

Hit Summary Sheet
SW-846

SDG No.: Q2074
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	TP-12							
Q2074-01	TP-12	SOIL	Acetone	27.5		4.10	21.9	ug/Kg
			Total Voc :	27.5				
Q2074-01	TP-12	SOIL	11H-Dibenzo[b,e][1,4]diazepin *	11.0	J	0	0	ug/Kg
			Total Tics :	11.0				
			Total Concentration:	38.5				
Client ID:	TP-20							
Q2074-04	TP-20	SOIL	Acetone	32.2		3.70	19.5	ug/Kg
			Total Voc :	32.2				
			Total Concentration:	32.2				
Client ID:	TP-38							
Q2074-05	TP-38	SOIL	Toluene	0.97	J	0.61	3.90	ug/Kg
			Total Voc :	0.97				
Q2074-05	TP-38	SOIL	Butane, 2-methyl- *	11.0	J	0	0	ug/Kg
			Total Tics :	11.0				
			Total Concentration:	12.0				
Client ID:	TP-19							
Q2074-06	TP-19	SOIL	Acetone	11.3	J	3.80	20.3	ug/Kg
Q2074-06	TP-19	SOIL	Benzene	1.70	J	0.64	4.10	ug/Kg
			Total Voc :	13.0				
			Total Concentration:	13.0				
Client ID:	TP-40							
Q2074-07	TP-40	SOIL	Acetone	14.3	J	4.40	23.2	ug/Kg
			Total Voc :	14.3				
			Total Concentration:	14.3				
Client ID:	TP-18							
Q2074-08	TP-18	SOIL	Acetone	53.0		5.30	27.8	ug/Kg
			Total Voc :	53.0				
			Total Concentration:	53.0				



SAMPLE DATA



Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.00	U	1.00	4.40	ug/Kg
74-87-3	Chloromethane	1.00	U	1.00	4.40	ug/Kg
75-01-4	Vinyl Chloride	0.69	U	0.69	4.40	ug/Kg
74-83-9	Bromomethane	0.94	UQ	0.94	4.40	ug/Kg
75-00-3	Chloroethane	1.10	UQ	1.10	4.40	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.40	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.93	U	0.93	4.40	ug/Kg
75-35-4	1,1-Dichloroethene	0.88	U	0.88	4.40	ug/Kg
67-64-1	Acetone	27.5		4.10	21.9	ug/Kg
75-15-0	Carbon Disulfide	0.93	U	0.93	4.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.64	U	0.64	4.40	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	4.40	ug/Kg
75-09-2	Methylene Chloride	3.10	U	3.10	8.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.75	U	0.75	4.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.70	U	0.70	4.40	ug/Kg
110-82-7	Cyclohexane	0.69	U	0.69	4.40	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	21.9	ug/Kg
56-23-5	Carbon Tetrachloride	0.85	U	0.85	4.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.66	U	0.66	4.40	ug/Kg
74-97-5	Bromochloromethane	1.00	U	1.00	4.40	ug/Kg
67-66-3	Chloroform	0.74	U	0.74	4.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.81	U	0.81	4.40	ug/Kg
108-87-2	Methylcyclohexane	0.80	U	0.80	4.40	ug/Kg
71-43-2	Benzene	0.69	U	0.69	4.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.69	U	0.69	4.40	ug/Kg
79-01-6	Trichloroethene	0.71	U	0.71	4.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.80	U	0.80	4.40	ug/Kg
75-27-4	Bromodichloromethane	0.68	U	0.68	4.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.10	U	3.10	21.9	ug/Kg
108-88-3	Toluene	0.68	U	0.68	4.40	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
Prep Method :	ID :	Level :	LOW
	0.25		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.57	U	0.57	4.40	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.54	U	0.54	4.40	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.81	U	0.81	4.40	ug/Kg
591-78-6	2-Hexanone	3.20	U	3.20	21.9	ug/Kg
124-48-1	Dibromochloromethane	0.76	U	0.76	4.40	ug/Kg
106-93-4	1,2-Dibromoethane	0.77	U	0.77	4.40	ug/Kg
127-18-4	Tetrachloroethene	0.92	U	0.92	4.40	ug/Kg
108-90-7	Chlorobenzene	0.80	U	0.80	4.40	ug/Kg
100-41-4	Ethyl Benzene	0.59	U	0.59	4.40	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.80	ug/Kg
95-47-6	o-Xylene	0.72	U	0.72	4.40	ug/Kg
100-42-5	Styrene	0.62	U	0.62	4.40	ug/Kg
75-25-2	Bromoform	0.75	U	0.75	4.40	ug/Kg
98-82-8	Isopropylbenzene	0.68	U	0.68	4.40	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.40	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.40	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.40	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.40	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.60	U	1.60	4.40	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.60	U	2.60	4.40	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.80	U	2.80	4.40	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	48.7	63 - 155	97%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7	70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	48.7	74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.3	38 - 136	81%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	253000	7.719
540-36-3	1,4-Difluorobenzene	433000	8.622
3114-55-4	Chlorobenzene-d5	349000	11.42
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.352

TENTATIVE IDENTIFIED COMPOUNDS

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID :	0.25
		Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
013450-73-2	11H-Dibenzo[b,e][1,4]diazepin-11-o	11.0	J		13.9	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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.90	U	0.90	3.90	ug/Kg
74-87-3	Chloromethane	0.90	U	0.90	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.84	UQ	0.84	3.90	ug/Kg
75-00-3	Chloroethane	0.99	UQ	0.99	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.95	U	0.95	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.79	U	0.79	3.90	ug/Kg
67-64-1	Acetone	3.70	U	3.70	19.6	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.90	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.59	U	0.59	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.66	U	0.66	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.73	U	0.73	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.71	U	0.71	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.64	U	0.64	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.6	ug/Kg
108-88-3	Toluene	0.61	U	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.49	U	0.49	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.6	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.82	U	0.82	3.90	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.53	U	0.53	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.90	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.56	U	0.56	3.90	ug/Kg
75-25-2	Bromoform	0.68	U	0.68	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.95	U	0.95	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.6		63 - 155	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	48.5		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.7		38 - 136	79%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	246000	7.719			
540-36-3	1,4-Difluorobenzene	435000	8.622			
3114-55-4	Chlorobenzene-d5	350000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID :	0.25
		Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.00	U	1.00	4.50	ug/Kg
74-87-3	Chloromethane	1.00	U	1.00	4.50	ug/Kg
75-01-4	Vinyl Chloride	0.71	U	0.71	4.50	ug/Kg
74-83-9	Bromomethane	0.96	UQ	0.96	4.50	ug/Kg
75-00-3	Chloroethane	1.10	UQ	1.10	4.50	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.50	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.95	U	0.95	4.50	ug/Kg
75-35-4	1,1-Dichloroethene	0.90	U	0.90	4.50	ug/Kg
67-64-1	Acetone	4.30	U	4.30	22.4	ug/Kg
75-15-0	Carbon Disulfide	0.95	U	0.95	4.50	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.66	U	0.66	4.50	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.50	ug/Kg
75-09-2	Methylene Chloride	3.20	U	3.20	9.00	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.77	U	0.77	4.50	ug/Kg
75-34-3	1,1-Dichloroethane	0.72	U	0.72	4.50	ug/Kg
110-82-7	Cyclohexane	0.71	U	0.71	4.50	ug/Kg
78-93-3	2-Butanone	5.90	U	5.90	22.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	4.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.67	U	0.67	4.50	ug/Kg
74-97-5	Bromochloromethane	1.00	U	1.00	4.50	ug/Kg
67-66-3	Chloroform	0.75	U	0.75	4.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.84	U	0.84	4.50	ug/Kg
108-87-2	Methylcyclohexane	0.82	U	0.82	4.50	ug/Kg
71-43-2	Benzene	0.71	U	0.71	4.50	ug/Kg
107-06-2	1,2-Dichloroethane	0.71	U	0.71	4.50	ug/Kg
79-01-6	Trichloroethene	0.73	U	0.73	4.50	ug/Kg
78-87-5	1,2-Dichloropropane	0.82	U	0.82	4.50	ug/Kg
75-27-4	Bromodichloromethane	0.70	U	0.70	4.50	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.20	U	3.20	22.4	ug/Kg
108-88-3	Toluene	0.70	U	0.70	4.50	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.58	U	0.58	4.50	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.56	U	0.56	4.50	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.83	U	0.83	4.50	ug/Kg
591-78-6	2-Hexanone	3.30	U	3.30	22.4	ug/Kg
124-48-1	Dibromochloromethane	0.78	U	0.78	4.50	ug/Kg
106-93-4	1,2-Dibromoethane	0.79	U	0.79	4.50	ug/Kg
127-18-4	Tetrachloroethene	0.94	U	0.94	4.50	ug/Kg
108-90-7	Chlorobenzene	0.82	U	0.82	4.50	ug/Kg
100-41-4	Ethyl Benzene	0.60	U	0.60	4.50	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	9.00	ug/Kg
95-47-6	o-Xylene	0.74	U	0.74	4.50	ug/Kg
100-42-5	Styrene	0.64	U	0.64	4.50	ug/Kg
75-25-2	Bromoform	0.77	U	0.77	4.50	ug/Kg
98-82-8	Isopropylbenzene	0.70	U	0.70	4.50	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.50	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1.70	4.50	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.70	U	2.70	4.50	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.90	U	2.90	4.50	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.2		63 - 155	90%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	48.2		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.1		38 - 136	74%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	267000	7.72			
540-36-3	1,4-Difluorobenzene	463000	8.622			
3114-55-4	Chlorobenzene-d5	361000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	126000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.89	U	0.89	3.90	ug/Kg
74-87-3	Chloromethane	0.89	U	0.89	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.83	UQ	0.83	3.90	ug/Kg
75-00-3	Chloroethane	0.98	UQ	0.98	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.94	U	0.94	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	3.90	ug/Kg
67-64-1	Acetone	32.2		3.70	19.5	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.67	U	0.67	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.5	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.58	U	0.58	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.65	U	0.65	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.71	U	0.71	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.63	U	0.63	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.5	ug/Kg
108-88-3	Toluene	0.61	U	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.48	U	0.48	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.5	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.82	U	0.82	3.90	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.52	U	0.52	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.80	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.55	U	0.55	3.90	ug/Kg
75-25-2	Bromoform	0.67	U	0.67	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.94	U	0.94	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.8		63 - 155	100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	49.3		74 - 123	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.2		38 - 136	80%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	243000	7.719			
540-36-3	1,4-Difluorobenzene	432000	8.622			
3114-55-4	Chlorobenzene-d5	350000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.90	U	0.90	3.90	ug/Kg
74-87-3	Chloromethane	0.90	U	0.90	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.84	UQ	0.84	3.90	ug/Kg
75-00-3	Chloroethane	0.99	UQ	0.99	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.95	U	0.95	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.79	U	0.79	3.90	ug/Kg
67-64-1	Acetone	3.70	U	3.70	19.6	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.90	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.59	U	0.59	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.66	U	0.66	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.73	U	0.73	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.72	U	0.72	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.64	U	0.64	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.72	U	0.72	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.6	ug/Kg
108-88-3	Toluene	0.97	J	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
Prep Method :	ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.49	U	0.49	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.6	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.83	U	0.83	3.90	ug/Kg
108-90-7	Chlorobenzene	0.72	U	0.72	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.53	U	0.53	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.90	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.56	U	0.56	3.90	ug/Kg
75-25-2	Bromoform	0.68	U	0.68	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.95	U	0.95	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	47.5	63 - 155	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7	70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	49.0	74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.7	38 - 136	79%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	242000	7.72
540-36-3	1,4-Difluorobenzene	427000	8.622
3114-55-4	Chlorobenzene-d5	344000	11.42
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.353

TENTATIVE IDENTIFIED COMPOUNDS

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID :	0.25
		Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000078-78-4	Butane, 2-methyl-	11.0	J		2.85	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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.92	U	0.92	4.10	ug/Kg
74-87-3	Chloromethane	0.92	U	0.92	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.64	U	0.64	4.10	ug/Kg
74-83-9	Bromomethane	0.87	UQ	0.87	4.10	ug/Kg
75-00-3	Chloroethane	1.00	UQ	1.00	4.10	ug/Kg
75-69-4	Trichlorofluoromethane	0.98	U	0.98	4.10	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.86	U	0.86	4.10	ug/Kg
75-35-4	1,1-Dichloroethene	0.81	U	0.81	4.10	ug/Kg
67-64-1	Acetone	11.3	J	3.80	20.3	ug/Kg
75-15-0	Carbon Disulfide	0.86	U	0.86	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.59	U	0.59	4.10	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	4.10	ug/Kg
75-09-2	Methylene Chloride	2.90	U	2.90	8.10	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.70	U	0.70	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.65	U	0.65	4.10	ug/Kg
110-82-7	Cyclohexane	0.64	U	0.64	4.10	ug/Kg
78-93-3	2-Butanone	5.30	U	5.30	20.3	ug/Kg
56-23-5	Carbon Tetrachloride	0.79	U	0.79	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	4.10	ug/Kg
74-97-5	Bromochloromethane	0.93	U	0.93	4.10	ug/Kg
67-66-3	Chloroform	0.68	U	0.68	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.75	U	0.75	4.10	ug/Kg
108-87-2	Methylcyclohexane	0.74	U	0.74	4.10	ug/Kg
71-43-2	Benzene	1.70	J	0.64	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.64	U	0.64	4.10	ug/Kg
79-01-6	Trichloroethene	0.66	U	0.66	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.74	U	0.74	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.63	U	0.63	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.90	U	2.90	20.3	ug/Kg
108-88-3	Toluene	0.63	U	0.63	4.10	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.53	U	0.53	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.75	U	0.75	4.10	ug/Kg
591-78-6	2-Hexanone	3.00	U	3.00	20.3	ug/Kg
124-48-1	Dibromochloromethane	0.71	U	0.71	4.10	ug/Kg
106-93-4	1,2-Dibromoethane	0.71	U	0.71	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.85	U	0.85	4.10	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.54	U	0.54	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	8.10	ug/Kg
95-47-6	o-Xylene	0.66	U	0.66	4.10	ug/Kg
100-42-5	Styrene	0.58	U	0.58	4.10	ug/Kg
75-25-2	Bromoform	0.70	U	0.70	4.10	ug/Kg
98-82-8	Isopropylbenzene	0.63	U	0.63	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.98	U	0.98	4.10	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.40	U	1.40	4.10	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.30	U	1.30	4.10	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.20	U	1.20	4.10	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.50	U	1.50	4.10	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.40	U	2.40	4.10	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.60	U	2.60	4.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.6		63 - 155	93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	48.0		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	33.7		38 - 136	67%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	232000	7.719			
540-36-3	1,4-Difluorobenzene	399000	8.622			
3114-55-4	Chlorobenzene-d5	296000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	94100	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	Level :	LOW
Prep Method :	ID : 0.25		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	4.60	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	4.60	ug/Kg
75-01-4	Vinyl Chloride	0.73	U	0.73	4.60	ug/Kg
74-83-9	Bromomethane	0.99	UQ	0.99	4.60	ug/Kg
75-00-3	Chloroethane	1.20	UQ	1.20	4.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.98	U	0.98	4.60	ug/Kg
75-35-4	1,1-Dichloroethene	0.93	U	0.93	4.60	ug/Kg
67-64-1	Acetone	14.3	J	4.40	23.2	ug/Kg
75-15-0	Carbon Disulfide	0.98	U	0.98	4.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.68	U	0.68	4.60	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.60	ug/Kg
75-09-2	Methylene Chloride	3.30	U	3.30	9.30	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.80	U	0.80	4.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.74	U	0.74	4.60	ug/Kg
110-82-7	Cyclohexane	0.73	U	0.73	4.60	ug/Kg
78-93-3	2-Butanone	6.10	U	6.10	23.2	ug/Kg
56-23-5	Carbon Tetrachloride	0.90	U	0.90	4.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.70	U	0.70	4.60	ug/Kg
74-97-5	Bromochloromethane	1.10	U	1.10	4.60	ug/Kg
67-66-3	Chloroform	0.78	U	0.78	4.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.86	U	0.86	4.60	ug/Kg
108-87-2	Methylcyclohexane	0.84	U	0.84	4.60	ug/Kg
71-43-2	Benzene	0.73	U	0.73	4.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.73	U	0.73	4.60	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	4.60	ug/Kg
78-87-5	1,2-Dichloropropane	0.84	U	0.84	4.60	ug/Kg
75-27-4	Bromodichloromethane	0.72	U	0.72	4.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.30	U	3.30	23.2	ug/Kg
108-88-3	Toluene	0.72	U	0.72	4.60	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	4.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.58	U	0.58	4.60	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.85	U	0.85	4.60	ug/Kg
591-78-6	2-Hexanone	3.40	U	3.40	23.2	ug/Kg
124-48-1	Dibromochloromethane	0.81	U	0.81	4.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.82	U	0.82	4.60	ug/Kg
127-18-4	Tetrachloroethene	0.97	U	0.97	4.60	ug/Kg
108-90-7	Chlorobenzene	0.84	U	0.84	4.60	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	4.60	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	9.30	ug/Kg
95-47-6	o-Xylene	0.76	U	0.76	4.60	ug/Kg
100-42-5	Styrene	0.66	U	0.66	4.60	ug/Kg
75-25-2	Bromoform	0.80	U	0.80	4.60	ug/Kg
98-82-8	Isopropylbenzene	0.72	U	0.72	4.60	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.60	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.60	U	1.60	4.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1.70	4.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.80	U	2.80	4.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.00	U	3.00	4.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.7		63 - 155	93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		70 - 134	98%	SPK: 50
2037-26-5	Toluene-d8	47.7		74 - 123	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	36.5		38 - 136	73%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	7.719			
540-36-3	1,4-Difluorobenzene	278000	8.622			
3114-55-4	Chlorobenzene-d5	213000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	75600	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID :	0.25
		Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.30	U	1.30	5.60	ug/Kg
74-87-3	Chloromethane	1.30	U	1.30	5.60	ug/Kg
75-01-4	Vinyl Chloride	0.88	U	0.88	5.60	ug/Kg
74-83-9	Bromomethane	1.20	UQ	1.20	5.60	ug/Kg
75-00-3	Chloroethane	1.40	UQ	1.40	5.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.30	U	1.30	5.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.20	U	1.20	5.60	ug/Kg
75-35-4	1,1-Dichloroethene	1.10	U	1.10	5.60	ug/Kg
67-64-1	Acetone	53.0		5.30	27.8	ug/Kg
75-15-0	Carbon Disulfide	1.20	U	1.20	5.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.81	U	0.81	5.60	ug/Kg
79-20-9	Methyl Acetate	1.70	U	1.70	5.60	ug/Kg
75-09-2	Methylene Chloride	3.90	U	3.90	11.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.96	U	0.96	5.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.89	U	0.89	5.60	ug/Kg
110-82-7	Cyclohexane	0.88	U	0.88	5.60	ug/Kg
78-93-3	2-Butanone	7.30	U	7.30	27.8	ug/Kg
56-23-5	Carbon Tetrachloride	1.10	U	1.10	5.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.83	U	0.83	5.60	ug/Kg
74-97-5	Bromochloromethane	1.30	U	1.30	5.60	ug/Kg
67-66-3	Chloroform	0.93	U	0.93	5.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	1.00	U	1.00	5.60	ug/Kg
108-87-2	Methylcyclohexane	1.00	U	1.00	5.60	ug/Kg
71-43-2	Benzene	0.88	U	0.88	5.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.88	U	0.88	5.60	ug/Kg
79-01-6	Trichloroethene	0.90	U	0.90	5.60	ug/Kg
78-87-5	1,2-Dichloropropane	1.00	U	1.00	5.60	ug/Kg
75-27-4	Bromodichloromethane	0.87	U	0.87	5.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.00	U	4.00	27.8	ug/Kg
108-88-3	Toluene	0.87	U	0.87	5.60	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77 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:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.72	U	0.72	5.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.69	U	0.69	5.60	ug/Kg
79-00-5	1,1,2-Trichloroethane	1.00	U	1.00	5.60	ug/Kg
591-78-6	2-Hexanone	4.10	U	4.10	27.8	ug/Kg
124-48-1	Dibromochloromethane	0.97	U	0.97	5.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.98	U	0.98	5.60	ug/Kg
127-18-4	Tetrachloroethene	1.20	U	1.20	5.60	ug/Kg
108-90-7	Chlorobenzene	1.00	U	1.00	5.60	ug/Kg
100-41-4	Ethyl Benzene	0.74	U	0.74	5.60	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	11.1	ug/Kg
95-47-6	o-Xylene	0.91	U	0.91	5.60	ug/Kg
100-42-5	Styrene	0.79	U	0.79	5.60	ug/Kg
75-25-2	Bromoform	0.96	U	0.96	5.60	ug/Kg
98-82-8	Isopropylbenzene	0.87	U	0.87	5.60	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.60	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.90	U	1.90	5.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.70	U	1.70	5.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.60	U	1.60	5.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.00	U	2.00	5.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.30	U	3.30	5.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.50	U	3.50	5.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.9		63 - 155	94%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		70 - 134	97%	SPK: 50
2037-26-5	Toluene-d8	47.9		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.3		38 - 136	75%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	237000	7.719			
540-36-3	1,4-Difluorobenzene	424000	8.622			
3114-55-4	Chlorobenzene-d5	328000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	117000	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q2074-01	TP-12	1,2-Dichloroethane-d4	50	48.7	97	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	48.7	97	74	123
		4-Bromofluorobenzene	50	40.3	81	38	136
Q2074-02	TP-7	1,2-Dichloroethane-d4	50	47.6	95	63	155
		Dibromofluoromethane	50	50.0	100	70	134
		Toluene-d8	50	48.5	97	74	123
		4-Bromofluorobenzene	50	39.7	79	38	136
Q2074-03	TP-15	1,2-Dichloroethane-d4	50	45.2	90	63	155
		Dibromofluoromethane	50	49.5	99	70	134
		Toluene-d8	50	48.2	96	74	123
		4-Bromofluorobenzene	50	37.1	74	38	136
Q2074-04	TP-20	1,2-Dichloroethane-d4	50	49.9	100	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	49.3	99	74	123
		4-Bromofluorobenzene	50	40.1	80	38	136
Q2074-05	TP-38	1,2-Dichloroethane-d4	50	47.5	95	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	49.0	98	74	123
		4-Bromofluorobenzene	50	39.7	79	38	136
Q2074-06	TP-19	1,2-Dichloroethane-d4	50	46.6	93	63	155
		Dibromofluoromethane	50	49.7	99	70	134
		Toluene-d8	50	48.0	96	74	123
		4-Bromofluorobenzene	50	33.7	67	38	136
Q2074-07	TP-40	1,2-Dichloroethane-d4	50	46.7	93	63	155
		Dibromofluoromethane	50	49.0	98	70	134
		Toluene-d8	50	47.7	95	74	123
		4-Bromofluorobenzene	50	36.5	73	38	136
Q2074-08	TP-18	1,2-Dichloroethane-d4	50	46.9	94	63	155
		Dibromofluoromethane	50	48.5	97	70	134
		Toluene-d8	50	47.9	96	74	123
		4-Bromofluorobenzene	50	37.3	75	38	136
VY0522SBL01	VY0522SBL01	1,2-Dichloroethane-d4	50	48.9	98	63	155
		Dibromofluoromethane	50	49.8	100	70	134
		Toluene-d8	50	48.7	97	74	123
		4-Bromofluorobenzene	50	39.5	79	38	136
VY0522SBS01	VY0522SBS01	1,2-Dichloroethane-d4	50	48.4	97	63	155
		Dibromofluoromethane	50	50.3	101	70	134
		Toluene-d8	50	50.3	101	74	123
		4-Bromofluorobenzene	50	47.7	95	38	136
VY0522SBSD01	VY0522SBSD01	1,2-Dichloroethane-d4	50	50.4	101	63	155
		Dibromofluoromethane	50	51.0	102	70	134
		Toluene-d8	50	49.9	100	74	123
		4-Bromofluorobenzene	50	47.1	94	38	136

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022382.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBS01	Dichlorodifluoromethane	20	19.6	ug/Kg	98			64	136	
	Chloromethane	20	23.3	ug/Kg	117			70	130	
	Vinyl chloride	20	24.9	ug/Kg	125			72	129	
	Bromomethane	20	34.5	ug/Kg	173		*	58	141	
	Chloroethane	20	28.5	ug/Kg	143		*	69	130	
	Trichlorofluoromethane	20	23.4	ug/Kg	117			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.9	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	20.5	ug/Kg	103			79	121	
	Acetone	100	110	ug/Kg	110			60	131	
	Carbon disulfide	20	19.3	ug/Kg	97			45	154	
	Methyl tert-butyl Ether	20	19.6	ug/Kg	98			77	129	
	Methyl Acetate	20	16.6	ug/Kg	83			69	149	
	Methylene Chloride	20	19.0	ug/Kg	95			56	174	
	trans-1,2-Dichloroethene	20	19.7	ug/Kg	99			80	123	
	1,1-Dichloroethane	20	19.4	ug/Kg	97			82	123	
	Cyclohexane	20	18.7	ug/Kg	94			76	122	
	2-Butanone	100	95.4	ug/Kg	95			69	131	
	Carbon Tetrachloride	20	19.8	ug/Kg	99			76	129	
	cis-1,2-Dichloroethene	20	19.9	ug/Kg	100			82	123	
	Bromochloromethane	20	18.6	ug/Kg	93			80	127	
	Chloroform	20	20.1	ug/Kg	101			82	125	
	1,1,1-Trichloroethane	20	19.5	ug/Kg	98			80	126	
	Methylcyclohexane	20	19.2	ug/Kg	96			77	123	
	Benzene	20	19.5	ug/Kg	98			84	121	
	1,2-Dichloroethane	20	19.1	ug/Kg	96			81	126	
	Trichloroethene	20	20.1	ug/Kg	101			83	122	
	1,2-Dichloropropane	20	19.1	ug/Kg	96			83	122	
	Bromodichloromethane	20	19.3	ug/Kg	97			82	123	
	4-Methyl-2-Pentanone	100	88.9	ug/Kg	89			70	135	
	Toluene	20	19.4	ug/Kg	97			83	122	
	t-1,3-Dichloropropene	20	18.5	ug/Kg	93			78	124	
	cis-1,3-Dichloropropene	20	18.8	ug/Kg	94			81	122	
	1,1,2-Trichloroethane	20	19.6	ug/Kg	98			82	125	
	2-Hexanone	100	89.5	ug/Kg	90			66	138	
	Dibromochloromethane	20	19.9	ug/Kg	100			79	125	
	1,2-Dibromoethane	20	19.6	ug/Kg	98			80	125	
	Tetrachloroethene	20	19.9	ug/Kg	100			83	125	
	Chlorobenzene	20	19.7	ug/Kg	99			84	122	
	Ethyl Benzene	20	18.7	ug/Kg	94			82	124	
	m/p-Xylenes	40	38.0	ug/Kg	95			83	124	
	o-Xylene	20	18.8	ug/Kg	94			83	123	
	Styrene	20	19.0	ug/Kg	95			82	124	
	Bromoform	20	19.2	ug/Kg	96			75	127	
	Isopropylbenzene	20	19.3	ug/Kg	97			82	124	
	1,1,2,2-Tetrachloroethane	20	19.8	ug/Kg	99			77	127	
	1,3-Dichlorobenzene	20	18.9	ug/Kg	95			83	122	
	1,4-Dichlorobenzene	20	19.0	ug/Kg	95			84	121	
	1,2-Dichlorobenzene	20	19.1	ug/Kg	96			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022382.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBS01	1,2-Dibromo-3-Chloropropane	20	19.6	ug/Kg	98			66	134	
	1,2,4-Trichlorobenzene	20	19.5	ug/Kg	98			78	127	
	1,2,3-Trichlorobenzene	20	19.2	ug/Kg	96			70	137	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022383.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBSD01	Dichlorodifluoromethane	20	20.2	ug/Kg	101	3		64	136	20
	Chloromethane	20	23.2	ug/Kg	116	1		70	130	20
	Vinyl chloride	20	25.4	ug/Kg	127	2		72	129	20
	Bromomethane	20	33.4	ug/Kg	167	4	*	58	141	20
	Chloroethane	20	28.3	ug/Kg	142	1	*	69	130	20
	Trichlorofluoromethane	20	21.1	ug/Kg	106	10		69	134	20
	1,1,2-Trichlorotrifluoroethane	20	21.3	ug/Kg	106	2		81	123	20
	1,1-Dichloroethene	20	20.8	ug/Kg	104	1		79	121	20
	Acetone	100	93.4	ug/Kg	93	17		60	131	20
	Carbon disulfide	20	19.7	ug/Kg	99	2		45	154	20
	Methyl tert-butyl Ether	20	21.1	ug/Kg	106	8		77	129	20
	Methyl Acetate	20	19.3	ug/Kg	97	16		69	149	20
	Methylene Chloride	20	19.0	ug/Kg	95	0		56	174	20
	trans-1,2-Dichloroethene	20	20.1	ug/Kg	101	2		80	123	20
	1,1-Dichloroethane	20	20.3	ug/Kg	102	5		82	123	20
	Cyclohexane	20	18.8	ug/Kg	94	0		76	122	20
	2-Butanone	100	97.2	ug/Kg	97	2		69	131	20
	Carbon Tetrachloride	20	19.5	ug/Kg	98	1		76	129	20
	cis-1,2-Dichloroethene	20	20.7	ug/Kg	104	4		82	123	20
	Bromochloromethane	20	20.3	ug/Kg	102	9		80	127	20
	Chloroform	20	20.7	ug/Kg	104	3		82	125	20
	1,1,1-Trichloroethane	20	20.5	ug/Kg	103	5		80	126	20
	Methylcyclohexane	20	19.6	ug/Kg	98	2		77	123	20
	Benzene	20	20.1	ug/Kg	101	3		84	121	20
	1,2-Dichloroethane	20	20.3	ug/Kg	102	6		81	126	20
	Trichloroethene	20	20.3	ug/Kg	102	1		83	122	20
	1,2-Dichloropropane	20	19.7	ug/Kg	99	3		83	122	20
	Bromodichloromethane	20	19.9	ug/Kg	100	3		82	123	20
	4-Methyl-2-Pentanone	100	97.6	ug/Kg	98	10		70	135	20
	Toluene	20	19.4	ug/Kg	97	0		83	122	20
	t-1,3-Dichloropropene	20	19.4	ug/Kg	97	4		78	124	20
	cis-1,3-Dichloropropene	20	19.7	ug/Kg	99	5		81	122	20
	1,1,2-Trichloroethane	20	20.8	ug/Kg	104	6		82	125	20
	2-Hexanone	100	95.7	ug/Kg	96	6		66	138	20
	Dibromochloromethane	20	20.4	ug/Kg	102	2		79	125	20
	1,2-Dibromoethane	20	20.2	ug/Kg	101	3		80	125	20
	Tetrachloroethene	20	20.9	ug/Kg	104	4		83	125	20
	Chlorobenzene	20	20.4	ug/Kg	102	3		84	122	20
	Ethyl Benzene	20	19.6	ug/Kg	98	4		82	124	20
	m/p-Xylenes	40	39.7	ug/Kg	99	4		83	124	20
	o-Xylene	20	19.8	ug/Kg	99	5		83	123	20
	Styrene	20	19.9	ug/Kg	100	5		82	124	20
	Bromoform	20	20.8	ug/Kg	104	8		75	127	20
	Isopropylbenzene	20	19.7	ug/Kg	99	2		82	124	20
	1,1,2,2-Tetrachloroethane	20	21.1	ug/Kg	106	7		77	127	20
	1,3-Dichlorobenzene	20	19.8	ug/Kg	99	4		83	122	20
	1,4-Dichlorobenzene	20	20.0	ug/Kg	100	5		84	121	20
	1,2-Dichlorobenzene	20	20.2	ug/Kg	101	5		83	124	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022383.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY0522SBSD01	1,2-Dibromo-3-Chloropropane	20	21.4	ug/Kg	107	9		66	134	20
	1,2,4-Trichlorobenzene	20	20.0	ug/Kg	100	2		78	127	20
	1,2,3-Trichlorobenzene	20	20.4	ug/Kg	102	6		70	137	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0522SBL01

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2074

SAS No.: Q2074 SDG NO.: Q2074

Lab File ID: VY022381.D

Lab Sample ID: VY0522SBL01

Date Analyzed: 05/22/2025

Time Analyzed: 09:07

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

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0522SBS01	VY0522SBS01	VY022382.D	05/22/2025
VY0522SBSD01	VY0522SBSD01	VY022383.D	05/22/2025
TP-12	Q2074-01	VY022389.D	05/22/2025
TP-7	Q2074-02	VY022390.D	05/22/2025
TP-15	Q2074-03	VY022391.D	05/22/2025
TP-20	Q2074-04	VY022392.D	05/22/2025
TP-38	Q2074-05	VY022393.D	05/22/2025
TP-19	Q2074-06	VY022394.D	05/22/2025
TP-40	Q2074-07	VY022395.D	05/22/2025
TP-18	Q2074-08	VY022396.D	05/22/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022252.D BFB Injection Date: 05/15/2025
Instrument ID: MSVOA_Y BFB Injection Time: 07:52
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	24
75	30.0 - 60.0% of mass 95	55.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.7 (0.9) 1
174	50.0 - 100.0% of mass 95	80.5
175	5.0 - 9.0% of mass 174	5.9 (7.3) 1
176	95.0 - 101.0% of mass 174	77.5 (96.3) 1
177	5.0 - 9.0% of mass 176	5.3 (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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC005	VSTDIC005	VY022253.D	05/15/2025	09:46
VSTDIC010	VSTDIC010	VY022254.D	05/15/2025	10:16
VSTDIC020	VSTDIC020	VY022255.D	05/15/2025	10:39
VSTDIC050	VSTDIC050	VY022256.D	05/15/2025	11:02
VSTDIC100	VSTDIC100	VY022257.D	05/15/2025	11:24
VSTDIC150	VSTDIC150	VY022258.D	05/15/2025	11:47

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022379.D BFB Injection Date: 05/22/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:05
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	24.1
75	30.0 - 60.0% of mass 95	57.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1.1 (1.3) 1
174	50.0 - 100.0% of mass 95	86.1
175	5.0 - 9.0% of mass 174	6.4 (7.5) 1
176	95.0 - 101.0% of mass 174	83.8 (97.4) 1
177	5.0 - 9.0% of mass 176	5.5 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY022380.D	05/22/2025	08:35
VY0522SBL01	VY0522SBL01	VY022381.D	05/22/2025	09:07
VY0522SBS01	VY0522SBS01	VY022382.D	05/22/2025	09:36
VY0522SBSD01	VY0522SBSD01	VY022383.D	05/22/2025	09:59
TP-12	Q2074-01	VY022389.D	05/22/2025	12:35
TP-7	Q2074-02	VY022390.D	05/22/2025	12:58
TP-15	Q2074-03	VY022391.D	05/22/2025	13:22
TP-20	Q2074-04	VY022392.D	05/22/2025	13:45
TP-38	Q2074-05	VY022393.D	05/22/2025	14:09
TP-19	Q2074-06	VY022394.D	05/22/2025	14:32
TP-40	Q2074-07	VY022395.D	05/22/2025	14:55
TP-18	Q2074-08	VY022396.D	05/22/2025	15:19

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022380.D Date Analyzed: 05/22/2025
Instrument ID: MSVOA_Y Time Analyzed: 08:35
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	161495	7.72	274168	8.62	235238	11.42
UPPER LIMIT	322990	8.22	548336	9.122	470476	11.92
LOWER LIMIT	80747.5	7.22	137084	8.122	117619	10.92
EPA SAMPLE NO.						
TP-12	252950	7.72	432513	8.62	349129	11.42
TP-7	245848	7.72	434620	8.62	349949	11.43
TP-15	266999	7.72	463257	8.62	360854	11.43
TP-20	243454	7.72	431875	8.62	349983	11.43
TP-38	242112	7.72	427478	8.62	344204	11.42
TP-19	231559	7.72	398601	8.62	296277	11.42
TP-40	163884	7.72	278478	8.62	213324	11.42
TP-18	236909	7.72	424090	8.62	327971	11.42
VY0522SBL01	263712	7.72	465826	8.62	376365	11.42
VY0522SBS01	174604	7.72	293942	8.62	250842	11.42
VY0522SBSD01	165702	7.71	283052	8.62	236945	11.42

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022380.D Date Analyzed: 05/22/2025
Instrument ID: MSVOA_Y Time Analyzed: 08:35
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	110586	13.353				
UPPER LIMIT	221172	13.853				
LOWER LIMIT	55293	12.853				
EPA SAMPLE NO.						
TP-12	130898	13.35				
TP-7	127586	13.35				
TP-15	125655	13.35				
TP-20	131238	13.35				
TP-38	128188	13.35				
TP-19	94056	13.35				
TP-40	75609	13.35				
TP-18	117014	13.35				
VY0522SBL01	137350	13.35				
VY0522SBS01	118480	13.35				
VY0522SBSD01	112772	13.35				

IS4 = 1,4-Dichlorobenzene-d4

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

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



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

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	48.9		63 - 155	98%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	48.7		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.5		38 - 136	79%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	264000	7.719			
540-36-3	1,4-Difluorobenzene	466000	8.622			
3114-55-4	Chlorobenzene-d5	376000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	137000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	19.6		1.10	5.00	ug/Kg
74-87-3	Chloromethane	23.3		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	24.9		0.79	5.00	ug/Kg
74-83-9	Bromomethane	34.5		1.10	5.00	ug/Kg
75-00-3	Chloroethane	28.5		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	23.4		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.9		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.5		1.00	5.00	ug/Kg
67-64-1	Acetone	110		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.3		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.6		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	16.6		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	19.0		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.7		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.4		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	18.7		0.79	5.00	ug/Kg
78-93-3	2-Butanone	95.4		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.8		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.9		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	18.6		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.1		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.2		0.91	5.00	ug/Kg
71-43-2	Benzene	19.5		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.1		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.1		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.1		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.3		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	88.9		3.60	25.0	ug/Kg
108-88-3	Toluene	19.4		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	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:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	18.5		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	18.8		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.6		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	89.5		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.9		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	19.6		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.9		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	19.7		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	18.7		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	38.0		1.20	10.0	ug/Kg
95-47-6	o-Xylene	18.8		0.82	5.00	ug/Kg
100-42-5	Styrene	19.0		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.2		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.3		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.8		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	18.9		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.0		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.1		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	19.6		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	19.5		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.2		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.4		63 - 155	97%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	50.3		74 - 123	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.7		38 - 136	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	175000	7.719			
540-36-3	1,4-Difluorobenzene	294000	8.622			
3114-55-4	Chlorobenzene-d5	251000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	118000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	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:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.2		1.10	5.00	ug/Kg
74-87-3	Chloromethane	23.2		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	25.4		0.79	5.00	ug/Kg
74-83-9	Bromomethane	33.4		1.10	5.00	ug/Kg
75-00-3	Chloroethane	28.3		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	21.1		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.3		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.8		1.00	5.00	ug/Kg
67-64-1	Acetone	93.4		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.7		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	21.1		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	19.3		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	19.0		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.1		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.3		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	18.8		0.79	5.00	ug/Kg
78-93-3	2-Butanone	97.2		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.5		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.7		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.3		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.7		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	19.6		0.91	5.00	ug/Kg
71-43-2	Benzene	20.1		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.3		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.3		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.7		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.9		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	97.6		3.60	25.0	ug/Kg
108-88-3	Toluene	19.4		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	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:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	19.4		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	20.8		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	95.7		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.4		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.2		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.9		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	20.4		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.6		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	39.7		1.20	10.0	ug/Kg
95-47-6	o-Xylene	19.8		0.82	5.00	ug/Kg
100-42-5	Styrene	19.9		0.71	5.00	ug/Kg
75-25-2	Bromoform	20.8		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.7		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	21.1		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.8		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.0		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	21.4		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.0		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	20.4		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.4		63 - 155	101%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		70 - 134	102%	SPK: 50
2037-26-5	Toluene-d8	49.9		74 - 123	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		38 - 136	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	166000	7.713			
540-36-3	1,4-Difluorobenzene	283000	8.621			
3114-55-4	Chlorobenzene-d5	237000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	113000	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074
 Instrument ID: MSVOA_Y Calibration Date(s): 05/15/2025 05/15/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 11:47
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF005 = VY022253.D			RRF010 = VY022254.D		RRF020 = VY022255.D			
	RRF050 = VY022256.D			RRF100 = VY022257.D		RRF150 = VY022258.D			
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dichlorodifluoromethane	0.546	0.587	0.541	0.507	0.470	0.479	0.522	8.5	
Chloromethane	1.212	1.237	1.153	1.042	1.046	0.894	1.097	11.7	
Vinyl Chloride	1.265	1.317	1.264	1.210	1.190	1.110	1.226	5.9	
Bromomethane	1.107	1.033	1.058	0.877	0.955	0.959	0.998	8.3	
Chloroethane	0.751	0.814	0.796	0.756	0.733	0.727	0.763	4.6	
Trichlorofluoromethane	1.254	1.292	1.260	1.214	1.211	1.217	1.241	2.6	
1,1,2-Trichlorotrifluoroethane	0.548	0.577	0.544	0.538	0.507	0.520	0.539	4.5	
1,1-Dichloroethene	0.545	0.544	0.540	0.539	0.518	0.523	0.535	2.2	
Acetone	0.126	0.114	0.096	0.093	0.094	0.092	0.102	13.6	
Carbon Disulfide	1.768	1.822	1.764	1.753	1.679	1.679	1.744	3.2	
Methyl tert-butyl Ether	1.463	1.523	1.393	1.459	1.504	1.507	1.475	3.2	
Methyl Acetate	0.349	0.308	0.286	0.302	0.346	0.347	0.323	8.6	
Methylene Chloride	0.797	0.811	0.646	0.597	0.570	0.552	0.662	17.3	
trans-1,2-Dichloroethene	0.577	0.609	0.603	0.592	0.580	0.581	0.590	2.2	
1,1-Dichloroethane	1.112	1.136	1.099	1.117	1.093	1.082	1.106	1.7	
Cyclohexane	1.300	1.191	1.077	1.055	0.998	1.011	1.105	10.6	
2-Butanone	0.180	0.181	0.158	0.161	0.174	0.174	0.171	5.6	
Carbon Tetrachloride	0.485	0.524	0.494	0.516	0.509	0.524	0.509	3.2	
cis-1,2-Dichloroethene	0.662	0.687	0.668	0.691	0.687	0.693	0.681	1.9	
Bromochloromethane	0.463	0.484	0.467	0.473	0.469	0.476	0.472	1.6	
Chloroform	1.032	1.079	1.067	1.079	1.054	1.057	1.061	1.7	
1,1,1-Trichloroethane	1.007	0.997	0.960	0.969	0.944	0.964	0.974	2.4	
Methylcyclohexane	0.664	0.678	0.645	0.670	0.639	0.667	0.660	2.3	
Benzene	1.369	1.462	1.435	1.499	1.482	1.496	1.457	3.4	
1,2-Dichloroethane	0.381	0.399	0.378	0.402	0.403	0.402	0.394	2.9	
Trichloroethene	0.358	0.366	0.361	0.371	0.356	0.363	0.362	1.5	
1,2-Dichloropropane	0.337	0.361	0.344	0.357	0.354	0.355	0.351	2.6	
Bromodichloromethane	0.466	0.494	0.476	0.506	0.504	0.504	0.492	3.4	
4-Methyl-2-Pentanone	0.238	0.247	0.230	0.253	0.275	0.275	0.253	7.4	
Toluene	0.871	0.924	0.890	0.944	0.947	0.961	0.923	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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074

Instrument ID: MSVOA_Y Calibration Date(s): 05/15/2025 05/15/2025

Heated Purge: (Y/N) Y Calibration Time(s): 09:46 11:47

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

LAB FILE ID:		RRF005 = VY022253.D		RRF010 = VY022254.D		RRF020 = VY022255.D		
		RRF050 = VY022256.D		RRF100 = VY022257.D		RRF150 = VY022258.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
t-1,3-Dichloropropene	0.464	0.473	0.457	0.487	0.498	0.499	0.480	3.7
cis-1,3-Dichloropropene	0.523	0.548	0.535	0.562	0.562	0.568	0.550	3.2
1,1,2-Trichloroethane	0.241	0.243	0.232	0.243	0.248	0.249	0.243	2.4
2-Hexanone	0.167	0.167	0.151	0.166	0.183	0.185	0.170	7.4
Dibromochloromethane	0.296	0.314	0.298	0.323	0.329	0.330	0.315	4.9
1,2-Dibromoethane	0.221	0.228	0.214	0.227	0.234	0.232	0.226	3.2
Tetrachloroethene	0.474	0.481	0.470	0.474	0.446	0.429	0.462	4.4
Chlorobenzene	1.112	1.110	1.106	1.154	1.143	1.143	1.128	1.9
Ethyl Benzene	2.014	2.043	2.049	2.175	2.173	2.222	2.113	4.1
m/p-Xylenes	0.749	0.770	0.763	0.818	0.825	0.852	0.796	5.2
o-Xylene	0.704	0.741	0.723	0.768	0.782	0.802	0.753	4.9
Styrene	1.182	1.214	1.210	1.303	1.335	1.380	1.270	6.3
Bromoform	0.202	0.214	0.194	0.209	0.219	0.217	0.209	4.5
Isopropylbenzene	4.157	4.192	4.100	4.197	4.028	4.181	4.142	1.6
1,1,2,2-Tetrachloroethane	0.656	0.647	0.581	0.628	0.645	0.666	0.637	4.8
1,3-Dichlorobenzene	1.757	1.774	1.715	1.838	1.839	1.914	1.806	4
1,4-Dichlorobenzene	1.759	1.765	1.706	1.750	1.723	1.720	1.737	1.4
1,2-Dichlorobenzene	1.526	1.520	1.479	1.534	1.520	1.523	1.517	1.3
1,2-Dibromo-3-Chloropropane	0.107	0.104	0.093	0.100	0.109	0.104	0.103	5.7
1,2,4-Trichlorobenzene	0.860	0.845	0.848	0.900	0.904	0.902	0.876	3.2
1,2,3-Trichlorobenzene	0.753	0.721	0.702	0.752	0.777	0.756	0.743	3.6
1,2-Dichloroethane-d4	0.547	0.559	0.527	0.541	0.545	0.560	0.546	2.2
Dibromofluoromethane	0.294	0.294	0.294	0.301	0.297	0.310	0.298	2.2
Toluene-d8	1.224	1.200	1.195	1.230	1.214	1.272	1.222	2.3
4-Bromofluorobenzene	0.390	0.386	0.368	0.387	0.387	0.407	0.387	3.3

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074

Instrument ID: MSVOA_Y Calibration Date/Time: 05/22/2025 08:35

Lab File ID: VY022380.D Init. Calib. Date(s): 05/15/2025 05/15/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 11:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.522	0.512		-1.92	20
Chloromethane	1.097	1.093	0.1	-0.46	20
Vinyl Chloride	1.226	1.451		18.35	20
Bromomethane	0.998	1.202		20.44	20
Chloroethane	0.763	0.992		30.01	20
Trichlorofluoromethane	1.241	1.338		7.82	20
1,1,2-Trichlorotrifluoroethane	0.539	0.600		11.32	20
1,1-Dichloroethene	0.535	0.576		7.66	20
Acetone	0.102	0.096		-5.88	20
Carbon Disulfide	1.744	1.805		3.5	20
Methyl tert-butyl Ether	1.475	1.522		3.19	20
Methyl Acetate	0.323	0.304		-5.88	20
Methylene Chloride	0.662	0.614		-7.25	20
trans-1,2-Dichloroethene	0.590	0.630		6.78	20
1,1-Dichloroethane	1.106	1.155	0.1	4.43	20
Cyclohexane	1.105	1.072		-2.99	20
2-Butanone	0.171	0.154		-9.94	20
Carbon Tetrachloride	0.509	0.548		7.66	20
cis-1,2-Dichloroethene	0.681	0.741		8.81	20
Bromochloromethane	0.472	0.490		3.81	20
Chloroform	1.061	1.157		9.05	20
1,1,1-Trichloroethane	0.974	1.054		8.21	20
Methylcyclohexane	0.660	0.694		5.15	20
Benzene	1.457	1.548		6.25	20
1,2-Dichloroethane	0.394	0.396		0.51	20
Trichloroethene	0.362	0.385		6.35	20
1,2-Dichloropropane	0.351	0.362		3.13	20
Bromodichloromethane	0.492	0.514		4.47	20
4-Methyl-2-Pentanone	0.253	0.230		-9.09	20
Toluene	0.923	0.978		5.96	20
t-1,3-Dichloropropene	0.480	0.478		-0.42	20
cis-1,3-Dichloropropene	0.550	0.565		2.73	20
1,1,2-Trichloroethane	0.243	0.246		1.24	20
2-Hexanone	0.170	0.151		-11.18	20
Dibromochloromethane	0.315	0.330		4.76	20
1,2-Dibromoethane	0.226	0.236		4.43	20
Tetrachloroethene	0.462	0.502		8.66	20
Chlorobenzene	1.128	1.194	0.3	5.85	20

