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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:	Q3215	**OrderDate:**	9/26/2025 8:43:00 AM
Client:	Sciacca General Contractors, LLC	**Project:**	507 Franklin Ave Nutley
Contact:	Rosanne Scirica	**Location:**	J41,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3215-01	**WASTE**	**SOIL**			**09/25/25**			**09/25/25**
			VOC-TCLVOA-10	8260D			09/26/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3215

Client: Sciacca General Contractors, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**WASTE**							
Q3215-01	WASTE	SOIL	n-Hexane	* 6.40	J	0	0	ug/Kg
			Total Tics :	6.40				
			Total Concentration:	6.40				

QC SUMMARY

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Surrogate Summary

SDG No.: Q3215

Client: Sciacca General Contractors, LLC

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3215-01	WASTE	1,2-Dichloroethane-d4	50	61.3	123		63	155
		Dibromofluoromethane	50	50.8	102		70	134
		Toluene-d8	50	52.8	106		74	123
		4-Bromofluorobenzene	50	46.9	94		17	146
VW0926SBL01	VW0926SBL01	1,2-Dichloroethane-d4	50	63.5	127		63	155
		Dibromofluoromethane	50	53.0	106		70	134
		Toluene-d8	50	53.6	107		74	123
		4-Bromofluorobenzene	50	47.5	95		17	146
VW0926SBS01	VW0926SBS01	1,2-Dichloroethane-d4	50	47.1	94		63	155
		Dibromofluoromethane	50	46.3	93		70	134
		Toluene-d8	50	46.9	94		74	123
		4-Bromofluorobenzene	50	48.4	97		17	146
VW0926SBSD0	VW0926SBSD01	1,2-Dichloroethane-d4	50	44.4	89		63	155
		Dibromofluoromethane	50	44.0	88		70	134
		Toluene-d8	50	46.2	92		74	123
		4-Bromofluorobenzene	50	45.5	91		17	146

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3215 **Analytical Method:** SW8260D

Client: Sciacca General Contractors, LLC **Datafile :** VW032269.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW0926SBS01	Dichlorodifluoromethane	20	21.2	ug/Kg	106			64	136	
	Chloromethane	20	20.2	ug/Kg	101			52	151	
	Vinyl chloride	20	22.8	ug/Kg	114			56	148	
	Bromomethane	20	23.1	ug/Kg	116			58	141	
	Chloroethane	20	21.5	ug/Kg	108			69	130	
	Trichlorofluoromethane	20	18.7	ug/Kg	94			69	134	
	1,1,2-Trichlorotrifluoroethane	20	21.7	ug/Kg	109			81	123	
	1,1-Dichloroethene	20	22.1	ug/Kg	111			79	121	
	Acetone	100	120	ug/Kg	120			40	171	
	Carbon disulfide	20	22.3	ug/Kg	112			59	130	
	Methyl tert-butyl Ether	20	20.5	ug/Kg	103			77	129	
	Methyl Acetate	20	16.1	ug/Kg	81			69	149	
	Methylene Chloride	20	21.3	ug/Kg	106			72	131	
	trans-1,2-Dichloroethene	20	21.2	ug/Kg	106			80	123	
	1,1-Dichloroethane	20	20.9	ug/Kg	104			82	123	
	Cyclohexane	20	21.3	ug/Kg	106			76	122	
	2-Butanone	100	100	ug/Kg	100			69	131	
	Carbon Tetrachloride	20	20.9	ug/Kg	104			76	129	
	cis-1,2-Dichloroethene	20	20.3	ug/Kg	102			82	123	
	Bromochloromethane	20	20.2	ug/Kg	101			80	127	
	Chloroform	20	20.8	ug/Kg	104			82	125	
	1,1,1-Trichloroethane	20	21.1	ug/Kg	106			80	126	
	Methylcyclohexane	20	20.3	ug/Kg	102			77	123	
	Benzene	20	21.0	ug/Kg	105			84	121	
	1,2-Dichloroethane	20	20.1	ug/Kg	101			81	126	
	Trichloroethene	20	20.9	ug/Kg	104			83	122	
	1,2-Dichloropropane	20	20.4	ug/Kg	102			83	122	
	Bromodichloromethane	20	20.1	ug/Kg	101			82	123	
	4-Methyl-2-Pentanone	100	91.9	ug/Kg	92			70	135	
	Toluene	20	20.8	ug/Kg	104			83	122	
	t-1,3-Dichloropropene	20	20.1	ug/Kg	101			78	124	
	cis-1,3-Dichloropropene	20	20.4	ug/Kg	102			81	122	
	1,1,2-Trichloroethane	20	19.3	ug/Kg	97			82	125	
	2-Hexanone	100	96.1	ug/Kg	96			66	138	
	Dibromochloromethane	20	20.0	ug/Kg	100			79	125	
	1,2-Dibromoethane	20	19.7	ug/Kg	99			80	125	
	Tetrachloroethene	20	21.4	ug/Kg	107			83	125	
	Chlorobenzene	20	21.7	ug/Kg	109			84	122	
	Ethyl Benzene	20	21.7	ug/Kg	109			82	124	
	m/p-Xylenes	40	44.2	ug/Kg	111			83	124	
	o-Xylene	20	21.6	ug/Kg	108			83	123	
	Styrene	20	22.2	ug/Kg	111			82	124	
	Bromoform	20	19.7	ug/Kg	99			75	127	
	Isopropylbenzene	20	20.6	ug/Kg	103			82	124	
	1,1,2,2-Tetrachloroethane	20	18.8	ug/Kg	94			77	127	
	1,3-Dichlorobenzene	20	21.6	ug/Kg	108			83	122	
	1,4-Dichlorobenzene	20	20.6	ug/Kg	103			84	121	
	1,2-Dichlorobenzene	20	20.9	ug/Kg	104			83	124	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	**Q3215**	**Analytical Method:**	**SW8260D**
Client:	**Sciacca General Contractors, LLC**	**Datafile :**	VW032269.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW0926SBS01	1,2-Dibromo-3-Chloropropane	20	18.0	ug/Kg	90			66	134	
	1,2,4-Trichlorobenzene	20	19.8	ug/Kg	99			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.: Q3215 **Analytical Method:** SW8260D

Client: Sciacca General Contractors, LLC **Datafile :** VW032270.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW0926SBSD01	Dichlorodifluoromethane	20	22.4	ug/Kg	112	6		64	136	20
	Chloromethane	20	20.1	ug/Kg	101	0		52	151	20
	Vinyl chloride	20	22.1	ug/Kg	111	3		56	148	20
	Bromomethane	20	22.1	ug/Kg	111	4		58	141	20
	Chloroethane	20	21.0	ug/Kg	105	3		69	130	20
	Trichlorofluoromethane	20	19.3	ug/Kg	97	3		69	134	20
	1,1,2-Trichlorotrifluoroethane	20	21.1	ug/Kg	106	3		81	123	20
	1,1-Dichloroethene	20	21.1	ug/Kg	106	5		79	121	20
	Acetone	100	120	ug/Kg	120	0		40	171	20
	Carbon disulfide	20	21.7	ug/Kg	109	3		59	130	20
	Methyl tert-butyl Ether	20	19.7	ug/Kg	99	4		77	129	20
	Methyl Acetate	20	14.0	ug/Kg	70	15		69	149	20
	Methylene Chloride	20	21.2	ug/Kg	106	0		72	131	20
	trans-1,2-Dichloroethene	20	20.7	ug/Kg	104	2		80	123	20
	1,1-Dichloroethane	20	20.0	ug/Kg	100	4		82	123	20
	Cyclohexane	20	21.1	ug/Kg	106	0		76	122	20
	2-Butanone	100	100	ug/Kg	100	0		69	131	20
	Carbon Tetrachloride	20	20.7	ug/Kg	104	0		76	129	20
	cis-1,2-Dichloroethene	20	20.0	ug/Kg	100	2		82	123	20
	Bromochloromethane	20	18.8	ug/Kg	94	7		80	127	20
	Chloroform	20	20.3	ug/Kg	102	2		82	125	20
	1,1,1-Trichloroethane	20	20.5	ug/Kg	103	3		80	126	20
	Methylcyclohexane	20	20.8	ug/Kg	104	2		77	123	20
	Benzene	20	20.2	ug/Kg	101	4		84	121	20
	1,2-Dichloroethane	20	19.5	ug/Kg	98	3		81	126	20
	Trichloroethene	20	20.3	ug/Kg	102	2		83	122	20
	1,2-Dichloropropane	20	19.8	ug/Kg	99	3		83	122	20
	Bromodichloromethane	20	19.6	ug/Kg	98	3		82	123	20
	4-Methyl-2-Pentanone	100	88.8	ug/Kg	89	3		70	135	20
	Toluene	20	20.3	ug/Kg	102	2		83	122	20
	t-1,3-Dichloropropene	20	19.6	ug/Kg	98	3		78	124	20
	cis-1,3-Dichloropropene	20	19.7	ug/Kg	99	3		81	122	20
	1,1,2-Trichloroethane	20	18.8	ug/Kg	94	3		82	125	20
	2-Hexanone	100	94.1	ug/Kg	94	2		66	138	20
	Dibromochloromethane	20	19.2	ug/Kg	96	4		79	125	20
	1,2-Dibromoethane	20	18.9	ug/Kg	95	4		80	125	20
	Tetrachloroethene	20	20.5	ug/Kg	103	4		83	125	20
	Chlorobenzene	20	21.2	ug/Kg	106	3		84	122	20
	Ethyl Benzene	20	21.7	ug/Kg	109	0		82	124	20
	m/p-Xylenes	40	42.9	ug/Kg	107	4		83	124	20
	o-Xylene	20	21.4	ug/Kg	107	1		83	123	20
	Styrene	20	21.6	ug/Kg	108	3		82	124	20
	Bromoform	20	19.1	ug/Kg	96	3		75	127	20
	Isopropylbenzene	20	21.6	ug/Kg	108	5		82	124	20
	1,1,2,2-Tetrachloroethane	20	19.4	ug/Kg	97	3		77	127	20
	1,3-Dichlorobenzene	20	22.7	ug/Kg	114	5		83	122	20
	1,4-Dichlorobenzene	20	22.6	ug/Kg	113	9		84	121	20
	1,2-Dichlorobenzene	20	20.2	ug/Kg	101	3		83	124	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3215 **Analytical Method:** SW8260D

Client: Sciacca General Contractors, LLC **Datafile :** VW032270.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VW0926SBSD01	1,2-Dibromo-3-Chloropropane	20	18.6	ug/Kg	93	3		66	134	20
	1,2,4-Trichlorobenzene	20	20.9	ug/Kg	104	5		78	127	20
	1,2,3-Trichlorobenzene	20	20.6	ug/Kg	103	7		70	137	20

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VOLATILE METHOD BLANK SUMMARY

Client ID: VW0926SBL01

Lab Name: Alliance Contract: SCIA01

Lab Code: ACE SDG NO.: Q3215

Lab File ID: VW032268.D Lab Sample ID: VW0926SBL01

Date Analyzed: 09/26/2025 Time Analyzed: 09:41

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

Instrument ID: MSVOA_W

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VW0926SBS01	VW0926SBS01	VW032269.D	09/26/2025
VW0926SBSD01	VW0926SBSD01	VW032270.D	09/26/2025
WASTE	Q3215-01	VW032280.D	09/26/2025

COMMENTS:

Raw Data: **VW032257.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: SCIA01
Lab Code: ACE
SDG NO.: Q3215
Lab File ID: VW032257.D
BFB Injection Date: 09/25/2025
Instrument ID: MSVOA_W
BFB Injection Time: 10:01
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	19
75	30.0 - 60.0% of mass 95	51
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	66.7
175	5.0 - 9.0% of mass 174	4.9 (7.4) 1
176	95.0 - 101.0% of mass 174	64.4 (96.6) 1
177	5.0 - 9.0% of mass 176	4 (6.2) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VW032258.D	09/25/2025	10:45
VSTDICC010	VSTDICC010	VW032259.D	09/25/2025	11:30
VSTDICC020	VSTDICC020	VW032260.D	09/25/2025	11:52
VSTDICCC050	VSTDICCC050	VW032261.D	09/25/2025	12:24
VSTDICC100	VSTDICC100	VW032262.D	09/25/2025	12:46
VSTDICC150	VSTDICC150	VW032263.D	09/25/2025	13:08

Raw Data: **VW032266.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: SCIA01
Lab Code: ACE
SDG NO.: Q3215
Lab File ID: VW032266.D
BFB Injection Date: 09/26/2025
Instrument ID: MSVOA_W
BFB Injection Time: 08:13
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	19
75	30.0 - 60.0% of mass 95	50.9
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	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	64.6
175	5.0 - 9.0% of mass 174	5.3 (8.2) 1
176	95.0 - 101.0% of mass 174	63.2 (97.8) 1
177	5.0 - 9.0% of mass 176	4.3 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VW032267.D	09/26/2025	08:43
VW0926SBL01	VW0926SBL01	VW032268.D	09/26/2025	09:41
VW0926SBS01	VW0926SBS01	VW032269.D	09/26/2025	10:08
VW0926SBSD01	VW0926SBSD01	VW032270.D	09/26/2025	11:09
WASTE	Q3215-01	VW032280.D	09/26/2025	15:09

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: SCIA01

Lab Code: ACE SDG NO.: Q3215

Lab File ID: VW032267.D Date Analyzed: 09/26/2025

Instrument ID: MSVOA_W Time Analyzed: 08:43

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	273367	7.97	482464	8.85	450604	11.63
UPPER LIMIT	546734	8.465	964928	9.349	901208	12.129
LOWER LIMIT	136684	7.465	241232	8.349	225302	11.129
EPA SAMPLE NO.						
WASTE	180242	7.96	388056	8.85	386764	11.64
VW0926SBL01	193650	7.96	436371	8.85	462353	11.63
VW0926SBS01	258288	7.96	477257	8.85	426681	11.63
VW0926SBSD01	272106	7.96	497590	8.85	443141	11.63

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: SCIA01

Lab Code: ACE SDG NO.: Q3215

Lab File ID: VW032267.D Date Analyzed: 09/26/2025

Instrument ID: MSVOA_W Time Analyzed: 08:43

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

	IS4 AREA #	RT #				
12 HOUR STD	228628	13.555				
UPPER LIMIT	457256	14.055				
LOWER LIMIT	114314	13.055				
EPA SAMPLE NO.						
WASTE	183728	13.56				
VW0926SBL01	216659	13.56				
VW0926SBS01	223480	13.56				
VW0926SBSD01	218363	13.55				

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

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	09/25/25
Project:	507 Franklin Ave Nutley	Date Received:	09/25/25
Client Sample ID:	WASTE	SDG No.:	Q3215
Lab Sample ID:	Q3215-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	90.5
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032280.D	1	09/26/25 15:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.30	U	1.30	5.50	ug/Kg
74-87-3	Chloromethane	1.30	U	1.30	5.50	ug/Kg
75-01-4	Vinyl Chloride	0.87	U	0.87	5.50	ug/Kg
74-83-9	Bromomethane	1.20	U	1.20	5.50	ug/Kg
75-00-3	Chloroethane	1.40	U	1.40	5.50	ug/Kg
75-69-4	Trichlorofluoromethane	1.30	U	1.30	5.50	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.20	U	1.20	5.50	ug/Kg
75-35-4	1,1-Dichloroethene	1.10	U	1.10	5.50	ug/Kg
67-64-1	Acetone	5.20	U	5.20	27.6	ug/Kg
75-15-0	Carbon Disulfide	1.20	U	1.20	5.50	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.81	U	0.81	5.50	ug/Kg
79-20-9	Methyl Acetate	1.70	U	1.70	5.50	ug/Kg
75-09-2	Methylene Chloride	3.90	U	3.90	11.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.95	U	0.95	5.50	ug/Kg
75-34-3	1,1-Dichloroethane	0.88	U	0.88	5.50	ug/Kg
110-82-7	Cyclohexane	0.87	U	0.87	5.50	ug/Kg
78-93-3	2-Butanone	7.20	U	7.20	27.6	ug/Kg
56-23-5	Carbon Tetrachloride	1.10	U	1.10	5.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.83	U	0.83	5.50	ug/Kg
74-97-5	Bromochloromethane	1.30	U	1.30	5.50	ug/Kg
67-66-3	Chloroform	0.93	U	0.93	5.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	1.00	U	1.00	5.50	ug/Kg
108-87-2	Methylcyclohexane	1.00	U	1.00	5.50	ug/Kg
71-43-2	Benzene	0.87	U	0.87	5.50	ug/Kg
107-06-2	1,2-Dichloroethane	0.87	U	0.87	5.50	ug/Kg
79-01-6	Trichloroethene	0.90	U	0.90	5.50	ug/Kg
78-87-5	1,2-Dichloropropane	1.00	U	1.00	5.50	ug/Kg
75-27-4	Bromodichloromethane	0.86	U	0.86	5.50	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.00	U	4.00	27.6	ug/Kg
108-88-3	Toluene	0.86	U	0.86	5.50	ug/Kg

Raw Data: **VW032280.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	09/25/25
Project:	507 Franklin Ave Nutley	Date Received:	09/25/25
Client Sample ID:	WASTE	SDG No.:	Q3215
Lab Sample ID:	Q3215-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	90.5
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032280.D	1	09/26/25 15:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.72	U	0.72	5.50	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.69	U	0.69	5.50	ug/Kg
79-00-5	1,1,2-Trichloroethane	1.00	U	1.00	5.50	ug/Kg
591-78-6	2-Hexanone	4.10	U	4.10	27.6	ug/Kg
124-48-1	Dibromochloromethane	0.96	U	0.96	5.50	ug/Kg
106-93-4	1,2-Dibromoethane	0.97	U	0.97	5.50	ug/Kg
127-18-4	Tetrachloroethene	1.20	U	1.20	5.50	ug/Kg
108-90-7	Chlorobenzene	1.00	U	1.00	5.50	ug/Kg
100-41-4	Ethyl Benzene	0.74	U	0.74	5.50	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	11.0	ug/Kg
95-47-6	o-Xylene	0.91	U	0.91	5.50	ug/Kg
100-42-5	Styrene	0.78	U	0.78	5.50	ug/Kg
75-25-2	Bromoform	0.95	U	0.95	5.50	ug/Kg
98-82-8	Isopropylbenzene	0.86	U	0.86	5.50	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.90	U	1.90	5.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.70	U	1.70	5.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.60	U	1.60	5.50	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.00	U	2.00	5.50	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.30	U	3.30	5.50	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.50	U	3.50	5.50	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	61.3		63 - 155	123%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		70 - 134	102%	SPK: 50
2037-26-5	Toluene-d8	52.8		74 - 123	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.9		17 - 146	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	180000	7.959			
540-36-3	1,4-Difluorobenzene	388000	8.849			
3114-55-4	Chlorobenzene-d5	387000	11.635			
3855-82-1	1,4-Dichlorobenzene-d4	184000	13.556			
TENTATIVE IDENTIFIED COMPOUNDS						

Raw Data: **VW032280.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	09/25/25
Project:	507 Franklin Ave Nutley	Date Received:	09/25/25
Client Sample ID:	WASTE	SDG No.:	Q3215
Lab Sample ID:	Q3215-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	90.5
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032280.D	1	09/26/25 15:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000110-54-3	n-Hexane	6.40	J		5.97	ug/Kg

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_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Quant Time: Sep 29 08:39:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	180242	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	388056	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	386764	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	183728	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	174400	61.279	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 122.560%			
35) Dibromofluoromethane	7.898	113	141847	50.827	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 101.660%			
50) Toluene-d8	10.325	98	530590	52.753	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 105.500%			
62) 4-Bromofluorobenzene	12.617	95	177949	46.904	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 93.800%			

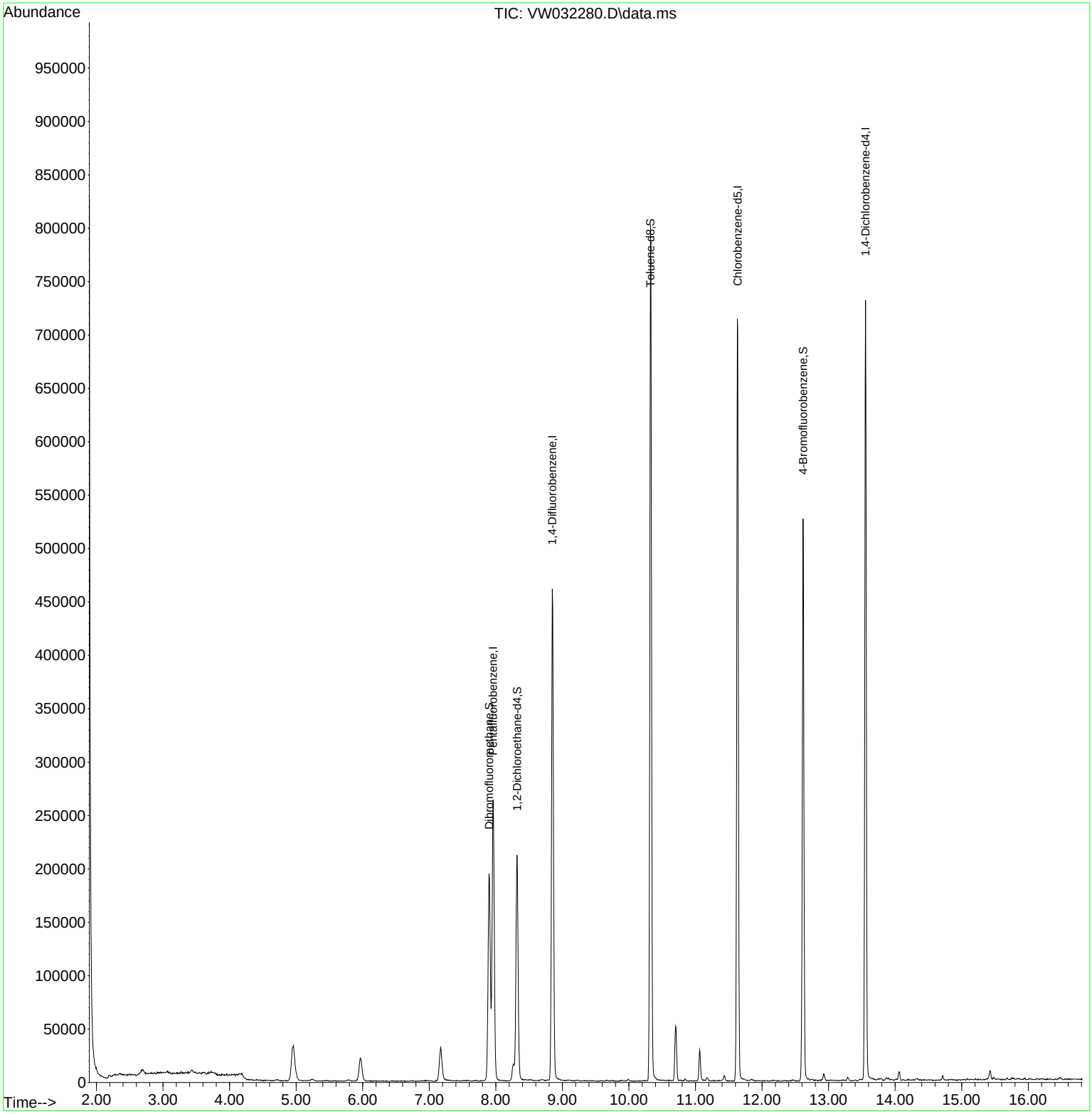
Target Compounds Qvalue

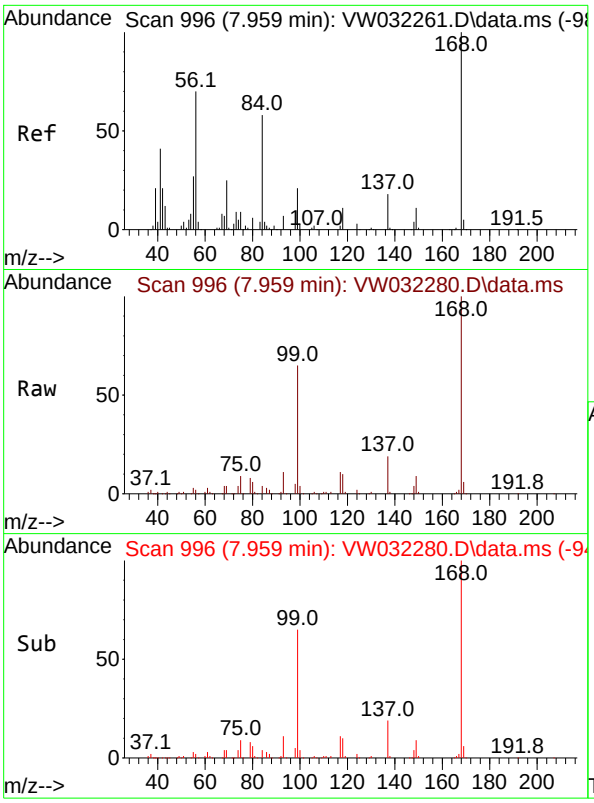
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Quant Time: Sep 29 08:39:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration



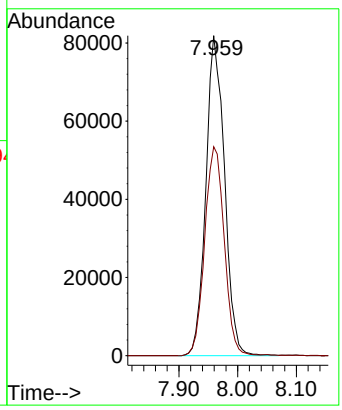


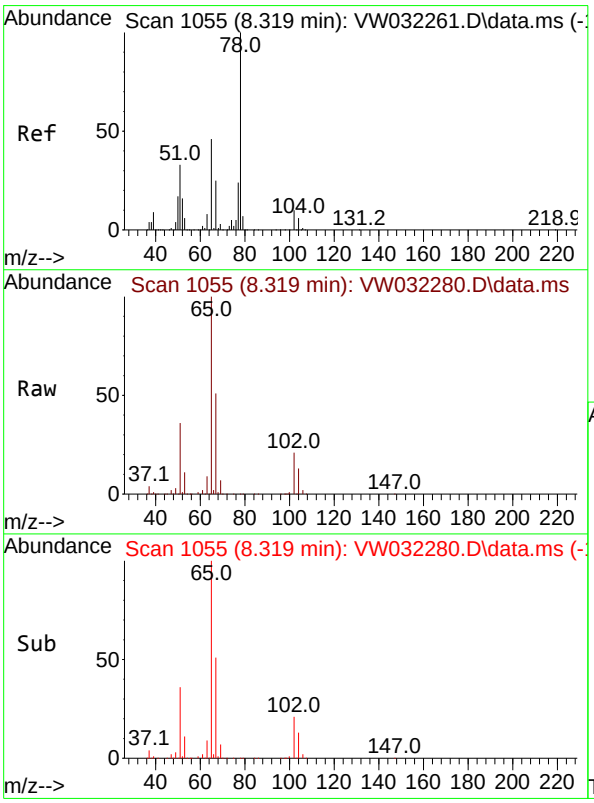
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Tgt Ion:168 Resp: 180242

Ion	Ratio	Lower	Upper
168	100		
99	65.3	55.0	82.4

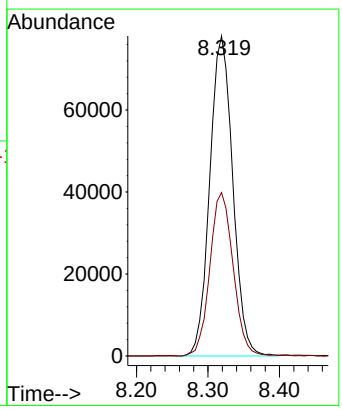


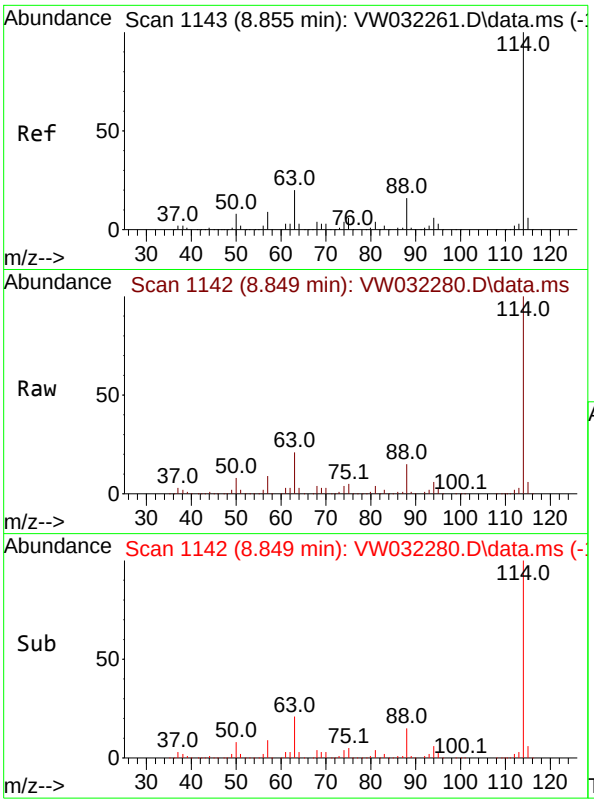


#33
1,2-Dichloroethane-d4
Concen: 61.279 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. 0.000 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Tgt Ion: 65 Resp: 174400

Ion	Ratio	Lower	Upper
65	100		
67	51.7	0.0	105.8



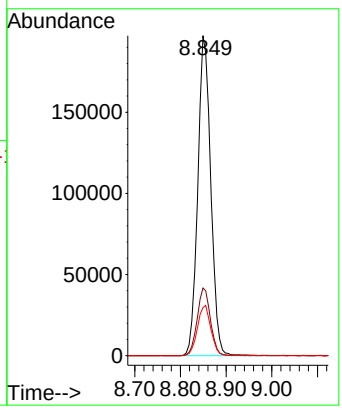


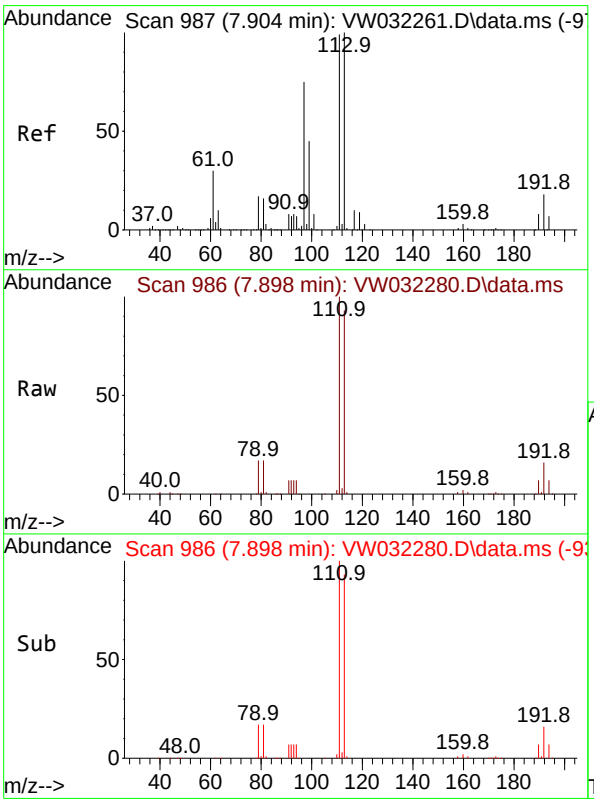
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Tgt Ion:114 Resp: 388056

Ion	Ratio	Lower	Upper
114	100		
63	21.1	0.0	40.2
88	15.1	0.0	32.0

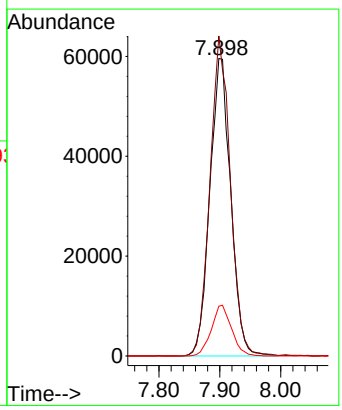


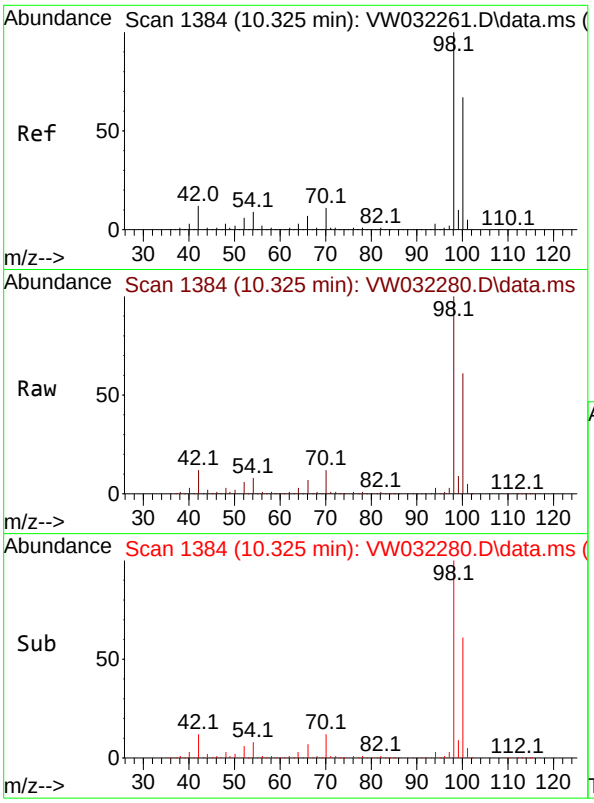


#35
Dibromofluoromethane
Concen: 50.827 ug/l
RT: 7.898 min Scan# 986
Delta R.T. -0.006 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Tgt Ion:113 Resp: 141847

Ion	Ratio	Lower	Upper
113	100		
111	105.1	81.8	122.8
192	16.5	13.0	19.4



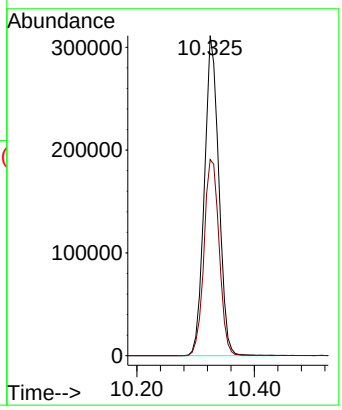


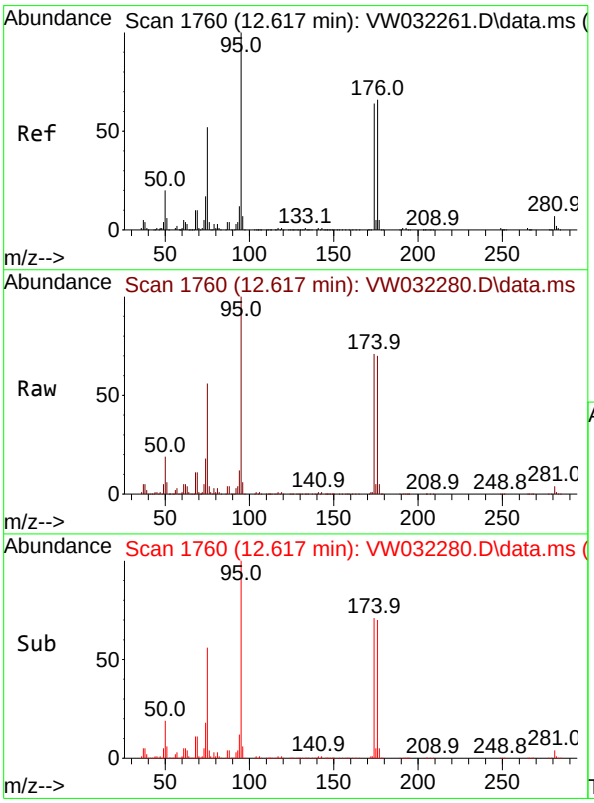
#50
Toluene-d8
Concen: 52.753 ug/l
RT: 10.325 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Tgt Ion: 98 Resp: 530590

Ion	Ratio	Lower	Upper
98	100		
100	64.6	53.0	79.4

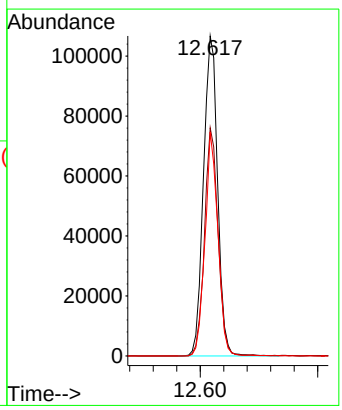


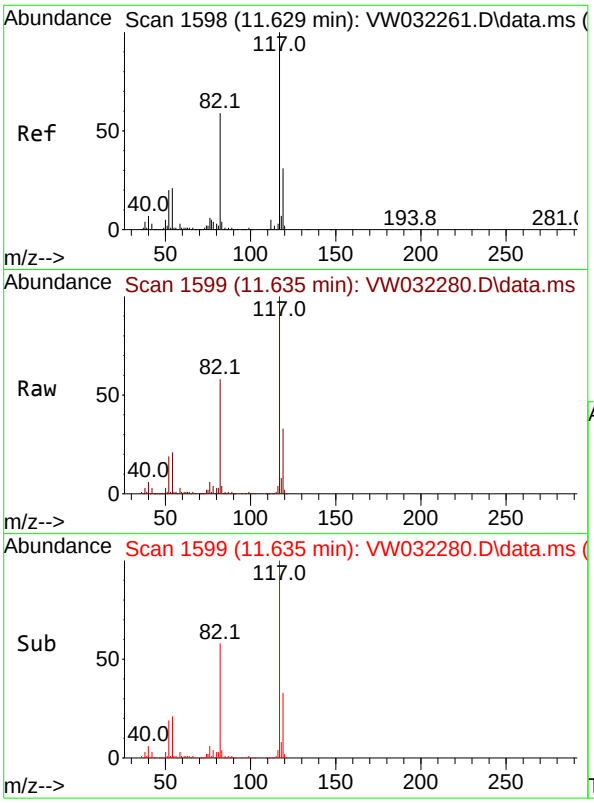


#62
4-Bromofluorobenzene
Concen: 46.904 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Tgt Ion: 95 Resp: 177949

Ion	Ratio	Lower	Upper
95	100		
174	68.2	0.0	130.6
176	64.2	0.0	127.0



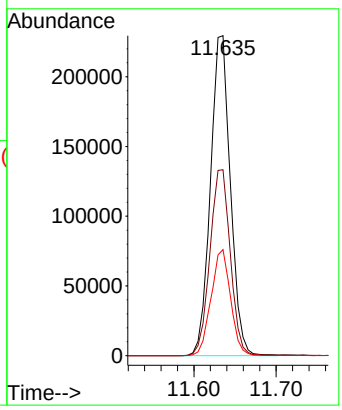


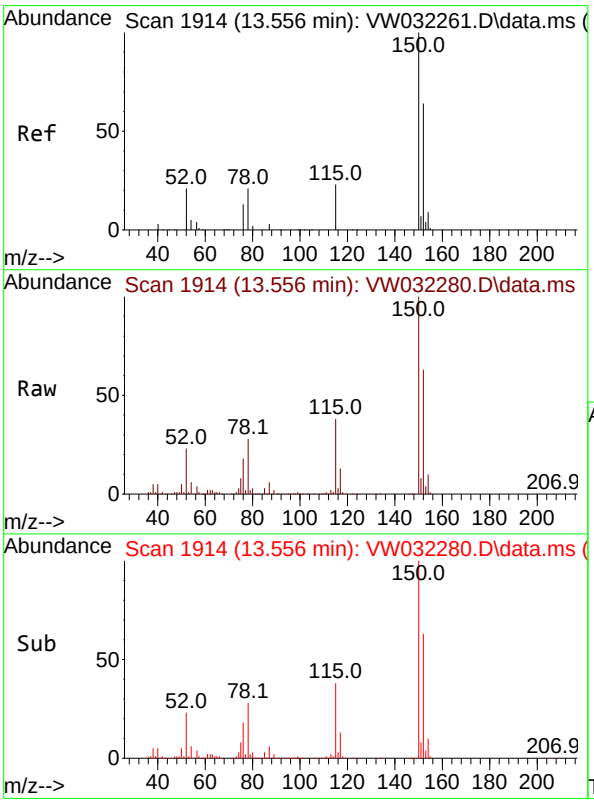
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 1
Delta R.T. 0.006 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Tgt Ion:117 Resp: 386764

Ion	Ratio	Lower	Upper
117	100		
82	58.1	46.9	70.3
119	33.2	24.9	37.3

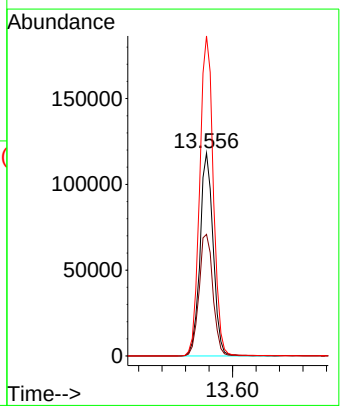




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. 0.000 min
Lab File: VW032280.D
Acq: 26 Sep 2025 15:09

Tgt Ion:152 Resp: 183728

Ion	Ratio	Lower	Upper
152	100		
115	63.5	32.5	97.5
150	163.0	0.0	370.2



Sample Results: **VW032280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

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_W\Method\82W092525S.M
Title : SW846 8260

Signal : TIC: VW032280.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.960	488	504	520	rBV3	33116	127768	9.07%	1.675%
2	5.966	657	669	680	rBV2	21614	68435	4.86%	0.897%
3	7.173	856	867	877	rBV	31152	88984	6.32%	1.166%
4	7.898	973	986	991	rBV	193795	464137	32.95%	6.083%
5	7.959	991	996	1009	rVB	262472	587628	41.72%	7.702%
6	8.270	1037	1047	1048	rBV2	15936	33811	2.40%	0.443%
7	8.319	1048	1055	1071	rVB	210967	478488	33.97%	6.272%
8	8.849	1134	1142	1157	rBV	460093	928305	65.91%	12.167%
9	10.325	1375	1384	1395	rBV	802166	1408538	100.00%	18.462%
10	10.703	1440	1446	1453	rVB2	50968	98013	6.96%	1.285%
11	11.062	1499	1505	1513	rBV	28796	50110	3.56%	0.657%
12	11.629	1590	1598	1609	rBV	713609	1224905	86.96%	16.055%
13	12.617	1749	1760	1772	rBV	526856	874909	62.11%	11.467%
14	13.556	1906	1914	1925	rBV	729871	1166155	82.79%	15.285%
15	14.062	1993	1997	2002	rVB2	8296	14272	1.01%	0.187%
16	15.427	2214	2221	2226	rVB3	7948	15037	1.07%	0.197%

