Compounds other than ethylene oxide were not quantitated.

SOP ERG-MOR-005
Air Toxics TO-15 Quality Control Review Checklist 2018-1

Sequence ID:	L19AQ_190107	**Instrument:**	RS1	**Batch:**	S9A1704
Cal Curve (Method):	9010002	**Analyst:**	MAT	**Date Analyzed:**	1-17-19
10% Review Sample IDs:	9011101-06	**Reviewer:**	DST	**Date:**	2/24/19
Optional Additional Review Sample IDs:		**Reviewer:**		**Date:**	DST 2/4/19

Parameter	Acceptance Criteria	Analyst Check (Initials and Date)	Task Lead/Data (Initials and Date)	10% QA Review (Initials and Date)	Optional Additional QA Review (Initials and Date)	Comments
BFB Instrument Tune Performance Check – one per analysis sequence	Evaluation criteria presented in Section 16.1.1	1-24-19	RMB 2/4/19	DST 2/4/19		
Initial calibration with a minimum of 5 points - quarterly	1)RSD of response factors < ±30% with two exceptions of up to ±40% (non-Tier I compounds) 2) IS response < ±40% of mean 3) RRTs for target peaks ±0.06 units from mean RRT 4) IS RTs within 20sec of mean 5) Each calibration standard within ±30% of nominal conc (for Tier I compounds)	1-24-19	RMB 2/4/19	DST 2/4/19		L19AE
ICV(LCS) Second source calibration verification check - immediately following ICAL	The response factor ≤ ±30% DEV from calibration curve average response factor	1-24-19	RMB 2/4/19	DST 2/4/19		L19AE
Continuing calibration verification (CCV), approximately mid-point of the calibration curve – one per analysis sequence	The response factor ≤ ±30% DEV from calibration curve average response factor	1-24-19	RMB 2/4/19	DST 2/4/19		
Method Blank Analysis – one per analysis sequence	1) < 3xMDL or 0.2ppbv, whichever is lower 2) Internal Standard (IS) area response within < ±40% and IS Retention Time (RT) within ±0.33 min. of most recent initial calibration	1-24-19	RMB 2/4/19	DST 2/4/19		

Checked 9011101-06 Spectra for t-2-butene. None found. DST 2/4/19

Compounds other than ethylene oxide were not quantitated.

Air Toxics TO-15 Quality Control Review Checklist 2018-1 (Continued)

Parameter	Acceptance Criteria	Analyst Check (Initials and Date)	Task Lead/Data (Initials and Date)	10% QA Review (Initials and Date)	Optional Additional QA Review (Initials and Date)	Comments
Replicate Analysis – one per analysis sequence /Duplicate Sample	< 25% RPD for compounds greater than 5 times the MDL	1-24-19	RMB 2/4/19	DST 2/4/19		
Canister Cleaning Certification	<3xMDL or 0.2ppbv per VOC targeted compound, whichever is lower	—	RMB 2/4/19	NA		
Preconcentrator Leak Check	≤ ± 0.2 psi/min	1-24-19	RMB 2/4/19	DST 2/4/19		
Samples/Internal Standard Check	IS area within ±40% and IS RT within ±0.33 min. of most recent initial calibration	1-24-19	RMB 2/4/19	DST 2/4/19		
COC Included and filled out	Lab receipt acknowledged, LIMS number added to COC	1-24-19	RMB 2/4/19	DST 2/4/19		
Manual Integration and peak deletion	Conforms with ERG-SOP-097 "Procedure for Manual Integration of Chromatographic Peaks"	1-24-19	RMB 2/4/19	DST 2/4/19		
Manual Calculation Check	One compound manual check must agree with software generated result		RMB 2/4/19	DST 2/4/19		901101-06 $\frac{536(4.77\ ppbv)}{52966(0.2464)}$ = 0.1959 ppbv
Qualifiers Check	Check to make sure LIMS data flags are correct	1-24-19	RMB 2/4/19	DST 2/4/19		

This review check sheet must be completed by primary data reviewer/TL/QA.

L19A2002 ethylene oxide $\frac{7547 \times 4.77}{57745 \times 0.2464} = 2.53$ ppbv

Compounds other than ethylene oxide were not quantitated.

Sequence Name: C:\msdchem\1\sequence\L19AQ.s
Comment: ANALYZE 1/17/19,8120004 exp 4/5/19, L19AQ
Operator: MAH
Data Path: C:\MSDCHEM\1\DATA\L19AQ\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line			Sample Name/Misc Info		
1)	Sample	1	L19AQ001	BFB	BFB
2)	Sample	2	L19AQ002	9010002	1901057-CCV1
3)	Sample	5	L19AQ003	9010002	FLUSH
4)	Sample	6	L19AQ004	9010002	B9A1704-BLK1
5)	Sample	7	L19AQ005	9010002	9010808-06
6)	Sample	8	L19AQ006	9010002	9010808-07
7)	Sample	9	L19AQ007	9010002	B9A1704-DUP1
8)	Sample	10	L19AQ008	9010002	B9A1704-DUP2
9)	Sample	11	L19AQ009	9010002	9010808-09
10)	Sample	12	L19AQ010	9010002	9010808-10
11)	Sample	13	L19AQ011	9010002	9011101-01
12)	Sample	14	L19AQ012	9010002	9011101-02
13)	Sample	15	L19AQ013	9010002	9011101-03
14)	Sample	16	L19AQ014	9010002	9011101-04
15)	Sample	17	L19AQ015	9010002	9011101-05
16)	Sample	18	L19AQ016	9010002	9011101-06
17)	Sample	19	L19AQ017	9010002	9011101-07
18)	Sample	20	L19AQ018	9010002	9011101-08
19)	Sample	21	L19AQ019	9010002	B9A1704-DUP3
20)	Sample	22	L19AQ020	9010002	B9A1704-DUP4
21)	Sample	23	L19AQ021	9010002	9011101-09
22)	Sample	100	OFF	FIDOFF	OFF

1-31-19

Compounds other than ethylene oxide were not quantitated.

ANALYSIS SEQUENCE

Instrument: ERGMS#1

1901057

Printed: 2/5/2019 2:14:46PM

Calibration ID: 9010002

Lab Number	Sample Name	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1901057-CCV1	Calibration Check	QC		1		9A10002	8L13002	
B9A1704-BLK1	Blank	QC		2			8L13002	
9010808-06	WB Village Hall C1	TO-15 2019	A	3			8L13002	
9010808-07	WB Village Hall C2	TO-15 2019	A	4			8L13002	
B9A1704-DUP1	Duplicate	QC		5			8L13002	
B9A1704-DUP2	Duplicate	QC		6			8L13002	
9010808-09	Water Tower	TO-15 2019	A	7			8L13002	
9010808-10	West Neighborhood	TO-15 2019	A	8			8L13002	
9011101-01	Watertower	TO-15 2019	A	9			8L13002	Ethylene Oxide only
9011101-02	Willow Pond Park	TO-15 2019	A	10			8L13002	Ethylene Oxide only
9011101-03	Hinsdale South HS	TO-15 2019	A	11			8L13002	Ethylene Oxide only
9011101-04	West Neighborhood	TO-15 2019	A	12			8L13002	Ethylene Oxide only
9011101-05	Gower ES VOID	TO-15 2019	A	13			8L13002	Ethylene Oxide only
9011101-06	Gower MS	TO-15 2019	A	14			8L13002	Ethylene Oxide only
9011101-07	WB Warehouse C1 VOID	TO-15 2019	A	15			8L13002	Ethylene Oxide only
9011101-08	WB Warehouse C2	TO-15 2019	A	16			8L13002	Ethylene Oxide only
B9A1704-DUP4	Duplicate	QC		17			8L13002	
B9A1704-DUP3	Duplicate	QC		18			8L13002	
9011101-09	WB Village Hall	TO-15 2019	A	19			8L13002	Ethylene Oxide only

Samples Loaded By Date

Randy Bone 2/5/19

Data Processed By Date

Compounds other than ethylene oxide were not quantitated.

Sample	1	BFB	BFB	L19AQ001	80 ML 8L13001	1
Sample	2	1901057-CCV1	9010002	L19AQ002	80 ML 8L13001,9A10002	1
Sample	5	FLUSH	9010002	L19AQ003	80 ML 8L13001	1
Sample	6	B9A1704-BLK1	9010002	L19AQ004	80 ML 8L13001,B-H1-541,A21013	1
Sample	7	9010808-06	9010002	L19AQ005	WILLOWBROOK VILLAHE HALL C1 1/7/19	1
Sample	8	9010808-07	9010002	L19AQ006	WILLOWBROOK VILLAHE HALL C2 1/7/19	1
Sample	9	B9A1704-DUP1	9010002	L19AQ007	WILLOWBROOK VILLAHE HALL R1 1/7/19	1
Sample	10	B9A1704-DUP2	9010002	L19AQ008	WILLOWBROOK VILLAHE HALL R2 1/7/19	1
Sample	11	9010808-09	9010002	L19AQ009	WATER TOWER 1/7/19	1
Sample	12	9010808-10	9010002	L19AQ010	WEST NEIGHBORHOOD 1/7/19	1
Sample	13	9011101-01	9010002	L19AQ011	WATER TOWER 1/10/19	1
Sample	14	9011101-02	9010002	L19AQ012	WIILOW POND PARK 1/10/19	1
Sample	15	9011101-03	9010002	L19AQ013	HINSDALE S. HS 1/10/19	1
Sample	16	9011101-04	9010002	L19AQ014	WEST NEIGHBORHOOD 1/10/19	1
Sample	17	9011101-05	9010002	L19AQ015	GROWER ES 1/10/19	1
Sample	18	9011101-06	9010002	L19AQ016	GOWER MS 1/10/19	1
Sample	19	9011101-07	9010002	L19AQ017	WEPA WB WAREHOUSE C1 1/10/19	1
Sample	20	9011101-08	9010002	L19AQ018	WEPA WB WAREHOUSE C2 1/10/19	1
Sample	21	B9A1704-DUP3	9010002	L19AQ019	WEPA WB WAREHOUSE R1 1/10/19	1
Sample	22	B9A1704-DUP4	9010002	L19AQ020	WEPA WB WAREHOUSE R2 1/10/19	1
Sample	23	9011101-09	9010002	L19AQ021	VILLAGE HALL 1/10/19	1
Sample	100	OFF	FIDOFF	OFF	OFF	1

1-31-19

Compounds other than ethylene oxide were not quantitated.

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\L19AQ.SEQ
Date: 01-18-2019
Time: 10:30:45
Int. Std Volume: 80 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB	1	1	0	0	C:\Smart\BFB.MPT	12:00
1901057-CCV1	2	1	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
FLUSH	1	1	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1704-BLK1	1	1	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9010808-06	1	2	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9010808-07	1	3	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1704-DUP1	1	2	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1704-DUP2	1	3	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9010808-09	1	4	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9010808-10	1	5	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-01	1	6	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-02	1	7	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-03	1	8	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-04	1	9	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-05	1	10	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-06	1	11	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-07	1	12	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-08	1	13	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1704-DUP3	1	12	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1704-DUP4	1	13	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011101-09	1	14	250	0	C:\Smart\TO-15A_MS1.MPT	12:00

1-31-19

Compounds other than ethylene oxide were not quantitated.

---------- Leak Check Report ----------

1/18/2019 2:17:10 PM
Leak Check for C:\Smart\L19AQ.SEQ
Report File: C:\Smart\L19AQ.LCR
Leak Check Method: Evacuation
Pressurize/Evacuate time(sec) 20
Equilibration time(sec) 20
Maintanance time(sec) 60

Sample Inlet	Auto1	Auto2	Auto3	Start	End	Rate(psi/min)
1	2	---	---	1.2	1.2	0.00
1	3	---	---	1.2	1.2	0.00
1	4	---	---	1.2	1.2	0.00
1	5	---	---	1.1	1.2	0.10
1	6	---	---	1.2	1.3	0.10
1	7	---	---	1.1	1.2	0.10
1	8	---	---	1.1	1.2	0.10
1	9	---	---	1.2	1.2	0.00
1	10	---	---	1.1	1.2	0.10
1	11	---	---	1.1	1.2	0.10
1	12	---	---	1.2	1.2	0.00
1	13	---	---	1.2	1.3	0.10
1	14	---	---	1.2	1.2	0.00

K, -3/18

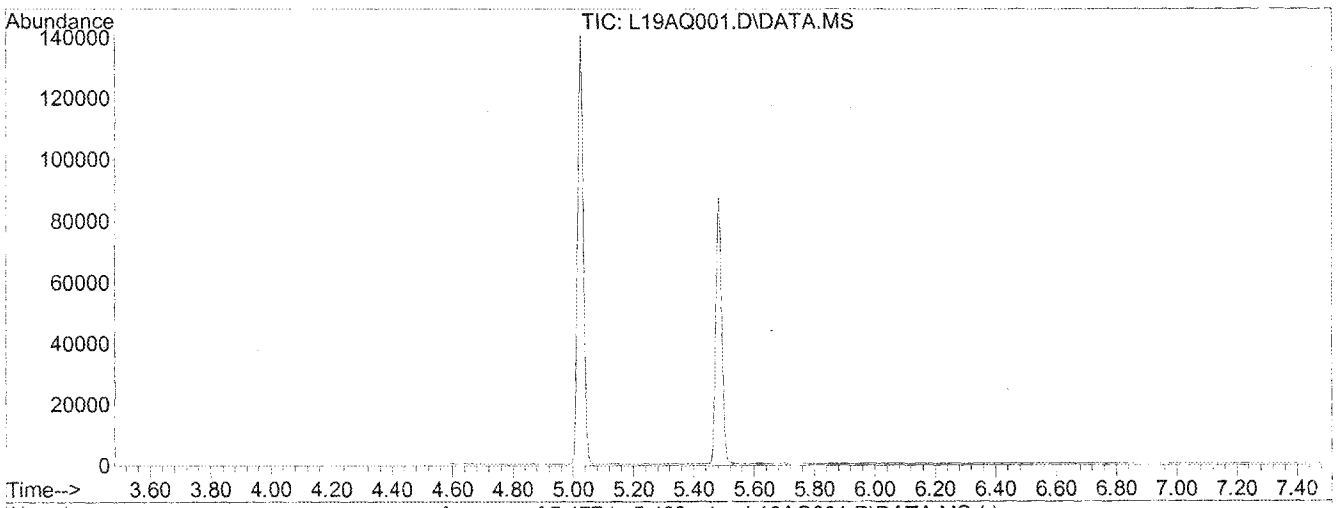
Compounds other than ethylene oxide were not quantitated.

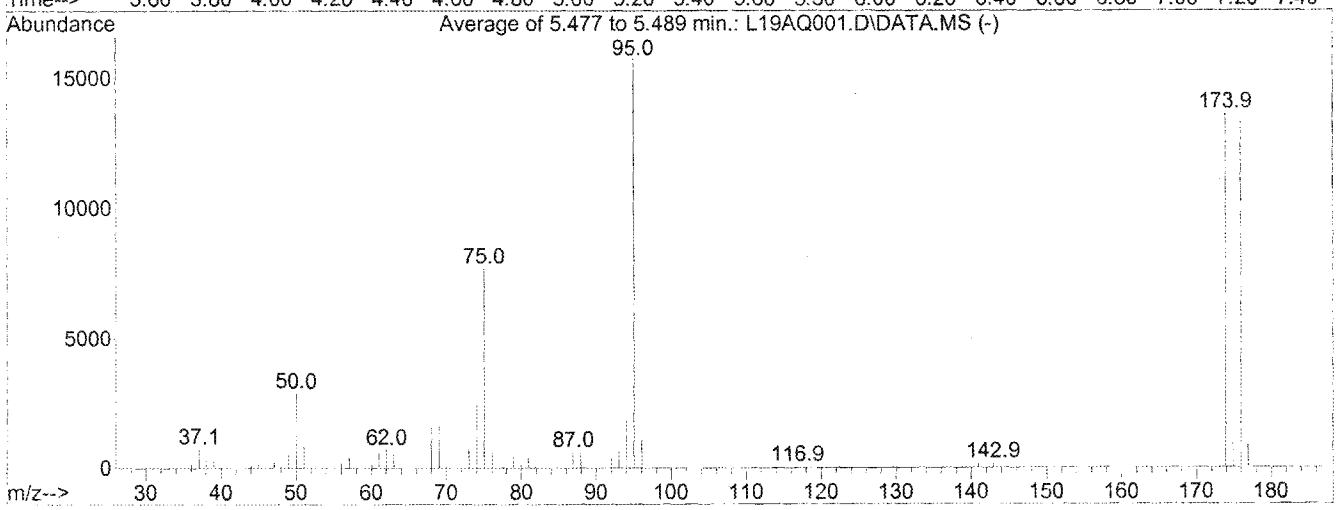
BFB

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ001.D
Acq On : 17 Jan 2019 11:32 am
Operator : MAH
Sample : BFB
Misc : 80 ML 8L13001
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\9010002.M
Title : TO-15 by Selective Ion Analysis
Last Update : Tue Jan 08 07:11:21 2019





AutoFind: Scans 146, 147, 148; Background Corrected with Scan 140

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	2883	PASS
75	95	30	66	48.5	7678	PASS
95	95	100	100	100.0	15822	PASS
96	95	5	9	7.0	1105	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.0	13611	PASS
175	174	4	9	6.8	932	PASS
176	174	93	101	97.4	13253	PASS
177	176	5	9	6.5	867	PASS

Compounds other than ethylene oxide were not quantitated.

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\L19AQ\L19AQ001.D
Tune Time : 17 Jan 2019 11:32 am

9010002	IS Avg Area	61735	149820	118119
	+40%	86428	209748	165367
	-40%	37041	89892	70872

File	Sample	Internal Standard Responses		
L19AQ002.D	1901057-CCV1	57745	136230	107885
L19AQ004.D	B9A1704-BLK1	54322	134527	105395
L19AQ005.D	9010808-06	53446	131116	104546
L19AQ006.D	9010808-07	54202	137374	106628
L19AQ007.D	B9A1704-DUP1	53288	131044	101404
L19AQ008.D	B9A1704-DUP2	54354	135252	103287
L19AQ009.D	9010808-09	54258	135095	103440
L19AQ010.D	9010808-10	57010	143079	107178
L19AQ011.D	9011101-01	53631	132526	100064
L19AQ012.D	9011101-02	53841	132828	100550
L19AQ013.D	9011101-03	54291	134330	103696
L19AQ014.D	9011101-04	55918	141344	105293
L19AQ015.D	9011101-05	52729	128321	99370
L19AQ016.D	9011101-06	52966	129659	100796
L19AQ017.D	9011101-07	54043	133282	102324
L19AQ018.D	9011101-08	54225	134274	100987
L19AQ019.D	B9A1704-DUP3	53521	131687	101195
L19AQ020.D	B9A1704-DUP4	54021	134719	103946
L19AQ021.D	9011101-09	52819	128849	97773

(fails) - fails 24hr time check * - fails criteria

Created: Wed Jan 23 07:38:41 2019 MS1

r 1-3rh

✓

Compounds other than ethylene oxide were not quantitated.

C:\MSDCH...

Compound Name			IS-Hexane-d14	IS-Hexane-d14	IS-Difluorobenzene	IS-Difluorobenzene	IS-Chlorobenzene-d5	IS-Chlorobenzene-d5
Labels	Date Acquired	Data File Name	(# 1) Target Response	(# 1) Ret Time	(# 28) Target Response	(# 28) Ret Time	(# 42) Target Response	(# 42) Ret Time
	1/18/2019 7:50	L19AQ021.D	52819	19.99	128849	23.15	97773	30.12
Format 1 (Yes/No)								
Format 1 Title								
Format 2 (Yes/No)			YES	YES	YES	YES	YES	YES
Format 2 Title								
Show X Axis Title			YES	YES	YES	YES	YES	YES
Show Y Axis Title								
Lines To Chart								

Start of Data	Format 1 X-axis	Format 2 X-axis	IS-Hexane-d14	% Rec	RT	DEV (min)	IS-Difluorobenzene	% Rec	RT	DEV (min)	IS-Chlorobenzene-d5	% Rec	RT	DEV (min)
		IS AVG / AVG RT	**61735**		**19.99**		**149820**		**23.15**		**118119**		**30.12**	
	1/17/2019 12:21	L19AQ002.D	57745	**94**	19.99	**0**	136230	**91**	23.15	**0**	107885	**91**	30.10	**-0.02**
	1/17/2019 14:25	L19AQ004.D	54322	**88**	19.99	**0**	134527	**90**	23.15	**0**	105395	**89**	30.09	**-0.03**
	1/17/2019 15:27	L19AQ005.D	53446	**87**	19.99	**0**	131116	**88**	23.15	**0**	104546	**89**	30.09	**-0.03**
	1/17/2019 16:27	L19AQ006.D	54202	**88**	19.99	**0**	137374	**92**	23.15	**0**	106628	**90**	30.10	**-0.02**
	1/17/2019 17:29	L19AQ007.D	53288	**86**	19.99	**0**	131044	**87**	23.15	**0**	101404	**86**	30.10	**-0.02**
	1/17/2019 18:31	L19AQ008.D	54354	**88**	19.99	**0**	135252	**90**	23.15	**0**	103287	**87**	30.12	**0**
	1/17/2019 19:33	L19AQ009.D	54258	**88**	19.99	**0**	135095	**90**	23.15	**0**	103440	**88**	30.11	**-0.01**
	1/17/2019 20:33	L19AQ010.D	57010	**92**	19.99	**0**	143079	**96**	23.15	**0**	107178	**91**	30.12	**0**
	1/17/2019 21:35	L19AQ011.D	53631	**87**	19.99	**0**	132526	**88**	23.15	**0**	100064	**85**	30.12	**0**
	1/17/2019 22:37	L19AQ012.D	53841	**87**	19.99	**0**	132828	**89**	23.15	**0**	100550	**85**	30.12	**0**
	1/17/2019 23:39	L19AQ013.D	54291	**88**	19.99	**0**	134330	**90**	23.15	**0**	103696	**88**	30.12	**0**
	1/18/2019 12:39	L19AQ014.D	55918	**91**	19.99	**0**	141344	**94**	23.15	**0**	105293	**89**	30.11	**-0.01**
	1/18/2019 1:41	L19AQ015.D	52729	**85**	19.99	**0**	128321	**86**	23.15	**0**	99370	**84**	30.12	**0**
	1/18/2019 2:43	L19AQ016.D	52966	**86**	19.99	**0**	129659	**87**	23.15	**0**	100796	**85**	30.12	**0**
	1/18/2019 3:45	L19AQ017.D	54043	**88**	19.99	**0**	133282	**89**	23.15	**0**	102324	**87**	30.11	**-0.01**
	1/18/2019 4:46	L19AQ018.D	54225	**88**	19.99	**0**	134274	**90**	23.15	**0**	100987	**85**	30.12	**0**
	1/18/2019 5:48	L19AQ019.D	53521	**87**	19.99	**0**	131687	**88**	23.15	**0**	101195	**86**	30.12	**0**
	1/18/2019 6:48	L19AQ020.D	54021	**88**	19.99	**0**	134719	**90**	23.15	**0**	103946	**88**	30.12	**0**
	1/18/2019 7:50	L19AQ021.D	52819	**86**	19.99	**0**	128849	**86**	23.15	**0**	97773	**83**	30.12	**0**

1-31-19

DAT 2/4/19

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19AQ\
Data File : L19AQ002.D
Acq On : 17 Jan 2019 12:21 pm
Operator : MAH
Sample : 1901057-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 07:32:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

1-31-19

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	ISS	IS-Hexane-d14	1.000	1.000	0.0	100	0.00
2	CT	Acetylene	0.368	0.347	5.7	100	0.00
3	CT	Propylene	0.454	0.493	-8.6	100	0.00
4	CT	Dichlorodifluoromethane	1.966	2.009	-2.2	100	0.00
5	CT	Chloromethane	0.586	0.597	-1.9	100	0.00
6	CT	Dichlorotetrafluoroethane	1.864	2.109	-13.1	100	0.00
7	CT	Vinyl Chloride	0.630	0.654	-3.8	100	0.00
8	CT	1,3-Butadiene	0.415	0.422	-1.7	100	0.00
9	CT	Ethylene oxide	0.246	0.249	-1.2	100	0.00
10	CT	Bromomethane	0.634	0.657	-3.6	100	0.00
11	CT	Chloroethane	0.279	0.289	-3.6	100	0.00
12	CT	Acetonitrile	0.479	0.473	1.3	100	0.00
13	CT	Acrolein	0.236	0.212	10.2	100	0.00
14	CT	Trichlorofluoromethane	1.865	1.680	9.9	100	0.00
15	CT	Acrylonitrile	0.385	0.362	6.0	100	0.00
16	CT	1,1-Dichloroethene	0.856	0.915	-6.9	100	0.00
17	CT	Methylene Chloride	0.612	0.631	-3.1	100	0.00
18	CT	Carbon Disulfide	1.862	1.885	-1.2	100	0.00
19	CT	Trichlorotrifluoroethane	1.345	1.428	-6.2	100	0.00
20	CT	trans-1,2-Dichloroethylene	0.483	0.481	0.4	100	0.00
21	CT	1,1-Dichloroethane	0.877	0.861	1.8	100	0.00
22	CT	Methyl tert-Butyl Ether	1.298	1.279	1.5	100	0.00
23	CT	Chloroprene	0.602	0.587	2.5	100	0.00
24	CT	cis-1,2-Dichloroethylene	0.670	0.647	3.4	100	0.00
25	CT	Bromochloromethane	0.368	0.352	4.3	100	0.00
26	CT	Chloroform	1.004	1.004	0.0	100	0.00
27	CT	Ethyl tert-Butyl Ether	1.360	1.358	0.1	100	0.00
28	CT	1,2-Dichloroethane	0.596	0.574	3.7	100	0.00
29	ISS	IS-1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
30	CT	1,1,1-Trichloroethane	0.417	0.420	-0.7	100	0.00
31	CT	Benzene	0.574	0.606	-5.6	100	0.00
32	CT	Carbon Tetrachloride	0.452	0.509	-12.6	100	0.00
33	CT	tert-Amyl Methyl Ether	0.483	0.491	-1.7	100	0.00
34	CT	1,2-Dichloropropane	0.241	0.240	0.4	100	0.00
35	CT	Ethyl Acrylate	0.323	0.326	-0.9	100	0.00
36	CT	Bromodichloromethane	0.440	0.384	12.7	100	0.00
37	CT	Trichloroethylene	0.276	0.257	6.9	100	0.00
38	CT	Methyl Methacrylate	0.850	0.826	2.8	100	0.00
39	CT	cis-1,3-Dichloropropene	0.221	0.231	-4.5	100	0.00
40	CT	Methyl Isobutyl Ketone	0.465	0.451	3.0	100	0.00
41	CT	trans-1,3-Dichloropropene	0.172	0.165	4.1	100	0.00
42	CT	1,1,2-Trichloroethane	0.214	0.212	0.9	100	0.00
43	ISS	IS-Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
44	CT	Toluene	0.762	0.773	-1.4	100	0.00
45	CT	Dibromochloromethane	1.910	1.736	9.1	100	0.00
46	CT	1,2-Dibromoethane	0.346	0.326	5.8	100	0.00
47	CT	n-Octane	0.471	0.469	0.4	100	0.00
48	CT	Tetrachloroethylene	0.387	0.398	-2.8	100	0.00

ED_002475_00000277-00011

Compounds other than ethylene oxide were not quantitated

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19AQ\
Data File : L19AQ002.D
Acq On : 17 Jan 2019 12:21 pm
Operator : MAH
Sample : 1901057-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 07:32:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
Last Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	CT	Chlorobenzene	0.538	0.524	2.6	100	0.00
50	CT	Ethylbenzene	0.814	0.811	0.4	100	0.00
51	CT	m,p-Xylene	0.708	0.700	1.1	100	0.00
52	CT	Bromoform	0.414	0.369	10.9	100	0.00
53	CT	Styrene	0.391	0.369	5.6	100	0.00
54	CT	1,1,2,2-Tetrachloroethane	0.517	0.515	0.4	100	0.00
55	CT	o-Xylene	0.683	0.725	-6.1	100	0.00
56	CT	1,3,5-Trimethylbenzene	0.669	0.657	1.8	100	0.00
57	CT	1,2,4-Trimethylbenzene	0.583	0.564	3.3	100	0.00
58	CT	m-Dichlorobenzene	0.401	0.312	22.2	100	0.00
59	CT	p-Dichlorobenzene	0.323	0.261	19.2	100	0.00
60	CT	o-Dichlorobenzene	0.349	0.307	12.0	100	0.00
61	CT	1,2,4-Trichlorobenzene	0.142	0.137	3.5	100	0.00
62	CT	Hexachloro-1,3-butadiene	0.360	0.403	-11.9	100	0.00

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

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L19AQ\
Data File : L19AQ002.D
Acq On : 17 Jan 2019 12:21 pm
Operator : MAH
Sample : 1901057-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 07:32:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

1-31-19

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) IS-Hexane-d14	19.990	66	57745	4.7700	ppbv	0.00
29) IS-1,4-Difluorobenzene	23.148	114	136230	4.9900	ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	107885	4.7400	ppbv	-0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Acetylene	5.415	26	10093	2.2638	ppbv	100
3) Propylene	7.823	41	14613	2.6564	ppbv	99
4) Dichlorodifluoromethane	8.685	85	57889	2.4327	ppbv	100
5) Chloromethane	9.740	50	17927	2.5253	ppbv	100
6) Dichlorotetrafluoroethane	10.864	85	62286	2.7599	ppbv	99
7) Vinyl Chloride	11.119	62	19798	2.5945	ppbv	99
8) 1,3-Butadiene	11.783	54	12621	2.5104	ppbv	98
9) Ethylene oxide	12.378	29	7547	2.5304	ppbv	98
10) Bromomethane	12.588	94	19869	2.5884	ppbv	99
11) Chloroethane	13.280	64	8737	2.5877	ppbv	99
12) Acetonitrile	14.355	41	14475	2.4960	ppbv	98
13) Acrolein	14.611	56	6202	2.1716	ppbv	97
14) Trichlorofluoromethane	15.190	101	50847	2.2522	ppbv	100
15) Acrylonitrile	15.933	53	10941	2.3484	ppbv	100
16) 1,1-Dichloroethene	16.420	61	27016	2.6070	ppbv	99
17) Methylene Chloride	16.744	49	18947	2.5573	ppbv	99
18) Carbon Disulfide	16.930	76	56588	2.5108	ppbv	100
19) Trichlorotrifluoroethane	17.278	101	42187	2.5903	ppbv	100
20) trans-1,2-Dichloroethy...	18.313	96	14319	2.4478	ppbv	100
21) 1,1-Dichloroethane	18.630	63	25325	2.3853	ppbv	99
22) Methyl tert-Butyl Ether	18.789	73	39330	2.5035	ppbv	100
23) Chloroprene	19.537	53	17609	2.4147	ppbv	199
24) cis-1,2-Dichloroethylene	19.945	61	19585	2.4162	ppbv	99
25) Bromochloromethane	20.172	128	10519	2.3581	ppbv	198
26) Chloroform	20.398	83	30382	2.5009	ppbv	99
27) Ethyl tert-Butyl Ether	21.182	59	42242	2.5663	ppbv	100
28) 1,2-Dichloroethane	21.475	62	17288	2.3976	ppbv	99
30) 1,1,1-Trichloroethane	21.867	97	28352	2.4905	ppbv	98
31) Benzene	22.533	78	41496	2.6498	ppbv	100
32) Carbon Tetrachloride	22.768	117	35042	2.8397	ppbv	100
33) tert-Amyl Methyl Ether	23.499	73	34827	2.6411	ppbv	100
34) 1,2-Dichloropropane	23.788	63	16608	2.5221	ppbv	95
35) Ethyl Acrylate	23.870	55	22631	2.5634	ppbv	100
36) Bromodichloromethane	24.076	83	26845	2.2362	ppbv	100
37) Trichloroethylene	24.159	130	17690	2.3455	ppbv	99
38) Methyl Methacrylate	24.530	41	57288	2.4691	ppbv	99
39) cis-1,3-Dichloropropene	25.509	75	16025	2.6529	ppbv	100
40) Methyl Isobutyl Ketone	25.604	43	31179	2.4547	ppbv	99
41) trans-1,3-Dichloropropene	26.348	75	11057	2.3512	ppbv	96
42) 1,1,2-Trichloroethane	26.615	97	14335	2.4542	ppbv	99
44) Toluene	27.092	91	42946	2.4776	ppbv	100
45) Dibromochloromethane	27.733	129	100389	2.3088	ppbv	100
46) 1,2-Dibromoethane	28.137	107	18571	2.3573	ppbv	100
47) n-Octane	28.856	43	26925	2.5116	ppbv	99
48) Tetrachloroethylene	28.997	166	22570	2.5598	ppbv	99
49) Chlorobenzene	30.172	112	29359	2.3992	ppbv	100
50) Ethylbenzene	30.898	91	46175	2.4918	ppbv	100

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L19AQ\
Data File : L19AQ002.D
Acq On : 17 Jan 2019 12:21 pm
Operator : MAH
Sample : 1901057-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 07:32:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
51) m,p-Xylene	31.222	91	79384	4.9268	ppbv	100
52) Bromoform	31.279	173	21348	2.2649	ppbv	100
53) Styrene	31.909	104	21003	2.3618	ppbv #	98
54) 1,1,2,2-Tetrachloroethane	32.062	83	29668	2.5192	ppbv	99
55) o-Xylene	32.119	91	40237	2.5901	ppbv	100
56) 1,3,5-Trimethylbenzene	34.919	105	37703	2.4750	ppbv	100
57) 1,2,4-Trimethylbenzene	35.827	105	30550	2.3031	ppbv	99
58) m-Dichlorobenzene	36.112	146	17043	1.8687	ppbv	100
59) p-Dichlorobenzene	36.273	146	15505	2.1102	ppbv	100
60) o-Dichlorobenzene	37.092	146	17495	2.2052	ppbv	100
61) 1,2,4-Trichlorobenzene	40.826	180	7741	2.3938	ppbv	100
62) Hexachloro-1,3-butadiene	41.620	225	22909	2.7925	ppbv	100

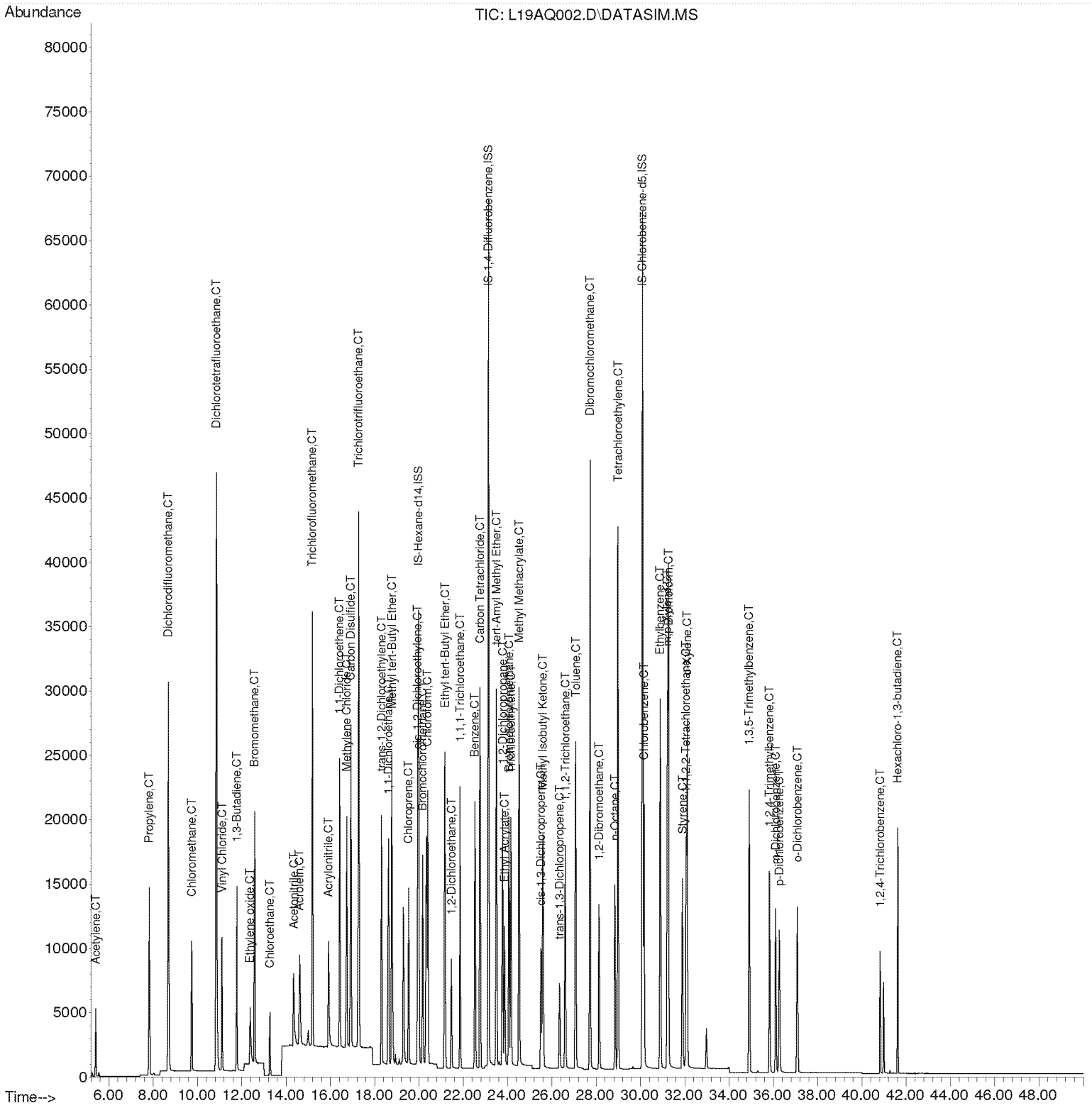
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

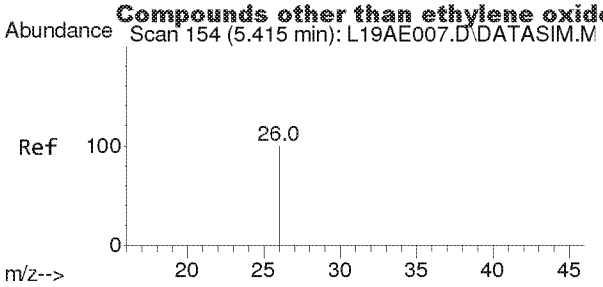
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ002.D
Acq On : 17 Jan 2019 12:21 pm
Operator : MAH
Sample : 1901057-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 07:32:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

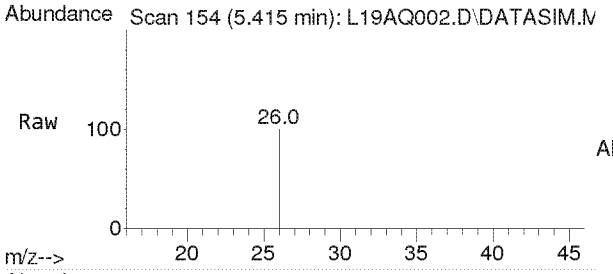


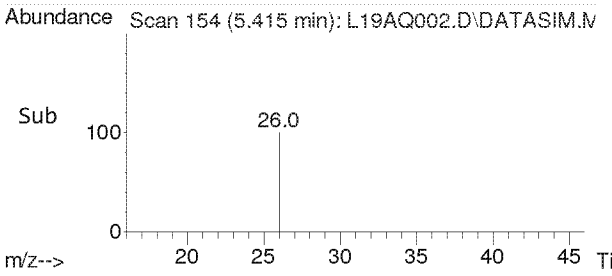
Compounds other than ethylene oxide were not quantitated.

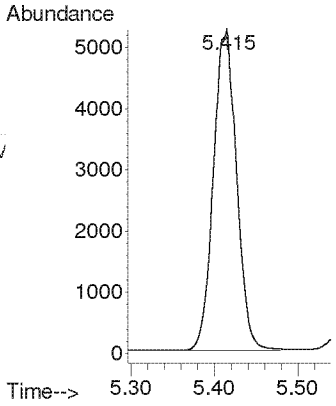


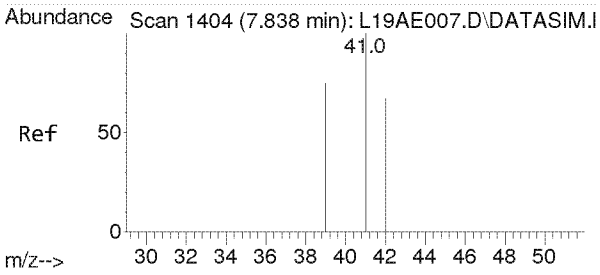
#2
Acetylene
Concen: 2.264 ppbv
RT: 5.415 min Scan# 154
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 26 Resp: 10093





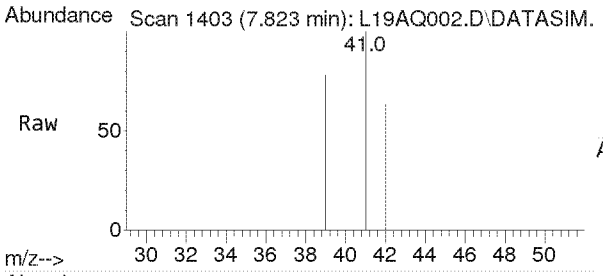


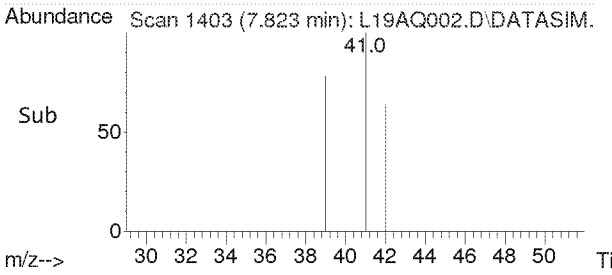


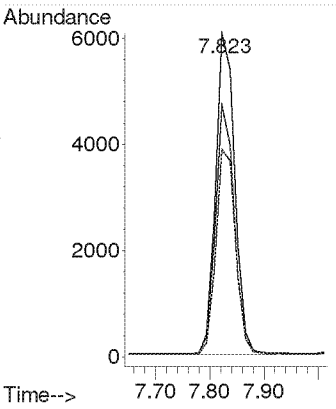
#3
Propylene
Concen: 2.656 ppbv
RT: 7.823 min Scan# 1403
Delta R.T. -0.015 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 41 Resp: 14613

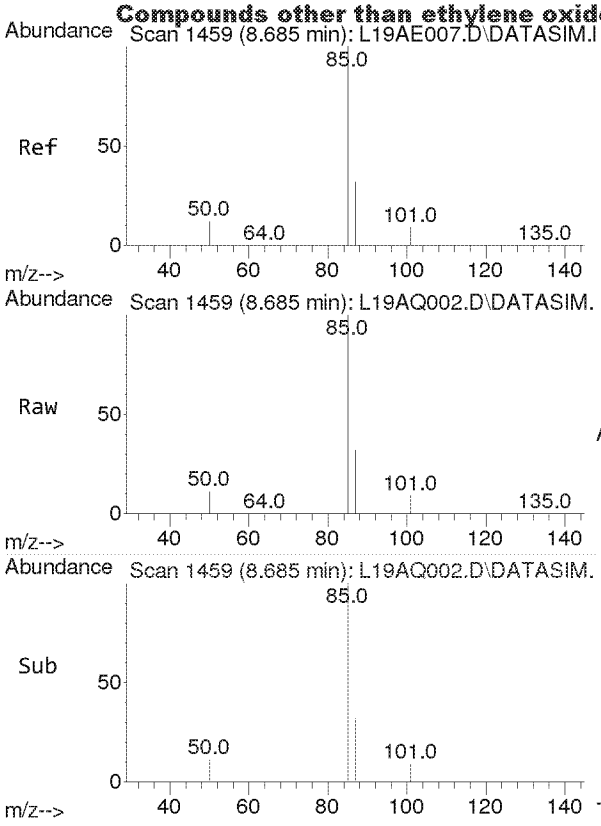
Ion	Ratio	Lower	Upper
41	100		
39	76.1	61.6	92.4
42	66.0	52.6	79.0







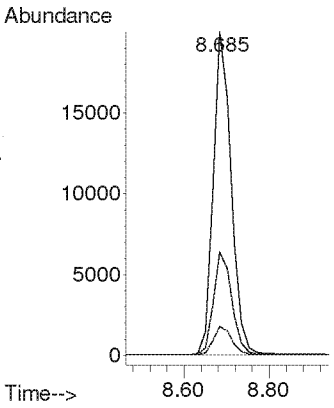
Compounds other than ethylene oxide were not quantitated.

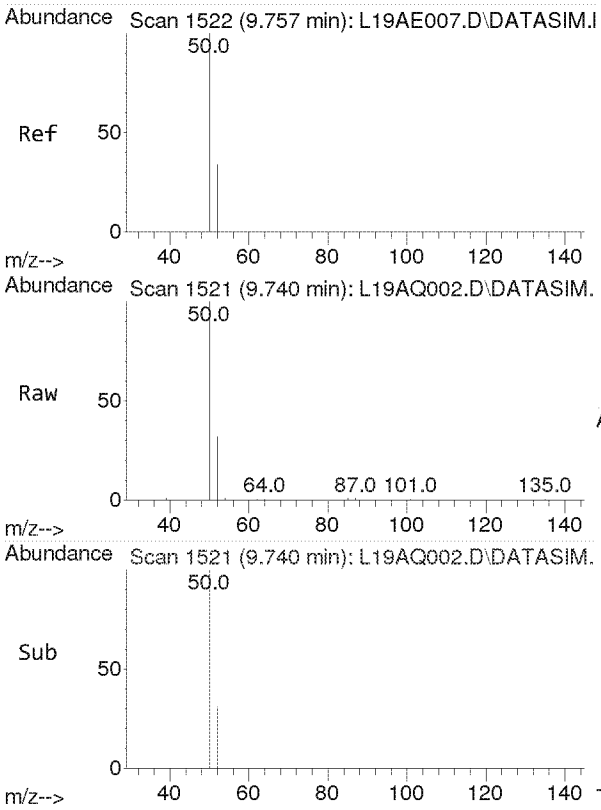


#4
Dichlorodifluoromethane
Concen: 2.433 ppbv
RT: 8.685 min Scan# 1459
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 85 Resp: 57889

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.0	39.0
101	8.9	7.1	10.7

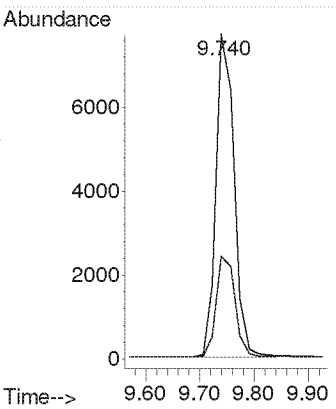




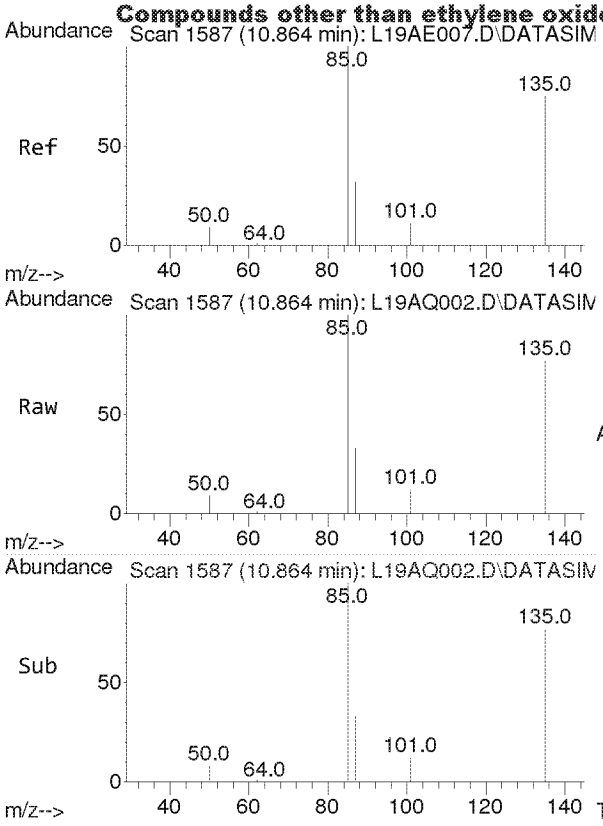
#5
Chloromethane
Concen: 2.525 ppbv
RT: 9.740 min Scan# 1521
Delta R.T. -0.017 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 50 Resp: 17927

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9



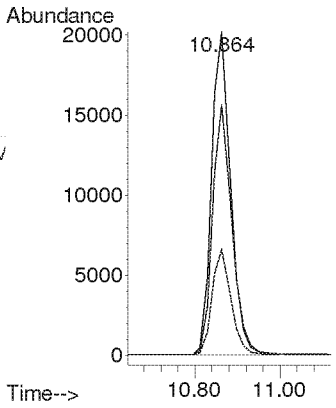
Compounds other than ethylene oxide were not quantitated.

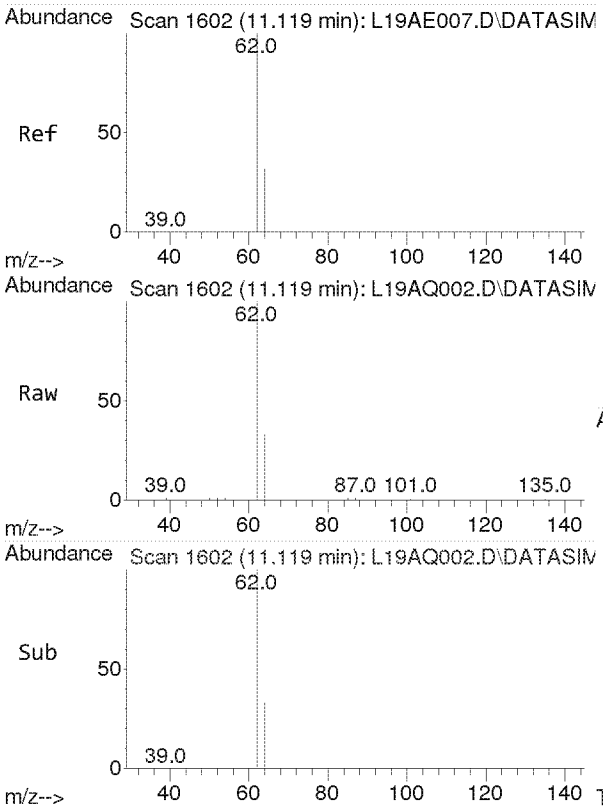


#6
Dichlorotetrafluoroethane
Concen: 2.760 ppbv
RT: 10.864 min Scan# 1587
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 85 Resp: 62286

Ion	Ratio	Lower	Upper
85	100		
135	78.8	63.6	95.4
87	32.3	25.8	38.6

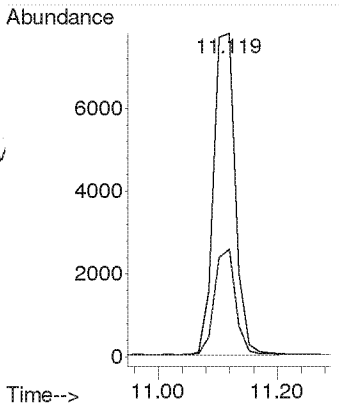




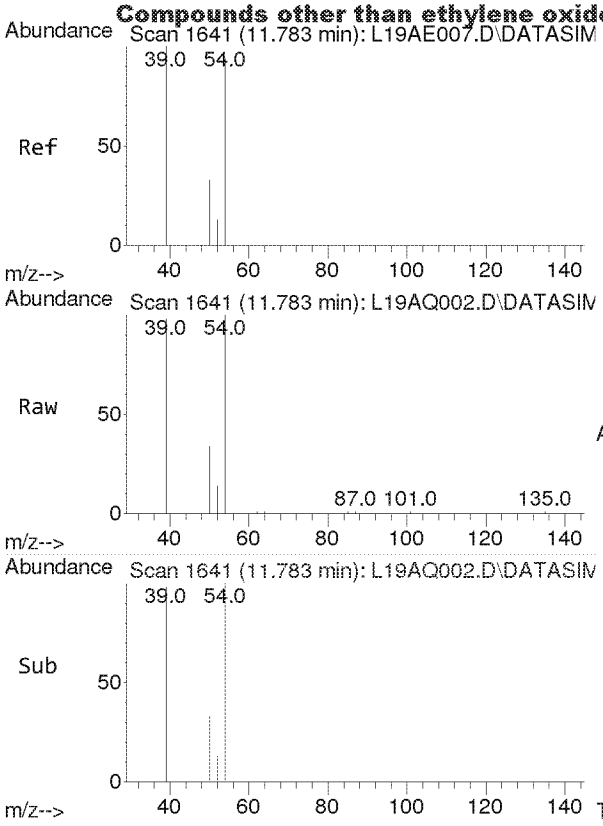
#7
Vinyl Chloride
Concen: 2.595 ppbv
RT: 11.119 min Scan# 1602
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 62 Resp: 19798

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.7	38.5



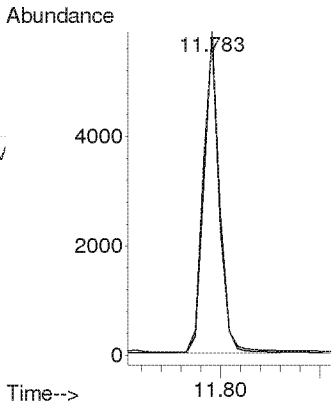
Compounds other than ethylene oxide were not quantitated.

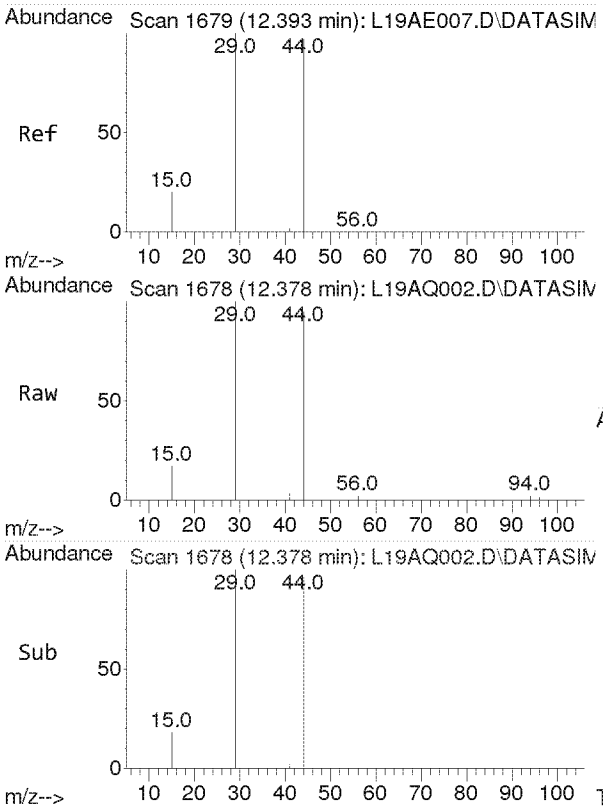


#8
1,3-Butadiene
Concen: 2.510 ppbv
RT: 11.783 min Scan# 1641
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 54 Resp: 12621

Ion	Ratio	Lower	Upper
54	100		
39	101.6	82.6	124.0

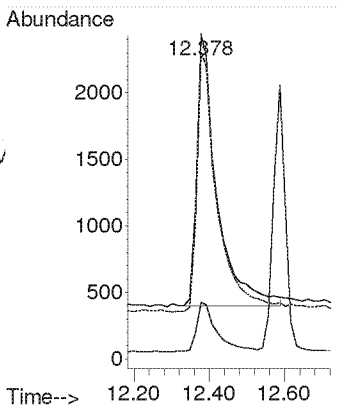




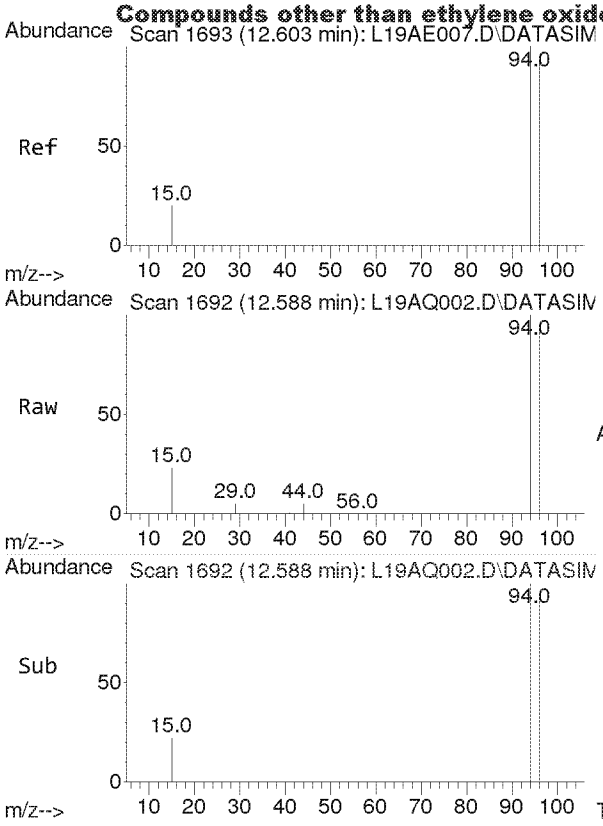
#9
Ethylene oxide
Concen: 2.530 ppbv
RT: 12.378 min Scan# 1678
Delta R.T. -0.015 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 29 Resp: 7547

Ion	Ratio	Lower	Upper
29	100		
15	17.8	15.4	23.0
44	98.7	77.4	116.2



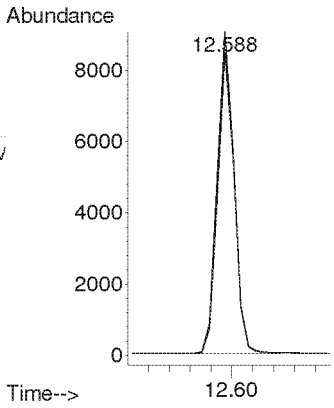
Compounds other than ethylene oxide were not quantitated.

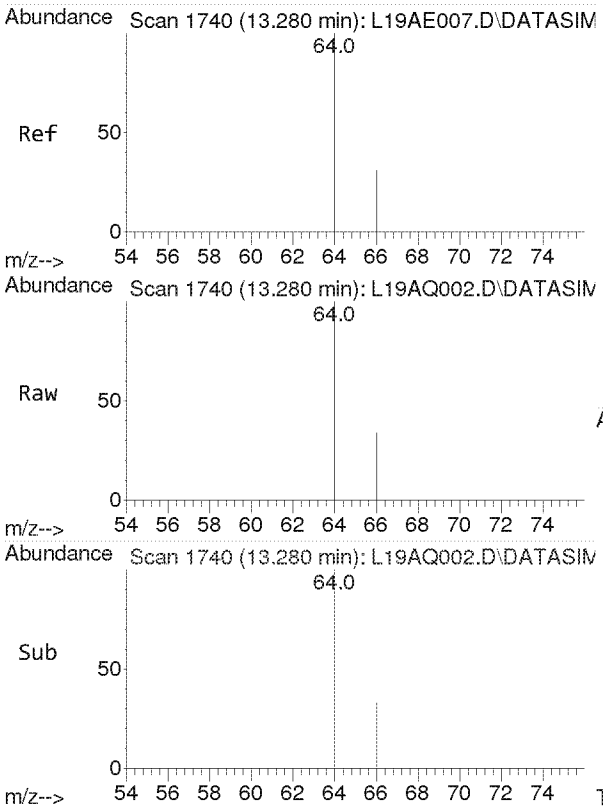


#10
Bromomethane
Concen: 2.588 ppbv
RT: 12.588 min Scan# 1692
Delta R.T. -0.015 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 94 Resp: 19869

Ion	Ratio	Lower	Upper
94	100		
96	93.8	75.4	113.2

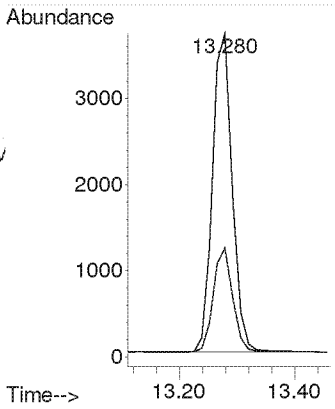




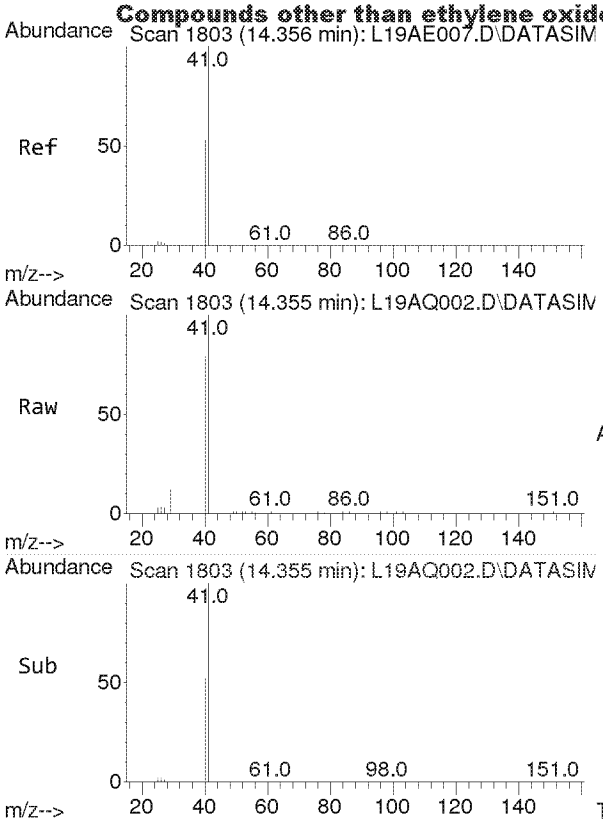
#11
Chloroethane
Concen: 2.588 ppbv
RT: 13.280 min Scan# 1740
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 64 Resp: 8737

Ion	Ratio	Lower	Upper
64	100		
66	31.8	25.9	38.9



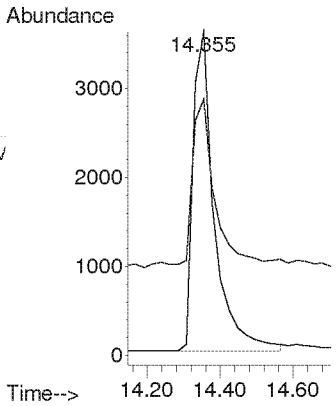
Compounds other than ethylene oxide were not quantitated.

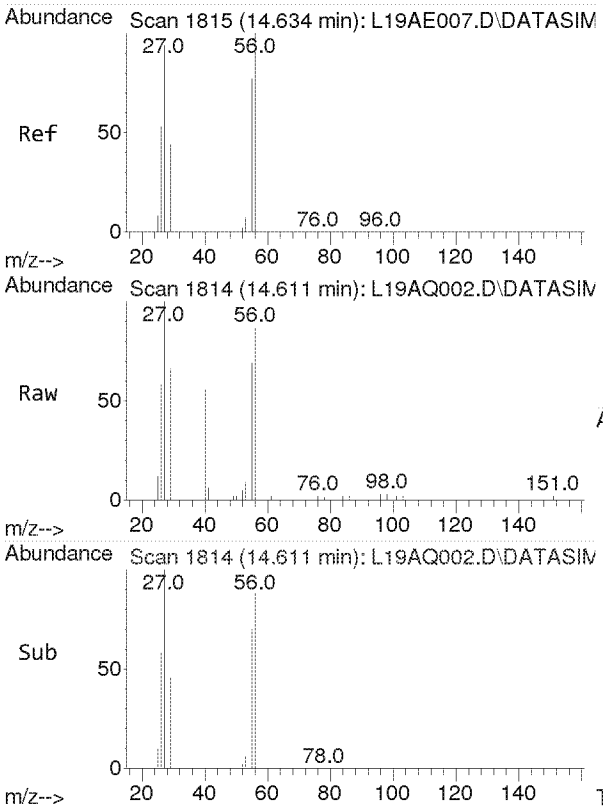


#12
Acetonitrile
Concen: 2.496 ppbv
RT: 14.355 min Scan# 1803
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 41 Resp: 14475

Ion	Ratio	Lower	Upper
41	100		
40	51.6	42.6	63.8

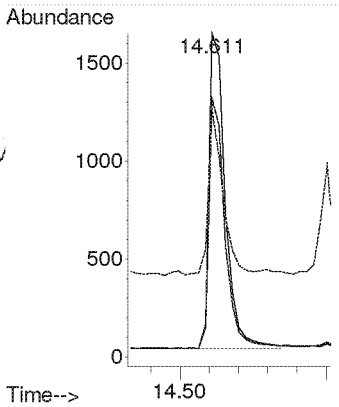




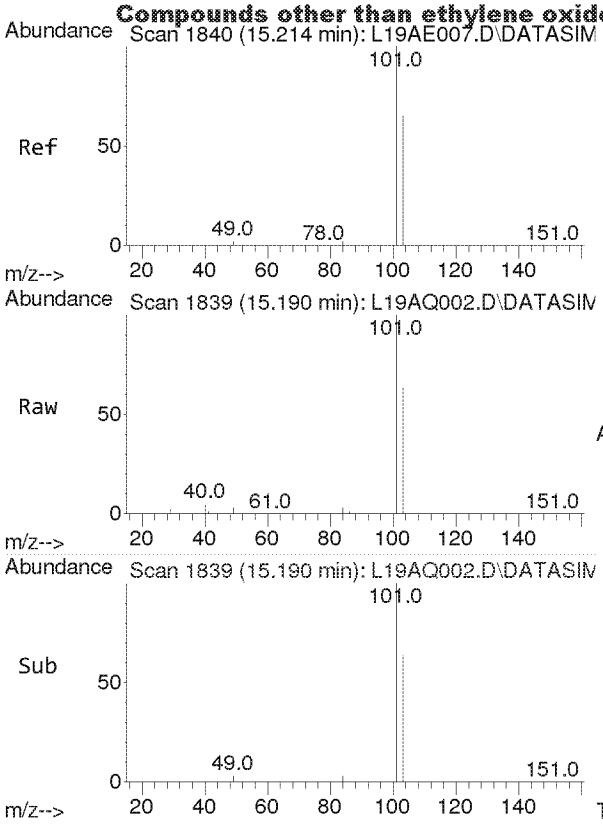
#13
Acrolein
Concen: 2.172 ppbv
RT: 14.611 min Scan# 1814
Delta R.T. -0.023 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 56 Resp: 6202

Ion	Ratio	Lower	Upper
56	100		
55	77.8	61.2	91.8
29	48.9	35.9	53.9



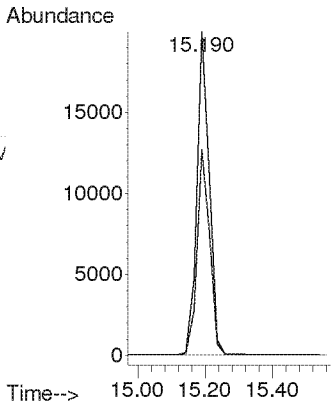
Compounds other than ethylene oxide were not quantitated.

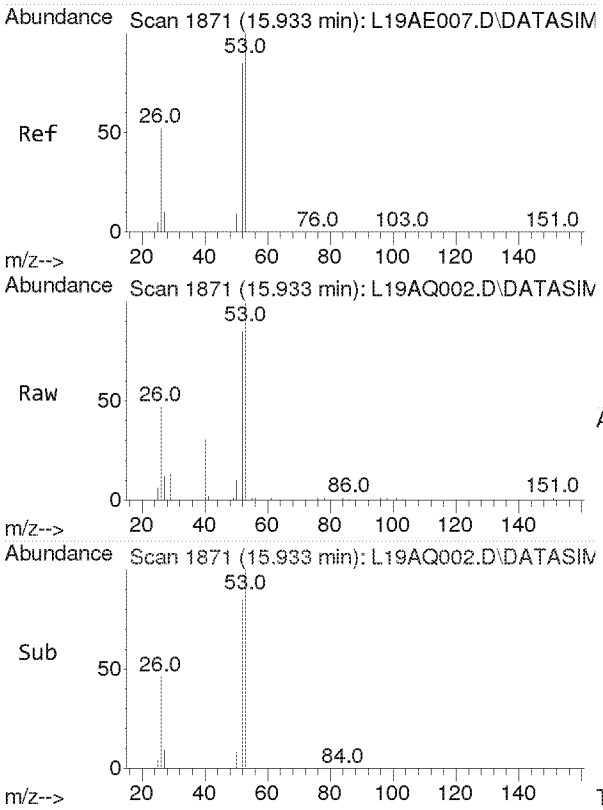


#14
Trichlorofluoromethane
Concen: 2.252 ppbv
RT: 15.190 min Scan# 1839
Delta R.T. -0.024 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:101 Resp: 50847

Ion	Ratio	Lower	Upper
101	100		
103	64.7	51.7	77.5

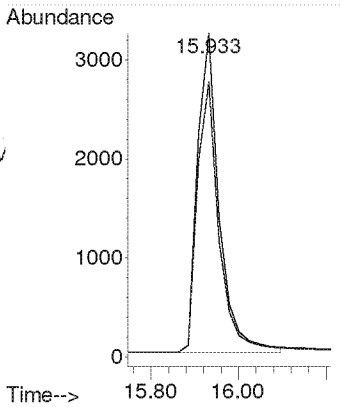




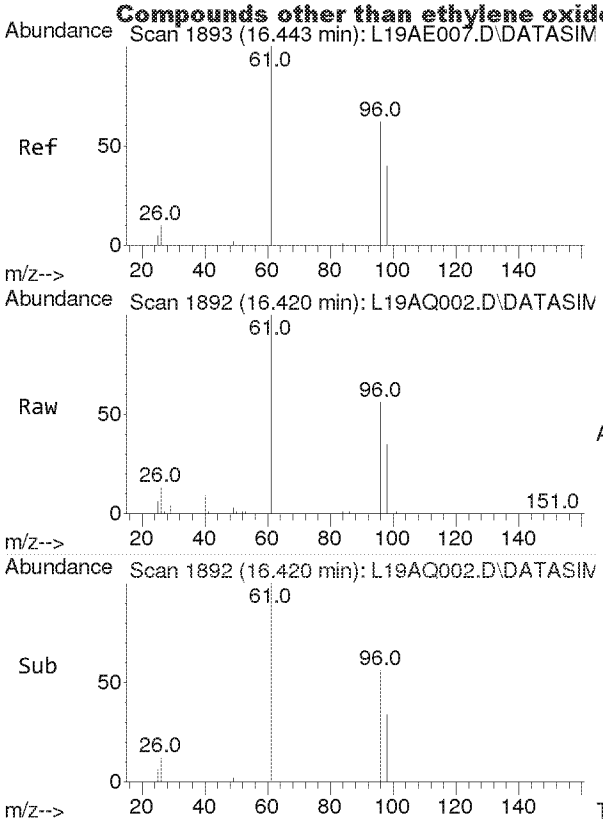
#15
Acrylonitrile
Concen: 2.348 ppbv
RT: 15.933 min Scan# 1871
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 53 Resp: 10941

Ion	Ratio	Lower	Upper
53	100		
52	85.1	67.8	101.6



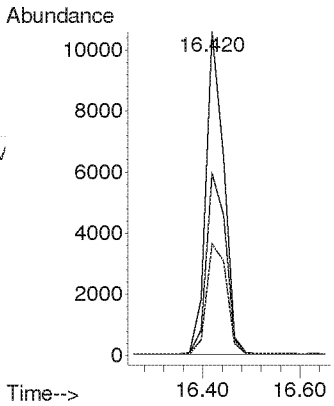
Compounds other than ethylene oxide were not quantitated.

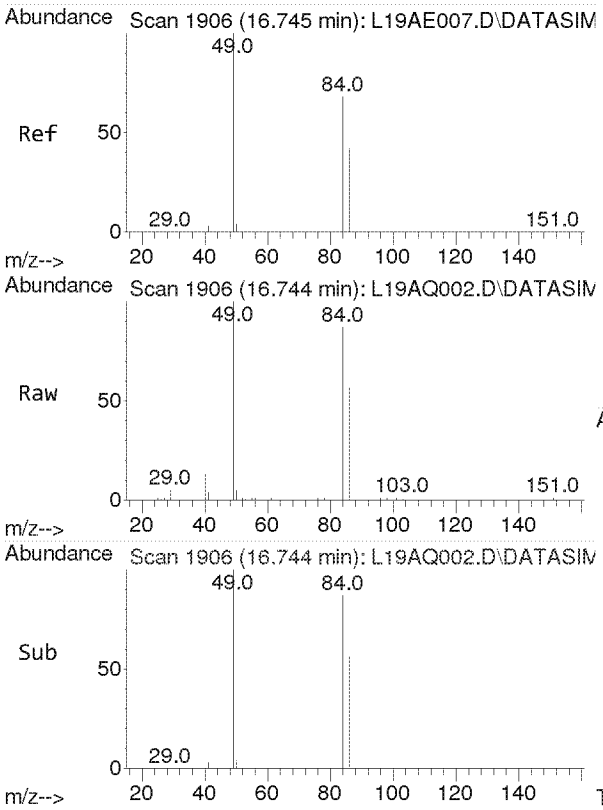


#16
1,1-Dichloroethene
Concen: 2.607 ppbv
RT: 16.420 min Scan# 1892
Delta R.T. -0.024 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 61 Resp: 27016

Ion	Ratio	Lower	Upper
61	100		
96	60.7	47.6	71.4
98	38.4	30.5	45.7

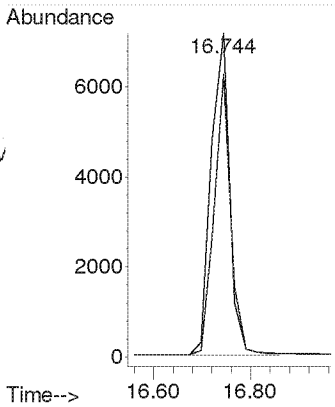




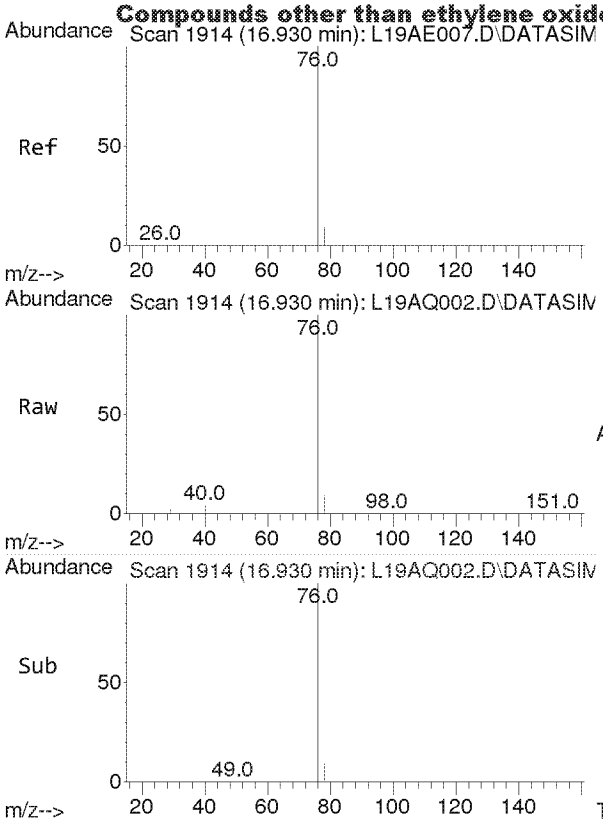
#17
Methylene Chloride
Concen: 2.557 ppbv
RT: 16.744 min Scan# 1906
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 49 Resp: 18947

Ion	Ratio	Lower	Upper
49	100		
84	78.5	54.1	100.5



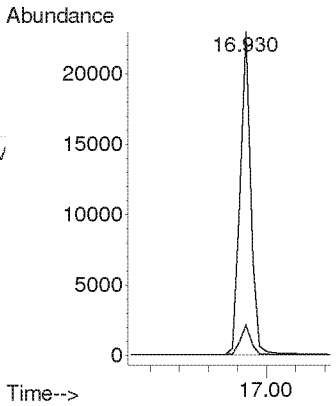
Compounds other than ethylene oxide were not quantitated.

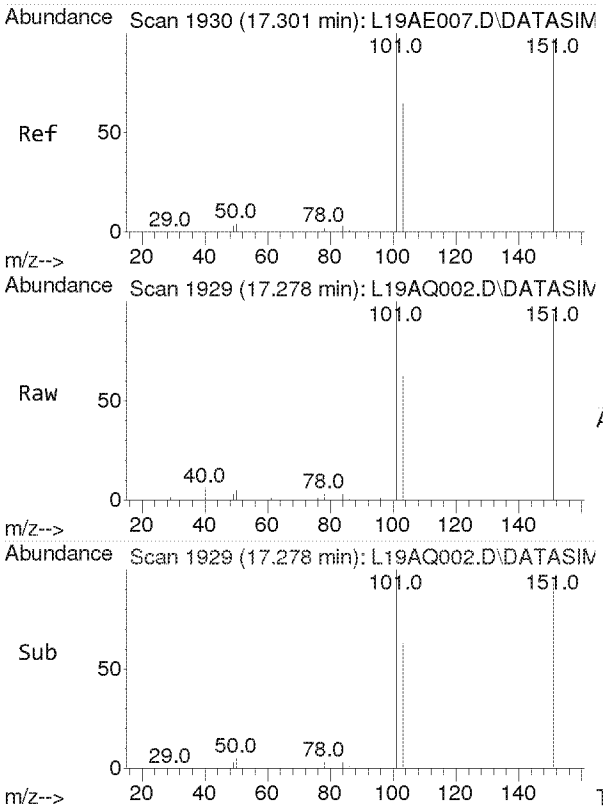


#18
Carbon Disulfide
Concen: 2.511 ppbv
RT: 16.930 min Scan# 1914
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 76 Resp: 56588

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.2	10.8

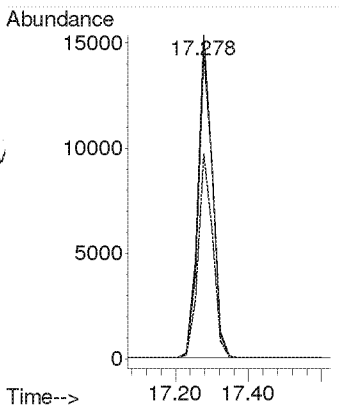




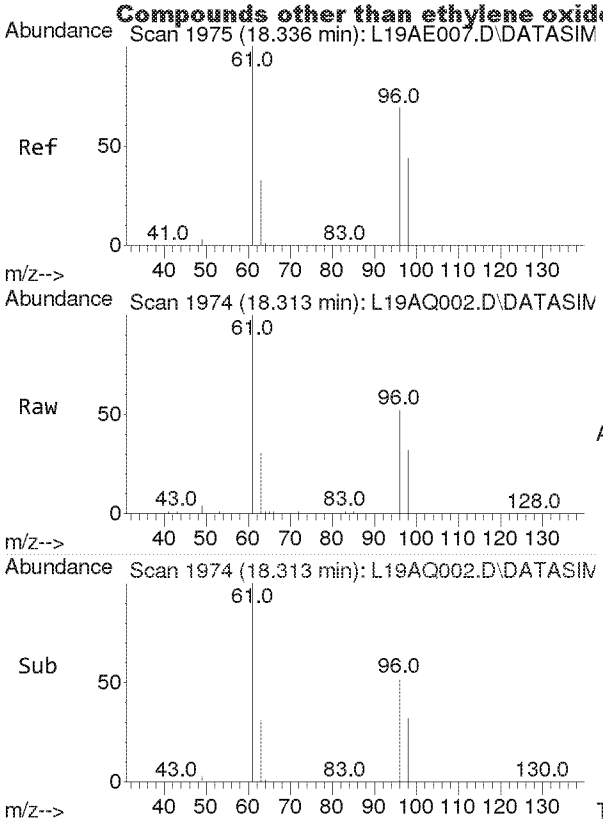
#19
Trichlorotrifluoroethane
Concen: 2.590 ppbv
RT: 17.278 min Scan# 1929
Delta R.T. -0.024 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:101 Resp: 42187

Ion	Ratio	Lower	Upper
101	100		
151	95.8	76.3	114.5
103	64.2	51.1	76.7



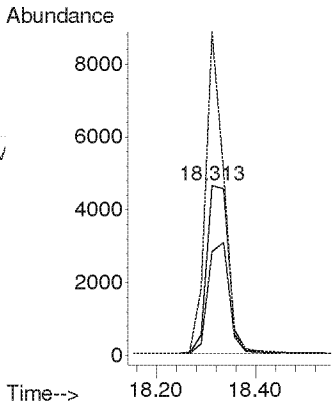
Compounds other than ethylene oxide were not quantitated.

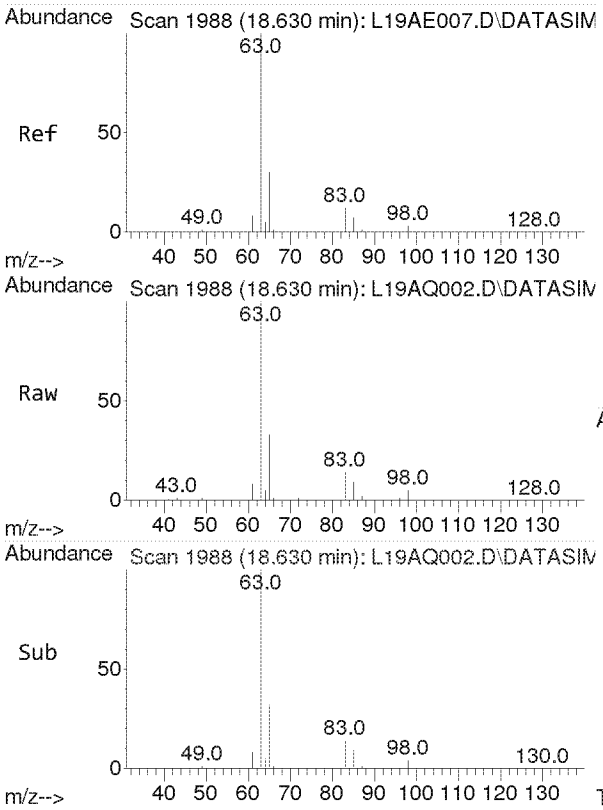


#20
trans-1,2-Dichloroethylene
Concen: 2.448 ppbv
RT: 18.313 min Scan# 1974
Delta R.T. -0.023 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 96 Resp: 14319

Ion	Ratio	Lower	Upper
96	100		
98	64.0	50.9	76.3
61	156.4	125.2	187.8

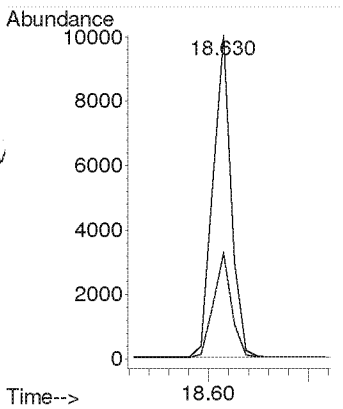




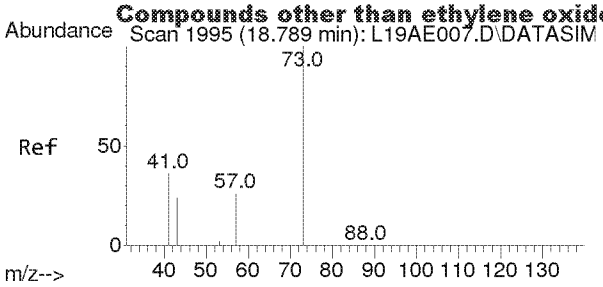
#21
1,1-Dichloroethane
Concen: 2.385 ppbv
RT: 18.630 min Scan# 1988
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 63 Resp: 25325

Ion	Ratio	Lower	Upper
63	100		
65	32.0	25.4	38.0



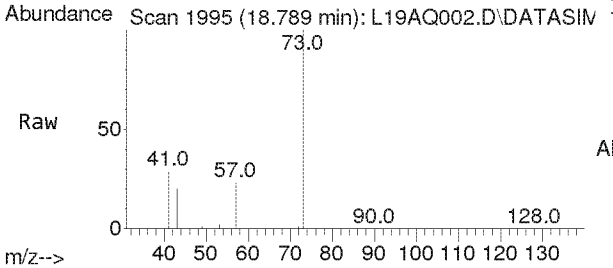
Compounds other than ethylene oxide were not quantitated.

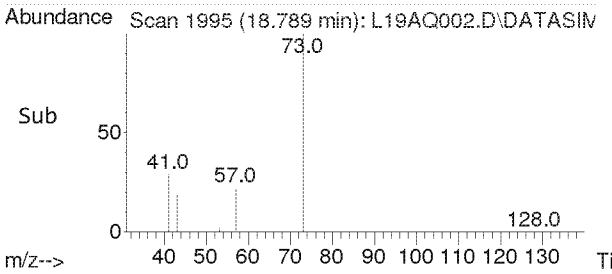


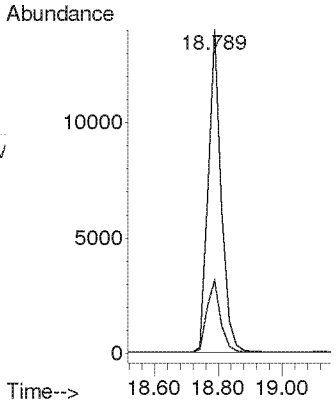
#22
Methyl tert-Butyl Ether
Concen: 2.503 ppbv
RT: 18.789 min Scan# 1995
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

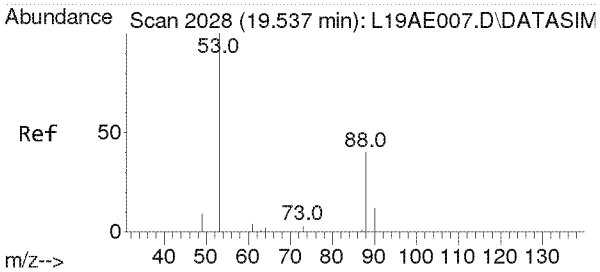
Tgt Ion: 73 Resp: 39330

Ion	Ratio	Lower	Upper
73	100		
57	23.4	18.9	28.3





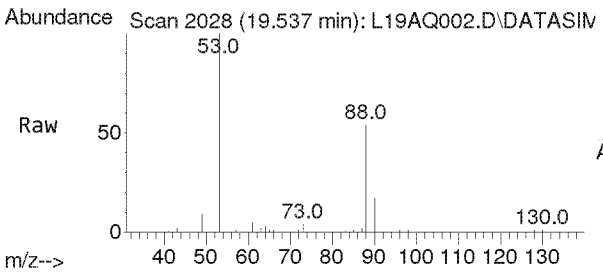


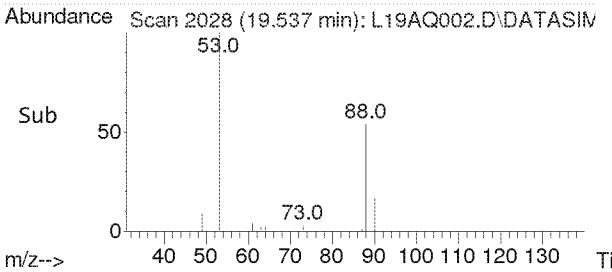


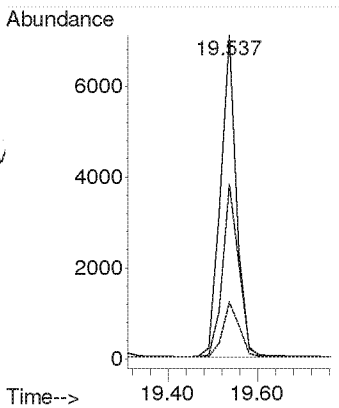
#23
Chloroprene
Concen: 2.415 ppbv
RT: 19.537 min Scan# 2028
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 53 Resp: 17609

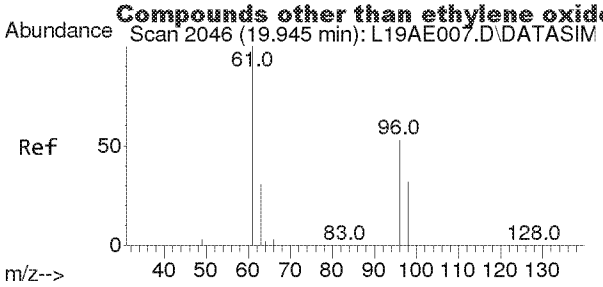
Ion	Ratio	Lower	Upper
53	100		
88	55.1	43.2	64.8
90	17.6	13.8	20.8







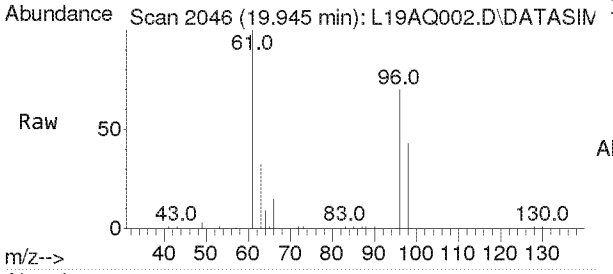
Compounds other than ethylene oxide were not quantitated.

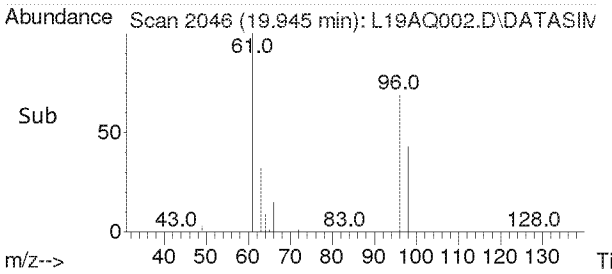


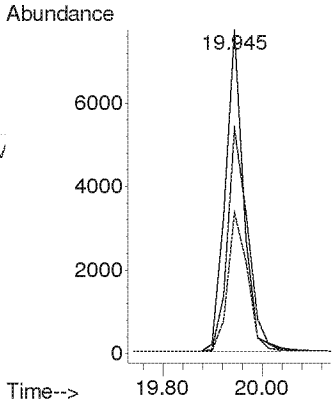
#24
cis-1,2-Dichloroethylene
Concen: 2.416 ppbv
RT: 19.945 min Scan# 2046
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

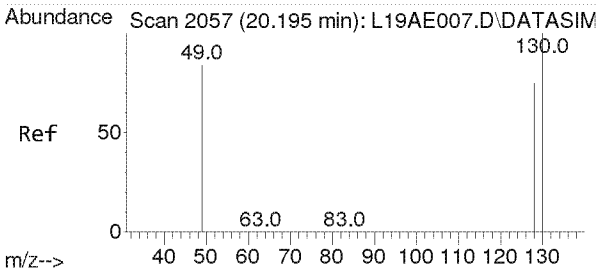
Tgt Ion: 61 Resp: 19585

Ion	Ratio	Lower	Upper
61	100		
96	76.7	60.6	90.8
98	46.5	37.1	55.7





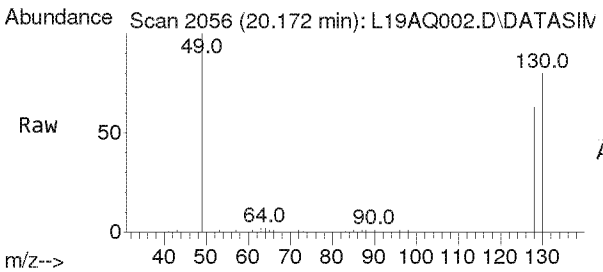


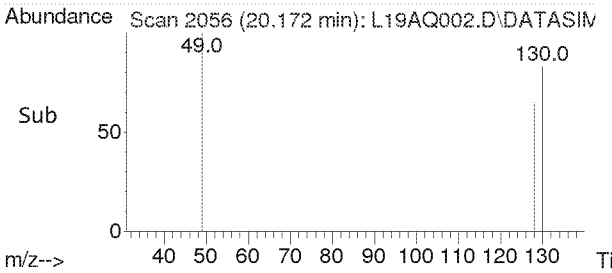


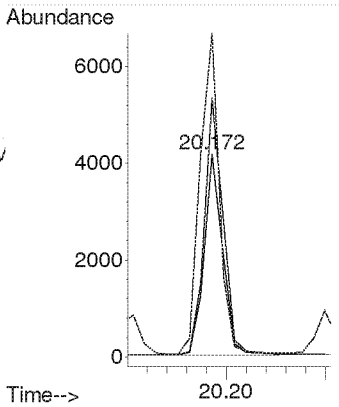
#25
Bromochloromethane
Concen: 2.358 ppbv
RT: 20.172 min Scan# 2056
Delta R.T. -0.023 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:128 Resp: 10519

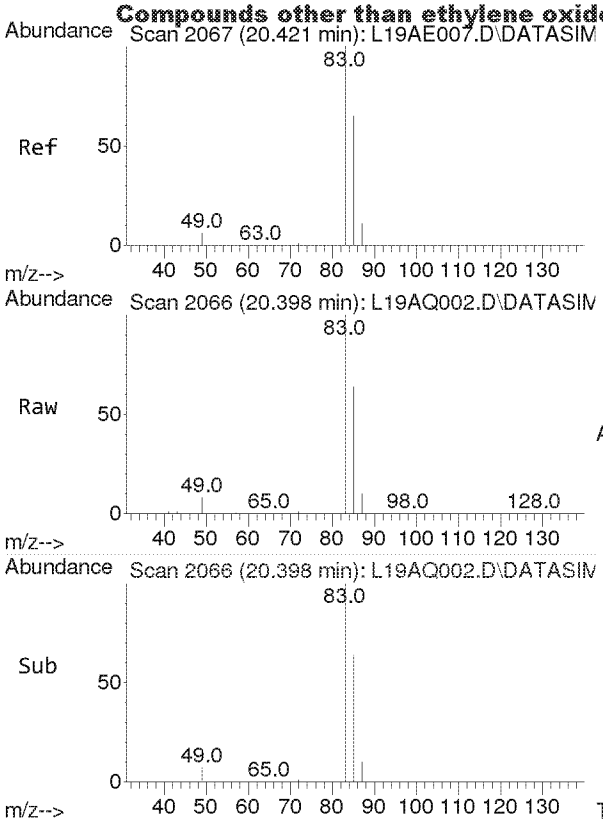
Ion	Ratio	Lower	Upper
128	100		
130	129.4	104.3	156.5
49	168.0	136.6	205.0







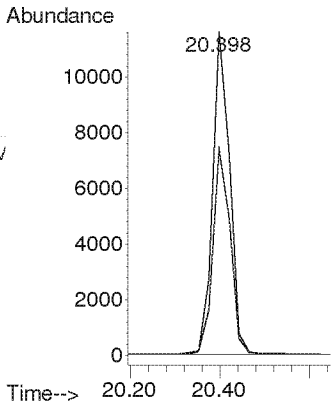
Compounds other than ethylene oxide were not quantitated.

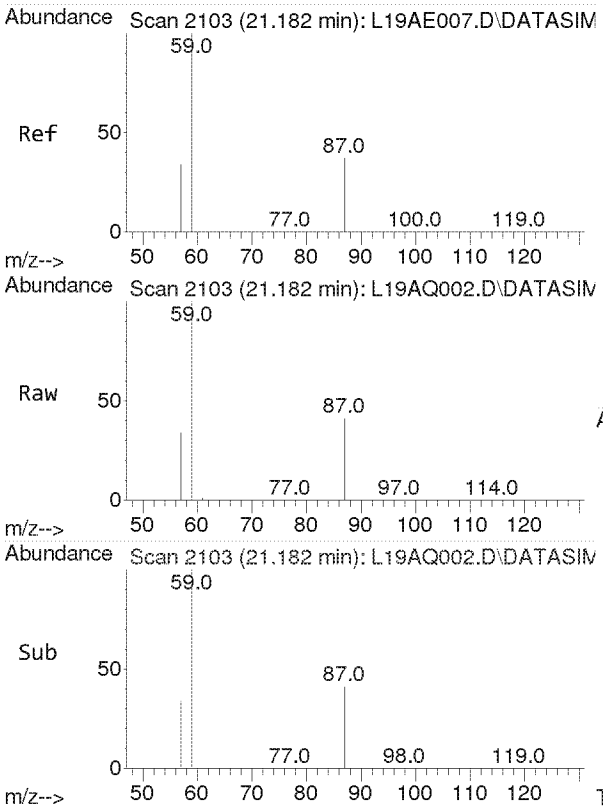


#26
Chloroform
Concen: 2.501 ppbv
RT: 20.398 min Scan# 2066
Delta R.T. -0.023 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 83 Resp: 30382

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.6	77.4

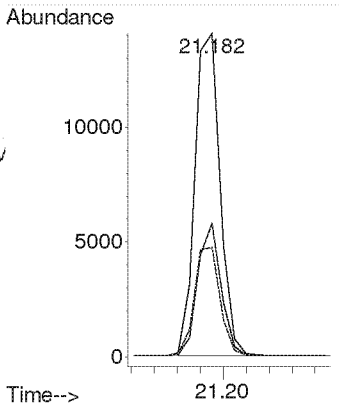




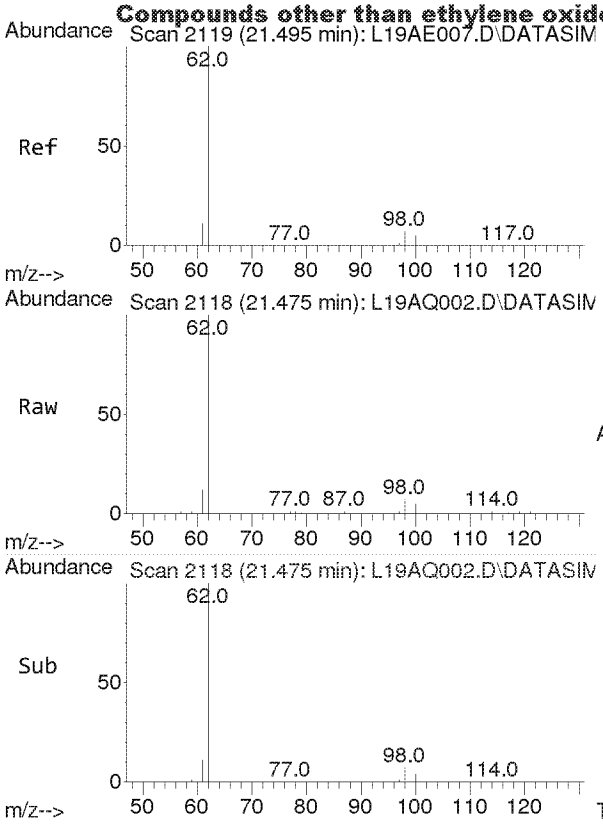
#27
Ethyl tert-Butyl Ether
Concen: 2.566 ppbv
RT: 21.182 min Scan# 2103
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 59 Resp: 42242

Ion	Ratio	Lower	Upper
59	100		
87	38.1	30.2	45.4
57	34.1	27.4	41.2



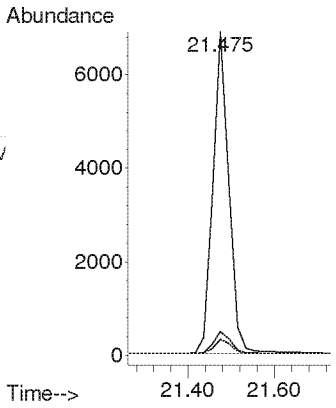
Compounds other than ethylene oxide were not quantitated.

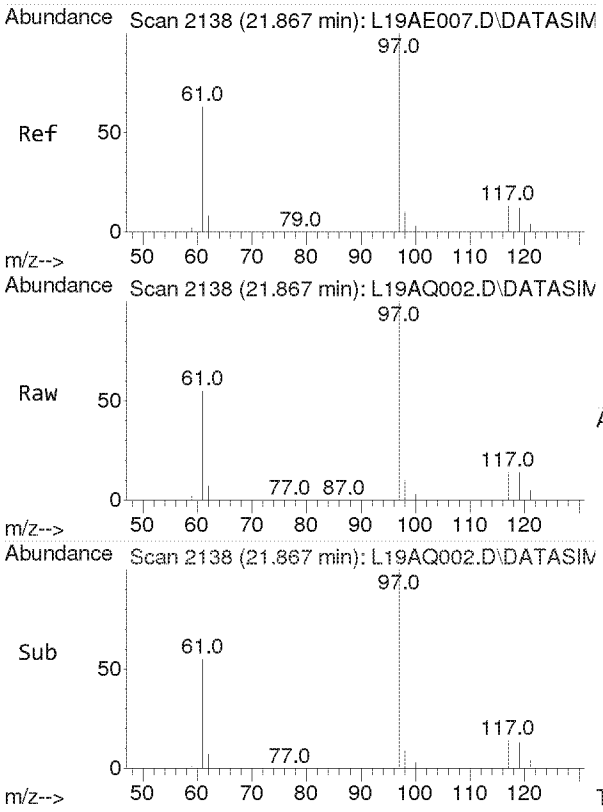


#28
1,2-Dichloroethane
Concen: 2.398 ppbv
RT: 21.475 min Scan# 2118
Delta R.T. -0.020 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 62 Resp: 17288

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.4	8.2
100	4.4	3.4	5.0

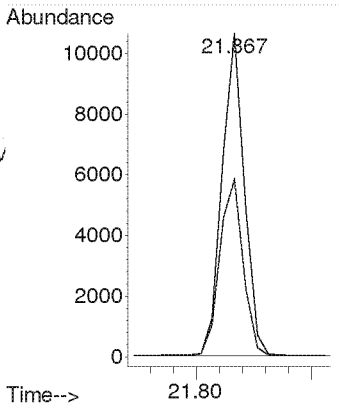




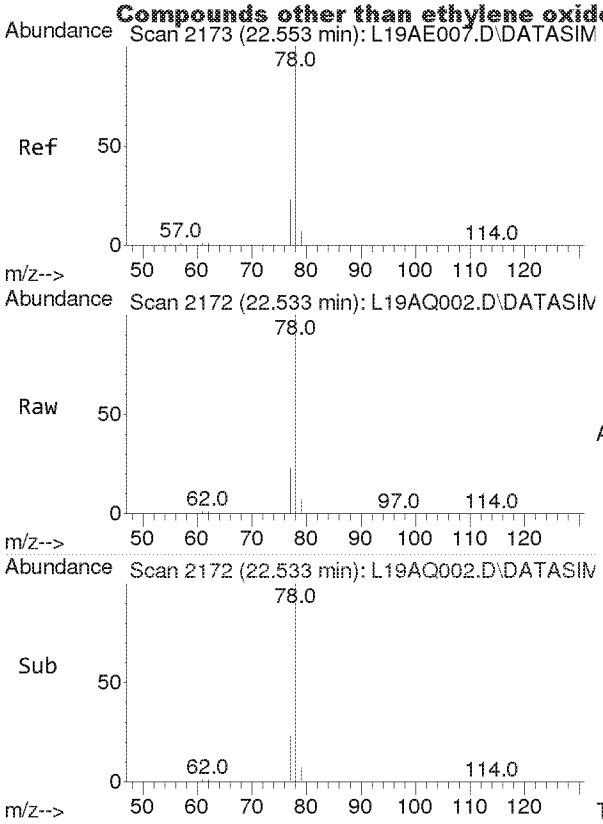
#30
1,1,1-Trichloroethane
Concen: 2.490 ppbv
RT: 21.867 min Scan# 2138
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 97 Resp: 28352

Ion	Ratio	Lower	Upper
97	100		
61	57.3	46.9	70.3



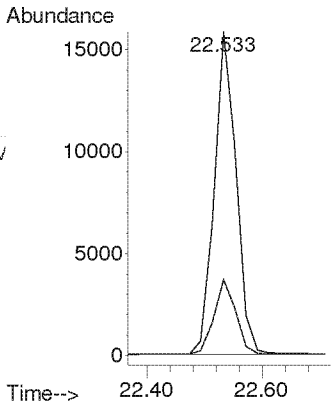
Compounds other than ethylene oxide were not quantitated.

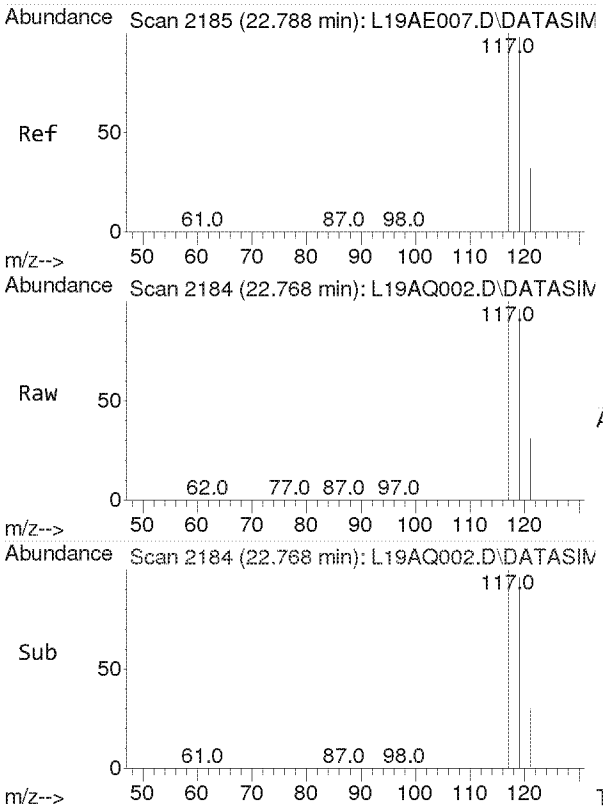


#31
Benzene
Concen: 2.650 ppbv
RT: 22.533 min Scan# 2172
Delta R.T. -0.020 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 78 Resp: 41496

Ion	Ratio	Lower	Upper
78	100		
77	23.0	18.3	27.5

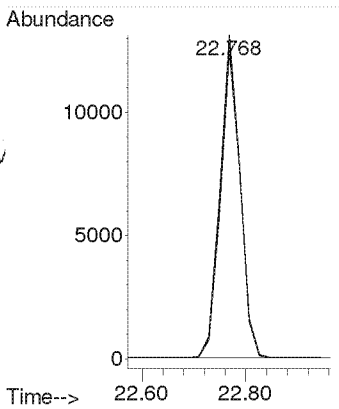




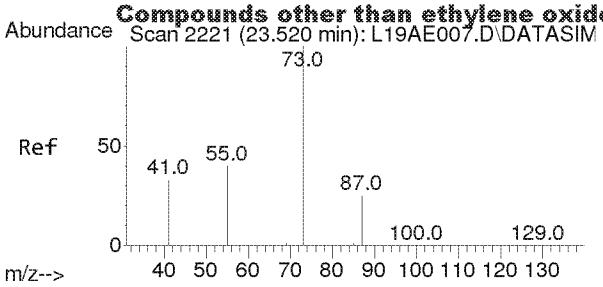
#32
Carbon Tetrachloride
Concen: 2.840 ppbv
RT: 22.768 min Scan# 2184
Delta R.T. -0.020 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:117 Resp: 35042

Ion	Ratio	Lower	Upper
117	100		
119	96.1	77.2	115.8



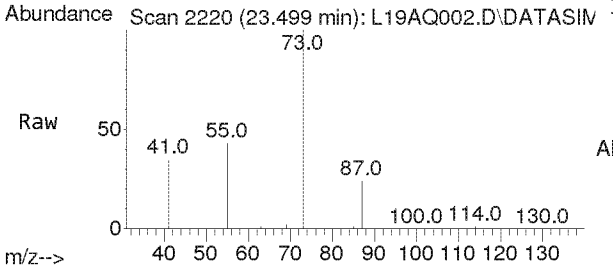
Compounds other than ethylene oxide were not quantitated.

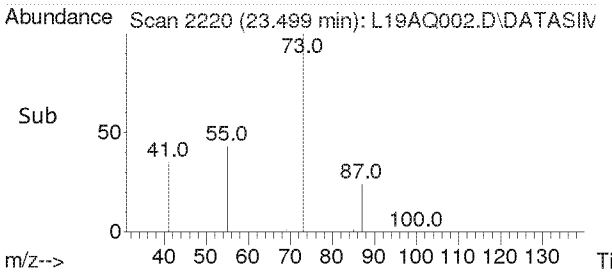


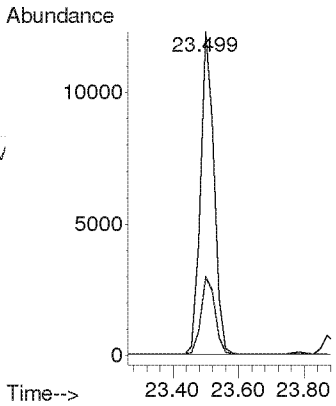
#33
tert-Amyl Methyl Ether
Concen: 2.641 ppbv
RT: 23.499 min Scan# 2220
Delta R.T. -0.021 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

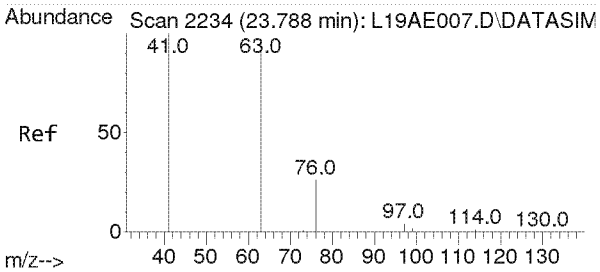
Tgt Ion: 73 Resp: 34827

Ion	Ratio	Lower	Upper
73	100		
87	24.9	19.8	29.8





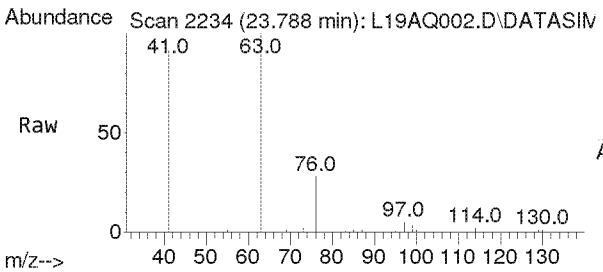


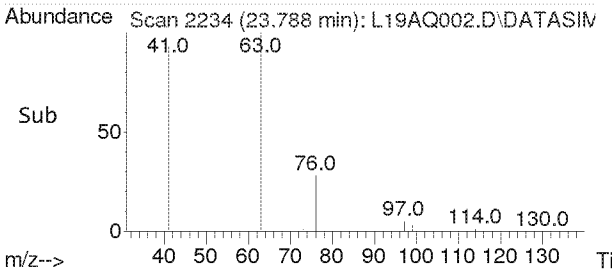


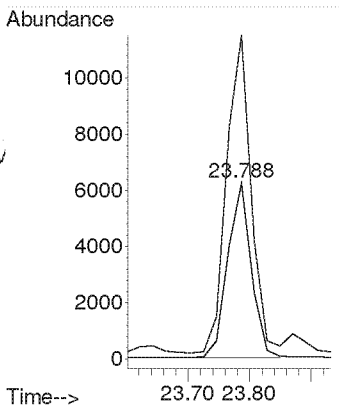
#34
1,2-Dichloropropane
Concen: 2.522 ppbv
RT: 23.788 min Scan# 2234
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 63 Resp: 16608

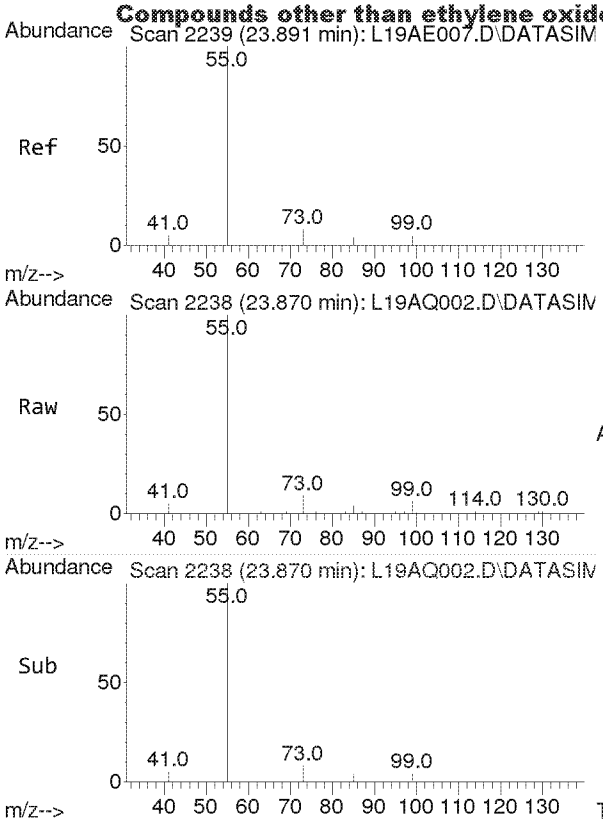
Ion	Ratio	Lower	Upper
63	100		
41	189.0	156.8	235.2







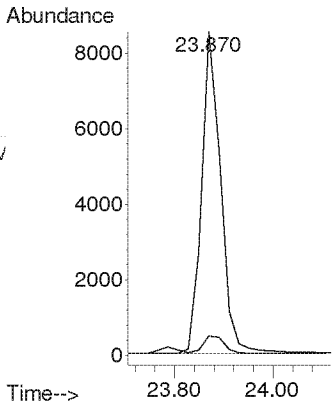
Compounds other than ethylene oxide were not quantitated.

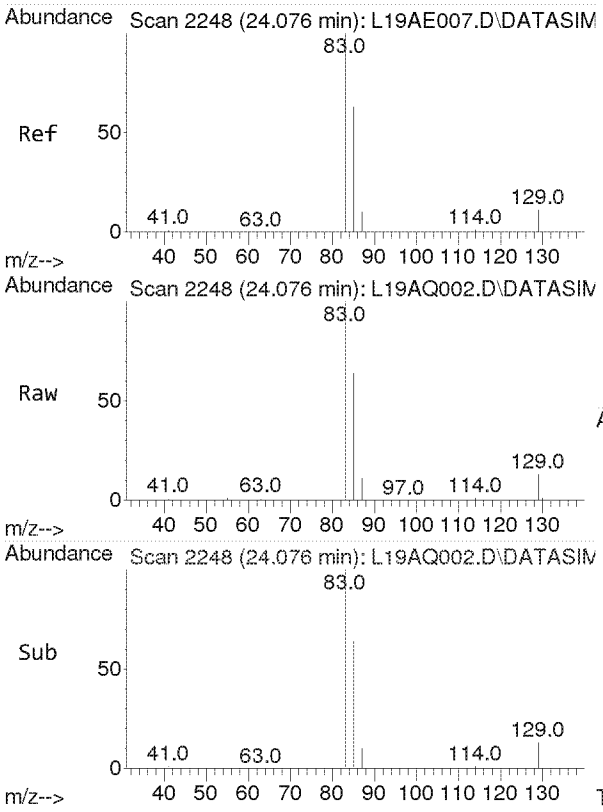


#35
Ethyl Acrylate
Concen: 2.563 ppbv
RT: 23.870 min Scan# 2238
Delta R.T. -0.021 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 55 Resp: 22631

Ion	Ratio	Lower	Upper
55	100		
99	6.1	4.8	7.2

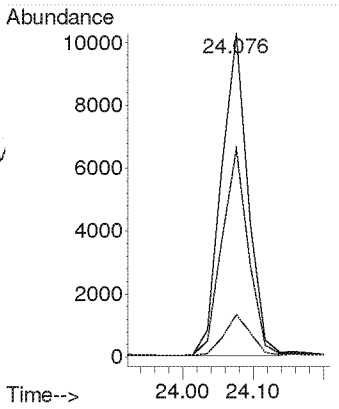




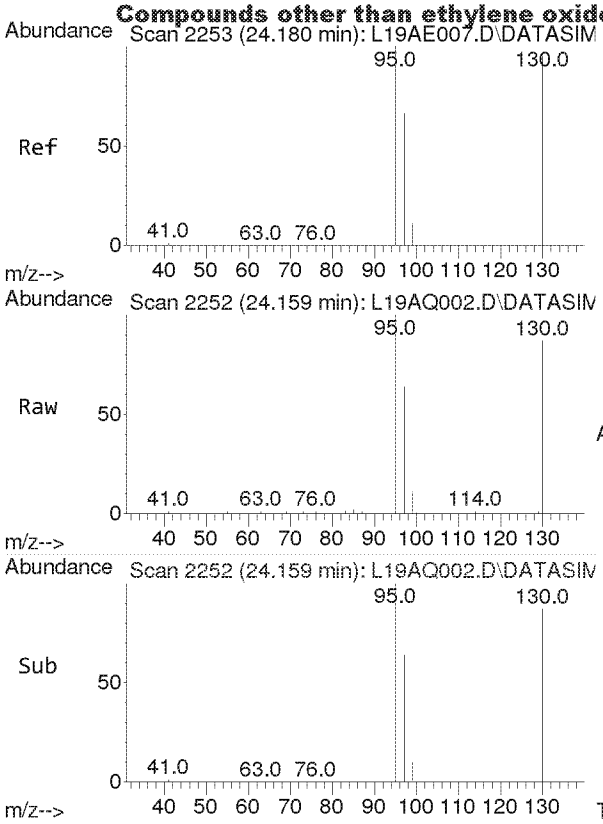
#36
Bromodichloromethane
Concen: 2.236 ppbv
RT: 24.076 min Scan# 2248
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 83 Resp: 26845

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.1	76.7
129	12.5	10.0	15.0



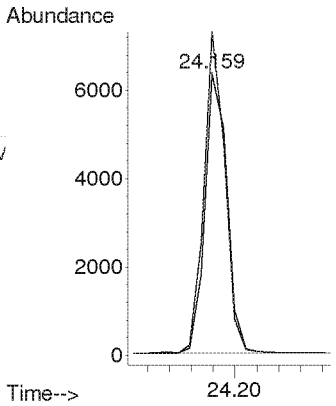
Compounds other than ethylene oxide were not quantitated.

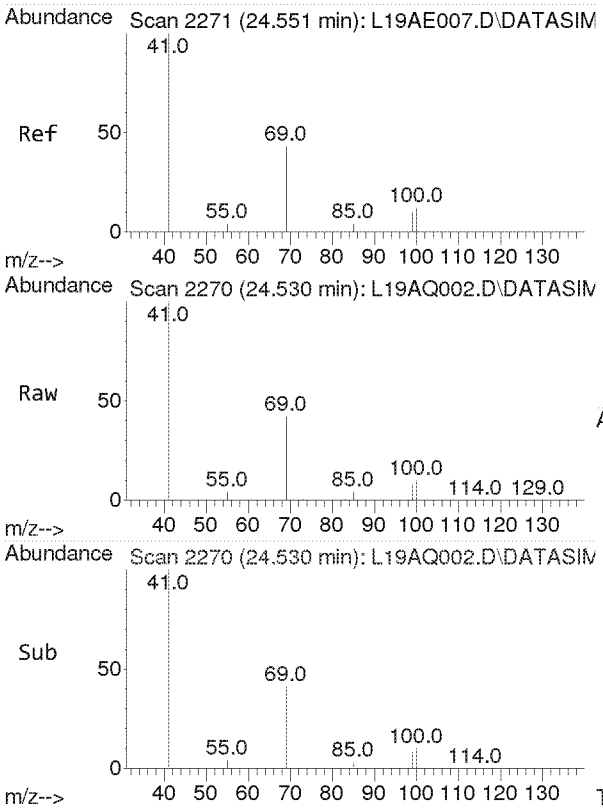


#37
Trichloroethylene
Concen: 2.346 ppbv
RT: 24.159 min Scan# 2252
Delta R.T. -0.021 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:130 Resp: 17690

Ion	Ratio	Lower	Upper
130	100		
95	109.8	86.9	130.3

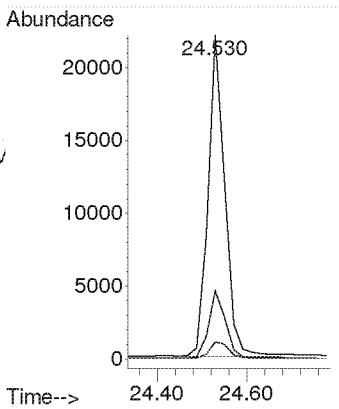




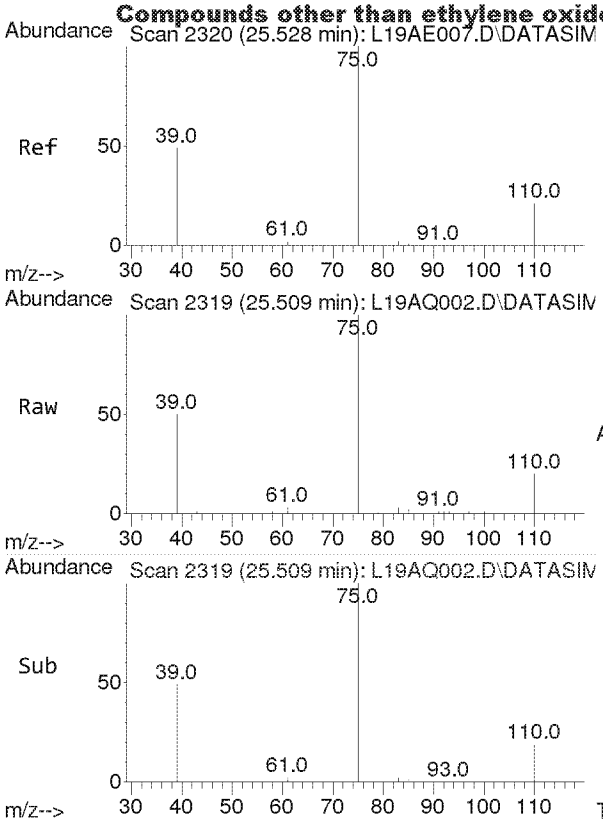
#38
Methyl Methacrylate
Concen: 2.469 ppbv
RT: 24.530 min Scan# 2270
Delta R.T. -0.021 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 41 Resp: 57288

Ion	Ratio	Lower	Upper
41	100		
69	21.2	16.6	24.8
100	5.6	4.2	6.4



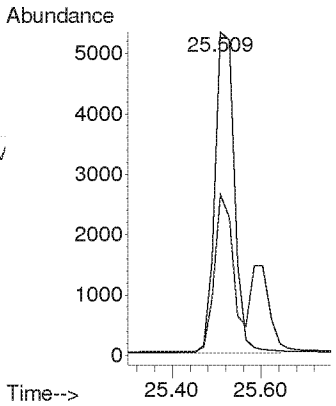
Compounds other than ethylene oxide were not quantitated.

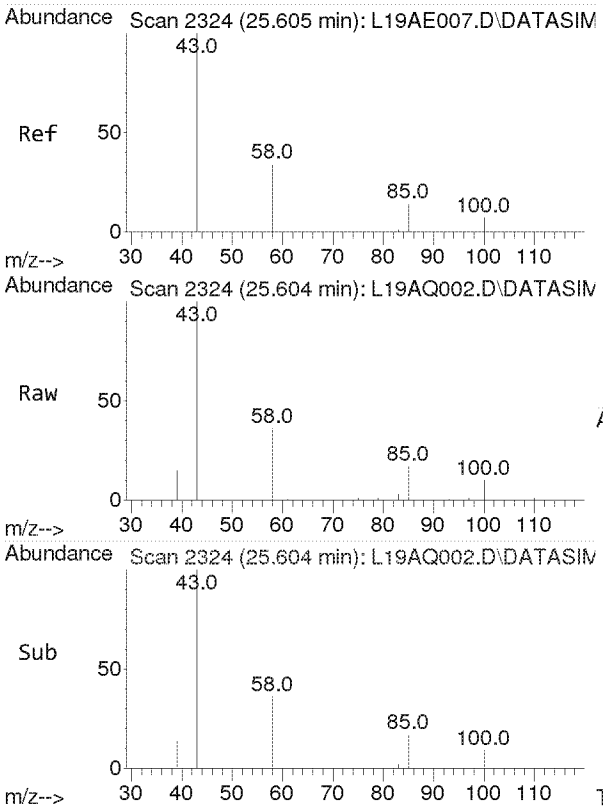


#39
cis-1,3-Dichloropropene
Concen: 2.653 ppbv
RT: 25.509 min Scan# 2319
Delta R.T. -0.019 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 75 Resp: 16025

Ion	Ratio	Lower	Upper
75	100		
39	48.6	38.6	58.0

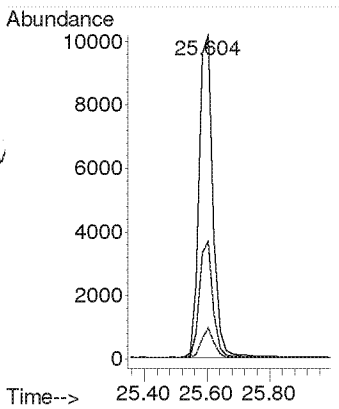




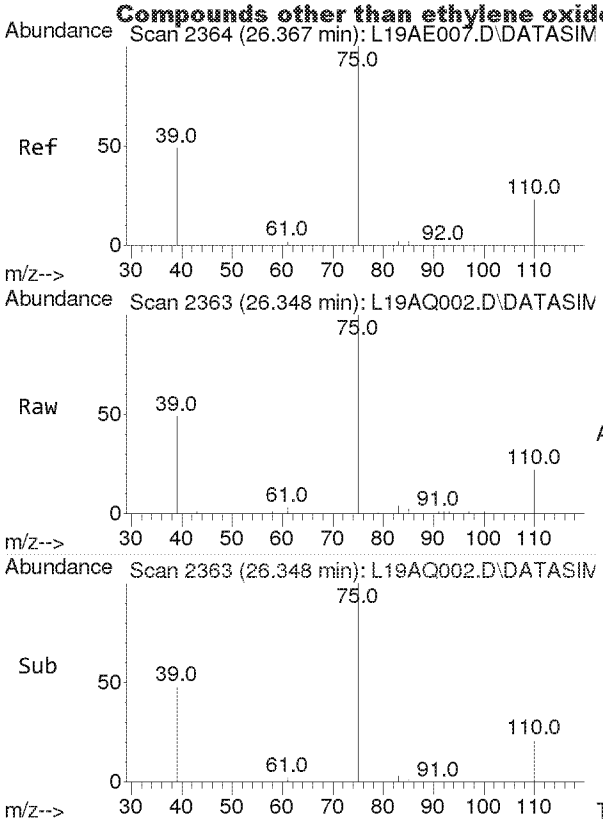
#40
Methyl Isobutyl Ketone
Concen: 2.455 ppbv
RT: 25.604 min Scan# 2324
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 43 Resp: 31179

Ion	Ratio	Lower	Upper
43	100		
58	35.2	27.6	41.4
100	8.2	6.5	9.7



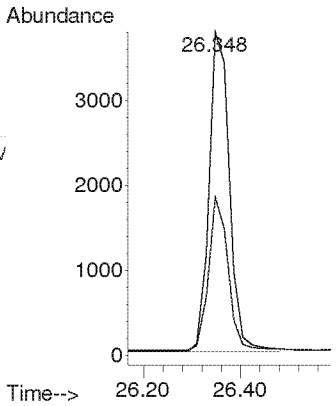
Compounds other than ethylene oxide were not quantitated.

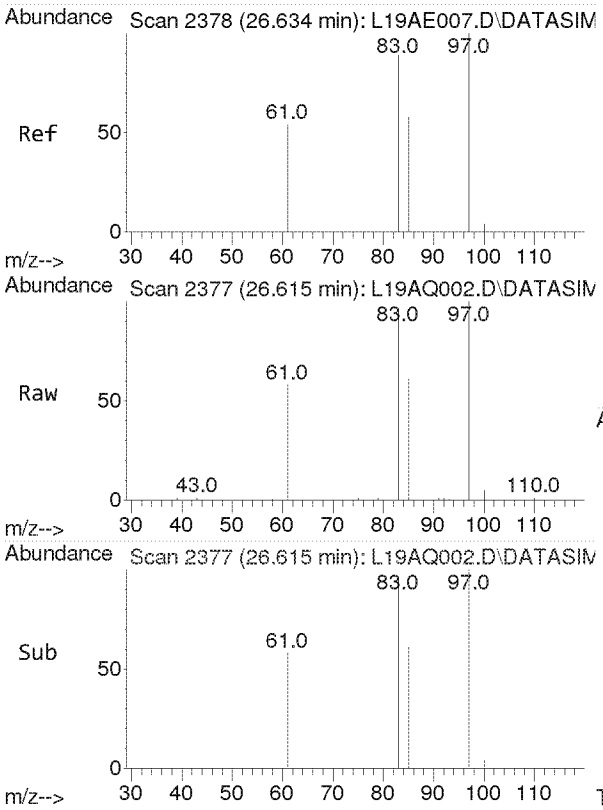


#41
trans-1,3-Dichloropropene
Concen: 2.351 ppbv
RT: 26.348 min Scan# 2363
Delta R.T. -0.019 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 75 Resp: 11057

Ion	Ratio	Lower	Upper
75	100		
39	45.9	39.0	58.6

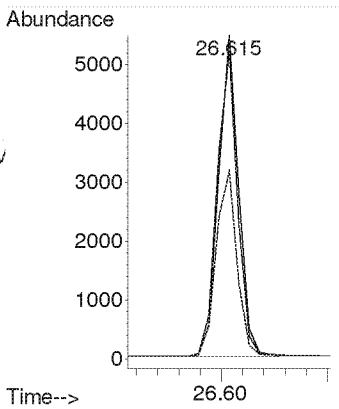




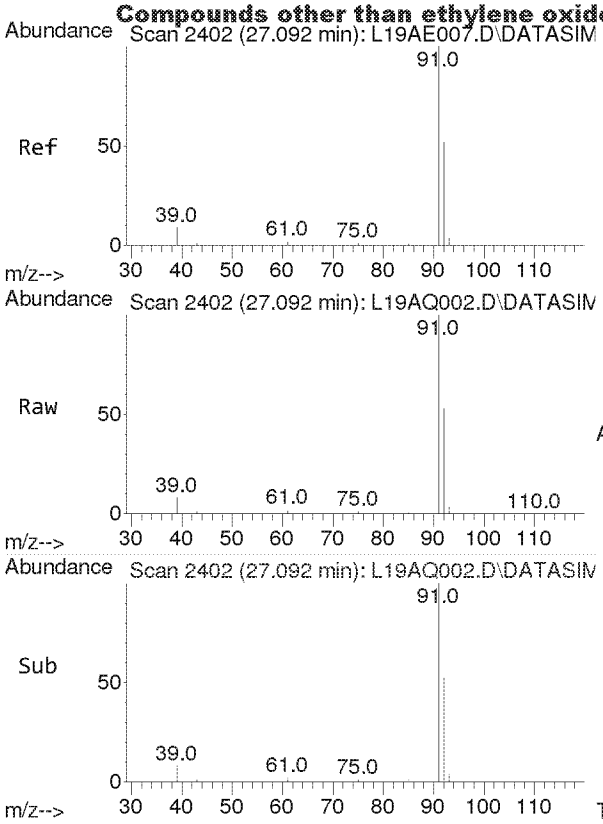
#42
1,1,2-Trichloroethane
Concen: 2.454 ppbv
RT: 26.615 min Scan# 2377
Delta R.T. -0.019 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 97 Resp: 14335

Ion	Ratio	Lower	Upper
97	100		
83	96.4	77.3	115.9
61	60.1	49.1	73.7



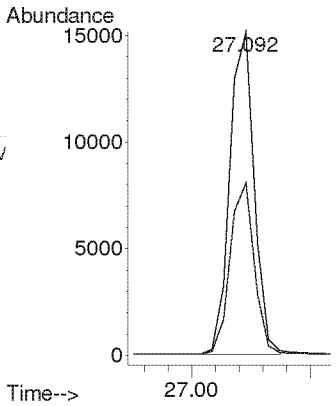
Compounds other than ethylene oxide were not quantitated.

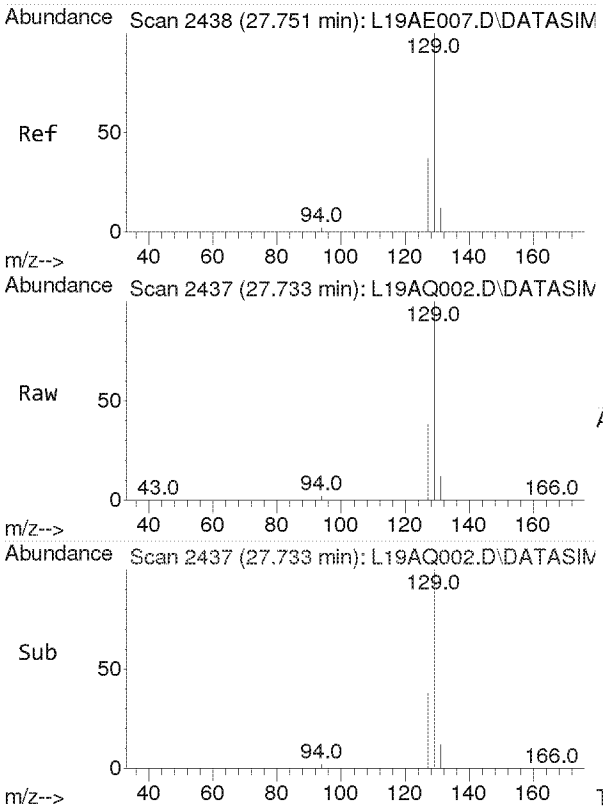


#44
Toluene
Concen: 2.478 ppbv
RT: 27.092 min Scan# 2402
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 91 Resp: 42946

Ion	Ratio	Lower	Upper
91	100		
92	52.7	42.0	63.0

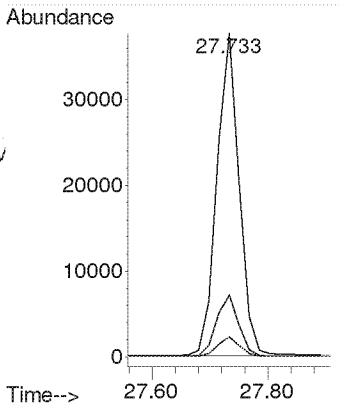




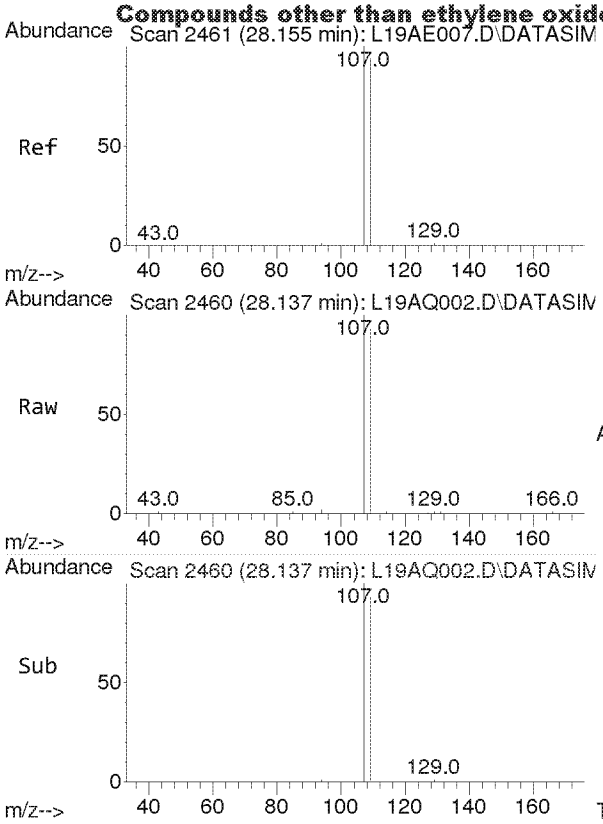
#45
Dibromochloromethane
Concen: 2.309 ppbv
RT: 27.733 min Scan# 2437
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:129 Resp: 100389

Ion	Ratio	Lower	Upper
129	100		
127	19.3	15.4	23.0
131	6.0	4.8	7.2



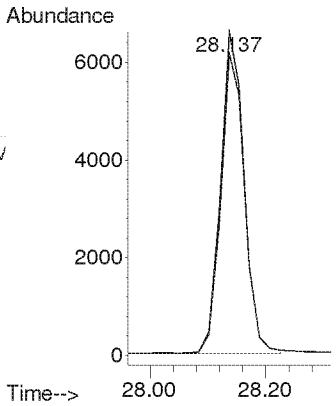
Compounds other than ethylene oxide were not quantitated.

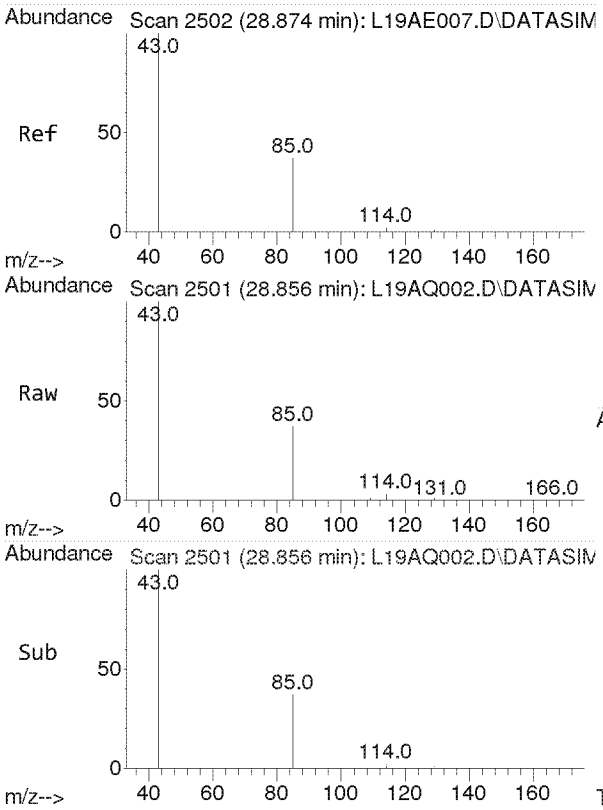


#46
1,2-Dibromoethane
Concen: 2.357 ppbv
RT: 28.137 min Scan# 2460
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:107 Resp: 18571

Ion	Ratio	Lower	Upper
107	100		
109	94.3	75.4	113.2

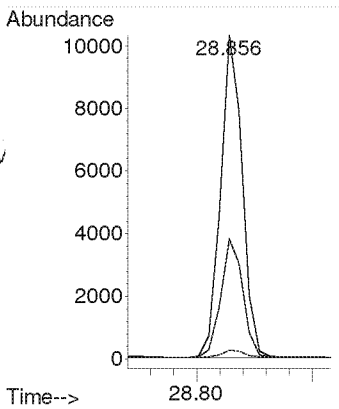




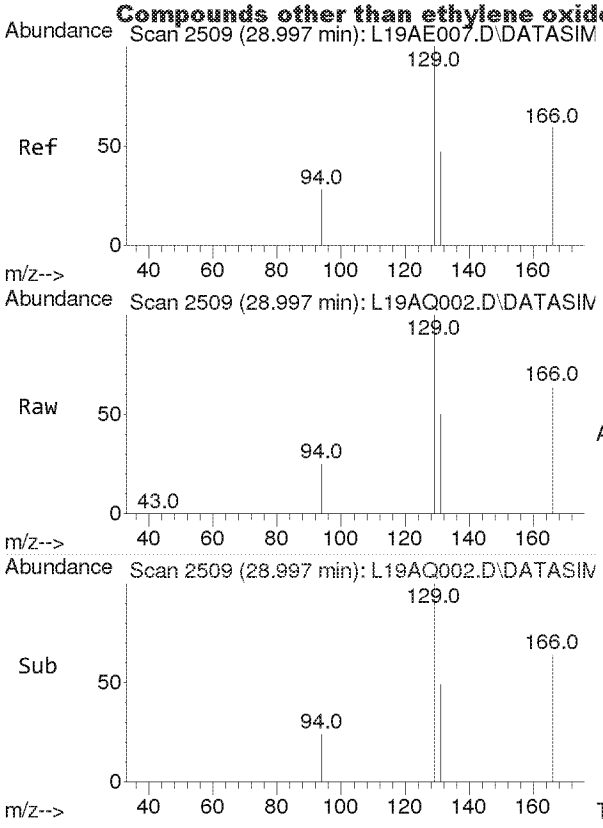
#47
n-Octane
Concen: 2.512 ppbv
RT: 28.856 min Scan# 2501
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 43 Resp: 26925

Ion	Ratio	Lower	Upper
43	100		
85	37.2	29.3	43.9
114	2.3	1.8	2.8



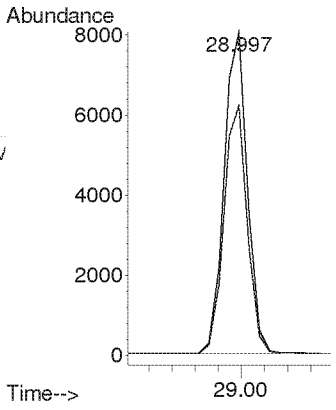
Compounds other than ethylene oxide were not quantitated.

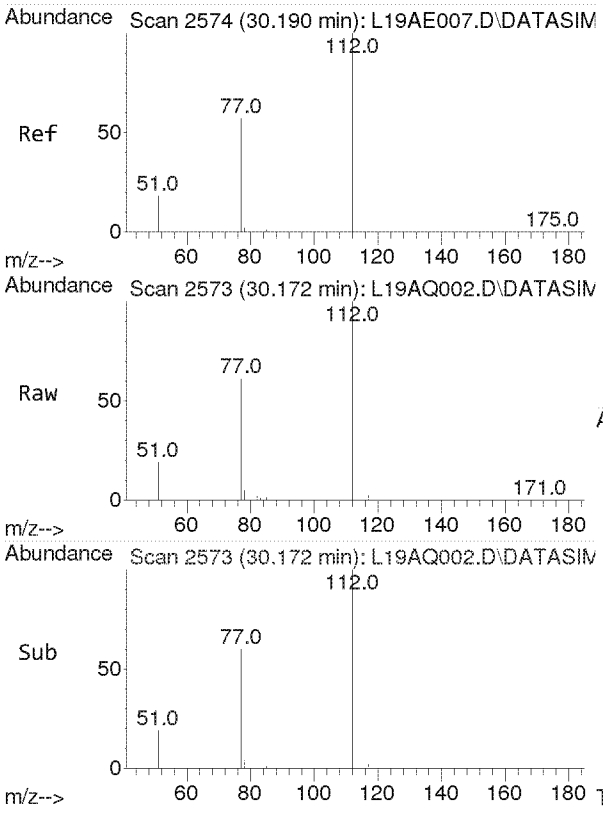


#48
Tetrachloroethylene
Concen: 2.560 ppbv
RT: 28.997 min Scan# 2509
Delta R.T. -0.000 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:166 Resp: 22570

Ion	Ratio	Lower	Upper
166	100		
131	77.7	62.6	93.8

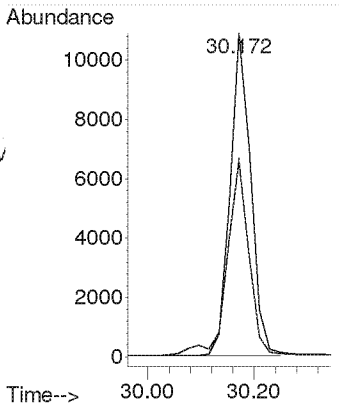




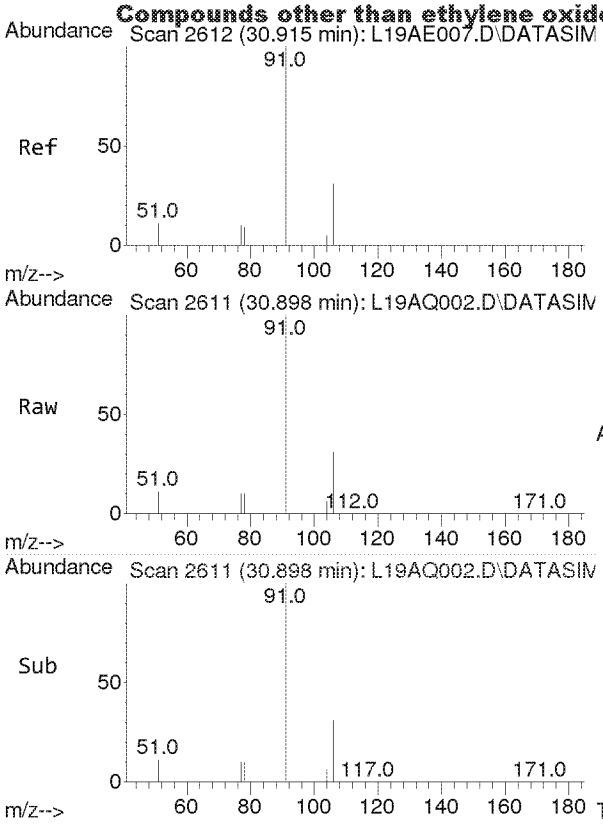
#49
Chlorobenzene
Concen: 2.399 ppbv
RT: 30.172 min Scan# 2573
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:112 Resp: 29359

Ion	Ratio	Lower	Upper
112	100		
77	61.2	49.0	73.4



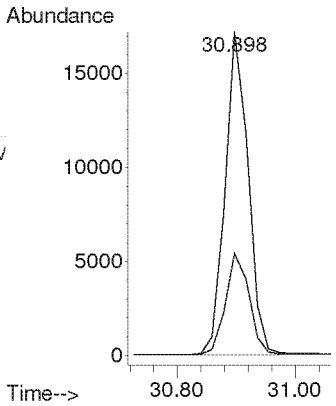
Compounds other than ethylene oxide were not quantitated.

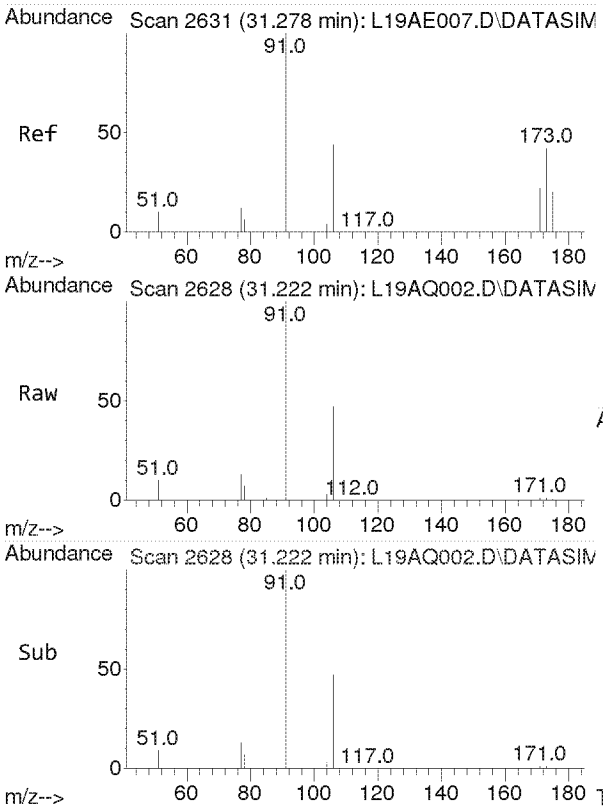


#50
Ethylbenzene
Concen: 2.492 ppbv
RT: 30.898 min Scan# 2611
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 91 Resp: 46175

Ion	Ratio	Lower	Upper
91	100		
106	32.0	25.4	38.0

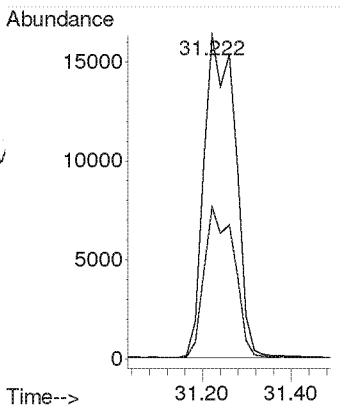




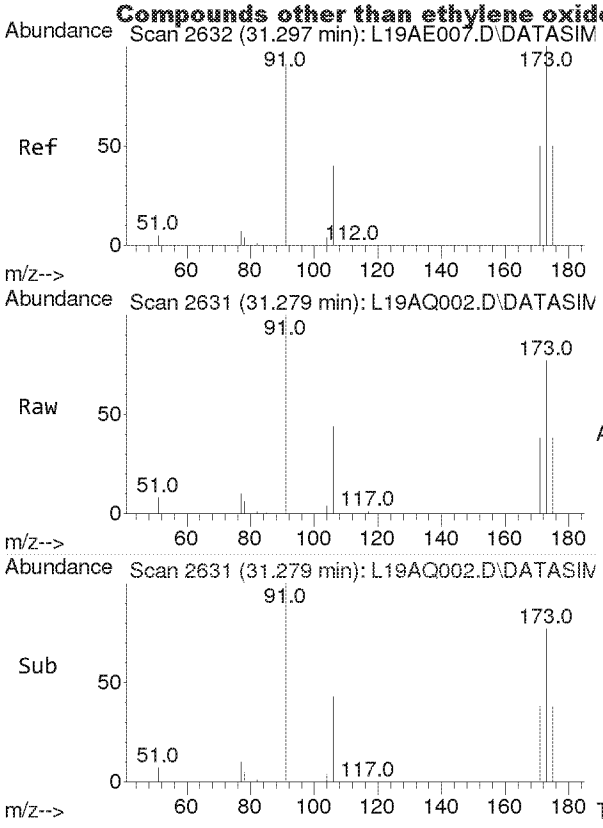
#51
m,p-Xylene
Concen: 4.927 ppbv
RT: 31.222 min Scan# 2628
Delta R.T. -0.056 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 91 Resp: 79384

Ion	Ratio	Lower	Upper
91	100		
106	44.7	35.7	53.5



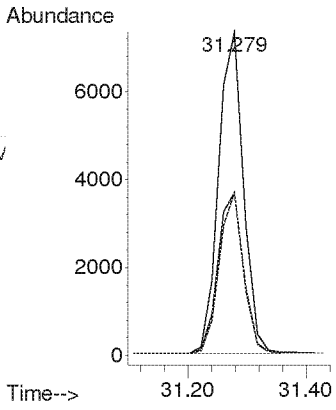
Compounds other than ethylene oxide were not quantitated.

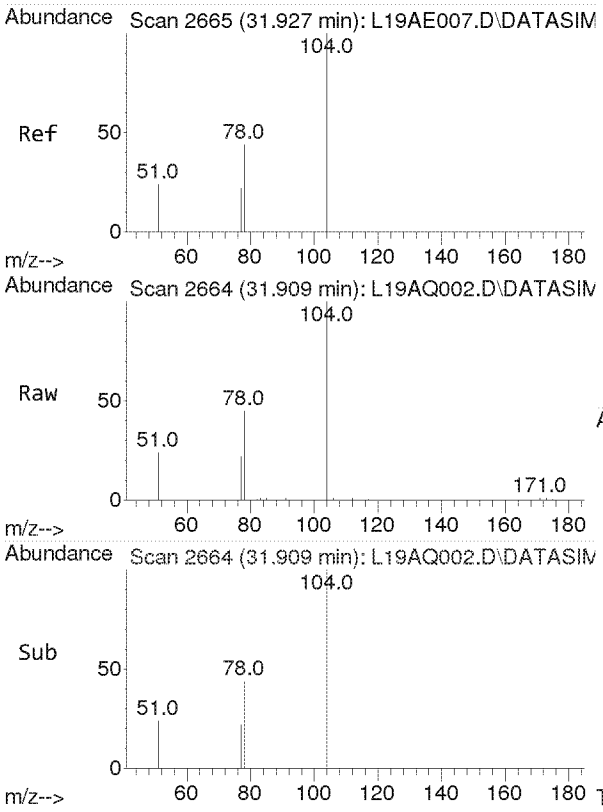


#52
Bromoform
Concen: 2.265 ppbv
RT: 31.279 min Scan# 2631
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:173 Resp: 21348

Ion	Ratio	Lower	Upper
173	100		
171	51.1	41.1	61.7
175	49.0	39.1	58.7

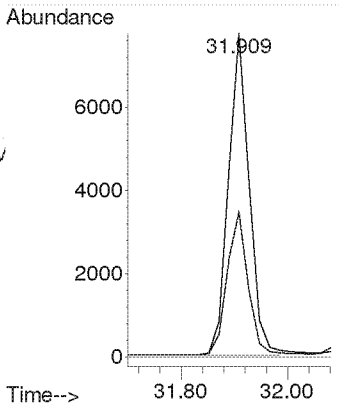




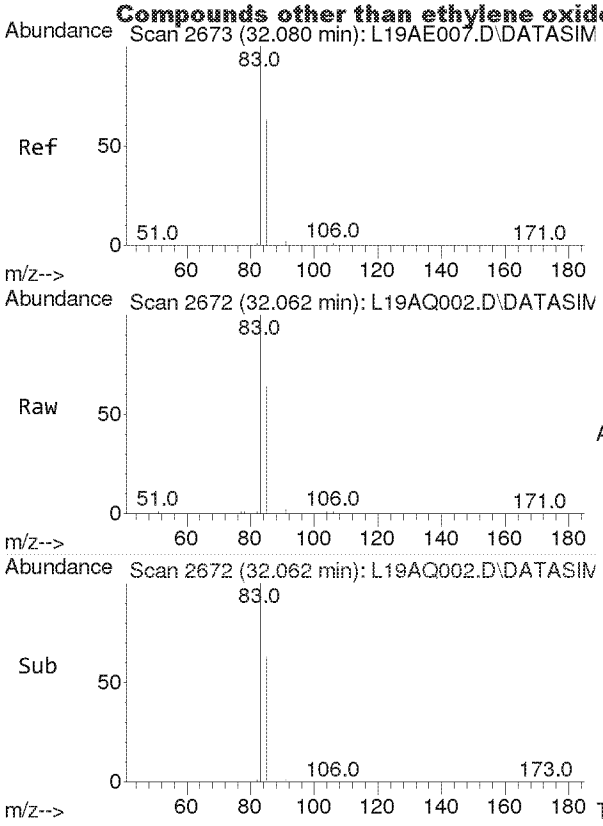
#53
Styrene
Concen: 2.362 ppbv
RT: 31.909 min Scan# 2664
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:104 Resp: 21003

Ion	Ratio	Lower	Upper
104	100		
78	44.8	36.6	55.0
103	0.0	0.0	0.0



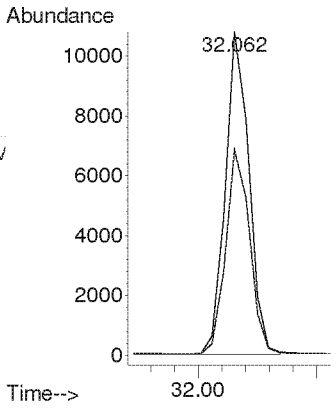
Compounds other than ethylene oxide were not quantitated.

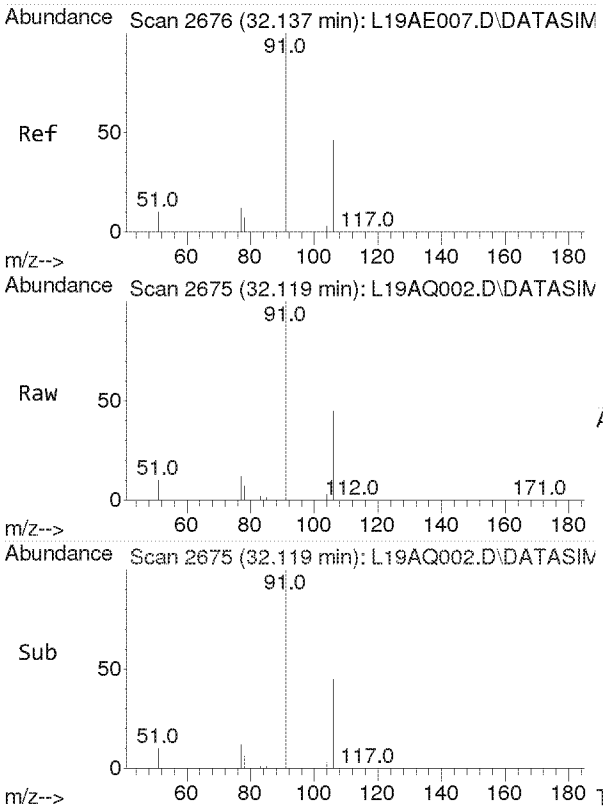


#54
1,1,2,2-Tetrachloroethane
Concen: 2.519 ppbv
RT: 32.062 min Scan# 2672
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 83 Resp: 29668

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.2	76.8

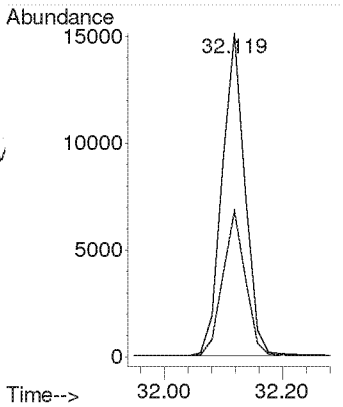




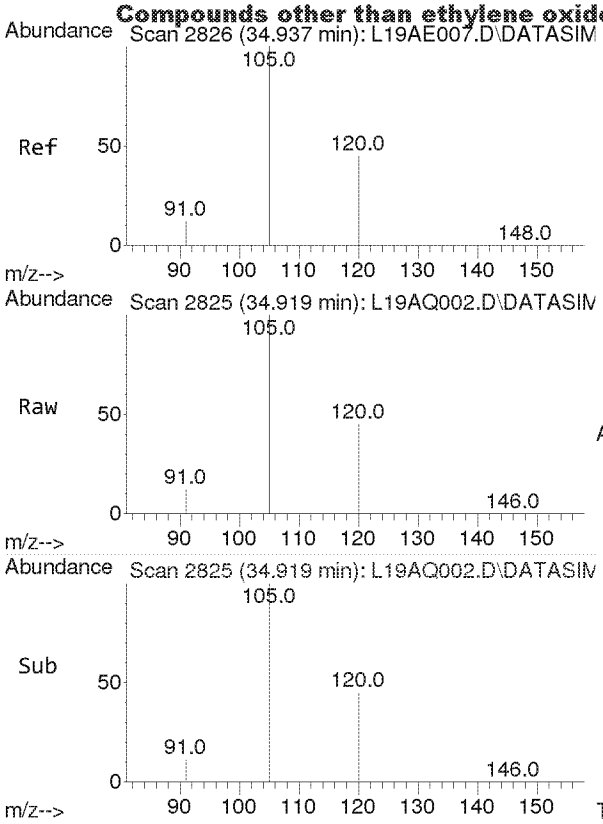
#55
o-Xylene
Concen: 2.590 ppbv
RT: 32.119 min Scan# 2675
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion: 91 Resp: 40237

Ion	Ratio	Lower	Upper
91	100		
106	44.6	35.8	53.8



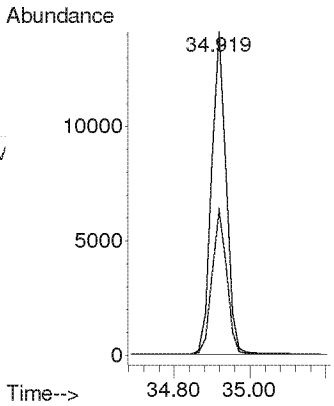
Compounds other than ethylene oxide were not quantitated.

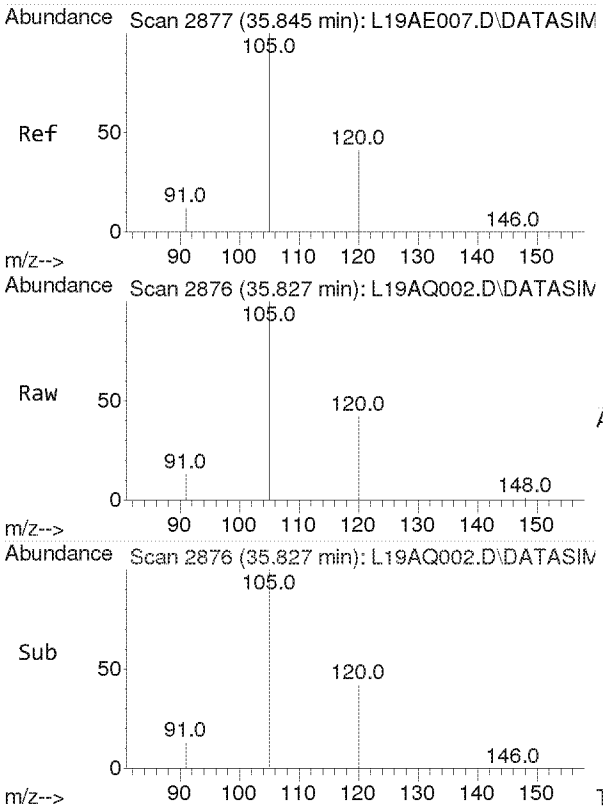


#56
1,3,5-Trimethylbenzene
Concen: 2.475 ppbv
RT: 34.919 min Scan# 2825
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:105 Resp: 37703

Ion	Ratio	Lower	Upper
105	100		
120	44.9	36.0	54.0

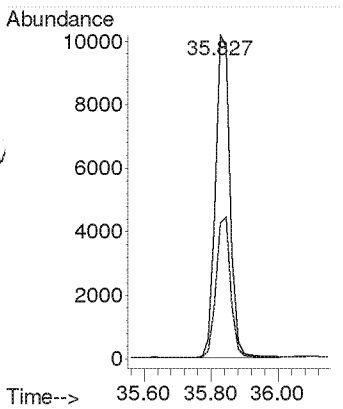




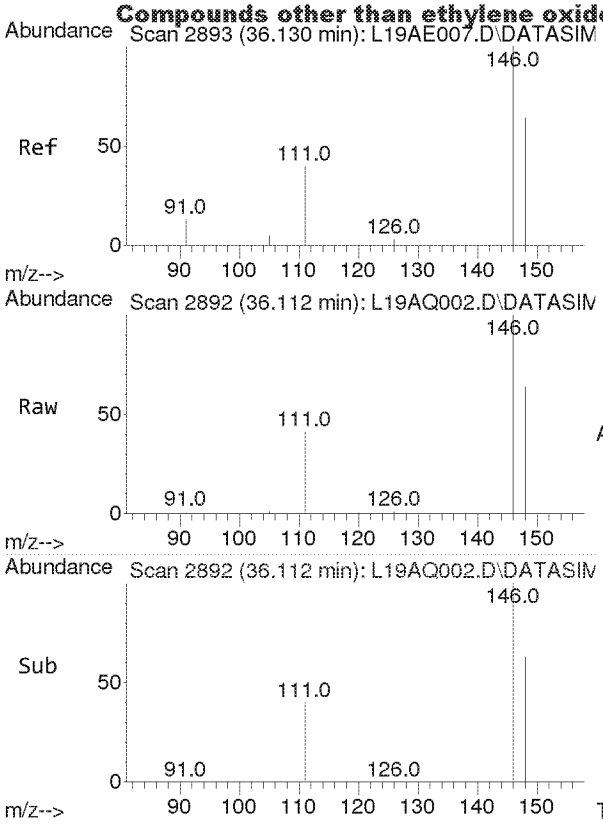
#57
1,2,4-Trimethylbenzene
Concen: 2.303 ppbv
RT: 35.827 min Scan# 2876
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:105 Resp: 30550

Ion	Ratio	Lower	Upper
105	100		
120	43.2	34.3	51.5



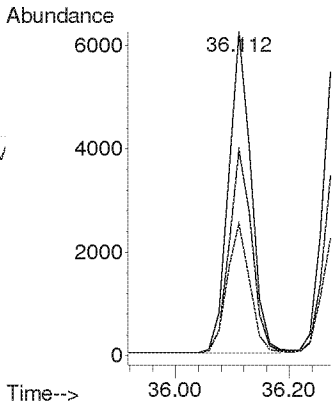
Compounds other than ethylene oxide were not quantitated.

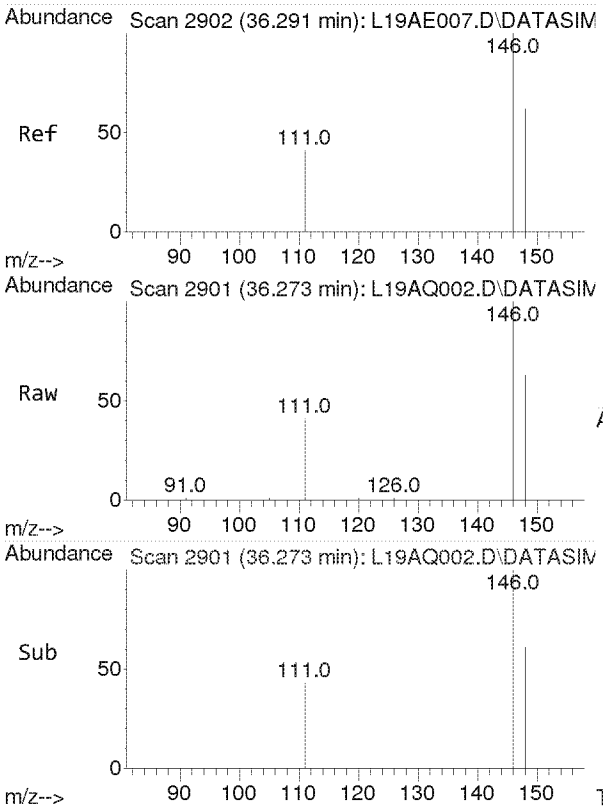


#58
m-Dichlorobenzene
Concen: 1.869 ppbv
RT: 36.112 min Scan# 2892
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:146 Resp: 17043

Ion	Ratio	Lower	Upper
146	100		
148	64.1	51.3	76.9
111	41.0	32.4	48.6

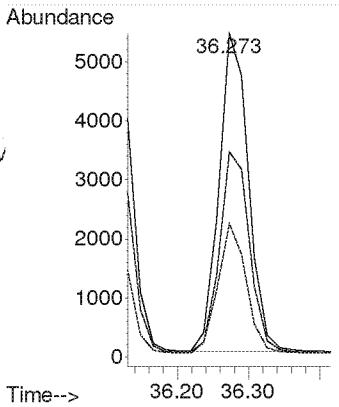




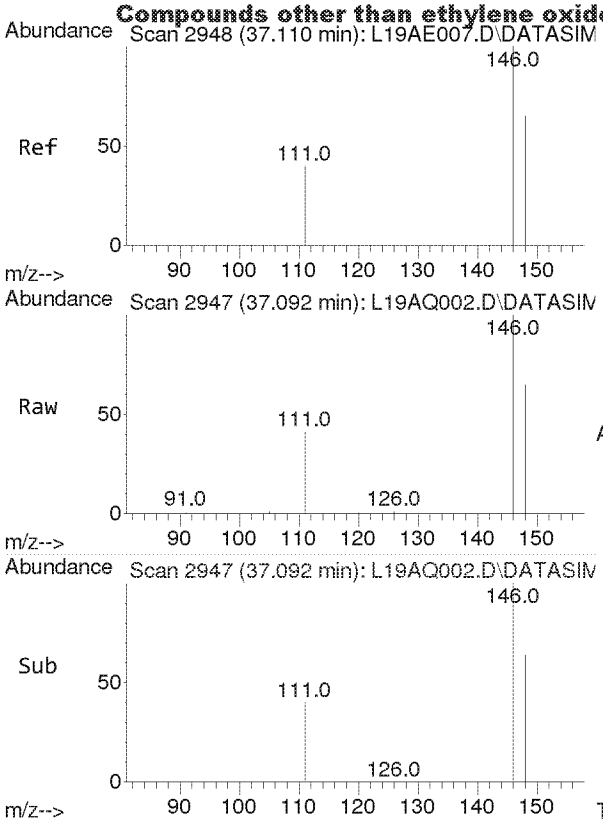
#59
p-Dichlorobenzene
Concen: 2.110 ppbv
RT: 36.273 min Scan# 2901
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:146 Resp: 15505

Ion	Ratio	Lower	Upper
146	100		
148	64.2	51.1	76.7
111	39.3	31.4	47.2



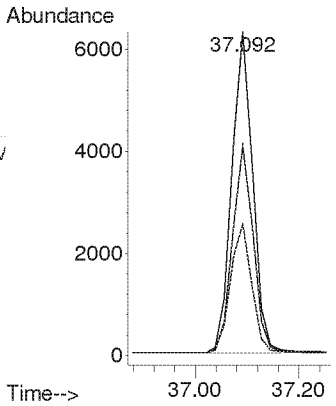
Compounds other than ethylene oxide were not quantitated.

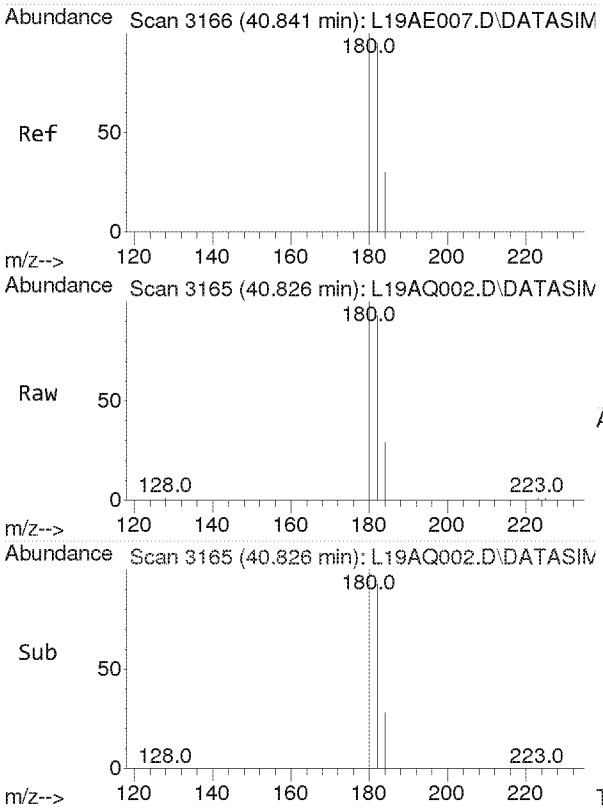


#60
o-Dichlorobenzene
Concen: 2.205 ppbv
RT: 37.092 min Scan# 2947
Delta R.T. -0.018 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:146 Resp: 17495

Ion	Ratio	Lower	Upper
146	100		
148	64.1	51.2	76.8
111	40.8	32.6	48.8

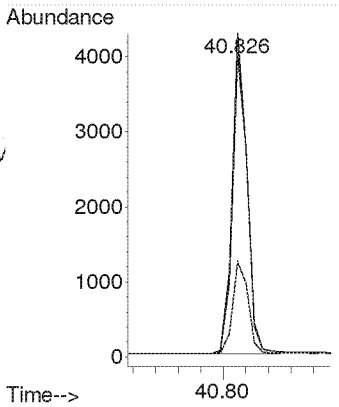




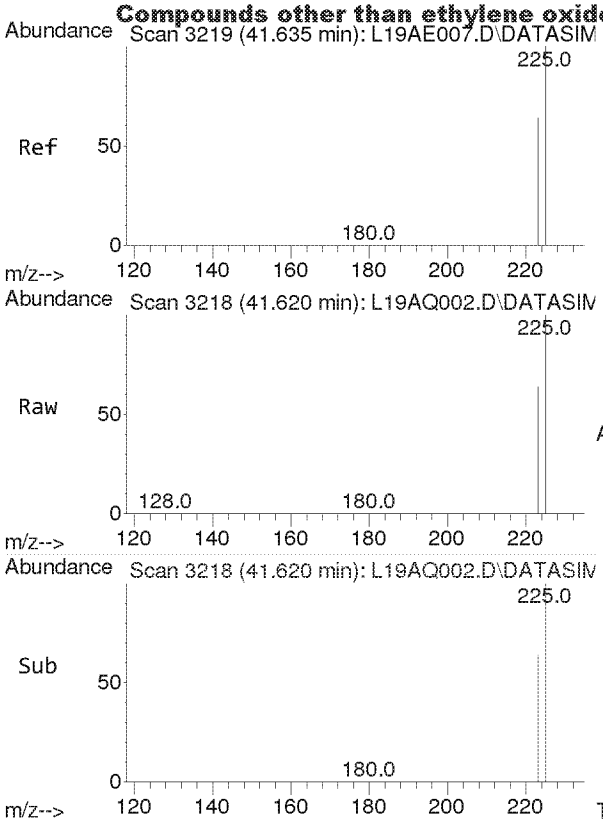
#61
1,2,4-Trichlorobenzene
Concen: 2.394 ppbv
RT: 40.826 min Scan# 3165
Delta R.T. -0.015 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:180 Resp: 7741

Ion	Ratio	Lower	Upper
180	100		
182	95.5	76.0	114.0
184	30.3	24.4	36.6



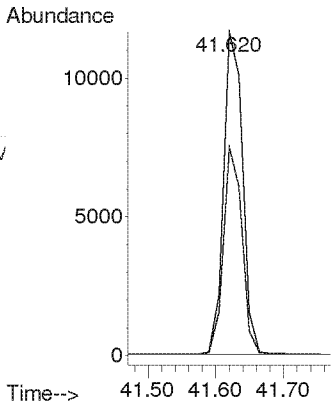
Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: 2.792 ppbv
RT: 41.620 min Scan# 3218
Delta R.T. -0.015 min
Lab File: L19AQ002.D
Acq: 17 Jan 2019 12:21 pm

Tgt Ion:225 Resp: 22909

Ion	Ratio	Lower	Upper
225	100		
223	62.7	49.9	74.9



Compounds other than ethylene oxide were not quantitated.

TO-15 Method Blank and Annual Canister Certification Blank

Analyst: ✓ Date: 1-31-19

Reviewer: MB Date: 2/4/19

Data File Name	L19AQ004.D
Operator	MAH
Acq. Method File	9010002.M
Sample Name	B9A1704-BLK1
Misc Info	80 ML 8L13001,

#	Name	Target Response	Amount (ppbv)	PASS*		Blank Criteria
1)	IS-Hexane-d14	54322		NA		NA
2)	Acetylene	0	0.000	Y		0.118
3)	Propylene	48	0.009	Y		0.192
4)	Dichlorodifluoromethane	0	0.000	Y		0.082
5)	Chloromethane	0	0.000	Y		0.139
6)	Dichlorotetrafluoroethane	0	0.000	Y		0.040
7)	Vinyl Chloride	0	0.000	Y		0.038
8)	1,3-Butadiene	0	0.000	Y		0.058
	Ethylene oxide	0	0.000	Y		0.136
9)	Bromomethane	0	0.000	Y		0.035
10)	Chloroethane	0	0.000	Y		0.075
11)	Acetonitrile	0	0.000	Y		0.049
12)	Acrolein	0	0.000	Y		0.200
13)	Trichlorofluoromethane	0	0.000	Y		0.035
14)	Acrylonitrile	0	0.000	Y		0.032
15)	1,1-Dichloroethene	0	0.000	Y		0.036
16)	Methylene Chloride	0	0.000	Y		0.043
17)	Carbon Disulfide	68	0.003	Y		0.200
18)	Trichlorotrifluoroethane	0	0.000	Y		0.029
19)	trans-1,2-Dichloroethylene	0	0.000	Y		0.040
20)	1,1-Dichloroethane	0	0.000	Y		0.043
21)	Methyl tert-Butyl Ether	0	0.000	Y		0.031
22)	Chloroprene	0	0.000	Y		0.039
23)	cis-1,2-Dichloroethylene	0	0.000	Y		0.056
24)	Bromochloromethane	0	0.000	Y		0.040
25)	Chloroform	0	0.000	Y		0.039
26)	Ethyl tert-Butyl Ether	0	0.000	Y		0.033
27)	1,2-Dichloroethane	0	0.000	Y		0.042
28)	IS-1,4-Difluorobenzene	134527		NA		NA
29)	1,1,1-Trichloroethane	0	0.000	Y		0.041
30)	Benzene	59	0.004	Y		0.043
31)	Carbon Tetrachloride	0	0.000	Y		0.040
32)	tert-Amyl Methyl Ether	0	0.000	Y		0.037
33)	1,2-Dichloropropane	0	0.000	Y		0.061
34)	Ethyl Acrylate	0	0.000	Y		0.070
35)	Bromodichloromethane	0	0.000	Y		0.049
36)	Trichloroethylene	0	0.000	Y		0.045
37)	Methyl Methacrylate	406	0.018	Y	MAX	0.200
38)	cis-1,3-dichloropropene	0	0.000	Y		0.059
39)	Methyl Isobutyl Ketone	0	0.000	Y		0.071
40)	trans-1,3-Dichloropropene	0	0.000	Y		0.059
41)	1,1,2-Trichloroethane	0	0.000	Y		0.057
42)	IS-Chlorobenzene-d5	105395		NA		NA
43)	Toluene	0	0.000	Y		0.200
44)	Dibromochloromethane	0	0.000	Y		0.046
45)	1,2-Dibromoethane	0	0.000	Y		0.057
46)	n-Octane	0	0.000	Y		0.097
47)	Tetrachloroethylene	0	0.000	Y		0.044
48)	Chlorobenzene	0	0.000	Y		0.058
49)	Ethylbenzene	86	0.005	Y		0.077
50)	m,p-Xylene	49	0.003	Y		0.108
51)	Bromoform	0	0.000	Y		0.053
52)	Styrene	0	0.000	Y		0.109
53)	1,1,2,2-Tetrachloroethane	0	0.000	Y		0.063
54)	o-Xylene	105	0.007	Y		0.080
55)	1,3,5-Trimethylbenzene	0	0.000	Y		0.102
56)	1,2,4-Trimethylbenzene	0	0.000	Y		0.080
57)	m-Dichlorobenzene	0	0.000	Y		0.055
58)	p-Dichlorobenzene	0	0.000	Y		0.060
59)	o-Dichlorobenzene	0	0.000	Y		0.062
60)	1,2,4-Trichlorobenzene	0	0.000	Y		0.200
61)	Hexachloro-1,3-butadiene	0	0.000	Y		0.082

*All Blanks must be below 0.2 ppb or 3 times the MDL whichever value is lower

TO-15_BLANK_TEMPLATES_3-19-18
2018 BLANK
Y:\AIR TOX\TO-15 BLANK TEST\TO-15_BLANK_TEMPLATES_8-29-18.xlsx

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ004.D
Acq On : 17 Jan 2019 2:25 pm
Operator : MAH
Sample : B9A1704-BLK1
Misc : 80 ML 8L13001,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 07:43:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	54322	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	134527	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	105395	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	
3) Propylene	7.838	41	48	0.0093 ppbv #	49
4) Dichlorodifluoromethane	0.000	85	0	N.D.	
5) Chloromethane	0.000	50	0	N.D.	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D.	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D.	
9) Ethylene oxide	0.000	29	0	N.D. d	
10) Bromomethane	0.000	94	0	N.D.	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D.	
13) Acrolein	0.000	56	0	N.D.	
14) Trichlorofluoromethane	0.000	101	0	N.D.	
15) Acrylonitrile	0.000	53	0	N.D.	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D.	
18) Carbon Disulfide	16.930	76	68	0.0032 ppbv #	75
19) Trichlorotrifluoroethane	0.000	101	0	N.D.	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D.	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D.	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	22.533	78	59	0.0038 ppbv #	53
32) Carbon Tetrachloride	0.000	117	0	N.D.	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	24.551	41	406	0.0177 ppbv #	95
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D.	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D.	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D.	
48) Tetrachloroethylene	0.000	166	0	N.D.	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	30.896	91	86	0.0048 ppbv #	43

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ004.D
Acq On : 17 Jan 2019 2:25 pm
Operator : MAH
Sample : B9A1704-BLK1
Misc : 80 ML 8L13001,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 07:43:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

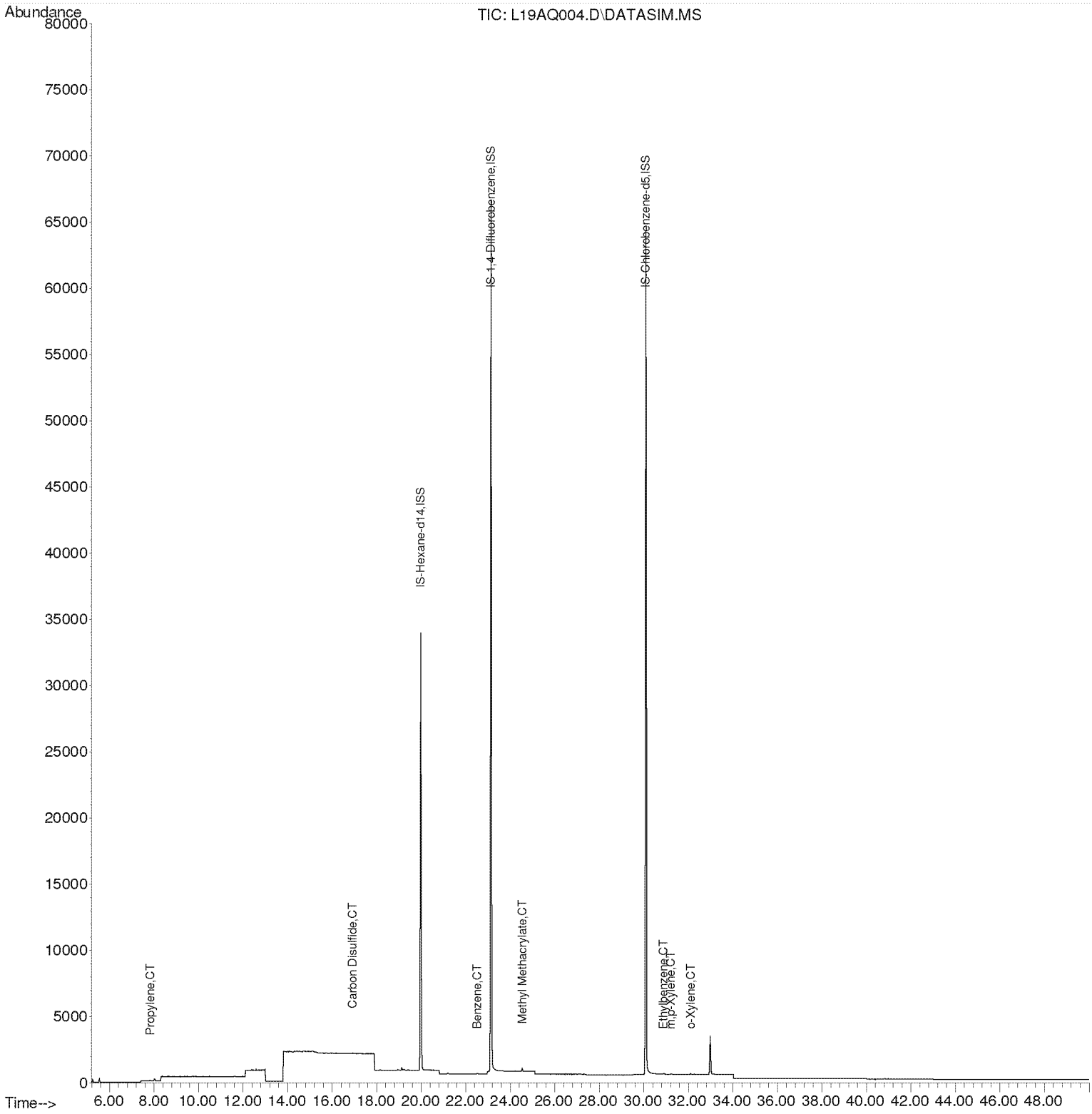
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	31.221	91	49	0.0031 ppbv #	31
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	32.118	91	105	0.0069 ppbv	99
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

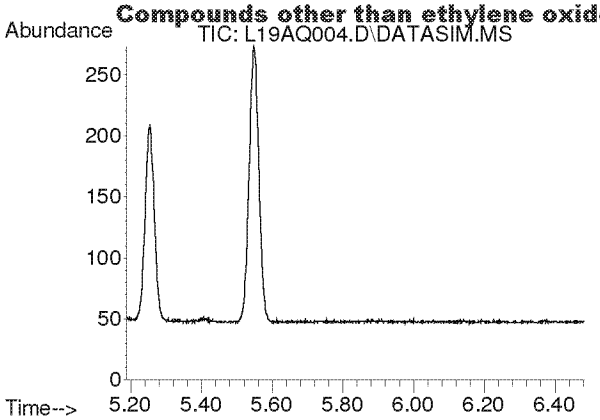
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ004.D
Acq On : 17 Jan 2019 2:25 pm
Operator : MAH
Sample : B9A1704-BLK1
Misc : 80 ML 8L13001,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 07:33:53 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



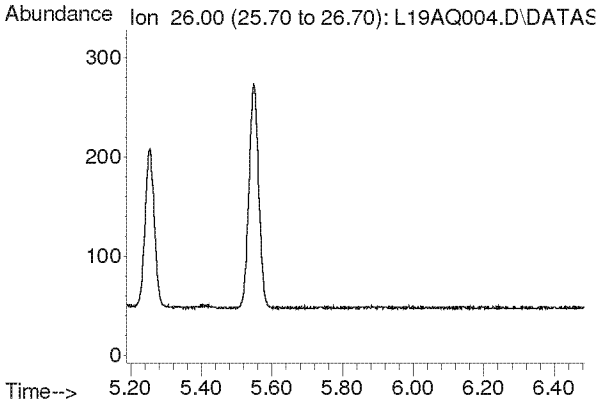
Compounds other than ethylene oxide were not quantitated.

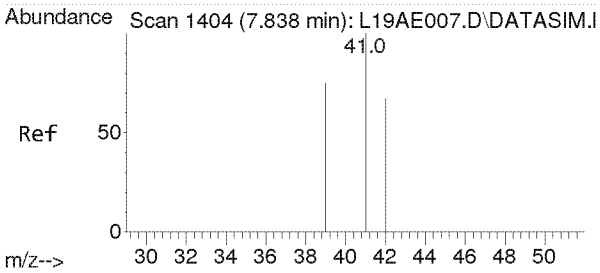


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 26

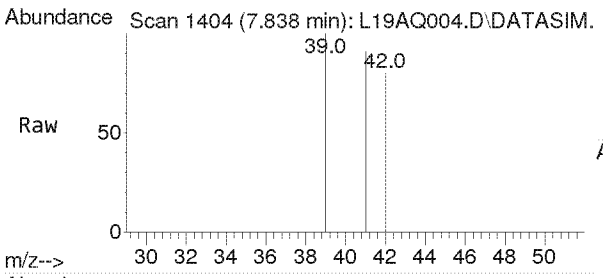


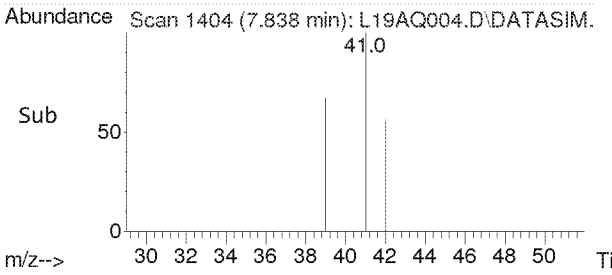


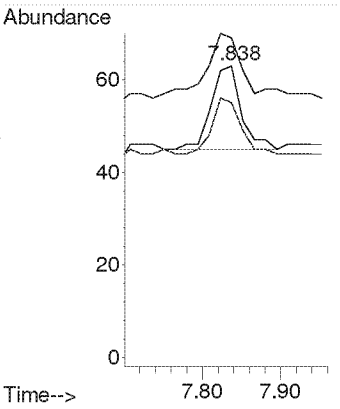
#3
Propylene
Concen: 0.009 ppbv
RT: 7.838 min Scan# 1404
Delta R.T. -0.000 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 41 Resp: 48

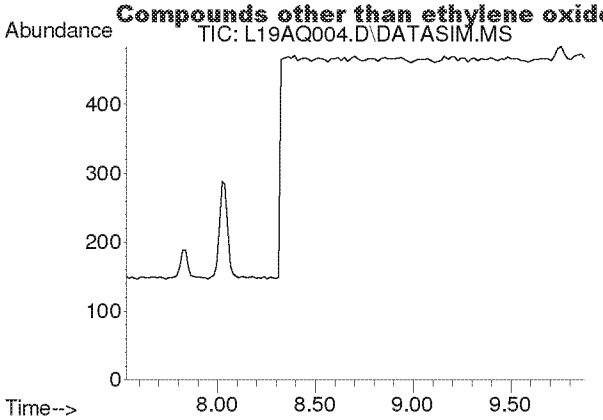
Ion	Ratio	Lower	Upper
41	100		
39	97.9	61.6	92.4#
42	0.0	52.6	79.0#







Compounds other than ethylene oxide were not quantitated.

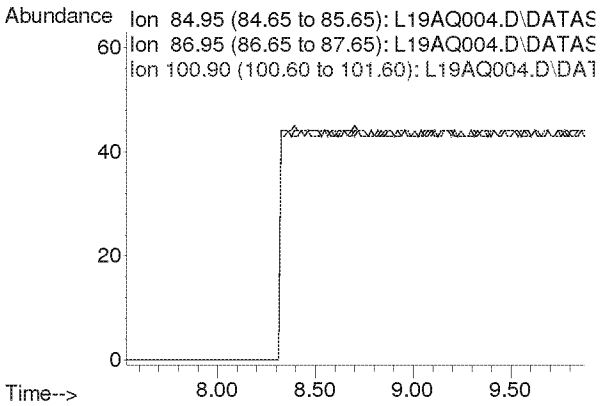


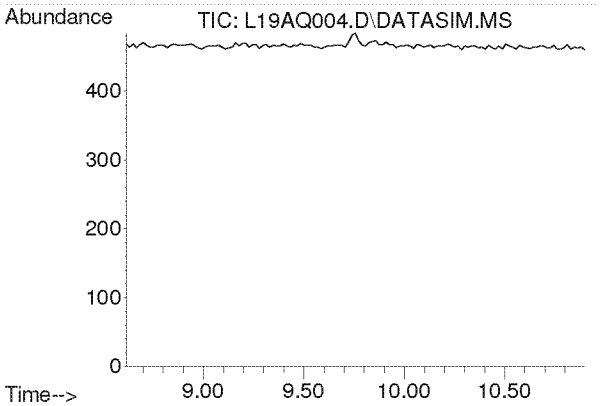
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



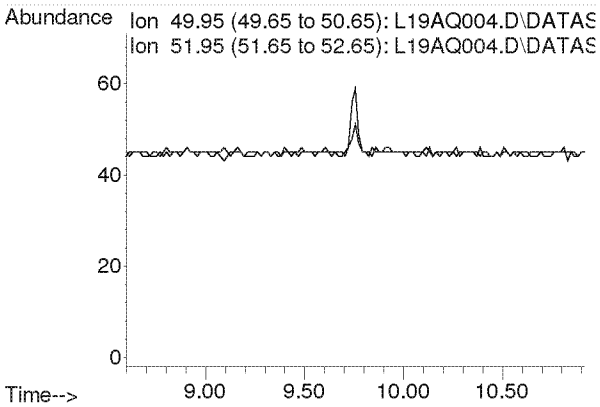


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

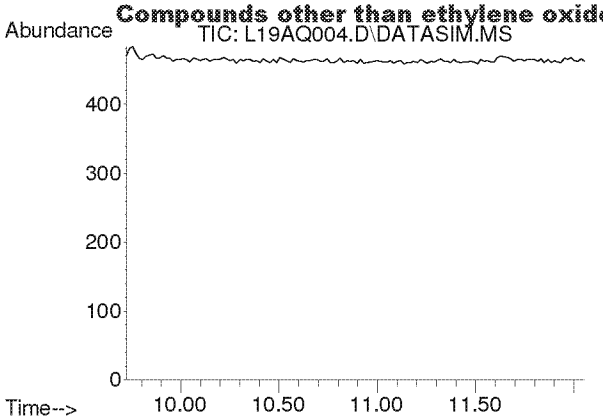
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

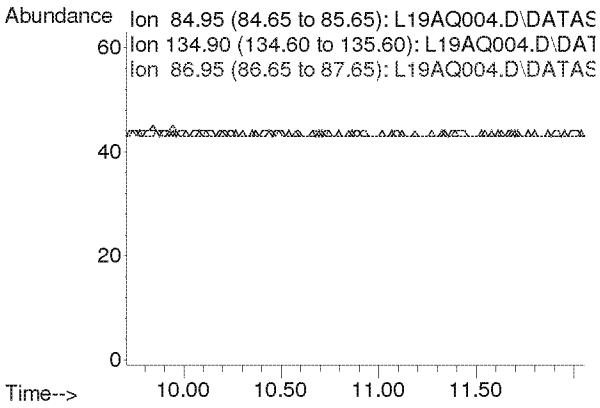


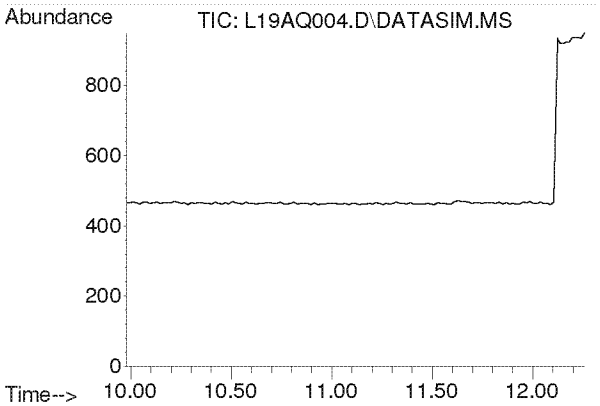
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



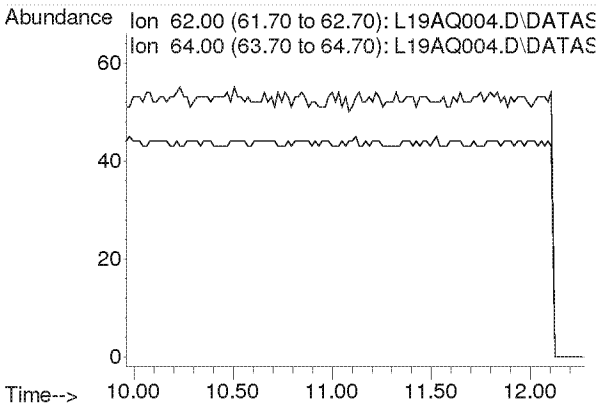


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

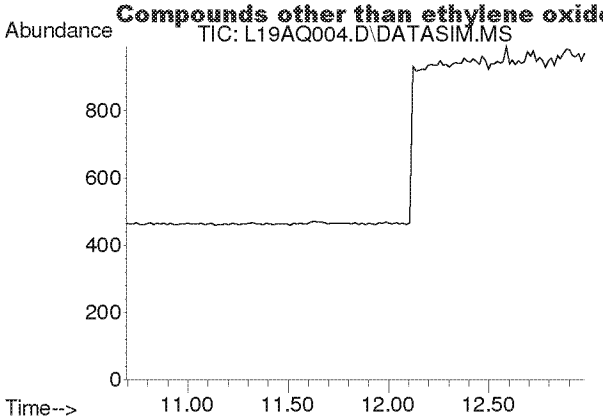
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

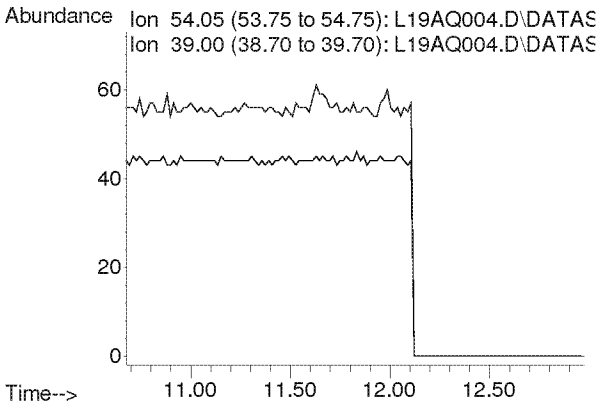


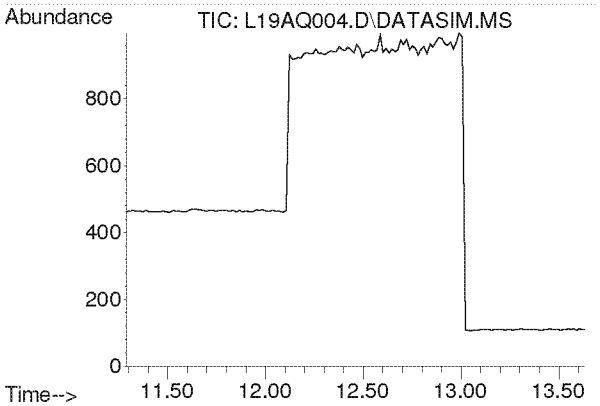
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



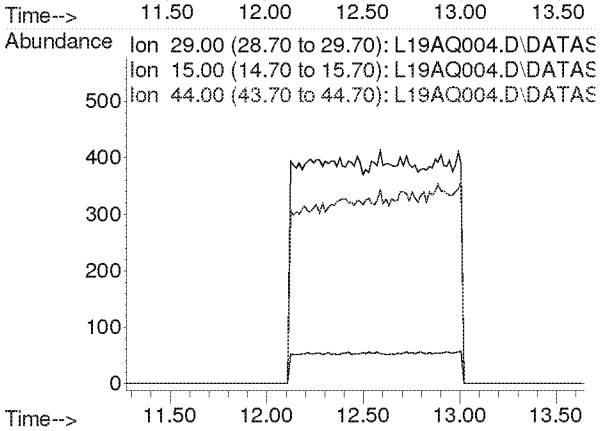


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

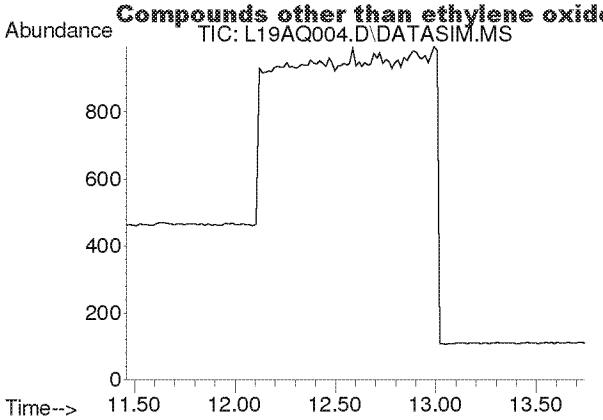
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

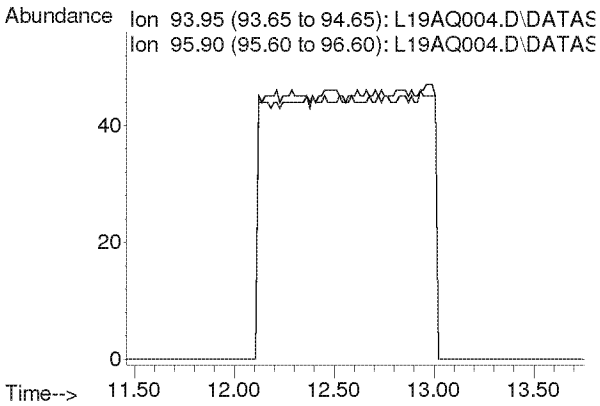


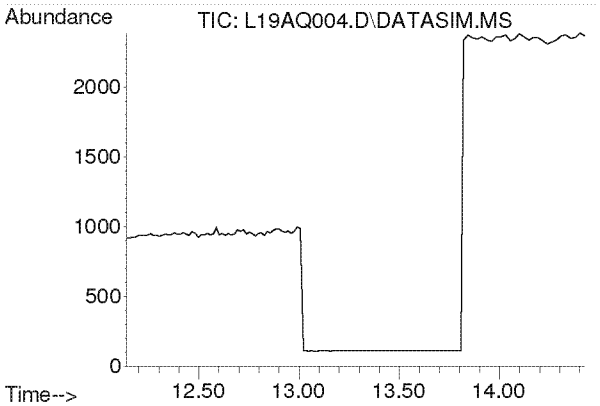
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



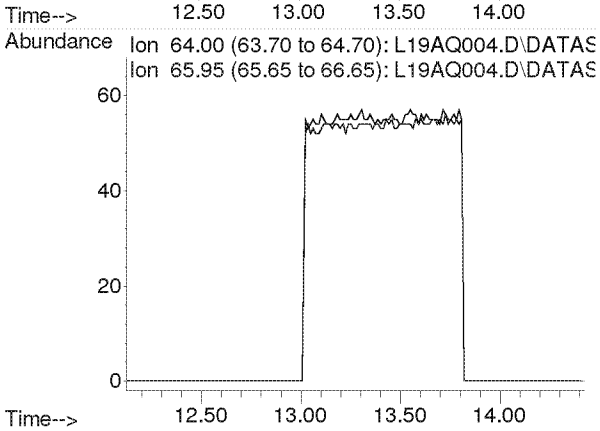


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

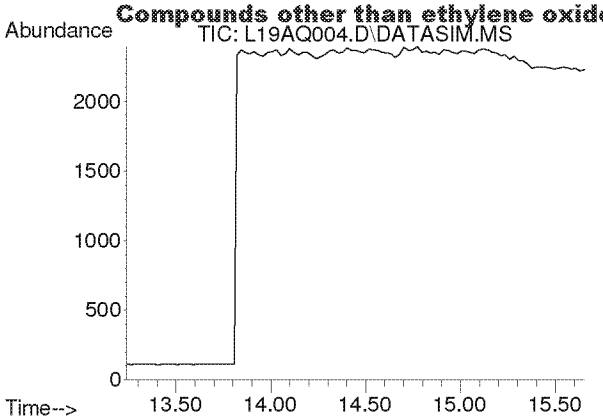
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

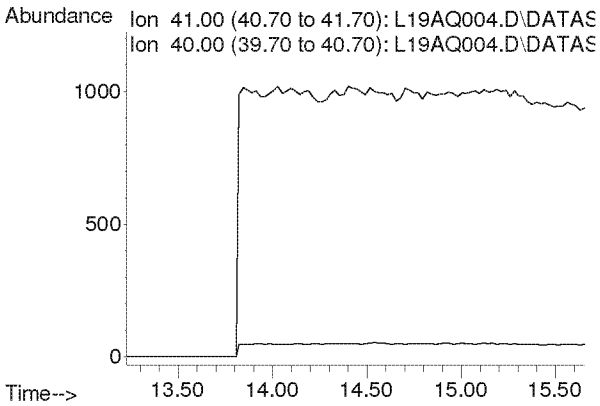


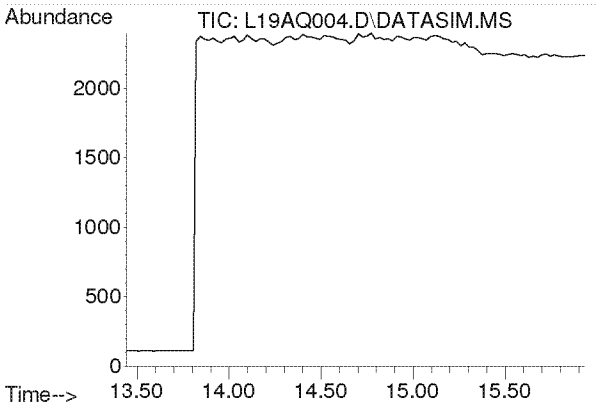
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



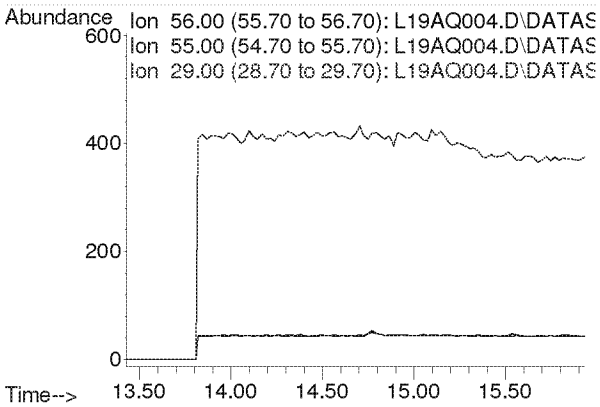


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

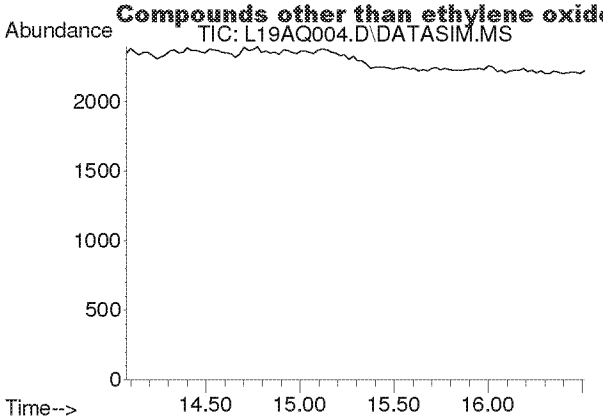
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

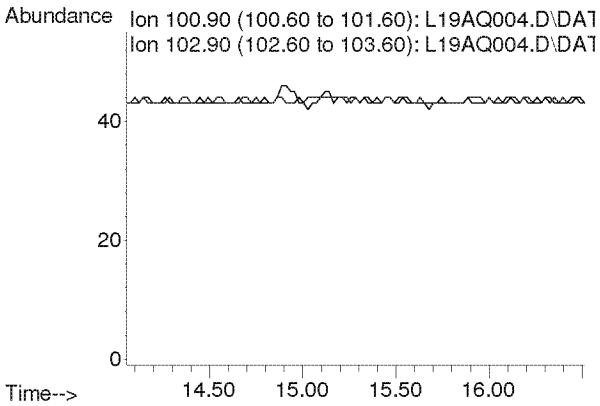


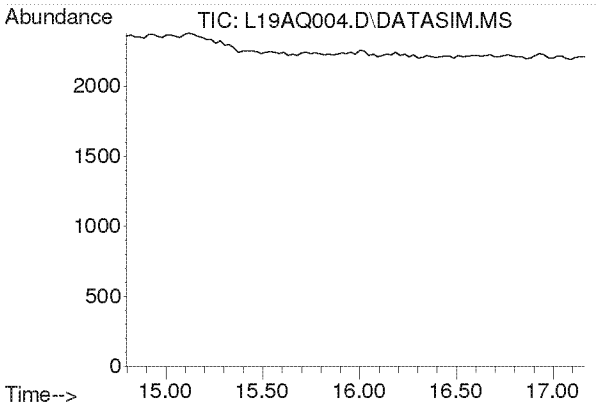
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



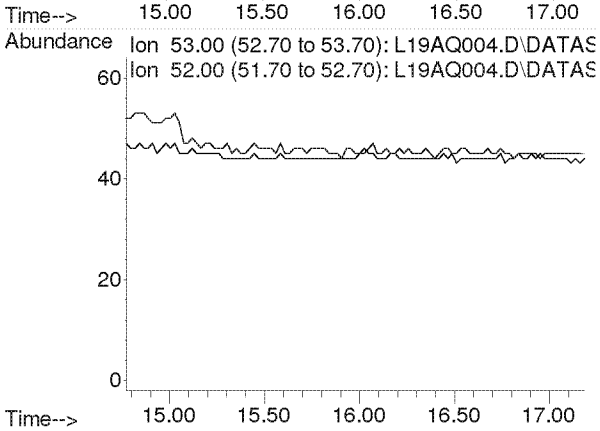


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

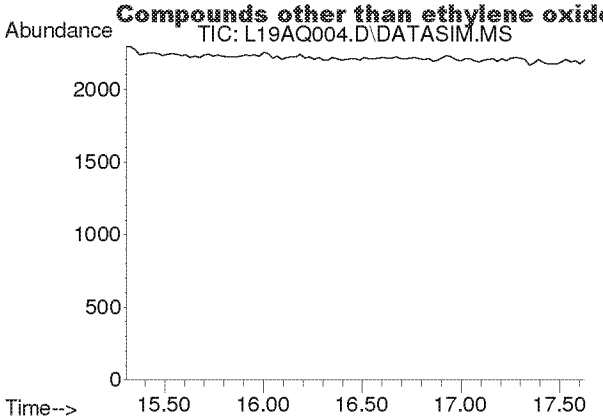
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

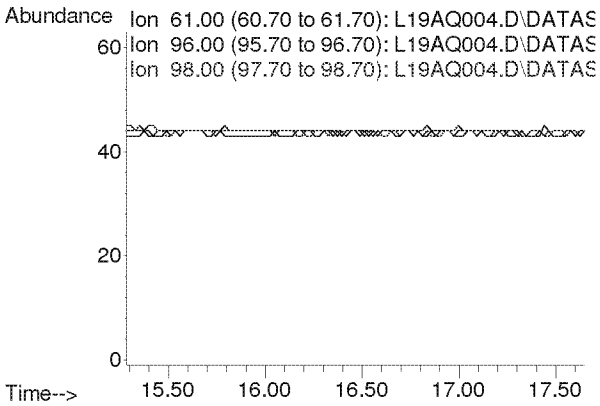


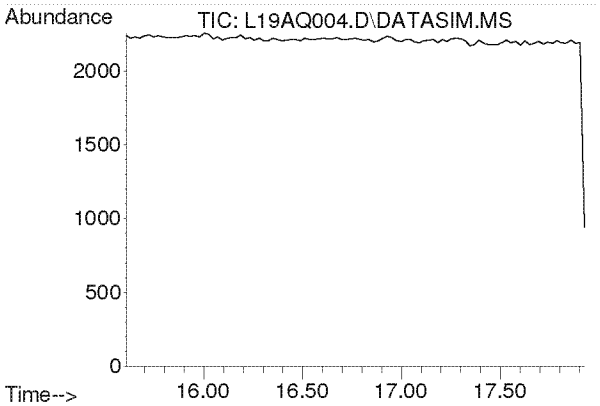
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



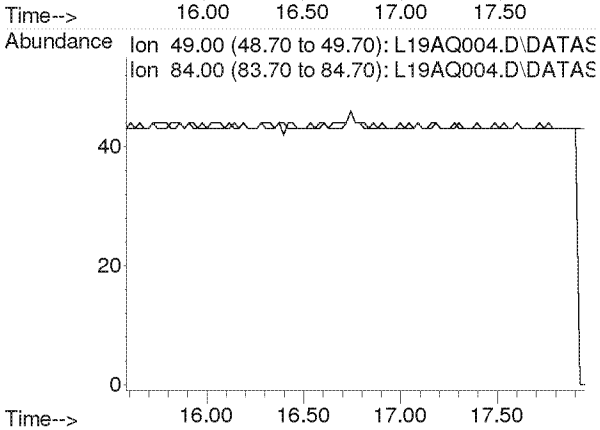


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

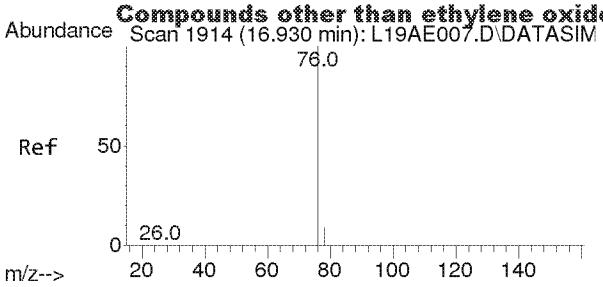
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



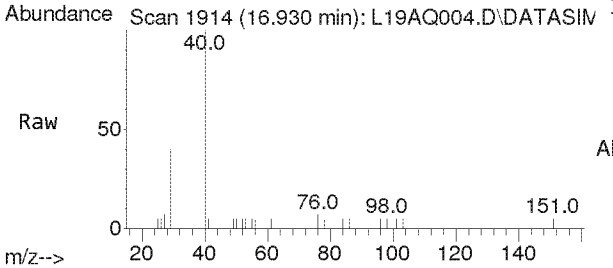
Compounds other than ethylene oxide were not quantitated.