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074

Instrument ID: MSVOA_Y Calibration Date/Time: 05/22/2025 08:35

Lab File ID: VY022380.D Init. Calib. Date(s): 05/15/2025 05/15/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 11:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	2.113	2.234		5.73	20
m/p-Xylenes	0.796	0.849		6.66	20
o-Xylene	0.753	0.791		5.05	20
Styrene	1.270	1.325		4.33	20
Bromoform	0.209	0.212	0.1	1.43	20
Isopropylbenzene	4.142	4.432		7	20
1,1,2,2-Tetrachloroethane	0.637	0.657	0.3	3.14	20
1,3-Dichlorobenzene	1.806	1.920		6.31	20
1,4-Dichlorobenzene	1.737	1.831		5.41	20
1,2-Dichlorobenzene	1.517	1.600		5.47	20
1,2-Dibromo-3-Chloropropane	0.103	0.104		0.97	20
1,2,4-Trichlorobenzene	0.876	0.937		6.96	20
1,2,3-Trichlorobenzene	0.743	0.779		4.84	20
1,2-Dichloroethane-d4	0.546	0.561		2.75	20
Dibromofluoromethane	0.298	0.318		6.71	20
Toluene-d8	1.222	1.298		6.22	20
4-Bromofluorobenzene	0.387	0.387		0	20

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



SAMPLE RAW DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022389.D
 Acq On : 22 May 2025 12:35
 Operator : SY/MD
 Sample : Q2074-01
 Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-12

A
B
C
D
E
F
G
H
I
J

Quant Time: May 23 03:36:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

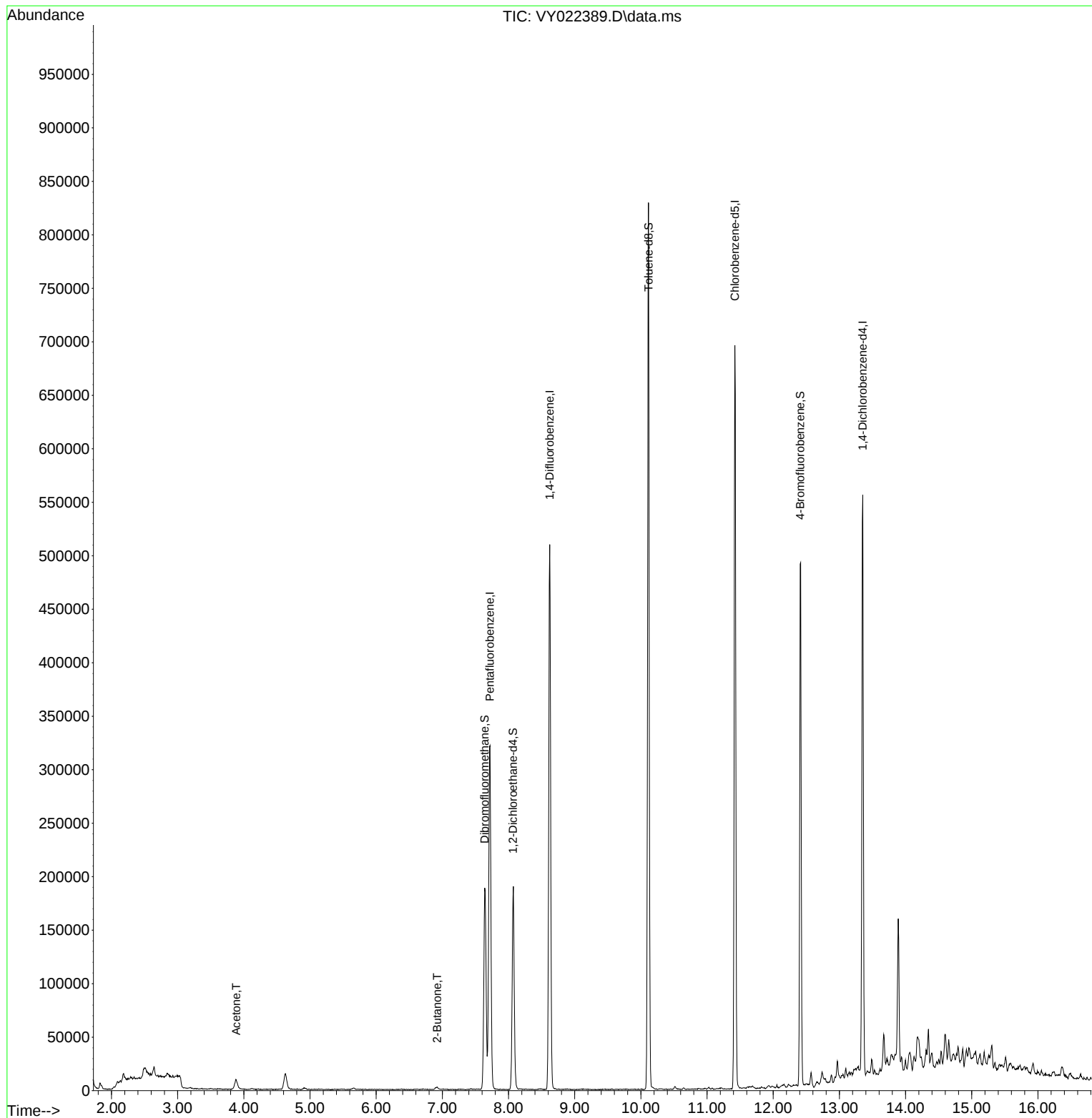
Internal Standards						
1) Pentafluorobenzene	7.719	168	252950	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	432513	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	349129	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	130898	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	134665	48.712	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	97.420%
35) Dibromofluoromethane	7.640	113	130934	50.720	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.440%
50) Toluene-d8	10.115	98	514682	48.680	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.360%
62) 4-Bromofluorobenzene	12.408	95	135002	40.285	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.580%
Target Compounds						
					Qvalue	
16) Acetone	3.885	43	16297	31.439	ug/l	95
25) 2-Butanone	6.921	43	3551	4.095	ug/l	97

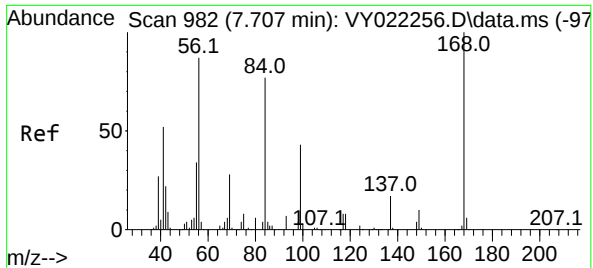
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Quant Time: May 23 03:36:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

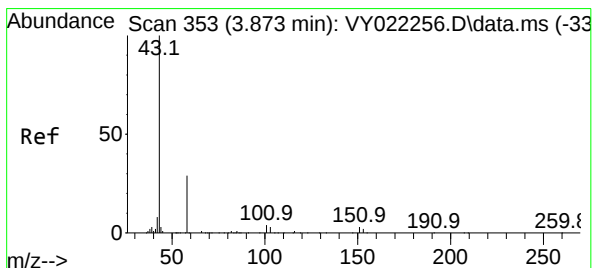
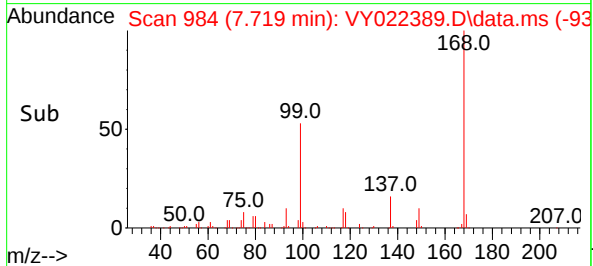
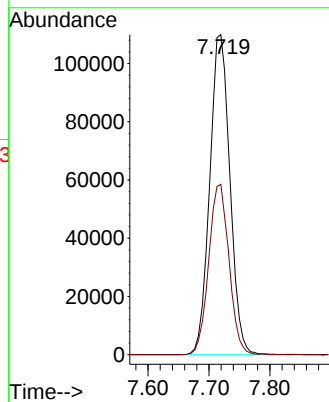
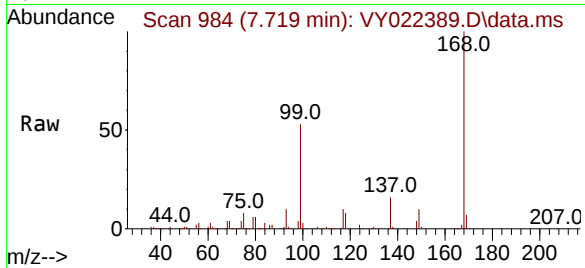




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022389.D
Acq: 22 May 2025 12:35

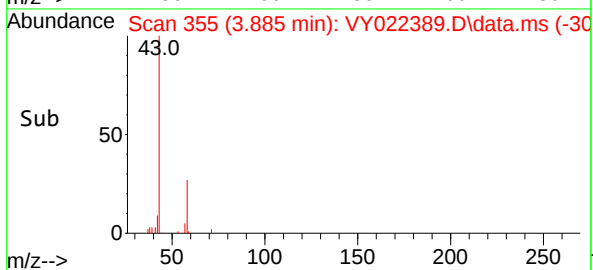
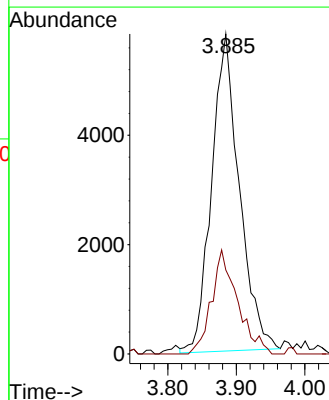
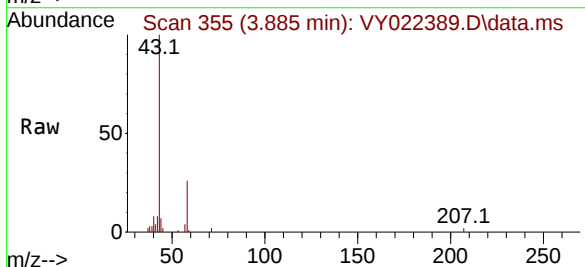
Instrument :
MSVOA_Y
ClientSampleId :
TP-12

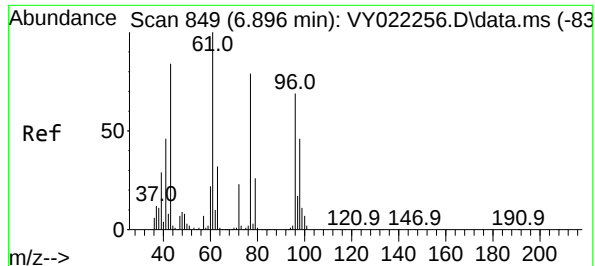
Tgt Ion:168 Resp: 252950
Ion Ratio Lower Upper
168 100
99 53.3 44.2 66.4



#16
Acetone
Concen: 31.439 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022389.D
Acq: 22 May 2025 12:35

Tgt Ion: 43 Resp: 16297
Ion Ratio Lower Upper
43 100
58 26.7 23.6 35.4





#25

2-Butanone

Concen: 4.095 ug/l

RT: 6.921 min Scan# 849

Delta R.T. 0.024 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

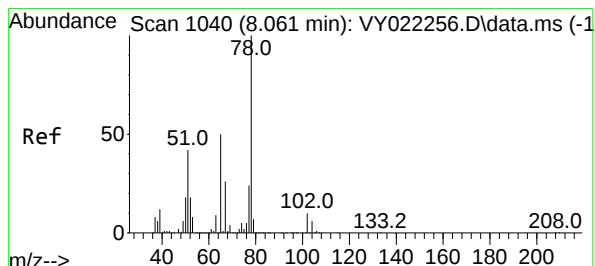
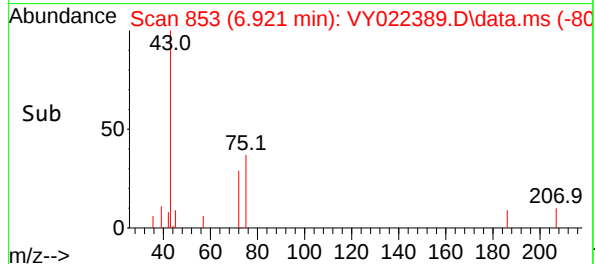
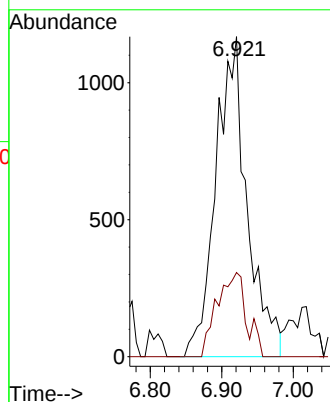
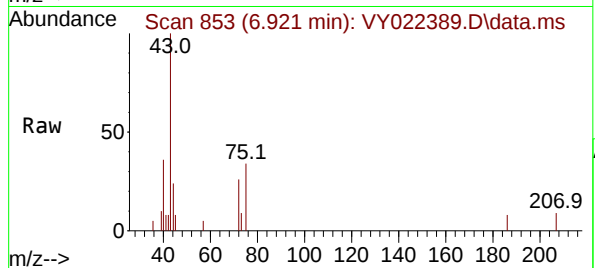
TP-12

Tgt Ion: 43 Resp: 3551

Ion Ratio Lower Upper

43 100

72 26.3 22.1 33.1



#33

1,2-Dichloroethane-d4

Concen: 48.712 ug/l

RT: 8.067 min Scan# 1041

Delta R.T. 0.006 min

Lab File: VY022389.D

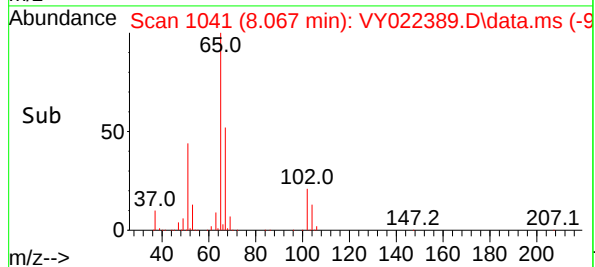
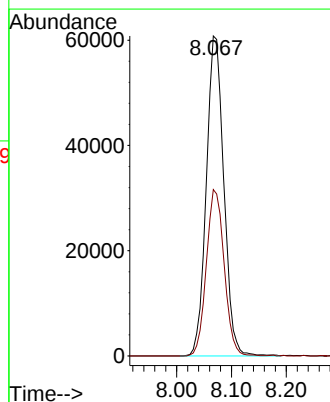
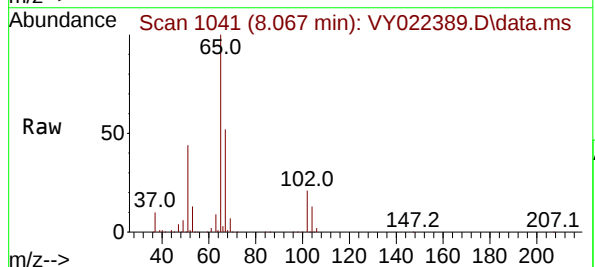
Acq: 22 May 2025 12:35

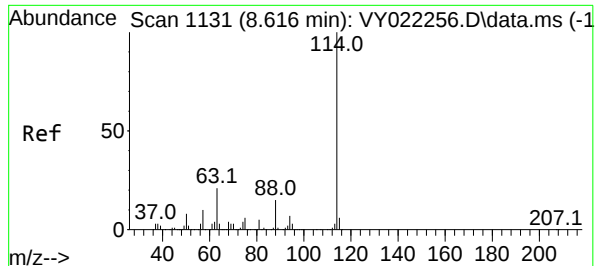
Tgt Ion: 65 Resp: 134665

Ion Ratio Lower Upper

65 100

67 52.9 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

TP-12

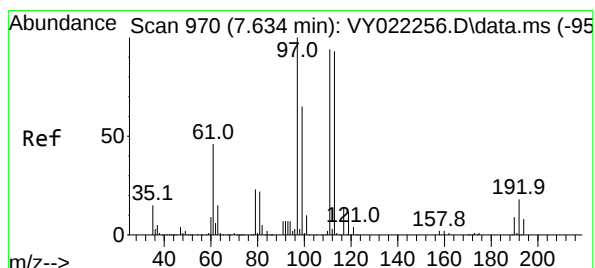
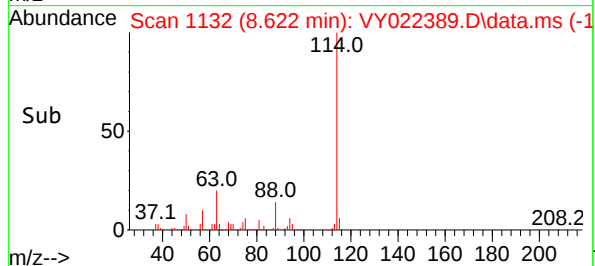
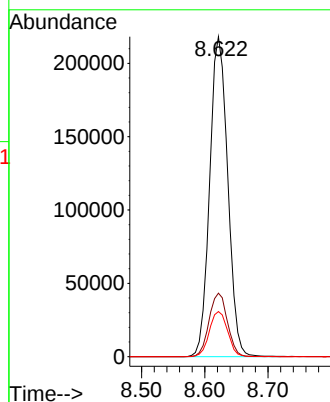
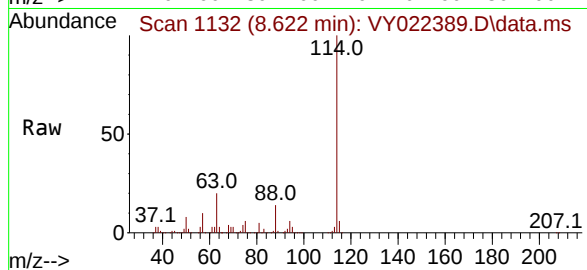
Tgt Ion:114 Resp: 432513

Ion Ratio Lower Upper

114 100

63 19.8 0.0 41.0

88 14.1 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.720 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

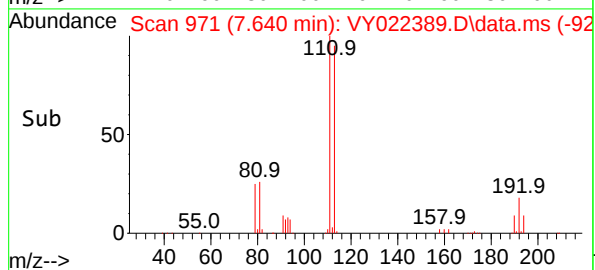
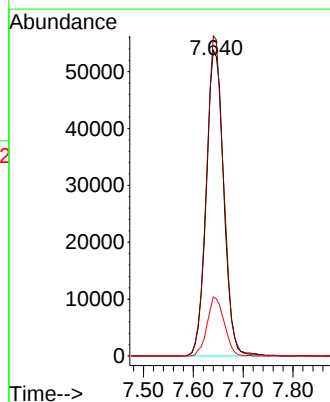
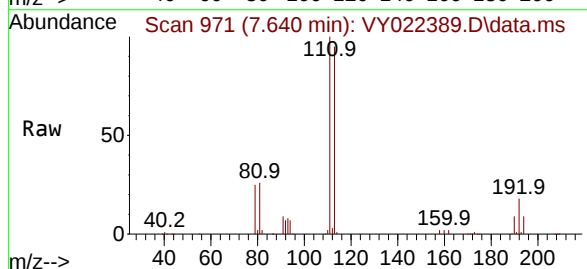
Tgt Ion:113 Resp: 130934

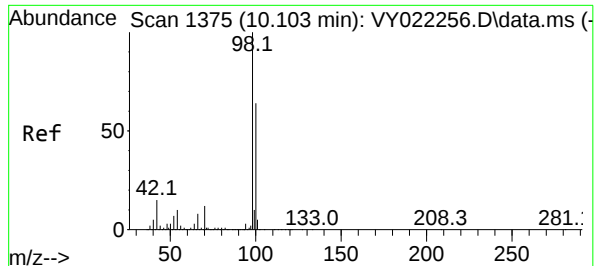
Ion Ratio Lower Upper

113 100

111 102.7 82.6 123.8

192 18.8 15.2 22.8





#50

Toluene-d8

Concen: 48.680 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

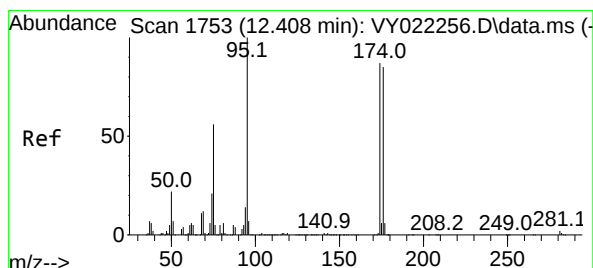
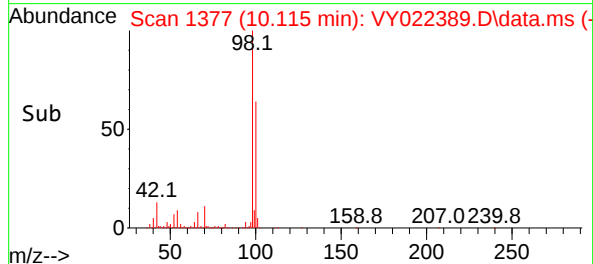
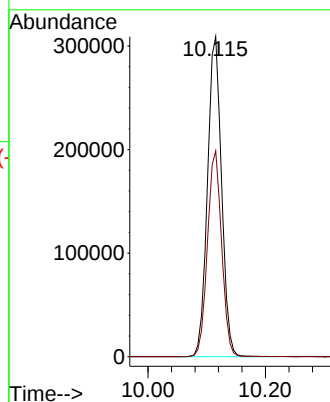
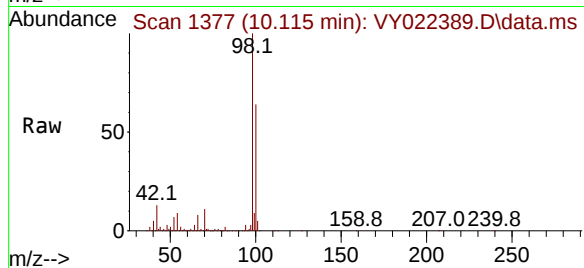
TP-12

Tgt Ion: 98 Resp: 514682

Ion Ratio Lower Upper

98 100

100 64.6 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 40.285 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. -0.000 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

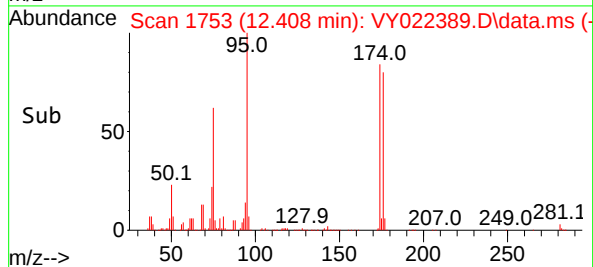
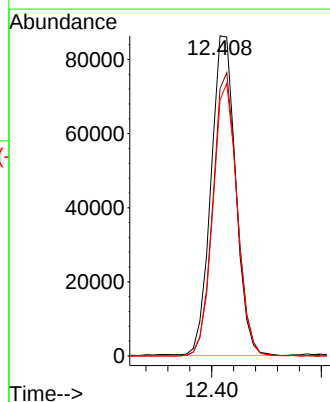
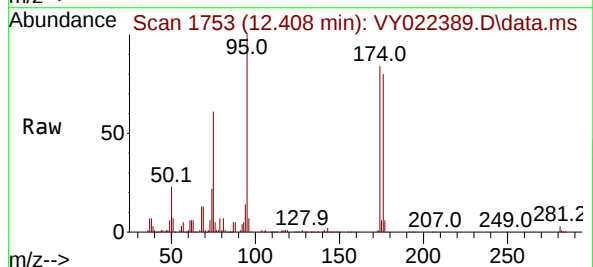
Tgt Ion: 95 Resp: 135002

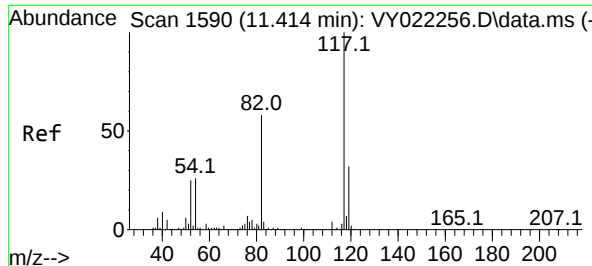
Ion Ratio Lower Upper

95 100

174 86.7 0.0 166.8

176 83.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

TP-12

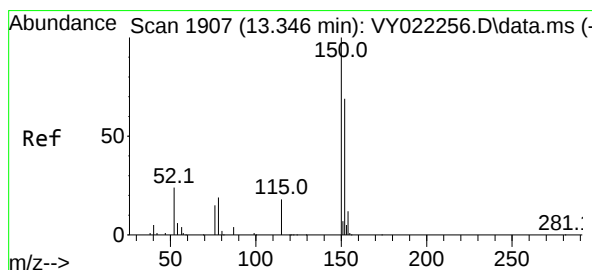
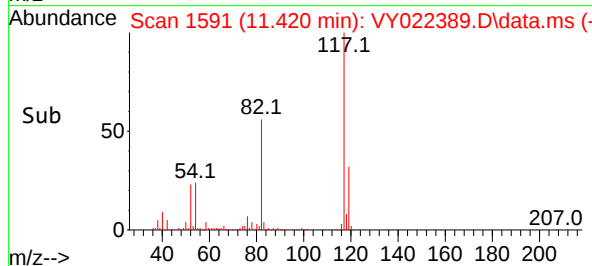
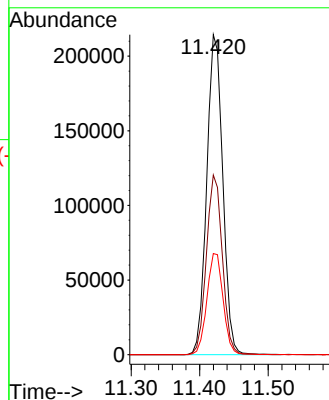
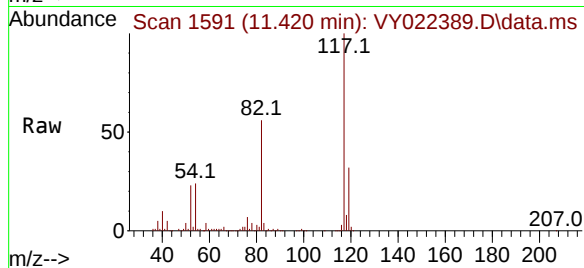
Tgt Ion:117 Resp: 349129

Ion Ratio Lower Upper

117 100

82 56.2 46.6 70.0

119 31.6 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

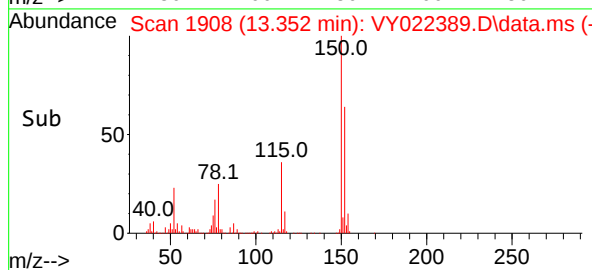
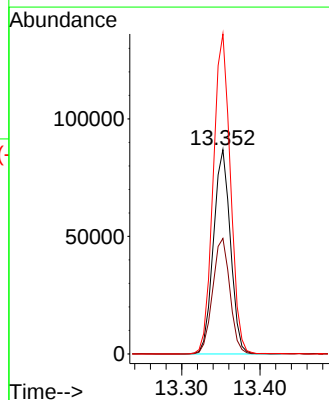
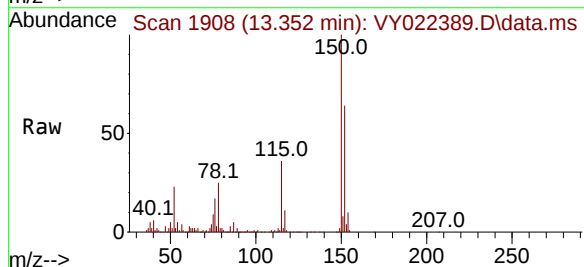
Tgt Ion:152 Resp: 130898

Ion Ratio Lower Upper

152 100

115 57.4 29.4 88.2

150 158.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022389.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.184	70	76	78	rBV3	8076	14949	1.07%	0.191%
2	3.879	344	354	367	rBV2	9207	28128	2.01%	0.360%
3	4.628	467	477	486	rBV3	14642	44818	3.21%	0.573%
4	7.640	961	971	977	rBV	188307	447663	32.02%	5.728%
5	7.719	977	984	995	rVB	320978	747358	53.46%	9.562%
6	8.073	1032	1042	1054	rBV	190004	407115	29.12%	5.209%
7	8.622	1122	1132	1144	rBV	509438	1016409	72.70%	13.004%
8	10.115	1367	1377	1385	rBV	829009	1398047	100.00%	17.887%
9	11.420	1584	1591	1603	rBV	695226	1133147	81.05%	14.498%
10	12.414	1747	1754	1762	rBV	489369	781250	55.88%	9.996%
11	12.572	1776	1780	1787	rVB3	13781	23530	1.68%	0.301%
12	12.737	1800	1807	1814	rBV9	11632	30396	2.17%	0.389%
13	12.968	1841	1845	1853	rVB4	15847	24464	1.75%	0.313%
14	13.352	1901	1908	1915	rVB	542540	856977	61.30%	10.964%
15	13.487	1926	1930	1935	rVB4	13775	21428	1.53%	0.274%
16	13.670	1954	1960	1965	rBV5	33907	63805	4.56%	0.816%
17	13.889	1991	1996	2001	rVB2	133753	215421	15.41%	2.756%
18	14.066	2019	2025	2031	rVB6	16770	43513	3.11%	0.557%
19	14.127	2031	2035	2039	rBV5	12852	26399	1.89%	0.338%
20	14.182	2039	2044	2051	rVV8	22709	63585	4.55%	0.814%
21	14.310	2060	2065	2067	rBV5	15464	24993	1.79%	0.320%
22	14.346	2067	2071	2074	rVV3	35166	53419	3.82%	0.683%
23	14.395	2075	2079	2087	rVB10	13597	27746	1.98%	0.355%
24	14.535	2099	2102	2106	rVB4	11632	14903	1.07%	0.191%
25	14.596	2106	2112	2117	rBV4	27532	59743	4.27%	0.764%
26	14.651	2118	2121	2127	rVB3	20374	30515	2.18%	0.390%
27	14.791	2142	2144	2149	rVB5	14723	19789	1.42%	0.253%
28	14.864	2153	2156	2159	rVB4	16423	20469	1.46%	0.262%
29	14.919	2159	2165	2168	rBV6	15743	32060	2.29%	0.410%
30	14.956	2169	2171	2176	rVB5	10156	16137	1.15%	0.206%
31	15.127	2193	2199	2204	rVB8	10522	20540	1.47%	0.263%
32	15.188	2205	2209	2216	rBV9	12149	20109	1.44%	0.257%
33	15.303	2225	2228	2232	rVB	20956	30913	2.21%	0.396%
34	15.511	2260	2262	2266	rVB5	13031	17697	1.27%	0.226%
35	15.925	2326	2330	2336	rVB8	9942	18516	1.32%	0.237%
36	16.358	2397	2401	2408	rVB9	8783	19985	1.43%	0.256%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

A

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J

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

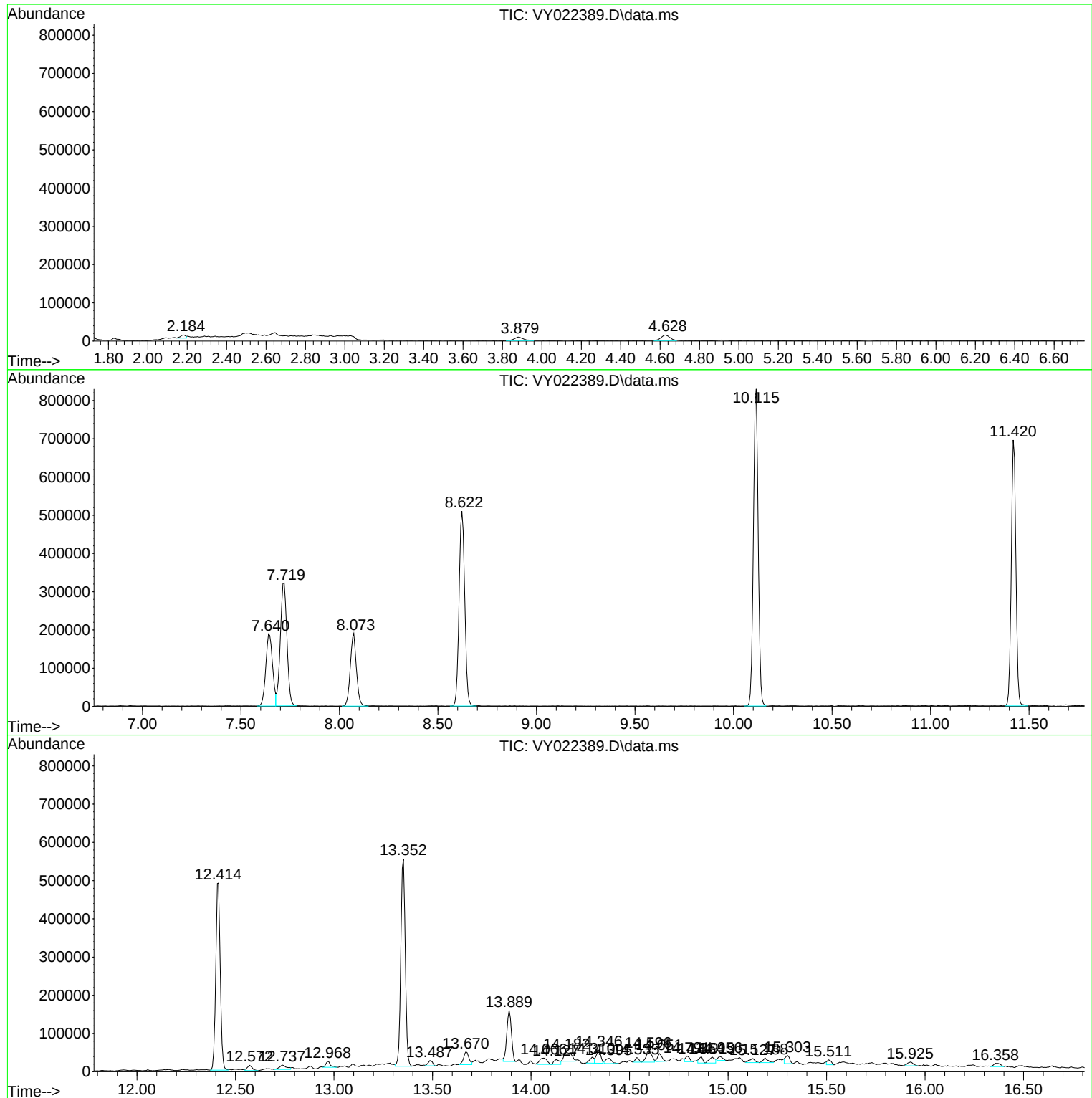
Sum of corrected areas: 7815936

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



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Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

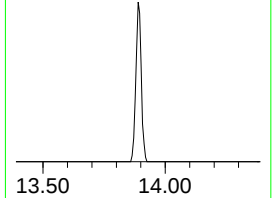
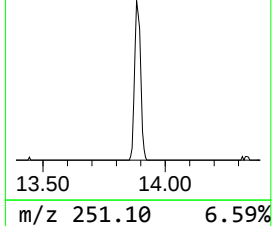
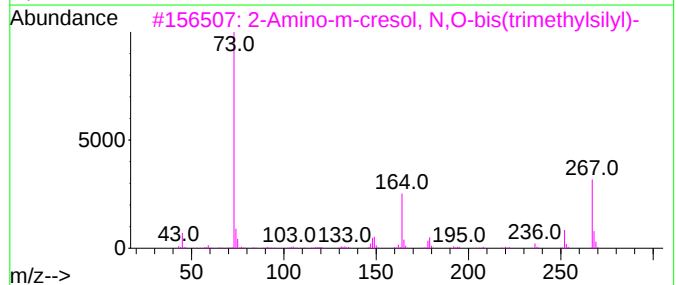
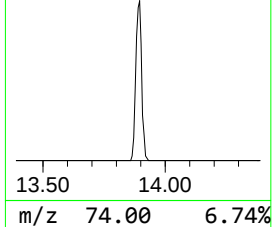
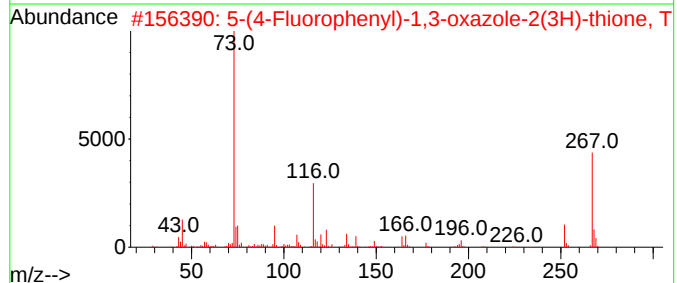
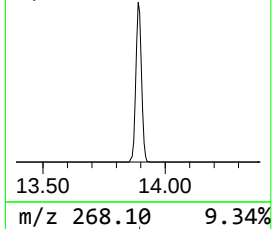
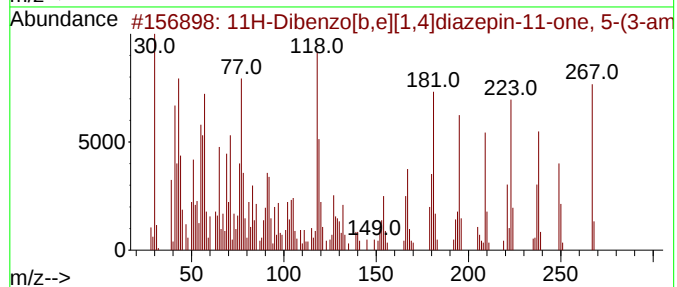
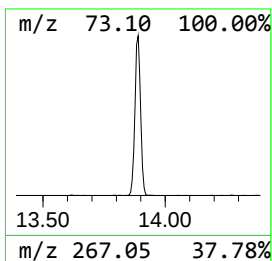
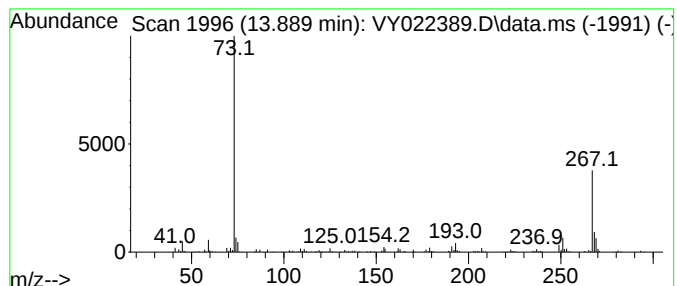
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

Peak Number 1 11H-Dibenzo[b,e][1,4]diazep... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.889	12.57 ug/l	215421	1,4-Dichlorobenzene-d4	13.352

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	95
2			5-(4-Fluorophenyl)-1,3-oxazole-2...	267	C12H14FNOSSi	1000497-07-6	53
3			2-Amino-m-cresol, N,O-bis(trimet...	267	C13H25NOSi2	1000449-77-1	53
4			Benzeneethanamine, N-methyl-.bet...	311	C15H29NO2Si2	029522-18-7	50
5			Benzeneethanamine, N-[(pentaflu...	475	C21H26F5NO2Si2	055429-85-1	42



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
11H-Dibenzo[b,e...	13.889	12.6	ug/l	215421	4	13.352	856977	50.0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022390.D
 Acq On : 22 May 2025 12:58
 Operator : SY/MD
 Sample : Q2074-02
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-7

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Quant Time: May 23 03:36:38 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	245848	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	434620	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	349949	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	127586	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	127834	47.577	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	95.160%
35) Dibromofluoromethane	7.646	113	129846	50.055	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.100%
50) Toluene-d8	10.115	98	515620	48.533	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.060%
62) 4-Bromofluorobenzene	12.414	95	133711	39.706	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.420%

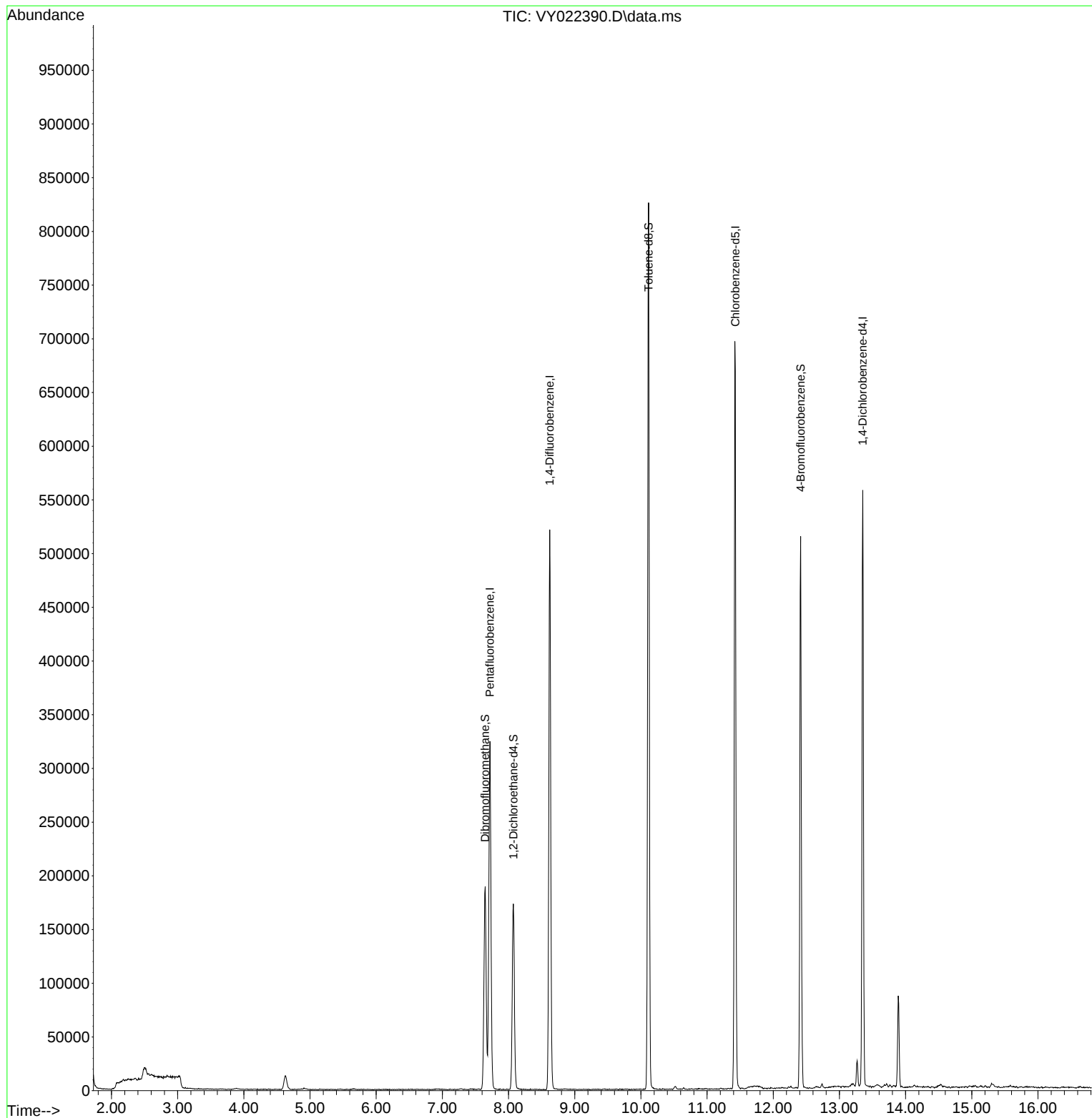
Target Compounds	Qvalue

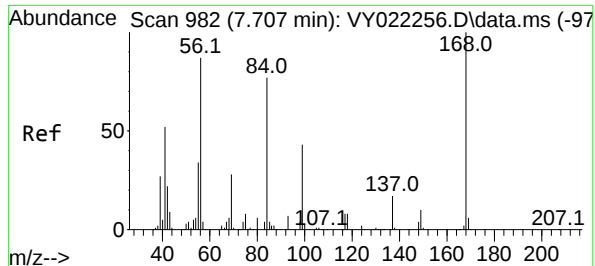
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Time: May 23 03:36:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

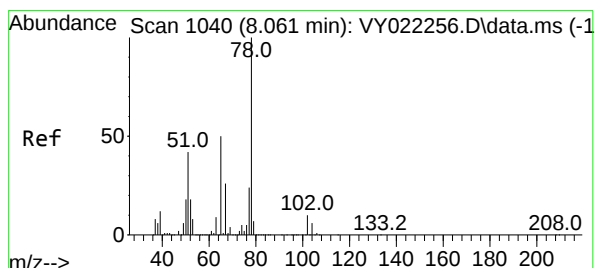
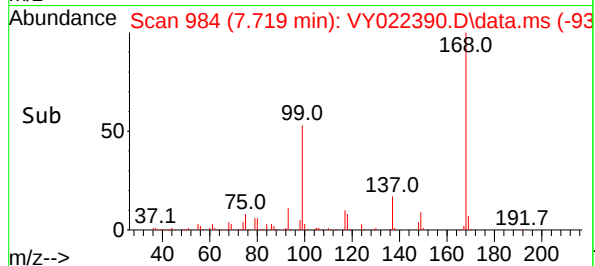
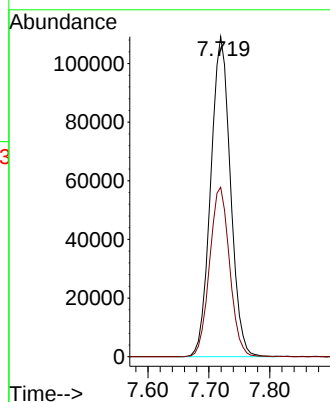
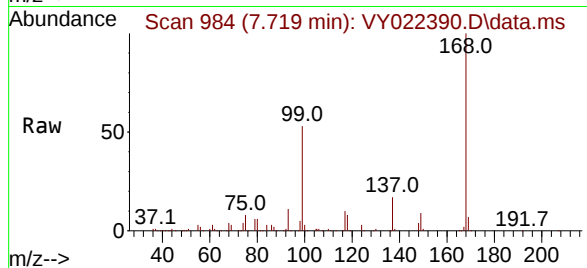




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 99
Delta R.T. 0.012 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

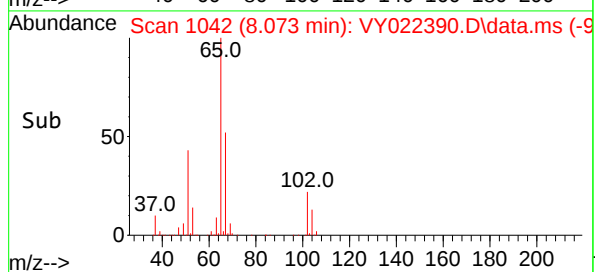
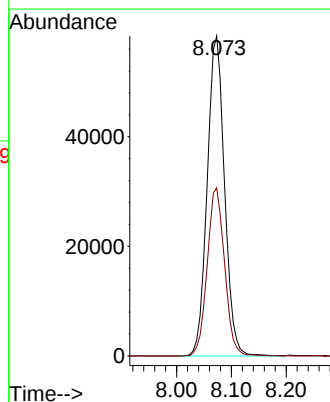
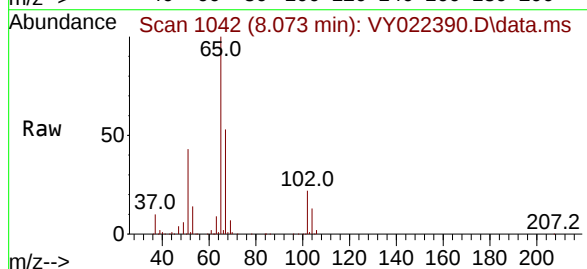
Instrument :
MSVOA_Y
ClientSampleId :
TP-7

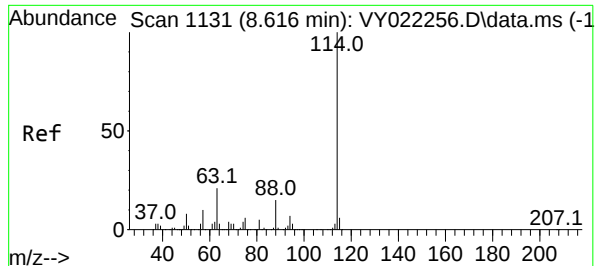
Tgt Ion:168 Resp: 245848
Ion Ratio Lower Upper
168 100
99 52.9 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 47.577 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

Tgt Ion: 65 Resp: 127834
Ion Ratio Lower Upper
65 100
67 52.7 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