Sum of corrected areas: 7629495

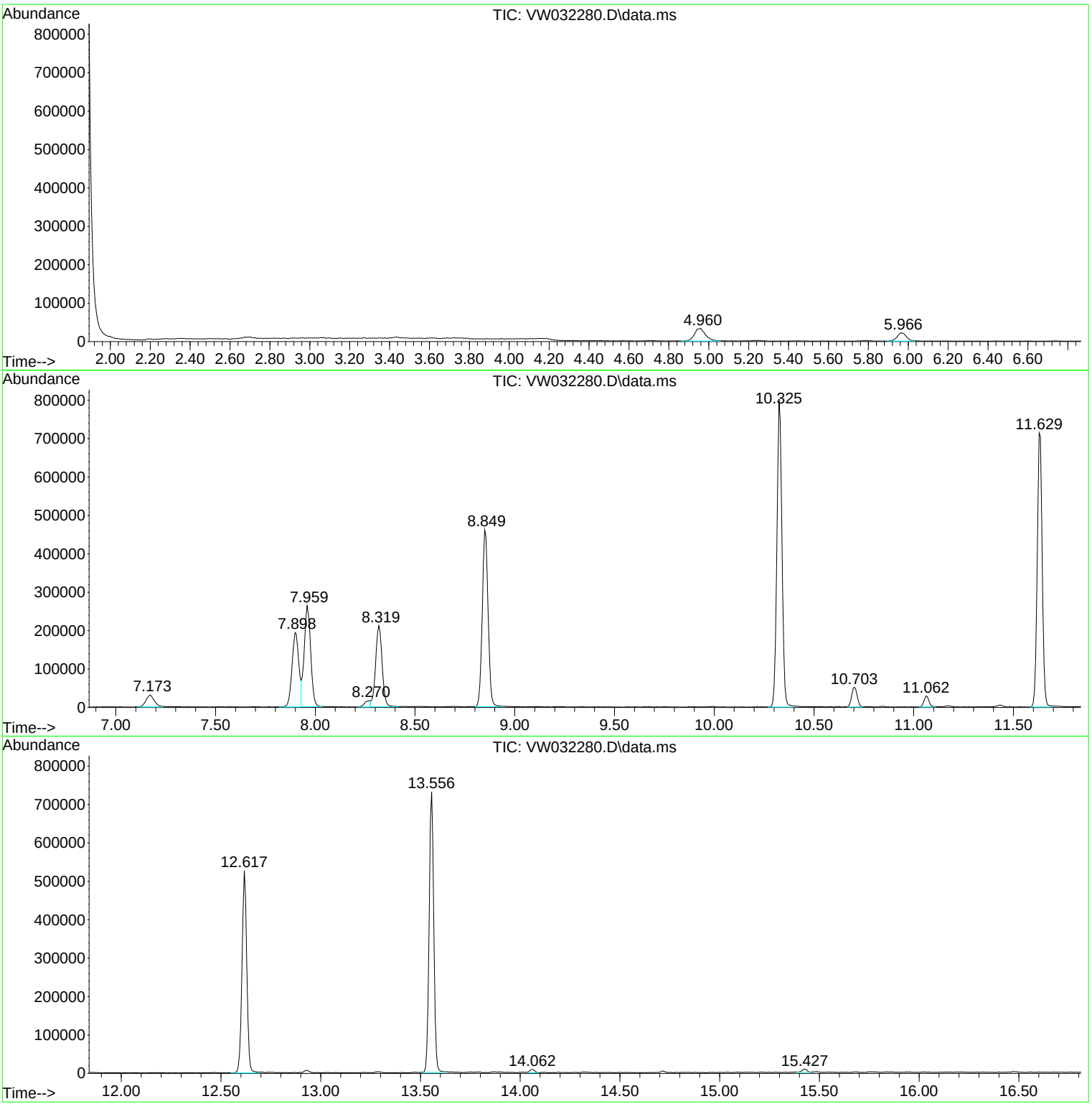
Sample Results: **VW032280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260

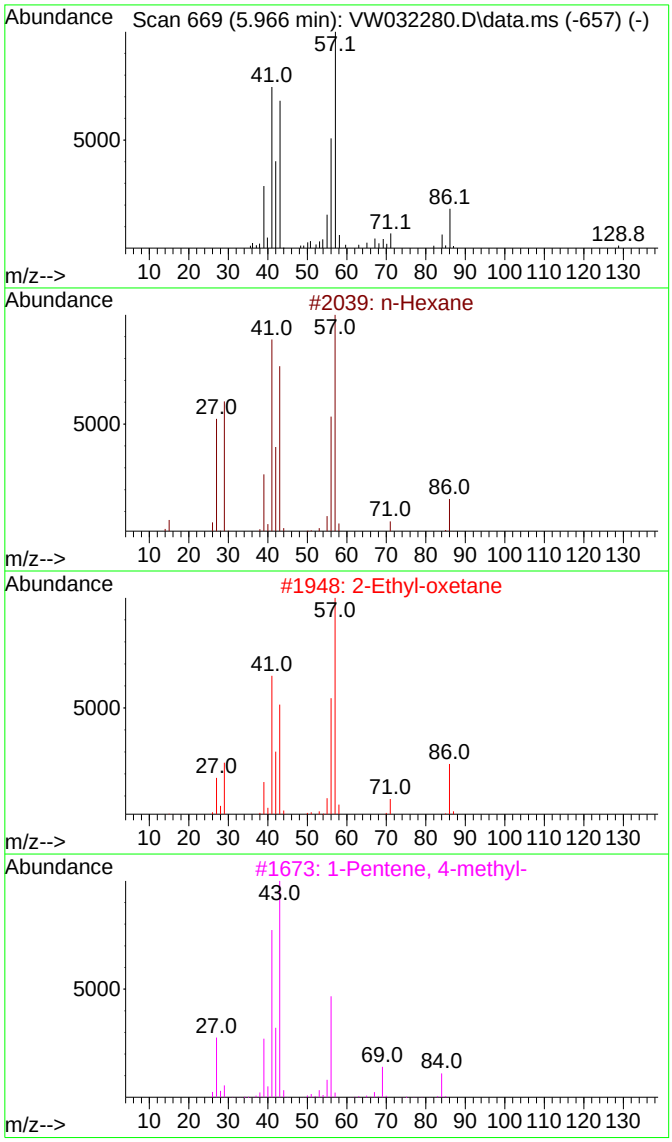
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

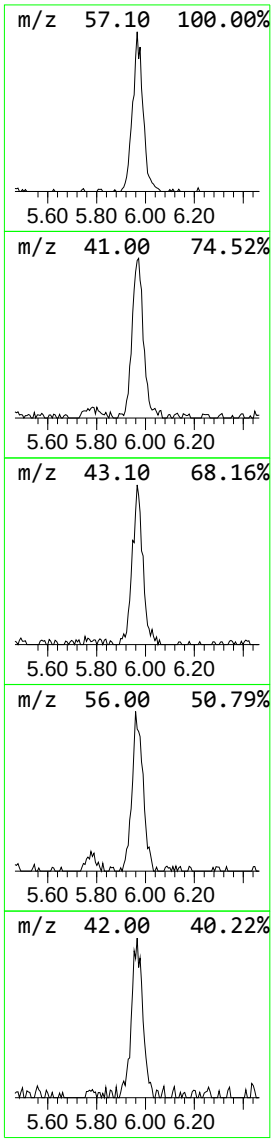
****

Peak Number 2 n-Hexane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.966	5.82 ug/l	68435	Pentafluorobenzene	7.959

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexane	86	C6H14	000110-54-3	90
2	2-Ethyl-oxetane	86	C5H10O	1010386-40-2	47
3	1-Pentene, 4-methyl-	84	C6H12	000691-37-2	45
4	2-Butene, (Z)-	56	C4H8	000590-18-1	38
5	Cyclobutane	56	C4H8	000287-23-0	38





Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032280.D
Acq On : 26 Sep 2025 15:09
Operator : SY/MD
Sample : Q3215-01
Misc : 5.00g/5mL/MSVOA_W/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
WASTE

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.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
n-Hexane	5.966	5.8	ug/l	68435	1	7.959	587628	50.0

CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: SCIA01

Lab Code: ACE SDG No.: Q3215

Instrument ID: MSVOA_W Calibration Date(s): 09/25/2025 09/25/2025

Heated Purge: (Y/N) Y Calibration Time(s): 10:45 13:08

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

LAB FILE ID: RRF005 = VW032258.D RRF010 = VW032259.D RRF020 = VW032260.D
RRF050 = VW032261.D RRF100 = VW032262.D RRF150 = VW032263.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.388	0.399	0.397	0.295	0.295	0.299	0.345	15.6
Chloromethane	0.540	0.557	0.548	0.423	0.439	0.459	0.494	12.3
Vinyl Chloride	0.611	0.628	0.654	0.537	0.514	0.522	0.578	10.5
Bromomethane	0.403	0.424	0.435	0.367	0.360	0.377	0.394	7.9
Chloroethane	0.416	0.408	0.434	0.359	0.356	0.376	0.391	8.3
Trichlorofluoromethane	0.399	0.417	0.519	0.383	0.438	0.455	0.435	11.2
1,1,2-Trichlorotrifluoroethane	0.593	0.587	0.625	0.526	0.495	0.508	0.556	9.5
1,1-Dichloroethene	0.595	0.633	0.670	0.551	0.550	0.565	0.594	8.2
Acetone	0.216	0.252	0.242	0.164	0.162	0.180	0.203	19.6
Carbon Disulfide	1.364	1.439	1.543	1.260	1.262	1.324	1.365	8.1
Methyl tert-butyl Ether	1.055	1.094	1.201	1.071	1.060	1.123	1.101	5
Methyl Acetate	0.637	0.602	0.639	0.738	0.749	0.818	0.697	12
Methylene Chloride	1.758	1.269	0.843	0.747	0.661	0.666	0.991	44.3
trans-1,2-Dichloroethene	0.633	0.668	0.703	0.605	0.602	0.630	0.640	6
1,1-Dichloroethane	1.313	1.343	1.418	1.232	1.201	1.250	1.293	6.2
Cyclohexane	1.132	1.088	1.139	0.912	0.912	0.933	1.019	10.9
2-Butanone	0.282	0.300	0.307	0.252	0.260	0.296	0.283	7.9
Carbon Tetrachloride	0.442	0.462	0.505	0.447	0.452	0.429	0.456	5.8
cis-1,2-Dichloroethene	0.803	0.821	0.843	0.763	0.760	0.789	0.796	4.1
Bromochloromethane	0.662	0.629	0.656	0.589	0.586	0.579	0.617	6
Chloroform	1.400	1.413	1.489	1.286	1.227	1.278	1.349	7.4
1,1,1-Trichloroethane	0.927	0.946	0.985	0.873	0.852	0.869	0.909	5.7
Methylcyclohexane	0.507	0.545	0.596	0.569	0.584	0.564	0.561	5.7
Benzene	1.503	1.545	1.639	1.516	1.515	1.438	1.526	4.3
1,2-Dichloroethane	0.545	0.518	0.537	0.486	0.488	0.470	0.507	6
Trichloroethene	0.343	0.371	0.382	0.346	0.359	0.339	0.357	4.7
1,2-Dichloropropane	0.391	0.408	0.423	0.393	0.384	0.372	0.395	4.5
Bromodichloromethane	0.549	0.544	0.577	0.558	0.557	0.541	0.554	2.4
4-Methyl-2-Pentanone	0.327	0.346	0.370	0.324	0.338	0.342	0.341	4.8
Toluene	0.894	0.955	1.010	0.937	0.963	0.916	0.946	4.3

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

Raw Data

Alliance TECHNICAL GROUP

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance | Contract: SCIA01

Lab Code: ACE | SDG No.: Q3215

Instrument ID: MSVOA_W | Calibration Date(s): 09/25/2025 09/25/2025

Heated Purge: (Y/N) Y | Calibration Time(s): 10:45 13:08

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

LAB FILE ID: RRF005 = VW032258.D RRF010 = VW032259.D RRF020 = VW032260.D
RRF050 = VW032261.D RRF100 = VW032262.D RRF150 = VW032263.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
t-1,3-Dichloropropene	0.440	0.478	0.521	0.507	0.554	0.547	0.508	8.5
cis-1,3-Dichloropropene	0.525	0.558	0.618	0.590	0.614	0.611	0.586	6.4
1,1,2-Trichloroethane	0.343	0.339	0.359	0.316	0.316	0.318	0.332	5.4
2-Hexanone	0.215	0.224	0.255	0.225	0.236	0.243	0.233	6.1
Dibromochloromethane	0.354	0.352	0.371	0.369	0.377	0.364	0.364	2.7
1,2-Dibromoethane	0.310	0.313	0.337	0.308	0.308	0.309	0.314	3.6
Tetrachloroethene	0.297	0.331	0.323	0.301	0.288	0.288	0.305	6
Chlorobenzene	1.146	1.205	1.234	1.126	1.109	1.091	1.152	4.9
Ethyl Benzene	1.710	1.890	1.993	1.882	1.927	1.908	1.885	5
m/p-Xylenes	0.647	0.728	0.793	0.721	0.729	0.717	0.723	6.4
o-Xylene	0.590	0.670	0.711	0.704	0.707	0.694	0.679	6.8
Styrene	0.977	1.180	1.315	1.247	1.223	1.204	1.191	9.6
Bromoform	0.186	0.222	0.219	0.210	0.214	0.223	0.212	6.5
Isopropylbenzene	3.005	3.296	3.600	3.704	3.535	3.740	3.480	8.1
1,1,2,2-Tetrachloroethane	0.955	0.945	0.943	0.886	0.843	0.902	0.912	4.7
1,3-Dichlorobenzene	1.700	1.684	1.659	1.737	1.656	1.722	1.693	1.9
1,4-Dichlorobenzene	1.811	1.770	1.807	1.674	1.631	1.685	1.730	4.4
1,2-Dichlorobenzene	1.587	1.636	1.663	1.630	1.465	1.524	1.584	4.8
1,2-Dibromo-3-Chloropropane	0.167	0.156	0.156	0.144	0.148	0.166	0.156	5.8
1,2,4-Trichlorobenzene	0.850	0.888	0.943	0.960	0.961	1.035	0.940	6.8
1,2,3-Trichlorobenzene	0.807	0.849	0.861	0.892	0.881	0.953	0.874	5.6
1,2-Dichloroethane-d4	0.886	0.863	0.864	0.708	0.703	0.714	0.789	11.3
Dibromofluoromethane	0.393	0.364	0.379	0.347	0.342	0.332	0.360	6.5
Toluene-d8	1.334	1.339	1.372	1.252	1.274	1.205	1.296	4.9
4-Bromofluorobenzene	0.505	0.491	0.511	0.482	0.486	0.458	0.489	3.8

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

Response Factor Report MSVOA_W

Method Path : Z:\voasrv\HPCHEM1\MSVOA_W\Method\
Method File : 82W092525S.M
Title : SW846 8260
Last Update : Fri Sep 26 07:11:42 2025
Response Via : Initial Calibration

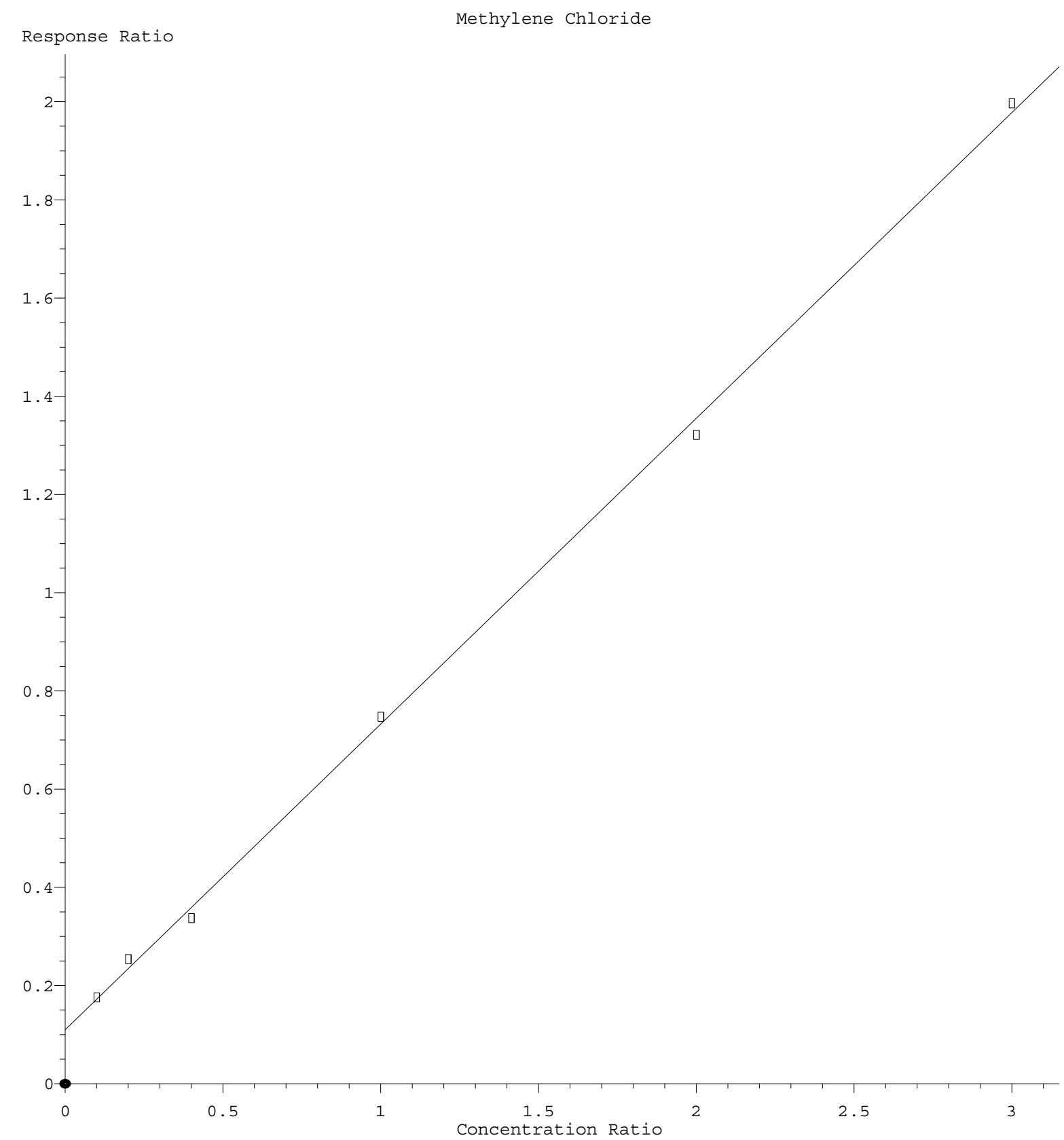
Calibration Files
5 =VW032258.D 10 =VW032259.D 20 =VW032260.D 50 =VW032261.D 100 =VW032262.D 150 =VW032263.D

		Compound	5	10	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.388	0.399	0.397	0.295	0.295	0.299	0.345	15.60
3)	P	Chloromethane	0.540	0.557	0.548	0.423	0.439	0.459	0.494	12.26
4)	C	Vinyl Chloride	0.611	0.628	0.654	0.537	0.514	0.522	0.578	10.47#
5)	T	Bromomethane	0.403	0.424	0.435	0.367	0.360	0.377	0.394	7.91
6)	T	Chloroethane	0.416	0.408	0.434	0.359	0.356	0.376	0.391	8.26
7)	T	Trichlorofluor...	0.399	0.417	0.519	0.383	0.438	0.455	0.435	11.18
8)	T	Diethyl Ether	0.475	0.440	0.436	0.368	0.366	0.384	0.412	10.97
9)	T	1,1,2-Trichlor...	0.593	0.587	0.625	0.526	0.495	0.508	0.556	9.48
10)	T	Methyl Iodide	0.748	0.763	0.840	0.712	0.721	0.725	0.751	6.30
11)	T	Tert butyl alc...	0.061	0.060	0.057	0.046	0.049	0.057	0.055	11.16
12)	CM	1,1-Dichloroet...	0.595	0.633	0.670	0.551	0.550	0.565	0.594	8.20#
13)	T	Acrolein	0.108	0.106	0.106	0.090	0.085	0.089	0.098	10.90
14)	T	Allyl chloride	0.911	0.933	1.006	0.879	0.880	0.921	0.922	5.06
15)	T	Acrylonitrile	0.216	0.220	0.232	0.189	0.197	0.218	0.212	7.60
16)	T	Acetone	0.216	0.252	0.242	0.164	0.162	0.180	0.203	19.64
17)	T	Carbon Disulfide	1.364	1.439	1.543	1.260	1.262	1.324	1.365	8.07
18)	T	Methyl Acetate	0.637	0.602	0.639	0.738	0.749	0.818	0.697	11.98
19)	T	Methyl tert-bu...	1.055	1.094	1.201	1.071	1.060	1.123	1.101	5.01
20)	T	Methylene Chlo...	1.758	1.269	0.843	0.747	0.661	0.666	0.991	44.29
21)	T	trans-1,2-Dich...	0.633	0.668	0.703	0.605	0.602	0.630	0.640	6.01
22)	T	Diisopropyl ether	1.893	2.067	2.306	2.003	1.989	2.030	2.048	6.79
23)	T	Vinyl Acetate	1.220	1.347	1.501	1.216	1.263	1.358	1.317	8.26
24)	P	1,1-Dichloroet...	1.313	1.343	1.418	1.232	1.201	1.250	1.293	6.25
25)	T	2-Butanone	0.282	0.300	0.307	0.252	0.260	0.296	0.283	7.92
26)	T	2,2-Dichloropr...	0.660	0.686	0.672	0.598	0.596	0.610	0.637	6.27
27)	T	cis-1,2-Dichlo...	0.803	0.821	0.843	0.763	0.760	0.789	0.796	4.10
28)	T	Bromochloromet...	0.662	0.629	0.656	0.589	0.586	0.579	0.617	6.03
29)	T	Tetrahydrofuran	0.179	0.189	0.200	0.166	0.173	0.194	0.183	7.14
30)	C	Chloroform	1.400	1.413	1.489	1.286	1.227	1.278	1.349	7.41#
31)	T	Cyclohexane	1.132	1.088	1.139	0.912	0.912	0.933	1.019	10.93
32)	T	1,1,1-Trichlor...	0.927	0.946	0.985	0.873	0.852	0.869	0.909	5.74
33)	S	1,2-Dichloroet...	0.886	0.863	0.864	0.708	0.703	0.714	0.789	11.32
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...	0.393	0.364	0.379	0.347	0.342	0.332	0.360	6.54
36)	T	1,1-Dichloropr...	0.481	0.486	0.524	0.483	0.479	0.456	0.485	4.50
37)	T	Ethyl Acetate	0.313	0.326	0.356	0.300	0.314	0.321	0.322	5.90
38)	T	Carbon Tetrach...	0.442	0.462	0.505	0.447	0.452	0.429	0.456	5.77
39)	T	Methylcyclohexane	0.507	0.545	0.596	0.569	0.584	0.564	0.561	5.68
40)	TM	Benzene	1.503	1.545	1.639	1.516	1.515	1.438	1.526	4.31
41)	T	Methacrylonitrile	0.168	0.182	0.200	0.177	0.177	0.203	0.184	7.56
42)	TM	1,2-Dichloroet...	0.545	0.518	0.537	0.486	0.488	0.470	0.507	5.99
43)	T	Isopropyl Acetate	0.553	0.575	0.604	0.548	0.578	0.596	0.576	3.89
44)	TM	Trichloroethene	0.343	0.371	0.382	0.346	0.359	0.339	0.357	4.73
45)	C	1,2-Dichloropr...	0.391	0.408	0.423	0.393	0.384	0.372	0.395	4.53#
46)	T	Dibromomethane	0.257	0.250	0.255	0.235	0.235	0.227	0.243	5.10
47)	T	Bromodichlorom...	0.549	0.544	0.577	0.558	0.557	0.541	0.554	2.37
48)	T	Methyl methacr...	0.236	0.257	0.279	0.269	0.288	0.296	0.271	8.11
49)	T	1,4-Dioxane	0.003	0.003	0.004	0.003	0.003	0.004	0.003	10.32
50)	S	Toluene-d8	1.334	1.339	1.372	1.252	1.274	1.205	1.296	4.86
51)	T	4-Methyl-2-Pen...	0.327	0.346	0.370	0.324	0.338	0.342	0.341	4.79
52)	CM	Toluene	0.894	0.955	1.010	0.937	0.963	0.916	0.946	4.26#
53)	T	t-1,3-Dichloro...	0.440	0.478	0.521	0.507	0.554	0.547	0.508	8.51
54)	T	cis-1,3-Dichlo...	0.525	0.558	0.618	0.590	0.614	0.611	0.586	6.36
55)	T	1,1,2-Trichlor...	0.343	0.339	0.359	0.316	0.316	0.318	0.332	5.41
56)	T	Ethyl methacry...	0.362	0.405	0.462	0.438	0.475	0.480	0.437	10.51

Method Path : Z:\voasrv\HPCHEM1\MSVOA_W\Method\
Method File : 82W092525S.M

57)	T	1,3-Dichloropr...	0.562	0.580	0.617	0.568	0.562	0.548	0.573	4.22
58)	T	2-Chloroethyl ...	0.206	0.220	0.236	0.252	0.264	0.261	0.240	9.74
59)	T	2-Hexanone	0.215	0.224	0.255	0.225	0.236	0.243	0.233	6.15
60)	T	Dibromochlorom...	0.354	0.352	0.371	0.369	0.377	0.364	0.364	2.66
61)	T	1,2-Dibromoethane	0.310	0.313	0.337	0.308	0.308	0.309	0.314	3.64
62)	S	4-Bromofluorob...	0.505	0.491	0.511	0.482	0.486	0.458	0.489	3.83
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.297	0.331	0.323	0.301	0.288	0.288	0.305	5.98
65)	PM	Chlorobenzene	1.146	1.205	1.234	1.126	1.109	1.091	1.152	4.89
66)	T	1,1,1,2-Tetrac...	0.354	0.367	0.377	0.360	0.366	0.361	0.364	2.20
67)	C	Ethyl Benzene	1.710	1.890	1.993	1.882	1.927	1.908	1.885	5.02#
68)	T	m/p-Xylenes	0.647	0.728	0.793	0.721	0.729	0.717	0.723	6.44
69)	T	o-Xylene	0.590	0.670	0.711	0.704	0.707	0.694	0.679	6.79
70)	T	Styrene	0.977	1.180	1.315	1.247	1.223	1.204	1.191	9.61
71)	P	Bromoform	0.186	0.222	0.219	0.210	0.214	0.223	0.212	6.52
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.005	3.296	3.600	3.704	3.535	3.740	3.480	8.07
74)	T	N-amyl acetate	0.995	1.051	1.158	1.082	1.086	1.203	1.096	6.80
75)	P	1,1,2,2-Tetrac...	0.955	0.945	0.943	0.886	0.843	0.902	0.912	4.75
76)	T	1,2,3-Trichlor...	0.752	0.709	0.701	0.665	0.631	0.670	0.688	6.09
77)	T	Bromobenzene	0.832	0.813	0.868	0.917	0.837	0.869	0.856	4.31
78)	T	n-propylbenzene	3.941	4.225	4.466	4.685	4.428	4.483	4.371	5.88
79)	T	2-Chlorotoluene	2.428	2.616	2.716	2.777	2.628	2.724	2.648	4.68
80)	T	1,3,5-Trimethy...	2.544	2.923	3.068	3.175	3.026	3.117	2.975	7.66
81)	T	trans-1,4-Dich...	0.229	0.241	0.256	0.270	0.278	0.315	0.265	11.53
82)	T	4-Chlorotoluene	2.530	2.844	2.867	2.928	2.752	2.870	2.799	5.12
83)	T	tert-Butylbenzene	2.196	2.346	2.559	2.617	2.538	2.674	2.488	7.28
84)	T	1,2,4-Trimethy...	2.557	2.971	3.151	3.202	3.108	3.136	3.021	7.94
85)	T	sec-Butylbenzene	3.324	3.569	3.851	3.989	3.738	3.949	3.737	6.77
86)	T	p-Isopropyltol...	2.720	3.012	3.145	3.380	3.116	3.193	3.095	7.10
87)	T	1,3-Dichlorobe...	1.700	1.684	1.659	1.737	1.656	1.722	1.693	1.94
88)	T	1,4-Dichlorobe...	1.811	1.770	1.807	1.674	1.631	1.685	1.730	4.42
89)	T	n-Butylbenzene	2.754	3.054	3.129	3.307	3.112	3.277	3.106	6.38
90)	T	Hexachloroethane	0.564	0.548	0.586	0.575	0.579	0.608	0.577	3.49
91)	T	1,2-Dichlorobe...	1.587	1.636	1.663	1.630	1.465	1.524	1.584	4.79
92)	T	1,2-Dibromo-3-...	0.167	0.156	0.156	0.144	0.148	0.166	0.156	5.78
93)	T	1,2,4-Trichlor...	0.850	0.888	0.943	0.960	0.961	1.035	0.940	6.83
94)	T	Hexachlorobuta...	0.461	0.436	0.474	0.391	0.405	0.422	0.432	7.41
95)	T	Naphthalene	1.847	2.080	2.252	2.318	2.369	2.665	2.255	12.25
96)	T	1,2,3-Trichlor...	0.807	0.849	0.861	0.892	0.881	0.953	0.874	5.57

(#) = Out of Range



Response = 6.223e-001 * Amt + 1.105e-001
Coef of Det (r^2) = 0.999012 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA W\Method\82W092525S.M
Calibration Table Last Updated: Fri Sep 26 07:11:42 2025

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032258.D
Acq On : 25 Sep 2025 10:45
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:46:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.959	168	238142	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.849	114	445366	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.635	117	431495	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.555	152	209227	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.319	65	21096	5.610	ug/l		0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	11.220%#			
35) Dibromofluoromethane	7.904	113	17518	5.469	ug/l		0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	10.940%#			
50) Toluene-d8	10.330	98	59424	5.148	ug/l		0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	10.300%#			
62) 4-Bromofluorobenzene	12.617	95	22506	5.169	ug/l		0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	10.340%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.045	85	9243	5.618	ug/l		93
3) Chloromethane	2.259	50	12861	5.462	ug/l		92
4) Vinyl Chloride	2.411	62	14540	5.285	ug/l	#	88
5) Bromomethane	2.826	94	9604	5.112	ug/l		99
6) Chloroethane	2.972	64	9905	5.313	ug/l		98
7) Trichlorofluoromethane	3.307	101	9495	4.581	ug/l	#	82
8) Diethyl Ether	3.722	74	11315	5.773	ug/l		95
9) 1,1,2-Trichlorotrifluo...	4.106	101	14114	5.334	ug/l		96
10) Methyl Iodide	4.319	142	17823	4.980	ug/l		98
11) Tert butyl alcohol	5.228	59	7211	27.627	ug/l		95
12) 1,1-Dichloroethene	4.082	96	14162	5.007	ug/l		93
13) Acrolein	3.935	56	12892	27.751	ug/l		94
14) Allyl chloride	4.703	41	21706	4.945	ug/l		98
15) Acrylonitrile	5.417	53	25755	25.513	ug/l		96
16) Acetone	4.167	43	25773	26.689	ug/l		97
17) Carbon Disulfide	4.423	76	32473	4.994	ug/l		98
18) Methyl Acetate	4.716	43	15180	4.571	ug/l		97
19) Methyl tert-butyl Ether	5.465	73	25133	4.794	ug/l		98
20) Methylene Chloride	4.966	84	41876	5.253	ug/l		96
21) trans-1,2-Dichloroethene	5.465	96	15086	4.946	ug/l		89
22) Diisopropyl ether	6.343	45	45086	4.622	ug/l	#	86
23) Vinyl Acetate	6.289	43	145249	23.148	ug/l		96
24) 1,1-Dichloroethane	6.246	63	31274	5.079	ug/l		99
25) 2-Butanone	7.197	43	33552	24.927	ug/l		91
26) 2,2-Dichloropropane	7.185	77	15711	5.178	ug/l		97
27) cis-1,2-Dichloroethene	7.191	96	19129	5.043	ug/l		99
28) Bromochloromethane	7.532	49	15762	5.365	ug/l	#	100
29) Tetrahydrofuran	7.563	42	21353	24.436	ug/l		95
30) Chloroform	7.691	83	33349	5.191	ug/l		91
31) Cyclohexane	7.965	56	26952	5.551	ug/l	#	82
32) 1,1,1-Trichloroethane	7.886	97	22073	5.100	ug/l	#	75
36) 1,1-Dichloropropene	8.093	75	21420	4.960	ug/l		96
37) Ethyl Acetate	7.288	43	13922	4.861	ug/l	#	80
38) Carbon Tetrachloride	8.087	117	19674	4.843	ug/l	#	87
39) Methylcyclohexane	9.343	83	22561	4.515	ug/l		97
40) Benzene	8.337	78	66943	4.925	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032258.D
Acq On : 25 Sep 2025 10:45
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:46:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.502	41	7461	4.549 ug/l	93
42) 1,2-Dichloroethane	8.416	62	24254	5.368 ug/l	100
43) Isopropyl Acetate	8.441	43	24619	4.802 ug/l	99
44) Trichloroethene	9.099	130	15290	4.813 ug/l	98
45) 1,2-Dichloropropane	9.373	63	17431	4.951 ug/l	95
46) Dibromomethane	9.471	93	11428	5.280 ug/l	96
47) Bromodichloromethane	9.654	83	24435	4.950 ug/l	96
48) Methyl methacrylate	9.446	41	10520	4.362 ug/l	92
49) 1,4-Dioxane	9.471	88	2525	87.105 ug/l #	99
51) 4-Methyl-2-Pentanone	10.215	43	72902	23.984 ug/l	96
52) Toluene	10.391	92	39810	4.725 ug/l	97
53) t-1,3-Dichloropropene	10.611	75	19584	4.330 ug/l	94
54) cis-1,3-Dichloropropene	10.081	75	23388	4.479 ug/l	97
55) 1,1,2-Trichloroethane	10.788	97	15277	5.171 ug/l	98
56) Ethyl methacrylate	10.647	69	16129	4.145 ug/l	97
57) 1,3-Dichloropropane	10.934	76	25050	4.908 ug/l	94
58) 2-Chloroethyl Vinyl ether	9.928	63	45909	21.490 ug/l	99
59) 2-Hexanone	10.971	43	47919	23.086 ug/l	93
60) Dibromochloromethane	11.129	129	15750	4.854 ug/l	99
61) 1,2-Dibromoethane	11.239	107	13807	4.933 ug/l	97
64) Tetrachloroethene	10.861	164	12819	4.875 ug/l #	89
65) Chlorobenzene	11.659	112	49447	4.975 ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.733	131	15257	4.854 ug/l	99
67) Ethyl Benzene	11.733	91	73779	4.535 ug/l	98
68) m/p-Xylenes	11.842	106	55830	8.952 ug/l	93
69) o-Xylene	12.166	106	25456	4.343 ug/l	98
70) Styrene	12.178	104	42166	4.102 ug/l	97
71) Bromoform	12.348	173	8018	4.377 ug/l #	86
73) Isopropylbenzene	12.464	105	62880	4.318 ug/l	98
74) N-amyl acetate	12.269	43	20827	4.541 ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.714	83	19979	5.233 ug/l	100
76) 1,2,3-Trichloropropane	12.763	75	15732m	4.781 ug/l	
77) Bromobenzene	12.745	156	17400	4.858 ug/l	93
78) n-propylbenzene	12.800	91	82458	4.508 ug/l	99
79) 2-Chlorotoluene	12.891	91	50795	4.584 ug/l	96
80) 1,3,5-Trimethylbenzene	12.940	105	53227	4.275 ug/l	99
81) trans-1,4-Dichloro-2-b...	12.507	75	4797	4.329 ug/l	87
82) 4-Chlorotoluene	12.989	91	52940	4.521 ug/l	98
83) tert-Butylbenzene	13.202	119	45943	4.412 ug/l	98
84) 1,2,4-Trimethylbenzene	13.251	105	53509	4.233 ug/l	96
85) sec-Butylbenzene	13.379	105	69549	4.448 ug/l	99
86) p-Isopropyltoluene	13.495	119	56914	4.395 ug/l	97
87) 1,3-Dichlorobenzene	13.495	146	35563	5.020 ug/l	98
88) 1,4-Dichlorobenzene	13.574	146	37891	5.235 ug/l	96
89) n-Butylbenzene	13.818	91	57629	4.434 ug/l	97
90) Hexachloroethane	14.086	117	11800	4.889 ug/l	96
91) 1,2-Dichlorobenzene	13.866	146	33197	5.009 ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.476	75	3485	5.336 ug/l	82
93) 1,2,4-Trichlorobenzene	15.122	180	17792	4.525 ug/l	98
94) Hexachlorobutadiene	15.232	225	9652	5.345 ug/l	89
95) Naphthalene	15.360	128	38646	4.095 ug/l	99
96) 1,2,3-Trichlorobenzene	15.549	180	16886	4.619 ug/l	94

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032258.D
Acq On : 25 Sep 2025 10:45
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:46:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