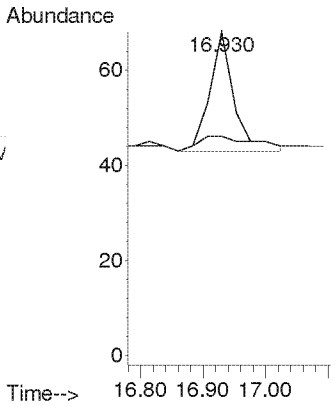


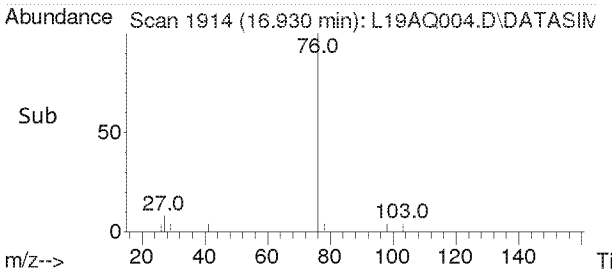
#18
Carbon Disulfide
Concen: 0.003 ppbv
RT: 16.930 min Scan# 1914
Delta R.T. -0.000 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

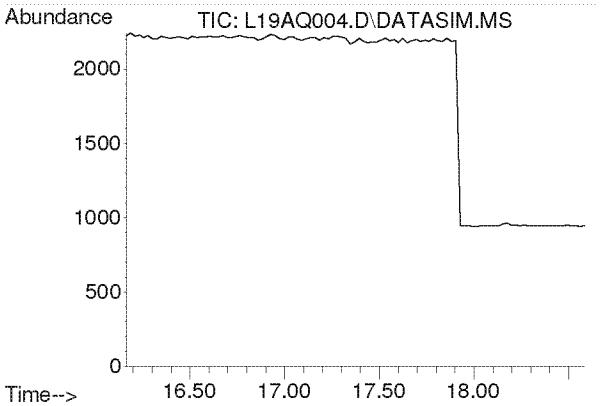
Tgt Ion: 76 Resp: 68

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.2	10.8#







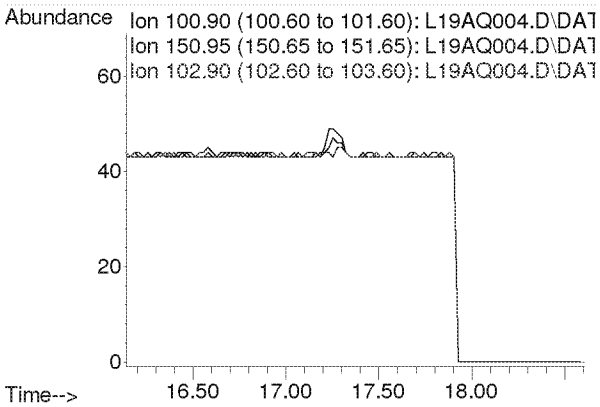


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

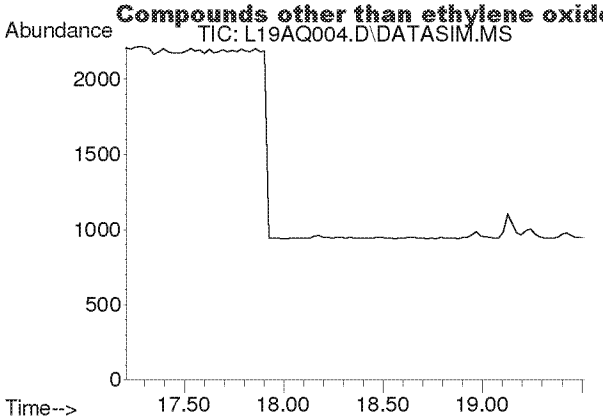
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

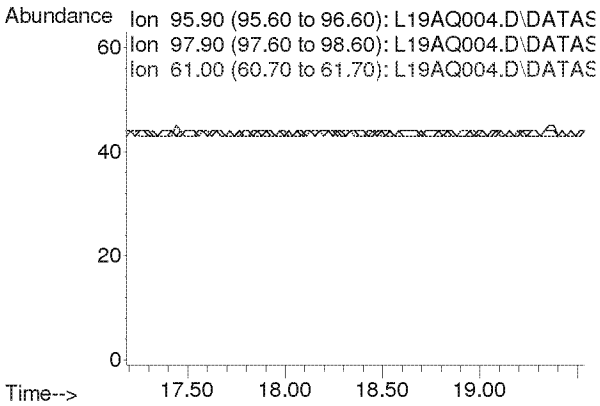


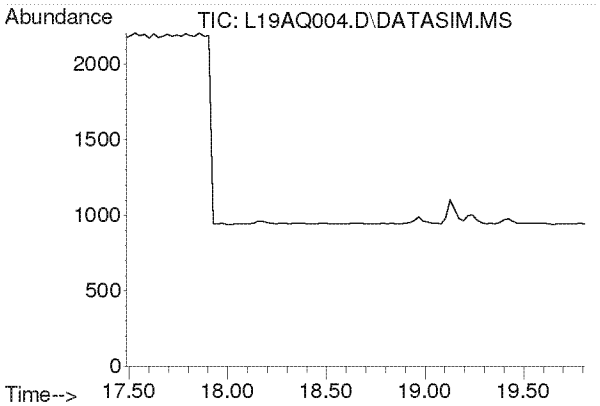
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



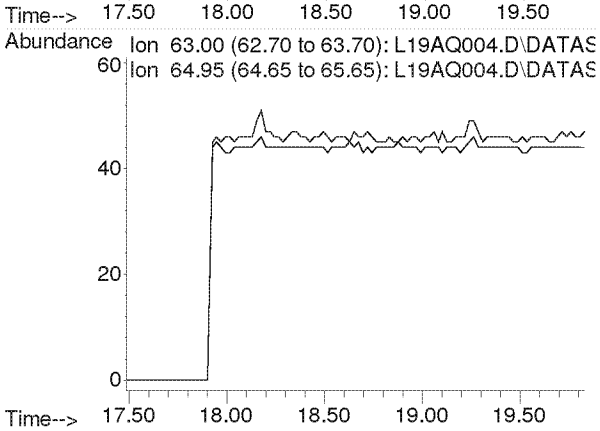


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

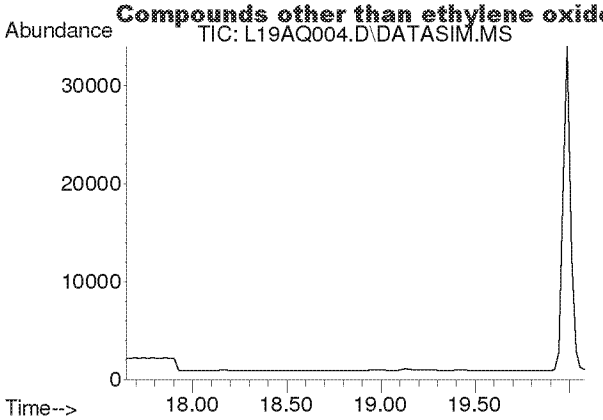
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

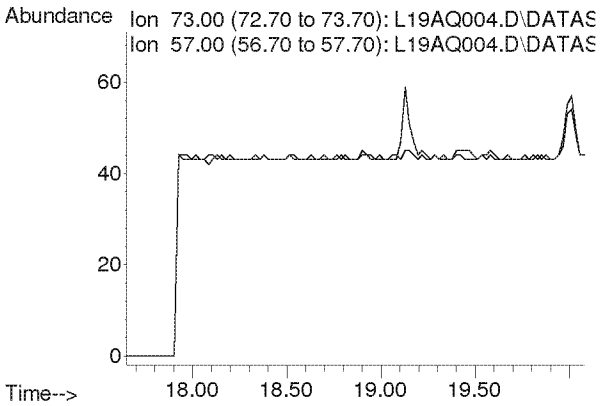


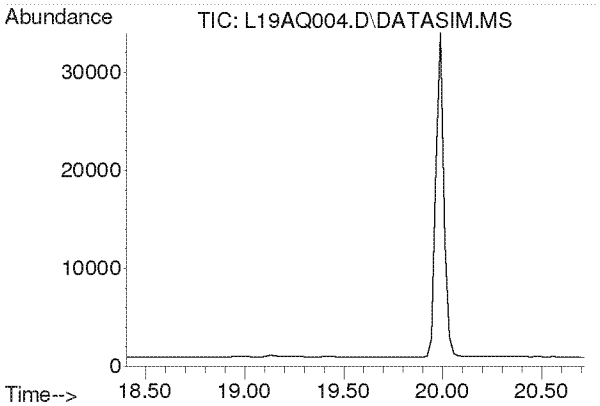
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



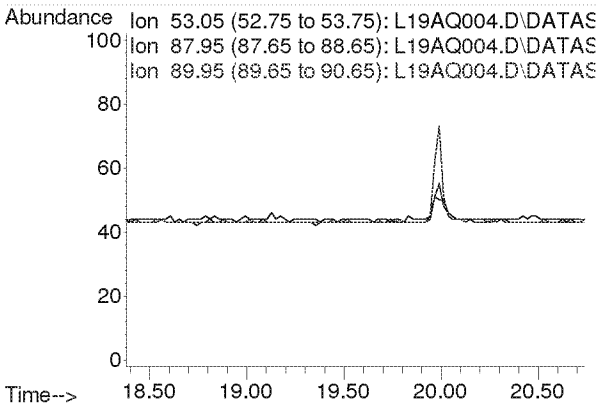


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

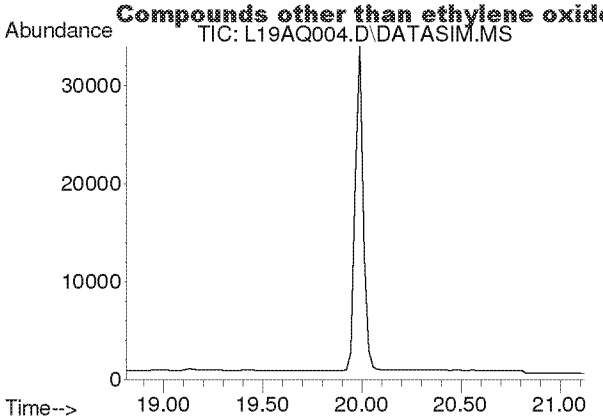
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

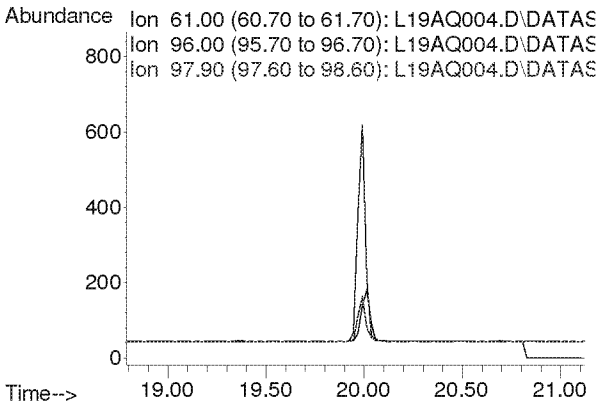


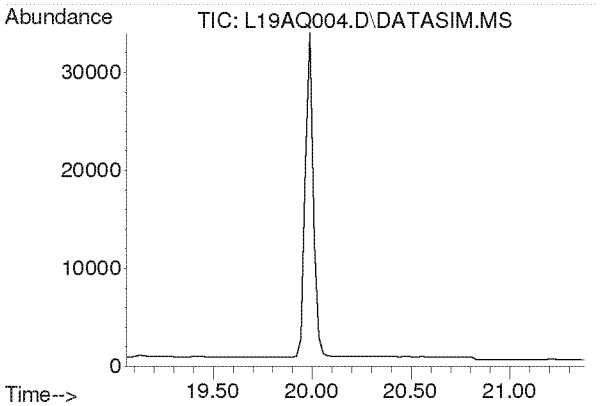
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



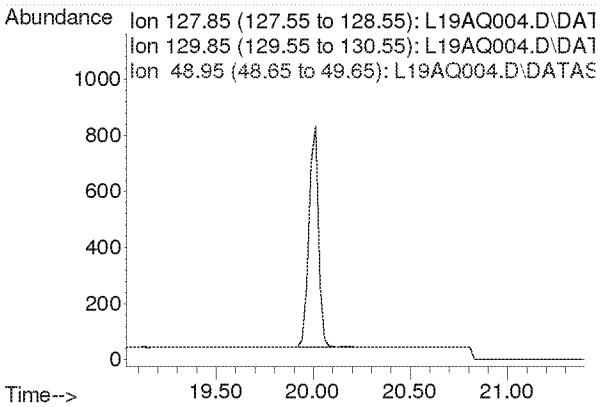


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

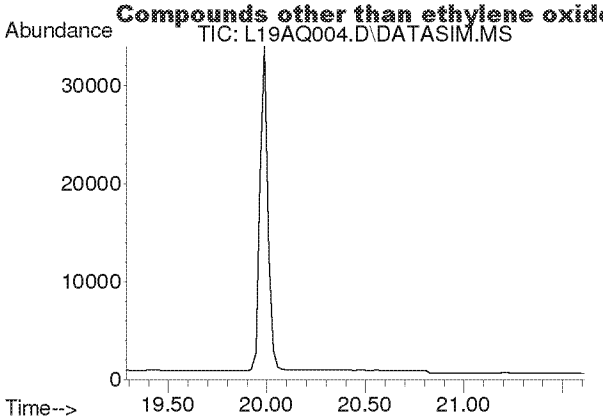
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

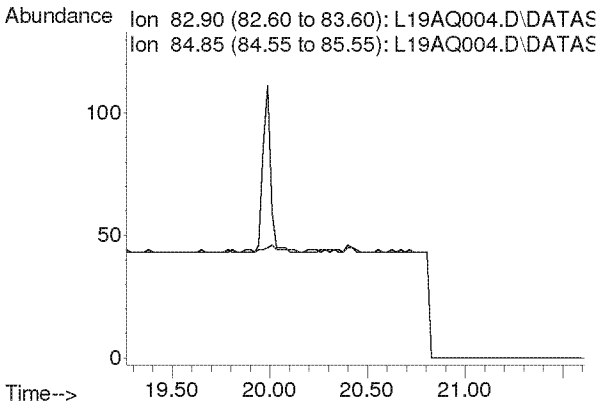


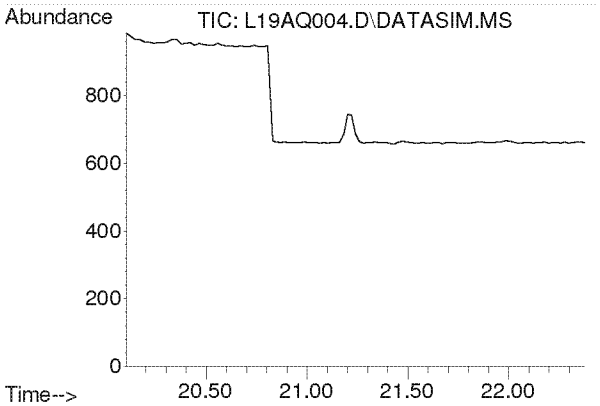
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



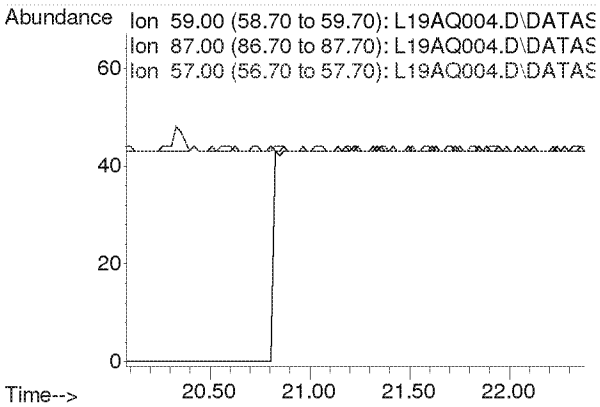


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

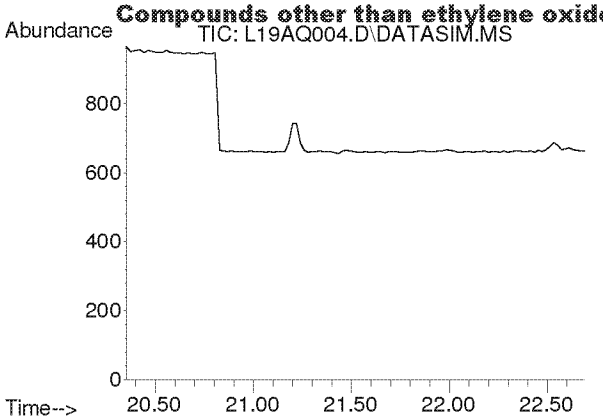
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

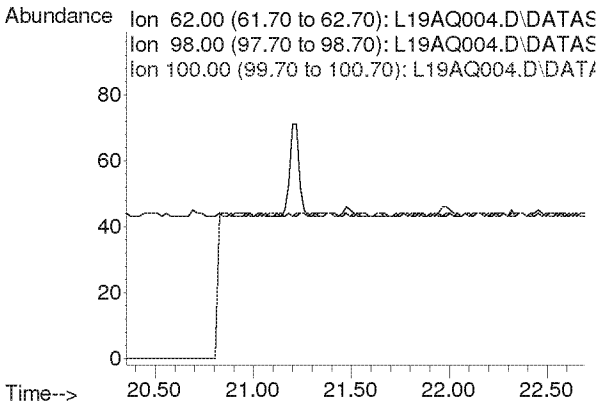


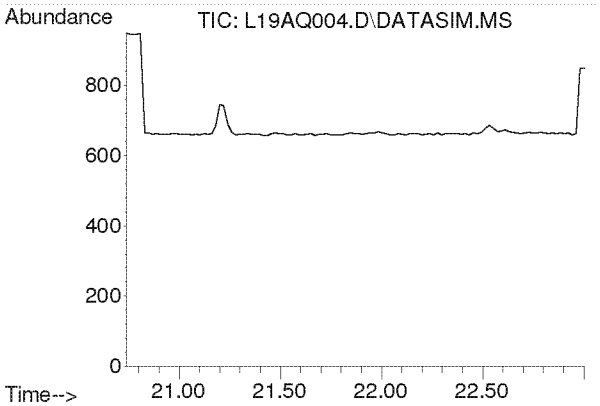
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



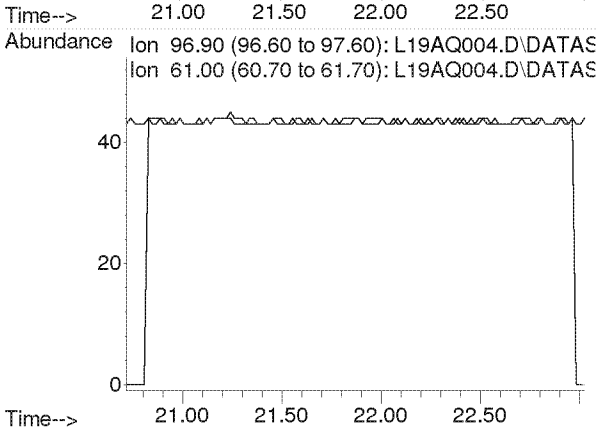


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

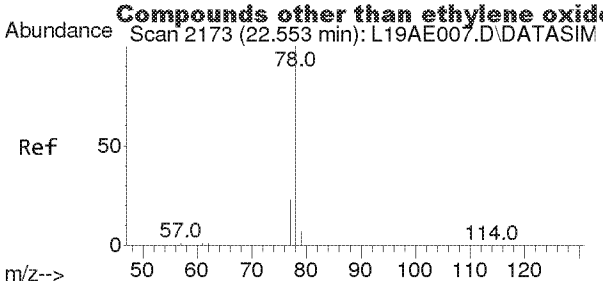
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



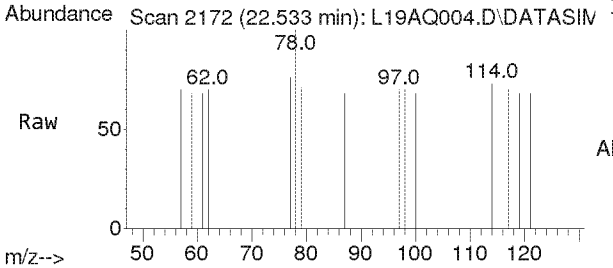
Compounds other than ethylene oxide were not quantitated.

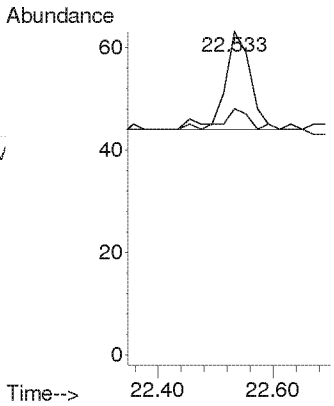


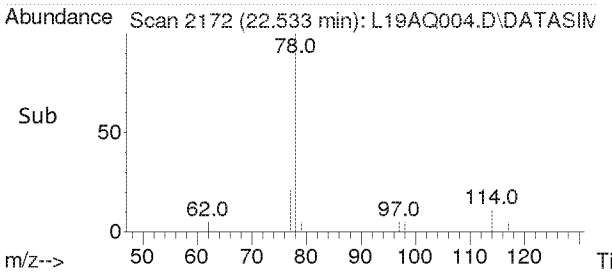
#31
Benzene
Concen: 0.004 ppbv
RT: 22.533 min Scan# 2172
Delta R.T. -0.020 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

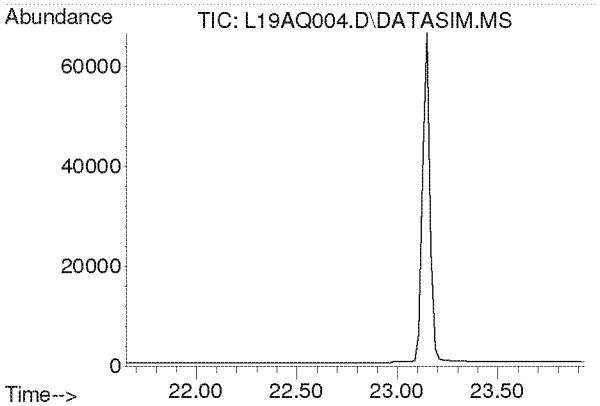
Tgt Ion: 78 Resp: 59

Ion	Ratio	Lower	Upper
78	100		
77	0.0	18.3	27.5#







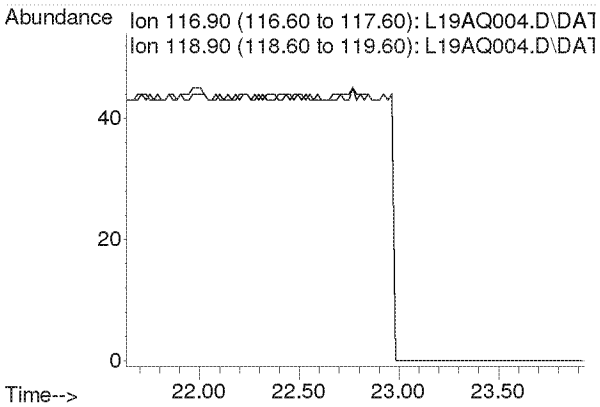


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

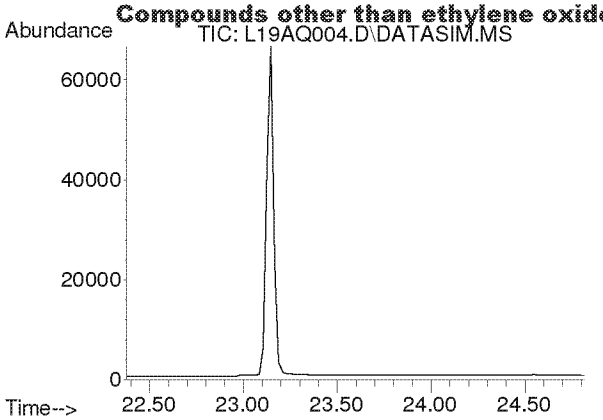
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

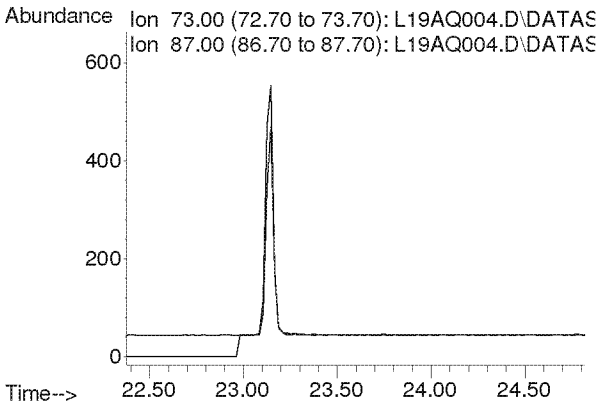


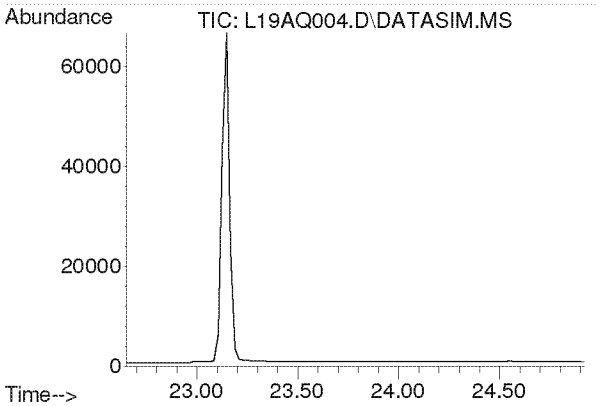
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



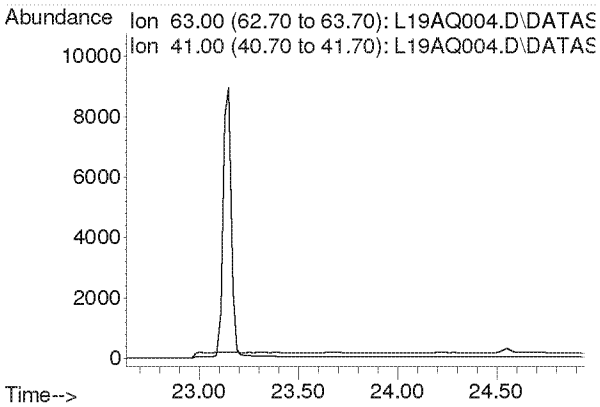


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

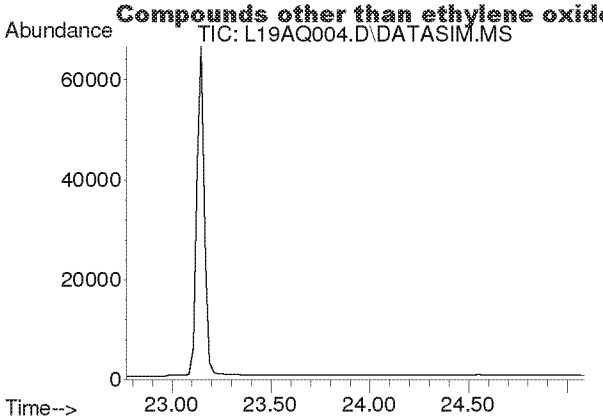
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

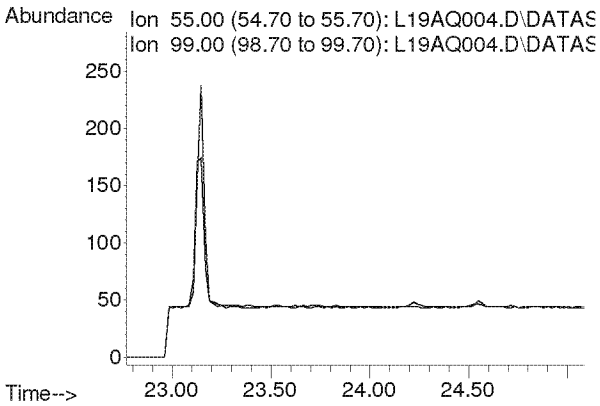


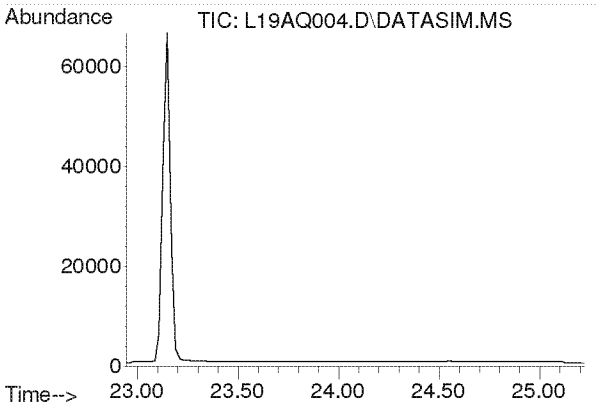
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



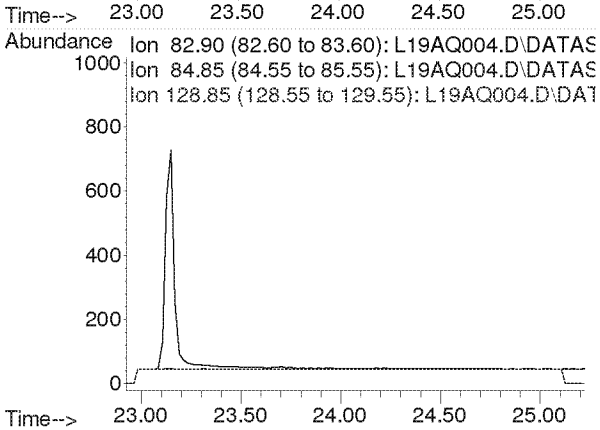


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

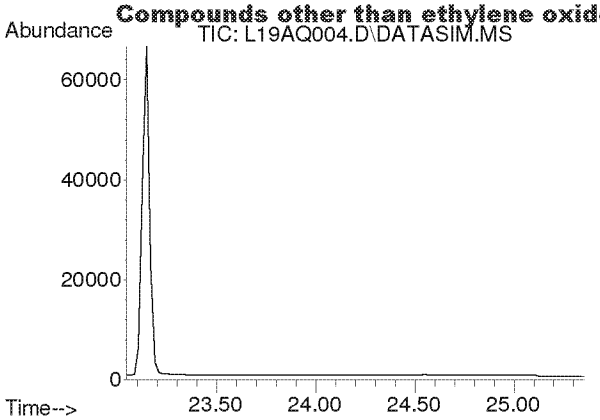
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

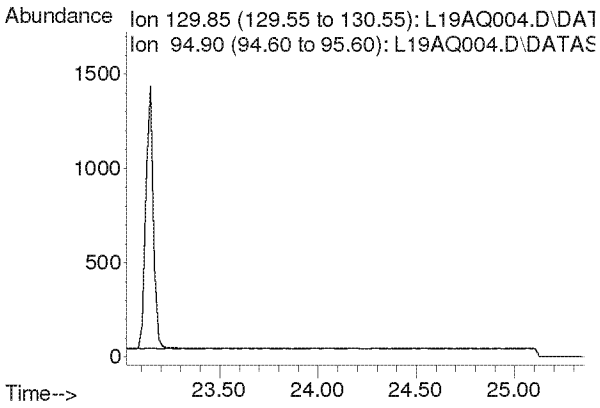


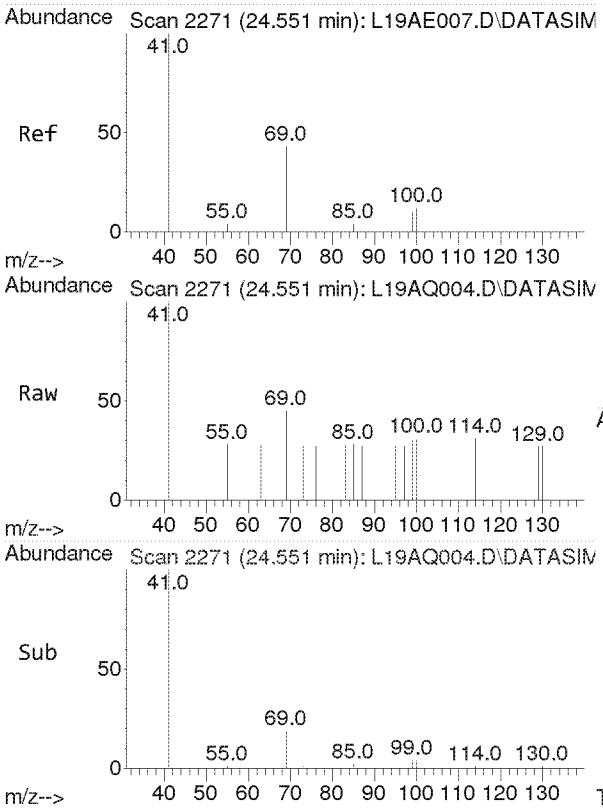
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6

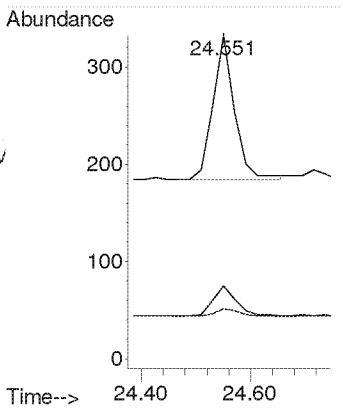




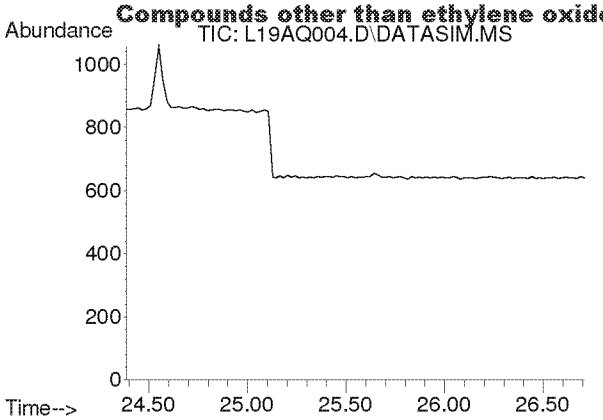
#38
Methyl Methacrylate
Concen: 0.018 ppbv
RT: 24.551 min Scan# 2271
Delta R.T. -0.000 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 41 Resp: 406

Ion	Ratio	Lower	Upper
41	100		
69	21.7	16.6	24.8
100	0.0	4.2	6.4#



Compounds other than ethylene oxide were not quantitated.

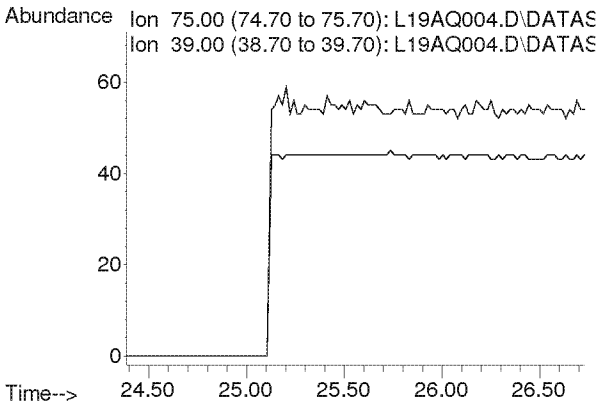


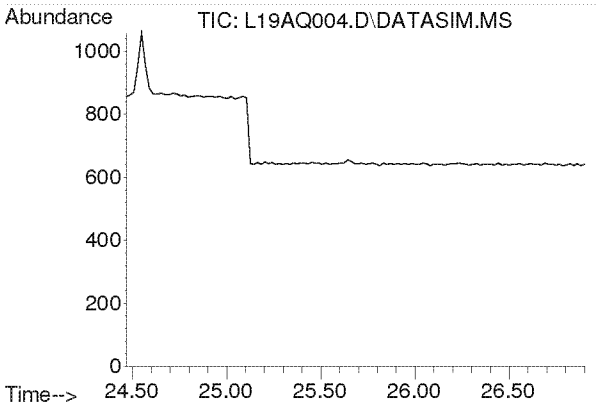
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



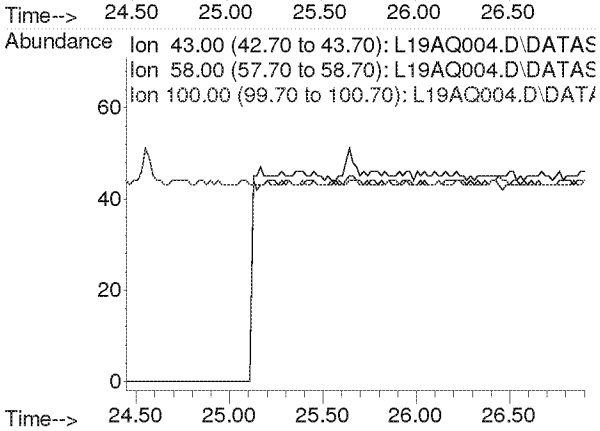


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

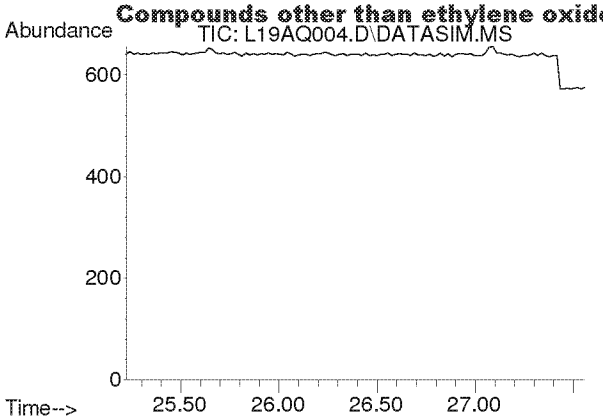
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

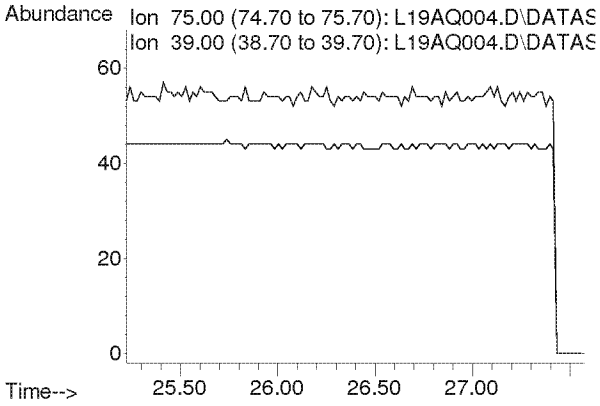


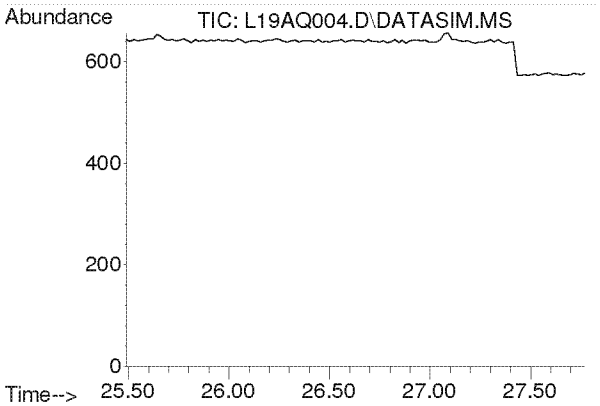
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



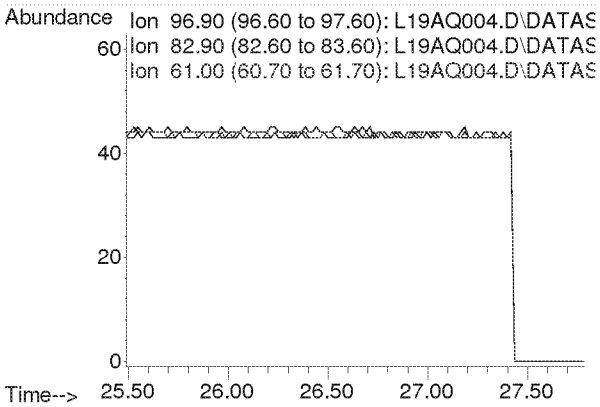


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

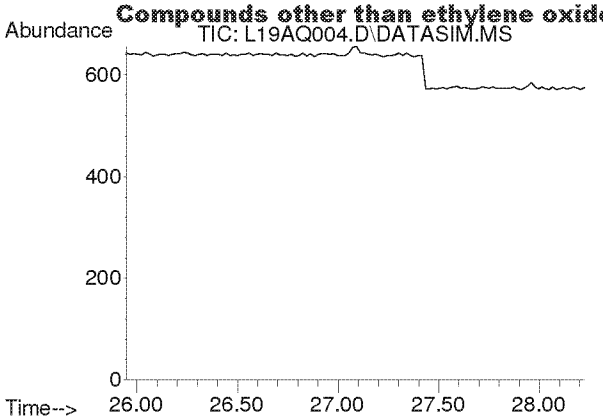
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

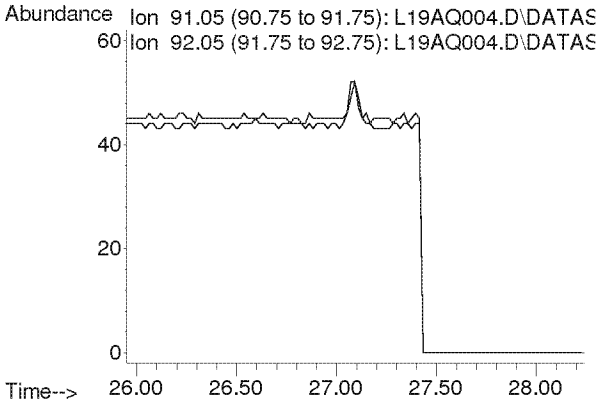


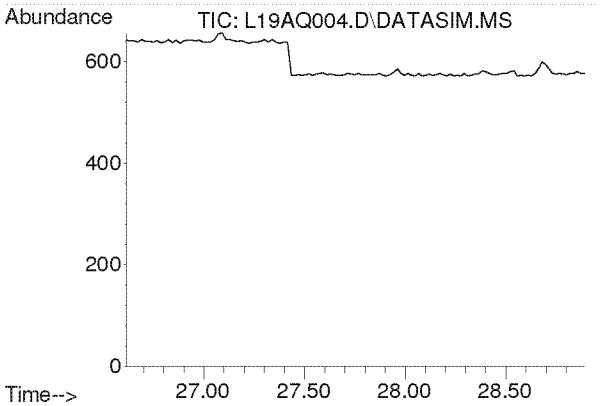
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



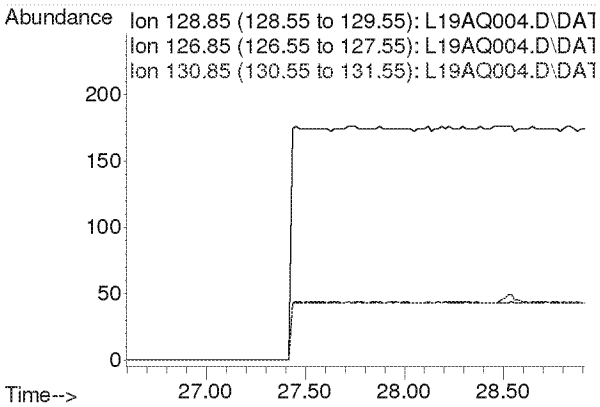


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

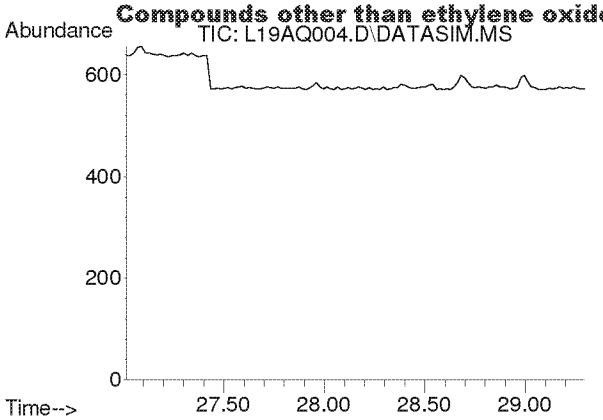
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

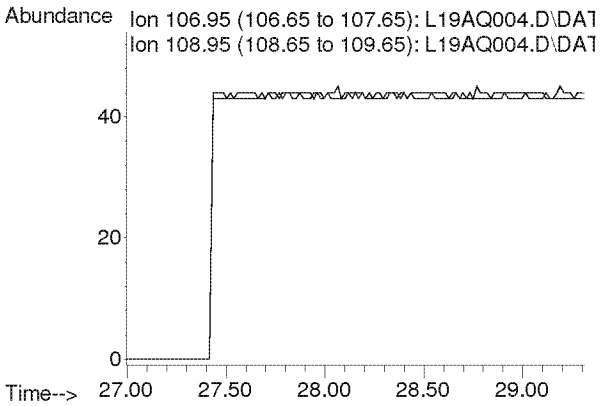


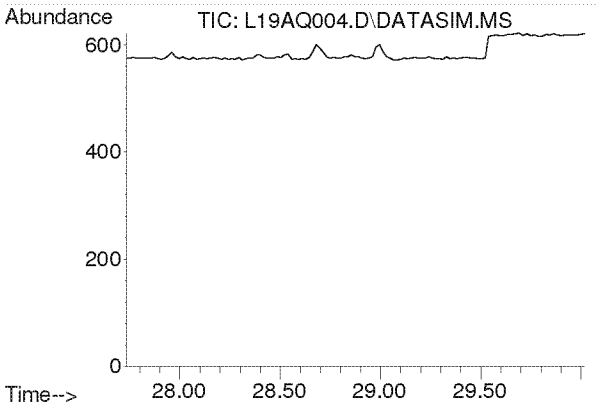
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



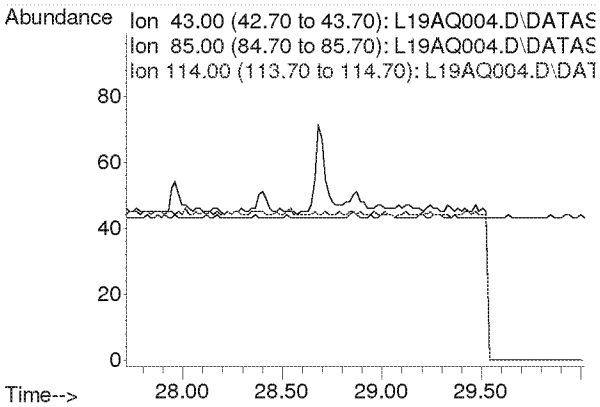


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

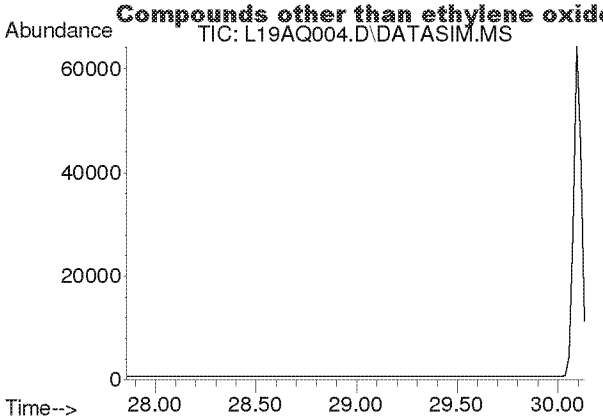
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

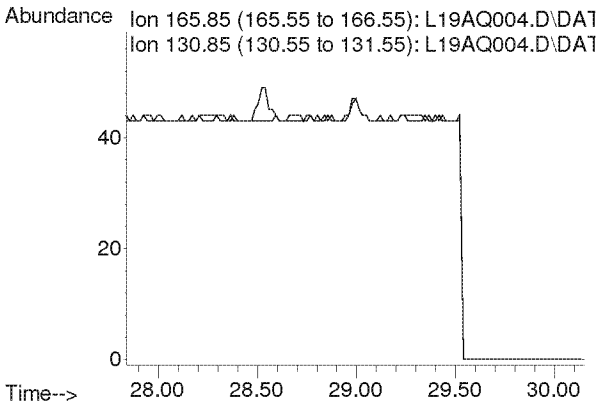


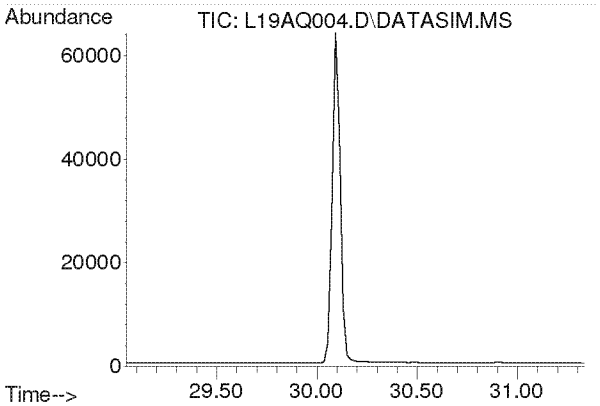
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



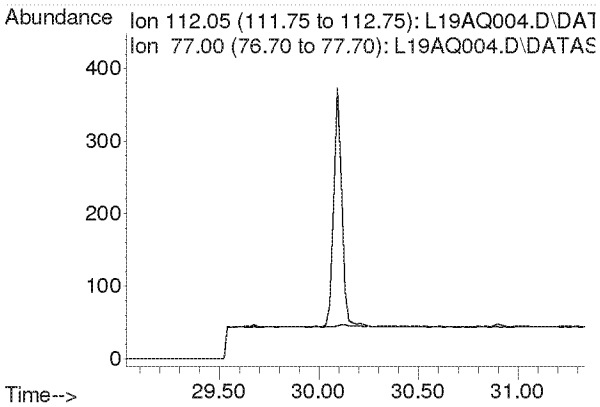


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

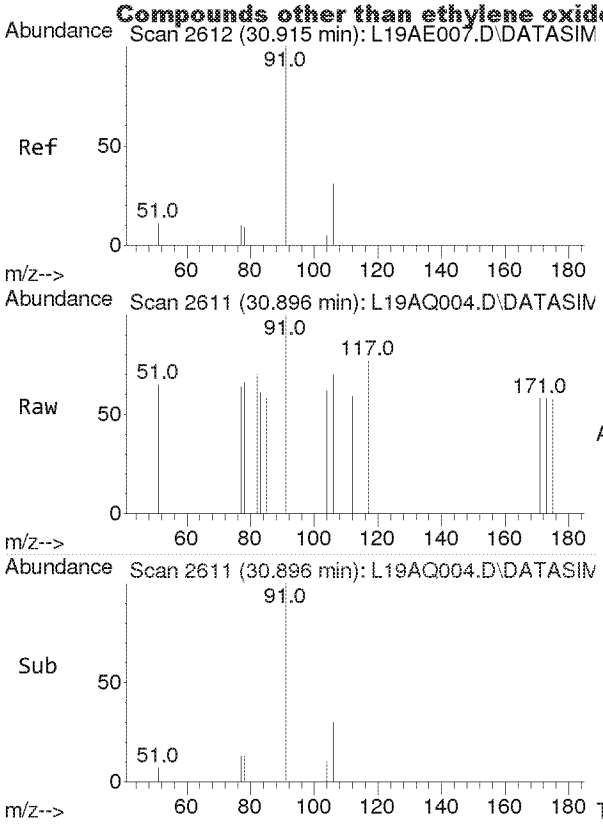
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



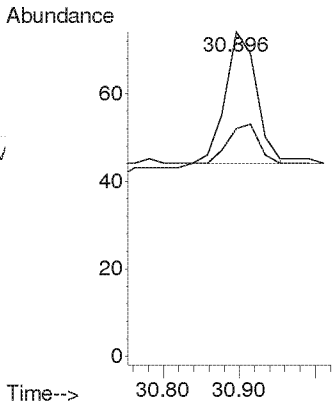
Compounds other than ethylene oxide were not quantitated.

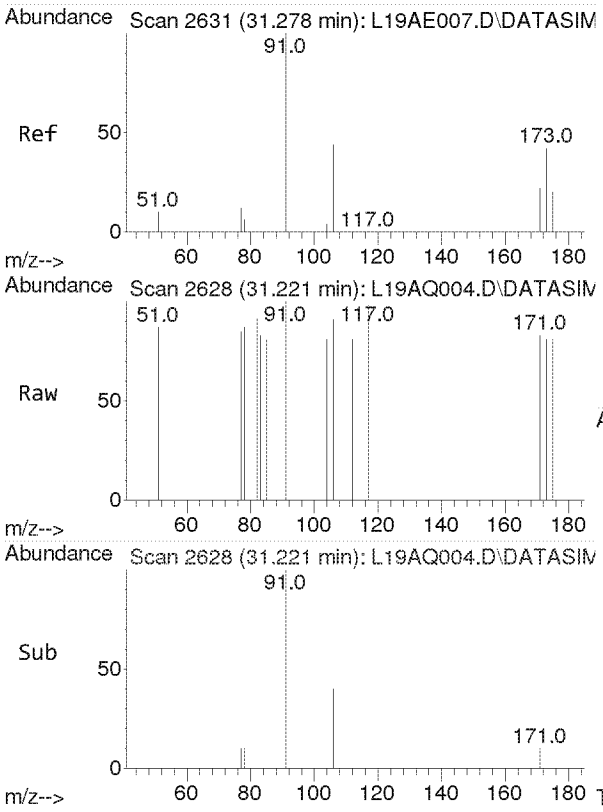


#50
Ethylbenzene
Concen: 0.005 ppbv
RT: 30.896 min Scan# 2611
Delta R.T. -0.019 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 91 Resp: 86

Ion	Ratio	Lower	Upper
91	100		
106	0.0	25.4	38.0#

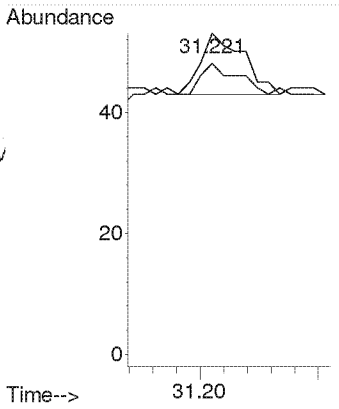




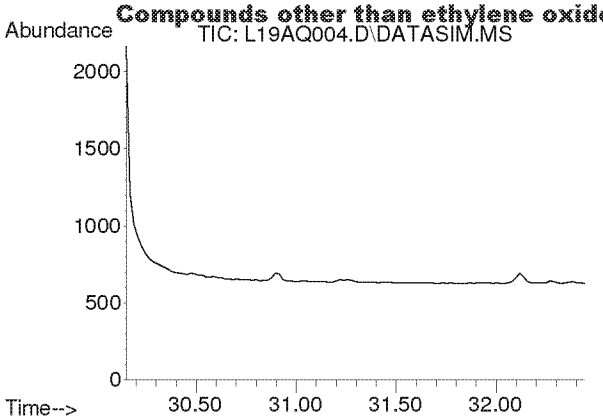
#51
m,p-Xylene
Concen: 0.003 ppbv
RT: 31.221 min Scan# 2628
Delta R.T. -0.057 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 91 Resp: 49

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.7	53.5#



Compounds other than ethylene oxide were not quantitated.

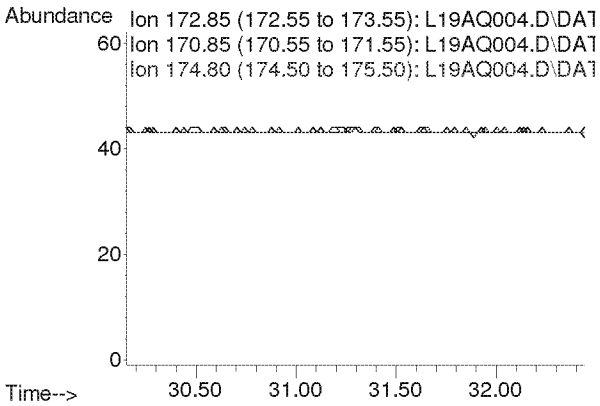


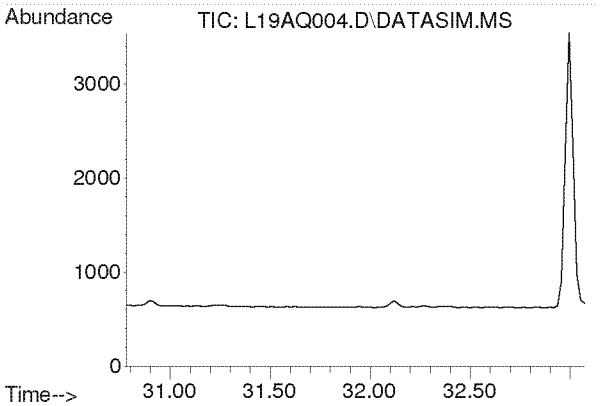
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



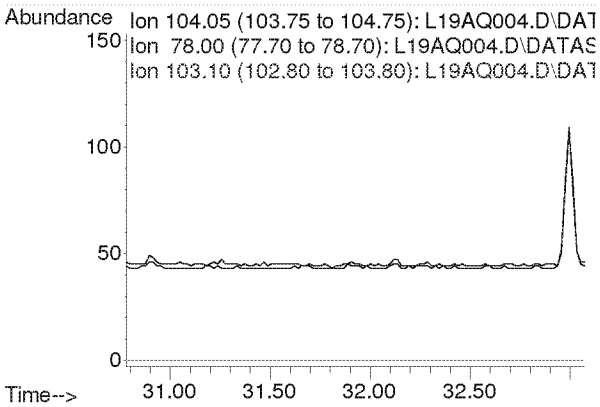


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

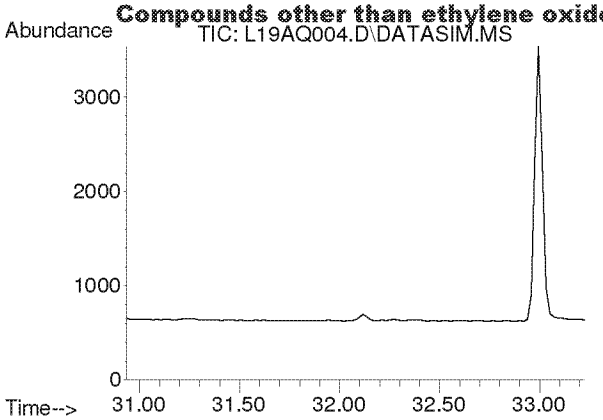
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

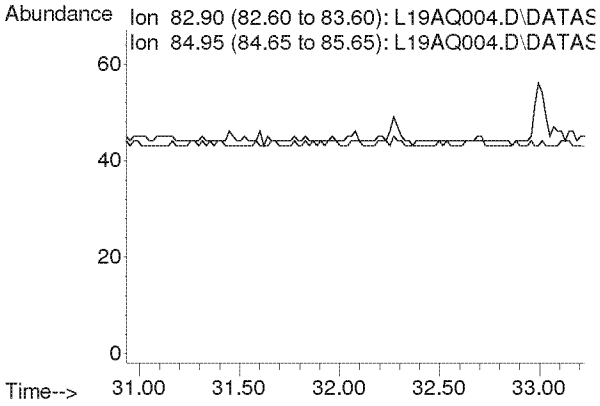


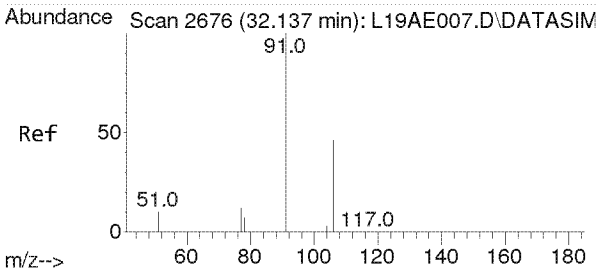
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0

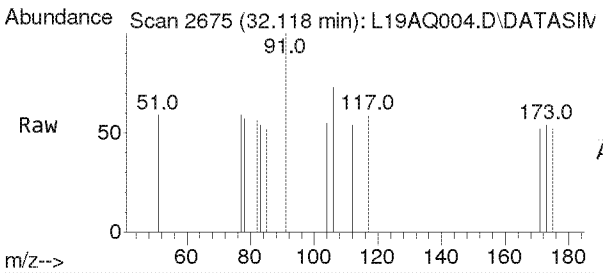


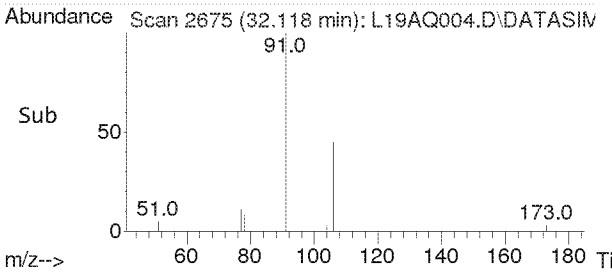


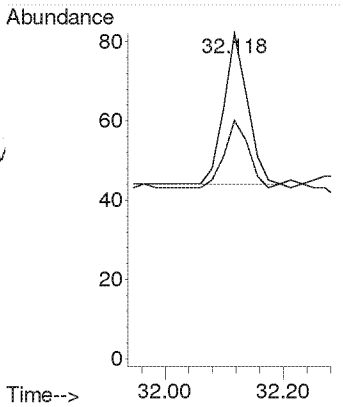
#55
o-Xylene
Concen: 0.007 ppbv
RT: 32.118 min Scan# 2675
Delta R.T. -0.019 min
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 91 Resp: 105

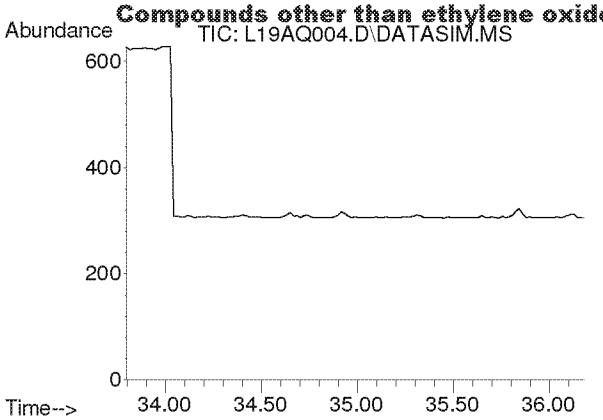
Ion	Ratio	Lower	Upper
91	100		
106	45.7	35.8	53.8







Compounds other than ethylene oxide were not quantitated.

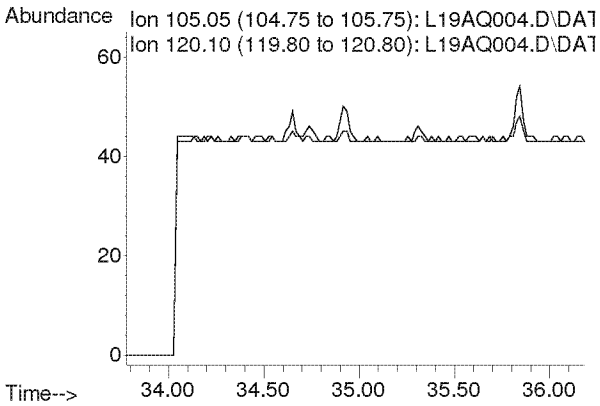


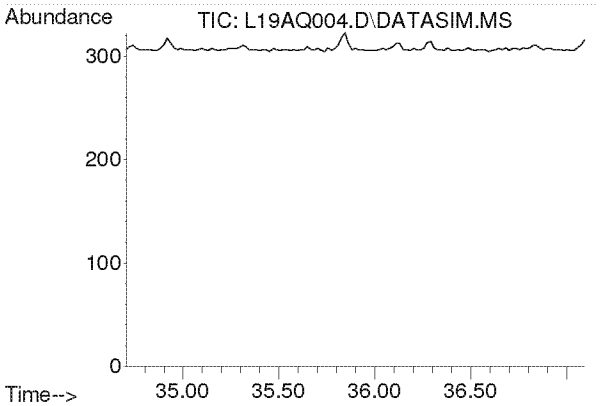
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



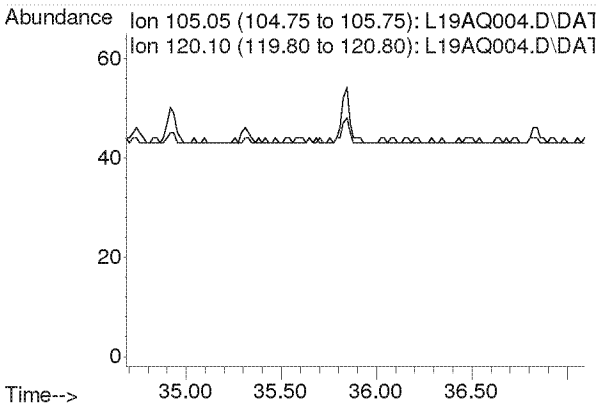


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

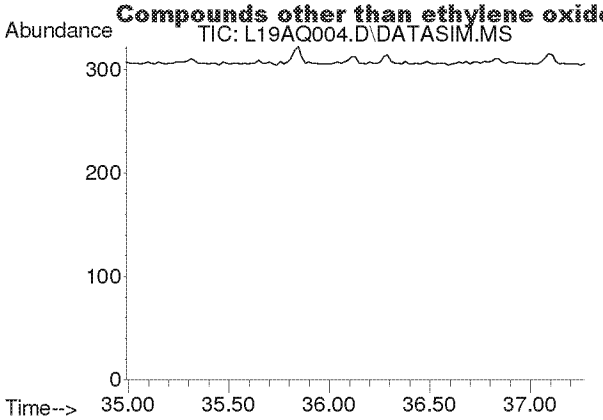
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

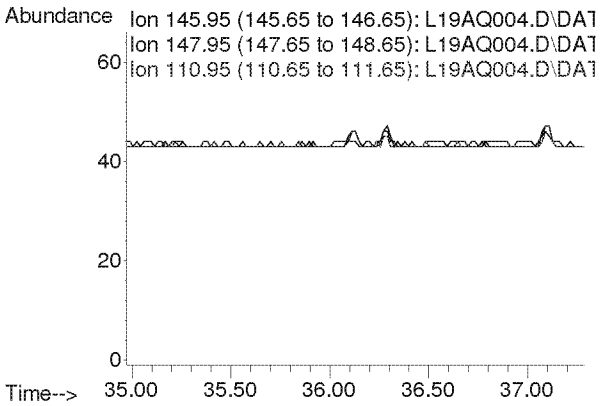


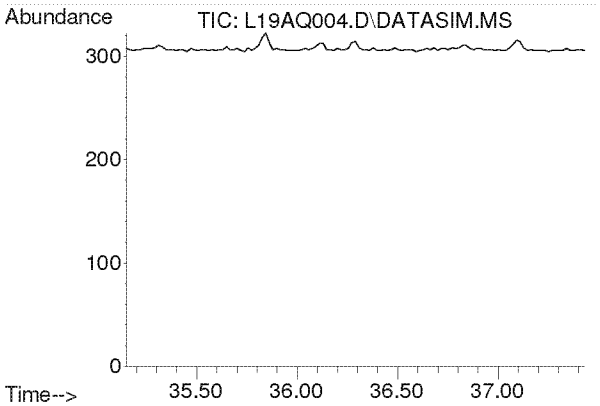
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



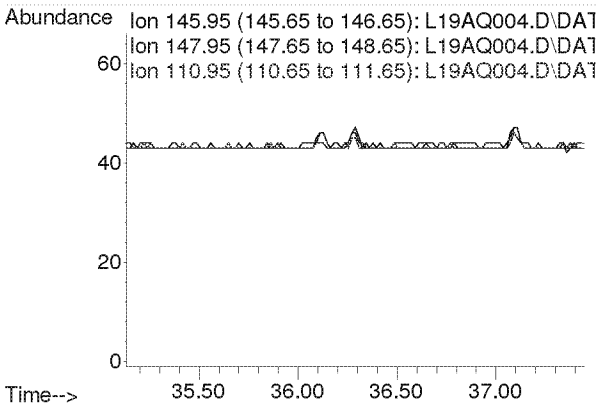


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

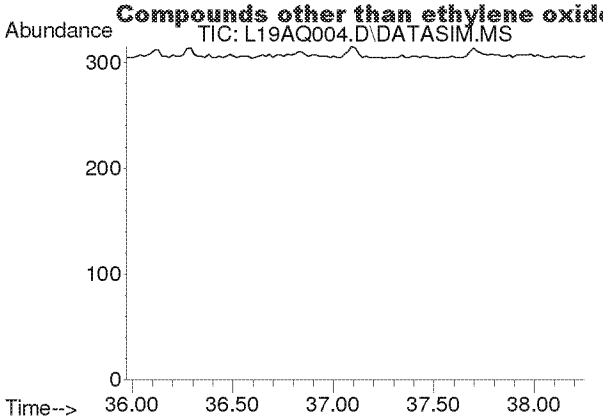
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

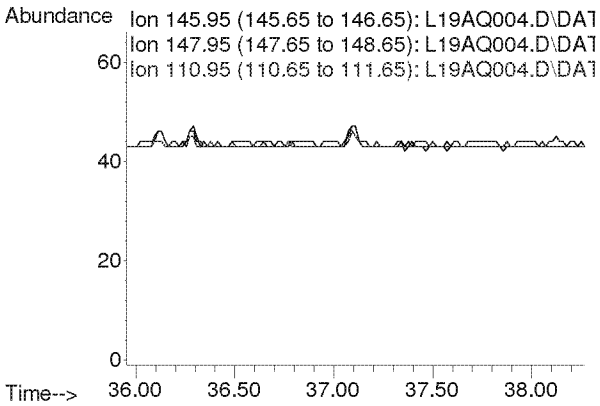


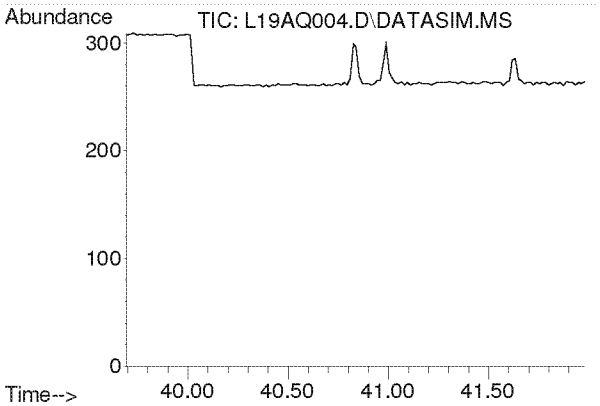
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



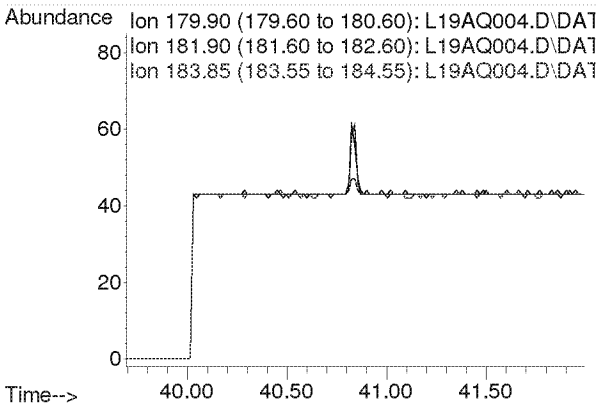


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

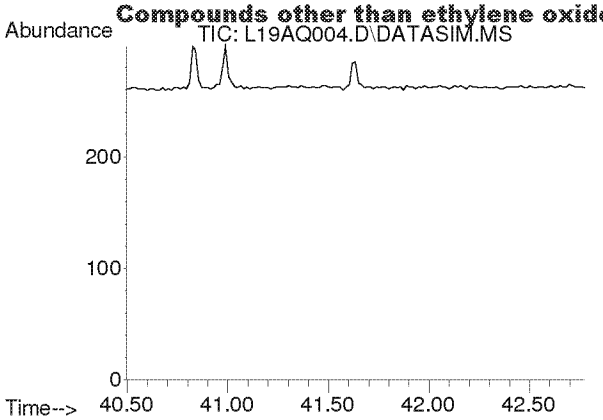
Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

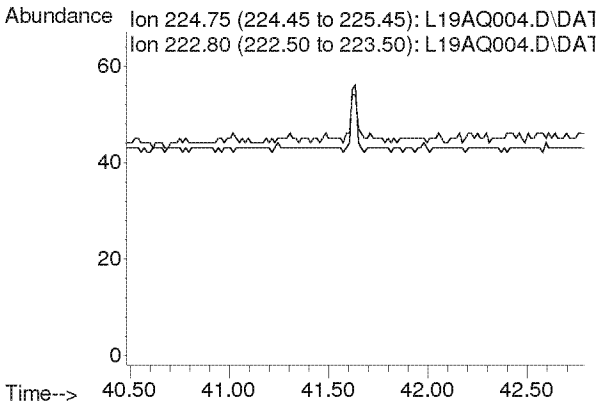


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ004.D
Acq: 17 Jan 2019 2:25 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Duplicate Comparison Check

Comparison of Duplicate Samples					
		D1	D2		
File ID		L19AQ005.D	L19AQ006.D		
Analyst		MAH	MAH		
Method		9010002 M	9010002 M		
Sample ID		9010808-06	9010808-07		
Mics Comments		WILLOWBROOK V	WILLOWBROOK VILLAGE HALL C2 1/7/		
Compound	MDL	Amount (ppbv)	Amount (ppbv)	RPD	Passed?
IS-Hexane-d14	NA			NA	
Acetylene	0.0394	0	0	NA	
Propylene	0.0639	0	0	NA	
Dichlorodifluoromethane	0.0273	0	0	NA	
Chloromethane	0.0465	0	0	NA	
Dichlorotetrafluoroethane	0.0134	0	0	NA	
Vinyl chloride	0.0128	0	0	NA	
1,3-Butadiene	0.0193	0	0	NA	
Ethylene Oxide	0.0453	4.199	3.663	13.64	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl Isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

1-31-19

NA = Not Applicable. Precision can not be evaluated due to an average value less than 5 times the MDL.

Compounds other than ethylene oxide were not quantitated.

Duplicate Comparison Check

Comparison of Replicate Analyses

		D1	R1		
File ID		L19AQ005.D	L19AQ007.D		
Analyst		MAH	MAH		
Method		9010002.M	9010002.M		
Sample ID		9010808-06	B9A1704-DUP1		
Mics Comments		WILLOWBROO	WILLOWBROOK VILLAGE HALL R1 1/7/19		
Compound	MDL	Amount/ppbv	Amount (ppbv)	RPD	Passed?
IS-Hexane-d14	NA			NA	
Acetylene	0.0394	0	0	NA	
Propylene	0.0639	0	0	NA	
Dichlorodifluoromethane	0.0273	0	0	NA	
Chloromethane	0.0465	0	0	NA	
Dichlorotetrafluoroethane	0.0134	0	0	NA	
Vinyl chloride	0.0128	0	0	NA	
1,3-Butadiene	0.0193	0	0	NA	
Ethylene Oxide	0.0453	4.199	4.037	3.93	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl Isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

Comparison of Replicate Analyses

		D2	R2		
File ID		L19AQ006.D	L19AQ008.D		
Analyst		MAH	MAH		
Method		9010002.M	9010002.M		
Sample ID		9010808-07	B9A1704-DUP2		
Mics Comments		WILLOWBROO	WILLOWBROOK VILLAGE HALL R2 1/		
Compound	MDL	Amount/ppbv	Amount (ppbv)	RPD	Passed?
IS-Hexane-d14	NA			NA	
Acetylene	0.0394	0	0	NA	
Propylene	0.0639	0	0	NA	
Dichlorodifluoromethane	0.0273	0	0	NA	
Chloromethane	0.0465	0	0	NA	
Dichlorotetrafluoroethane	0.0134	0	0	NA	
Vinyl chloride	0.0128	0	0	NA	
1,3-Butadiene	0.0193	0	0	NA	
Ethylene Oxide	0.0453	3.663	3.842	4.77	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl Isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

NA = Not Applicable. Precision can not be evaluated due to an average value less than 5 times the MDL.

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ005.D
Acq On : 17 Jan 2019 3:27 pm
Operator : MAH
Sample : 9010808-06
Misc : WILLOWBROOK VILLAGE HALL C1 1/7/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 23 07:45:34 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	53446	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	131116	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	104546	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.378	29	11592	4.1992 ppbv #	29
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D. d	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D. d	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ005.D
Acq On : 17 Jan 2019 3:27 pm
Operator : MAH
Sample : 9010808-06
Misc : WILLOWBROOK VILLAGE HALL C1 1/7/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 23 07:45:34 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

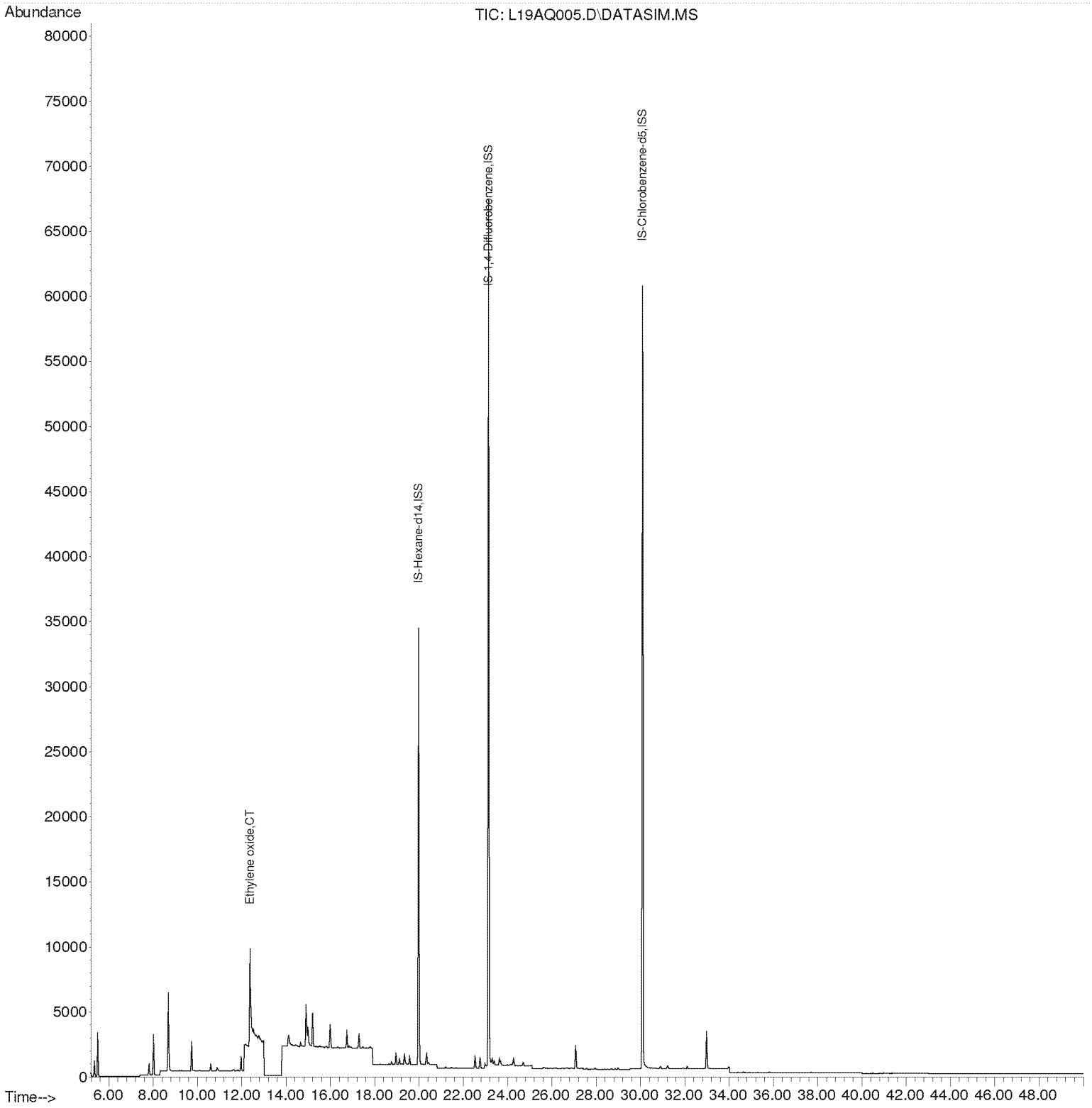
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00083

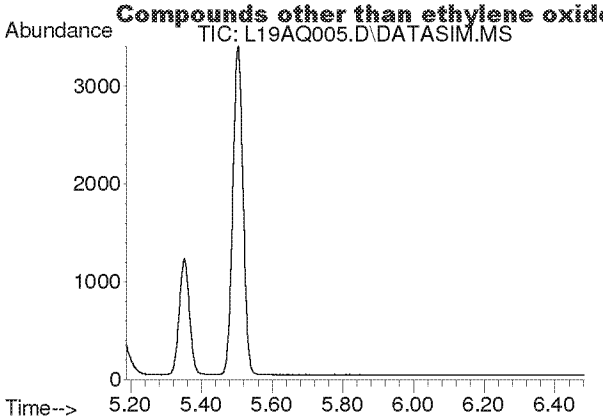
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ005.D
Acq On : 17 Jan 2019 3:27 pm
Operator : MAH
Sample : 9010808-06
Misc : WILLOWBROOK VILLAGE HALL C1 1/7/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 23 07:34:03 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



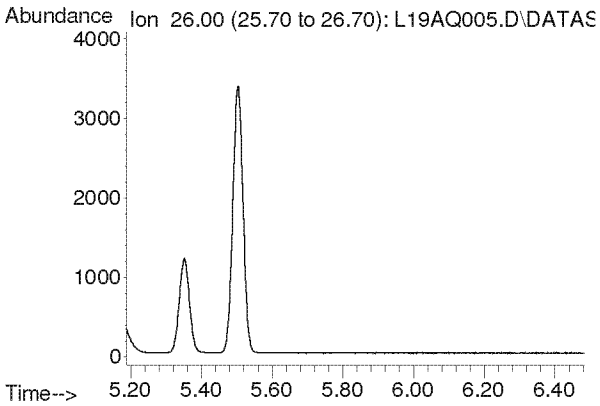
Compounds other than ethylene oxide were not quantitated.

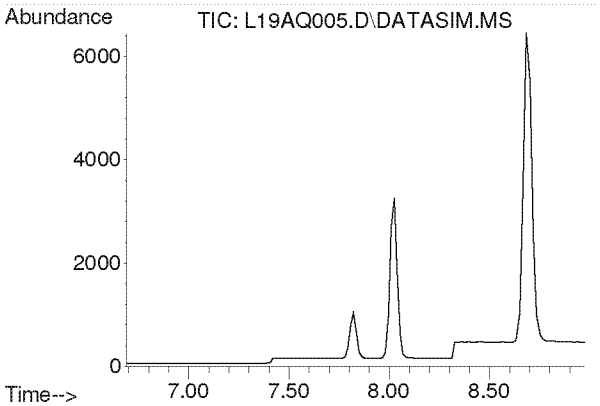


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 26



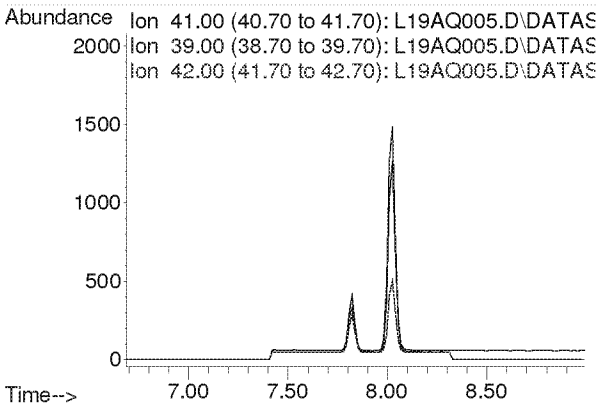


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

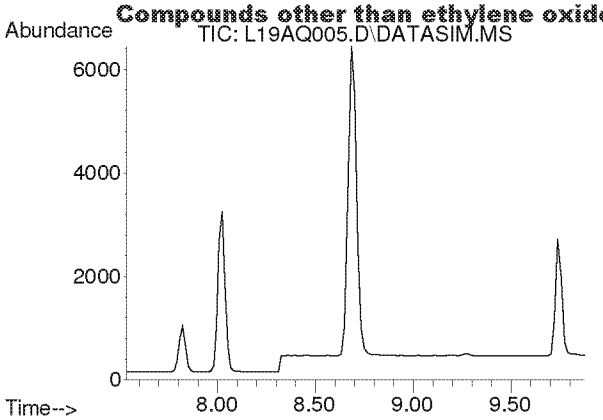
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

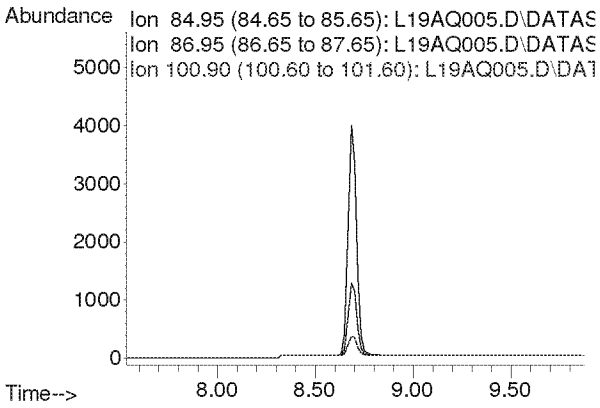


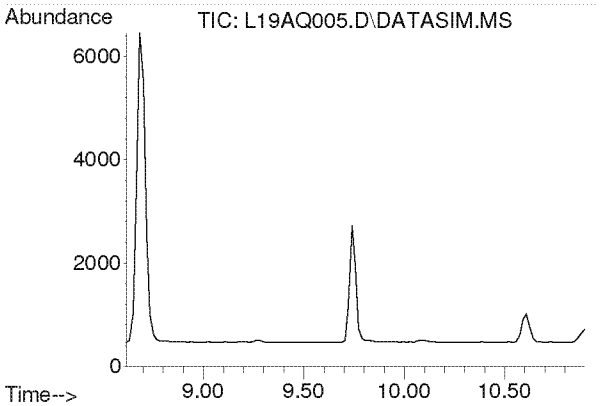
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



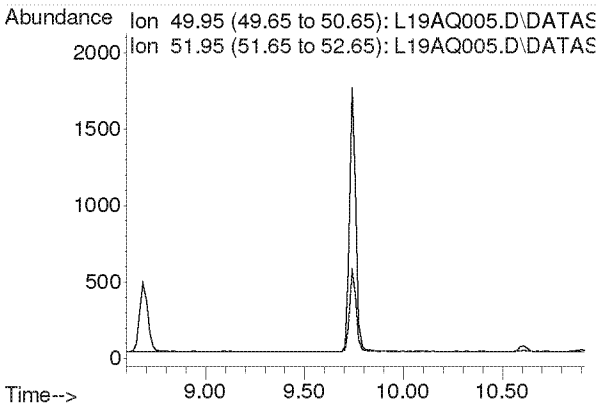


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

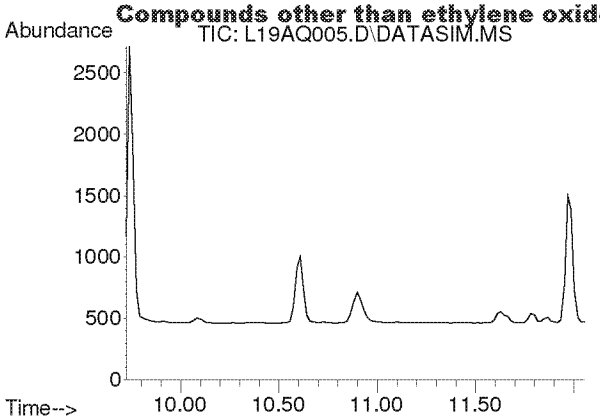
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

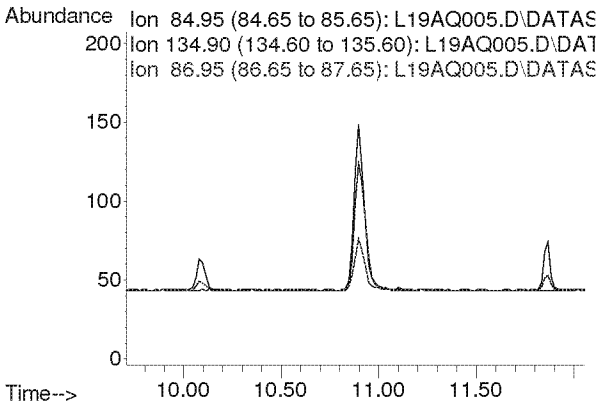


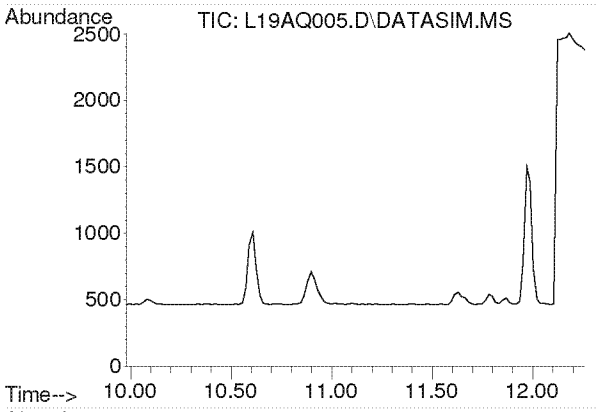
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



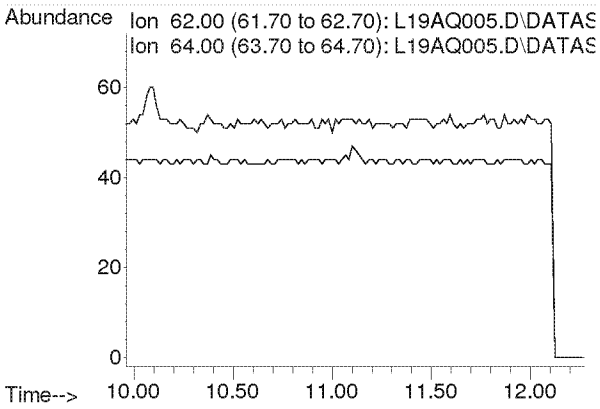


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

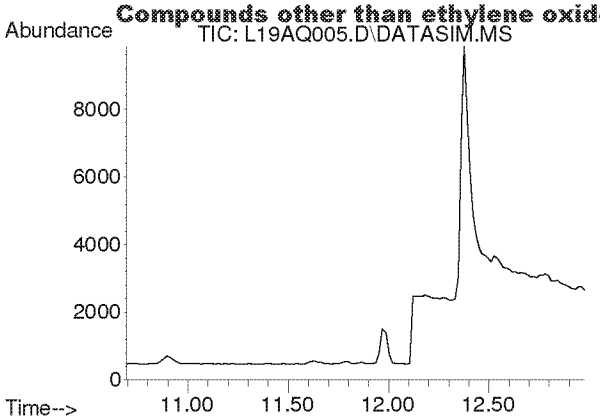
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

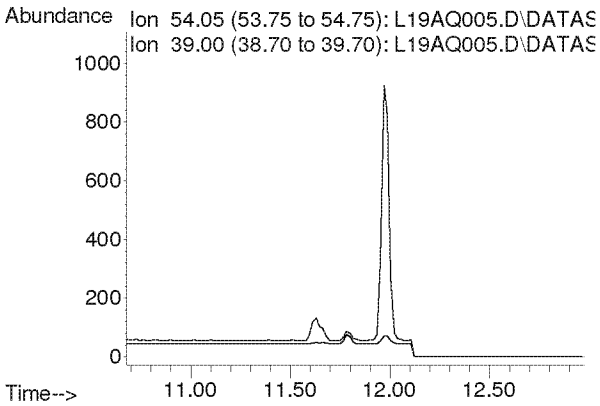


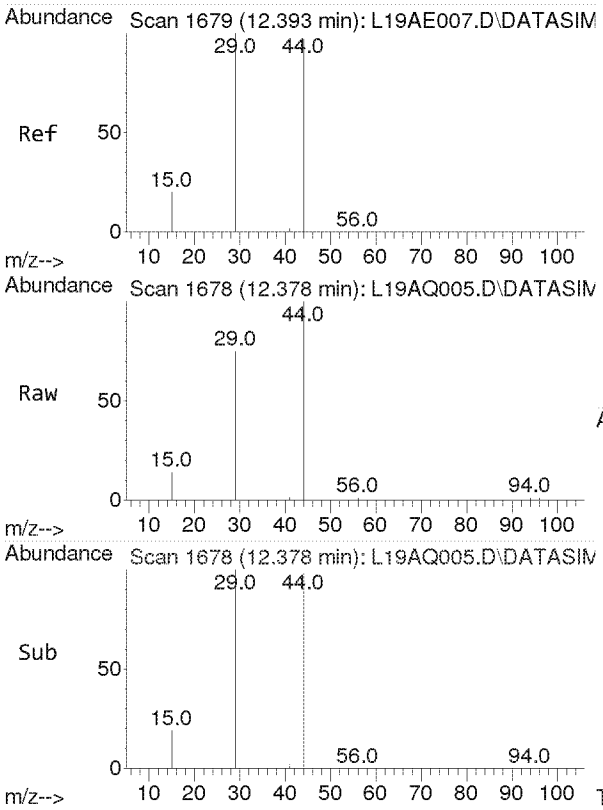
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

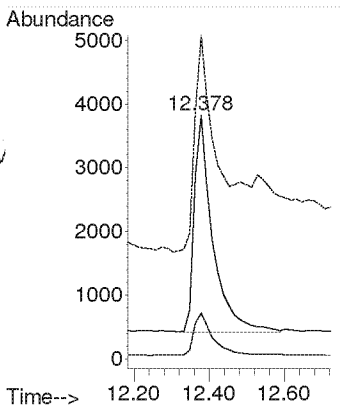




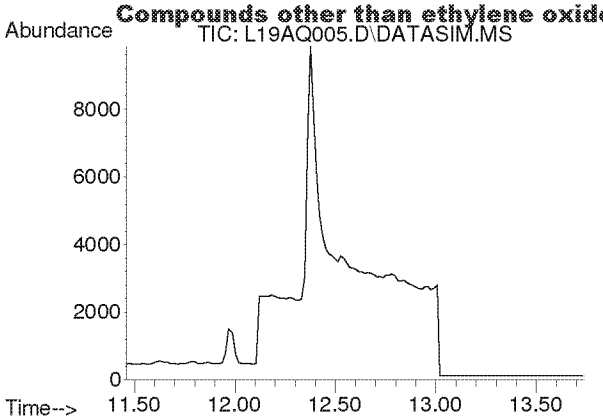
#9
Ethylene oxide
Concen: 4.199 ppbv
RT: 12.378 min Scan# 1678
Delta R.T. -0.015 min
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 29 Resp: 11592

Ion	Ratio	Lower	Upper
29	100		
15	19.6	15.4	23.0
44	180.0	77.4	116.2#



Compounds other than ethylene oxide were not quantitated.

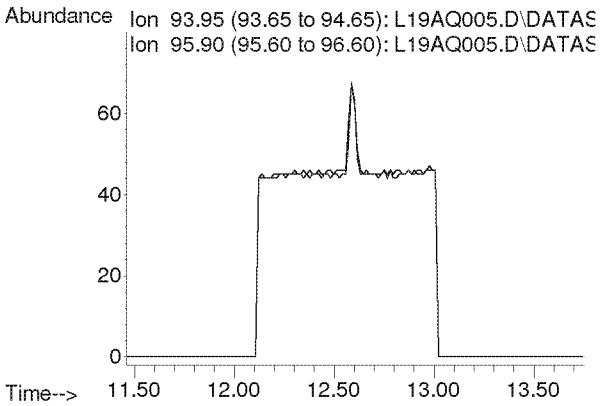


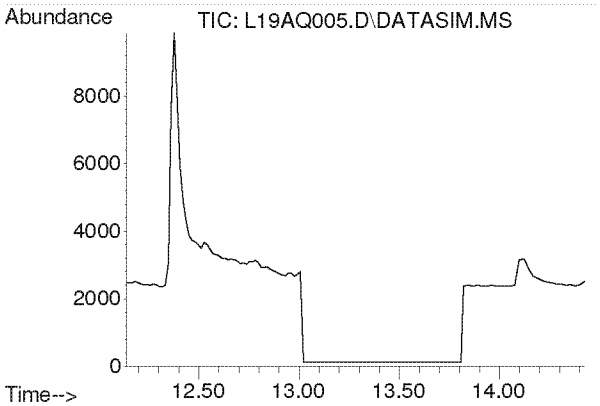
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



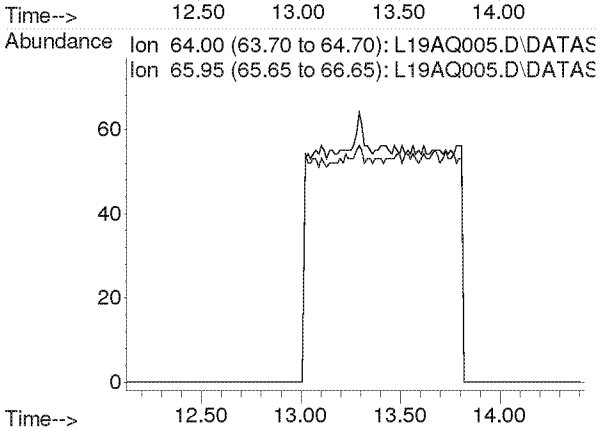


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

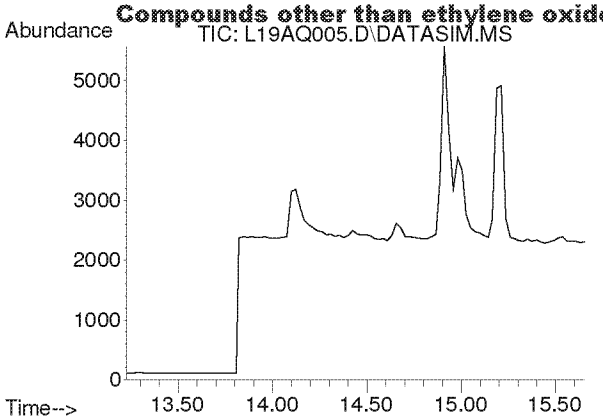
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

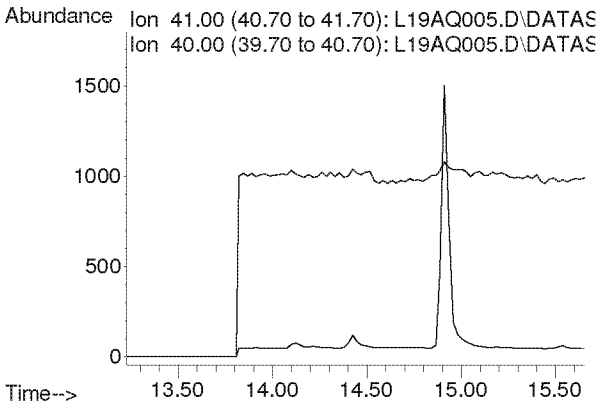


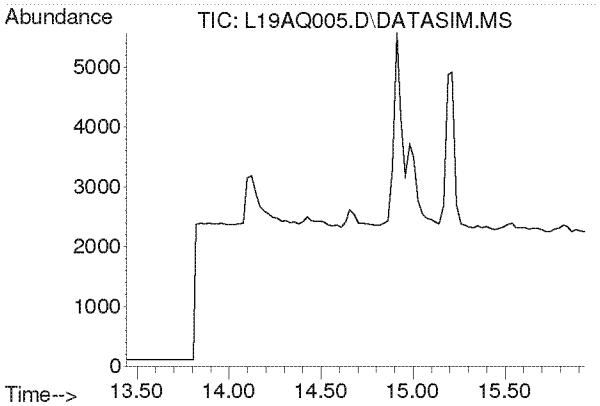
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



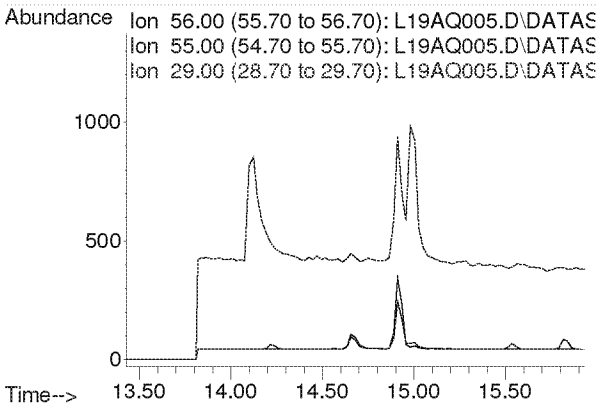


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

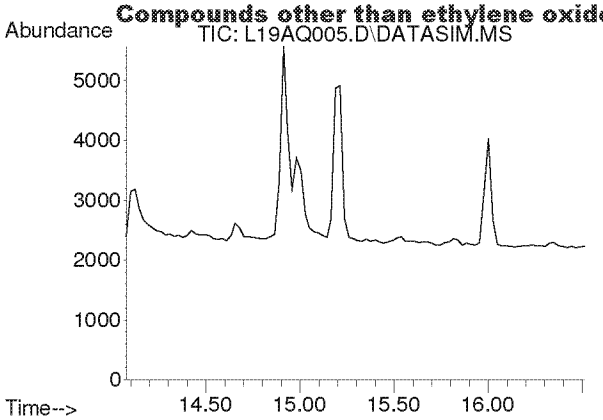
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

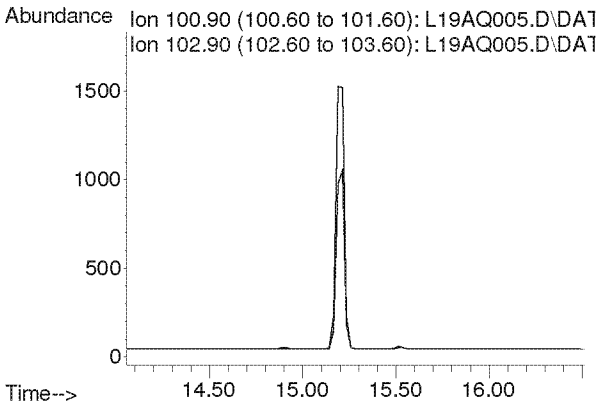


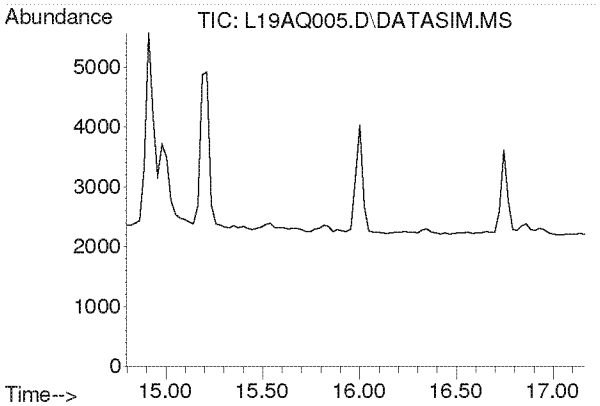
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



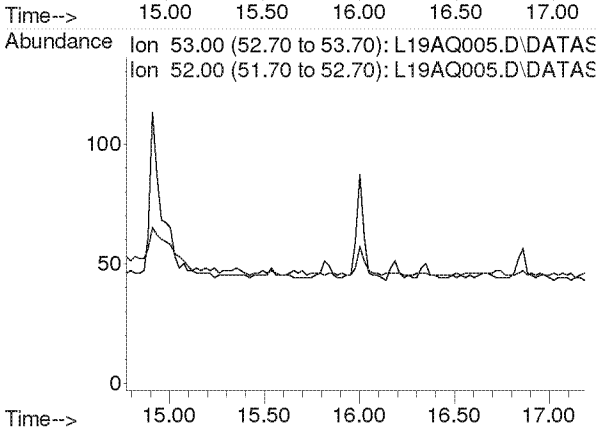


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

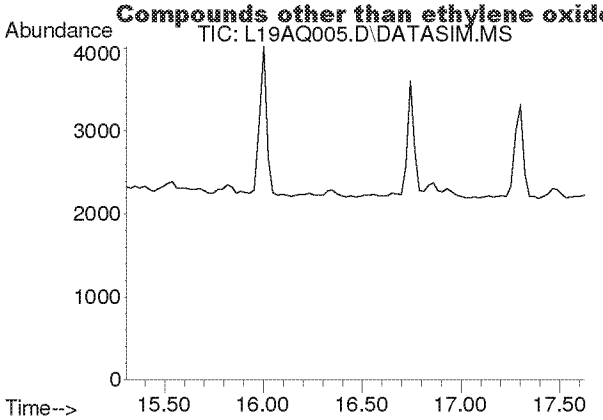
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

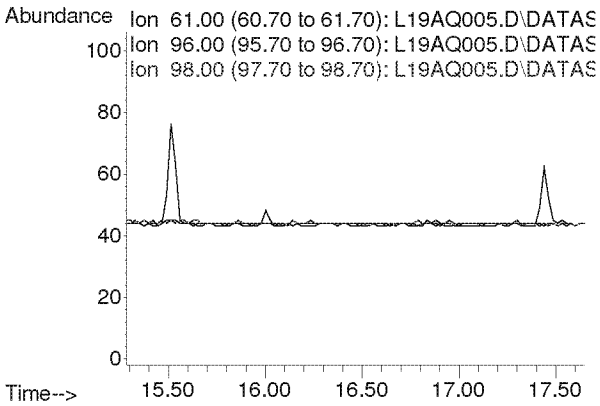


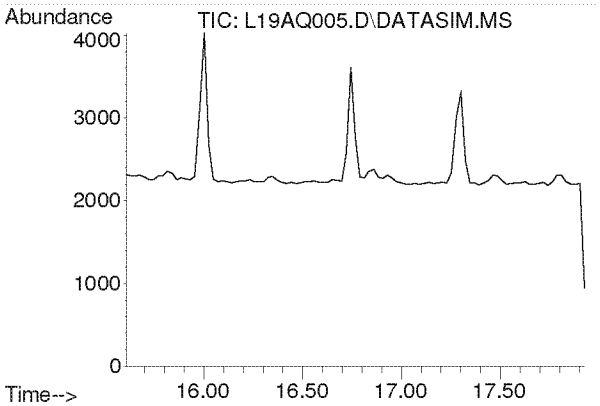
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



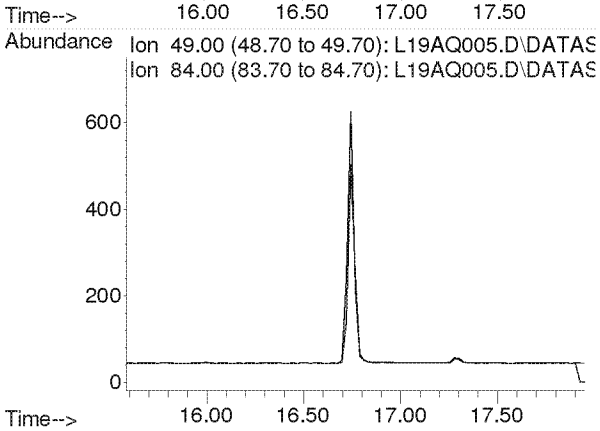


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

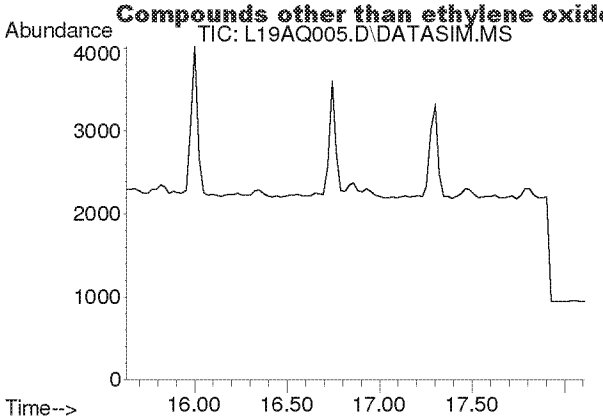
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

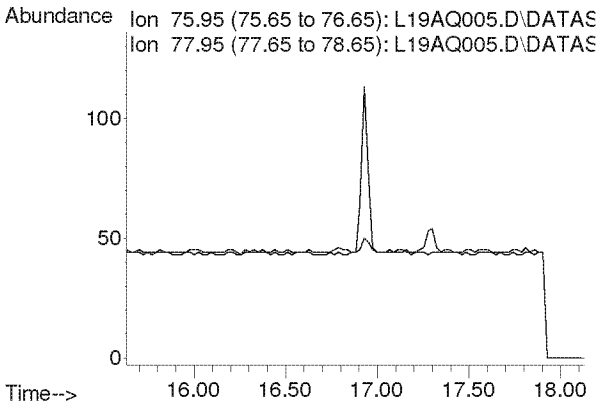


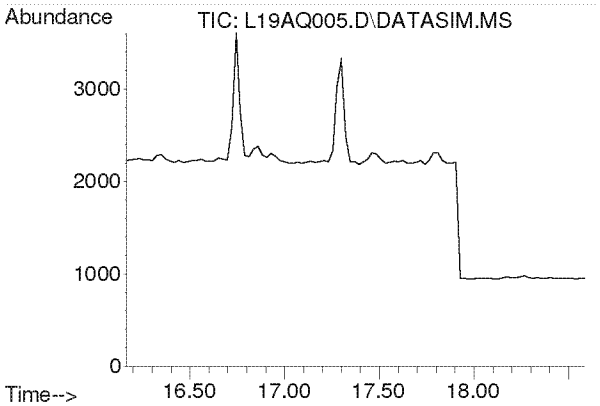
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



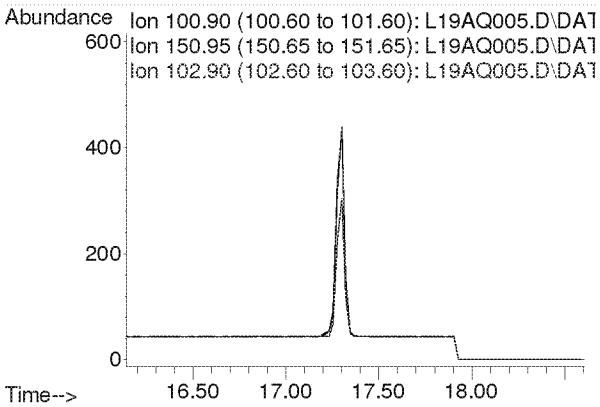


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

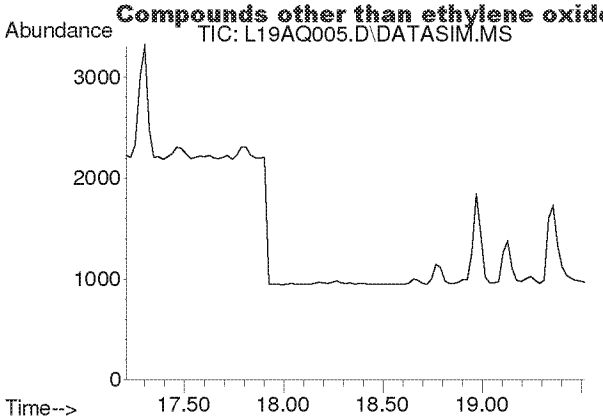
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

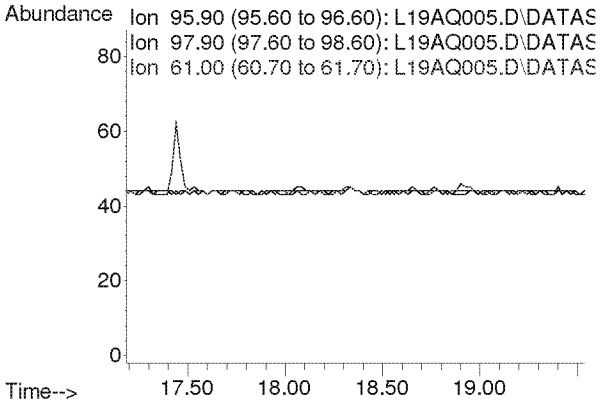


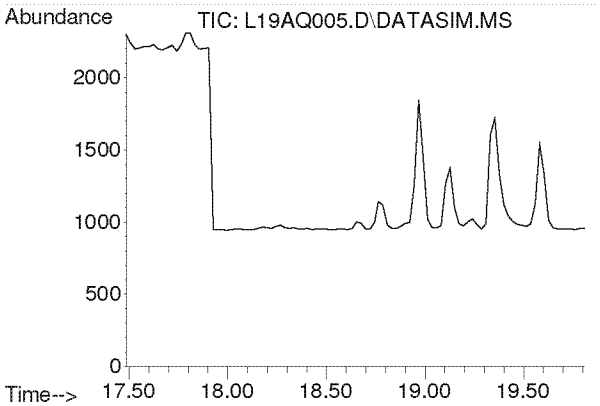
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



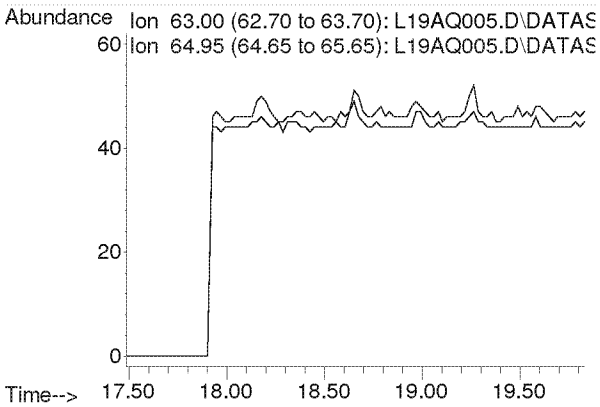


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

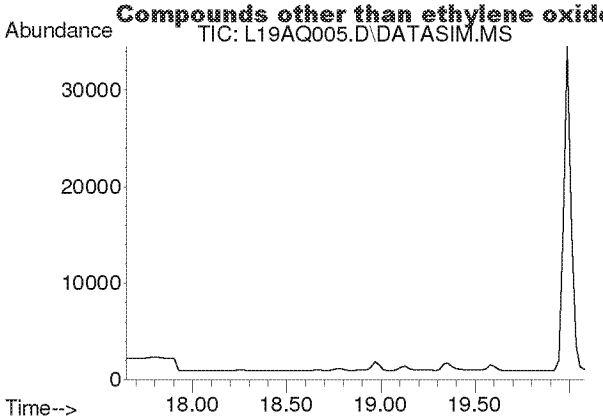
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

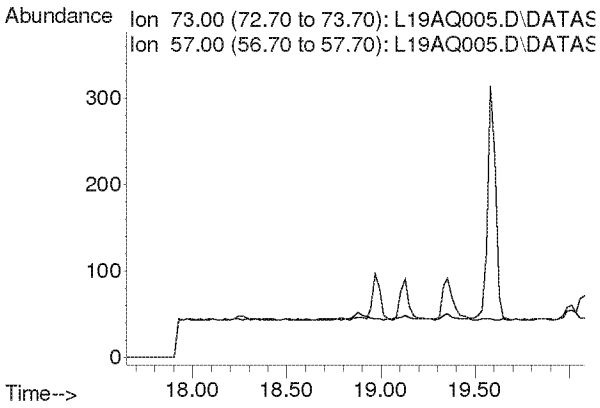


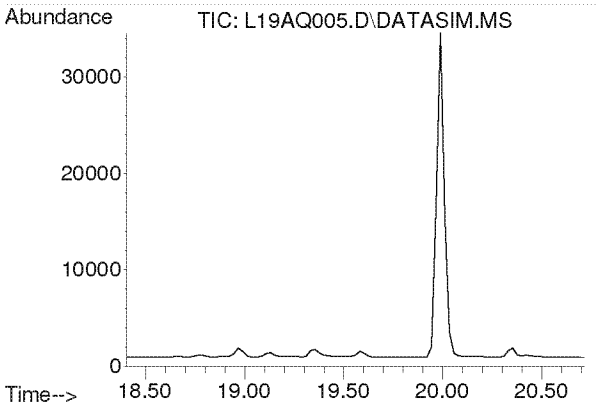
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



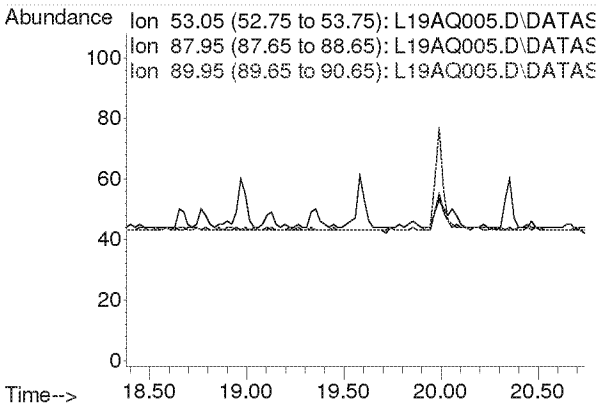


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

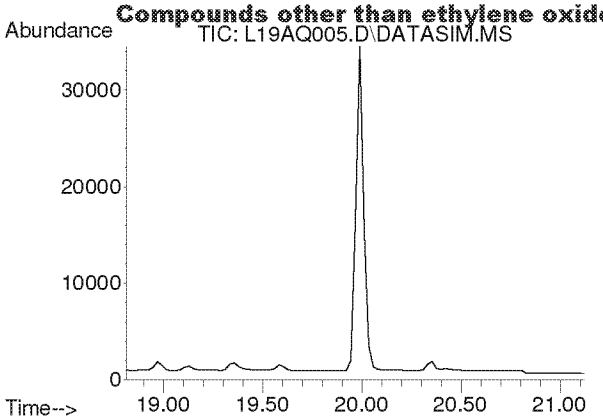
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

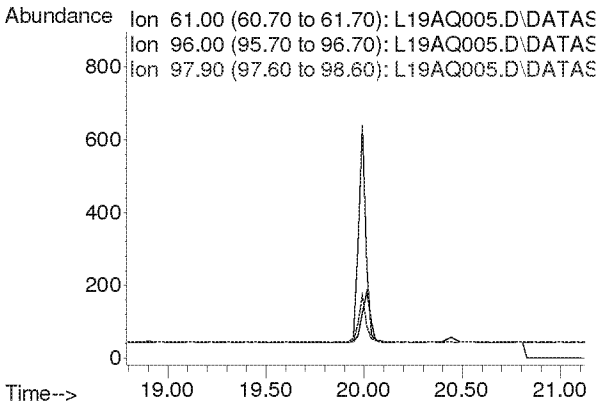


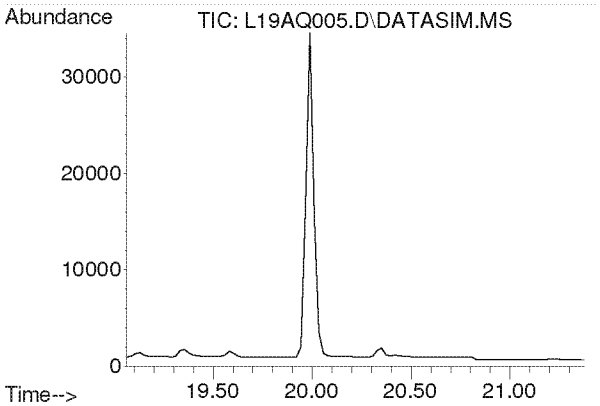
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



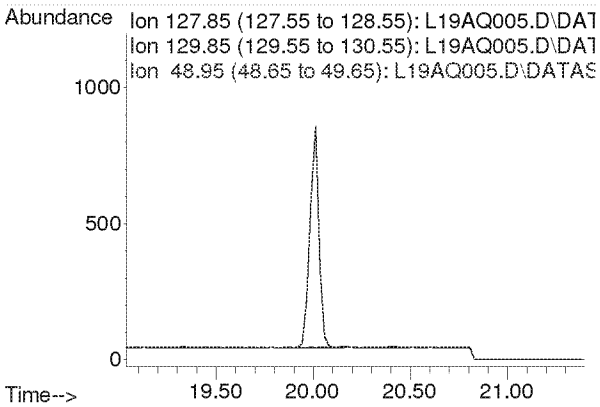


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

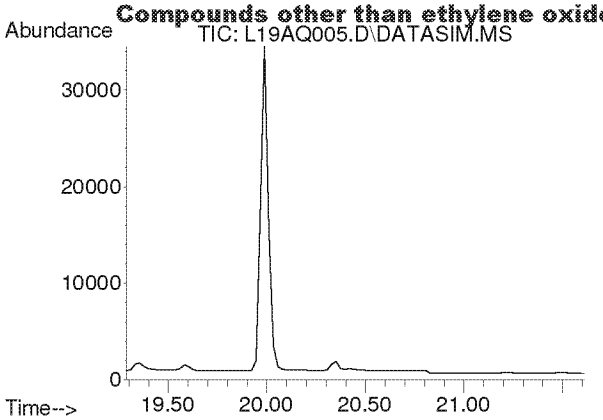
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

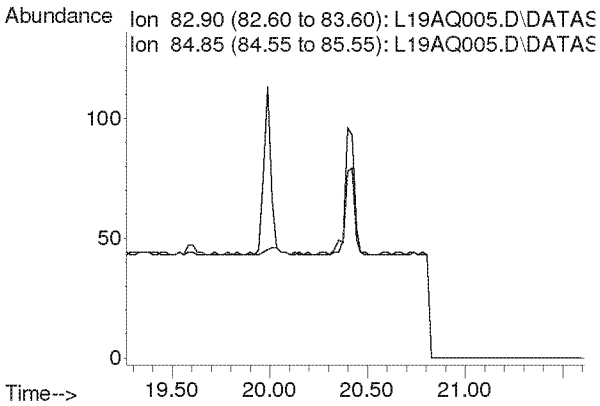


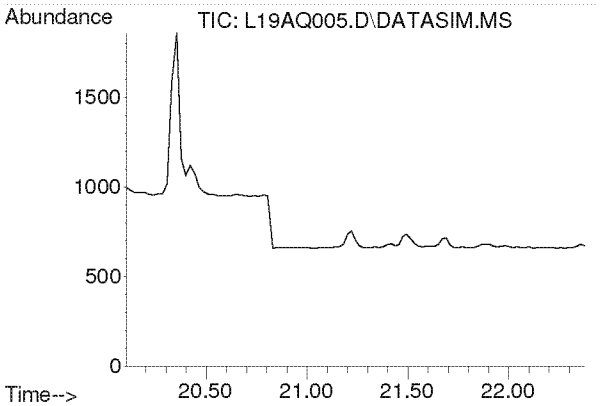
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



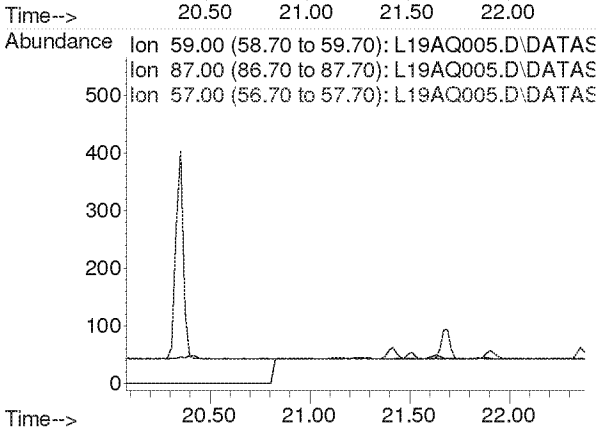


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

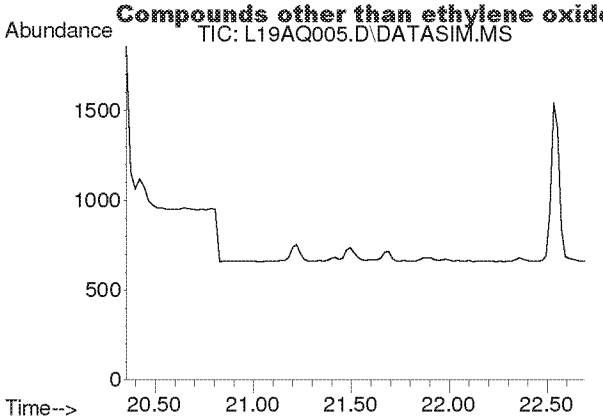
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

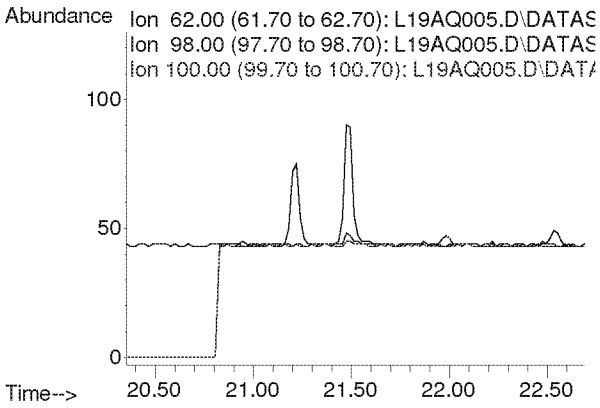


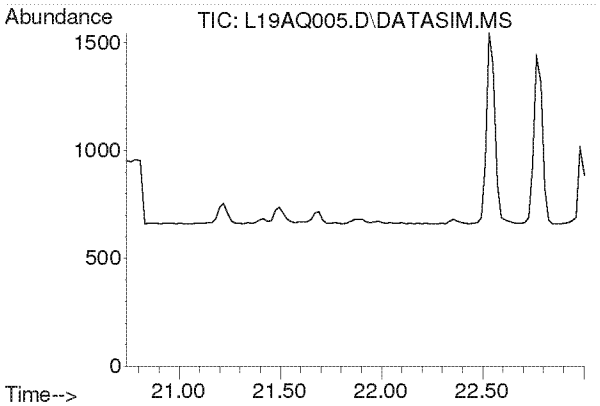
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



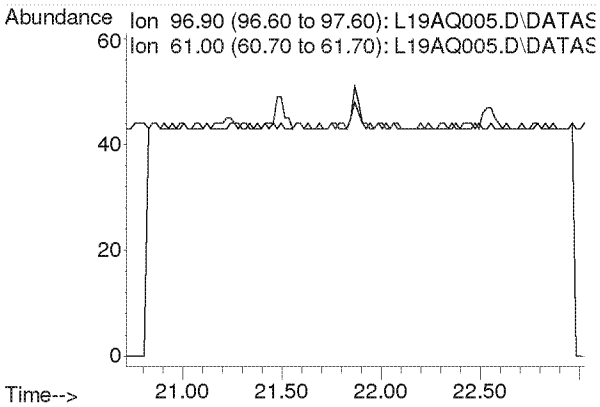


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

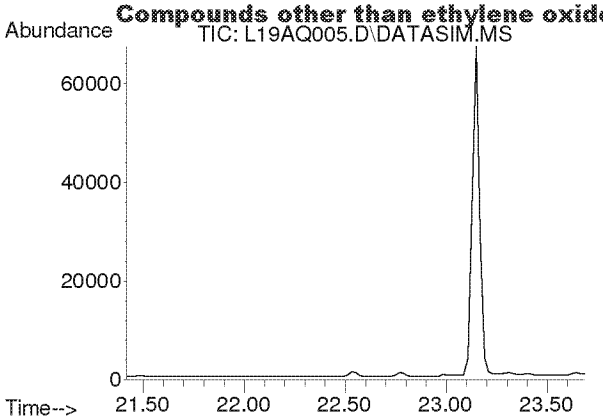
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

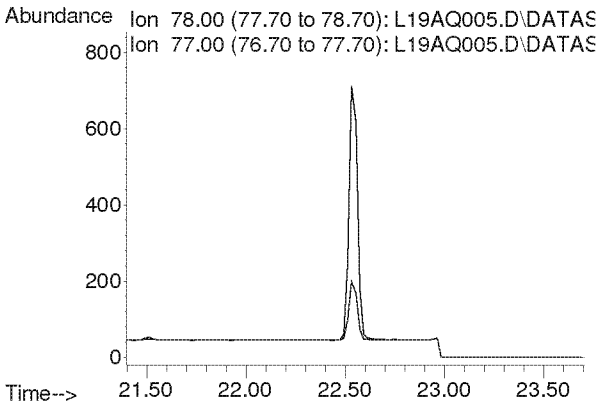


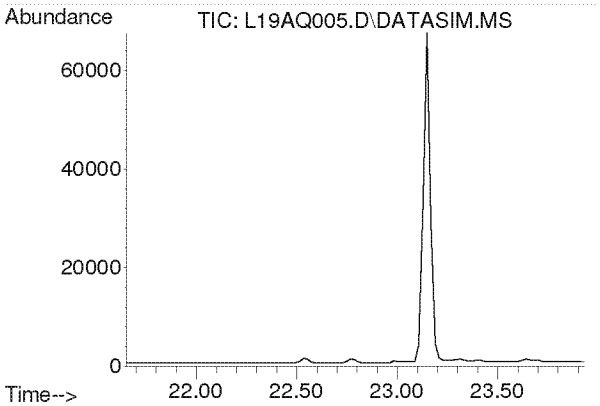
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



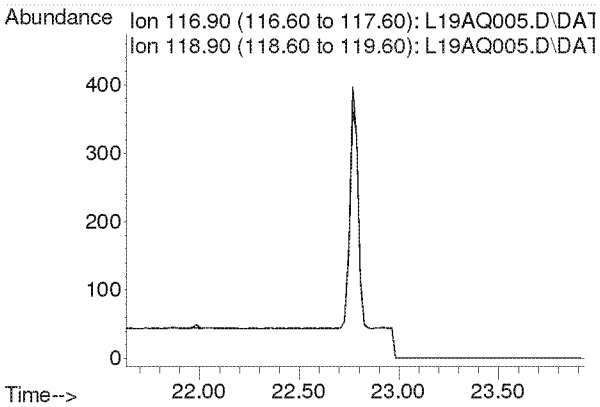


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

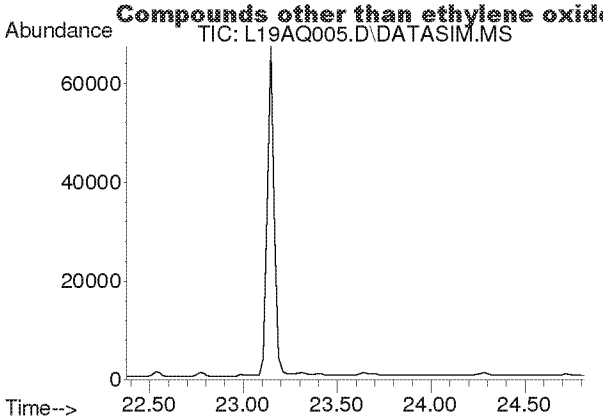
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

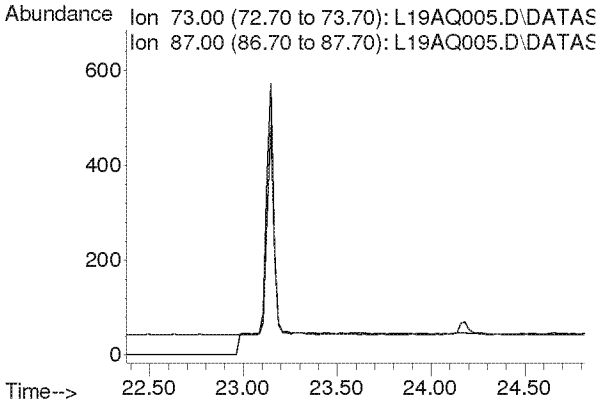


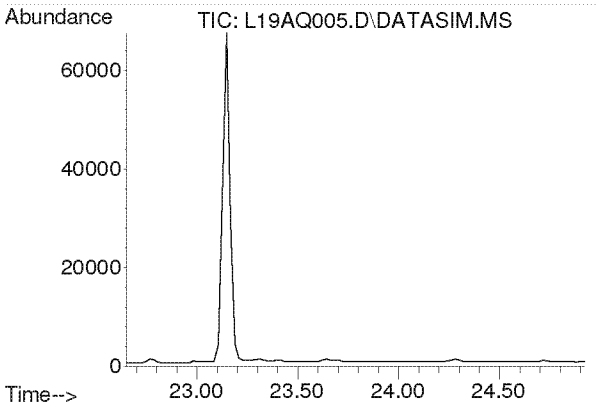
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



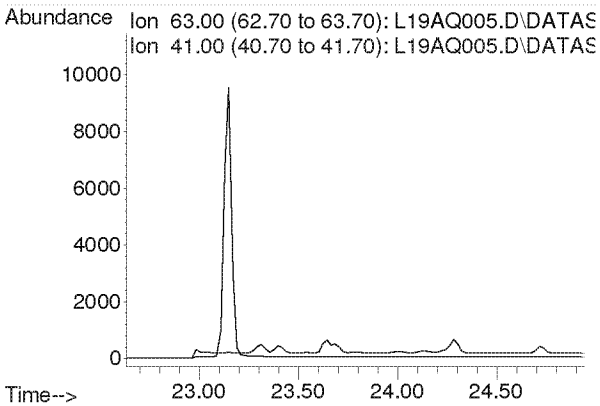


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

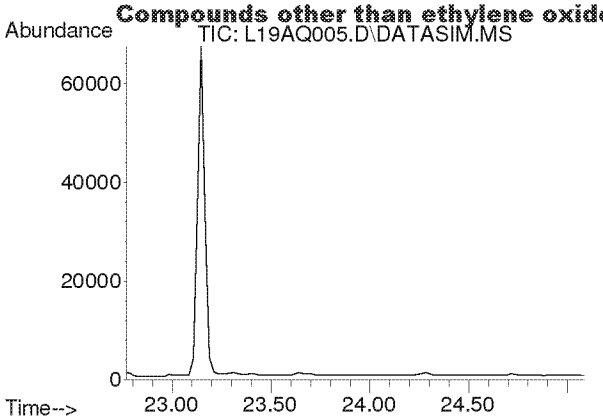
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

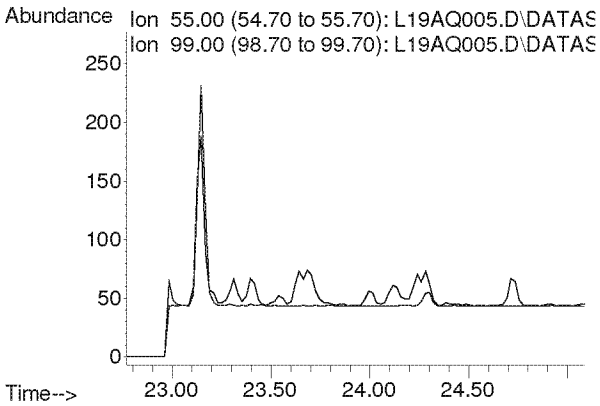


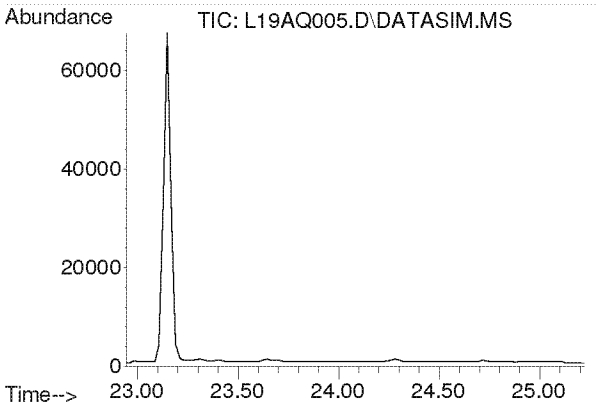
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



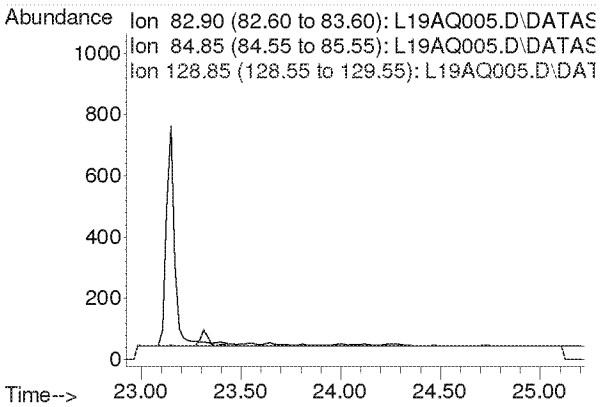


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

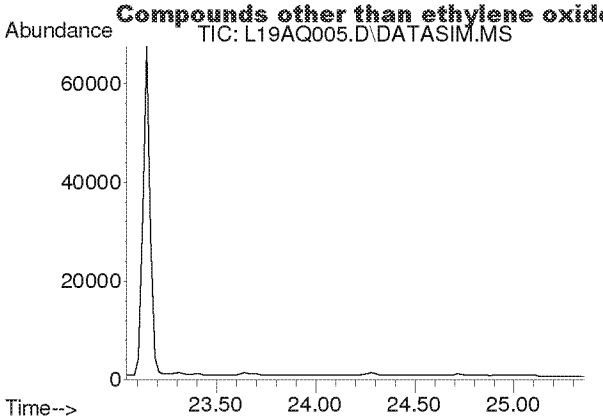
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

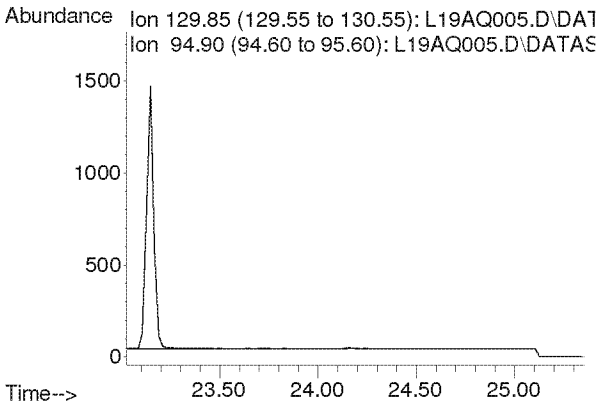


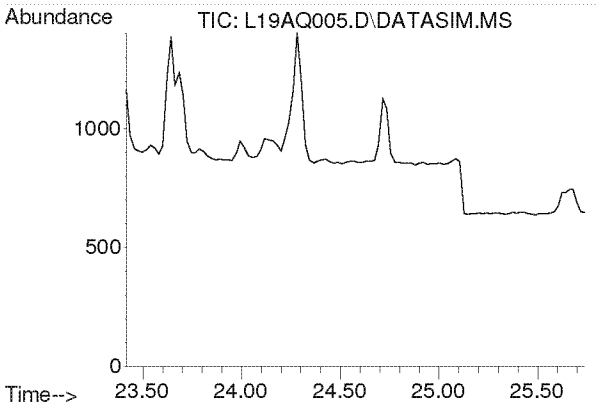
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



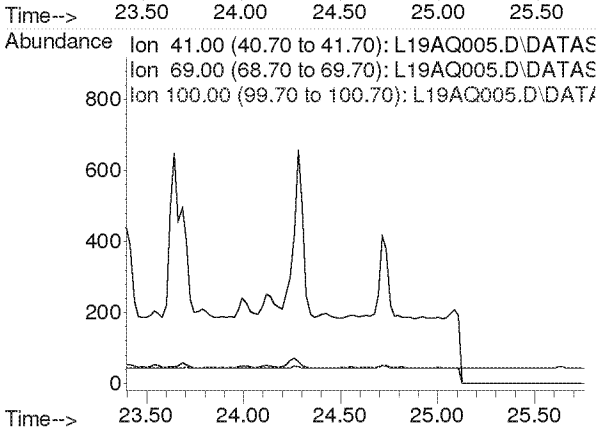


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

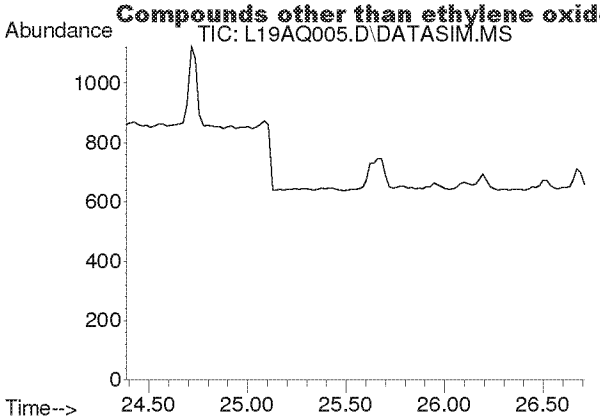
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

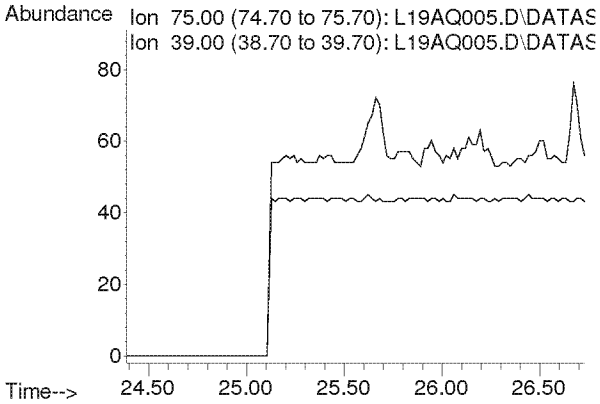


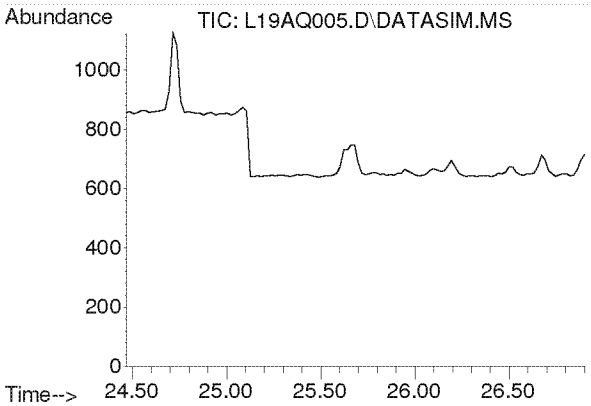
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



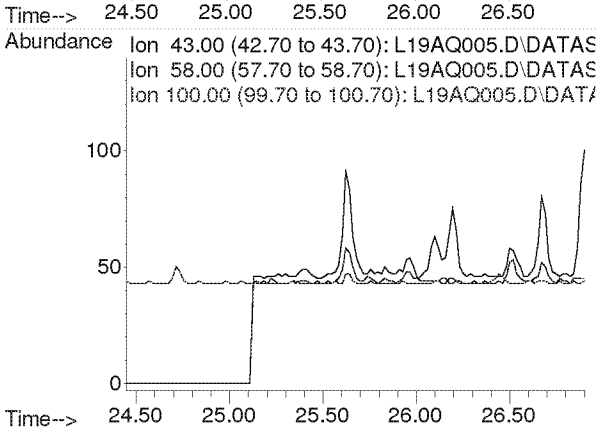


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

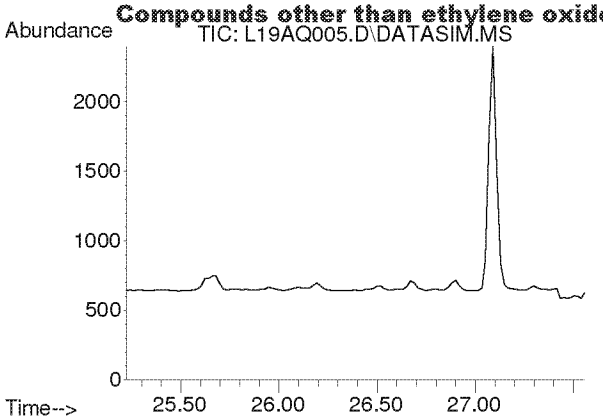
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

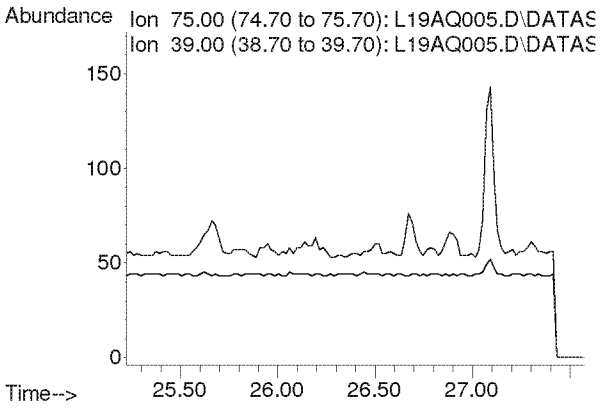


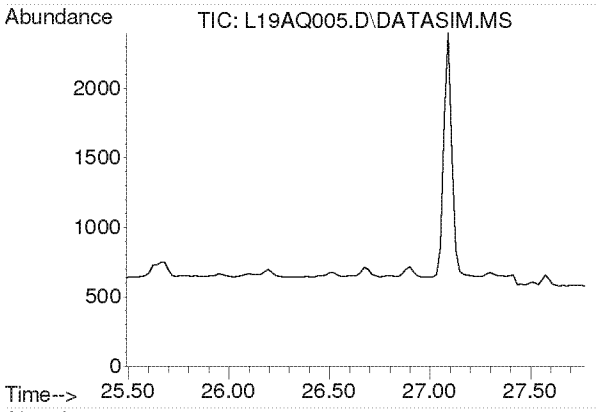
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



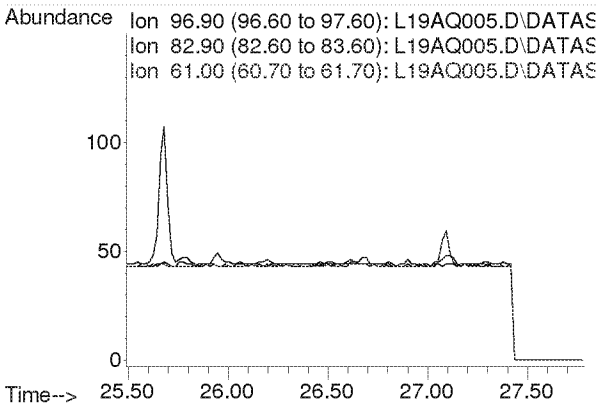


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

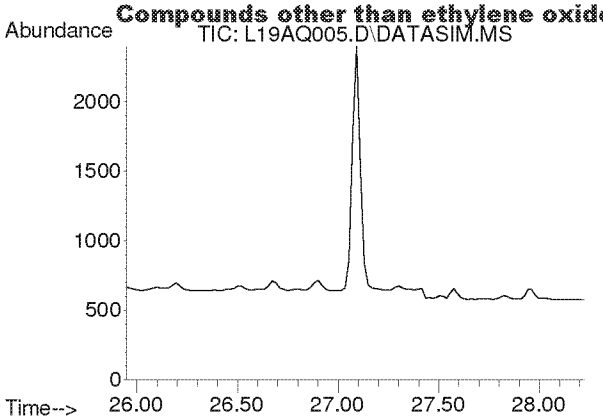
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

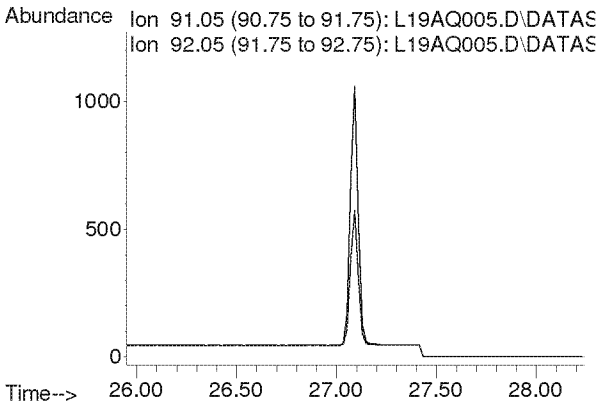


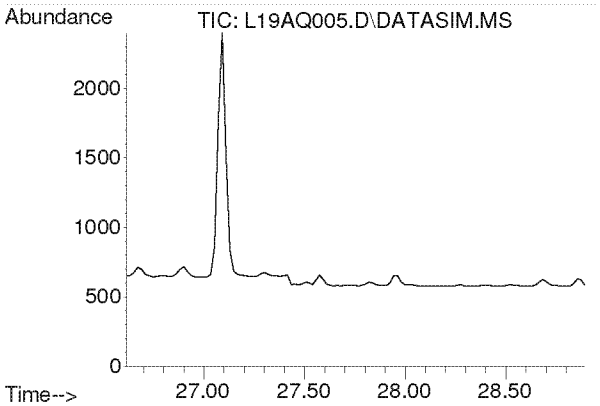
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



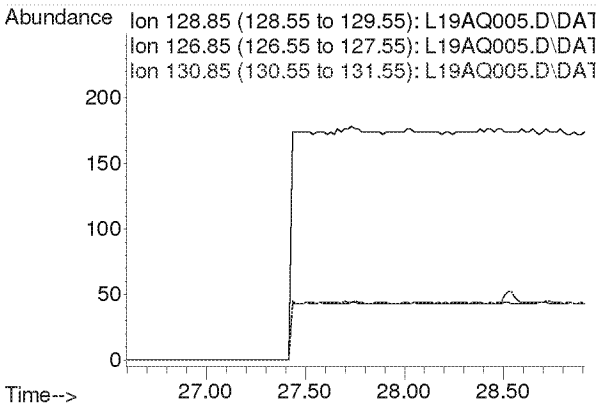


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

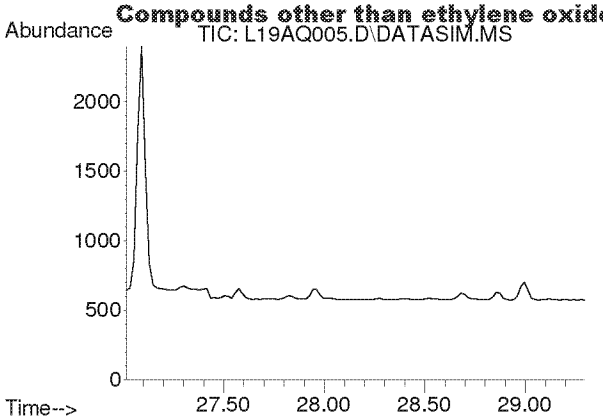
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

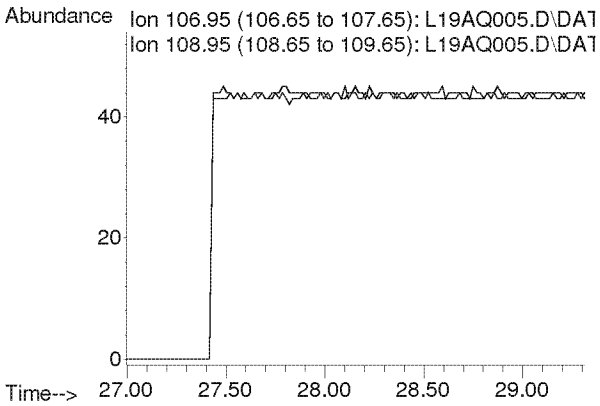


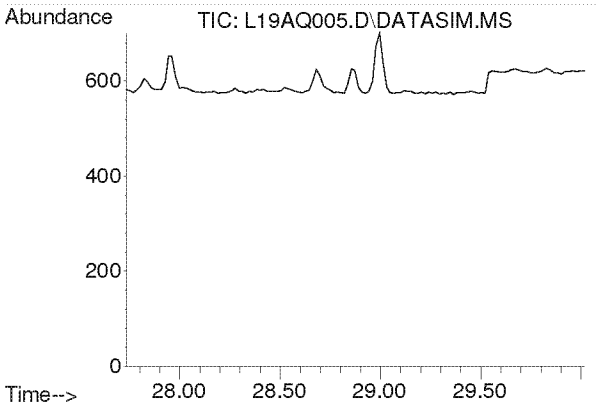
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



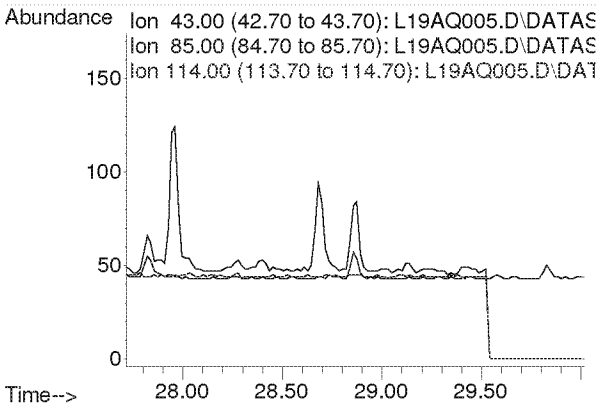


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

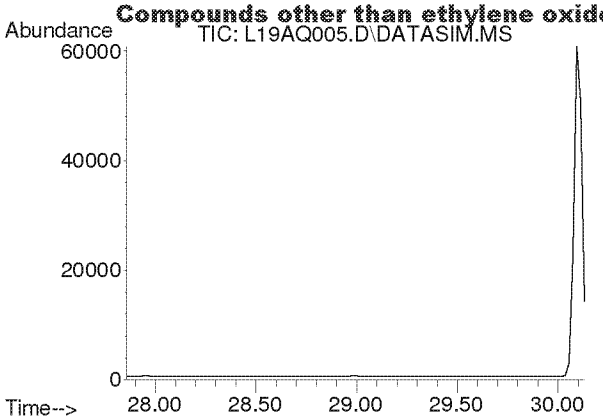
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

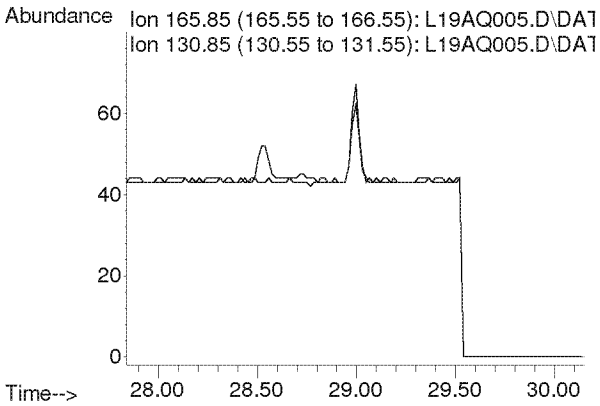


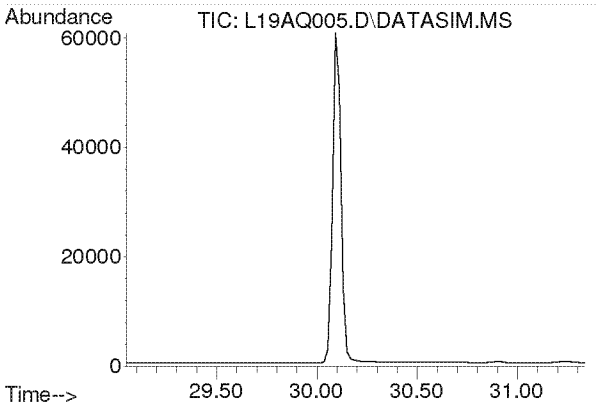
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



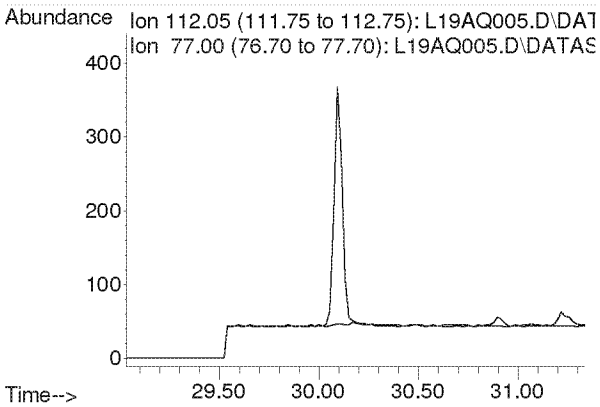


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

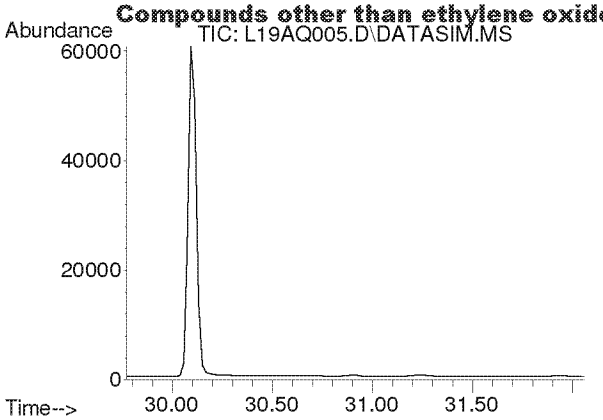
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

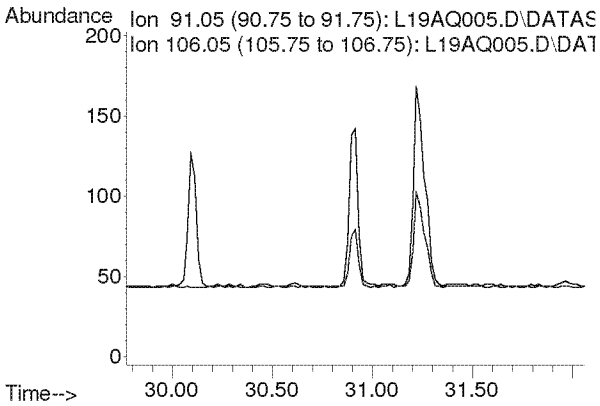


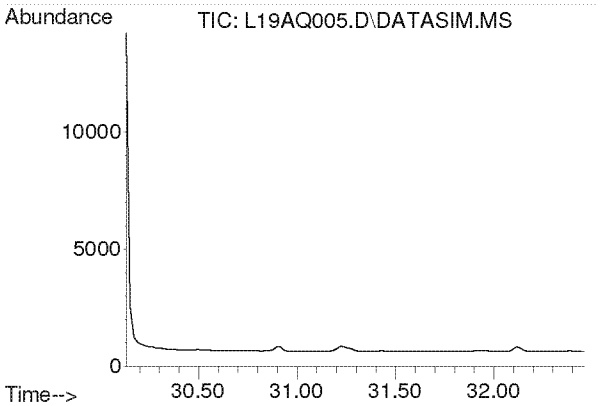
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



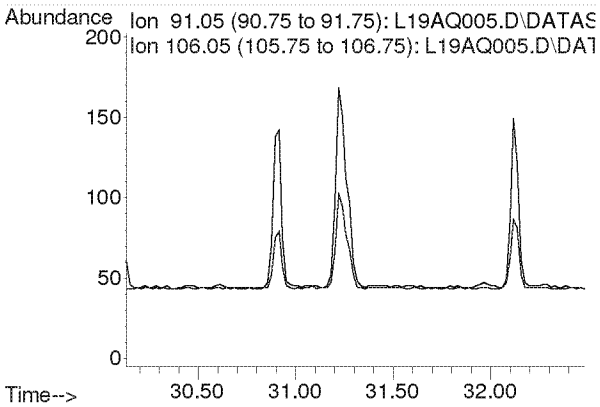


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

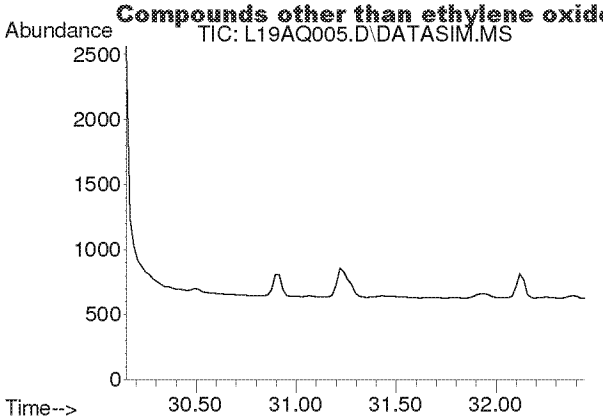
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

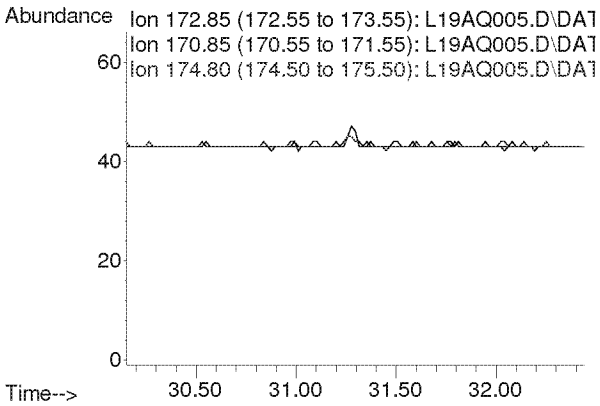


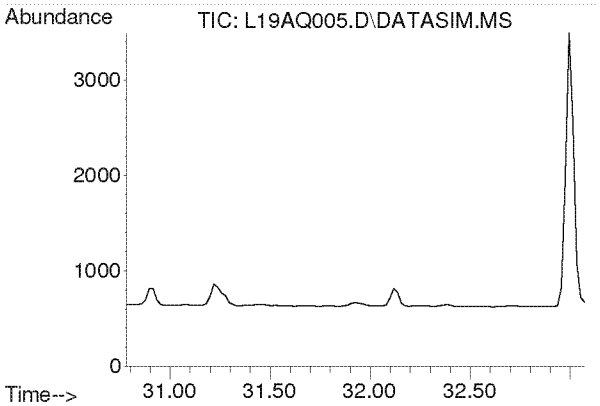
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



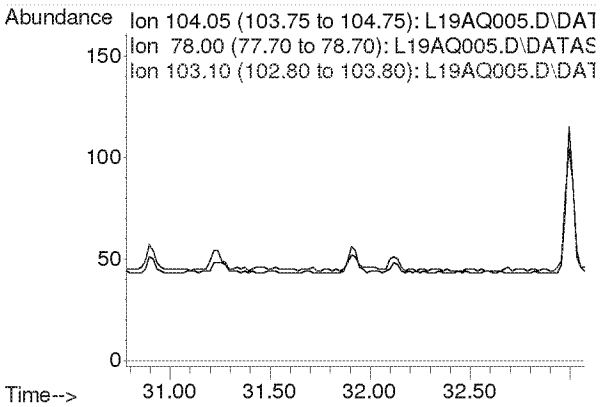


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

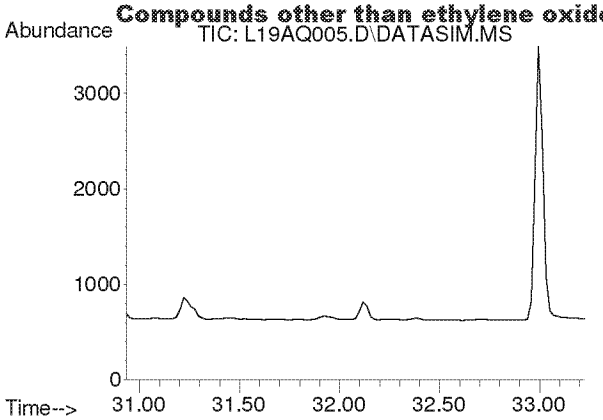
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

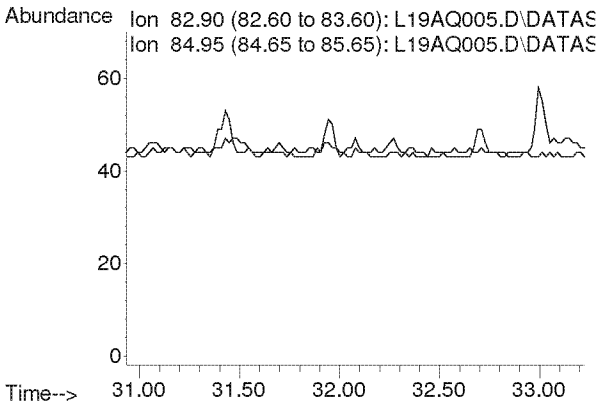


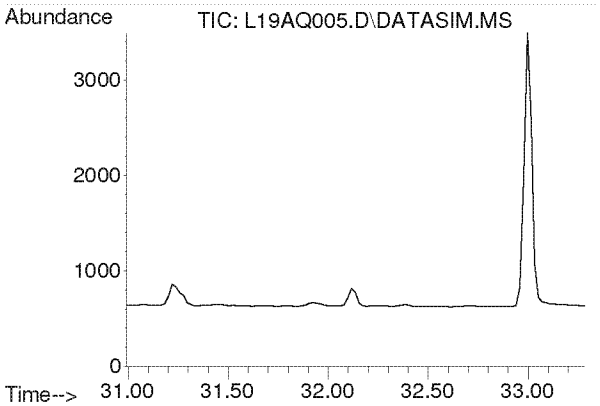
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



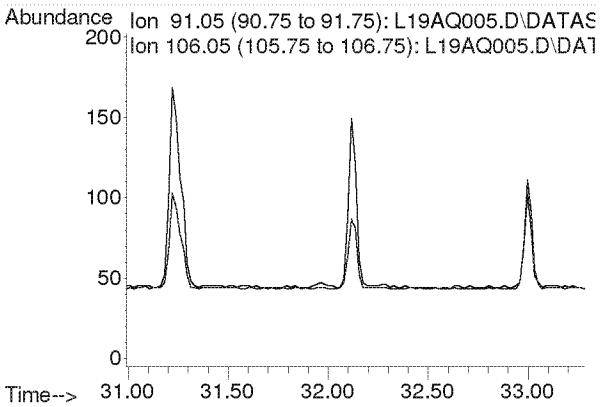


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

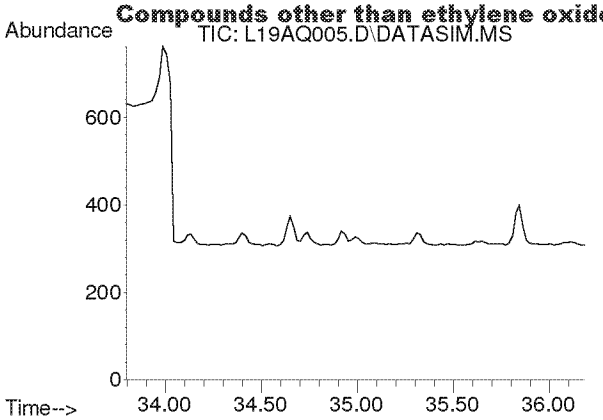
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

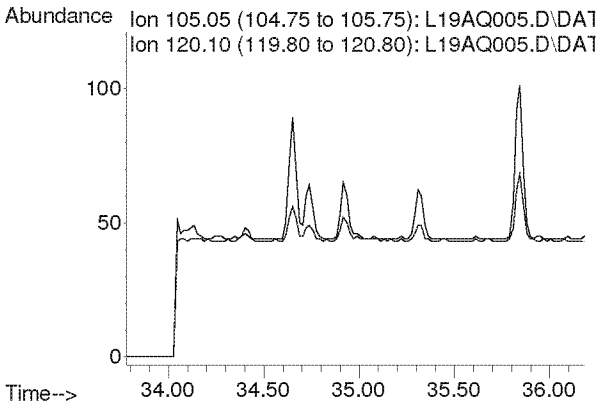


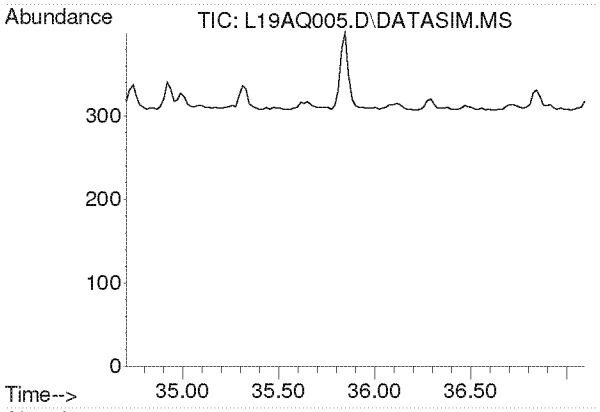
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



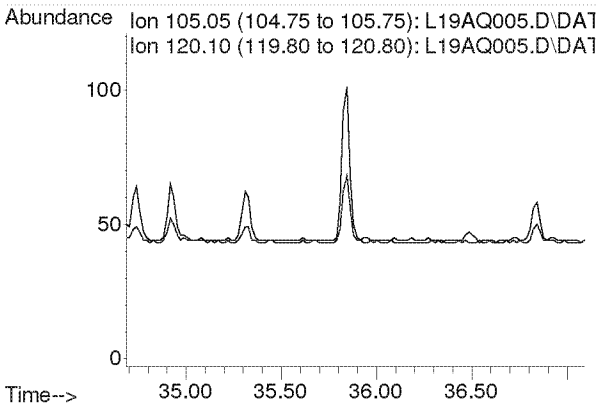


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

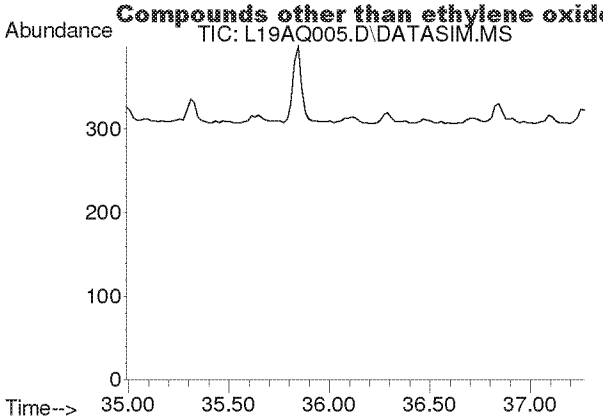
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

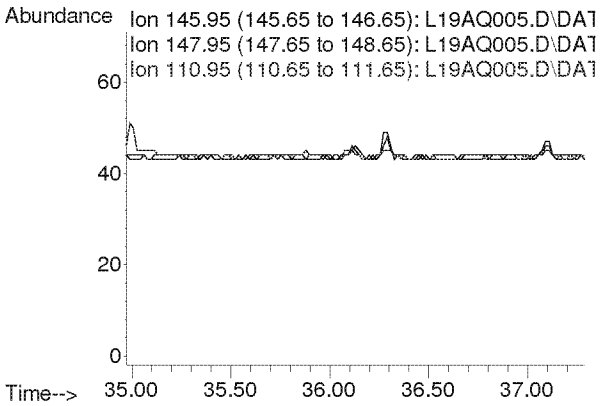


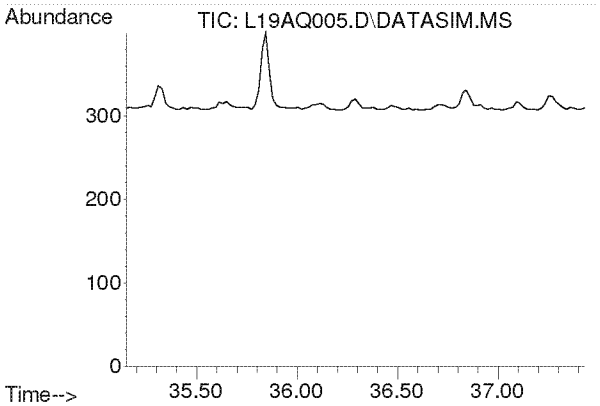
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



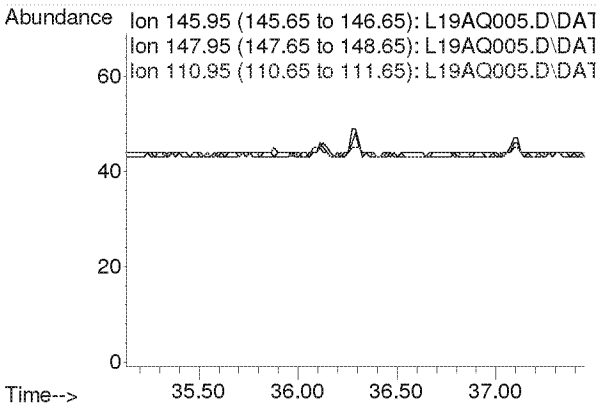


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

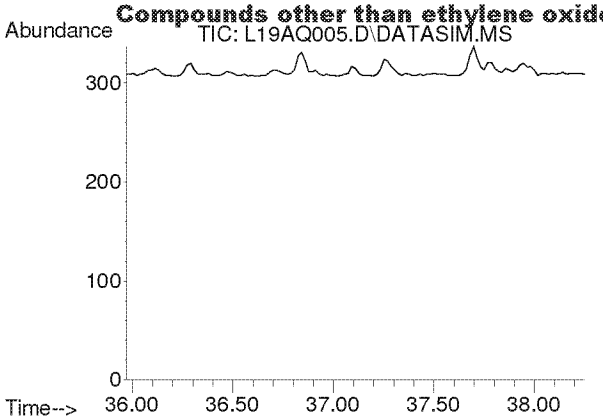
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

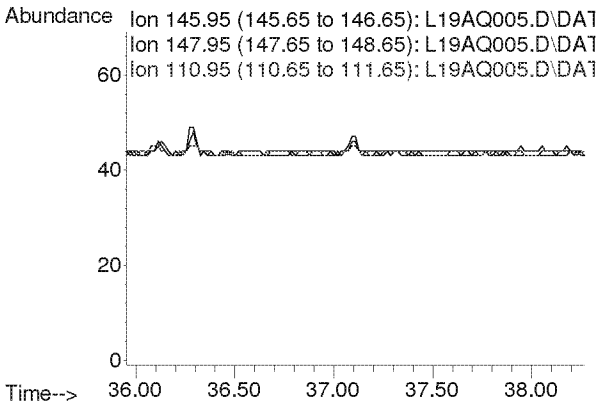


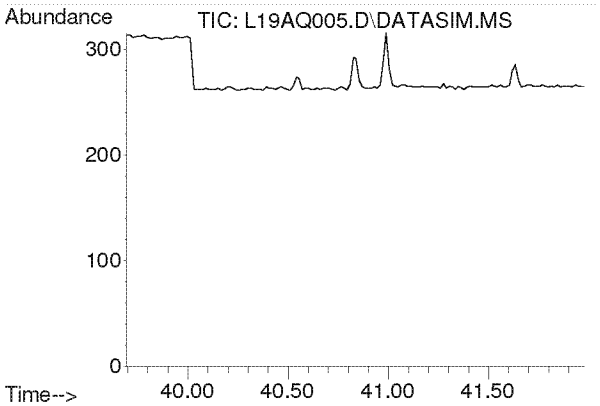
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



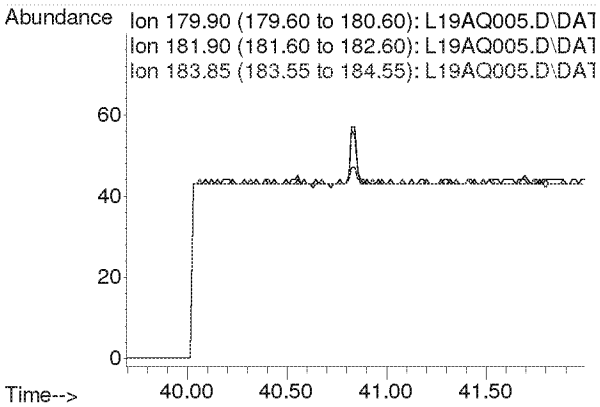


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

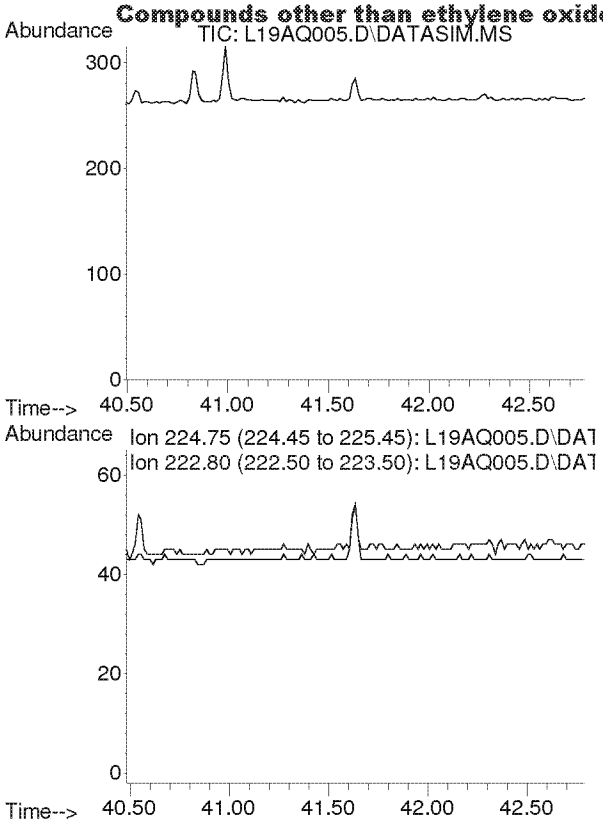
Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ005.D
Acq: 17 Jan 2019 3:27 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ006.D
Acq On : 17 Jan 2019 4:27 pm
Operator : MAH
Sample : 9010808-07
Misc : WILLOWBROOK VILLAGE HALL C2 1/7/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 23 07:46:07 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

A-MR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	54202	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	137374	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	106628	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.380	29	10254	3.6627 ppbv #	1
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D. d	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ006.D
Acq On : 17 Jan 2019 4:27 pm
Operator : MAH
Sample : 9010808-07
Misc : WILLOWBROOK VILLAGE HALL C2 1/7/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 23 07:46:07 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

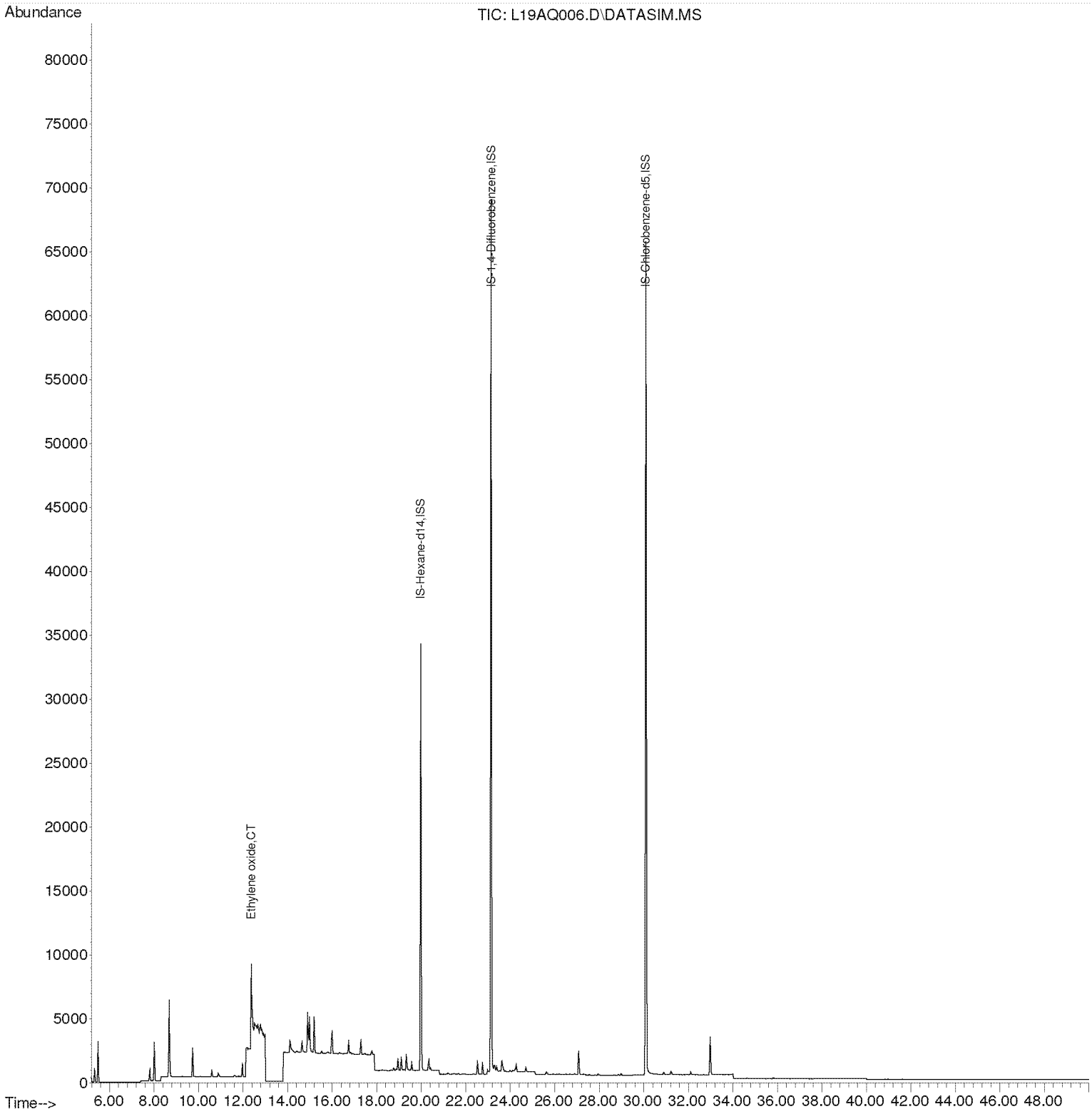
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00116

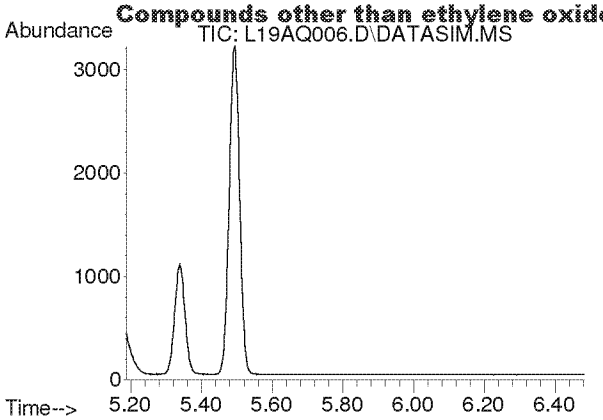
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ006.D
Acq On : 17 Jan 2019 4:27 pm
Operator : MAH
Sample : 9010808-07
Misc : WILLOWBROOK VILLAGE HALL C2 1/7/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 23 07:34:09 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



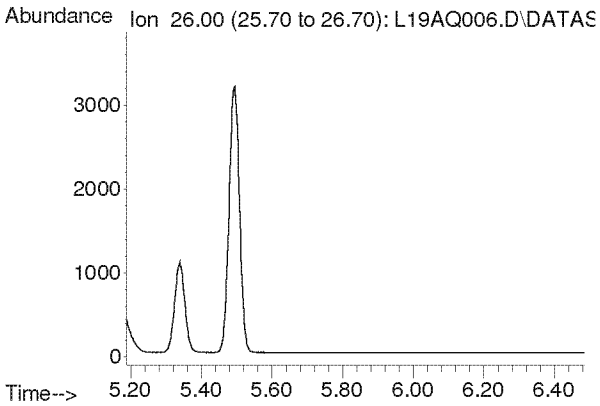
Compounds other than ethylene oxide were not quantitated.

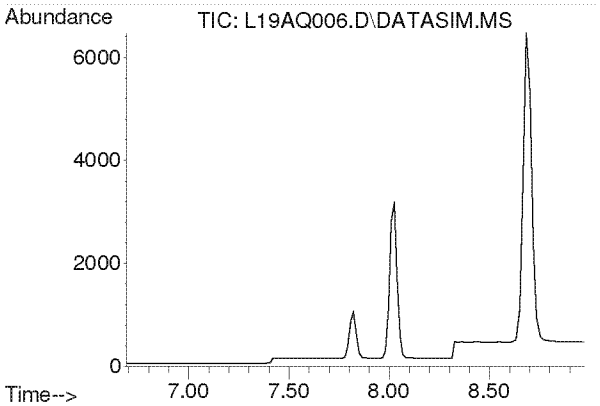


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 26



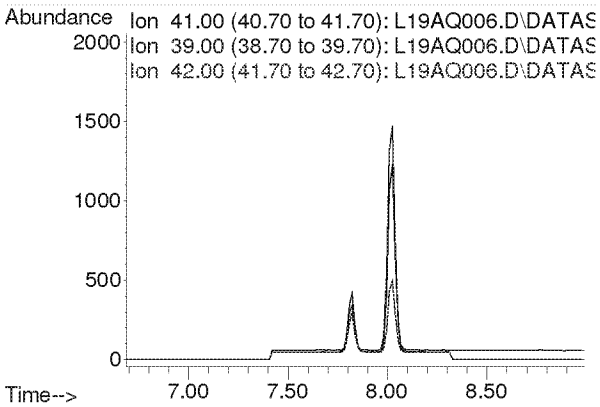


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

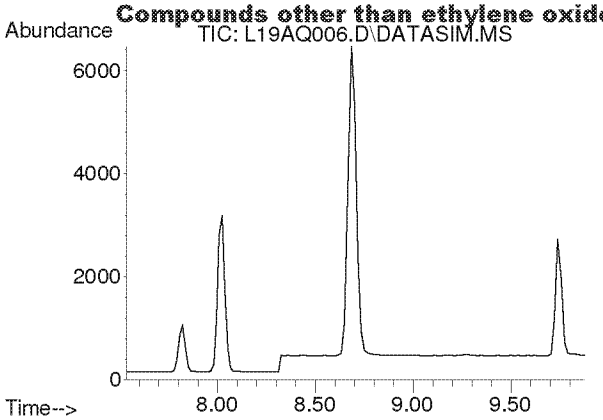
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

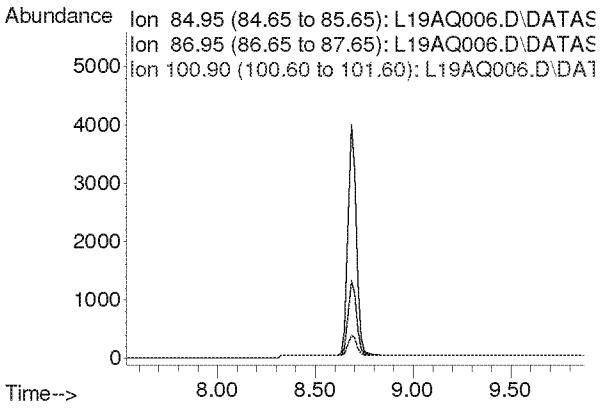


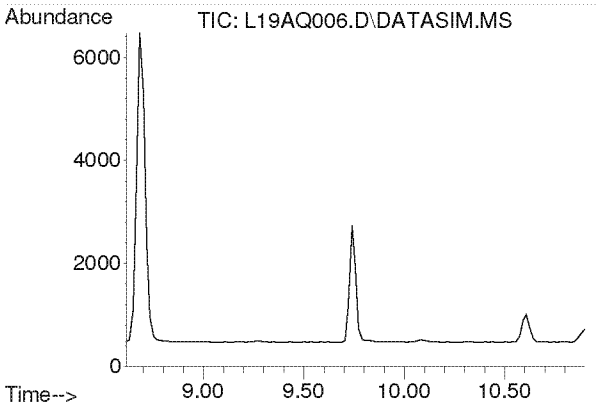
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



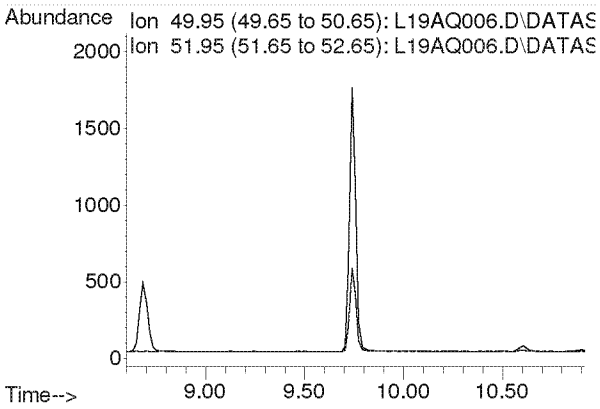


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

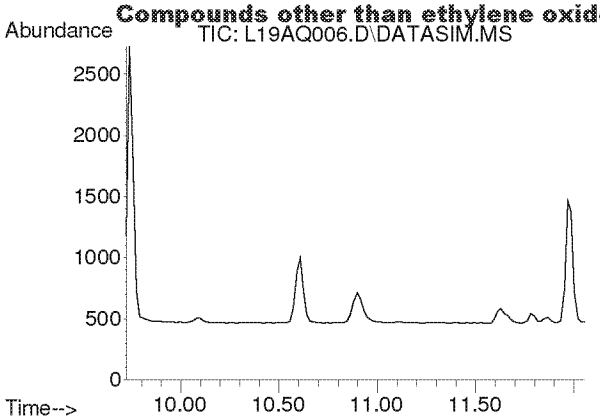
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

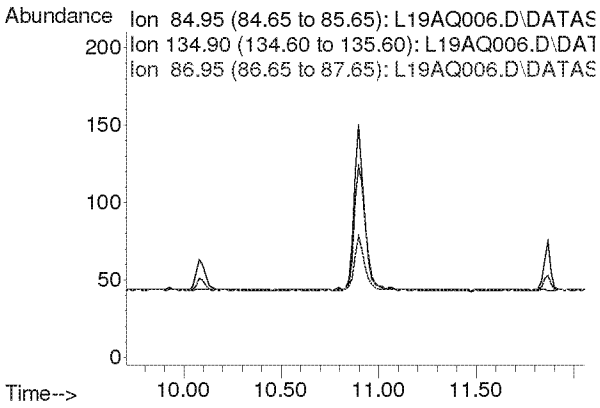


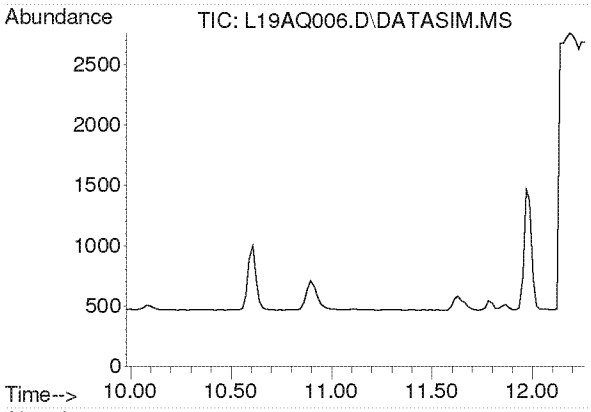
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



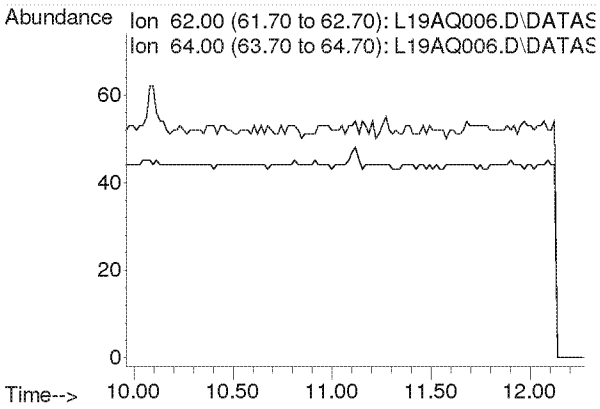


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

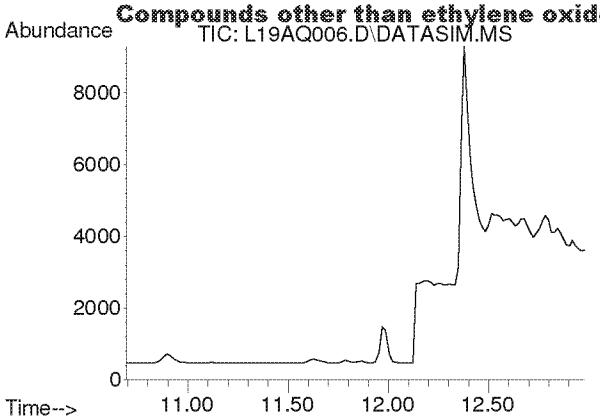
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

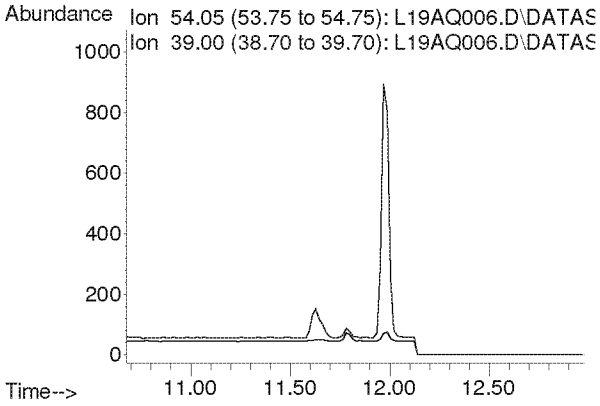


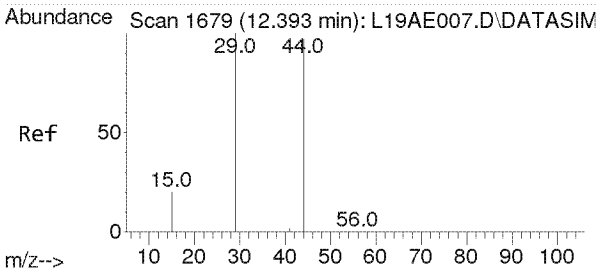
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

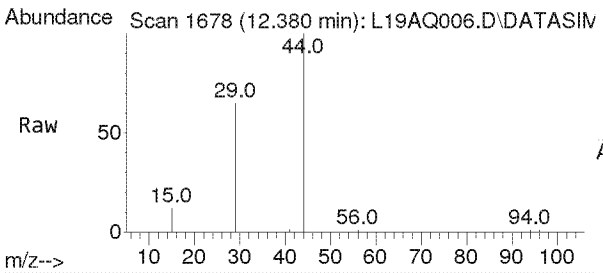


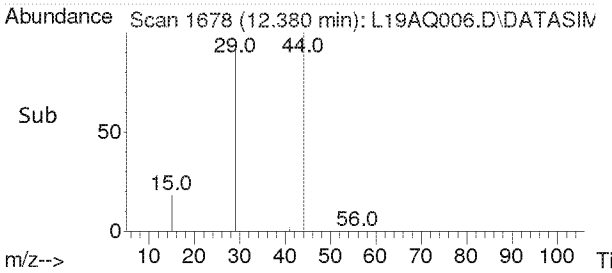


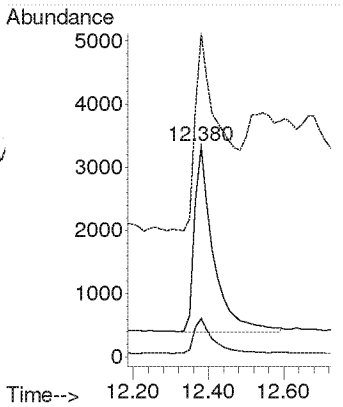
#9
Ethylene oxide
Concen: 3.663 ppbv
RT: 12.380 min Scan# 1678
Delta R.T. -0.013 min
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 29 Resp: 10254

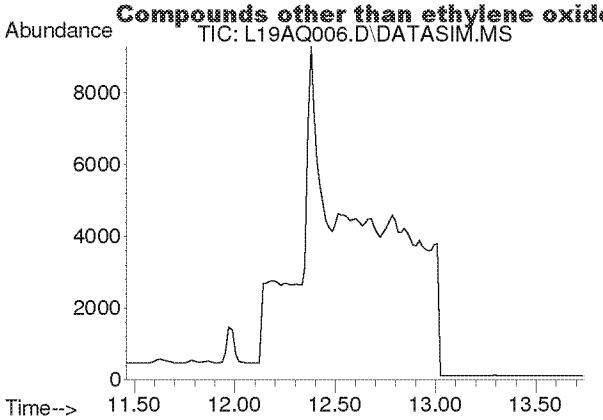
Ion	Ratio	Lower	Upper
29	100		
15	18.6	15.4	23.0
44	237.4	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

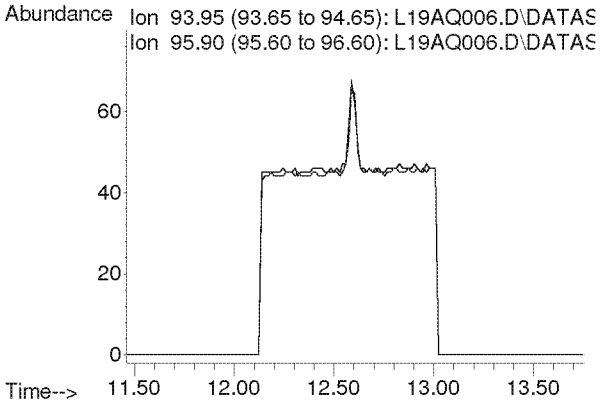


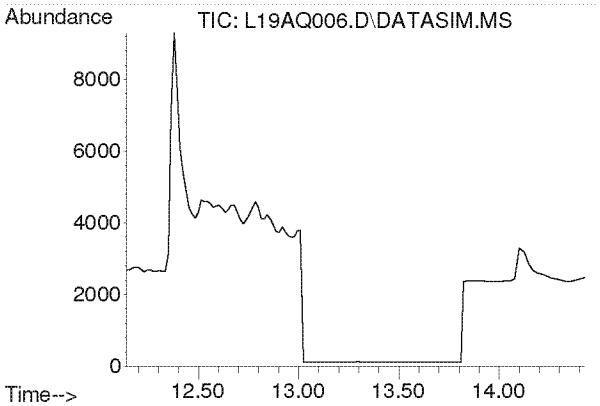
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



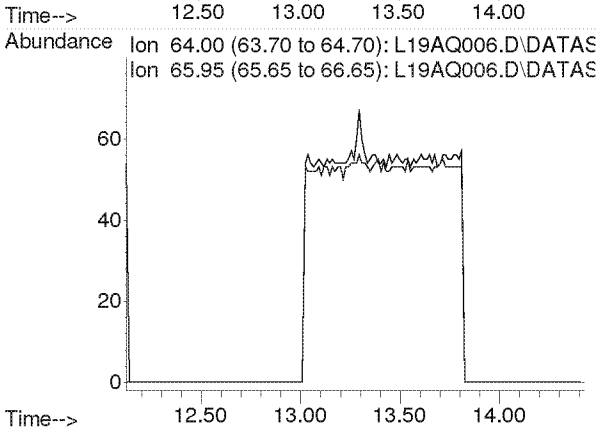


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

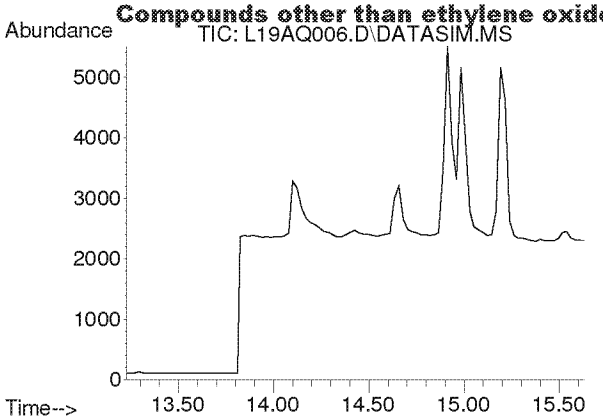
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

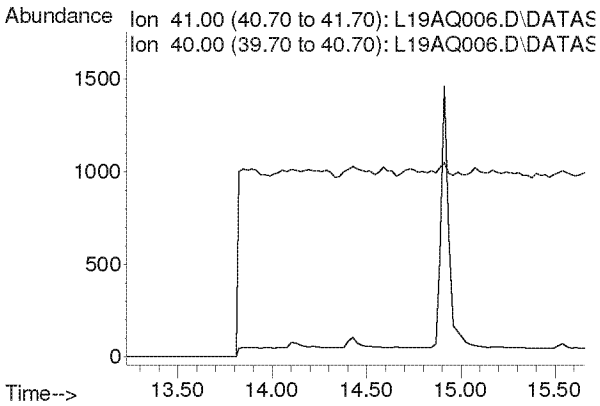


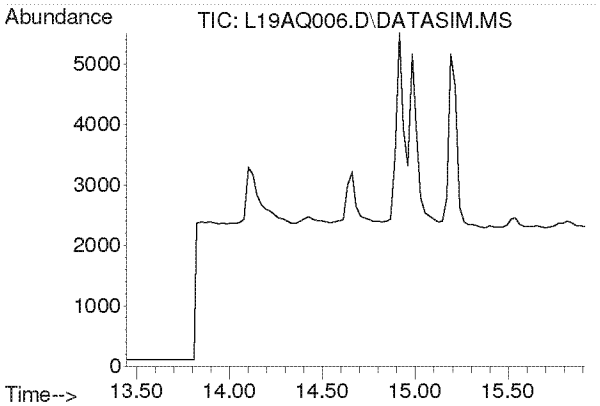
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



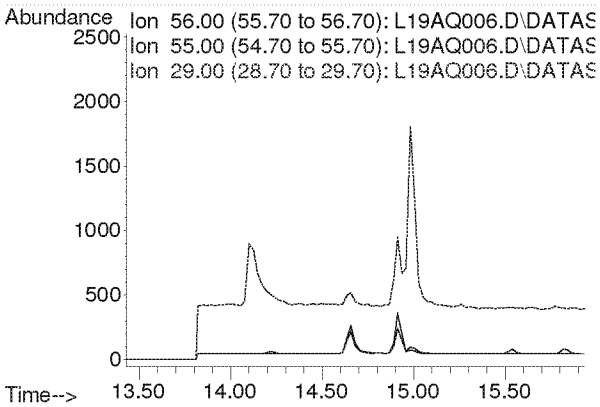


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

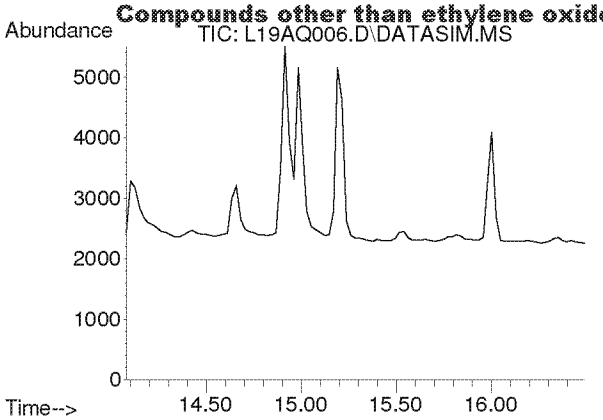
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

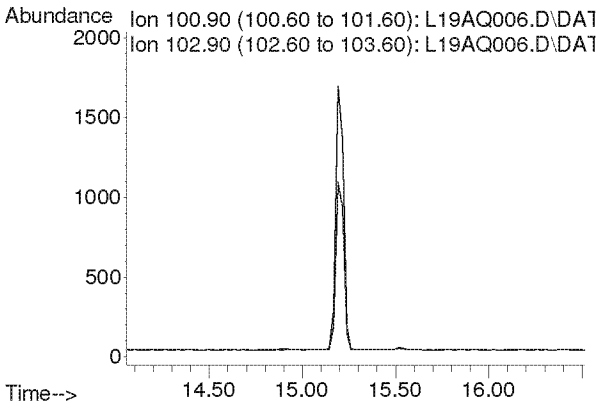


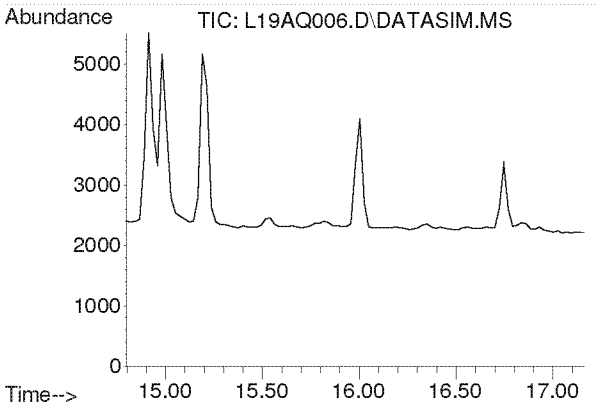
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



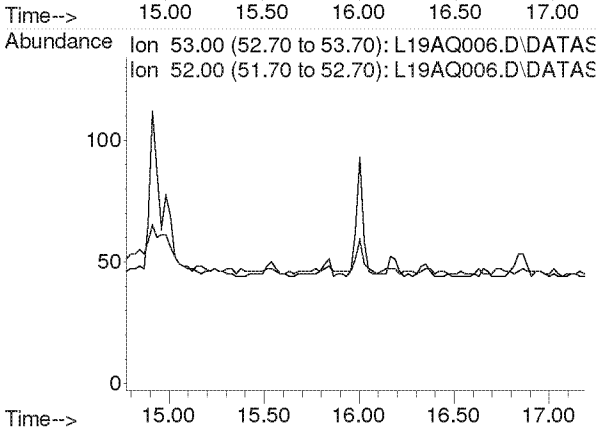


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

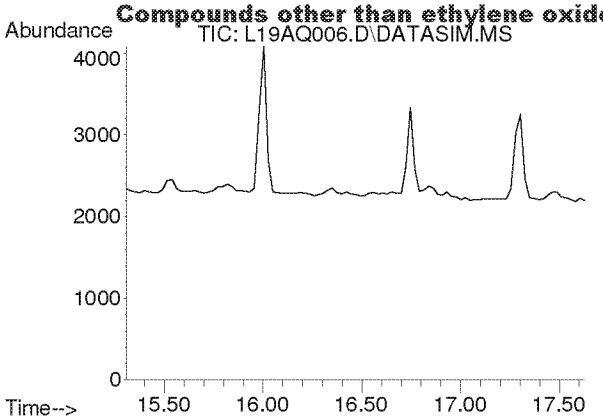
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

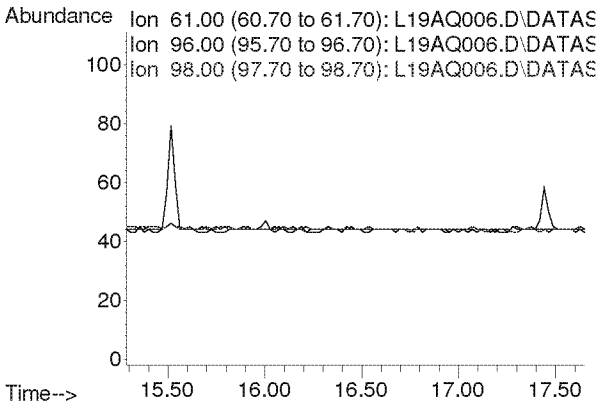


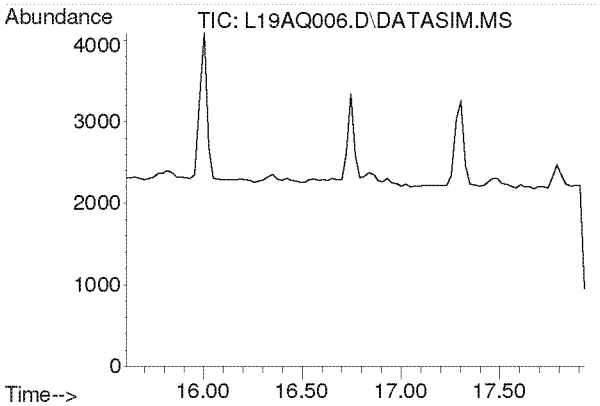
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



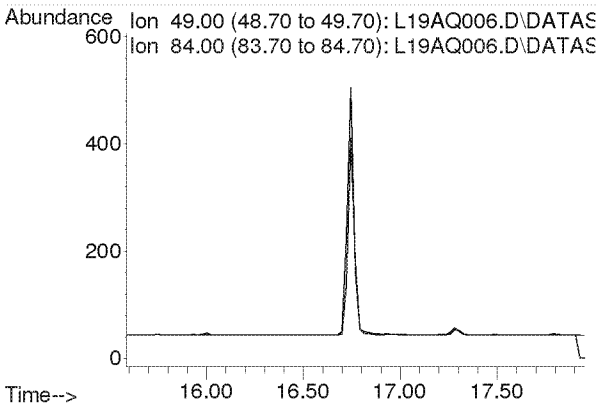


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

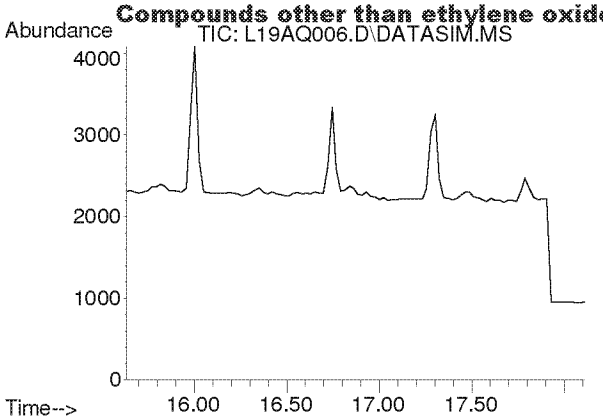
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

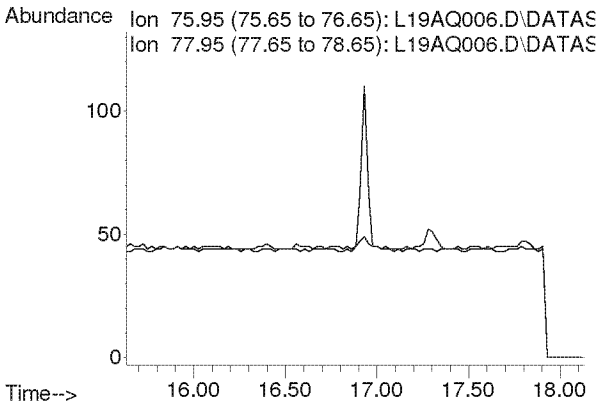


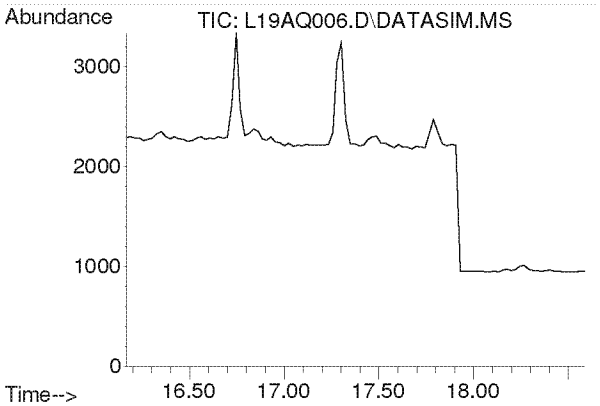
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



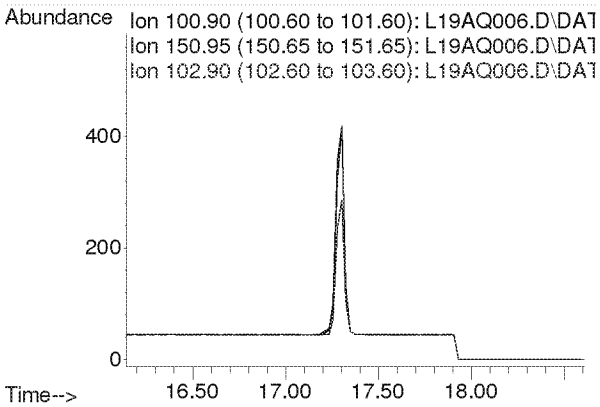


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

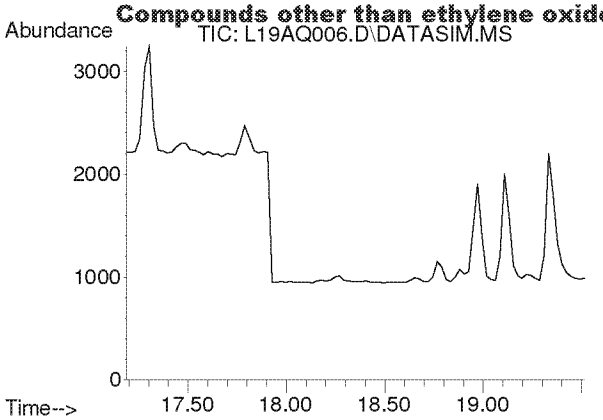
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

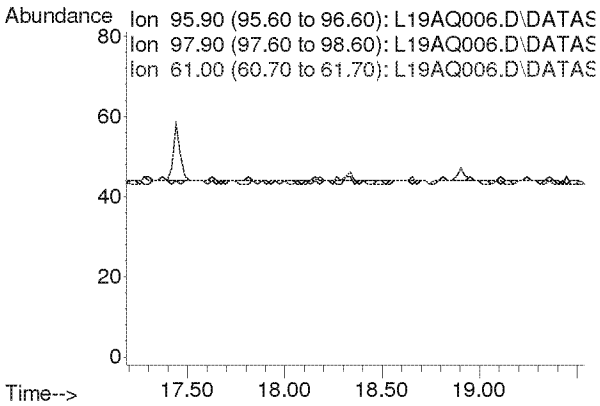


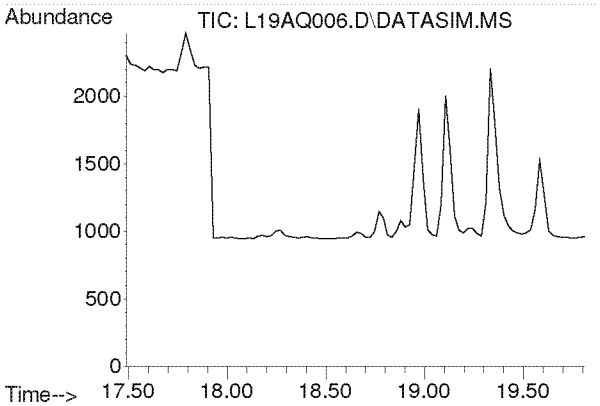
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



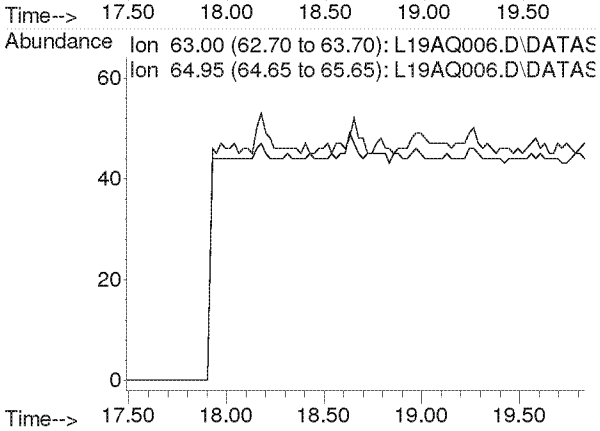


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

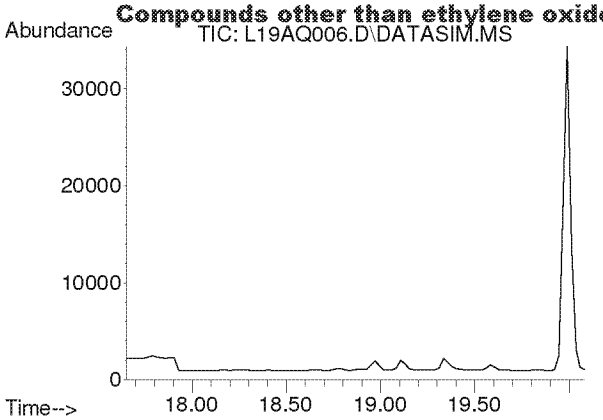
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

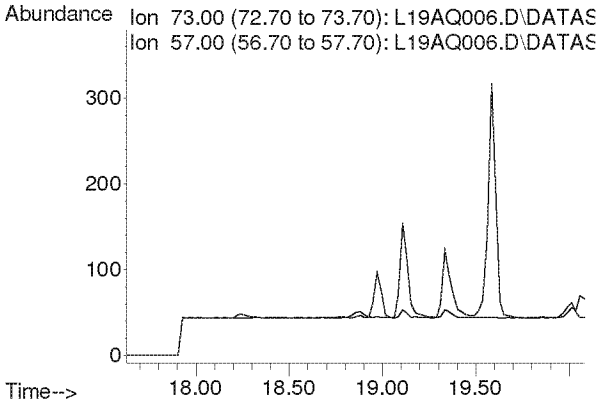


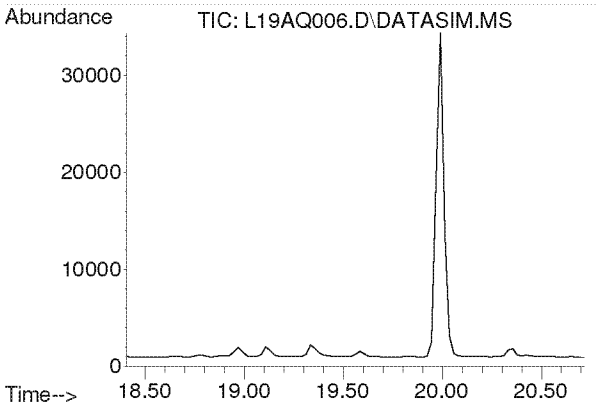
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



