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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

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LAB CHRONICLE

OrderID:	Q3615	**OrderDate:**	11/12/2025 1:09:05 PM
Client:	Core Environmental Consultants and Services, Inc.	**Project:**	Jones Beach Concrete
Contact:	Roland Scardino	**Location:**	J32,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3615-01	**East Bathhouse-Concrete**	**SOIL**			**11/12/25**			**11/12/25**
			VOC-TCLVOA-10	8260D			11/13/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3615

Client: Core Environmental Consultants and Services, Inc.

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

0

Total Voc :

Total Concentration:

QC SUMMARY

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Surrogate Summary

SDG No.: Q3615

Client: Core Environmental Consultants and Services, Inc.

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3615-01	East Bathhouse- Concrete	1,2-Dichloroethane-d4	50	57.3	115		63	155
		Dibromofluoromethane	50	39.4	79		70	134
		Toluene-d8	50	48.6	97		74	123
		4-Bromofluorobenzene	50	42.8	86		52	138
VY1113SBL01	VY1113SBL01	1,2-Dichloroethane-d4	50	56.7	113		63	155
		Dibromofluoromethane	50	50.5	101		70	134
		Toluene-d8	50	48.7	97		74	123
		4-Bromofluorobenzene	50	50.5	101		52	138
VY1113SBS01	VY1113SBS01	1,2-Dichloroethane-d4	50	50.7	101		63	155
		Dibromofluoromethane	50	50.1	100		70	134
		Toluene-d8	50	51.1	102		74	123
		4-Bromofluorobenzene	50	62.2	124		52	138
VY1113SBSD01	VY1113SBSD01	1,2-Dichloroethane-d4	50	51.8	104		63	155
		Dibromofluoromethane	50	51.6	103		70	134
		Toluene-d8	50	52.9	106		74	123
		4-Bromofluorobenzene	50	53.2	106		52	138

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3615 **Analytical Method:** SW8260D

Client: Core Environmental Consultants and **Datafile :** VY023776.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VY1113SBS01	Dichlorodifluoromethane	20	22.2	ug/Kg	111			64	136	
	Chloromethane	20	21.2	ug/Kg	106			73	129	
	Vinyl chloride	20	20.2	ug/Kg	101			73	133	
	Bromomethane	20	20.0	ug/Kg	100			77	137	
	Chloroethane	20	19.6	ug/Kg	98			69	130	
	Trichlorofluoromethane	20	21.7	ug/Kg	109			69	134	
	1,1,2-Trichlorotrifluoroethane	20	21.7	ug/Kg	109			81	123	
	1,1-Dichloroethene	20	21.5	ug/Kg	108			79	121	
	Acetone	100	120	ug/Kg	120			60	174	
	Carbon disulfide	20	21.4	ug/Kg	107			73	125	
	Methyl tert-butyl Ether	20	20.1	ug/Kg	101			77	129	
	Methyl Acetate	20	16.5	ug/Kg	83			51	140	
	Methylene Chloride	20	22.3	ug/Kg	112			54	158	
	trans-1,2-Dichloroethene	20	20.9	ug/Kg	104			80	123	
	1,1-Dichloroethane	20	21.6	ug/Kg	108			82	123	
	Cyclohexane	20	21.4	ug/Kg	107			76	122	
	2-Butanone	100	110	ug/Kg	110			69	131	
	Carbon Tetrachloride	20	20.7	ug/Kg	104			76	129	
	cis-1,2-Dichloroethene	20	20.6	ug/Kg	103			82	123	
	Bromochloromethane	20	21.6	ug/Kg	108			80	127	
	Chloroform	20	21.3	ug/Kg	106			82	125	
	1,1,1-Trichloroethane	20	21.3	ug/Kg	106			80	126	
	Methylcyclohexane	20	20.2	ug/Kg	101			77	123	
	Benzene	20	21.2	ug/Kg	106			84	121	
	1,2-Dichloroethane	20	20.7	ug/Kg	104			81	126	
	Trichloroethene	20	20.2	ug/Kg	101			83	122	
	1,2-Dichloropropane	20	21.1	ug/Kg	106			83	122	
	Bromodichloromethane	20	21.0	ug/Kg	105			82	123	
	4-Methyl-2-Pentanone	100	100	ug/Kg	100			70	135	
	Toluene	20	21.3	ug/Kg	106			83	122	
	t-1,3-Dichloropropene	20	20.4	ug/Kg	102			78	124	
	cis-1,3-Dichloropropene	20	20.7	ug/Kg	104			81	122	
	1,1,2-Trichloroethane	20	20.5	ug/Kg	103			82	125	
	2-Hexanone	100	110	ug/Kg	110			66	138	
	Dibromochloromethane	20	20.2	ug/Kg	101			79	125	
	1,2-Dibromoethane	20	20.4	ug/Kg	102			80	125	
	Tetrachloroethene	20	19.5	ug/Kg	98			83	125	
	Chlorobenzene	20	19.7	ug/Kg	99			84	122	
	Ethyl Benzene	20	19.4	ug/Kg	97			82	124	
	m/p-Xylenes	40	39.1	ug/Kg	98			83	124	
	o-Xylene	20	19.1	ug/Kg	96			83	123	
	Styrene	20	19.5	ug/Kg	98			82	124	
	Bromoform	20	22.2	ug/Kg	111			75	127	
	Isopropylbenzene	20	20.8	ug/Kg	104			82	124	
	1,1,2,2-Tetrachloroethane	20	19.5	ug/Kg	98			77	127	
	1,3-Dichlorobenzene	20	19.9	ug/Kg	100			83	122	
	1,4-Dichlorobenzene	20	19.8	ug/Kg	99			84	121	
	1,2-Dichlorobenzene	20	19.6	ug/Kg	98			83	124	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3615 **Analytical Method:** SW8260D

Client: Core Environmental Consultants and **Datafile :** VY023776.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VY1113SBS01	1,2-Dibromo-3-Chloropropane	20	18.5	ug/Kg	93			66	134	
	1,2,4-Trichlorobenzene	20	18.5	ug/Kg	93			78	127	
	1,2,3-Trichlorobenzene	20	19.1	ug/Kg	96			70	137	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3615 **Analytical Method:** SW8260D

Client: Core Environmental Consultants and S **Datafile :** VY023777.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VY1113SBSD01	Dichlorodifluoromethane	20	21.9	ug/Kg	110	1		64	136	20
	Chloromethane	20	20.2	ug/Kg	101	5		73	129	15
	Vinyl chloride	20	19.4	ug/Kg	97	4		73	133	15
	Bromomethane	20	18.6	ug/Kg	93	7		77	137	15
	Chloroethane	20	18.9	ug/Kg	95	3		69	130	15
	Trichlorofluoromethane	20	20.1	ug/Kg	101	8		69	134	27
	1,1,2-Trichlorotrifluoroethane	20	21.1	ug/Kg	106	3		81	123	20
	1,1-Dichloroethene	20	20.4	ug/Kg	102	6		79	121	16
	Acetone	100	110	ug/Kg	110	9		60	174	28
	Carbon disulfide	20	20.5	ug/Kg	103	4		73	125	15
	Methyl tert-butyl Ether	20	19.4	ug/Kg	97	4		77	129	20
	Methyl Acetate	20	15.6	ug/Kg	78	6		51	140	30
	Methylene Chloride	20	20.3	ug/Kg	102	9		54	158	20
	trans-1,2-Dichloroethene	20	20.5	ug/Kg	103	1		80	123	15
	1,1-Dichloroethane	20	20.9	ug/Kg	104	4		82	123	15
	Cyclohexane	20	21.0	ug/Kg	105	2		76	122	15
	2-Butanone	100	110	ug/Kg	110	0		69	131	29
	Carbon Tetrachloride	20	20.3	ug/Kg	102	2		76	129	15
	cis-1,2-Dichloroethene	20	20.1	ug/Kg	101	2		82	123	15
	Bromochloromethane	20	21.1	ug/Kg	106	2		80	127	15
	Chloroform	20	20.5	ug/Kg	103	3		82	125	15
	1,1,1-Trichloroethane	20	20.6	ug/Kg	103	3		80	126	15
	Methylcyclohexane	20	19.8	ug/Kg	99	2		77	123	15
	Benzene	20	20.6	ug/Kg	103	3		84	121	15
	1,2-Dichloroethane	20	19.5	ug/Kg	98	6		81	126	15
	Trichloroethene	20	19.3	ug/Kg	97	4		83	122	15
	1,2-Dichloropropane	20	20.6	ug/Kg	103	3		83	122	15
	Bromodichloromethane	20	20.3	ug/Kg	102	3		82	123	15
	4-Methyl-2-Pentanone	100	97.3	ug/Kg	97	3		70	135	26
	Toluene	20	20.6	ug/Kg	103	3		83	122	15
	t-1,3-Dichloropropene	20	19.6	ug/Kg	98	4		78	124	15
	cis-1,3-Dichloropropene	20	19.9	ug/Kg	100	4		81	122	15
	1,1,2-Trichloroethane	20	19.7	ug/Kg	99	4		82	125	15
	2-Hexanone	100	100	ug/Kg	100	10		66	138	27
	Dibromochloromethane	20	19.4	ug/Kg	97	4		79	125	15
	1,2-Dibromoethane	20	19.2	ug/Kg	96	6		80	125	16
	Tetrachloroethene	20	19.1	ug/Kg	96	2		83	125	15
	Chlorobenzene	20	19.9	ug/Kg	100	1		84	122	15
	Ethyl Benzene	20	20.1	ug/Kg	101	4		82	124	15
	m/p-Xylenes	40	40.7	ug/Kg	102	4		83	124	15
	o-Xylene	20	19.7	ug/Kg	99	3		83	123	15
	Styrene	20	20.0	ug/Kg	100	2		82	124	15
	Bromoform	20	18.9	ug/Kg	95	16		75	127	16
	Isopropylbenzene	20	20.3	ug/Kg	102	2		82	124	15
	1,1,2,2-Tetrachloroethane	20	20.4	ug/Kg	102	4		77	127	21
	1,3-Dichlorobenzene	20	19.8	ug/Kg	99	1		83	122	15
	1,4-Dichlorobenzene	20	19.7	ug/Kg	99	0		84	121	15
	1,2-Dichlorobenzene	20	19.6	ug/Kg	98	0		83	124	15

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3615 **Analytical Method:** SW8260D

Client: Core Environmental Consultants and S **Datafile :** VY023777.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VY1113SBSD01	1,2-Dibromo-3-Chloropropane	20	19.7	ug/Kg	99	6		66	134	20
	1,2,4-Trichlorobenzene	20	22.3	ug/Kg	112	19		78	127	20
	1,2,3-Trichlorobenzene	20	23.5	ug/Kg	117	20	*	70	137	16

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VOLATILE METHOD BLANK SUMMARY

Client ID: VY1113SBL01

Lab Name: Alliance | Contract: CORE02

Lab Code: ACE | SDG NO.: Q3615

Lab File ID: VY023775.D | Lab Sample ID: VY1113SBL01

Date Analyzed: 11/13/2025 | Time Analyzed: 10:17

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

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY1113SBS01	VY1113SBS01	VY023776.D	11/13/2025
VY1113SBSD01	VY1113SBSD01	VY023777.D	11/13/2025
East Bathhouse- Concrete	Q3615-01	VY023779.D	11/13/2025

COMMENTS:

Raw Data: **VY023660.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: CORE02
Lab Code: ACE
SDG NO.: Q3615
Lab File ID: VY023660.D
BFB Injection Date: 11/04/2025
Instrument ID: MSVOA_Y
BFB Injection Time: 08:11
GC Column: RXI-624 ID: 0.25 (mm)
Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.3
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1.3 (1.3) 1
174	50.0 - 100.0% of mass 95	94.8
175	5.0 - 9.0% of mass 174	7 (7.4) 1
176	95.0 - 101.0% of mass 174	91.1 (96.1) 1
177	5.0 - 9.0% of mass 176	6 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VY023661.D	11/04/2025	09:19
VSTDICC010	VSTDICC010	VY023662.D	11/04/2025	09:42
VSTDICC020	VSTDICC020	VY023663.D	11/04/2025	10:19
VSTDICCC050	VSTDICCC050	VY023664.D	11/04/2025	10:42
VSTDICC100	VSTDICC100	VY023665.D	11/04/2025	11:05
VSTDICC150	VSTDICC150	VY023666.D	11/04/2025	11:27

Raw Data: **VY023773.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance | Contract: CORE02

Lab Code: ACE | SDG NO.: Q3615

Lab File ID: VY023773.D | BFB Injection Date: 11/13/2025

Instrument ID: MSVOA_Y | BFB Injection Time: 09:06

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	48.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1.1 (1.2) 1
174	50.0 - 100.0% of mass 95	92.4
175	5.0 - 9.0% of mass 174	6.7 (7.3) 1
176	95.0 - 101.0% of mass 174	88.1 (95.4) 1
177	5.0 - 9.0% of mass 176	5.7 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY023774.D	11/13/2025	09:48
VY1113SBL01	VY1113SBL01	VY023775.D	11/13/2025	10:17
VY1113SBS01	VY1113SBS01	VY023776.D	11/13/2025	10:46
VY1113SBSD01	VY1113SBSD01	VY023777.D	11/13/2025	11:09
East Bathhouse- Concrete	Q3615-01	VY023779.D	11/13/2025	12:14

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: CORE02

Lab Code: ACE SDG NO.: Q3615

Lab File ID: VY023774.D Date Analyzed: 11/13/2025

Instrument ID: MSVOA_Y Time Analyzed: 09:48

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	535734	7.71	769382	8.62	787003	11.41
UPPER LIMIT	1071470	8.207	1538760	9.116	1574010	11.914
LOWER LIMIT	267867	7.207	384691	8.116	393502	10.914
EPA SAMPLE NO.						
East Bathhouse- Concrete	759197	7.71	1341213	8.62	1126773	11.41
VY1113SBL01	770600	7.71	1347630	8.62	1134546	11.41
VY1113SBS01	545029	7.71	820567	8.62	760023	11.41
VY1113SBSD01	571249	7.71	854908	8.62	744787	11.41

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: CORE02

Lab Code: ACE SDG NO.: Q3615

Lab File ID: VY023774.D Date Analyzed: 11/13/2025

Instrument ID: MSVOA_Y Time Analyzed: 09:48

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

	IS4 AREA #	RT #				
12 HOUR STD	393514	13.347				
UPPER LIMIT	787028	13.847				
LOWER LIMIT	196757	12.847				
EPA SAMPLE NO.						
East Bathhouse- Concrete	446837	13.35				
VY1113SBL01	509347	13.35				
VY1113SBS01	418145	13.35				
VY1113SBSD01	370605	13.35				

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.

SAMPLE DATA

Raw Data: **VY023779.D**

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	11/12/25
Project:	Jones Beach Concrete	Date Received:	11/12/25
Client Sample ID:	East Bathhouse- Concrete	SDG No.:	Q3615
Lab Sample ID:	Q3615-01	Matrix:	SOIL
Analytical Method:	8260D Level: LOW	% Solid:	100
Sample Wt/Vol:	5.5 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	1.00	U	1	1.00	4.50	ug/Kg	11/13/25 12:14	VY111325
74-87-3	Chloromethane	1.00	U	1	1.00	4.50	ug/Kg	11/13/25 12:14	VY111325
75-01-4	Vinyl Chloride	0.72	U	1	0.72	4.50	ug/Kg	11/13/25 12:14	VY111325
74-83-9	Bromomethane	0.97	U	1	0.97	4.50	ug/Kg	11/13/25 12:14	VY111325
75-00-3	Chloroethane	1.10	U	1	1.10	4.50	ug/Kg	11/13/25 12:14	VY111325
75-69-4	Trichlorofluoromethane	1.10	U	1	1.10	4.50	ug/Kg	11/13/25 12:14	VY111325
76-13-1	1,1,2-Trichlorotrifluoroethane	0.96	U	1	0.96	4.50	ug/Kg	11/13/25 12:14	VY111325
75-35-4	1,1-Dichloroethene	0.91	U	1	0.91	4.50	ug/Kg	11/13/25 12:14	VY111325
67-64-1	Acetone	4.30	U	1	4.30	22.7	ug/Kg	11/13/25 12:14	VY111325
75-15-0	Carbon Disulfide	0.96	U	1	0.96	4.50	ug/Kg	11/13/25 12:14	VY111325
1634-04-4	Methyl tert-butyl Ether	0.66	U	1	0.66	4.50	ug/Kg	11/13/25 12:14	VY111325
79-20-9	Methyl Acetate	1.40	U	1	1.40	4.50	ug/Kg	11/13/25 12:14	VY111325
75-09-2	Methylene Chloride	3.20	U	1	3.20	9.10	ug/Kg	11/13/25 12:14	VY111325
156-60-5	trans-1,2-Dichloroethene	0.78	U	1	0.78	4.50	ug/Kg	11/13/25 12:14	VY111325
75-34-3	1,1-Dichloroethane	0.73	U	1	0.73	4.50	ug/Kg	11/13/25 12:14	VY111325
110-82-7	Cyclohexane	0.72	U	1	0.72	4.50	ug/Kg	11/13/25 12:14	VY111325
78-93-3	2-Butanone	5.90	U	1	5.90	22.7	ug/Kg	11/13/25 12:14	VY111325
56-23-5	Carbon Tetrachloride	0.88	U	1	0.88	4.50	ug/Kg	11/13/25 12:14	VY111325
156-59-2	cis-1,2-Dichloroethene	0.68	U	1	0.68	4.50	ug/Kg	11/13/25 12:14	VY111325
74-97-5	Bromochloromethane	1.00	U	1	1.00	4.50	ug/Kg	11/13/25 12:14	VY111325
67-66-3	Chloroform	0.76	U	1	0.76	4.50	ug/Kg	11/13/25 12:14	VY111325
71-55-6	1,1,1-Trichloroethane	0.85	U	1	0.85	4.50	ug/Kg	11/13/25 12:14	VY111325
108-87-2	Methylcyclohexane	0.83	U	1	0.83	4.50	ug/Kg	11/13/25 12:14	VY111325
71-43-2	Benzene	0.72	U	1	0.72	4.50	ug/Kg	11/13/25 12:14	VY111325
107-06-2	1,2-Dichloroethane	0.72	U	1	0.72	4.50	ug/Kg	11/13/25 12:14	VY111325
79-01-6	Trichloroethene	0.74	U	1	0.74	4.50	ug/Kg	11/13/25 12:14	VY111325
78-87-5	1,2-Dichloropropane	0.83	U	1	0.83	4.50	ug/Kg	11/13/25 12:14	VY111325
75-27-4	Bromodichloromethane	0.71	U	1	0.71	4.50	ug/Kg	11/13/25 12:14	VY111325
108-10-1	4-Methyl-2-Pentanone	3.30	U	1	3.30	22.7	ug/Kg	11/13/25 12:14	VY111325
108-88-3	Toluene	0.71	U	1	0.71	4.50	ug/Kg	11/13/25 12:14	VY111325
10061-02-6	t-1,3-Dichloropropene	0.59	U	1	0.59	4.50	ug/Kg	11/13/25 12:14	VY111325
10061-01-5	cis-1,3-Dichloropropene	0.56	U	1	0.56	4.50	ug/Kg	11/13/25 12:14	VY111325
79-00-5	1,1,2-Trichloroethane	0.84	U	1	0.84	4.50	ug/Kg	11/13/25 12:14	VY111325
591-78-6	2-Hexanone	3.40	U	1	3.40	22.7	ug/Kg	11/13/25 12:14	VY111325
124-48-1	Dibromochloromethane	0.79	U	1	0.79	4.50	ug/Kg	11/13/25 12:14	VY111325
106-93-4	1,2-Dibromoethane	0.80	U	1	0.80	4.50	ug/Kg	11/13/25 12:14	VY111325
127-18-4	Tetrachloroethene	0.95	U	1	0.95	4.50	ug/Kg	11/13/25 12:14	VY111325
108-90-7	Chlorobenzene	0.83	U	1	0.83	4.50	ug/Kg	11/13/25 12:14	VY111325
100-41-4	Ethyl Benzene	0.61	U	1	0.61	4.50	ug/Kg	11/13/25 12:14	VY111325
179601-23-1	m/p-Xylenes	1.10	U	1	1.10	9.10	ug/Kg	11/13/25 12:14	VY111325
95-47-6	o-Xylene	0.75	U	1	0.75	4.50	ug/Kg	11/13/25 12:14	VY111325
100-42-5	Styrene	0.65	U	1	0.65	4.50	ug/Kg	11/13/25 12:14	VY111325
75-25-2	Bromoform	0.78	U	1	0.78	4.50	ug/Kg	11/13/25 12:14	VY111325

Raw Data: **VY023779.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	11/12/25
Project:	Jones Beach Concrete	Date Received:	11/12/25
Client Sample ID:	East Bathhouse- Concrete	SDG No.:	Q3615
Lab Sample ID:	Q3615-01	Matrix:	SOIL
Analytical Method:	8260D Level: LOW	% Solid:	100
Sample Wt/Vol:	5.5 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	0.71	U	1	0.71	4.50	ug/Kg	11/13/25 12:14	VY111325
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1	1.10	4.50	ug/Kg	11/13/25 12:14	VY111325
541-73-1	1,3-Dichlorobenzene	1.60	U	1	1.60	4.50	ug/Kg	11/13/25 12:14	VY111325
106-46-7	1,4-Dichlorobenzene	1.40	U	1	1.40	4.50	ug/Kg	11/13/25 12:14	VY111325
95-50-1	1,2-Dichlorobenzene	1.30	U	1	1.30	4.50	ug/Kg	11/13/25 12:14	VY111325
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1	1.70	4.50	ug/Kg	11/13/25 12:14	VY111325
120-82-1	1,2,4-Trichlorobenzene	2.70	U	1	2.70	4.50	ug/Kg	11/13/25 12:14	VY111325
87-61-6	1,2,3-Trichlorobenzene	2.90	U	1	2.90	4.50	ug/Kg	11/13/25 12:14	VY111325
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	57.3			63 - 155	115%	SPK: 50		
1868-53-7	Dibromofluoromethane	39.4			70 - 134	79%	SPK: 50		
2037-26-5	Toluene-d8	48.6			74 - 123	97%	SPK: 50		
460-00-4	4-Bromofluorobenzene	42.8			52 - 138	86%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	759000							
540-36-3	1,4-Difluorobenzene	1340000							
3114-55-4	Chlorobenzene-d5	1130000							
3855-82-1	1,4-Dichlorobenzene-d4	447000							

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

Sample Results: **VY023779.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Quant Time: Nov 13 13:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	759197	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	1341213	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	1126773	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	446837	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	371216	57.321	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 114.640%			
35) Dibromofluoromethane	7.634	113	330109	39.385	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 78.760%			
50) Toluene-d8	10.103	98	1517303	48.597	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 97.200%			
62) 4-Bromofluorobenzene	12.408	95	432028	42.788	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 85.580%			
Target Compounds						Qvalue
16) Acetone	3.879	43	2584	1.605	ug/l	98
20) Methylene Chloride	4.616	84	17254	2.220	ug/l	91
25) 2-Butanone	6.890	43	3616	1.943	ug/l #	78

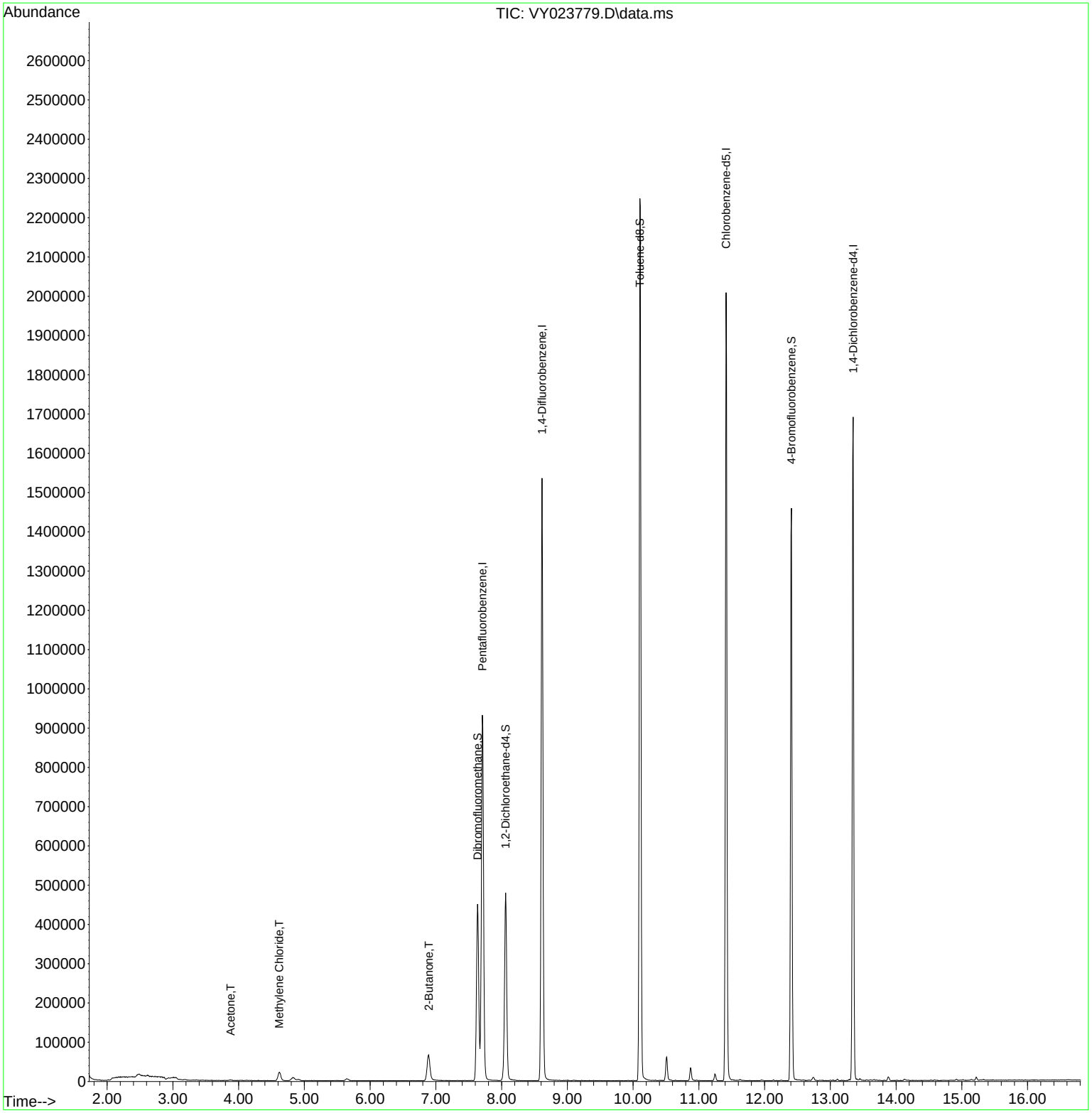
(#) = qualifier out of range (m) = manual integration (+) = signals summed

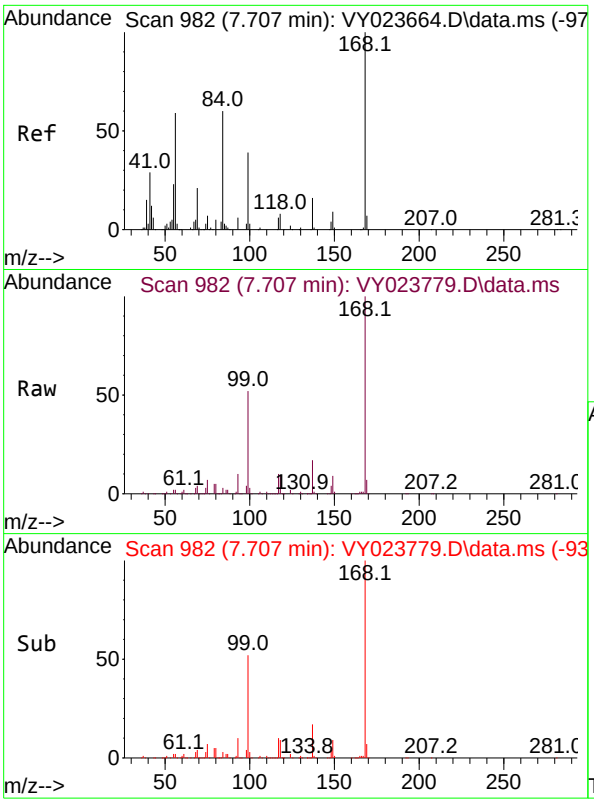
Sample Results: **VY023779.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Quant Time: Nov 13 13:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration



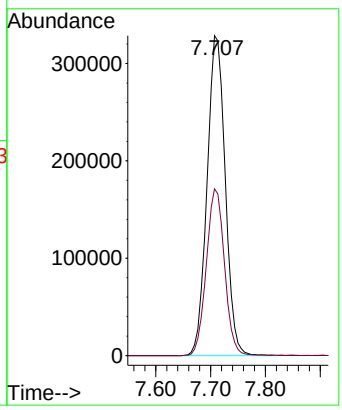


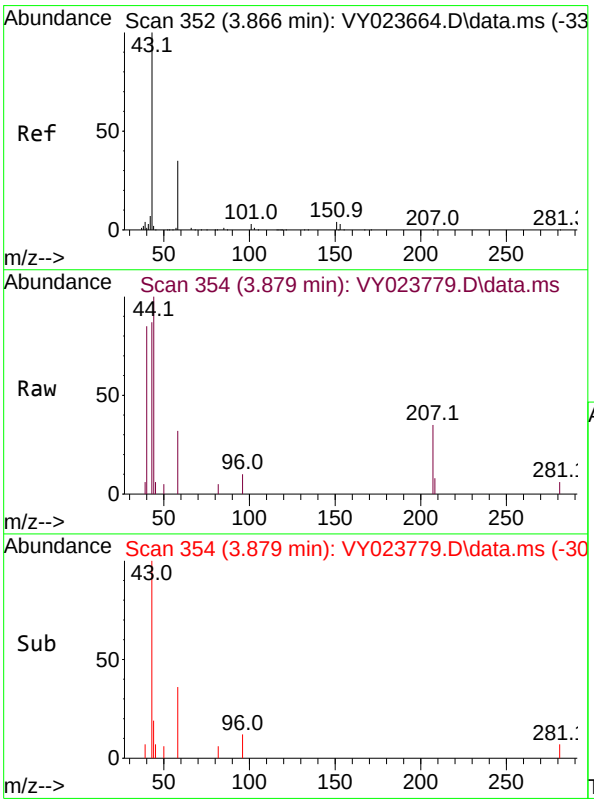
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 98
Delta R.T. 0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion:168 Resp: 759197

Ion	Ratio	Lower	Upper
168	100		
99	52.1	41.0	61.4

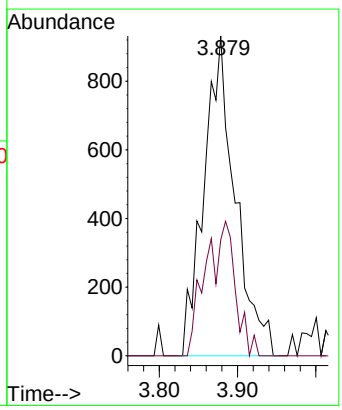


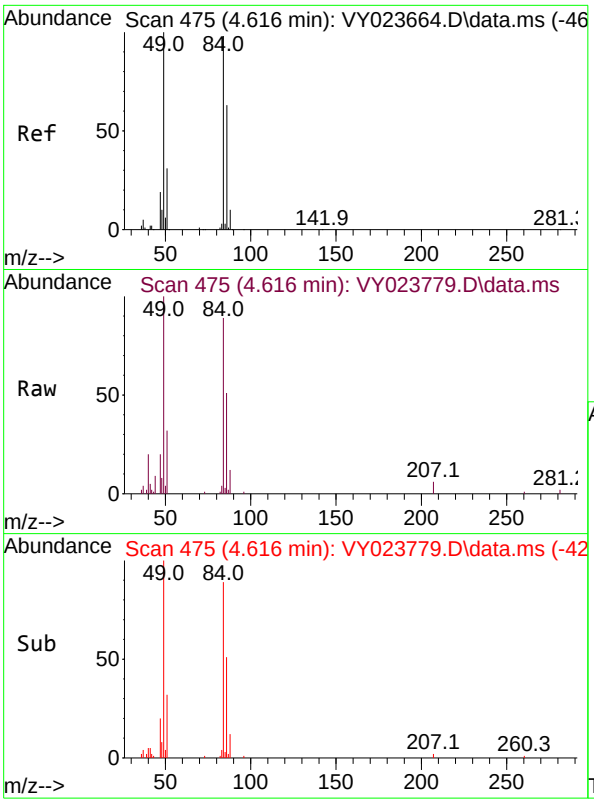


#16
Acetone
Concen: 1.605 ug/l
RT: 3.879 min Scan# 354
Delta R.T. 0.012 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Tgt Ion: 43 Resp: 2584

Ion	Ratio	Lower	Upper
43	100		
58	36.3	28.2	42.4



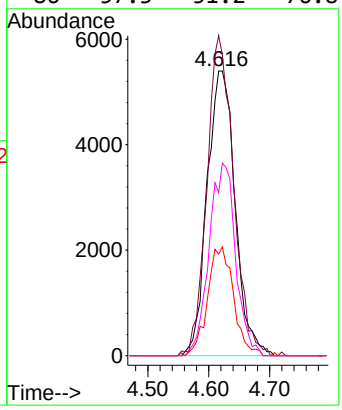


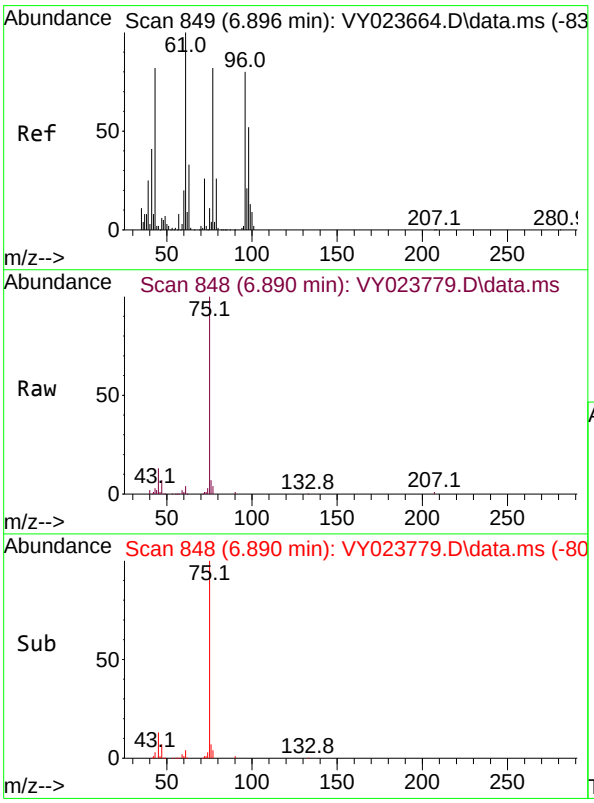
#20
Methylene Chloride
Concen: 2.220 ug/l
RT: 4.616 min Scan# 4
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion: 84 Resp: 17254

Ion	Ratio	Lower	Upper
84	100		
49	112.4	81.5	122.3
51	35.7	25.5	38.3
86	57.3	51.2	76.8

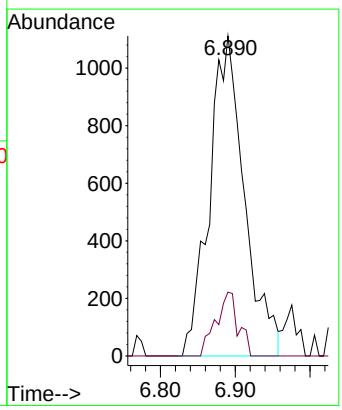


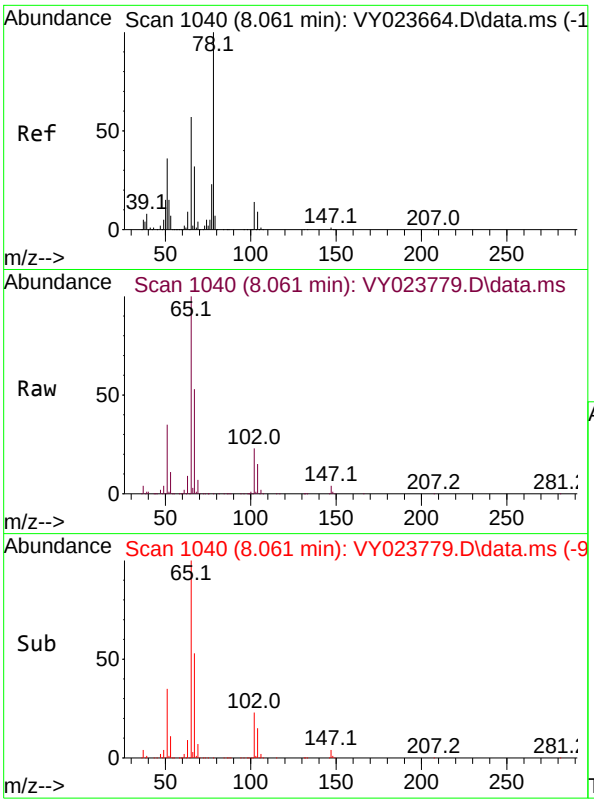


#25
2-Butanone
Concen: 1.943 ug/l
RT: 6.890 min Scan# 848
Delta R.T. -0.006 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Tgt Ion: 43 Resp: 3616

Ion	Ratio	Lower	Upper
43	100		
72	20.0	25.7	38.5#



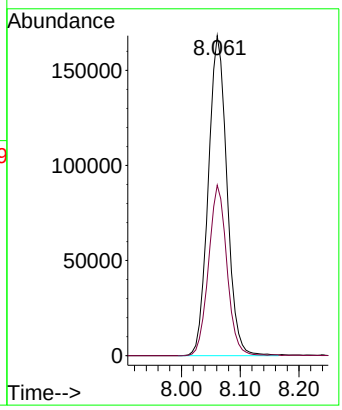


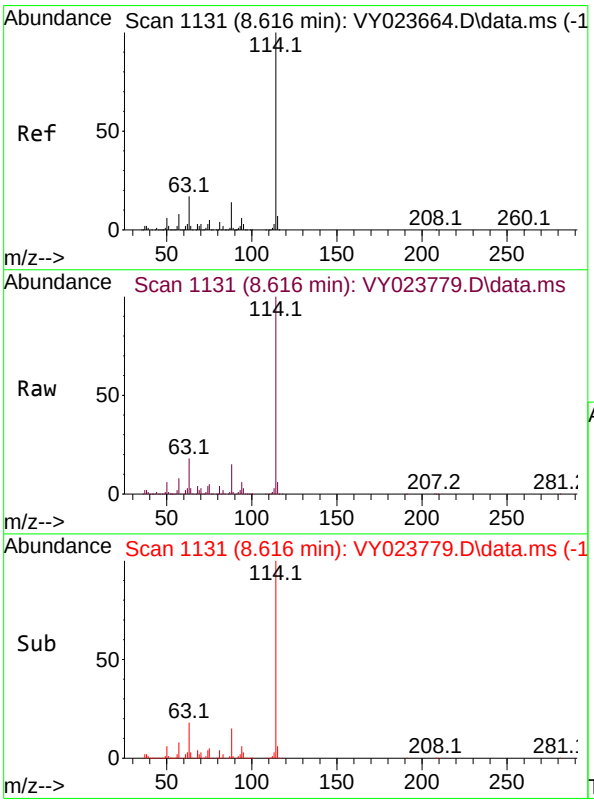
#33
1,2-Dichloroethane-d4
Concen: 57.321 ug/l
RT: 8.061 min Scan# 10
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion: 65 Resp: 371216

Ion	Ratio	Lower	Upper
65	100		
67	52.3	0.0	107.4

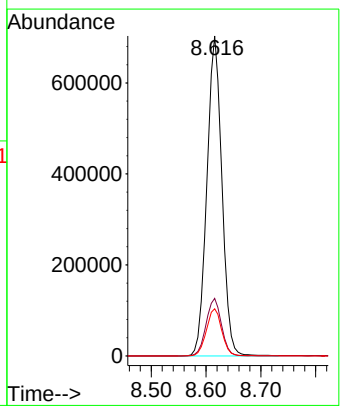


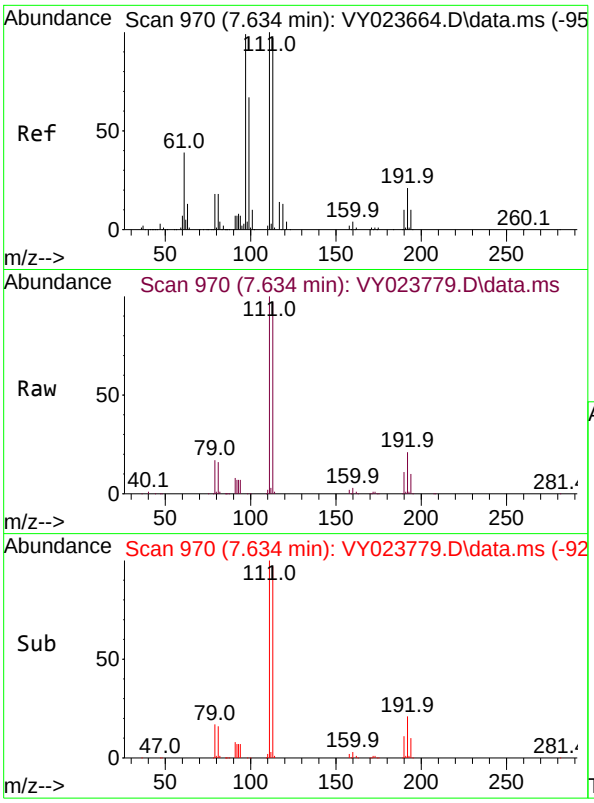


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.616 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Tgt Ion:114 Resp: 1341213

Ion	Ratio	Lower	Upper
114	100		
63	18.0	0.0	33.8
88	14.7	0.0	29.0



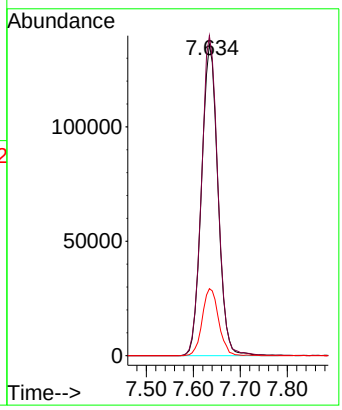


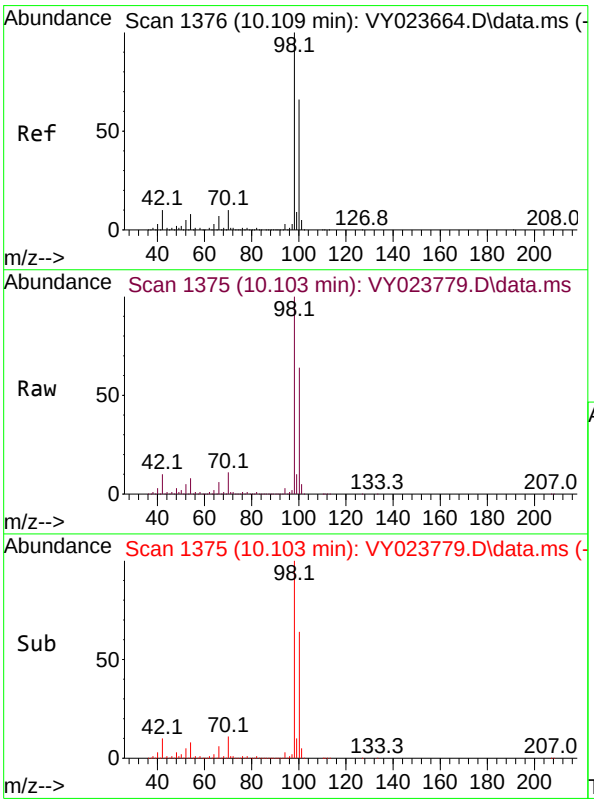
#35
Dibromofluoromethane
Concen: 39.385 ug/l
RT: 7.634 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion:113 Resp: 330109

Ion	Ratio	Lower	Upper
113	100		
111	102.6	82.2	123.4
192	21.5	17.3	25.9

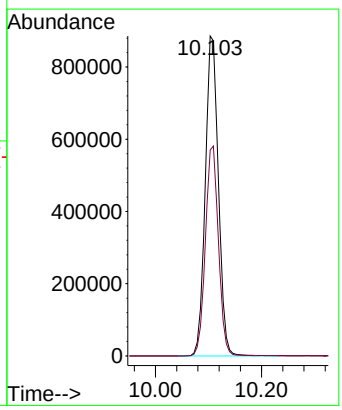


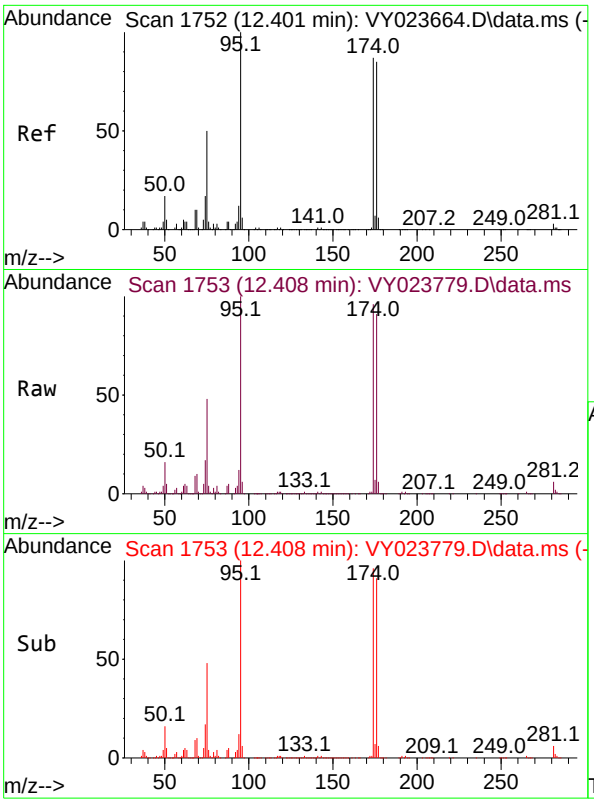


#50
Toluene-d8
Concen: 48.597 ug/l
RT: 10.103 min Scan# 1375
Delta R.T. -0.006 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Tgt Ion: 98 Resp: 1517303