Instrument :

MSVOA_Y

ClientSampleId :

TP-7

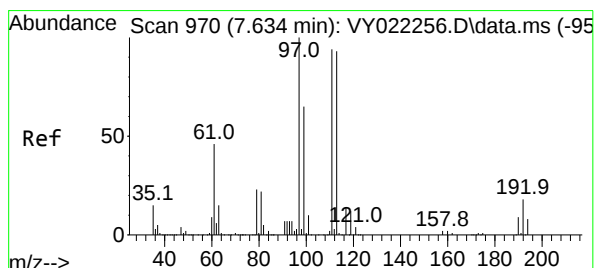
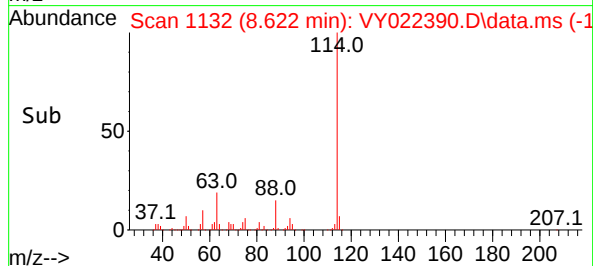
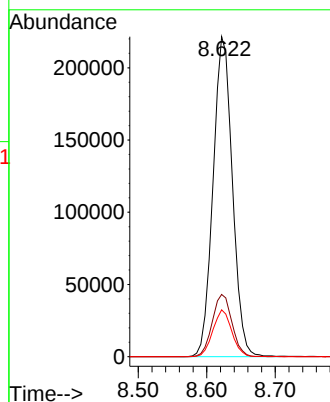
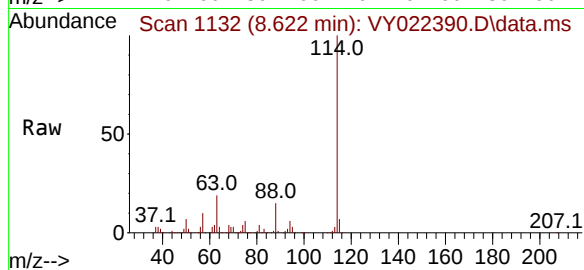
Tgt Ion:114 Resp: 434620

Ion Ratio Lower Upper

114 100

63 19.4 0.0 41.0

88 14.6 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.055 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

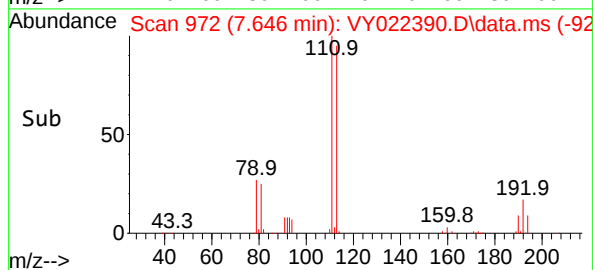
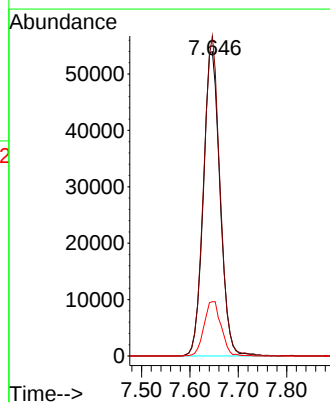
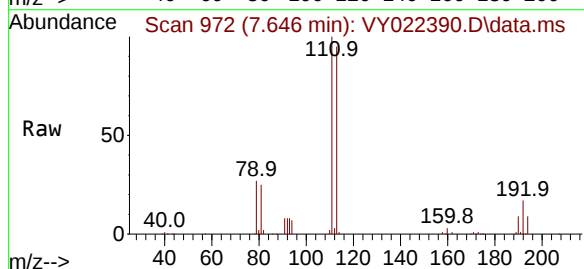
Tgt Ion:113 Resp: 129846

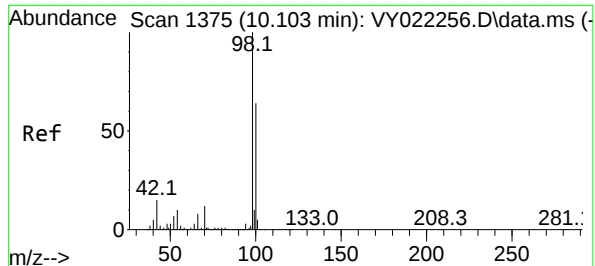
Ion Ratio Lower Upper

113 100

111 102.5 82.6 123.8

192 18.3 15.2 22.8





#50

Toluene-d8

Concen: 48.533 ug/l

RT: 10.115 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

Instrument :

MSVOA_Y

ClientSampleId :

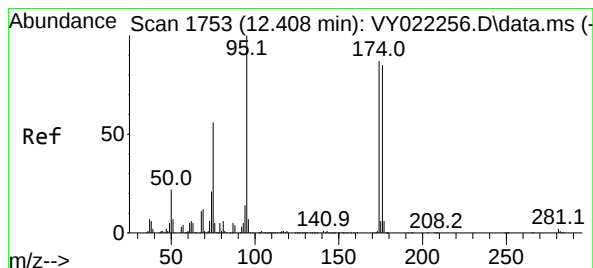
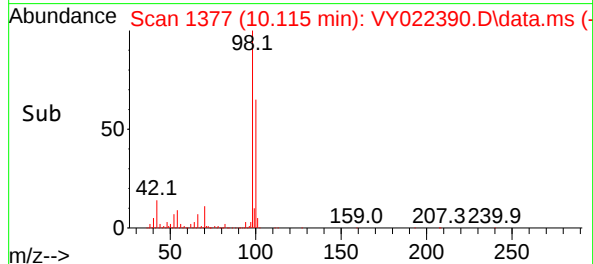
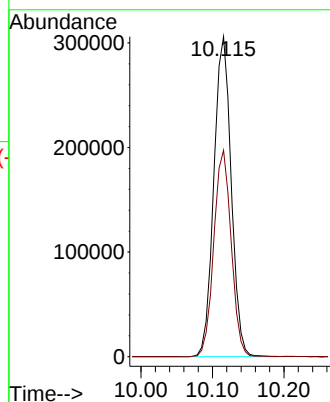
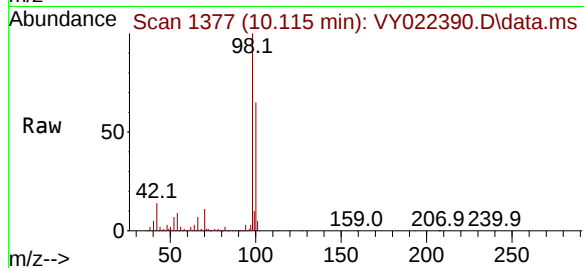
TP-7

Tgt Ion: 98 Resp: 515620

Ion Ratio Lower Upper

98 100

100 64.7 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 39.706 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

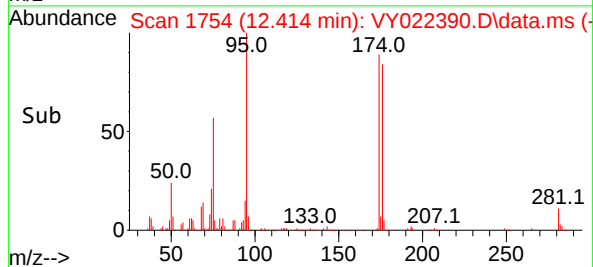
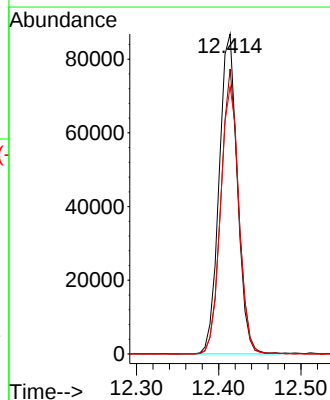
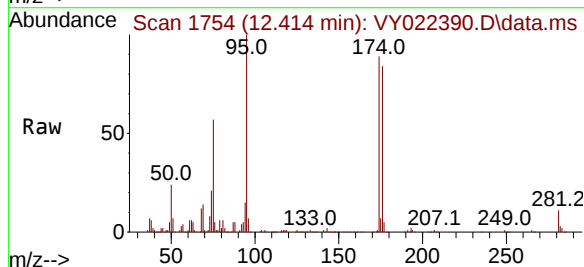
Tgt Ion: 95 Resp: 133711

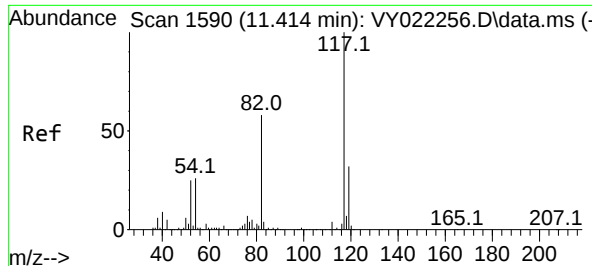
Ion Ratio Lower Upper

95 100

174 86.2 0.0 166.8

176 84.4 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

Instrument :

MSVOA_Y

ClientSampleId :

TP-7

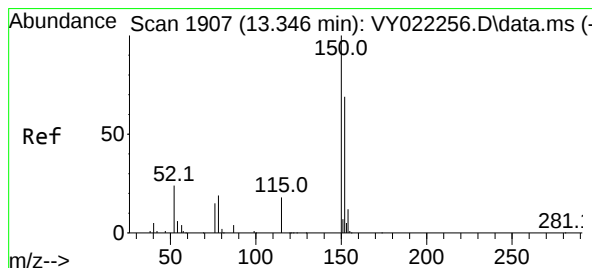
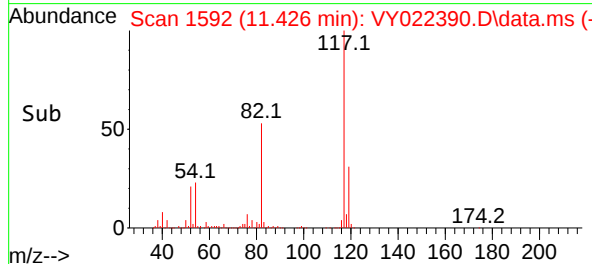
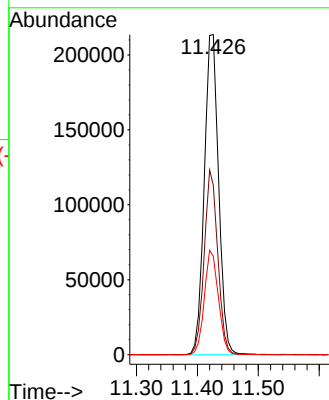
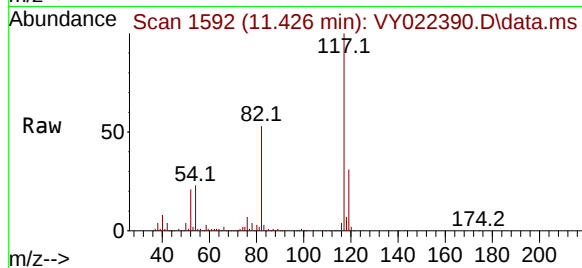
Tgt Ion:117 Resp: 349949

Ion Ratio Lower Upper

117 100

82 53.0 46.6 70.0

119 30.8 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

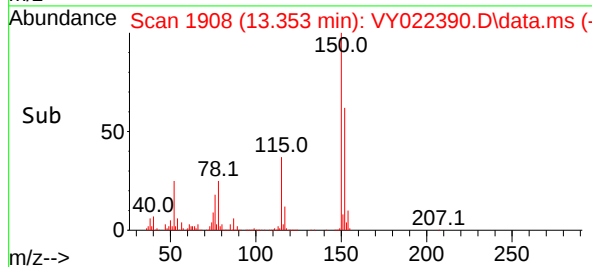
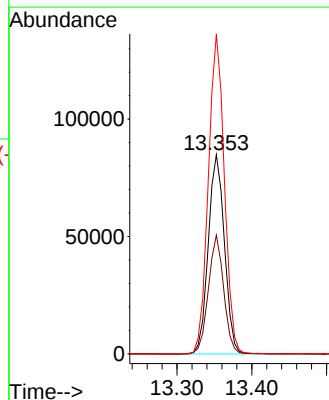
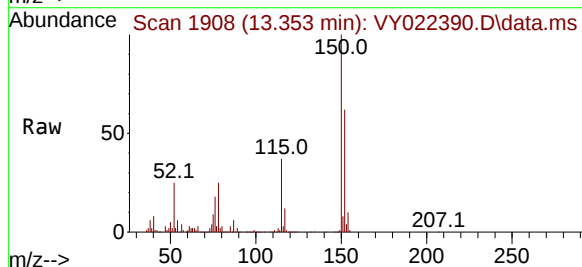
Tgt Ion:152 Resp: 127586

Ion Ratio Lower Upper

152 100

115 56.8 29.4 88.2

150 159.0 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022390.D
 Acq On : 22 May 2025 12:58
 Operator : SY/MD
 Sample : Q2074-02
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-7

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022390.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.099	50	62	65	rBV6	5970	20626	1.47%	0.293%
2	2.507	120	129	135	rBV3	10684	39270	2.80%	0.557%
3	4.629	467	477	488	rBV3	13008	41388	2.95%	0.587%
4	7.646	961	972	978	rBV2	188844	451859	32.25%	6.412%
5	7.719	978	984	998	rVB	323889	721020	51.46%	10.232%
6	8.073	1033	1042	1052	rBV	172761	383969	27.40%	5.449%
7	8.622	1123	1132	1143	rBV	521415	1017950	72.65%	14.446%
8	10.115	1369	1377	1393	rBV	825468	1401187	100.00%	19.885%
9	11.420	1584	1591	1605	rVB	696115	1135668	81.05%	16.117%
10	12.414	1747	1754	1762	rBV2	513786	826172	58.96%	11.724%
11	13.267	1889	1894	1899	rBV2	23564	35333	2.52%	0.501%
12	13.353	1899	1908	1920	rVB	554889	834154	59.53%	11.838%
13	13.889	1989	1996	2002	rVB2	84889	137999	9.85%	1.958%

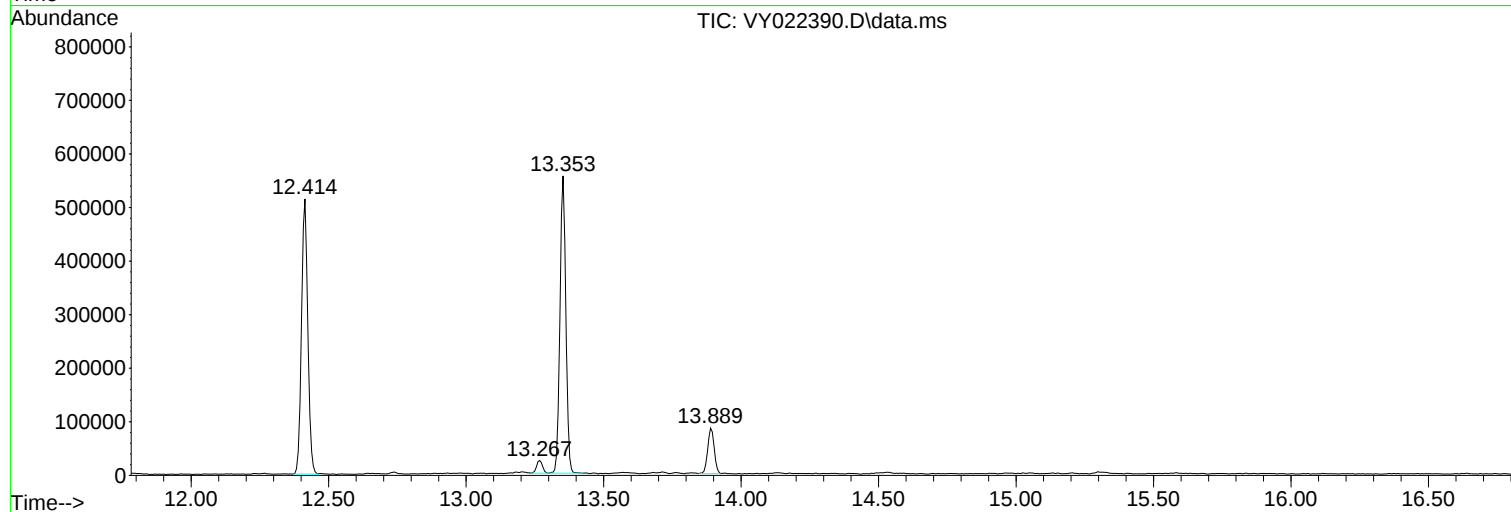
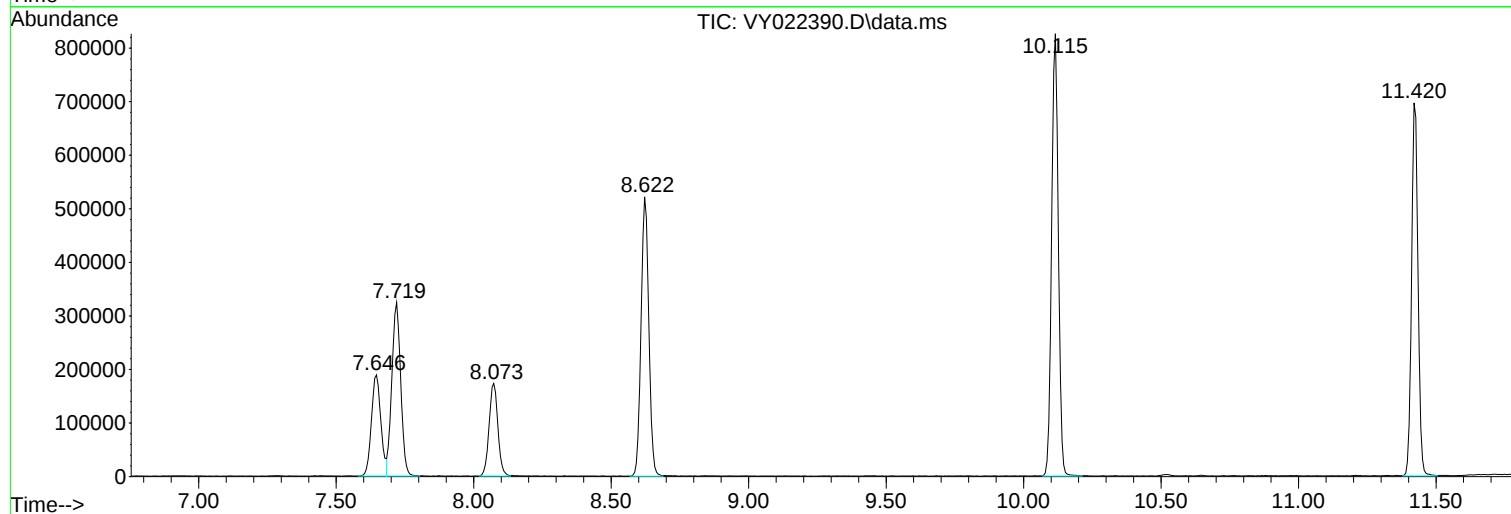
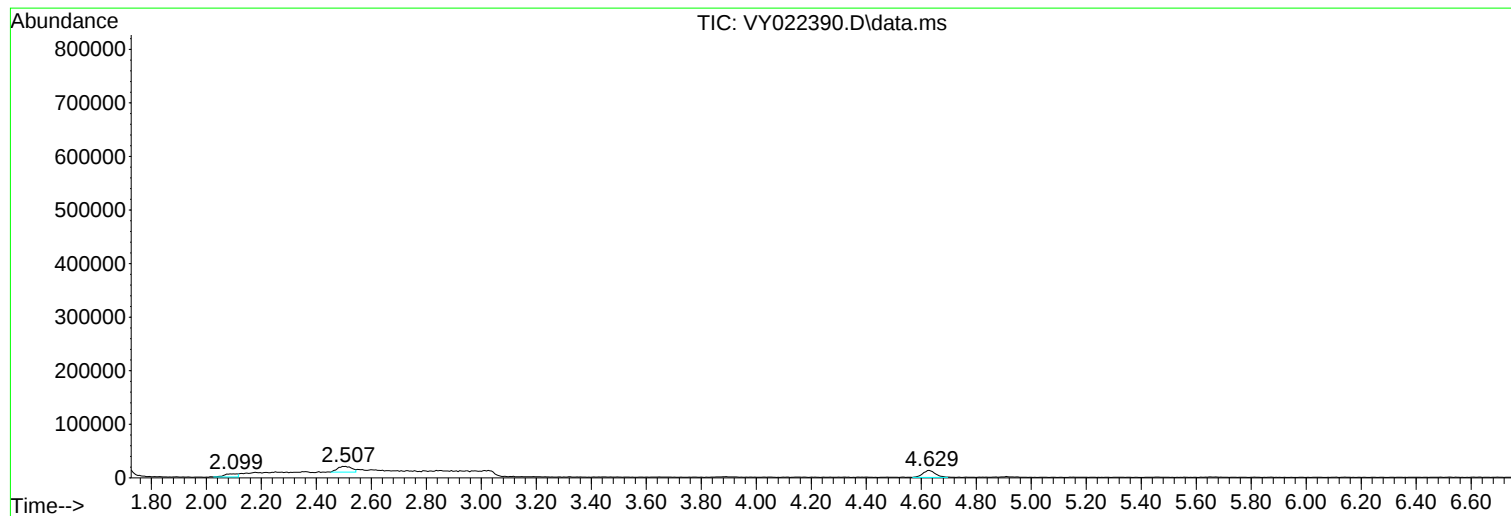
Sum of corrected areas: 7046595

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

A

B

C

D

E

F

G

H

I

J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

A

B

C

D

E

F

G

H

I

J

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022391.D
 Acq On : 22 May 2025 13:22
 Operator : SY/MD
 Sample : Q2074-03
 Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-15

A
B
C
D
E
F
G
H
I
J

Quant Time: May 23 03:37:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.720	168	266999	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	463257	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	360854	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	125655	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	132004	45.237	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	90.480%
35) Dibromofluoromethane	7.646	113	136878	49.504	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.000%
50) Toluene-d8	10.115	98	545447	48.166	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.340%
62) 4-Bromofluorobenzene	12.414	95	133077	37.075	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	74.160%

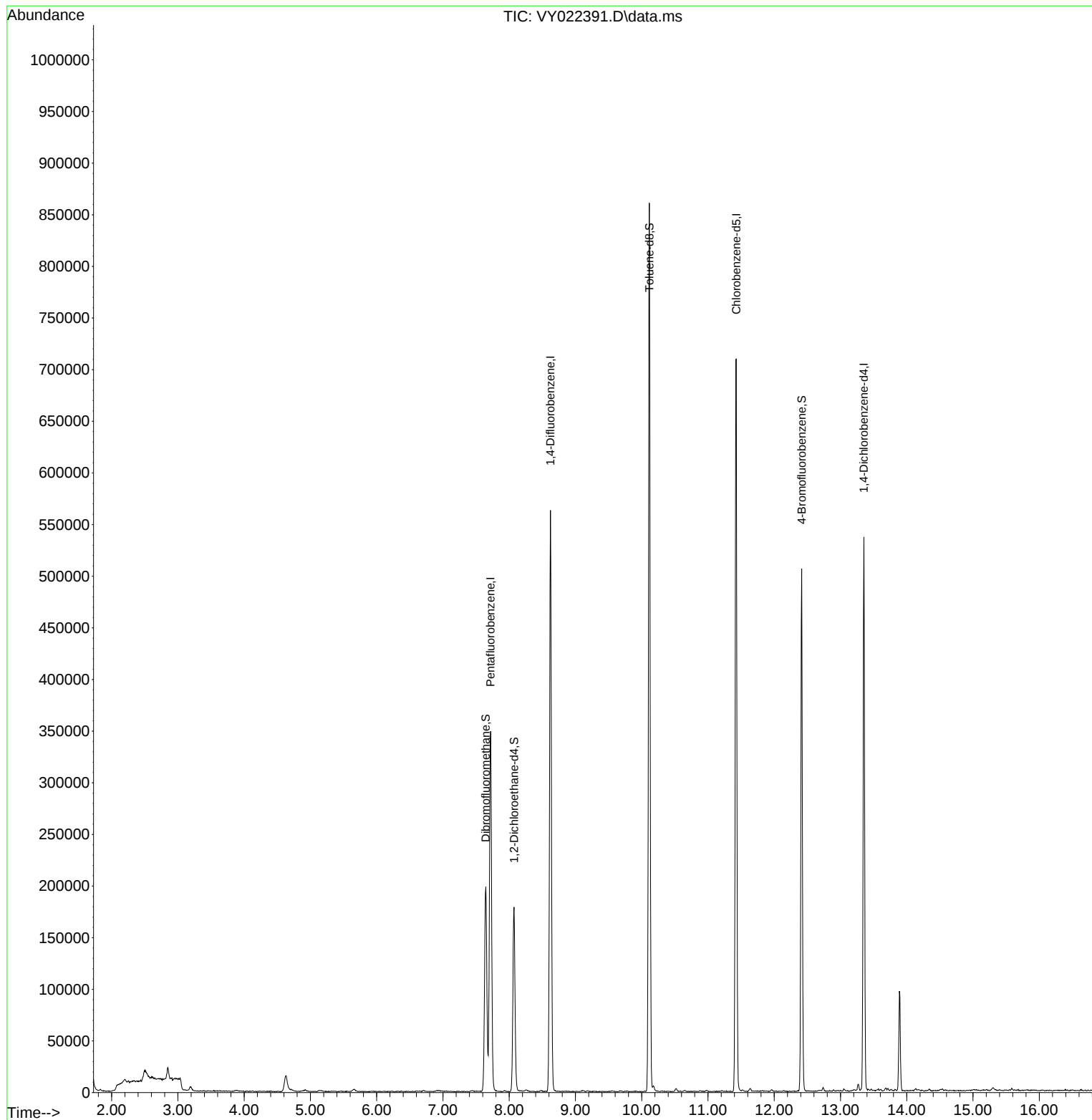
Target Compounds	Qvalue

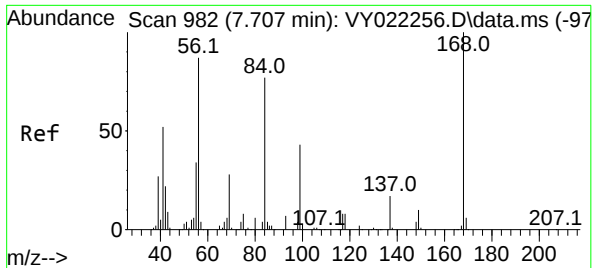
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Time: May 23 03:37:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

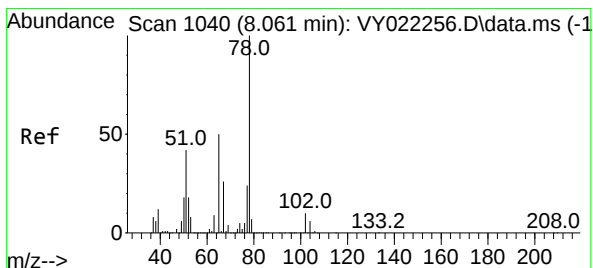
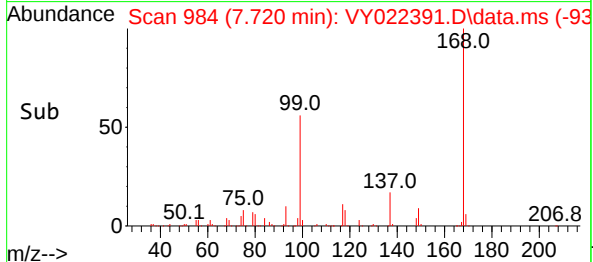
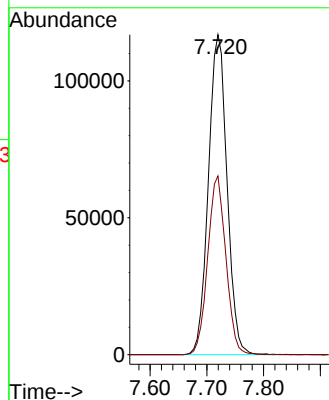
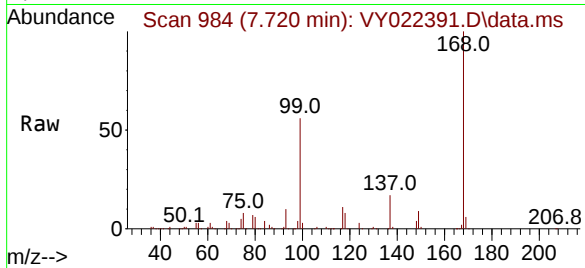




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.720 min Scan# 91
Delta R.T. 0.013 min
Lab File: VY022391.D
Acq: 22 May 2025 13:22

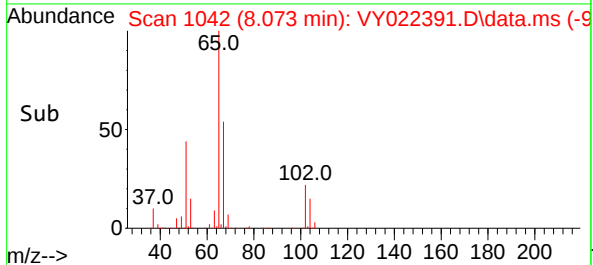
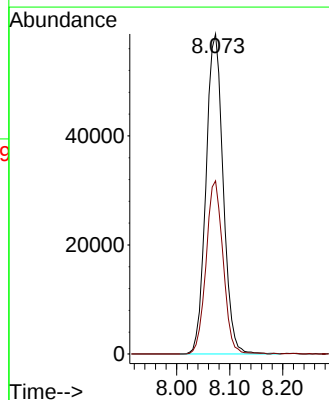
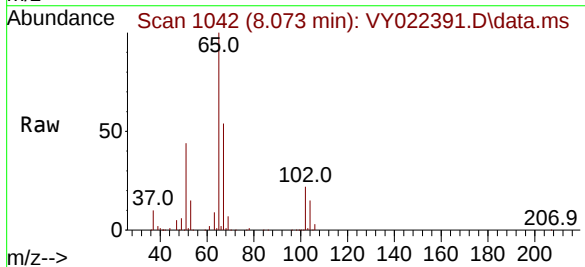
Instrument :
MSVOA_Y
ClientSampleId :
TP-15

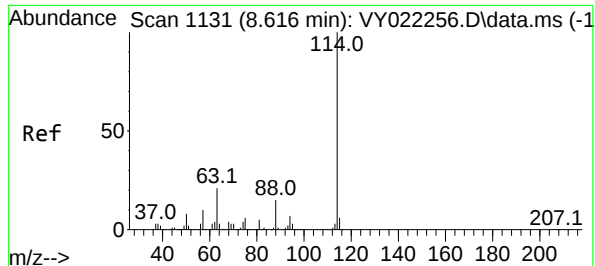
Tgt Ion:168 Resp: 266999
Ion Ratio Lower Upper
168 100
99 55.8 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 45.237 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022391.D
Acq: 22 May 2025 13:22

Tgt Ion: 65 Resp: 132004
Ion Ratio Lower Upper
65 100
67 53.4 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

TP-15

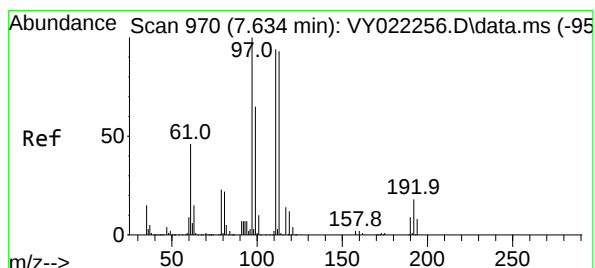
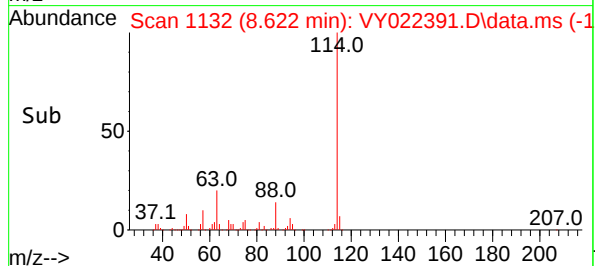
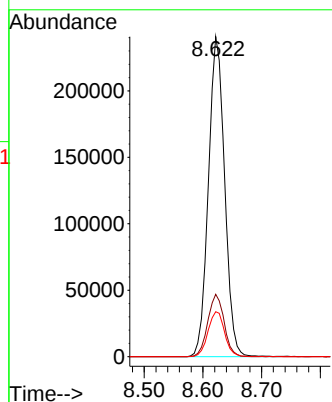
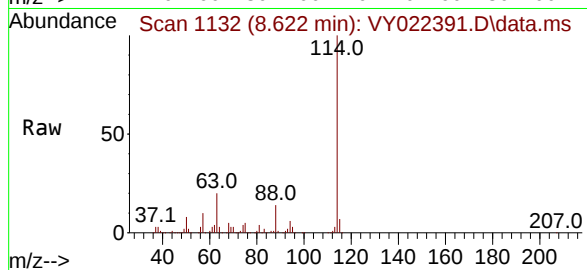
Tgt Ion:114 Resp: 463257

Ion Ratio Lower Upper

114 100

63 19.5 0.0 41.0

88 14.0 0.0 29.4



#35

Dibromofluoromethane

Concen: 49.504 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

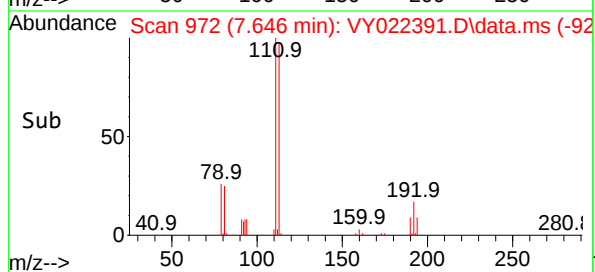
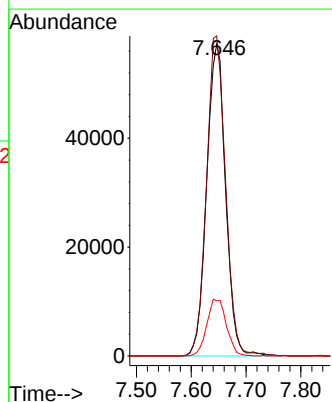
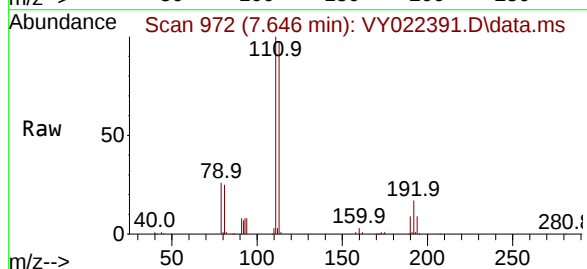
Tgt Ion:113 Resp: 136878

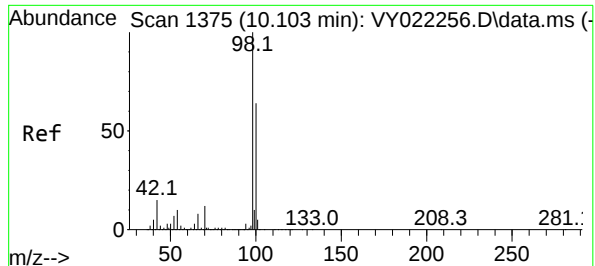
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.8 15.2 22.8





#50

Toluene-d8

Concen: 48.166 ug/l

RT: 10.115 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

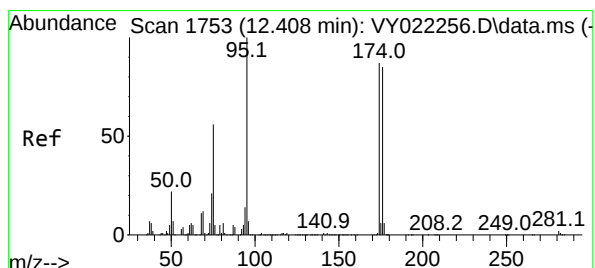
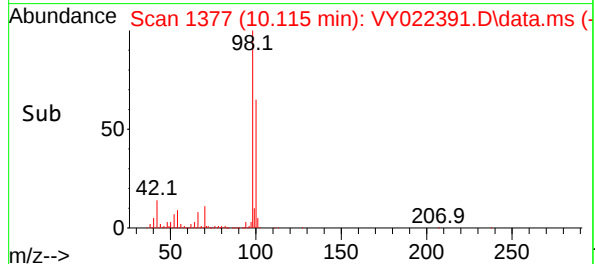
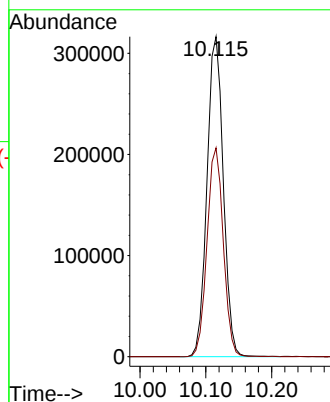
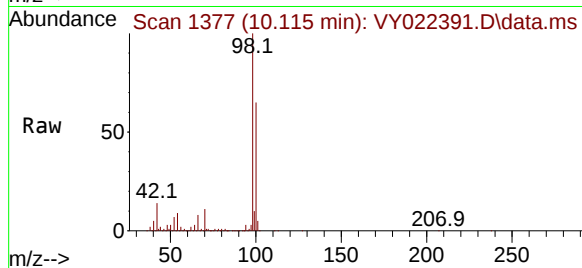
TP-15

Tgt Ion: 98 Resp: 545447

Ion Ratio Lower Upper

98 100

100 65.1 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 37.075 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

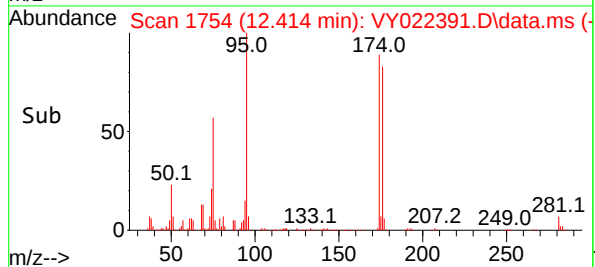
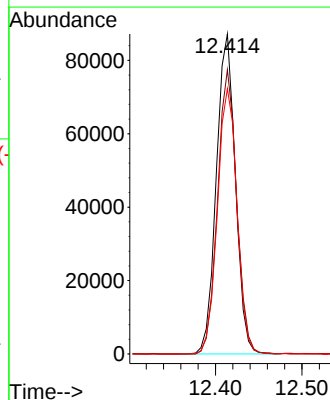
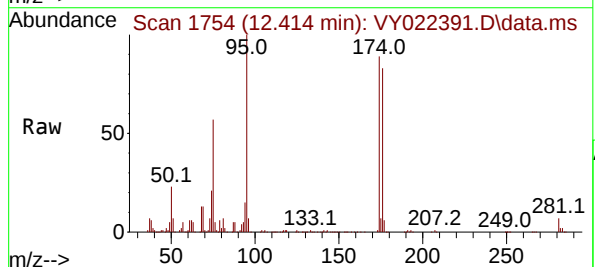
Tgt Ion: 95 Resp: 133077

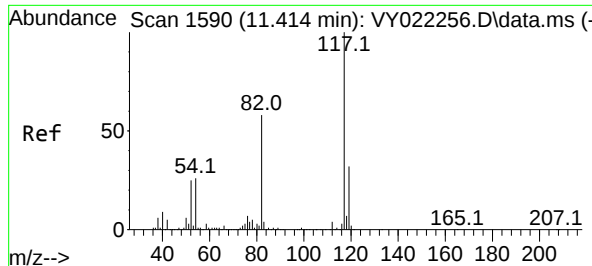
Ion Ratio Lower Upper

95 100

174 89.2 0.0 166.8

176 85.3 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 117

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

TP-15

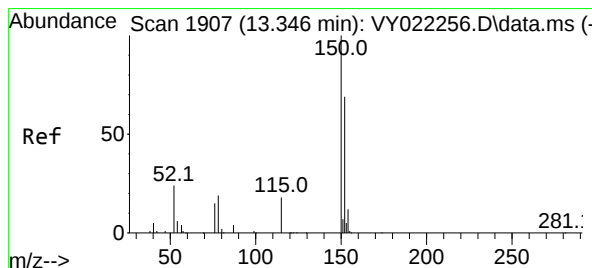
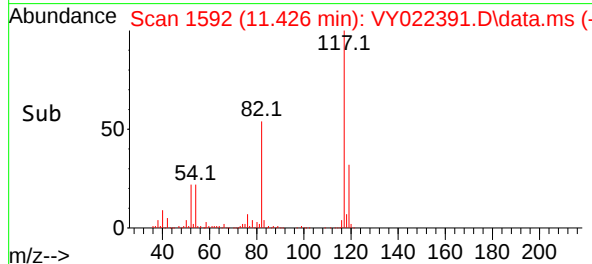
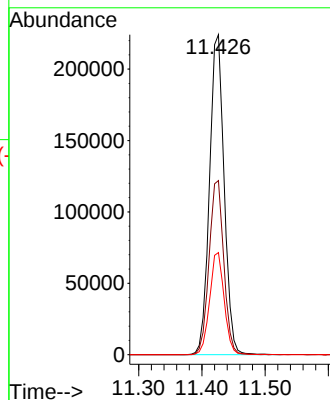
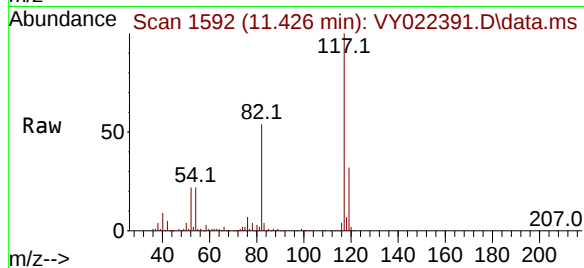
Tgt Ion:117 Resp: 360854

Ion Ratio Lower Upper

117 100

82 54.4 46.6 70.0

119 31.9 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

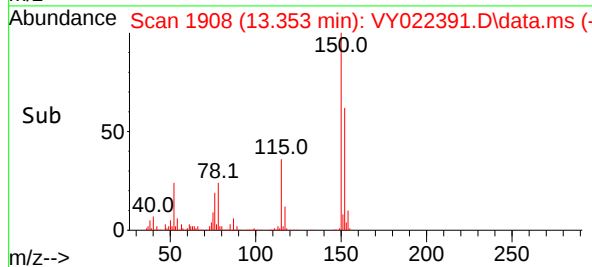
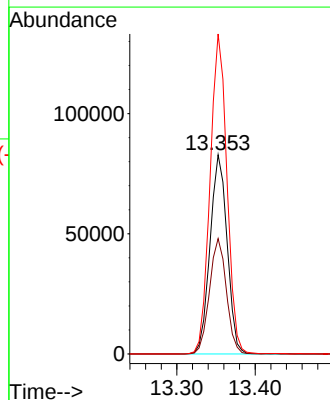
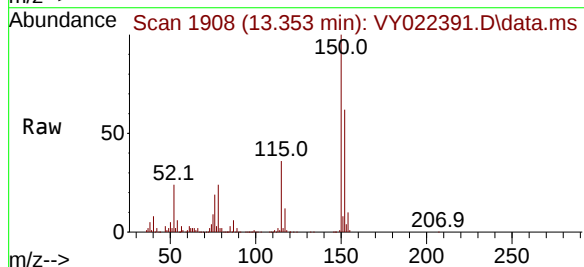
Tgt Ion:152 Resp: 125655

Ion Ratio Lower Upper

152 100

115 57.2 29.4 88.2

150 158.0 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

A
B
C
D
E
F
G
H
I
J

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022391.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.123	53	66	68	rBV8	6664	25660	1.73%	0.351%
2	2.507	119	129	141	rBV6	11117	50404	3.40%	0.689%
3	2.848	180	185	191	rVB4	10782	19363	1.31%	0.265%
4	4.635	466	478	488	rBV3	15388	53534	3.61%	0.731%
5	7.646	960	972	978	rBV	198210	480934	32.45%	6.571%
6	7.720	978	984	997	rVB	348429	785755	53.02%	10.735%
7	8.073	1031	1042	1052	rBV	178728	400254	27.01%	5.468%
8	8.622	1124	1132	1144	rBV	562668	1081995	73.00%	14.782%
9	10.115	1368	1377	1385	rBV	860408	1482105	100.00%	20.249%
10	11.426	1581	1592	1605	rBV	709330	1168032	78.81%	15.958%
11	12.414	1746	1754	1763	rBV	505972	801221	54.06%	10.946%
12	13.353	1898	1908	1917	rVV	535760	814991	54.99%	11.134%
13	13.889	1989	1996	2003	rVB	96613	155272	10.48%	2.121%

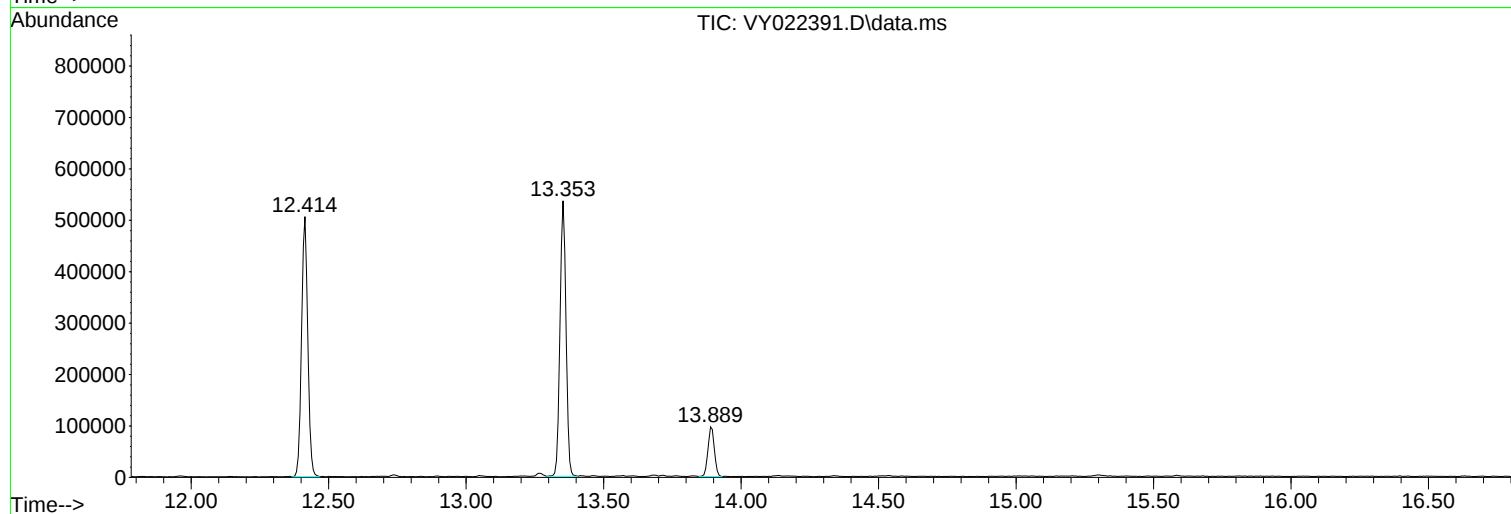
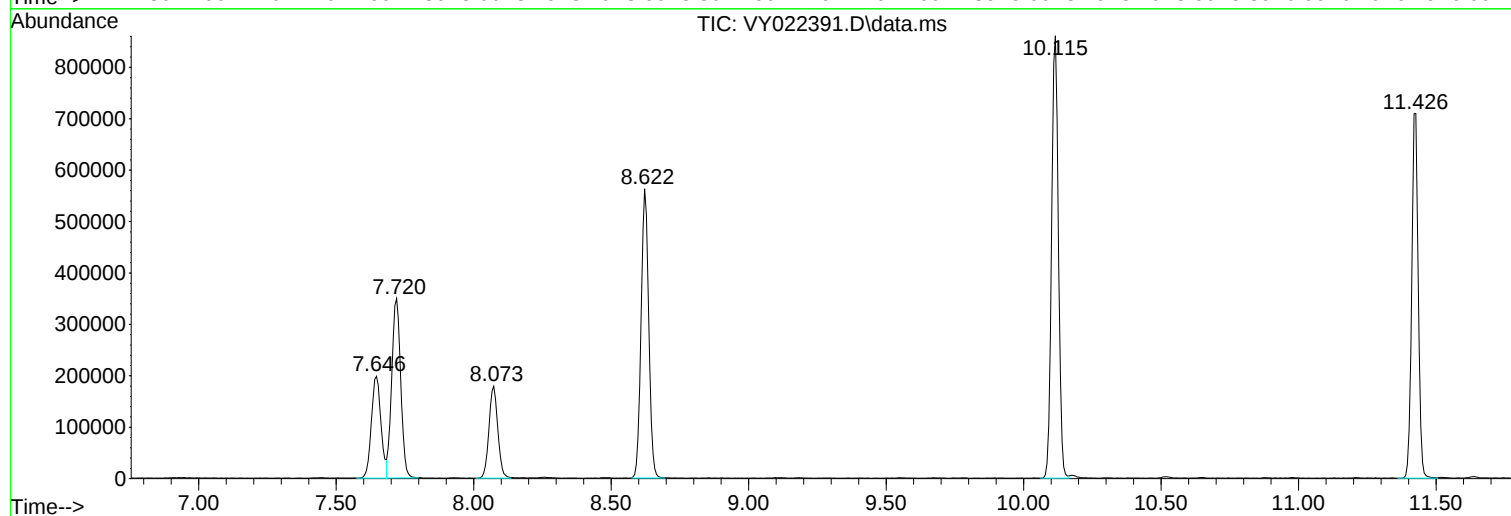
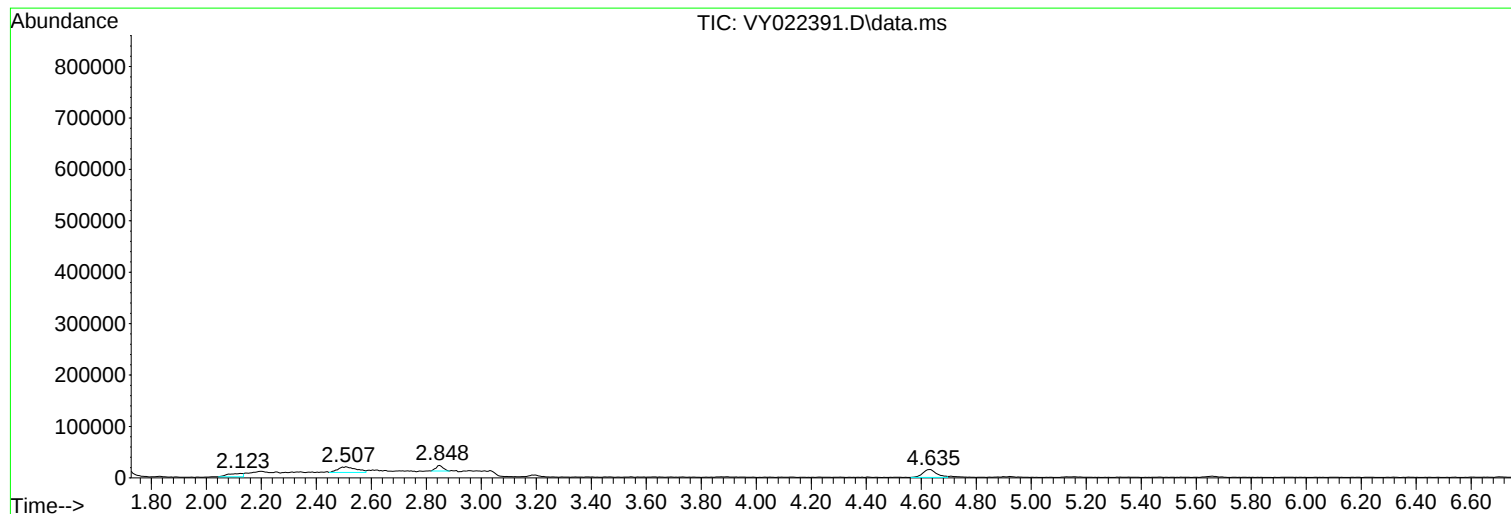
Sum of corrected areas: 7319520