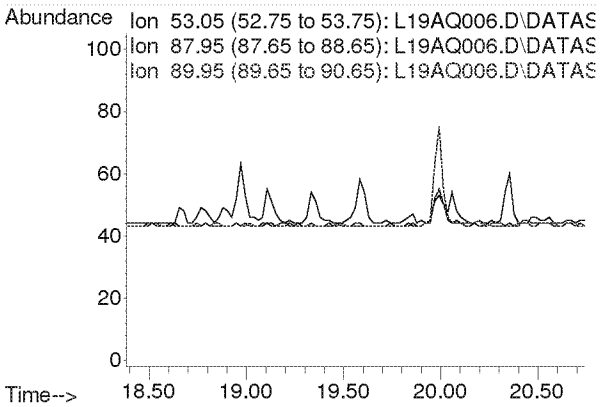


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

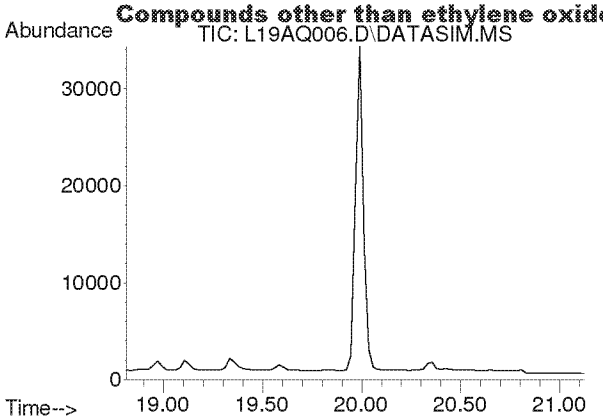
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

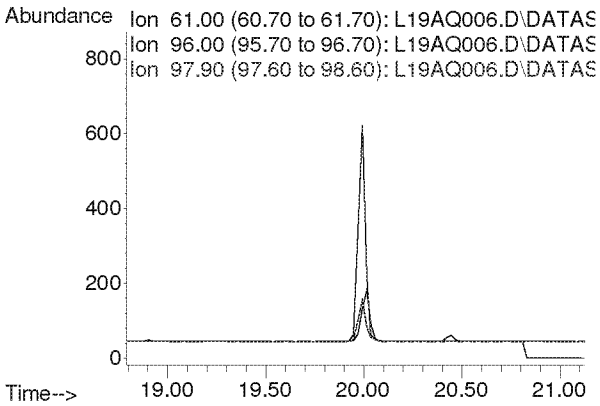


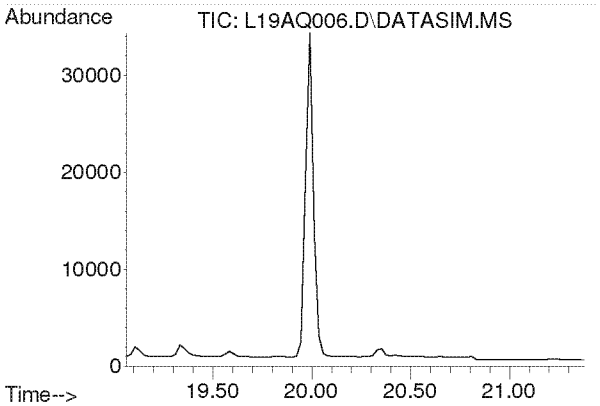
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



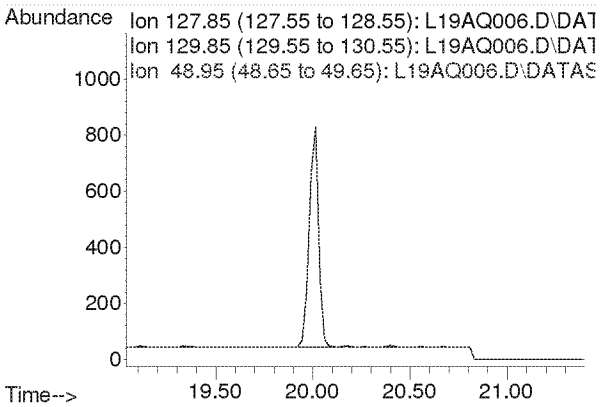


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

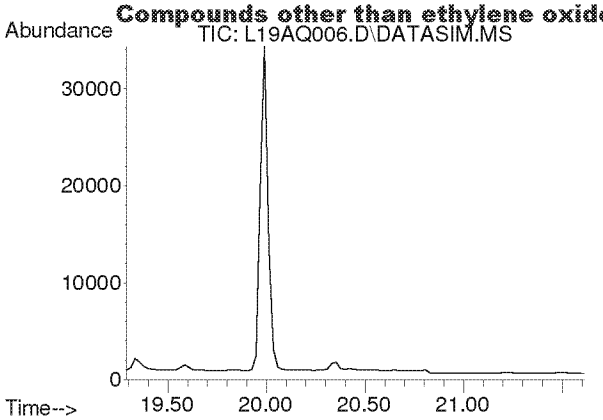
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

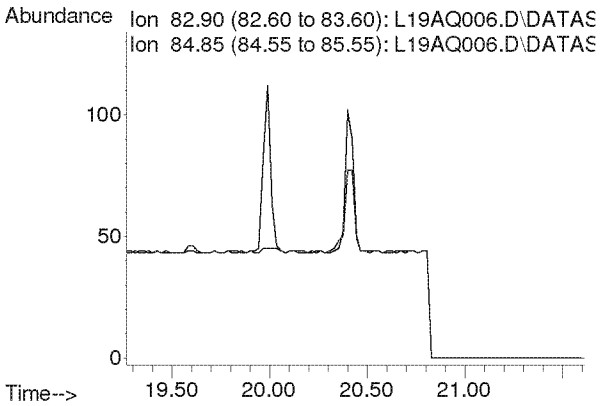


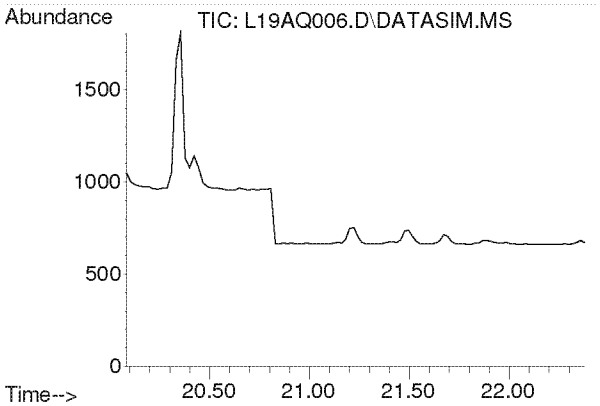
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



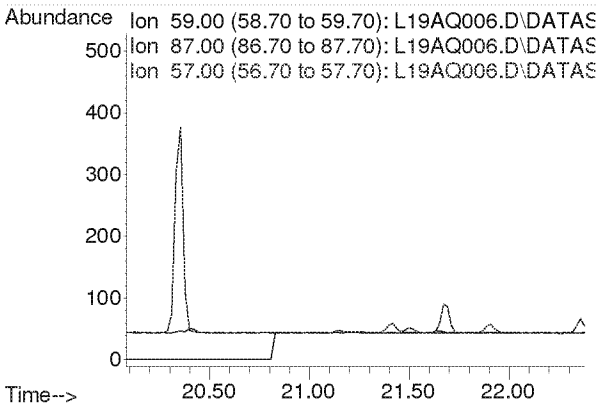


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

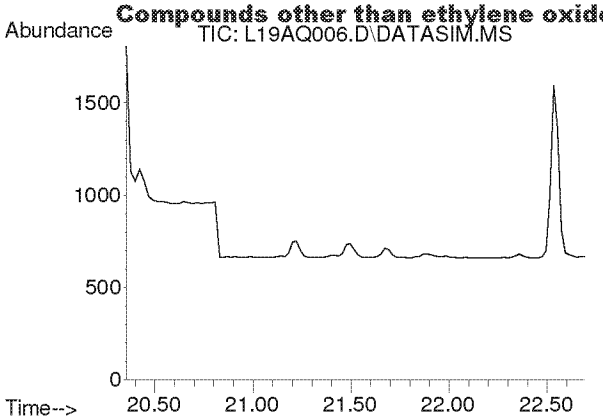
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

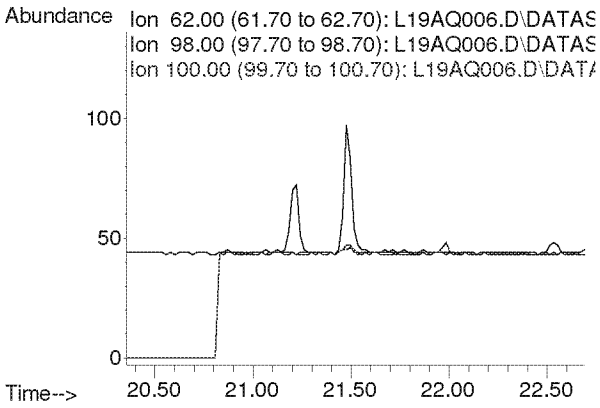


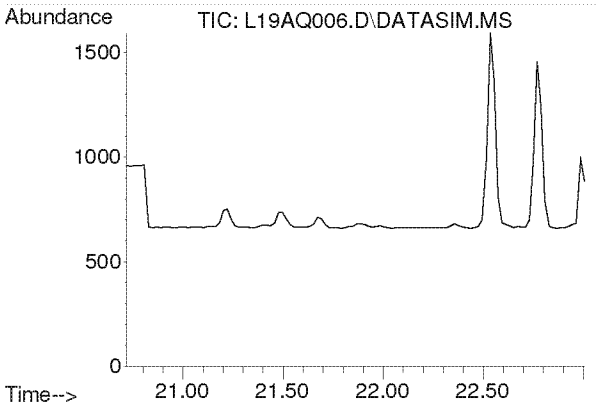
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



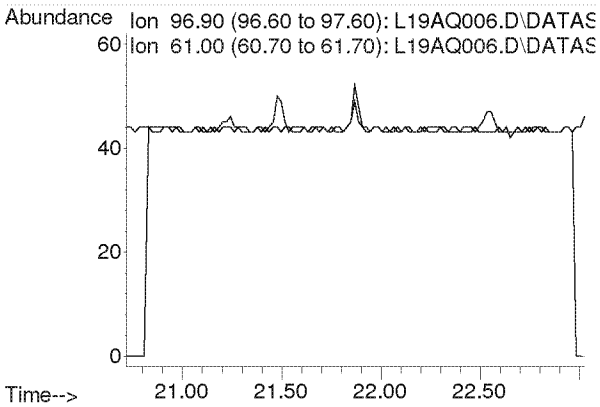


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

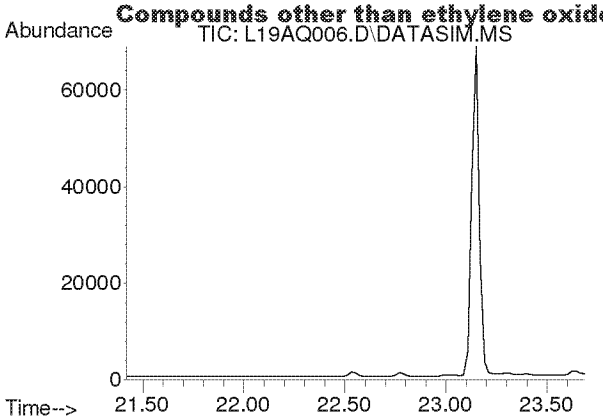
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

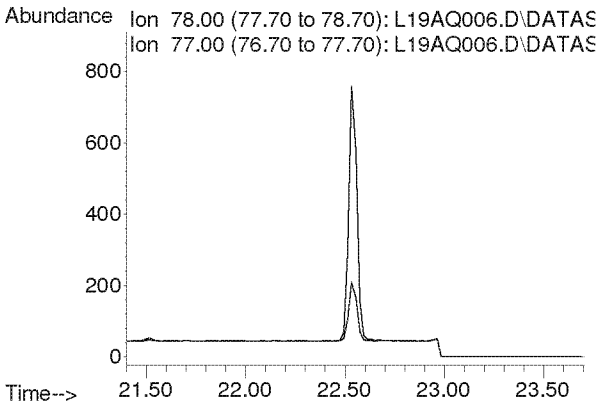


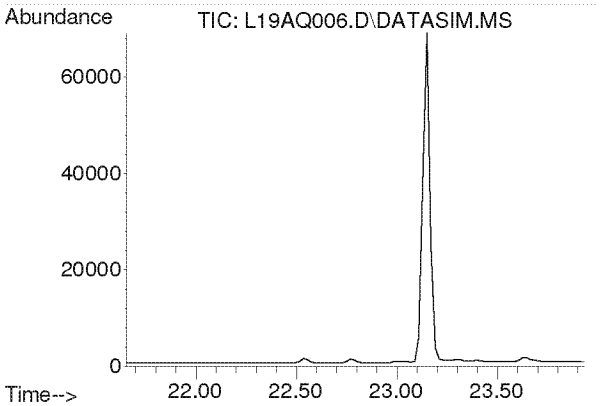
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



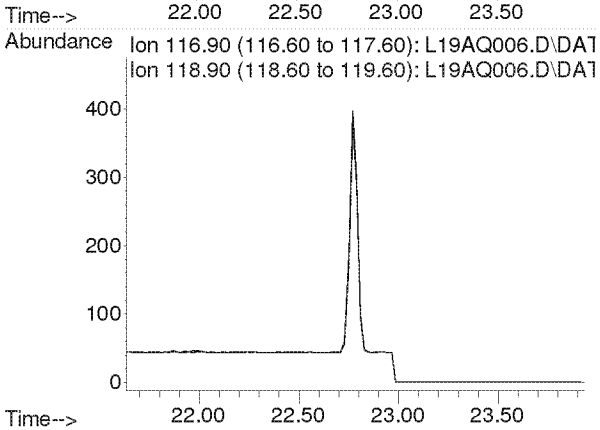


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

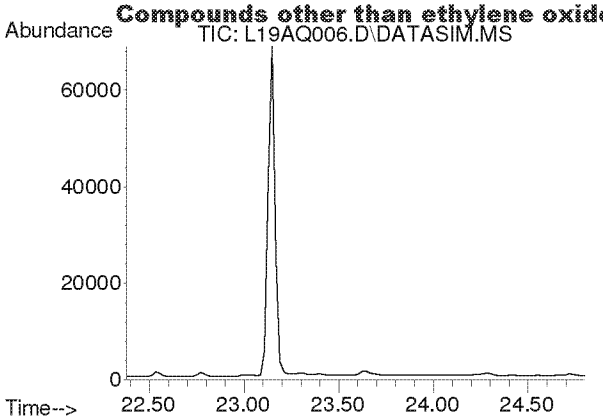
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

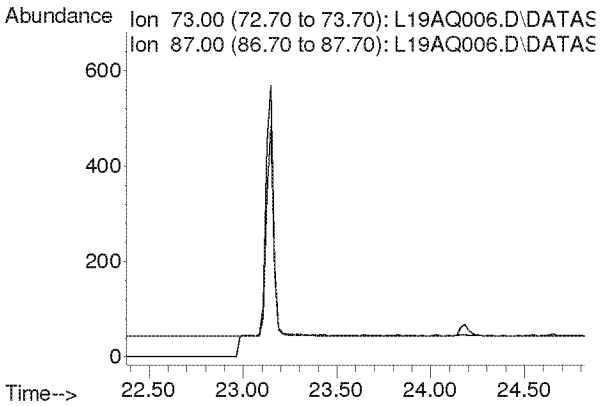


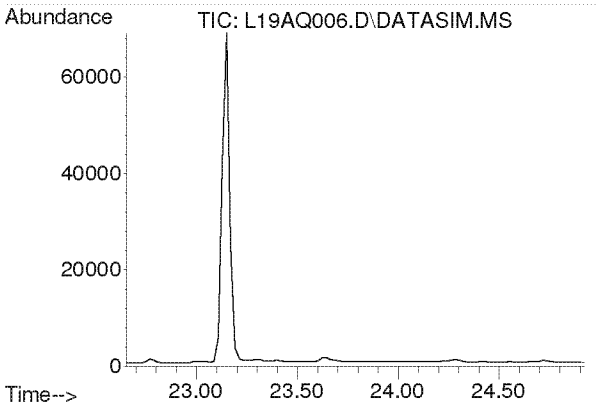
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



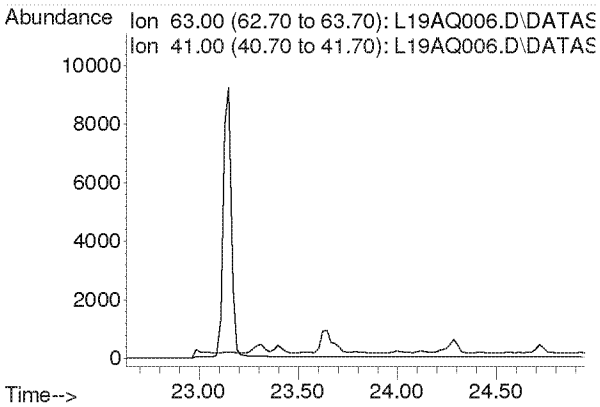


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

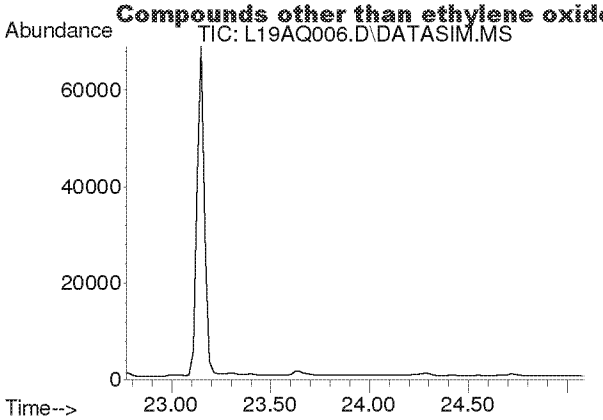
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

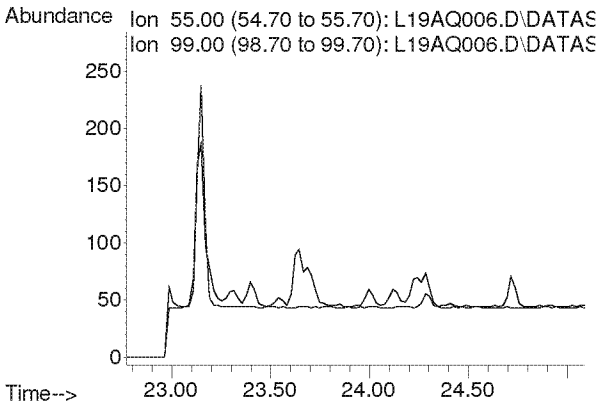


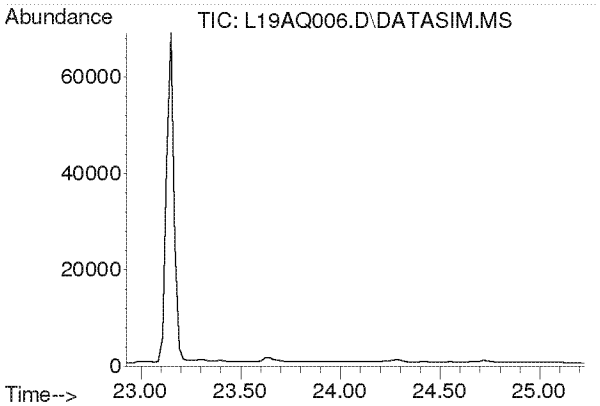
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



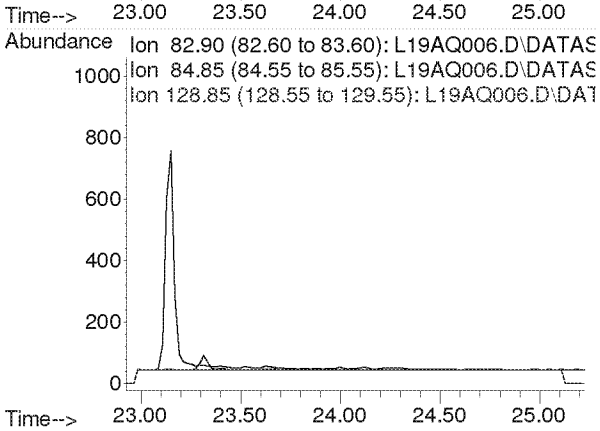


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

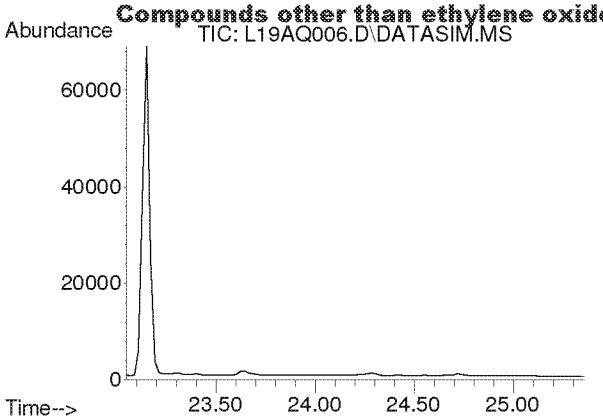
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

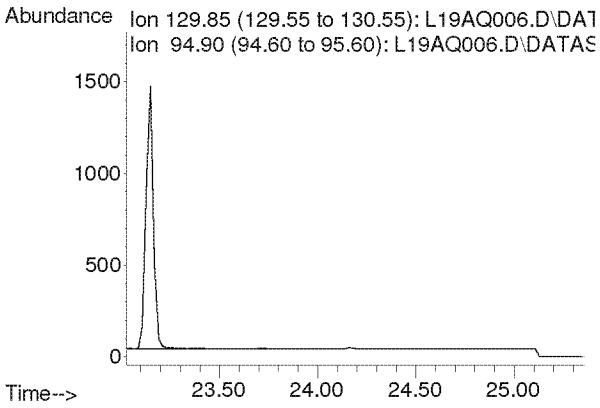


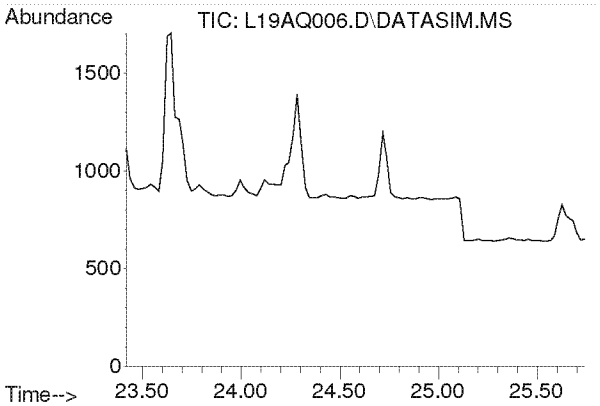
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



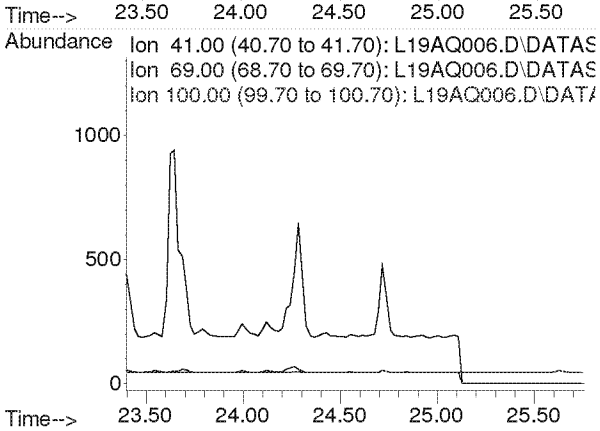


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

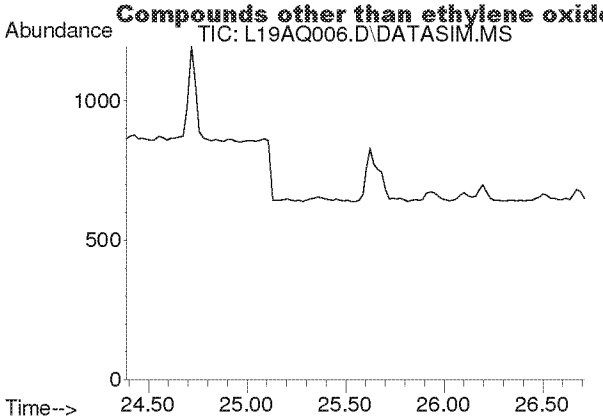
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

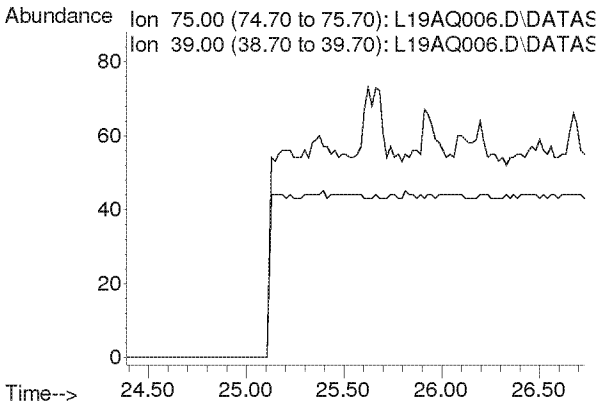


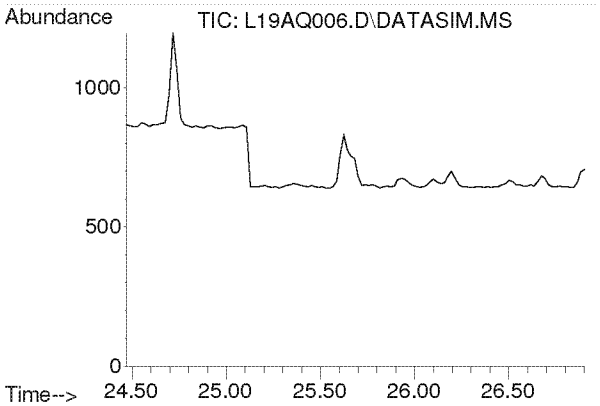
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



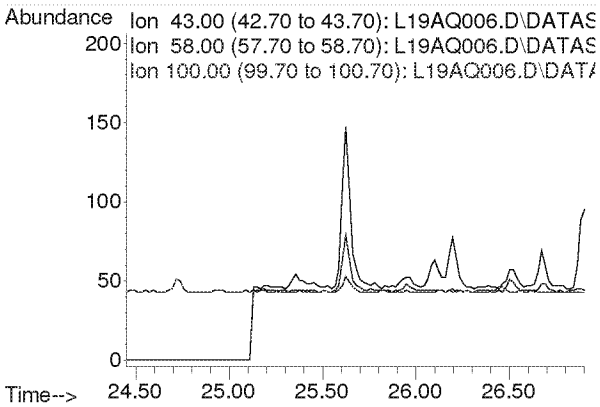


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

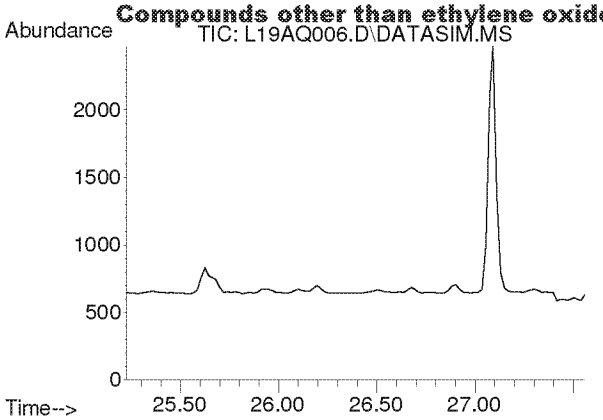
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

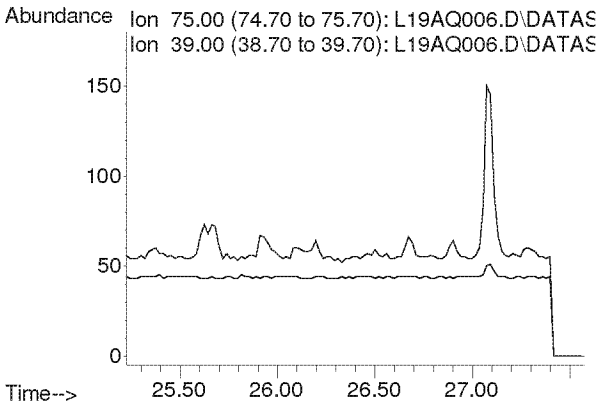


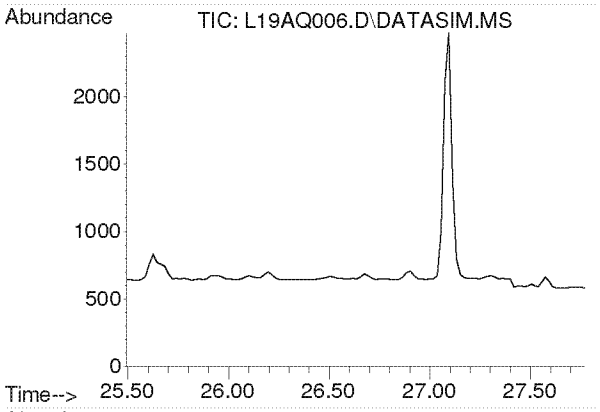
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



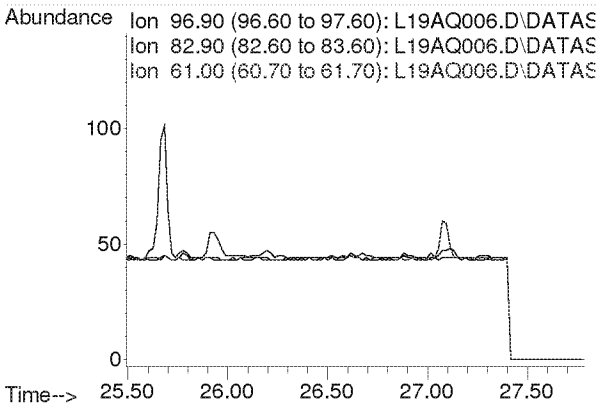


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

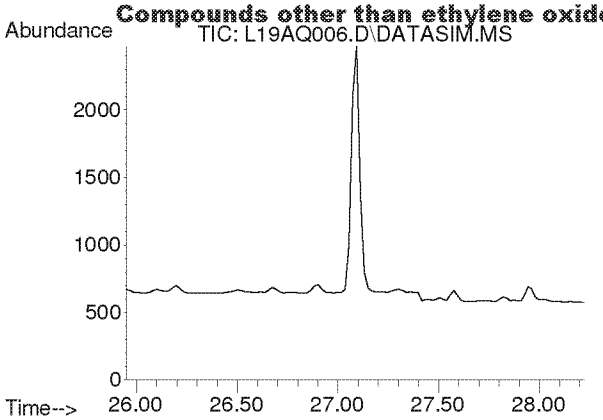
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

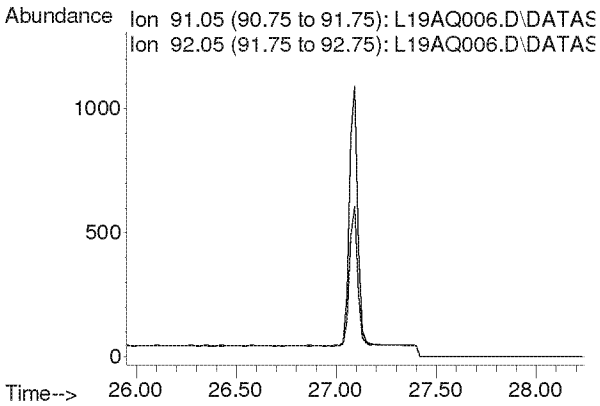


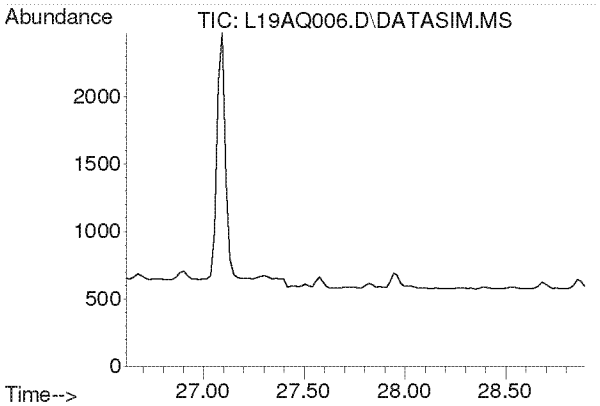
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



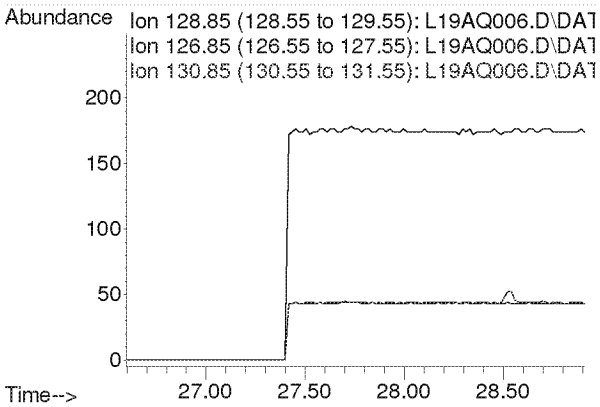


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

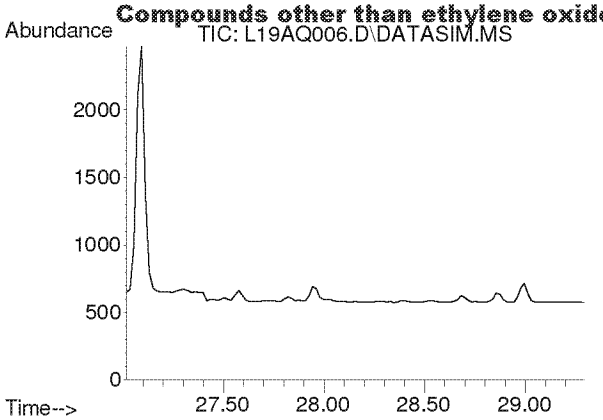
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

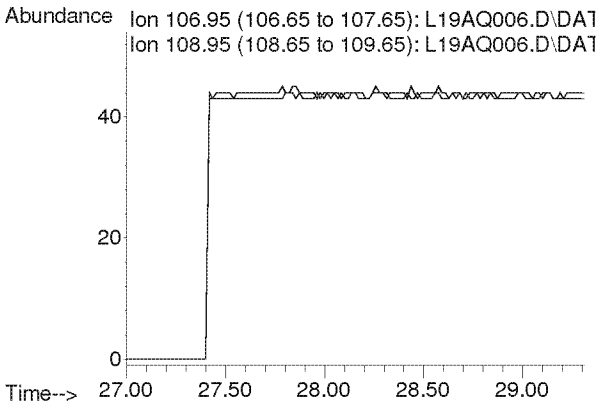


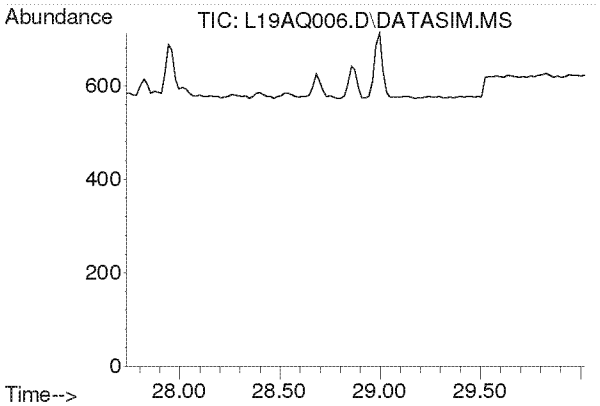
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



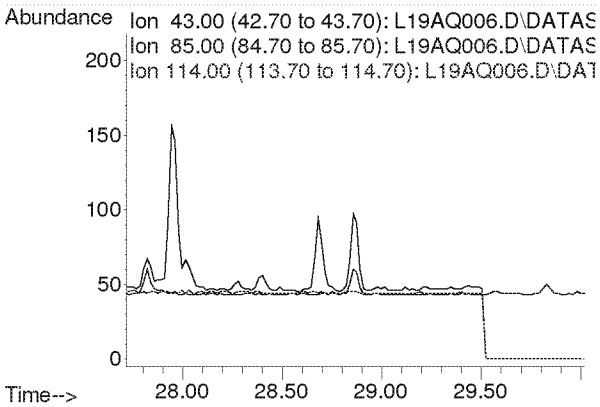


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

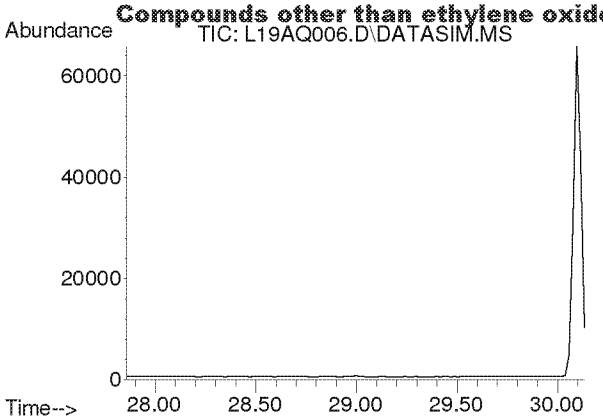
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

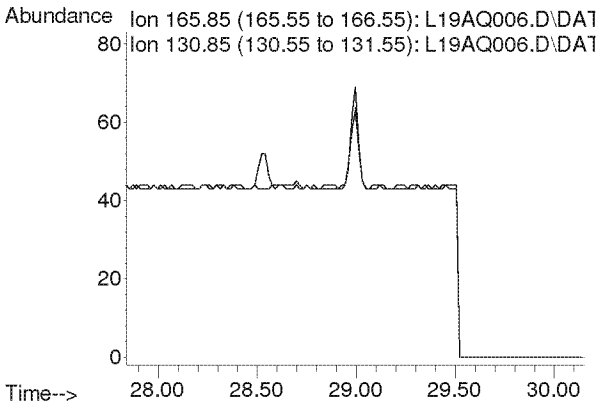


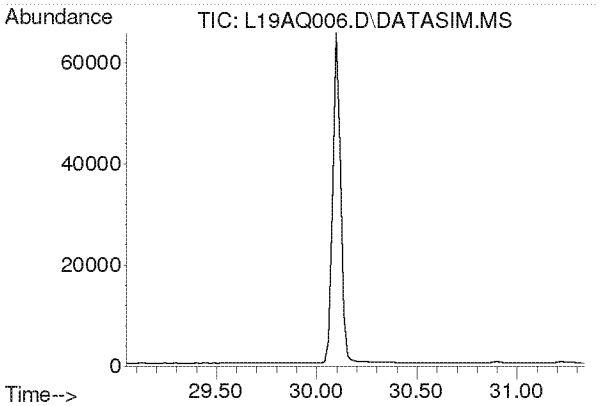
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



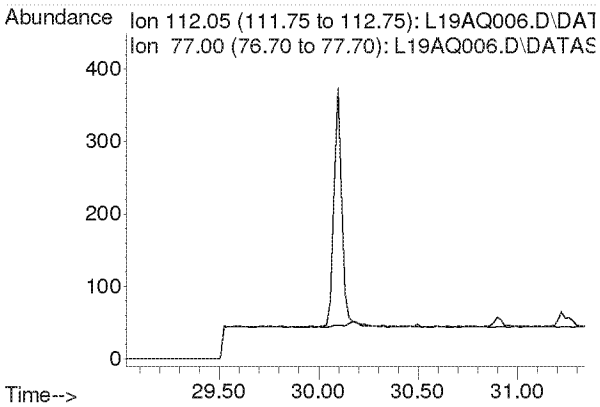


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

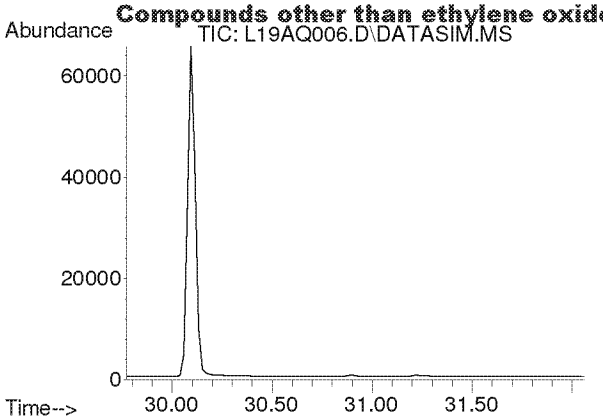
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

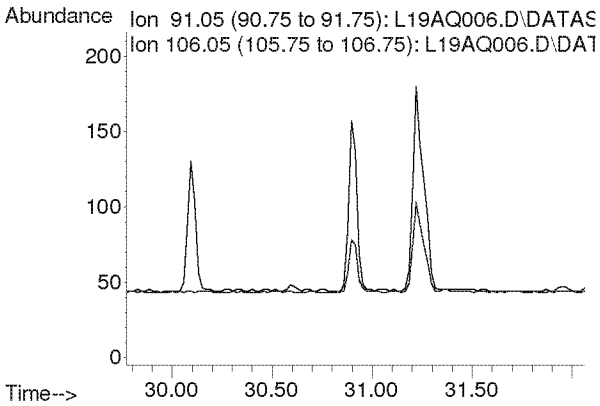


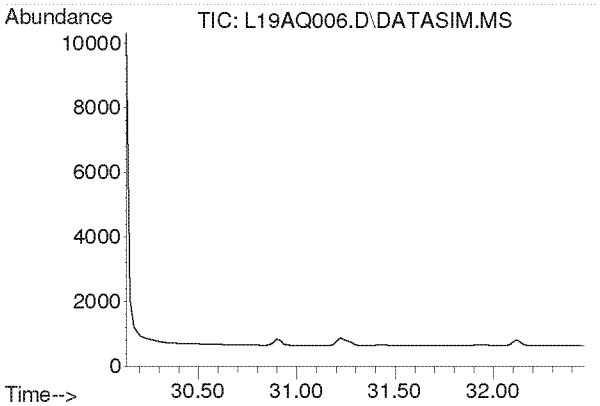
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



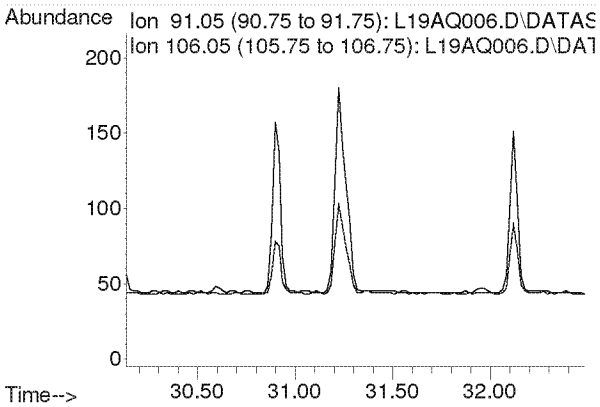


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

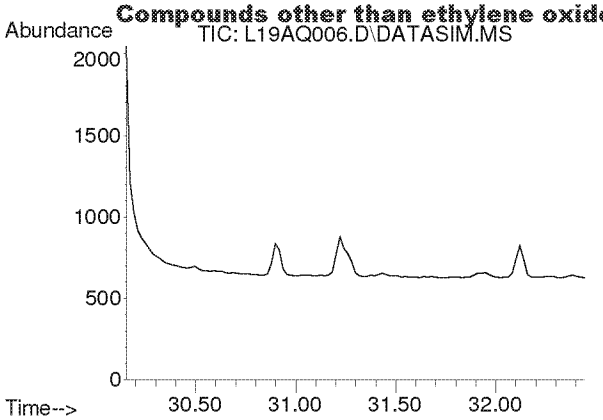
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

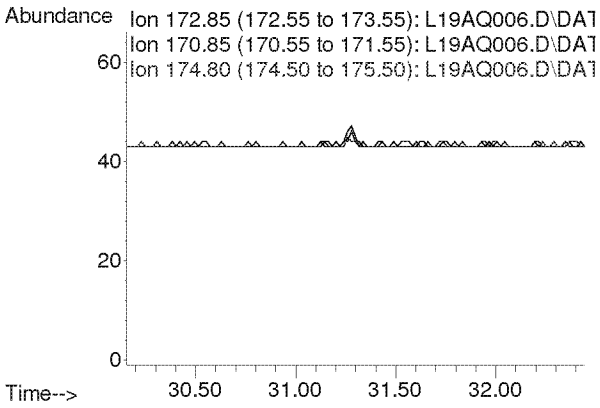


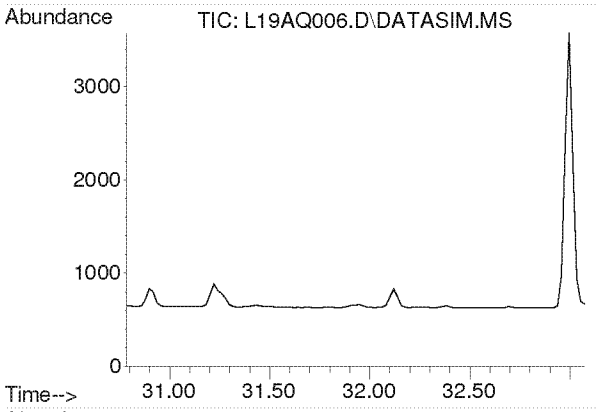
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



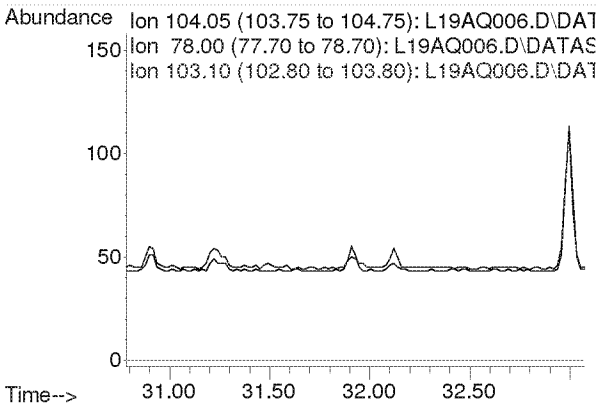


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

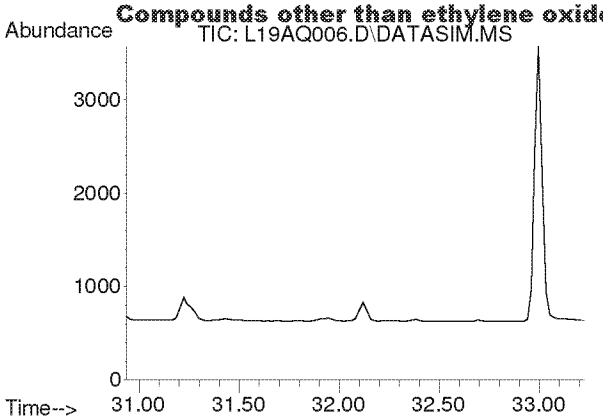
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

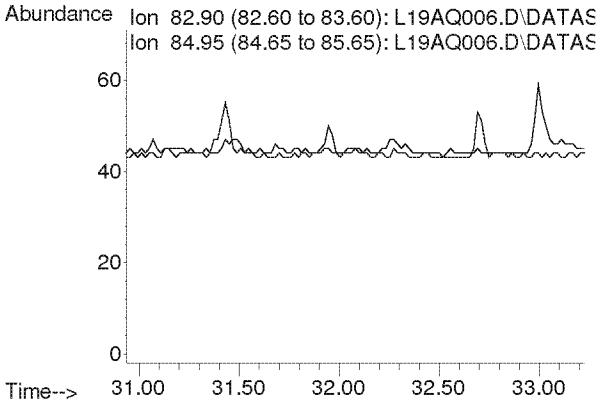


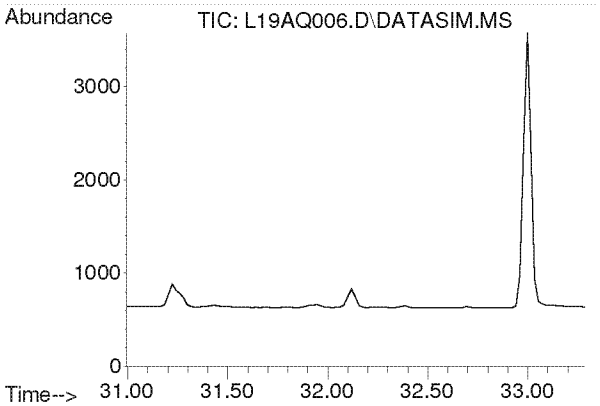
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



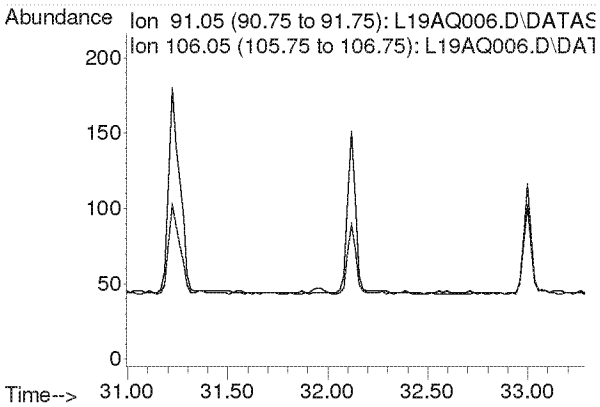


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

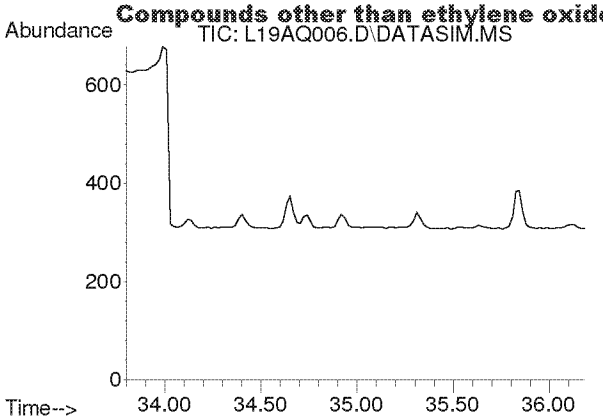
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

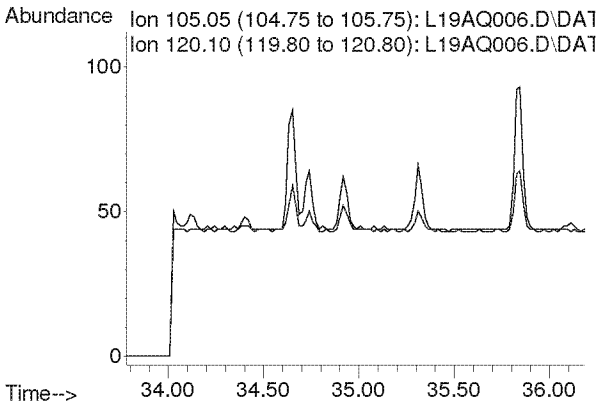


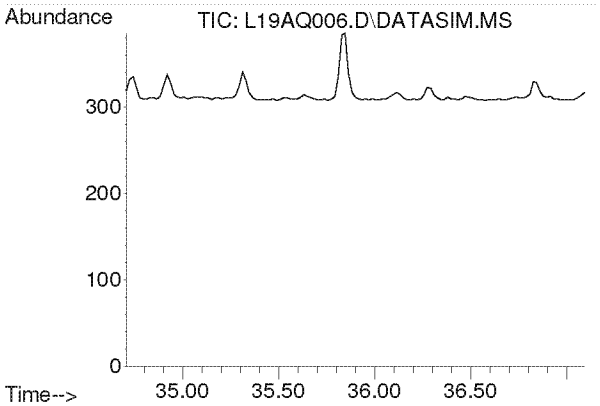
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



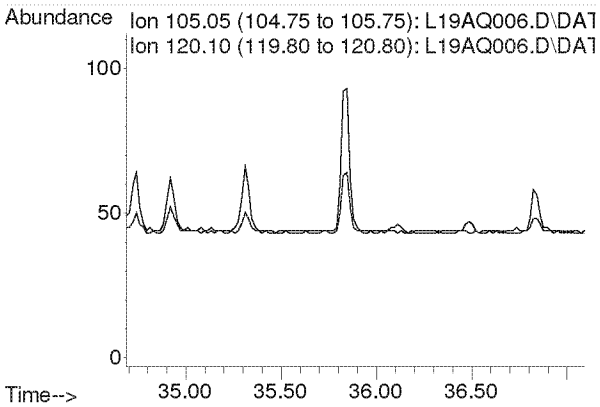


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

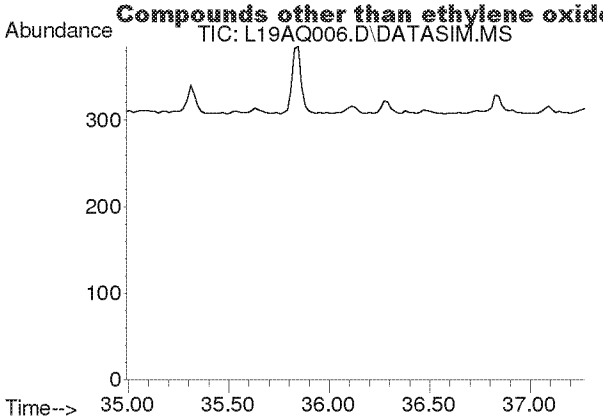
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

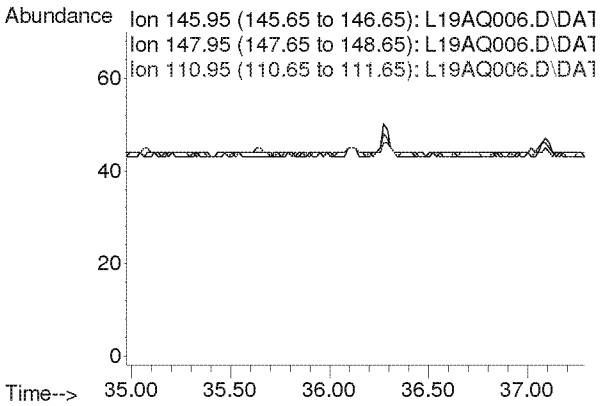


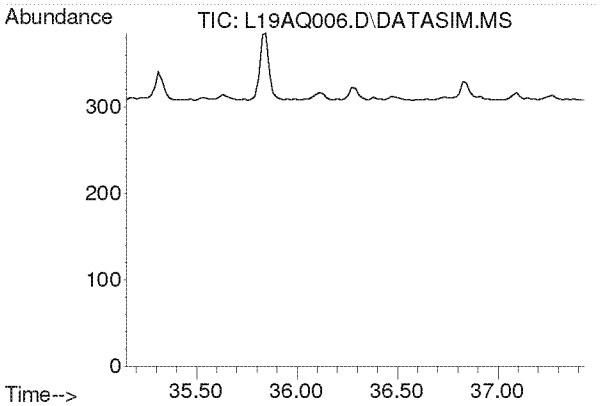
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



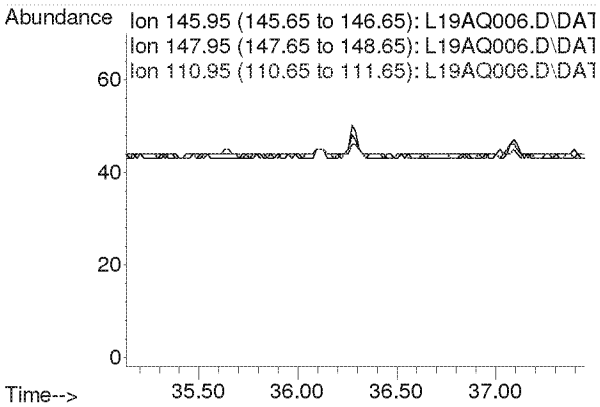


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

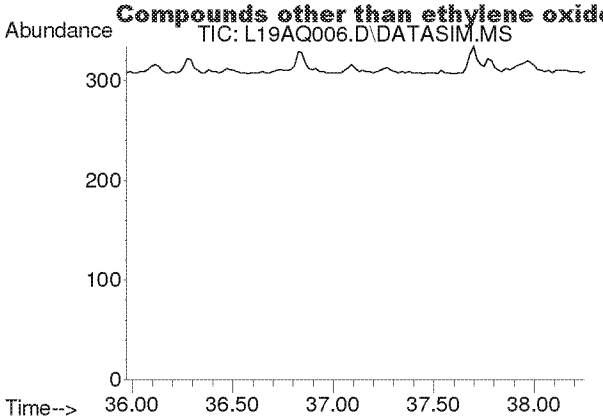
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

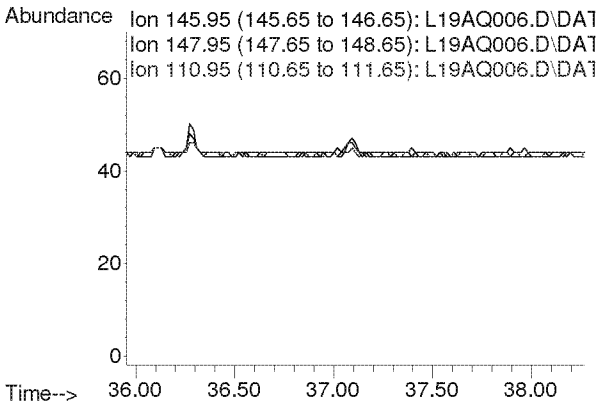


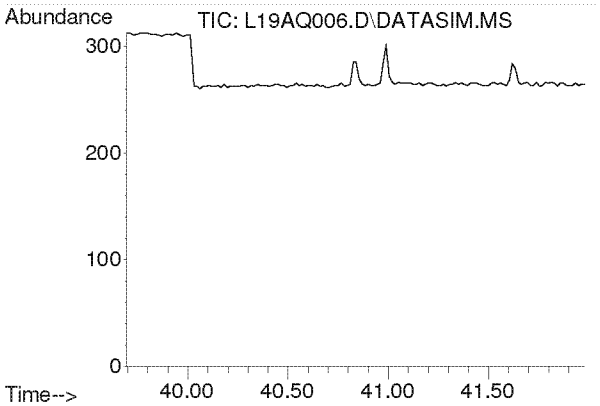
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



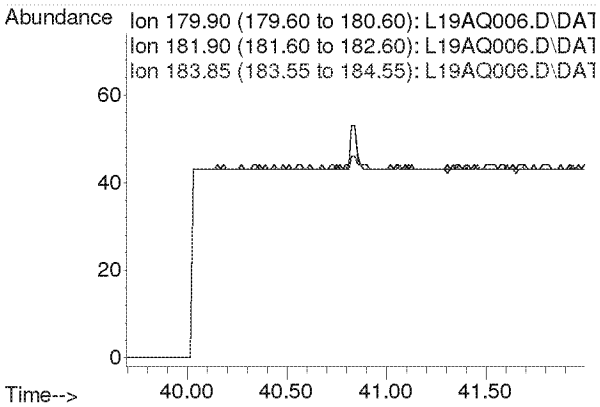


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

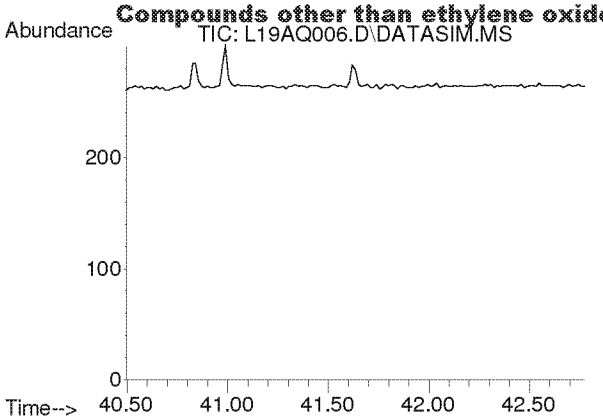
Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

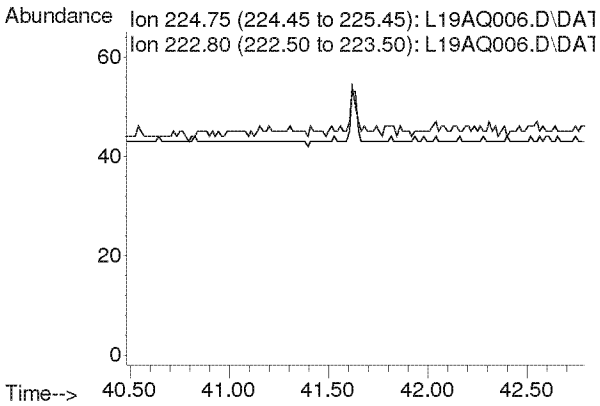


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ006.D
Acq: 17 Jan 2019 4:27 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ007.D
Acq On : 17 Jan 2019 5:29 pm
Operator : MAH
Sample : B9A1704-DUP1
Misc : WILLOWBROOK VILLAGE HALL R1 1/7/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 23 07:46:44 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	53288	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.150	114	131044	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	101404	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.380	29	11111	4.0369 ppbv	92
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D. d	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ007.D
Acq On : 17 Jan 2019 5:29 pm
Operator : MAH
Sample : B9A1704-DUP1
Misc : WILLOWBROOK VILLAGE HALL R1 1/7/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 23 07:46:44 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

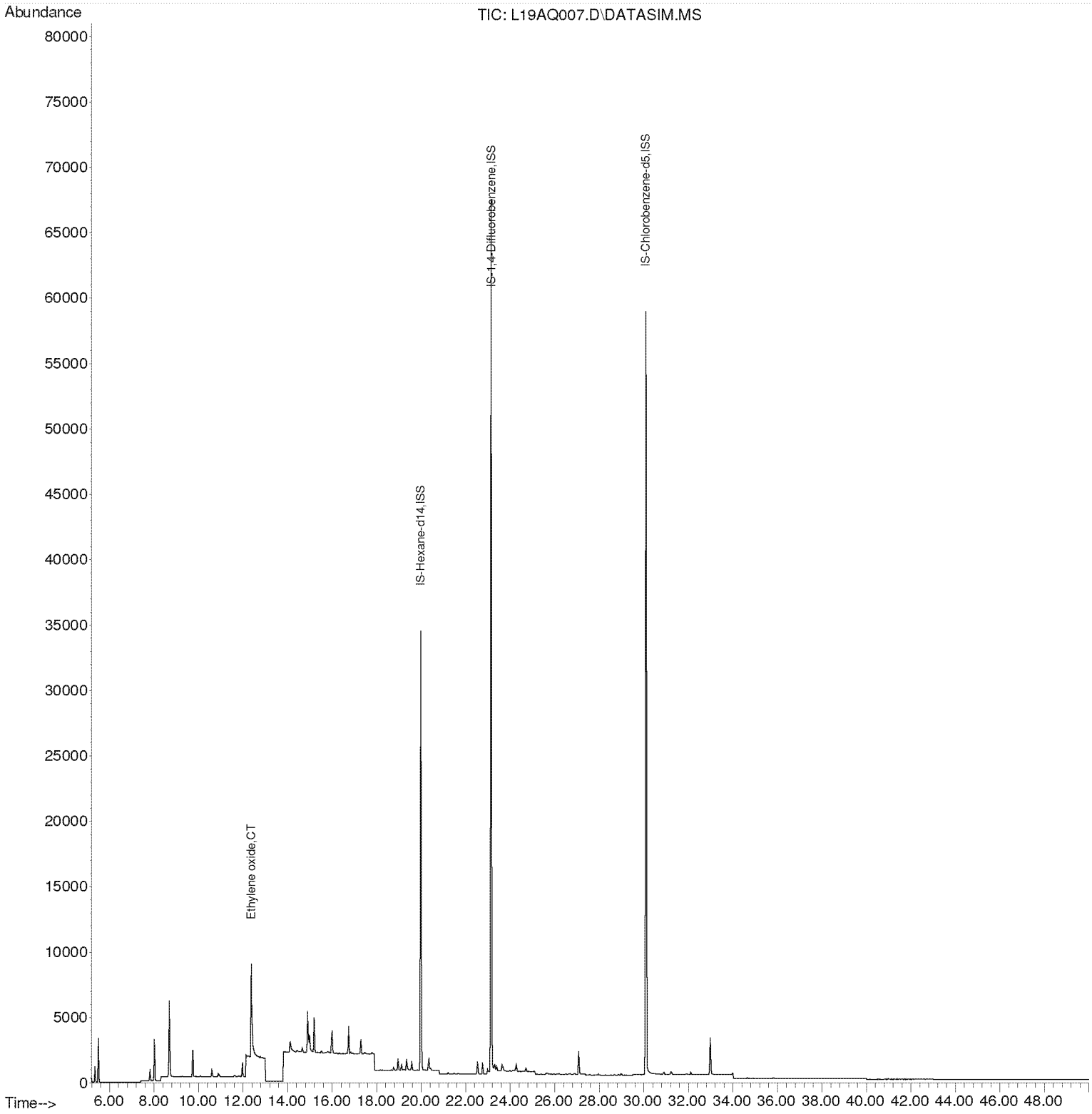
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

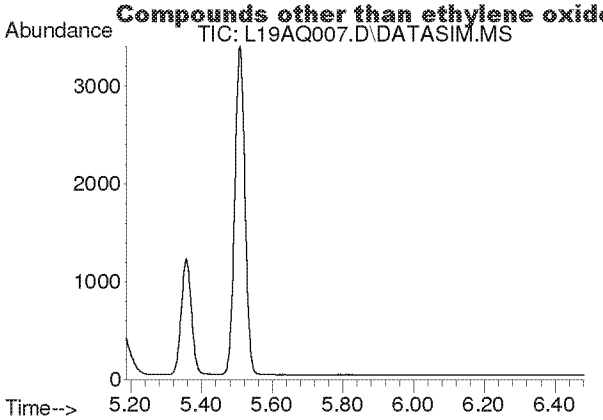
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ007.D
Acq On : 17 Jan 2019 5:29 pm
Operator : MAH
Sample : B9A1704-DUP1
Misc : WILLOWBROOK VILLAGE HALL R1 1/7/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 23 07:34:15 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



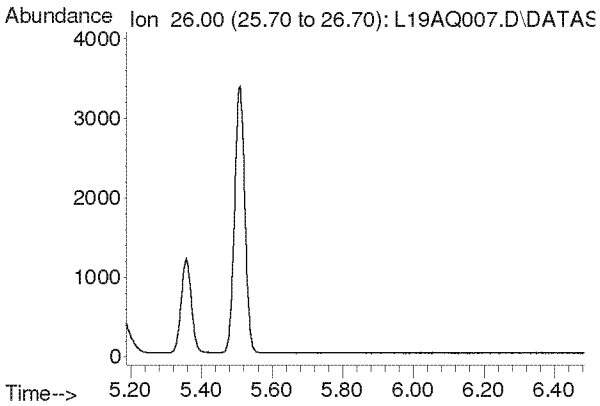
Compounds other than ethylene oxide were not quantitated.

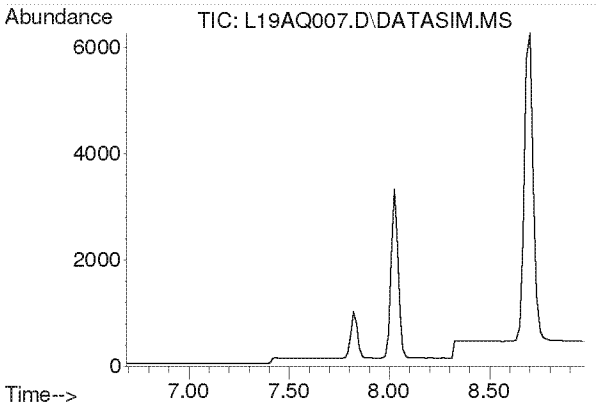


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 26



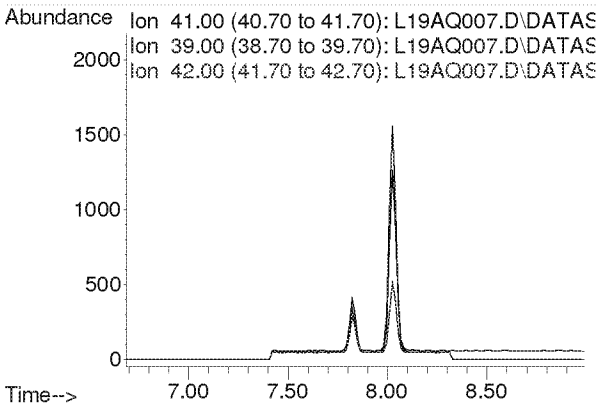


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

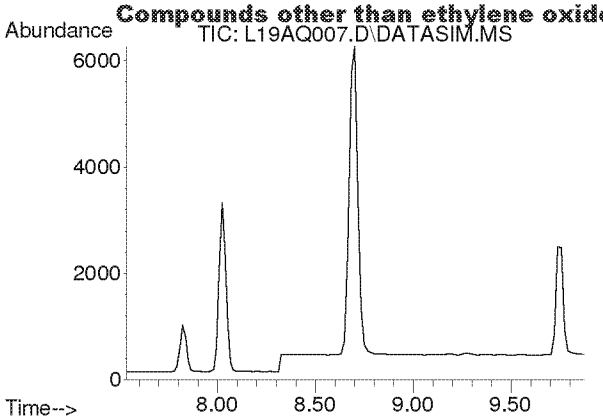
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

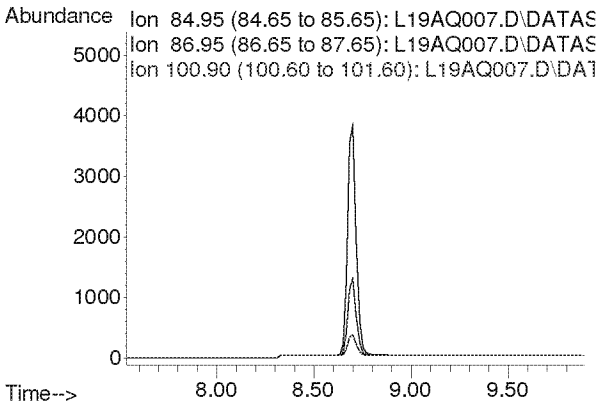


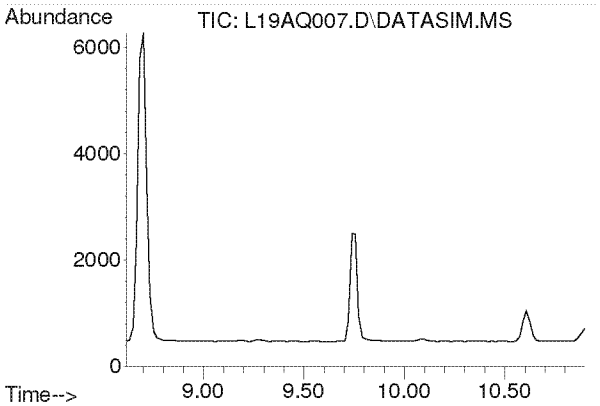
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



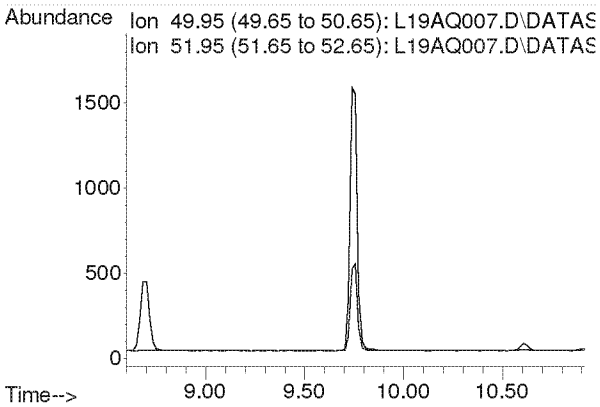


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

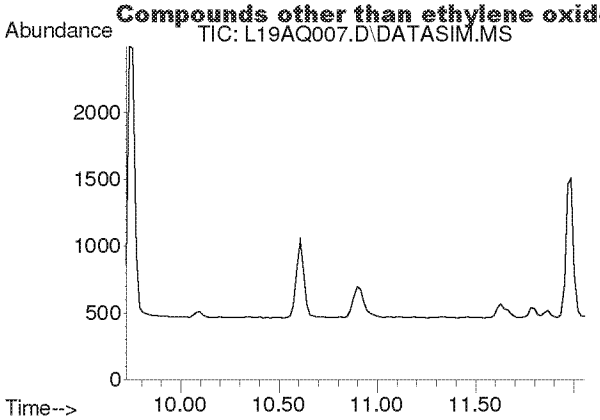
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

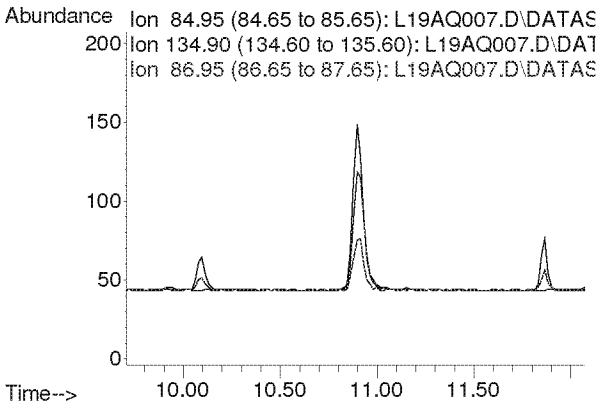


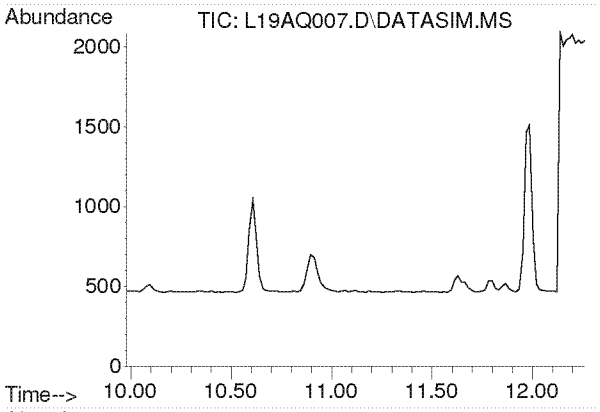
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



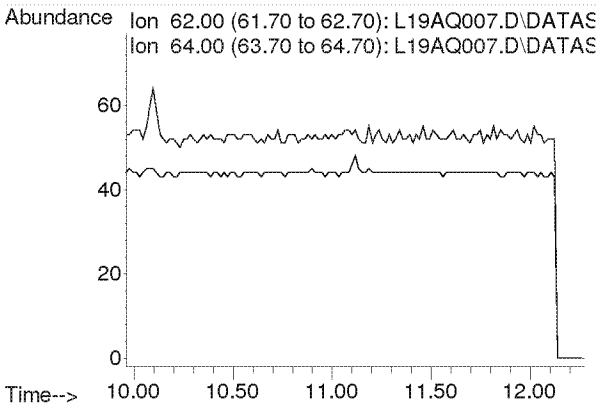


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

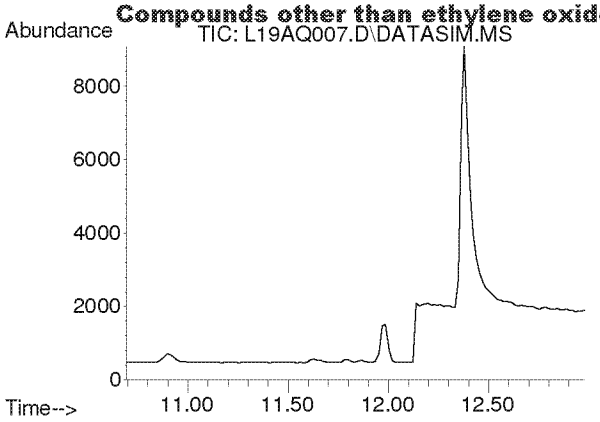
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

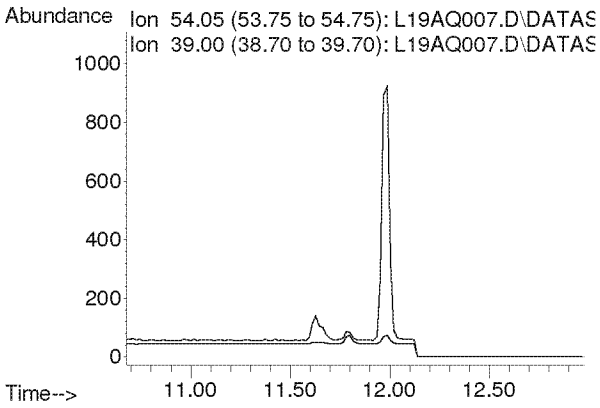


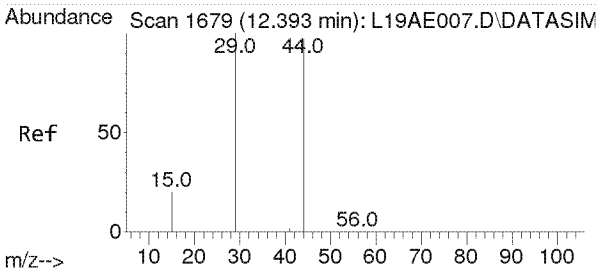
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

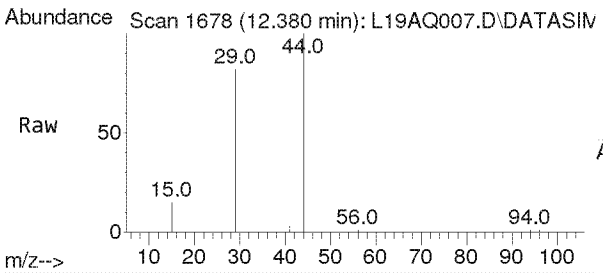


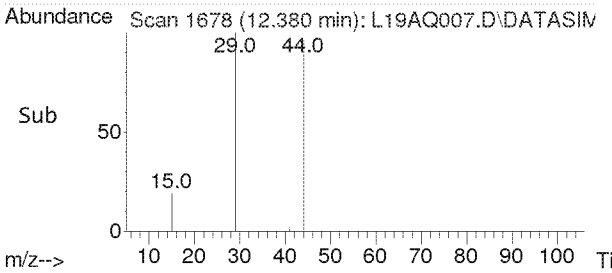


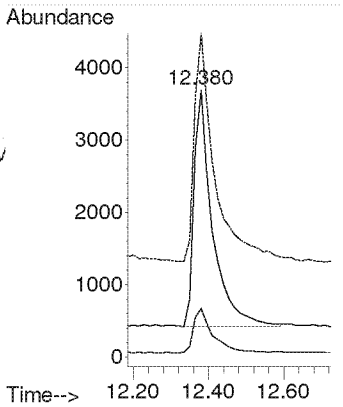
#9
Ethylene oxide
Concen: 4.037 ppbv
RT: 12.380 min Scan# 1678
Delta R.T. -0.013 min
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 29 Resp: 11111

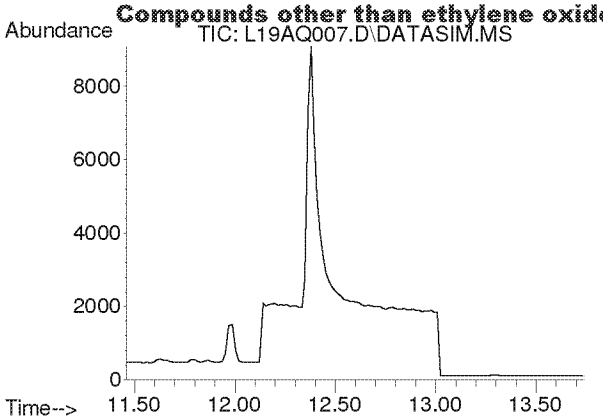
Ion	Ratio	Lower	Upper
29	100		
15	19.7	15.4	23.0
44	106.2	77.4	116.2







Compounds other than ethylene oxide were not quantitated.

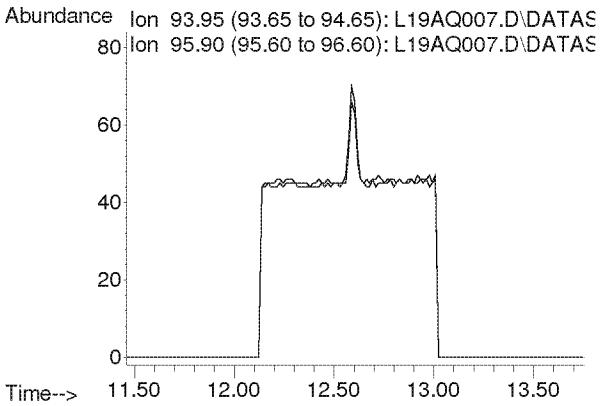


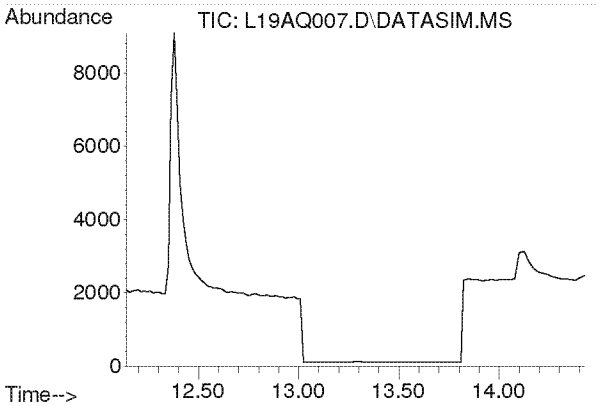
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



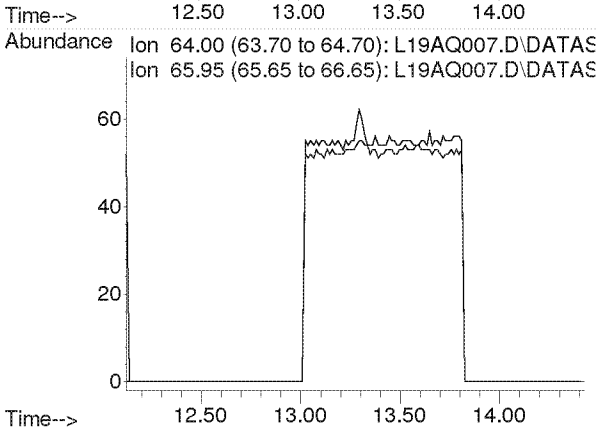


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

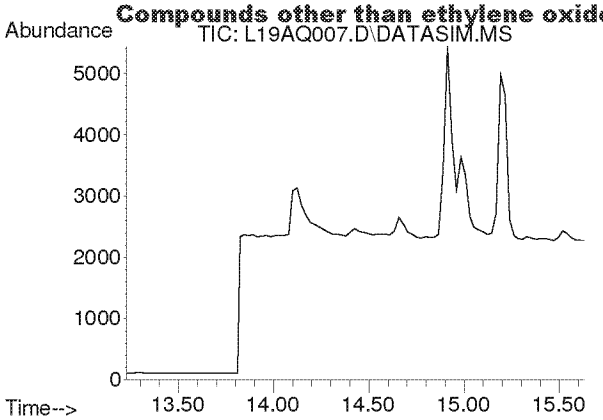
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

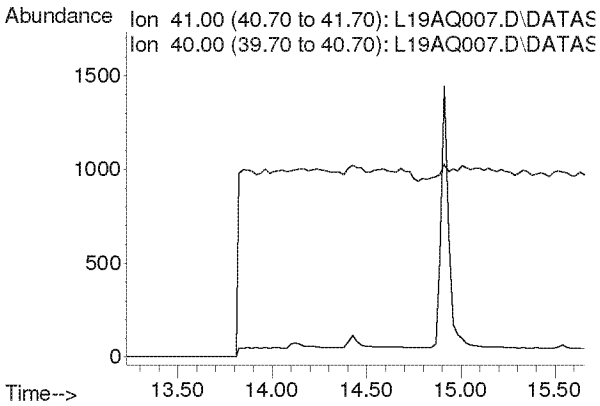


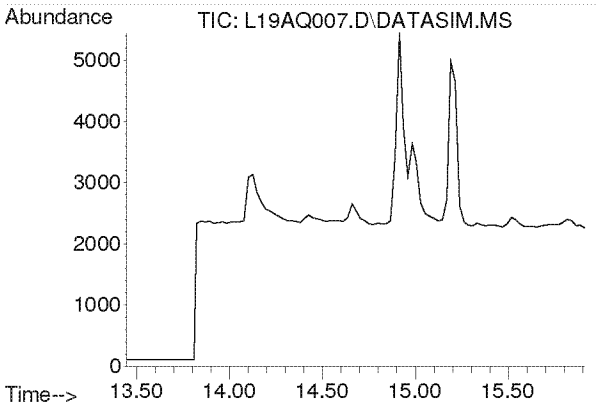
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



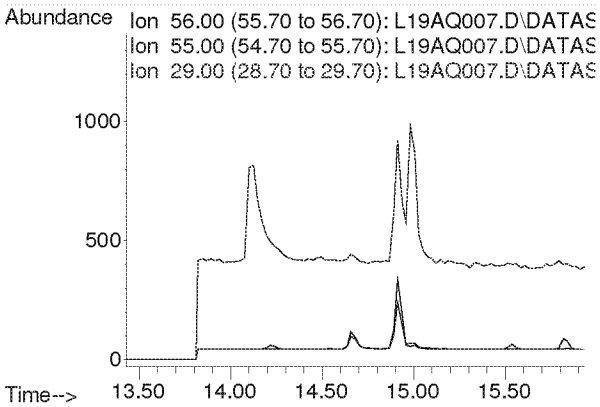


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

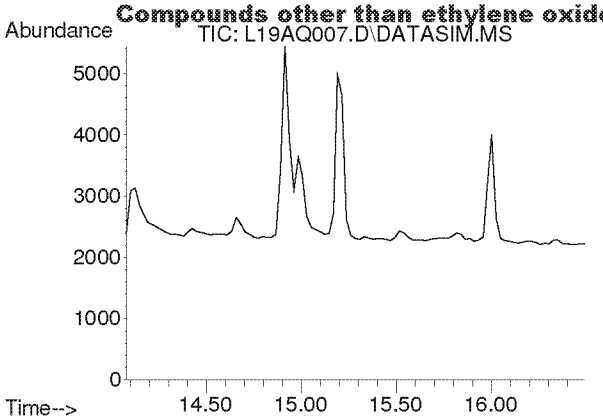
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

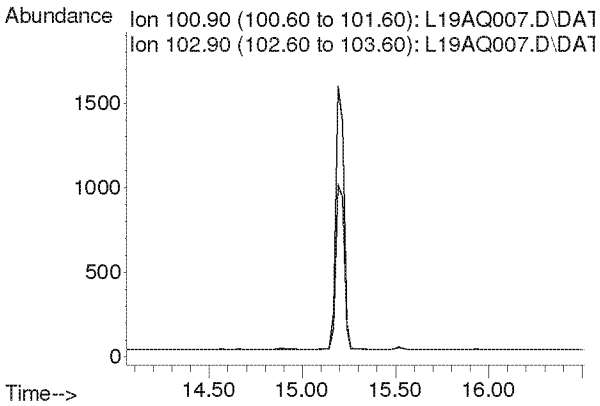


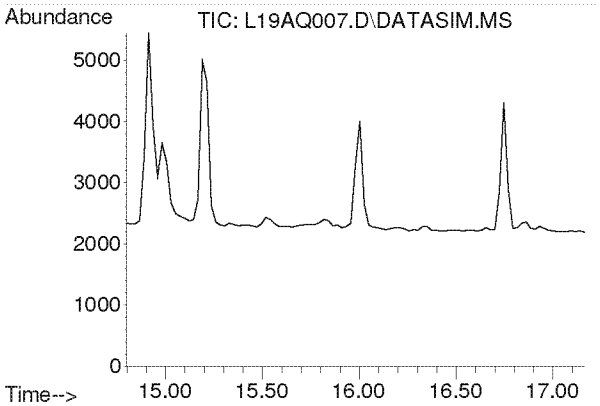
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



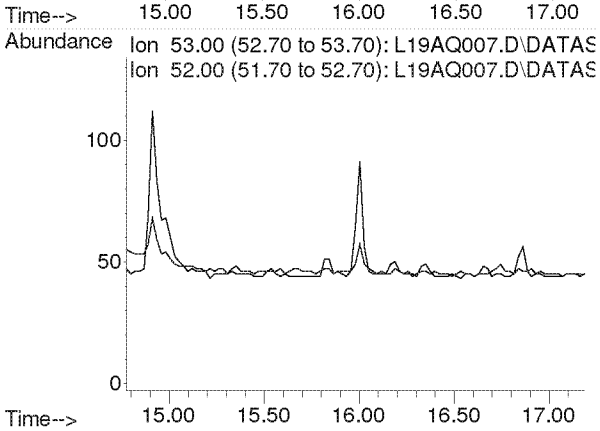


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

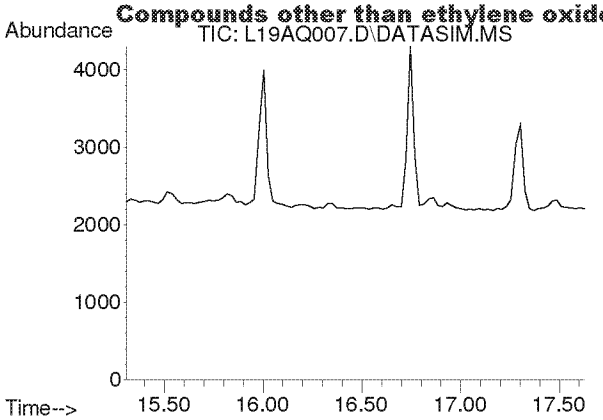
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

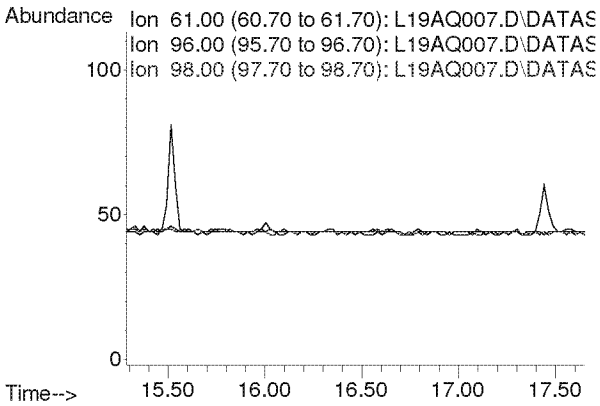


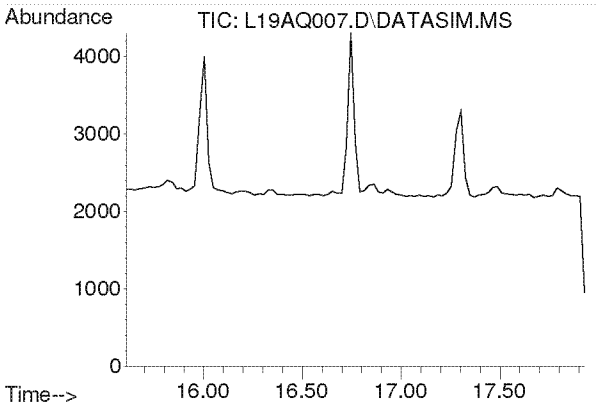
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



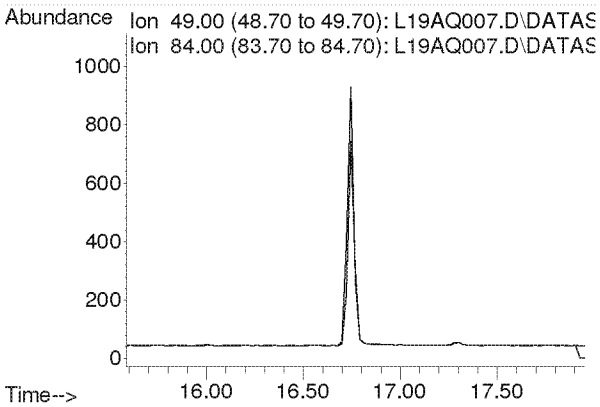


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

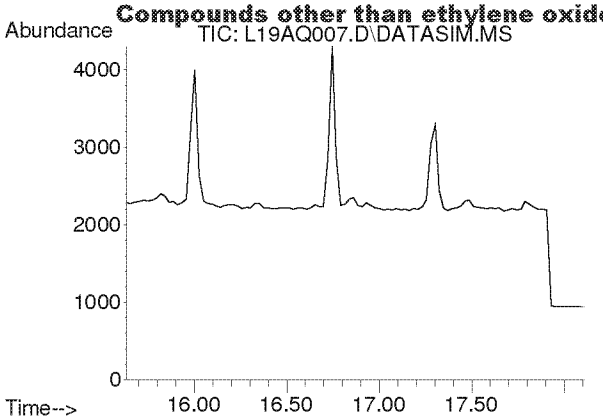
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

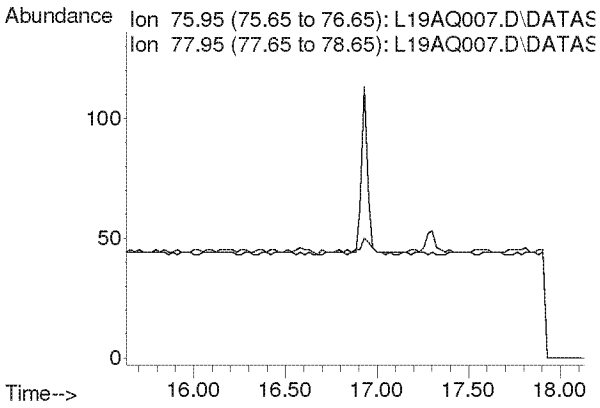


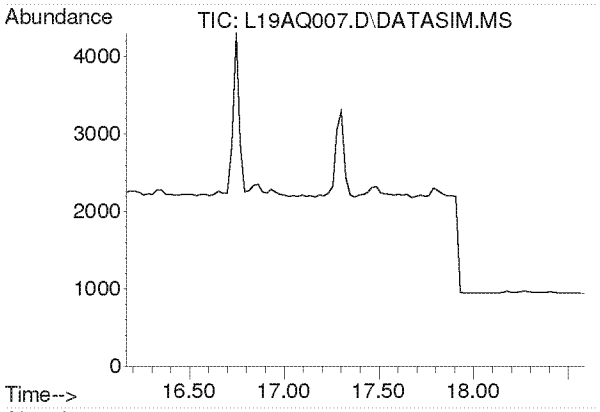
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



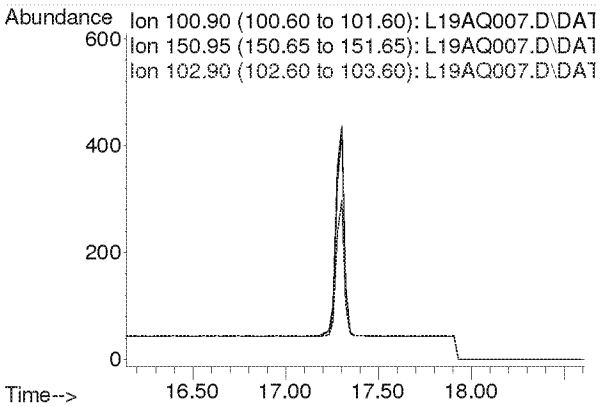


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

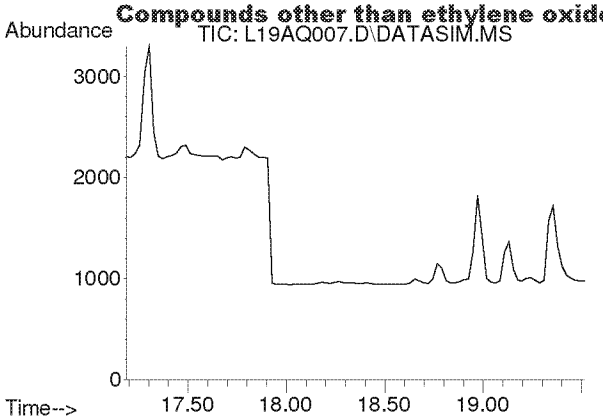
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

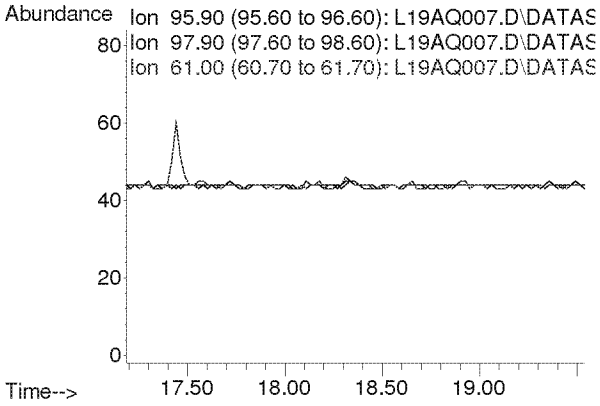


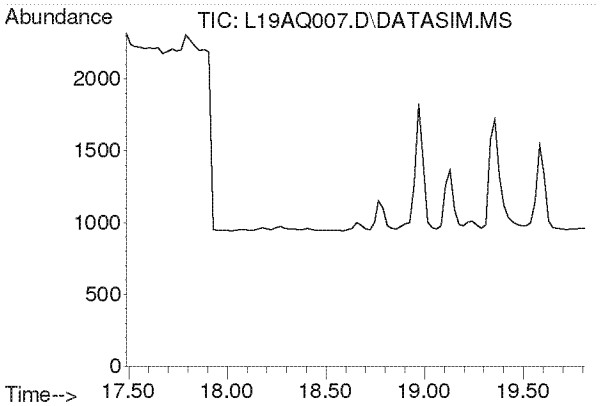
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



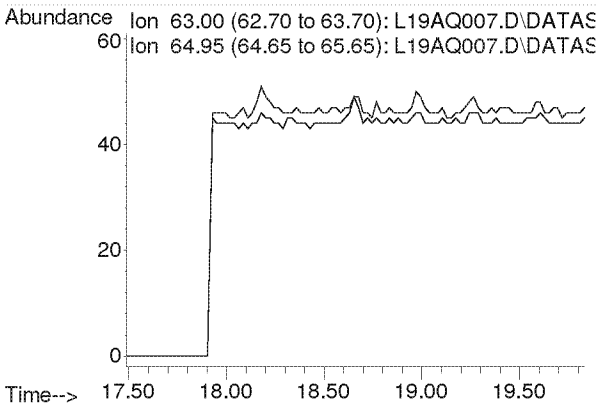


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

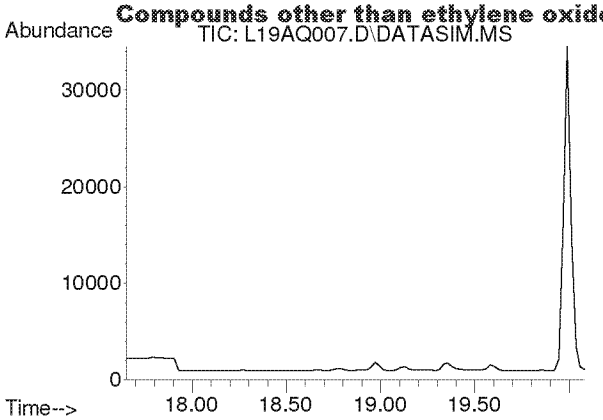
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

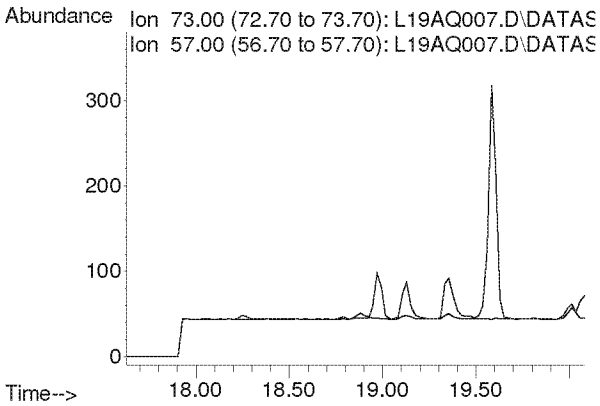


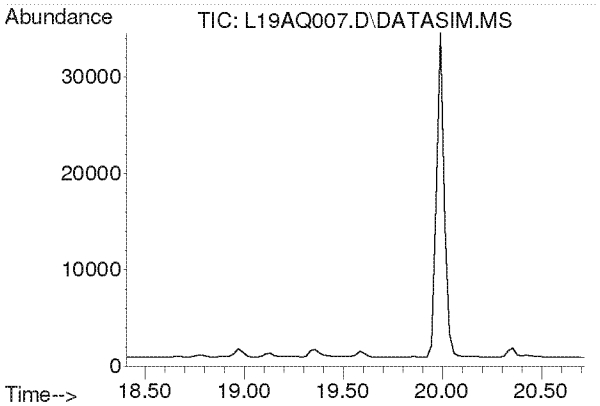
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



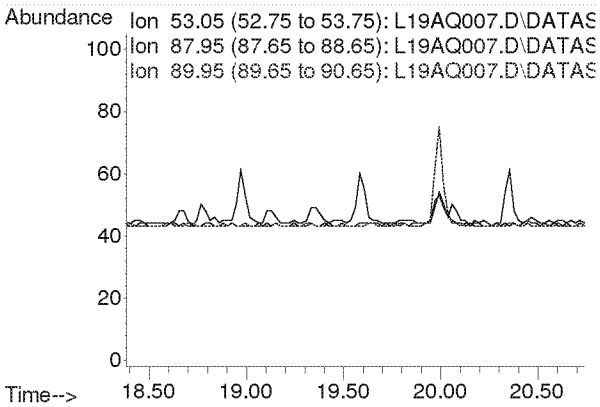


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

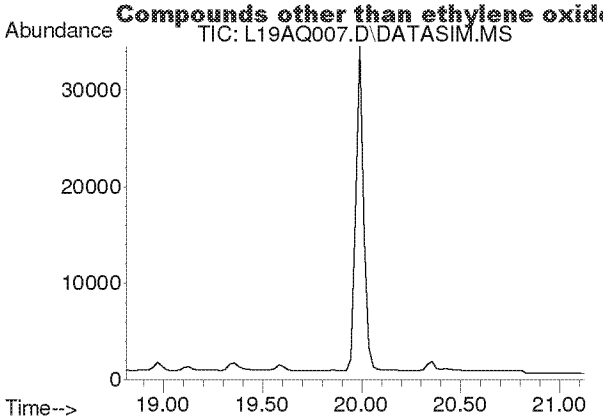
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

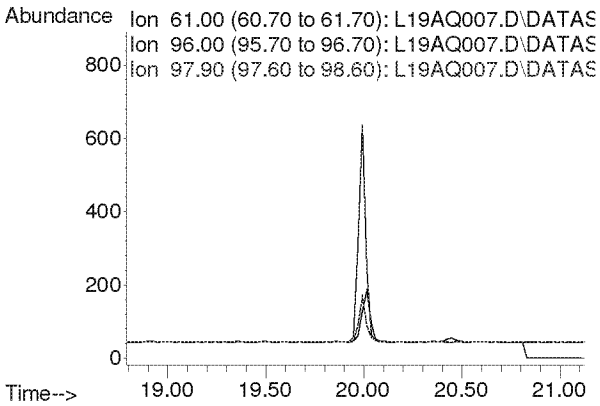


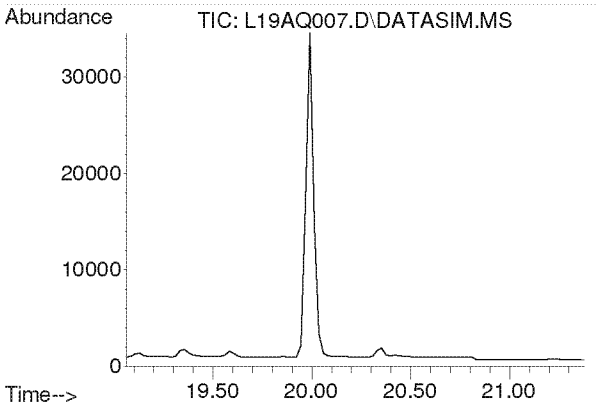
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



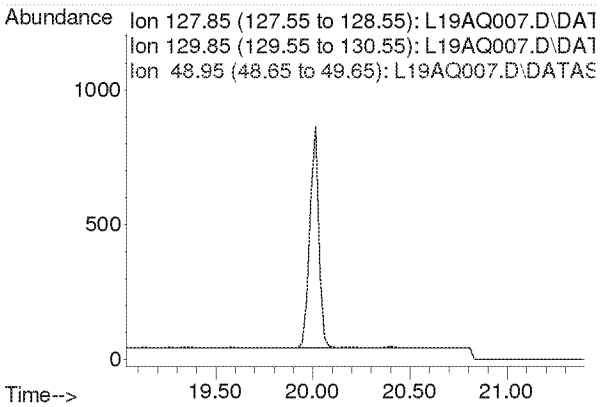


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

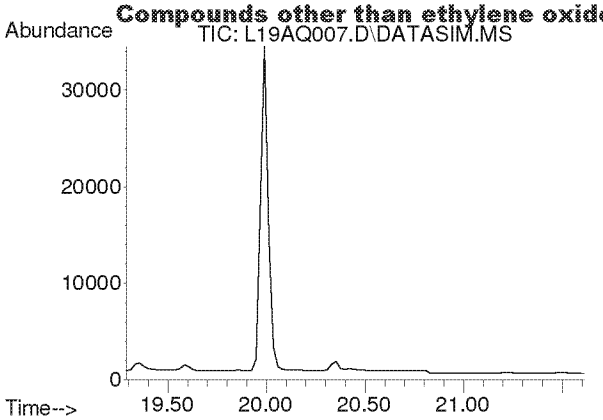
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

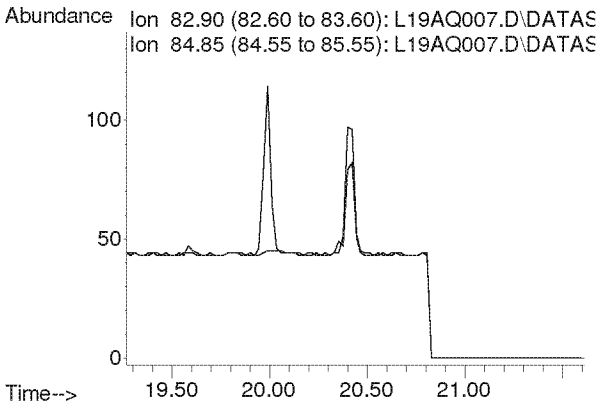


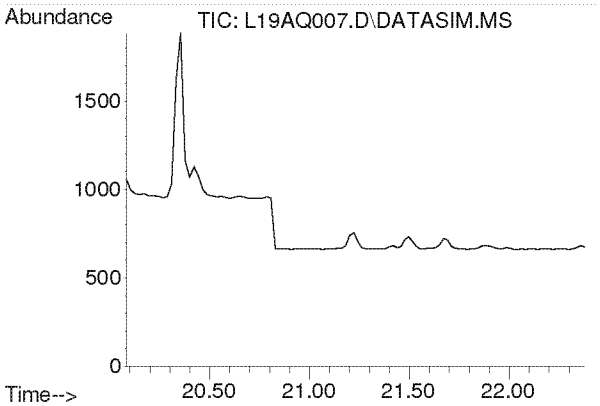
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



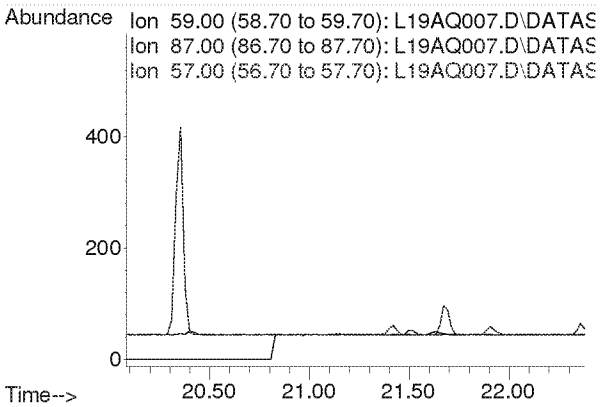


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

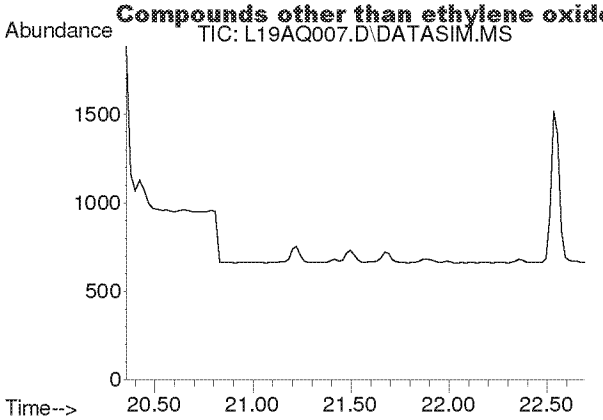
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

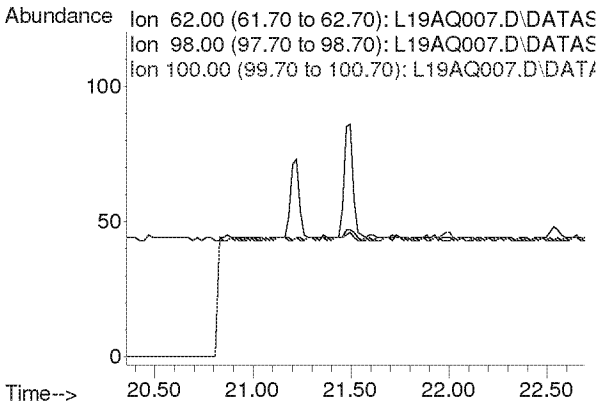


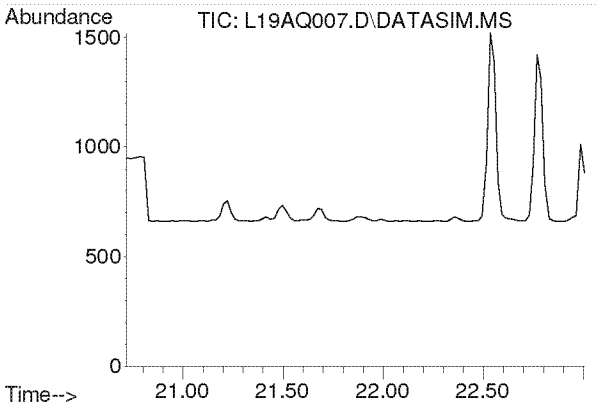
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



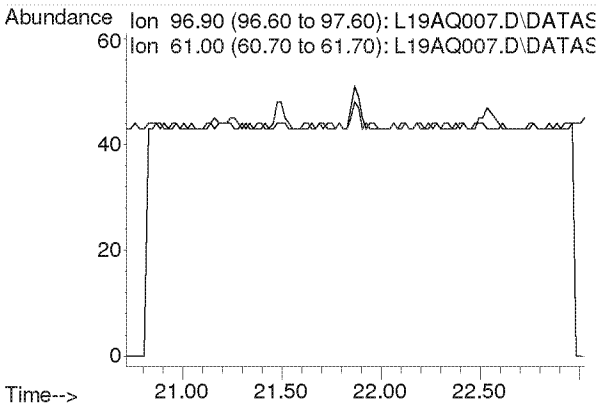


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

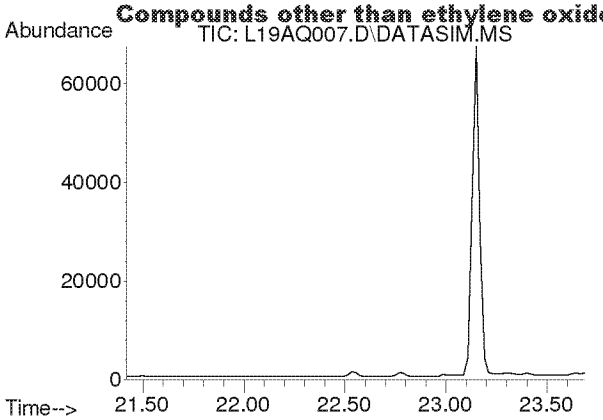
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

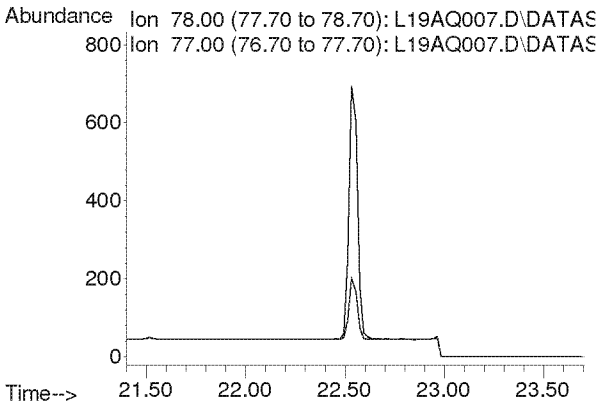


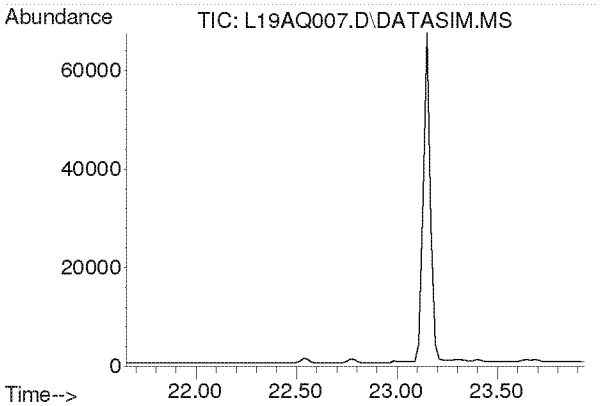
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



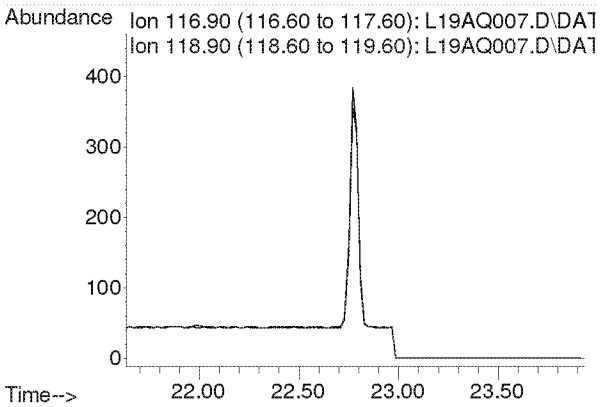


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

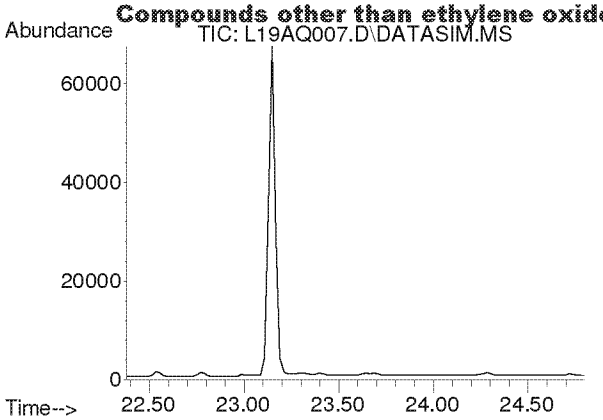
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

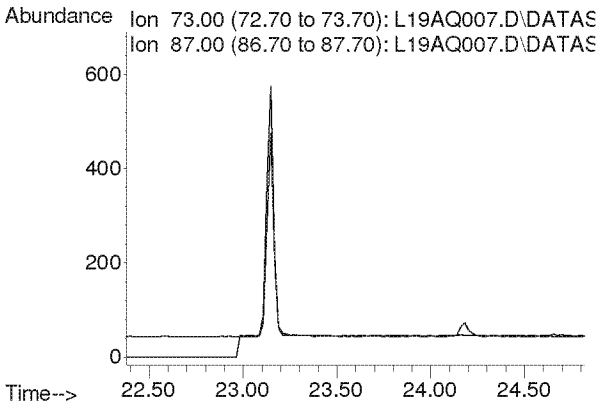


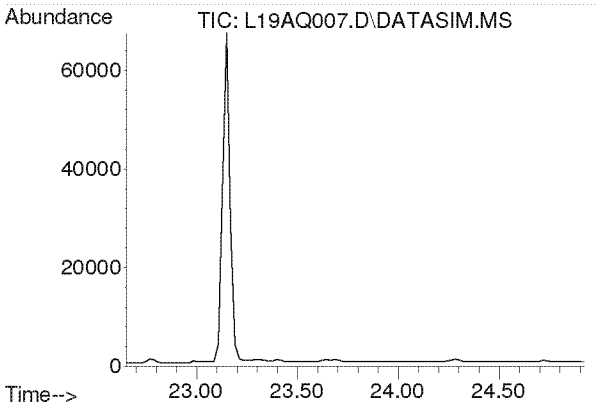
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



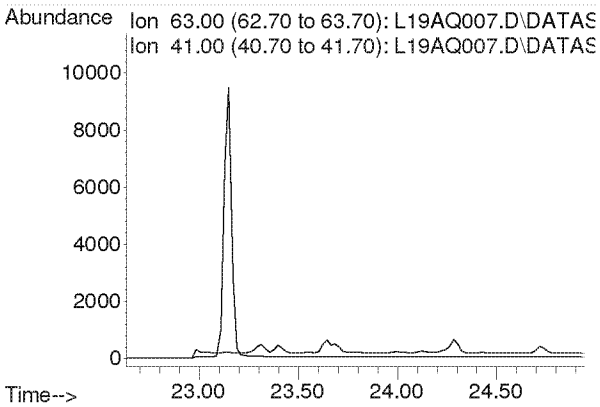


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

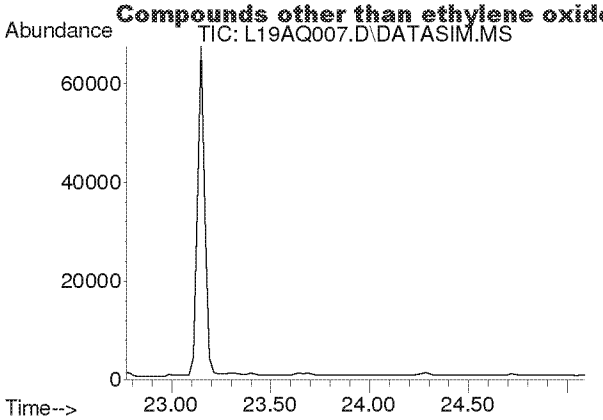
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

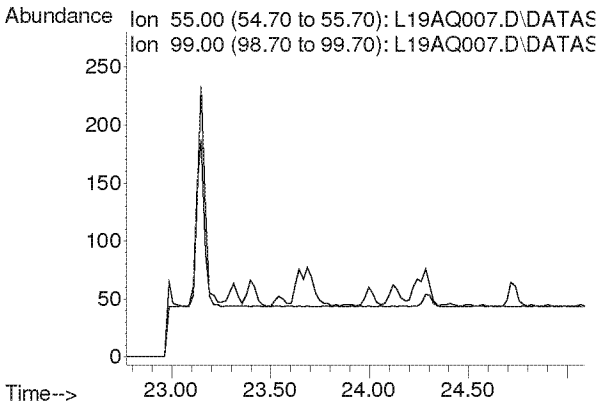


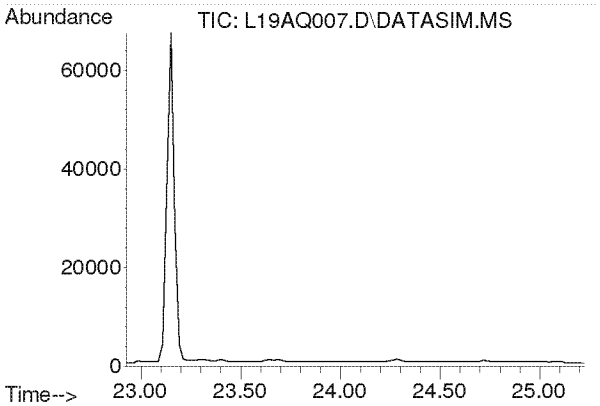
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



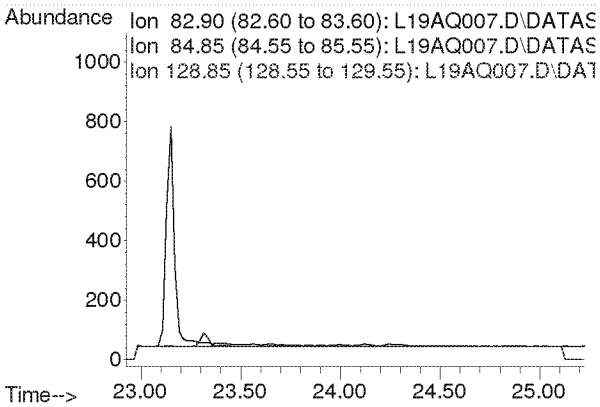


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

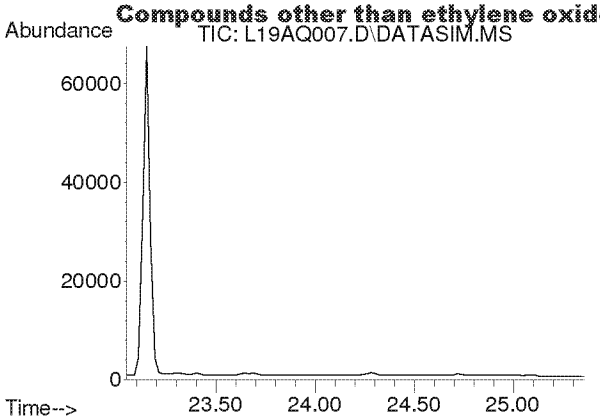
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

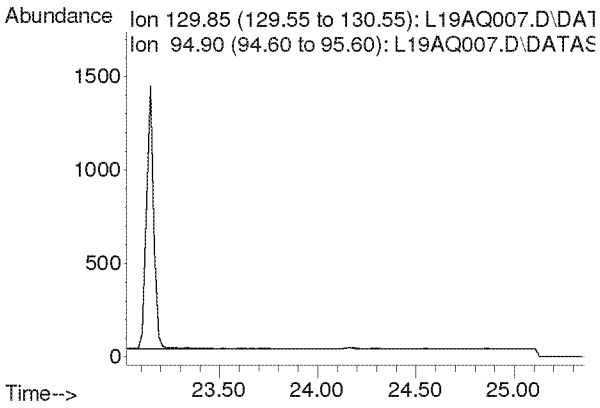


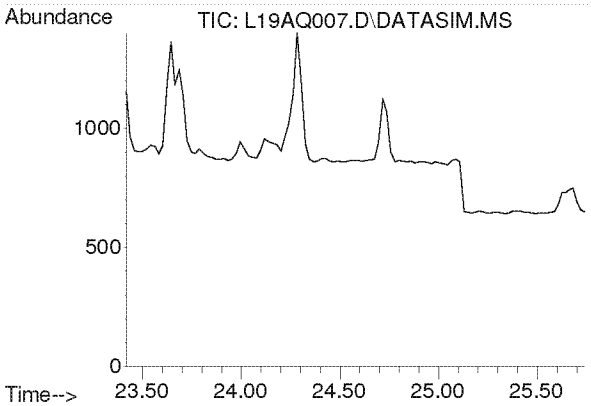
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



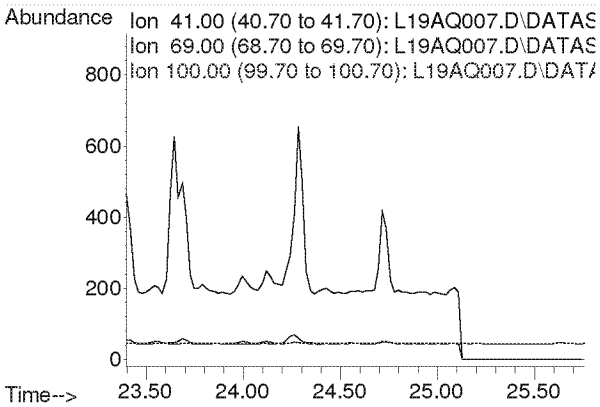


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

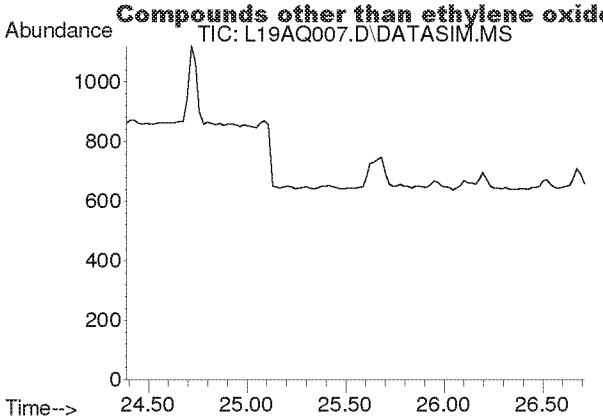
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

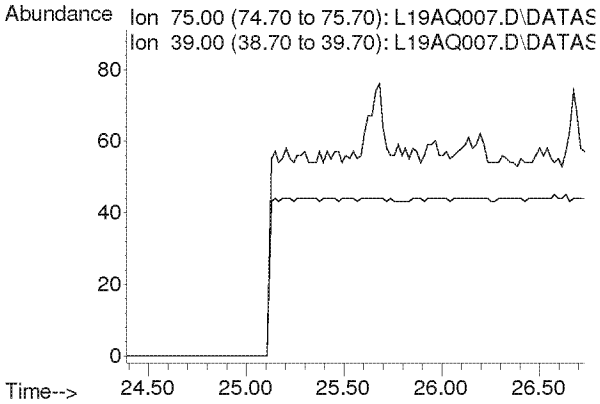


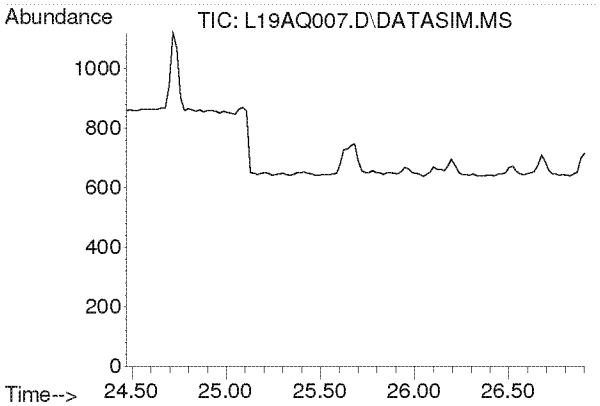
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



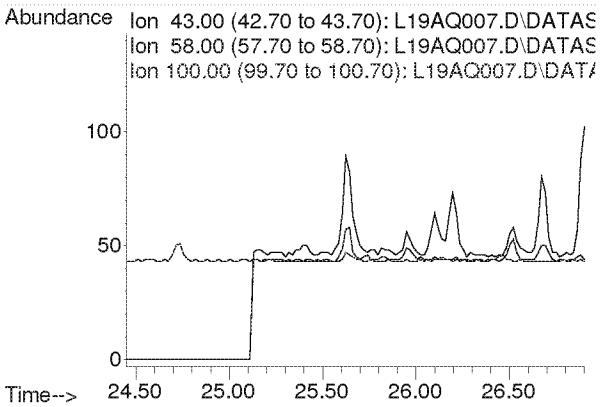


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

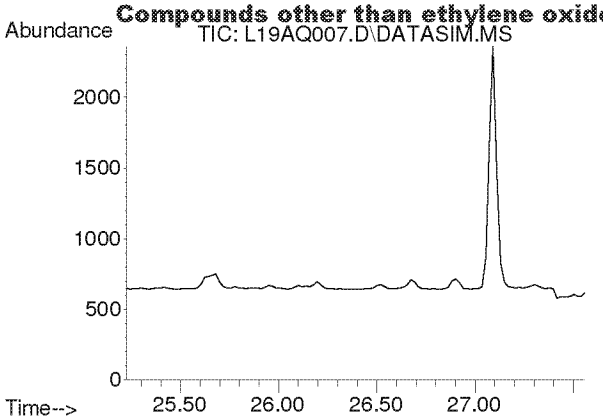
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

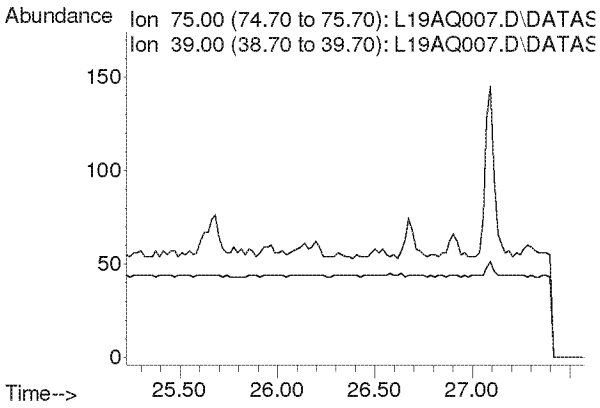


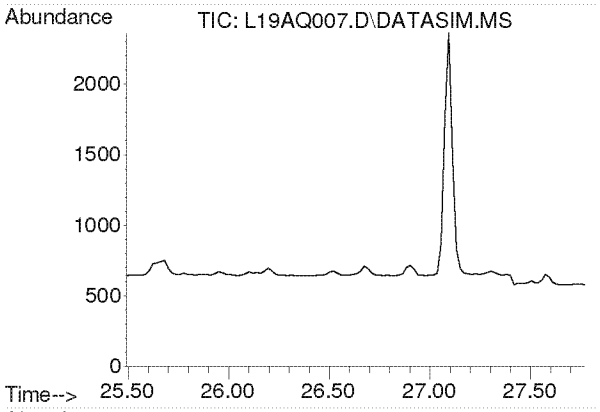
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



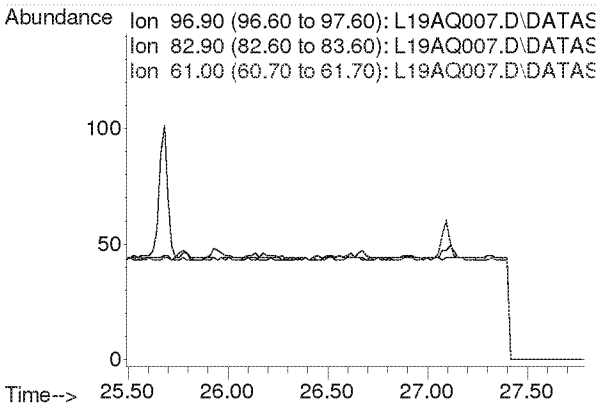


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

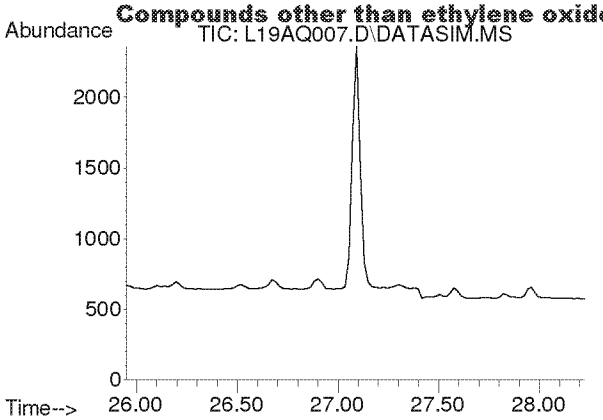
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

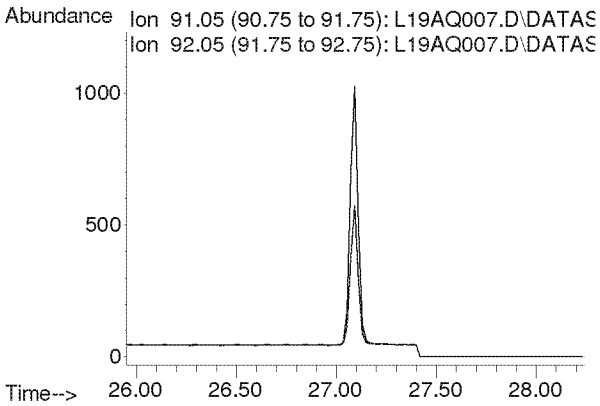


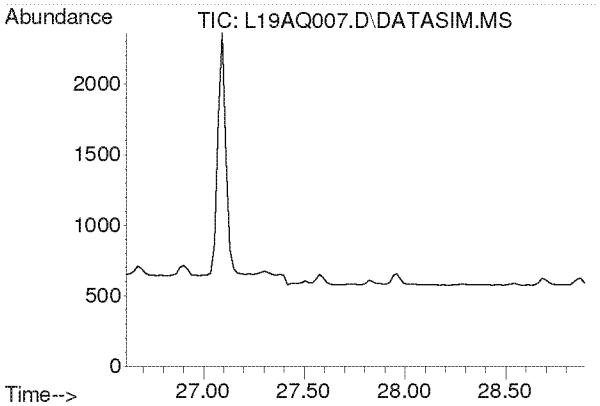
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



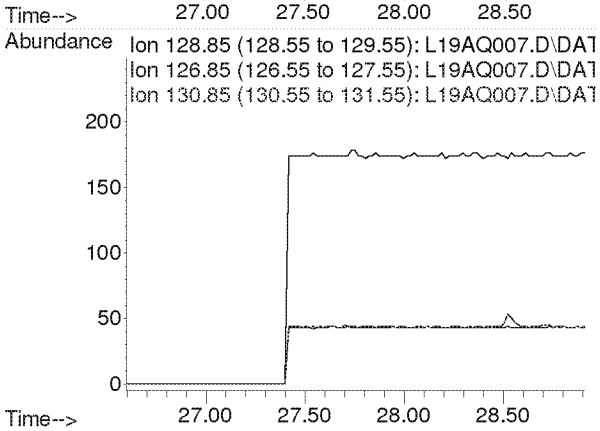


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

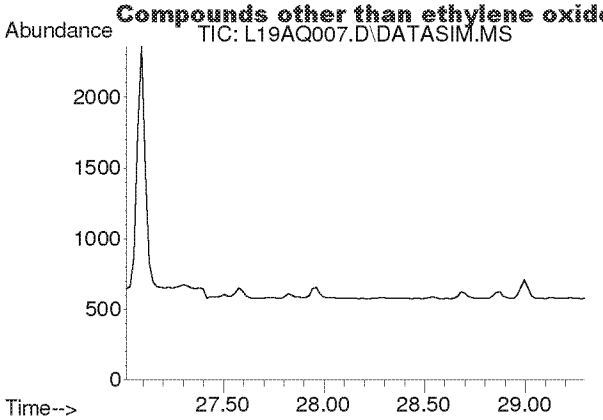
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

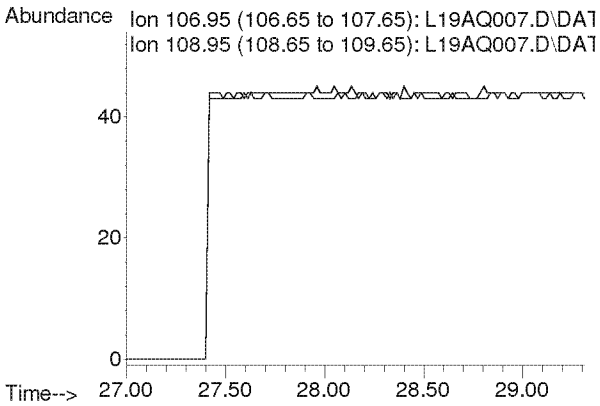


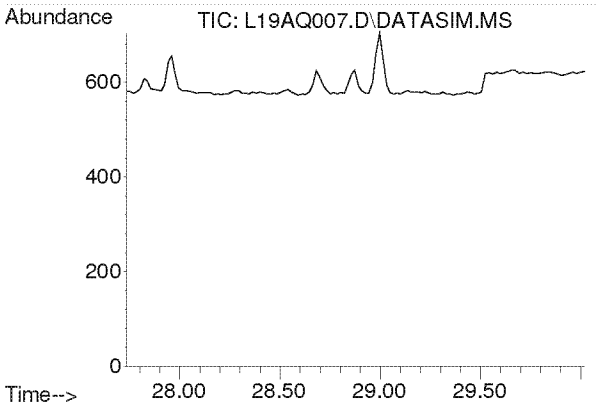
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



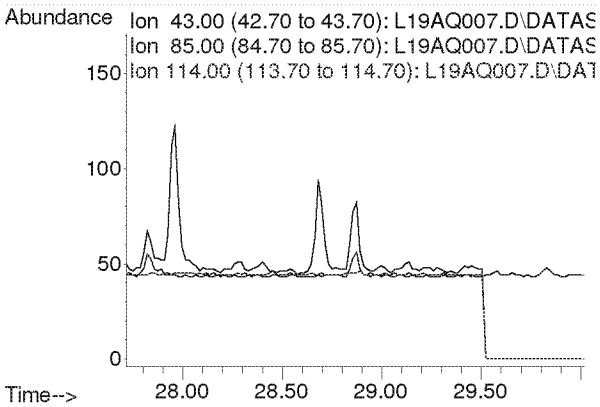


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

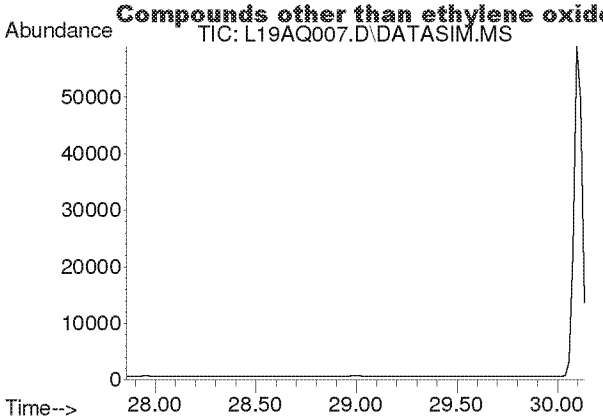
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

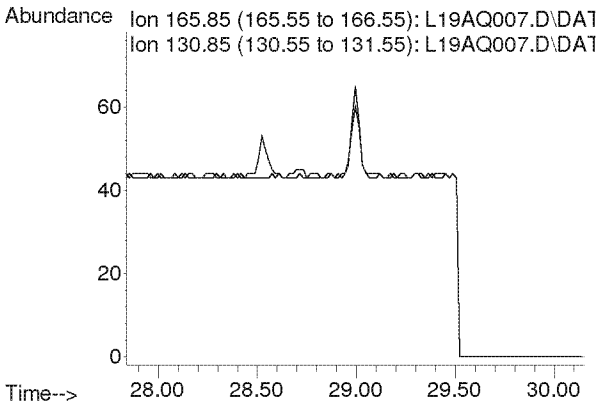


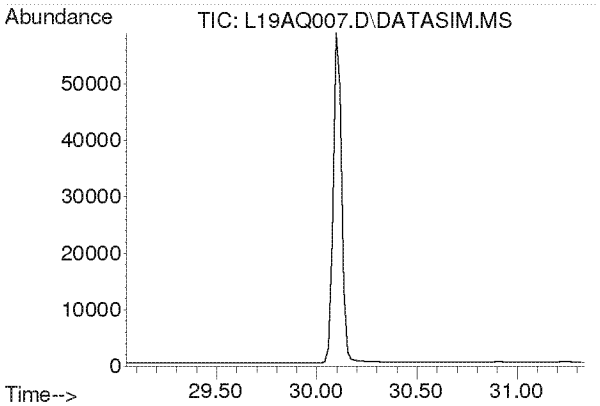
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



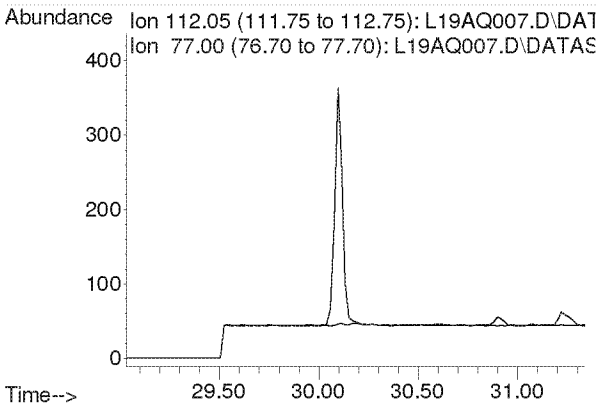


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

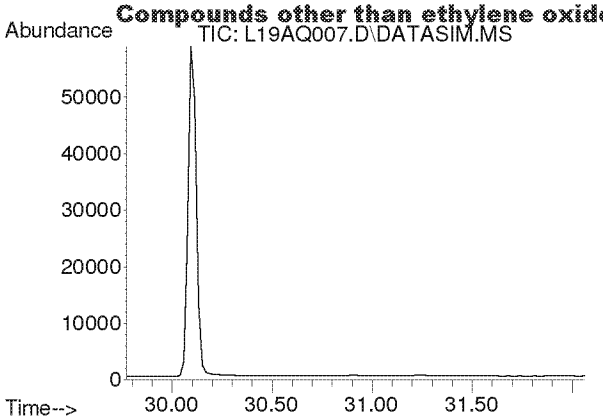
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

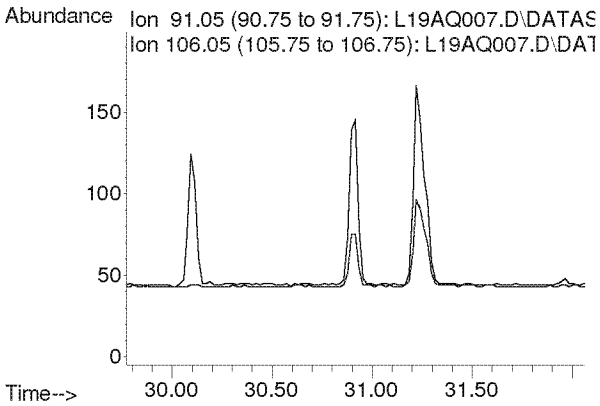


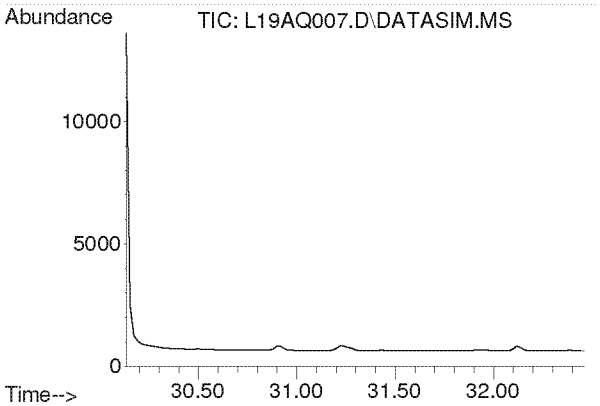
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



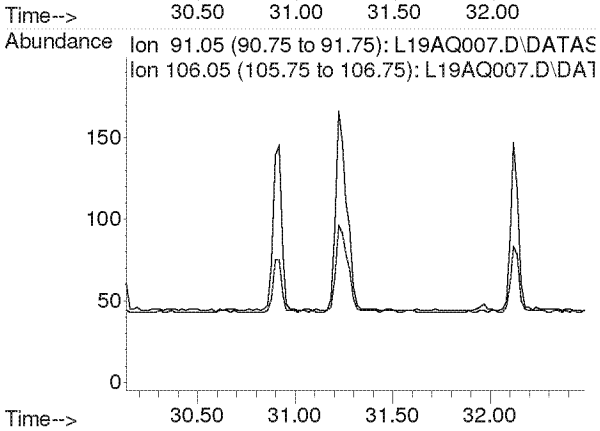


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

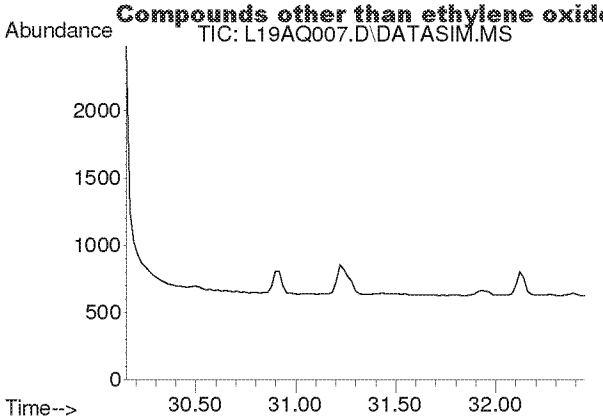
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

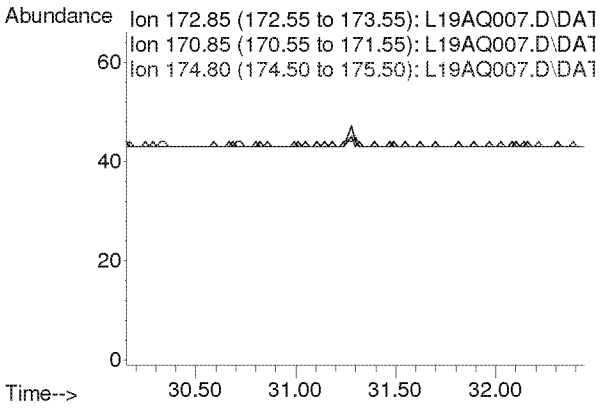


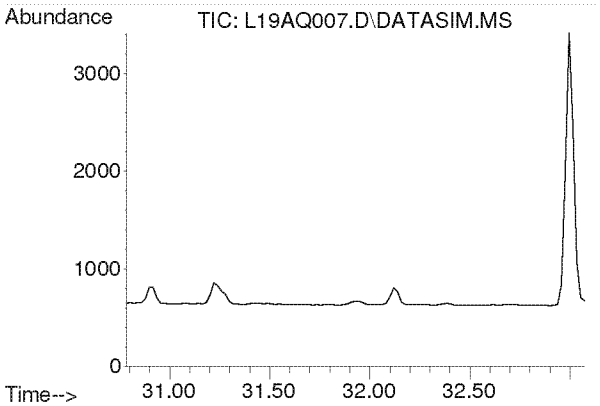
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



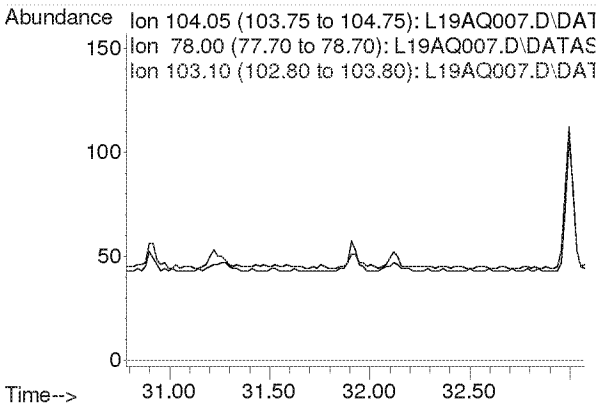


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

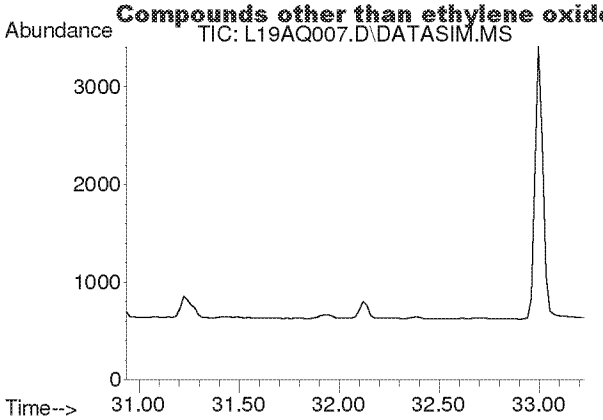
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

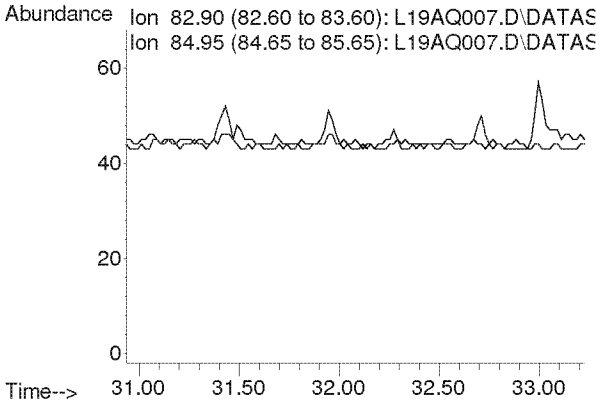


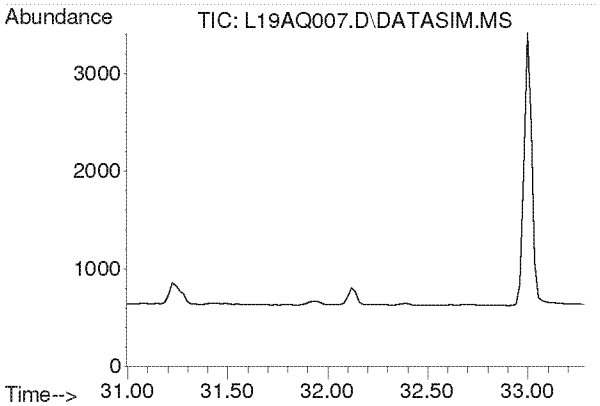
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



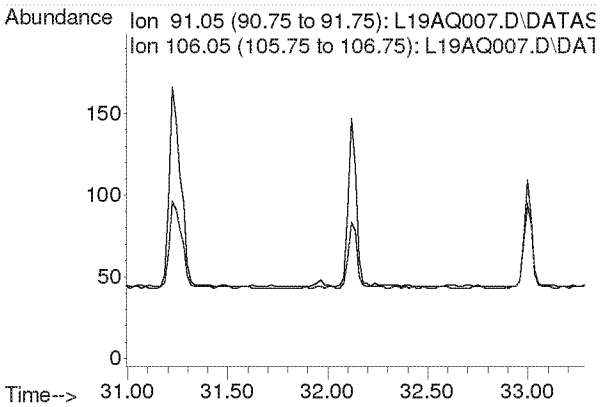


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

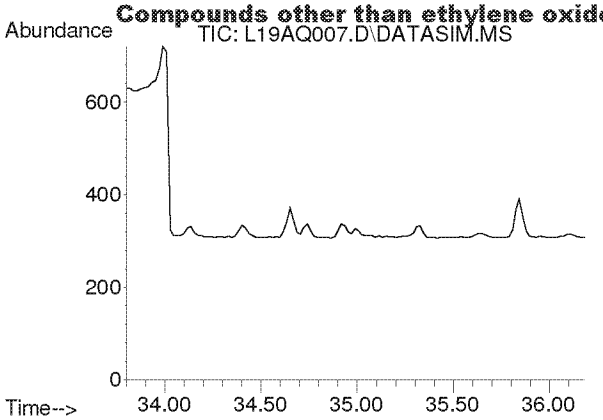
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

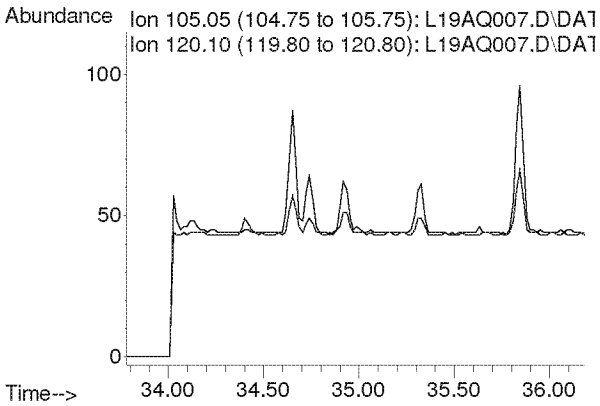


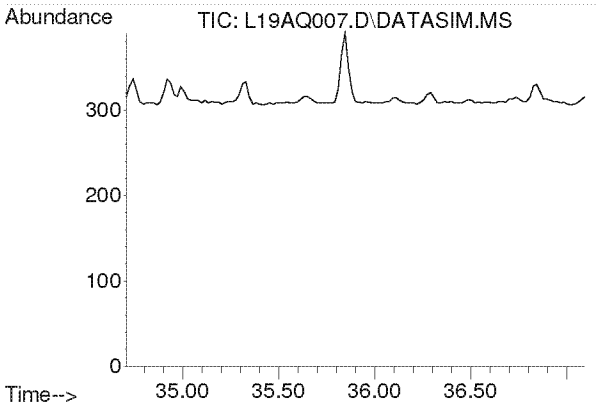
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



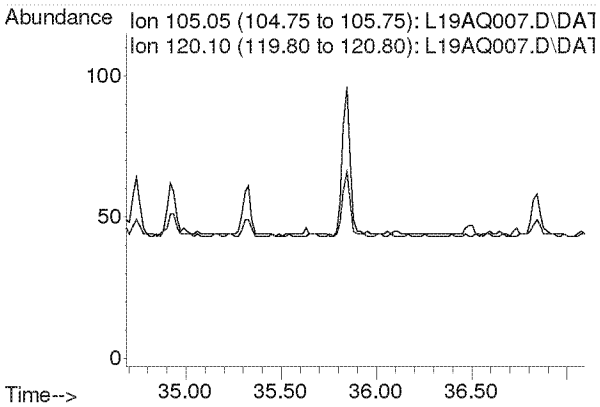


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

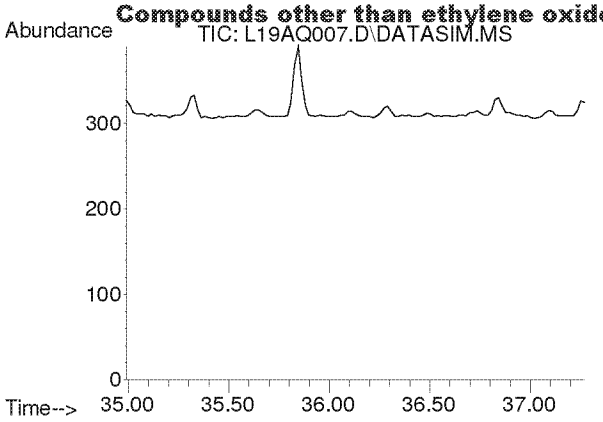
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

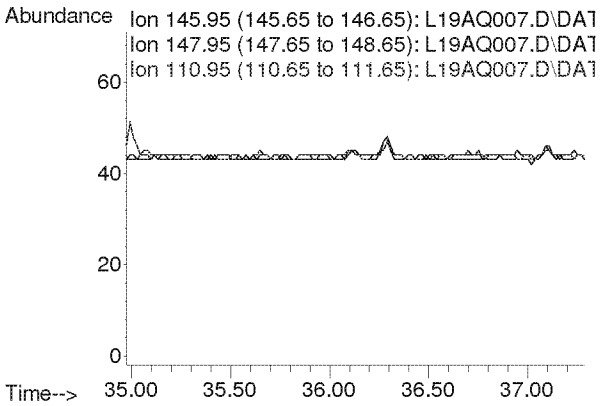


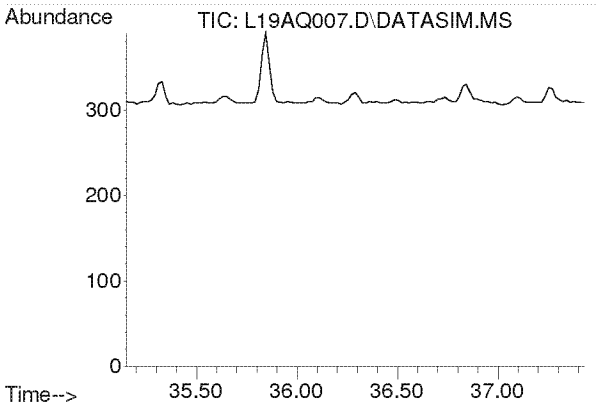
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



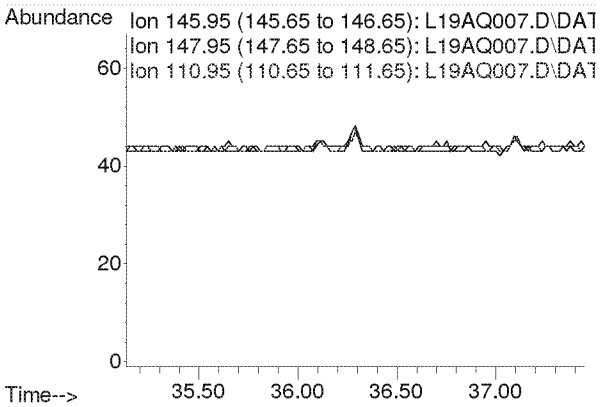


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

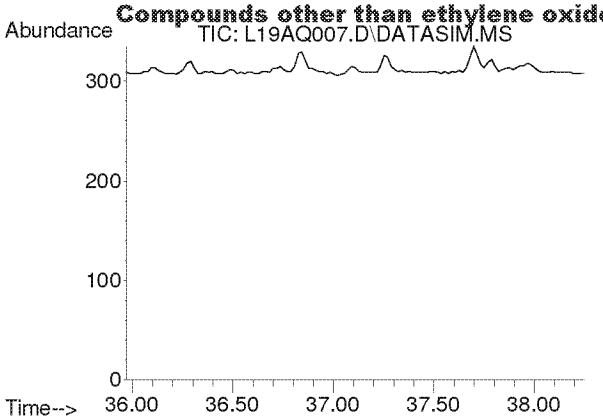
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

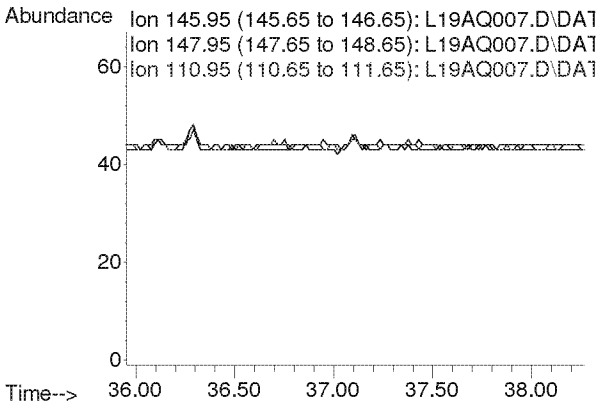


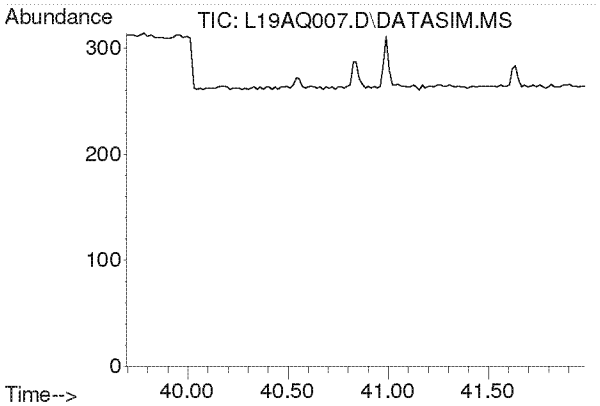
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



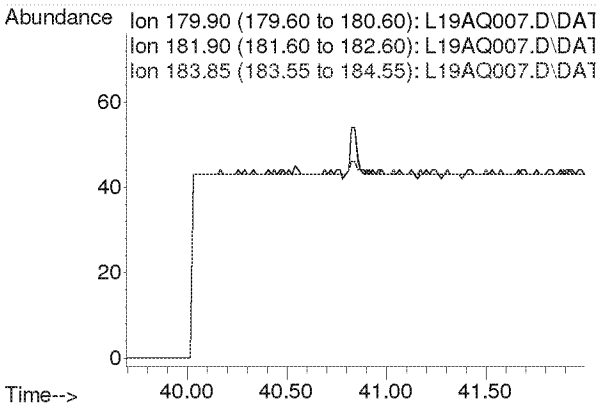


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

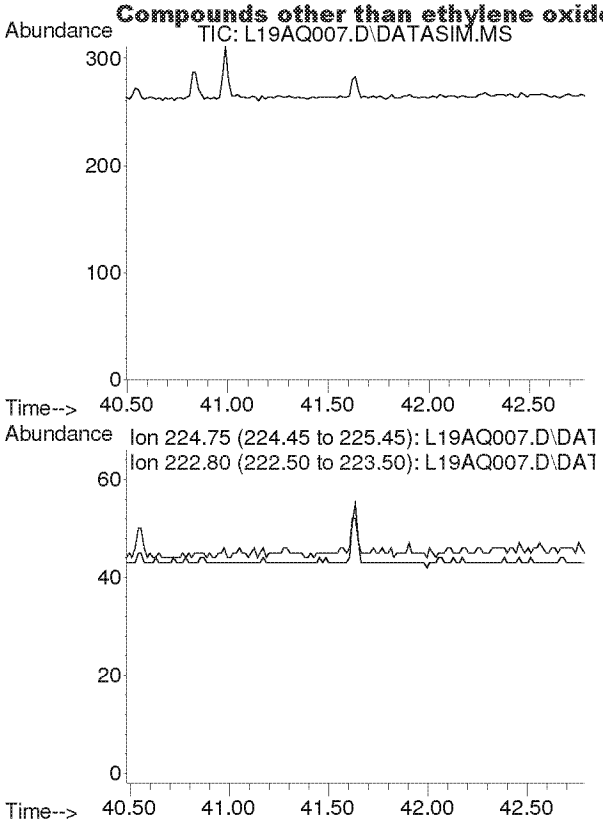
Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ007.D
Acq: 17 Jan 2019 5:29 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ008.D
Acq On : 17 Jan 2019 6:31 pm
Operator : MAH
Sample : B9A1704-DUP2
Misc : WILLOWBROOK VILLAGE HALL R2 1/7/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 07:47:14 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

d: MH

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	54354	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	135252	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	103287	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.380	29	10786	3.8420 ppbv	91
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ008.D
Acq On : 17 Jan 2019 6:31 pm
Operator : MAH
Sample : B9A1704-DUP2
Misc : WILLOWBROOK VILLAGE HALL R2 1/7/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 07:47:14 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

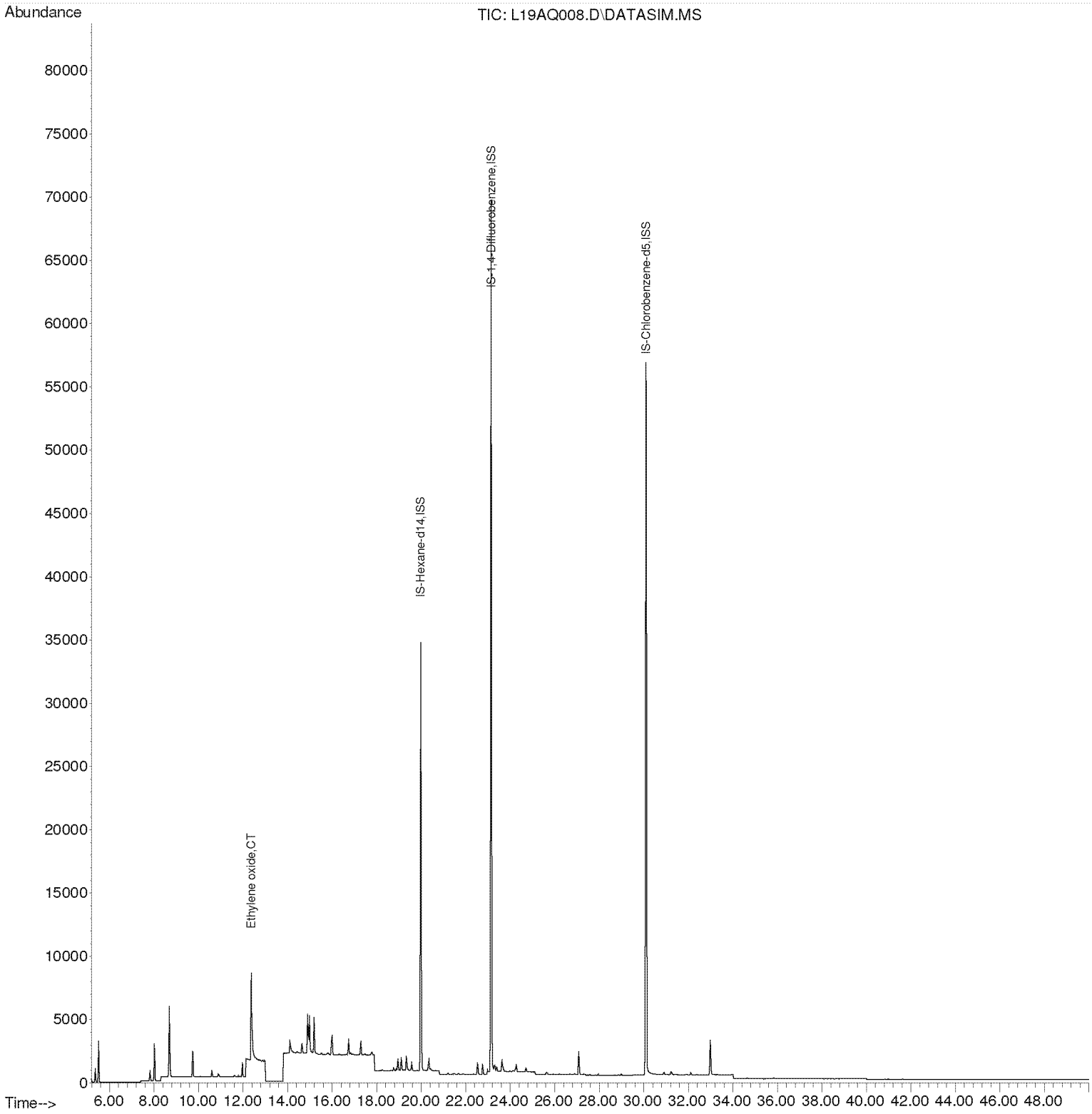
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

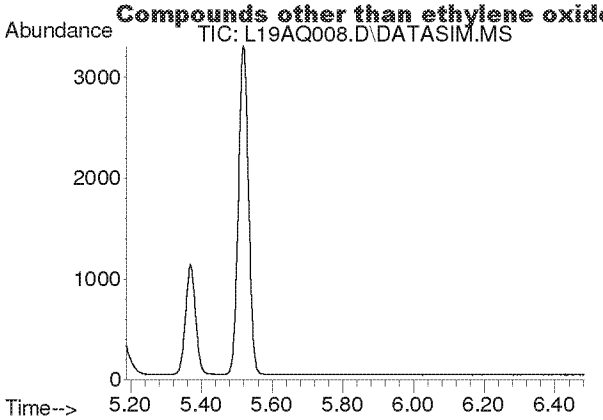
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ008.D
Acq On : 17 Jan 2019 6:31 pm
Operator : MAH
Sample : B9A1704-DUP2
Misc : WILLOWBROOK VILLAGE HALL R2 1/7/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 07:34:22 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



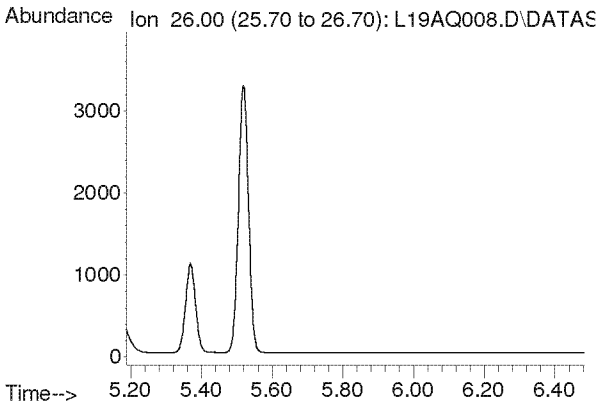
Compounds other than ethylene oxide were not quantitated.

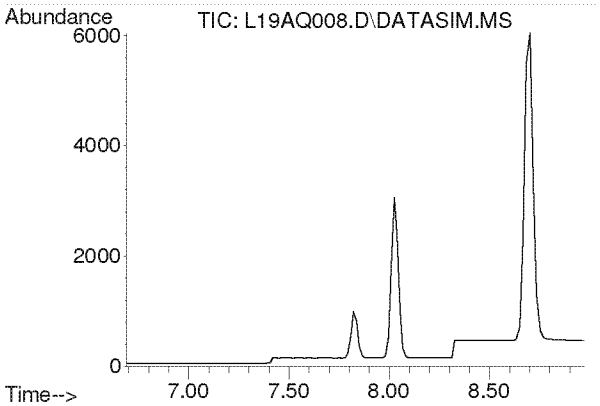


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 26



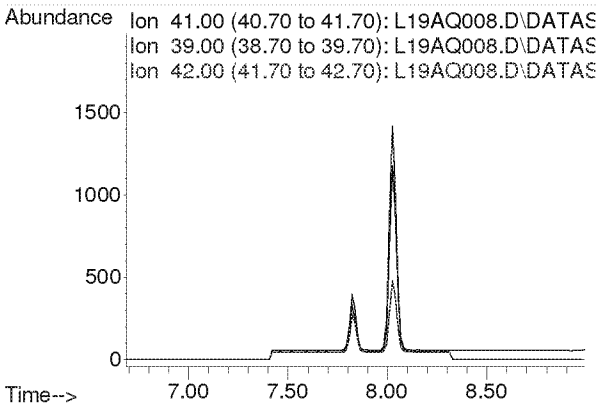


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

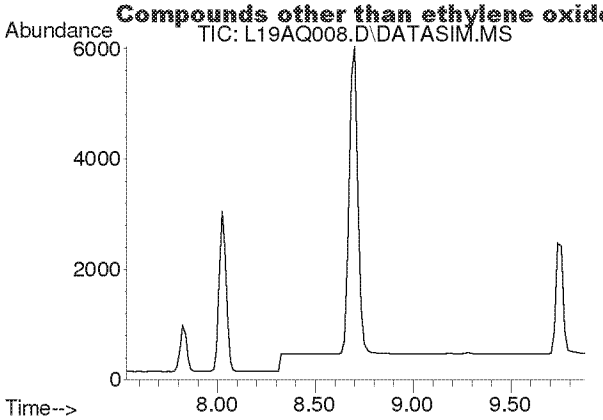
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

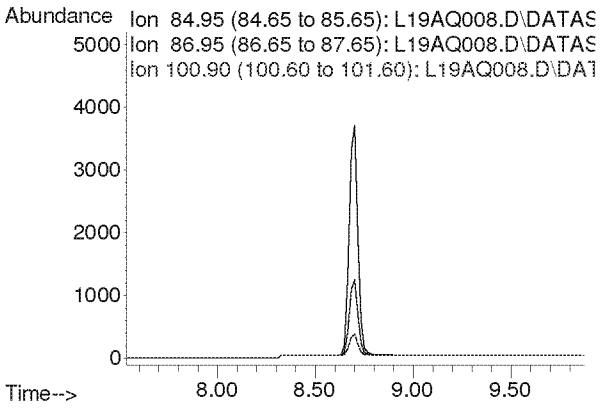


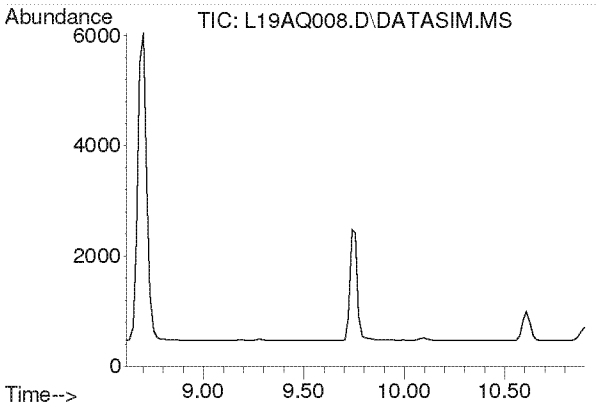
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



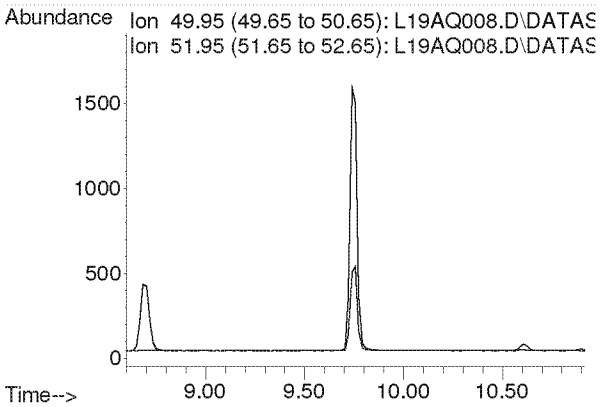


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

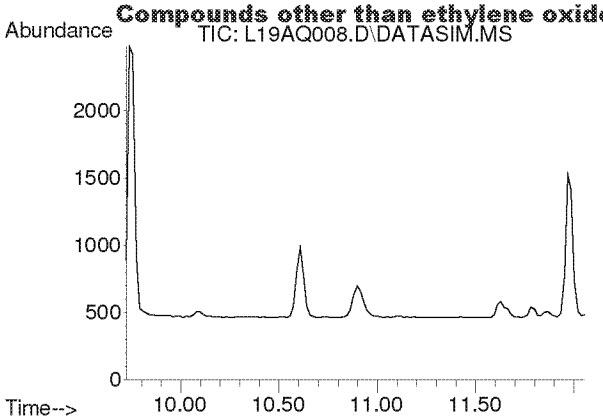
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

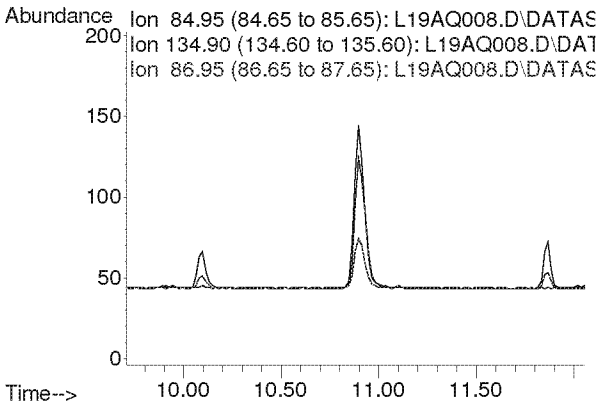


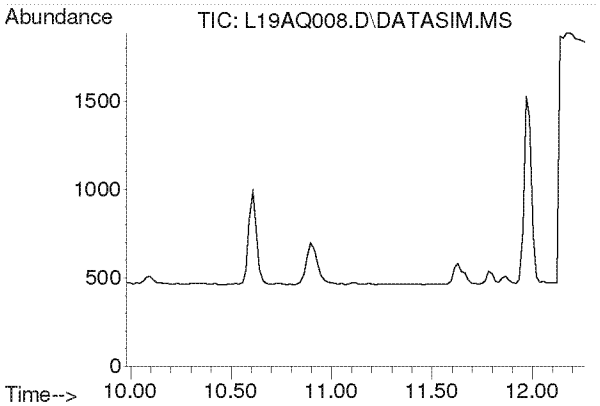
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



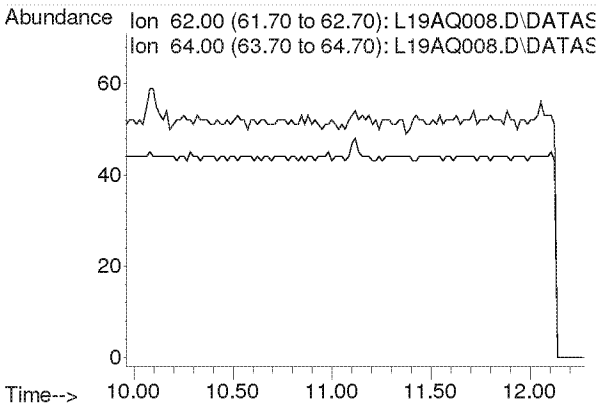


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

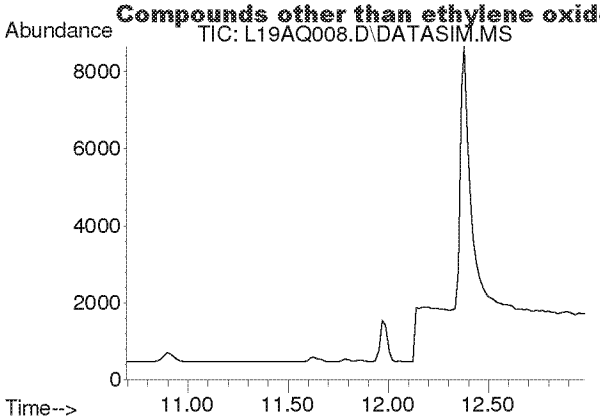
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

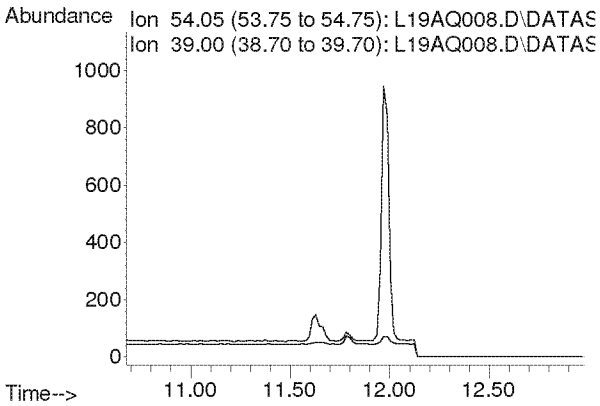


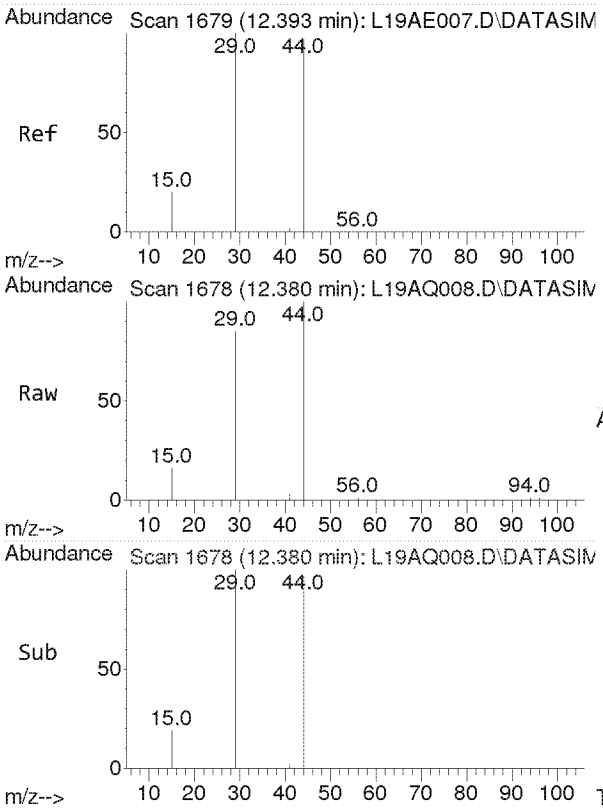
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

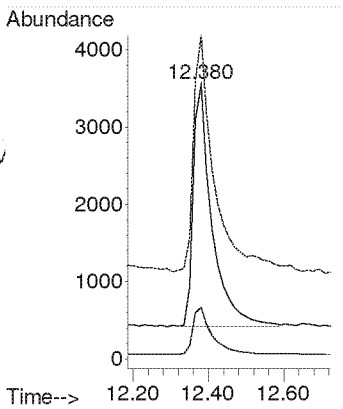




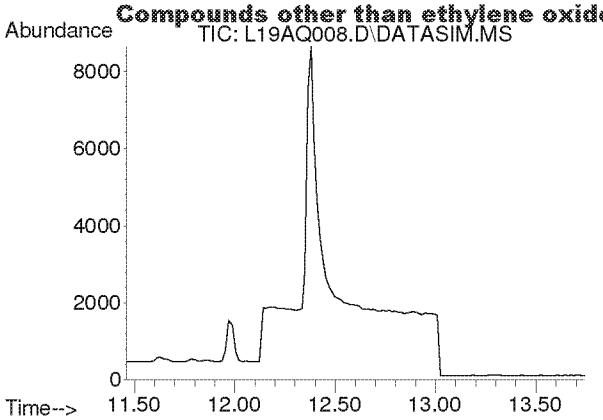
#9
Ethylene oxide
Concen: 3.842 ppbv
RT: 12.380 min Scan# 1678
Delta R.T. -0.013 min
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 29 Resp: 10786

Ion	Ratio	Lower	Upper
29	100		
15	19.7	15.4	23.0
44	107.4	77.4	116.2



Compounds other than ethylene oxide were not quantitated.

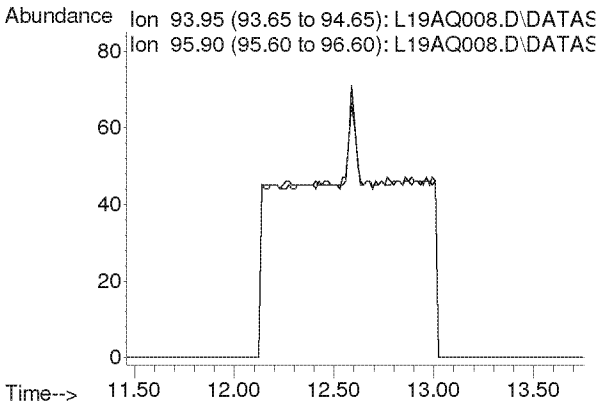


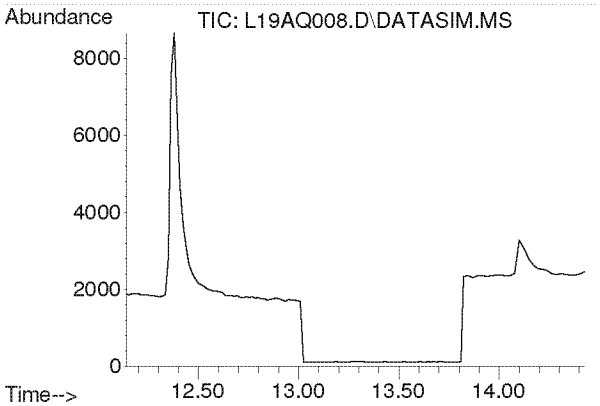
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



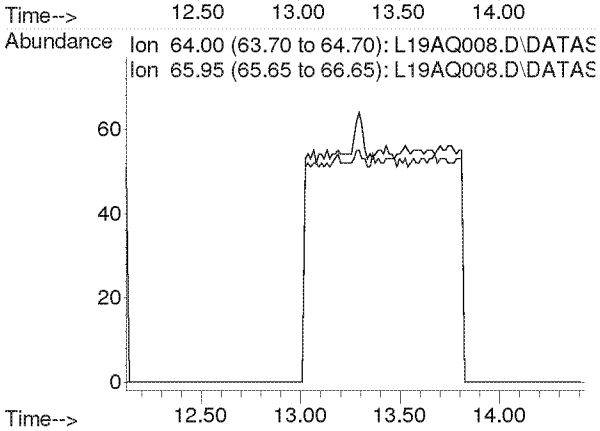


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

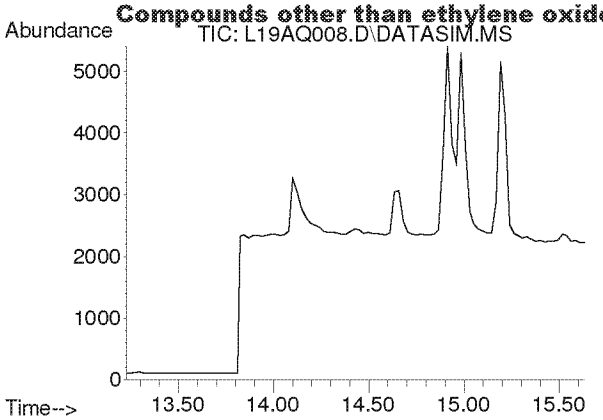
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

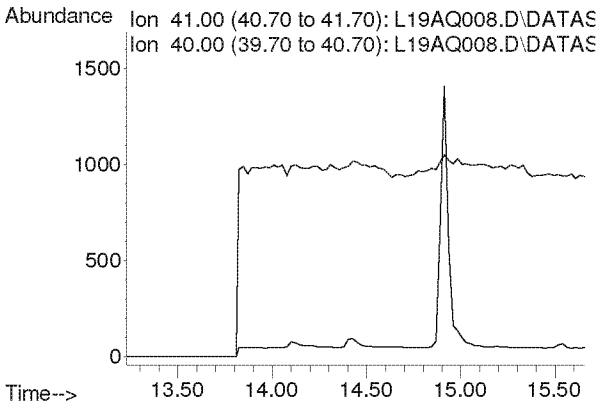


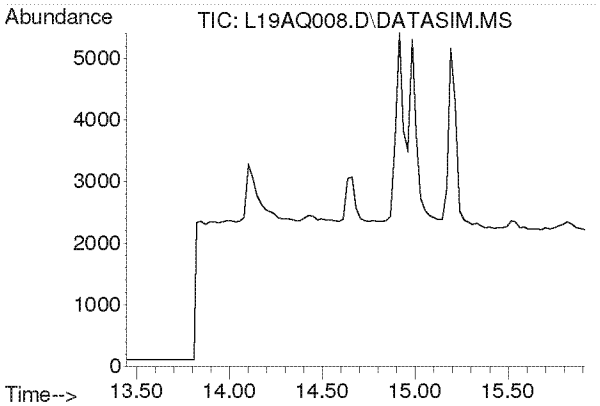
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



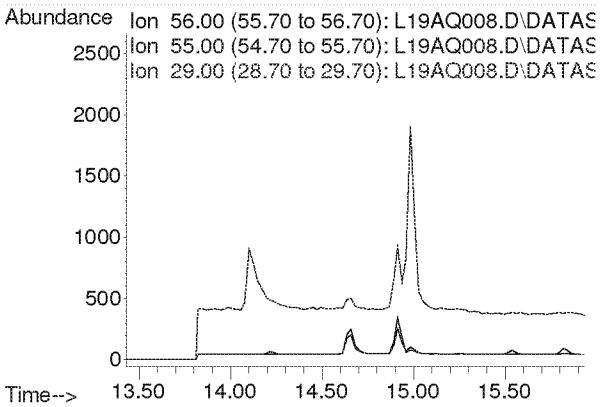


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

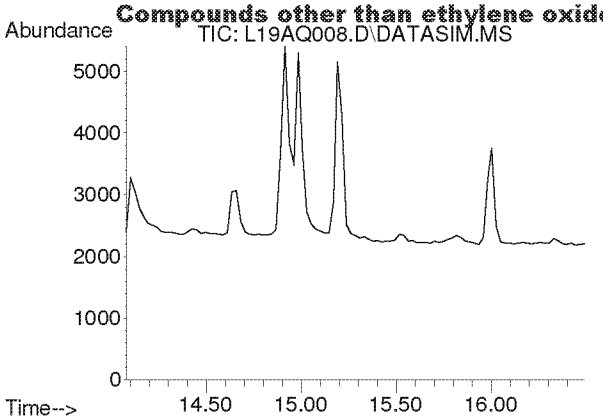
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

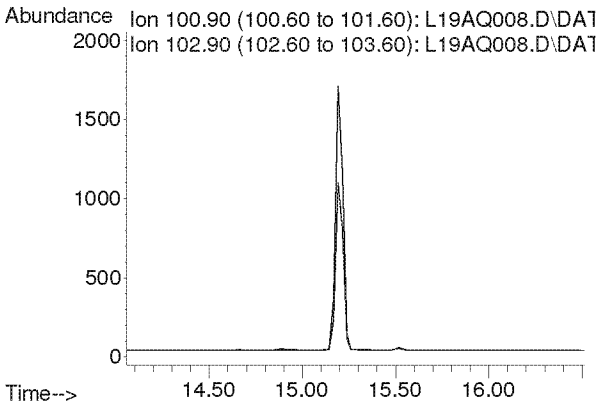


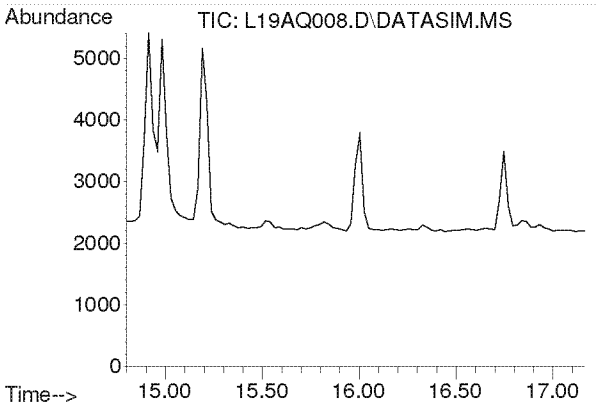
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



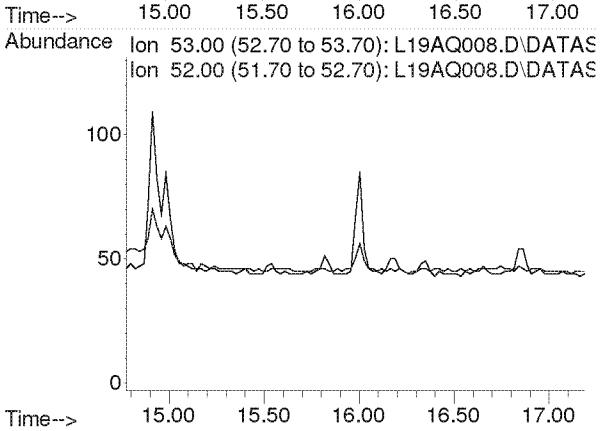


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

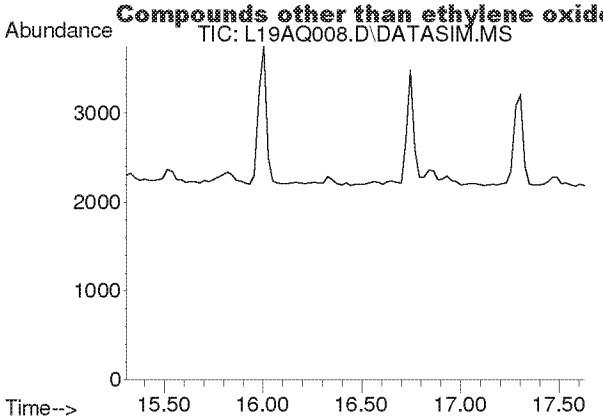
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

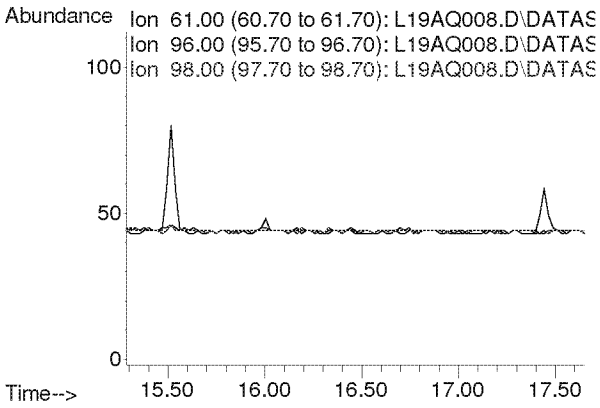


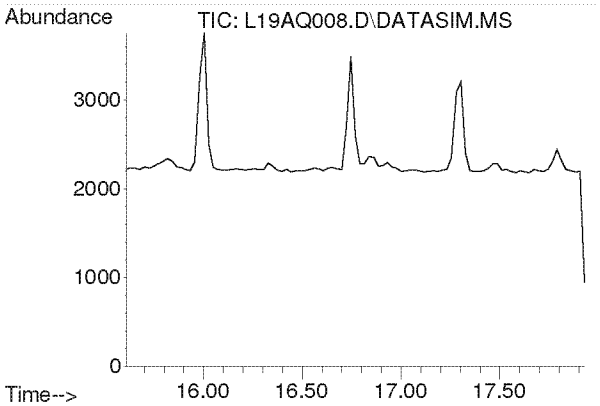
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



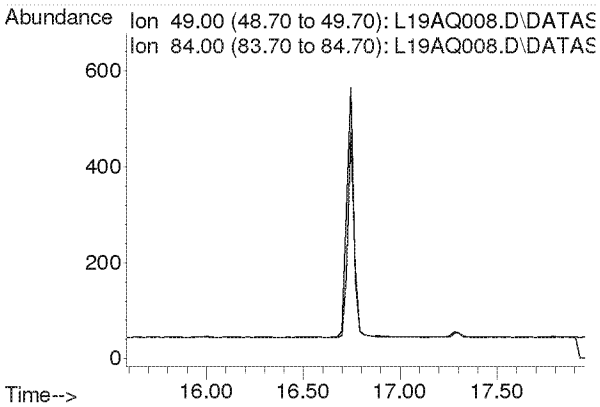


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

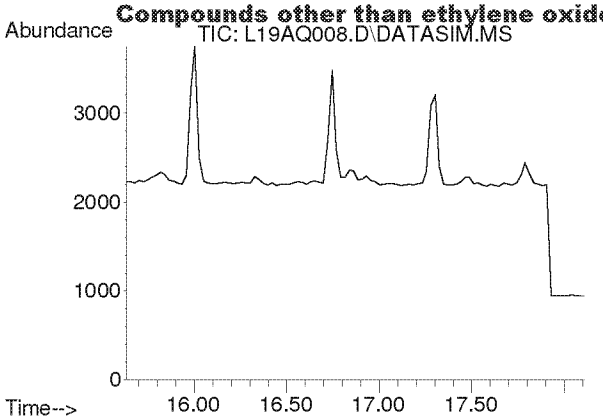
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

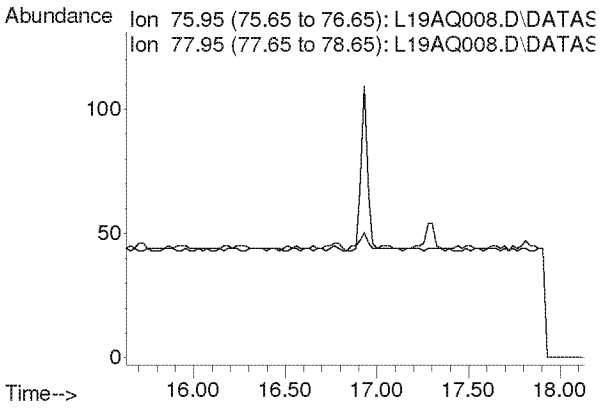


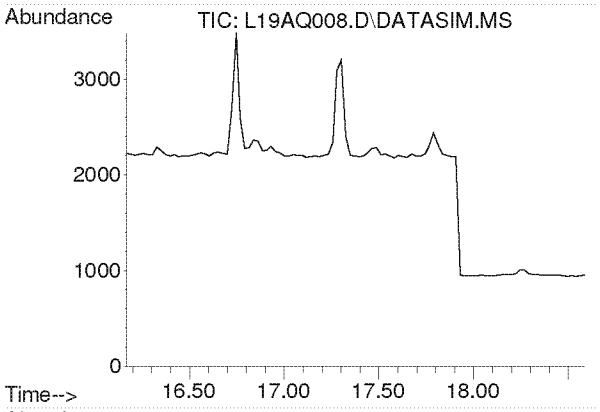
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



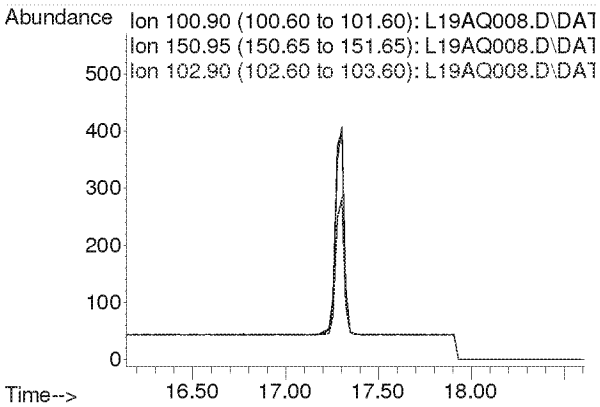


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

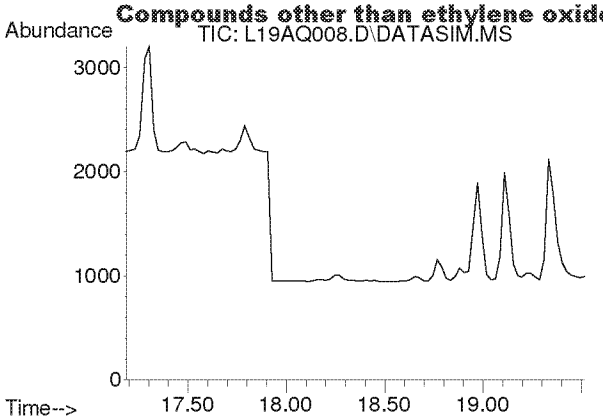
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

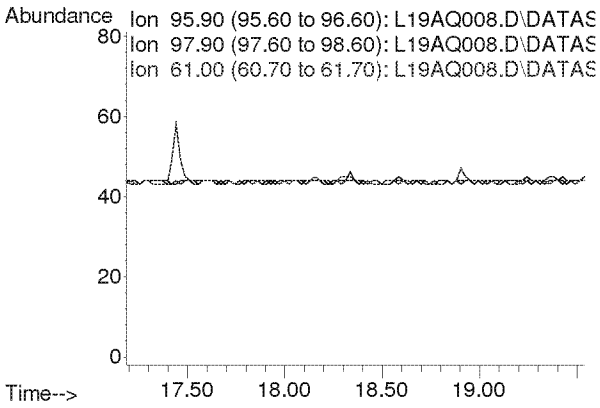


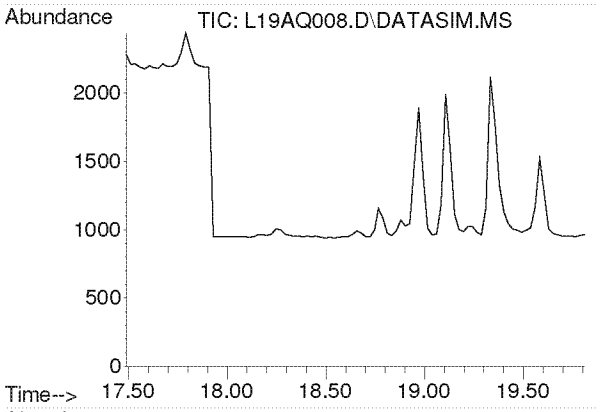
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



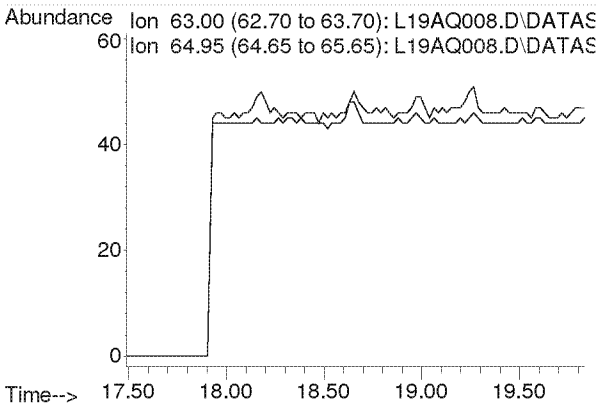


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

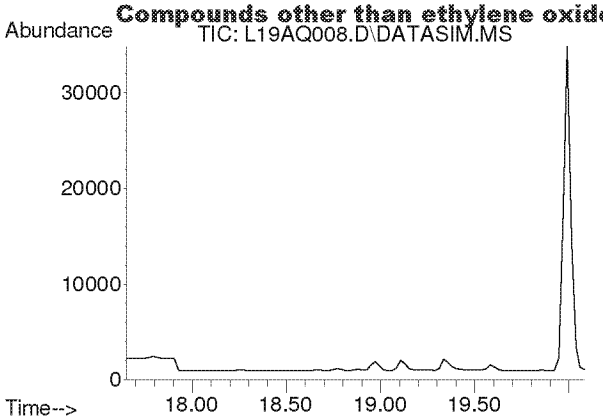
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

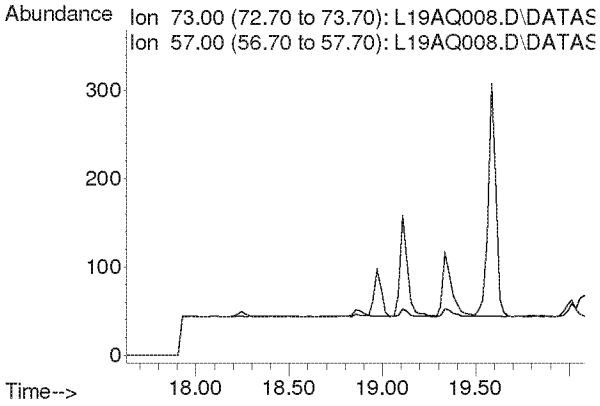


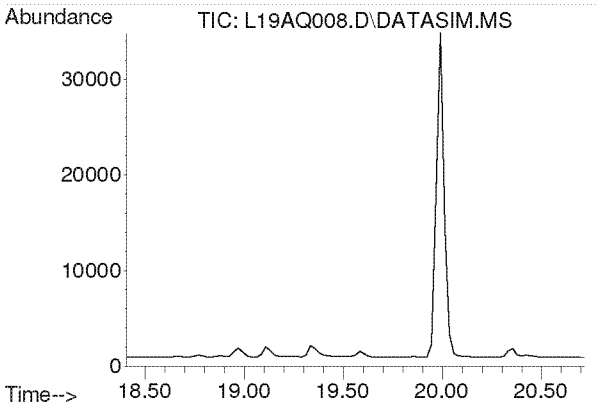
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



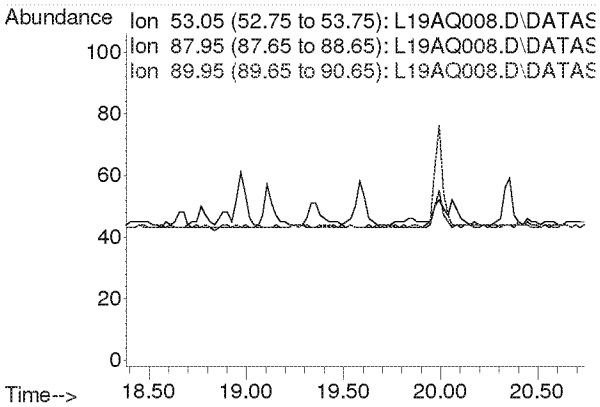


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

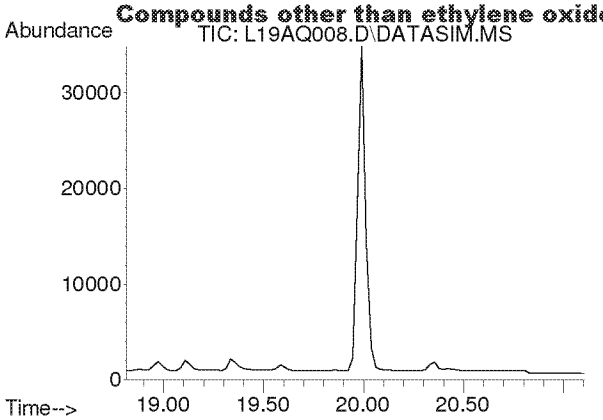
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

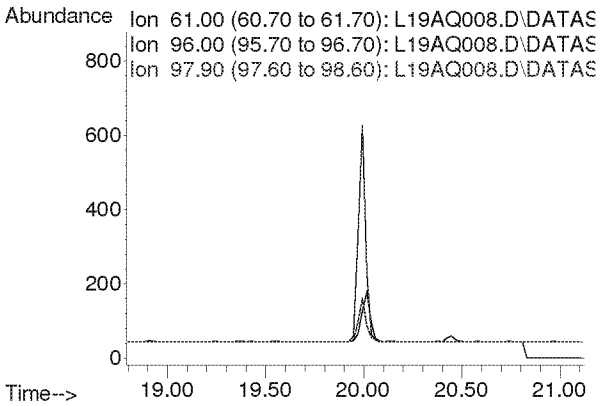


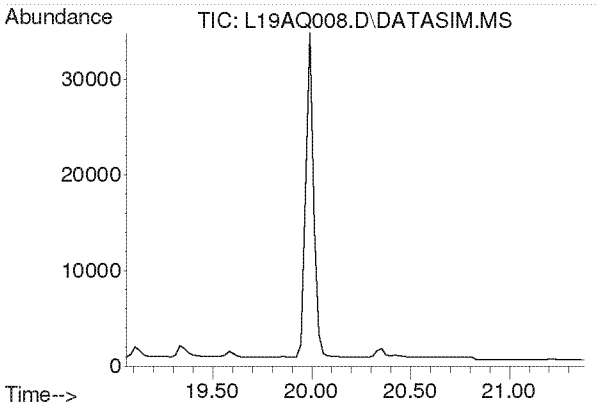
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



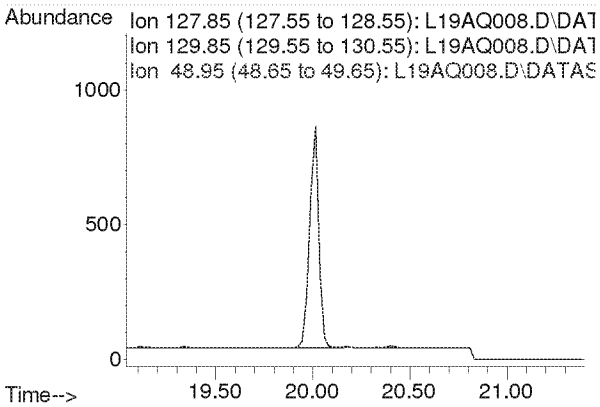


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

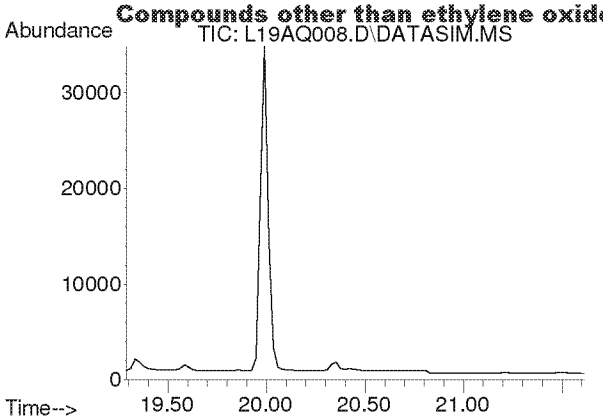
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

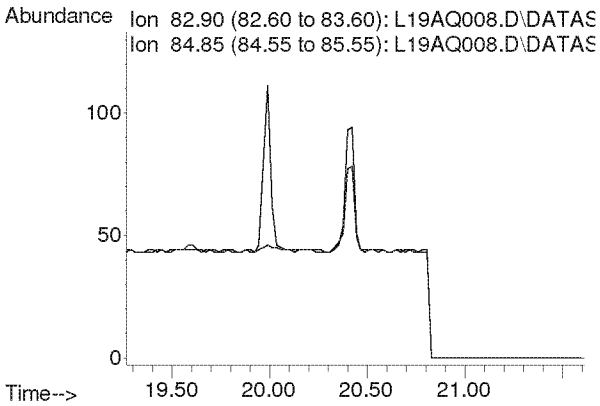


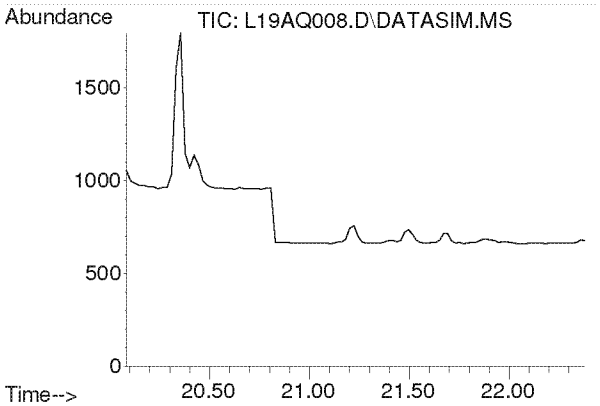
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



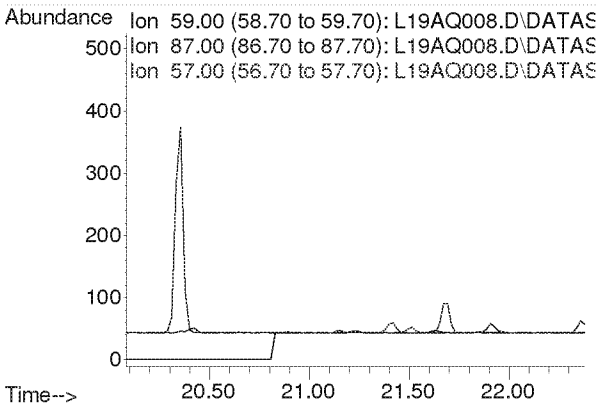


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

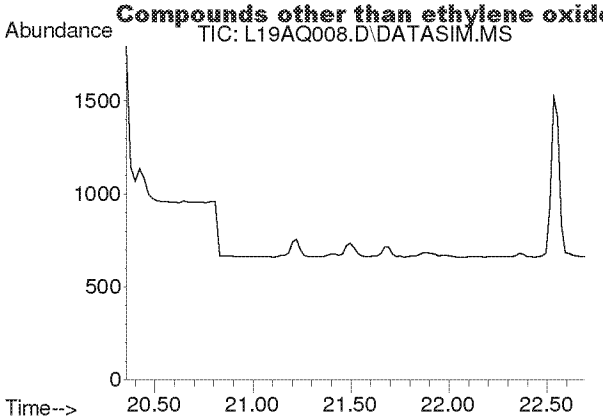
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

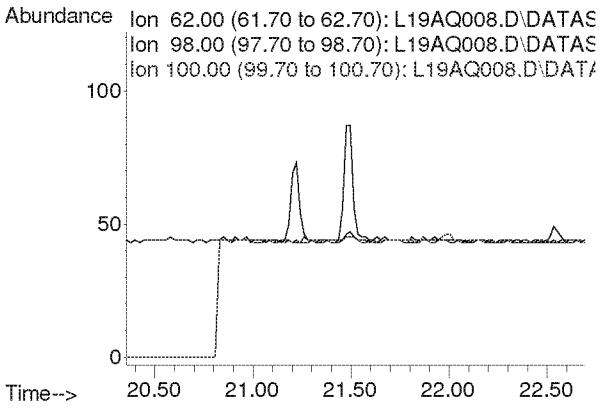


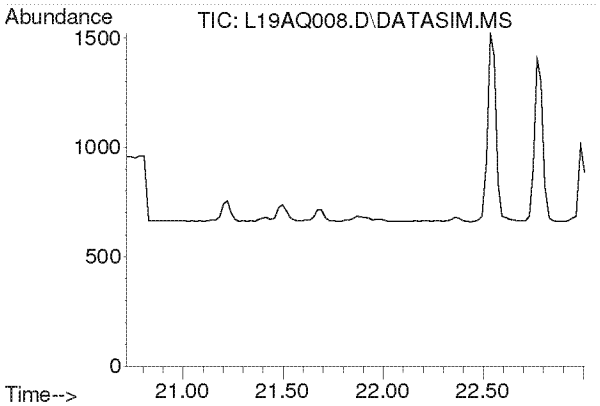
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



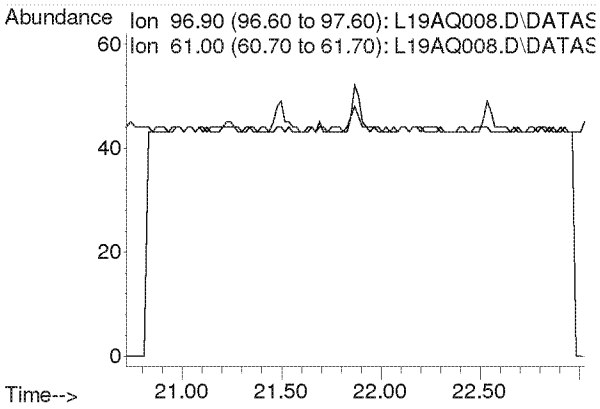


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

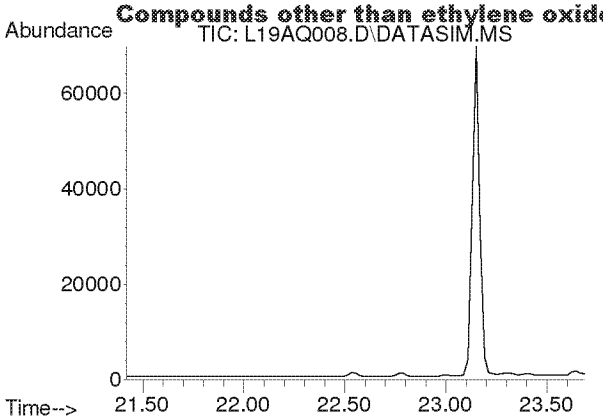
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

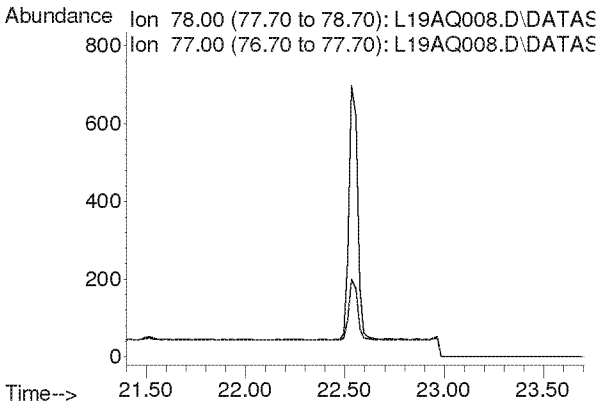


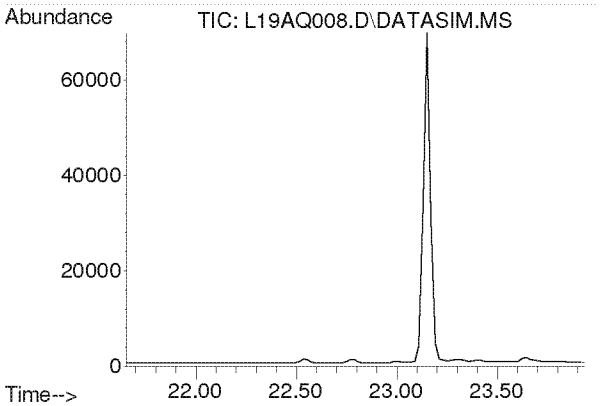
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