Ion	Ratio	Lower	Upper
98	100		
100	65.3	52.7	79.1



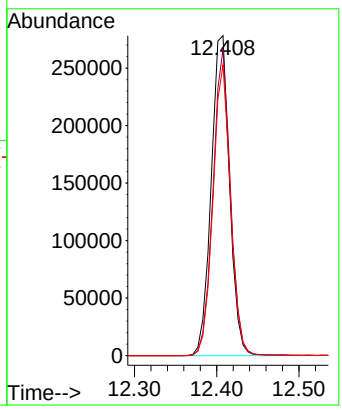


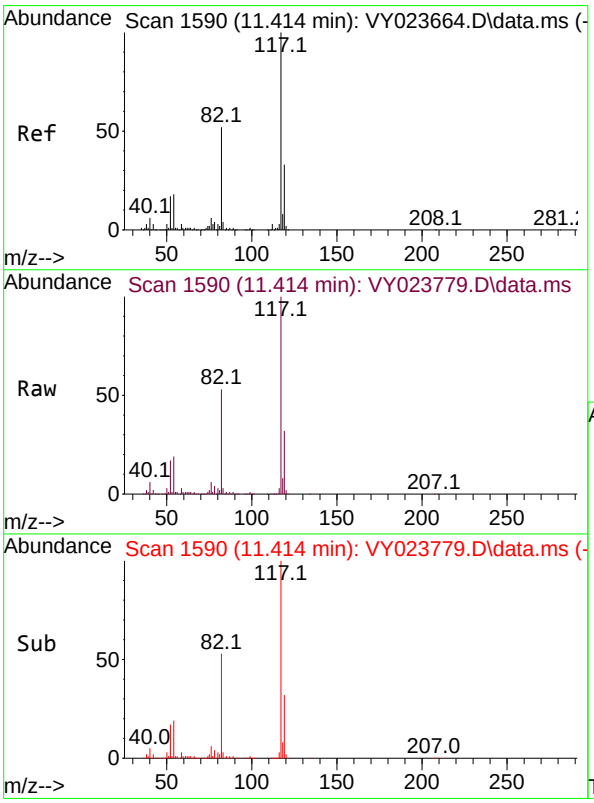
#62
4-Bromofluorobenzene
Concen: 42.788 ug/l
RT: 12.408 min Scan# 1
Delta R.T. 0.006 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion: 95 Resp: 432028

Ion	Ratio	Lower	Upper
95	100		
174	91.4	0.0	184.8
176	87.1	0.0	181.6

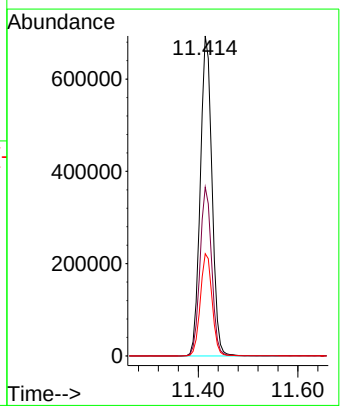


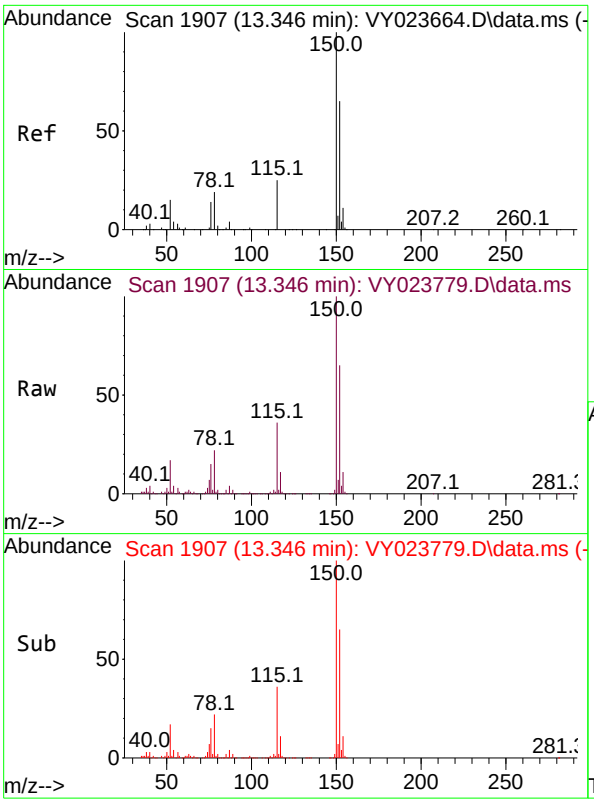


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.414 min Scan# 1590
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Tgt Ion:117 Resp: 1126773

Ion	Ratio	Lower	Upper
117	100		
82	52.7	41.2	61.8
119	31.9	26.2	39.2



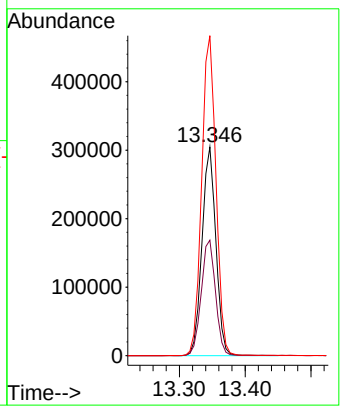


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.346 min Scan# 19
Delta R.T. -0.000 min
Lab File: VY023779.D
Acq: 13 Nov 2025 12:14

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Tgt Ion:152 Resp: 446837

Ion	Ratio	Lower	Upper
152	100		
115	57.0	27.5	82.5
150	157.8	0.0	349.0



Sample Results: **VY023779.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

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_Y\methods\82Y110425S.M
Title : SW846 8260

Signal : TIC: VY023779.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.622	467	476	490	rVB2	21372	66366	1.70%	0.335%
2	6.890	836	848	864	rBV	66060	212516	5.44%	1.072%
3	7.634	960	970	976	rBV	449646	1090769	27.94%	5.501%
4	7.707	976	982	998	rVB	929151	2138031	54.77%	10.783%
5	8.061	1023	1040	1054	rBV	478301	1114939	28.56%	5.623%
6	8.616	1121	1131	1145	rBV	1534667	2965532	75.97%	14.956%
7	10.103	1366	1375	1403	rBV	2247242	3903696	100.00%	19.688%
8	10.512	1435	1442	1458	rBV	60719	119161	3.05%	0.601%
9	10.871	1494	1501	1510	rBV	32511	60144	1.54%	0.303%
10	11.414	1580	1590	1604	rBV	2007719	3274545	83.88%	16.515%
11	12.408	1742	1753	1762	rBV	1458582	2319208	59.41%	11.697%
12	13.346	1899	1907	1915	rBV	1688793	2563168	65.66%	12.927%

Sum of corrected areas: 19828075

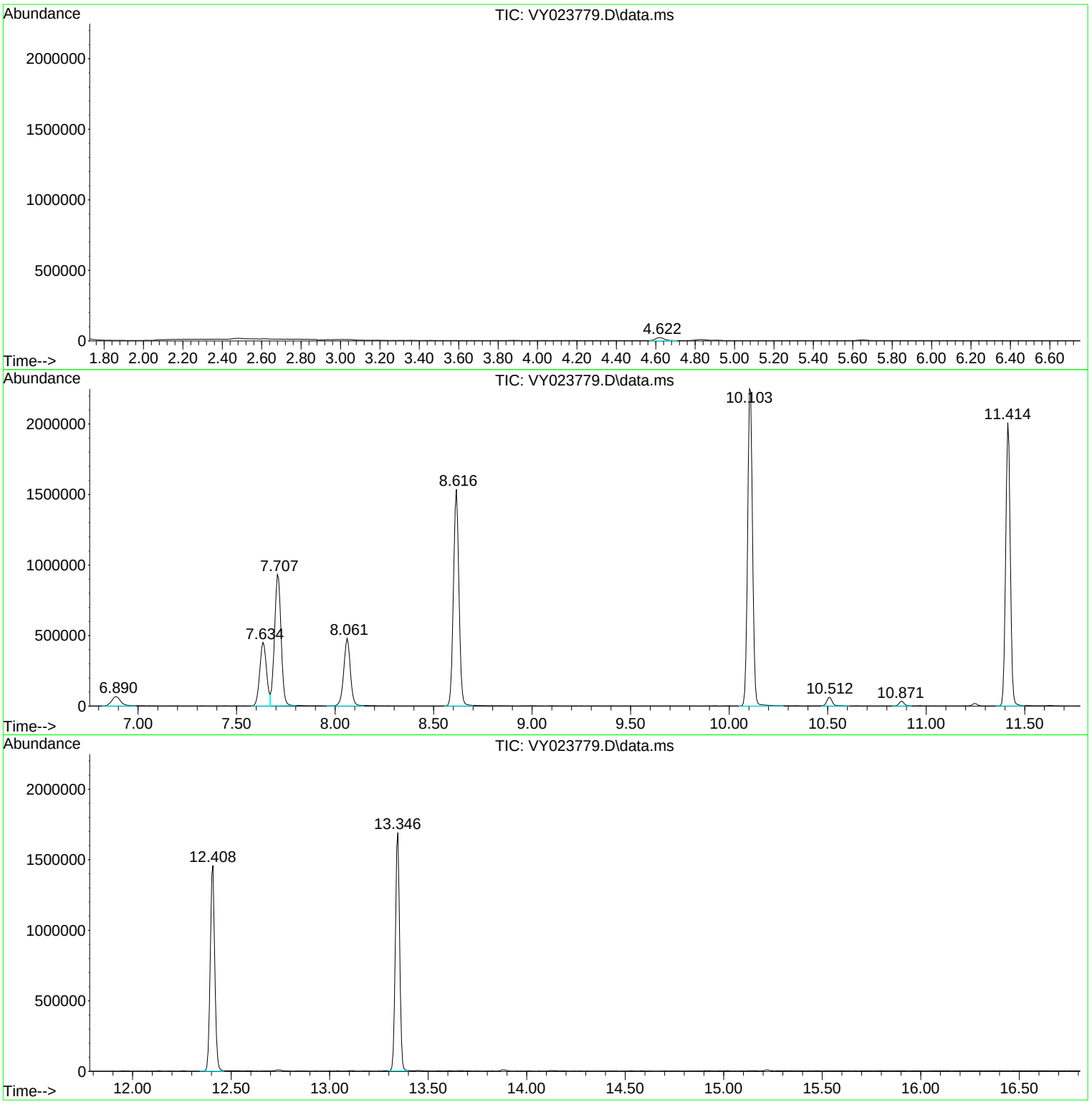
Sample Results: **VY023779.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023779.D
Acq On : 13 Nov 2025 12:14
Operator : SY/MD
Sample : Q3615-01
Misc : 5.50g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
East Bathhouse- Concrete

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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

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

CALIBRATION SUMMARY

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: CORE02

Lab Code: ACE SDG No.: Q3615

Instrument ID: MSVOA_Y Calibration Date(s): 11/04/2025 11/04/2025

Heated Purge: (Y/N) Y Calibration Time(s): 09:19 11:27

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

LAB FILE ID: RRF005 = VY023661.D RRF010 = VY023662.D RRF020 = VY023663.D
RRF050 = VY023664.D RRF100 = VY023665.D RRF150 = VY023666.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.391	0.380	0.373	0.275	0.284	0.266	0.328	17.9
Chloromethane	0.537	0.510	0.489	0.413	0.424	0.382	0.459	13.4
Vinyl Chloride	0.680	0.662	0.633	0.547	0.556	0.508	0.598	11.7
Bromomethane	0.587	0.555	0.530	0.443	0.464	0.437	0.503	12.5
Chloroethane	0.458	0.455	0.432	0.386	0.393	0.354	0.413	10.1
Trichlorofluoromethane	0.937	0.908	0.887	0.780	0.782	0.756	0.842	9.2
1,1,2-Trichlorotrifluoroethane	0.519	0.506	0.471	0.433	0.439	0.414	0.464	9.1
1,1-Dichloroethene	0.476	0.462	0.462	0.421	0.441	0.419	0.447	5.2
Acetone	0.115	0.106	0.115	0.094	0.105	0.102	0.106	7.4
Carbon Disulfide	1.479	1.468	1.424	1.288	1.330	1.237	1.371	7.3
Methyl tert-butyl Ether	0.980	0.945	1.059	1.008	1.132	1.091	1.036	6.8
Methyl Acetate	0.221	0.206	0.292	0.210	0.256	0.218	0.234	14.4
Methylene Chloride	0.652	0.532	0.515	0.460	0.476	0.436	0.512	15.1
trans-1,2-Dichloroethene	0.512	0.515	0.519	0.487	0.510	0.479	0.504	3.3
1,1-Dichloroethane	0.855	0.818	0.822	0.775	0.813	0.760	0.807	4.3
Cyclohexane	0.789	0.719	0.692	0.662	0.695	0.660	0.703	6.8
2-Butanone	0.128	0.113	0.130	0.111	0.127	0.127	0.123	6.8
Carbon Tetrachloride	0.516	0.491	0.501	0.477	0.494	0.473	0.492	3.2
cis-1,2-Dichloroethene	0.571	0.582	0.574	0.560	0.599	0.564	0.575	2.4
Bromochloromethane	0.317	0.329	0.329	0.290	0.311	0.279	0.309	6.7
Chloroform	0.957	0.934	0.919	0.863	0.898	0.833	0.901	5.1
1,1,1-Trichloroethane	0.852	0.833	0.820	0.769	0.803	0.753	0.805	4.7
Methylcyclohexane	0.499	0.495	0.536	0.539	0.569	0.563	0.534	5.8
Benzene	1.323	1.322	1.355	1.287	1.345	1.265	1.316	2.6
1,2-Dichloroethane	0.343	0.331	0.344	0.321	0.339	0.320	0.333	3.3
Trichloroethene	0.398	0.383	0.387	0.366	0.377	0.358	0.378	3.8
1,2-Dichloropropane	0.294	0.285	0.300	0.284	0.297	0.283	0.290	2.6
Bromodichloromethane	0.456	0.442	0.471	0.444	0.469	0.441	0.454	3
4-Methyl-2-Pentanone	0.143	0.136	0.170	0.158	0.181	0.180	0.162	11.8
Toluene	0.761	0.813	0.874	0.854	0.898	0.842	0.840	5.7

* 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.

Raw Data

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: CORE02

Lab Code: ACE SDG No.: Q3615

Instrument ID: MSVOA_Y Calibration Date(s): 11/04/2025 11/04/2025

Heated Purge: (Y/N) Y Calibration Time(s): 09:19 11:27

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

LAB FILE ID: RRF005 = VY023661.D RRF010 = VY023662.D RRF020 = VY023663.D
RRF050 = VY023664.D RRF100 = VY023665.D RRF150 = VY023666.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
t-1,3-Dichloropropene	0.346	0.349	0.389	0.387	0.426	0.407	0.384	8.2
cis-1,3-Dichloropropene	0.419	0.434	0.475	0.463	0.495	0.474	0.460	6.1
1,1,2-Trichloroethane	0.244	0.230	0.250	0.234	0.249	0.236	0.241	3.5
2-Hexanone	0.101	0.099	0.127	0.115	0.132	0.133	0.118	12.9
Dibromochloromethane	0.325	0.314	0.342	0.326	0.347	0.329	0.330	3.7
1,2-Dibromoethane	0.221	0.208	0.240	0.222	0.238	0.226	0.226	5.3
Tetrachloroethene	0.554	0.549	0.545	0.512	0.500	0.462	0.520	6.9
Chlorobenzene	1.096	1.095	1.109	1.067	1.107	1.057	1.089	2
Ethyl Benzene	1.589	1.661	1.787	1.807	1.908	1.819	1.762	6.6
m/p-Xylenes	0.618	0.671	0.722	0.727	0.757	0.727	0.704	7.1
o-Xylene	0.562	0.600	0.659	0.674	0.717	0.691	0.651	9
Styrene	0.903	0.979	1.110	1.121	1.184	1.145	1.074	10.1
Bromoform	0.222	0.209	0.230	0.219	0.238	0.231	0.225	4.5
Isopropylbenzene	2.940	3.203	3.298	3.461	3.641	3.521	3.344	7.6
1,1,2,2-Tetrachloroethane	0.553	0.494	0.522	0.503	0.569	0.564	0.534	6
1,3-Dichlorobenzene	1.680	1.703	1.714	1.694	1.744	1.709	1.707	1.3
1,4-Dichlorobenzene	1.752	1.685	1.666	1.652	1.679	1.630	1.677	2.5
1,2-Dichlorobenzene	1.468	1.467	1.488	1.454	1.494	1.457	1.471	1.1
1,2-Dibromo-3-Chloropropane	0.085	0.076	0.083	0.076	0.086	0.086	0.082	5.7
1,2,4-Trichlorobenzene	0.738	0.747	0.835	0.853	0.933	0.944	0.842	10.5
1,2,3-Trichlorobenzene	0.619	0.611	0.698	0.717	0.782	0.791	0.703	10.9
1,2-Dichloroethane-d4	0.468	0.425	0.426	0.407	0.425	0.407	0.427	5.3
Dibromofluoromethane	0.312	0.316	0.312	0.310	0.318	0.308	0.312	1.2
Toluene-d8	1.109	1.148	1.155	1.189	1.224	1.159	1.164	3.3
4-Bromofluorobenzene	0.354	0.354	0.379	0.388	0.400	0.385	0.376	5

* 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.

Response Factor Report GCVOA_Y

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
Method File : 82Y110425S.M
Title : SW846 8260
Last Update : Wed Nov 05 04:41:50 2025
Response Via : Initial Calibration

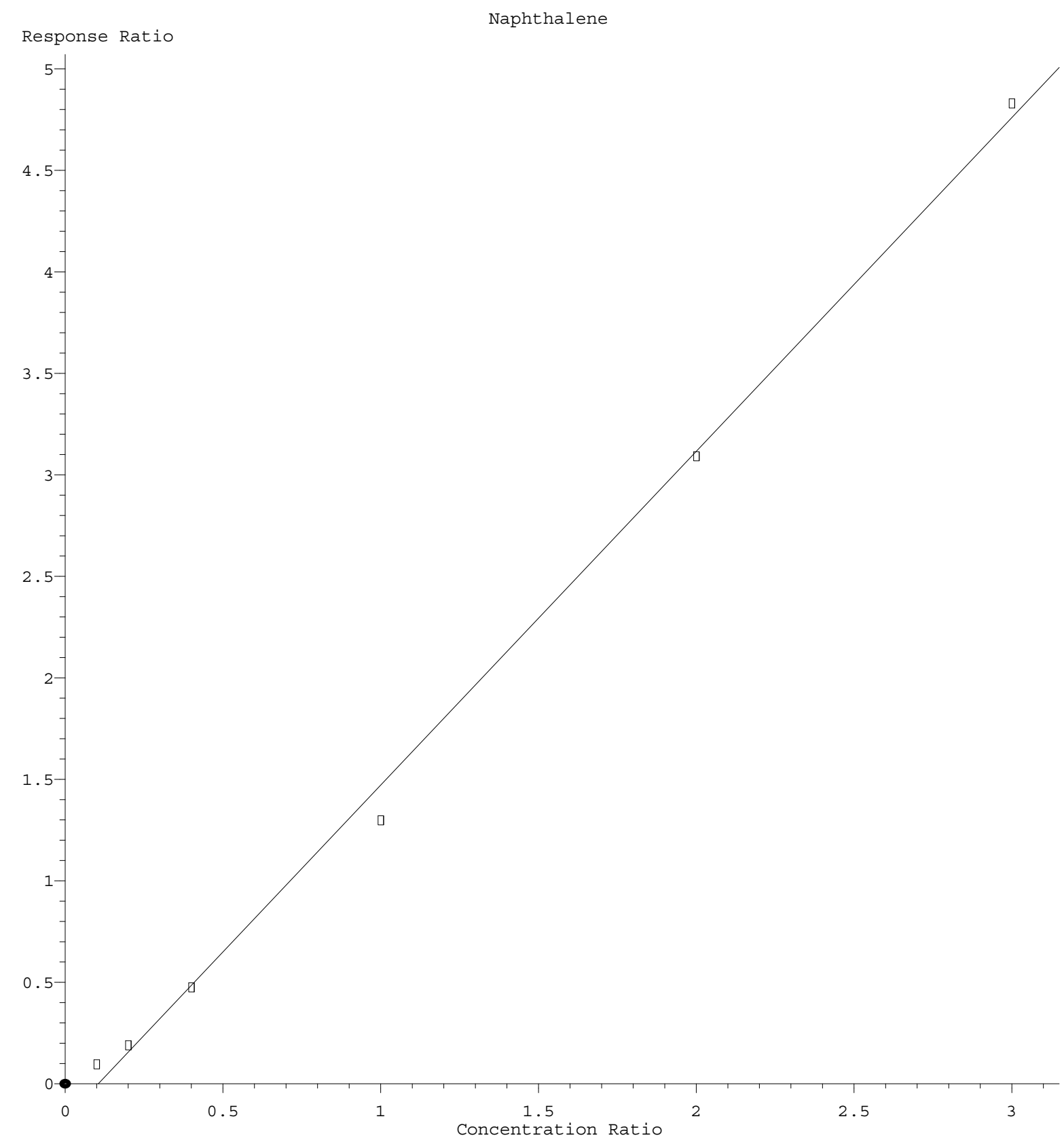
Calibration Files
5 =VY023661.D 10 =VY023662.D 20 =VY023663.D 50 =VY023664.D 100 =VY023665.D 150 =VY023666.D

		Compound	5	10	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.391	0.380	0.373	0.275	0.284	0.266	0.328	17.90
3)	P	Chloromethane	0.537	0.510	0.489	0.413	0.424	0.382	0.459	13.38
4)	C	Vinyl Chloride	0.680	0.662	0.633	0.547	0.556	0.508	0.598	11.68#
5)	T	Bromomethane	0.587	0.555	0.530	0.443	0.464	0.437	0.503	12.53
6)	T	Chloroethane	0.458	0.455	0.432	0.386	0.393	0.354	0.413	10.08
7)	T	Trichlorofluor...	0.937	0.908	0.887	0.780	0.782	0.756	0.842	9.25
8)	T	Diethyl Ether	0.232	0.228	0.232	0.212	0.230	0.219	0.226	3.58
9)	T	1,1,2-Trichlor...	0.519	0.506	0.471	0.433	0.439	0.414	0.464	9.09
10)	T	Methyl Iodide	0.491	0.546	0.558	0.573	0.585	0.533	0.548	6.10
11)	T	Tert butyl alc...	0.035	0.027	0.027	0.023	0.026	0.027	0.028	15.05
12)	CM	1,1-Dichloroet...	0.476	0.462	0.462	0.421	0.441	0.419	0.447	5.23#
13)	T	Acrolein	0.041	0.036	0.039	0.030	0.034	0.033	0.035	12.04
14)	T	Allyl chloride	0.530	0.534	0.549	0.527	0.577	0.545	0.544	3.38
15)	T	Acrylonitrile	0.087	0.079	0.090	0.081	0.092	0.089	0.086	5.76
16)	T	Acetone	0.115	0.106	0.115	0.094	0.105	0.102	0.106	7.41
17)	T	Carbon Disulfide	1.479	1.468	1.424	1.288	1.330	1.237	1.371	7.32
18)	T	Methyl Acetate	0.221	0.206	0.292	0.210	0.256	0.218	0.234	14.40
19)	T	Methyl tert-bu...	0.980	0.945	1.059	1.008	1.132	1.091	1.036	6.81
20)	T	Methylene Chlo...	0.652	0.532	0.515	0.460	0.476	0.436	0.512	15.09
21)	T	trans-1,2-Dich...	0.512	0.515	0.519	0.487	0.510	0.479	0.504	3.29
22)	T	Diisopropyl ether	1.097	1.167	1.263	1.222	1.305	1.215	1.212	6.04
23)	T	Vinyl Acetate	0.585	0.589	0.631	0.652	0.716	0.706	0.647	8.69
24)	P	1,1-Dichloroet...	0.855	0.818	0.822	0.775	0.813	0.760	0.807	4.27
25)	T	2-Butanone	0.128	0.113	0.130	0.111	0.127	0.127	0.123	6.79
26)	T	2,2-Dichloropr...	0.799	0.758	0.742	0.709	0.739	0.708	0.742	4.56
27)	T	cis-1,2-Dichlo...	0.571	0.582	0.574	0.560	0.599	0.564	0.575	2.42
28)	T	Bromochloromet...	0.317	0.329	0.329	0.290	0.311	0.279	0.309	6.68
29)	T	Tetrahydrofuran	0.061	0.059	0.068	0.062	0.072	0.070	0.065	8.58
30)	C	Chloroform	0.957	0.934	0.919	0.863	0.898	0.833	0.901	5.14#
31)	T	Cyclohexane	0.789	0.719	0.692	0.662	0.695	0.660	0.703	6.77
32)	T	1,1,1-Trichlor...	0.852	0.833	0.820	0.769	0.803	0.753	0.805	4.72
33)	S	1,2-Dichloroet...	0.468	0.425	0.426	0.407	0.425	0.407	0.427	5.27
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...	0.312	0.316	0.312	0.310	0.318	0.308	0.312	1.23
36)	T	1,1-Dichloropr...	0.426	0.416	0.427	0.409	0.422	0.405	0.418	2.15
37)	T	Ethyl Acetate	0.158	0.151	0.161	0.155	0.173	0.172	0.162	5.64
38)	T	Carbon Tetrach...	0.516	0.491	0.501	0.477	0.494	0.473	0.492	3.21
39)	T	Methylcyclohexane	0.499	0.495	0.536	0.539	0.569	0.563	0.534	5.79
40)	TM	Benzene	1.323	1.322	1.355	1.287	1.345	1.265	1.316	2.60
41)	T	Methacrylonitrile	0.083	0.079	0.086	0.084	0.098	0.100	0.088	9.67
42)	TM	1,2-Dichloroet...	0.343	0.331	0.344	0.321	0.339	0.320	0.333	3.29
43)	T	Isopropyl Acetate	0.280	0.267	0.306	0.295	0.336	0.338	0.304	9.59
44)	TM	Trichloroethene	0.398	0.383	0.387	0.366	0.377	0.358	0.378	3.81
45)	C	1,2-Dichloropr...	0.294	0.285	0.300	0.284	0.297	0.283	0.290	2.56#
46)	T	Dibromomethane	0.183	0.172	0.191	0.173	0.185	0.176	0.180	4.19
47)	T	Bromodichlorom...	0.456	0.442	0.471	0.444	0.469	0.441	0.454	3.01
48)	T	Methyl methacr...	0.119	0.117	0.146	0.146	0.165	0.169	0.143	15.27
49)	T	1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	8.93
50)	S	Toluene-d8	1.109	1.148	1.155	1.189	1.224	1.159	1.164	3.34
51)	T	4-Methyl-2-Pen...	0.143	0.136	0.170	0.158	0.181	0.180	0.162	11.80
52)	CM	Toluene	0.761	0.813	0.874	0.854	0.898	0.842	0.840	5.74#
53)	T	t-1,3-Dichloro...	0.346	0.349	0.389	0.387	0.426	0.407	0.384	8.18
54)	T	cis-1,3-Dichlo...	0.419	0.434	0.475	0.463	0.495	0.474	0.460	6.13
55)	T	1,1,2-Trichlor...	0.244	0.230	0.250	0.234	0.249	0.236	0.241	3.46
56)	T	Ethyl methacry...	0.208	0.204	0.261	0.276	0.318	0.323	0.265	19.45

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
Method File : 82Y110425S.M

57)	T	1,3-Dichloropr...	0.375	0.363	0.401	0.376	0.399	0.376	0.381	3.94
58)	T	2-Chloroethyl ...	0.094	0.097	0.119	0.127	0.146	0.146	0.122	18.71
59)	T	2-Hexanone	0.101	0.099	0.127	0.114	0.132	0.133	0.118	12.88
60)	T	Dibromochlorom...	0.325	0.314	0.342	0.326	0.347	0.329	0.330	3.67
61)	T	1,2-Dibromoethane	0.221	0.208	0.240	0.222	0.238	0.226	0.226	5.28
62)	S	4-Bromofluorob...	0.354	0.354	0.379	0.388	0.400	0.385	0.376	5.04
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.554	0.549	0.545	0.512	0.500	0.462	0.520	6.87
65)	PM	Chlorobenzene	1.096	1.095	1.109	1.067	1.107	1.057	1.088	1.97
66)	T	1,1,1,2-Tetrac...	0.396	0.380	0.387	0.377	0.394	0.376	0.385	2.25
67)	C	Ethyl Benzene	1.589	1.661	1.787	1.807	1.908	1.819	1.762	6.59#
68)	T	m/p-Xylenes	0.618	0.671	0.722	0.727	0.757	0.727	0.704	7.13
69)	T	o-Xylene	0.562	0.600	0.659	0.674	0.717	0.691	0.651	9.02
70)	T	Styrene	0.903	0.979	1.110	1.121	1.184	1.145	1.074	10.12
71)	P	Bromoform	0.222	0.209	0.230	0.219	0.238	0.231	0.225	4.47
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	2.940	3.203	3.298	3.461	3.641	3.521	3.344	7.55
74)	T	N-amyl acetate	0.455	0.481	0.523	0.577	0.663	0.698	0.566	17.36
75)	P	1,1,2,2-Tetrac...	0.553	0.494	0.522	0.503	0.569	0.564	0.534	6.05
76)	T	1,2,3-Trichlor...	0.403	0.453	0.410	0.373	0.397	0.391	0.405	6.62
77)	T	Bromobenzene	0.837	0.855	0.850	0.862	0.915	0.885	0.867	3.25
78)	T	n-propylbenzene	3.526	3.781	3.927	4.085	4.205	4.076	3.933	6.30
79)	T	2-Chlorotoluene	2.100	2.244	2.288	2.325	2.407	2.332	2.283	4.58
80)	T	1,3,5-Trimethy...	2.330	2.604	2.734	2.834	2.943	2.857	2.717	8.18
81)	T	trans-1,4-Dich...	0.173	0.169	0.172	0.172	0.192	0.196	0.179	6.63
82)	T	4-Chlorotoluene	2.193	2.325	2.382	2.387	2.455	2.383	2.354	3.79
83)	T	tert-Butylbenzene	2.172	2.326	2.402	2.558	2.717	2.674	2.475	8.56
84)	T	1,2,4-Trimethy...	2.248	2.601	2.701	2.819	2.931	2.846	2.691	9.13
85)	T	sec-Butylbenzene	3.176	3.473	3.539	3.675	3.830	3.722	3.569	6.47
86)	T	p-Isopropyltol...	2.577	2.830	3.007	3.166	3.291	3.258	3.022	9.17
87)	T	1,3-Dichlorobe...	1.680	1.703	1.714	1.694	1.744	1.709	1.707	1.28
88)	T	1,4-Dichlorobe...	1.752	1.685	1.666	1.652	1.679	1.630	1.677	2.49
89)	T	n-Butylbenzene	2.293	2.441	2.557	2.752	2.877	2.844	2.627	8.95
90)	T	Hexachloroethane	0.657	0.656	0.632	0.639	0.664	0.648	0.649	1.85
91)	T	1,2-Dichlorobe...	1.468	1.467	1.488	1.454	1.494	1.457	1.471	1.12
92)	T	1,2-Dibromo-3-...	0.085	0.076	0.083	0.076	0.086	0.086	0.082	5.72
93)	T	1,2,4-Trichlor...	0.738	0.747	0.835	0.853	0.933	0.944	0.842	10.46
94)	T	Hexachlorobuta...	0.561	0.551	0.538	0.552	0.560	0.546	0.551	1.58
95)	T	Naphthalene	0.956	0.948	1.187	1.298	1.546	1.610	1.257	22.51
96)	T	1,2,3-Trichlor...	0.619	0.611	0.698	0.717	0.782	0.791	0.703	10.93

(#) = Out of Range



Response = 1.644e+000 * Amt - 1.730e-001
Coef of Det (r^2) = 0.997394 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y110425S.M
Calibration Table Last Updated: Wed Nov 05 04:41:50 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023661.D
Acq On : 04 Nov 2025 09:19
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:24:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	510707	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	780075	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	667589	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	326953	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	23922	5.491	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 10.980%#			
35) Dibromofluoromethane	7.640	113	24311	4.987	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 9.980%#			
50) Toluene-d8	10.109	98	86542	4.766	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 9.540%#			
62) 4-Bromofluorobenzene	12.402	95	27590	4.698	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 9.400%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	19990	5.963	ug/l	97
3) Chloromethane	2.074	50	27439	5.849	ug/l	91
4) Vinyl Chloride	2.208	62	34731	5.689	ug/l	99
5) Bromomethane	2.599	94	29962	5.835	ug/l	98
6) Chloroethane	2.739	64	23388	5.543	ug/l	97
7) Trichlorofluoromethane	3.062	101	47868	5.568	ug/l	95
8) Diethyl Ether	3.464	74	11851	5.140	ug/l	94
9) 1,1,2-Trichlorotrifluo...	3.824	101	26531	5.601	ug/l	99
10) Methyl Iodide	4.007	142	25054	4.479	ug/l	99
11) Tert butyl alcohol	4.860	59	9027	32.136	ug/l #	74
12) 1,1-Dichloroethene	3.800	96	24289	5.323	ug/l	89
13) Acrolein	3.653	56	10439	28.913	ug/l	98
14) Allyl chloride	4.385	41	27044	4.869	ug/l	99
15) Acrylonitrile	5.068	53	22096	25.078	ug/l	100
16) Acetone	3.867	43	29389	27.140	ug/l	89
17) Carbon Disulfide	4.110	76	75554	5.395	ug/l	96
18) Methyl Acetate	4.391	43	11286	4.725	ug/l	99
19) Methyl tert-butyl Ether	5.116	73	50027	4.728	ug/l	97
20) Methylene Chloride	4.623	84	33305	6.371	ug/l	93
21) trans-1,2-Dichloroethene	5.116	96	26157	5.084	ug/l	96
22) Diisopropyl ether	6.025	45	56019	4.527	ug/l	95
23) Vinyl Acetate	5.970	43	149457	22.631	ug/l	97
24) 1,1-Dichloroethane	5.915	63	43679	5.298	ug/l	99
25) 2-Butanone	6.897	43	32720	26.134	ug/l	93
26) 2,2-Dichloropropane	6.884	77	40803	5.380	ug/l	98
27) cis-1,2-Dichloroethene	6.897	96	29179	4.966	ug/l	98
28) Bromochloromethane	7.250	49	16184	5.127	ug/l	96
29) Tetrahydrofuran	7.275	42	15473	23.206	ug/l	96
30) Chloroform	7.427	83	48896	5.316	ug/l	93
31) Cyclohexane	7.707	56	40292	5.612	ug/l #	75
32) 1,1,1-Trichloroethane	7.616	97	43512	5.292	ug/l	100
36) 1,1-Dichloropropene	7.835	75	33214	5.099	ug/l	99
37) Ethyl Acetate	6.994	43	12363	4.902	ug/l	96
38) Carbon Tetrachloride	7.823	117	40263	5.246	ug/l	99
39) Methylcyclohexane	9.110	83	38956	4.680	ug/l	95
40) Benzene	8.079	78	103199	5.026	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023661.D
Acq On : 04 Nov 2025 09:19
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:24:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.232	41	6457	4.800	ug/l	#	72
42) 1,2-Dichloroethane	8.159	62	26761	5.151	ug/l		99
43) Isopropyl Acetate	8.195	43	21814	4.604	ug/l		96
44) Trichloroethene	8.866	130	31010	5.258	ug/l		88
45) 1,2-Dichloropropane	9.140	63	22961	5.067	ug/l		93
46) Dibromomethane	9.238	93	14269	5.082	ug/l		99
47) Bromodichloromethane	9.427	83	35539	5.020	ug/l		95
48) Methyl methacrylate	9.225	41	9263	4.138	ug/l		94
49) 1,4-Dioxane	9.225	88	2794	97.232	ug/l	#	87
51) 4-Methyl-2-Pentanone	10.000	43	55920	22.192	ug/l		96
52) Toluene	10.170	92	59389	4.530	ug/l		95
53) t-1,3-Dichloropropene	10.396	75	27017	4.510	ug/l		93
54) cis-1,3-Dichloropropene	9.859	75	32719	4.559	ug/l		96
55) 1,1,2-Trichloroethane	10.573	97	19045	5.075	ug/l		98
56) Ethyl methacrylate	10.439	69	16257	3.932	ug/l		95
57) 1,3-Dichloropropane	10.719	76	29234	4.912	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.713	63	36528	19.254	ug/l		100
59) 2-Hexanone	10.762	43	39473	21.472	ug/l		95
60) Dibromochloromethane	10.908	129	25371	4.921	ug/l		98
61) 1,2-Dibromoethane	11.018	107	17256	4.900	ug/l		99
64) Tetrachloroethene	10.646	164	36969	5.320	ug/l		98
65) Chlorobenzene	11.438	112	73160	5.034	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.518	131	26429	5.143	ug/l		99
67) Ethyl Benzene	11.518	91	106047	4.508	ug/l		99
68) m/p-Xylenes	11.627	106	82562	8.785	ug/l		99
69) o-Xylene	11.951	106	37501	4.317	ug/l		98
70) Styrene	11.969	104	60258	4.204	ug/l		99
71) Bromoform	12.133	173	14838	4.944	ug/l	#	99
73) Isopropylbenzene	12.255	105	96120	4.396	ug/l		99
74) N-amyl acetate	12.066	43	14878	4.019	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.505	83	18096	5.181	ug/l		99
76) 1,2,3-Trichloropropane	12.554	75	13170m	4.977	ug/l		
77) Bromobenzene	12.530	156	27375	4.826	ug/l		96
78) n-propylbenzene	12.591	91	115286	4.482	ug/l		99
79) 2-Chlorotoluene	12.676	91	68648	4.599	ug/l		96
80) 1,3,5-Trimethylbenzene	12.737	105	76176	4.288	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.304	75	5654	4.829	ug/l		95
82) 4-Chlorotoluene	12.774	91	71686	4.657	ug/l		98
83) tert-Butylbenzene	12.993	119	70998	4.388	ug/l		98
84) 1,2,4-Trimethylbenzene	13.042	105	73513	4.177	ug/l		99
85) sec-Butylbenzene	13.176	105	103852	4.450	ug/l		99
86) p-Isopropyltoluene	13.292	119	84269	4.265	ug/l		100
87) 1,3-Dichlorobenzene	13.286	146	54916	4.919	ug/l		99
88) 1,4-Dichlorobenzene	13.365	146	57281	5.223	ug/l		95
89) n-Butylbenzene	13.615	91	74974	4.364	ug/l		99
90) Hexachloroethane	13.877	117	21483	5.060	ug/l		99
91) 1,2-Dichlorobenzene	13.658	146	47997	4.989	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	2763	5.138	ug/l		90
93) 1,2,4-Trichlorobenzene	14.919	180	24126	4.384	ug/l		98
94) Hexachlorobutadiene	15.023	225	18339	5.086	ug/l		98
95) Naphthalene	15.145	128	31252	8.168	ug/l		99
96) 1,2,3-Trichlorobenzene	15.328	180	20253	4.405	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023661.D
Acq On : 04 Nov 2025 09:19
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:24:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

ICAL Form

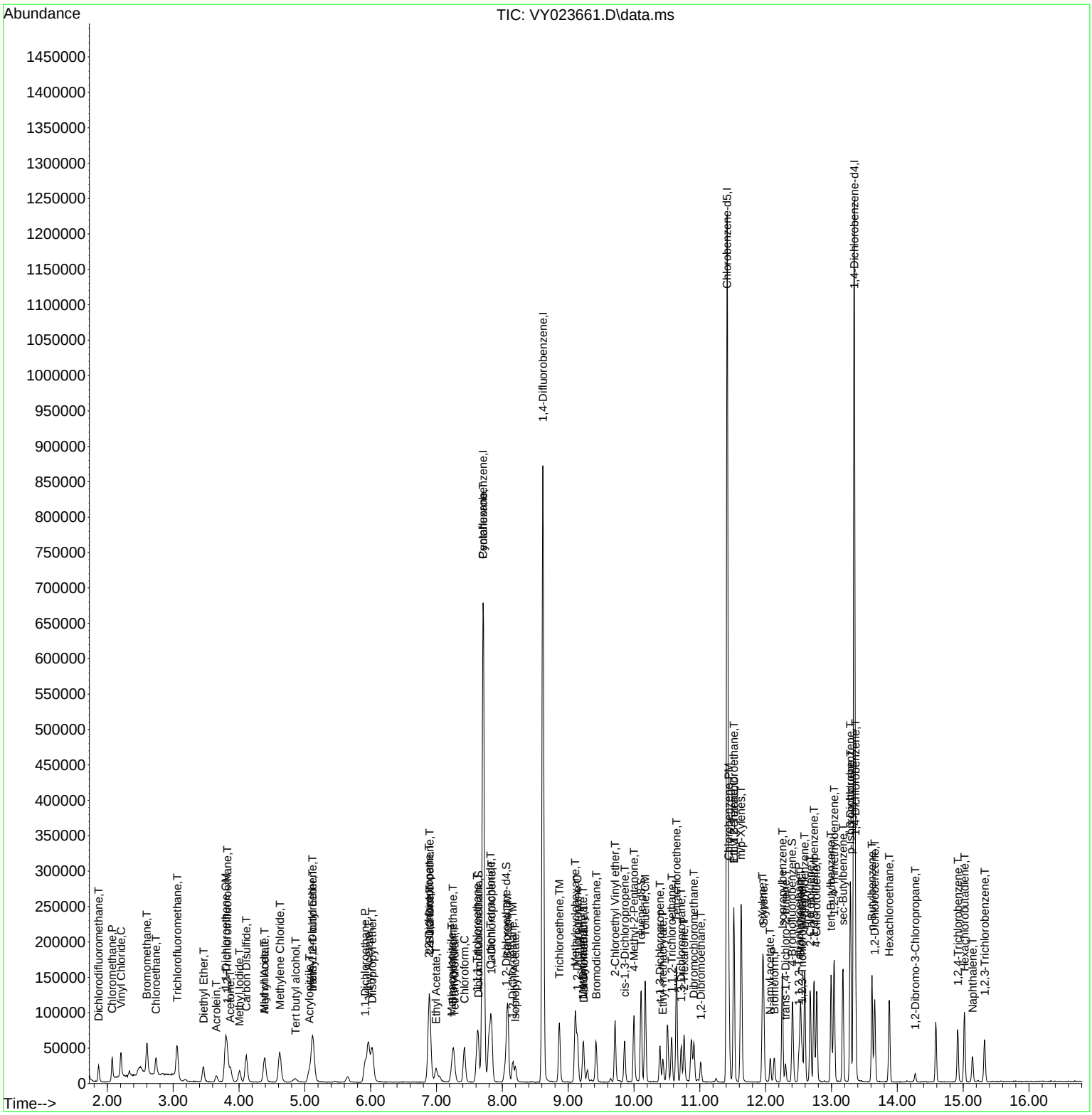
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023661.D
Acq On : 04 Nov 2025 09:19
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 05 04:24:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023662.D
Acq On : 04 Nov 2025 09:42
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.713	168	529353	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	803774	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.413	117	690563	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	340245	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.060	65	45020	9.970	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 19.940%#			
35) Dibromofluoromethane	7.640	113	50749	10.103	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 20.200%#			
50) Toluene-d8	10.109	98	184529	9.862	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 19.720%#			
62) 4-Bromofluorobenzene	12.401	95	56847	9.395	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 18.780%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.866	85	40187	11.565	ug/l	97
3) Chloromethane	2.074	50	54024	11.110	ug/l	100
4) Vinyl Chloride	2.208	62	70038	11.069	ug/l	98
5) Bromomethane	2.598	94	58773	11.043	ug/l	94
6) Chloroethane	2.738	64	48132	11.006	ug/l	100
7) Trichlorofluoromethane	3.055	101	96161	10.791	ug/l	100
8) Diethyl Ether	3.458	74	24107	10.088	ug/l	98
9) 1,1,2-Trichlorotrifluo...	3.817	101	53535	10.904	ug/l	99
10) Methyl Iodide	4.006	142	57829	9.974	ug/l	99
11) Tert butyl alcohol	4.866	59	14032	48.194	ug/l	97
12) 1,1-Dichloroethene	3.793	96	48878	10.335	ug/l	97
13) Acrolein	3.653	56	19002	50.776	ug/l	97
14) Allyl chloride	4.390	41	56587	9.830	ug/l	99
15) Acrylonitrile	5.067	53	42033	46.026	ug/l	98
16) Acetone	3.872	43	55971	49.867	ug/l	99
17) Carbon Disulfide	4.110	76	155402	10.705	ug/l	100
18) Methyl Acetate	4.390	43	21794	8.803	ug/l	95
19) Methyl tert-butyl Ether	5.122	73	100086	9.126	ug/l	92
20) Methylene Chloride	4.622	84	56341	10.398	ug/l	95
21) trans-1,2-Dichloroethene	5.122	96	54511	10.222	ug/l	97
22) Diisopropyl ether	6.018	45	123533	9.630	ug/l #	90
23) Vinyl Acetate	5.963	43	311609	45.522	ug/l	98
24) 1,1-Dichloroethane	5.921	63	86555	10.129	ug/l	97
25) 2-Butanone	6.896	43	59816	46.094	ug/l	99
26) 2,2-Dichloropropane	6.890	77	80230	10.207	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	61638	10.120	ug/l	99
28) Bromochloromethane	7.250	49	34809	10.638	ug/l	94
29) Tetrahydrofuran	7.274	42	31053	44.932	ug/l	96
30) Chloroform	7.420	83	98898	10.373	ug/l	98
31) Cyclohexane	7.707	56	76145	10.232	ug/l #	89
32) 1,1,1-Trichloroethane	7.615	97	88141	10.343	ug/l	99
36) 1,1-Dichloropropene	7.841	75	66838	9.958	ug/l	100
37) Ethyl Acetate	6.987	43	24198	9.313	ug/l	98
38) Carbon Tetrachloride	7.817	117	78995	9.989	ug/l	97
39) Methylcyclohexane	9.109	83	79613	9.283	ug/l	95
40) Benzene	8.079	78	212456	10.042	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023662.D
Acq On : 04 Nov 2025 09:42
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.225	41	12643m	9.122	ug/l		
42) 1,2-Dichloroethane	8.158	62	53223	9.943	ug/l		98
43) Isopropyl Acetate	8.201	43	42964	8.800	ug/l		97
44) Trichloroethene	8.865	130	61596	10.136	ug/l		100
45) 1,2-Dichloropropane	9.139	63	45808	9.810	ug/l		95
46) Dibromomethane	9.231	93	27595	9.538	ug/l		99
47) Bromodichloromethane	9.426	83	71048	9.740	ug/l		96
48) Methyl methacrylate	9.225	41	18849	8.172	ug/l		95
49) 1,4-Dioxane	9.231	88	5062	170.965	ug/l		94
51) 4-Methyl-2-Pentanone	9.999	43	109221	42.067	ug/l		98
52) Toluene	10.170	92	130648	9.672	ug/l		99
53) t-1,3-Dichloropropene	10.395	75	56121	9.093	ug/l		99
54) cis-1,3-Dichloropropene	9.859	75	69773	9.436	ug/l		98
55) 1,1,2-Trichloroethane	10.572	97	37044	9.581	ug/l		94
56) Ethyl methacrylate	10.438	69	32716	7.680	ug/l		97
57) 1,3-Dichloropropane	10.718	76	58301	9.506	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.713	63	78241	40.025	ug/l		99
59) 2-Hexanone	10.761	43	79804	42.130	ug/l		95
60) Dibromochloromethane	10.914	129	50465	9.499	ug/l		100
61) 1,2-Dibromoethane	11.017	107	33380	9.199	ug/l		97
64) Tetrachloroethene	10.645	164	75769	10.541	ug/l		98
65) Chlorobenzene	11.444	112	151288	10.063	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.517	131	52459	9.868	ug/l		97
67) Ethyl Benzene	11.517	91	229438	9.430	ug/l		100
68) m/p-Xylenes	11.627	106	185401	19.072	ug/l		100
69) o-Xylene	11.956	106	82846	9.219	ug/l		99
70) Styrene	11.968	104	135208	9.119	ug/l		99
71) Bromoform	12.133	173	28921	9.315	ug/l	#	99
73) Isopropylbenzene	12.255	105	217972	9.579	ug/l		99
74) N-amyl acetate	12.066	43	32719	8.492	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.505	83	33622	9.251	ug/l		96
76) 1,2,3-Trichloropropane	12.553	75	30827m	11.195	ug/l		
77) Bromobenzene	12.529	156	58175	9.855	ug/l		99
78) n-propylbenzene	12.596	91	257281	9.612	ug/l		100
79) 2-Chlorotoluene	12.675	91	152691	9.830	ug/l		99
80) 1,3,5-Trimethylbenzene	12.736	105	177222	9.585	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.304	75	11473	9.416	ug/l		95
82) 4-Chlorotoluene	12.773	91	158206	9.876	ug/l		100
83) tert-Butylbenzene	12.999	119	158294	9.400	ug/l		100
84) 1,2,4-Trimethylbenzene	13.041	105	177023	9.667	ug/l		100
85) sec-Butylbenzene	13.175	105	236332	9.730	ug/l		100
86) p-Isopropyltoluene	13.291	119	192560	9.365	ug/l		99
87) 1,3-Dichlorobenzene	13.285	146	115903	9.976	ug/l		100
88) 1,4-Dichlorobenzene	13.364	146	114652	10.046	ug/l		96
89) n-Butylbenzene	13.614	91	166099	9.290	ug/l		99
90) Hexachloroethane	13.876	117	44630	10.101	ug/l		100
91) 1,2-Dichlorobenzene	13.657	146	99858	9.974	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	5202	9.296	ug/l		95
93) 1,2,4-Trichlorobenzene	14.919	180	50808	8.872	ug/l		98
94) Hexachlorobutadiene	15.023	225	37521	9.999	ug/l		99
95) Naphthalene	15.144	128	64530	11.029	ug/l		99
96) 1,2,3-Trichlorobenzene	15.327	180	41611	8.697	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023662.D
Acq On : 04 Nov 2025 09:42
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