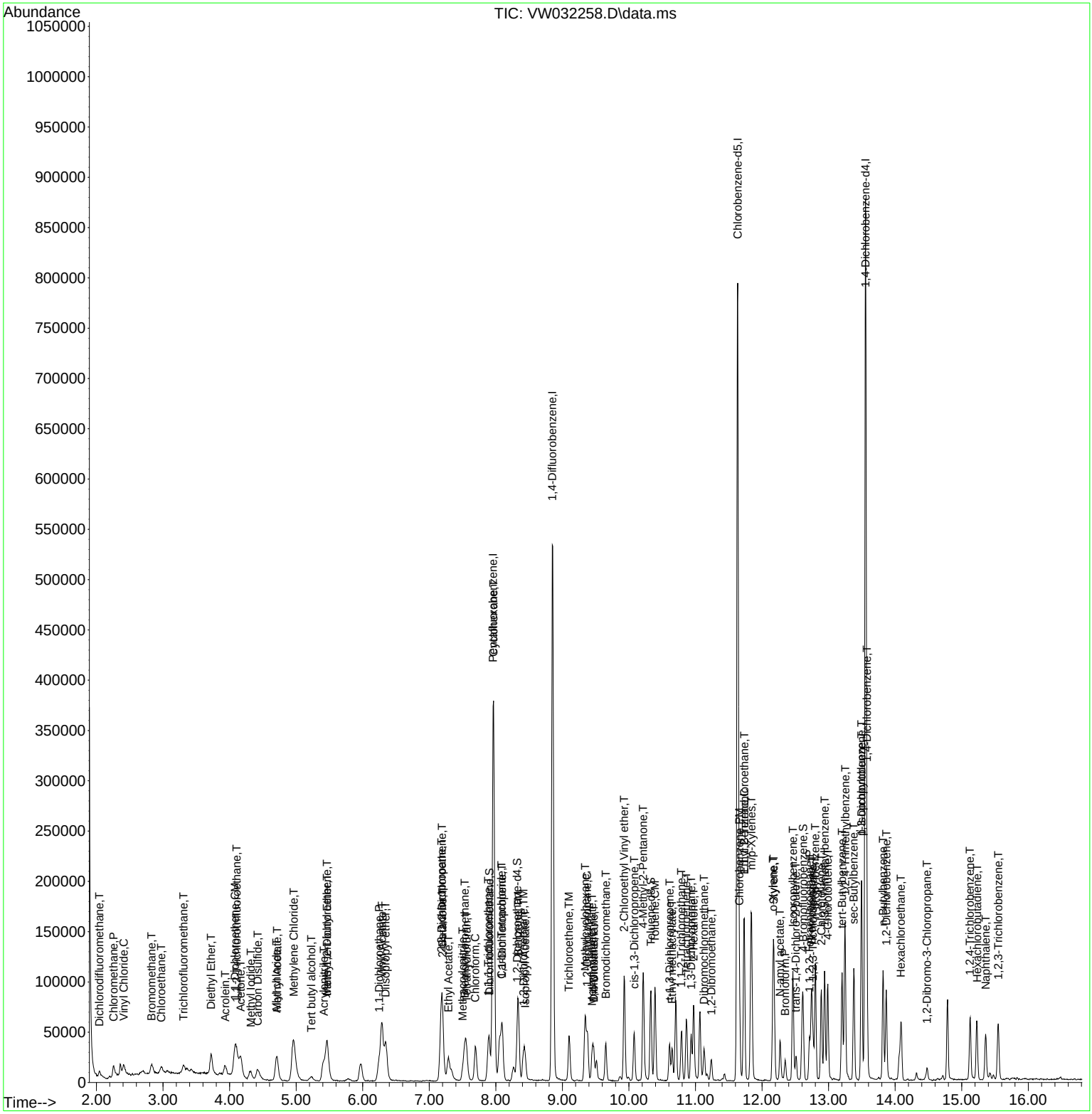
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032258.D
Acq On : 25 Sep 2025 10:45
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 26 06:46:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032259.D
Acq On : 25 Sep 2025 11:30
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:47:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	248065	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	468360	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	429928	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	222948	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	42794	10.926	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	21.860%#		
35) Dibromofluoromethane	7.898	113	34108	10.126	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	20.260%#		
50) Toluene-d8	10.331	98	125406	10.331	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	20.660%#		
62) 4-Bromofluorobenzene	12.617	95	45948	10.035	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	20.060%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	19773	11.537	ug/l	98
3) Chloromethane	2.253	50	27657	11.276	ug/l	93
4) Vinyl Chloride	2.405	62	31161	10.874	ug/l	99
5) Bromomethane	2.826	94	21051	10.757	ug/l	94
6) Chloroethane	2.978	64	20229	10.417	ug/l	96
7) Trichlorofluoromethane	3.302	101	20665	9.570	ug/l	97
8) Diethyl Ether	3.728	74	21842	10.698	ug/l	95
9) 1,1,2-Trichlorotrifluo...	4.100	101	29104	10.560	ug/l	95
10) Methyl Iodide	4.308	142	37859	10.156	ug/l	98
11) Tert butyl alcohol	5.228	59	14898	54.794	ug/l	99
12) 1,1-Dichloroethene	4.082	96	31390	10.654	ug/l	89
13) Acrolein	3.930	56	26417	54.589	ug/l	99
14) Allyl chloride	4.704	41	46273	10.120	ug/l	98
15) Acrylonitrile	5.405	53	54484	51.814	ug/l	99
16) Acetone	4.161	43	62561	62.193	ug/l	98
17) Carbon Disulfide	4.423	76	71415	10.543	ug/l	98
18) Methyl Acetate	4.716	43	29862	8.632	ug/l	96
19) Methyl tert-butyl Ether	5.460	73	54291	9.941	ug/l	95
20) Methylene Chloride	4.954	84	62968	11.520	ug/l	96
21) trans-1,2-Dichloroethene	5.460	96	33128	10.428	ug/l	90
22) Diisopropyl ether	6.344	45	102543	10.093	ug/l	96
23) Vinyl Acetate	6.289	43	334126	51.119	ug/l	97
24) 1,1-Dichloroethane	6.240	63	66637	10.390	ug/l	98
25) 2-Butanone	7.197	43	74330	53.014	ug/l	97
26) 2,2-Dichloropropane	7.191	77	34033	10.768	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	40710	10.303	ug/l	98
28) Bromochloromethane	7.533	49	31230	10.204	ug/l #	97
29) Tetrahydrofuran	7.563	42	46844	51.463	ug/l	98
30) Chloroform	7.697	83	70085	10.473	ug/l	99
31) Cyclohexane	7.971	56	53996	10.677	ug/l #	92
32) 1,1,1-Trichloroethane	7.886	97	46942	10.413	ug/l	97
36) 1,1-Dichloropropene	8.100	75	45535	10.027	ug/l	99
37) Ethyl Acetate	7.283	43	30498	10.126	ug/l	96
38) Carbon Tetrachloride	8.081	117	43230	10.118	ug/l	87
39) Methylcyclohexane	9.343	83	51092	9.723	ug/l	98
40) Benzene	8.337	78	144721	10.124	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032259.D
Acq On : 25 Sep 2025 11:30
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:47:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	Methacrylonitrile	7.502	41	17016	9.865	ug/l		92
42)	1,2-Dichloroethane	8.417	62	48566	10.222	ug/l		98
43)	Isopropyl Acetate	8.435	43	53838	9.986	ug/l		99
44)	Trichloroethene	9.099	130	34730	10.395	ug/l		89
45)	1,2-Dichloropropane	9.374	63	38213	10.322	ug/l		97
46)	Dibromomethane	9.465	93	23384	10.273	ug/l		98
47)	Bromodichloromethane	9.648	83	50969	9.818	ug/l		97
48)	Methyl methacrylate	9.441	41	24046	9.481	ug/l		98
49)	1,4-Dioxane	9.465	88	5391	176.842	ug/l	#	96
51)	4-Methyl-2-Pentanone	10.215	43	162030	50.689	ug/l		96
52)	Toluene	10.392	92	89443	10.096	ug/l		99
53)	t-1,3-Dichloropropene	10.611	75	44781	9.415	ug/l		97
54)	cis-1,3-Dichloropropene	10.081	75	52304	9.525	ug/l		96
55)	1,1,2-Trichloroethane	10.788	97	31763	10.223	ug/l		97
56)	Ethyl methacrylate	10.648	69	37918	9.265	ug/l		98
57)	1,3-Dichloropropane	10.934	76	54352	10.126	ug/l		96
58)	2-Chloroethyl Vinyl ether	9.928	63	102960	45.830	ug/l		100
59)	2-Hexanone	10.971	43	105087	48.141	ug/l		95
60)	Dibromochloromethane	11.129	129	33001	9.672	ug/l		99
61)	1,2-Dibromoethane	11.233	107	29299	9.954	ug/l		95
64)	Tetrachloroethene	10.861	164	28481	10.870	ug/l		89
65)	Chlorobenzene	11.660	112	103607	10.462	ug/l		98
66)	1,1,1,2-Tetrachloroethane	11.727	131	31543	10.071	ug/l		98
67)	Ethyl Benzene	11.733	91	162514	10.026	ug/l		98
68)	m/p-Xylenes	11.837	106	125268	20.160	ug/l		98
69)	o-Xylene	12.166	106	57588	9.862	ug/l		97
70)	Styrene	12.178	104	101464	9.908	ug/l		98
71)	Bromoform	12.349	173	19072	10.450	ug/l		98
73)	Isopropylbenzene	12.465	105	146979	9.472	ug/l		99
74)	N-amyl acetate	12.270	43	46865	9.590	ug/l		99
75)	1,1,2,2-Tetrachloroethane	12.715	83	42129	10.355	ug/l		99
76)	1,2,3-Trichloropropane	12.763	75	31615m	9.017	ug/l		
77)	Bromobenzene	12.745	156	36258	9.500	ug/l		86
78)	n-propylbenzene	12.800	91	188377	9.665	ug/l		99
79)	2-Chlorotoluene	12.891	91	116645	9.879	ug/l		100
80)	1,3,5-Trimethylbenzene	12.940	105	130321	9.823	ug/l		99
81)	trans-1,4-Dichloro-2-b...	12.513	75	10751	9.104	ug/l		89
82)	4-Chlorotoluene	12.989	91	126800	10.161	ug/l		98
83)	tert-Butylbenzene	13.202	119	104621	9.429	ug/l		99
84)	1,2,4-Trimethylbenzene	13.245	105	132488	9.836	ug/l		95
85)	sec-Butylbenzene	13.379	105	159160	9.553	ug/l		99
86)	p-Isopropyltoluene	13.495	119	134315	9.734	ug/l		98
87)	1,3-Dichlorobenzene	13.495	146	75097	9.947	ug/l		98
88)	1,4-Dichlorobenzene	13.574	146	78941	10.235	ug/l		96
89)	n-Butylbenzene	13.818	91	136190	9.835	ug/l		98
90)	Hexachloroethane	14.086	117	24456	9.509	ug/l		98
91)	1,2-Dichlorobenzene	13.867	146	72927	10.326	ug/l		98
92)	1,2-Dibromo-3-Chloropr...	14.483	75	6957	9.997	ug/l		91
93)	1,2,4-Trichlorobenzene	15.129	180	39615	9.455	ug/l		98
94)	Hexachlorobutadiene	15.232	225	19426	10.095	ug/l		92
95)	Naphthalene	15.360	128	92765	9.225	ug/l		100
96)	1,2,3-Trichlorobenzene	15.549	180	37857	9.717	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032259.D
Acq On : 25 Sep 2025 11:30
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:47:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

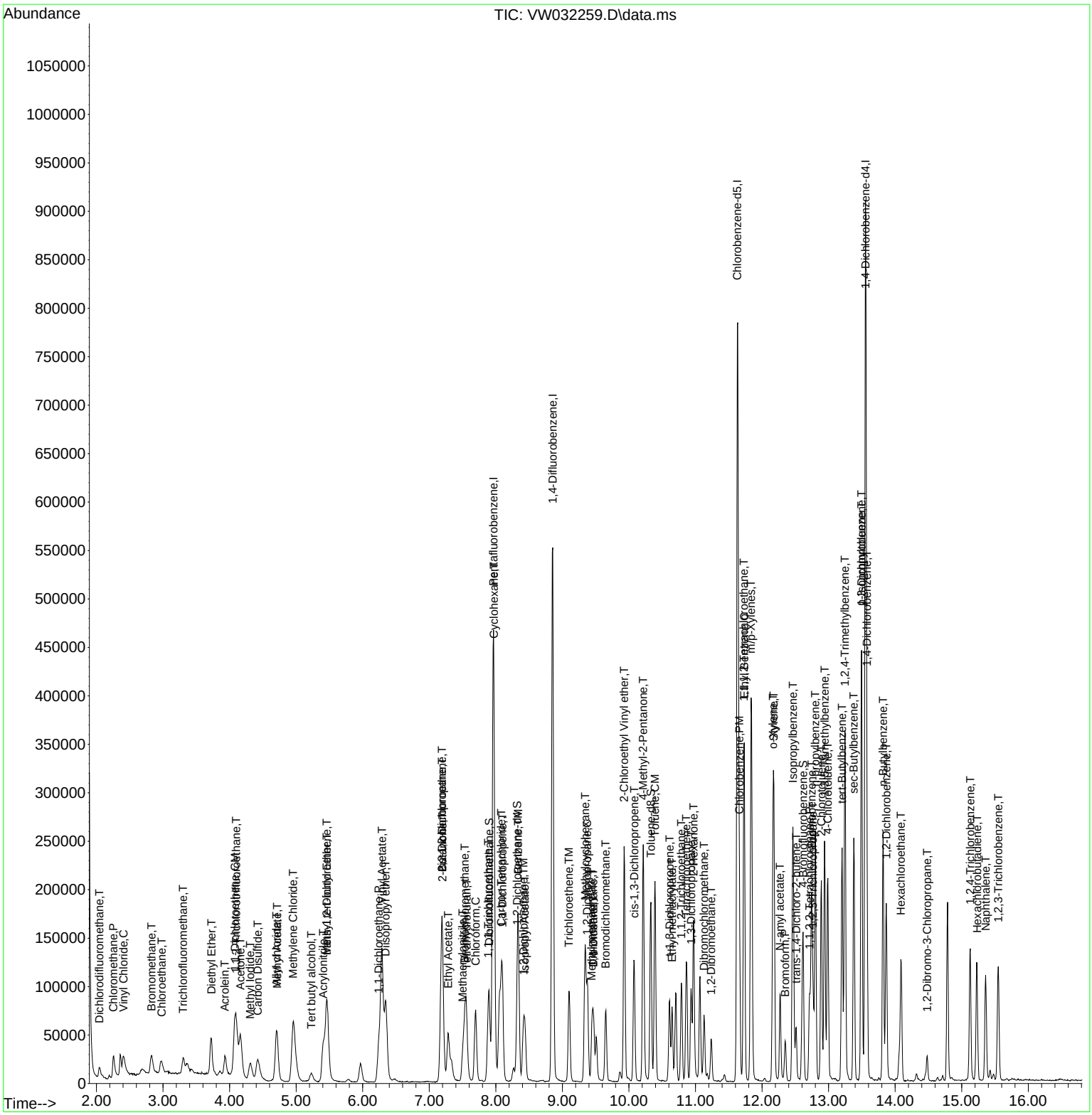
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032259.D
Acq On : 25 Sep 2025 11:30
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 26 06:47:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032260.D
Acq On : 25 Sep 2025 11:52
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:48:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	243729	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	461392	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	434624	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	226451	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.325	65	84184	21.875	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	43.740%#		
35) Dibromofluoromethane	7.898	113	69983	21.091	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	42.180%#		
50) Toluene-d8	10.331	98	253179	21.171	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	42.340%#		
62) 4-Bromofluorobenzene	12.617	95	94235	20.891	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	41.780%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	38695	22.979	ug/l	96
3) Chloromethane	2.259	50	53411	22.164	ug/l	94
4) Vinyl Chloride	2.405	62	63783	22.653	ug/l	100
5) Bromomethane	2.820	94	42423	22.064	ug/l	87
6) Chloroethane	2.966	64	42305	22.173	ug/l	98
7) Trichlorofluoromethane	3.302	101	50606	23.853	ug/l	93
8) Diethyl Ether	3.722	74	42486	21.179	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.100	101	60885	22.484	ug/l	99
10) Methyl Iodide	4.308	142	81878	22.355	ug/l	100
11) Tert butyl alcohol	5.222	59	27601	103.322	ug/l #	86
12) 1,1-Dichloroethene	4.076	96	65285	22.553	ug/l	100
13) Acrolein	3.930	56	51881	109.117	ug/l	94
14) Allyl chloride	4.710	41	98036	21.823	ug/l	100
15) Acrylonitrile	5.405	53	113227	109.593	ug/l	98
16) Acetone	4.161	43	118108	119.503	ug/l	95
17) Carbon Disulfide	4.423	76	150468	22.608	ug/l	99
18) Methyl Acetate	4.710	43	62340	18.340	ug/l	97
19) Methyl tert-butyl Ether	5.466	73	117064	21.817	ug/l	100
20) Methylene Chloride	4.960	84	82214	18.228	ug/l	98
21) trans-1,2-Dichloroethene	5.454	96	68490	21.942	ug/l	100
22) Diisopropyl ether	6.344	45	224788	22.518	ug/l	99
23) Vinyl Acetate	6.289	43	731805	113.954	ug/l	98
24) 1,1-Dichloroethane	6.240	63	138225	21.935	ug/l	100
25) 2-Butanone	7.197	43	149616	108.608	ug/l	99
26) 2,2-Dichloropropane	7.185	77	65482	21.087	ug/l	97
27) cis-1,2-Dichloroethene	7.191	96	82208	21.175	ug/l	98
28) Bromochloromethane	7.533	49	63972	21.275	ug/l #	99
29) Tetrahydrofuran	7.557	42	97668	109.208	ug/l	100
30) Chloroform	7.691	83	145120	22.072	ug/l	99
31) Cyclohexane	7.971	56	111011	22.340	ug/l	98
32) 1,1,1-Trichloroethane	7.892	97	96016	21.677	ug/l	98
36) 1,1-Dichloropropene	8.093	75	96645	21.603	ug/l	99
37) Ethyl Acetate	7.276	43	65684	22.138	ug/l	100
38) Carbon Tetrachloride	8.081	117	93252	22.156	ug/l	98
39) Methylcyclohexane	9.343	83	110069	21.264	ug/l	97
40) Benzene	8.337	78	302446	21.478	ug/l	97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032260.D
Acq On : 25 Sep 2025 11:52
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:48:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.508	41	36840	21.680	ug/l		96
42) 1,2-Dichloroethane	8.410	62	99043	21.160	ug/l		99
43) Isopropyl Acetate	8.441	43	111547	21.003	ug/l		99
44) Trichloroethene	9.105	130	70450	21.404	ug/l		85
45) 1,2-Dichloropropane	9.374	63	78048	21.400	ug/l		97
46) Dibromomethane	9.465	93	47056	20.986	ug/l		98
47) Bromodichloromethane	9.654	83	106511	20.826	ug/l	#	97
48) Methyl methacrylate	9.447	41	51409	20.575	ug/l		96
49) 1,4-Dioxane	9.471	88	13201	439.575	ug/l	#	96
51) 4-Methyl-2-Pentanone	10.215	43	341323	108.392	ug/l		99
52) Toluene	10.392	92	186350	21.351	ug/l		99
53) t-1,3-Dichloropropene	10.611	75	96092	20.507	ug/l		96
54) cis-1,3-Dichloropropene	10.075	75	114070	21.086	ug/l		96
55) 1,1,2-Trichloroethane	10.788	97	66195	21.627	ug/l		98
56) Ethyl methacrylate	10.648	69	85321	21.163	ug/l		97
57) 1,3-Dichloropropane	10.934	76	113957	21.552	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	217872	98.444	ug/l		99
59) 2-Hexanone	10.971	43	234851	109.212	ug/l		97
60) Dibromochloromethane	11.129	129	68381	20.343	ug/l		98
61) 1,2-Dibromoethane	11.239	107	62256	21.470	ug/l		98
64) Tetrachloroethene	10.861	164	56103	21.182	ug/l		94
65) Chlorobenzene	11.660	112	214538	21.430	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.727	131	65613	20.723	ug/l		98
67) Ethyl Benzene	11.733	91	346566	21.149	ug/l		98
68) m/p-Xylenes	11.837	106	275886	43.920	ug/l		94
69) o-Xylene	12.166	106	123539	20.927	ug/l		96
70) Styrene	12.178	104	228628	22.084	ug/l		98
71) Bromoform	12.349	173	38000	20.596	ug/l	#	96
73) Isopropylbenzene	12.465	105	326048	20.686	ug/l		97
74) N-amyl acetate	12.270	43	104936	21.142	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.715	83	85459	20.680	ug/l		99
76) 1,2,3-Trichloropropane	12.769	75	63465m	17.820	ug/l		
77) Bromobenzene	12.745	156	78661	20.291	ug/l		92
78) n-propylbenzene	12.800	91	404504	20.432	ug/l		100
79) 2-Chlorotoluene	12.891	91	245976	20.510	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	277878	20.621	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.513	75	23150	19.301	ug/l		90
82) 4-Chlorotoluene	12.989	91	259722	20.491	ug/l		99
83) tert-Butylbenzene	13.202	119	231761	20.565	ug/l		97
84) 1,2,4-Trimethylbenzene	13.245	105	285414	20.861	ug/l		100
85) sec-Butylbenzene	13.379	105	348797	20.611	ug/l		99
86) p-Isopropyltoluene	13.495	119	284908	20.328	ug/l		98
87) 1,3-Dichlorobenzene	13.495	146	150306	19.601	ug/l		95
88) 1,4-Dichlorobenzene	13.574	146	163717	20.899	ug/l		97
89) n-Butylbenzene	13.818	91	283445	20.152	ug/l		99
90) Hexachloroethane	14.092	117	53076	20.318	ug/l		91
91) 1,2-Dichlorobenzene	13.867	146	150614	20.996	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.476	75	14130	19.991	ug/l		96
93) 1,2,4-Trichlorobenzene	15.129	180	85426	20.074	ug/l		99
94) Hexachlorobutadiene	15.232	225	42929	21.964	ug/l		86
95) Naphthalene	15.360	128	203984	19.971	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	78000	19.712	ug/l		93

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032260.D
Acq On : 25 Sep 2025 11:52
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:48:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

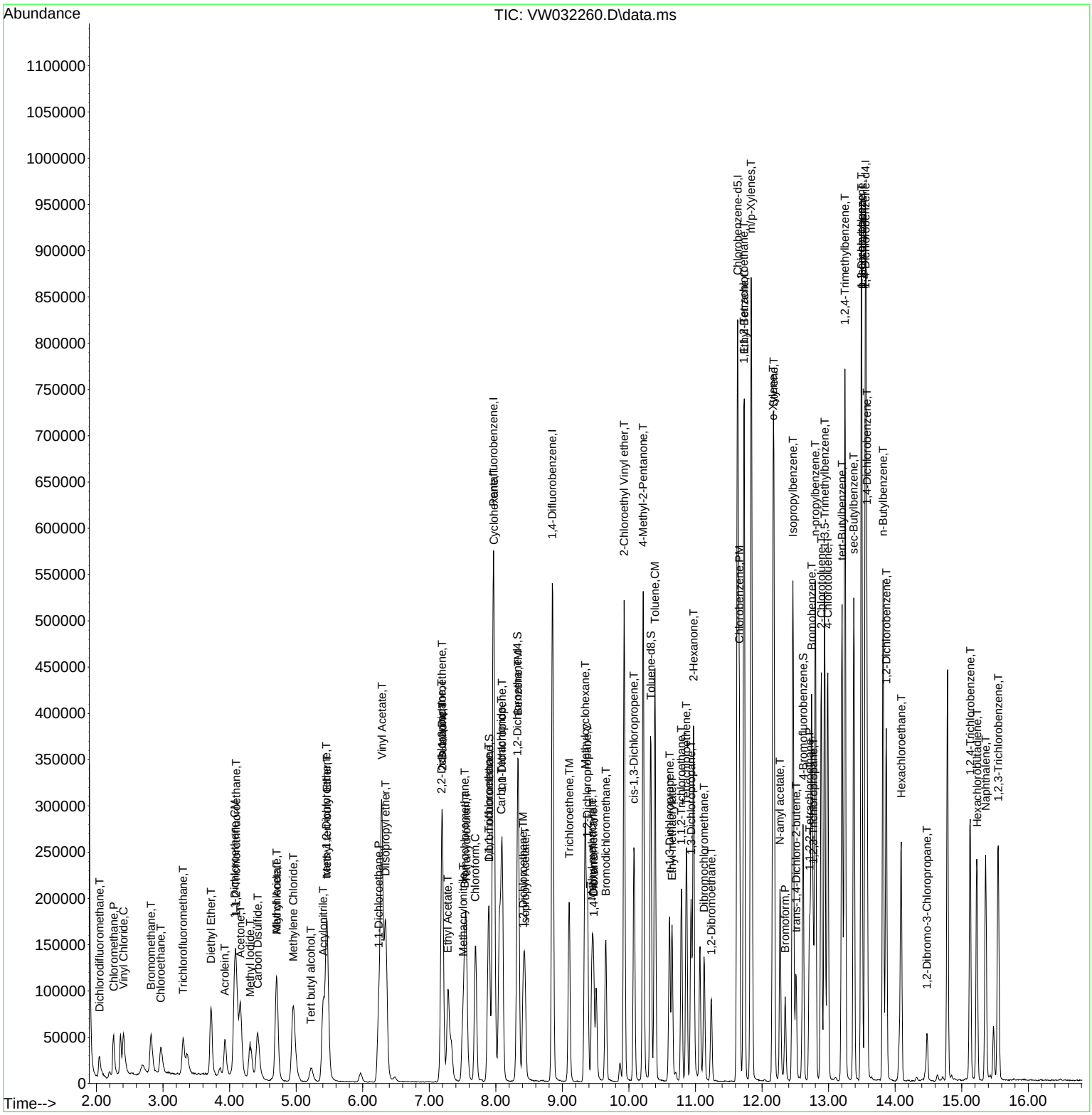
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032260.D
Acq On : 25 Sep 2025 11:52
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 26 06:48:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032261.D
Acq On : 25 Sep 2025 12:24
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:49:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	263419	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	461173	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	443387	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	213560	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	186598	44.863	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 89.720%			
35) Dibromofluoromethane	7.904	113	159800	48.182	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 96.360%			
50) Toluene-d8	10.325	98	577472	48.312	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 96.620%			
62) 4-Bromofluorobenzene	12.617	95	222382	49.323	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 98.640%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.039	85	77732	42.711	ug/l	100
3) Chloromethane	2.253	50	111388	42.767	ug/l	100
4) Vinyl Chloride	2.405	62	141381	46.459	ug/l	100
5) Bromomethane	2.820	94	96600	46.487	ug/l	100
6) Chloroethane	2.966	64	94674	45.912	ug/l	100
7) Trichlorofluoromethane	3.301	101	100937	44.021	ug/l	100
8) Diethyl Ether	3.716	74	96887	44.687	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.100	101	138524	47.331	ug/l	100
10) Methyl Iodide	4.301	142	187435	47.349	ug/l	100
11) Tert butyl alcohol	5.216	59	60028	207.913	ug/l	100
12) 1,1-Dichloroethene	4.076	96	145223	46.418	ug/l	100
13) Acrolein	3.929	56	118954	231.485	ug/l	100
14) Allyl chloride	4.698	41	231447	47.669	ug/l	100
15) Acrylonitrile	5.399	53	248561	222.601	ug/l	100
16) Acetone	4.161	43	215356	201.612	ug/l	100
17) Carbon Disulfide	4.417	76	331845	46.133	ug/l	100
18) Methyl Acetate	4.710	43	194479	52.938	ug/l	100
19) Methyl tert-butyl Ether	5.460	73	282181	48.658	ug/l	100
20) Methylene Chloride	4.954	84	196832	51.165	ug/l	100
21) trans-1,2-Dichloroethene	5.453	96	159500	47.279	ug/l	100
22) Diisopropyl ether	6.337	45	527651	48.907	ug/l	100
23) Vinyl Acetate	6.283	43	1601259	230.704	ug/l	100
24) 1,1-Dichloroethane	6.246	63	324470	47.641	ug/l	100
25) 2-Butanone	7.191	43	332100	223.055	ug/l	100
26) 2,2-Dichloropropane	7.185	77	157515	46.933	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	200886	47.877	ug/l	100
28) Bromochloromethane	7.526	49	155192	47.753	ug/l #	100
29) Tetrahydrofuran	7.551	42	218311	225.860	ug/l	100
30) Chloroform	7.691	83	338865	47.686	ug/l	100
31) Cyclohexane	7.971	56	240167	44.720	ug/l	100
32) 1,1,1-Trichloroethane	7.886	97	230079	48.061	ug/l	100
36) 1,1-Dichloropropene	8.093	75	222842	49.836	ug/l	100
37) Ethyl Acetate	7.276	43	138317	46.641	ug/l	100
38) Carbon Tetrachloride	8.087	117	206044	48.978	ug/l	100
39) Methylcyclohexane	9.343	83	262496	50.734	ug/l	100
40) Benzene	8.331	78	699089	49.669	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032261.D
Acq On : 25 Sep 2025 12:24
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:49:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	81434	47.946	ug/l		100
42) 1,2-Dichloroethane	8.410	62	224207	47.924	ug/l		100
43) Isopropyl Acetate	8.435	43	252816	47.624	ug/l		100
44) Trichloroethene	9.099	130	159555	48.499	ug/l		100
45) 1,2-Dichloropropane	9.373	63	181112	49.683	ug/l		100
46) Dibromomethane	9.465	93	108241	48.295	ug/l		100
47) Bromodichloromethane	9.648	83	257273	50.329	ug/l		100
48) Methyl methacrylate	9.441	41	123924	49.620	ug/l		100
49) 1,4-Dioxane	9.465	88	30020	1000.100	ug/l	#	100
51) 4-Methyl-2-Pentanone	10.215	43	747705	237.557	ug/l		100
52) Toluene	10.386	92	432072	49.529	ug/l		100
53) t-1,3-Dichloropropene	10.611	75	234010	49.964	ug/l		100
54) cis-1,3-Dichloropropene	10.075	75	272276	50.355	ug/l		100
55) 1,1,2-Trichloroethane	10.788	97	145639	47.606	ug/l		100
56) Ethyl methacrylate	10.648	69	201819	50.082	ug/l		100
57) 1,3-Dichloropropane	10.934	76	262086	49.590	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.928	63	581038	262.662	ug/l		100
59) 2-Hexanone	10.971	43	518965	241.448	ug/l		100
60) Dibromochloromethane	11.129	129	170115	50.633	ug/l		100
61) 1,2-Dibromoethane	11.239	107	141919	48.966	ug/l		100
64) Tetrachloroethene	10.867	164	133631	49.455	ug/l		100
65) Chlorobenzene	11.660	112	499320	48.890	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.727	131	159711	49.447	ug/l		100
67) Ethyl Benzene	11.727	91	834567	49.923	ug/l		100
68) m/p-Xylenes	11.836	106	639320	99.765	ug/l		100
69) o-Xylene	12.166	106	312144	51.830	ug/l		100
70) Styrene	12.178	104	552922	52.353	ug/l		100
71) Bromoform	12.349	173	93158	49.493	ug/l	#	100
73) Isopropylbenzene	12.464	105	791099	53.222	ug/l		100
74) N-amyl acetate	12.269	43	231039	49.357	ug/l		100
75) 1,1,2,2-Tetrachloroethane	12.714	83	189180	48.542	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	141938m	42.260	ug/l		
77) Bromobenzene	12.745	156	195785	53.552	ug/l		100
78) n-propylbenzene	12.800	91	1000628	53.593	ug/l		100
79) 2-Chlorotoluene	12.891	91	592976	52.428	ug/l		100
80) 1,3,5-Trimethylbenzene	12.940	105	678131	53.361	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.507	75	57637	50.954	ug/l		100
82) 4-Chlorotoluene	12.983	91	625344	52.316	ug/l		100
83) tert-Butylbenzene	13.202	119	558898	52.587	ug/l		100
84) 1,2,4-Trimethylbenzene	13.245	105	683724	52.990	ug/l		100
85) sec-Butylbenzene	13.379	105	851810	53.372	ug/l		100
86) p-Isopropyltoluene	13.495	119	721846	54.612	ug/l		100
87) 1,3-Dichlorobenzene	13.495	146	371057	51.310	ug/l		100
88) 1,4-Dichlorobenzene	13.574	146	357426	48.381	ug/l		100
89) n-Butylbenzene	13.818	91	706203	53.238	ug/l		100
90) Hexachloroethane	14.092	117	122891	49.885	ug/l		100
91) 1,2-Dichlorobenzene	13.867	146	348041	51.447	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.476	75	30775	46.167	ug/l		100
93) 1,2,4-Trichlorobenzene	15.129	180	204990	51.077	ug/l		100
94) Hexachlorobutadiene	15.232	225	83590	45.350	ug/l		100
95) Naphthalene	15.360	128	494973	51.385	ug/l		100
96) 1,2,3-Trichlorobenzene	15.543	180	190435	51.031	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032261.D
Acq On : 25 Sep 2025 12:24
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:49:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

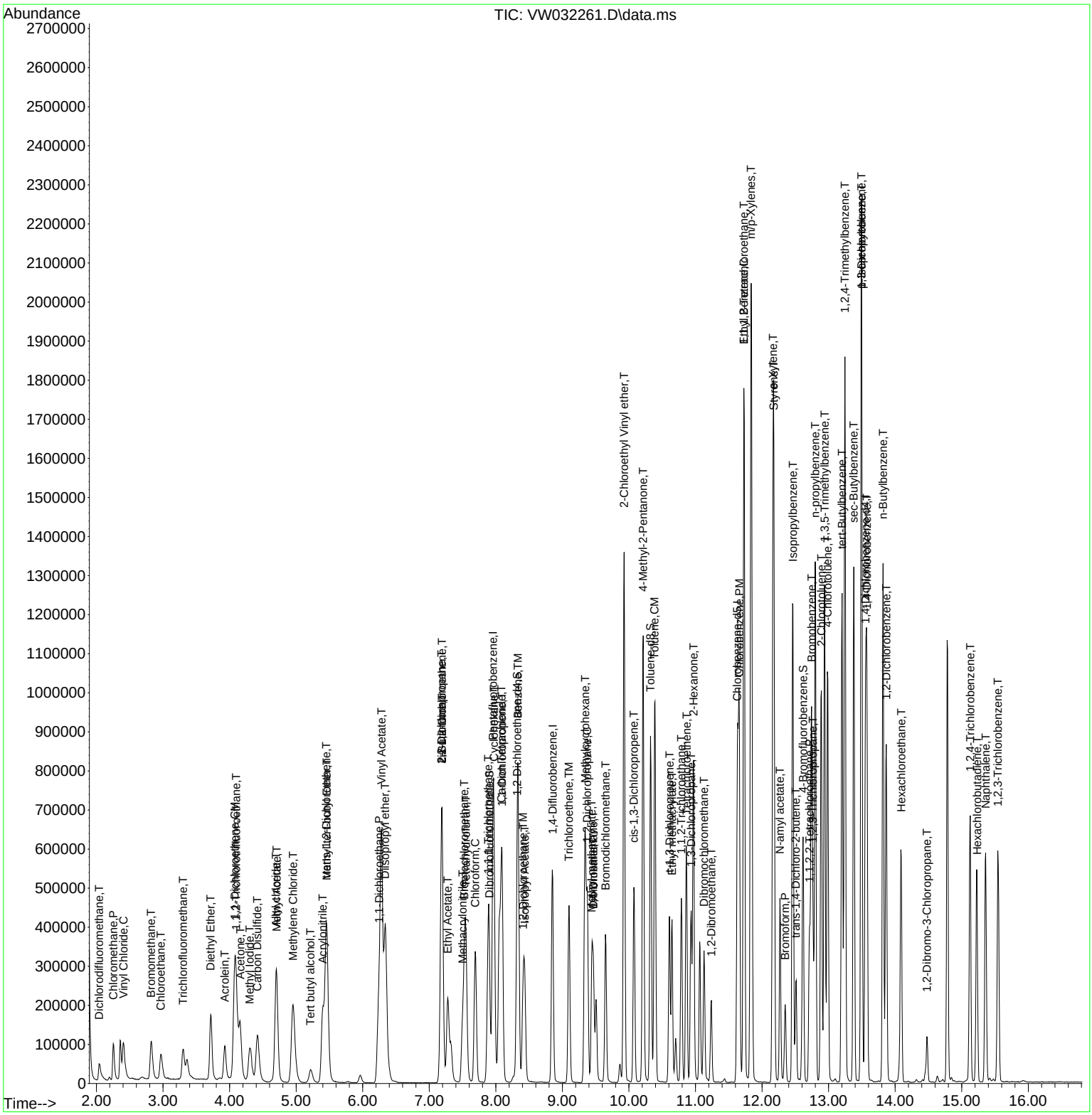
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032261.D
Acq On : 25 Sep 2025 12:24
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 26 06:49:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032262.D
Acq On : 25 Sep 2025 12:46
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:50:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	270060	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	469392	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	452792	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	225531	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	379535	89.005	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 178.020%#			
35) Dibromofluoromethane	7.904	113	320954	95.077	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 190.160%#			
50) Toluene-d8	10.325	98	1195947	98.302	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 196.600%#			
62) 4-Bromofluorobenzene	12.617	95	456586	99.494	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 198.980%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	159187	85.317	ug/l	98
3) Chloromethane	2.253	50	236913	88.725	ug/l	93
4) Vinyl Chloride	2.405	62	277540	88.959	ug/l	96
5) Bromomethane	2.820	94	194678	91.381	ug/l	89
6) Chloroethane	2.972	64	192034	90.836	ug/l	98
7) Trichlorofluoromethane	3.301	101	236771	100.722	ug/l	97
8) Diethyl Ether	3.722	74	197656	88.924	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.106	101	267494	89.149	ug/l	99
10) Methyl Iodide	4.319	142	389172	95.893	ug/l	97
11) Tert butyl alcohol	5.228	59	132448	447.465	ug/l	98
12) 1,1-Dichloroethene	4.082	96	296922	92.573	ug/l	97
13) Acrolein	3.929	56	228335	433.414	ug/l	95
14) Allyl chloride	4.704	41	475222	95.469	ug/l	99
15) Acrylonitrile	5.405	53	531479	464.265	ug/l	99
16) Acetone	4.161	43	436453	398.550	ug/l	100
17) Carbon Disulfide	4.423	76	681761	92.447	ug/l	100
18) Methyl Acetate	4.716	43	404654	107.440	ug/l	99
19) Methyl tert-butyl Ether	5.466	73	572270	96.254	ug/l	98
20) Methylene Chloride	4.954	84	356808	97.287	ug/l	97
21) trans-1,2-Dichloroethene	5.453	96	325375	94.076	ug/l	95
22) Diisopropyl ether	6.344	45	1074108	97.109	ug/l	100
23) Vinyl Acetate	6.283	43	3409679	479.176	ug/l	98
24) 1,1-Dichloroethane	6.246	63	648524	92.880	ug/l	99
25) 2-Butanone	7.197	43	701086	459.305	ug/l	100
26) 2,2-Dichloropropane	7.191	77	322157	93.629	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	410677	95.469	ug/l	99
28) Bromochloromethane	7.532	49	316521	95.000	ug/l #	98
29) Tetrahydrofuran	7.557	42	467041	471.309	ug/l	100
30) Chloroform	7.697	83	662900	90.992	ug/l	98
31) Cyclohexane	7.971	56	492754	89.496	ug/l	99
32) 1,1,1-Trichloroethane	7.886	97	460229	93.772	ug/l	100
36) 1,1-Dichloropropene	8.099	75	449330	98.728	ug/l	99
37) Ethyl Acetate	7.276	43	294907	97.703	ug/l	98
38) Carbon Tetrachloride	8.087	117	424225	99.075	ug/l	100
39) Methylcyclohexane	9.343	83	548695	104.193	ug/l	96
40) Benzene	8.337	78	1422633	99.306	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032262.D
Acq On : 25 Sep 2025 12:46
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:50:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	166119	96.094	ug/l		98
42) 1,2-Dichloroethane	8.416	62	457918	96.165	ug/l		100
43) Isopropyl Acetate	8.441	43	542177	100.345	ug/l		99
44) Trichloroethene	9.105	130	336963	100.631	ug/l		87
45) 1,2-Dichloropropane	9.373	63	360778	97.236	ug/l		100
46) Dibromomethane	9.465	93	221052	96.902	ug/l		97
47) Bromodichloromethane	9.654	83	522751	100.472	ug/l		96
48) Methyl methacrylate	9.441	41	270335	106.349	ug/l		100
49) 1,4-Dioxane	9.465	88	63276	2071.095	ug/l	#	100
51) 4-Methyl-2-Pentanone	10.215	43	1586527	495.237	ug/l		99
52) Toluene	10.392	92	904359	101.852	ug/l		97
53) t-1,3-Dichloropropene	10.611	75	519907	109.064	ug/l		100
54) cis-1,3-Dichloropropene	10.081	75	576534	104.759	ug/l		98
55) 1,1,2-Trichloroethane	10.788	97	296466	95.211	ug/l		96
56) Ethyl methacrylate	10.648	69	445747	108.677	ug/l		98
57) 1,3-Dichloropropane	10.934	76	527430	98.049	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	1240539	550.975	ug/l		100
59) 2-Hexanone	10.971	43	1108386	506.646	ug/l		100
60) Dibromochloromethane	11.129	129	353508	103.376	ug/l		97
61) 1,2-Dibromoethane	11.239	107	289333	98.079	ug/l		98
64) Tetrachloroethene	10.867	164	260649	94.460	ug/l	#	89
65) Chlorobenzene	11.660	112	1003942	96.257	ug/l		96
66) 1,1,1,2-Tetrachloroethane	11.733	131	331436	100.481	ug/l		99
67) Ethyl Benzene	11.733	91	1744976	102.215	ug/l		95
68) m/p-Xylenes	11.836	106	1319678	201.657	ug/l		95
69) o-Xylene	12.166	106	640114	104.080	ug/l		99
70) Styrene	12.178	104	1107088	102.647	ug/l		99
71) Bromoform	12.349	173	193866	100.857	ug/l	#	96
73) Isopropylbenzene	12.464	105	1594475	101.576	ug/l		99
74) N-amyl acetate	12.269	43	489840	99.091	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.714	83	380449	92.439	ug/l		99
76) 1,2,3-Trichloropropane	12.763	75	284709m	80.269	ug/l		
77) Bromobenzene	12.745	156	377479	97.769	ug/l		93
78) n-propylbenzene	12.800	91	1997481	101.306	ug/l		99
79) 2-Chlorotoluene	12.891	91	1185558	99.258	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	1364777	101.693	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.513	75	125300	104.893	ug/l		97
82) 4-Chlorotoluene	12.989	91	1241413	98.344	ug/l		99
83) tert-Butylbenzene	13.202	119	1144817	101.999	ug/l		99
84) 1,2,4-Trimethylbenzene	13.245	105	1402022	102.892	ug/l		97
85) sec-Butylbenzene	13.379	105	1686020	100.034	ug/l		99
86) p-Isopropyltoluene	13.495	119	1405656	100.702	ug/l		98
87) 1,3-Dichlorobenzene	13.495	146	747138	97.831	ug/l		100
88) 1,4-Dichlorobenzene	13.574	146	735529	94.276	ug/l		94
89) n-Butylbenzene	13.818	91	1403783	100.210	ug/l		97
90) Hexachloroethane	14.092	117	261127	100.372	ug/l		98
91) 1,2-Dichlorobenzene	13.867	146	660780	92.492	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.482	75	66815	94.913	ug/l		98
93) 1,2,4-Trichlorobenzene	15.129	180	433343	102.243	ug/l		99
94) Hexachlorobutadiene	15.232	225	182643	93.830	ug/l		90
95) Naphthalene	15.360	128	1068790	105.067	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	397191	100.785	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032262.D
Acq On : 25 Sep 2025 12:46
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:50:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