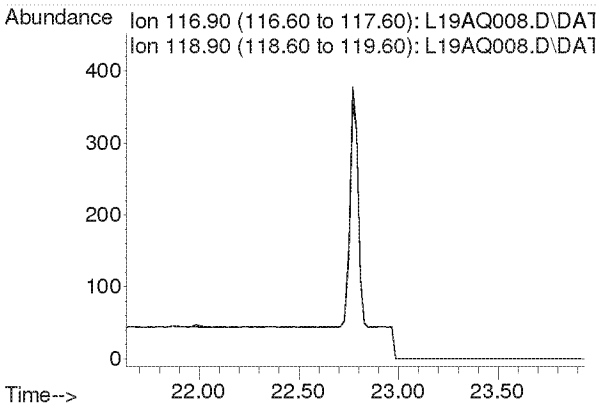


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

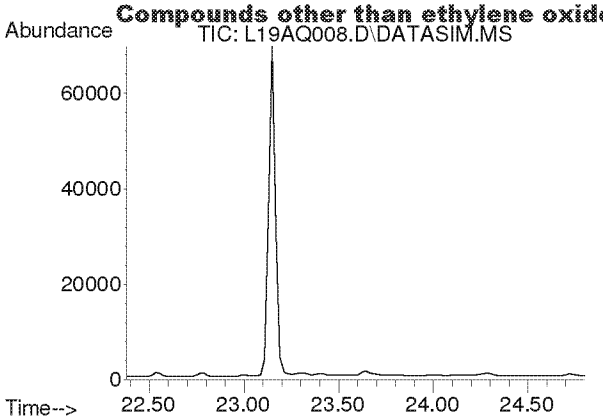
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

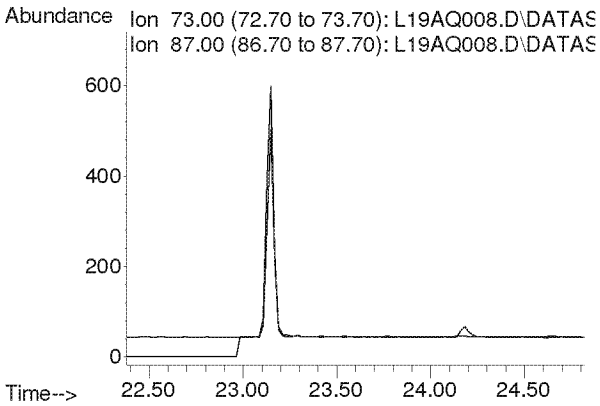


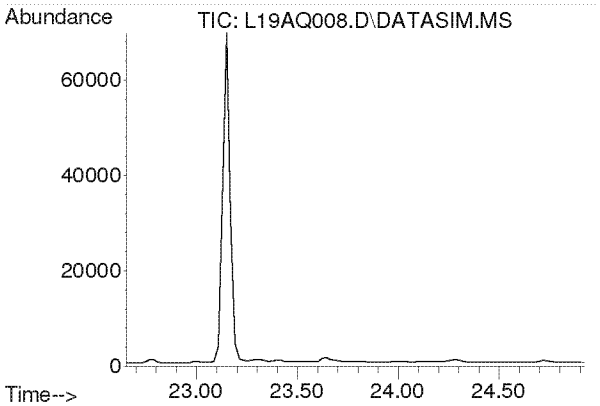
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



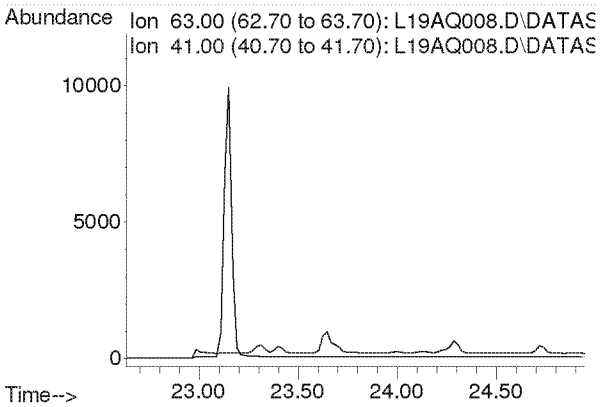


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

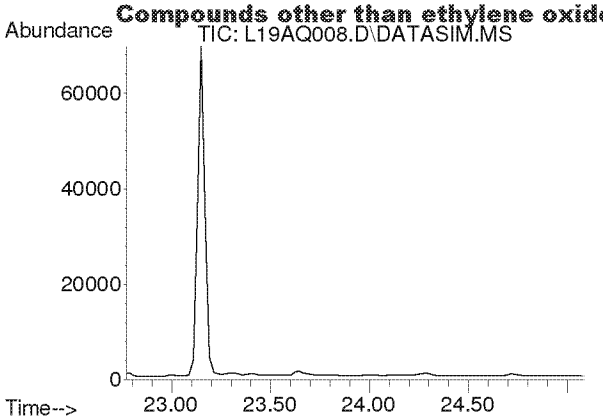
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

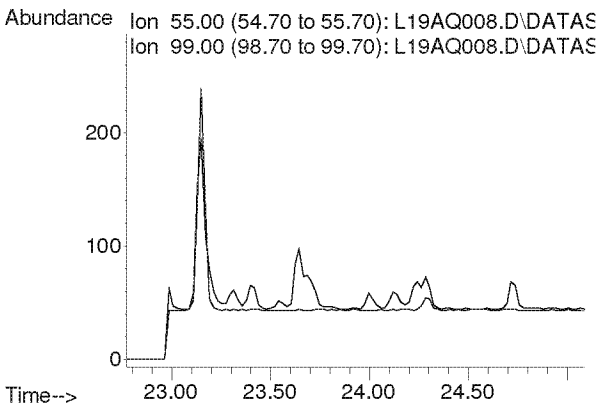


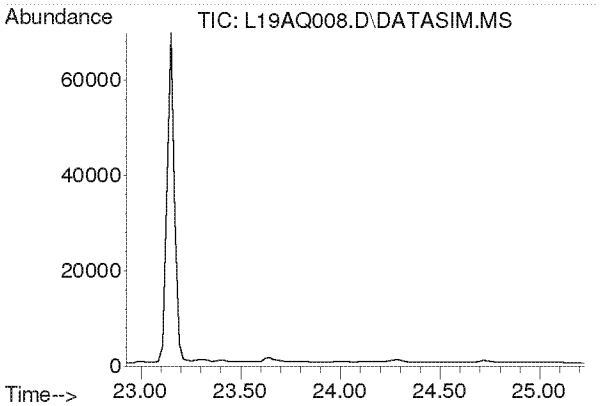
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



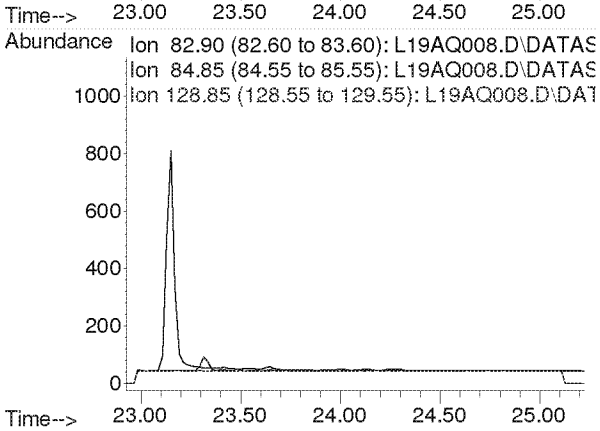


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

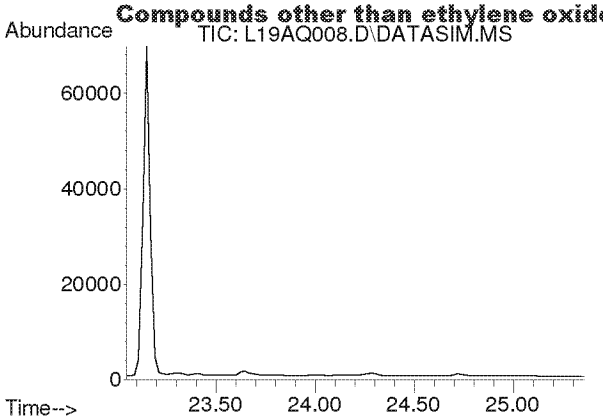
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

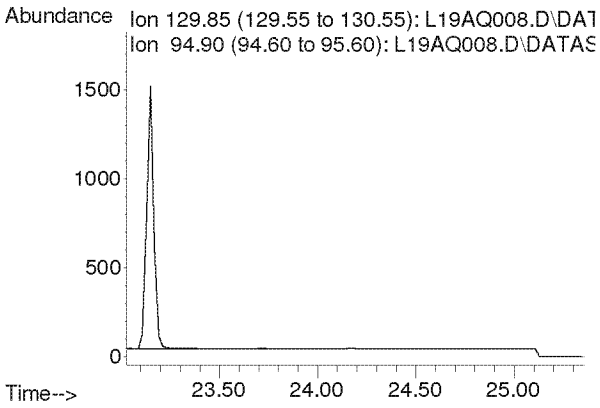


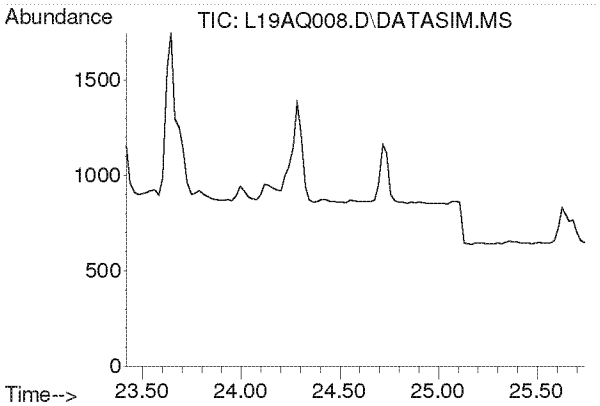
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



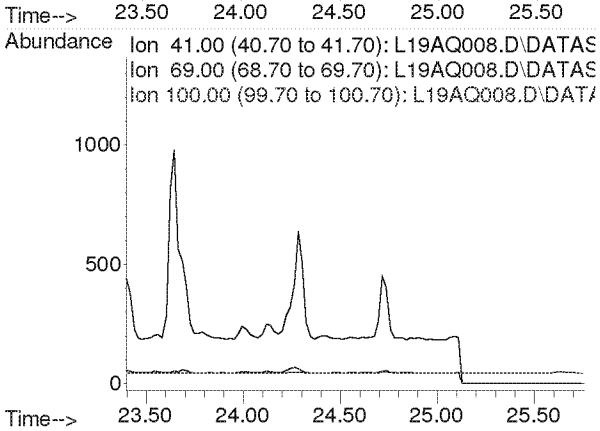


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

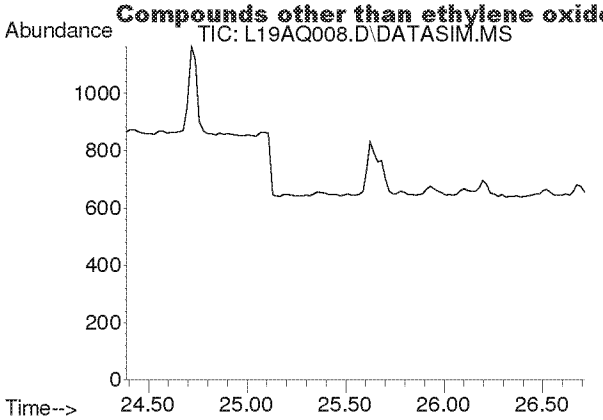
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

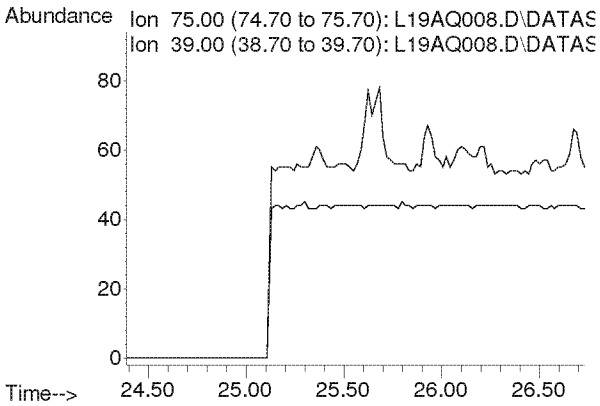


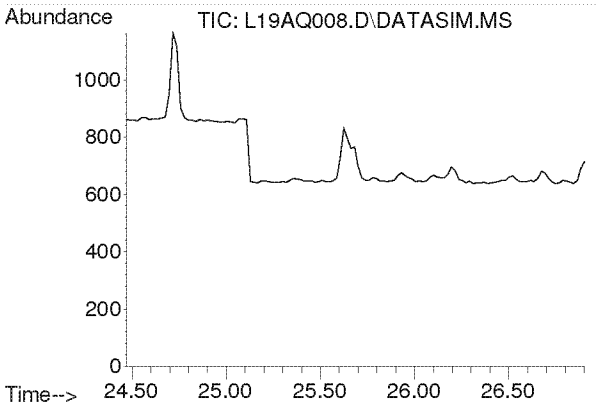
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



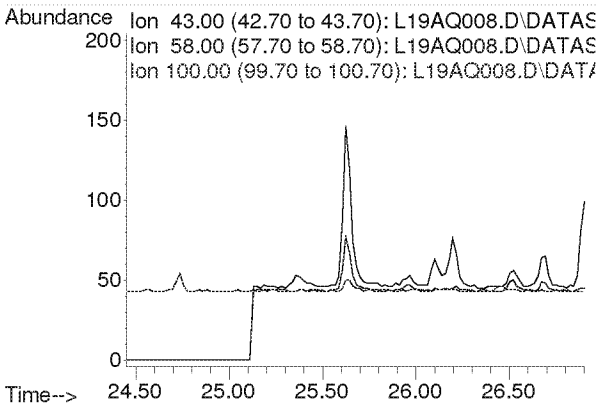


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

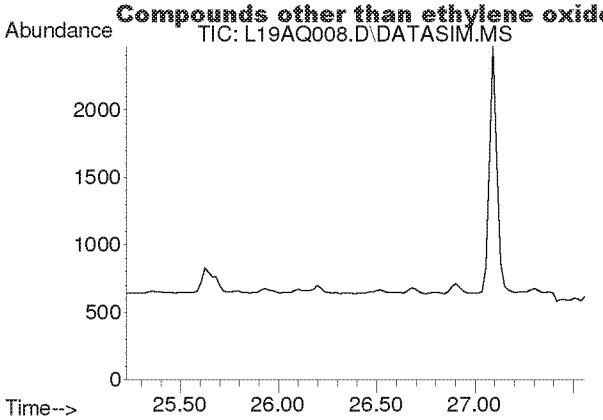
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

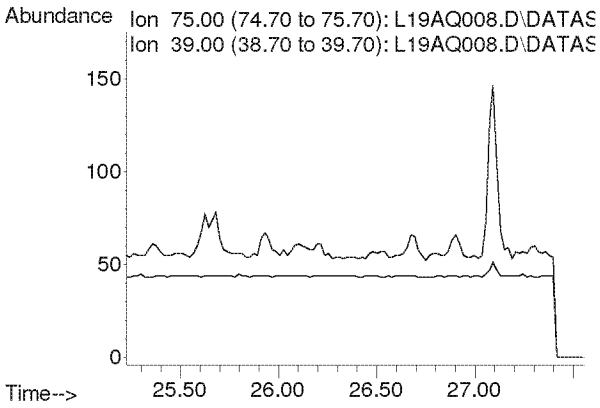


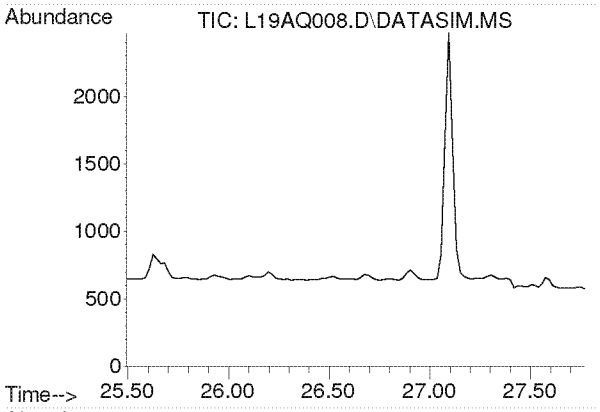
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



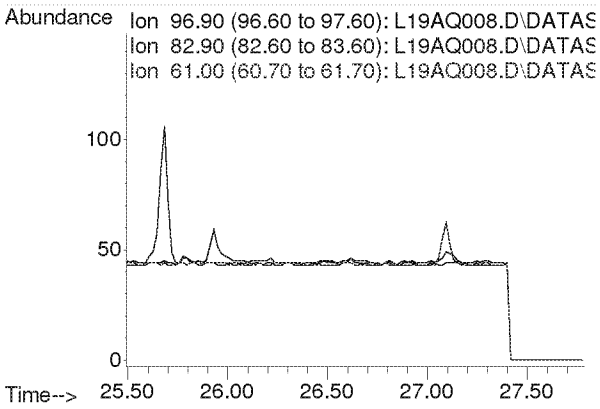


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

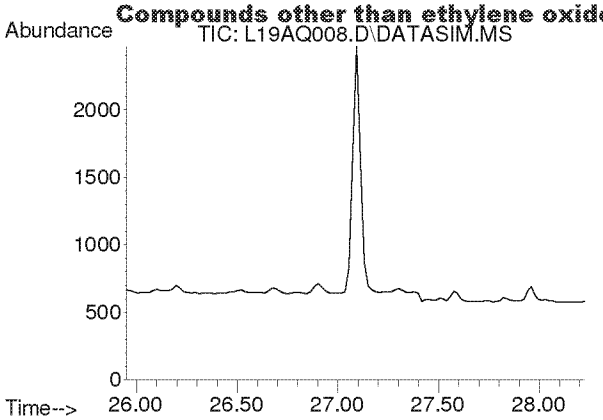
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

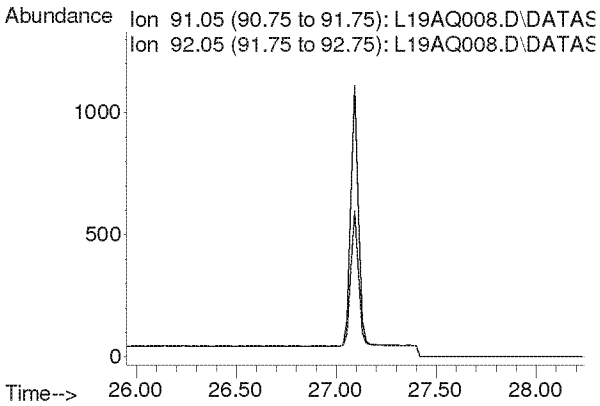


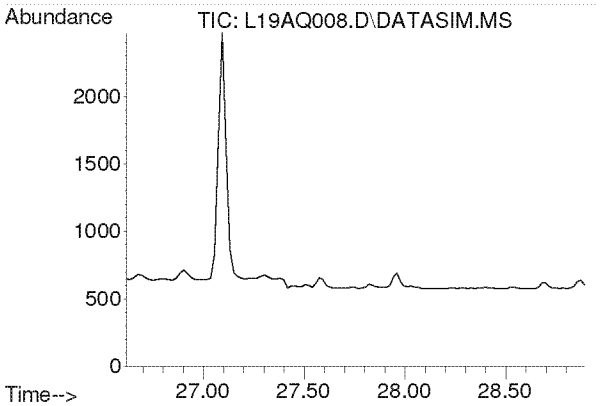
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



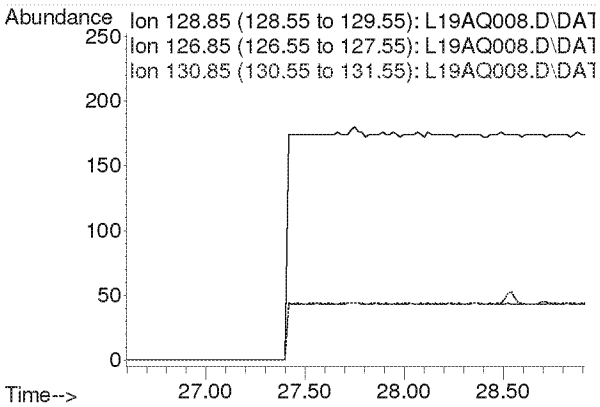


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

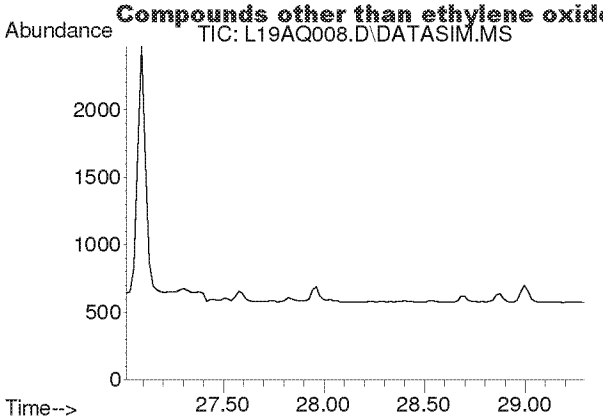
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

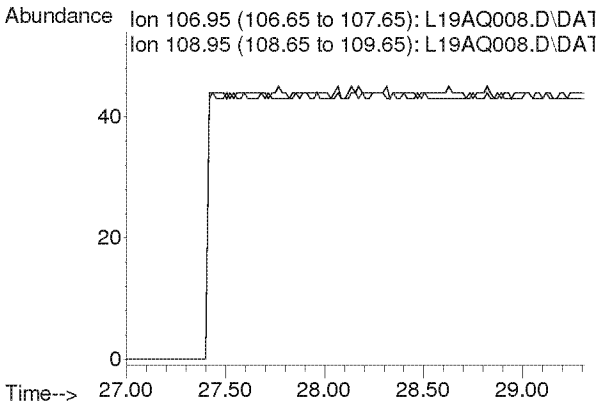


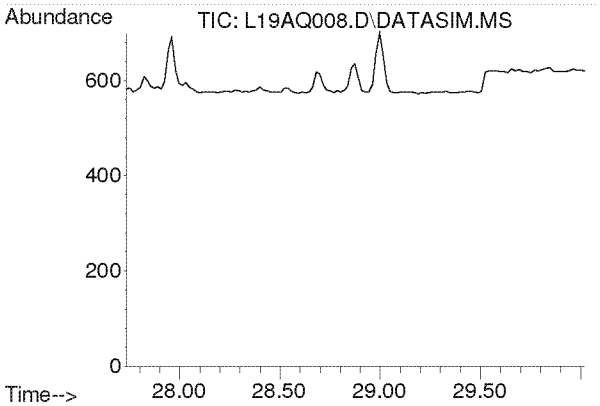
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



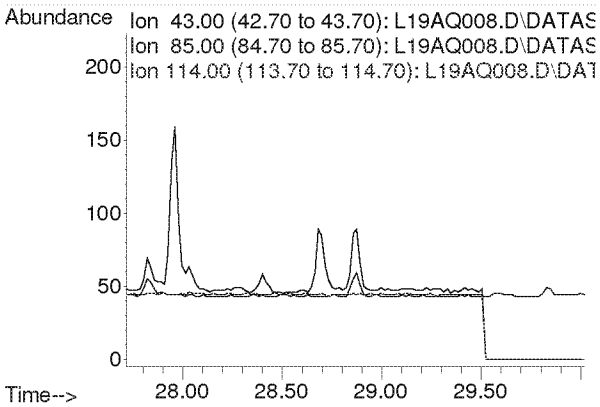


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

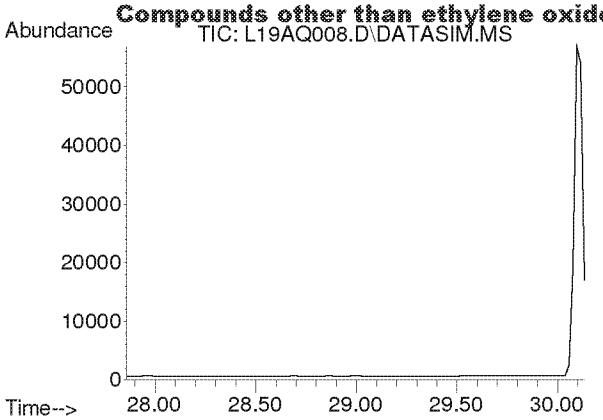
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

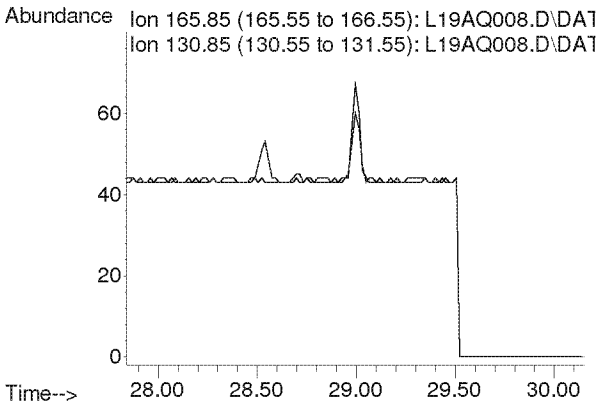


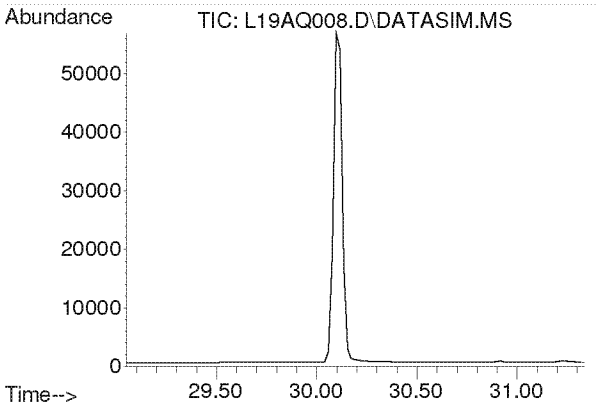
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



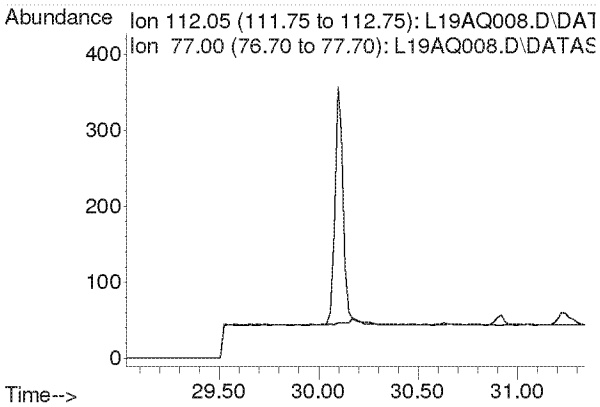


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

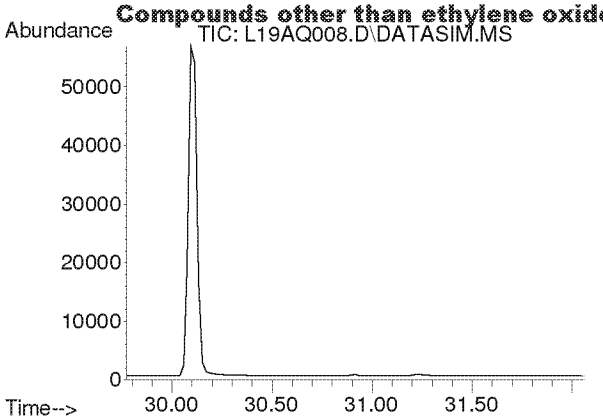
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

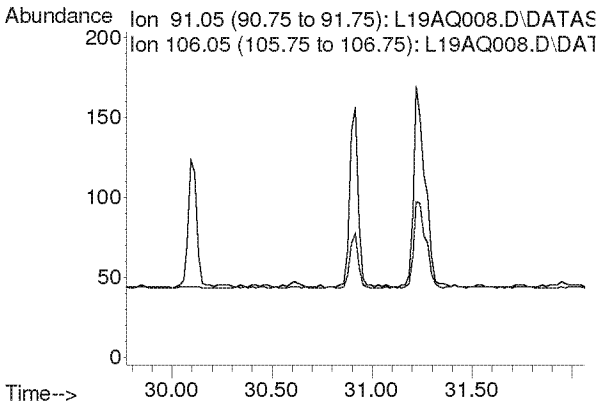


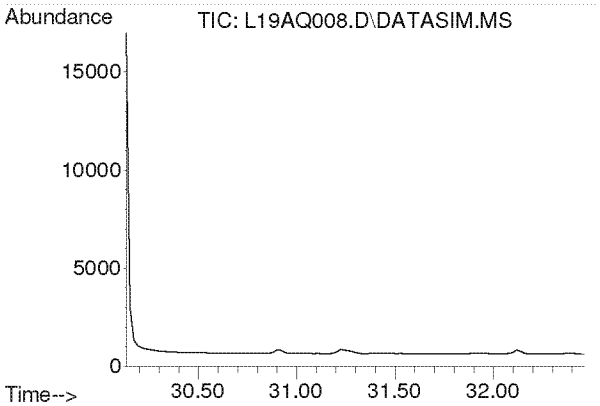
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



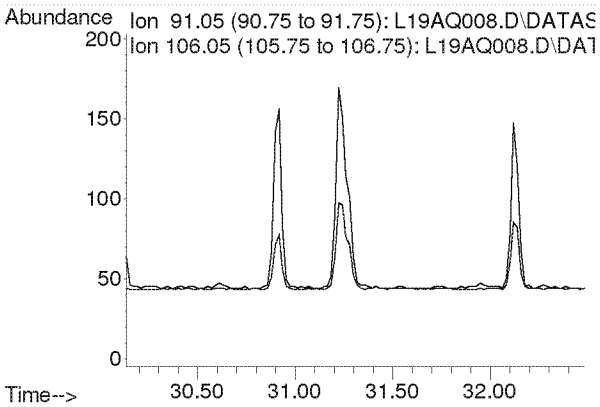


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

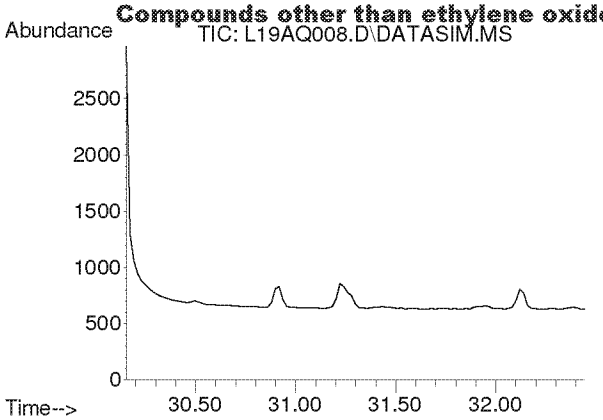
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

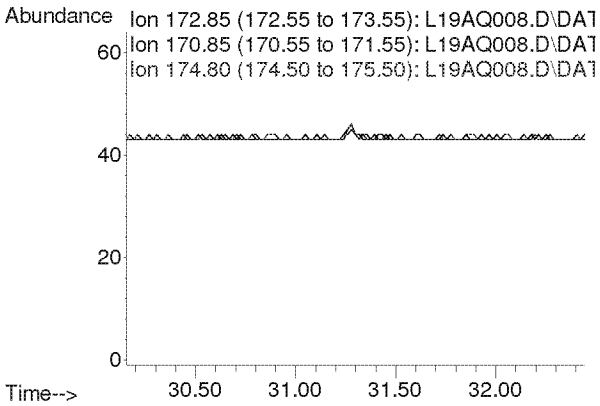


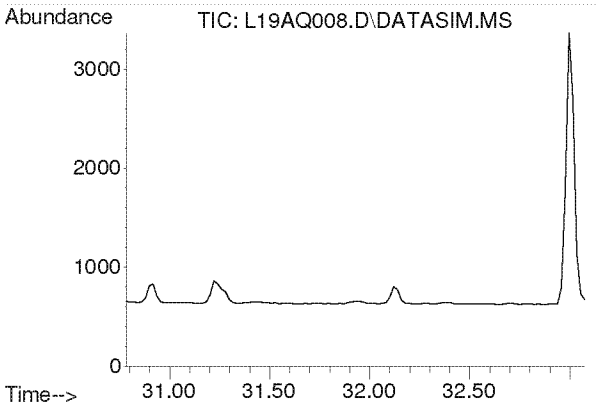
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



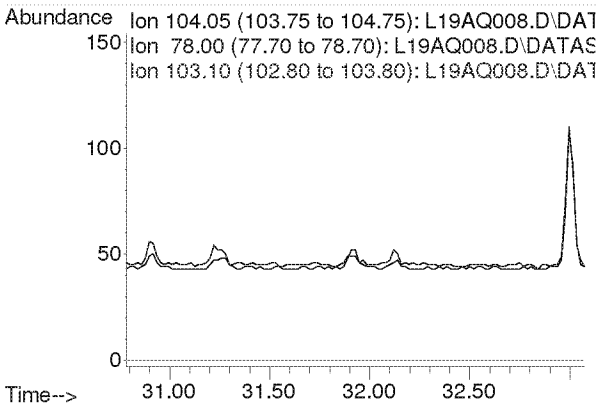


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

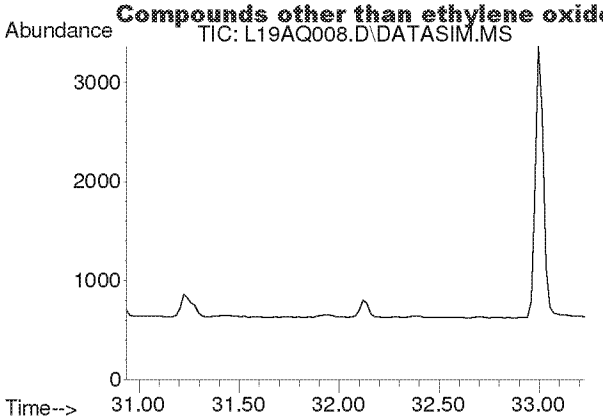
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

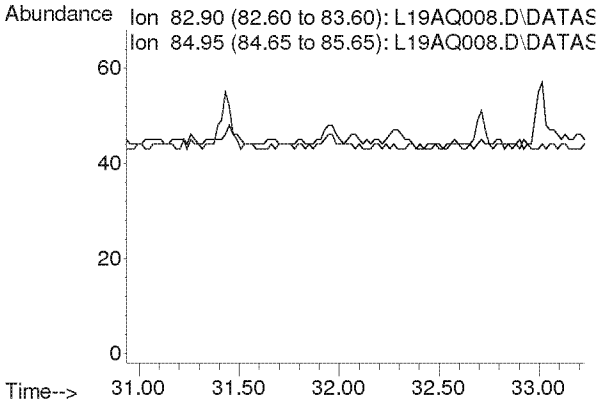


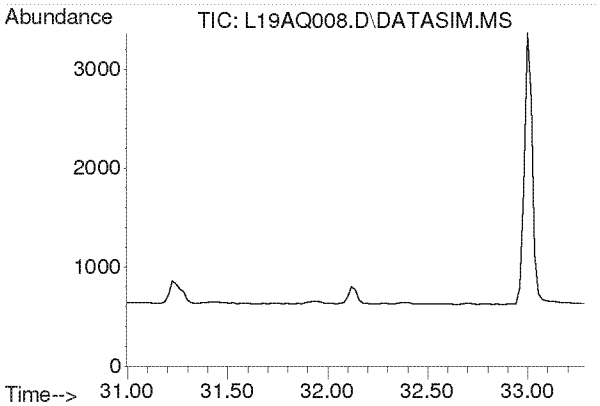
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



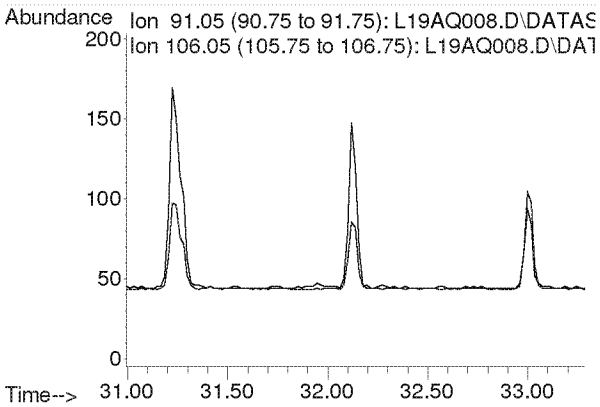


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

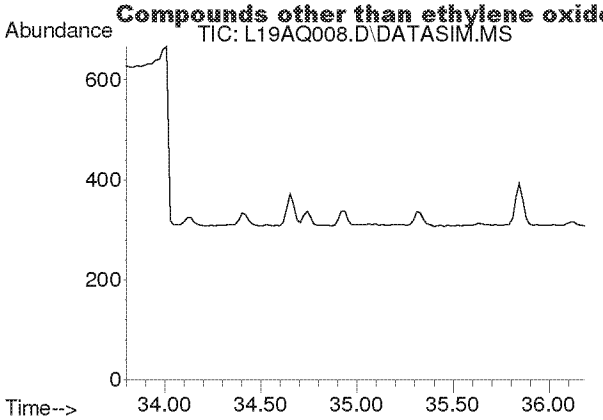
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

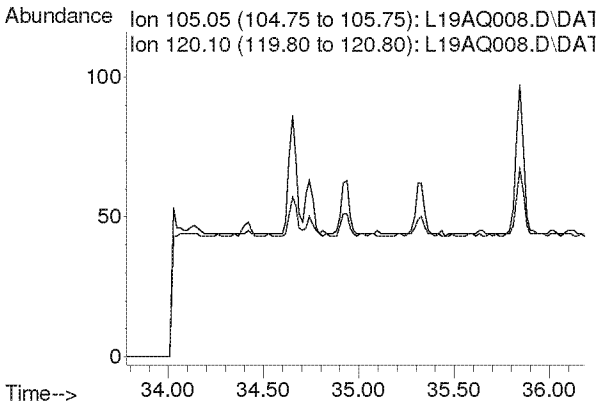


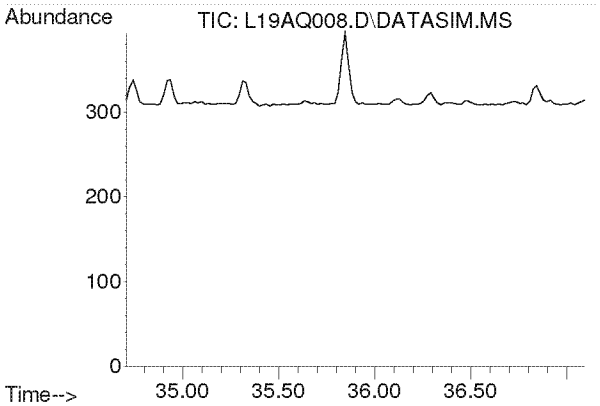
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



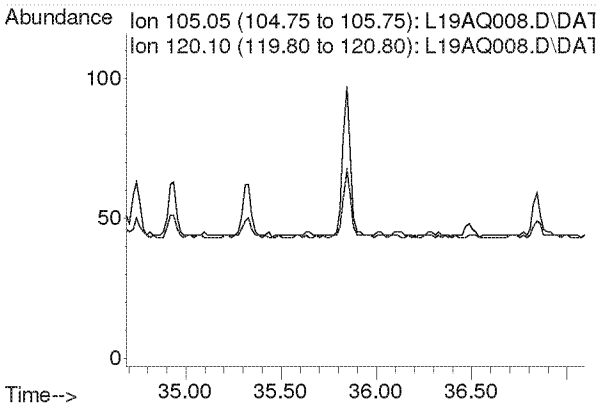


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

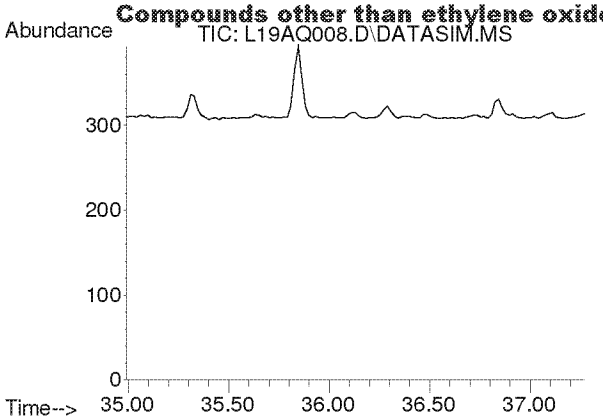
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

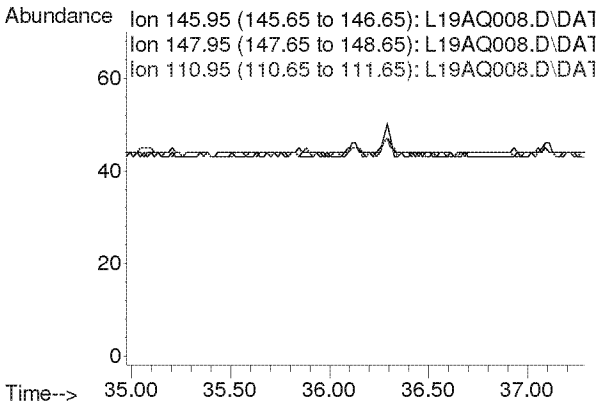


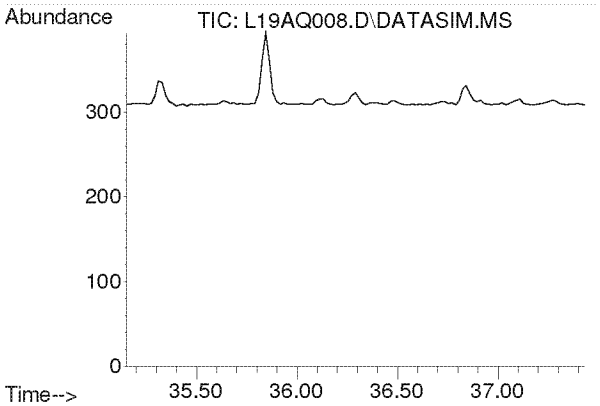
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



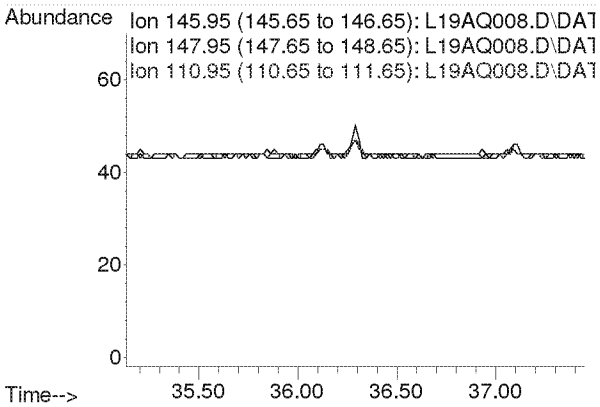


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

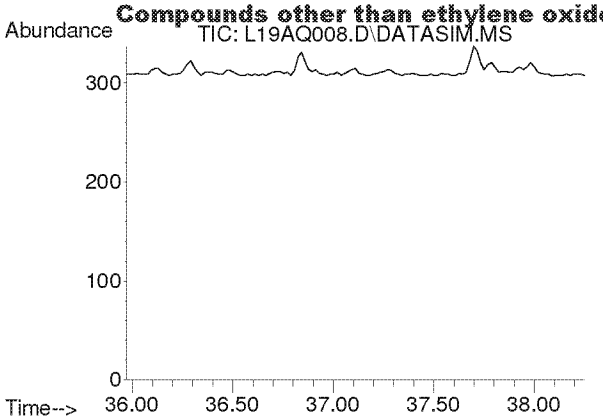
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

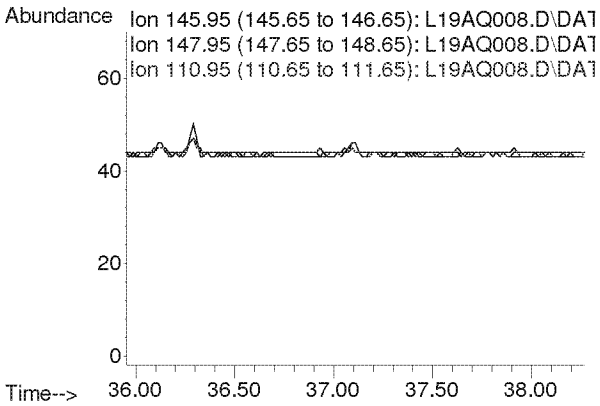


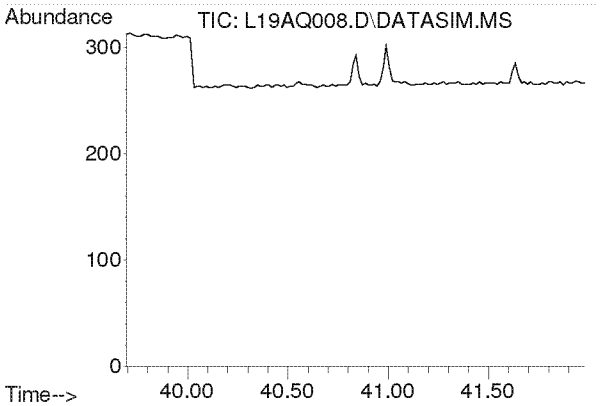
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



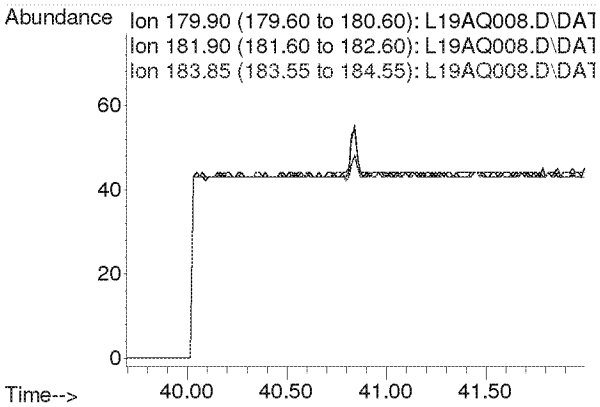


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

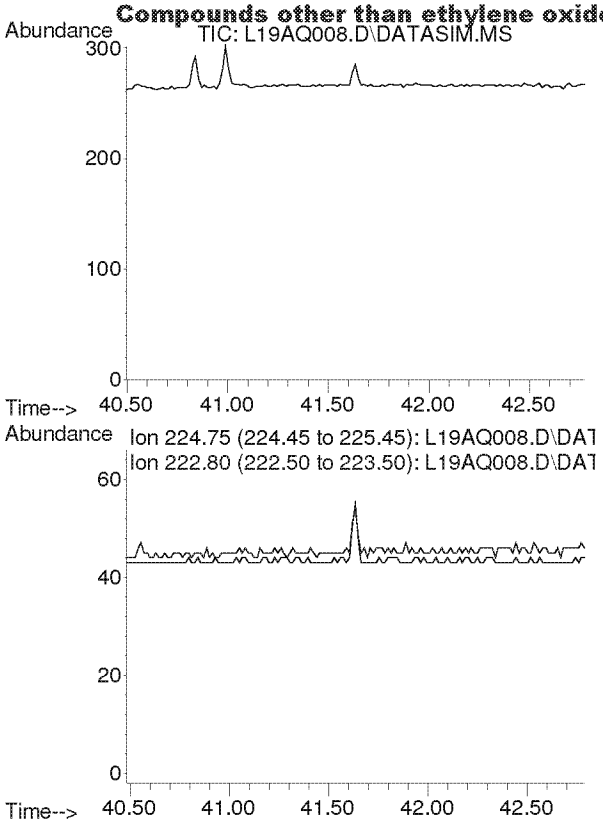
Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ008.D
Acq: 17 Jan 2019 6:31 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ009.D
Acq On : 17 Jan 2019 7:33 pm
Operator : MAH
Sample : 9010808-09
Misc : WATER TOWER 1/7/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 07:49:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

ETOH only

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	54258	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	135095	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.114	117	103440	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	0.000	29	0	N.D. d	
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D. d	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D. d	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

✓ CKT 2/4/19

Compounds other than ethylene oxide were not quantitated

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ009.D
Acq On : 17 Jan 2019 7:33 pm
Operator : MAH
Sample : 9010808-09
Misc : WATER TOWER 1/7/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 07:49:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

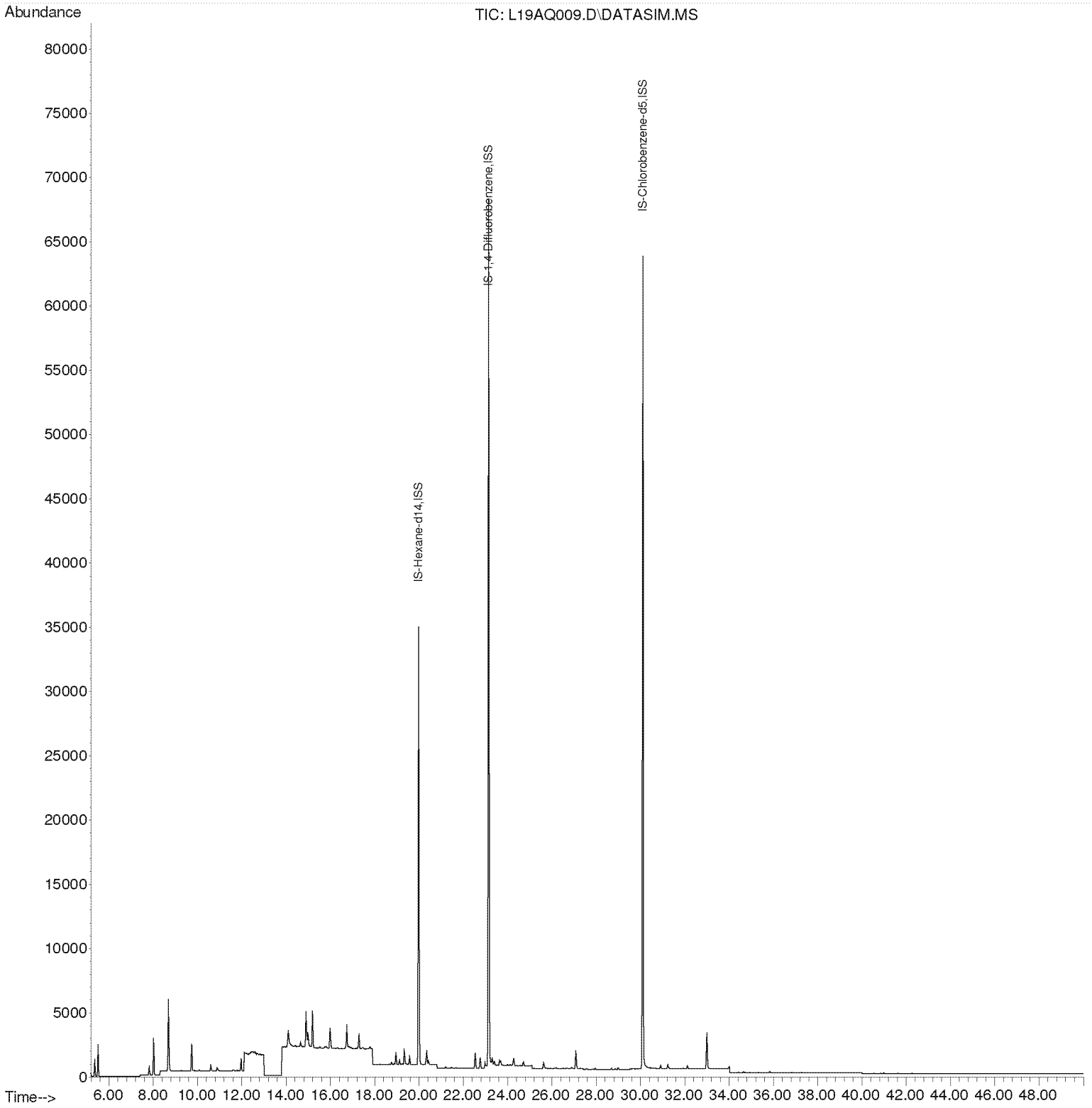
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

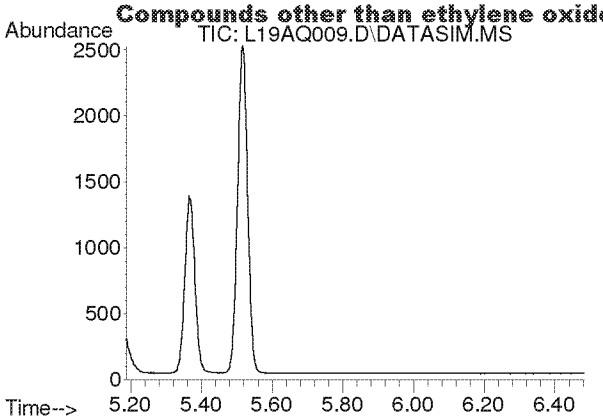
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ009.D
Acq On : 17 Jan 2019 7:33 pm
Operator : MAH
Sample : 9010808-09
Misc : WATER TOWER 1/7/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 07:35:22 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



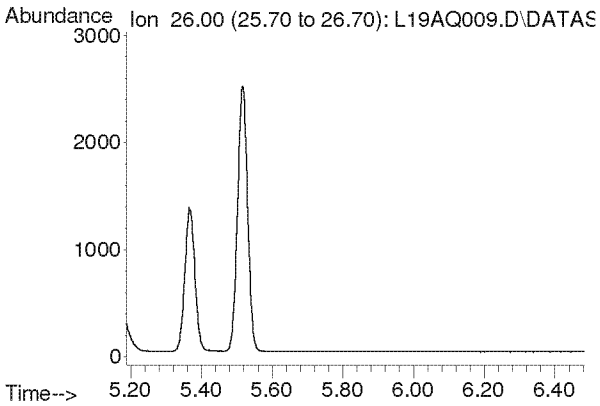
Compounds other than ethylene oxide were not quantitated.

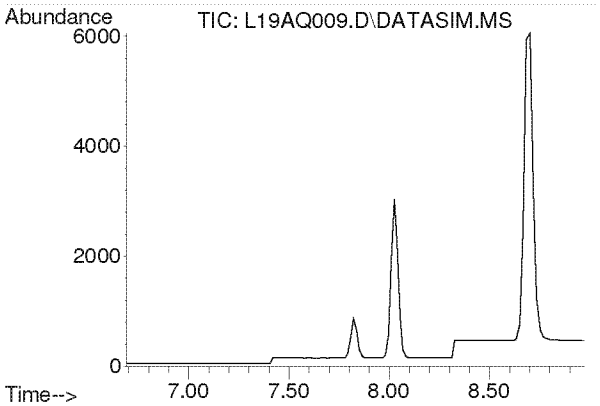


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 26



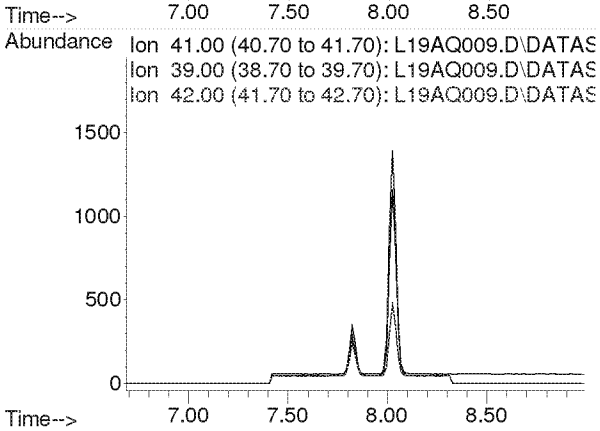


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

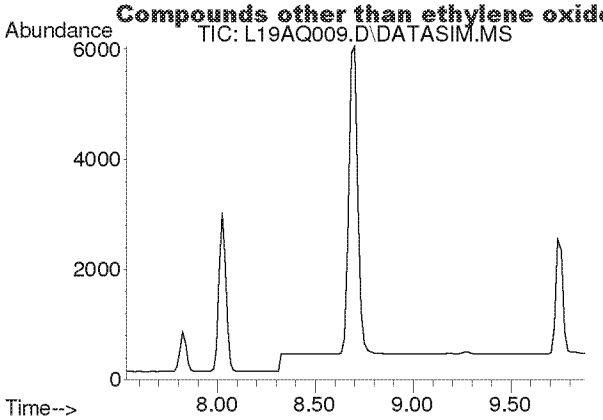
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

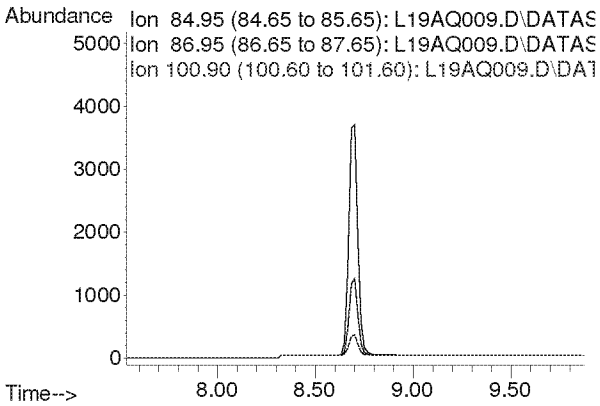


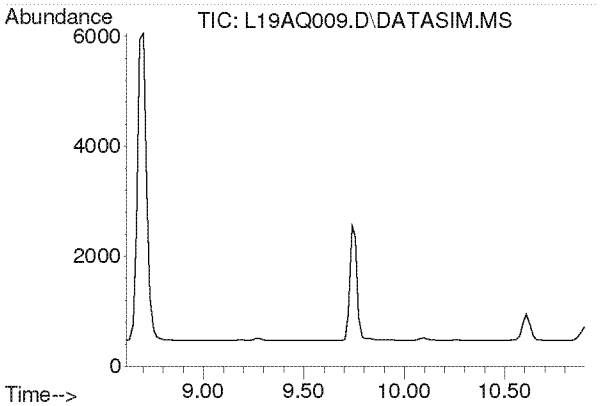
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



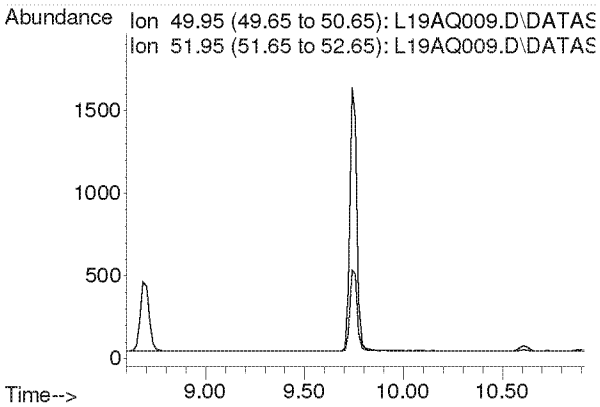


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

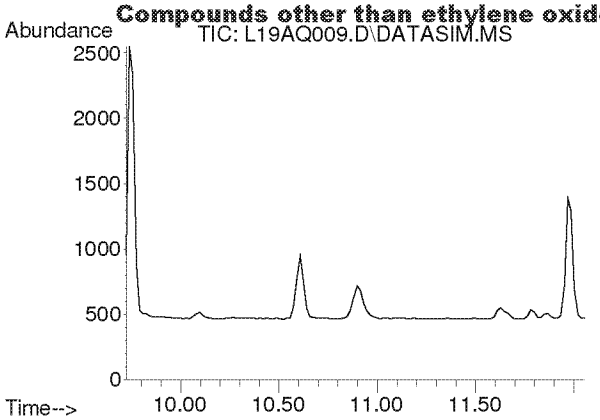
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

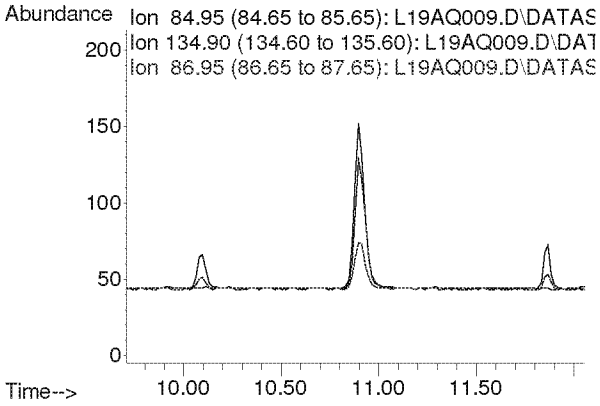


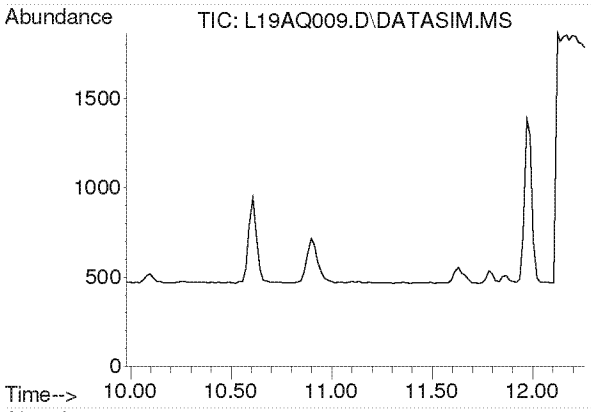
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



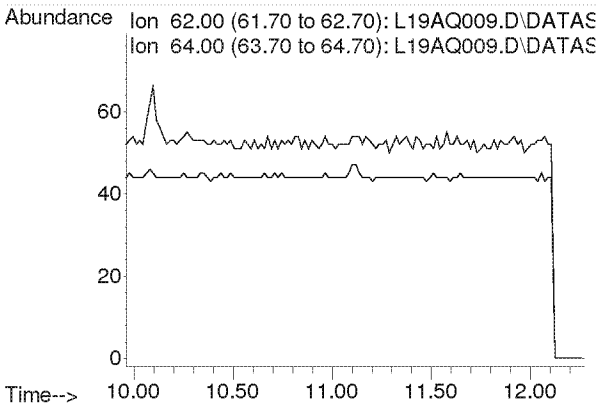


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

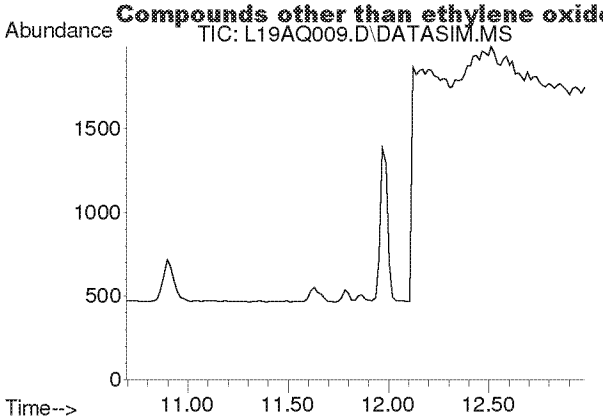
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

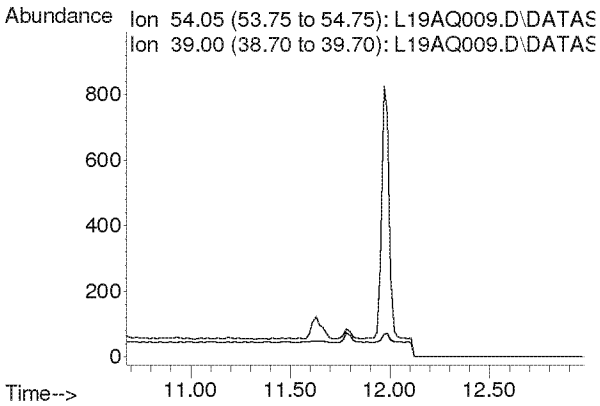


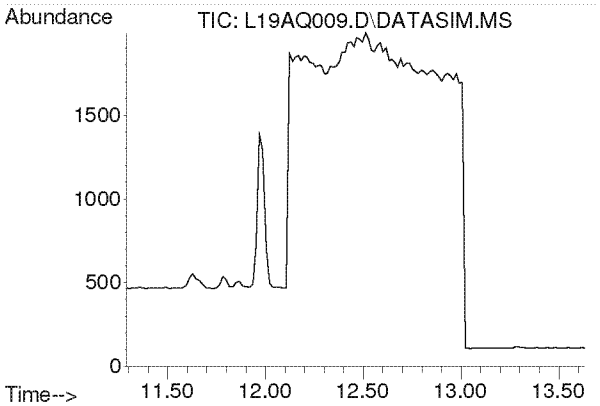
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



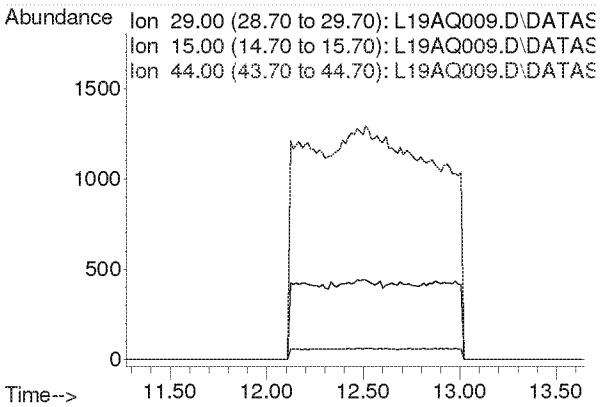


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

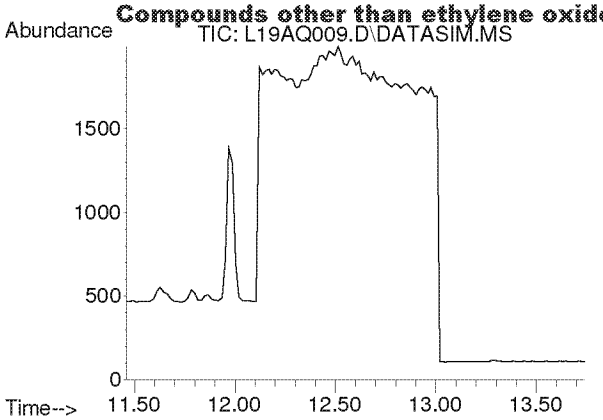
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

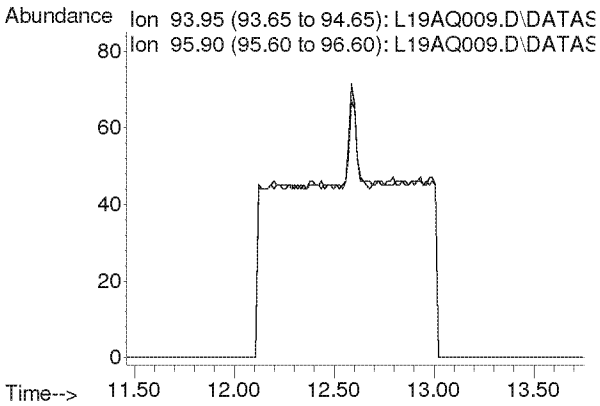


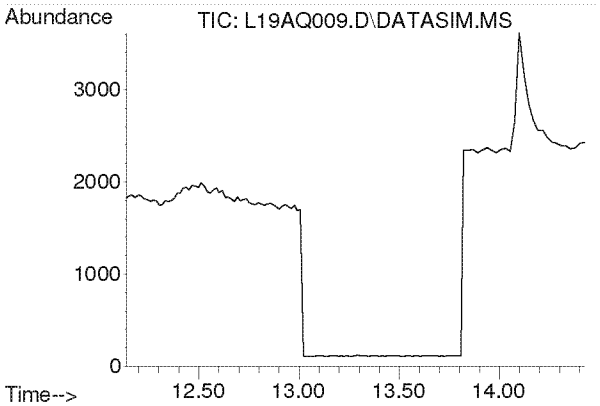
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



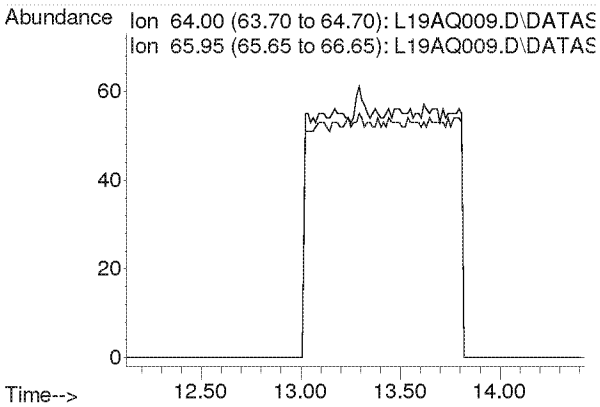


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

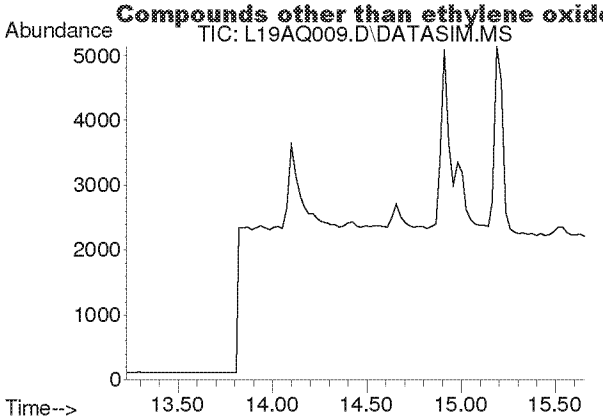
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

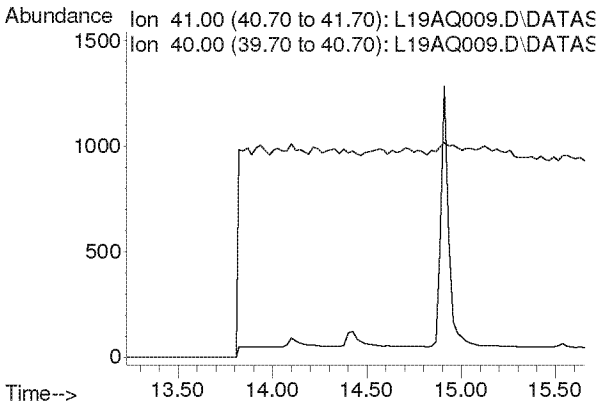


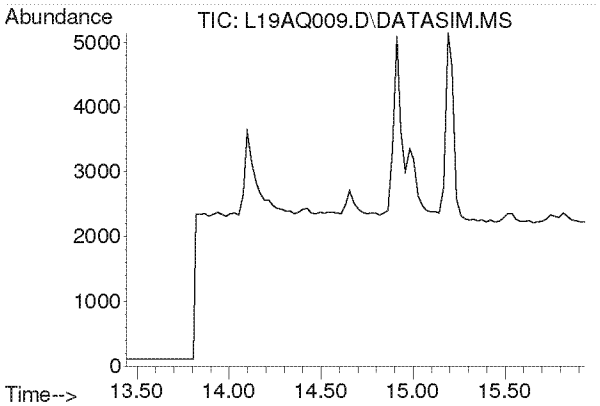
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



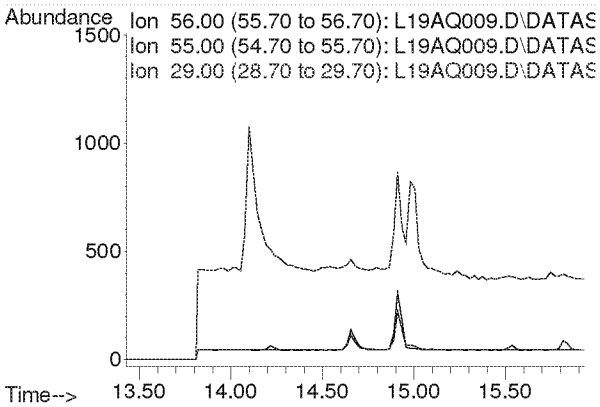


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

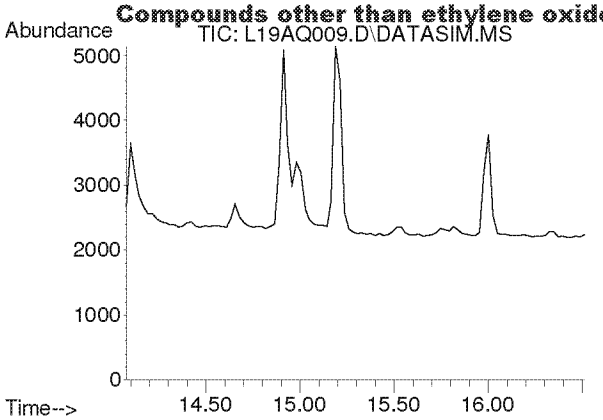
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

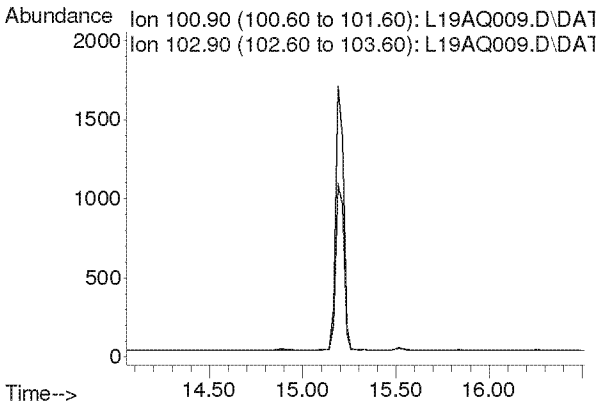


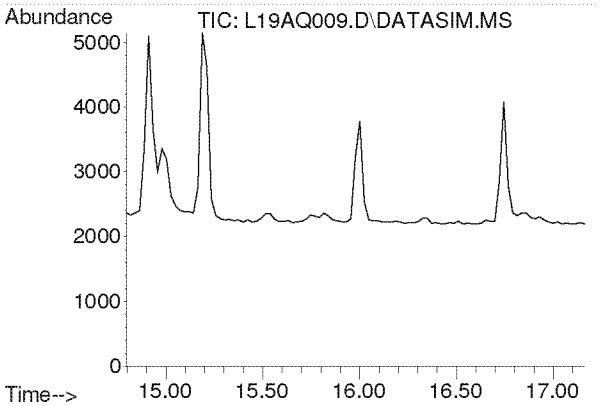
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



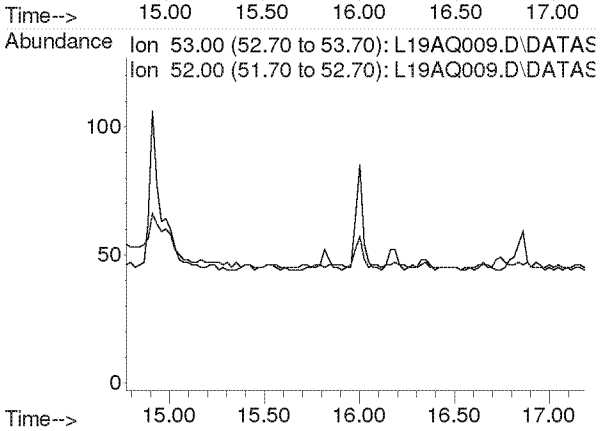


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

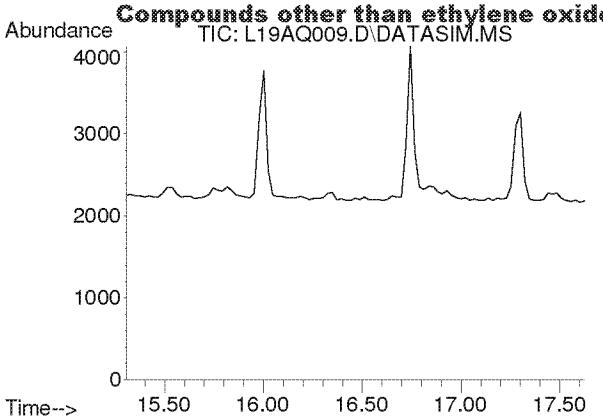
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

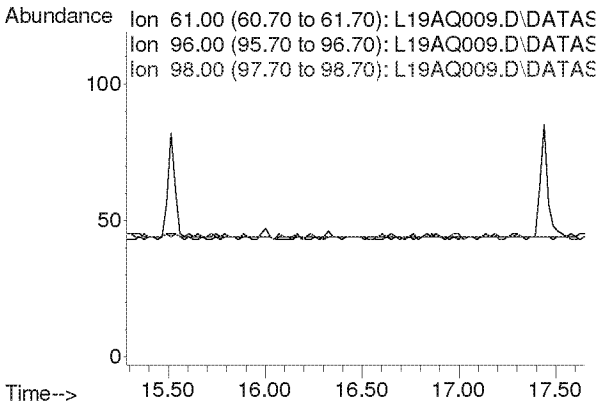


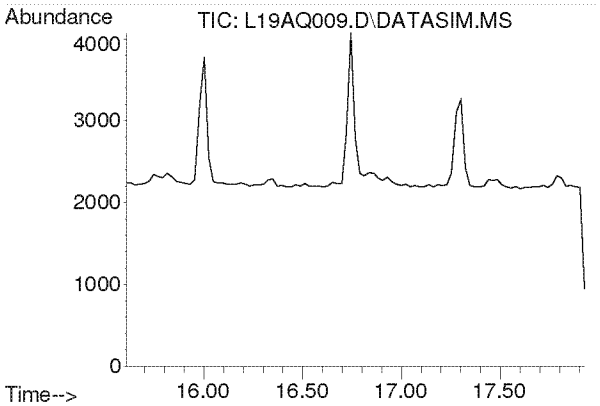
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



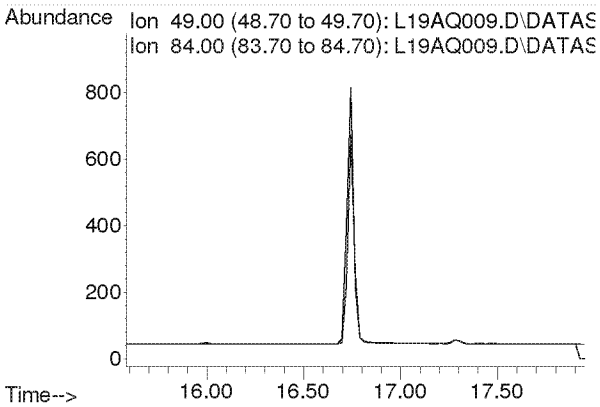


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

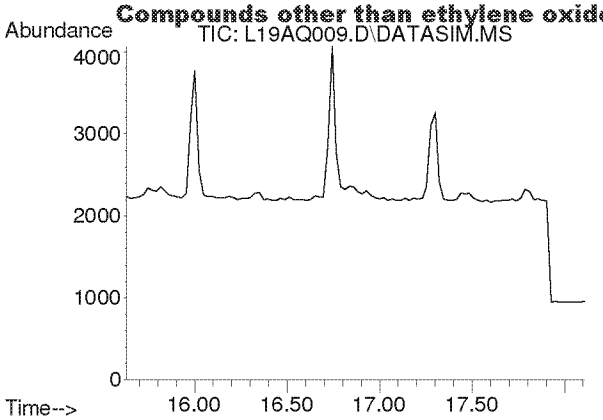
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

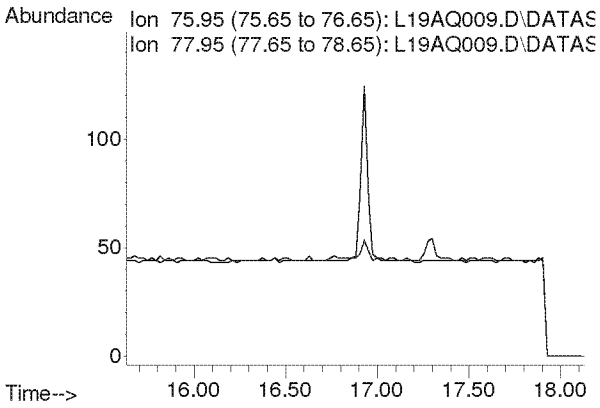


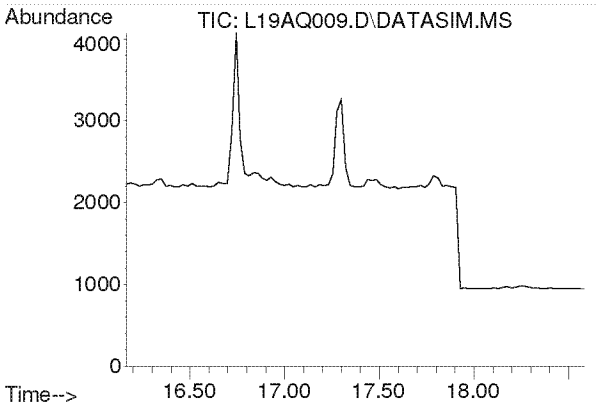
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



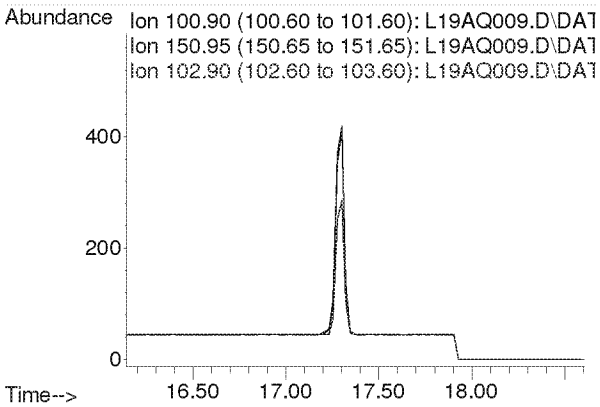


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

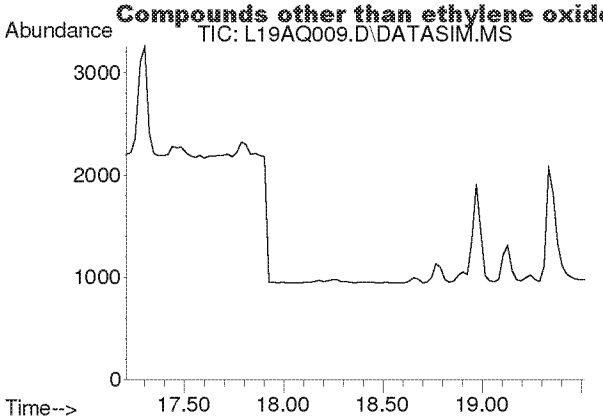
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

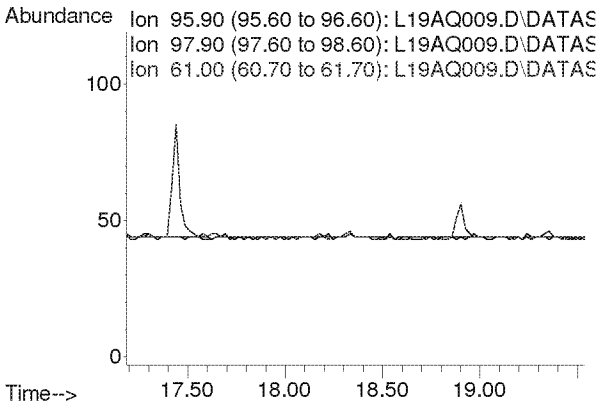


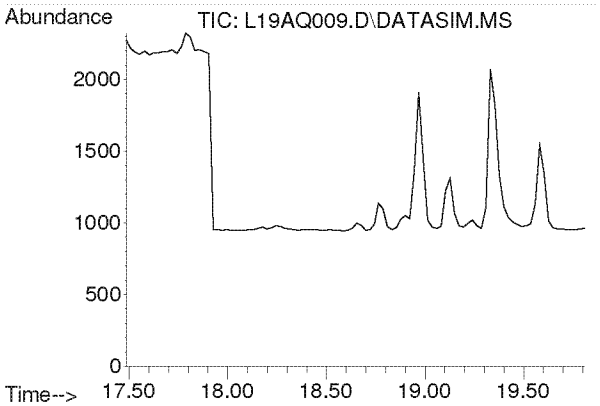
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



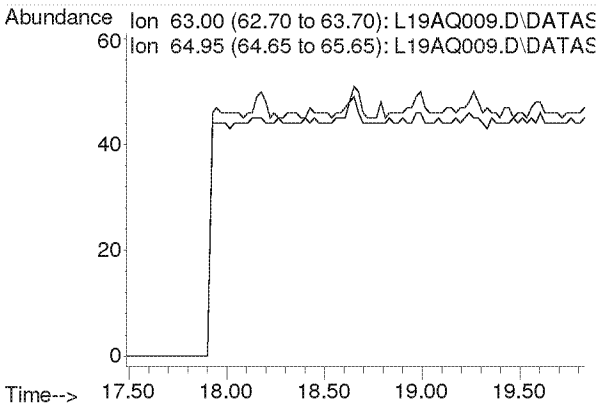


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

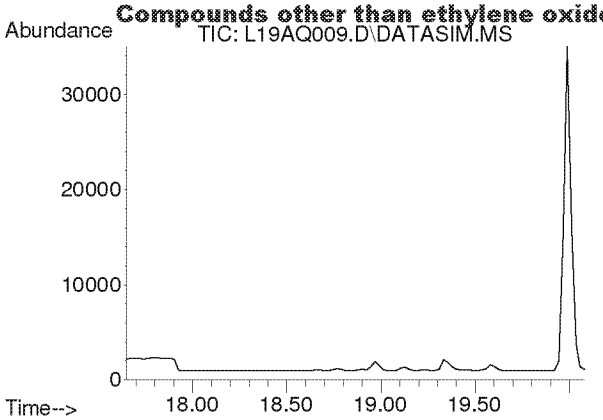
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

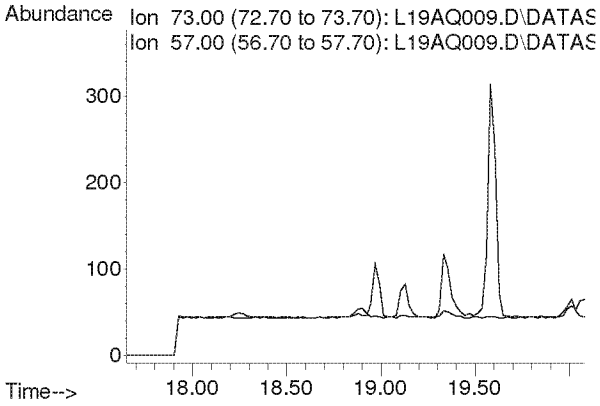


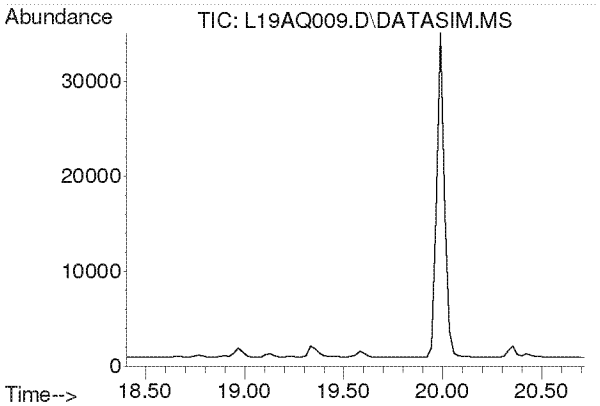
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



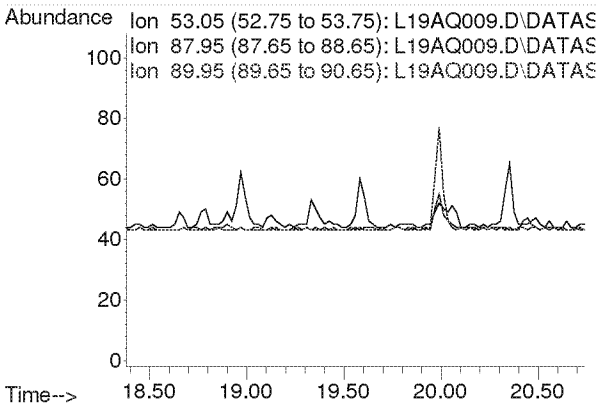


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

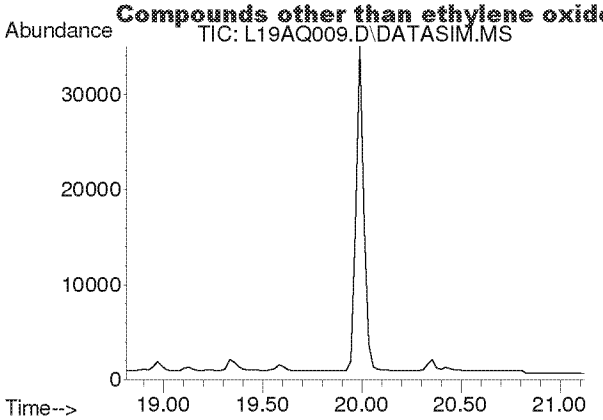
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

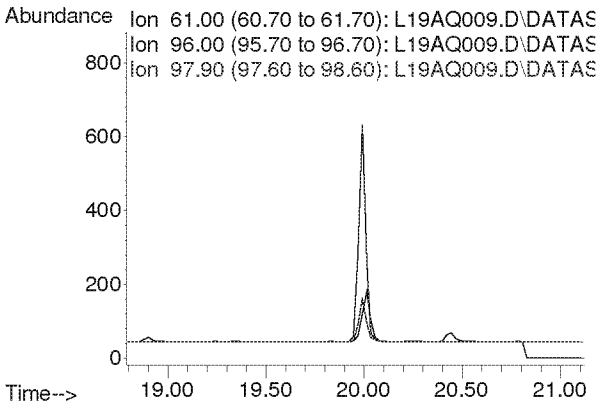


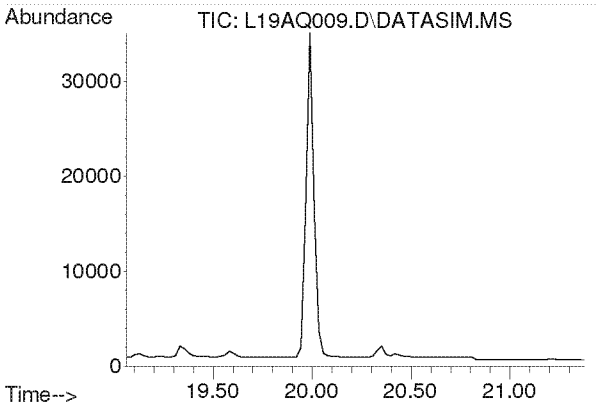
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



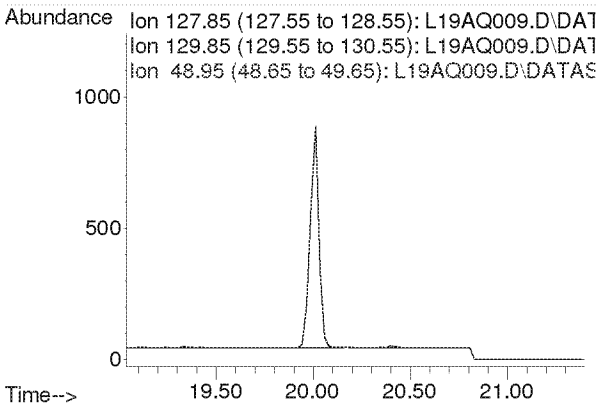


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

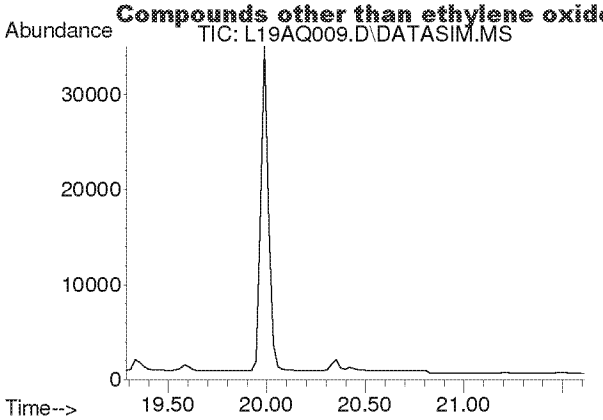
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

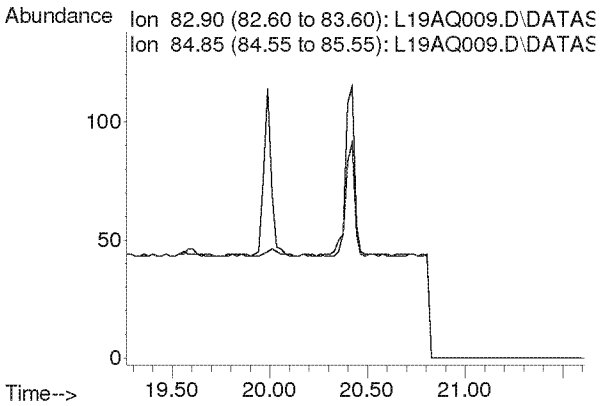


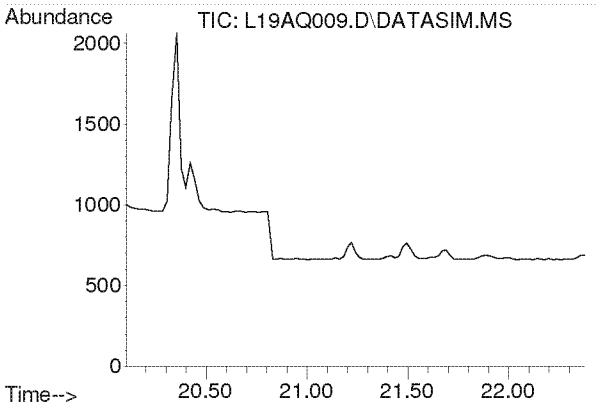
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



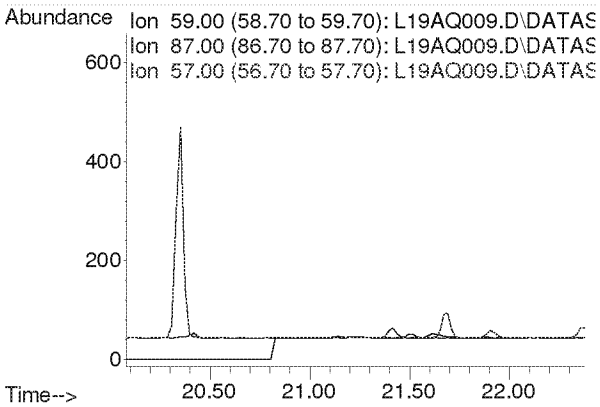


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

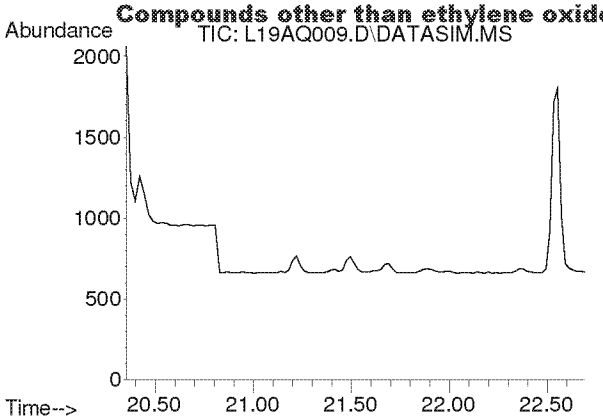
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

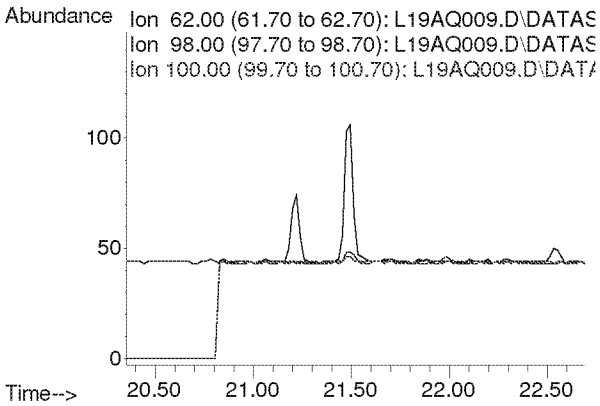


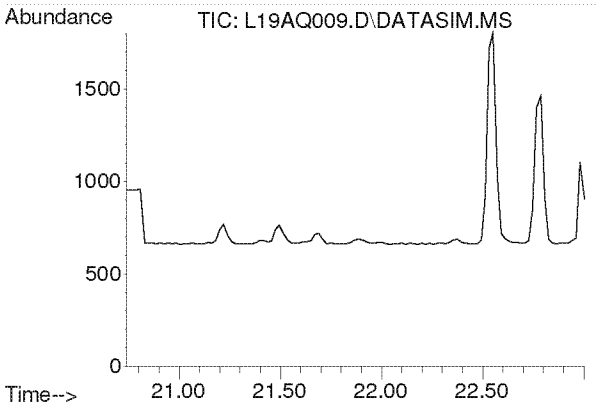
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



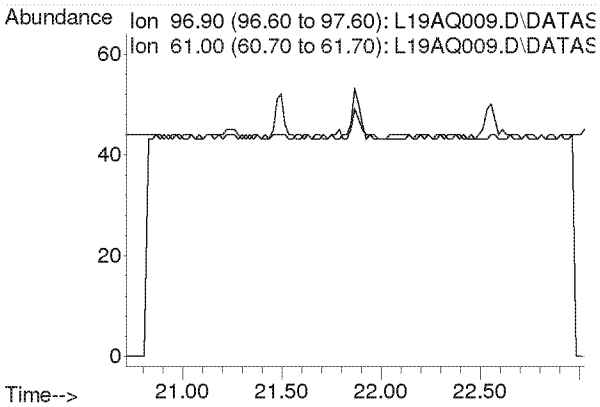


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

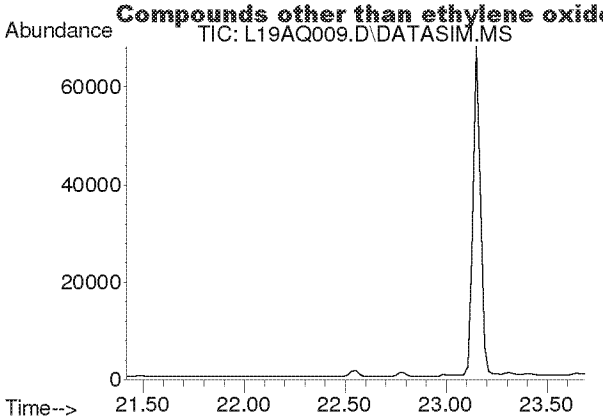
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

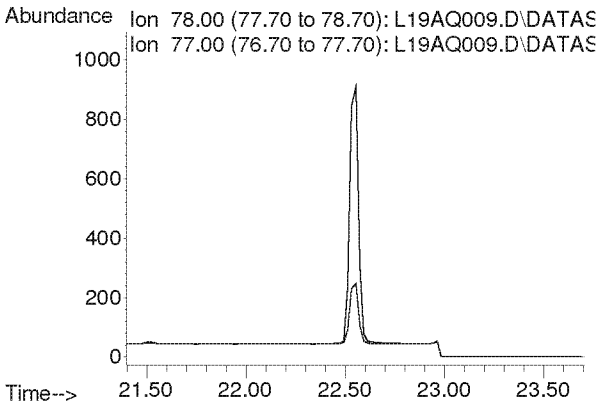


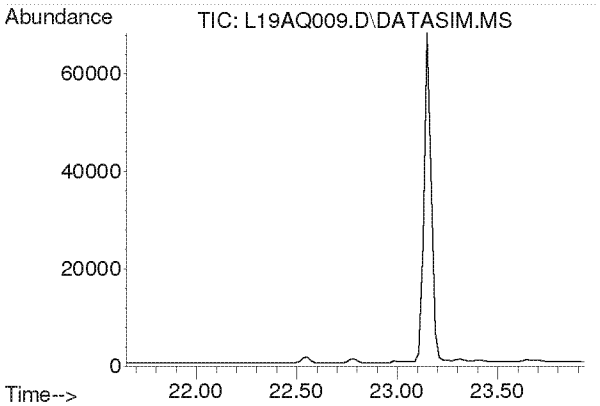
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



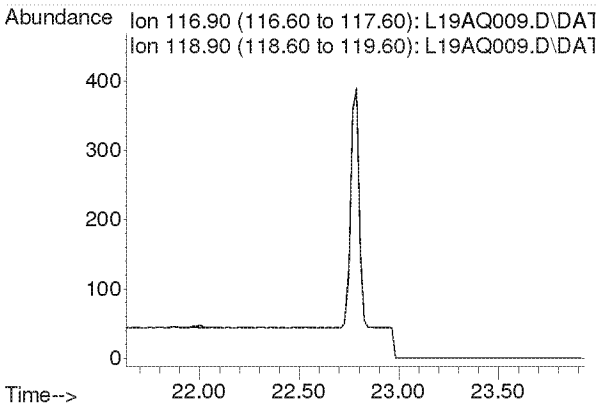


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

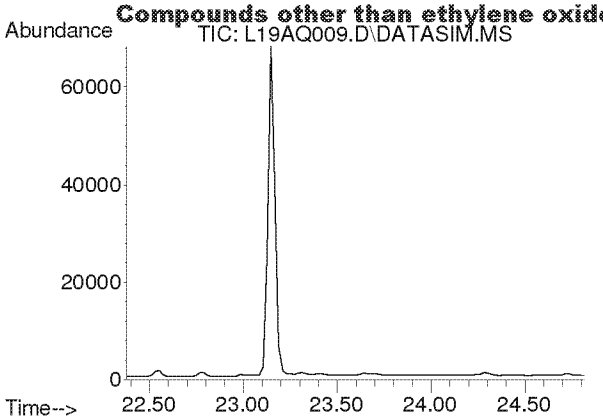
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

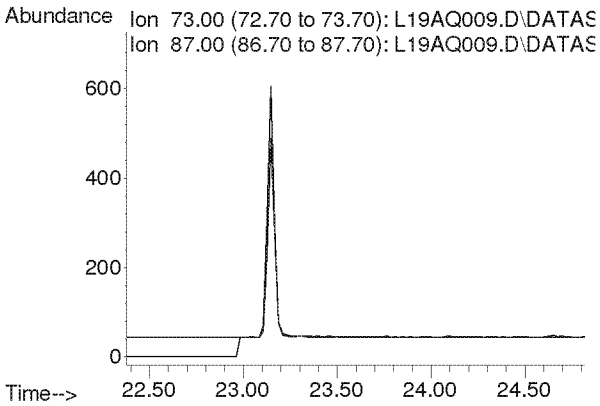


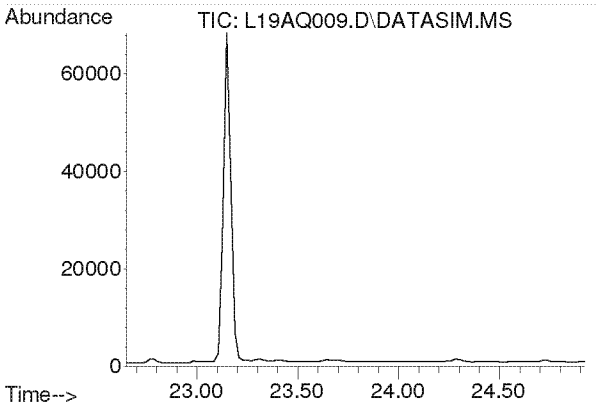
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



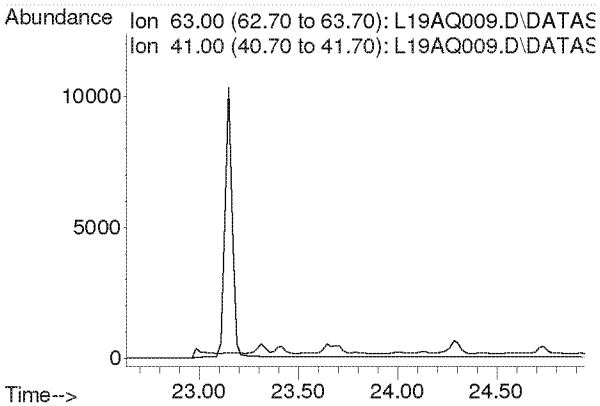


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

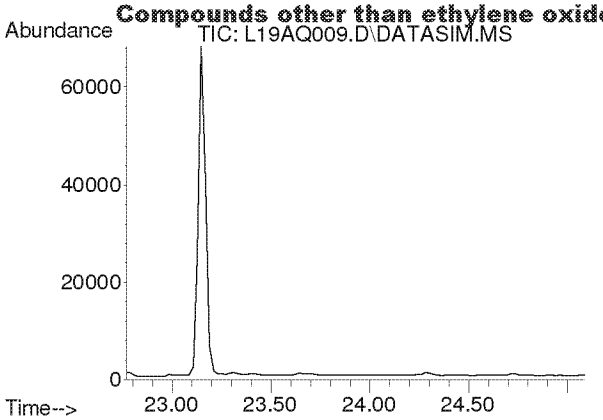
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

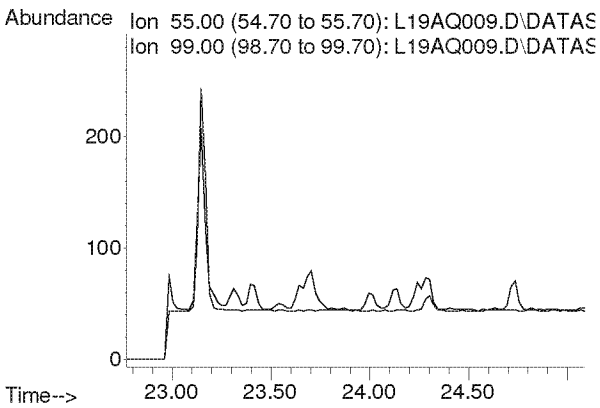


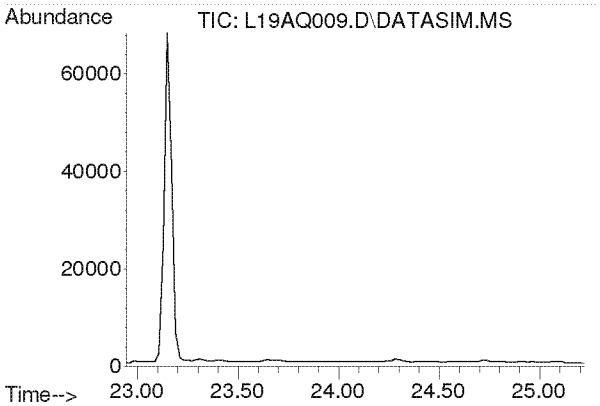
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



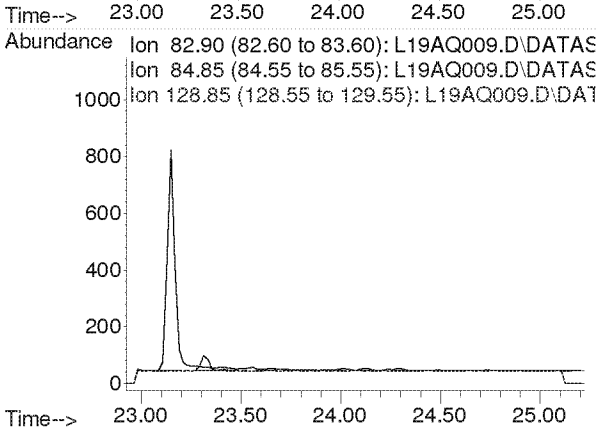


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

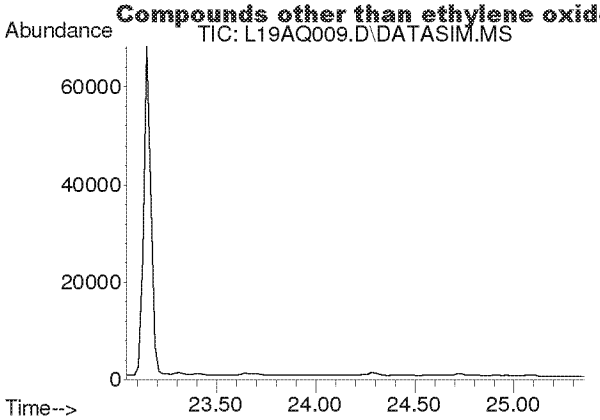
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

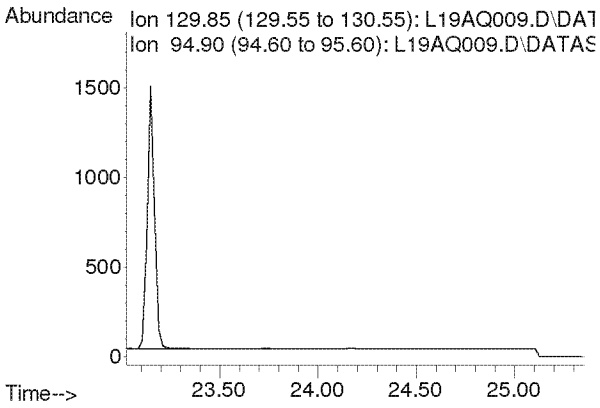


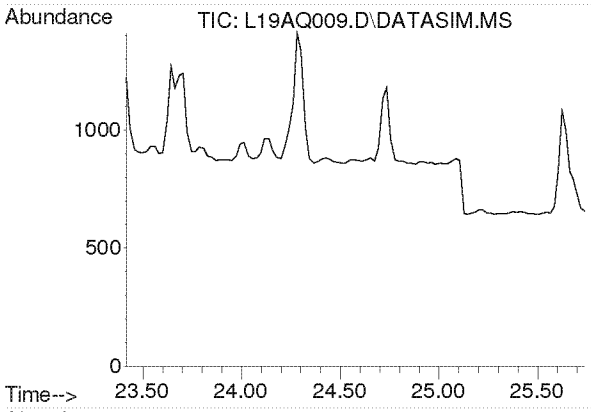
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



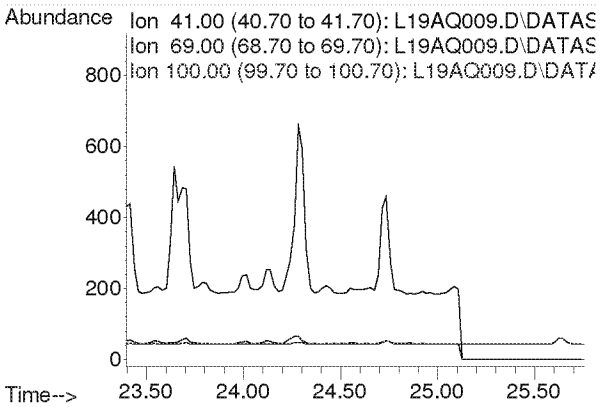


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

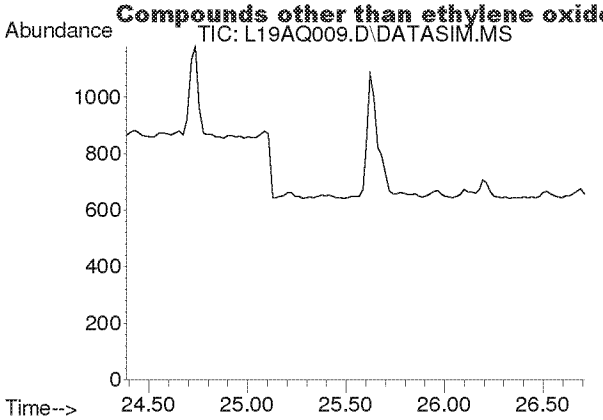
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

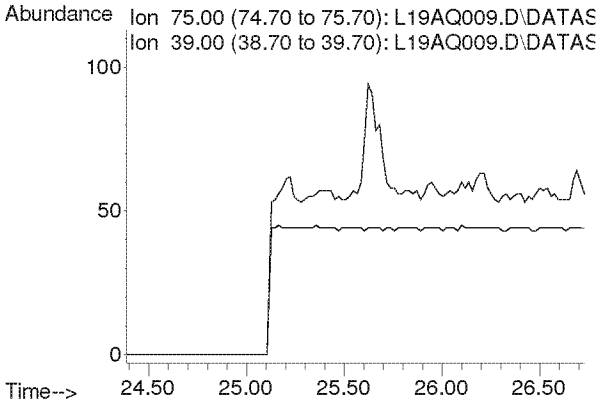


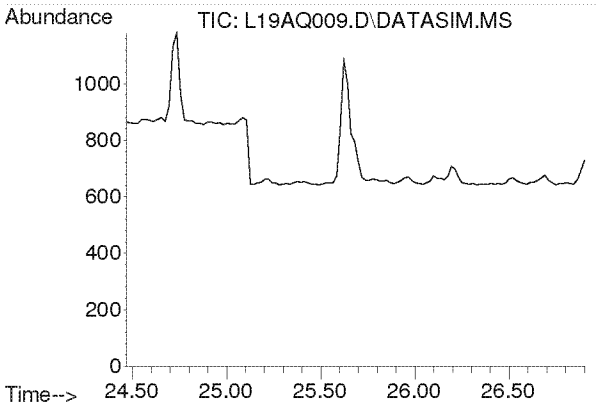
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



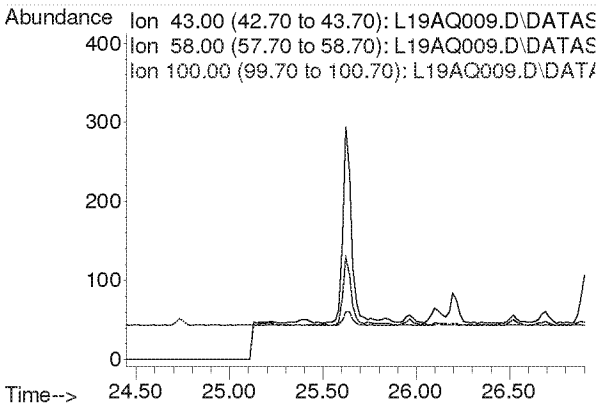


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

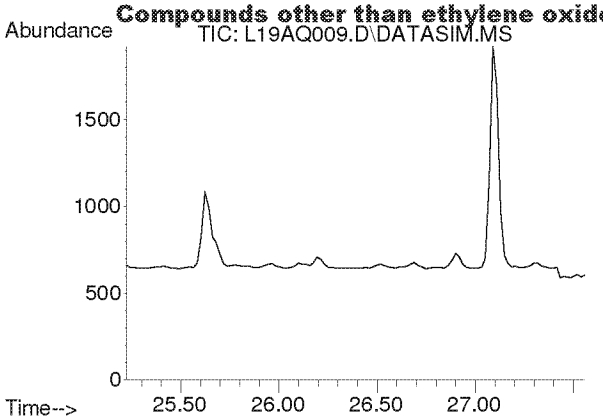
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

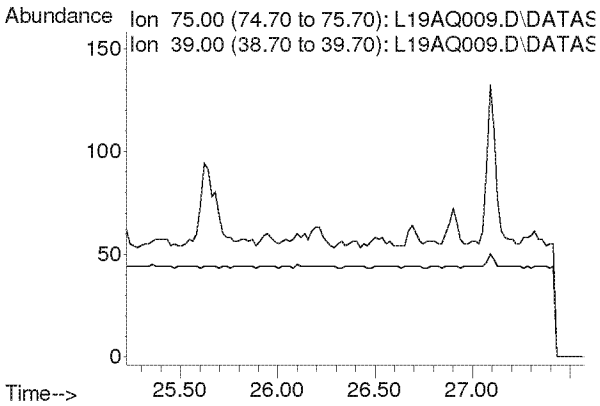


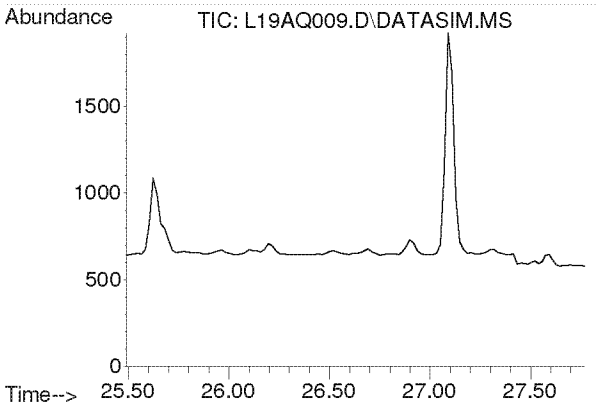
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



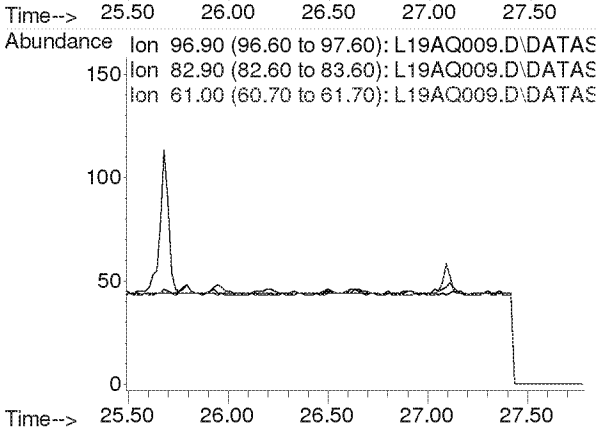


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

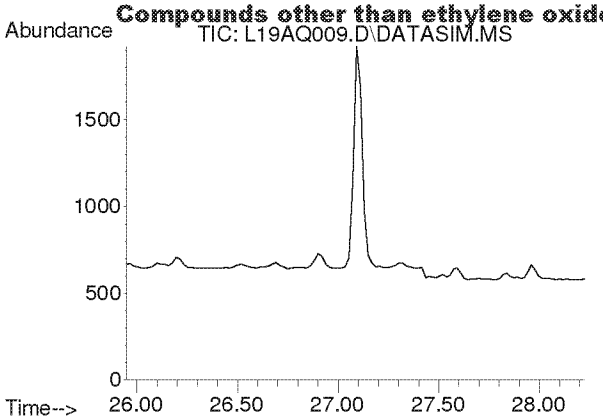
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

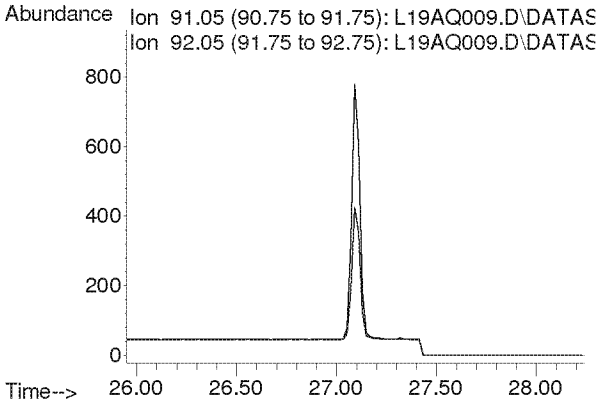


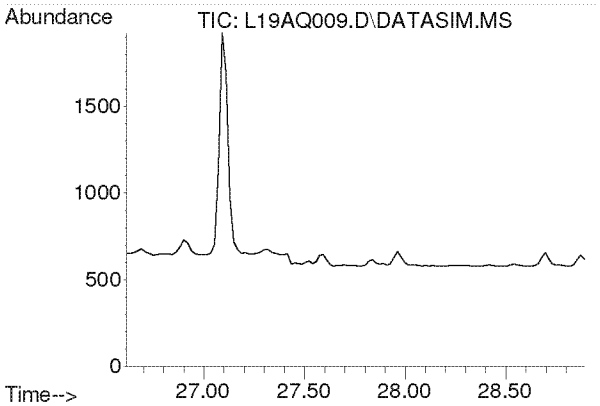
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



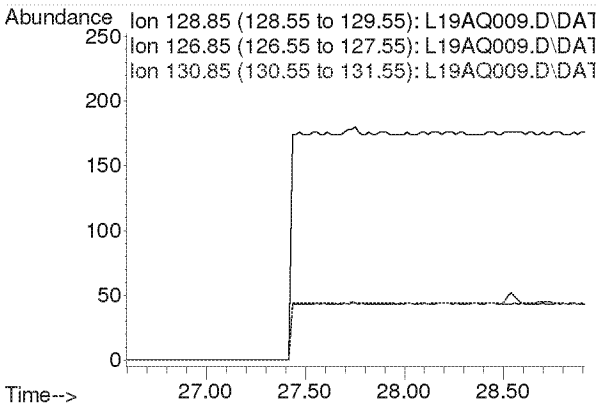


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

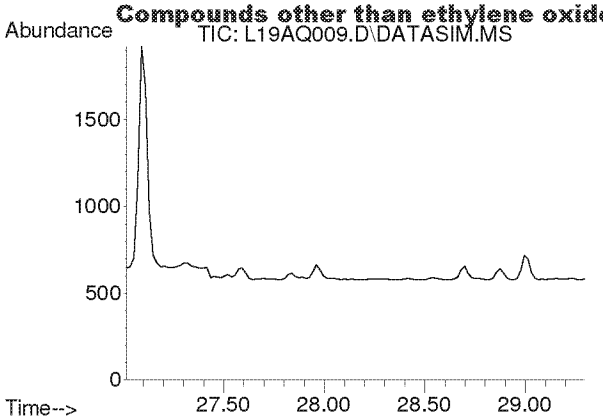
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

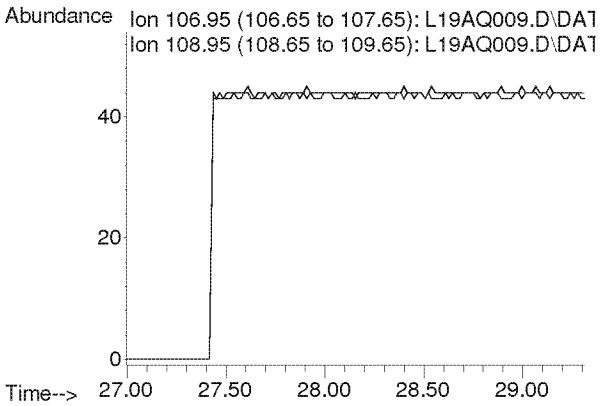


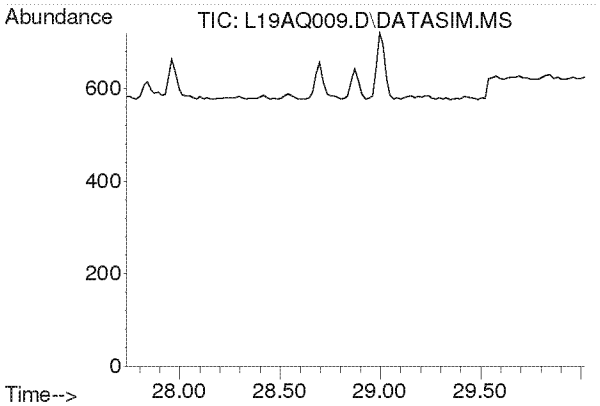
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



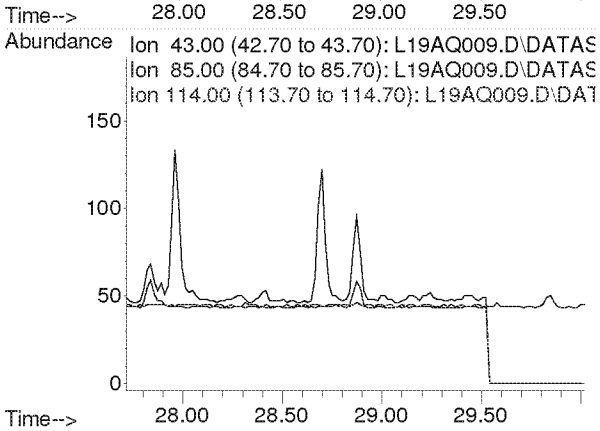


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

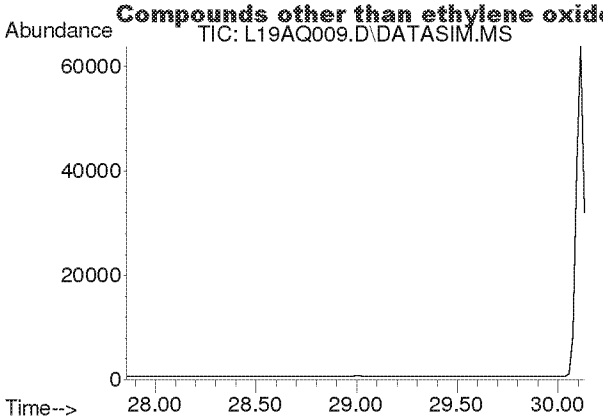
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

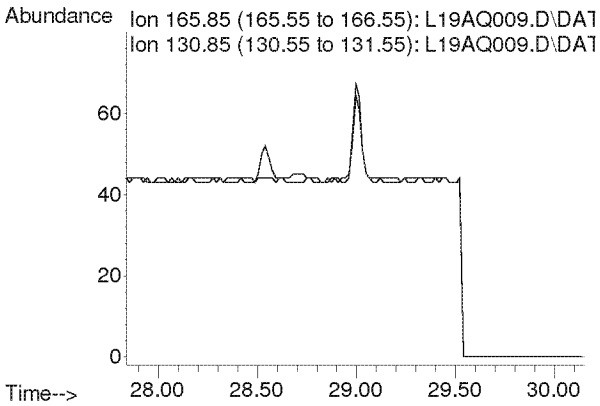


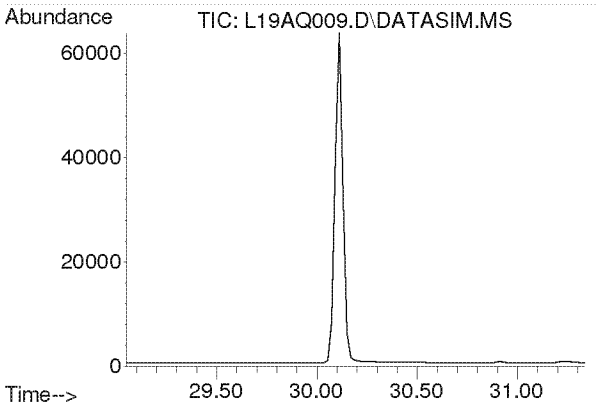
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



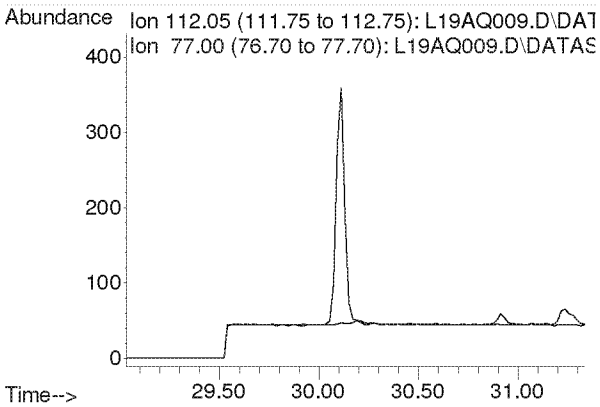


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

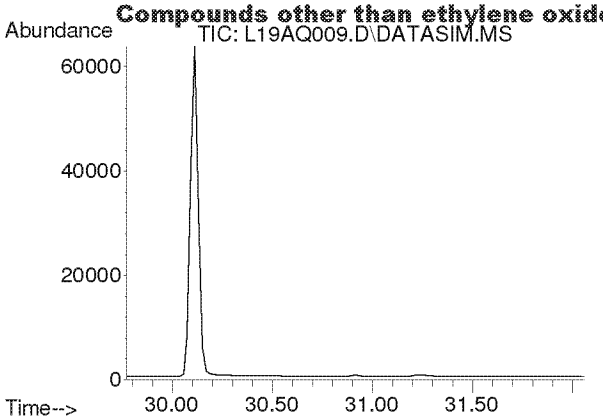
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

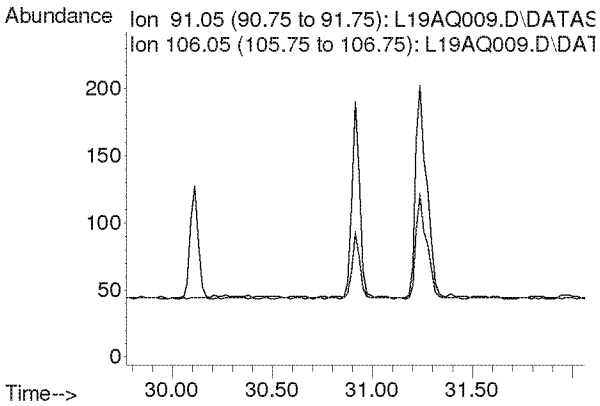


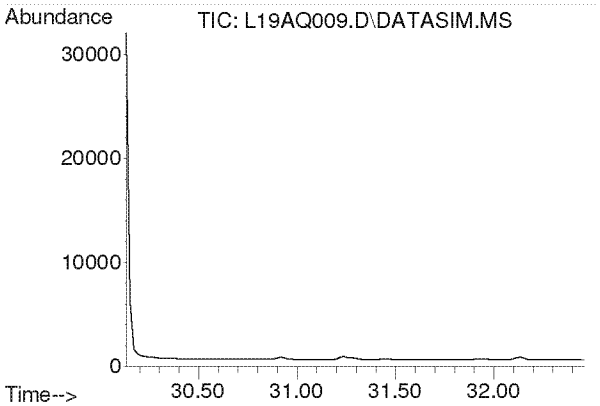
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



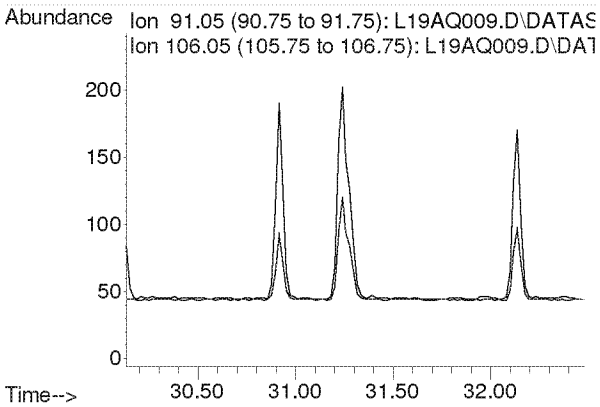


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

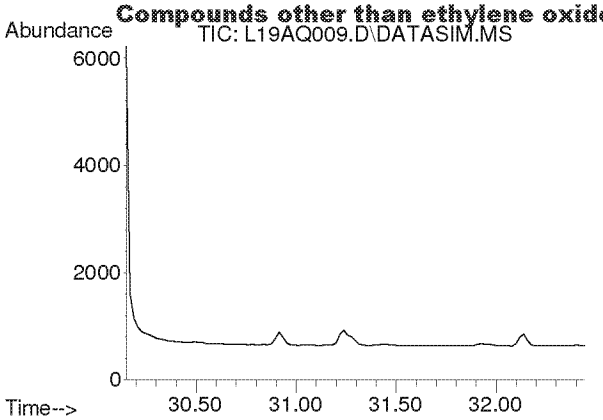
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

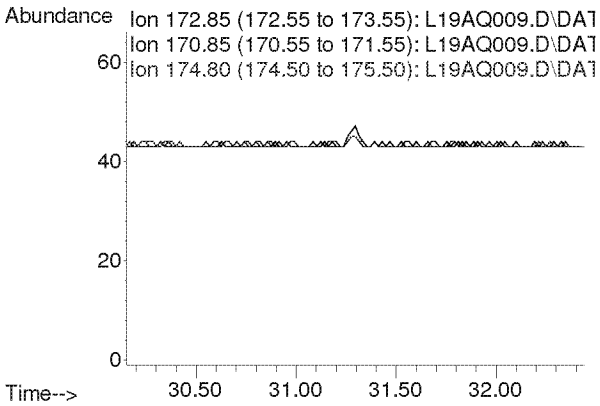


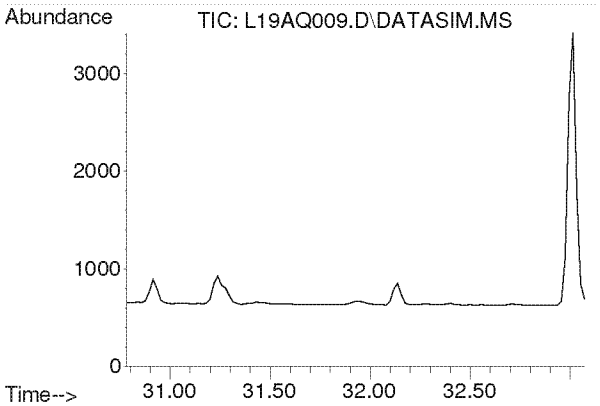
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



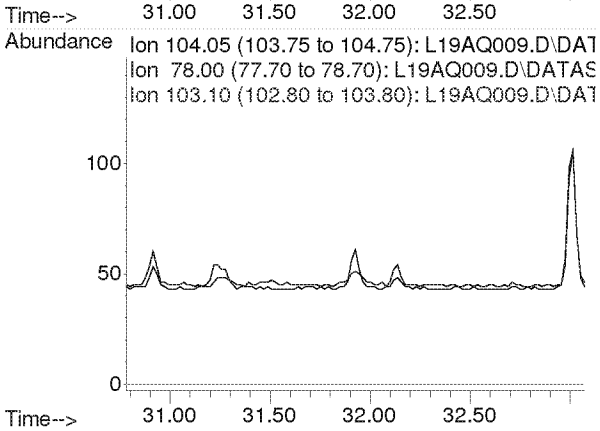


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

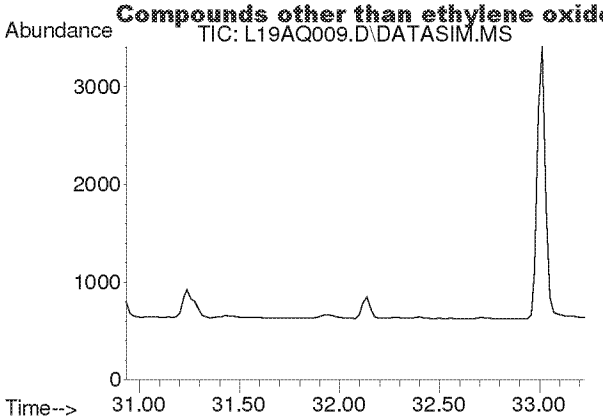
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

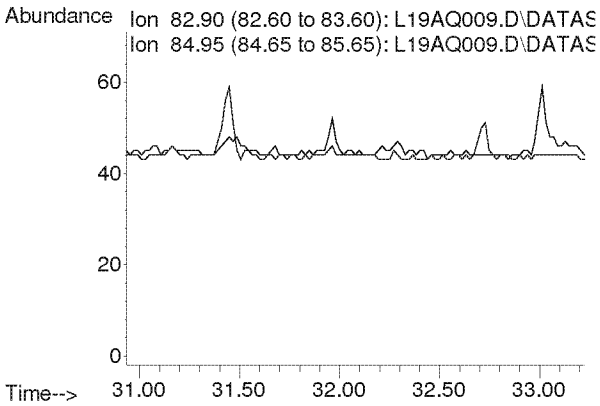


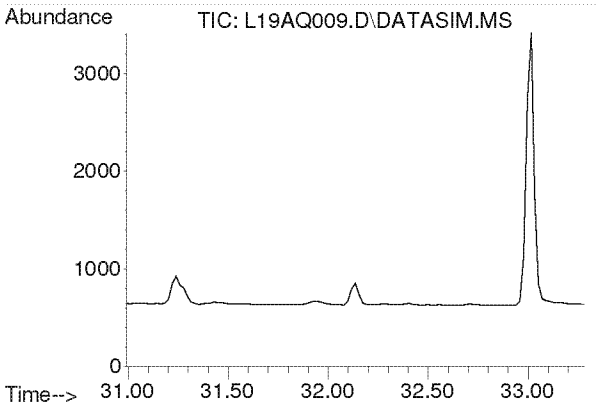
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



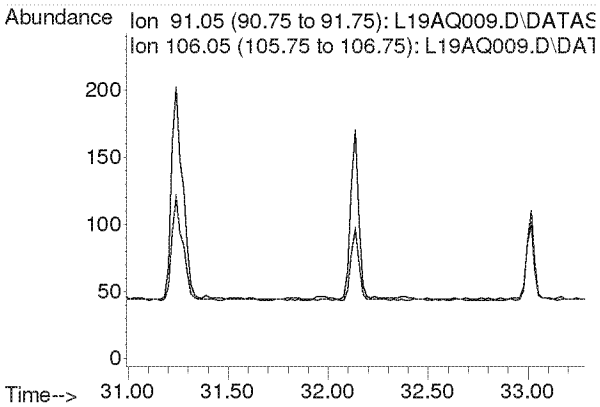


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

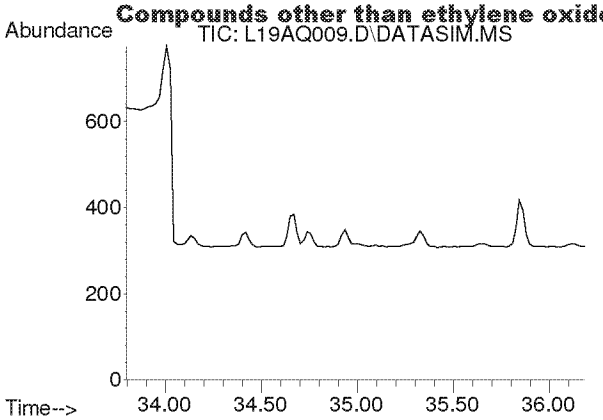
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

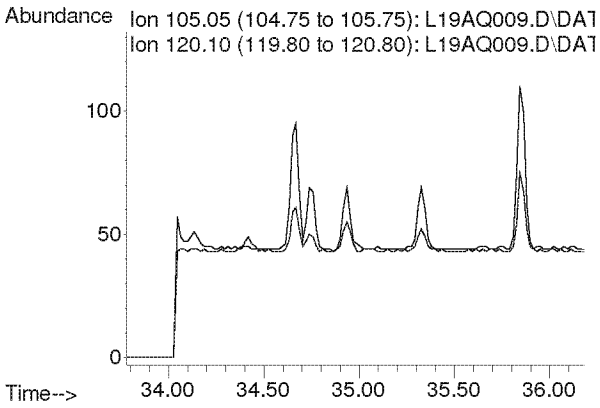


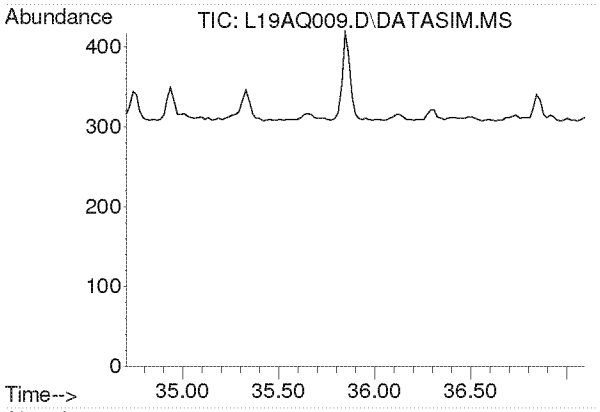
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



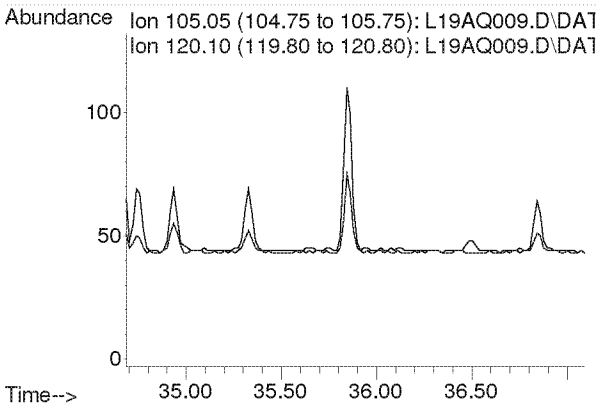


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

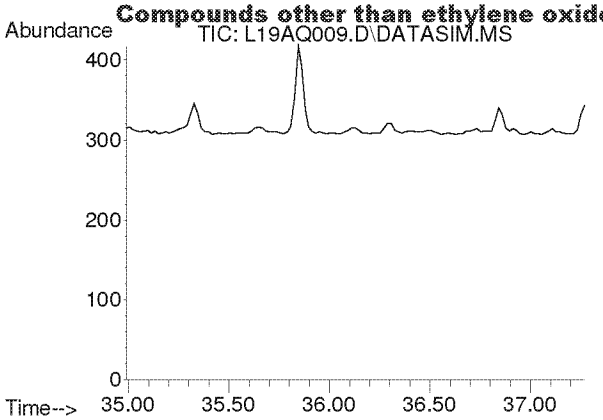
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

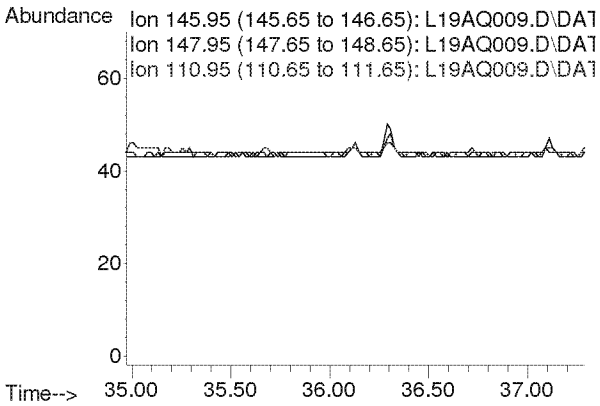


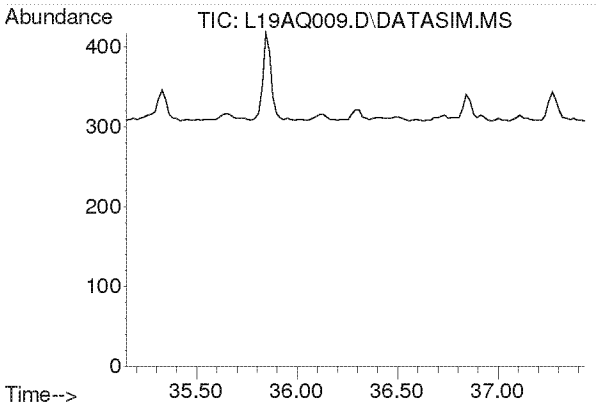
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



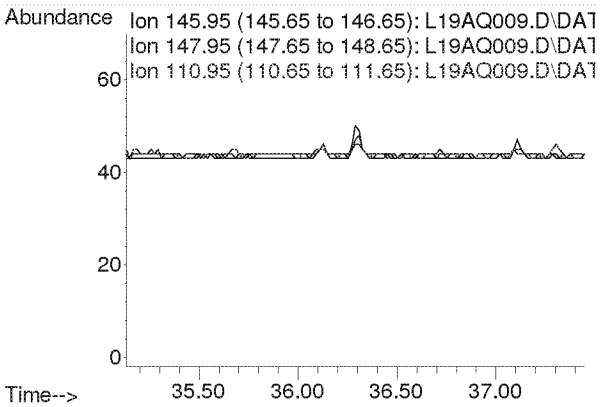


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

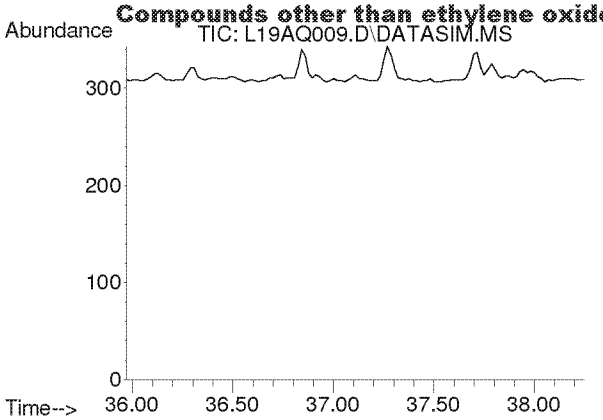
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

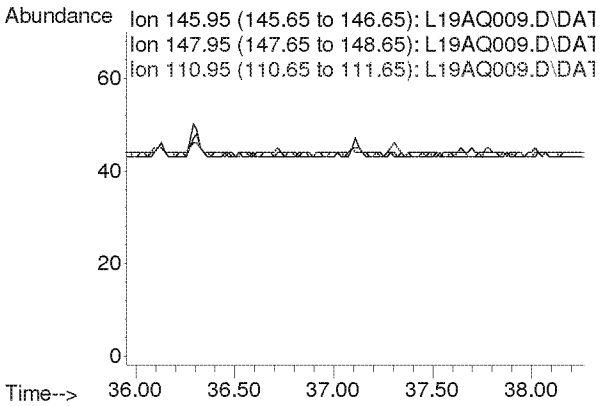


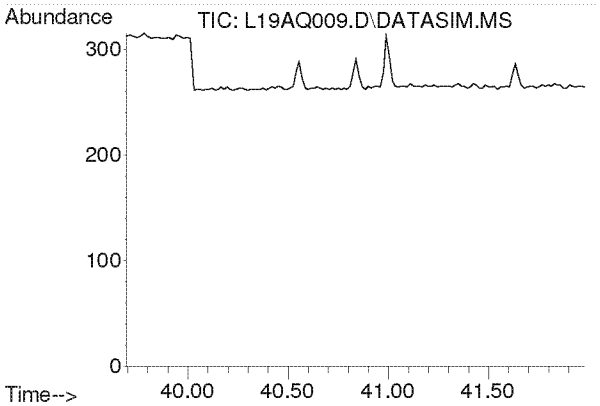
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



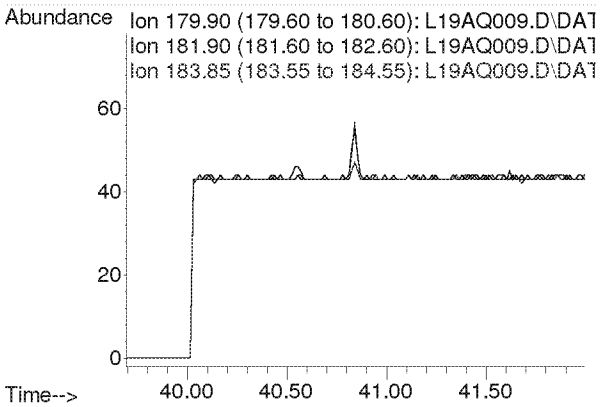


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

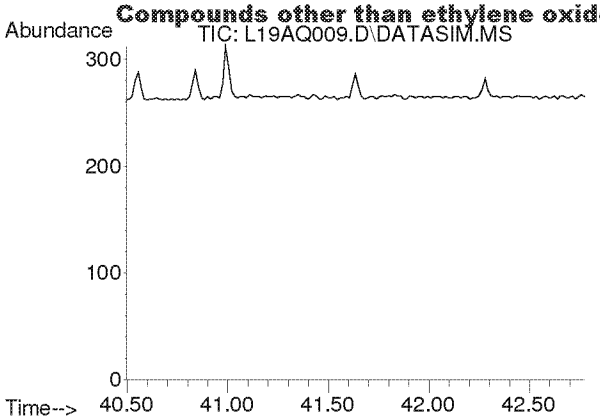
Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

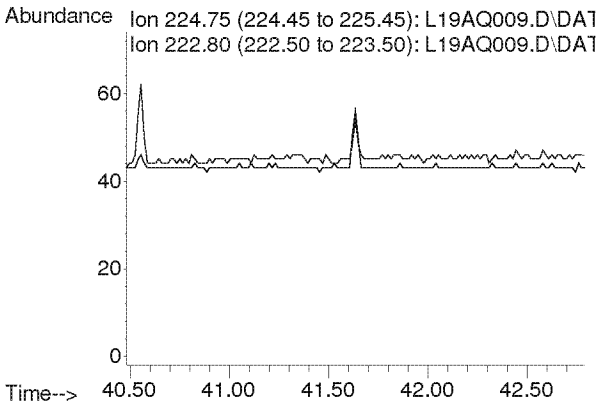


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ009.D
Acq: 17 Jan 2019 7:33 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ010.D
Acq On : 17 Jan 2019 8:33 pm
Operator : MAH
Sample : 9010808-10
Misc : WEST NEIGHBORHOOD 1/7/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 07:50:29 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

d-mk

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	57010	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	143079	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	107178	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.410	29	2547	0.8650 ppbv #	1
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ010.D
Acq On : 17 Jan 2019 8:33 pm
Operator : MAH
Sample : 9010808-10
Misc : WEST NEIGHBORHOOD 1/7/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 07:50:29 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

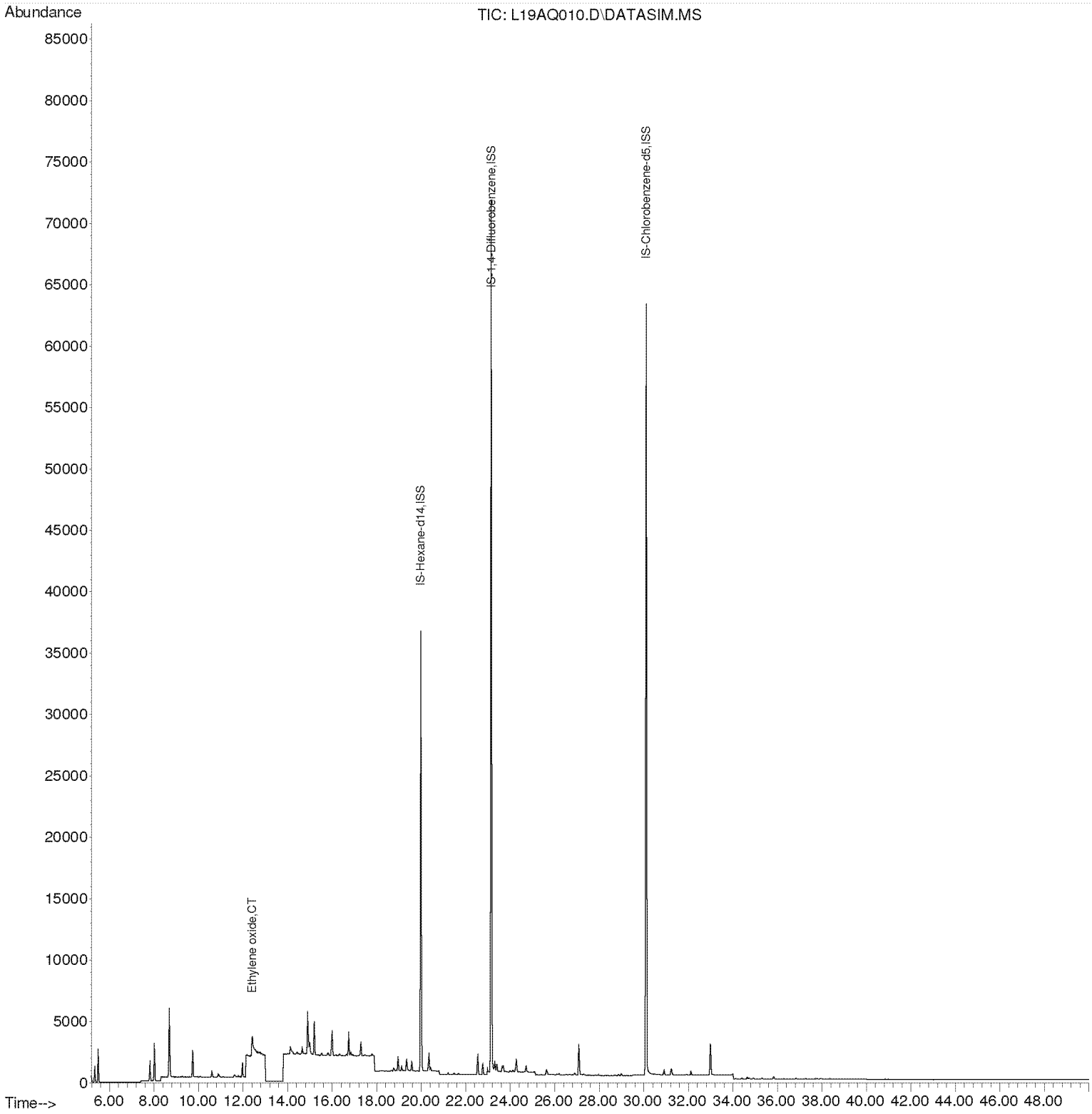
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

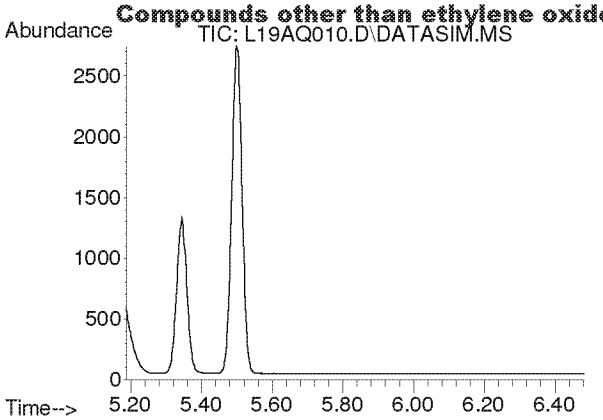
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ010.D
Acq On : 17 Jan 2019 8:33 pm
Operator : MAH
Sample : 9010808-10
Misc : WEST NEIGHBORHOOD 1/7/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 07:35:28 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



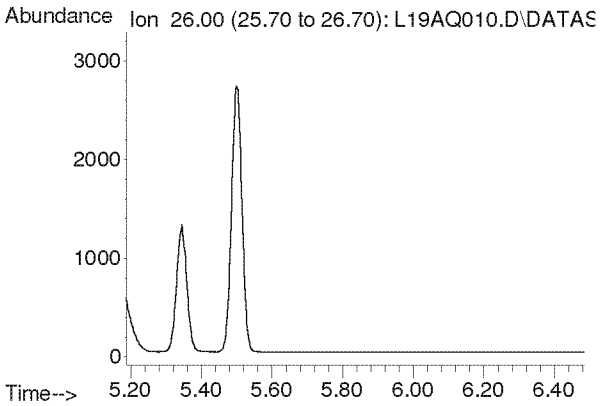
Compounds other than ethylene oxide were not quantitated.

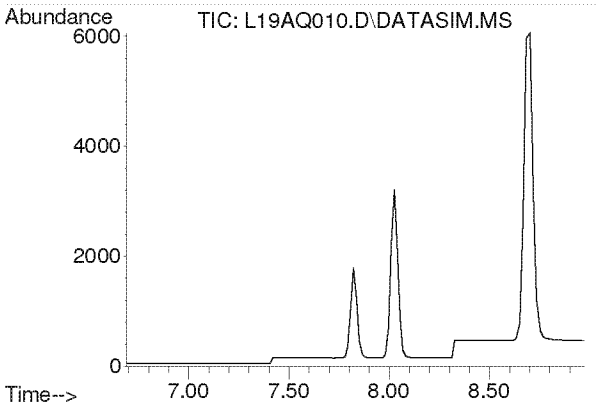


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 26



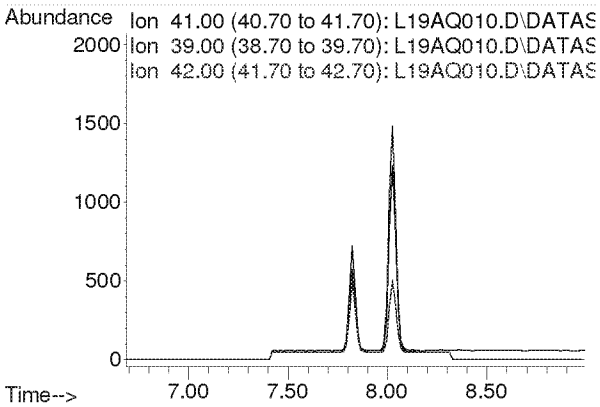


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

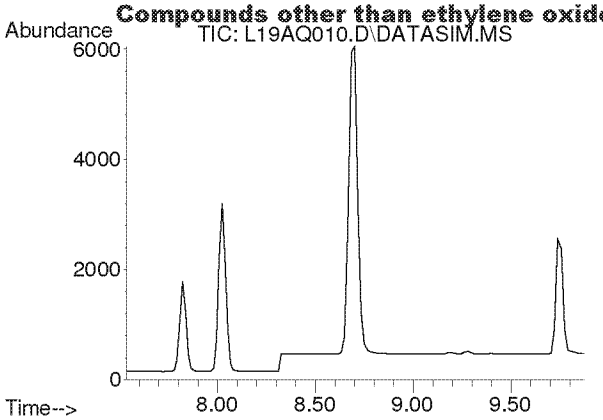
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

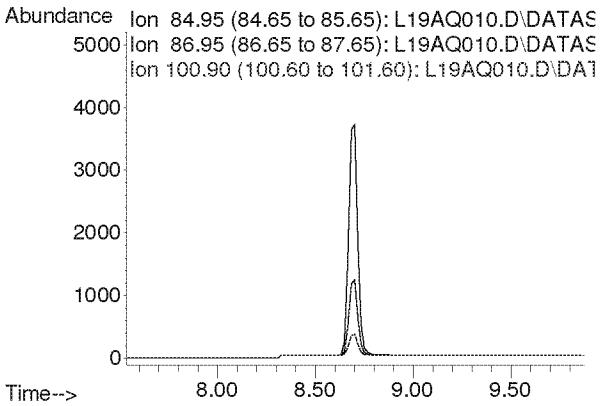


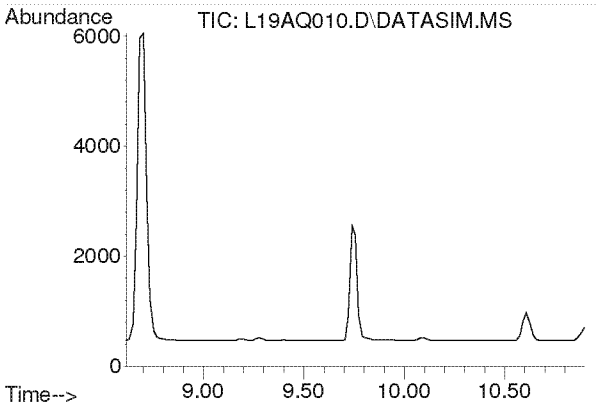
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



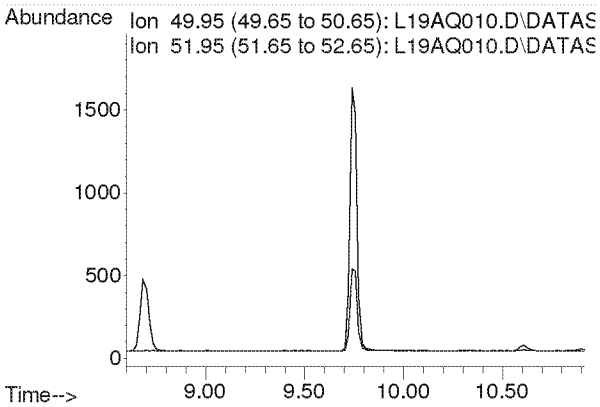


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

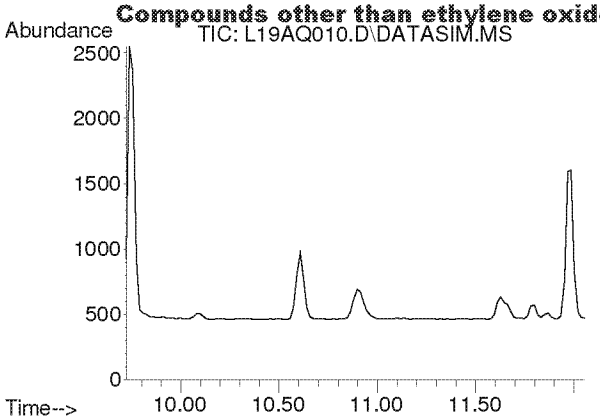
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

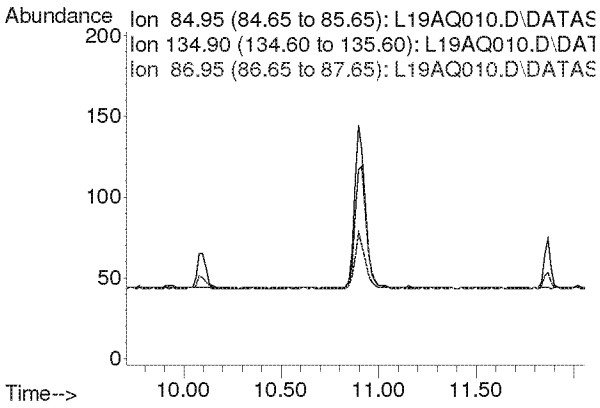


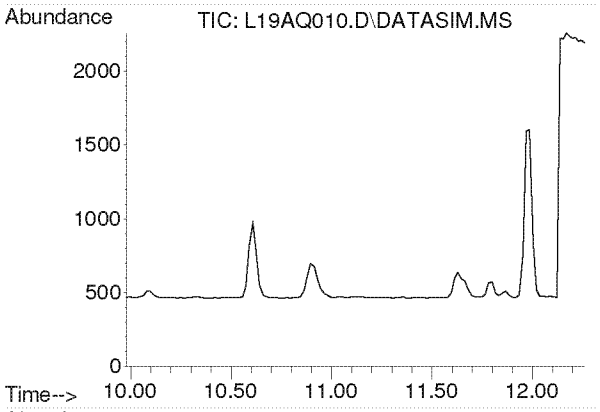
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



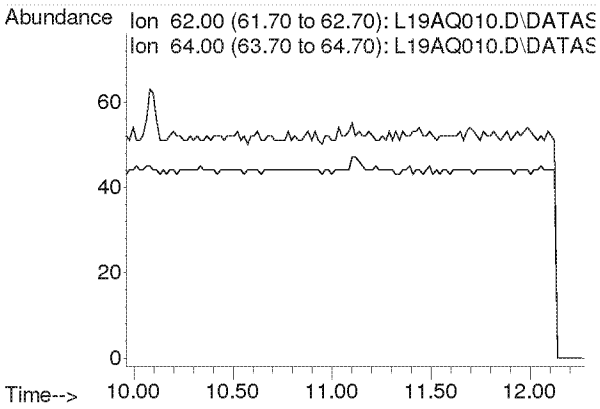


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

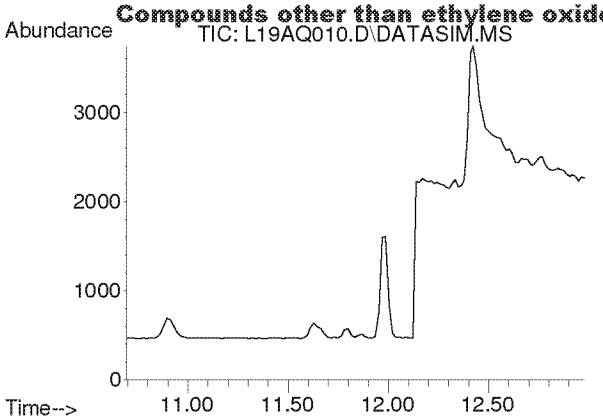
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

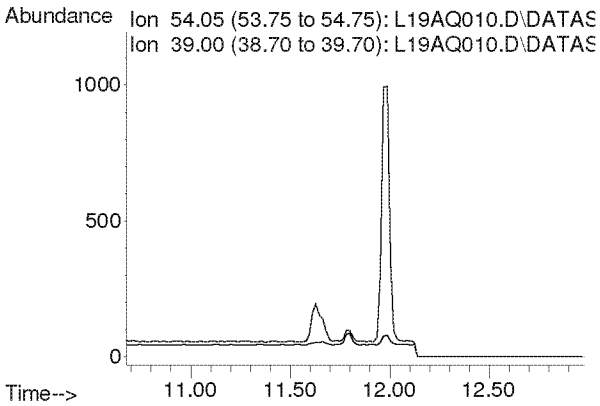


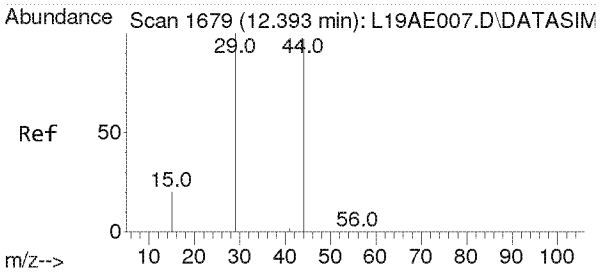
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

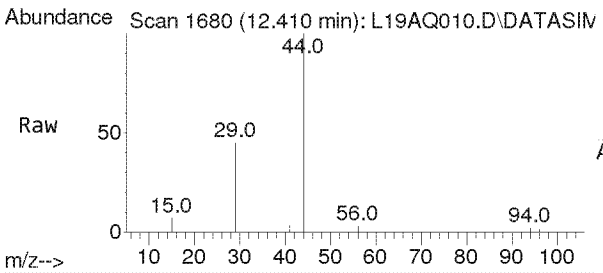


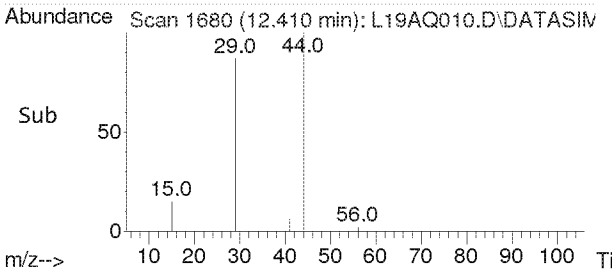


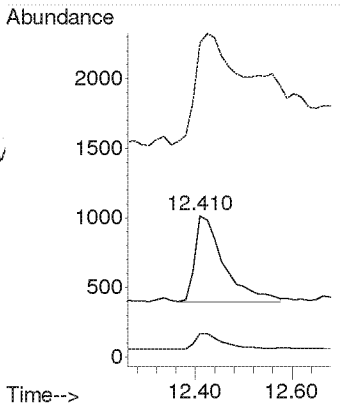
#9
Ethylene oxide
Concen: 0.865 ppbv
RT: 12.410 min Scan# 1680
Delta R.T. 0.017 min
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 29 Resp: 2547

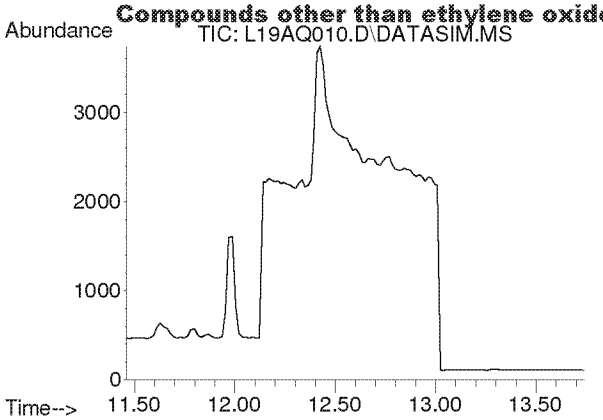
Ion	Ratio	Lower	Upper
29	100		
15	17.9	15.4	23.0
44	269.5	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

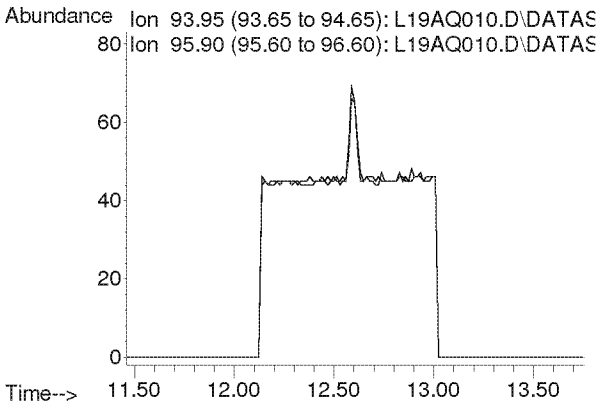


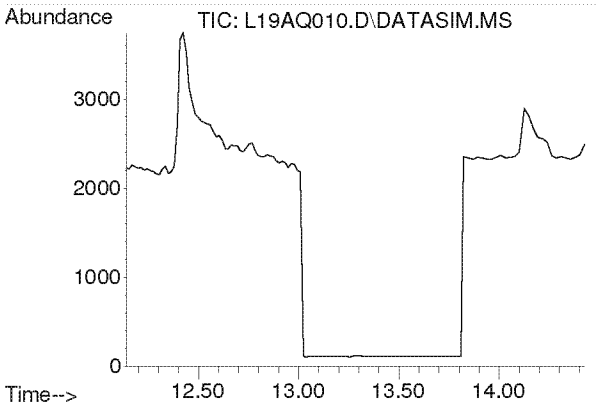
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



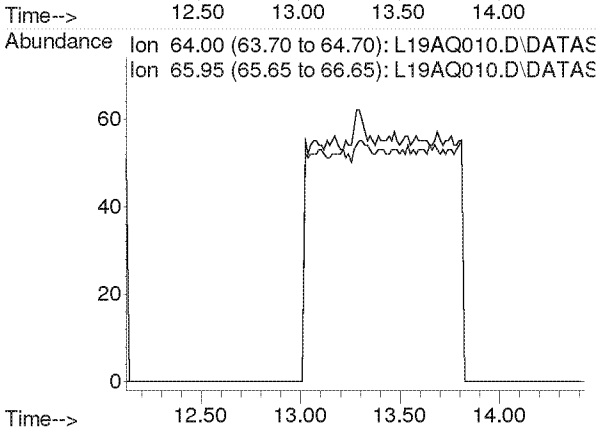


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

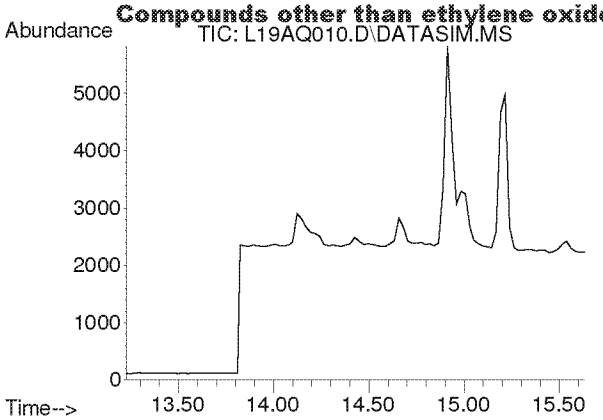
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

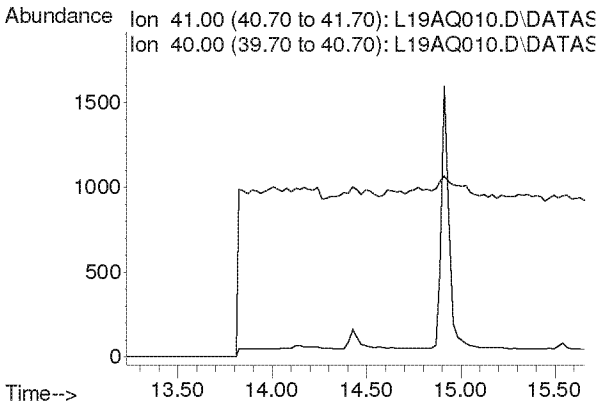


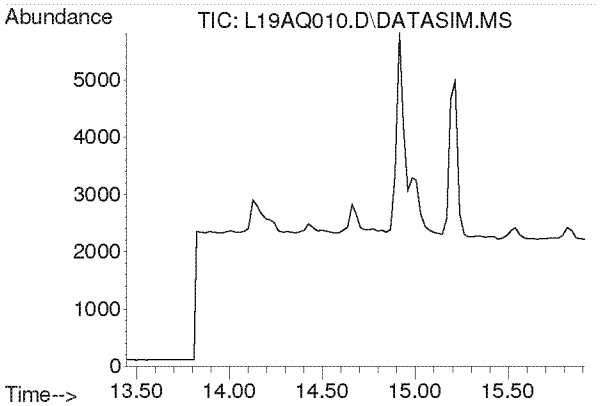
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



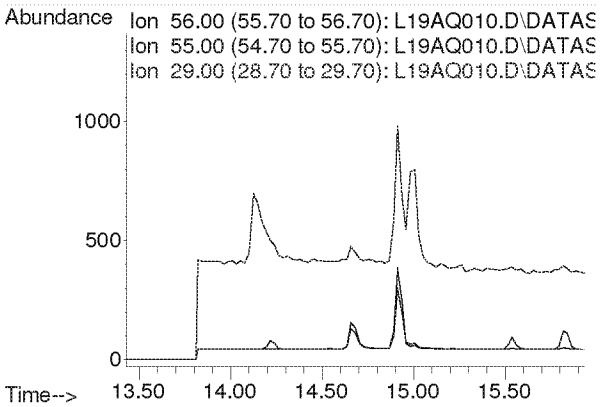


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

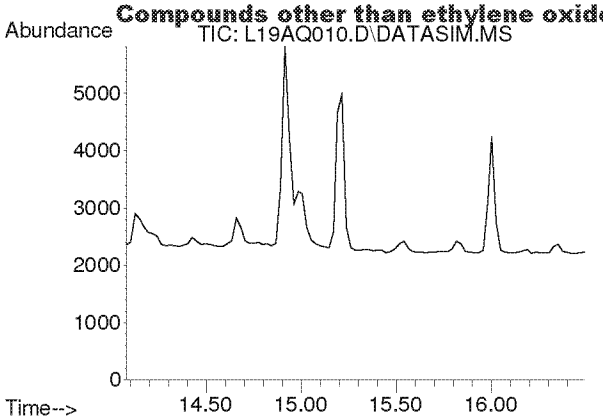
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

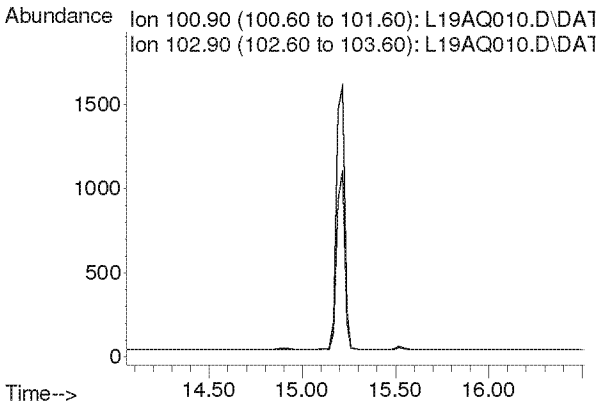


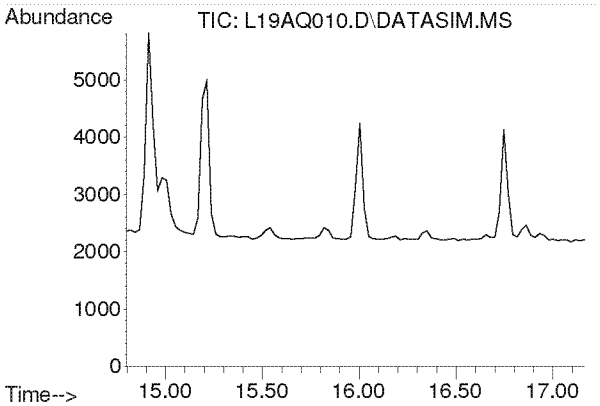
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



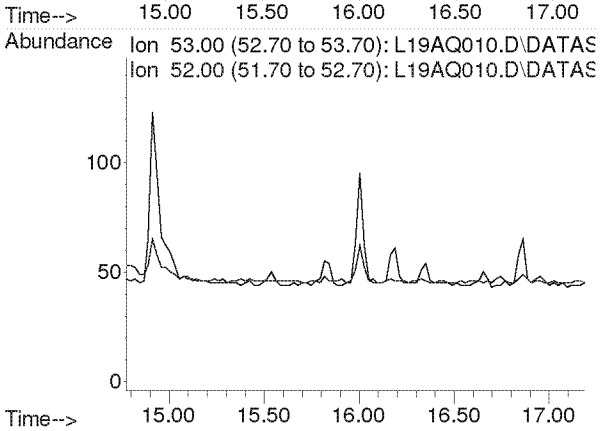


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

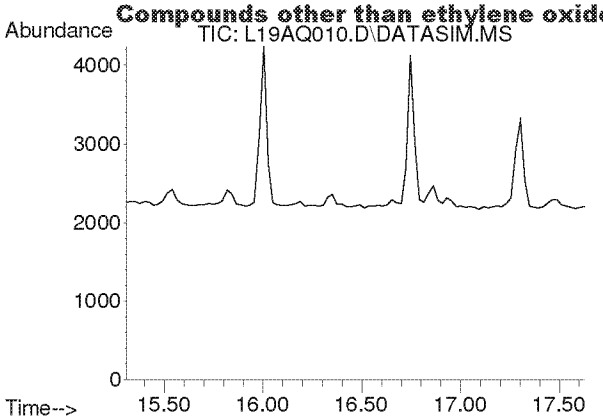
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

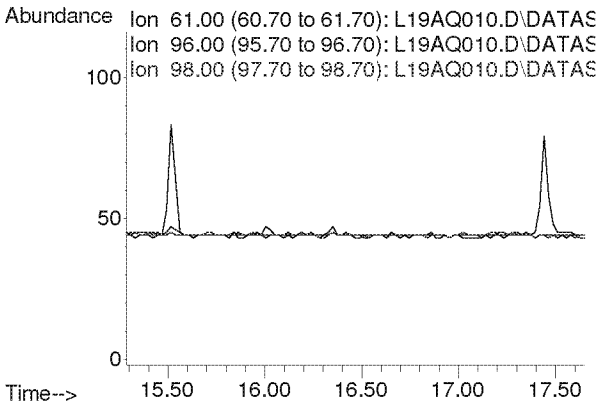


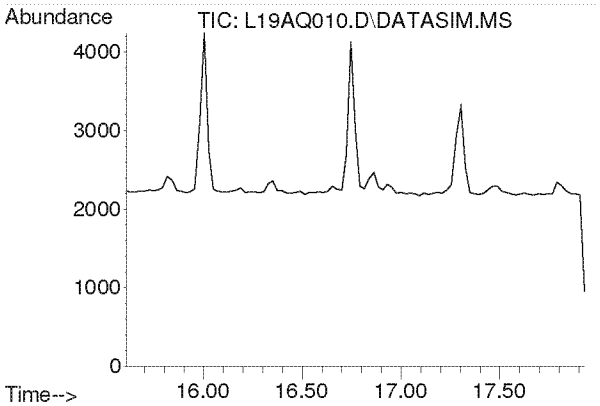
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



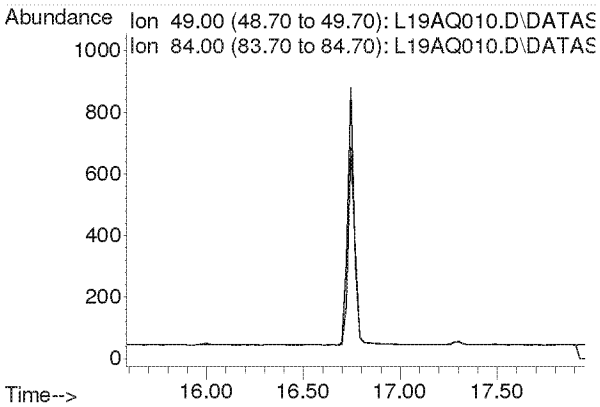


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

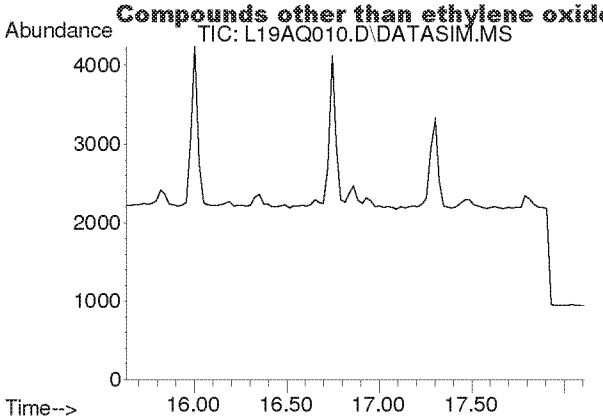
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

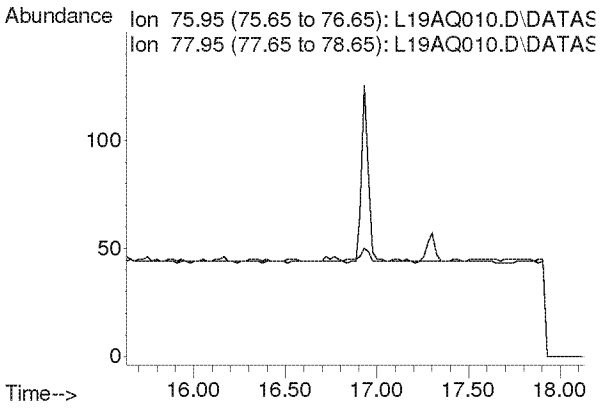


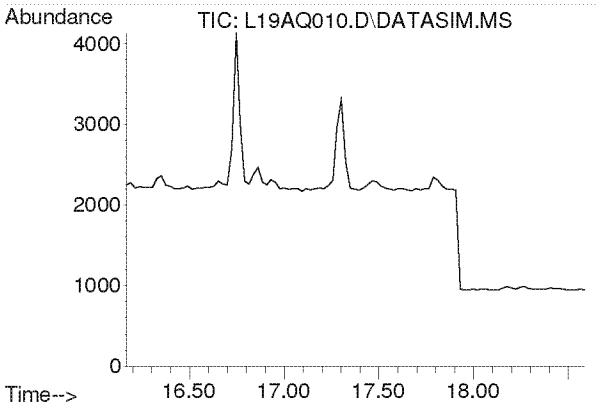
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



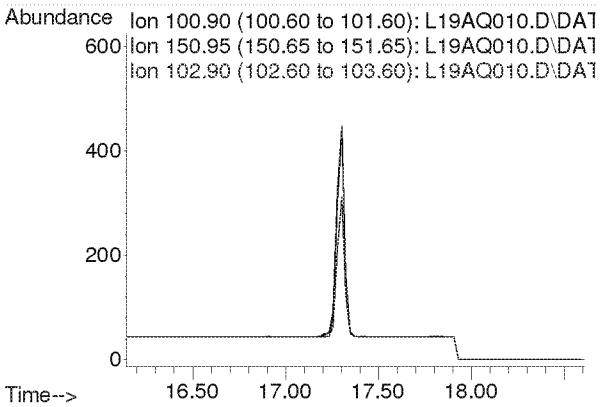


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

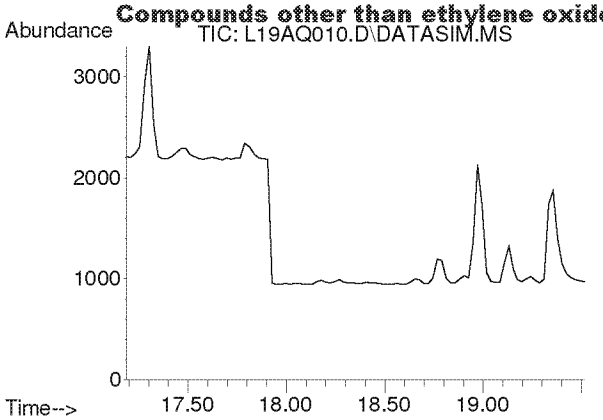
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

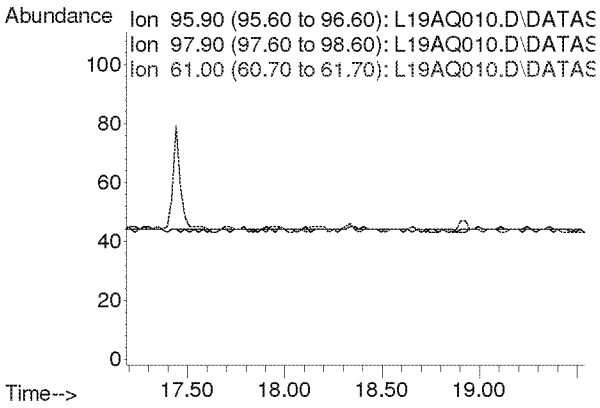


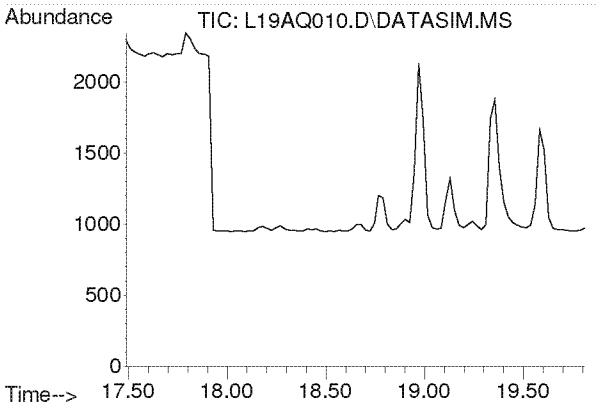
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



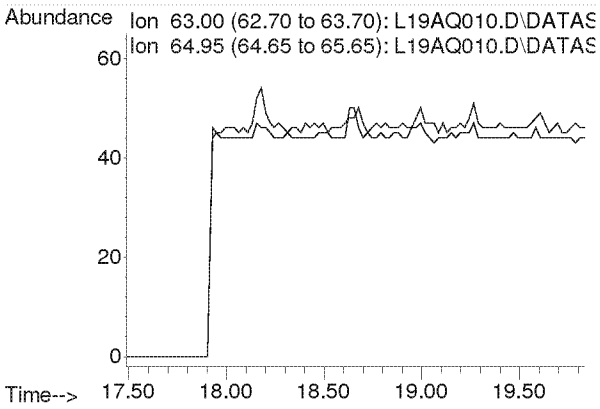


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

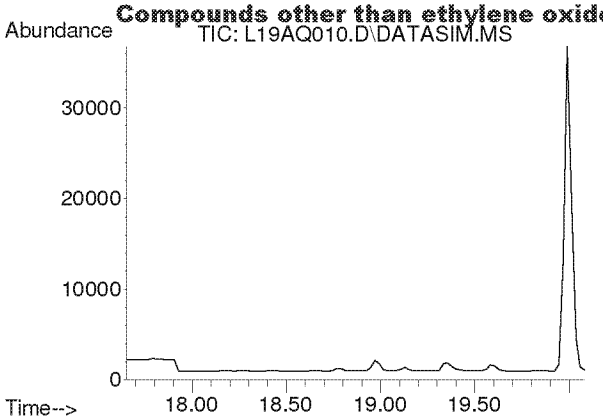
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

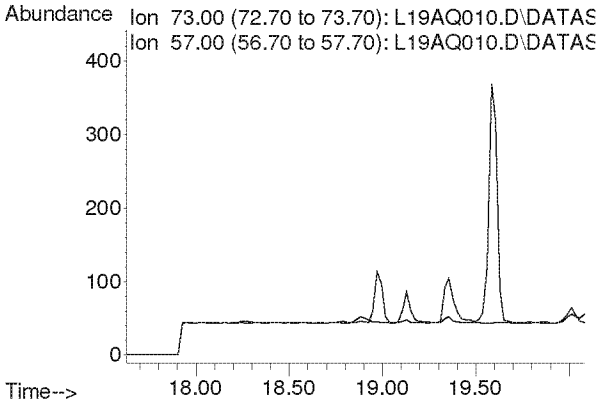


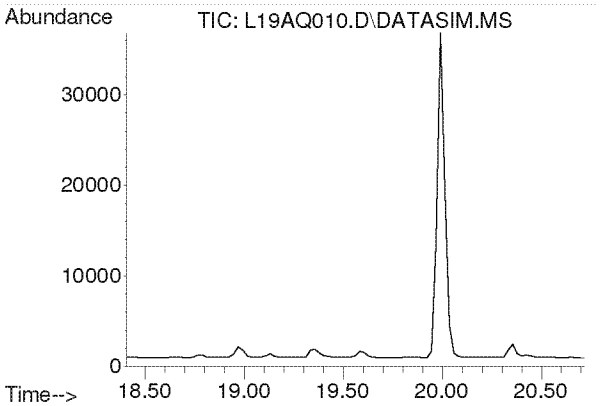
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



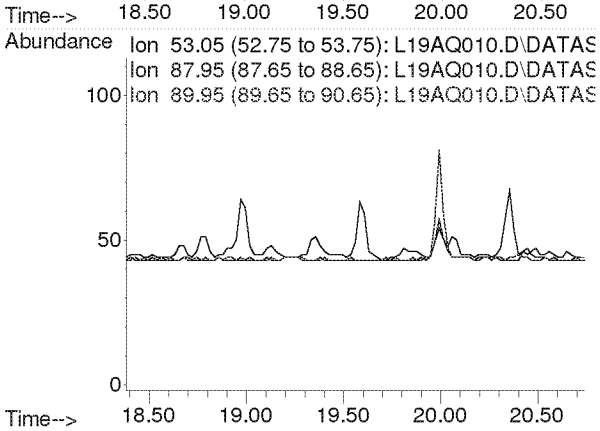


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

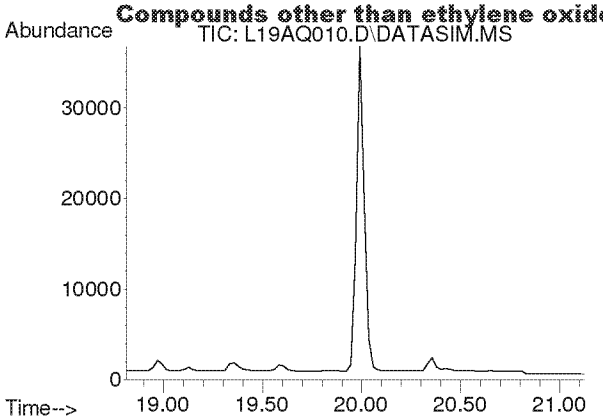
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

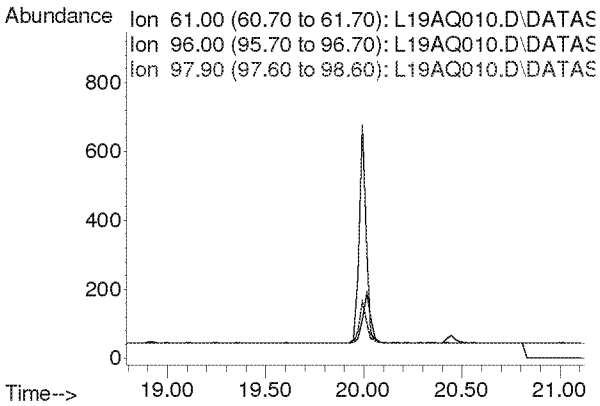


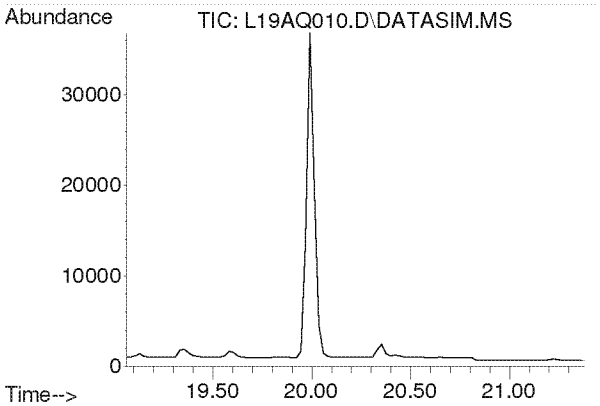
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



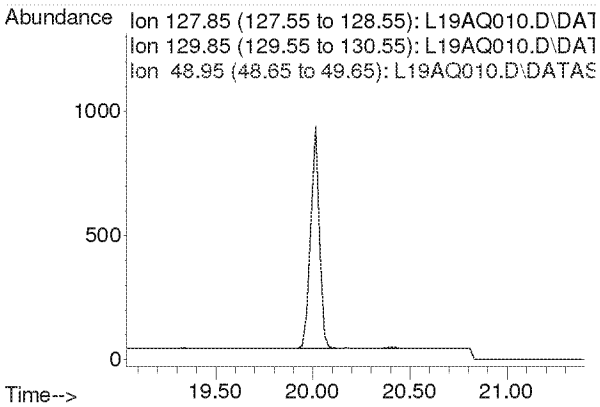


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

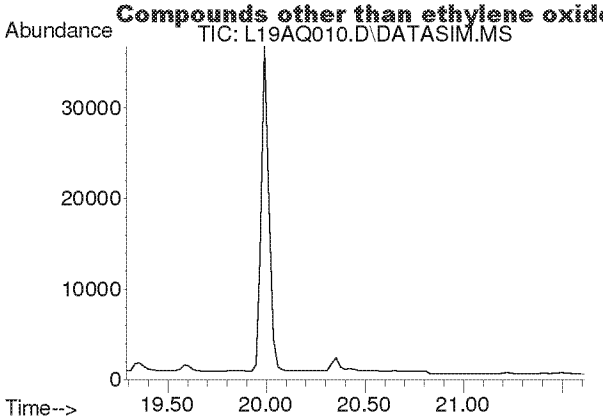
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

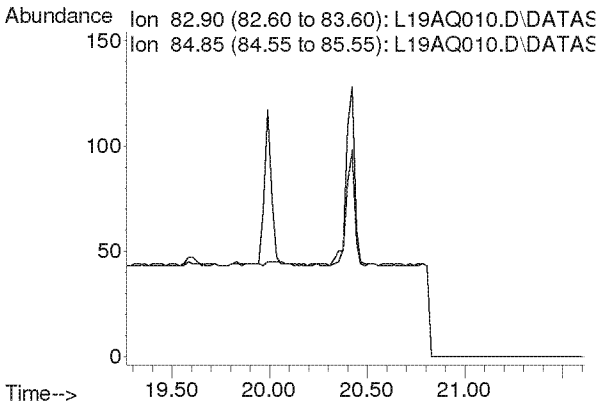


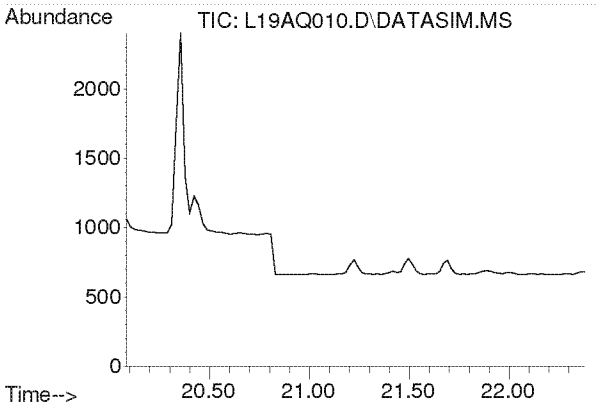
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



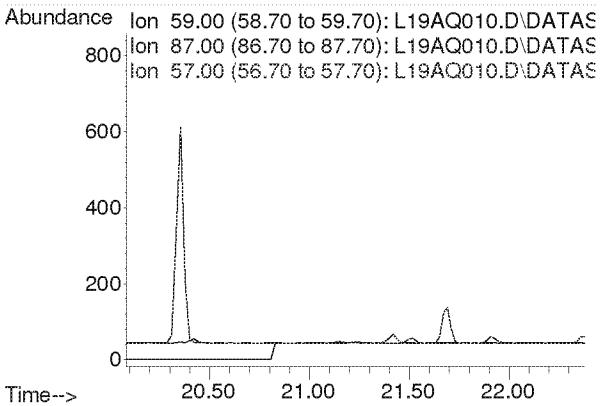


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

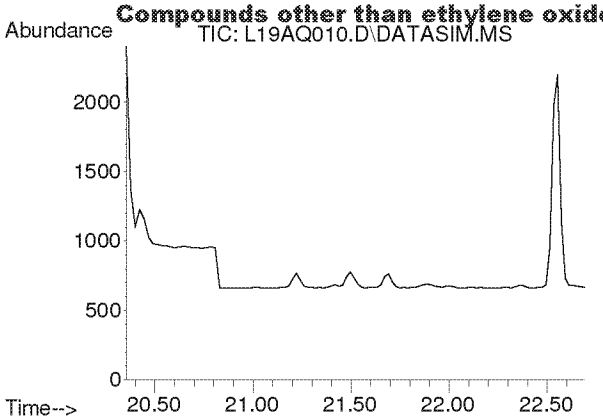
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

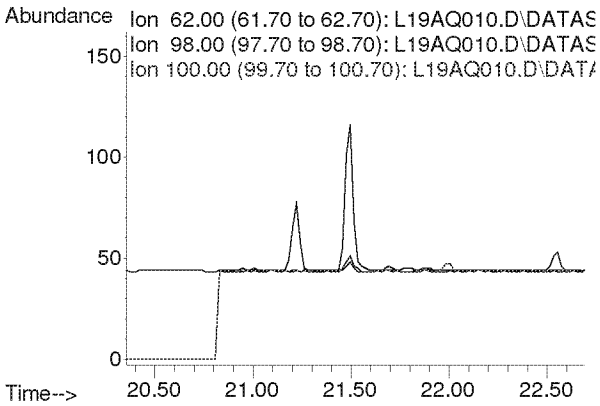


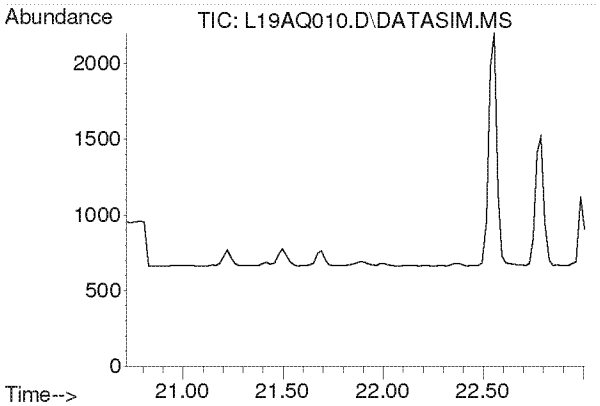
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



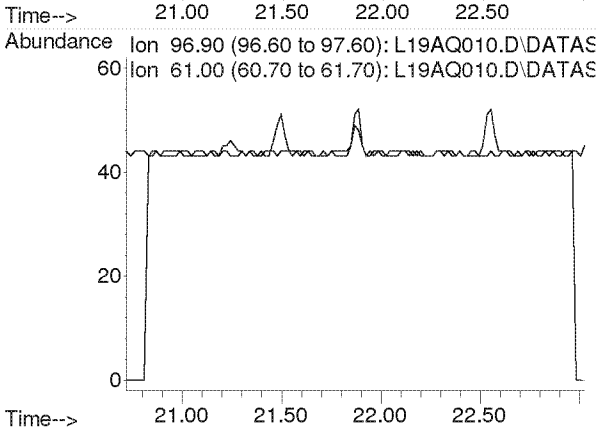


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

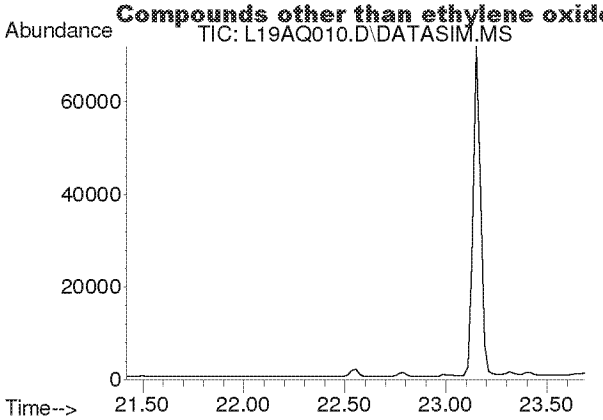
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

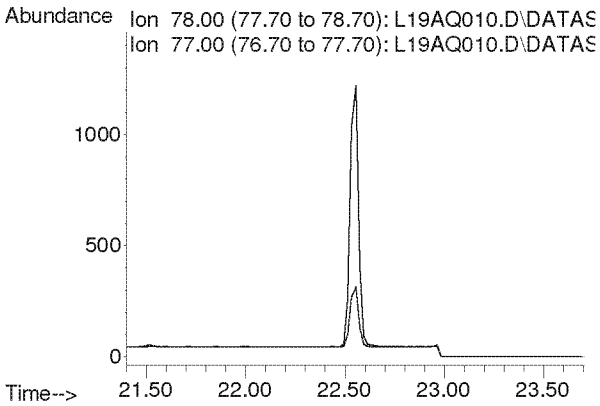


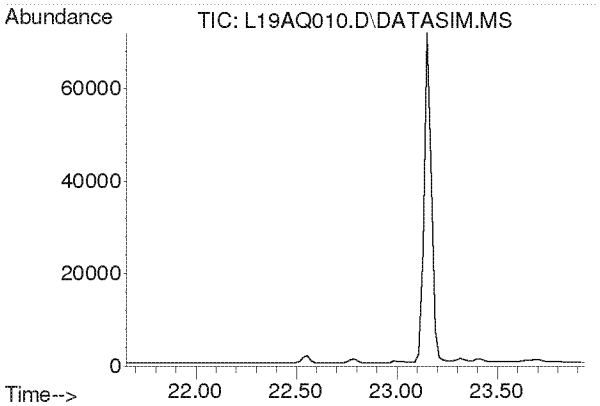
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



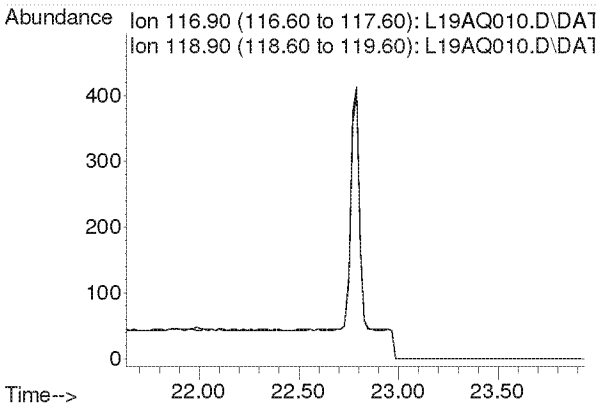


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

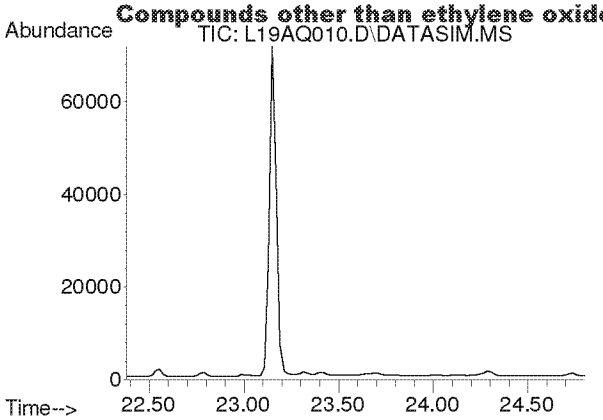
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

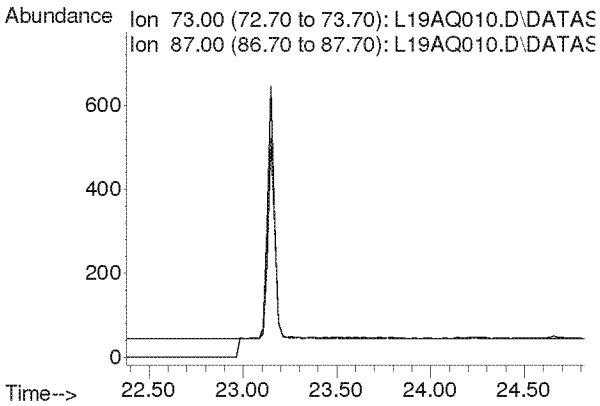


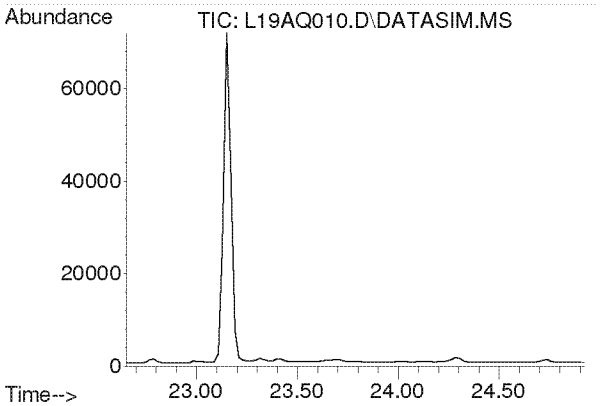
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



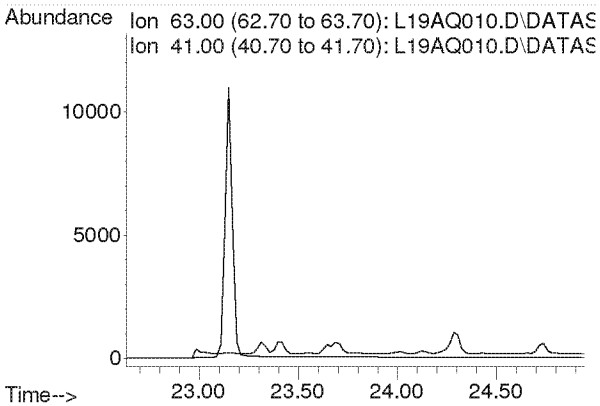


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

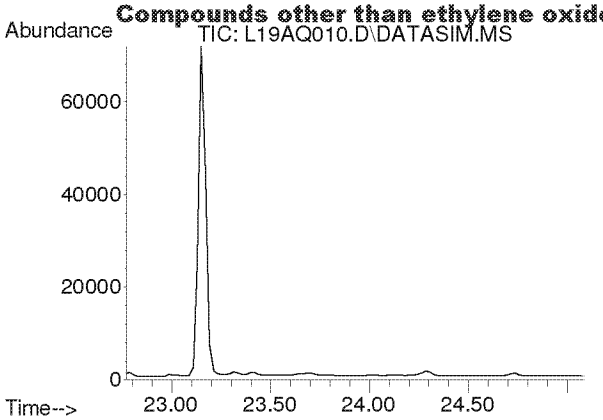
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

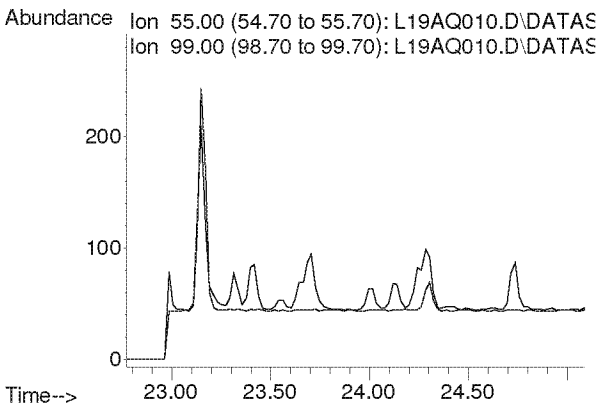


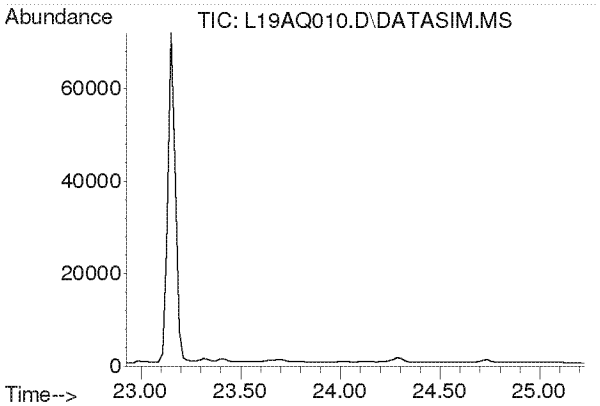
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



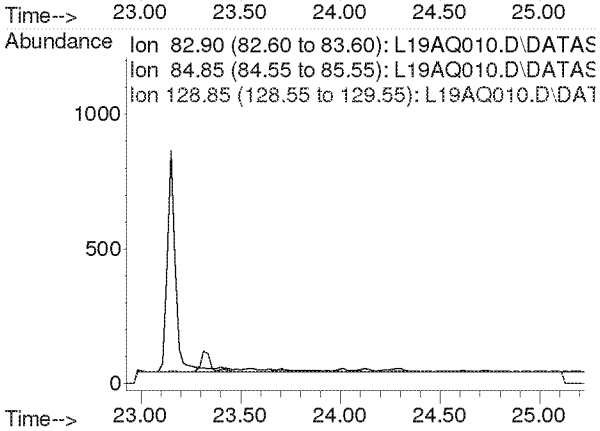


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

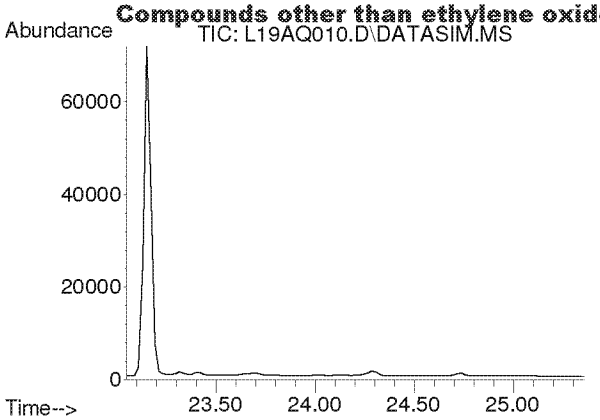
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

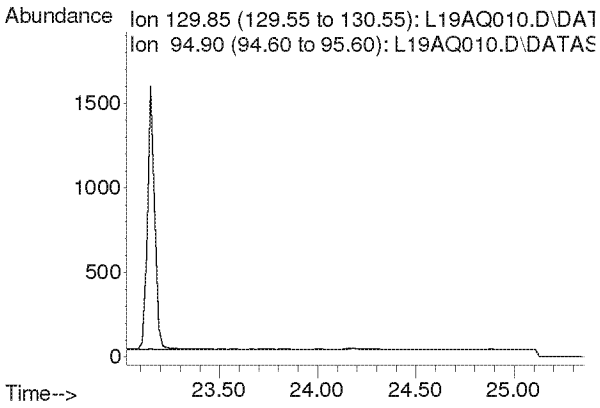


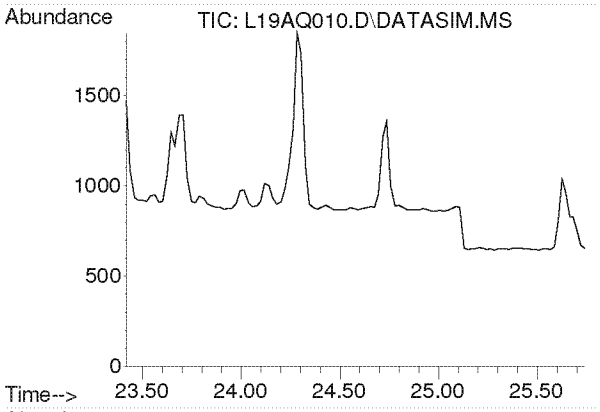
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



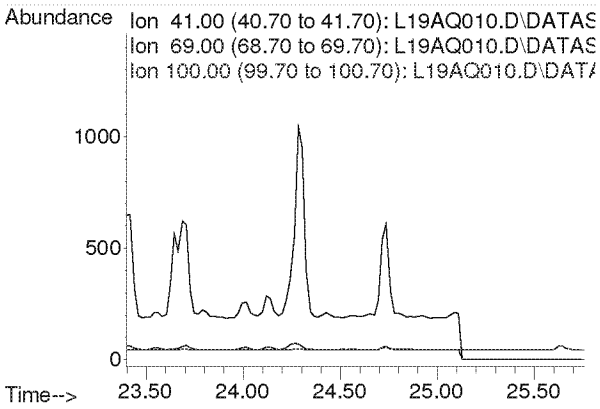


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

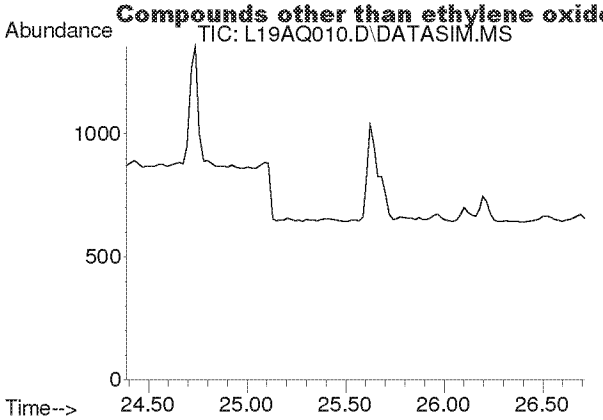
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

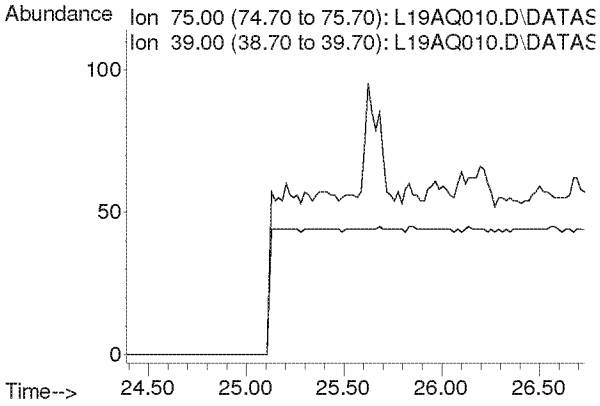


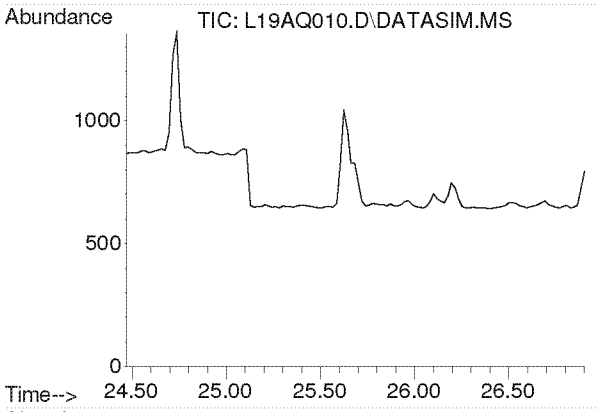
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



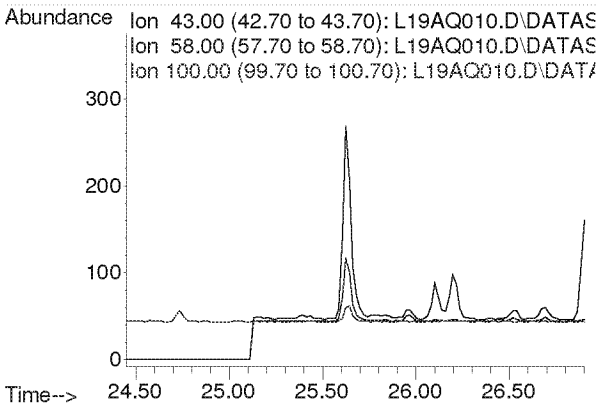


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

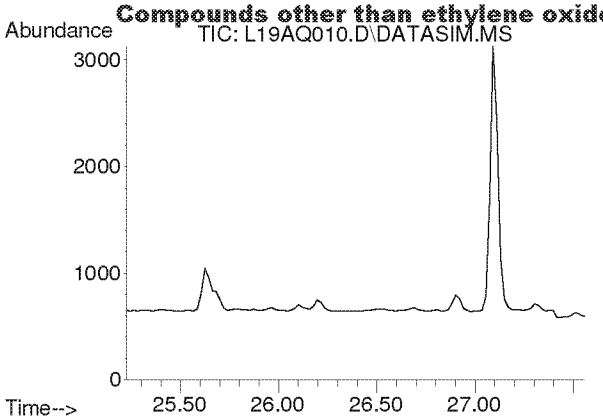
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