ICAL Form

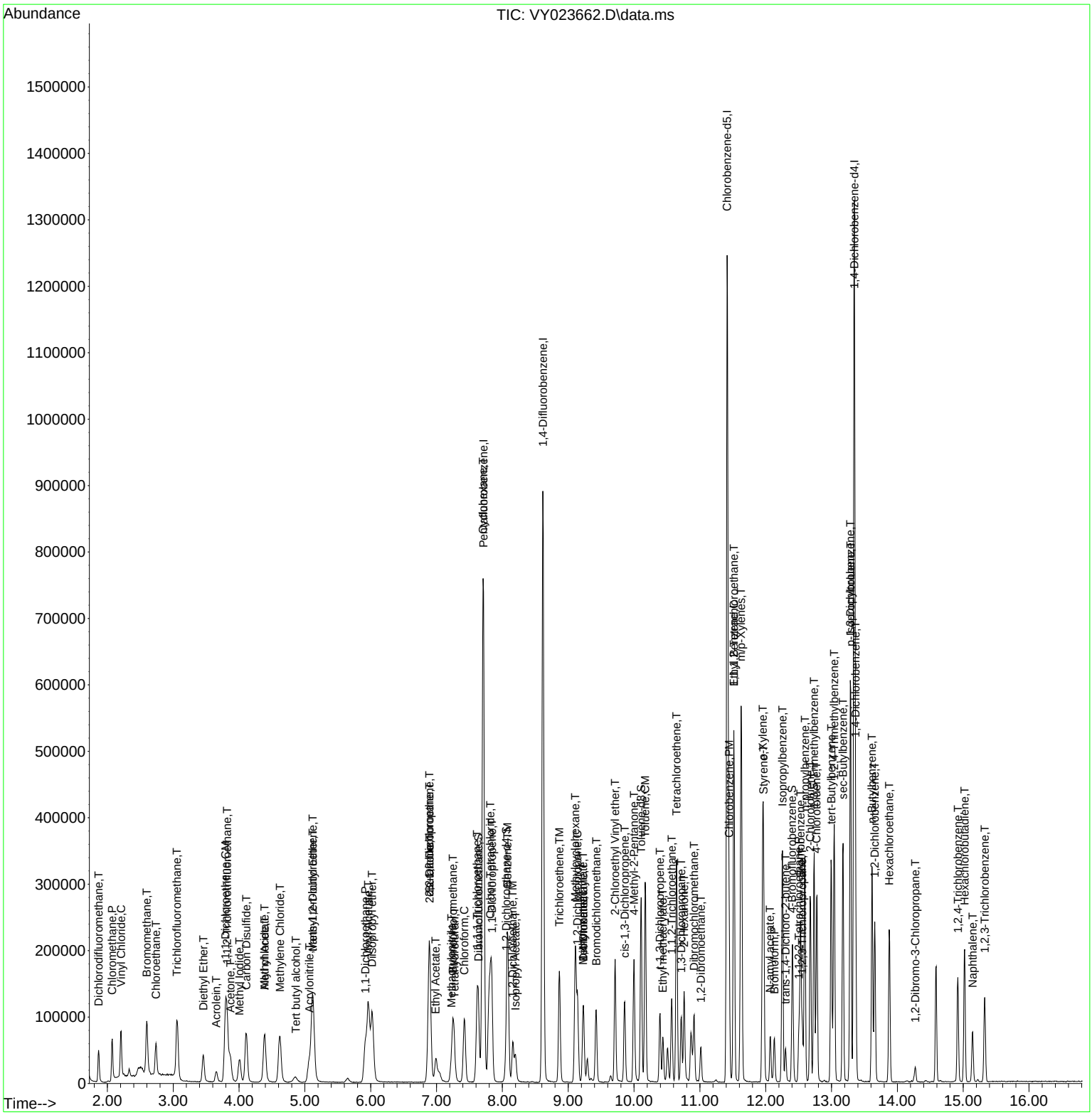
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023662.D
Acq On : 04 Nov 2025 09:42
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 05 04:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023663.D
Acq On : 04 Nov 2025 10:19
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:27:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	545914	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	804973	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	707291	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	367397	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	93111	19.995	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	40.000%#		
35) Dibromofluoromethane	7.634	113	100472	19.972	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	39.940%#		
50) Toluene-d8	10.109	98	371763	19.839	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	39.680%#		
62) 4-Bromofluorobenzene	12.402	95	121943	20.122	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	40.240%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	81455	22.731	ug/l	100
3) Chloromethane	2.074	50	106778	21.293	ug/l	100
4) Vinyl Chloride	2.208	62	138125	21.168	ug/l	98
5) Bromomethane	2.592	94	115694	21.078	ug/l	98
6) Chloroethane	2.739	64	94359	20.922	ug/l	98
7) Trichlorofluoromethane	3.056	101	193612	21.067	ug/l	96
8) Diethyl Ether	3.452	74	50730	20.585	ug/l	98
9) 1,1,2-Trichlorotrifluo...	3.818	101	102772	20.297	ug/l	99
10) Methyl Iodide	4.007	142	121925	20.392	ug/l	100
11) Tert butyl alcohol	4.854	59	29518	98.306	ug/l	99
12) 1,1-Dichloroethene	3.787	96	100782	20.662	ug/l	98
13) Acrolein	3.653	56	42967	111.331	ug/l	99
14) Allyl chloride	4.385	41	119977	20.209	ug/l	100
15) Acrylonitrile	5.061	53	97947	103.998	ug/l	100
16) Acetone	3.873	43	125071	108.051	ug/l	96
17) Carbon Disulfide	4.104	76	310907	20.768	ug/l	100
18) Methyl Acetate	4.385	43	63810	24.993	ug/l	97
19) Methyl tert-butyl Ether	5.122	73	231292	20.450	ug/l	97
20) Methylene Chloride	4.616	84	112357	20.107	ug/l	98
21) trans-1,2-Dichloroethene	5.116	96	113402	20.620	ug/l	98
22) Diisopropyl ether	6.019	45	275900	20.856	ug/l	95
23) Vinyl Acetate	5.964	43	688746	97.564	ug/l	99
24) 1,1-Dichloroethane	5.915	63	179473	20.365	ug/l	99
25) 2-Butanone	6.896	43	141827	105.975	ug/l	97
26) 2,2-Dichloropropane	6.884	77	162022	19.986	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	125435	19.971	ug/l	99
28) Bromochloromethane	7.244	49	71844	21.291	ug/l	100
29) Tetrahydrofuran	7.262	42	74415	104.407	ug/l	97
30) Chloroform	7.421	83	200613	20.402	ug/l	98
31) Cyclohexane	7.707	56	151188	19.699	ug/l	89
32) 1,1,1-Trichloroethane	7.616	97	179118	20.382	ug/l	99
36) 1,1-Dichloropropene	7.841	75	137450	20.447	ug/l	99
37) Ethyl Acetate	6.988	43	51827	19.916	ug/l	98
38) Carbon Tetrachloride	7.817	117	161201	20.353	ug/l	99
39) Methylcyclohexane	9.109	83	172623	20.098	ug/l	98
40) Benzene	8.079	78	436191	20.586	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023663.D
Acq On : 04 Nov 2025 10:19
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:27:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.220	41	27760m	19.999 ug/l		
42) 1,2-Dichloroethane	8.158	62	110796	20.669 ug/l		100
43) Isopropyl Acetate	8.201	43	98512	20.148 ug/l		99
44) Trichloroethene	8.866	130	124567	20.468 ug/l		96
45) 1,2-Dichloropropane	9.140	63	96481	20.632 ug/l		98
46) Dibromomethane	9.231	93	61391	21.188 ug/l		97
47) Bromodichloromethane	9.426	83	151710	20.767 ug/l		99
48) Methyl methacrylate	9.225	41	46988	20.341 ug/l		98
49) 1,4-Dioxane	9.231	88	11983	404.113 ug/l		97
51) 4-Methyl-2-Pentanone	9.999	43	273875	105.327 ug/l		99
52) Toluene	10.170	92	281364	20.799 ug/l		99
53) t-1,3-Dichloropropene	10.396	75	125239	20.261 ug/l		99
54) cis-1,3-Dichloropropene	9.853	75	152830	20.637 ug/l		99
55) 1,1,2-Trichloroethane	10.573	97	80390	20.761 ug/l		96
56) Ethyl methacrylate	10.438	69	83993	19.687 ug/l		98
57) 1,3-Dichloropropane	10.719	76	128976	20.999 ug/l		99
58) 2-Chloroethyl Vinyl ether	9.713	63	192206	98.178 ug/l		100
59) 2-Hexanone	10.762	43	203840	107.451 ug/l		99
60) Dibromochloromethane	10.914	129	110009	20.677 ug/l		98
61) 1,2-Dibromoethane	11.018	107	77174	21.237 ug/l		97
64) Tetrachloroethene	10.646	164	154270	20.955 ug/l		98
65) Chlorobenzene	11.444	112	313776	20.378 ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.518	131	109560	20.122 ug/l		98
67) Ethyl Benzene	11.518	91	505466	20.283 ug/l		98
68) m/p-Xylenes	11.627	106	408699	41.048 ug/l		97
69) o-Xylene	11.956	106	186475	20.260 ug/l		100
70) Styrene	11.969	104	313946	20.674 ug/l		100
71) Bromoform	12.133	173	64954	20.426 ug/l	#	98
73) Isopropylbenzene	12.255	105	484626	19.723 ug/l		99
74) N-amyl acetate	12.072	43	76905	18.486 ug/l		97
75) 1,1,2,2-Tetrachloroethane	12.505	83	76650	19.531 ug/l		97
76) 1,2,3-Trichloropropane	12.554	75	60277m	20.272 ug/l		
77) Bromobenzene	12.530	156	124926	19.600 ug/l		97
78) n-propylbenzene	12.597	91	577151	19.968 ug/l		99
79) 2-Chlorotoluene	12.676	91	336249	20.048 ug/l		99
80) 1,3,5-Trimethylbenzene	12.737	105	401810	20.126 ug/l		99
81) trans-1,4-Dichloro-2-b...	12.304	75	25299	19.229 ug/l		98
82) 4-Chlorotoluene	12.780	91	350104	20.241 ug/l		100
83) tert-Butylbenzene	12.999	119	352929	19.409 ug/l		100
84) 1,2,4-Trimethylbenzene	13.042	105	397002	20.077 ug/l		100
85) sec-Butylbenzene	13.176	105	520106	19.831 ug/l		100
86) p-Isopropyltoluene	13.292	119	441869	19.902 ug/l		100
87) 1,3-Dichlorobenzene	13.286	146	251903	20.080 ug/l		100
88) 1,4-Dichlorobenzene	13.365	146	244807	19.866 ug/l		99
89) n-Butylbenzene	13.615	91	375842	19.467 ug/l		100
90) Hexachloroethane	13.877	117	92928	19.477 ug/l		100
91) 1,2-Dichlorobenzene	13.657	146	218655	20.225 ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	12260	20.289 ug/l		95
93) 1,2,4-Trichlorobenzene	14.919	180	122756	19.851 ug/l		99
94) Hexachlorobutadiene	15.023	225	79039	19.507 ug/l		99
95) Naphthalene	15.145	128	174378	19.694 ug/l		100
96) 1,2,3-Trichlorobenzene	15.328	180	102582	19.855 ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023663.D
Acq On : 04 Nov 2025 10:19
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:27:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

ICAL Form

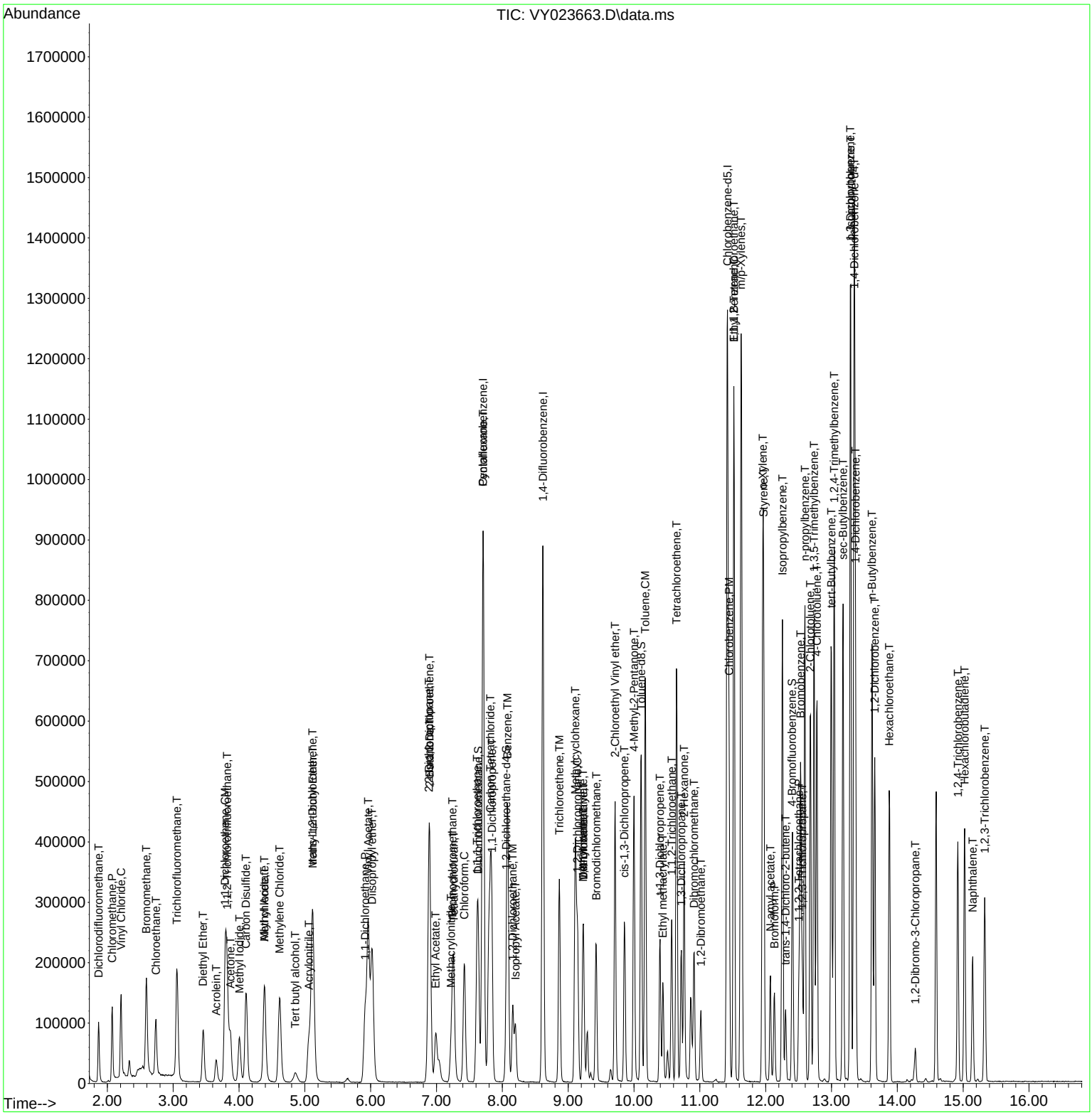
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023663.D
Acq On : 04 Nov 2025 10:19
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 05 04:27:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023664.D
Acq On : 04 Nov 2025 10:42
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:28:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	575867	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	844654	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	748313	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	378927	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	234526	47.743	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 95.480%			
35) Dibromofluoromethane	7.634	113	261509	49.542	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 99.080%			
50) Toluene-d8	10.109	98	1004143	51.068	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 102.140%			
62) 4-Bromofluorobenzene	12.401	95	327509	51.505	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 103.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	158310	41.880	ug/l	100
3) Chloromethane	2.074	50	237663	44.928	ug/l	100
4) Vinyl Chloride	2.208	62	315113	45.779	ug/l	100
5) Bromomethane	2.598	94	255339	44.099	ug/l	100
6) Chloroethane	2.739	64	222257	46.718	ug/l	100
7) Trichlorofluoromethane	3.062	101	448928	46.308	ug/l	100
8) Diethyl Ether	3.458	74	122314	47.049	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.818	101	249353	46.685	ug/l	100
10) Methyl Iodide	4.007	142	329865	52.300	ug/l	100
11) Tert butyl alcohol	4.866	59	65929	208.147	ug/l	100
12) 1,1-Dichloroethene	3.793	96	242599	47.151	ug/l	100
13) Acrolein	3.653	56	85009	208.809	ug/l	100
14) Allyl chloride	4.385	41	303471	48.458	ug/l	100
15) Acrylonitrile	5.061	53	234014	235.546	ug/l	100
16) Acetone	3.866	43	272077	222.826	ug/l	100
17) Carbon Disulfide	4.110	76	741781	46.973	ug/l	100
18) Methyl Acetate	4.385	43	121078	44.957	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	580730	48.676	ug/l	100
20) Methylene Chloride	4.616	84	264862	44.934	ug/l	100
21) trans-1,2-Dichloroethene	5.122	96	280571	48.364	ug/l	100
22) Diisopropyl ether	6.025	45	703596	50.420	ug/l	100
23) Vinyl Acetate	5.964	43	1877953	252.183	ug/l	100
24) 1,1-Dichloroethane	5.915	63	446287	48.007	ug/l	100
25) 2-Butanone	6.896	43	319404	226.250	ug/l	100
26) 2,2-Dichloropropane	6.890	77	408039	47.716	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	322689	48.703	ug/l	100
28) Bromochloromethane	7.244	49	167148	46.958	ug/l	100
29) Tetrahydrofuran	7.262	42	178179	236.990	ug/l	100
30) Chloroform	7.421	83	497055	47.921	ug/l	100
31) Cyclohexane	7.701	56	381239	47.090	ug/l	100
32) 1,1,1-Trichloroethane	7.616	97	442659	47.750	ug/l	100
36) 1,1-Dichloropropene	7.835	75	345431	48.973	ug/l	100
37) Ethyl Acetate	6.982	43	130827	47.912	ug/l	100
38) Carbon Tetrachloride	7.817	117	402944	48.486	ug/l	100
39) Methylcyclohexane	9.109	83	454885	50.473	ug/l	100
40) Benzene	8.079	78	1087048	48.893	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023664.D
Acq On : 04 Nov 2025 10:42
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:28:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	71198	48.884	ug/l	100
42) 1,2-Dichloroethane	8.158	62	270723	48.130	ug/l	100
43) Isopropyl Acetate	8.195	43	249080	48.549	ug/l	100
44) Trichloroethene	8.866	130	308925	48.377	ug/l	100
45) 1,2-Dichloropropane	9.140	63	239811	48.873	ug/l	100
46) Dibromomethane	9.231	93	146001	48.022	ug/l	100
47) Bromodichloromethane	9.420	83	374866	48.904	ug/l	100
48) Methyl methacrylate	9.219	41	122935	50.717	ug/l	100
49) 1,4-Dioxane	9.231	88	30413	977.461	ug/l	100
51) 4-Methyl-2-Pentanone	9.999	43	667795	244.757	ug/l	100
52) Toluene	10.170	92	721090	50.801	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	326566	50.350	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	391126	50.333	ug/l	100
55) 1,1,2-Trichloroethane	10.573	97	197468	48.601	ug/l	100
56) Ethyl methacrylate	10.438	69	233410	52.139	ug/l	100
57) 1,3-Dichloropropane	10.719	76	317296	49.234	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	538181	261.987	ug/l	100
59) 2-Hexanone	10.762	43	483563	242.927	ug/l	100
60) Dibromochloromethane	10.908	129	275217	49.299	ug/l	100
61) 1,2-Dibromoethane	11.011	107	187108	49.070	ug/l	100
64) Tetrachloroethene	10.646	164	383425	49.228	ug/l	100
65) Chlorobenzene	11.438	112	798384	49.008	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	282049	48.962	ug/l	100
67) Ethyl Benzene	11.517	91	1352193	51.285	ug/l	100
68) m/p-Xylenes	11.627	106	1088606	103.340	ug/l	100
69) o-Xylene	11.956	106	504648	51.824	ug/l	100
70) Styrene	11.969	104	838808	52.208	ug/l	100
71) Bromoform	12.133	173	163771	48.678	ug/l	100
73) Isopropylbenzene	12.255	105	1311582	51.752	ug/l	100
74) N-amyl acetate	12.066	43	218665	50.962	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.505	83	190486	47.061	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	141409m	46.111	ug/l	
77) Bromobenzene	12.530	156	326732	49.702	ug/l	100
78) n-propylbenzene	12.597	91	1548019	51.929	ug/l	100
79) 2-Chlorotoluene	12.676	91	881152	50.938	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	1073705	52.144	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	65310	48.129	ug/l	100
82) 4-Chlorotoluene	12.773	91	904469	50.699	ug/l	100
83) tert-Butylbenzene	12.993	119	969322	51.686	ug/l	100
84) 1,2,4-Trimethylbenzene	13.042	105	1068009	52.367	ug/l	100
85) sec-Butylbenzene	13.176	105	1392655	51.485	ug/l	100
86) p-Isopropyltoluene	13.292	119	1199869	52.399	ug/l	100
87) 1,3-Dichlorobenzene	13.285	146	641830	49.605	ug/l	100
88) 1,4-Dichlorobenzene	13.365	146	625847	49.241	ug/l	100
89) n-Butylbenzene	13.615	91	1042799	52.370	ug/l	100
90) Hexachloroethane	13.877	117	242026	49.183	ug/l	100
91) 1,2-Dichlorobenzene	13.657	146	550837	49.400	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	28889	46.355	ug/l	100
93) 1,2,4-Trichlorobenzene	14.919	180	323218	50.677	ug/l	100
94) Hexachlorobutadiene	15.023	225	209077	50.032	ug/l	100
95) Naphthalene	15.145	128	491886	44.734	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	271777	51.002	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023664.D
Acq On : 04 Nov 2025 10:42
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:28:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

ICAL Form

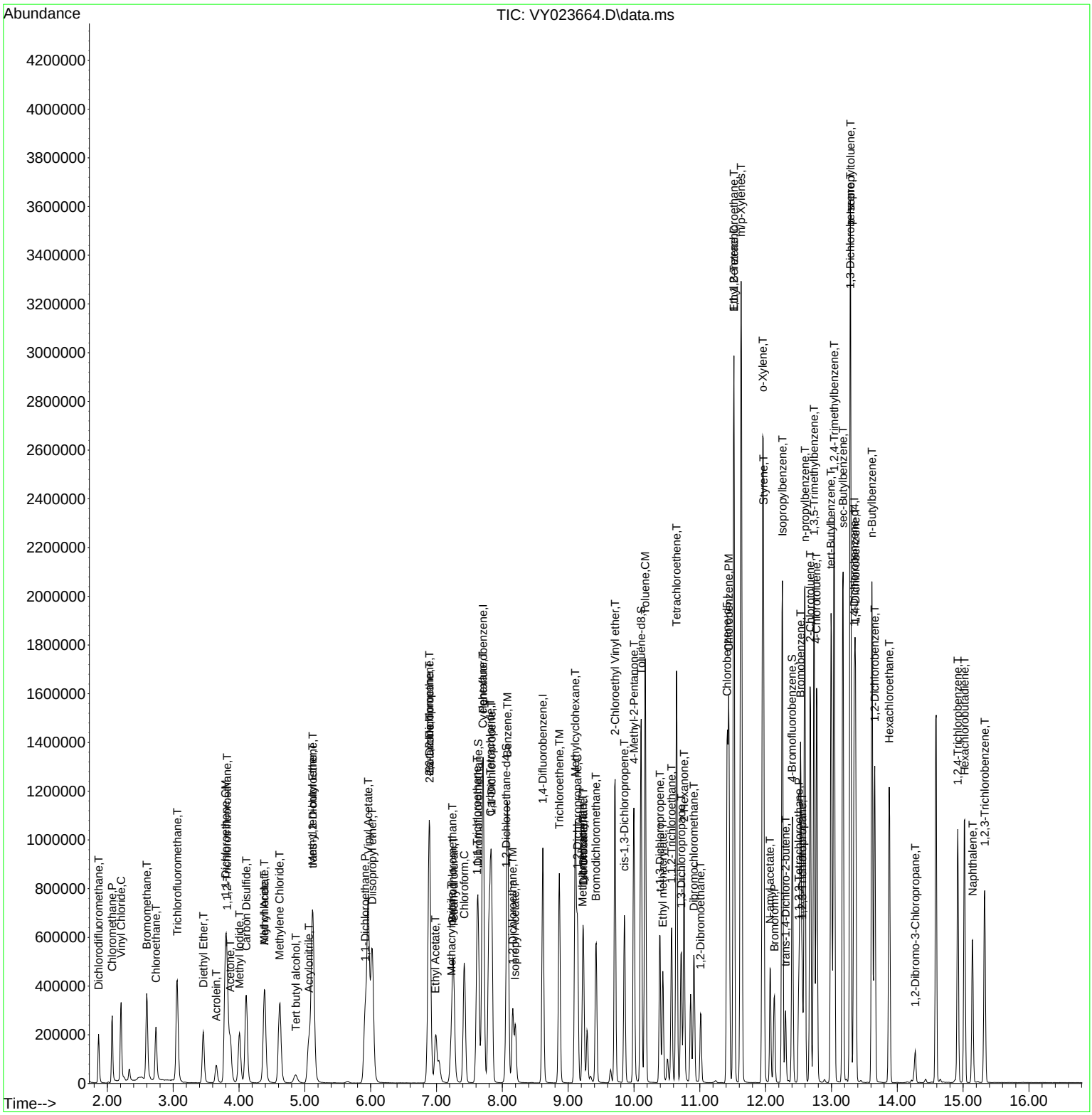
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023664.D
Acq On : 04 Nov 2025 10:42
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 05 04:28:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023665.D
Acq On : 04 Nov 2025 11:05
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:29:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.713	168	565663	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	831963	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	740642	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	370503	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	480881	99.661	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 199.320%#			
35) Dibromofluoromethane	7.634	113	529343	101.812	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 203.620%#			
50) Toluene-d8	10.109	98	2036678	105.160	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 210.320%#			
62) 4-Bromofluorobenzene	12.402	95	665813	106.305	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 212.600%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	321162	86.493	ug/l	99
3) Chloromethane	2.074	50	479848	92.348	ug/l	99
4) Vinyl Chloride	2.208	62	629525	93.106	ug/l	99
5) Bromomethane	2.592	94	525066	92.319	ug/l	98
6) Chloroethane	2.733	64	445045	95.235	ug/l	99
7) Trichlorofluoromethane	3.056	101	884872	92.924	ug/l	100
8) Diethyl Ether	3.458	74	260634	102.064	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.818	101	496959	94.721	ug/l	100
10) Methyl Iodide	4.007	142	661306	106.741	ug/l	99
11) Tert butyl alcohol	4.860	59	149691	481.121	ug/l	98
12) 1,1-Dichloroethene	3.793	96	499345	98.802	ug/l	100
13) Acrolein	3.653	56	191158	478.014	ug/l	99
14) Allyl chloride	4.385	41	652452	106.061	ug/l	99
15) Acrylonitrile	5.061	53	521023	533.895	ug/l	99
16) Acetone	3.866	43	591155	492.879	ug/l	100
17) Carbon Disulfide	4.110	76	1505201	97.036	ug/l	99
18) Methyl Acetate	4.385	43	289722	109.515	ug/l	98
19) Methyl tert-butyl Ether	5.122	73	1280442	109.260	ug/l	100
20) Methylene Chloride	4.616	84	538051	92.927	ug/l	97
21) trans-1,2-Dichloroethene	5.116	96	576752	101.211	ug/l	97
22) Diisopropyl ether	6.025	45	1476751	107.734	ug/l	98
23) Vinyl Acetate	5.964	43	4052575	554.021	ug/l	99
24) 1,1-Dichloroethane	5.921	63	920205	100.771	ug/l	99
25) 2-Butanone	6.890	43	716857	516.946	ug/l	100
26) 2,2-Dichloropropane	6.890	77	836165	99.545	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	677651	104.123	ug/l	100
28) Bromochloromethane	7.250	49	351637	100.569	ug/l	99
29) Tetrahydrofuran	7.262	42	407174	551.338	ug/l	98
30) Chloroform	7.421	83	1015475	99.668	ug/l	100
31) Cyclohexane	7.701	56	785863	98.820	ug/l	98
32) 1,1,1-Trichloroethane	7.622	97	908433	99.760	ug/l	99
36) 1,1-Dichloropropene	7.835	75	702866	101.168	ug/l	99
37) Ethyl Acetate	6.988	43	287737	106.984	ug/l	99
38) Carbon Tetrachloride	7.817	117	821264	100.329	ug/l	99
39) Methylcyclohexane	9.109	83	946648	106.639	ug/l	99
40) Benzene	8.079	78	2238265	102.208	ug/l	100

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023665.D
Acq On : 04 Nov 2025 11:05
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 05 04:29:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.226	41	162465	113.249	ug/l		97
42) 1,2-Dichloroethane	8.158	62	564693	101.924	ug/l		99
43) Isopropyl Acetate	8.201	43	559293	110.678	ug/l	#	87
44) Trichloroethene	8.866	130	626949	99.676	ug/l		97
45) 1,2-Dichloropropane	9.140	63	494430	102.300	ug/l		99
46) Dibromomethane	9.231	93	308450	103.001	ug/l		99
47) Bromodichloromethane	9.426	83	780217	103.338	ug/l		98
48) Methyl methacrylate	9.219	41	273819	114.688	ug/l		98
49) 1,4-Dioxane	9.231	88	66284	2162.837	ug/l		98
51) 4-Methyl-2-Pentanone	10.000	43	1509447	561.674	ug/l		99
52) Toluene	10.170	92	1494139	106.868	ug/l		98
53) t-1,3-Dichloropropene	10.396	75	708290	110.869	ug/l		100
54) cis-1,3-Dichloropropene	9.853	75	824093	107.667	ug/l		99
55) 1,1,2-Trichloroethane	10.573	97	414987	103.695	ug/l		96
56) Ethyl methacrylate	10.438	69	529329	120.046	ug/l		98
57) 1,3-Dichloropropane	10.719	76	663870	104.582	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.713	63	1213712	599.849	ug/l		99
59) 2-Hexanone	10.762	43	1099726	560.896	ug/l		99
60) Dibromochloromethane	10.914	129	577908	105.098	ug/l		100
61) 1,2-Dibromoethane	11.018	107	396076	105.457	ug/l		99
64) Tetrachloroethene	10.646	164	741118	96.137	ug/l		99
65) Chlorobenzene	11.438	112	1639055	101.655	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.518	131	583207	102.290	ug/l		99
67) Ethyl Benzene	11.518	91	2825731	108.283	ug/l		99
68) m/p-Xylenes	11.627	106	2241551	214.992	ug/l		99
69) o-Xylene	11.950	106	1062605	110.253	ug/l		99
70) Styrene	11.969	104	1753830	110.290	ug/l		100
71) Bromoform	12.133	173	351826	105.656	ug/l		99
73) Isopropylbenzene	12.255	105	2698043	108.880	ug/l		100
74) N-amyl acetate	12.066	43	491427	117.135	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.505	83	421715	106.557	ug/l		100
76) 1,2,3-Trichloropropane	12.554	75	294519m	98.221	ug/l		
77) Bromobenzene	12.530	156	677938	105.471	ug/l		98
78) n-propylbenzene	12.591	91	3116044	106.906	ug/l		99
79) 2-Chlorotoluene	12.676	91	1783319	105.435	ug/l		99
80) 1,3,5-Trimethylbenzene	12.737	105	2181015	108.328	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.304	75	142192	107.168	ug/l		99
82) 4-Chlorotoluene	12.773	91	1818934	104.277	ug/l		100
83) tert-Butylbenzene	12.993	119	2013210	109.789	ug/l		100
84) 1,2,4-Trimethylbenzene	13.042	105	2172108	108.924	ug/l		99
85) sec-Butylbenzene	13.176	105	2838051	107.306	ug/l		100
86) p-Isopropyltoluene	13.286	119	2438892	108.929	ug/l		100
87) 1,3-Dichlorobenzene	13.286	146	1292429	102.159	ug/l		99
88) 1,4-Dichlorobenzene	13.365	146	1243927	100.096	ug/l		99
89) n-Butylbenzene	13.615	91	2131963	109.503	ug/l		98
90) Hexachloroethane	13.877	117	492034	102.262	ug/l		99
91) 1,2-Dichlorobenzene	13.657	146	1107343	101.567	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	64052	105.113	ug/l		99
93) 1,2,4-Trichlorobenzene	14.919	180	691314	110.855	ug/l		100
94) Hexachlorobutadiene	15.023	225	415145	101.602	ug/l		99
95) Naphthalene	15.139	128	1145310	99.258	ug/l		100
96) 1,2,3-Trichlorobenzene	15.328	180	579136	111.152	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023665.D
Acq On : 04 Nov 2025 11:05
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:29:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

Quantitation Report (QT Reviewed)

ICAL Form

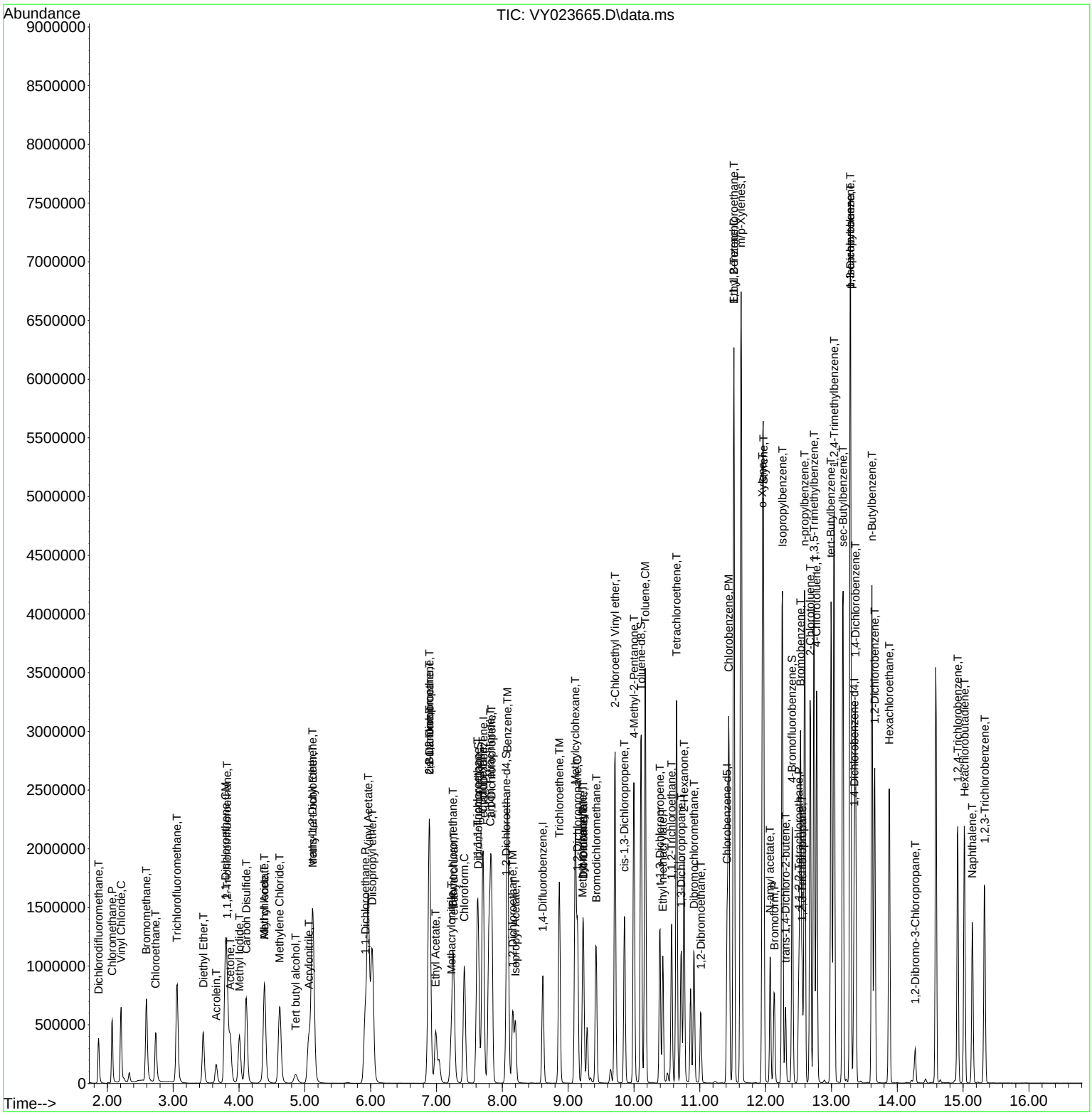
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023665.D
Acq On : 04 Nov 2025 11:05
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 05 04:29:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023666.D
Acq On : 04 Nov 2025 11:27
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:30:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.713	168	621042	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	901916	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	790988	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	391606	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	757684	143.025	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 286.060%#			
35) Dibromofluoromethane	7.634	113	832527	147.706	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 295.420%#			
50) Toluene-d8	10.109	98	3136015	149.364	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 298.720%#			
62) 4-Bromofluorobenzene	12.402	95	1040552	153.250	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 306.500%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	496440	121.776	ug/l	99
3) Chloromethane	2.068	50	712373	124.873	ug/l	99
4) Vinyl Chloride	2.208	62	946660	127.526	ug/l	99
5) Bromomethane	2.586	94	814598	130.454	ug/l	99
6) Chloroethane	2.733	64	660222	128.682	ug/l	99
7) Trichlorofluoromethane	3.056	101	1409197	134.789	ug/l	99
8) Diethyl Ether	3.452	74	408901	145.847	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.812	101	772147	134.049	ug/l	100
10) Methyl Iodide	4.007	142	993484	146.059	ug/l	99
11) Tert butyl alcohol	4.860	59	249226	729.606	ug/l	98
12) 1,1-Dichloroethene	3.787	96	780521	140.665	ug/l	99
13) Acrolein	3.653	56	304058	692.535	ug/l	99
14) Allyl chloride	4.385	41	1016094	150.446	ug/l	98
15) Acrylonitrile	5.055	53	824786	769.798	ug/l	99
16) Acetone	3.866	43	947595	719.612	ug/l	99
17) Carbon Disulfide	4.104	76	2304859	135.337	ug/l	100
18) Methyl Acetate	4.385	43	405494	139.609	ug/l	98
19) Methyl tert-butyl Ether	5.122	73	2032527	157.970	ug/l	99
20) Methylene Chloride	4.616	84	813039	127.899	ug/l	99
21) trans-1,2-Dichloroethene	5.116	96	892080	142.587	ug/l	95
22) Diisopropyl ether	6.019	45	2264384	150.464	ug/l	98
23) Vinyl Acetate	5.958	43	6576961	818.950	ug/l	99
24) 1,1-Dichloroethane	5.915	63	1415798	141.217	ug/l	99
25) 2-Butanone	6.896	43	1180801	775.579	ug/l	99
26) 2,2-Dichloropropane	6.884	77	1319960	143.128	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	1051376	147.141	ug/l	99
28) Bromochloromethane	7.244	49	519064	135.216	ug/l	99
29) Tetrahydrofuran	7.262	42	655805	808.815	ug/l	99
30) Chloroform	7.421	83	1551090	138.663	ug/l	99
31) Cyclohexane	7.701	56	1230432	140.926	ug/l	98
32) 1,1,1-Trichloroethane	7.622	97	1402944	140.327	ug/l	99
36) 1,1-Dichloropropene	7.835	75	1096950	145.645	ug/l	99
37) Ethyl Acetate	6.982	43	465489	159.651	ug/l	99
38) Carbon Tetrachloride	7.817	117	1279569	144.193	ug/l	99
39) Methylcyclohexane	9.109	83	1522789	158.237	ug/l	99
40) Benzene	8.079	78	3423551	144.208	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023666.D
Acq On : 04 Nov 2025 11:27
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:30:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	270053	173.645	ug/l	93
42) 1,2-Dichloroethane	8.158	62	864999	144.018	ug/l	99
43) Isopropyl Acetate	8.195	43	915445	167.105	ug/l	100
44) Trichloroethene	8.866	130	968647	142.056	ug/l	100
45) 1,2-Dichloropropane	9.140	63	765153	146.035	ug/l	98
46) Dibromomethane	9.231	93	477241	147.004	ug/l	99
47) Bromodichloromethane	9.420	83	1193540	145.820	ug/l	100
48) Methyl methacrylate	9.219	41	456960	176.551	ug/l	99
49) 1,4-Dioxane	9.225	88	110006	3311.077	ug/l	98
51) 4-Methyl-2-Pentanone	10.000	43	2437010	836.491	ug/l	100
52) Toluene	10.170	92	2278105	150.304	ug/l	97
53) t-1,3-Dichloropropene	10.390	75	1101094	158.988	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	1281333	154.422	ug/l	98
55) 1,1,2-Trichloroethane	10.573	97	637615	146.967	ug/l	98
56) Ethyl methacrylate	10.438	69	873314	182.696	ug/l	99
57) 1,3-Dichloropropane	10.719	76	1018360	147.983	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	1973993	899.933	ug/l	99
59) 2-Hexanone	10.762	43	1802207	847.892	ug/l	99
60) Dibromochloromethane	10.914	129	889783	149.265	ug/l	99
61) 1,2-Dibromoethane	11.012	107	612102	150.335	ug/l	100
64) Tetrachloroethene	10.646	164	1096726	133.211	ug/l	98
65) Chlorobenzene	11.438	112	2508744	145.689	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	891788	146.458	ug/l	99
67) Ethyl Benzene	11.518	91	4316877	154.896	ug/l	100
68) m/p-Xylenes	11.627	106	3451849	310.002	ug/l	99
69) o-Xylene	11.957	106	1640734	159.402	ug/l	100
70) Styrene	11.969	104	2716949	159.981	ug/l	99
71) Bromoform	12.133	173	548567	154.254	ug/l	100
73) Isopropylbenzene	12.255	105	4137095	157.957	ug/l	99
74) N-amyl acetate	12.066	43	819575	184.824	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	662143	158.291	ug/l	99
76) 1,2,3-Trichloropropane	12.554	75	459716m	145.052	ug/l	
77) Bromobenzene	12.530	156	1039954	153.073	ug/l	98
78) n-propylbenzene	12.591	91	4789010	155.449	ug/l	99
79) 2-Chlorotoluene	12.676	91	2739475	153.238	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	3356489	157.728	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	230746	164.538	ug/l	98
82) 4-Chlorotoluene	12.773	91	2799224	151.827	ug/l	99
83) tert-Butylbenzene	12.993	119	3140967	162.060	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	3343184	158.616	ug/l	99
85) sec-Butylbenzene	13.176	105	4372346	156.408	ug/l	99
86) p-Isopropyltoluene	13.292	119	3826970	161.714	ug/l	99
87) 1,3-Dichlorobenzene	13.286	146	2007587	150.136	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	1914429	145.749	ug/l	99
89) n-Butylbenzene	13.615	91	3341239	162.367	ug/l	98
90) Hexachloroethane	13.877	117	761235	149.685	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	1711163	148.493	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	101448	157.511	ug/l	96
93) 1,2,4-Trichlorobenzene	14.919	180	1108704	168.205	ug/l	99
94) Hexachlorobutadiene	15.023	225	641847	148.620	ug/l	99
95) Naphthalene	15.139	128	1891291	152.117	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	929367	168.759	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023666.D
Acq On : 04 Nov 2025 11:27
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:30:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