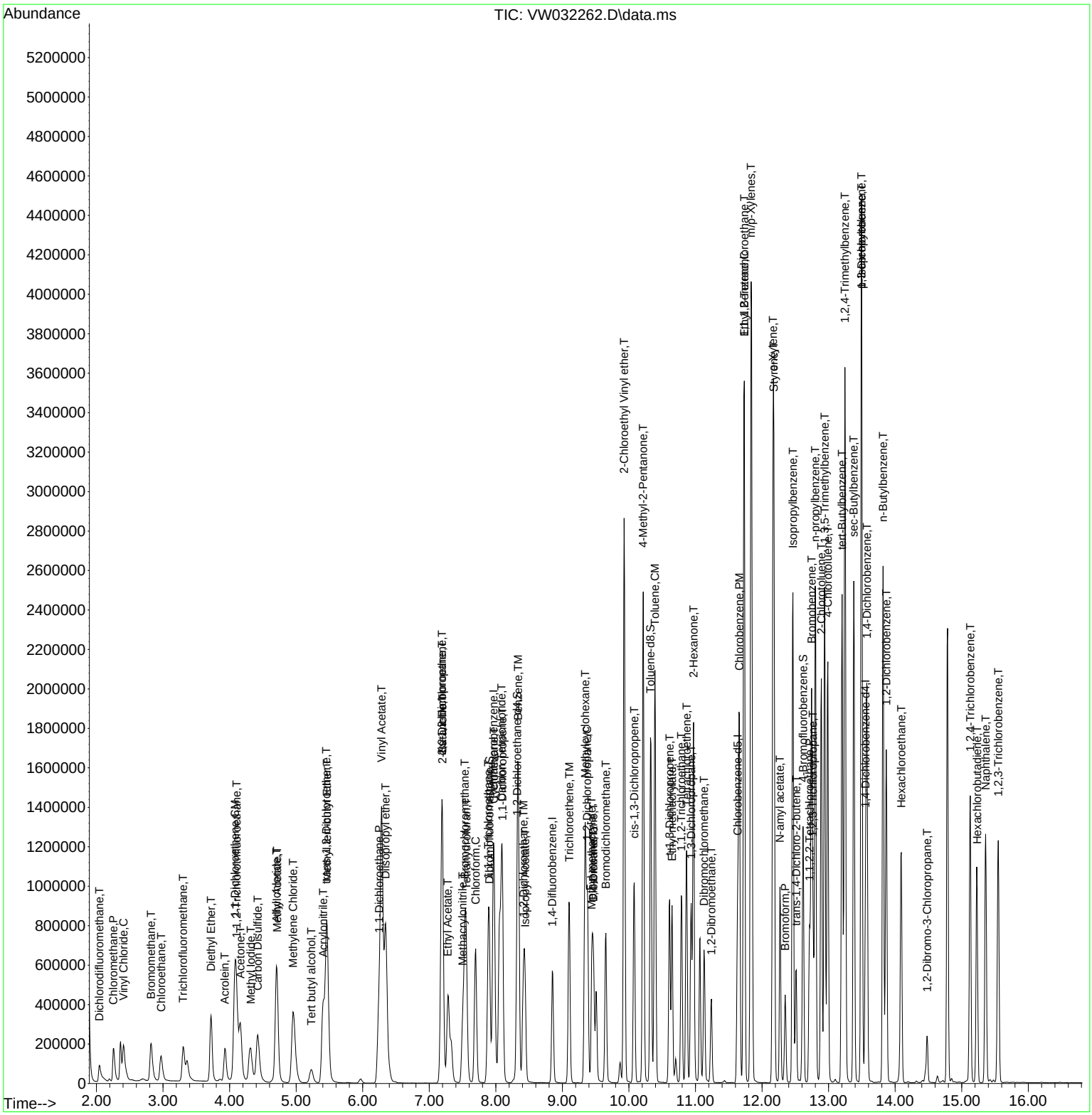
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032262.D
Acq On : 25 Sep 2025 12:46
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 26 06:50:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032263.D
Acq On : 25 Sep 2025 13:08
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:51:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.965	168	268103	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	503264	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	471325	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	221054	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	574246	135.650	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 271.300%#			
35) Dibromofluoromethane	7.898	113	501948	138.686	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 277.380%#			
50) Toluene-d8	10.331	98	1818751	139.432	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 278.860%#			
62) 4-Bromofluorobenzene	12.617	95	691432	140.528	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 281.060%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.039	85	240712	129.953	ug/l	98
3) Chloromethane	2.259	50	369476	139.381	ug/l	92
4) Vinyl Chloride	2.405	62	420083	135.631	ug/l	100
5) Bromomethane	2.814	94	302978	143.255	ug/l	96
6) Chloroethane	2.960	64	302351	144.062	ug/l	98
7) Trichlorofluoromethane	3.301	101	366348	156.982	ug/l	96
8) Diethyl Ether	3.722	74	309062	140.059	ug/l	99
9) 1,1,2-Trichlorotrifluo...	4.100	101	408786	137.233	ug/l	99
10) Methyl Iodide	4.307	142	583039	144.711	ug/l	99
11) Tert butyl alcohol	5.228	59	229035	779.425	ug/l	99
12) 1,1-Dichloroethene	4.082	96	454400	142.705	ug/l	97
13) Acrolein	3.929	56	358621	685.685	ug/l	95
14) Allyl chloride	4.704	41	741086	149.967	ug/l	99
15) Acrylonitrile	5.405	53	876508	771.249	ug/l	99
16) Acetone	4.161	43	725678	667.495	ug/l	100
17) Carbon Disulfide	4.423	76	1064701	145.428	ug/l	99
18) Methyl Acetate	4.710	43	657620	175.880	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	903547	153.083	ug/l	99
20) Methylene Chloride	4.954	84	535268	151.547	ug/l	98
21) trans-1,2-Dichloroethene	5.460	96	507076	147.681	ug/l	89
22) Diisopropyl ether	6.344	45	1632431	148.663	ug/l	98
23) Vinyl Acetate	6.283	43	5462201	773.228	ug/l	99
24) 1,1-Dichloroethane	6.246	63	1005238	145.019	ug/l	99
25) 2-Butanone	7.197	43	1188481	784.297	ug/l	98
26) 2,2-Dichloropropane	7.185	77	490986	143.738	ug/l	98
27) cis-1,2-Dichloroethene	7.197	96	634273	148.524	ug/l	100
28) Bromochloromethane	7.532	49	465294	140.671	ug/l #	100
29) Tetrahydrofuran	7.551	42	778509	791.357	ug/l	100
30) Chloroform	7.691	83	1027625	142.085	ug/l	99
31) Cyclohexane	7.971	56	750802	137.359	ug/l	97
32) 1,1,1-Trichloroethane	7.886	97	698636	143.387	ug/l	99
36) 1,1-Dichloropropene	8.093	75	688774	141.154	ug/l	99
37) Ethyl Acetate	7.276	43	484636	149.754	ug/l	99
38) Carbon Tetrachloride	8.081	117	648359	141.229	ug/l	95
39) Methylcyclohexane	9.343	83	851000	150.722	ug/l	95
40) Benzene	8.337	78	2170741	141.329	ug/l	100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032263.D
Acq On : 25 Sep 2025 13:08
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:51:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	305799	164.987	ug/l		94
42) 1,2-Dichloroethane	8.410	62	709201	138.911	ug/l		100
43) Isopropyl Acetate	8.441	43	899258	155.231	ug/l		99
44) Trichloroethene	9.099	130	512412	142.728	ug/l		95
45) 1,2-Dichloropropane	9.374	63	561821	141.229	ug/l		99
46) Dibromomethane	9.465	93	342097	139.871	ug/l		99
47) Bromodichloromethane	9.654	83	816402	146.351	ug/l	#	99
48) Methyl methacrylate	9.441	41	447621	164.241	ug/l		97
49) 1,4-Dioxane	9.459	88	109095	3330.471	ug/l	#	95
51) 4-Methyl-2-Pentanone	10.215	43	2581810	751.674	ug/l		99
52) Toluene	10.392	92	1383297	145.306	ug/l		97
53) t-1,3-Dichloropropene	10.611	75	825886	161.590	ug/l		99
54) cis-1,3-Dichloropropene	10.081	75	922892	156.407	ug/l		96
55) 1,1,2-Trichloroethane	10.788	97	479692	143.686	ug/l		99
56) Ethyl methacrylate	10.648	69	724292	164.704	ug/l		98
57) 1,3-Dichloropropane	10.934	76	826934	143.381	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.928	63	1967595	815.074	ug/l		100
59) 2-Hexanone	10.971	43	1834008	781.907	ug/l		99
60) Dibromochloromethane	11.135	129	549090	149.762	ug/l		100
61) 1,2-Dibromoethane	11.239	107	467063	147.671	ug/l		100
64) Tetrachloroethene	10.867	164	407222	141.775	ug/l		91
65) Chlorobenzene	11.660	112	1542105	142.042	ug/l		97
66) 1,1,1,2-Tetrachloroethane	11.733	131	511003	148.829	ug/l		99
67) Ethyl Benzene	11.727	91	2698460	151.851	ug/l		96
68) m/p-Xylenes	11.837	106	2029004	297.855	ug/l		95
69) o-Xylene	12.166	106	980912	153.220	ug/l		100
70) Styrene	12.178	104	1702538	151.648	ug/l		99
71) Bromoform	12.349	173	315558	157.711	ug/l	#	99
73) Isopropylbenzene	12.464	105	2480347	161.210	ug/l		100
74) N-amyl acetate	12.269	43	797679	164.633	ug/l		98
75) 1,1,2,2-Tetrachloroethane	12.714	83	598288	148.312	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	444249m	127.785	ug/l		
77) Bromobenzene	12.745	156	576269	152.279	ug/l		89
78) n-propylbenzene	12.800	91	2972678	153.818	ug/l		99
79) 2-Chlorotoluene	12.891	91	1806322	154.293	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	2066765	157.118	ug/l		98
81) trans-1,4-Dichloro-2-b...	12.513	75	209132	178.617	ug/l		95
82) 4-Chlorotoluene	12.989	91	1903051	153.811	ug/l		98
83) tert-Butylbenzene	13.202	119	1773318	161.195	ug/l		98
84) 1,2,4-Trimethylbenzene	13.245	105	2079611	155.710	ug/l		100
85) sec-Butylbenzene	13.379	105	2618834	158.526	ug/l		99
86) p-Isopropyltoluene	13.495	119	2117769	154.791	ug/l		98
87) 1,3-Dichlorobenzene	13.495	146	1141699	152.522	ug/l		99
88) 1,4-Dichlorobenzene	13.574	146	1117378	146.119	ug/l		94
89) n-Butylbenzene	13.818	91	2173243	158.280	ug/l		99
90) Hexachloroethane	14.092	117	403116	158.088	ug/l		97
91) 1,2-Dichlorobenzene	13.867	146	1010379	144.291	ug/l		98
92) 1,2-Dibromo-3-Chloropr...	14.482	75	109812	159.151	ug/l		98
93) 1,2,4-Trichlorobenzene	15.129	180	686602	165.278	ug/l		94
94) Hexachlorobutadiene	15.226	225	279873	146.692	ug/l		94
95) Naphthalene	15.360	128	1767143	177.236	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	631845	163.575	ug/l		97

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032263.D
Acq On : 25 Sep 2025 13:08
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 06:51:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 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

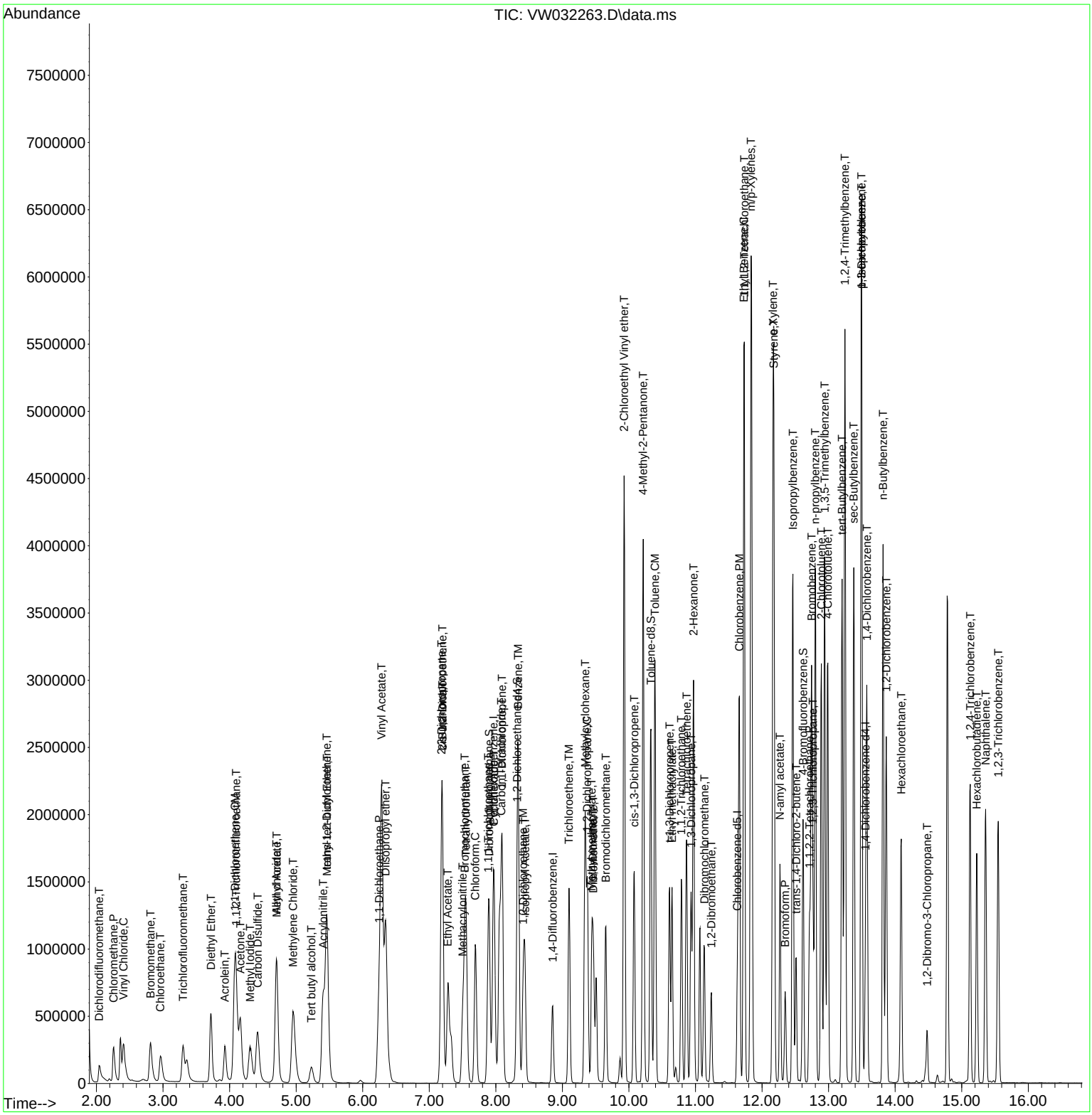
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032263.D
Acq On : 25 Sep 2025 13:08
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 26 06:51:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 06:41:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	275381	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	493743	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	451873	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	222449	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	192251	44.214	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 88.420%			
35) Dibromofluoromethane	7.898	113	160415	45.177	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 90.360%			
50) Toluene-d8	10.324	98	599404	46.839	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 93.680%			
62) 4-Bromofluorobenzene	12.617	95	224886	46.588	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 93.180%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.045	85	77331	40.645	ug/l	97
3) Chloromethane	2.253	50	115143	42.288	ug/l	93
4) Vinyl Chloride	2.405	62	142880	44.912	ug/l	99
5) Bromomethane	2.820	94	99519	45.811	ug/l	94
6) Chloroethane	2.972	64	98382	45.637	ug/l	98
7) Trichlorofluoromethane	3.301	101	101896	42.509	ug/l	100
8) Diethyl Ether	3.716	74	98989	43.674	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.100	101	138798	45.364	ug/l	98
10) Methyl Iodide	4.313	142	192131	46.427	ug/l	97
11) Tert butyl alcohol	5.216	59	70266	232.801	ug/l	99
12) 1,1-Dichloroethene	4.082	96	147736	45.171	ug/l	96
13) Acrolein	3.929	56	118579	220.732	ug/l	94
14) Allyl chloride	4.703	41	238823	47.051	ug/l	99
15) Acrylonitrile	5.398	53	268385	229.914	ug/l	100
16) Acetone	4.161	43	275365	246.593	ug/l	99
17) Carbon Disulfide	4.417	76	341149	45.366	ug/l	99
18) Methyl Acetate	4.703	43	197694	51.476	ug/l	98
19) Methyl tert-butyl Ether	5.459	73	303552	50.070	ug/l	98
20) Methylene Chloride	4.947	84	175238	42.256	ug/l	98
21) trans-1,2-Dichloroethene	5.453	96	162872	46.181	ug/l	91
22) Diisopropyl ether	6.343	45	540578	47.929	ug/l	97
23) Vinyl Acetate	6.282	43	1729901	238.412	ug/l	99
24) 1,1-Dichloroethane	6.240	63	327611	46.013	ug/l	99
25) 2-Butanone	7.191	43	380974	244.766	ug/l	96
26) 2,2-Dichloropropane	7.191	77	165803	47.257	ug/l	99
27) cis-1,2-Dichloroethene	7.191	96	203186	46.321	ug/l	98
28) Bromochloromethane	7.532	49	157473	46.350	ug/l #	98
29) Tetrahydrofuran	7.551	42	235105	232.669	ug/l	99
30) Chloroform	7.691	83	338340	45.544	ug/l	96
31) Cyclohexane	7.971	56	242682	43.225	ug/l	96
32) 1,1,1-Trichloroethane	7.886	97	230793	46.116	ug/l	99
36) 1,1-Dichloropropene	8.093	75	227191	47.457	ug/l	100
37) Ethyl Acetate	7.270	43	148163	46.666	ug/l	99
38) Carbon Tetrachloride	8.081	117	211869	47.040	ug/l	98
39) Methylcyclohexane	9.343	83	268585	48.487	ug/l	96
40) Benzene	8.331	78	707587	46.957	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.496	41	88790	48.829	ug/l		96
42) 1,2-Dichloroethane	8.410	62	234326	46.783	ug/l		99
43) Isopropyl Acetate	8.435	43	277465	48.820	ug/l		99
44) Trichloroethene	9.099	130	165536	46.998	ug/l		88
45) 1,2-Dichloropropane	9.373	63	179584	46.014	ug/l		99
46) Dibromomethane	9.465	93	111930	46.647	ug/l		98
47) Bromodichloromethane	9.648	83	254445	46.492	ug/l		100
48) Methyl methacrylate	9.440	41	134674	50.368	ug/l		98
49) 1,4-Dioxane	9.459	88	31181	970.255	ug/l	#	96
51) 4-Methyl-2-Pentanone	10.215	43	818368	242.856	ug/l		99
52) Toluene	10.391	92	453815	48.589	ug/l		97
53) t-1,3-Dichloropropene	10.605	75	251526	50.162	ug/l		99
54) cis-1,3-Dichloropropene	10.074	75	282634	48.823	ug/l		99
55) 1,1,2-Trichloroethane	10.788	97	150225	45.866	ug/l		97
56) Ethyl methacrylate	10.648	69	217909	50.508	ug/l		98
57) 1,3-Dichloropropane	10.934	76	267442	47.265	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	630192	266.090	ug/l		99
59) 2-Hexanone	10.971	43	580772	252.380	ug/l		99
60) Dibromochloromethane	11.129	129	168649	46.885	ug/l		97
61) 1,2-Dibromoethane	11.233	107	146339	47.160	ug/l		96
64) Tetrachloroethene	10.867	164	135242	49.112	ug/l		95
65) Chlorobenzene	11.660	112	499921	48.030	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.727	131	163293	49.606	ug/l		97
67) Ethyl Benzene	11.733	91	856675	50.283	ug/l		100
68) m/p-Xylenes	11.836	106	661932	101.354	ug/l		94
69) o-Xylene	12.166	106	311812	50.802	ug/l		99
70) Styrene	12.178	104	561475	52.165	ug/l		99
71) Bromoform	12.348	173	92649	48.298	ug/l	#	96
73) Isopropylbenzene	12.464	105	813069	52.514	ug/l		98
74) N-amyl acetate	12.269	43	250576	51.392	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.714	83	198553	48.912	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	146151m	47.756	ug/l		
77) Bromobenzene	12.745	156	187660	49.278	ug/l		91
78) n-propylbenzene	12.800	91	1000306	51.435	ug/l		99
79) 2-Chlorotoluene	12.891	91	602382	51.132	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	673147	50.853	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.513	75	60514	51.360	ug/l		99
82) 4-Chlorotoluene	12.982	91	637484	51.201	ug/l		99
83) tert-Butylbenzene	13.196	119	576966	52.118	ug/l		96
84) 1,2,4-Trimethylbenzene	13.245	105	689694	51.317	ug/l		99
85) sec-Butylbenzene	13.379	105	883354	53.137	ug/l		99
86) p-Isopropyltoluene	13.495	119	738513	53.640	ug/l		99
87) 1,3-Dichlorobenzene	13.495	146	369709	49.081	ug/l		99
88) 1,4-Dichlorobenzene	13.574	146	385587	50.107	ug/l		94
89) n-Butylbenzene	13.818	91	717557	51.933	ug/l		98
90) Hexachloroethane	14.092	117	127284	49.603	ug/l		100
91) 1,2-Dichlorobenzene	13.866	146	338162	47.990	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.482	75	33822	48.711	ug/l		96
93) 1,2,4-Trichlorobenzene	15.128	180	208974	49.989	ug/l		99
94) Hexachlorobutadiene	15.226	225	92899	48.387	ug/l		87
95) Naphthalene	15.360	128	524950	52.320	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	198272	51.008	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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_W\Data\VW092525\
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Operator : SY/MD
Sample : VSTDICV050
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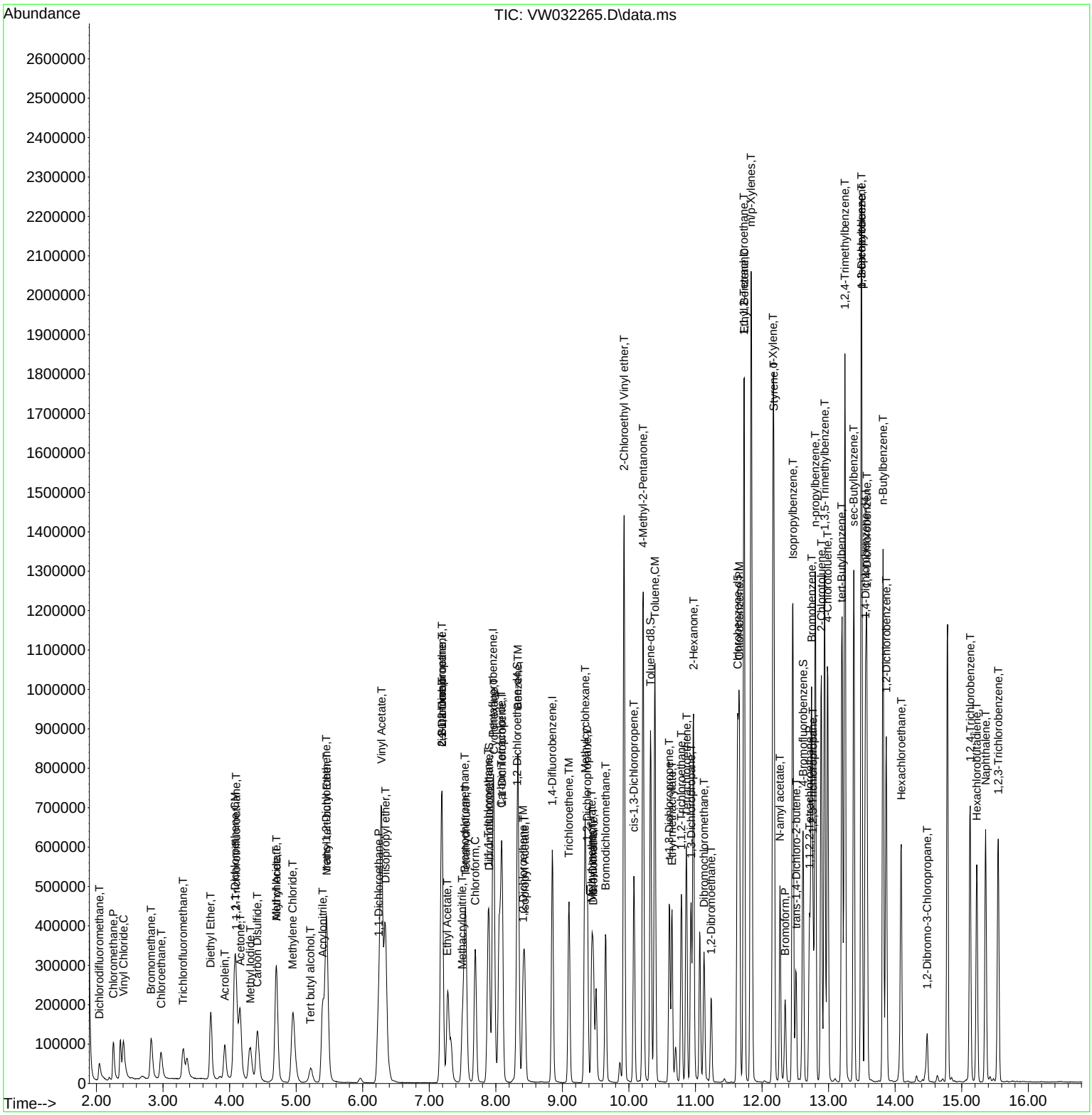
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	105	0.00
2	T	Dichlorodifluoromethane	0.345	0.281	18.6	99	0.00
3	P	Chloromethane	0.494	0.418	15.4	103	0.00
4	C	Vinyl Chloride	0.578	0.519	10.2#	101	0.00
5	T	Bromomethane	0.394	0.361	8.4	103	0.00
6	T	Chloroethane	0.391	0.357	8.7	104	0.00
7	T	Trichlorofluoromethane	0.435	0.370	14.9	101	0.00
8	T	Diethyl Ether	0.412	0.359	12.9	102	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.556	0.504	9.4	100	0.00
10	T	Methyl Iodide	0.751	0.698	7.1	103	0.01
11	T	Tert butyl alcohol	0.055	0.051	7.3	117	0.00
12	CM	1,1-Dichloroethene	0.594	0.536	9.8#	102	0.00
13	T	Acrolein	0.098	0.086	12.2	100	0.00
14	T	Allyl chloride	0.922	0.867	6.0	103	0.00
15	T	Acrylonitrile	0.212	0.195	8.0	108	0.00
16	T	Acetone	0.203	0.200	1.5	128	0.00
17	T	Carbon Disulfide	1.365	1.239	9.2	103	0.00
18	T	Methyl Acetate	0.697	0.718	-3.0	102	0.00
19	T	Methyl tert-butyl Ether	1.101	1.102	-0.1	108	0.00
20	T	Methylene Chloride	0.991	0.636	35.8#	89	0.00
21	T	trans-1,2-Dichloroethene	0.640	0.591	7.7	102	0.00
22	T	Diisopropyl ether	2.048	1.963	4.2	102	0.00
23	T	Vinyl Acetate	1.317	1.256	4.6	108	0.00
24	P	1,1-Dichloroethane	1.293	1.190	8.0	101	0.00
25	T	2-Butanone	0.283	0.277	2.1	115	0.00
26	T	2,2-Dichloropropane	0.637	0.602	5.5	105	0.00
27	T	cis-1,2-Dichloroethene	0.796	0.738	7.3	101	0.00
28	T	Bromochloromethane	0.617	0.572	7.3	101	0.00
29	T	Tetrahydrofuran	0.183	0.171	6.6	108	0.00
30	C	Chloroform	1.349	1.229	8.9#	100	0.00
31	T	Cyclohexane	1.019	0.881	13.5	101	0.00
32	T	1,1,1-Trichloroethane	0.909	0.838	7.8	100	0.00
33	S	1,2-Dichloroethane-d4	0.789	0.698	11.5	103	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	107	0.00
35	S	Dibromofluoromethane	0.360	0.325	9.7	100	0.00
36	T	1,1-Dichloropropene	0.485	0.460	5.2	102	0.00
37	T	Ethyl Acetate	0.322	0.300	6.8	107	0.00
38	T	Carbon Tetrachloride	0.456	0.429	5.9	103	0.00
39	T	Methylcyclohexane	0.561	0.544	3.0	102	0.00
40	TM	Benzene	1.526	1.433	6.1	101	0.00
41	T	Methacrylonitrile	0.184	0.180	2.2	109	0.00
42	TM	1,2-Dichloroethane	0.507	0.475	6.3	105	0.00
43	T	Isopropyl Acetate	0.576	0.562	2.4	110	0.00
44	TM	Trichloroethene	0.357	0.335	6.2	104	0.00
45	C	1,2-Dichloropropane	0.395	0.364	7.8#	99	0.00
46	T	Dibromomethane	0.243	0.227	6.6	103	0.00
47	T	Bromodichloromethane	0.554	0.515	7.0	99	0.00
48	T	Methyl methacrylate	0.271	0.273	-0.7	109	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	0.003	0.003	0.0	104	0.00
50	S	Toluene-d8	1.296	1.214	6.3	104	0.00
51	T	4-Methyl-2-Pentanone	0.341	0.331	2.9	109	0.00
52	CM	Toluene	0.946	0.919	2.9#	105	0.00
53	T	t-1,3-Dichloropropene	0.508	0.509	-0.2	107	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.572	2.4	104	0.00
55	T	1,1,2-Trichloroethane	0.332	0.304	8.4	103	0.00
56	T	Ethyl methacrylate	0.437	0.441	-0.9	108	0.00
57	T	1,3-Dichloropropane	0.573	0.542	5.4	102	0.00
58	T	2-Chloroethyl Vinyl ether	0.240	0.255	-6.3	108	0.00
59	T	2-Hexanone	0.233	0.235	-0.9	112	0.00
60	T	Dibromochloromethane	0.364	0.342	6.0	99	0.00
61	T	1,2-Dibromoethane	0.314	0.296	5.7	103	0.00
62	S	4-Bromofluorobenzene	0.489	0.455	7.0	101	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64	T	Tetrachloroethene	0.305	0.299	2.0	101	0.00
65	PM	Chlorobenzene	1.152	1.106	4.0	100	0.00
66	T	1,1,1,2-Tetrachloroethane	0.364	0.361	0.8	102	0.00
67	C	Ethyl Benzene	1.885	1.896	-0.6#	103	0.00
68	T	m/p-Xylenes	0.723	0.732	-1.2	104	0.00
69	T	o-Xylene	0.679	0.690	-1.6	100	0.00
70	T	Styrene	1.191	1.243	-4.4	102	0.00
71	P	Bromoform	0.212	0.205	3.3	99	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73	T	Isopropylbenzene	3.480	3.655	-5.0	103	0.00
74	T	N-amyl acetate	1.096	1.126	-2.7	108	0.00
75	P	1,1,2,2-Tetrachloroethane	0.912	0.893	2.1	105	0.00
76	T	1,2,3-Trichloropropane	0.688	0.657	4.5	103	0.00
77	T	Bromobenzene	0.856	0.844	1.4	96	0.00
78	T	n-propylbenzene	4.371	4.497	-2.9	100	0.00
79	T	2-Chlorotoluene	2.648	2.708	-2.3	102	0.00
80	T	1,3,5-Trimethylbenzene	2.975	3.026	-1.7	99	0.00
81	T	trans-1,4-Dichloro-2-butene	0.265	0.272	-2.6	105	0.00
82	T	4-Chlorotoluene	2.799	2.866	-2.4	102	0.00
83	T	tert-Butylbenzene	2.488	2.594	-4.3	103	0.00
84	T	1,2,4-Trimethylbenzene	3.021	3.100	-2.6	101	0.00
85	T	sec-Butylbenzene	3.737	3.971	-6.3	104	0.00
86	T	p-Isopropyltoluene	3.095	3.320	-7.3	102	0.00
87	T	1,3-Dichlorobenzene	1.693	1.662	1.8	100	0.00
88	T	1,4-Dichlorobenzene	1.730	1.733	-0.2	108	0.00
89	T	n-Butylbenzene	3.106	3.226	-3.9	102	0.00
90	T	Hexachloroethane	0.577	0.572	0.9	104	0.00
91	T	1,2-Dichlorobenzene	1.584	1.520	4.0	97	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.156	0.152	2.6	110	0.00
93	T	1,2,4-Trichlorobenzene	0.940	0.939	0.1	102	0.00
94	T	Hexachlorobutadiene	0.432	0.418	3.2	111	0.00
95	T	Naphthalene	2.255	2.360	-4.7	106	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	0.874	0.891	-1.9	104	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	105	0.00
2	T	Dichlorodifluoromethane	50.000	40.645	18.7	99	0.00
3	P	Chloromethane	50.000	42.288	15.4	103	0.00
4	C	Vinyl Chloride	50.000	44.912	10.2#	101	0.00
5	T	Bromomethane	50.000	45.811	8.4	103	0.00
6	T	Chloroethane	50.000	45.637	8.7	104	0.00
7	T	Trichlorofluoromethane	50.000	42.509	15.0	101	0.00
8	T	Diethyl Ether	50.000	43.674	12.7	102	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	45.364	9.3	100	0.00
10	T	Methyl Iodide	50.000	46.427	7.1	103	0.01
11	T	Tert butyl alcohol	250.000	232.801	6.9	117	0.00
12	CM	1,1-Dichloroethene	50.000	45.171	9.7#	102	0.00
13	T	Acrolein	250.000	220.732	11.7	100	0.00
14	T	Allyl chloride	50.000	47.051	5.9	103	0.00
15	T	Acrylonitrile	250.000	229.914	8.0	108	0.00
16	T	Acetone	250.000	246.593	1.4	128	0.00
17	T	Carbon Disulfide	50.000	45.366	9.3	103	0.00
18	T	Methyl Acetate	50.000	51.476	-3.0	102	0.00
19	T	Methyl tert-butyl Ether	50.000	50.070	-0.1	108	0.00
20	T	Methylene Chloride	50.000	42.256	15.5	89	0.00
21	T	trans-1,2-Dichloroethene	50.000	46.181	7.6	102	0.00
22	T	Diisopropyl ether	50.000	47.929	4.1	102	0.00
23	T	Vinyl Acetate	250.000	238.412	4.6	108	0.00
24	P	1,1-Dichloroethane	50.000	46.013	8.0	101	0.00
25	T	2-Butanone	250.000	244.766	2.1	115	0.00
26	T	2,2-Dichloropropane	50.000	47.257	5.5	105	0.00
27	T	cis-1,2-Dichloroethene	50.000	46.321	7.4	101	0.00
28	T	Bromochloromethane	50.000	46.350	7.3	101	0.00
29	T	Tetrahydrofuran	250.000	232.669	6.9	108	0.00
30	C	Chloroform	50.000	45.544	8.9#	100	0.00
31	T	Cyclohexane	50.000	43.225	13.5	101	0.00
32	T	1,1,1-Trichloroethane	50.000	46.116	7.8	100	0.00
33	S	1,2-Dichloroethane-d4	50.000	44.214	11.6	103	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	107	0.00
35	S	Dibromofluoromethane	50.000	45.177	9.6	100	0.00
36	T	1,1-Dichloropropene	50.000	47.457	5.1	102	0.00
37	T	Ethyl Acetate	50.000	46.666	6.7	107	0.00
38	T	Carbon Tetrachloride	50.000	47.040	5.9	103	0.00
39	T	Methylcyclohexane	50.000	48.487	3.0	102	0.00
40	TM	Benzene	50.000	46.957	6.1	101	0.00
41	T	Methacrylonitrile	50.000	48.829	2.3	109	0.00
42	TM	1,2-Dichloroethane	50.000	46.783	6.4	105	0.00
43	T	Isopropyl Acetate	50.000	48.820	2.4	110	0.00
44	TM	Trichloroethene	50.000	46.998	6.0	104	0.00
45	C	1,2-Dichloropropane	50.000	46.014	8.0#	99	0.00
46	T	Dibromomethane	50.000	46.647	6.7	103	0.00
47	T	Bromodichloromethane	50.000	46.492	7.0	99	0.00
48	T	Methyl methacrylate	50.000	50.368	-0.7	109	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	970.255	3.0	104	0.00
50	S	Toluene-d8	50.000	46.839	6.3	104	0.00
51	T	4-Methyl-2-Pentanone	250.000	242.856	2.9	109	0.00
52	CM	Toluene	50.000	48.589	2.8#	105	0.00
53	T	t-1,3-Dichloropropene	50.000	50.162	-0.3	107	0.00
54	T	cis-1,3-Dichloropropene	50.000	48.823	2.4	104	0.00
55	T	1,1,2-Trichloroethane	50.000	45.866	8.3	103	0.00
56	T	Ethyl methacrylate	50.000	50.508	-1.0	108	0.00
57	T	1,3-Dichloropropane	50.000	47.265	5.5	102	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	266.090	-6.4	108	0.00
59	T	2-Hexanone	250.000	252.380	-1.0	112	0.00
60	T	Dibromochloromethane	50.000	46.885	6.2	99	0.00
61	T	1,2-Dibromoethane	50.000	47.160	5.7	103	0.00
62	S	4-Bromofluorobenzene	50.000	46.588	6.8	101	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	102	0.00
64	T	Tetrachloroethene	50.000	49.112	1.8	101	0.00
65	PM	Chlorobenzene	50.000	48.030	3.9	100	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.606	0.8	102	0.00
67	C	Ethyl Benzene	50.000	50.283	-0.6#	103	0.00
68	T	m/p-Xylenes	100.000	101.354	-1.4	104	0.00
69	T	o-Xylene	50.000	50.802	-1.6	100	0.00
70	T	Styrene	50.000	52.165	-4.3	102	0.00
71	P	Bromoform	50.000	48.298	3.4	99	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73	T	Isopropylbenzene	50.000	52.514	-5.0	103	0.00
74	T	N-amyl acetate	50.000	51.392	-2.8	108	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	48.912	2.2	105	0.00
76	T	1,2,3-Trichloropropane	50.000	47.756	4.5	103	0.00
77	T	Bromobenzene	50.000	49.278	1.4	96	0.00
78	T	n-propylbenzene	50.000	51.435	-2.9	100	0.00
79	T	2-Chlorotoluene	50.000	51.132	-2.3	102	0.00
80	T	1,3,5-Trimethylbenzene	50.000	50.853	-1.7	99	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	51.360	-2.7	105	0.00
82	T	4-Chlorotoluene	50.000	51.201	-2.4	102	0.00
83	T	tert-Butylbenzene	50.000	52.118	-4.2	103	0.00
84	T	1,2,4-Trimethylbenzene	50.000	51.317	-2.6	101	0.00
85	T	sec-Butylbenzene	50.000	53.137	-6.3	104	0.00
86	T	p-Isopropyltoluene	50.000	53.640	-7.3	102	0.00
87	T	1,3-Dichlorobenzene	50.000	49.081	1.8	100	0.00
88	T	1,4-Dichlorobenzene	50.000	50.107	-0.2	108	0.00
89	T	n-Butylbenzene	50.000	51.933	-3.9	102	0.00
90	T	Hexachloroethane	50.000	49.603	0.8	104	0.00
91	T	1,2-Dichlorobenzene	50.000	47.990	4.0	97	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	48.711	2.6	110	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.989	0.0	102	0.00
94	T	Hexachlorobutadiene	50.000	48.387	3.2	111	0.00
95	T	Naphthalene	50.000	52.320	-4.6	106	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032265.D
Acq On : 25 Sep 2025 14:41
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
ICVVW092525

Quant Time: Sep 26 07:14:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	51.008	-2.0	104	0.00

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

Raw Data: **VW032267.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance
Contract: SCIA01
Lab Code: ACE
SDG No.: Q3215
Instrument ID: MSVOA_W
Calibration Date/Time: 09/26/2025 08:43
Lab File ID: VW032267.D
Init. Calib. Date(s): 09/25/2025 09/25/2025
Heated Purge: (Y/N) Y
Init. Calib. Time(s): 10:45 13:08
GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.345	0.315		-8.7	20
Chloromethane	0.494	0.438	0.1	-11.34	20
Vinyl Chloride	0.578	0.555		-3.98	20
Bromomethane	0.394	0.395		0.25	20
Chloroethane	0.391	0.377		-3.58	20
Trichlorofluoromethane	0.435	0.401		-7.82	20
1,1,2-Trichlorotrifluoroethane	0.556	0.542		-2.52	20
1,1-Dichloroethene	0.594	0.586		-1.35	20
Acetone	0.203	0.238		17.24	20
Carbon Disulfide	1.365	1.334		-2.27	20
Methyl tert-butyl Ether	1.101	1.173		6.54	20
Methyl Acetate	0.697	0.786		12.77	20
Methylene Chloride	0.991	0.751		-24.22	20
trans-1,2-Dichloroethene	0.640	0.631		-1.41	20
1,1-Dichloroethane	1.293	1.260	0.1	-2.55	20
Cyclohexane	1.019	0.965		-5.3	20
2-Butanone	0.283	0.310		9.54	20
Carbon Tetrachloride	0.456	0.480		5.26	20
cis-1,2-Dichloroethene	0.796	0.787		-1.13	20
Bromochloromethane	0.617	0.591		-4.21	20
Chloroform	1.349	1.334		-1.11	20
1,1,1-Trichloroethane	0.909	0.907		-0.22	20
Methylcyclohexane	0.561	0.587		4.64	20
Benzene	1.526	1.548		1.44	20
1,2-Dichloroethane	0.507	0.502		-0.99	20
Trichloroethene	0.357	0.354		-0.84	20
1,2-Dichloropropane	0.395	0.405		2.53	20
Bromodichloromethane	0.554	0.568		2.53	20
4-Methyl-2-Pentanone	0.341	0.364		6.74	20
Toluene	0.946	0.950		0.42	20
t-1,3-Dichloropropene	0.508	0.554		9.06	20
cis-1,3-Dichloropropene	0.586	0.630		7.51	20
1,1,2-Trichloroethane	0.332	0.338		1.81	20
2-Hexanone	0.233	0.261		12.02	20
Dibromochloromethane	0.364	0.384		5.49	20
1,2-Dibromoethane	0.314	0.325		3.5	20
Tetrachloroethene	0.305	0.309		1.31	20
Chlorobenzene	1.152	1.180	0.3	2.43	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: **VW032267.D**

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: SCIA01

Lab Code: ACE SDG No.: Q3215

Instrument ID: MSVOA_W Calibration Date/Time: 09/26/2025 08:43

Lab File ID: VW032267.D Init. Calib. Date(s): 09/25/2025 09/25/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 10:45 13:08