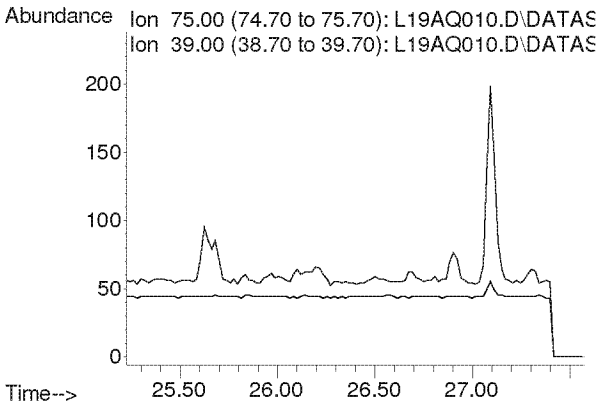


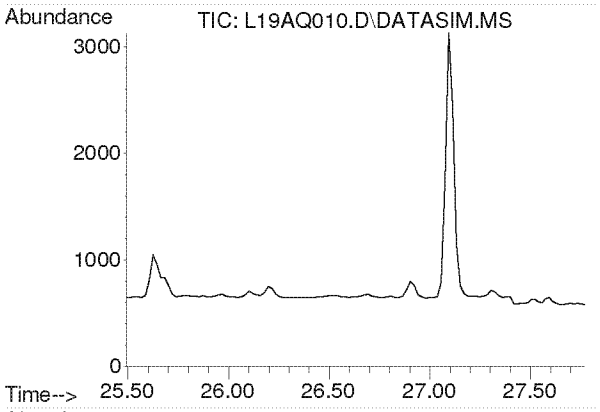
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



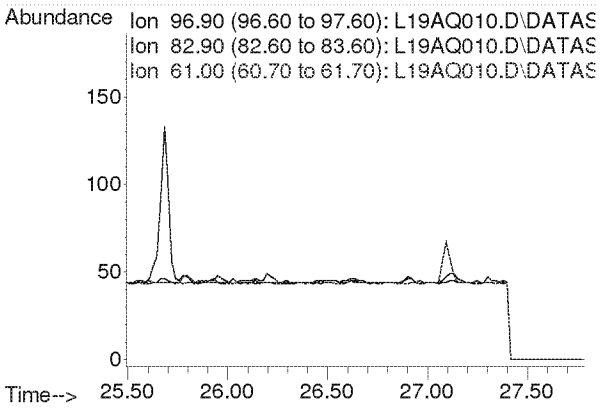


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

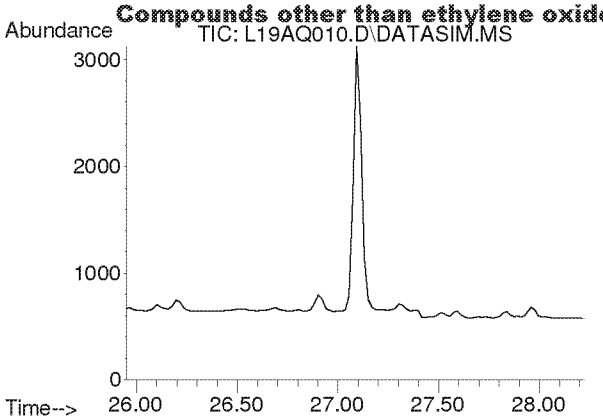
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

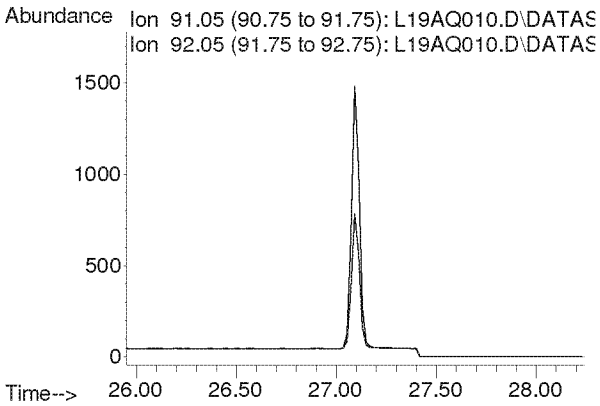


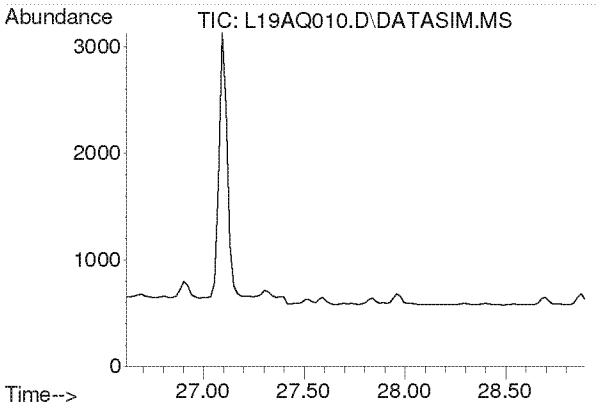
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



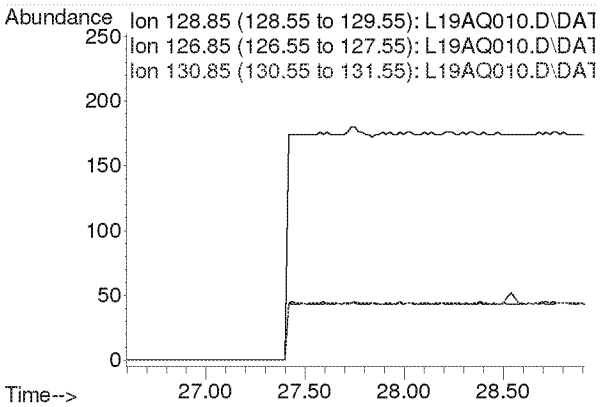


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

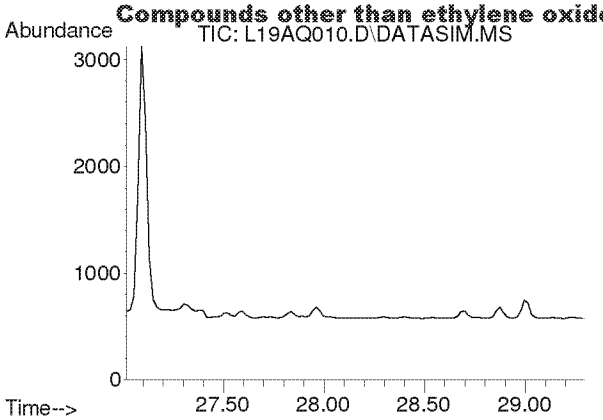
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

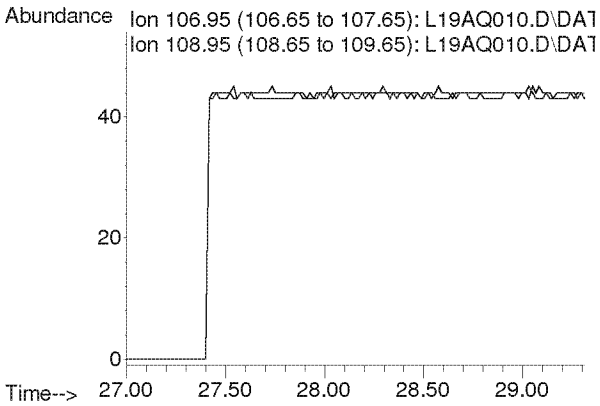


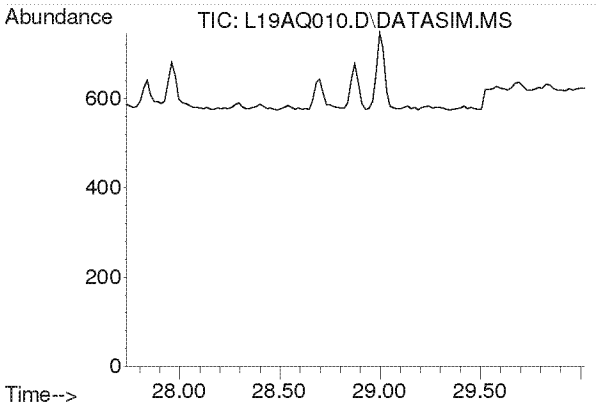
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



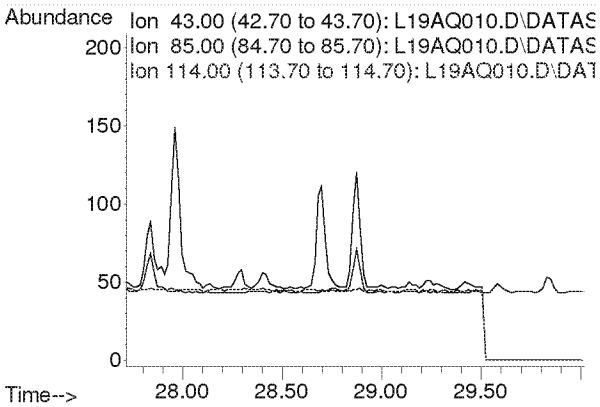


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

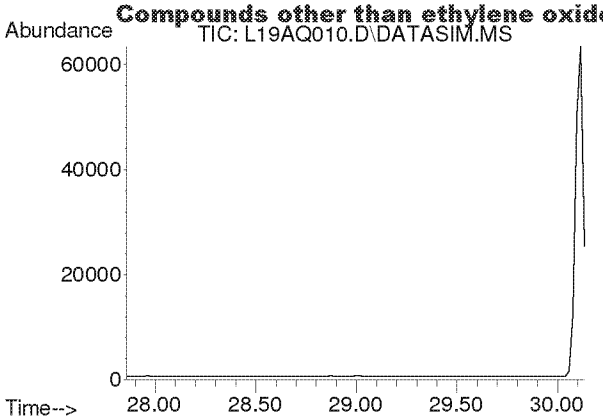
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

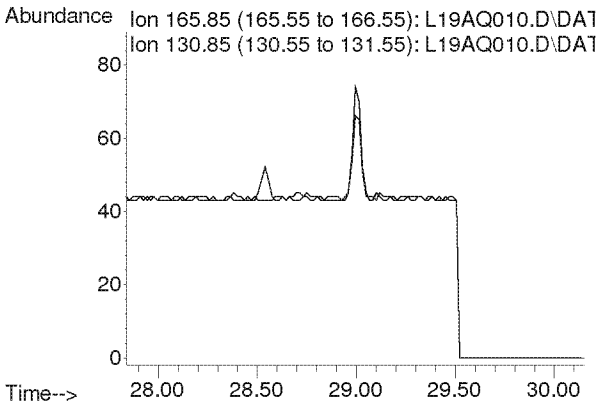


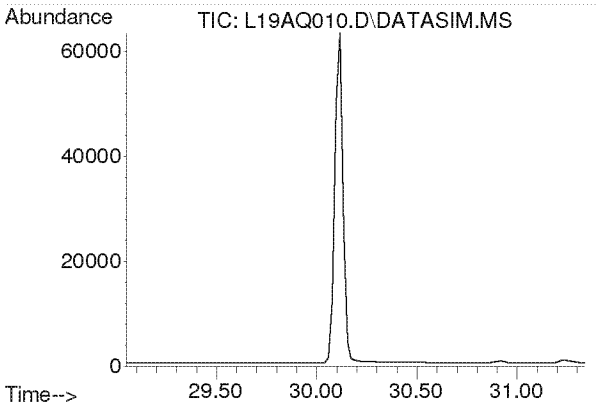
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



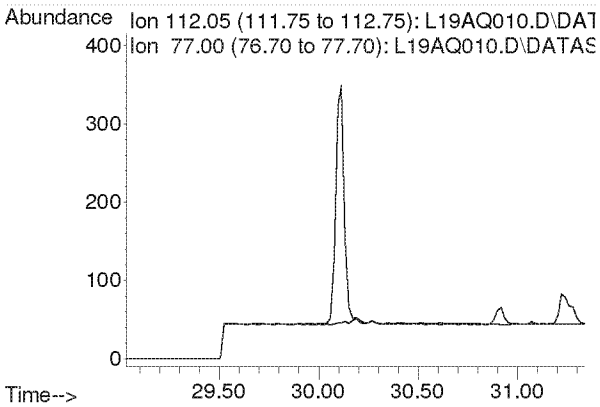


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

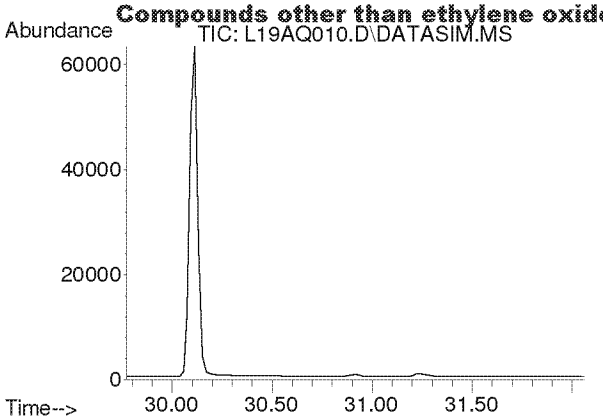
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

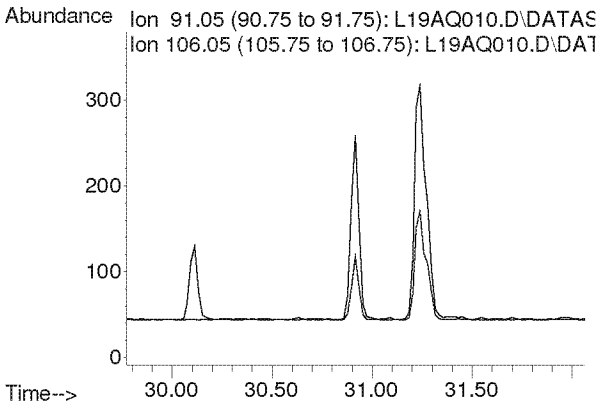


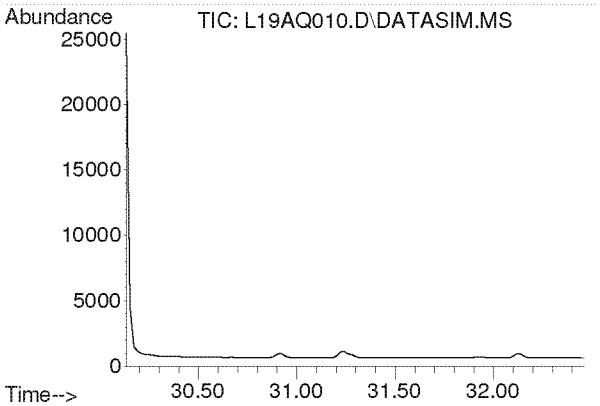
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



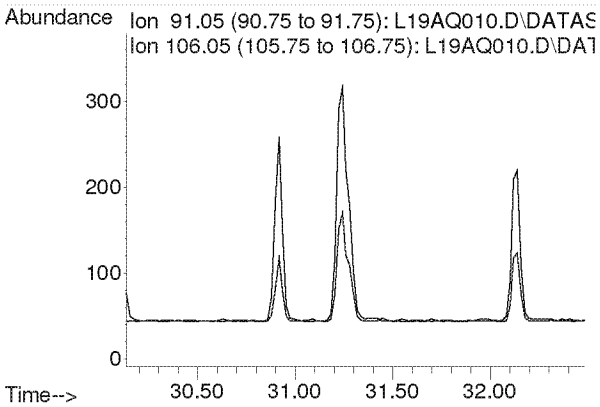


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

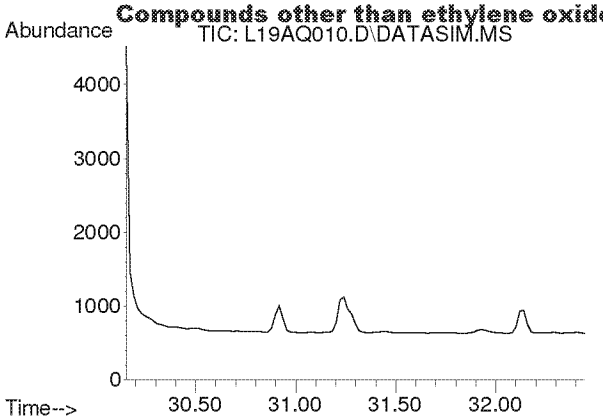
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

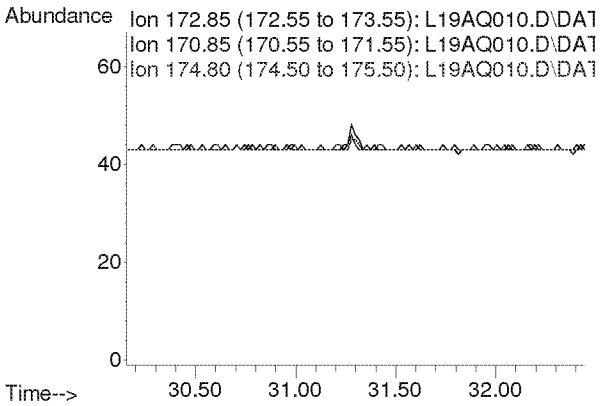


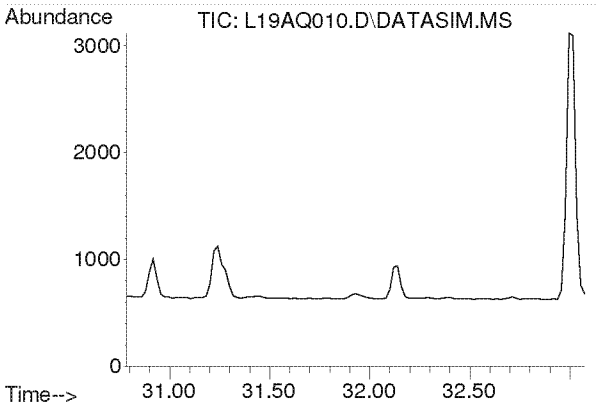
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



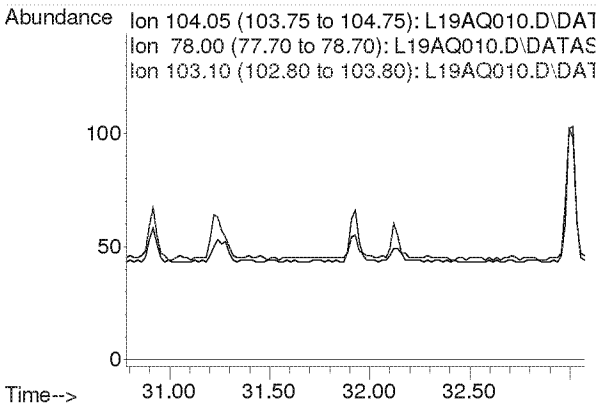


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

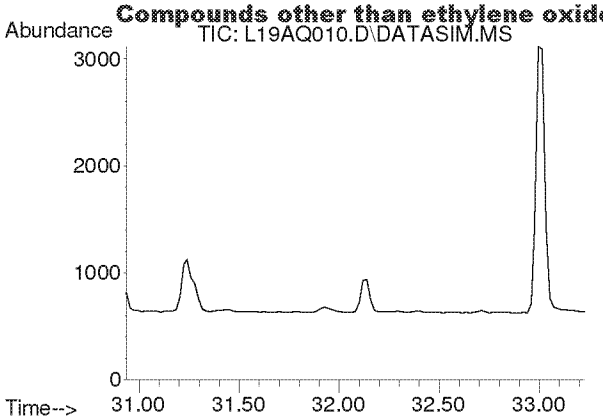
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

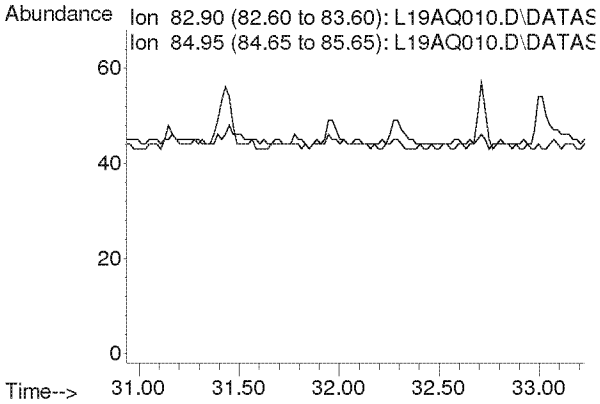


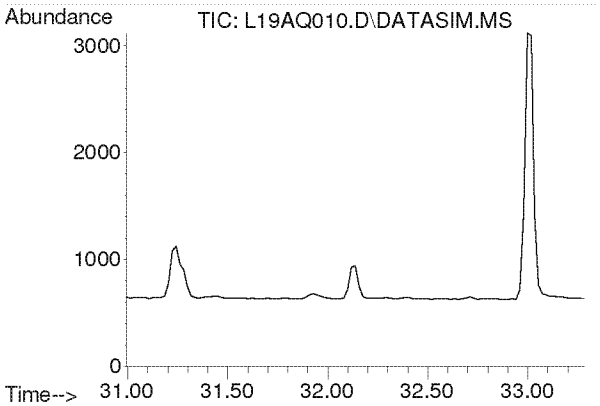
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



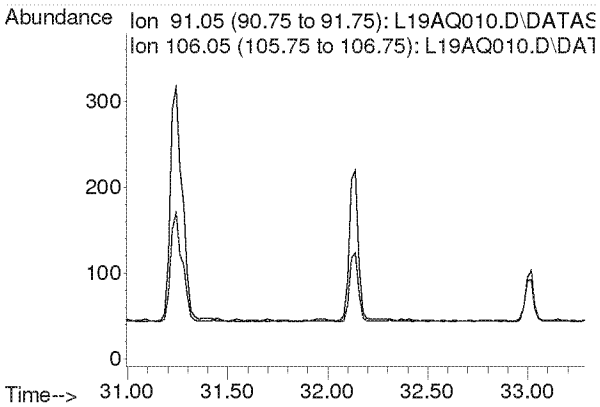


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

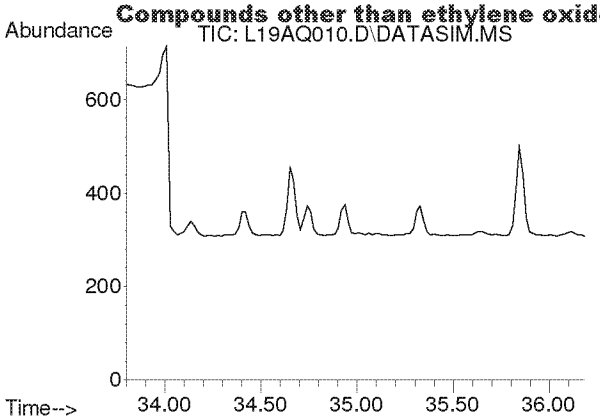
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

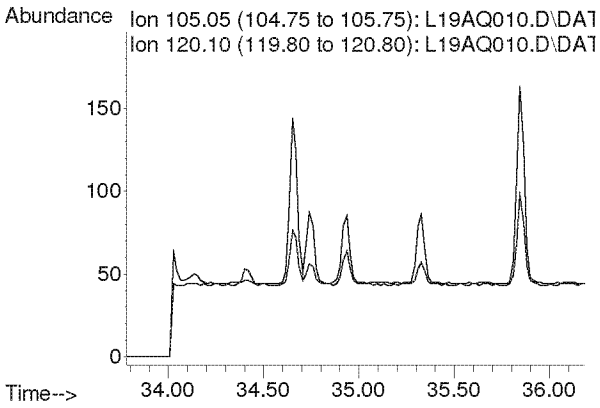


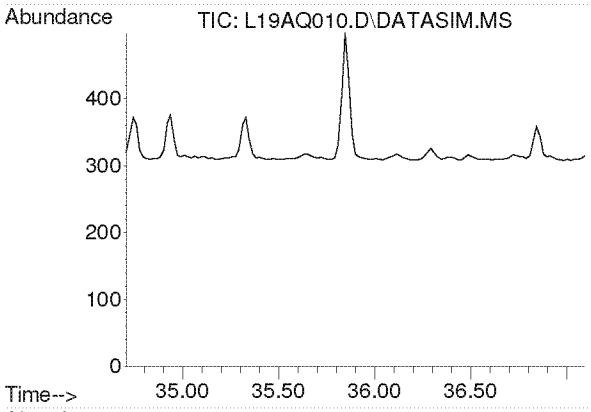
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



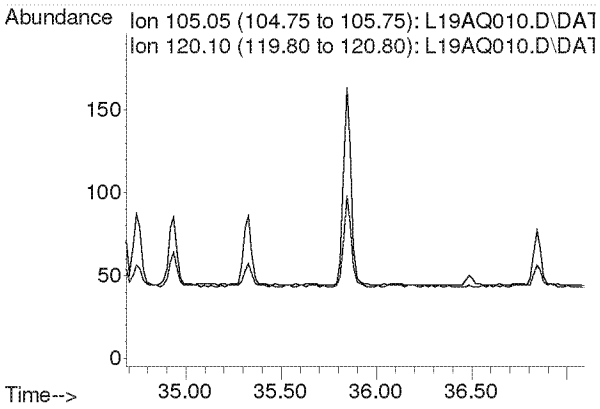


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

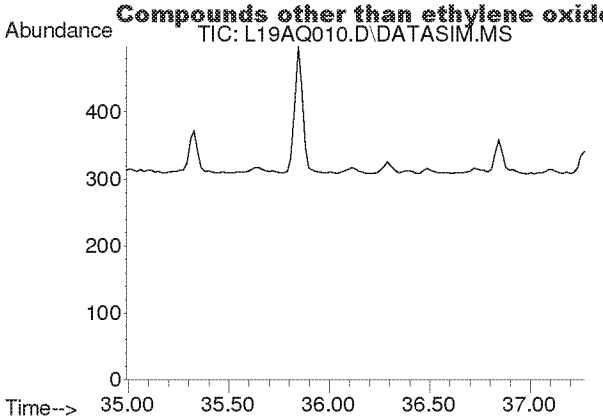
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

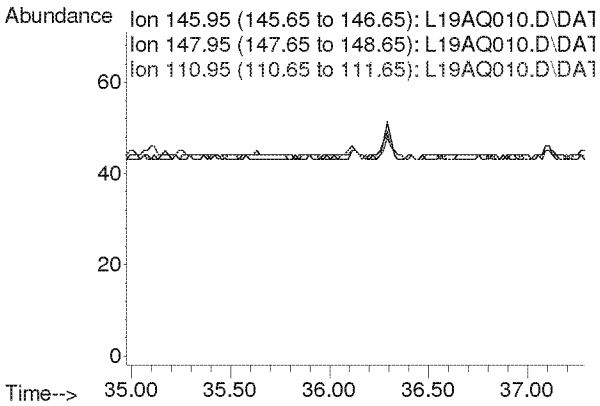


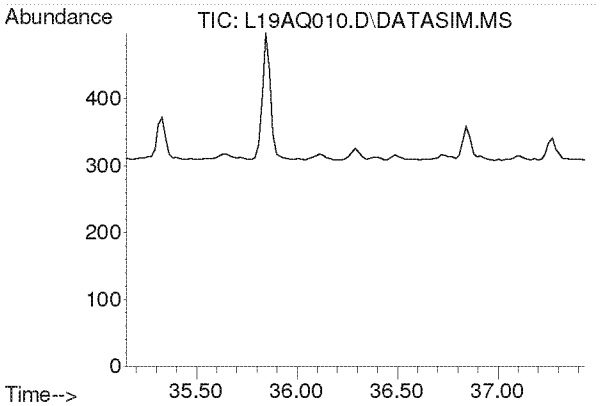
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



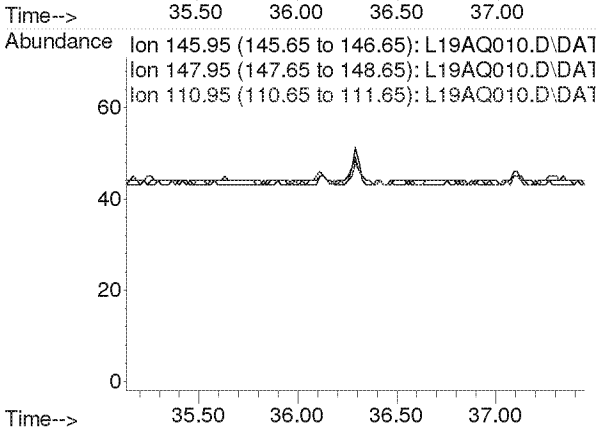


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

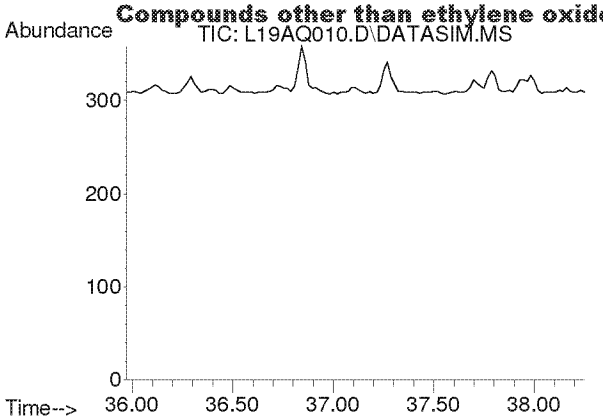
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

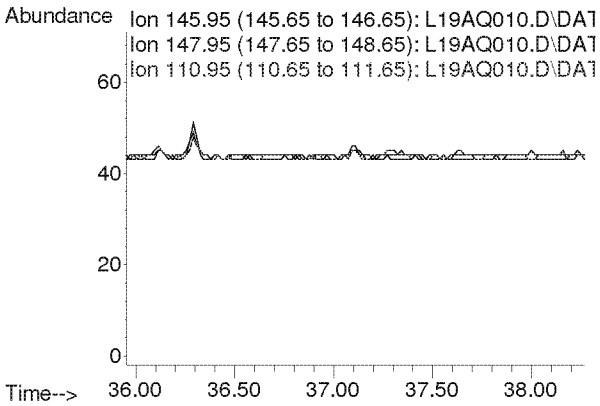


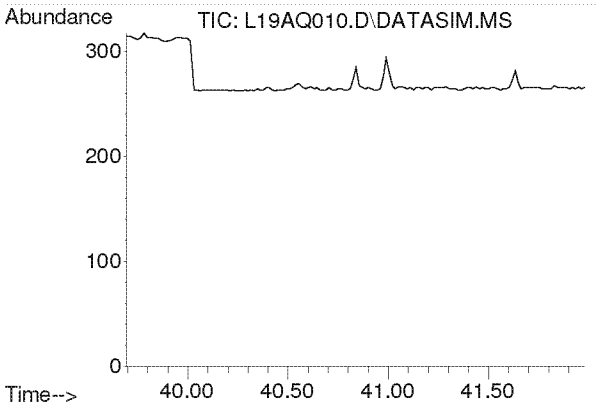
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



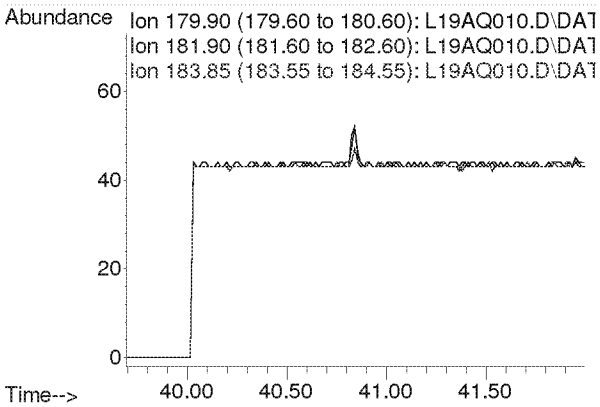


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

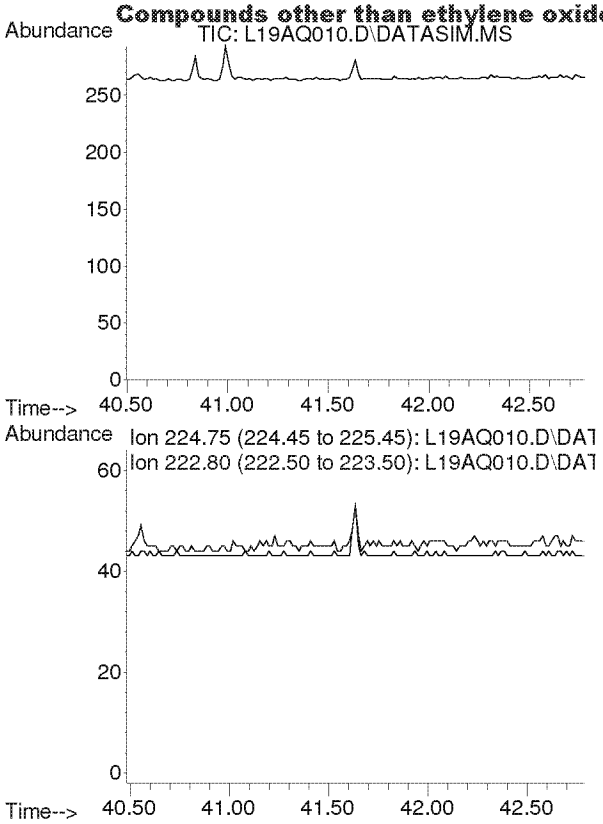
Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ010.D
Acq: 17 Jan 2019 8:33 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ011.D
Acq On : 17 Jan 2019 9:35 pm
Operator : MAH
Sample : 9011101-01
Misc : WATER TOWER 1/10/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 07:50:53 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	53631	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	132526	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	100064	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	0.000	29	0	N.D. d	
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D. d	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ011.D
Acq On : 17 Jan 2019 9:35 pm
Operator : MAH
Sample : 9011101-01
Misc : WATER TOWER 1/10/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 07:50:53 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

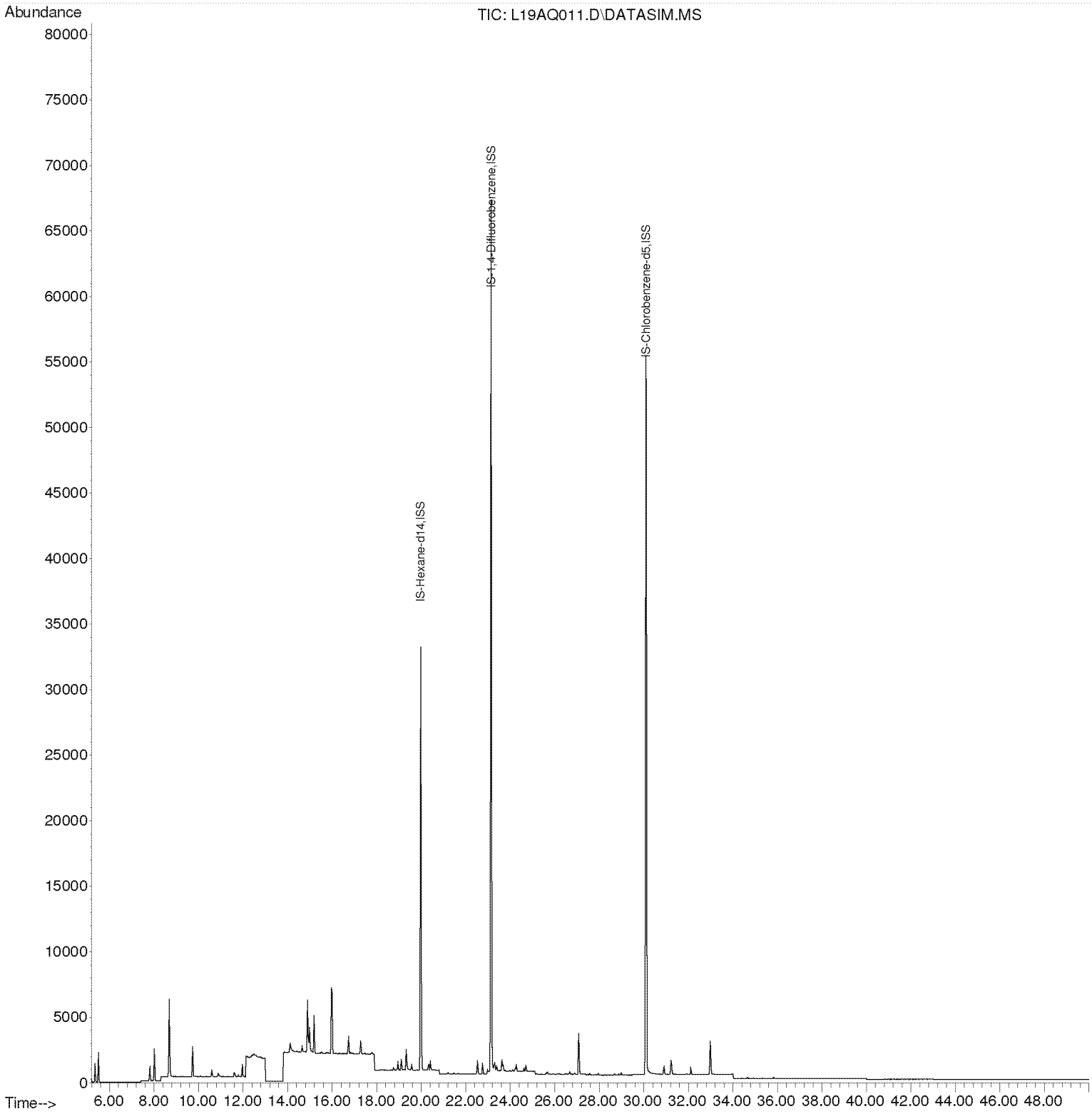
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00281

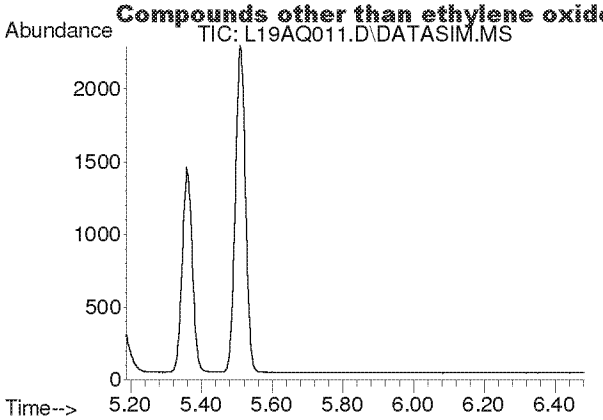
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ011.D
Acq On : 17 Jan 2019 9:35 pm
Operator : MAH
Sample : 9011101-01
Misc : WATER TOWER 1/10/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 07:35:35 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



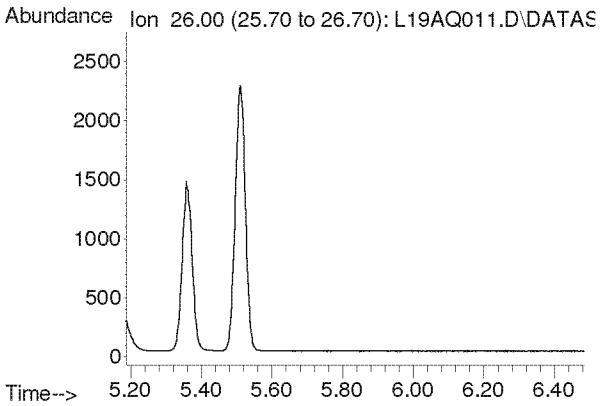
Compounds other than ethylene oxide were not quantitated.

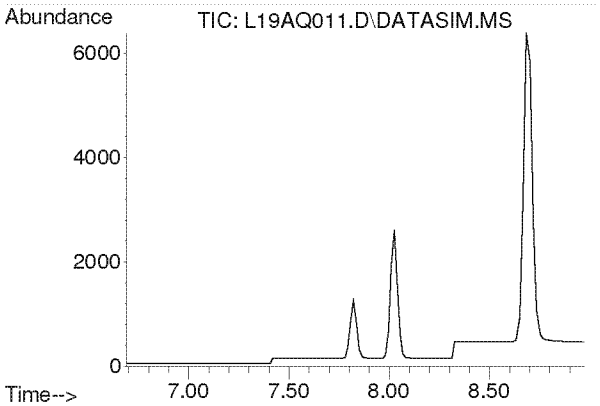


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 26



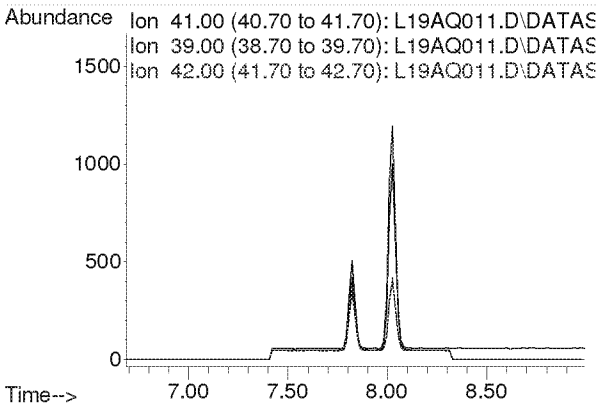


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

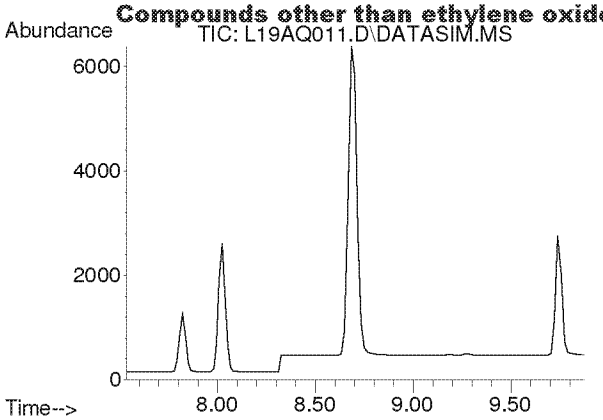
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

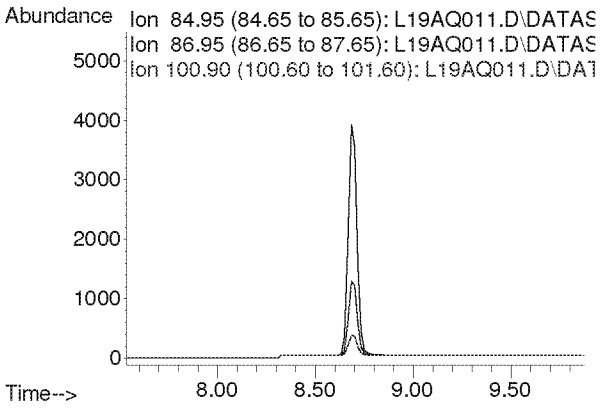


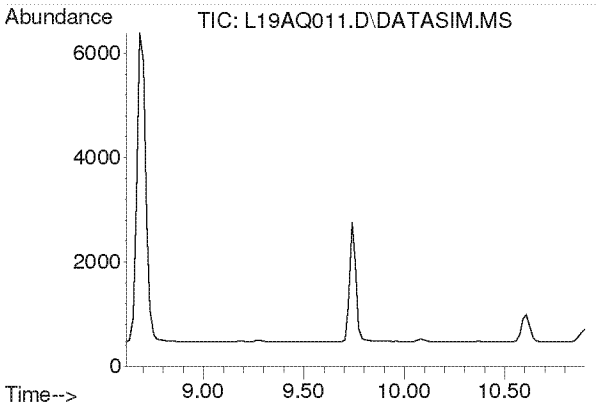
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



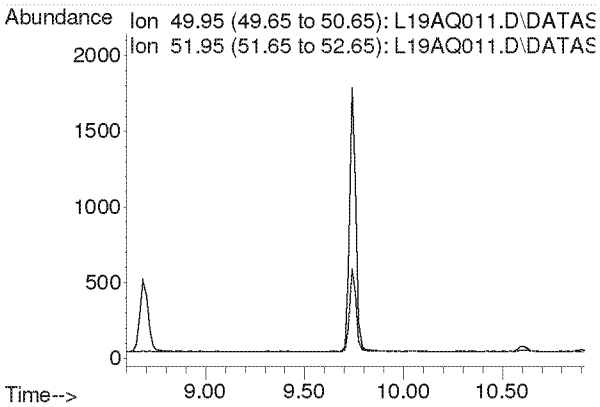


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

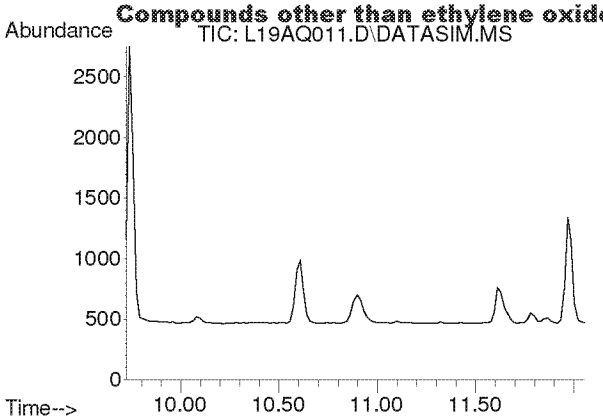
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

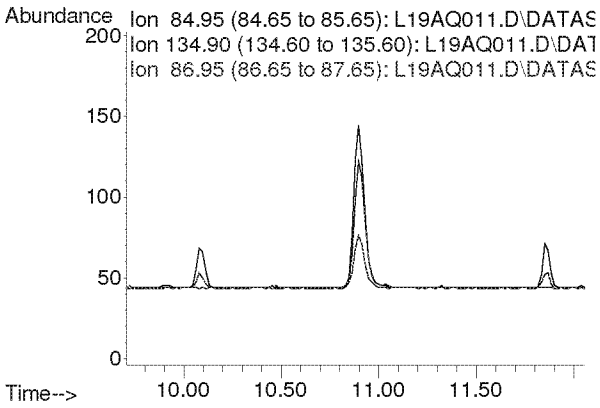


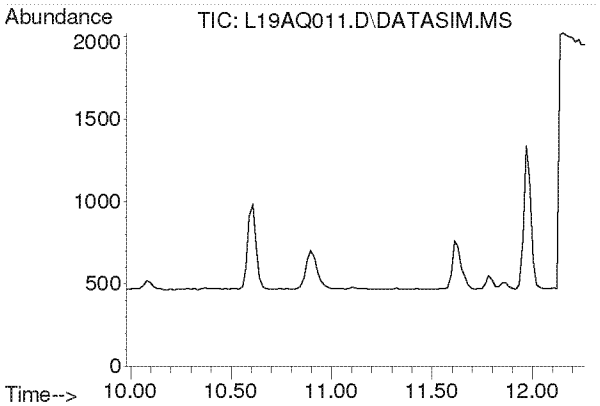
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



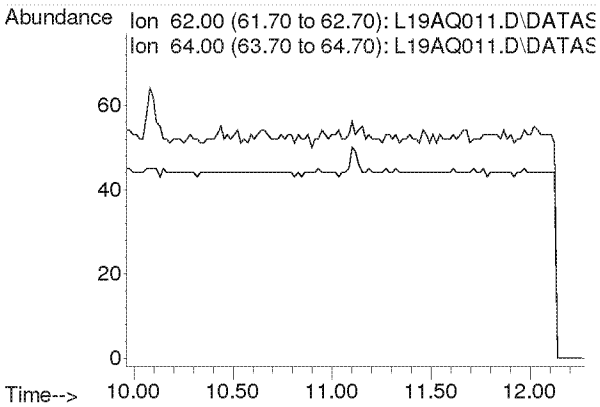


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

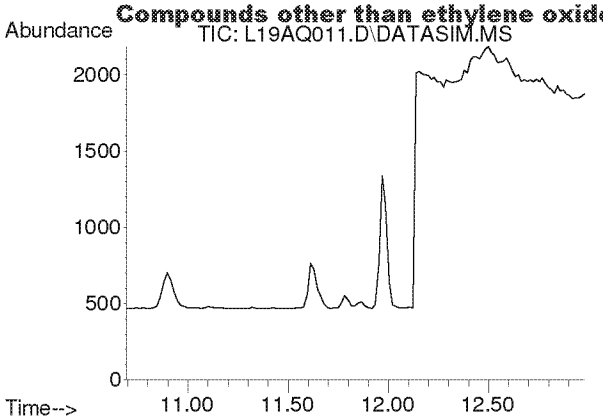
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

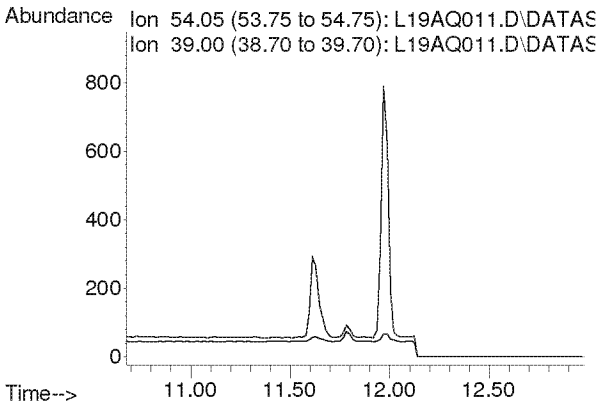


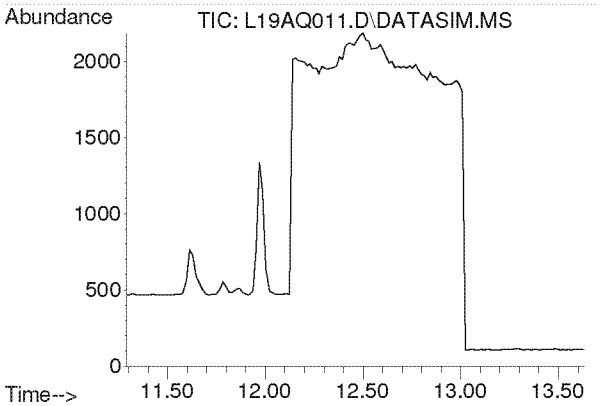
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



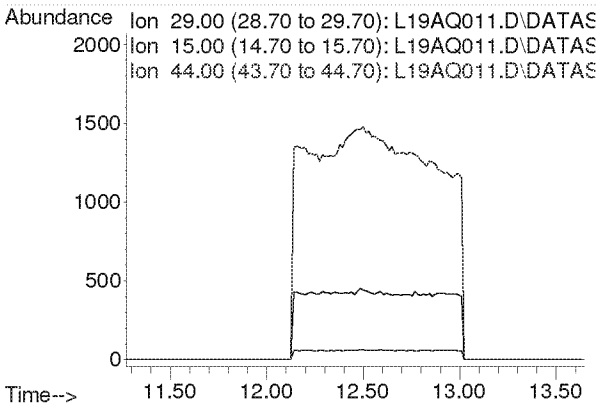


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

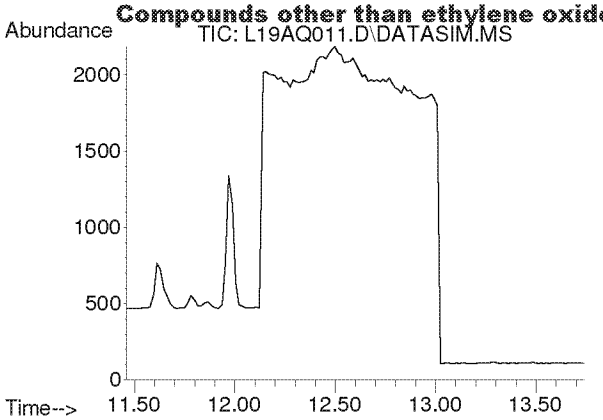
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

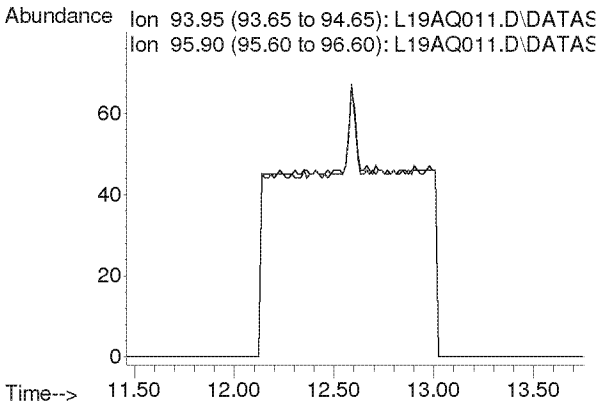


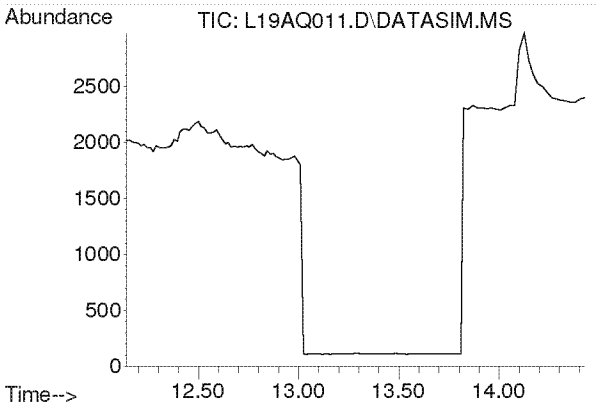
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



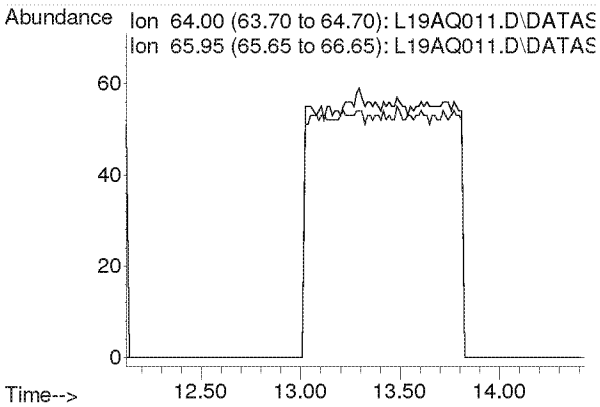


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

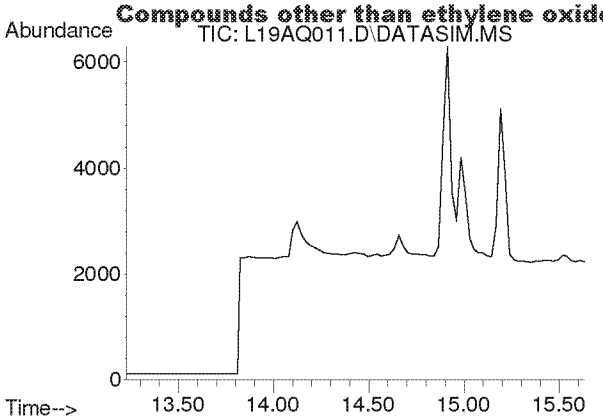
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

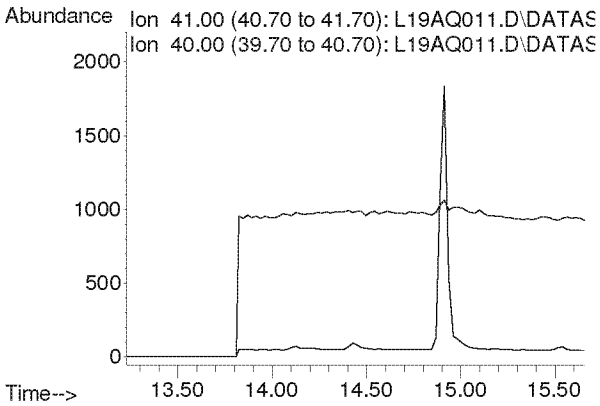


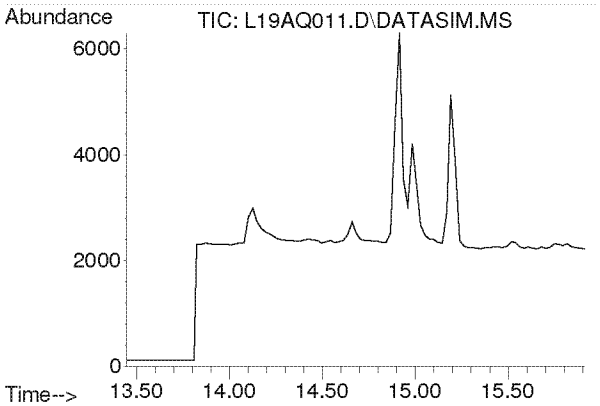
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



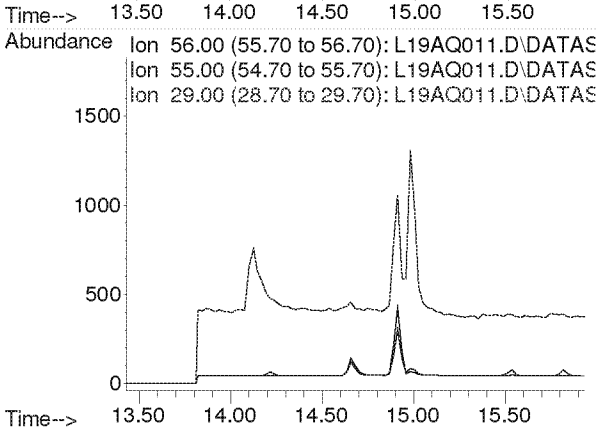


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

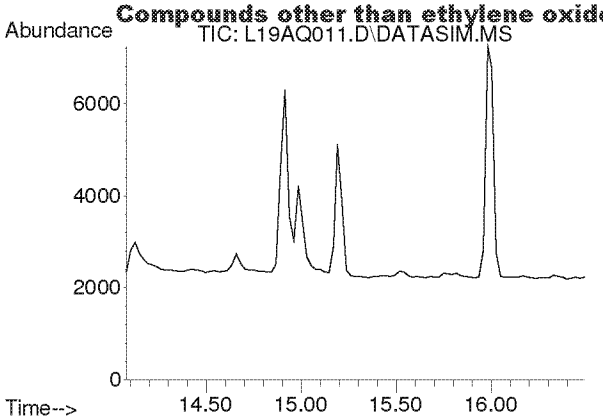
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

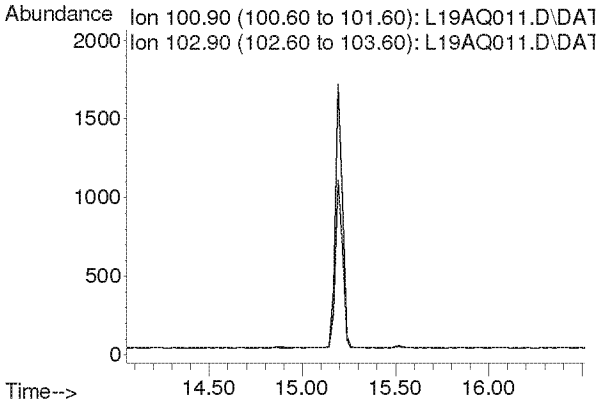


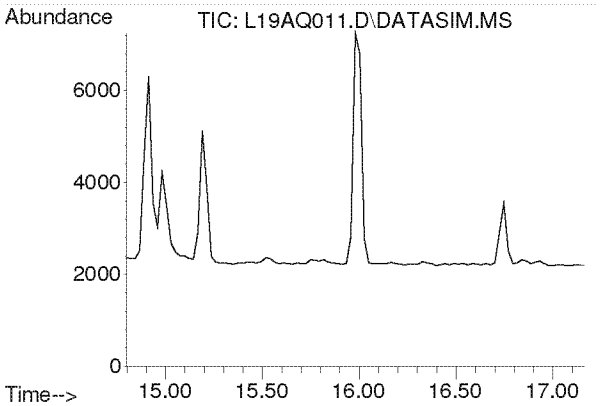
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



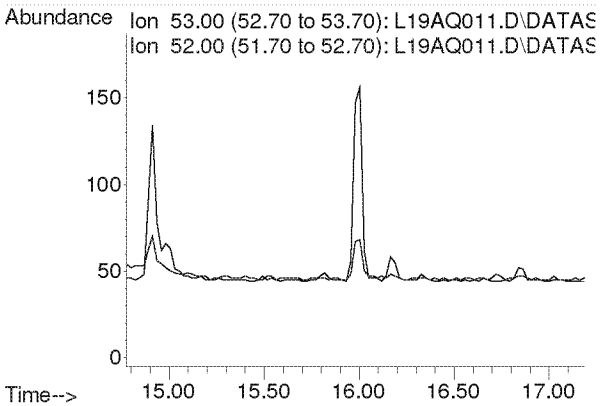


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

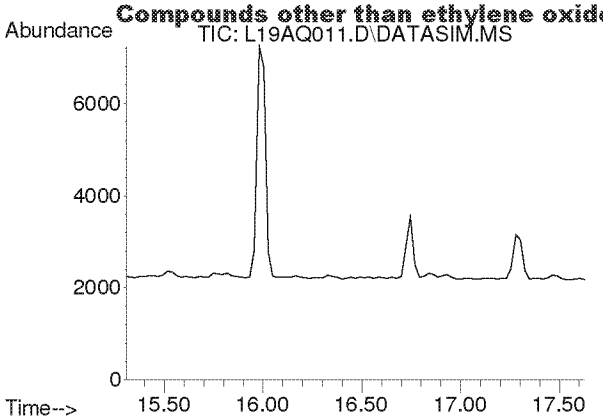
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

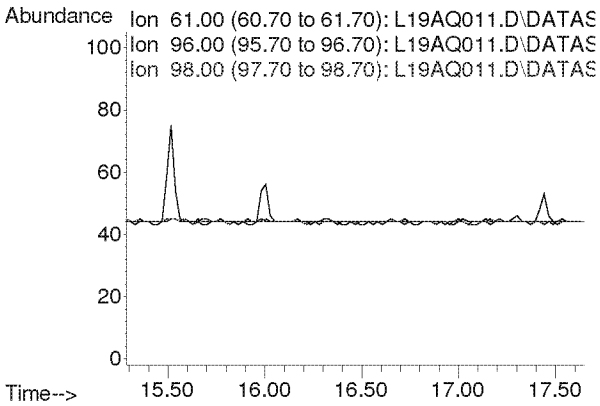


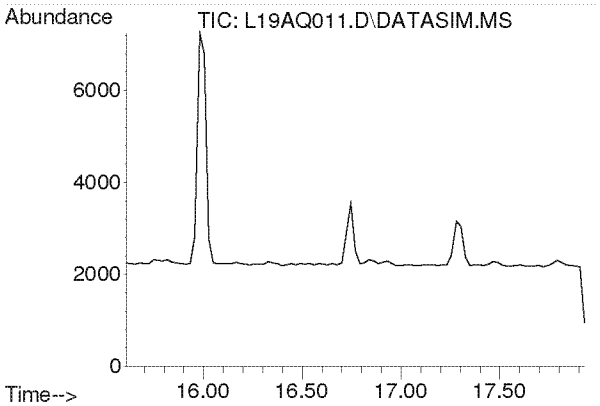
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



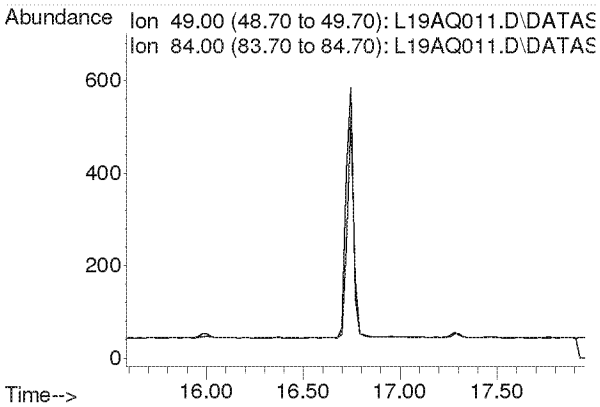


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

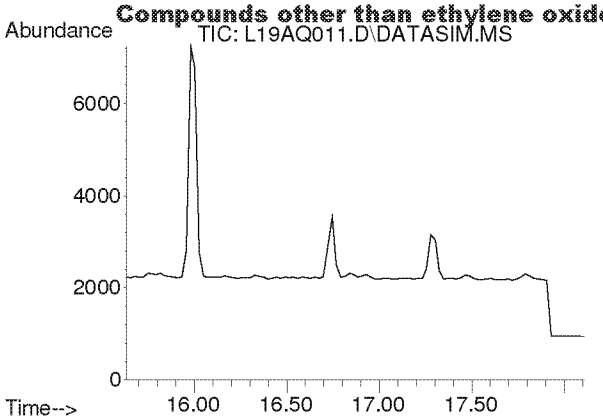
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

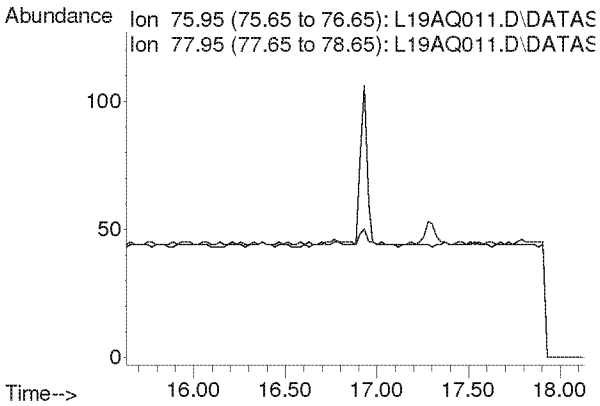


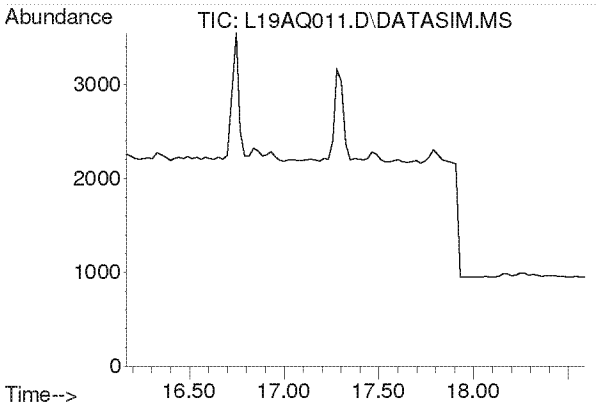
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



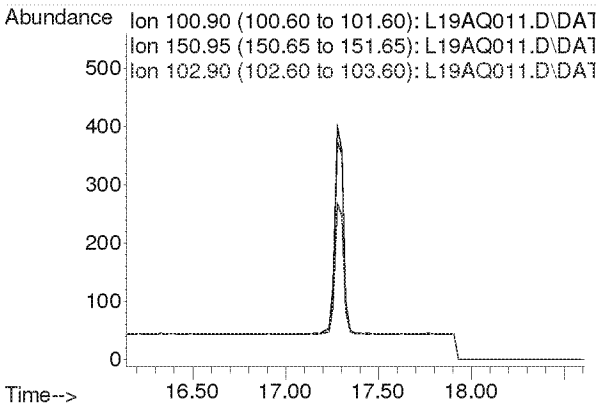


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

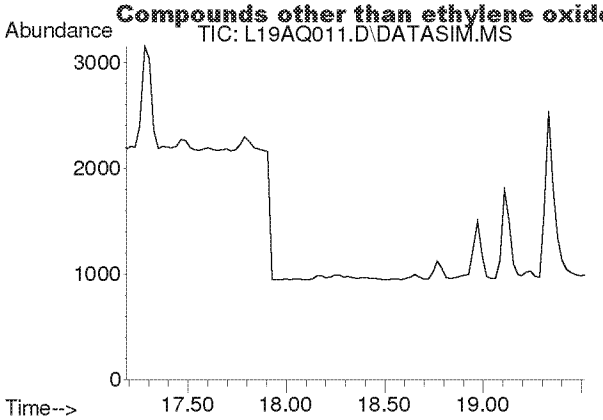
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

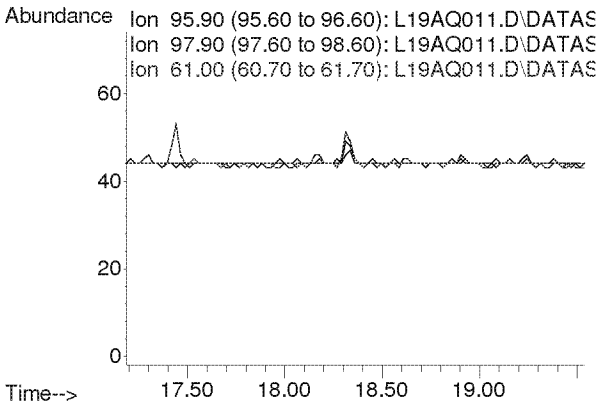


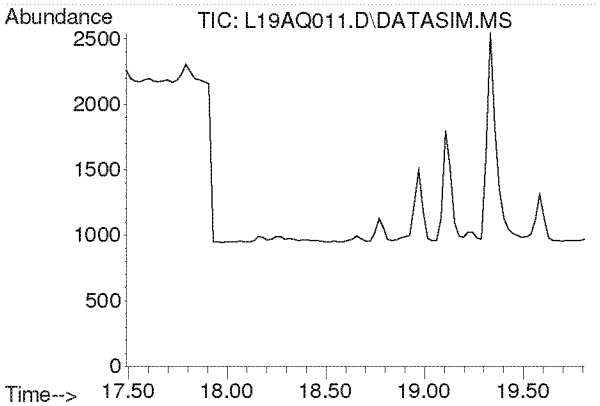
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



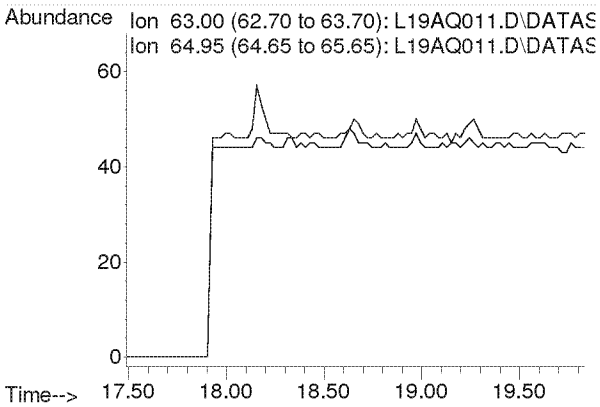


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

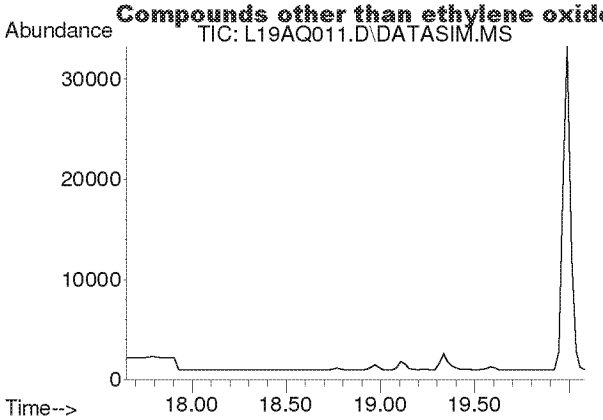
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

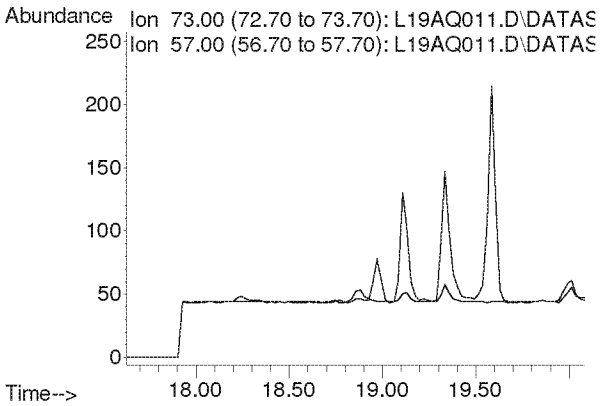


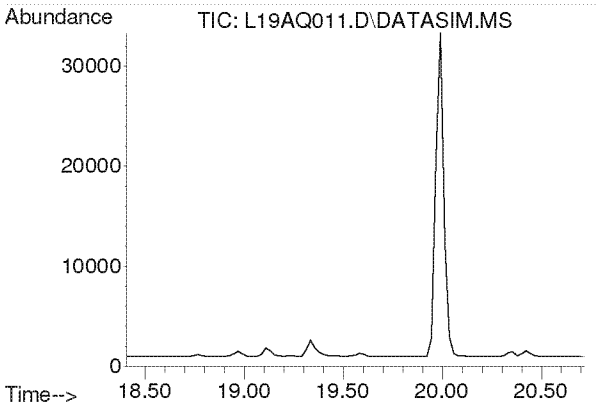
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



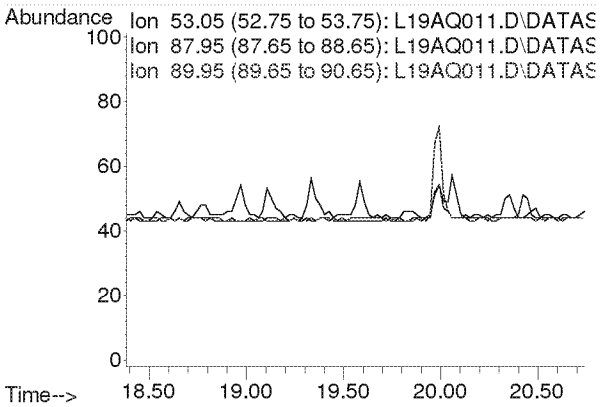


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

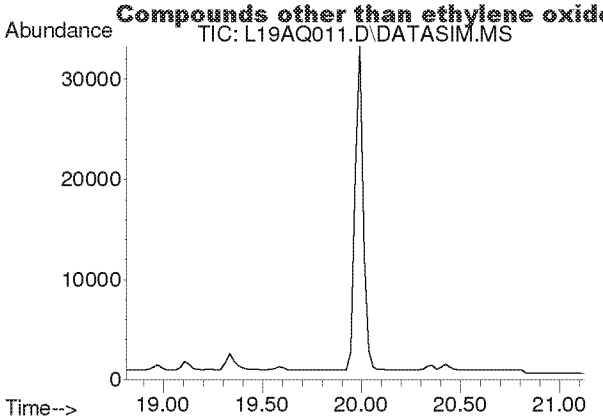
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

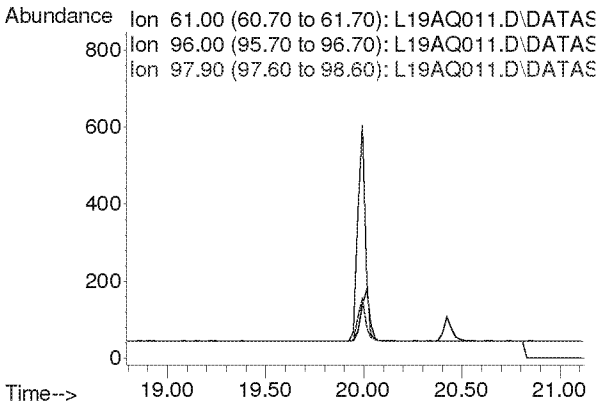


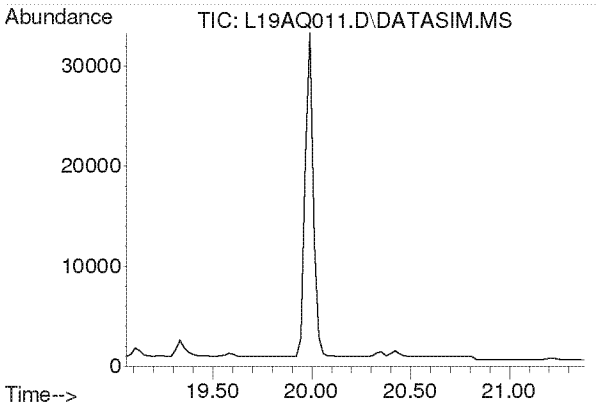
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



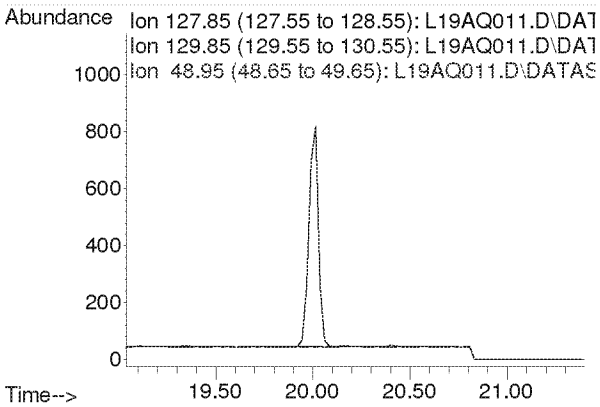


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

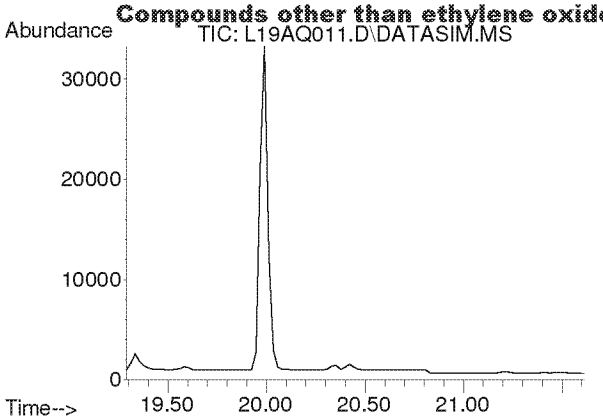
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

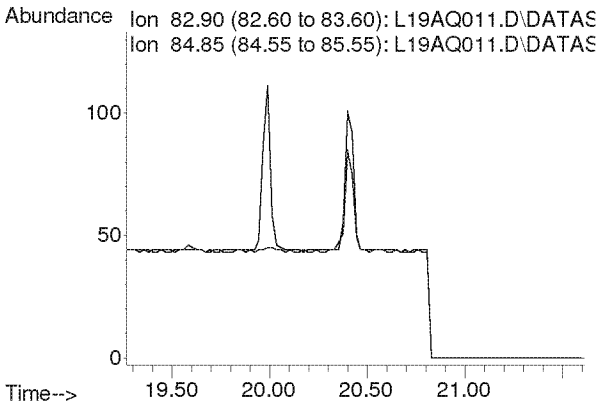


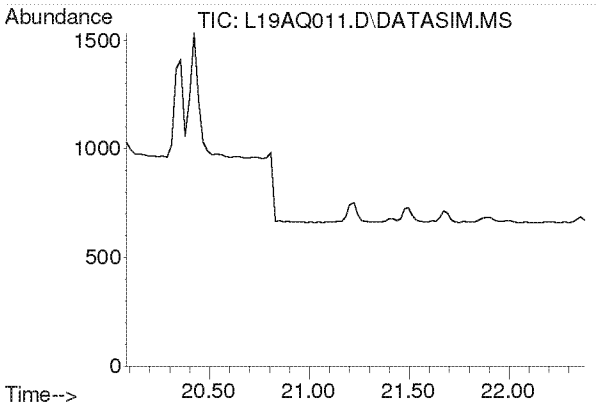
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



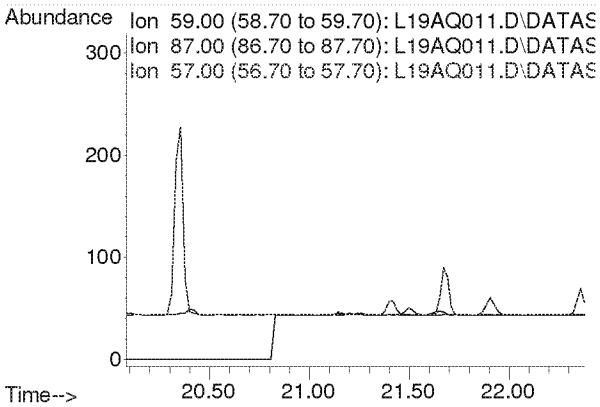


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

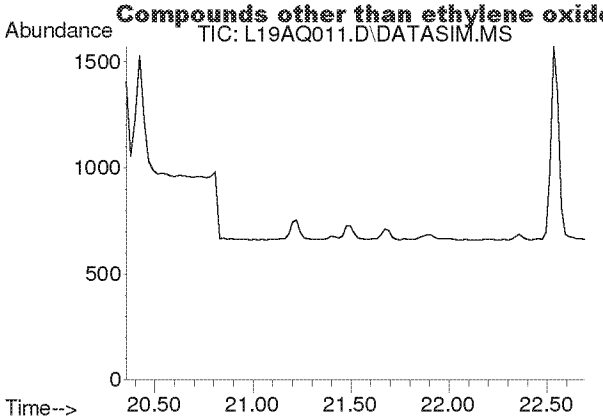
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

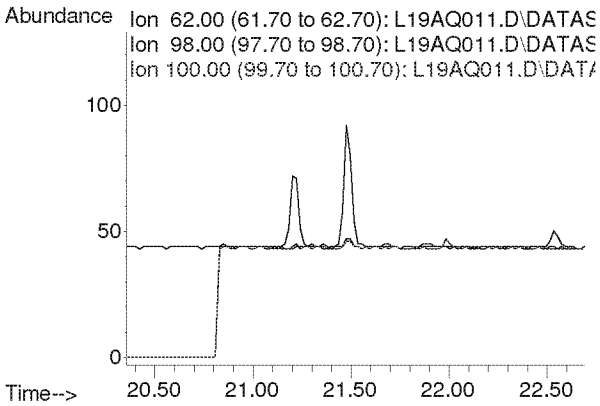


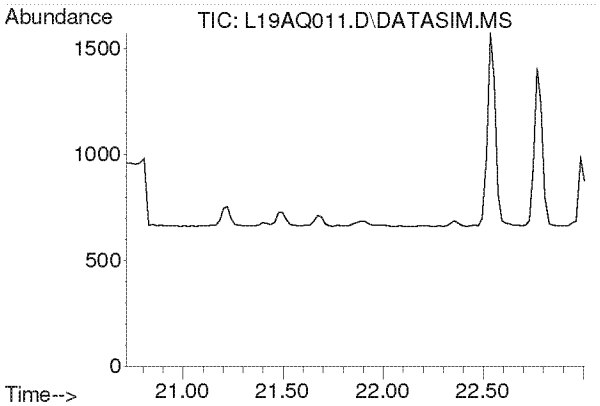
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



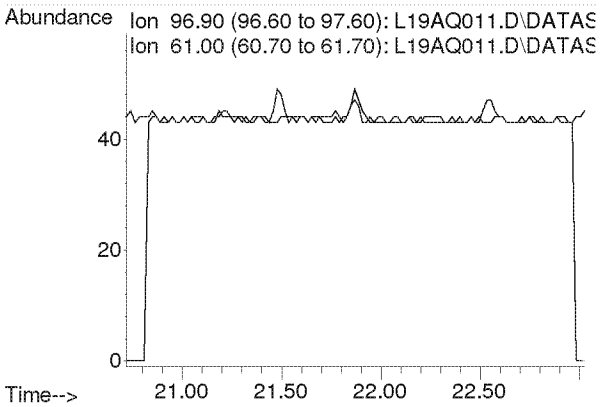


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

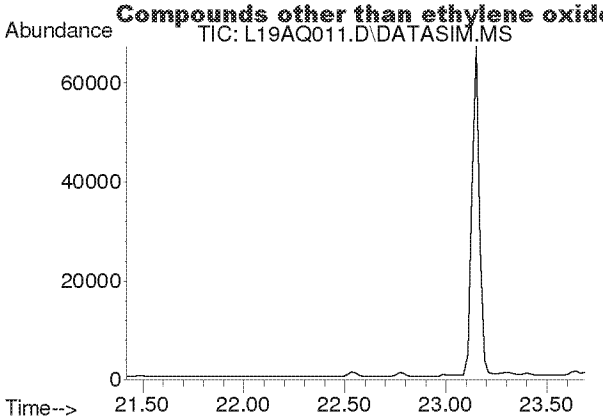
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

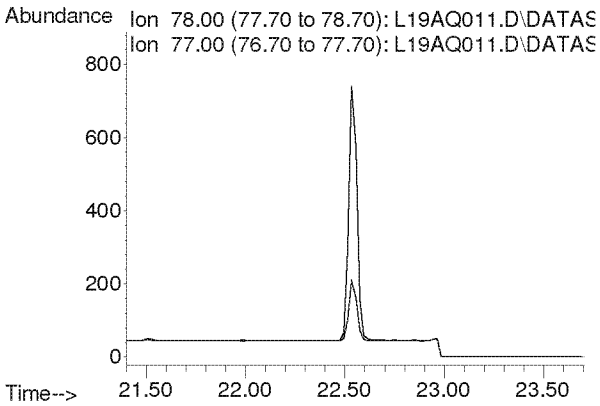


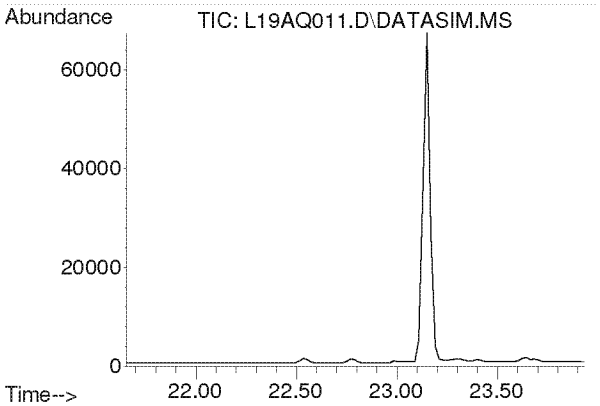
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



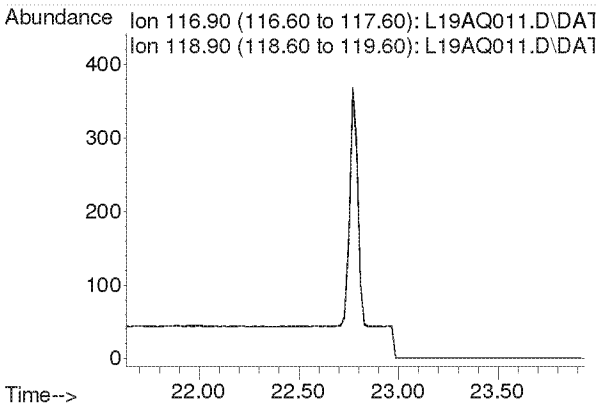


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

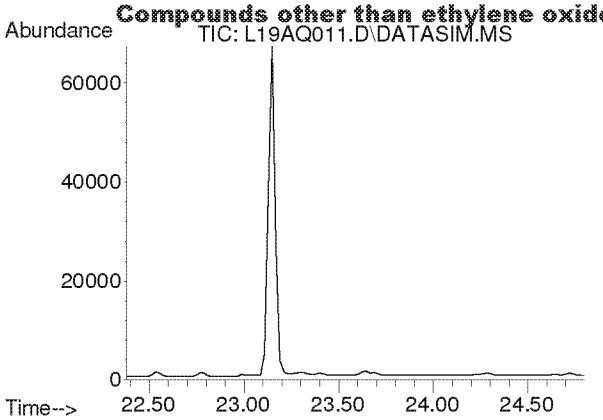
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

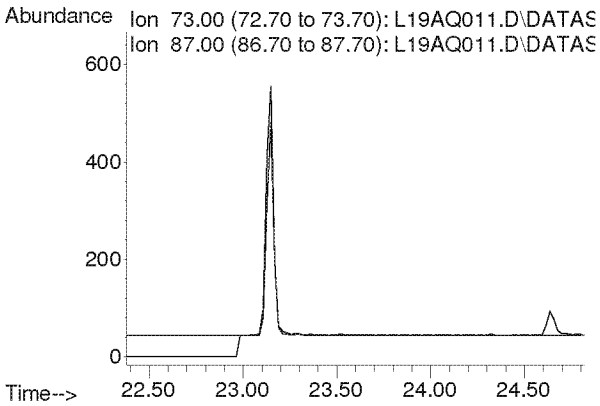


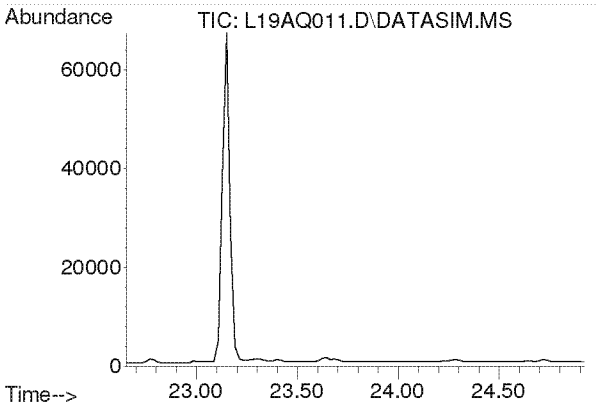
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



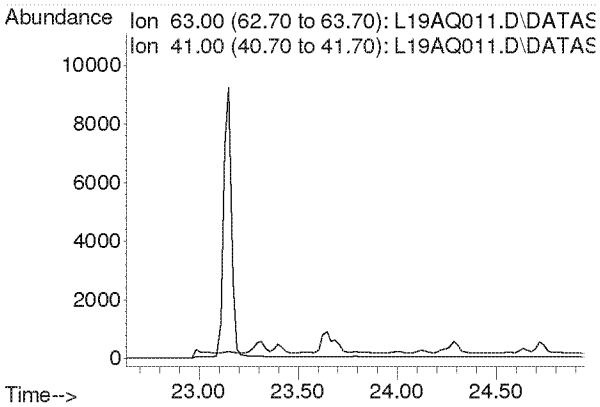


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

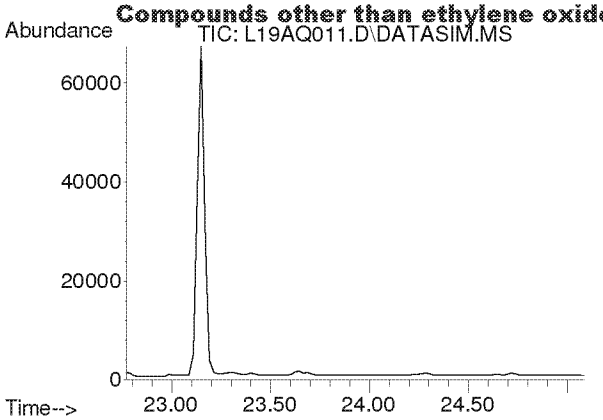
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

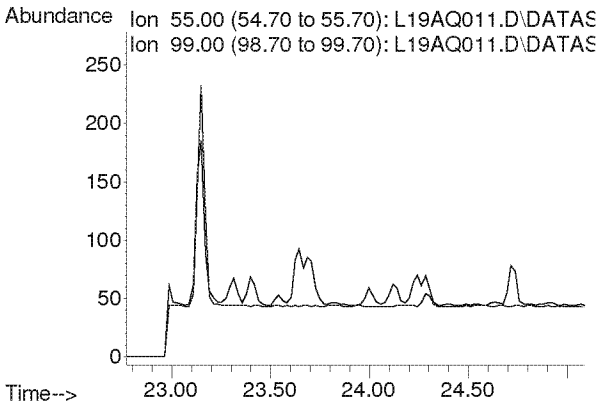


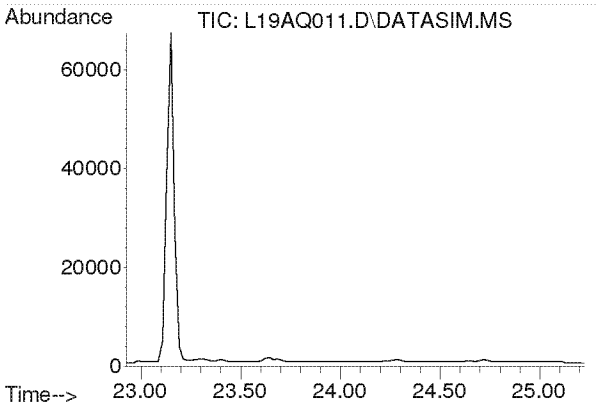
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



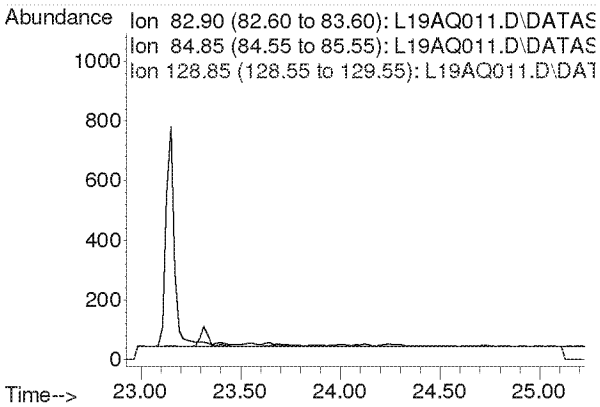


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

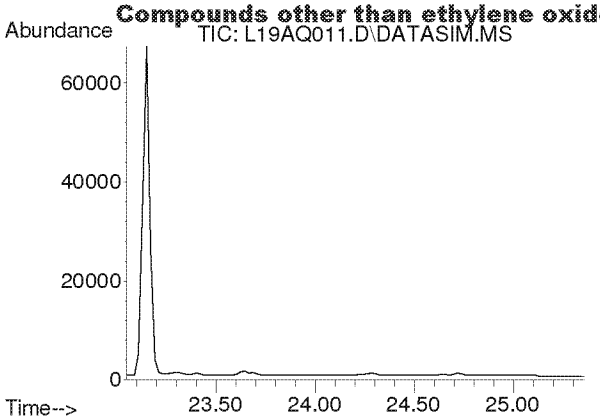
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

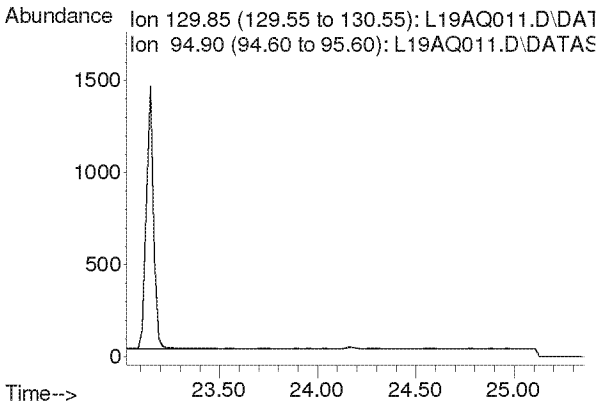


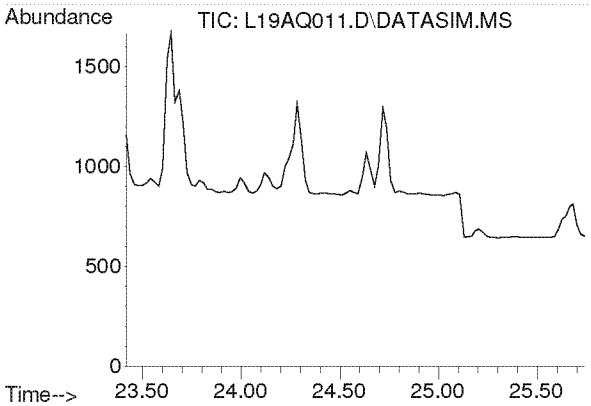
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



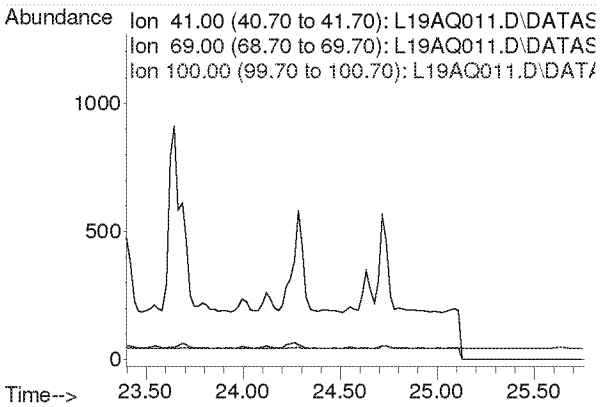


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

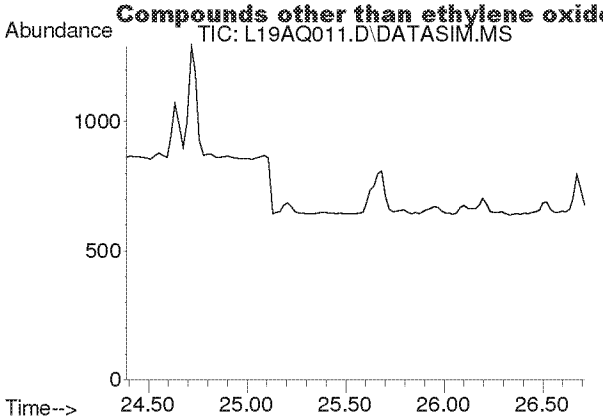
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

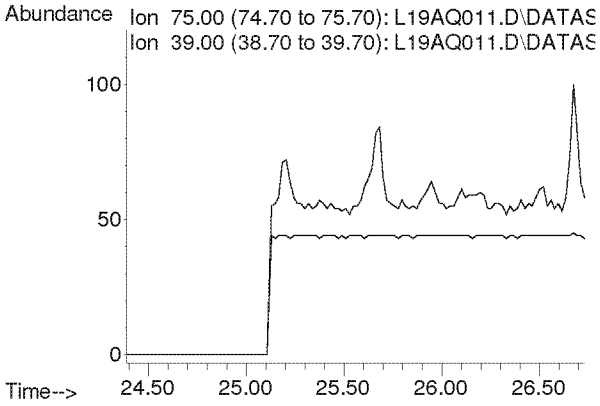


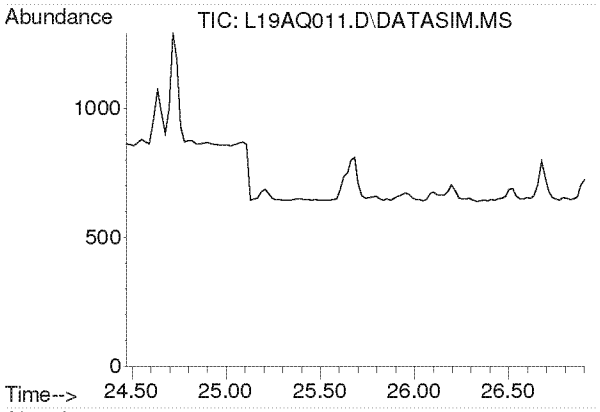
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



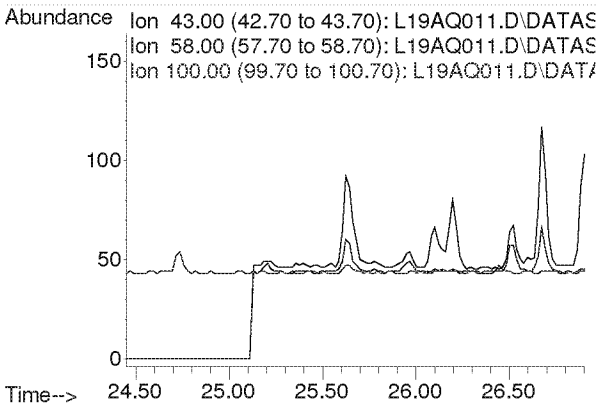


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

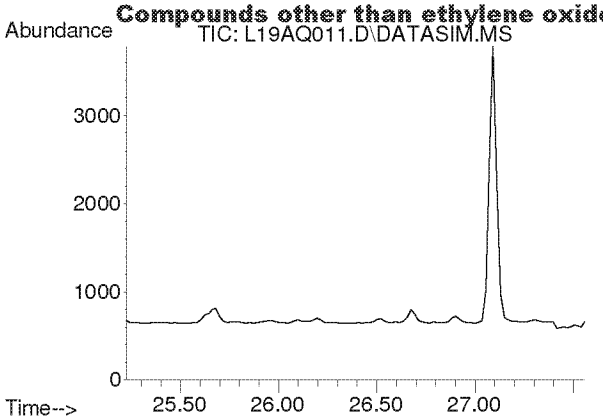
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

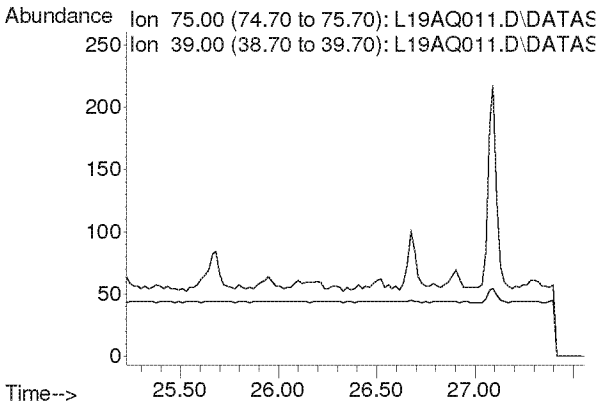


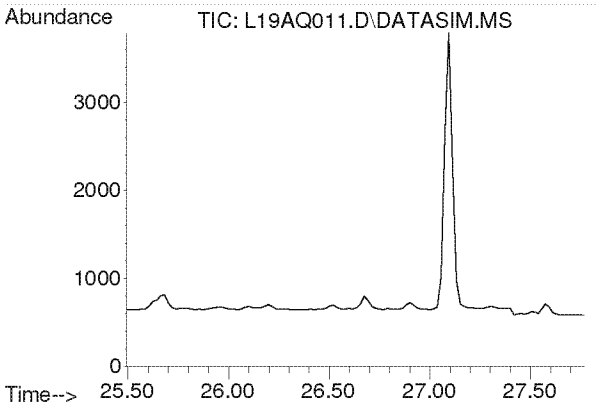
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



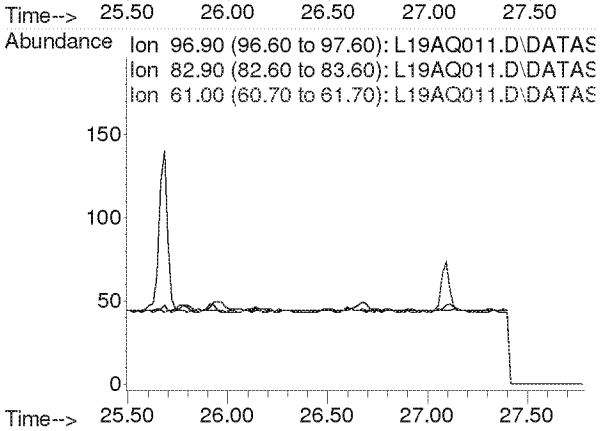


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

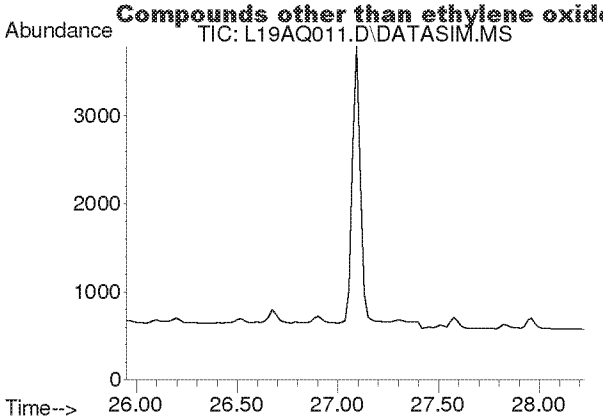
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

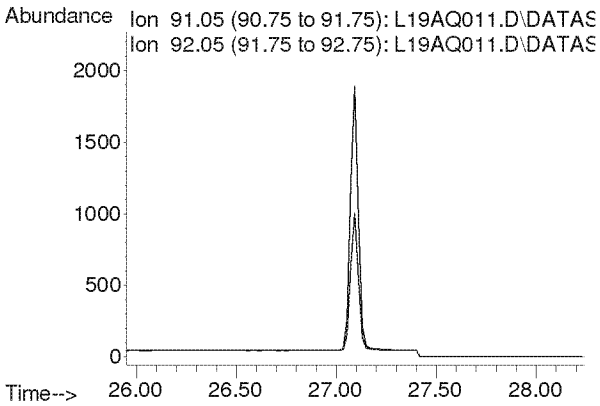


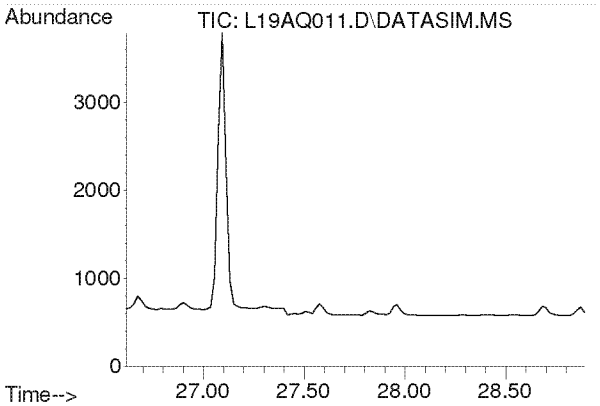
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



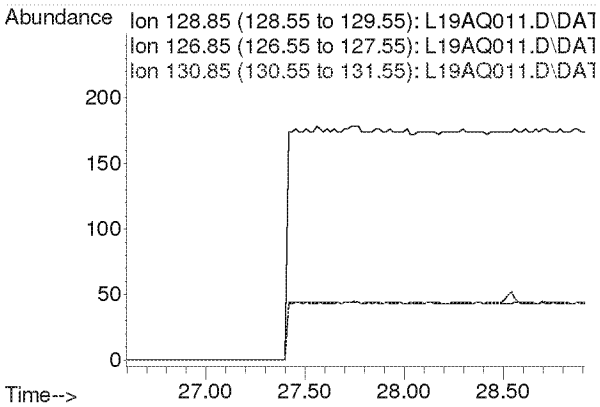


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

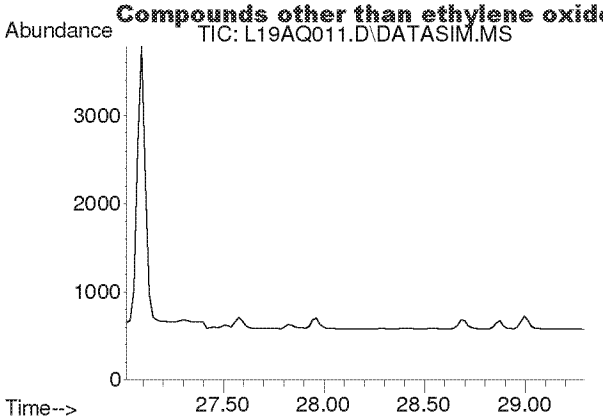
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

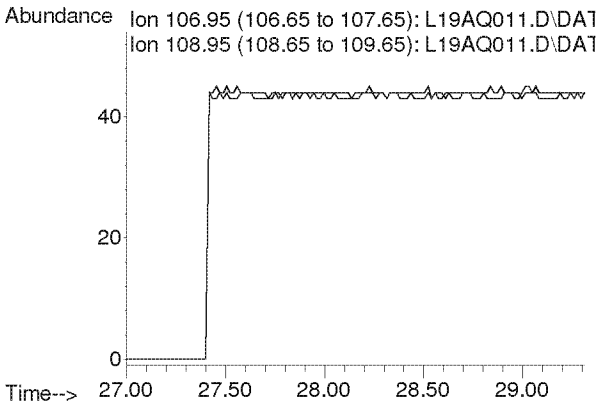


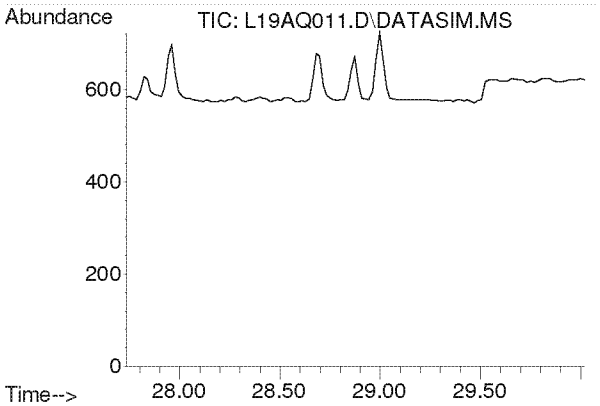
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



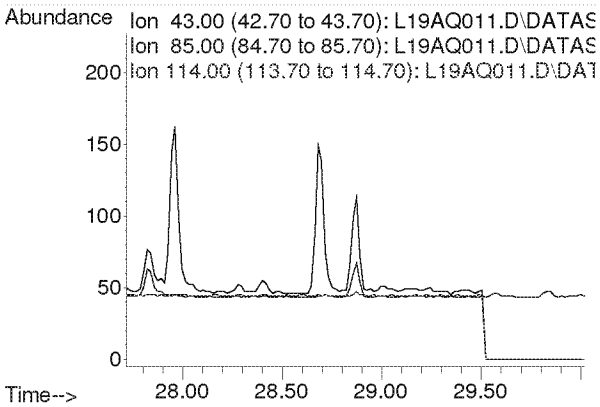


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

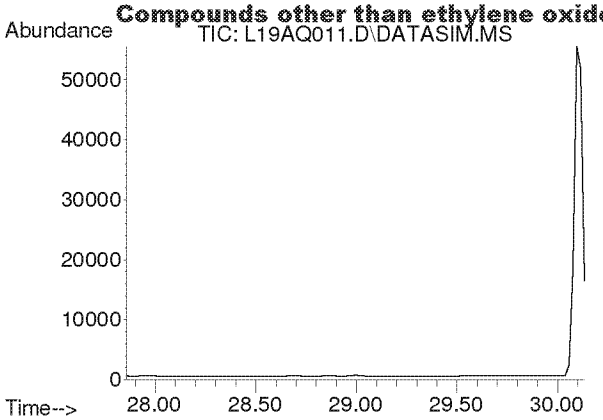
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

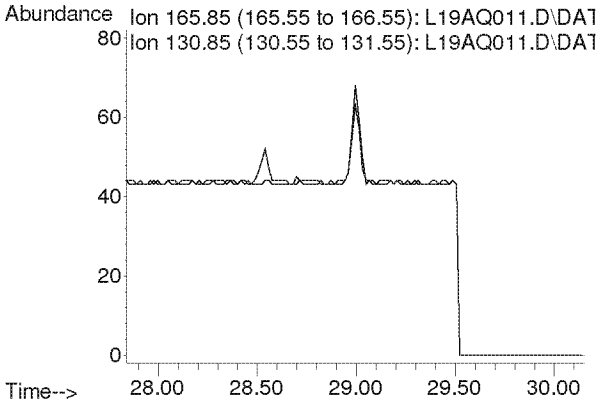


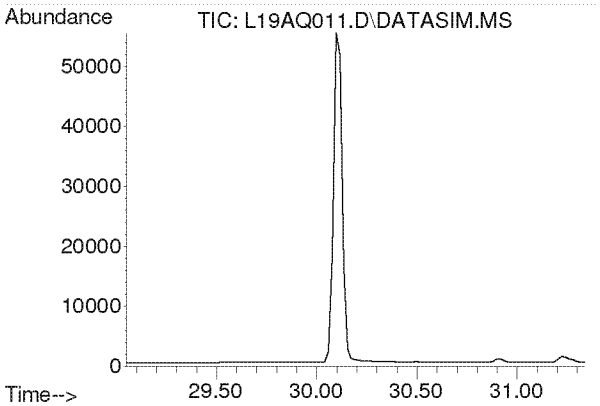
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



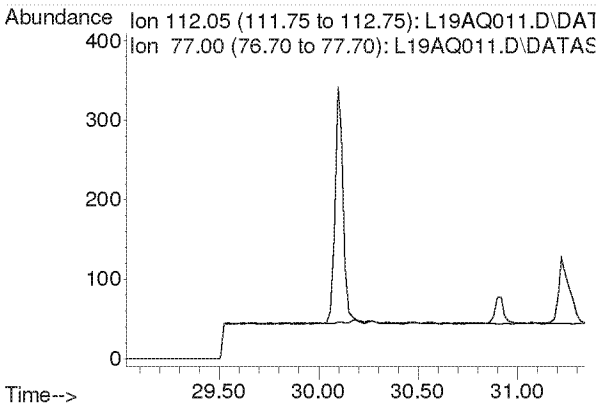


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

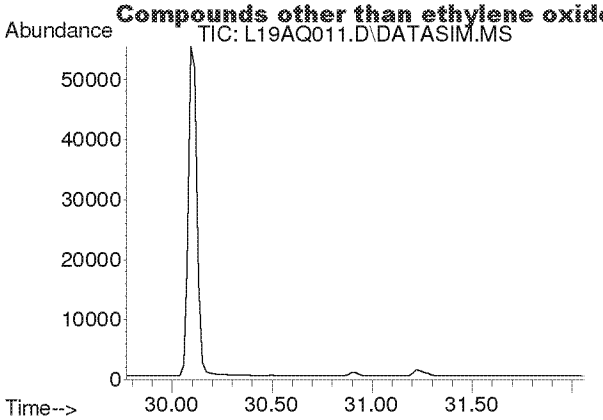
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

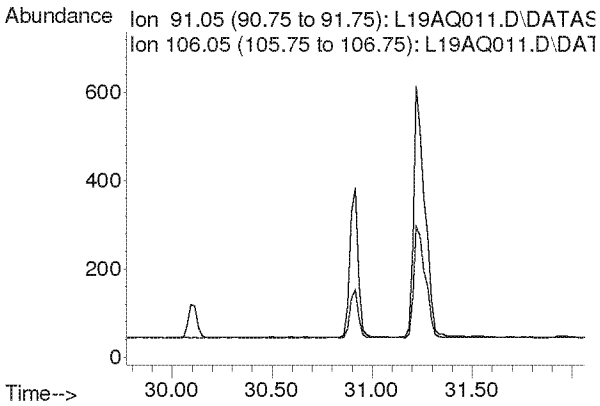


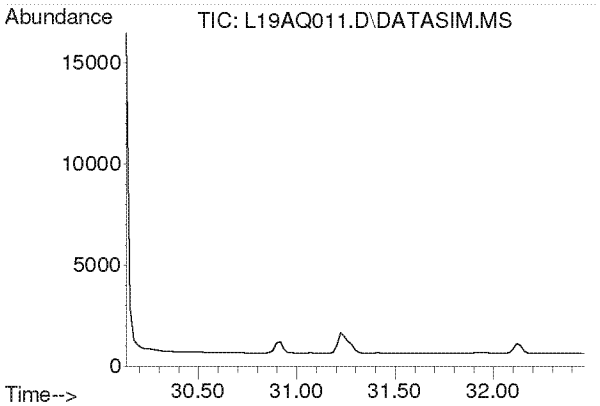
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



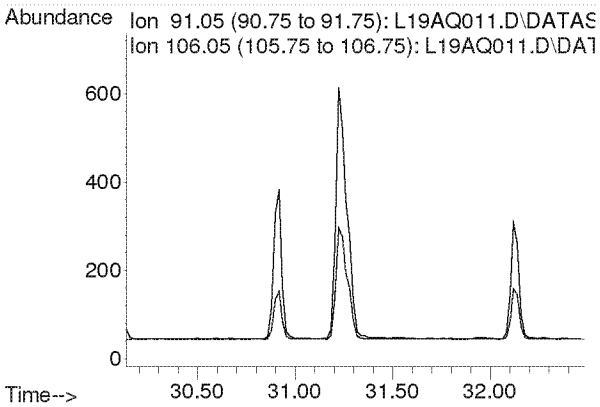


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

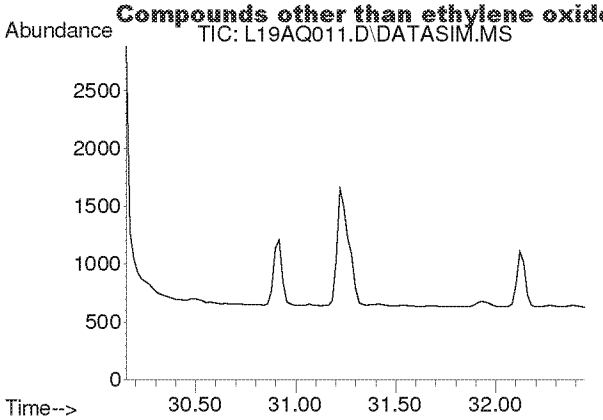
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

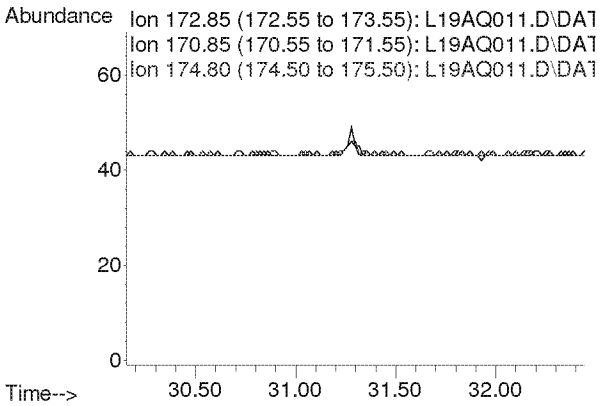


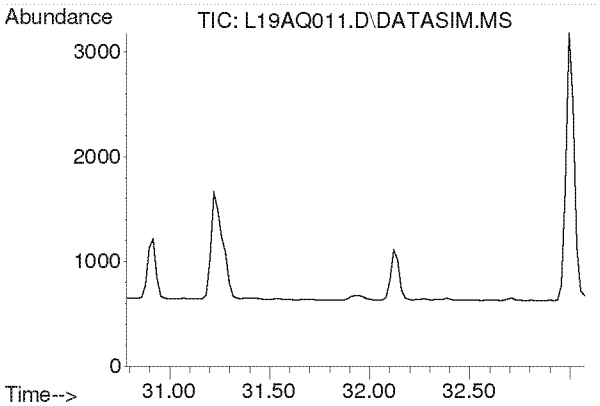
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



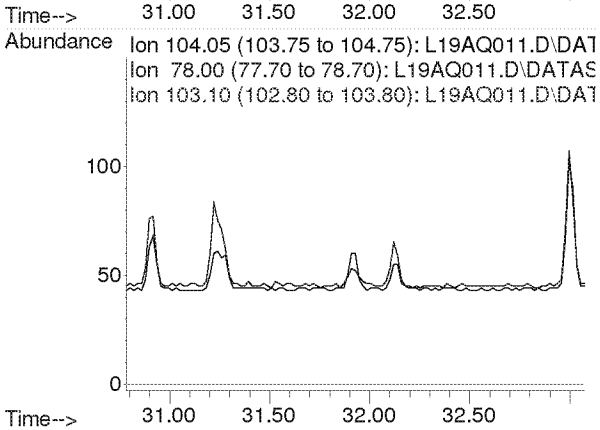


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

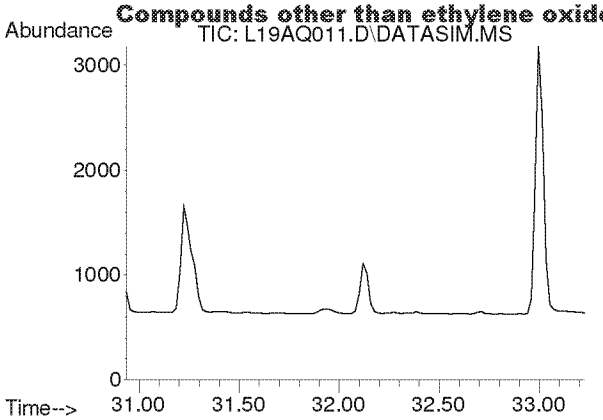
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

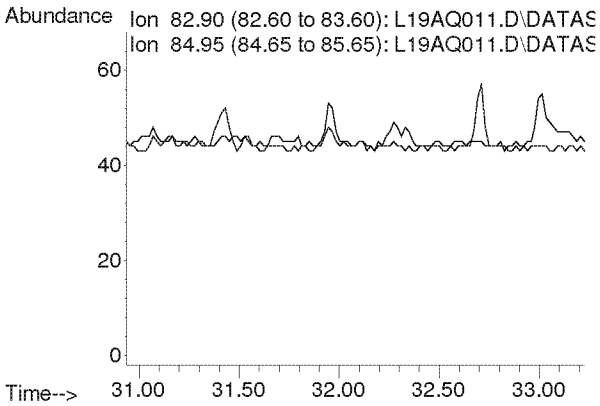


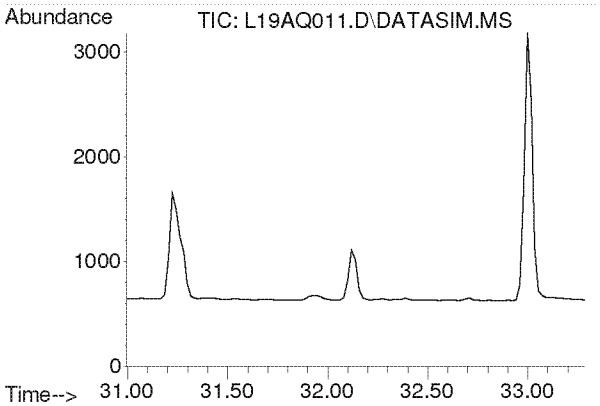
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



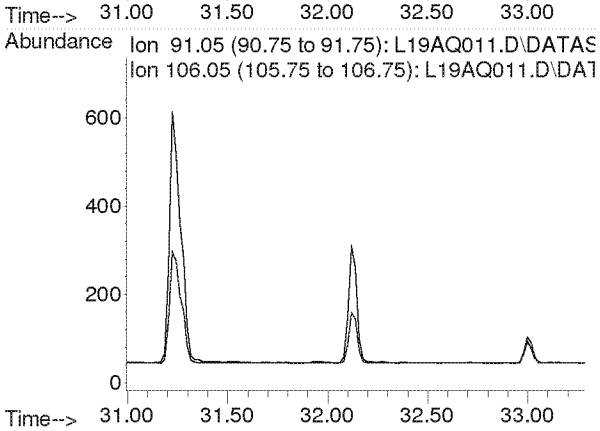


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

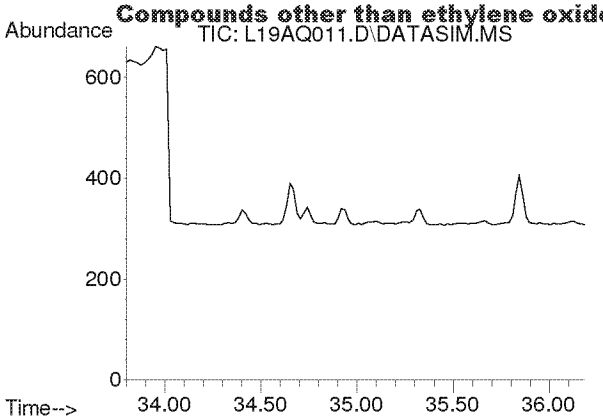
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

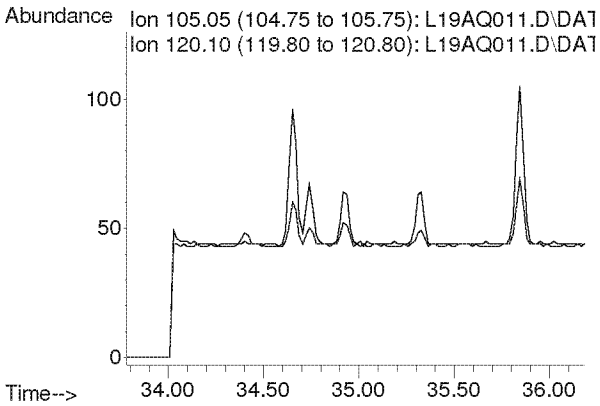


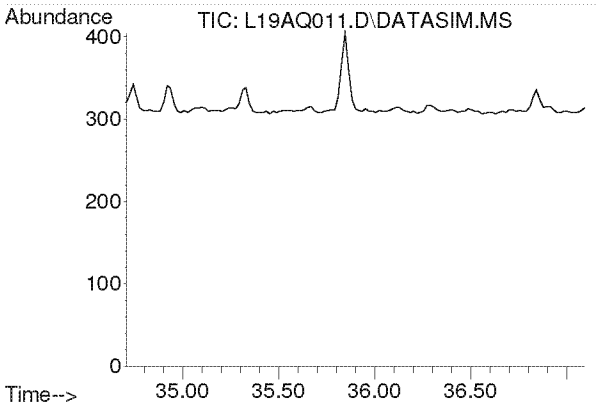
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



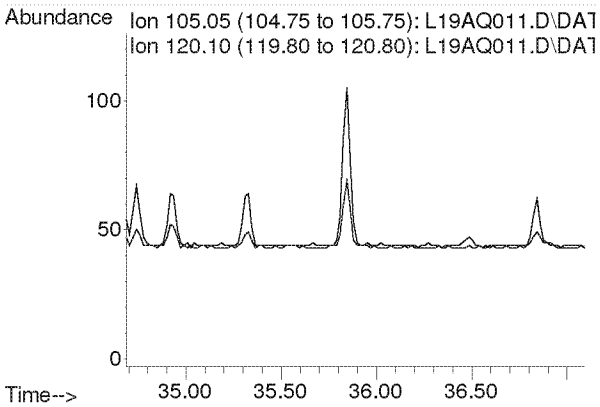


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

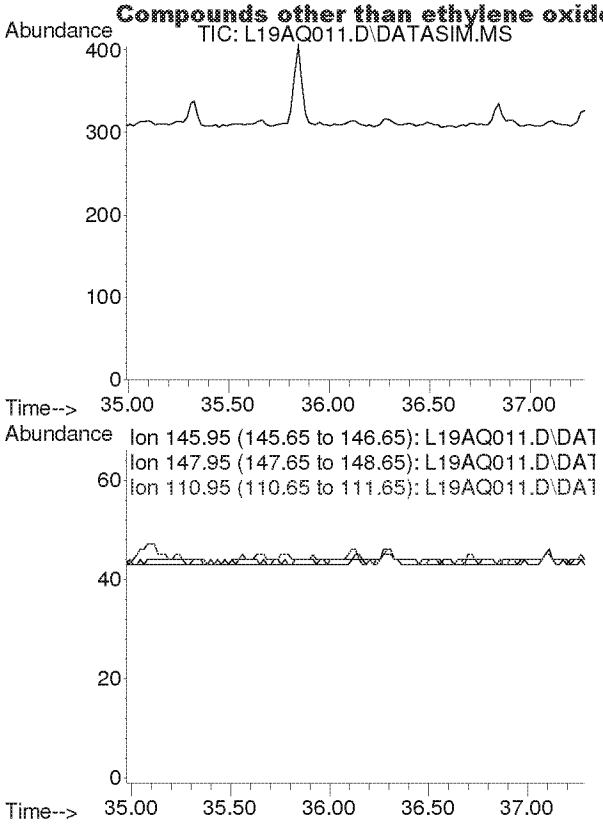
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

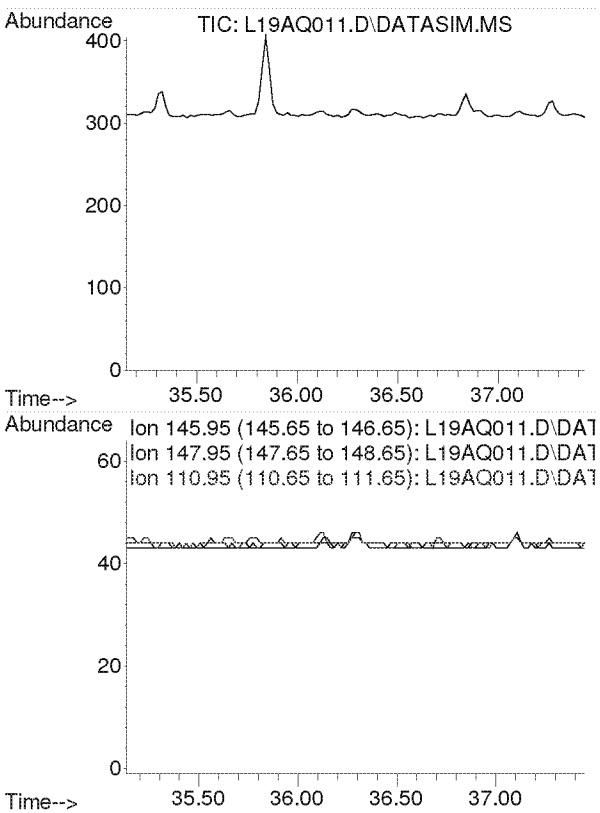


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



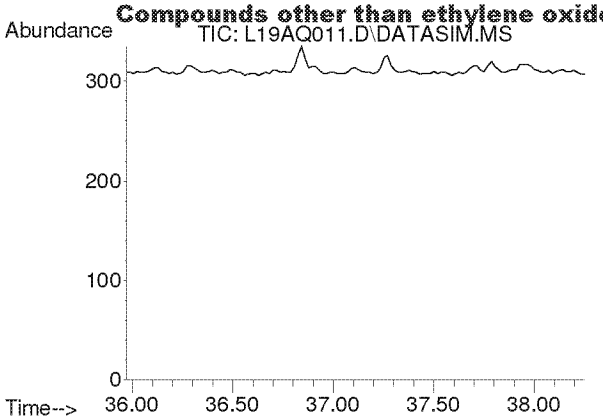
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

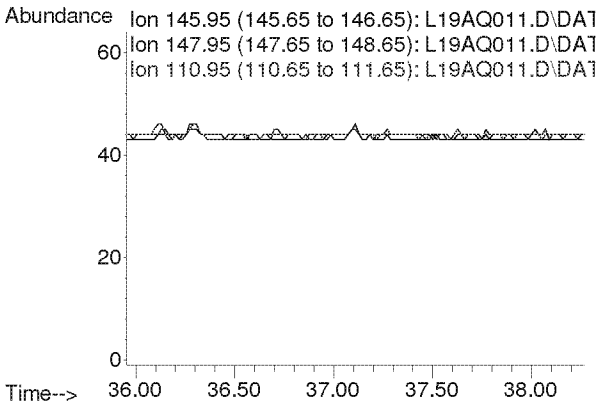


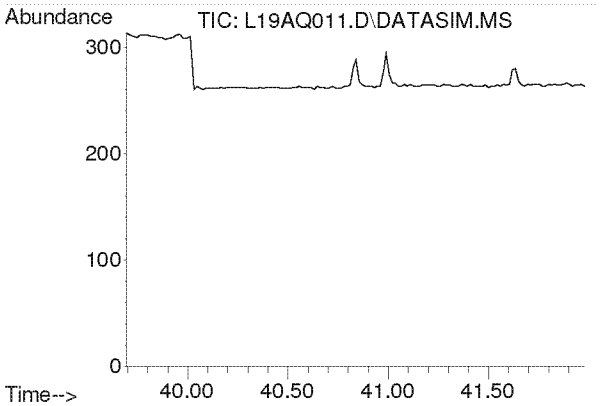
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



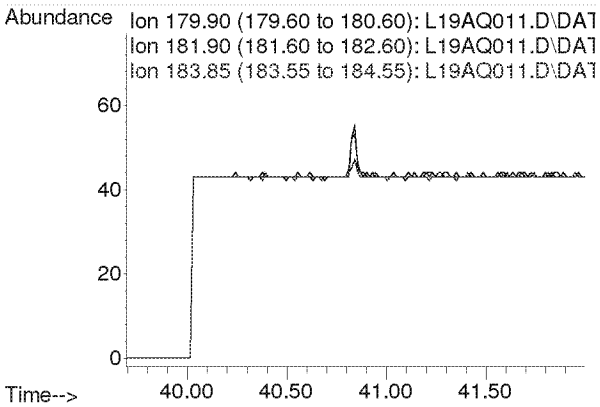


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

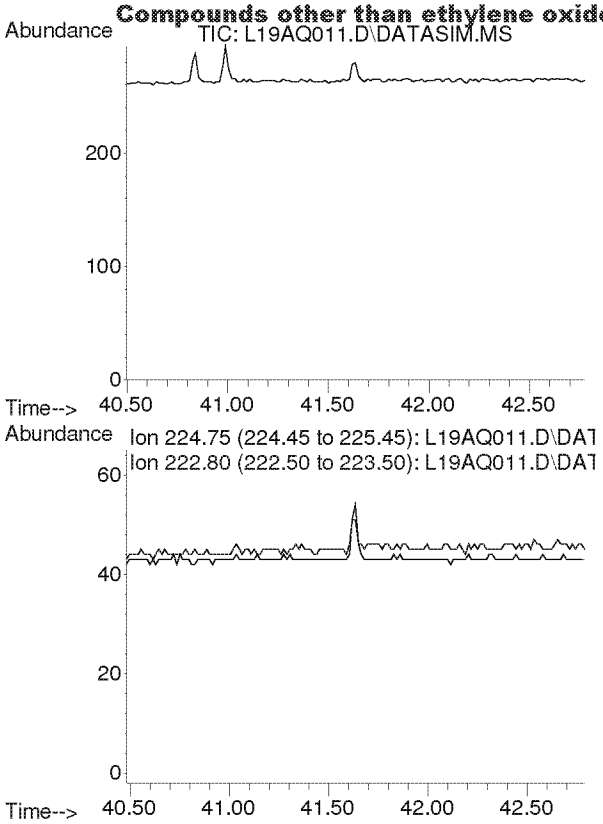
Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ011.D
Acq: 17 Jan 2019 9:35 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ012.D
Acq On : 17 Jan 2019 10:37 pm
Operator : MAH
Sample : 9011101-02
Misc : WIILOW POND PARK 1/10/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 07:51:30 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

d-11A

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	53841	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	132828	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	100550	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	d
3) Propylene	0.000	41	0	N.D.	d
4) Dichlorodifluoromethane	0.000	85	0	N.D.	d
5) Chloromethane	0.000	50	0	N.D.	d
6) Dichlorotetrafluoroethane	0.000	85	0	N.D.	d
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D.	d
9) Ethylene oxide	12.500	29	336m 10ng	0.1208 ppbv	
10) Bromomethane	0.000	94	0	N.D.	d
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D.	d
13) Acrolein	0.000	56	0	N.D.	d
14) Trichlorofluoromethane	0.000	101	0	N.D.	d
15) Acrylonitrile	0.000	53	0	N.D.	d
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D.	d
18) Carbon Disulfide	0.000	76	0	N.D.	d
19) Trichlorotrifluoroethane	0.000	101	0	N.D.	d
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	d
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D.	d
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D.	d
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D.	d
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D.	d
32) Carbon Tetrachloride	0.000	117	0	N.D.	d
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	d
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D.	d
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D.	d
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D.	d
48) Tetrachloroethylene	0.000	166	0	N.D.	d
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D.	d

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ012.D
Acq On : 17 Jan 2019 10:37 pm
Operator : MAH
Sample : 9011101-02
Misc : WIILOW POND PARK 1/10/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 07:51:30 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

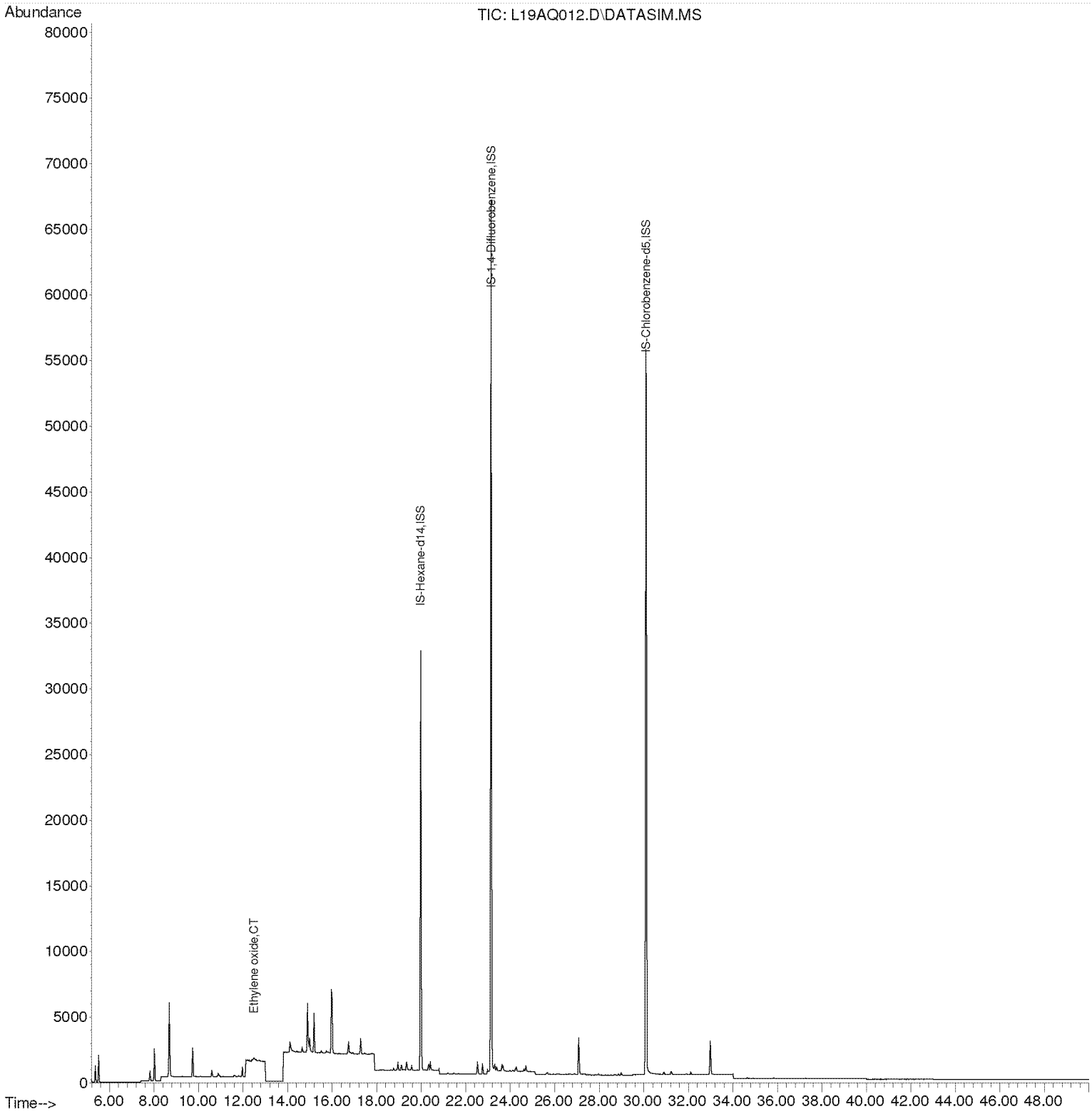
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00314

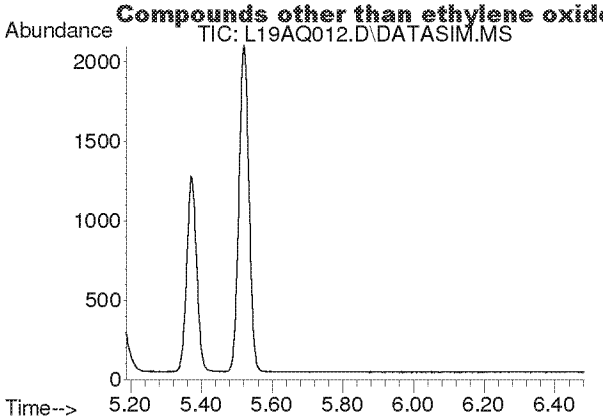
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ012.D
Acq On : 17 Jan 2019 10:37 pm
Operator : MAH
Sample : 9011101-02
Misc : WIILOW POND PARK 1/10/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 07:35:42 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



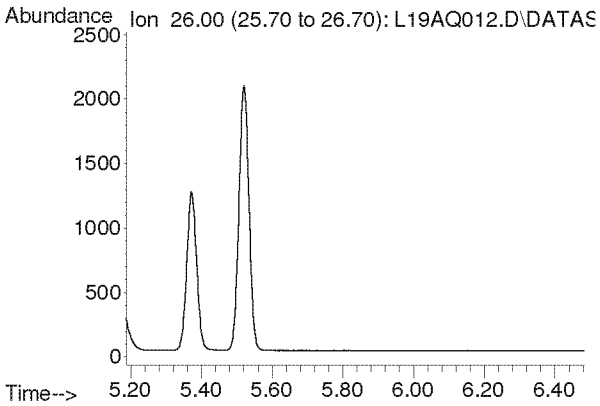
Compounds other than ethylene oxide were not quantitated.

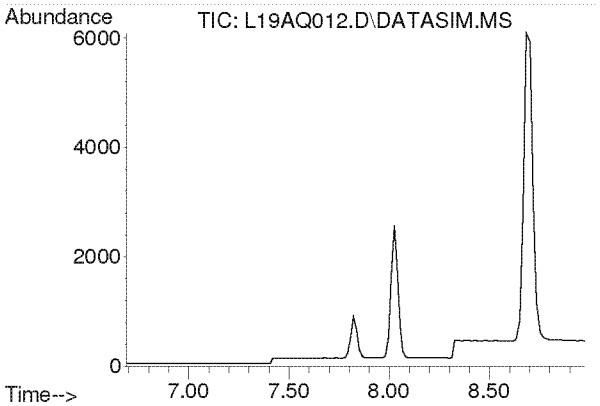


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 26



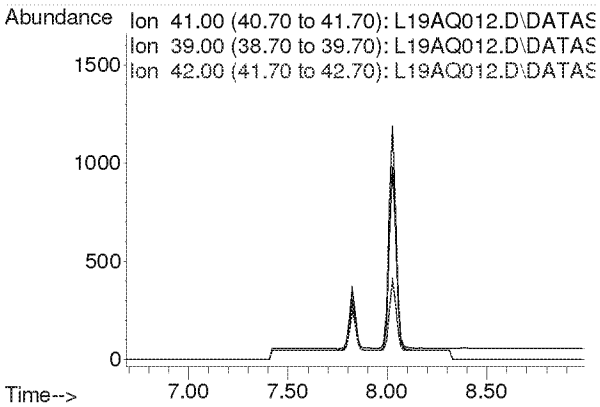


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

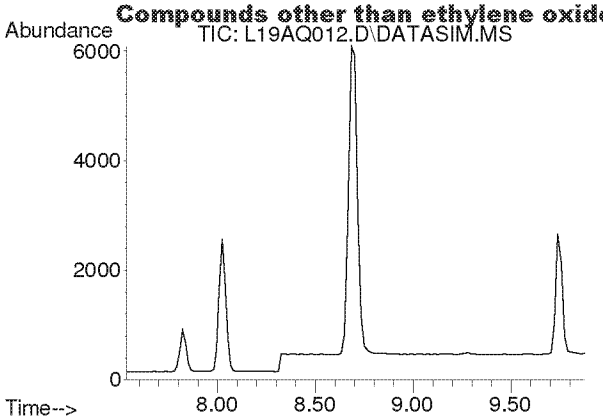
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

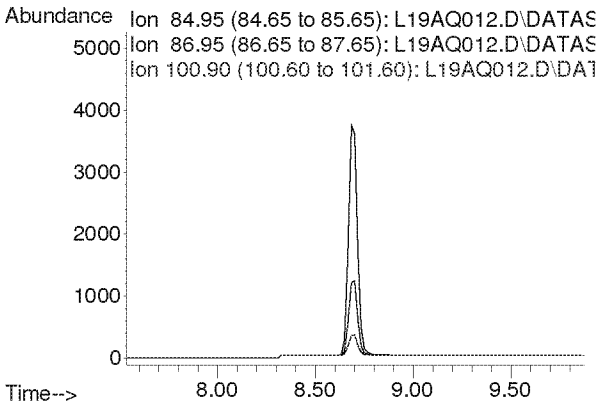


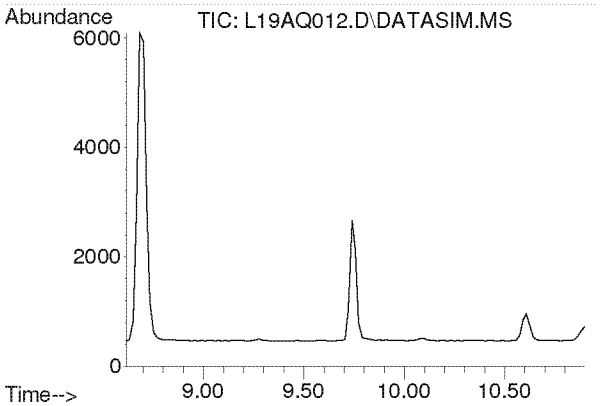
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



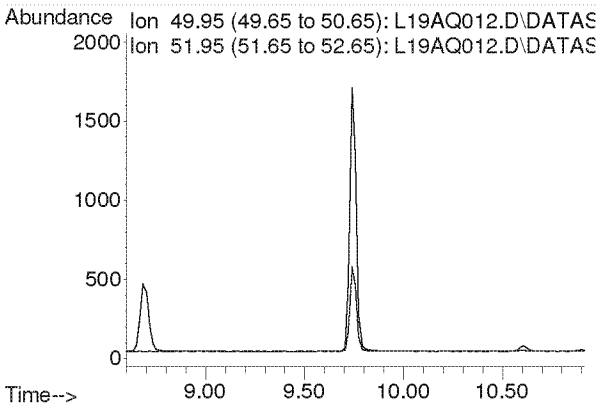


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

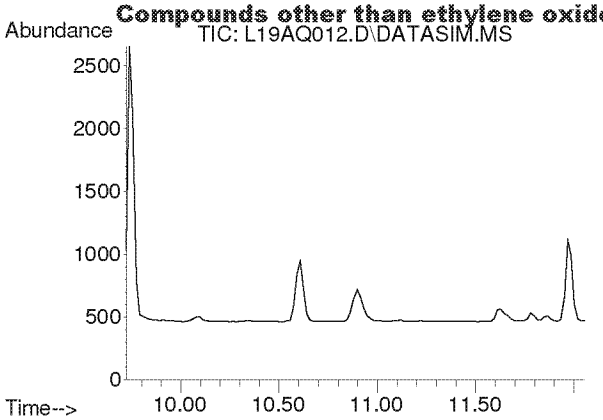
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

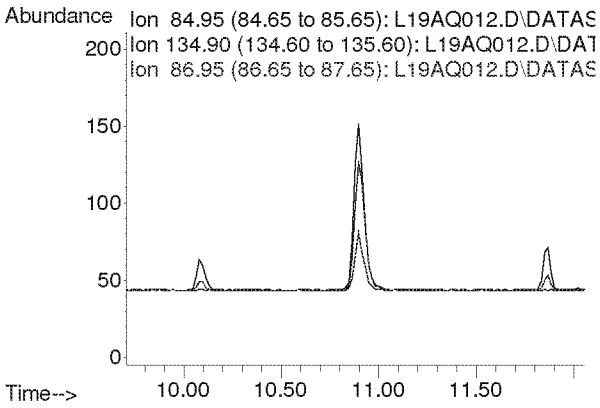


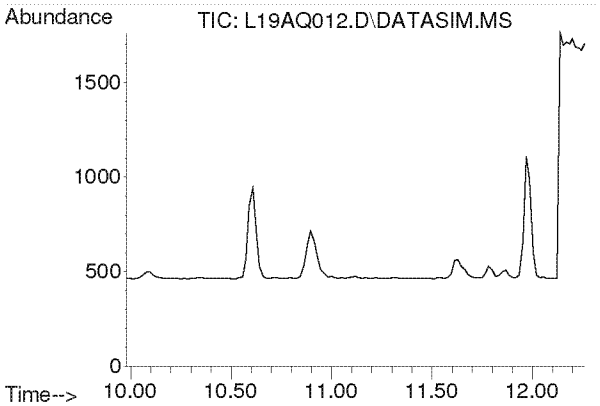
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



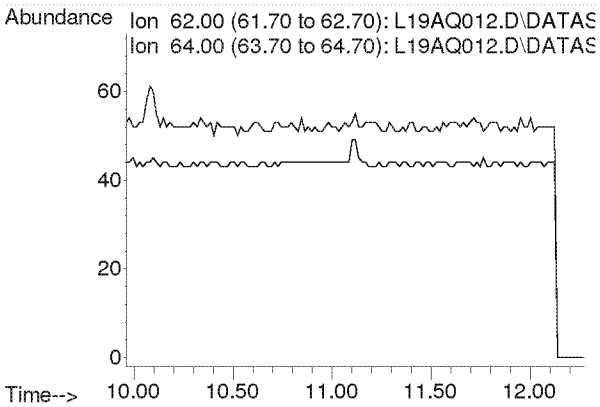


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

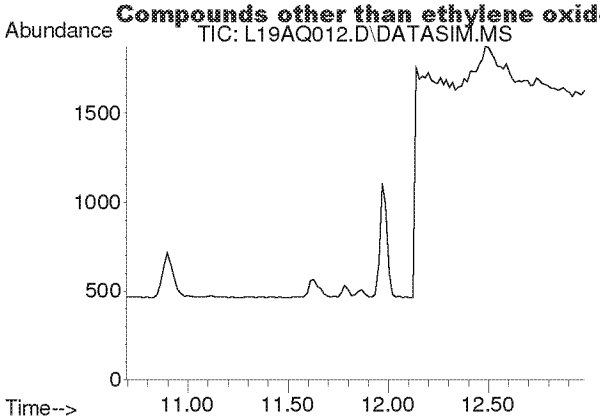
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

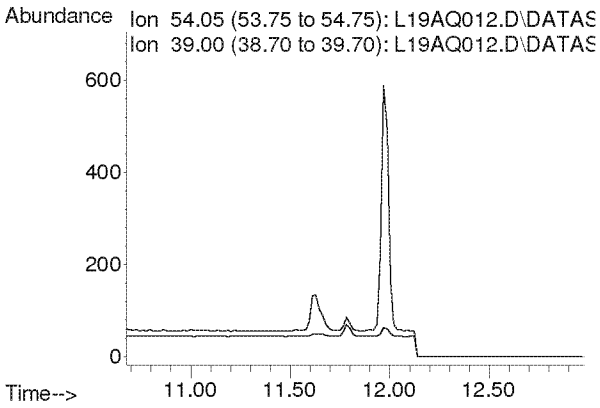


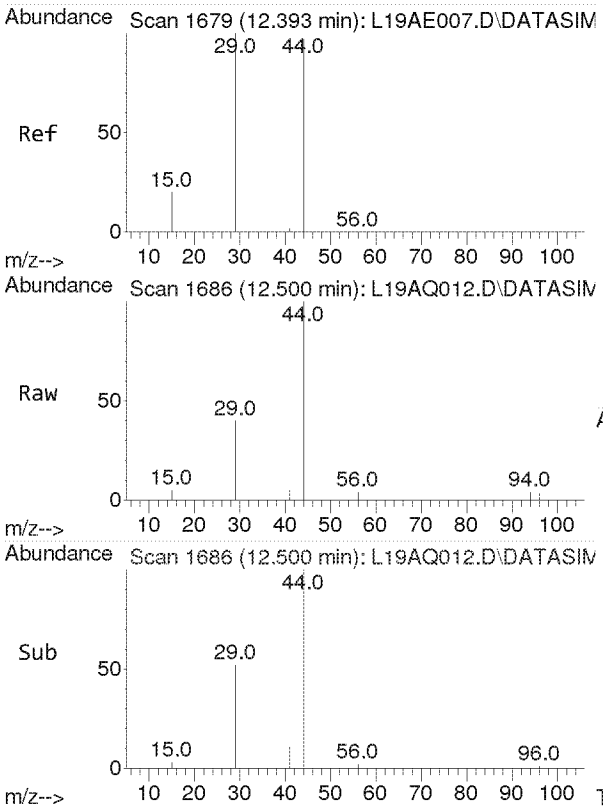
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

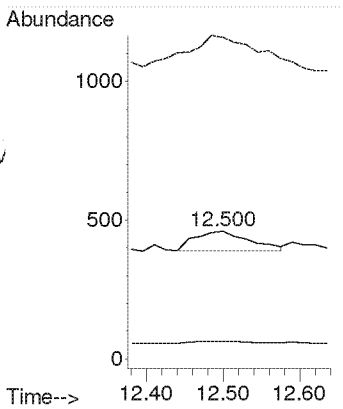




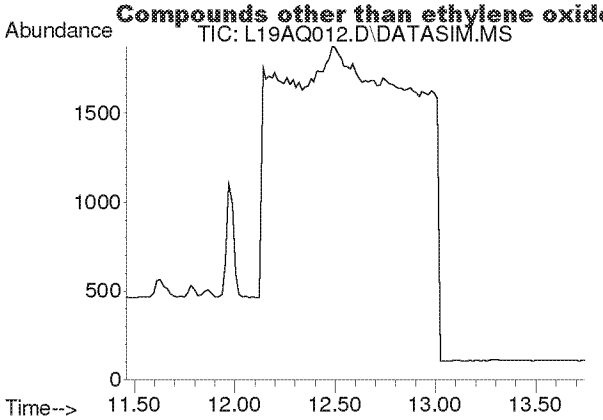
#9
Ethylene oxide
Concen: 0.121 ppbv m
RT: 12.500 min Scan# 1686
Delta R.T. 0.107 min
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 29 Resp: 336

Ion	Ratio	Lower	Upper
29	100		
15	13.1	15.4	23.0#
44	413.7	77.4	116.2#



Compounds other than ethylene oxide were not quantitated.

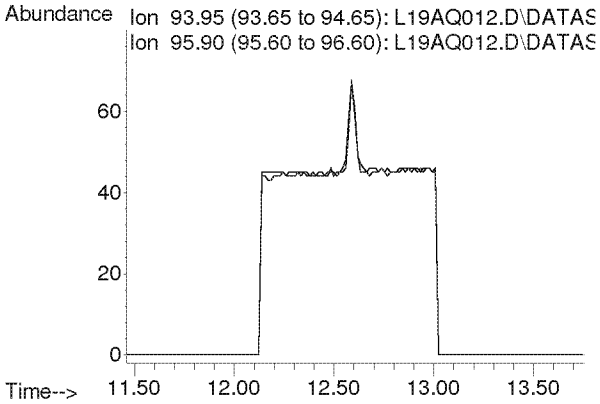


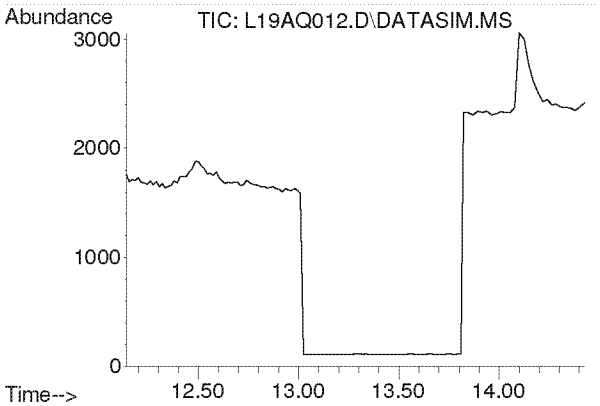
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



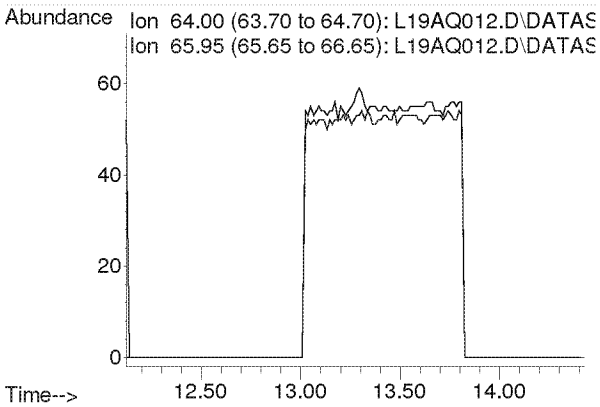


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

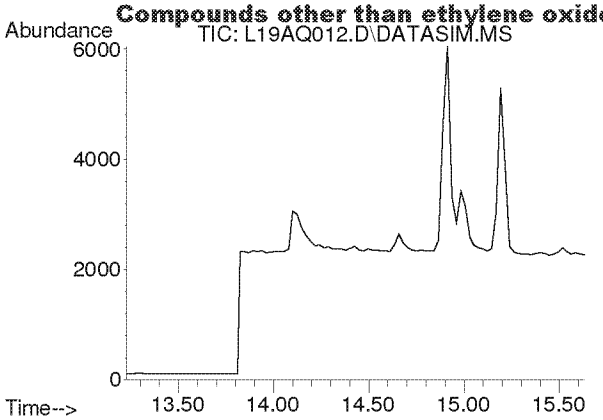
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

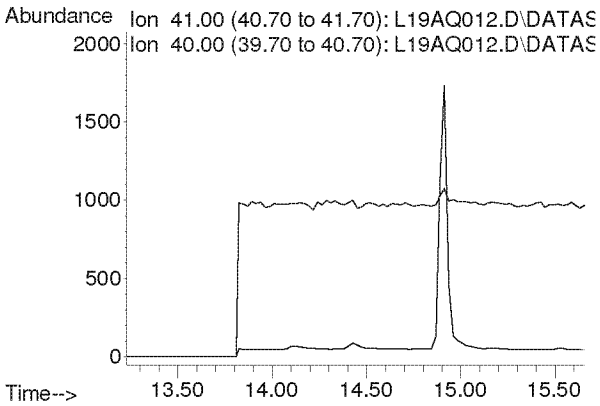


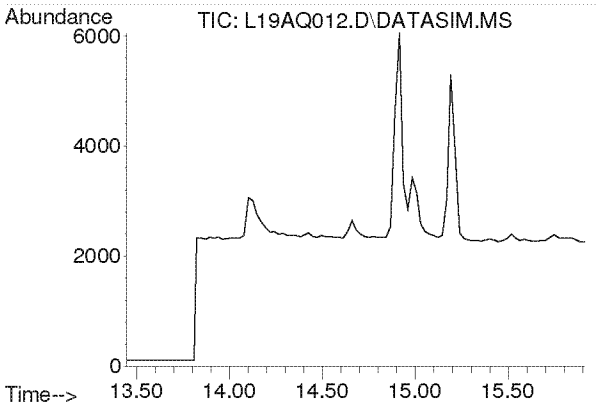
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



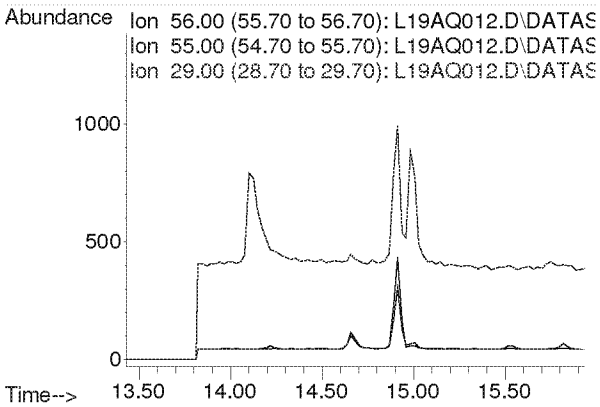


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

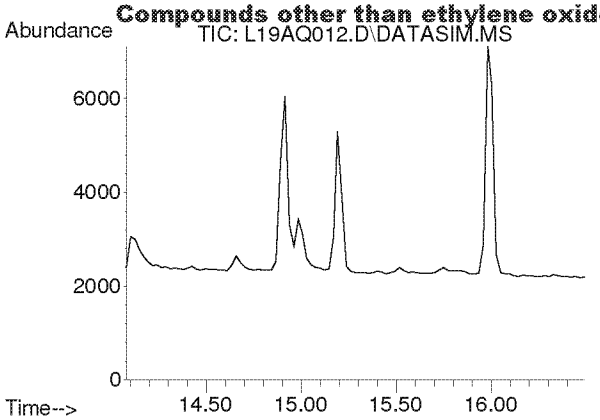
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

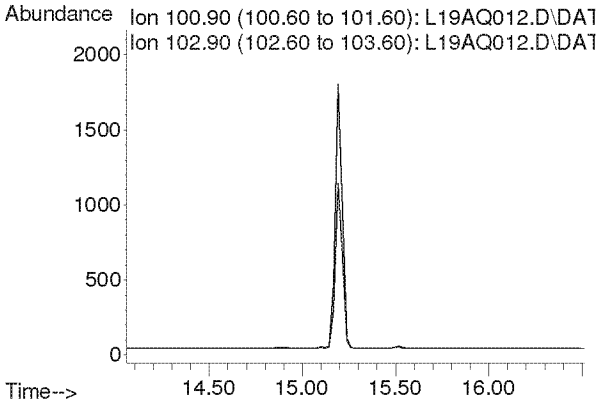


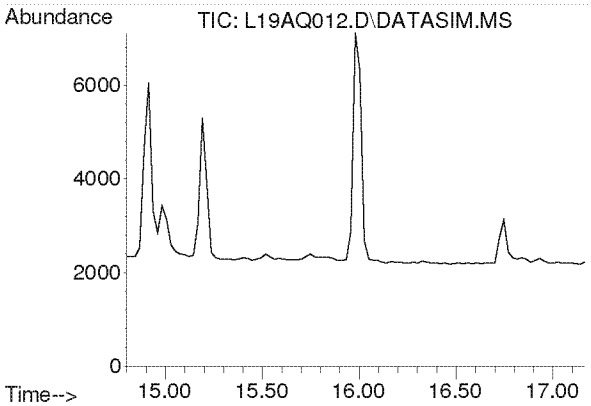
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



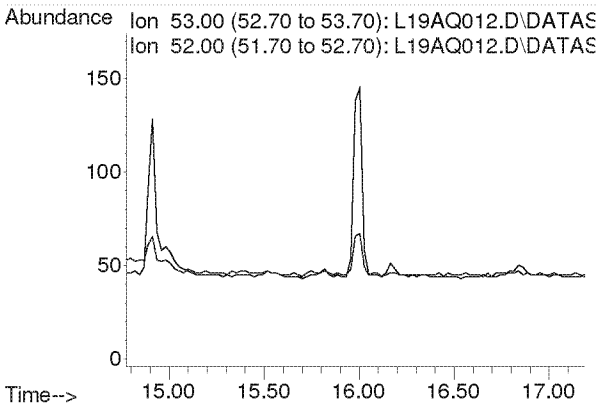


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

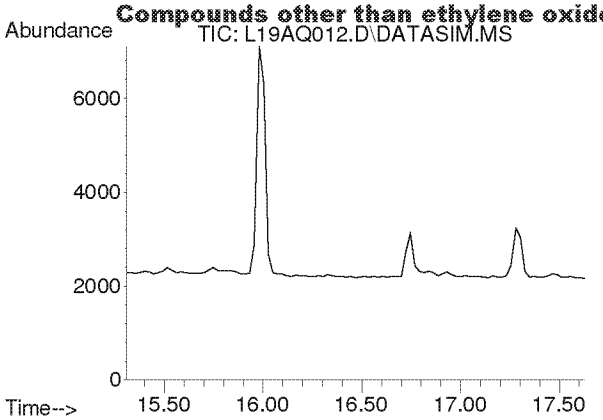
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

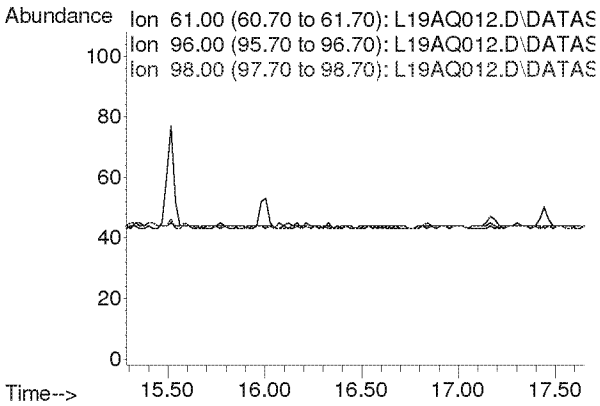


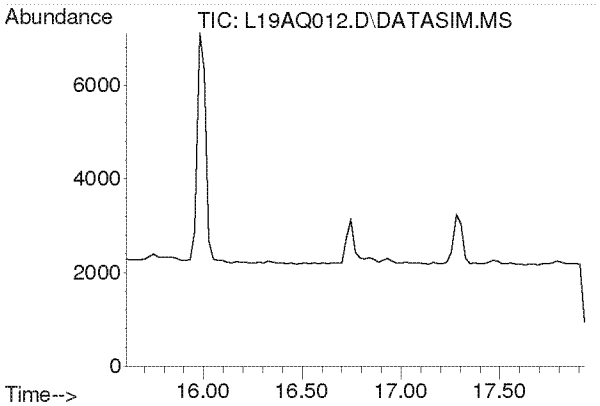
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



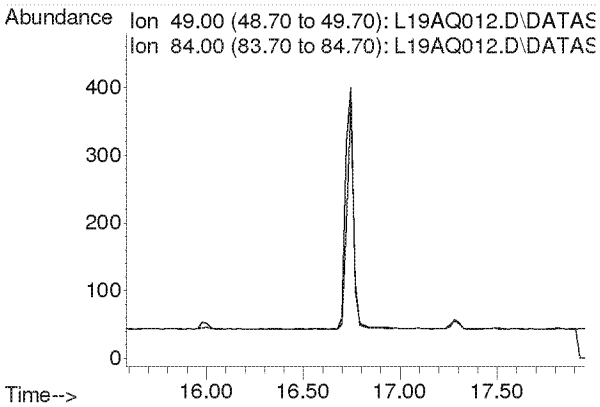


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

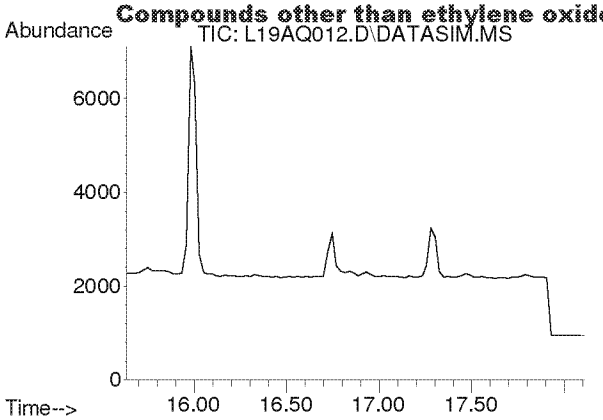
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

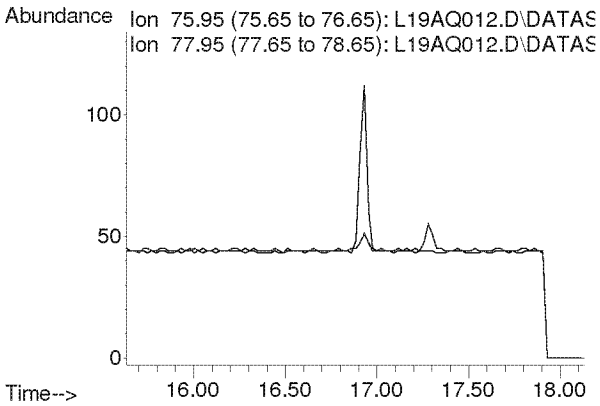


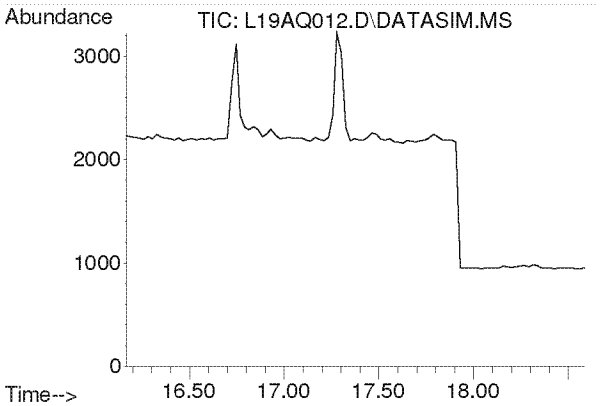
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



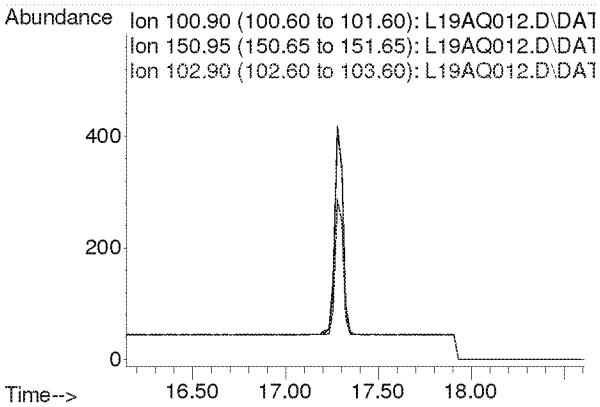


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

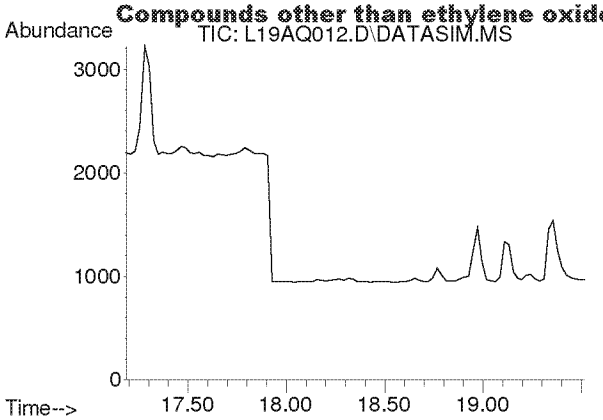
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

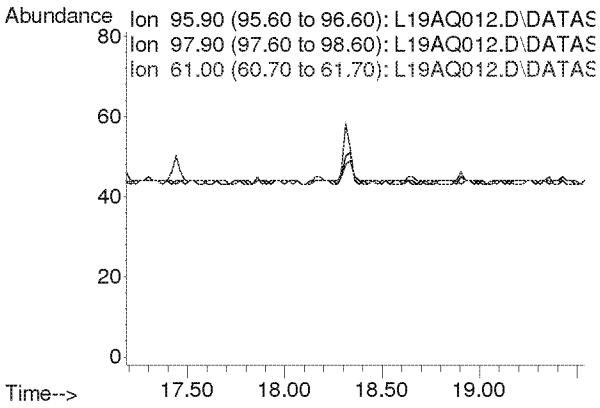


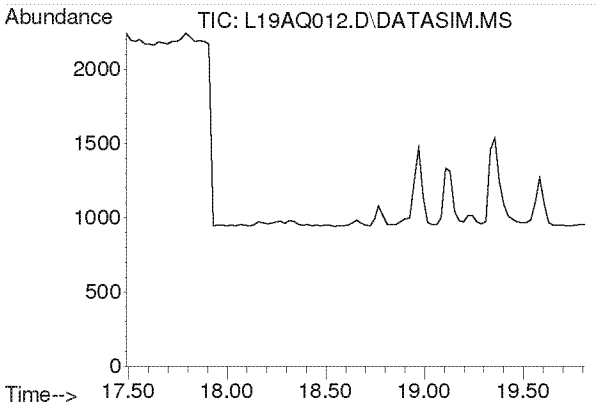
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



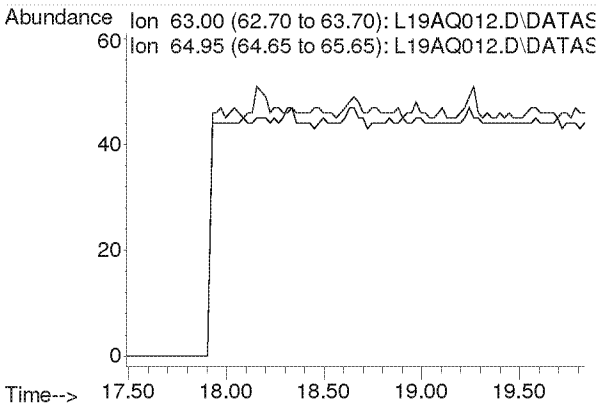


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

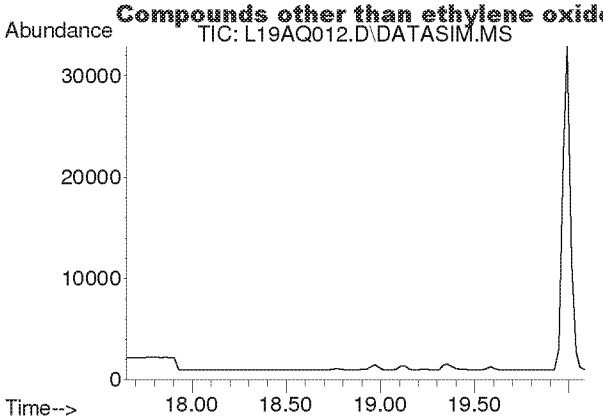
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

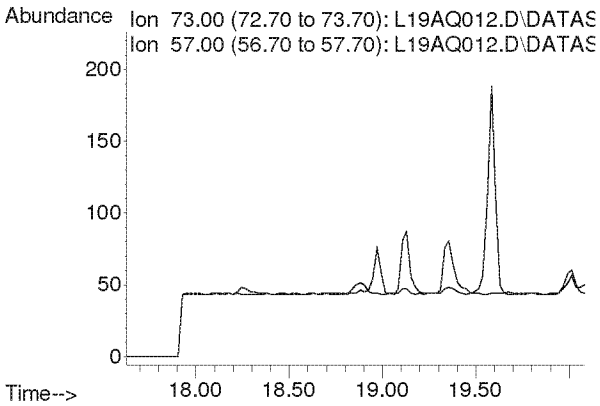


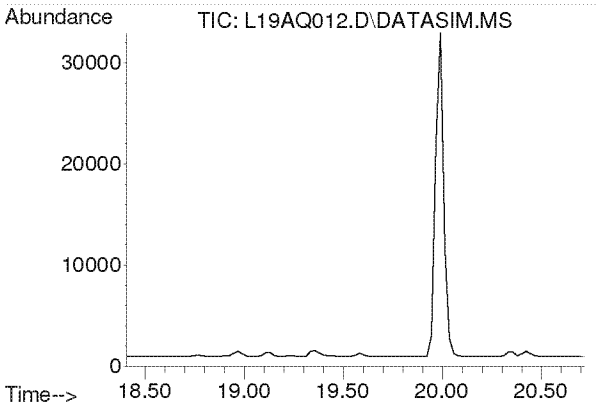
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



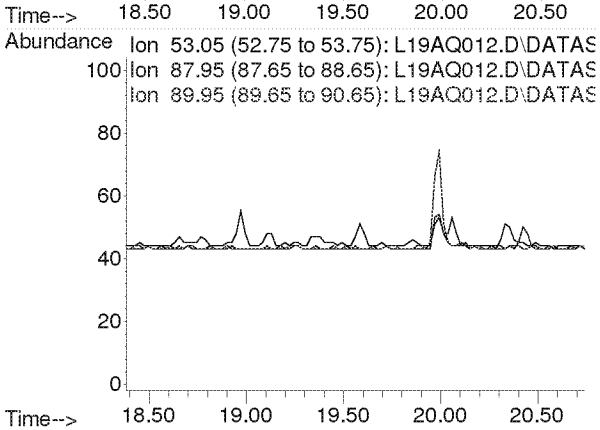


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

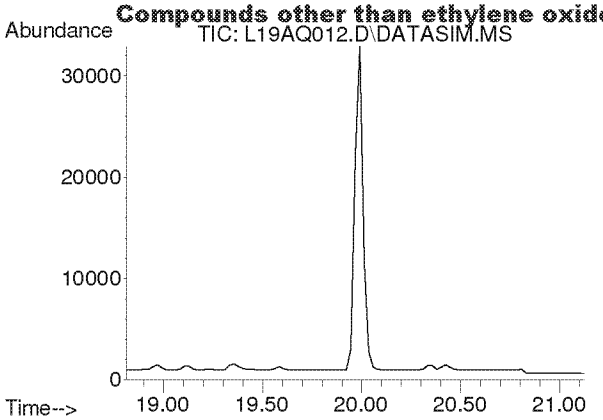
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

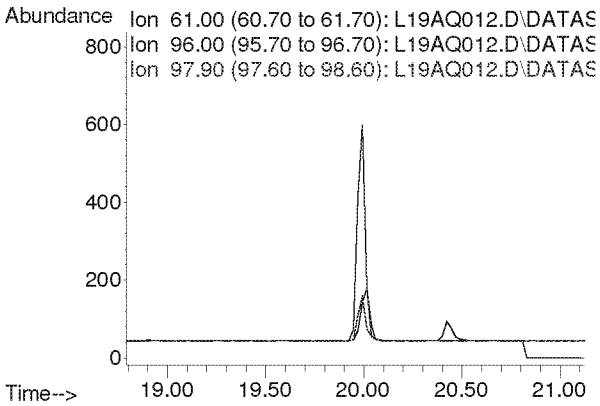


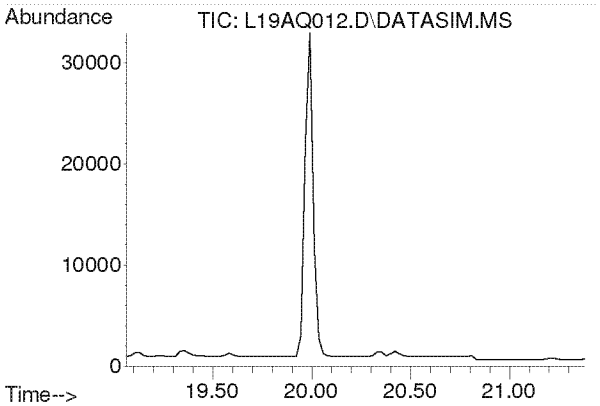
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



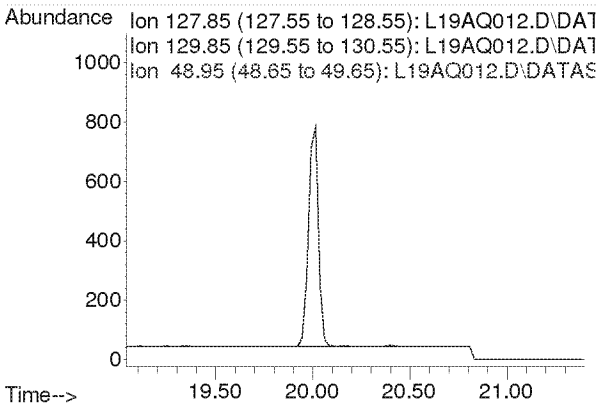


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

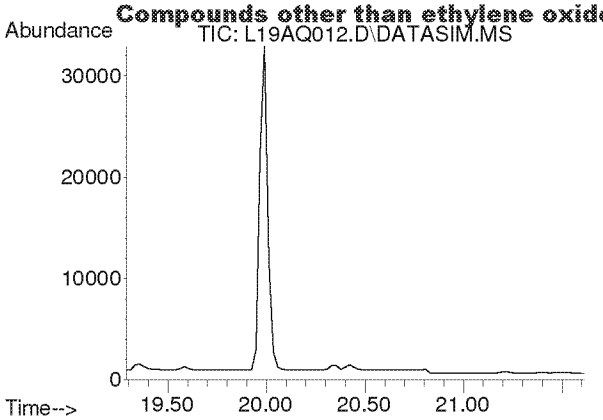
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

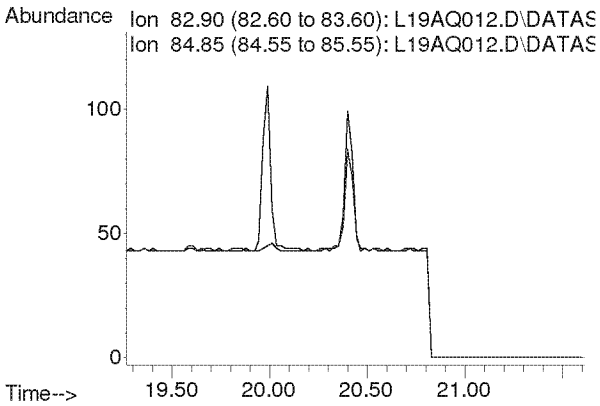


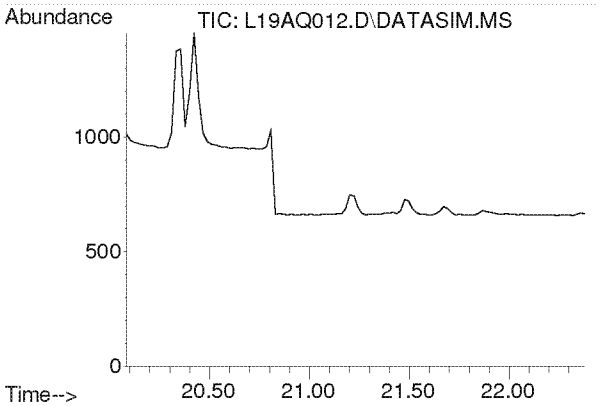
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



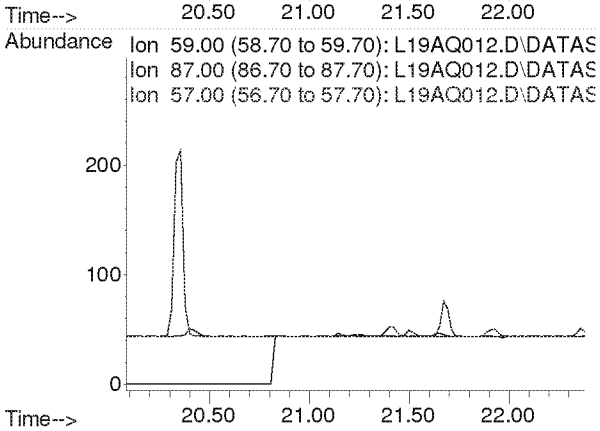


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

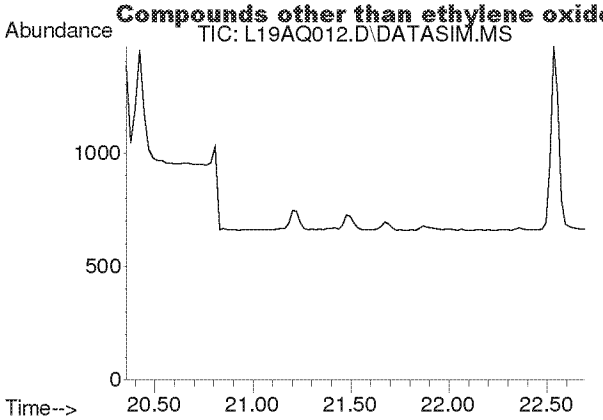
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

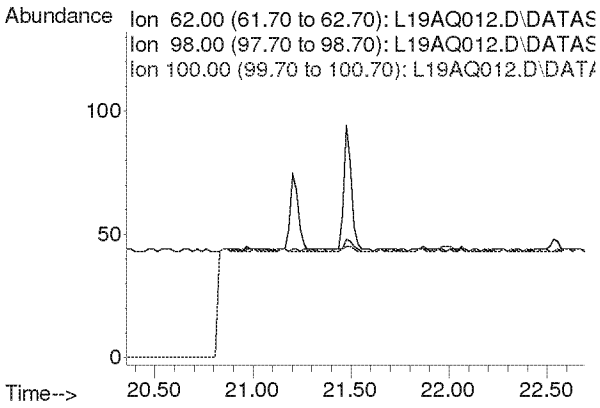


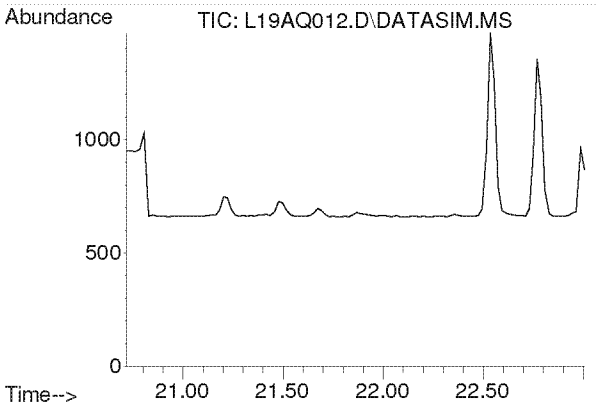
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



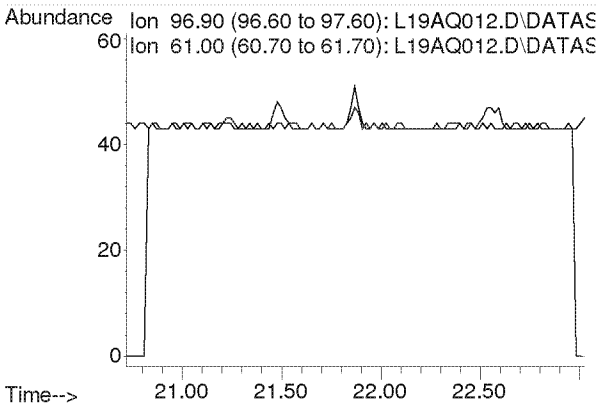


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

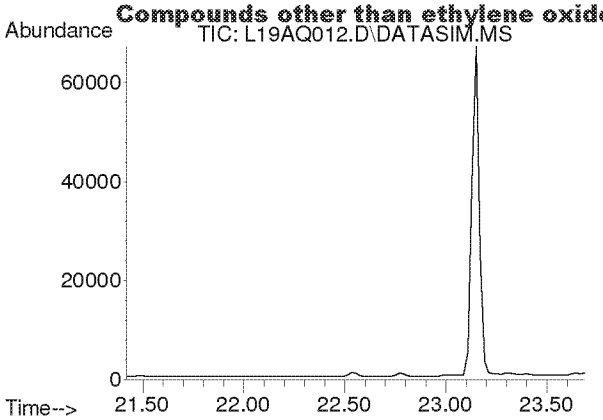
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

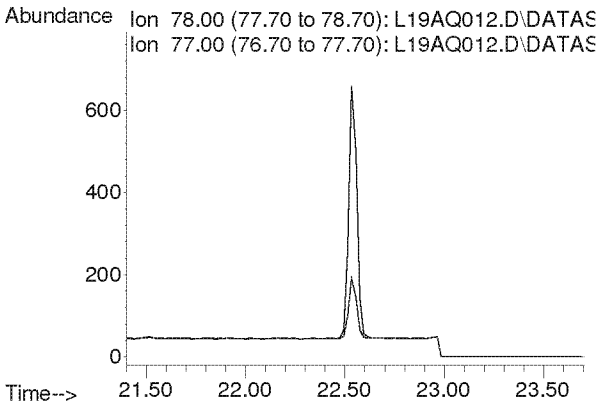


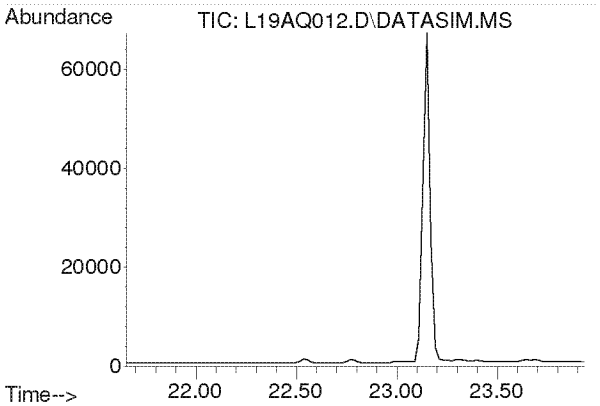
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



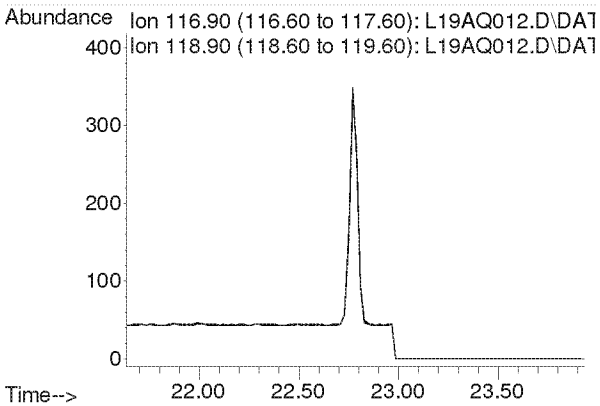


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

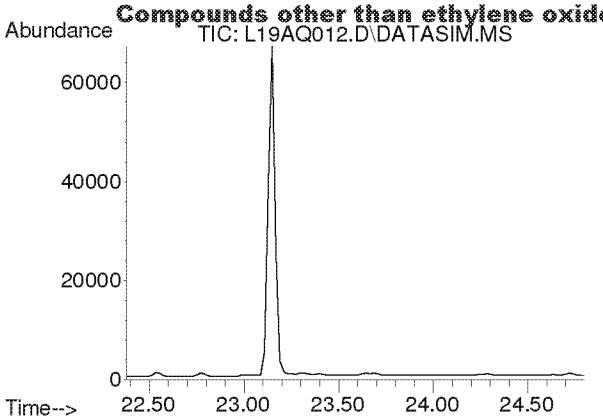
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

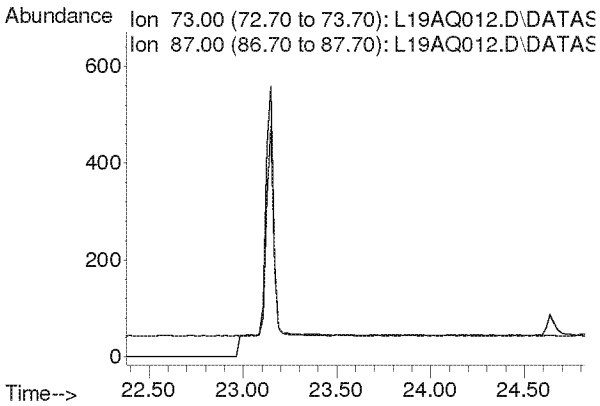


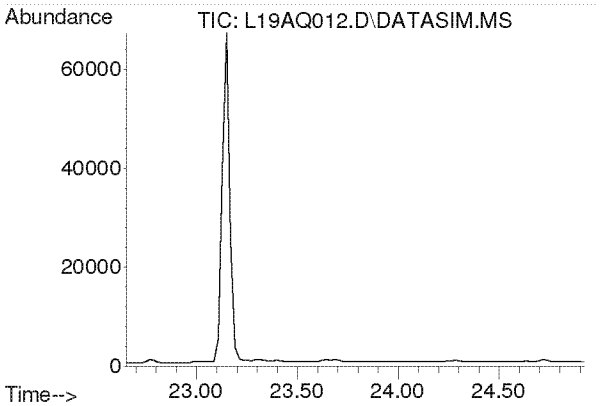
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



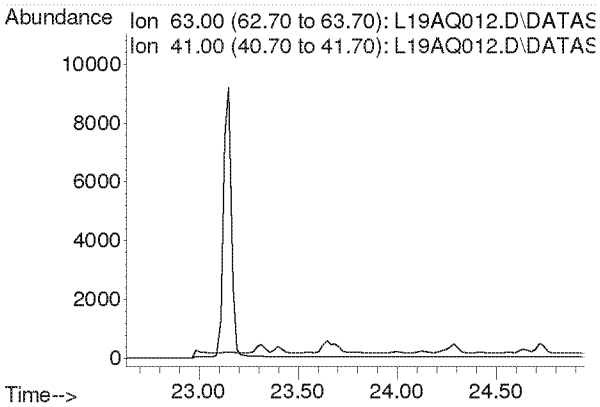


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

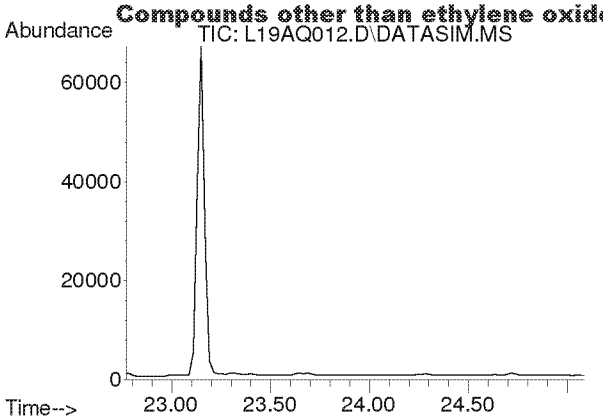
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

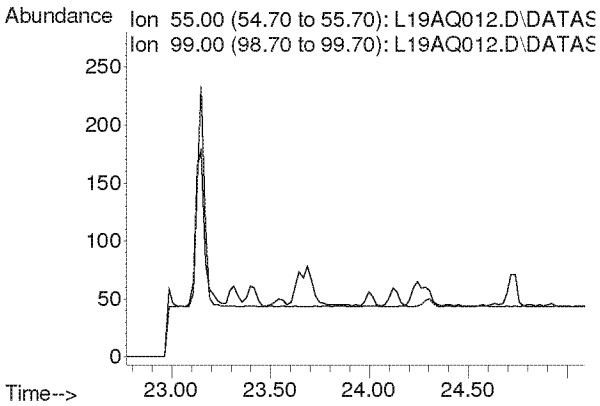


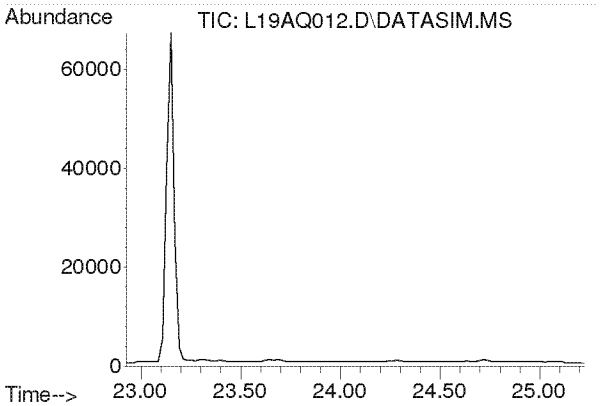
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



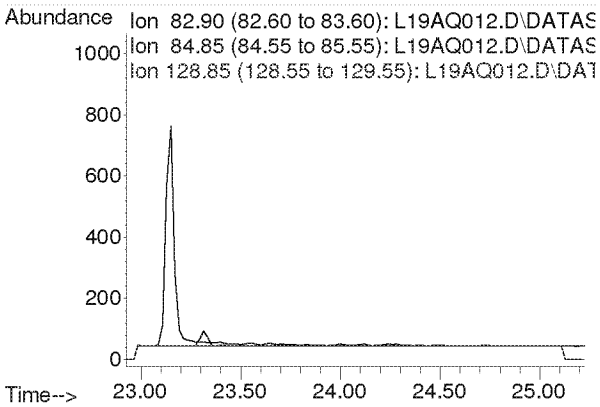


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

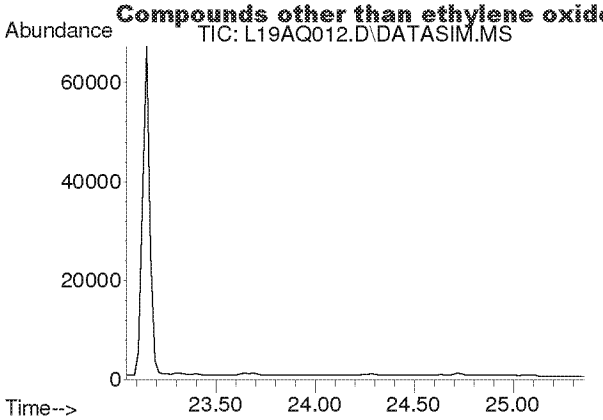
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

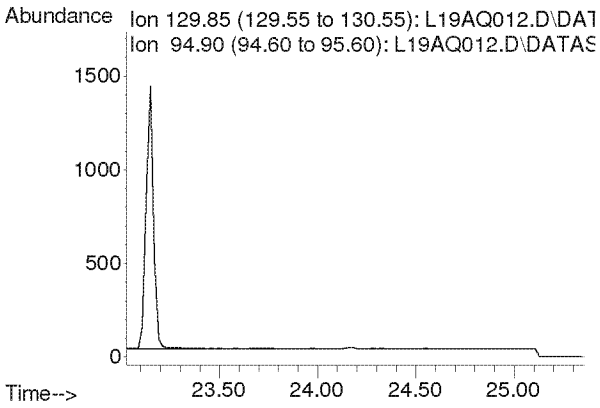


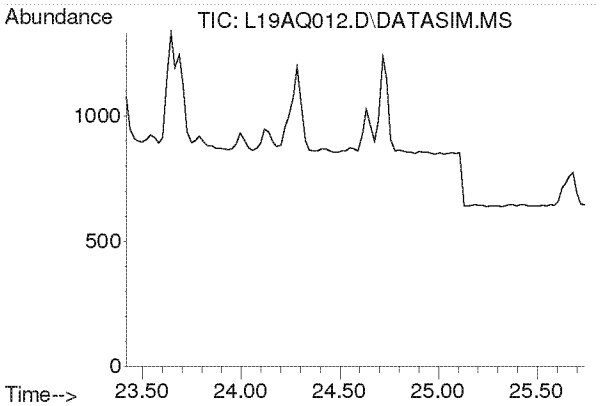
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



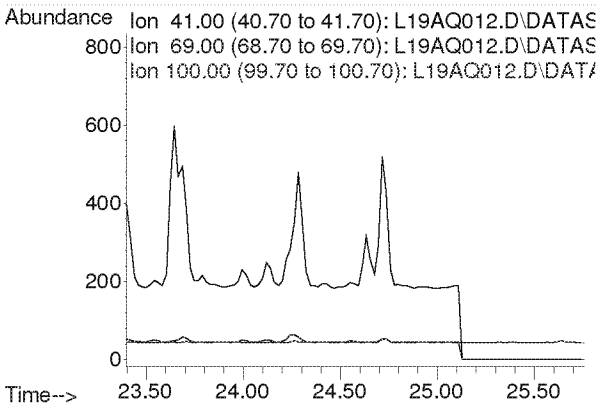


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

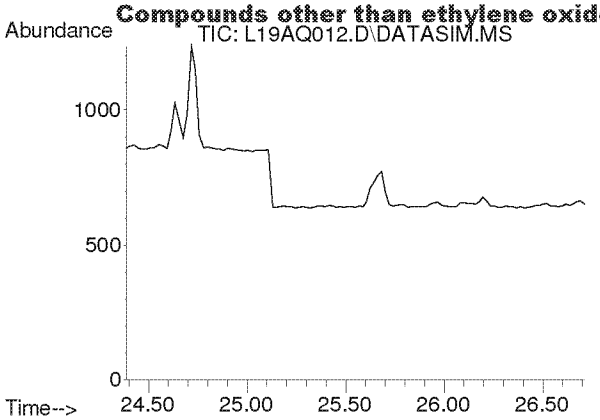
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

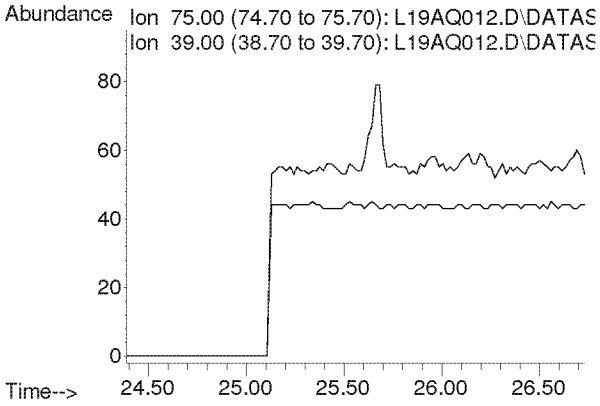


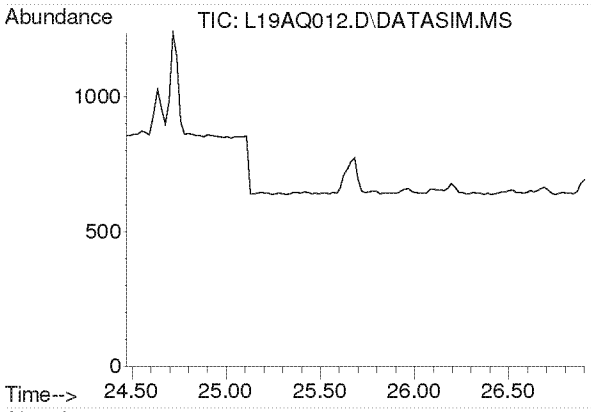
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



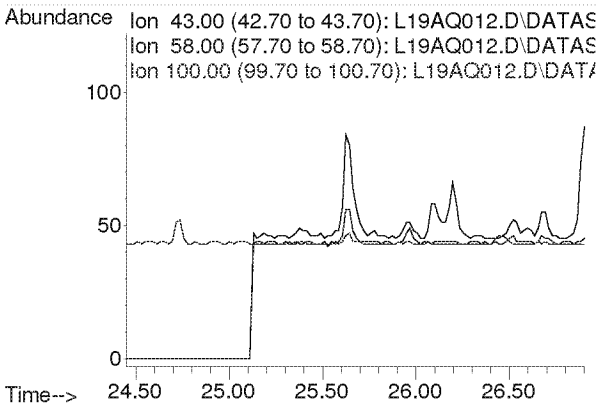


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

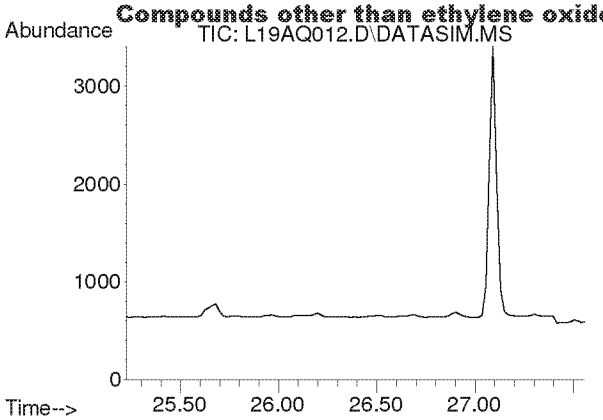
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

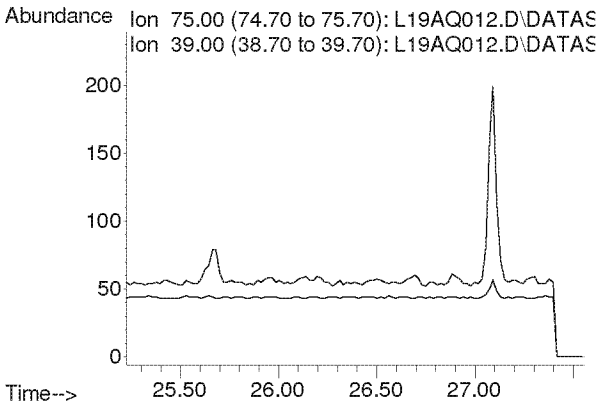


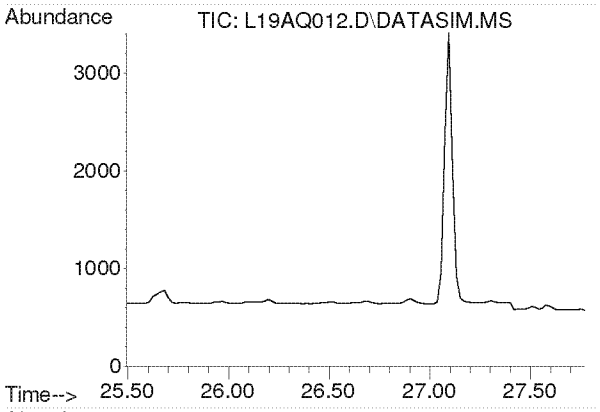
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



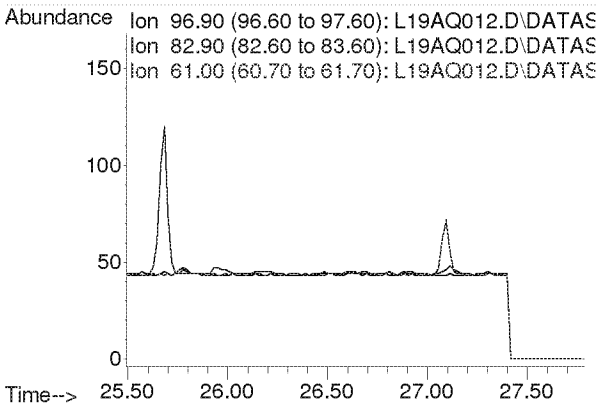


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

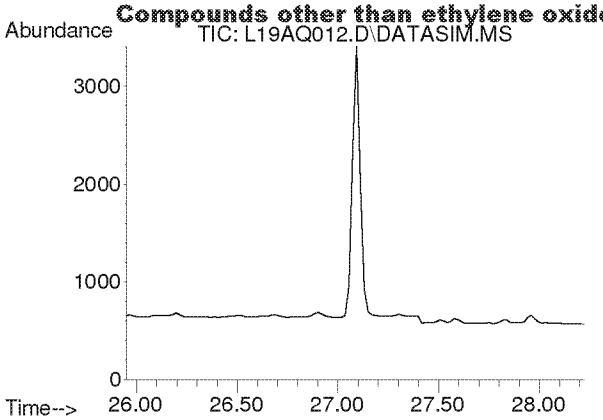
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

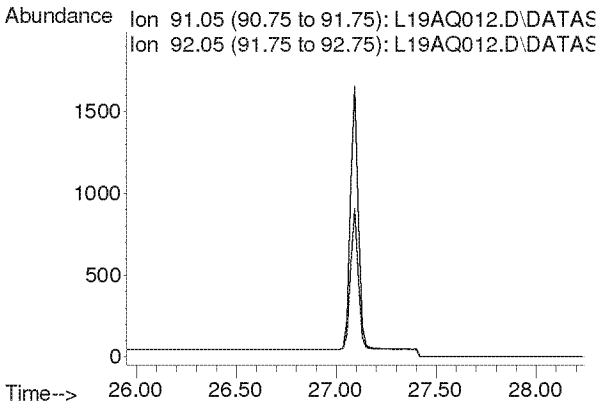


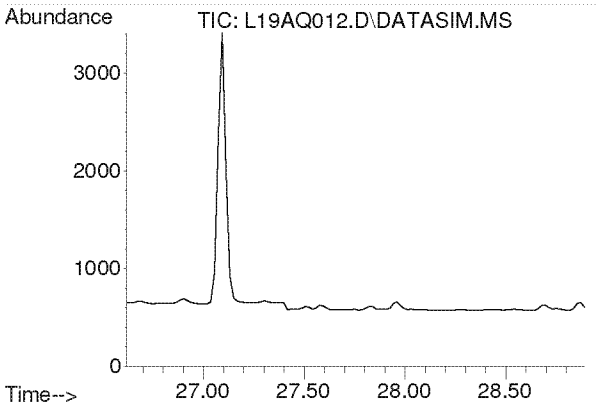
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



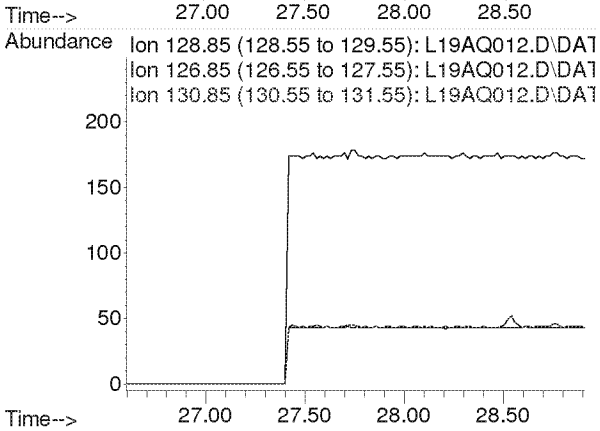


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

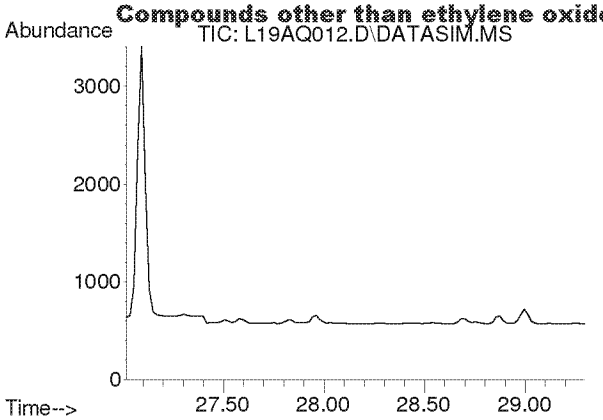
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

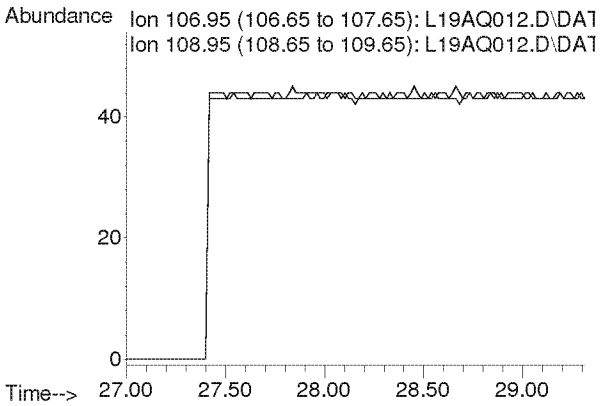


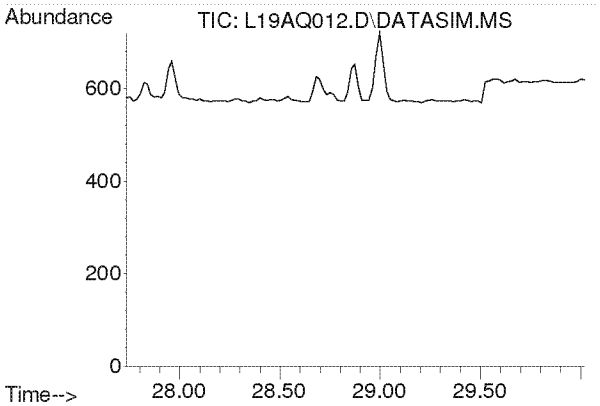
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



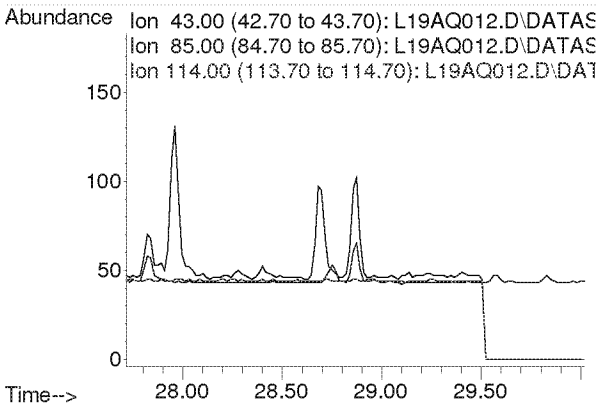


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

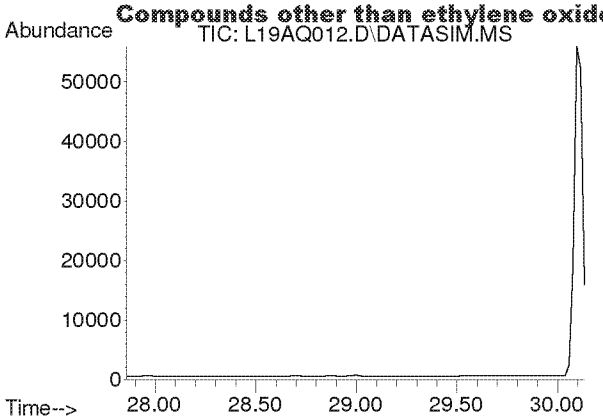
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

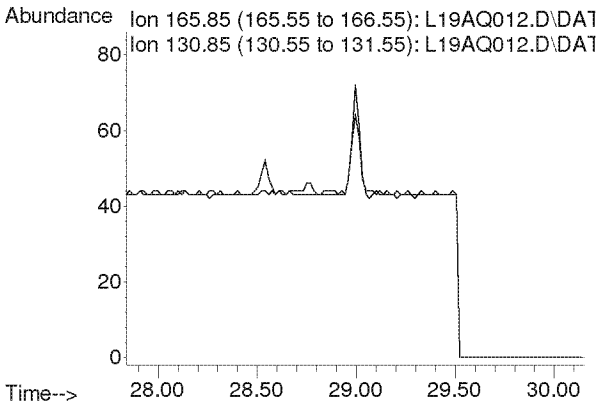


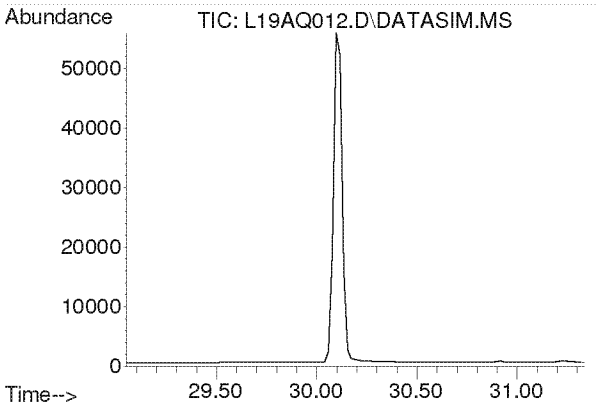
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



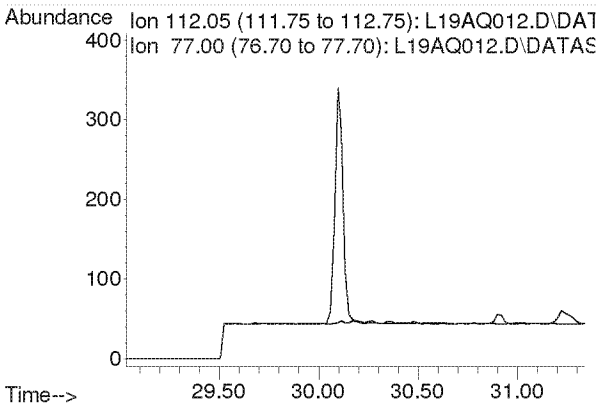


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

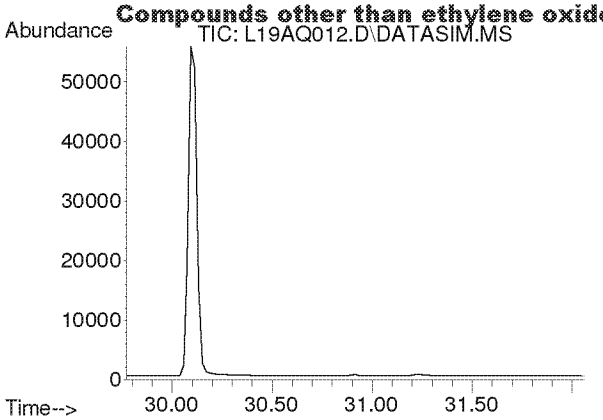
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

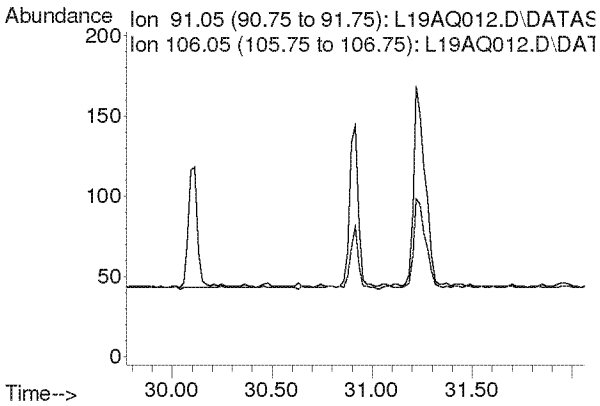


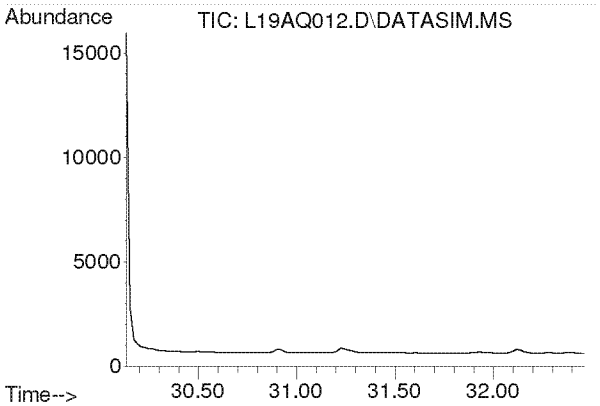
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



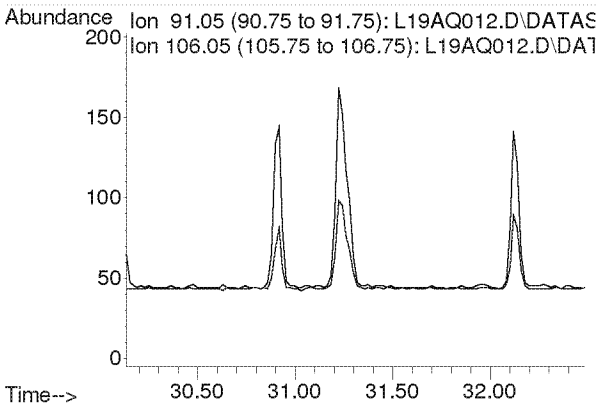


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

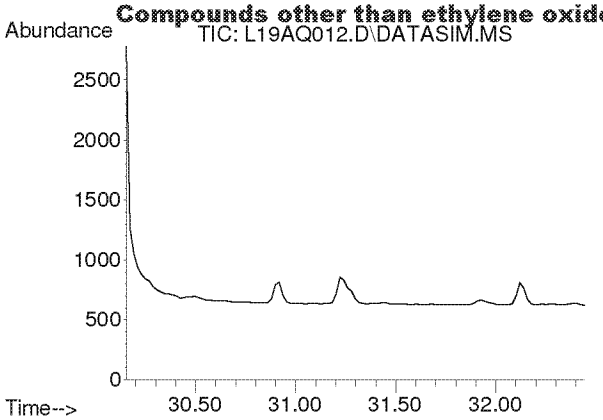
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

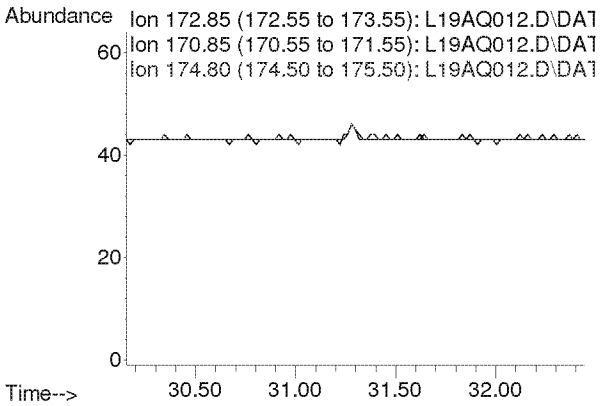


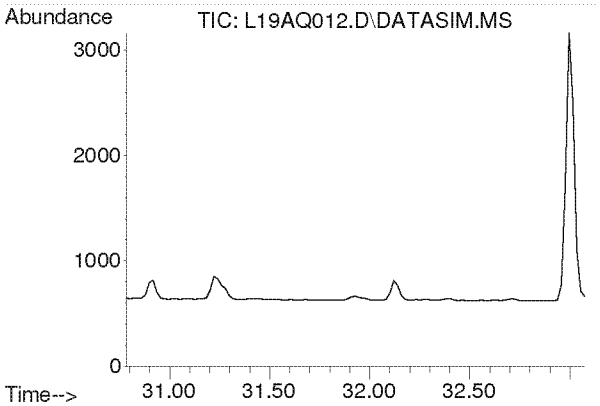
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



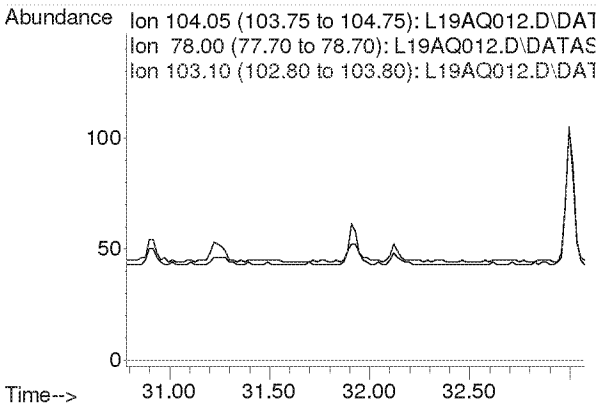


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

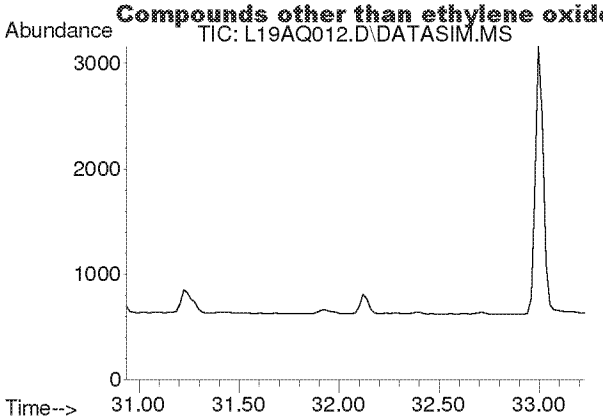
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

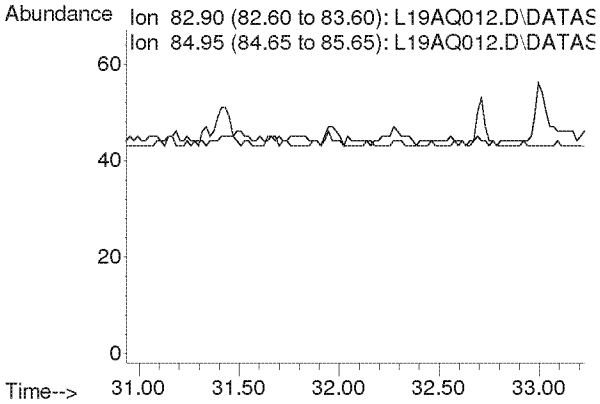


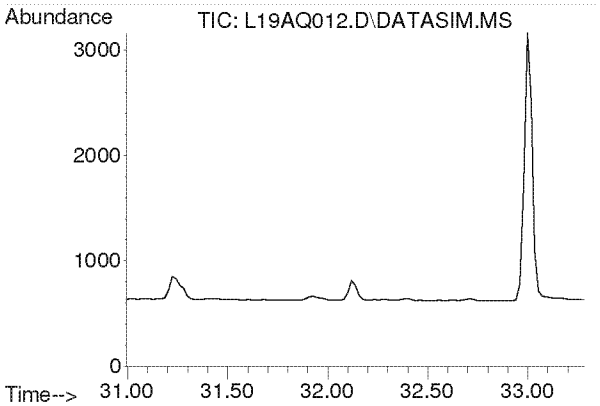
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



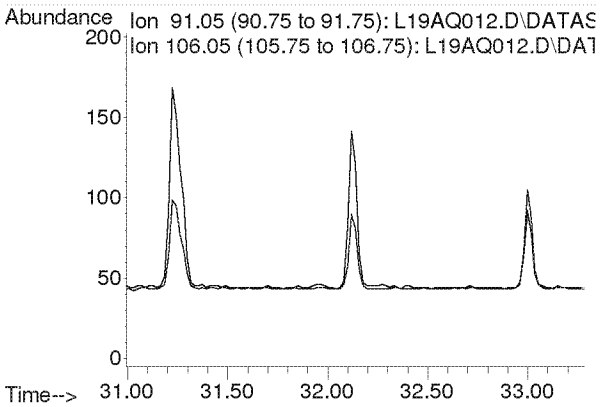


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

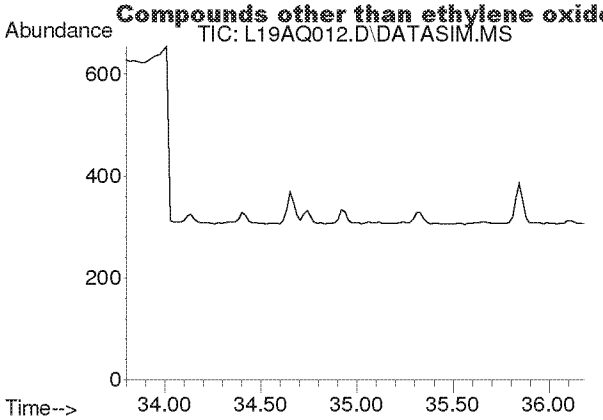
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

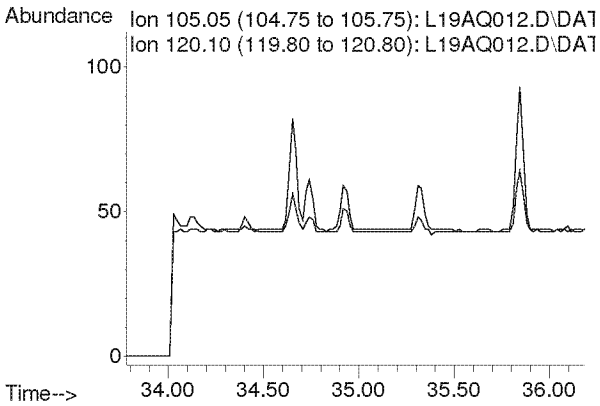


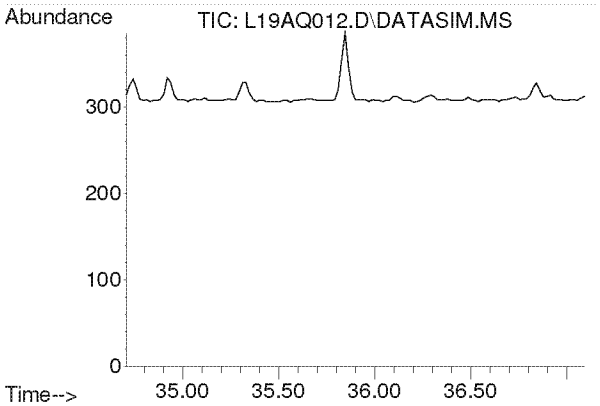
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



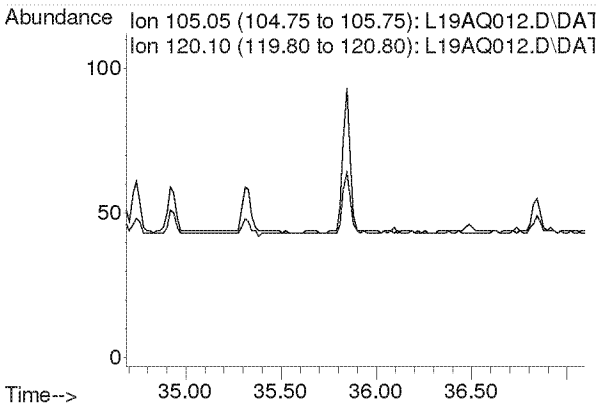


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

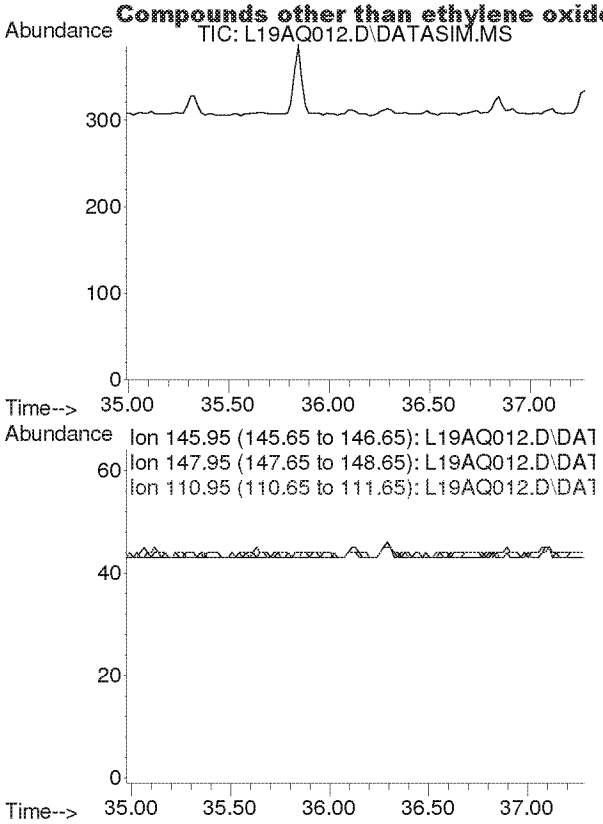
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

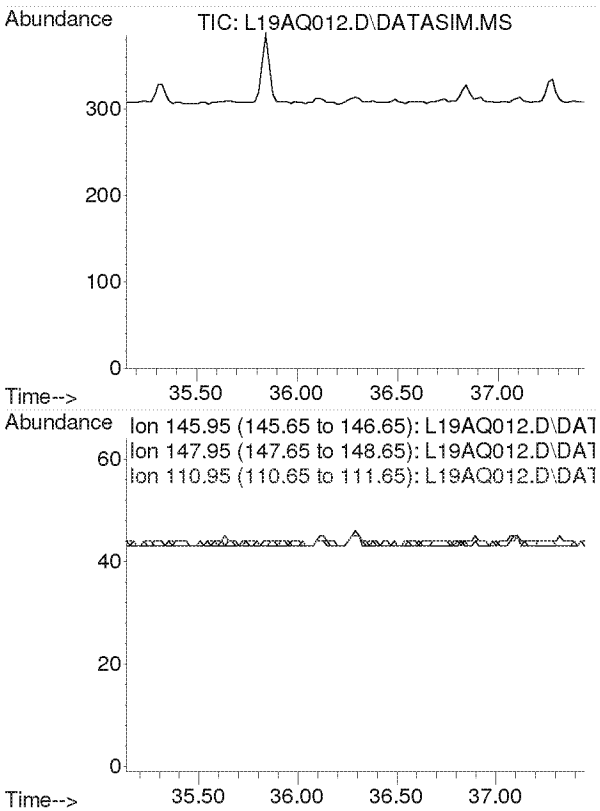


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



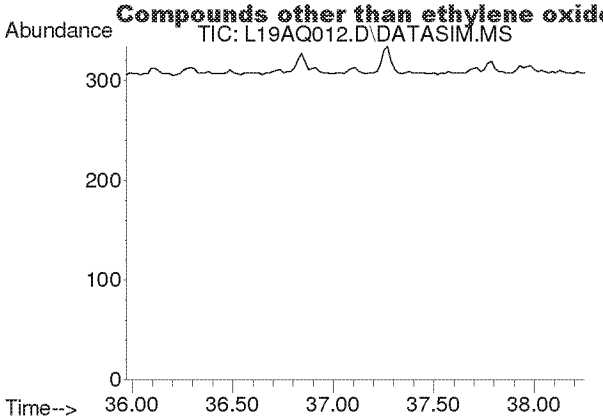
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

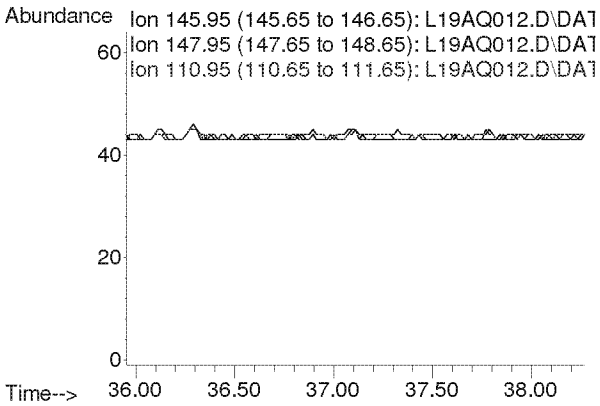


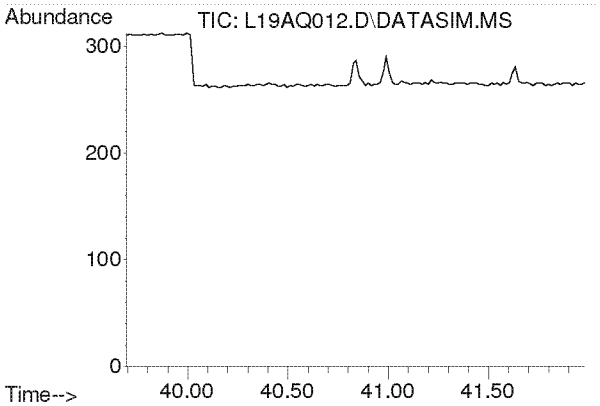
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



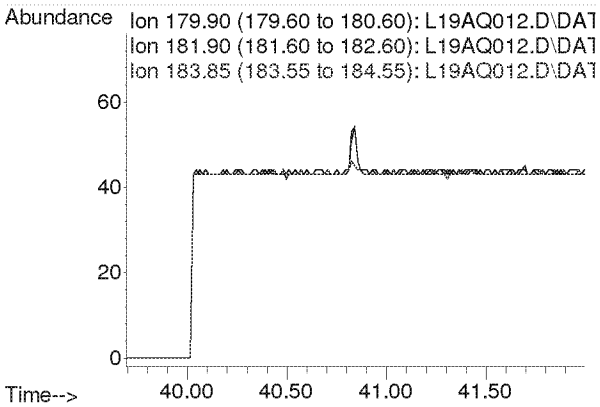


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

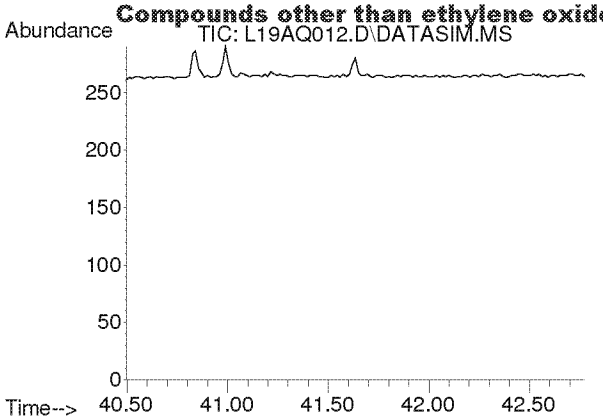
Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

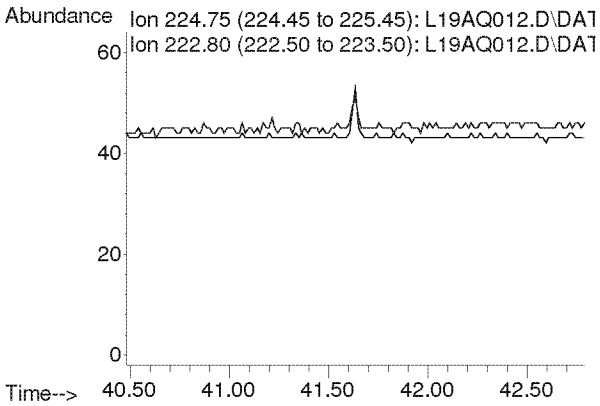


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ012.D
Acq: 17 Jan 2019 10:37 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ013.D
Acq On : 17 Jan 2019 11:39 pm
Operator : MAH
Sample : 9011101-03
Misc : HINSDALE S. HS 1/10/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 07:35:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	54291	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.150	114	134330	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	103696	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.470	29	458m	0.1633 ppbv	RMB 2/4/19
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ013.D
Acq On : 17 Jan 2019 11:39 pm
Operator : MAH
Sample : 9011101-03
Misc : HINSDALE S. HS 1/10/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 07:35:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

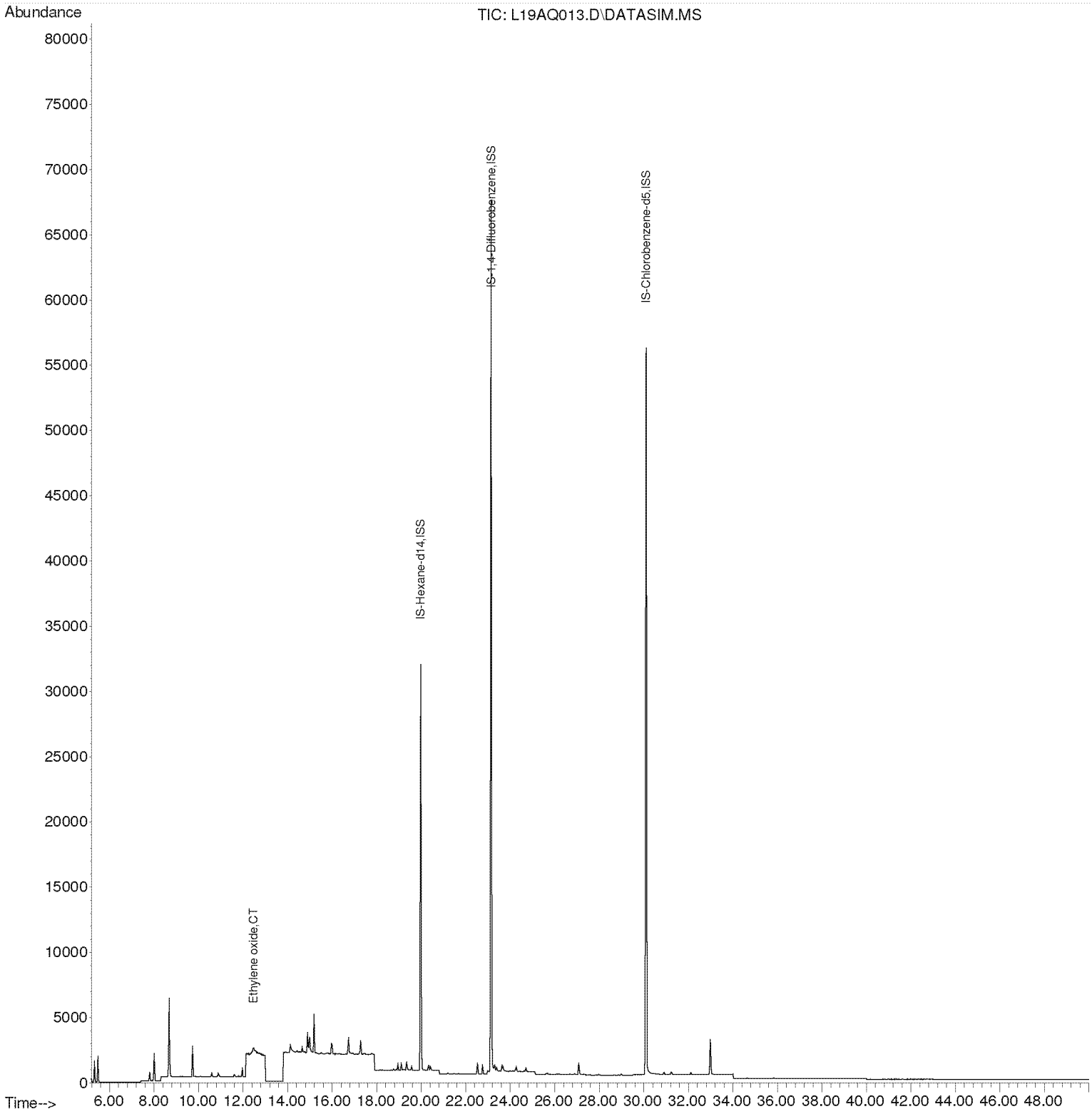
Internal Standards	R.T.	QIon	Response	Conc Units Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D.
50) Ethylbenzene	0.000	91	0	N.D. d
51) m,p-Xylene	0.000	91	0	N.D. d
52) Bromoform	0.000	173	0	N.D.
53) Styrene	0.000	104	0	N.D. d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.
55) o-Xylene	0.000	91	0	N.D. d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d
58) m-Dichlorobenzene	0.000	146	0	N.D.
59) p-Dichlorobenzene	0.000	146	0	N.D.
60) o-Dichlorobenzene	0.000	146	0	N.D.
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.