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

A

B

C

D

E

F

G

H

I

J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

A

B

C

D

E

F

G

H

I

J

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022392.D
 Acq On : 22 May 2025 13:45
 Operator : SY/MD
 Sample : Q2074-04
 Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-20

A
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Quant Time: May 23 03:37:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

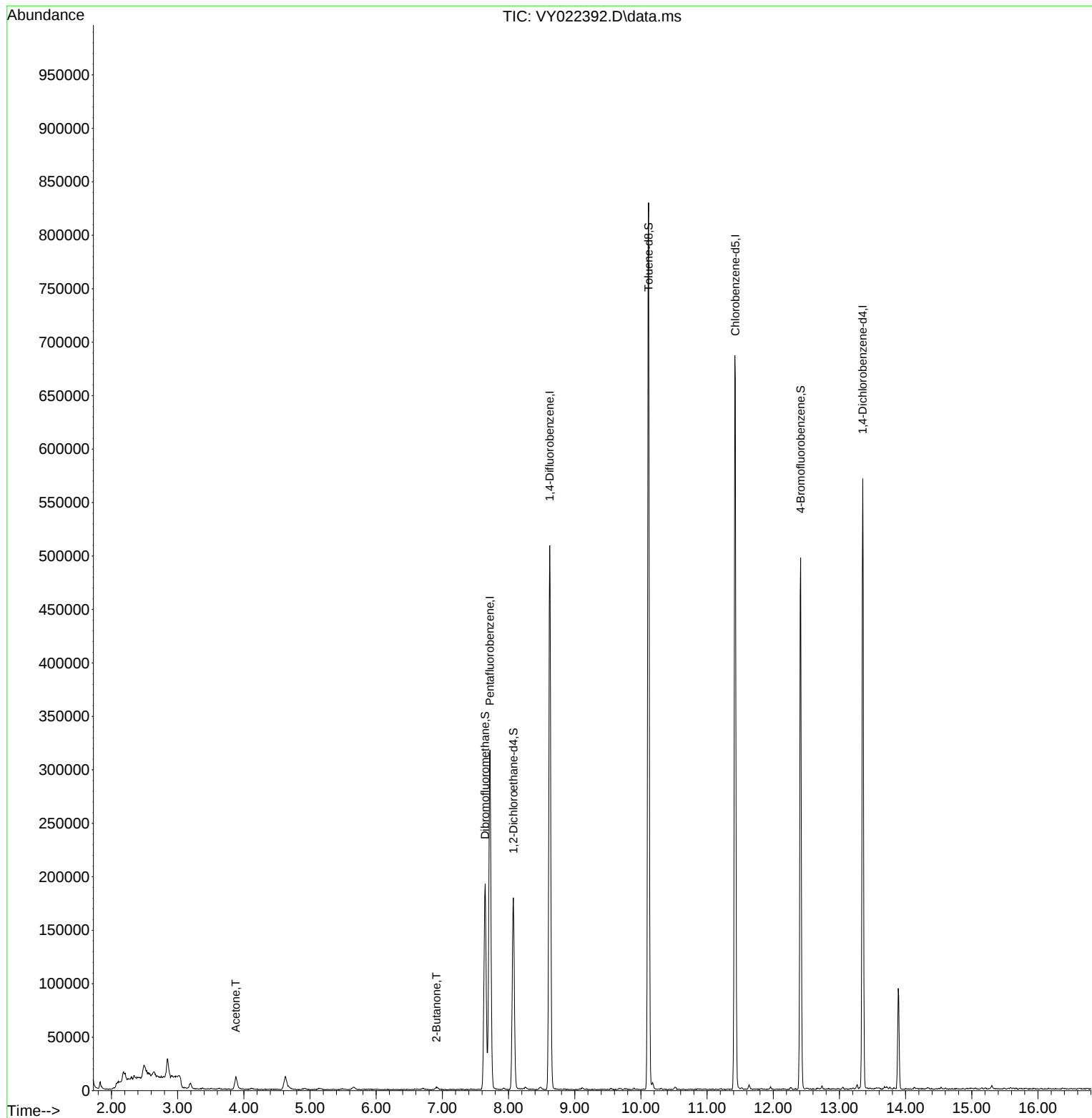
Internal Standards						
1) Pentafluorobenzene	7.719	168	243454	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	431875	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	349983	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	131238	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	132631	49.848	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	99.700%
35) Dibromofluoromethane	7.646	113	130701	50.705	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.400%
50) Toluene-d8	10.115	98	520772	49.329	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	98.660%
62) 4-Bromofluorobenzene	12.414	95	134355	40.151	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.300%
Target Compounds						
					Qvalue	
16) Acetone	3.879	43	20631	41.353	ug/l	95
25) 2-Butanone	6.909	43	3046	3.650	ug/l	96

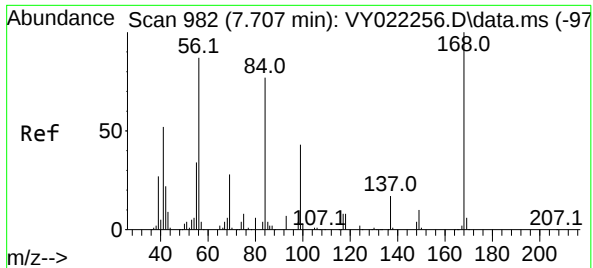
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Time: May 23 03:37:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

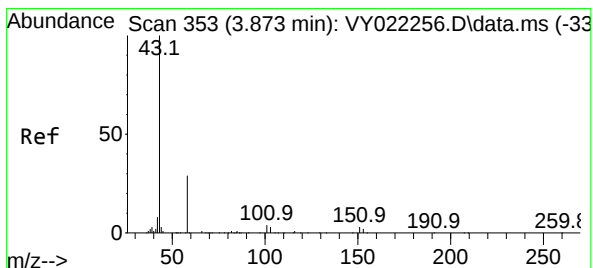
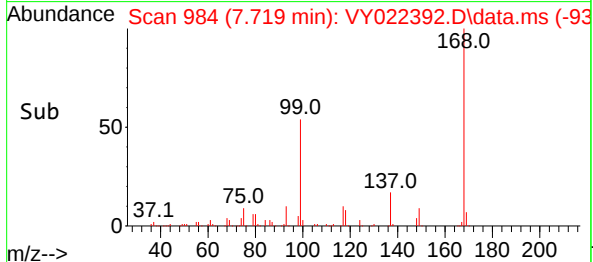
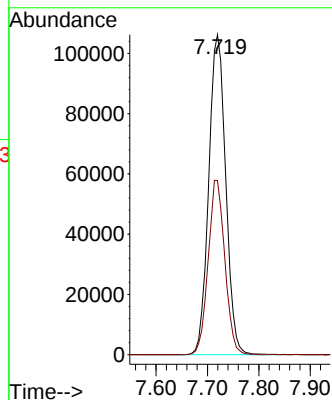
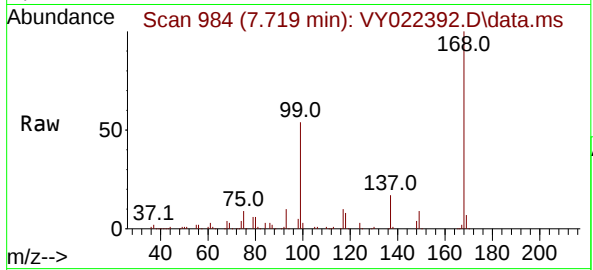




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

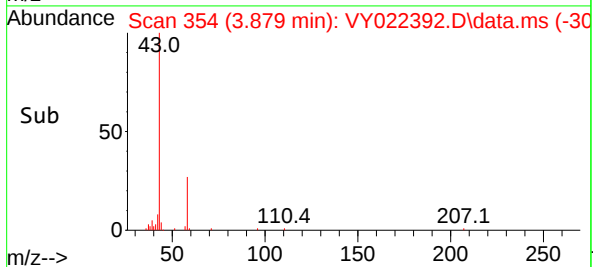
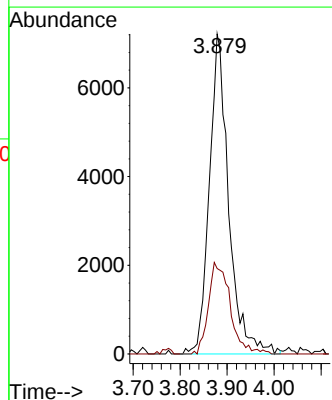
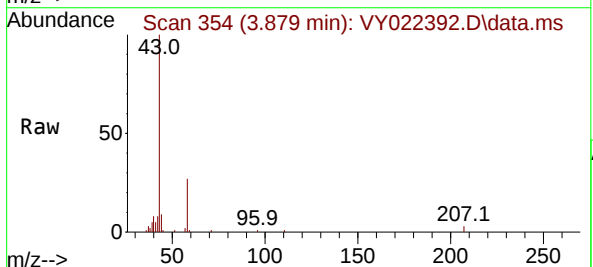
Instrument :
MSVOA_Y
ClientSampleId :
TP-20

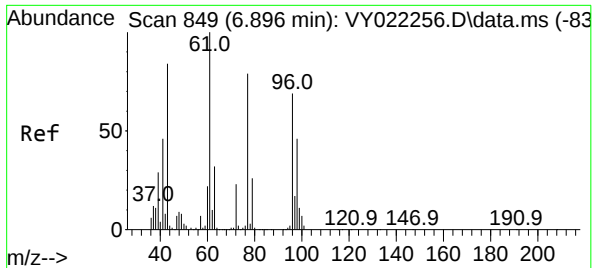
Tgt Ion:168 Resp: 243454
Ion Ratio Lower Upper
168 100
99 54.4 44.2 66.4



#16
Acetone
Concen: 41.353 ug/l
RT: 3.879 min Scan# 354
Delta R.T. 0.006 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

Tgt Ion: 43 Resp: 20631
Ion Ratio Lower Upper
43 100
58 26.7 23.6 35.4





#25

2-Butanone

Concen: 3.650 ug/l

RT: 6.909 min Scan# 8

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

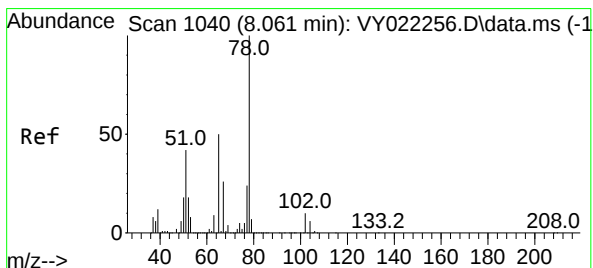
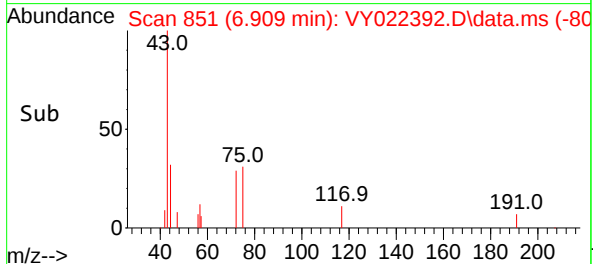
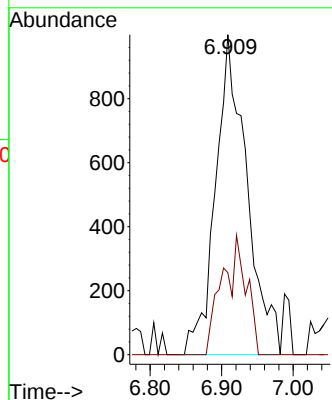
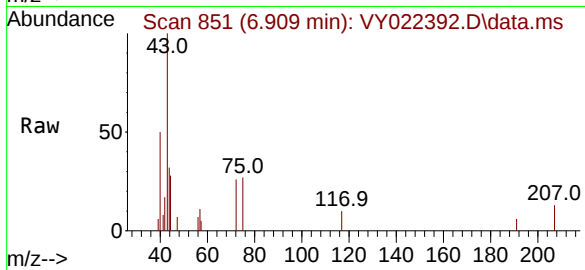
TP-20

Tgt Ion: 43 Resp: 3046

Ion Ratio Lower Upper

43 100

72 25.6 22.1 33.1



#33

1,2-Dichloroethane-d4

Concen: 49.848 ug/l

RT: 8.073 min Scan# 1042

Delta R.T. 0.012 min

Lab File: VY022392.D

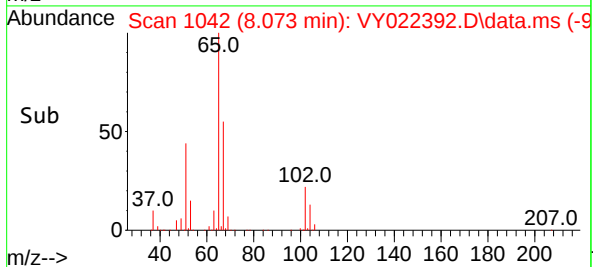
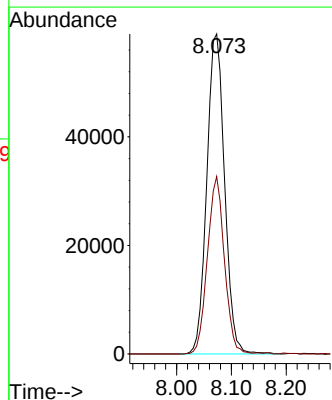
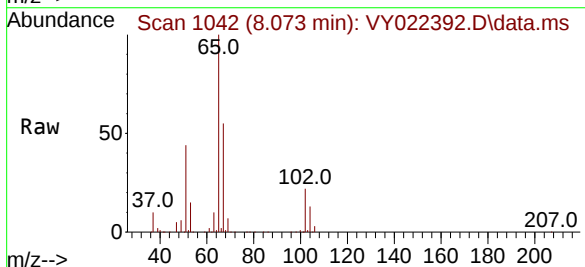
Acq: 22 May 2025 13:45

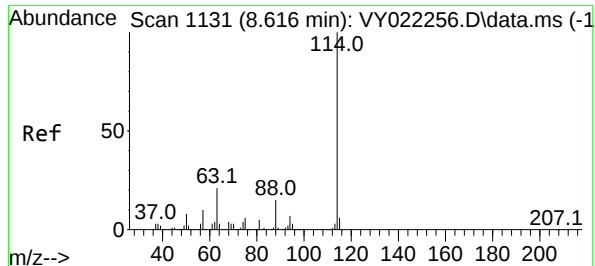
Tgt Ion: 65 Resp: 132631

Ion Ratio Lower Upper

65 100

67 52.9 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

TP-20

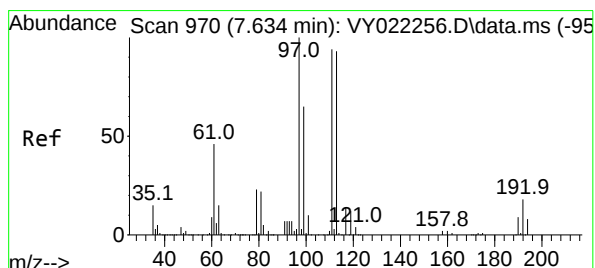
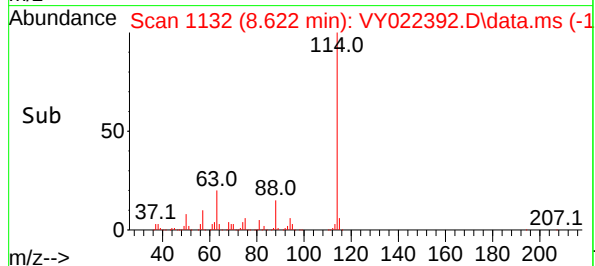
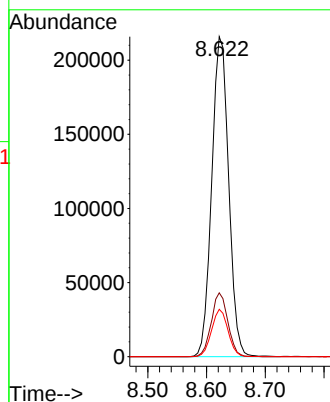
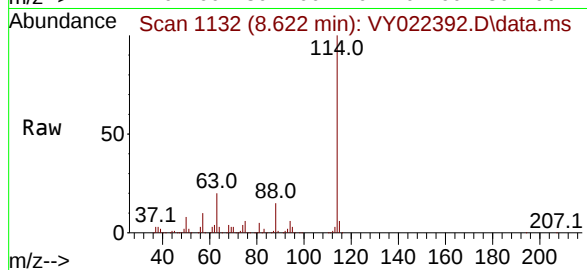
Tgt Ion:114 Resp: 431875

Ion Ratio Lower Upper

114 100

63 20.0 0.0 41.0

88 14.8 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.705 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

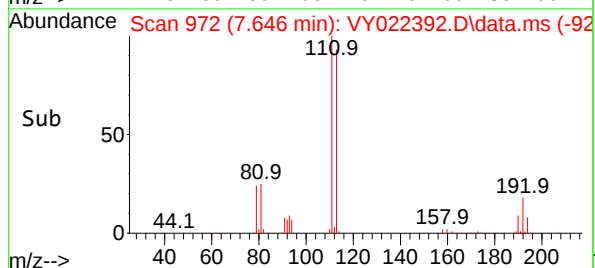
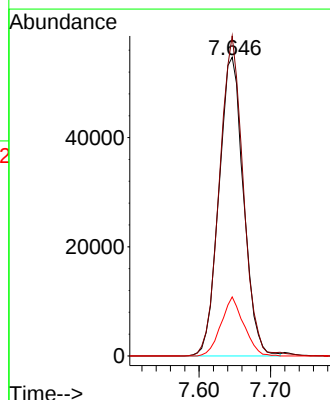
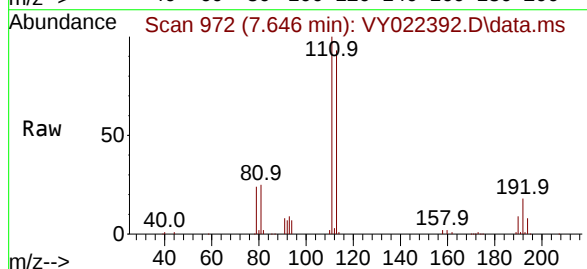
Tgt Ion:113 Resp: 130701

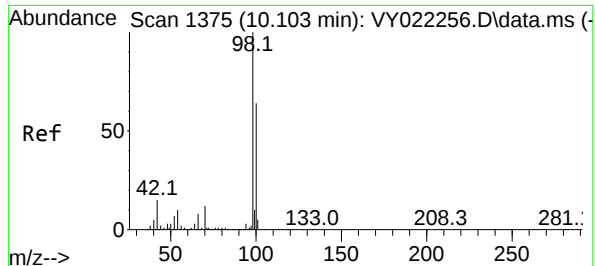
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.3 15.2 22.8





#50

Toluene-d8

Concen: 49.329 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

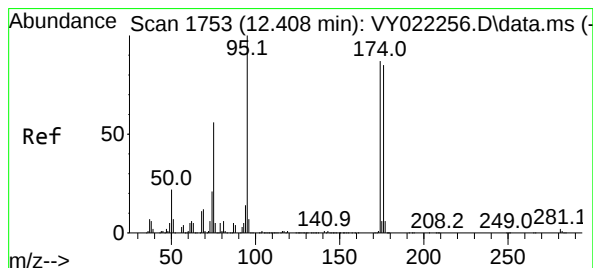
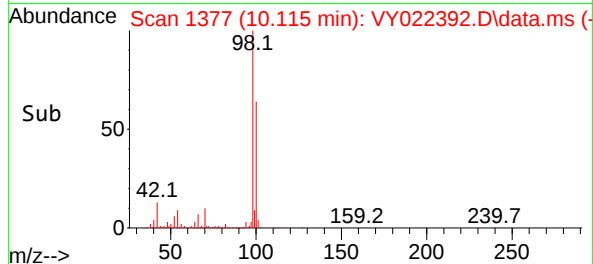
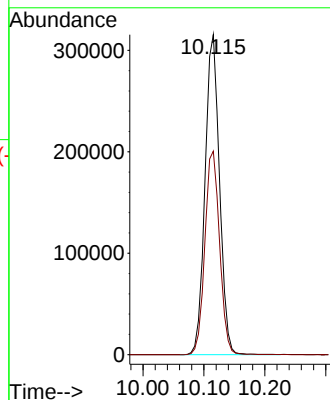
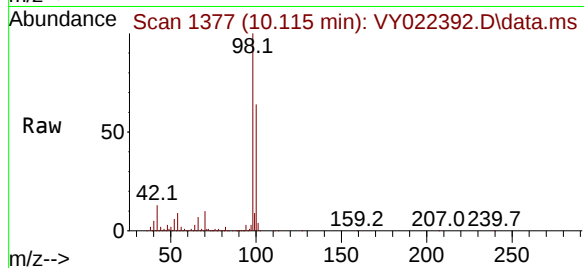
TP-20

Tgt Ion: 98 Resp: 520772

Ion Ratio Lower Upper

98 100

100 64.6 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 40.151 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

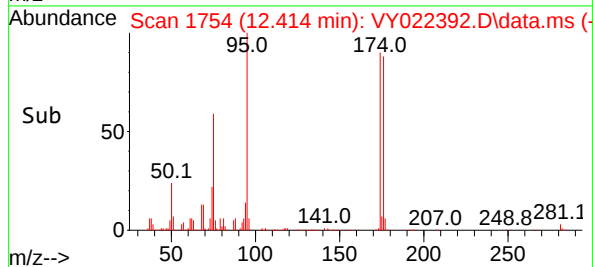
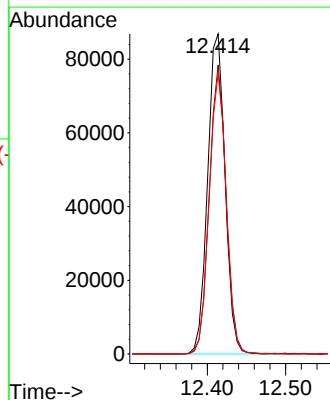
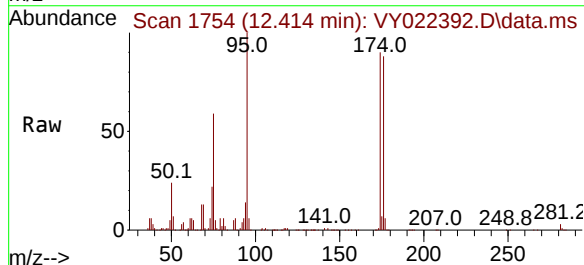
Tgt Ion: 95 Resp: 134355

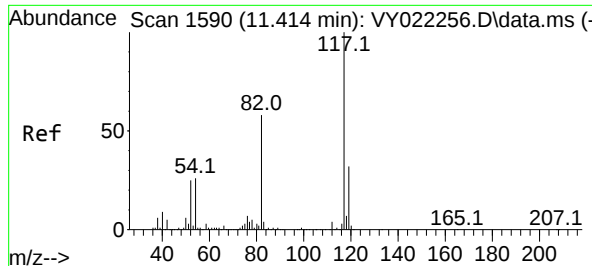
Ion Ratio Lower Upper

95 100

174 86.6 0.0 166.8

176 85.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

TP-20

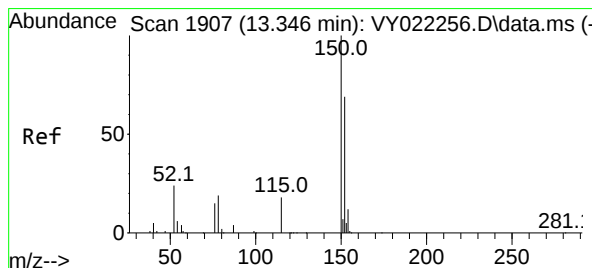
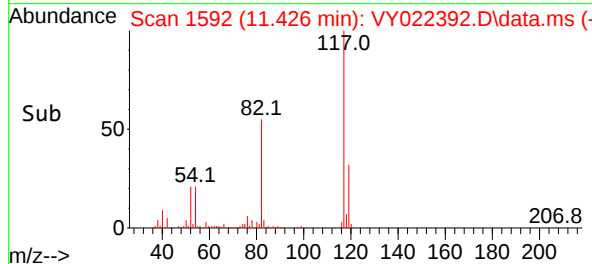
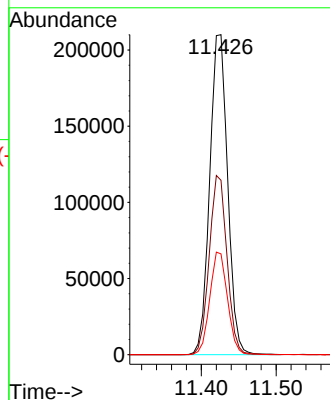
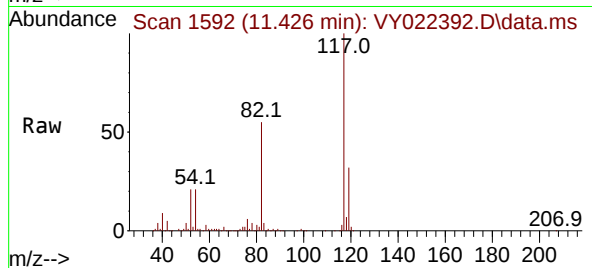
Tgt Ion:117 Resp: 349983

Ion Ratio Lower Upper

117 100

82 54.5 46.6 70.0

119 31.5 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

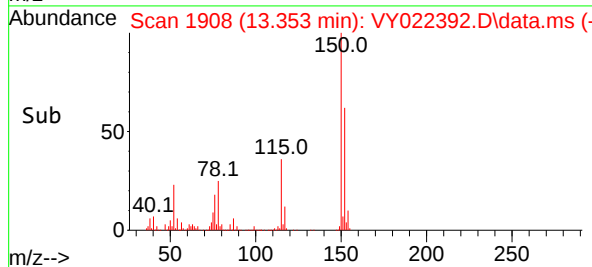
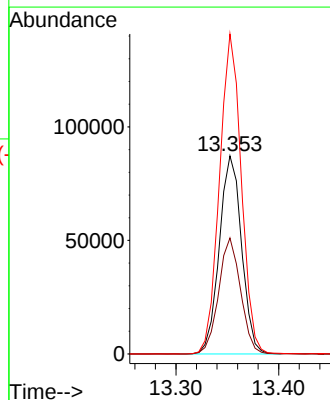
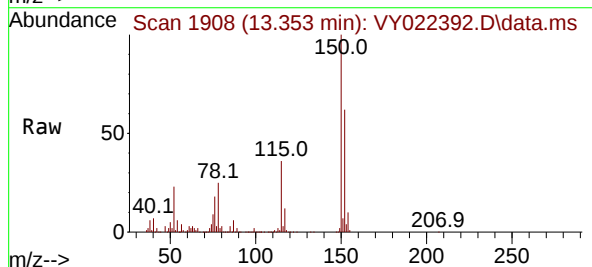
Tgt Ion:152 Resp: 131238

Ion Ratio Lower Upper

152 100

115 57.5 29.4 88.2

150 158.0 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022392.D
 Acq On : 22 May 2025 13:45
 Operator : SY/MD
 Sample : Q2074-04
 Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-20

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022392.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.184	70	76	78	rBV	9270	17769	1.27%	0.252%
2	2.489	120	126	132	rBV3	11084	30781	2.20%	0.436%
3	2.848	178	185	192	rVB2	17453	40922	2.92%	0.580%
4	3.879	342	354	365	rBV2	11875	33952	2.42%	0.481%
5	4.629	465	477	483	rBV3	12294	37142	2.65%	0.526%
6	7.646	962	972	978	rBV	191941	457678	32.67%	6.484%
7	7.719	978	984	994	rVB	316302	713363	50.93%	10.107%
8	8.073	1032	1042	1053	rBV	179491	399700	28.54%	5.663%
9	8.622	1123	1132	1145	rBV	508895	1010434	72.14%	14.315%
10	10.115	1369	1377	1385	rBV	829253	1400704	100.00%	19.844%
11	11.420	1584	1591	1604	rBV	686678	1137347	81.20%	16.113%
12	12.414	1747	1754	1765	rBV	496895	775511	55.37%	10.987%
13	13.353	1898	1908	1916	rBV	570565	853546	60.94%	12.093%
14	13.889	1990	1996	2007	rVB2	94462	149604	10.68%	2.120%

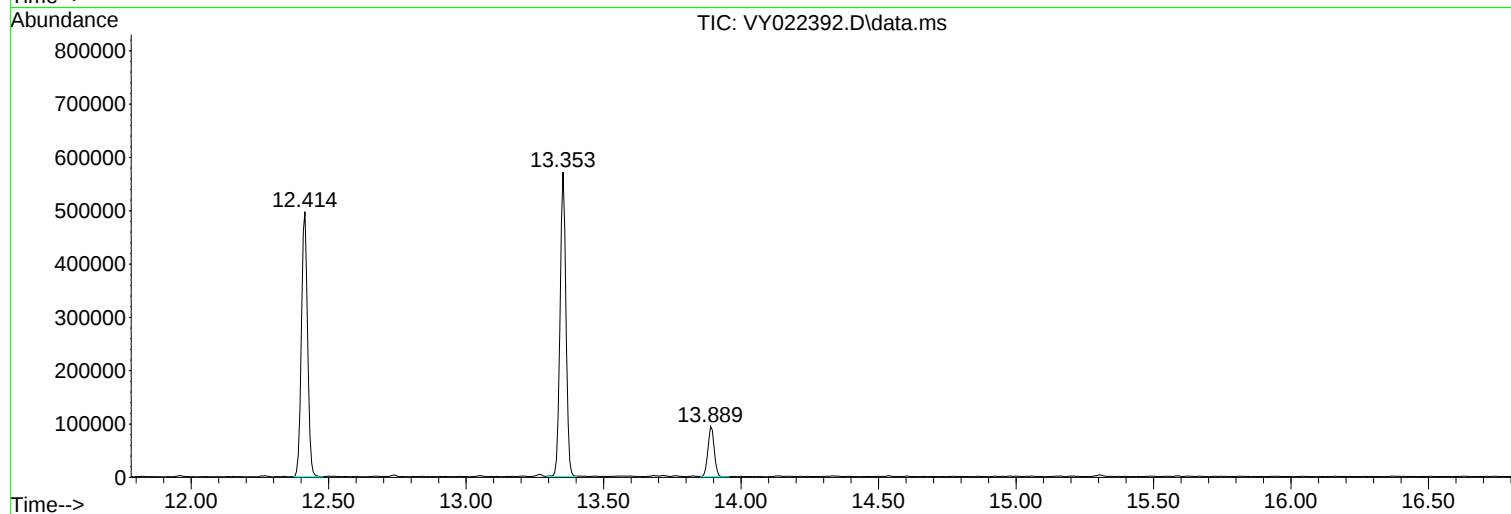
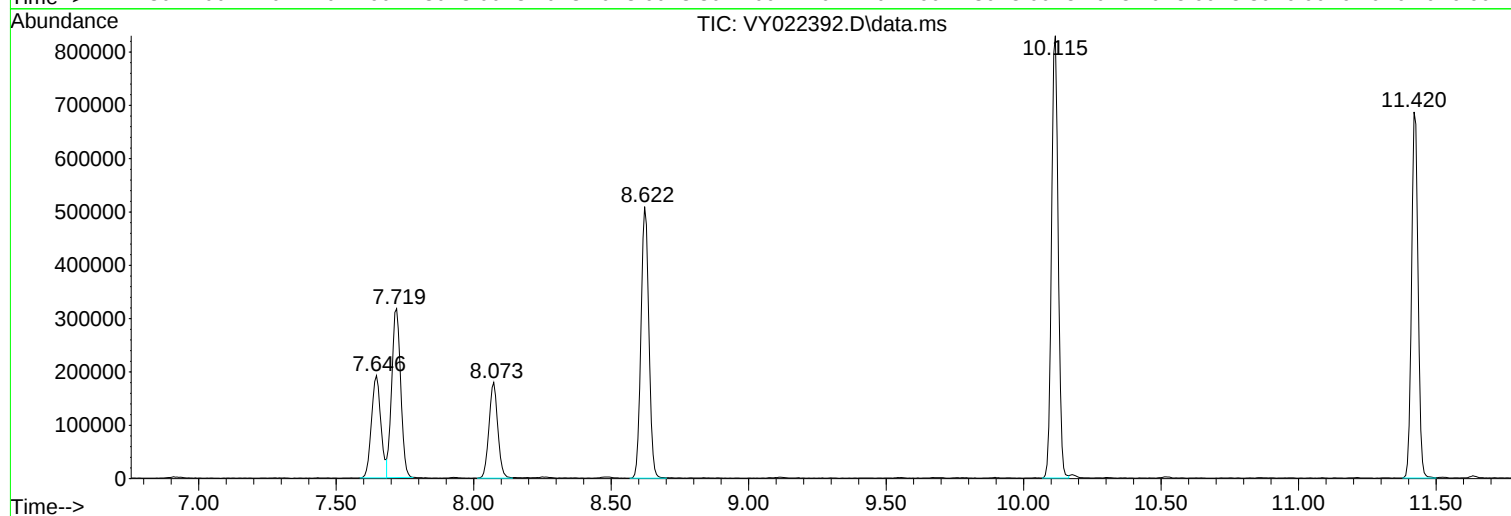
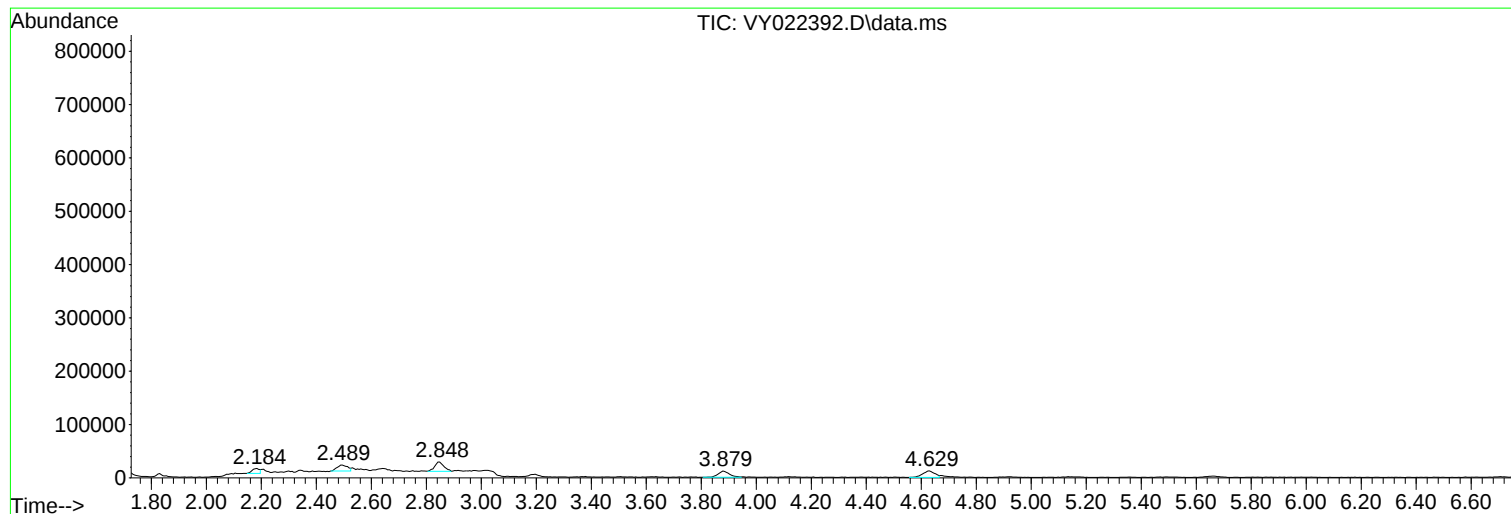
Sum of corrected areas: 7058453

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

A

B

C

D

E

F

G

H

I

J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

A

B

C

D

E

F

G

H

I

J

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Time: May 23 03:37:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

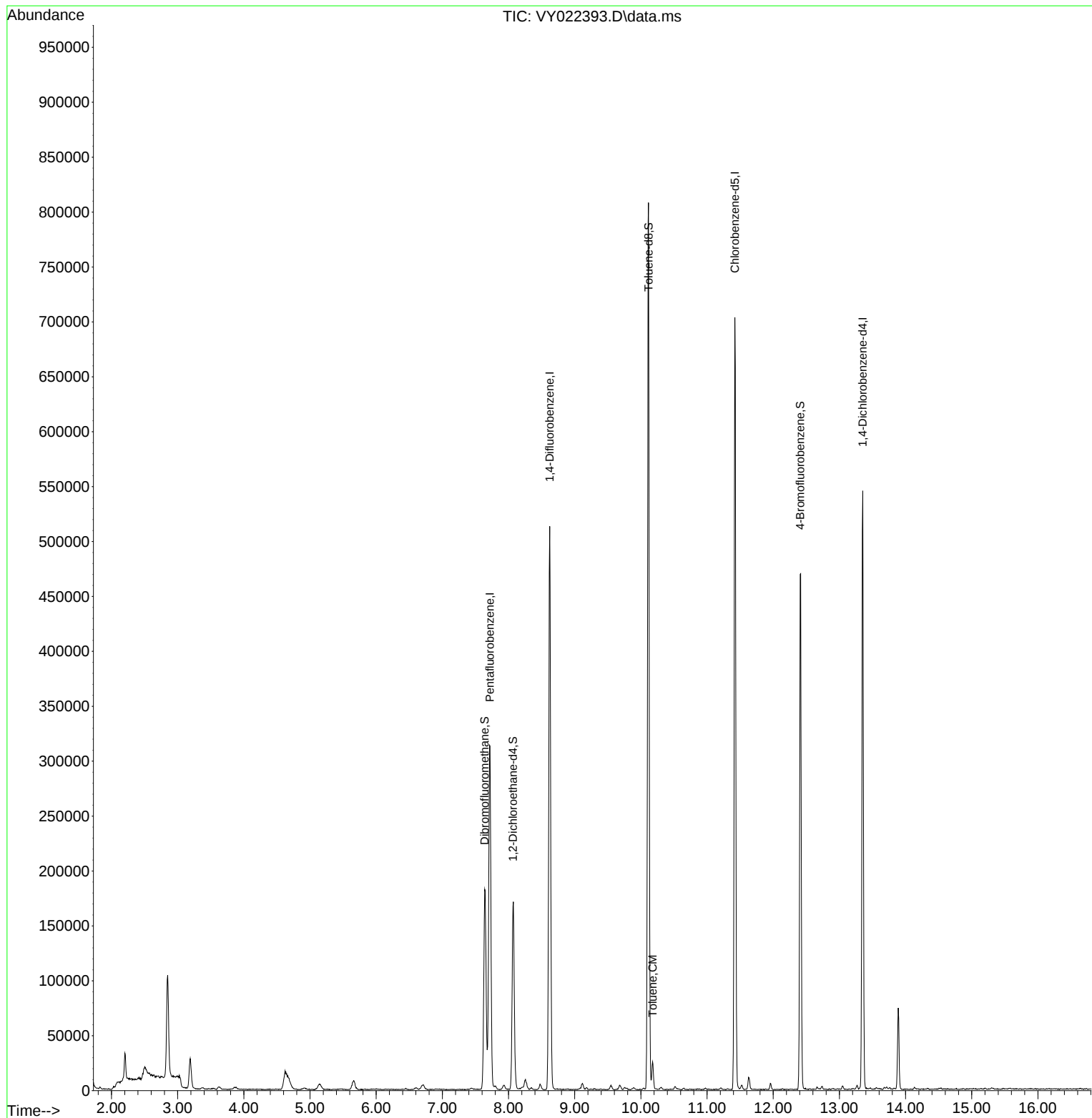
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.720	168	242112	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	427478	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	344204	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	128188	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	125709	47.508	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	95.020%
35) Dibromofluoromethane	7.640	113	129435	50.730	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.460%
50) Toluene-d8	10.115	98	512091	49.006	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	98.020%
62) 4-Bromofluorobenzene	12.408	95	131623	39.739	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.480%
Target Compounds						
52) Toluene	10.176	92	9715	1.231	ug/l	Qvalue 99

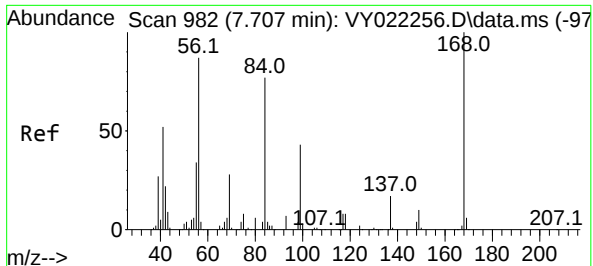
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Time: May 23 03:37:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

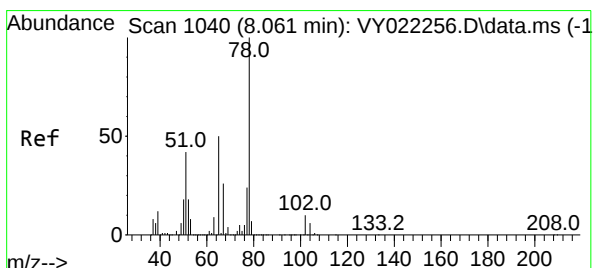
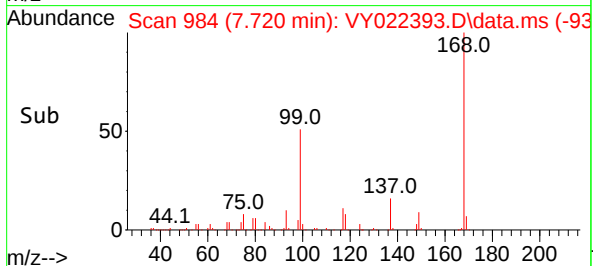
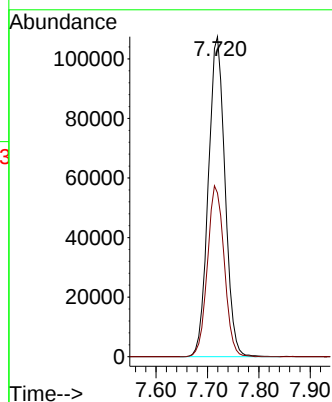
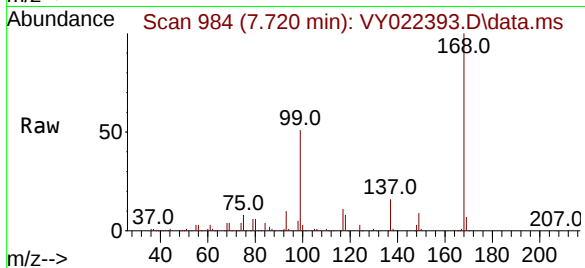




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.720 min Scan# 982
Delta R.T. 0.013 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

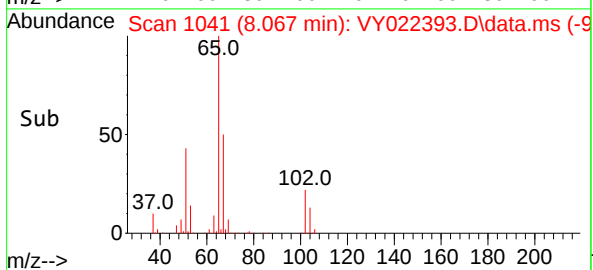
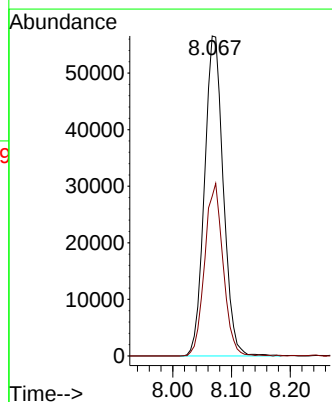
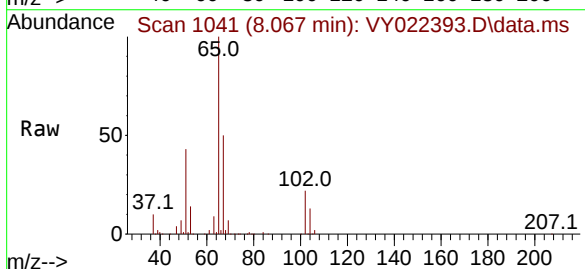
Instrument :
MSVOA_Y
ClientSampleId :
TP-38

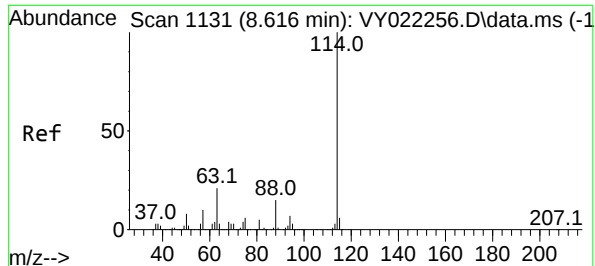
Tgt Ion:168 Resp: 242112
Ion Ratio Lower Upper
168 100
99 51.1 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 47.508 ug/l
RT: 8.067 min Scan# 1041
Delta R.T. 0.006 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

Tgt Ion: 65 Resp: 125709
Ion Ratio Lower Upper
65 100
67 52.8 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

Instrument :

MSVOA_Y

ClientSampleId :

TP-38

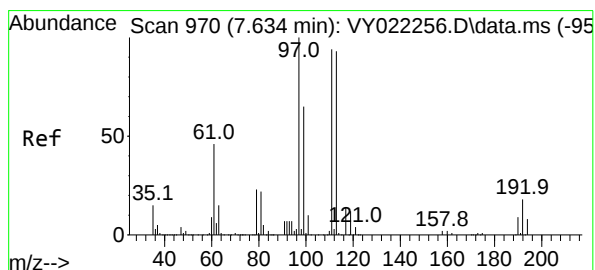
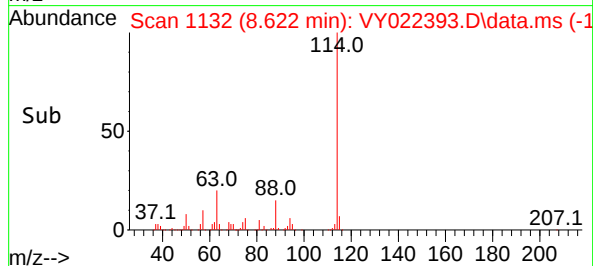
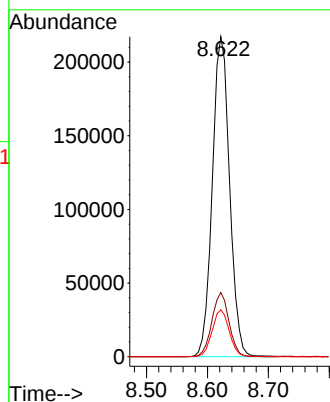
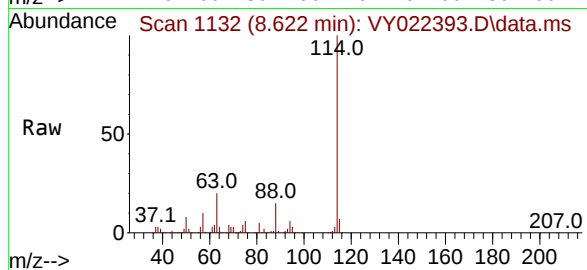
Tgt Ion:114 Resp: 427478

Ion Ratio Lower Upper

114 100

63 20.1 0.0 41.0

88 14.7 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.730 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

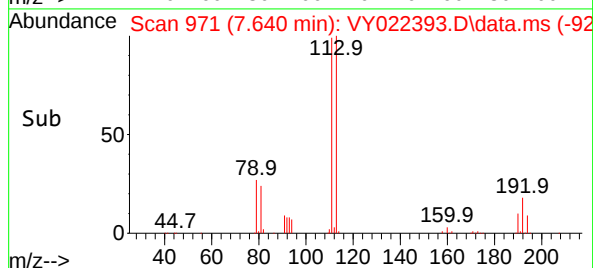
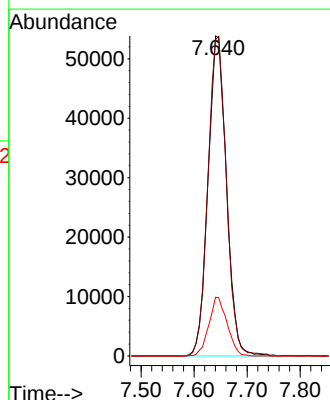
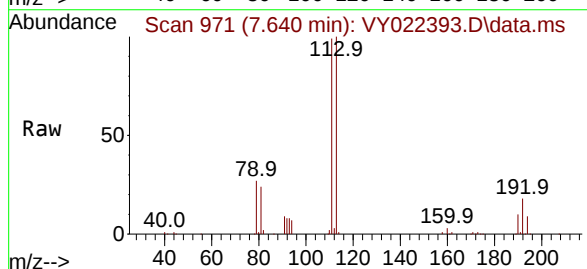
Tgt Ion:113 Resp: 129435

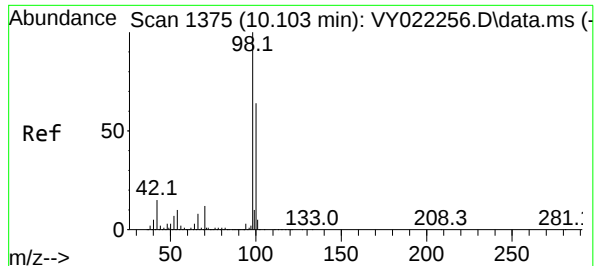
Ion Ratio Lower Upper

113 100

111 100.8 82.6 123.8

192 18.2 15.2 22.8

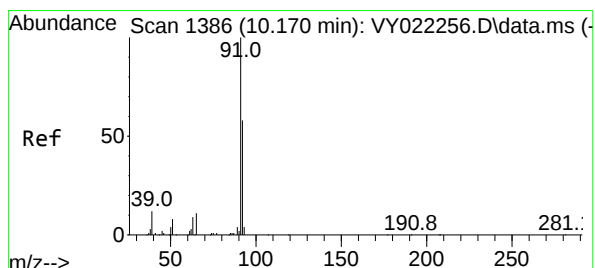
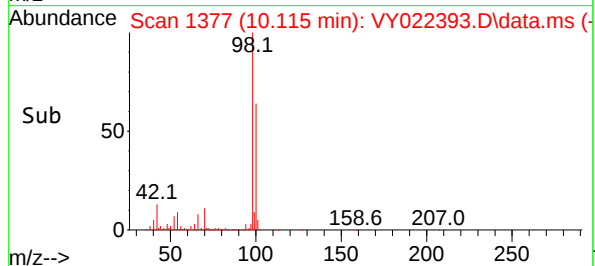
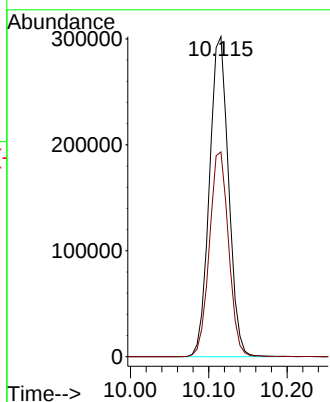
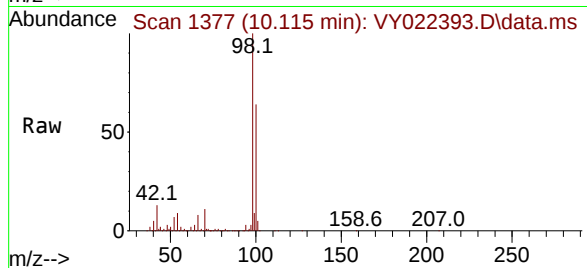




#50
Toluene-d8
Concen: 49.006 ug/l
RT: 10.115 min Scan# 11
Delta R.T. 0.012 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

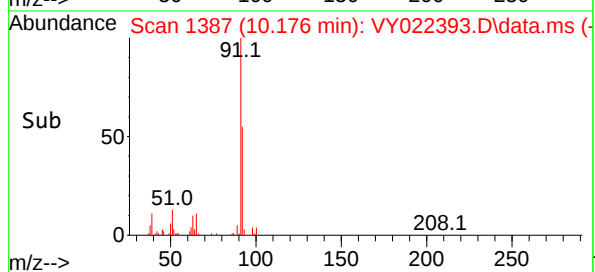
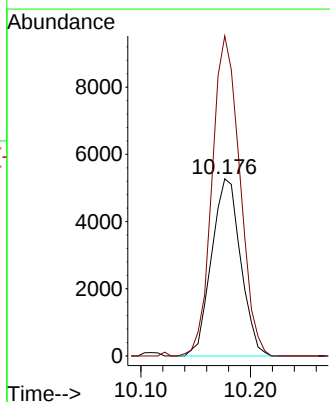
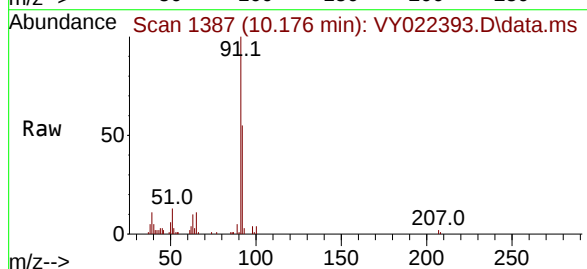
Instrument :
MSVOA_Y
ClientSampleId :
TP-38

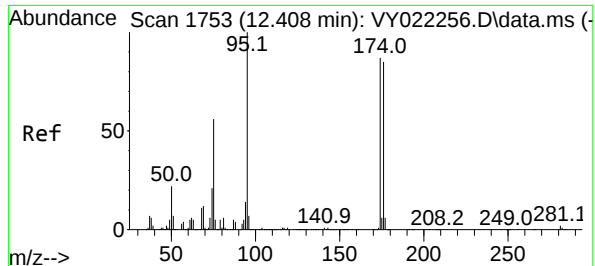
Tgt Ion: 98 Resp: 512091
Ion Ratio Lower Upper
98 100
100 64.4 51.8 77.8



#52
Toluene
Concen: 1.231 ug/l
RT: 10.176 min Scan# 1387
Delta R.T. 0.006 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

Tgt Ion: 92 Resp: 9715
Ion Ratio Lower Upper
92 100
91 172.5 139.1 208.7





#62

4-Bromofluorobenzene

Concen: 39.739 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

Instrument :

MSVOA_Y

ClientSampleId :

TP-38

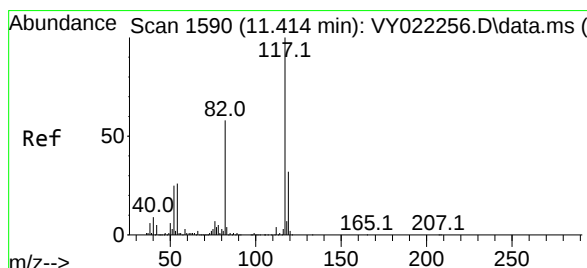
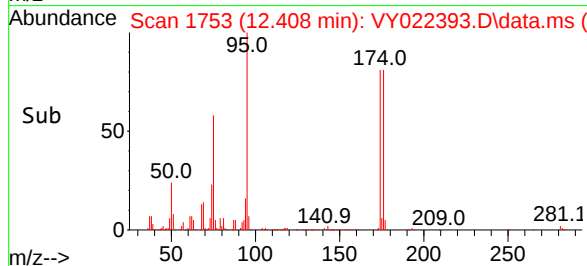
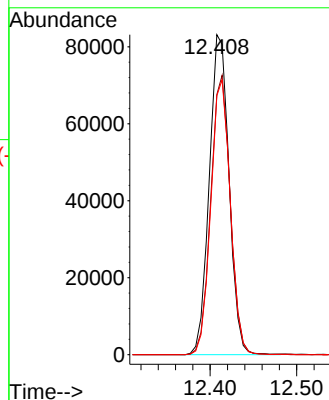
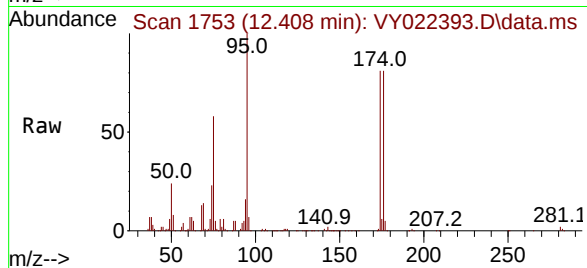
Tgt Ion: 95 Resp: 131623

Ion Ratio Lower Upper

95 100

174 86.1 0.0 166.8

176 84.5 0.0 160.8



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.006 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

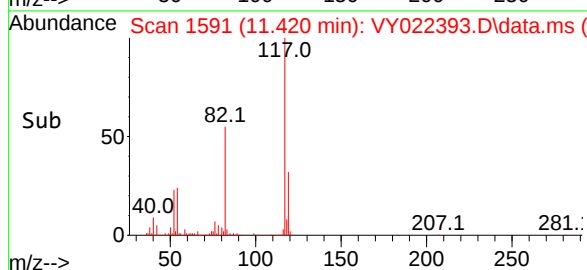
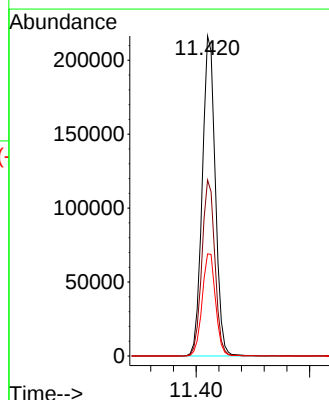
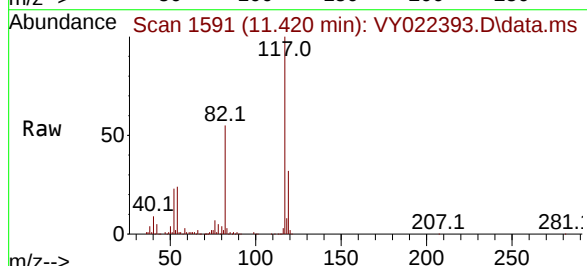
Tgt Ion: 117 Resp: 344204

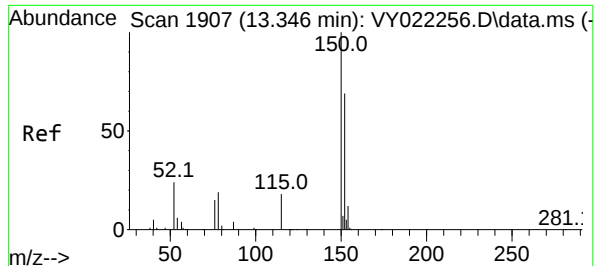
Ion Ratio Lower Upper

117 100

82 55.0 46.6 70.0

119 31.9 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 19

Delta R.T. 0.006 min

Lab File: VY022393.D

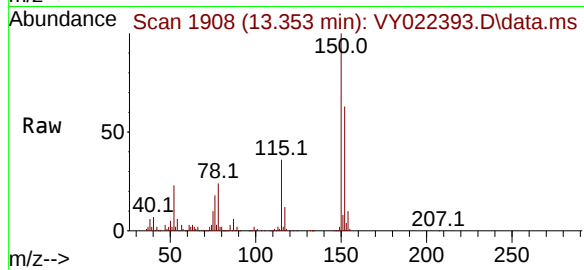
Acq: 22 May 2025 14:09

Instrument :

MSVOA_Y

ClientSampleId :

TP-38



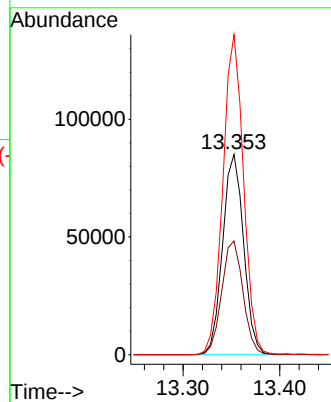
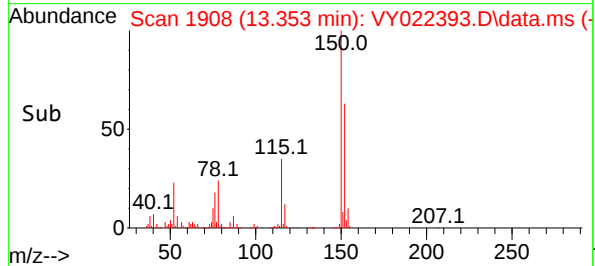
Tgt Ion:152 Resp: 128188

Ion Ratio Lower Upper

152 100

115 57.7 29.4 88.2

150 156.9 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022393.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.202	72	79	84	rBV	25351	43636	3.15%	0.596%
2	2.501	121	128	137	rBV8	10231	38251	2.76%	0.522%
3	2.848	178	185	197	rVB	92539	201872	14.59%	2.756%
4	3.190	233	241	255	rVB2	27656	67012	4.84%	0.915%
5	4.623	466	476	482	rBV2	16687	55454	4.01%	0.757%
6	5.141	548	561	572	rBV6	5245	20797	1.50%	0.284%
7	5.659	635	646	655	rBV4	8185	25759	1.86%	0.352%
8	7.640	962	971	977	rBV	181959	438213	31.66%	5.982%
9	7.713	977	983	994	rVB	311318	722276	52.19%	9.860%
10	8.073	1033	1042	1054	rBV	170766	385527	27.86%	5.263%
11	8.256	1059	1072	1081	rVB2	9208	28651	2.07%	0.391%
12	8.622	1121	1132	1147	rBV	512925	1006449	72.72%	13.739%
13	10.115	1369	1377	1384	rBV	807085	1383987	100.00%	18.893%
14	10.176	1384	1387	1400	rVB	25098	42995	3.11%	0.587%
15	11.420	1584	1591	1602	rBV	703210	1124020	81.22%	15.344%
16	11.627	1619	1625	1635	rVB3	10951	20377	1.47%	0.278%
17	12.414	1746	1754	1763	rBV	469759	766591	55.39%	10.465%
18	13.353	1898	1908	1916	rBV	544727	834934	60.33%	11.398%
19	13.889	1990	1996	2004	rVB2	74030	118583	8.57%	1.619%

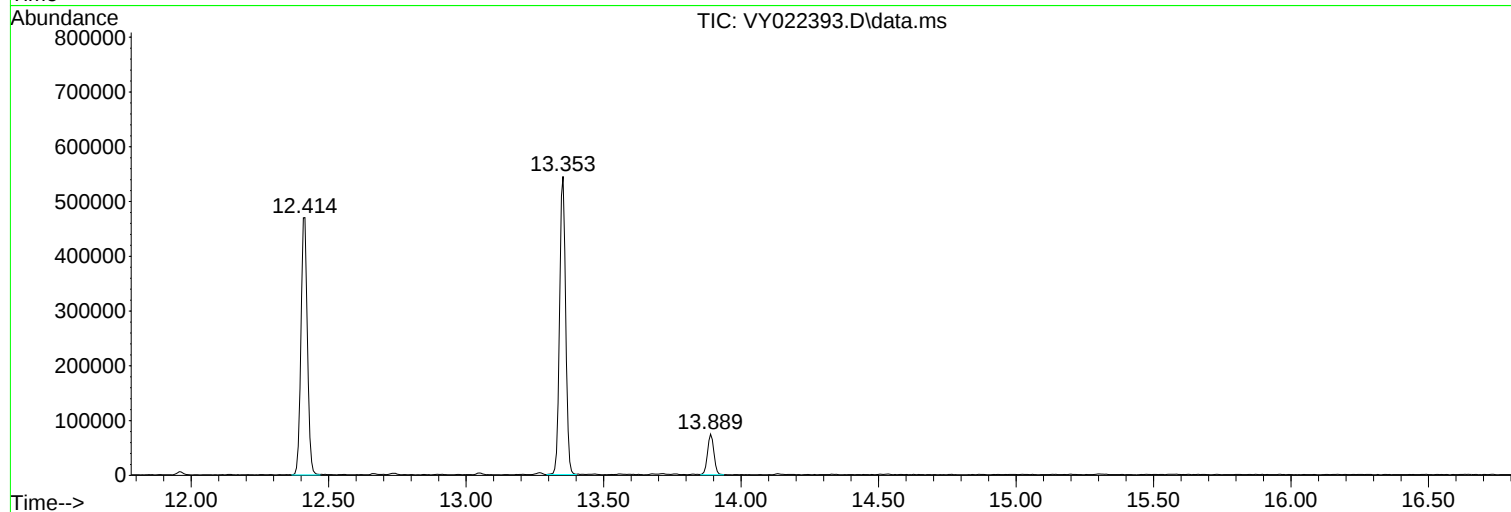
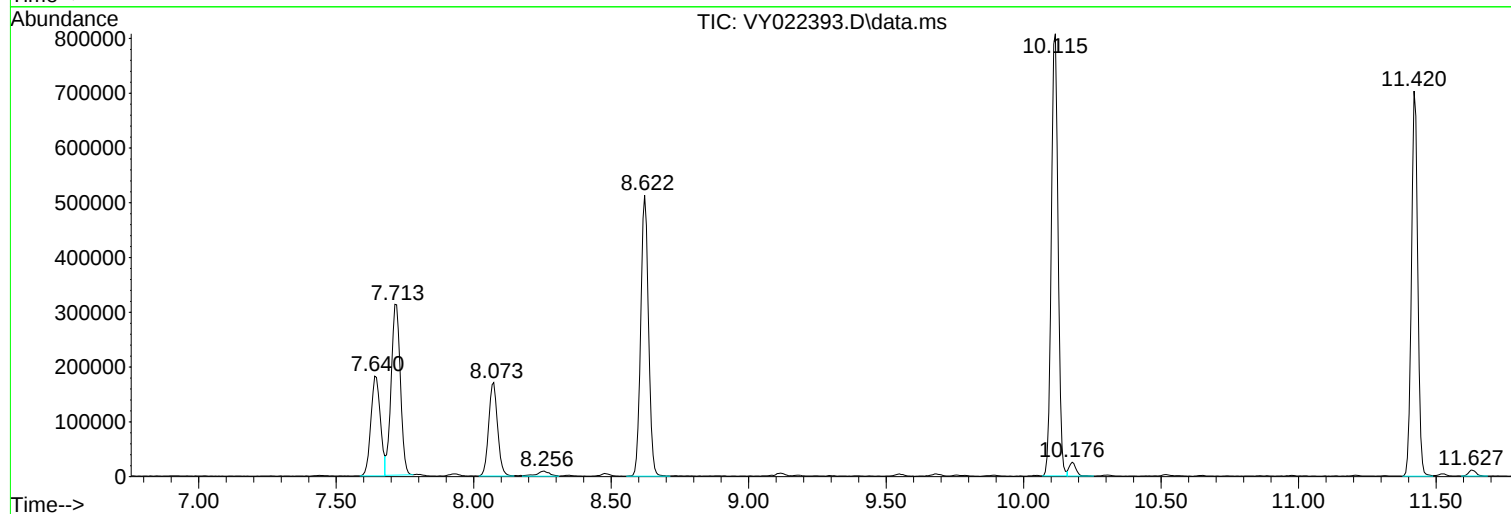
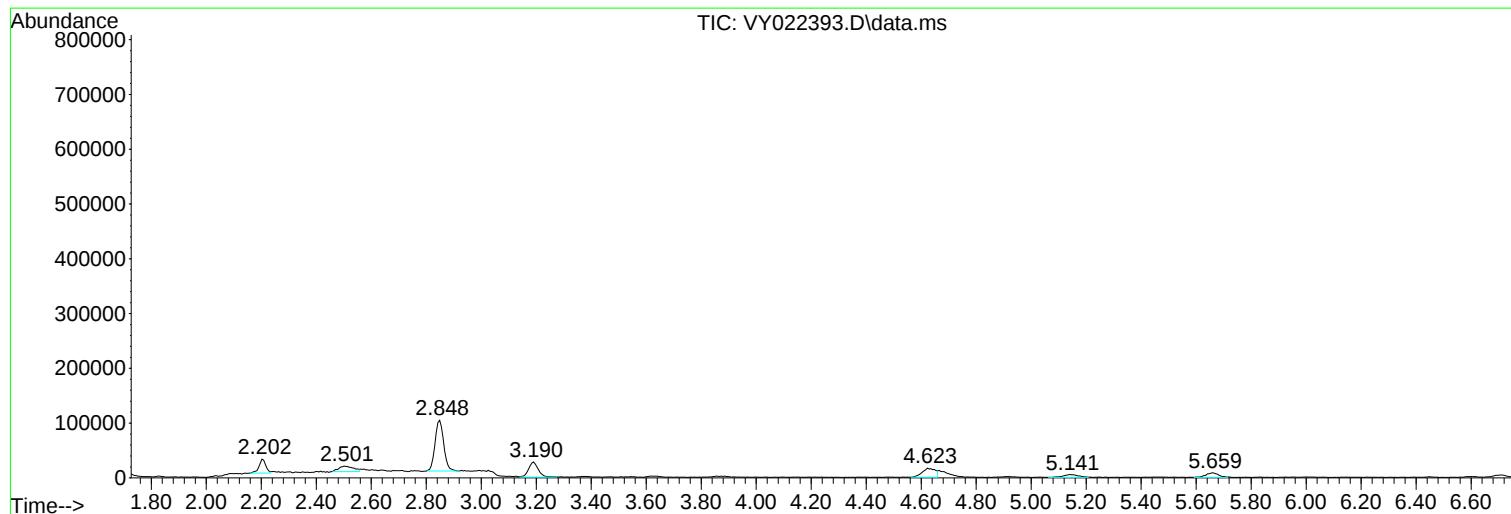
Sum of corrected areas: 7325384

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

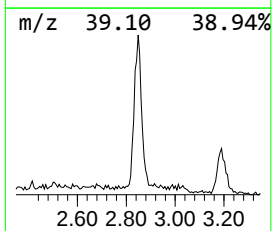
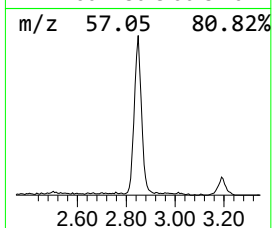
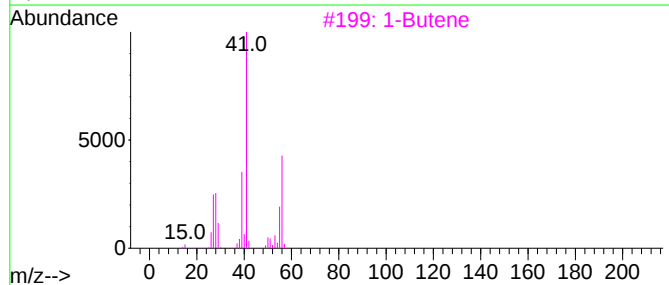
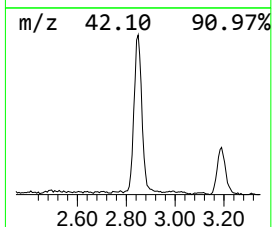
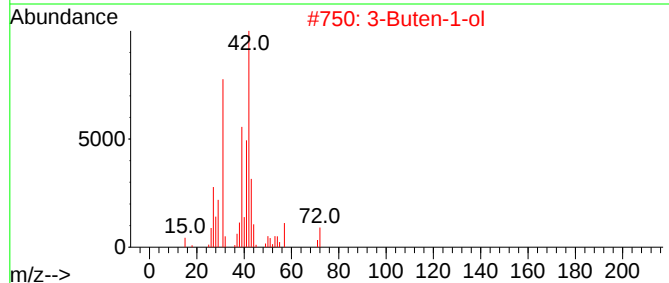
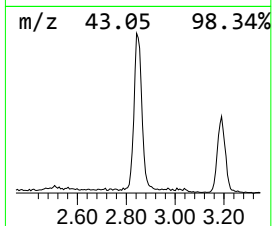
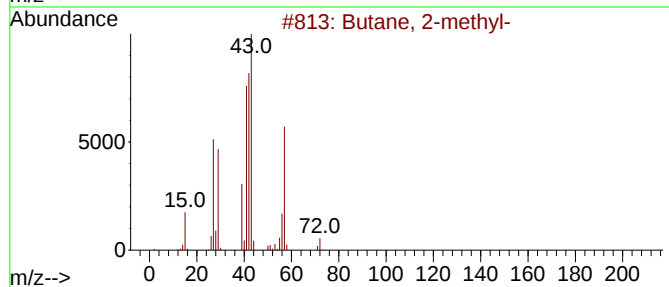
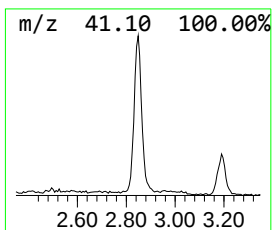
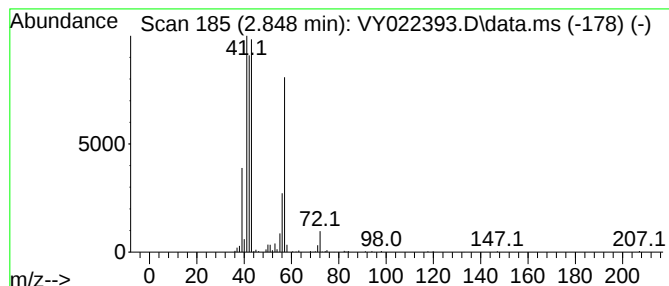
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

Peak Number 1 Butane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.848	13.97 ug/l	201872	Pentafluorobenzene	7.720

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butane, 2-methyl-	72	C5H12	000078-78-4	64
2			3-Buten-1-ol	72	C4H8O	000627-27-0	28
3			1-Butene	56	C4H8	000106-98-9	27
4			1-Propene, 2-methyl-	56	C4H8	000115-11-7	22
5			1,1-Diisobutoxy-butane	202	C12H26O2	013002-16-9	17



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methyl-	2.848	14.0	ug/l	201872	1	7.720	722276	50.0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022394.D
 Acq On : 22 May 2025 14:32
 Operator : SY/MD
 Sample : Q2074-06
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-19

Quant Time: May 23 03:38:04 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

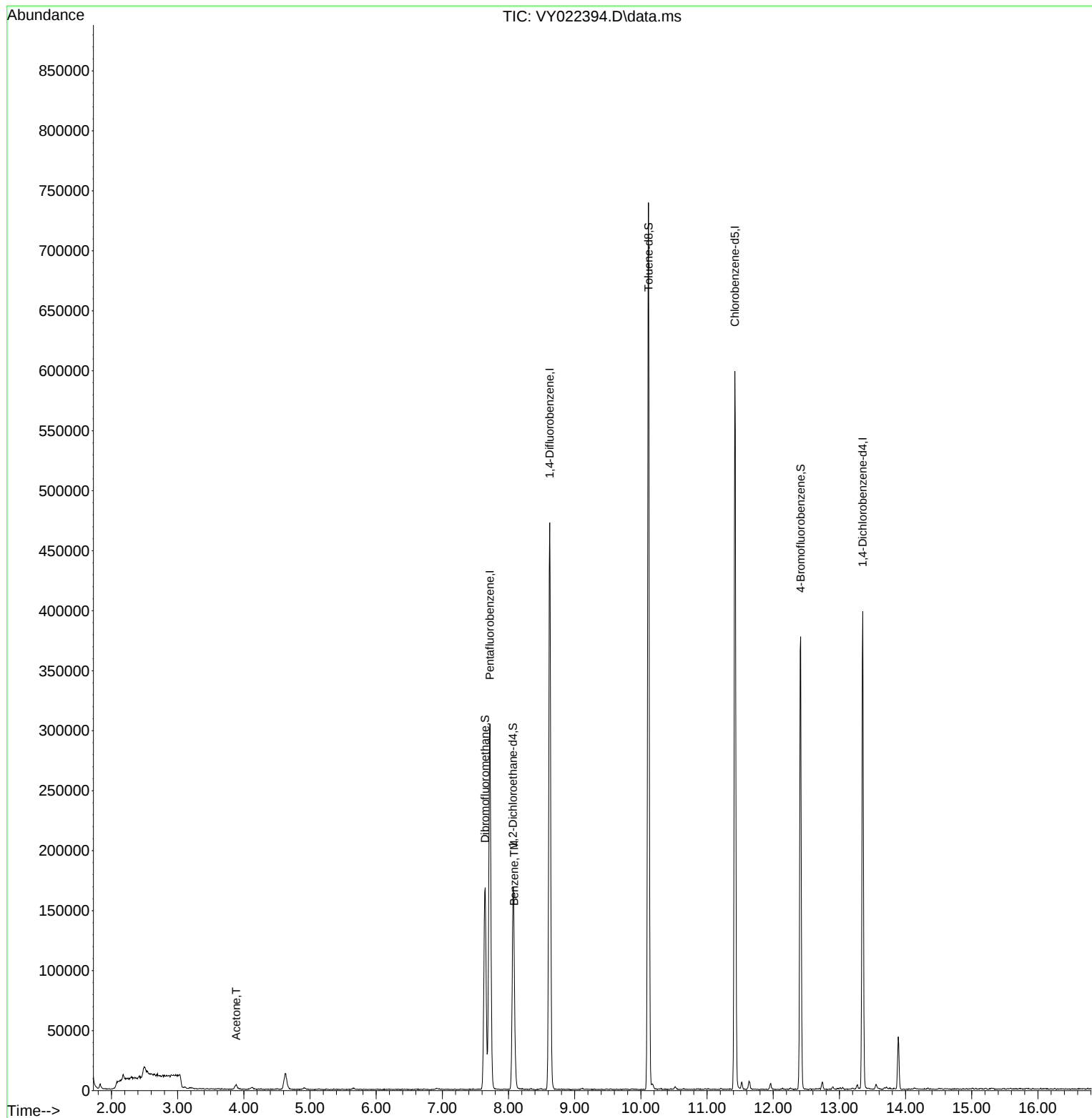
Internal Standards						
1) Pentafluorobenzene	7.719	168	231559	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	398601	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	296277	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	94056	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	117822	46.557	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.120%
35) Dibromofluoromethane	7.646	113	118230	49.696	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.400%
50) Toluene-d8	10.115	98	467756	48.006	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.020%
62) 4-Bromofluorobenzene	12.414	95	103960	33.661	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	67.320%
Target Compounds						
					Qvalue	
16) Acetone	3.885	43	6639	13.991	ug/l #	86
40) Benzene	8.085	78	23915	2.059	ug/l	94

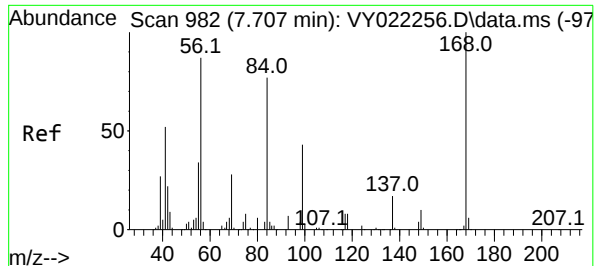
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Time: May 23 03:38:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

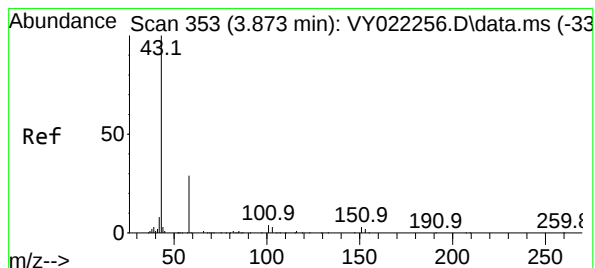
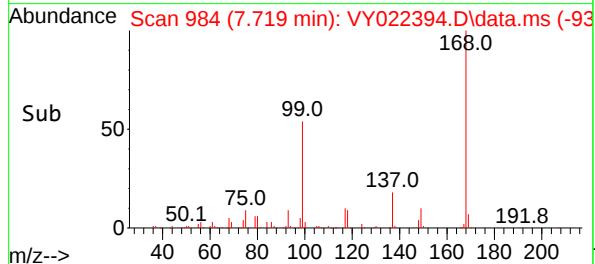
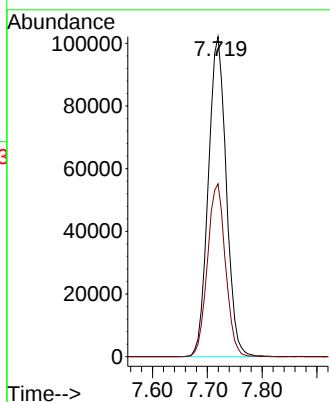
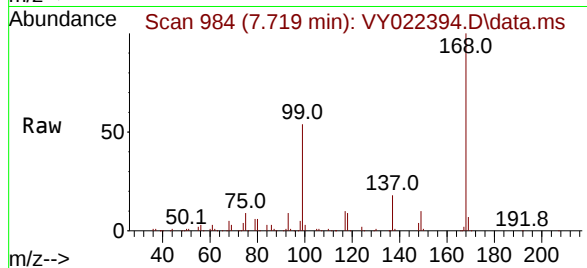




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022394.D
Acq: 22 May 2025 14:32

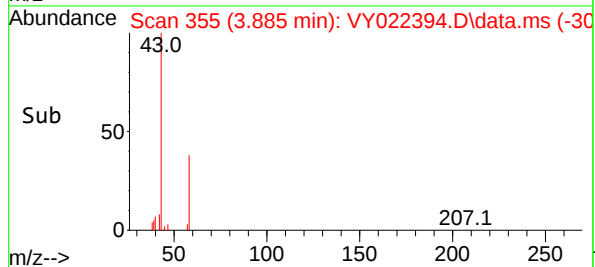
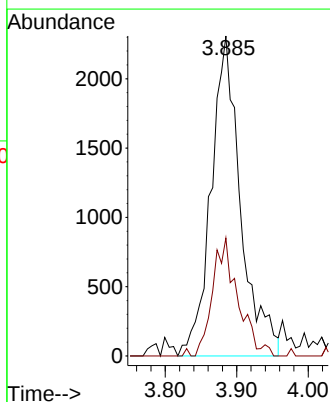
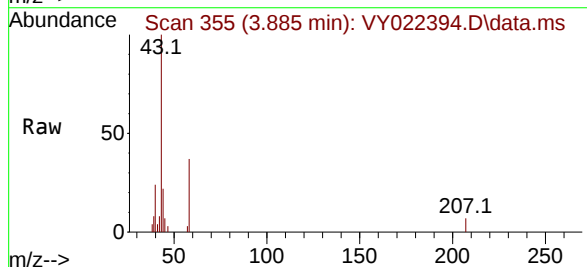
Instrument :
MSVOA_Y
ClientSampleId :
TP-19

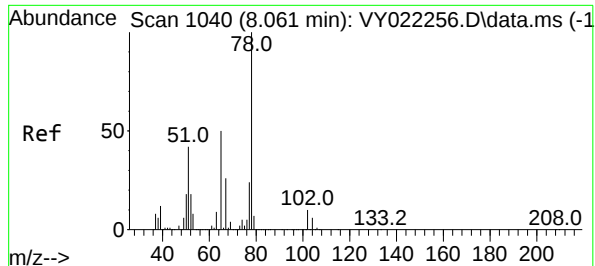
Tgt Ion:168 Resp: 231559
Ion Ratio Lower Upper
168 100
99 54.0 44.2 66.4



#16
Acetone
Concen: 13.991 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022394.D
Acq: 22 May 2025 14:32

Tgt Ion: 43 Resp: 6639
Ion Ratio Lower Upper
43 100
58 36.9 23.6 35.4#





#33

1,2-Dichloroethane-d4

Concen: 46.557 ug/l

RT: 8.067 min Scan# 110

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

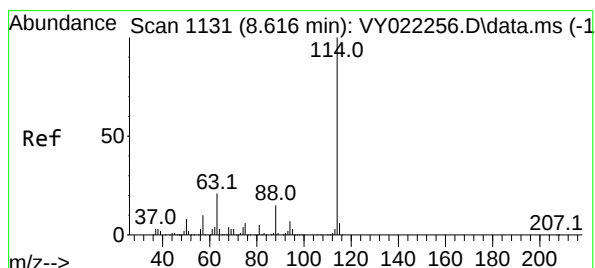
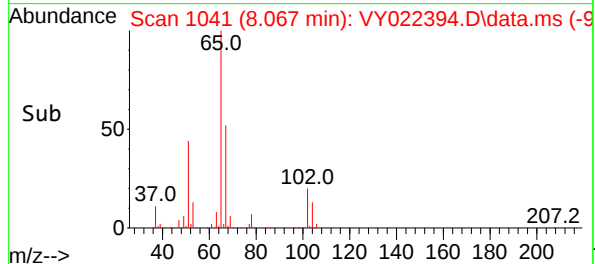
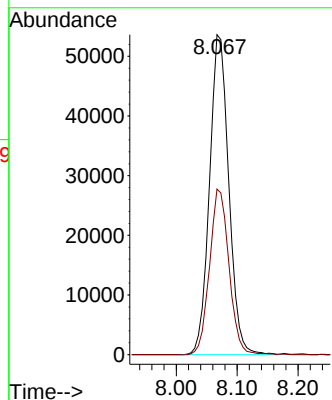
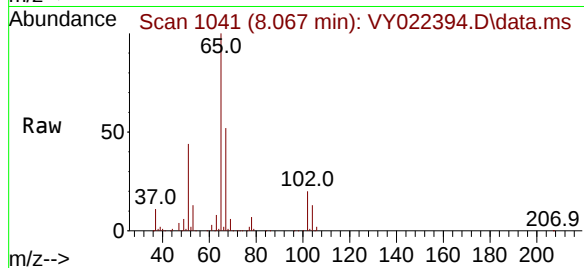
TP-19

Tgt Ion: 65 Resp: 117822

Ion Ratio Lower Upper

65 100

67 52.2 0.0 104.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

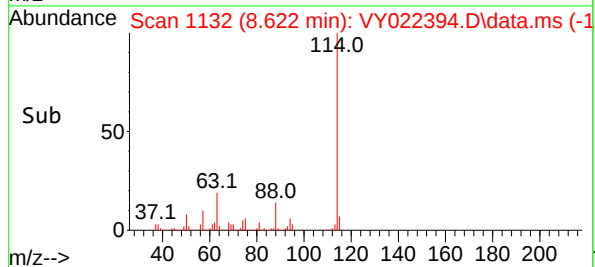
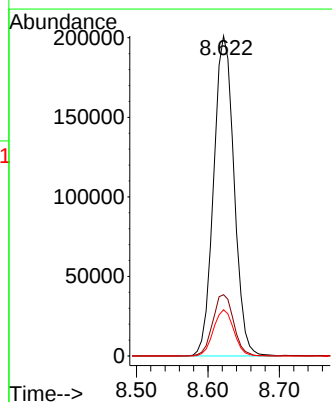
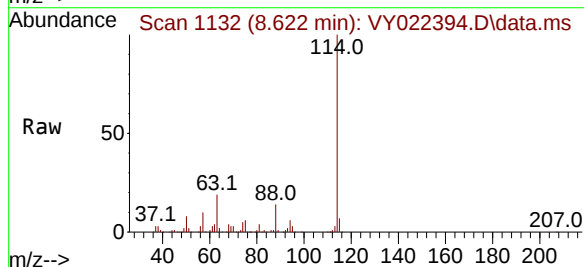
Tgt Ion: 114 Resp: 398601

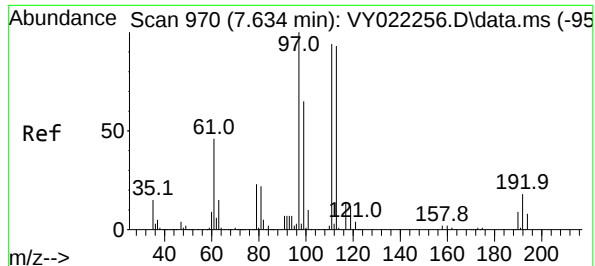
Ion Ratio Lower Upper

114 100

63 19.1 0.0 41.0

88 14.5 0.0 29.4





#35

Dibromofluoromethane

Concen: 49.696 ug/l

RT: 7.646 min Scan# 91

Delta R.T. 0.012 min

Lab File: VY022394.D

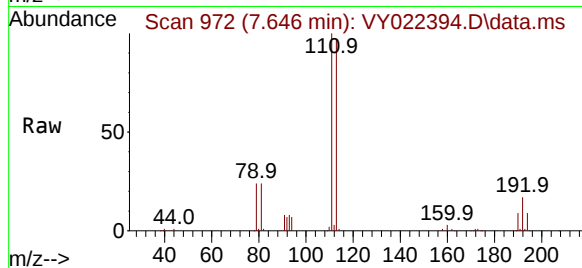
Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

TP-19



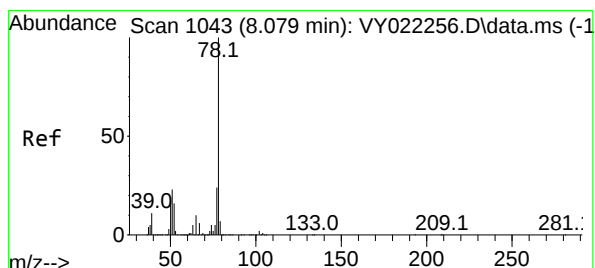
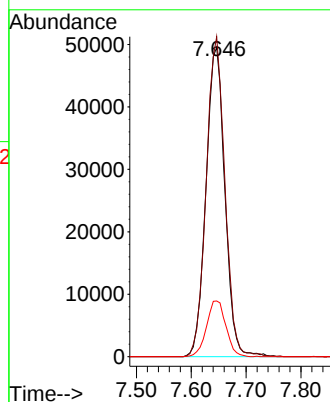
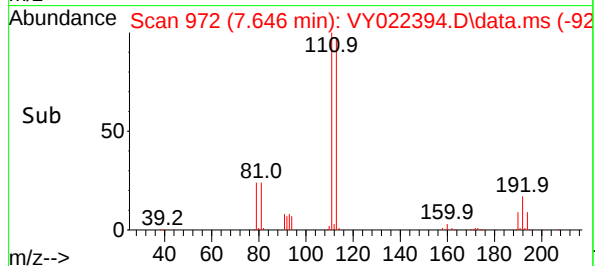
Tgt Ion:113 Resp: 118230

Ion Ratio Lower Upper

113 100

111 102.5 82.6 123.8

192 18.5 15.2 22.8



#40

Benzene

Concen: 2.059 ug/l

RT: 8.085 min Scan# 1044

Delta R.T. 0.006 min

Lab File: VY022394.D

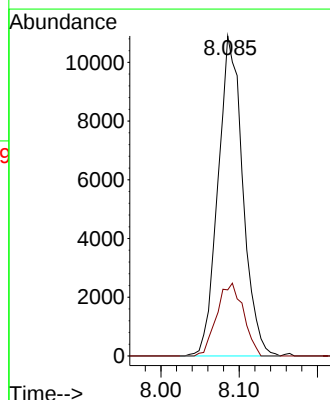
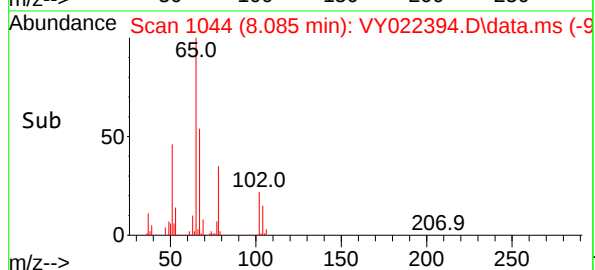
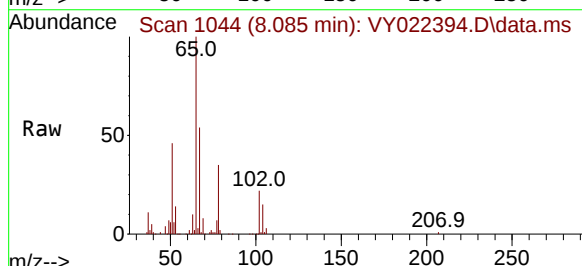
Acq: 22 May 2025 14:32

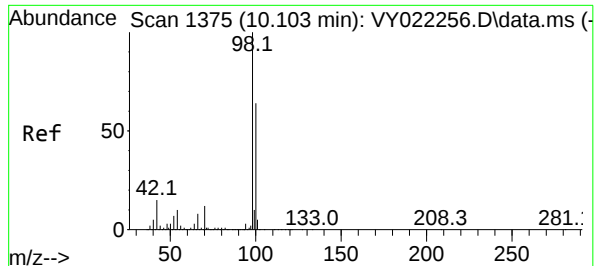
Tgt Ion: 78 Resp: 23915

Ion Ratio Lower Upper

78 100

77 20.7 18.9 28.3





#50

Toluene-d8

Concen: 48.006 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

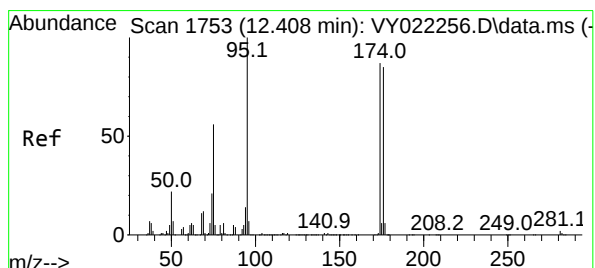
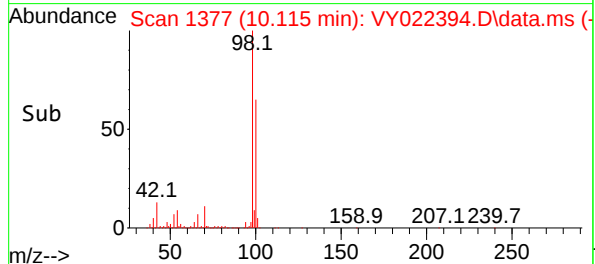
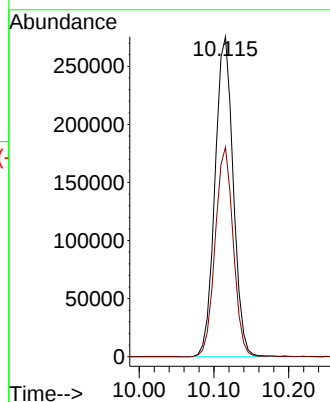
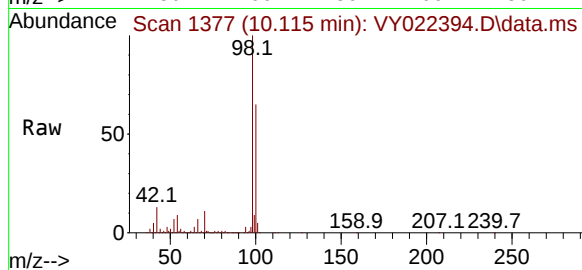
TP-19

Tgt Ion: 98 Resp: 467756

Ion Ratio Lower Upper

98 100

100 64.7 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 33.661 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

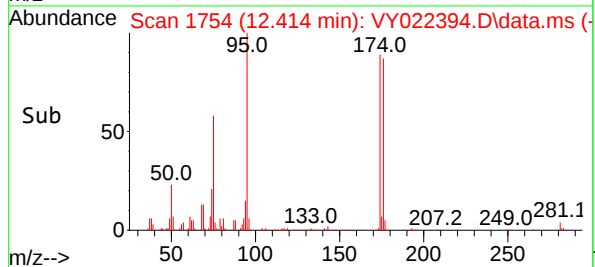
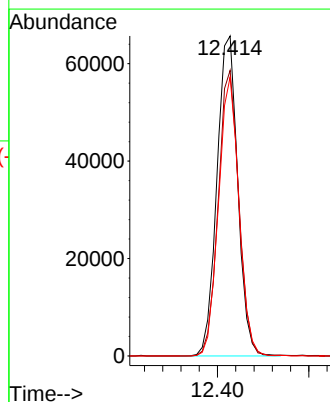
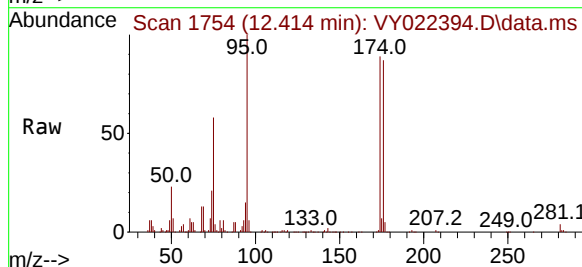
Tgt Ion: 95 Resp: 103960

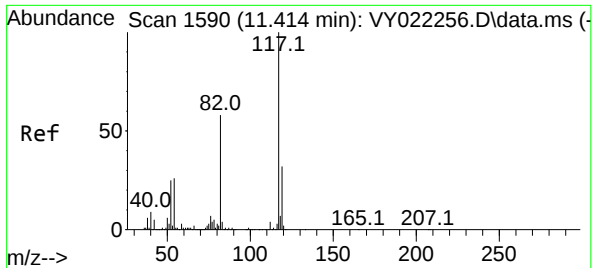
Ion Ratio Lower Upper

95 100

174 88.2 0.0 166.8

176 85.4 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

TP-19

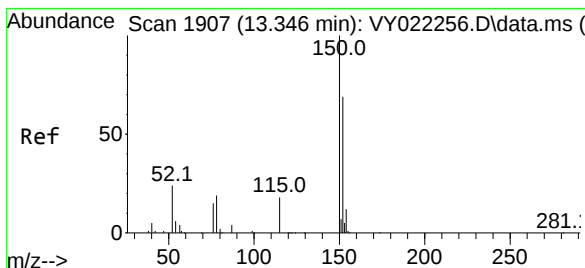
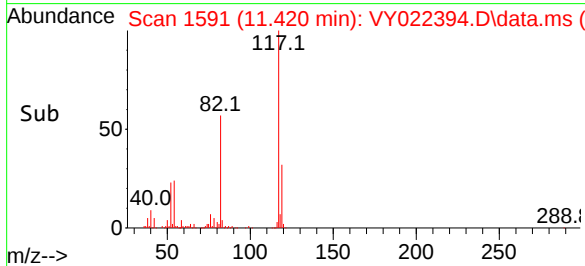
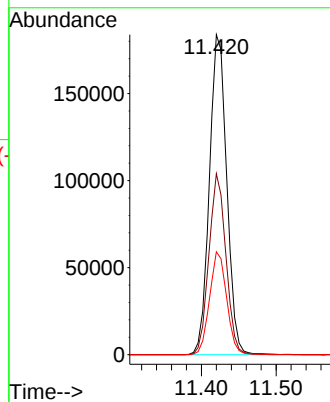
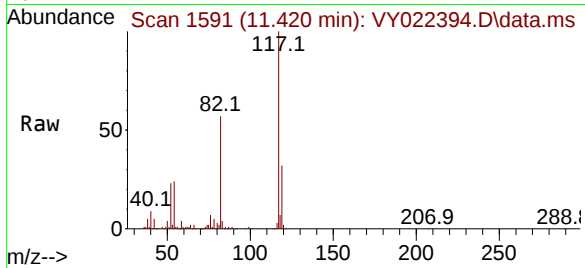
Tgt Ion:117 Resp: 296277

Ion Ratio Lower Upper

117 100

82 56.6 46.6 70.0

119 32.2 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

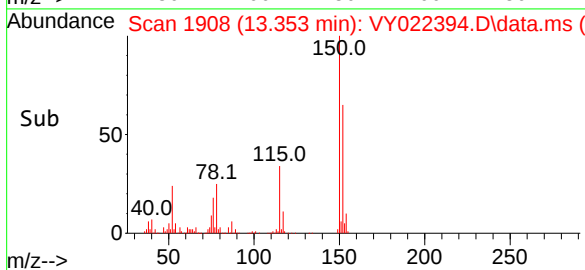
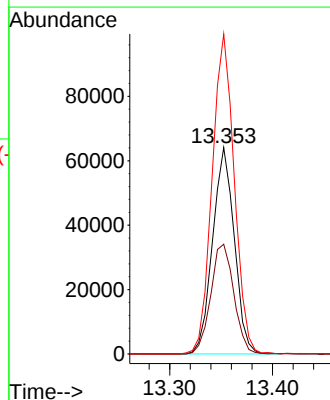
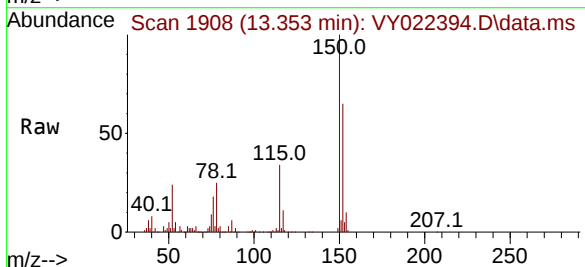
Tgt Ion:152 Resp: 94056

Ion Ratio Lower Upper

152 100

115 56.6 29.4 88.2

150 157.5 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022394.D
 Acq On : 22 May 2025 14:32
 Operator : SY/MD
 Sample : Q2074-06
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-19

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022394.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.495	121	127	132	rBV2	8240	22571	1.78%	0.375%
2	4.622	466	476	487	rBV3	13279	41800	3.30%	0.694%
3	7.646	961	972	977	rBV	168091	400416	31.63%	6.648%
4	7.719	977	984	995	rVB	304080	689026	54.43%	11.440%
5	8.073	1031	1042	1055	rBV2	168745	404911	31.99%	6.723%
6	8.622	1123	1132	1144	rBV	472562	932566	73.67%	15.484%
7	10.115	1369	1377	1384	rBV	739115	1265797	100.00%	21.017%
8	11.420	1584	1591	1603	rBV	598637	964469	76.19%	16.013%
9	11.633	1620	1626	1631	rBV3	6964	13314	1.05%	0.221%
10	12.414	1746	1754	1765	rVB	377178	609796	48.17%	10.125%
11	13.353	1901	1908	1919	rBV	397725	606832	47.94%	10.075%
12	13.889	1990	1996	2005	rVB	43885	71359	5.64%	1.185%

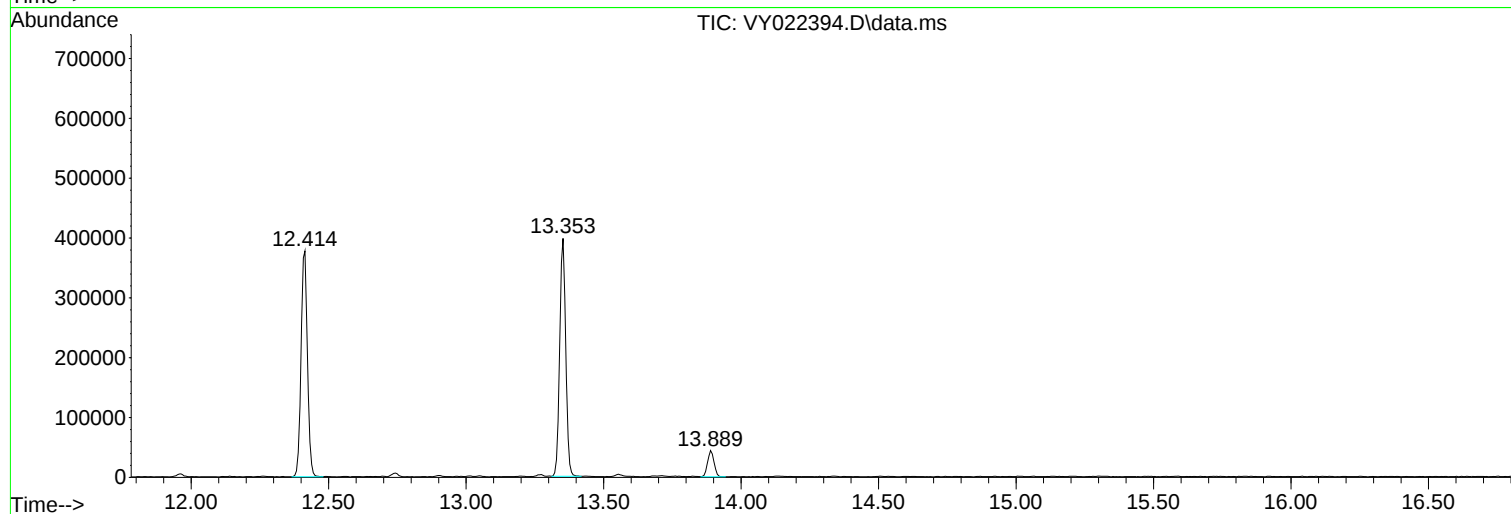
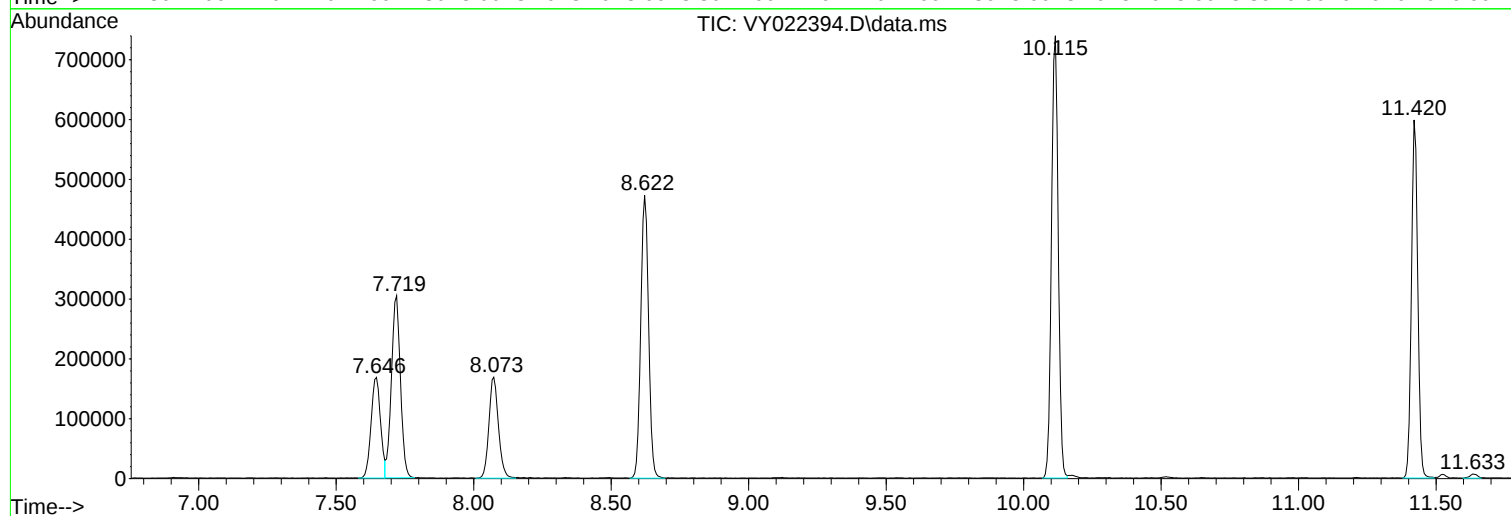
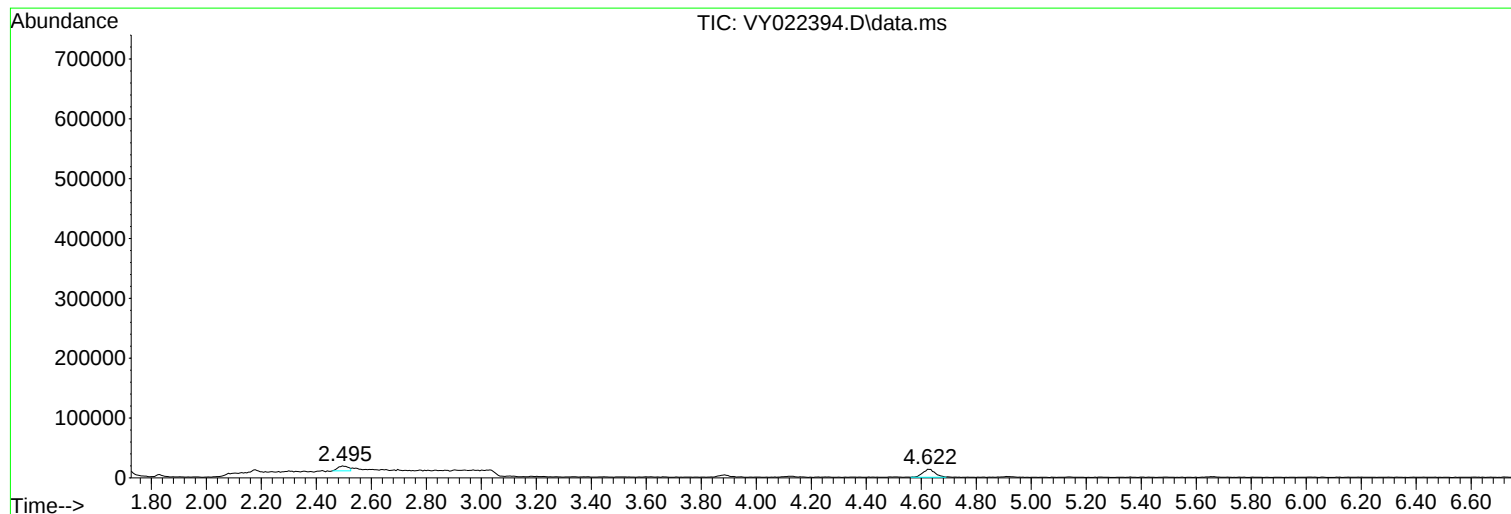
Sum of corrected areas: 6022857

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022395.D
 Acq On : 22 May 2025 14:55
 Operator : SY/MD
 Sample : Q2074-07
 Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-40

A
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Quant Time: May 23 03:38:26 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

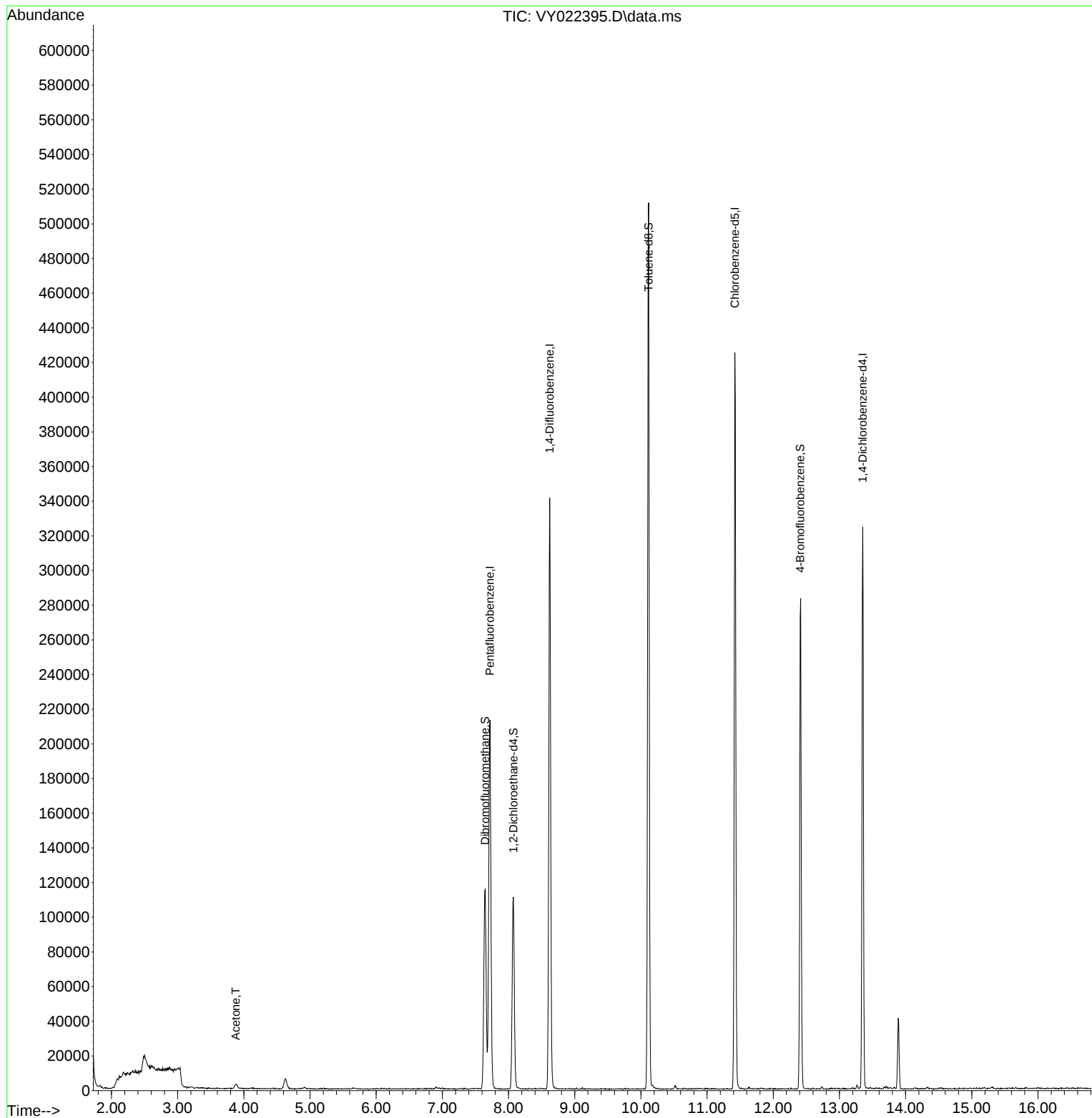
Internal Standards						
1) Pentafluorobenzene	7.719	168	163884	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	278478	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	213324	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	75609	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	83592	46.671	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.340%
35) Dibromofluoromethane	7.646	113	81440	48.998	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	98.000%
50) Toluene-d8	10.115	98	324899	47.728	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	95.460%
62) 4-Bromofluorobenzene	12.407	95	78682	36.466	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	72.940%
Target Compounds						
16) Acetone	3.879	43	5169	15.391	ug/l	Qvalue # 88

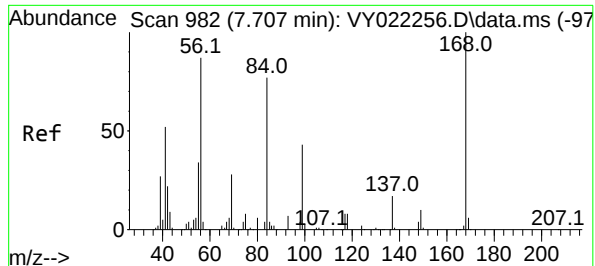
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Time: May 23 03:38:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

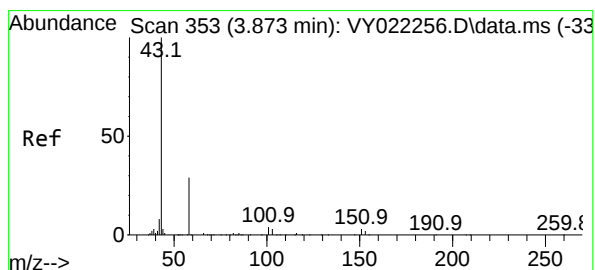
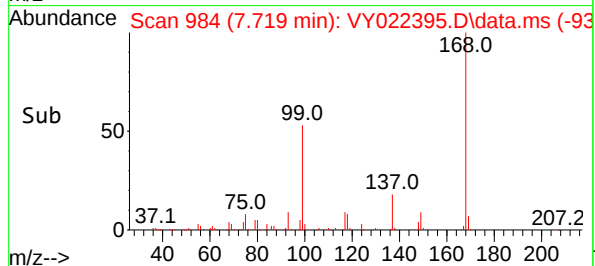
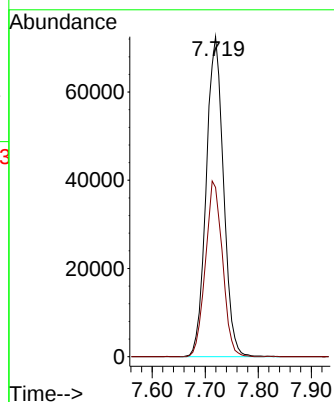
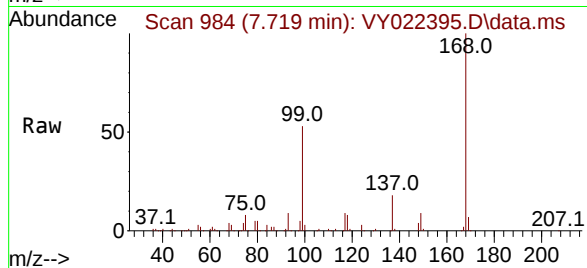




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022395.D
Acq: 22 May 2025 14:55

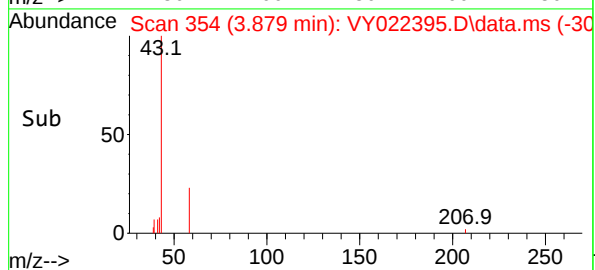
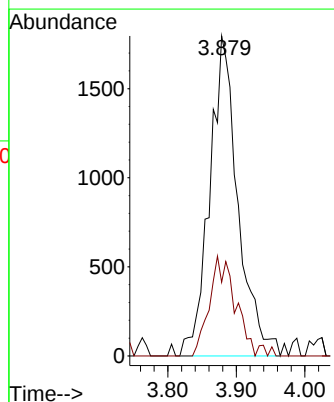
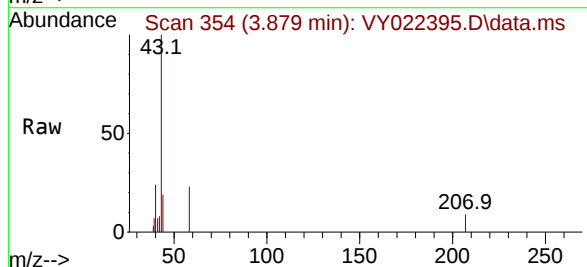
Instrument :
MSVOA_Y
ClientSampleId :
TP-40

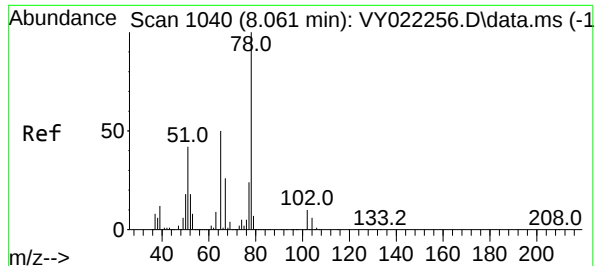
Tgt Ion:168 Resp: 163884
Ion Ratio Lower Upper
168 100
99 52.9 44.2 66.4



#16
Acetone
Concen: 15.391 ug/l
RT: 3.879 min Scan# 354
Delta R.T. 0.006 min
Lab File: VY022395.D
Acq: 22 May 2025 14:55

Tgt Ion: 43 Resp: 5169
Ion Ratio Lower Upper
43 100
58 23.1 23.6 35.4#





#33

1,2-Dichloroethane-d4

Concen: 46.671 ug/l

RT: 8.073 min Scan# 1040

Delta R.T. 0.012 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

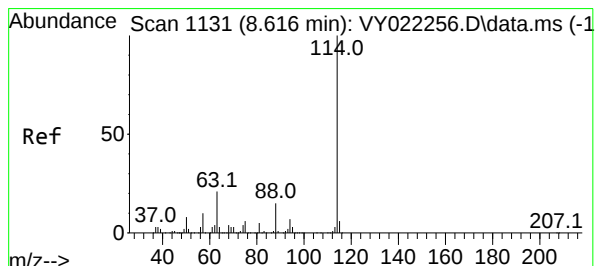
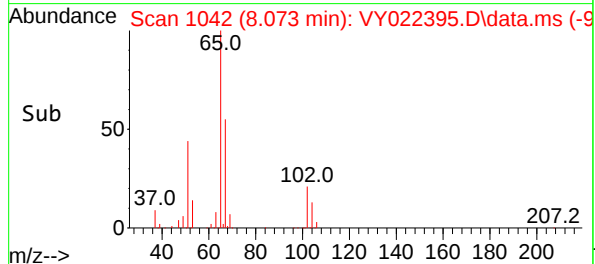
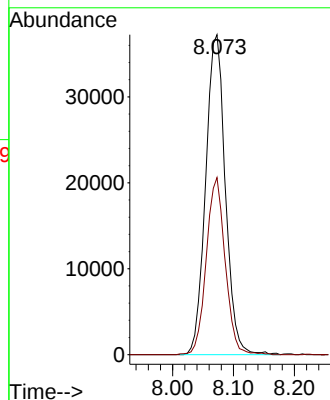
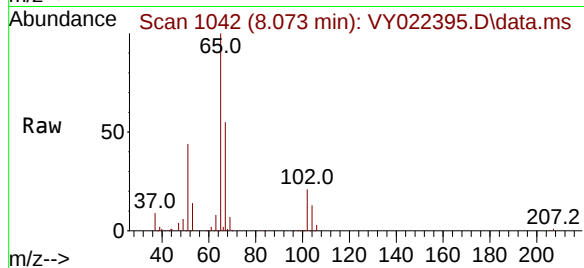
TP-40

Tgt Ion: 65 Resp: 83592

Ion Ratio Lower Upper

65 100

67 53.2 0.0 104.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

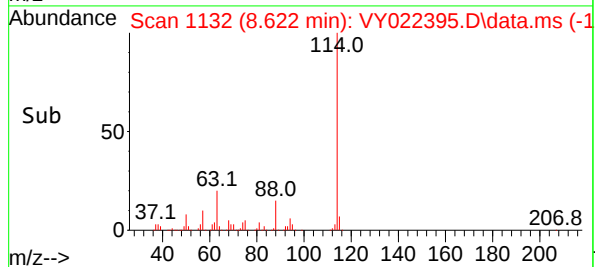
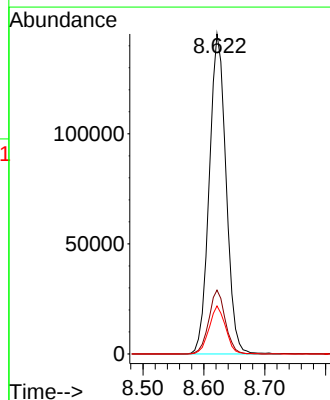
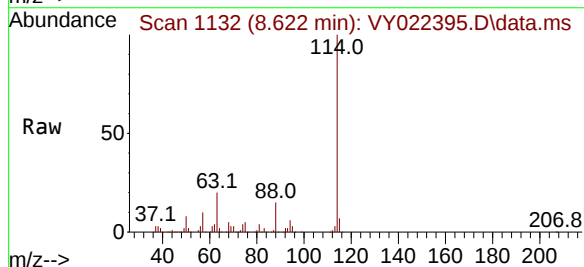
Tgt Ion: 114 Resp: 278478

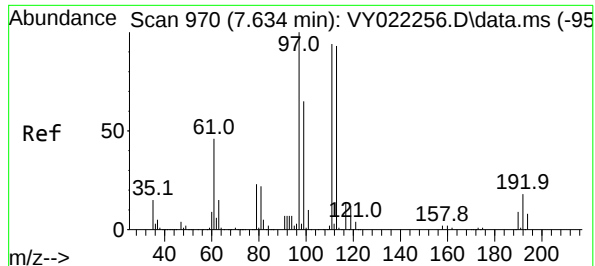
Ion Ratio Lower Upper

114 100

63 19.9 0.0 41.0

88 15.0 0.0 29.4





#35

Dibromofluoromethane

Concen: 48.998 ug/l

RT: 7.646 min Scan# 91

Delta R.T. 0.012 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40

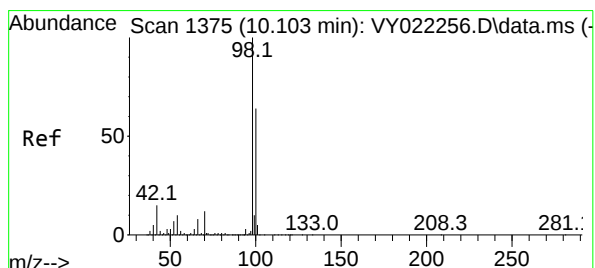
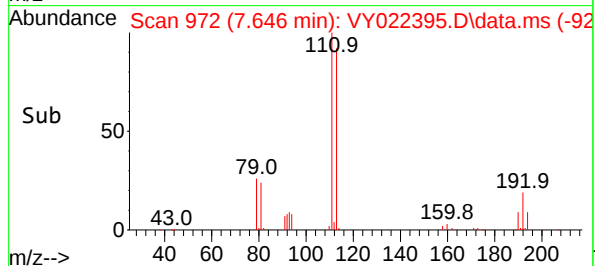
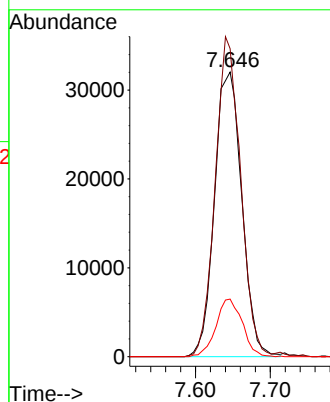
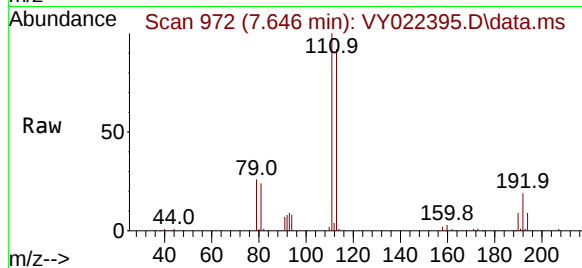
Tgt Ion:113 Resp: 81440

Ion Ratio Lower Upper

113 100

111 104.2 82.6 123.8

192 19.6 15.2 22.8



#50

Toluene-d8

Concen: 47.728 ug/l

RT: 10.115 min Scan# 1377

Delta R.T. 0.012 min

Lab File: VY022395.D

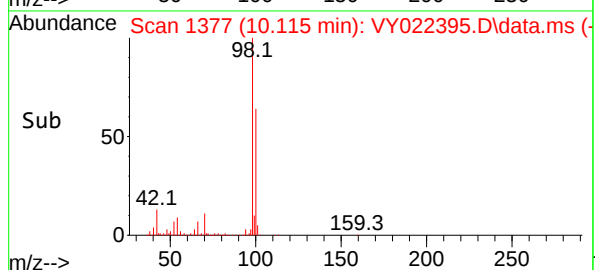
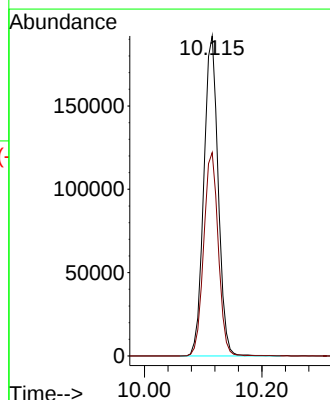
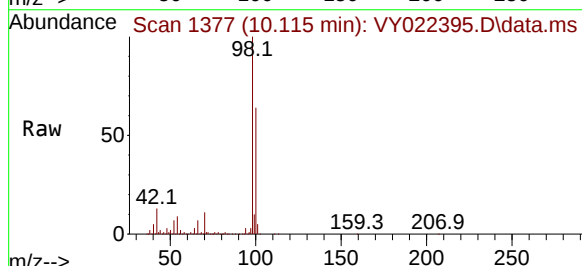
Acq: 22 May 2025 14:55

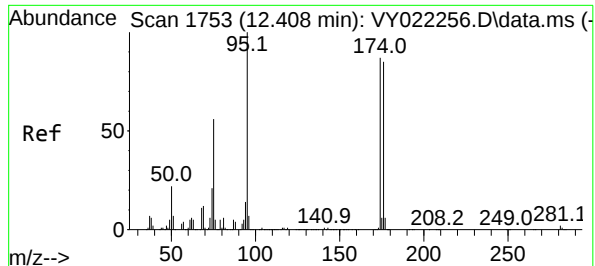
Tgt Ion: 98 Resp: 324899

Ion Ratio Lower Upper

98 100

100 64.4 51.8 77.8





#62

4-Bromofluorobenzene

Concen: 36.466 ug/l

RT: 12.407 min Scan# 11

Delta R.T. -0.000 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40

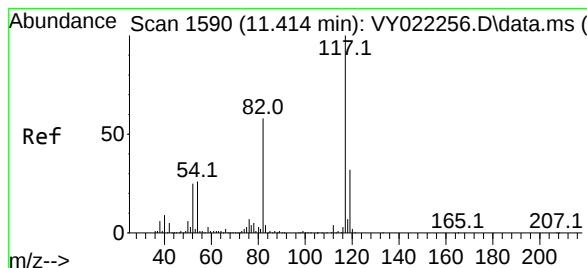
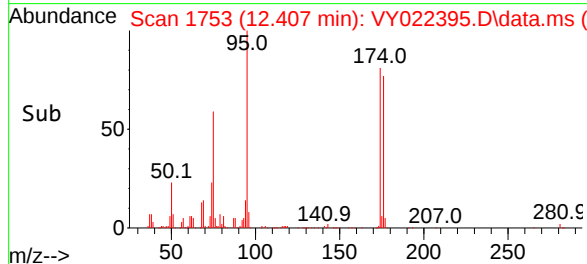
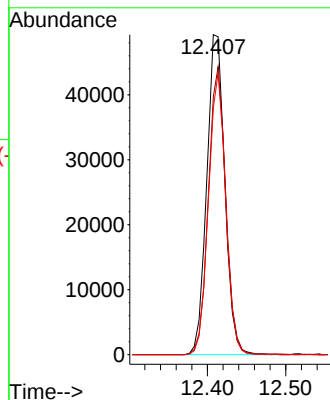
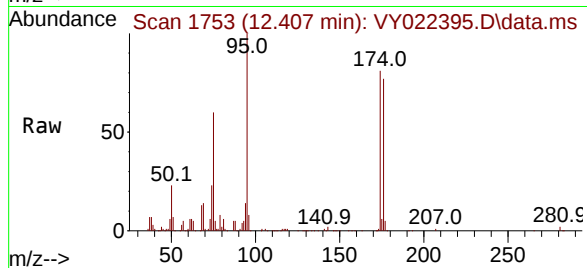
Tgt Ion: 95 Resp: 78682

Ion Ratio Lower Upper

95 100

174 87.1 0.0 166.8

176 83.9 0.0 160.8



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.006 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

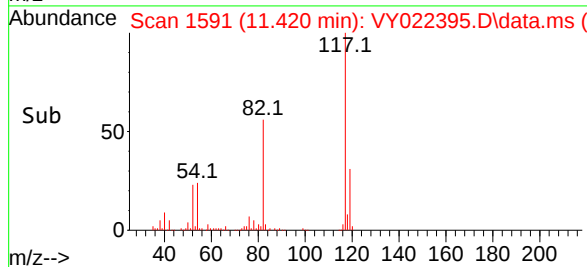
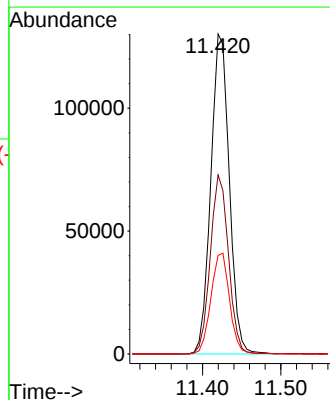
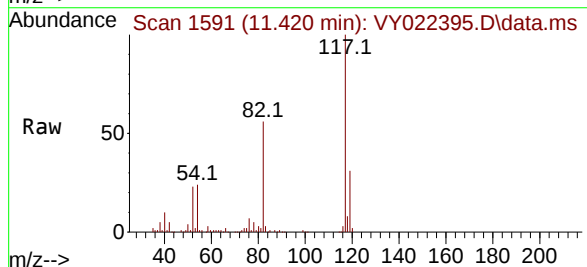
Tgt Ion: 117 Resp: 213324

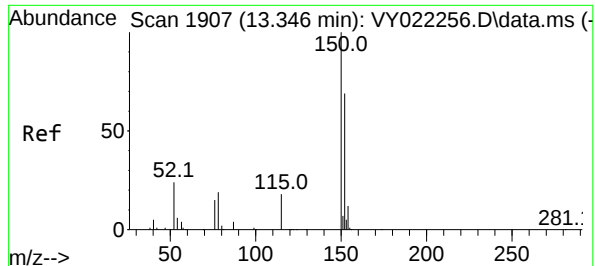
Ion Ratio Lower Upper

117 100

82 56.0 46.6 70.0

119 30.8 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022395.D

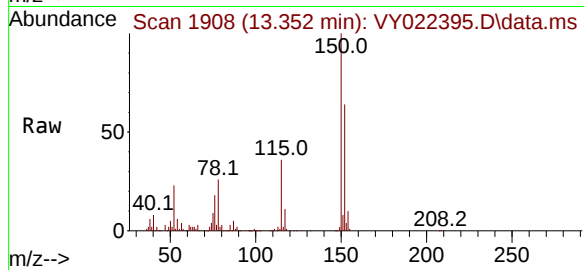
Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40



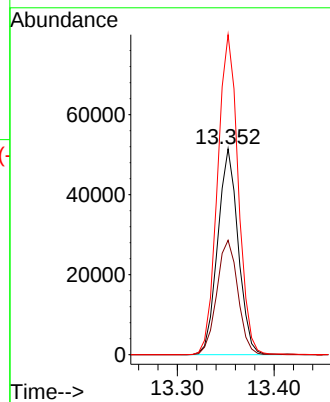
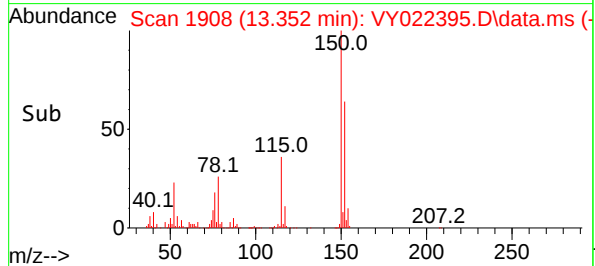
Tgt Ion:152 Resp: 75609

Ion Ratio Lower Upper

152 100

115 57.3 29.4 88.2

150 157.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022395.D
 Acq On : 22 May 2025 14:55
 Operator : SY/MD
 Sample : Q2074-07
 Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-40

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022395.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.086	52	60	63	rBV3	5123	13387	1.53%	0.311%
2	2.482	120	125	126	rBV5	8652	12436	1.42%	0.289%
3	4.628	467	477	486	rBV4	5907	18635	2.12%	0.433%
4	7.646	962	972	977	rBV	115241	282015	32.13%	6.548%
5	7.719	977	984	995	rVB	212621	492650	56.12%	11.439%
6	8.073	1030	1042	1053	rBV	110657	248574	28.32%	5.772%
7	8.622	1121	1132	1145	rBV	341033	656420	74.78%	15.242%
8	10.115	1369	1377	1385	rBV	511191	877795	100.00%	20.382%
9	11.420	1584	1591	1603	rVB	424613	691740	78.80%	16.062%
10	12.414	1744	1754	1763	rBV	283190	458537	52.24%	10.647%
11	13.352	1901	1908	1916	rVB	323831	488428	55.64%	11.341%
12	13.889	1990	1996	2003	rVB2	40867	66011	7.52%	1.533%

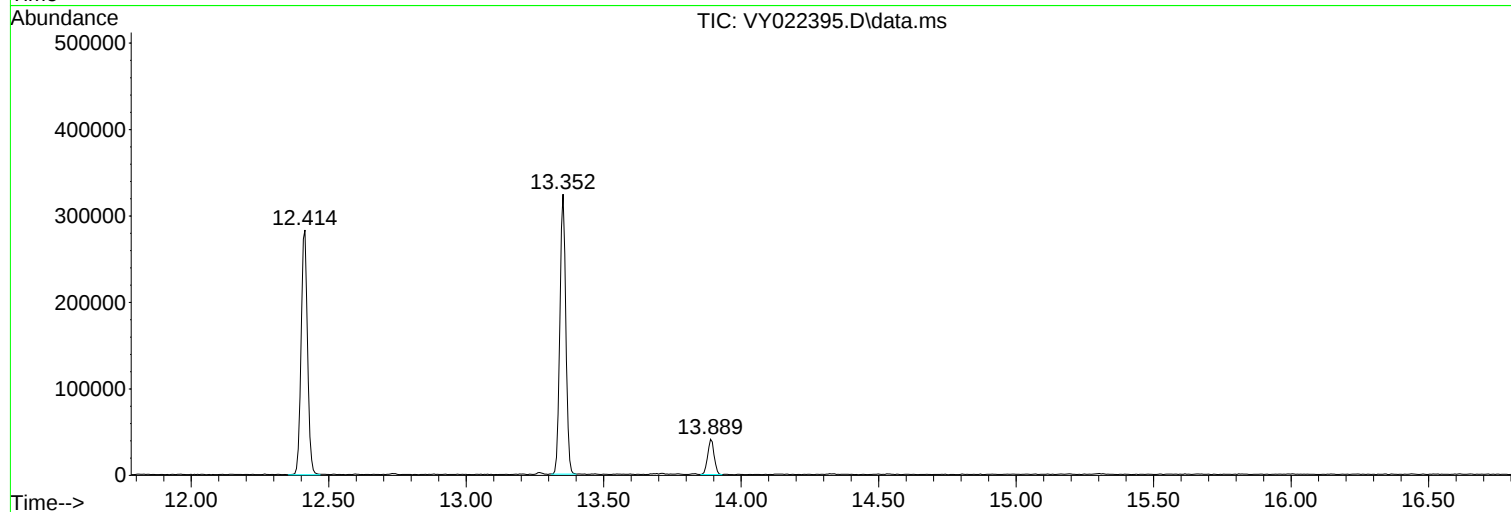
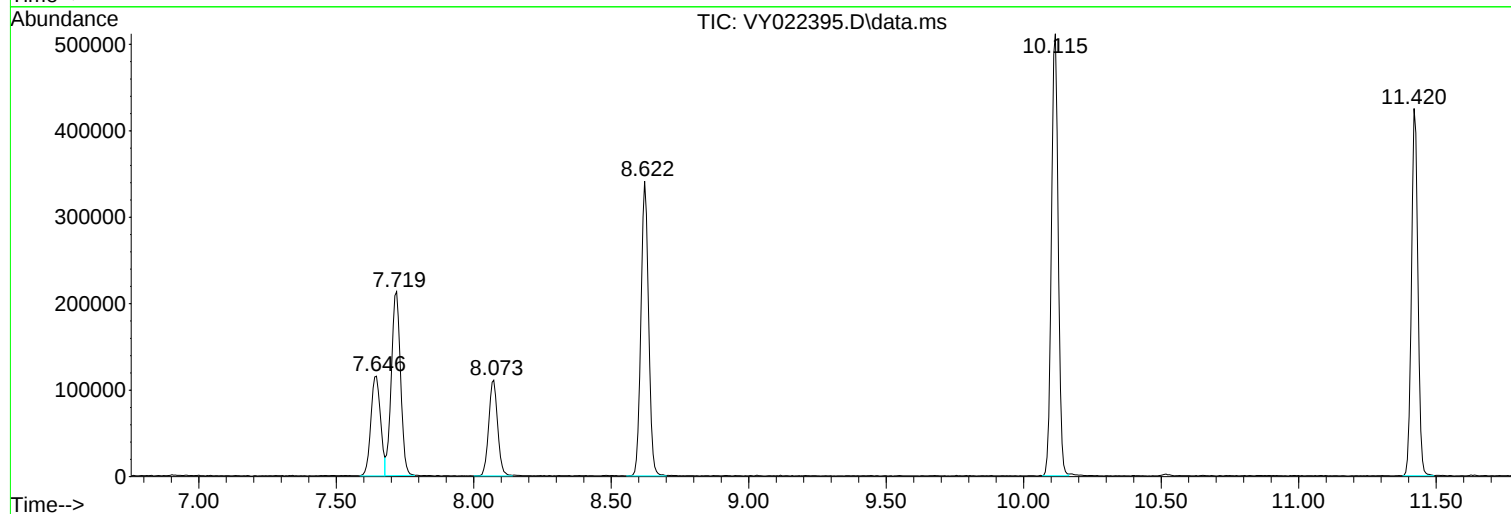
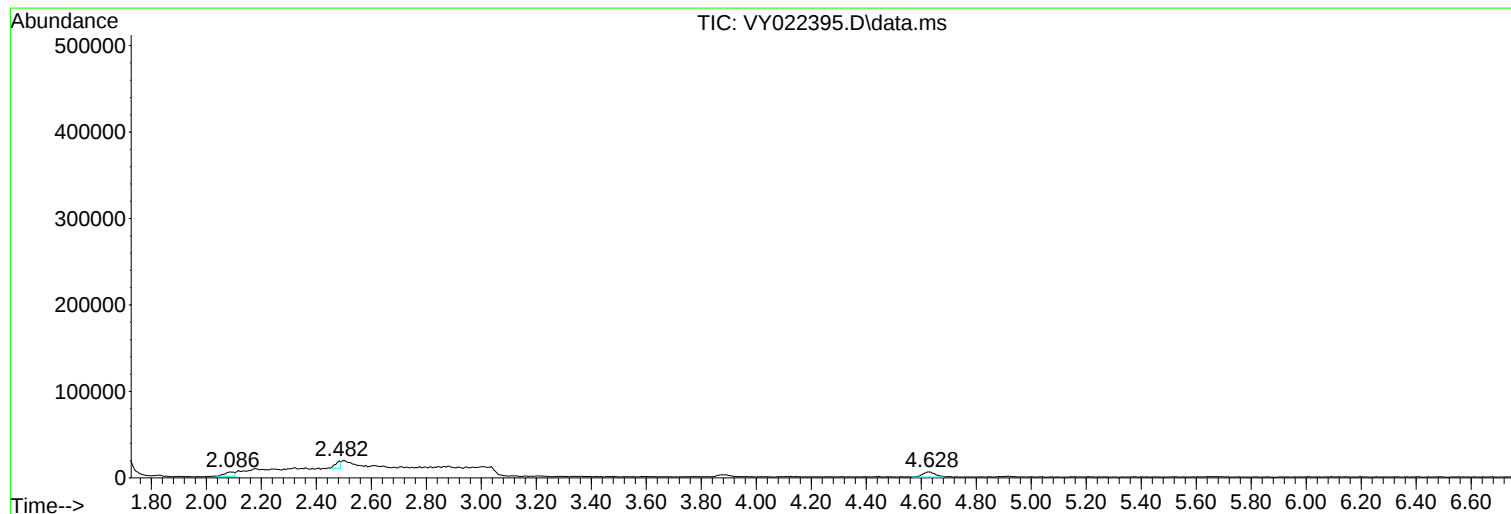
Sum of corrected areas: 4306628

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Time: May 23 03:38:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

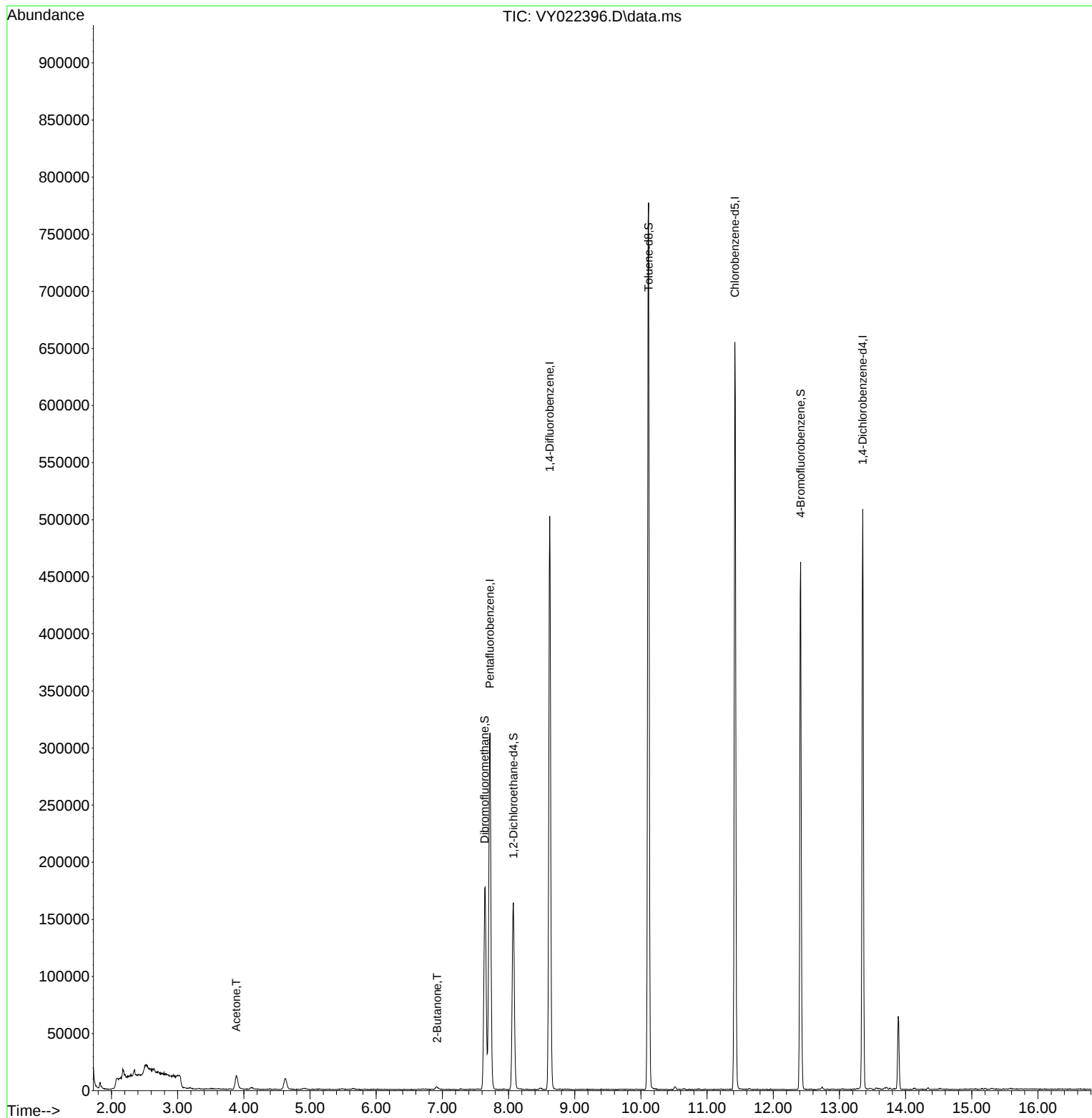
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.719	168	236909	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	424090	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	327971	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	117014	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	121510	46.930	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.860%
35) Dibromofluoromethane	7.640	113	122812	48.519	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	97.040%
50) Toluene-d8	10.115	98	496981	47.940	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	95.880%
62) 4-Bromofluorobenzene	12.414	95	122403	37.251	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	74.500%
Target Compounds						
16) Acetone	3.885	43	23151	47.686	ug/l	98
25) 2-Butanone	6.921	43	4170	5.135	ug/l #	85

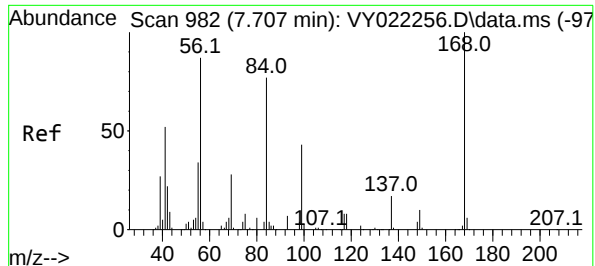
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Time: May 23 03:38:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

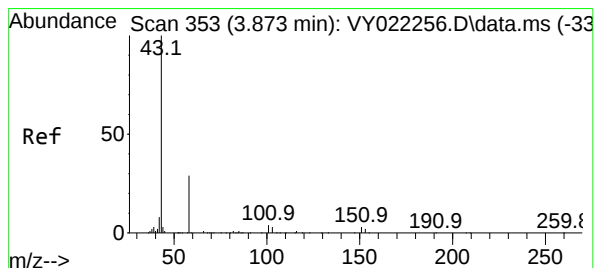
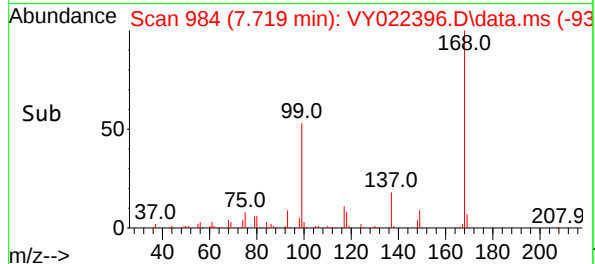
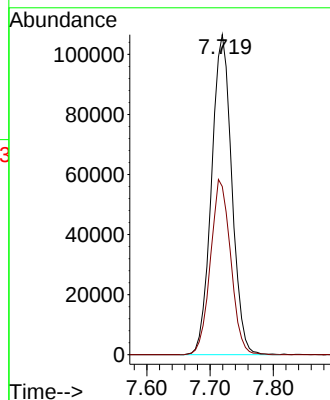
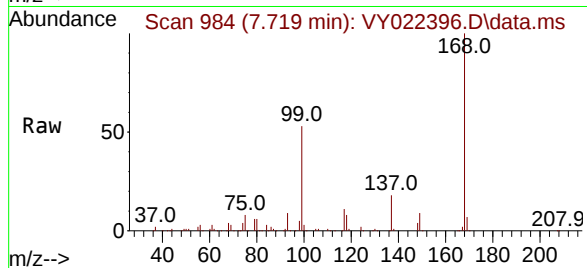




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 91
Delta R.T. 0.012 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

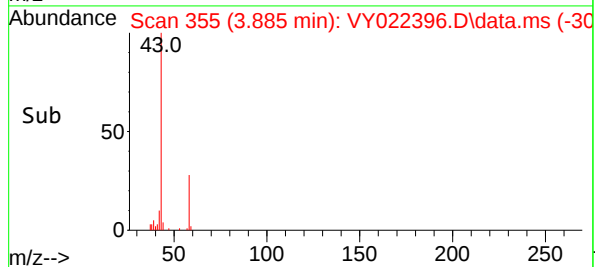
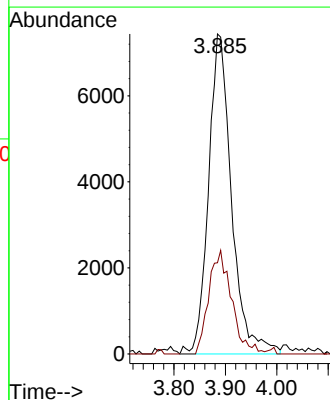
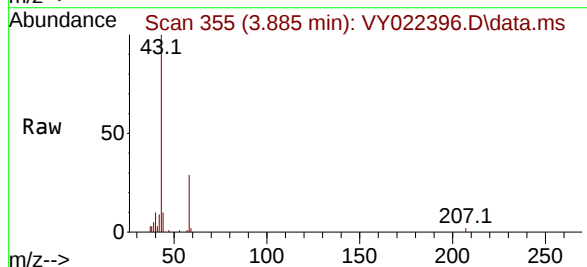
Instrument :
MSVOA_Y
ClientSampleId :
TP-18

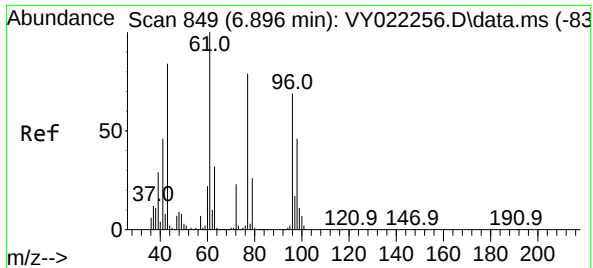
Tgt Ion:168 Resp: 236909
Ion Ratio Lower Upper
168 100
99 52.6 44.2 66.4



#16
Acetone
Concen: 47.686 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

Tgt Ion: 43 Resp: 23151
Ion Ratio Lower Upper
43 100
58 28.5 23.6 35.4





#25

2-Butanone

Concen: 5.135 ug/l

RT: 6.921 min Scan# 849

Delta R.T. 0.024 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

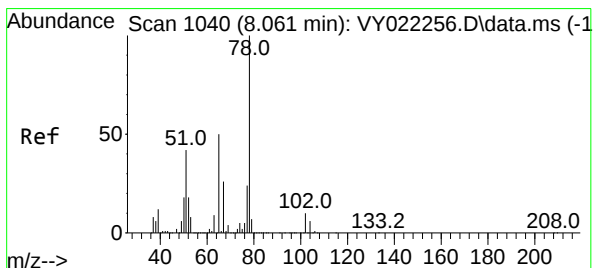
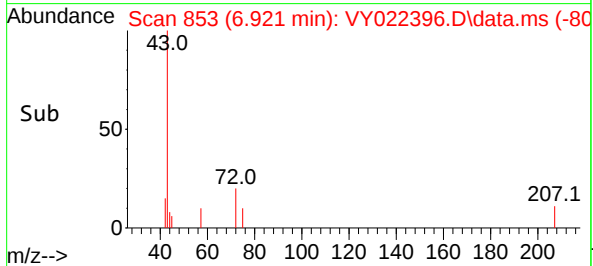
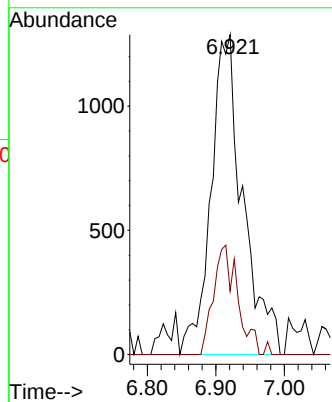
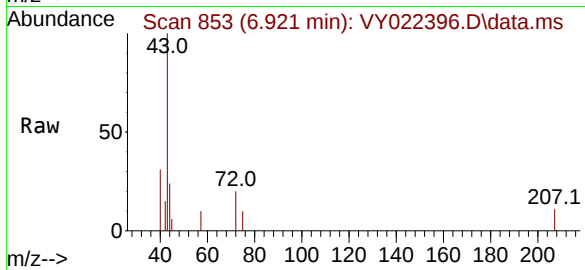
TP-18

Tgt Ion: 43 Resp: 4170

Ion Ratio Lower Upper

43 100

72 19.9 22.1 33.1#



#33

1,2-Dichloroethane-d4

Concen: 46.930 ug/l

RT: 8.073 min Scan# 1042

Delta R.T. 0.012 min

Lab File: VY022396.D

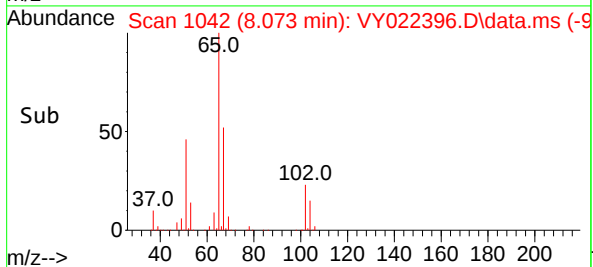
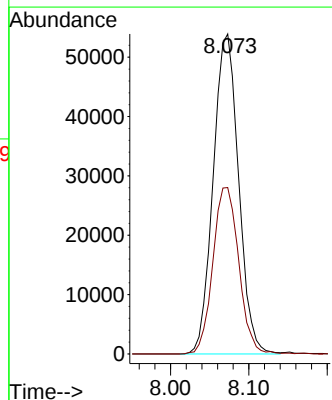
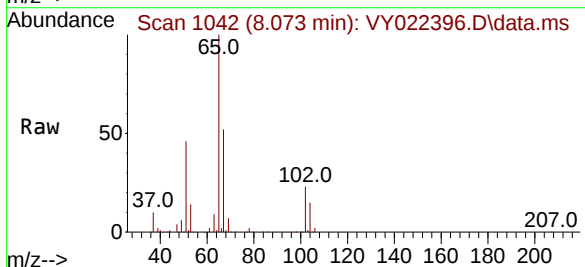
Acq: 22 May 2025 15:19

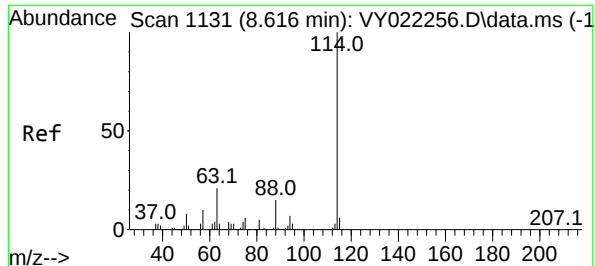
Tgt Ion: 65 Resp: 121510

Ion Ratio Lower Upper

65 100

67 53.1 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

TP-18

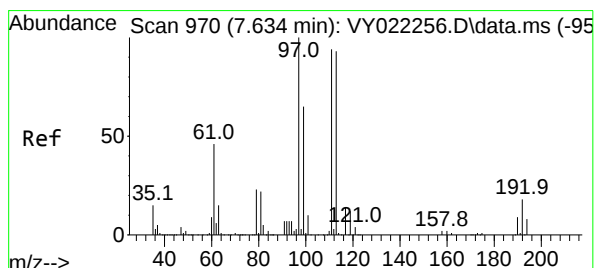
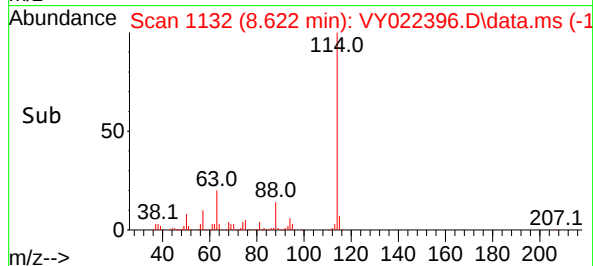
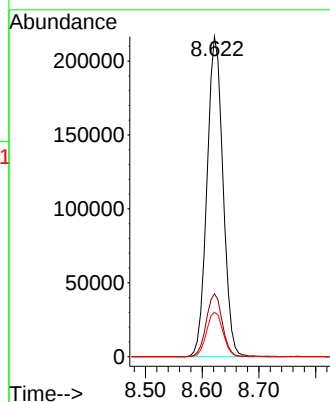
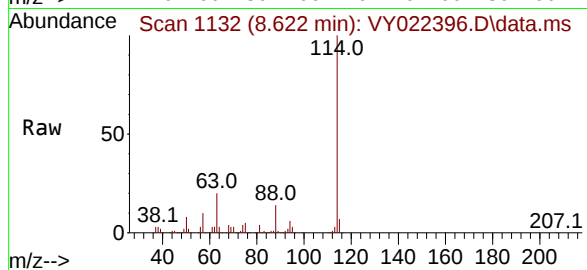
Tgt Ion:114 Resp: 424090

Ion Ratio Lower Upper

114 100

63 19.6 0.0 41.0

88 13.8 0.0 29.4



#35

Dibromofluoromethane

Concen: 48.519 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

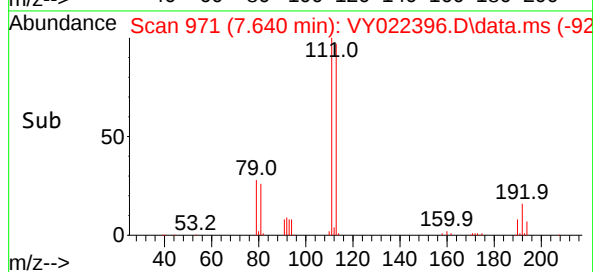
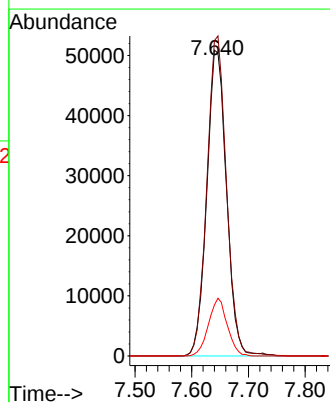
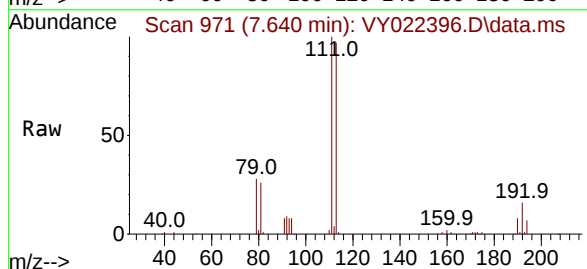
Tgt Ion:113 Resp: 122812

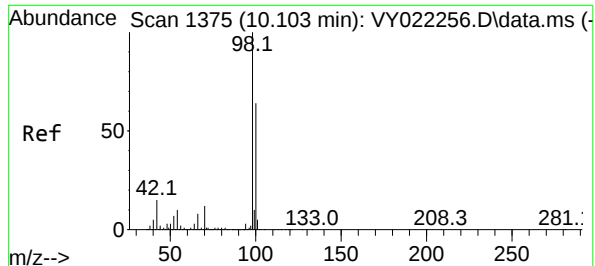
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.0 15.2 22.8





#50

Toluene-d8

Concen: 47.940 ug/l

RT: 10.115 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

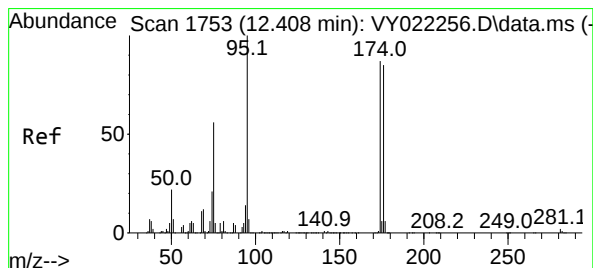
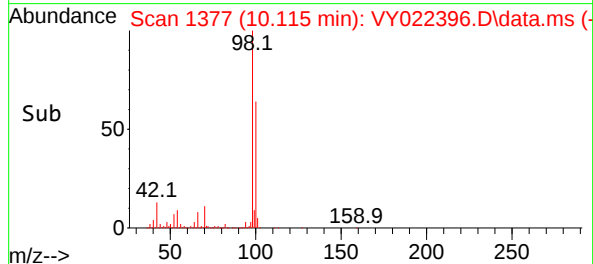
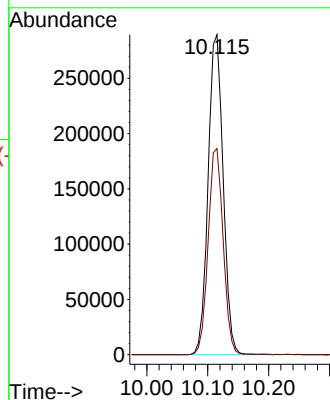
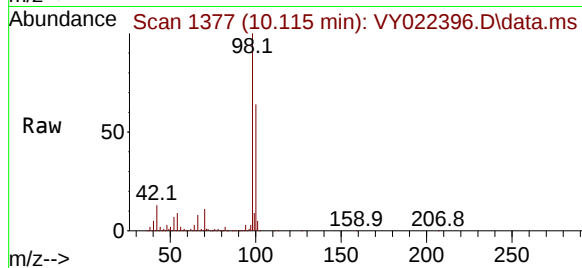
TP-18

Tgt Ion: 98 Resp: 496981

Ion Ratio Lower Upper

98 100

100 64.3 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 37.251 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

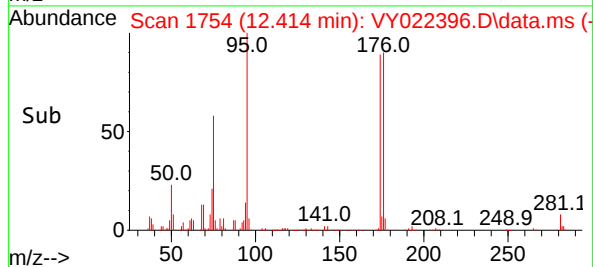
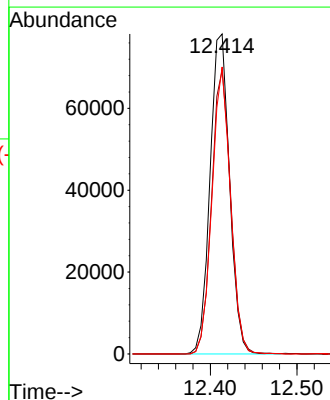
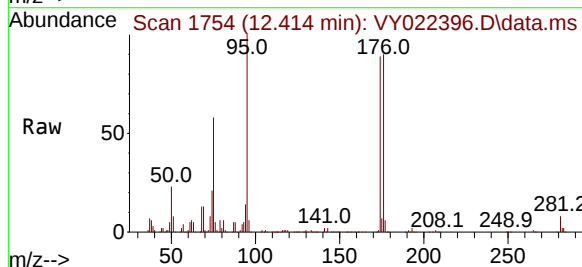
Tgt Ion: 95 Resp: 122403

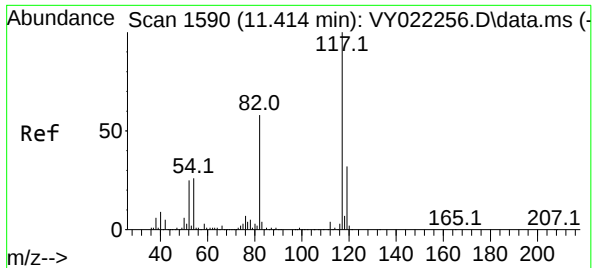
Ion Ratio Lower Upper

95 100

174 86.5 0.0 166.8

176 84.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

TP-18

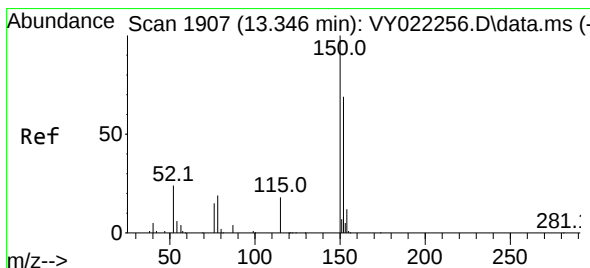
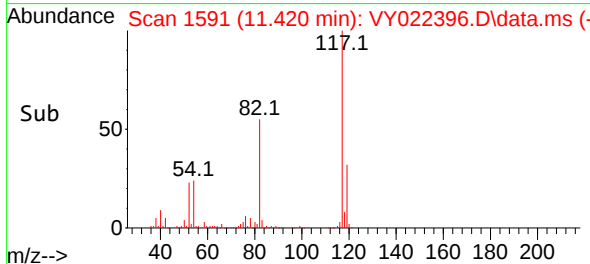
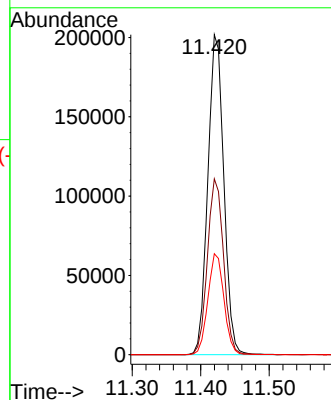
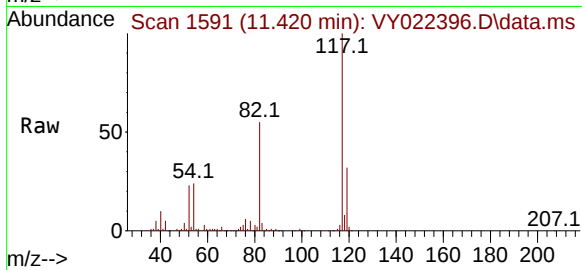
Tgt Ion:117 Resp: 327971

Ion Ratio Lower Upper

117 100

82 54.9 46.6 70.0

119 31.5 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

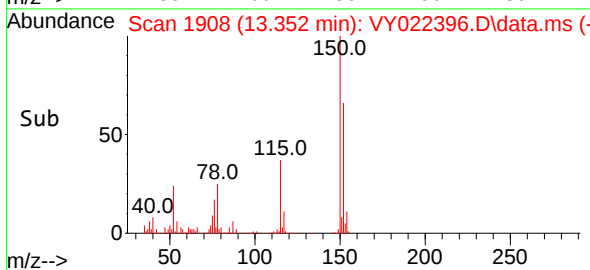
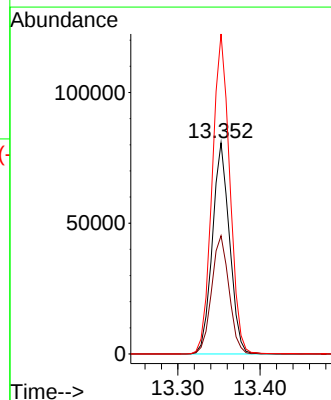
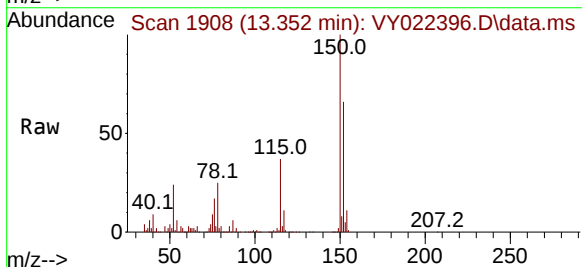
Tgt Ion:152 Resp: 117014

Ion Ratio Lower Upper

152 100

115 56.8 29.4 88.2

150 155.2 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022396.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.086	45	60	63	rBV6	9678	29336	2.18%	0.444%
2	2.172	70	74	78	rBV4	8470	14556	1.08%	0.220%
3	3.885	346	355	366	rBV	11969	35743	2.66%	0.541%
4	4.622	466	476	488	rBV2	9669	31713	2.36%	0.480%
5	7.646	962	972	977	rBV2	177135	421053	31.33%	6.378%
6	7.719	977	984	999	rVB	312144	711722	52.96%	10.781%
7	8.073	1031	1042	1053	rBV	163854	372626	27.73%	5.644%
8	8.622	1122	1132	1143	rBV	502205	988644	73.56%	14.975%
9	10.115	1368	1377	1390	rBV	776765	1343963	100.00%	20.358%
10	11.420	1584	1591	1603	rBV	654565	1061231	78.96%	16.075%
11	12.414	1745	1754	1763	rBV2	462086	734381	54.64%	11.124%
12	13.352	1896	1908	1916	rBV	507812	755129	56.19%	11.438%
13	13.889	1990	1996	2005	rVB2	64076	101688	7.57%	1.540%

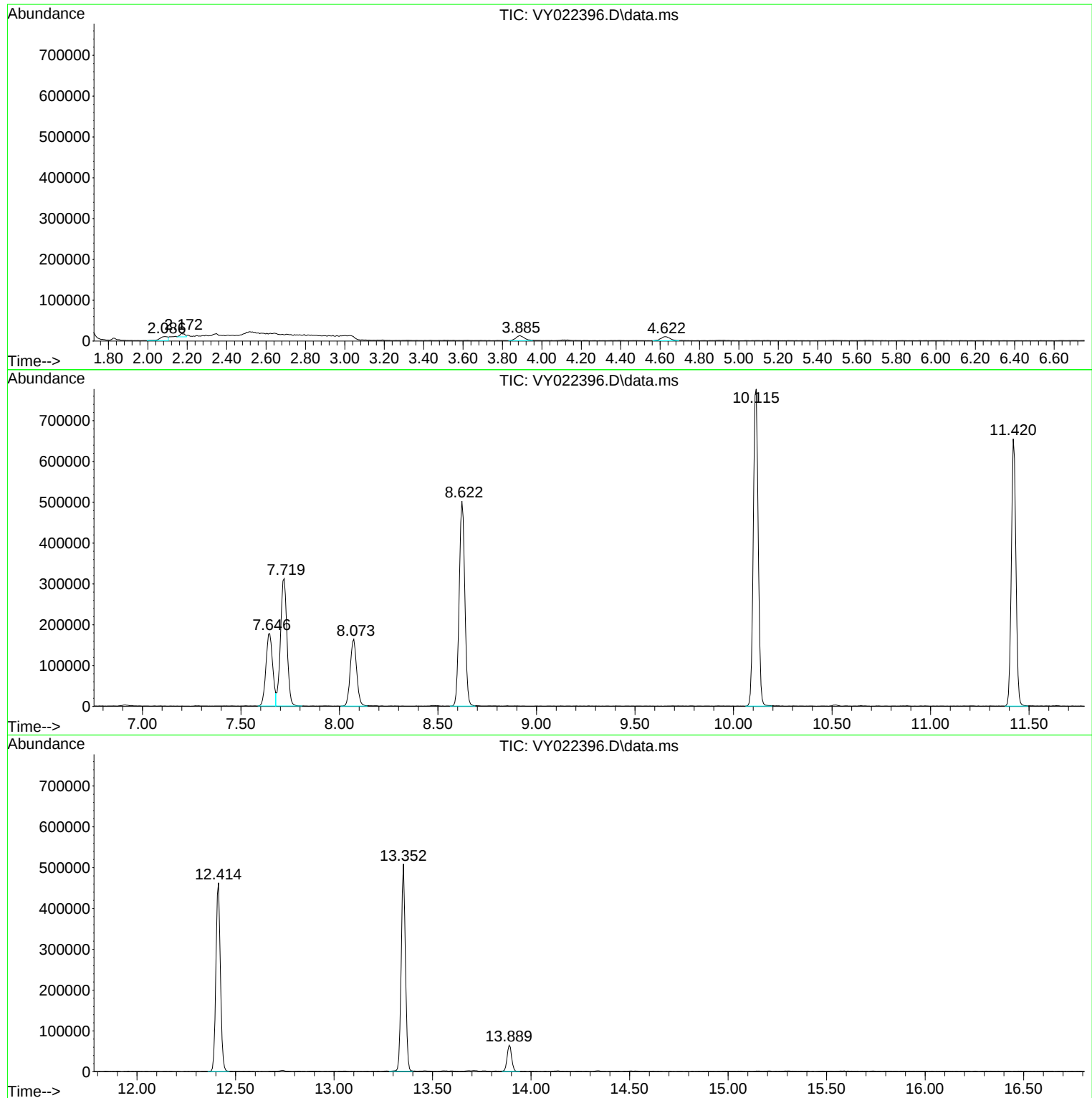
Sum of corrected areas: 6601785

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



A
B
C
D
E
F
G
H
I
J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

A

B

C

D

E

F

G

H

I

J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

A

B

C

D

E

F

G

H

I

J

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Time: May 23 03:31:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	263712	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	465826	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	376365	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	137350	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	140906	48.890	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	97.780%
35) Dibromofluoromethane	7.646	113	138461	49.800	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.600%
50) Toluene-d8	10.115	98	554254	48.674	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.340%
62) 4-Bromofluorobenzene	12.408	95	142658	39.525	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.060%

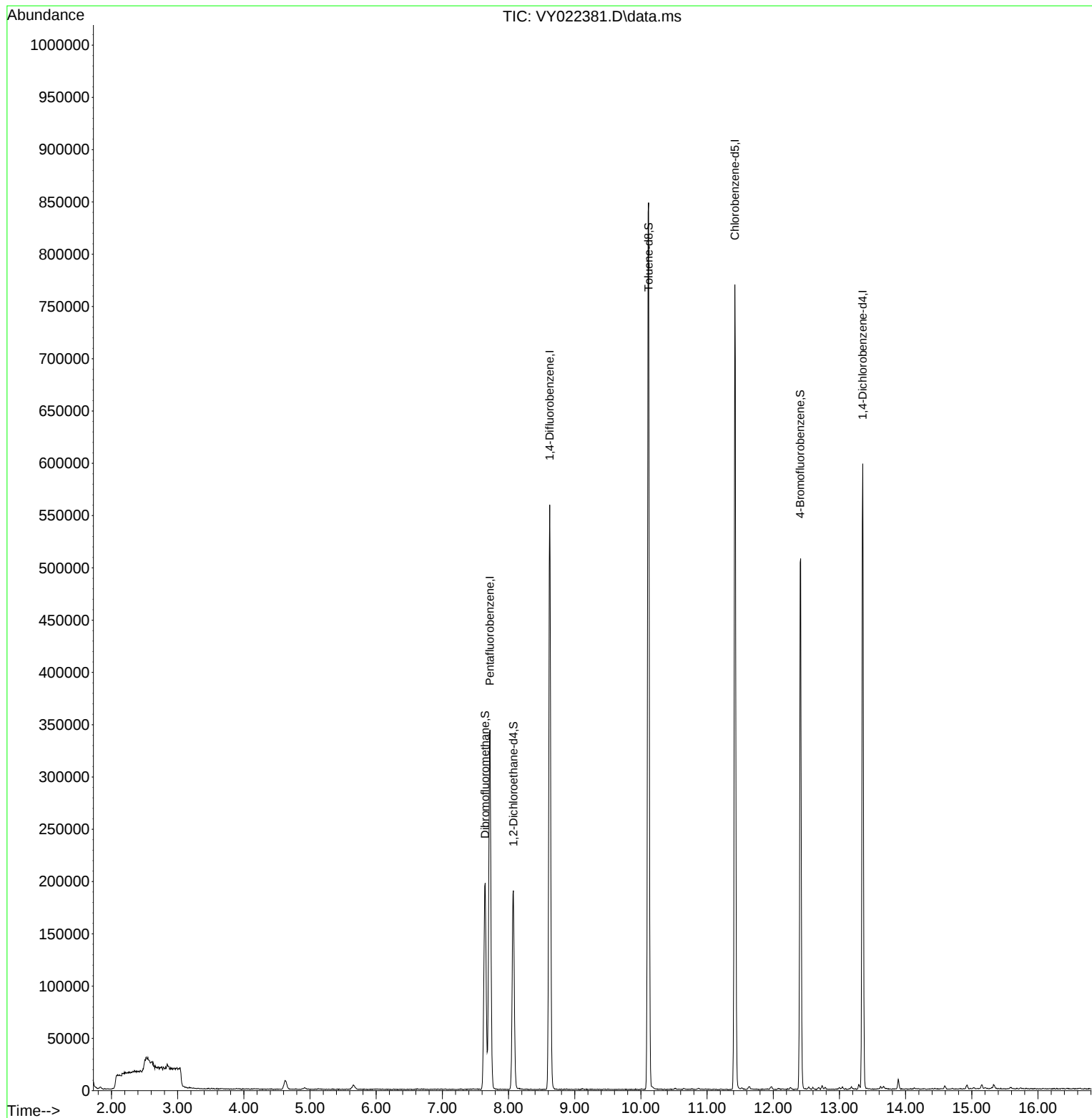
Target Compounds	Qvalue

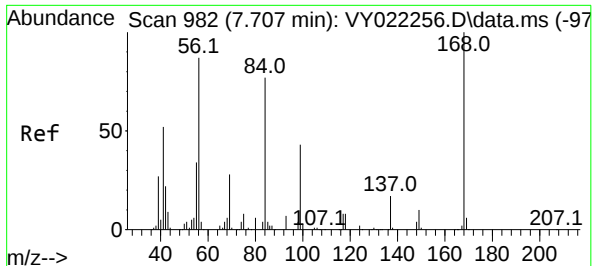
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Time: May 23 03:31:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

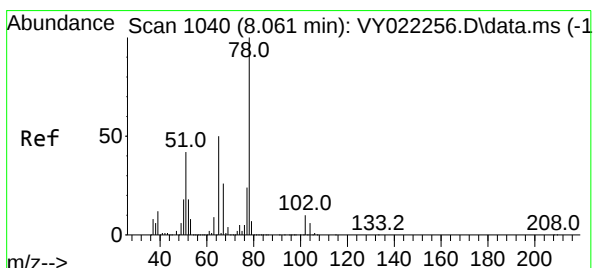
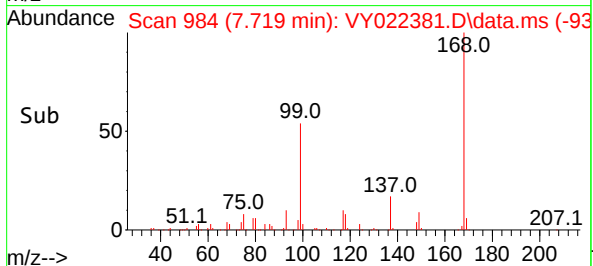
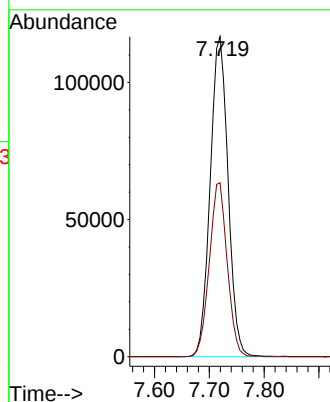
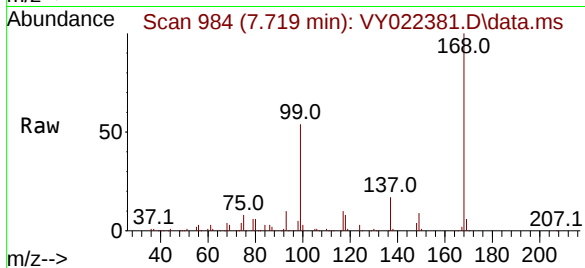




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 99
Delta R.T. 0.012 min
Lab File: VY022381.D
Acq: 22 May 2025 09:07

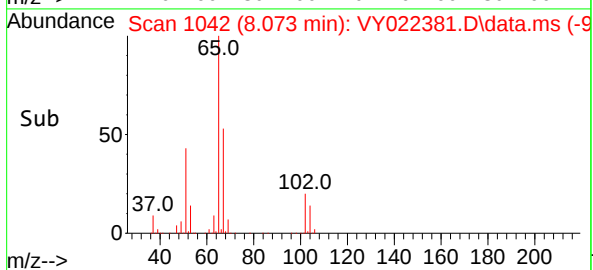
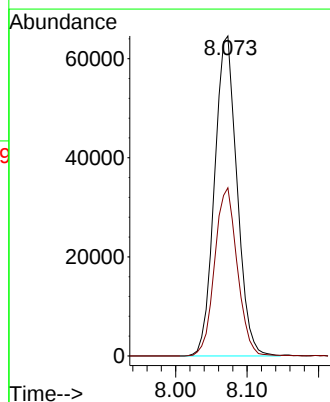
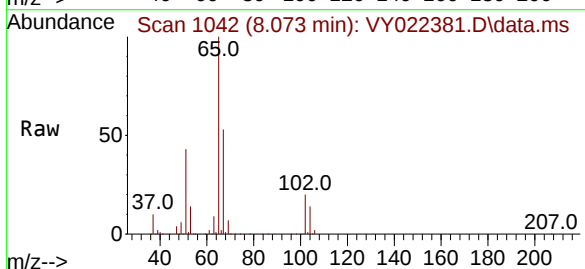
Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

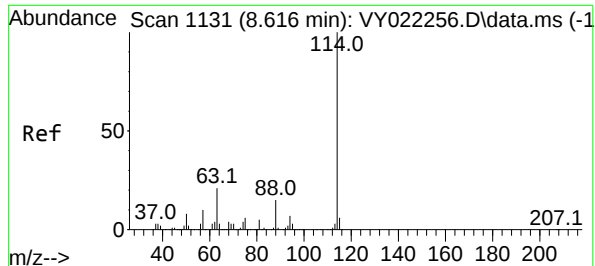
Tgt Ion:168 Resp: 263712
Ion Ratio Lower Upper
168 100
99 54.4 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 48.890 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022381.D
Acq: 22 May 2025 09:07

Tgt Ion: 65 Resp: 140906
Ion Ratio Lower Upper
65 100
67 53.0 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

VY0522SBL01

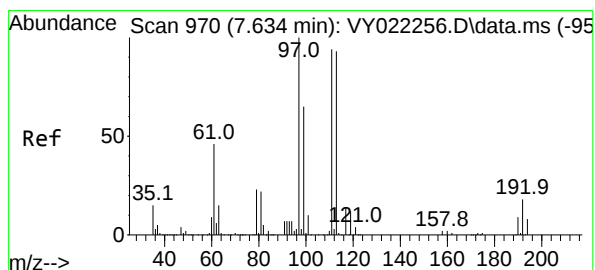
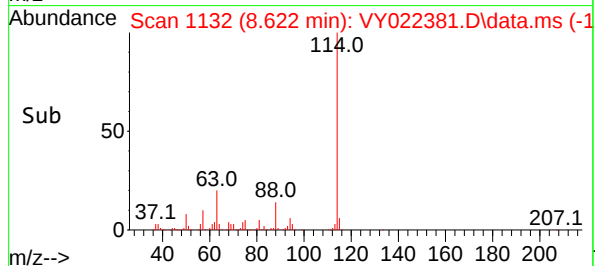
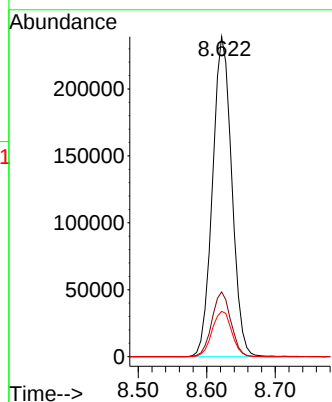
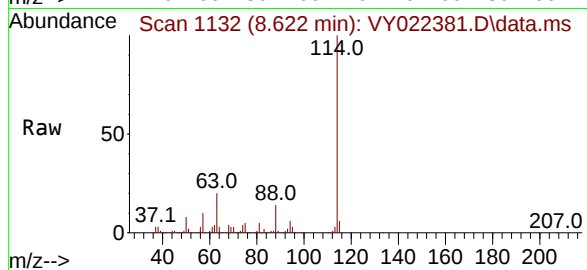
Tgt Ion:114 Resp: 465826

Ion Ratio Lower Upper

114 100

63 20.2 0.0 41.0

88 14.1 0.0 29.4



#35

Dibromofluoromethane

Concen: 49.800 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

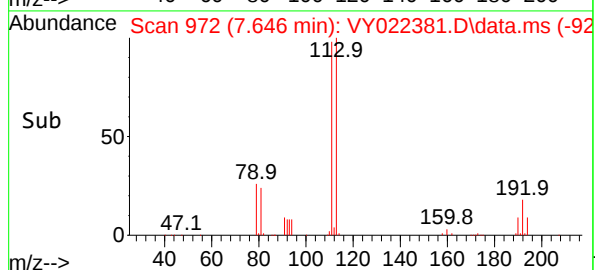
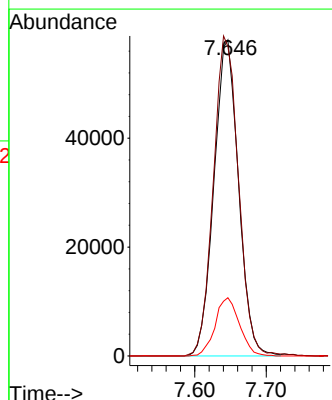
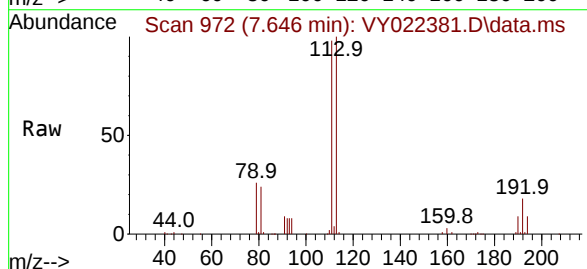
Tgt Ion:113 Resp: 138461

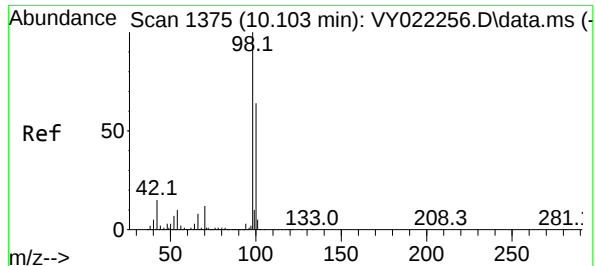
Ion Ratio Lower Upper

113 100

111 103.6 82.6 123.8

192 18.2 15.2 22.8





#50

Toluene-d8

Concen: 48.674 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

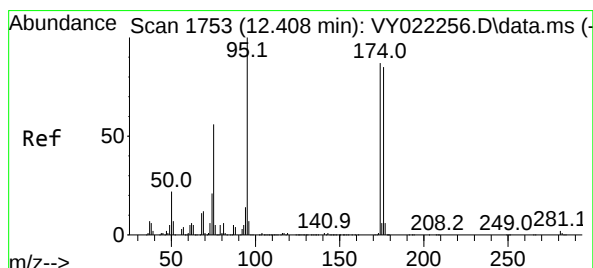
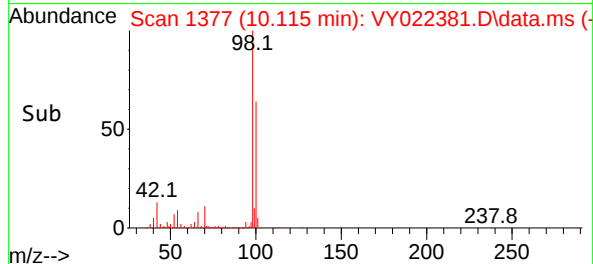
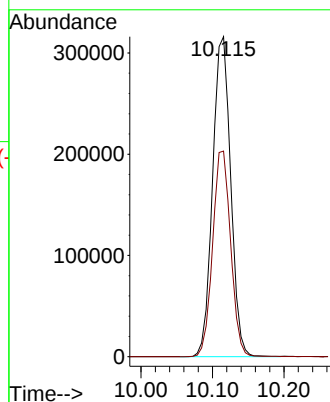
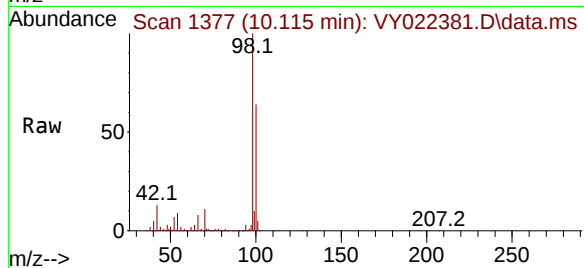
VY0522SBL01

Tgt Ion: 98 Resp: 554254

Ion Ratio Lower Upper

98 100

100 64.2 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 39.525 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

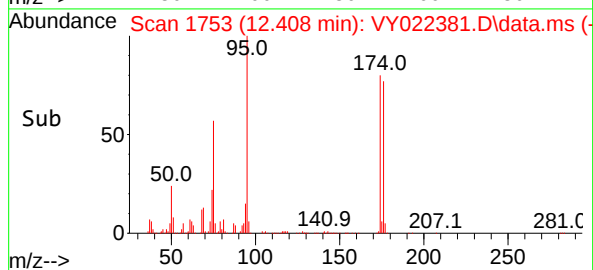
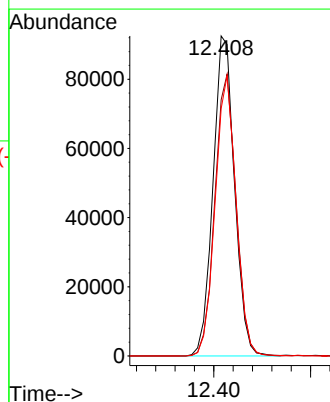
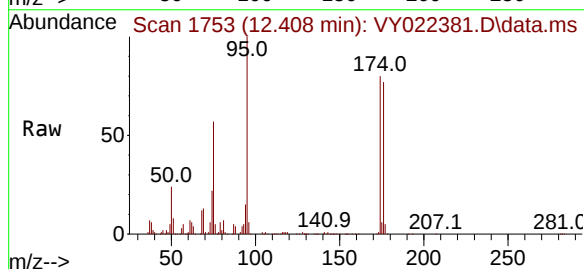
Tgt Ion: 95 Resp: 142658

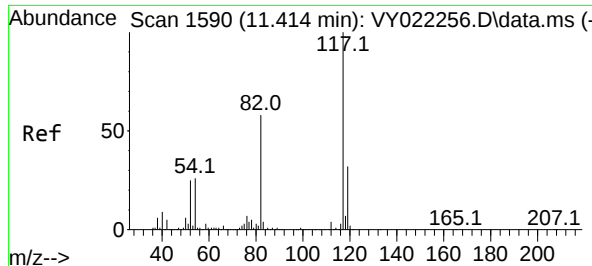
Ion Ratio Lower Upper

95 100

174 86.8 0.0 166.8

176 85.2 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

VY0522SBL01

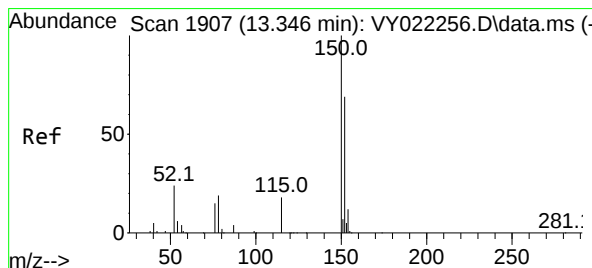
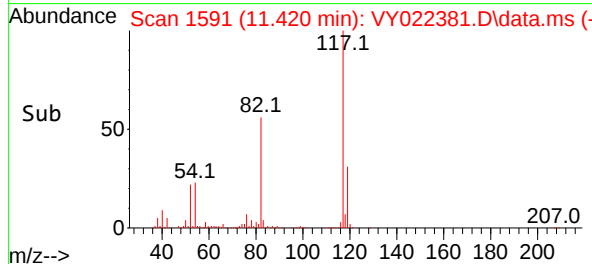
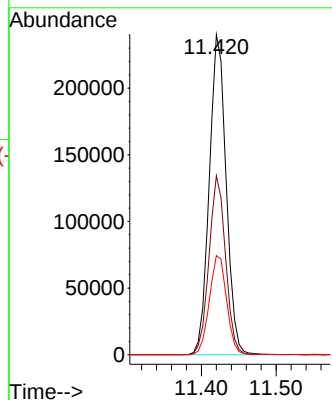
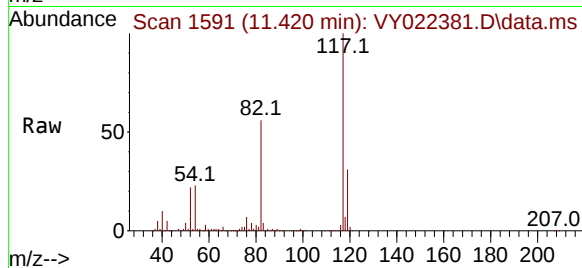
Tgt Ion:117 Resp: 376365

Ion Ratio Lower Upper

117 100

82 55.9 46.6 70.0

119 31.0 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

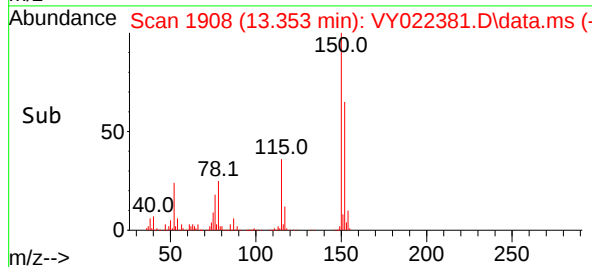
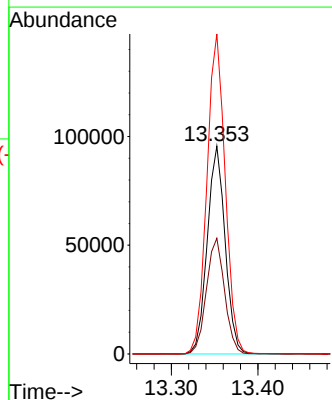
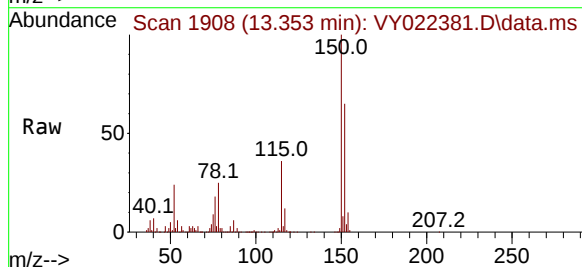
Tgt Ion:152 Resp: 137350

Ion Ratio Lower Upper

152 100

115 56.5 29.4 88.2

150 157.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022381.D
 Acq On : 22 May 2025 09:07
 Operator : SY/MD
 Sample : VY0522SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022381.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.080	46	59	60	rBV5	13183	26197	1.74%	0.361%
2	4.622	466	476	486	rBV2	8616	26540	1.77%	0.366%
3	7.646	962	972	977	rBV	197533	474258	31.57%	6.539%
4	7.719	977	984	994	rVB	343189	786755	52.38%	10.848%
5	8.073	1031	1042	1053	rBV	190297	421547	28.07%	5.812%
6	8.622	1124	1132	1145	rVB	558969	1092880	72.76%	15.069%
7	10.115	1369	1377	1385	rBV	848017	1502036	100.00%	20.711%
8	11.420	1583	1591	1604	rBV	769811	1222504	81.39%	16.856%
9	12.414	1747	1754	1763	rBV	507460	807002	53.73%	11.127%
10	13.353	1902	1908	1916	rVB	597669	892776	59.44%	12.310%

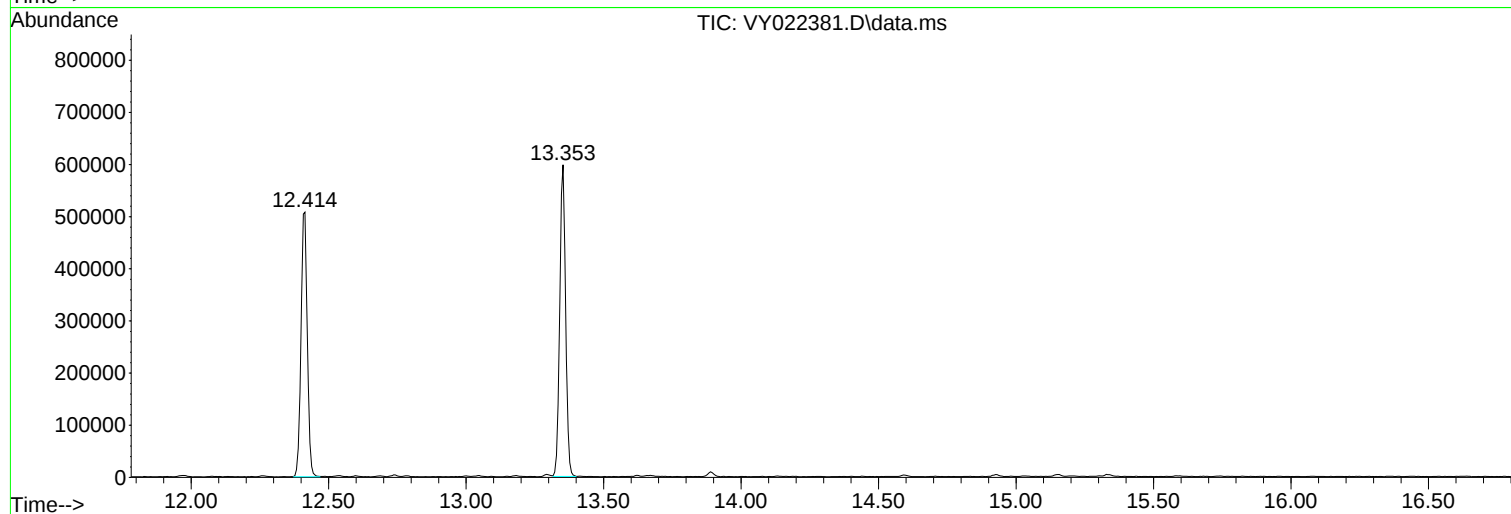
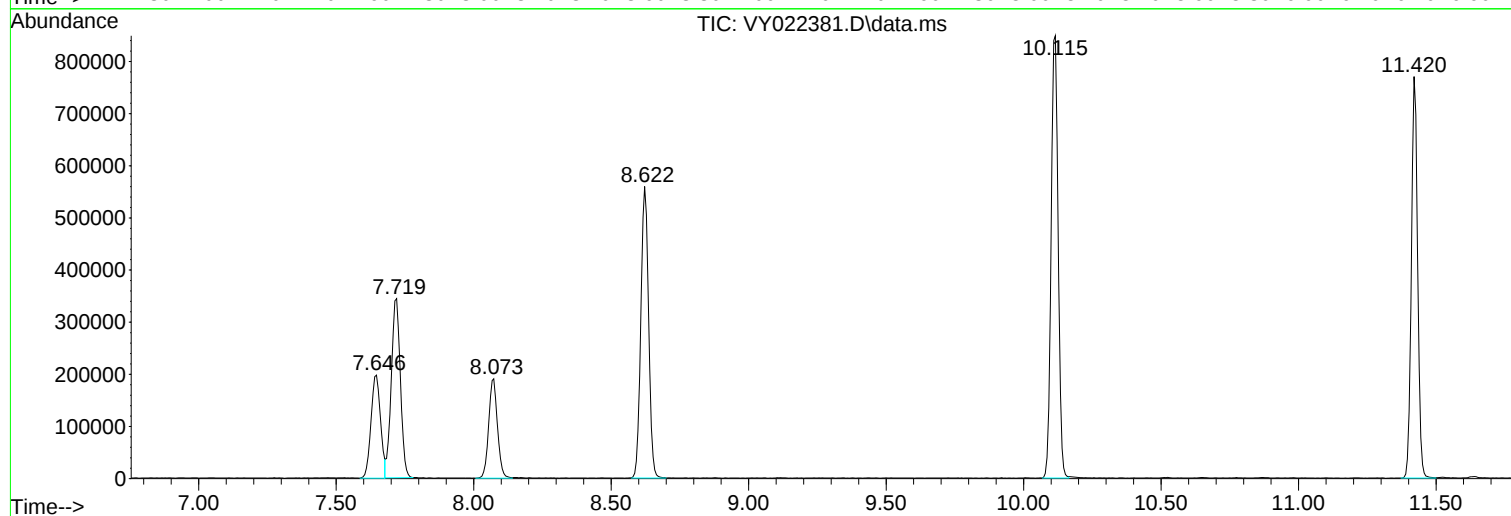
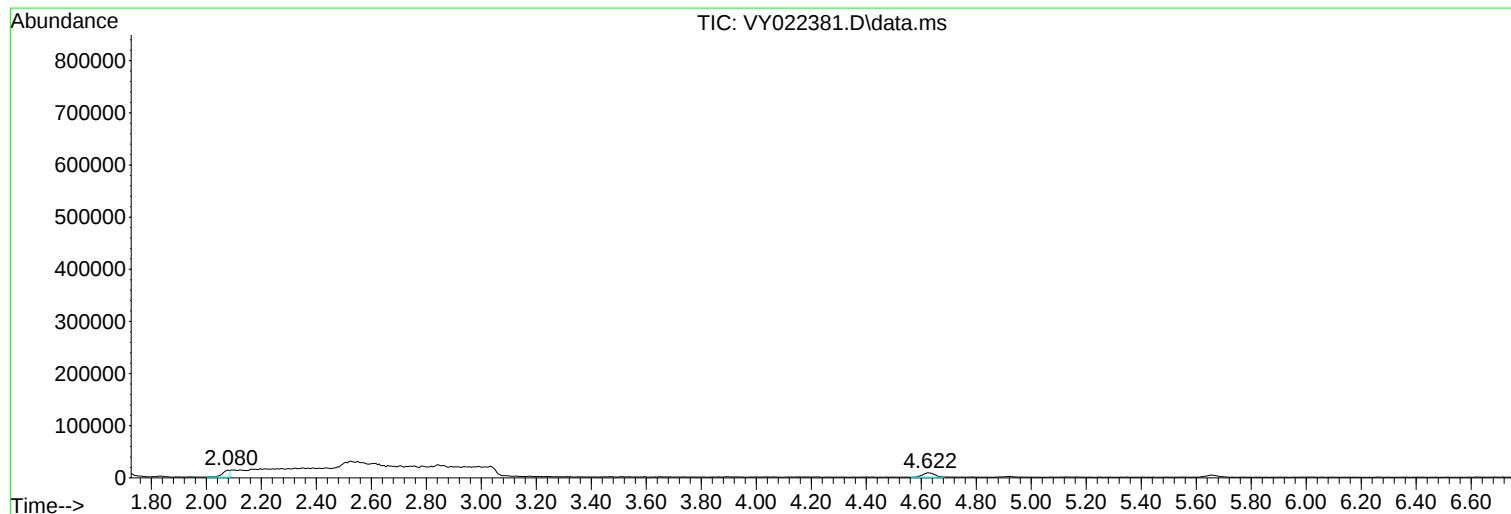
Sum of corrected areas: 7252495

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

A
B
C
D
E
F
G
H
I
J

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

A

B

C

D

E

F

G

H

I

J

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022382.D
 Acq On : 22 May 2025 09:36
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.719	168	174604	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	293942	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	250842	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	118480	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	92313	48.376	ug/l	0.01
Spiked Amount 50.000	Range 50 - 163		Recovery = 96.760%			
35) Dibromofluoromethane	7.646	113	88232	50.291	ug/l	0.01
Spiked Amount 50.000	Range 54 - 147		Recovery = 100.580%			
50) Toluene-d8	10.115	98	361670	50.334	ug/l	0.01
Spiked Amount 50.000	Range 58 - 134		Recovery = 100.660%			
62) 4-Bromofluorobenzene	12.414	95	108691	47.724	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 95.440%			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.867	85	35700	19.595	ug/l	100
3) Chloromethane	2.074	50	89428	23.334	ug/l	96
4) Vinyl Chloride	2.208	62	106584	24.892	ug/l	98
5) Bromomethane	2.598	94	120242	34.496	ug/l	100
6) Chloroethane	2.739	64	75963	28.516	ug/l	99
7) Trichlorofluoromethane	3.056	101	101302	23.367	ug/l	96
8) Diethyl Ether	3.464	74	20744	19.939	ug/l	92
9) 1,1,2-Trichlorotrifluo...	3.824	101	39378	20.923	ug/l	99
10) Methyl Iodide	4.013	142	39404	18.090	ug/l	98
11) Tert butyl alcohol	4.891	59	13893	95.339	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	38242	20.476	ug/l	94
13) Acrolein	3.665	56	11668	54.771	ug/l	97
14) Allyl chloride	4.397	41	57800	17.650	ug/l	93
15) Acrylonitrile	5.067	53	41413	96.604	ug/l	99
16) Acetone	3.885	43	37784	105.597	ug/l	96
17) Carbon Disulfide	4.116	76	117567	19.304	ug/l	99
18) Methyl Acetate	4.403	43	18733	16.605	ug/l #	89
19) Methyl tert-butyl Ether	5.128	73	100940	19.601	ug/l	98
20) Methylene Chloride	4.629	84	43819	18.952	ug/l	90
21) trans-1,2-Dichloroethene	5.122	96	40647	19.717	ug/l	95
22) Diisopropyl ether	6.031	45	124864	18.055	ug/l	98
23) Vinyl Acetate	5.970	43	370765	88.742	ug/l	96
24) 1,1-Dichloroethane	5.927	63	75035	19.421	ug/l	99
25) 2-Butanone	6.909	43	57111	95.421	ug/l	95
26) 2,2-Dichloropropane	6.890	77	69084	20.103	ug/l	100
27) cis-1,2-Dichloroethene	6.902	96	47248	19.861	ug/l	97
28) Bromochloromethane	7.256	49	30609	18.573	ug/l	96
29) Tetrahydrofuran	7.280	42	35533	92.280	ug/l	94
30) Chloroform	7.433	83	74530	20.111	ug/l	99
31) Cyclohexane	7.713	56	72006	18.653	ug/l	95
32) 1,1,1-Trichloroethane	7.628	97	66206	19.472	ug/l	99
36) 1,1-Dichloropropene	7.847	75	56933	19.702	ug/l	99
37) Ethyl Acetate	6.994	43	26743	19.234	ug/l	97
38) Carbon Tetrachloride	7.829	117	59138	19.771	ug/l	97
39) Methylcyclohexane	9.116	83	74349	19.151	ug/l	97
40) Benzene	8.091	78	167114	19.508	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022382.D
 Acq On : 22 May 2025 09:36
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VY0522SBS01

Manual Integrations

APPROVED

Reviewed By :John Carlone 05/23/2025

Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Quant Title : SW846 8260

QLast Update : Fri May 16 01:42:09 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.232	41	14142	15.333	ug/l #	82
42) 1,2-Dichloroethane	8.171	62	44204	19.081	ug/l	98
43) Isopropyl Acetate	8.207	43	52844	17.427	ug/l	98
44) Trichloroethene	8.872	130	42833	20.109	ug/l	96
45) 1,2-Dichloropropane	9.152	63	39408	19.081	ug/l	97
46) Dibromomethane	9.237	93	22173	19.905	ug/l	97
47) Bromodichloromethane	9.433	83	55825	19.317	ug/l	98
48) Methyl methacrylate	9.231	41	24395	17.203	ug/l	94
49) 1,4-Dioxane	9.250	88	5019	398.826	ug/l	89
51) 4-Methyl-2-Pentanone	10.006	43	132300	88.920	ug/l	96
52) Toluene	10.176	92	105474	19.443	ug/l	98
53) t-1,3-Dichloropropene	10.402	75	52289	18.540	ug/l	100
54) cis-1,3-Dichloropropene	9.865	75	60767	18.806	ug/l	95
55) 1,1,2-Trichloroethane	10.579	97	27910	19.566	ug/l	99
56) Ethyl methacrylate	10.445	69	41592	18.718	ug/l	95
57) 1,3-Dichloropropane	10.725	76	50921	20.091	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	80535	80.750	ug/l	97
59) 2-Hexanone	10.768	43	89261	89.478	ug/l	95
60) Dibromochloromethane	10.920	129	36931	19.947	ug/l	100
61) 1,2-Dibromoethane	11.024	107	26053	19.596	ug/l	99
64) Tetrachloroethene	10.652	164	46204	19.928	ug/l	96
65) Chlorobenzene	11.450	112	111687	19.735	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.524	131	36492	18.757	ug/l	98
67) Ethyl Benzene	11.524	91	198411	18.720	ug/l	99
68) m/p-Xylenes	11.633	106	151710	37.987	ug/l	97
69) o-Xylene	11.963	106	71140	18.827	ug/l	100
70) Styrene	11.975	104	121069	18.995	ug/l	97
71) Bromoform	12.139	173	20171	19.208	ug/l #	99
73) Isopropylbenzene	12.261	105	189456	19.302	ug/l	100
74) N-amyl acetate	12.078	43	47777	17.019	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.511	83	29957	19.845	ug/l	98
76) 1,2,3-Trichloropropane	12.560	75	22658m	18.877	ug/l	
77) Bromobenzene	12.536	156	39583	18.881	ug/l	98
78) n-propylbenzene	12.603	91	229385	19.375	ug/l	100
79) 2-Chlorotoluene	12.682	91	120979	18.594	ug/l	98
80) 1,3,5-Trimethylbenzene	12.743	105	149426	18.859	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	10636	17.950	ug/l	97
82) 4-Chlorotoluene	12.780	91	123043	18.386	ug/l	99
83) tert-Butylbenzene	12.999	119	134904	19.156	ug/l	97
84) 1,2,4-Trimethylbenzene	13.048	105	147645	18.771	ug/l	99
85) sec-Butylbenzene	13.182	105	202478	19.368	ug/l	100
86) p-Isopropyltoluene	13.298	119	166855	18.977	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	80701	18.857	ug/l	98
88) 1,4-Dichlorobenzene	13.371	146	78194	18.995	ug/l	99
89) n-Butylbenzene	13.621	91	160206	19.260	ug/l	100
90) Hexachloroethane	13.883	117	33947	19.127	ug/l	98
91) 1,2-Dichlorobenzene	13.663	146	68652	19.098	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	4780	19.637	ug/l	99
93) 1,2,4-Trichlorobenzene	14.925	180	40453	19.482	ug/l	99
94) Hexachlorobutadiene	15.029	225	21731	18.766	ug/l	98
95) Naphthalene	15.151	128	76320	19.368	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	33805	19.191	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022382.D
Acq On : 22 May 2025 09:36
Operator : SY/MD
Sample : VY0522SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

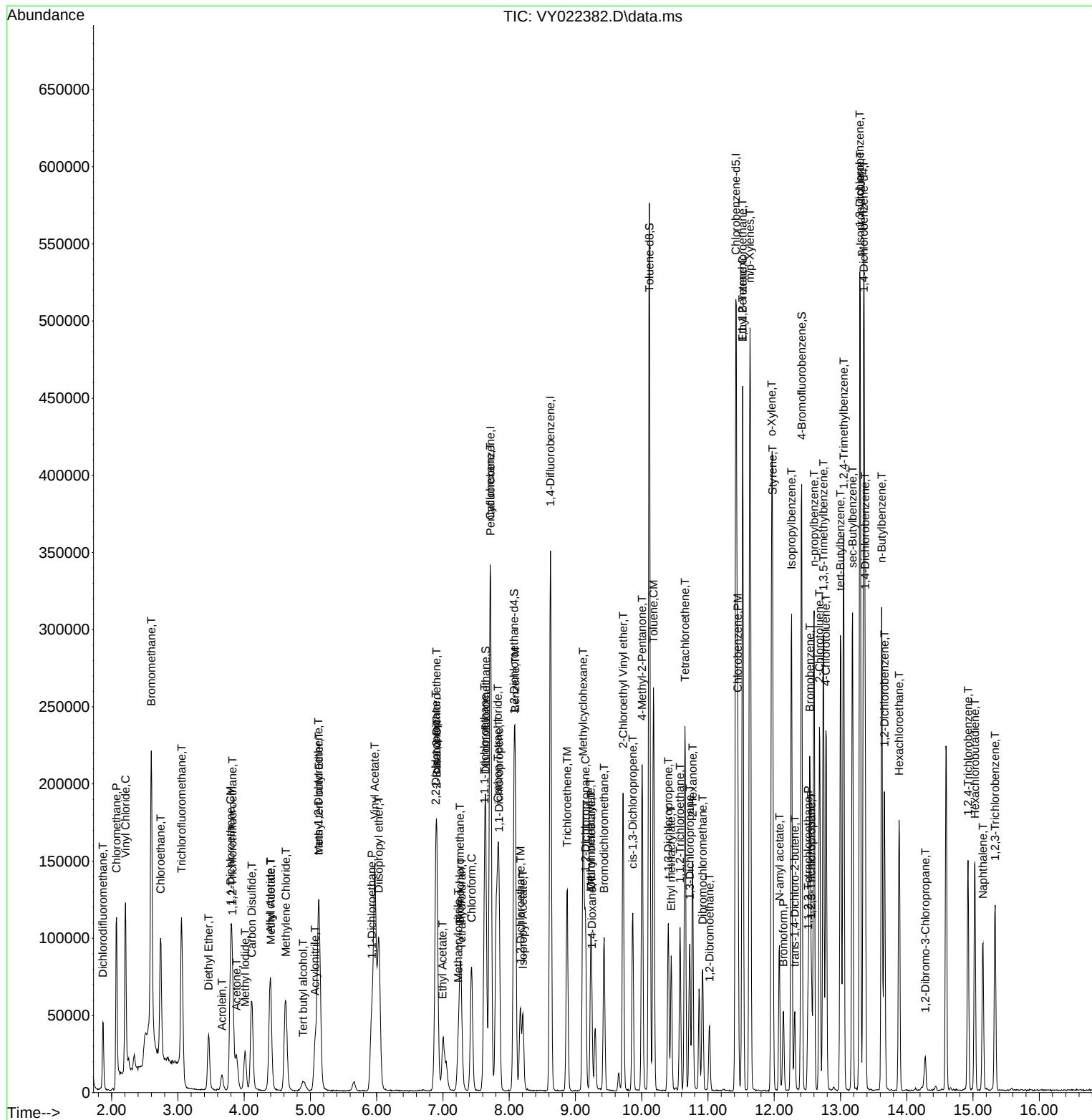
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022382.D
Acq On : 22 May 2025 09:36
Operator : SY/MD
Sample : VY0522SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBS01

Manual Integrations

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022383.D
 Acq On : 22 May 2025 09:59
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.713	168	165702	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	283052	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	236945	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	112772	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	91305	50.418	ug/l	0.01
Spiked Amount 50.000	Range 50 - 163		Recovery = 100.840%			
35) Dibromofluoromethane	7.640	113	86124	50.978	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 101.960%			
50) Toluene-d8	10.115	98	344960	49.856	ug/l	0.01
Spiked Amount 50.000	Range 58 - 134		Recovery = 99.720%			
62) 4-Bromofluorobenzene	12.413	95	103227	47.068	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 94.140%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.866	85	34872	20.169	ug/l	98
3) Chloromethane	2.068	50	84322	23.184	ug/l	98
4) Vinyl Chloride	2.208	62	103245	25.408	ug/l	96
5) Bromomethane	2.598	94	110601	33.435	ug/l	100
6) Chloroethane	2.738	64	71548	28.302	ug/l	97
7) Trichlorofluoromethane	3.055	101	86964	21.138	ug/l	98
8) Diethyl Ether	3.464	74	20593	20.857	ug/l	95
9) 1,1,2-Trichlorotrifluo...	3.823	101	38058	21.308	ug/l	99
10) Methyl Iodide	4.006	142	40873	19.772	ug/l	99
11) Tert butyl alcohol	4.884	59	14857	107.432	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	36929	20.835	ug/l	85
13) Acrolein	3.659	56	11544	57.100	ug/l	90
14) Allyl chloride	4.384	41	56854	18.294	ug/l	94
15) Acrylonitrile	5.073	53	42184	103.689	ug/l	98
16) Acetone	3.884	43	31709	93.380	ug/l	94
17) Carbon Disulfide	4.116	76	114095	19.740	ug/l	99
18) Methyl Acetate	4.396	43	20711	19.345	ug/l	95
19) Methyl tert-butyl Ether	5.128	73	102955	21.066	ug/l	95
20) Methylene Chloride	4.622	84	41710	19.009	ug/l	92
21) trans-1,2-Dichloroethene	5.122	96	39375	20.126	ug/l	92
22) Diisopropyl ether	6.030	45	125231	19.081	ug/l	94
23) Vinyl Acetate	5.969	43	381544	96.228	ug/l	95
24) 1,1-Dichloroethane	5.927	63	74250	20.250	ug/l	99
25) 2-Butanone	6.908	43	55203	97.189	ug/l	100
26) 2,2-Dichloropropane	6.896	77	65151	19.977	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	46809	20.734	ug/l	96
28) Bromochloromethane	7.256	49	31798	20.331	ug/l	99
29) Tetrahydrofuran	7.268	42	37375	102.279	ug/l	92
30) Chloroform	7.432	83	72756	20.687	ug/l	99
31) Cyclohexane	7.713	56	69034	18.844	ug/l	96
32) 1,1,1-Trichloroethane	7.628	97	66078	20.479	ug/l	99
36) 1,1-Dichloropropene	7.847	75	54364	19.537	ug/l	98
37) Ethyl Acetate	6.994	43	27223	20.333	ug/l	97
38) Carbon Tetrachloride	7.823	117	56279	19.539	ug/l	97
39) Methylcyclohexane	9.115	83	73130	19.561	ug/l	93
40) Benzene	8.091	78	166008	20.124	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022383.D
 Acq On : 22 May 2025 09:59
 Operator : SY/MD
 Sample : VY0522SBSD01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBSD01

Manual Integrations APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.231	41	13388	15.074	ug/l #	75
42) 1,2-Dichloroethane	8.164	62	45353	20.330	ug/l	100
43) Isopropyl Acetate	8.207	43	55775	19.101	ug/l	98
44) Trichloroethene	8.871	130	41551	20.257	ug/l	98
45) 1,2-Dichloropropane	9.146	63	39131	19.675	ug/l	98
46) Dibromomethane	9.237	93	22317	20.805	ug/l	97
47) Bromodichloromethane	9.432	83	55379	19.900	ug/l	96
48) Methyl methacrylate	9.231	41	24767	18.137	ug/l	93
49) 1,4-Dioxane	9.237	88	5070	418.379	ug/l	93
51) 4-Methyl-2-Pentanone	10.005	43	139840	97.604	ug/l	97
52) Toluene	10.176	92	101209	19.375	ug/l	99
53) t-1,3-Dichloropropene	10.401	75	52641	19.383	ug/l	99
54) cis-1,3-Dichloropropene	9.865	75	61287	19.697	ug/l	96
55) 1,1,2-Trichloroethane	10.578	97	28589	20.813	ug/l	97
56) Ethyl methacrylate	10.444	69	42404	19.818	ug/l	94
57) 1,3-Dichloropropane	10.725	76	50499	20.692	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.719	63	83817	87.274	ug/l	97
59) 2-Hexanone	10.767	43	91893	95.660	ug/l	96
60) Dibromochloromethane	10.920	129	36293	20.356	ug/l	99
61) 1,2-Dibromoethane	11.017	107	25923	20.248	ug/l	100
64) Tetrachloroethene	10.651	164	45749	20.889	ug/l	97
65) Chlorobenzene	11.450	112	108867	20.365	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.523	131	36887	20.072	ug/l	99
67) Ethyl Benzene	11.523	91	196186	19.596	ug/l	99
68) m/p-Xylenes	11.633	106	149849	39.722	ug/l	96
69) o-Xylene	11.956	106	70807	19.838	ug/l	96
70) Styrene	11.974	104	119807	19.899	ug/l	97
71) Bromoform	12.133	173	20642	20.810	ug/l #	97
73) Isopropylbenzene	12.261	105	184158	19.712	ug/l	100
74) N-amyl acetate	12.072	43	50559	18.922	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	30272	21.069	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	23203m	20.309	ug/l	
77) Bromobenzene	12.535	156	39924	20.008	ug/l	99
78) n-propylbenzene	12.602	91	222841	19.775	ug/l	100
79) 2-Chlorotoluene	12.682	91	120348	19.434	ug/l	98
80) 1,3,5-Trimethylbenzene	12.742	105	148179	19.648	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	11117	19.711	ug/l	95
82) 4-Chlorotoluene	12.779	91	122004	19.154	ug/l	96
83) tert-Butylbenzene	12.999	119	135145	20.161	ug/l	96
84) 1,2,4-Trimethylbenzene	13.047	105	146449	19.562	ug/l	98
85) sec-Butylbenzene	13.181	105	198914	19.991	ug/l	99
86) p-Isopropyltoluene	13.297	119	162649	19.435	ug/l	98
87) 1,3-Dichlorobenzene	13.291	146	80601	19.787	ug/l	98
88) 1,4-Dichlorobenzene	13.370	146	78462	20.025	ug/l	99
89) n-Butylbenzene	13.620	91	155438	19.633	ug/l	100
90) Hexachloroethane	13.883	117	33072	19.577	ug/l	96
91) 1,2-Dichlorobenzene	13.663	146	69239	20.236	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	4955	21.386	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	39517	19.994	ug/l	97
94) Hexachlorobutadiene	15.029	225	20733	18.811	ug/l	99
95) Naphthalene	15.144	128	76999	20.530	ug/l	100
96) 1,2,3-Trichlorobenzene	15.333	180	34249	20.427	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022383.D
Acq On : 22 May 2025 09:59
Operator : SY/MD
Sample : VY0522SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBSD01

Manual Integrations
APPROVED

Reviewed By : John Carlone 05/23/2025
Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

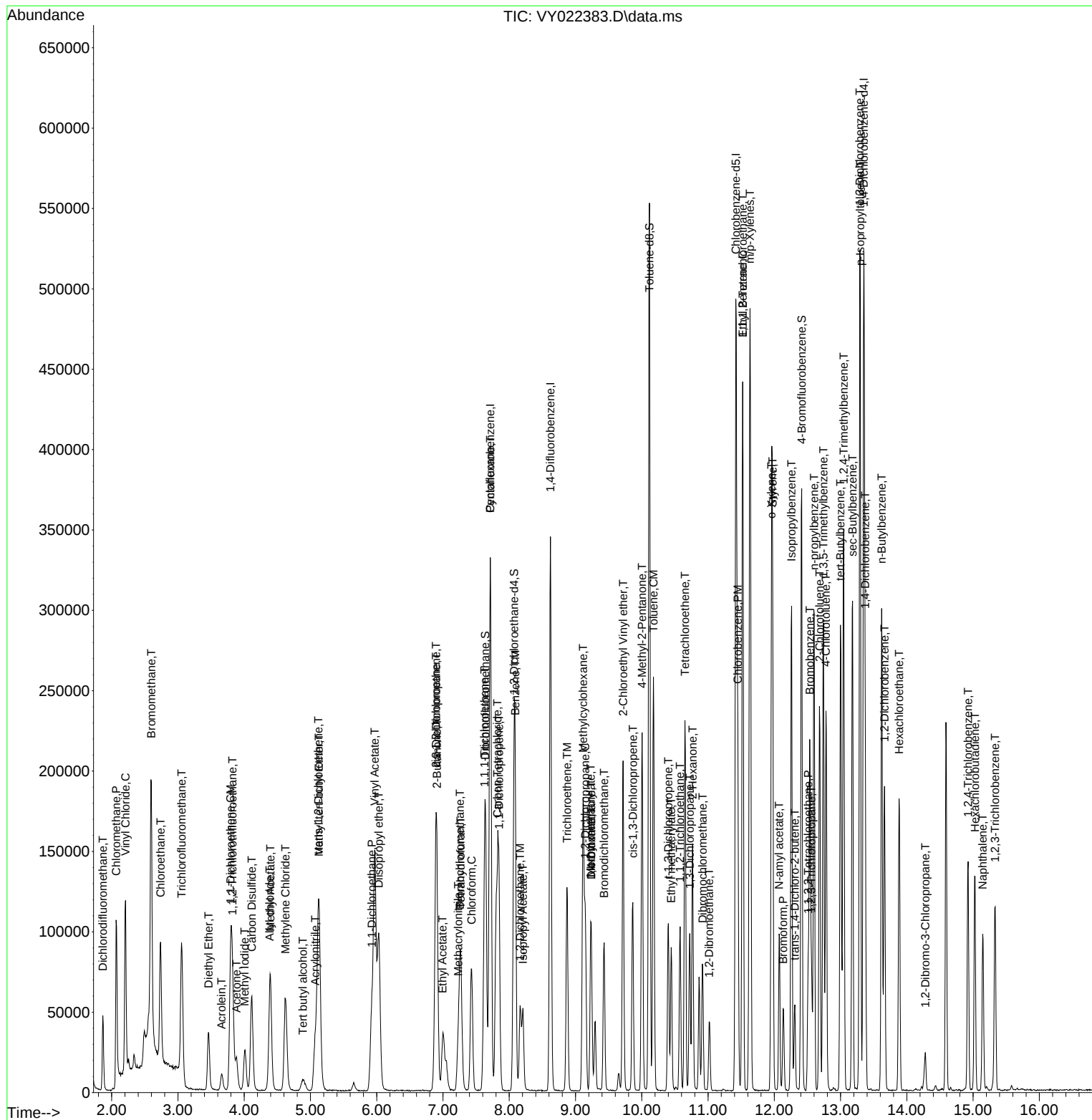
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025



Manual Integration Report

Sequence:	VY051525	Instrument	MSVOA_y
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VY022253.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDICC005	VY022253.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDICC005	VY022253.D	Methyl Acetate	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDICC010	VY022254.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:33 AM	Sam	5/16/2025 11:50:49 AM	Peak Integrated by Software
VSTDICC010	VY022254.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:33 AM	Sam	5/16/2025 11:50:49 AM	Peak Integrated by Software
VSTDICC020	VY022255.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:32 AM	Sam	5/16/2025 11:50:48 AM	Peak Integrated by Software
VSTDICC020	VY022255.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:32 AM	Sam	5/16/2025 11:50:48 AM	Peak Integrated by Software
VSTDICCC050	VY022256.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:30 AM	Sam	5/16/2025 11:50:46 AM	Peak Integrated by Software
VSTDICCC050	VY022256.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:30 AM	Sam	5/16/2025 11:50:46 AM	Peak Integrated by Software
VSTDICC100	VY022257.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:28 AM	Sam	5/16/2025 11:50:45 AM	Peak Integrated by Software
VSTDICC100	VY022257.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:28 AM	Sam	5/16/2025 11:50:45 AM	Peak Integrated by Software
VSTDICC150	VY022258.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:27 AM	Sam	5/16/2025 11:50:43 AM	Peak Integrated by Software
VSTDICC150	VY022258.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:27 AM	Sam	5/16/2025 11:50:43 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VY051525

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VY022260.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:25 AM	Sam	5/16/2025 11:50:42 AM	Peak Integrated by Software
VSTDICV050	VY022260.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:25 AM	Sam	5/16/2025 11:50:42 AM	Peak Integrated by Software
VSTDCCC050	VY022275.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:21 AM	Sam	5/16/2025 11:50:27 AM	Peak Integrated by Software
VSTDCCC050	VY022275.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:21 AM	Sam	5/16/2025 11:50:27 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	vy052225	Instrument	MSVOA_y
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY022380.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:46 AM	MMDadoda	5/23/2025 4:07:00 PM	Peak Integrated by Software
VY0522SBS01	VY022382.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:50 AM	MMDadoda	5/23/2025 4:07:01 PM	Peak Integrated by Software
VY0522SBSD0 1	VY022383.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:54 AM	MMDadoda	5/23/2025 4:07:02 PM	Peak Integrated by Software
VSTDCCC050	VY022405.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:59 AM	MMDadoda	5/23/2025 4:07:04 PM	Peak Integrated by Software
VSTDCCC050	VY022405.D	Methacrylonitrile	JOHN	5/23/2025 11:04:59 AM	MMDadoda	5/23/2025 4:07:04 PM	Peak Integrated by Software

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY051525

Review By	Maresh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY022252.D	15 May 2025 07:52	SY/MD	Ok
2	VSTDIC005	VY022253.D	15 May 2025 09:46	SY/MD	Ok,M
3	VSTDIC010	VY022254.D	15 May 2025 10:16	SY/MD	Ok,M
4	VSTDIC020	VY022255.D	15 May 2025 10:39	SY/MD	Ok,M
5	VSTDIC050	VY022256.D	15 May 2025 11:02	SY/MD	Ok,M
6	VSTDIC100	VY022257.D	15 May 2025 11:24	SY/MD	Ok,M
7	VSTDIC150	VY022258.D	15 May 2025 11:47	SY/MD	Ok,M
8	VIBLK	VY022259.D	15 May 2025 12:34	SY/MD	Ok
9	VSTDICV050	VY022260.D	15 May 2025 13:20	SY/MD	Ok,M
10	VY0515SBL01	VY022261.D	15 May 2025 13:44	SY/MD	Ok
11	VY0515SBS01	VY022262.D	15 May 2025 14:07	SY/MD	Ok,M
12	VY0515SBS01	VY022263.D	15 May 2025 14:29	SY/MD	Ok,M
13	Q1984-01	VY022264.D	15 May 2025 15:12	SY/MD	Ok
14	Q1984-03	VY022265.D	15 May 2025 15:35	SY/MD	Ok
15	Q1984-05	VY022266.D	15 May 2025 15:59	SY/MD	Ok
16	Q1984-07	VY022267.D	15 May 2025 16:22	SY/MD	ReRun
17	Q1984-09	VY022268.D	15 May 2025 16:46	SY/MD	Not Ok
18	Q1984-11	VY022269.D	15 May 2025 17:09	SY/MD	Not Ok
19	Q1984-13	VY022270.D	15 May 2025 17:33	SY/MD	Not Ok
20	Q1984-15	VY022271.D	15 May 2025 17:56	SY/MD	ReRun
21	Q1982-04	VY022272.D	15 May 2025 18:19	SY/MD	Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY051525

Review By	Maresh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q1982-05	VY022273.D	15 May 2025 18:43	SY/MD	Ok
23	Q1982-06	VY022274.D	15 May 2025 19:06	SY/MD	Ok
24	VSTDCCC050	VY022275.D	15 May 2025 19:52	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM		
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM		
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP134001			
CCC		VP134002,VP134003			
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	VY022379.D	22 May 2025 08:05	SY/MD	Ok
2	VSTDCCC050	VY022380.D	22 May 2025 08:35	SY/MD	Ok,M
3	VY0522SBL01	VY022381.D	22 May 2025 09:07	SY/MD	Ok
4	VY0522SBS01	VY022382.D	22 May 2025 09:36	SY/MD	Ok,M
5	VY0522SBSD01	VY022383.D	22 May 2025 09:59	SY/MD	Ok,M
6	Q2087-03RE	VY022384.D	22 May 2025 10:38	SY/MD	Confirms
7	Q2101-03	VY022385.D	22 May 2025 11:01	SY/MD	Ok
8	Q2097-11RE	VY022386.D	22 May 2025 11:25	SY/MD	Confirms
9	Q2102-01	VY022387.D	22 May 2025 11:48	SY/MD	Ok
10	Q2104-01RE	VY022388.D	22 May 2025 12:11	SY/MD	Confirms
11	Q2074-01	VY022389.D	22 May 2025 12:35	SY/MD	Ok
12	Q2074-02	VY022390.D	22 May 2025 12:58	SY/MD	Ok
13	Q2074-03	VY022391.D	22 May 2025 13:22	SY/MD	Ok
14	Q2074-04	VY022392.D	22 May 2025 13:45	SY/MD	Ok
15	Q2074-05	VY022393.D	22 May 2025 14:09	SY/MD	Ok
16	Q2074-06	VY022394.D	22 May 2025 14:32	SY/MD	Ok
17	Q2074-07	VY022395.D	22 May 2025 14:55	SY/MD	Ok
18	Q2074-08	VY022396.D	22 May 2025 15:19	SY/MD	Ok
19	Q2100-01	VY022397.D	22 May 2025 15:42	SY/MD	ReRun
20	Q2100-02	VY022398.D	22 May 2025 16:06	SY/MD	Ok
21	Q2100-03	VY022399.D	22 May 2025 16:29	SY/MD	Not Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM		
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM		
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP134001			
CCC		VP134002,VP134003			
Internal Standard/PEM		VP133934			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q2100-04	VY022400.D	22 May 2025 16:53	SY/MD	Ok
23	Q2112-01	VY022401.D	22 May 2025 17:16	SY/MD	ReRun
24	Q2109-03	VY022402.D	22 May 2025 17:40	SY/MD	Ok
25	Q2075-06	VY022403.D	22 May 2025 18:03	SY/MD	Dilution
26	VIBLK	VY022404.D	22 May 2025 18:26	SY/MD	Ok
27	VSTDCCC050	VY022405.D	22 May 2025 18:49	SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Mahesh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY022252.D	15 May 2025 07:52		SY/MD	Ok
2	VSTDIC005	VSTDIC005	VY022253.D	15 May 2025 09:46		SY/MD	Ok,M
3	VSTDIC010	VSTDIC010	VY022254.D	15 May 2025 10:16		SY/MD	Ok,M
4	VSTDIC020	VSTDIC020	VY022255.D	15 May 2025 10:39		SY/MD	Ok,M
5	VSTDIC050	VSTDIC050	VY022256.D	15 May 2025 11:02		SY/MD	Ok,M
6	VSTDIC100	VSTDIC100	VY022257.D	15 May 2025 11:24		SY/MD	Ok,M
7	VSTDIC150	VSTDIC150	VY022258.D	15 May 2025 11:47		SY/MD	Ok,M
8	VIBLK	VIBLK	VY022259.D	15 May 2025 12:34		SY/MD	Ok
9	VSTDICV050	ICVVY051525	VY022260.D	15 May 2025 13:20		SY/MD	Ok,M
10	VY0515SBL01	VY0515SBL01	VY022261.D	15 May 2025 13:44		SY/MD	Ok
11	VY0515SBS01	VY0515SBS01	VY022262.D	15 May 2025 14:07		SY/MD	Ok,M
12	VY0515SBSD01	VY0515SBSD01	VY022263.D	15 May 2025 14:29		SY/MD	Ok,M
13	Q1984-01	OU4-PCS-TC-33-05072	VY022264.D	15 May 2025 15:12	vial-A	SY/MD	Ok
14	Q1984-03	OU4-PCS-TC-34-05072	VY022265.D	15 May 2025 15:35	vial-A	SY/MD	Ok
15	Q1984-05	OU4-PCS-TC-35-05072	VY022266.D	15 May 2025 15:59	vial-A	SY/MD	Ok
16	Q1984-07	OU4-TS-24-050725	VY022267.D	15 May 2025 16:22	vial-A Surrogate fail	SY/MD	ReRun
17	Q1984-09	OU4-TS-25-050725	VY022268.D	15 May 2025 16:46	vial-A Surrogate fail	SY/MD	Not Ok
18	Q1984-11	OU4-TS-26-050725	VY022269.D	15 May 2025 17:09	vial-A Surrogate fail	SY/MD	Not Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Mahesh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME	STD REF.#				
Tune/Reschk	VP133916				
Initial Calibration Stds	VP133918,VP133919,VP133920,VP133921,VP133922,VP133923				
CCC	VP133925				
Internal Standard/PEM	VP131783				
ICV/I.BLK	VP133924				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

19	Q1984-13	OU4-TS-27-050725	VY022270.D	15 May 2025 17:33	vial-A Surrogate fail	SY/MD	Not Ok
20	Q1984-15	OU4-TS-28-050725	VY022271.D	15 May 2025 17:56	vial-A Surrogate fail	SY/MD	ReRun
21	Q1982-04	TP-4	VY022272.D	15 May 2025 18:19	vial-A	SY/MD	Ok
22	Q1982-05	TP-5	VY022273.D	15 May 2025 18:43	vial-A	SY/MD	Ok
23	Q1982-06	TP-6	VY022274.D	15 May 2025 19:06	vial-A	SY/MD	Ok
24	VSTDCCC050	VSTDCCC050EC	VY022275.D	15 May 2025 19:52		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y HP Processing Method 82y051525s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134001		
CCC	VP134002,VP134003		
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	VY022379.D	22 May 2025 08:05		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY022380.D	22 May 2025 08:35		SY/MD	Ok,M
3	VY0522SBL01	VY0522SBL01	VY022381.D	22 May 2025 09:07		SY/MD	Ok
4	VY0522SBS01	VY0522SBS01	VY022382.D	22 May 2025 09:36		SY/MD	Ok,M
5	VY0522SBSD01	VY0522SBSD01	VY022383.D	22 May 2025 09:59		SY/MD	Ok,M
6	Q2087-03RE	NB-08-05202025RE	VY022384.D	22 May 2025 10:38	vial-B ,Internal Standard Fail	SY/MD	Confirms
7	Q2101-03	TP-1-MHE-VOC	VY022385.D	22 May 2025 11:01	vial-B	SY/MD	Ok
8	Q2097-11RE	RT3419RE	VY022386.D	22 May 2025 11:25	vial-B ,Internal Standard Fail	SY/MD	Confirms
9	Q2102-01	LAW-25-0077	VY022387.D	22 May 2025 11:48	vial-B	SY/MD	Ok
10	Q2104-01RE	TR-06-052125RE	VY022388.D	22 May 2025 12:11	vial-B ,Internal Standard Fail; Surrogate Fail	SY/MD	Confirms
11	Q2074-01	TP-12	VY022389.D	22 May 2025 12:35	vial-A	SY/MD	Ok
12	Q2074-02	TP-7	VY022390.D	22 May 2025 12:58	vial-A	SY/MD	Ok
13	Q2074-03	TP-15	VY022391.D	22 May 2025 13:22	vial-A	SY/MD	Ok
14	Q2074-04	TP-20	VY022392.D	22 May 2025 13:45	vial-A	SY/MD	Ok
15	Q2074-05	TP-38	VY022393.D	22 May 2025 14:09	vial-A	SY/MD	Ok
16	Q2074-06	TP-19	VY022394.D	22 May 2025 14:32	vial-A	SY/MD	Ok
17	Q2074-07	TP-40	VY022395.D	22 May 2025 14:55	vial-A	SY/MD	Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM		
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM		
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME	STD REF.#				
Tune/Reschk Initial Calibration Stds	VP134001				
CCC	VP134002,VP134003				
Internal Standard/PEM	VP133934				
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

18	Q2074-08	TP-18	VY022396.D	22 May 2025 15:19	vial-A	SY/MD	Ok
19	Q2100-01	TP-16	VY022397.D	22 May 2025 15:42	vial-A ,Internal Standard Fail	SY/MD	ReRun
20	Q2100-02	TP-22	VY022398.D	22 May 2025 16:06	vial-A	SY/MD	Ok
21	Q2100-03	TP-21	VY022399.D	22 May 2025 16:29	vial-A ,Not purge	SY/MD	Not Ok
22	Q2100-04	TP-45	VY022400.D	22 May 2025 16:53	vial-A	SY/MD	Ok
23	Q2112-01	EO-03-05222025	VY022401.D	22 May 2025 17:16	vial-A ,Internal Standard Fail	SY/MD	ReRun
24	Q2109-03	TP-02-MHF-VOC	VY022402.D	22 May 2025 17:40	vial-A	SY/MD	Ok
25	Q2075-06	SS-MW1-11.5	VY022403.D	22 May 2025 18:03	vial-A ,Need MeOH	SY/MD	Dilution
26	VIBLK	VIBLK	VY022404.D	22 May 2025 18:26		SY/MD	Ok
27	VSTDCCC050	VSTDCCC050EC	VY022405.D	22 May 2025 18:49		SY/MD	Ok,M

M : Manual Integration

LAB CHRONICLE

OrderID:	Q2074	OrderDate:	5/16/2025 3:13:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	L31,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2074-01	TP-12	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-02	TP-7	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-03	TP-15	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-04	TP-20	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-05	TP-38	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-06	TP-19	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-07	TP-40	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-08	TP-18	SOIL	VOC-TCLVOA-10	8260D	05/16/25		05/22/25	05/16/25