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.885	2.019		7.11	20
m/p-Xylenes	0.723	0.761		5.26	20
o-Xylene	0.679	0.719		5.89	20
Styrene	1.191	1.306		9.66	20
Bromoform	0.212	0.216	0.1	1.89	20
Isopropylbenzene	3.480	3.625		4.17	20
1,1,2,2-Tetrachloroethane	0.912	0.923	0.3	1.21	20
1,3-Dichlorobenzene	1.693	1.681		-0.71	20
1,4-Dichlorobenzene	1.730	1.775		2.6	20
1,2-Dichlorobenzene	1.584	1.627		2.71	20
1,2-Dibromo-3-Chloropropane	0.156	0.156		0	20
1,2,4-Trichlorobenzene	0.940	0.972		3.4	20
1,2,3-Trichlorobenzene	0.874	0.931		6.52	20
1,2-Dichloroethane-d4	0.789	0.724		-8.24	20
Dibromofluoromethane	0.360	0.341		-5.28	20
Toluene-d8	1.296	1.232		-4.94	20
4-Bromofluorobenzene	0.489	0.478		-2.25	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_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025
Supervised By :Semsettin Yesilyurt
09/29/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene	7.965	168	273367	50.000 ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	482464	50.000 ug/l	0.00
63) Chlorobenzene-d5	11.629	117	450604	50.000 ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.555	152	228628	50.000 ug/l	0.00
System Monitoring Compounds					
33) 1,2-Dichloroethane-d4	8.319	65	197933	45.856 ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	91.720%	
35) Dibromofluoromethane	7.898	113	164510	47.413 ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	94.820%	
50) Toluene-d8	10.324	98	594303	47.526 ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	95.060%	
62) 4-Bromofluorobenzene	12.617	95	230736	48.917 ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	97.840%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.045	85	86078	45.576 ug/l	90
3) Chloromethane	2.259	50	119798	44.322 ug/l	93
4) Vinyl Chloride	2.405	62	151797	48.067 ug/l	92
5) Bromomethane	2.826	94	107848	50.011 ug/l	90
6) Chloroethane	2.972	64	102963	48.114 ug/l	97
7) Trichlorofluoromethane	3.301	101	109500	46.018 ug/l	98
8) Diethyl Ether	3.722	74	109858	48.826 ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.106	101	148289	48.823 ug/l	98
10) Methyl Iodide	4.307	142	202703	49.342 ug/l	99
11) Tert butyl alcohol	5.215	59	79568	265.562 ug/l	99
12) 1,1-Dichloroethene	4.082	96	160183	49.337 ug/l	95
13) Acrolein	3.929	56	123996	232.516 ug/l	97
14) Allyl chloride	4.703	41	258499	51.303 ug/l	98
15) Acrylonitrile	5.398	53	292239	252.193 ug/l	100
16) Acetone	4.155	43	325384	293.532 ug/l	99
17) Carbon Disulfide	4.417	76	364772	48.865 ug/l	99
18) Methyl Acetate	4.709	43	214945	56.380 ug/l	99
19) Methyl tert-butyl Ether	5.459	73	320524	53.259 ug/l	99
20) Methylene Chloride	4.953	84	205186	51.435 ug/l	97
21) trans-1,2-Dichloroethene	5.459	96	172385	49.239 ug/l	92
22) Diisopropyl ether	6.337	45	578557	51.674 ug/l	97
23) Vinyl Acetate	6.282	43	1840304	255.497 ug/l	99
24) 1,1-Dichloroethane	6.246	63	344485	48.739 ug/l	99
25) 2-Butanone	7.191	43	423887	274.343 ug/l	95
26) 2,2-Dichloropropane	7.185	77	176026	50.540 ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	215200	49.422 ug/l	98
28) Bromochloromethane	7.526	49	161529	47.894 ug/l #	99
29) Tetrahydrofuran	7.550	42	257687	256.896 ug/l	99
30) Chloroform	7.691	83	364637	49.446 ug/l	95
31) Cyclohexane	7.971	56	263836	47.339 ug/l	98
32) 1,1,1-Trichloroethane	7.886	97	247985	49.916 ug/l	99
36) 1,1-Dichloropropene	8.093	75	239541	51.207 ug/l	100
37) Ethyl Acetate	7.276	43	162215	52.286 ug/l	99
38) Carbon Tetrachloride	8.081	117	231586	52.620 ug/l	98
39) Methylcyclohexane	9.343	83	283447	52.366 ug/l	96
40) Benzene	8.337	78	746803	50.718 ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025
Supervised By :Semsettin Yesilyurt
09/29/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	94359	53.104	ug/l		98
42) 1,2-Dichloroethane	8.410	62	241985	49.441	ug/l		99
43) Isopropyl Acetate	8.434	43	293555	52.858	ug/l		99
44) Trichloroethene	9.099	130	170853	49.641	ug/l		93
45) 1,2-Dichloropropane	9.373	63	195184	51.180	ug/l		100
46) Dibromomethane	9.465	93	120749	51.498	ug/l		99
47) Bromodichloromethane	9.654	83	274166	51.267	ug/l		99
48) Methyl methacrylate	9.440	41	143636	54.975	ug/l		97
49) 1,4-Dioxane	9.459	88	33972	1081.815	ug/l	#	97
51) 4-Methyl-2-Pentanone	10.215	43	878888	266.913	ug/l		98
52) Toluene	10.391	92	458556	50.245	ug/l		99
53) t-1,3-Dichloropropene	10.611	75	267381	54.570	ug/l		99
54) cis-1,3-Dichloropropene	10.074	75	303973	53.737	ug/l		99
55) 1,1,2-Trichloroethane	10.788	97	163071	50.952	ug/l		93
56) Ethyl methacrylate	10.647	69	232679	55.192	ug/l		97
57) 1,3-Dichloropropane	10.934	76	283280	51.235	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.928	63	656204	283.551	ug/l		100
59) 2-Hexanone	10.971	43	630581	280.431	ug/l		99
60) Dibromochloromethane	11.129	129	185228	52.698	ug/l		99
61) 1,2-Dibromoethane	11.239	107	156937	51.758	ug/l		98
64) Tetrachloroethene	10.867	164	139445	50.781	ug/l		95
65) Chlorobenzene	11.659	112	531675	51.224	ug/l		95
66) 1,1,1,2-Tetrachloroethane	11.733	131	173578	52.879	ug/l		98
67) Ethyl Benzene	11.726	91	909731	53.548	ug/l		99
68) m/p-Xylenes	11.836	106	686206	105.367	ug/l		99
69) o-Xylene	12.165	106	323859	52.914	ug/l		96
70) Styrene	12.178	104	588531	54.832	ug/l		100
71) Bromoform	12.348	173	97168	50.796	ug/l	#	92
73) Isopropylbenzene	12.464	105	828790	52.083	ug/l		100
74) N-amyl acetate	12.269	43	267223	53.325	ug/l		100
75) 1,1,2,2-Tetrachloroethane	12.714	83	211052	50.585	ug/l		100
76) 1,2,3-Trichloropropane	12.763	75	151890m	48.290	ug/l		
77) Bromobenzene	12.745	156	194678	49.739	ug/l		88
78) n-propylbenzene	12.799	91	1038146	51.938	ug/l		100
79) 2-Chlorotoluene	12.891	91	620604	51.255	ug/l		100
80) 1,3,5-Trimethylbenzene	12.940	105	713060	52.412	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.513	75	67083	55.397	ug/l		99
82) 4-Chlorotoluene	12.982	91	662687	51.786	ug/l		97
83) tert-Butylbenzene	13.202	119	614580	54.015	ug/l		96
84) 1,2,4-Trimethylbenzene	13.245	105	728418	52.733	ug/l		95
85) sec-Butylbenzene	13.379	105	900981	52.732	ug/l		98
86) p-Isopropyltoluene	13.494	119	754293	53.306	ug/l		99
87) 1,3-Dichlorobenzene	13.494	146	384261	49.634	ug/l		99
88) 1,4-Dichlorobenzene	13.574	146	405802	51.309	ug/l		91
89) n-Butylbenzene	13.818	91	742768	52.305	ug/l		100
90) Hexachloroethane	14.086	117	140658	53.334	ug/l		99
91) 1,2-Dichlorobenzene	13.866	146	371954	51.359	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.476	75	35686	50.007	ug/l		99
93) 1,2,4-Trichlorobenzene	15.128	180	222241	51.725	ug/l		98
94) Hexachlorobutadiene	15.232	225	97379	49.349	ug/l		91
95) Naphthalene	15.360	128	558741	54.183	ug/l		100
96) 1,2,3-Trichlorobenzene	15.549	180	212802	53.266	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025
Supervised By :Semsettin Yesilyurt
09/29/2025

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VSTDCCC050

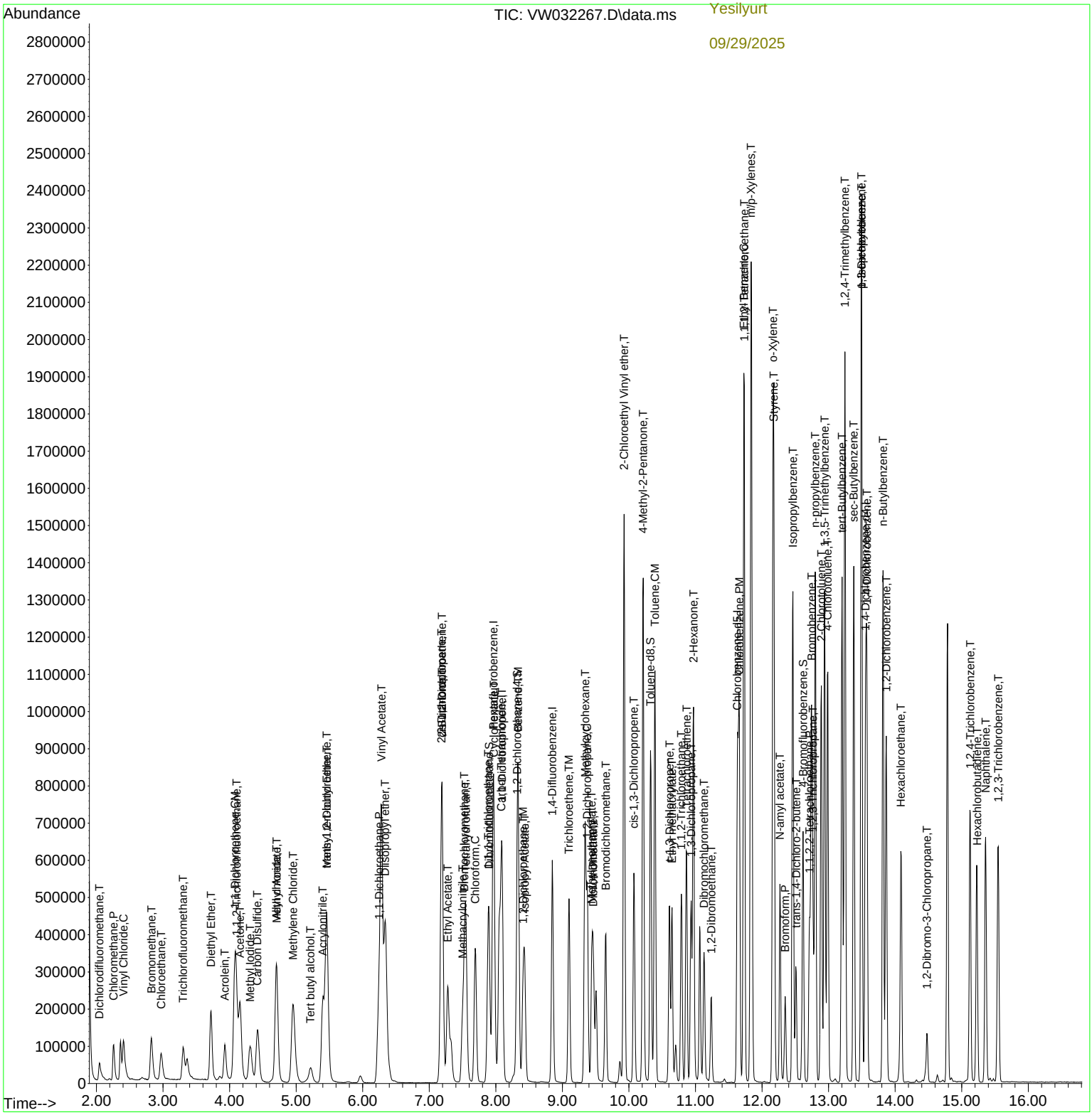
Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda

09/29/2025

Supervised By :Semsettin Yesilyurt

09/29/2025



Evaluate Continuing Calibration Report

Sample Results: **VW032267.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	104	0.00
2	T	Dichlorodifluoromethane	0.345	0.315	8.7	111	0.00
3	P	Chloromethane	0.494	0.438	11.3	108	0.00
4	C	Vinyl Chloride	0.578	0.555	4.0#	107	0.00
5	T	Bromomethane	0.394	0.395	-0.3	112	0.00
6	T	Chloroethane	0.391	0.377	3.6	109	0.00
7	T	Trichlorofluoromethane	0.435	0.401	7.8	108	0.00
8	T	Diethyl Ether	0.412	0.402	2.4	113	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.556	0.542	2.5	107	0.00
10	T	Methyl Iodide	0.751	0.742	1.2	108	0.00
11	T	Tert butyl alcohol	0.055	0.058	-5.5	133	0.00
12	CM	1,1-Dichloroethene	0.594	0.586	1.3#	110	0.00
13	T	Acrolein	0.098	0.091	7.1	104	0.00
14	T	Allyl chloride	0.922	0.946	-2.6	112	0.00
15	T	Acrylonitrile	0.212	0.214	-0.9	118	0.00
16	T	Acetone	0.203	0.238	-17.2	151#	0.00
17	T	Carbon Disulfide	1.365	1.334	2.3	110	0.00
18	T	Methyl Acetate	0.697	0.786	-12.8	111	0.00
19	T	Methyl tert-butyl Ether	1.101	1.173	-6.5	114	0.00
20	T	Methylene Chloride	0.991	0.751	24.2	104	0.00
21	T	trans-1,2-Dichloroethene	0.640	0.631	1.4	108	0.00
22	T	Diisopropyl ether	2.048	2.116	-3.3	110	0.00
23	T	Vinyl Acetate	1.317	1.346	-2.2	115	0.00
24	P	1,1-Dichloroethane	1.293	1.260	2.6	106	0.00
25	T	2-Butanone	0.283	0.310	-9.5	128	0.00
26	T	2,2-Dichloropropane	0.637	0.644	-1.1	112	0.00
27	T	cis-1,2-Dichloroethene	0.796	0.787	1.1	107	0.00
28	T	Bromochloromethane	0.617	0.591	4.2	104	0.00
29	T	Tetrahydrofuran	0.183	0.189	-3.3	118	0.00
30	C	Chloroform	1.349	1.334	1.1#	108	0.00
31	T	Cyclohexane	1.019	0.965	5.3	110	0.00
32	T	1,1,1-Trichloroethane	0.909	0.907	0.2	108	0.00
33	S	1,2-Dichloroethane-d4	0.789	0.724	8.2	106	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	105	0.00
35	S	Dibromofluoromethane	0.360	0.341	5.3	103	0.00
36	T	1,1-Dichloropropene	0.485	0.496	-2.3	107	0.00
37	T	Ethyl Acetate	0.322	0.336	-4.3	117	0.00
38	T	Carbon Tetrachloride	0.456	0.480	-5.3	112	0.00
39	T	Methylcyclohexane	0.561	0.587	-4.6	108	0.00
40	TM	Benzene	1.526	1.548	-1.4	107	0.00
41	T	Methacrylonitrile	0.184	0.196	-6.5	116	0.00
42	TM	1,2-Dichloroethane	0.507	0.502	1.0	108	0.00
43	T	Isopropyl Acetate	0.576	0.608	-5.6	116	0.00
44	TM	Trichloroethene	0.357	0.354	0.8	107	0.00
45	C	1,2-Dichloropropane	0.395	0.405	-2.5#	108	0.00
46	T	Dibromomethane	0.243	0.250	-2.9	112	0.00
47	T	Bromodichloromethane	0.554	0.568	-2.5	107	0.00
48	T	Methyl methacrylate	0.271	0.298	-10.0	116	0.00

Sample Results: **VW032267.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	0.003	0.004	-33.3#	113	0.00
50	S	Toluene-d8	1.296	1.232	4.9	103	0.00
51	T	4-Methyl-2-Pentanone	0.341	0.364	-6.7	118	0.00
52	CM	Toluene	0.946	0.950	-0.4#	106	0.00
53	T	t-1,3-Dichloropropene	0.508	0.554	-9.1	114	0.00
54	T	cis-1,3-Dichloropropene	0.586	0.630	-7.5	112	0.00
55	T	1,1,2-Trichloroethane	0.332	0.338	-1.8	112	0.00
56	T	Ethyl methacrylate	0.437	0.482	-10.3	115	0.00
57	T	1,3-Dichloropropane	0.573	0.587	-2.4	108	0.00
58	T	2-Chloroethyl Vinyl ether	0.240	0.272	-13.3	113	0.00
59	T	2-Hexanone	0.233	0.261	-12.0	122	0.00
60	T	Dibromochloromethane	0.364	0.384	-5.5	109	0.00
61	T	1,2-Dibromoethane	0.314	0.325	-3.5	111	0.00
62	S	4-Bromofluorobenzene	0.489	0.478	2.2	104	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64	T	Tetrachloroethene	0.305	0.309	-1.3	104	0.00
65	PM	Chlorobenzene	1.152	1.180	-2.4	106	0.00
66	T	1,1,1,2-Tetrachloroethane	0.364	0.385	-5.8	109	0.00
67	C	Ethyl Benzene	1.885	2.019	-7.1#	109	0.00
68	T	m/p-Xylenes	0.723	0.761	-5.3	107	0.00
69	T	o-Xylene	0.679	0.719	-5.9	104	0.00
70	T	Styrene	1.191	1.306	-9.7	106	0.00
71	P	Bromoform	0.212	0.216	-1.9	104	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
73	T	Isopropylbenzene	3.480	3.625	-4.2	105	0.00
74	T	N-amyl acetate	1.096	1.169	-6.7	116	0.00
75	P	1,1,2,2-Tetrachloroethane	0.912	0.923	-1.2	112	0.00
76	T	1,2,3-Trichloropropane	0.688	0.664	3.5	107	0.00
77	T	Bromobenzene	0.856	0.852	0.5	99	0.00
78	T	n-propylbenzene	4.371	4.541	-3.9	104	0.00
79	T	2-Chlorotoluene	2.648	2.714	-2.5	105	0.00
80	T	1,3,5-Trimethylbenzene	2.975	3.119	-4.8	105	0.00
81	T	trans-1,4-Dichloro-2-butene	0.265	0.293	-10.6	116	0.00
82	T	4-Chlorotoluene	2.799	2.899	-3.6	106	0.00
83	T	tert-Butylbenzene	2.488	2.688	-8.0	110	0.00
84	T	1,2,4-Trimethylbenzene	3.021	3.186	-5.5	107	0.00
85	T	sec-Butylbenzene	3.737	3.941	-5.5	106	0.00
86	T	p-Isopropyltoluene	3.095	3.299	-6.6	104	0.00
87	T	1,3-Dichlorobenzene	1.693	1.681	0.7	104	0.00
88	T	1,4-Dichlorobenzene	1.730	1.775	-2.6	114	0.00
89	T	n-Butylbenzene	3.106	3.249	-4.6	105	0.00
90	T	Hexachloroethane	0.577	0.615	-6.6	114	0.00
91	T	1,2-Dichlorobenzene	1.584	1.627	-2.7	107	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.156	0.156	0.0	116	0.00
93	T	1,2,4-Trichlorobenzene	0.940	0.972	-3.4	108	0.00
94	T	Hexachlorobutadiene	0.432	0.426	1.4	116	0.00
95	T	Naphthalene	2.255	2.444	-8.4	113	0.00

Sample Results: **VW032267.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	0.874	0.931	-6.5	112	0.00

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

Sample Results: **VW032267.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	104	0.00
2	T	Dichlorodifluoromethane	50.000	45.576	8.8	111	0.00
3	P	Chloromethane	50.000	44.322	11.4	108	0.00
4	C	Vinyl Chloride	50.000	48.067	3.9#	107	0.00
5	T	Bromomethane	50.000	50.011	-0.0	112	0.00
6	T	Chloroethane	50.000	48.114	3.8	109	0.00
7	T	Trichlorofluoromethane	50.000	46.018	8.0	108	0.00
8	T	Diethyl Ether	50.000	48.826	2.3	113	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	48.823	2.4	107	0.00
10	T	Methyl Iodide	50.000	49.342	1.3	108	0.00
11	T	Tert butyl alcohol	250.000	265.562	-6.2	133	0.00
12	CM	1,1-Dichloroethene	50.000	49.337	1.3#	110	0.00
13	T	Acrolein	250.000	232.516	7.0	104	0.00
14	T	Allyl chloride	50.000	51.303	-2.6	112	0.00
15	T	Acrylonitrile	250.000	252.193	-0.9	118	0.00
16	T	Acetone	250.000	293.532	-17.4	151	0.00
17	T	Carbon Disulfide	50.000	48.865	2.3	110	0.00
18	T	Methyl Acetate	50.000	56.380	-12.8	111	0.00
19	T	Methyl tert-butyl Ether	50.000	53.259	-6.5	114	0.00
20	T	Methylene Chloride	50.000	51.435	-2.9	104	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.239	1.5	108	0.00
22	T	Diisopropyl ether	50.000	51.674	-3.3	110	0.00
23	T	Vinyl Acetate	250.000	255.497	-2.2	115	0.00
24	P	1,1-Dichloroethane	50.000	48.739	2.5	106	0.00
25	T	2-Butanone	250.000	274.343	-9.7	128	0.00
26	T	2,2-Dichloropropane	50.000	50.540	-1.1	112	0.00
27	T	cis-1,2-Dichloroethene	50.000	49.422	1.2	107	0.00
28	T	Bromochloromethane	50.000	47.894	4.2	104	0.00
29	T	Tetrahydrofuran	250.000	256.896	-2.8	118	0.00
30	C	Chloroform	50.000	49.446	1.1#	108	0.00
31	T	Cyclohexane	50.000	47.339	5.3	110	0.00
32	T	1,1,1-Trichloroethane	50.000	49.916	0.2	108	0.00
33	S	1,2-Dichloroethane-d4	50.000	45.856	8.3	106	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00
35	S	Dibromofluoromethane	50.000	47.413	5.2	103	0.00
36	T	1,1-Dichloropropene	50.000	51.207	-2.4	107	0.00
37	T	Ethyl Acetate	50.000	52.286	-4.6	117	0.00
38	T	Carbon Tetrachloride	50.000	52.620	-5.2	112	0.00
39	T	Methylcyclohexane	50.000	52.366	-4.7	108	0.00
40	TM	Benzene	50.000	50.718	-1.4	107	0.00
41	T	Methacrylonitrile	50.000	53.104	-6.2	116	0.00
42	TM	1,2-Dichloroethane	50.000	49.441	1.1	108	0.00
43	T	Isopropyl Acetate	50.000	52.858	-5.7	116	0.00
44	TM	Trichloroethene	50.000	49.641	0.7	107	0.00
45	C	1,2-Dichloropropane	50.000	51.180	-2.4#	108	0.00
46	T	Dibromomethane	50.000	51.498	-3.0	112	0.00
47	T	Bromodichloromethane	50.000	51.267	-2.5	107	0.00
48	T	Methyl methacrylate	50.000	54.975	-10.0	116	0.00

Sample Results: **VW032267.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	1081.815	-8.2	113	0.00
50	S	Toluene-d8	50.000	47.526	4.9	103	0.00
51	T	4-Methyl-2-Pentanone	250.000	266.913	-6.8	118	0.00
52	CM	Toluene	50.000	50.245	-0.5#	106	0.00
53	T	t-1,3-Dichloropropene	50.000	54.570	-9.1	114	0.00
54	T	cis-1,3-Dichloropropene	50.000	53.737	-7.5	112	0.00
55	T	1,1,2-Trichloroethane	50.000	50.952	-1.9	112	0.00
56	T	Ethyl methacrylate	50.000	55.192	-10.4	115	0.00
57	T	1,3-Dichloropropane	50.000	51.235	-2.5	108	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	283.551	-13.4	113	0.00
59	T	2-Hexanone	250.000	280.431	-12.2	122	0.00
60	T	Dibromochloromethane	50.000	52.698	-5.4	109	0.00
61	T	1,2-Dibromoethane	50.000	51.758	-3.5	111	0.00
62	S	4-Bromofluorobenzene	50.000	48.917	2.2	104	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	102	0.00
64	T	Tetrachloroethene	50.000	50.781	-1.6	104	0.00
65	PM	Chlorobenzene	50.000	51.224	-2.4	106	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	52.879	-5.8	109	0.00
67	C	Ethyl Benzene	50.000	53.548	-7.1#	109	0.00
68	T	m/p-Xylenes	100.000	105.367	-5.4	107	0.00
69	T	o-Xylene	50.000	52.914	-5.8	104	0.00
70	T	Styrene	50.000	54.832	-9.7	106	0.00
71	P	Bromoform	50.000	50.796	-1.6	104	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	107	0.00
73	T	Isopropylbenzene	50.000	52.083	-4.2	105	0.00
74	T	N-amyl acetate	50.000	53.325	-6.7	116	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	50.585	-1.2	112	0.00
76	T	1,2,3-Trichloropropane	50.000	48.290	3.4	107	0.00
77	T	Bromobenzene	50.000	49.739	0.5	99	0.00
78	T	n-propylbenzene	50.000	51.938	-3.9	104	0.00
79	T	2-Chlorotoluene	50.000	51.255	-2.5	105	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.412	-4.8	105	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	55.397	-10.8	116	0.00
82	T	4-Chlorotoluene	50.000	51.786	-3.6	106	0.00
83	T	tert-Butylbenzene	50.000	54.015	-8.0	110	0.00
84	T	1,2,4-Trimethylbenzene	50.000	52.733	-5.5	107	0.00
85	T	sec-Butylbenzene	50.000	52.732	-5.5	106	0.00
86	T	p-Isopropyltoluene	50.000	53.306	-6.6	104	0.00
87	T	1,3-Dichlorobenzene	50.000	49.634	0.7	104	0.00
88	T	1,4-Dichlorobenzene	50.000	51.309	-2.6	114	0.00
89	T	n-Butylbenzene	50.000	52.305	-4.6	105	0.00
90	T	Hexachloroethane	50.000	53.334	-6.7	114	0.00
91	T	1,2-Dichlorobenzene	50.000	51.359	-2.7	107	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	50.007	-0.0	116	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.725	-3.5	108	0.00
94	T	Hexachlorobutadiene	50.000	49.349	1.3	116	0.00
95	T	Naphthalene	50.000	54.183	-8.4	113	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032267.D
Acq On : 26 Sep 2025 08:43
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_W
LabSampleId :
VSTDCCC050

Quant Time: Sep 27 04:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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	53.266	-6.5	112	0.00

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

QC SAMPLE DATA

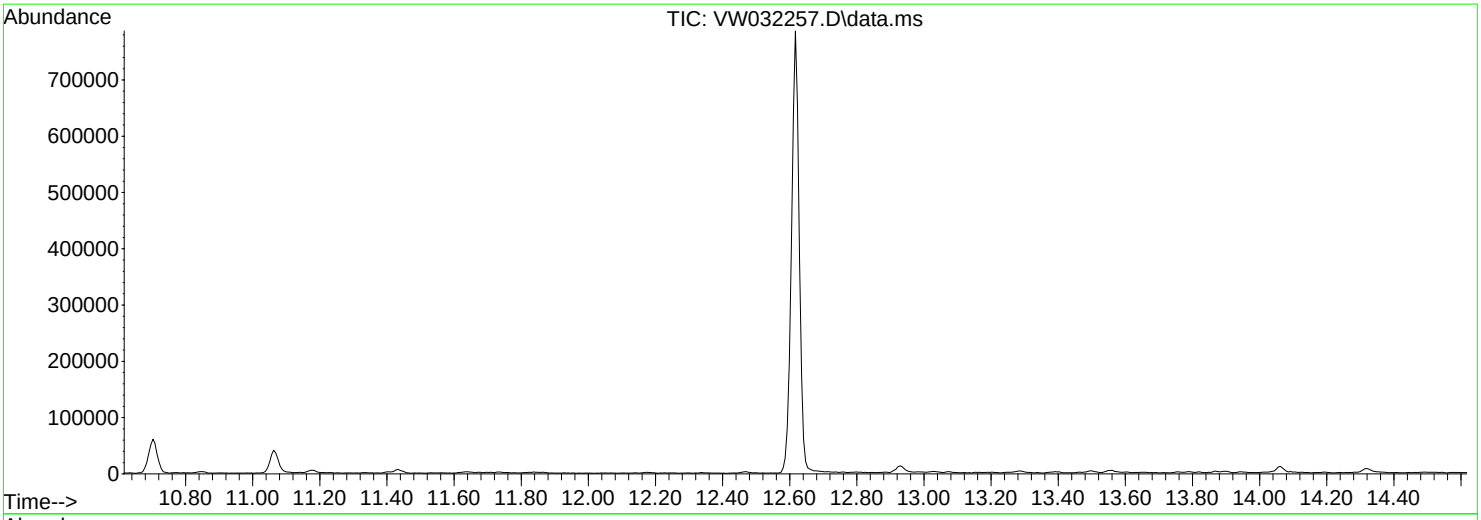
Sample Results: **VW032257.D**

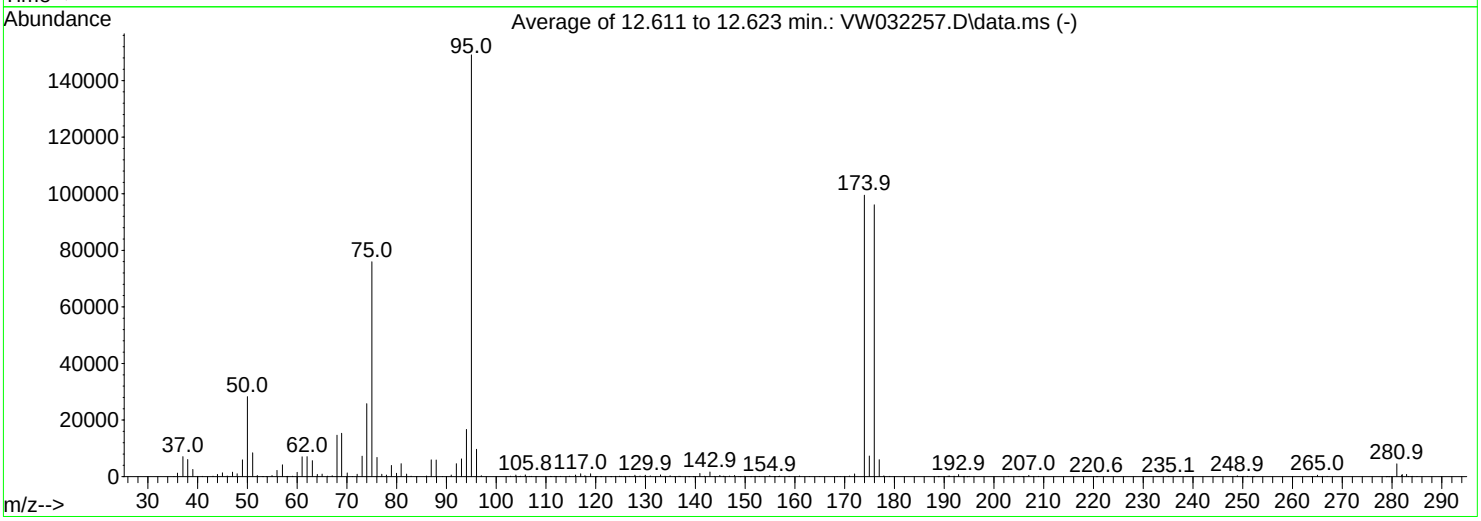
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092525\
Data File : VW032257.D
Acq On : 25 Sep 2025 10:01
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Title : SW846 8260
Last Update : Fri Sep 26 07:11:42 2025





AutoFind: Scans 1759, 1760, 1761; Background Corrected with Scan 1750

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	28296	PASS
75	95	30	60	51.0	75976	PASS
95	95	100	100	100.0	149099	PASS
96	95	5	9	6.5	9671	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.7	99464	PASS
175	174	5	9	7.4	7318	PASS
176	174	95	101	96.6	96075	PASS
177	176	5	9	6.2	5983	PASS

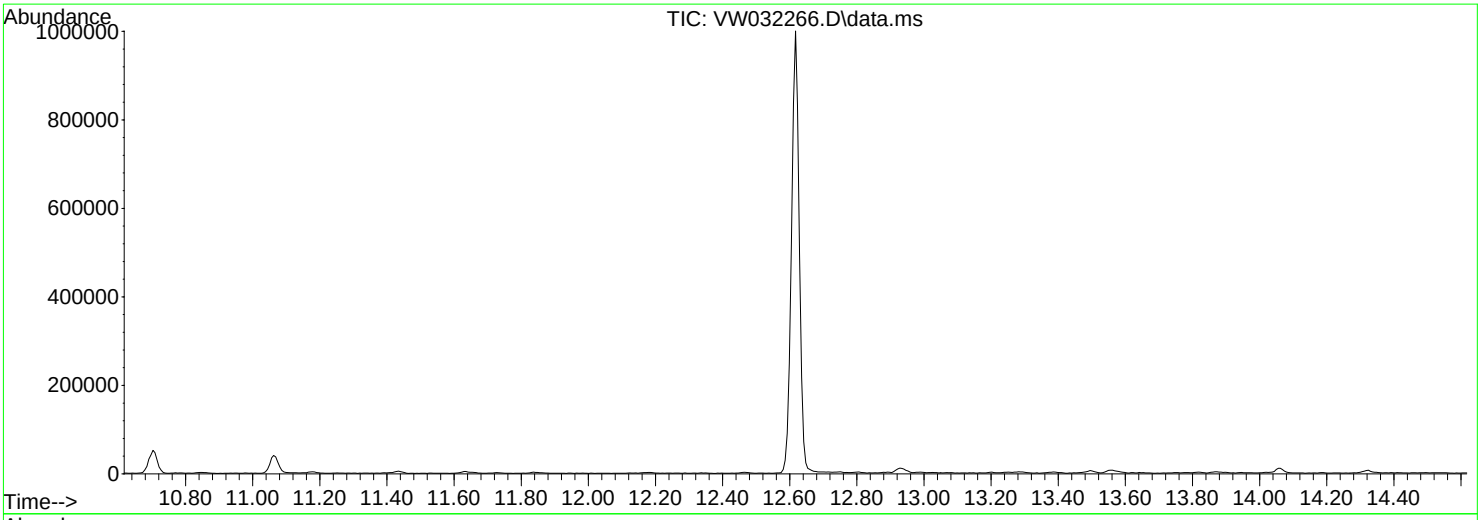
Sample Results: **VW032266.D**

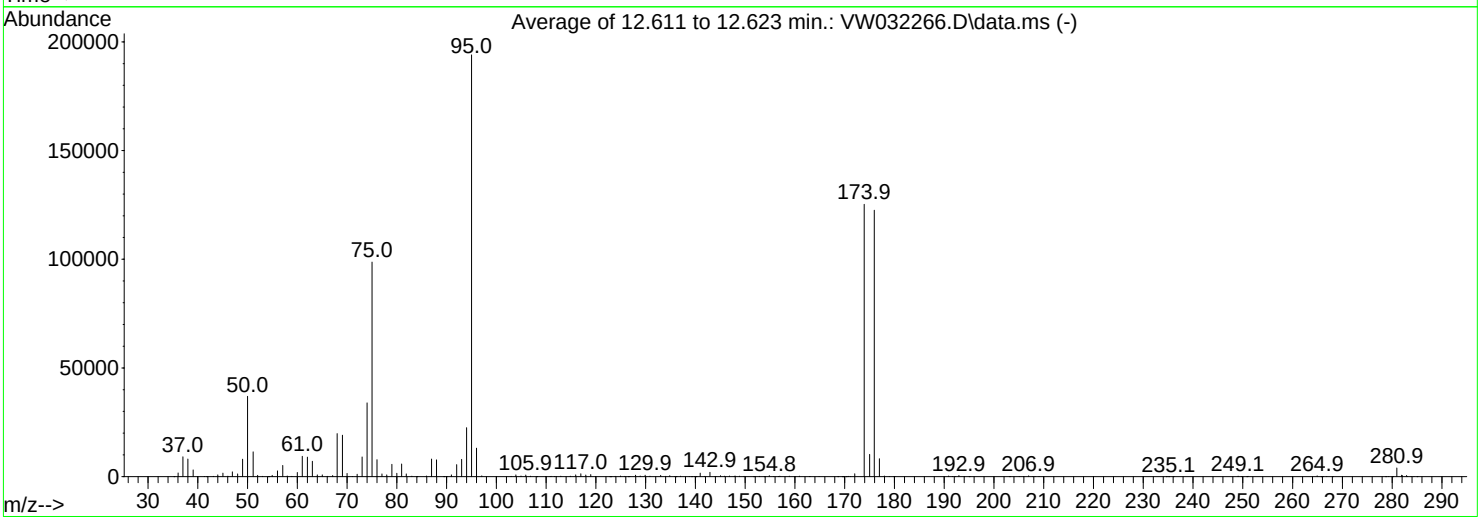
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032266.D
Acq On : 26 Sep 2025 08:13
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Title : SW846 8260
Last Update : Fri Sep 26 07:11:42 2025





AutoFind: Scans 1759, 1760, 1761; Background Corrected with Scan 1750

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	36931	PASS
75	95	30	60	50.9	98688	PASS
95	95	100	100	100.0	194027	PASS
96	95	5	9	6.7	13073	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.6	125301	PASS
175	174	5	9	8.2	10245	PASS
176	174	95	101	97.8	122568	PASS
177	176	5	9	6.8	8275	PASS

Raw Data: **VW032268.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBL01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032268.D	1	09/26/25 09:41	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.00	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.00	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	1.20	U	1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.00	ug/Kg
67-64-1	Acetone	4.70	U	4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.73	U	0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.80	U	0.80	5.00	ug/Kg
110-82-7	Cyclohexane	0.79	U	0.79	5.00	ug/Kg
78-93-3	2-Butanone	6.50	U	6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.97	U	0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.00	ug/Kg
67-66-3	Chloroform	0.84	U	0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.93	U	0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.00	ug/Kg
71-43-2	Benzene	0.79	U	0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.79	U	0.79	5.00	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.91	U	0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.0	ug/Kg
108-88-3	Toluene	0.78	U	0.78	5.00	ug/Kg

Raw Data: **VW032268.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBL01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032268.D	1	09/26/25 09:41	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	63.5		63 - 155	127%	SPK: 50
1868-53-7	Dibromofluoromethane	53.0		70 - 134	106%	SPK: 50
2037-26-5	Toluene-d8	53.6		74 - 123	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		17 - 146	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	194000	7.959			
540-36-3	1,4-Difluorobenzene	436000	8.849			
3114-55-4	Chlorobenzene-d5	462000	11.629			
3855-82-1	1,4-Dichlorobenzene-d4	217000	13.556			

Raw Data: **VW032268.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBL01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032268.D	1	09/26/25 09:41	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Quant Time: Sep 27 04:31:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	193650	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	436371	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	462353	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	216659	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	194023	63.454	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 126.900%			
35) Dibromofluoromethane	7.898	113	166202	52.960	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 105.920%			
50) Toluene-d8	10.325	98	606362	53.612	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 107.220%			
62) 4-Bromofluorobenzene	12.617	95	202578	47.484	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 94.960%			

Target Compounds Qvalue

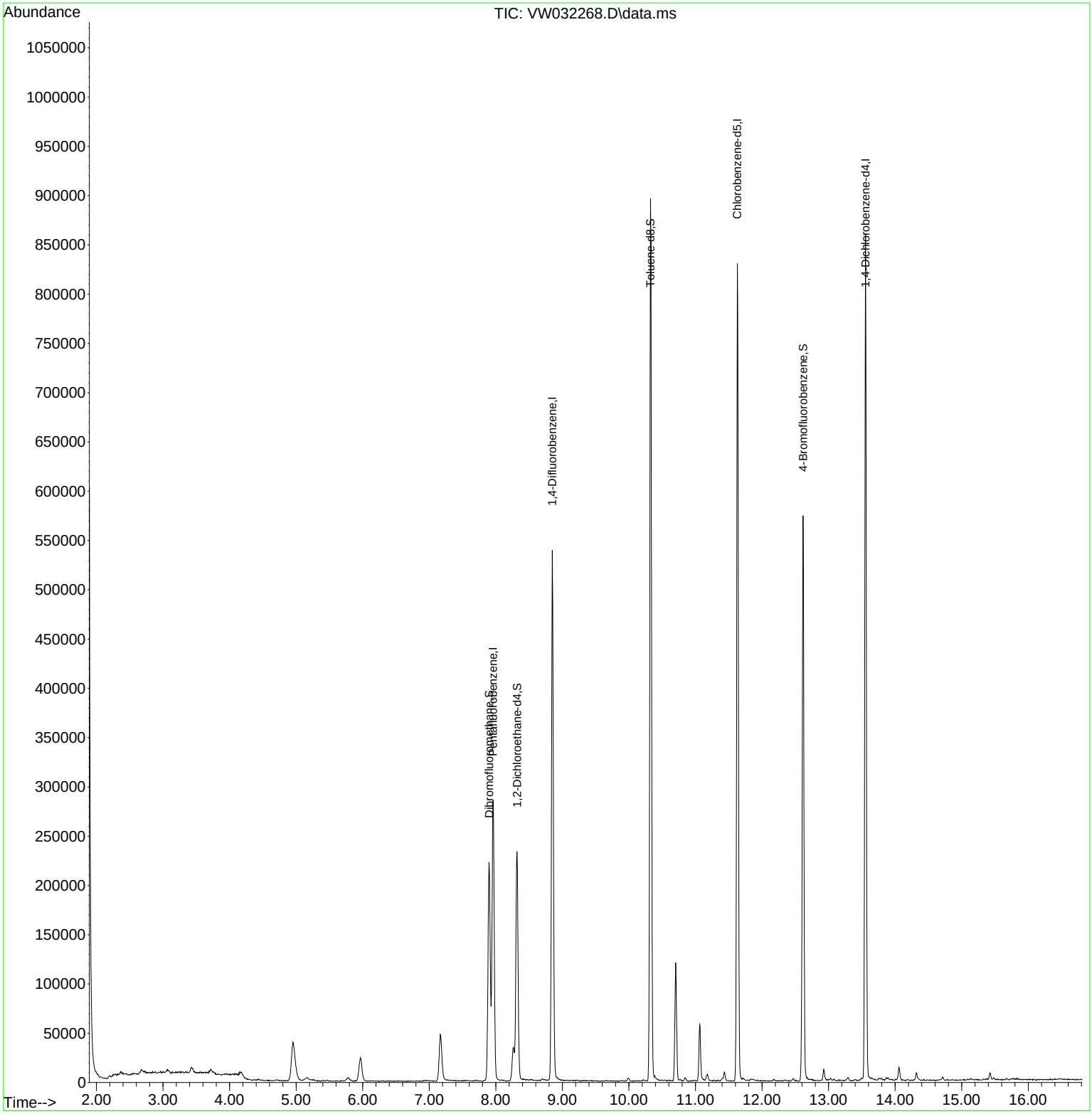
(#) = qualifier out of range (m) = manual integration (+) = signals summed

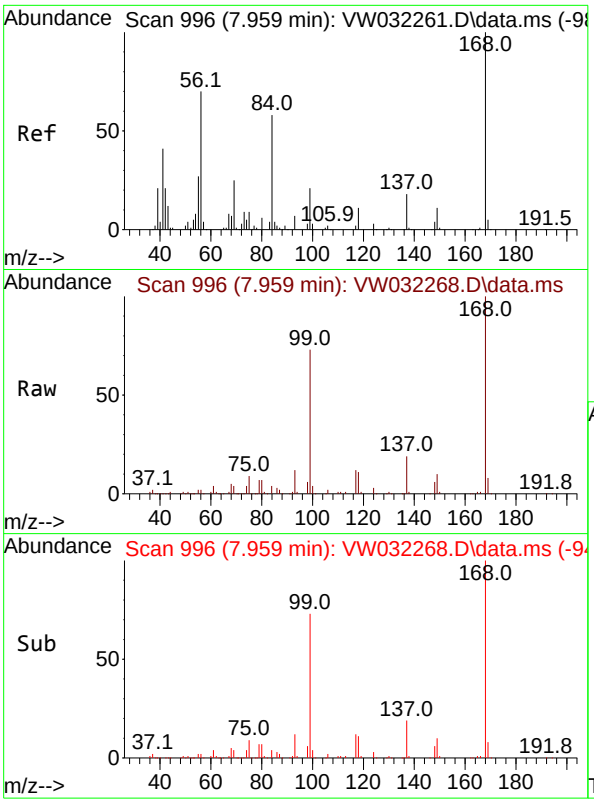
Sample Results: **VW032268.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Quant Time: Sep 27 04:31:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration



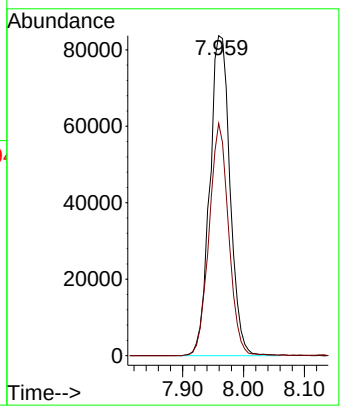


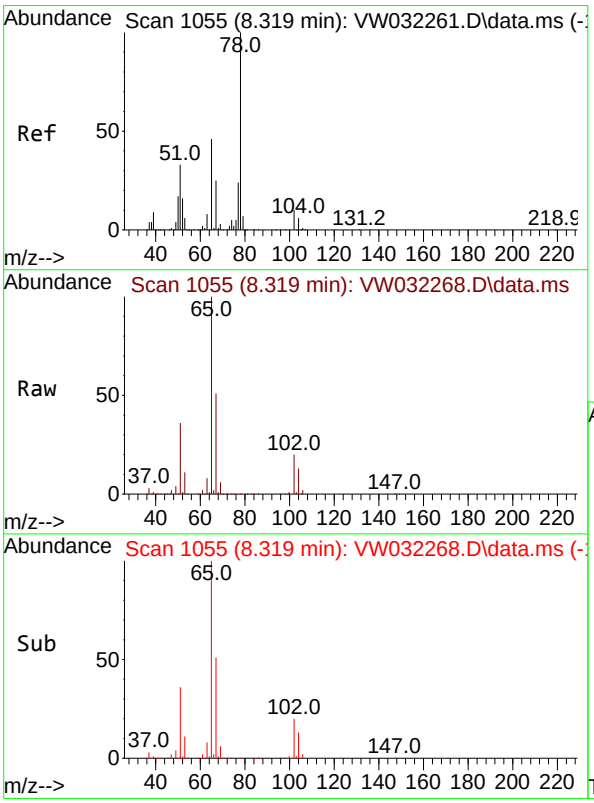
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.959 min Scan# 9
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Tgt Ion:168 Resp: 193650

Ion	Ratio	Lower	Upper
168	100		
99	72.5	55.0	82.4

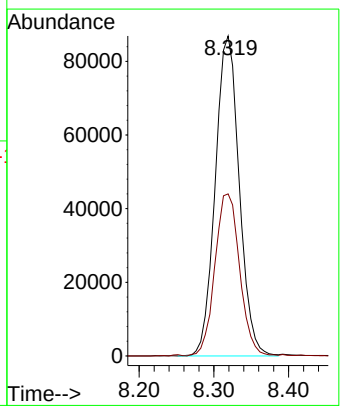


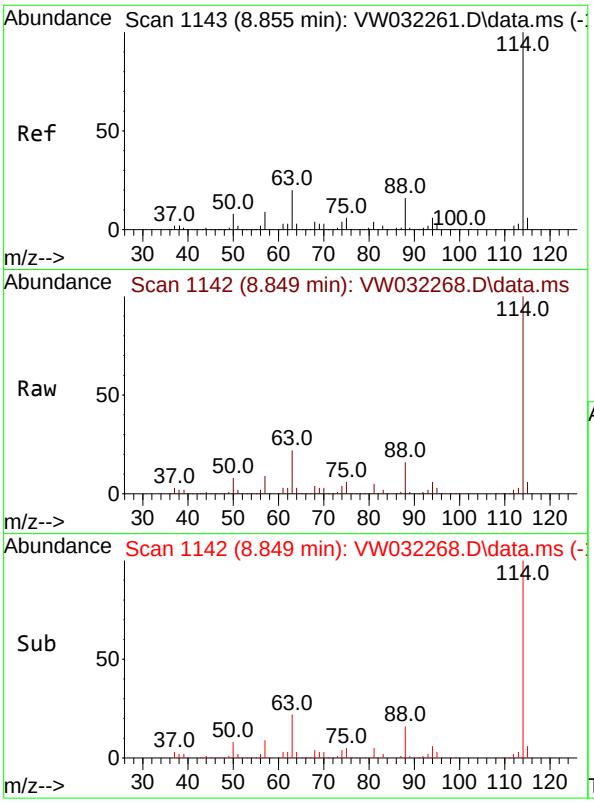


#33
1,2-Dichloroethane-d4
Concen: 63.454 ug/l
RT: 8.319 min Scan# 1055
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Tgt Ion: 65 Resp: 194023

Ion	Ratio	Lower	Upper
65	100		
67	52.2	0.0	105.8



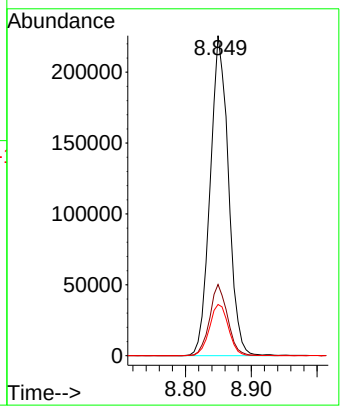


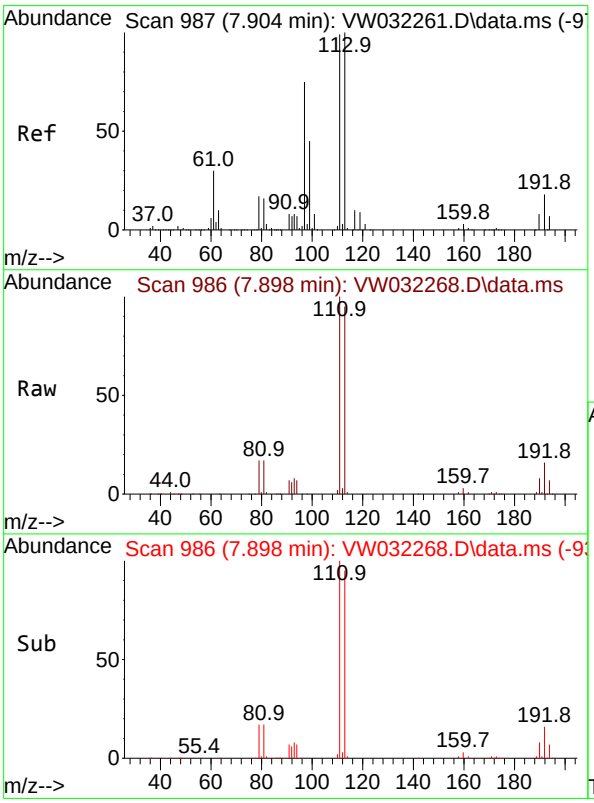
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Tgt Ion:114 Resp: 436371

Ion	Ratio	Lower	Upper
114	100		
63	22.3	0.0	40.2
88	16.0	0.0	32.0

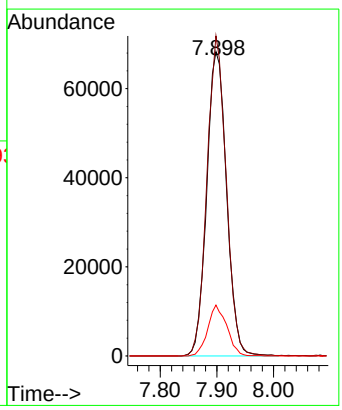


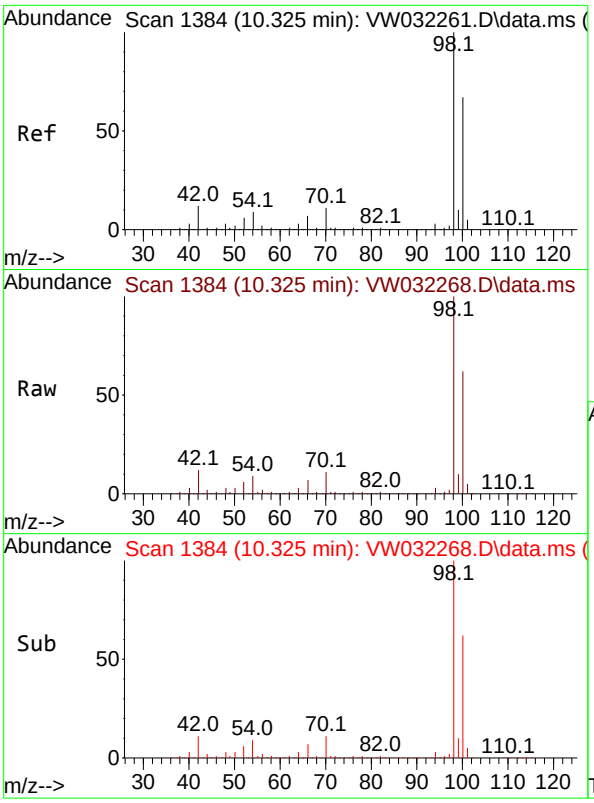


#35
Dibromofluoromethane
Concen: 52.960 ug/l
RT: 7.898 min Scan# 986
Delta R.T. -0.006 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Tgt Ion:113 Resp: 166202

Ion	Ratio	Lower	Upper
113	100		
111	101.7	81.8	122.8
192	16.1	13.0	19.4



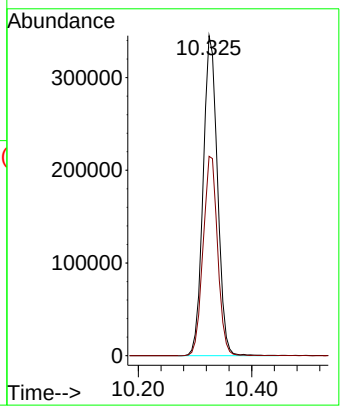


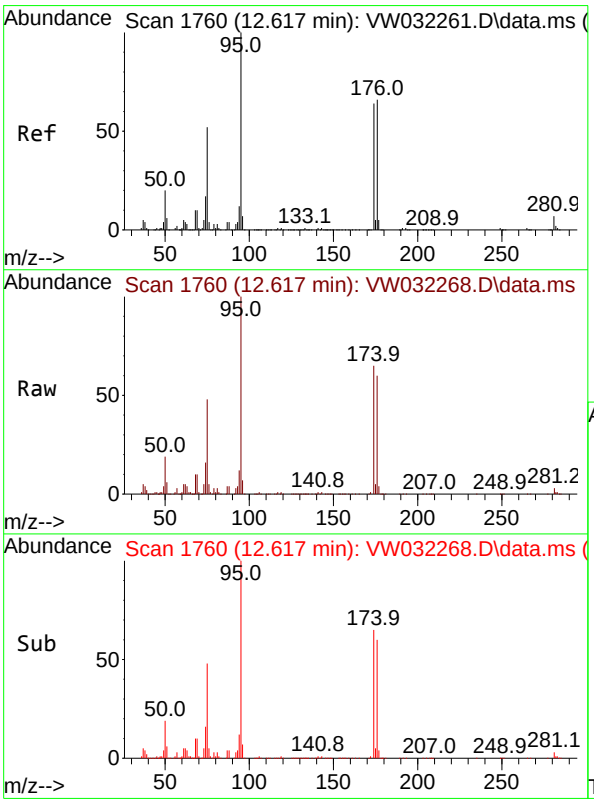
#50
Toluene-d8
Concen: 53.612 ug/l
RT: 10.325 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Tgt Ion: 98 Resp: 606362

Ion	Ratio	Lower	Upper
98	100		
100	63.1	53.0	79.4

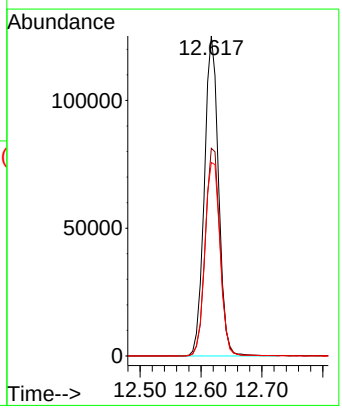


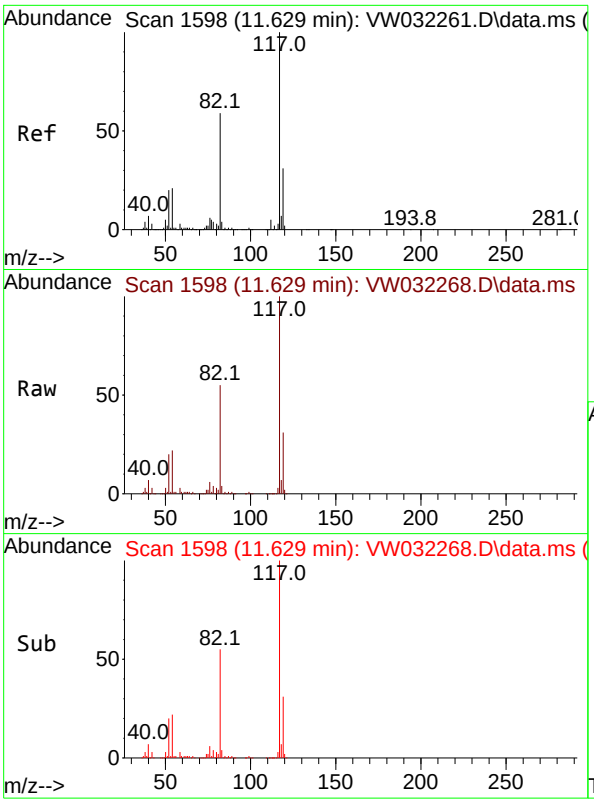


#62
4-Bromofluorobenzene
Concen: 47.484 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Tgt Ion: 95 Resp: 202578

Ion	Ratio	Lower	Upper
95	100		
174	67.1	0.0	130.6
176	65.1	0.0	127.0



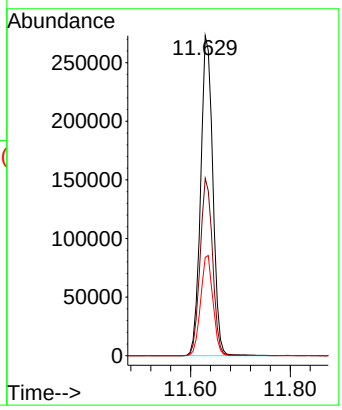


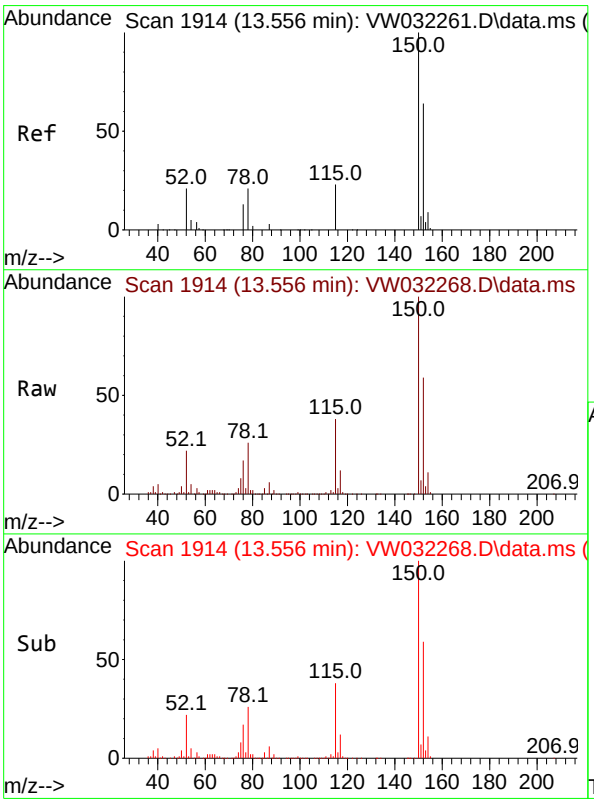
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.629 min Scan# 1
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Tgt Ion:117 Resp: 462353

Ion	Ratio	Lower	Upper
117	100		
82	55.4	46.9	70.3
119	30.7	24.9	37.3

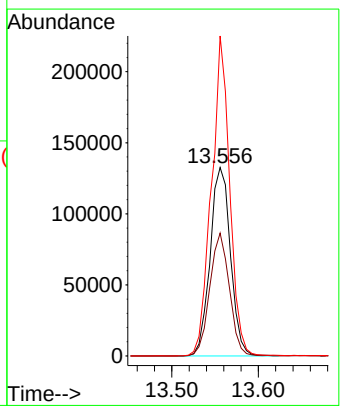




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.556 min Scan# 1914
Delta R.T. 0.000 min
Lab File: VW032268.D
Acq: 26 Sep 2025 09:41

Tgt Ion:152 Resp: 216659

Ion	Ratio	Lower	Upper
152	100		
115	62.7	32.5	97.5
150	152.2	0.0	370.2



Sample Results: **VW032268.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

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_W\Method\82W092525S.M
Title : SW846 8260

Signal : TIC: VW032268.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.954	490	503	520	rBV3	39213	160558	10.13%	1.796%
2	5.966	658	669	685	rVB2	23985	77768	4.91%	0.870%
3	7.167	854	866	881	rBV	47346	141848	8.95%	1.587%
4	7.898	976	986	991	rBV	221532	533313	33.64%	5.966%
5	7.959	991	996	1013	rVB	284484	647369	40.83%	7.242%
6	8.264	1037	1046	1048	rBV	33923	72143	4.55%	0.807%
7	8.319	1048	1055	1068	rVB	231838	540298	34.08%	6.044%
8	8.849	1130	1142	1153	rBV	537851	1054084	66.49%	11.792%
9	10.325	1376	1384	1393	rBV	895250	1585385	100.00%	17.735%
10	10.703	1439	1446	1454	rBV2	120334	213084	13.44%	2.384%
11	11.062	1499	1505	1514	rBV	57368	104325	6.58%	1.167%
12	11.629	1590	1598	1608	rBV	829773	1427230	90.02%	15.966%
13	12.617	1751	1760	1774	rBV	573561	996235	62.84%	11.145%
14	12.928	1807	1811	1817	rBV5	10767	17238	1.09%	0.193%
15	13.556	1907	1914	1927	rVB	857386	1344667	84.82%	15.042%
16	14.056	1990	1996	2004	rVB2	13229	23673	1.49%	0.265%

Sum of corrected areas: 8939218

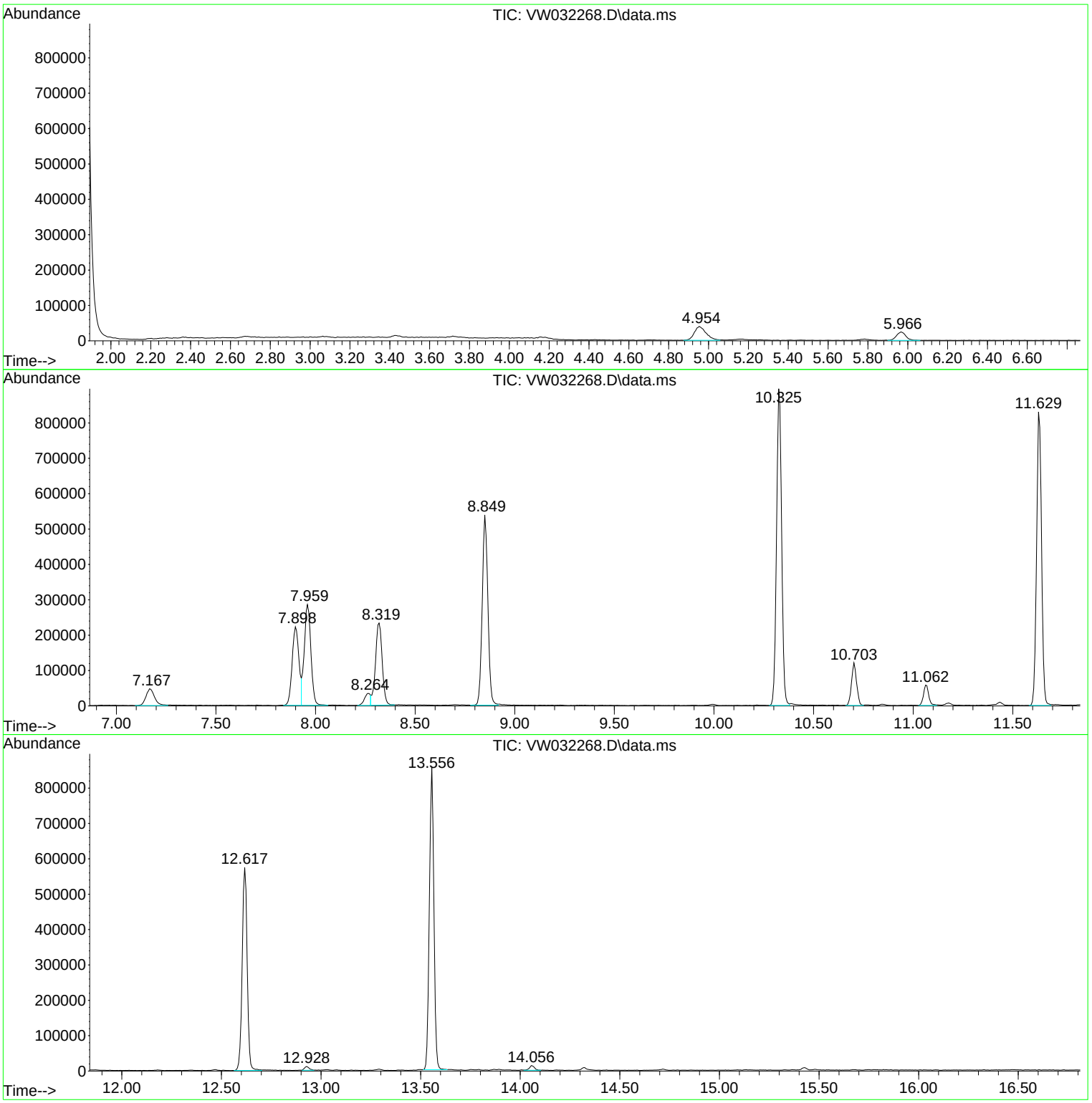
Sample Results: **VW032268.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VW032268.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.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_W\Data\VW092625\
Data File : VW032268.D
Acq On : 26 Sep 2025 09:41
Operator : SY/MD
Sample : VW0926SBL01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.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: **VW032269.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBS01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032269.D	1	09/26/25 10:08	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	21.2		1.10	5.00	ug/Kg
74-87-3	Chloromethane	20.2		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	22.8		0.79	5.00	ug/Kg
74-83-9	Bromomethane	23.1		1.10	5.00	ug/Kg
75-00-3	Chloroethane	21.5		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	18.7		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.7		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	22.1		1.00	5.00	ug/Kg
67-64-1	Acetone	120		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	22.3		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.5		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	16.1		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	21.3		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	21.2		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.9		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	21.3		0.79	5.00	ug/Kg
78-93-3	2-Butanone	100		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.9		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.3		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.2		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.8		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	21.1		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.3		0.91	5.00	ug/Kg
71-43-2	Benzene	21.0		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.1		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.9		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.4		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.1		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	91.9		3.60	25.0	ug/Kg
108-88-3	Toluene	20.8		0.78	5.00	ug/Kg

Raw Data: **VW032269.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBS01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032269.D	1	09/26/25 10:08	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	20.1		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.4		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.3		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	96.1		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.0		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	19.7		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.4		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	21.7		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	21.7		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	44.2		1.20	10.0	ug/Kg
95-47-6	o-Xylene	21.6		0.82	5.00	ug/Kg
100-42-5	Styrene	22.2		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.7		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.6		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	18.8		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	21.6		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.6		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.9		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18.0		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	19.8		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.1		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.1		63 - 155	94%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		70 - 134	93%	SPK: 50
2037-26-5	Toluene-d8	46.9		74 - 123	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.3		17 - 146	97%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	258000	7.959			
540-36-3	1,4-Difluorobenzene	477000	8.849			
3114-55-4	Chlorobenzene-d5	427000	11.629			
3855-82-1	1,4-Dichlorobenzene-d4	223000	13.556			

Raw Data: **VW032269.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBS01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032269.D	1	09/26/25 10:08	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032269.D
Acq On : 26 Sep 2025 10:08
Operator : SY/MD
Sample : VW0926SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 27 04:31:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBS01

Manual Integrations APPROVED
Reviewed By :Mahesh Dadoda
09/29/2025
Supervised By :Semsettin Yesilyurt
09/29/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	258288	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	477257	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	426681	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.556	152	223480	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.313	65	192065	47.094	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 94.180%			
35) Dibromofluoromethane	7.904	113	158775	46.259	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery = 92.520%			
50) Toluene-d8	10.325	98	579559	46.852	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 93.700%			
62) 4-Bromofluorobenzene	12.617	95	225595	48.349	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 96.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.046	85	37842	21.206	ug/l	98
3) Chloromethane	2.253	50	51625	20.215	ug/l	96
4) Vinyl Chloride	2.405	62	67947	22.772	ug/l	96
5) Bromomethane	2.820	94	47148	23.140	ug/l	88
6) Chloroethane	2.966	64	43409	21.469	ug/l	96
7) Trichlorofluoromethane	3.301	101	41970	18.668	ug/l	98
8) Diethyl Ether	3.716	74	42168	19.836	ug/l	100
9) 1,1,2-Trichlorotrifluo...	4.100	101	62237	21.687	ug/l	100
10) Methyl Iodide	4.307	142	83781	21.585	ug/l	99
11) Tert butyl alcohol	5.222	59	30277	106.950	ug/l	96
12) 1,1-Dichloroethene	4.082	96	67892	22.132	ug/l	87
13) Acrolein	3.929	56	48232	95.724	ug/l	96
14) Allyl chloride	4.698	41	101529	21.326	ug/l	99
15) Acrylonitrile	5.399	53	99331	90.724	ug/l	98
16) Acetone	4.161	43	124429	118.802	ug/l	100
17) Carbon Disulfide	4.417	76	156951	22.253	ug/l	99
18) Methyl Acetate	4.704	43	58117	16.134	ug/l	97
19) Methyl tert-butyl Ether	5.466	73	116547	20.496	ug/l	98
20) Methylene Chloride	4.954	84	97152	21.347	ug/l	97
21) trans-1,2-Dichloroethene	5.460	96	69980	21.155	ug/l	96
22) Diisopropyl ether	6.338	45	224780	21.248	ug/l	93
23) Vinyl Acetate	6.283	43	702126	103.170	ug/l	99
24) 1,1-Dichloroethane	6.240	63	139846	20.941	ug/l	99
25) 2-Butanone	7.197	43	147498	101.035	ug/l	93
26) 2,2-Dichloropropane	7.185	77	69568	21.140	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	83416	20.275	ug/l	97
28) Bromochloromethane	7.532	49	64260	20.166	ug/l #	99
29) Tetrahydrofuran	7.551	42	85741	90.468	ug/l	99
30) Chloroform	7.691	83	144668	20.763	ug/l	98
31) Cyclohexane	7.971	56	112115	21.291	ug/l	95
32) 1,1,1-Trichloroethane	7.886	97	99064	21.104	ug/l	98
36) 1,1-Dichloropropene	8.093	75	94168	20.350	ug/l	98
37) Ethyl Acetate	7.270	43	59573	19.411	ug/l	99
38) Carbon Tetrachloride	8.081	117	90875	20.874	ug/l	99
39) Methylcyclohexane	9.343	83	108509	20.265	ug/l	97
40) Benzene	8.337	78	305208	20.954	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032269.D
Acq On : 26 Sep 2025 10:08
Operator : SY/MD
Sample : VW0926SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 27 04:31:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025

Supervised By :Semsettin Yesilyurt
09/29/2025

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Methacrylonitrile	7.496	41	31816	18.101 ug/l	96
42) 1,2-Dichloroethane	8.410	62	97519	20.142 ug/l	99
43) Isopropyl Acetate	8.435	43	103104	18.768 ug/l	99
44) Trichloroethene	9.099	130	71206	20.915 ug/l	94
45) 1,2-Dichloropropane	9.374	63	77145	20.449 ug/l	98
46) Dibromomethane	9.465	93	46372	19.993 ug/l	98
47) Bromodichloromethane	9.648	83	106292	20.093 ug/l	100
48) Methyl methacrylate	9.441	41	48310	18.692 ug/l	98
49) 1,4-Dioxane	9.459	88	11583	372.877 ug/l #	94
51) 4-Methyl-2-Pentanone	10.215	43	299407	91.920 ug/l	98
52) Toluene	10.392	92	187424	20.760 ug/l	99
53) t-1,3-Dichloropropene	10.611	75	97505	20.117 ug/l	95
54) cis-1,3-Dichloropropene	10.075	75	114169	20.403 ug/l	98
55) 1,1,2-Trichloroethane	10.788	97	61241	19.344 ug/l	94
56) Ethyl methacrylate	10.648	69	79427	19.046 ug/l	99
57) 1,3-Dichloropropane	10.934	76	108013	19.749 ug/l	98
58) 2-Chloroethyl Vinyl ether	9.928	63	200248	87.473 ug/l	100
59) 2-Hexanone	10.971	43	213695	96.071 ug/l	97
60) Dibromochloromethane	11.129	129	69693	20.044 ug/l	98
61) 1,2-Dibromoethane	11.239	107	59022	19.678 ug/l	97
64) Tetrachloroethene	10.861	164	55720	21.429 ug/l	86
65) Chlorobenzene	11.660	112	213331	21.706 ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.727	131	64799	20.847 ug/l	97
67) Ethyl Benzene	11.727	91	349768	21.742 ug/l	100
68) m/p-Xylenes	11.837	106	272503	44.189 ug/l	97
69) o-Xylene	12.166	106	124923	21.555 ug/l	96
70) Styrene	12.178	104	225931	22.230 ug/l	100
71) Bromoform	12.349	173	35746	19.735 ug/l	97
73) Isopropylbenzene	12.464	105	320847	20.627 ug/l	100
74) N-amyl acetate	12.269	43	93561	19.100 ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.714	83	76820	18.837 ug/l	99
76) 1,2,3-Trichloropropane	12.763	75	56341m	18.325 ug/l	
77) Bromobenzene	12.745	156	77712	20.312 ug/l	93
78) n-propylbenzene	12.800	91	415955	21.290 ug/l	100
79) 2-Chlorotoluene	12.891	91	250287	21.147 ug/l	100
80) 1,3,5-Trimethylbenzene	12.940	105	275113	20.687 ug/l	100
81) trans-1,4-Dichloro-2-b...	12.513	75	21754	18.378 ug/l	93
82) 4-Chlorotoluene	12.989	91	260792	20.849 ug/l	100
83) tert-Butylbenzene	13.202	119	224202	20.159 ug/l	98
84) 1,2,4-Trimethylbenzene	13.245	105	278390	20.618 ug/l	99
85) sec-Butylbenzene	13.379	105	347938	20.833 ug/l	99
86) p-Isopropyltoluene	13.495	119	290111	20.974 ug/l	99
87) 1,3-Dichlorobenzene	13.495	146	163503	21.606 ug/l	98
88) 1,4-Dichlorobenzene	13.574	146	159112	20.581 ug/l	98
89) n-Butylbenzene	13.818	91	289490	20.855 ug/l	99
90) Hexachloroethane	14.092	117	53545	20.770 ug/l	97
91) 1,2-Dichlorobenzene	13.867	146	147974	20.903 ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.476	75	12549	17.990 ug/l	94
93) 1,2,4-Trichlorobenzene	15.123	180	83072	19.780 ug/l	100
94) Hexachlorobutadiene	15.232	225	41545	21.539 ug/l	87
95) Naphthalene	15.360	128	188745	18.725 ug/l	99
96) 1,2,3-Trichlorobenzene	15.543	180	74748	19.141 ug/l	93

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032269.D
Acq On : 26 Sep 2025 10:08
Operator : SY/MD
Sample : VW0926SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025
Supervised By :Semsettin Yesilyurt
09/29/2025

Quant Time: Sep 27 04:31:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 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_W\Data\VW092625\
Data File : VW032269.D
Acq On : 26 Sep 2025 10:08
Operator : SY/MD
Sample : VW0926SBS01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 4 Sample Multiplier: 1

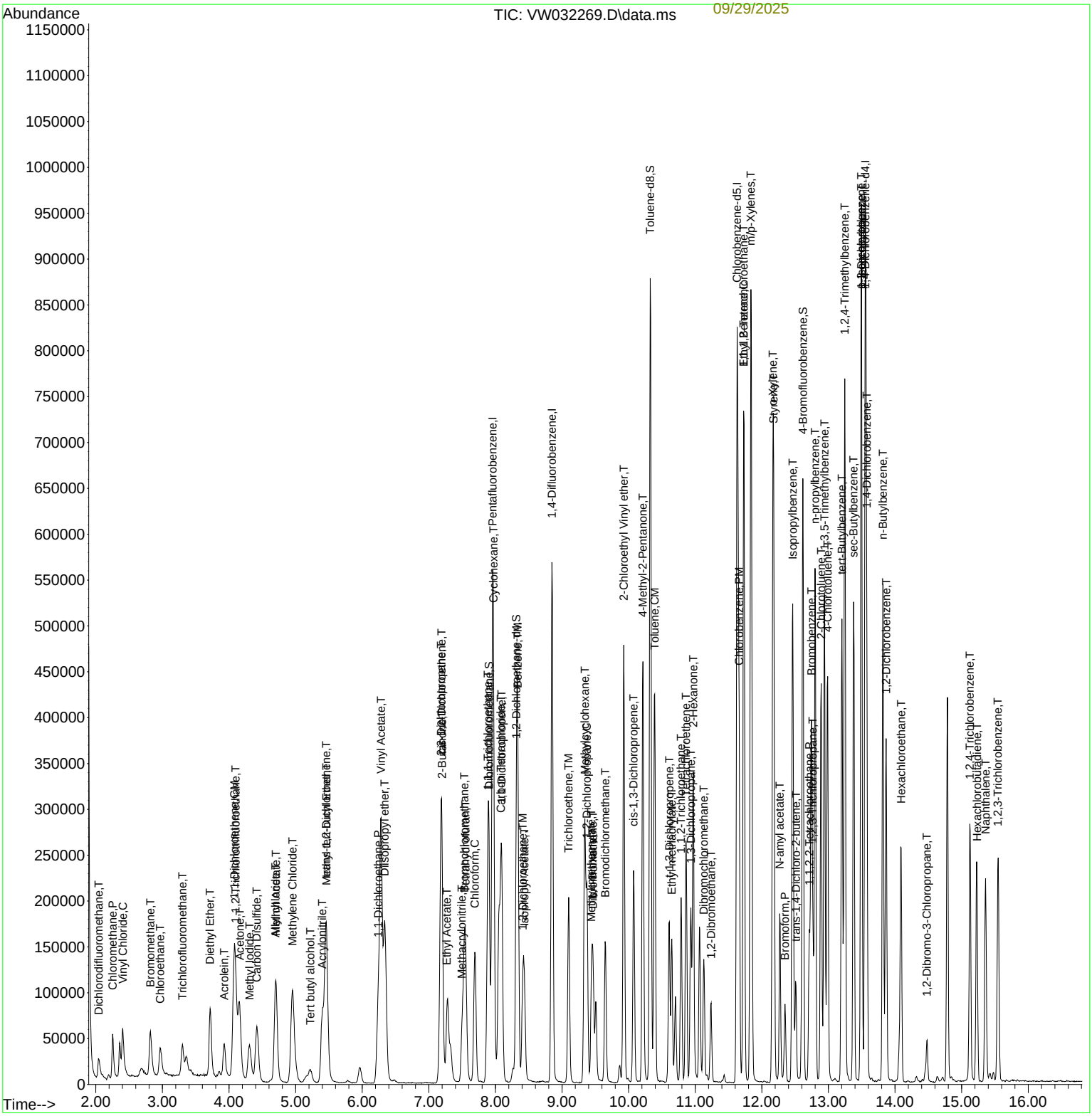
Quant Time: Sep 27 04:31:37 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda
09/29/2025

Supervised By :Semsettin Yesilyurt
09/29/2025



Raw Data: **VW032270.D**

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBSD01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032270.D	1	09/26/25 11:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	22.4		1.10	5.00	ug/Kg
74-87-3	Chloromethane	20.1		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	22.1		0.79	5.00	ug/Kg
74-83-9	Bromomethane	22.1		1.10	5.00	ug/Kg
75-00-3	Chloroethane	21.0		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.3		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.1		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	21.1		1.00	5.00	ug/Kg
67-64-1	Acetone	120		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	21.7		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.7		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	14.0		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	21.2		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.7		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.0		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	21.1		0.79	5.00	ug/Kg
78-93-3	2-Butanone	100		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.7		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.0		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	18.8		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.3		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.8		0.91	5.00	ug/Kg
71-43-2	Benzene	20.2		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.5		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.3		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.8		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.6		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	88.8		3.60	25.0	ug/Kg
108-88-3	Toluene	20.3		0.78	5.00	ug/Kg

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBSD01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032270.D	1	09/26/25 11:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	19.6		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.7		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	18.8		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	94.1		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.2		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	18.9		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.5		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	21.2		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	21.7		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	42.9		1.20	10.0	ug/Kg
95-47-6	o-Xylene	21.4		0.82	5.00	ug/Kg
100-42-5	Styrene	21.6		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.1		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	21.6		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.4		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	22.7		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	22.6		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.2		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18.6		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.9		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	20.6		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	44.4		63 - 155	89%	SPK: 50
1868-53-7	Dibromofluoromethane	44.0		70 - 134	88%	SPK: 50
2037-26-5	Toluene-d8	46.2		74 - 123	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		17 - 146	91%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	272000	7.959			
540-36-3	1,4-Difluorobenzene	498000	8.849			
3114-55-4	Chlorobenzene-d5	443000	11.629			
3855-82-1	1,4-Dichlorobenzene-d4	218000	13.55			

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

Report of Analysis

Client:	Sciacca General Contractors, LLC	Date Collected:	
Project:	507 Franklin Ave Nutley	Date Received:	
Client Sample ID:	VW0926SBSD01	SDG No.:	Q3215
Lab Sample ID:	VW0926SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
VW032270.D	1	09/26/25 11:09	vw092625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

Sample Results: **VW032270.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032270.D
Acq On : 26 Sep 2025 11:09
Operator : SY/MD
Sample : VW0926SBSD01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 27 04:32:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.959	168	272106	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.849	114	497590	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.629	117	443141	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.550	152	218363	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	190572	44.355	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery = 88.720%			
35) Dibromofluoromethane	7.892	113	157550	44.027	ug/l	-0.01
Spiked Amount 50.000	Range 70 - 134		Recovery = 88.060%			
50) Toluene-d8	10.325	98	595383	46.165	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery = 92.320%			
62) 4-Bromofluorobenzene	12.617	95	221310	45.492	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery = 90.980%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.039	85	42175	22.434	ug/l	97
3) Chloromethane	2.253	50	54111	20.112	ug/l	97
4) Vinyl Chloride	2.405	62	69447	22.092	ug/l	100
5) Bromomethane	2.820	94	47340	22.054	ug/l	93
6) Chloroethane	2.972	64	44637	20.955	ug/l	100
7) Trichlorofluoromethane	3.301	101	45707	19.298	ug/l	97
8) Diethyl Ether	3.722	74	43297	19.332	ug/l	98
9) 1,1,2-Trichlorotrifluo...	4.094	101	63683	21.064	ug/l	98
10) Methyl Iodide	4.301	142	84226	20.597	ug/l	99
11) Tert butyl alcohol	5.210	59	31590	105.922	ug/l	96
12) 1,1-Dichloroethene	4.076	96	68292	21.132	ug/l	97
13) Acrolein	3.923	56	48499	91.366	ug/l	95
14) Allyl chloride	4.697	41	103275	20.591	ug/l	99
15) Acrylonitrile	5.399	53	102219	88.620	ug/l	100
16) Acetone	4.155	43	135529	122.829	ug/l	100
17) Carbon Disulfide	4.417	76	160875	21.651	ug/l	98
18) Methyl Acetate	4.704	43	53153	14.007	ug/l	98
19) Methyl tert-butyl Ether	5.466	73	118072	19.710	ug/l	100
20) Methylene Chloride	4.947	84	101964	21.234	ug/l	98
21) trans-1,2-Dichloroethene	5.453	96	72035	20.671	ug/l	92
22) Diisopropyl ether	6.337	45	226621	20.334	ug/l	94
23) Vinyl Acetate	6.283	43	725065	101.130	ug/l	99
24) 1,1-Dichloroethane	6.240	63	140586	19.983	ug/l	99
25) 2-Butanone	7.191	43	154905	100.720	ug/l	96
26) 2,2-Dichloropropane	7.185	77	72871	21.019	ug/l	100
27) cis-1,2-Dichloroethene	7.191	96	86590	19.978	ug/l	97
28) Bromochloromethane	7.526	49	62971	18.758	ug/l #	98
29) Tetrahydrofuran	7.551	42	86984	87.119	ug/l	99
30) Chloroform	7.691	83	149109	20.313	ug/l	96
31) Cyclohexane	7.965	56	117088	21.106	ug/l	94
32) 1,1,1-Trichloroethane	7.886	97	101299	20.485	ug/l	99
36) 1,1-Dichloropropene	8.093	75	100542	20.840	ug/l	99
37) Ethyl Acetate	7.276	43	60978	19.057	ug/l	99
38) Carbon Tetrachloride	8.081	117	93752	20.654	ug/l	97
39) Methylcyclohexane	9.343	83	115915	20.764	ug/l	92
40) Benzene	8.331	78	306302	20.170	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032270.D
Acq On : 26 Sep 2025 11:09
Operator : SY/MD
Sample : VW0926SBSD01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 04:32:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.502	41	32832	17.916	ug/l		98
42) 1,2-Dichloroethane	8.410	62	98393	19.492	ug/l		99
43) Isopropyl Acetate	8.435	43	105370	18.396	ug/l		99
44) Trichloroethene	9.099	130	72007	20.286	ug/l		95
45) 1,2-Dichloropropane	9.373	63	78044	19.842	ug/l		99
46) Dibromomethane	9.465	93	46456	19.211	ug/l		99
47) Bromodichloromethane	9.648	83	108329	19.641	ug/l		99
48) Methyl methacrylate	9.441	41	49231	18.270	ug/l		96
49) 1,4-Dioxane	9.465	88	11298	348.840	ug/l	#	98
51) 4-Methyl-2-Pentanone	10.215	43	301478	88.774	ug/l		100
52) Toluene	10.392	92	191152	20.308	ug/l		98
53) t-1,3-Dichloropropene	10.605	75	99074	19.606	ug/l		99
54) cis-1,3-Dichloropropene	10.075	75	114967	19.706	ug/l		95
55) 1,1,2-Trichloroethane	10.788	97	62181	18.838	ug/l		97
56) Ethyl methacrylate	10.648	69	80857	18.597	ug/l		97
57) 1,3-Dichloropropane	10.934	76	107224	18.803	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.928	63	212181	88.898	ug/l		100
59) 2-Hexanone	10.971	43	218230	94.101	ug/l		97
60) Dibromochloromethane	11.129	129	69723	19.234	ug/l		98
61) 1,2-Dibromoethane	11.239	107	59218	18.936	ug/l		99
64) Tetrachloroethene	10.861	164	55423	20.523	ug/l		93
65) Chlorobenzene	11.660	112	216779	21.237	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.733	131	68045	21.078	ug/l		97
67) Ethyl Benzene	11.727	91	363183	21.737	ug/l		96
68) m/p-Xylenes	11.836	106	274780	42.903	ug/l		100
69) o-Xylene	12.166	106	129005	21.432	ug/l		99
70) Styrene	12.178	104	227760	21.577	ug/l		99
71) Bromoform	12.349	173	35931	19.100	ug/l	#	98
73) Isopropylbenzene	12.458	105	327633	21.557	ug/l		99
74) N-amyl acetate	12.269	43	98794	20.641	ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.714	83	77496	19.448	ug/l		99
76) 1,2,3-Trichloropropane	12.763	75	57052m	18.991	ug/l		
77) Bromobenzene	12.745	156	79837	21.357	ug/l		95
78) n-propylbenzene	12.800	91	415309	21.755	ug/l		99
79) 2-Chlorotoluene	12.891	91	252433	21.828	ug/l		99
80) 1,3,5-Trimethylbenzene	12.940	105	282095	21.710	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.507	75	22375	19.346	ug/l		89
82) 4-Chlorotoluene	12.989	91	266639	21.816	ug/l		99
83) tert-Butylbenzene	13.202	119	239765	22.063	ug/l		98
84) 1,2,4-Trimethylbenzene	13.245	105	294145	22.295	ug/l		98
85) sec-Butylbenzene	13.379	105	358750	21.984	ug/l		100
86) p-Isopropyltoluene	13.495	119	308031	22.792	ug/l		100
87) 1,3-Dichlorobenzene	13.495	146	167801	22.693	ug/l		97
88) 1,4-Dichlorobenzene	13.574	146	170824	22.614	ug/l		94
89) n-Butylbenzene	13.818	91	296710	21.876	ug/l		99
90) Hexachloroethane	14.086	117	53370	21.188	ug/l		97
91) 1,2-Dichlorobenzene	13.867	146	139829	20.215	ug/l		96
92) 1,2-Dibromo-3-Chloropr...	14.482	75	12663	18.579	ug/l		94
93) 1,2,4-Trichlorobenzene	15.122	180	85932	20.940	ug/l		99
94) Hexachlorobutadiene	15.226	225	43985	23.338	ug/l		88
95) Naphthalene	15.354	128	192649	19.560	ug/l		99
96) 1,2,3-Trichlorobenzene	15.549	180	78521	20.578	ug/l		94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032270.D
Acq On : 26 Sep 2025 11:09
Operator : SY/MD
Sample : VW0926SBSD01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025