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

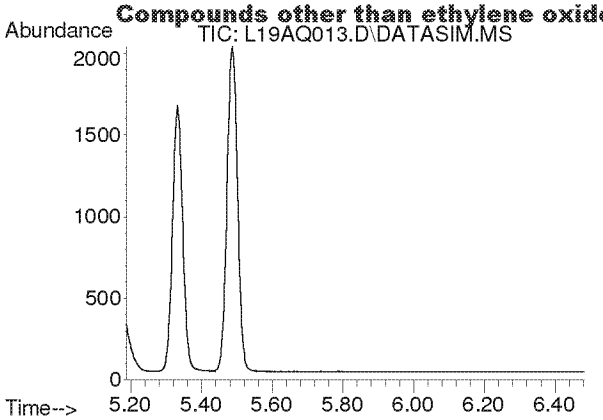
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ013.D
Acq On : 17 Jan 2019 11:39 pm
Operator : MAH
Sample : 9011101-03
Misc : HINSDALE S. HS 1/10/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 07:35:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



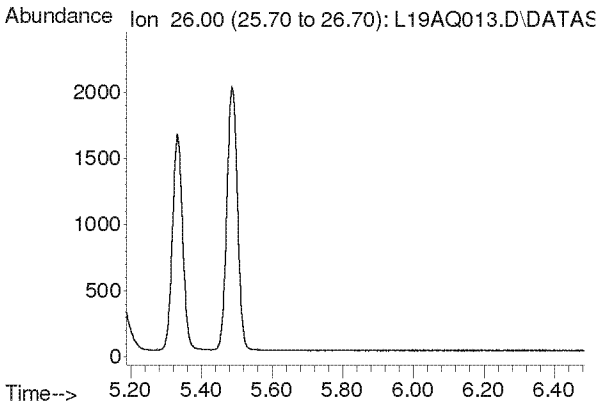
Compounds other than ethylene oxide were not quantitated.

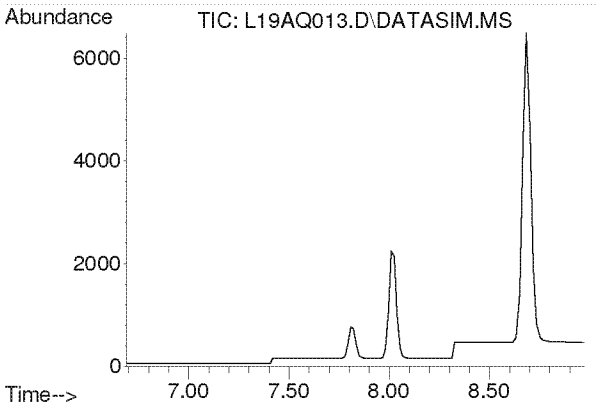


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 26



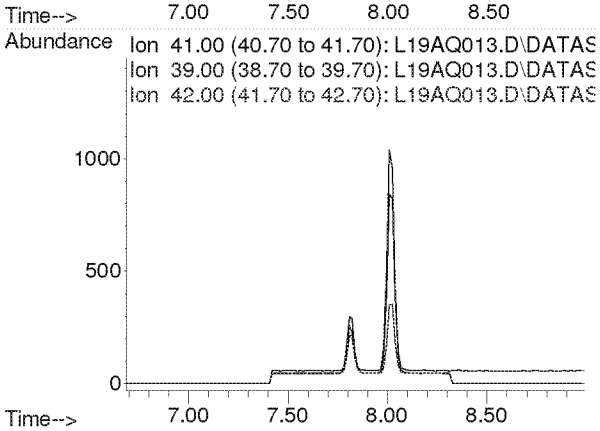


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

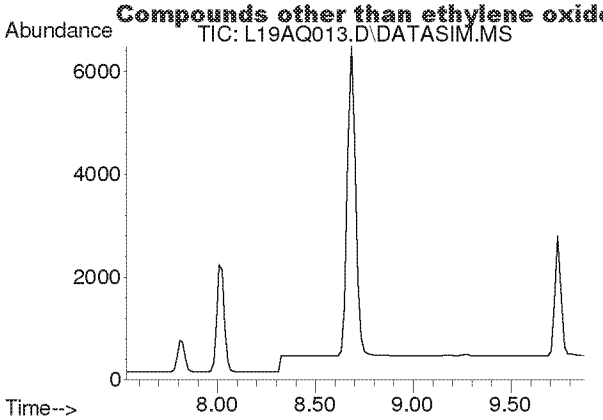
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

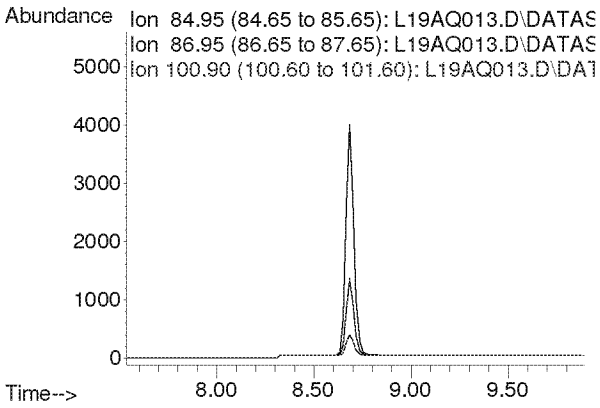


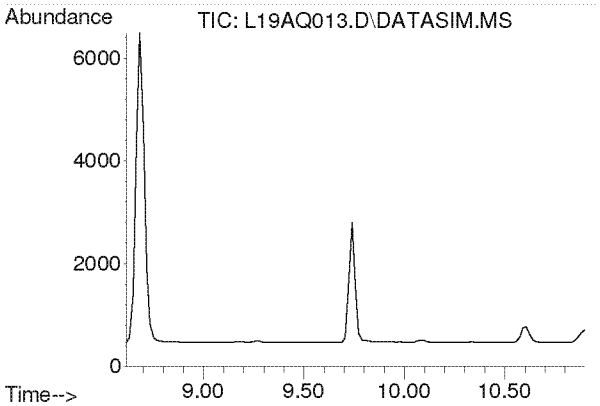
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



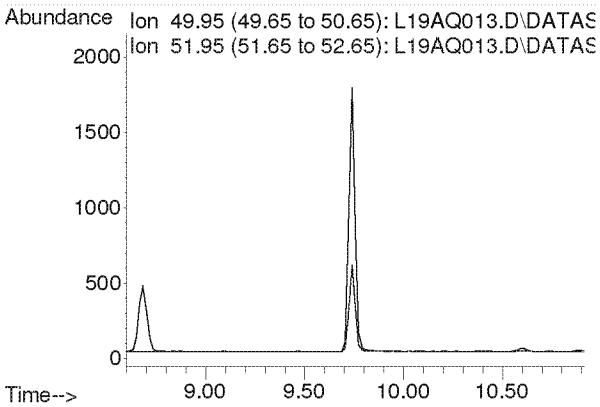


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

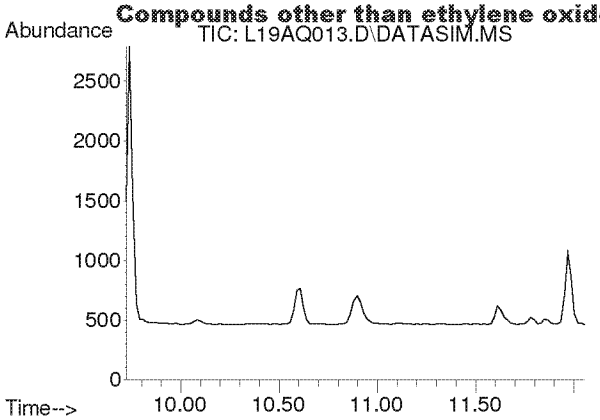
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

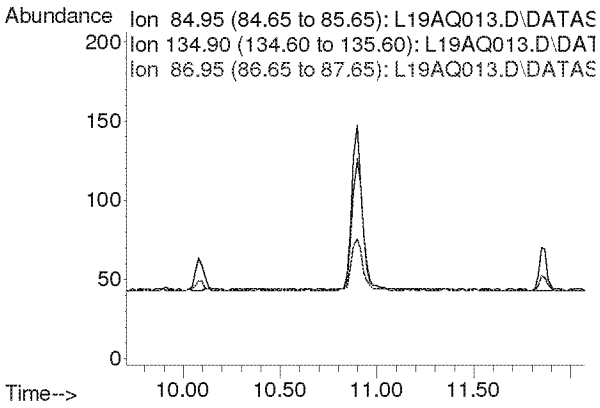


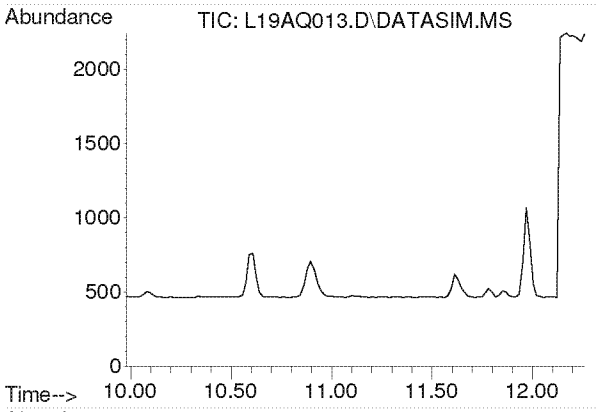
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



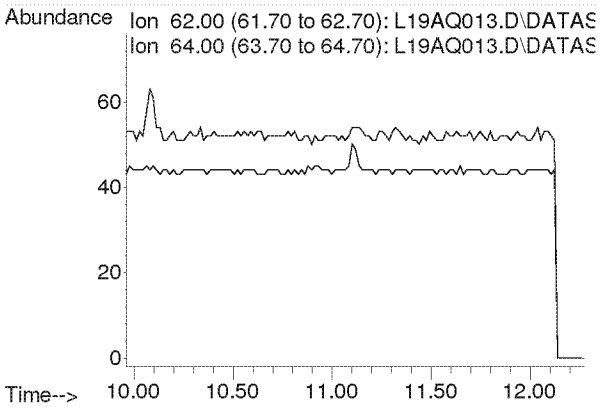


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

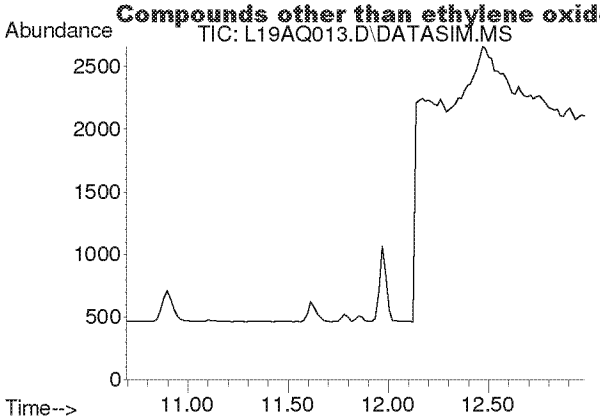
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

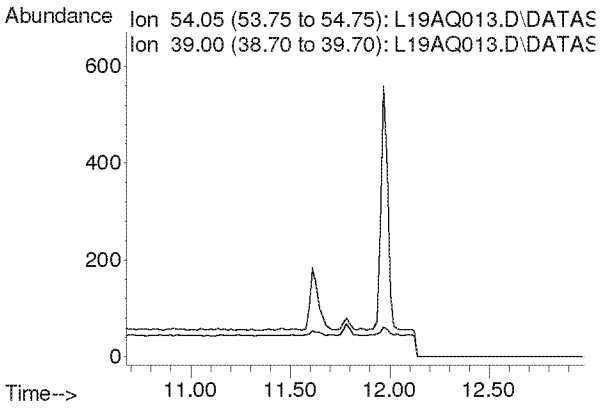


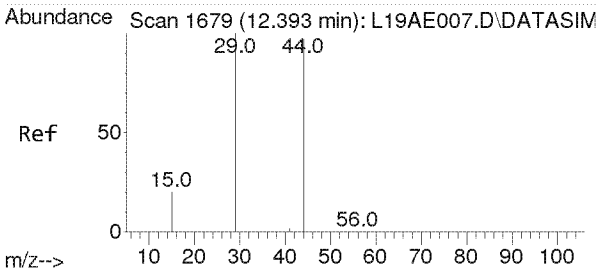
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

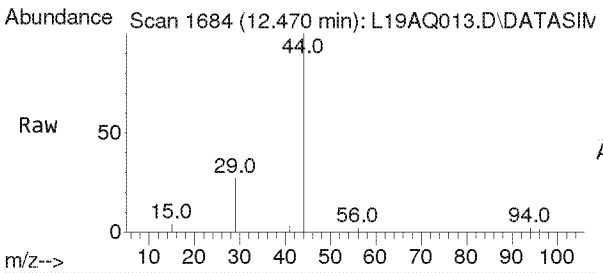


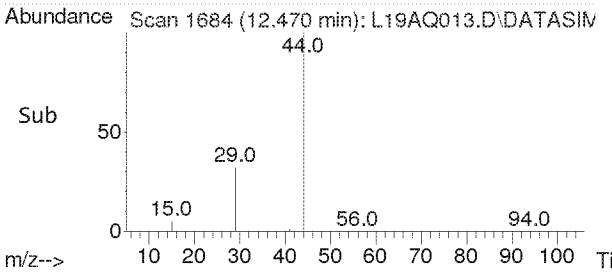


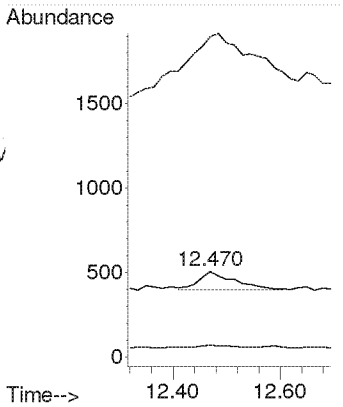
#9
Ethylene oxide
Concen: 0.163 ppbv m
RT: 12.470 min Scan# 1684
Delta R.T. 0.077 min
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 29 Resp: 458

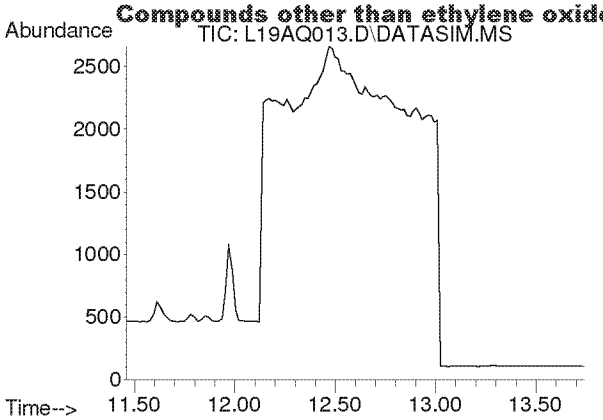
Ion	Ratio	Lower	Upper
29	100		
15	0.0	15.4	23.0#
44	0.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

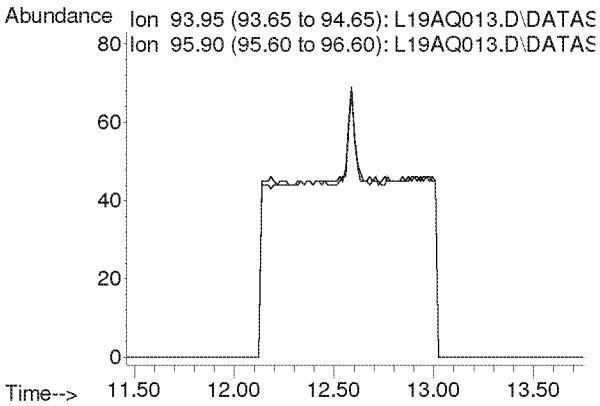


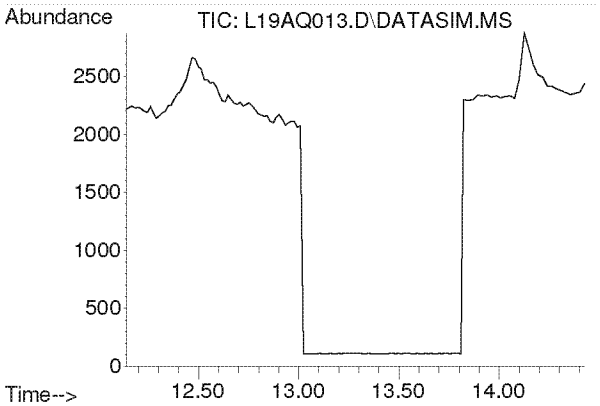
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



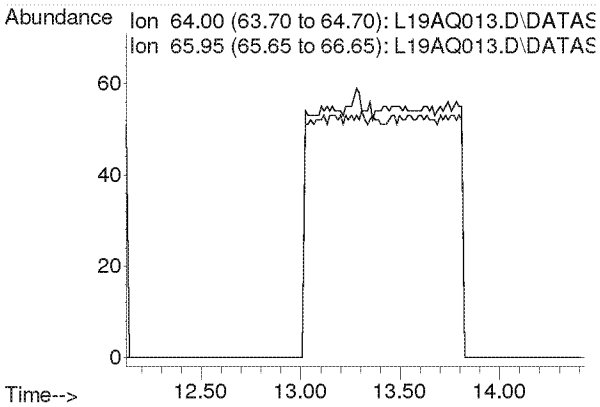


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

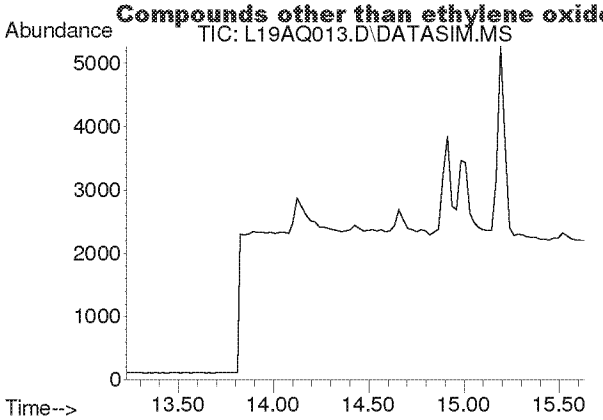
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

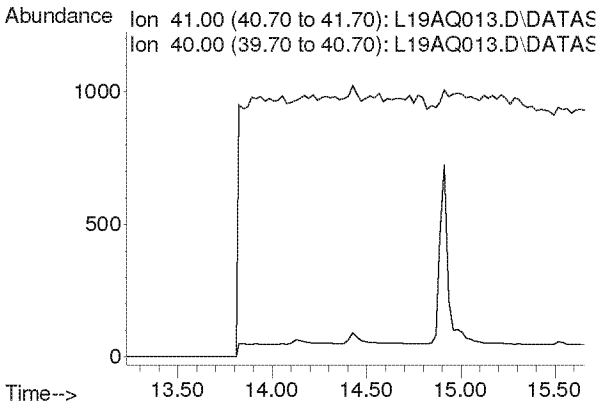


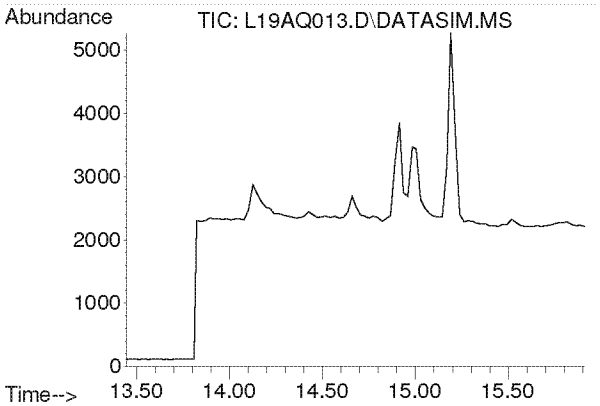
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



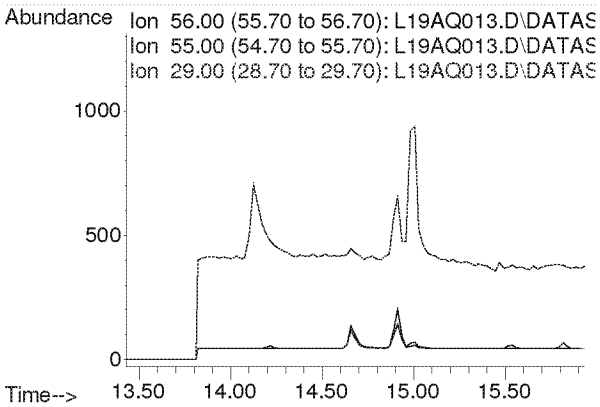


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

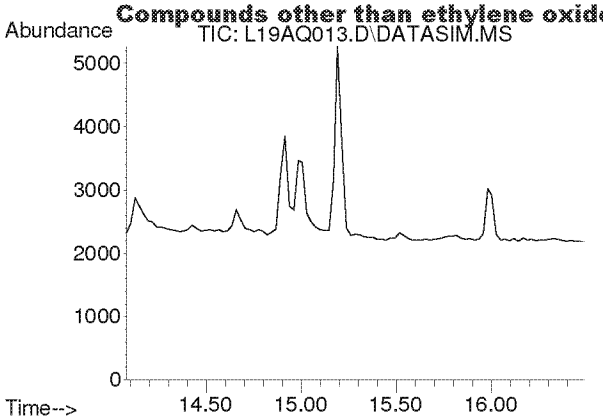
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

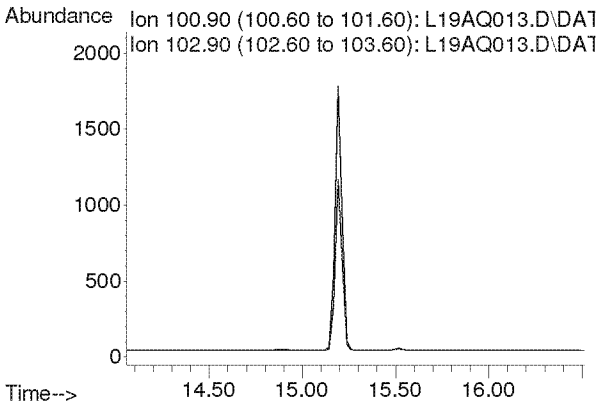


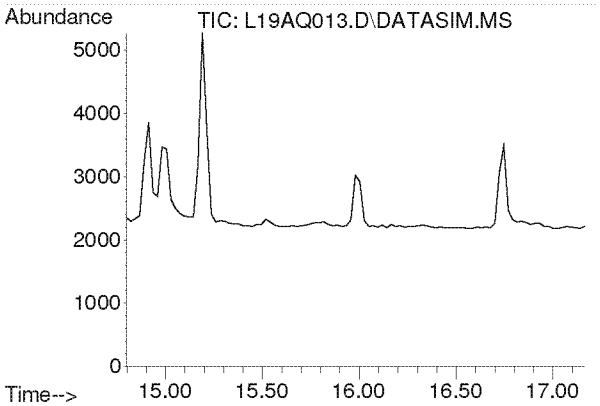
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



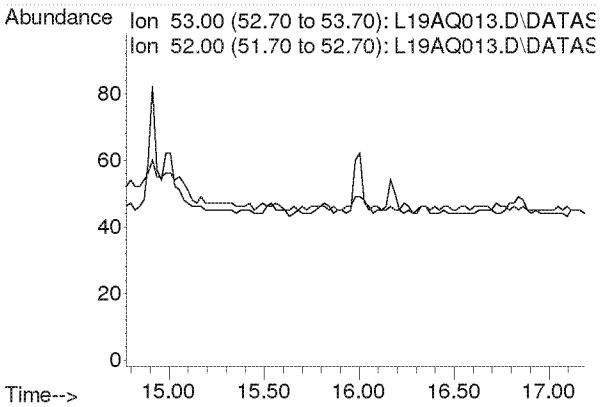


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

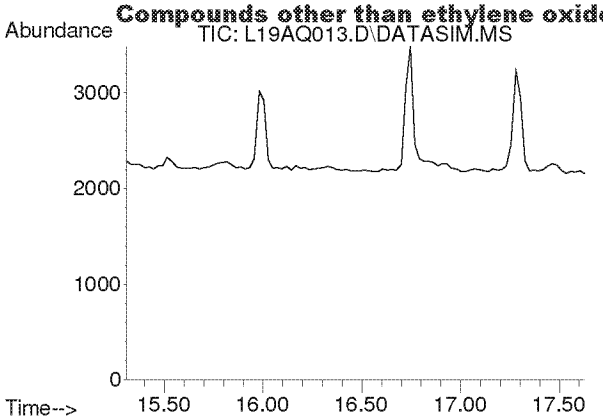
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

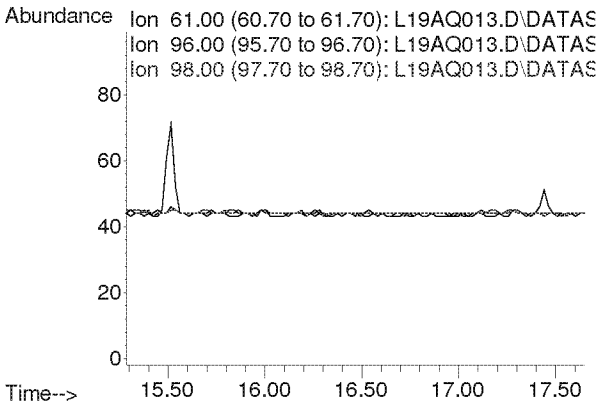


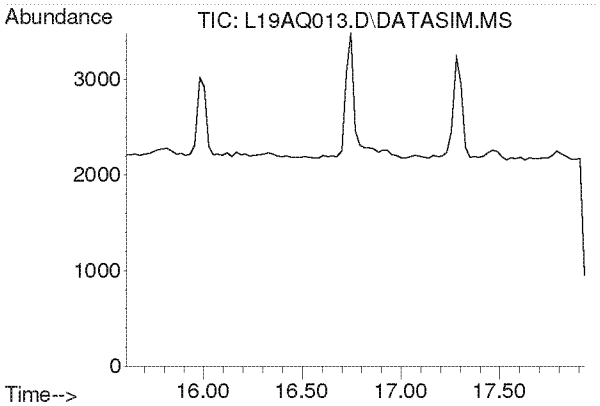
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



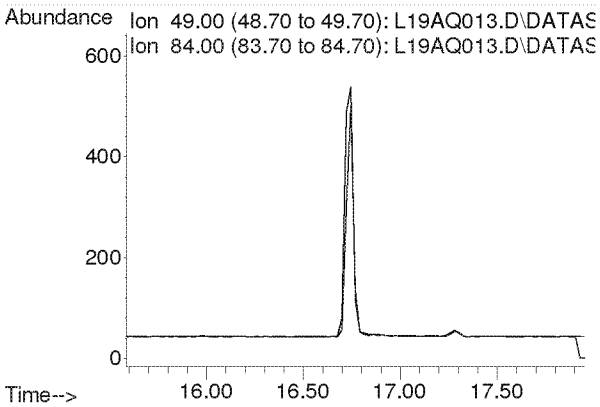


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

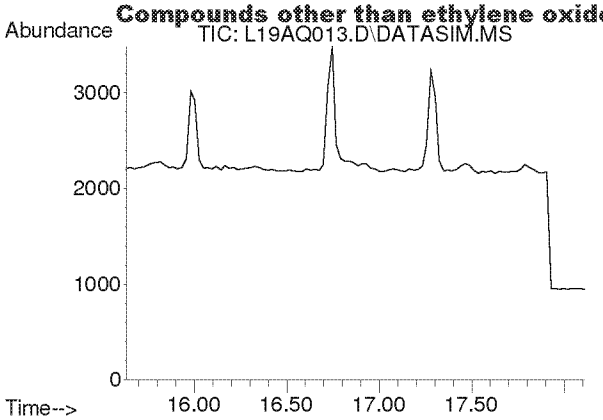
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

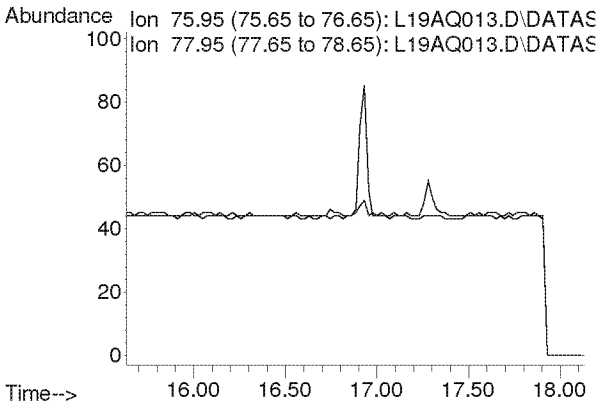


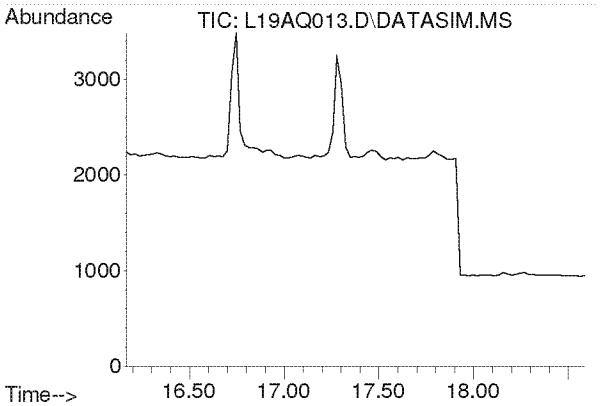
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



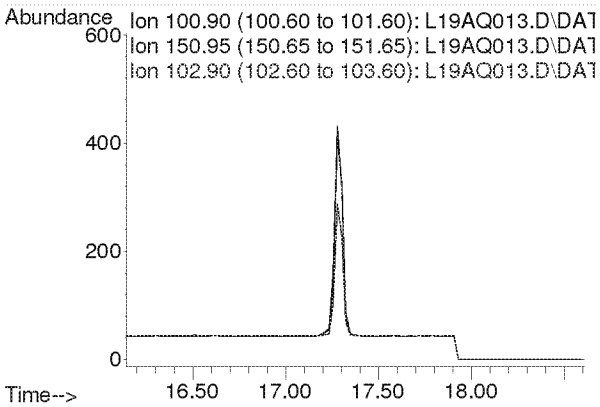


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

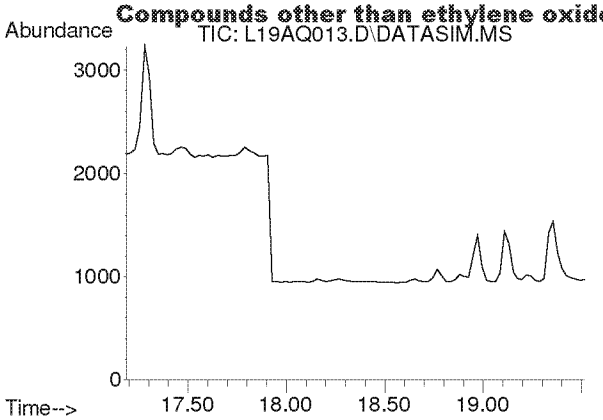
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

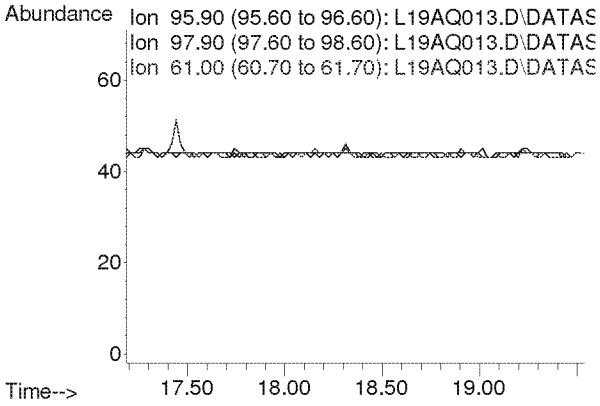


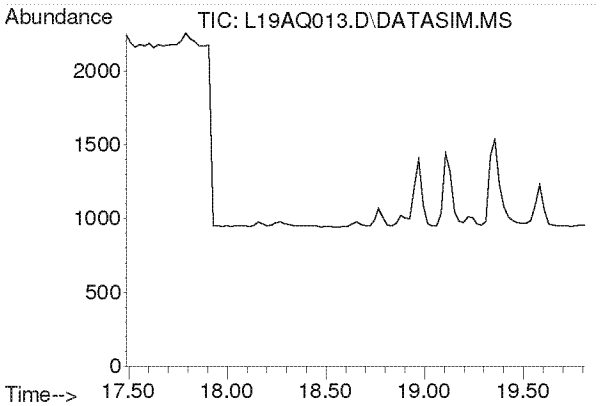
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



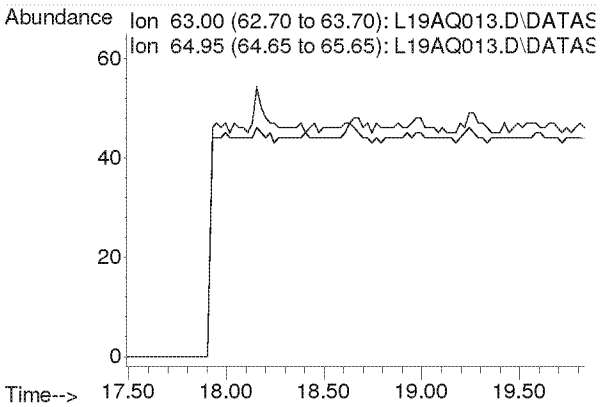


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

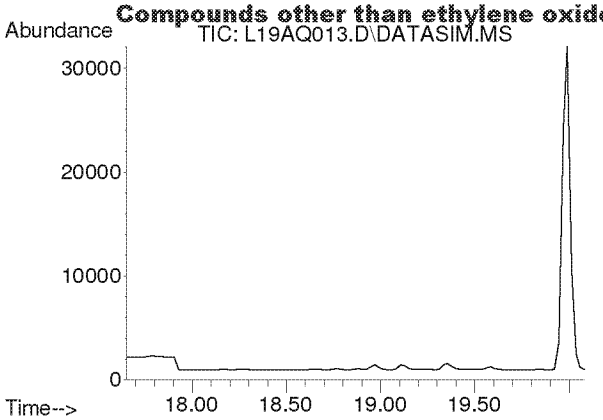
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

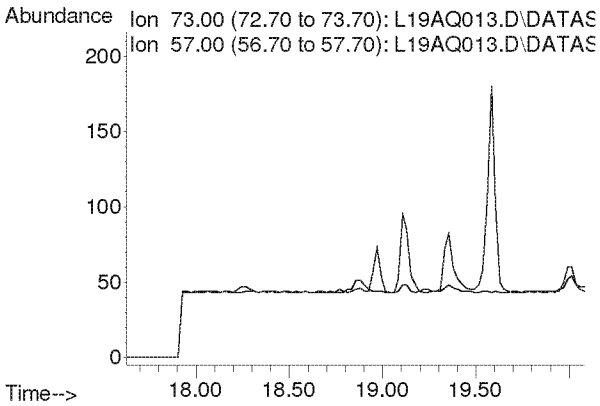


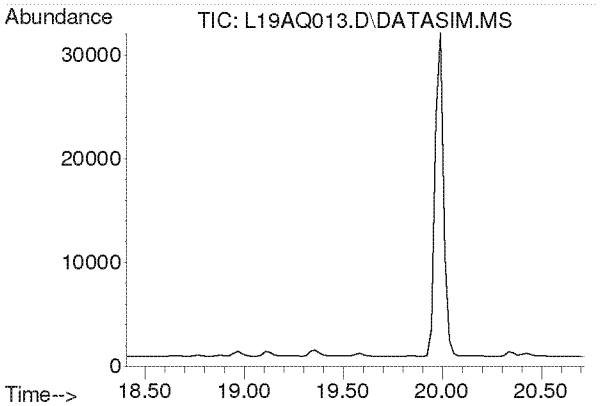
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



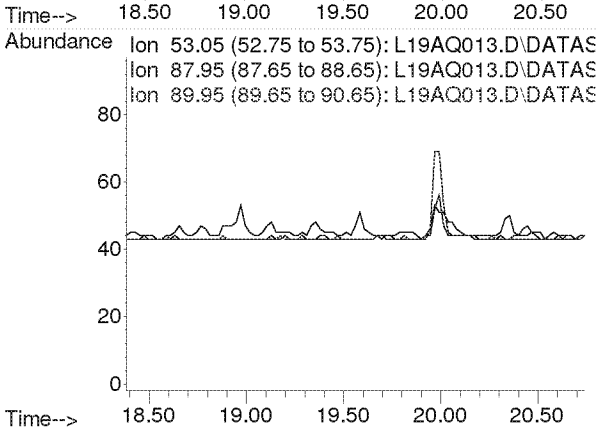


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

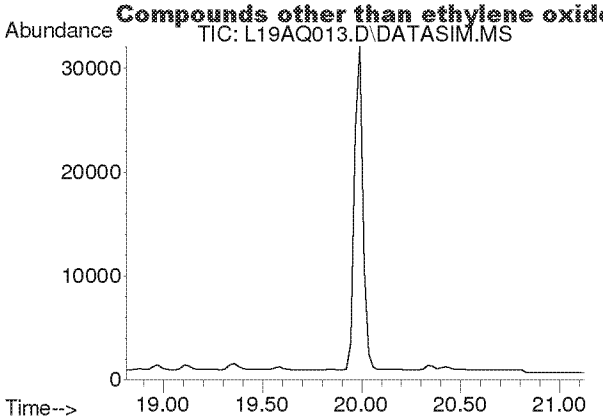
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

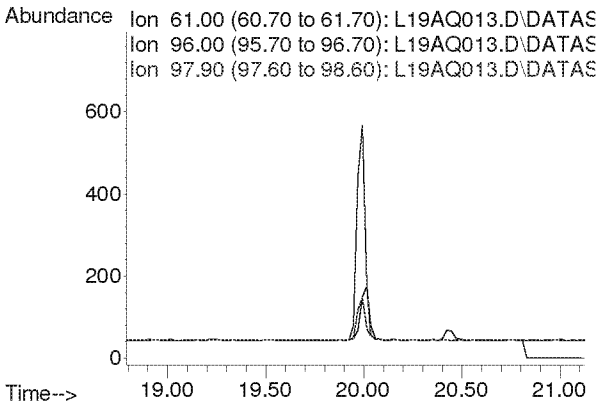


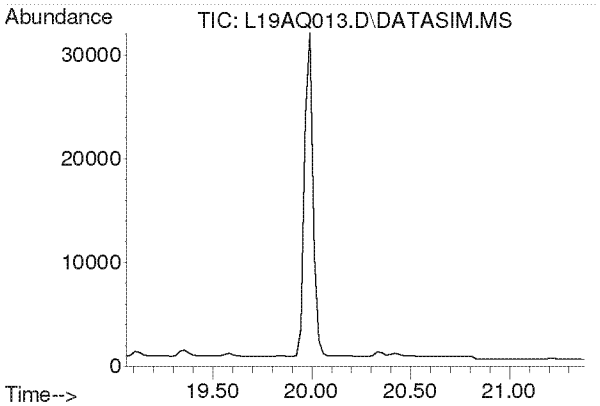
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



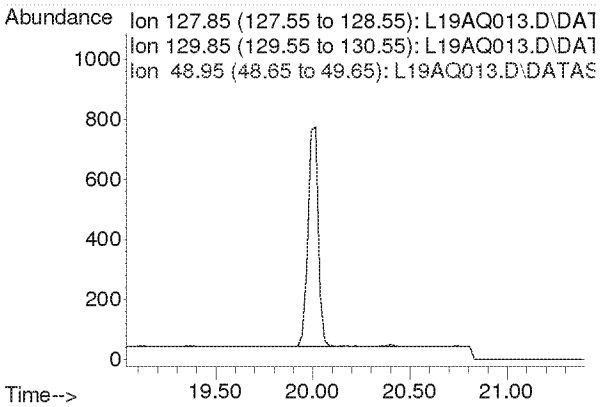


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

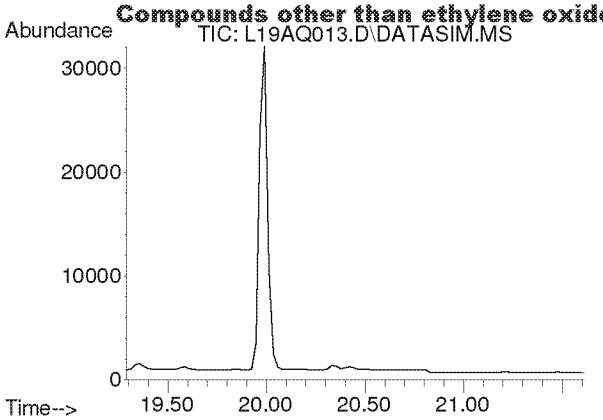
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

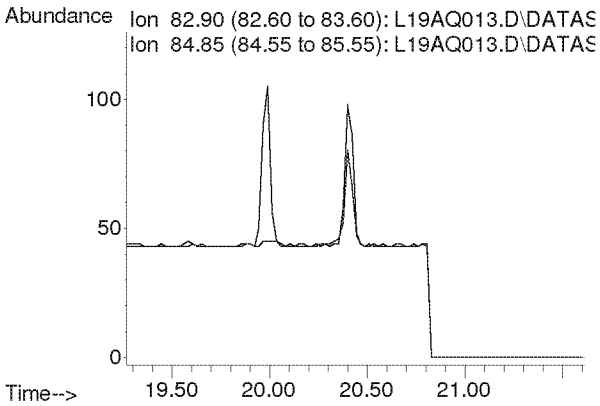


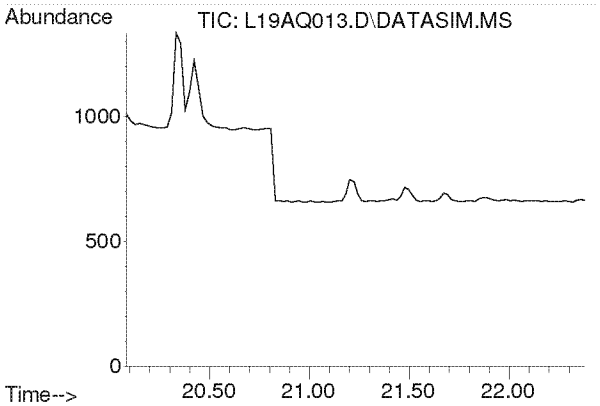
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



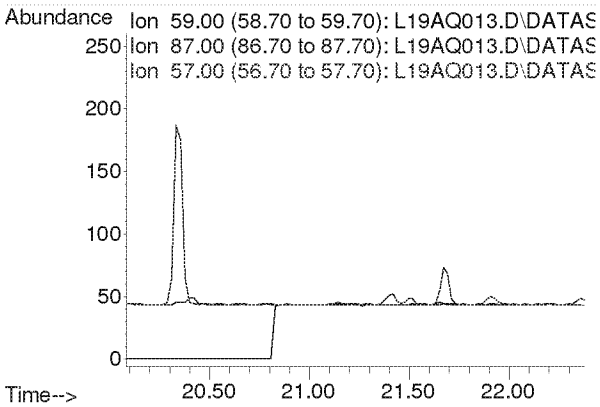


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

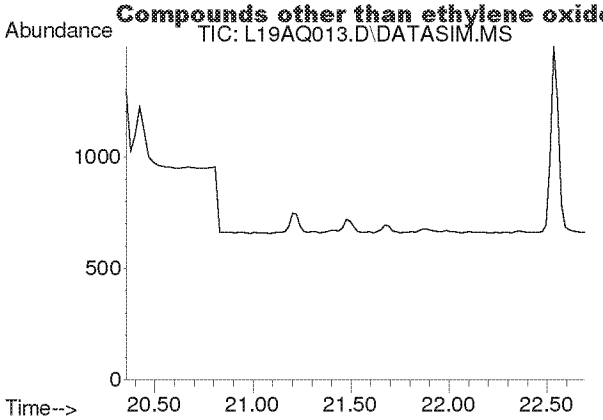
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

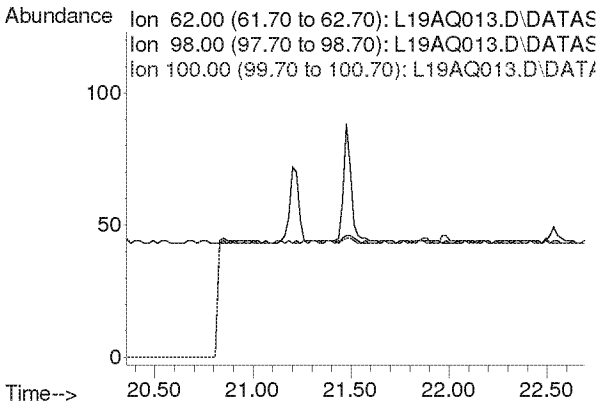


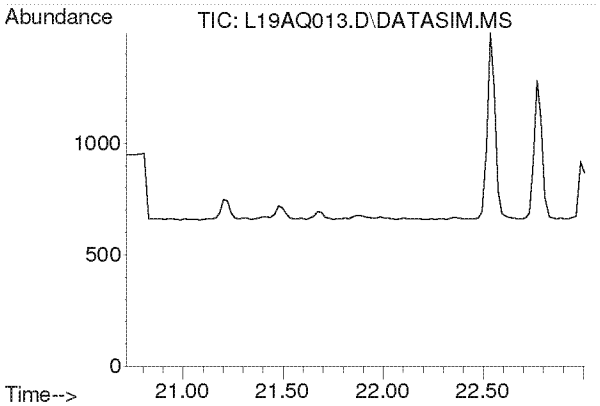
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



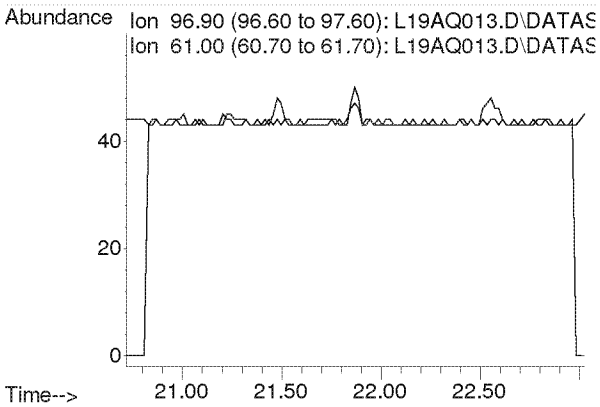


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

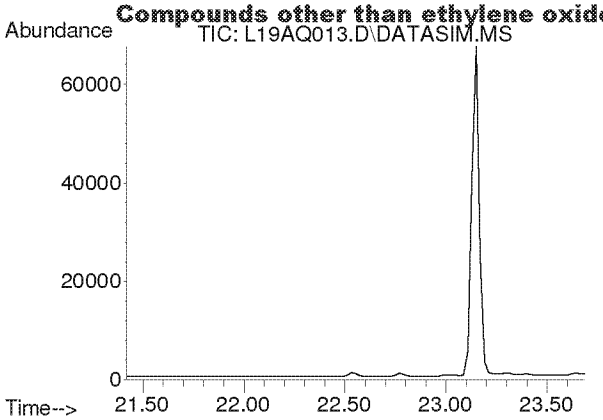
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

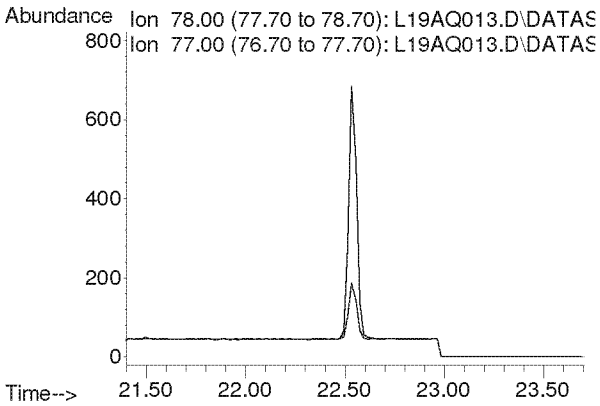


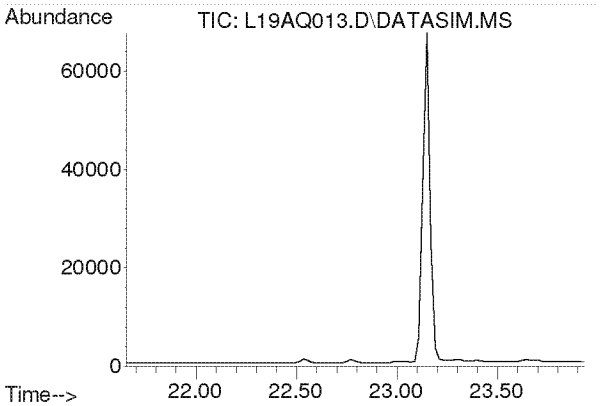
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



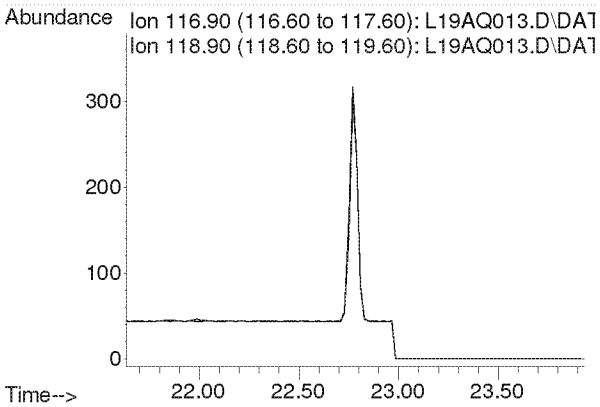


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

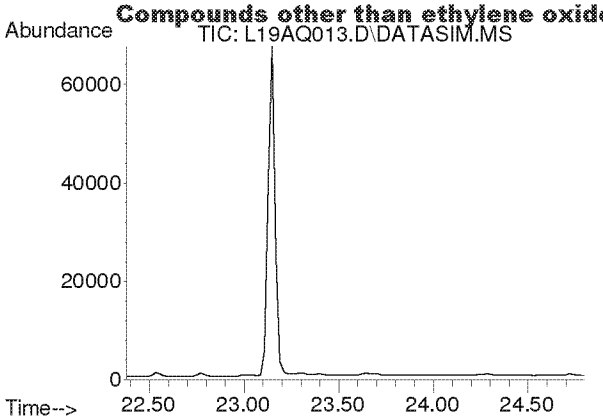
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

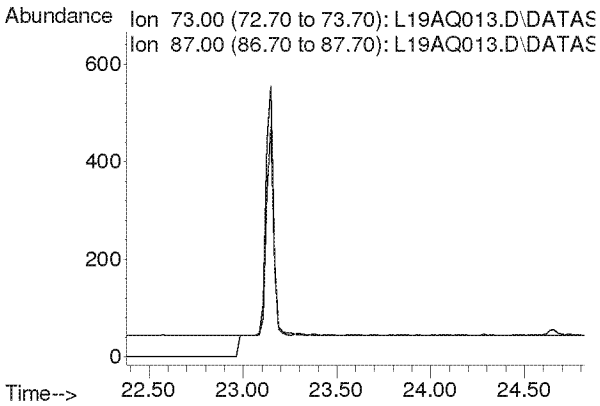


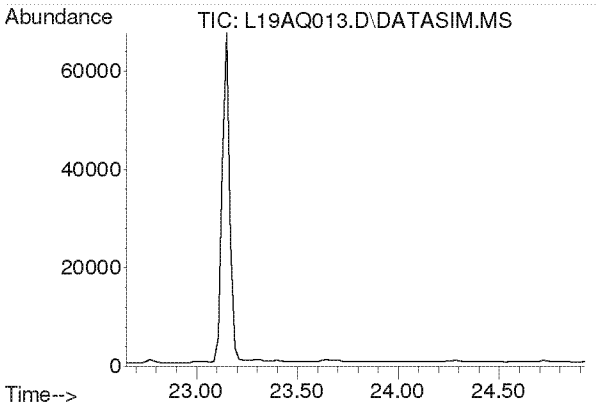
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



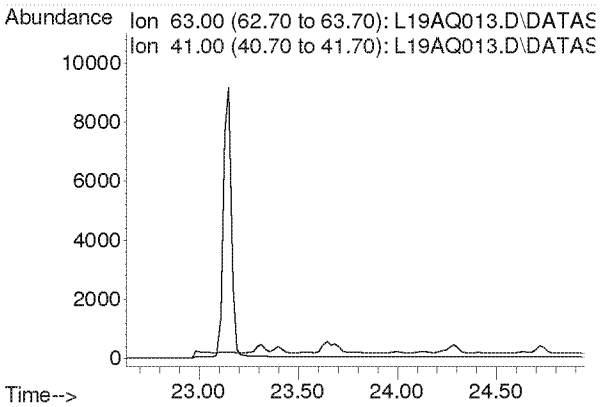


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

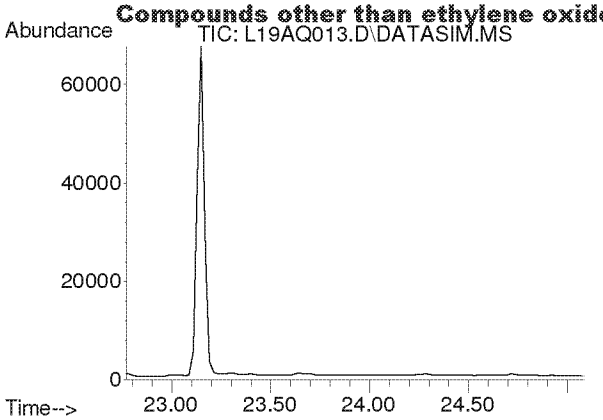
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

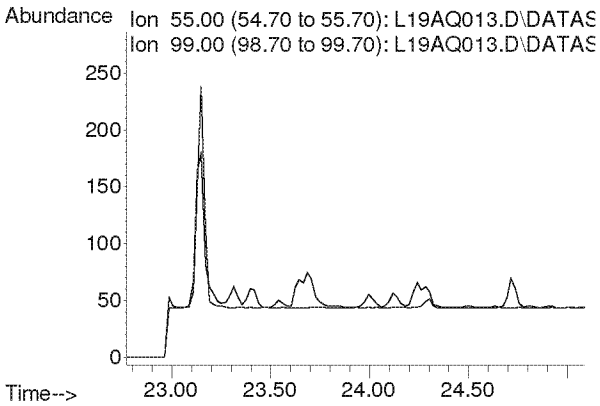


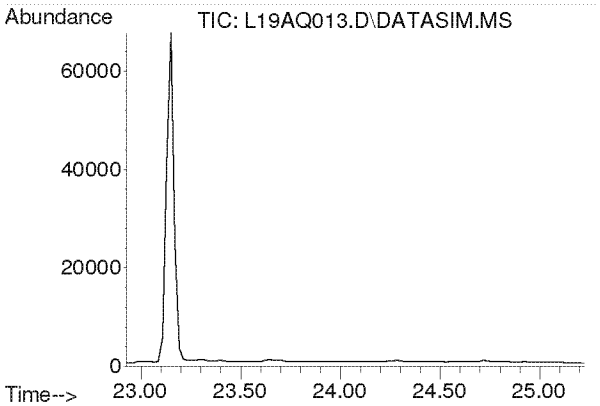
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



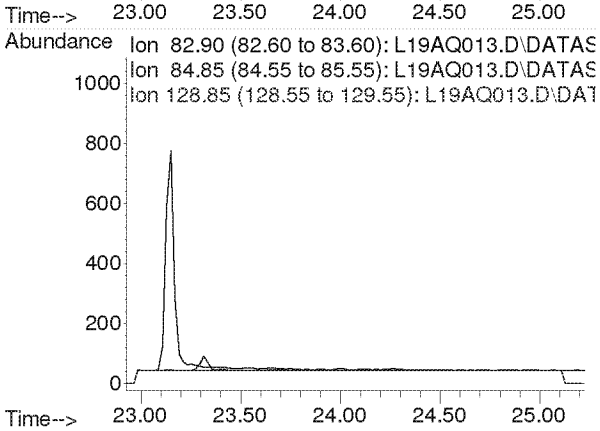


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

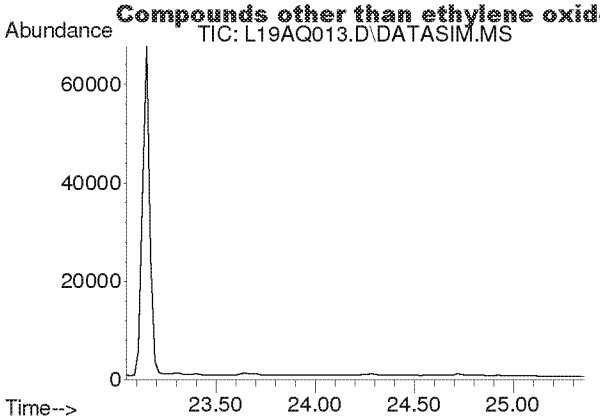
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

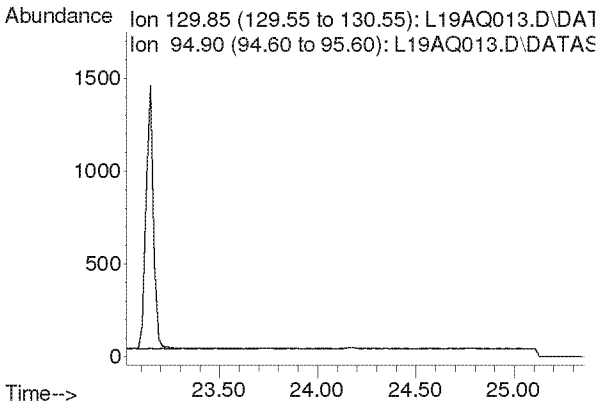


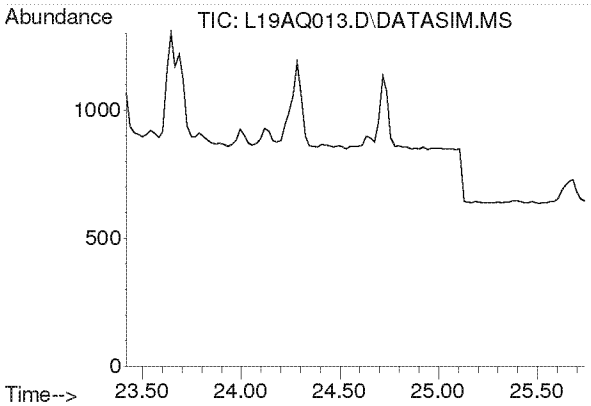
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



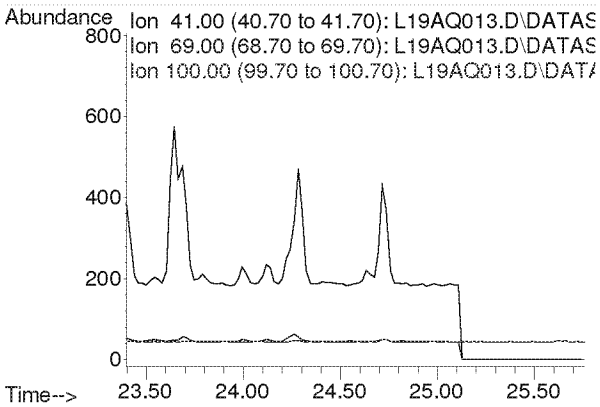


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

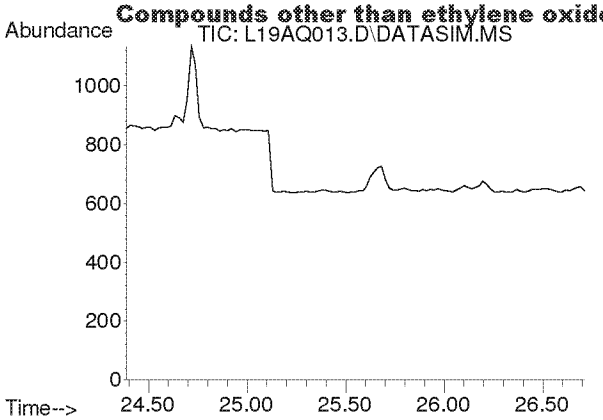
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

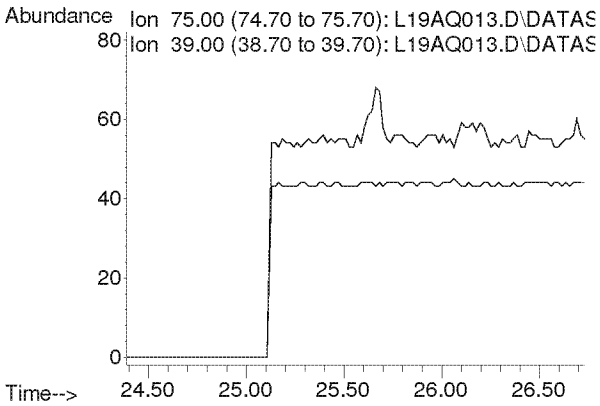


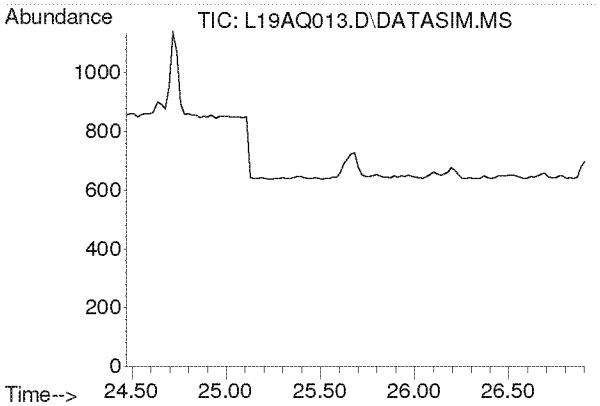
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



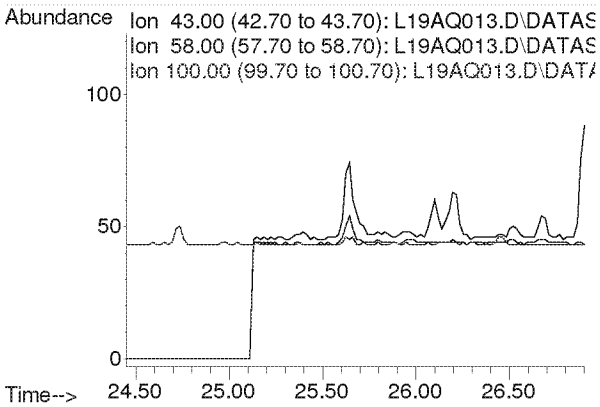


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

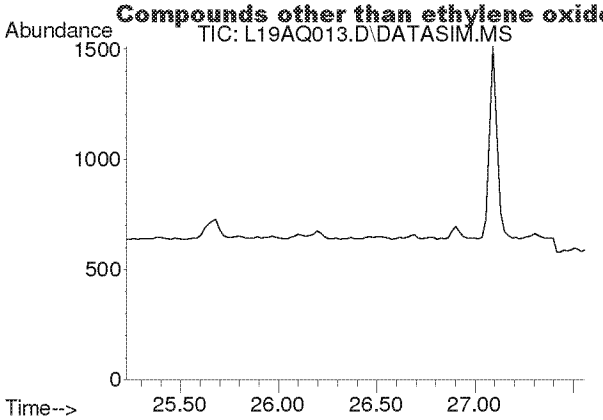
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

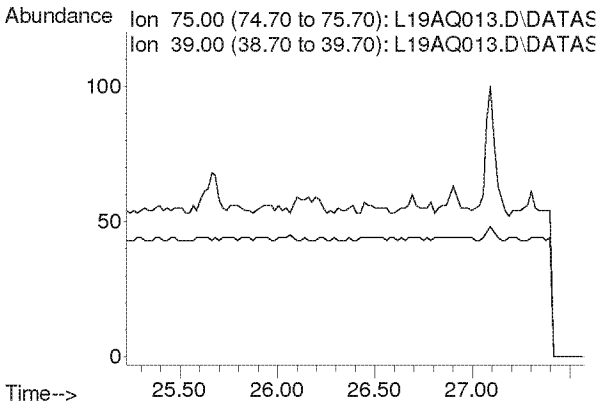


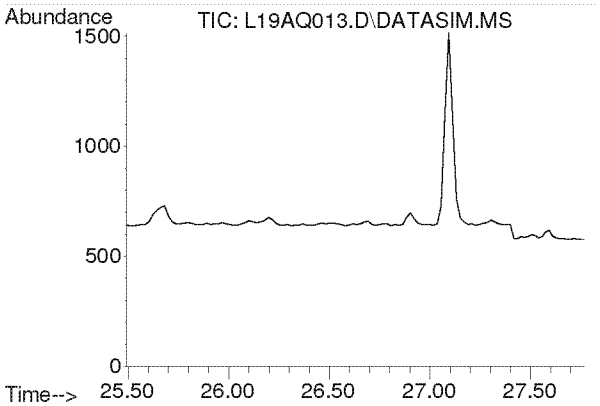
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



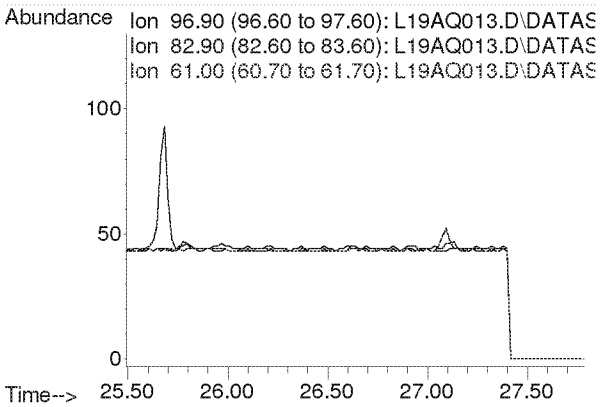


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

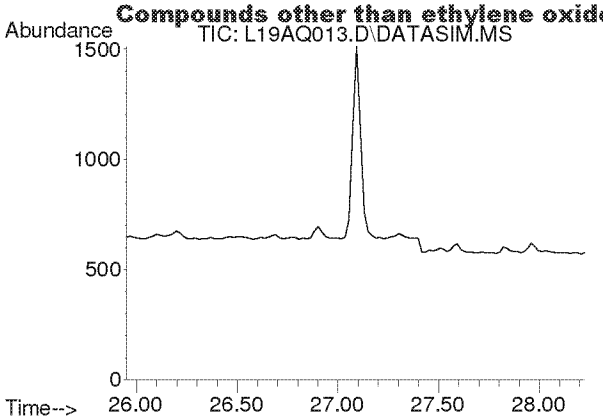
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

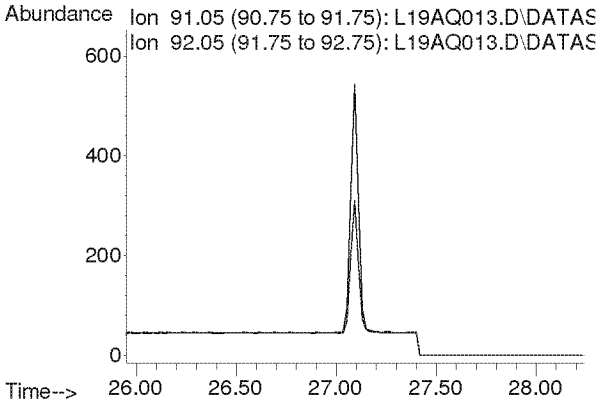


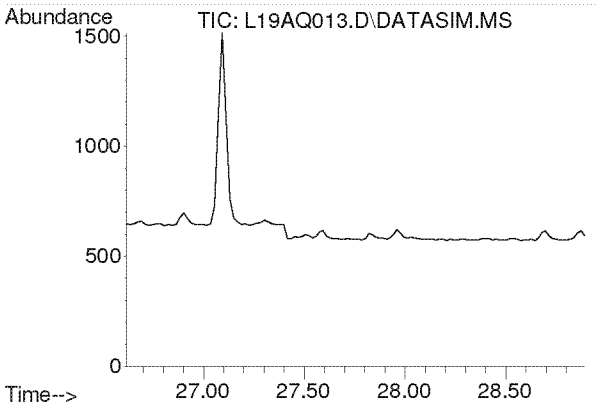
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



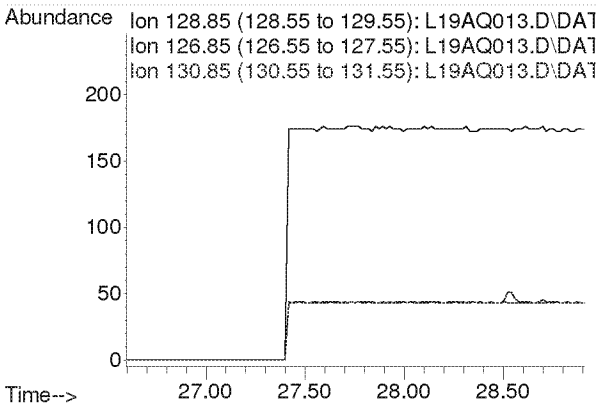


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

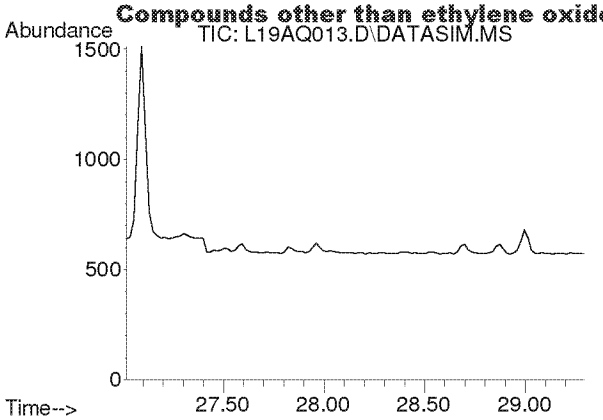
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

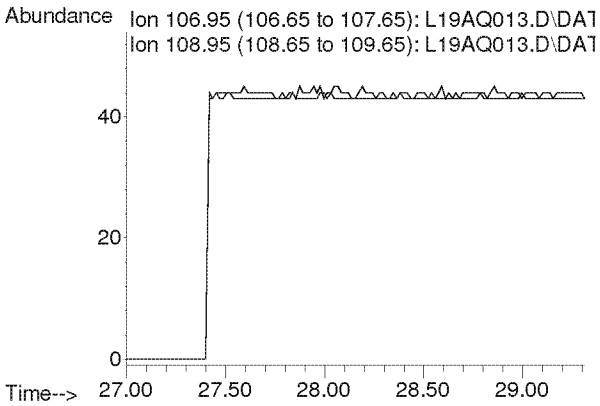


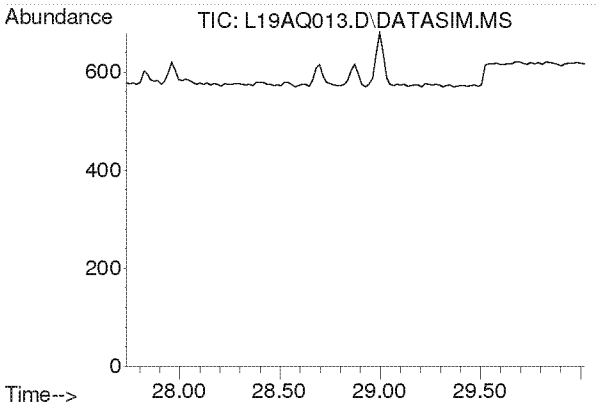
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



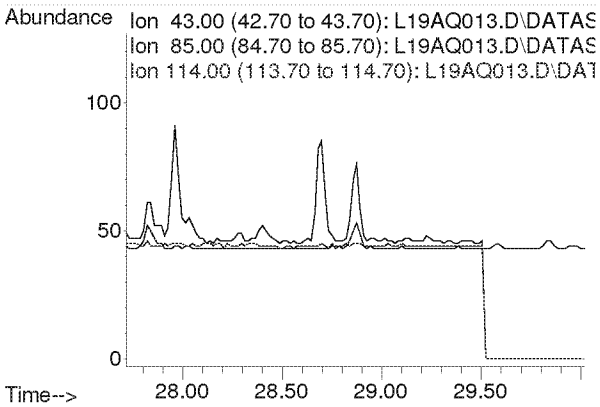


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

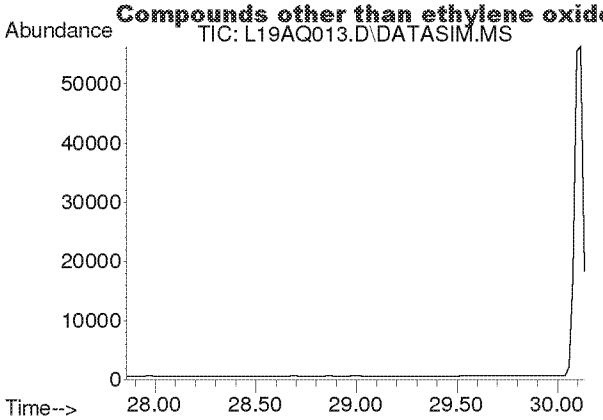
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

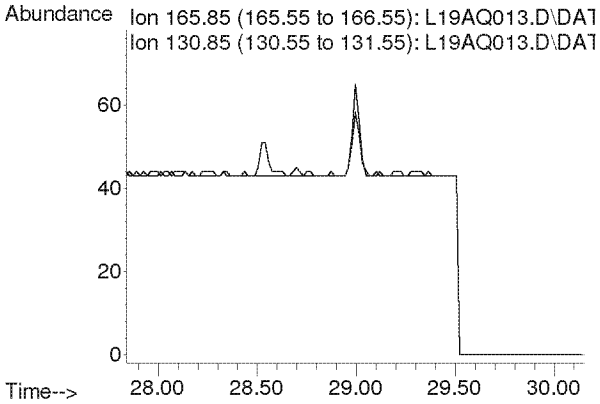


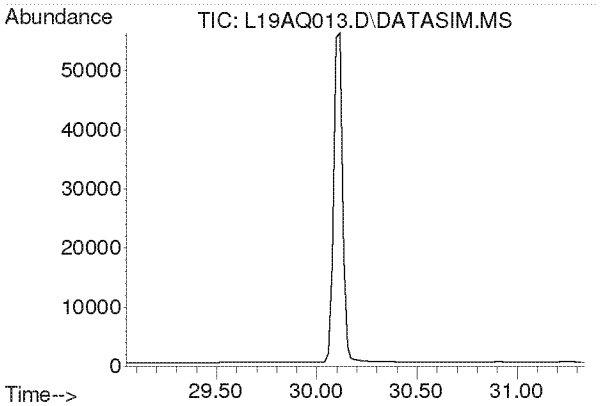
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



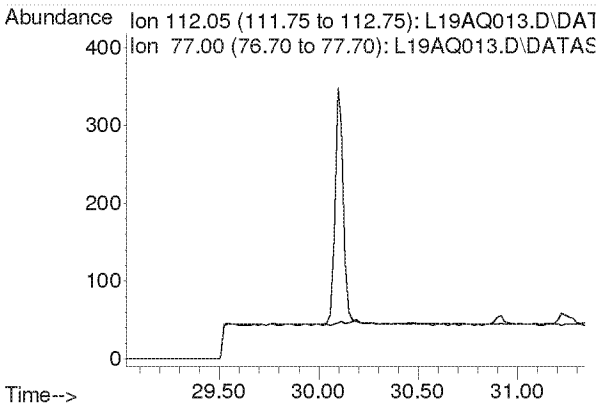


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

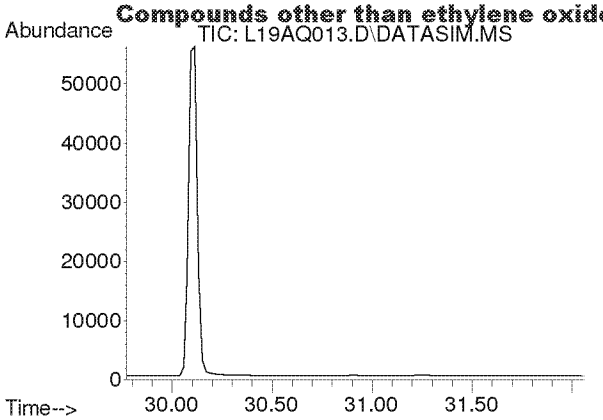
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

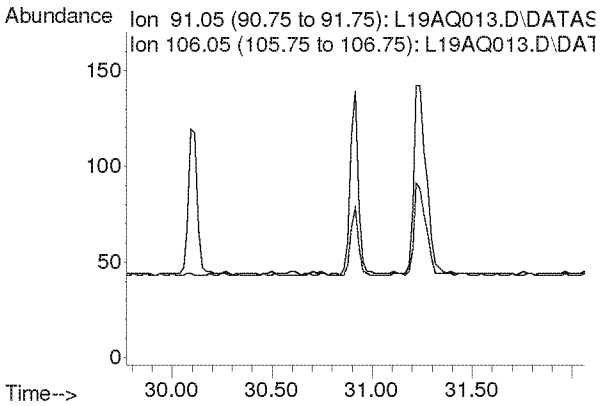


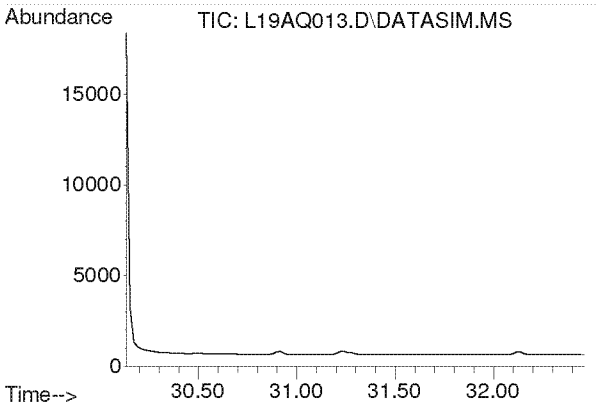
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



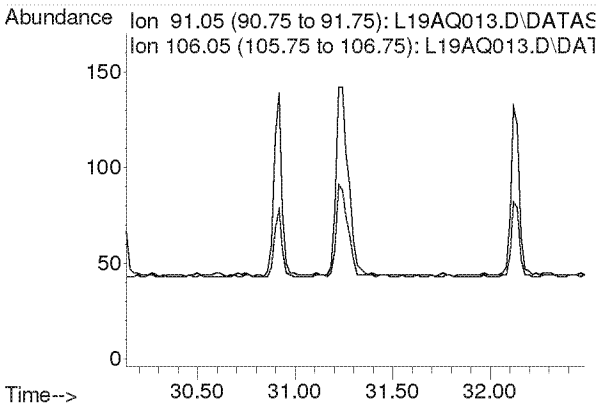


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

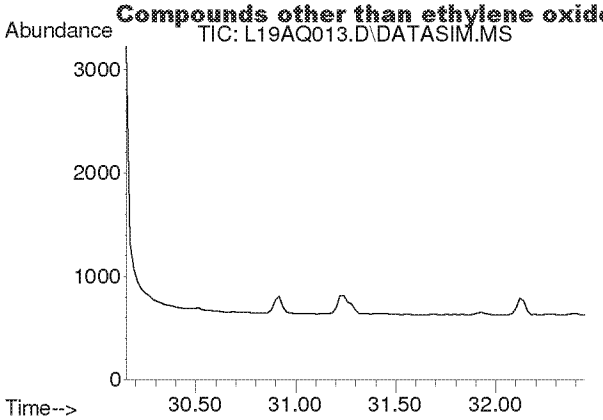
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

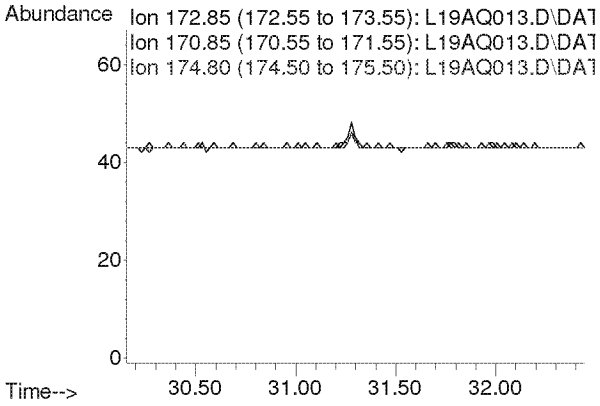


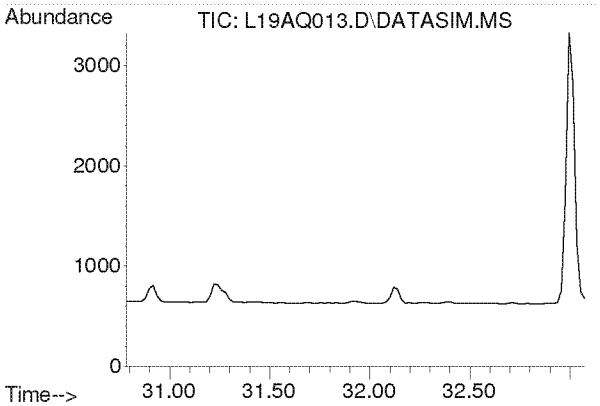
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



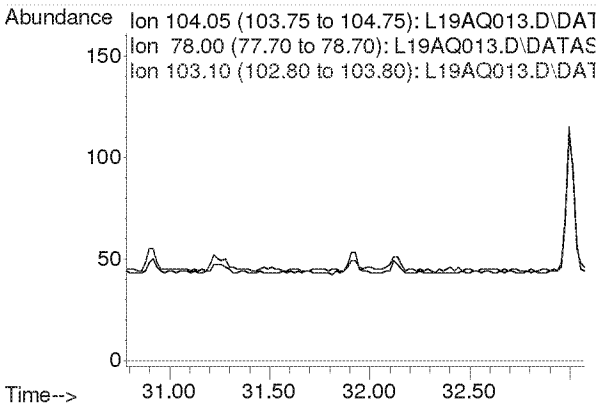


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

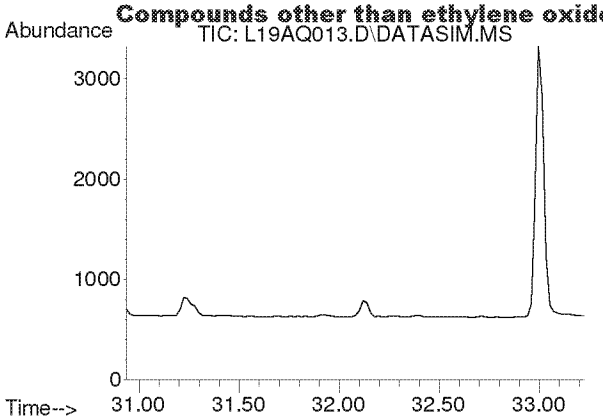
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

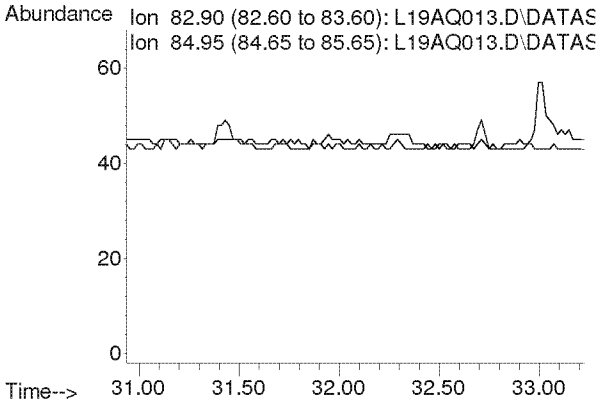


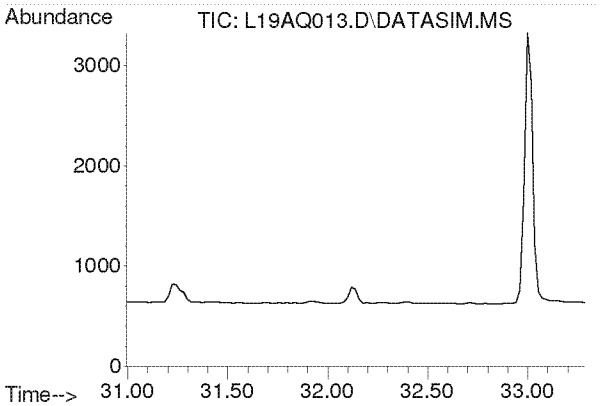
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



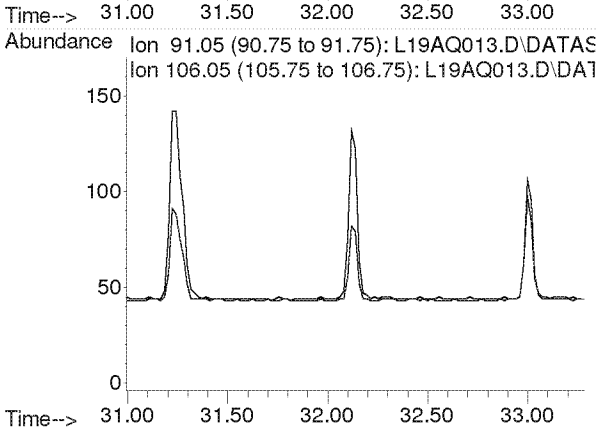


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

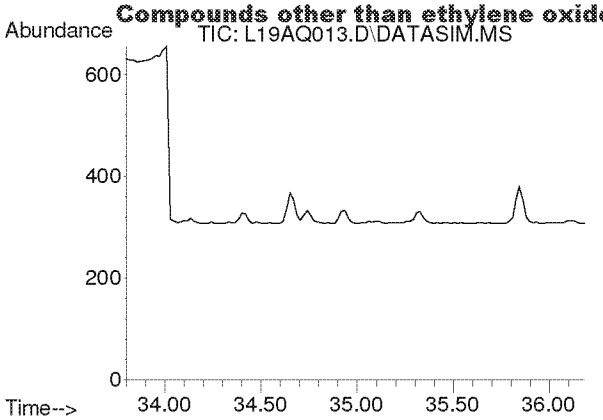
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

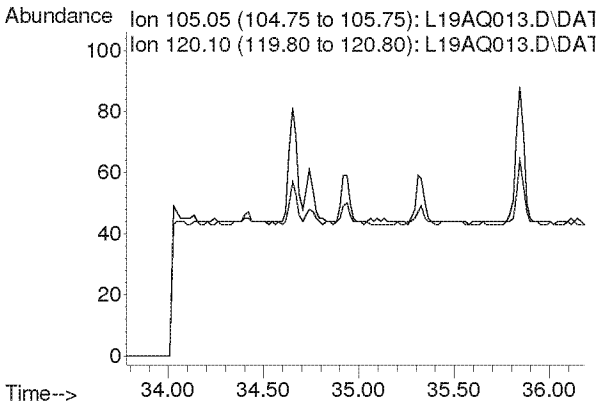


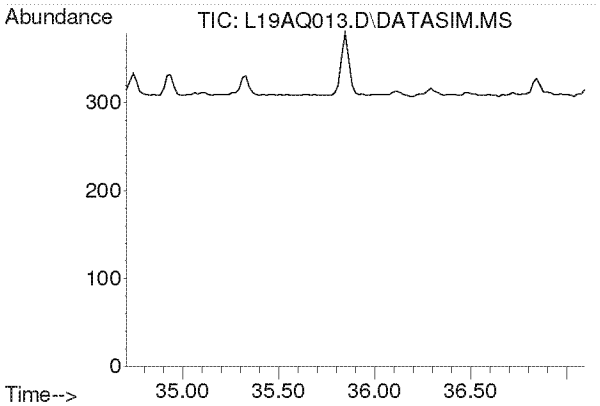
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



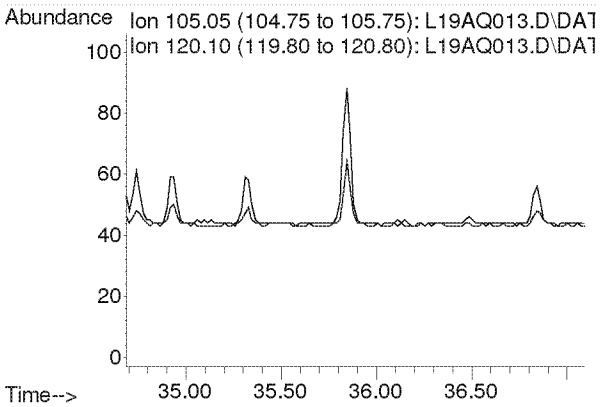


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

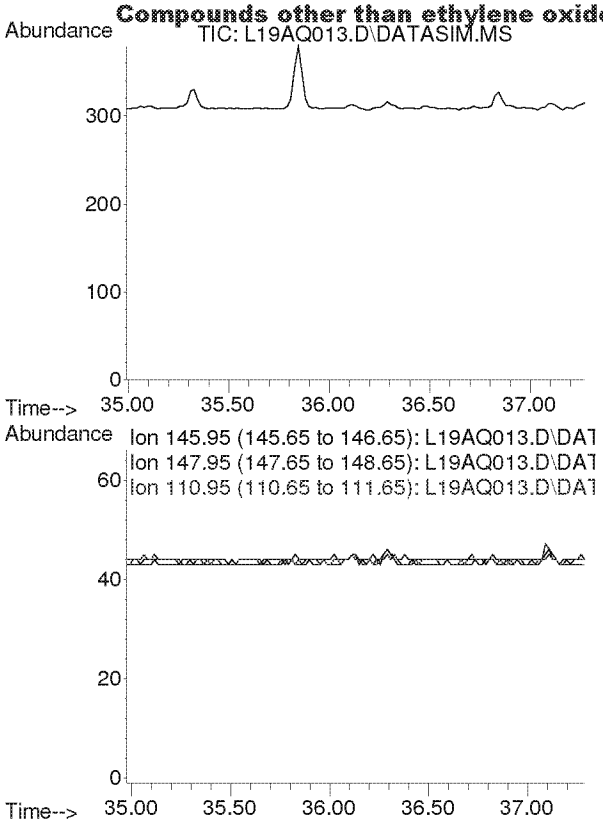
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

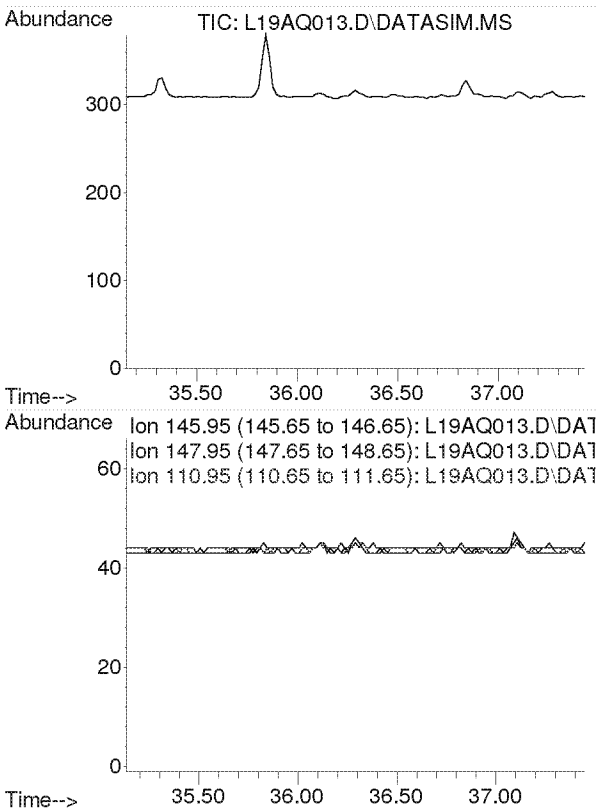


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



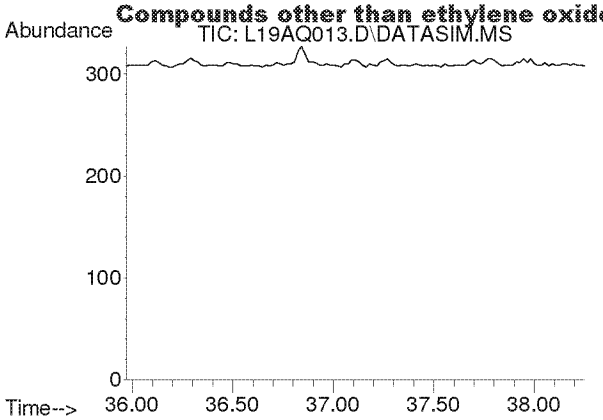
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

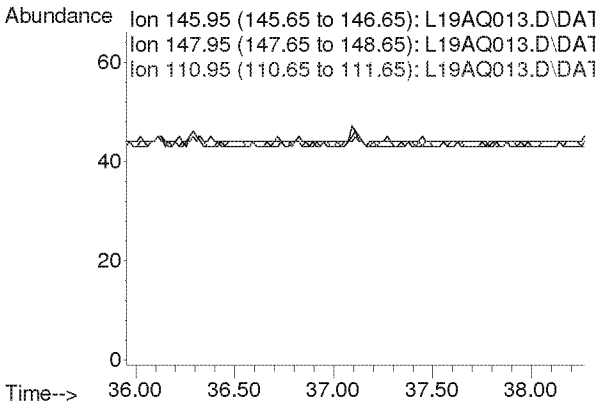


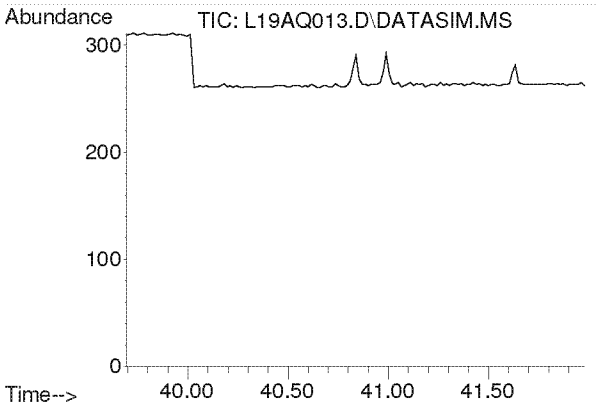
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



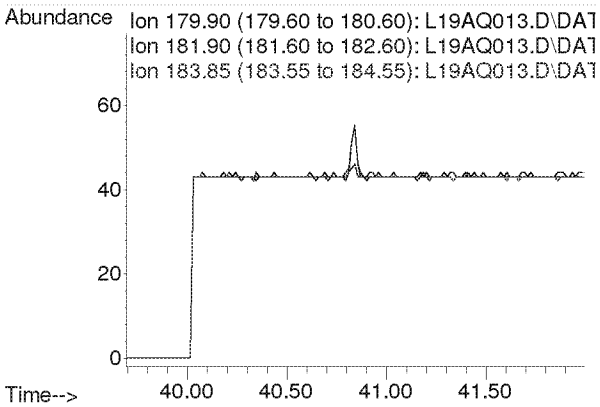


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

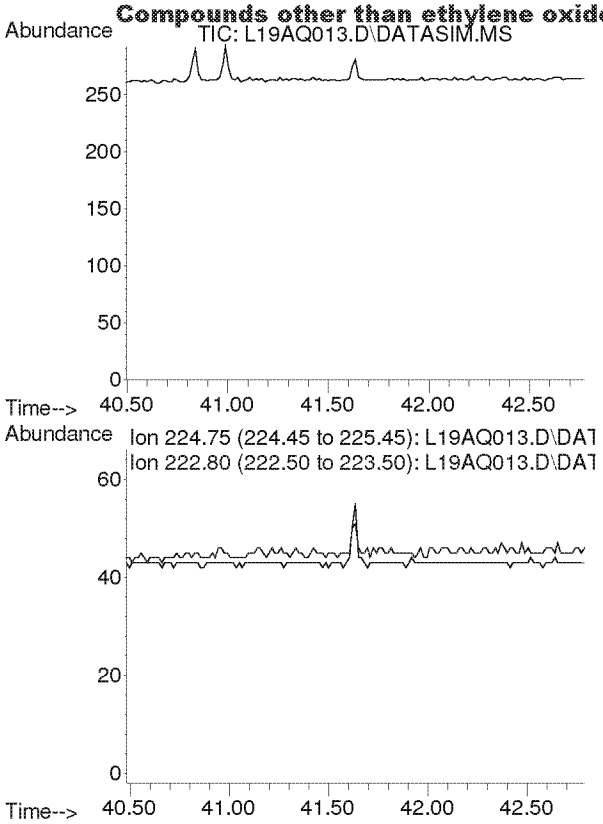
Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ013.D
Acq: 17 Jan 2019 11:39 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ014.D
Acq On : 18 Jan 2019 12:39 am
Operator : MAH
Sample : 9011101-04
Misc : WEST NEIGHBORHOOD 1/10/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 07:53:03 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	55918	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	141344	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.114	117	105293	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.513	29	183m	0.0634 ppbv	
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantification Report 1 (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ014.D
Acq On : 18 Jan 2019 12:39 am
Operator : MAH
Sample : 9011101-04
Misc : WEST NEIGHBORHOOD 1/10/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 07:53:03 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

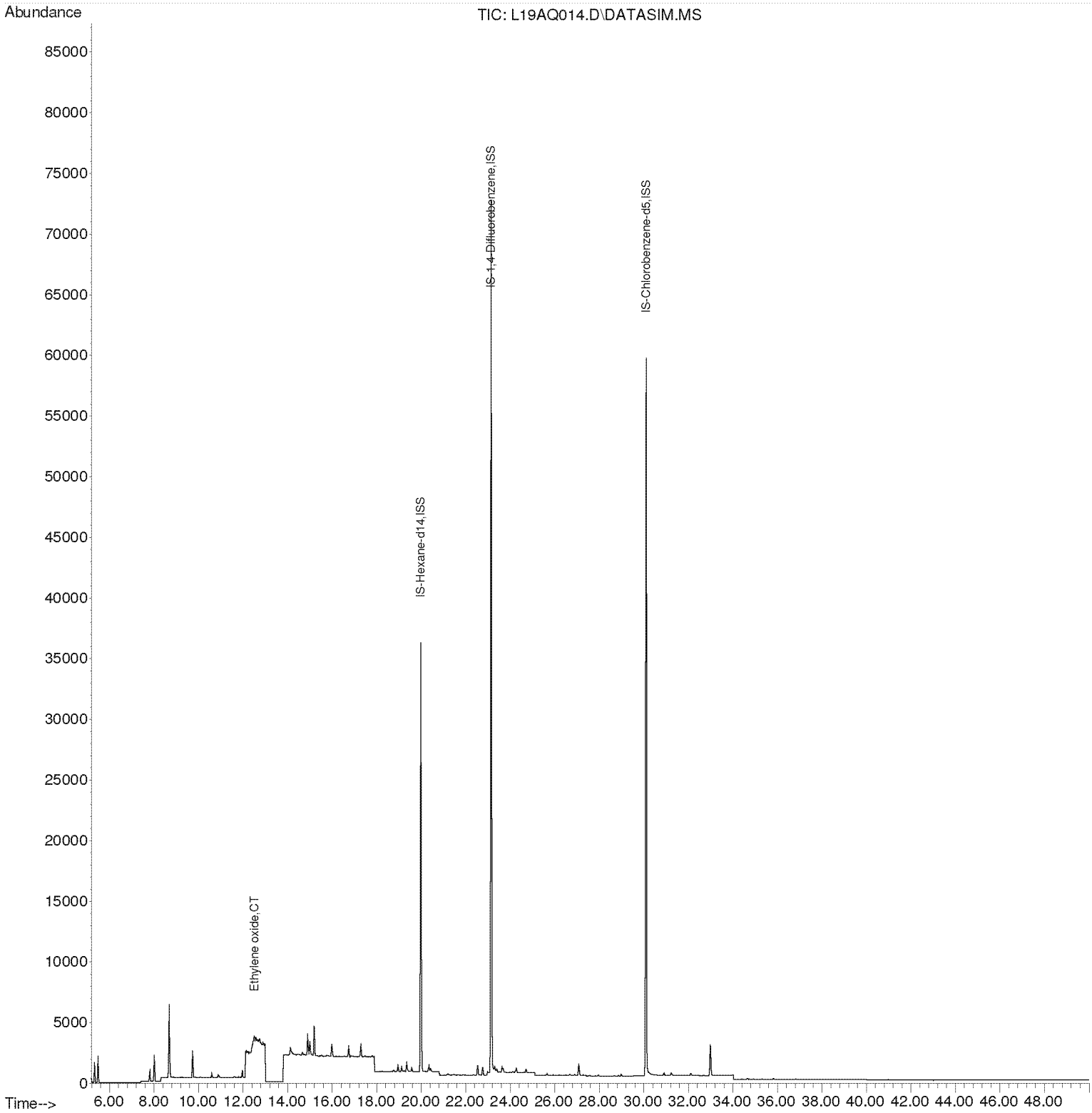
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00380

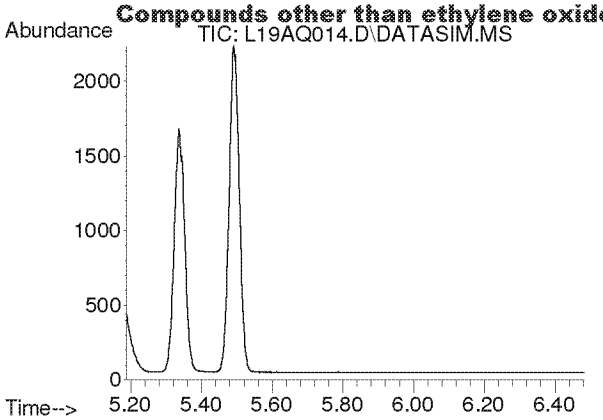
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ014.D
Acq On : 18 Jan 2019 12:39 am
Operator : MAH
Sample : 9011101-04
Misc : WEST NEIGHBORHOOD 1/10/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 07:35:57 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



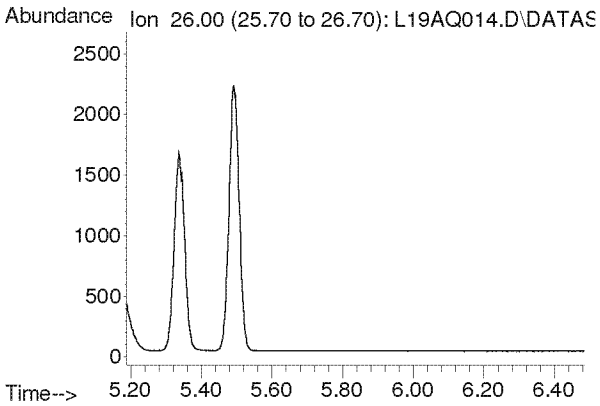
Compounds other than ethylene oxide were not quantitated.

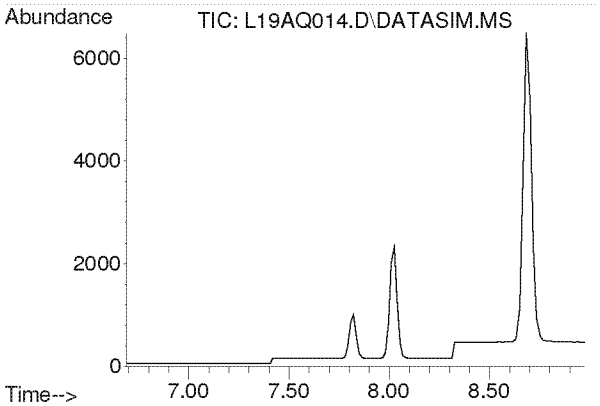


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 26



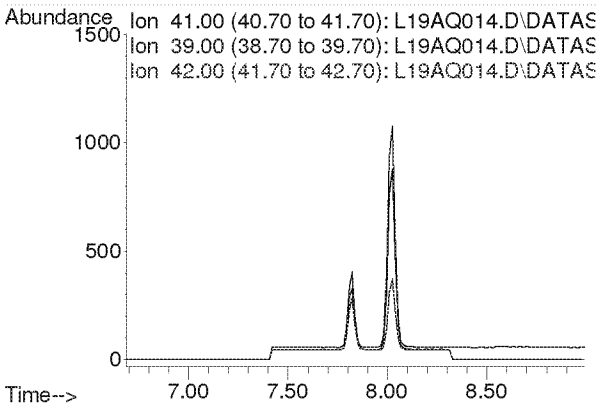


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

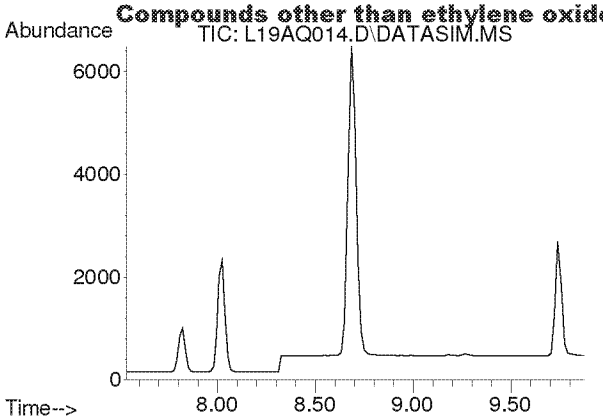
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

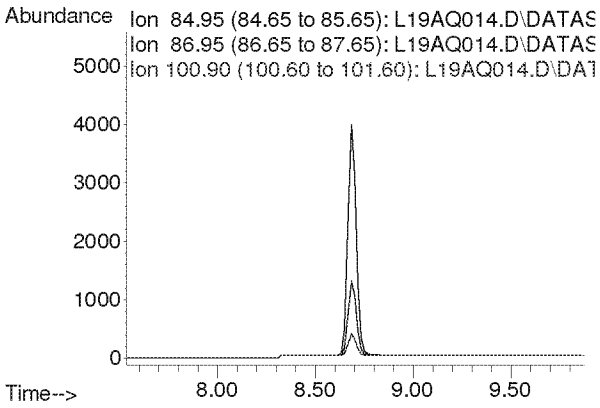


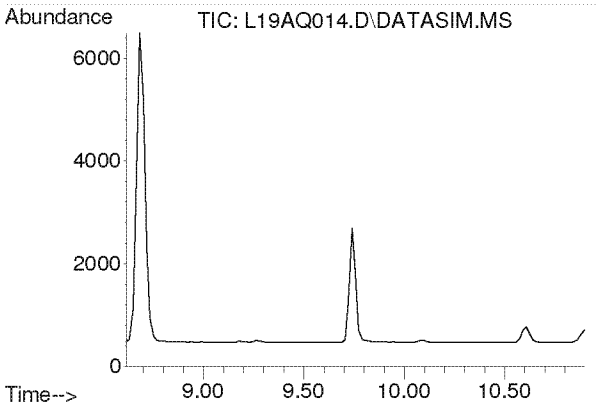
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



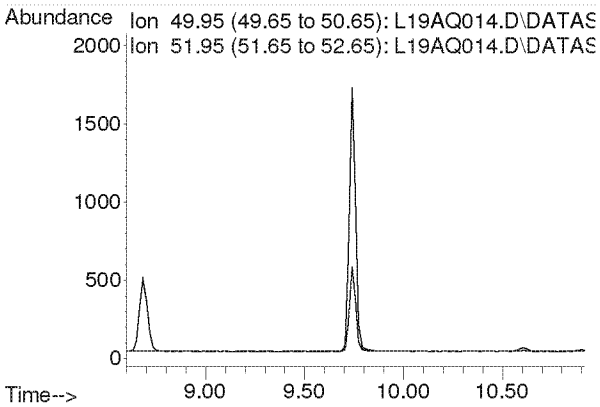


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

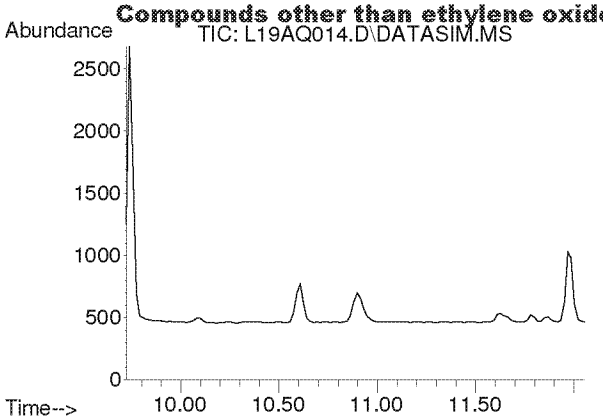
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

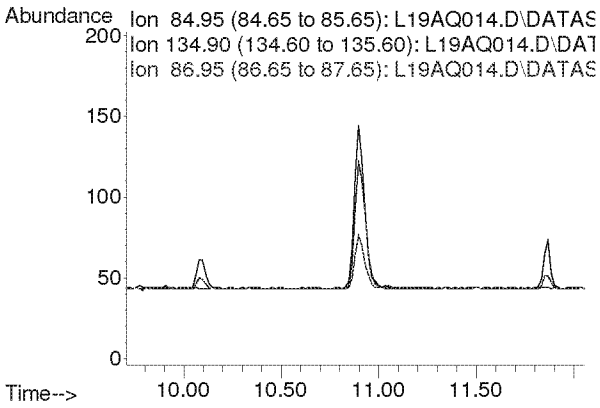


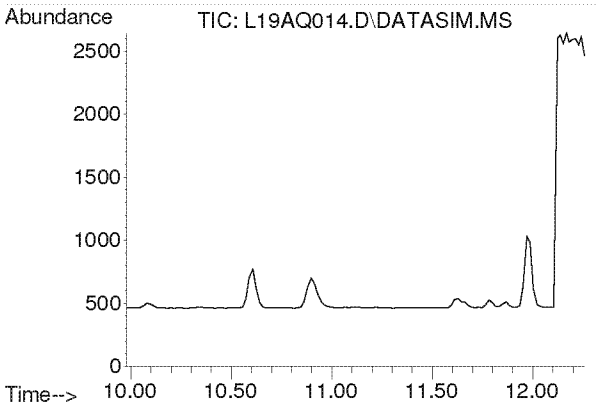
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



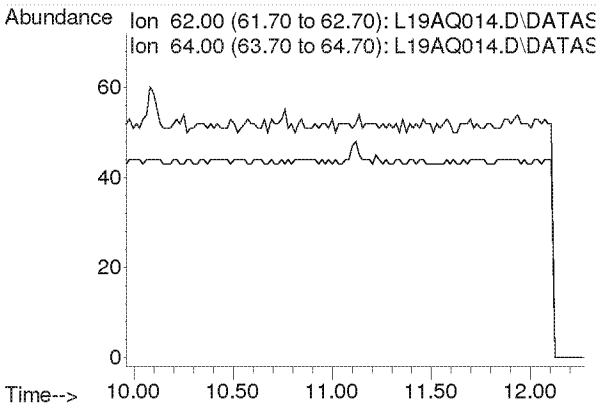


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

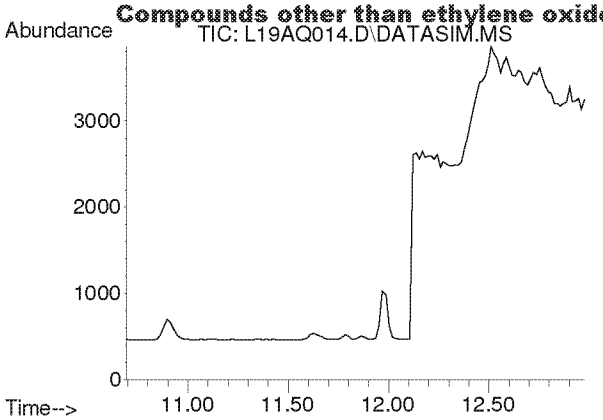
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

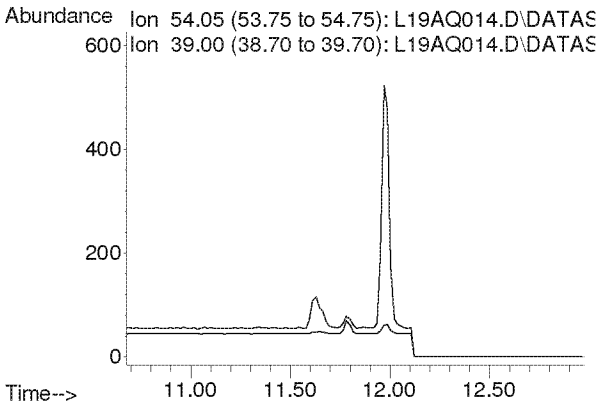


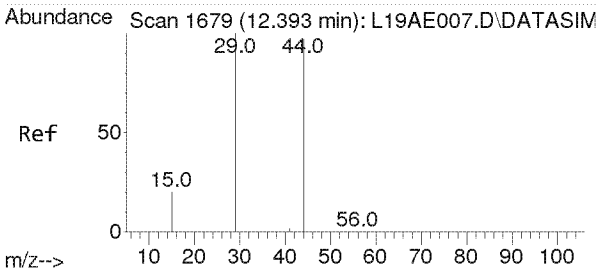
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

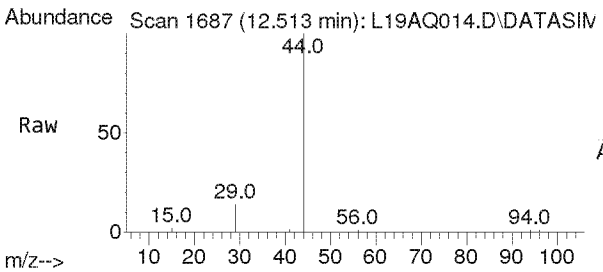


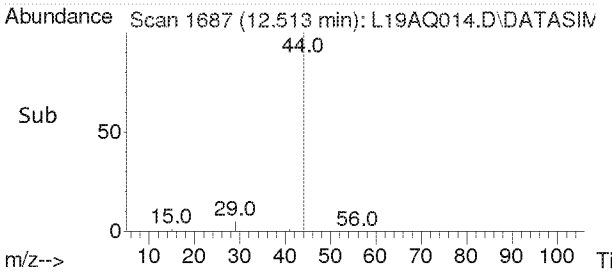


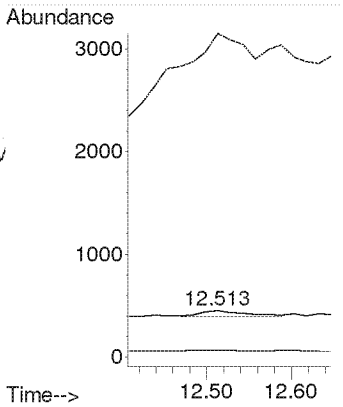
#9
Ethylene oxide
Concen: 0.063 ppbv m
RT: 12.513 min Scan# 1687
Delta R.T. 0.120 min
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 29 Resp: 183

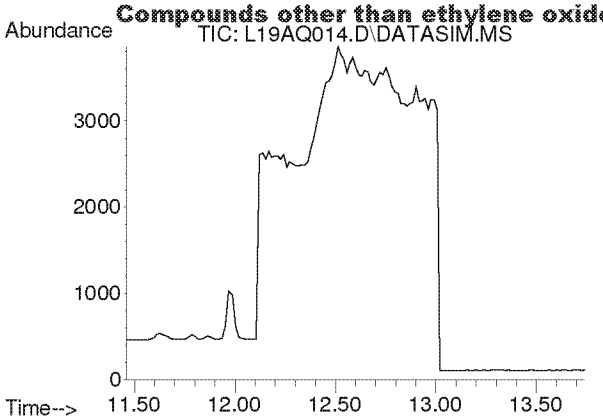
Ion	Ratio	Lower	Upper
29	100		
15	0.0	15.4	23.0#
44	6125.1	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

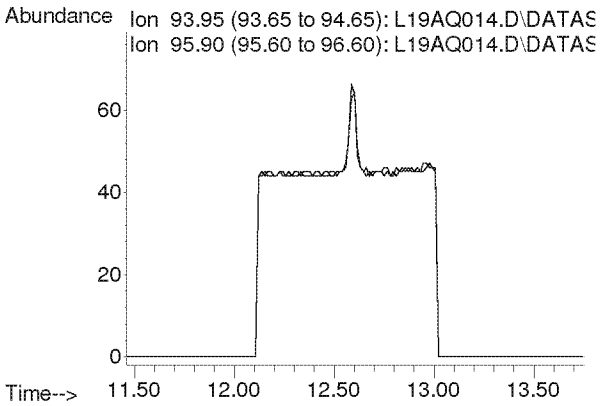


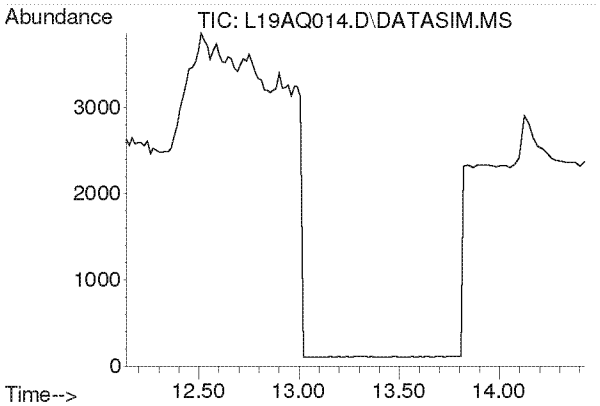
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



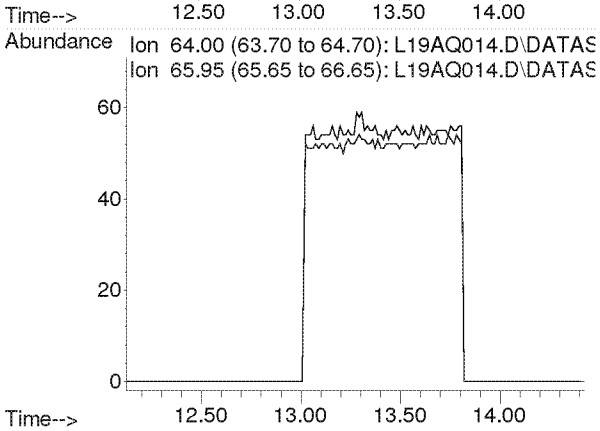


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

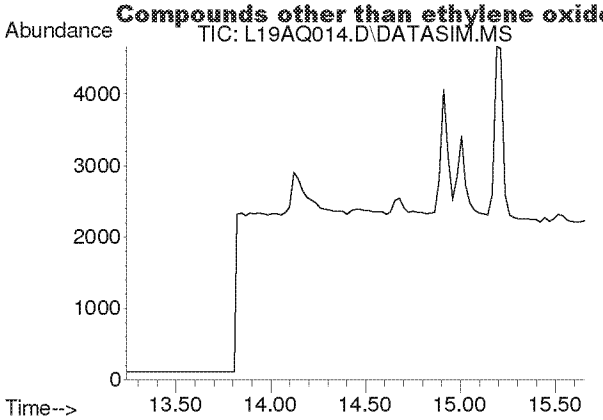
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

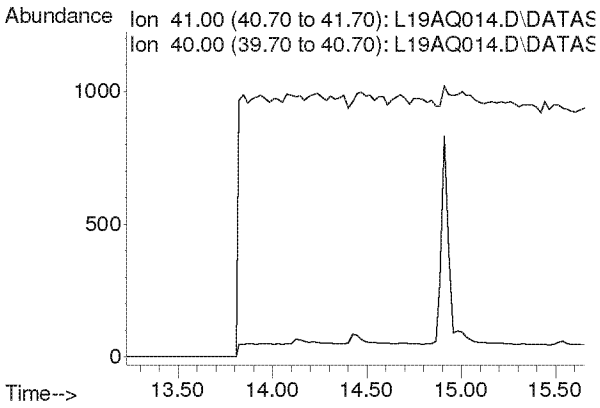


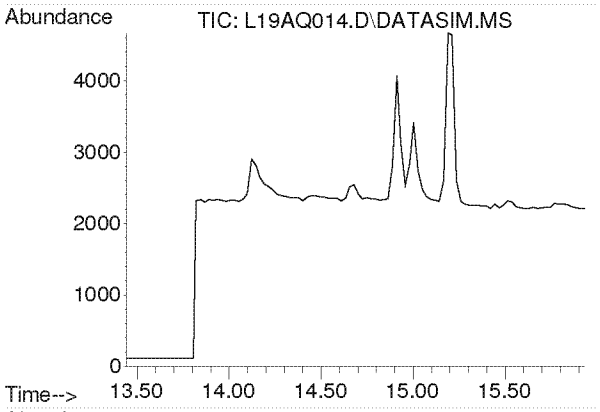
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



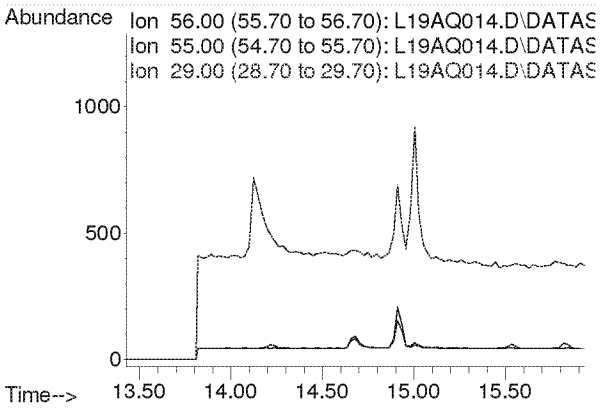


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

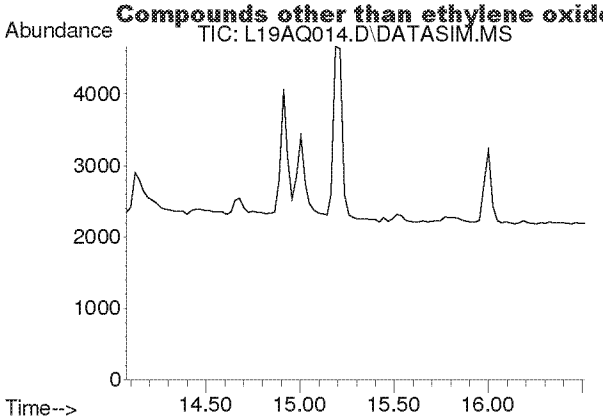
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

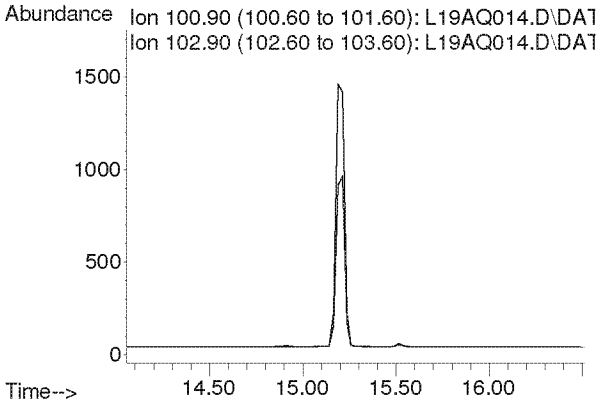


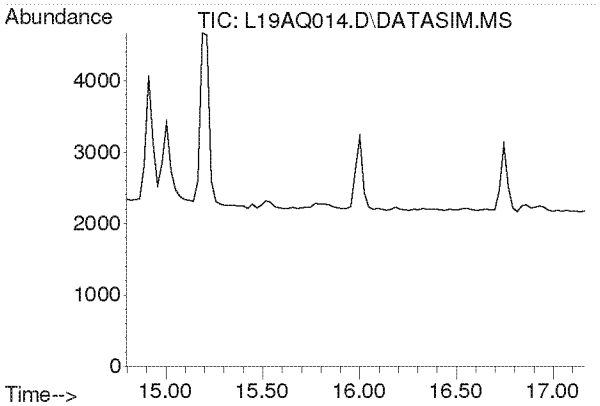
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



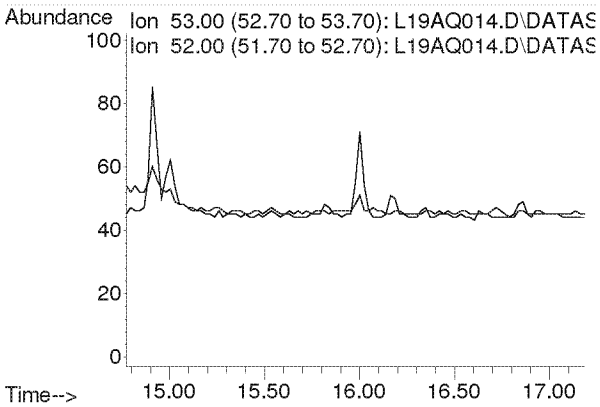


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

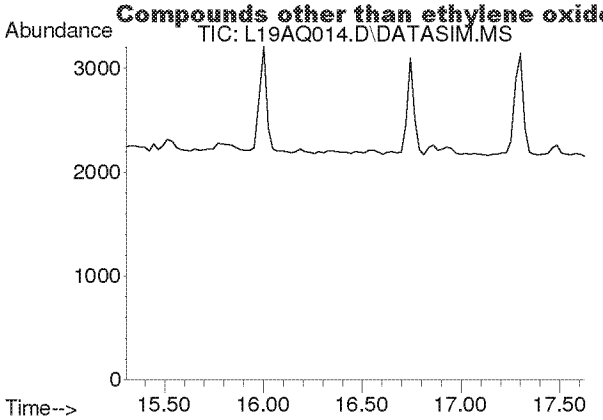
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

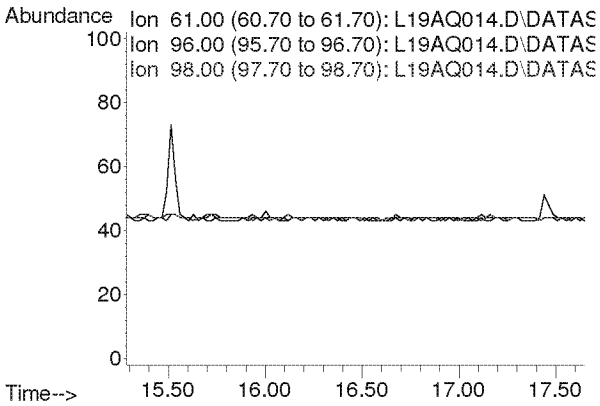


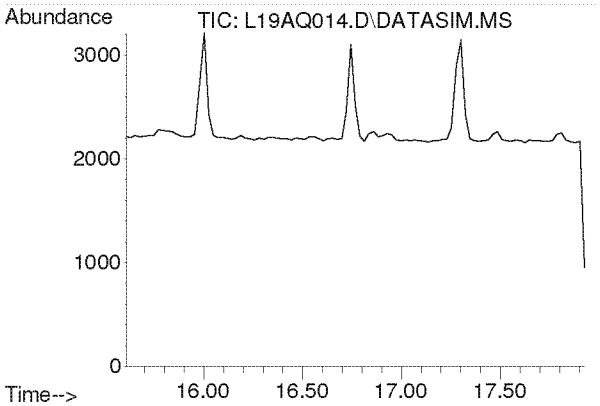
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



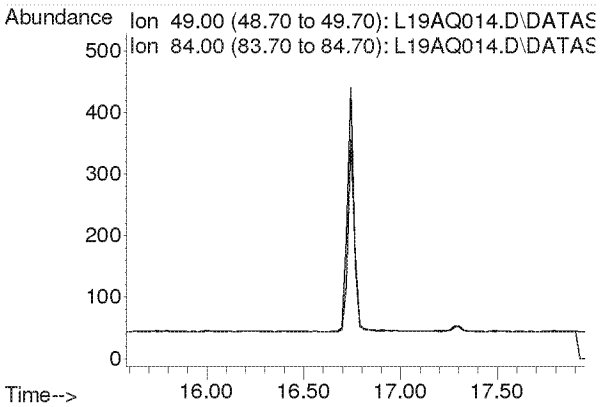


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

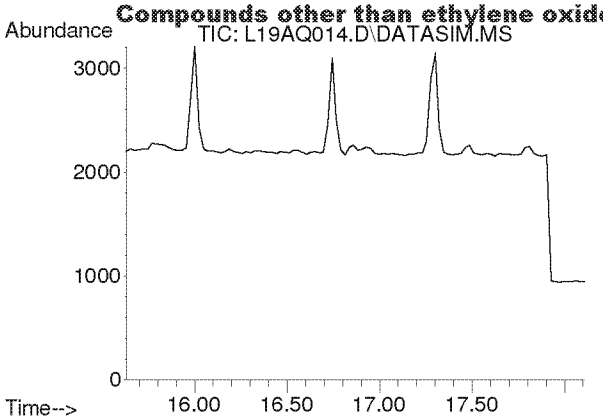
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

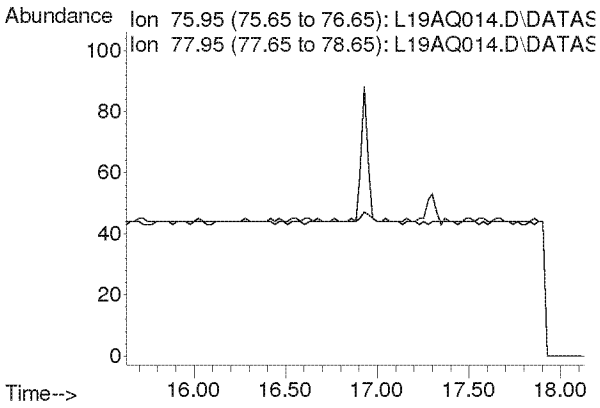


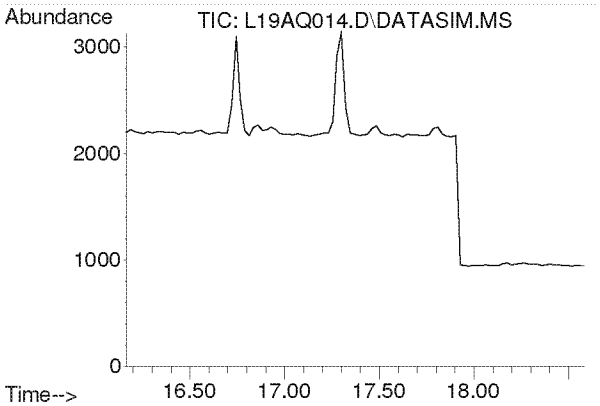
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



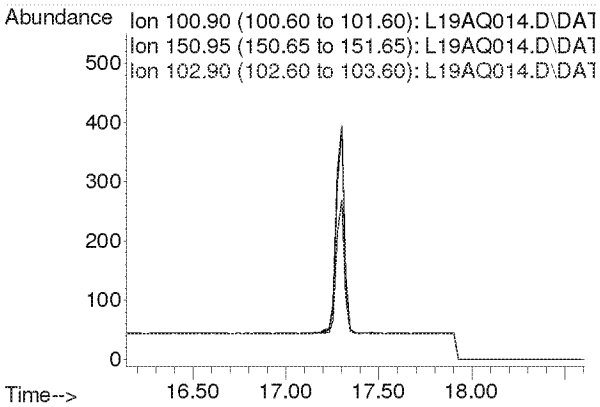


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

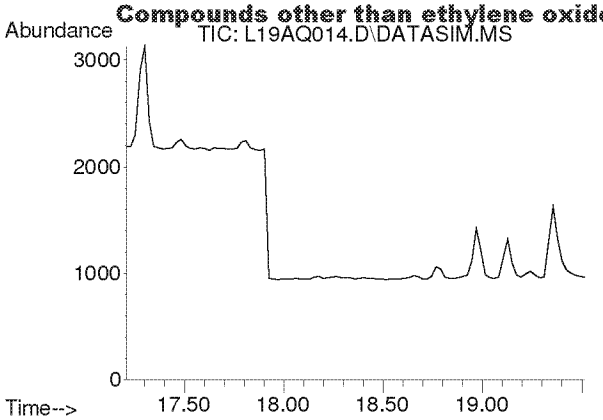
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

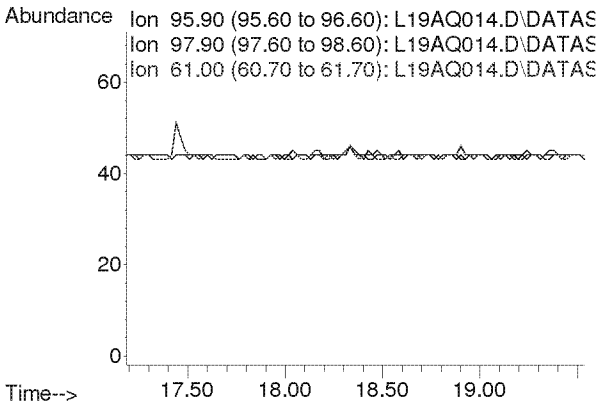


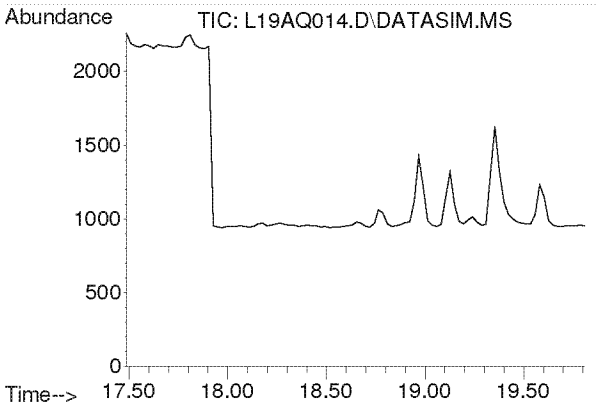
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



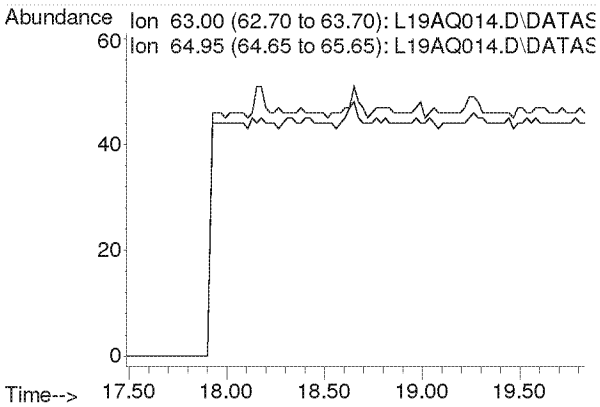


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

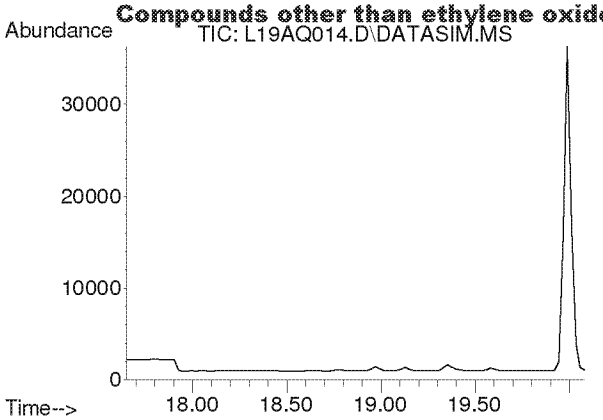
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

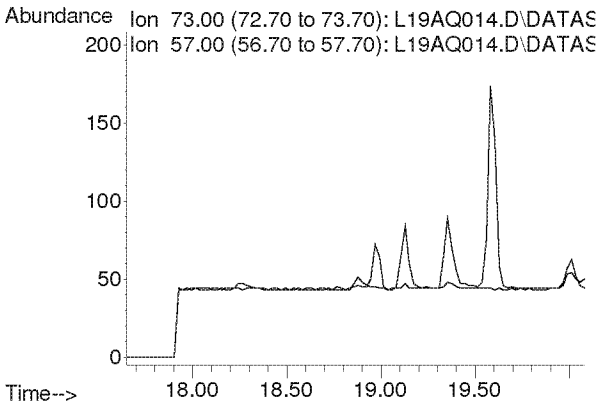


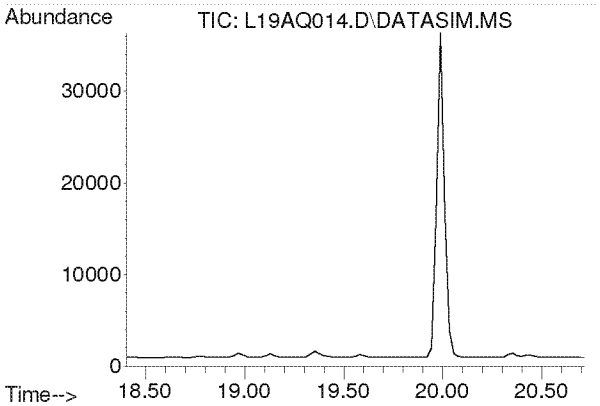
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



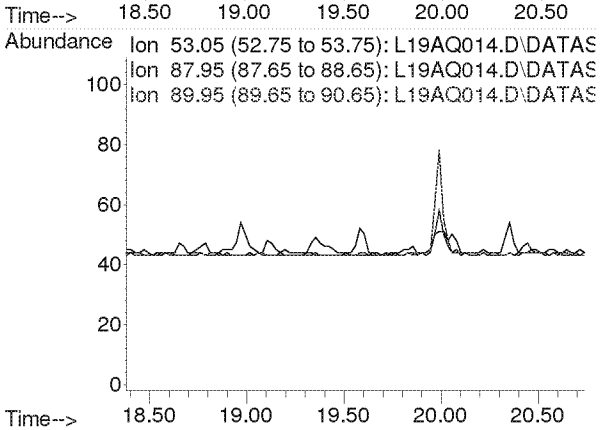


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

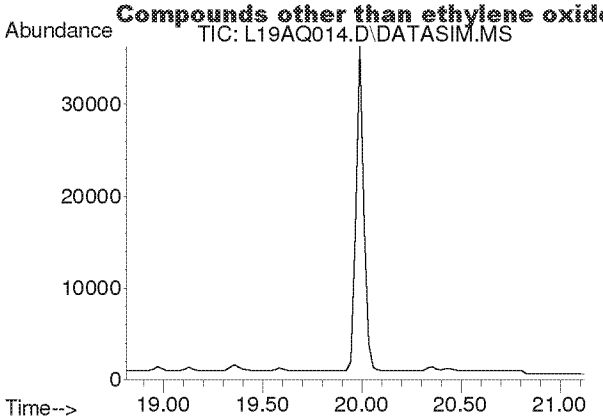
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

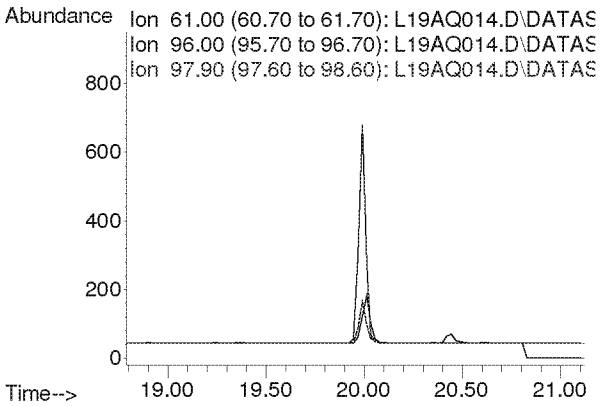


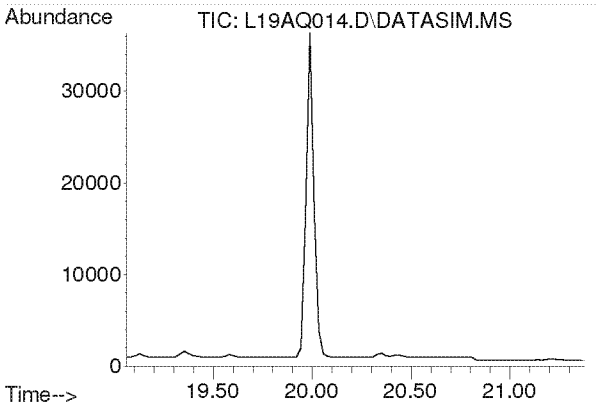
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



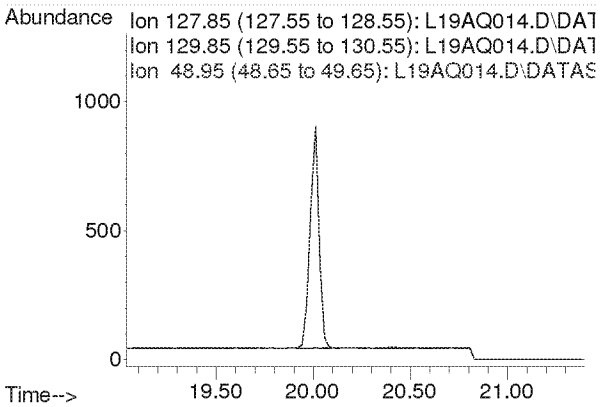


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

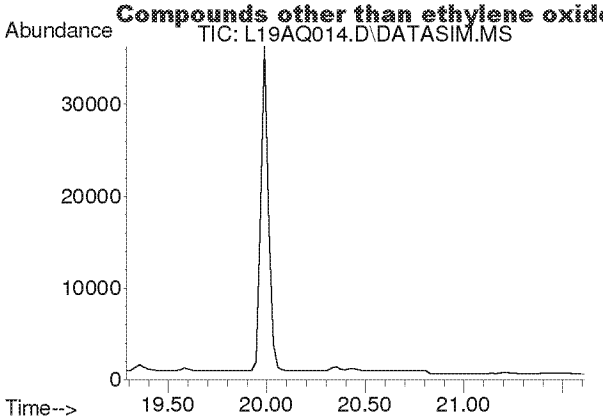
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

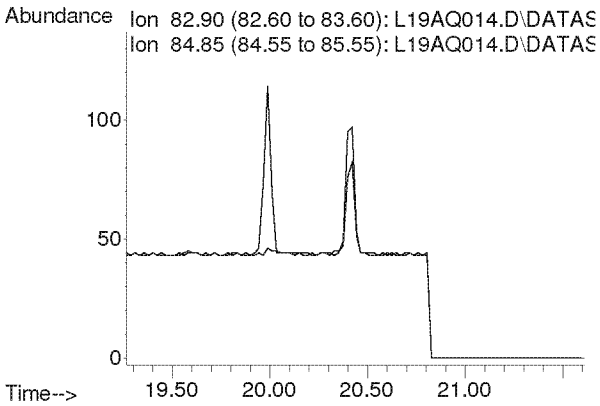


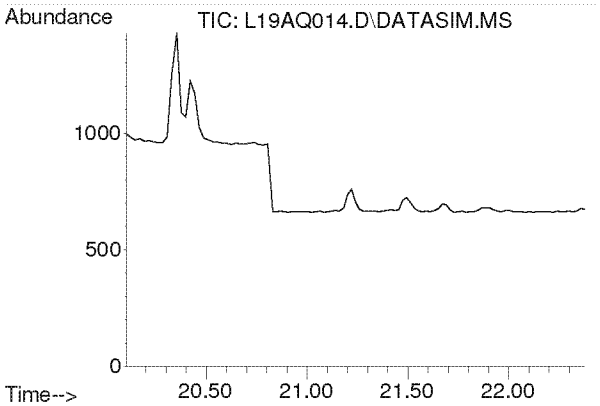
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



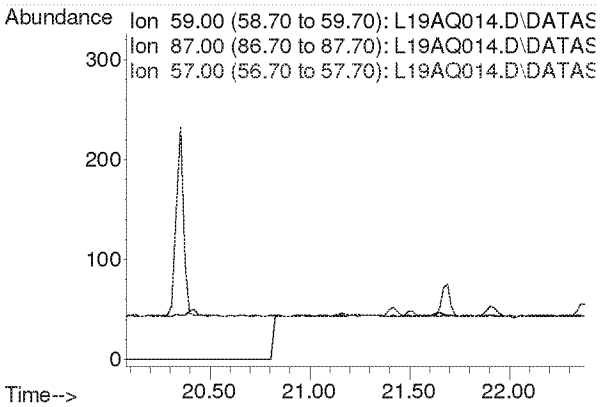


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

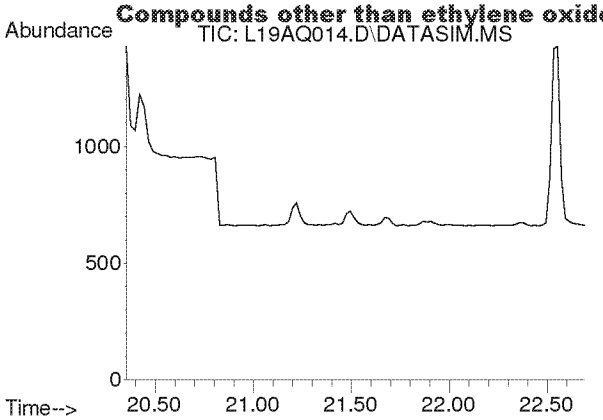
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

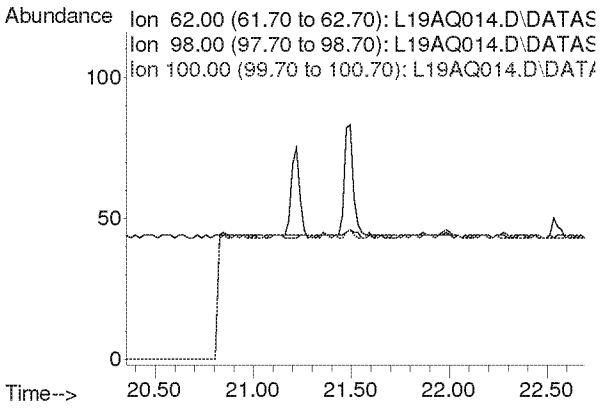


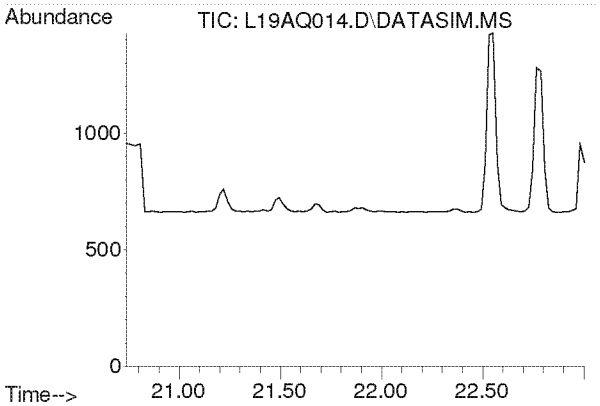
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



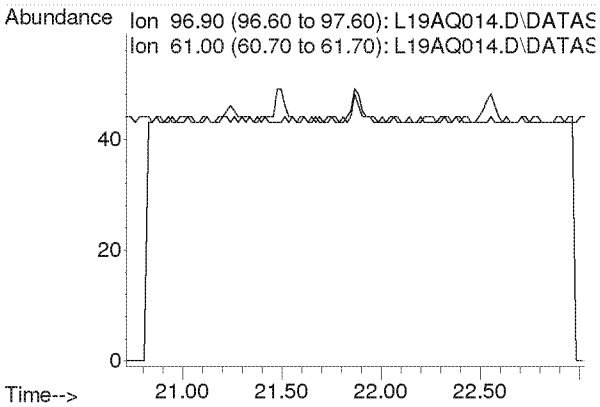


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

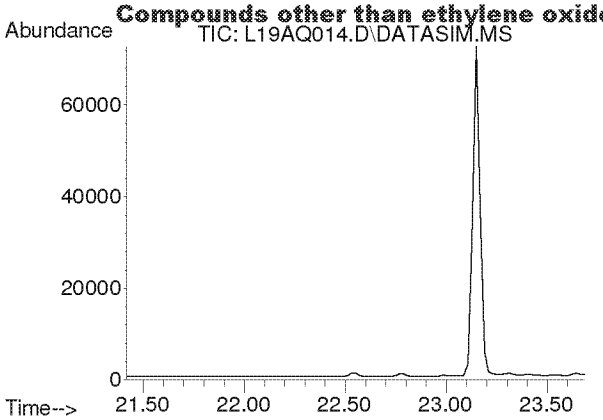
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

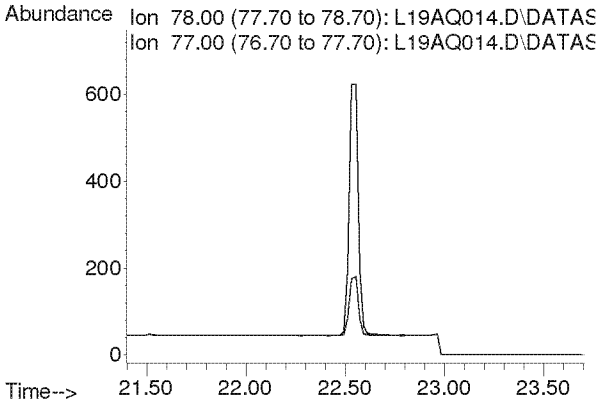


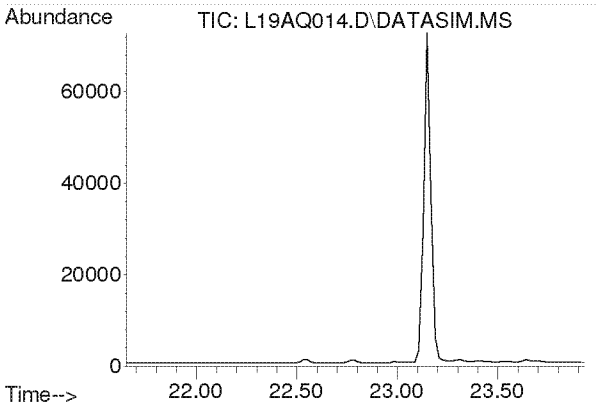
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



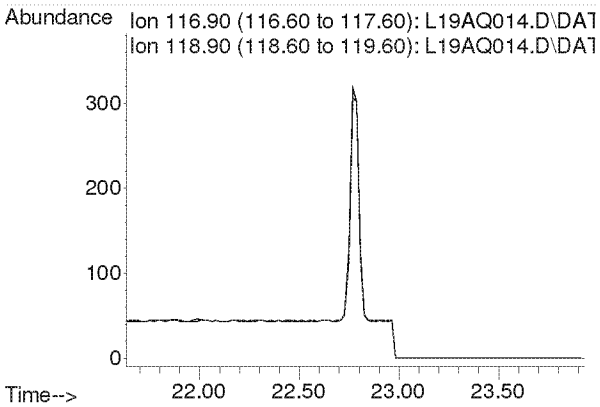


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

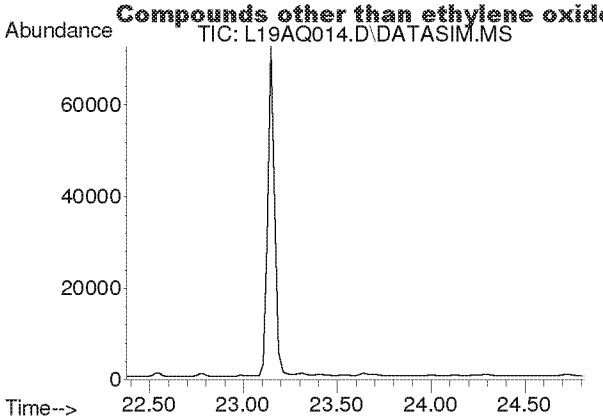
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

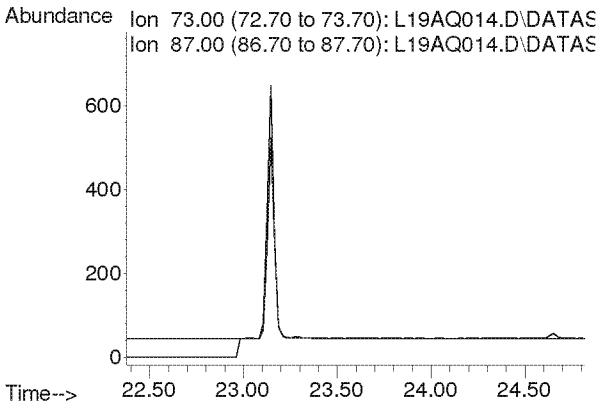


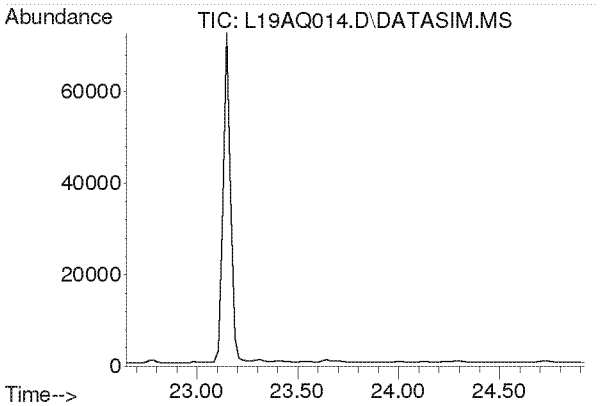
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



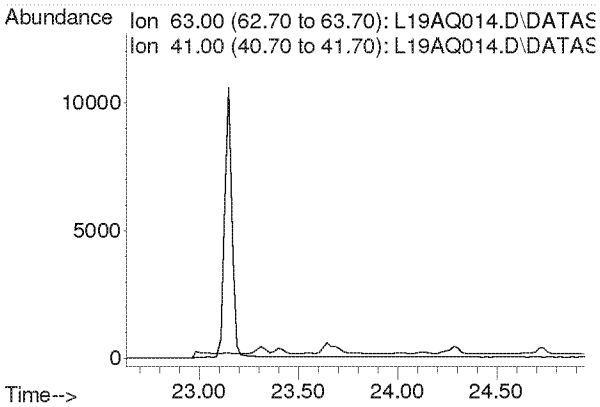


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

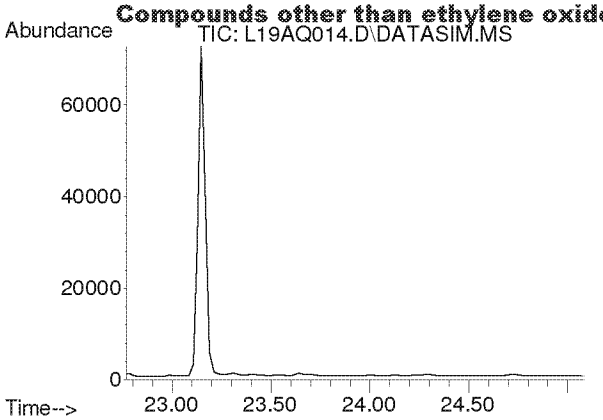
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

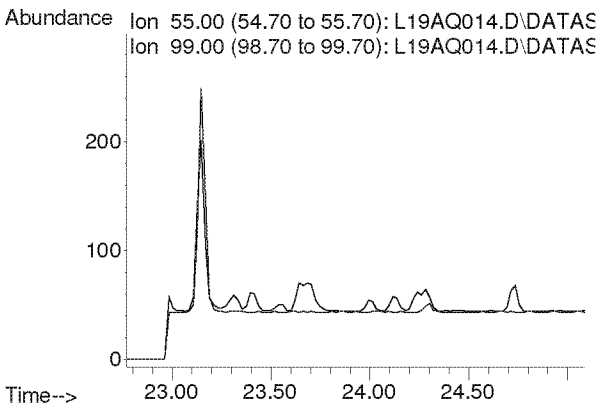


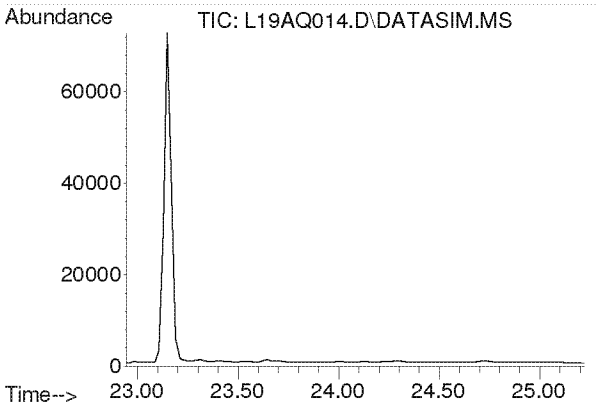
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



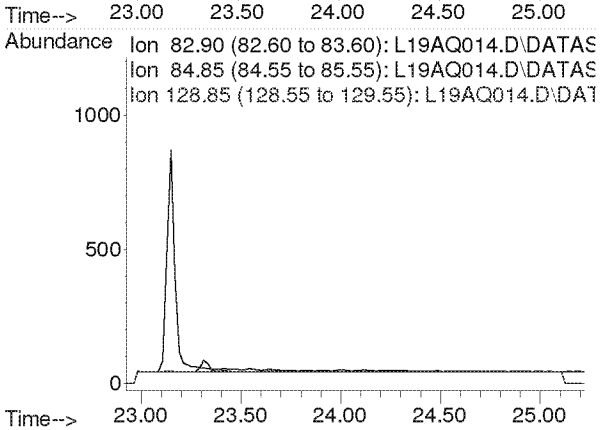


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

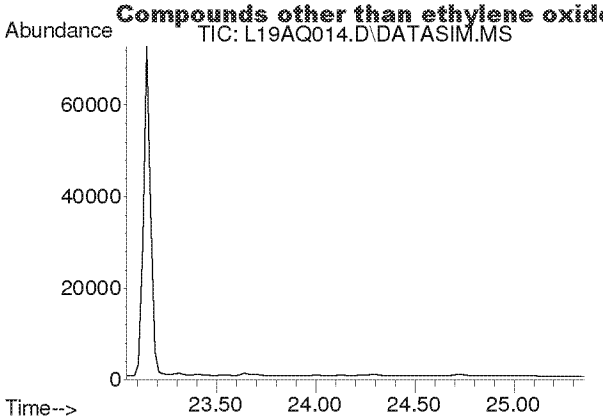
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

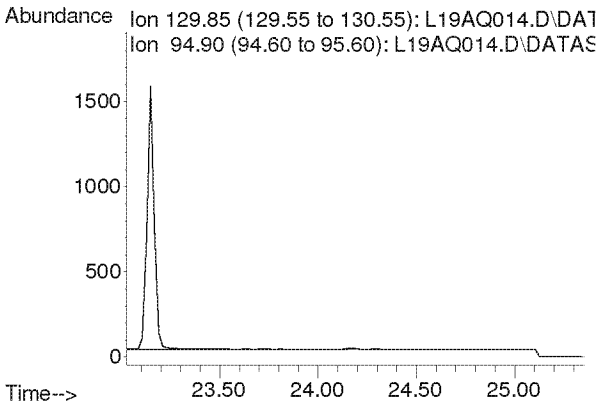


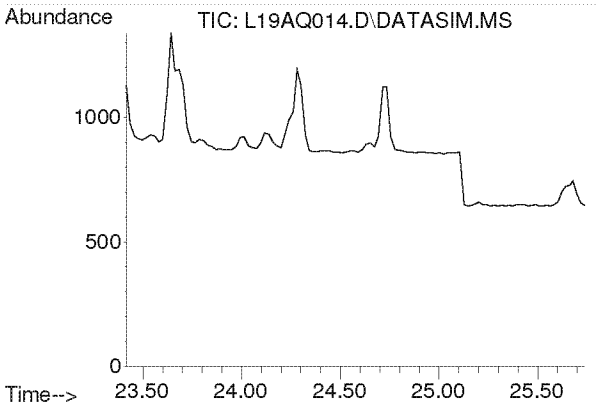
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



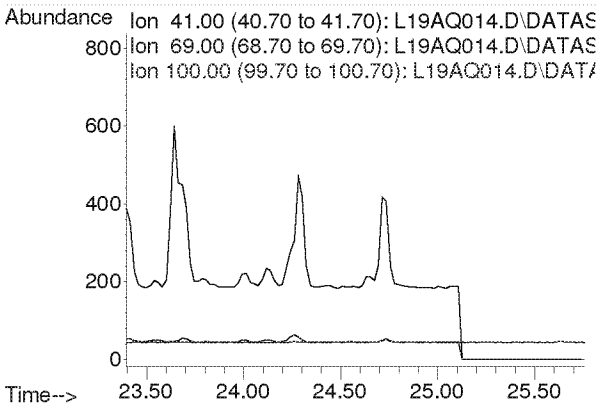


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

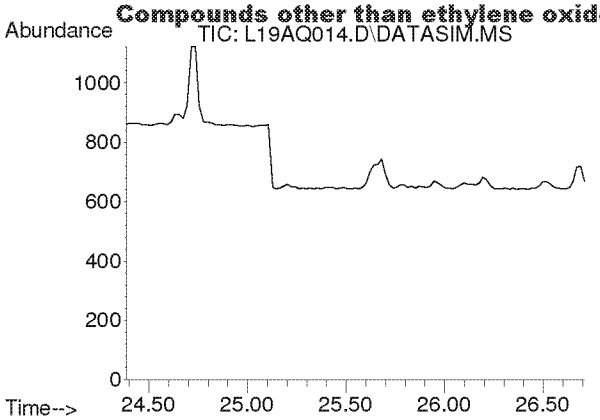
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

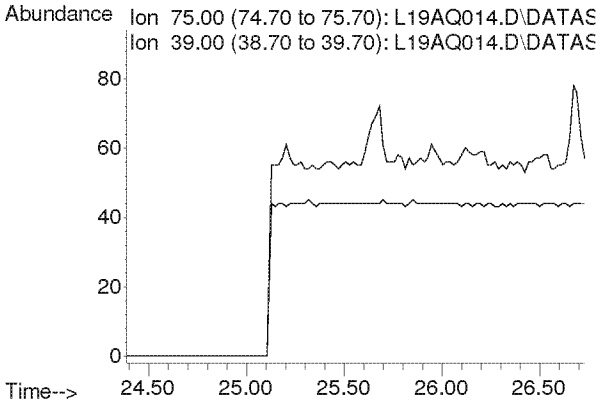


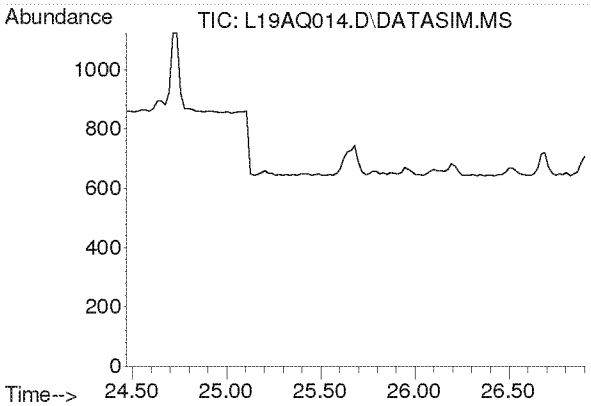
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



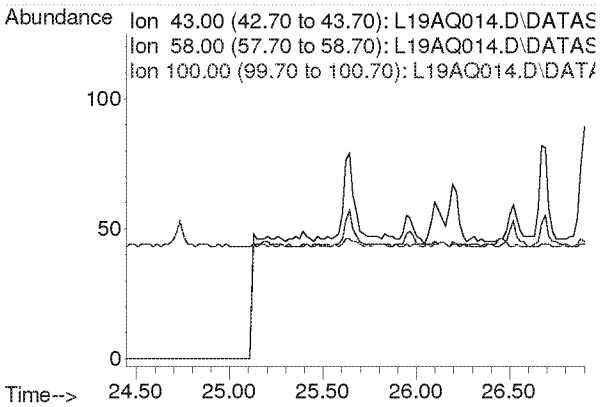


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

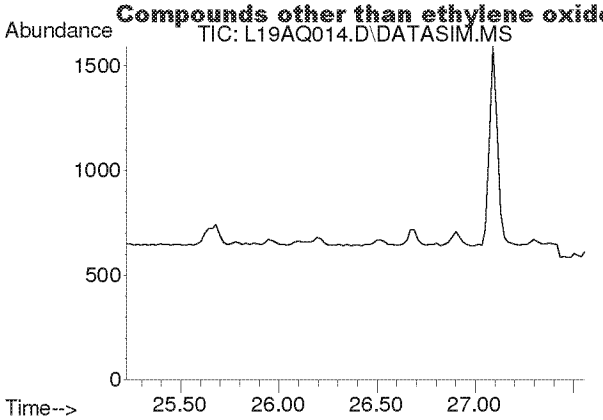
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

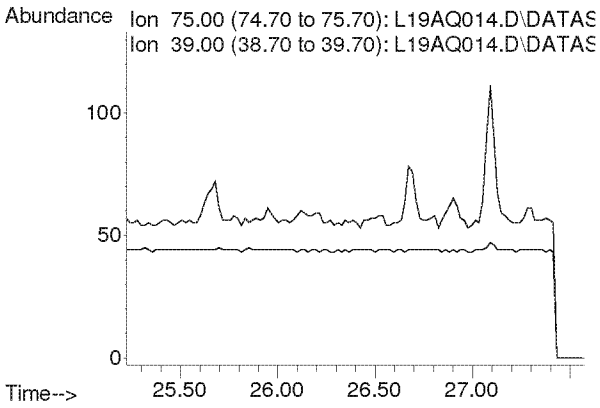


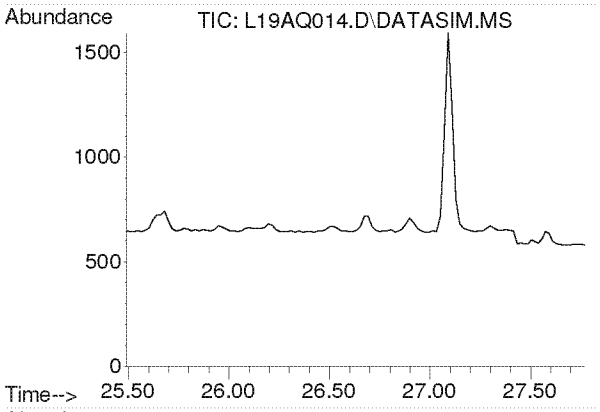
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



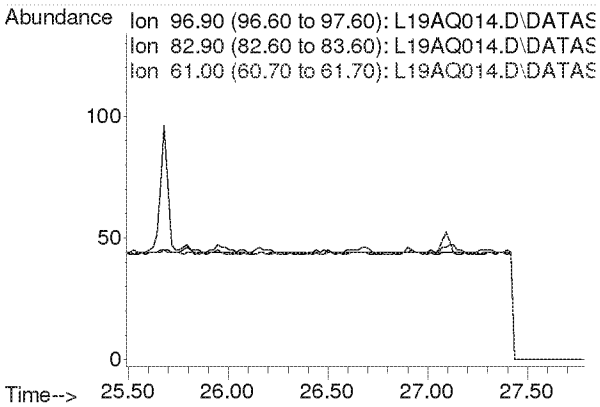


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

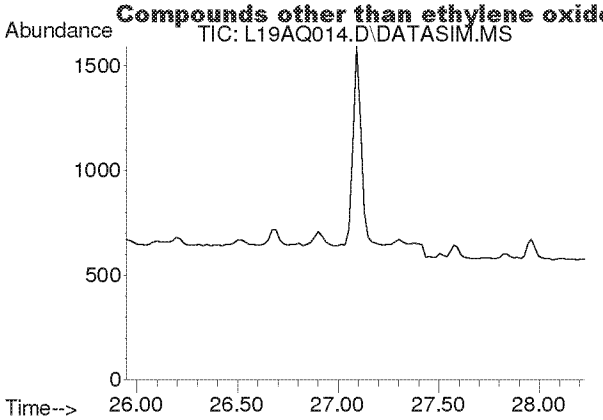
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

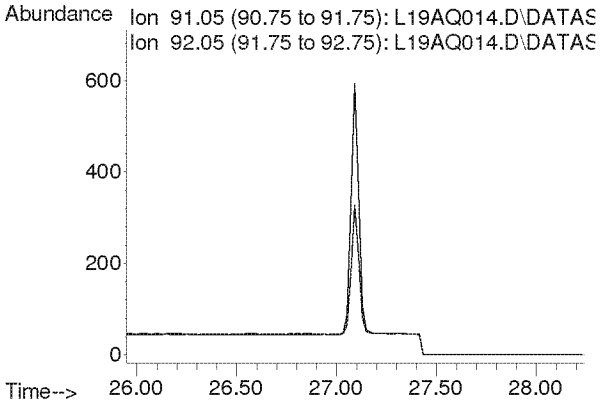


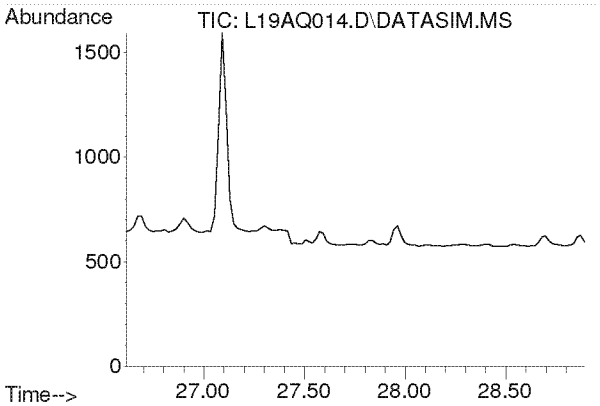
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



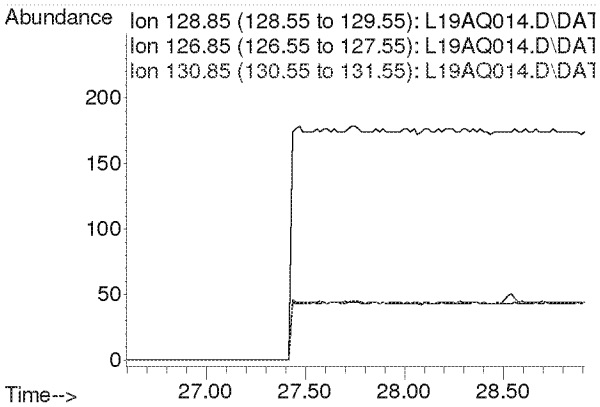


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

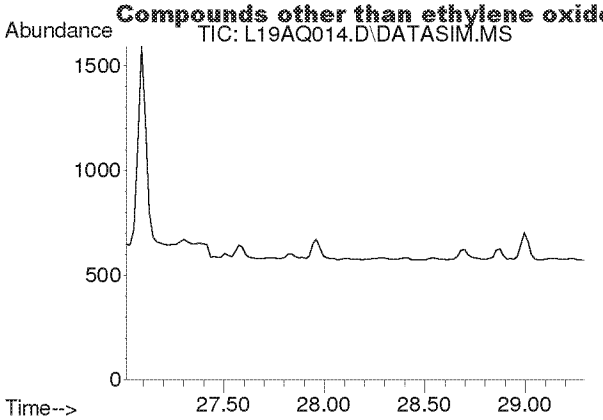
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

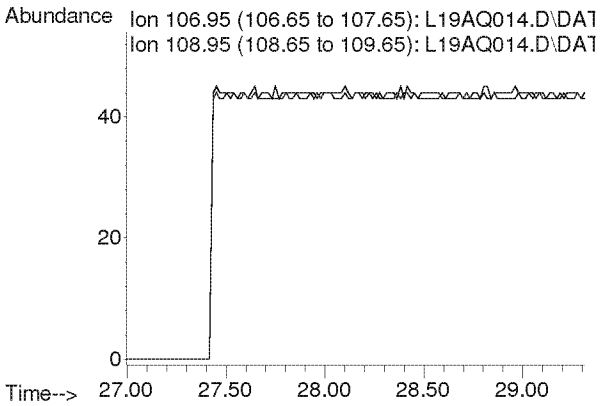


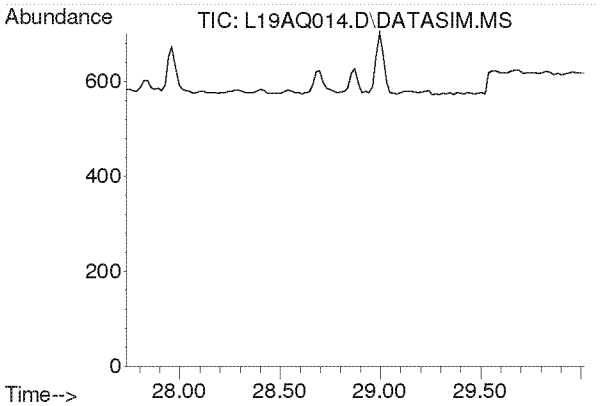
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



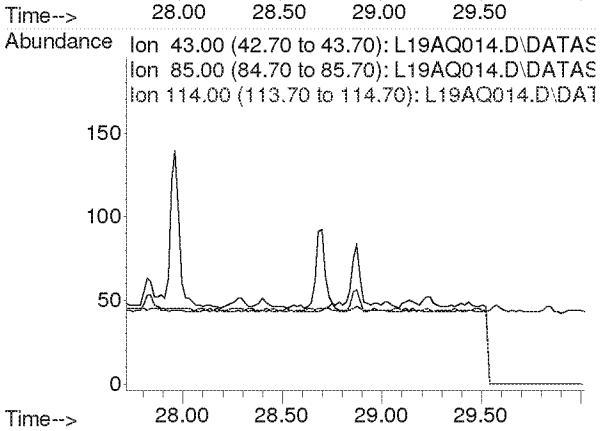


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

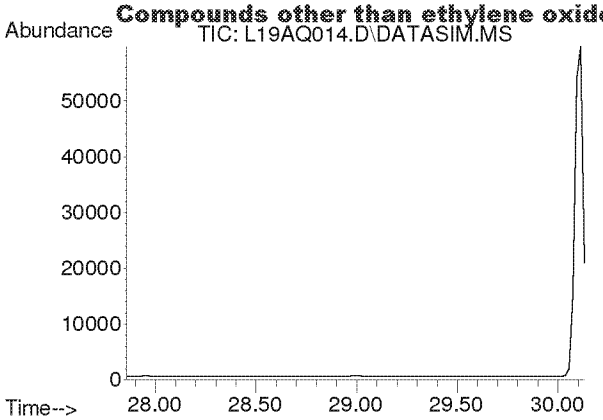
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

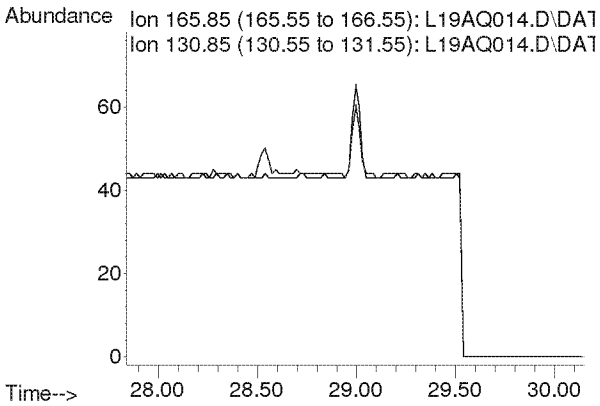


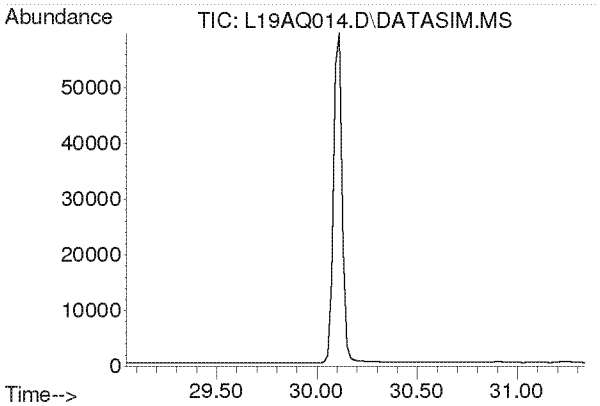
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



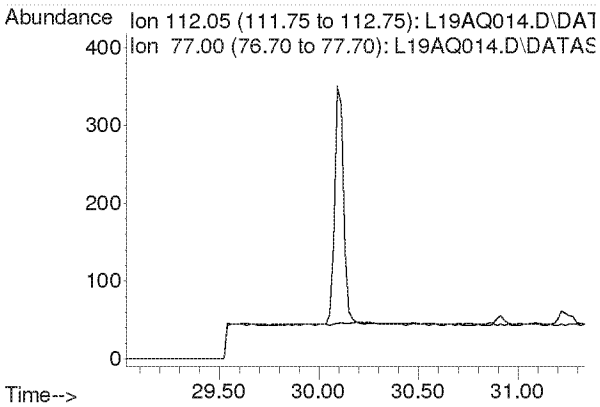


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

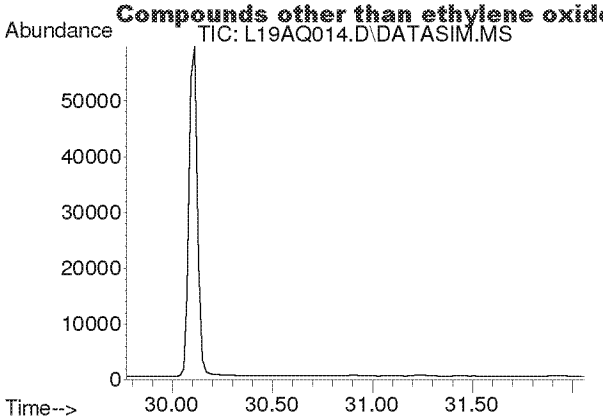
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

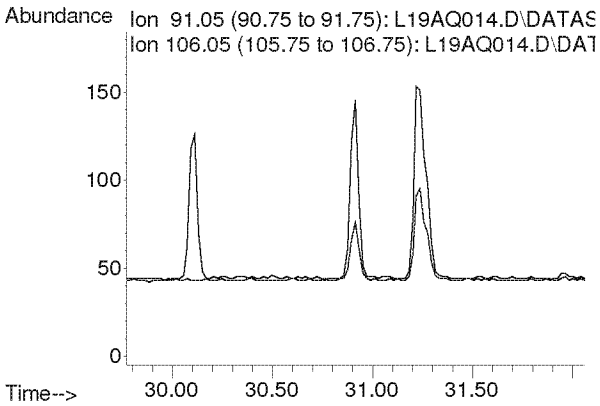


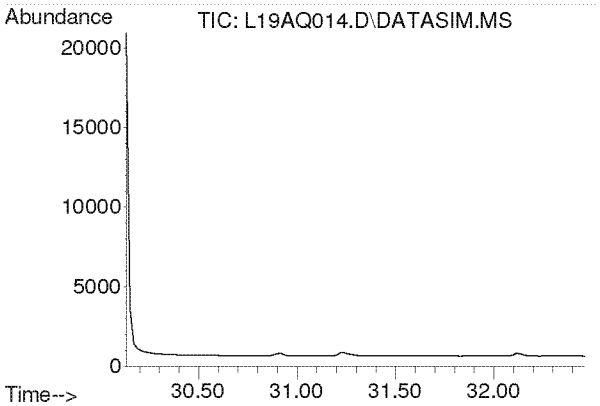
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



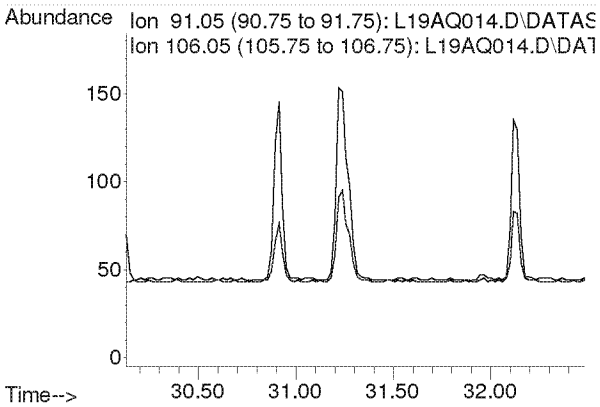


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

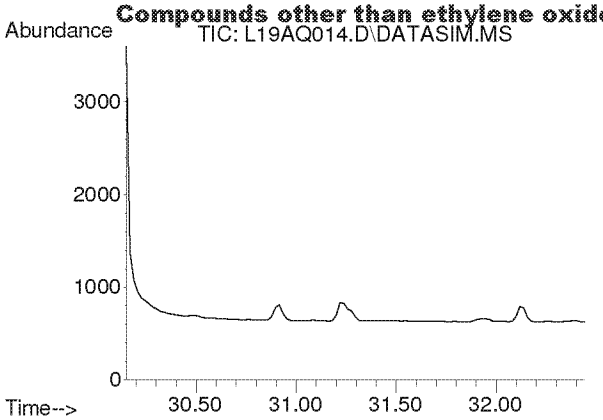
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

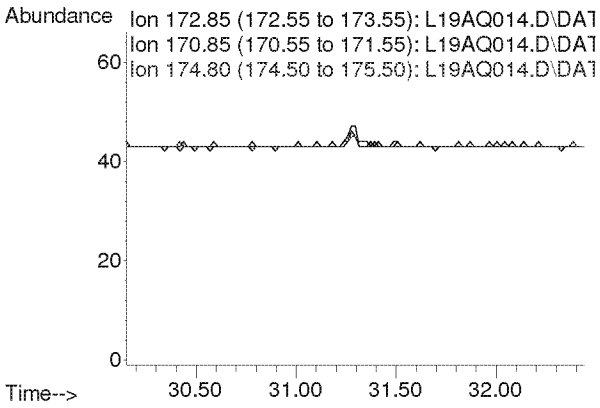


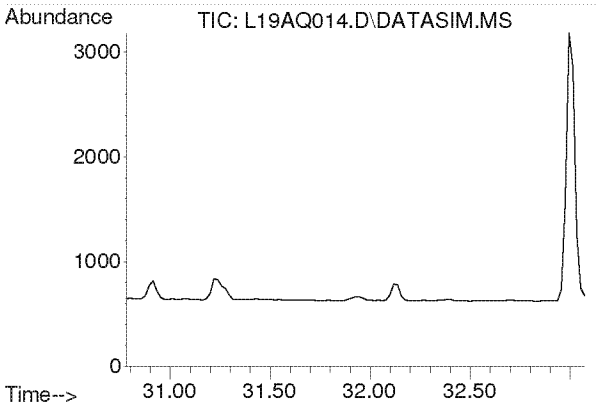
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



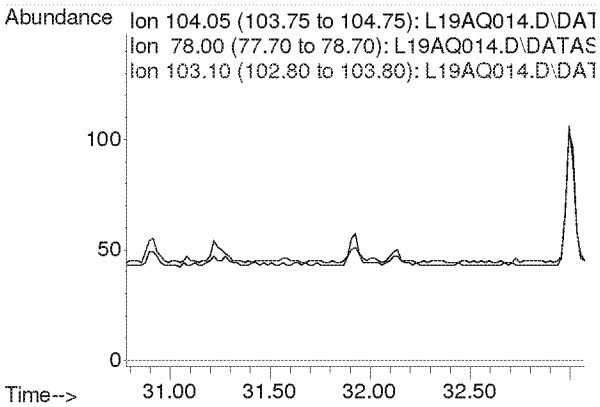


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

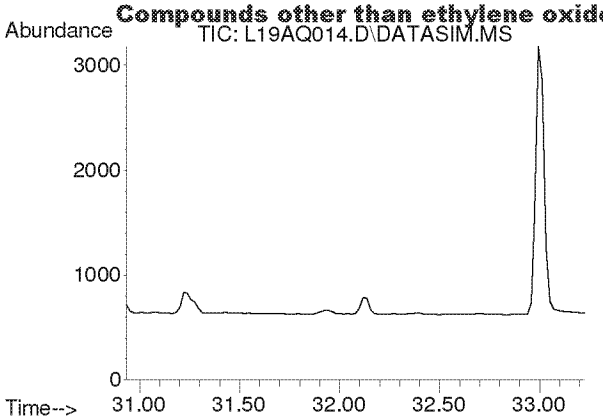
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

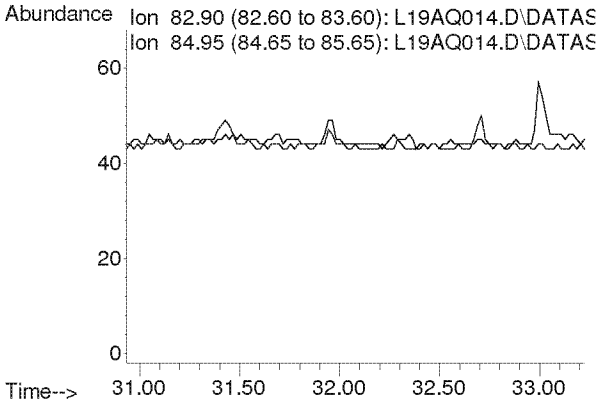


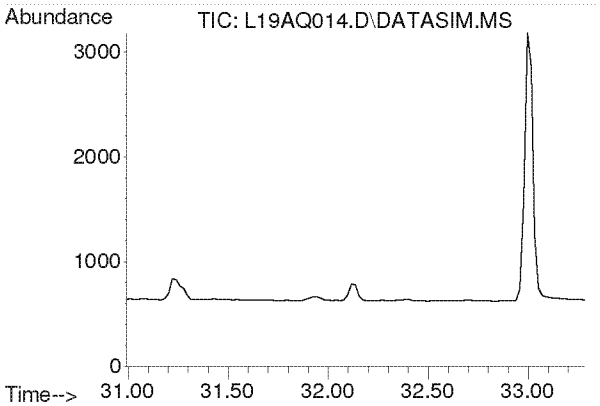
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



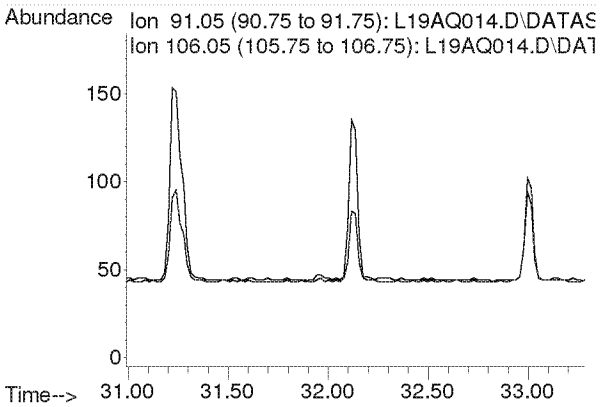


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

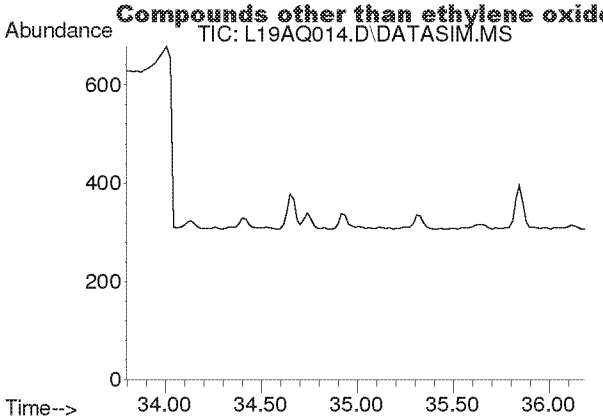
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

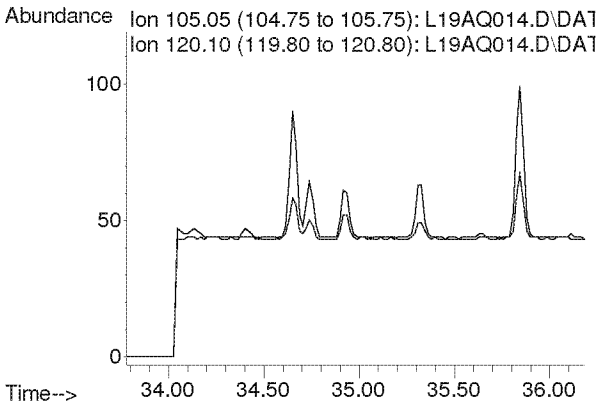


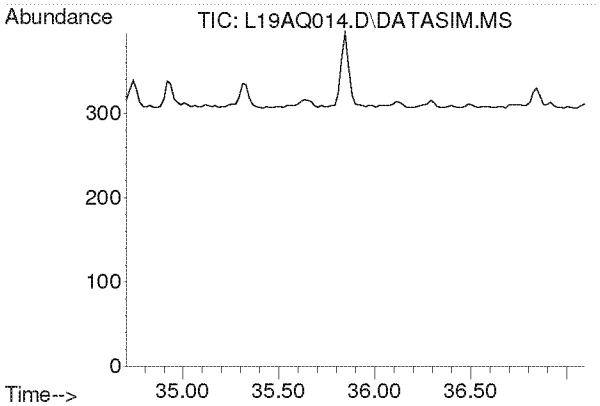
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



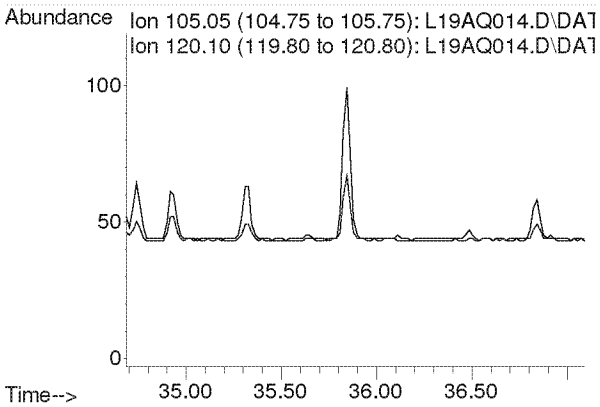


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

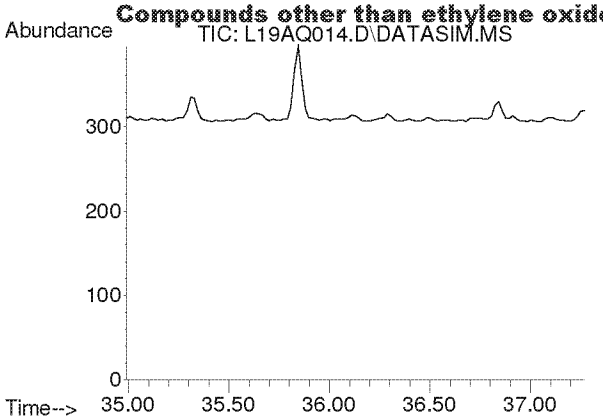
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

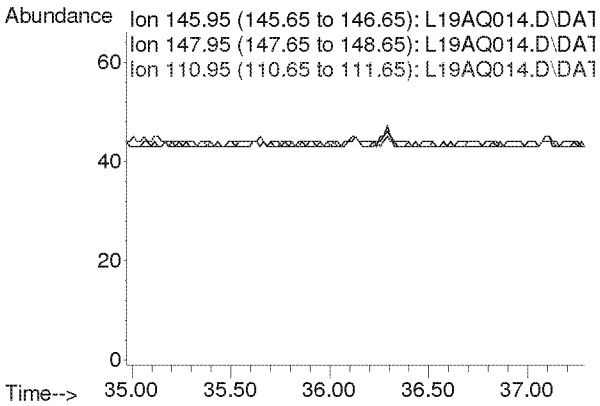


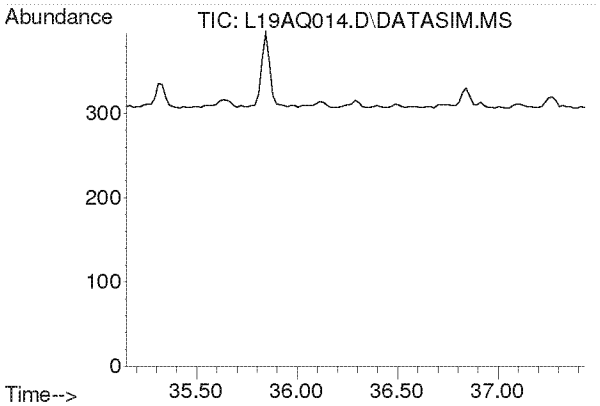
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



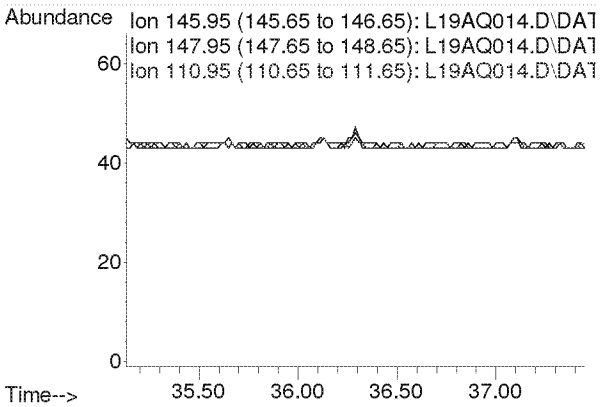


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

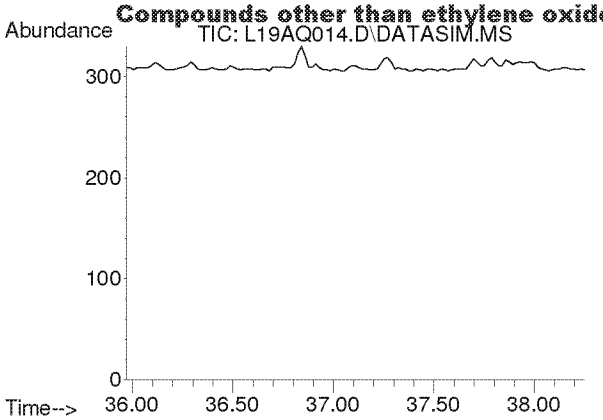
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

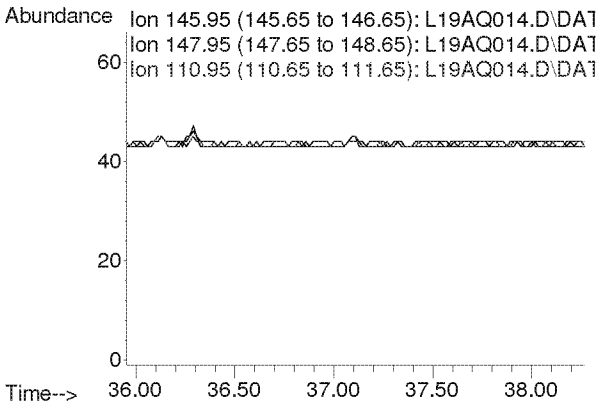


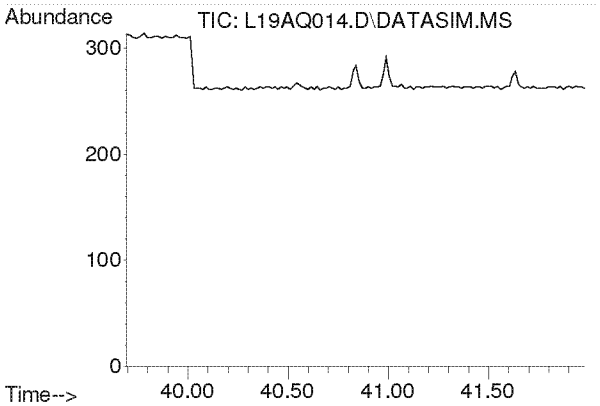
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



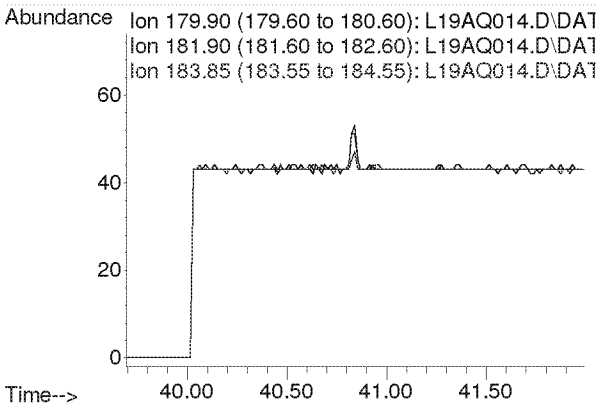


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

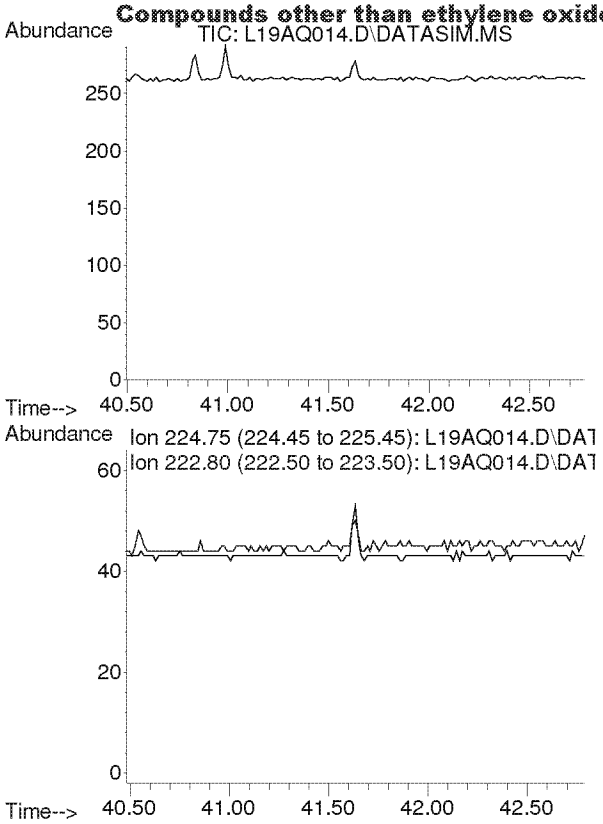
Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ014.D
Acq: 18 Jan 2019 12:39 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ016.D
Acq On : 18 Jan 2019 2:43 am
Operator : MAH
Sample : 9011101-06
Misc : GOWER MS 1/10/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 07:55:13 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	52966	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	129659	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	100796	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	d
3) Propylene	0.000	41	0	N.D.	d
4) Dichlorodifluoromethane	0.000	85	0	N.D.	d
5) Chloromethane	0.000	50	0	N.D.	d
6) Dichlorotetrafluoroethane	0.000	85	0	N.D.	d
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D.	d
9) Ethylene oxide	12.455	29	536m	0.1959 ppbv	
10) Bromomethane	0.000	94	0	N.D.	d
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D.	d
13) Acrolein	0.000	56	0	N.D.	d
14) Trichlorofluoromethane	0.000	101	0	N.D.	d
15) Acrylonitrile	0.000	53	0	N.D.	d
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D.	d
18) Carbon Disulfide	0.000	76	0	N.D.	d
19) Trichlorotrifluoroethane	0.000	101	0	N.D.	d
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D.	d
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D.	d
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D.	d
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D.	d
32) Carbon Tetrachloride	0.000	117	0	N.D.	d
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	d
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D.	d
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D.	d
45) Dibromochloromethane	0.000	129	0	N.D.	d
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D.	d
48) Tetrachloroethylene	0.000	166	0	N.D.	d
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D.	d

Compounds other than ethylene oxide were not quantitated. eviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ016.D
Acq On : 18 Jan 2019 2:43 am
Operator : MAH
Sample : 9011101-06
Misc : GOWER MS 1/10/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 07:55:13 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

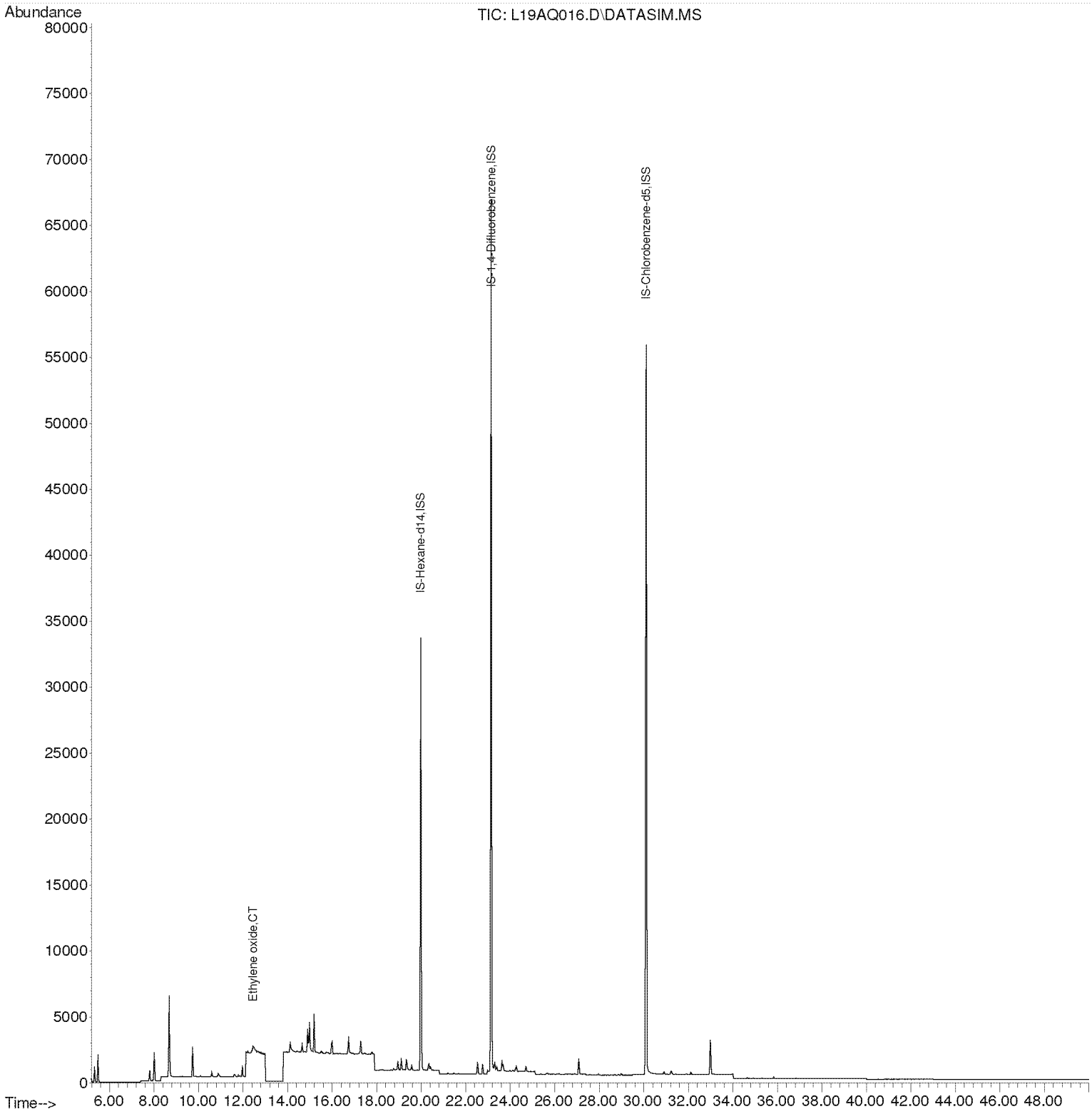
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00413

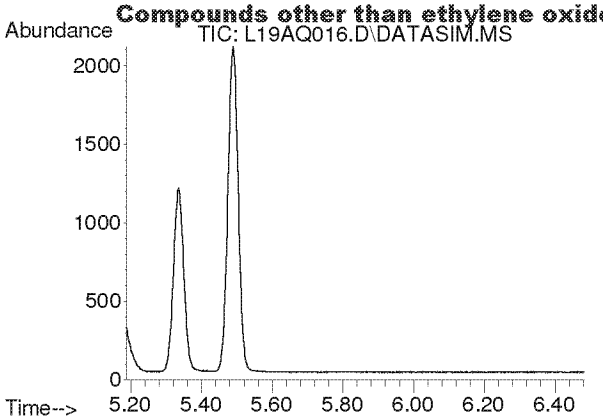
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ016.D
Acq On : 18 Jan 2019 2:43 am
Operator : MAH
Sample : 9011101-06
Misc : GOWER MS 1/10/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 07:36:34 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



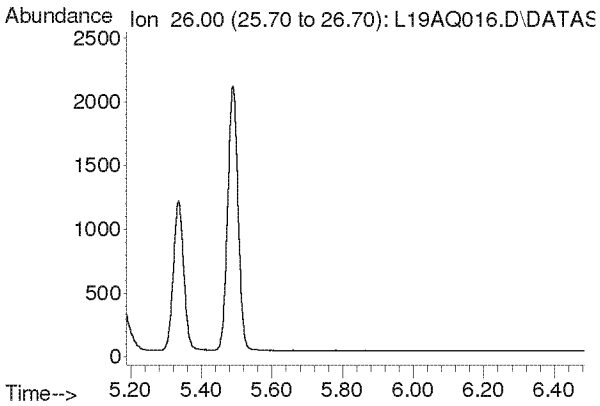
Compounds other than ethylene oxide were not quantitated.

