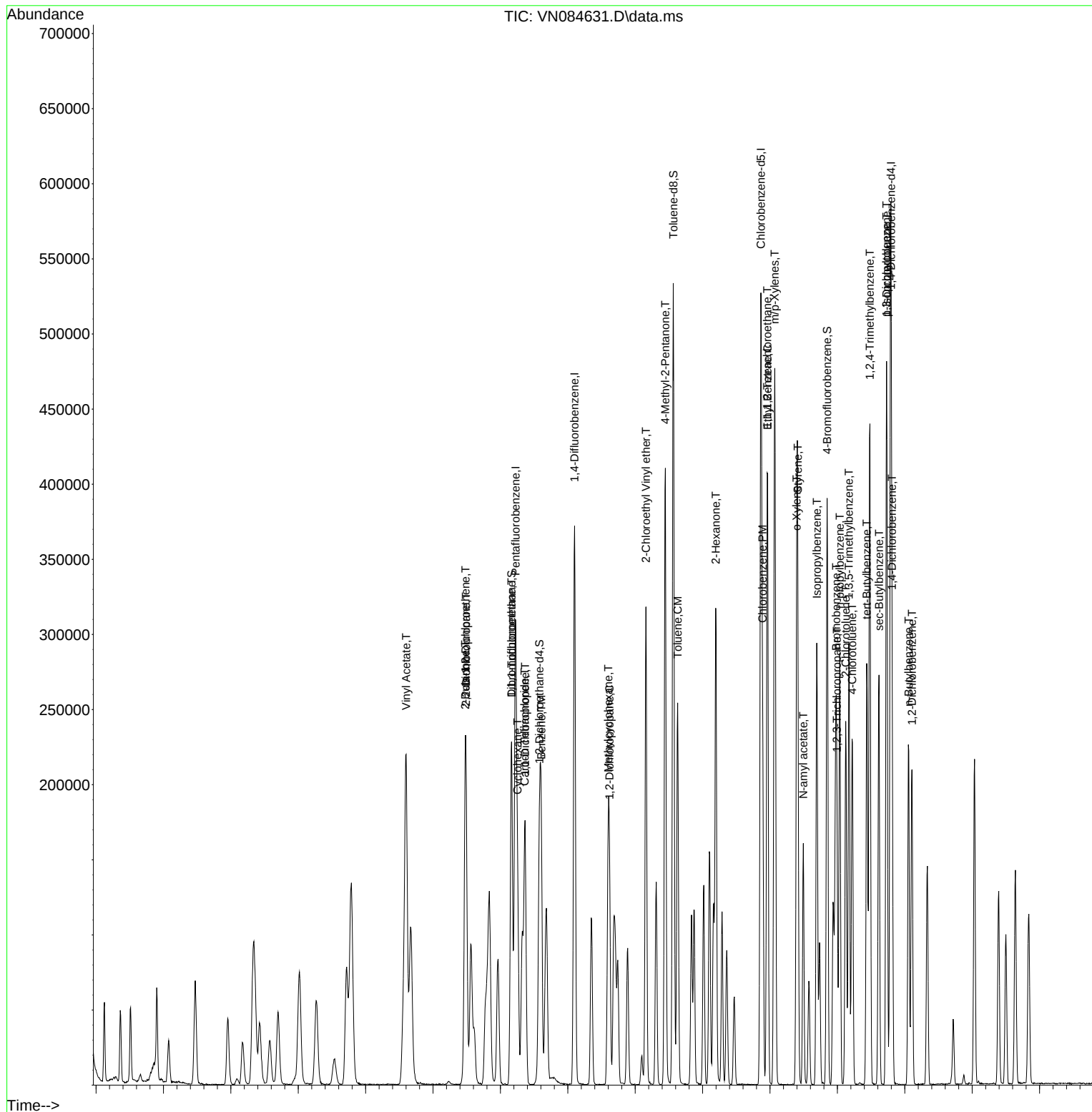
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084631.D
 Acq On : 01 Nov 2024 12:08
 Operator : JC\MD
 Sample : VN1101WBS01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
 Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:24:13 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 31 18:45:38 2024
 Response via : Initial Calibration



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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084632.D
 Acq On : 01 Nov 2024 12:32
 Operator : JC\MD
 Sample : VN1101WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
 Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:25:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 31 18:45:38 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.224	168	179647	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	303928	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	276373	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	139639	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	116705	44.978	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	89.960%		
35) Dibromofluoromethane	8.165	113	95578	46.460	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	92.920%		
50) Toluene-d8	10.565	98	350812	46.293	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	92.580%		
62) 4-Bromofluorobenzene	12.847	95	131770	46.526	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery =	93.060%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	2.124	85	39968	19.353	ug/l	97
3) Chloromethane	2.365	50	44651	16.750	ug/l	100
4) Vinyl Chloride	2.512	62	41926	18.875	ug/l	96
5) Bromomethane	2.901	94	21697	18.436	ug/l	93
6) Chloroethane	3.071	64	27307	18.995	ug/l	95
7) Trichlorofluoromethane	3.465	101	73409	20.063	ug/l	94
8) Diethyl Ether	3.948	74	26516	20.543	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.359	101	40756	19.712	ug/l	96
10) Methyl Iodide	4.577	142	53396	19.324	ug/l	95
11) Tert butyl alcohol	5.542	59	32016	93.479	ug/l	98
12) 1,1-Dichloroethene	4.324	96	37823	18.488	ug/l	96
13) Acrolein	4.177	56	35001	102.484	ug/l	97
14) Allyl chloride	5.012	41	64716	19.506	ug/l	92
15) Acrylonitrile	5.718	53	104289	105.182	ug/l	98
16) Acetone	4.424	43	80384	105.601	ug/l	99
17) Carbon Disulfide	4.701	76	110433	17.529	ug/l	99
18) Methyl Acetate	5.012	43	56734	18.181	ug/l	100
19) Methyl tert-butyl Ether	5.795	73	128070	20.424	ug/l	97
20) Methylene Chloride	5.271	84	44336	19.428	ug/l	86
21) trans-1,2-Dichloroethene	5.771	96	39898	18.993	ug/l	99
22) Diisopropyl ether	6.671	45	136989	20.780	ug/l	97
23) Vinyl Acetate	6.600	43	473087	104.061	ug/l	99
24) 1,1-Dichloroethane	6.559	63	78807	19.911	ug/l	96
25) 2-Butanone	7.483	43	126655	104.629	ug/l	99
26) 2,2-Dichloropropane	7.489	77	68278	19.820	ug/l	99
27) cis-1,2-Dichloroethene	7.483	96	48150	19.630	ug/l	98
28) Bromochloromethane	7.812	49	34905	22.135	ug/l	93
29) Tetrahydrofuran	7.841	42	83561	104.051	ug/l	96
30) Chloroform	7.959	83	80798	20.057	ug/l	96
31) Cyclohexane	8.253	56	69908	19.515	ug/l	96
32) 1,1,1-Trichloroethane	8.165	97	73597	20.072	ug/l	98
36) 1,1-Dichloropropene	8.365	75	54311	19.036	ug/l	99
37) Ethyl Acetate	7.559	43	54883	21.202	ug/l	98
38) Carbon Tetrachloride	8.359	117	63997	20.068	ug/l	98
39) Methylcyclohexane	9.600	83	56902	19.604	ug/l	99
40) Benzene	8.600	78	178059	19.433	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
 Data File : VN084632.D
 Acq On : 01 Nov 2024 12:32
 Operator : JC\MD
 Sample : VN1101WBSD01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN1101WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
 Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:25:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 31 18:45:38 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.777	41	29975	21.533	ug/l	96
42) 1,2-Dichloroethane	8.671	62	60410	20.358	ug/l	98
43) Isopropyl Acetate	8.688	43	94407	19.145	ug/l	99
44) Trichloroethene	9.347	130	40547	19.188	ug/l	97
45) 1,2-Dichloropropane	9.624	63	43144	20.073	ug/l	99
46) Dibromomethane	9.706	93	29954	19.750	ug/l	96
47) Bromodichloromethane	9.888	83	64340	20.125	ug/l	93
48) Methyl methacrylate	9.683	41	41114	20.408	ug/l	96
49) 1,4-Dioxane	9.700	88	15620	437.525	ug/l	95
51) 4-Methyl-2-Pentanone	10.447	43	269825	109.342	ug/l	99
52) Toluene	10.630	92	111675	20.840	ug/l	98
53) t-1,3-Dichloropropene	10.835	75	63947	19.323	ug/l	99
54) cis-1,3-Dichloropropene	10.312	75	68709	19.617	ug/l	98
55) 1,1,2-Trichloroethane	11.012	97	42554	21.081	ug/l	94
56) Ethyl methacrylate	10.871	69	62143	21.283	ug/l	98
57) 1,3-Dichloropropane	11.159	76	70269	20.283	ug/l	99
58) 2-Chloroethyl Vinyl ether	10.159	63	137129	100.367	ug/l	98
59) 2-Hexanone	11.194	43	194808	108.454	ug/l	97
60) Dibromochloromethane	11.359	129	48478	21.072	ug/l	100
61) 1,2-Dibromoethane	11.465	107	42488	20.554	ug/l	96
64) Tetrachloroethene	11.100	164	36361	19.779	ug/l	95
65) Chlorobenzene	11.888	112	116675	18.870	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.959	131	42973	19.982	ug/l	99
67) Ethyl Benzene	11.965	91	200430	19.420	ug/l	99
68) m/p-Xylenes	12.071	106	155447	39.784	ug/l	98
69) o-Xylene	12.400	106	73499	20.108	ug/l	98
70) Styrene	12.412	104	128498	20.153	ug/l	98
71) Bromoform	12.576	173	31565	19.505	ug/l #	97
73) Isopropylbenzene	12.694	105	187731	19.185	ug/l	100
74) N-amyl acetate	12.494	43	80040	19.218	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.935	83	61000	18.676	ug/l	99
76) 1,2,3-Trichloropropane	12.994	75	50243m	18.000	ug/l	
77) Bromobenzene	12.976	156	48197	18.321	ug/l	93
78) n-propylbenzene	13.035	91	219361	19.130	ug/l	99
79) 2-Chlorotoluene	13.124	91	142054	18.959	ug/l	98
80) 1,3,5-Trimethylbenzene	13.171	105	161079	19.861	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.735	75	21497	18.271	ug/l	97
82) 4-Chlorotoluene	13.218	91	143409	18.187	ug/l	97
83) tert-Butylbenzene	13.435	119	137807	20.530	ug/l	98
84) 1,2,4-Trimethylbenzene	13.482	105	164356	19.634	ug/l	98
85) sec-Butylbenzene	13.612	105	184495	19.458	ug/l	99
86) p-Isopropyltoluene	13.729	119	155045	19.939	ug/l	99
87) 1,3-Dichlorobenzene	13.729	146	89011	17.338	ug/l	98
88) 1,4-Dichlorobenzene	13.812	146	90455	18.501	ug/l	100
89) n-Butylbenzene	14.053	91	126197	17.349	ug/l	99
90) Hexachloroethane	14.329	117	30596	17.643	ug/l	99
91) 1,2-Dichlorobenzene	14.106	146	89620	18.166	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.723	75	12000	18.135	ug/l	97
93) 1,2,4-Trichlorobenzene	15.394	180	43138	15.975	ug/l	99
94) Hexachlorobutadiene	15.500	225	19708	16.620	ug/l	98
95) Naphthalene	15.641	128	131737	16.299	ug/l	99
96) 1,2,3-Trichlorobenzene	15.835	180	42176	16.090	ug/l	99

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110124\
Data File : VN084632.D
Acq On : 01 Nov 2024 12:32
Operator : JC\MD
Sample : VN1101WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBSD01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
Supervised By :Semsettin Yesilyurt 11/04/2024

Quant Time: Nov 04 04:25:11 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

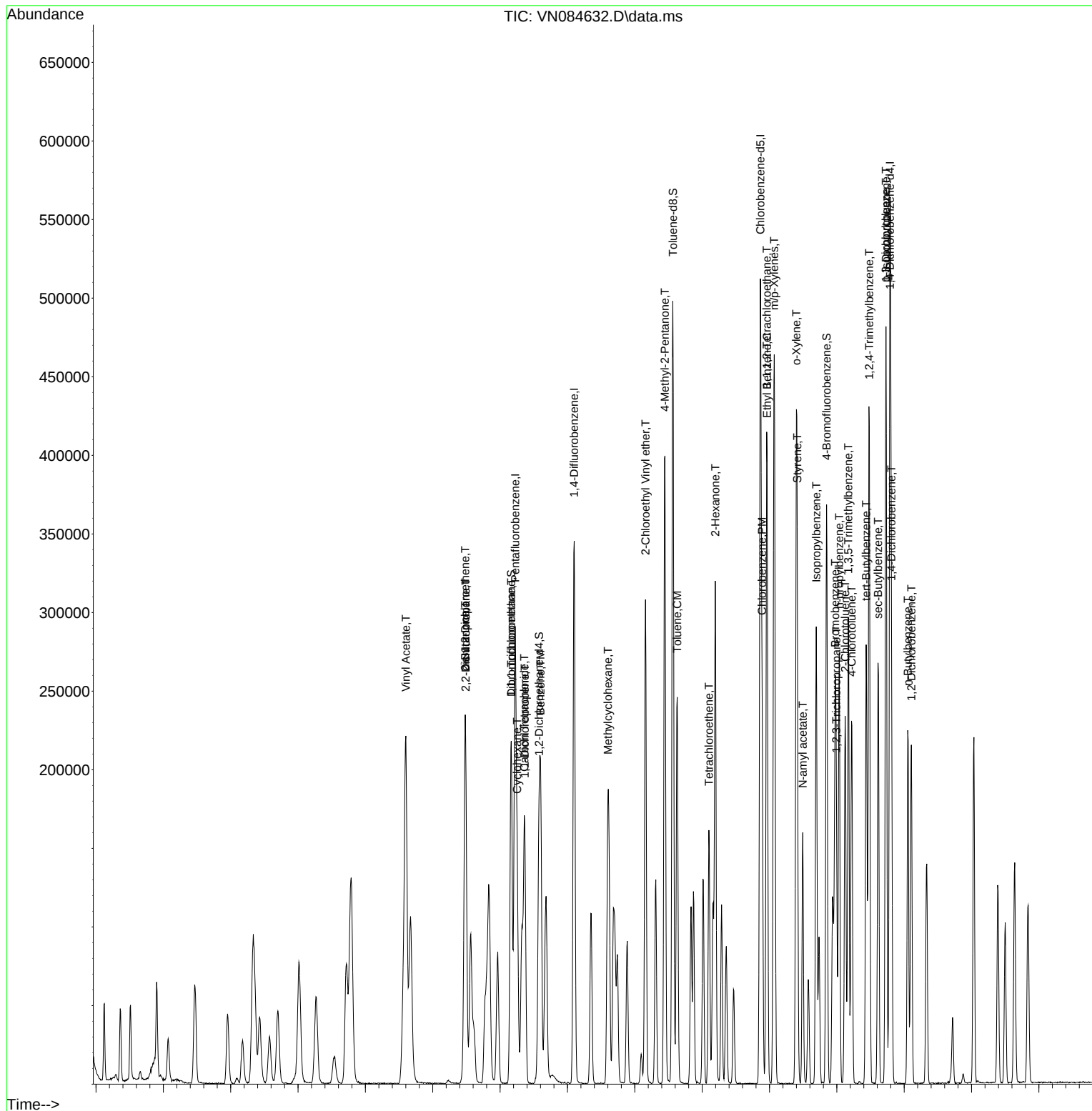
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Data File : VN084632.D
Acq On : 01 Nov 2024 12:32
Operator : JC\MD
Sample : VN1101WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 04 04:25:11 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N103024W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 31 18:45:38 2024
Response via : Initial Calibration

Instrument :
MSVOA_N
ClientSampleId :
VN1101WBSD01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 11/04/2024
Supervised By :Semsettin Yesilyurt 11/04/2024



Manual Integration Report

Sequence:	vn103024	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC100	VN084570.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:14 AM	MMDadoda	11/4/2024 1:18:00 AM	Peak Integrated by Software
VSTDICCC050	VN084571.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:15 AM	MMDadoda	11/4/2024 1:18:01 AM	Peak Integrated by Software
VSTDICC020	VN084572.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:16 AM	MMDadoda	11/4/2024 1:18:03 AM	Peak Integrated by Software
VSTDICC010	VN084573.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:17 AM	MMDadoda	11/4/2024 1:18:04 AM	Peak Integrated by Software
VSTDICC005	VN084574.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:20 AM	MMDadoda	11/4/2024 1:18:05 AM	Peak Integrated by Software
VSTDICC001	VN084575.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:21 AM	MMDadoda	11/4/2024 1:18:07 AM	Peak Integrated by Software
VSTDICC001	VN084575.D	1,4-Dichlorobenzene	SAM	11/4/2024 1:12:21 AM	MMDadoda	11/4/2024 1:18:07 AM	Peak Integrated by Software
VSTDICC001	VN084575.D	Acetone	SAM	11/4/2024 1:12:21 AM	MMDadoda	11/4/2024 1:18:07 AM	Peak Integrated by Software
VSTDICC001	VN084575.D	Diethyl Ether	SAM	11/4/2024 1:12:21 AM	MMDadoda	11/4/2024 1:18:07 AM	Peak Integrated by Software
VSTDICV050	VN084577.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:23 AM	MMDadoda	11/4/2024 1:18:09 AM	Peak Integrated by Software
VSTDCCC050	VN084579.D	1,2,3-Trichloropropane	SAM	11/4/2024 1:12:34 AM	MMDadoda	11/4/2024 1:18:38 AM	Peak Integrated by Software
VSTDCCC050	VN084579.D	trans-1,4-Dichloro-2-butene	SAM	11/4/2024 1:12:34 AM	MMDadoda	11/4/2024 1:18:38 AM	Peak Integrated by Software



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

Manual Integration Report

Sequence:

vn103024

Instrument

MSVOA_n

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:	VN110124	Instrument	MSVOA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VN084628.D	1,2,3-Trichloropropane	MMDadoda	11/4/2024 5:57:12 PM	SAM	11/4/2024 5:58:20 PM	Peak Integrated by Software
VN1101WBS01	VN084631.D	1,2,3-Trichloropropane	MMDadoda	11/4/2024 5:57:14 PM	SAM	11/4/2024 5:58:21 PM	Peak Integrated by Software
VN1101WBSD01	VN084632.D	1,2,3-Trichloropropane	MMDadoda	11/4/2024 5:57:16 PM	SAM	11/4/2024 5:58:23 PM	Peak Integrated by Software
VSTDCCC050	VN084643.D	1,2,3-Trichloropropane	MMDadoda	11/4/2024 5:57:22 PM	SAM	11/4/2024 5:58:27 PM	Peak Integrated by Software

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN103024

Review By	Semsettin Yesilyurt	Review On	11/1/2024 2:56:11 PM		
Supervise By	Maresh Dadoda	Supervise On	11/4/2024 1:18:30 AM		
SubDirectory	VN103024	HP Acquire Method	MSVOA_N	HP Processing Method	82n103024w.m
STD. NAME		STD REF.#			
Tune/Reschk		VP131194.VP131195			
Initial Calibration Stds		VP131185,VP131186,VP131187,VP131188,VP131189,VP131190			
CCC		VP131191,VP131192			
Internal Standard/PEM		VP128298			
ICV/I.BLK		VP131193			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN084569.D	30 Oct 2024 10:42	JC\MD	Ok
2	VSTDICC100	VN084570.D	30 Oct 2024 11:46	JC\MD	Ok,M
3	VSTDICCC050	VN084571.D	30 Oct 2024 12:09	JC\MD	Ok,M
4	VSTDICC020	VN084572.D	30 Oct 2024 12:33	JC\MD	Ok,M
5	VSTDICC010	VN084573.D	30 Oct 2024 12:57	JC\MD	Ok,M
6	VSTDICC005	VN084574.D	30 Oct 2024 13:21	JC\MD	Ok,M
7	VSTDICC001	VN084575.D	30 Oct 2024 13:45	JC\MD	Ok,M
8	VIBLK	VN084576.D	30 Oct 2024 14:42	JC\MD	Ok
9	VSTDICV050	VN084577.D	30 Oct 2024 15:06	JC\MD	Ok,M
10	BFB	VN084578.D	30 Oct 2024 19:24	JC\MD	Ok
11	VSTDCCC050	VN084579.D	30 Oct 2024 20:12	JC\MD	Ok,M
12	VN1030MBL01	VN084580.D	30 Oct 2024 20:48	JC\MD	Ok
13	VN1030WBL01	VN084581.D	30 Oct 2024 21:12	JC\MD	Ok
14	VN1030WBS01	VN084582.D	30 Oct 2024 21:46	JC\MD	Ok,M
15	VN1030WBSD01	VN084583.D	30 Oct 2024 22:10	JC\MD	Ok,M
16	P4594-04	VN084584.D	30 Oct 2024 22:34	JC\MD	Ok,M
17	P4594-08	VN084585.D	30 Oct 2024 22:58	JC\MD	Ok
18	P4594-12	VN084586.D	30 Oct 2024 23:22	JC\MD	Ok
19	P4594-16	VN084587.D	30 Oct 2024 23:46	JC\MD	Ok
20	P4594-20	VN084588.D	31 Oct 2024 00:09	JC\MD	Ok
21	P4597-03	VN084589.D	31 Oct 2024 00:34	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN103024

Review By	Semsettin Yesilyurt	Review On	11/1/2024 2:56:11 PM		
Supervise By	Maresh Dadoda	Supervise On	11/4/2024 1:18:30 AM		
SubDirectory	VN103024	HP Acquire Method	MSVOA_N	HP Processing Method	82n103024w.m
STD. NAME		STD REF.#			
Tune/Reschk		VP131194.VP131195			
Initial Calibration Stds		VP131185,VP131186,VP131187,VP131188,VP131189,VP131190			
CCC		VP131191,VP131192			
Internal Standard/PEM		VP128298			
ICV/I.BLK		VP131193			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	P4597-06	VN084590.D	31 Oct 2024 00:57	JC\MD	Ok,M
23	P4597-09	VN084591.D	31 Oct 2024 01:21	JC\MD	Ok
24	P4597-12	VN084592.D	31 Oct 2024 01:45	JC\MD	Ok,M
25	P4598-04	VN084593.D	31 Oct 2024 02:09	JC\MD	Ok
26	P4598-08	VN084594.D	31 Oct 2024 02:33	JC\MD	Ok
27	P4598-12	VN084595.D	31 Oct 2024 02:57	JC\MD	Ok
28	P4611-03	VN084596.D	31 Oct 2024 03:21	JC\MD	Ok
29	P4611-06	VN084597.D	31 Oct 2024 03:45	JC\MD	Ok
30	P4611-09	VN084598.D	31 Oct 2024 04:09	JC\MD	Ok
31	P4611-12	VN084599.D	31 Oct 2024 04:33	JC\MD	Ok
32	P4611-15	VN084600.D	31 Oct 2024 04:57	JC\MD	Ok
33	P4611-18	VN084601.D	31 Oct 2024 05:21	JC\MD	Ok
34	P4612-04	VN084602.D	31 Oct 2024 05:45	JC\MD	Ok
35	P4613-02	VN084603.D	31 Oct 2024 06:09	JC\MD	Ok
36	PB164501ZHE#13	VN084604.D	31 Oct 2024 06:33	JC\MD	Ok,M
37	PB164501ZHE#14	VN084605.D	31 Oct 2024 06:57	JC\MD	Ok,M
38	PB164501ZHE#15	VN084606.D	31 Oct 2024 07:22	JC\MD	Ok,M
39	PB164501ZHE#16	VN084607.D	31 Oct 2024 07:46	JC\MD	Ok
40	PB164501ZHE#17	VN084608.D	31 Oct 2024 08:10	JC\MD	Ok,M
41	PB164501ZHE#18	VN084609.D	31 Oct 2024 08:34	JC\MD	Ok,M
42	PB164501ZHE#19	VN084610.D	31 Oct 2024 08:58	JC\MD	Ok,M
43	PB164501ZHE#20	VN084611.D	31 Oct 2024 09:22	JC\MD	Ok

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN110124

Review By	Mahesh Dadoda	Review On	11/4/2024 5:57:30 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	11/4/2024 5:58:33 PM		
SubDirectory	VN110124	HP Acquire Method	MSVOA_N	HP Processing Method	82n103024w.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP131230			
CCC		VP131233,VP131234			
Internal Standard/PEM		VP128298			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VN084627.D	01 Nov 2024 09:48	JC\MD	Ok
2	VSTDCCC050	VN084628.D	01 Nov 2024 10:22	JC\MD	Ok,M
3	VN1101MBL01	VN084629.D	01 Nov 2024 11:04	JC\MD	Not Ok
4	VN1101WBL01	VN084630.D	01 Nov 2024 11:29	JC\MD	Ok
5	VN1101WBS01	VN084631.D	01 Nov 2024 12:08	JC\MD	Ok,M
6	VN1101WBSD01	VN084632.D	01 Nov 2024 12:32	JC\MD	Ok,M
7	VIBLK	VN084633.D	01 Nov 2024 12:56	JC\MD	Ok
8	P4658-04	VN084634.D	01 Nov 2024 13:20	JC\MD	Ok
9	P4665-01	VN084635.D	01 Nov 2024 13:53	JC\MD	Ok
10	P4665-05	VN084636.D	01 Nov 2024 14:17	JC\MD	Ok
11	P4665-06	VN084637.D	01 Nov 2024 14:42	JC\MD	Ok
12	P4665-02	VN084638.D	01 Nov 2024 15:06	JC\MD	Ok
13	P4665-03	VN084639.D	01 Nov 2024 15:30	JC\MD	Ok
14	P4665-04	VN084640.D	01 Nov 2024 15:54	JC\MD	Ok
15	P4665-07	VN084641.D	01 Nov 2024 16:19	JC\MD	Ok,M
16	VIBLK	VN084642.D	01 Nov 2024 16:43	JC\MD	Ok
17	VSTDCCC050	VN084643.D	01 Nov 2024 17:07	JC\MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN103024

Review By	Semsettin Yesilyurt	Review On	11/1/2024 2:56:11 PM
Supervise By	Maresh Dadoda	Supervise On	11/4/2024 1:18:30 AM
SubDirectory	VN103024	HP Acquire Method	MSVOA_N HP Processing Method 82n103024w.m
STD. NAME	STD REF.#		
Tune/Reschk	VP131194,VP131195		
Initial Calibration Stds	VP131185,VP131186,VP131187,VP131188,VP131189,VP131190		
CCC	VP131191,VP131192		
Internal Standard/PEM	VP128298		
ICV/I.BLK	VP131193		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN084569.D	30 Oct 2024 10:42		JC\MD	Ok
2	VSTDICC100	VSTDICC100	VN084570.D	30 Oct 2024 11:46	Comp #03 fail for %D	JC\MD	Ok,M
3	VSTDICCC050	VSTDICCC050	VN084571.D	30 Oct 2024 12:09	LR-03,06,16,18,43	JC\MD	Ok,M
4	VSTDICC020	VSTDICC020	VN084572.D	30 Oct 2024 12:33	QR-88	JC\MD	Ok,M
5	VSTDICC010	VSTDICC010	VN084573.D	30 Oct 2024 12:57		JC\MD	Ok,M
6	VSTDICC005	VSTDICC005	VN084574.D	30 Oct 2024 13:21		JC\MD	Ok,M
7	VSTDICC001	VSTDICC001	VN084575.D	30 Oct 2024 13:45		JC\MD	Ok,M
8	VIBLK	VIBLK	VN084576.D	30 Oct 2024 14:42		JC\MD	Ok
9	VSTDICV050	ICVVN103024	VN084577.D	30 Oct 2024 15:06		JC\MD	Ok,M
10	BFB	BFB	VN084578.D	30 Oct 2024 19:24		JC\MD	Ok
11	VSTDCCC050	VSTDCCC050	VN084579.D	30 Oct 2024 20:12		JC\MD	Ok,M
12	VN1030MBL01	VN1030MBL01	VN084580.D	30 Oct 2024 20:48		JC\MD	Ok
13	VN1030WBL01	VN1030WBL01	VN084581.D	30 Oct 2024 21:12		JC\MD	Ok
14	VN1030WBS01	VN1030WBS01	VN084582.D	30 Oct 2024 21:46		JC\MD	Ok,M
15	VN1030WBSD01	VN1030WBSD01	VN084583.D	30 Oct 2024 22:10		JC\MD	Ok,M
16	P4594-04	TP-4	VN084584.D	30 Oct 2024 22:34	pH#5.0 A	JC\MD	Ok,M
17	P4594-08	BP-F17	VN084585.D	30 Oct 2024 22:58	pH#5.0 A	JC\MD	Ok
18	P4594-12	BP-F16	VN084586.D	30 Oct 2024 23:22	pH#5.0 A	JC\MD	Ok

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN103024

Review By	Semsettin Yesilyurt	Review On	11/1/2024 2:56:11 PM		
Supervise By	Mahesh Dadoda	Supervise On	11/4/2024 1:18:30 AM		
SubDirectory	VN103024	HP Acquire Method	MSVOA_N	HP Processing Method	82n103024w.m
STD. NAME		STD REF.#			
Tune/Reschk		VP131194.VP131195			
Initial Calibration Stds		VP131185,VP131186,VP131187,VP131188,VP131189,VP131190			
CCC		VP131191,VP131192			
Internal Standard/PEM		VP128298			
ICV/I.BLK		VP131193			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

19	P4594-16	TP-5	VN084587.D	30 Oct 2024 23:46	pH#7.0 A	JC\MD	Ok
20	P4594-20	BP-F15	VN084588.D	31 Oct 2024 00:09	pH#6.0 A	JC\MD	Ok
21	P4597-03	RED-1-1	VN084589.D	31 Oct 2024 00:34	pH#6.0 A	JC\MD	Ok
22	P4597-06	RED-1-2	VN084590.D	31 Oct 2024 00:57	pH#5.0 A	JC\MD	Ok,M
23	P4597-09	BLUE-2-1	VN084591.D	31 Oct 2024 01:21	pH#5.0 A	JC\MD	Ok
24	P4597-12	BLUE-2-2	VN084592.D	31 Oct 2024 01:45	pH#5.0 A	JC\MD	Ok,M
25	P4598-04	BP-F12	VN084593.D	31 Oct 2024 02:09	pH#7.0 A	JC\MD	Ok
26	P4598-08	BP-F11	VN084594.D	31 Oct 2024 02:33	pH#7.0 A	JC\MD	Ok
27	P4598-12	TP-8	VN084595.D	31 Oct 2024 02:57	pH#6.0 A	JC\MD	Ok
28	P4611-03	TP-1	VN084596.D	31 Oct 2024 03:21	pH#5.0 A	JC\MD	Ok
29	P4611-06	TP-2	VN084597.D	31 Oct 2024 03:45	pH#5.0 A	JC\MD	Ok
30	P4611-09	TP-3	VN084598.D	31 Oct 2024 04:09	pH#5.0 A	JC\MD	Ok
31	P4611-12	TP-4	VN084599.D	31 Oct 2024 04:33	pH#5.0 A	JC\MD	Ok
32	P4611-15	TP-5	VN084600.D	31 Oct 2024 04:57	pH#5.0 A	JC\MD	Ok
33	P4611-18	TP-6	VN084601.D	31 Oct 2024 05:21	pH#5.0 A	JC\MD	Ok
34	P4612-04	MOO-24-00335	VN084602.D	31 Oct 2024 05:45	pH#5.0 A	JC\MD	Ok
35	P4613-02	ARS20-0001	VN084603.D	31 Oct 2024 06:09	pH#5.0 A	JC\MD	Ok
36	PB164501ZHE#13	PB164501ZHE#13	VN084604.D	31 Oct 2024 06:33	pH#5.0 A	JC\MD	Ok,M
37	PB164501ZHE#14	PB164501ZHE#14	VN084605.D	31 Oct 2024 06:57	pH#5.0 A	JC\MD	Ok,M

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN103024

Review By	Semsettin Yesilyurt	Review On	11/1/2024 2:56:11 PM		
Supervise By	Maresh Dadoda	Supervise On	11/4/2024 1:18:30 AM		
SubDirectory	VN103024	HP Acquire Method	MSVOA_N	HP Processing Method	82n103024w.m
STD. NAME	STD REF.#				
Tune/Reschk	VP131194.VP131195				
Initial Calibration Stds	VP131185,VP131186,VP131187,VP131188,VP131189,VP131190				
CCC	VP131191,VP131192				
Internal Standard/PEM	VP128298				
ICV/I.BLK	VP131193				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

38	PB164501ZHE#15	PB164501ZHE#15	VN084606.D	31 Oct 2024 07:22	pH#5.0 A	JC\MD	Ok,M
39	PB164501ZHE#16	PB164501ZHE#16	VN084607.D	31 Oct 2024 07:46	pH#5.0 A	JC\MD	Ok
40	PB164501ZHE#17	PB164501ZHE#17	VN084608.D	31 Oct 2024 08:10	pH#5.0 A	JC\MD	Ok,M
41	PB164501ZHE#18	PB164501ZHE#18	VN084609.D	31 Oct 2024 08:34	pH#5.0 A	JC\MD	Ok,M
42	PB164501ZHE#19	PB164501ZHE#19	VN084610.D	31 Oct 2024 08:58	pH#5.0 A	JC\MD	Ok,M
43	PB164501ZHE#20	PB164501ZHE#20	VN084611.D	31 Oct 2024 09:22	pH#5.0 A	JC\MD	Ok

M : Manual Integration

Instrument ID: MSVOA_N

Daily Analysis Runlog For Sequence/QC Batch ID # VN110124

Review By	Maresh Dadoda	Review On	11/4/2024 5:57:30 PM
Supervise By	Semsettin Yesilyurt	Supervise On	11/4/2024 5:58:33 PM
SubDirectory	VN110124	HP Acquire Method	MSVOA_N HP Processing Method 82n103024w.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP131230		
CCC	VP131233,VP131234		
Internal Standard/PEM	VP128298		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VN084627.D	01 Nov 2024 09:48		JC\MD	Ok
2	VSTDCCC050	VSTDCCC050	VN084628.D	01 Nov 2024 10:22		JC\MD	Ok,M
3	VN1101MBL01	VN1101MBL01	VN084629.D	01 Nov 2024 11:04	Contaminated	JC\MD	Not Ok
4	VN1101WBL01	VN1101WBL01	VN084630.D	01 Nov 2024 11:29		JC\MD	Ok
5	VN1101WBS01	VN1101WBS01	VN084631.D	01 Nov 2024 12:08		JC\MD	Ok,M
6	VN1101WBSD01	VN1101WBSD01	VN084632.D	01 Nov 2024 12:32		JC\MD	Ok,M
7	VIBLK	VIBLK	VN084633.D	01 Nov 2024 12:56		JC\MD	Ok
8	P4658-04	TB	VN084634.D	01 Nov 2024 13:20	pH<2 A TB	JC\MD	Ok
9	P4665-01	BP-VPB-190-TB-20241	VN084635.D	01 Nov 2024 13:53	pH<2 A TB;Hit of comp.#29	JC\MD	Ok
10	P4665-05	BP-VPB-190-GW-558-5	VN084636.D	01 Nov 2024 14:17	pH<2 A	JC\MD	Ok
11	P4665-06	BP-VPB-190-GW-583-5	VN084637.D	01 Nov 2024 14:42	pH<2 A	JC\MD	Ok
12	P4665-02	VPB190-HYD-2024103	VN084638.D	01 Nov 2024 15:06	pH<2 A	JC\MD	Ok
13	P4665-03	BP-VPB-190-EB-20241	VN084639.D	01 Nov 2024 15:30	pH<2 A EB	JC\MD	Ok
14	P4665-04	BP-VPB-190-GW-538-5	VN084640.D	01 Nov 2024 15:54	pH<2 A	JC\MD	Ok
15	P4665-07	BP-VPB-190-GW-598-6	VN084641.D	01 Nov 2024 16:19	pH<2 A	JC\MD	Ok,M
16	VIBLK	VIBLK	VN084642.D	01 Nov 2024 16:43		JC\MD	Ok
17	VSTDCCC050	VSTDCCC050EC	VN084643.D	01 Nov 2024 17:07		JC\MD	Ok,M

M : Manual Integration

LAB CHRONICLE

OrderID:	P4658	OrderDate:	10/31/2024 12:18:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	K61,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4658-04	TB	Water	VOC-TCLVOA-10	8260-Low	10/31/24		11/01/24	10/31/24

Hit Summary Sheet
SW-846

SDG No.:	P4658	Order ID:	P4658
Client:	Portal Partners Tri-Venture	Project ID:	Amtrak Sawtooth Bridges 2024

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : B-131-1-SB02								
P4658-01	B-131-1-SB02	SOIL	Lead	13.8		0.25	0.98	mg/Kg
Client ID : B-131-2-SB02								
P4658-02	B-131-2-SB02	SOIL	Lead	15.6		0.22	0.88	mg/Kg
Client ID : B-131-3-SB02								
P4658-03	B-131-3-SB02	SOIL	Lead	16.5		0.24	0.97	mg/Kg



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/31/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/31/24
Client Sample ID:	B-131-1-SB02	SDG No.:	P4658
Lab Sample ID:	P4658-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	51.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	13.8	1	0.25	0.98	mg/Kg	11/03/24 15:00	11/06/24 21:34	SW6010	SW3050	

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/31/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/31/24
Client Sample ID:	B-131-2-SB02	SDG No.:	P4658
Lab Sample ID:	P4658-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	55.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	15.6	1	0.22		0.88	mg/Kg	11/03/24 15:00	11/06/24 21:39	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/31/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/31/24
Client Sample ID:	B-131-3-SB02	SDG No.:	P4658
Lab Sample ID:	P4658-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	56

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7439-92-1	Lead	16.5	1	0.24		0.97	mg/Kg	11/03/24 15:00	11/06/24 21:43	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group3			

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

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



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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Portal Partners Tri-Venture				SDG No.:	P4658			
Contract:	PORT06	Lab Code:	CHEM	Case No.:	P4658	SAS No.:	P4658		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	17:43	LB133323

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	18:27	LB133323
CCB02	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	18:44	LB133323
CCB03	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	19:36	LB133323
CCB04	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	20:26	LB133323
CCB05	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	21:17	LB133323
CCB06	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	22:15	LB133323
CCB07	Lead	12.0	+/-12.0	U	12.0	P	11/06/2024	23:07	LB133323
CCB08	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	00:03	LB133323
CCB09	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	00:57	LB133323
CCB10	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	01:53	LB133323

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture		SDG No.: P4658							
Contract:	PORT06	Lab Code:	CHEM	Case No.:	P4658	SAS No.:	P4658		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	14:38	LB133344

A
B
C
D
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G
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J

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Portal Partners Tri-Venture		SDG No.: P4658							
Contract: PORT06	Lab Code: CHEM	Case No.: P4658	SAS No.: P4658						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	15:05	LB133344
CCB02	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	15:58	LB133344
CCB03	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	16:49	LB133344
CCB04	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	18:04	LB133344
CCB05	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	18:37	LB133344
CCB06	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	19:12	LB133344
CCB07	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	20:02	LB133344
CCB08	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	21:02	LB133344
CCB09	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	21:55	LB133344
CCB10	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	22:56	LB133344
CCB11	Lead	12.0	+/-12.0	U	12.0	P	11/07/2024	23:47	LB133344
CCB12	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	00:43	LB133344
CCB13	Lead	12.0	+/-12.0	U	12.0	P	11/08/2024	01:01	LB133344

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Portal Partners Tri-Venture

SDG No.: P4658

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB164634BL		SOLID		Batch Number:	PB164634		Prep Date:	11/03/2024	
	Lead	0.57	<0.57	U	0.57	P	11/08/2024	00:08	LB133344

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METAL CALIBRATION DATA

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture SDG No.: P4658
 Contract: PORT06 Lab Code: CHEM Case No.: P4658 SAS No.: P4658
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Lead	1000	1000	100	90 - 110	P	11/06/2024	17:34	LB133323

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Lead	12.2	12.0	102	80 - 120	P	11/06/2024	17:38	LB133323

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture SDG No.: P4658
Contract: PORT06 Lab Code: CHEM Case No.: P4658 SAS No.: P4658
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Lead	5010	5000	100	90 - 110	P	11/06/2024	18:23	LB133323
CCV02	Lead	4970	5000	99	90 - 110	P	11/06/2024	18:39	LB133323
CCV03	Lead	4910	5000	98	90 - 110	P	11/06/2024	19:32	LB133323
CCV04	Lead	5080	5000	102	90 - 110	P	11/06/2024	20:22	LB133323
CCV05	Lead	5120	5000	102	90 - 110	P	11/06/2024	21:13	LB133323
CCV06	Lead	5030	5000	100	90 - 110	P	11/06/2024	22:11	LB133323
CCV07	Lead	5100	5000	102	90 - 110	P	11/06/2024	23:03	LB133323
CCV08	Lead	5040	5000	101	90 - 110	P	11/06/2024	23:59	LB133323
CCV09	Lead	4900	5000	98	90 - 110	P	11/07/2024	00:53	LB133323
CCV10	Lead	5270	5000	105	90 - 110	P	11/07/2024	01:49	LB133323

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Lead	1020	1000	102	90 - 110	P	11/07/2024	13:49	LB133344



Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Portal Partners Tri-Venture SDG No.: P4658
Contract: PORT06 Lab Code: CHEM Case No.: P4658 SAS No.: P4658
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Lead	4920	5000	98	90 - 110	P	11/07/2024	15:01	LB133344
CCV02	Lead	4800	5000	96	90 - 110	P	11/07/2024	15:53	LB133344
CCV03	Lead	4970	5000	99	90 - 110	P	11/07/2024	16:45	LB133344
CCV04	Lead	5010	5000	100	90 - 110	P	11/07/2024	17:56	LB133344
CCV05	Lead	4880	5000	98	90 - 110	P	11/07/2024	18:32	LB133344
CCV06	Lead	4930	5000	99	90 - 110	P	11/07/2024	19:08	LB133344
CCV07	Lead	4850	5000	97	90 - 110	P	11/07/2024	19:58	LB133344
CCV08	Lead	4840	5000	97	90 - 110	P	11/07/2024	20:58	LB133344
CCV09	Lead	4780	5000	96	90 - 110	P	11/07/2024	21:51	LB133344
CCV10	Lead	4710	5000	94	90 - 110	P	11/07/2024	22:52	LB133344
CCV11	Lead	4800	5000	96	90 - 110	P	11/07/2024	23:43	LB133344
CCV12	Lead	4820	5000	96	90 - 110	P	11/08/2024	00:39	LB133344
CCV13	Lead	4870	5000	97	90 - 110	P	11/08/2024	00:57	LB133344

C



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5

- 2b -

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>P4658</u>	
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.: <u>P4658</u> SAS No.: <u>P4658</u>
Initial Calibration Source:	<u></u>			
Continuing Calibration Source:	<u></u>			

94658

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Portal Partners Tri-Venture</u>	SDG No.: <u>P4658</u>
Contract: <u>PORT06</u> Lab Code: <u>CHEM</u>	Case No.: <u>P4658</u> SAS No.: <u>P4658</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P4</u>

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Lead	9.93			-12	12	11/06/2024	18:08	LB133323
ICSAB01	Lead	57.7	49.0	118	37	61	11/06/2024	18:13	LB133323
ICSA01	Lead	8.91			-12	12	11/07/2024	14:47	LB133344
ICSAB01	Lead	56.6	49.0	116	37	61	11/07/2024	14:51	LB133344



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>P4658</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>P4658</u> sas no.: <u>P4658</u>
matrix: <u>Solid</u>	sample id: <u>P4680-05</u>	client id: <u>BP-F25MS</u>
Percent Solids for Sample: 88.8	Spiked ID: P4680-05MS	Percent Solids for Spike Sample: 88.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	mg/Kg	75 - 125	57.4		9.57		46.5	103		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>P4658</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>P4658</u> sas no.: <u>P4658</u>
matrix: <u>Solid</u>	sample id: <u>P4680-05</u>	client id: <u>BP-F25MSD</u>
Percent Solids for Sample: 88.8	Spiked ID: P4680-05MSD	Percent Solids for Spike Sample: 88.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Lead	mg/Kg	75 - 125	67.6		9.57		54.9	106		P

Metals
- 5b -

Client: Portal Partners Tri-Venture

SDG No.: P4658

Contract: PORT06

Lab Code: CHEM

Case No.: P4658

SAS No.: P4658

Matrix:

Level: LOW

Client ID:

Sample ID:

Spiked ID:

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	Level:	<u>LOW</u>	SDG No.:	<u>P4658</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4658</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>P4680-05</u>	Client ID:	<u>BP-F25DUP</u>
Percent Solids for Sample:	88.8	Duplicate ID	P4680-05DUP	Percent Solids for Spike Sample:	88.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Lead	mg/Kg	20	9.57		8.98		6		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	Level:	<u>LOW</u>	SDG No.:	<u>P4658</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>P4658</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>P4680-05MS</u>	Client ID:	<u>BP-F25MSD</u>
Percent Solids for Sample:	88.8	Duplicate ID	P4680-05MSD	Percent Solids for Spike Sample:	88.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Lead	mg/Kg	20	57.4		67.6		16		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB164634BS Lead	mg/Kg	47.6	44.8		94	80 - 120	P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

BP-F25L

Lab Name: Chemtech Consulting Group **Contract:** PORT06
Lab Code: CHEM **Lb No.:** lb133323 **Lab Sample ID :** P4680-05L **SDG No.:** P4658
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	M
Lead	9.57	9.91	4		P

metals
- 14 -
ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4658 **Sas no.:** P4658 **Sdg no.:** P4658

Instrument id number: **Method:** **Run number:** LB133323

Start date: 11/06/2024 **End date:** 11/07/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1709	Pb
S1	S1	1	1713	Pb
S2	S2	1	1717	Pb
S3	S3	1	1722	Pb
S4	S4	1	1726	Pb
S5	S5	1	1730	Pb
ICV01	ICV01	1	1734	Pb
LLICV01	LLICV01	1	1738	Pb
ICB01	ICB01	1	1743	Pb
CRI01	CRI01	1	1804	Pb
ICSA01	ICSA01	1	1808	Pb
ICSAB01	ICSAB01	1	1813	Pb
CCV01	CCV01	1	1823	Pb
CCB01	CCB01	1	1827	Pb
CCV02	CCV02	1	1839	Pb
CCB02	CCB02	1	1844	Pb
P4680-05DUP	BP-F25DUP	1	1928	Pb
CCV03	CCV03	1	1932	Pb
CCB03	CCB03	1	1936	Pb
P4680-05L	BP-F25L	5	1940	Pb
P4680-05MS	BP-F25MS	1	1944	Pb
P4680-05MSD	BP-F25MSD	1	1948	Pb
CCV04	CCV04	1	2022	Pb
CCB04	CCB04	1	2026	Pb
CCV05	CCV05	1	2113	Pb
CCB05	CCB05	1	2117	Pb
P4658-01	B-131-1-SB02	1	2134	Pb
P4658-02	B-131-2-SB02	1	2139	Pb
P4658-03	B-131-3-SB02	1	2143	Pb
CCV06	CCV06	1	2211	Pb
CCB06	CCB06	1	2215	Pb
CCV07	CCV07	1	2303	Pb
CCB07	CCB07	1	2307	Pb
CCV08	CCV08	1	2359	Pb
CCB08	CCB08	1	0003	Pb
CCV09	CCV09	1	0053	Pb
CCB09	CCB09	1	0057	Pb
CCV10	CCV10	1	0149	Pb
CCB10	CCB10	1	0153	Pb

metals
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ANALYSIS RUN LOG

Client: Portal Partners Tri-Venture **Contract:** PORT06

Lab code: CHEM **Case no.:** P4658 **Sas no.:** P4658 **Sdg no.:** P4658

Instrument id number: **Method:** **Run number:** LB133344

Start date: 11/07/2024 **End date:** 11/08/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1323	Pb
S1	S1	1	1328	Pb
S2	S2	1	1332	Pb
S3	S3	1	1336	Pb
S4	S4	1	1340	Pb
S5	S5	1	1345	Pb
ICV01	ICV01	1	1349	Pb
LLICV01	LLICV01	1	1423	Pb
ICB01	ICB01	1	1438	Pb
CRI01	CRI01	1	1442	Pb
ICSA01	ICSA01	1	1447	Pb
ICSAB01	ICSAB01	1	1451	Pb
CCV01	CCV01	1	1501	Pb
CCB01	CCB01	1	1505	Pb
CCV02	CCV02	1	1553	Pb
CCB02	CCB02	1	1558	Pb
CCV03	CCV03	1	1645	Pb
CCB03	CCB03	1	1649	Pb
CCV04	CCV04	1	1756	Pb
CCB04	CCB04	1	1804	Pb
CCV05	CCV05	1	1832	Pb
CCB05	CCB05	1	1837	Pb
CCV06	CCV06	1	1908	Pb
CCB06	CCB06	1	1912	Pb
CCV07	CCV07	1	1958	Pb
CCB07	CCB07	1	2002	Pb
CCV08	CCV08	1	2058	Pb
CCB08	CCB08	1	2102	Pb
CCV09	CCV09	1	2151	Pb
CCB09	CCB09	1	2155	Pb
CCV10	CCV10	1	2252	Pb
CCB10	CCB10	1	2256	Pb
CCV11	CCV11	1	2343	Pb
CCB11	CCB11	1	2347	Pb
PB164634BL	PB164634BL	1	0008	Pb
PB164634BS	PB164634BS	1	0013	Pb
CCV12	CCV12	1	0039	Pb
CCB12	CCB12	1	0043	Pb
CCV13	CCV13	1	0057	Pb
CCB13	CCB13	1	0101	Pb



METAL PREPARATION & INSTRUMENT DATA

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Instrument ID: **Date:**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Instrument ID: **Date:**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Instrument ID: **Date:**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Portal Partners Tri-Venture **SDG No.:** P4658
Contract: PORT06 **Lab Code:** CHEM **Case No.:** P4658 **SAS No.:** P4658
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000

A

B

C

D

E

F

G

H

I

J

LAB CHRONICLE

OrderID:	P4658	OrderDate:	10/31/2024 12:18:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	K61,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4658-01	B-131-1-SB02	SOIL	Metals Group3	6010D	10/31/24	11/03/24	11/06/24	10/31/24
P4658-02	B-131-2-SB02	SOIL	Metals Group3	6010D	10/31/24	11/03/24	11/06/24	10/31/24
P4658-03	B-131-3-SB02	SOIL	Metals Group3	6010D	10/31/24	11/03/24	11/06/24	10/31/24



METAL PREPARATION & ANALYICAL SUMMARY

Metals
- 13 -

SAMPLE PREPARATION SUMMARY

Client:	<u>Portal Partners Tri-Venture</u>	SDG No.:	<u>P4658</u>
Contract:	<u>PORT06</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>P4658</u>
		SAS No.:	<u>P4658</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB164634							
P4658-01	B-131-1-SB02	SAM	SOLID	11/03/2024	2.37	100.0	51.50
P4658-02	B-131-2-SB02	SAM	SOLID	11/03/2024	2.47	100.0	55.20
P4658-03	B-131-3-SB02	SAM	SOLID	11/03/2024	2.20	100.0	56.00
P4680-05DUP	BP-F25DUP	DUP	SOLID	11/03/2024	2.36	100.0	88.80
P4680-05MS	BP-F25MS	MS	SOLID	11/03/2024	2.42	100.0	88.80
P4680-05MSD	BP-F25MSD	MSD	SOLID	11/03/2024	2.05	100.0	88.80
PB164634BL	PB164634BL	MB	SOLID	11/03/2024	2.10	100.0	100.00
PB164634BS	PB164634BS	LCS	SOLID	11/03/2024	2.10	100.0	100.00

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/06/24 17:09		Kareem	OK
2	S1	S1	CAL2	11/06/24 17:13		Kareem	OK
3	S2	S2	CAL3	11/06/24 17:17		Kareem	OK
4	S3	S3	CAL4	11/06/24 17:22		Kareem	OK
5	S4	S4	CAL5	11/06/24 17:26		Kareem	OK
6	S5	S5	CAL6	11/06/24 17:30		Kareem	OK
7	ICV01	ICV01	ICV	11/06/24 17:34		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/06/24 17:38		Kareem	OK
9	ICB01	ICB01	ICB	11/06/24 17:43		Kareem	OK
10	CRI01	CRI01	CRDL	11/06/24 18:04		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/06/24 18:08		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/06/24 18:13		Kareem	OK
13	CCV01	CCV01	CCV	11/06/24 18:23		Kareem	OK
14	CCB01	CCB01	CCB	11/06/24 18:27		Kareem	OK
15	P4709-01	HR-02-110424	SAM	11/06/24 18:31		Kareem	OK
16	P4709-03	HR-03-110424	SAM	11/06/24 18:35		Kareem	OK
17	CCV02	CCV02	CCV	11/06/24 18:39		Kareem	OK
18	CCB02	CCB02	CCB	11/06/24 18:44		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

19	P4652-01	RW5-SP100-50-2024	SAM	11/06/24 18:49		Kareem	OK
20	P4679-01	MH-1	SAM	11/06/24 18:53		Kareem	OK
21	P4659-01	MH-2	SAM	11/06/24 18:57		Kareem	OK
22	P4652-03	RW5-SP301-303-50-2	SAM	11/06/24 19:02		Kareem	OK
23	P4652-04	RW5-SP100-90-2024	SAM	11/06/24 19:06		Kareem	OK
24	P4652-06	RW5-SP301-303-90-2	SAM	11/06/24 19:11		Kareem	OK
25	P4661-03	102324-A	SAM	11/06/24 19:15		Kareem	OK
26	P4680-01	BP-F26	SAM	11/06/24 19:19		Kareem	OK
27	P4680-05	BP-F25	SAM	11/06/24 19:24		Kareem	OK
28	P4680-05DUP	BP-F25DUP	DUP	11/06/24 19:28		Kareem	OK
29	CCV03	CCV03	CCV	11/06/24 19:32		Kareem	OK
30	CCB03	CCB03	CCB	11/06/24 19:36		Kareem	OK
31	P4680-05L	BP-F25L	SD	11/06/24 19:40		Kareem	OK
32	P4680-05MS	BP-F25MS	MS	11/06/24 19:44	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
33	P4680-05MSD	BP-F25MSD	MSD	11/06/24 19:48	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
34	P4680-05A	BP-F25A	PS	11/06/24 19:52	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
35	PB164634BL	PB164634BL	MB	11/06/24 19:56	NOT USE	Kareem	Not Ok

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

36	P4662-04DL	102524-DDL	SAM	11/06/24 20:05	Straight 5x Dilution for all elements	Kareem	OK
37	P4673-01	OUTFALL-001	SAM	11/06/24 20:09		Kareem	OK
38	P4673-02	OUTFALL-002	SAM	11/06/24 20:13		Kareem	OK
39	P4673-03	OUTFALL-003	SAM	11/06/24 20:18		Kareem	OK
40	CCV04	CCV04	CCV	11/06/24 20:22		Kareem	OK
41	CCB04	CCB04	CCB	11/06/24 20:26		Kareem	OK
42	P4673-04	OUTFALL-004	SAM	11/06/24 20:31		Kareem	OK
43	P4673-05	OUTFALL-005	SAM	11/06/24 20:35		Kareem	OK
44	P4673-06	OUTFALL-006	SAM	11/06/24 20:39		Kareem	OK
45	P4673-07	OUTFALL-007	SAM	11/06/24 20:44		Kareem	OK
46	P4673-07DUP	OUTFALL-007DUP	DUP	11/06/24 20:48		Kareem	OK
47	P4673-07L	OUTFALL-007L	SD	11/06/24 20:52		Kareem	OK
48	P4673-07MS	OUTFALL-007MS	MS	11/06/24 20:57	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
49	P4673-07MSD	OUTFALL-007MSD	MSD	11/06/24 21:01	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
50	P4673-07A	OUTFALL-007A	PS	11/06/24 21:05	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
51	P4674-01	OUTFALL-001	SAM	11/06/24 21:09		Kareem	OK
52	CCV05	CCV05	CCV	11/06/24 21:13		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

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Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

53	CCB05	CCB05	CCB	11/06/24 21:17		Kareem	OK
54	P4684-03	MECHANIC-ST-OIL-V	SAM	11/06/24 21:22	Fe high & Ag (OverSaturated)	Kareem	Dilution
55	PB164645BL	PB164645BL	MB	11/06/24 21:26	NOT USE	Kareem	Not Ok
56	PB164645BS	PB164645BS	LCS	11/06/24 21:30	NOT USE - fail for Na	Kareem	Not Ok
57	P4658-01	B-131-1-SB02	SAM	11/06/24 21:34		Kareem	OK
58	P4658-02	B-131-2-SB02	SAM	11/06/24 21:39		Kareem	OK
59	P4658-03	B-131-3-SB02	SAM	11/06/24 21:43		Kareem	OK
60	P4364-15	SB-07-0.167-0.667	SAM	11/06/24 21:47	NOT USE	Kareem	Not Ok
61	P4364-16	SB-08-0.167-0.667	SAM	11/06/24 21:52	NOT USE	Kareem	Not Ok
62	P4364-14	SB-06-0.167-0.667	SAM	11/06/24 21:56		Kareem	OK
63	P4364-14DUP	SB-06-0.167-0.667DU	DUP	11/06/24 22:01		Kareem	OK
64	CCV06	CCV06	CCV	11/06/24 22:11		Kareem	OK
65	CCB06	CCB06	CCB	11/06/24 22:15		Kareem	OK
66	P4364-14L	SB-06-0.167-0.667L	SD	11/06/24 22:19		Kareem	OK
67	P4364-14MS	SB-06-0.167-0.667MS	MS	11/06/24 22:23	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
68	P4364-14MSD	SB-06-0.167-0.667MS	MSD	11/06/24 22:28	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
69	P4364-14A	SB-06-0.167-0.667A	PS	11/06/24 22:33	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

70	P4667-01	BP-F-6	SAM	11/06/24 22:38		Kareem	OK
71	P4667-05	BP-F-5	SAM	11/06/24 22:42		Kareem	OK
72	P4667-09	BP-F-10	SAM	11/06/24 22:46		Kareem	OK
73	P4667-13	BP-F-7	SAM	11/06/24 22:50		Kareem	OK
74	P4675-01	COMP-1	SAM	11/06/24 22:54		Kareem	OK
75	P4675-02	COMP-2	SAM	11/06/24 22:59		Kareem	OK
76	CCV07	CCV07	CCV	11/06/24 23:03		Kareem	OK
77	CCB07	CCB07	CCB	11/06/24 23:07		Kareem	OK
78	P4675-03	COMP-3	SAM	11/06/24 23:12		Kareem	OK
79	P4675-04	COMP-4	SAM	11/06/24 23:16		Kareem	OK
80	P4675-05	COMP-5	SAM	11/06/24 23:20		Kareem	OK
81	P4675-06	COMP-6	SAM	11/06/24 23:25		Kareem	OK
82	P4685-01	OK-01-11012024	SAM	11/06/24 23:29		Kareem	OK
83	P4685-01DUP	OK-01-11012024DUP	DUP	11/06/24 23:33		Kareem	OK
84	P4685-01L	OK-01-11012024L	SD	11/06/24 23:37		Kareem	OK
85	P4685-01MS	OK-01-11012024MS	MS	11/06/24 23:41	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
86	P4685-01MSD	OK-01-11012024MSD	MSD	11/06/24 23:45	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM

STD. NAME	STD REF.#
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084
ICV Standard	MP83085
CCV Standard	MP83088
ICSA Standard	MP83086 MP83087
CRI Standard	MP83084
LCS Standard	
Chk Standard	MP83091 MP83092

87	P4685-01A	OK-01-11012024A	PS	11/06/24 23:49	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
88	CCV08	CCV08	CCV	11/06/24 23:59		Kareem	OK
89	CCB08	CCB08	CCB	11/07/24 00:03		Kareem	OK
90	P4397-04	WB-301-SW	SAM	11/07/24 00:07	Na (Over Saturated)	Kareem	Dilution
91	P4397-04DUP	WB-301-SWDUP	DUP	11/07/24 00:12	Na (Over Saturated)	Kareem	Dilution
92	P4397-04L	WB-301-SWL	SD	11/07/24 00:16		Kareem	OK
93	P4397-04MS	WB-301-SWMS	MS	11/07/24 00:21	Na (Over Saturated)	Kareem	Dilution
94	P4397-04MSD	WB-301-SWMSD	MSD	11/07/24 00:25	Na (Over Saturated)	Kareem	Dilution
95	P4397-04A	WB-301-SWA	PS	11/07/24 00:29	0.1ML OF M6010 AND M6001 WERE ADDED TO 10ML OF SAMPLE	Kareem	OK
96	PB164647BS	PB164647BS	LCS	11/07/24 00:38	NOT USE	Kareem	Not Ok
97	LR1	LR1	HIGH STD	11/07/24 00:43		Kareem	OK
98	LR2	LR2	HIGH STD	11/07/24 00:48		Kareem	OK
99	CCV09	CCV09	CCV	11/07/24 00:53		Kareem	OK
100	CCB09	CCB09	CCB	11/07/24 00:57		Kareem	OK
101	P4397-04DL	WB-301-SWDL	SAM	11/07/24 01:01	5x for Na	Kareem	Confirms
102	P4397-04DUPDL	WB-301-SWDUPDL	DUP	11/07/24 01:06	5x for Na	Kareem	Confirms
103	P4397-04LDL	WB-301-SWLDL	SD	11/07/24 01:10	Not Required	Kareem	Not Ok
104	P4397-04MSDL	WB-301-SWMSDL	MS	11/07/24 01:15	5x for Na	Kareem	Confirms

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133323

Review By	kareem	Review On	11/7/2024 1:15:13 PM
Supervise By	mohan	Supervise On	11/11/2024 12:01:52 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078 MP83079 MP73080 MP83081 MP83082 MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086 MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091 MP83092		

105	P4397-04MSDDL	WB-301-SWMSDDL	MSD	11/07/24 01:19	5x for Na	Kareem	Confirms
106	P4397-04ADL	WB-301-SWADL	PS	11/07/24 01:24	Not Required	Kareem	Not Ok
107	P4684-03DL	MECHANIC-ST-OIL-V	SAM	11/07/24 01:28	5x for Fe,Ag	Kareem	Confirms
108	P4364-16DL	SB-08-0.167-0.667DL	SAM	11/07/24 01:33	NOT USE	Kareem	Not Ok
109	PB164563BL	PB164563BL	MB	11/07/24 01:37	NOT USE	Kareem	Not Ok
110	PB164563BS	PB164563BS	LCS	11/07/24 01:41	NOT USE - fail for K,Na	Kareem	Not Ok
111	CCV10	CCV10	CCV	11/07/24 01:49		Kareem	OK
112	CCB10	CCB10	CCB	11/07/24 01:53		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	11/07/24 13:23		Kareem	OK
2	S1	S1	CAL2	11/07/24 13:28		Kareem	OK
3	S2	S2	CAL3	11/07/24 13:32		Kareem	OK
4	S3	S3	CAL4	11/07/24 13:36		Kareem	OK
5	S4	S4	CAL5	11/07/24 13:40		Kareem	OK
6	S5	S5	CAL6	11/07/24 13:45		Kareem	OK
7	ICV01	ICV01	ICV	11/07/24 13:49		Kareem	OK
8	LLICV01	LLICV01	LLICV	11/07/24 14:23		Kareem	OK
9	ICB01	ICB01	ICB	11/07/24 14:38		Kareem	OK
10	CRI01	CRI01	CRDL	11/07/24 14:42		Kareem	OK
11	ICSA01	ICSA01	ICSA	11/07/24 14:47		Kareem	OK
12	ICSAB01	ICSAB01	ICSAB	11/07/24 14:51		Kareem	OK
13	CCV01	CCV01	CCV	11/07/24 15:01		Kareem	OK
14	CCB01	CCB01	CCB	11/07/24 15:05		Kareem	OK
15	P4645-04	Z-02-WC	SAM	11/07/24 15:09		Kareem	OK
16	P4659-04	MH-2	SAM	11/07/24 15:14		Kareem	OK
17	P4660-03	WC-TA2-01-C	SAM	11/07/24 15:18		Kareem	OK
18	P4660-07	WC-WOOD-01-C	SAM	11/07/24 15:22		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

19	P4660-11	WC-CONCRETE-01-C	SAM	11/07/24 15:27		Kareem	OK
20	P4667-04	BP-F-6	SAM	11/07/24 15:31		Kareem	OK
21	P4667-08	BP-F-5	SAM	11/07/24 15:36		Kareem	OK
22	P4667-12	BP-F-10	SAM	11/07/24 15:40		Kareem	OK
23	P4667-16	BP-F-7	SAM	11/07/24 15:45		Kareem	OK
24	P4679-04	MH-1	SAM	11/07/24 15:49		Kareem	OK
25	CCV02	CCV02	CCV	11/07/24 15:53		Kareem	OK
26	CCB02	CCB02	CCB	11/07/24 15:58		Kareem	OK
27	P4680-04	BP-F26	SAM	11/07/24 16:02		Kareem	OK
28	P4680-08	BP-F25	SAM	11/07/24 16:06		Kareem	OK
29	P4684-01	MECHANIC-ST-SWEI	SAM	11/07/24 16:11		Kareem	OK
30	P4684-01DUP	MECHANIC-ST-SWEI	DUP	11/07/24 16:15		Kareem	OK
31	P4684-01L	MECHANIC-ST-SWEI	SD	11/07/24 16:20		Kareem	OK
32	P4684-01MS	MECHANIC-ST-SWEI	MS	11/07/24 16:24		Kareem	OK
33	P4684-01MSD	MECHANIC-ST-SWEI	MSD	11/07/24 16:28		Kareem	OK
34	P4684-01A	MECHANIC-ST-SWEI	PS	11/07/24 16:32		Kareem	OK
35	PB164560TB	PB164560TB	MB	11/07/24 16:36		Kareem	OK
36	PB164665BL	PB164665BL	MB	11/07/24 16:41		Kareem	OK
37	CCV03	CCV03	CCV	11/07/24 16:45		Kareem	OK
38	CCB03	CCB03	CCB	11/07/24 16:49		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

39	PB164665BS	PB164665BS	LCS	11/07/24 16:54		Kareem	OK
40	P4693-04	BP-G5-WC	SAM	11/07/24 16:58		Kareem	OK
41	P4693-08	BP-G4-WC	SAM	11/07/24 17:02		Kareem	OK
42	P4694-04	Z-03A	SAM	11/07/24 17:06		Kareem	OK
43	P4694-08	Z-04	SAM	11/07/24 17:11		Kareem	OK
44	P4695-04	Z-01	SAM	11/07/24 17:15		Kareem	OK
45	P4700-04	MH-8	SAM	11/07/24 17:20		Kareem	OK
46	P4701-01	BP-F3	SAM	11/07/24 17:24		Kareem	OK
47	P4701-08	BP-F4	SAM	11/07/24 17:29		Kareem	OK
48	P4711-05	CF-613-COMP-16	SAM	11/07/24 17:33		Kareem	OK
49	CCV04	CCV04	CCV	11/07/24 17:56		Kareem	OK
50	CCB04	CCB04	CCB	11/07/24 18:04		Kareem	OK
51	P4711-10	CF-613-COMP-17	SAM	11/07/24 18:08		Kareem	OK
52	P4702-01	TOTE-1	SAM	11/07/24 18:13		Kareem	OK
53	P4662-06DL2	102524-DDL2	SAM	11/07/24 18:17	NOT USE	Kareem	Not Ok
54	P4662-06DL	102524-DDL	SAM	11/07/24 18:22	NOT USE	Kareem	Not Ok
55	P4662-06	102524-D	SAM	11/07/24 18:28		Kareem	OK
56	CCV05	CCV05	CCV	11/07/24 18:32		Kareem	OK
57	CCB05	CCB05	CCB	11/07/24 18:37		Kareem	OK
58	P4702-01DUP	TOTE-1DUP	DUP	11/07/24 18:43		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

59	P4702-01L	TOTE-1L	SD	11/07/24 18:47		Kareem	OK
60	P4706-01	TR-04-110424	SAM	11/07/24 18:51		Kareem	OK
61	P4708-01	OR-02-110424	SAM	11/07/24 18:56		Kareem	OK
62	P4711-01	CF-613-COMP-16	SAM	11/07/24 19:00		Kareem	OK
63	P4711-06	CF-613-COMP-17	SAM	11/07/24 19:04		Kareem	OK
64	CCV06	CCV06	CCV	11/07/24 19:08		Kareem	OK
65	CCB06	CCB06	CCB	11/07/24 19:12		Kareem	OK
66	P4702-01MS	TOTE-1MS	MS	11/07/24 19:16		Kareem	OK
67	P4702-01MSD	TOTE-1MSD	MSD	11/07/24 19:20		Kareem	OK
68	P4702-01A	TOTE-1A	PS	11/07/24 19:24		Kareem	OK
69	PB164662TB	PB164662TB	MB	11/07/24 19:28		Kareem	OK
70	PB164685TB	PB164685TB	MB	11/07/24 19:32		Kareem	OK
71	PB164712BL	PB164712BL	MB	11/07/24 19:37		Kareem	OK
72	PB164712BS	PB164712BS	LCS	11/07/24 19:41		Kareem	OK
73	P4720-01	JC-701-COMP-01	SAM	11/07/24 19:45		Kareem	OK
74	P4720-01DUP	JC-701-COMP-01DUP	DUP	11/07/24 19:50		Kareem	OK
75	P4720-01L	JC-701-COMP-01L	SD	11/07/24 19:54		Kareem	OK
76	CCV07	CCV07	CCV	11/07/24 19:58		Kareem	OK
77	CCB07	CCB07	CCB	11/07/24 20:02		Kareem	OK
78	P4617-04	CONCRETE-PILE	SAM	11/07/24 20:08		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

79	P4617-04DUP	CONCRETE-PILEDU	DUP	11/07/24 20:12		Kareem	OK
80	P4617-04L	CONCRETE-PILEL	SD	11/07/24 20:17		Kareem	OK
81	P4617-04MS	CONCRETE-PILEMS	MS	11/07/24 20:21		Kareem	OK
82	P4617-04MSD	CONCRETE-PILEMS	MSD	11/07/24 20:25		Kareem	OK
83	P4549-04	TT-069-IDWGW-2024	SAM	11/07/24 20:34		Kareem	OK
84	P4617-04A	CONCRETE-PILEA	PS	11/07/24 20:41		Kareem	OK
85	P4549-04DUP	TT-069-IDWGW-2024	DUP	11/07/24 20:45		Kareem	OK
86	P4549-04L	TT-069-IDWGW-2024	SD	11/07/24 20:49		Kareem	OK
87	P4549-04MS	TT-069-IDWGW-2024	MS	11/07/24 20:54		Kareem	OK
88	CCV08	CCV08	CCV	11/07/24 20:58		Kareem	OK
89	CCB08	CCB08	CCB	11/07/24 21:02		Kareem	OK
90	P4549-04MSD	TT-069-IDWGW-2024	MSD	11/07/24 21:08		Kareem	OK
91	P4549-04A	TT-069-IDWGW-2024	PS	11/07/24 21:12		Kareem	OK
92	P4720-01MS	JC-701-COMP-01MS	MS	11/07/24 21:16		Kareem	OK
93	P4720-01MSD	JC-701-COMP-01MS	MSD	11/07/24 21:20		Kareem	OK
94	P4720-01A	JC-701-COMP-01A	PS	11/07/24 21:24		Kareem	OK
95	P4722-03	WC-1(0-6)	SAM	11/07/24 21:29	Fe high	Kareem	Dilution
96	P4722-08	WC-2(0-6)	SAM	11/07/24 21:33		Kareem	OK
97	P4722-13	WC-3(0-6)	SAM	11/07/24 21:38		Kareem	OK
98	PB164723BL	PB164723BL	MB	11/07/24 21:42		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

99	PB164723BS	PB164723BS	LCS	11/07/24 21:47		Kareem	OK
100	CCV09	CCV09	CCV	11/07/24 21:51		Kareem	OK
101	CCB09	CCB09	CCB	11/07/24 21:55		Kareem	OK
102	P4693-01	BP-G5-WC	SAM	11/07/24 22:09		Kareem	OK
103	P4693-05	BP-G4-WC	SAM	11/07/24 22:13		Kareem	OK
104	P4694-01	Z-03A	SAM	11/07/24 22:17		Kareem	OK
105	P4694-05	Z-04	SAM	11/07/24 22:22		Kareem	OK
106	P4695-01	Z-01	SAM	11/07/24 22:26		Kareem	OK
107	P4697-01	TP-1	SAM	11/07/24 22:30		Kareem	OK
108	P4699-01	MIXED-DEMO	SAM	11/07/24 22:34	Confirm Wt	Kareem	OK
109	P4699-01DUP	MIXED-DEMODUP	DUP	11/07/24 22:39	Confirm	Kareem	OK
110	P4699-01L	MIXED-DEMOL	SD	11/07/24 22:43		Kareem	OK
111	P4699-01MS	MIXED-DEMOMS	MS	11/07/24 22:47		Kareem	OK
112	CCV10	CCV10	CCV	11/07/24 22:52		Kareem	OK
113	CCB10	CCB10	CCB	11/07/24 22:56		Kareem	OK
114	P4699-01MSD	MIXED-DEMOMSD	MSD	11/07/24 23:00		Kareem	OK
115	P4699-01A	MIXED-DEMOA	PS	11/07/24 23:04		Kareem	OK
116	P4700-01	MH-8	SAM	11/07/24 23:09		Kareem	OK
117	P4701-01RE	BP-F3RE	SAM	11/07/24 23:13	NOT USE	Kareem	Not Ok
118	P4701-05	BP-F4	SAM	11/07/24 23:17		Kareem	OK

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

119	P4707-01	HD-02-110424	SAM	11/07/24 23:22		Kareem	OK
120	P4718-01	WB-307-SB01	SAM	11/07/24 23:26		Kareem	OK
121	P4718-02	WB-307-SB02	SAM	11/07/24 23:30		Kareem	OK
122	P4719-01	BAYAVE-STOCKPILE	SAM	11/07/24 23:34		Kareem	OK
123	PB164708BL	PB164708BL	MB	11/07/24 23:38		Kareem	OK
124	CCV11	CCV11	CCV	11/07/24 23:43		Kareem	OK
125	CCB11	CCB11	CCB	11/07/24 23:47		Kareem	OK
126	PB164708BS	PB164708BS	LCS	11/07/24 23:51		Kareem	OK
127	PB164563BL	PB164563BL	MB	11/07/24 23:55		Kareem	OK
128	PB164563BS	PB164563BS	LCS	11/08/24 00:05		Kareem	OK
129	PB164634BL	PB164634BL	MB	11/08/24 00:08		Kareem	OK
130	PB164634BS	PB164634BS	LCS	11/08/24 00:13		Kareem	OK
131	PB164647BL	PB164647BL	MB	11/08/24 00:17		Kareem	OK
132	PB164647BS	PB164647BS	LCS	11/08/24 00:21		Kareem	OK
133	P4722-03DL	WC-1(0-6)DL	SAM	11/08/24 00:26	5x for Fe	Kareem	Confirms
134	LR1	LR1	HIGH STD	11/08/24 00:30		Kareem	OK
135	LR2	LR2	HIGH STD	11/08/24 00:35		Kareem	OK
136	CCV12	CCV12	CCV	11/08/24 00:39		Kareem	OK
137	CCB12	CCB12	CCB	11/08/24 00:43		Kareem	OK
138	P4701-01DL	BP-F3DL	SAM	11/08/24 00:48	NOT USE	Kareem	Not Ok

Instrument ID: P4

Daily Analysis Runlog For Sequence/QC Batch ID # LB133344

Review By	mohan	Review On	11/9/2024 12:07:42 AM
Supervise By	jaswal	Supervise On	11/9/2024 12:08:14 AM
STD. NAME	STD REF.#		
ICAL Standard	MP83078,MP83079,MP73080,MP83081,MP83082,MP83084		
ICV Standard	MP83085		
CCV Standard	MP83088		
ICSA Standard	MP83086,MP83087		
CRI Standard	MP83084		
LCS Standard			
Chk Standard	MP83091,MP83092		

139	CCV13	CCV13	CCV	11/08/24 00:57		Kareem	OK
140	CCB13	CCB13	CCB	11/08/24 01:01		Kareem	OK

SOP ID : M3050B-Digestion-20

SDG No : N/A **Start Digest Date:** 11/03/2024 **Time :** 15:00 **Temp :** 96 °C

Matrix : SOIL **End Digest Date:** 11/03/2024 **Time :** 17:10 **Temp :** 96 °C

Pipette ID: ICP A **Digestion tube ID:** M6054

Balance ID : M SC-2 **Block thermometer ID:** MET-DIG. #2

Filter paper ID : N/A **Dig Technician Signature:** *JSP*

pH Strip ID : M6069 **Supervisor Signature:** *[Signature]*

Hood ID : #3 **Temp :** 1. 96°C 2. N/A

Block ID: 1. HOT BLOCK #2 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
LFS-1	1.00	M6000
LFS-2	1.00	M6009
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	10.00	MP81119
CONC: HNO3	5.00	MP82127
30% H2O2	3.00	M5634
CONC: HCL	10.00	M6095
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK #2 Cell #34 : 96 C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/3/24 17:20	<i>JSP / Met Dig</i>	<i>[Signature]</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
P4658-01	B-131-1-SB02	N/A	2.37	100	Brown	Yellow	Medium	N/A	N/A	1
P4658-02	B-131-2-SB02	N/A	2.47	100	Brown	Yellow	Medium	N/A	N/A	2
P4658-03	B-131-3-SB02	N/A	2.20	100	Brown	Yellow	Medium	N/A	N/A	3
P4659-01	MH-2	N/A	2.15	100	Brown	Yellow	Medium	N/A	N/A	4
P4663-02	TENNANT-PAD-2-3-STOCKPILE	N/A	2.13	100	Brown	Yellow	Medium	N/A	N/A	5
P4663-04	RES-BUILDING-PAD-NO-11	N/A	2.19	100	Brown	Yellow	Medium	N/A	N/A	6
P4663-06	RES-BUILDING-PAD-NO-3	N/A	2.49	100	Brown	Yellow	Medium	N/A	N/A	7
P4663-08	RES-BUILDING-PAD-NO-2	N/A	2.42	100	Brown	Yellow	Medium	N/A	N/A	8
P4677-01	2410-6346	N/A	2.18	100	Brown	Yellow	Medium	N/A	N/A	9
P4679-01	MH-1	N/A	2.42	100	Brown	Yellow	Medium	N/A	N/A	10
P4680-01	BP-F26	N/A	2.47	100	Brown	Yellow	Medium	N/A	N/A	11
P4680-05	BP-F25	N/A	2.20	100	Brown	Yellow	Medium	N/A	N/A	12
P4680-05DUP	BP-F25DUP	N/A	2.36	100	Brown	Yellow	Medium	N/A	N/A	13
P4680-05MS	BP-F25MS	N/A	2.42	100	Brown	Yellow	Medium	N/A	M6000,M6009	14
P4680-05MSD	BP-F25MSD	N/A	2.05	100	Brown	Yellow	Medium	N/A	M6000,M6009	15
PB164634BL	PBS634	N/A	2.10	100	Colorless	Colorless	Fine	N/A	N/A	16
PB164634BS	LCS634	N/A	2.10	100	Colorless	Colorless	Fine	N/A	M6000,M6009	17



SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

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

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number

P4658

2042039

7

7.1

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Gannett Fleming

ADDRESS: 1010 Adams Avenue

CITY: Auckland STATE: PA ZIP:

ATTENTION: Joe Kruparsky

PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak's sep. of B.

PROJECT NO.: LOCATION: Kedar, NJ

PROJECT MANAGER: Joe Kruparsky

e-mail: GAGC@bemsys.com

PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Chemtech PO#:

ADDRESS: 281 Sheffield St

CITY: Mountainside STATE: NJ ZIP:

ATTENTION: Samantha PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*

HARDCOPY (DATA PACKAGE): 10 DAYS*

EDD: 10 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)

☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP

☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B

+ Raw Data) ☐ Other

☐ EDD FORMAT BEN EDD

1	2	3	4	5	6	7	8	9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	B-131-1-SB02	S		X	10/31	8:30	1	X										
2.	B-131-2-SB02	S		X	10/31	8:15	1	X										
3.	B-131-3-SB02	S		X	10/31	8:55	1	X										
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. [Signature]	DATE/TIME: 10/31/2024	RECEIVED BY: 1. [Signature]
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME: 11:50	RECEIVED BY: 2. [Signature]
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME: 1850	RECEIVED BY: 3. [Signature]

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.4 °C

Comments:

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete

☐ YES ☐ NO

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4658	PORT06	Order Date : 10/31/2024 12:18:00 PM	Project Mgr : Yazmeen
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 10/31/2024 6:50:00 PM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff : 11/1/2024 10:53:53 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4658-04	TB	Water	10/31/2024	00:00	VOC-TCLVOA-10		8260-Low		10 Bus. Days

Relinquished By: 

Date / Time :

11-1-24 1150

Received By: 

Date / Time :

11/1/24 11:00 

Storage Area : VOA Refridgerator Room