Quant Time: Sep 27 04:32:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

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

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

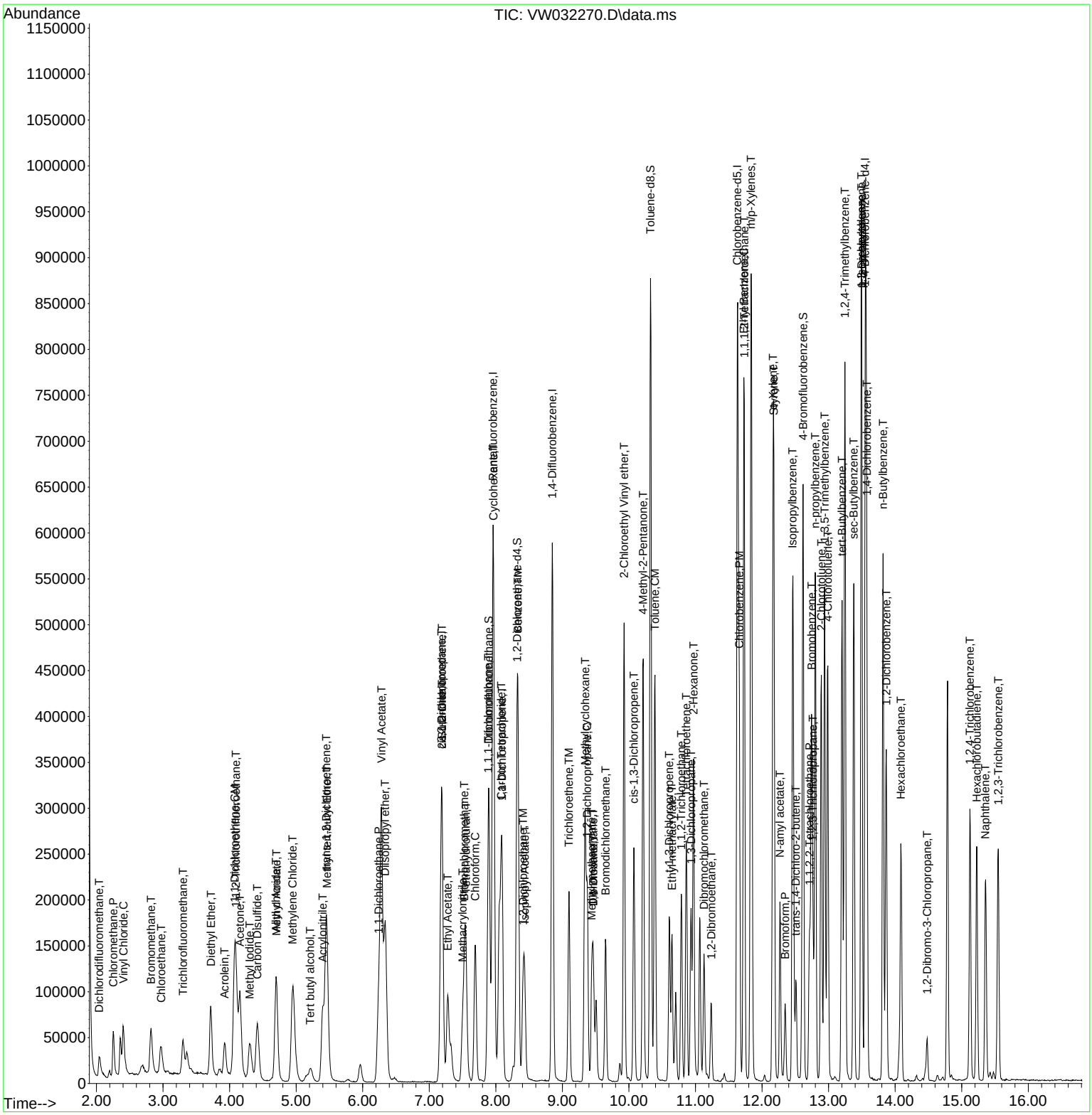
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW092625\
Data File : VW032270.D
Acq On : 26 Sep 2025 11:09
Operator : SY/MD
Sample : VW0926SBSD01
Misc : 5.00g/5mL/MSVOA_W/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 27 04:32:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W092525S.M
Quant Title : SW846 8260
QLast Update : Fri Sep 26 07:11:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_W
ClientSampleId :
VW0926SBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/29/2025
Supervised By :Semsettin Yesilyurt 09/29/2025



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

Manual Integration Report

Sequence:	VW092525	Instrument	MSVOA_w

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VW032258.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:23 AM	sam	9/29/2025 1:04:57 AM	Peak Integrated by Software
VSTDICC010	VW032259.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:28 AM	sam	9/29/2025 1:05:07 AM	Peak Integrated by Software
VSTDICC020	VW032260.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:34 AM	sam	9/29/2025 1:05:14 AM	Peak Integrated by Software
VSTDICCC050	VW032261.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:41 AM	sam	9/29/2025 1:05:24 AM	Peak Integrated by Software
VSTDICC100	VW032262.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:48 AM	sam	9/29/2025 1:05:28 AM	Peak Integrated by Software
VSTDICC150	VW032263.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:53 AM	sam	9/29/2025 1:05:38 AM	Peak Integrated by Software
VSTDICV050	VW032265.D	1,2,3-Trichloropropane	MMdadoda	9/29/2025 12:53:58 AM	sam	9/29/2025 1:05:42 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VW092625	Instrument	MSVOA_w

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VW032267.D	1,2,3-Trichloropropane	MMDadoda	9/29/2025 7:35:19 AM	SAM	9/29/2025 7:40:21 AM	Peak Integrated by Software
VW0926SBS01	VW032269.D	1,2,3-Trichloropropane	MMDadoda	9/29/2025 7:35:21 AM	SAM	9/29/2025 7:40:27 AM	Peak Integrated by Software
VW0926SBSD01	VW032270.D	1,2,3-Trichloropropane	MMDadoda	9/29/2025 7:35:23 AM	SAM	9/29/2025 7:40:28 AM	Peak Integrated by Software

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

Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW092525

Review By	Mahesh Dadoda	Review On	9/29/2025 1:07:01 AM				
Supervise By	Semsettin Yesilyurt	Supervise On	9/29/2025 1:07:30 AM				
SubDirectory	VW092525	HP Acquire Method	MSVOA_W	HP Processing Method	82w092525s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP135637
Initial Calibration Stds	VP135638,VP135639,VP135641,VP135642,VP135643,VP135644
CCC	
Internal Standard/PEM	VP133934
ICV/I.BLK	VP135645
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VW032257.D	25 Sep 2025 10:01	SY/MD	Ok
2	VSTDICC005	VW032258.D	25 Sep 2025 10:45	SY/MD	Ok,M
3	VSTDICC010	VW032259.D	25 Sep 2025 11:30	SY/MD	Ok,M
4	VSTDICC020	VW032260.D	25 Sep 2025 11:52	SY/MD	Ok,M
5	VSTDICCC050	VW032261.D	25 Sep 2025 12:24	SY/MD	Ok,M
6	VSTDICC100	VW032262.D	25 Sep 2025 12:46	SY/MD	Ok,M
7	VSTDICC150	VW032263.D	25 Sep 2025 13:08	SY/MD	Ok,M
8	VIBLK	VW032264.D	25 Sep 2025 13:46	SY/MD	Ok
9	VSTDICV050	VW032265.D	25 Sep 2025 14:41	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_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW092625

Review By	Semsettin Yesilyurt	Review On	9/29/2025 7:41:11 AM				
Supervise By	Mahesh Dadoda	Supervise On	9/30/2025 2:21:17 AM				
SubDirectory	VW092625	HP Acquire Method	MSVOA_W	HP Processing Method	82w092525s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP135670
Initial Calibration Stds	
CCC	VP135671,VP135672
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VW032266.D	26 Sep 2025 08:13	SY/MD	Ok
2	VSTDCCC050	VW032267.D	26 Sep 2025 08:43	SY/MD	Ok,M
3	VW0926SBL01	VW032268.D	26 Sep 2025 09:41	SY/MD	Ok
4	VW0926SBS01	VW032269.D	26 Sep 2025 10:08	SY/MD	Ok,M
5	VW0926SBSD01	VW032270.D	26 Sep 2025 11:09	SY/MD	Ok,M
6	Q3178-02MS	VW032271.D	26 Sep 2025 11:49	SY/MD	Ok,M
7	Q3178-03MSD	VW032272.D	26 Sep 2025 12:11	SY/MD	Ok,M
8	Q3168-03RE	VW032273.D	26 Sep 2025 12:33	SY/MD	Confirms
9	Q3200-01	VW032274.D	26 Sep 2025 12:56	SY/MD	Ok
10	Q3209-01RE	VW032275.D	26 Sep 2025 13:18	SY/MD	Confirms
11	Q3206-01RE	VW032276.D	26 Sep 2025 13:39	SY/MD	Confirms
12	Q3221-01	VW032277.D	26 Sep 2025 14:01	SY/MD	ReRun
13	Q3220-01	VW032278.D	26 Sep 2025 14:23	SY/MD	ReRun
14	Q3216-02	VW032279.D	26 Sep 2025 14:45	SY/MD	Ok
15	Q3215-01	VW032280.D	26 Sep 2025 15:09	SY/MD	Ok
16	Q3222-01	VW032281.D	26 Sep 2025 15:31	SY/MD	Ok
17	Q3231-03	VW032282.D	26 Sep 2025 15:53	SY/MD	Ok
18	Q3231-07	VW032283.D	26 Sep 2025 16:15	SY/MD	Ok
19	Q3231-11	VW032284.D	26 Sep 2025 16:37	SY/MD	Ok
20	Q3231-15	VW032285.D	26 Sep 2025 16:59	SY/MD	Ok
21	VIBLK	VW032286.D	26 Sep 2025 17:20	SY/MD	Ok

M : Manual Integration

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

Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW092525

Review By	Mahesh Dadoda	Review On	9/29/2025 1:07:01 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/29/2025 1:07:30 AM		
SubDirectory	VW092525	HP Acquire Method	MSVOA_W	HP Processing Method	82w092525s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135637
Initial Calibration Stds	VP135638,VP135639,VP135641,VP135642,VP135643,VP135644
CCC	
Internal Standard/PEM	VP133934
ICV/I.BLK	VP135645
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VW032257.D	25 Sep 2025 10:01		SY/MD	Ok
2	VSTDICC005	VSTDICC005	VW032258.D	25 Sep 2025 10:45	LR-20	SY/MD	Ok,M
3	VSTDICC010	VSTDICC010	VW032259.D	25 Sep 2025 11:30		SY/MD	Ok,M
4	VSTDICC020	VSTDICC020	VW032260.D	25 Sep 2025 11:52		SY/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VW032261.D	25 Sep 2025 12:24		SY/MD	Ok,M
6	VSTDICC100	VSTDICC100	VW032262.D	25 Sep 2025 12:46		SY/MD	Ok,M
7	VSTDICC150	VSTDICC150	VW032263.D	25 Sep 2025 13:08		SY/MD	Ok,M
8	VIBLK	VIBLK	VW032264.D	25 Sep 2025 13:46		SY/MD	Ok
9	VSTDICV050	ICVVW092525	VW032265.D	25 Sep 2025 14:41		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_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW092625

Review By	Semsettin Yesilyurt	Review On	9/29/2025 7:41:11 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/30/2025 2:21:17 AM		
SubDirectory	VW092625	HP Acquire Method	MSVOA_W	HP Processing Method	82w092525s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135670
Initial Calibration Stds	
CCC	VP135671,VP135672
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VW032266.D	26 Sep 2025 08:13		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VW032267.D	26 Sep 2025 08:43		SY/MD	Ok,M
3	VW0926SBL01	VW0926SBL01	VW032268.D	26 Sep 2025 09:41		SY/MD	Ok
4	VW0926SBS01	VW0926SBS01	VW032269.D	26 Sep 2025 10:08		SY/MD	Ok,M
5	VW0926SBSD01	VW0926SBSD01	VW032270.D	26 Sep 2025 11:09		SY/MD	Ok,M
6	Q3178-02MS	EME-TS14-01MS	VW032271.D	26 Sep 2025 11:49	vial-B Internal Standard fail	SY/MD	Ok,M
7	Q3178-03MSD	EME-TS14-01MSD	VW032272.D	26 Sep 2025 12:11	vial-B Internal Standard fail	SY/MD	Ok,M
8	Q3168-03RE	ARS20-0010-Oily Soil-S	VW032273.D	26 Sep 2025 12:33	vial-B Internal Standard Fail	SY/MD	Confirms
9	Q3200-01	ETGI-367	VW032274.D	26 Sep 2025 12:56	vial-B	SY/MD	Ok
10	Q3209-01RE	PL-02-092525RE	VW032275.D	26 Sep 2025 13:18	vial-B Internal Standard fail	SY/MD	Confirms
11	Q3206-01RE	TR-06-092525RE	VW032276.D	26 Sep 2025 13:39	vial-B Internal Standard fail	SY/MD	Confirms
12	Q3221-01	HD-01-092625	VW032277.D	26 Sep 2025 14:01	vial-A Internal Standard fail	SY/MD	ReRun
13	Q3220-01	OR-03-092625	VW032278.D	26 Sep 2025 14:23	vial-A Internal Standard fail	SY/MD	ReRun
14	Q3216-02	VOC	VW032279.D	26 Sep 2025 14:45	vial-A	SY/MD	Ok
15	Q3215-01	WASTE	VW032280.D	26 Sep 2025 15:09	vial-A	SY/MD	Ok
16	Q3222-01	SU-03-092625	VW032281.D	26 Sep 2025 15:31	vial-A	SY/MD	Ok
17	Q3231-03	WC-1-VOC	VW032282.D	26 Sep 2025 15:53	vial-A	SY/MD	Ok
18	Q3231-07	WC-2-VOC	VW032283.D	26 Sep 2025 16:15	vial-A	SY/MD	Ok

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Instrument ID: MSVOA_W

Daily Analysis Runlog For Sequence/QCBatch ID # VW092625

Review By	Semsettin Yesilyurt	Review On	9/29/2025 7:41:11 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/30/2025 2:21:17 AM		
SubDirectory	VW092625	HP Acquire Method	MSVOA_W	HP Processing Method	82w092525s.m

STD. NAME	STD REF.#
Tune/Reschk	VP135670
Initial Calibration Stds	
CCC	VP135671,VP135672
Internal Standard/PEM	VP133934
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3231-11	WC-3-VOC	VW032284.D	26 Sep 2025 16:37	vial-A	SY/MD	Ok
20	Q3231-15	WC-4-VOC	VW032285.D	26 Sep 2025 16:59	vial-A	SY/MD	Ok
21	VIBLK	VIBLK	VW032286.D	26 Sep 2025 17:20		SY/MD	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: rubina
Date: 9/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 09/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN #1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 09:20
Out Date: 09/27/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB137341

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
Q3215-01	WASTE	1	1.18	10.23	11.41	10.44	90.5	
Q3216-01	WASTE	2	1.19	10.62	11.81	10.67	89.3	
Q3216-02	VOC	3	1.19	10.50	11.69	10.44	88.1	
Q3216-03	1	4	1.16	10.34	11.5	10.53	90.6	
Q3216-04	2	5	1.16	10.69	11.85	10.81	90.3	
Q3216-05	3	6	1.15	10.36	11.51	10.5	90.3	
Q3216-06	4	7	1.18	10.51	11.69	10.72	90.8	
Q3216-07	5	8	1.19	10.41	11.6	10.52	89.6	
Q3220-01	OR-03-092625	9	1.18	10.87	12.05	10.76	88.1	
Q3220-02	OR-03-092625-E2	10	1.16	10.65	11.81	10.54	88.1	
Q3221-01	HD-01-092625	11	1.13	10.49	11.62	10.53	89.6	
Q3221-02	HD-01-092625-E2	12	1.18	10.45	11.63	10.18	86.1	
Q3222-01	SU-03-092625	13	1.19	10.31	11.5	10.46	89.9	
Q3222-02	SU-03-092625-E2	14	1.13	10.77	11.9	10.77	89.5	
Q3223-01	917	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3223-02	917-A	16	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3223-03	2027	17	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3223-04	2028	18	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3224-01	60159	19	1.00	1.00	2.00	2.00	100.0	oil sample
Q3225-01	60052	20	1.00	1.00	2.00	2.00	100.0	oil sample
Q3226-05	SVOC-GPC-BLANK	21	1.00	1.00	2.00	2.00	100.0	
Q3226-06	PEST-GPC-BLANK	22	1.00	1.00	2.00	2.00	100.0	
Q3226-07	PEST-GPC-BLANK-SPIKE	23	1.00	1.00	2.00	2.00	100.0	
Q3226-09	PEST-GPC2-BLANK	24	1.00	1.00	2.00	2.00	100.0	
Q3226-10	PEST -GPC2-BLANK-SPIKE	25	1.00	1.00	2.00	2.00	100.0	
Q3230-01	WALL-PROBE-BRICK-1	26	1.14	10.40	11.54	9.81	83.4	
Q3231-01	WC-1	27	1.12	10.62	11.74	10.08	84.4	
Q3231-02	WC-1-EPH	28	1.14	10.31	11.45	10.04	86.3	

PERCENT SOLID

Supervisor: Iwona
Analyst: rubina
Date: 9/29/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 09/26/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN #1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 09:20
Out Date: 09/27/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB137341

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
Q3231-03	WC-1-VOC	29	1.12	11.52	12.64	10.63	82.6	
Q3231-05	WC-2	30	1.19	10.17	11.36	9.7	83.7	
Q3231-06	WC-2-EPH	31	1.18	10.31	11.49	9.78	83.4	
Q3231-07	WC-2-VOC	32	1.19	10.83	12.02	10.37	84.8	
Q3231-09	WC-3	33	1.15	10.00	11.15	9.88	87.3	
Q3231-10	WC-3-EPH	34	1.16	10.34	11.5	10.15	86.9	
Q3231-11	WC-3-VOC	35	1.17	11.06	12.23	10.57	85.0	
Q3231-13	WC-4	36	1.16	10.79	11.95	10.81	89.4	
Q3231-14	WC-4-EPH	37	1.13	11.90	13.03	10.87	81.8	
Q3231-15	WC-4-VOC	38	1.14	11.74	12.88	11.3	86.5	
Q3232-01	CONC-1	39	1.00	1.00	2.00	2.00	100.0	Concreate sample
Q3233-01	0926-01	40	1.18	11.05	12.23	12.11	98.9	

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

WORKLIST(Hardcopy Internal Chain)

VB 137341

WorkList Name : %1-092625 **WorkList ID :** 192106 **Department :** Wet-Chemistry **Date :** 09-26-2025 08:04:06

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3215-01	WASTE	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-01	WASTE	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-02	VOC	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-03	1	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-04	2	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-05	3	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-06	4	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3216-07	5	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3220-01	OR-03-092625	Solid	Percent Solids	Cool 4 deg C	SCIA01	J41	09/25/2025	Chemtech -SO
Q3220-02	OR-03-092625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3221-01	HD-01-092625	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3221-02	HD-01-092625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3222-01	SU-03-092625	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3222-02	SU-03-092625-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3223-01	917	Solid	Percent Solids	Cool 4 deg C	PSEG05	D31	09/26/2025	Chemtech -SO
Q3223-02	917-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3223-03	2027	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3223-04	2028	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3224-01	60159	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3225-01	60052	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3226-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO

Date/Time 09/26/25 15:10

Raw Sample Received by: [signature]

Raw Sample Relinquished by: Rm Sm

Date/Time 09/26/25 1730

Raw Sample Received by: Rm Sm

Raw Sample Relinquished by: [signature]

WORKLIST(Hardcopy Internal Chain)

VB 137341

WorkList Name : %1-092625 **WorkList ID :** 192106 **Department :** Wet-Chemistry **Date :** 09-26-2025 08:04:06

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3226-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO
Q3226-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO
Q3226-09	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO
Q3226-10	PEST -GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO
Q3230-01	WALL-PROBE-BRICK-1	Solid	Percent Solids	Cool 4 deg C	ALLI03	A12	09/19/2025	Chemtech -SO
Q3231-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-05	WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-06	WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-07	WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-09	WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-10	WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-11	WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-13	WC-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-14	WC-4-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3231-15	WC-4-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3232-01	CONC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO
Q3233-01	0926-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	D31	09/26/2025	Chemtech -SO

Date/Time 09/26/25 15:10

Raw Sample Received by: [signature]

Raw Sample Relinquished by: RM SM

Date/Time 09/26/25 17:30

Raw Sample Received by: RM SM

Raw Sample Relinquished by: [signature]

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Prep Standard - Chemical Standard Summary

Order ID : Q3215

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: VW092625,

Standard ID :
VP133934,VP134147,VP134149,VP134150,VP134934,VP134957,VP135480,VP135481,VP135552,VP135553,VP135670,VP135671,VP135672,

Chemical ID :
V13391,V14200,V14204,V14205,V14290,V14509,V14510,V14531,V14532,V14625,V14636,V14637,V14638,V14639,V14673,V14727,V14728,V14803,V14815,V14844,V14906,V14921,V14928,V14929,V14951,V14952,V15066,V15067,V15068,W3112,

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1917	8260 Internal standard 50 ppm	VP133934	05/16/2025	11/12/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 05/21/2025

FROM 0.10000ml of V14290 + 49.90000ml of V14921 = Final Quantity: 50.000 ml

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

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VOC STANDARD PREPARATION LOG

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

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

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VOC STANDARD PREPARATION LOG

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

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

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
51	8260 Working STD (Acrolein) -first source, 800PPM	VP135480	09/16/2025	10/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/19/2025

FROM 1.00000ml of V15066 + 1.50000ml of V15067 + 1.50000ml of V15068 + 21.00000ml of V14625 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
56	8260 Working STD (Acrolein) -first source, 500PPM	VP135481	09/16/2025	10/15/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/19/2025

FROM 5.62500ml of V14625 + 9.37500ml of VP135480 = Final Quantity: 15.000 ml

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VOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
257	8260 Calibration Working STD Mix-First source, 160PPM	VP135552	09/22/2025	11/03/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2025

FROM 0.40000ml of V14844 + 1.00000ml of V14200 + 1.00000ml of V14509 + 1.00000ml of V14510 + 1.00000ml of V14531 + 1.00000ml of V14532 + 1.00000ml of V14727 + 1.00000ml of V14728 + 1.00000ml of V14803 + 1.00000ml of V14815 + 1.00000ml of V14951 + 1.00000ml of V14952 + 1.50000ml of V14204 + 1.50000ml of V14205 + 10.60000ml of V14928 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
244	8260 Calibration Working STD Mix-First source, 100PPM	VP135553	09/22/2025	11/03/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/26/2025

FROM 5.62500ml of V14928 + 9.37500ml of VP135552 = Final Quantity: 15.000 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	VP135670	09/26/2025	09/27/2025	Amit Patel	None	None	Mahesh Dadoda 10/02/2025

FROM 4.99800ml of W3112 + 0.00200ml of VP134957 = 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	VP135671	09/26/2025	09/27/2025	Amit Patel	None	None	Mahesh Dadoda 10/02/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135481 + 0.00250ml of VP135553 + 0.00500ml of VP133934 = 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
773	50 PPB CCC, 8260-SOIL	VP135672	09/26/2025	09/27/2025	Amit Patel	None	None	Mahesh Dadoda 10/02/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP134147 + 0.00250ml of VP134150 + 0.00250ml of VP134934 + 0.00250ml of VP135481 + 0.00250ml of VP135553 + 0.00500ml of VP133934 = Final Quantity: 5.000 ml

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Fax : 908 789 8922

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	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14200

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	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14204

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	A0200785	03/22/2026	09/22/2025 / sam	02/28/2024 / SAM	V14205

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	12/12/2025	12/12/2024 / SAM	04/15/2024 / SAM	V14290

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	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14509

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CHEMICAL RECEIPT LOG BOOK

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	03/22/2026	09/22/2025 / sam	09/17/2024 / SAM	V14510

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	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14531

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	03/22/2026	09/22/2025 / sam	09/18/2024 / SAM	V14532

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

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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

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	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14727

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	03/22/2026	09/22/2025 / sam	12/17/2024 / SAM	V14728

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	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14803

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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	03/22/2026	09/22/2025 / sam	01/08/2025 / SAM	V14815

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	11/12/2025	05/12/2025 / SAM	05/09/2025 / SAM	V14921

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

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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	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14951

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	03/22/2026	09/22/2025 / sam	05/19/2025 / SAM	V14952

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15066

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15067

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	091525	10/15/2025	09/16/2025 / sam	09/16/2025 / sam	V15068

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

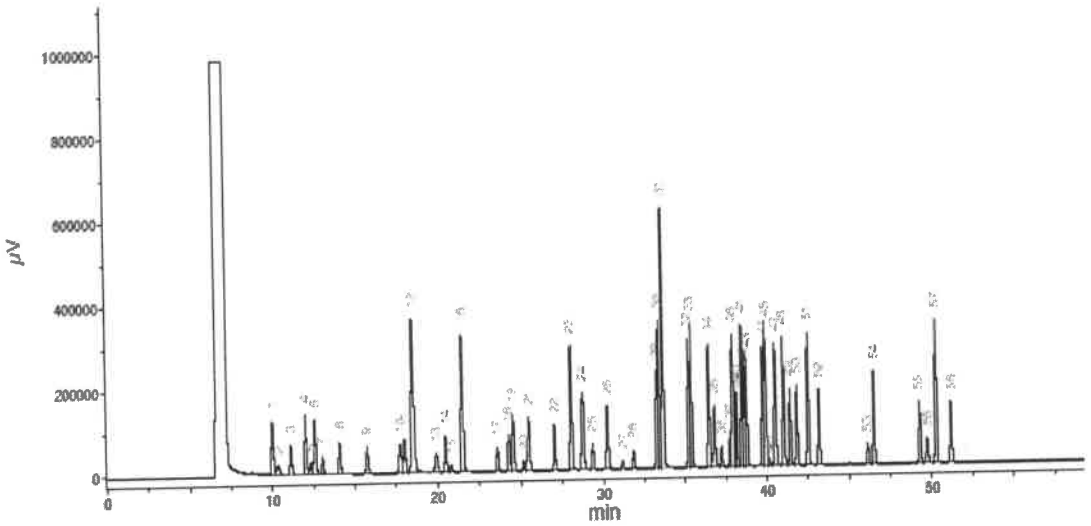
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, 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

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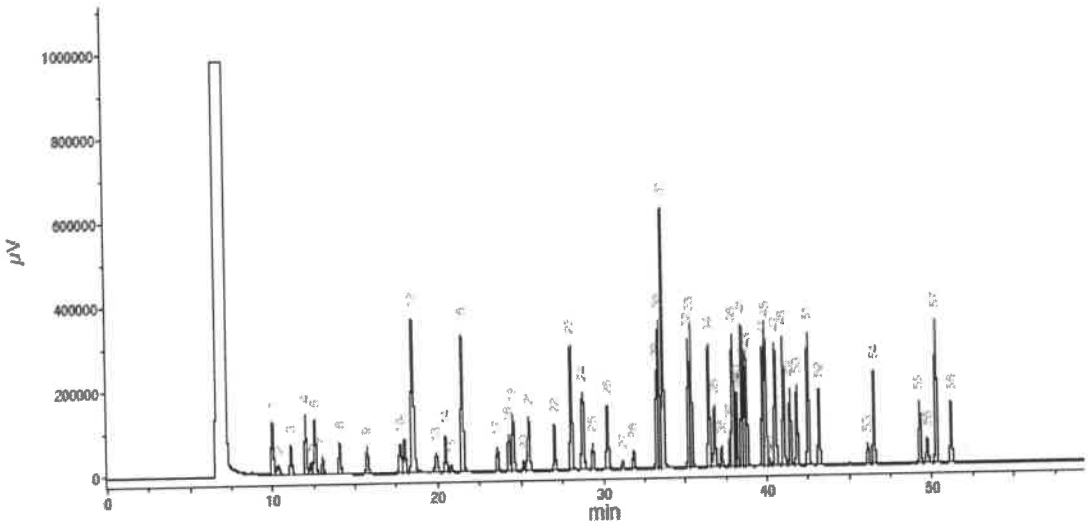
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the 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

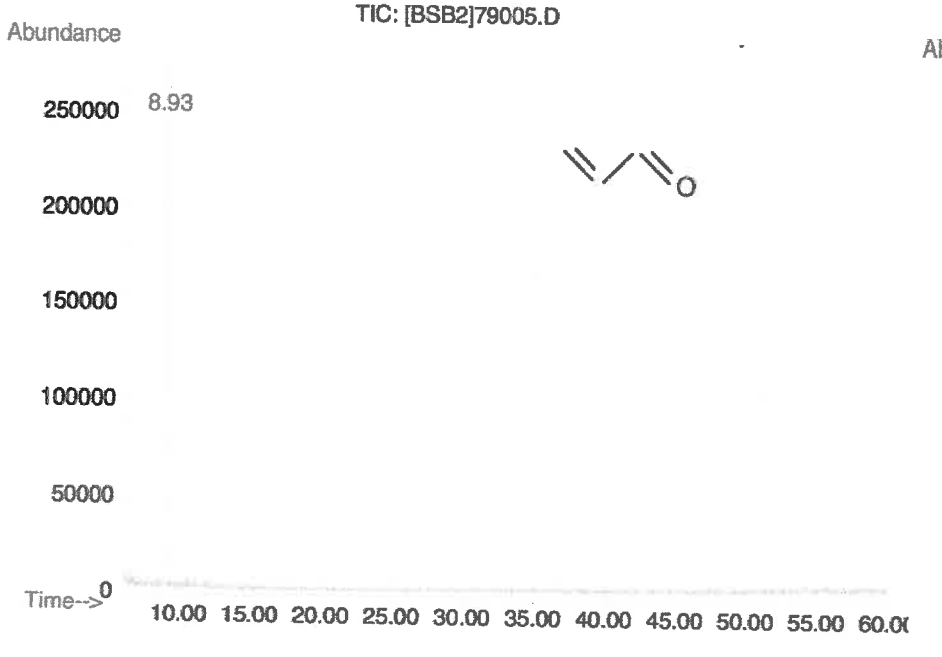
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

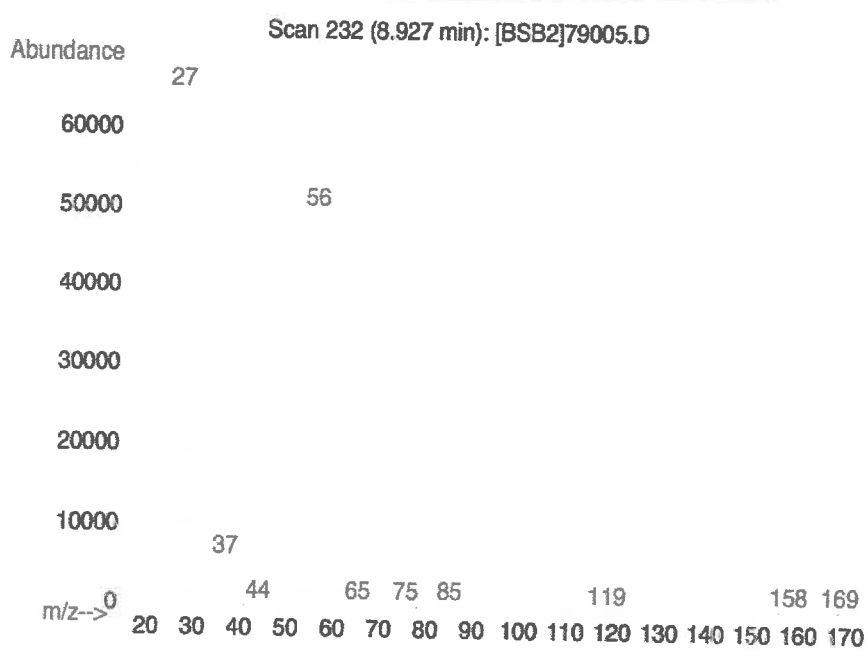
Formulated By: Justin Dippold 091424 DATE

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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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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Absolute Standards, Inc.
800-368-1131
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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

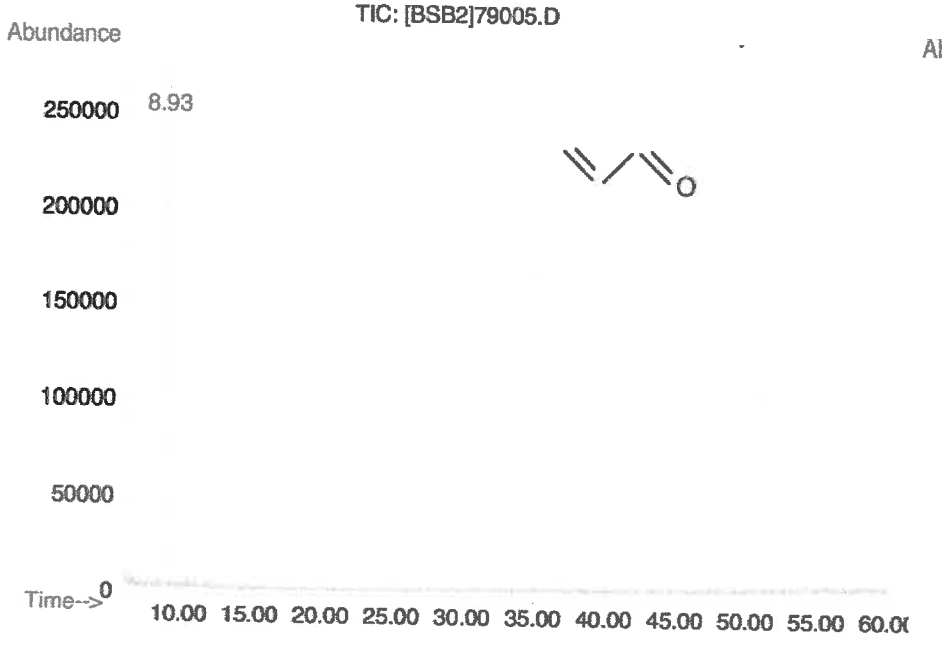
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

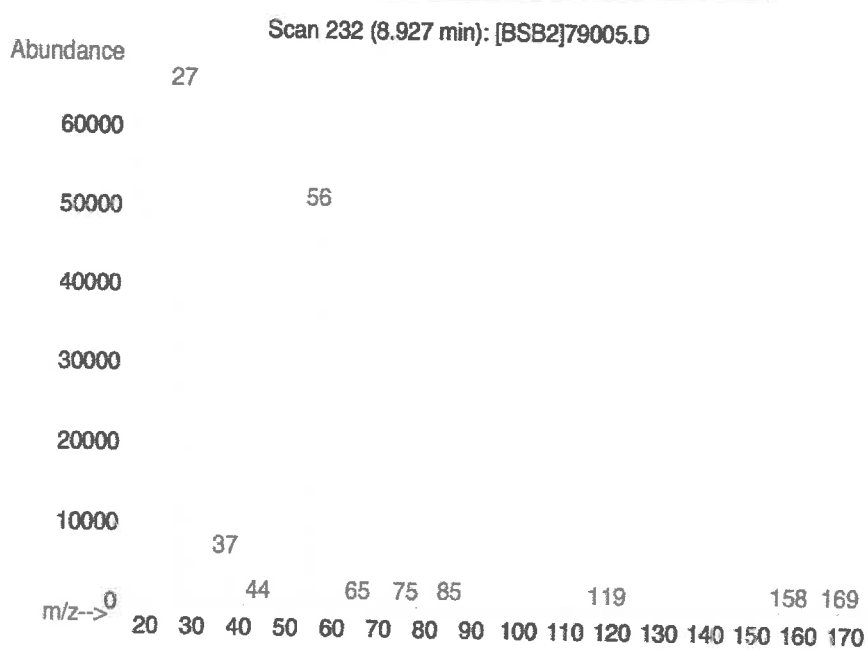
Formulated By: Justin Dippold 091424 DATE

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

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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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

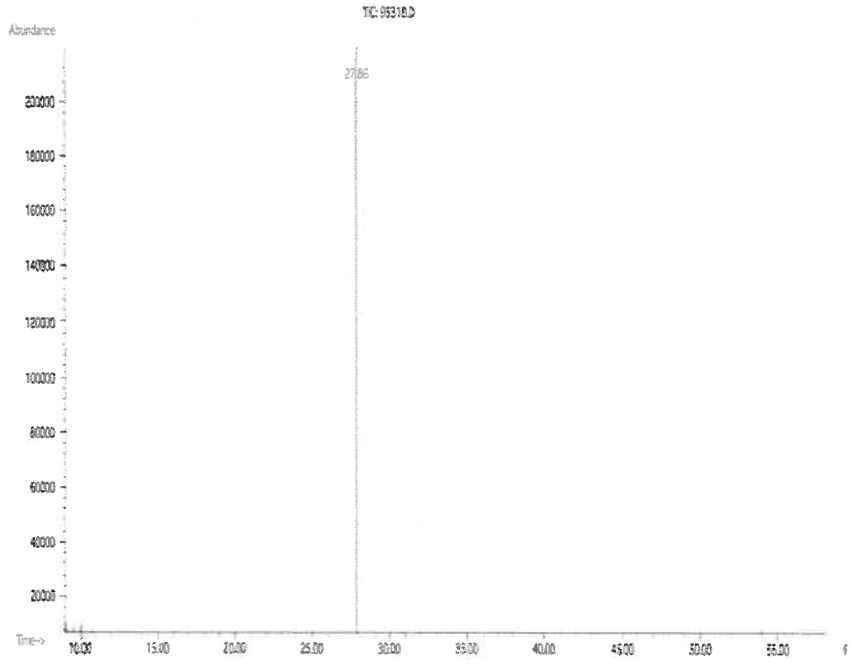
V14630 to V14649

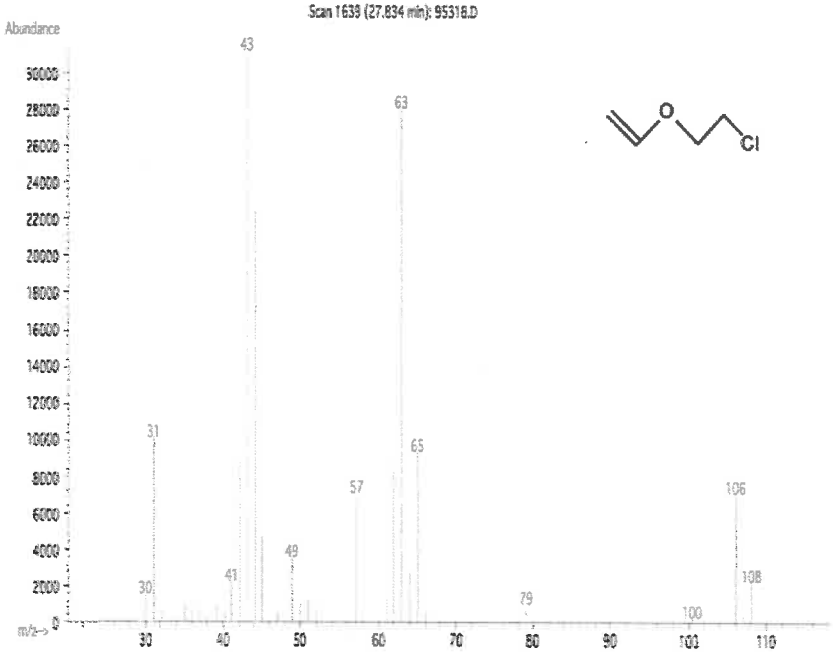
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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.





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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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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

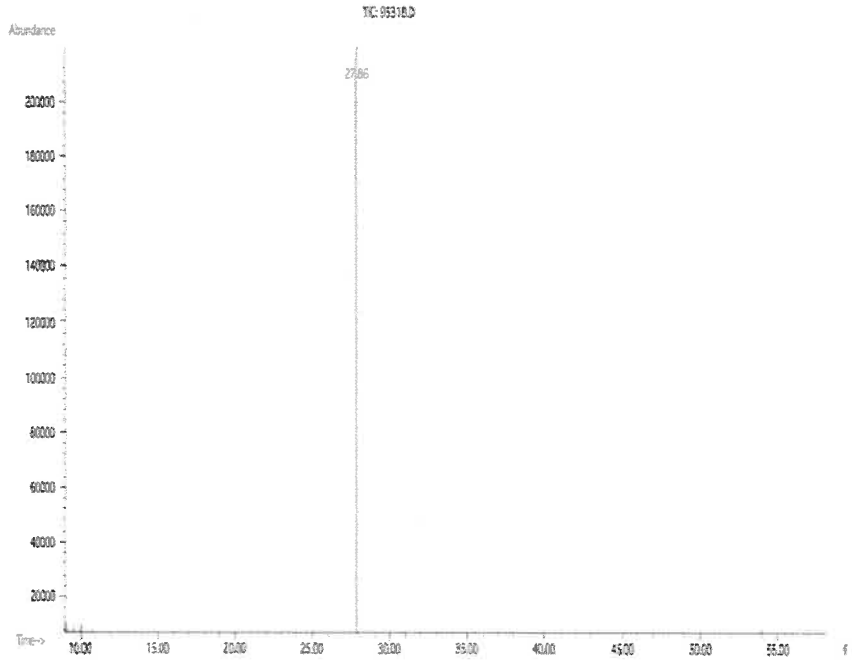
V14630 to V14649

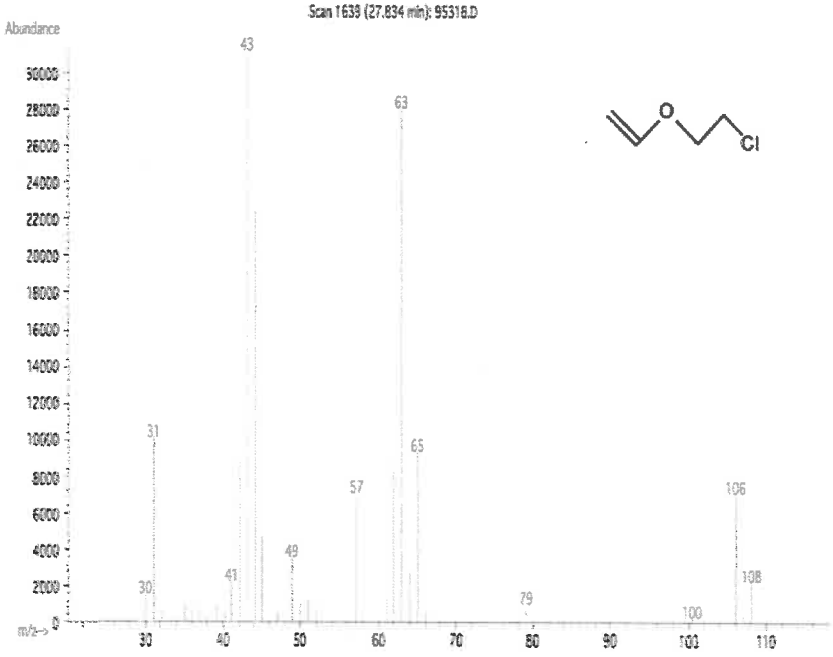
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 50.0 0.001 Flask Uncertainty

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

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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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
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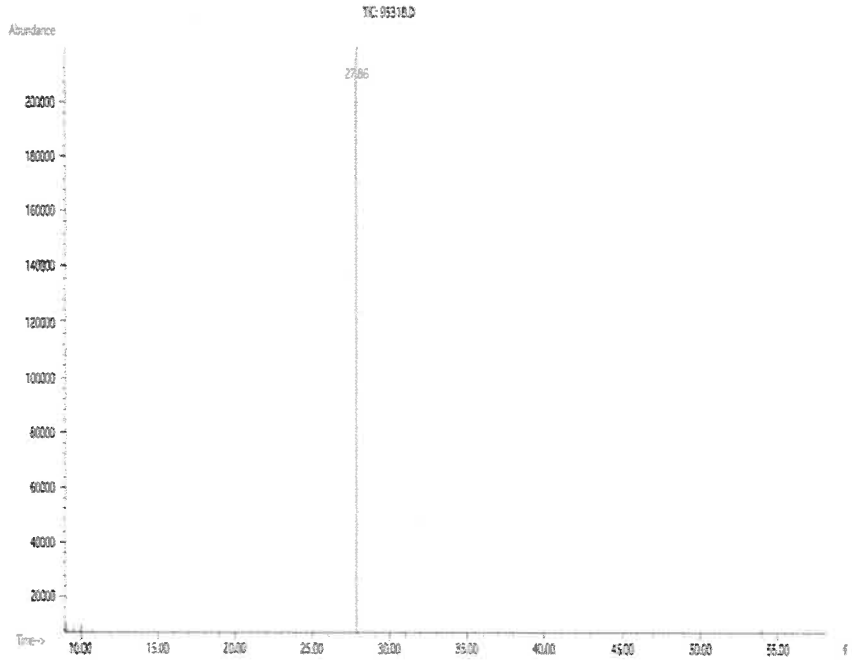
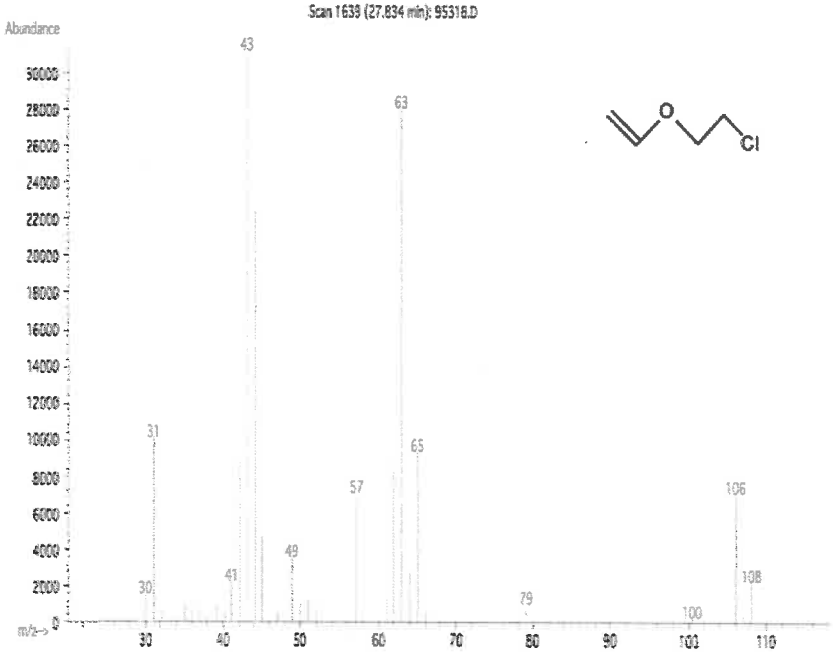
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	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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Signal Word: DANGER

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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
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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
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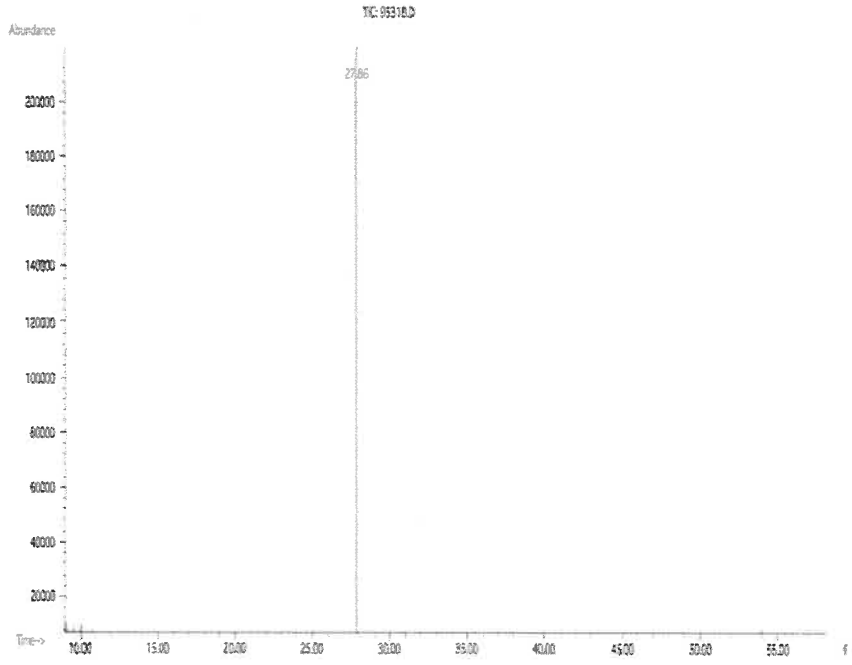
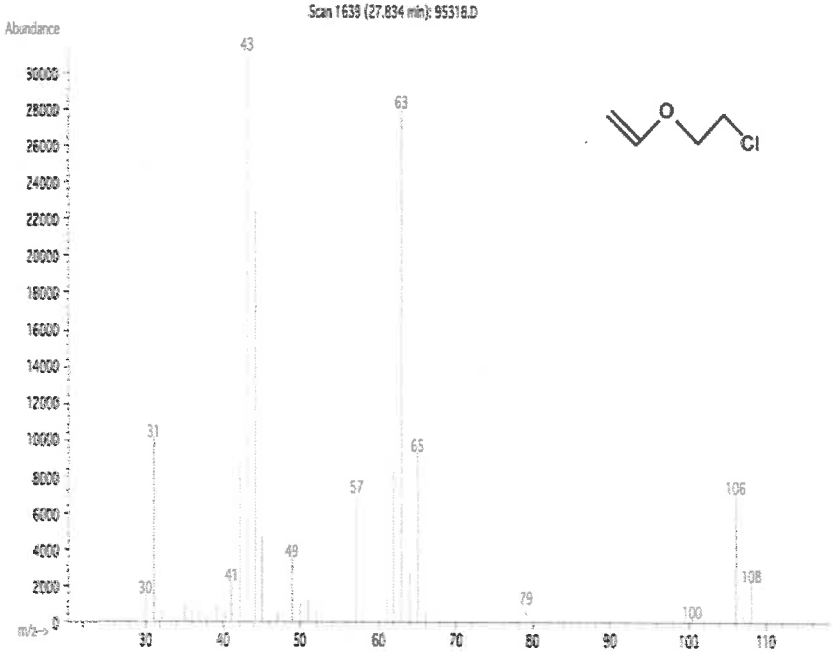
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	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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- 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

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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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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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. : 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.)

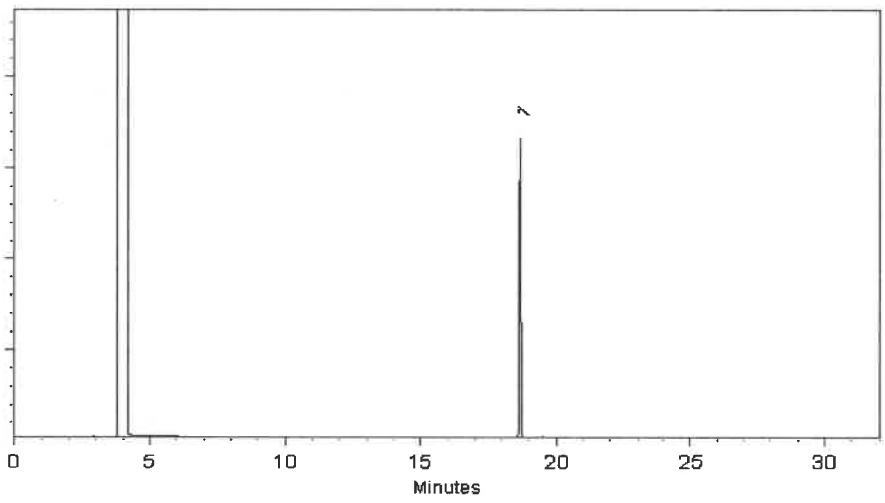
Inj. Temp:
200°C

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.

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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.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* 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.)

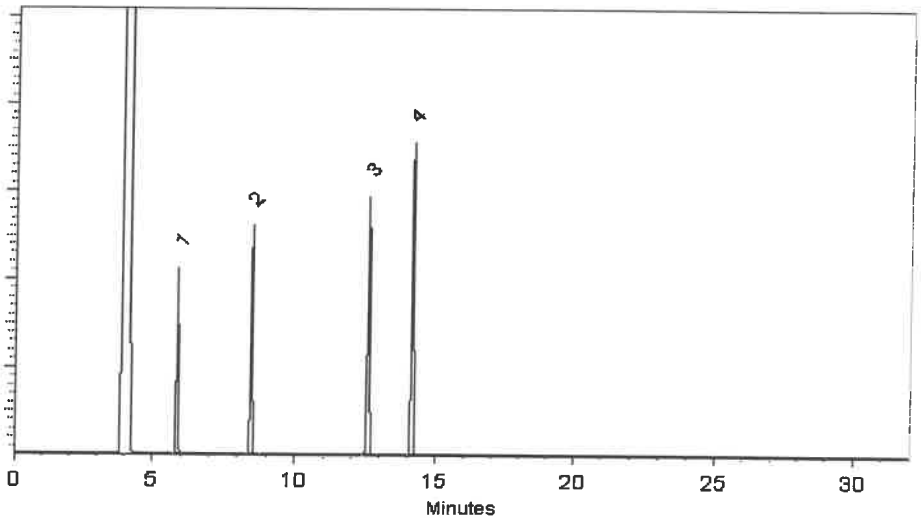
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

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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Catalog No. : 30006 **Lot No.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	5,010.7 µg/mL	+/- 173.1455
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* 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.)

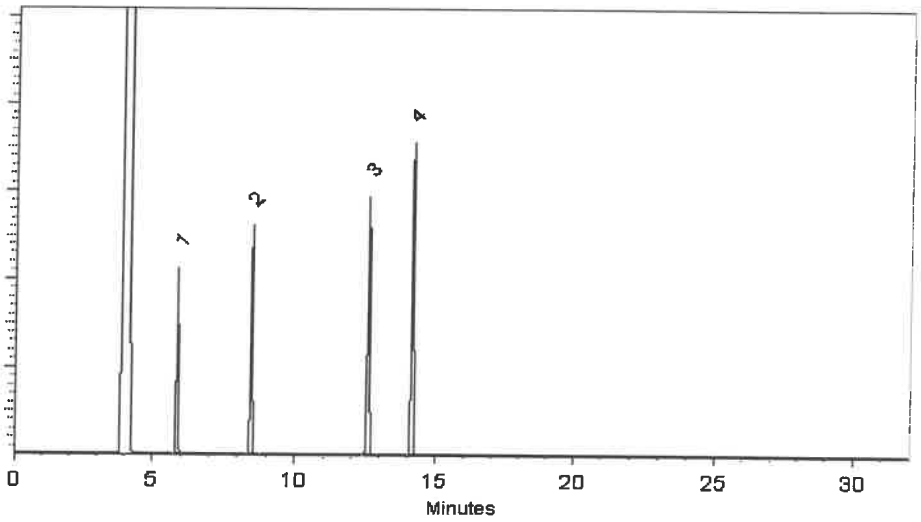
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

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

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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.:** A0200785

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 : November 30, 2026 **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	SHBP8774	99%	5,018.5 µg/mL	+/- 173.4162
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	5,016.0 µg/mL	+/- 173.3298
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4	2-Hexanone	591-78-6	MKCQ6663	99%	5,015.0 µg/mL	+/- 173.2952

* 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.)

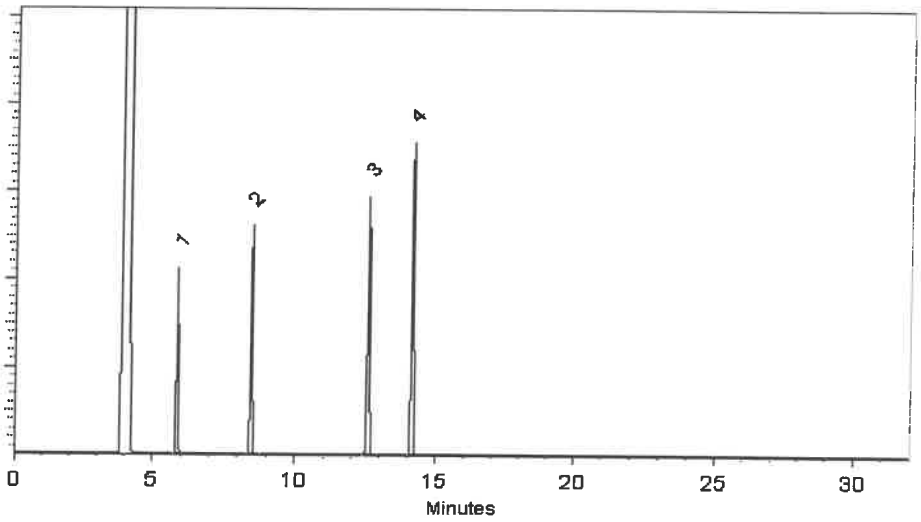
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 16-Aug-2023

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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

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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. : 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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Dec: 12/09/24

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Testing Laboratory
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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. : 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.)

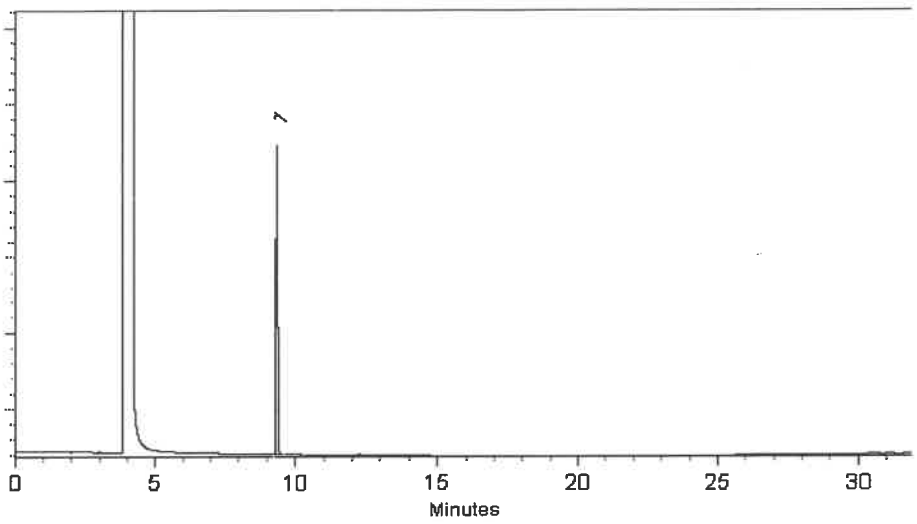
Inj. Temp:
200°C

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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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. : 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.

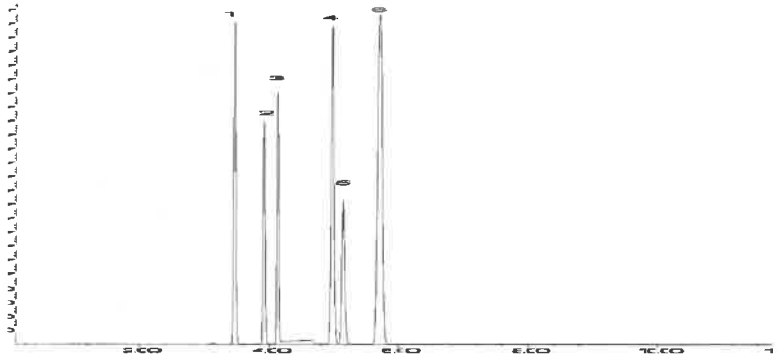
Inj. Temp:
200°C

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:

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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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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.

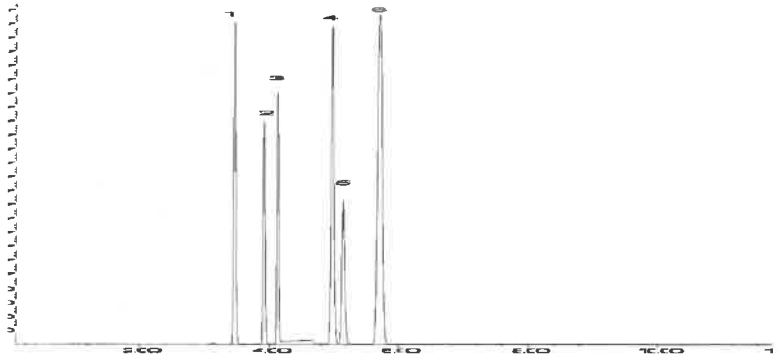
Inj. Temp:
200°C

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:

- 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. : 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.)

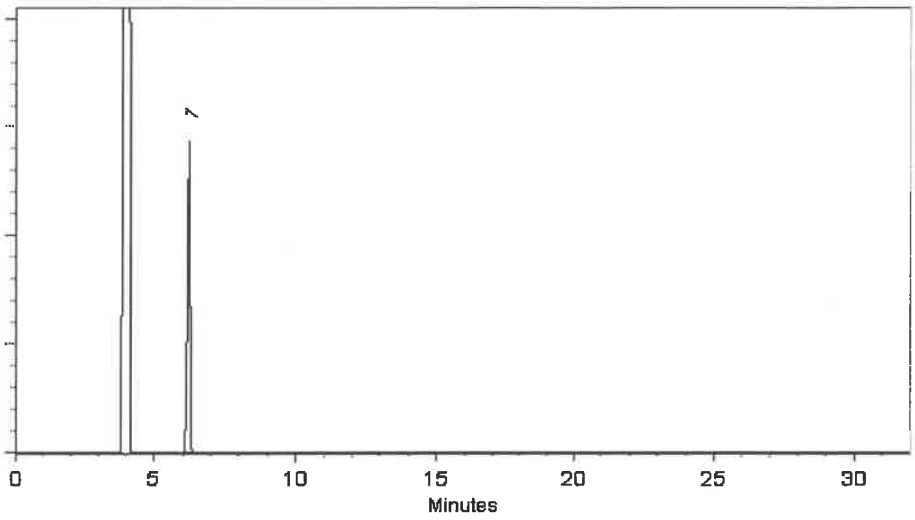
Inj. Temp:
200°C

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:

- 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.

Zoviny Rec 01/08/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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V14803 - V14822

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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.)

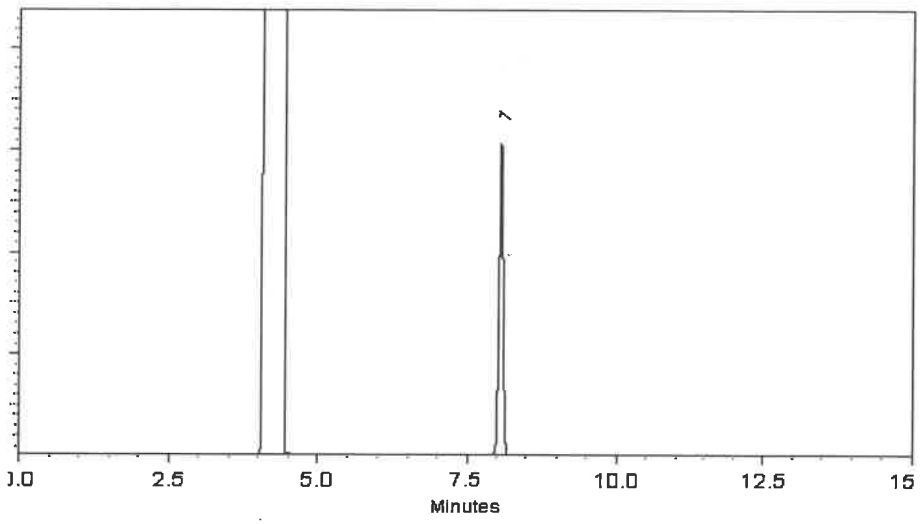
Inj. Temp:
200°C

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:

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

  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.

Zoviny Rec 01/08/21

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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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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.)

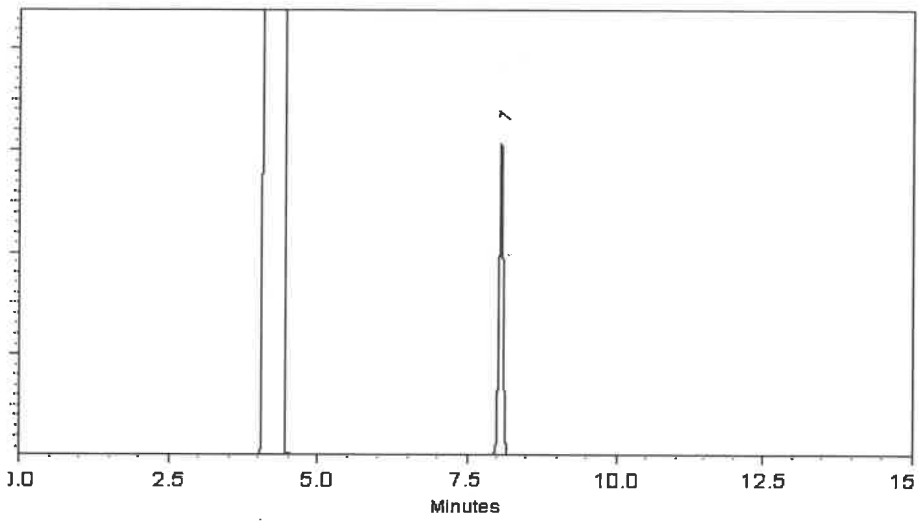
Inj. Temp:
200°C

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:

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

  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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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.
- 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.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

Rec 05/09/25

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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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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

Rec 05/19/25

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CERTIFIED REFERENCE MATERIAL
20 Vial

Certificate of Analysis

chromatographic plus

VJ14951 to VJ14970

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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

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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

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Certified Reference Material CRM

Rec 09/16/25 5 vial

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

CERTIFIED WEIGHT REPORT

Part Number:	91980
Lot Number:	091525
Description:	Acrolein
Expiration Date:	101525
Recommended Storage:	Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

V15064 to V15068

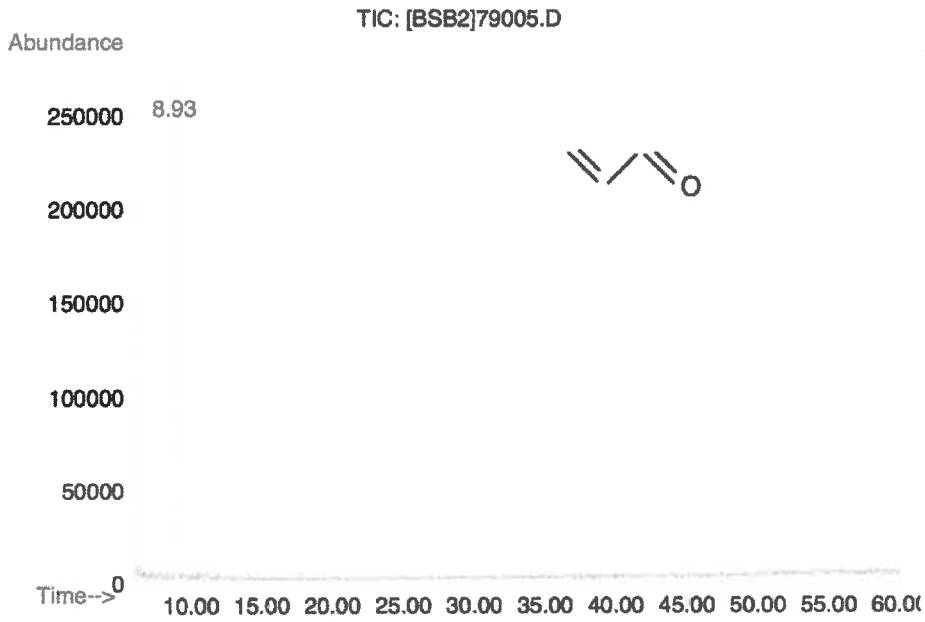
5E-05 Balance Uncertainty

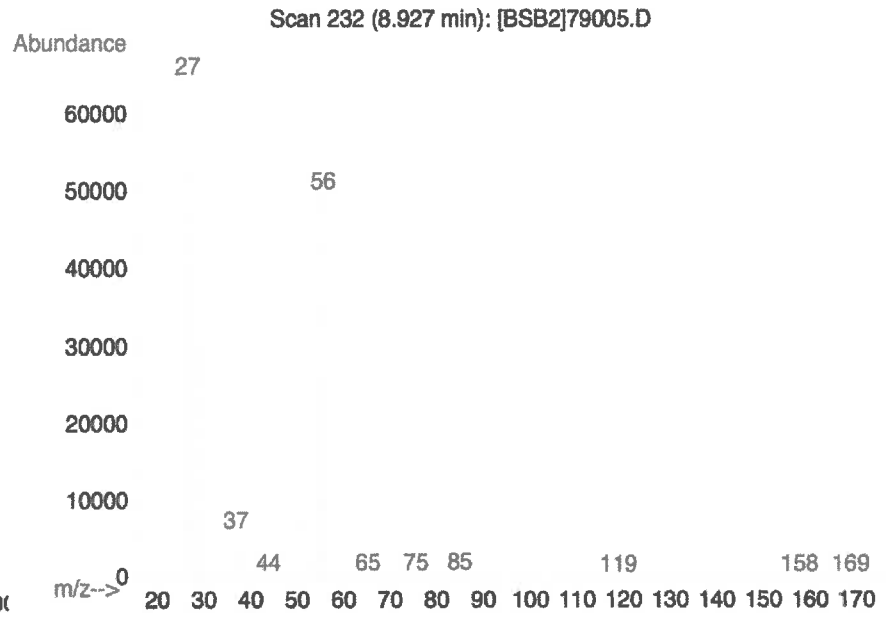
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	091525
Formulated By: Anthony Mahoney	DATE
	091525
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	0.05176	5009.9	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.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **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.**
- **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).**

Rev 1.0, 2/25/2025

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Certified Reference Material CRM

Rec 09/16/25 5 vial

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

CERTIFIED WEIGHT REPORT

Part Number:	91980
Lot Number:	091525
Description:	Acrolein
Expiration Date:	101525
Recommended Storage:	Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

V15064 to V15068

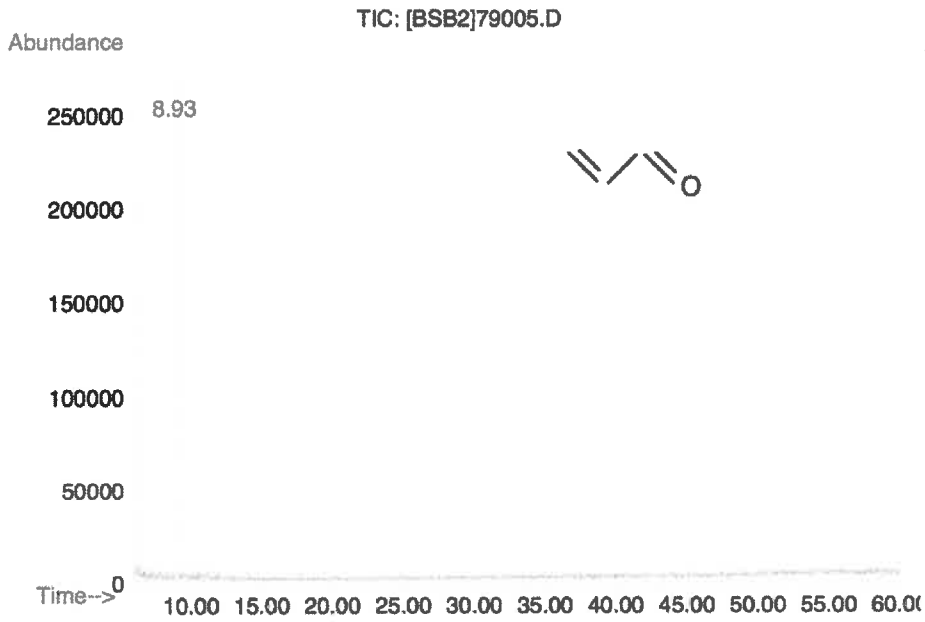
5E-05 Balance Uncertainty

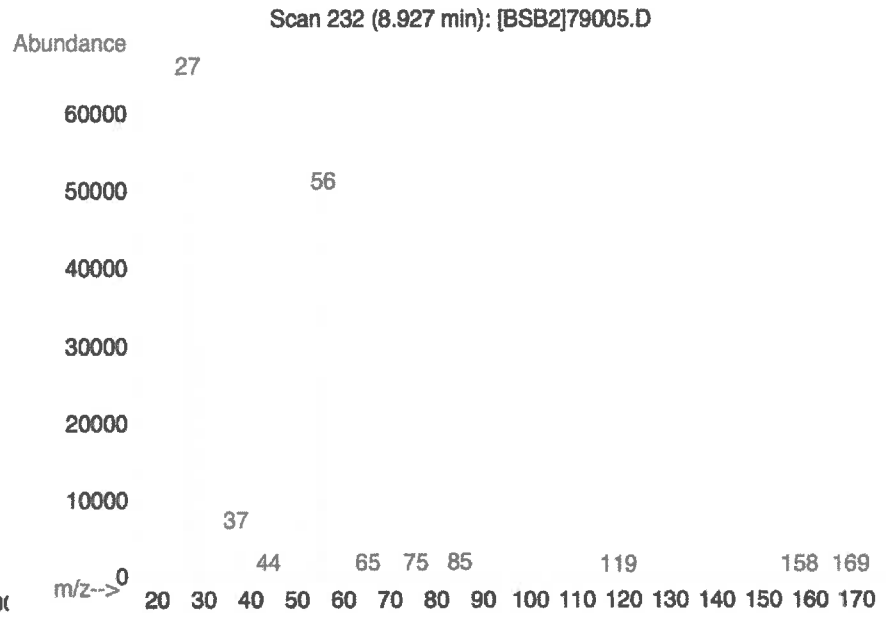
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	091525
Formulated By: Anthony Mahoney	DATE
	091525
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	0.05176	5009.9	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.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **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.**
- **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).**

Rev 1.0, 2/25/2025

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Certified Reference Material CRM

Rec 09/16/25 5 vial

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

CERTIFIED WEIGHT REPORT

Part Number:	91980
Lot Number:	091525
Description:	Acrolein
Expiration Date:	101525
Recommended Storage:	Refrigerate (2°C to 8°C)
Nominal Concentration (µg/mL):	5000
NIST Test ID#:	6UTB

Solvent(s): Water **Lot#** 041725Q

V15064 to V15068

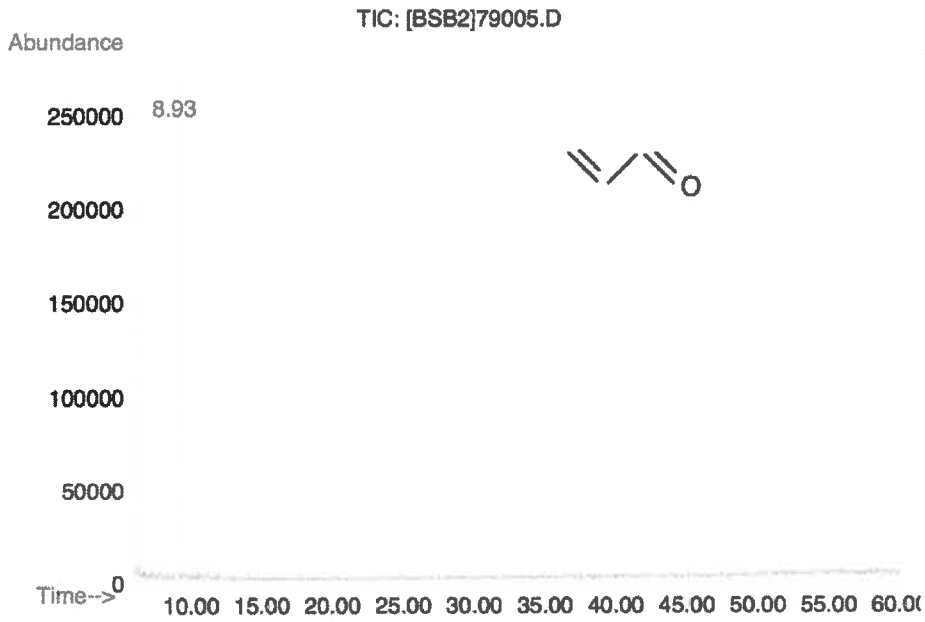
5E-05 Balance Uncertainty

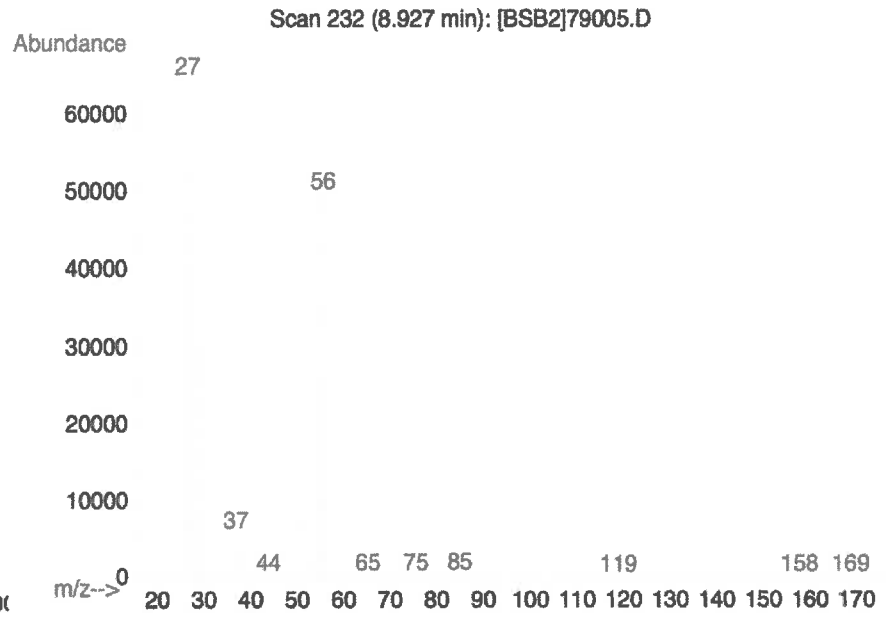
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

	091525
Formulated By: Anthony Mahoney	DATE
	091525
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	0.05176	5009.9	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.





- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **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.**
- **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).**

Rev 1.0, 2/25/2025

SHIPPING DOCUMENTS

Q3215

507 Franklin Ave
Nutley

CHEMTECH
CHAIN OF CUSTODY RECORD

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

Chemtech Project Number

COC Number

CLIENT INFORMATION

Report to be sent to:

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION:
PHONE: FAX:

PROJECT INFORMATION

PROJECT NAME:
PROJECT #: LOCATION:
PROJECT MANAGER:
E-MAIL:
PHONE: FAX:

BILLING INFORMATION

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

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1 TPH GC
2 VOC
3 EPH-F2
4
5
6
7
8
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	WASTE				9/25	915	1	X									
2.	VOC					1115	1		X								
3.	1					1130	1			X							
4.	2					1215	1			X							
5.	3					1245	1			X							
6.	4					100	1			X							
7.	5					"	1			X							
8.																	
9.																	
10.																	

PRESERVATIVES: 1 2 3 4 5 6 7 8 9

COMMENTS: <—Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	9-25-25 1630	1. 9.25.25 1630
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.		2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.	9-25-25 1730	3.

Conditions of bottles or coilers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.0C
Comments:

Page _____ of _____

CLIENT: ☐ Hand Delivered ☐ Other: _____
CHEMTECH: ☐ Picked Up

Shipment Complete ☐ YES ☐ NO

10/2018

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

Clean Earth Sampling Protocol
Carteret

PARAMETERS		TOTAL PETROLEUM HYDROCARBONS (TPH)*	TOTAL VOLATILE ORGANIC COMPOUNDS (VOCs)	POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)	TOTAL METALS - 8 RCRA	TCLP METALS - RCRA	IGNITABILITY	CORROSIVITY (pH)	REACTIVITY - SULFIDE AND CYANIDE	PCBs
METHODS (1)		8015C	8260D	8270E	6010D/7471B	1311/6010D/7470A	1030A	9045D	SW846 CHAPTER 7.3	8082A
	FREQUENCY									
RESIDENTIAL	[illegible]	x								
	8 point composite sample every 800 CY		x							
Limit (mg/Kg)		--				Below RCRA [illegible]	Negative	>2 - <12.5	Sulfide <500 Cyanide <250	[illegible]
COMMERCIAL	[illegible]	x								
	[illegible]		x	x	x	x	x	x	x	x
Limit (mg/Kg)		--			[illegible]	[illegible]	Negative	[illegible]	[illegible]	[illegible]

* - NJ EPH Category 2 Non-Fractionated method may also be used for Petroleum Hydrocarbon analysis
TPH-GRO analysis is required for soils with known or suspected gasoline contamination

** - For soils with greater than 17,000 ppm TPH or EPH, provide Paint Filter Test analysis Method 9095

(1) The methods provided are standard EPA methods. The method revisions are subject to change and the most current method should always be utilized by the laboratory

This is to be used as a guideline for sampling. Sampling frequencies and parameter requirements may be modified at the discretion of the CE Approval staff based upon items such as site history, levels of contamination and/or source of contamination, etc

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 : Q3215 SCIA01
Client Name : Sciacca General Contractors
Client Contact : Rosanne Scirica
Invoice Name : Sciacca General Contractors
Invoice Contact : Rosanne Scirica

Order Date : 9/26/2025 8:43:00 AM
Project Name : 507 Franklin Ave Nutley
Receive DateTime : 9/25/2025 5:30:00 PM
Purchase Order :

Project Mgr :
Report Type : Results Only
EDD Type : EXCEL NJCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3215-01	WASTE	Solid	09/25/2025	09:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days

Relinguished By : CL
Date / Time : 9/26/25 1240

Received By :
Date / Time : 9/26/25 1240
Storage Area : VOA Refridgerator Room