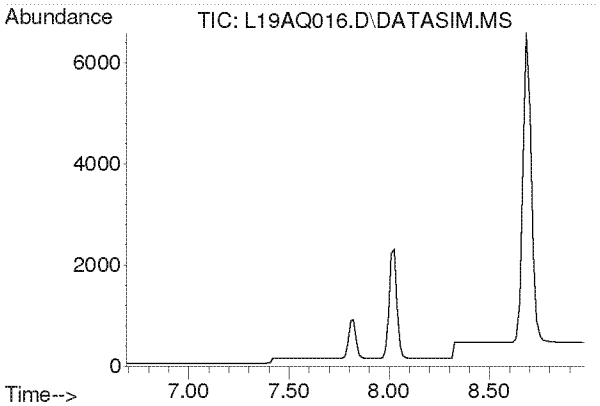


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 26



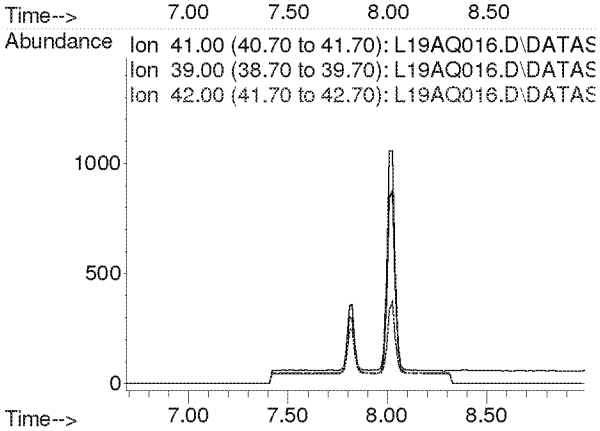


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

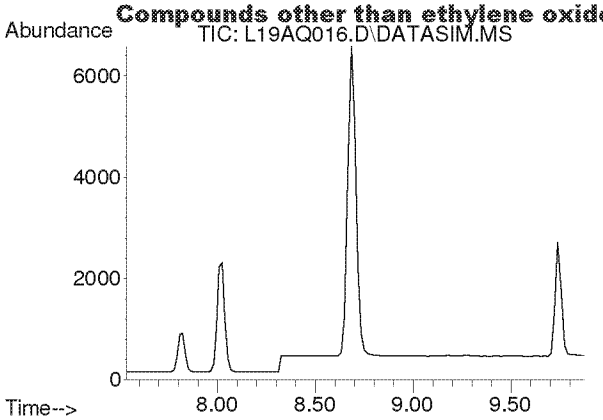
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

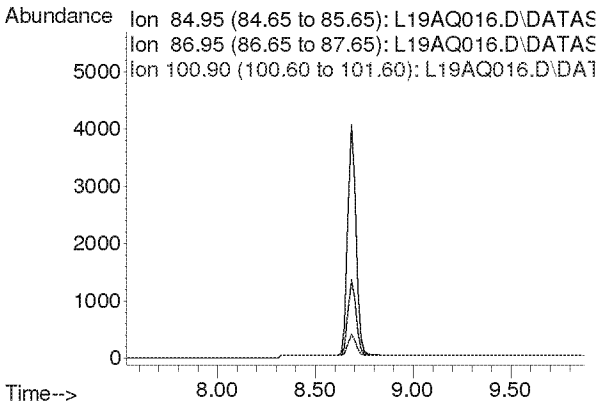


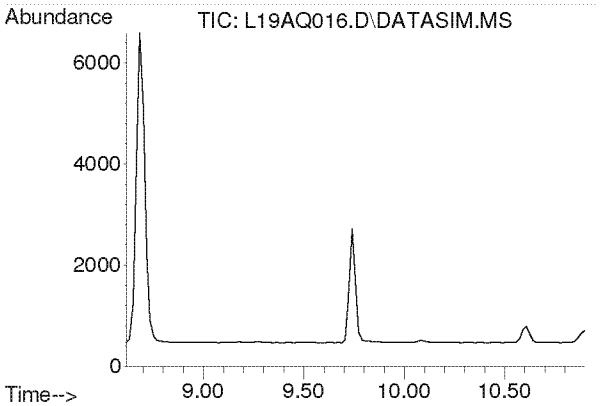
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



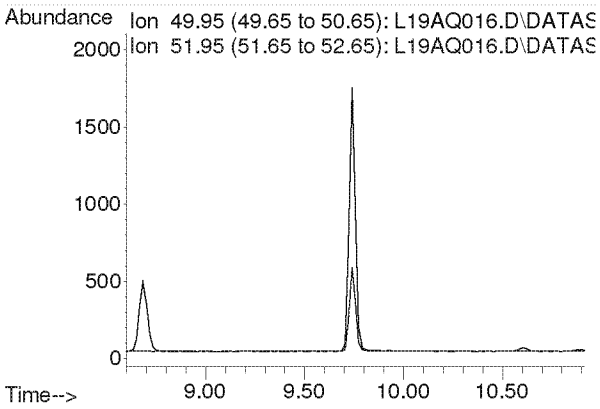


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

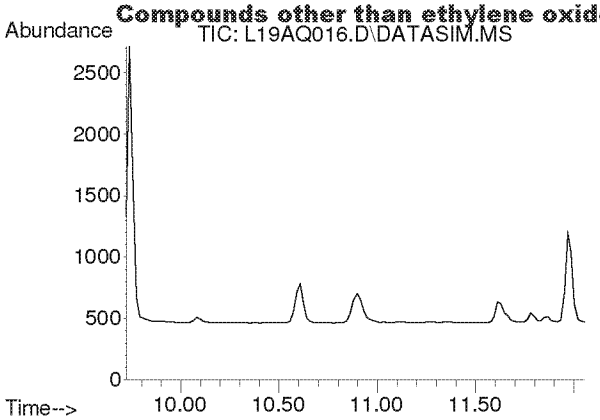
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

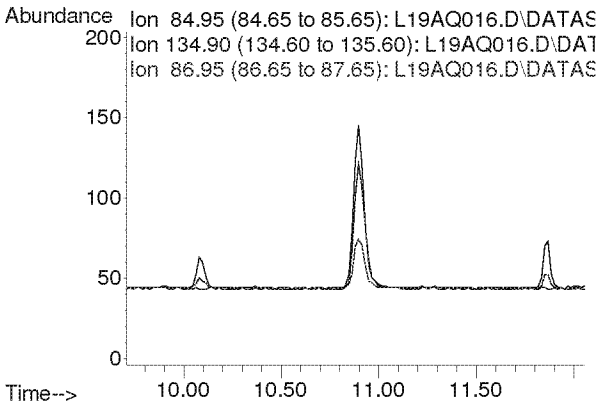


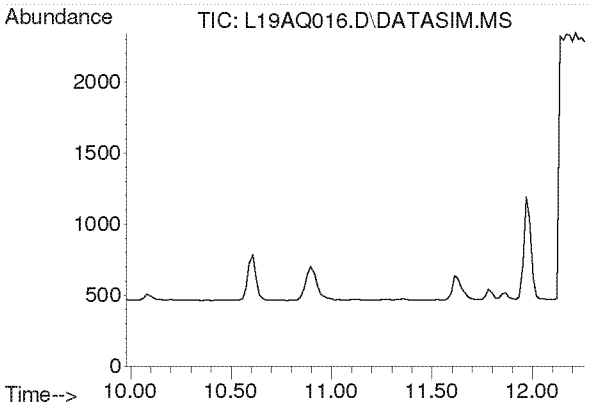
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



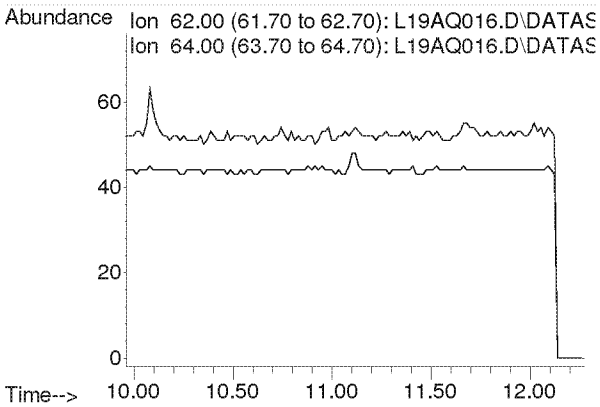


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

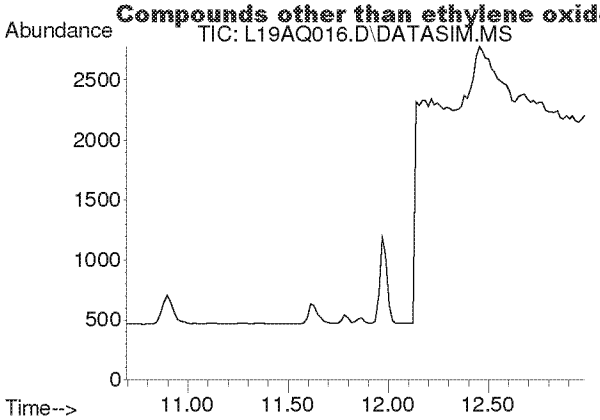
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

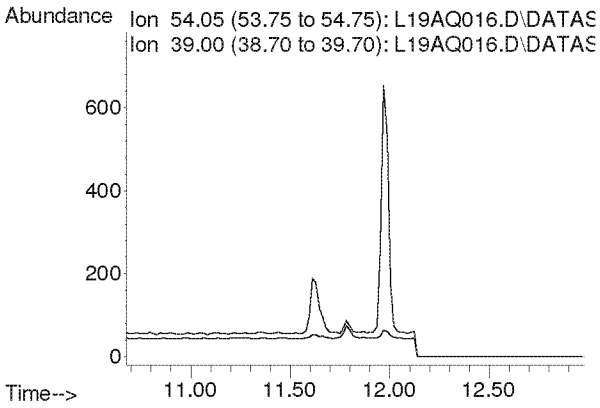


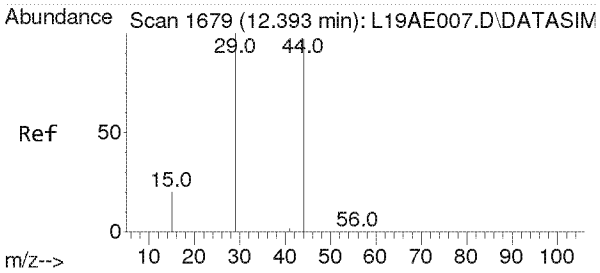
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

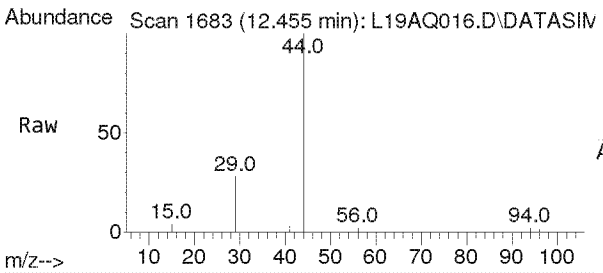


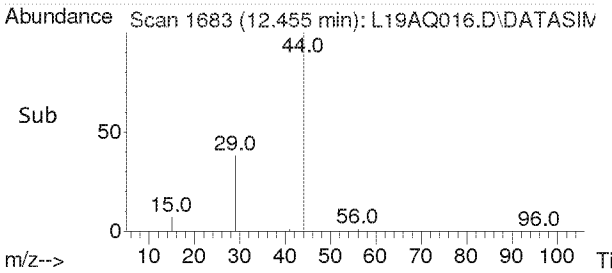


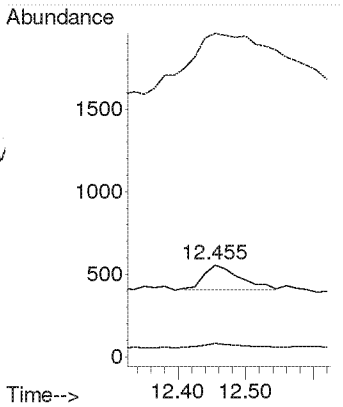
#9
Ethylene oxide
Concen: 0.196 ppbv m
RT: 12.455 min Scan# 1683
Delta R.T. 0.062 min
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 29 Resp: 536

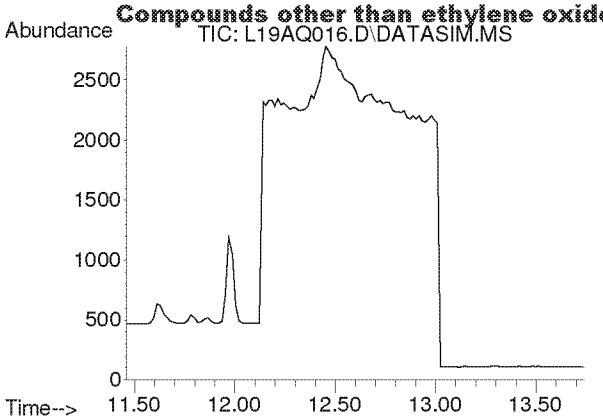
Ion	Ratio	Lower	Upper
29	100		
15	0.0	15.4	23.0#
44	0.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

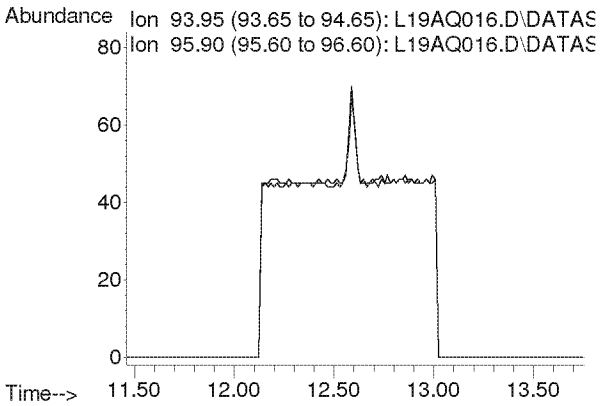


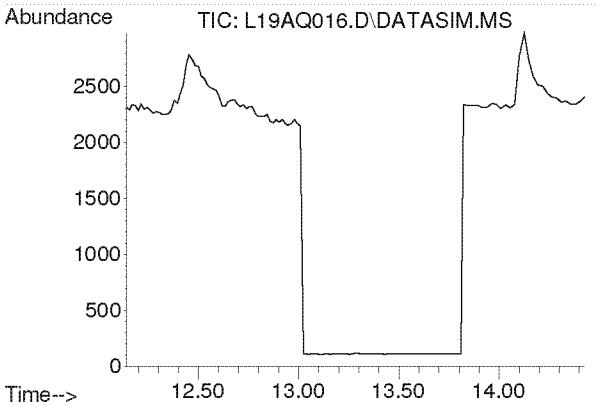
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



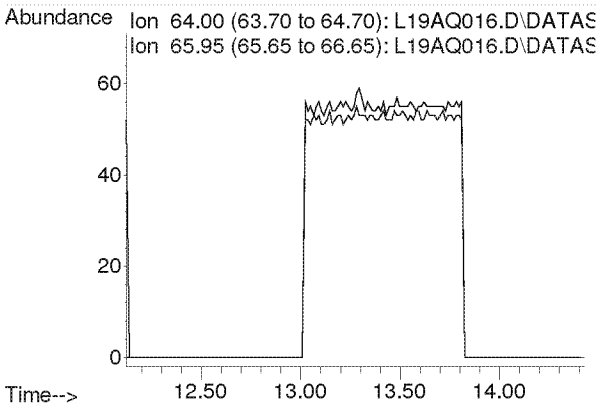


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

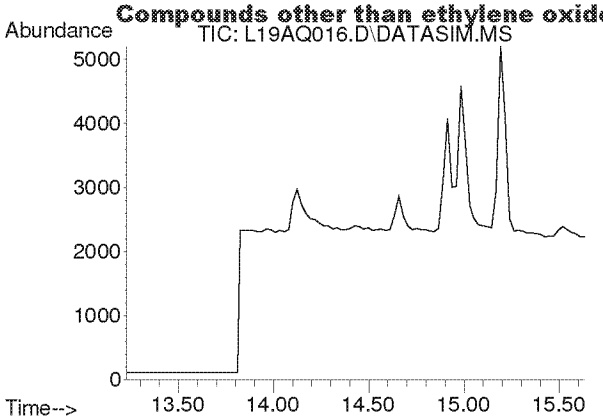
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

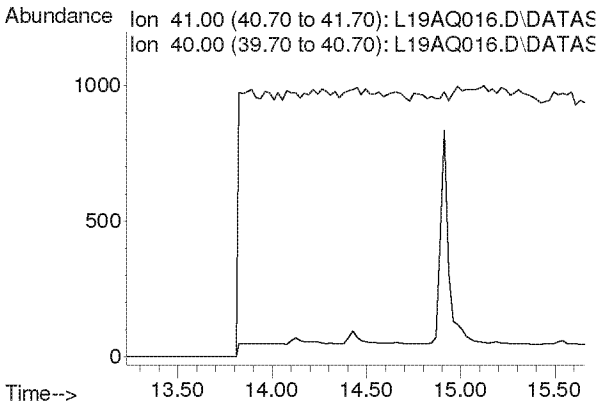


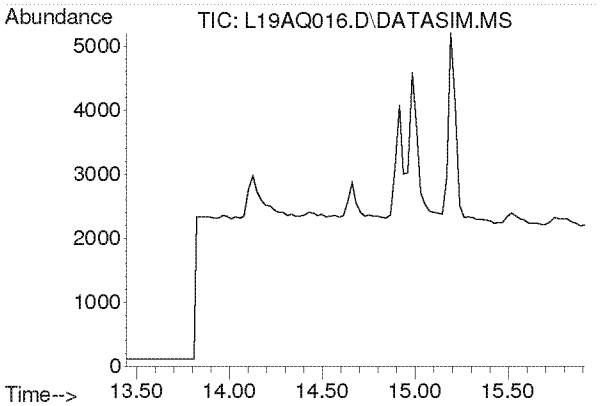
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



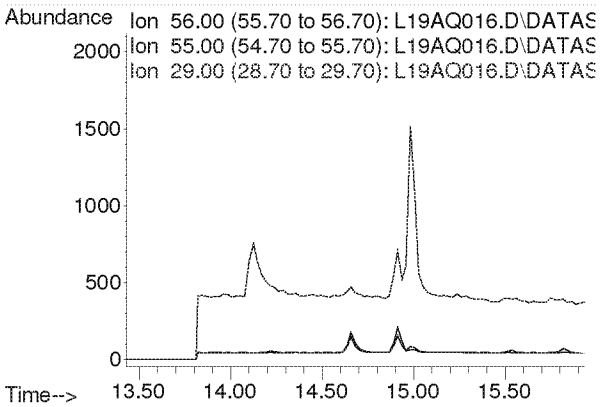


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

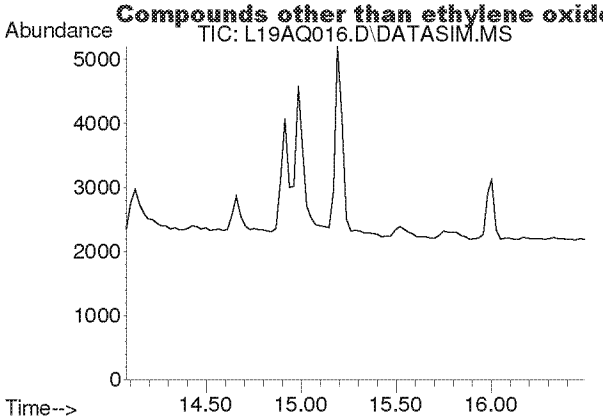
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

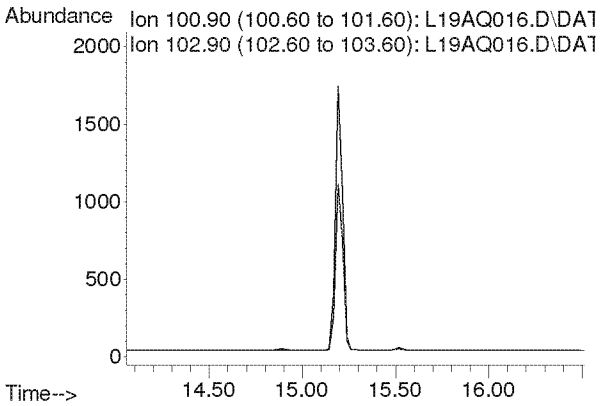


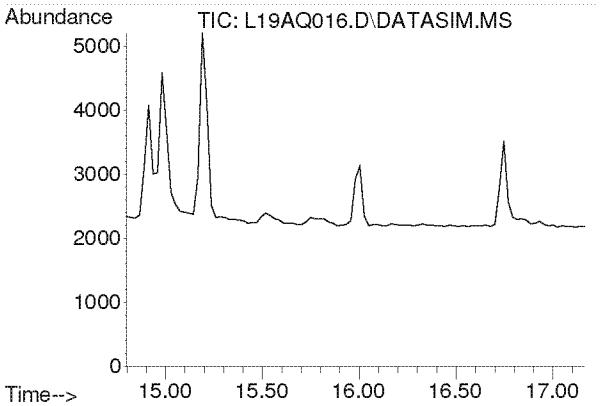
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



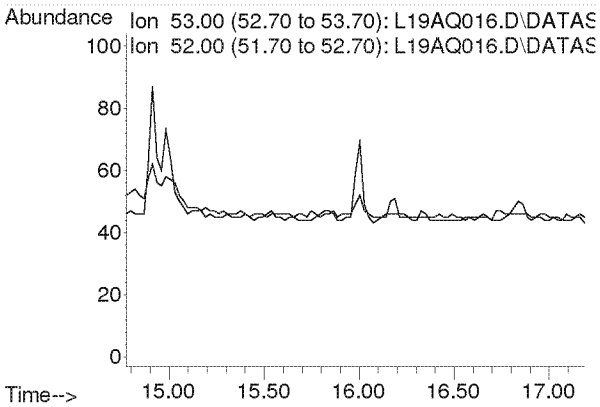


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

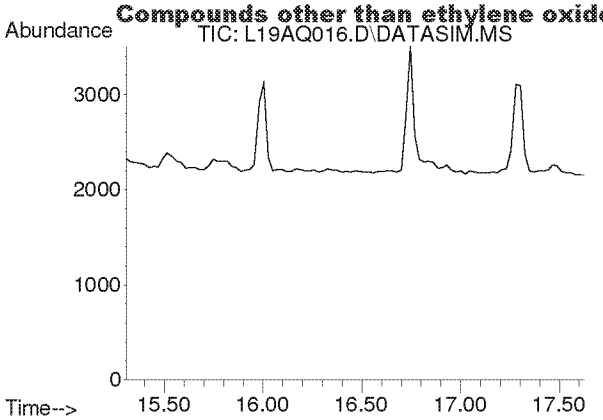
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

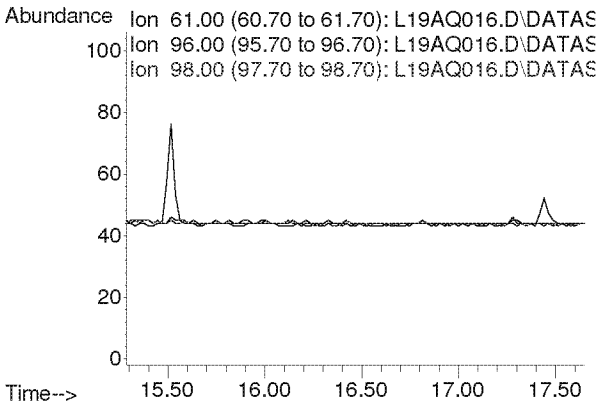


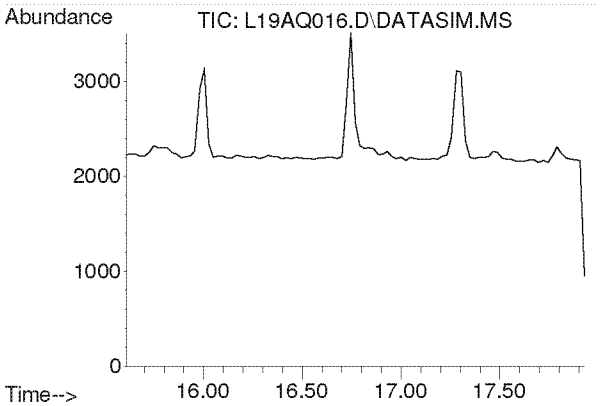
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



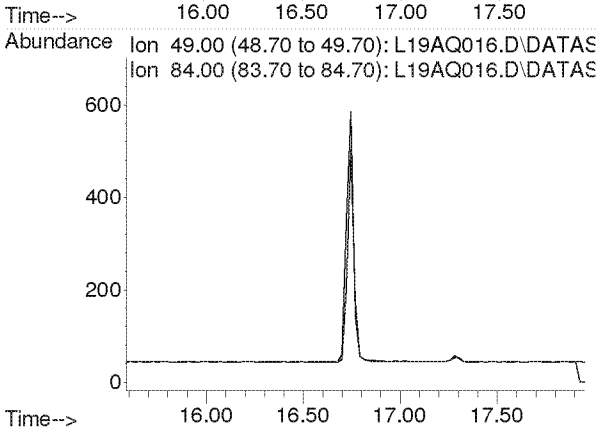


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

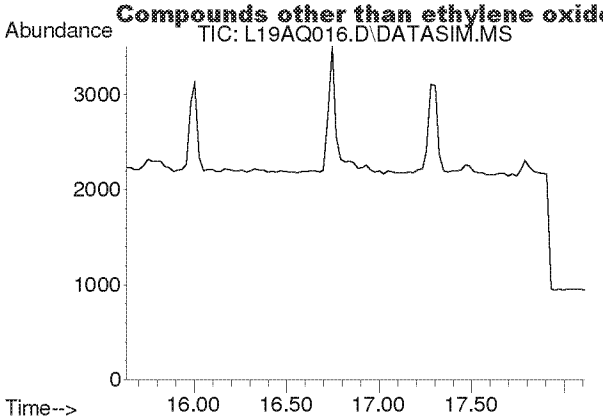
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

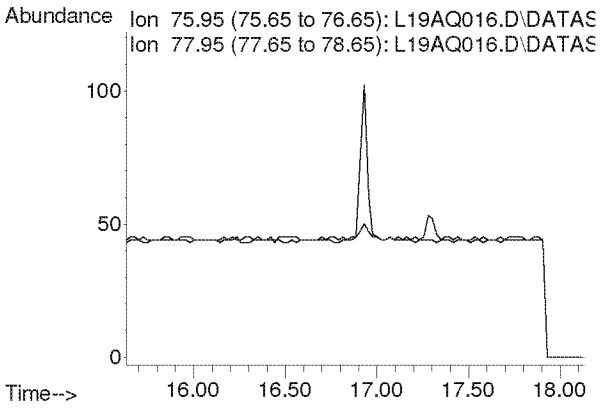


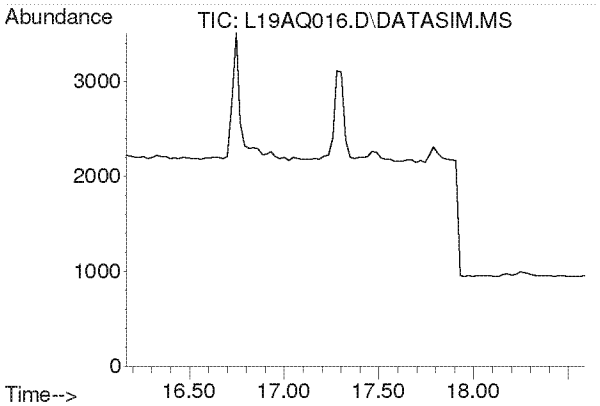
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



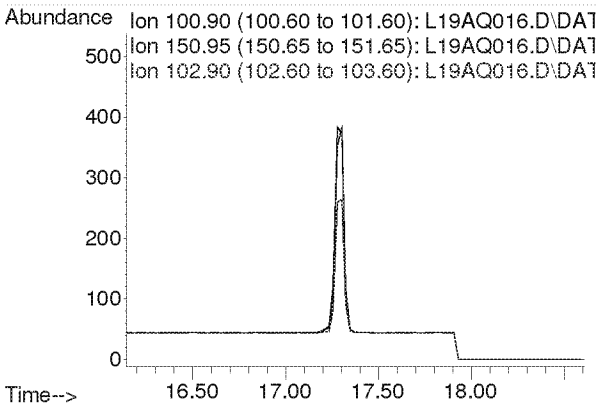


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

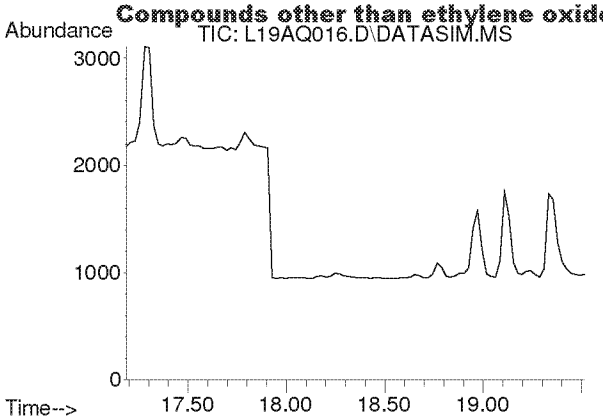
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

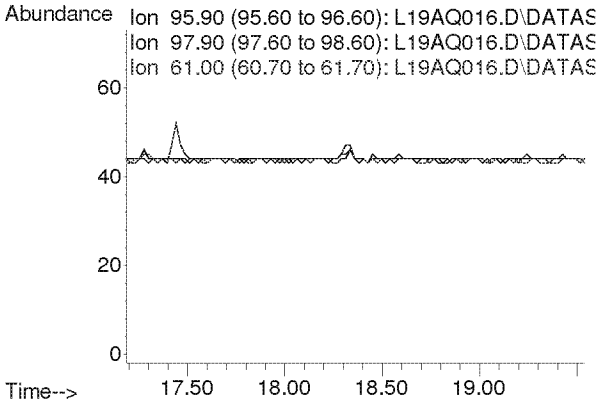


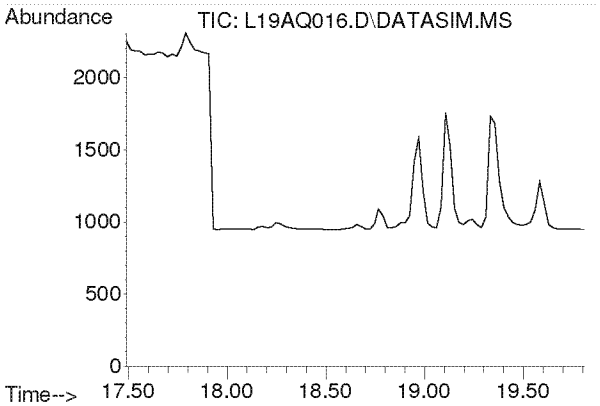
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



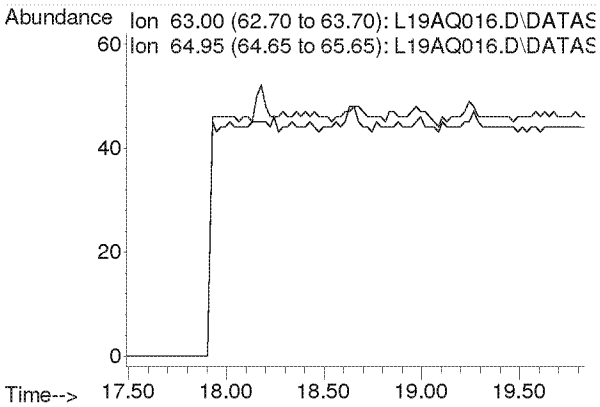


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

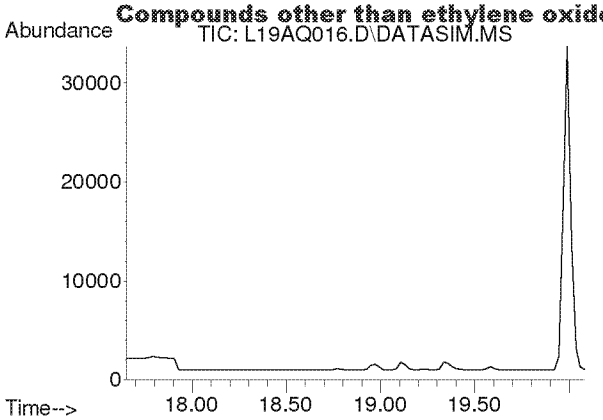
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

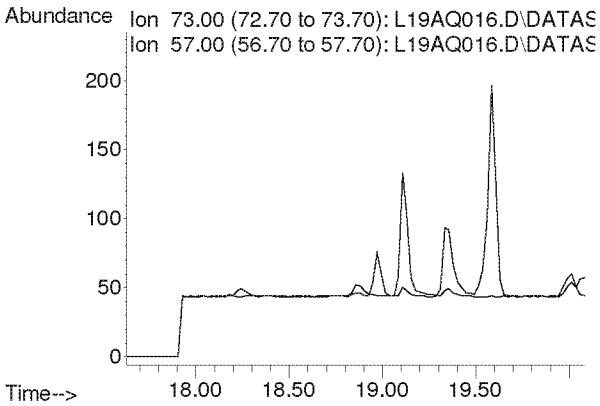


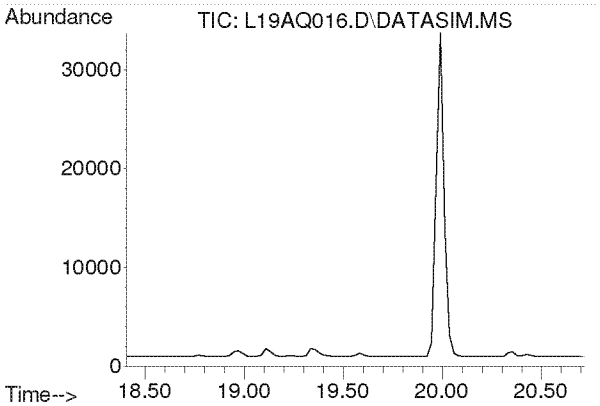
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



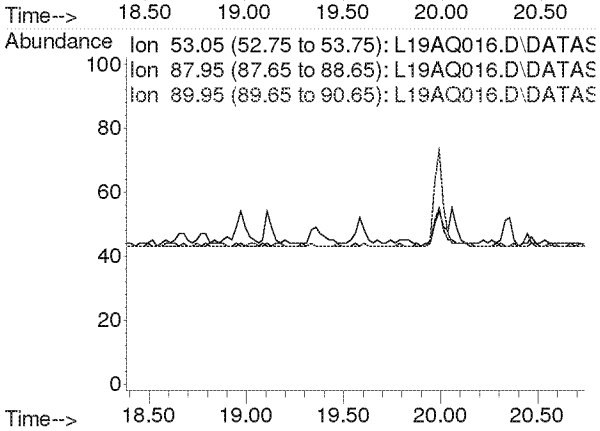


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

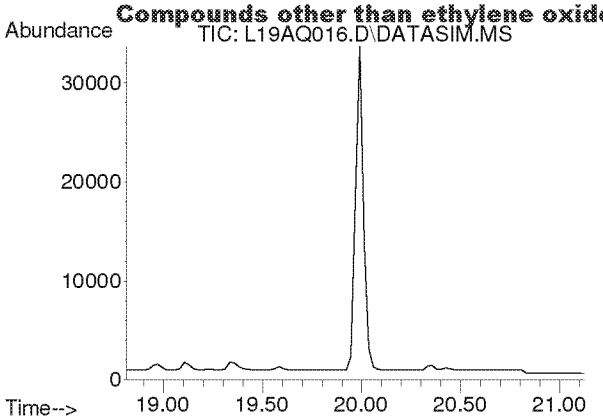
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

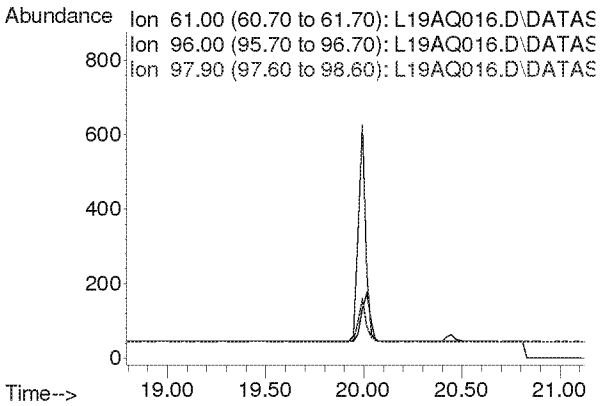


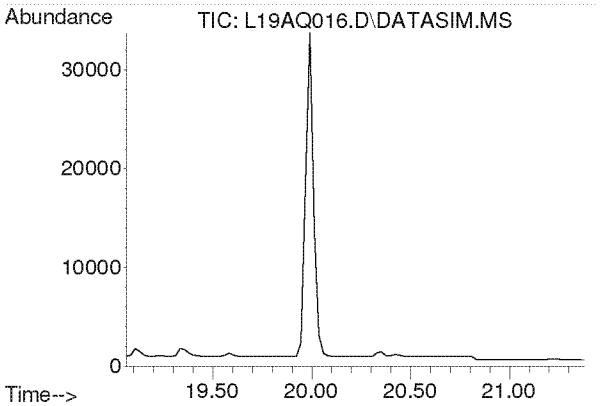
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



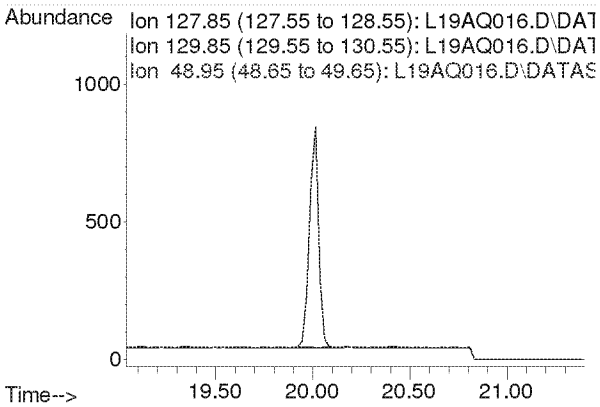


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

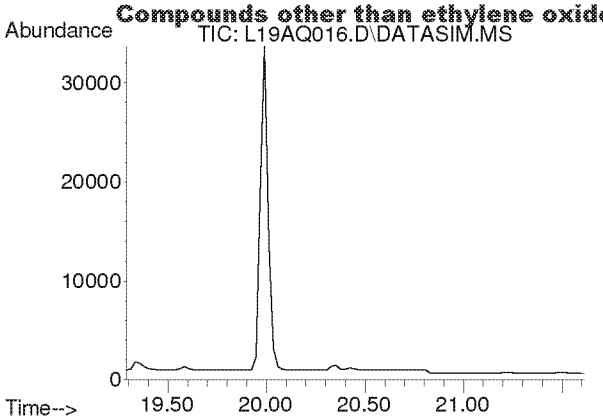
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

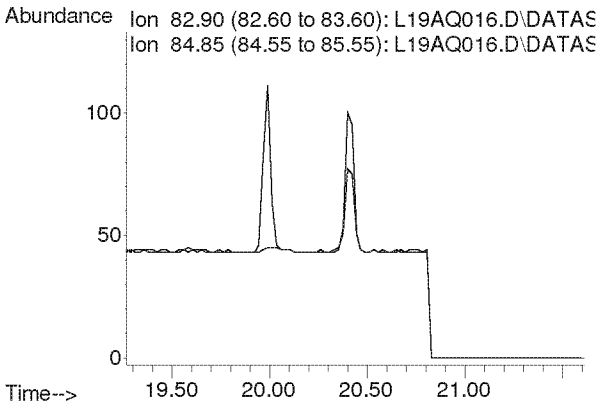


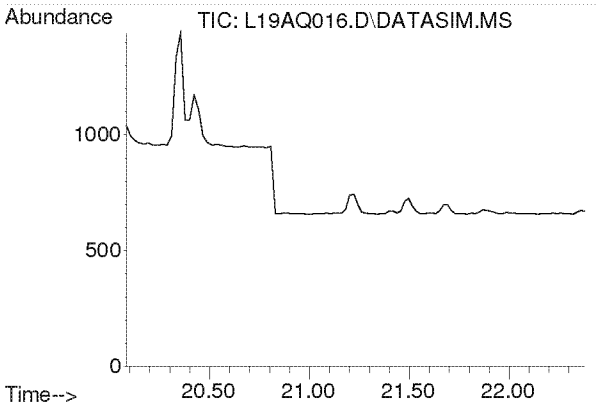
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



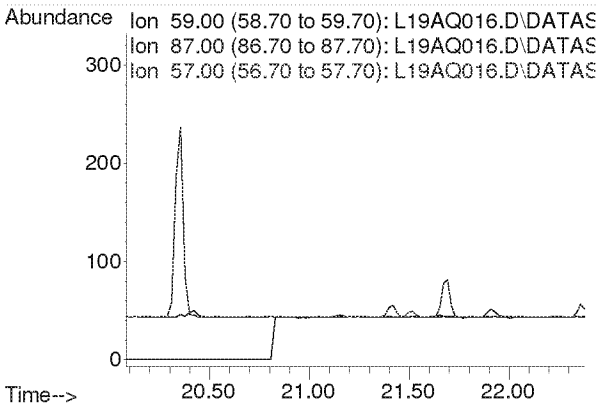


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

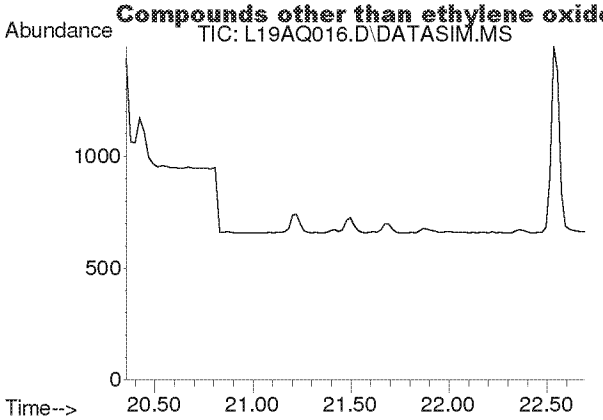
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

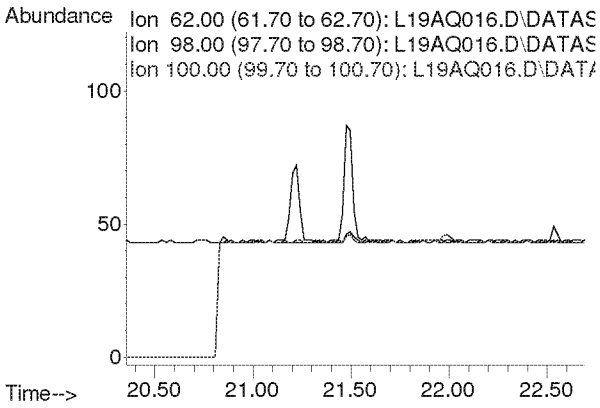


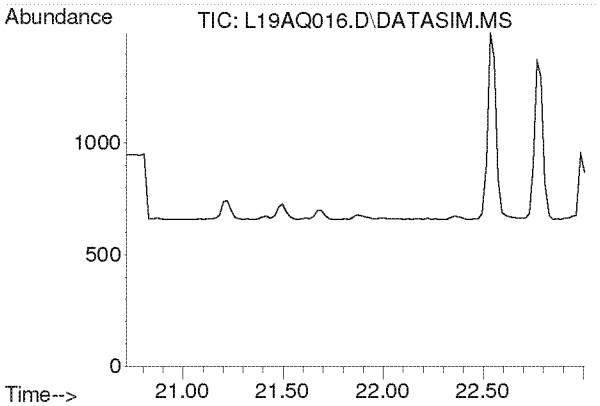
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



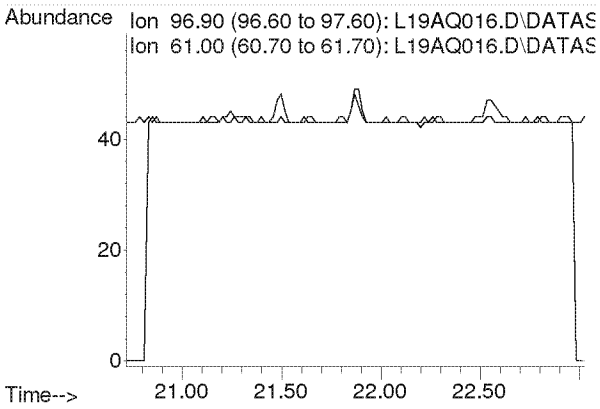


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

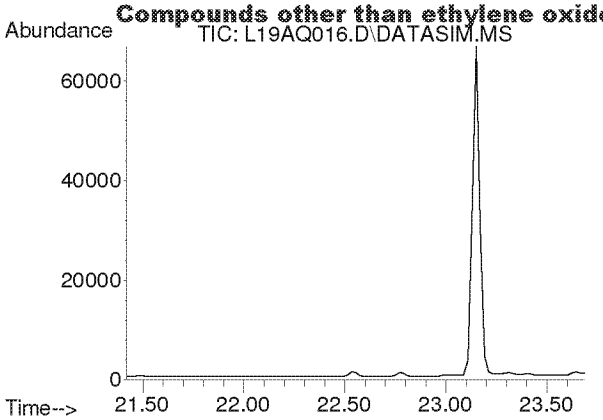
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

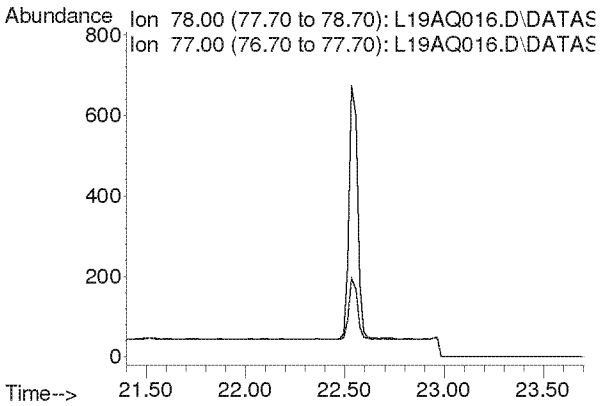


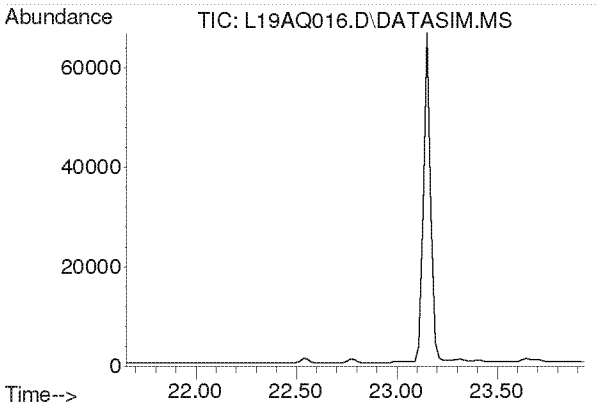
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



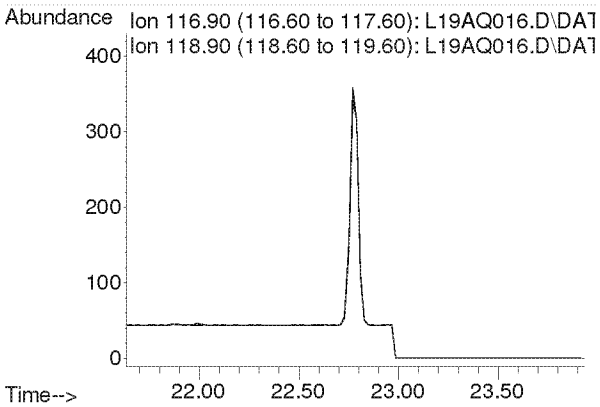


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

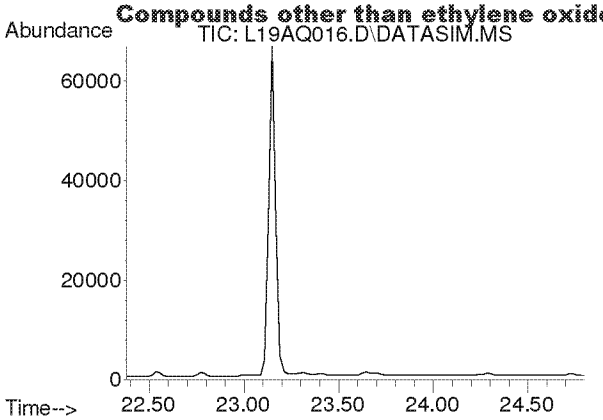
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

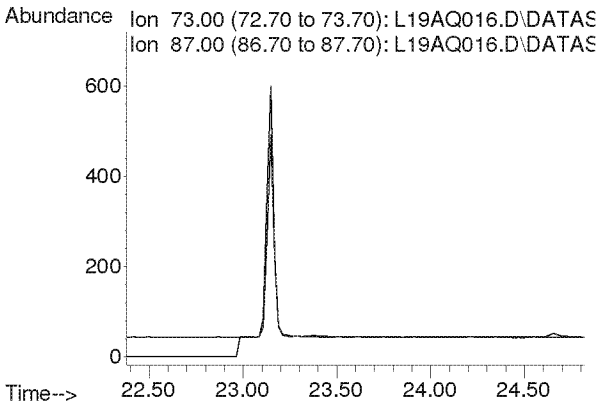


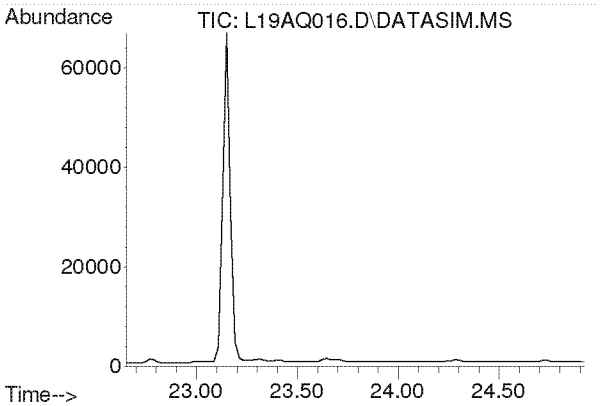
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



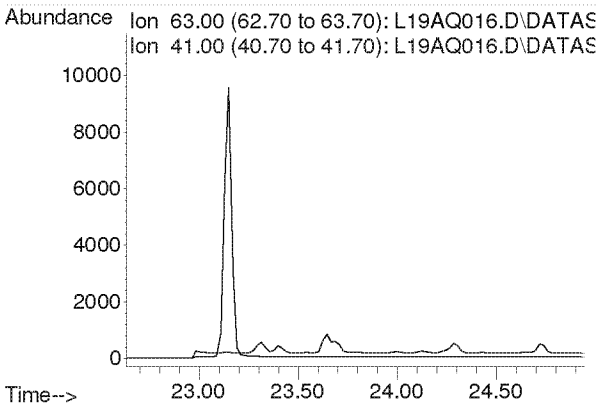


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

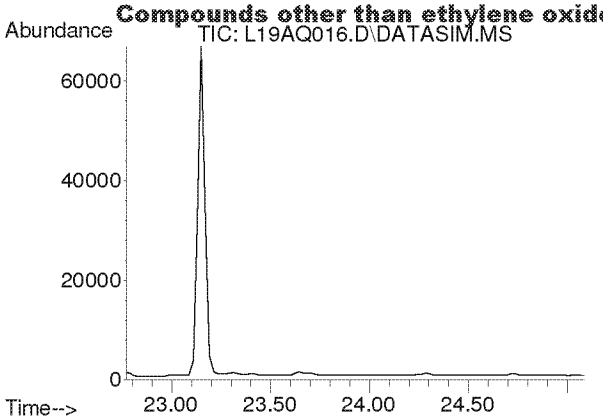
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

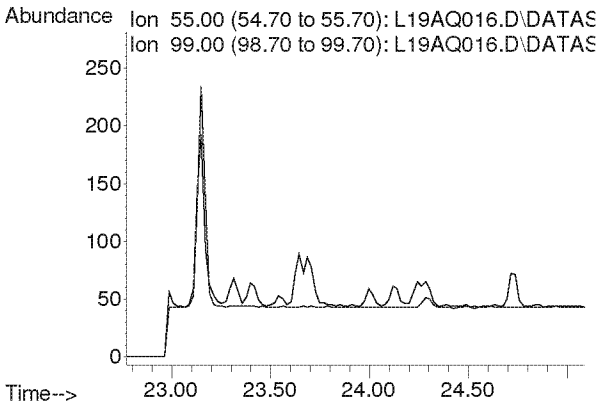


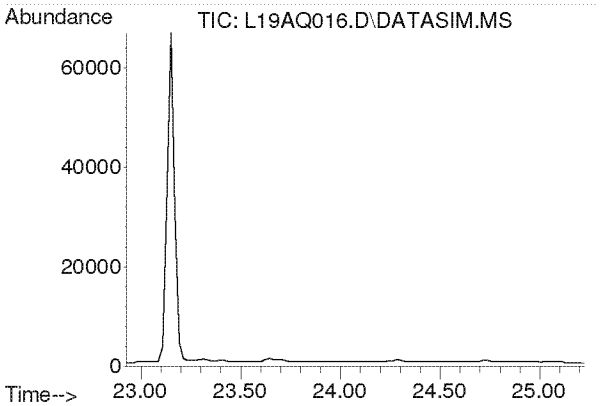
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



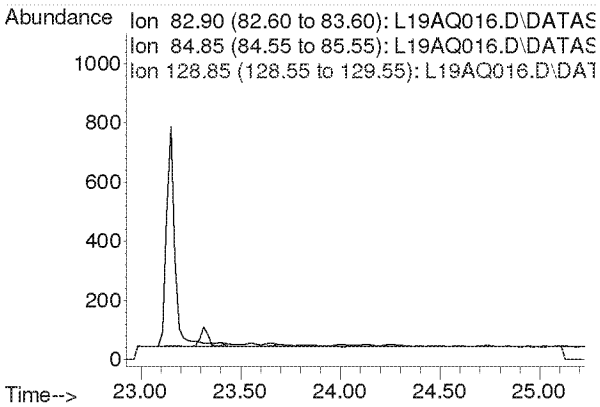


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

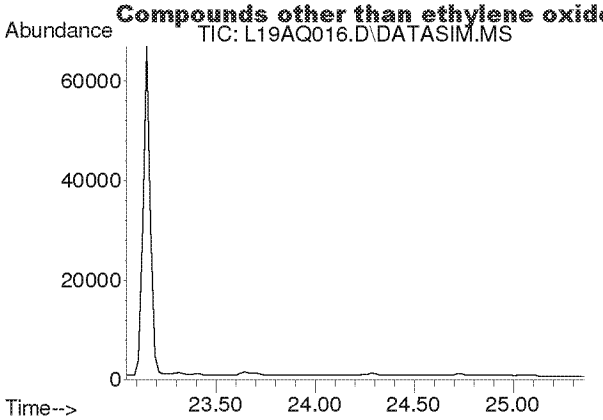
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

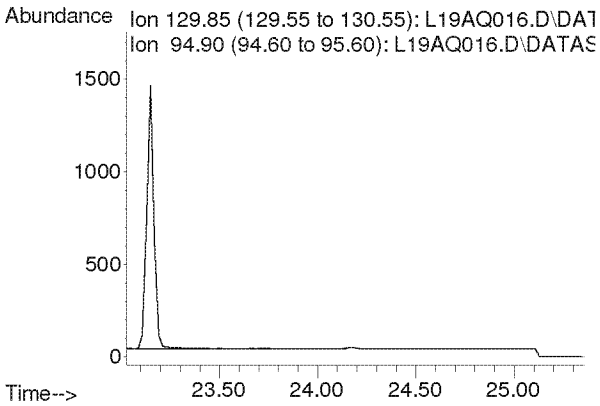


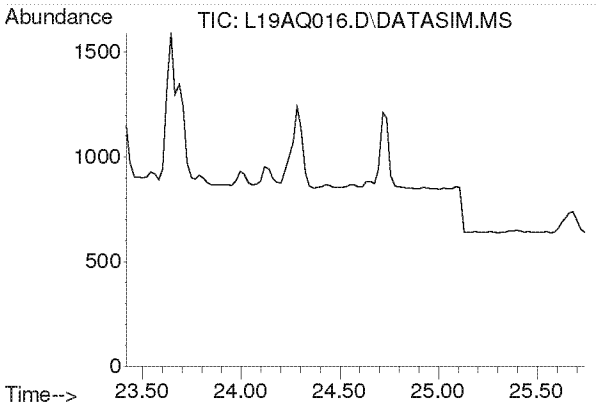
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



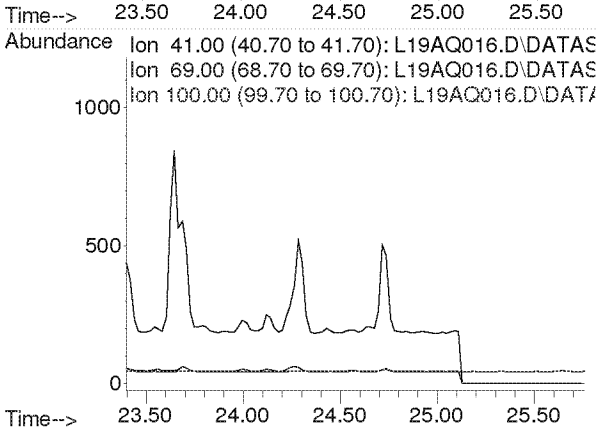


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

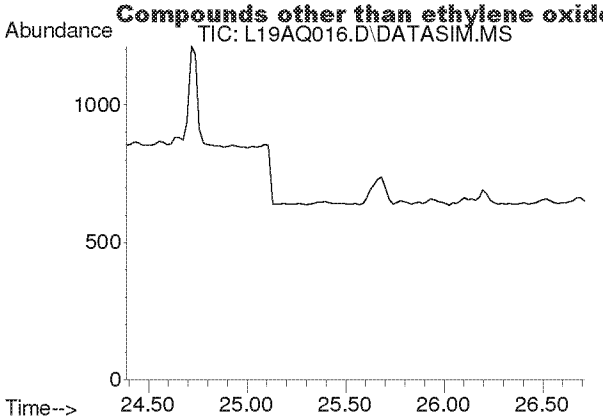
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

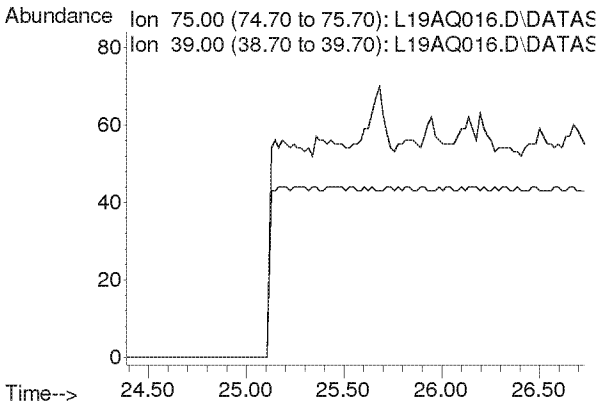


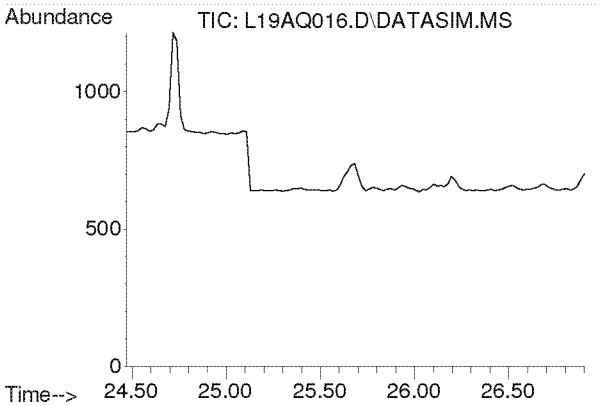
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



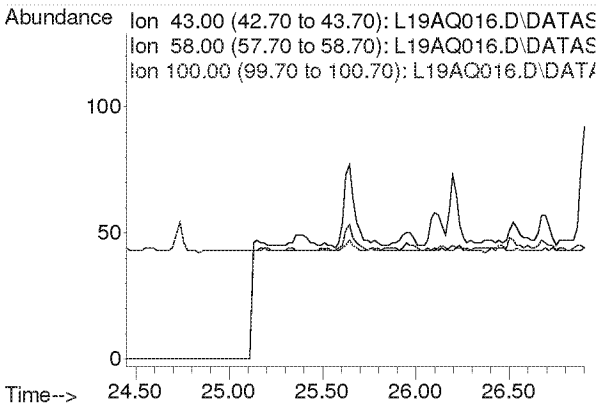


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

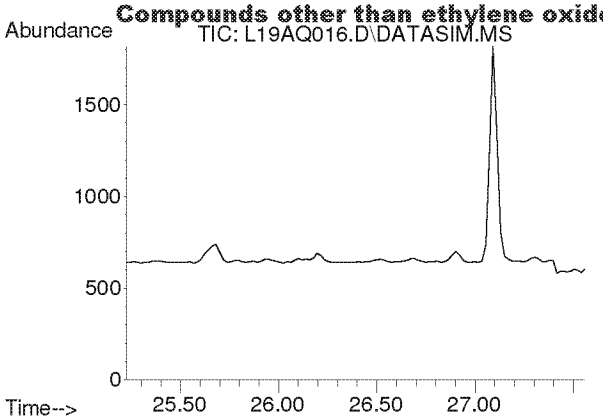
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

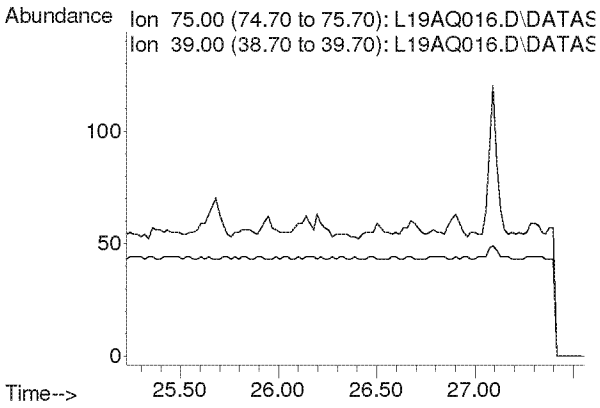


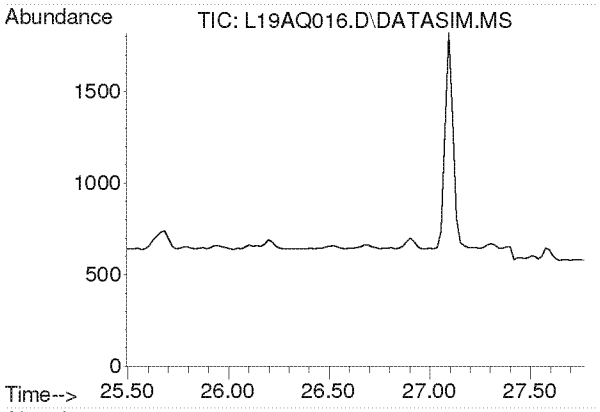
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



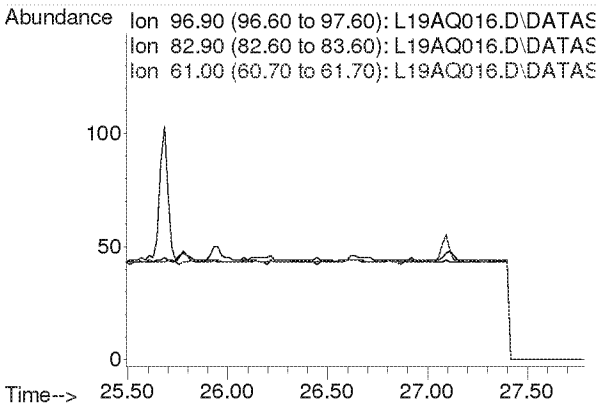


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

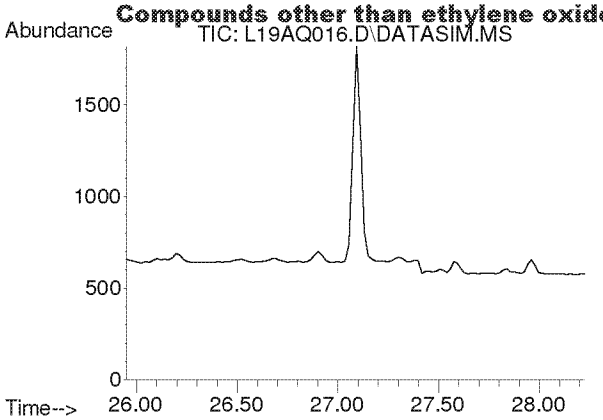
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

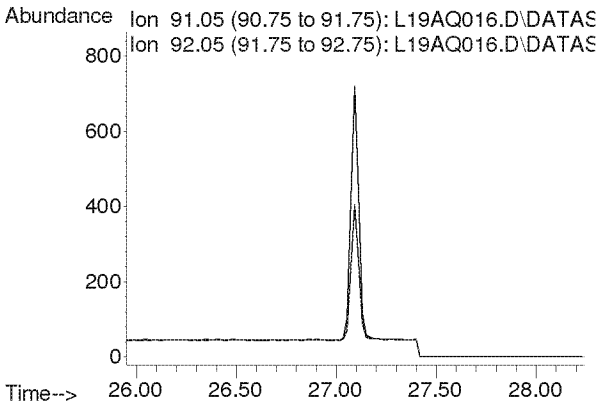


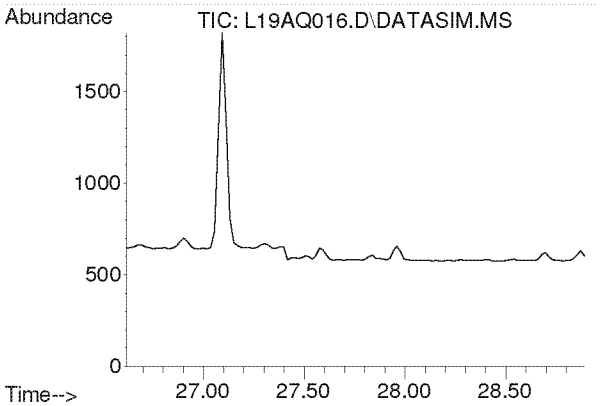
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



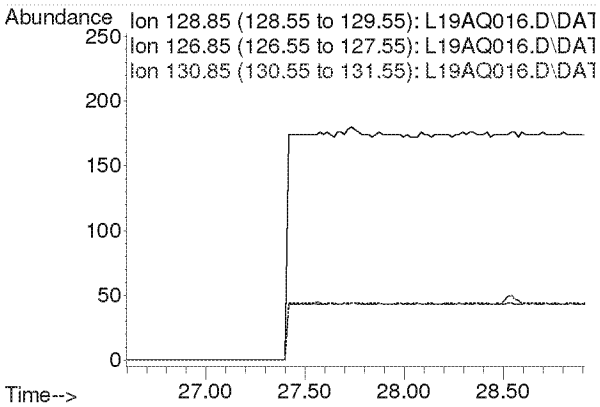


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

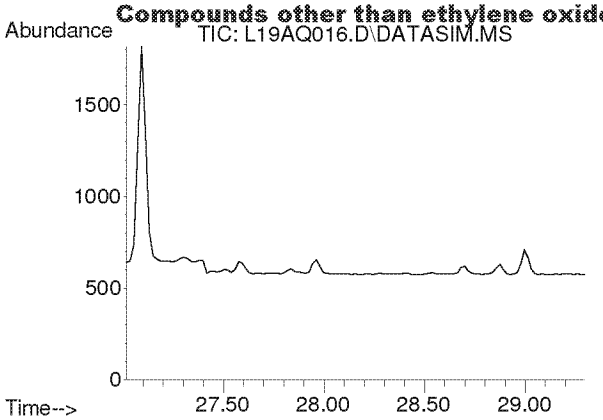
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

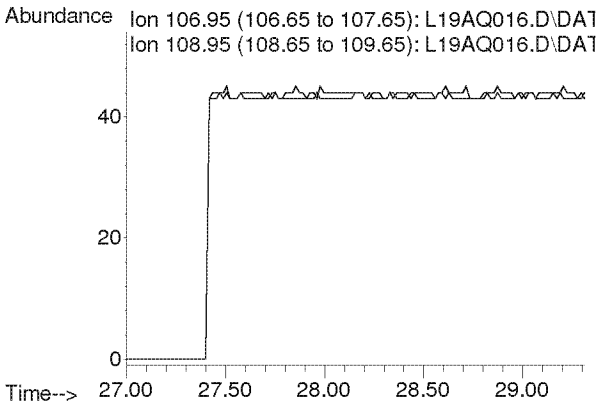


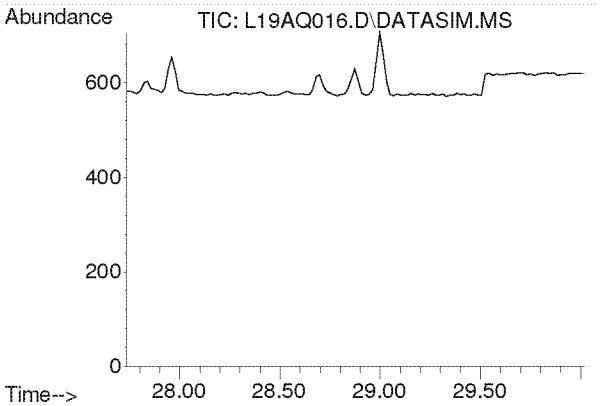
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



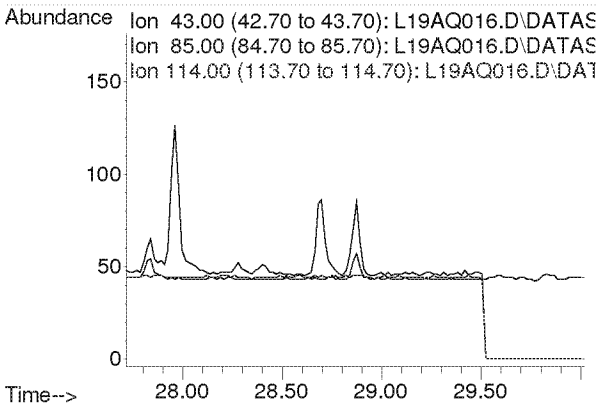


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

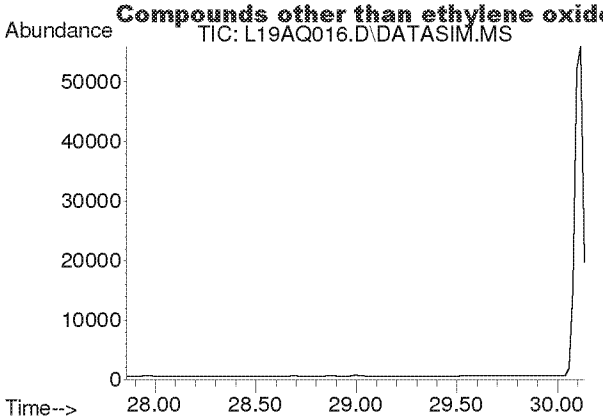
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

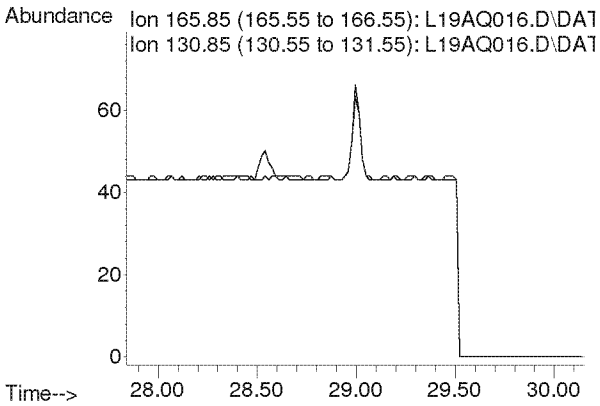


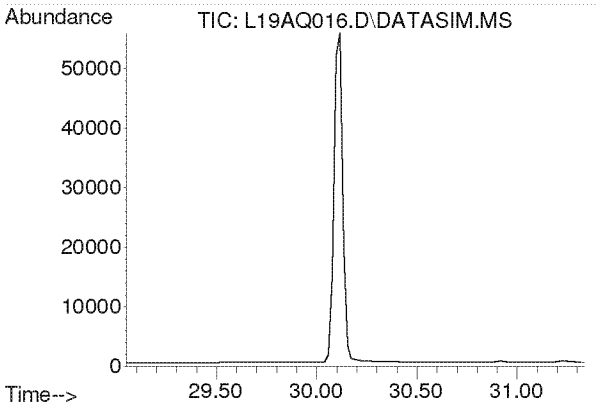
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



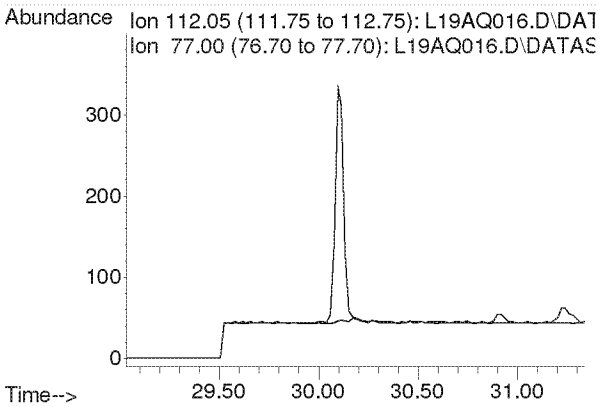


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

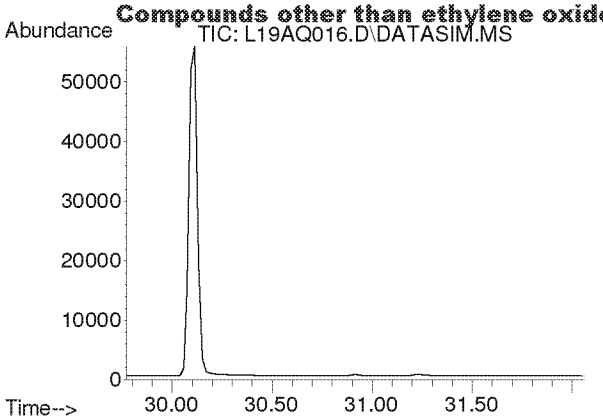
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

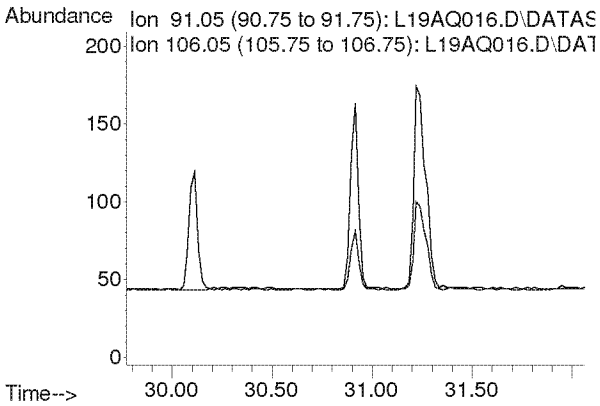


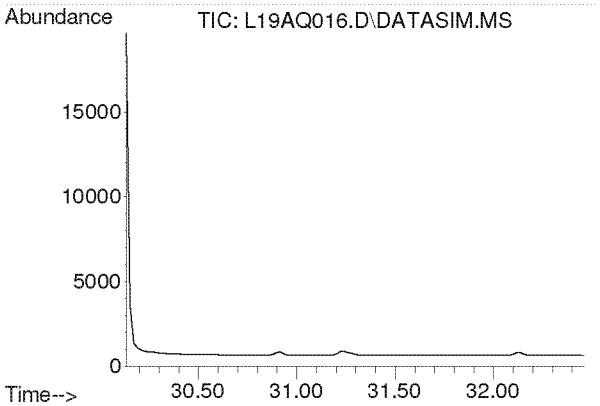
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



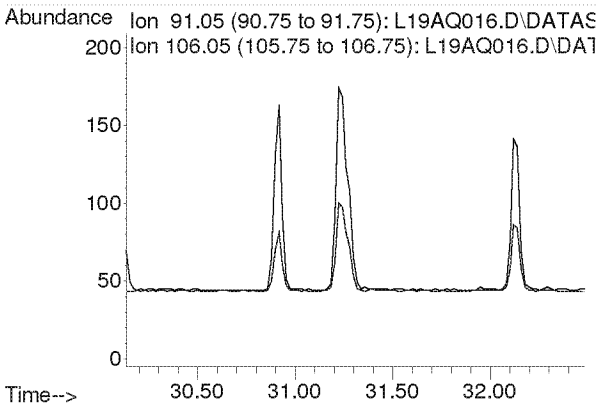


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

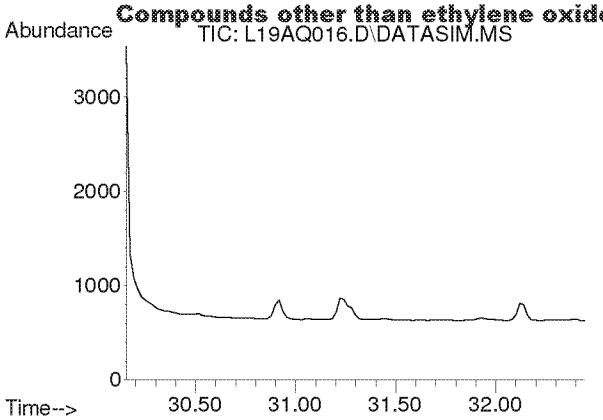
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

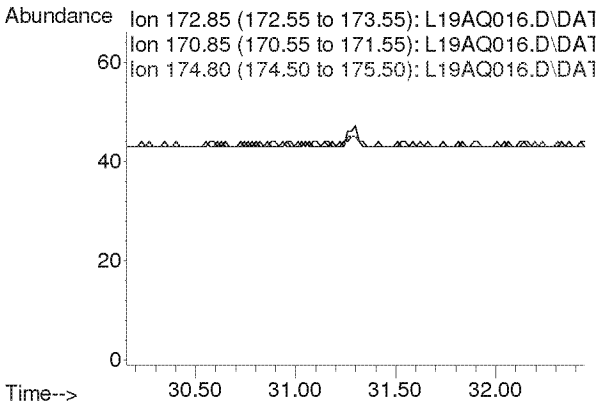


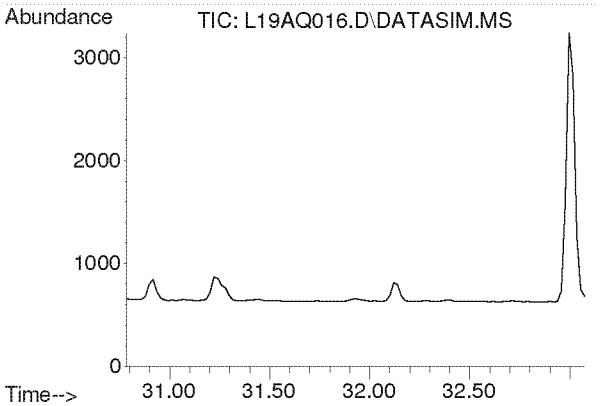
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



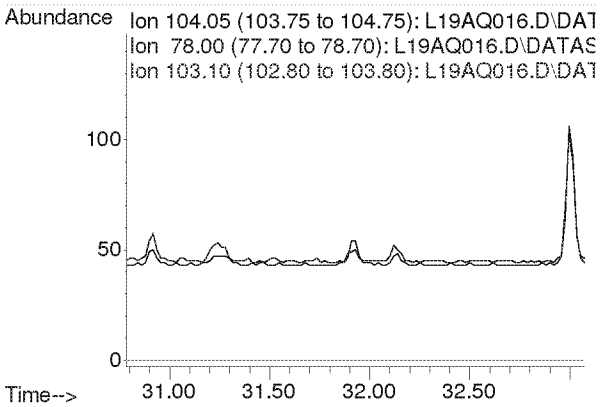


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

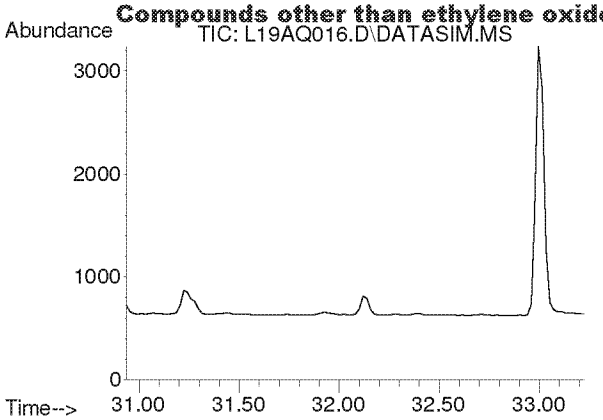
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

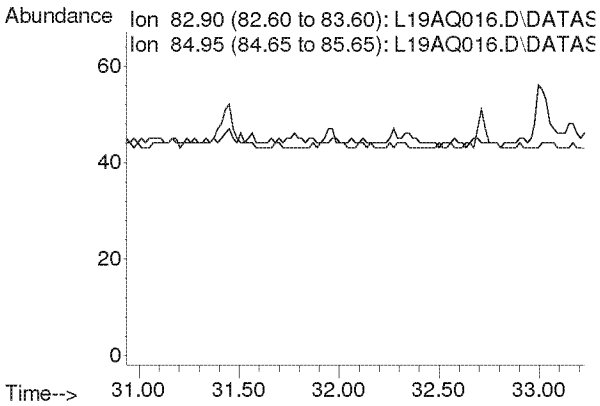


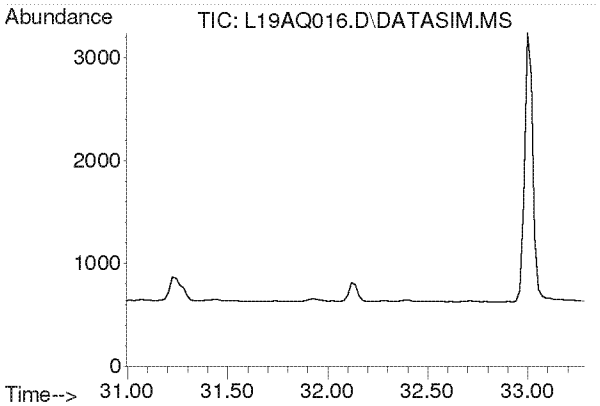
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



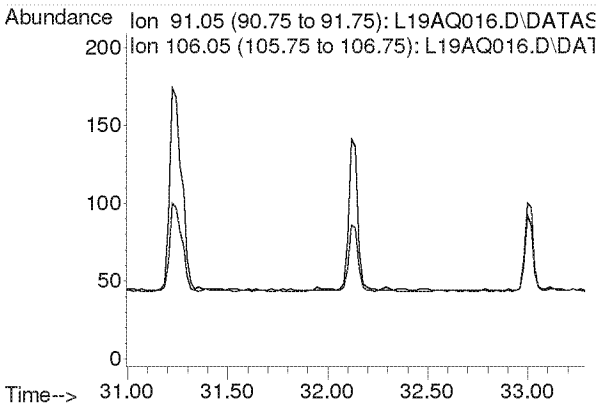


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

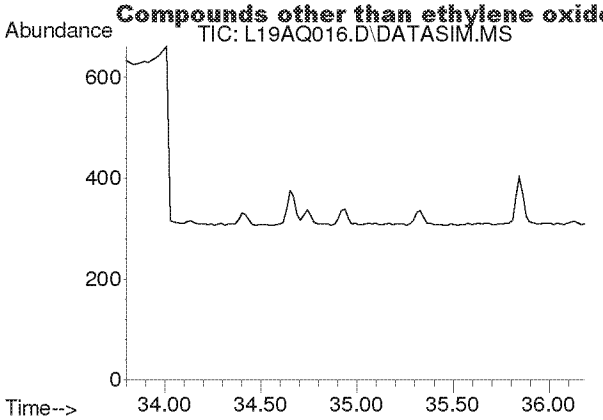
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

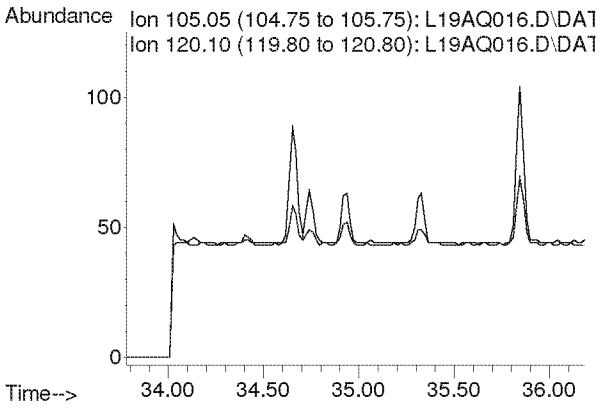


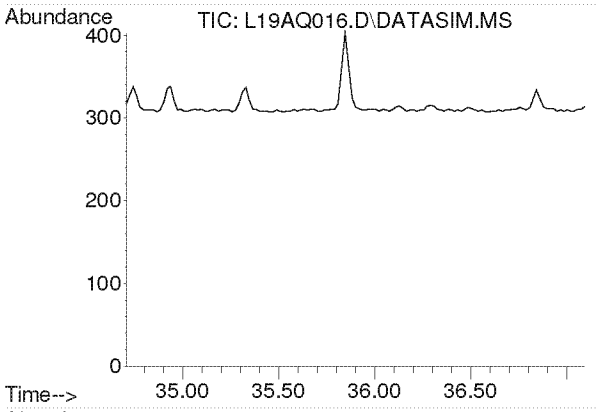
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



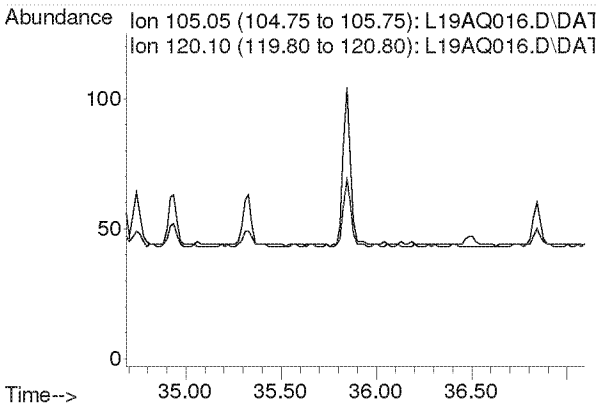


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

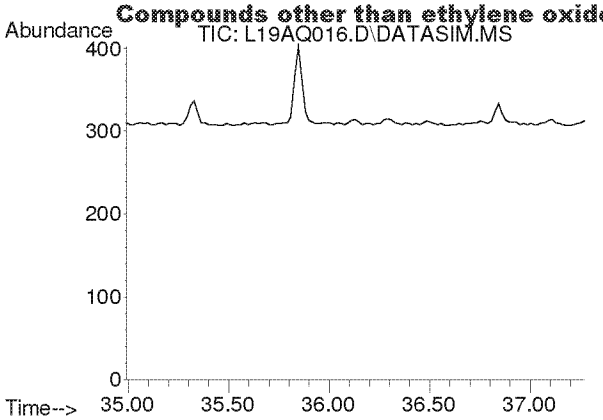
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

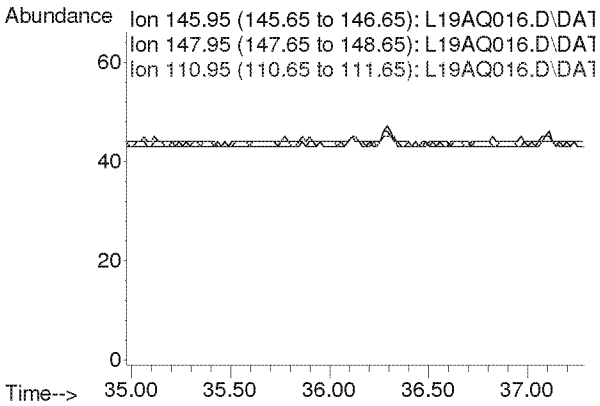


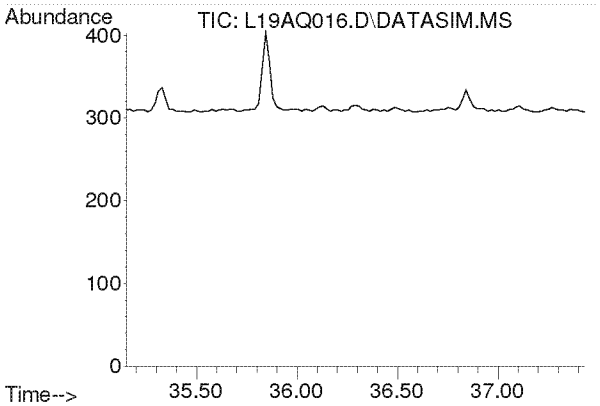
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



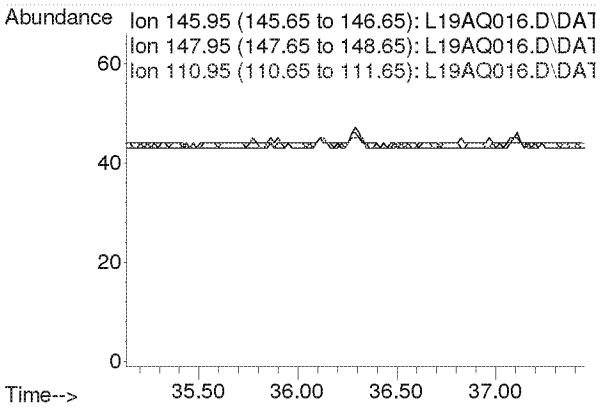


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

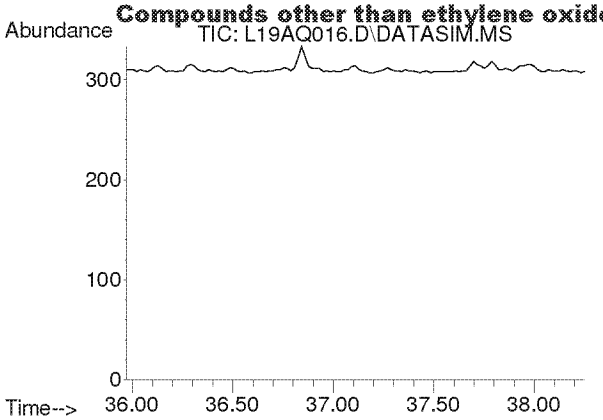
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

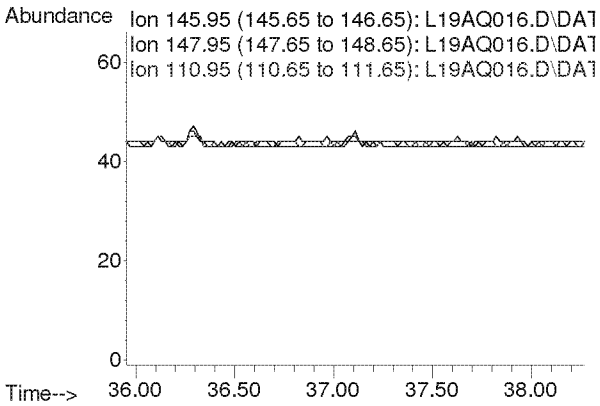


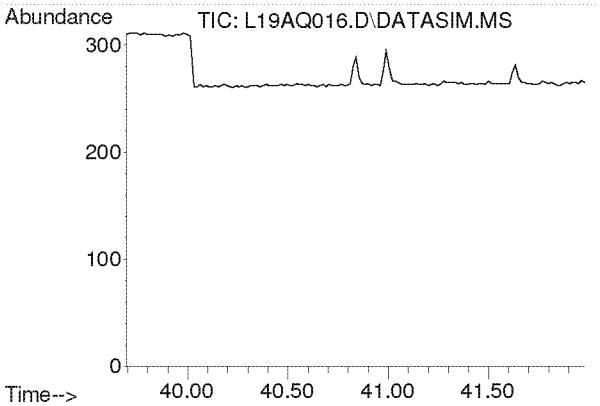
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



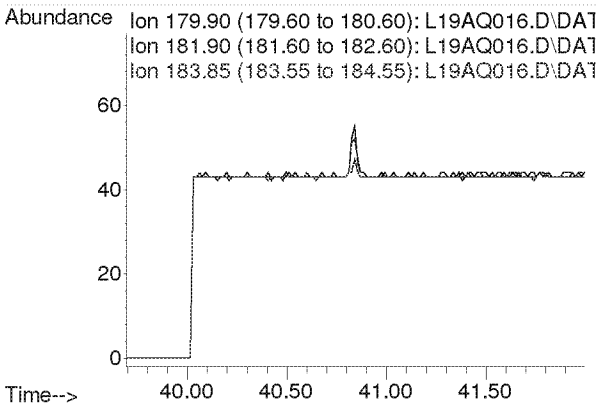


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

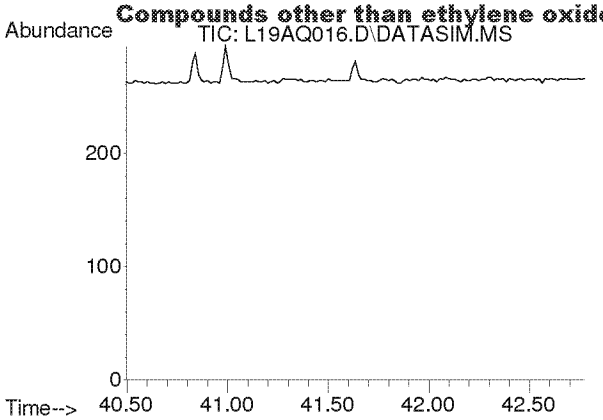
Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

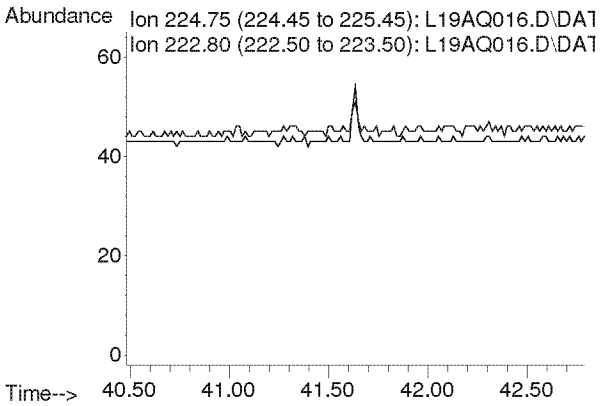


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ016.D
Acq: 18 Jan 2019 2:43 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ018.D
Acq On : 18 Jan 2019 4:46 am
Operator : MAH
Sample : 9011101-08
Misc : EPA WB WAREHOUSE C2 1/10/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 07:36:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	54225	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	134274	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	100987	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.440	29	1062m	0.3792 ppbv	RJB 2/4/19
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ018.D
Acq On : 18 Jan 2019 4:46 am
Operator : MAH
Sample : 9011101-08
Misc : EPA WB WAREHOUSE C2 1/10/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 07:36:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

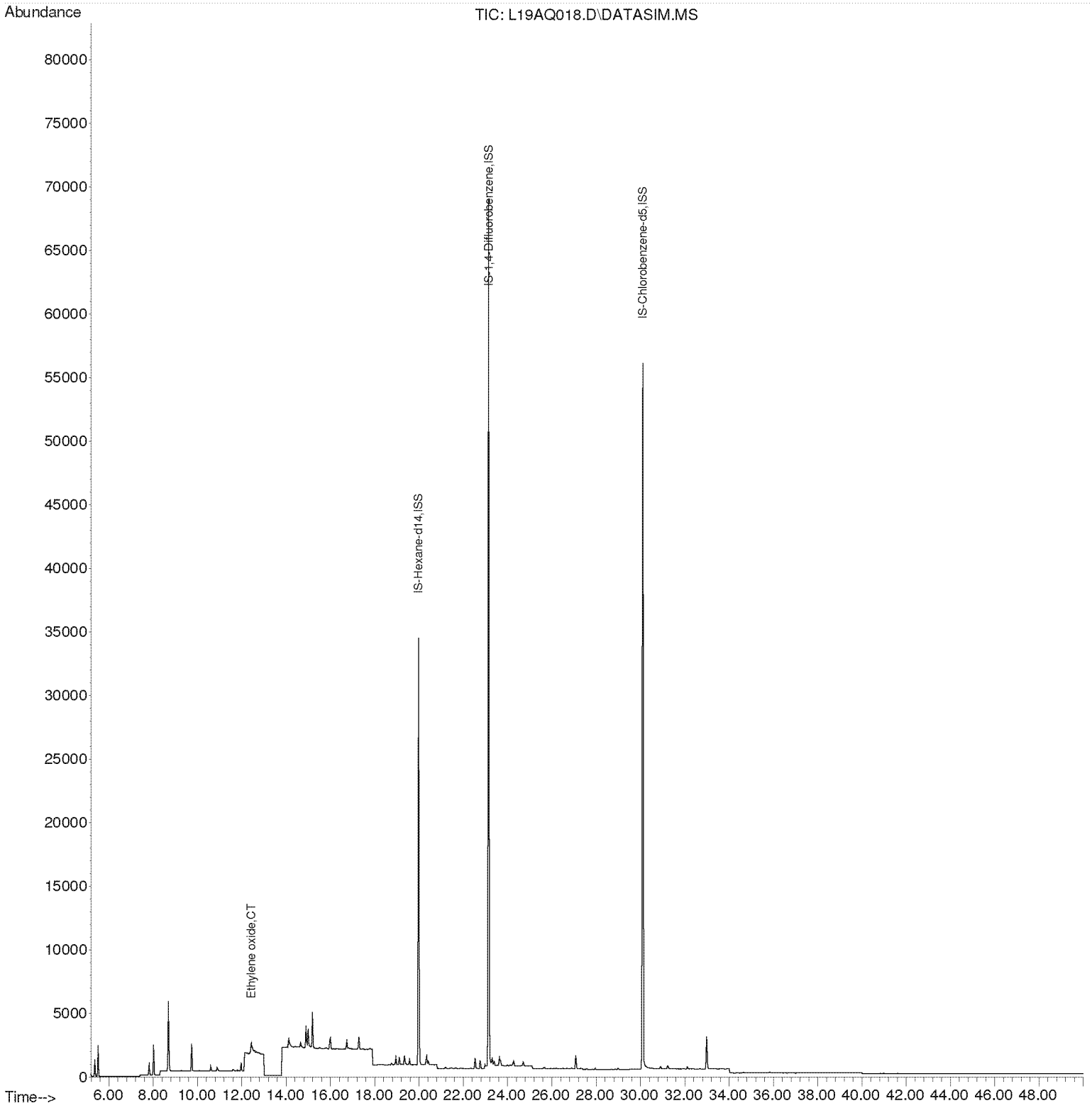
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D.	d
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

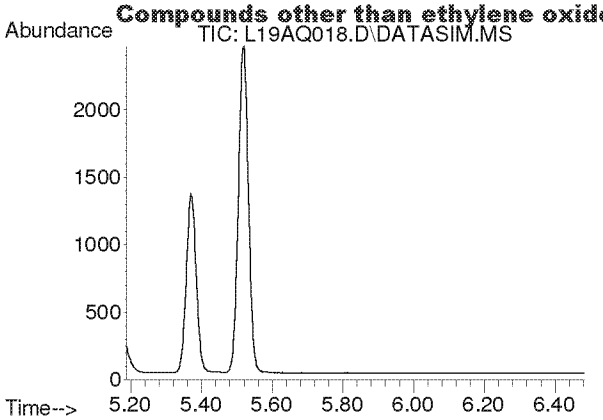
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ018.D
Acq On : 18 Jan 2019 4:46 am
Operator : MAH
Sample : 9011101-08
Misc : EPA WB WAREHOUSE C2 1/10/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 07:36:50 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



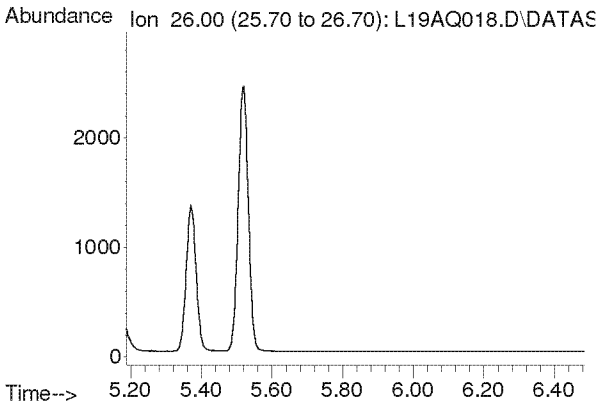
Compounds other than ethylene oxide were not quantitated.

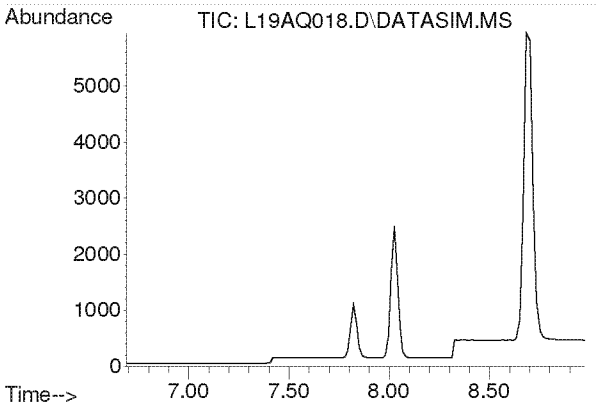


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 26



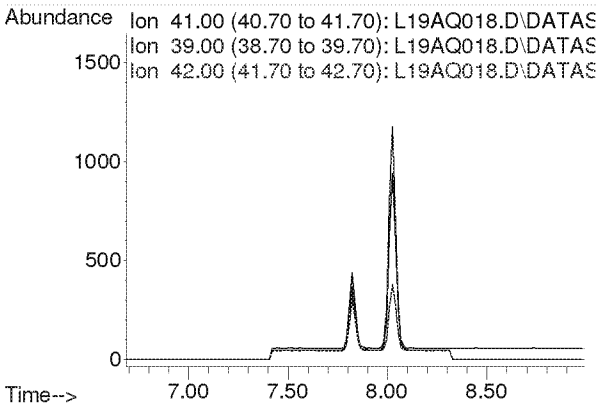


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

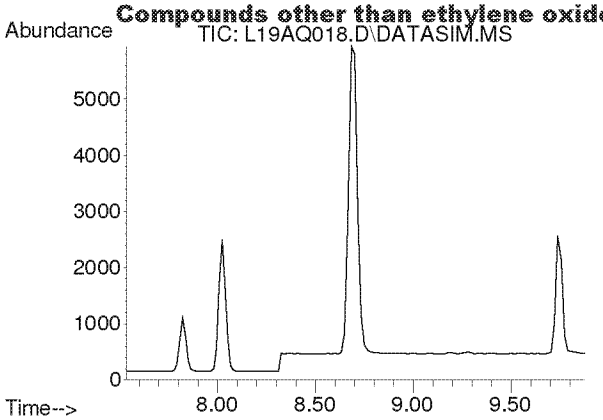
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

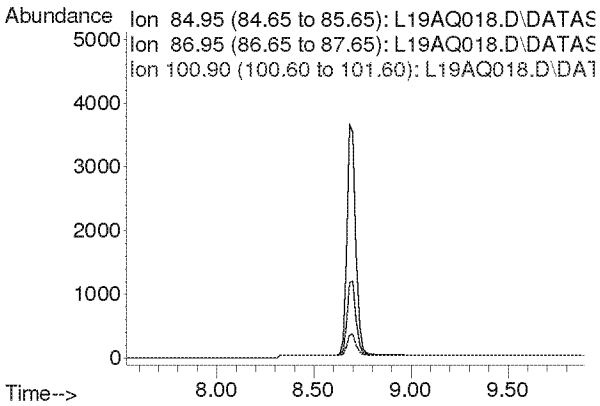


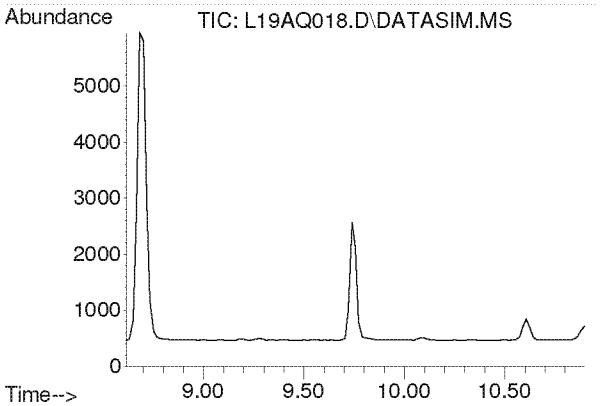
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



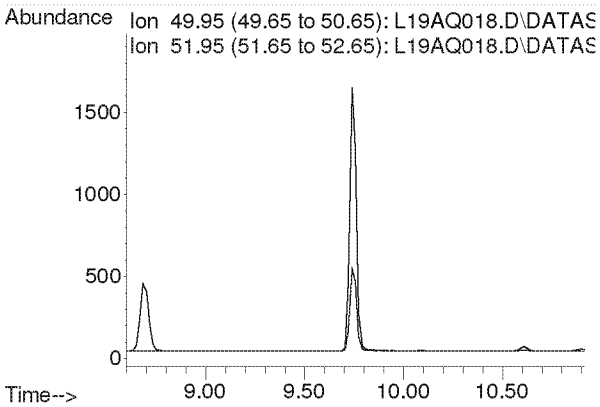


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

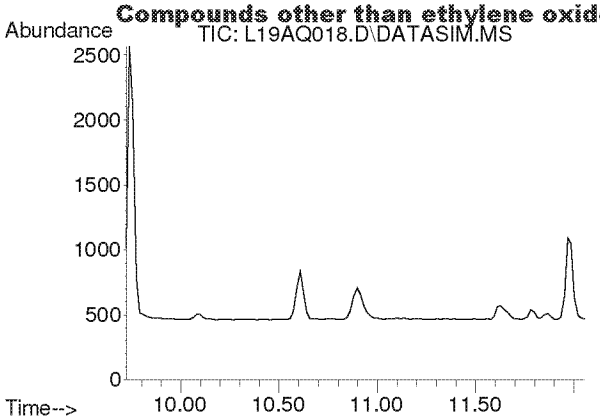
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

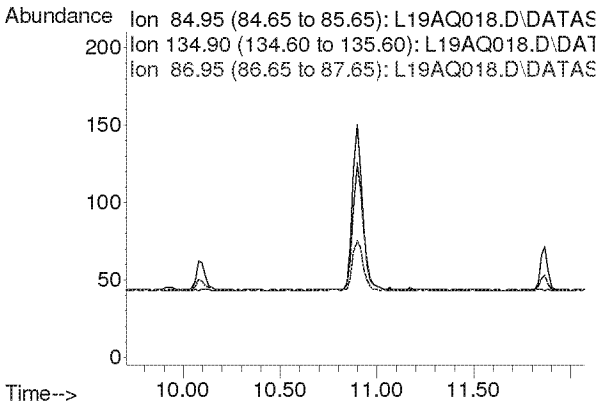


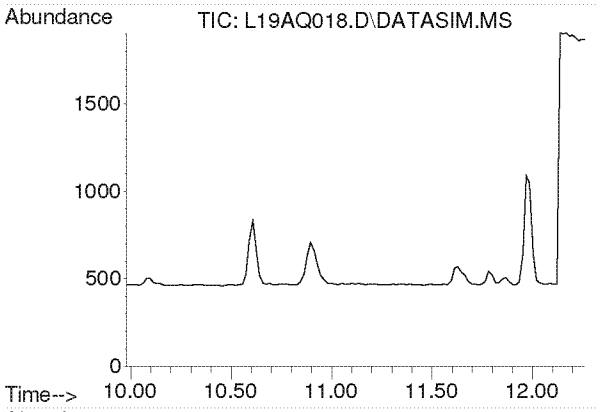
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



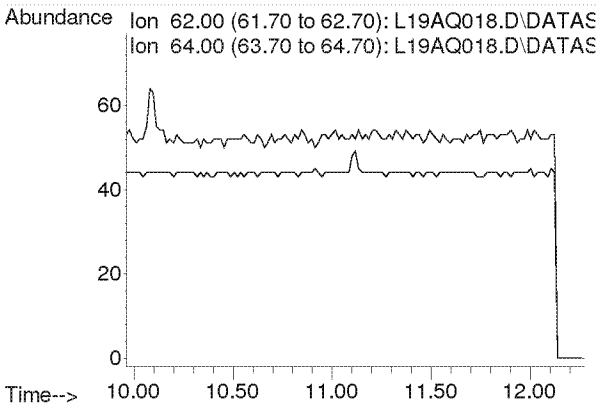


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

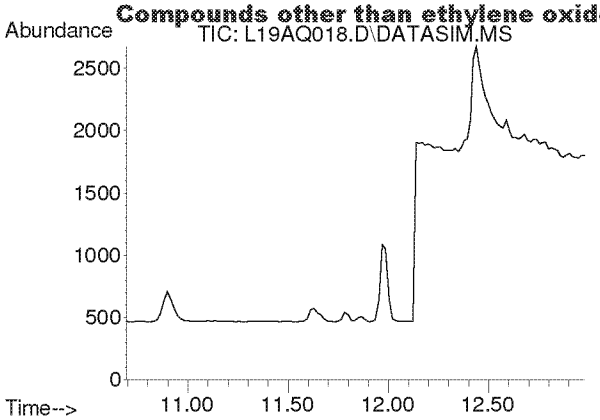
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

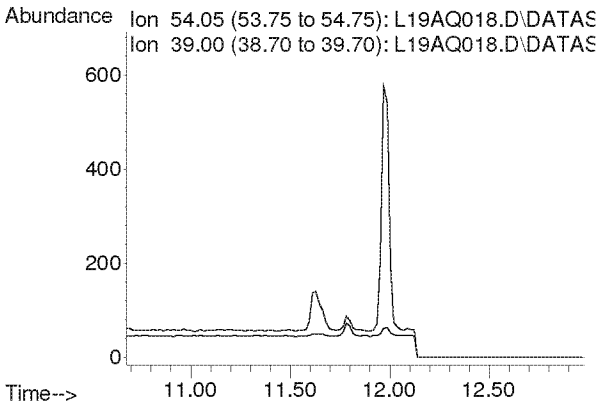


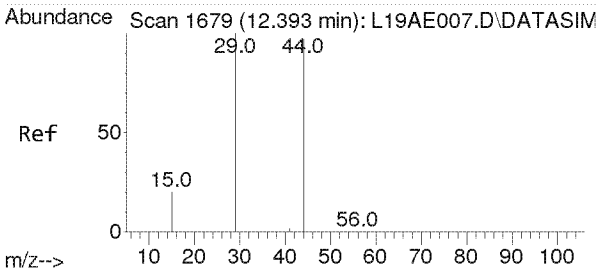
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

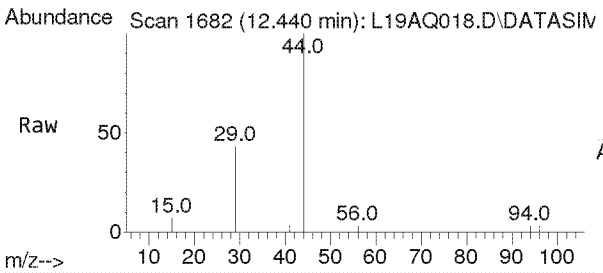


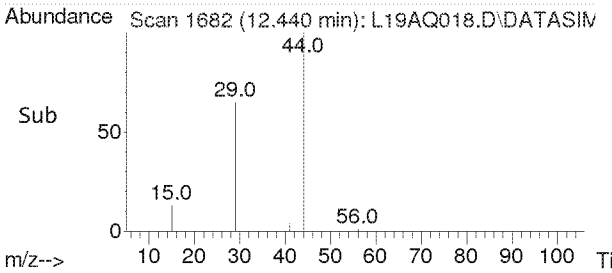


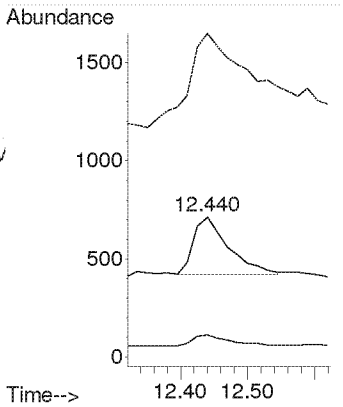
#9
Ethylene oxide
Concen: 0.379 ppbv m
RT: 12.440 min Scan# 1682
Delta R.T. 0.047 min
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 29 Resp: 1062

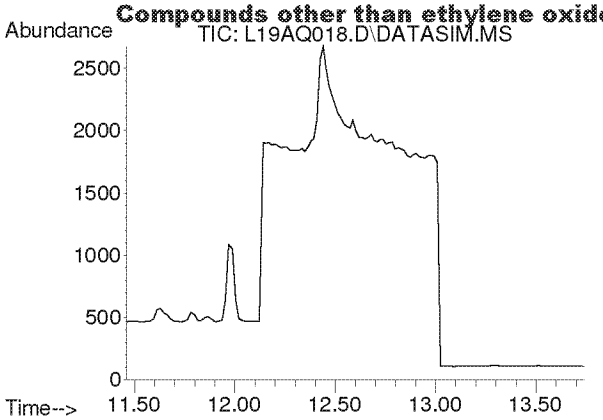
Ion	Ratio	Lower	Upper
29	100		
15	22.6	15.4	23.0
44	311.9	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

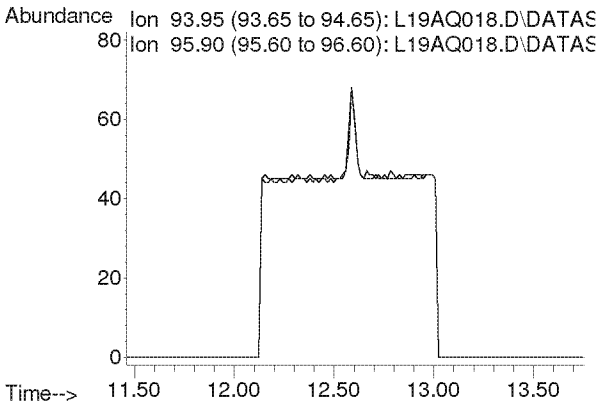


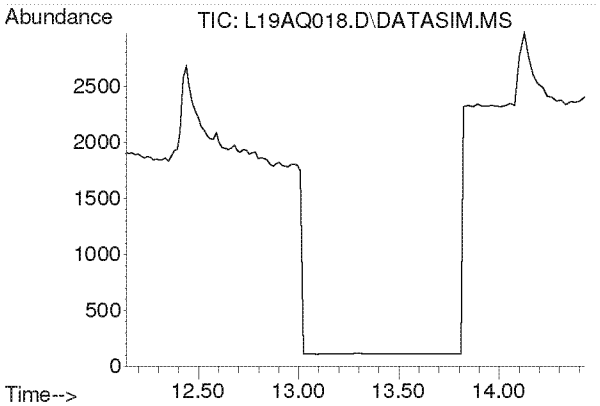
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



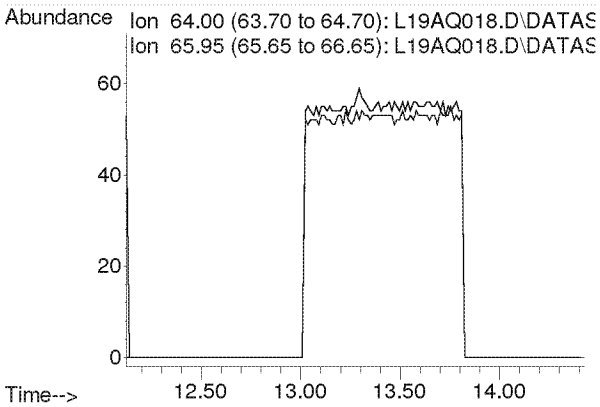


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

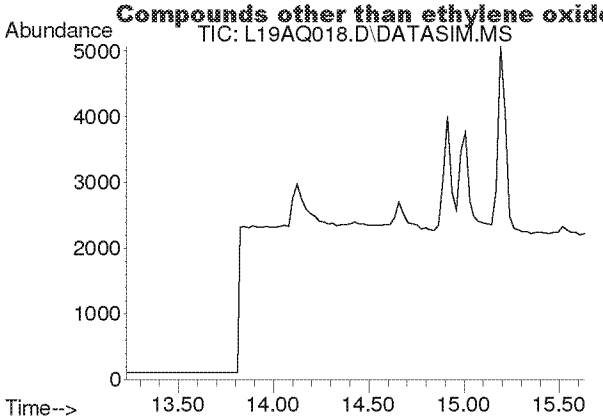
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

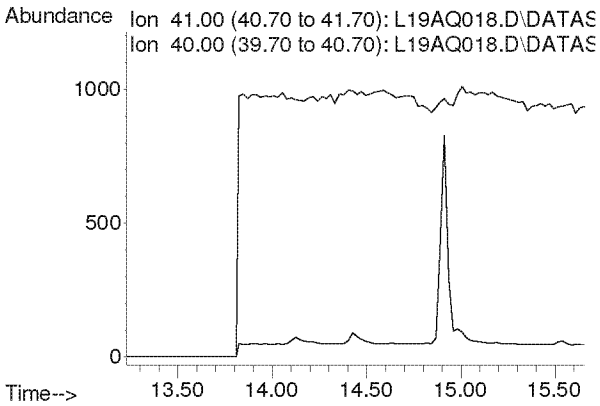


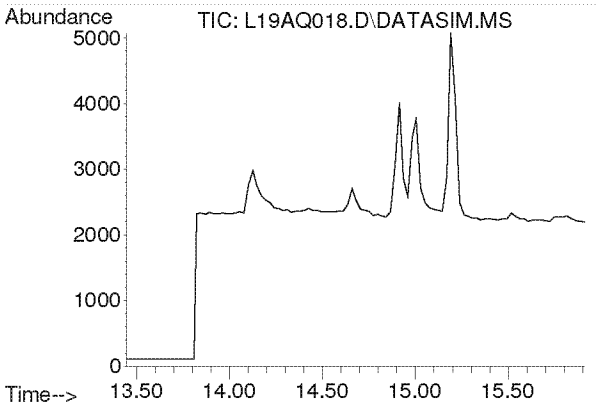
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



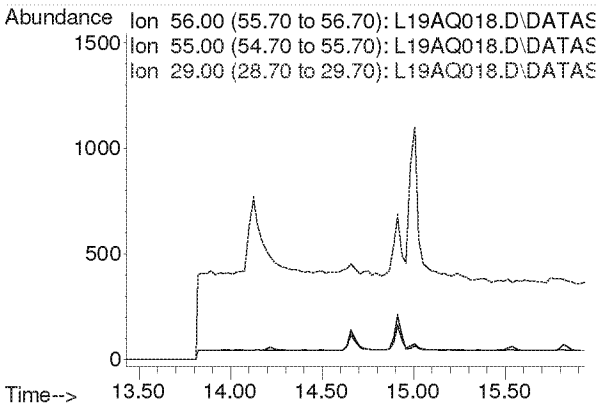


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

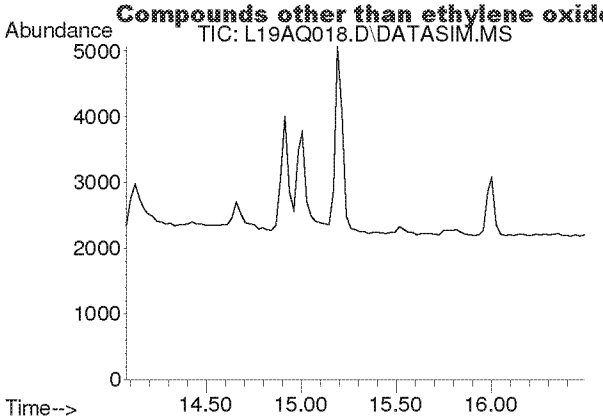
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

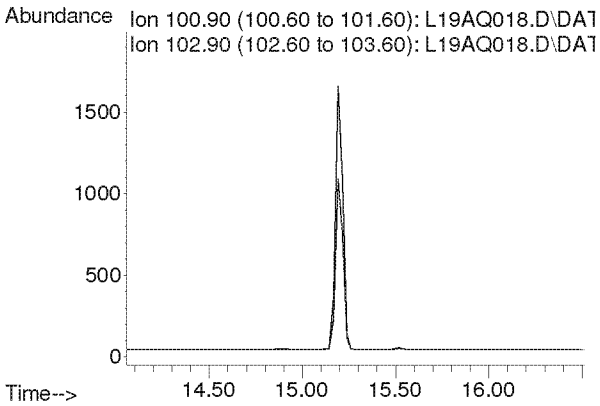


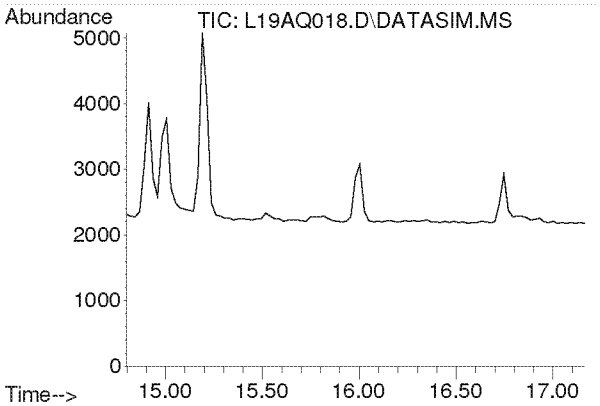
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



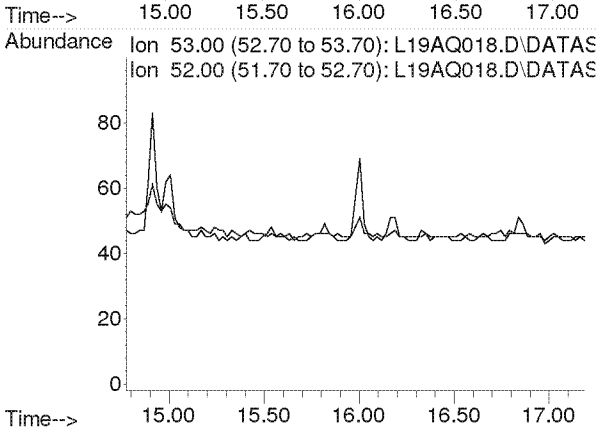


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

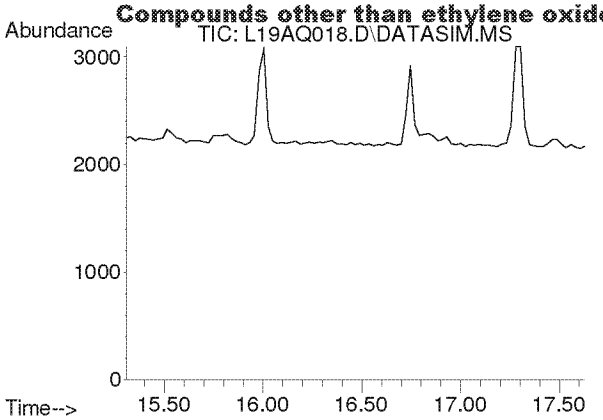
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

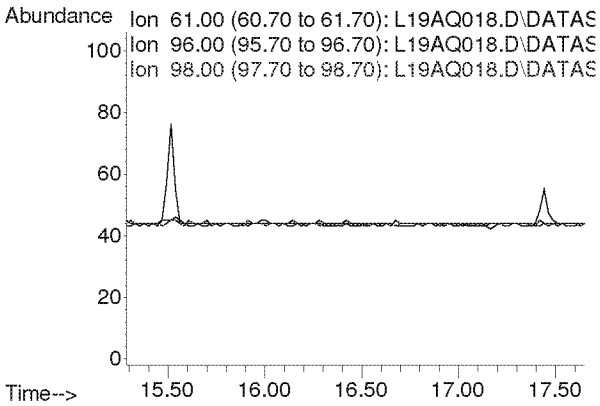


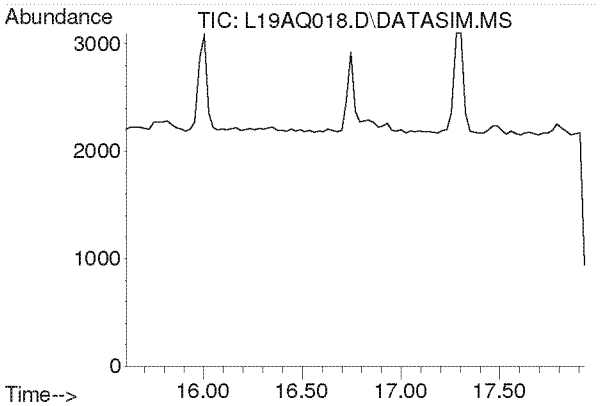
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



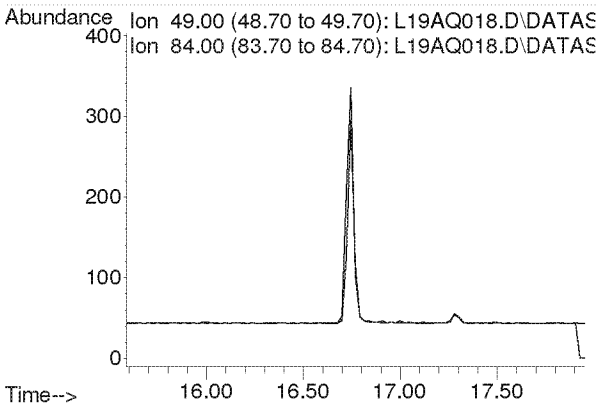


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

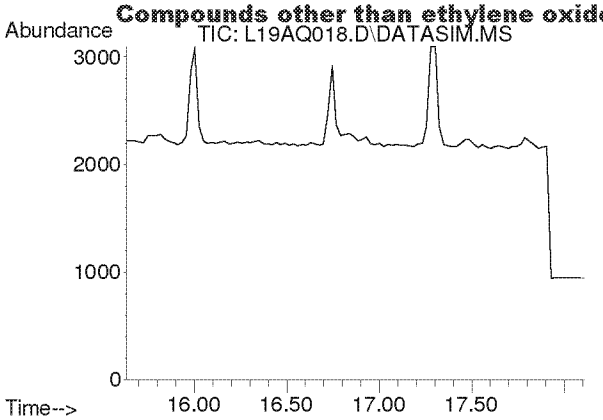
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

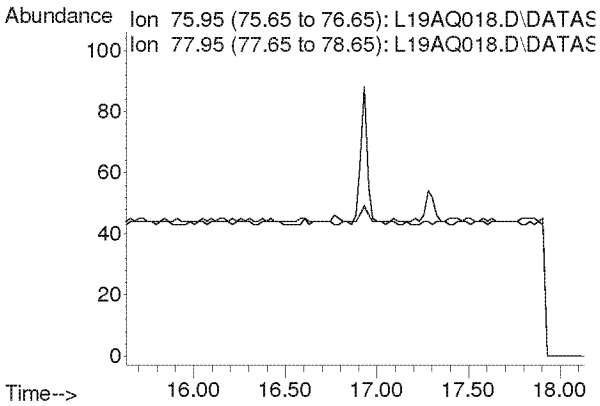


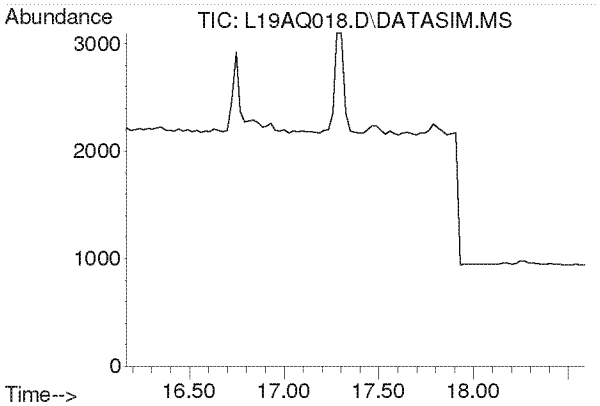
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



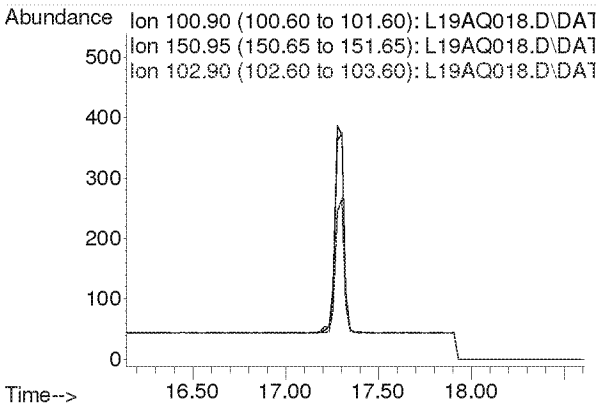


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

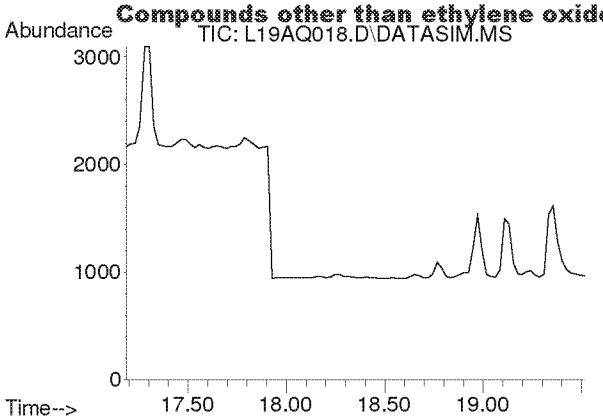
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

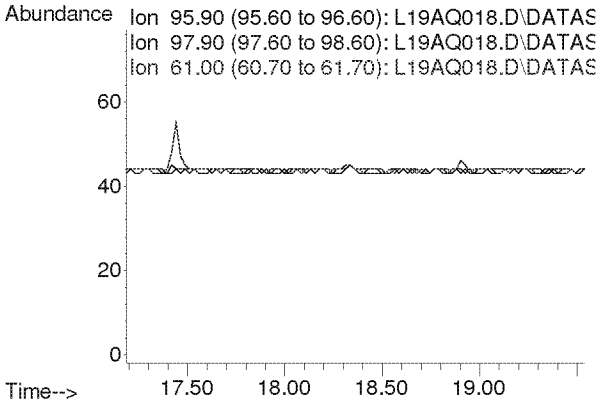


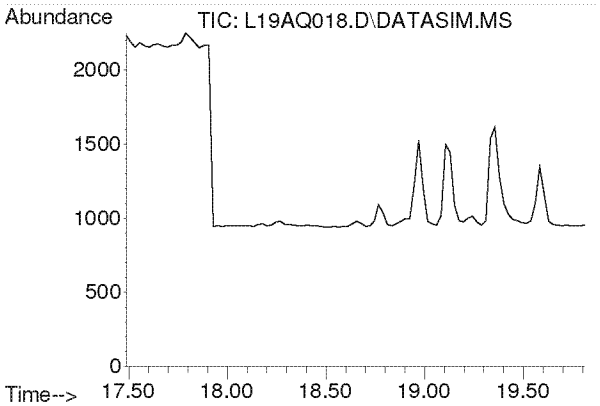
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



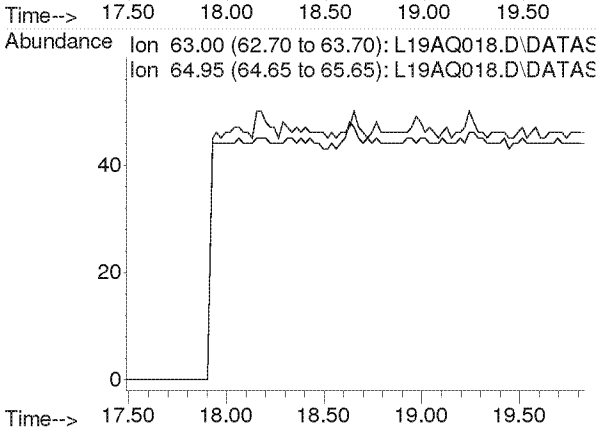


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

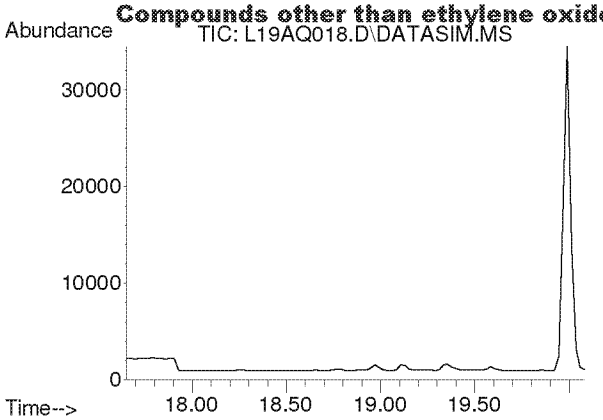
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

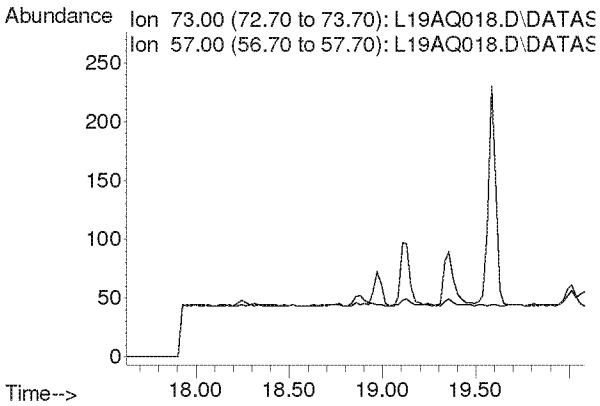


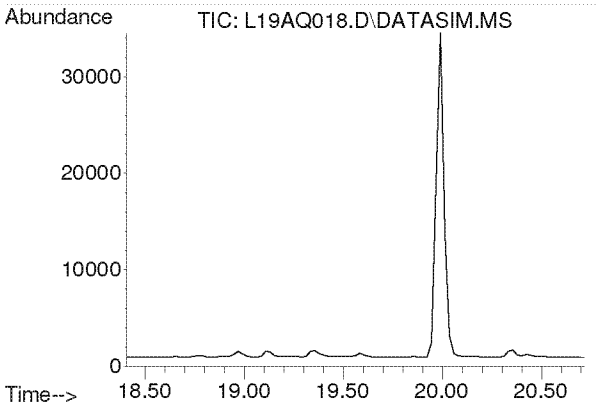
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



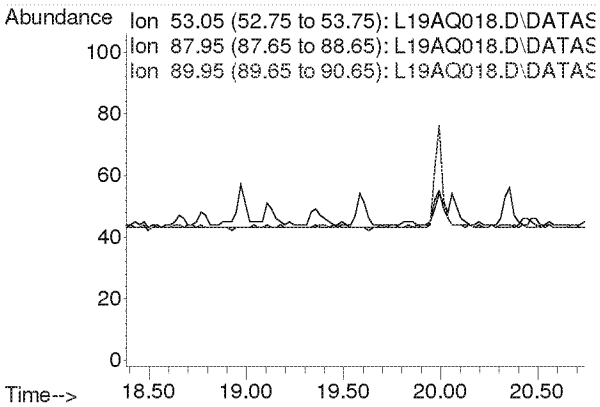


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

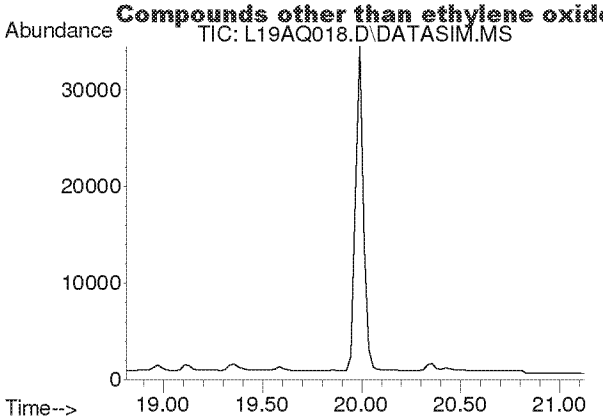
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

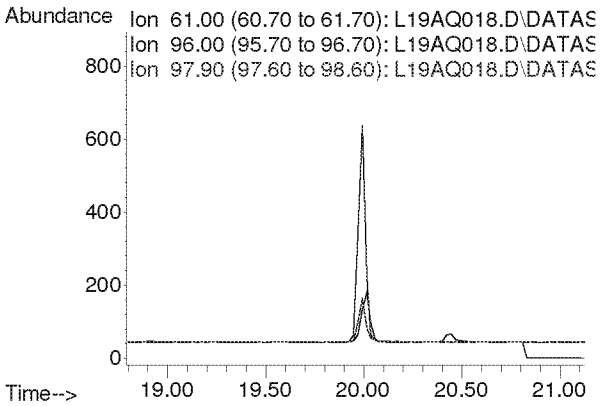


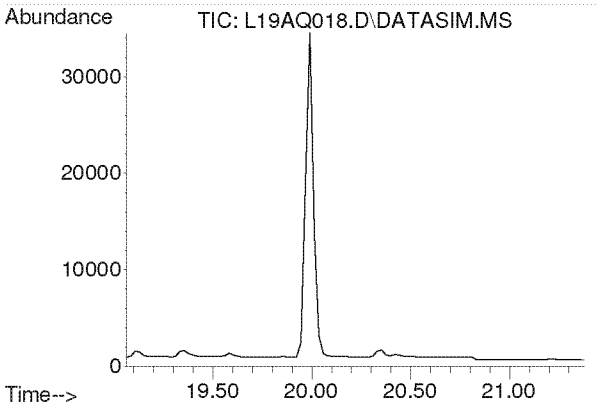
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



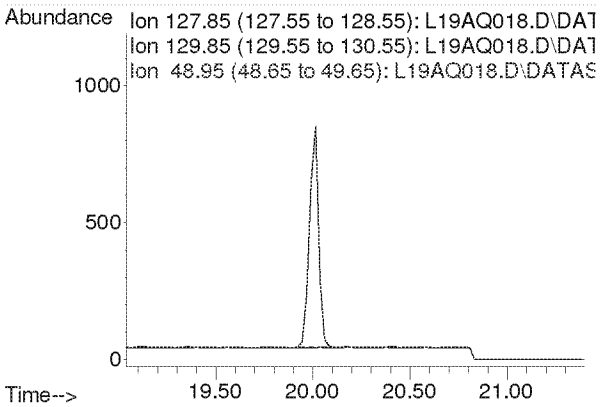


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

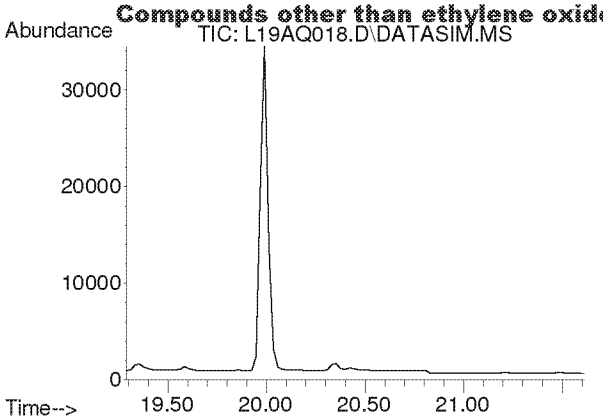
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

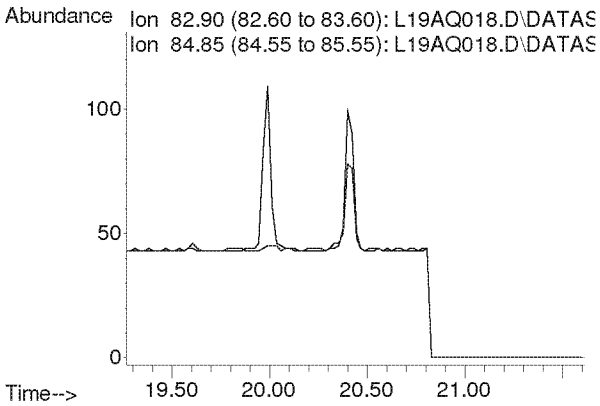


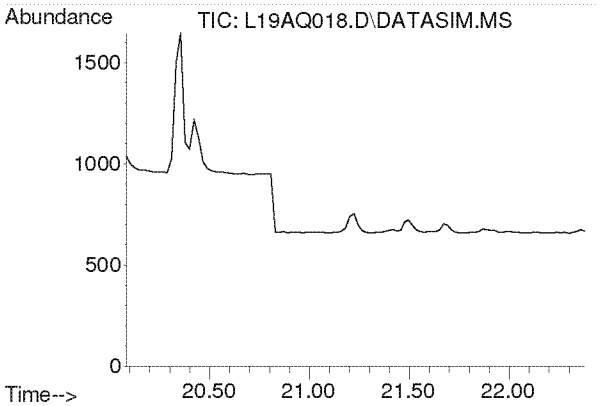
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



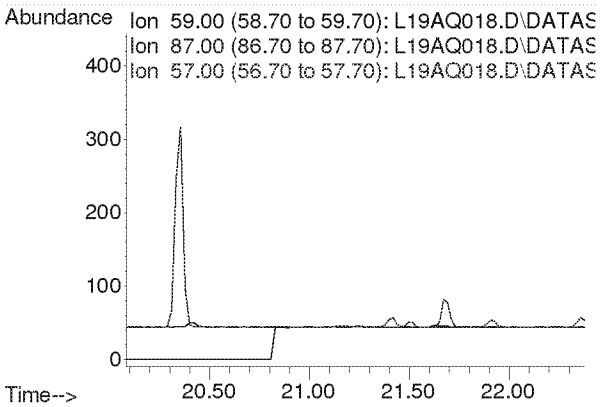


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

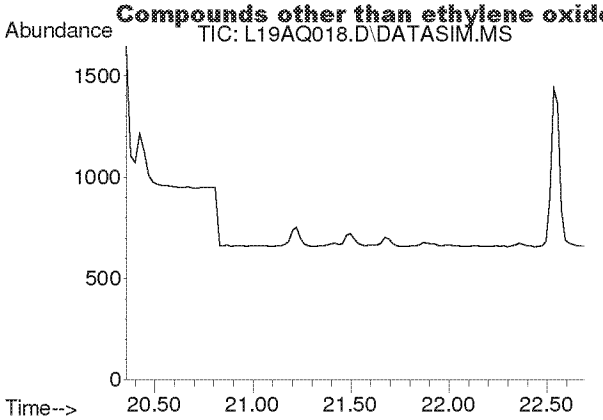
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

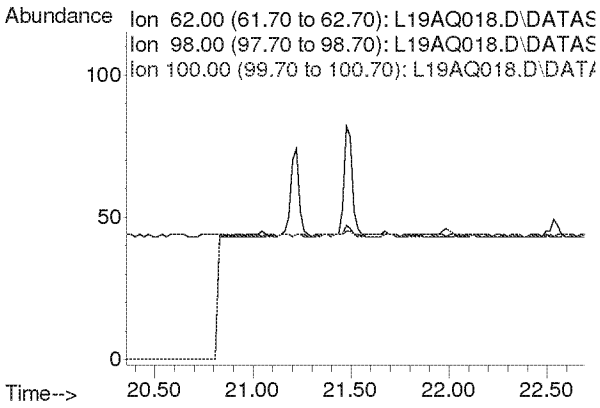


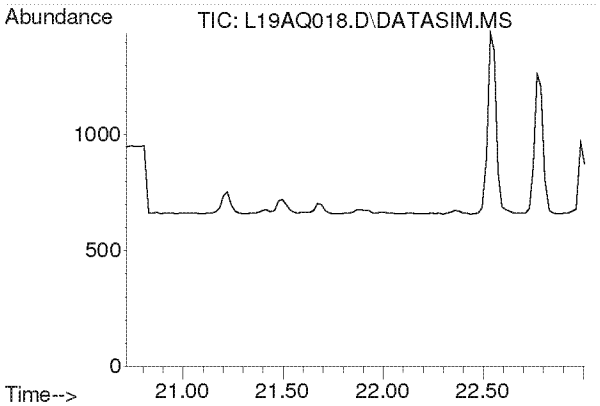
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



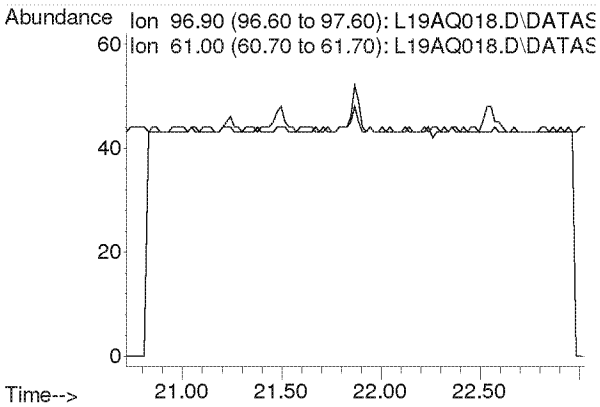


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

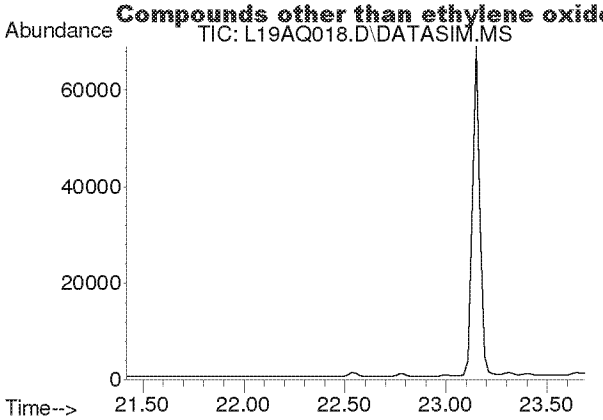
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

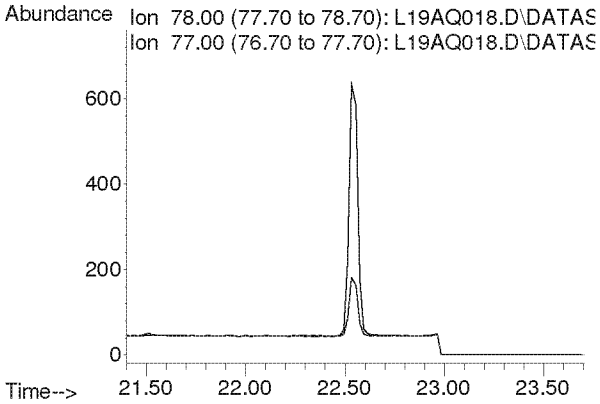


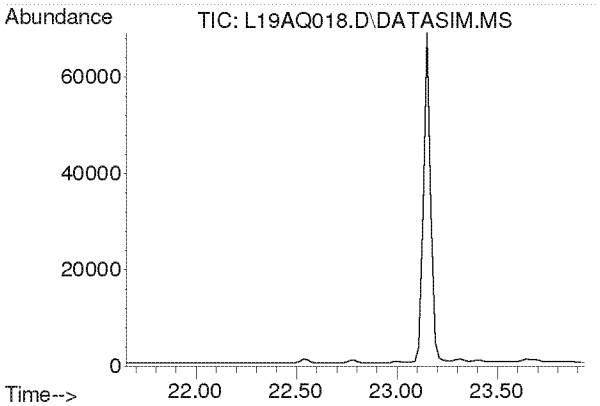
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



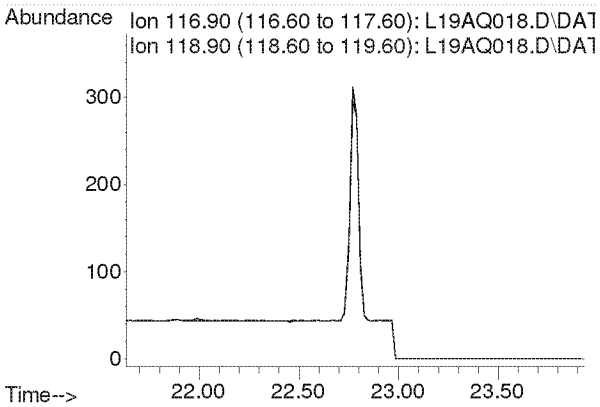


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

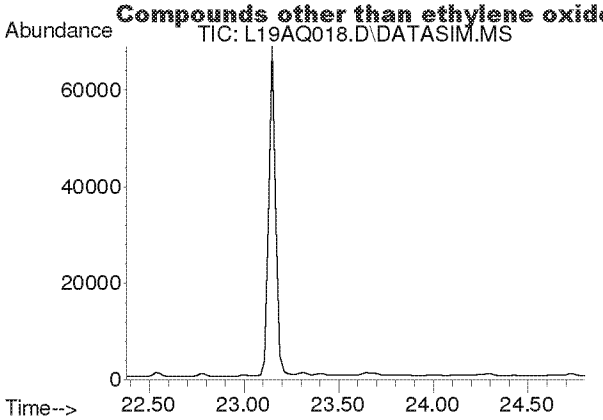
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

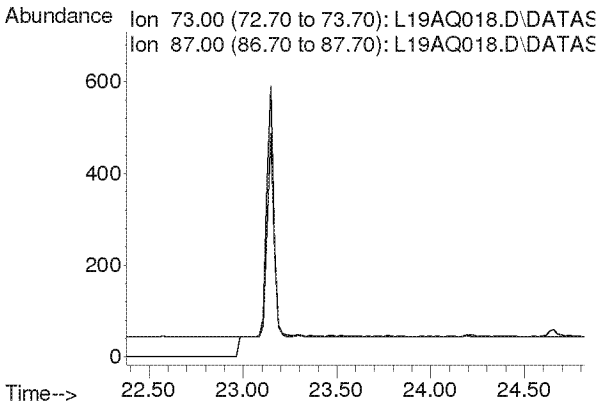


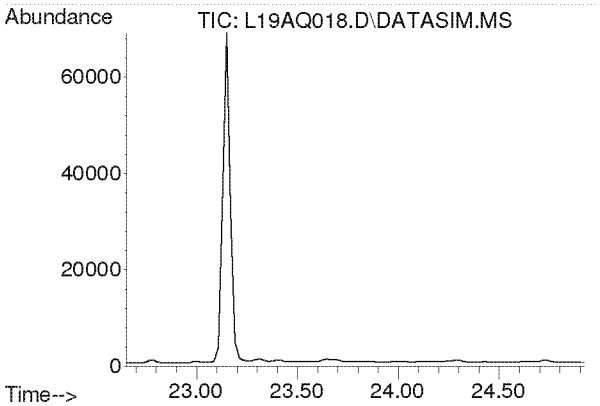
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



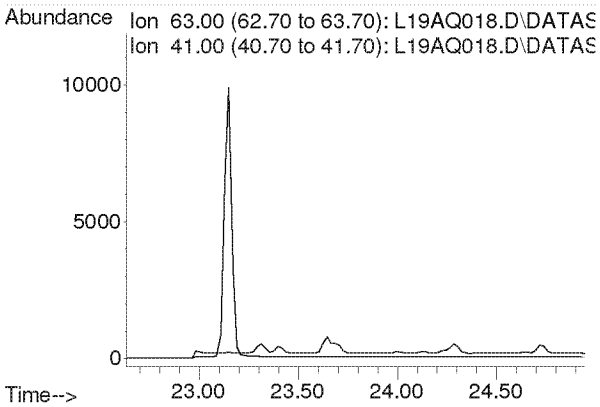


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

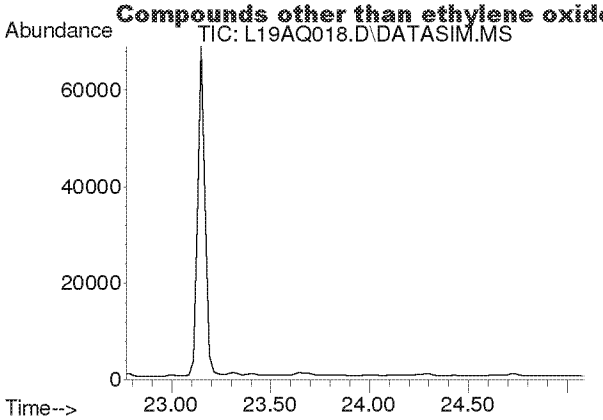
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

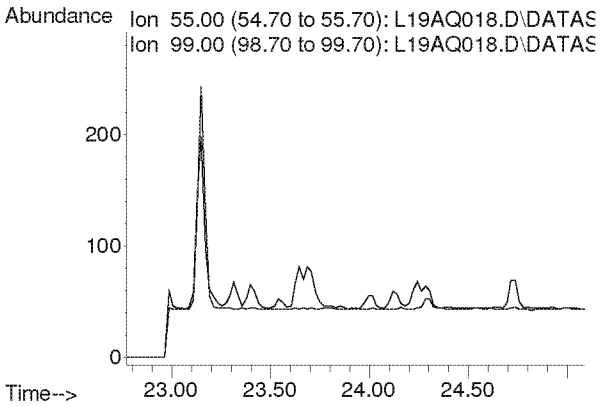


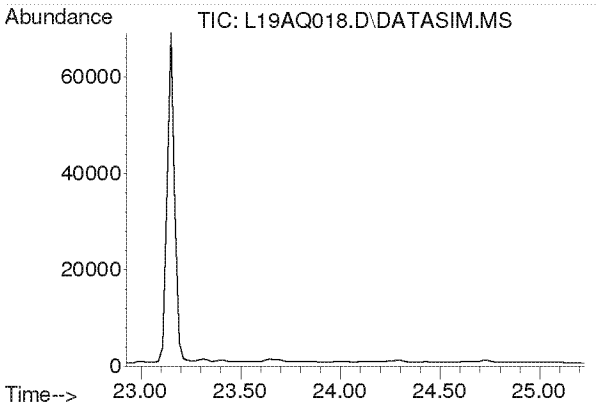
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



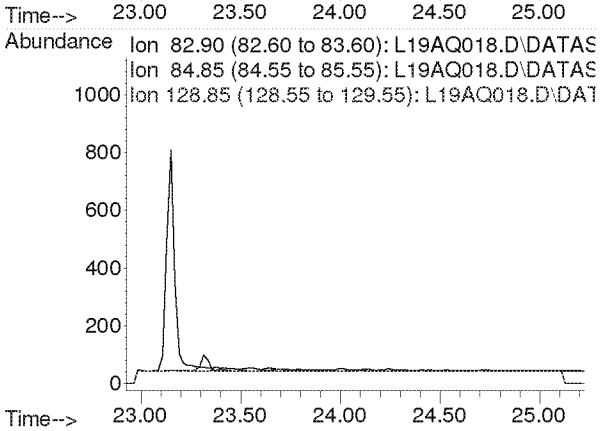


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

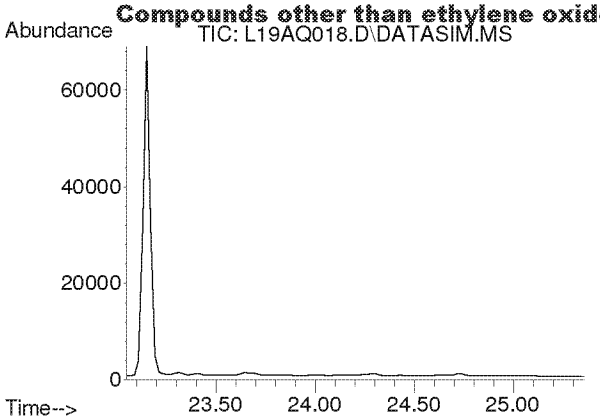
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

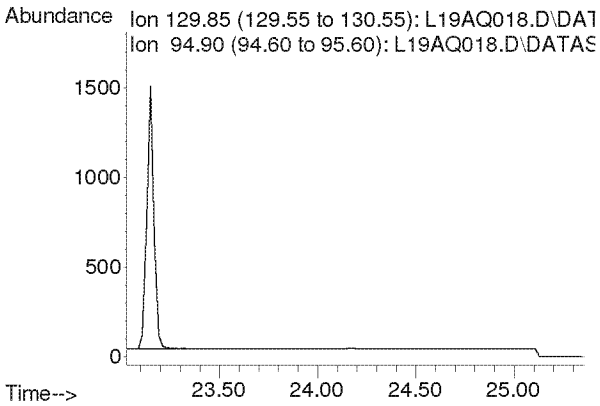


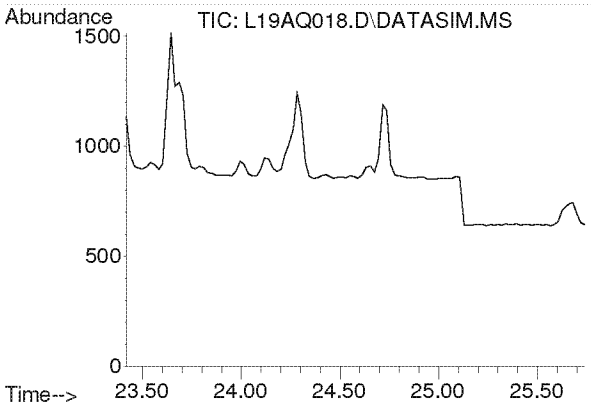
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



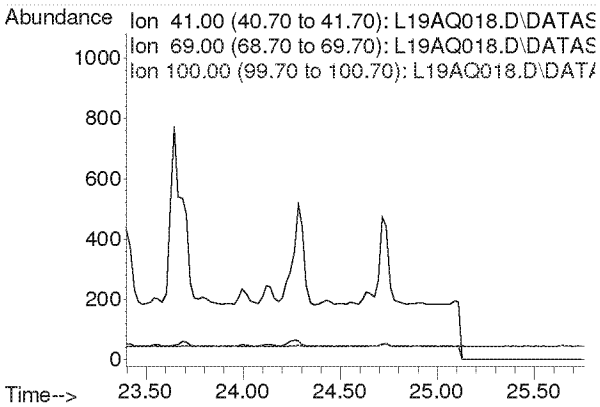


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

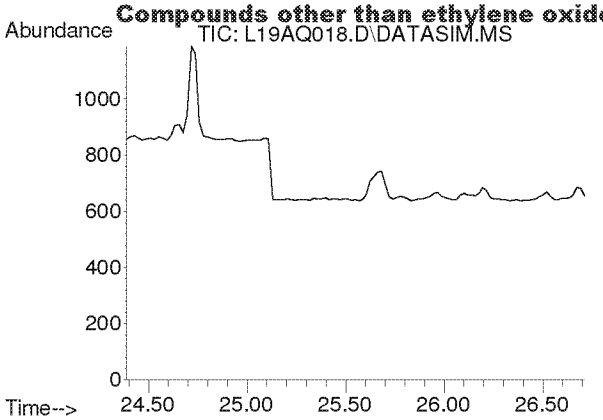
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

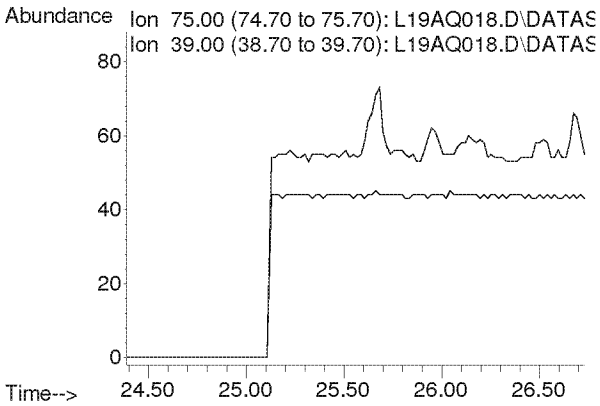


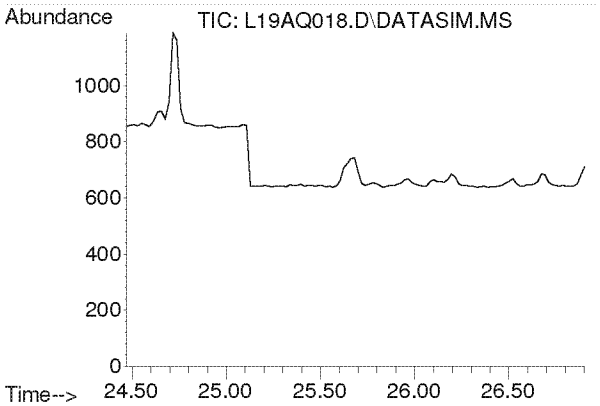
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



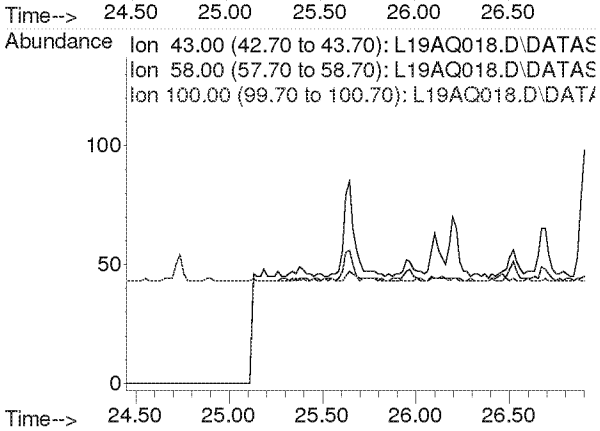


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

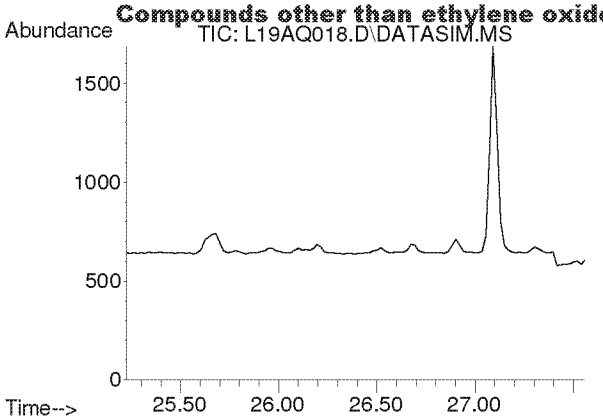
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

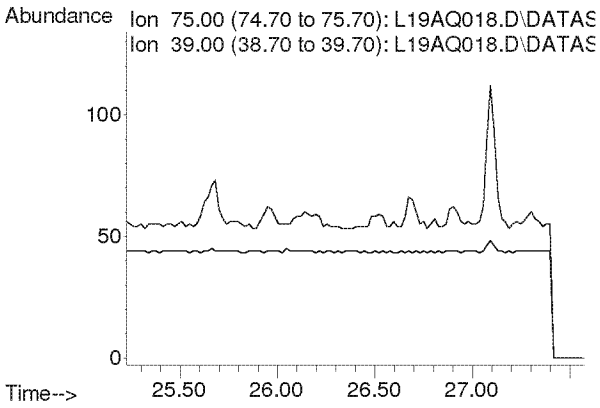


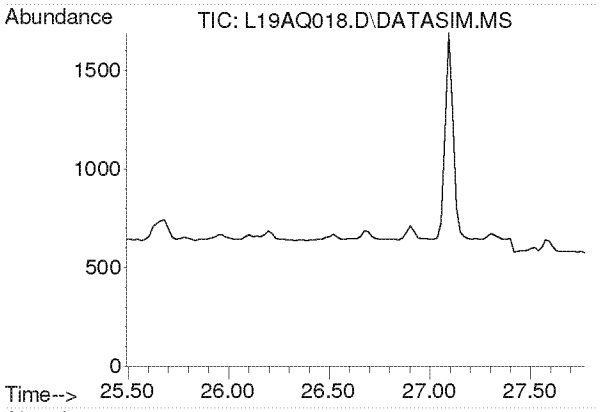
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



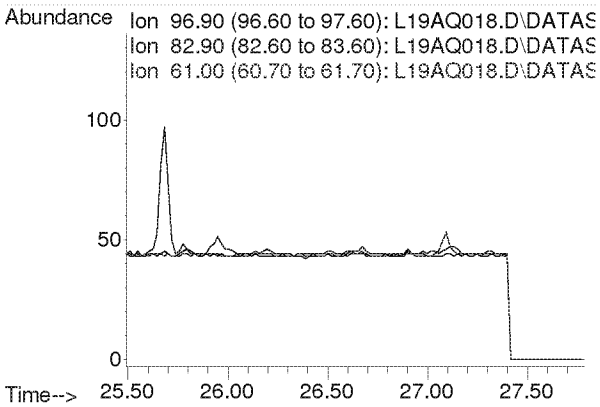


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

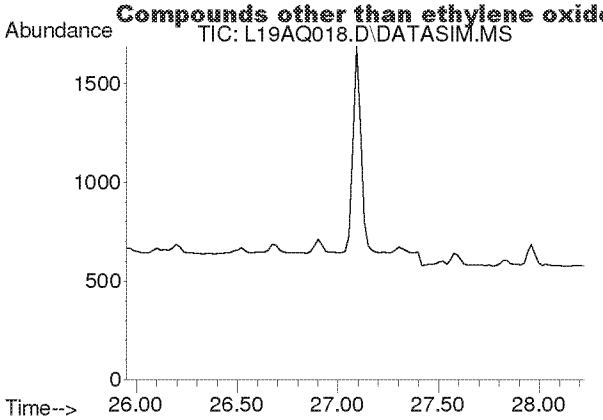
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

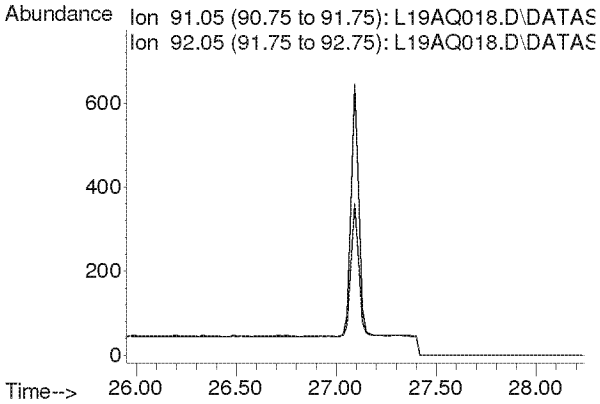


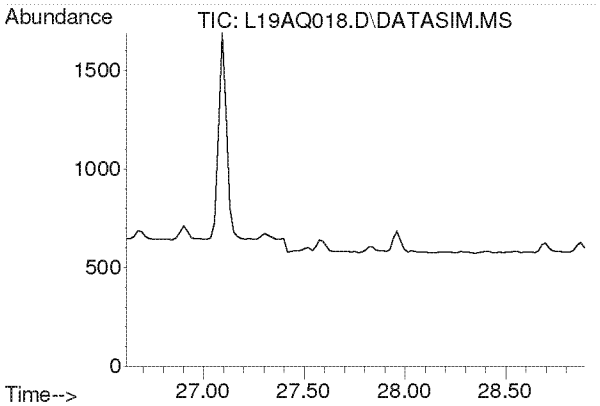
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



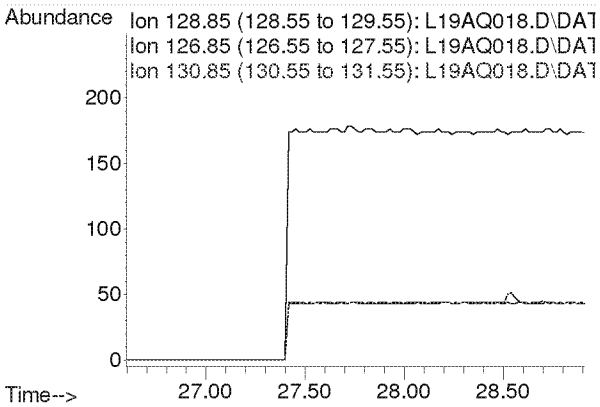


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

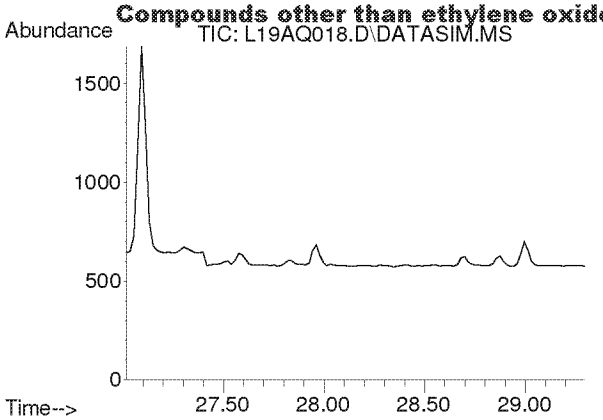
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

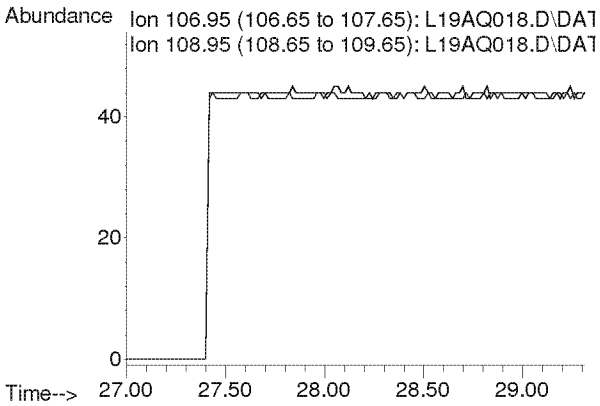


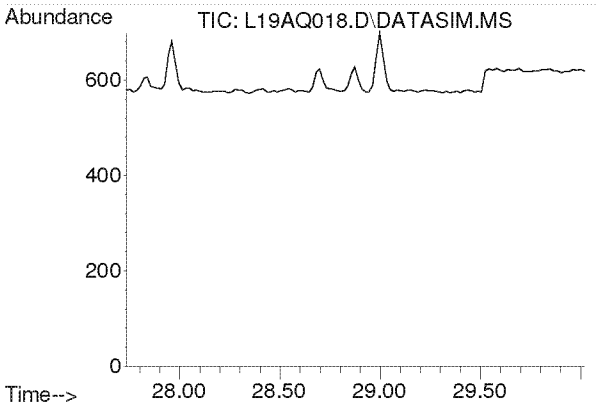
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



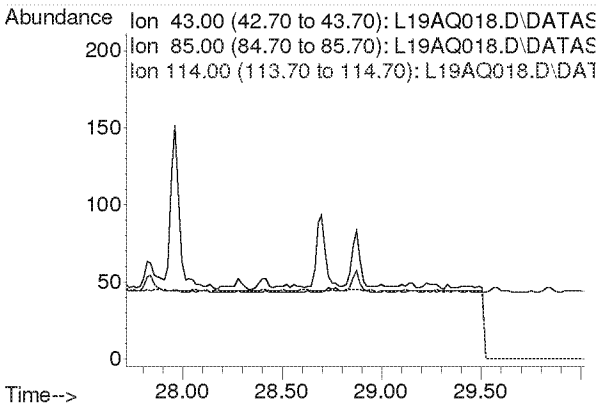


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

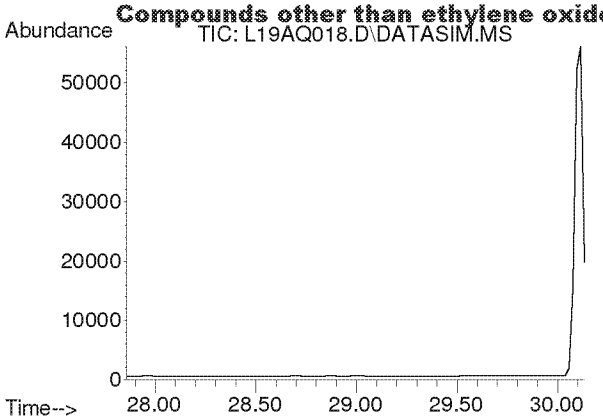
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

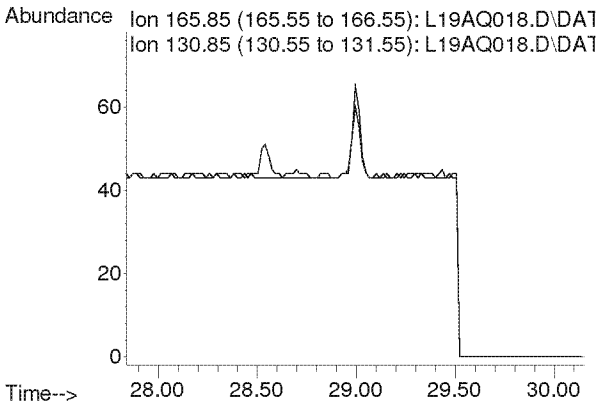


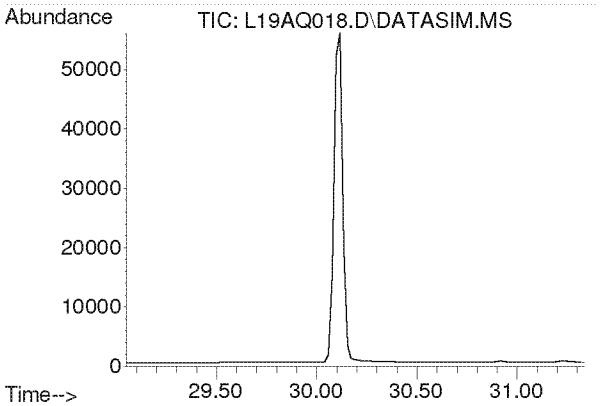
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



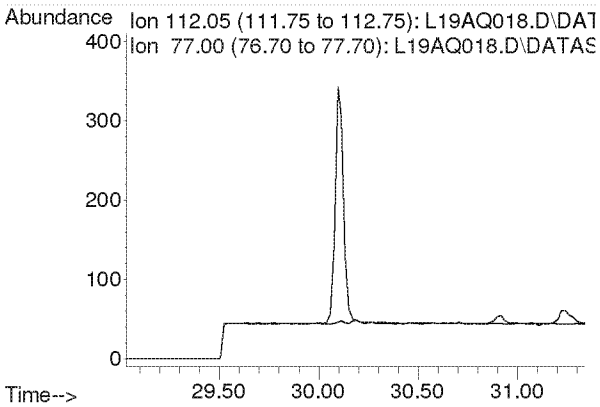


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

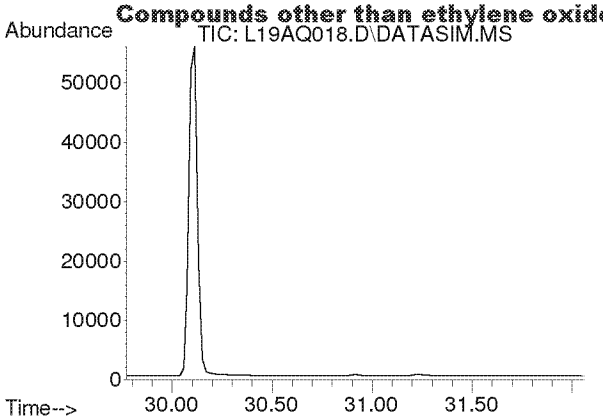
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

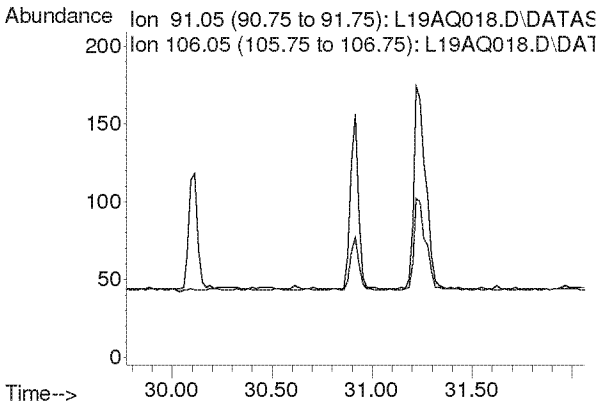


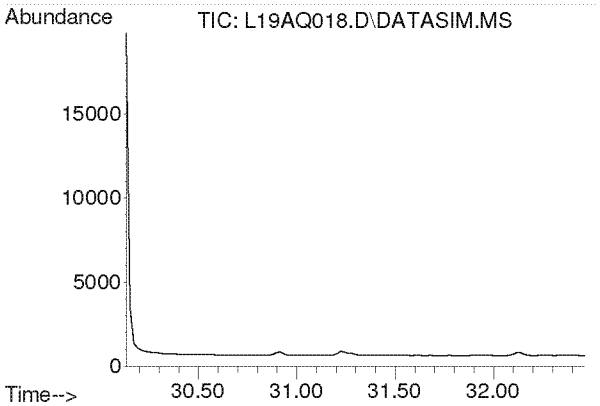
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



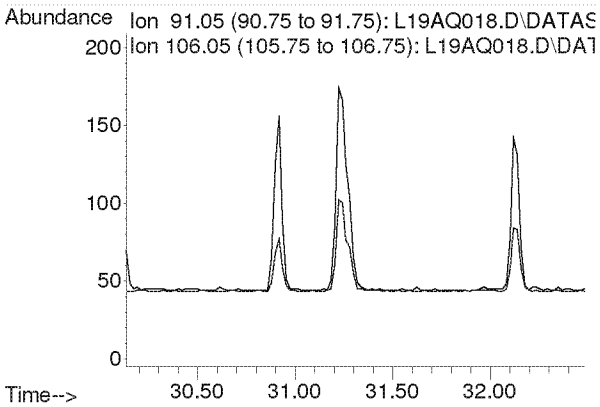


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

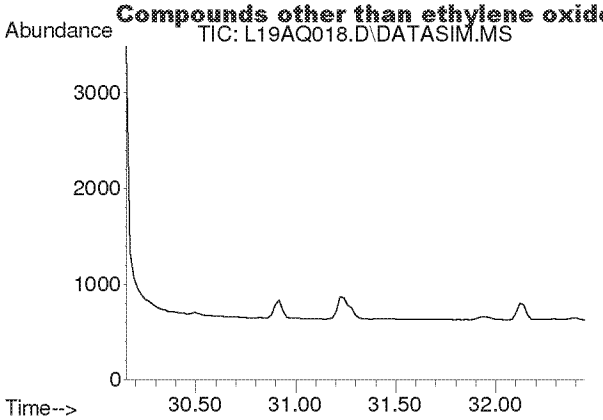
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

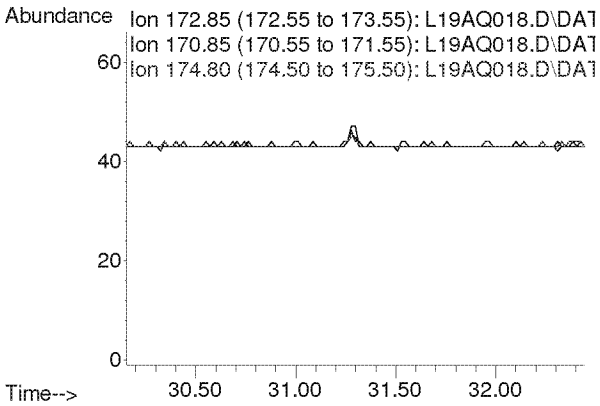


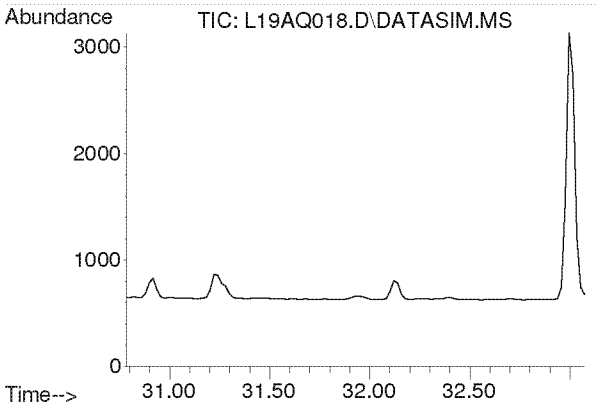
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



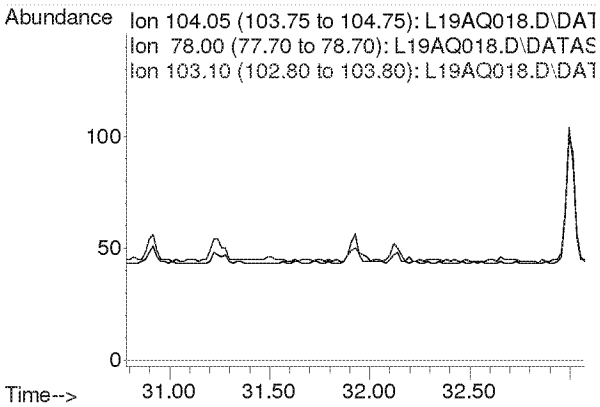


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

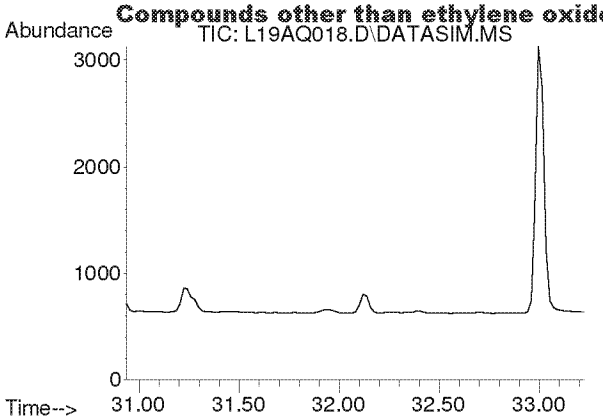
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

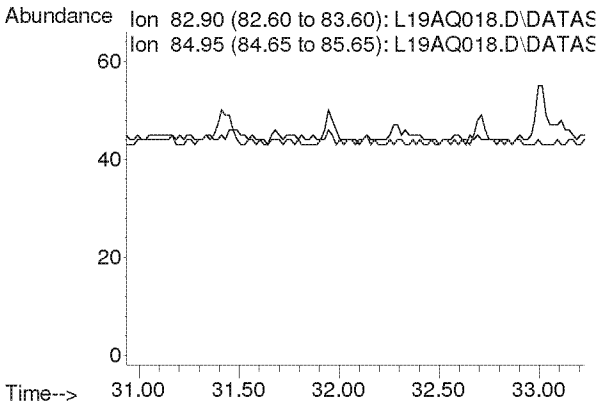


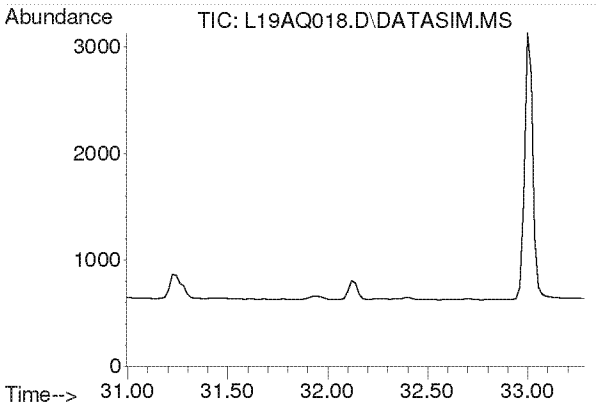
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



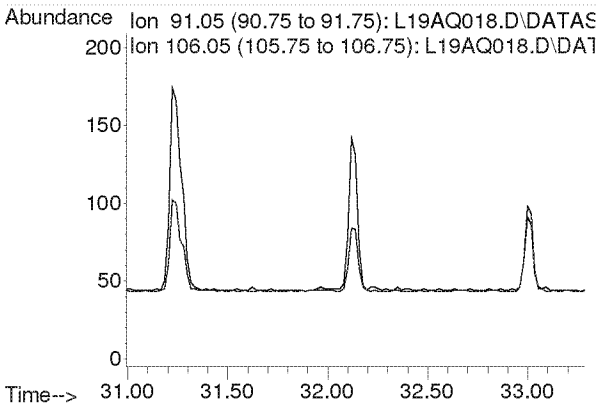


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

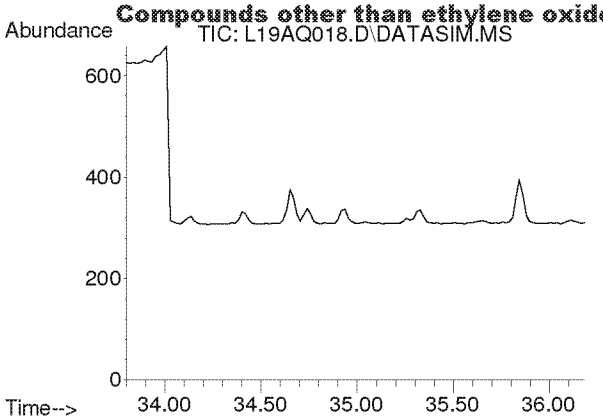
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

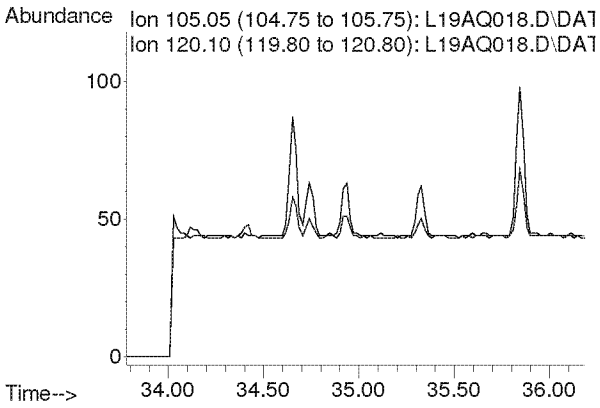


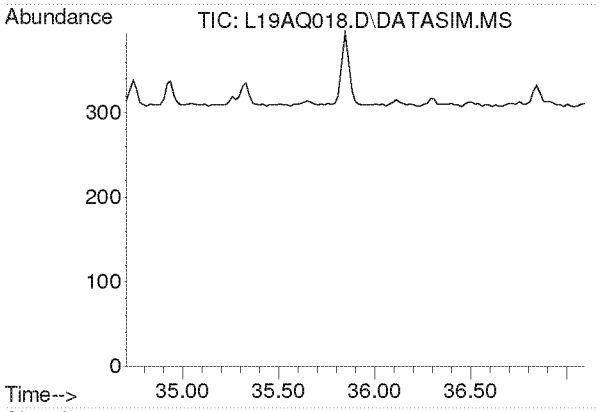
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



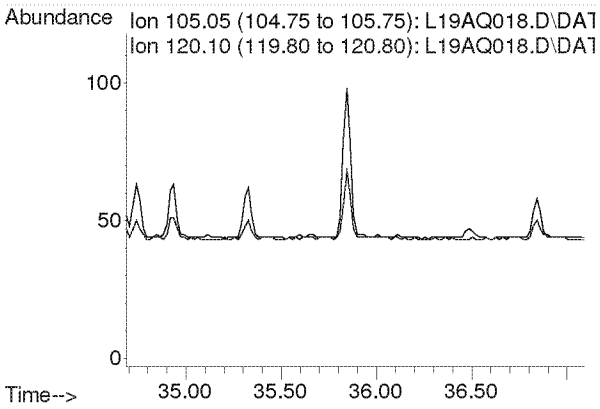


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

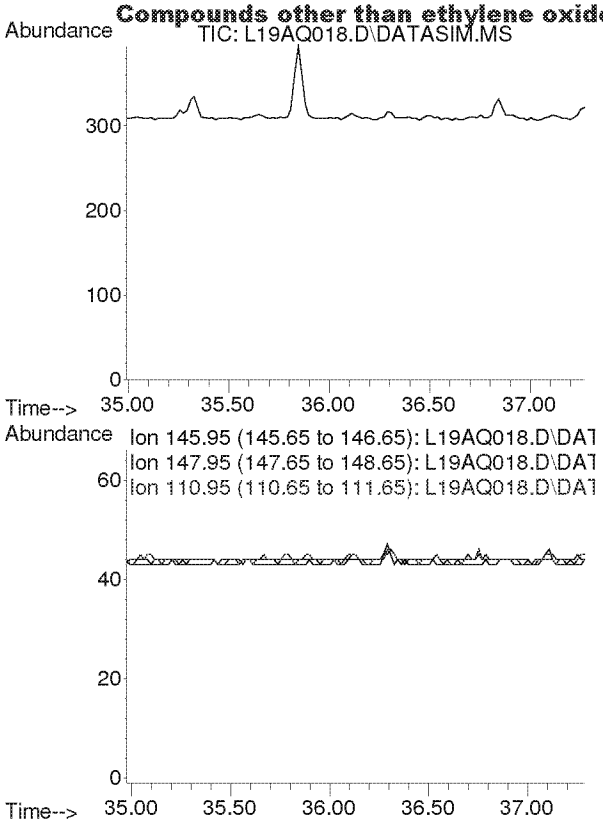
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

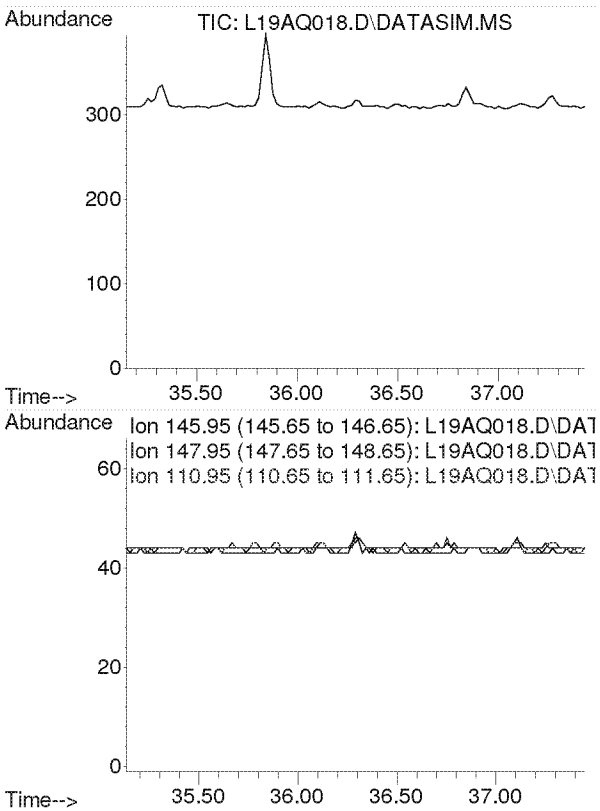


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



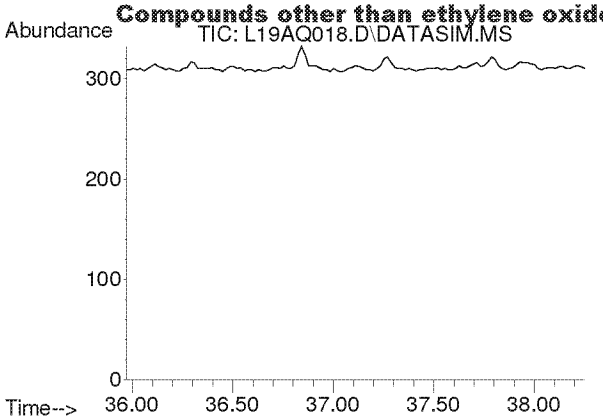
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

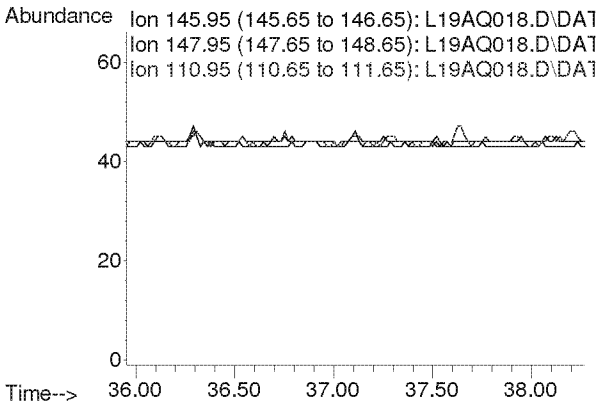


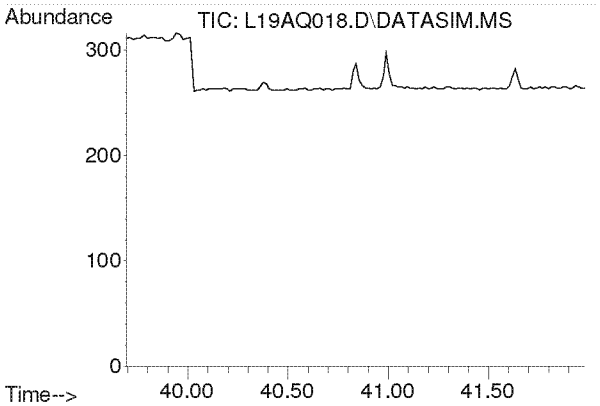
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



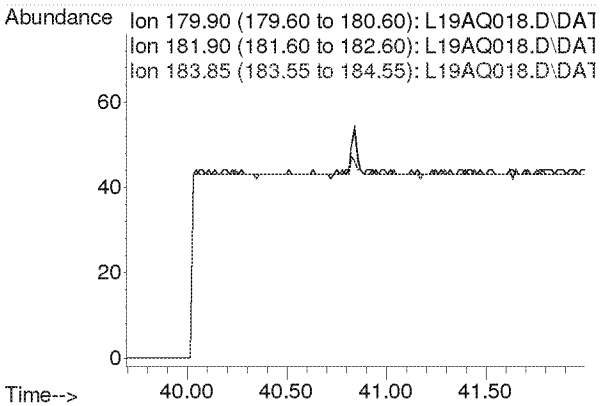


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

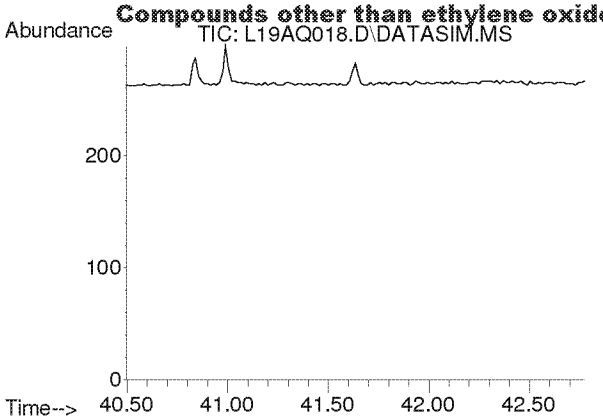
Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

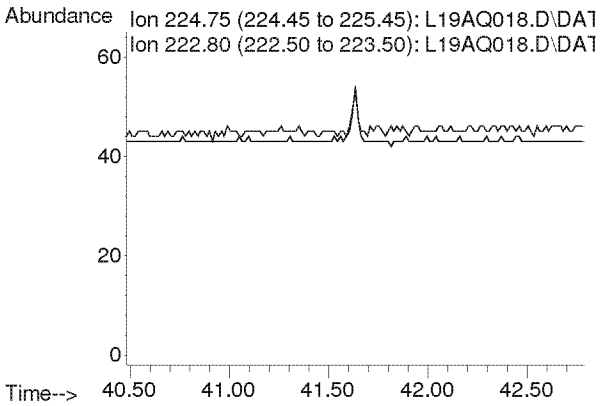


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ018.D
Acq: 18 Jan 2019 4:46 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ020.D
Acq On : 18 Jan 2019 6:48 am
Operator : MAH
Sample : B9A1704-DUP4
Misc : EPA WB WAREHOUSE R2 1/10/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 07:37:09 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	54021	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	134719	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	103946	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.440	29	969m	0.3473 ppbv	RHB 2/4/19
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D.	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ020.D
Acq On : 18 Jan 2019 6:48 am
Operator : MAH
Sample : B9A1704-DUP4
Misc : EPA WB WAREHOUSE R2 1/10/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 07:37:09 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

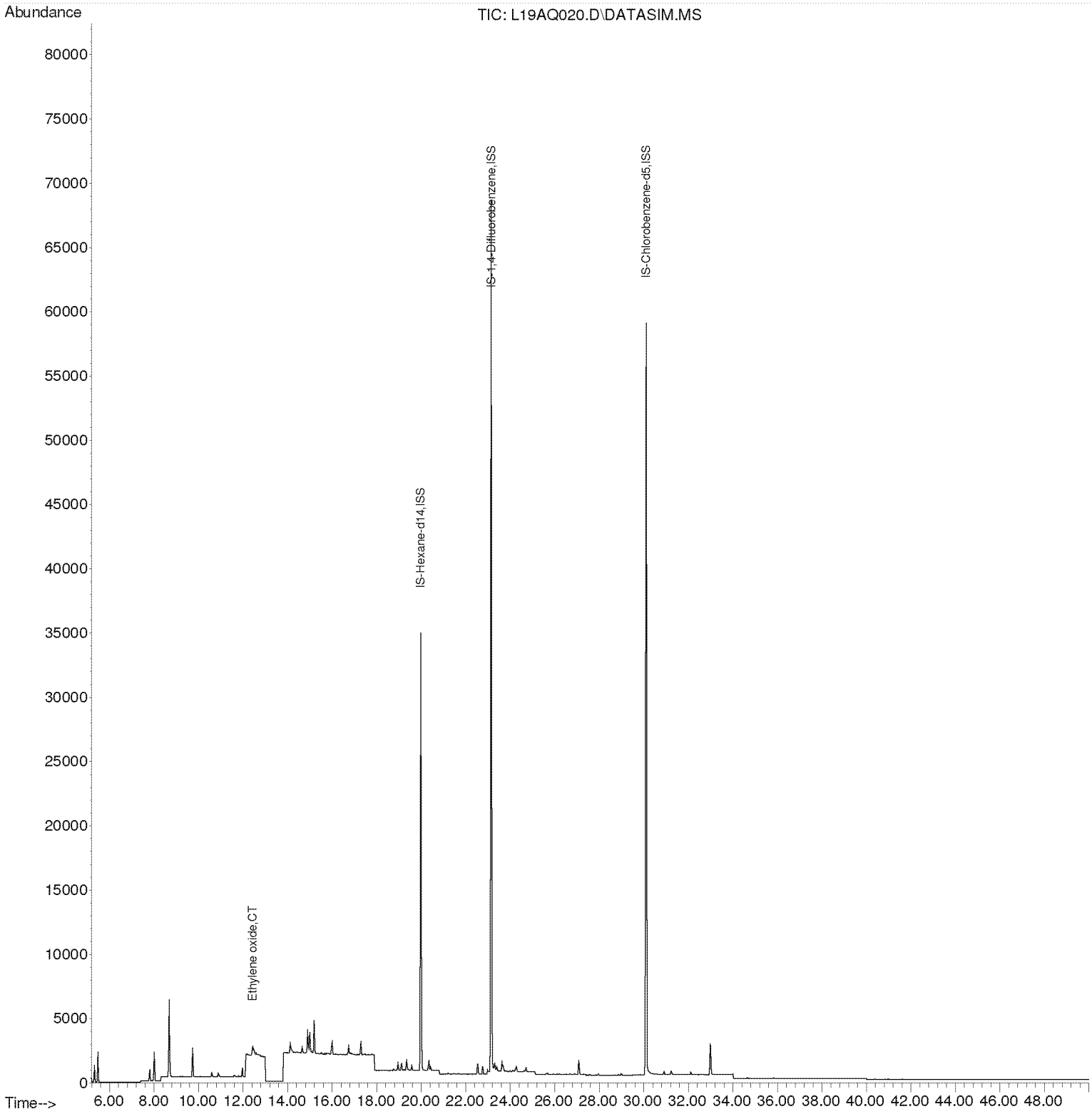
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D.	d
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

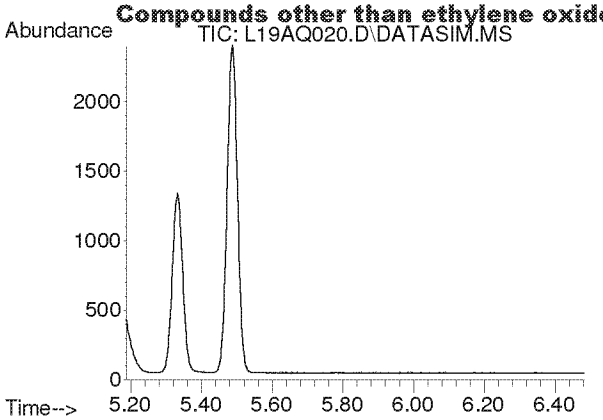
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ020.D
Acq On : 18 Jan 2019 6:48 am
Operator : MAH
Sample : B9A1704-DUP4
Misc : EPA WB WAREHOUSE R2 1/10/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 07:37:09 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



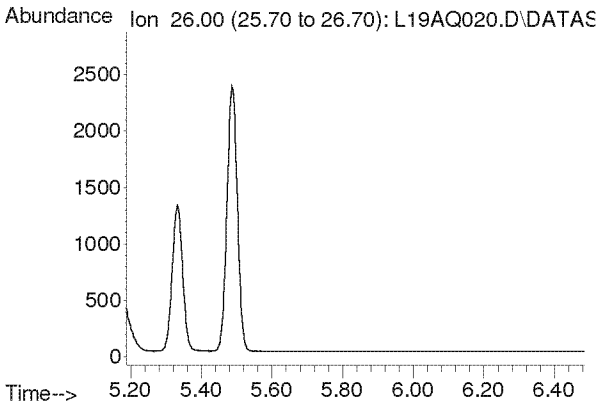
Compounds other than ethylene oxide were not quantitated.