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

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

ICAL Form

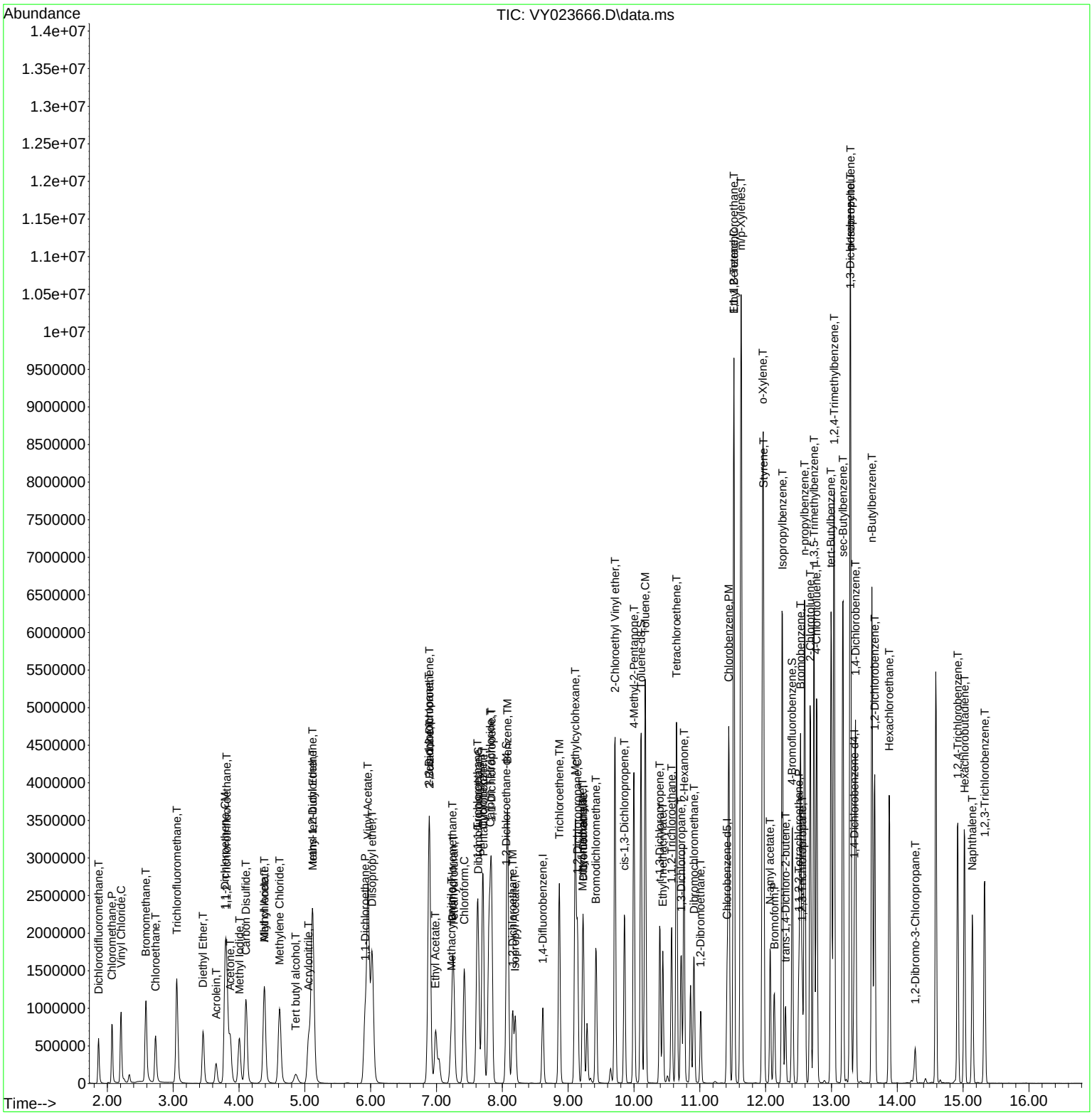
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023666.D
Acq On : 04 Nov 2025 11:27
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 05 04:30:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:24:21 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	608113	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	888282	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	783299	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	398785	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	242791	46.805	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 93.620%			
35) Dibromofluoromethane	7.634	113	268074	48.291	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 96.580%			
50) Toluene-d8	10.109	98	1040318	50.309	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 100.620%			
62) 4-Bromofluorobenzene	12.402	95	344284	51.484	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 102.960%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	169445	42.448	ug/l	99
3) Chloromethane	2.074	50	256717	45.957	ug/l	99
4) Vinyl Chloride	2.208	62	330280	45.438	ug/l	98
5) Bromomethane	2.599	94	277800	45.434	ug/l	97
6) Chloroethane	2.739	64	235159	46.809	ug/l	99
7) Trichlorofluoromethane	3.056	101	474583	46.359	ug/l	98
8) Diethyl Ether	3.458	74	132465	48.252	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.818	101	267535	47.433	ug/l	100
10) Methyl Iodide	4.007	142	316753	47.558	ug/l	99
11) Tert butyl alcohol	4.860	59	75144	224.660	ug/l	96
12) 1,1-Dichloroethene	3.793	96	261851	48.194	ug/l	99
13) Acrolein	3.653	56	91811	213.558	ug/l	99
14) Allyl chloride	4.385	41	330702	50.006	ug/l	99
15) Acrylonitrile	5.062	53	257491	245.434	ug/l	99
16) Acetone	3.867	43	294814	228.644	ug/l	95
17) Carbon Disulfide	4.110	76	787691	47.235	ug/l	99
18) Methyl Acetate	4.385	43	126071	44.328	ug/l	98
19) Methyl tert-butyl Ether	5.116	73	643310	51.062	ug/l	99
20) Methylene Chloride	4.616	84	285026	45.791	ug/l	99
21) trans-1,2-Dichloroethene	5.122	96	300477	49.048	ug/l	99
22) Diisopropyl ether	6.025	45	755561	51.273	ug/l	100
23) Vinyl Acetate	5.964	43	2077321	264.163	ug/l	100
24) 1,1-Dichloroethane	5.921	63	471845	48.064	ug/l	99
25) 2-Butanone	6.897	43	352581	236.507	ug/l	100
26) 2,2-Dichloropropane	6.890	77	437078	48.402	ug/l	99
27) cis-1,2-Dichloroethene	6.897	96	347603	49.682	ug/l	99
28) Bromochloromethane	7.250	49	176101	46.849	ug/l	99
29) Tetrahydrofuran	7.262	42	198667	250.229	ug/l	99
30) Chloroform	7.421	83	524526	47.888	ug/l	100
31) Cyclohexane	7.701	56	414807	48.520	ug/l	98
32) 1,1,1-Trichloroethane	7.622	97	471242	48.137	ug/l	99
36) 1,1-Dichloropropene	7.835	75	369989	49.878	ug/l	100
37) Ethyl Acetate	6.988	43	146441	50.997	ug/l	99
38) Carbon Tetrachloride	7.823	117	432288	49.462	ug/l	100
39) Methylcyclohexane	9.110	83	501162	52.876	ug/l	98
40) Benzene	8.079	78	1163766	49.773	ug/l	99

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.226	41	68046	43.412	ug/l	#	81
42) 1,2-Dichloroethane	8.159	62	287665	48.630	ug/l		99
43) Isopropyl Acetate	8.201	43	277810	51.490	ug/l	#	87
44) Trichloroethene	8.866	130	327327	48.741	ug/l		97
45) 1,2-Dichloropropane	9.140	63	257161	49.835	ug/l		98
46) Dibromomethane	9.232	93	159165	49.780	ug/l		98
47) Bromodichloromethane	9.420	83	399133	49.512	ug/l		99
48) Methyl methacrylate	9.219	41	135247	53.056	ug/l		99
49) 1,4-Dioxane	9.225	88	32783	1001.883	ug/l		100
51) 4-Methyl-2-Pentanone	10.000	43	739467	257.714	ug/l		99
52) Toluene	10.170	92	769370	51.540	ug/l		98
53) t-1,3-Dichloropropene	10.396	75	349820	51.286	ug/l		100
54) cis-1,3-Dichloropropene	9.859	75	418833	51.251	ug/l		96
55) 1,1,2-Trichloroethane	10.573	97	209781	49.096	ug/l		95
56) Ethyl methacrylate	10.439	69	259940	55.214	ug/l		99
57) 1,3-Dichloropropane	10.719	76	337613	49.813	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.713	63	586635	271.549	ug/l		100
59) 2-Hexanone	10.762	43	536488	256.278	ug/l		100
60) Dibromochloromethane	10.908	129	293578	50.005	ug/l		100
61) 1,2-Dibromoethane	11.012	107	200656	50.038	ug/l		99
64) Tetrachloroethene	10.646	164	384807	47.199	ug/l		98
65) Chlorobenzene	11.438	112	849748	49.832	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.518	131	298190	49.452	ug/l		99
67) Ethyl Benzene	11.518	91	1445427	52.373	ug/l		99
68) m/p-Xylenes	11.627	106	1159953	105.195	ug/l		100
69) o-Xylene	11.957	106	541389	53.114	ug/l		99
70) Styrene	11.969	104	896108	53.283	ug/l		99
71) Bromoform	12.133	173	177352	50.360	ug/l	#	99
73) Isopropylbenzene	12.255	105	1417486	53.146	ug/l		99
74) N-amyl acetate	12.072	43	238873	52.899	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.505	83	214414	50.335	ug/l		100
76) 1,2,3-Trichloropropane	12.554	75	153462m	47.550	ug/l		
77) Bromobenzene	12.530	156	348579	50.384	ug/l		99
78) n-propylbenzene	12.591	91	1654045	52.723	ug/l		100
79) 2-Chlorotoluene	12.676	91	940627	51.669	ug/l		99
80) 1,3,5-Trimethylbenzene	12.737	105	1152618	53.189	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.298	75	70336	49.252	ug/l		99
82) 4-Chlorotoluene	12.774	91	965258	51.412	ug/l		100
83) tert-Butylbenzene	12.993	119	1067903	54.107	ug/l		99
84) 1,2,4-Trimethylbenzene	13.042	105	1146575	53.419	ug/l		99
85) sec-Butylbenzene	13.170	105	1517909	53.321	ug/l		100
86) p-Isopropyltoluene	13.292	119	1299518	53.924	ug/l		100
87) 1,3-Dichlorobenzene	13.286	146	681531	50.050	ug/l		99
88) 1,4-Dichlorobenzene	13.365	146	656109	49.051	ug/l		99
89) n-Butylbenzene	13.615	91	1139328	54.369	ug/l		99
90) Hexachloroethane	13.877	117	258543	49.923	ug/l		99
91) 1,2-Dichlorobenzene	13.658	146	587705	50.082	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	31188	47.551	ug/l		96
93) 1,2,4-Trichlorobenzene	14.919	180	356674	53.138	ug/l		100
94) Hexachlorobutadiene	15.023	225	222246	50.535	ug/l		99
95) Naphthalene	15.139	128	560653	48.012	ug/l		100
96) 1,2,3-Trichlorobenzene	15.328	180	300360	53.559	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

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

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

ICAL Form

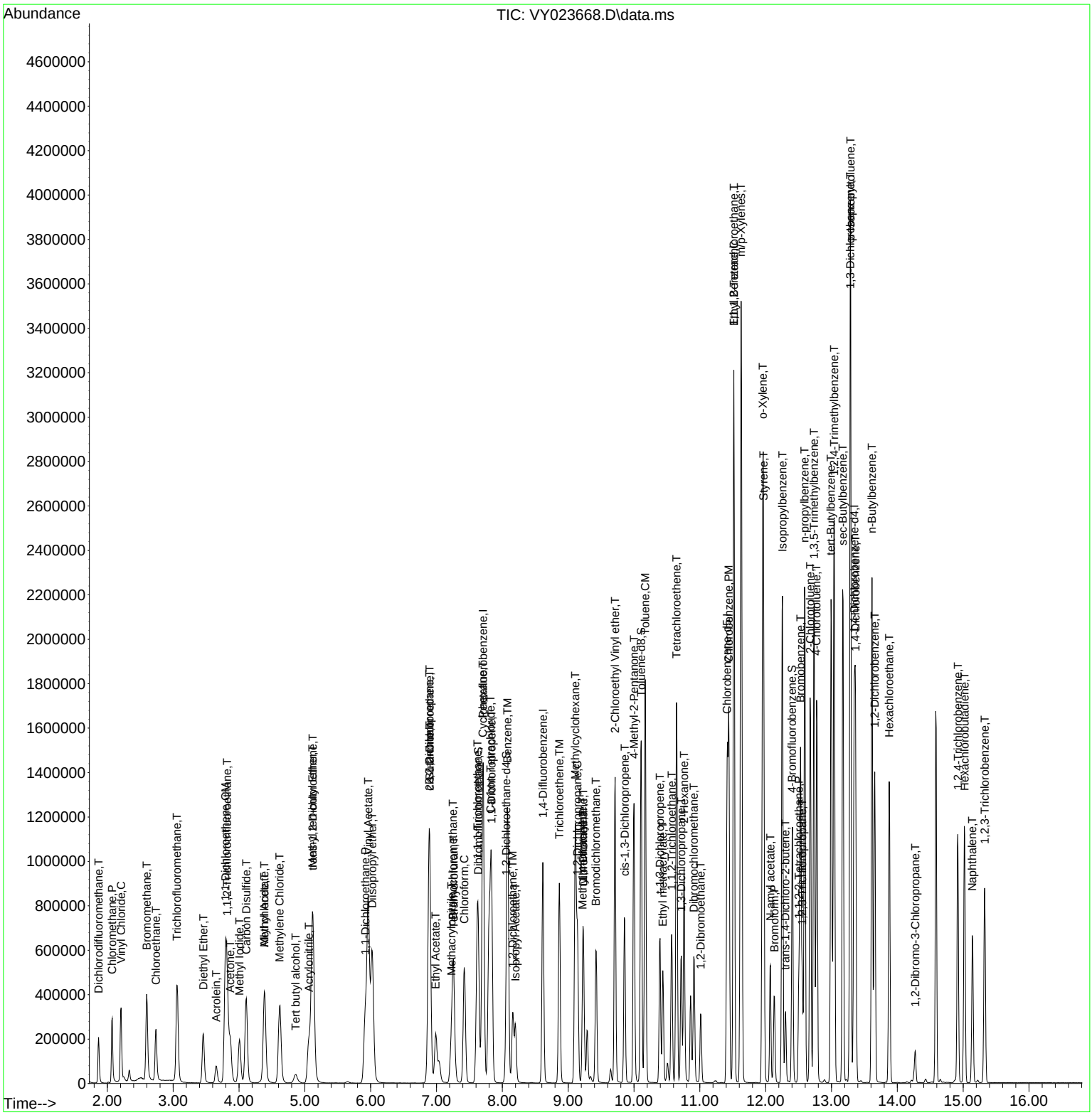
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/05/2025
Supervised By :Mahesh Dadoda 11/05/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	106	0.00
2	T	Dichlorodifluoromethane	0.328	0.279	14.9	107	0.00
3	P	Chloromethane	0.459	0.422	8.1	108	0.00
4	C	Vinyl Chloride	0.598	0.543	9.2#	105	0.00
5	T	Bromomethane	0.503	0.457	9.1	109	0.00
6	T	Chloroethane	0.413	0.387	6.3	106	0.00
7	T	Trichlorofluoromethane	0.842	0.780	7.4	106	0.00
8	T	Diethyl Ether	0.226	0.218	3.5	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.464	0.440	5.2	107	0.00
10	T	Methyl Iodide	0.548	0.521	4.9	96	0.00
11	T	Tert butyl alcohol	0.028	0.025	10.7	114	0.00
12	CM	1,1-Dichloroethene	0.447	0.431	3.6#	108	0.00
13	T	Acrolein	0.035	0.030	14.3	108	0.00
14	T	Allyl chloride	0.544	0.544	0.0	109	0.00
15	T	Acrylonitrile	0.086	0.085	1.2	110	0.00
16	T	Acetone	0.106	0.097	8.5	108	0.00
17	T	Carbon Disulfide	1.371	1.295	5.5	106	0.00
18	T	Methyl Acetate	0.234	0.207	11.5	104	0.00
19	T	Methyl tert-butyl Ether	1.036	1.058	-2.1	111	0.00
20	T	Methylene Chloride	0.512	0.469	8.4	108	0.00
21	T	trans-1,2-Dichloroethene	0.504	0.494	2.0	107	0.00
22	T	Diisopropyl ether	1.212	1.242	-2.5	107	0.00
23	T	Vinyl Acetate	0.647	0.683	-5.6	111	0.00
24	P	1,1-Dichloroethane	0.807	0.776	3.8	106	0.00
25	T	2-Butanone	0.123	0.116	5.7	110	0.00
26	T	2,2-Dichloropropane	0.742	0.719	3.1	107	0.00
27	T	cis-1,2-Dichloroethene	0.575	0.572	0.5	108	0.00
28	T	Bromochloromethane	0.309	0.290	6.1	105	0.00
29	T	Tetrahydrofuran	0.065	0.065	0.0	111	0.00
30	C	Chloroform	0.901	0.863	4.2#	106	0.00
31	T	Cyclohexane	0.703	0.682	3.0	109	0.00
32	T	1,1,1-Trichloroethane	0.805	0.775	3.7	106	0.00
33	S	1,2-Dichloroethane-d4	0.427	0.399	6.6	104	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35	S	Dibromofluoromethane	0.312	0.302	3.2	103	0.00
36	T	1,1-Dichloropropene	0.418	0.417	0.2	107	0.00
37	T	Ethyl Acetate	0.162	0.165	-1.9	112	0.00
38	T	Carbon Tetrachloride	0.492	0.487	1.0	107	0.00
39	T	Methylcyclohexane	0.534	0.564	-5.6	110	0.00
40	TM	Benzene	1.316	1.310	0.5	107	0.00
41	T	Methacrylonitrile	0.088	0.077	12.5	96	0.00
42	TM	1,2-Dichloroethane	0.333	0.324	2.7	106	0.00
43	T	Isopropyl Acetate	0.304	0.313	-3.0	112	0.00
44	TM	Trichloroethene	0.378	0.368	2.6	106	0.00
45	C	1,2-Dichloropropane	0.290	0.290	0.0	107	0.00
46	T	Dibromomethane	0.180	0.179	0.6	109	0.00
47	T	Bromodichloromethane	0.454	0.449	1.1	106	0.00
48	T	Methyl methacrylate	0.143	0.152	-6.3	110	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.002	0.002	0.0	108	0.00
50	S	Toluene-d8	1.164	1.171	-0.6	104	0.00
51	T	4-Methyl-2-Pentanone	0.162	0.166	-2.5	111	0.00
52	CM	Toluene	0.840	0.866	-3.1#	107	0.00
53	T	t-1,3-Dichloropropene	0.384	0.394	-2.6	107	0.00
54	T	cis-1,3-Dichloropropene	0.460	0.472	-2.6	107	0.00
55	T	1,1,2-Trichloroethane	0.241	0.236	2.1	106	0.00
56	T	Ethyl methacrylate	0.265	0.293	-10.6	111	0.00
57	T	1,3-Dichloropropane	0.381	0.380	0.3	106	0.00
58	T	2-Chloroethyl Vinyl ether	0.122	0.132	-8.2	109	0.00
59	T	2-Hexanone	0.118	0.121	-2.5	111	0.00
60	T	Dibromochloromethane	0.330	0.331	-0.3	107	0.00
61	T	1,2-Dibromoethane	0.226	0.226	0.0	107	0.00
62	S	4-Bromofluorobenzene	0.376	0.388	-3.2	105	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
64	T	Tetrachloroethene	0.520	0.491	5.6	100	0.00
65	PM	Chlorobenzene	1.088	1.085	0.3	106	0.00
66	T	1,1,1,2-Tetrachloroethane	0.385	0.381	1.0	106	0.00
67	C	Ethyl Benzene	1.762	1.845	-4.7#	107	0.00
68	T	m/p-Xylenes	0.704	0.740	-5.1	107	0.00
69	T	o-Xylene	0.651	0.691	-6.1	107	0.00
70	T	Styrene	1.074	1.144	-6.5	107	0.00
71	P	Bromoform	0.225	0.226	-0.4	108	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00
73	T	Isopropylbenzene	3.344	3.555	-6.3	108	0.00
74	T	N-amyl acetate	0.566	0.599	-5.8	109	0.00
75	P	1,1,2,2-Tetrachloroethane	0.534	0.538	-0.7	113	0.00
76	T	1,2,3-Trichloropropane	0.405	0.385	4.9	109	0.00
77	T	Bromobenzene	0.867	0.874	-0.8	107	0.00
78	T	n-propylbenzene	3.933	4.148	-5.5	107	0.00
79	T	2-Chlorotoluene	2.283	2.359	-3.3	107	0.00
80	T	1,3,5-Trimethylbenzene	2.717	2.890	-6.4	107	0.00
81	T	trans-1,4-Dichloro-2-butene	0.179	0.176	1.7	108	0.00
82	T	4-Chlorotoluene	2.354	2.420	-2.8	107	0.00
83	T	tert-Butylbenzene	2.475	2.678	-8.2	110	0.00
84	T	1,2,4-Trimethylbenzene	2.691	2.875	-6.8	107	0.00
85	T	sec-Butylbenzene	3.569	3.806	-6.6	109	0.00
86	T	p-Isopropyltoluene	3.022	3.259	-7.8	108	0.00
87	T	1,3-Dichlorobenzene	1.707	1.709	-0.1	106	0.00
88	T	1,4-Dichlorobenzene	1.677	1.645	1.9	105	0.00
89	T	n-Butylbenzene	2.627	2.857	-8.8	109	0.00
90	T	Hexachloroethane	0.649	0.648	0.2	107	0.00
91	T	1,2-Dichlorobenzene	1.471	1.474	-0.2	107	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.082	0.078	4.9	108	0.00
93	T	1,2,4-Trichlorobenzene	0.842	0.894	-6.2	110	0.00
94	T	Hexachlorobutadiene	0.551	0.557	-1.1	106	0.00
95	T	Naphthalene	1.257	1.406	-11.9	114	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.703	0.753	-7.1	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 5

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	106	0.00
2	T	Dichlorodifluoromethane	50.000	42.448	15.1	107	0.00
3	P	Chloromethane	50.000	45.957	8.1	108	0.00
4	C	Vinyl Chloride	50.000	45.438	9.1#	105	0.00
5	T	Bromomethane	50.000	45.434	9.1	109	0.00
6	T	Chloroethane	50.000	46.809	6.4	106	0.00
7	T	Trichlorofluoromethane	50.000	46.359	7.3	106	0.00
8	T	Diethyl Ether	50.000	48.252	3.5	108	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	47.433	5.1	107	0.00
10	T	Methyl Iodide	50.000	47.558	4.9	96	0.00
11	T	Tert butyl alcohol	250.000	224.660	10.1	114	0.00
12	CM	1,1-Dichloroethene	50.000	48.194	3.6#	108	0.00
13	T	Acrolein	250.000	213.558	14.6	108	0.00
14	T	Allyl chloride	50.000	50.006	-0.0	109	0.00
15	T	Acrylonitrile	250.000	245.434	1.8	110	0.00
16	T	Acetone	250.000	228.644	8.5	108	0.00
17	T	Carbon Disulfide	50.000	47.235	5.5	106	0.00
18	T	Methyl Acetate	50.000	44.328	11.3	104	0.00
19	T	Methyl tert-butyl Ether	50.000	51.062	-2.1	111	0.00
20	T	Methylene Chloride	50.000	45.791	8.4	108	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.048	1.9	107	0.00
22	T	Diisopropyl ether	50.000	51.273	-2.5	107	0.00
23	T	Vinyl Acetate	250.000	264.163	-5.7	111	0.00
24	P	1,1-Dichloroethane	50.000	48.064	3.9	106	0.00
25	T	2-Butanone	250.000	236.507	5.4	110	0.00
26	T	2,2-Dichloropropane	50.000	48.402	3.2	107	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.682	0.6	108	0.00
28	T	Bromochloromethane	50.000	46.849	6.3	105	0.00
29	T	Tetrahydrofuran	250.000	250.229	-0.1	111	0.00
30	C	Chloroform	50.000	47.888	4.2#	106	0.00
31	T	Cyclohexane	50.000	48.520	3.0	109	0.00
32	T	1,1,1-Trichloroethane	50.000	48.137	3.7	106	0.00
33	S	1,2-Dichloroethane-d4	50.000	46.805	6.4	104	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35	S	Dibromofluoromethane	50.000	48.291	3.4	103	0.00
36	T	1,1-Dichloropropene	50.000	49.878	0.2	107	0.00
37	T	Ethyl Acetate	50.000	50.997	-2.0	112	0.00
38	T	Carbon Tetrachloride	50.000	49.462	1.1	107	0.00
39	T	Methylcyclohexane	50.000	52.876	-5.8	110	0.00
40	TM	Benzene	50.000	49.773	0.5	107	0.00
41	T	Methacrylonitrile	50.000	43.412	13.2	96	0.00
42	TM	1,2-Dichloroethane	50.000	48.630	2.7	106	0.00
43	T	Isopropyl Acetate	50.000	51.490	-3.0	112	0.00
44	TM	Trichloroethene	50.000	48.741	2.5	106	0.00
45	C	1,2-Dichloropropane	50.000	49.835	0.3#	107	0.00
46	T	Dibromomethane	50.000	49.780	0.4	109	0.00
47	T	Bromodichloromethane	50.000	49.512	1.0	106	0.00
48	T	Methyl methacrylate	50.000	53.056	-6.1	110	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1001.883	-0.2	108	0.00
50	S	Toluene-d8	50.000	50.309	-0.6	104	0.00
51	T	4-Methyl-2-Pentanone	250.000	257.714	-3.1	111	0.00
52	CM	Toluene	50.000	51.540	-3.1#	107	0.00
53	T	t-1,3-Dichloropropene	50.000	51.286	-2.6	107	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.251	-2.5	107	0.00
55	T	1,1,2-Trichloroethane	50.000	49.096	1.8	106	0.00
56	T	Ethyl methacrylate	50.000	55.214	-10.4	111	0.00
57	T	1,3-Dichloropropane	50.000	49.813	0.4	106	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	271.549	-8.6	109	0.00
59	T	2-Hexanone	250.000	256.278	-2.5	111	0.00
60	T	Dibromochloromethane	50.000	50.005	-0.0	107	0.00
61	T	1,2-Dibromoethane	50.000	50.038	-0.1	107	0.00
62	S	4-Bromofluorobenzene	50.000	51.484	-3.0	105	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	105	0.00
64	T	Tetrachloroethene	50.000	47.199	5.6	100	0.00
65	PM	Chlorobenzene	50.000	49.832	0.3	106	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.452	1.1	106	0.00
67	C	Ethyl Benzene	50.000	52.373	-4.7#	107	0.00
68	T	m/p-Xylenes	100.000	105.195	-5.2	107	0.00
69	T	o-Xylene	50.000	53.114	-6.2	107	0.00
70	T	Styrene	50.000	53.283	-6.6	107	0.00
71	P	Bromoform	50.000	50.360	-0.7	108	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	105	0.00
73	T	Isopropylbenzene	50.000	53.146	-6.3	108	0.00
74	T	N-amyl acetate	50.000	52.899	-5.8	109	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.335	-0.7	113	0.00
76	T	1,2,3-Trichloropropane	50.000	47.550	4.9	109	0.00
77	T	Bromobenzene	50.000	50.384	-0.8	107	0.00
78	T	n-propylbenzene	50.000	52.723	-5.4	107	0.00
79	T	2-Chlorotoluene	50.000	51.669	-3.3	107	0.00
80	T	1,3,5-Trimethylbenzene	50.000	53.189	-6.4	107	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	49.252	1.5	108	0.00
82	T	4-Chlorotoluene	50.000	51.412	-2.8	107	0.00
83	T	tert-Butylbenzene	50.000	54.107	-8.2	110	0.00
84	T	1,2,4-Trimethylbenzene	50.000	53.419	-6.8	107	0.00
85	T	sec-Butylbenzene	50.000	53.321	-6.6	109	0.00
86	T	p-Isopropyltoluene	50.000	53.924	-7.8	108	0.00
87	T	1,3-Dichlorobenzene	50.000	50.050	-0.1	106	0.00
88	T	1,4-Dichlorobenzene	50.000	49.051	1.9	105	0.00
89	T	n-Butylbenzene	50.000	54.369	-8.7	109	0.00
90	T	Hexachloroethane	50.000	49.923	0.2	107	0.00
91	T	1,2-Dichlorobenzene	50.000	50.082	-0.2	107	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	47.551	4.9	108	0.00
93	T	1,2,4-Trichlorobenzene	50.000	53.138	-6.3	110	0.00
94	T	Hexachlorobutadiene	50.000	50.535	-1.1	106	0.00
95	T	Naphthalene	50.000	48.012	4.0	114	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023668.D
Acq On : 04 Nov 2025 12:14
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY110425

Quant Time: Nov 05 04:45:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	53.559	-7.1	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VY023774.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: CORE02
Lab Code: ACE
SDG No.: Q3615
Instrument ID: MSVOA_Y
Calibration Date/Time: 11/13/2025 09:48
Lab File ID: VY023774.D
Init. Calib. Date(s): 11/04/2025 11/04/2025
Heated Purge: (Y/N) Y
Init. Calib. Time(s): 09:19 11:27
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.328	0.286		-12.81	20
Chloromethane	0.459	0.421	0.1	-8.28	20
Vinyl Chloride	0.598	0.540		-9.7	20
Bromomethane	0.503	0.419		-16.7	20
Chloroethane	0.413	0.364		-11.86	20
Trichlorofluoromethane	0.842	0.880		4.51	20
1,1,2-Trichlorotrifluoroethane	0.464	0.474		2.15	20
1,1-Dichloroethene	0.447	0.447		0	20
Acetone	0.106	0.112		5.66	20
Carbon Disulfide	1.371	1.363		-0.58	20
Methyl tert-butyl Ether	1.036	1.102		6.37	20
Methyl Acetate	0.234	0.227		-2.99	20
Methylene Chloride	0.512	0.506		-1.17	20
trans-1,2-Dichloroethene	0.504	0.519		2.98	20
1,1-Dichloroethane	0.807	0.849	0.1	5.2	20
Cyclohexane	0.703	0.709		0.85	20
2-Butanone	0.123	0.130		5.69	20
Carbon Tetrachloride	0.492	0.525		6.71	20
cis-1,2-Dichloroethene	0.575	0.590		2.61	20
Bromochloromethane	0.309	0.332		7.44	20
Chloroform	0.901	0.934		3.66	20
1,1,1-Trichloroethane	0.805	0.835		3.73	20
Methylcyclohexane	0.534	0.574		7.49	20
Benzene	1.316	1.422		8.06	20
1,2-Dichloroethane	0.333	0.359		7.81	20
Trichloroethene	0.378	0.392		3.7	20
1,2-Dichloropropane	0.290	0.319		10	20
Bromodichloromethane	0.454	0.495		9.03	20
4-Methyl-2-Pentanone	0.162	0.190		17.28	20
Toluene	0.840	0.923		9.88	20
t-1,3-Dichloropropene	0.384	0.425		10.68	20
cis-1,3-Dichloropropene	0.460	0.507		10.22	20
1,1,2-Trichloroethane	0.241	0.261		8.3	20
2-Hexanone	0.118	0.135		14.41	20
Dibromochloromethane	0.330	0.358		8.48	20
1,2-Dibromoethane	0.226	0.244		7.97	20
Tetrachloroethene	0.520	0.481		-7.5	20
Chlorobenzene	1.089	1.101	0.3	1.1	20

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

Raw Data: **VY023774.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: CORE02
Lab Code: ACE
SDG No.: Q3615
Instrument ID: MSVOA_Y
Calibration Date/Time: 11/13/2025 09:48
Lab File ID: VY023774.D
Init. Calib. Date(s): 11/04/2025 11/04/2025
Heated Purge: (Y/N) Y
Init. Calib. Time(s): 09:19 11:27
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.762	1.980		12.37	20
m/p-Xylenes	0.704	0.783		11.22	20
o-Xylene	0.651	0.741		13.82	20
Styrene	1.074	1.239		15.36	20
Bromoform	0.225	0.256	0.1	13.78	20
Isopropylbenzene	3.344	3.765		12.59	20
1,1,2,2-Tetrachloroethane	0.534	0.588	0.3	10.11	20
1,3-Dichlorobenzene	1.707	1.777		4.1	20
1,4-Dichlorobenzene	1.677	1.701		1.43	20
1,2-Dichlorobenzene	1.471	1.510		2.65	20
1,2-Dibromo-3-Chloropropane	0.082	0.087		6.1	20
1,2,4-Trichlorobenzene	0.842	0.868		3.09	20
1,2,3-Trichlorobenzene	0.703	0.670		-4.69	20
1,2-Dichloroethane-d4	0.427	0.433		1.4	20
Dibromofluoromethane	0.312	0.324		3.85	20
Toluene-d8	1.164	1.231		5.76	20
4-Bromofluorobenzene	0.376	0.495		31.65	20

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	535734	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	769382	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	787003	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	393514	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	232074	50.783	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 101.560%			
35) Dibromofluoromethane	7.634	113	249525	51.897	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 103.800%			
50) Toluene-d8	10.109	98	947301	52.891	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 105.780%			
62) 4-Bromofluorobenzene	12.408	95	380600	65.710	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 131.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	153156	43.551	ug/l	99
3) Chloromethane	2.074	50	225434	45.809	ug/l	98
4) Vinyl Chloride	2.208	62	289443	45.200	ug/l	98
5) Bromomethane	2.599	94	224410	41.661	ug/l	96
6) Chloroethane	2.739	64	195187	44.101	ug/l	99
7) Trichlorofluoromethane	3.062	101	471261	52.254	ug/l	99
8) Diethyl Ether	3.458	74	121627	50.290	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.818	101	254154	51.148	ug/l	100
10) Methyl Iodide	4.007	142	300594	51.229	ug/l	100
11) Tert butyl alcohol	4.854	59	79122	268.512	ug/l	99
12) 1,1-Dichloroethene	3.793	96	239632	50.063	ug/l	99
13) Acrolein	3.653	56	52209	137.849	ug/l	99
14) Allyl chloride	4.385	41	312682	53.669	ug/l	95
15) Acrylonitrile	5.055	53	255925	276.898	ug/l	99
16) Acetone	3.867	43	300501	264.541	ug/l	97
17) Carbon Disulfide	4.110	76	730386	49.716	ug/l	99
18) Methyl Acetate	4.385	43	121442	48.470	ug/l	99
19) Methyl tert-butyl Ether	5.116	73	590306	53.185	ug/l	97
20) Methylene Chloride	4.616	84	271105	49.438	ug/l	97
21) trans-1,2-Dichloroethene	5.116	96	277847	51.482	ug/l	92
22) Diisopropyl ether	6.019	45	724113	55.778	ug/l	97
23) Vinyl Acetate	5.958	43	1988757	287.068	ug/l	98
24) 1,1-Dichloroethane	5.915	63	454928	52.602	ug/l	99
25) 2-Butanone	6.897	43	347692	264.738	ug/l	99
26) 2,2-Dichloropropane	6.884	77	416127	52.307	ug/l	100
27) cis-1,2-Dichloroethene	6.897	96	316159	51.293	ug/l	97
28) Bromochloromethane	7.244	49	177667	53.652	ug/l	96
29) Tetrahydrofuran	7.262	42	198772	284.185	ug/l	97
30) Chloroform	7.421	83	500360	51.853	ug/l	100
31) Cyclohexane	7.701	56	379657	50.408	ug/l	96
32) 1,1,1-Trichloroethane	7.622	97	447239	51.858	ug/l	99
36) 1,1-Dichloropropene	7.835	75	345108	53.714	ug/l	99
37) Ethyl Acetate	6.982	43	143974	57.886	ug/l	100
38) Carbon Tetrachloride	7.817	117	403694	53.328	ug/l	97
39) Methylcyclohexane	9.110	83	441809	53.818	ug/l	96
40) Benzene	8.079	78	1093681	54.004	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.220	41	67188	49.489	ug/l		90
42) 1,2-Dichloroethane	8.159	62	276317	53.930	ug/l		99
43) Isopropyl Acetate	8.195	43	262605	56.193	ug/l		99
44) Trichloroethene	8.866	130	301949	51.910	ug/l		96
45) 1,2-Dichloropropane	9.140	63	245362	54.896	ug/l		100
46) Dibromomethane	9.231	93	151169	54.586	ug/l		98
47) Bromodichloromethane	9.420	83	380563	54.504	ug/l		99
48) Methyl methacrylate	9.219	41	128160	58.046	ug/l		98
49) 1,4-Dioxane	9.225	88	31032	1094.931	ug/l		93
51) 4-Methyl-2-Pentanone	10.000	43	729813	293.657	ug/l		99
52) Toluene	10.170	92	709757	54.895	ug/l		99
53) t-1,3-Dichloropropene	10.396	75	327128	55.371	ug/l		100
54) cis-1,3-Dichloropropene	9.853	75	390104	55.113	ug/l		98
55) 1,1,2-Trichloroethane	10.573	97	200597	54.201	ug/l		95
56) Ethyl methacrylate	10.439	69	243194	59.640	ug/l		99
57) 1,3-Dichloropropane	10.719	76	324147	55.218	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.713	63	567252	303.155	ug/l		98
59) 2-Hexanone	10.762	43	519217	286.358	ug/l		100
60) Dibromochloromethane	10.914	129	275080	54.095	ug/l		99
61) 1,2-Dibromoethane	11.018	107	187603	54.013	ug/l		99
64) Tetrachloroethene	10.646	164	378366	46.190	ug/l		98
65) Chlorobenzene	11.445	112	866308	50.564	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.518	131	330235	54.509	ug/l		99
67) Ethyl Benzene	11.518	91	1558469	56.203	ug/l		99
68) m/p-Xylenes	11.627	106	1232148	111.216	ug/l		98
69) o-Xylene	11.957	106	583473	56.973	ug/l		99
70) Styrene	11.969	104	975092	57.707	ug/l		99
71) Bromoform	12.133	173	201730	57.012	ug/l	#	100
73) Isopropylbenzene	12.255	105	1481388	56.286	ug/l		100
74) N-amyl acetate	12.072	43	233575	52.419	ug/l		89
75) 1,1,2,2-Tetrachloroethane	12.505	83	231287	55.023	ug/l		100
76) 1,2,3-Trichloropropane	12.554	75	178573m	56.071	ug/l		
77) Bromobenzene	12.530	156	380070	55.672	ug/l		97
78) n-propylbenzene	12.597	91	1707917	55.169	ug/l		100
79) 2-Chlorotoluene	12.682	91	1001802	55.766	ug/l		100
80) 1,3,5-Trimethylbenzene	12.737	105	1195577	55.910	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.304	75	77062	54.684	ug/l		97
82) 4-Chlorotoluene	12.780	91	1013044	54.680	ug/l		99
83) tert-Butylbenzene	12.999	119	1006497	51.679	ug/l		99
84) 1,2,4-Trimethylbenzene	13.042	105	1151348	54.360	ug/l		99
85) sec-Butylbenzene	13.176	105	1548572	55.127	ug/l		100
86) p-Isopropyltoluene	13.292	119	1307126	54.967	ug/l		100
87) 1,3-Dichlorobenzene	13.286	146	699161	52.033	ug/l		99
88) 1,4-Dichlorobenzene	13.365	146	669229	50.702	ug/l		99
89) n-Butylbenzene	13.615	91	1139075	55.085	ug/l		98
90) Hexachloroethane	13.877	117	259100	50.701	ug/l		98
91) 1,2-Dichlorobenzene	13.658	146	594274	51.320	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	34039	52.594	ug/l		95
93) 1,2,4-Trichlorobenzene	14.919	180	341751	51.597	ug/l		100
94) Hexachlorobutadiene	15.023	225	198442	45.727	ug/l		99
95) Naphthalene	15.145	128	486905	42.886	ug/l		100
96) 1,2,3-Trichlorobenzene	15.328	180	263770	47.665	ug/l		100

Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

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

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

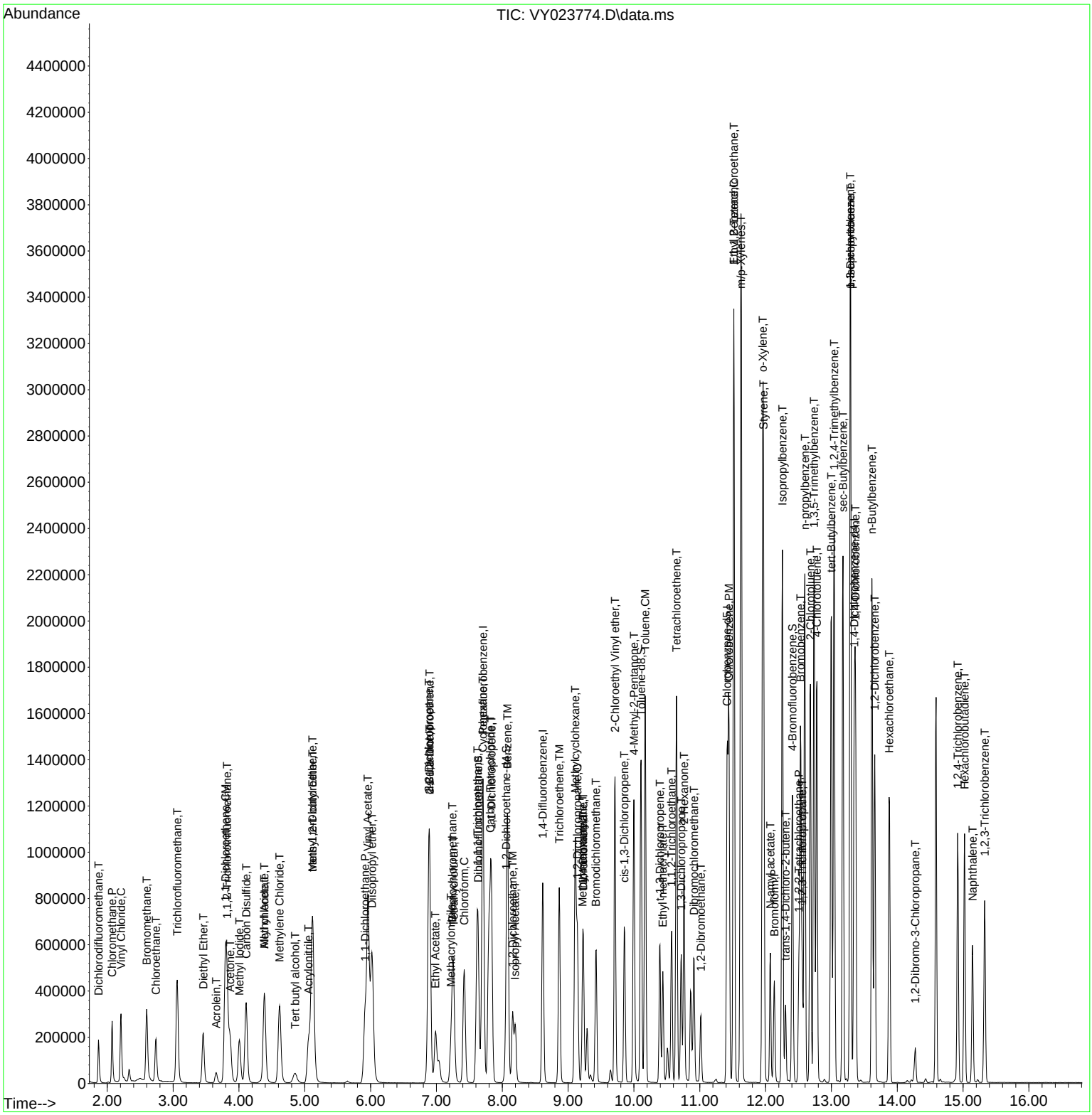
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025



Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	0.328	0.286	12.8	97	0.00
3	P	Chloromethane	0.459	0.421	8.3	95	0.00
4	C	Vinyl Chloride	0.598	0.540	9.7#	92	0.00
5	T	Bromomethane	0.503	0.419	16.7	88	0.00
6	T	Chloroethane	0.413	0.364	11.9	88	0.00
7	T	Trichlorofluoromethane	0.842	0.880	-4.5	105	0.00
8	T	Diethyl Ether	0.226	0.227	-0.4	99	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.464	0.474	-2.2	102	0.00
10	T	Methyl Iodide	0.548	0.561	-2.4	91	0.00
11	T	Tert butyl alcohol	0.028	0.030	-7.1	120	-0.01
12	CM	1,1-Dichloroethene	0.447	0.447	0.0	99	0.00
13	T	Acrolein	0.035	0.019	45.7#	61	0.00
14	T	Allyl chloride	0.544	0.584	-7.4	103	0.00
15	T	Acrylonitrile	0.086	0.096	-11.6	109	0.00
16	T	Acetone	0.106	0.112	-5.7	110	0.00
17	T	Carbon Disulfide	1.371	1.363	0.6	98	0.00
18	T	Methyl Acetate	0.234	0.227	3.0	100	0.00
19	T	Methyl tert-butyl Ether	1.036	1.102	-6.4	102	0.00
20	T	Methylene Chloride	0.512	0.506	1.2	102	0.00
21	T	trans-1,2-Dichloroethene	0.504	0.519	-3.0	99	0.00
22	T	Diisopropyl ether	1.212	1.352	-11.6	103	0.00
23	T	Vinyl Acetate	0.647	0.742	-14.7	106	0.00
24	P	1,1-Dichloroethane	0.807	0.849	-5.2	102	0.00
25	T	2-Butanone	0.123	0.130	-5.7	109	0.00
26	T	2,2-Dichloropropane	0.742	0.777	-4.7	102	0.00
27	T	cis-1,2-Dichloroethene	0.575	0.590	-2.6	98	0.00
28	T	Bromochloromethane	0.309	0.332	-7.4	106	0.00
29	T	Tetrahydrofuran	0.065	0.074	-13.8	112	0.00
30	C	Chloroform	0.901	0.934	-3.7#	101	0.00
31	T	Cyclohexane	0.703	0.709	-0.9	100	0.00
32	T	1,1,1-Trichloroethane	0.805	0.835	-3.7	101	0.00
33	S	1,2-Dichloroethane-d4	0.427	0.433	-1.4	99	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
35	S	Dibromofluoromethane	0.312	0.324	-3.8	95	0.00
36	T	1,1-Dichloropropene	0.418	0.449	-7.4	100	0.00
37	T	Ethyl Acetate	0.162	0.187	-15.4	110	0.00
38	T	Carbon Tetrachloride	0.492	0.525	-6.7	100	0.00
39	T	Methylcyclohexane	0.534	0.574	-7.5	97	0.00
40	TM	Benzene	1.316	1.422	-8.1	101	0.00
41	T	Methacrylonitrile	0.088	0.087	1.1	94	0.00
42	TM	1,2-Dichloroethane	0.333	0.359	-7.8	102	0.00
43	T	Isopropyl Acetate	0.304	0.341	-12.2	105	0.00
44	TM	Trichloroethene	0.378	0.392	-3.7	98	0.00
45	C	1,2-Dichloropropane	0.290	0.319	-10.0#	102	0.00
46	T	Dibromomethane	0.180	0.196	-8.9	104	0.00
47	T	Bromodichloromethane	0.454	0.495	-9.0	102	0.00
48	T	Methyl methacrylate	0.143	0.167	-16.8	104	0.00

Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	0.002	0.002	0.0	102	0.00
50	S	Toluene-d8	1.164	1.231	-5.8	94	0.00
51	T	4-Methyl-2-Pentanone	0.162	0.190	-17.3	109	0.00
52	CM	Toluene	0.840	0.923	-9.9#	98	0.00
53	T	t-1,3-Dichloropropene	0.384	0.425	-10.7	100	0.00
54	T	cis-1,3-Dichloropropene	0.460	0.507	-10.2	100	0.00
55	T	1,1,2-Trichloroethane	0.241	0.261	-8.3	102	0.00
56	T	Ethyl methacrylate	0.265	0.316	-19.2	104	0.00
57	T	1,3-Dichloropropane	0.381	0.421	-10.5	102	0.00
58	T	2-Chloroethyl Vinyl ether	0.122	0.147	-20.5	105	0.00
59	T	2-Hexanone	0.118	0.135	-14.4	107	0.00
60	T	Dibromochloromethane	0.330	0.358	-8.5	100	0.00
61	T	1,2-Dibromoethane	0.226	0.244	-8.0	100	0.00
62	S	4-Bromofluorobenzene	0.376	0.495	-31.6#	116	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
64	T	Tetrachloroethene	0.520	0.481	7.5	99	0.00
65	PM	Chlorobenzene	1.088	1.101	-1.2	109	0.00
66	T	1,1,1,2-Tetrachloroethane	0.385	0.420	-9.1	117	0.00
67	C	Ethyl Benzene	1.762	1.980	-12.4#	115	0.00
68	T	m/p-Xylenes	0.704	0.783	-11.2	113	0.00
69	T	o-Xylene	0.651	0.741	-13.8	116	0.00
70	T	Styrene	1.074	1.239	-15.4	116	0.00
71	P	Bromoform	0.225	0.256	-13.8	123	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73	T	Isopropylbenzene	3.344	3.765	-12.6	113	0.00
74	T	N-amyl acetate	0.566	0.594	-4.9	107	0.00
75	P	1,1,2,2-Tetrachloroethane	0.534	0.588	-10.1	121	0.00
76	T	1,2,3-Trichloropropane	0.405	0.454	-12.1	126	0.00
77	T	Bromobenzene	0.867	0.966	-11.4	116	0.00
78	T	n-propylbenzene	3.933	4.340	-10.3	110	0.00
79	T	2-Chlorotoluene	2.283	2.546	-11.5	114	0.00
80	T	1,3,5-Trimethylbenzene	2.717	3.038	-11.8	111	0.00
81	T	trans-1,4-Dichloro-2-butene	0.179	0.196	-9.5	118	0.00
82	T	4-Chlorotoluene	2.354	2.574	-9.3	112	0.00
83	T	tert-Butylbenzene	2.475	2.558	-3.4	104	0.00
84	T	1,2,4-Trimethylbenzene	2.691	2.926	-8.7	108	0.00
85	T	sec-Butylbenzene	3.569	3.935	-10.3	111	0.00
86	T	p-Isopropyltoluene	3.022	3.322	-9.9	109	0.00
87	T	1,3-Dichlorobenzene	1.707	1.777	-4.1	109	0.00
88	T	1,4-Dichlorobenzene	1.677	1.701	-1.4	107	0.00
89	T	n-Butylbenzene	2.627	2.895	-10.2	109	0.00
90	T	Hexachloroethane	0.649	0.658	-1.4	107	0.00
91	T	1,2-Dichlorobenzene	1.471	1.510	-2.7	108	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.082	0.087	-6.1	118	0.00
93	T	1,2,4-Trichlorobenzene	0.842	0.868	-3.1	106	0.00
94	T	Hexachlorobutadiene	0.551	0.504	8.5	95	0.00
95	T	Naphthalene	1.257	1.237	1.6	99	0.00

Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.703	0.670	4.7	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 5

Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	50.000	43.551	12.9	97	0.00
3	P	Chloromethane	50.000	45.809	8.4	95	0.00
4	C	Vinyl Chloride	50.000	45.200	9.6#	92	0.00
5	T	Bromomethane	50.000	41.661	16.7	88	0.00
6	T	Chloroethane	50.000	44.101	11.8	88	0.00
7	T	Trichlorofluoromethane	50.000	52.254	-4.5	105	0.00
8	T	Diethyl Ether	50.000	50.290	-0.6	99	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	51.148	-2.3	102	0.00
10	T	Methyl Iodide	50.000	51.229	-2.5	91	0.00
11	T	Tert butyl alcohol	250.000	268.512	-7.4	120	-0.01
12	CM	1,1-Dichloroethene	50.000	50.063	-0.1#	99	0.00
13	T	Acrolein	250.000	137.849	44.9#	61	0.00
14	T	Allyl chloride	50.000	53.669	-7.3	103	0.00
15	T	Acrylonitrile	250.000	276.898	-10.8	109	0.00
16	T	Acetone	250.000	264.541	-5.8	110	0.00
17	T	Carbon Disulfide	50.000	49.716	0.6	98	0.00
18	T	Methyl Acetate	50.000	48.470	3.1	100	0.00
19	T	Methyl tert-butyl Ether	50.000	53.185	-6.4	102	0.00
20	T	Methylene Chloride	50.000	49.438	1.1	102	0.00
21	T	trans-1,2-Dichloroethene	50.000	51.482	-3.0	99	0.00
22	T	Diisopropyl ether	50.000	55.778	-11.6	103	0.00
23	T	Vinyl Acetate	250.000	287.068	-14.8	106	0.00
24	P	1,1-Dichloroethane	50.000	52.602	-5.2	102	0.00
25	T	2-Butanone	250.000	264.738	-5.9	109	0.00
26	T	2,2-Dichloropropane	50.000	52.307	-4.6	102	0.00
27	T	cis-1,2-Dichloroethene	50.000	51.293	-2.6	98	0.00
28	T	Bromochloromethane	50.000	53.652	-7.3	106	0.00
29	T	Tetrahydrofuran	250.000	284.185	-13.7	112	0.00
30	C	Chloroform	50.000	51.853	-3.7#	101	0.00
31	T	Cyclohexane	50.000	50.408	-0.8	100	0.00
32	T	1,1,1-Trichloroethane	50.000	51.858	-3.7	101	0.00
33	S	1,2-Dichloroethane-d4	50.000	50.783	-1.6	99	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	91	0.00
35	S	Dibromofluoromethane	50.000	51.897	-3.8	95	0.00
36	T	1,1-Dichloropropene	50.000	53.714	-7.4	100	0.00
37	T	Ethyl Acetate	50.000	57.886	-15.8	110	0.00
38	T	Carbon Tetrachloride	50.000	53.328	-6.7	100	0.00
39	T	Methylcyclohexane	50.000	53.818	-7.6	97	0.00
40	TM	Benzene	50.000	54.004	-8.0	101	0.00
41	T	Methacrylonitrile	50.000	49.489	1.0	94	0.00
42	TM	1,2-Dichloroethane	50.000	53.930	-7.9	102	0.00
43	T	Isopropyl Acetate	50.000	56.193	-12.4	105	0.00
44	TM	Trichloroethene	50.000	51.910	-3.8	98	0.00
45	C	1,2-Dichloropropane	50.000	54.896	-9.8#	102	0.00
46	T	Dibromomethane	50.000	54.586	-9.2	104	0.00
47	T	Bromodichloromethane	50.000	54.504	-9.0	102	0.00
48	T	Methyl methacrylate	50.000	58.046	-16.1	104	0.00

Sample Results: **VY023774.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	1094.931	-9.5	102	0.00
50	S	Toluene-d8	50.000	52.891	-5.8	94	0.00
51	T	4-Methyl-2-Pentanone	250.000	293.657	-17.5	109	0.00
52	CM	Toluene	50.000	54.895	-9.8#	98	0.00
53	T	t-1,3-Dichloropropene	50.000	55.371	-10.7	100	0.00
54	T	cis-1,3-Dichloropropene	50.000	55.113	-10.2	100	0.00
55	T	1,1,2-Trichloroethane	50.000	54.201	-8.4	102	0.00
56	T	Ethyl methacrylate	50.000	59.640	-19.3	104	0.00
57	T	1,3-Dichloropropane	50.000	55.218	-10.4	102	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	303.155	-21.3	105	0.00
59	T	2-Hexanone	250.000	286.358	-14.5	107	0.00
60	T	Dibromochloromethane	50.000	54.095	-8.2	100	0.00
61	T	1,2-Dibromoethane	50.000	54.013	-8.0	100	0.00
62	S	4-Bromofluorobenzene	50.000	65.710	-31.4#	116	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	105	0.00
64	T	Tetrachloroethene	50.000	46.190	7.6	99	0.00
65	PM	Chlorobenzene	50.000	50.564	-1.1	109	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	54.509	-9.0	117	0.00
67	C	Ethyl Benzene	50.000	56.203	-12.4#	115	0.00
68	T	m/p-Xylenes	100.000	111.216	-11.2	113	0.00
69	T	o-Xylene	50.000	56.973	-13.9	116	0.00
70	T	Styrene	50.000	57.707	-15.4	116	0.00
71	P	Bromoform	50.000	57.012	-14.0	123	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73	T	Isopropylbenzene	50.000	56.286	-12.6	113	0.00
74	T	N-amyl acetate	50.000	52.419	-4.8	107	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	55.023	-10.0	121	0.00
76	T	1,2,3-Trichloropropane	50.000	56.071	-12.1	126	0.00
77	T	Bromobenzene	50.000	55.672	-11.3	116	0.00
78	T	n-propylbenzene	50.000	55.169	-10.3	110	0.00
79	T	2-Chlorotoluene	50.000	55.766	-11.5	114	0.00
80	T	1,3,5-Trimethylbenzene	50.000	55.910	-11.8	111	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	54.684	-9.4	118	0.00
82	T	4-Chlorotoluene	50.000	54.680	-9.4	112	0.00
83	T	tert-Butylbenzene	50.000	51.679	-3.4	104	0.00
84	T	1,2,4-Trimethylbenzene	50.000	54.360	-8.7	108	0.00
85	T	sec-Butylbenzene	50.000	55.127	-10.3	111	0.00
86	T	p-Isopropyltoluene	50.000	54.967	-9.9	109	0.00
87	T	1,3-Dichlorobenzene	50.000	52.033	-4.1	109	0.00
88	T	1,4-Dichlorobenzene	50.000	50.702	-1.4	107	0.00
89	T	n-Butylbenzene	50.000	55.085	-10.2	109	0.00
90	T	Hexachloroethane	50.000	50.701	-1.4	107	0.00
91	T	1,2-Dichlorobenzene	50.000	51.320	-2.6	108	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	52.594	-5.2	118	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.597	-3.2	106	0.00
94	T	Hexachlorobutadiene	50.000	45.727	8.5	95	0.00
95	T	Naphthalene	50.000	42.886	14.2	99	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023774.D
Acq On : 13 Nov 2025 09:48
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Nov 14 04:20:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	47.665	4.7	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 6

QC SAMPLE DATA

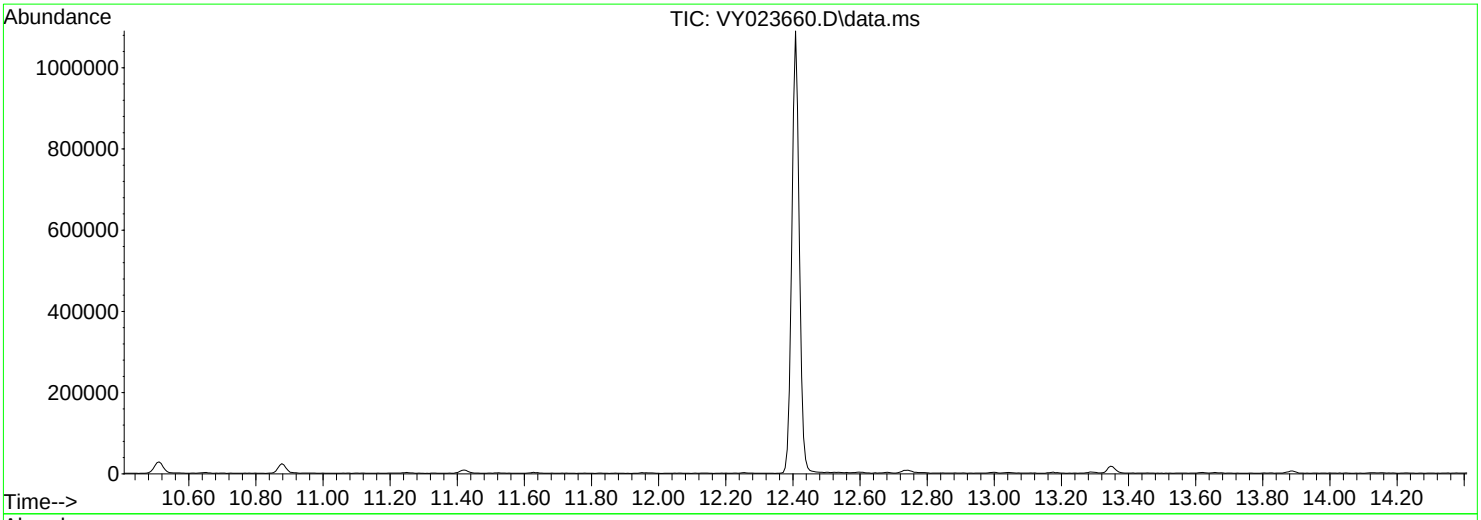
Sample Results: **VY023660.D**

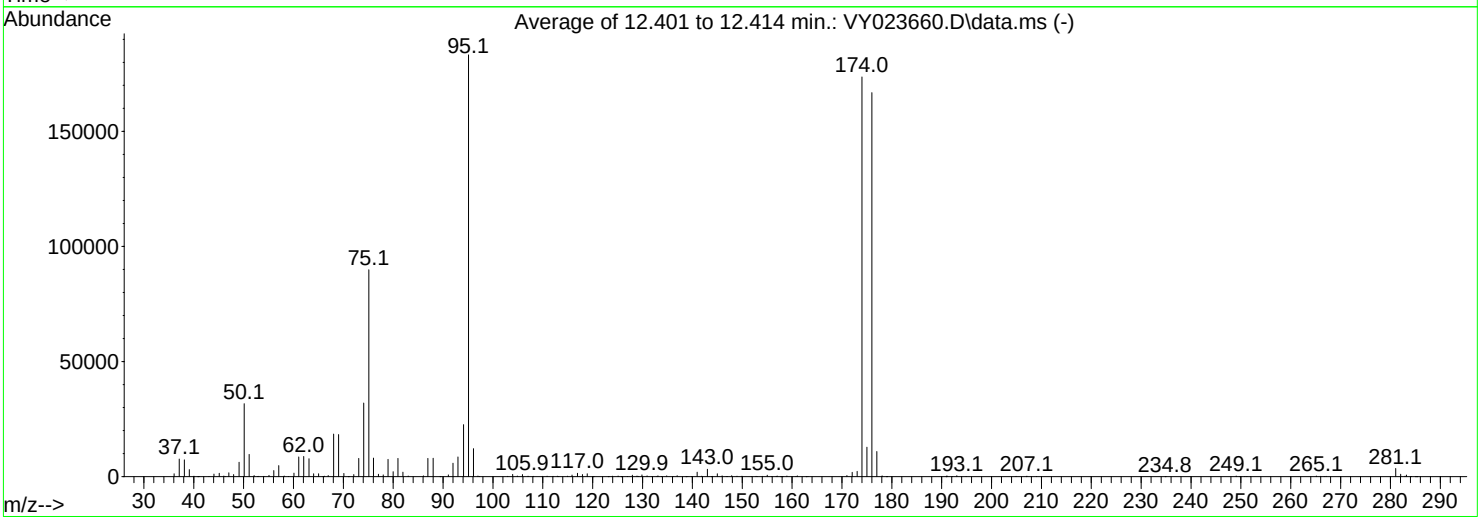
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY110425\
Data File : VY023660.D
Acq On : 04 Nov 2025 08:11
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Title : SW846 8260
Last Update : Wed Nov 05 04:41:50 2025





AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	31677	PASS
75	95	30	60	49.0	89880	PASS
95	95	100	100	100.0	183253	PASS
96	95	5	9	6.7	12193	PASS
173	174	0.00	2	1.3	2292	PASS
174	95	50	100	94.8	173653	PASS
175	174	5	9	7.4	12790	PASS
176	174	95	101	96.1	166869	PASS
177	176	5	9	6.5	10925	PASS

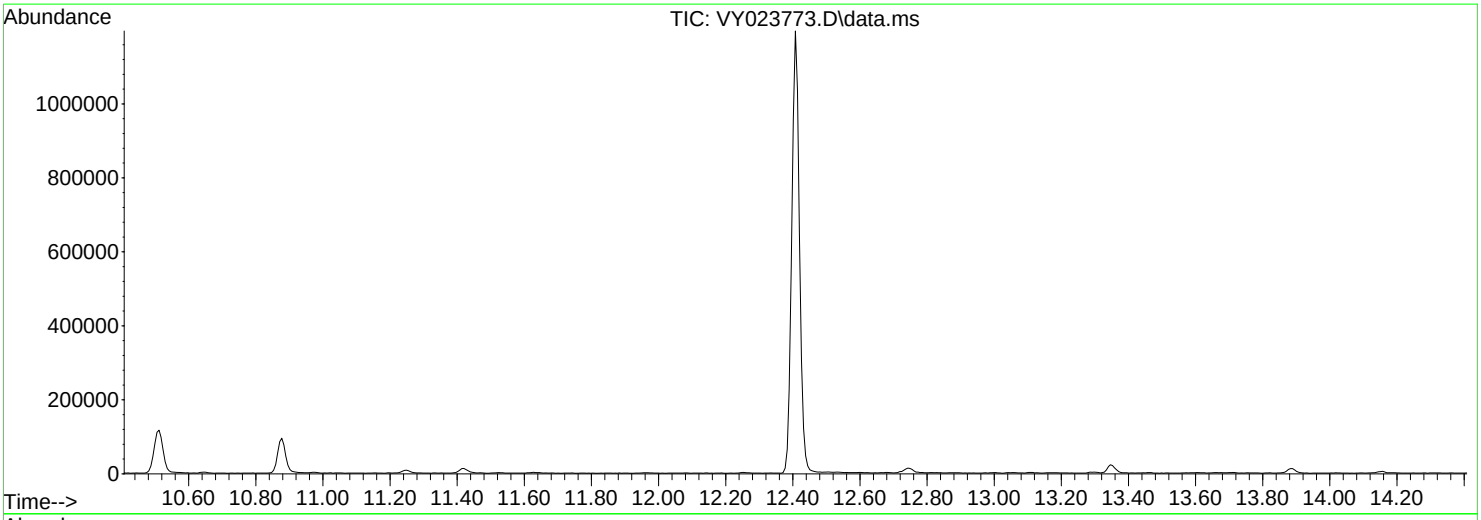
Sample Results: **VY023773.D**

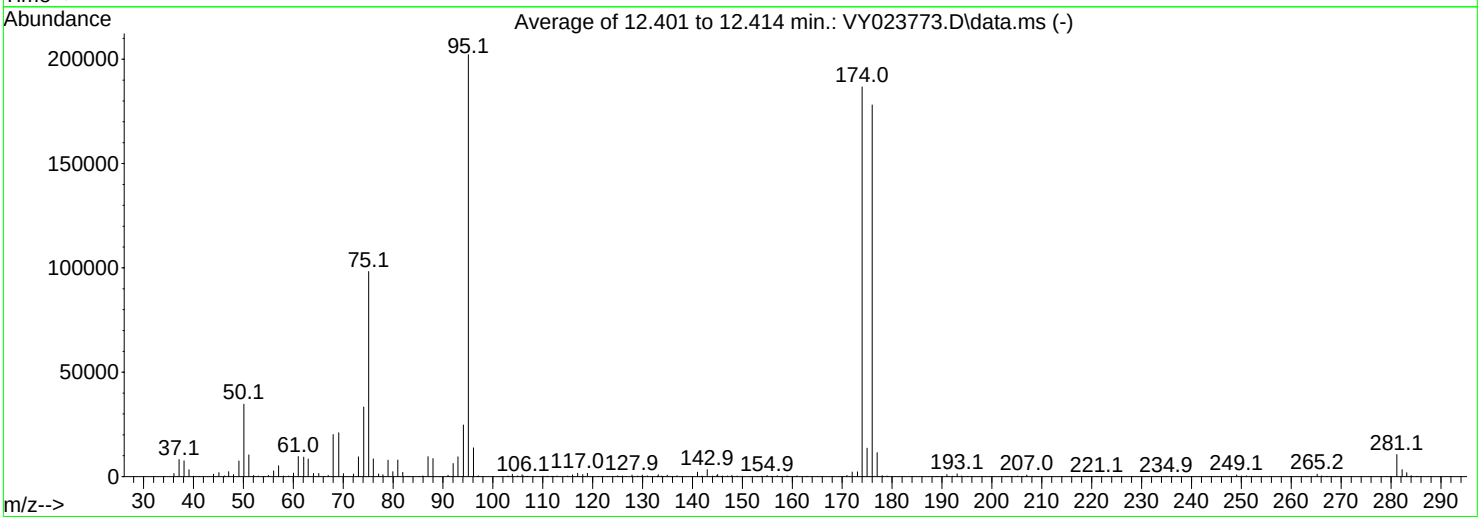
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023773.D
Acq On : 13 Nov 2025 09:06
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Title : SW846 8260
Last Update : Wed Nov 05 04:41:50 2025





AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1743

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	34712	PASS
75	95	30	60	48.6	98232	PASS
95	95	100	100	100.0	202133	PASS
96	95	5	9	6.8	13776	PASS
173	174	0.00	2	1.2	2267	PASS
174	95	50	100	92.4	186773	PASS
175	174	5	9	7.3	13635	PASS
176	174	95	101	95.4	178091	PASS
177	176	5	9	6.4	11479	PASS

Raw Data: **VY023775.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	
Project:	Jones Beach Concrete	Date Received:	
Client Sample ID:	VY1113SBL01	SDG No.:	Q3615
Lab Sample ID:	VY1113SBL01	Matrix:	SOIL
Analytical Method:	8260D	Level: LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
74-87-3	Chloromethane	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
75-01-4	Vinyl Chloride	0.79	U	1	0.79	5.00	ug/Kg	11/13/25 10:17	VY111325
74-83-9	Bromomethane	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
75-00-3	Chloroethane	1.30	U	1	1.30	5.00	ug/Kg	11/13/25 10:17	VY111325
75-69-4	Trichlorofluoromethane	1.20	U	1	1.20	5.00	ug/Kg	11/13/25 10:17	VY111325
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
75-35-4	1,1-Dichloroethene	1.00	U	1	1.00	5.00	ug/Kg	11/13/25 10:17	VY111325
67-64-1	Acetone	4.70	U	1	4.70	25.0	ug/Kg	11/13/25 10:17	VY111325
75-15-0	Carbon Disulfide	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
1634-04-4	Methyl tert-butyl Ether	0.73	U	1	0.73	5.00	ug/Kg	11/13/25 10:17	VY111325
79-20-9	Methyl Acetate	1.50	U	1	1.50	5.00	ug/Kg	11/13/25 10:17	VY111325
75-09-2	Methylene Chloride	3.50	U	1	3.50	10.0	ug/Kg	11/13/25 10:17	VY111325
156-60-5	trans-1,2-Dichloroethene	0.86	U	1	0.86	5.00	ug/Kg	11/13/25 10:17	VY111325
75-34-3	1,1-Dichloroethane	0.80	U	1	0.80	5.00	ug/Kg	11/13/25 10:17	VY111325
110-82-7	Cyclohexane	0.79	U	1	0.79	5.00	ug/Kg	11/13/25 10:17	VY111325
78-93-3	2-Butanone	6.50	U	1	6.50	25.0	ug/Kg	11/13/25 10:17	VY111325
56-23-5	Carbon Tetrachloride	0.97	U	1	0.97	5.00	ug/Kg	11/13/25 10:17	VY111325
156-59-2	cis-1,2-Dichloroethene	0.75	U	1	0.75	5.00	ug/Kg	11/13/25 10:17	VY111325
74-97-5	Bromochloromethane	1.20	U	1	1.20	5.00	ug/Kg	11/13/25 10:17	VY111325
67-66-3	Chloroform	0.84	U	1	0.84	5.00	ug/Kg	11/13/25 10:17	VY111325
71-55-6	1,1,1-Trichloroethane	0.93	U	1	0.93	5.00	ug/Kg	11/13/25 10:17	VY111325
108-87-2	Methylcyclohexane	0.91	U	1	0.91	5.00	ug/Kg	11/13/25 10:17	VY111325
71-43-2	Benzene	0.79	U	1	0.79	5.00	ug/Kg	11/13/25 10:17	VY111325
107-06-2	1,2-Dichloroethane	0.79	U	1	0.79	5.00	ug/Kg	11/13/25 10:17	VY111325
79-01-6	Trichloroethene	0.81	U	1	0.81	5.00	ug/Kg	11/13/25 10:17	VY111325
78-87-5	1,2-Dichloropropane	0.91	U	1	0.91	5.00	ug/Kg	11/13/25 10:17	VY111325
75-27-4	Bromodichloromethane	0.78	U	1	0.78	5.00	ug/Kg	11/13/25 10:17	VY111325
108-10-1	4-Methyl-2-Pentanone	3.60	U	1	3.60	25.0	ug/Kg	11/13/25 10:17	VY111325
108-88-3	Toluene	0.78	U	1	0.78	5.00	ug/Kg	11/13/25 10:17	VY111325
10061-02-6	t-1,3-Dichloropropene	0.65	U	1	0.65	5.00	ug/Kg	11/13/25 10:17	VY111325
10061-01-5	cis-1,3-Dichloropropene	0.62	U	1	0.62	5.00	ug/Kg	11/13/25 10:17	VY111325
79-00-5	1,1,2-Trichloroethane	0.92	U	1	0.92	5.00	ug/Kg	11/13/25 10:17	VY111325
591-78-6	2-Hexanone	3.70	U	1	3.70	25.0	ug/Kg	11/13/25 10:17	VY111325
124-48-1	Dibromochloromethane	0.87	U	1	0.87	5.00	ug/Kg	11/13/25 10:17	VY111325
106-93-4	1,2-Dibromoethane	0.88	U	1	0.88	5.00	ug/Kg	11/13/25 10:17	VY111325
127-18-4	Tetrachloroethene	1.10	U	1	1.10	5.00	ug/Kg	11/13/25 10:17	VY111325
108-90-7	Chlorobenzene	0.91	U	1	0.91	5.00	ug/Kg	11/13/25 10:17	VY111325
100-41-4	Ethyl Benzene	0.67	U	1	0.67	5.00	ug/Kg	11/13/25 10:17	VY111325
179601-23-1	m/p-Xylenes	1.20	U	1	1.20	10.0	ug/Kg	11/13/25 10:17	VY111325
95-47-6	o-Xylene	0.82	U	1	0.82	5.00	ug/Kg	11/13/25 10:17	VY111325
100-42-5	Styrene	0.71	U	1	0.71	5.00	ug/Kg	11/13/25 10:17	VY111325
75-25-2	Bromoform	0.86	U	1	0.86	5.00	ug/Kg	11/13/25 10:17	VY111325

Raw Data: **VY023775.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	
Project:	Jones Beach Concrete	Date Received:	
Client Sample ID:	VY1113SBL01	SDG No.:	Q3615
Lab Sample ID:	VY1113SBL01	Matrix:	SOIL
Analytical Method:	8260D Level: LOW	% Solid:	100
Sample Wt/Vol:	5 g Final Vol: 5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	0.78	U	1	0.78	5.00	ug/Kg	11/13/25 10:17	VY111325
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1	1.20	5.00	ug/Kg	11/13/25 10:17	VY111325
541-73-1	1,3-Dichlorobenzene	1.70	U	1	1.70	5.00	ug/Kg	11/13/25 10:17	VY111325
106-46-7	1,4-Dichlorobenzene	1.60	U	1	1.60	5.00	ug/Kg	11/13/25 10:17	VY111325
95-50-1	1,2-Dichlorobenzene	1.50	U	1	1.50	5.00	ug/Kg	11/13/25 10:17	VY111325
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1	1.80	5.00	ug/Kg	11/13/25 10:17	VY111325
120-82-1	1,2,4-Trichlorobenzene	3.00	U	1	3.00	5.00	ug/Kg	11/13/25 10:17	VY111325
87-61-6	1,2,3-Trichlorobenzene	3.20	U	1	3.20	5.00	ug/Kg	11/13/25 10:17	VY111325
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	56.7			63 - 155	113%	SPK: 50		
1868-53-7	Dibromofluoromethane	50.5			70 - 134	101%	SPK: 50		
2037-26-5	Toluene-d8	48.7			74 - 123	97%	SPK: 50		
460-00-4	4-Bromofluorobenzene	50.5			52 - 138	101%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	771000							
540-36-3	1,4-Difluorobenzene	1350000							
3114-55-4	Chlorobenzene-d5	1130000							
3855-82-1	1,4-Dichlorobenzene-d4	509000							

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

Sample Results: **VY023775.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Quant Time: Nov 14 04:23:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

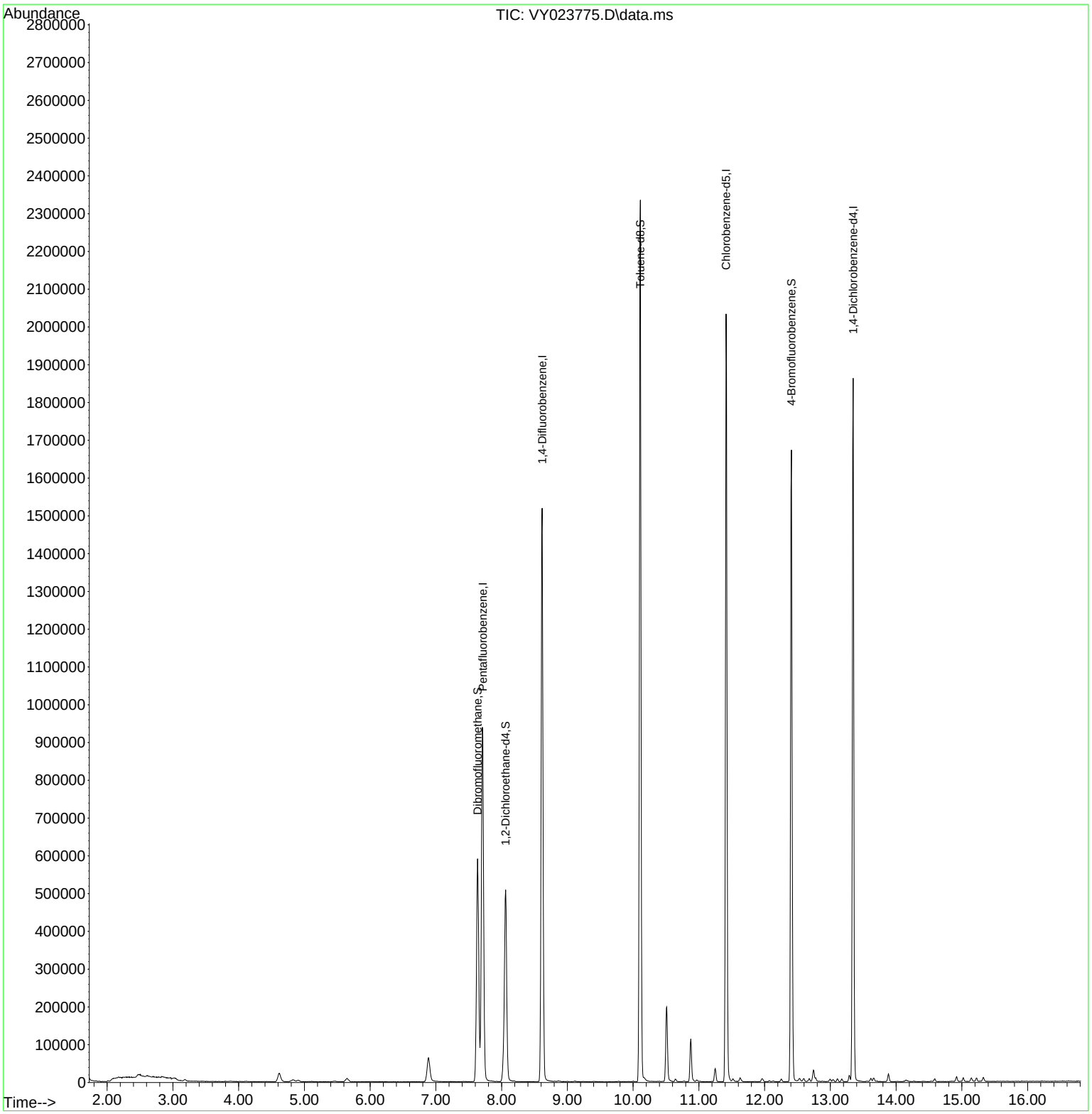
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.713	168	770600	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	1347630	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	1134546	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	509347	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	372807	56.715	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 113.440%			
35) Dibromofluoromethane	7.634	113	424945	50.458	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 100.920%			
50) Toluene-d8	10.109	98	1526427	48.656	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 97.320%			
62) 4-Bromofluorobenzene	12.408	95	512720	50.537	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 101.080%			
Target Compounds						Qvalue

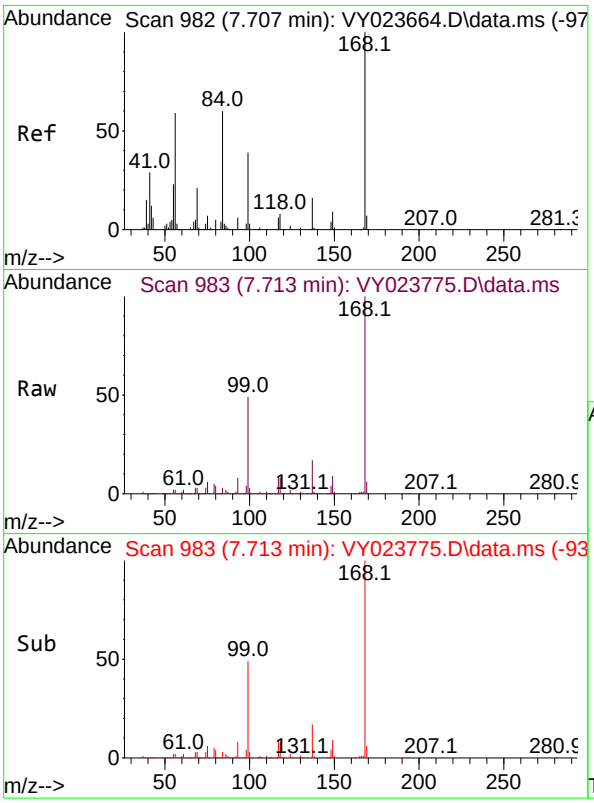
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Quant Time: Nov 14 04:23:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration



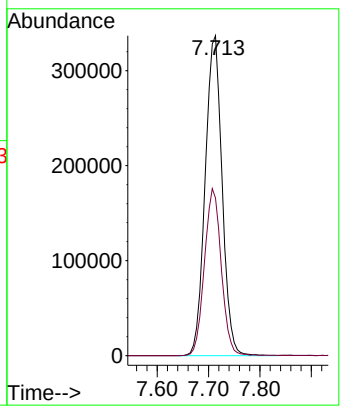


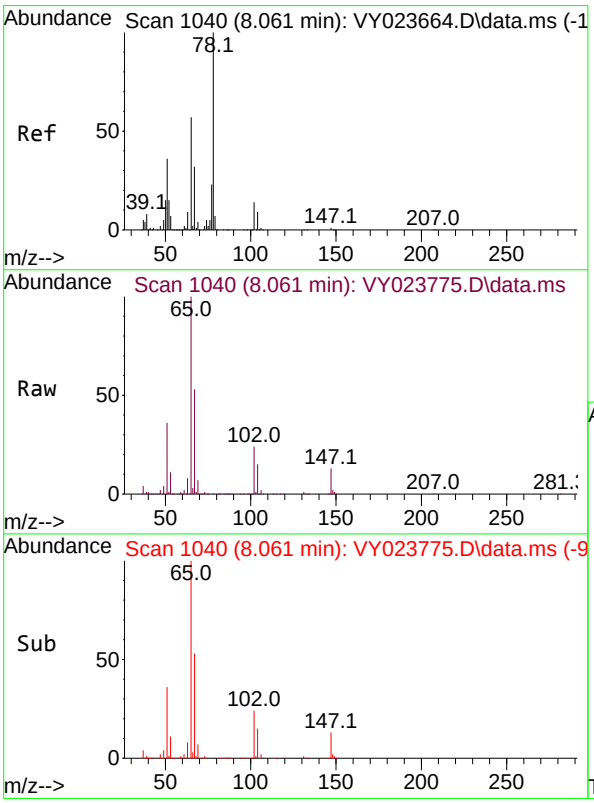
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.713 min Scan# 98
Delta R.T. 0.006 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Tgt Ion:168 Resp: 770600

Ion	Ratio	Lower	Upper
168	100		
99	49.3	41.0	61.4

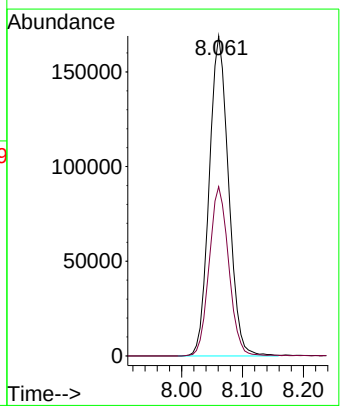


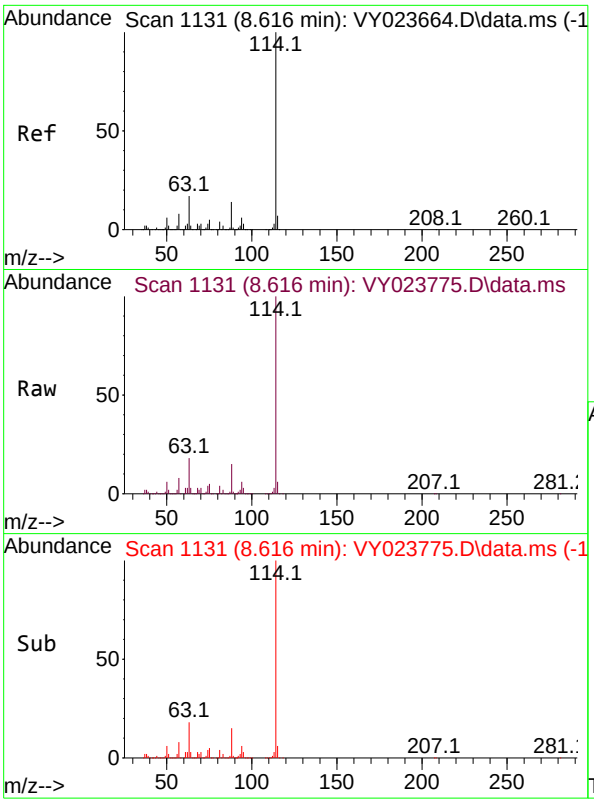


#33
1,2-Dichloroethane-d4
Concen: 56.715 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Tgt Ion: 65 Resp: 372807

Ion	Ratio	Lower	Upper
65	100		
67	53.3	0.0	107.4



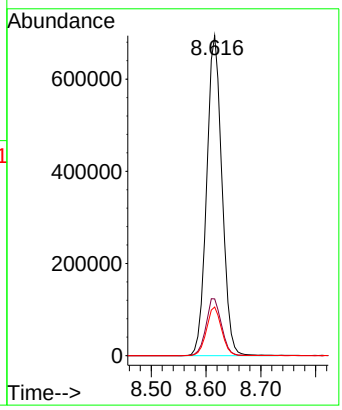


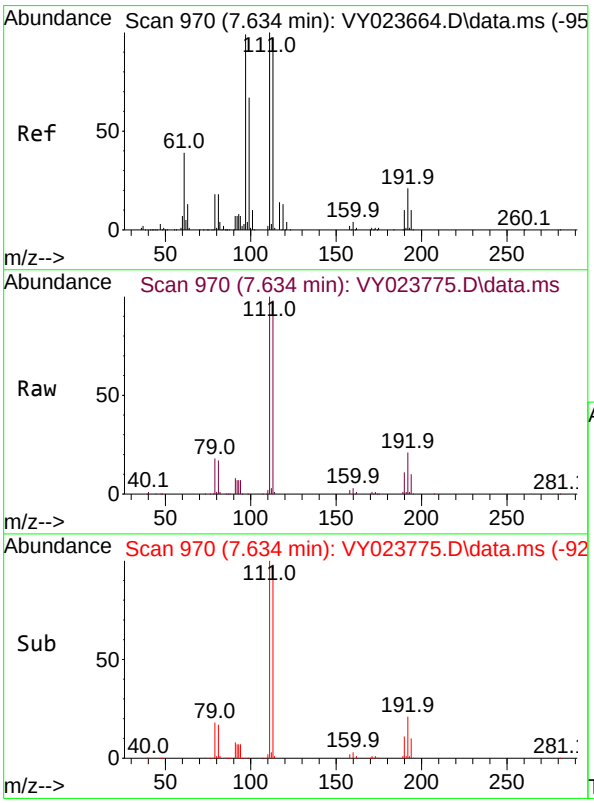
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.616 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Tgt Ion:114 Resp: 1347630

Ion	Ratio	Lower	Upper
114	100		
63	17.7	0.0	33.8
88	15.2	0.0	29.0

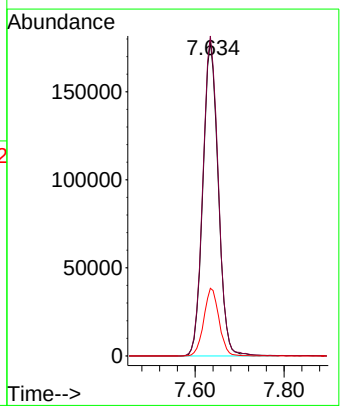


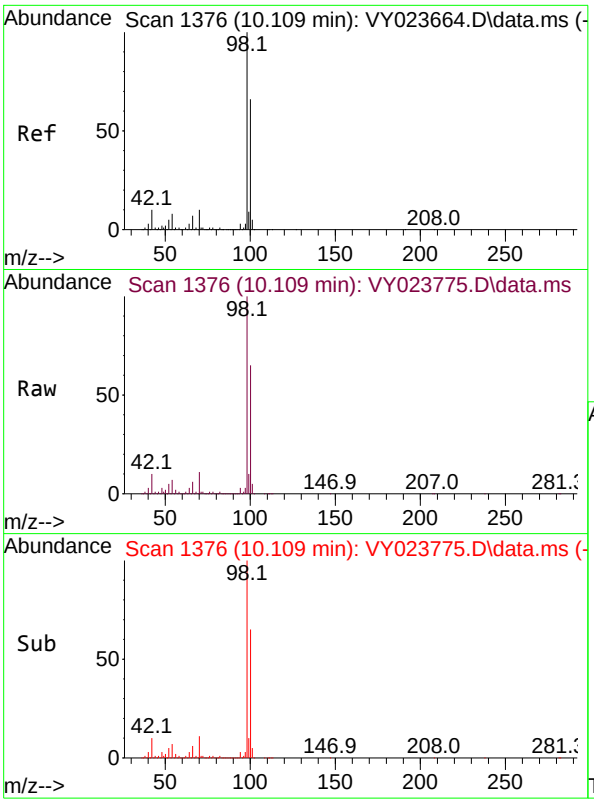


#35
Dibromofluoromethane
Concen: 50.458 ug/l
RT: 7.634 min Scan# 970
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Tgt Ion:113 Resp: 424945

Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.2	123.4
192	21.3	17.3	25.9



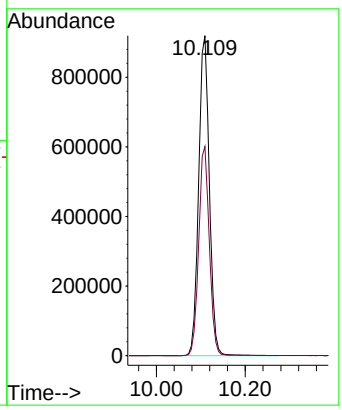


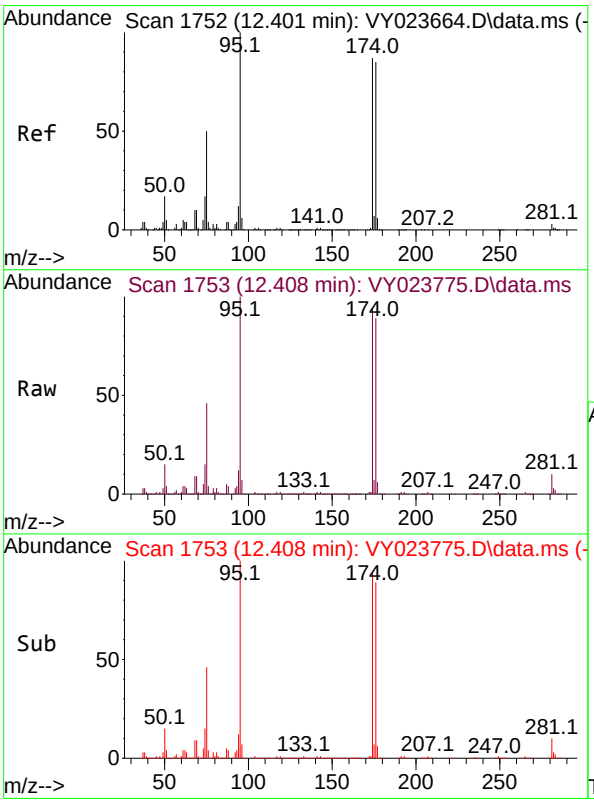
#50
Toluene-d8
Concen: 48.656 ug/l
RT: 10.109 min Scan# 1
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Tgt Ion: 98 Resp: 1526427

Ion	Ratio	Lower	Upper
98	100		
100	65.0	52.7	79.1

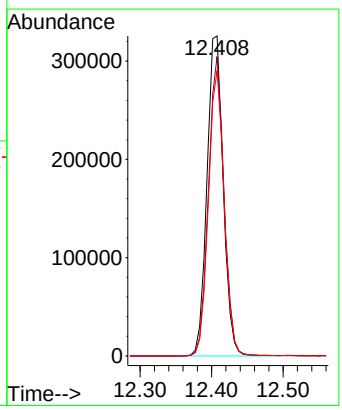


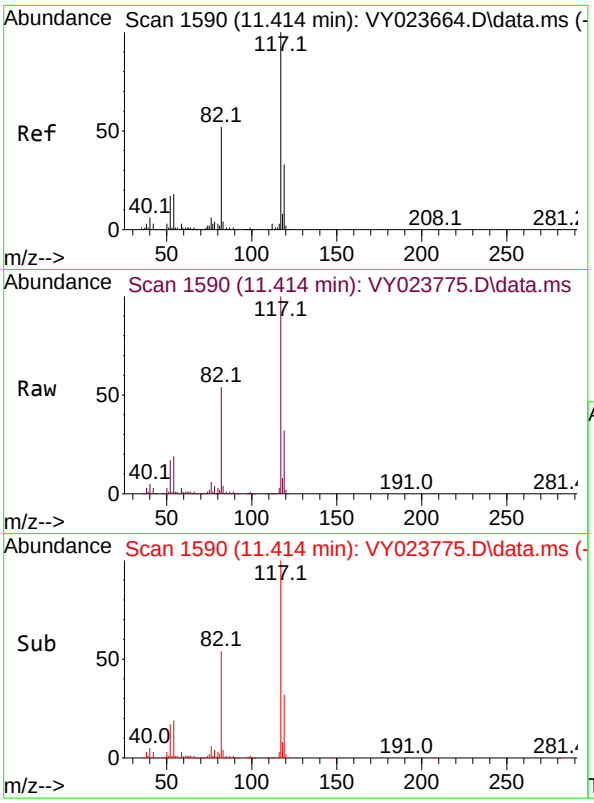


#62
4-Bromofluorobenzene
Concen: 50.537 ug/l
RT: 12.408 min Scan# 1753
Delta R.T. 0.006 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Tgt Ion: 95 Resp: 512720

Ion	Ratio	Lower	Upper
95	100		
174	90.3	0.0	184.8
176	86.5	0.0	181.6



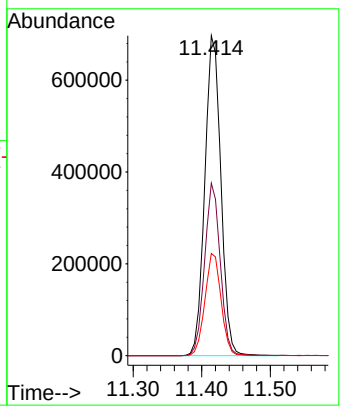


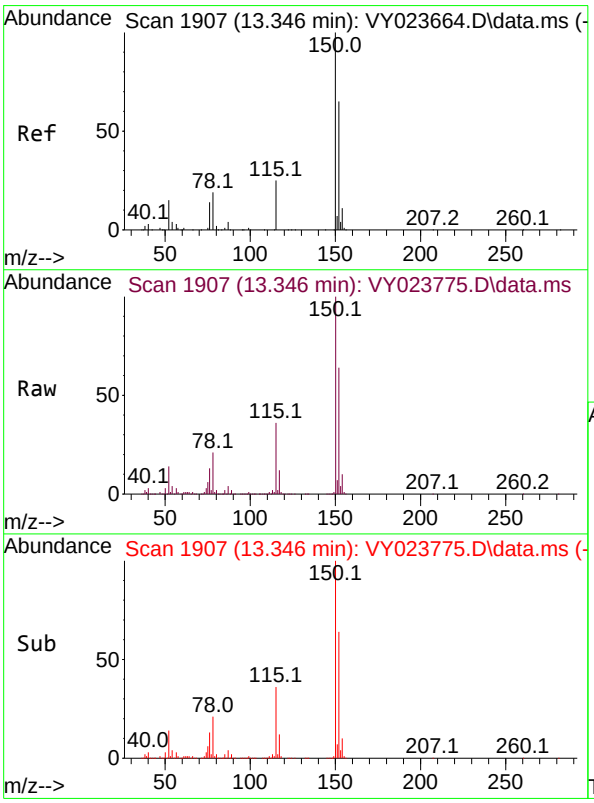
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.414 min Scan# 1
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Tgt Ion:117 Resp: 1134546

Ion	Ratio	Lower	Upper
117	100		
82	53.9	41.2	61.8
119	31.9	26.2	39.2

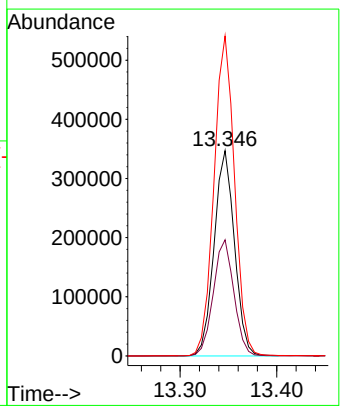




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.346 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VY023775.D
Acq: 13 Nov 2025 10:17

Tgt Ion:152 Resp: 509347

Ion	Ratio	Lower	Upper
152	100		
115	57.0	27.5	82.5
150	157.6	0.0	349.0



Sample Results: **VY023775.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

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_Y\methods\82Y110425S.M
Title : SW846 8260

Signal : TIC: VY023775.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.622	465	476	488	rBV3	22268	71298	1.83%	0.331%
2	6.890	835	848	861	rBV2	63525	199233	5.11%	0.926%
3	7.634	960	970	976	rBV	589847	1401312	35.93%	6.511%
4	7.707	976	982	997	rVB	935803	2166502	55.55%	10.066%
5	8.061	1026	1040	1057	rBV2	508034	1289857	33.07%	5.993%
6	8.616	1122	1131	1147	rBV	1517835	2970624	76.17%	13.802%
7	10.109	1368	1376	1385	rBV	2334156	3900242	100.00%	18.121%
8	10.512	1434	1442	1456	rVB	197198	375654	9.63%	1.745%
9	10.877	1495	1502	1512	rBV	113675	195567	5.01%	0.909%
10	11.249	1557	1563	1569	rBV	34494	58435	1.50%	0.271%
11	11.414	1583	1590	1603	rBV	2033082	3296913	84.53%	15.318%
12	12.408	1745	1753	1767	rBV2	1672011	2723958	69.84%	12.656%
13	12.743	1801	1808	1813	rBV2	29212	57814	1.48%	0.269%
14	13.346	1901	1907	1918	rVB	1860135	2816255	72.21%	13.084%

Sum of corrected areas: 21523664

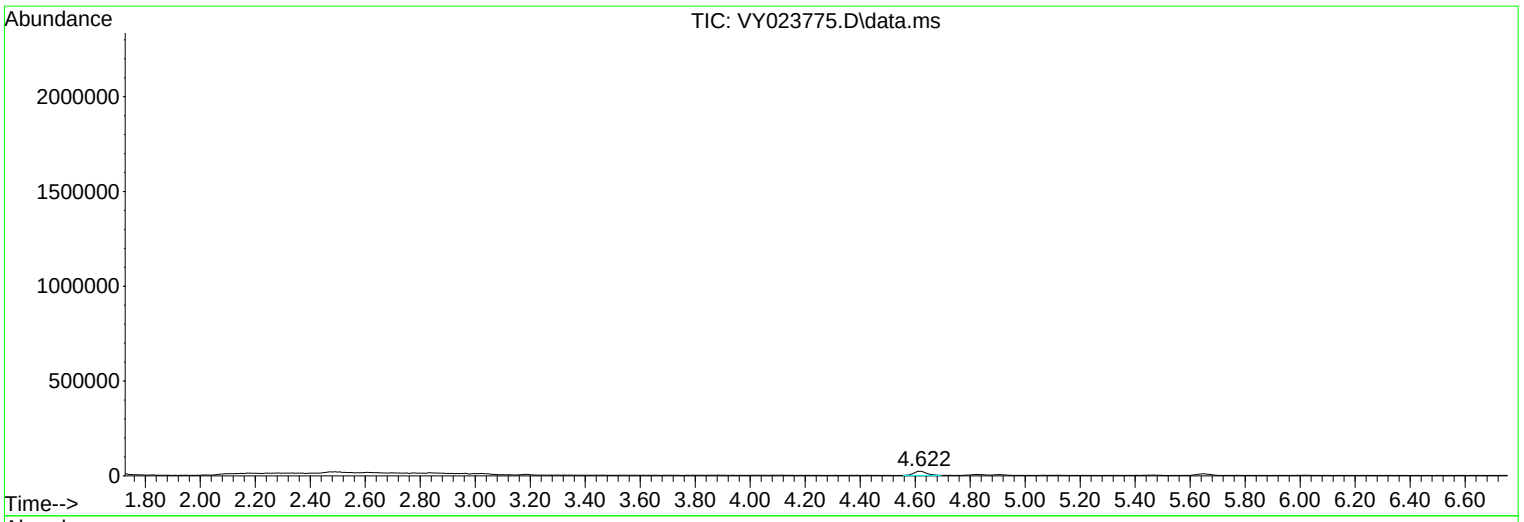
Sample Results: **VY023775.D**

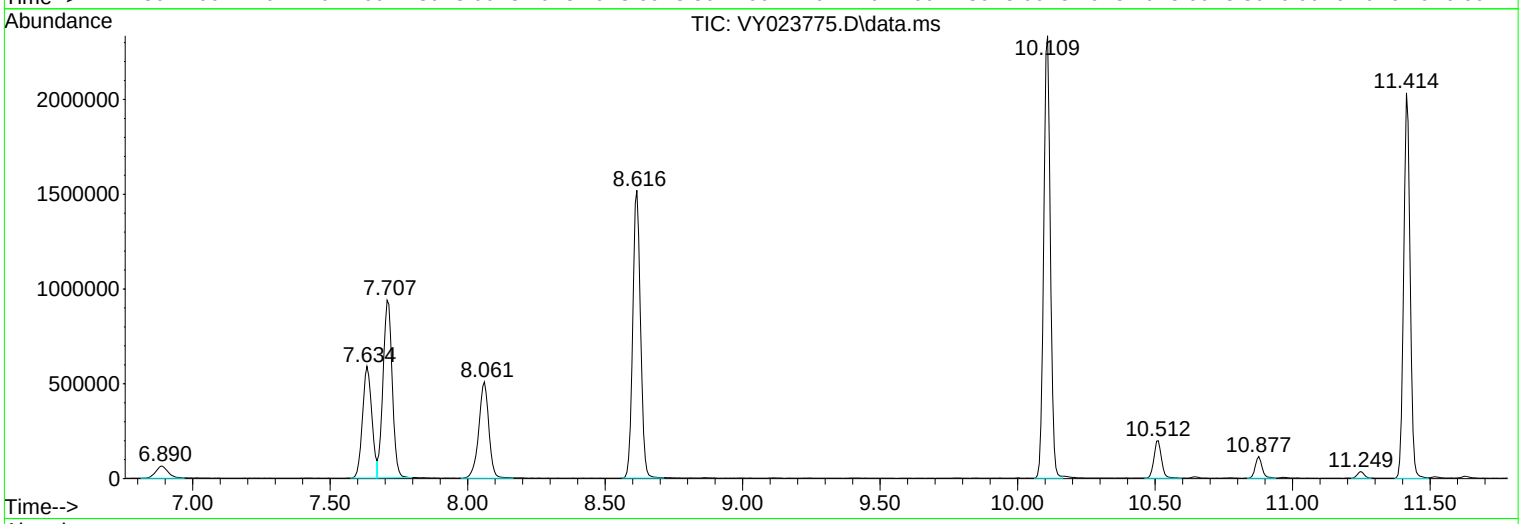
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

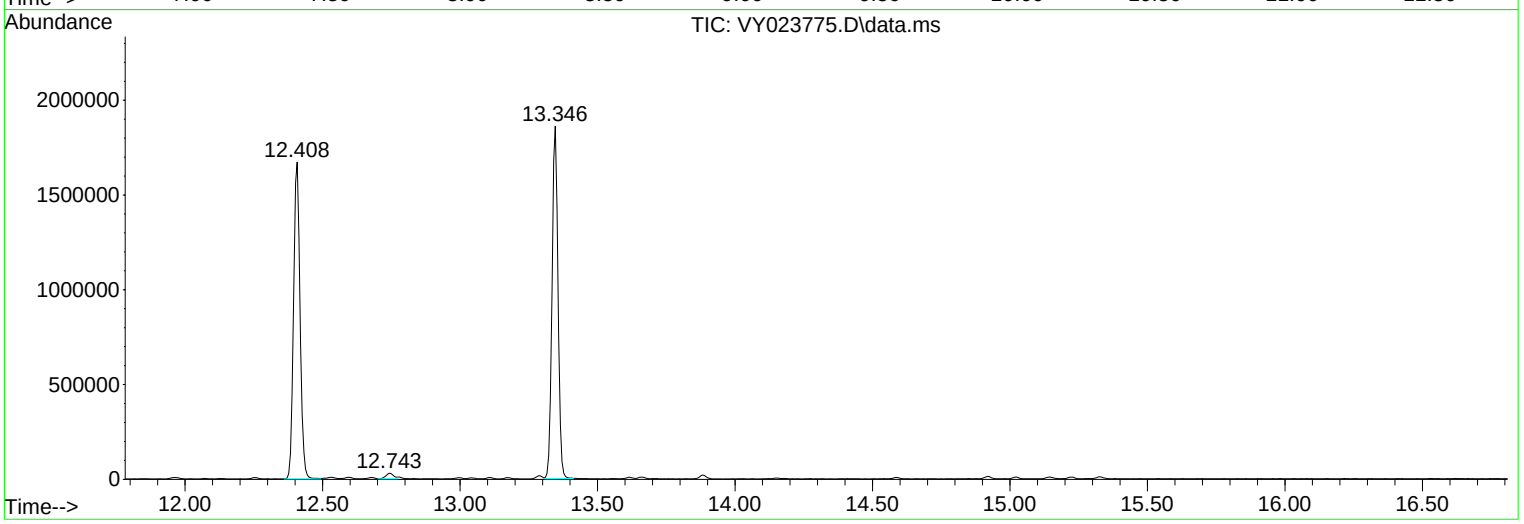
Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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







Library Search Compound Report

Sample Results: **VY023775.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected
****

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023775.D
Acq On : 13 Nov 2025 10:17
Operator : SY/MD
Sample : VY1113SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260

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

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

Raw Data: **VY023776.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	
Project:	Jones Beach Concrete	Date Received:	
Client Sample ID:	VY1113SBS01	SDG No.:	Q3615
Lab Sample ID:	VY1113SBS01	Matrix:	SOIL
Analytical Method:	8260D	Level: LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	22.2		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
74-87-3	Chloromethane	21.2		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
75-01-4	Vinyl Chloride	20.2		1	0.79	5.00	ug/Kg	11/13/25 10:46	VY111325
74-83-9	Bromomethane	20.0		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
75-00-3	Chloroethane	19.6		1	1.30	5.00	ug/Kg	11/13/25 10:46	VY111325
75-69-4	Trichlorofluoromethane	21.7		1	1.20	5.00	ug/Kg	11/13/25 10:46	VY111325
76-13-1	1,1,2-Trichlorotrifluoroethane	21.7		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
75-35-4	1,1-Dichloroethene	21.5		1	1.00	5.00	ug/Kg	11/13/25 10:46	VY111325
67-64-1	Acetone	120		1	4.70	25.0	ug/Kg	11/13/25 10:46	VY111325
75-15-0	Carbon Disulfide	21.4		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
1634-04-4	Methyl tert-butyl Ether	20.1		1	0.73	5.00	ug/Kg	11/13/25 10:46	VY111325
79-20-9	Methyl Acetate	16.5		1	1.50	5.00	ug/Kg	11/13/25 10:46	VY111325
75-09-2	Methylene Chloride	22.3		1	3.50	10.0	ug/Kg	11/13/25 10:46	VY111325
156-60-5	trans-1,2-Dichloroethene	20.9		1	0.86	5.00	ug/Kg	11/13/25 10:46	VY111325
75-34-3	1,1-Dichloroethane	21.6		1	0.80	5.00	ug/Kg	11/13/25 10:46	VY111325
110-82-7	Cyclohexane	21.4		1	0.79	5.00	ug/Kg	11/13/25 10:46	VY111325
78-93-3	2-Butanone	110		1	6.50	25.0	ug/Kg	11/13/25 10:46	VY111325
56-23-5	Carbon Tetrachloride	20.7		1	0.97	5.00	ug/Kg	11/13/25 10:46	VY111325
156-59-2	cis-1,2-Dichloroethene	20.6		1	0.75	5.00	ug/Kg	11/13/25 10:46	VY111325
74-97-5	Bromochloromethane	21.6		1	1.20	5.00	ug/Kg	11/13/25 10:46	VY111325
67-66-3	Chloroform	21.3		1	0.84	5.00	ug/Kg	11/13/25 10:46	VY111325
71-55-6	1,1,1-Trichloroethane	21.3		1	0.93	5.00	ug/Kg	11/13/25 10:46	VY111325
108-87-2	Methylcyclohexane	20.2		1	0.91	5.00	ug/Kg	11/13/25 10:46	VY111325
71-43-2	Benzene	21.2		1	0.79	5.00	ug/Kg	11/13/25 10:46	VY111325
107-06-2	1,2-Dichloroethane	20.7		1	0.79	5.00	ug/Kg	11/13/25 10:46	VY111325
79-01-6	Trichloroethene	20.2		1	0.81	5.00	ug/Kg	11/13/25 10:46	VY111325
78-87-5	1,2-Dichloropropane	21.1		1	0.91	5.00	ug/Kg	11/13/25 10:46	VY111325
75-27-4	Bromodichloromethane	21.0		1	0.78	5.00	ug/Kg	11/13/25 10:46	VY111325
108-10-1	4-Methyl-2-Pentanone	100		1	3.60	25.0	ug/Kg	11/13/25 10:46	VY111325
108-88-3	Toluene	21.3		1	0.78	5.00	ug/Kg	11/13/25 10:46	VY111325
10061-02-6	t-1,3-Dichloropropene	20.4		1	0.65	5.00	ug/Kg	11/13/25 10:46	VY111325
10061-01-5	cis-1,3-Dichloropropene	20.7		1	0.62	5.00	ug/Kg	11/13/25 10:46	VY111325
79-00-5	1,1,2-Trichloroethane	20.5		1	0.92	5.00	ug/Kg	11/13/25 10:46	VY111325
591-78-6	2-Hexanone	110		1	3.70	25.0	ug/Kg	11/13/25 10:46	VY111325
124-48-1	Dibromochloromethane	20.2		1	0.87	5.00	ug/Kg	11/13/25 10:46	VY111325
106-93-4	1,2-Dibromoethane	20.4		1	0.88	5.00	ug/Kg	11/13/25 10:46	VY111325
127-18-4	Tetrachloroethene	19.5		1	1.10	5.00	ug/Kg	11/13/25 10:46	VY111325
108-90-7	Chlorobenzene	19.7		1	0.91	5.00	ug/Kg	11/13/25 10:46	VY111325
100-41-4	Ethyl Benzene	19.4		1	0.67	5.00	ug/Kg	11/13/25 10:46	VY111325
179601-23-1	m/p-Xylenes	39.1		1	1.20	10.0	ug/Kg	11/13/25 10:46	VY111325
95-47-6	o-Xylene	19.1		1	0.82	5.00	ug/Kg	11/13/25 10:46	VY111325
100-42-5	Styrene	19.5		1	0.71	5.00	ug/Kg	11/13/25 10:46	VY111325
75-25-2	Bromoform	22.2		1	0.86	5.00	ug/Kg	11/13/25 10:46	VY111325

Raw Data: **VY023776.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.			Date Collected:	
Project:	Jones Beach Concrete			Date Received:	
Client Sample ID:	VY1113SBS01			SDG No.:	Q3615
Lab Sample ID:	VY1113SBS01			Matrix:	SOIL
Analytical Method:	8260D	Level:	LOW	% Solid:	100
Sample Wt/Vol:	5 g	Final Vol:	5000 uL	Test:	VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	20.8		1	0.78	5.00	ug/Kg	11/13/25 10:46	VY111325
79-34-5	1,1,2,2-Tetrachloroethane	19.5		1	1.20	5.00	ug/Kg	11/13/25 10:46	VY111325
541-73-1	1,3-Dichlorobenzene	19.9		1	1.70	5.00	ug/Kg	11/13/25 10:46	VY111325
106-46-7	1,4-Dichlorobenzene	19.8		1	1.60	5.00	ug/Kg	11/13/25 10:46	VY111325
95-50-1	1,2-Dichlorobenzene	19.6		1	1.50	5.00	ug/Kg	11/13/25 10:46	VY111325
96-12-8	1,2-Dibromo-3-Chloropropane	18.5		1	1.80	5.00	ug/Kg	11/13/25 10:46	VY111325
120-82-1	1,2,4-Trichlorobenzene	18.5		1	3.00	5.00	ug/Kg	11/13/25 10:46	VY111325
87-61-6	1,2,3-Trichlorobenzene	19.1		1	3.20	5.00	ug/Kg	11/13/25 10:46	VY111325
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	50.7			63 - 155	101%	SPK: 50		
1868-53-7	Dibromofluoromethane	50.1			70 - 134	100%	SPK: 50		
2037-26-5	Toluene-d8	51.1			74 - 123	102%	SPK: 50		
460-00-4	4-Bromofluorobenzene	62.2			52 - 138	124%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	545000							
540-36-3	1,4-Difluorobenzene	821000							
3114-55-4	Chlorobenzene-d5	760000							
3855-82-1	1,4-Dichlorobenzene-d4	418000							

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023776.D
Acq On : 13 Nov 2025 10:46
Operator : SY/MD
Sample : VY1113SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 04:23:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	545029	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	820567	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	760023	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	418145	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	235681	50.693	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 101.380%			
35) Dibromofluoromethane	7.634	113	256940	50.105	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 100.220%			
50) Toluene-d8	10.103	98	976007	51.094	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 102.180%			
62) 4-Bromofluorobenzene	12.402	95	384143	62.185	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 124.360%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	79594	22.247	ug/l	97
3) Chloromethane	2.074	50	106278	21.228	ug/l	99
4) Vinyl Chloride	2.202	62	131346	20.161	ug/l	99
5) Bromomethane	2.592	94	109472	19.977	ug/l	100
6) Chloroethane	2.733	64	88056	19.556	ug/l	99
7) Trichlorofluoromethane	3.056	101	199401	21.733	ug/l	100
8) Diethyl Ether	3.458	74	51454	20.912	ug/l	98
9) 1,1,2-Trichlorotrifluo...	3.818	101	109549	21.671	ug/l	99
10) Methyl Iodide	4.007	142	106137	17.780	ug/l	98
11) Tert butyl alcohol	4.842	59	46387	154.737	ug/l #	86
12) 1,1-Dichloroethene	3.787	96	104547	21.469	ug/l	97
13) Acrolein	3.653	56	32558	84.498	ug/l	97
14) Allyl chloride	4.385	41	129235	21.804	ug/l	95
15) Acrylonitrile	5.055	53	100126	106.484	ug/l	99
16) Acetone	3.866	43	138157	119.550	ug/l	97
17) Carbon Disulfide	4.104	76	320170	21.422	ug/l	100
18) Methyl Acetate	4.385	43	42045	16.495	ug/l	98
19) Methyl tert-butyl Ether	5.116	73	227189	20.120	ug/l	99
20) Methylene Chloride	4.616	84	124301	22.281	ug/l	95
21) trans-1,2-Dichloroethene	5.116	96	114996	20.944	ug/l	92
22) Diisopropyl ether	6.019	45	293002	22.185	ug/l	96
23) Vinyl Acetate	5.958	43	772434	109.596	ug/l	97
24) 1,1-Dichloroethane	5.915	63	189891	21.582	ug/l	99
25) 2-Butanone	6.896	43	150376	112.546	ug/l	97
26) 2,2-Dichloropropane	6.884	77	177614	21.945	ug/l	98
27) cis-1,2-Dichloroethene	6.890	96	129453	20.644	ug/l	97
28) Bromochloromethane	7.244	49	72758	21.597	ug/l	94
29) Tetrahydrofuran	7.256	42	73131	102.773	ug/l	95
30) Chloroform	7.421	83	209452	21.336	ug/l	96
31) Cyclohexane	7.701	56	164132	21.420	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	187015	21.315	ug/l	99
36) 1,1-Dichloropropene	7.835	75	143675	20.967	ug/l	98
37) Ethyl Acetate	6.982	43	54421	20.515	ug/l	99
38) Carbon Tetrachloride	7.817	117	166738	20.652	ug/l	98
39) Methylcyclohexane	9.109	83	176587	20.169	ug/l	95
40) Benzene	8.079	78	457268	21.171	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023776.D
Acq On : 13 Nov 2025 10:46
Operator : SY/MD
Sample : VY1113SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 04:23:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.226	41	25725	17.766 ug/l #	73
42) 1,2-Dichloroethane	8.158	62	113325	20.739 ug/l	100
43) Isopropyl Acetate	8.195	43	101503	20.365 ug/l	98
44) Trichloroethene	8.866	130	125002	20.150 ug/l	100
45) 1,2-Dichloropropane	9.140	63	100412	21.064 ug/l	97
46) Dibromomethane	9.231	93	61074	20.678 ug/l	95
47) Bromodichloromethane	9.420	83	156275	20.986 ug/l	100
48) Methyl methacrylate	9.219	41	44060	18.711 ug/l	97
49) 1,4-Dioxane	9.225	88	12378	409.501 ug/l	97
51) 4-Methyl-2-Pentanone	10.000	43	270250	101.958 ug/l	99
52) Toluene	10.170	92	293575	21.290 ug/l	99
53) t-1,3-Dichloropropene	10.390	75	128390	20.376 ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	156524	20.734 ug/l	98
55) 1,1,2-Trichloroethane	10.573	97	81108	20.548 ug/l	95
56) Ethyl methacrylate	10.438	69	85667	19.698 ug/l	99
57) 1,3-Dichloropropane	10.713	76	129224	20.640 ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	203517	101.981 ug/l	98
59) 2-Hexanone	10.762	43	204847	105.930 ug/l	98
60) Dibromochloromethane	10.908	129	109389	20.170 ug/l	98
61) 1,2-Dibromoethane	11.012	107	75698	20.435 ug/l	97
64) Tetrachloroethene	10.646	164	154096	19.480 ug/l	98
65) Chlorobenzene	11.438	112	326124	19.711 ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	113251	19.357 ug/l	99
67) Ethyl Benzene	11.518	91	519543	19.401 ug/l	98
68) m/p-Xylenes	11.627	106	417915	39.061 ug/l	97
69) o-Xylene	11.957	106	188450	19.054 ug/l	97
70) Styrene	11.969	104	318461	19.516 ug/l	99
71) Bromoform	12.127	173	75763	22.172 ug/l #	99
73) Isopropylbenzene	12.255	105	580787	20.767 ug/l	100
74) N-amyl acetate	12.066	43	83531	17.642 ug/l	91
75) 1,1,2,2-Tetrachloroethane	12.505	83	87155	19.513 ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	63683m	18.818 ug/l	
77) Bromobenzene	12.530	156	149004	20.540 ug/l	98
78) n-propylbenzene	12.591	91	688982	20.945 ug/l	100
79) 2-Chlorotoluene	12.676	91	405941	21.266 ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	494452	21.761 ug/l	98
81) trans-1,4-Dichloro-2-b...	12.304	75	29575	19.751 ug/l	90
82) 4-Chlorotoluene	12.773	91	425037	21.590 ug/l	99
83) tert-Butylbenzene	12.993	119	418202	20.208 ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	469133	20.845 ug/l	99
85) sec-Butylbenzene	13.176	105	614481	20.586 ug/l	100
86) p-Isopropyltoluene	13.292	119	513632	20.327 ug/l	99
87) 1,3-Dichlorobenzene	13.286	146	284549	19.929 ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	277351	19.775 ug/l	99
89) n-Butylbenzene	13.615	91	429665	19.554 ug/l	99
90) Hexachloroethane	13.877	117	103951	19.143 ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	240850	19.574 ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	12745	18.532 ug/l	98
93) 1,2,4-Trichlorobenzene	14.919	180	130145	18.492 ug/l	98
94) Hexachlorobutadiene	15.023	225	89012	19.303 ug/l	99
95) Naphthalene	15.145	128	180841	18.413 ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	112209	19.082 ug/l	100

Sample Results: **VY023776.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023776.D
Acq On : 13 Nov 2025 10:46
Operator : SY/MD
Sample : VY1113SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 04:23:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

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

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

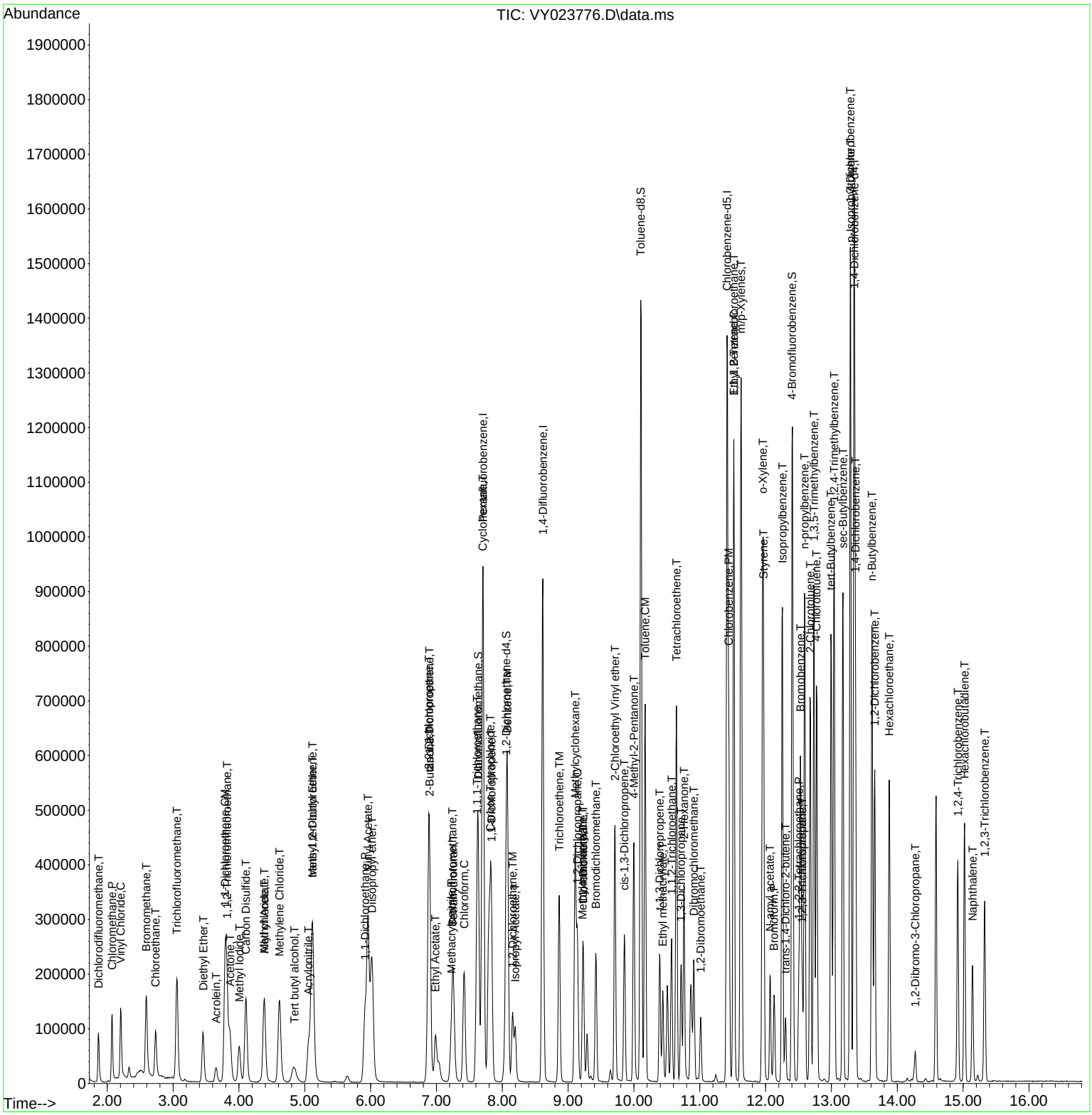
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023776.D
Acq On : 13 Nov 2025 10:46
Operator : SY/MD
Sample : VY1113SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 14 04:23:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBS01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025



Raw Data: **VY023777.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	
Project:	Jones Beach Concrete	Date Received:	
Client Sample ID:	VY1113SBSD01	SDG No.:	Q3615
Lab Sample ID:	VY1113SBSD01	Matrix:	SOIL
Analytical Method:	8260D	Level: LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
75-71-8	Dichlorodifluoromethane	21.9		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
74-87-3	Chloromethane	20.2		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
75-01-4	Vinyl Chloride	19.4		1	0.79	5.00	ug/Kg	11/13/25 11:09	VY111325
74-83-9	Bromomethane	18.6		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
75-00-3	Chloroethane	18.9		1	1.30	5.00	ug/Kg	11/13/25 11:09	VY111325
75-69-4	Trichlorofluoromethane	20.1		1	1.20	5.00	ug/Kg	11/13/25 11:09	VY111325
76-13-1	1,1,2-Trichlorotrifluoroethane	21.1		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
75-35-4	1,1-Dichloroethene	20.4		1	1.00	5.00	ug/Kg	11/13/25 11:09	VY111325
67-64-1	Acetone	110		1	4.70	25.0	ug/Kg	11/13/25 11:09	VY111325
75-15-0	Carbon Disulfide	20.5		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
1634-04-4	Methyl tert-butyl Ether	19.4		1	0.73	5.00	ug/Kg	11/13/25 11:09	VY111325
79-20-9	Methyl Acetate	15.6		1	1.50	5.00	ug/Kg	11/13/25 11:09	VY111325
75-09-2	Methylene Chloride	20.3		1	3.50	10.0	ug/Kg	11/13/25 11:09	VY111325
156-60-5	trans-1,2-Dichloroethene	20.5		1	0.86	5.00	ug/Kg	11/13/25 11:09	VY111325
75-34-3	1,1-Dichloroethane	20.9		1	0.80	5.00	ug/Kg	11/13/25 11:09	VY111325
110-82-7	Cyclohexane	21.0		1	0.79	5.00	ug/Kg	11/13/25 11:09	VY111325
78-93-3	2-Butanone	110		1	6.50	25.0	ug/Kg	11/13/25 11:09	VY111325
56-23-5	Carbon Tetrachloride	20.3		1	0.97	5.00	ug/Kg	11/13/25 11:09	VY111325
156-59-2	cis-1,2-Dichloroethene	20.1		1	0.75	5.00	ug/Kg	11/13/25 11:09	VY111325
74-97-5	Bromochloromethane	21.1		1	1.20	5.00	ug/Kg	11/13/25 11:09	VY111325
67-66-3	Chloroform	20.5		1	0.84	5.00	ug/Kg	11/13/25 11:09	VY111325
71-55-6	1,1,1-Trichloroethane	20.6		1	0.93	5.00	ug/Kg	11/13/25 11:09	VY111325
108-87-2	Methylcyclohexane	19.8		1	0.91	5.00	ug/Kg	11/13/25 11:09	VY111325
71-43-2	Benzene	20.6		1	0.79	5.00	ug/Kg	11/13/25 11:09	VY111325
107-06-2	1,2-Dichloroethane	19.5		1	0.79	5.00	ug/Kg	11/13/25 11:09	VY111325
79-01-6	Trichloroethene	19.3		1	0.81	5.00	ug/Kg	11/13/25 11:09	VY111325
78-87-5	1,2-Dichloropropane	20.6		1	0.91	5.00	ug/Kg	11/13/25 11:09	VY111325
75-27-4	Bromodichloromethane	20.3		1	0.78	5.00	ug/Kg	11/13/25 11:09	VY111325
108-10-1	4-Methyl-2-Pentanone	97.3		1	3.60	25.0	ug/Kg	11/13/25 11:09	VY111325
108-88-3	Toluene	20.6		1	0.78	5.00	ug/Kg	11/13/25 11:09	VY111325
10061-02-6	t-1,3-Dichloropropene	19.6		1	0.65	5.00	ug/Kg	11/13/25 11:09	VY111325
10061-01-5	cis-1,3-Dichloropropene	19.9		1	0.62	5.00	ug/Kg	11/13/25 11:09	VY111325
79-00-5	1,1,2-Trichloroethane	19.7		1	0.92	5.00	ug/Kg	11/13/25 11:09	VY111325
591-78-6	2-Hexanone	100		1	3.70	25.0	ug/Kg	11/13/25 11:09	VY111325
124-48-1	Dibromochloromethane	19.4		1	0.87	5.00	ug/Kg	11/13/25 11:09	VY111325
106-93-4	1,2-Dibromoethane	19.2		1	0.88	5.00	ug/Kg	11/13/25 11:09	VY111325
127-18-4	Tetrachloroethene	19.1		1	1.10	5.00	ug/Kg	11/13/25 11:09	VY111325
108-90-7	Chlorobenzene	19.9		1	0.91	5.00	ug/Kg	11/13/25 11:09	VY111325
100-41-4	Ethyl Benzene	20.1		1	0.67	5.00	ug/Kg	11/13/25 11:09	VY111325
179601-23-1	m/p-Xylenes	40.7		1	1.20	10.0	ug/Kg	11/13/25 11:09	VY111325
95-47-6	o-Xylene	19.7		1	0.82	5.00	ug/Kg	11/13/25 11:09	VY111325
100-42-5	Styrene	20.0		1	0.71	5.00	ug/Kg	11/13/25 11:09	VY111325
75-25-2	Bromoform	18.9		1	0.86	5.00	ug/Kg	11/13/25 11:09	VY111325

Raw Data: **VY023777.D**

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

Report of Analysis

Client:	Core Environmental Consultants and Services, Inc.	Date Collected:	
Project:	Jones Beach Concrete	Date Received:	
Client Sample ID:	VY1113SBSD01	SDG No.:	Q3615
Lab Sample ID:	VY1113SBSD01	Matrix:	SOIL
Analytical Method:	8260D	Level: LOW	% Solid: 100
Sample Wt/Vol:	5 g	Final Vol: 5000 uL	Test: VOC-TCLVOA-10

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
98-82-8	Isopropylbenzene	20.3		1	0.78	5.00	ug/Kg	11/13/25 11:09	VY111325
79-34-5	1,1,2,2-Tetrachloroethane	20.4		1	1.20	5.00	ug/Kg	11/13/25 11:09	VY111325
541-73-1	1,3-Dichlorobenzene	19.8		1	1.70	5.00	ug/Kg	11/13/25 11:09	VY111325
106-46-7	1,4-Dichlorobenzene	19.7		1	1.60	5.00	ug/Kg	11/13/25 11:09	VY111325
95-50-1	1,2-Dichlorobenzene	19.6		1	1.50	5.00	ug/Kg	11/13/25 11:09	VY111325
96-12-8	1,2-Dibromo-3-Chloropropane	19.7		1	1.80	5.00	ug/Kg	11/13/25 11:09	VY111325
120-82-1	1,2,4-Trichlorobenzene	22.3		1	3.00	5.00	ug/Kg	11/13/25 11:09	VY111325
87-61-6	1,2,3-Trichlorobenzene	23.5		1	3.20	5.00	ug/Kg	11/13/25 11:09	VY111325
SURROGATES									
17060-07-0	1,2-Dichloroethane-d4	51.8			63 - 155	104%	SPK: 50		
1868-53-7	Dibromofluoromethane	51.6			70 - 134	103%	SPK: 50		
2037-26-5	Toluene-d8	52.9			74 - 123	106%	SPK: 50		
460-00-4	4-Bromofluorobenzene	53.2			52 - 138	106%	SPK: 50		
INTERNAL STANDARDS		**Area Count**							
363-72-4	Pentafluorobenzene	571000							
540-36-3	1,4-Difluorobenzene	855000							
3114-55-4	Chlorobenzene-d5	745000							
3855-82-1	1,4-Dichlorobenzene-d4	371000							

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023777.D
Acq On : 13 Nov 2025 11:09
Operator : SY/MD
Sample : VY1113SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 14 04:24:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBSD01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.707	168	571249	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	854908	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	744787	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	370605	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	252195	51.755	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 103.520%			
35) Dibromofluoromethane	7.634	113	275464	51.560	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 103.120%			
50) Toluene-d8	10.103	98	1051858	52.853	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 105.700%			
62) 4-Bromofluorobenzene	12.402	95	342483	53.214	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 106.420%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.867	85	82044	21.880	ug/l	99
3) Chloromethane	2.074	50	105950	20.191	ug/l	99
4) Vinyl Chloride	2.208	62	132501	19.405	ug/l	97
5) Bromomethane	2.592	94	106704	18.578	ug/l	98
6) Chloroethane	2.733	64	89145	18.890	ug/l	98
7) Trichlorofluoromethane	3.056	101	193519	20.123	ug/l	97
8) Diethyl Ether	3.458	74	50893	19.735	ug/l	95
9) 1,1,2-Trichlorotrifluo...	3.818	101	112004	21.139	ug/l	99
10) Methyl Iodide	4.007	142	112238	17.939	ug/l	99
11) Tert butyl alcohol	4.848	59	39520	125.779	ug/l #	94
12) 1,1-Dichloroethene	3.787	96	104144	20.405	ug/l	94
13) Acrolein	3.653	56	31573	78.180	ug/l	97
14) Allyl chloride	4.385	41	128784	20.730	ug/l	95
15) Acrylonitrile	5.061	53	99415	100.875	ug/l	99
16) Acetone	3.866	43	133888	110.538	ug/l	96
17) Carbon Disulfide	4.104	76	321723	20.538	ug/l	99
18) Methyl Acetate	4.385	43	41752	15.628	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	229916	19.427	ug/l	99
20) Methylene Chloride	4.616	84	118437	20.255	ug/l	98
21) trans-1,2-Dichloroethene	5.116	96	118069	20.517	ug/l	97
22) Diisopropyl ether	6.019	45	296346	21.408	ug/l	96
23) Vinyl Acetate	5.964	43	773184	104.667	ug/l	100
24) 1,1-Dichloroethane	5.915	63	192988	20.927	ug/l	99
25) 2-Butanone	6.896	43	148847	106.288	ug/l	99
26) 2,2-Dichloropropane	6.884	77	177700	20.948	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	132037	20.089	ug/l	98
28) Bromochloromethane	7.244	49	74503	21.100	ug/l	94
29) Tetrahydrofuran	7.262	42	72197	96.803	ug/l	98
30) Chloroform	7.421	83	211322	20.538	ug/l	99
31) Cyclohexane	7.701	56	168746	21.012	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	189251	20.580	ug/l	100
36) 1,1-Dichloropropene	7.835	75	147160	20.613	ug/l	99
37) Ethyl Acetate	6.982	43	55692	20.151	ug/l	99
38) Carbon Tetrachloride	7.817	117	171022	20.332	ug/l	97
39) Methylcyclohexane	9.109	83	180758	19.816	ug/l	96
40) Benzene	8.079	78	464263	20.631	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023777.D
Acq On : 13 Nov 2025 11:09
Operator : SY/MD
Sample : VY1113SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 14 04:24:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBSD01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.220	41	25322m	16.786	ug/l		
42) 1,2-Dichloroethane	8.152	62	111254	19.542	ug/l		99
43) Isopropyl Acetate	8.195	43	99669	19.194	ug/l		99
44) Trichloroethene	8.866	130	124906	19.325	ug/l		96
45) 1,2-Dichloropropane	9.140	63	102474	20.633	ug/l		99
46) Dibromomethane	9.231	93	59853	19.450	ug/l		97
47) Bromodichloromethane	9.420	83	157413	20.289	ug/l		98
48) Methyl methacrylate	9.219	41	46318	18.879	ug/l		96
49) 1,4-Dioxane	9.231	88	12032	382.065	ug/l		92
51) 4-Methyl-2-Pentanone	10.000	43	268785	97.332	ug/l		99
52) Toluene	10.170	92	296348	20.627	ug/l		99
53) t-1,3-Dichloropropene	10.390	75	128802	19.620	ug/l		98
54) cis-1,3-Dichloropropene	9.853	75	156760	19.931	ug/l		97
55) 1,1,2-Trichloroethane	10.573	97	81084	19.717	ug/l		96
56) Ethyl methacrylate	10.438	69	85612	18.895	ug/l		100
57) 1,3-Dichloropropane	10.713	76	129649	19.876	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.707	63	204228	98.226	ug/l		98
59) 2-Hexanone	10.762	43	203510	101.011	ug/l		99
60) Dibromochloromethane	10.908	129	109344	19.351	ug/l		100
61) 1,2-Dibromoethane	11.012	107	74118	19.205	ug/l		100
64) Tetrachloroethene	10.646	164	147823	19.069	ug/l		98
65) Chlorobenzene	11.438	112	323200	19.933	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.518	131	112867	19.686	ug/l		99
67) Ethyl Benzene	11.518	91	527652	20.107	ug/l		97
68) m/p-Xylenes	11.627	106	426889	40.716	ug/l		99
69) o-Xylene	11.950	106	191040	19.711	ug/l		97
70) Styrene	11.969	104	319808	19.999	ug/l		99
71) Bromoform	12.127	173	63439	18.945	ug/l	#	98
73) Isopropylbenzene	12.255	105	503084	20.296	ug/l		100
74) N-amyl acetate	12.066	43	83057	19.792	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.505	83	80572	20.353	ug/l		99
76) 1,2,3-Trichloropropane	12.554	75	57357m	19.123	ug/l		
77) Bromobenzene	12.530	156	127235	19.789	ug/l		95
78) n-propylbenzene	12.591	91	605532	20.769	ug/l		99
79) 2-Chlorotoluene	12.676	91	350932	20.742	ug/l		100
80) 1,3,5-Trimethylbenzene	12.737	105	415196	20.617	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.298	75	24733	18.636	ug/l		99
82) 4-Chlorotoluene	12.773	91	361606	20.725	ug/l		99
83) tert-Butylbenzene	12.993	119	365003	19.900	ug/l		99
84) 1,2,4-Trimethylbenzene	13.042	105	409365	20.523	ug/l		100
85) sec-Butylbenzene	13.176	105	538142	20.341	ug/l		100
86) p-Isopropyltoluene	13.292	119	449740	20.081	ug/l		99
87) 1,3-Dichlorobenzene	13.286	146	251073	19.840	ug/l		99
88) 1,4-Dichlorobenzene	13.365	146	245279	19.732	ug/l		98
89) n-Butylbenzene	13.615	91	397748	20.424	ug/l		99
90) Hexachloroethane	13.877	117	100331	20.846	ug/l		97
91) 1,2-Dichlorobenzene	13.657	146	213329	19.562	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.267	75	12030	19.736	ug/l		94
93) 1,2,4-Trichlorobenzene	14.919	180	139193	22.314	ug/l		98
94) Hexachlorobutadiene	15.023	225	96394	23.585	ug/l		100
95) Naphthalene	15.139	128	202867	21.907	ug/l		99
96) 1,2,3-Trichlorobenzene	15.328	180	122243	23.455	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023777.D
Acq On : 13 Nov 2025 11:09
Operator : SY/MD
Sample : VY1113SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBSD01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025

Quant Time: Nov 14 04:24:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

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

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

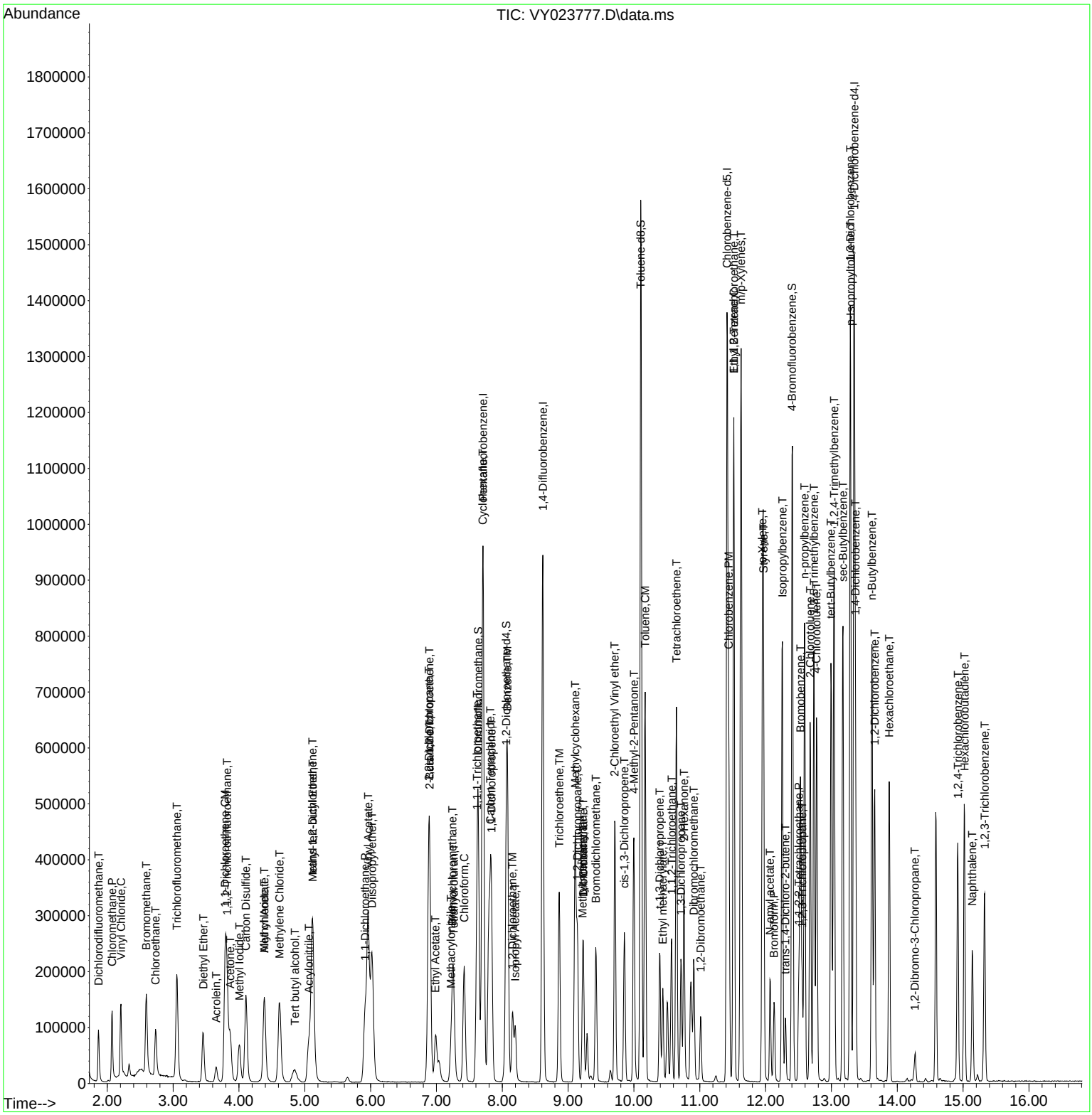
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY111325\
Data File : VY023777.D
Acq On : 13 Nov 2025 11:09
Operator : SY/MD
Sample : VY1113SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 14 04:24:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y110425S.M
Quant Title : SW846 8260
QLast Update : Wed Nov 05 04:41:50 2025
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY1113SBSD01

Manual Integrations APPROVED

Reviewed By :Amit Patel 11/14/2025
Supervised By :Mahesh Dadoda 11/14/2025



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

Manual Integration Report

Sequence:	VY110425	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VY023661.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:39:41 PM	MMDadoda	11/5/2025 2:42:20 PM	Peak Integrated by Software
VSTDICC010	VY023662.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:39:45 PM	MMDadoda	11/5/2025 2:42:23 PM	Peak Integrated by Software
VSTDICC010	VY023662.D	Methacrylonitrile	Amit	11/5/2025 2:39:45 PM	MMDadoda	11/5/2025 2:42:23 PM	Peak Integrated by Software
VSTDICC020	VY023663.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:39:50 PM	MMDadoda	11/5/2025 2:42:26 PM	Peak Integrated by Software
VSTDICC020	VY023663.D	Methacrylonitrile	Amit	11/5/2025 2:39:50 PM	MMDadoda	11/5/2025 2:42:26 PM	Peak Integrated by Software
VSTDICCC050	VY023664.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:39:54 PM	MMDadoda	11/5/2025 2:42:29 PM	Peak Integrated by Software
VSTDICC100	VY023665.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:41:22 PM	MMDadoda	11/5/2025 2:42:32 PM	Peak Integrated by Software
VSTDICC150	VY023666.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:39:59 PM	MMDadoda	11/5/2025 2:42:36 PM	Peak Integrated by Software
VSTDICV050	VY023668.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:40:02 PM	MMDadoda	11/5/2025 2:42:40 PM	Peak Integrated by Software
VSTDCCC050	VY023677.D	1,2,3-Trichloropropane	Amit	11/5/2025 2:41:12 PM	MMDadoda	11/5/2025 2:42:58 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VY111325	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY023774.D	1,2,3-Trichloropropane	Amit	11/14/2025 9:56:33 AM	MMDadoda	11/14/2025 10:56:52 AM	Peak Integrated by Software
VY1113SBS01	VY023776.D	1,2,3-Trichloropropane	Amit	11/14/2025 9:56:36 AM	MMDadoda	11/14/2025 10:56:56 AM	Peak Integrated by Software
VY1113SBSD01	VY023777.D	1,2,3-Trichloropropane	Amit	11/14/2025 9:56:39 AM	MMDadoda	11/14/2025 10:57:01 AM	Peak Integrated by Software
VY1113SBSD01	VY023777.D	Methacrylonitrile	Amit	11/14/2025 9:56:39 AM	MMDadoda	11/14/2025 10:57:01 AM	Peak Integrated by Software
VSTDCCC050	VY023784.D	1,2,3-Trichloropropane	Amit	11/14/2025 9:56:43 AM	MMDadoda	11/14/2025 10:57:05 AM	Peak Integrated by Software
VSTDCCC050	VY023784.D	Methacrylonitrile	Amit	11/14/2025 9:56:43 AM	MMDadoda	11/14/2025 10:57:05 AM	Peak Integrated by Software

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

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY110425

Review By	Amit Patel	Review On	11/5/2025 2:42:53 PM				
Supervise By	Mahesh Dadoda	Supervise On	11/6/2025 8:39:21 AM				
SubDirectory	VY110425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y110425s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP136031
Initial Calibration Stds	VP136032,VP136033,VP136034,VP136035,VP136036,VP136037
CCC	VP136050,LOD VP136051,VP136052,LOQ VP136053
Internal Standard/PEM	VP133934
ICV/I.BLK	VP136038
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY023660.D	04 Nov 2025 08:11	SY/MD	Ok
2	VSTDICC005	VY023661.D	04 Nov 2025 09:19	SY/MD	Ok,M
3	VSTDICC010	VY023662.D	04 Nov 2025 09:42	SY/MD	Ok,M
4	VSTDICC020	VY023663.D	04 Nov 2025 10:19	SY/MD	Ok,M
5	VSTDICCC050	VY023664.D	04 Nov 2025 10:42	SY/MD	Ok,M
6	VSTDICC100	VY023665.D	04 Nov 2025 11:05	SY/MD	Ok,M
7	VSTDICC150	VY023666.D	04 Nov 2025 11:27	SY/MD	Ok,M
8	VIBLK	VY023667.D	04 Nov 2025 11:51	SY/MD	Ok
9	VSTDICV050	VY023668.D	04 Nov 2025 12:14	SY/MD	Ok,M
10	VY1104SBL01	VY023669.D	04 Nov 2025 12:37	SY/MD	Ok
11	VY1104SBS01	VY023670.D	04 Nov 2025 13:14	SY/MD	Ok,M
12	VY1104SBSD01	VY023671.D	04 Nov 2025 13:37	SY/MD	Ok,M
13	Q3530-01	VY023672.D	04 Nov 2025 14:08	SY/MD	Ok,M
14	Q3530-01	VY023673.D	04 Nov 2025 14:31	SY/MD	Ok,M
15	Q3530-02	VY023674.D	04 Nov 2025 14:53	SY/MD	Ok,M
16	Q3532-03	VY023675.D	04 Nov 2025 15:16	SY/MD	Ok
17	Q3532-07	VY023676.D	04 Nov 2025 15:40	SY/MD	Ok
18	VSTDCCC050	VY023677.D	04 Nov 2025 16:26	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY111325

Review By	Amit Patel	Review On	11/14/2025 9:56:57 AM	
Supervise By	Mahesh Dadoda	Supervise On	11/14/2025 10:57:16 AM	
SubDirectory	VY111325	HP Acquire Method		HP Processing Method

STD. NAME	STD REF.#
Tune/Reschk	VP136192
Initial Calibration Stds	
CCC	VP136190,VP136191
Internal Standard/PEM	VP136146
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY023773.D	13 Nov 2025 09:06	SY/MD	Ok
2	VSTDCCC050	VY023774.D	13 Nov 2025 09:48	SY/MD	Ok,M
3	VY1113SBL01	VY023775.D	13 Nov 2025 10:17	SY/MD	Ok
4	VY1113SBS01	VY023776.D	13 Nov 2025 10:46	SY/MD	Ok,M
5	VY1113SBSD01	VY023777.D	13 Nov 2025 11:09	SY/MD	Ok,M
6	Q3615-01	VY023778.D	13 Nov 2025 11:51	SY/MD	ReRun
7	Q3615-01	VY023779.D	13 Nov 2025 12:14	SY/MD	Ok
8	Q3618-01	VY023780.D	13 Nov 2025 12:38	SY/MD	Ok
9	Q3618-02	VY023781.D	13 Nov 2025 13:01	SY/MD	Ok
10	Q3628-03	VY023782.D	13 Nov 2025 13:25	SY/MD	Ok
11	VIBLK	VY023783.D	13 Nov 2025 13:57	SY/MD	Ok
12	VSTDCCC050	VY023784.D	13 Nov 2025 14:20	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY110425

Review By	Amit Patel	Review On	11/5/2025 2:42:53 PM		
Supervise By	Mahesh Dadoda	Supervise On	11/6/2025 8:39:21 AM		
SubDirectory	VY110425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y110425s.m

STD. NAME	STD REF.#
Tune/Reschk	VP136031
Initial Calibration Stds	VP136032,VP136033,VP136034,VP136035,VP136036,VP136037
CCC	VP136050,LOD VP136051,VP136052,LOQ VP136053
Internal Standard/PEM	VP133934
ICV/I.BLK	VP136038
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY023660.D	04 Nov 2025 08:11		SY/MD	Ok
2	VSTDICC005	VSTDICC005	VY023661.D	04 Nov 2025 09:19		SY/MD	Ok,M
3	VSTDICC010	VSTDICC010	VY023662.D	04 Nov 2025 09:42		SY/MD	Ok,M
4	VSTDICC020	VSTDICC020	VY023663.D	04 Nov 2025 10:19		SY/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VY023664.D	04 Nov 2025 10:42	Comp. #95 on Linear Regression	SY/MD	Ok,M
6	VSTDICC100	VSTDICC100	VY023665.D	04 Nov 2025 11:05		SY/MD	Ok,M
7	VSTDICC150	VSTDICC150	VY023666.D	04 Nov 2025 11:27		SY/MD	Ok,M
8	VIBLK	VIBLK	VY023667.D	04 Nov 2025 11:51		SY/MD	Ok
9	VSTDICV050	ICVVY110425	VY023668.D	04 Nov 2025 12:14		SY/MD	Ok,M
10	VY1104SBL01	VY1104SBL01	VY023669.D	04 Nov 2025 12:37		SY/MD	Ok
11	VY1104SBS01	VY1104SBS01	VY023670.D	04 Nov 2025 13:14		SY/MD	Ok,M
12	VY1104SBSD01	VY1104SBSD01	VY023671.D	04 Nov 2025 13:37		SY/MD	Ok,M
13	Q3530-01	LOD-MDL-SOIL-01-QT	VY023672.D	04 Nov 2025 14:08		SY/MD	Ok,M
14	Q3530-01	LOD-MDL-SOIL-01-QT	VY023673.D	04 Nov 2025 14:31		SY/MD	Ok,M
15	Q3530-02	LOQ-SOIL-02-QT4-202	VY023674.D	04 Nov 2025 14:53		SY/MD	Ok,M
16	Q3532-03	TP-1-VOC	VY023675.D	04 Nov 2025 15:16	vial-A	SY/MD	Ok
17	Q3532-07	TP-2-VOC	VY023676.D	04 Nov 2025 15:40	vial-A	SY/MD	Ok
18	VSTDCCC050	VSTDCCC050EC	VY023677.D	04 Nov 2025 16:26		SY/MD	Ok,M

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

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY110425

Review By	Amit Patel	Review On	11/5/2025 2:42:53 PM		
Supervise By	Mahesh Dadoda	Supervise On	11/6/2025 8:39:21 AM		
SubDirectory	VY110425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y110425s.m

STD. NAME	STD REF.#
Tune/Reschk	VP136031
Initial Calibration Stds	VP136032,VP136033,VP136034,VP136035,VP136036,VP136037
CCC	VP136050,LOD VP136051,VP136052,LOQ VP136053
Internal Standard/PEM	VP133934
ICV/I.BLK	VP136038
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

M : Manual Integration

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

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY111325

Review By	Amit Patel	Review On	11/14/2025 9:56:57 AM
Supervise By	Mahesh Dadoda	Supervise On	11/14/2025 10:57:16 AM
SubDirectory	VY111325	HP Acquire Method	HP Processing Method

STD. NAME	STD REF.#
Tune/Reschk	VP136192
Initial Calibration Stds	
CCC	VP136190,VP136191
Internal Standard/PEM	VP136146
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY023773.D	13 Nov 2025 09:06		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY023774.D	13 Nov 2025 09:48		SY/MD	Ok,M
3	VY1113SBL01	VY1113SBL01	VY023775.D	13 Nov 2025 10:17		SY/MD	Ok
4	VY1113SBS01	VY1113SBS01	VY023776.D	13 Nov 2025 10:46		SY/MD	Ok,M
5	VY1113SBSD01	VY1113SBSD01	VY023777.D	13 Nov 2025 11:09		SY/MD	Ok,M
6	Q3615-01	East Bathhouse- Concr	VY023778.D	13 Nov 2025 11:51	vial-A Surrogate Fail	SY/MD	ReRun
7	Q3615-01	East Bathhouse- Concr	VY023779.D	13 Nov 2025 12:14	vial-B	SY/MD	Ok
8	Q3618-01	EME-TOP-SOIL	VY023780.D	13 Nov 2025 12:38	vial-A	SY/MD	Ok
9	Q3618-02	EME-GENERAL-FILL	VY023781.D	13 Nov 2025 13:01	vial-A	SY/MD	Ok
10	Q3628-03	TP-5-VOC	VY023782.D	13 Nov 2025 13:25	vial-A	SY/MD	Ok
11	VIBLK	VIBLK	VY023783.D	13 Nov 2025 13:57		SY/MD	Ok
12	VSTDCCC050	VSTDCCC050EC	VY023784.D	13 Nov 2025 14:20		SY/MD	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 11/13/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 11/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:27
Out Date: 11/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB137869

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3609-01	AU-713-COMP-01	1	1.15	10.53	11.68	9.74	81.6	
Q3609-02	AU-713-VOC-01	2	1.18	10.57	11.75	10.37	86.9	
Q3609-04	AU-713-COMP-02	3	1.19	10.53	11.72	10.1	84.6	
Q3609-05	AU-713-VOC-02	4	1.15	10.68	11.83	9.23	75.7	
Q3609-07	AU-713-COMP-03	5	1.19	10.33	11.52	10.00	85.3	
Q3609-08	AU-713-VOC-03	6	1.16	10.90	12.06	10.44	85.1	
Q3609-10	AU-713-COMP-04	7	1.18	10.34	11.52	9.51	80.6	
Q3609-11	AU-713-VOC-04	8	1.13	10.46	11.59	10.16	86.3	
Q3609-13	AU-713-COMP-05	9	1.14	10.49	11.63	10.05	84.9	
Q3609-14	AU-713-VOC-05	10	1.13	10.40	11.53	10.00	85.3	
Q3609-15	AU-713-COMP-05	11	1.14	10.49	11.63	10.05	84.9	
Q3610-01	AU-713-TPH-01	12	1.18	10.35	11.53	10.37	88.8	
Q3610-02	AU-713-TPH-02	13	1.19	10.50	11.69	9.48	79.0	
Q3610-03	AU-713-TPH-03	14	1.11	10.33	11.44	9.75	83.6	
Q3610-04	AU-713-TPH-04	15	1.18	10.42	11.6	9.1	76.0	
Q3610-05	AU-713-TPH-05	16	1.18	10.56	11.74	10.33	86.6	
Q3610-06	AU-713-TPH-06	17	1.19	10.37	11.56	10.03	85.2	
Q3610-07	AU-713-TPH-07	18	1.15	10.40	11.55	9.08	76.3	
Q3610-08	AU-713-TPH-08	19	1.19	10.43	11.62	10.04	84.9	
Q3610-09	AU-713-TPH-09	20	1.18	10.71	11.89	9.9	81.4	
Q3610-10	AU-713-TPH-10	21	1.16	10.24	11.4	9.96	85.9	
Q3610-11	AU-713-TPH-11	22	1.14	9.99	11.13	8.96	78.3	
Q3610-12	AU-713-TPH-12	23	1.19	10.49	11.68	9.99	83.9	
Q3610-13	AU-713-TPH-13	24	1.15	10.84	11.99	10.4	85.3	
Q3610-14	AU-713-TPH-14	25	1.18	10.50	11.68	10.44	88.2	
Q3610-15	AU-713-TPH-15	26	1.14	10.48	11.62	10.34	87.8	
Q3611-01	AU-713-01	27	1.13	10.54	11.67	9.83	82.5	
Q3611-02	AU-713-02	28	1.12	11.27	12.39	9.7	76.1	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 11/13/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 11/12/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:27
Out Date: 11/13/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB137869

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3611-03	AU-713-03	29	1.12	10.07	11.19	9.69	85.1	
Q3611-04	AU-713-04	30	1.16	10.64	11.8	9.27	76.2	
Q3611-05	AU-713-05	31	1.16	10.31	11.47	10.55	91.1	
Q3611-06	AU-713-06	32	1.18	10.70	11.88	10.14	83.7	
Q3611-07	AU-713-07	33	1.15	10.28	11.43	9.16	77.9	
Q3611-08	AU-713-08	34	1.19	10.71	11.9	10.05	82.7	
Q3611-09	AU-713-09	35	1.19	10.66	11.85	9.64	79.3	
Q3611-10	AU-713-10	36	1.17	10.13	11.3	9.79	85.1	
Q3611-11	AU-713-11	37	1.13	11.03	12.16	9.74	78.1	
Q3611-12	AU-713-12	38	1.11	10.13	11.24	9.17	79.6	
Q3611-13	AU-713-13	39	1.13	10.59	11.72	9.54	79.4	
Q3611-14	AU-713-14	40	1.16	10.23	11.39	10.02	86.6	
Q3611-15	AU-713-15	41	1.16	10.44	11.6	10.08	85.4	
Q3614-01	COMP-1	42	1.12	10.94	12.06	10.12	82.3	
Q3614-02	COMP-2	43	1.18	10.44	11.62	9.71	81.7	
Q3614-03	COMP-3	44	1.18	10.30	11.48	9.78	83.5	
Q3615-01	East Bathhouse-Concrete	45	1.00	1.00	2.00	2.00	100.0	Concreate sample
Q3618-01	EME-TOP-SOIL	46	1.18	10.33	11.51	8.44	70.3	
Q3618-02	EME-GENERAL-FILL	47	1.19	10.38	11.57	10.34	88.2	
Q3621-01	VNJ-231	48	1.16	10.38	11.54	11.06	95.4	
Q3621-02	VNJ-231	49	1.19	10.21	11.4	10.7	93.1	
Q3622-01	RT3071-SOLID	50	1.15	10.44	11.59	8.75	72.8	
Q3623-01	RBR200007-SOIL	51	1.13	10.84	11.97	10.5	86.4	
Q3623-02	RBR200007-SILICA	52	1.13	10.86	11.99	3.71	23.8	sludge sample
Q3624-01	OK-02-11122025	53	1.13	10.91	12.04	10.54	86.3	
Q3624-02	OK-02-11122025-E2	54	1.16	10.34	11.5	10.12	86.7	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

UB 137869

WorkList Name : %1-111225 **WorkList ID :** 193056 **Department :** Wet-Chemistry **Date :** 11-12-2025 07:31:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3609-01	AU-713-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-02	AU-713-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-04	AU-713-COMP-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-05	AU-713-VOC-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-07	AU-713-COMP-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-08	AU-713-VOC-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-10	AU-713-COMP-04	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-11	AU-713-VOC-04	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-13	AU-713-COMP-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-14	AU-713-VOC-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3609-15	AU-713-COMP-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-01	AU-713-TPH-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-02	AU-713-TPH-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-03	AU-713-TPH-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-04	AU-713-TPH-04	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-05	AU-713-TPH-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-06	AU-713-TPH-06	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-07	AU-713-TPH-07	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-08	AU-713-TPH-08	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-09	AU-713-TPH-09	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-10	AU-713-TPH-10	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO

Date/Time 11-12-25 15:30

Raw Sample Received by: JB WPC

Raw Sample Relinquished by: CR

Date/Time 11-12-25 17:40

Raw Sample Received by: CR

Raw Sample Relinquished by: JB WPC

WORKLIST(Hardcopy Internal Chain)

WB137869

WorkList Name : %1-111225 **WorkList ID :** 193056 **Department :** Wet-Chemistry **Date :** 11-12-2025 07:31:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3610-11	AU-713-TPH-11	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-12	AU-713-TPH-12	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-13	AU-713-TPH-13	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-14	AU-713-TPH-14	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3610-15	AU-713-TPH-15	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3611-01	AU-713-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/11/2025	Chemtech -SO
Q3611-02	AU-713-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-03	AU-713-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-04	AU-713-04	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-05	AU-713-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-06	AU-713-06	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-07	AU-713-07	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-08	AU-713-08	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-09	AU-713-09	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-10	AU-713-10	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-11	AU-713-11	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-12	AU-713-12	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-13	AU-713-13	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-14	AU-713-14	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3611-15	AU-713-15	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	11/12/2025	Chemtech -SO
Q3614-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	POWE02	J21	11/11/2025	Chemtech -SO

Date/Time 11-12-25 13:30

Raw Sample Received by: JD WC

Raw Sample Relinquished by: AP

Date/Time 11-12-25 17:40

Raw Sample Received by: AP

Raw Sample Relinquished by: JD WC

JB 1377869

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-111225 **WorkList ID :** 193056 **Department :** Wet-Chemistry **Date :** 11-12-2025 07:31:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3614-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	POWE02	J21	11/11/2025	Chemtech -SO
Q3614-03	COMP-3	Solid	Percent Solids	Cool 4 deg C	POWE02	J21	11/11/2025	Chemtech -SO
Q3615-01	East Bathhouse- Concrete	Solid	Percent Solids	Cool 4 deg C	CORE02	J32	11/12/2025	Chemtech -SO
Q3618-01	EME-TOP-SOIL	Solid	Percent Solids	Cool 4 deg C	ENTA05	D41	11/12/2025	Chemtech -SO
Q3618-02	EME-GENERAL-FILL	Solid	Percent Solids	Cool 4 deg C	ENTA05	D41	11/12/2025	Chemtech -SO
Q3621-01	VNJ-231	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/12/2025	Chemtech -SO
Q3621-02	VNJ-231	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/12/2025	Chemtech -SO
Q3622-01	RT3071-SOLID	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/12/2025	Chemtech -SO
Q3623-01	RBR200007-SOIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/12/2025	Chemtech -SO
Q3623-02	RBR200007-SILICA	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	11/12/2025	Chemtech -SO
Q3624-01	OK-02-11122025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	11/12/2025	Chemtech -SO
Q3624-02	OK-02-11122025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	11/12/2025	Chemtech -SO

Date/Time 11-12-25 15:30
Raw Sample Received by: [signature]
Raw Sample Relinquished by: [signature]

Date/Time 11-12-25 17:40
Raw Sample Received by: [signature]
Raw Sample Relinquished by: [signature]

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Prep Standard - Chemical Standard Summary

Order ID : Q3615

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VY111325,

Standard ID :
VP134147,VP134149,VP134150,VP134934,VP134957,VP135834,VP135835,VP136027,VP136028,VP136146,VP136190,VP136191,VP136192,

Chemical ID :
V13391,V14291,V14511,V14512,V14533,V14534,V14625,V14636,V14637,V14638,V14639,V14673,V14697,V14698,V14701,V14735,V14738,V14813,V14816,V14844,V14906,V14928,V14929,V14931,V14937,V14955,V14956,V15073,V15074,V15075,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
252	8260 Working STD (BCM)-First source, 100PPM	VP134147	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14673 + 19.00000ml of V14929 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1810	8260 Working Std(2-CVE)-800ppm	VP134149	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 1.00000ml of V14636 + 1.00000ml of V14637 + 1.00000ml of V14638 + 1.00000ml of V14639 + 46.00000ml of V14929 = Final Quantity: 50.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1811	8260 Working Std(2-CVE)-500ppm	VP134150	06/06/2025	12/06/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 06/10/2025

FROM 7.50000ml of V14929 + 12.50000ml of VP134149 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
249	8260 Surrogate, 100PPM	VP134934	07/29/2025	01/29/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.10000ml of V14906 + 24.90000ml of V14625 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
218	BFB, 25PPM	VP134957	08/01/2025	11/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 08/06/2025

FROM 0.50000ml of V13391 + 49.50000ml of V14625 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP135834	10/17/2025	11/16/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/17/2025

FROM 1.00000ml of V15073 + 1.50000ml of V15074 + 1.50000ml of V15075 + 21.00000ml of V14928 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
56	8260 Working STD (Acrolein) -first source, 500PPM	VP135835	10/17/2025	11/16/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 10/17/2025

FROM 7.50000ml of V14928 + 12.50000ml of VP135834 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP136027	11/04/2025	12/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/04/2025

FROM 0.40000ml of V14844 + 1.00000ml of V14511 + 1.00000ml of V14512 + 1.00000ml of V14533 + 1.00000ml of V14534 + 1.00000ml of V14701 + 1.00000ml of V14735 + 1.00000ml of V14738 + 1.00000ml of V14813 + 1.00000ml of V14816 + 1.00000ml of V14955 + 1.00000ml of V14956 + 1.50000ml of V14697 + 1.50000ml of V14698 + 10.60000ml of V14931 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
244	8260 Calibration Working STD Mix-First source, 100PPM	VP136028	11/04/2025	12/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/04/2025

FROM 5.62500ml of V14931 + 9.37500ml of VP136027 = Final Quantity: 15.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1917	8260 Internal standard 50 ppm	VP136146	11/11/2025	04/30/2026	Semsettin Yesilyurt	None	None	Mahesh Dadoda 11/12/2025

FROM 0.05000ml of V14291 + 24.95000ml of V14937 = Final Quantity: 25.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
773	50 PPB CCC, 8260-SOIL	VP136190	11/13/2025	11/14/2025	Amit Patel	None	None	Mahesh Dadoda 11/14/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135835 + 0.00250ml of VP136028 + 0.00500ml of VP136146 = Final Quantity: 5.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
773	50 PPB CCC, 8260-SOIL	VP136191	11/13/2025	11/14/2025	Amit Patel	None	None	Mahesh Dadoda 11/14/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135835 + 0.00250ml of VP136028 + 0.00500ml of VP136146 = Final Quantity: 5.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
732	BFB TUNE CHECK - SOIL	VP136192	11/13/2025	11/14/2025	Amit Patel	None	None	Mahesh Dadoda 11/14/2025

FROM 4.99800ml of W3112 + 0.00200ml of VP134957 = Final Quantity: 5.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	11/11/2026	11/11/2025 / sam	04/15/2024 / SAM	V14291

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	04/30/2026	10/31/2025 / sam	09/17/2024 / SAM	V14511

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	04/30/2026	10/31/2025 / sam	09/17/2024 / SAM	V14512

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	04/30/2026	10/31/2025 / sam	09/18/2024 / SAM	V14533

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	04/30/2026	10/31/2025 / sam	09/18/2024 / SAM	V14534

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	01/29/2026	07/29/2025 / SAM	11/26/2024 / SAM	V14625

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14636

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14637

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14638

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	12/06/2025	06/06/2025 / SAM	12/06/2024 / SAM	V14639

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0214960	12/06/2025	06/06/2025 / SAM	12/09/2024 / SAM	V14673

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14701

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14735

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	04/30/2026	10/31/2025 / sam	12/17/2024 / SAM	V14738

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	04/30/2026	10/31/2025 / sam	01/08/2025 / SAM	V14813

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS	A0220471	04/30/2026	10/31/2025 / sam	01/08/2025 / SAM	V14816

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	03/22/2026	09/22/2025 / sam	01/21/2025 / SAM	V14844

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0223904	07/29/2026	07/29/2025 / SAM	03/24/2025 / SAM	V14906

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	03/22/2026	09/22/2025 / sam	05/09/2025 / SAM	V14928

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	12/06/2025	06/06/2025 / SAM	05/09/2025 / SAM	V14929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	04/27/2026	10/27/2025 / sam	05/09/2025 / SAM	V14931

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	24G0262002	04/30/2026	10/31/2025 / Amit	05/09/2025 / SAM	V14937

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	04/30/2026	10/31/2025 / sam	05/19/2025 / SAM	V14955

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0222076	04/30/2026	10/31/2025 / sam	05/19/2025 / SAM	V14956

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15073

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	101625	11/16/2025	10/17/2025 / sam	10/17/2025 / sam	V15075

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 2310762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable Base (µeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

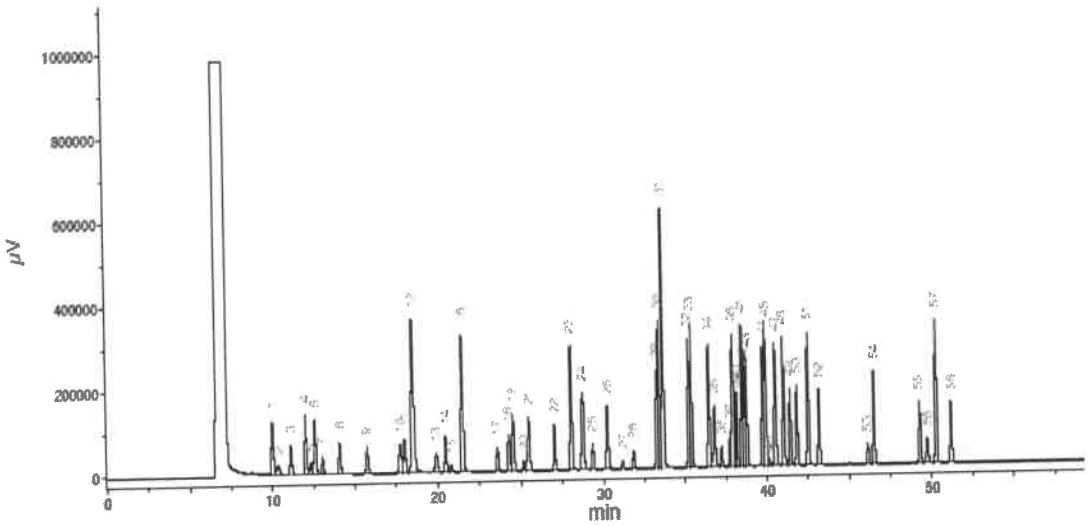
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/17/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	orl-rat 2460mg/kg
2. Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	orl-rat 700mg/kg
3. Carbon disulphide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	orl-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A
5. trans-1,4-Dichloro-2-butene	(0466)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A
6. Diethyl ether	(0153)	IK18CAS0000	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A
7. Ethyl methacrylate	(0381)	06128PX	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	orl-rat 14800mg/kg
8. Iodomethane	(0489)	SHBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm(28mg/m3/8H)(skin)	orl-rat 76mg/kg
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	orl-rat 2460mg/kg
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H)(skin)	orl-rat 120mg/kg
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm(35mg/m3/8H)(skin)	orl-rat 277mg/kg
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	orl-rat 7872mg/kg
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H)(skin)	orl-rat 780mg/kg
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	orl-rat 720mg/kg
15. Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7600mg/m3/8H)	orl-rat 43g/kg
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	orl-rat 916mg/kg
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	orl-rat 846mg/kg
19. cis-1,2-Dichloroethene	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A
20. trans-1,2-Dichloroethene	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	orl-rat 1235mg/kg
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	orl-rat 820mg/kg
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	orl-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	orl-rat 933mg/kg
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	orl-rat 2350mg/kg
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	orl-rat 908mg/kg
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	orl-rat 108mg/kg
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	orl-rat 725mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A
29. Tetrachloroethene	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.6	127-18-4	25 ppm (170mg/m3/8H)(final)	orl-rat 2629mg/kg
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	orl-rat 10300mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-8	0.001 ppm	orl-rat 170mg/kg
32. 1,2-Dibromoethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	orl-rat 108mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-06-2	50 ppm (8H)	orl-rat 670mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-87-5	75 ppm (350mg/m3/8H)	orl-rat 1947mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	unr-mus 3600mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-58-6	N/A	N/A
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.6	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	orl-rat 82mg/kg
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	orl-rat 670mg/kg
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H)(skin)	orl-rat 800mg/kg
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (45mg/m3/8H)(skin)	orl-rat 836mg/kg
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	orl-mus 2402mg/kg
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (60mg/m3/8H)	orl-rat 149.6mg/kg
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	orl-rat 4894mg/kg
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-86-1	N/A	orl-rat 2699mg/kg
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	orl-rat >2000mg/kg
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	orl-rat 4750mg/kg
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
51. Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	orl-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-88-3	200 ppm	orl-rat 5000mg/kg
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	ipr-mus 1390mg/kg
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	orl-rat 756mg/kg
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.6	23.0	95-63-6	N/A	orl-rat 5g/kg
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-67-8	N/A	orl-rat 5000mg/kg
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.8	22.9	135-98-8	N/A	orl-rat 2240mg/kg
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	orl-rat 2290mg/kg
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	orl-rat 3900mg/kg
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	orl-rat 2100mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	50 ppm (300mg/m3) (CL)	orl-rat 500mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	23.0	541-73-1	N/A	ipr-mus 1062mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	106-46-7	75 ppm (450mg/m3/8H)	orl-rat 500mg/kg
66. Isopropylbenzene	35163	101923	0.05	5.00	40000.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	98-82-8	50 ppm (245mg/m3/8H)	orl-rat 1400mg/kg
67. n-Propylbenzene	35163	101923	0.05	5.00	40003.4	2000	NA	NA	0.017	NA	NA	1999.7	23.0	103-65-1	N/A	orl-rat 8040mg/kg
68. o-Xylene	35163	101923	0.05	5.00	40040.8	2000	NA	NA	0.017	NA	NA	2001.5	23.0	95-47-6	100 ppm (435mg/m3/8H)	ipr-mus 1364mg/kg
69. p-Xylene	35163	101923	0.05	5.00	40000.6	2000	NA	NA	0.017	NA	NA	1999.5	22.9	106-42-3	100 ppm (435mg/m3/8H)	orl-rat 5g/kg

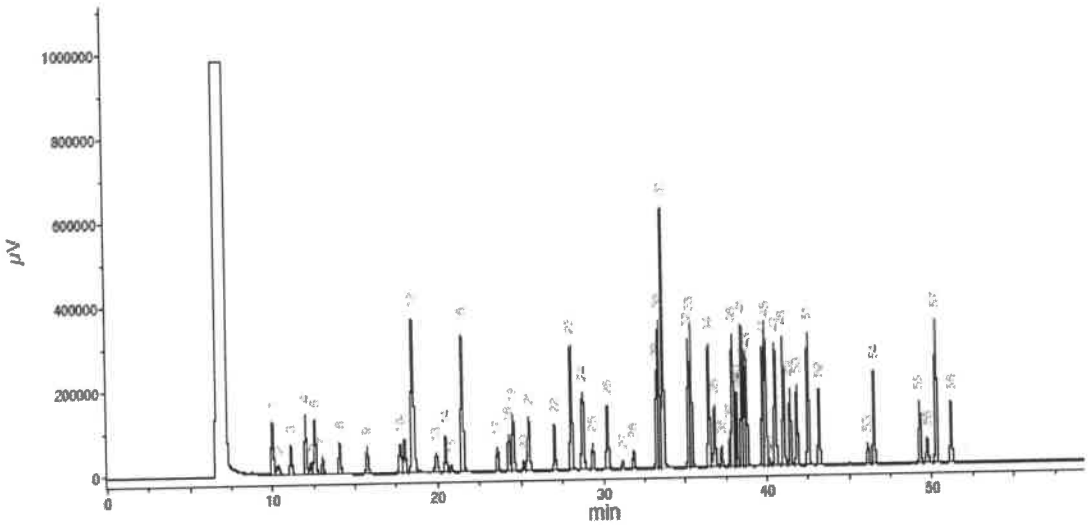
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Run 16, "P95317 L021624 (2000µg/mL in MeOH)"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,3-trifluoroethane	10.33
3	1,1-Dichloroethene	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethene	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.74
11	cis-1,2-Dichloroethene	18.00
12	Methacrylonitrile/Methyl acrylate/Chloroform	18.49
13	Isobutanol/1,1,1-Trichloroethane	18.91
14	1,1-Dichloropropene	19.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.48
17	Trichloroethene	23.86
18	1,2-Dichloropropane	24.26
19	Methyl methacrylate	24.62
20	Bromodichloromethane	25.13
21	Dibromomethane/2-Nitropropane	25.46
22	cis-1,3-Dichloropropene	27.07
23	Toluene	28.09
24	Ethyl methacrylate/trans-1,3-Dichloropropene	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.34
27	Dibromochloromethane	31.16
28	1,2-Dibromoethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.85
32	o-Xylene	35.33
33	Styrene	35.50
34	Isopropylbenzene/Bromoform	35.48
35	cis-1,4-Dichloro-2-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.92
39	trans-1,4-Dichloro-2-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.50
42	2-Chlorotoluene	38.62
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.76
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.12
50	1,4-Dichlorobenzene	41.63
51	n-Butylbenzene	42.52
52	1,2-Dichlorobenzene	42.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.58
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.46
58	1,2,3-Trichlorobenzene	51.16

Absolute Standards Inc.

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	**1-352-323-3500**
		Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

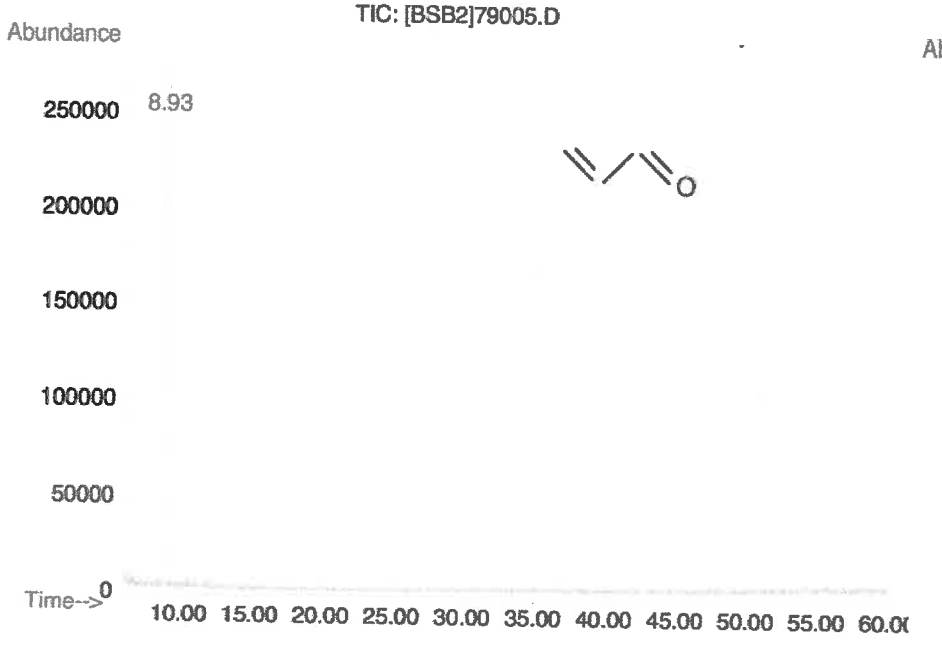
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

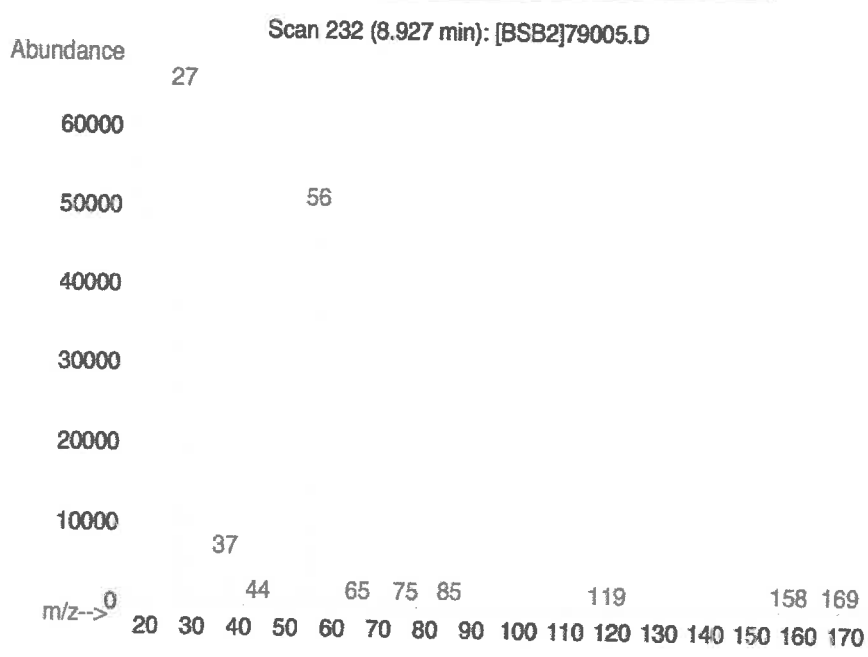
Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.). Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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Certified Reference Material CRM

Rec 09/16/24 2 Vials

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 091424
Description: Acrolein

Expiration Date: 101424
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): **Lot#**
Water 072324Q

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

Formulated By: Justin Dippold 091424 DATE

Reviewed By: Pedro L. Rentas 091424 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	orl-rat 46mg/kg

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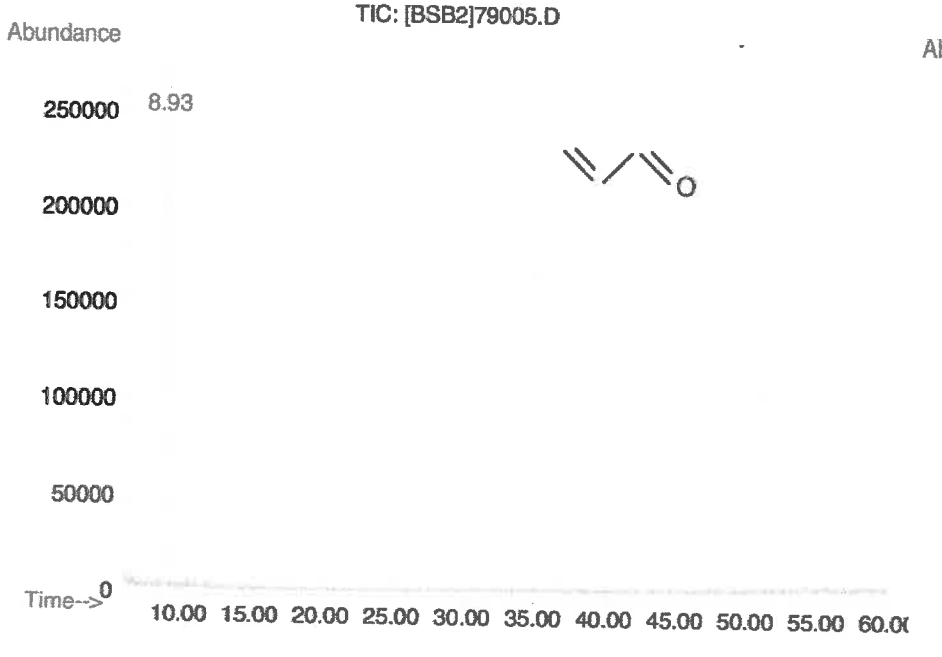

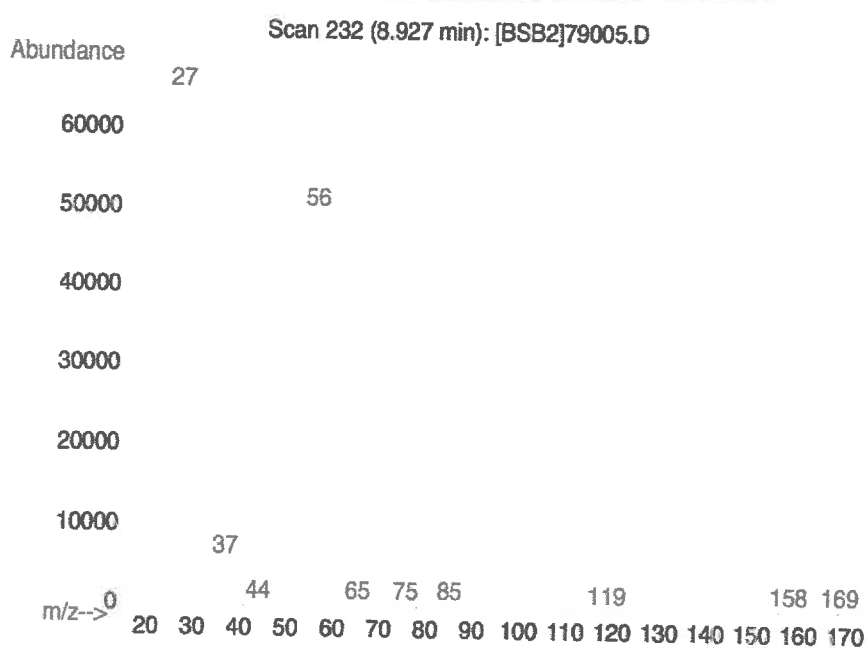

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Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

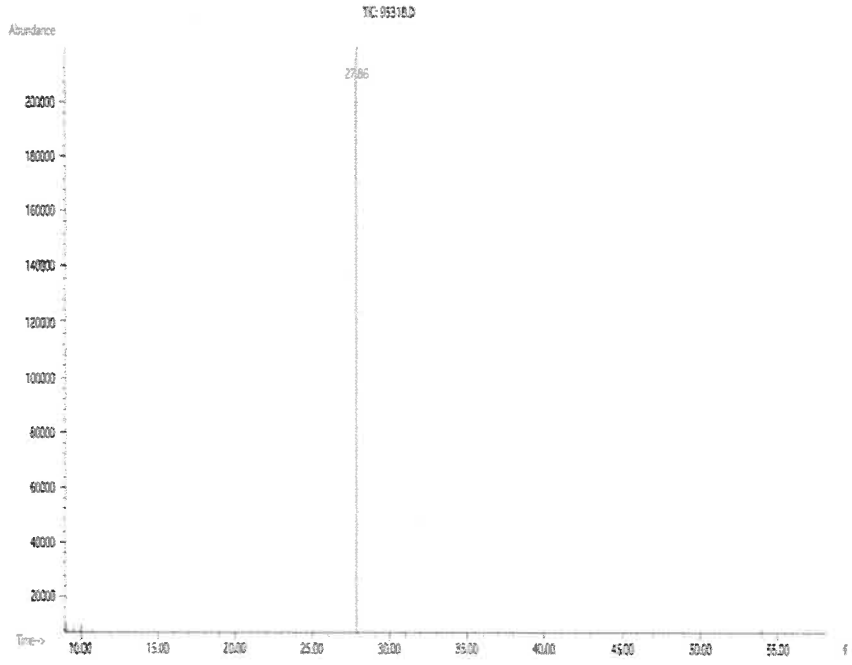
V14630 to V14649

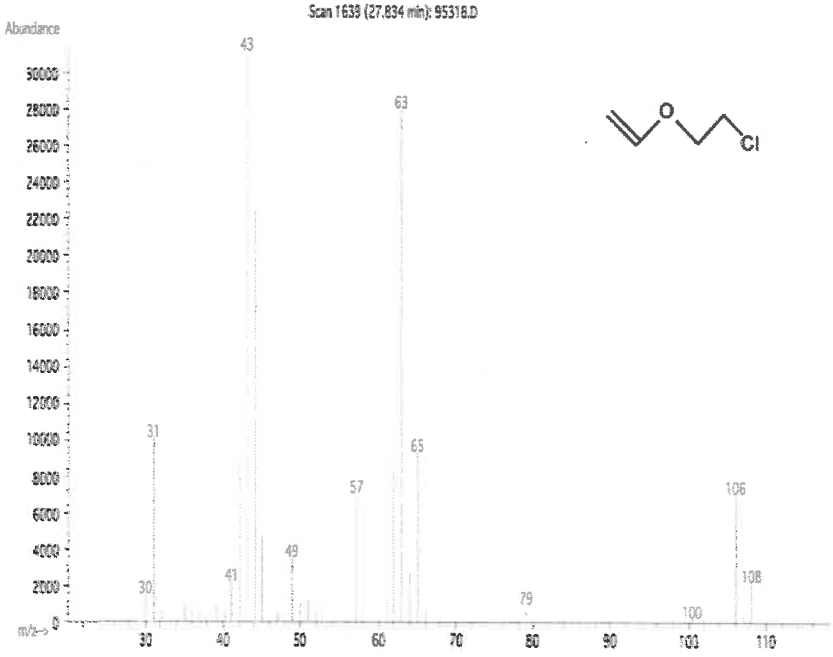
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

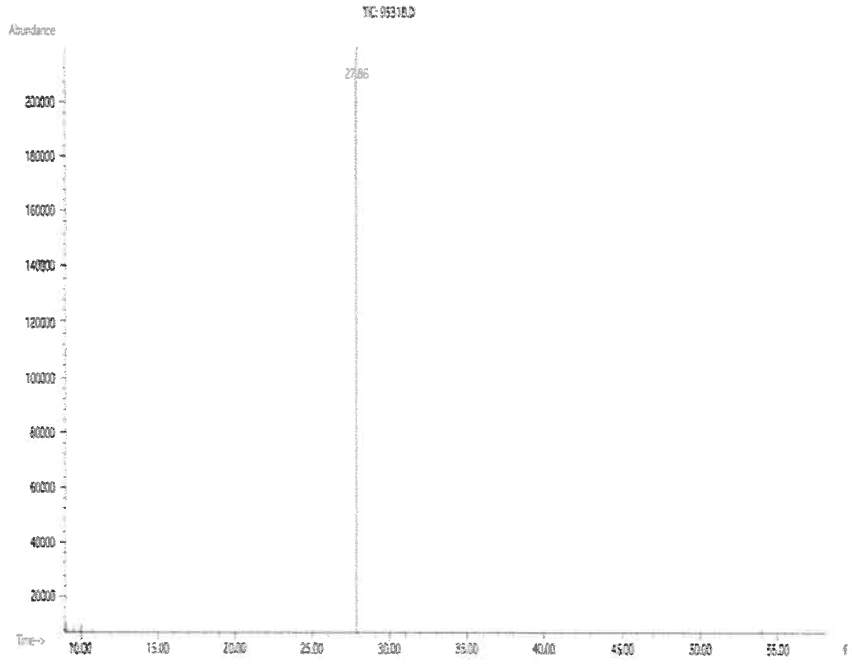
V14630 to V14649

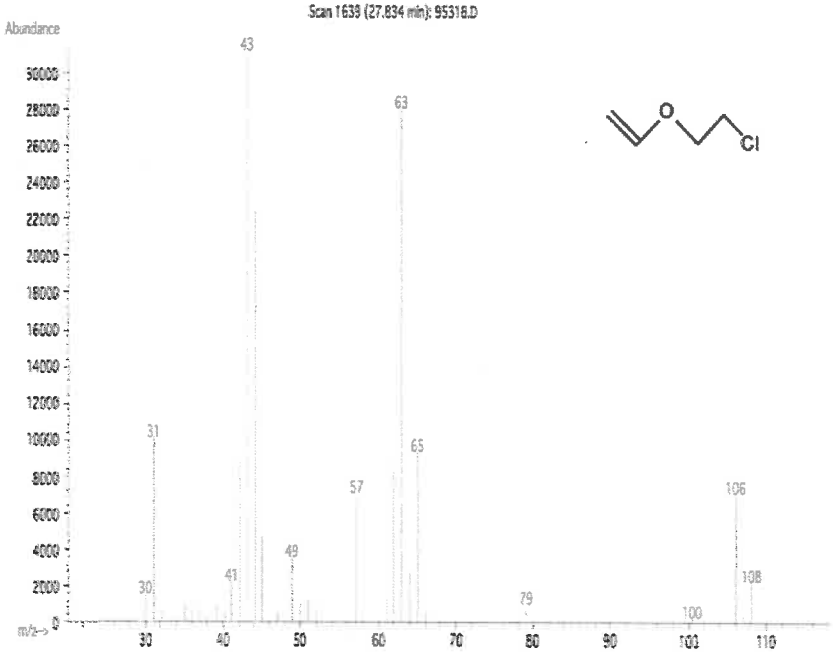
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





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H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
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Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
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Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

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Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50	15,400 mg/l - 96 h
EC50	24,500.00 mg/l - 48 h
EC100	10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 12/6/24
20 vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

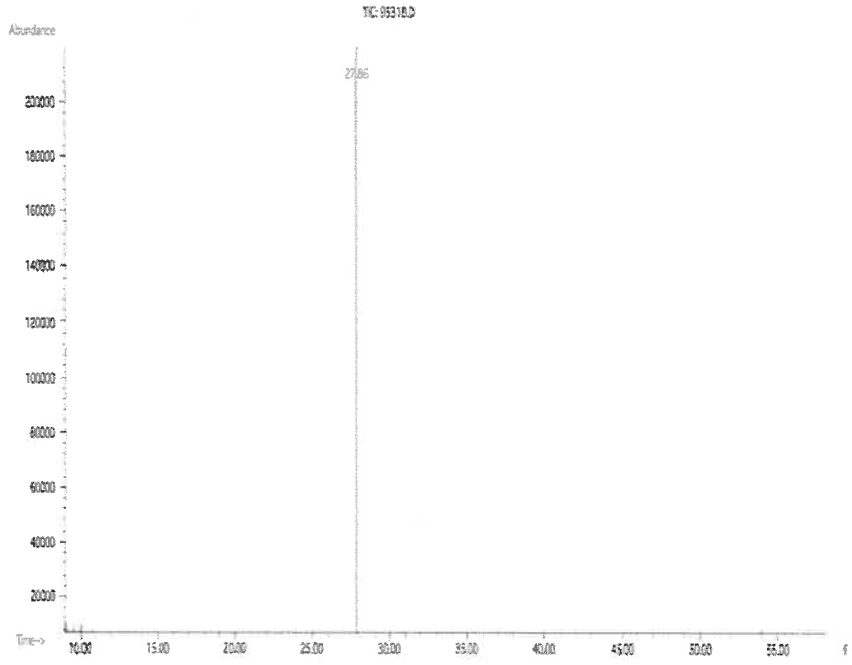
V14630 to V14649

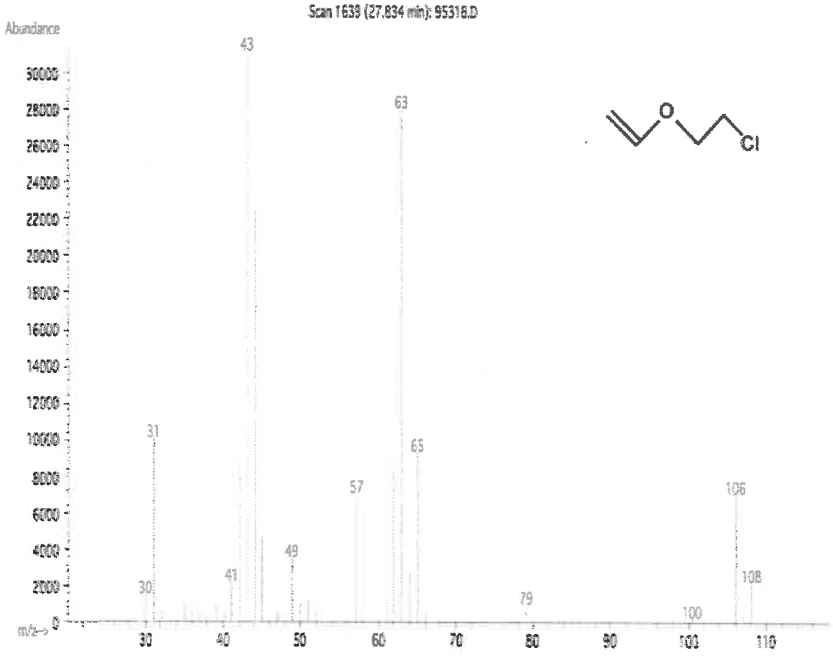
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

Prashant Chauhan	120524
Formulated By: Prashant Chauhan	DATE
Pedro L. Rentas	120524
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	ori-rat 250mg/kg

Method: GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

Safety Data Sheet (SDS) GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	**1-800-535-5053**
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International Date Prepared/Revised	**1-352-323-3500** January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	**Highly Flammable Liquid and Vapor**	**H301, 311, 331**	**Toxic if swallowed, skin contact, inhaled**
H370	**Cause damage to organs**	**H351**	**Suspected of causing cancer**
P271	**Use in ventilated area**	**P280**	**Use gloves, eye protection/face sheild**
P302,332	**If on skin, wash with soap and water**	**P305,351,338**	**If in eyes, remove contacts, rinse with water**

Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H2O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

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Dispose with normal Laboratory Solvent Waste.

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UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

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Expiration Date: 120527
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Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Solvent(s): Methanol **Lot#** EJ143-US

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Prashant Chauhan	120524
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Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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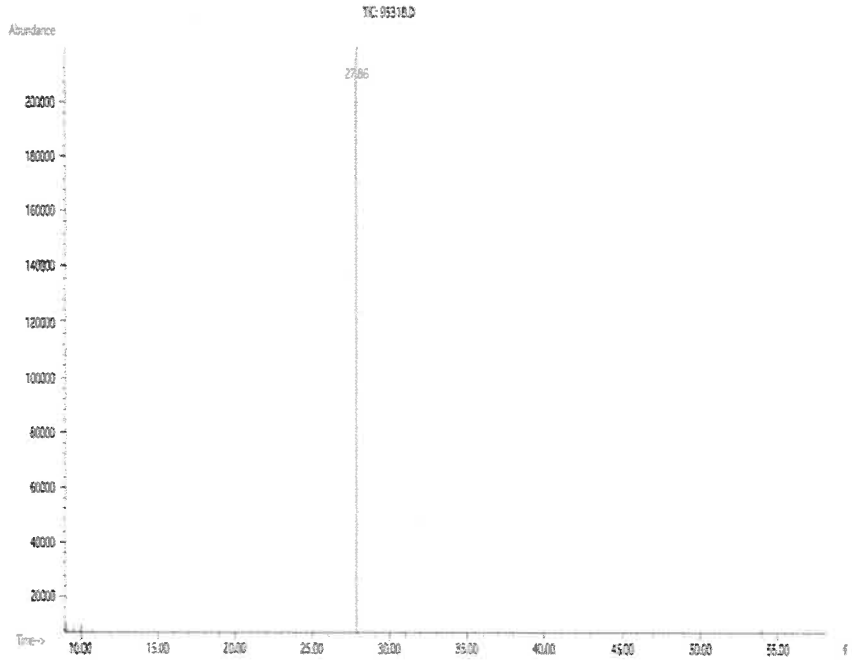

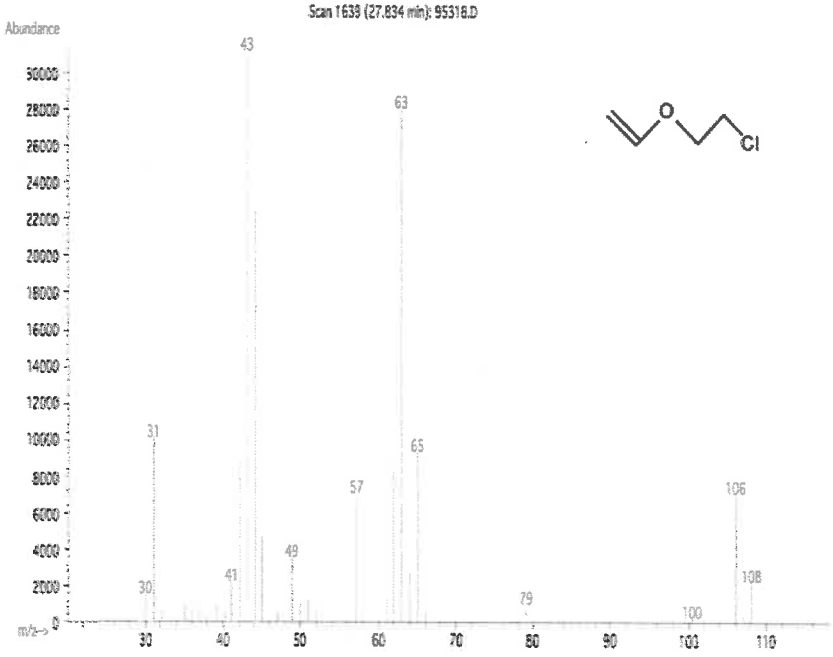

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UN number: 1230 Class: 3 Packing group: II
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RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

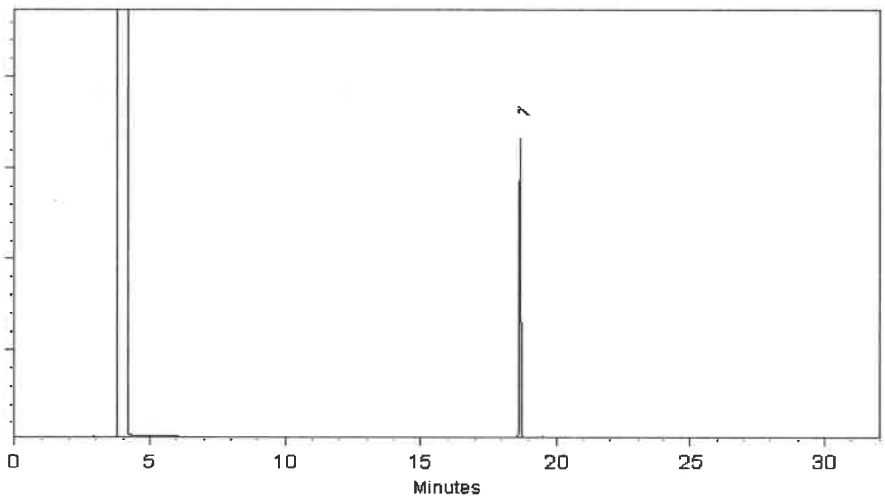
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555581 **Lot No.:** A0210184

Description : Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

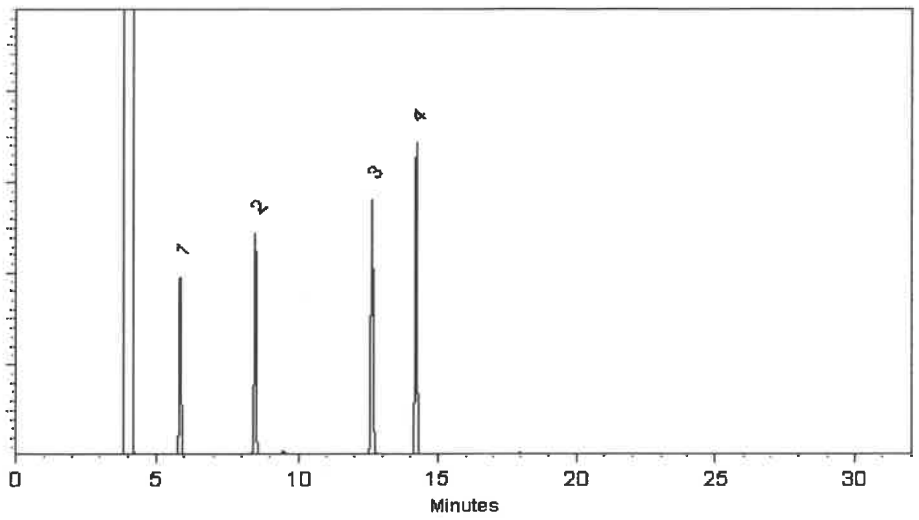
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

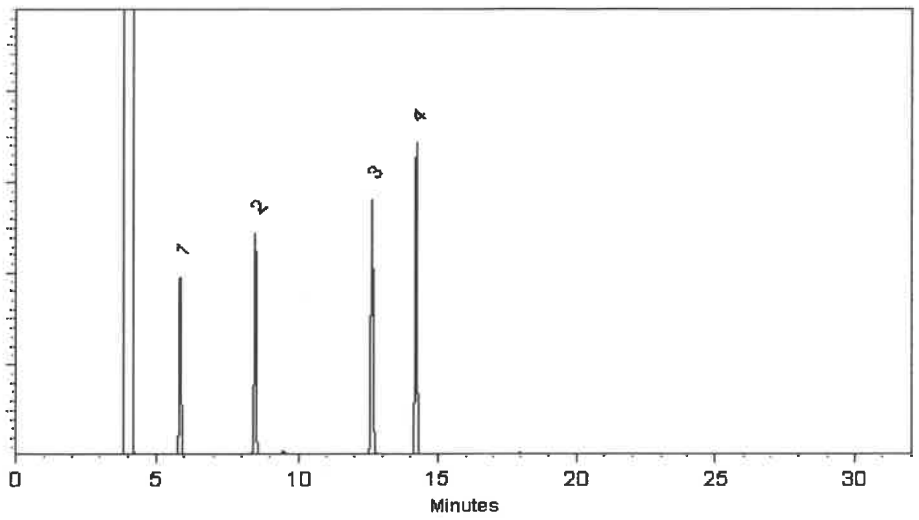
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618

Description : VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

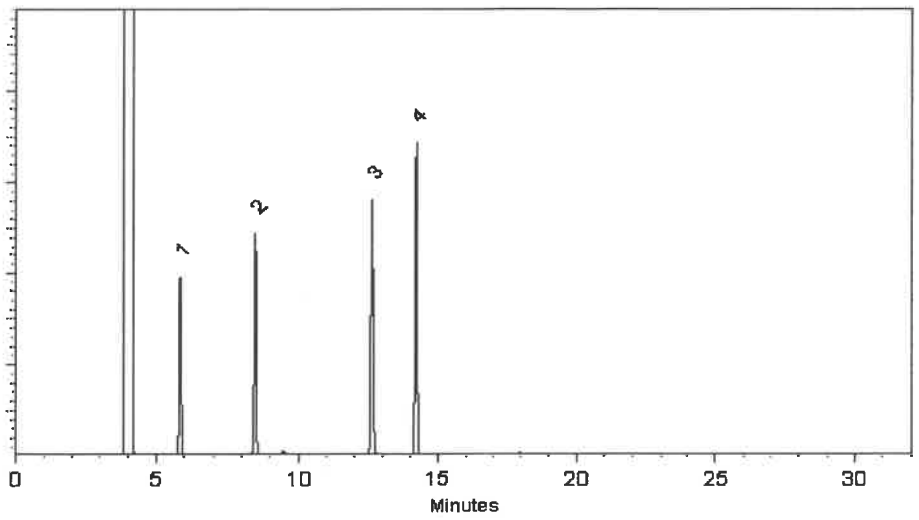
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Dec: 12/09/24

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V14667 to
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0214960

Description : Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	SYN240416CTH	99%	2,012.0 µg/mL	+/- 113.0519

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

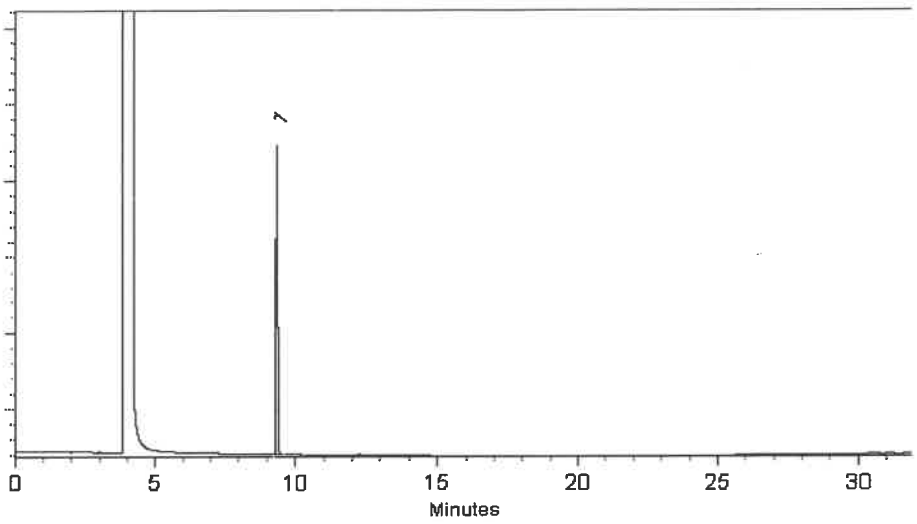
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 08-Aug-2024 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

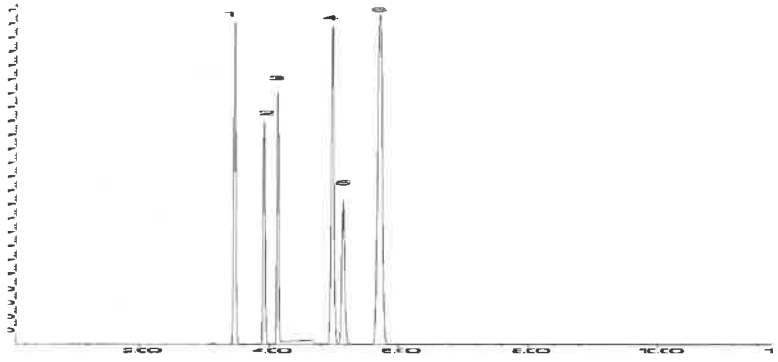
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Rec 12/17/24

CERTIFIED REFERENCE MATERIAL

30 Vial

Certificate of Analysis

chromatographic plus

V14727 to
V14756

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

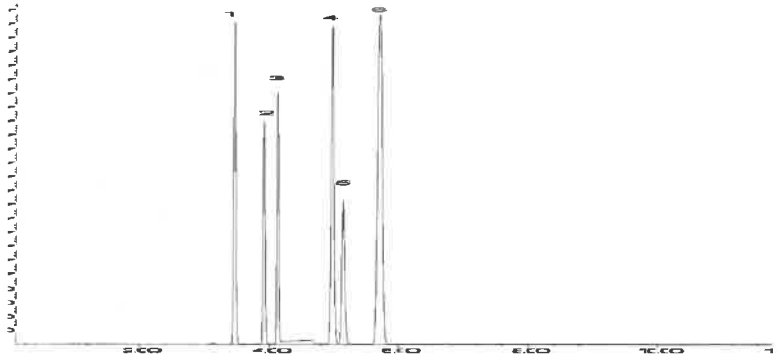
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 23-Sep-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535

Description : tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

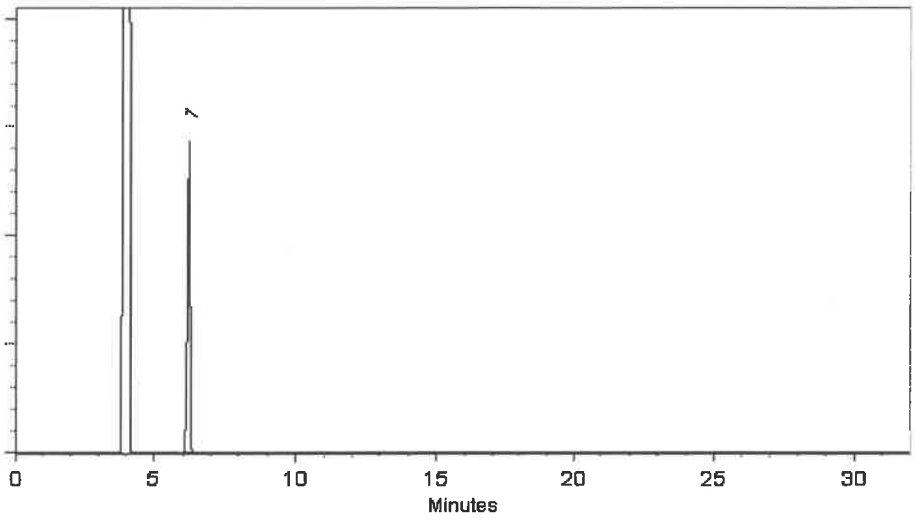
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024 **Balance Serial #** B251644995

Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

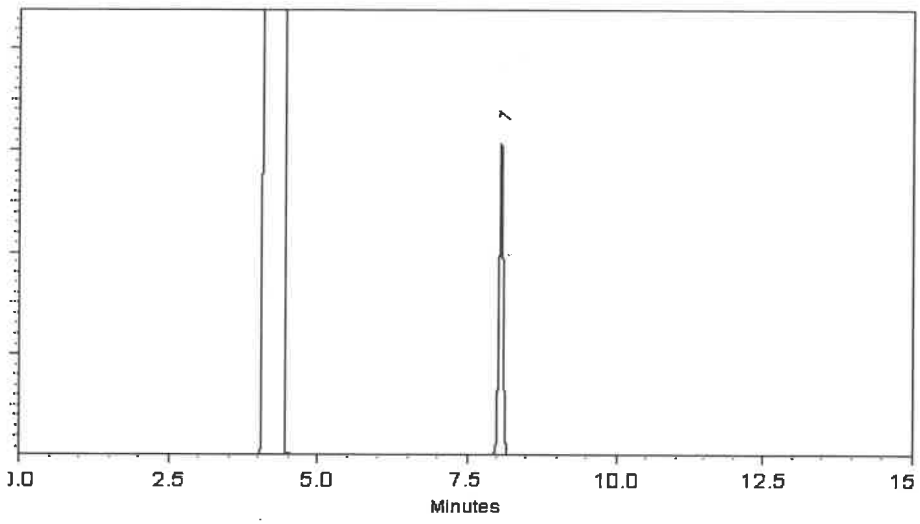
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471

Description : Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

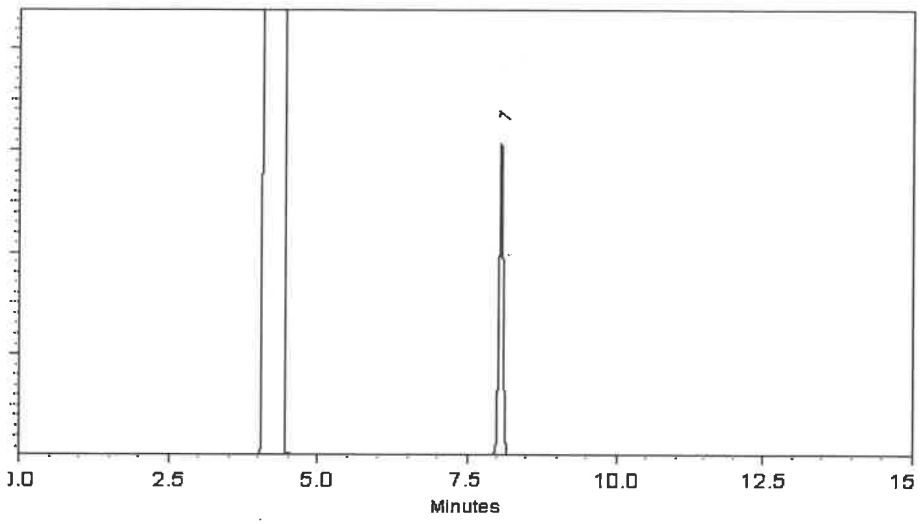
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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10 vial

CERTIFIED REFERENCE MATERIAL

Lee 03/31/25

Certificate of Analysis

gravimetric

V14904 to V14913

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0223904

Description : Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	25,108.0 µg/mL	+/- 1,421.9957
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	25,108.0 µg/mL	+/- 1,421.9957
3	Dibromofluoromethane	1868-53-7	VENKAT02	99%	25,232.0 µg/mL	+/- 1,429.0184
4	Toluene-d8	2037-26-5	PR-34141	99%	25,156.0 µg/mL	+/- 1,424.7141

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Brittany Federinko - Operations Tech I

Date Mixed: 27-Mar-2025 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

avantor™ | J.T.Baker®

V14921 to
V14938

Material No.: 9077-02
Batch No.: 24G0262002
Manufactured Date: 2024-05-14
Expiration Date: 2027-05-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.3
Titrable Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

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Director Quality Operations, Bioscience Production

Rec 05/19/25

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0222076

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBR1889	99%	2,004.0 µg/mL	+/- 69.2674
2	Vinyl acetate	108-05-4	RD240423RSR	99%	2,010.0 µg/mL	+/- 69.4748
3	Ethyl acetate	141-78-6	SHBS3323	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,008.0 µg/mL	+/- 69.4057
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBR2024	99%	2,008.0 µg/mL	+/- 69.4057
7	Amyl acetate	628-63-7	BCBT7442	99%	2,006.7 µg/mL	+/- 69.3596

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

Rec 05/19/25

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
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Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 10/16/25 5 Vial

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 101625
Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
Recommended Storage: Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

V15071 – V15075

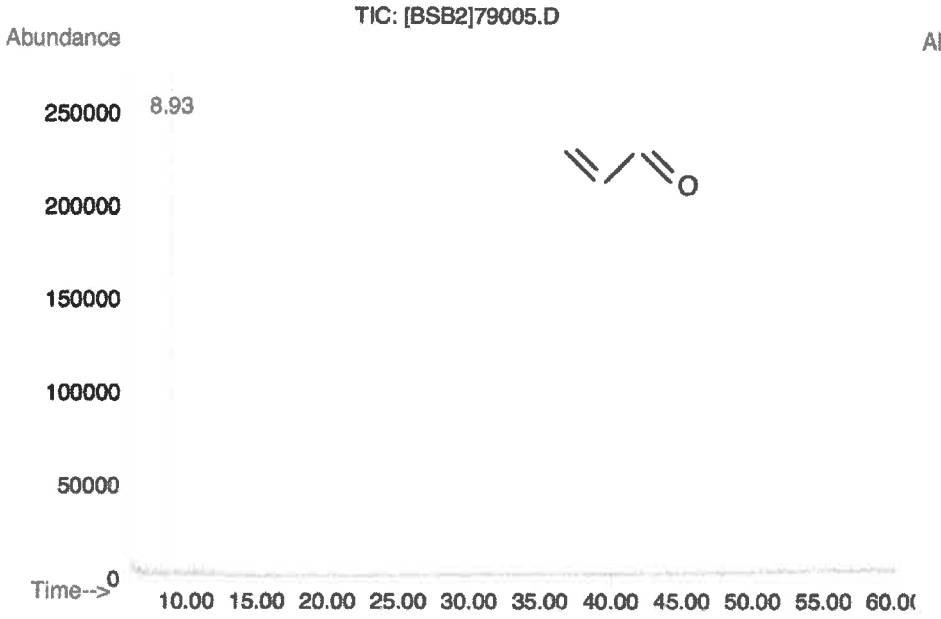
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

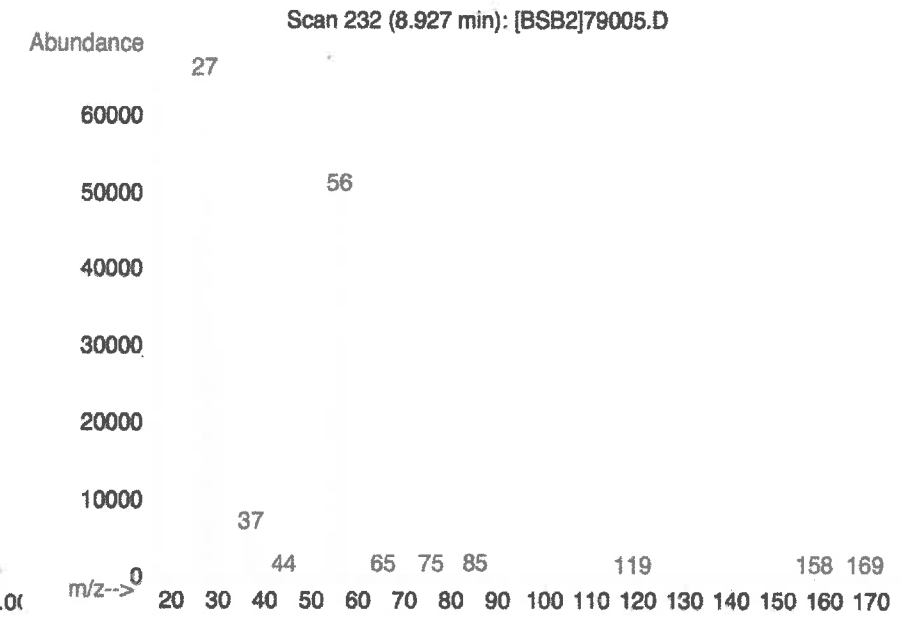
Weight(s) shown below were combined and diluted to (mL): 10.0

Prashant Chauhan		101625
Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05180	5013.7	52.6	107-02-8	0.1 ppm	orl-rat 46mg/kg

Method: GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C (Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.





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- **Standards are prepared gravimetrically using balances that are calibrated by an ISO 17025 certified organization with weights traceable through NIST to the SI kilogram (see above).**
- **Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.**
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  Rev 1.0, 2/25/2025

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

Rec 10/16/25 5 Vial

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CERTIFIED WEIGHT REPORT

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Description: Acrolein

Solvent(s): Water **Lot#** 041725Q

Expiration Date: 111625
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NIST Test ID#: 6UTB

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Formulated By:	Prashant Chauhan	DATE
Pedro Rentas		101625
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
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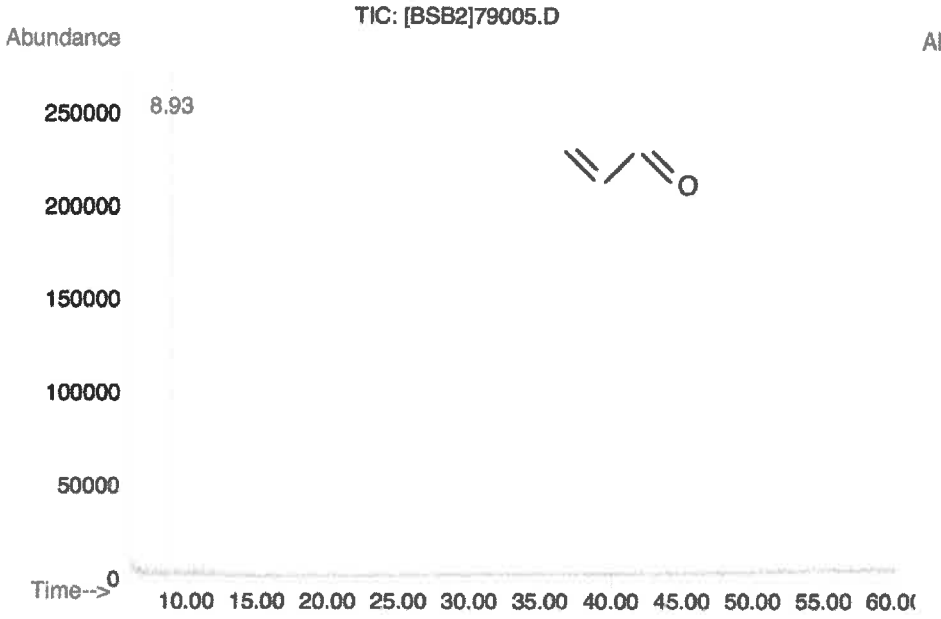

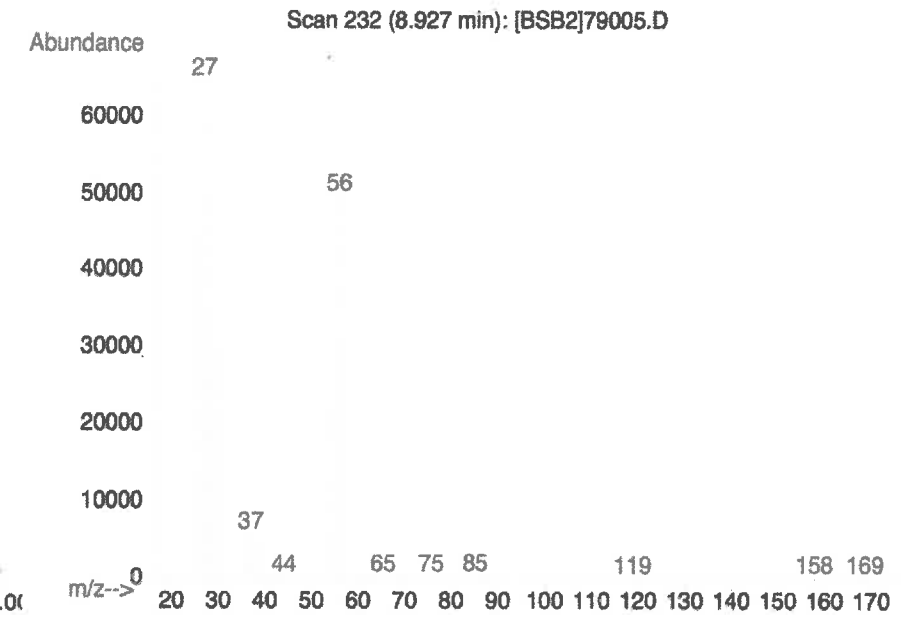

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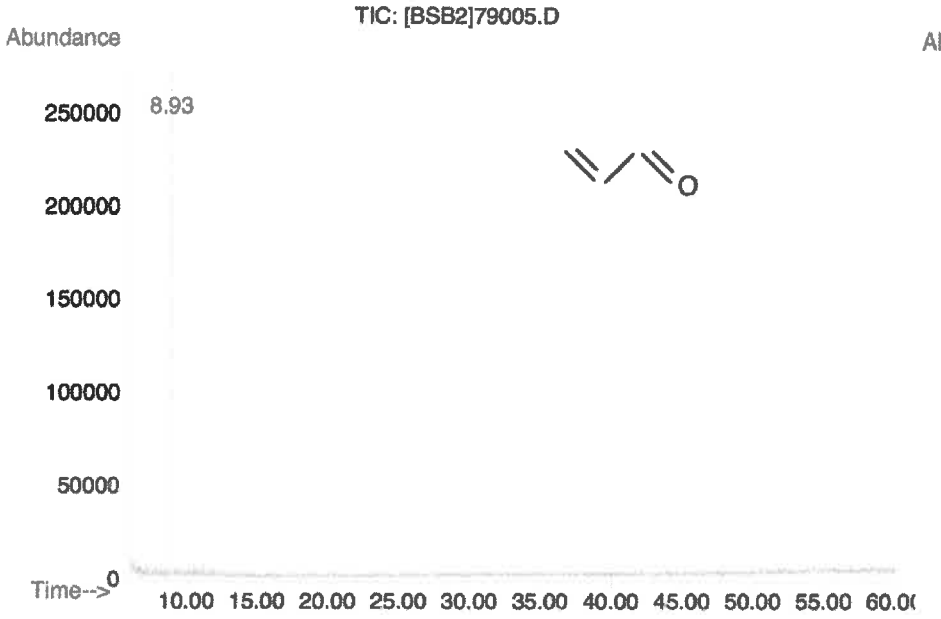

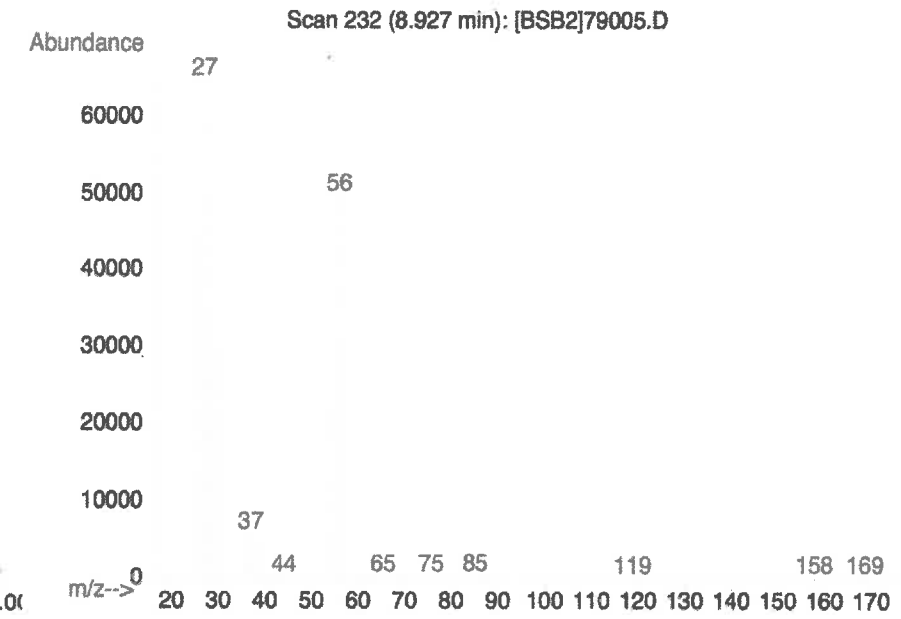

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  Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 788-9222
www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number: Q 3615

COC Number:

CLIENT INFORMATION

COMPANY: CORE ENVIRONMENTAL CONSULTANTS
ADDRESS: 22-48 119TH STREET
CITY: COLLEGE POINT STATE: NY ZIP: 11356
ATTENTION: ROLAND SCARDINO
PHONE: 609-781-8074 FAX:

PROJECT INFORMATION

PROJECT NAME: Breeze - Jones Beach Concrete
PROJECT #: LOCATION: 3000 Ocean Pkwy, Wantagh, NY
PROJECT MANAGER: ROLAND SCARDINO
E-MAIL: rscardino@coreenv.com
PHONE: 609-781-8074 FAX:

BILLING INFORMATION

BILL TO: CORE ENVIRONMENTAL CONSULTANTS PO#
ADDRESS: 2312 WEHRLE DR
CITY: BUFFALO STATE: NY ZIP:14221
ATTENTION: JOSEPH ZAHEER PHONE:716-204-8054

DATA TURNAROUND INFORMATION

FAX:_____ DAYS*
HARD COPY:_____24 HR_____ DAYS*
EDD_____24 HR_____ DAYS*
* TO BE APPROVED BY ALLIANCE
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESELTS ONLY
- ☒ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ EDD Format NYSDEC V5
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other_____

ANALYSIS

1	2	3	4	5	6	7	8	9
TPH (8015)	PCBs (8082)	TAL Metals (6010/74710)	SVOCs (8270)	VOCs (8620)				

If any metals exceed the 20x rule, run the TCLP analaysis on 72-hr TAT

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	East Bathhouse - Concrete	solid	X		11/12/25	10:00	5	X	X	X	X	X					
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	11/12/25	1. 1250 11-12-25
RELINQUISHED BY 2.	DATE/TIME	RECEIVED BY 2.
RELINQUISHED BY 3.	DATE/TIME 1410 11-12-25	RECEIVED FOR LAB BY 3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.4°C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:_____
Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
ALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - ALLIANCE COPYFOR RETURN TO CLIENT **YELLOW** - ALLIANCE COPY **PINK** - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

QA Control Code: A2070148

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	Q3615 CORE02	**Order Date :**	11/12/2025 1:09:05 PM	**Project Mgr :**	Deepak
Client Name :	Core Environmental Consul	**Project Name :**	Jones Beach Concrete	**Report Type :**	Results+QC
Client Contact :	Roland Scardino	**Receive DateTime :**	11/12/2025 2:21:00 PM	**EDD Type :**	Excel NY
Invoice Name :	Core Environmental Consul	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	Roland Scardino			**Date Signoff :**	11/12/2025 2:53:33 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3615-01	East Bathhouse- Concrete	Solid	11/12/2025	10:00					
					VOC-TCLVOA-10		8260D	1 Bus. Day	

Relinguished By : cp
Date / Time : 11/12/25 15:00

Received By : ap
Date / Time : 11/12/2025 15:00
Storage Area : **VOA Refridgerator Room**