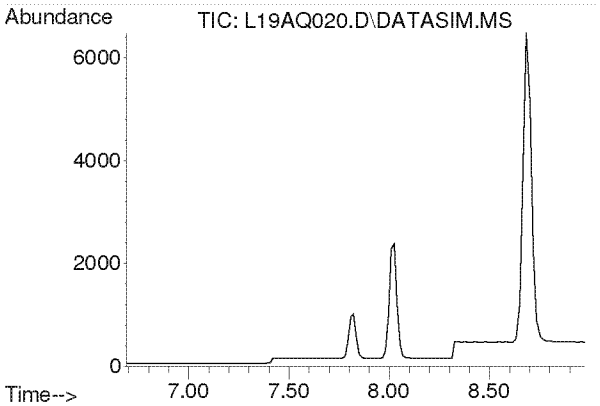


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 26



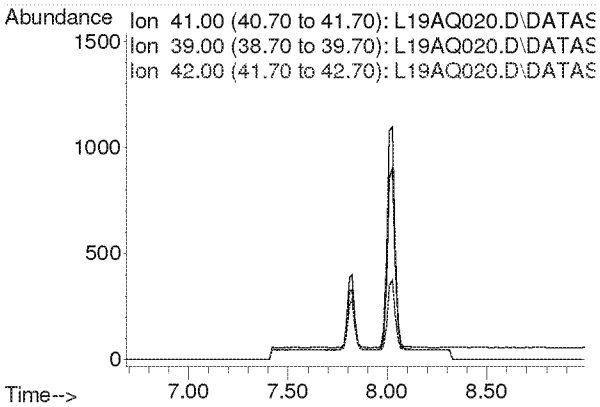


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

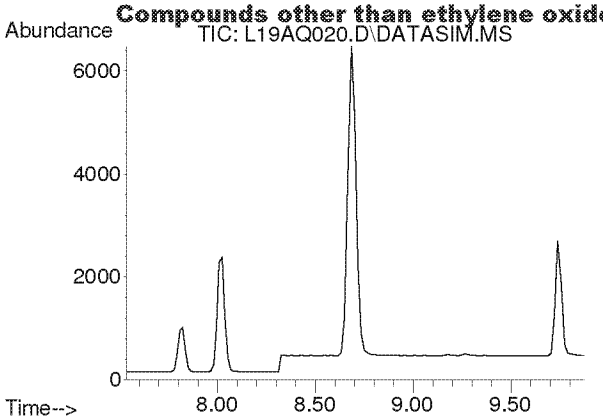
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

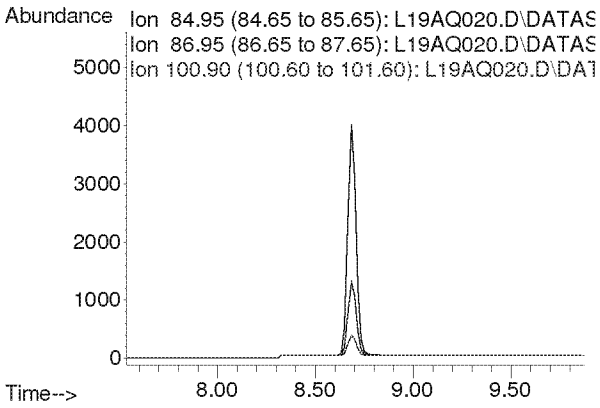


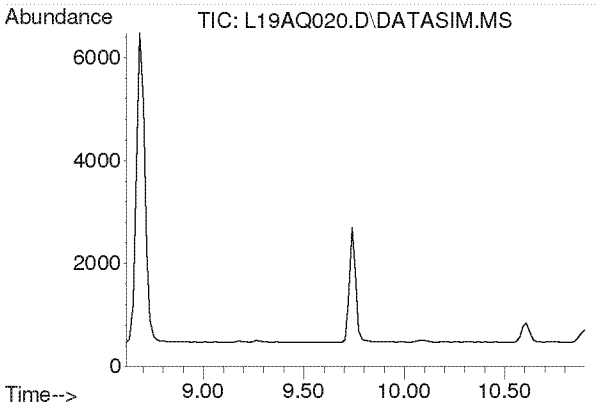
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



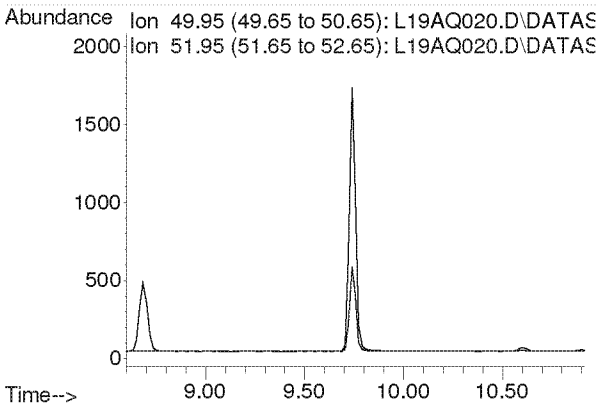


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

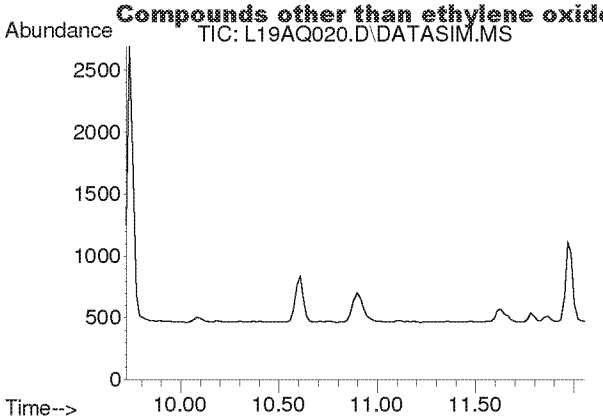
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

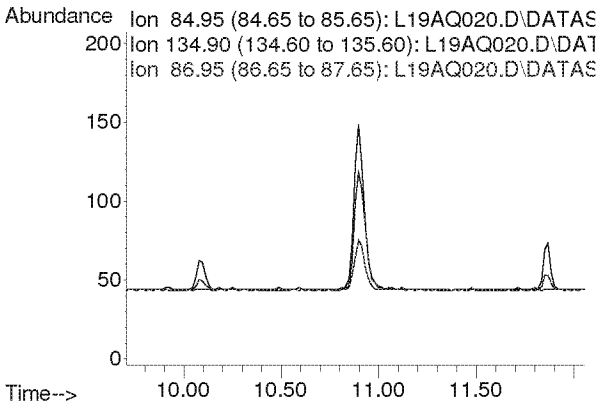


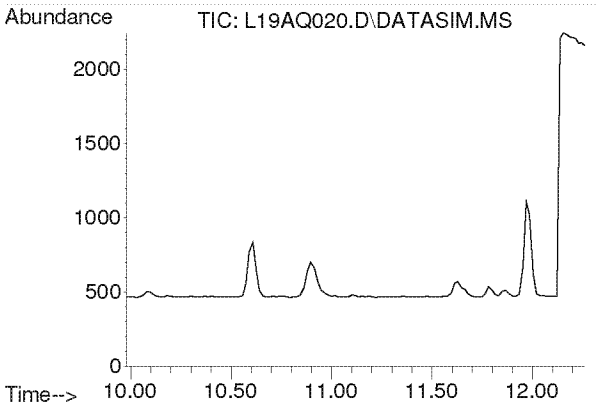
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



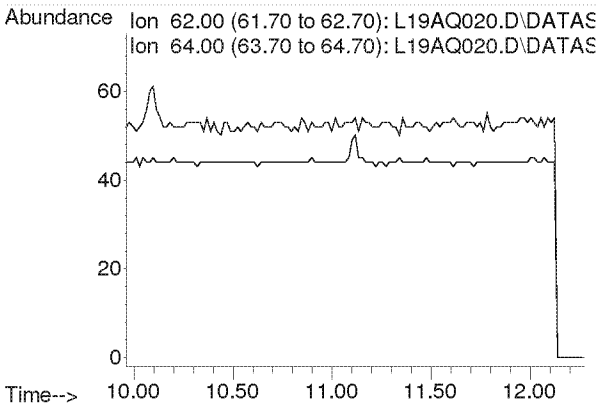


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

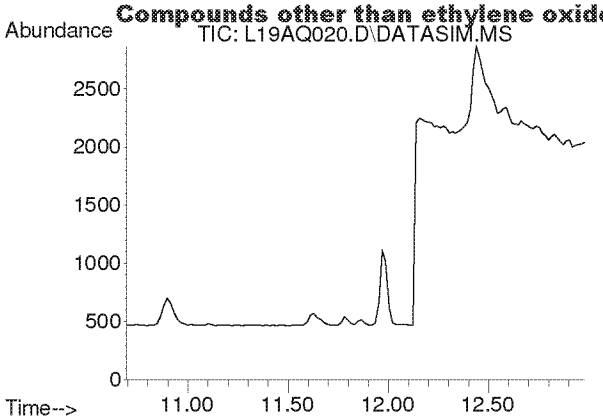
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

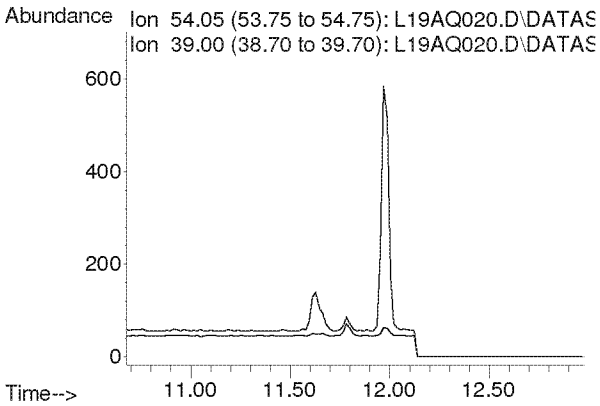


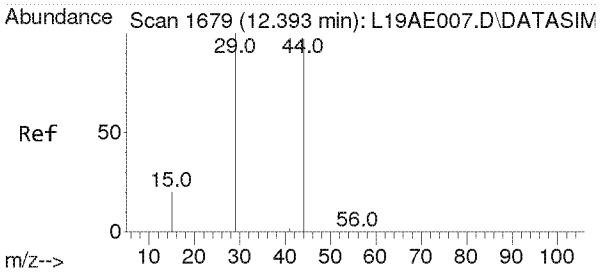
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

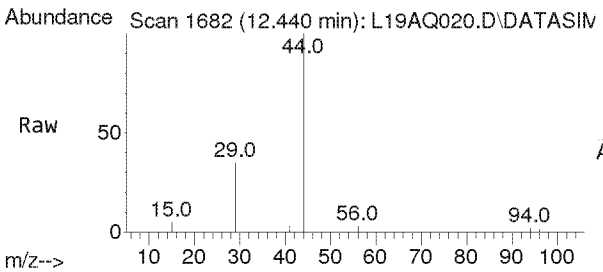


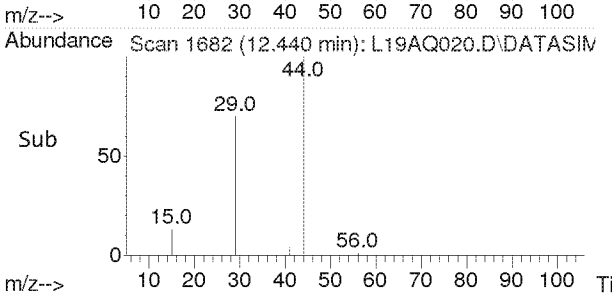


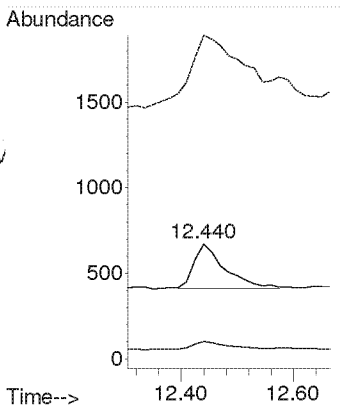
#9
Ethylene oxide
Concen: 0.347 ppbv m
RT: 12.440 min Scan# 1682
Delta R.T. 0.047 min
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 29 Resp: 969

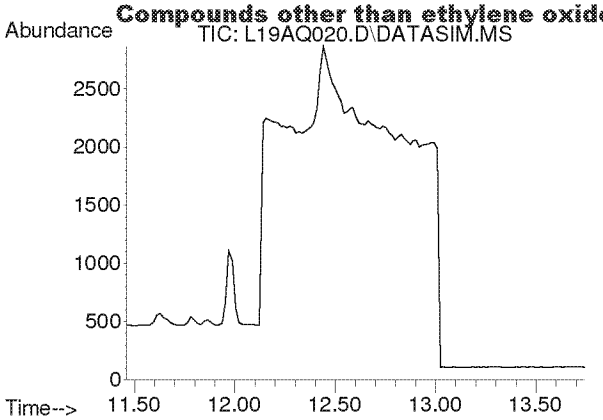
Ion	Ratio	Lower	Upper
29	100		
15	24.0	15.4	23.0#
44	327.8	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

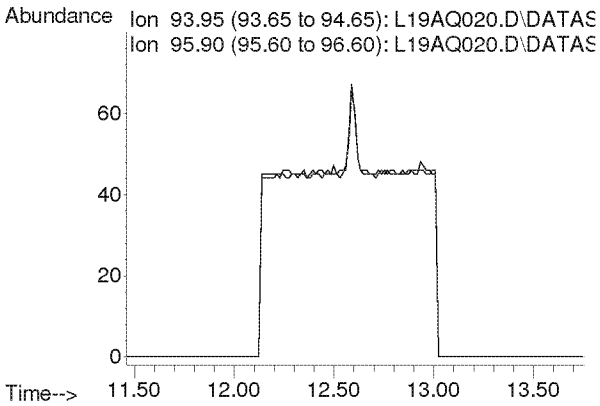


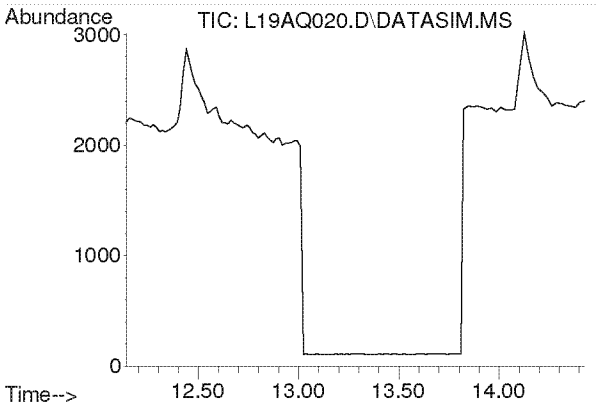
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



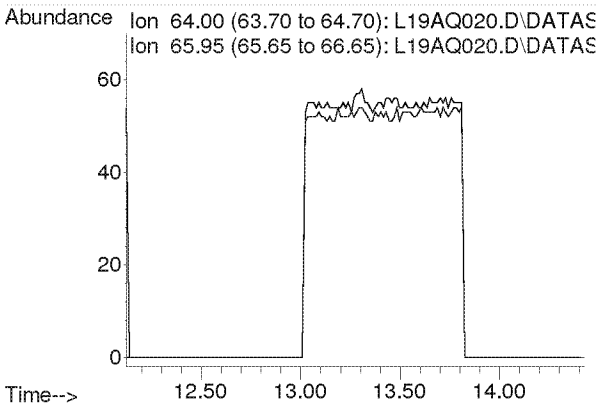


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

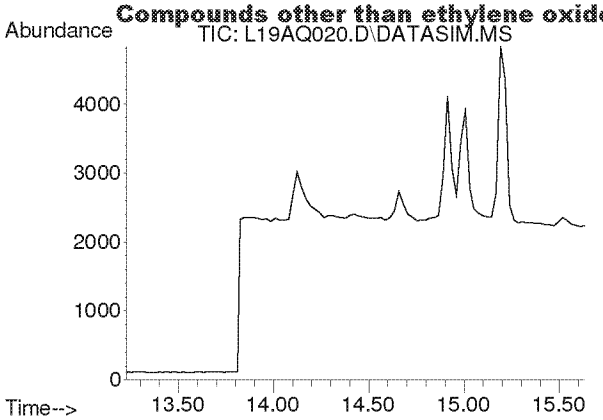
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

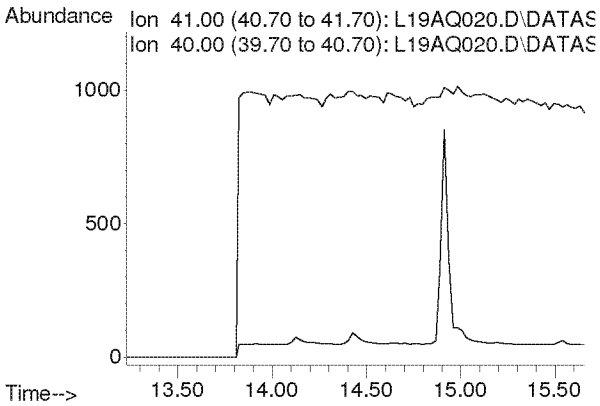


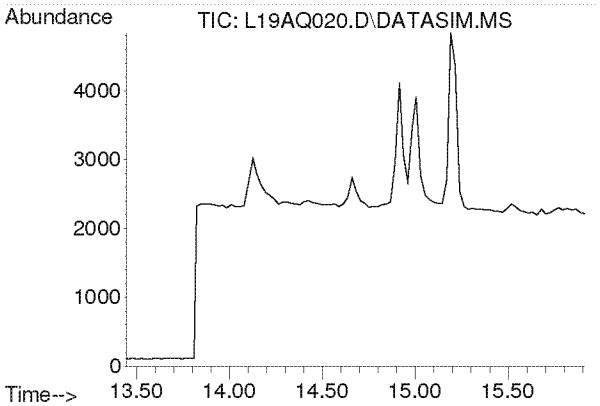
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



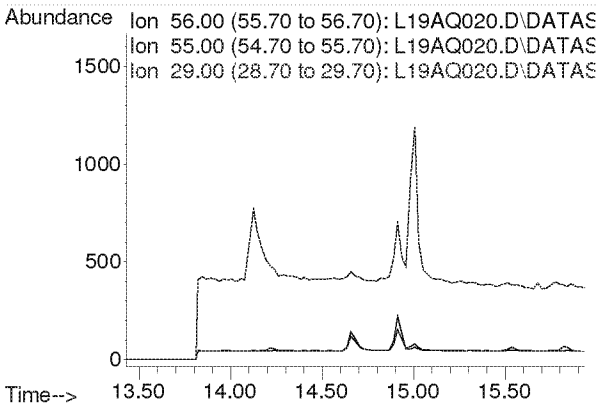


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

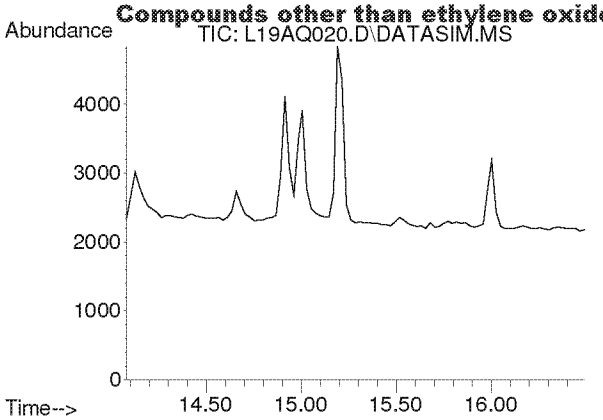
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

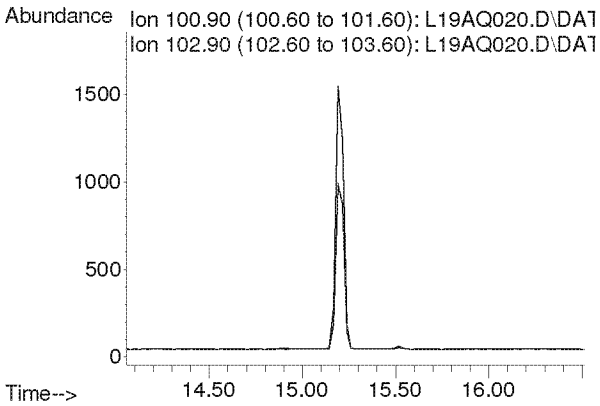


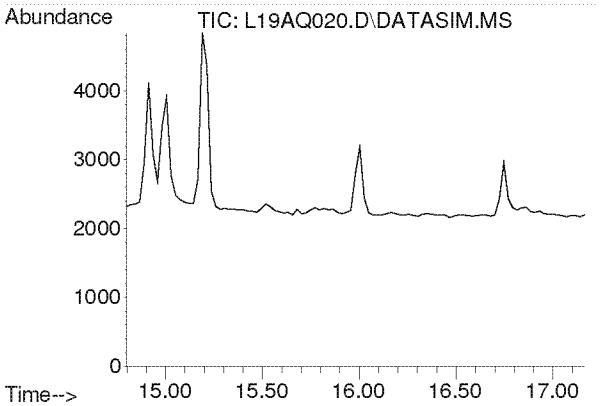
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



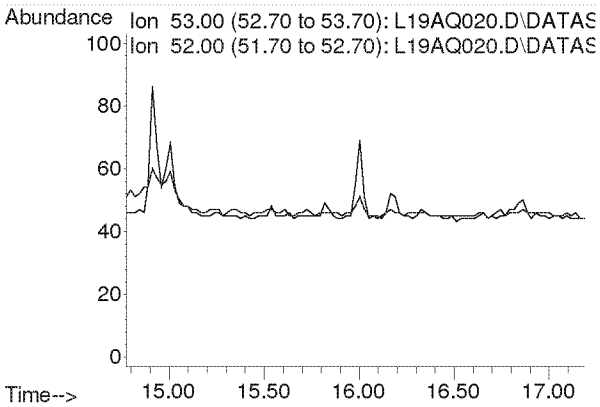


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

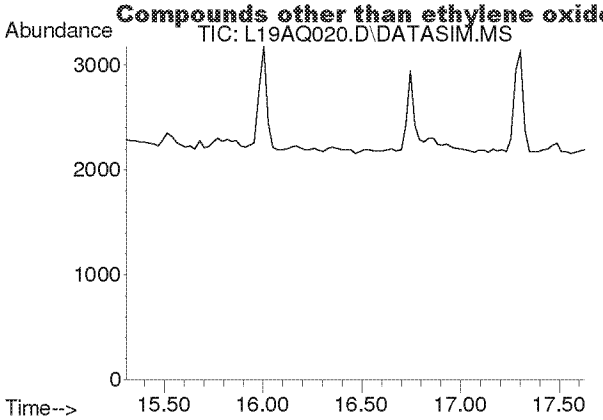
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

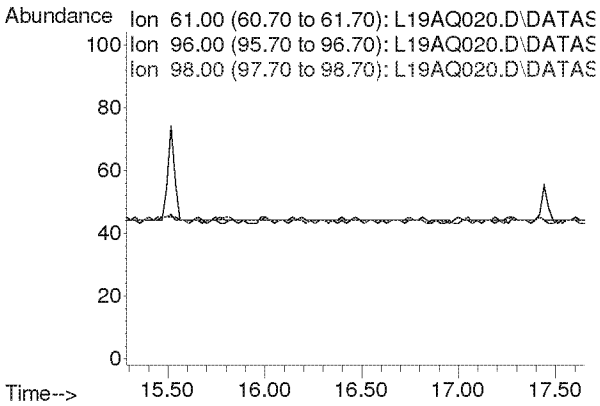


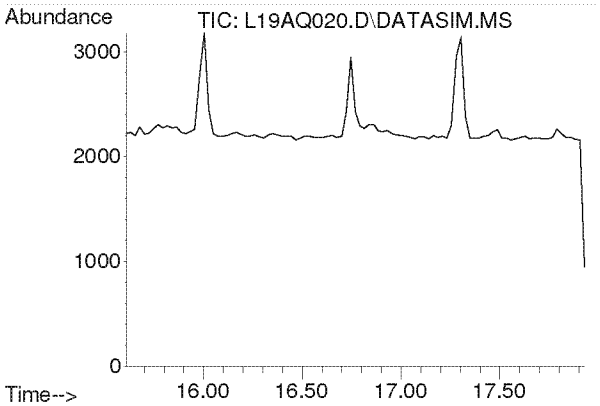
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



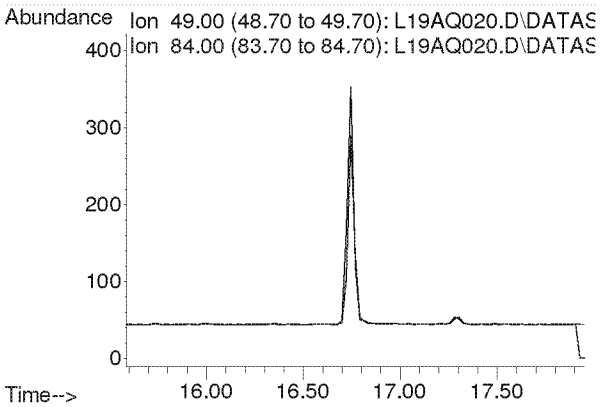


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

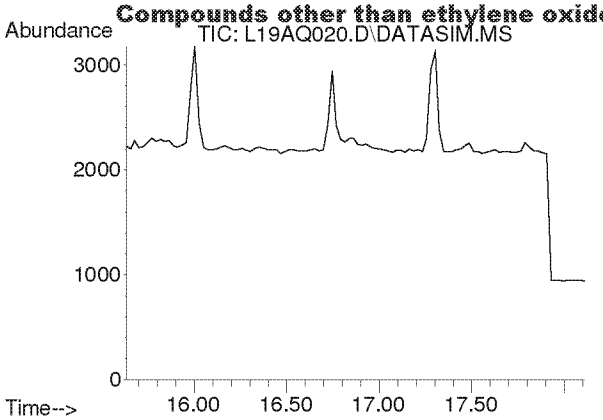
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

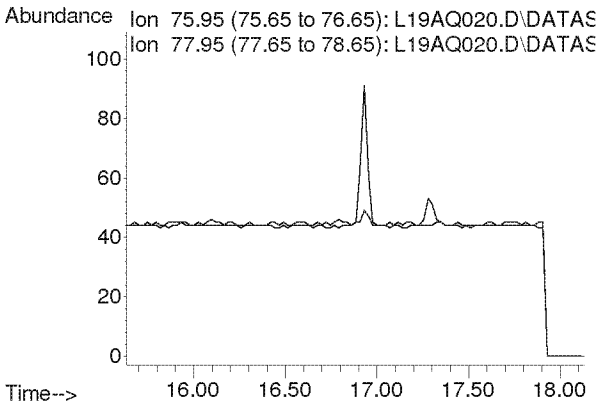


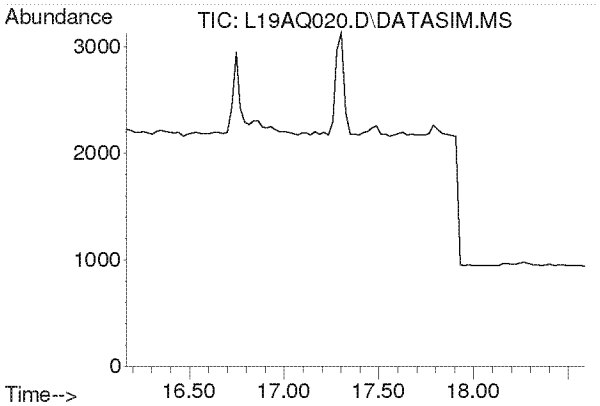
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



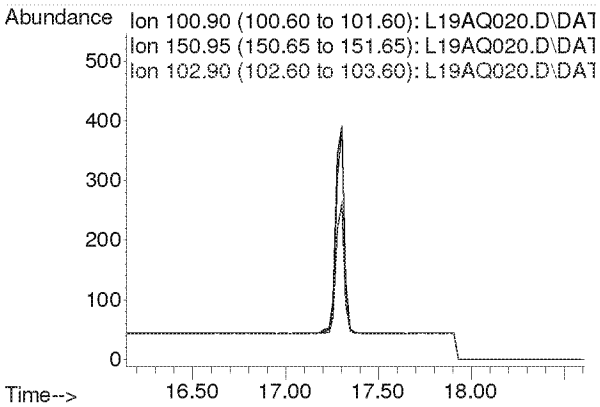


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

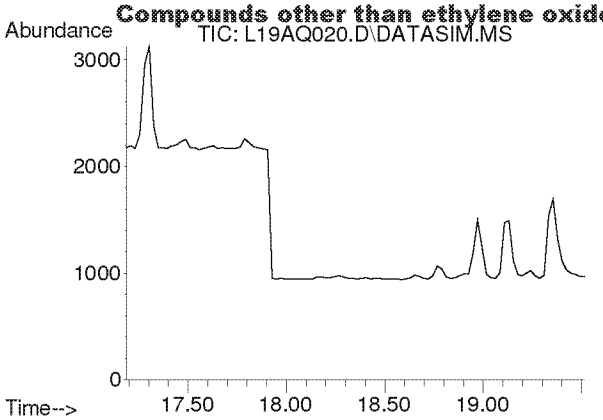
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

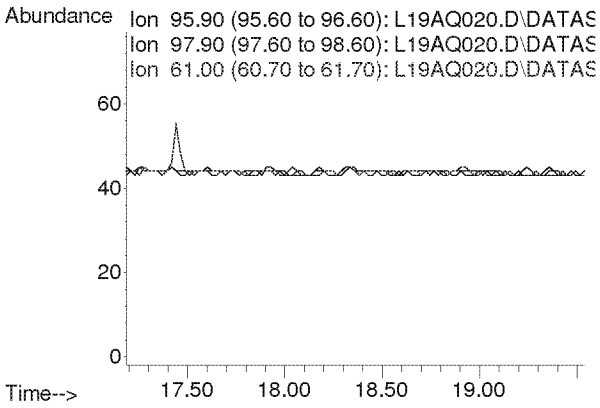


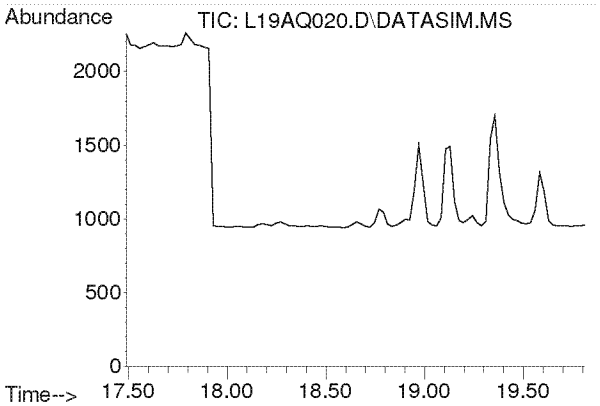
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



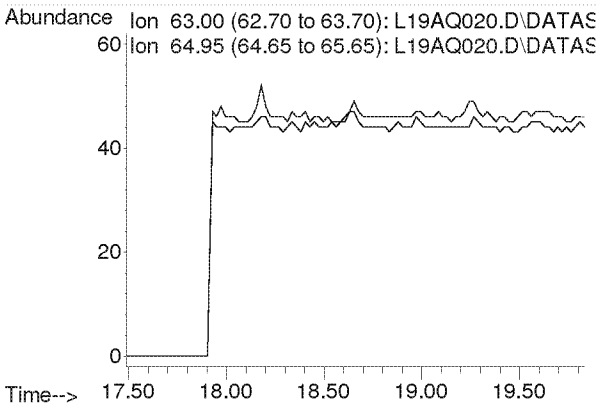


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

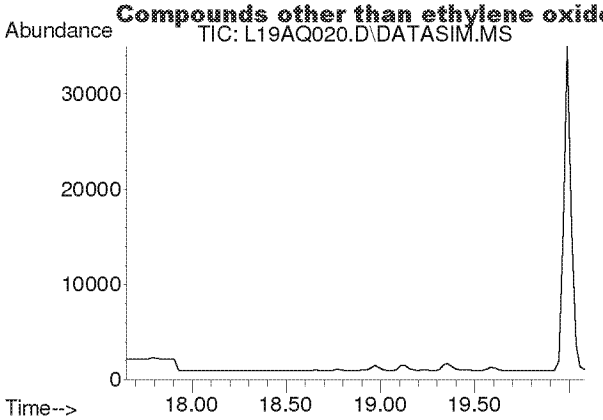
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

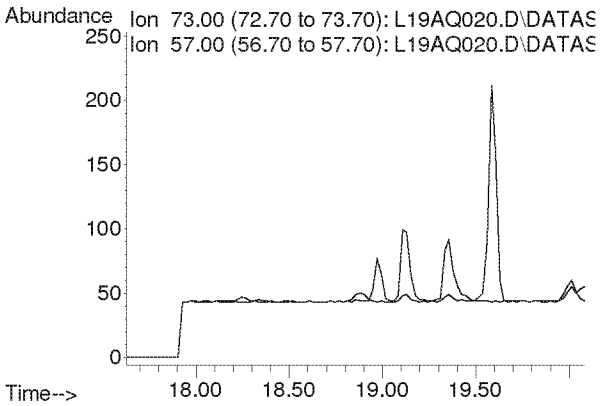


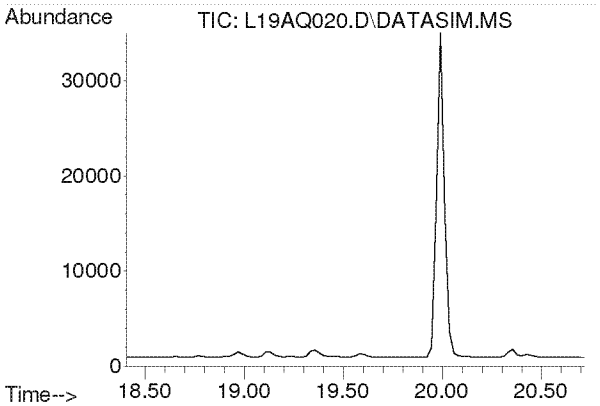
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



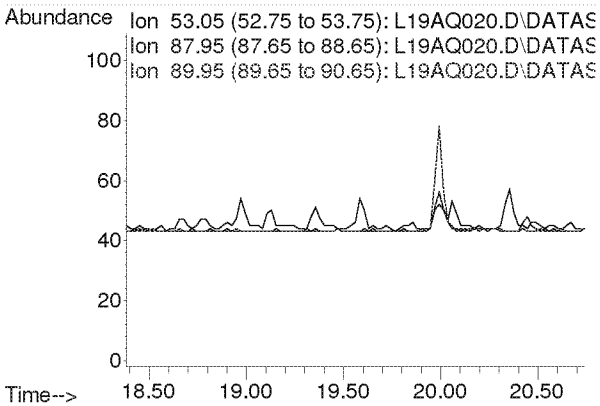


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

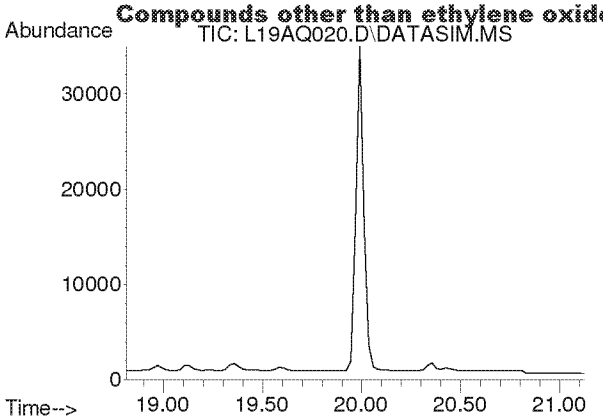
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

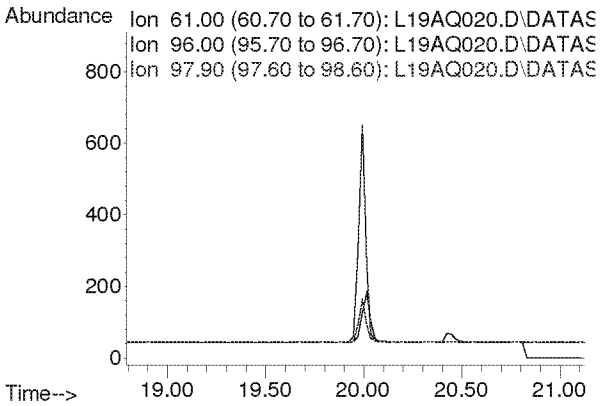


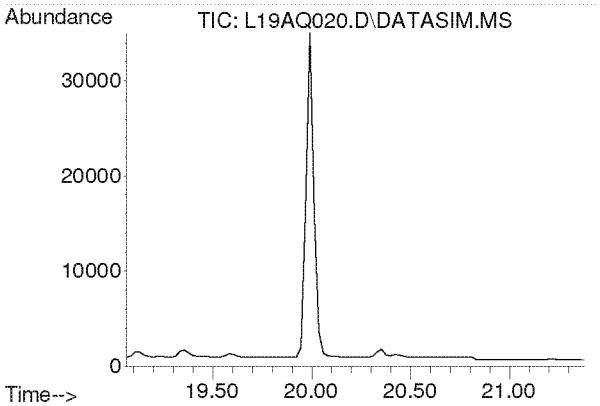
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



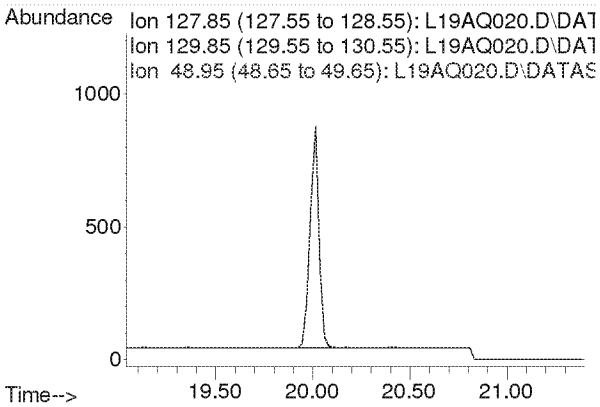


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

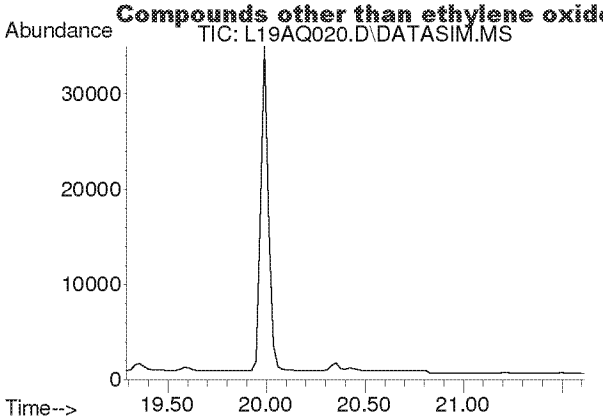
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

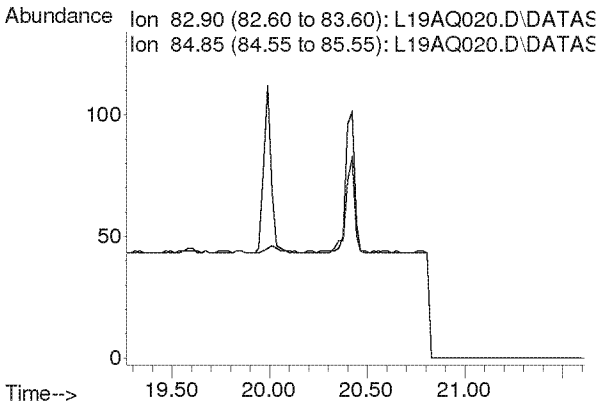


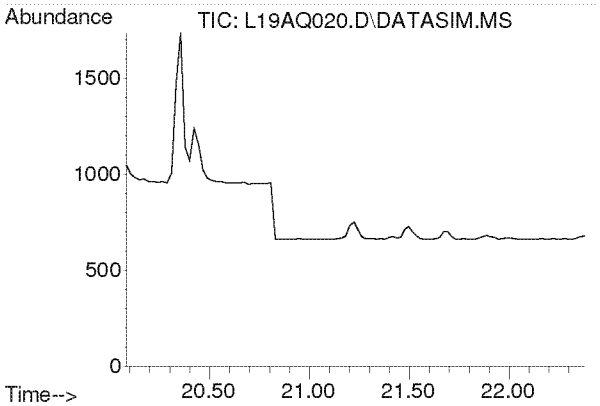
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



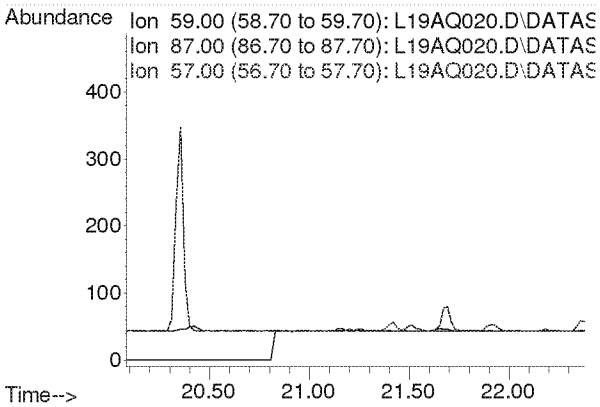


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

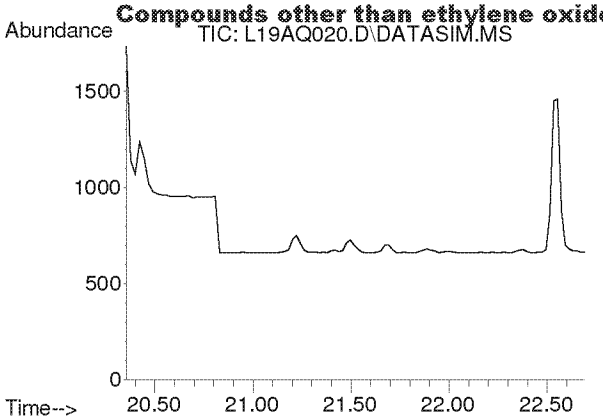
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

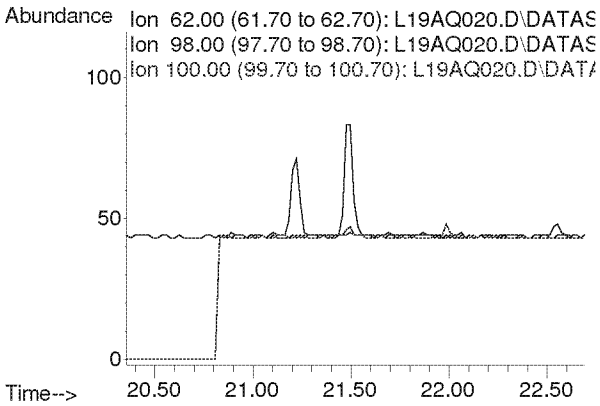


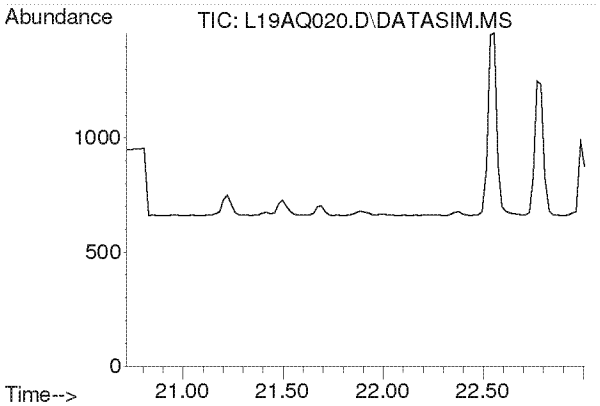
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



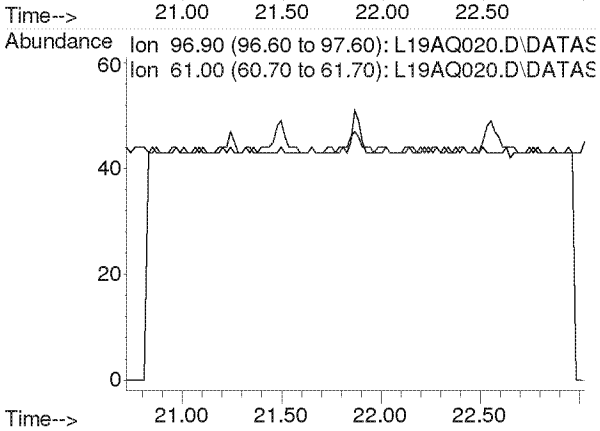


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

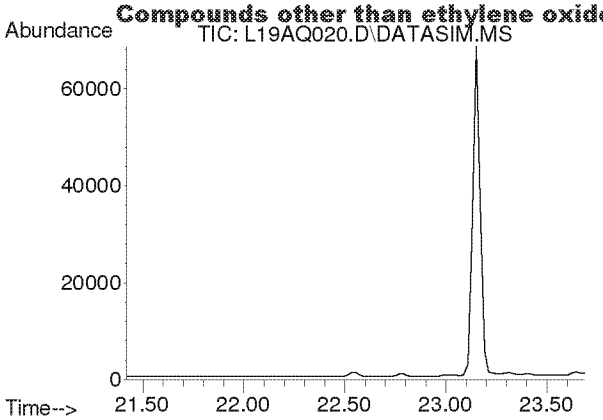
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

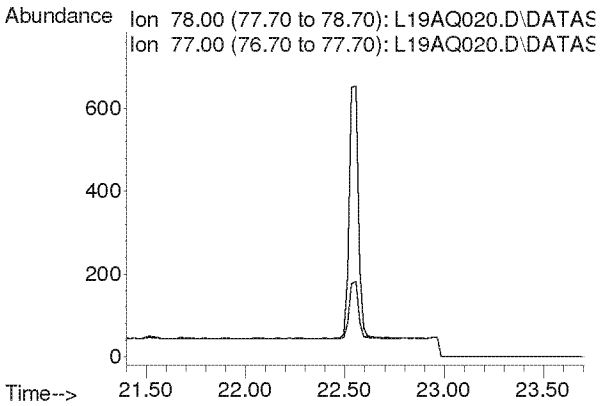


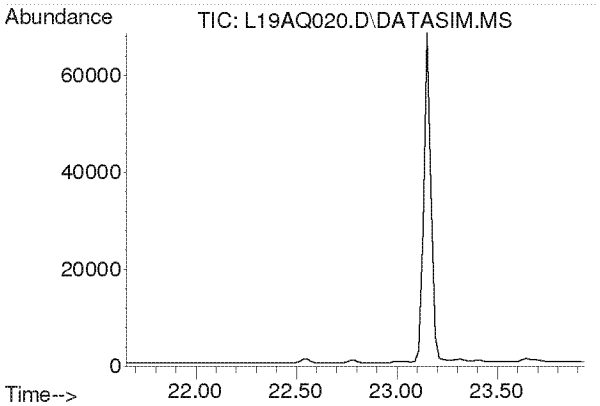
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



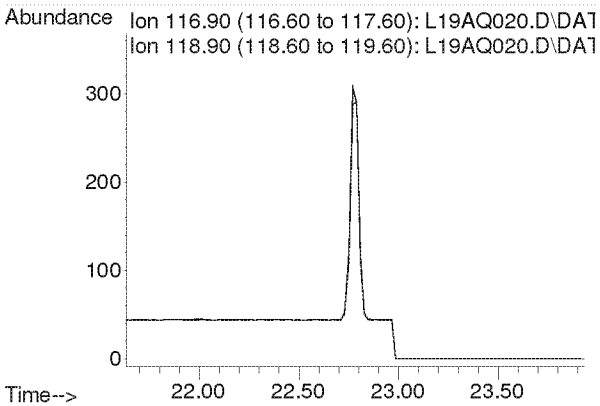


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

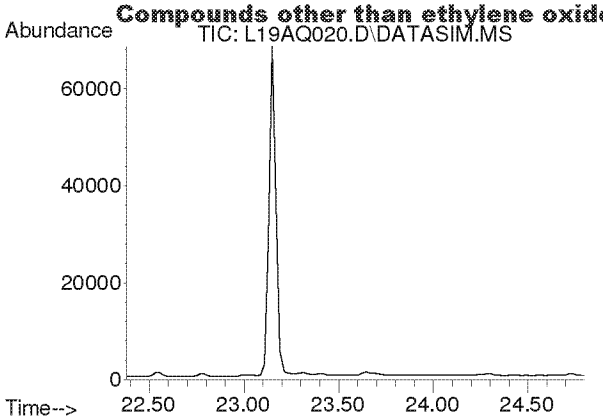
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

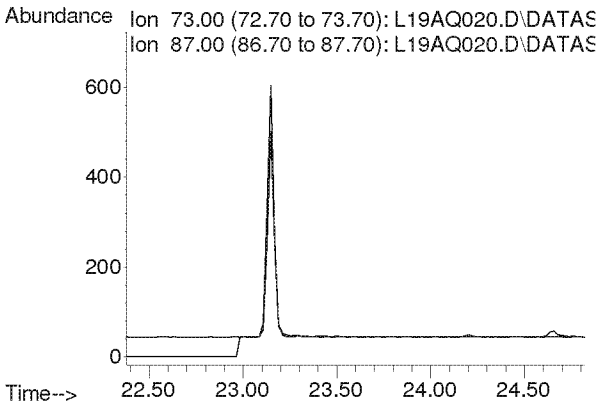


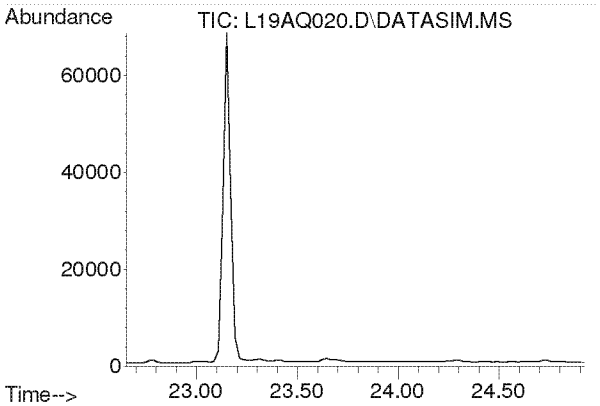
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



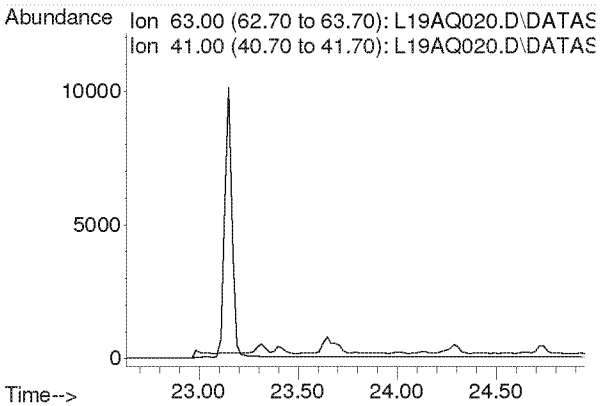


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

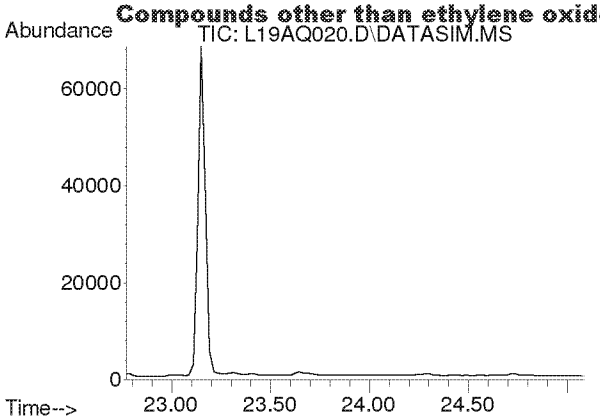
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

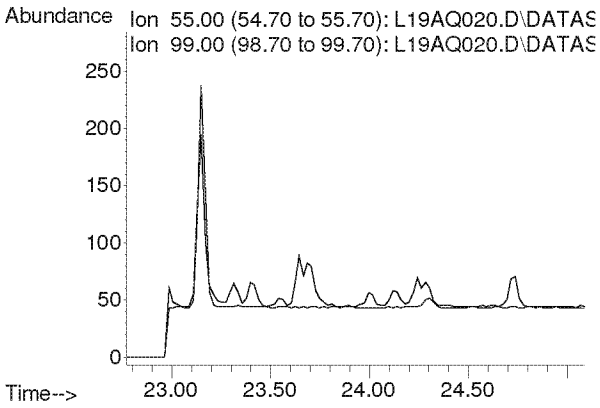


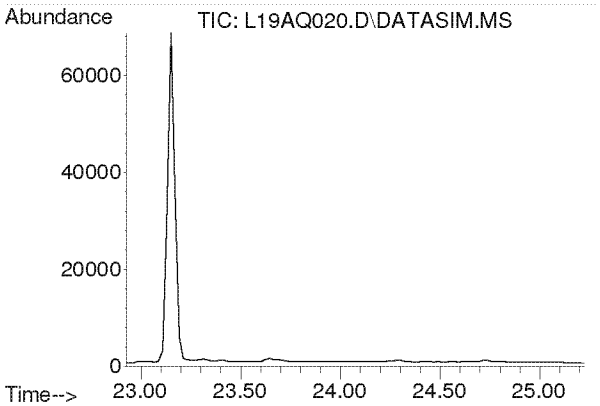
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



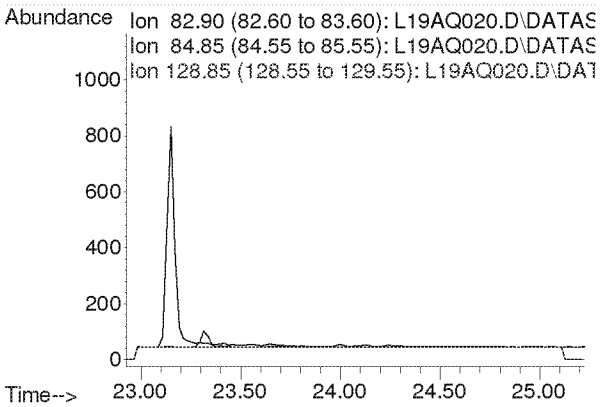


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

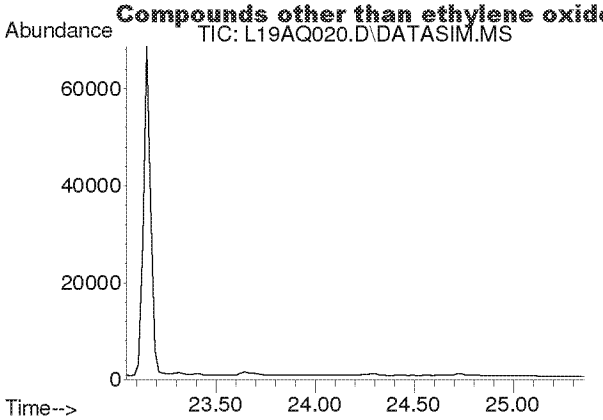
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

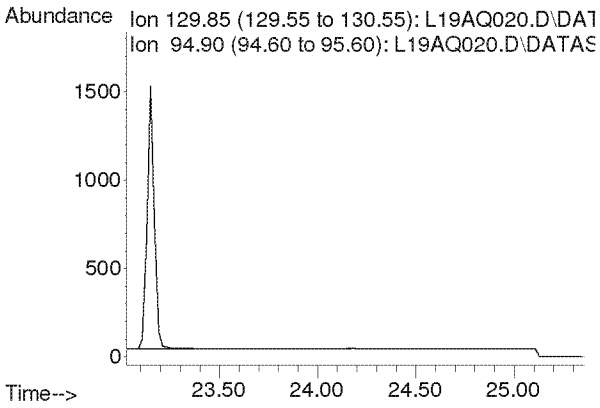


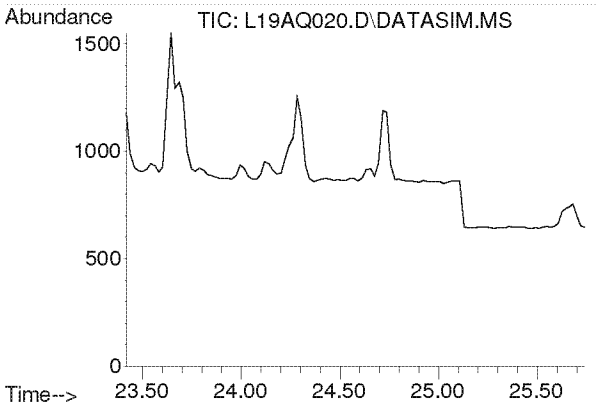
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



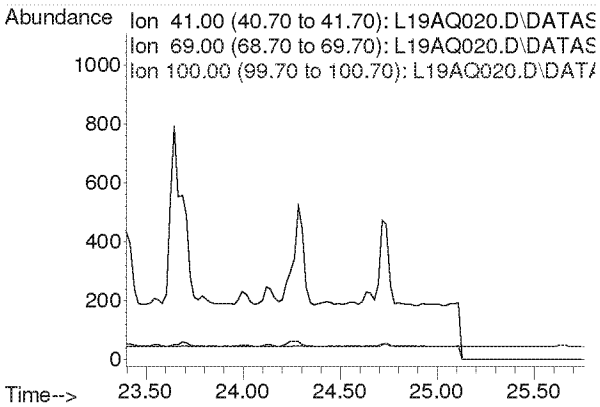


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

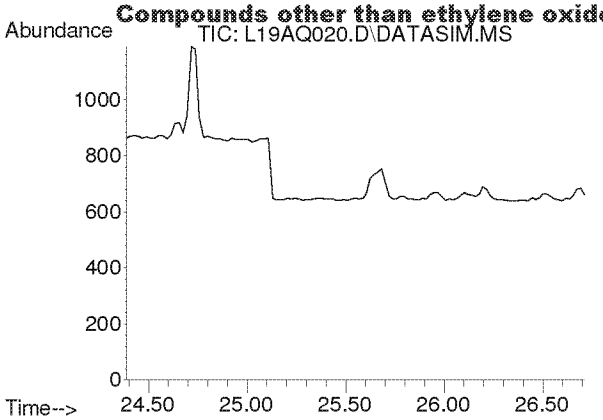
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

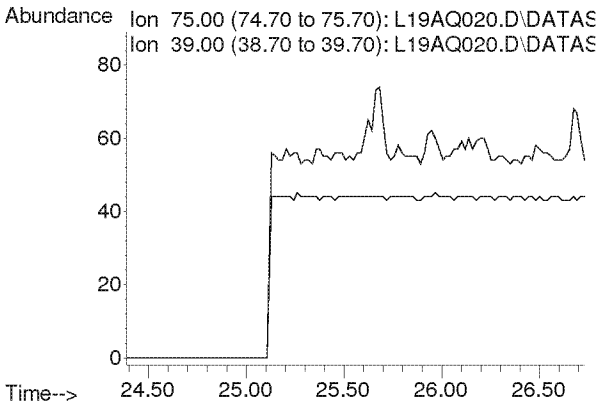


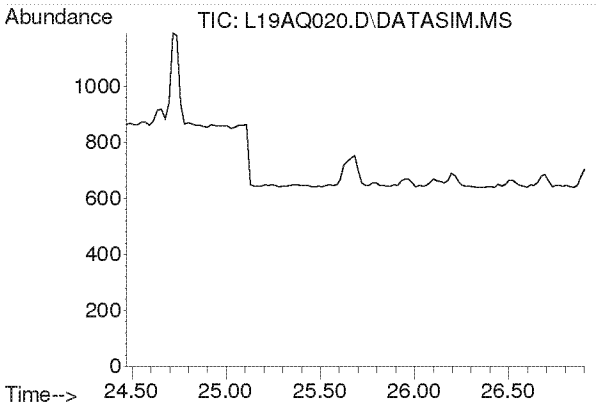
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



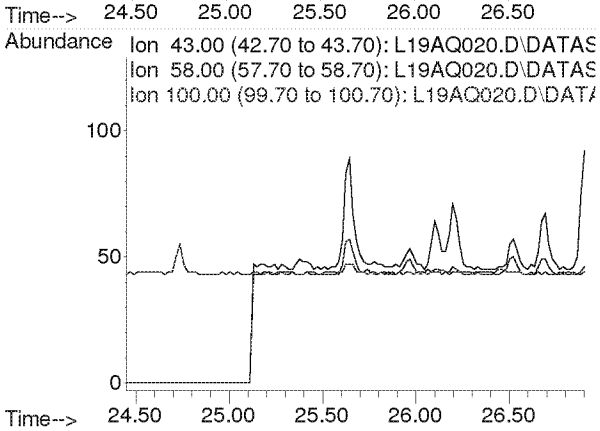


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

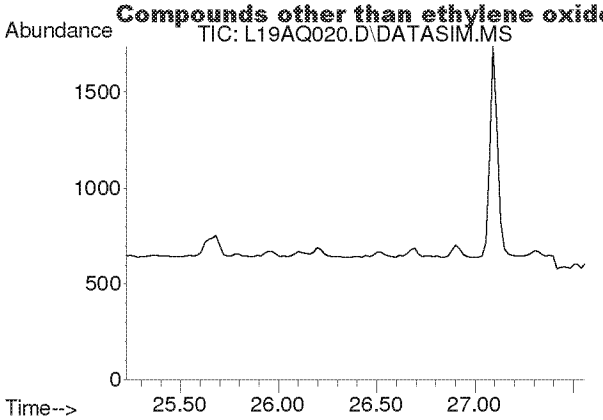
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

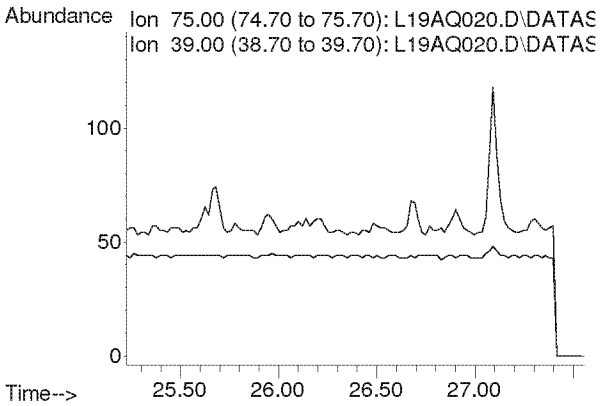


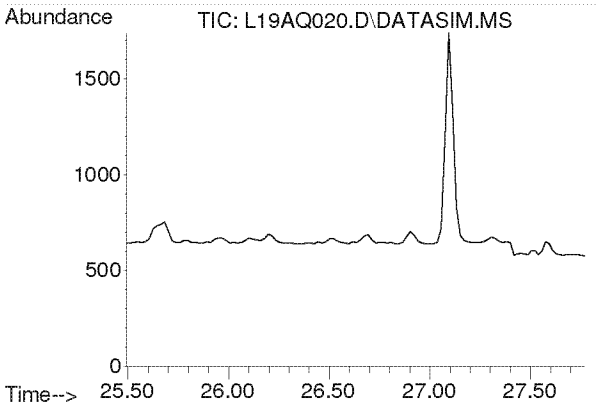
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



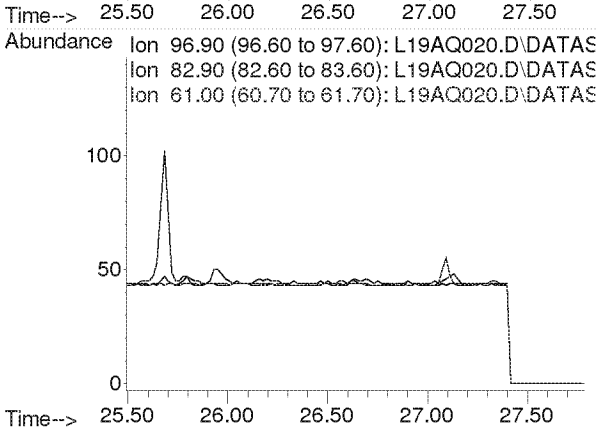


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

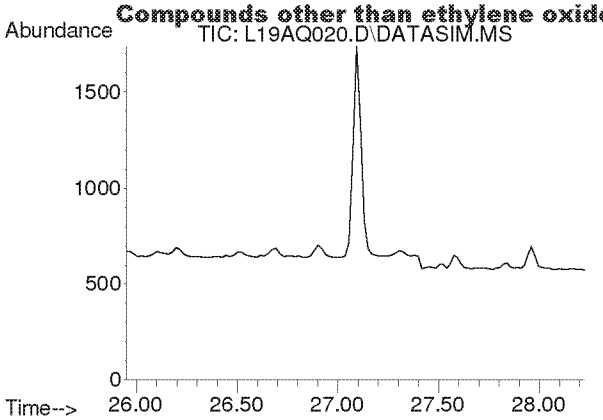
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

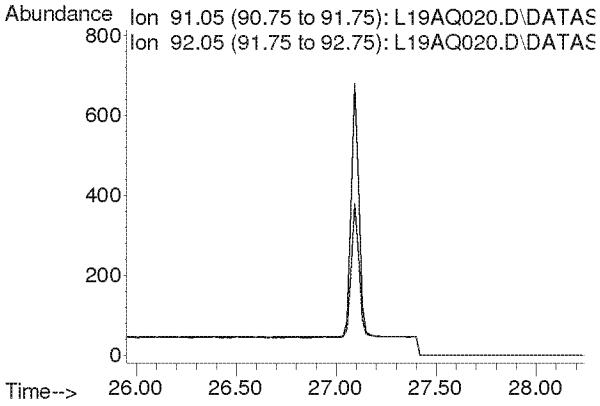


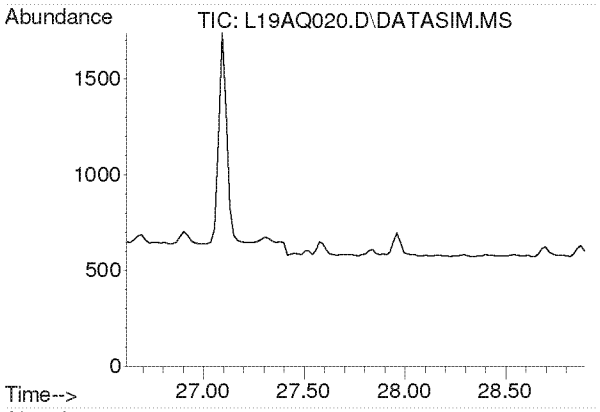
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



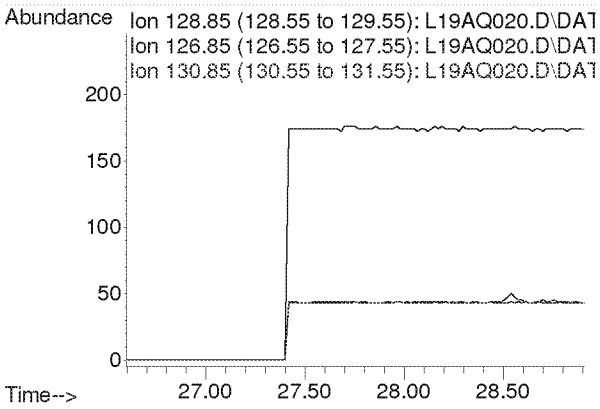


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

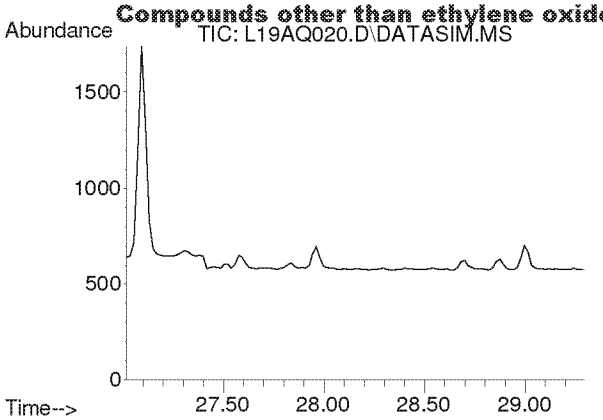
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

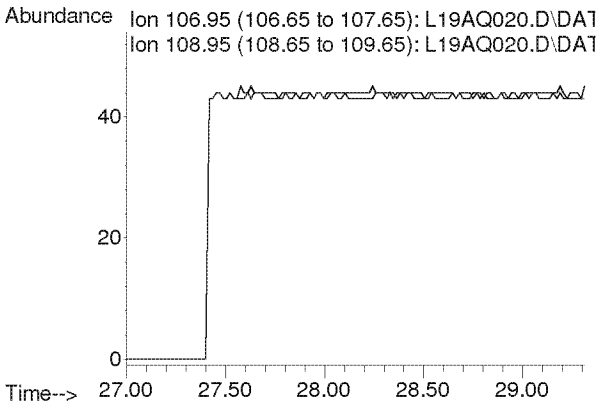


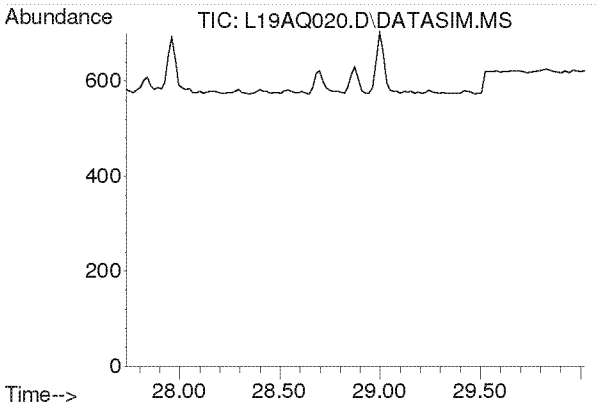
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



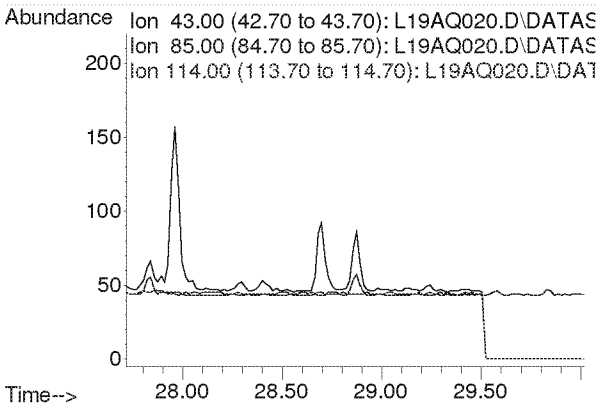


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

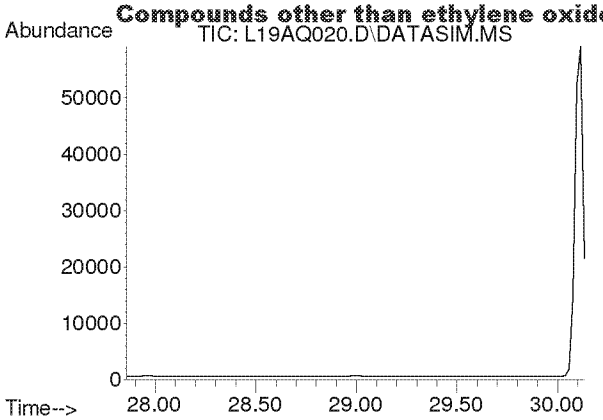
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

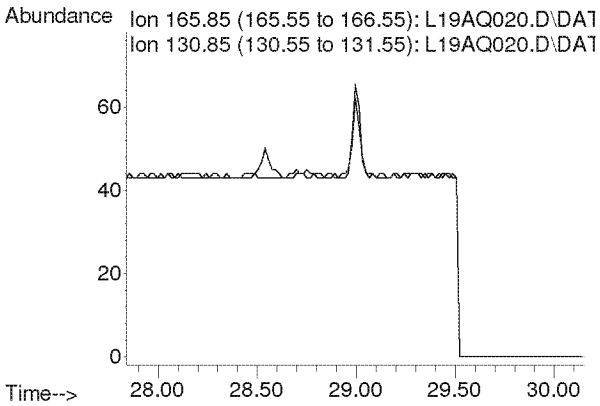


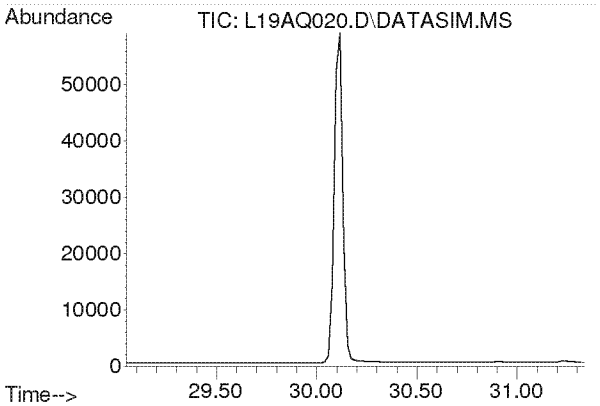
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



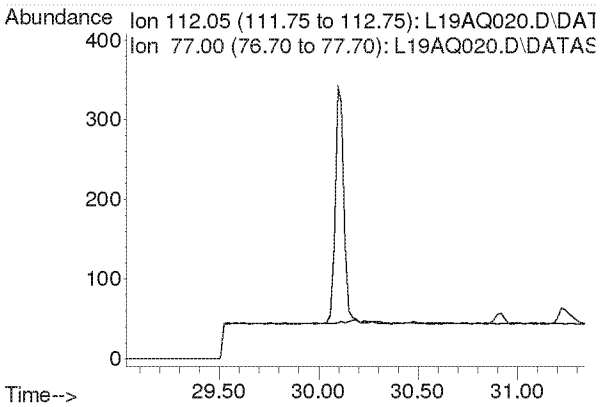


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

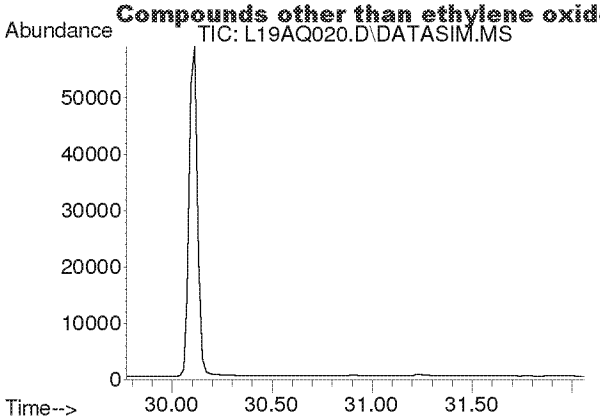
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

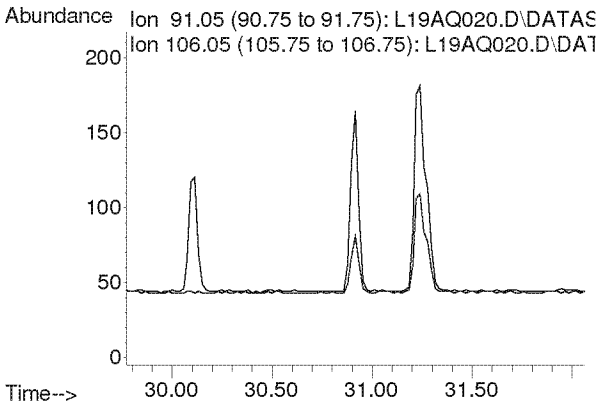


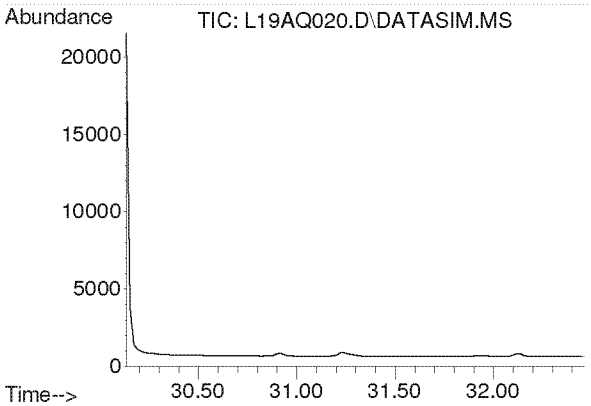
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



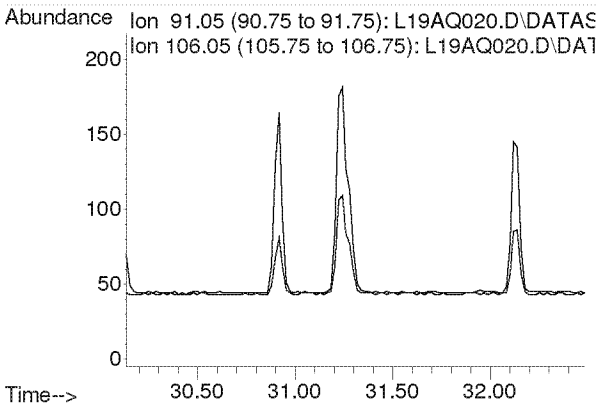


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

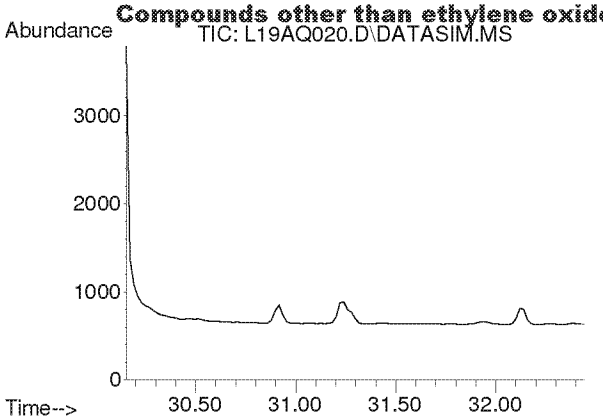
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

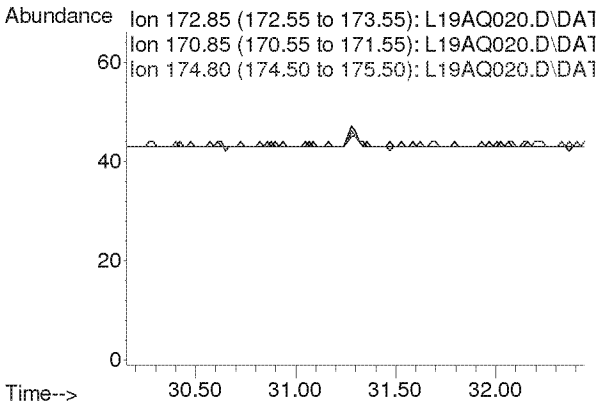


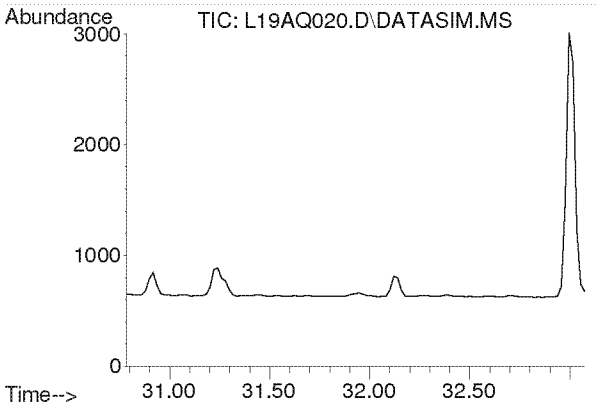
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



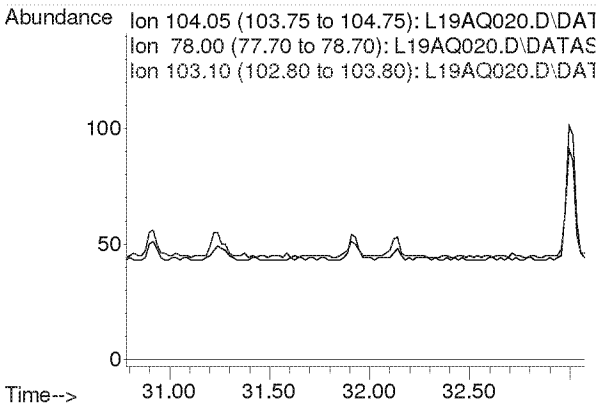


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

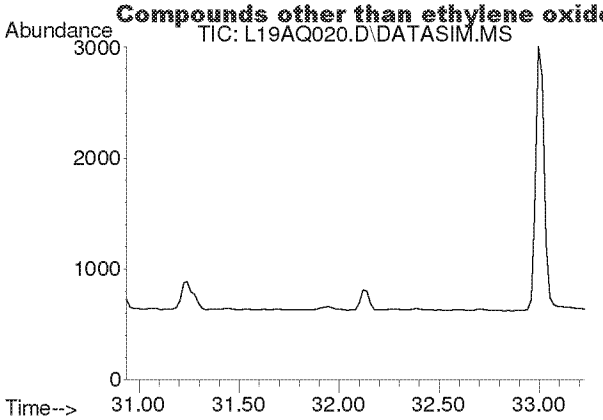
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

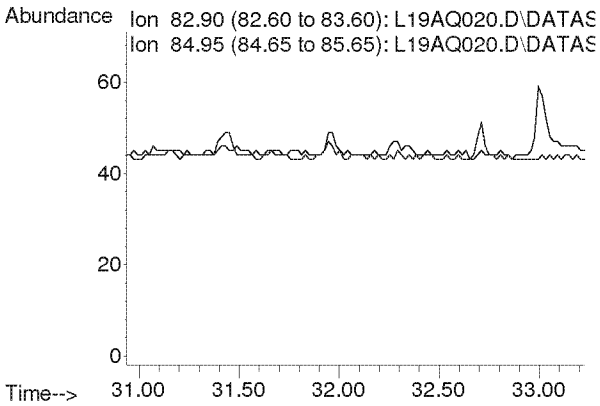


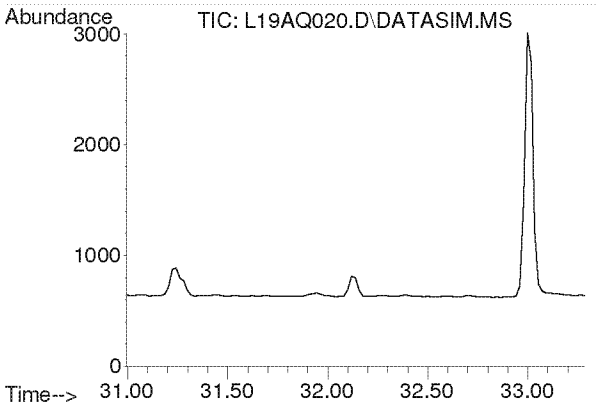
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



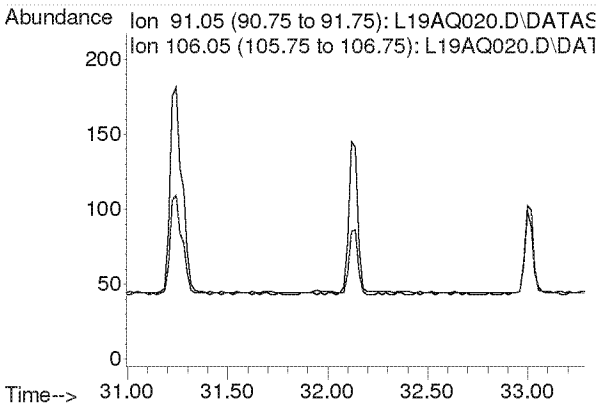


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

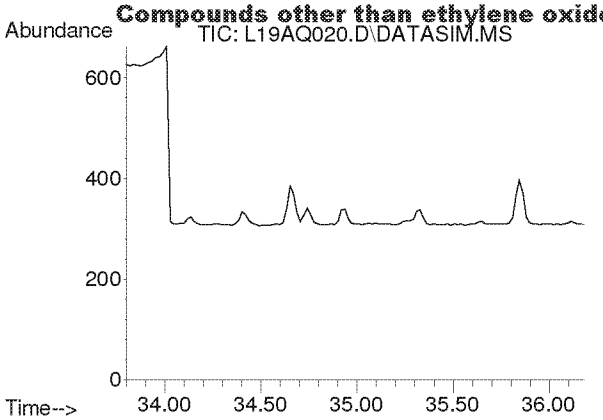
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

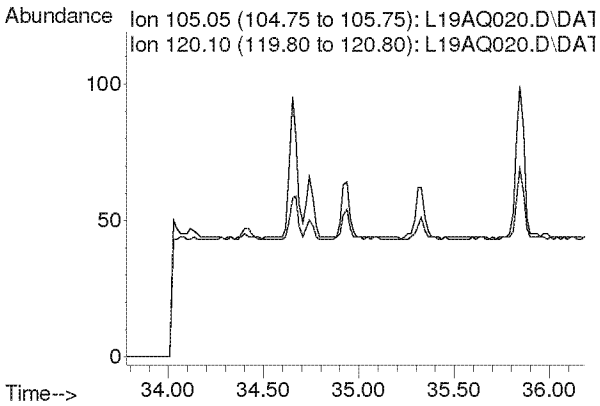


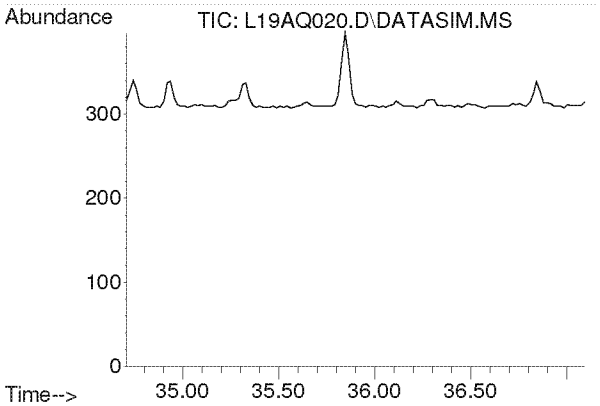
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



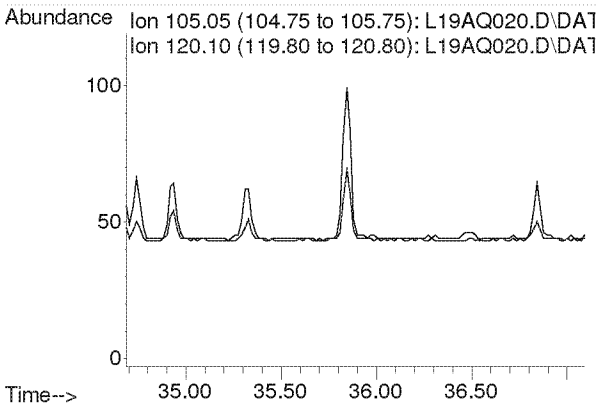


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

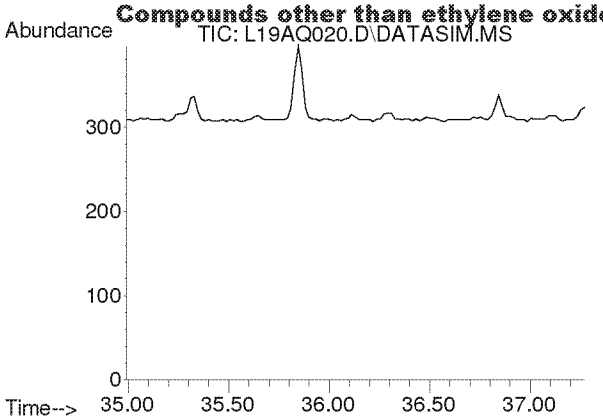
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

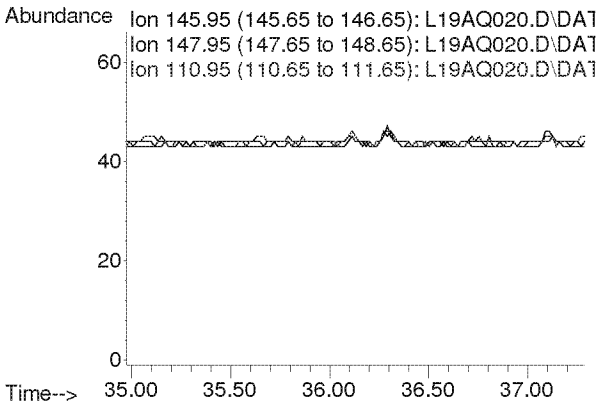


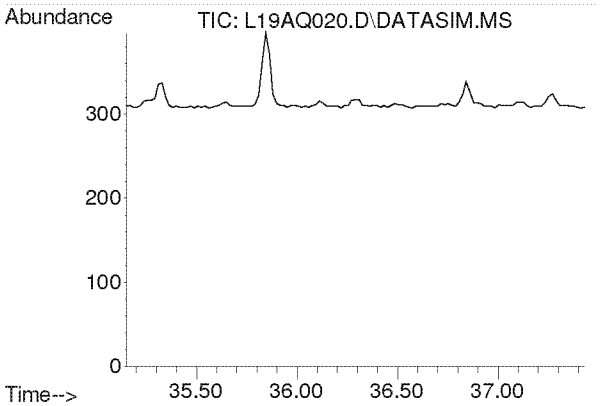
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



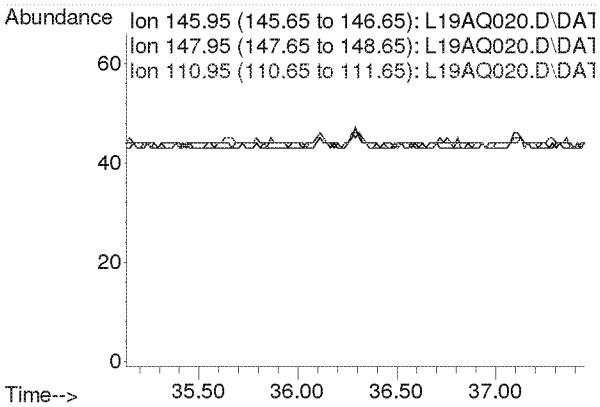


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

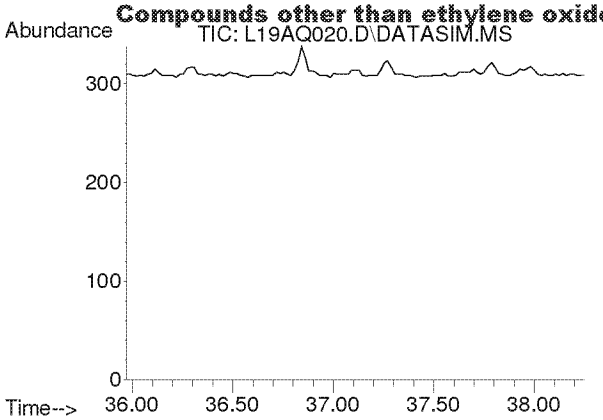
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

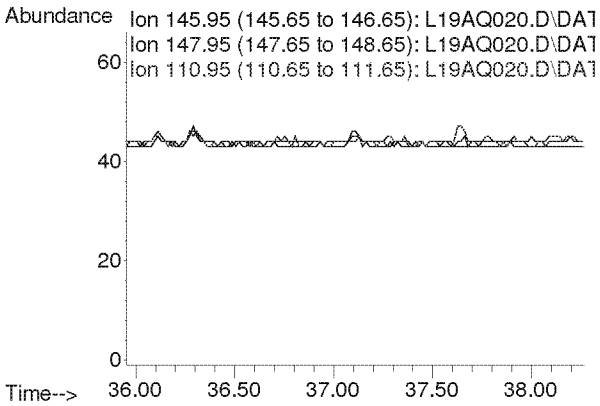


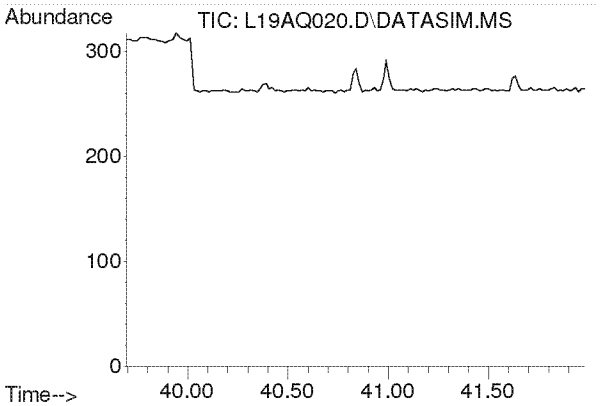
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



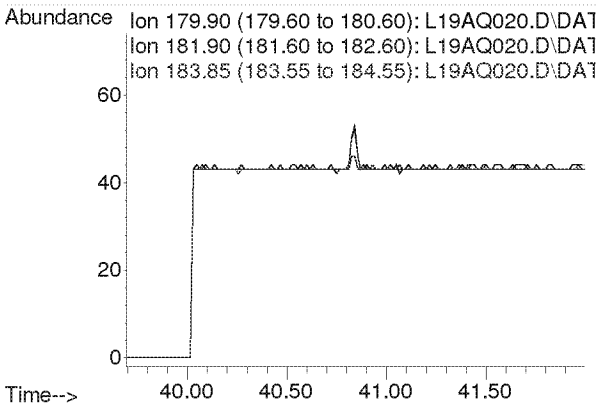


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

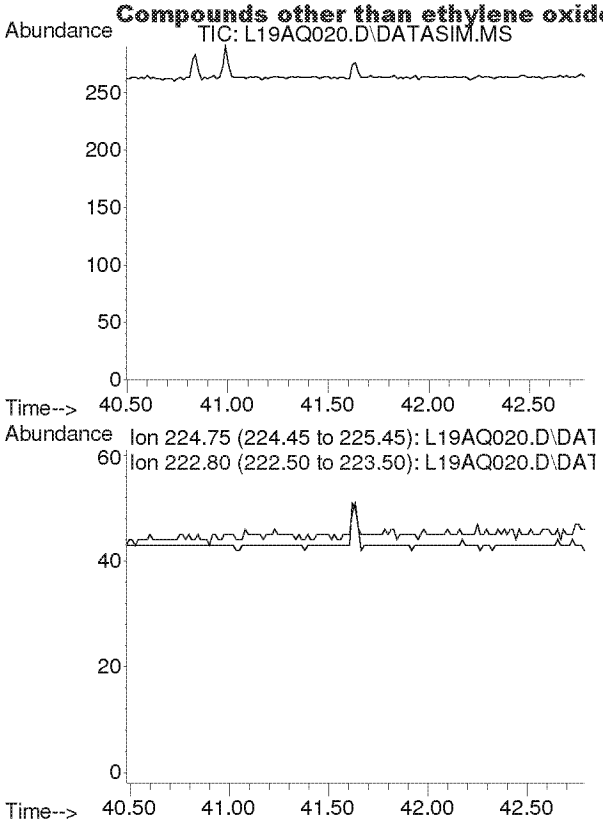
Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ020.D
Acq: 18 Jan 2019 6:48 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ021.D
Acq On : 18 Jan 2019 7:50 am
Operator : MAH
Sample : 9011101-09'
Misc : VILLAGE HALL 1/10/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 08:03:07 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

ctmr

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	52819	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	128849	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	97773	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.395	29	5755	2.1095 ppbv #	28
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D.	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D. d	
36) Bromodichloromethane	0.000	83	0	N.D.	
37) Trichloroethylene	0.000	130	0	N.D.	
38) Methyl Methacrylate	0.000	41	0	N.D.	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	0.000	43	0	N.D. d	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	0.000	91	0	N.D. d	
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D. d	

ED_002475_00000277-00511

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AQ\
Data File : L19AQ021.D
Acq On : 18 Jan 2019 7:50 am
Operator : MAH
Sample : 9011101-09
Misc : VILLAGE HALL 1/10/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 08:03:07 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	d
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D.	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

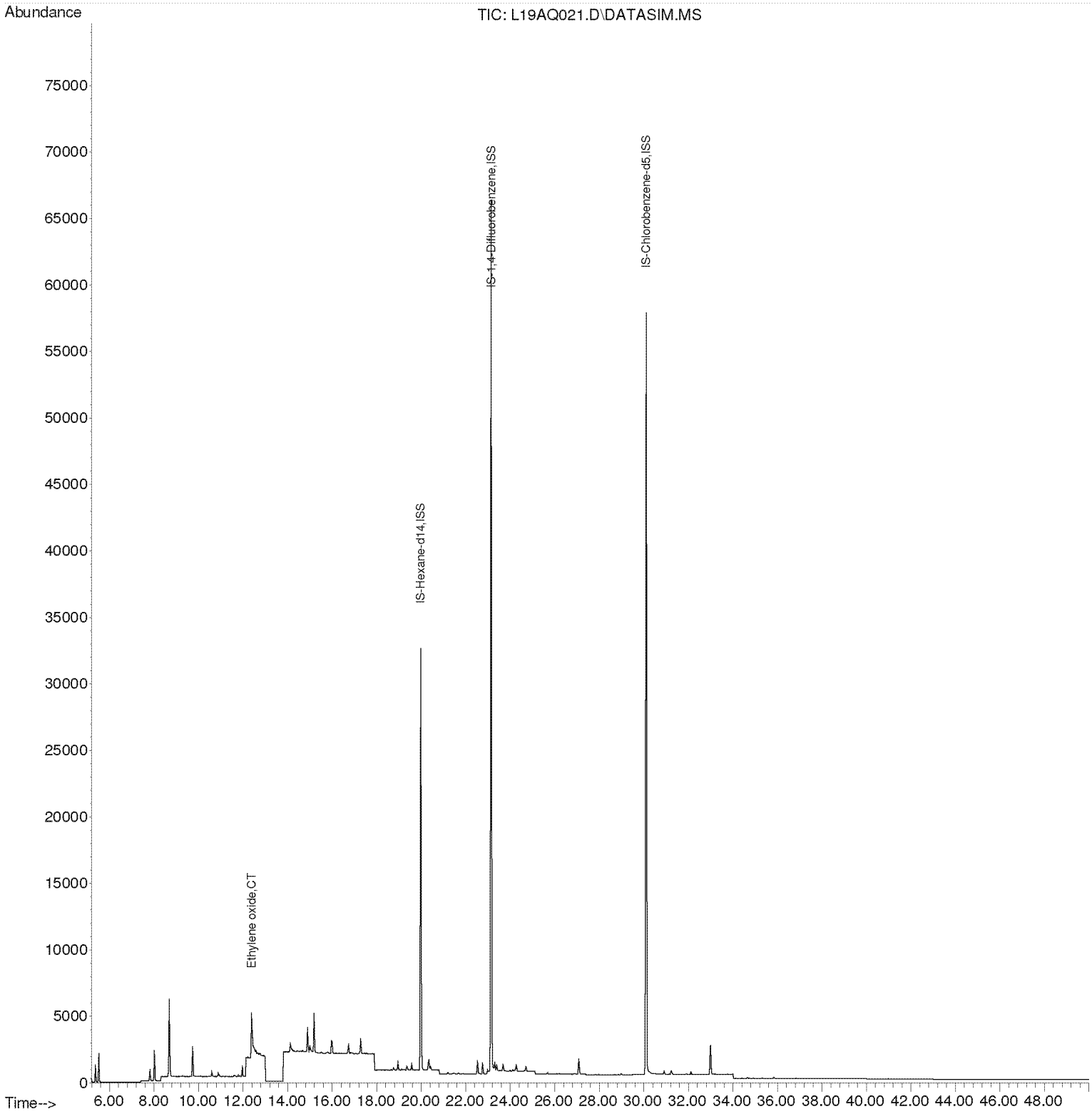
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000277-00512

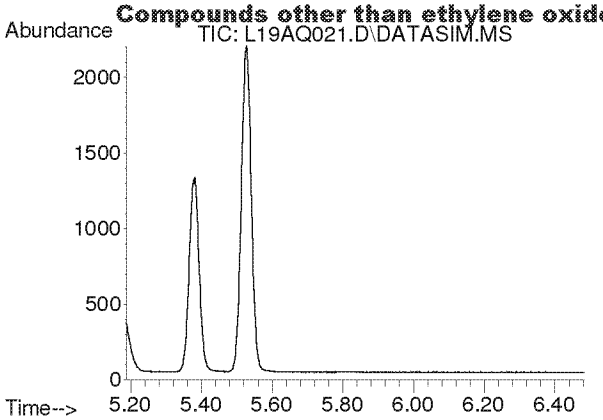
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AQ\
Data File : L19AQ021.D
Acq On : 18 Jan 2019 7:50 am
Operator : MAH
Sample : 9011101-09
Misc : VILLAGE HALL 1/10/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 07:37:16 2019
Quant Method : C:\msdchem\1\METHODS\9010002.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Tue Jan 08 07:11:21 2019
Response via : Initial Calibration



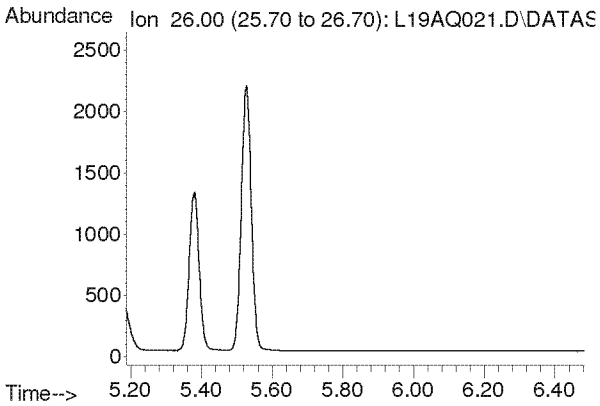
Compounds other than ethylene oxide were not quantitated.

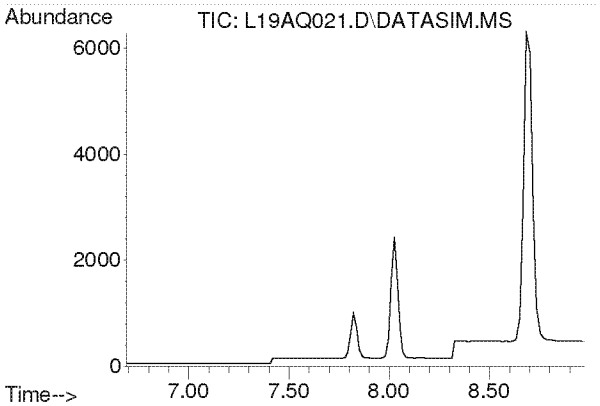


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 26



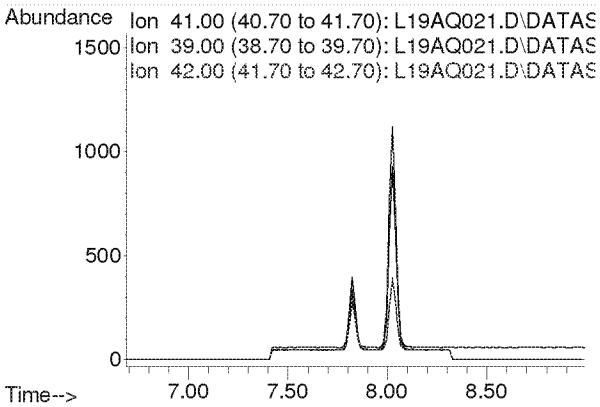


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

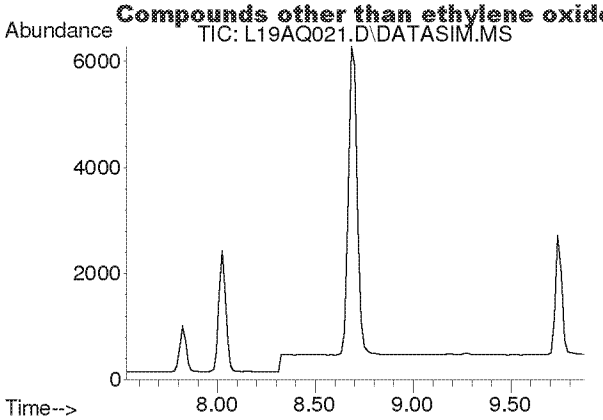
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

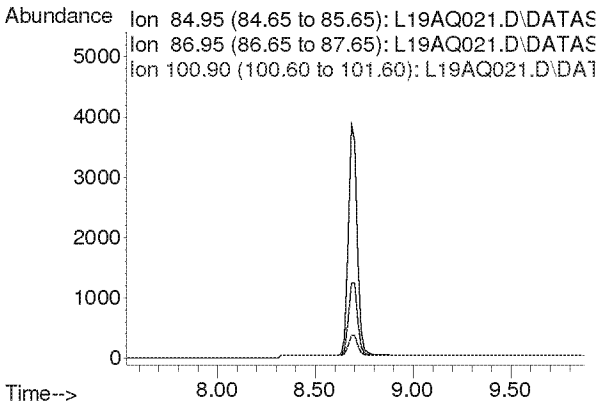


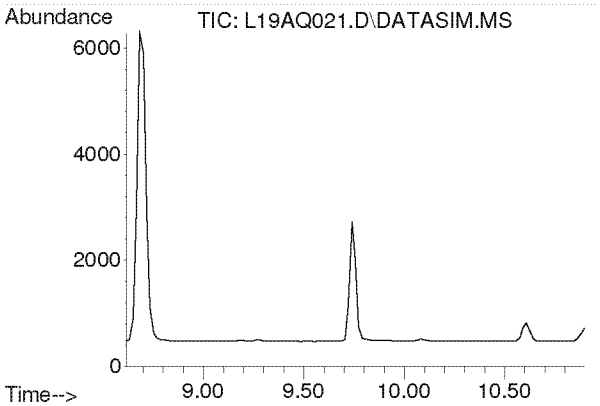
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



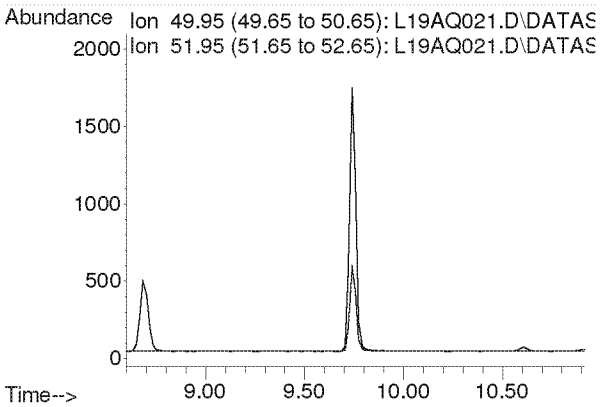


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

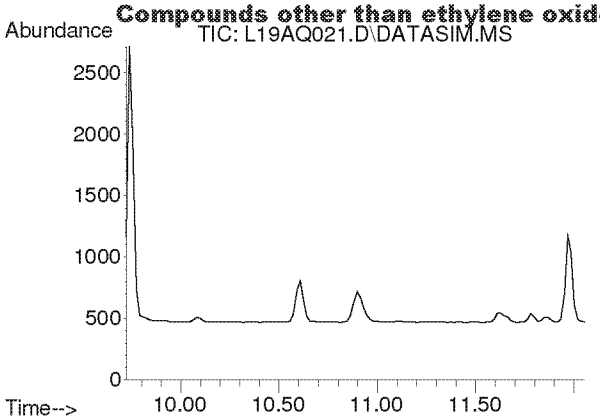
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

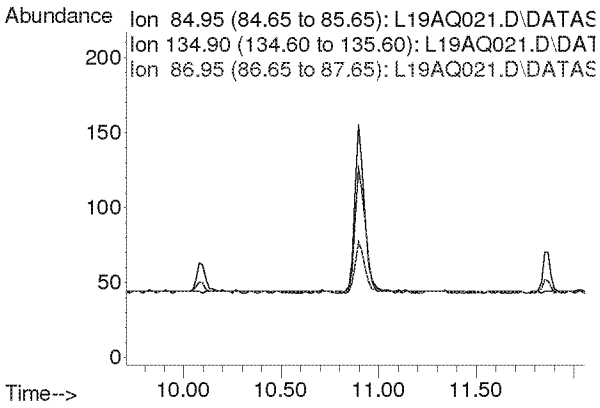


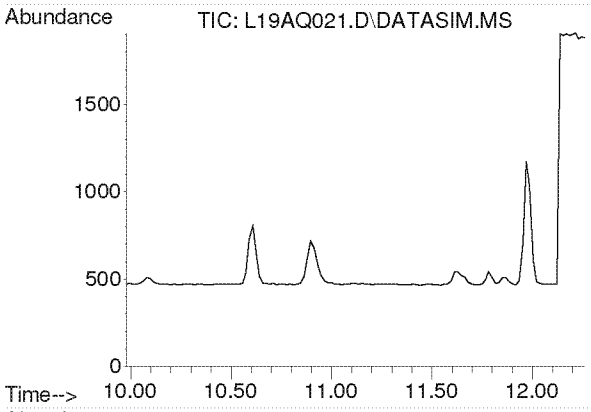
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



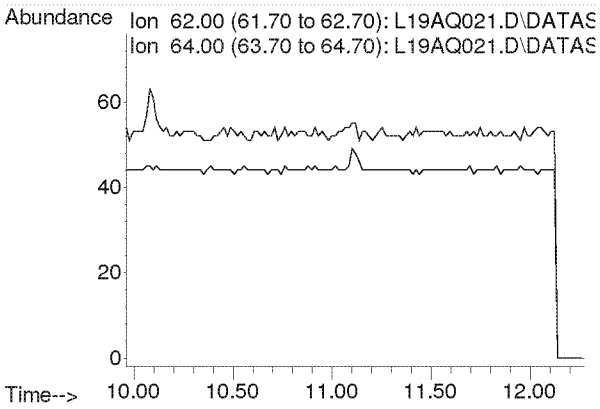


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

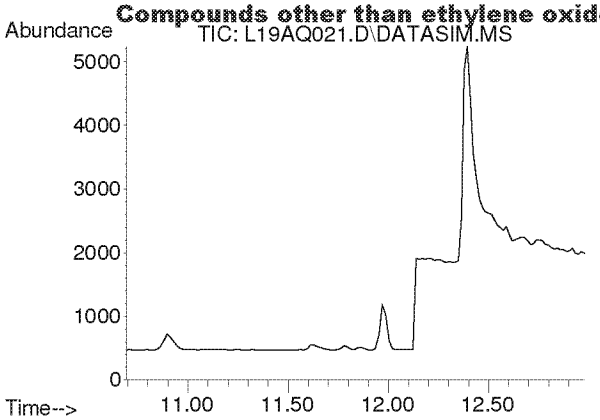
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

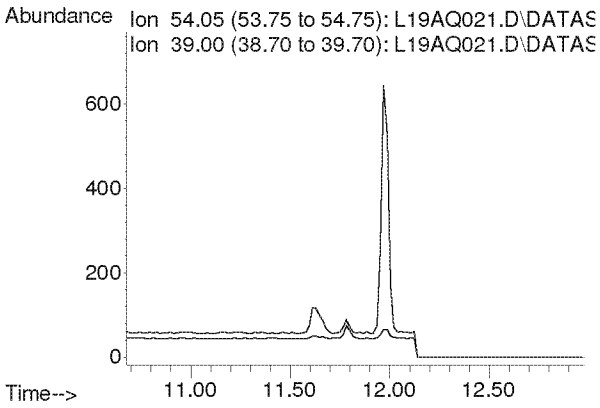


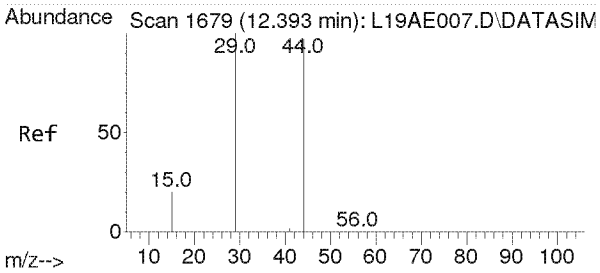
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

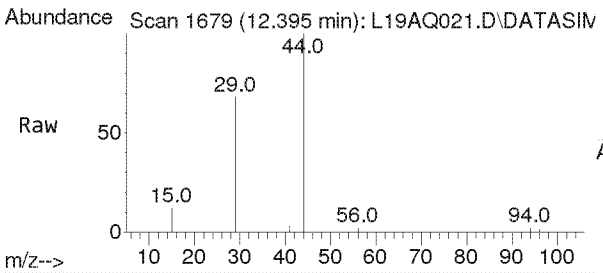


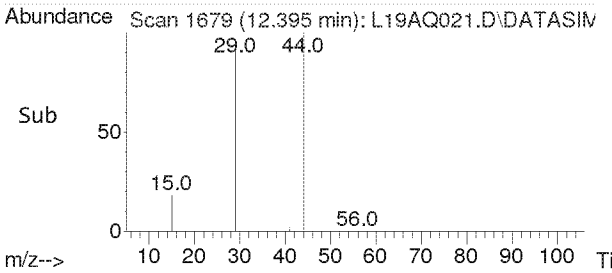


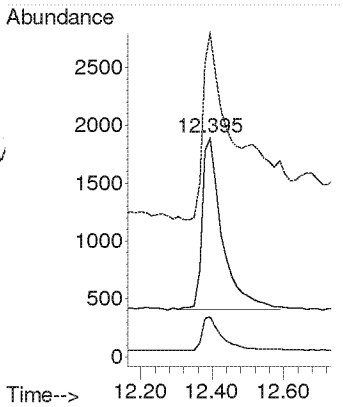
#9
Ethylene oxide
Concen: 2.109 ppbv
RT: 12.395 min Scan# 1679
Delta R.T. 0.002 min
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 29 Resp: 5755

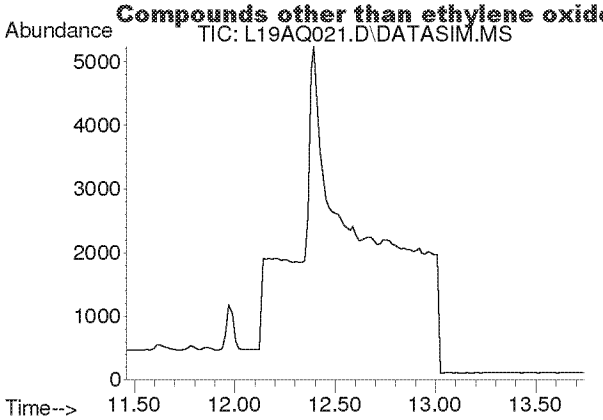
Ion	Ratio	Lower	Upper
29	100		
15	20.0	15.4	23.0
44	181.4	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

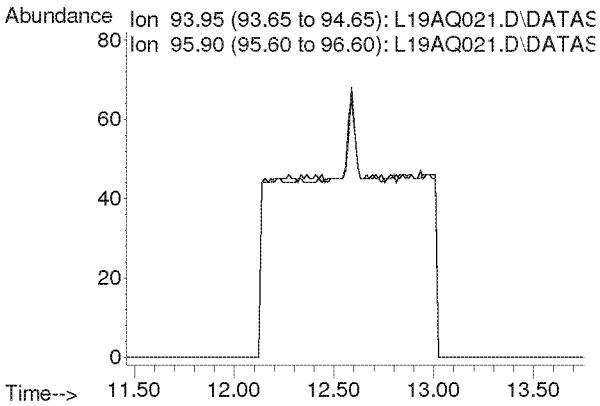


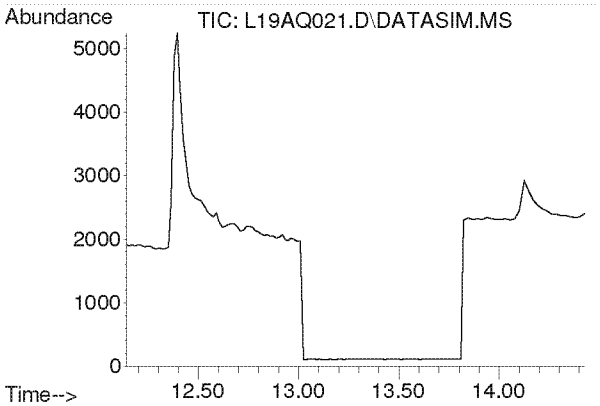
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



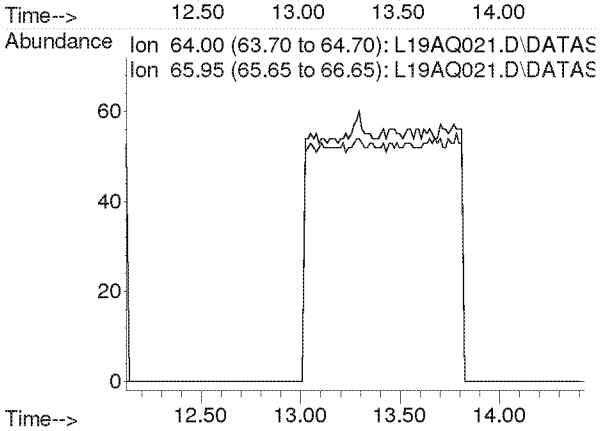


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

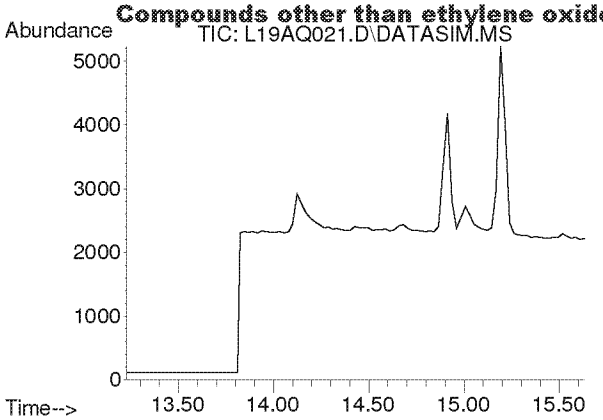
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

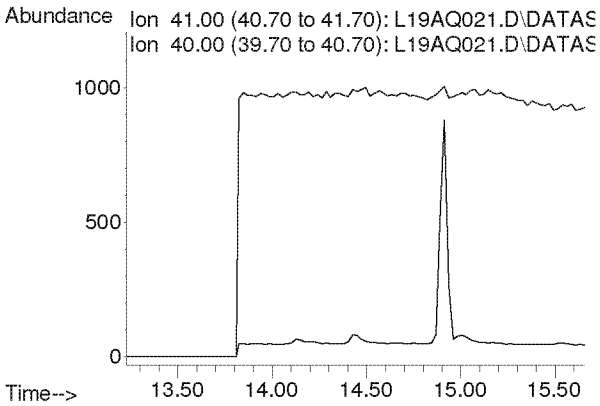


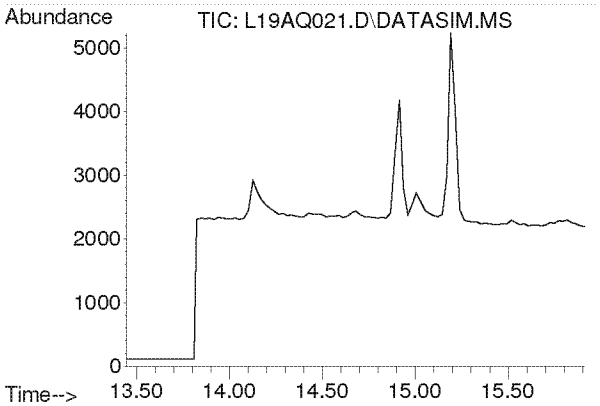
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



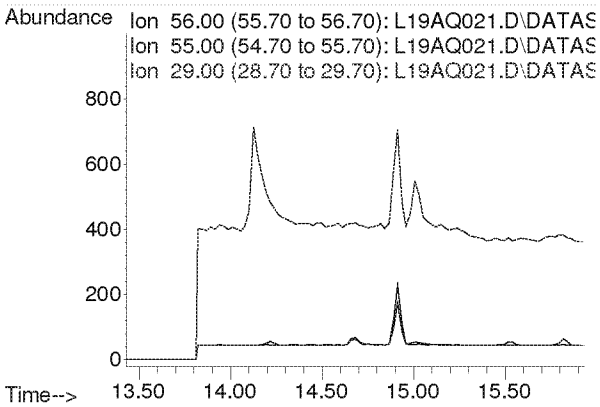


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

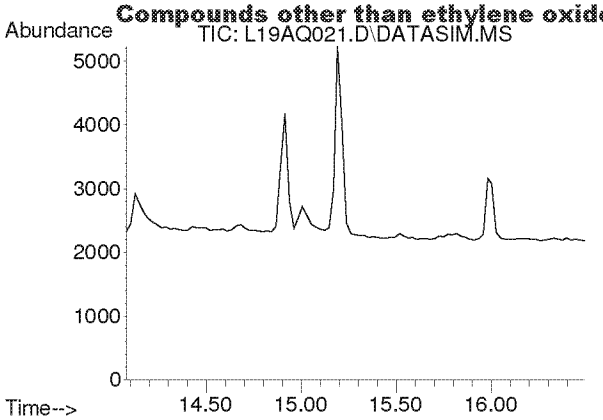
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

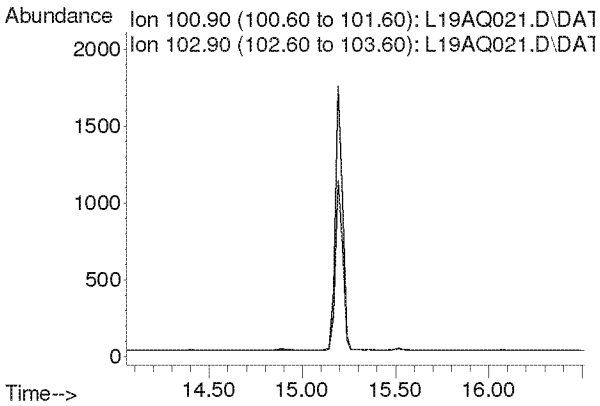


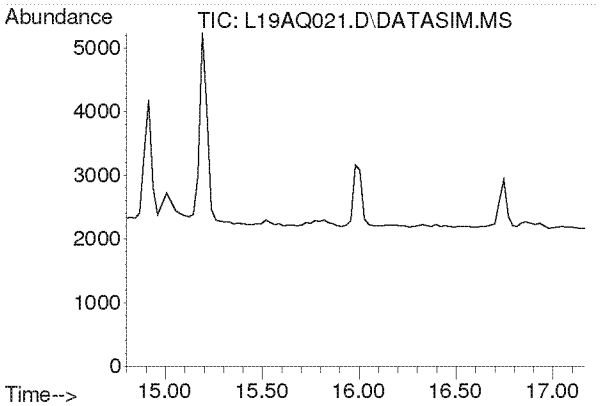
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



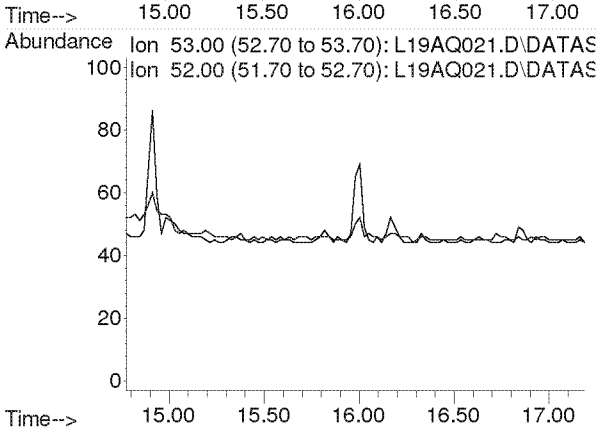


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

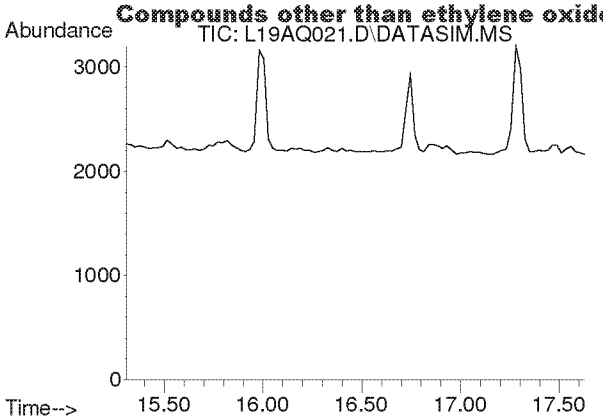
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

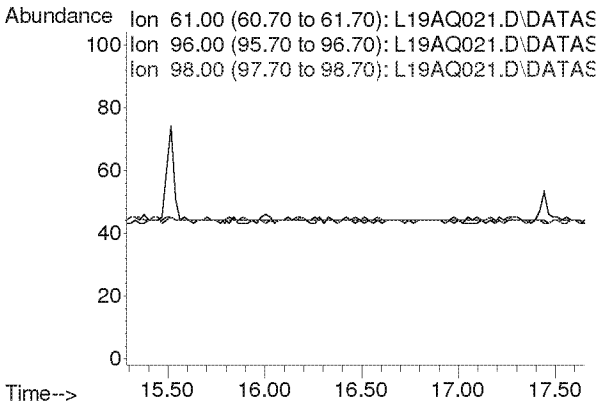


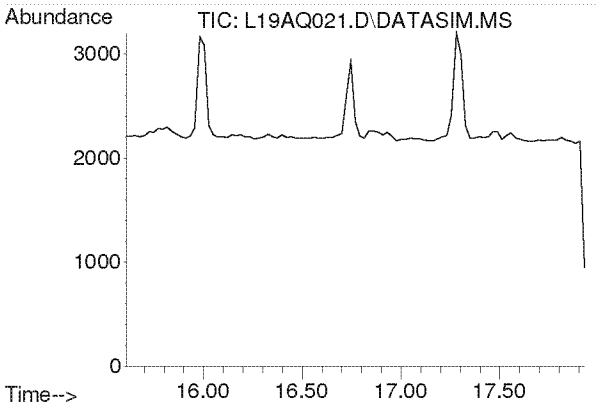
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



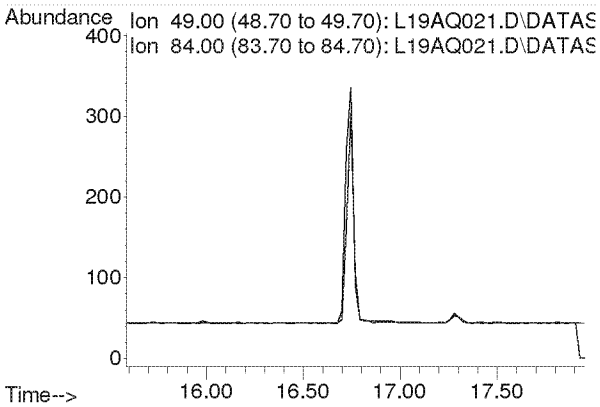


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

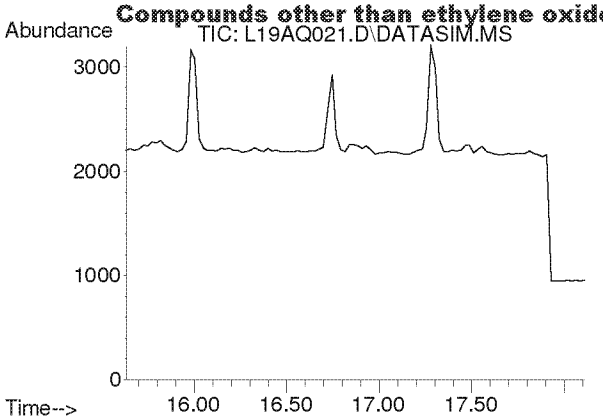
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

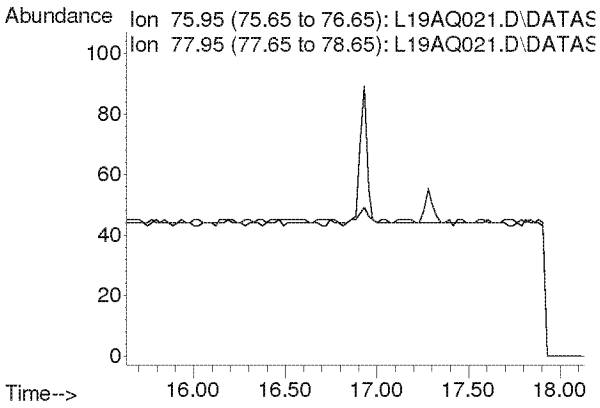


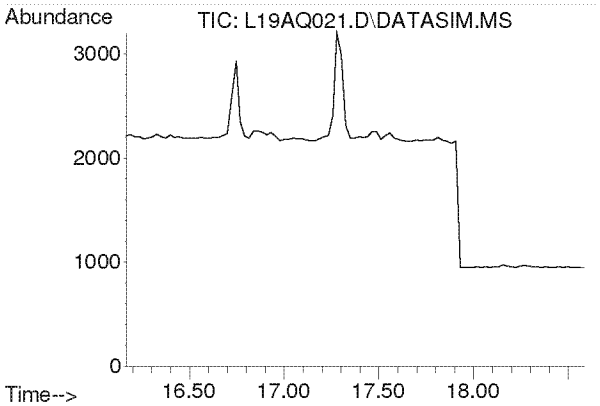
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



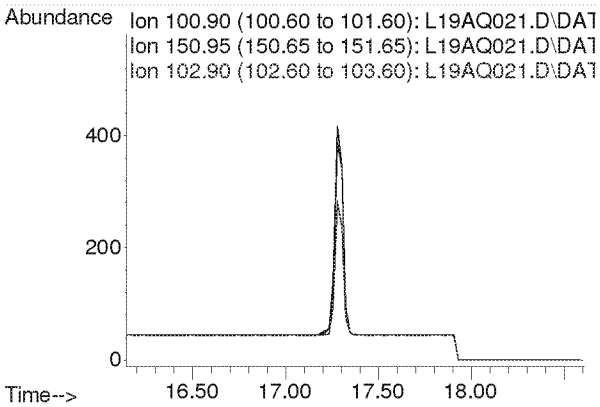


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

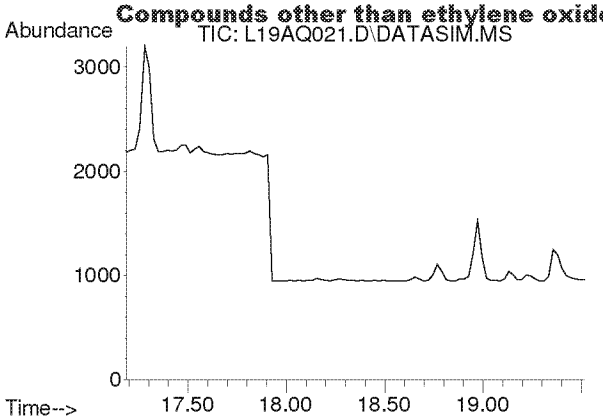
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

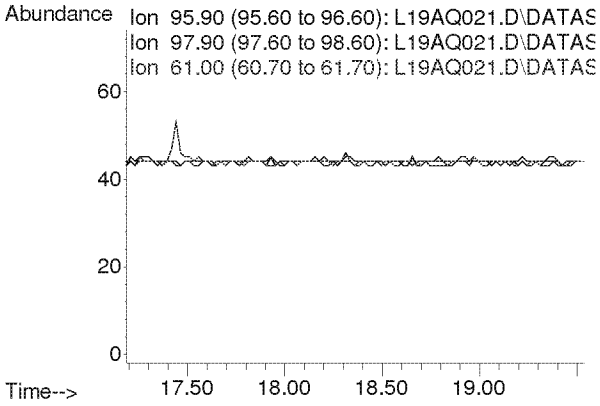


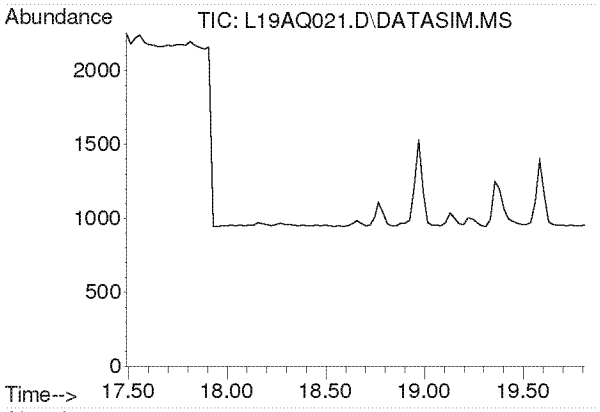
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



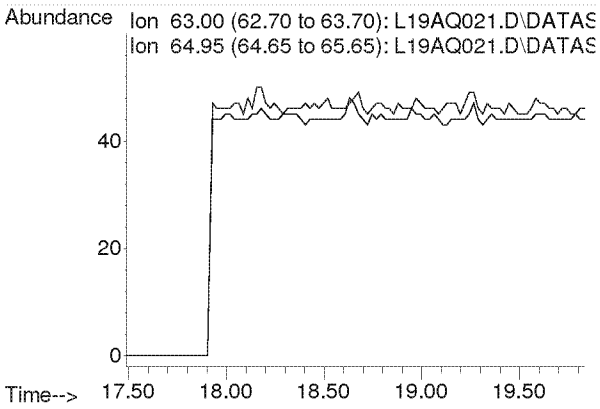


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

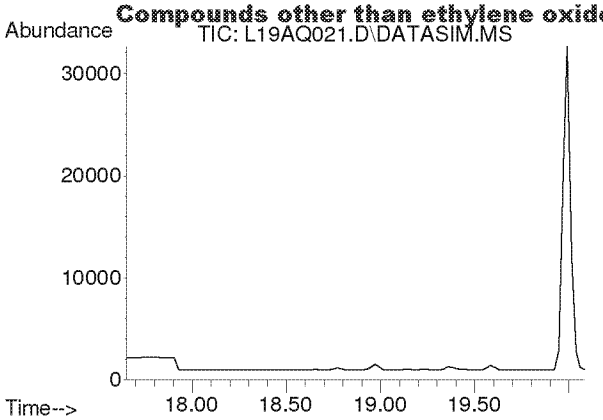
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

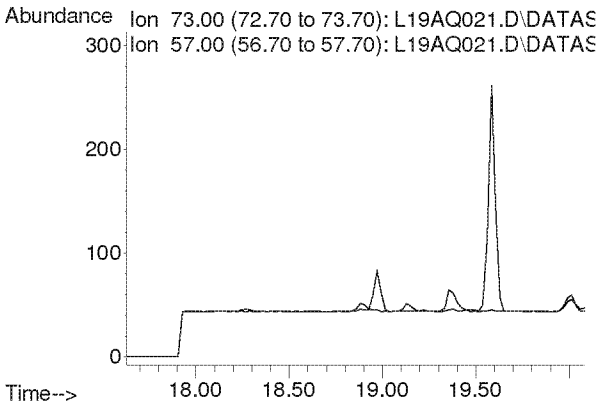


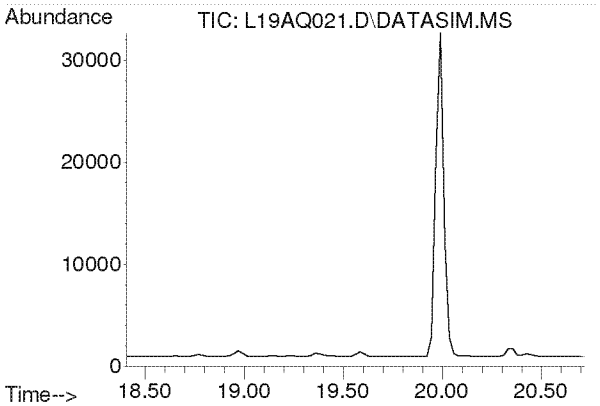
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



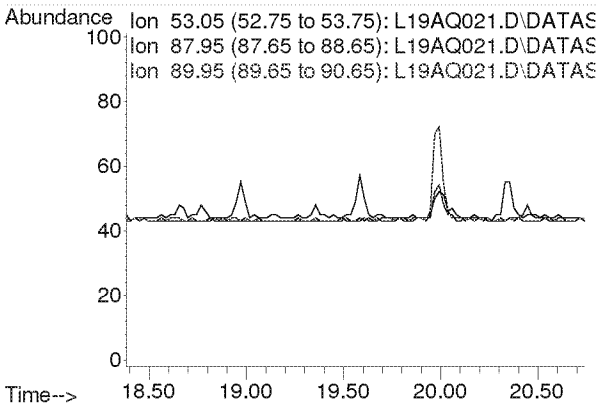


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

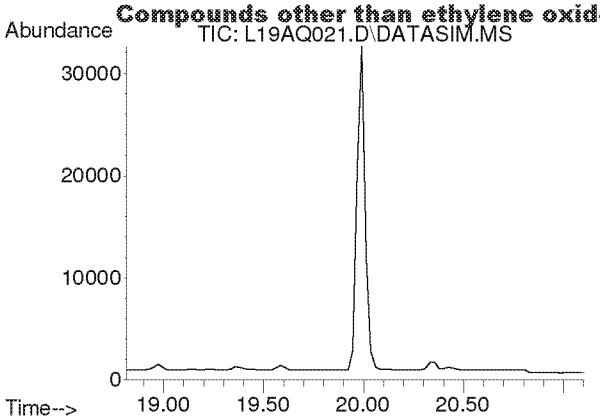
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

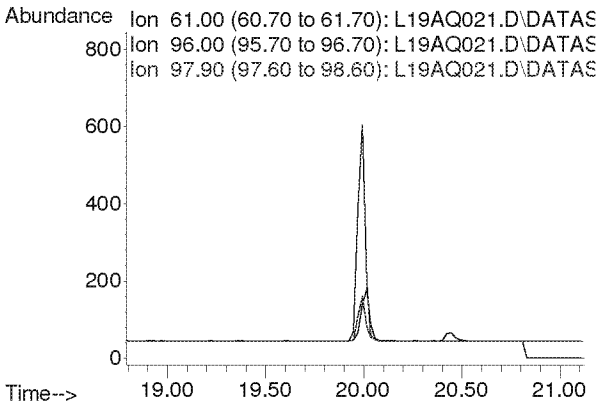


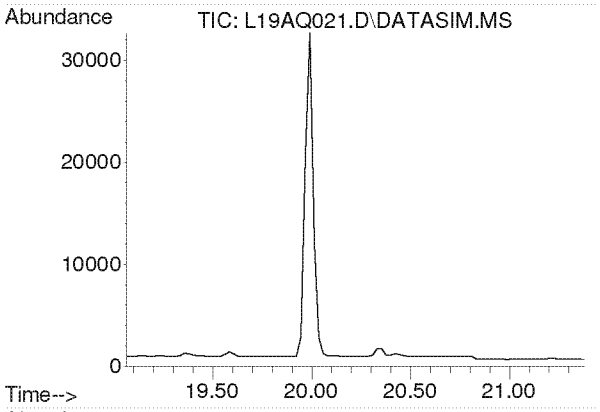
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



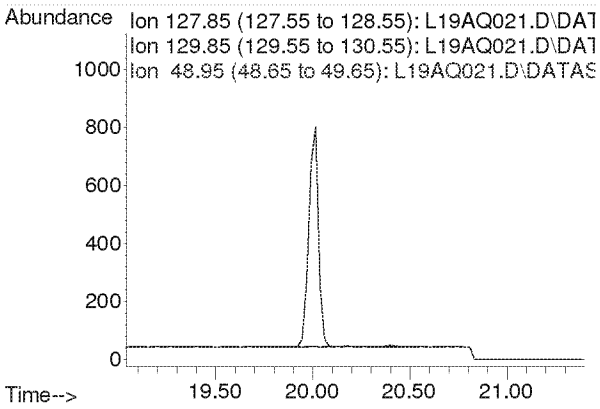


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

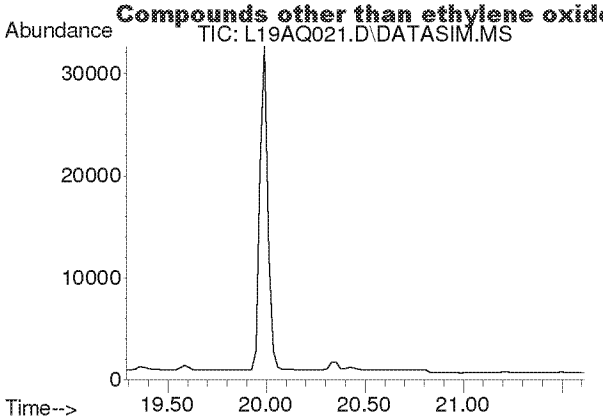
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

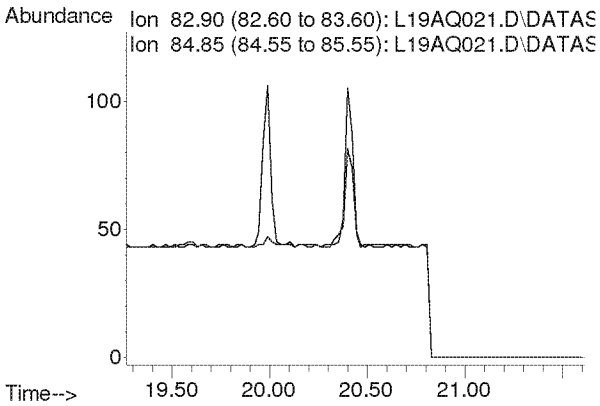


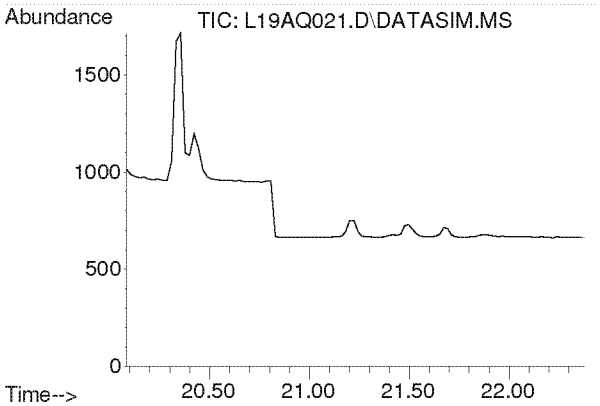
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



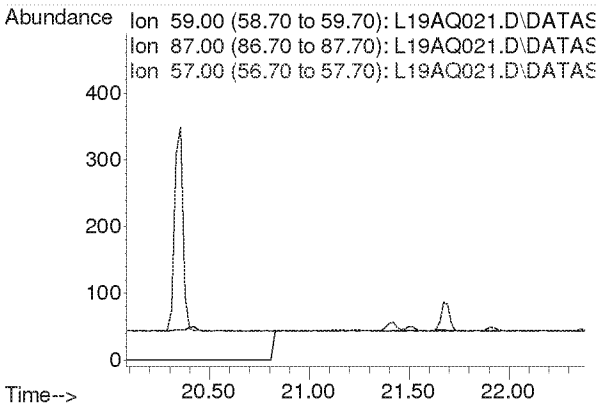


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

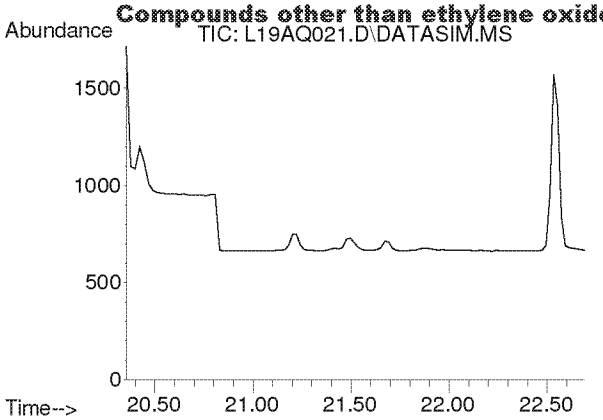
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

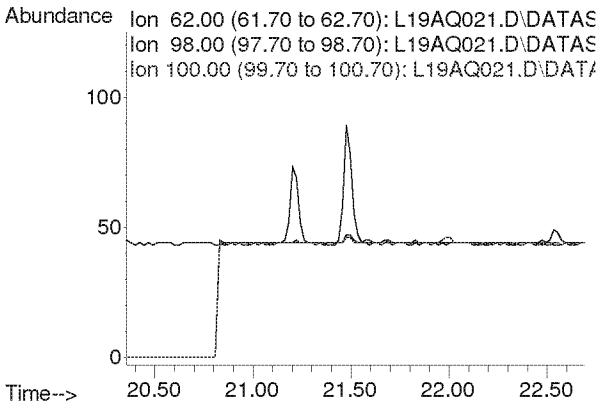


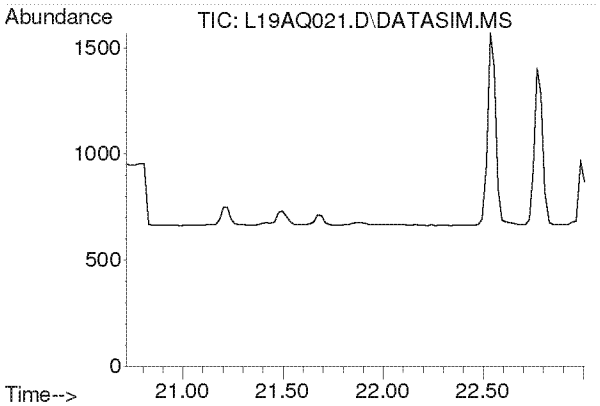
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



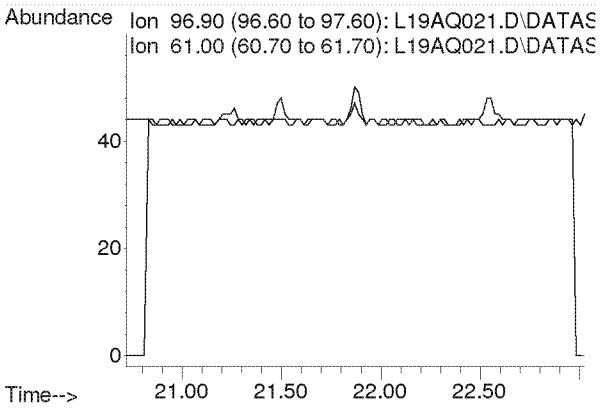


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

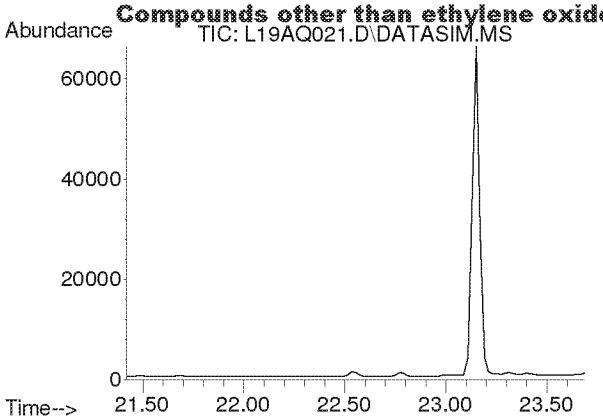
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

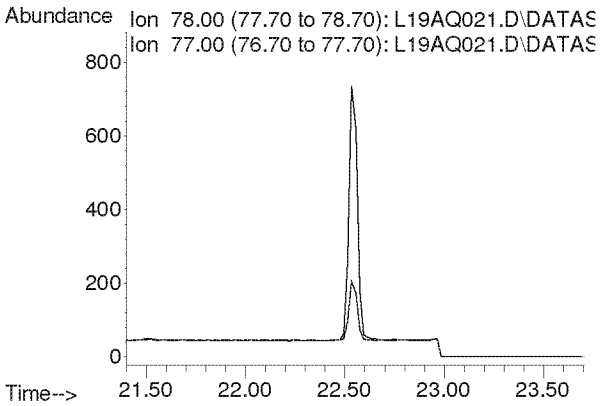


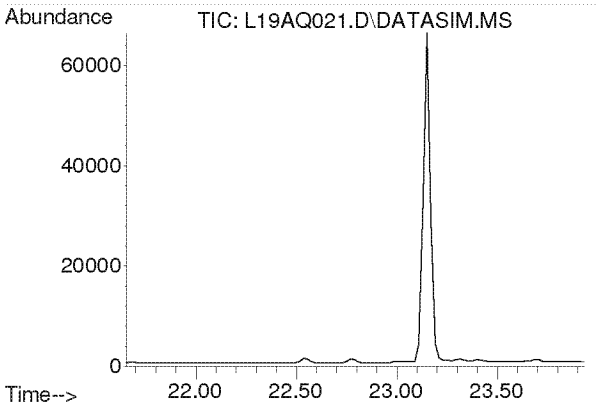
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



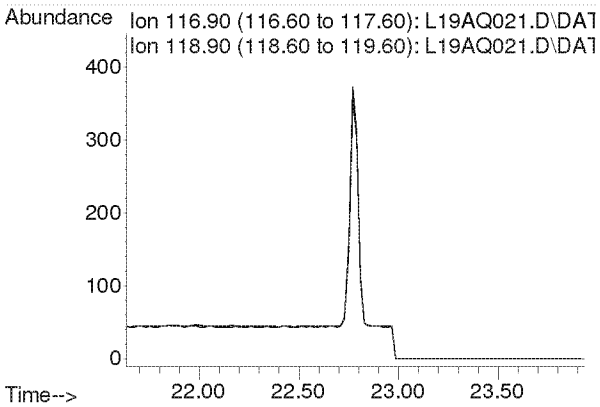


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

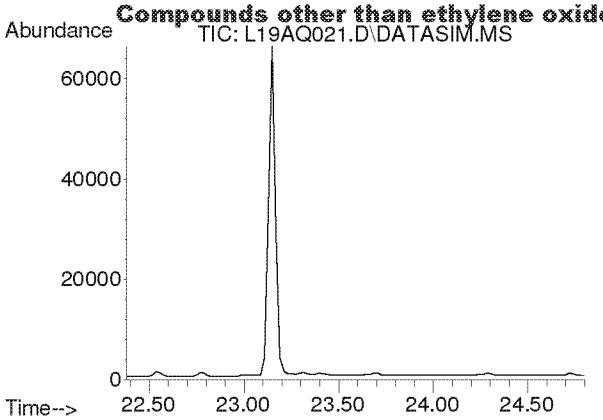
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

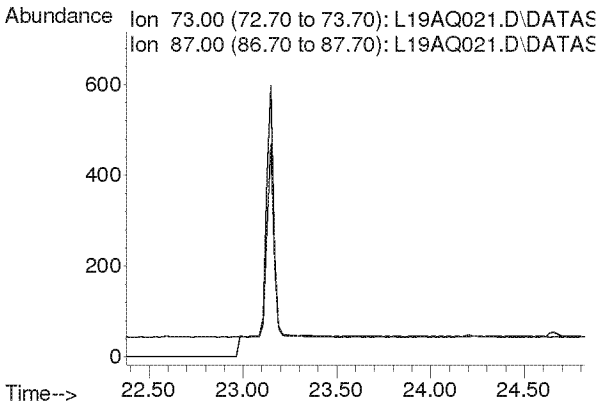


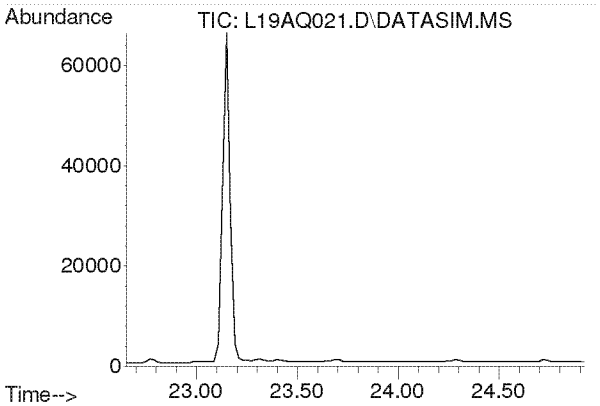
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



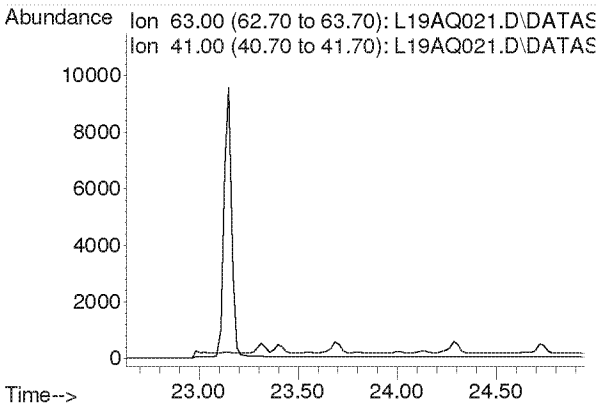


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

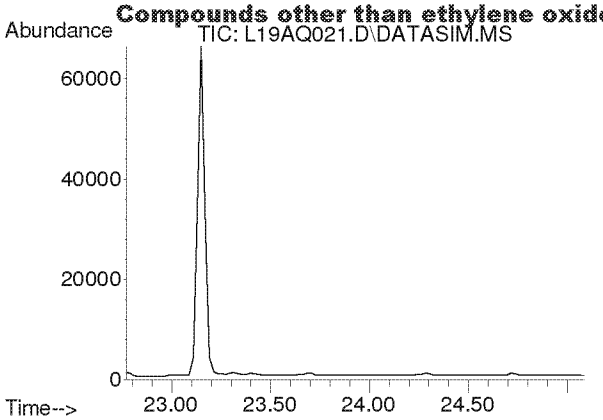
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

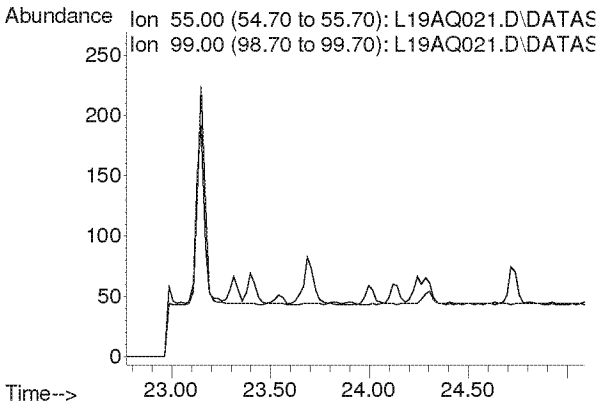


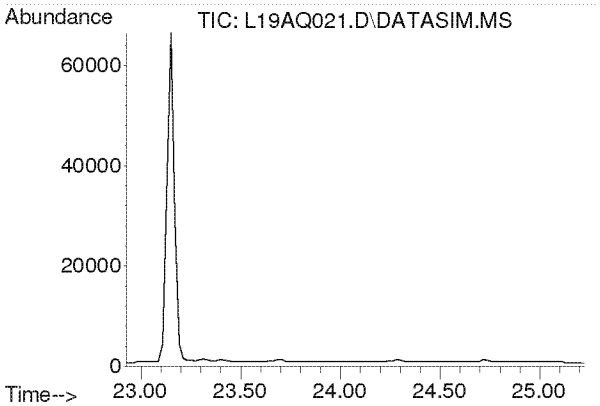
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



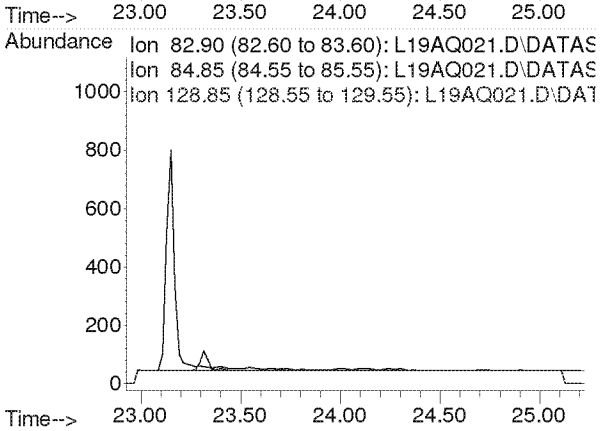


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

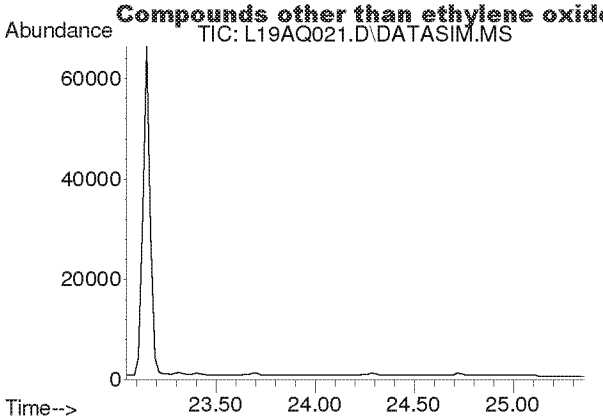
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

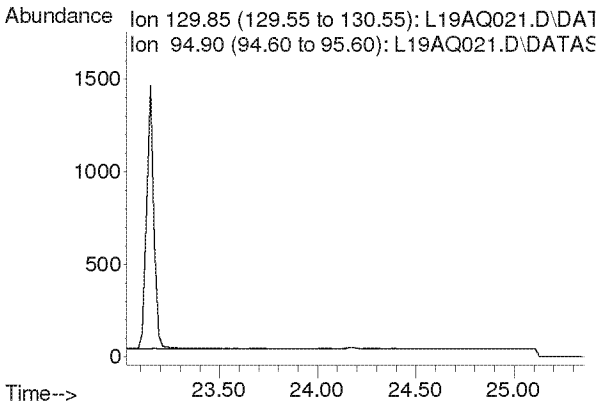


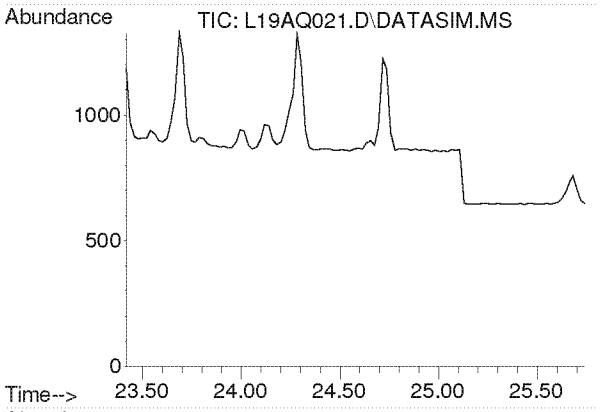
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



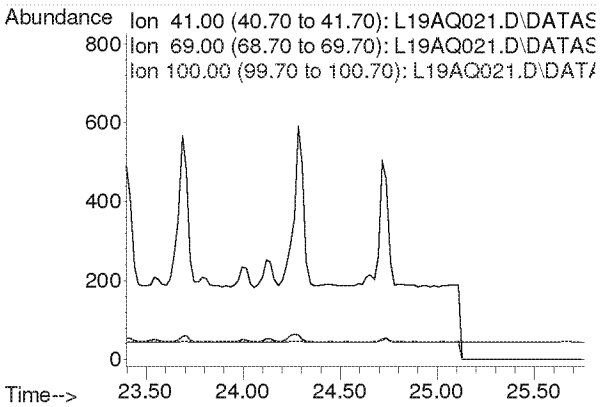


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

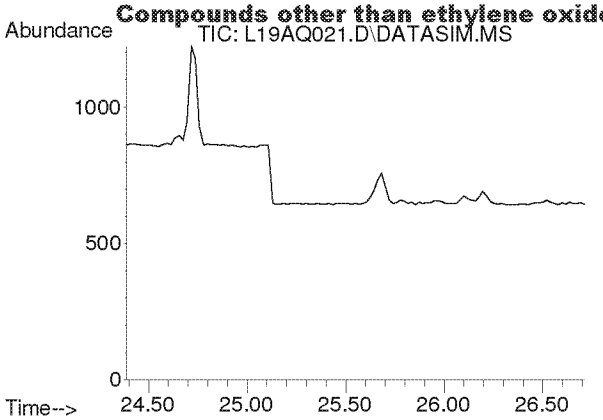
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

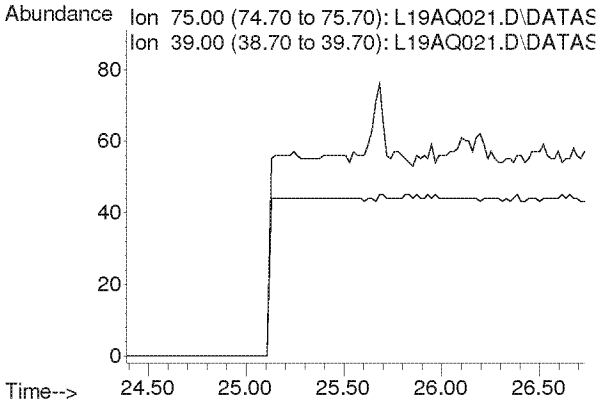


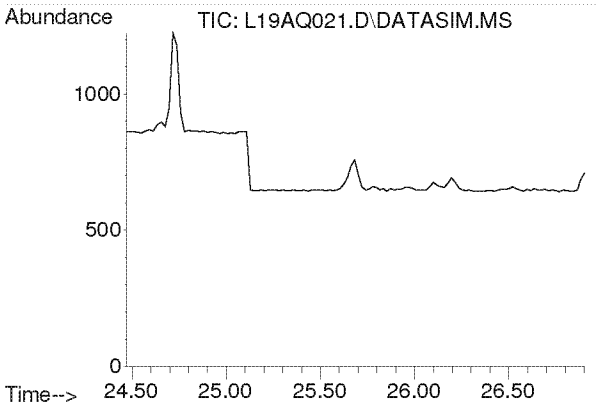
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



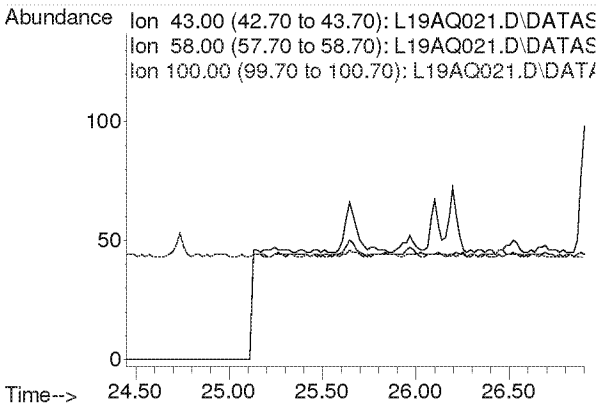


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

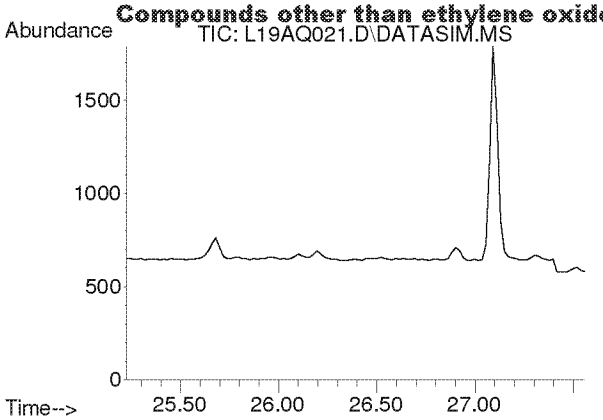
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

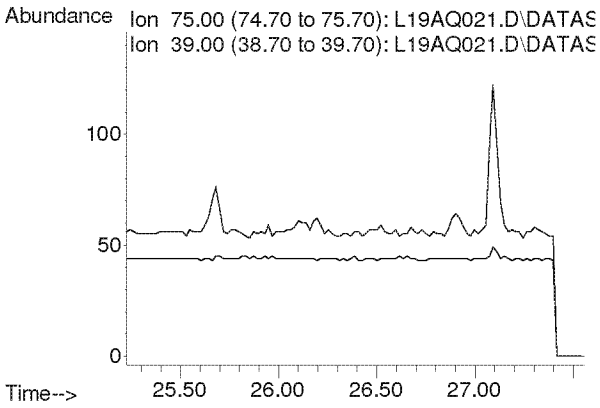


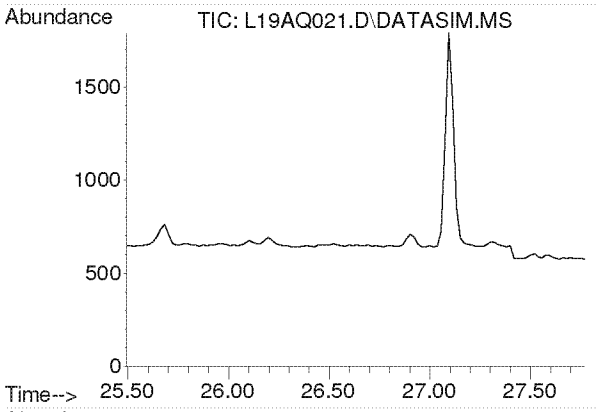
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



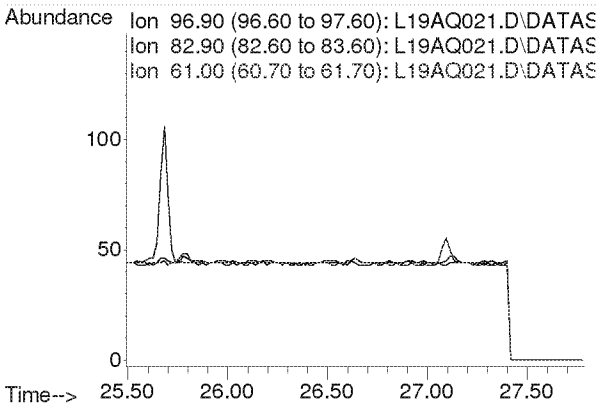


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

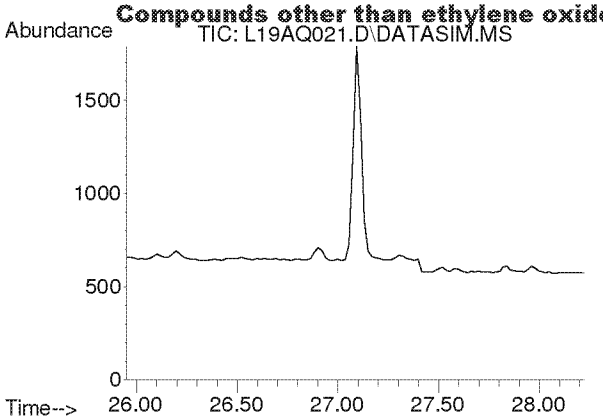
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

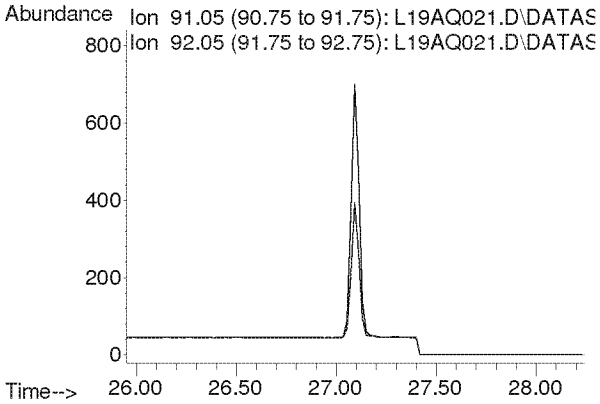


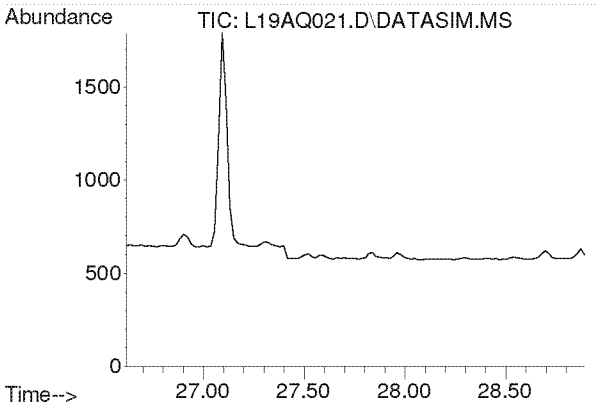
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



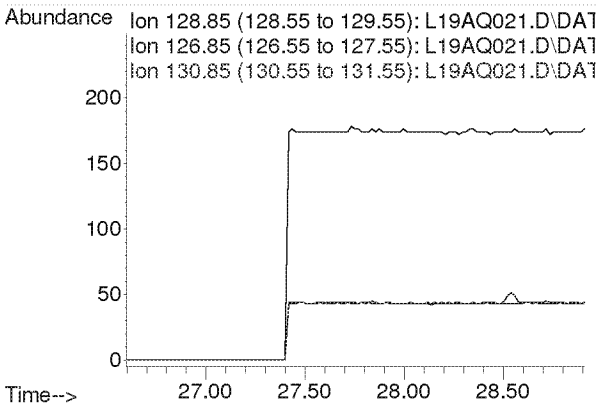


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

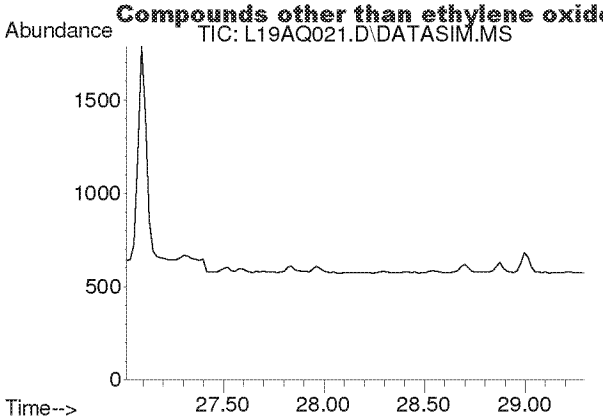
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

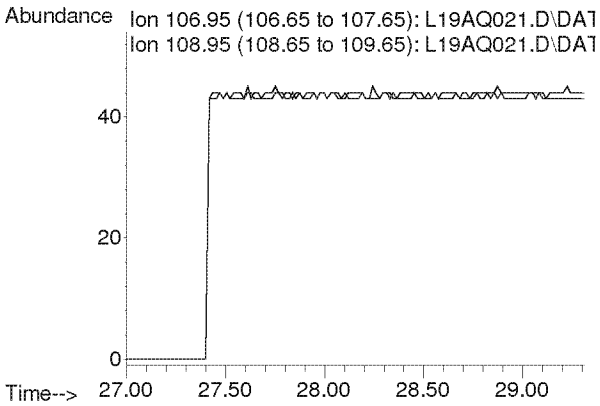


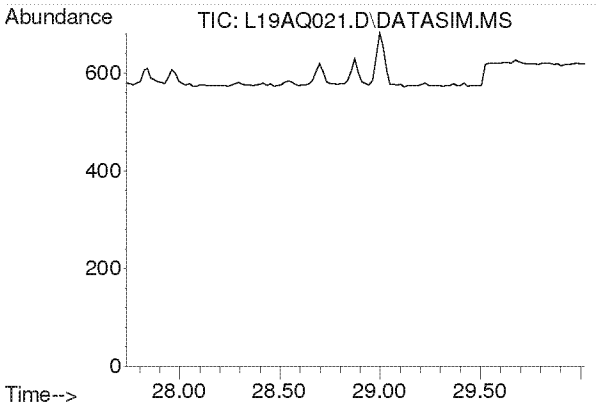
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



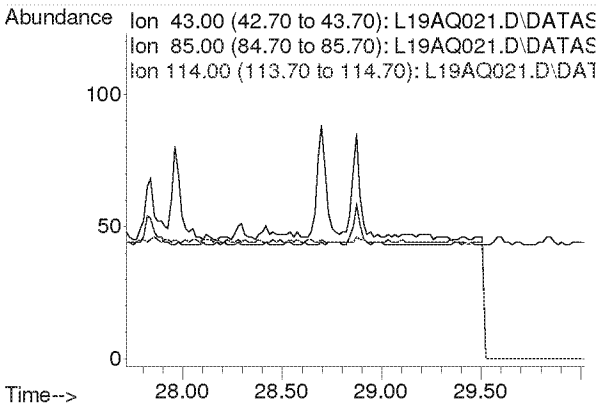


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

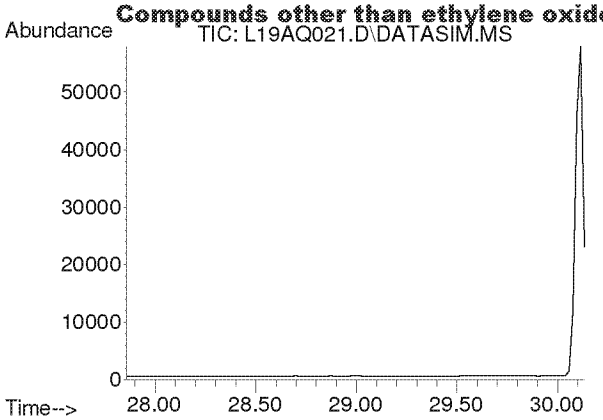
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

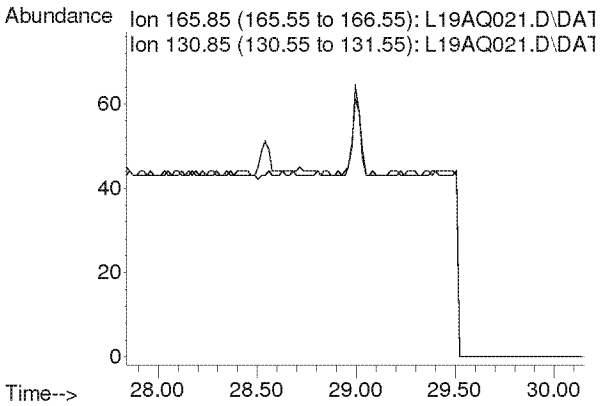


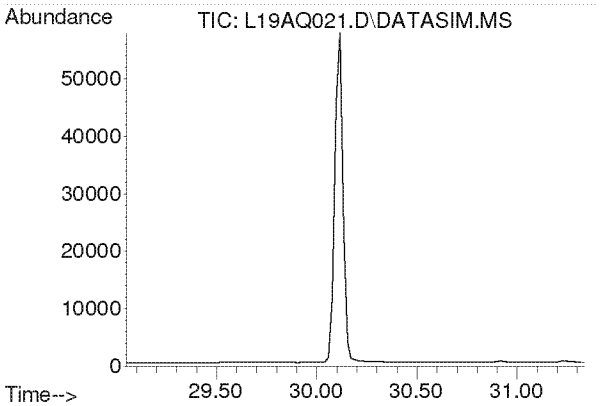
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



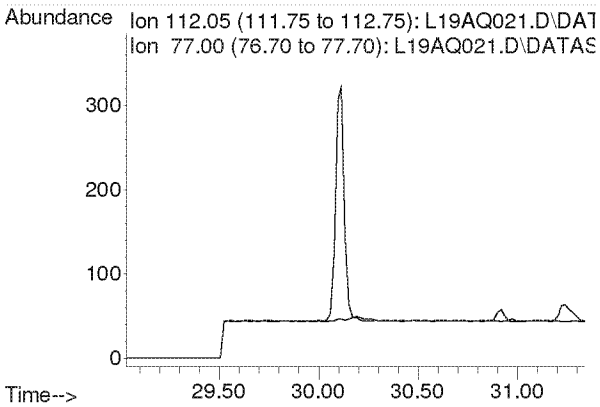


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

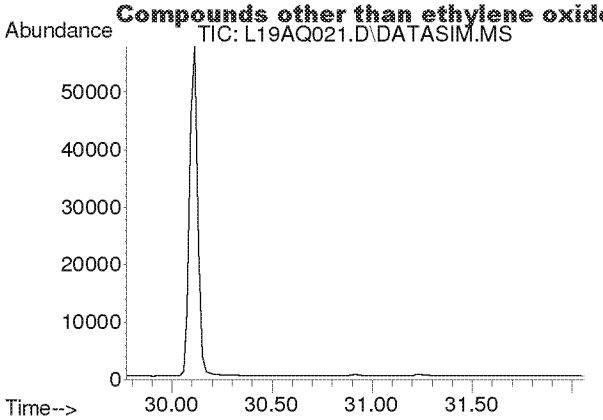
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

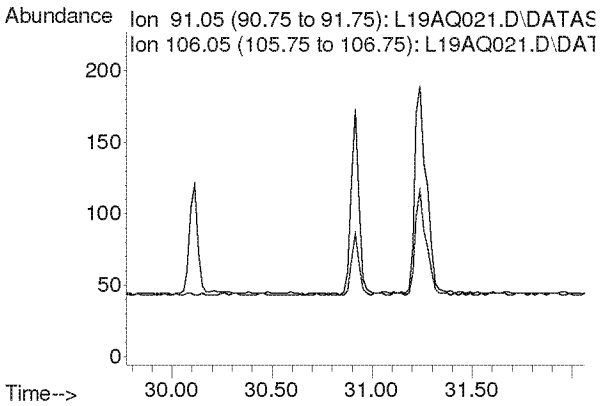


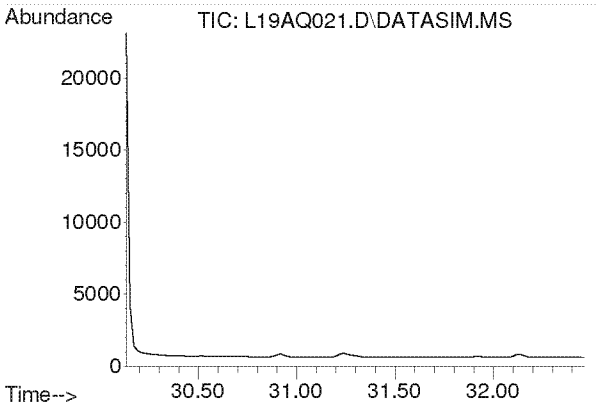
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



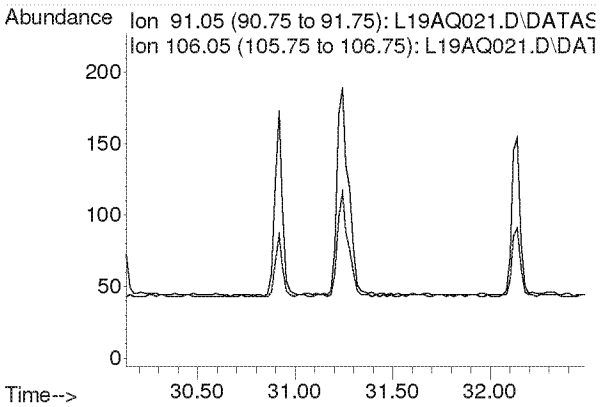


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

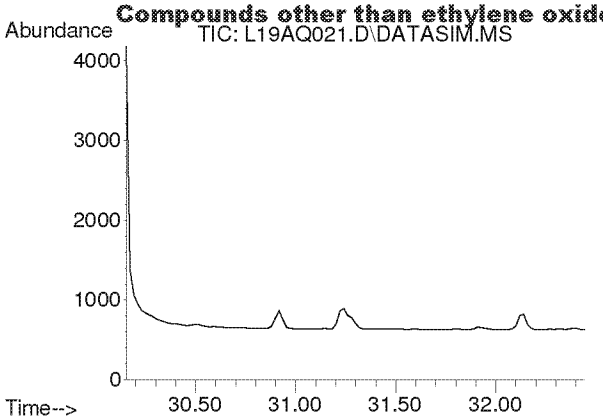
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

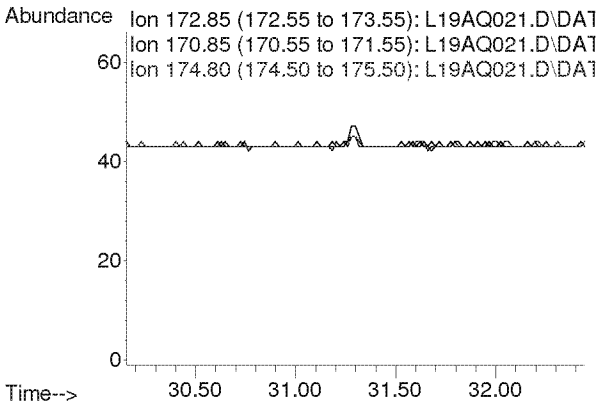


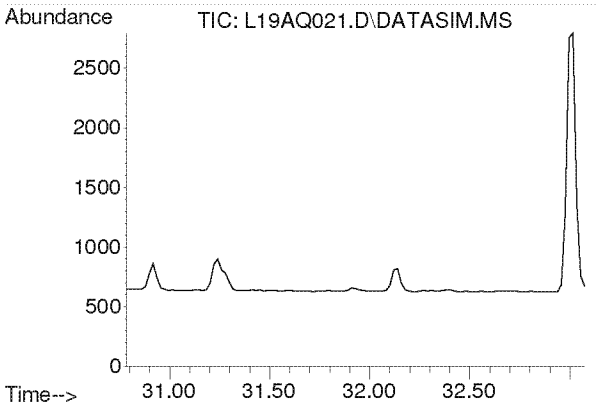
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



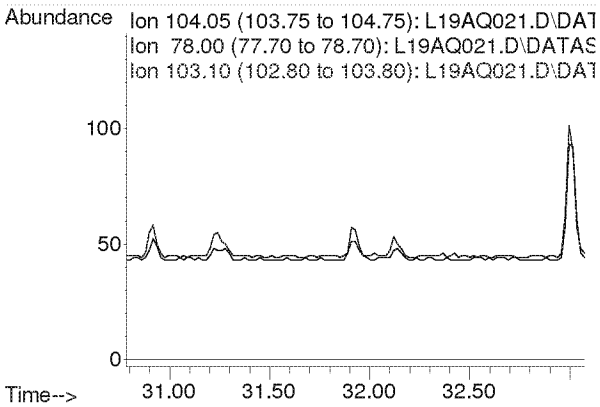


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

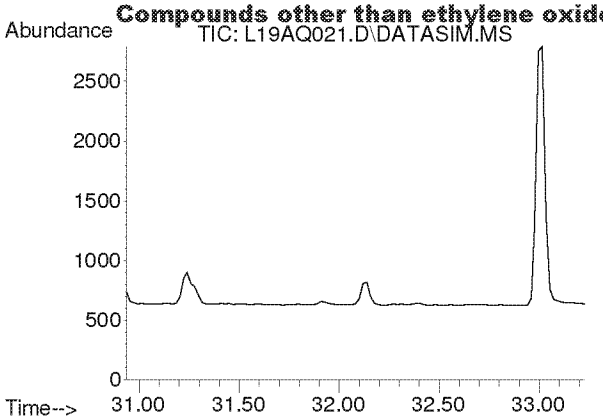
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

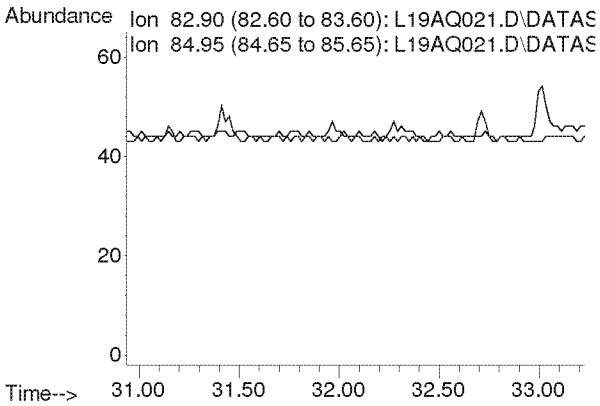


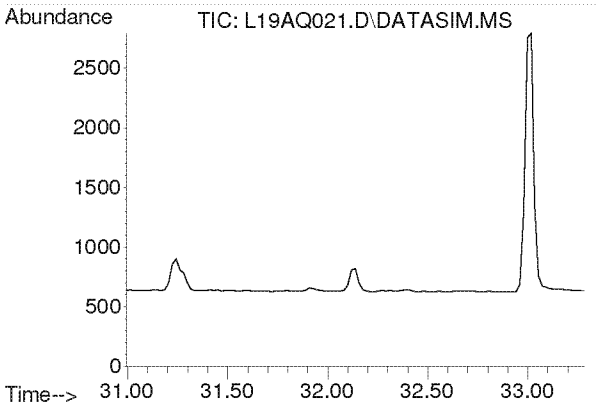
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



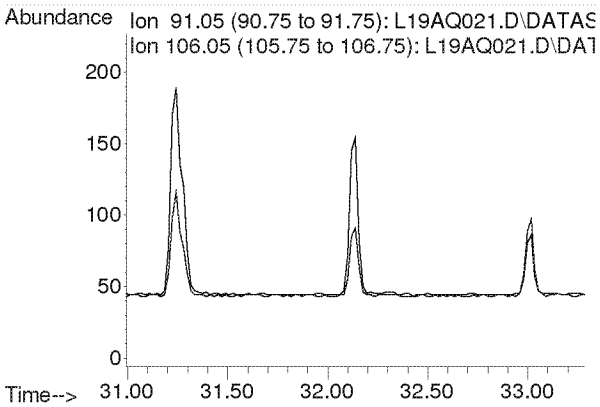


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

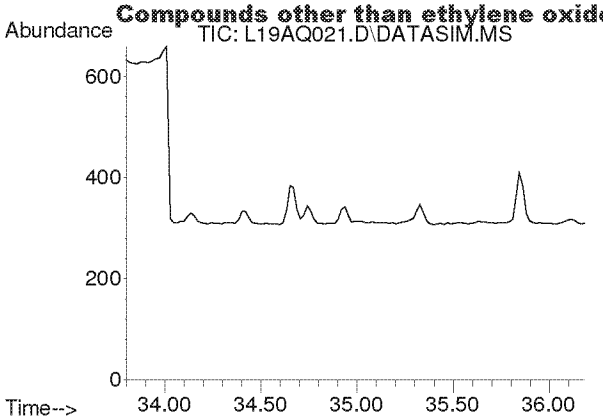
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

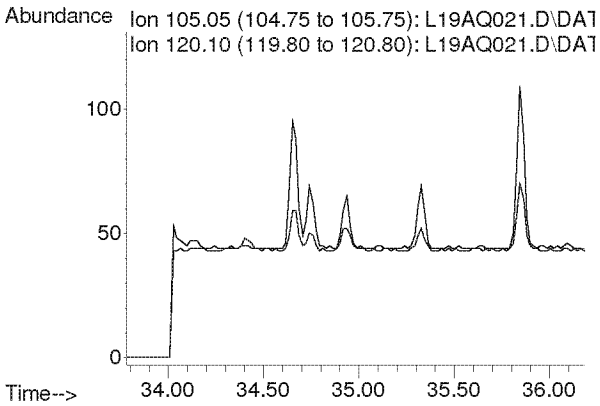


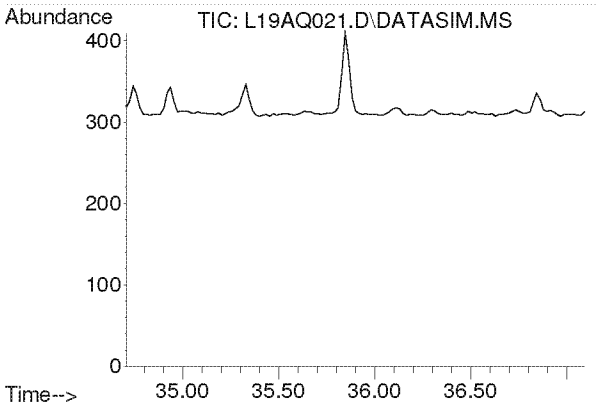
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



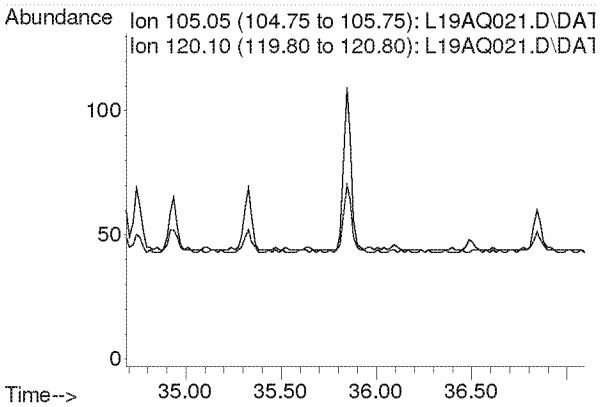


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

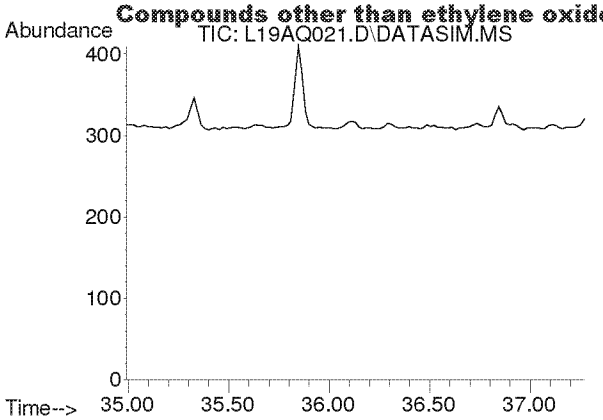
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

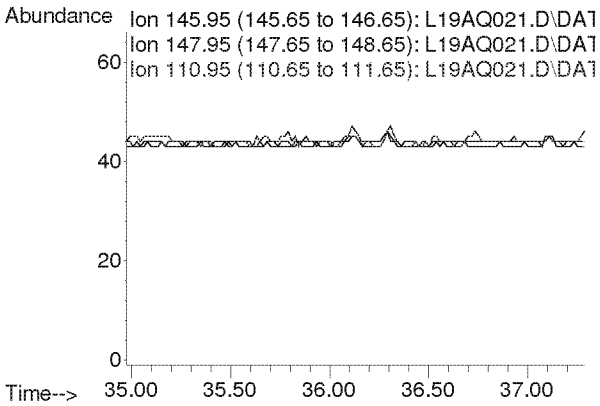


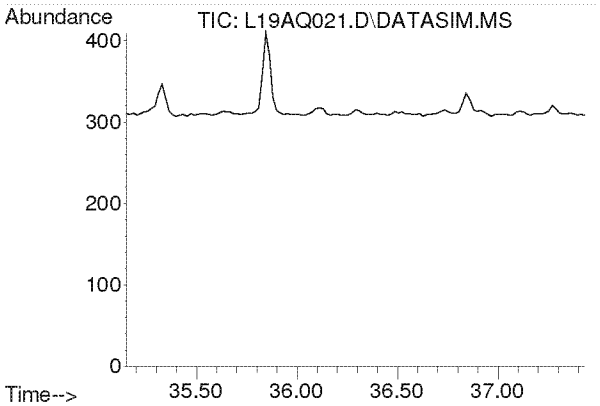
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



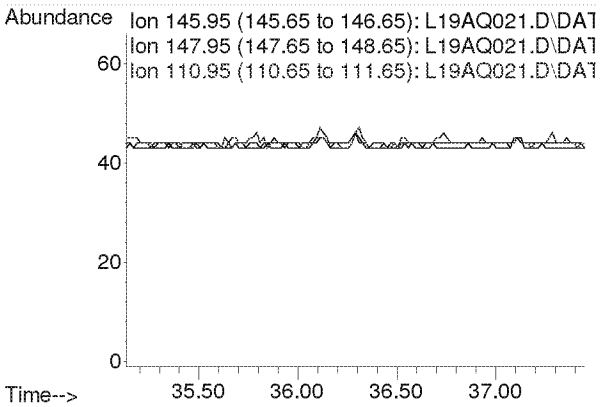


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

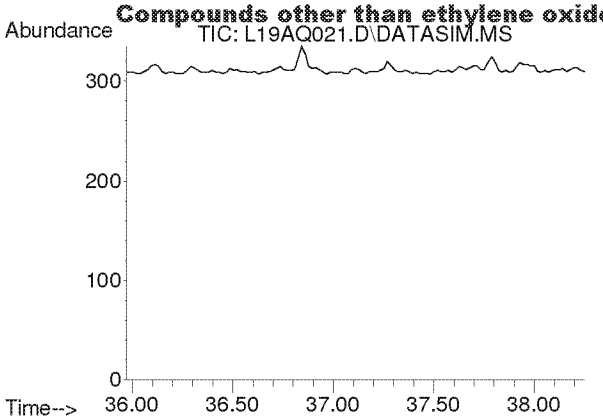
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

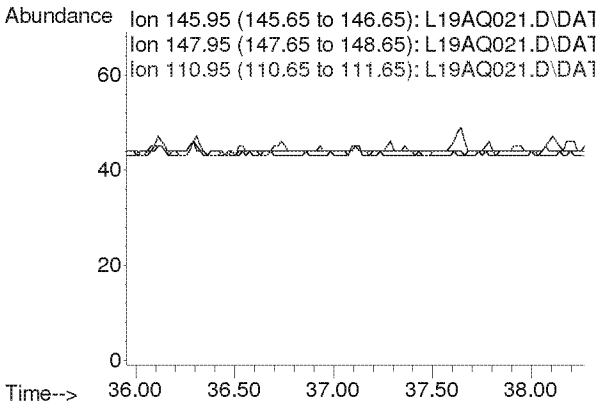


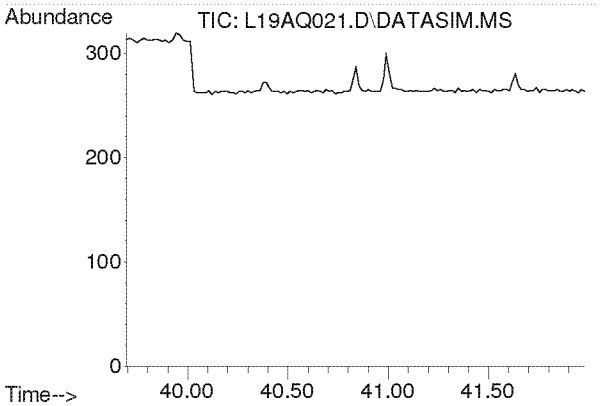
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



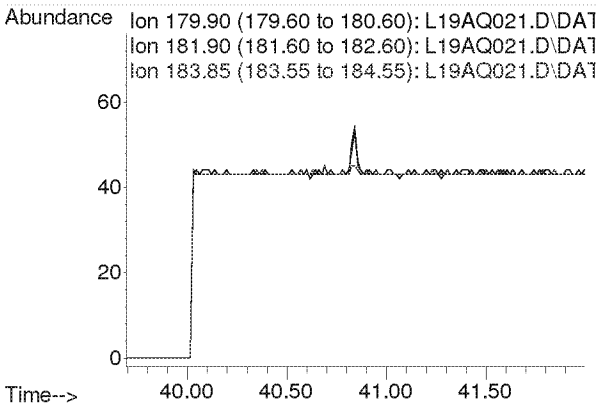


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

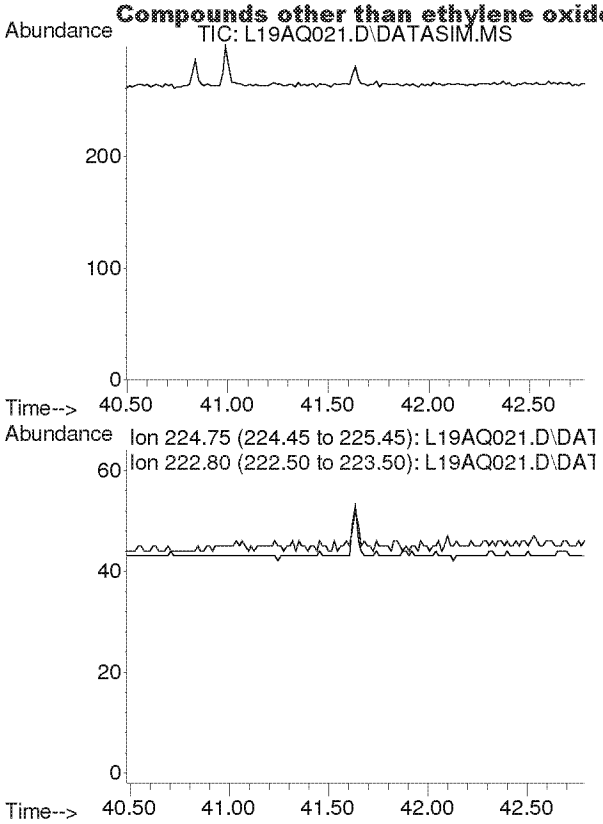
Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AQ021.D
Acq: 18 Jan 2019 7:50 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B9A1704

Eastern Research Group

Matrix: Air | **Prepared using: Air Toxics - Summa Canister Prep** | **Printed: 1/17/2019 2:03:24PM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments	
9010808-06 *TO-15 2019*	01/07/19 09:33	250	250	U.S. Environmental Protection Agency - OAQPS				
9010808-07 *TO-15 2019*	01/07/19 09:33	250	250	U.S. Environmental Protection Agency - OAQPS				
9010808-09 *TO-15 2019*	01/07/19 09:46	250	250	U.S. Environmental Protection Agency - OAQPS				
9010808-10 *TO-15 2019*	01/07/19 10:18	250	250	U.S. Environmental Protection Agency - OAQPS				
9011101-01 *TO-15 2019*	01/10/19 10:03	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-02 *TO-15 2019*	01/10/19 10:11	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-03 *TO-15 2019*	01/10/19 10:19	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-04 *TO-15 2019*	01/10/19 10:29	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-05 *TO-15 2019*	01/10/19 09:08	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-06 *TO-15 2019*	01/10/19 09:54	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-07 *TO-15 2019*	01/10/19 09:26	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-08 *TO-15 2019*	01/10/19 09:26	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
9011101-09 *TO-15 2019*	01/10/19 09:41	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only			Ethylene Oxide only
B9A1704-BLK1	01/14/19 08:00	250	250			b-h1-541		

1-31-19

Spiking Witnessed By | Date | Preparation Reviewed By | Date | Extracts Received By | Date

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B9A1704

PREPARATION BENCH SHEET

Eastern Research Group

Matrix: Air **Prepared using: Air Toxics - Summa Canister Prep** **rinted: 1/17/2019 2:03:24PM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments
B9A1704-DUP1	01/07/19 09:33	250	250		9010808-06		
B9A1704-DUP2	01/07/19 09:33	250	250		9010808-07		
B9A1704-DUP3	01/10/19 09:26	250	250		9011101-07		
B9A1704-DUP4	01/10/19 09:26	250	250		9011101-08		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

Compounds other than ethylene oxide were not quantitated.

2

ERG Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9010808-06

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible]
City/State: Willowbrook, IL
AQS Code:
Collection Date: 1/6/19
Options:
SNMOC (Y/N):
TOXICS (Y/N): Y
METHANE (Y/N):
Relinquished by: RMB
Date: 1/3/19

Canister Number: 082
Lab Initial Can. Press. ("Hg): 29.7
Cleaning Batch # : H2-530
Date Can. Cleaned: 12/27/18
Duplicate Event (Y/N): Y
Duplicate Can # : 5073

Field Setup

Received by: M. Lumpher
Date: 1/6/19
Operator: M. Lumpher
System #: 10313
Setup Date: 1/6/19
Field Initial Can. Press.: -24 psig psia "Hg (Circle one)

MFC Setting:
Elapsed Timer Reset (Y/N):
Canister Valve Opened (Y/N): Y @ 09:26

Field Recovery

Recovery Date: 1/7/19
Operator: C. Cummings
Field Final Can. Press.: -3 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Relinquished by: C. Cummings
Date: 1/7/19

Sample Duration (3 or 24 hr): 24
Elapsed Time:
Canister Valve Closed (Y/N): Y @ 09:33

Lab Recovery

Received by: KR
Date: 1/8/19
Lab Final Can. Press.: 2 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: leak check -24" Hg @ 9:15, -28" Hg @ 09:20
Ambient temperature @ deployment = 37°F, Recovery 45°F rain

MSY

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

7

ERG Eastern Research Group, Inc.

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9010808-07

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Willowbrook Village Hall Duplicate

Canister Number: 5073

City/State: Willowbrook, IL

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H1-531

Collection Date: 1/6/19

Date Can. Cleaned: 12/28/18

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): Y

TOXICS (Y/N): Y

Duplicate Can # : 082

METHANE (Y/N):

Relinquished by: RWB

Date: 1/3/19

Field Setup

Received by: M. Lompher

Date: 1/6/19

Operator: M. Lompher

MFC Setting:

System #: 10315

Elapsed Timer Reset (Y/N):

Setup Date: 1/6/19

Canister Valve Opened (Y/N): Y@ [illegible]

Field Initial Can. Press.: [illegible] psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/7/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: -6 psig psia "Hg (Circle one)

Status: VALID VOID (Circle one)

Canister Valve Closed (Y/N): y@09:33

Relinquished by: C. Cummings

Date: 1/7/19

Lab Recovery

Received by: KC

Date: 1/8/19

Lab Final Can. Press.: 4.5 psig "Hg (Circle one)

Converted to psia:

Status: VALID VOID (Circle one)

Gauge: 1 2 (Circle one)

If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: leak check -30 @ 09:11, leak check [illegible] -24 "Hg @ 09:24

Ambient temperature at deployment = 37°F, recovery 45°F rain

MSC

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 9010808-09

ERG Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Water Tower
Canister Number: 406
City/State: Willowmark, IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H2-530
Collection Date: 1/6/19
Date Can. Cleaned: 12/27/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/3/19

Field Setup

Received by: C Cummings
Date: 1/6/19
Operator: C Cummings
MFC Setting:
System #: 10312
Elapsed Timer Reset (Y/N):
Setup Date: 1/6/19
Canister Valve Opened (Y/N): Y @ 09:49
Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/7/19
Sample Duration (3 or 24 hr): 24
Operator: C Cummings
Elapsed Time: ~~0~~ 24
Field Final Can. Press.: -3 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 09:46
Relinquished by: C Cummings
Date: 1/7/19

Lab Recovery

Received by: LR
Date: 1/8/19
Lab Final Can. Press.: 2.5 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check [illegible] 09:43, -29 @ 09:48
Field Setup 37°F, Recovery 45°F rain

MSL

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9010808-10

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: West Neighborhood
Canister Number: 061
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : HZ-530
Collection Date: 1/6/19
Date Can. Cleaned: 12/27/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): ✓
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RWB
Date: 1/3/19

Field Setup

Received by: C. Cummings
Date: 1/6/19
Operator: C. Cummings
MFC Setting:
System #: 1010
Elapsed Timer Reset (Y/N):
Setup Date: 1/6/19
Canister Valve Opened (Y/N): Y @ 10:40
Field Initial Can. Press.: -28.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/7/19
Sample Duration (3 or 24 hr): 24
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: -4 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:18
Relinquished by: C. Cummings
Date: 1/7/19

Lab Recovery

Received by: KK
Date: 1/8/19
Lab Final Can. Press.: 4 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check: -28.5 @ 10:35, -28.5 @ 10:45
Field Temp: 37°F, Field Recovery: 45°F Rain

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Eastern Research Group, Inc.

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9011101-01

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible]

City/State: [illegible]

AQS Code:

Collection Date: 1/9/19

Options:

SNMOC (Y/N):

TOXICS (Y/N): y

METHANE (Y/N):

Relinquished by: RMB

Canister Number: 629

Lab Initial Can. Press. ("Hg): 29.7

Cleaning Batch # : H2-532

Date Can. Cleaned: 1/2/19

Duplicate Event (Y/N): [illegible]

Duplicate Can # :

Date: 1/4/19

Field Setup

Received by: C Cummings

Date: 1/9/19

Operator: C Cummings

System #: 10313

Setup Date: 1/9/19

Field Initial Can. Press.: [illegible] psig psia "Hg (Circle one)

MFC Setting:

Elapsed Timer Reset (Y/N):

Canister Valve Opened (Y/N): y@ [illegible]

Field Recovery

Recovery Date: 1/10/19

Operator: C Cummings

Field Final Can. Press.: -2 psig psia "Hg (Circle one)

Status: **VALID** **VOID** (Circle one)

Relinquished by: C Cummings

Sample Duration (3 or 24 hr): 24

Elapsed Time:

Canister Valve Closed (Y/N): y@ 10:05

Date: 1/10/19

Lab Recovery

Received by: KB

Date: 1/11/19

Lab Final Can. Press.: 1.1 psig "Hg (Circle one)

Converted to psia:

Status: **VALID** **VOID** (Circle one)

Gauge: **1** **2** (Circle one)

If void, why: Heiss gauge

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check: [illegible]

[illegible] 180°F

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Eastern Research Group, Inc.

ERG Lab ID # 9011101-02

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible] Canister Number: C053

City/State: [illegible] Lab Initial Can. Press. ("Hg): 29.7

AQS Code: Cleaning Batch # : H2-532

Collection Date: [illegible] Date Can. Cleaned: 1/2/19

Options:

SNMOC (Y/N): Duplicate Event (Y/N): [illegible]

TOXICS (Y/N): [illegible] Duplicate Can # :

METHANE (Y/N): [illegible]

Relinquished by: RMB Date: 1/4/19

Field Setup

Received by: [illegible] Date: [illegible]

Operator: [illegible] MFC Setting:

System #: [illegible] Elapsed Timer Reset (Y/N):

Setup Date: [illegible] Canister Valve Opened (Y/N): [illegible]

Field Initial Can. Press.: 29 **psig psia "Hg (Circle one)**

Field Recovery

Recovery Date: 1/10/19 Sample Duration (3 or 24 hr): 24

Operator: C. Cummings Elapsed Time:

Field Final Can. Press.: -4 **psig psia "Hg (Circle one)**

Status: **VALID** **VOID** (Circle one) Canister Valve Closed (Y/N): [illegible]

Relinquished by: C. Cummings Date: [illegible]

Lab Recovery

Received by: [illegible] Date: 1/11/19

Lab Final Can. Press.: 2.56 **psig "Hg (Circle one)** Converted to psia:

Status: **VALID** **VOID** (Circle one) Gauge: **1** **2** (Circle one)

If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check: -2 [illegible] @ [illegible]am, -29"Hg @ 10:02am

Field Setup: 18°F

Field Recovery: 18°F

White: Sample Traveler Canary: Lab Copy Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Eastern Research Group, Inc.

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9011101-03

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible] S High School

Canister Number: SAT037

City/State: Dacon, IL

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H2-529

Collection Date: 1/9/19

Date Can. Cleaned: 12/26/18

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): Y

TOXICS (Y/N): Y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/4/19

Field Setup

Received by: C Cummings

Date: 1/9/19

Operator: C. Cummings

MFC Setting:

System #: 10070

Elapsed Timer Reset (Y/N):

Setup Date: 1/9/19

Canister Valve Opened (Y/N): Y @ 10:13

Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/10/19

Sample Duration (3 or 24 hr): 24

Operator: C Cummings

Elapsed Time:

Field Final Can. Press.: -9 psig psia "Hg (Circle one)

Status: VALID VOID (Circle one)

Canister Valve Closed (Y/N): Y @ 10:19

Relinquished by: C Cummings

Date: 1/10/19

Lab Recovery

Received by: KB

Date: 1/11/19

Lab Final Can. Press.: 4.00 psig "Hg (Circle one)

Converted to psia:

Status: VALID VOID (Circle one)

Gauge: 1 2 (Circle one)

If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check -29 @ 10:09 am, -29 @ 10:13 am

Field Setup: 18.5°F

Field Recovery: 18°F

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Eastern Research Group, Inc.

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9011101-04

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: West Neighborhood

Canister Number: A21011

City/State: Willowbrook, IL

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H1-531

Collection Date: 1/9/19

Date Can. Cleaned: 12/28/18

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): ✓

TOXICS (Y/N): y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/4/19

Field Setup

Received by: C. Cummings

Date: 1/9/19

Operator: C. Cummings

MFC Setting:

System #: 10310

Elapsed Timer Reset (Y/N):

Setup Date: 1/9/19

Canister Valve Opened (Y/N): y@10:38

Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/10/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: psig psia "Hg (Circle one)

Status: **VALID** **VOID** (Circle one)

Canister Valve Closed (Y/N): 10:29

Relinquished by: C. Cummings

Date: 1/10/19

Lab Recovery

Received by: KB

Date: 1/11/19

Lab Final Can. Press.: 2.50 psig "Hg (Circle one)

Converted to psia:

Status: **VALID** **VOID** (Circle one)

Gauge: 1 2 (Circle one)

If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check: -29 @ 10:33am [illegible]

Field Setup: 18.5 °F

Field Recovery 18°F

MSC ✓

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 901610 1-05

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible] ES
Canister Number: 3639A
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H1-532
Collection Date: 1/9/19
Date Can. Cleaned: 1/2/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/4/19

Field Setup

Received by: C Cummings
Date: 1/9/19
Operator: C. Cummings
MFC Setting:
System #: 17293
Elapsed Timer Reset (Y/N):
Setup Date: 1/9/19
Canister Valve Opened (Y/N): y @ [illegible]
Field Initial Can. Press.: [illegible] psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/10/19
Sample Duration (3 or 24 hr): 24
Operator: C Cummings
Elapsed Time:
Field Final Can. Press.: [illegible] psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): y @ [illegible]
Relinquished by: C. Cummings
Date: 1/10/19

Lab Recovery

Received by: KB
Date: 1/11/19
Lab Final Can. Press.: 2.2 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why: Heiss Gauge

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check: -26" Hg @ [illegible]
Field Setup: 18.5 ~~" Hg~~ °F
Field Recovery: 18°F
Due to the low starting pressure of -26" Hg, This Sample was collected first. Valve was closed ~30 mins shy of the 23 hr window to retain pressure in canister for transit.

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9011101-06

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible]
Canister Number: AZ47
City/State: [illegible] IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H2-529
Collection Date: 1/9/19
Date Can. Cleaned: 12/26/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/4/19

Field Setup

Received by: C. Cummings
Date: 1/9/19
Operator: C. Cummings
MFC Setting:
System #: 1031
Elapsed Timer Reset (Y/N):
Setup Date: 1/9/19
Canister Valve Opened (Y/N): [illegible]
Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/10/19
Sample Duration (3 or 24 hr): 24
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: -5 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): [illegible]
Relinquished by: C. Cummings
Date: 1/10/19

Lab Recovery

Received by: KB
Date: 1/11/19
Lab Final Can. Press.: 2.50 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check 30 [illegible]
Field Setup: 18.5°F
Field Recovery: 18°F
MSC ✓

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Lab ID # 901101-07

ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible]
Canister Number: 5101
City/State: [illegible]
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H2-532
Collection Date: [illegible]
Date Can. Cleaned: 1/2/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N):
TOXICS (Y/N):
Duplicate Can # : [illegible]
METHANE (Y/N):
Relinquished by: RMB
Date: 1/4/19

Field Setup

Received by: [illegible]
Date: [illegible]
Operator: [illegible]
MFC Setting:
System #: [illegible]
Elapsed Timer Reset (Y/N):
Setup Date: [illegible]
Canister Valve Opened (Y/N): [illegible]
Field Initial Can. Press.: [illegible] psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/10/19
Sample Duration (3 or 24 hr): 24
Operator: [illegible]
Elapsed Time:
Field Final Can. Press.: [illegible] psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): [illegible]
Relinquished by: [illegible]
Date: 1/10/19

Lab Recovery

Received by: KF
Date: 1/11/19
Lab Final Can. Press.: 2.00 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check [illegible]
Field Setup: 18.5°F [illegible]
Field Recovery: 18°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG Eastern Research Group, Inc.

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 9011101-08

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: EPA WB Warehouse Duplicate

Canister Number: A21098

City/State: [illegible], NC

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H2-532

Collection Date: [illegible]

Date Can. Cleaned: 1/2/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N):

TOXICS (Y/N):

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/4/19

Field Setup

Received by: C. Cummings

Date:

Operator: C. Cummings

MFC Setting:

System #: [illegible]

Elapsed Timer Reset (Y/N):

Setup Date: [illegible]

Canister Valve Opened (Y/N): [illegible]

Field Initial Can. Press.: -29.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: ~~1/9/19~~ 1/10/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: psig psia "Hg (Circle one)

Status: **VALID** **VOID** (Circle one)

Canister Valve Closed (Y/N): [illegible]

Relinquished by: C. Cummings

Date: 1/10/19

Lab Recovery

Received by: KB

Date: 1/11/19

Lab Final Can. Press.: 2.50 psig "Hg (Circle one)

Converted to psia:

Status: **VALID** **VOID** (Circle one)

Gauge: 1 2 (Circle one)

If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: [illegible]

[illegible] 18.5°F

Field Recovery 18°F

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 901101-09

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: [illegible]
Canister Number: 19277
City/State: [illegible]
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H2-532
Collection Date: [illegible]
Date Can. Cleaned: 1/2/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): [illegible]
TOXICS (Y/N): [illegible]
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/4/19

Field Setup

Received by: C. Cummings
Date: [illegible]
Operator: [illegible]
MFC Setting:
System #: [illegible]
Elapsed Timer Reset (Y/N):
Setup Date: [illegible]
Canister Valve Opened (Y/N): [illegible]
Field Initial Can. Press.: [illegible] **psig psia "Hg (Circle one)**

Field Recovery

Recovery Date: 1/10/19
Sample Duration (3 or 24 hr): [illegible]
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: [illegible] **psig psia "Hg (Circle one)**
Status: **VALID** **VOID** (Circle one)
Canister Valve Closed (Y/N): [illegible]
Relinquished by: C. Cummings
Date: 1/10/19

Lab Recovery

Received by: KB
Date: 1/11/19
Lab Final Can. Press.: 1.4 **psig "Hg (Circle one)**
Converted to psia:
Status: **VALID** **VOID** (Circle one)
Gauge: **1** **2** (Circle one)
If void, why: Heiss gauge

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak Check [illegible]
Field [illegible]
Lab Recovery [illegible]

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy