Compounds other than ethylene oxide were not quantitated.

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

Sequence ID:	L19AR1901061	**Instrument:**	MS1	**Batch:**	B9A1806
Cal Curve (Method):	9010002	**Analyst:**	[illegible]	**Date Analyzed:**	1-18-19
10% Review Sample IDs:	9011527-02, 9011701-03	**Reviewer:**	DST	**Date:**	2/4/19
Optional Additional Review Sample IDs:		**Reviewer:**		**Date:**	

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	1-28-19	RMB 1/31/19	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)	1-28-19	RMB 1/31/19	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	1-28-19	RMB 1/31/19	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	1-28-19	RMB 1/31/19	DST 2/4/19		2nd Source
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	1-28-19	RMB 1/31/19	DST 2/4/19		

Samples 9011527-02 and 9011701-03 spectra checked for ~~tetrachloroethene~~. 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	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		
Canister Cleaning Certification	<3xMDL or 0.2ppbv per VOC targeted compound, whichever is lower	✓ 1-28-19	RMB 1/31/19	NA		none
Preconcentrator Leak Check	≤ ± 0.2 psi/min	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		
Samples/Internal Standard Check	IS area within ±40% and IS RT within ±0.33 min. of most recent initial calibration	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		
COC Included and filled out	Lab receipt acknowledged, LIMS number added to COC	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		
Manual Integration and peak deletion	Conforms with ERG-SOP-097 "Procedure for Manual Integration of Chromatographic Peaks"	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		
Manual Calculation Check	One compound manual check must agree with software generated result		RMB 1/31/19	DST 2/4/19		9011527-01 2456 (4.77 ppbv) / 54896 (0.2464) = 9.866 ppbv
Qualifiers Check	Check to make sure LIMS data flags are correct	✓ 1-28-19	RMB 1/31/19	DST 2/4/19		

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

L19AR002 ethylene oxide

$$\frac{7275 \times 4.77}{58911 \times 0.2464} = 2.39 \text{ ppbv}$$

Compounds other than ethylene oxide were not quantitated.

ANALYSIS SEQUENCE

Instrument: ERGMS#1

1901061

Printed: 1/31/2019 11:37:12AM

Calibration ID: 9010002

Lab Number	Sample Name	Analysis	Container	Order	Position	STD ID	ISTD ID	Comments
1901061-CCV1	Calibration Check	QC		1		9A10002	8L13002	
B9A1806-BLK1	Blank	QC		2			8L13002	
9011118-09	TO-15 2019 MDL #5	TO-15 2019	A	3			8L13002	
9011118-10	TO-15 2019 MDL #6	TO-15 2019	A	4			8L13002	
9011118-11	TO-15 2019 MDL #7	TO-15 2019	A	5			8L13002	
9011118-12	TO-15 2019 MDL #8	TO-15 2019	A	6			8L13002	
9011527-01	WB Village Hall C1	TO-15 2019	A	7			8L13002	Ethylene Oxide only
9011527-02	WB Village Hall C2	TO-15 2019	A	8			8L13002	Ethylene Oxide only
B9A1806-DUP1	Duplicate	QC		9			8L13002	
B9A1806-DUP2	Duplicate	QC		10			8L13002	
9011527-03	Gower ES	TO-15 2019	A	11			8L13002	Ethylene Oxide only
9011527-04	Gower MS	TO-15 2019	A	12			8L13002	Ethylene Oxide only
9011527-05	Willow Pond Park	TO-15 2019	A	13			8L13002	Ethylene Oxide only
9011527-06	Hinsdale South HS	TO-15 2019	A	14			8L13002	Ethylene Oxide only
9011527-07	WB Warehouse	TO-15 2019	A	15			8L13002	Ethylene Oxide only
9011527-08	Watertower	TO-15 2019	A	16			8L13002	Ethylene Oxide only
9011527-09	West Neighborhood	TO-15 2019	A	17			8L13002	Ethylene Oxide only
9011701-01	Hinsdale South HS	TO-15 2019	A	18			8L13002	Ethylene Oxide only
9011701-02	Watertower	TO-15 2019	A	19			8L13002	Ethylene Oxide only
9011701-03	West Neighborhood	TO-15 2019	A	20			8L13002	Ethylene Oxide only

Samples Loaded By Date

Randy Bower 1/31/19

Data Processed By Date

Compounds other than ethylene oxide were not quantitated.

Sequence Name: C:\msdchem\1\sequence\L19AR.s
Comment: ANALYZE 1/18/19,9010002exp 4/5/19, L19AR
Operator: MAH
Data Path: C:\MSDCHEM\1\DATA\L19AR\
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	L19AR001	BFB	BFB
2)	Sample	2	L19AR002	9010002	1901061-CCV1
3)	Sample	3	L19AR003	9010002	FLUSH
4)	Sample	4	L19AR004	9010002	B9A1806-BLK1
5)	Sample	5	L19AR005	9010002	9011118-09 NOT USED
6)	Sample	6	L19AR006	9010002	9011118-09
7)	Sample	7	L19AR007	9010002	9011118-10
8)	Sample	8	L19AR008	9010002	9011118-11
9)	Sample	9	L19AR009	9010002	9011118-12
10)	Sample	10	L19AR010	9010002	9011527-01
11)	Sample	11	L19AR011	9010002	9011527-02
12)	Sample	12	L19AR012	9010002	B9A1806-DUP1
13)	Sample	13	L19AR013	9010002	B9A1806-DUP2
14)	Sample	14	L19AR014	9010002	9011527-03
15)	Sample	15	L19AR015	9010002	9011527-04
16)	Sample	16	L19AR016	9010002	9011527-05
17)	Sample	17	L19AR017	9010002	9011527-06
18)	Sample	18	L19AR018	9010002	9011527-07
19)	Sample	19	L19AR019	9010002	9011527-08
20)	Sample	20	L19AR020	9010002	9011527-09
21)	Sample	21	L19AR021	9010002	9011701-01
22)	Sample	22	L19AR022	9010002	9011701-02
23)	Sample	23	L19AR023	9010002	9011701-03
24)	Sample	100	OFF	FIDOFF	OFF

7-28-19

ED_002475_00000317-00004

Compounds other than ethylene oxide were not quantitated.

Sample	1	BFB	BFB	L19AR001	80 ML 8L13001	1
Sample	2	1901061-CCV1	9010002	L19AR002	80 ML 8L13001,9A10002	1
Sample	3	FLUSH	9010002	L19AR003	80 ML 8L13001	1
Sample	4	B9A1806-BLK1	9010002	L19AR004	80 ML 8L13001	1
Sample	5	9011118-09 NOT USE	9010002	L19AR005	CAN NOT ON TREE	1
Sample	6	9011118-09	9010002	L19AR006	2019 TO-15 MDL#6,9A14015,RERUN	1
Sample	7	9011118-10	9010002	L19AR007	2019 TO-15 MDL#7,9A14016,RERUN	1
Sample	8	9011118-11	9010002	L19AR008	2019 TO-15 MDL#8,9A14017,RERUN	1
Sample	9	9011118-12	9010002	L19AR009	2019 TO-15 MDL#9,9A14018,RERUN	1
Sample	10	9011527-01	9010002	L19AR010	WB VILLAGE HALL C1 1/13/19	1
Sample	11	9011527-02	9010002	L19AR011	WB VILLAGE HALL C2 1/13/19	1
Sample	12	B9A1806-DUP1	9010002	L19AR012	WB VILLAGE HALL R1 1/13/19	1
Sample	13	B9A1806-DUP2	9010002	L19AR013	WB VILLAGE HALL R2 1/13/19	1
Sample	14	9011527-03	9010002	L19AR014	GOWER ES 1/13/19	1
Sample	15	9011527-04	9010002	L19AR015	GOWER MS 1/13/19	1
Sample	16	9011527-05	9010002	L19AR016	WILLOW POND PARK 1/13/19	1
Sample	17	9011527-06	9010002	L19AR017	HINSDALE S. HS 1/13/19	1
Sample	18	9011527-07	9010002	L19AR018	EPA WB WAREHOUSE 1/13/19	1
Sample	19	9011527-08	9010002	L19AR019	WATER TOWER 1/13/19	1
Sample	20	9011527-09	9010002	L19AR020	WEST NEIGHBORHOOD 1/13/19	1
Sample	21	9011701-01	9010002	L19AR021	HINSDALE S.HS 1/16/19	1
Sample	22	9011701-02	9010002	L19AR022	WATER TOWER 1/16/19	1
Sample	23	9011701-03	9010002	L19AR023	WEST NEIGHBORHOOD 1/16/19	1
Sample	100	OFF	FIDOFF	OFF	OFF	1

1-28-19

Compounds other than ethylene oxide were not quantitated.

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

Sequence Name: C:\Smart\L19AR.SEQ
Date: 01-22-2019
Time: 10:21:39
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
901061-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
B9A1806-BLK1	1	1	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011118-09 RR	1	2	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011118-09 RR	1	2	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011118-10 RR	1	3	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011118-11 RR	1	4	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011118-12 RR	1	5	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-01	1	6	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-02	1	7	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1806-DUP1	1	6	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
B9A1806-DUP2	1	7	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-03	1	8	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-04	1	9	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-05	1	10	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-06	1	11	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-07	1	12	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-08	1	13	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011527-09	1	14	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011701-01	1	15	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011701-02	1	16	250	0	C:\Smart\TO-15A_MS1.MPT	12:00
9011701-03	1	1	250	0	C:\Smart\TO-15A_MS1.MPT	12:00

1-23-19

Compounds other than ethylene oxide were not quantitated.

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

1/22/2019 3:34:31 PM
Leak Check for C:\Smart\L19AR.SEQ
Report File: C:\Smart\L19AR.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	---	---	1.1	1.2	0.10
1	4	---	---	1.1	1.2	0.10
1	5	---	---	1.1	1.2	0.10
1	6	---	---	1.1	1.2	0.10
1	7	---	---	1.1	1.2	0.10
1	8	---	---	1.1	1.2	0.10
1	9	---	---	1.1	1.2	0.10
1	10	---	---	1.1	1.2	0.10
1	11	---	---	1.2	1.2	0.00
1	12	---	---	1.1	1.2	0.10
1	13	---	---	1.1	1.2	0.10
1	14	---	---	1.1	1.2	0.10
1	15	---	---	1.2	1.2	0.00
1	16	---	---	1.2	1.2	0.00
1	1	---	---	1.2	1.3	0.10

1-28-19

Compounds other than ethylene oxide were not quantitated.

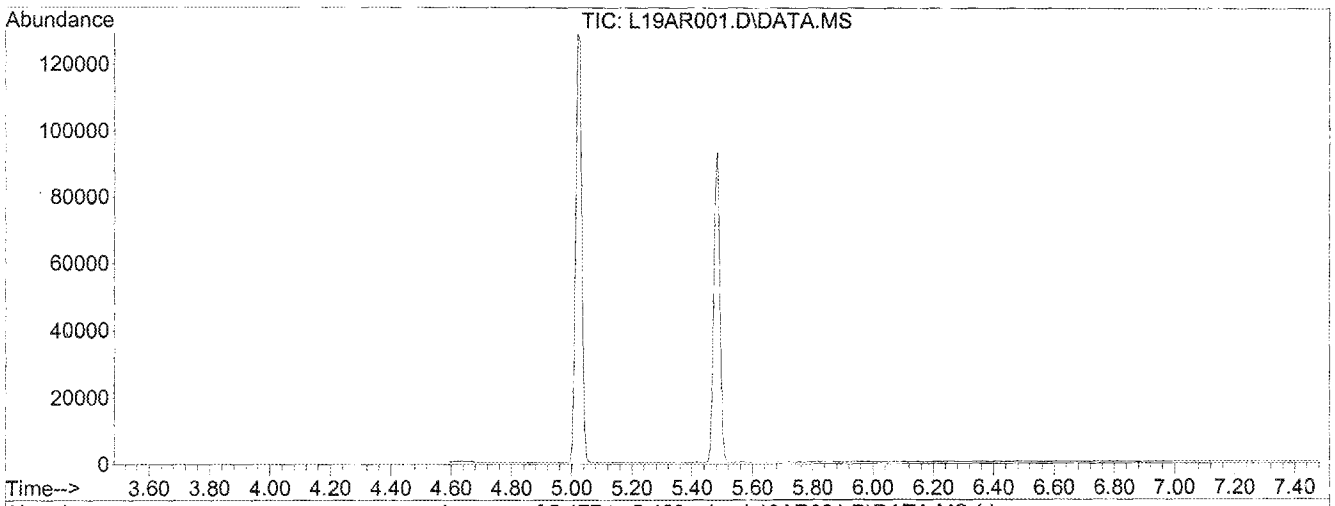
BFB

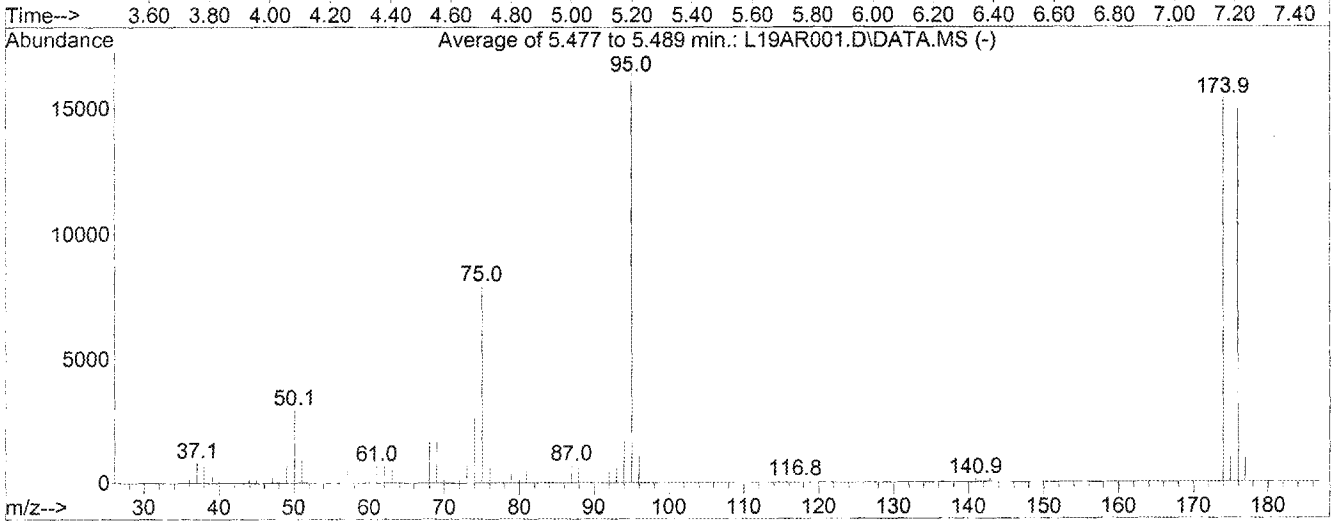
Data Path : C:\msdchem\1\DATA\L19AR\
Data File : L19AR001.D
Acq On : 18 Jan 2019 10:53 am
Operator : MAH
Sample : BFB
Misc : 80 ML 8L13001
ALS Vial : 1 Sample Multiplier: 1

1/22/19

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 139

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.9	2942	PASS
75	95	30	66	48.2	7921	PASS
95	95	100	100	100.0	16439	PASS
96	95	5	9	6.7	1101	PASS
173	174	0.00	2	0.3	47	PASS
174	95	50	120	93.5	15365	PASS
175	174	4	9	6.7	1029	PASS
176	174	93	101	97.3	14945	PASS
177	176	5	9	6.5	976	PASS

Compounds other than ethylene oxide were not quantitated.

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\L19AR\L19AR001.D
Tune Time : 18 Jan 2019 10:53 am

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

File	Sample	Internal Standard Responses		
L19AR002.D	1901061-CCV1	58911	141790	112490
L19AR004.D	b9a1806-BLk1	56331	142536	109267
L19AR006.D	9011118-09	53171	134373	104066
L19AR007.D	9011118-10	53242	132034	99429
L19AR008.D	9011118-11	53940	135574	106073
L19AR009.D	9011118-12	54541	142139	110804
L19AR010.D	9011527-01	54896	138764	106595
L19AR011.D	9011527-02	50689	123317	95200
L19AR012.D	B9A1806-DUP1	53529	130941	98074
L19AR013.D	B9A1806-DUP2	50100	122574	94828
L19AR014.D	9011527-03	51695	130095	100291
L19AR015.D	9011527-04	53849	132131	101457
L19AR016.D	9011527-05	48601	116079	91098
L19AR017.D	9011527-06	51574	126571	97417
L19AR018.D	9011527-07	52224	129560	99974
L19AR019.D	9011527-08	52498	130054	100265
L19AR020.D	9011527-09	53588	129784	102591
L19AR021.D	9011701-01	49647	120380	93802
L19AR022.D	9011701-02	51025	124484	97462
L19AR023.D	9011701-03	52482	128505	98104

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

Created: Wed Jan 23 08:41:13 2019 MS1

Compounds other than ethylene oxide were not quantitated.

C:\MSDCHEM\1\DATA\L19AR\L19AR023.D

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	
	1/19/2019 9:56	L19AR023.D	52482		19.99		128505		23.15		98104		30.10	
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														
	Format 1	Format 2												
Start of Data	X-axis	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	
	1/18/2019 11:43	L19AR002.D	58911	95	19.99	0	141790	95	23.15	0	112490	95	30.10	-0.02
	1/18/2019 13:45	L19AR004.D	56331	91	19.99	0	142536	95	23.15	0	109267	93	30.10	-0.02
	1/18/2019 16:32	L19AR006.D	53171	86	19.99	0	134373	90	23.15	0	104066	88	30.10	-0.02
	1/18/2019 17:33	L19AR007.D	53242	86	19.99	0	132034	88	23.15	0	99429	84	30.10	-0.02
	1/18/2019 18:35	L19AR008.D	53940	87	19.99	0	135574	90	23.15	0	106073	90	30.10	-0.02
	1/18/2019 19:35	L19AR009.D	54541	88	19.99	0	142139	95	23.15	0	110804	94	30.10	-0.02
	1/18/2019 20:35	L19AR010.D	54896	89	19.99	0	138764	93	23.15	0	106595	90	30.10	-0.02
	1/18/2019 21:37	L19AR011.D	50689	82	19.99	0	123317	82	23.15	0	95200	81	30.10	-0.02
	1/18/2019 22:39	L19AR012.D	53529	87	19.99	0	130941	87	23.15	0	98074	83	30.09	-0.03
	1/18/2019 23:41	L19AR013.D	50100	81	19.99	0	122574	82	23.15	0	94828	80	30.10	-0.02
	1/19/2019 12:41	L19AR014.D	51695	84	19.99	0	130095	87	23.15	0	100291	85	30.10	-0.02
	1/19/2019 1:43	L19AR015.D	53849	87	19.99	0	132131	88	23.15	0	101457	86	30.09	-0.03
	1/19/2019 2:45	L19AR016.D	48601	79	19.99	0	116079	77	23.15	0	91098	77	30.10	-0.02
	1/19/2019 3:47	L19AR017.D	51574	84	19.99	0	126571	84	23.15	0	97417	82	30.09	-0.03
	1/19/2019 4:48	L19AR018.D	52224	85	19.99	0	129560	86	23.15	0	99974	85	30.09	-0.03
	1/19/2019 5:47	L19AR019.D	52498	85	19.99	0	130054	87	23.15	0	100265	85	30.10	-0.02
	1/19/2019 6:49	L19AR020.D	53588	87	19.99	0	129784	87	23.15	0	102591	87	30.10	-0.02
	1/19/2019 7:52	L19AR021.D	49647	80	19.99	0	120380	80	23.15	0	93802	79	30.10	-0.02
	1/19/2019 8:54	L19AR022.D	51025	83	19.99	0	124484	83	23.15	0	97462	83	30.09	-0.03
	1/19/2019 9:56	L19AR023.D	52482	85	19.99	0	128505	86	23.15	0	98104	83	30.10	-0.02

7-21-19

DST
2/4/19

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19AR\
Data File : L19AR002.D
Acq On : 18 Jan 2019 11:43 am
Operator : MAH
Sample : 1901061-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 08:37:28 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

1-27-19

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	0.330	10.3	100	0.00
3	CT	Propylene	0.454	0.483	-6.4	100	0.00
4	CT	Dichlorodifluoromethane	1.966	1.909	2.9	100	0.00
5	CT	Chloromethane	0.586	0.582	0.7	100	0.00
6	CT	Dichlorotetrafluoroethane	1.864	2.004	-7.5	100	0.00
7	CT	Vinyl Chloride	0.630	0.614	2.5	100	0.00
8	CT	1,3-Butadiene	0.415	0.406	2.2	100	0.00
9	CT	Ethylene oxide	0.246	0.236	4.1	100	0.00
10	CT	Bromomethane	0.634	0.624	1.6	100	0.00
11	CT	Chloroethane	0.279	0.283	-1.4	100	0.00
12	CT	Acetonitrile	0.479	0.453	5.4	100	0.00
13	CT	Acrolein	0.236	0.205	13.1	100	0.00
14	CT	Trichlorofluoromethane	1.865	1.582	15.2	100	0.00
15	CT	Acrylonitrile	0.385	0.340	11.7	100	0.00
16	CT	1,1-Dichloroethene	0.856	0.880	-2.8	100	0.00
17	CT	Methylene Chloride	0.612	0.612	0.0	100	0.00
18	CT	Carbon Disulfide	1.862	1.809	2.8	100	0.00
19	CT	Trichlorotrifluoroethane	1.345	1.362	-1.3	100	0.00
20	CT	trans-1,2-Dichloroethylene	0.483	0.467	3.3	100	0.00
21	CT	1,1-Dichloroethane	0.877	0.830	5.4	100	0.00
22	CT	Methyl tert-Butyl Ether	1.298	1.224	5.7	100	0.00
23	CT	Chloroprene	0.602	0.570	5.3	100	0.00
24	CT	cis-1,2-Dichloroethylene	0.670	0.624	6.9	100	0.00
25	CT	Bromochloromethane	0.368	0.336	8.7	100	0.00
26	CT	Chloroform	1.004	0.970	3.4	100	0.00
27	CT	Ethyl tert-Butyl Ether	1.360	1.286	5.4	100	0.00
28	CT	1,2-Dichloroethane	0.596	0.552	7.4	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	0.395	5.3	100	0.00
31	CT	Benzene	0.574	0.578	-0.7	100	0.00
32	CT	Carbon Tetrachloride	0.452	0.475	-5.1	100	0.00
33	CT	tert-Amyl Methyl Ether	0.483	0.460	4.8	100	0.00
34	CT	1,2-Dichloropropane	0.241	0.227	5.8	100	0.00
35	CT	Ethyl Acrylate	0.323	0.310	4.0	100	0.00
36	CT	Bromodichloromethane	0.440	0.363	17.5	100	0.00
37	CT	Trichloroethylene	0.276	0.240	13.0	100	0.00
38	CT	Methyl Methacrylate	0.850	0.779	8.4	100	0.00
39	CT	cis-1,3-Dichloropropene	0.221	0.222	-0.5	100	0.00
40	CT	Methyl Isobutyl Ketone	0.465	0.425	8.6	100	0.00
41	CT	trans-1,3-Dichloropropene	0.172	0.158	8.1	100	0.00
42	CT	1,1,2-Trichloroethane	0.214	0.201	6.1	100	0.00
43	ISS	IS-Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
44	CT	Toluene	0.762	0.741	2.8	100	0.00
45	CT	Dibromochloromethane	1.910	1.643	14.0	100	0.00
46	CT	1,2-Dibromoethane	0.346	0.308	11.0	100	0.00
47	CT	n-Octane	0.471	0.444	5.7	100	0.00
48	CT	Tetrachloroethylene	0.387	0.373	3.6	100	0.00

Compounds other than ethylene oxide were not quantitated

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19AR\
Data File : L19AR002.D
Acq On : 18 Jan 2019 11:43 am
Operator : MAH
Sample : 1901061-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 08:37:28 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	0.500	7.1	100	0.00
50	CT	Ethylbenzene	0.814	0.775	4.8	100	0.00
51	CT	m,p-Xylene	0.708	0.667	5.8	100	0.00
52	CT	Bromoform	0.414	0.359	13.3	100	0.00
53	CT	Styrene	0.391	0.354	9.5	100	0.00
54	CT	1,1,2,2-Tetrachloroethane	0.517	0.492	4.8	100	0.00
55	CT	o-Xylene	0.683	0.693	-1.5	100	0.00
56	CT	1,3,5-Trimethylbenzene	0.669	0.629	6.0	100	0.00
57	CT	1,2,4-Trimethylbenzene	0.583	0.544	6.7	100	0.00
58	CT	m-Dichlorobenzene	0.401	0.304	24.2	100	0.00
59	CT	p-Dichlorobenzene	0.323	0.256	20.7	100	0.00
60	CT	o-Dichlorobenzene	0.349	0.300	14.0	100	0.00
61	CT	1,2,4-Trichlorobenzene	0.142	0.135	4.9	100	0.00
62	CT	Hexachloro-1,3-butadiene	0.360	0.381	-5.8	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\L19AR\
Data File : L19AR002.D
Acq On : 18 Jan 2019 11:43 am
Operator : MAH
Sample : 1901061-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 08:37:28 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)
1) IS-Hexane-d14	19.990	66	58911	4.7700	ppbv	0.00
29) IS-1,4-Difluorobenzene	23.148	114	141790	4.9900	ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	112490	4.7400	ppbv	-0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Acetylene	5.406	26	9773	2.1487	ppbv	100
3) Propylene	7.823	41	14623	2.6056	ppbv	100
4) Dichlorodifluoromethane	8.685	85	56099	2.3108	ppbv	100
5) Chloromethane	9.740	50	17821	2.4607	ppbv	100
6) Dichlorotetrafluoroethane	10.847	85	60383	2.6226	ppbv	99
7) Vinyl Chloride	11.102	62	18961	2.4356	ppbv	99
8) 1,3-Butadiene	11.783	54	12388	2.4153	ppbv	98
9) Ethylene oxide	12.378	29	7275	2.3909	ppbv	99
10) Bromomethane	12.588	94	19281	2.4621	ppbv	100
11) Chloroethane	13.266	64	8748	2.5397	ppbv	99
12) Acetonitrile	14.332	41	14169	2.3949	ppbv	99
13) Acrolein	14.611	56	6120	2.1004	ppbv	97
14) Trichlorofluoromethane	15.190	101	48831	2.1201	ppbv	100
15) Acrylonitrile	15.909	53	10506	2.2104	ppbv	99
16) 1,1-Dichloroethene	16.420	61	26508	2.5074	ppbv	99
17) Methylene Chloride	16.721	49	18747	2.4803	ppbv	98
18) Carbon Disulfide	16.930	76	55420	2.4103	ppbv	100
19) Trichlorotrifluoroethane	17.278	101	41043	2.4702	ppbv	100
20) trans-1,2-Dichloroethy...	18.313	96	14197	2.3789	ppbv	100
21) 1,1-Dichloroethane	18.630	63	24910	2.2998	ppbv	100
22) Methyl tert-Butyl Ether	18.789	73	38389	2.3952	ppbv	100
23) Chloroprene	19.537	53	17452	2.3458	ppbv	99
24) cis-1,2-Dichloroethylene	19.945	61	19265	2.3296	ppbv	99
25) Bromochloromethane	20.172	128	10249	2.2521	ppbv	99
26) Chloroform	20.398	83	29951	2.4166	ppbv	100
27) Ethyl tert-Butyl Ether	21.162	59	40804	2.4298	ppbv	100
28) 1,2-Dichloroethane	21.476	62	16973	2.3073	ppbv	99
30) 1,1,1-Trichloroethane	21.867	97	27701	2.3379	ppbv	98
31) Benzene	22.533	78	41205	2.5281	ppbv	100
32) Carbon Tetrachloride	22.768	117	34045	2.6507	ppbv	100
33) tert-Amyl Methyl Ether	23.499	73	34011	2.4781	ppbv	100
34) 1,2-Dichloropropane	23.788	63	16317	2.3807	ppbv	96
35) Ethyl Acrylate	23.870	55	22345	2.4318	ppbv	100
36) Bromodichloromethane	24.076	83	26431	2.1153	ppbv	100
37) Trichloroethylene	24.159	130	17170	2.1873	ppbv	98
38) Methyl Methacrylate	24.530	41	56241	2.3289	ppbv	99
39) cis-1,3-Dichloropropene	25.509	75	16036	2.5506	ppbv	100
40) Methyl Isobutyl Ketone	25.604	43	30544	2.3104	ppbv	99
41) trans-1,3-Dichloropropene	26.348	75	11053	2.2581	ppbv	95
42) 1,1,2-Trichloroethane	26.615	97	14157	2.3287	ppbv	99
44) Toluene	27.092	91	42898	2.3736	ppbv	100
45) Dibromochloromethane	27.734	129	99018	2.1841	ppbv	100
46) 1,2-Dibromoethane	28.137	107	18296	2.2273	ppbv	100
47) n-Octane	28.857	43	26551	2.3753	ppbv	99
48) Tetrachloroethylene	28.997	166	22049	2.3984	ppbv	100
49) Chlorobenzene	30.172	112	29210	2.2893	ppbv	100
50) Ethylbenzene	30.898	91	45953	2.3783	ppbv	100

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L19AR\
Data File : L19AR002.D
Acq On : 18 Jan 2019 11:43 am
Operator : MAH
Sample : 1901061-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 08:37:28 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

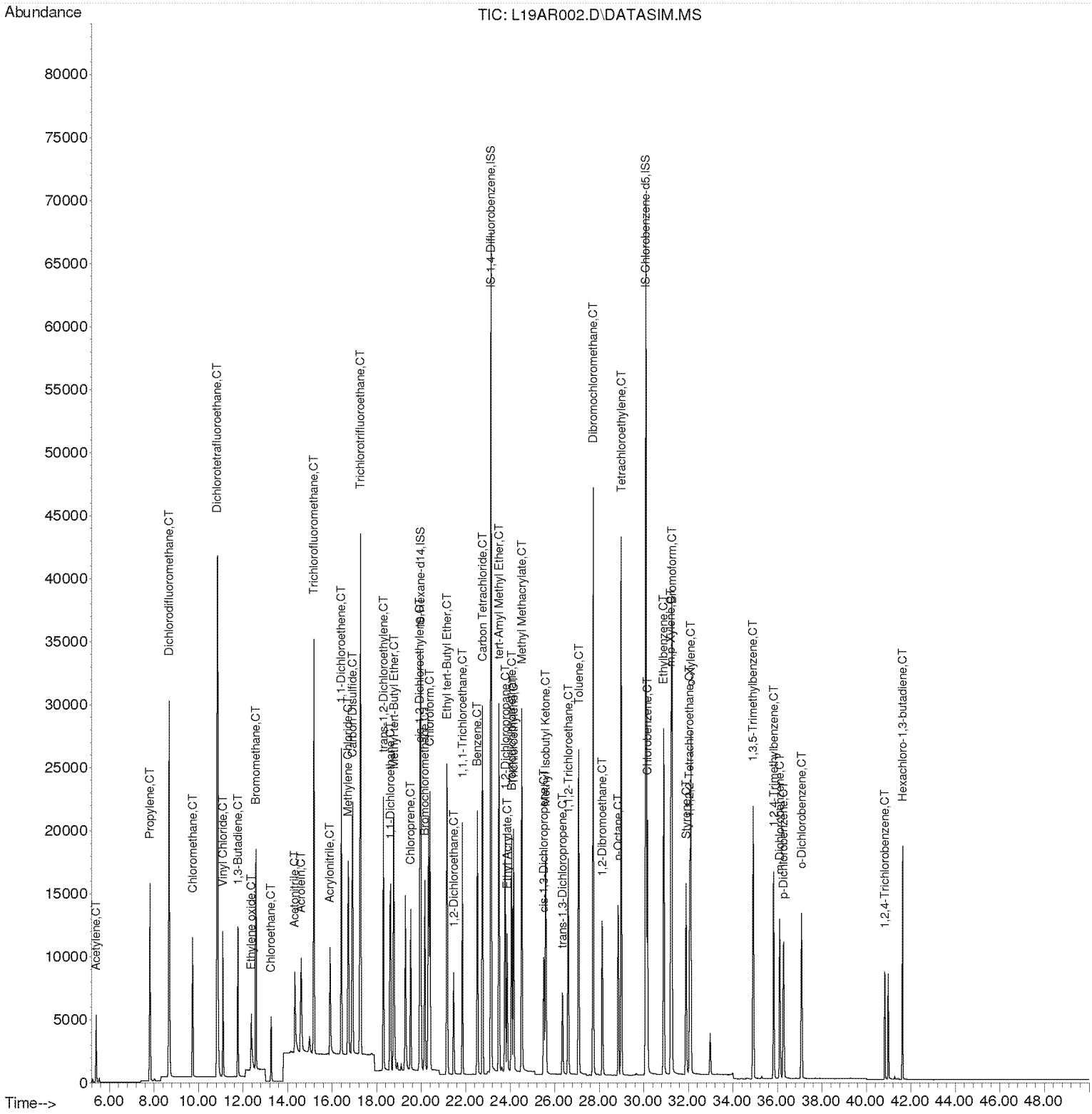
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) m,p-Xylene	31.222	91	78777	4.6890	ppbv		100
52) Bromoform	31.279	173	21611	2.1990	ppbv		100
53) Styrene	31.909	104	21031	2.2682	ppbv	#	98
54) 1,1,2,2-Tetrachloroethane	32.062	83	29545	2.4060	ppbv		100
55) o-Xylene	32.119	91	40130	2.4774	ppbv		100
56) 1,3,5-Trimethylbenzene	34.919	105	37631	2.3691	ppbv		100
57) 1,2,4-Trimethylbenzene	35.845	105	30737	2.2223	ppbv		100
58) m-Dichlorobenzene	36.112	146	17309	1.8202	ppbv		100
59) p-Dichlorobenzene	36.291	146	15829	2.0661	ppbv		100
60) o-Dichlorobenzene	37.092	146	17770	2.1482	ppbv		100
61) 1,2,4-Trichlorobenzene	40.826	180	7954	2.3590	ppbv		100
62) Hexachloro-1,3-butadiene	41.635	225	22603	2.6424	ppbv		100

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

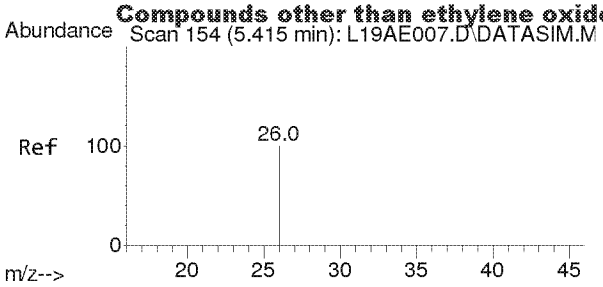
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR002.D
Acq On : 18 Jan 2019 11:43 am
Operator : MAH
Sample : 1901061-CCV1
Misc : 80 ML 8L13001,9A10002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 08:37:28 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

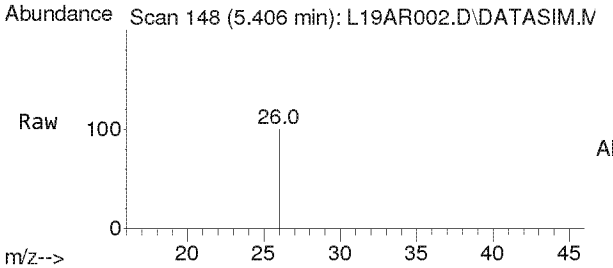


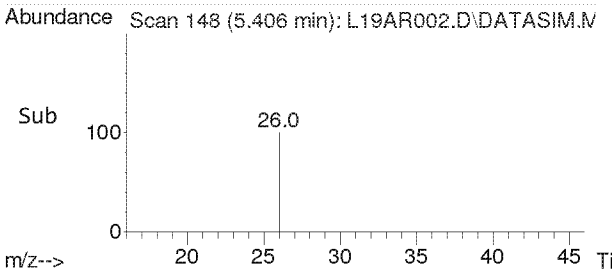
Compounds other than ethylene oxide were not quantitated.

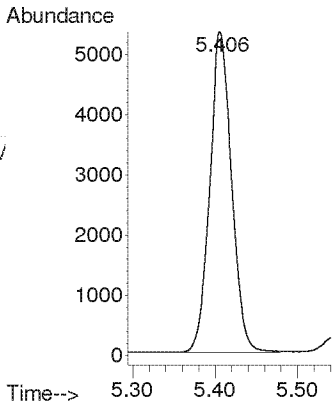


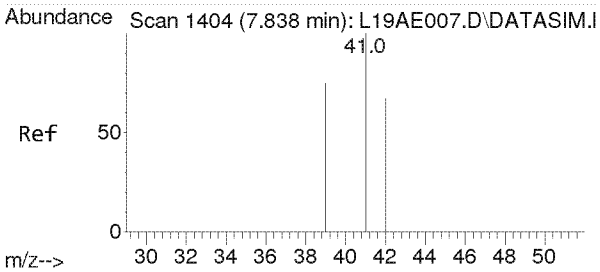
#2
Acetylene
Concen: 2.149 ppbv
RT: 5.406 min Scan# 148
Delta R.T. -0.009 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 26 Resp: 9773





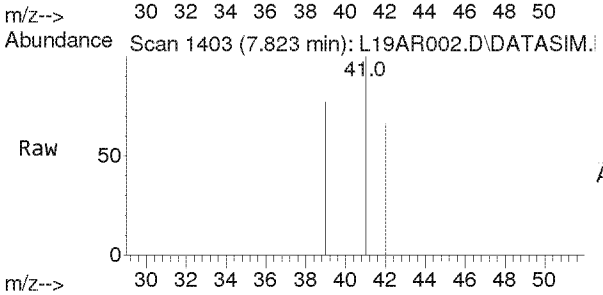


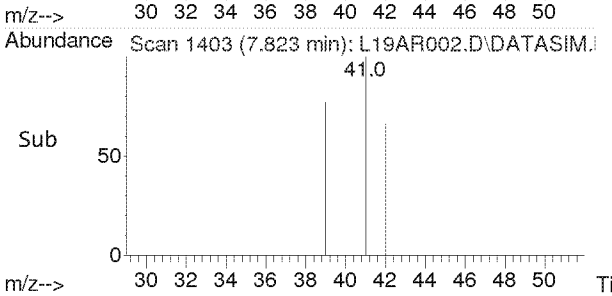


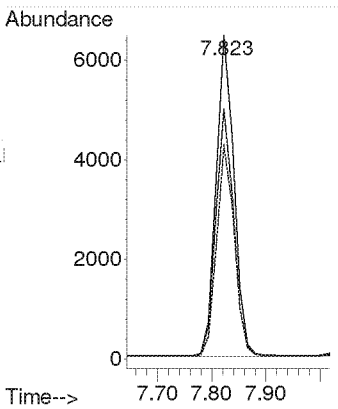
#3
Propylene
Concen: 2.606 ppbv
RT: 7.823 min Scan# 1403
Delta R.T. -0.015 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 41 Resp: 14623

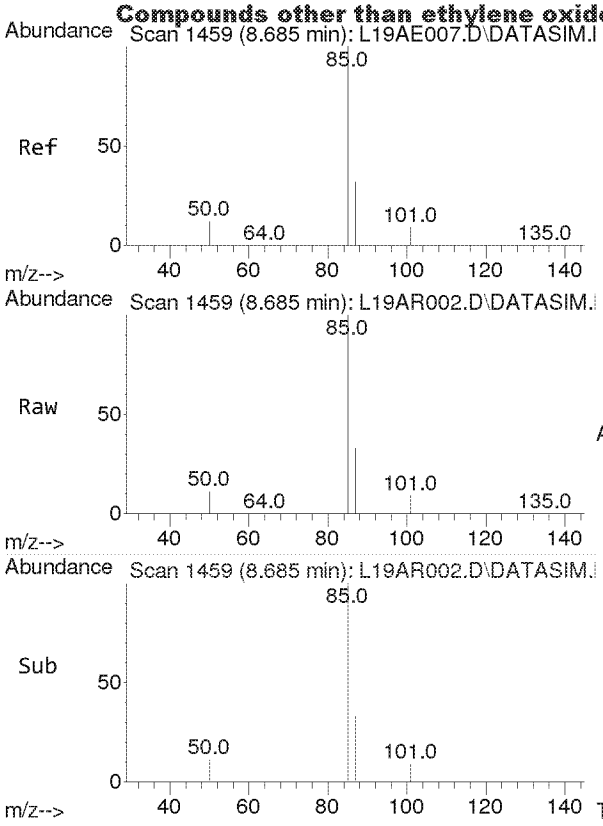
Ion	Ratio	Lower	Upper
41	100		
39	76.8	61.6	92.4
42	65.8	52.6	79.0







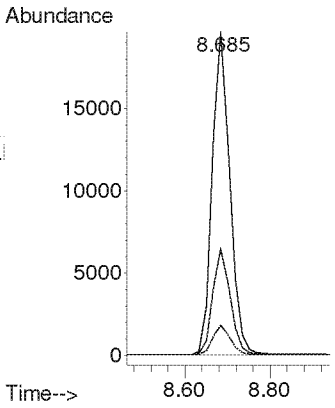
Compounds other than ethylene oxide were not quantitated.

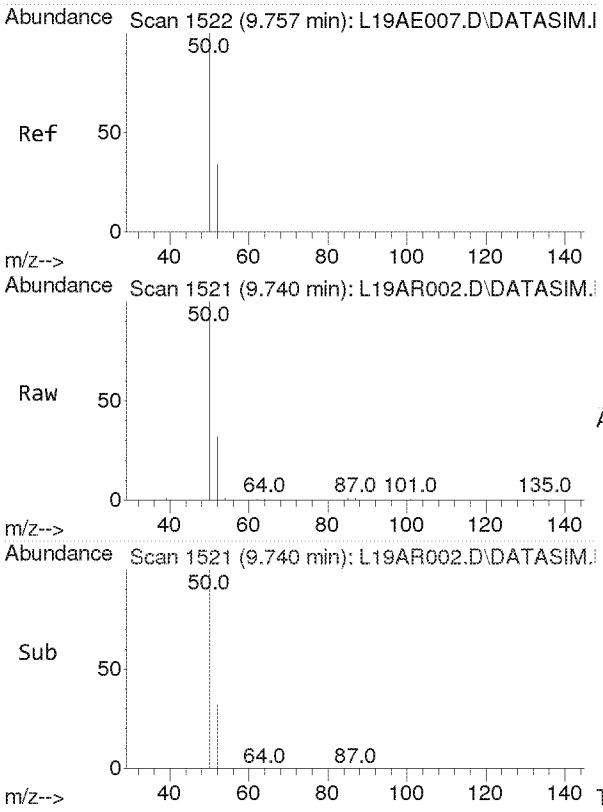


#4
Dichlorodifluoromethane
Concen: 2.311 ppbv
RT: 8.685 min Scan# 1459
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 85 Resp: 56099

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.0	39.0
101	9.0	7.1	10.7

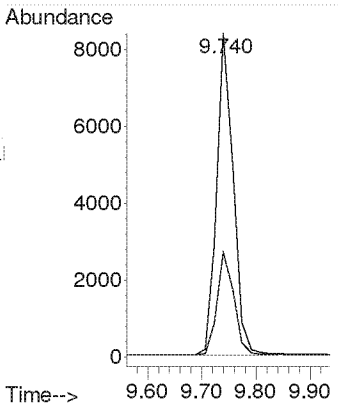




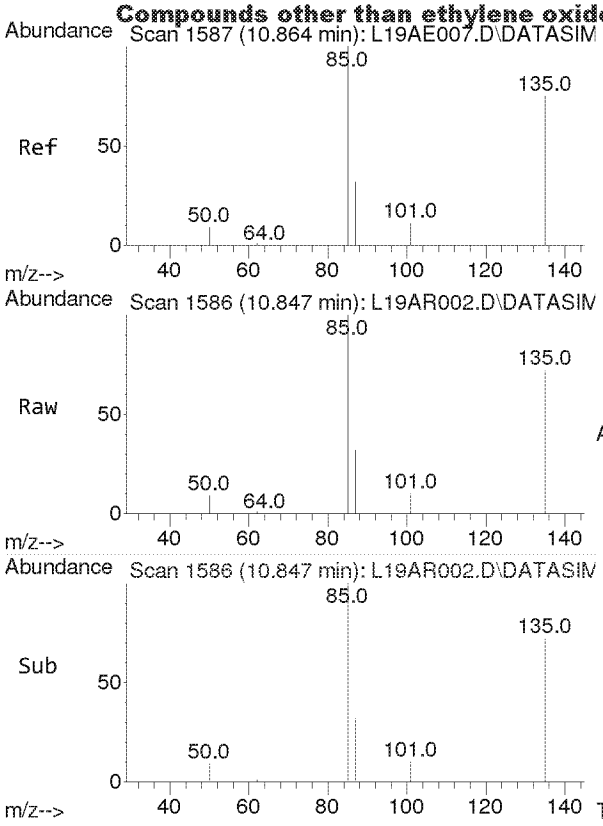
#5
Chloromethane
Concen: 2.461 ppbv
RT: 9.740 min Scan# 1521
Delta R.T. -0.017 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 50 Resp: 17821

Ion	Ratio	Lower	Upper
50	100		
52	32.5	25.9	38.9



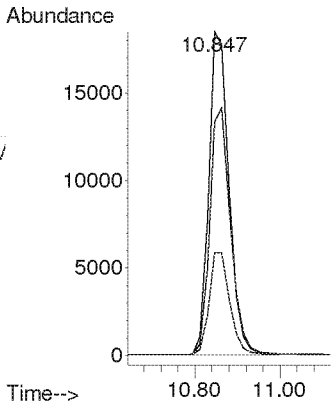
Compounds other than ethylene oxide were not quantitated.

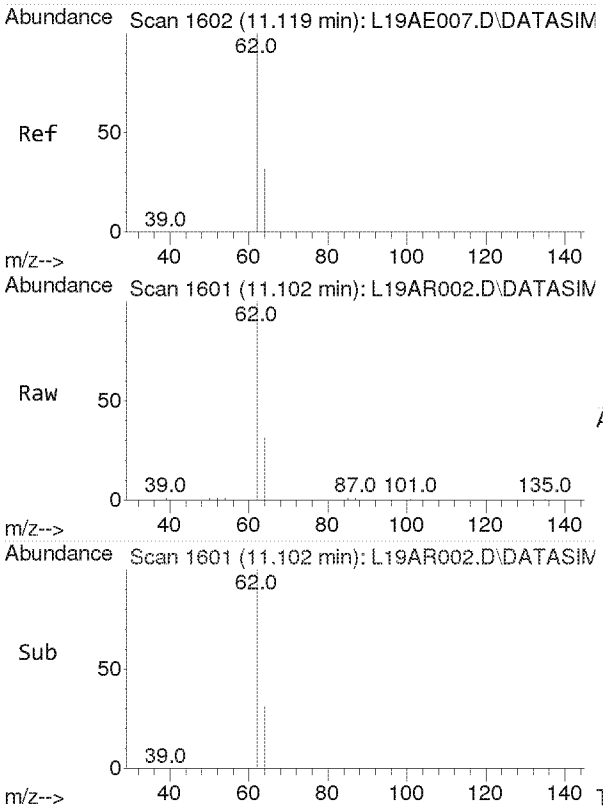


#6
Dichlorotetrafluoroethane
Concen: 2.623 ppbv
RT: 10.847 min Scan# 1586
Delta R.T. -0.017 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 85 Resp: 60383

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

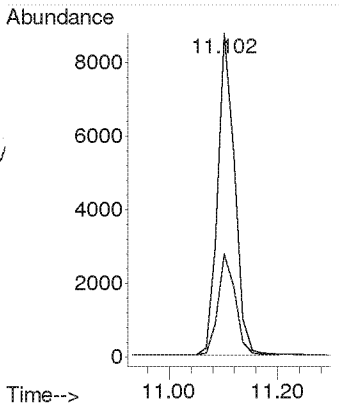




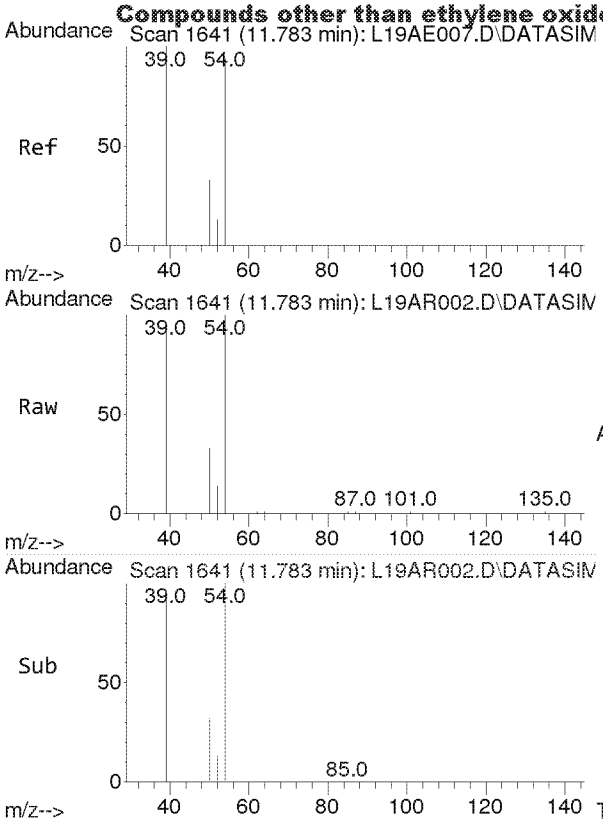
#7
Vinyl Chloride
Concen: 2.436 ppbv
RT: 11.102 min Scan# 1601
Delta R.T. -0.017 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 62 Resp: 18961

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.7	38.5



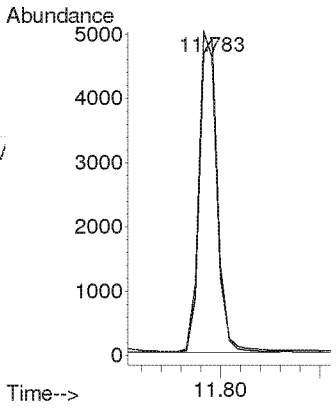
Compounds other than ethylene oxide were not quantitated.

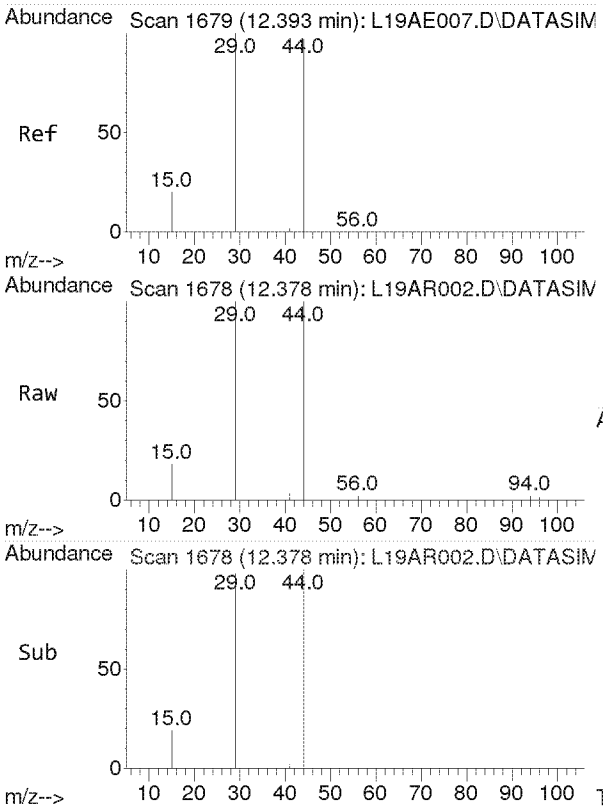


#8
1,3-Butadiene
Concen: 2.415 ppbv
RT: 11.783 min Scan# 1641
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 54 Resp: 12388

Ion	Ratio	Lower	Upper
54	100		
39	101.2	82.6	124.0

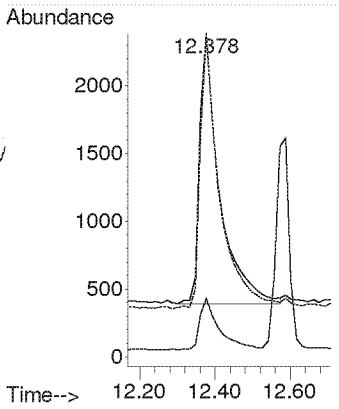




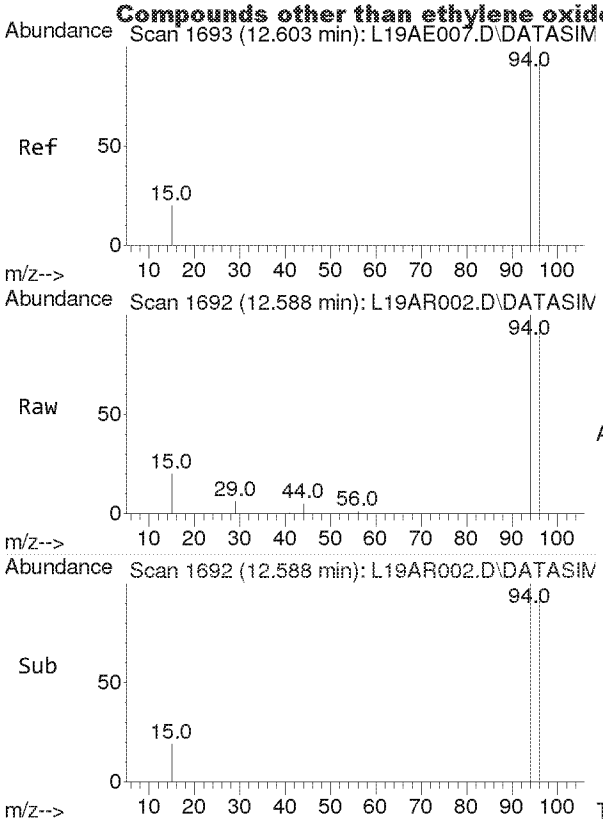
#9
Ethylene oxide
Concen: 2.391 ppbv
RT: 12.378 min Scan# 1678
Delta R.T. -0.015 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 29 Resp: 7275

Ion	Ratio	Lower	Upper
29	100		
15	17.8	15.4	23.0
44	97.6	77.4	116.2



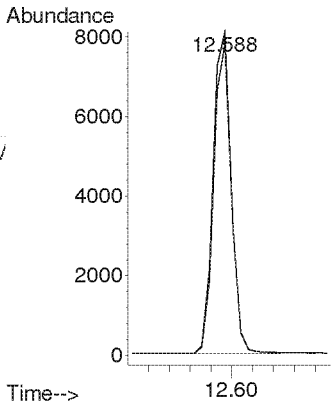
Compounds other than ethylene oxide were not quantitated.

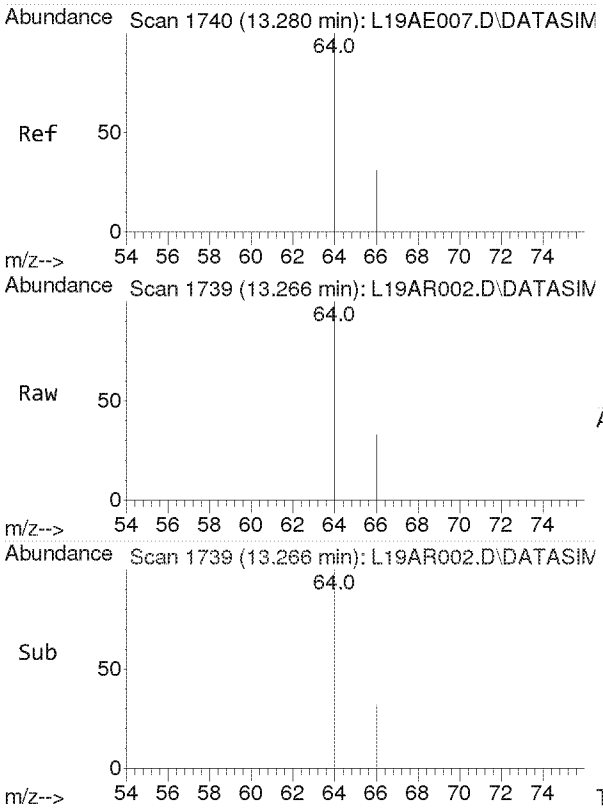


#10
Bromomethane
Concen: 2.462 ppbv
RT: 12.588 min Scan# 1692
Delta R.T. -0.015 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 94 Resp: 19281

Ion	Ratio	Lower	Upper
94	100		
96	94.2	75.4	113.2

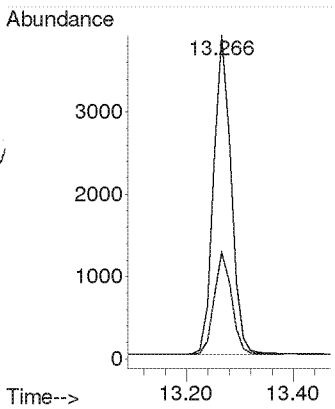




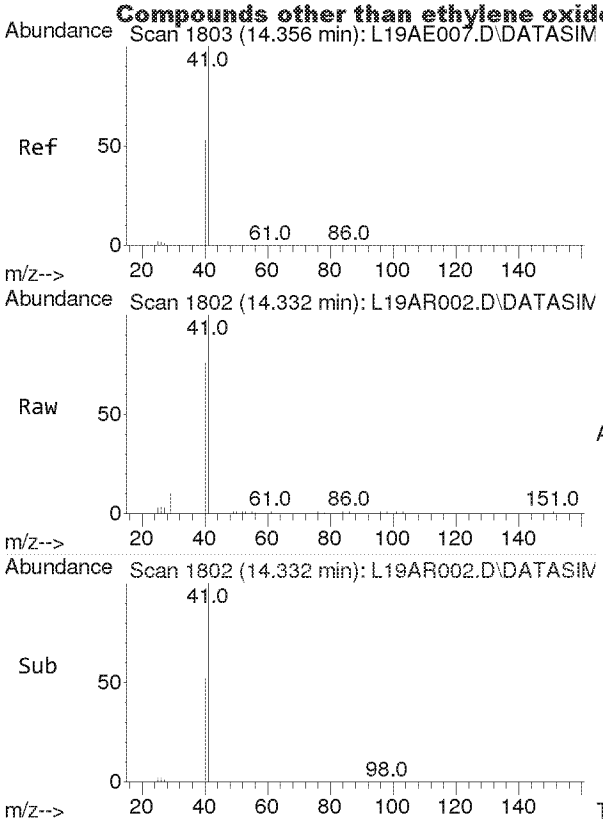
#11
Chloroethane
Concen: 2.540 ppbv
RT: 13.266 min Scan# 1739
Delta R.T. -0.014 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 64 Resp: 8748

Ion	Ratio	Lower	Upper
64	100		
66	31.8	25.9	38.9



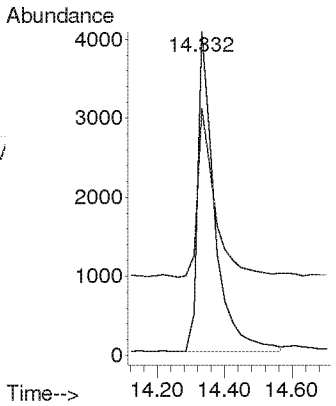
Compounds other than ethylene oxide were not quantitated.

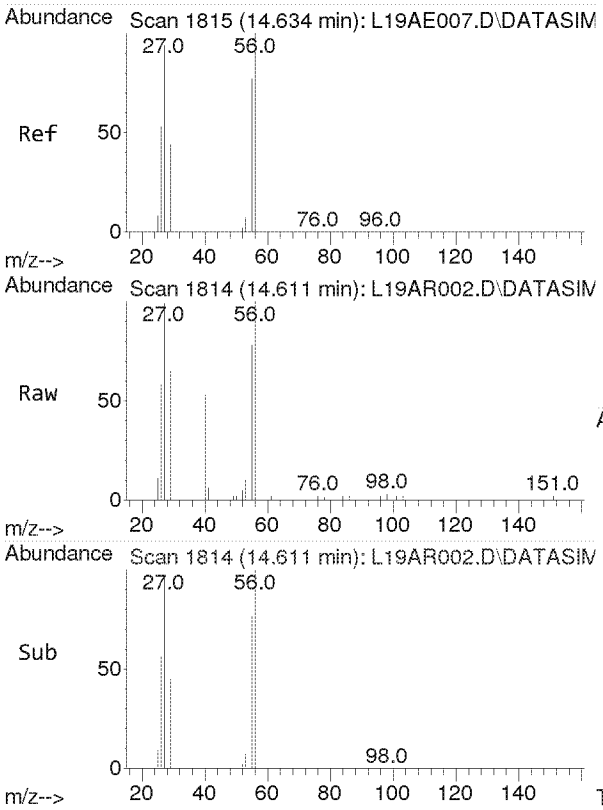


#12
Acetonitrile
Concen: 2.395 ppbv
RT: 14.332 min Scan# 1802
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 41 Resp: 14169

Ion	Ratio	Lower	Upper
41	100		
40	53.6	42.6	63.8

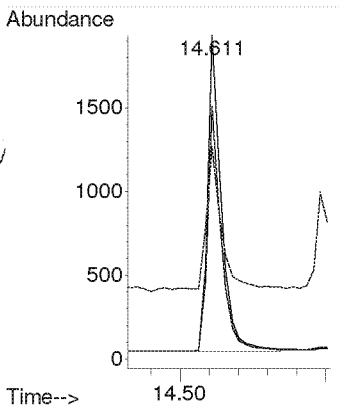




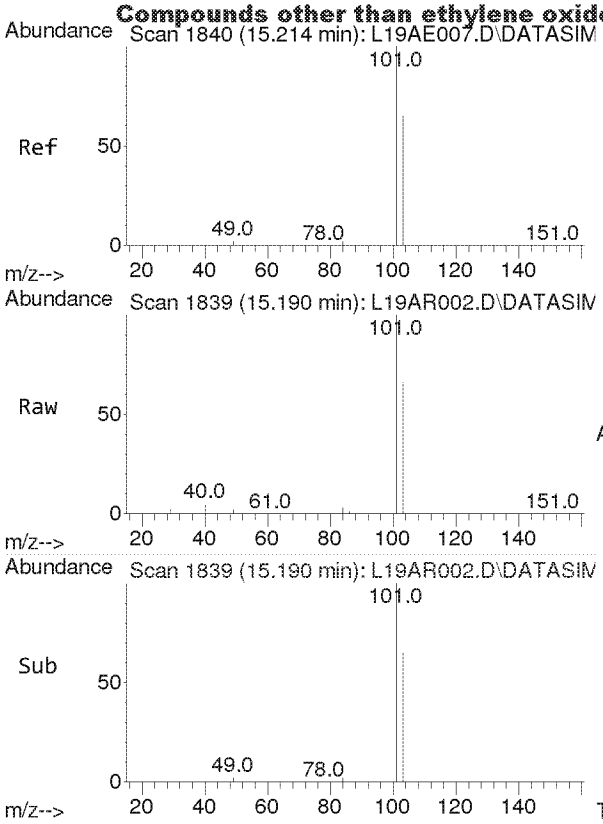
#13
Acrolein
Concen: 2.100 ppbv
RT: 14.611 min Scan# 1814
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 56 Resp: 6120

Ion	Ratio	Lower	Upper
56	100		
55	77.5	61.2	91.8
29	49.6	35.9	53.9



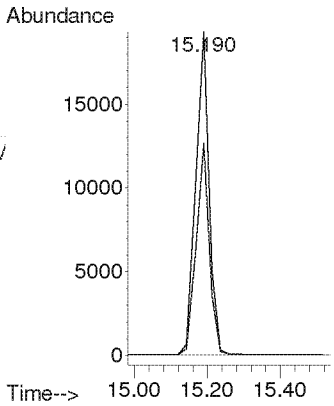
Compounds other than ethylene oxide were not quantitated.

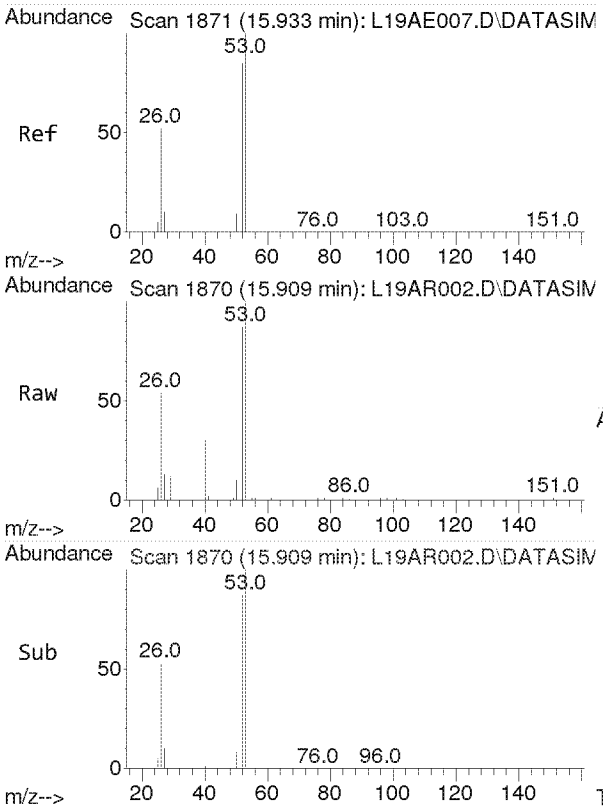


#14
Trichlorofluoromethane
Concen: 2.120 ppbv
RT: 15.190 min Scan# 1839
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:101 Resp: 48831

Ion	Ratio	Lower	Upper
101	100		
103	64.7	51.7	77.5

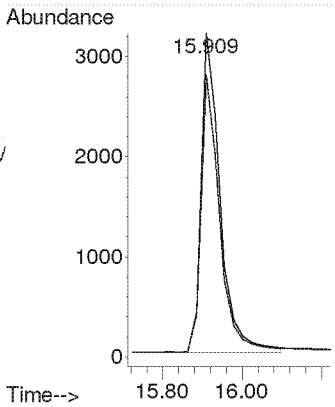




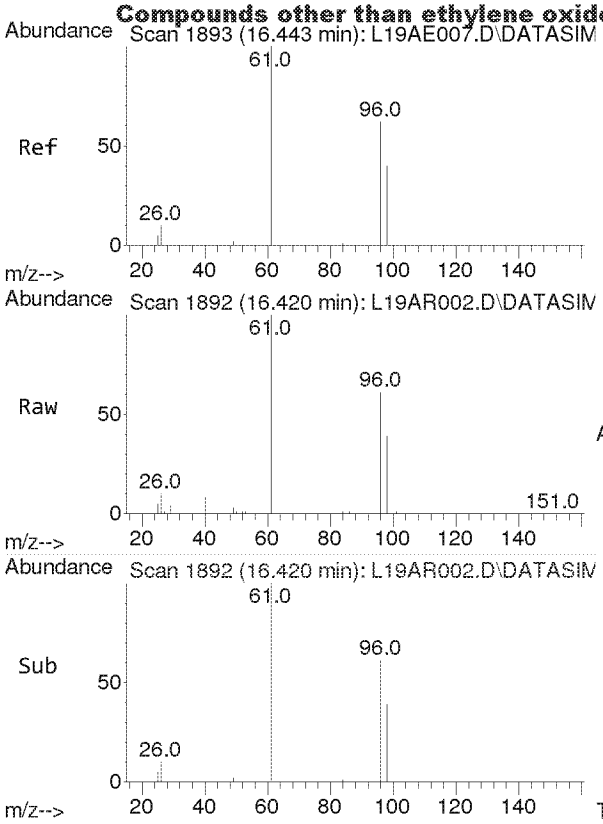
#15
Acrylonitrile
Concen: 2.210 ppbv
RT: 15.909 min Scan# 1870
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 53 Resp: 10506

Ion	Ratio	Lower	Upper
53	100		
52	85.2	67.8	101.6



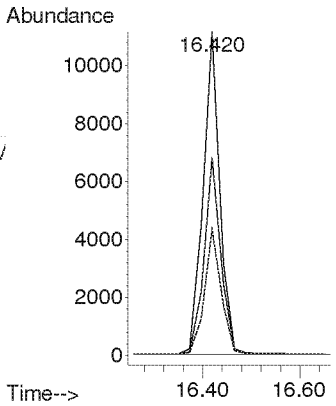
Compounds other than ethylene oxide were not quantitated.

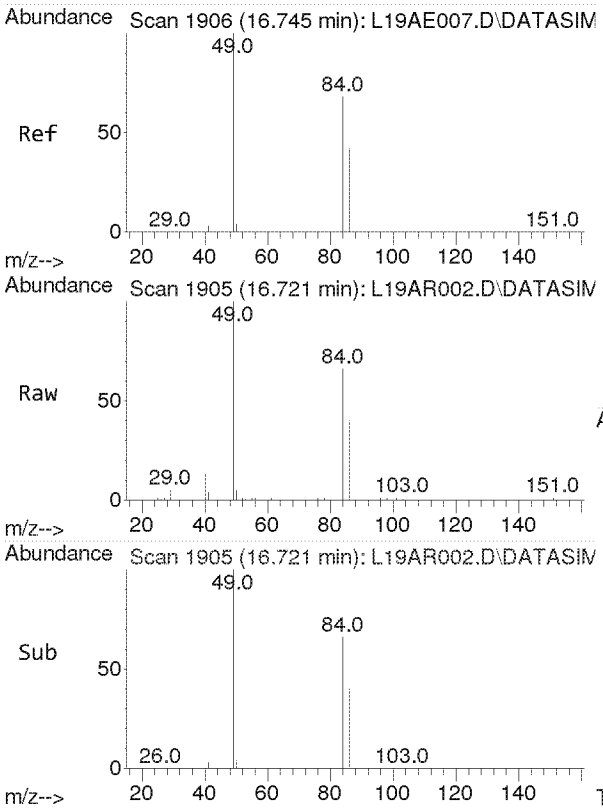


#16
1,1-Dichloroethene
Concen: 2.507 ppbv
RT: 16.420 min Scan# 1892
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 61 Resp: 26508

Ion	Ratio	Lower	Upper
61	100		
96	60.7	47.6	71.4
98	38.6	30.5	45.7

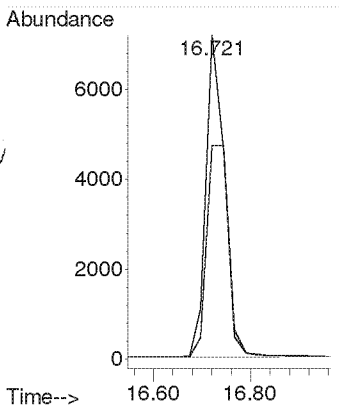




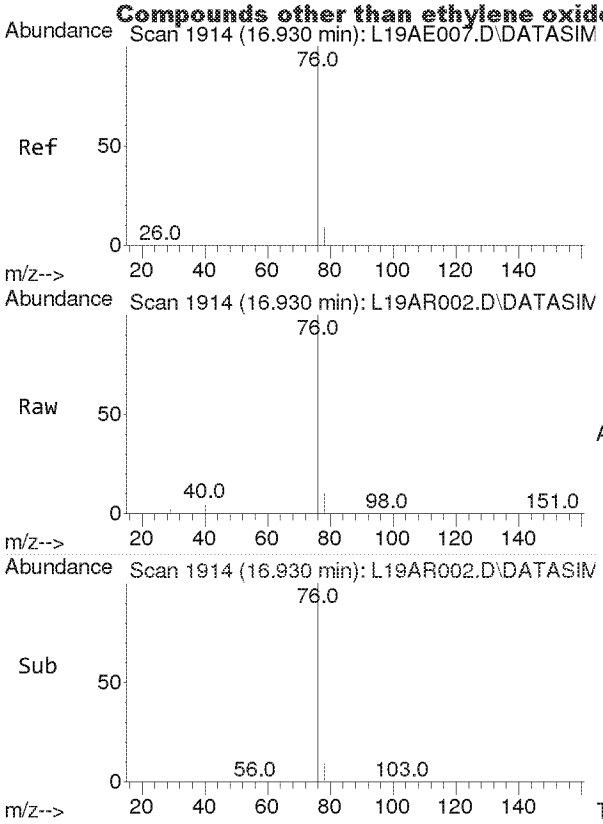
#17
Methylene Chloride
Concen: 2.480 ppbv
RT: 16.721 min Scan# 1905
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 49 Resp: 18747

Ion	Ratio	Lower	Upper
49	100		
84	78.7	54.1	100.5



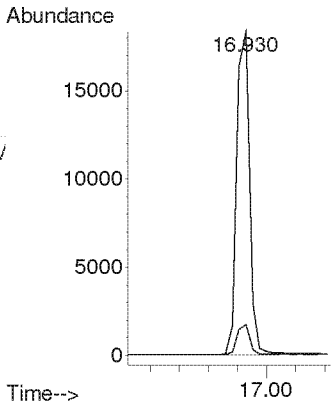
Compounds other than ethylene oxide were not quantitated.

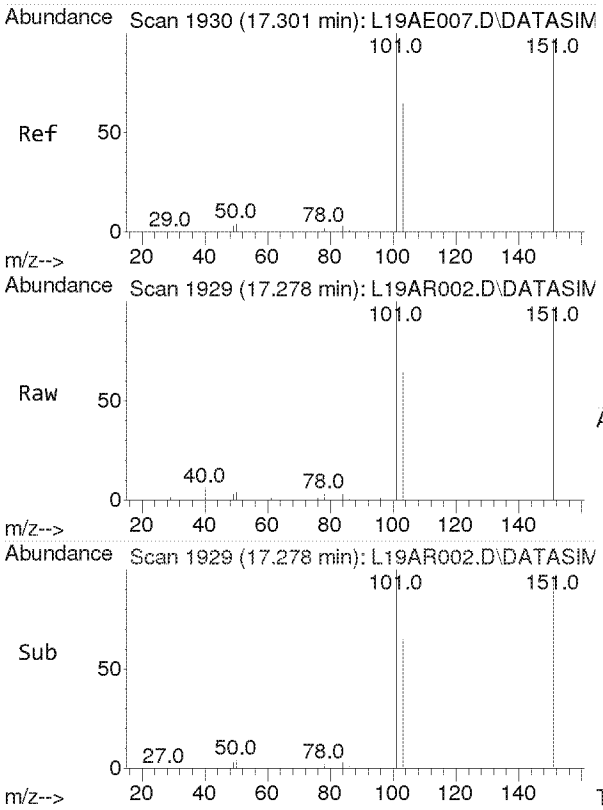


#18
Carbon Disulfide
Concen: 2.410 ppbv
RT: 16.930 min Scan# 1914
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 76 Resp: 55420

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.2	10.8

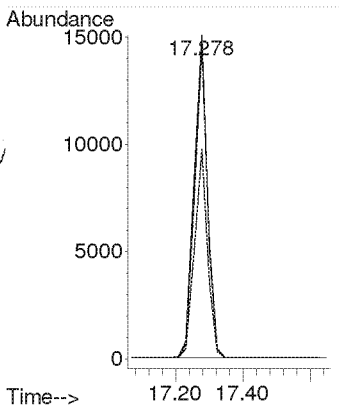




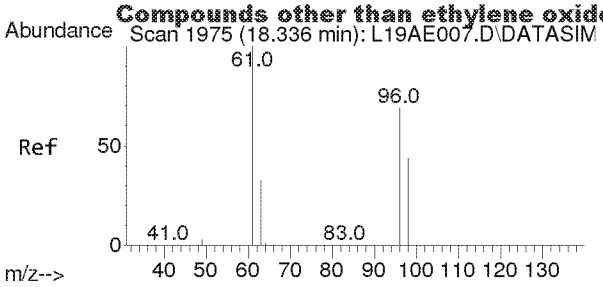
#19
Trichlorotrifluoroethane
Concen: 2.470 ppbv
RT: 17.278 min Scan# 1929
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:101 Resp: 41043

Ion	Ratio	Lower	Upper
101	100		
151	95.9	76.3	114.5
103	64.0	51.1	76.7



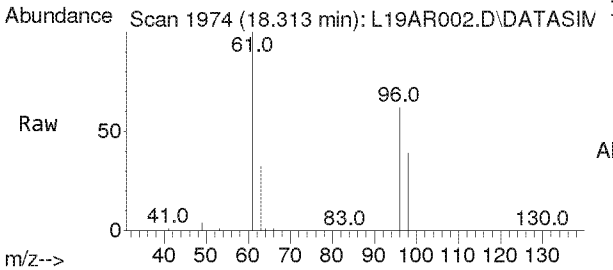
Compounds other than ethylene oxide were not quantitated.

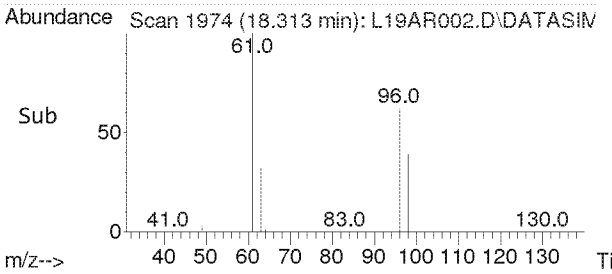


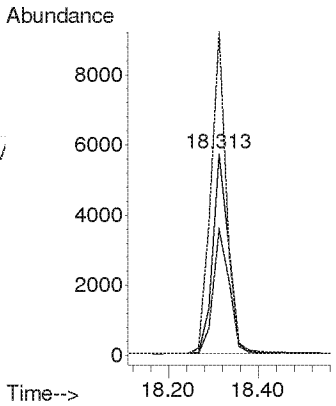
#20
trans-1,2-Dichloroethylene
Concen: 2.379 ppbv
RT: 18.313 min Scan# 1974
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

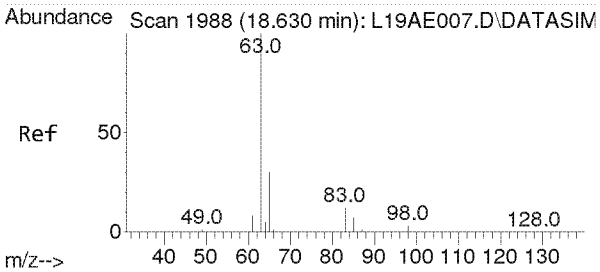
Tgt Ion: 96 Resp: 14197

Ion	Ratio	Lower	Upper
96	100		
98	63.5	50.9	76.3
61	156.5	125.2	187.8





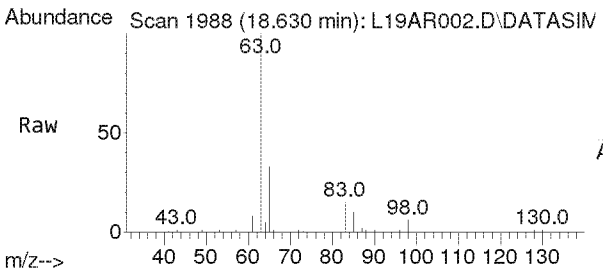


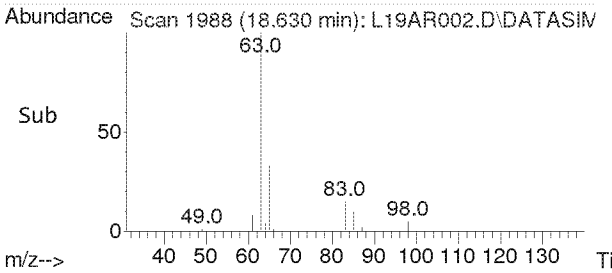


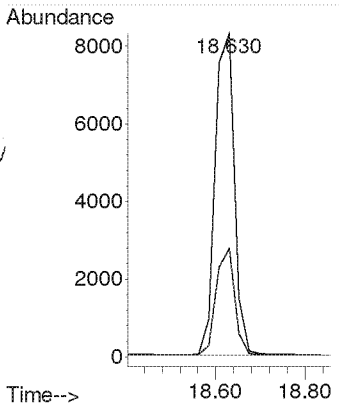
#21
1,1-Dichloroethane
Concen: 2.300 ppbv
RT: 18.630 min Scan# 1988
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 63 Resp: 24910

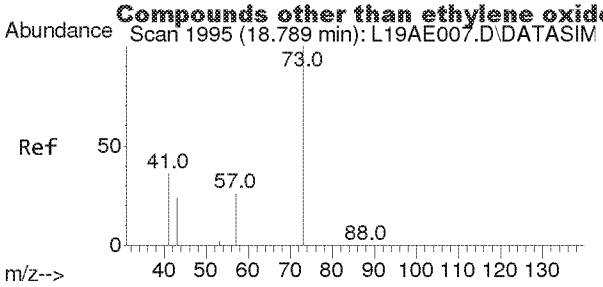
Ion	Ratio	Lower	Upper
63	100		
65	31.9	25.4	38.0







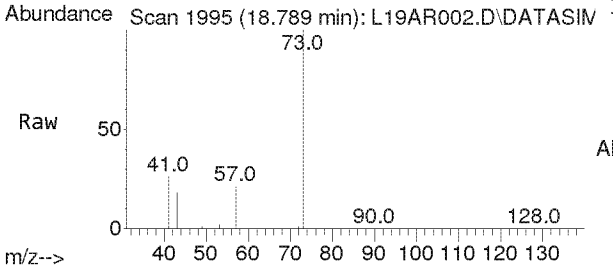
Compounds other than ethylene oxide were not quantitated.

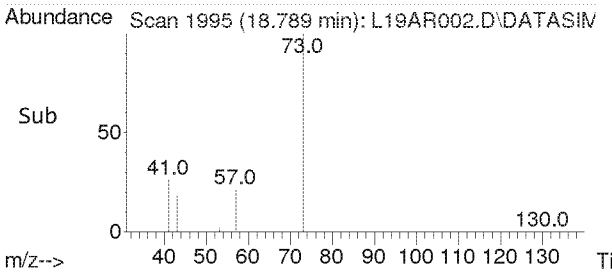


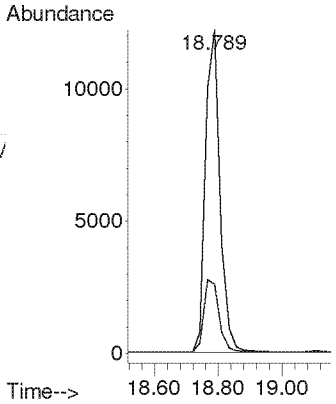
#22
Methyl tert-Butyl Ether
Concen: 2.395 ppbv
RT: 18.789 min Scan# 1995
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

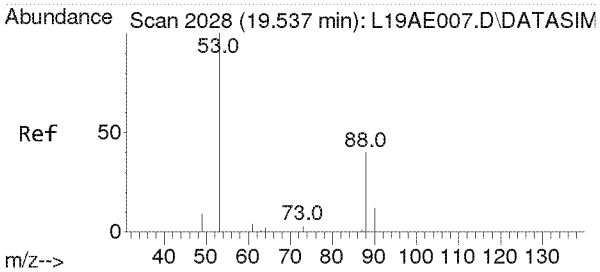
Tgt Ion: 73 Resp: 38389

Ion	Ratio	Lower	Upper
73	100		
57	23.4	18.9	28.3





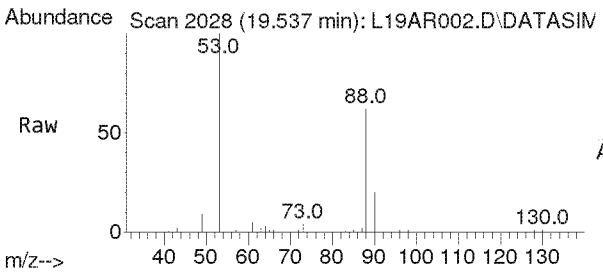


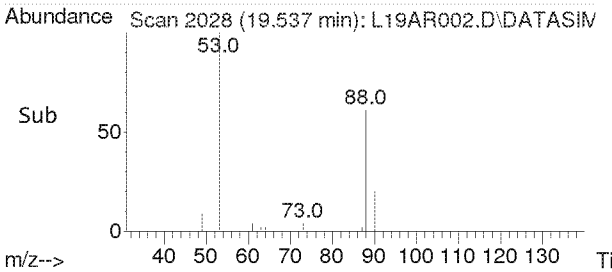


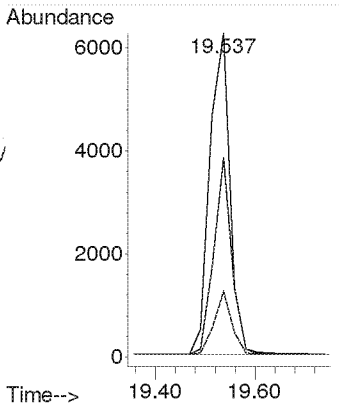
#23
Chloroprene
Concen: 2.346 ppbv
RT: 19.537 min Scan# 2028
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 53 Resp: 17452

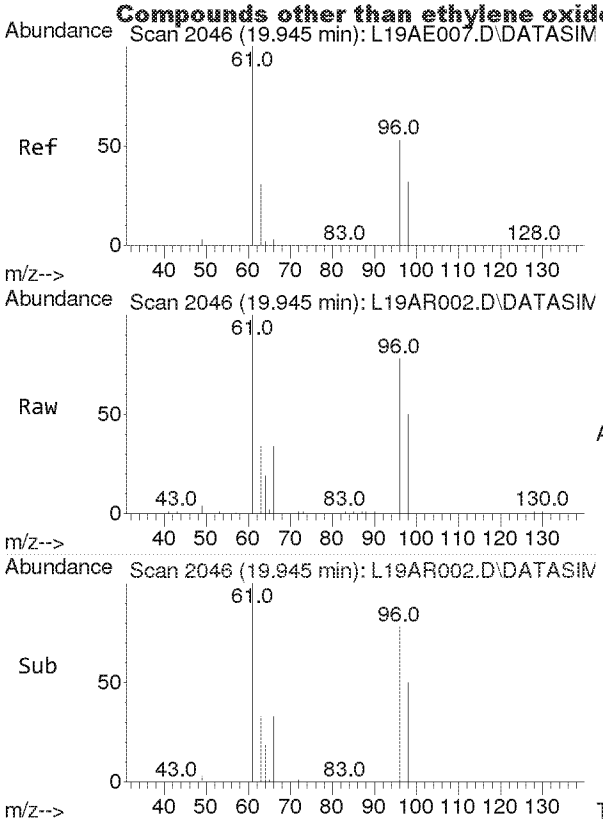
Ion	Ratio	Lower	Upper
53	100		
88	54.9	43.2	64.8
90	17.5	13.8	20.8







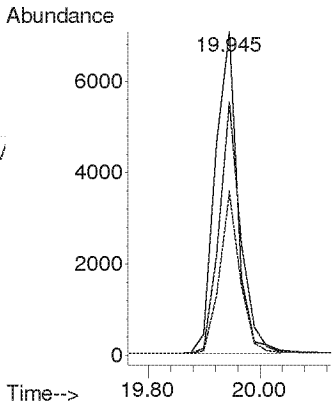
Compounds other than ethylene oxide were not quantitated.

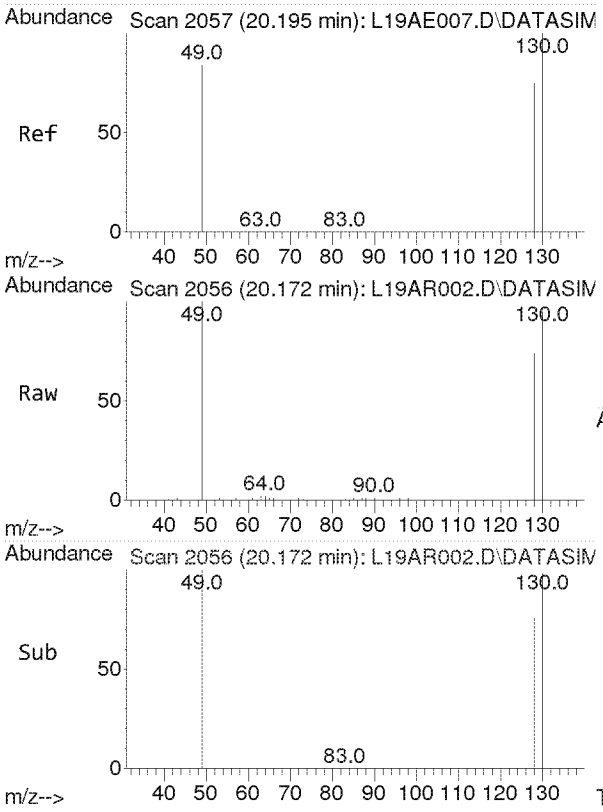


#24
cis-1,2-Dichloroethylene
Concen: 2.330 ppbv
RT: 19.945 min Scan# 2046
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 61 Resp: 19265

Ion	Ratio	Lower	Upper
61	100		
96	76.6	60.6	90.8
98	46.7	37.1	55.7

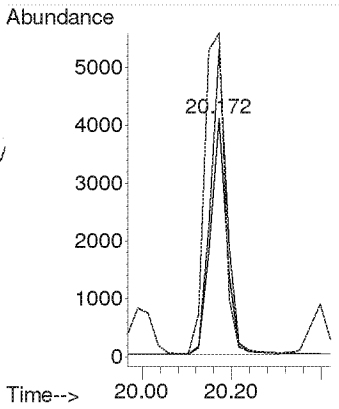




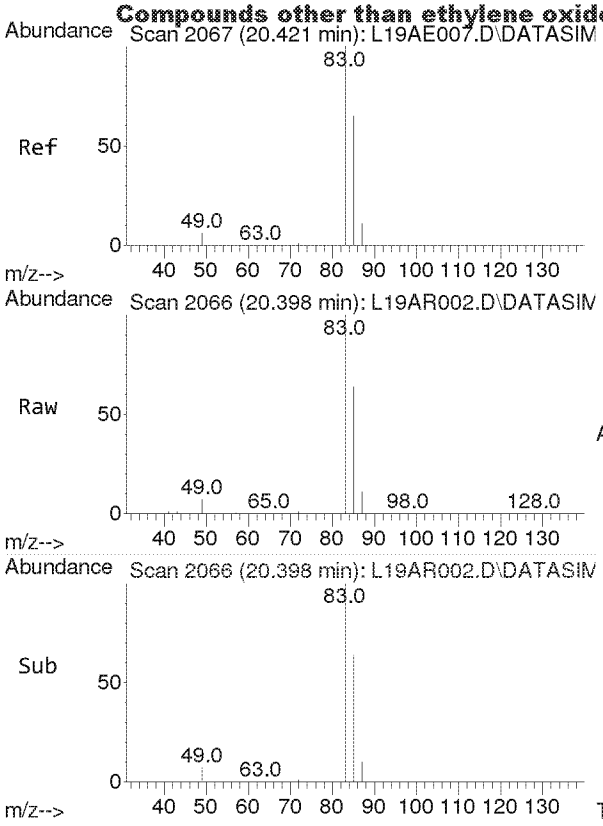
#25
Bromochloromethane
Concen: 2.252 ppbv
RT: 20.172 min Scan# 2056
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:128 Resp: 10249

Ion	Ratio	Lower	Upper
128	100		
130	129.7	104.3	156.5
49	168.3	136.6	205.0



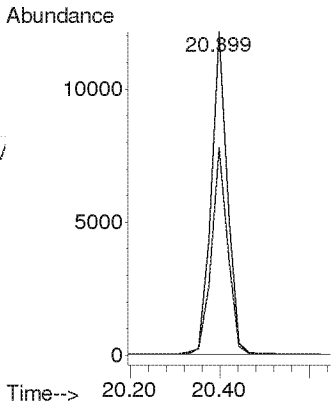
Compounds other than ethylene oxide were not quantitated.

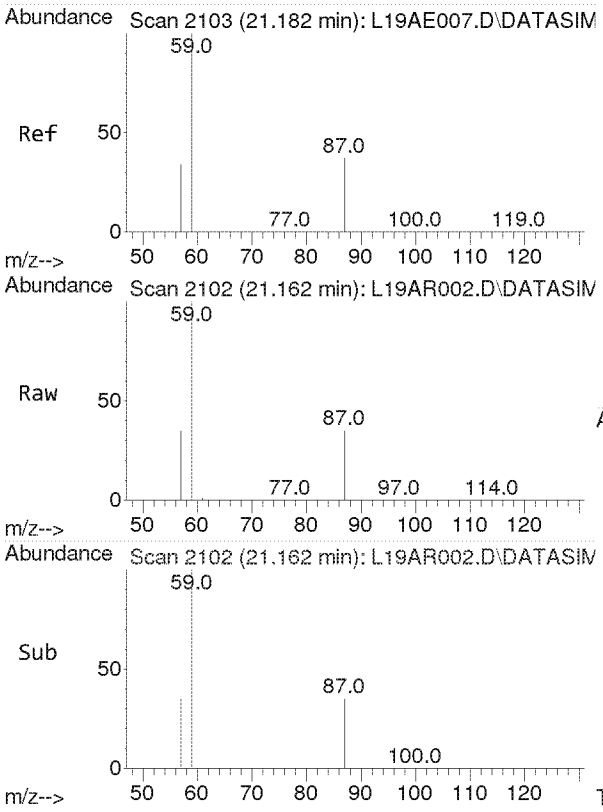


#26
Chloroform
Concen: 2.417 ppbv
RT: 20.398 min Scan# 2066
Delta R.T. -0.023 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 83 Resp: 29951

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.6	77.4

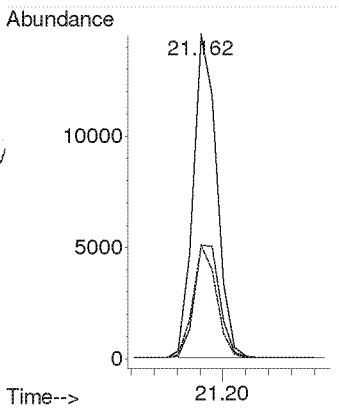




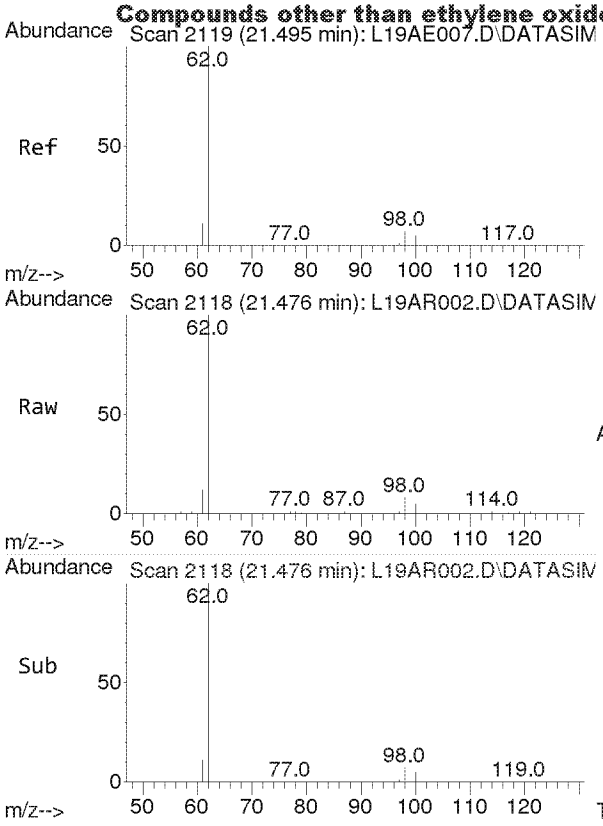
#27
Ethyl tert-Butyl Ether
Concen: 2.430 ppbv
RT: 21.162 min Scan# 2102
Delta R.T. -0.020 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 59 Resp: 40804

Ion	Ratio	Lower	Upper
59	100		
87	38.1	30.2	45.4
57	34.4	27.4	41.2



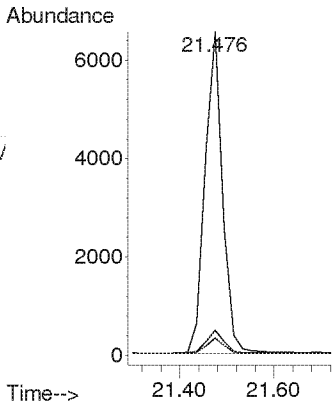
Compounds other than ethylene oxide were not quantitated.

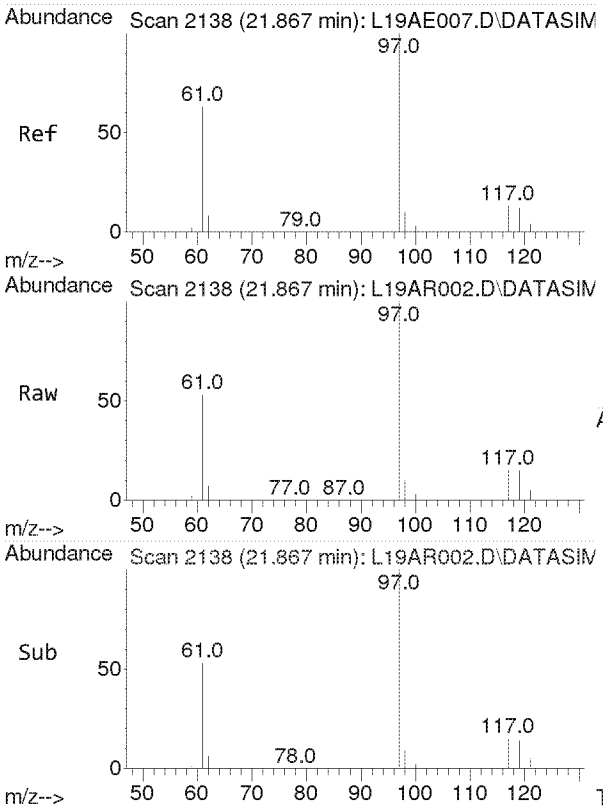


#28
1,2-Dichloroethane
Concen: 2.307 ppbv
RT: 21.476 min Scan# 2118
Delta R.T. -0.020 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 62 Resp: 16973

Ion	Ratio	Lower	Upper
62	100		
98	6.9	5.4	8.2
100	4.5	3.4	5.0

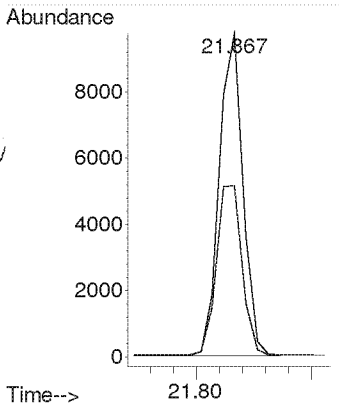




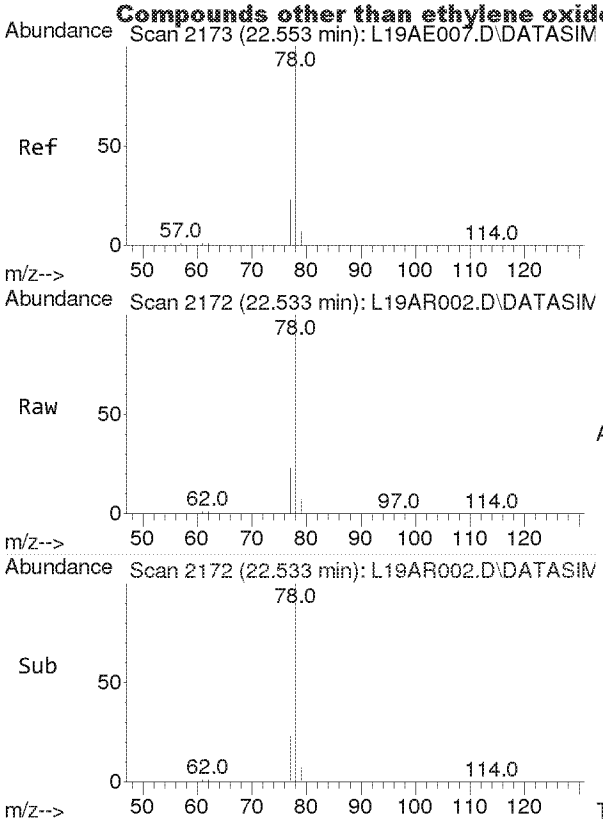
#30
1,1,1-Trichloroethane
Concen: 2.338 ppbv
RT: 21.867 min Scan# 2138
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 97 Resp: 27701

Ion	Ratio	Lower	Upper
97	100		
61	57.0	46.9	70.3



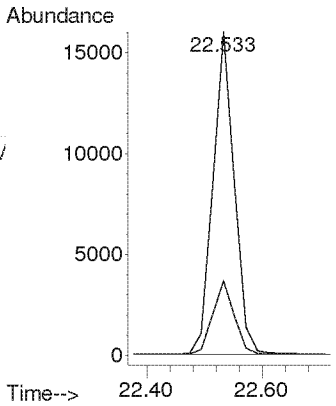
Compounds other than ethylene oxide were not quantitated.

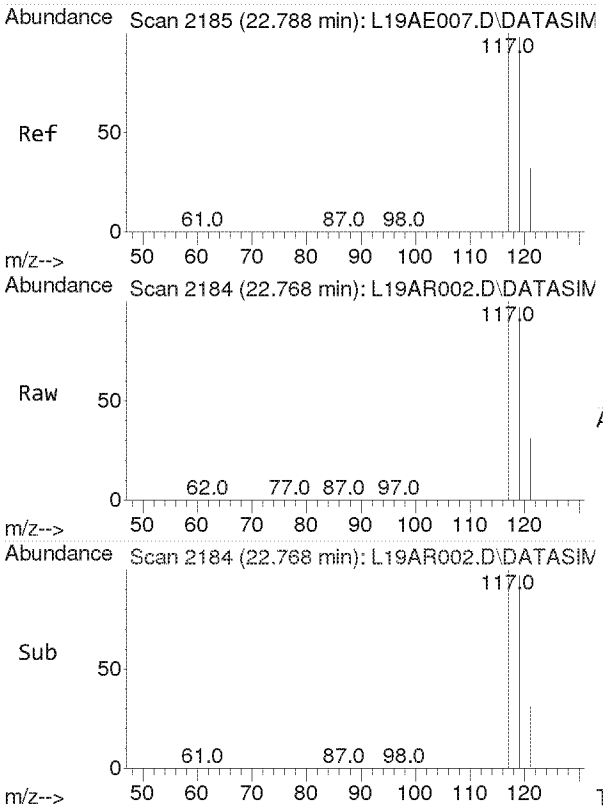


#31
Benzene
Concen: 2.528 ppbv
RT: 22.533 min Scan# 2172
Delta R.T. -0.020 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 78 Resp: 41205

Ion	Ratio	Lower	Upper
78	100		
77	22.8	18.3	27.5

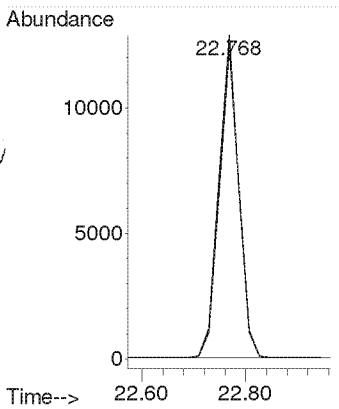




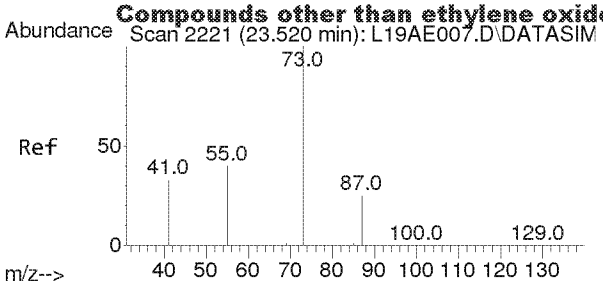
#32
Carbon Tetrachloride
Concen: 2.651 ppbv
RT: 22.768 min Scan# 2184
Delta R.T. -0.020 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:117 Resp: 34045

Ion	Ratio	Lower	Upper
117	100		
119	96.5	77.2	115.8



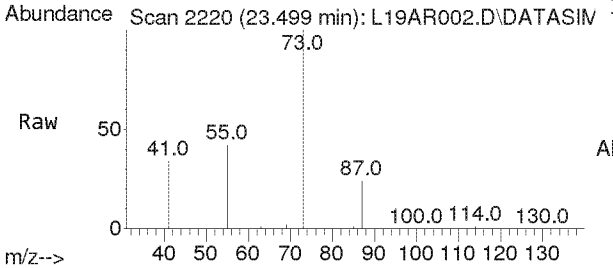
Compounds other than ethylene oxide were not quantitated.

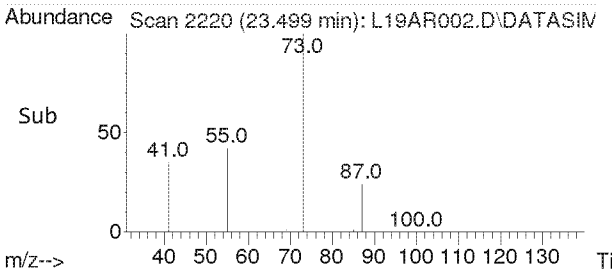


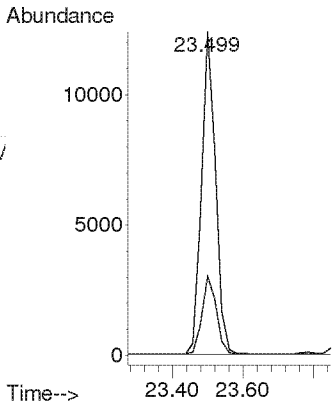
#33
tert-Amyl Methyl Ether
Concen: 2.478 ppbv
RT: 23.499 min Scan# 2220
Delta R.T. -0.021 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

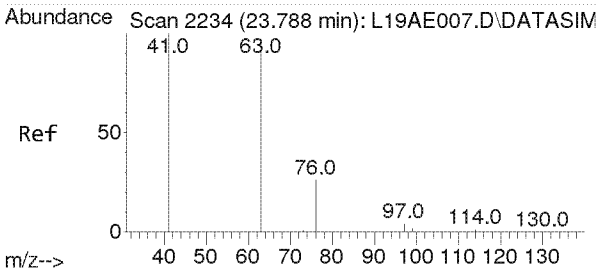
Tgt Ion: 73 Resp: 34011

Ion	Ratio	Lower	Upper
73	100		
87	24.6	19.8	29.8





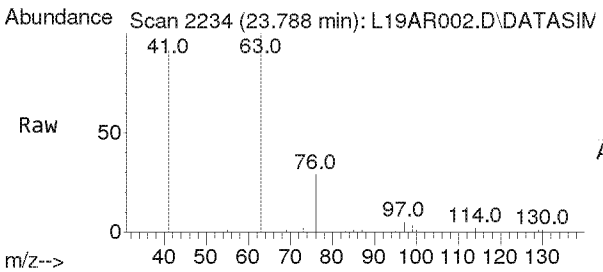


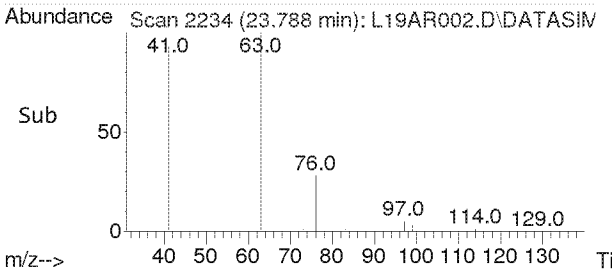


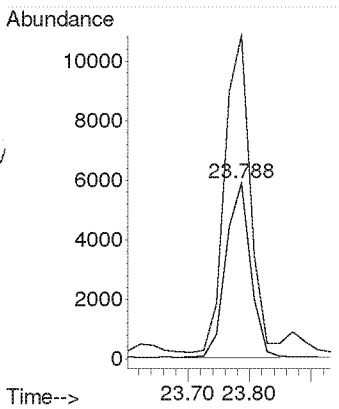
#34
1,2-Dichloropropane
Concen: 2.381 ppbv
RT: 23.788 min Scan# 2234
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 63 Resp: 16317

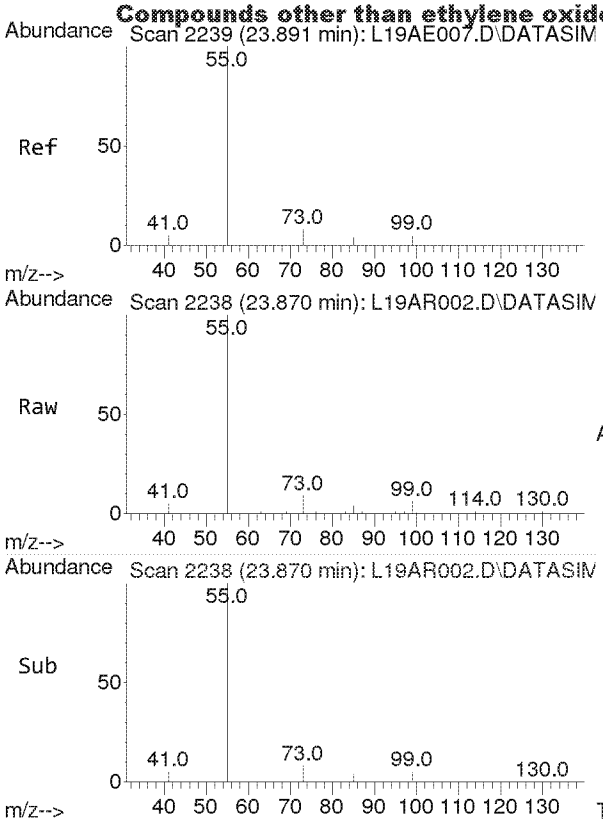
Ion	Ratio	Lower	Upper
63	100		
41	189.4	156.8	235.2







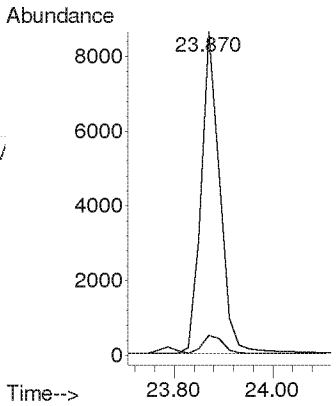
Compounds other than ethylene oxide were not quantitated.

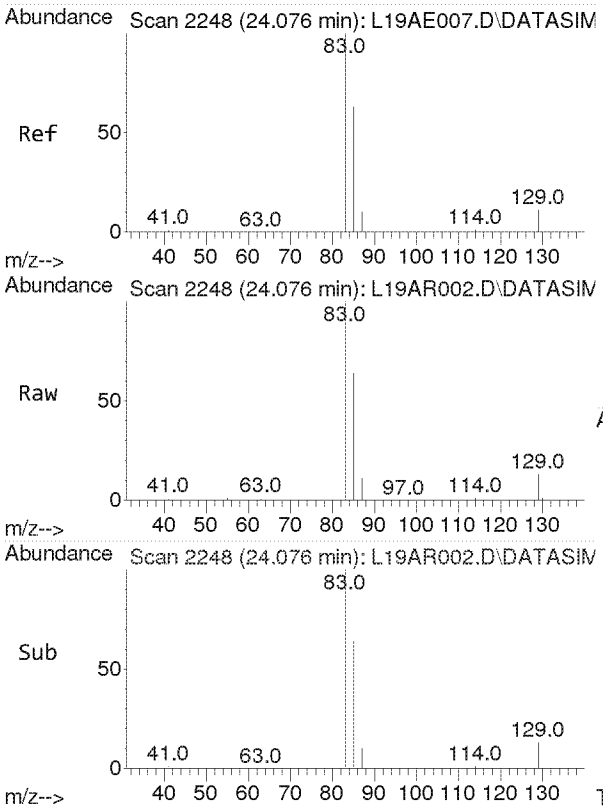


#35
Ethyl Acrylate
Concen: 2.432 ppbv
RT: 23.870 min Scan# 2238
Delta R.T. -0.021 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 55 Resp: 22345

Ion	Ratio	Lower	Upper
55	100		
99	6.1	4.8	7.2

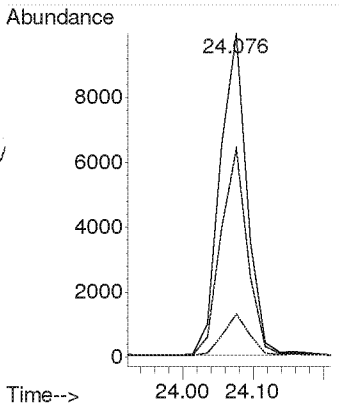




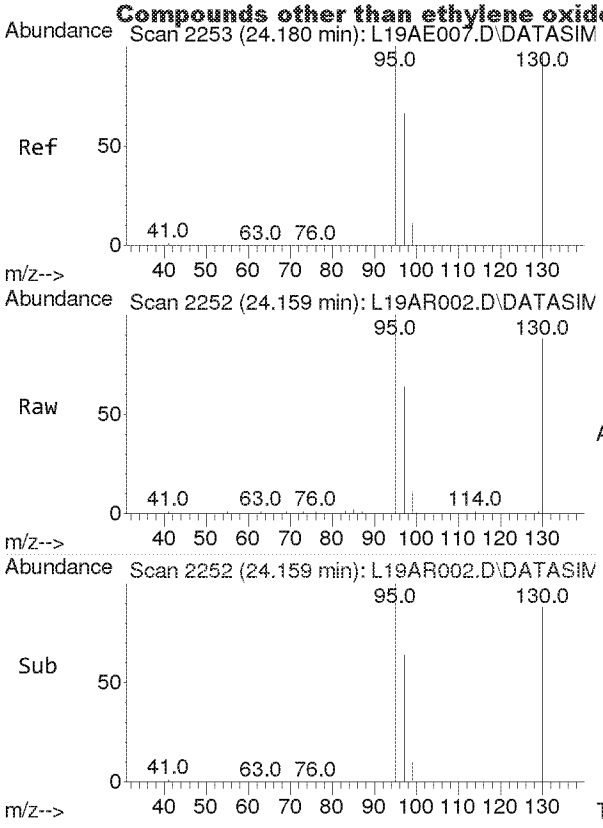
#36
Bromodichloromethane
Concen: 2.115 ppbv
RT: 24.076 min Scan# 2248
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 83 Resp: 26431

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.1	76.7
129	12.5	10.0	15.0



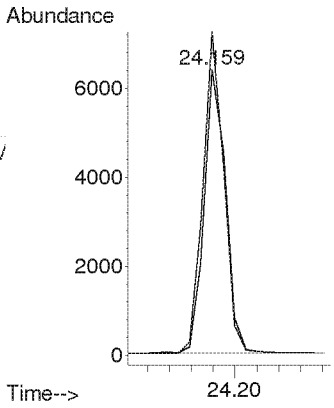
Compounds other than ethylene oxide were not quantitated.

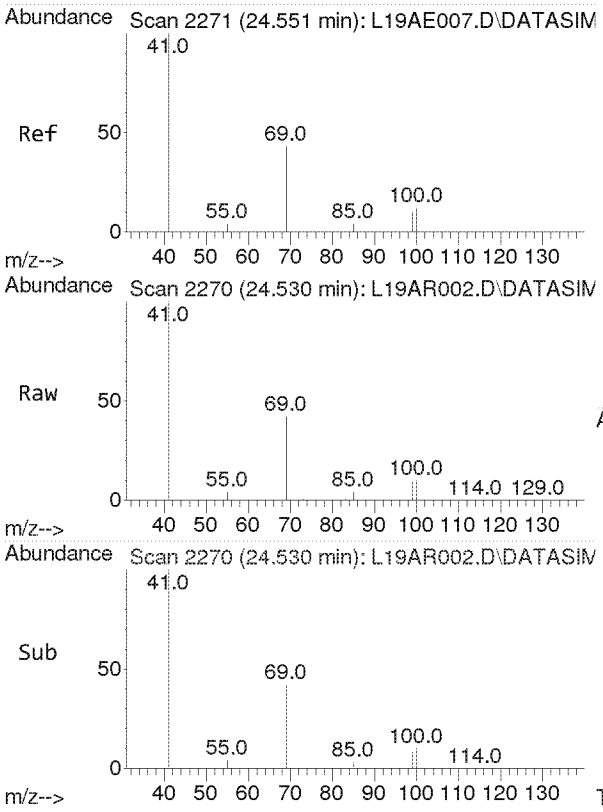


#37
Trichloroethylene
Concen: 2.187 ppbv
RT: 24.159 min Scan# 2252
Delta R.T. -0.021 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:130 Resp: 17170

Ion	Ratio	Lower	Upper
130	100		
95	110.3	86.9	130.3

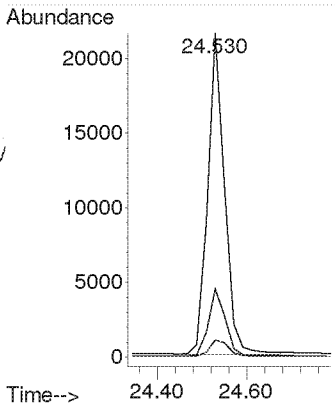




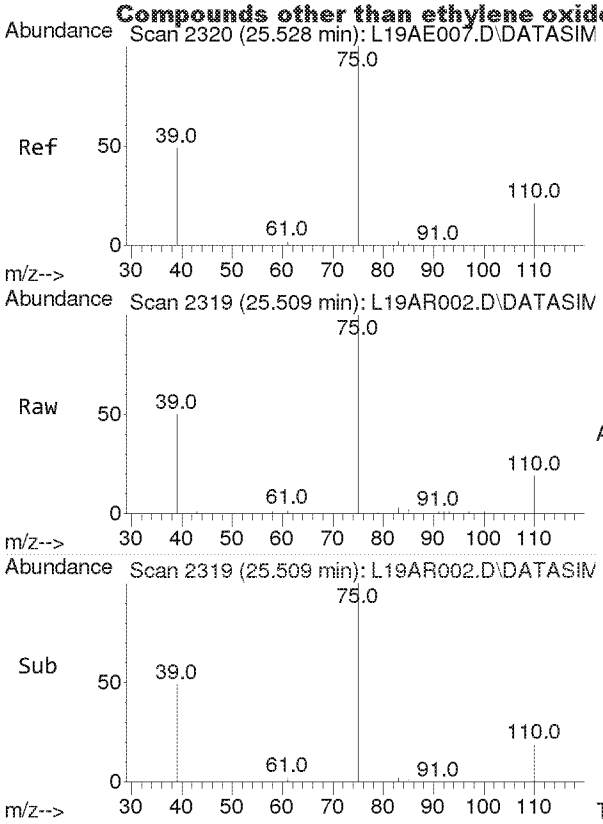
#38
Methyl Methacrylate
Concen: 2.329 ppbv
RT: 24.530 min Scan# 2270
Delta R.T. -0.021 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 41 Resp: 56241

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



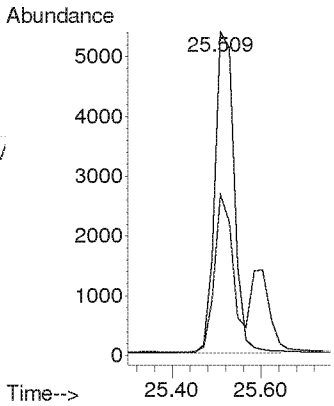
Compounds other than ethylene oxide were not quantitated.

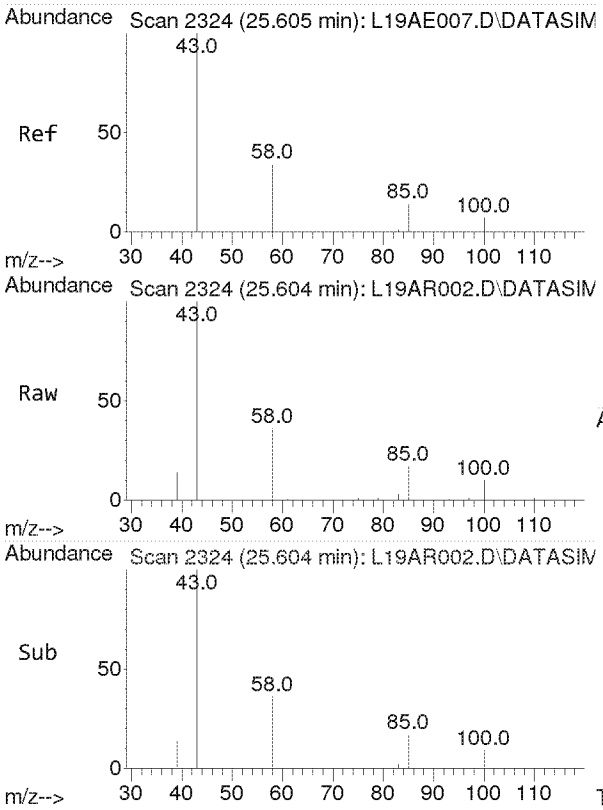


#39
cis-1,3-Dichloropropene
Concen: 2.551 ppbv
RT: 25.509 min Scan# 2319
Delta R.T. -0.019 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 75 Resp: 16036

Ion	Ratio	Lower	Upper
75	100		
39	48.2	38.6	58.0

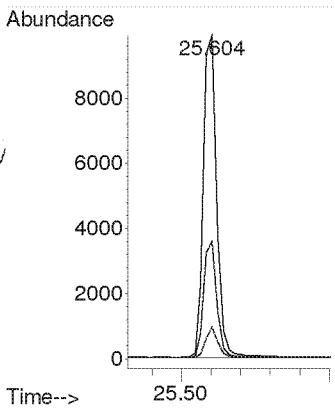




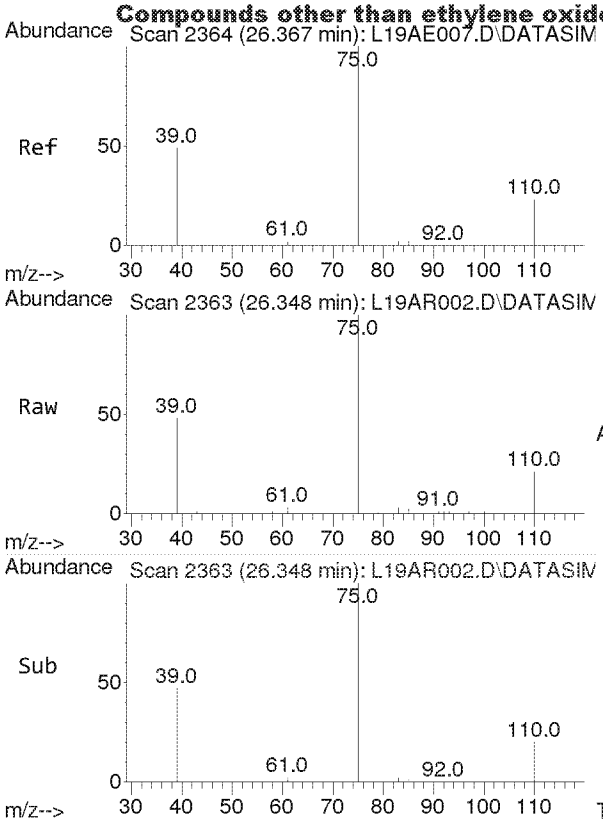
#40
Methyl Isobutyl Ketone
Concen: 2.310 ppbv
RT: 25.604 min Scan# 2324
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 43 Resp: 30544

Ion	Ratio	Lower	Upper
43	100		
58	35.3	27.6	41.4
100	8.3	6.5	9.7



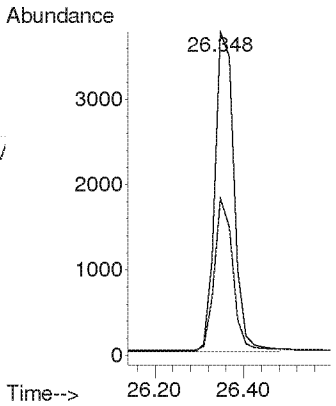
Compounds other than ethylene oxide were not quantitated.

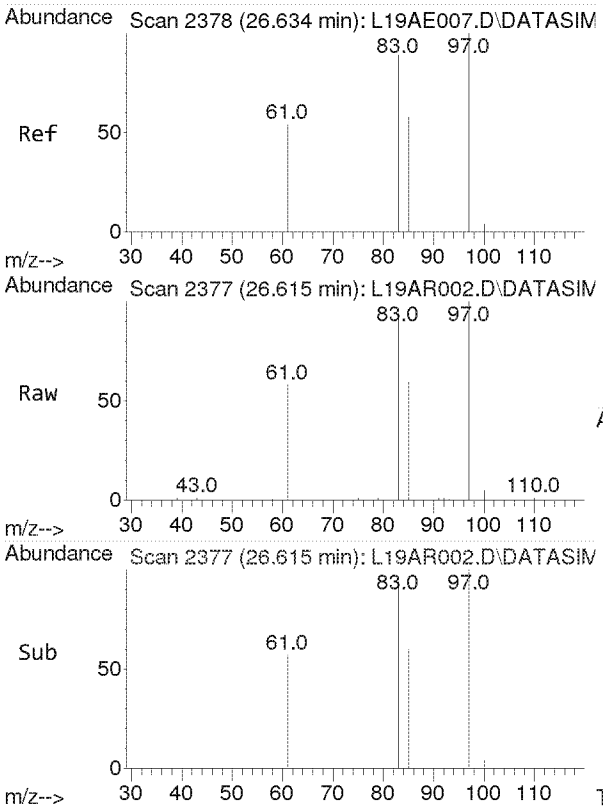


#41
trans-1,3-Dichloropropene
Concen: 2.258 ppbv
RT: 26.348 min Scan# 2363
Delta R.T. -0.019 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 75 Resp: 11053

Ion	Ratio	Lower	Upper
75	100		
39	45.4	39.0	58.6

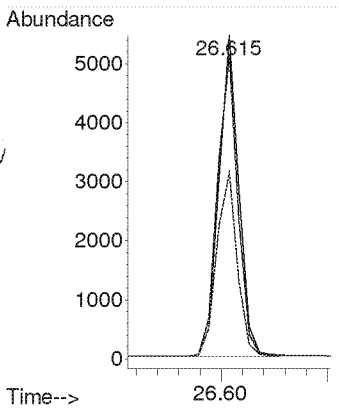




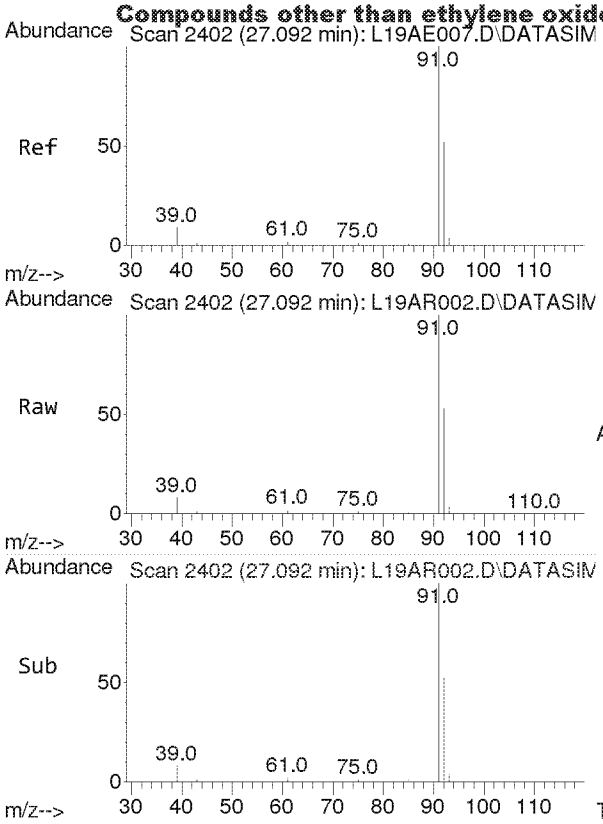
#42
1,1,2-Trichloroethane
Concen: 2.329 ppbv
RT: 26.615 min Scan# 2377
Delta R.T. -0.019 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 97 Resp: 14157

Ion	Ratio	Lower	Upper
97	100		
83	96.0	77.3	115.9
61	59.4	49.1	73.7



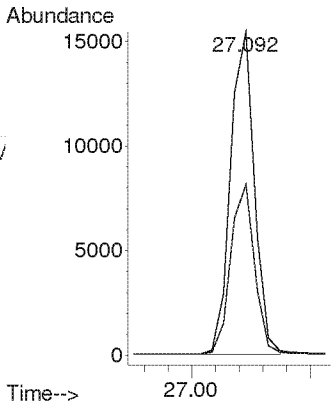
Compounds other than ethylene oxide were not quantitated.

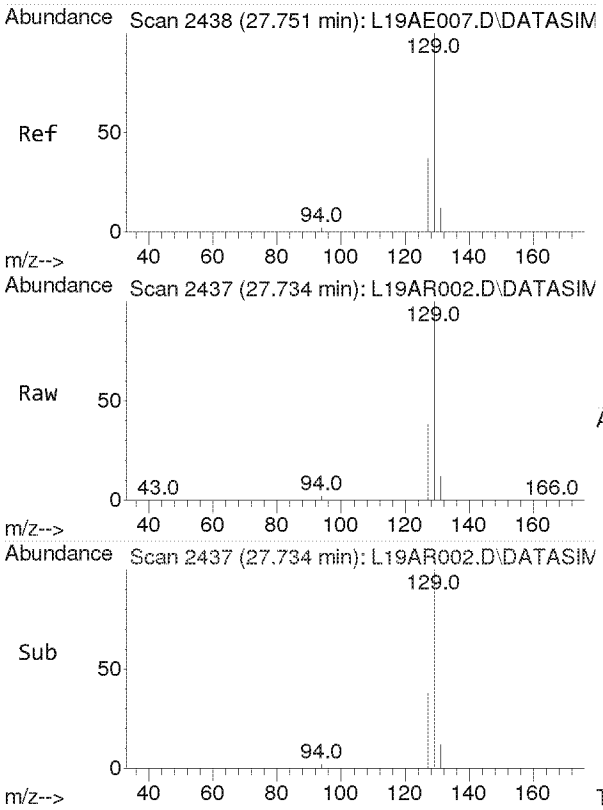


#44
Toluene
Concen: 2.374 ppbv
RT: 27.092 min Scan# 2402
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 91 Resp: 42898

Ion	Ratio	Lower	Upper
91	100		
92	52.6	42.0	63.0

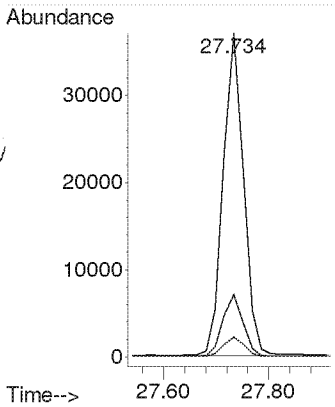




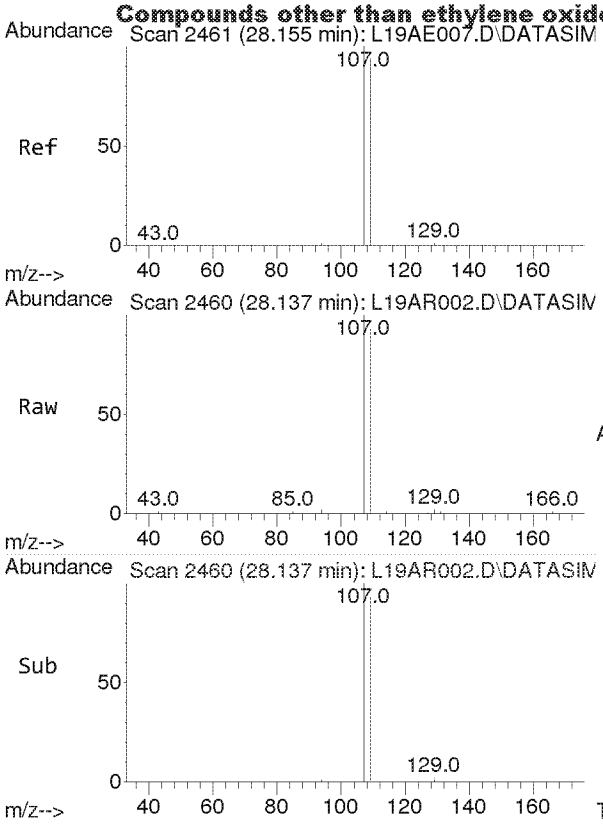
#45
Dibromochloromethane
Concen: 2.184 ppbv
RT: 27.734 min Scan# 2437
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:129 Resp: 99018

Ion	Ratio	Lower	Upper
129	100		
127	19.2	15.4	23.0
131	6.1	4.8	7.2



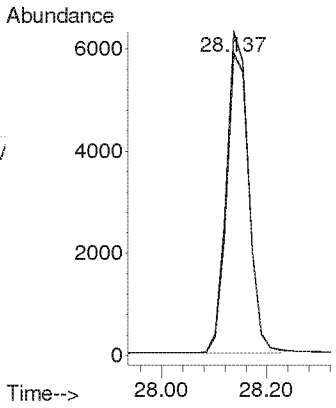
Compounds other than ethylene oxide were not quantitated.

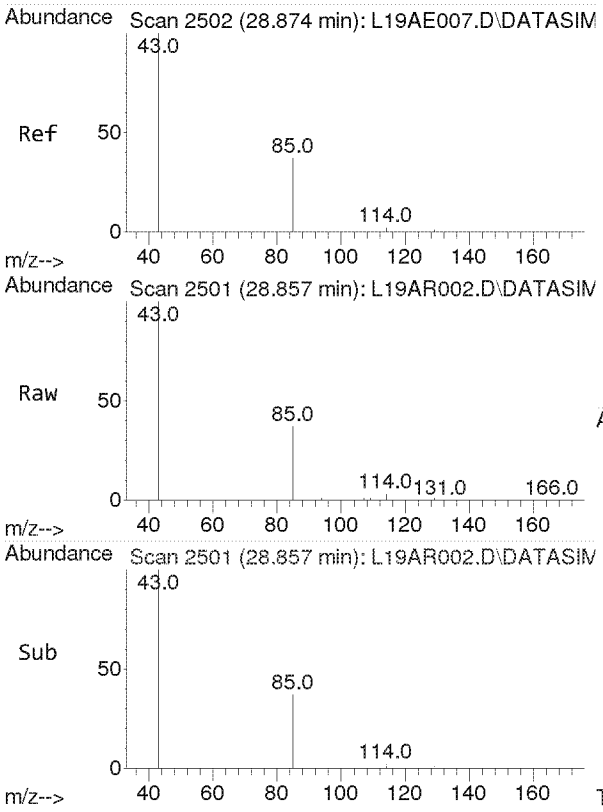


#46
1,2-Dibromoethane
Concen: 2.227 ppbv
RT: 28.137 min Scan# 2460
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:107 Resp: 18296

Ion	Ratio	Lower	Upper
107	100		
109	94.6	75.4	113.2

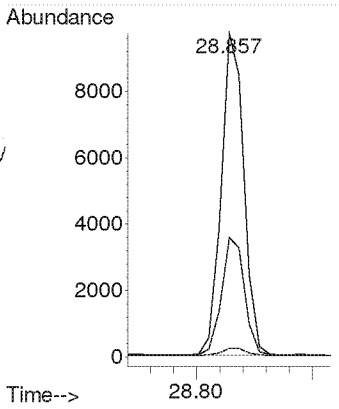




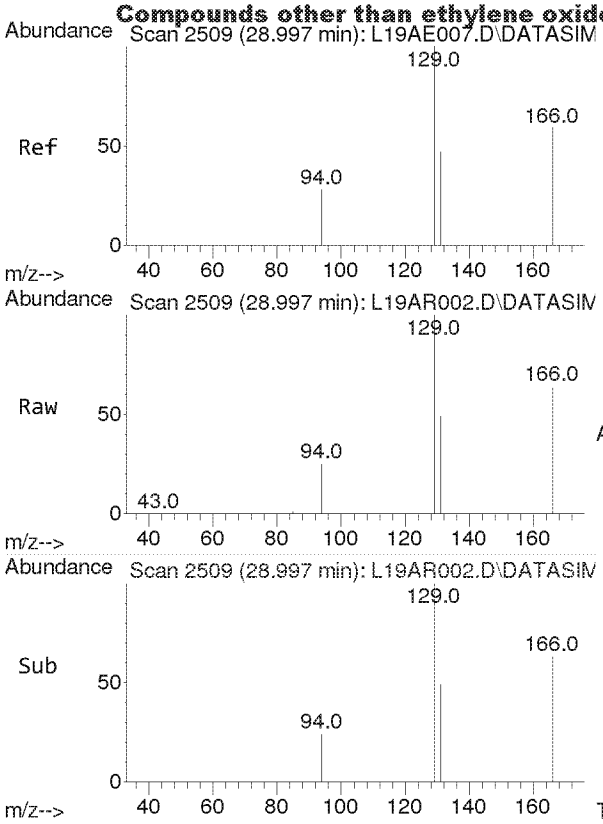
#47
n-Octane
Concen: 2.375 ppbv
RT: 28.857 min Scan# 2501
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 43 Resp: 26551

Ion	Ratio	Lower	Upper
43	100		
85	37.1	29.3	43.9
114	2.2	1.8	2.8



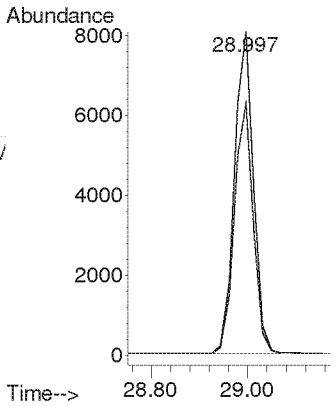
Compounds other than ethylene oxide were not quantitated.

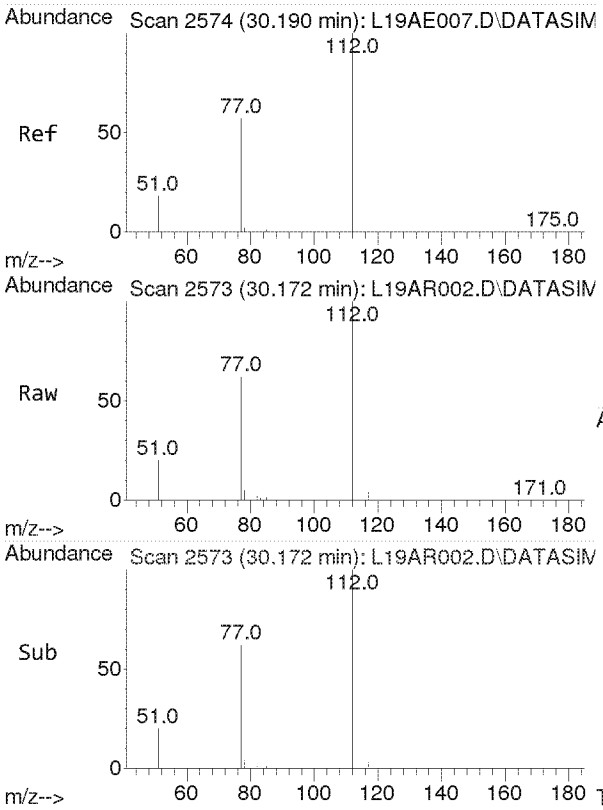


#48
Tetrachloroethylene
Concen: 2.398 ppbv
RT: 28.997 min Scan# 2509
Delta R.T. -0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:166 Resp: 22049

Ion	Ratio	Lower	Upper
166	100		
131	77.9	62.6	93.8

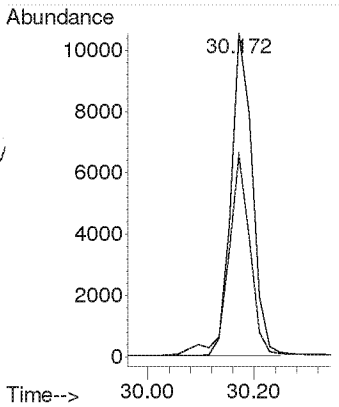




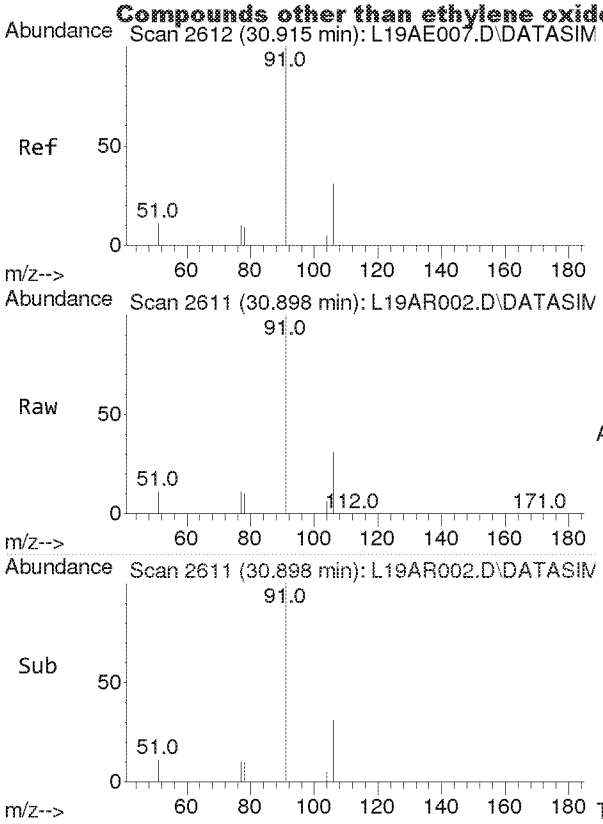
#49
Chlorobenzene
Concen: 2.289 ppbv
RT: 30.172 min Scan# 2573
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:112 Resp: 29210

Ion	Ratio	Lower	Upper
112	100		
77	61.5	49.0	73.4



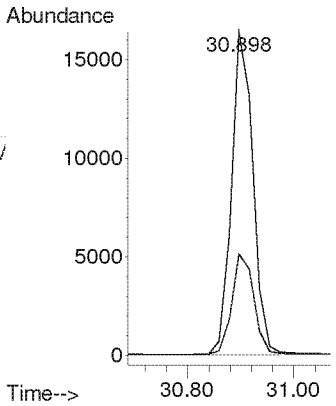
Compounds other than ethylene oxide were not quantitated.

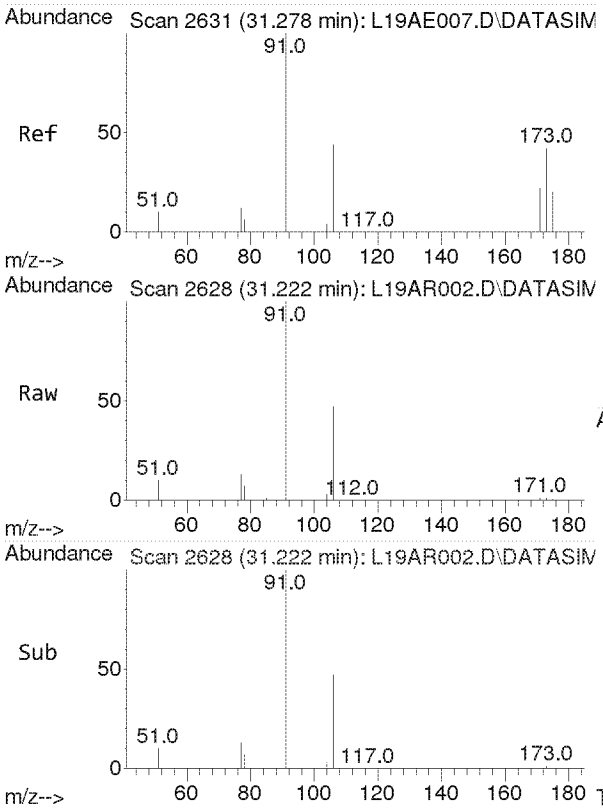


#50
Ethylbenzene
Concen: 2.378 ppbv
RT: 30.898 min Scan# 2611
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 91 Resp: 45953

Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.4	38.0

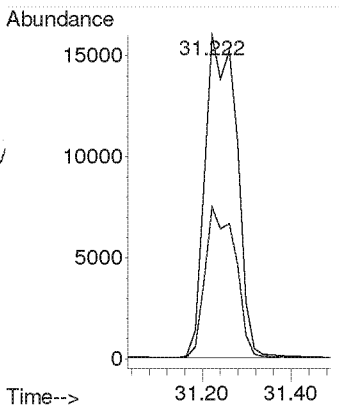




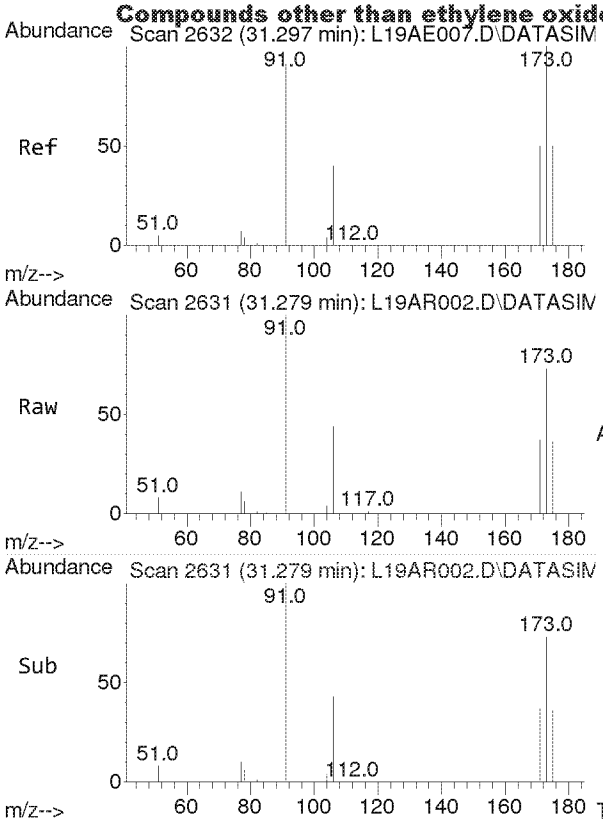
#51
m,p-Xylene
Concen: 4.689 ppbv
RT: 31.222 min Scan# 2628
Delta R.T. -0.056 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 91 Resp: 78777

Ion	Ratio	Lower	Upper
91	100		
106	44.7	35.7	53.5



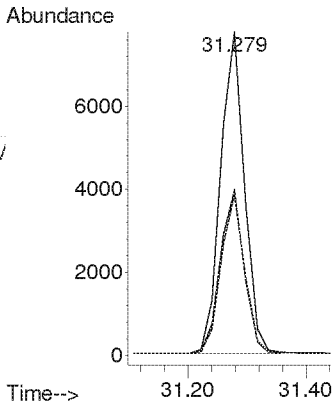
Compounds other than ethylene oxide were not quantitated.

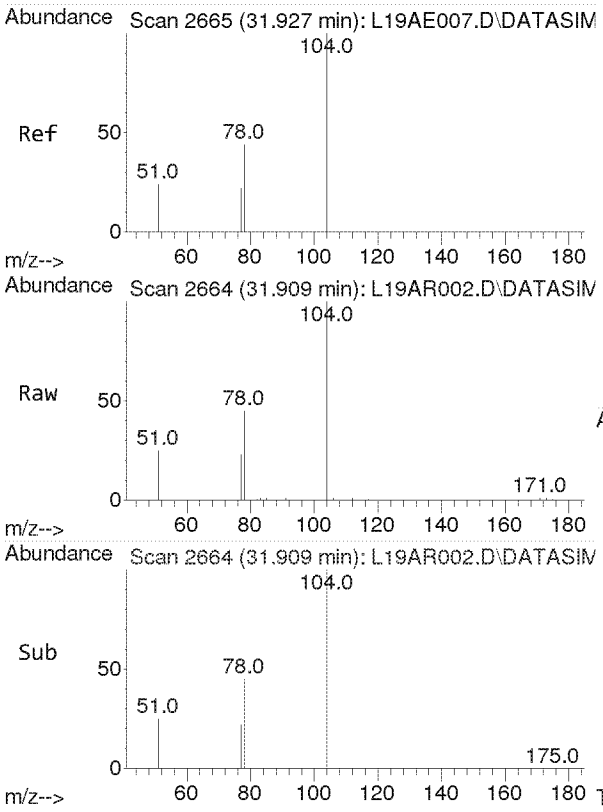


#52
Bromoform
Concen: 2.199 ppbv
RT: 31.279 min Scan# 2631
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:173 Resp: 21611

Ion	Ratio	Lower	Upper
173	100		
171	51.0	41.1	61.7
175	49.0	39.1	58.7

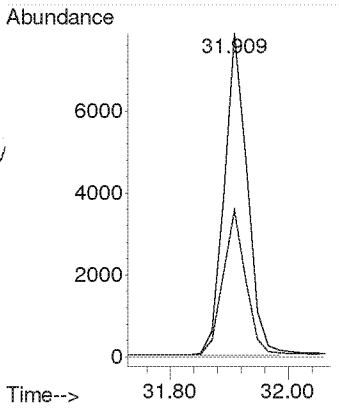




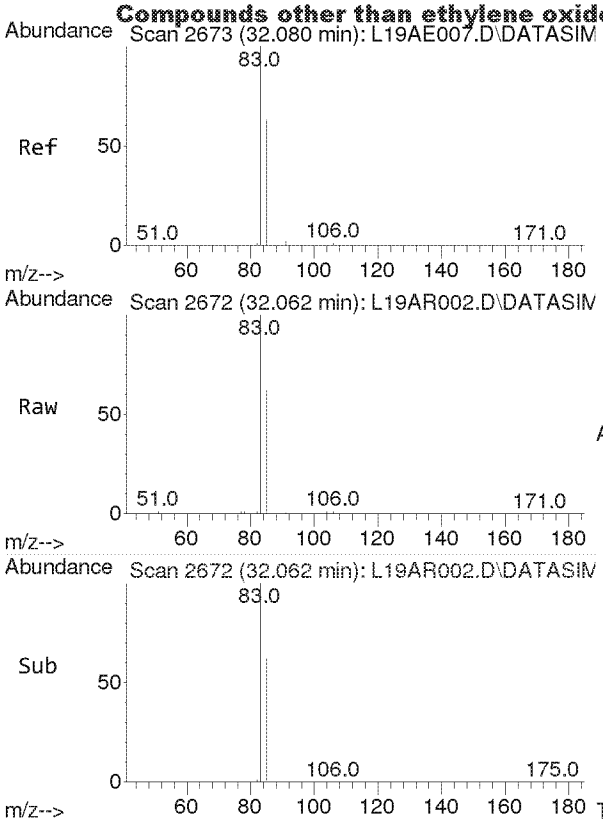
#53
Styrene
Concen: 2.268 ppbv
RT: 31.909 min Scan# 2664
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:104 Resp: 21031

Ion	Ratio	Lower	Upper
104	100		
78	44.6	36.6	55.0
103	0.0	0.0	0.0



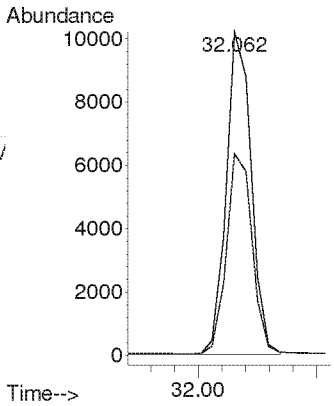
Compounds other than ethylene oxide were not quantitated.

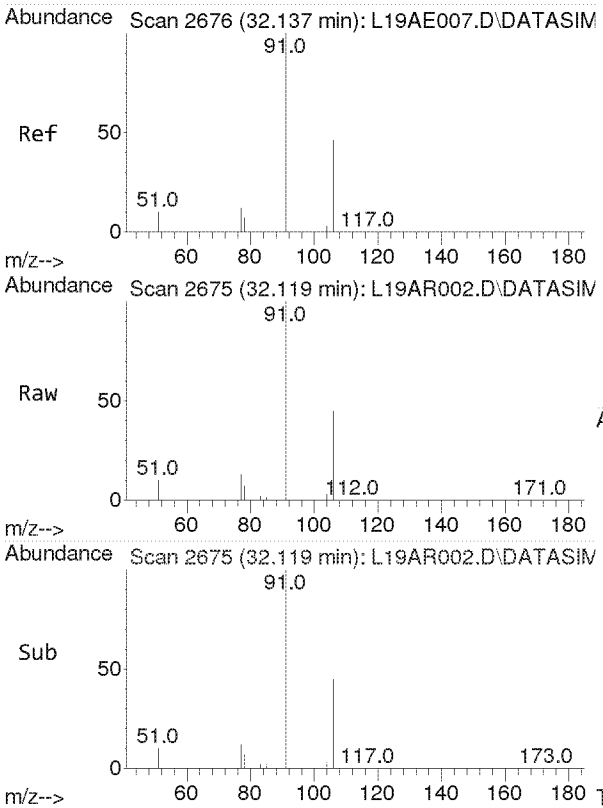


#54
1,1,2,2-Tetrachloroethane
Concen: 2.406 ppbv
RT: 32.062 min Scan# 2672
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 83 Resp: 29545

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.2	76.8

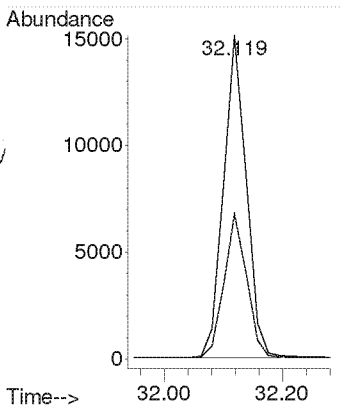




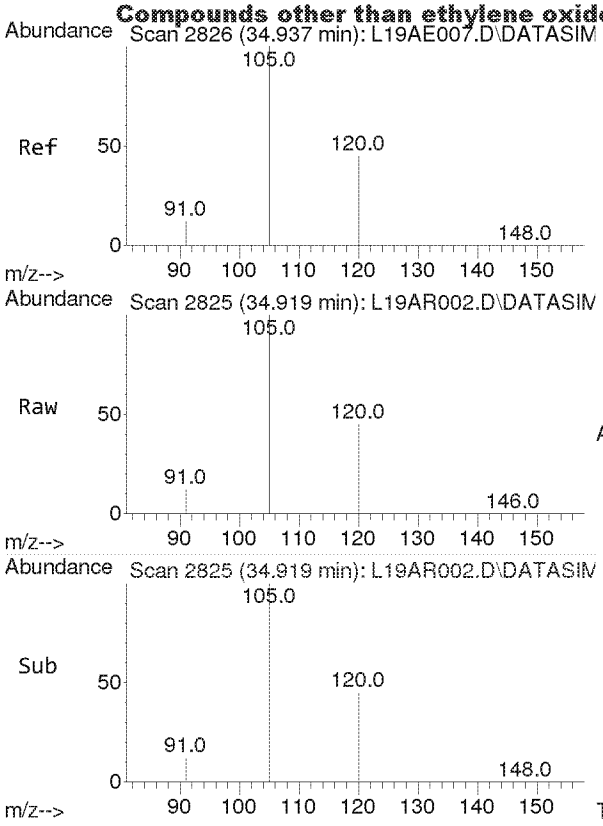
#55
o-Xylene
Concen: 2.477 ppbv
RT: 32.119 min Scan# 2675
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion: 91 Resp: 40130

Ion	Ratio	Lower	Upper
91	100		
106	44.6	35.8	53.8



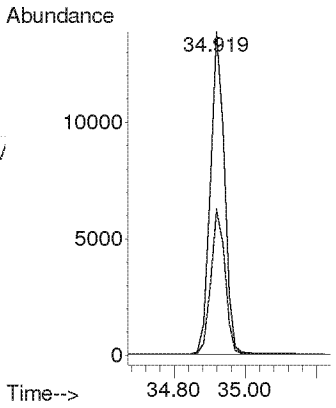
Compounds other than ethylene oxide were not quantitated.

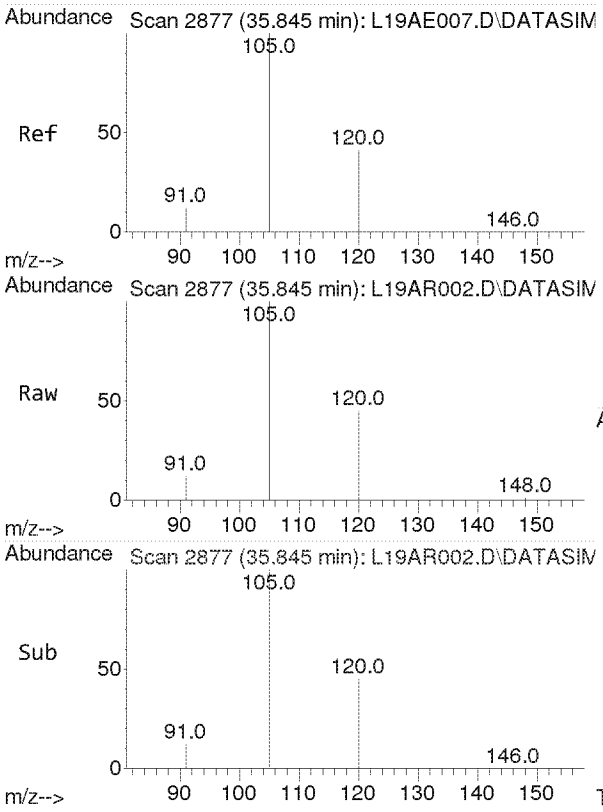


#56
1,3,5-Trimethylbenzene
Concen: 2.369 ppbv
RT: 34.919 min Scan# 2825
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:105 Resp: 37631

Ion	Ratio	Lower	Upper
105	100		
120	45.1	36.0	54.0

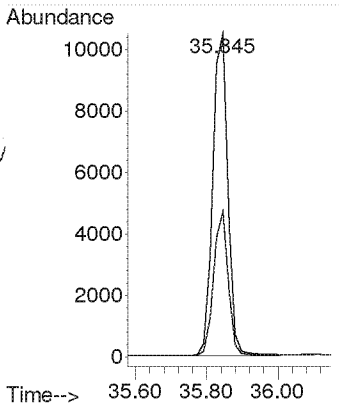




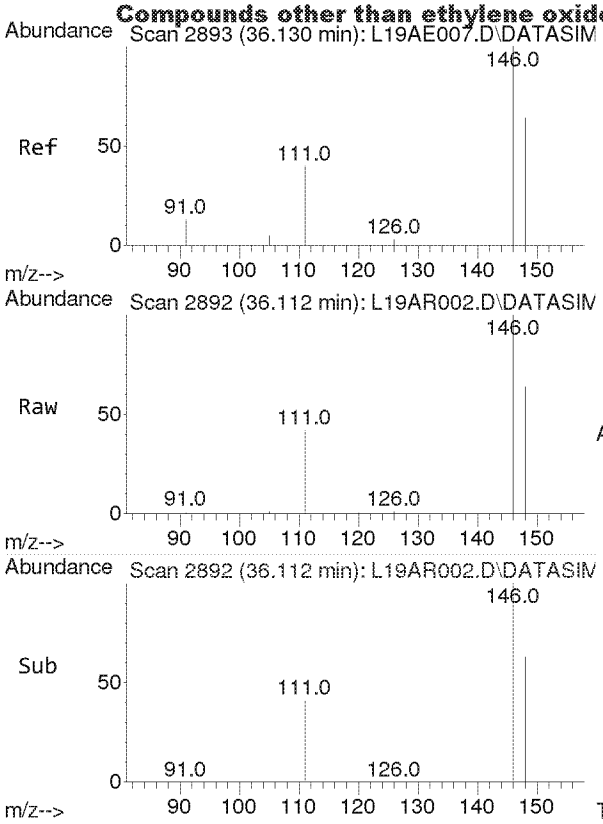
#57
1,2,4-Trimethylbenzene
Concen: 2.222 ppbv
RT: 35.845 min Scan# 2877
Delta R.T. 0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:105 Resp: 30737

Ion	Ratio	Lower	Upper
105	100		
120	43.0	34.3	51.5



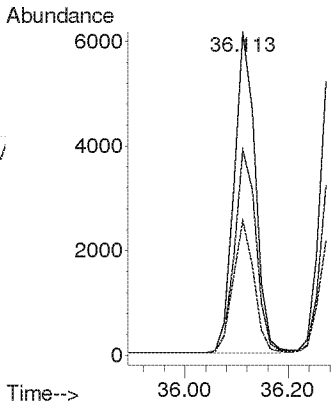
Compounds other than ethylene oxide were not quantitated.

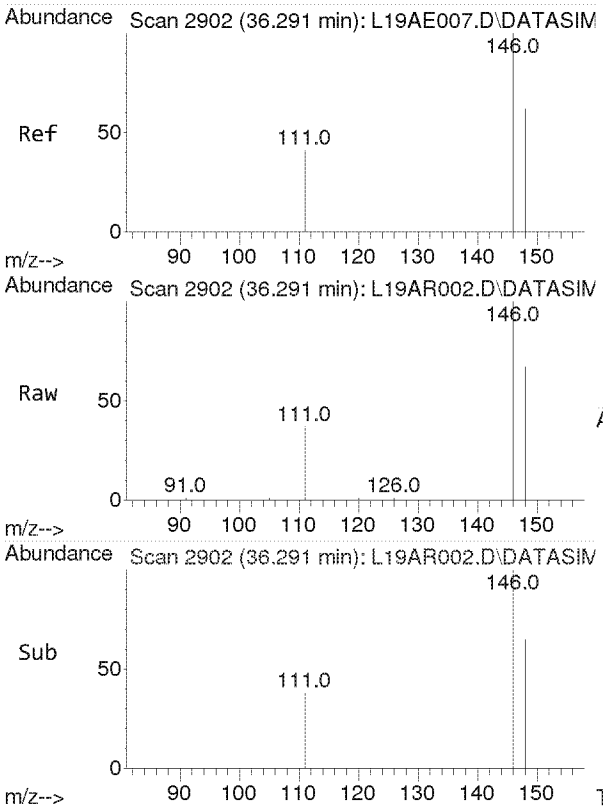


#58
m-Dichlorobenzene
Concen: 1.820 ppbv
RT: 36.112 min Scan# 2892
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:146 Resp: 17309

Ion	Ratio	Lower	Upper
146	100		
148	63.9	51.3	76.9
111	40.7	32.4	48.6

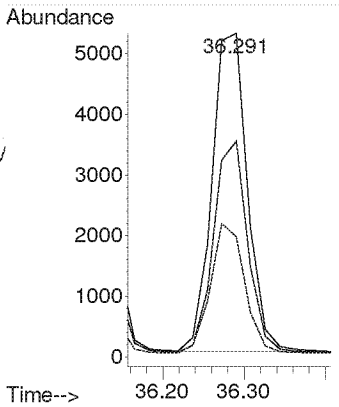




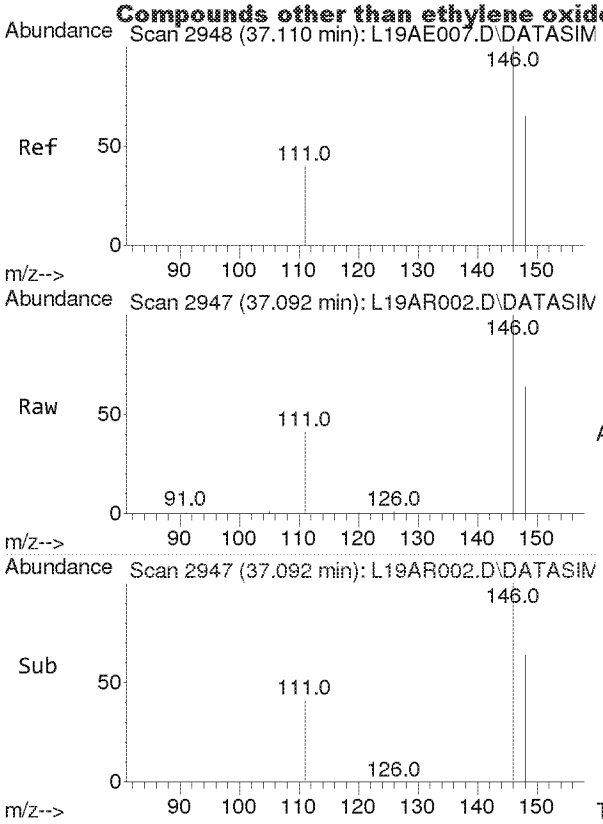
#59
p-Dichlorobenzene
Concen: 2.066 ppbv
RT: 36.291 min Scan# 2902
Delta R.T. 0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:146 Resp: 15829

Ion	Ratio	Lower	Upper
146	100		
148	64.1	51.1	76.7
111	39.2	31.4	47.2



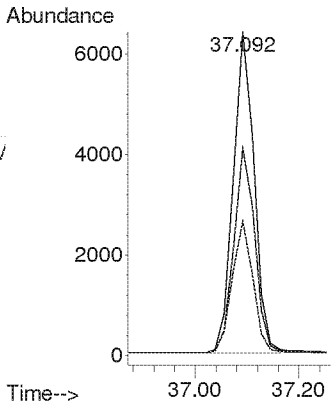
Compounds other than ethylene oxide were not quantitated.

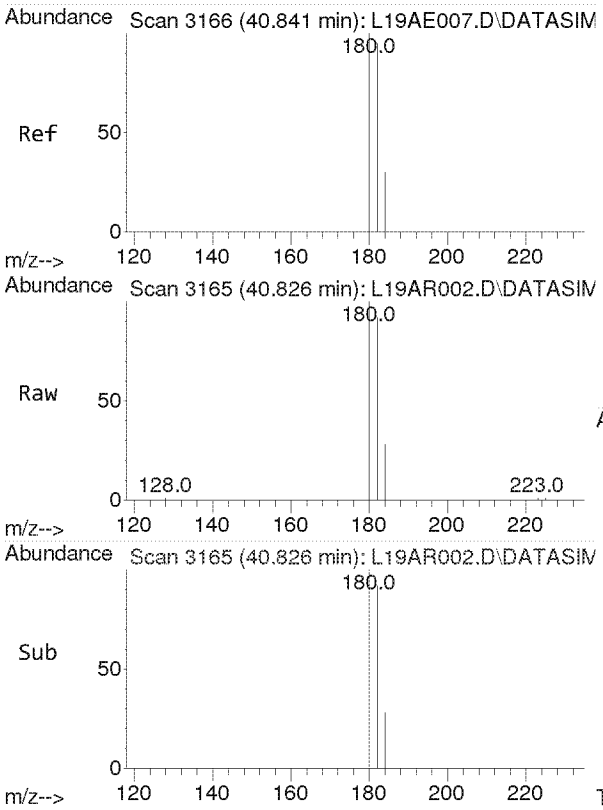


#60
o-Dichlorobenzene
Concen: 2.148 ppbv
RT: 37.092 min Scan# 2947
Delta R.T. -0.018 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:146 Resp: 17770

Ion	Ratio	Lower	Upper
146	100		
148	64.2	51.2	76.8
111	41.0	32.6	48.8

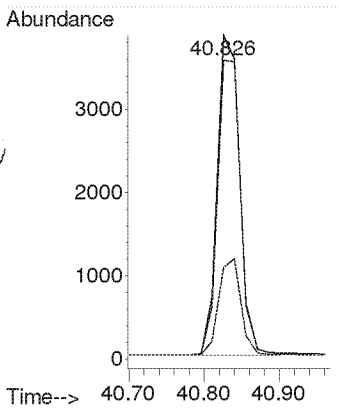




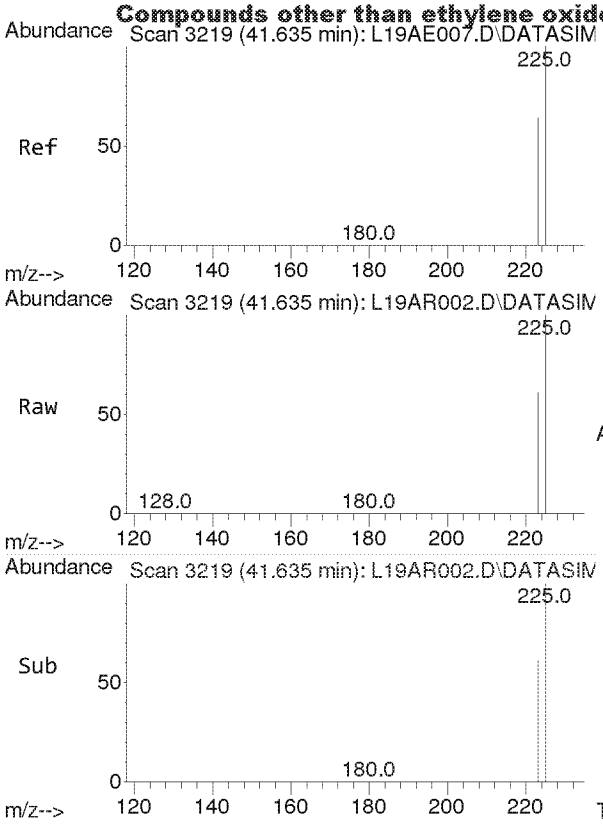
#61
1,2,4-Trichlorobenzene
Concen: 2.359 ppbv
RT: 40.826 min Scan# 3165
Delta R.T. -0.015 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:180 Resp: 7954

Ion	Ratio	Lower	Upper
180	100		
182	95.2	76.0	114.0
184	30.1	24.4	36.6



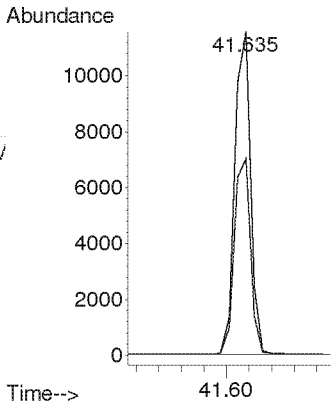
Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: 2.642 ppbv
RT: 41.635 min Scan# 3219
Delta R.T. 0.000 min
Lab File: L19AR002.D
Acq: 18 Jan 2019 11:43 am

Tgt Ion:225 Resp: 22603

Ion	Ratio	Lower	Upper
225	100		
223	62.4	49.9	74.9



Compounds other than ethylene oxide were not quantitated.

TO-15 Method Blank and Annual Canister Certification Blank

Analyst: [illegible] Date: 1-21-19

Reviewer: RMB Date: 1/31/19

Data File Name	L19AR004.D
Operator	MAH
Acq. Method File	9010002.M
Sample Name	b9a1806-BLK1
Misc Info	80 ML 8L13001

#	Name	Target Response	Amount (ppbv)	PASS*		Blank Criteria
1)	IS-Hexane-d14	56331		NA		NA
2)	Acetylene	0	0.000	Y		0.118
3)	Propylene	54	0.010	Y		0.192
4)	Dichlorodifluoromethane	0	0.000	Y		0.082
5)	Chloromethane	42	0.006	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	57	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	142536		NA		NA
29)	1,1,1-Trichloroethane	0	0.000	Y		0.041
30)	Benzene	55	0.003	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	411	0.017	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	109267		NA		NA
43)	Toluene	45	0.003	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	92	0.005	Y		0.077
50)	m,p-Xylene	45	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\L19AR\
Data File : L19AR004.D
Acq On : 18 Jan 2019 1:45 pm
Operator : MAH
Sample : b9a1806-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 23 08:53:05 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	56331	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	142536	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	109267	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	
3) Propylene	7.838	41	54	0.0101 ppbv #	54
4) Dichlorodifluoromethane	0.000	85	0	N.D.	
5) Chloromethane	9.758	50	42	0.0061 ppbv #	42
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	16.932	76	57	0.0026 ppbv #	75
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.	
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	22.535	78	55	0.0034 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	24.553	41	411	0.0169 ppbv #	88
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	27.094	91	45	0.0026 ppbv #	26
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	30.917	91	92	0.0049 ppbv #	43

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L19AR\
Data File : L19AR004.D
Acq On : 18 Jan 2019 1:45 pm
Operator : MAH
Sample : b9a1806-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 23 08:53:05 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

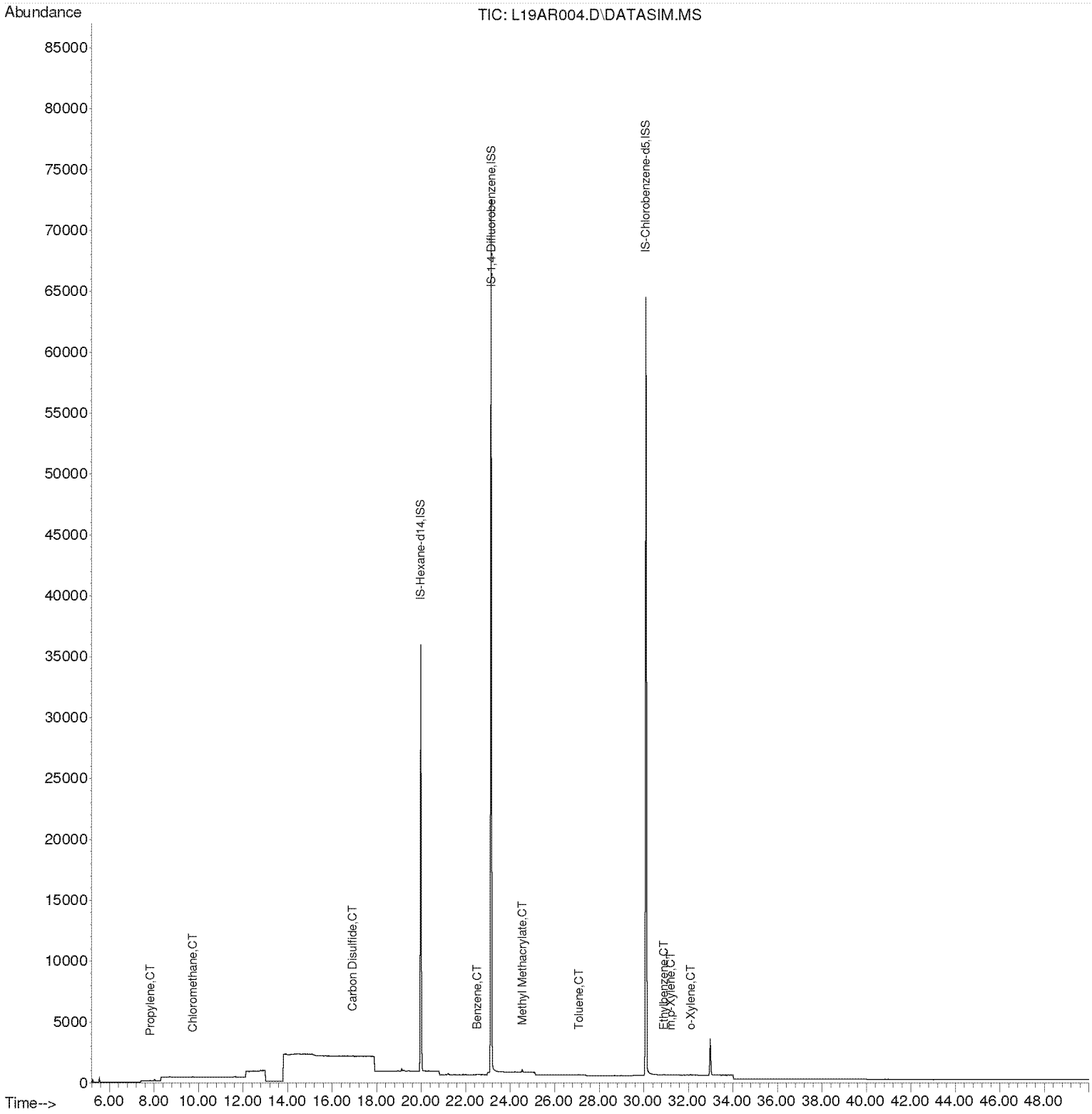
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	31.223	91	45	0.0028 ppbv #	31
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	32.120	91	105	0.0067 ppbv	100
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
57) 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

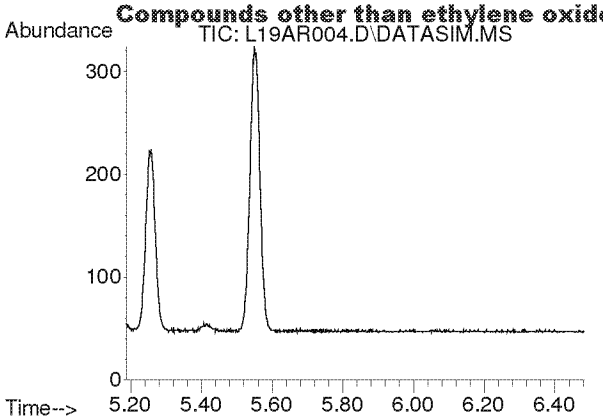
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR004.D
Acq On : 18 Jan 2019 1:45 pm
Operator : MAH
Sample : b9a1806-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 23 08:37:49 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



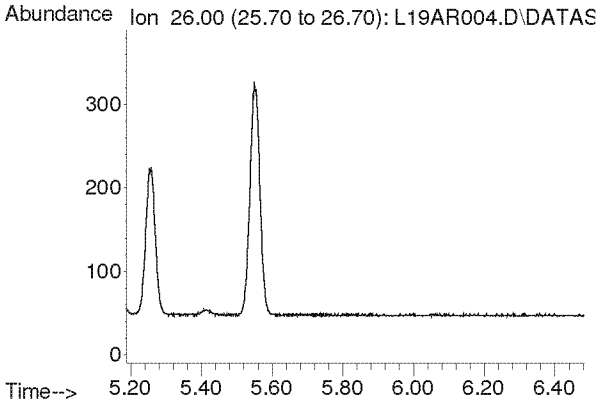
Compounds other than ethylene oxide were not quantitated.

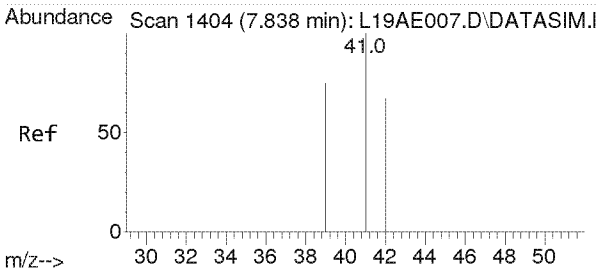


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 26

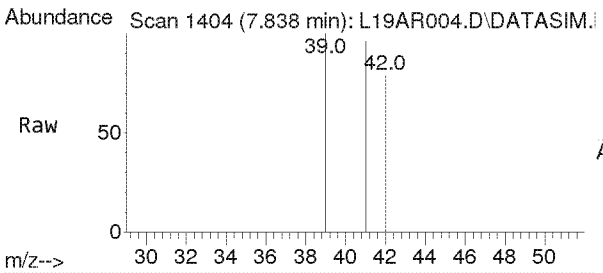


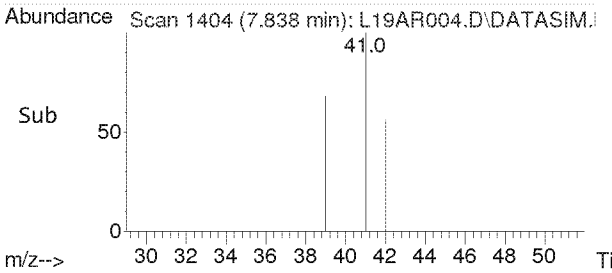


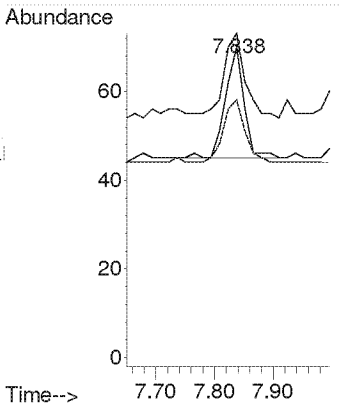
#3
Propylene
Concen: 0.010 ppbv
RT: 7.838 min Scan# 1404
Delta R.T. 0.000 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 41 Resp: 54

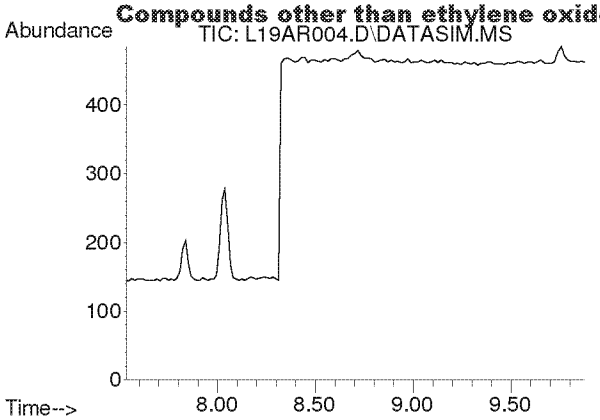
Ion	Ratio	Lower	Upper
41	100		
39	88.9	61.6	92.4
42	0.0	52.6	79.0#







Compounds other than ethylene oxide were not quantitated.

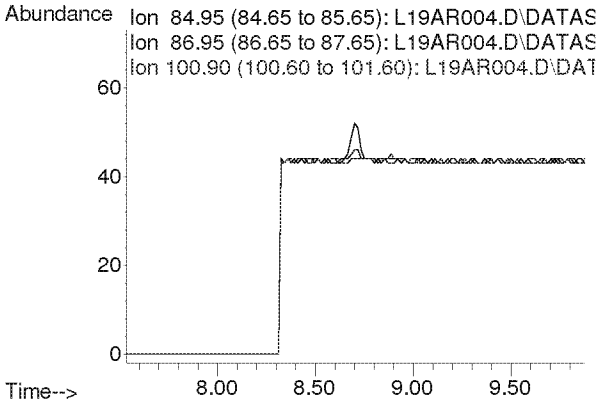


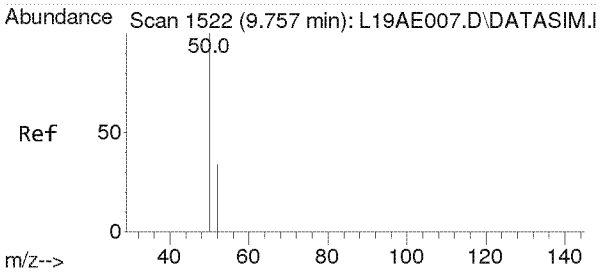
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9

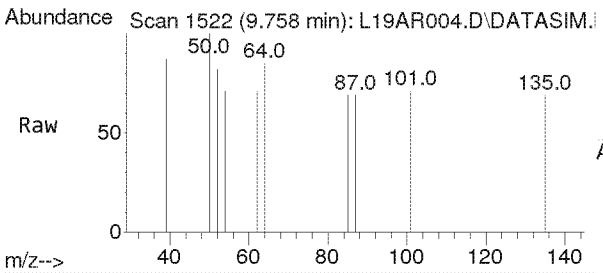


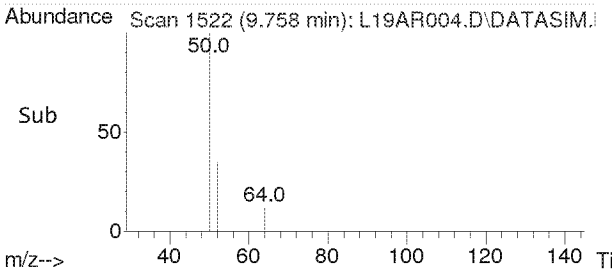


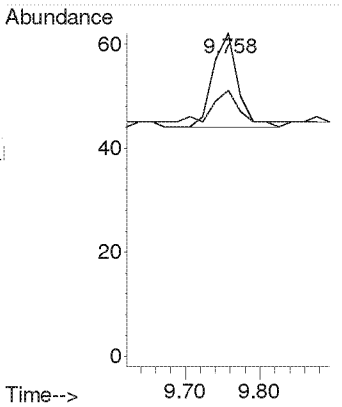
#5
Chloromethane
Concen: 0.006 ppbv
RT: 9.758 min Scan# 1522
Delta R.T. 0.000 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 50 Resp: 42

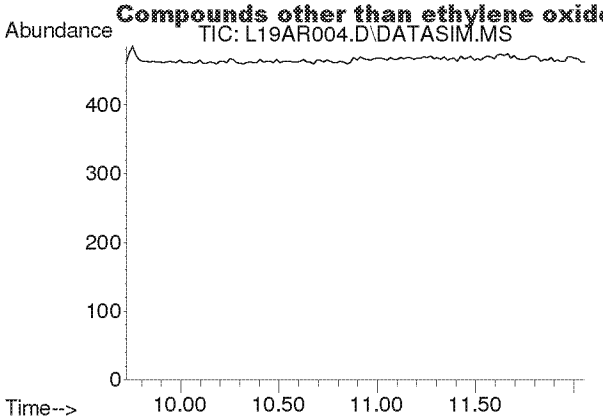
Ion	Ratio	Lower	Upper
50	100		
52	0.0	25.9	38.9#







Compounds other than ethylene oxide were not quantitated.

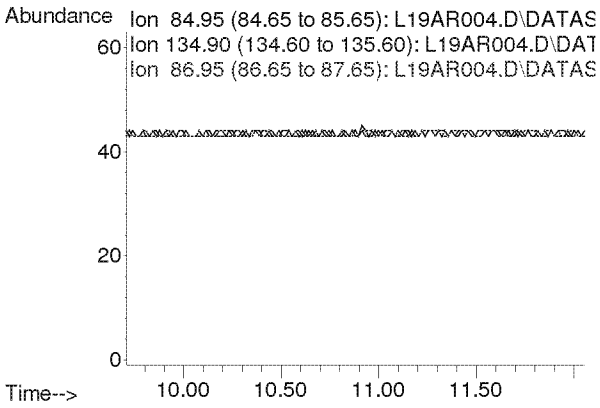


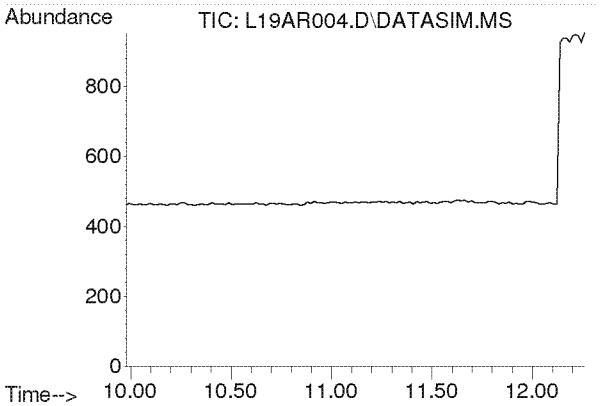
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



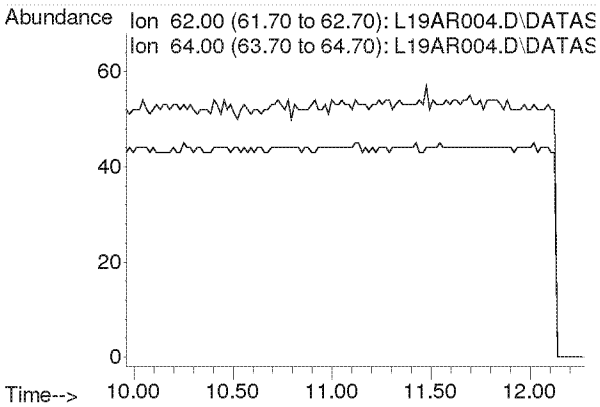


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

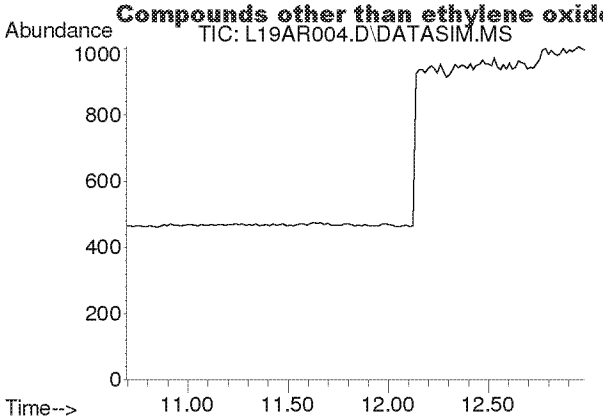
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

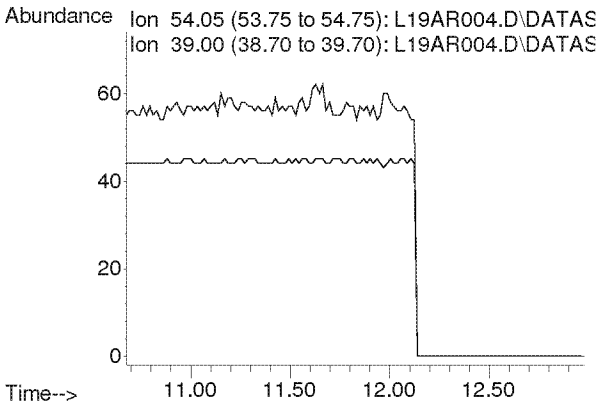


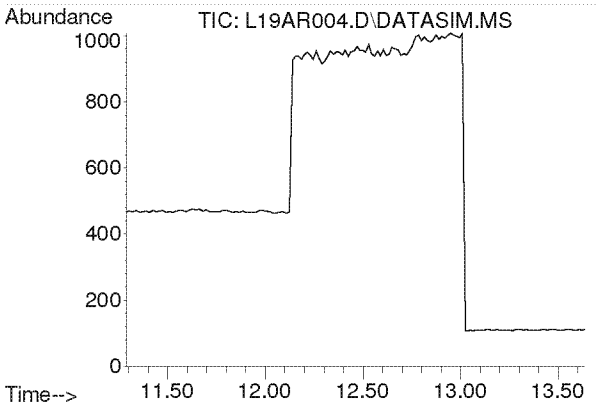
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



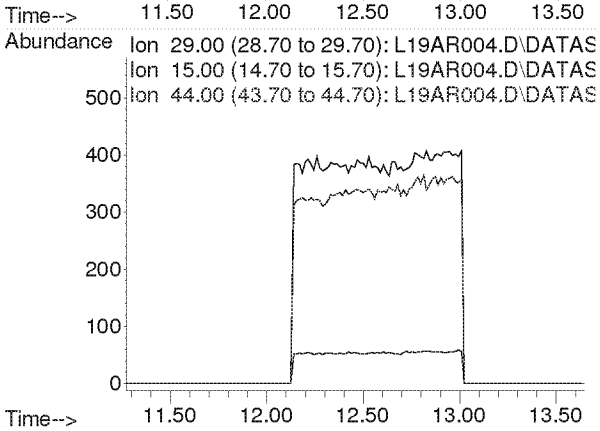


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

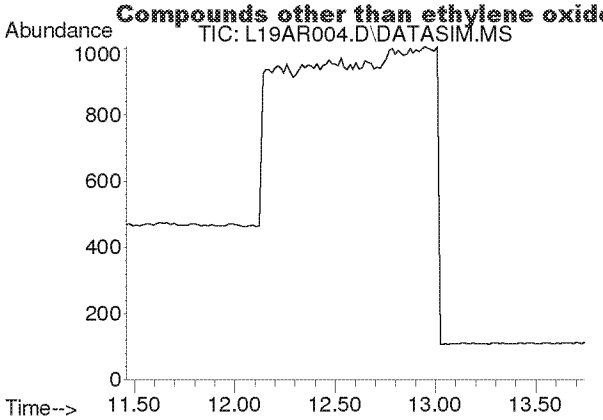
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

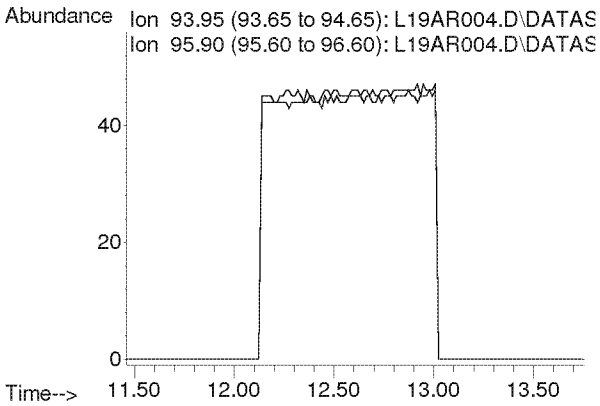


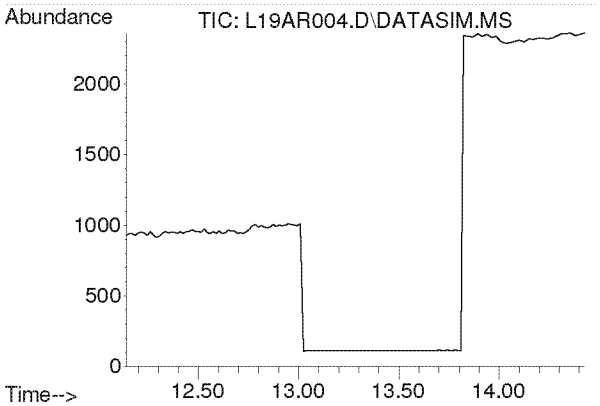
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



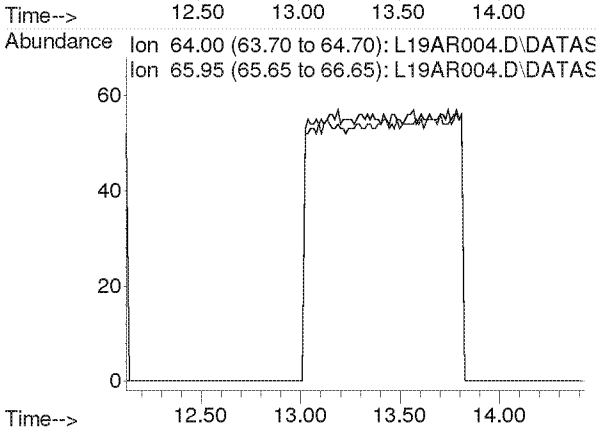


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

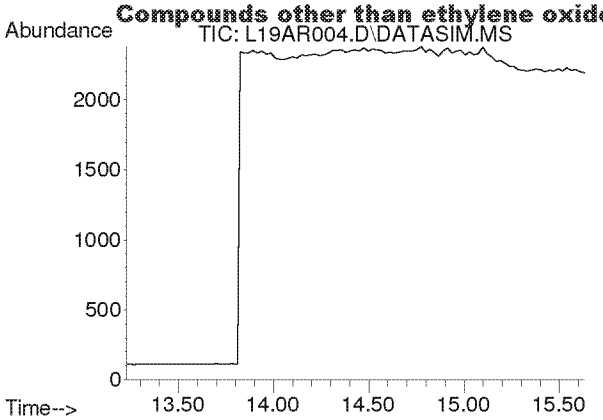
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

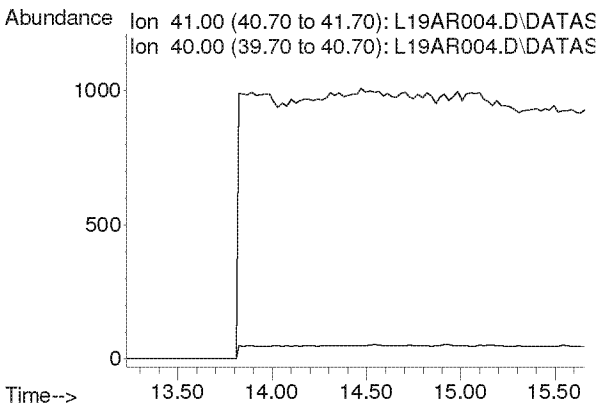


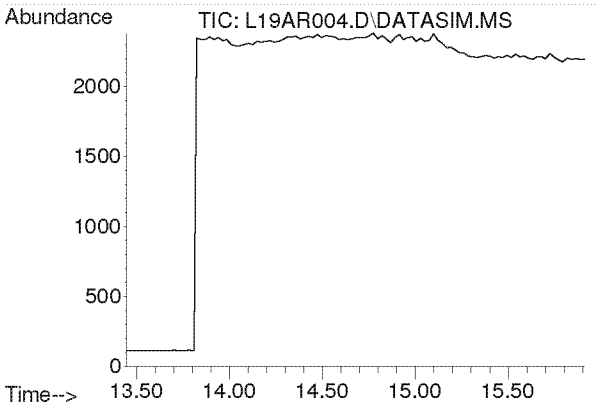
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



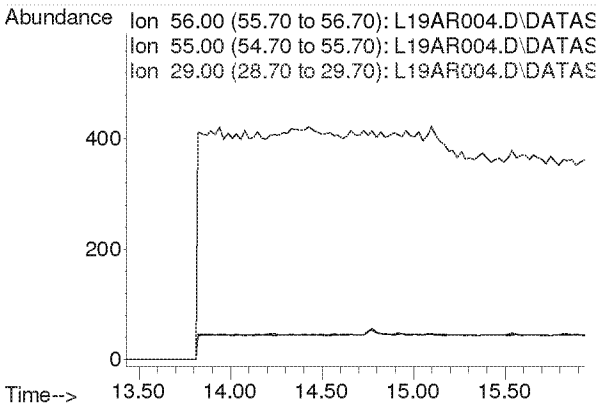


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

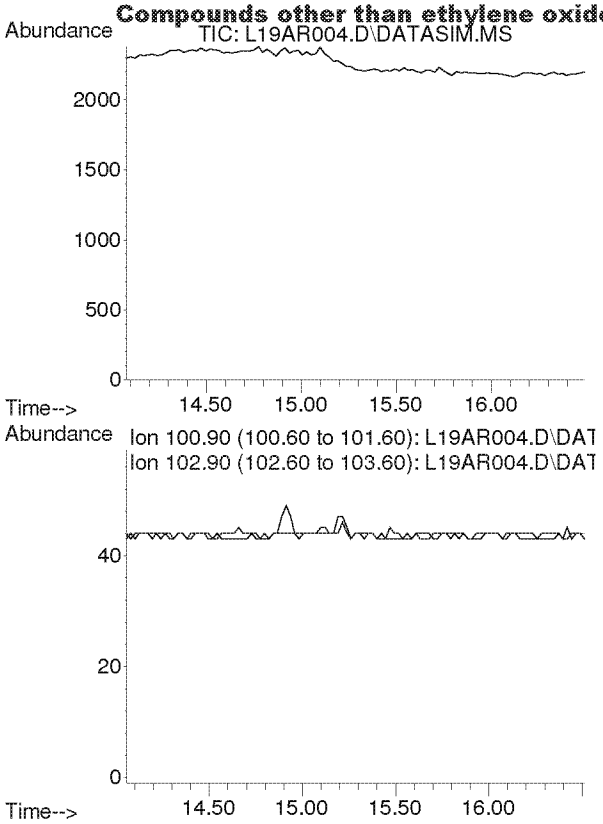
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

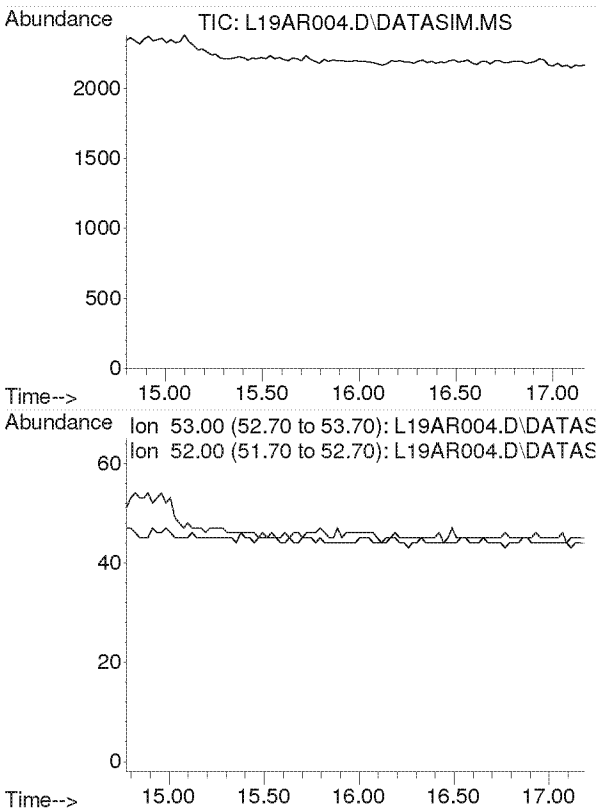


#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



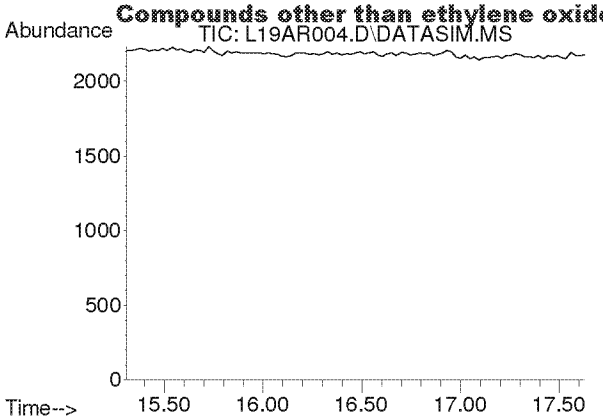
#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7

Compounds other than ethylene oxide were not quantitated.

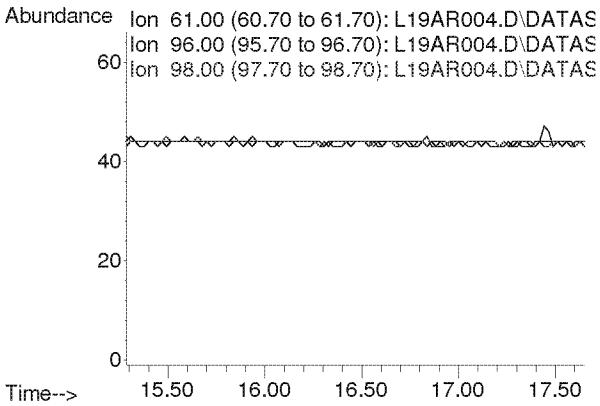


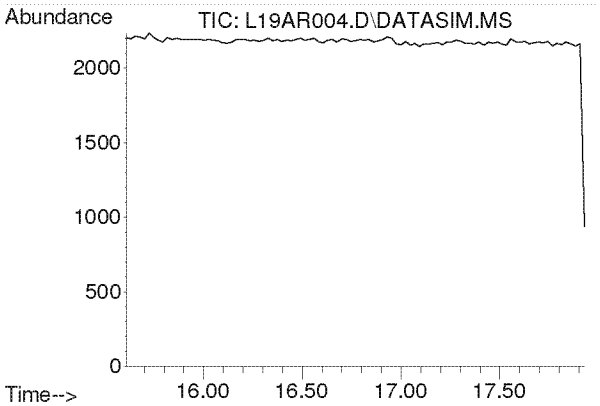
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



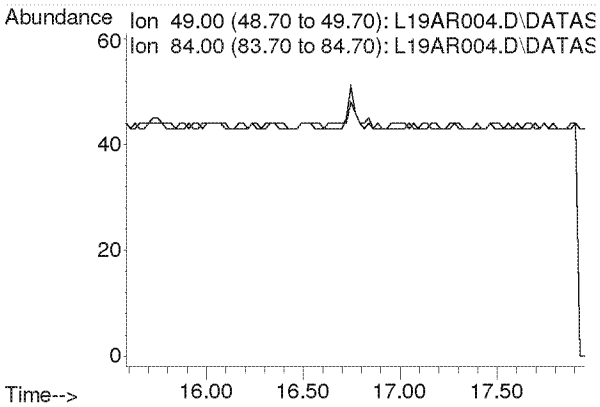


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

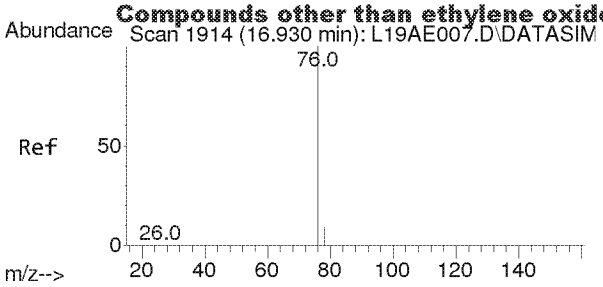
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



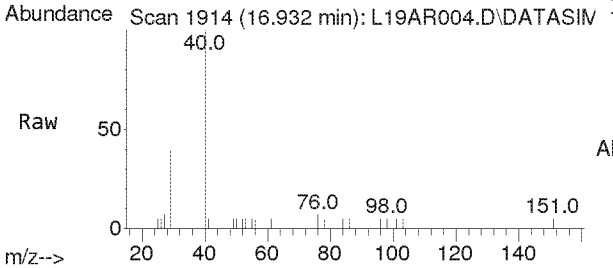
Compounds other than ethylene oxide were not quantitated.

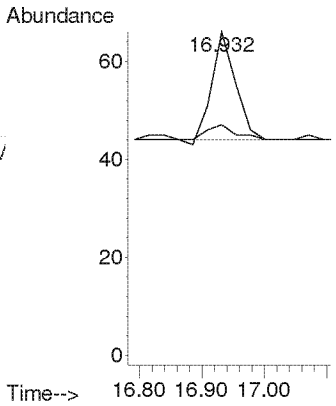


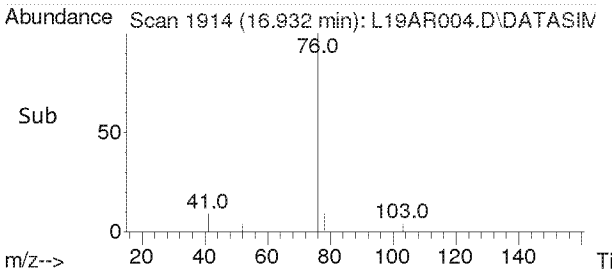
#18
Carbon Disulfide
Concen: 0.003 ppbv
RT: 16.932 min Scan# 1914
Delta R.T. 0.002 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

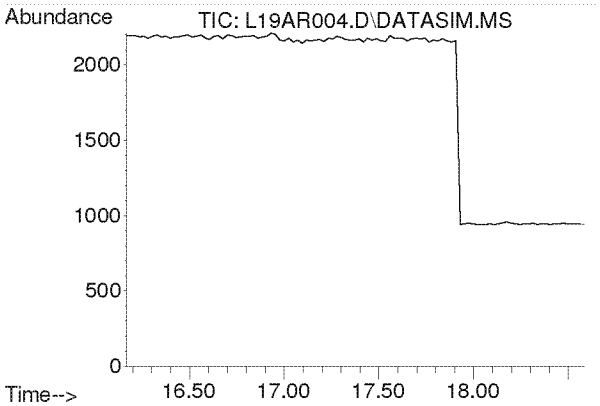
Tgt Ion: 76 Resp: 57

Ion	Ratio	Lower	Upper
76	100		
78	0.0	7.2	10.8#







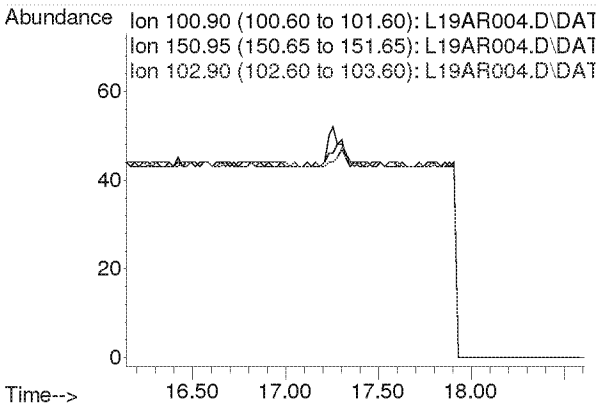


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

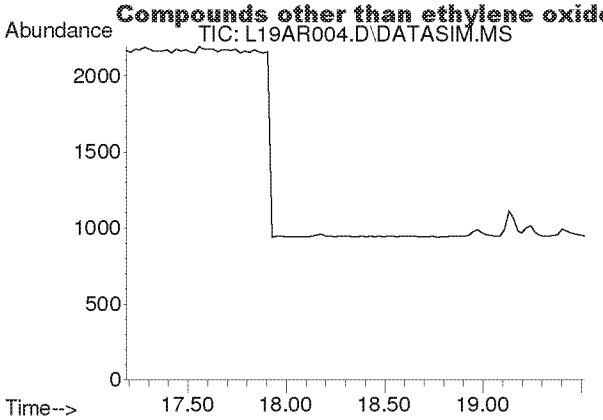
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

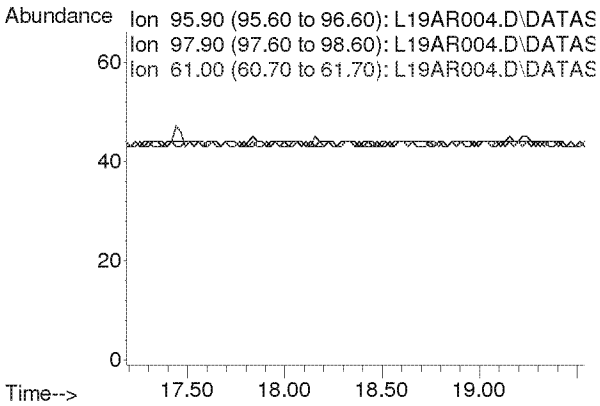


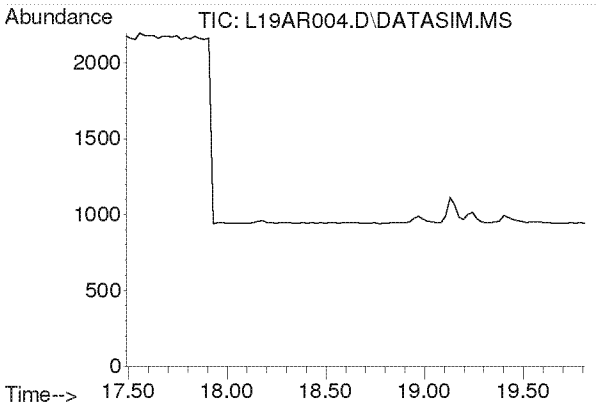
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



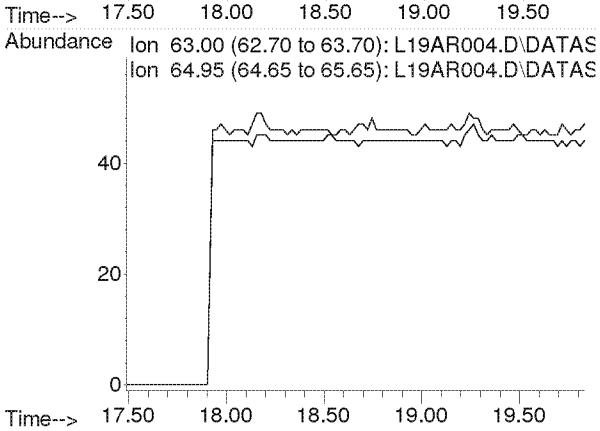


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

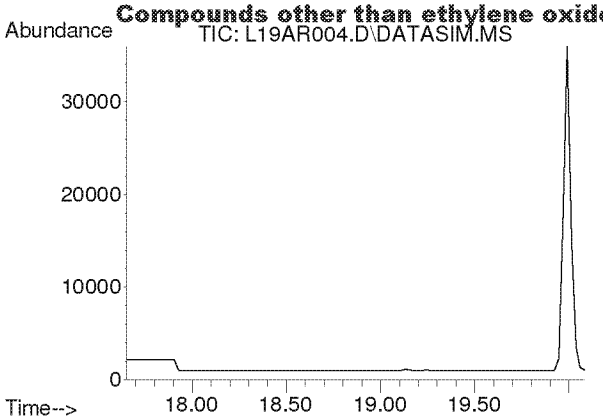
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

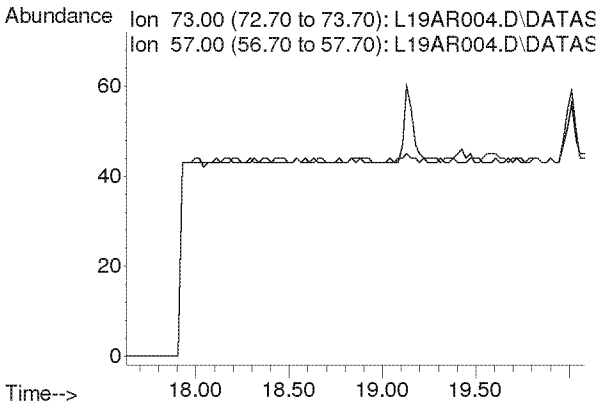


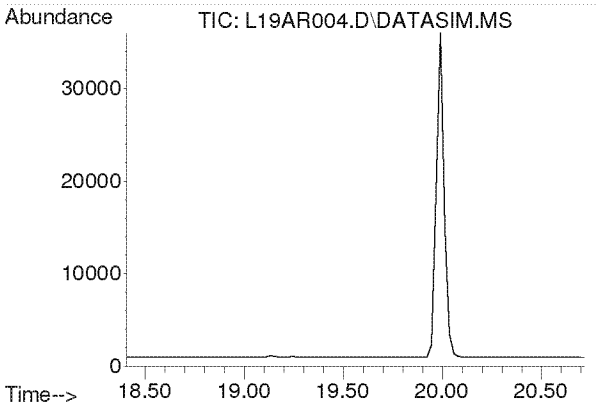
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



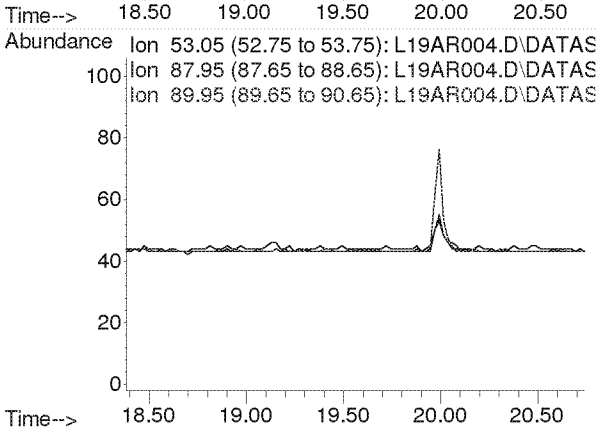


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

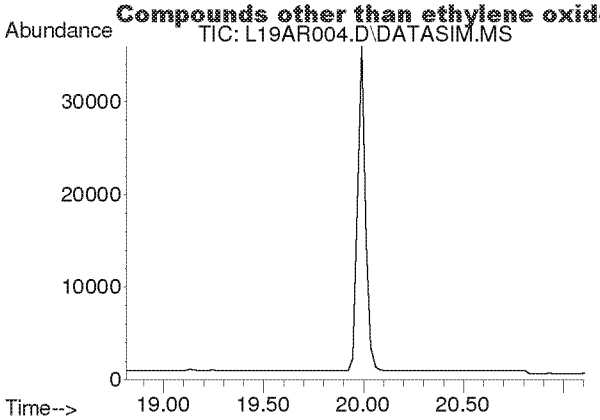
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

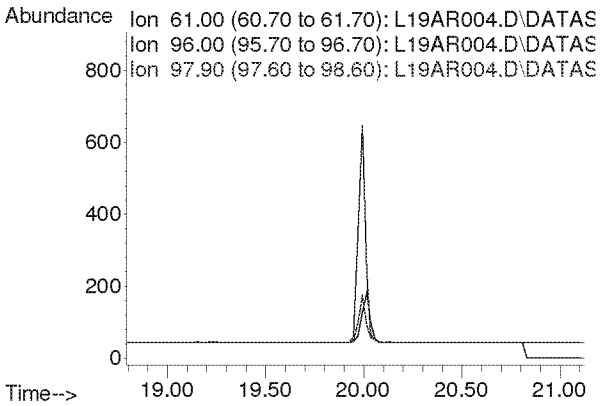


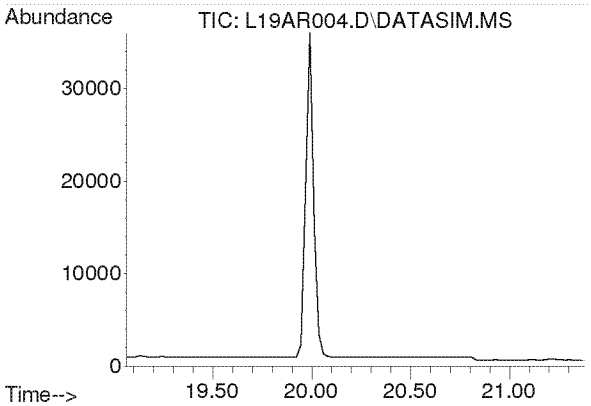
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



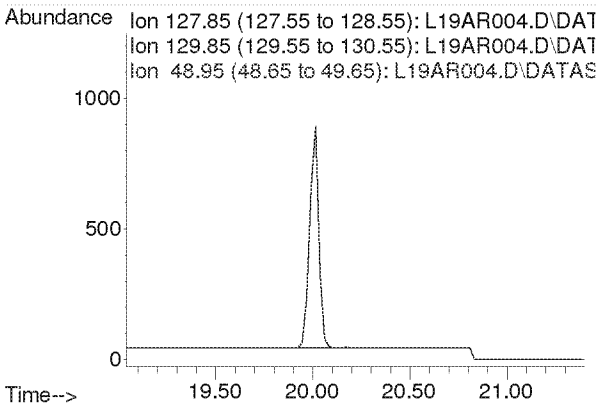


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

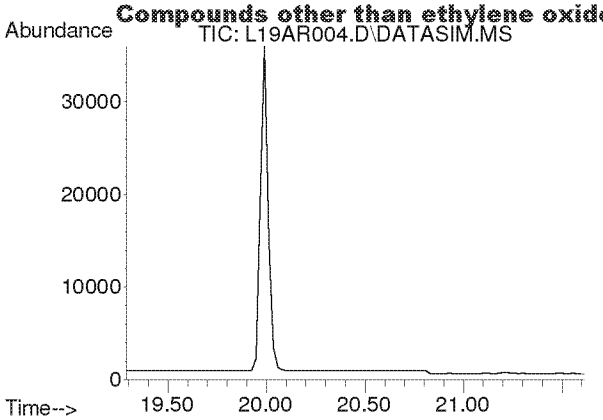
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

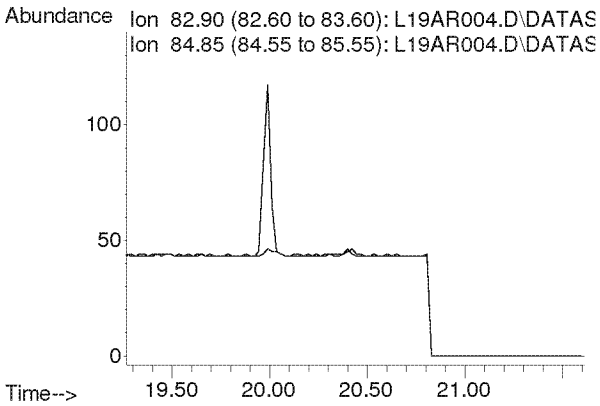


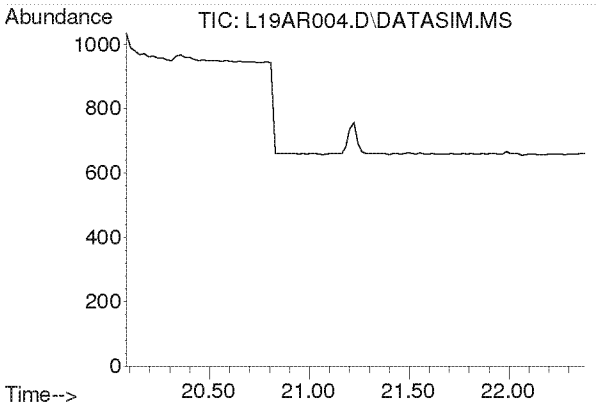
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



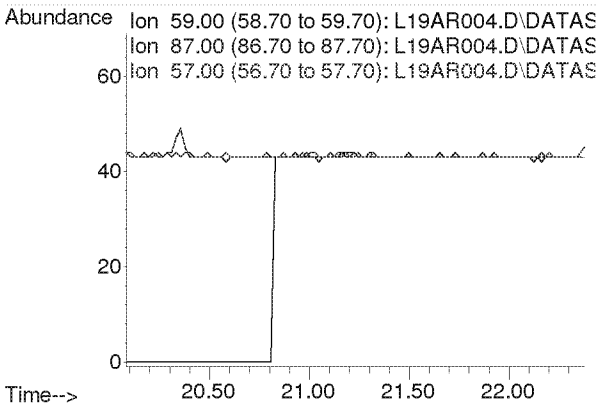


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

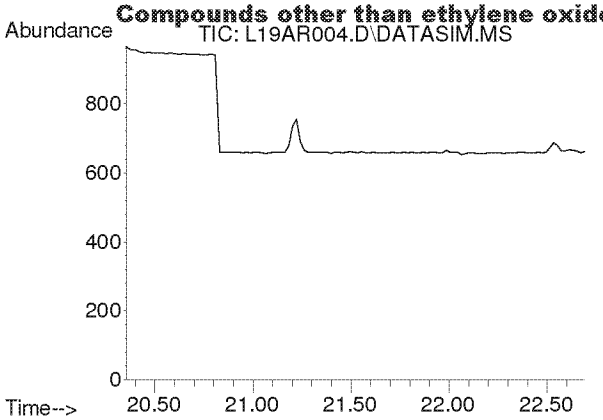
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

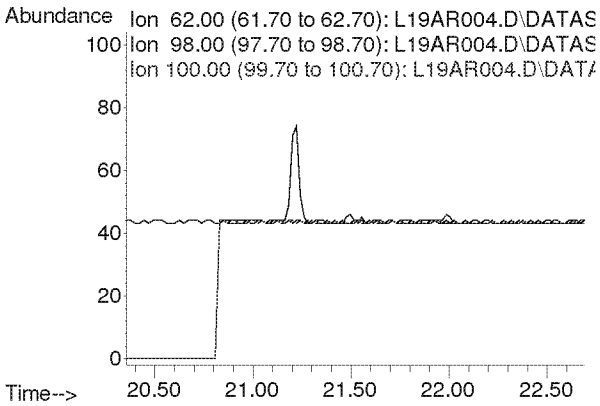


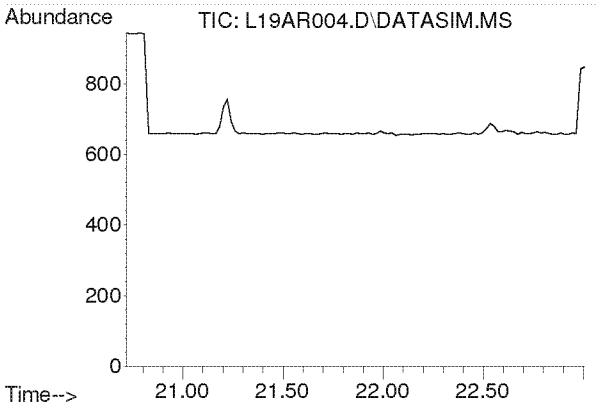
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



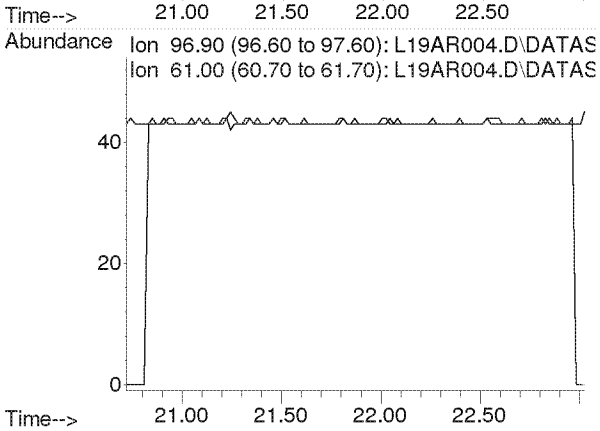


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

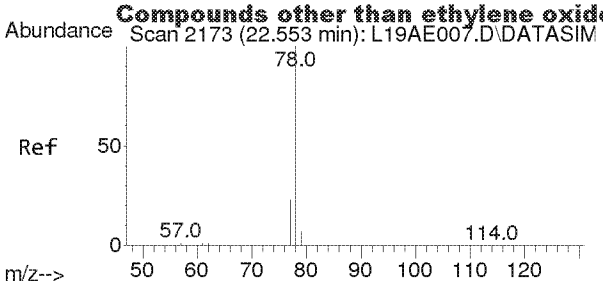
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



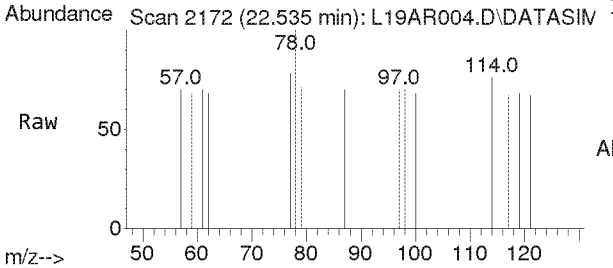
Compounds other than ethylene oxide were not quantitated.

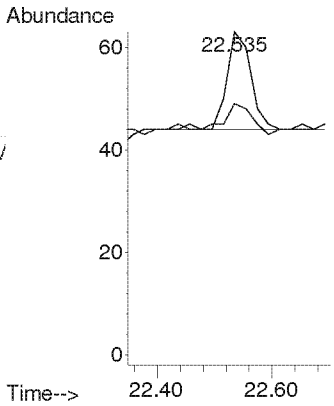


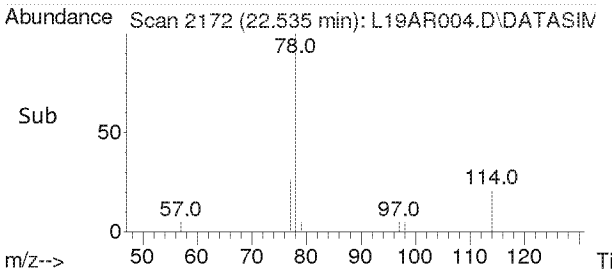
#31
Benzene
Concen: 0.003 ppbv
RT: 22.535 min Scan# 2172
Delta R.T. -0.018 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

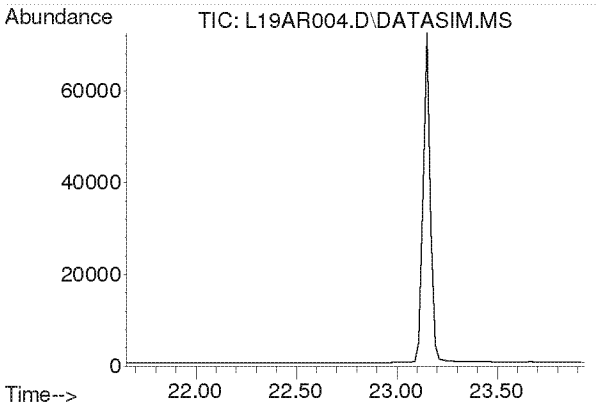
Tgt Ion: 78 Resp: 55

Ion	Ratio	Lower	Upper
78	100		
77	0.0	18.3	27.5#







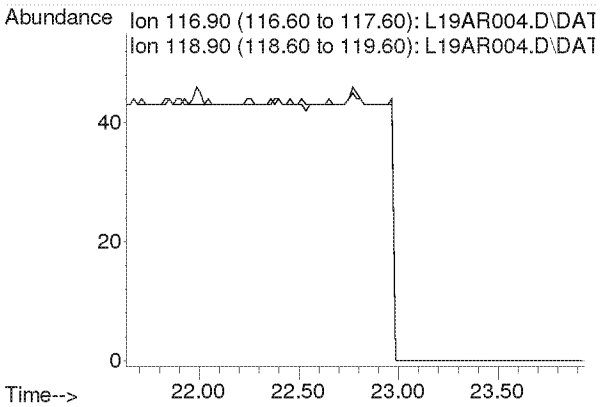


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

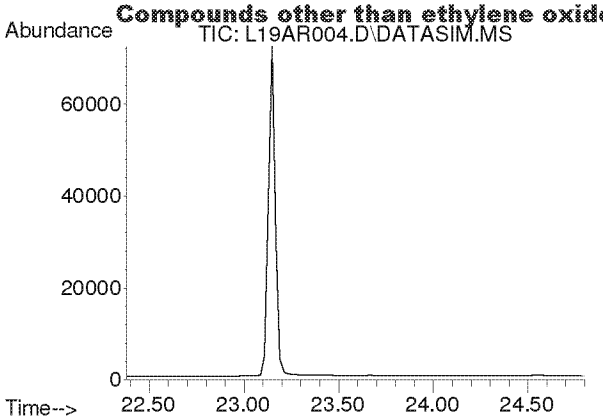
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

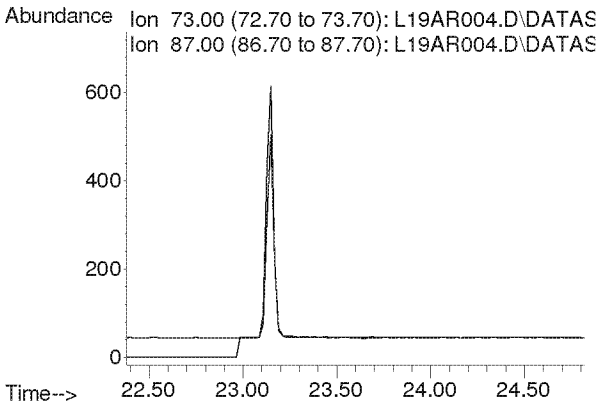


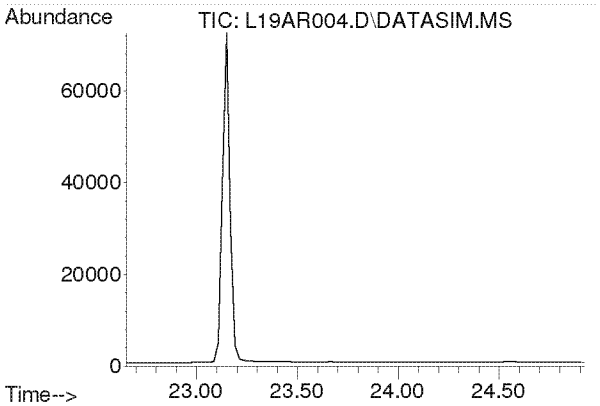
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



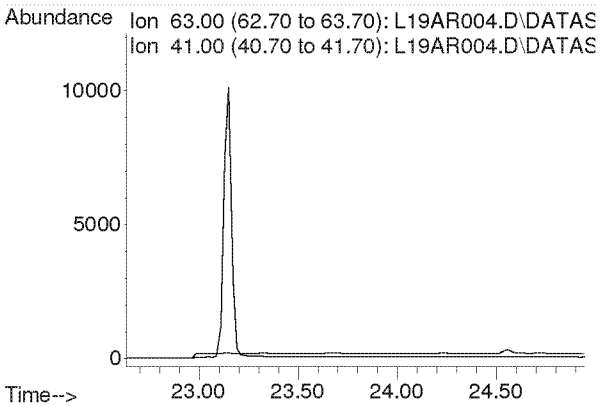


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

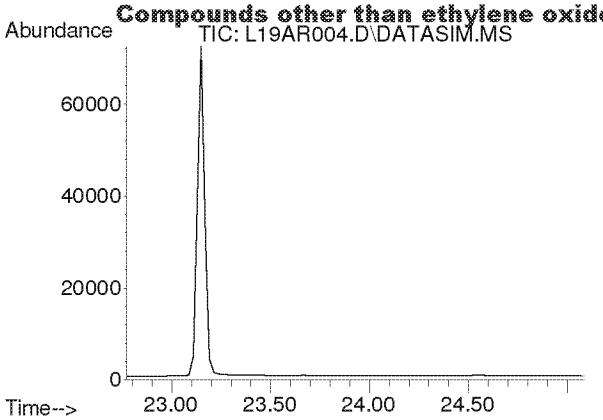
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

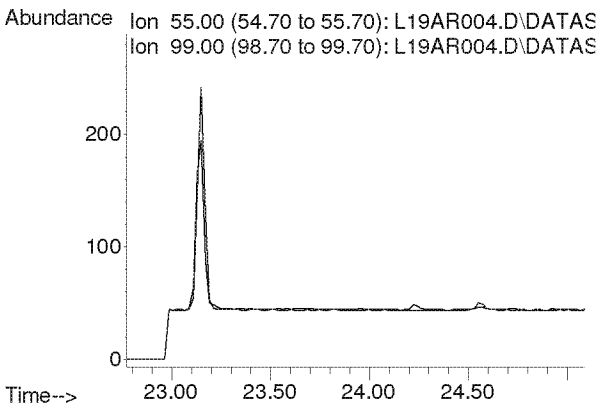


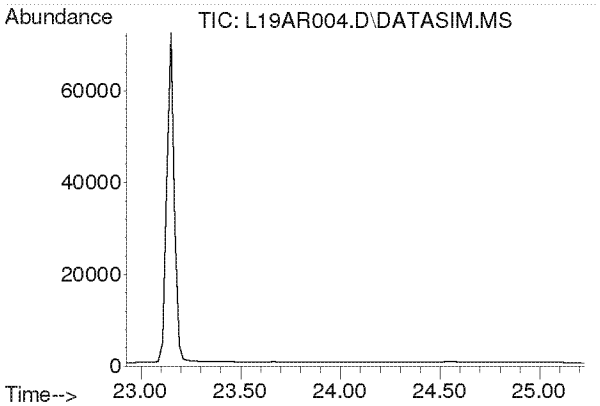
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



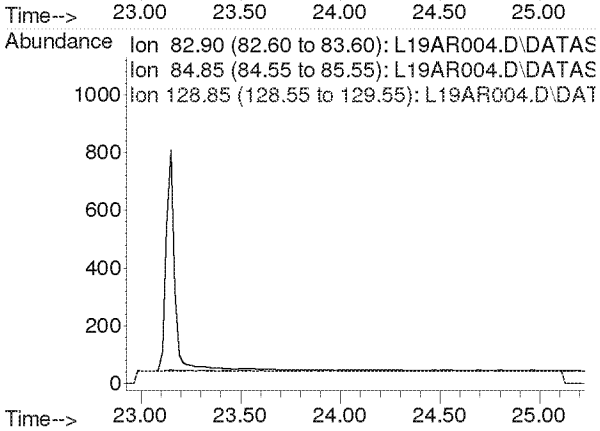


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

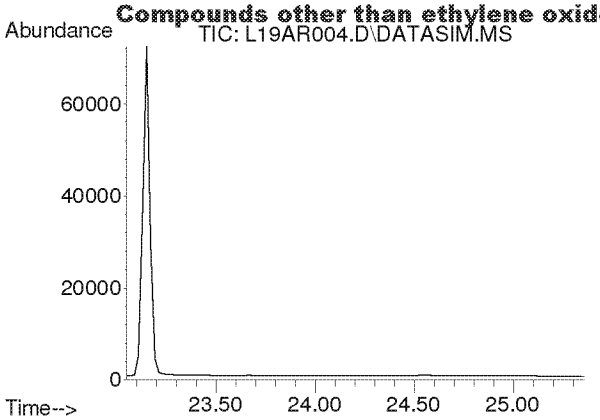
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

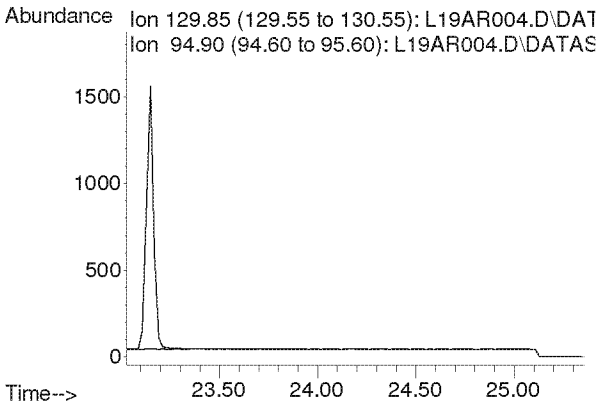


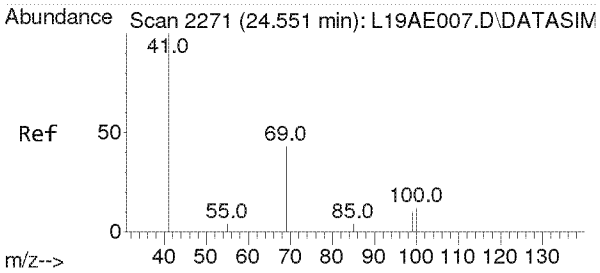
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6

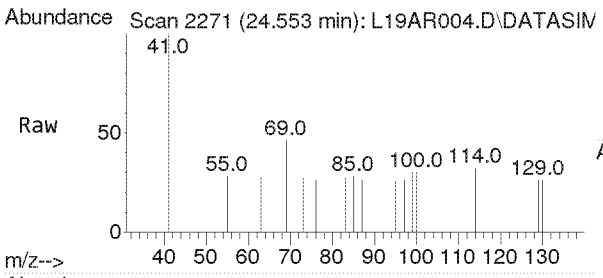


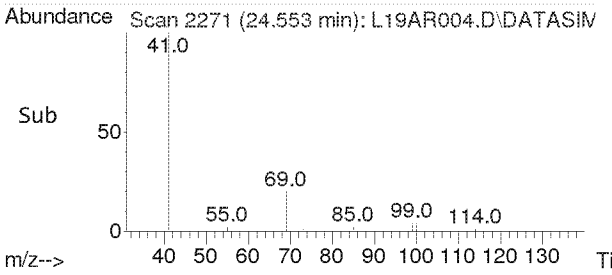


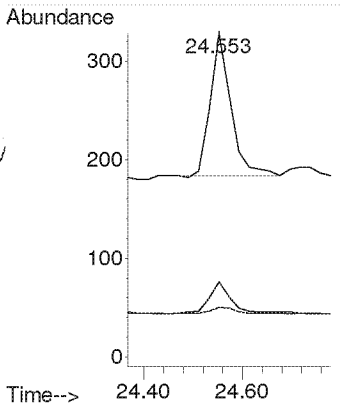
#38
Methyl Methacrylate
Concen: 0.017 ppbv
RT: 24.553 min Scan# 2271
Delta R.T. 0.002 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 41 Resp: 411

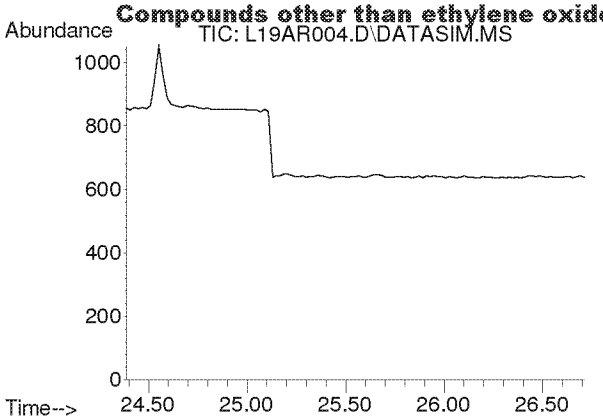
Ion	Ratio	Lower	Upper
41	100		
69	25.5	16.6	24.8#
100	0.0	4.2	6.4#







Compounds other than ethylene oxide were not quantitated.

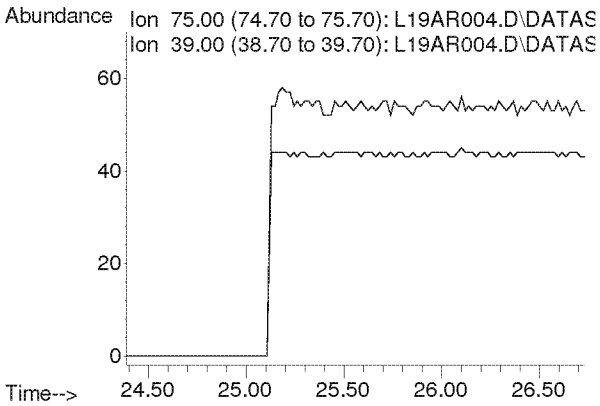


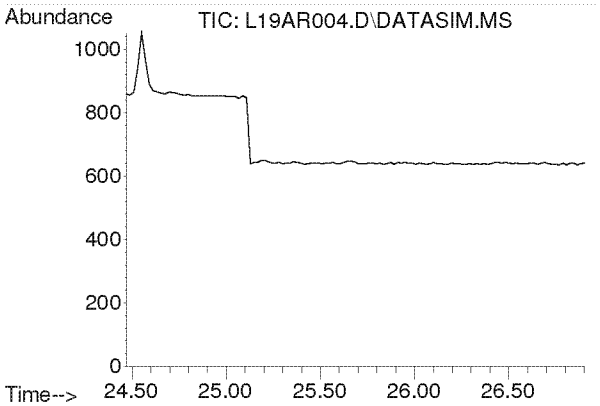
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



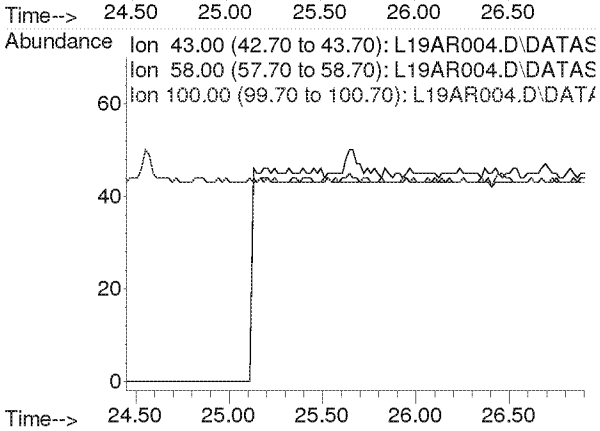


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

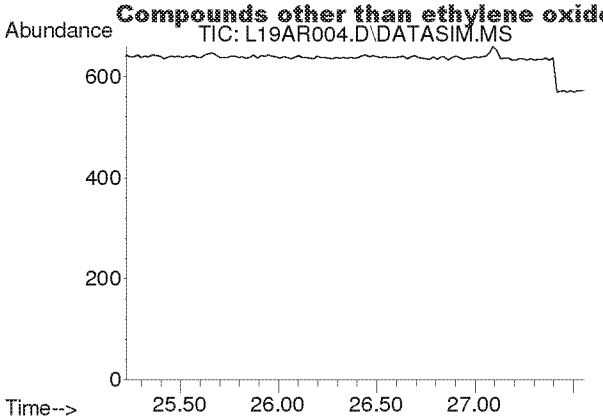
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

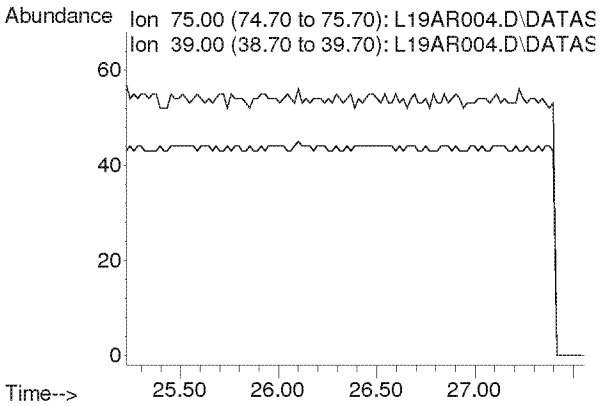


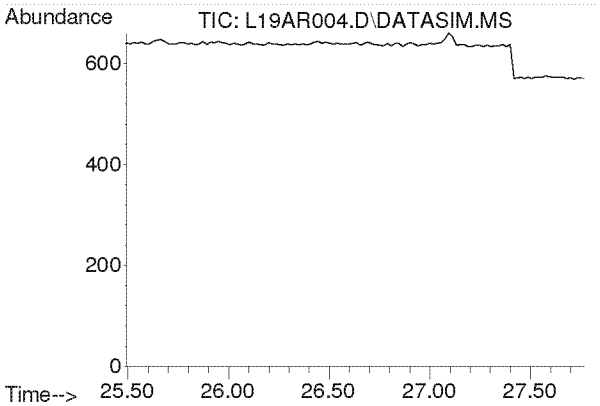
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



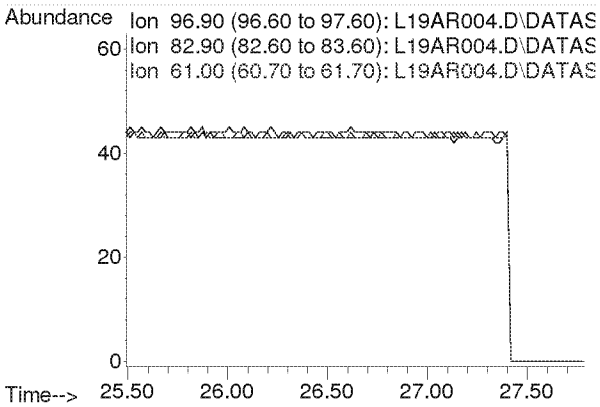


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

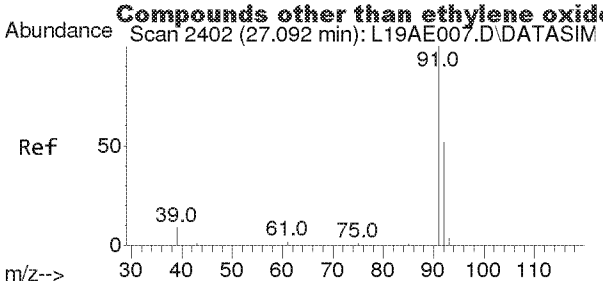
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



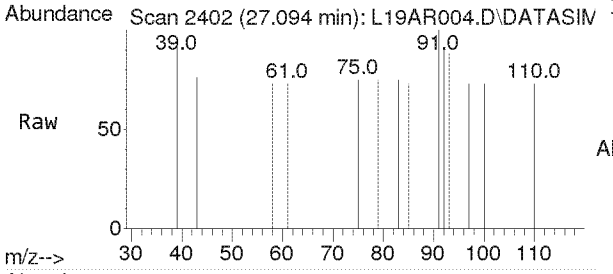
Compounds other than ethylene oxide were not quantitated.

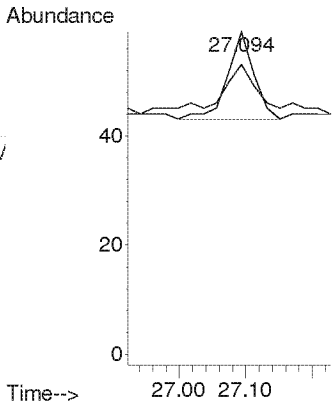


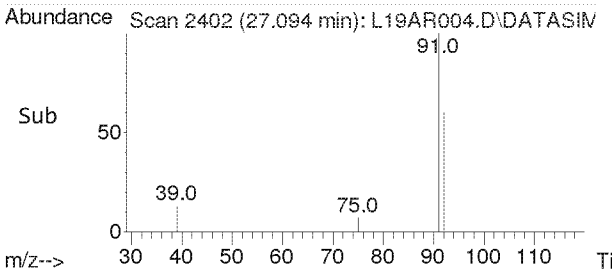
#44
Toluene
Concen: 0.003 ppbv
RT: 27.094 min Scan# 2402
Delta R.T. 0.002 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

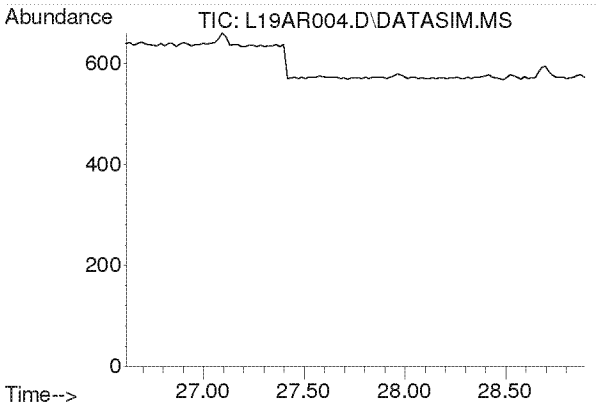
Tgt Ion: 91 Resp: 45

Ion	Ratio	Lower	Upper
91	100		
92	0.0	42.0	63.0#







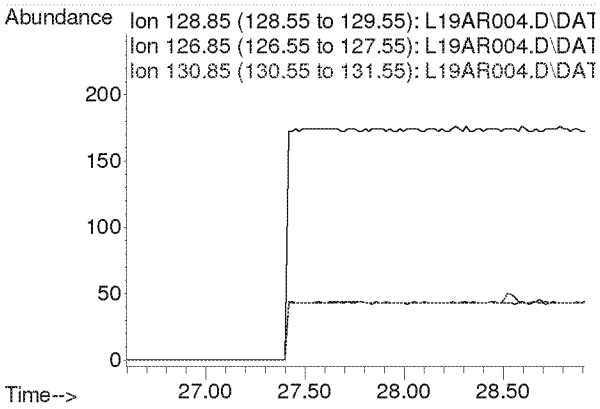


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

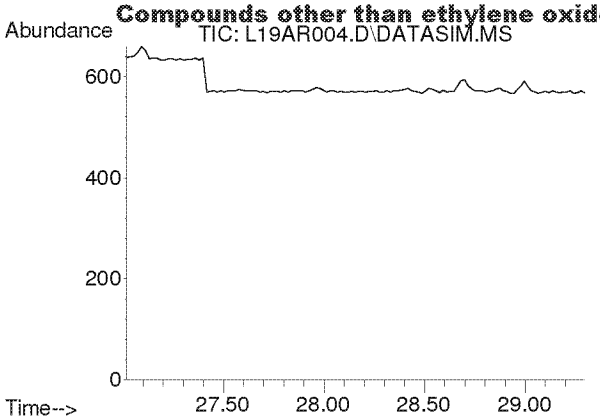
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

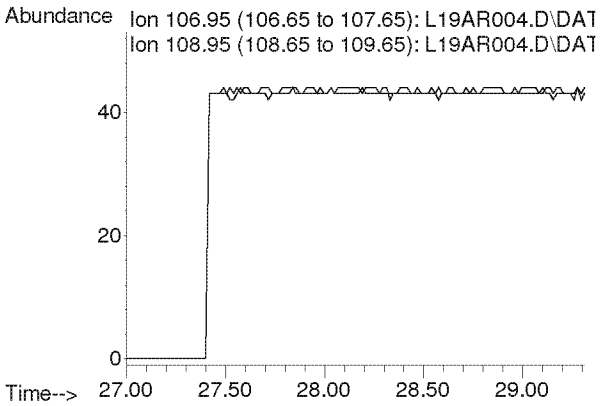


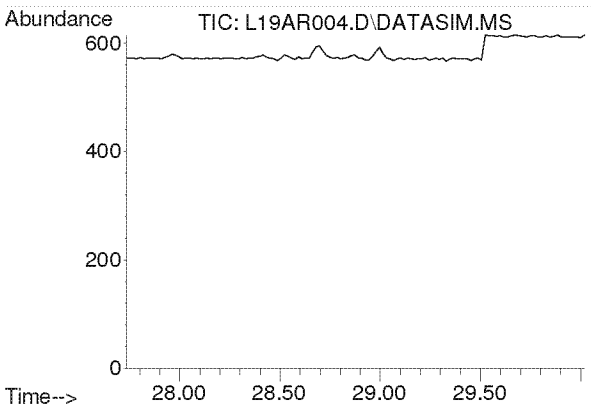
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



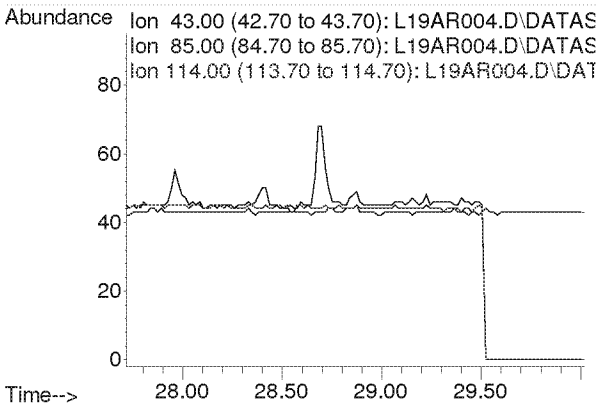


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

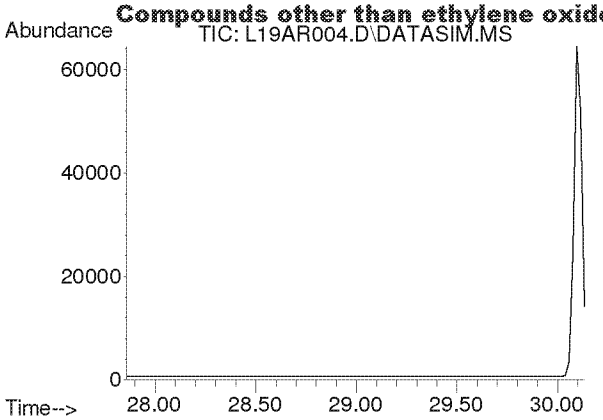
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

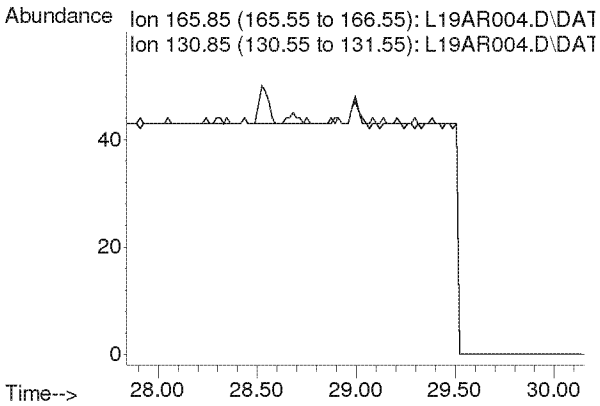


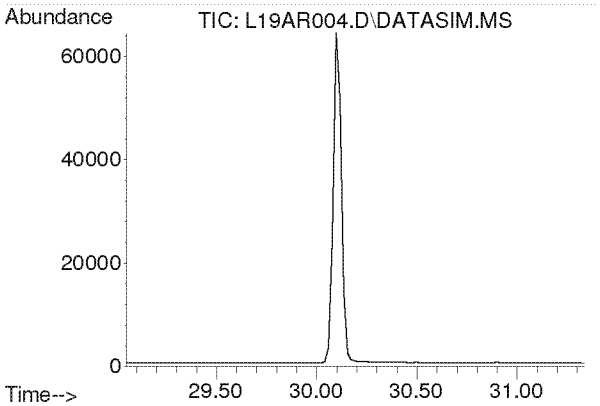
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



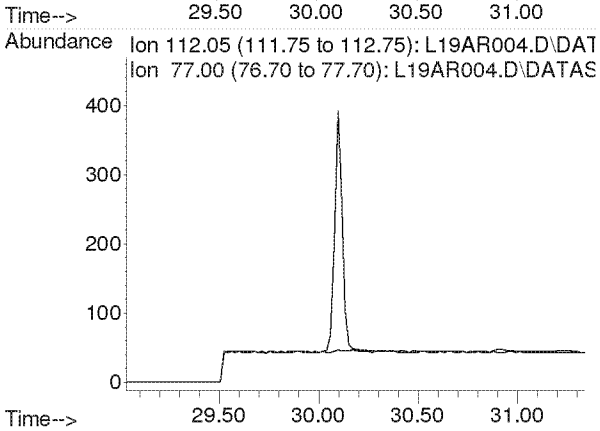


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

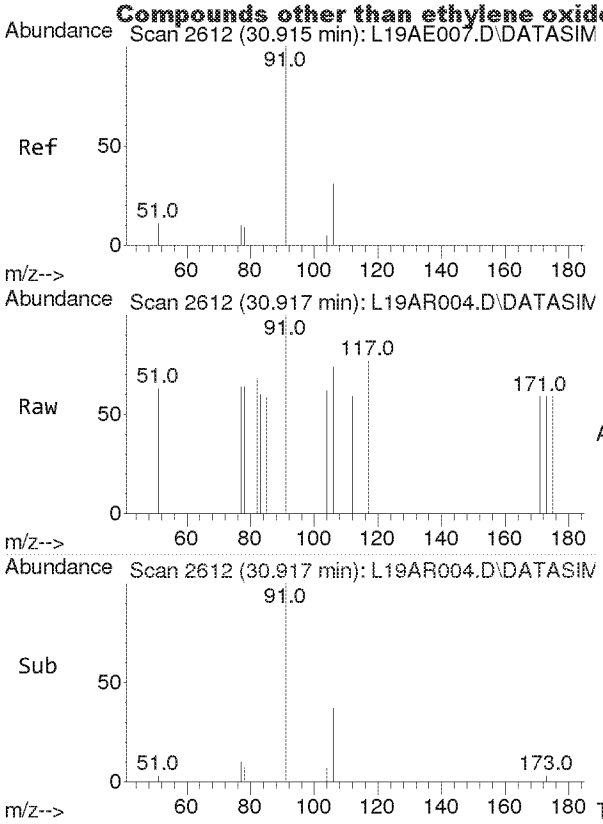
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



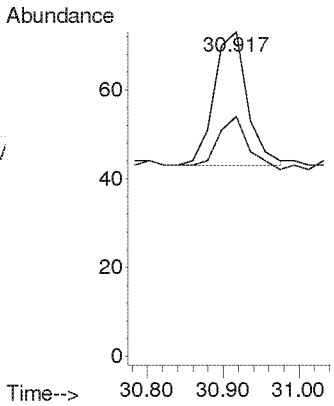
Compounds other than ethylene oxide were not quantitated.

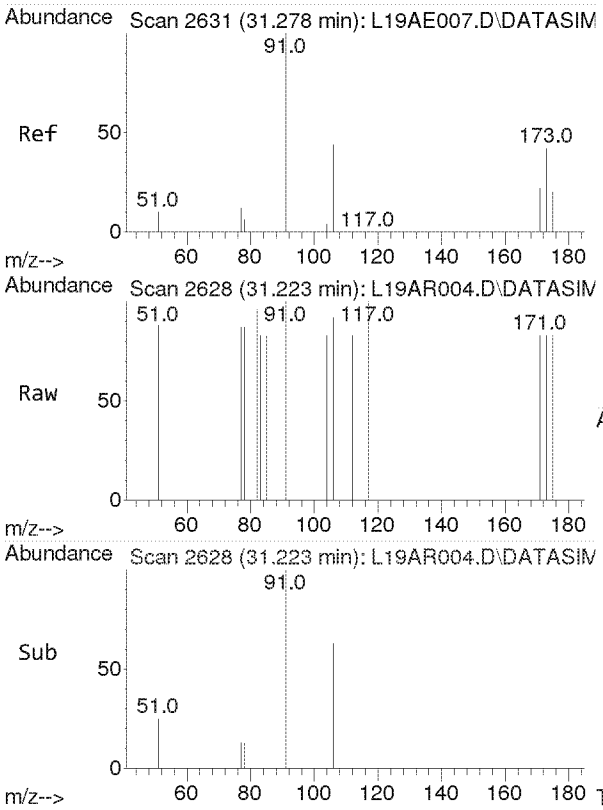


#50
Ethylbenzene
Concen: 0.005 ppbv
RT: 30.917 min Scan# 2612
Delta R.T. 0.002 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 91 Resp: 92

Ion	Ratio	Lower	Upper
91	100		
106	0.0	25.4	38.0#

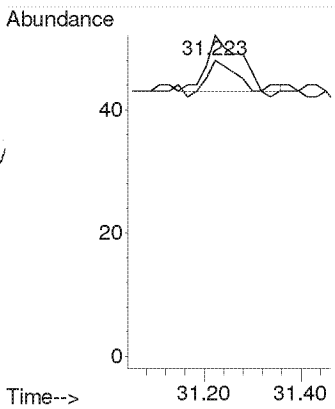




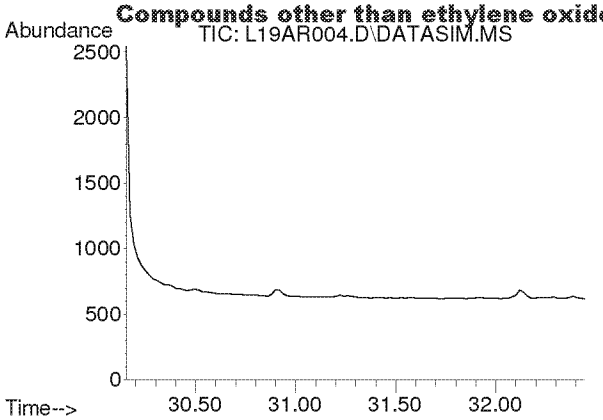
#51
m,p-Xylene
Concen: 0.003 ppbv
RT: 31.223 min Scan# 2628
Delta R.T. -0.055 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 91 Resp: 45

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.7	53.5#



Compounds other than ethylene oxide were not quantitated.

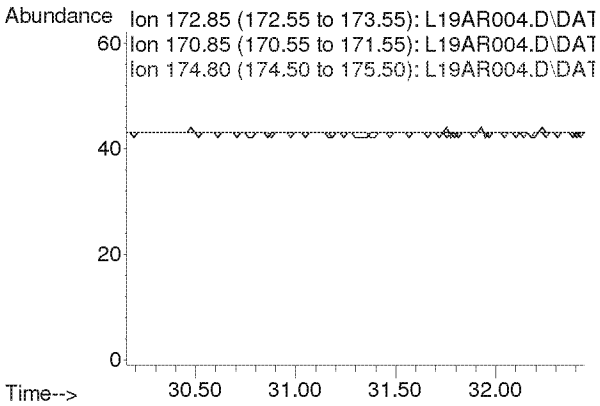


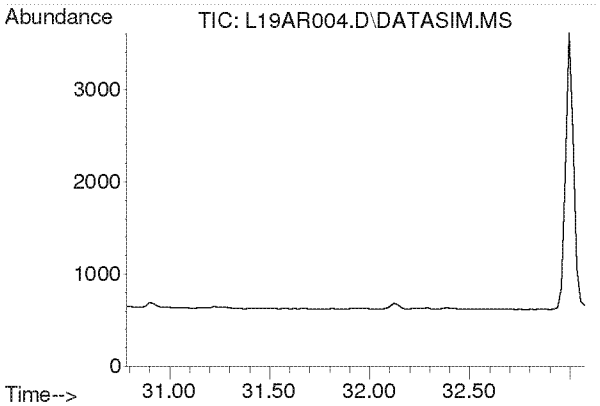
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



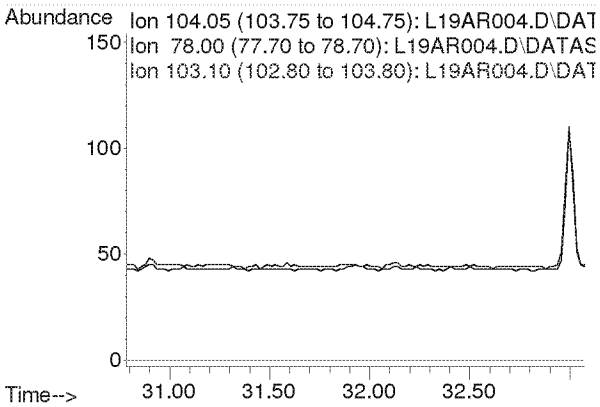


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

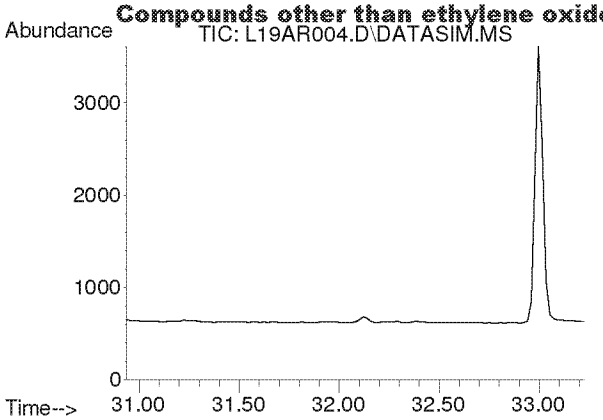
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

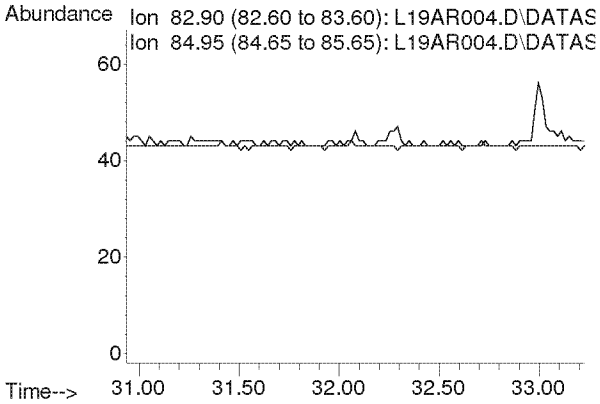


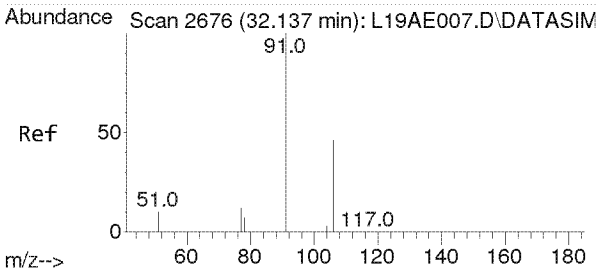
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0

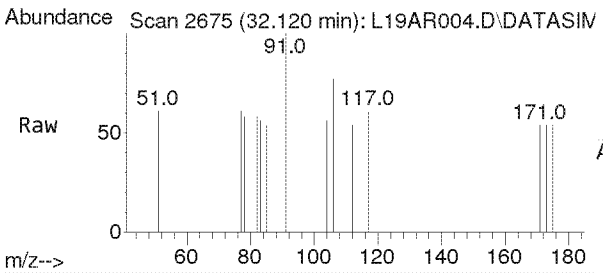


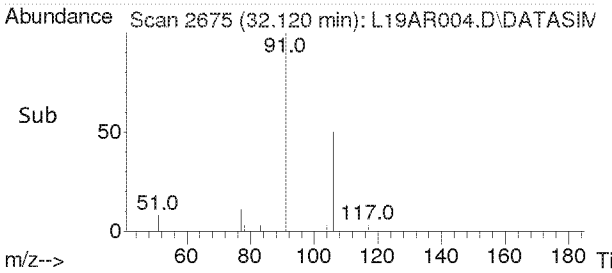


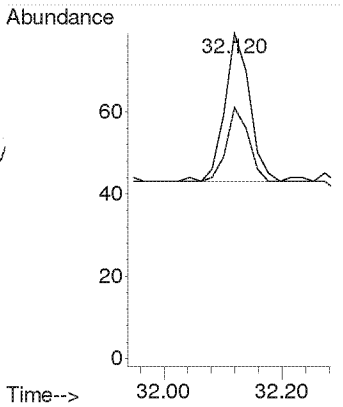
#55
o-Xylene
Concen: 0.007 ppbv
RT: 32.120 min Scan# 2675
Delta R.T. -0.017 min
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 91 Resp: 105

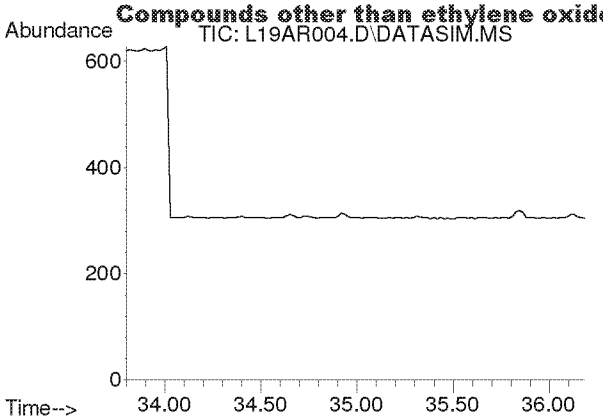
Ion	Ratio	Lower	Upper
91	100		
106	44.8	35.8	53.8







Compounds other than ethylene oxide were not quantitated.

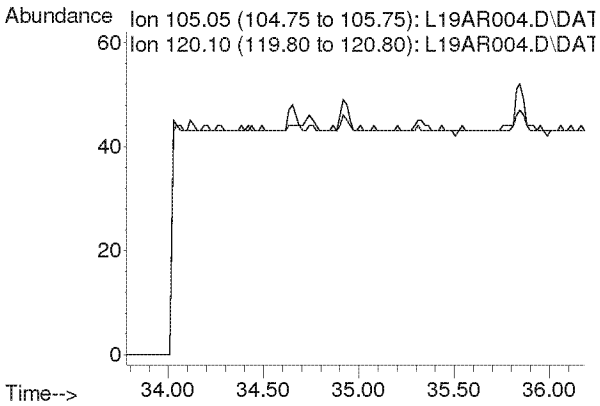


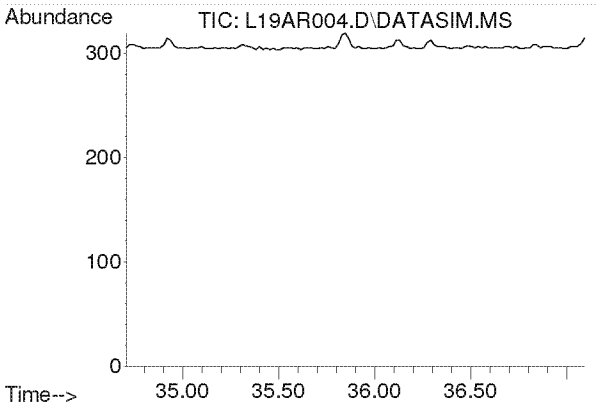
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



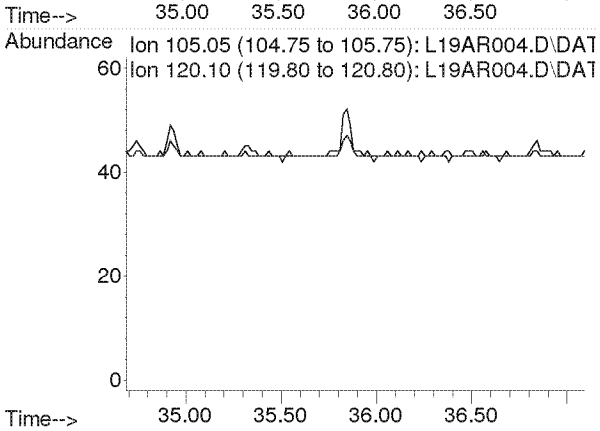


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

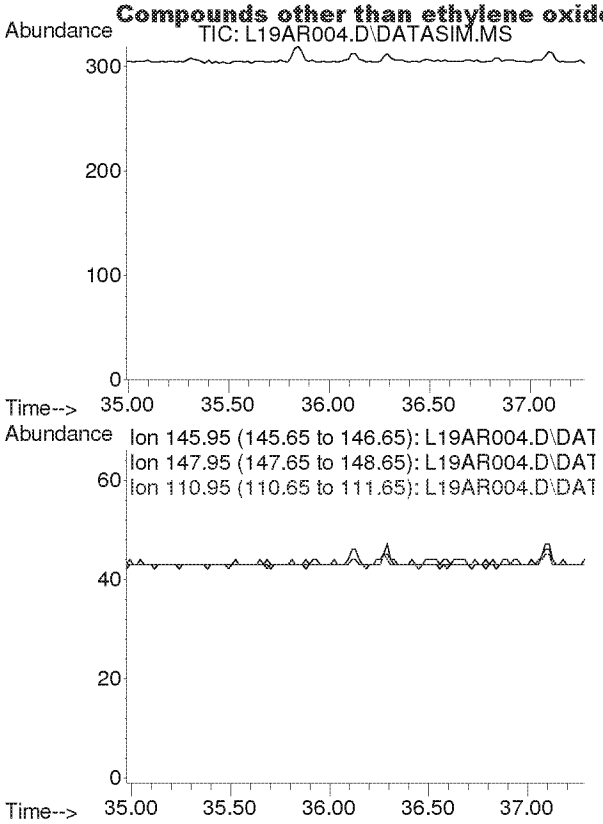
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

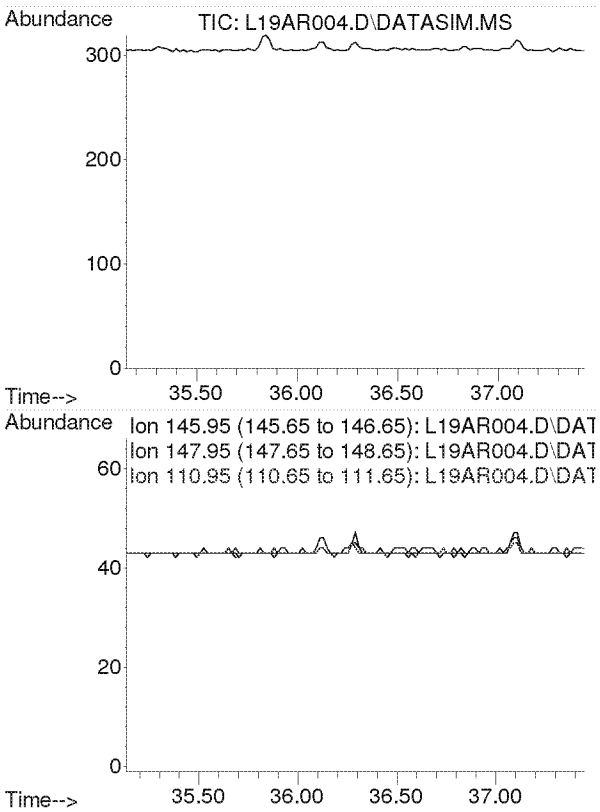


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



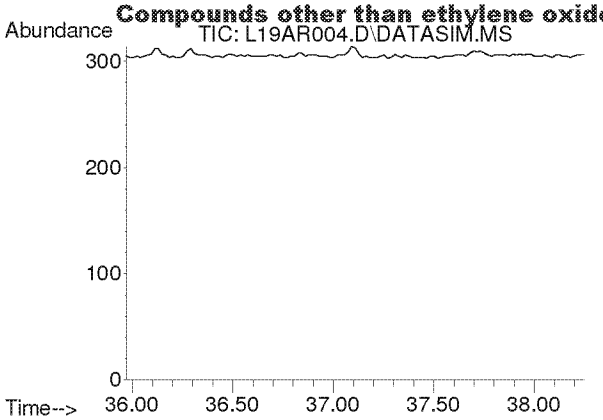
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

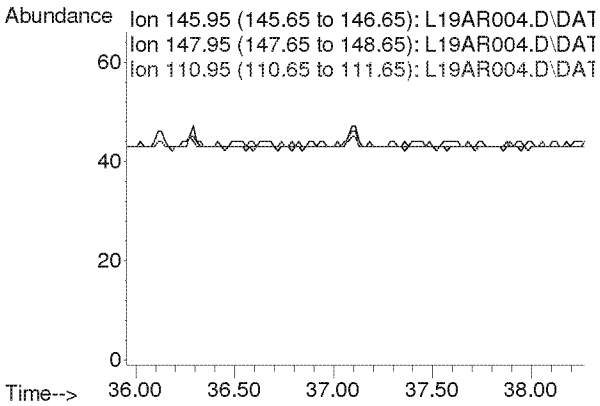


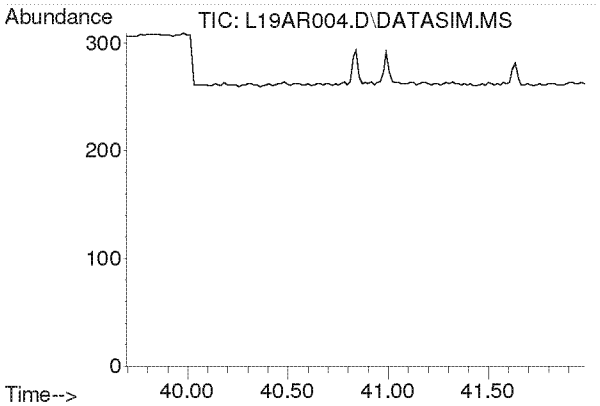
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



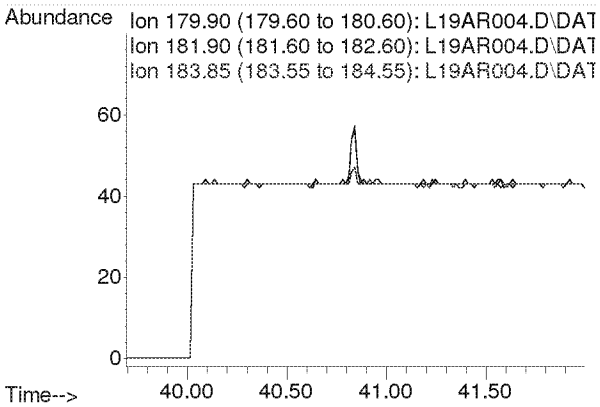


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

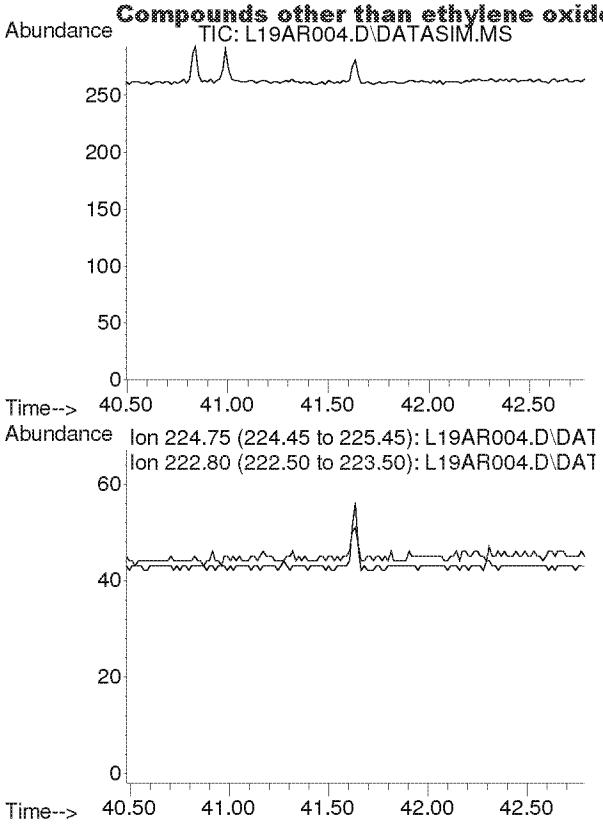
Lab File: L19AR004.D
Acq: 18 Jan 2019 1:45 pm

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: L19AR004.D
Acq: 18 Jan 2019 1:45 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		L19AR010.D	L19AR011.D		
Analyst		MAH	MAH		
Method		9010002.M	9010002.M		
Sample ID		9011527-01	9011527-02		
Mics Comments		WB VILLAGE HALL	WB VILLAGE HALL C2 1/13/19		
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	0.866	0.911	5.06	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	

RMB 2/5/19

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

Y:\AIR TOX\TO-15 DUPTEST\DUPTEST_2018_NATTS\ETOX\EPA WB WAREHOUSE 1_13_19.xlsx
DUPTEST 2017 TEMPLATE 012517

Compounds other than ethylene oxide were not quantitated.

Duplicate Comparison Check

Comparison of Replicate Analyses

		D1	R1		
File ID		L19AR010.D	L19AR012.D		
Analyst		MAH	MAH		
Method		9010002.M	9010002.M		
Sample ID		9011527-01	B9A1806-DUP1		
Mics Comments		WB VILLAGE H	WB VILLAGE HALL R1 1/13/19		
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	0.866	0.952	9.46	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		L19AR011.D	L19AR013.D		
Analyst		MAH	MAH		
Method		9010002.M	9010002.M		
Sample ID		9011527-02	B9A1806-DUP2		
Mics Comments		WB VILLAGE H	WB VILLAGE HALL R2 1/13/19		
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	0.911	0.961	5.34	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\L19AR\
Data File : L19AR010.D
Acq On : 18 Jan 2019 8:35 pm
Operator : MAH
Sample : 9011527-01
Misc : WB VILLAGE HALL C1 1/13/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 09:16:47 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	54896	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	138764	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	106595	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	12.410	29	2456	0.8662 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	1
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\L19AR\
Data File : L19AR010.D
Acq On : 18 Jan 2019 8:35 pm
Operator : MAH
Sample : 9011527-01
Misc : WB VILLAGE HALL C1 1/13/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 09:16:47 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.	

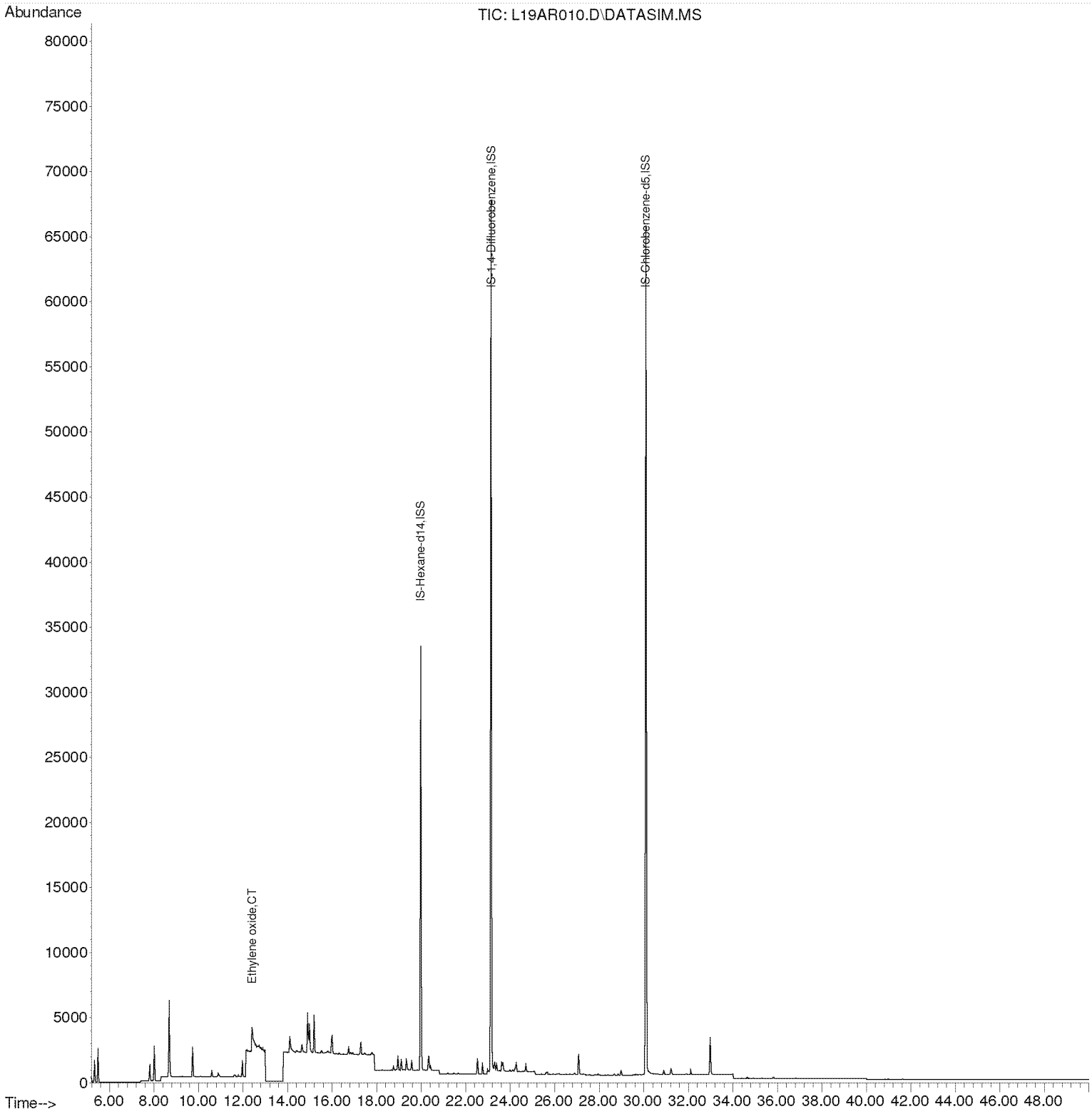
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00083

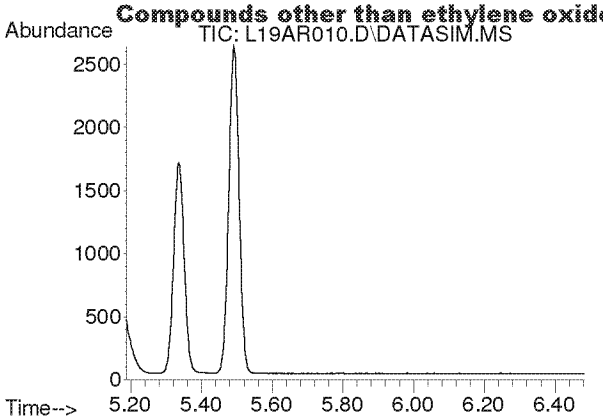
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR010.D
Acq On : 18 Jan 2019 8:35 pm
Operator : MAH
Sample : 9011527-01
Misc : WB VILLAGE HALL C1 1/13/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 23 08:38:37 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



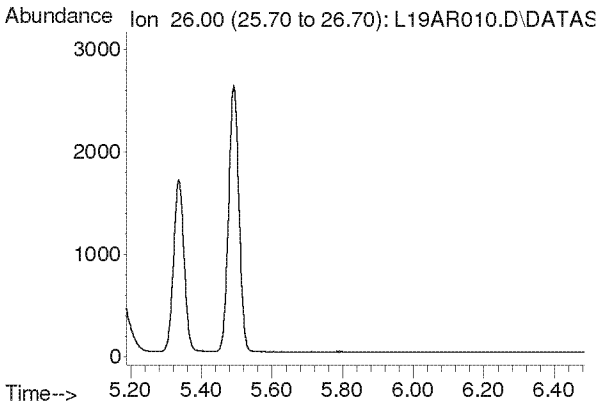
Compounds other than ethylene oxide were not quantitated.

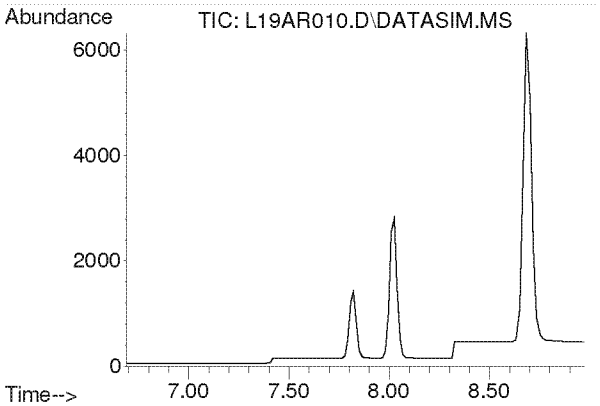


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 26



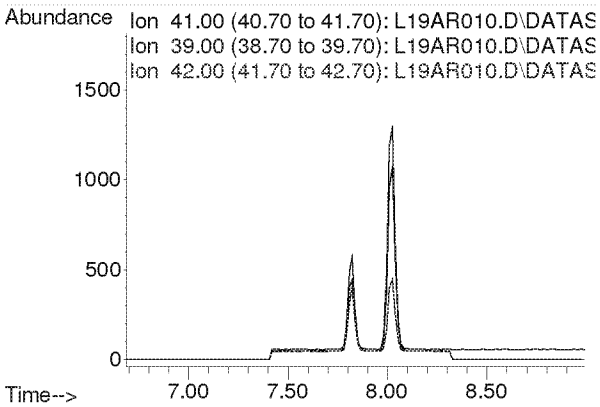


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

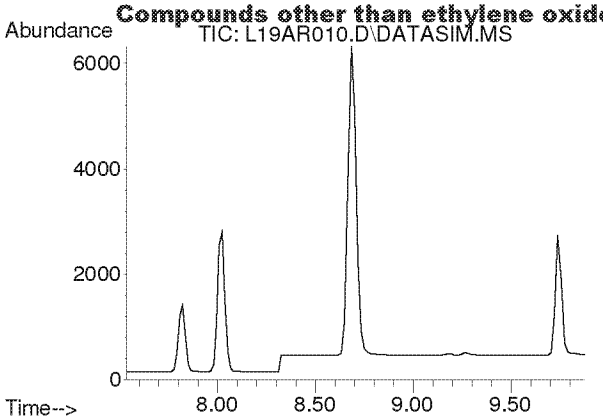
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

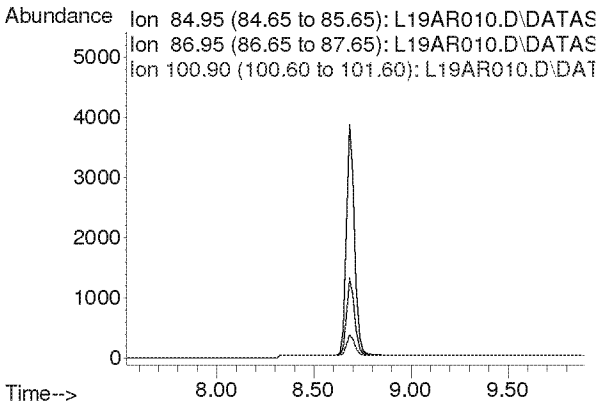


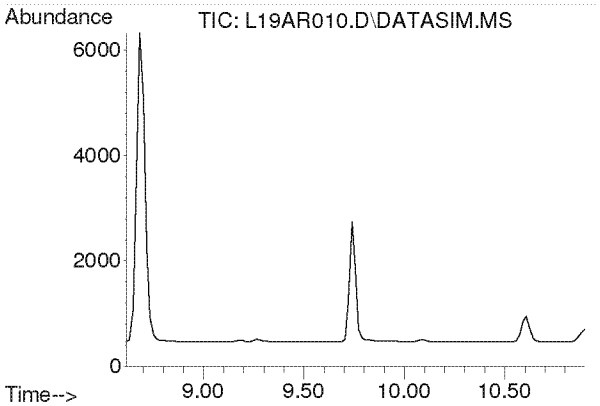
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



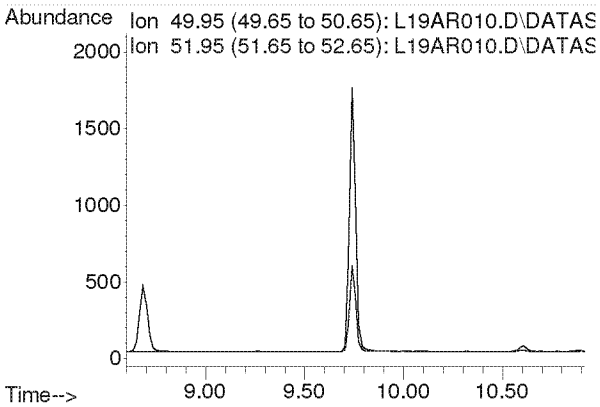


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

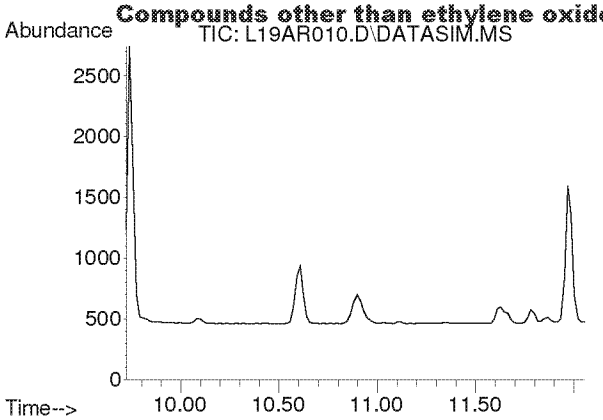
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

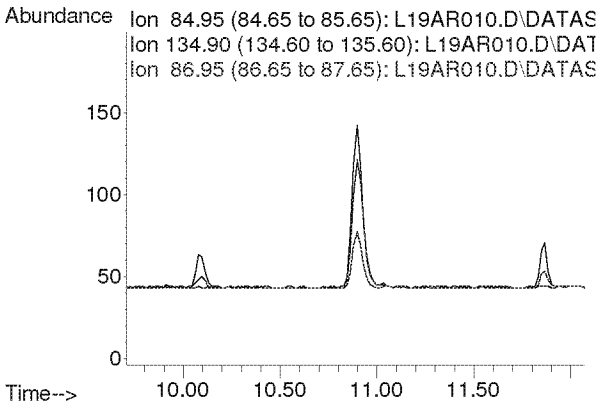


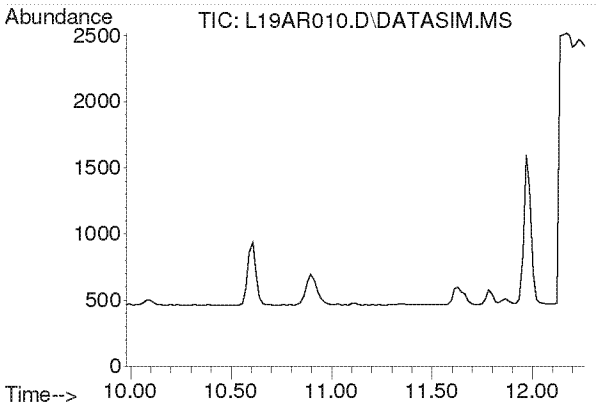
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



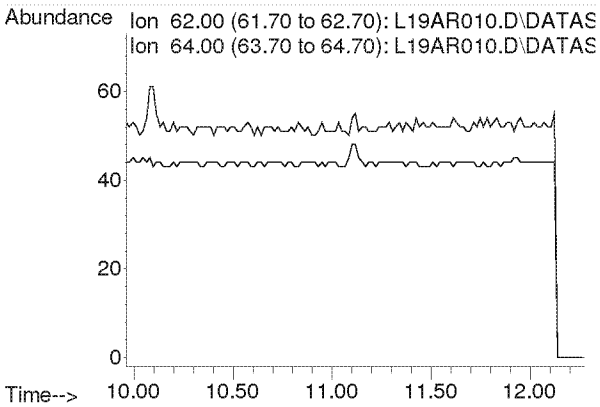


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

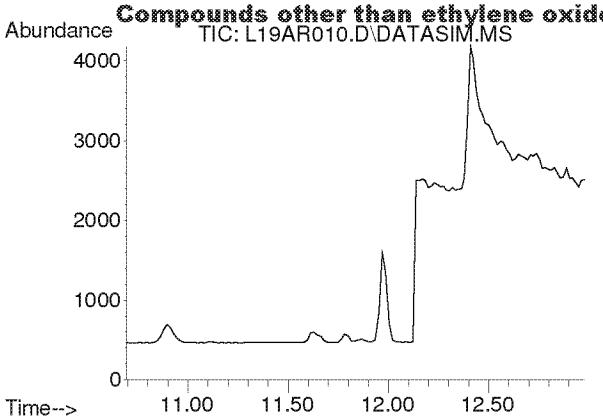
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

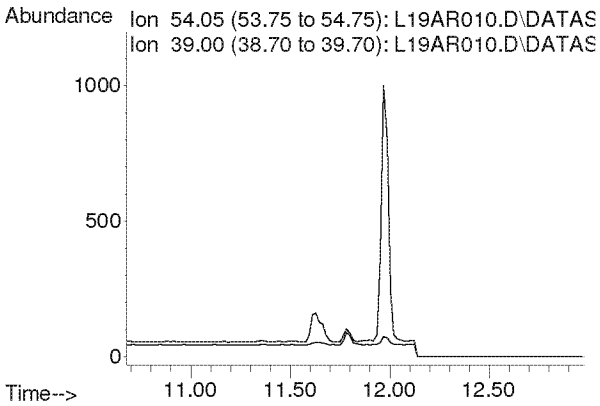


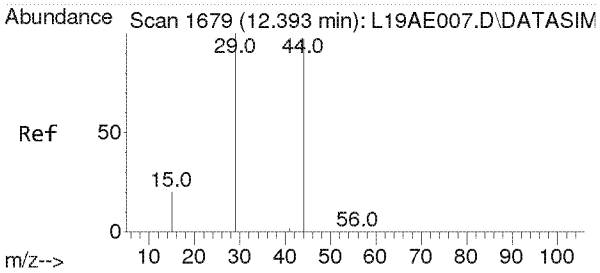
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

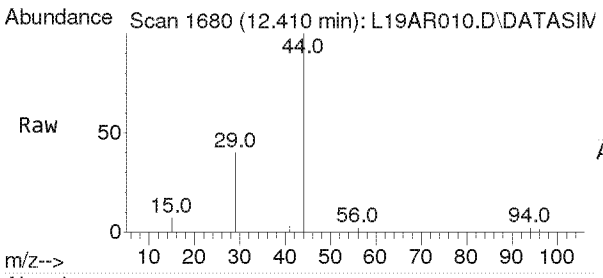


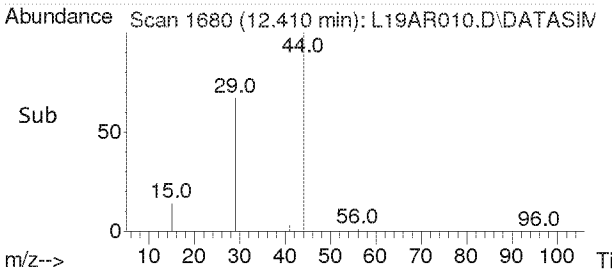


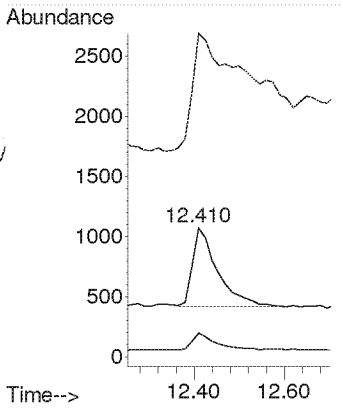
#9
Ethylene oxide
Concen: 0.866 ppbv
RT: 12.410 min Scan# 1680
Delta R.T. 0.017 min
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 29 Resp: 2456

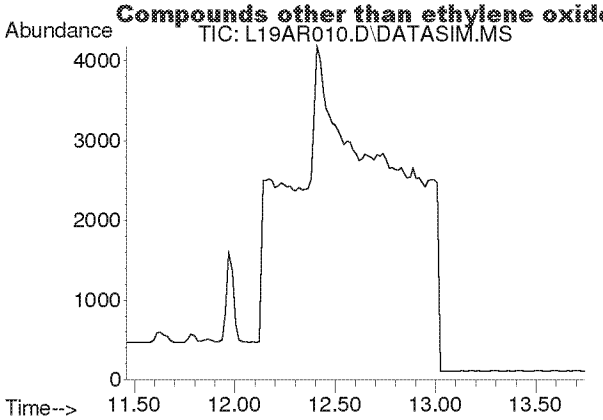
Ion	Ratio	Lower	Upper
29	100		
15	21.3	15.4	23.0
44	352.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

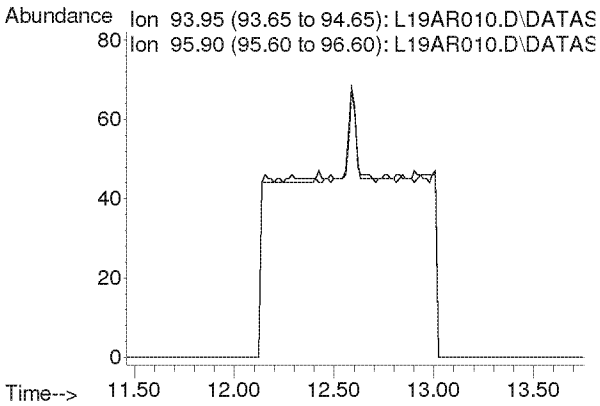


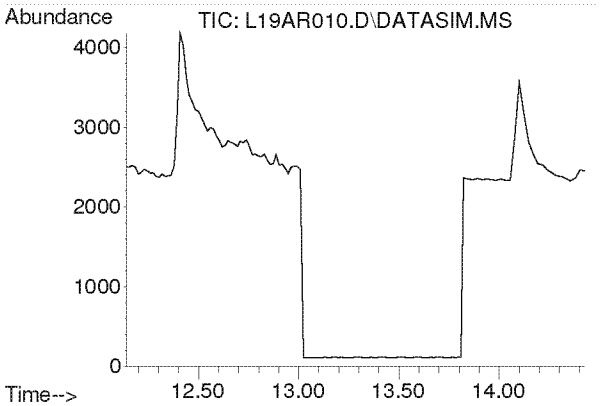
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



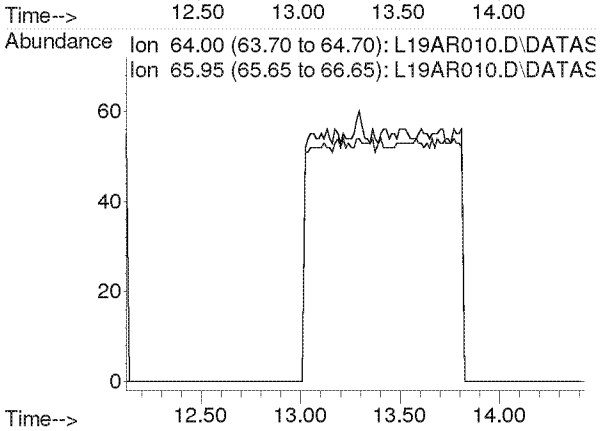


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

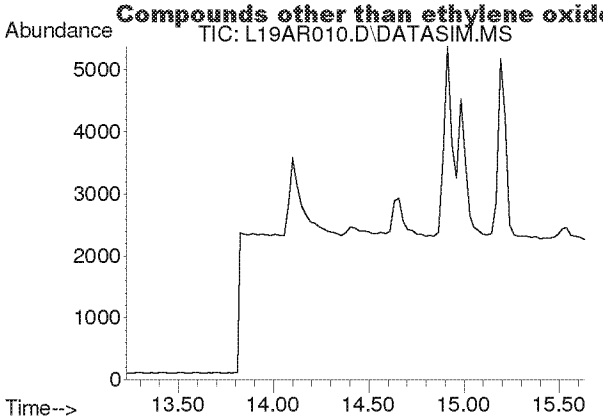
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

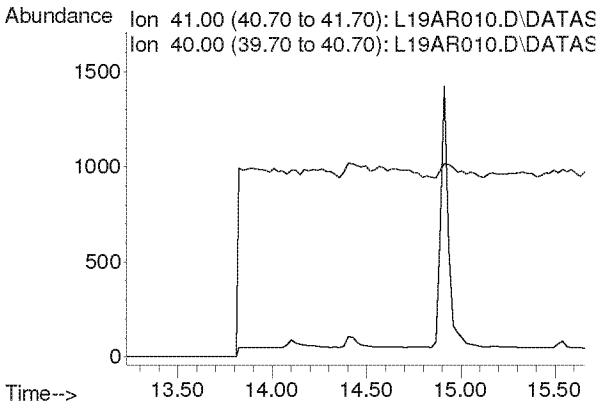


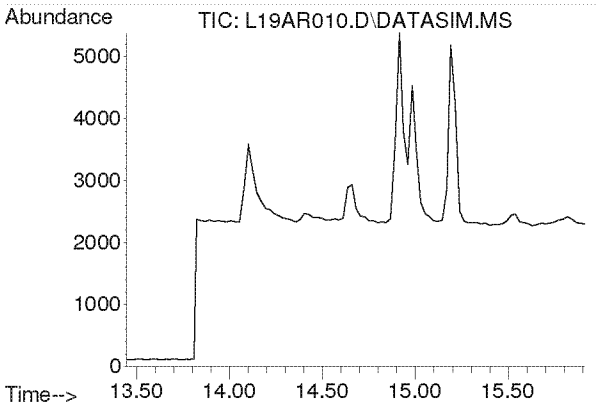
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



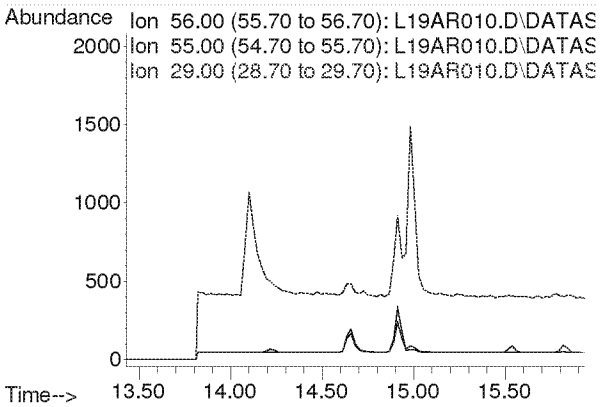


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

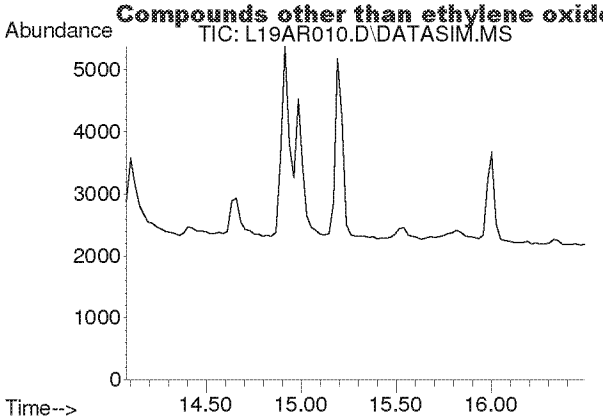
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

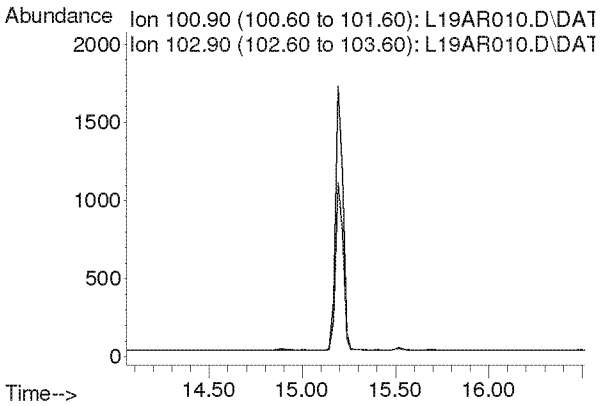


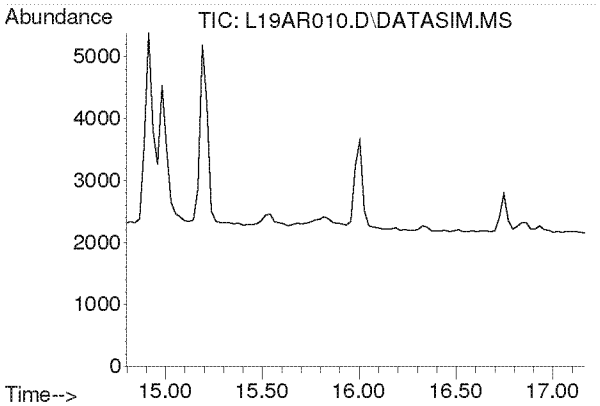
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



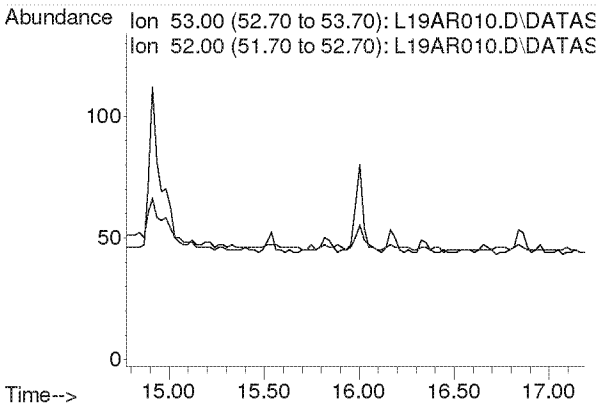


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

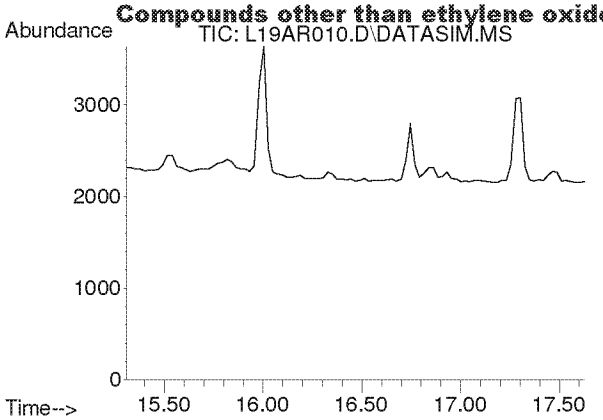
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

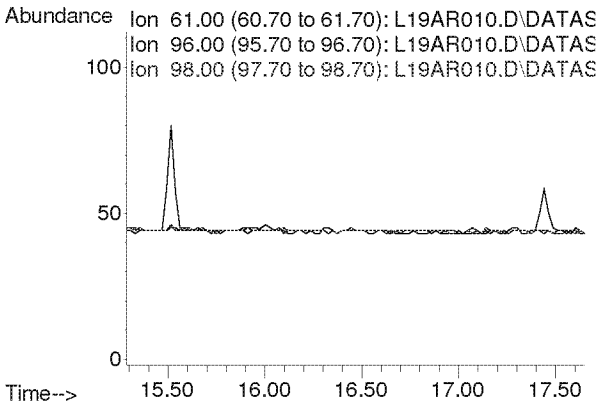


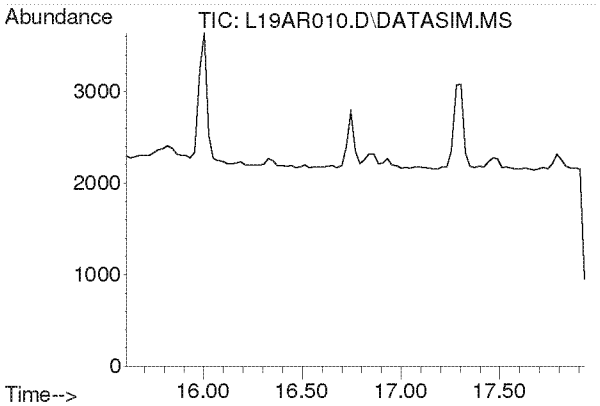
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



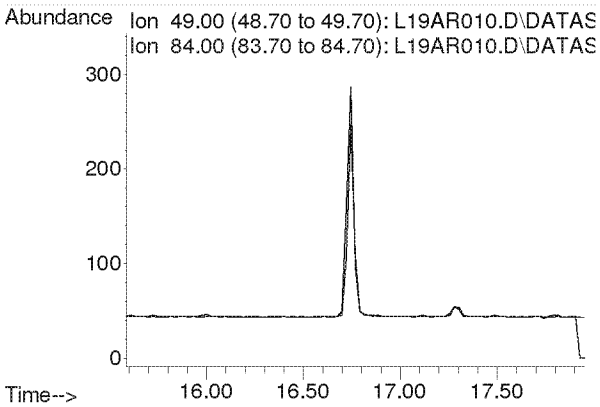


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

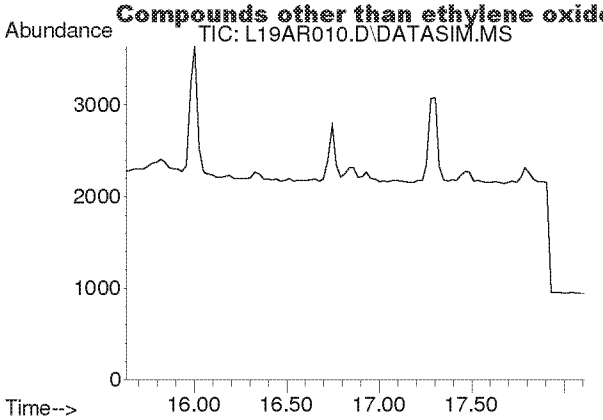
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

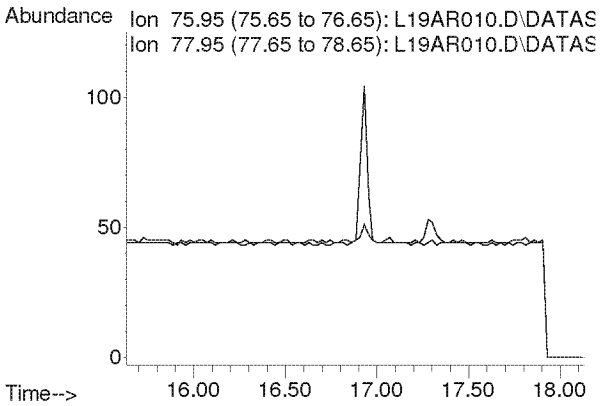


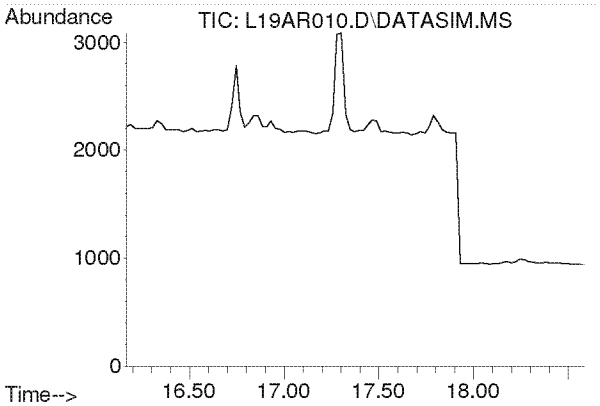
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



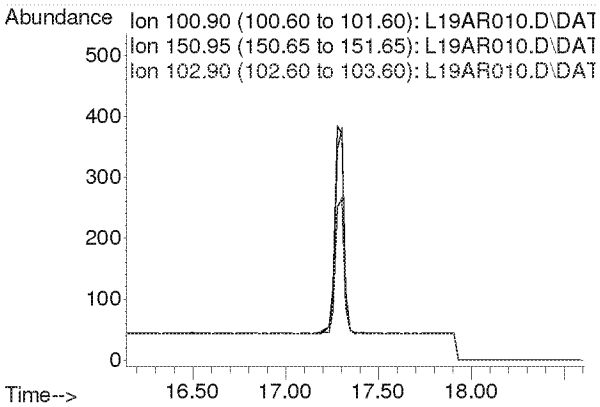


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

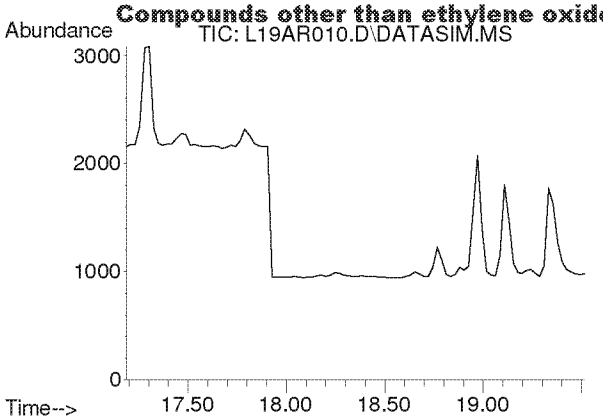
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

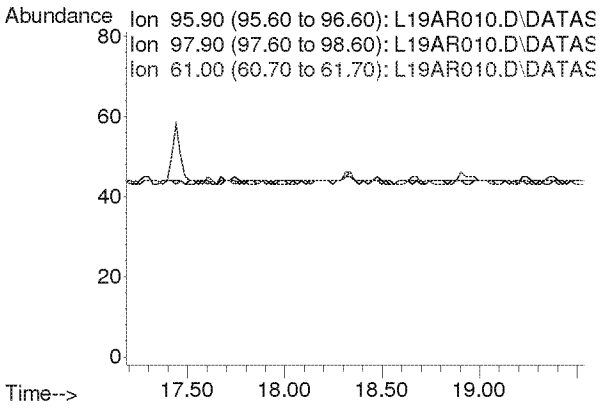


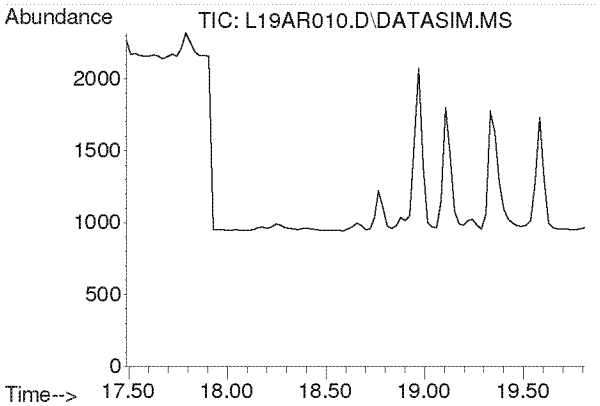
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



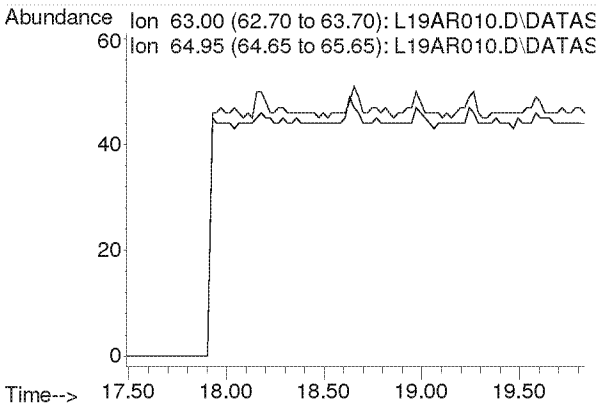


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

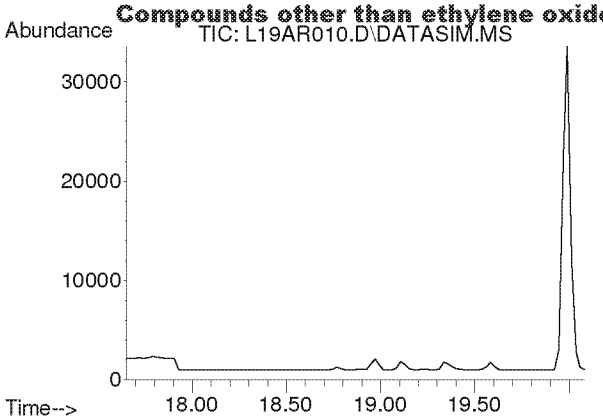
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

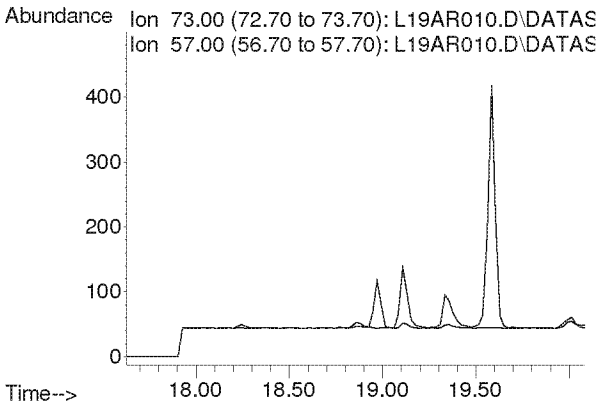


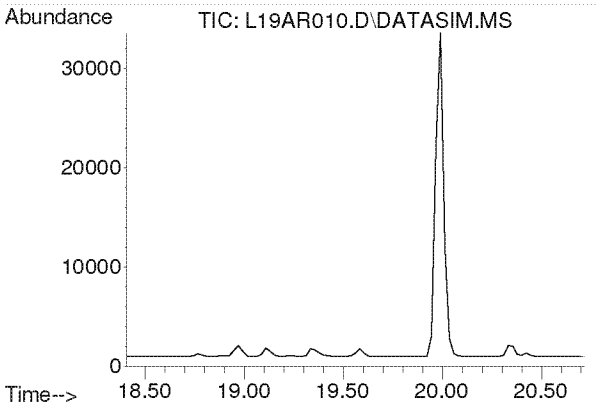
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



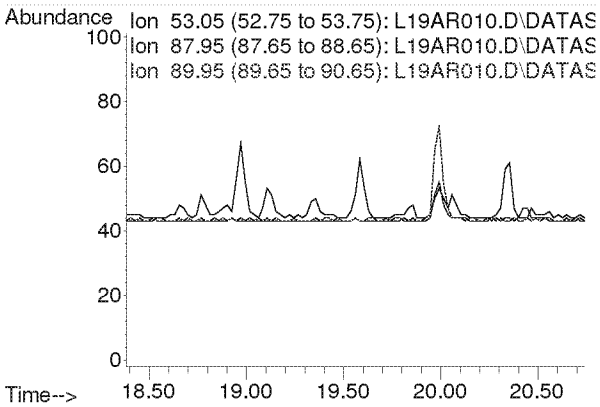


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

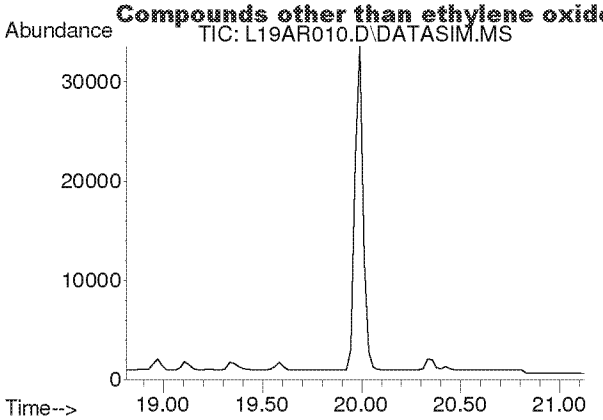
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

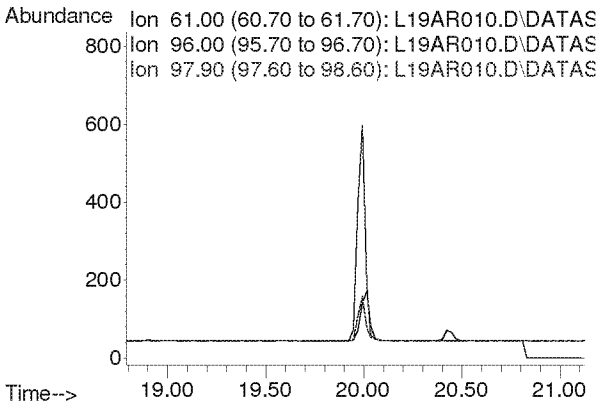


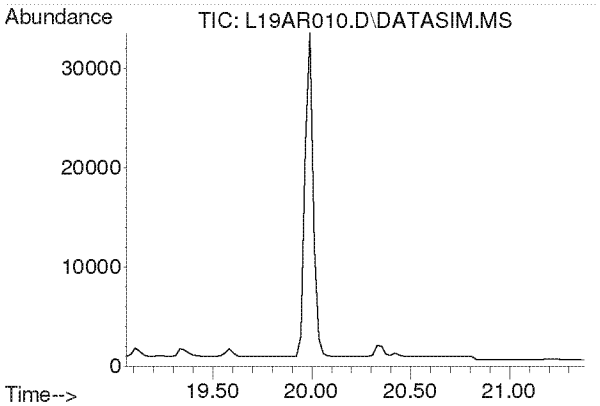
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



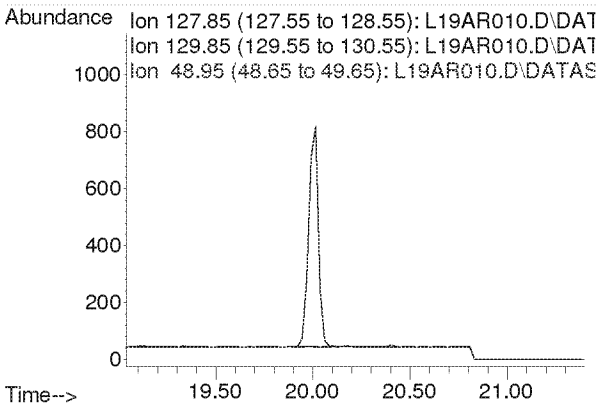


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

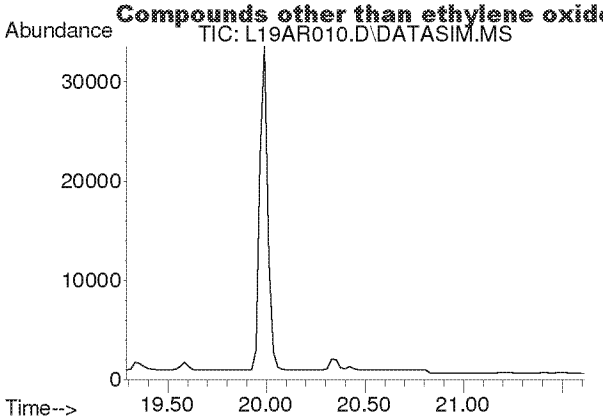
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

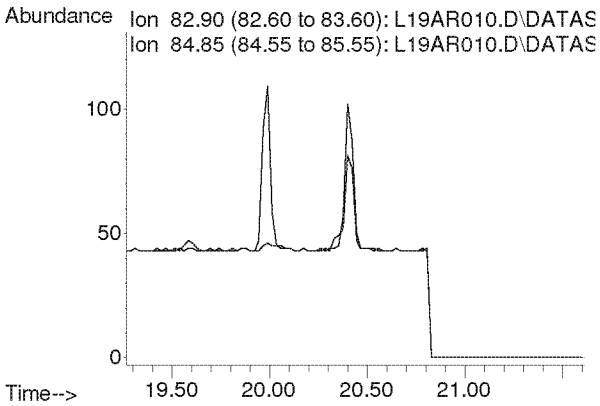


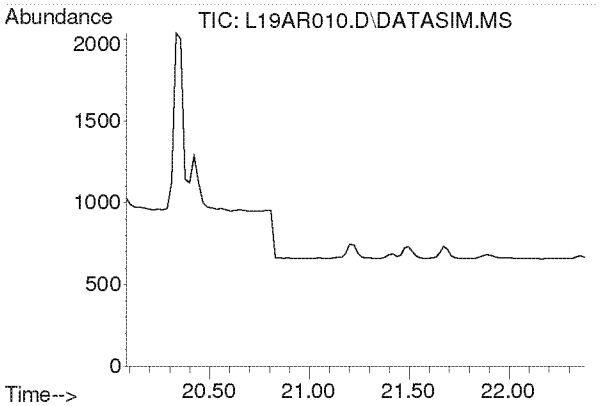
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



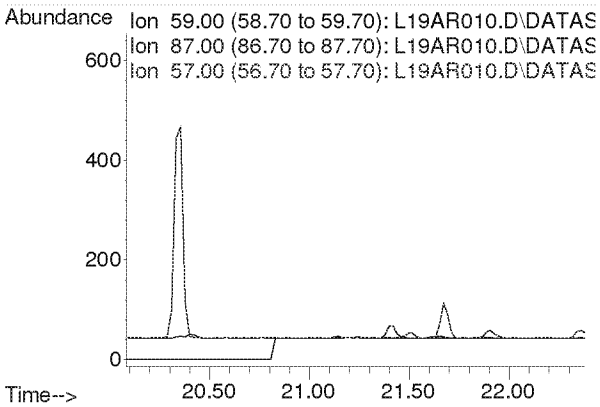


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

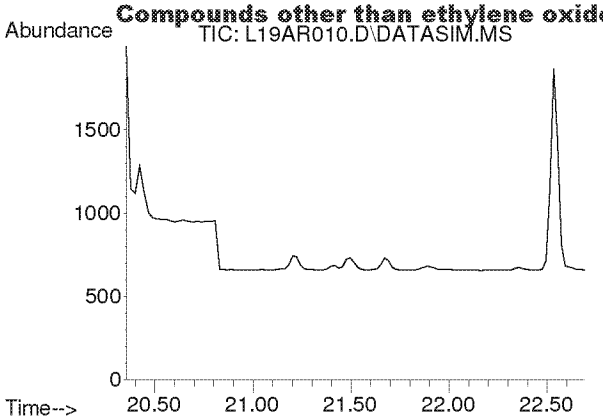
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

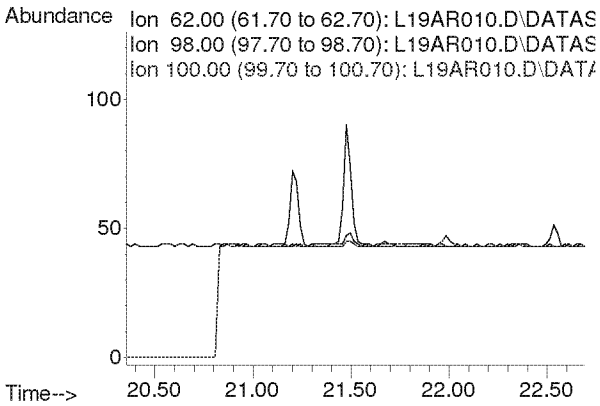


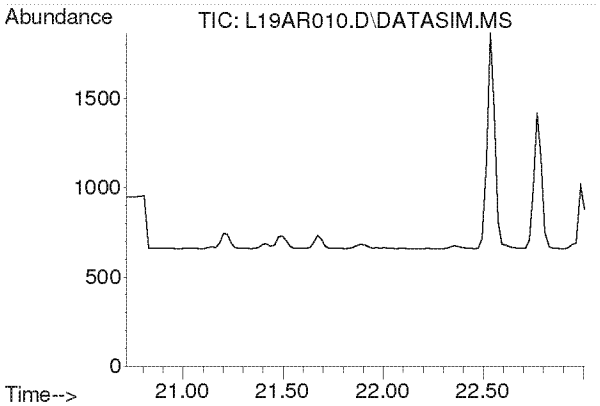
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



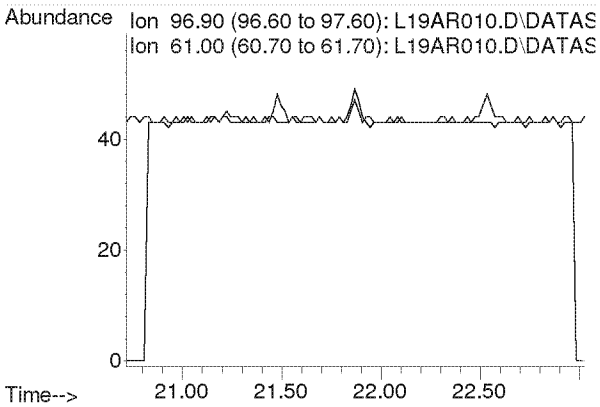


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

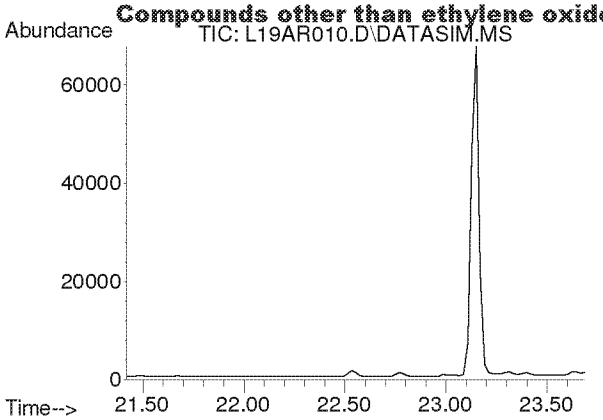
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

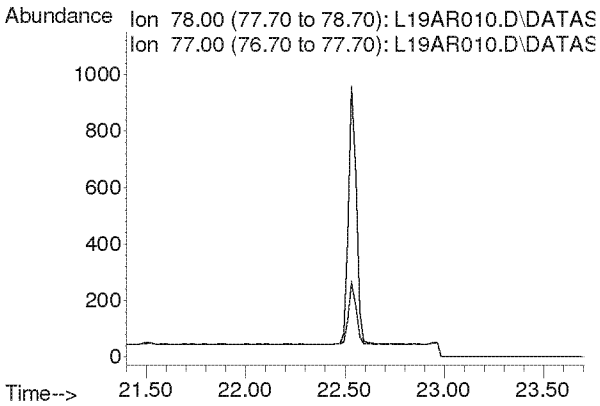


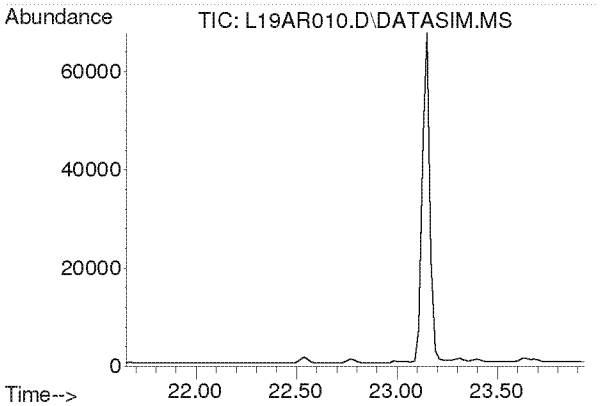
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



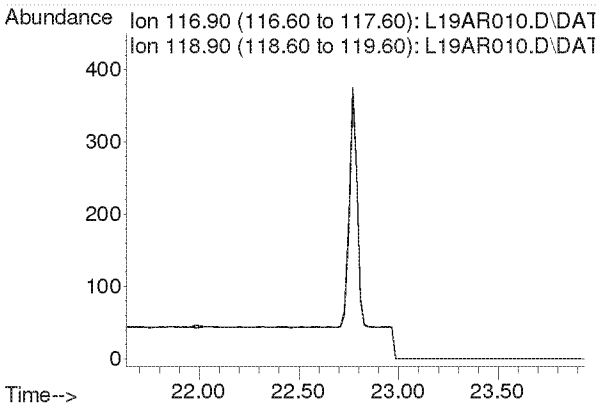


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

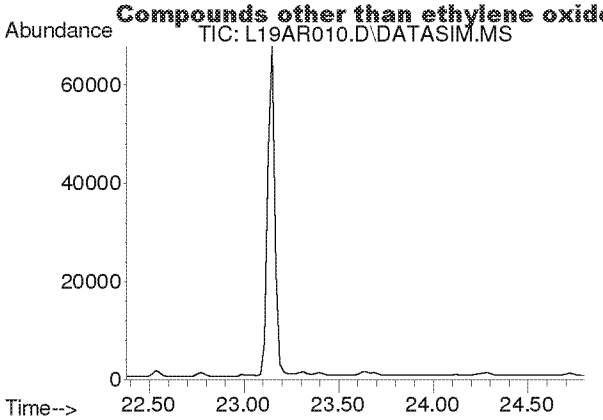
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

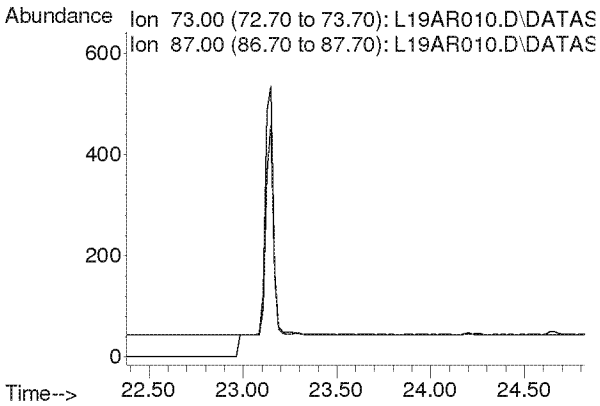


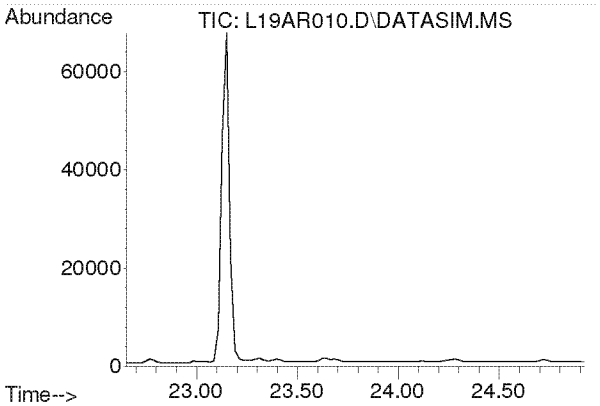
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



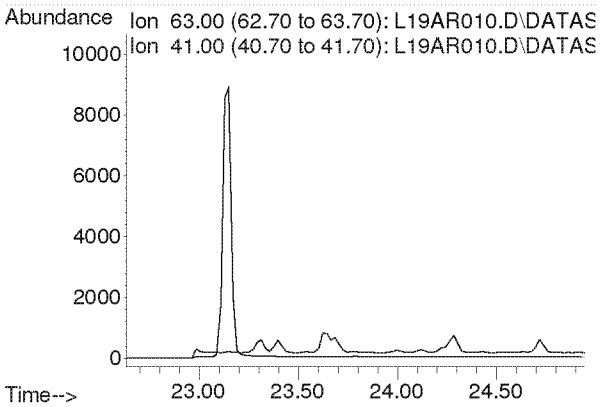


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

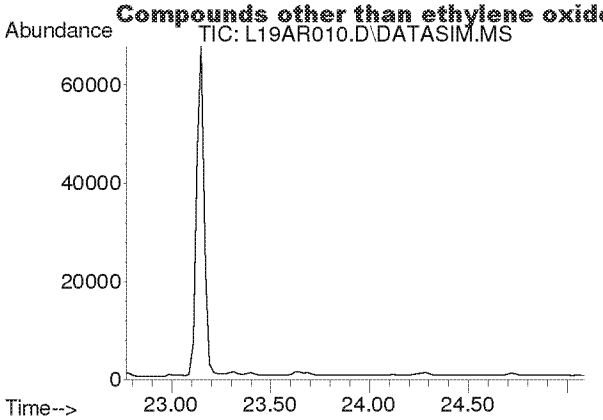
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

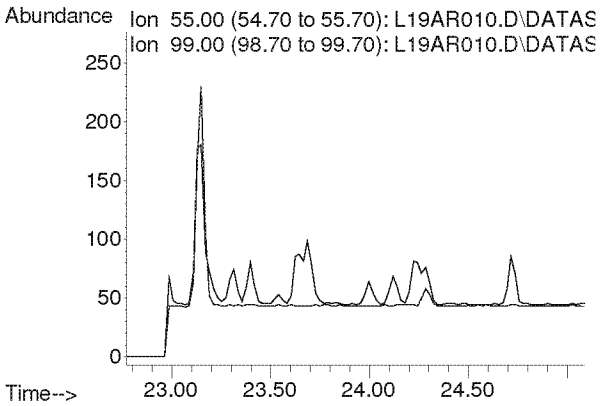


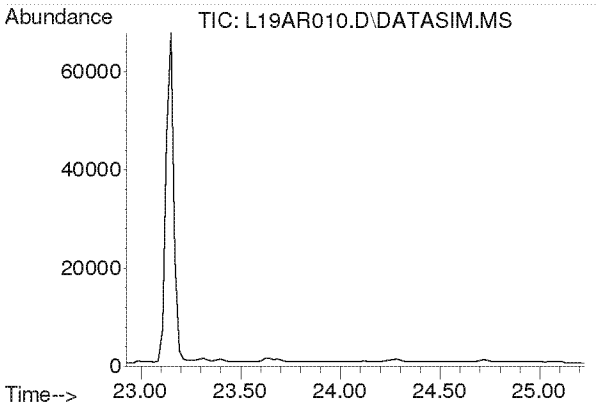
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



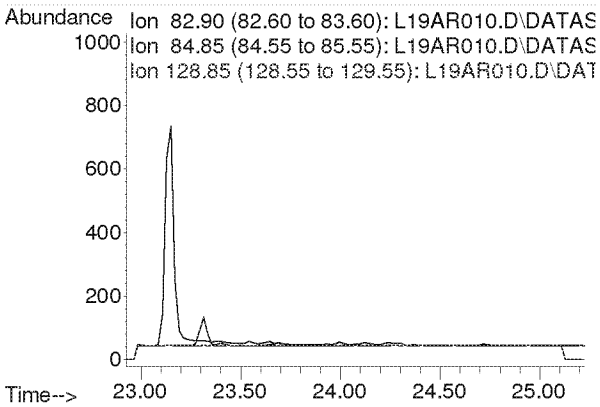


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

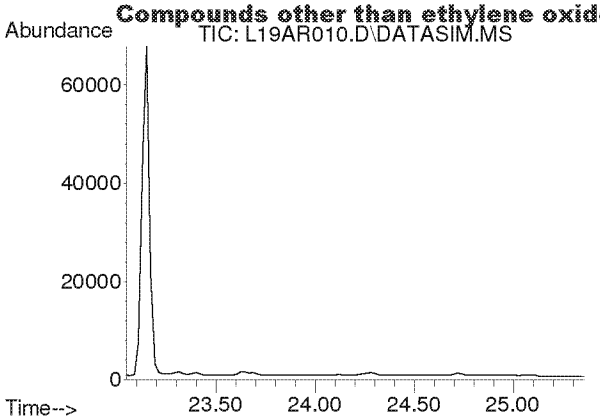
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

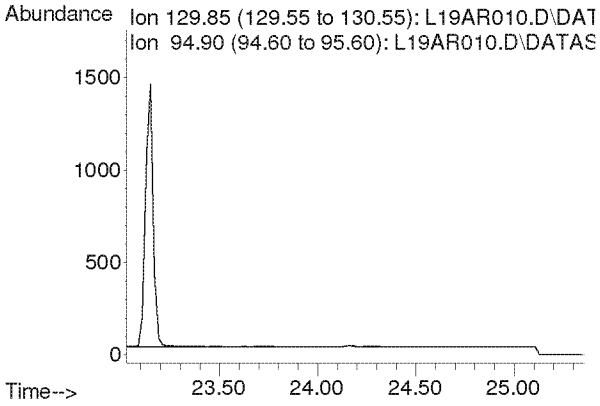


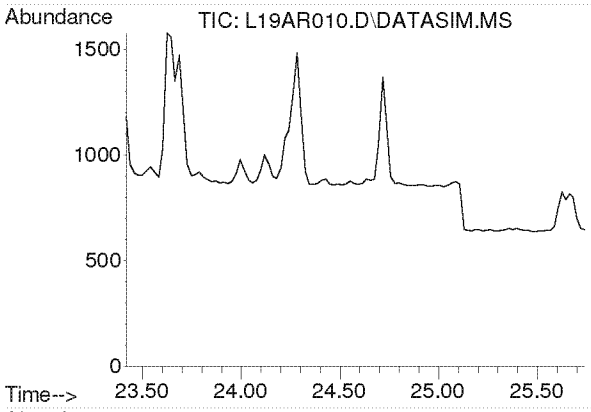
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



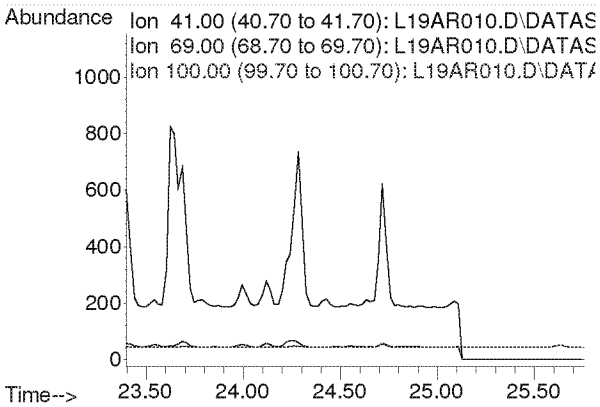


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

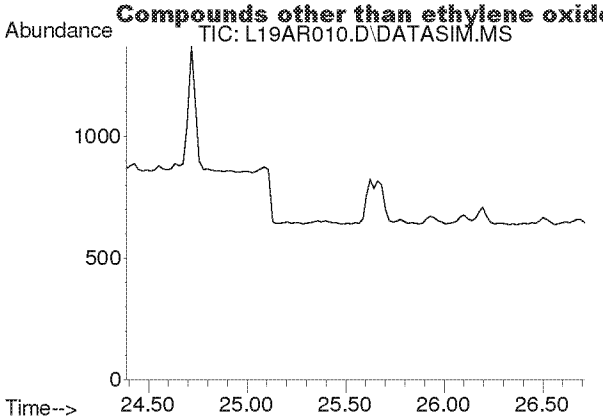
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

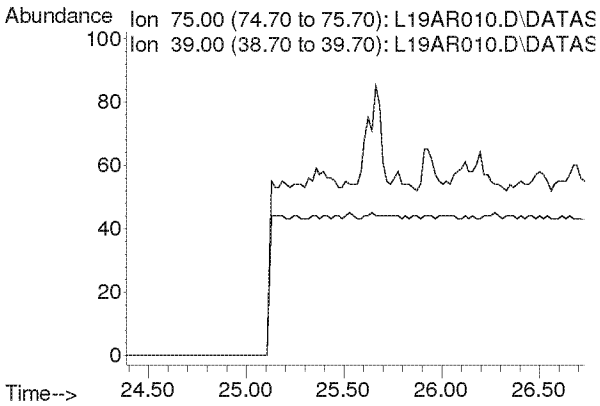


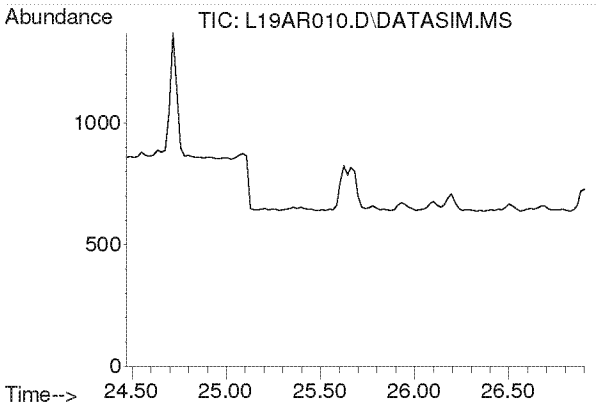
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



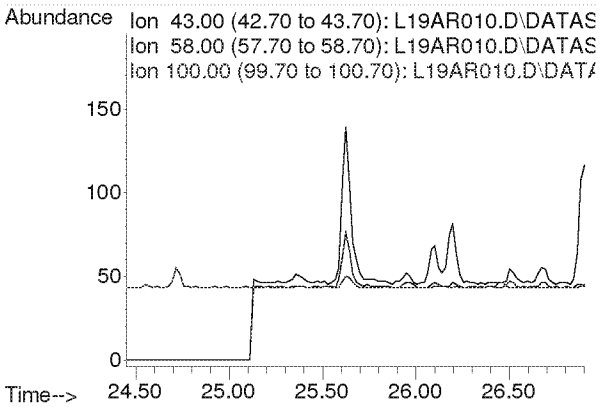


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

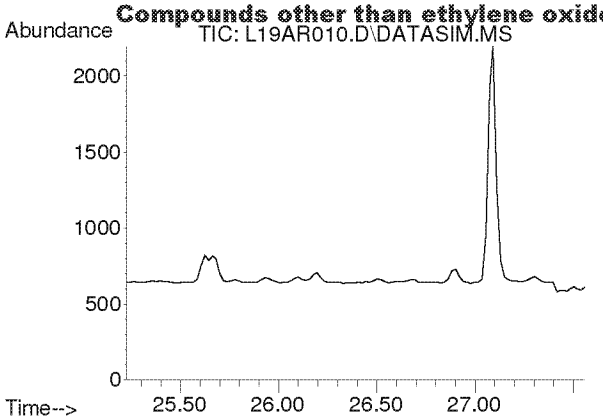
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

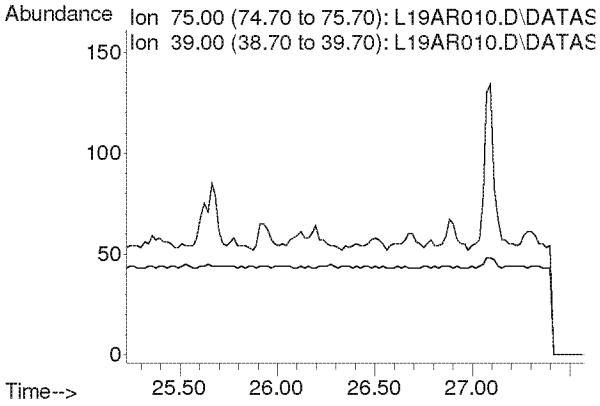


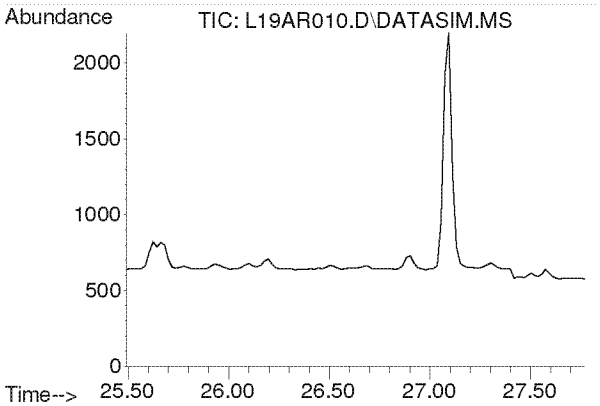
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



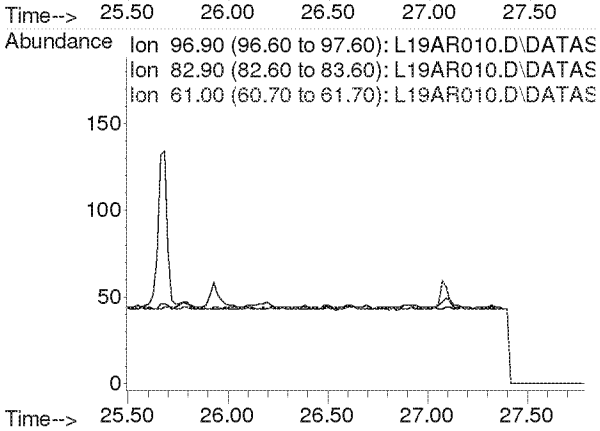


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

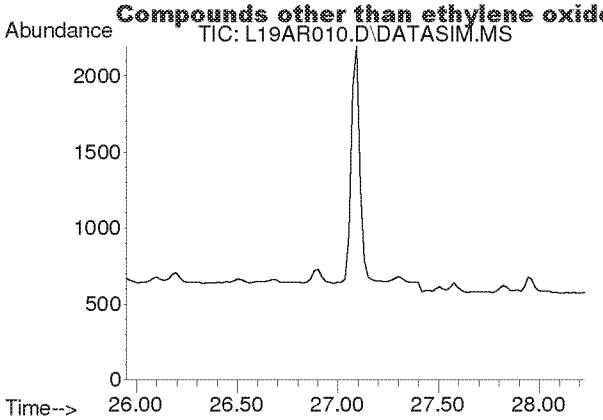
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

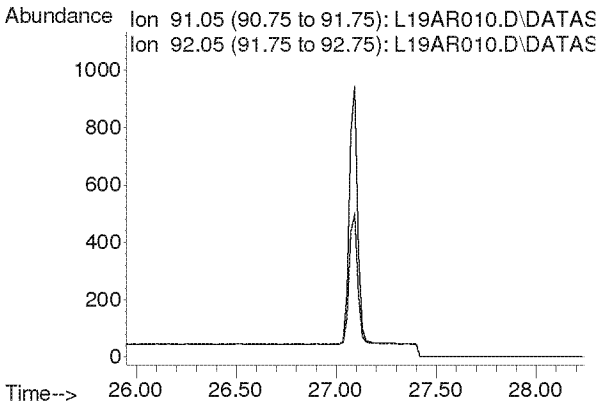


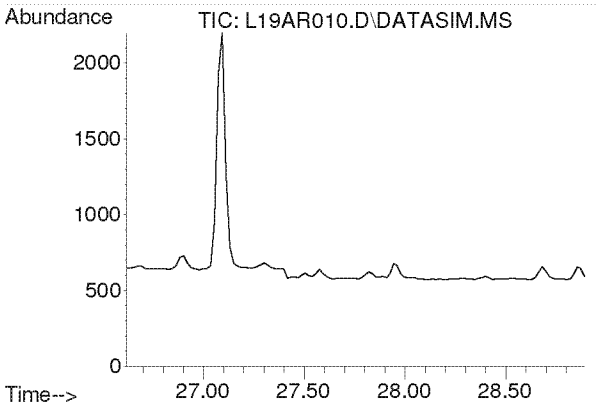
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



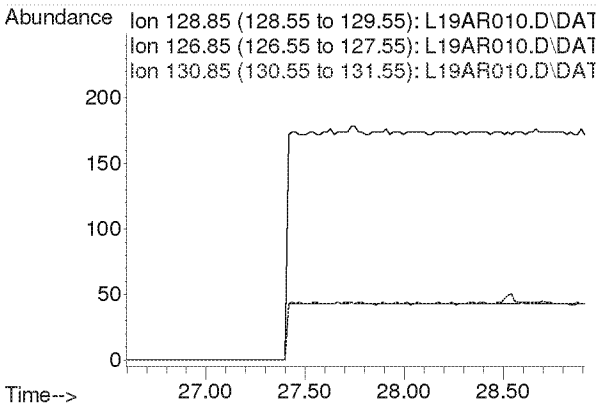


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

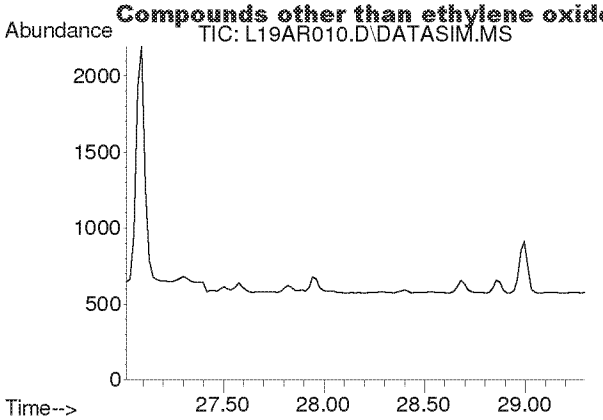
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

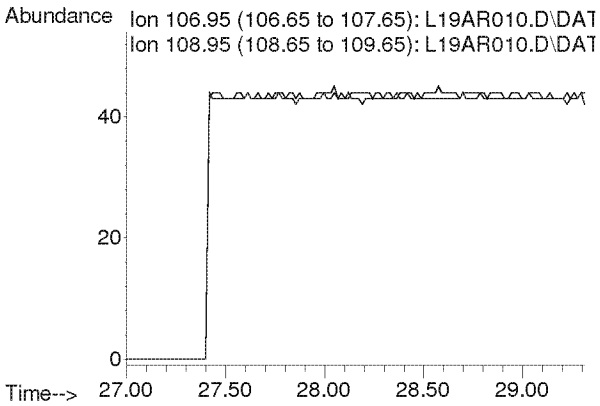


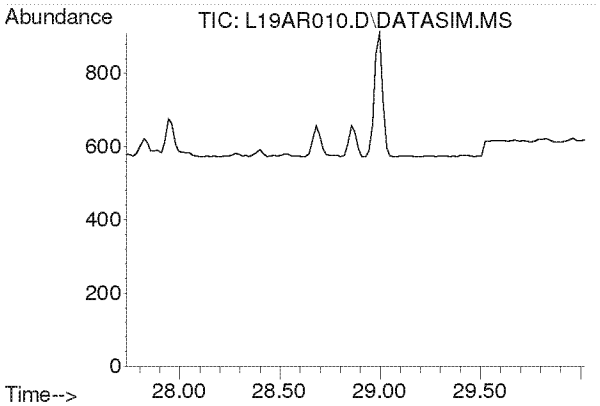
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



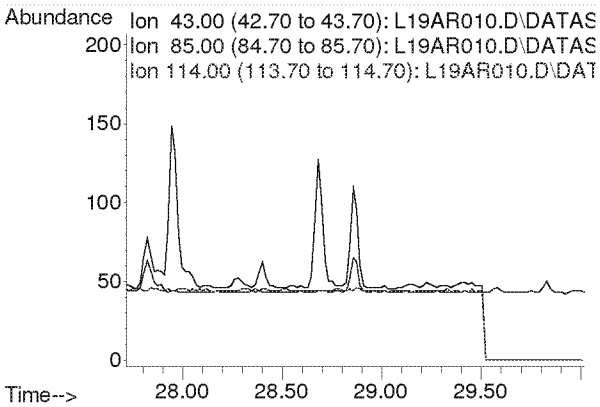


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

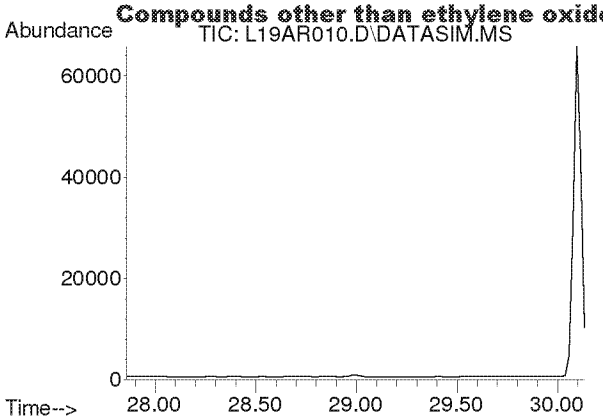
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

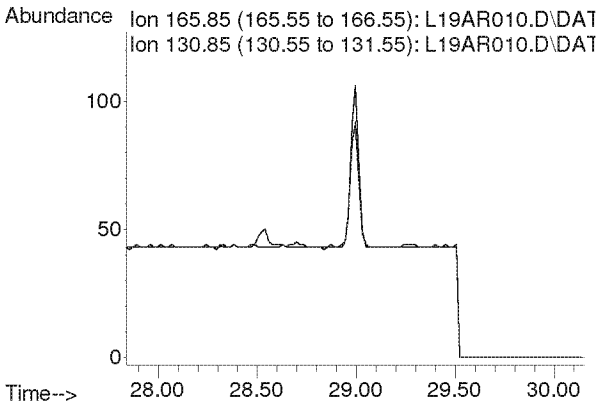


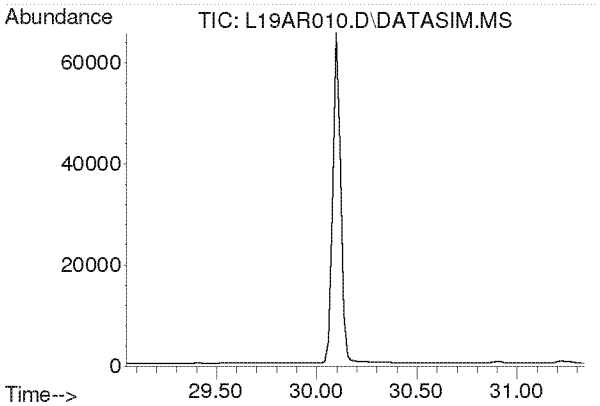
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



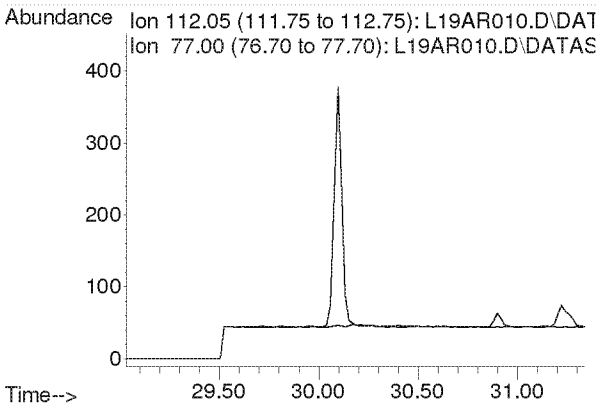


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

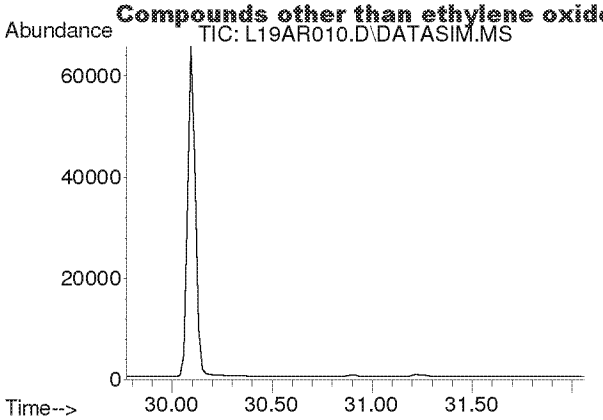
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

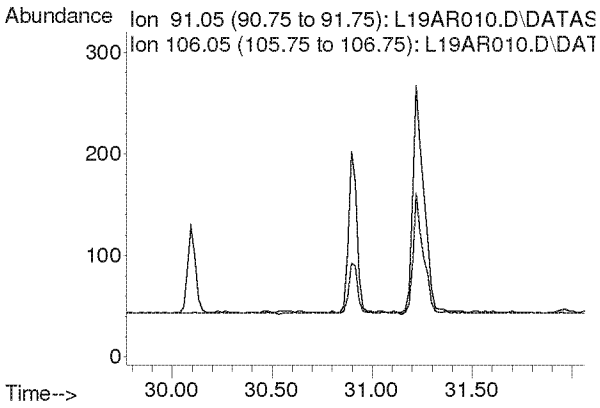


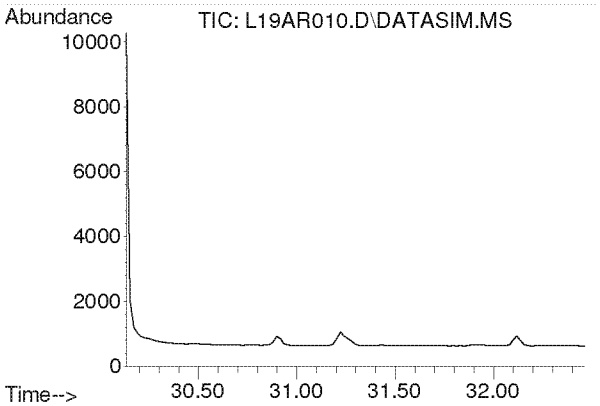
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



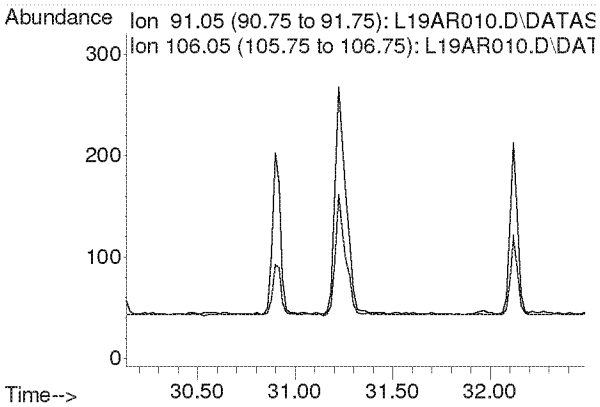


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

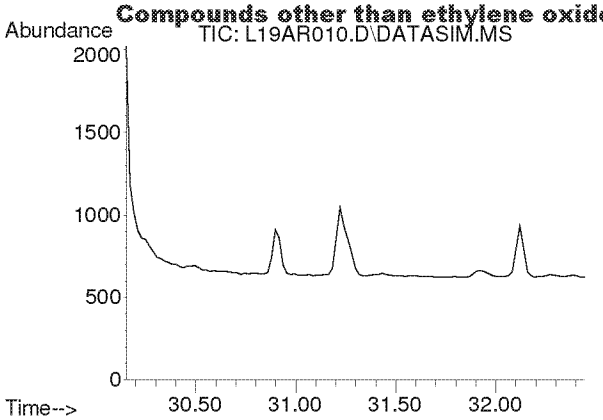
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

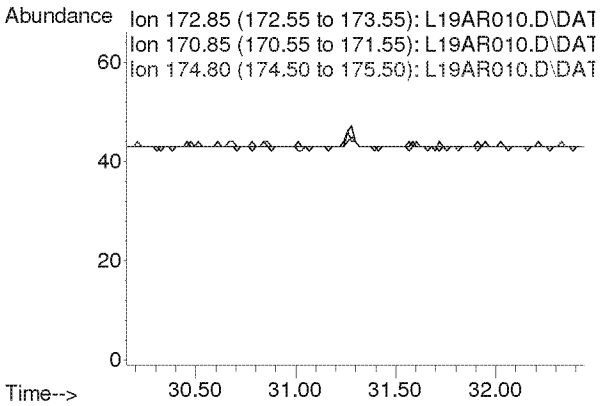


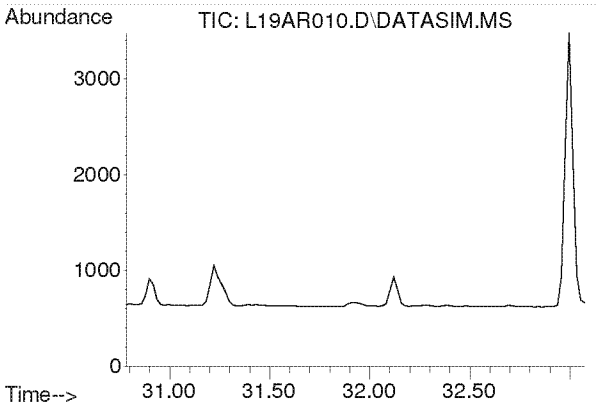
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



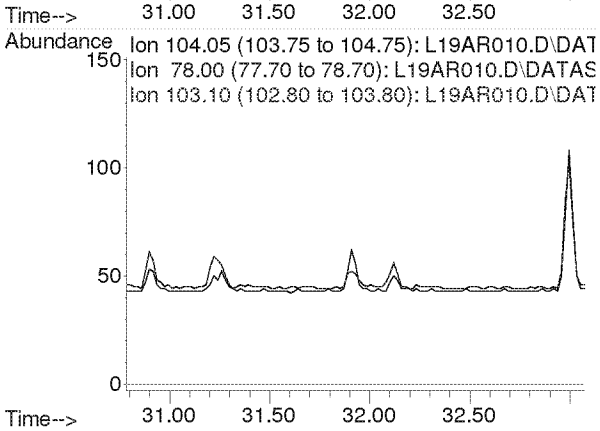


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

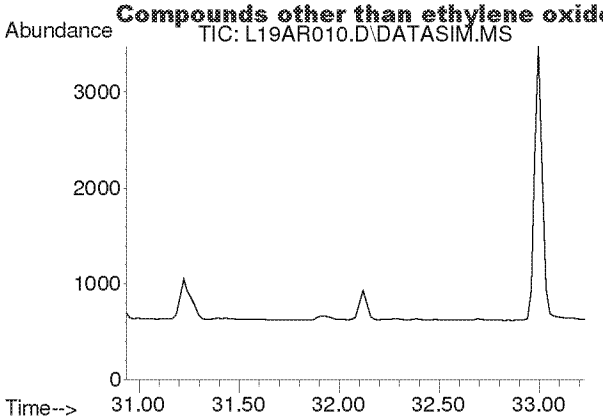
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

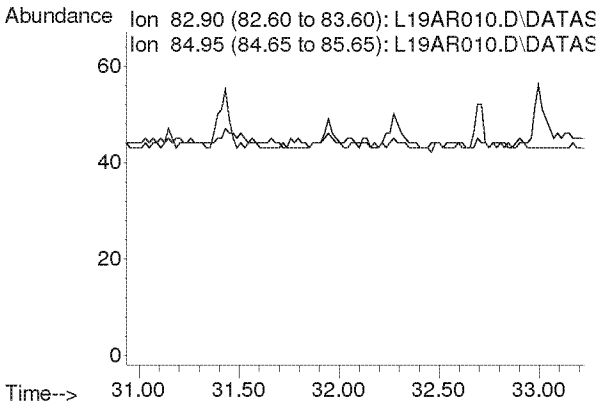


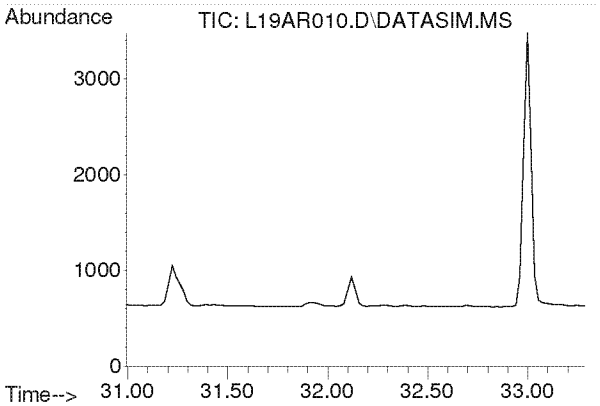
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



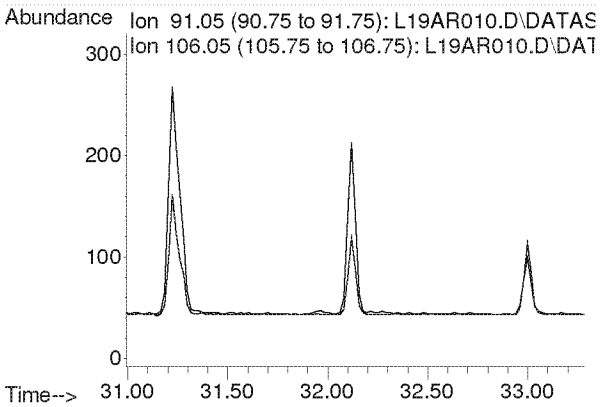


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

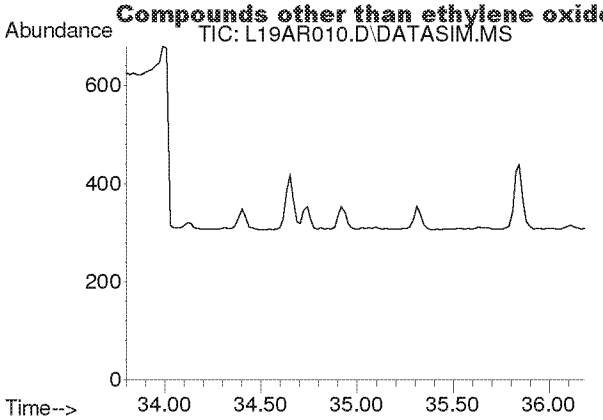
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

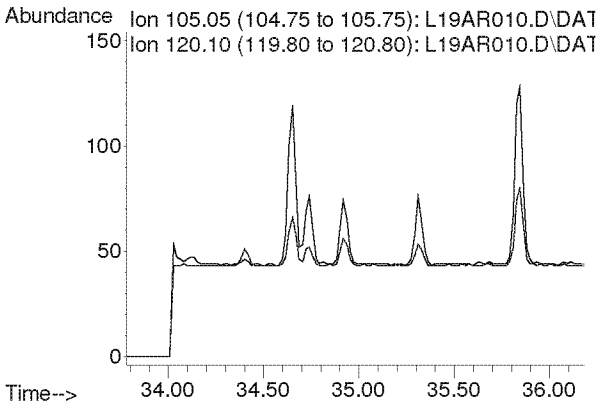


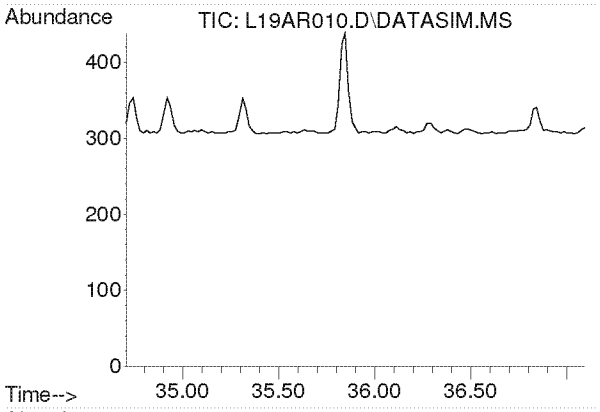
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



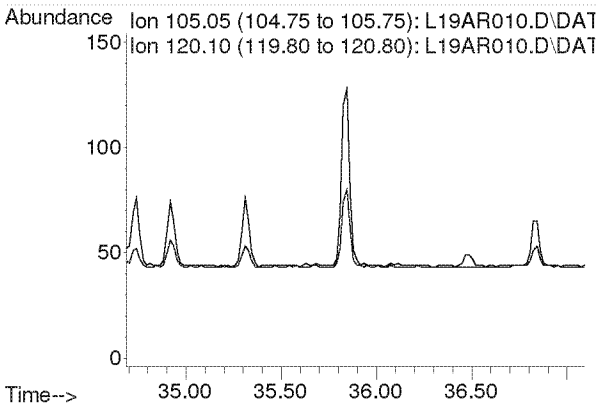


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

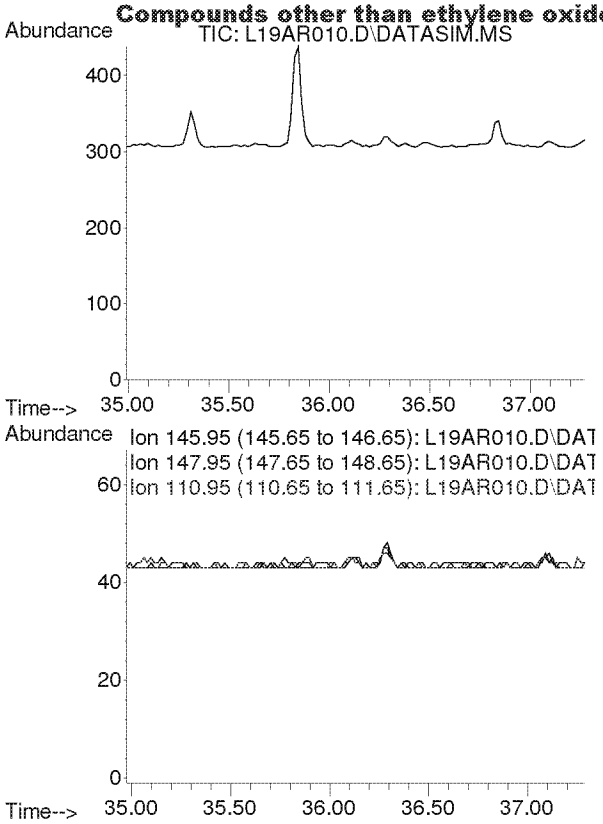
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

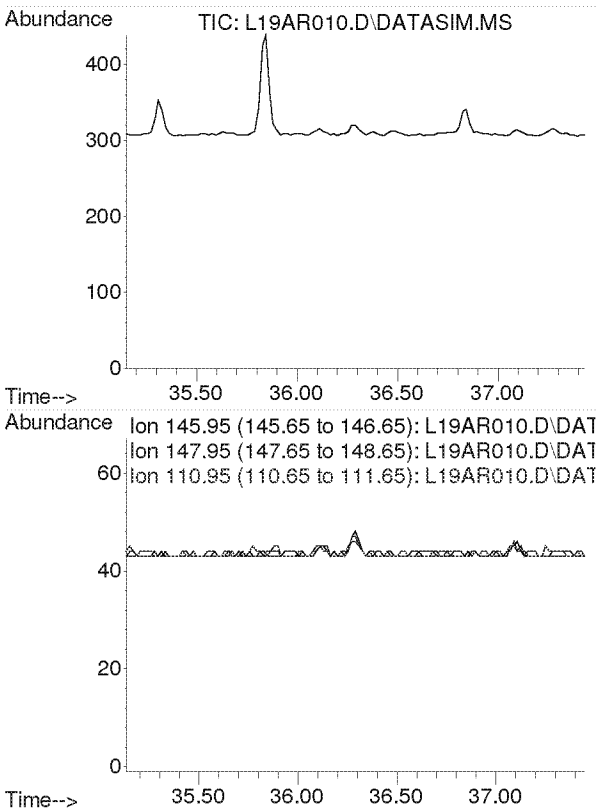


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



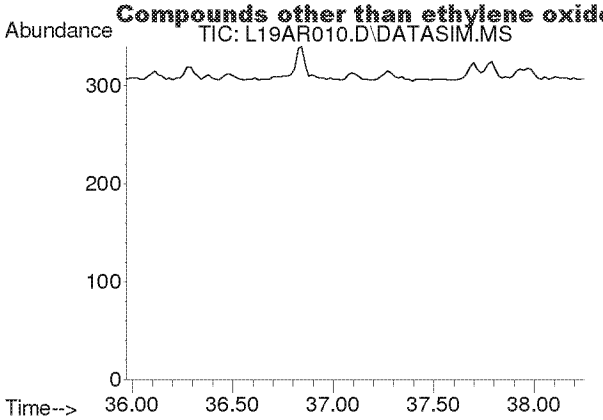
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

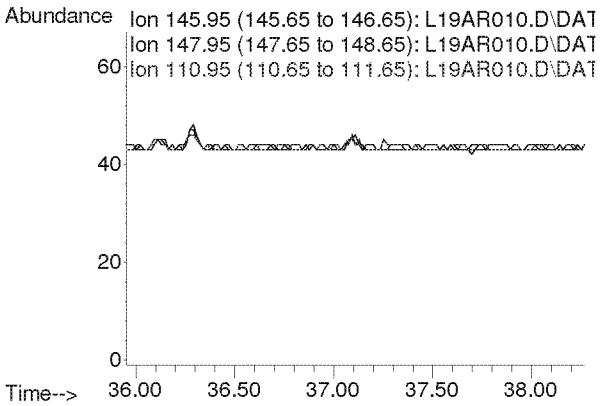


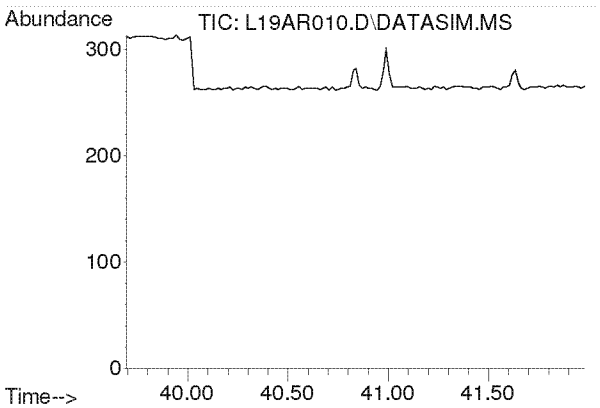
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



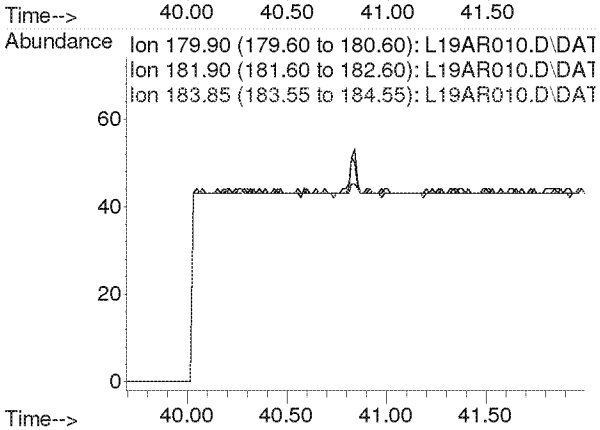


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

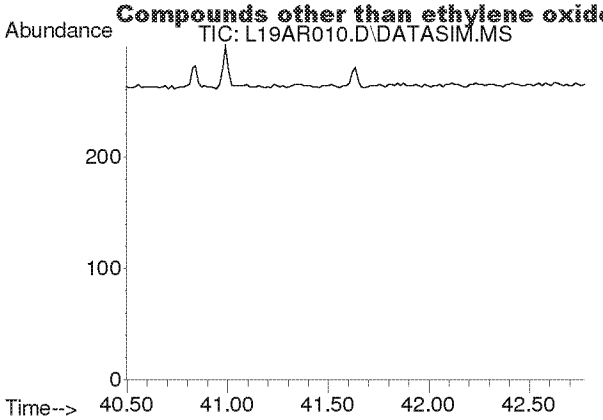
Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

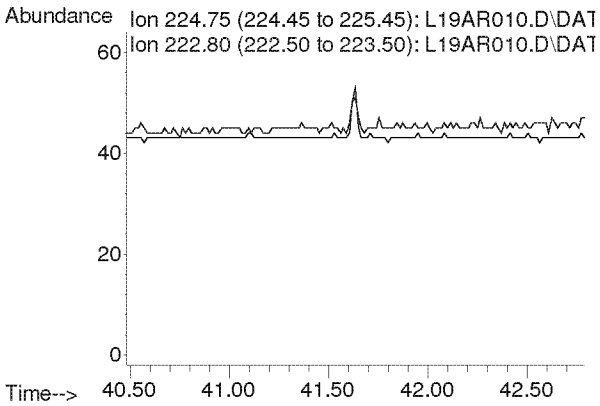


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AR010.D
Acq: 18 Jan 2019 8:35 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 : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR011.D
Acq On : 18 Jan 2019 9:37 pm
Operator : MAH
Sample : 9011527-02
Misc : WB VILLAGE HALL C2 1/13/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 08:38:54 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	19.990	66	50689	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.148	114	123317	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	95200	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	12.408	29	2386m	0.9113 ppbv	RMB 2/5/14
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	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR011.D
Acq On : 18 Jan 2019 9:37 pm
Operator : MAH
Sample : 9011527-02
Misc : WB VILLAGE HALL C2 1/13/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 08:38:54 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

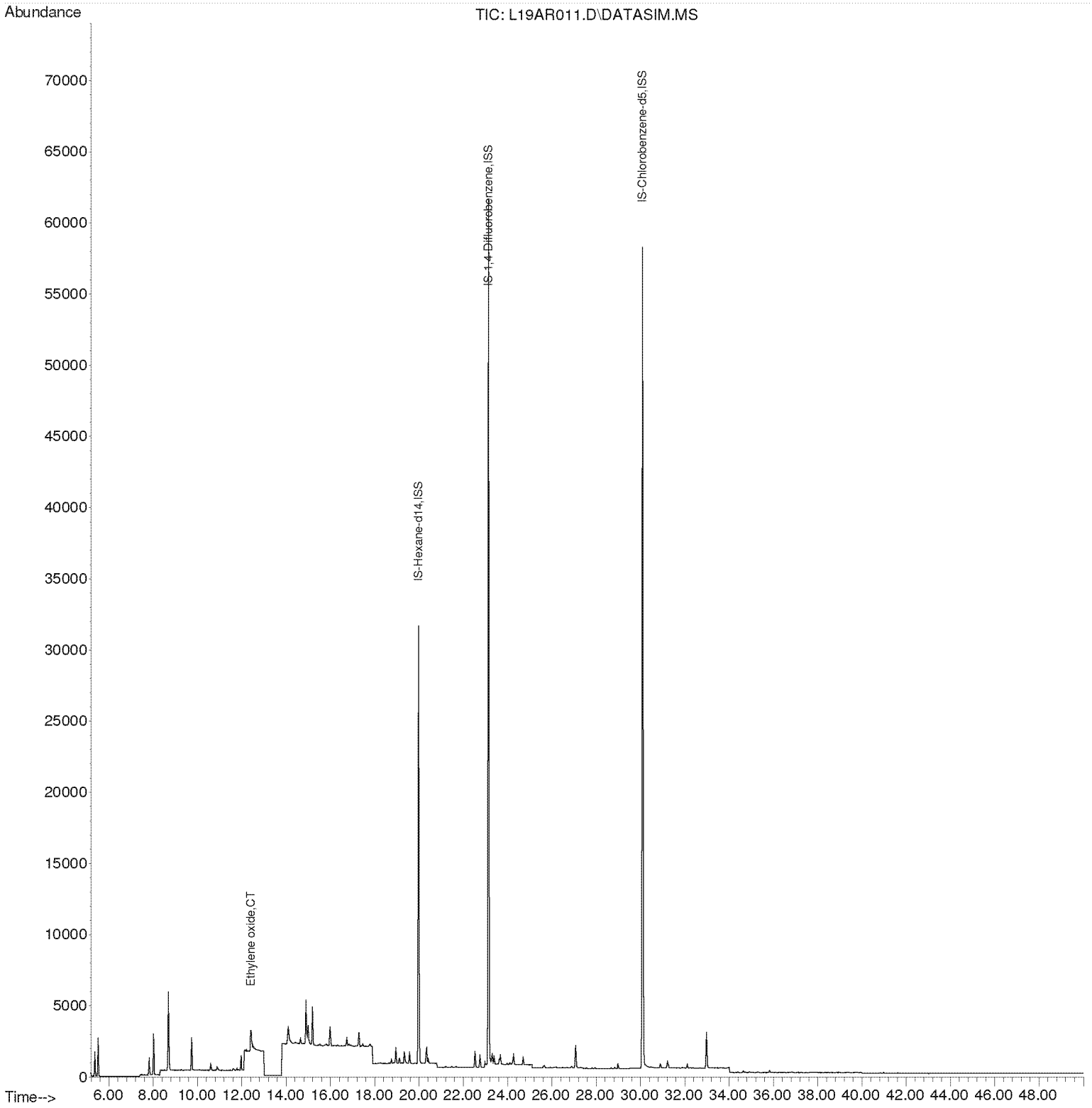
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	0.000	91	0	N.D.	d
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	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

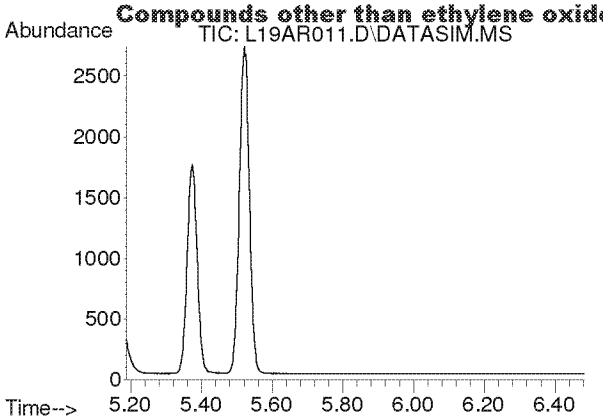
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR011.D
Acq On : 18 Jan 2019 9:37 pm
Operator : MAH
Sample : 9011527-02
Misc : WB VILLAGE HALL C2 1/13/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 23 08:38:54 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



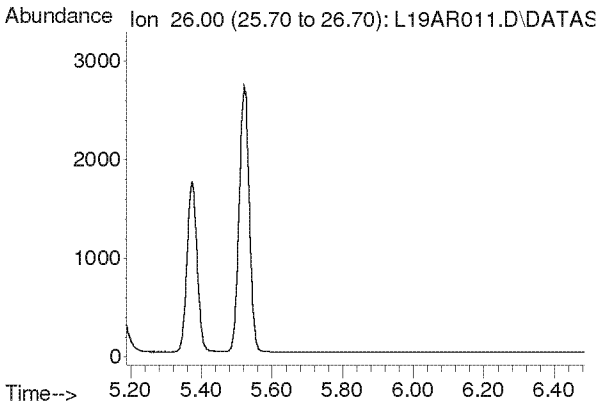
Compounds other than ethylene oxide were not quantitated.

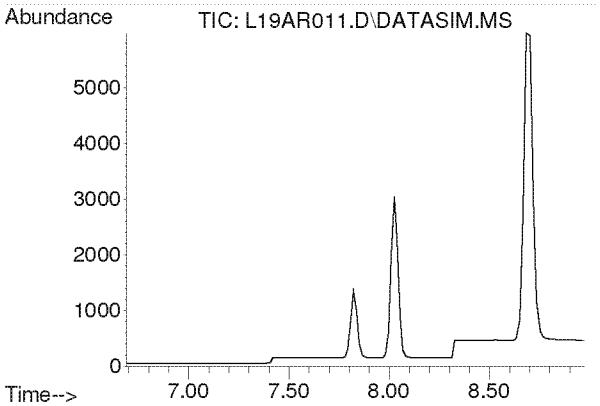


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 26



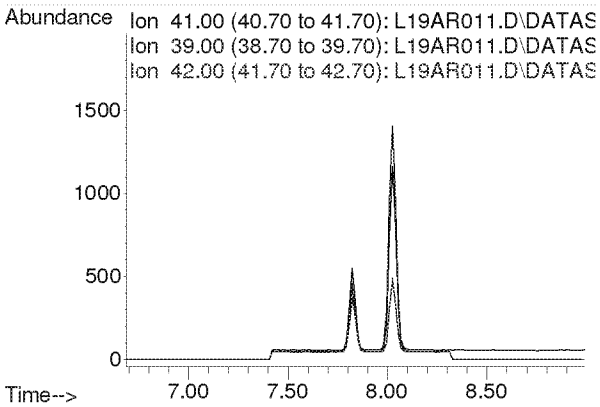


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

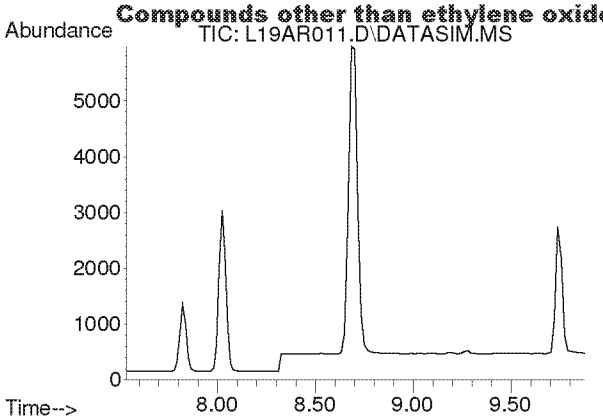
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

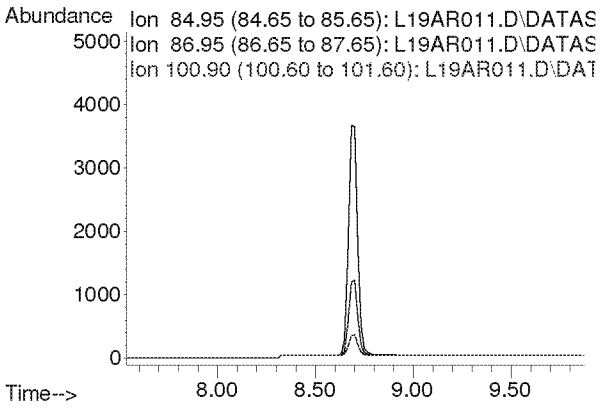


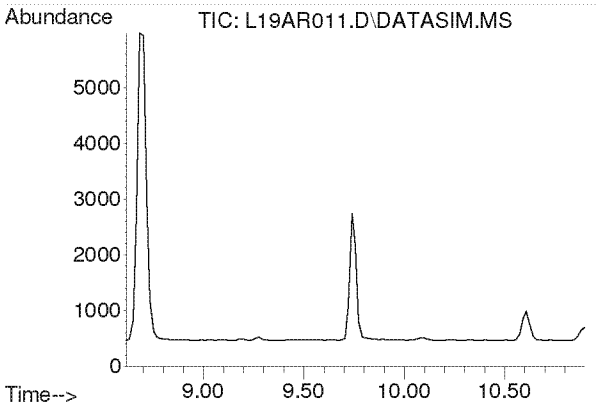
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



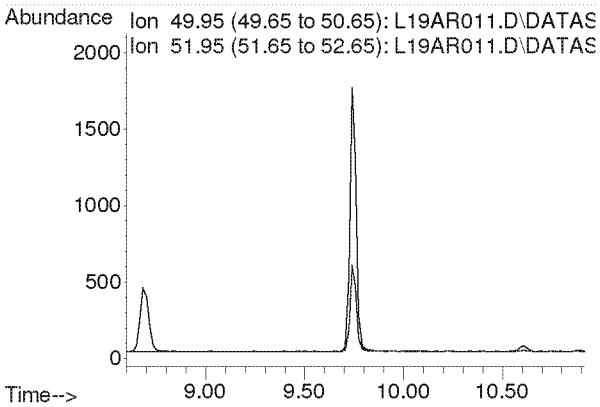


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

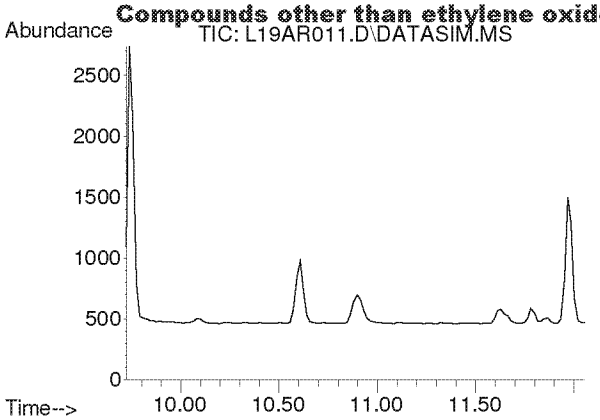
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

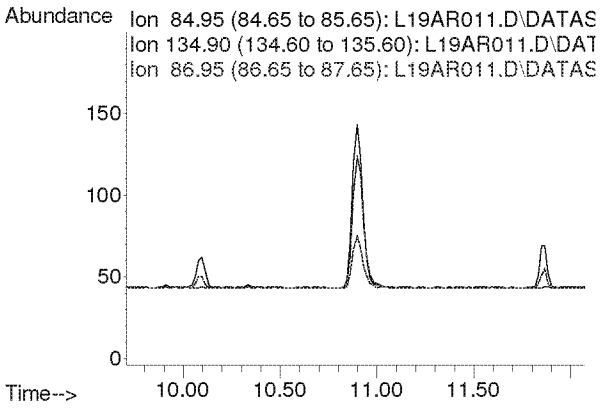


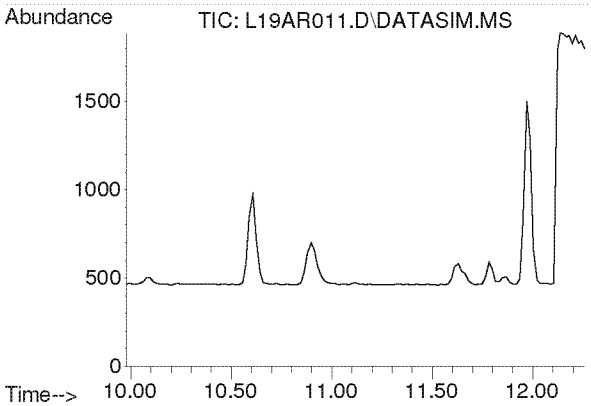
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



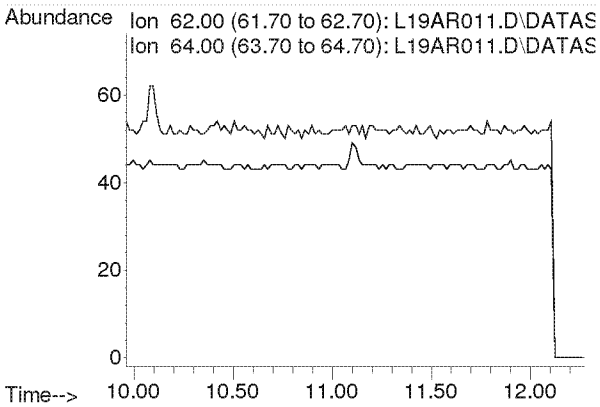


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

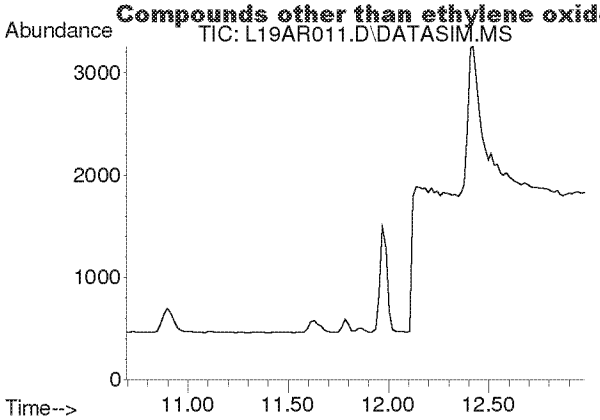
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

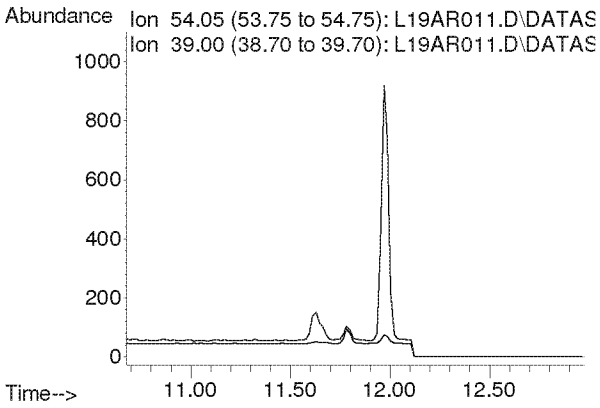


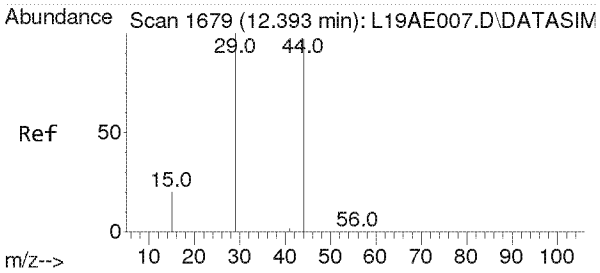
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

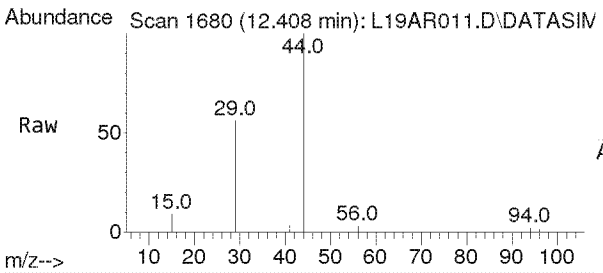


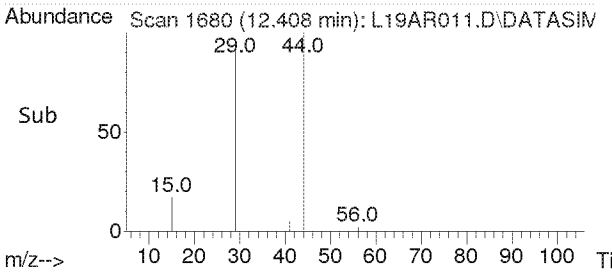


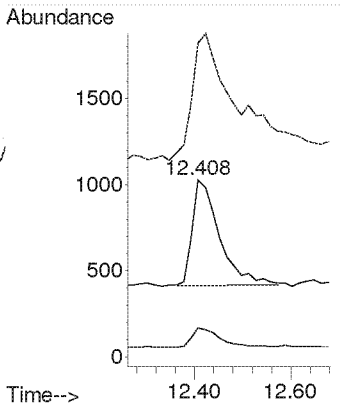
#9
Ethylene oxide
Concen: 0.911 ppbv m
RT: 12.408 min Scan# 1680
Delta R.T. 0.015 min
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 29 Resp: 2386

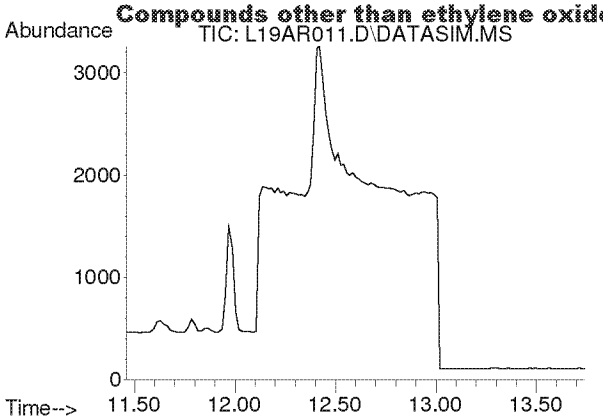
Ion	Ratio	Lower	Upper
29	100		
15	18.8	15.4	23.0
44	196.9	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

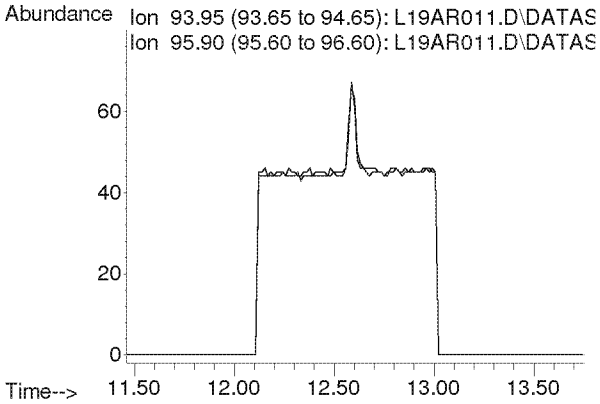


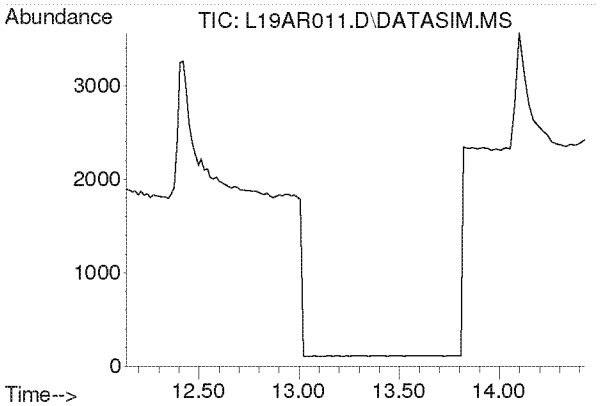
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



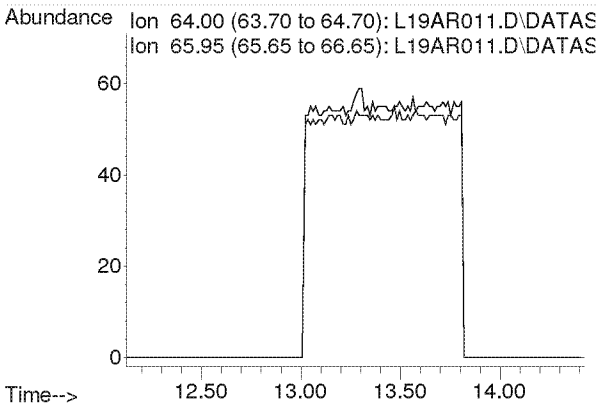


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

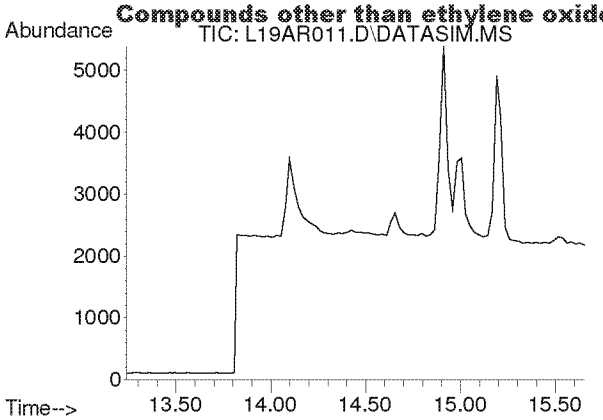
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

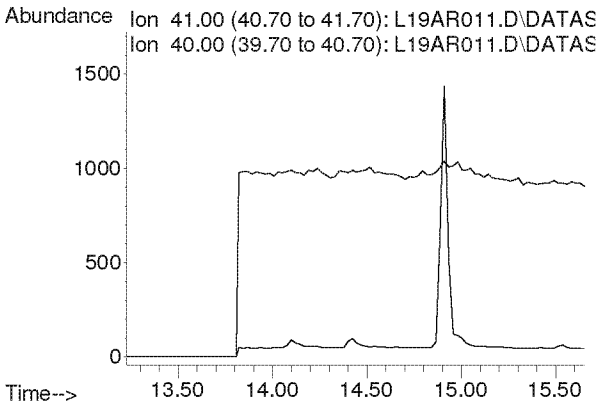


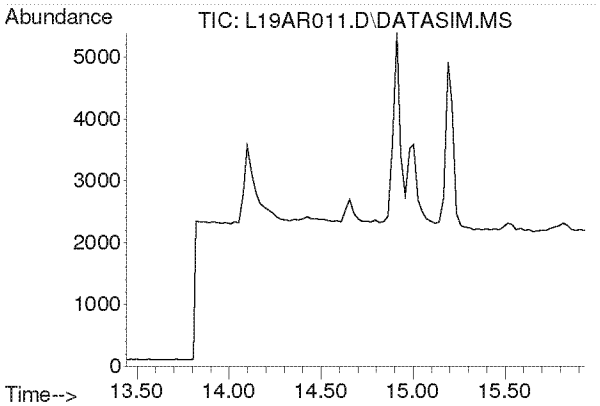
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



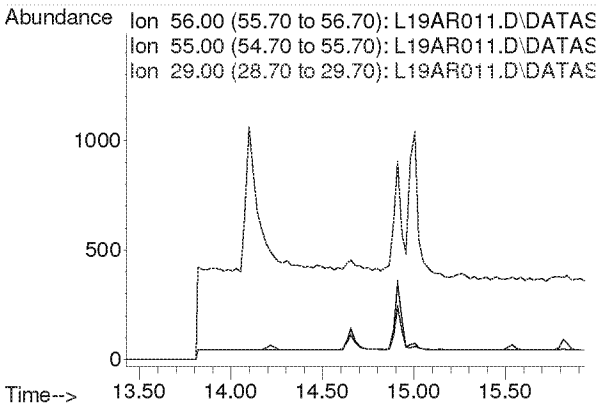


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

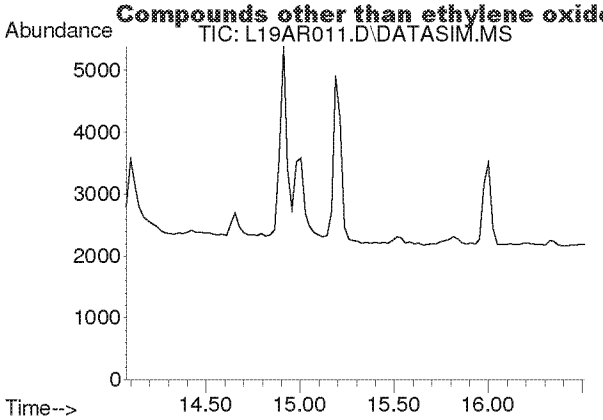
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

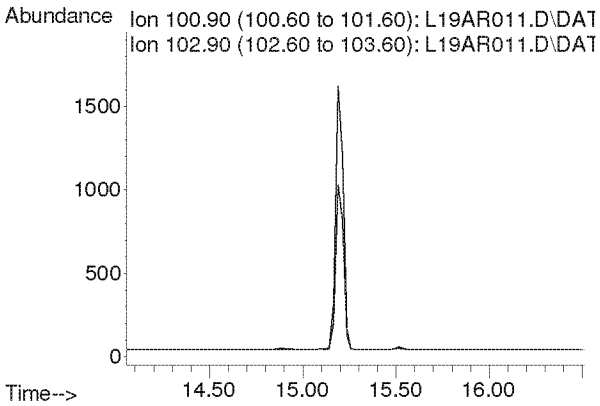


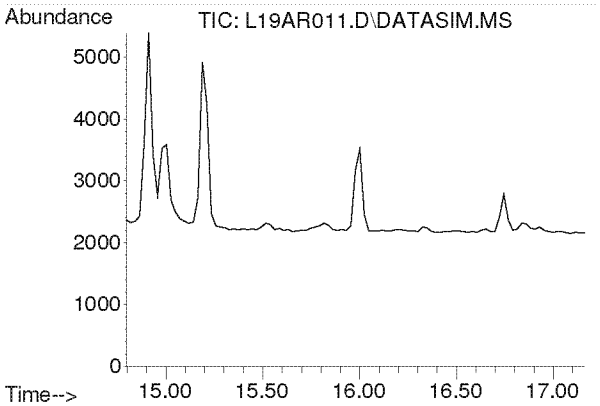
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



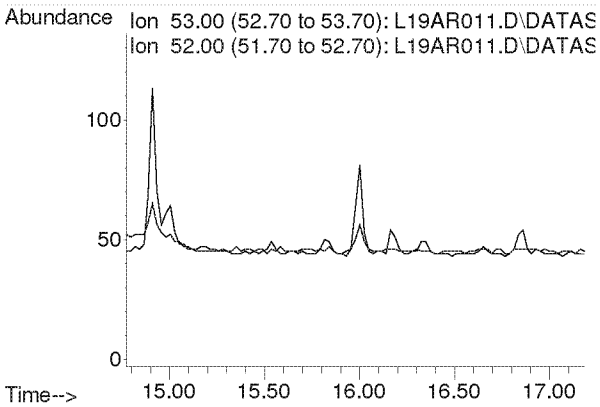


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

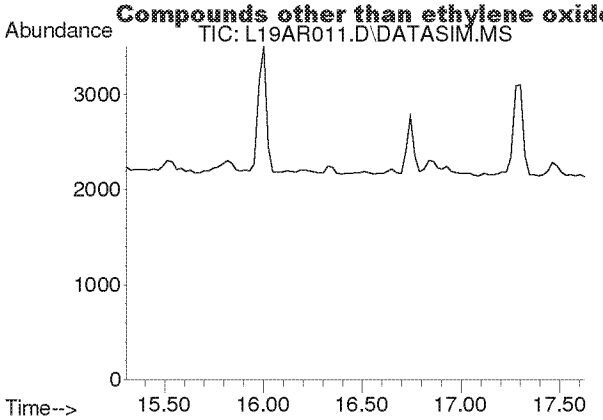
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

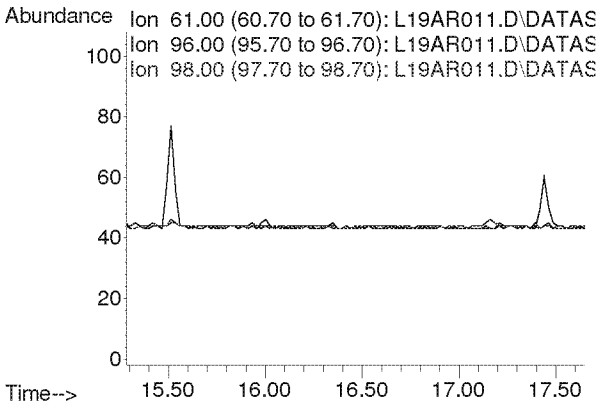


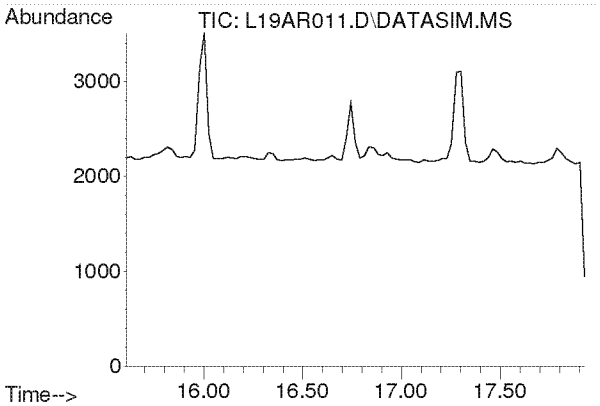
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



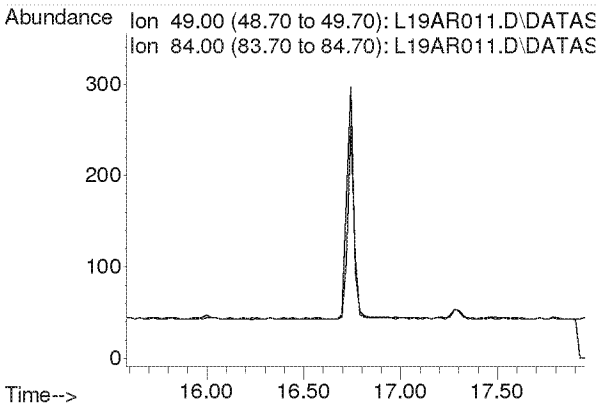


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

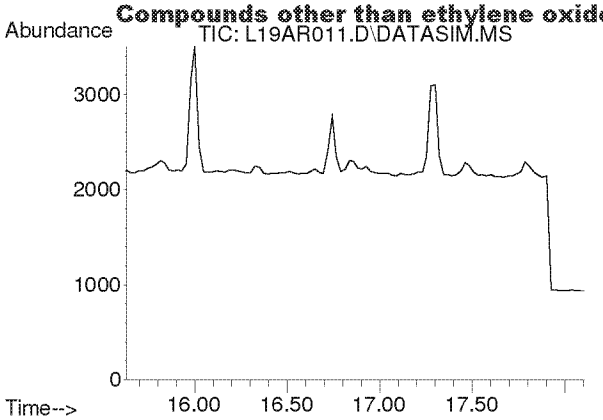
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

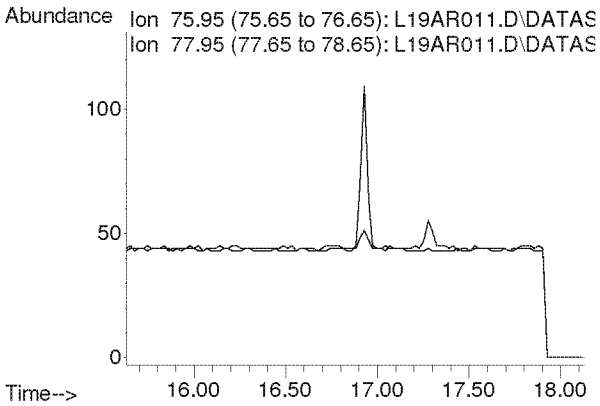


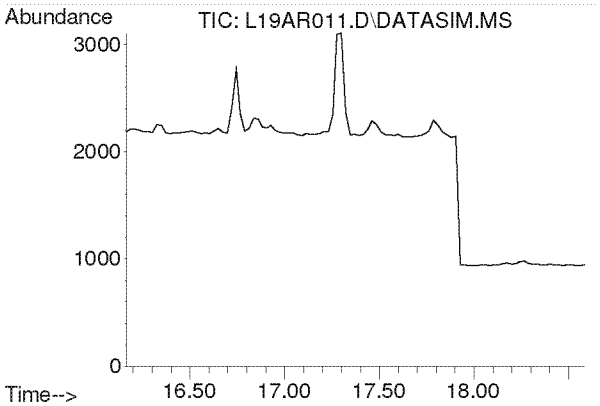
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



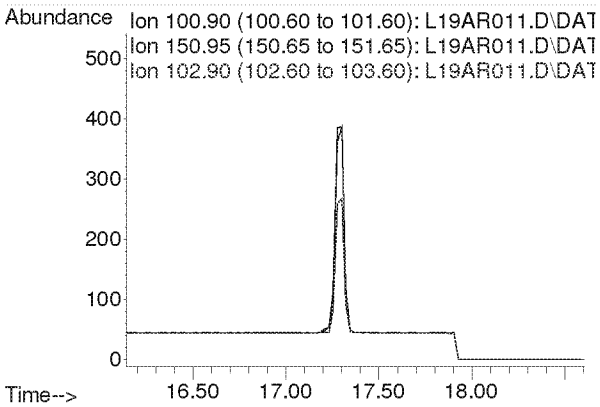


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

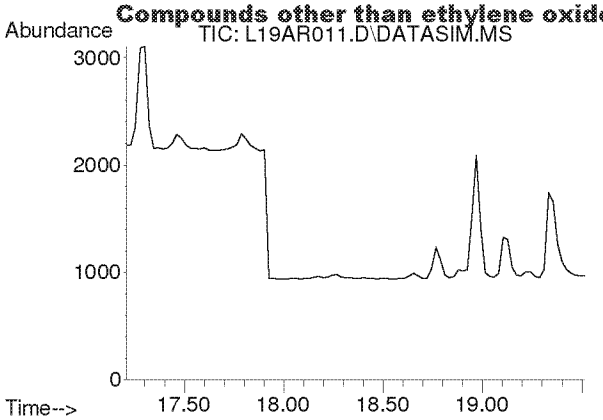
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

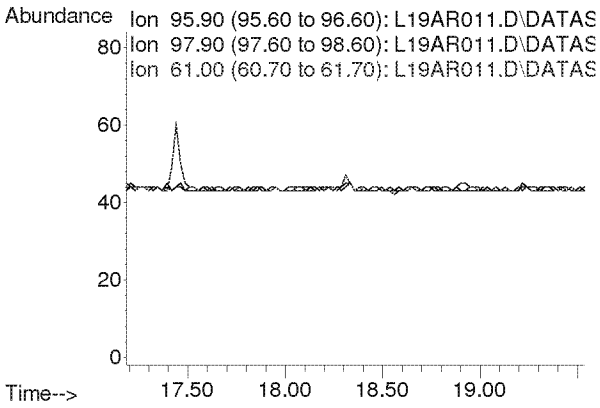


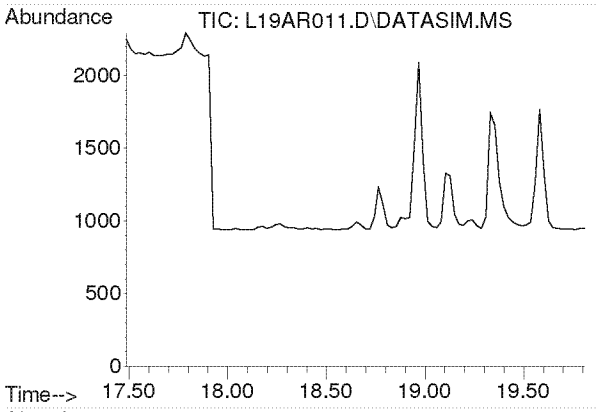
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



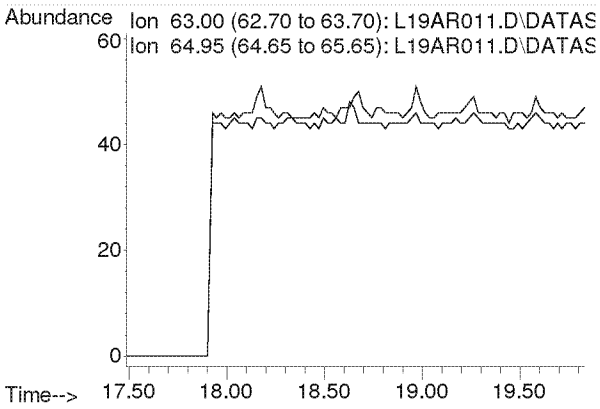


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

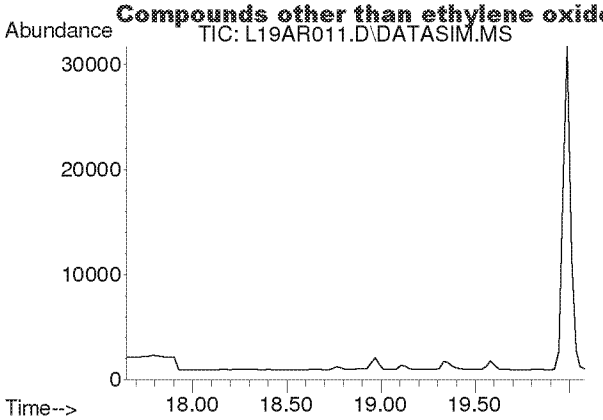
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

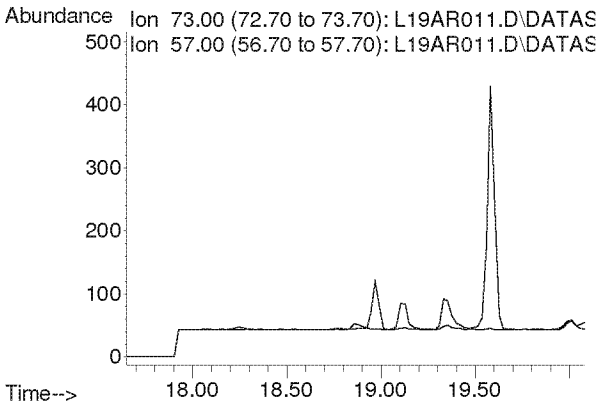


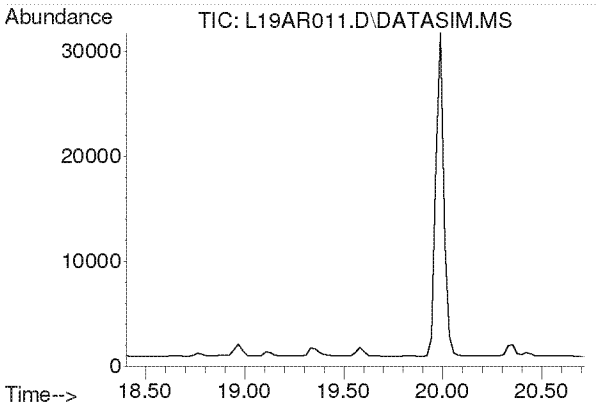
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



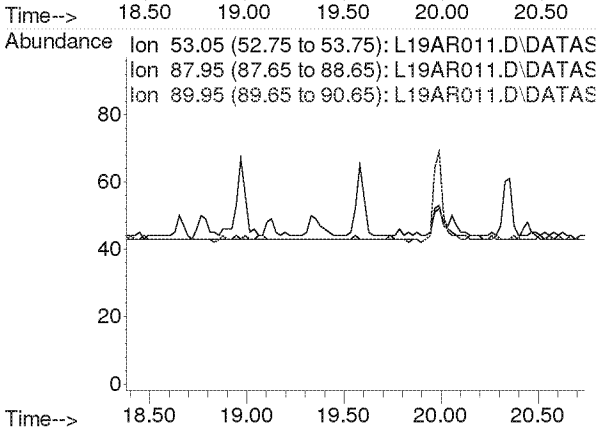


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

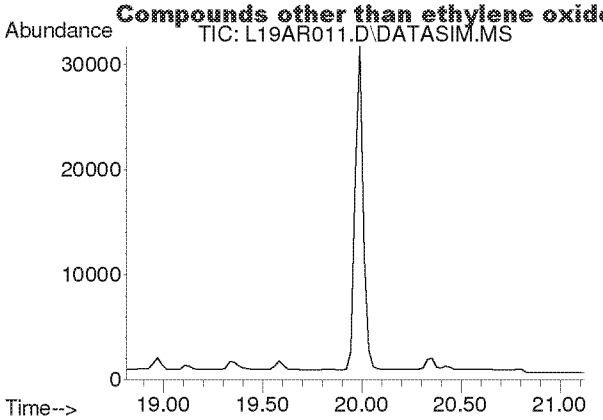
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

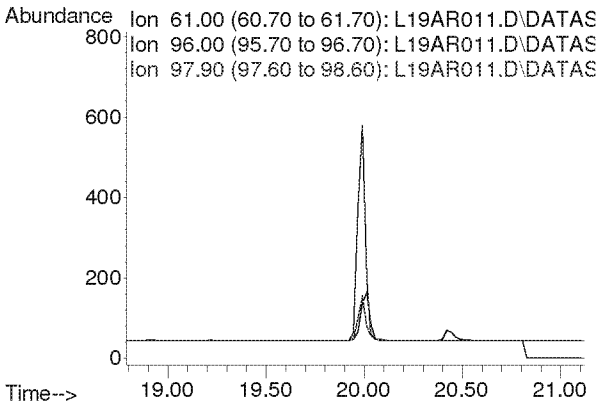


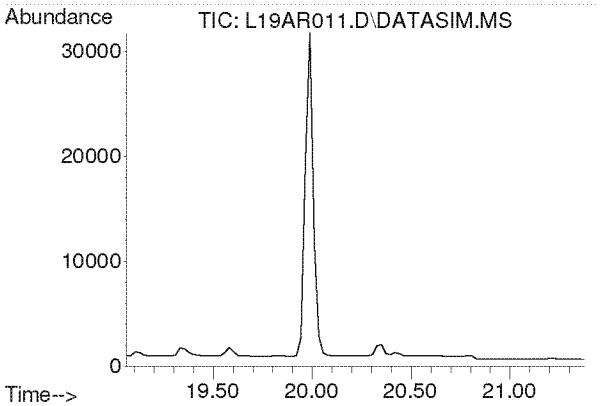
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



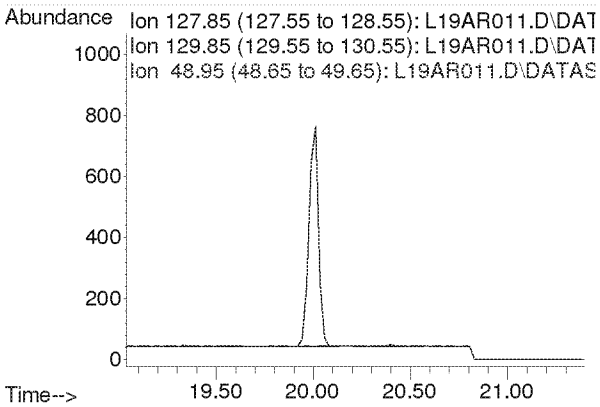


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

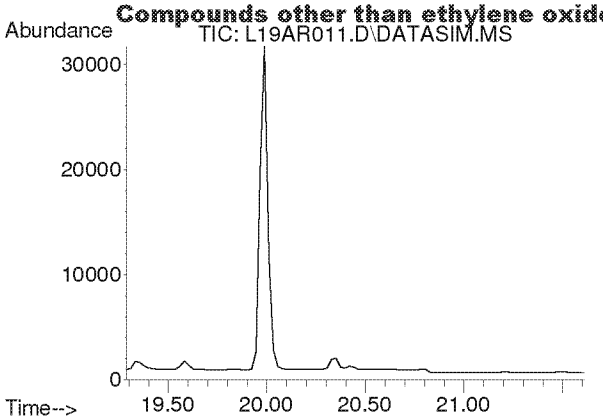
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

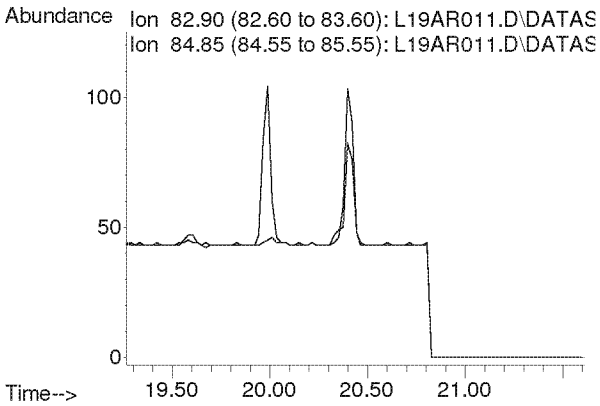


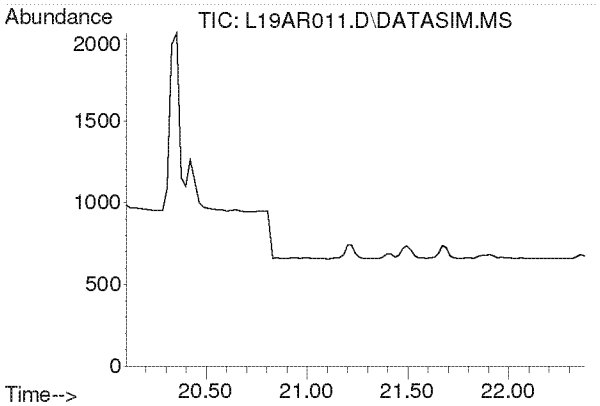
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



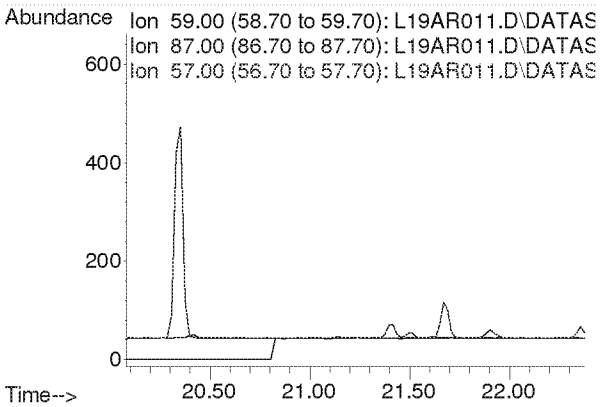


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

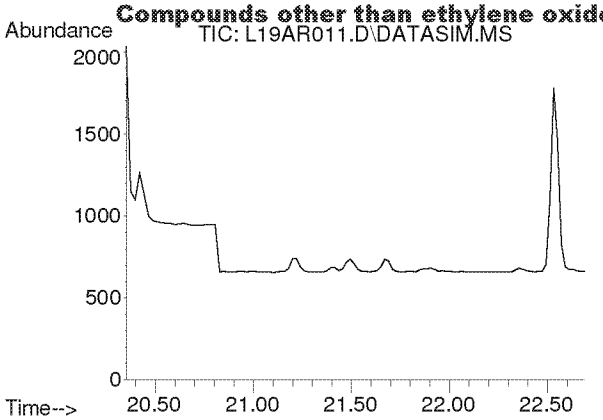
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

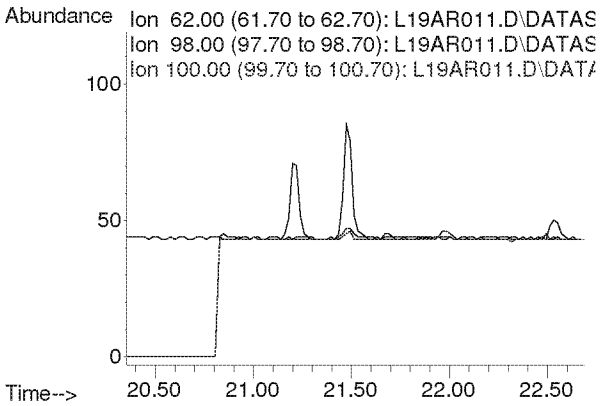


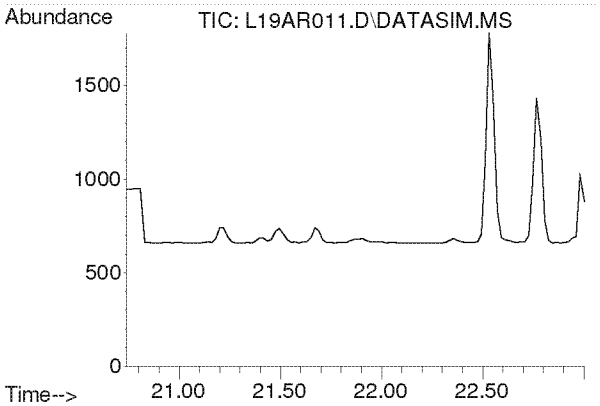
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



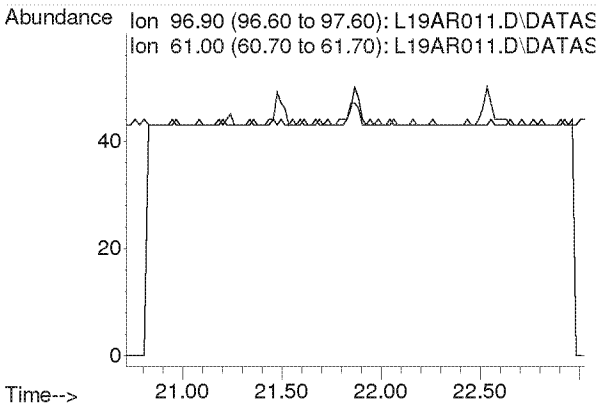


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

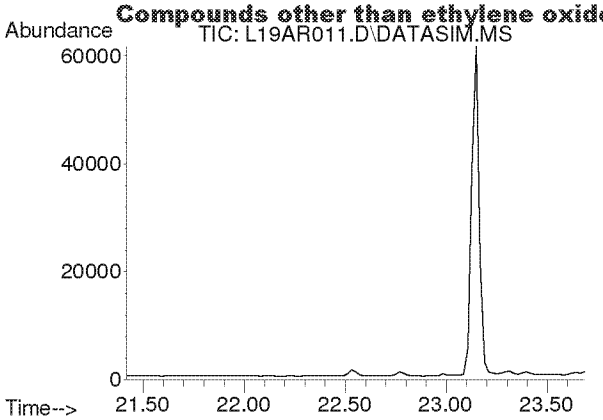
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

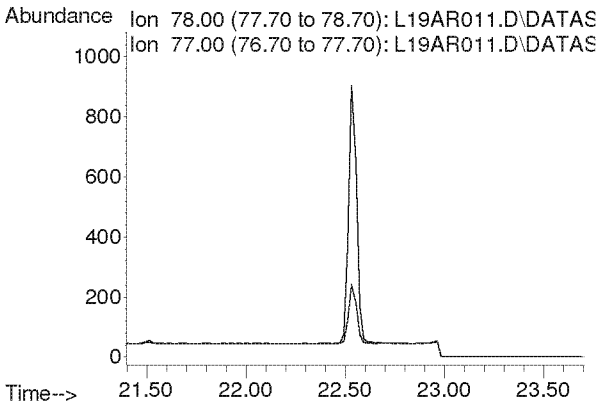


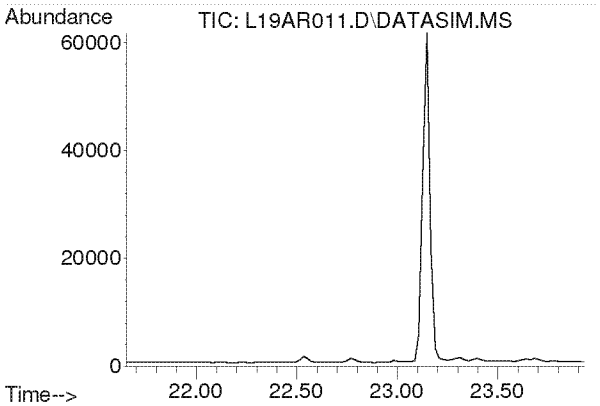
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



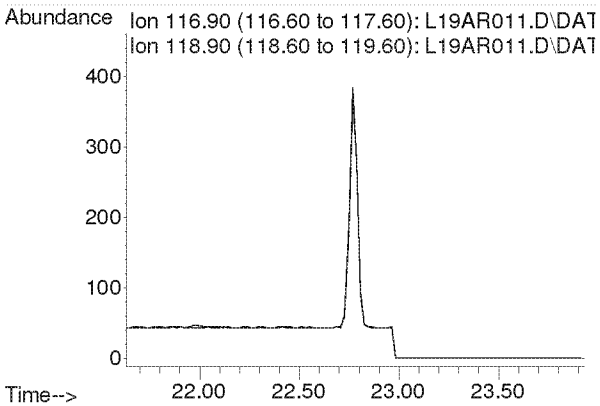


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

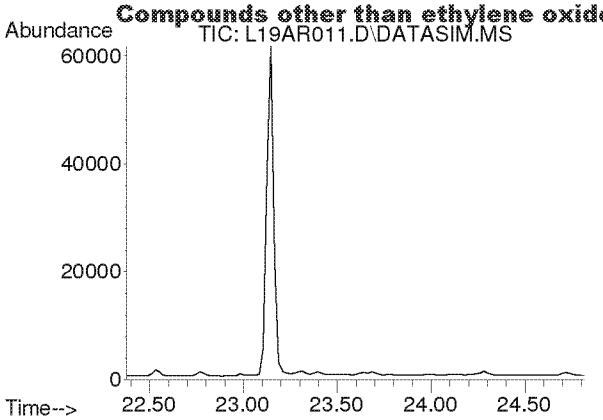
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

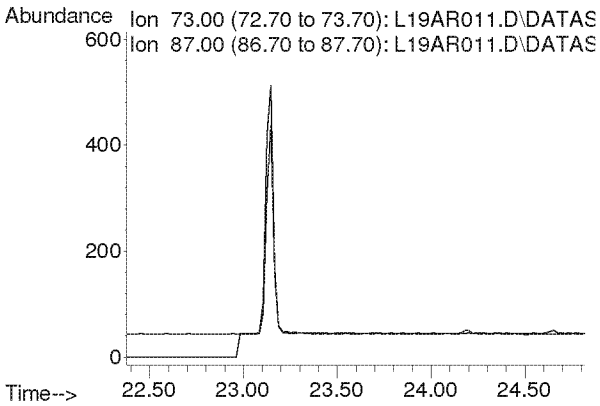


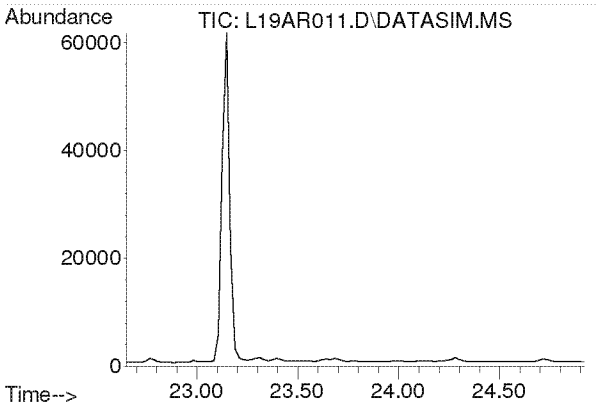
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



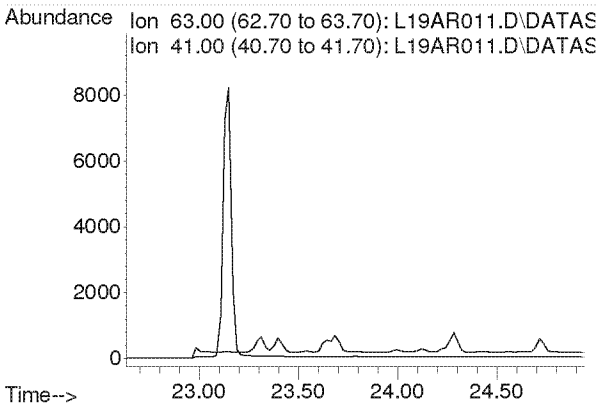


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

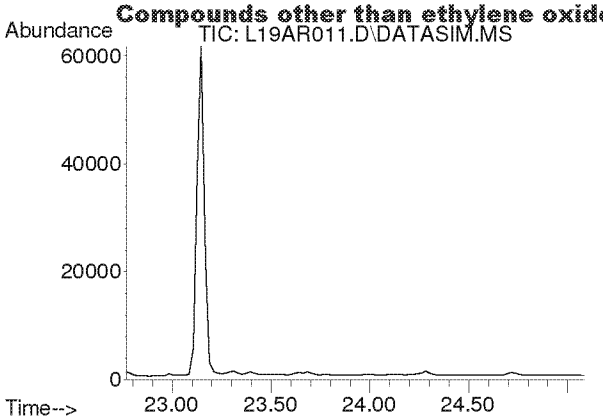
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

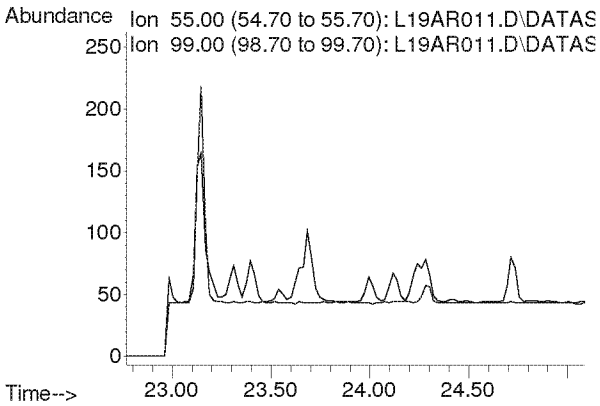


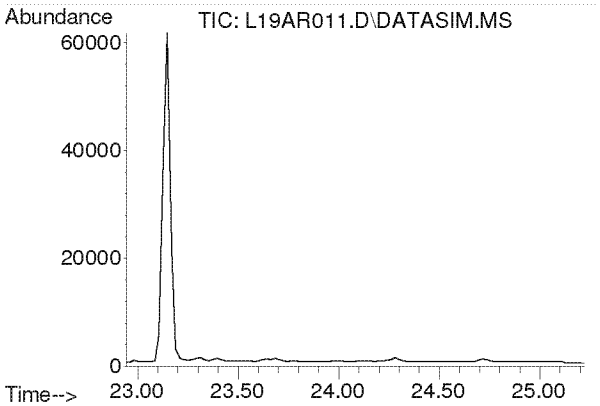
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



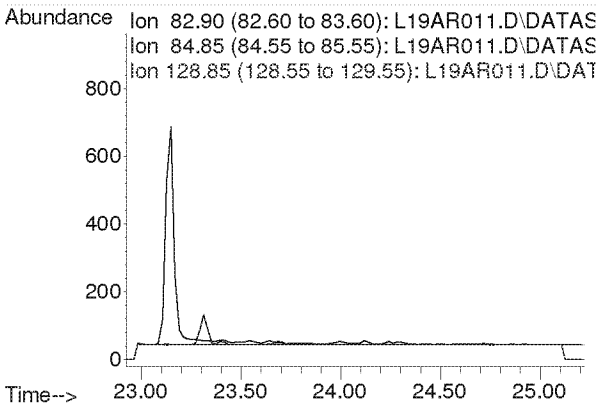


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

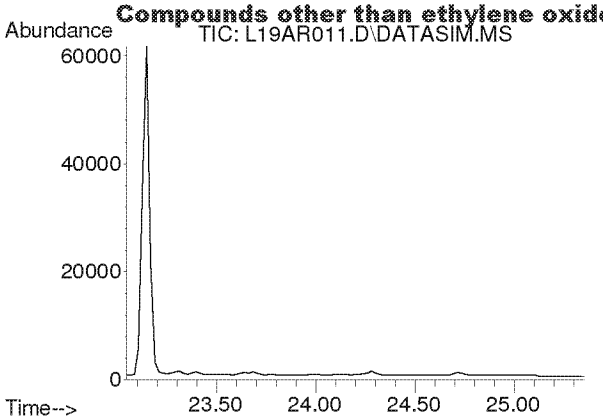
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

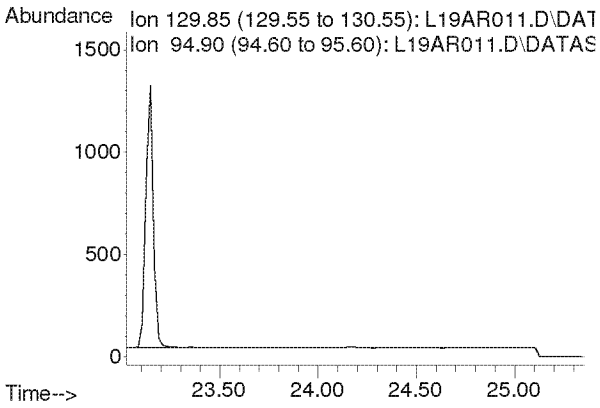


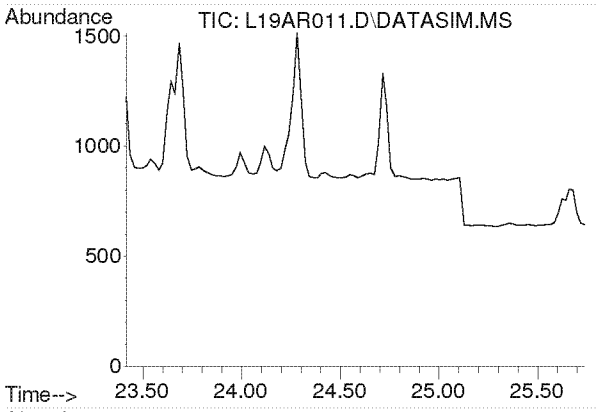
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



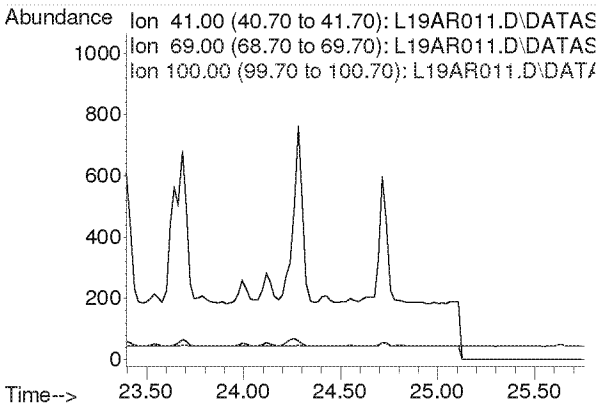


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

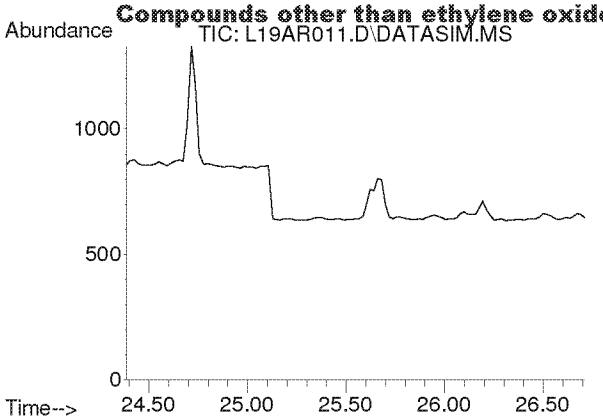
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

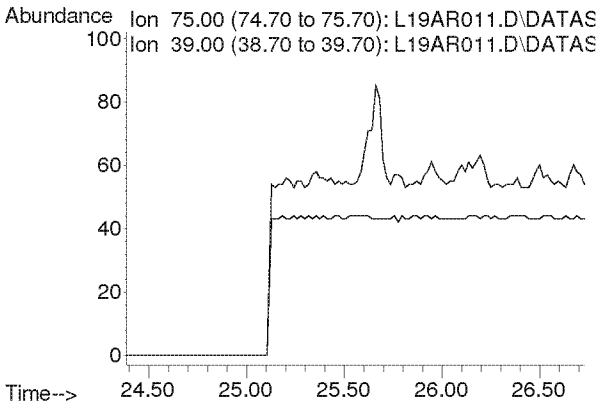


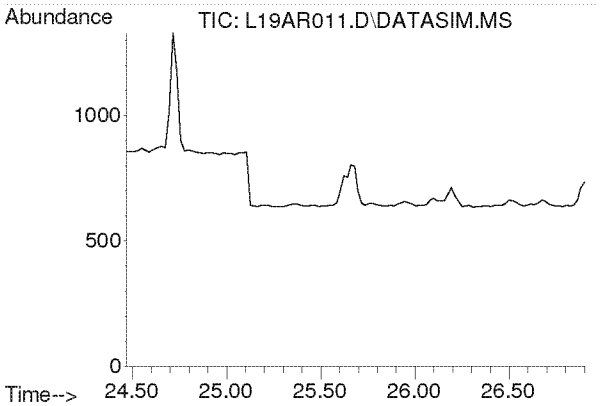
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



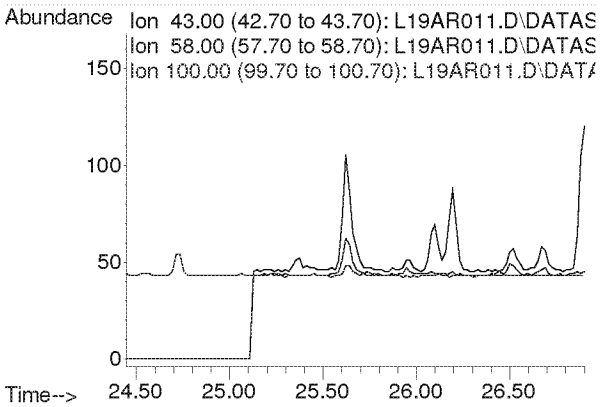


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

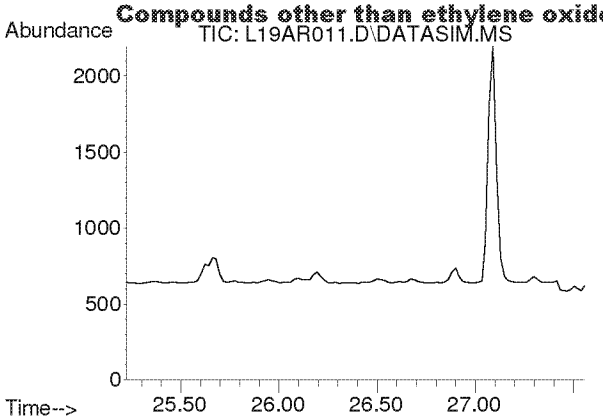
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

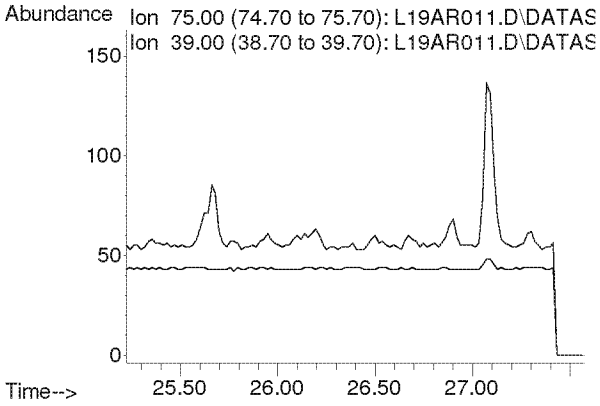


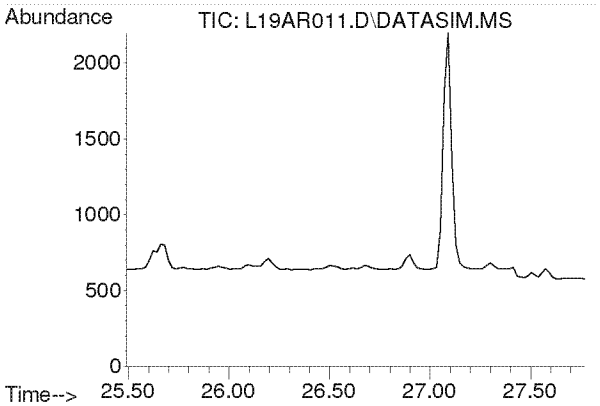
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



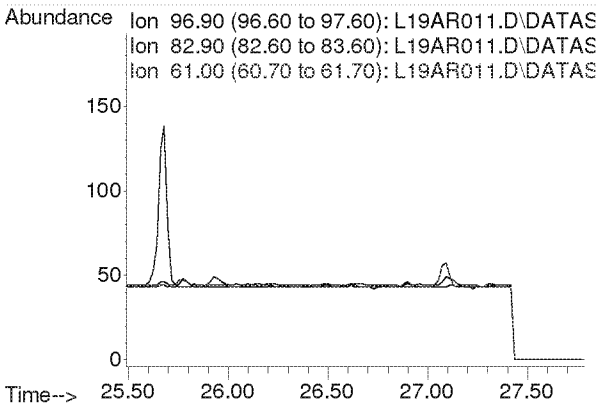


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

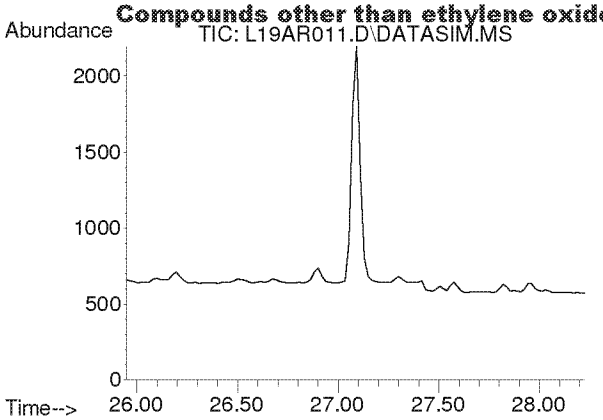
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

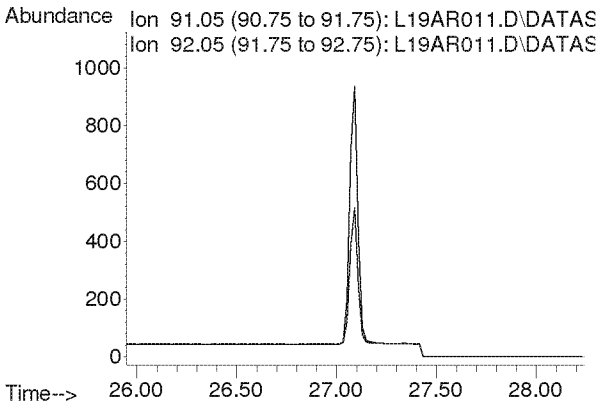


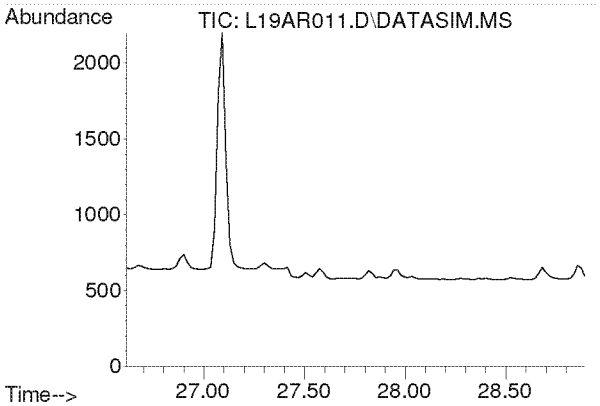
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



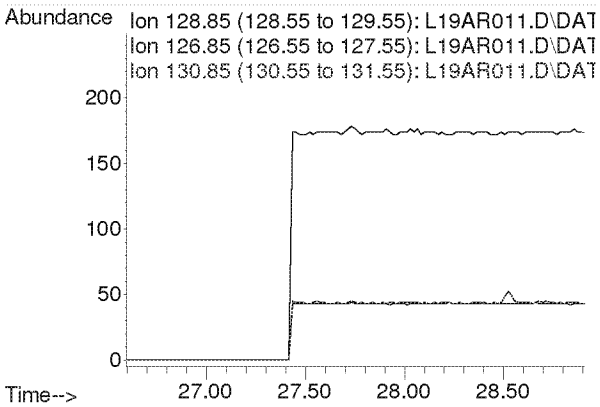


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

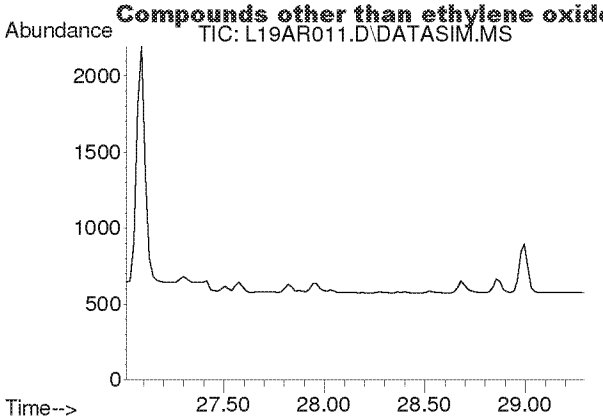
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

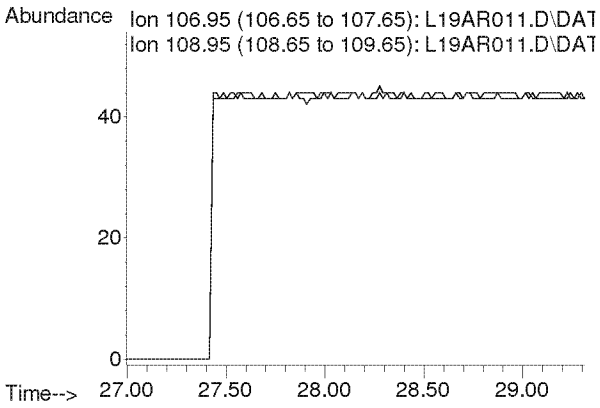


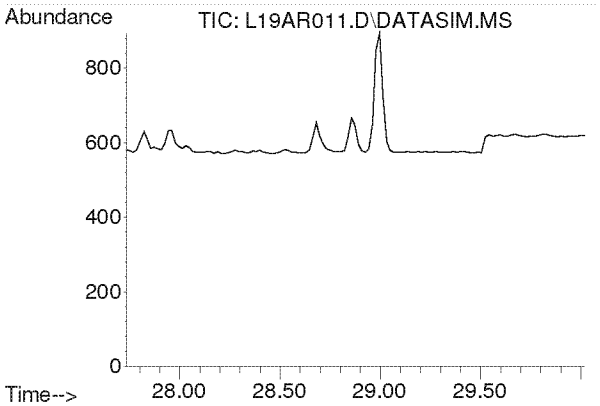
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



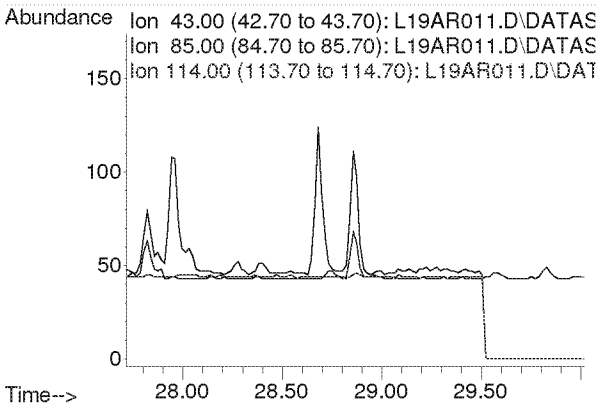


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

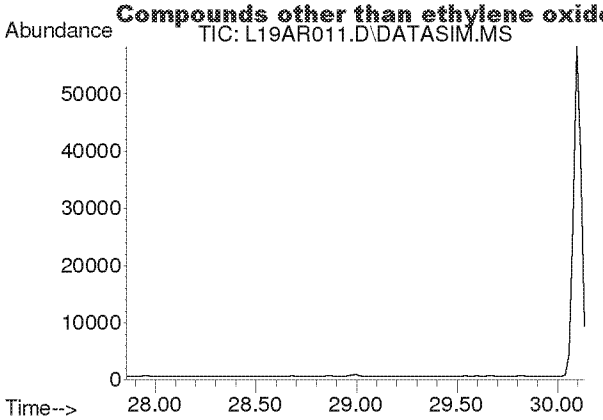
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

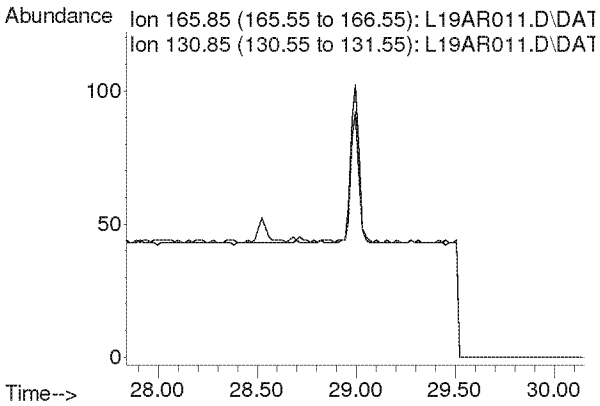


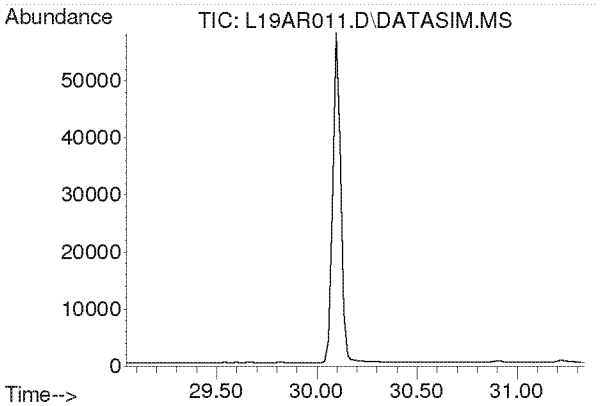
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



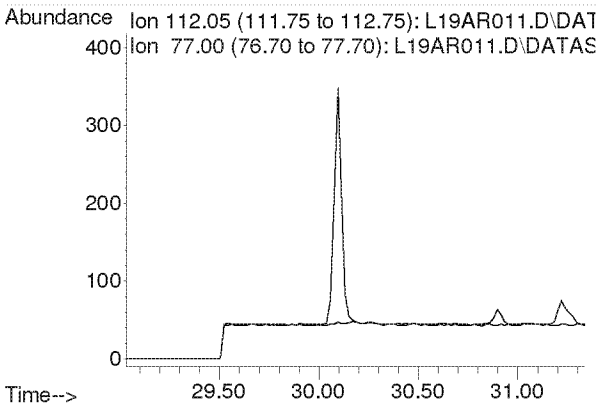


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

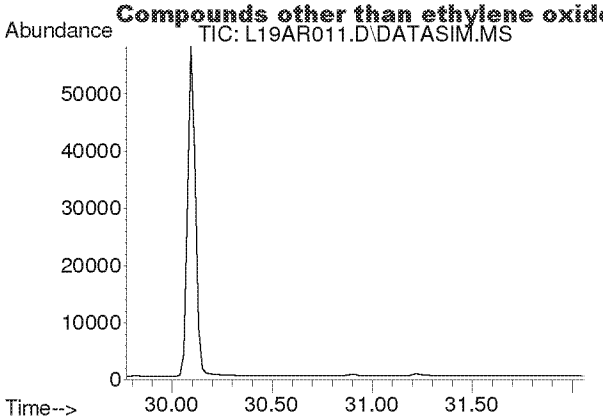
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

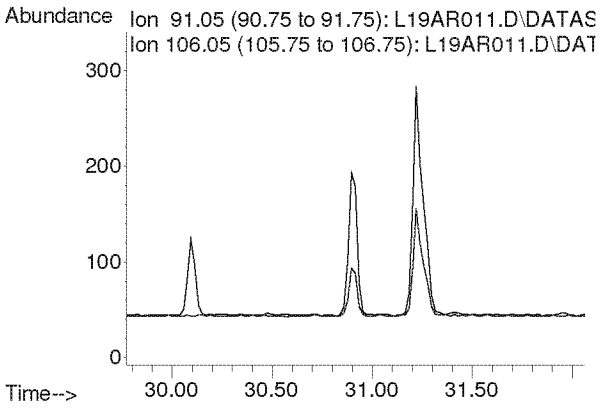


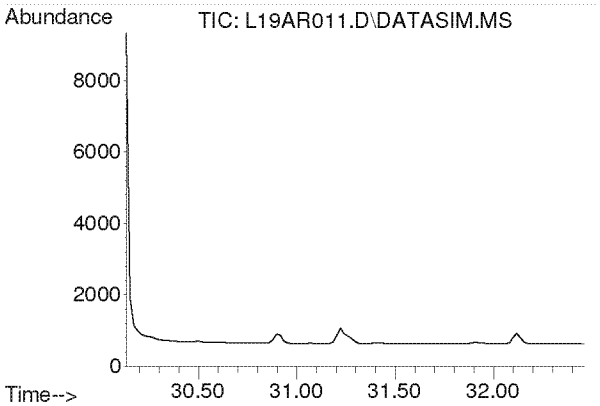
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



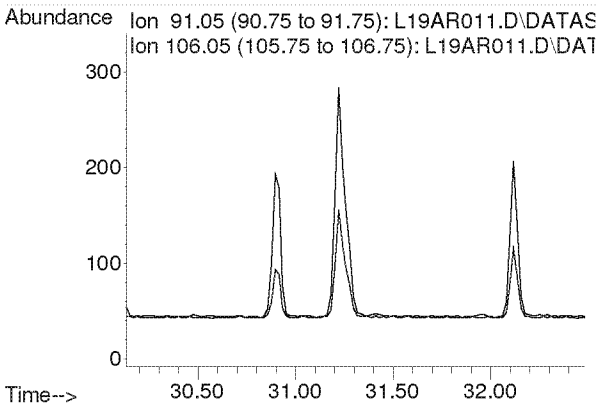


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

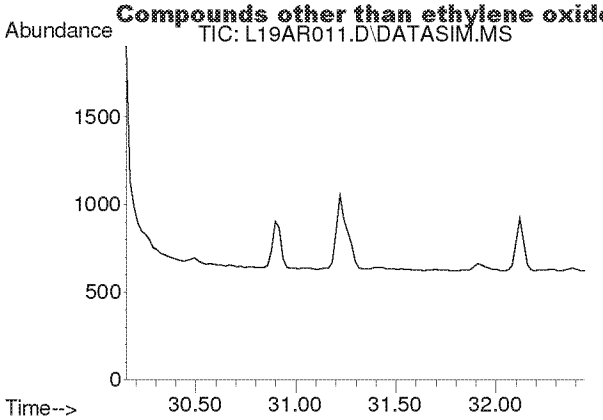
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

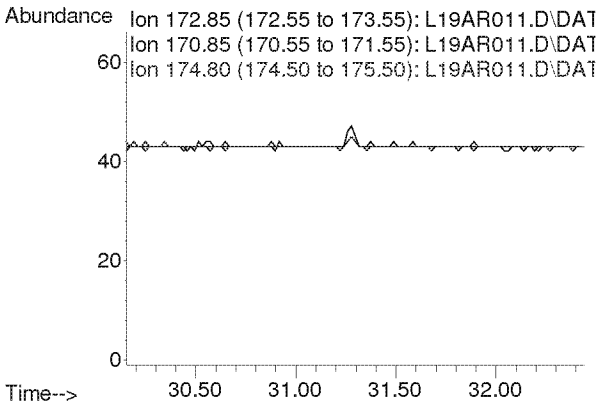


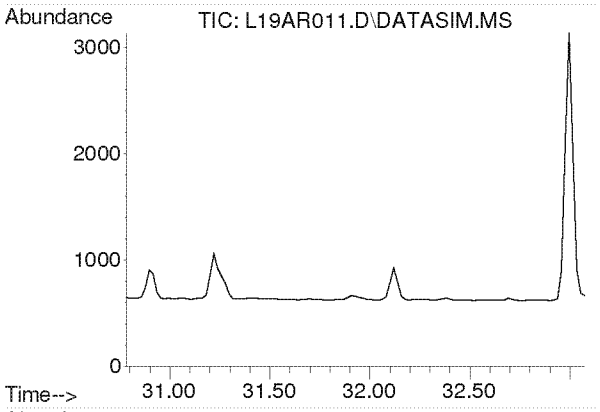
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



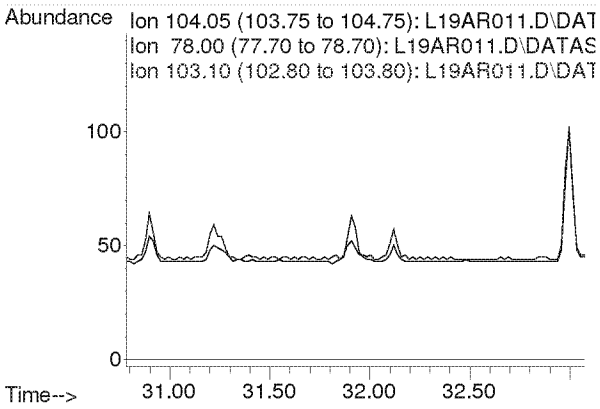


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

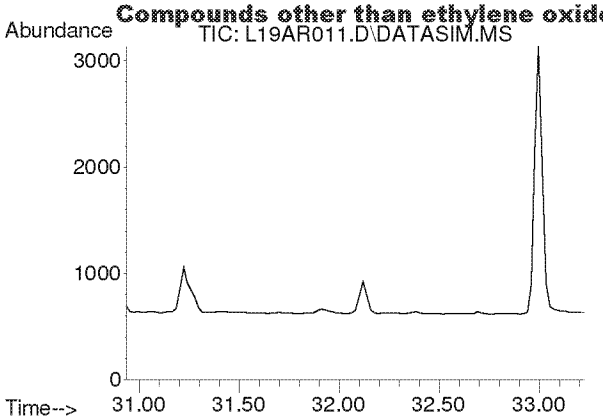
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

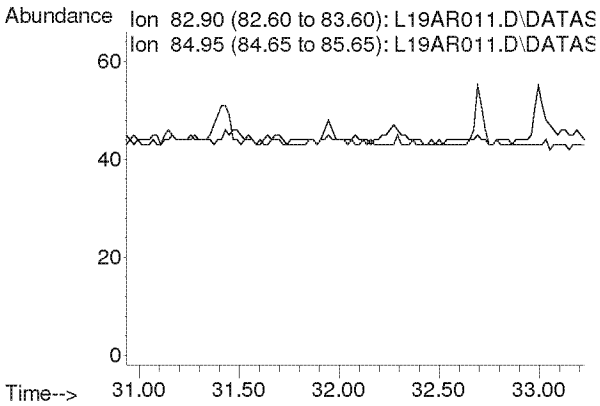


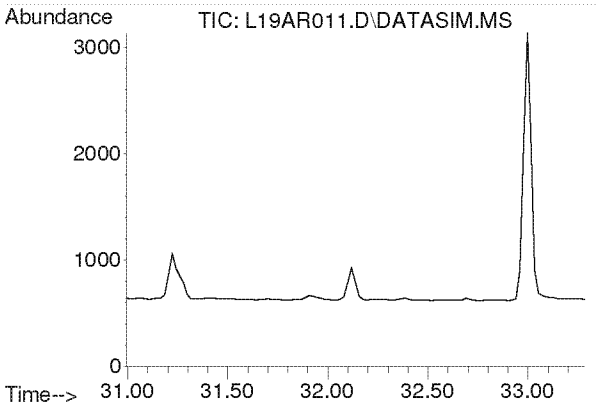
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



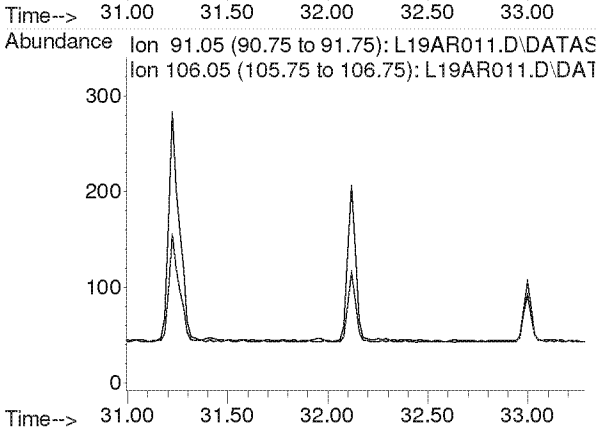


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

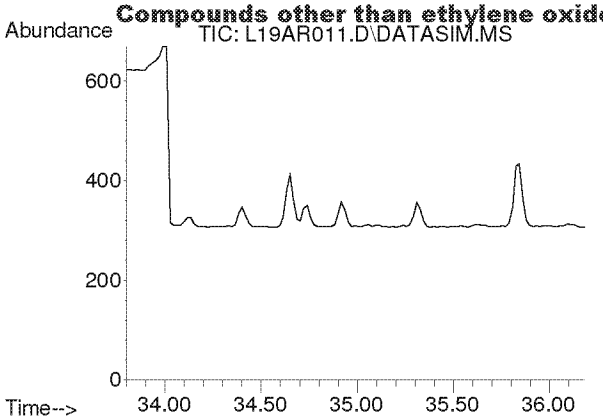
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

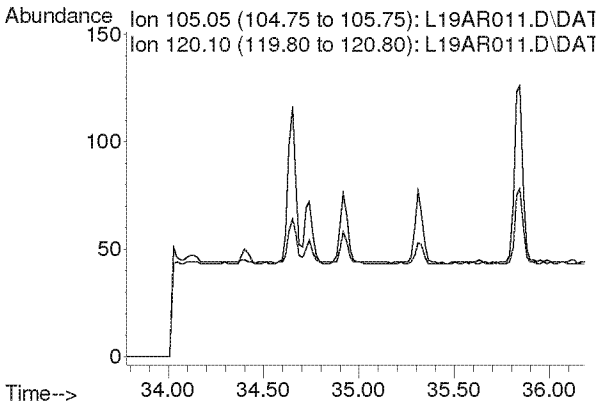


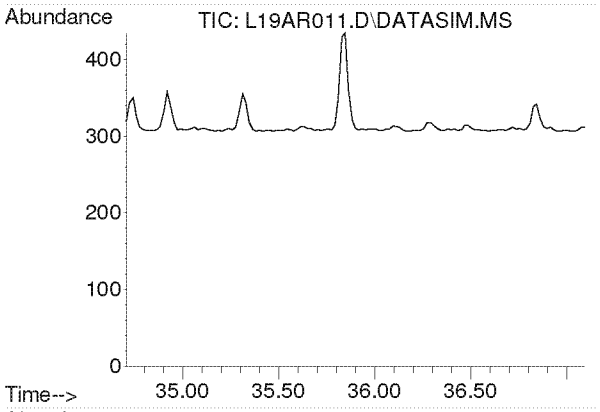
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



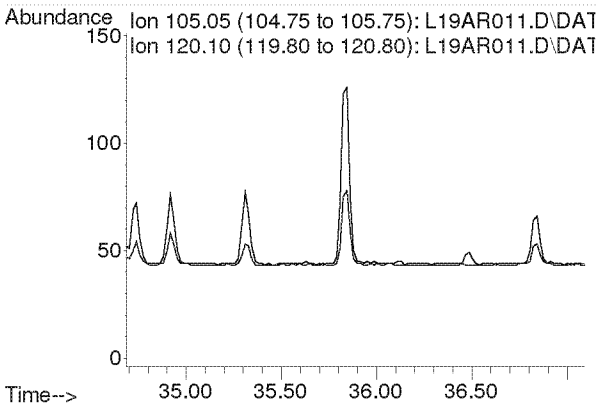


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

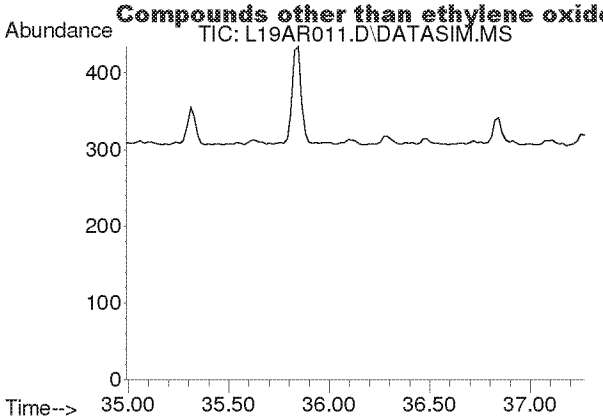
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

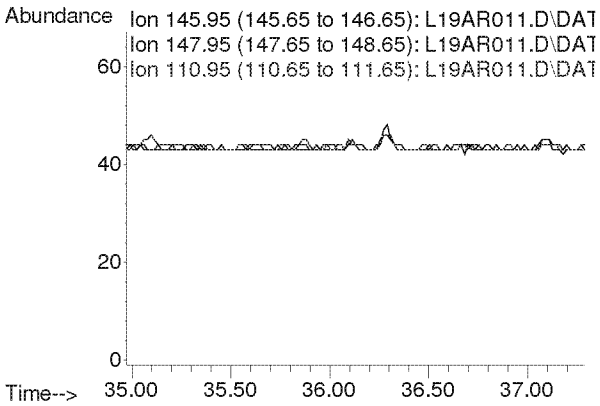


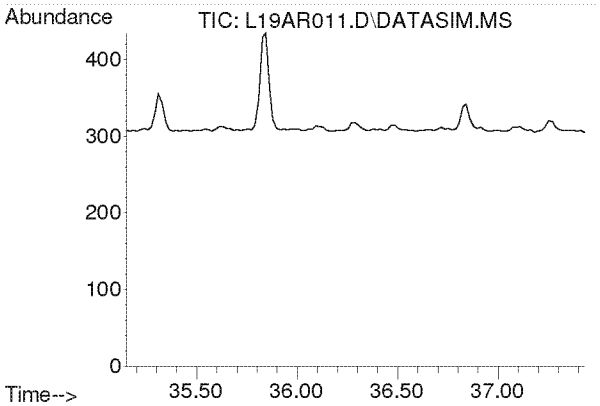
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



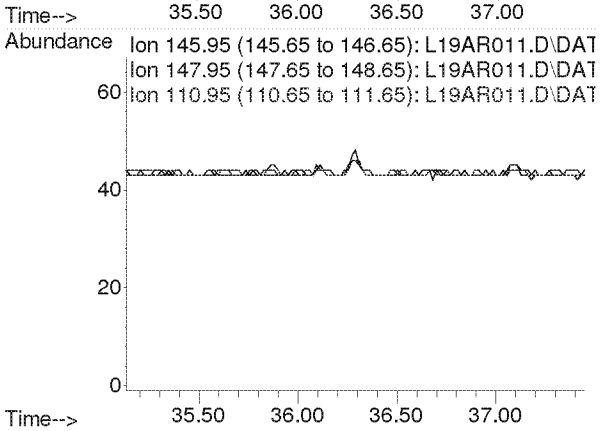


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

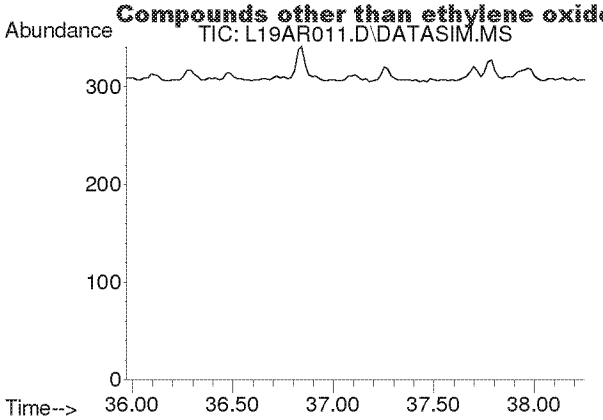
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

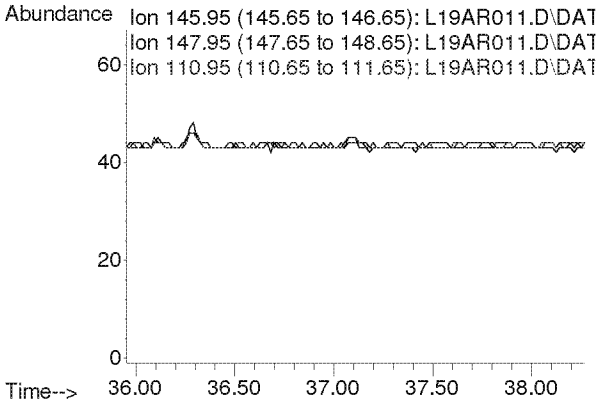


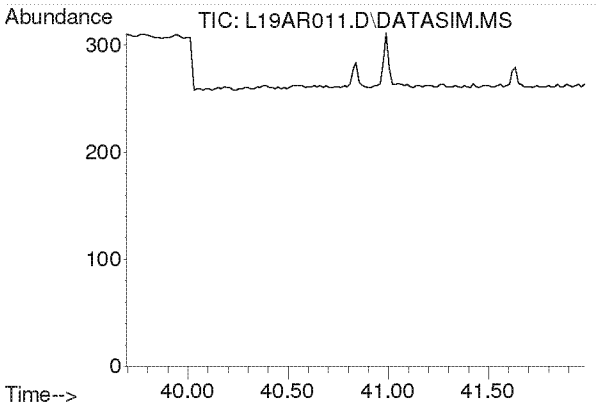
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



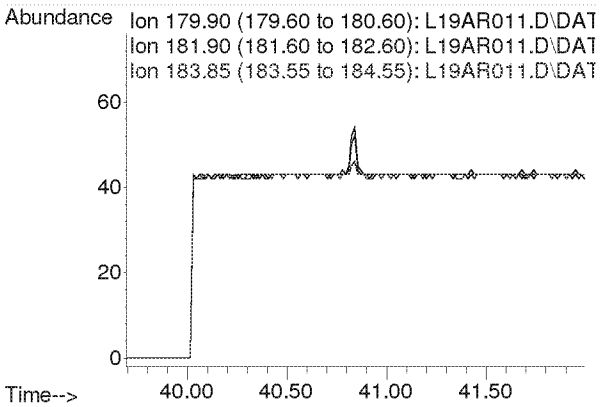


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

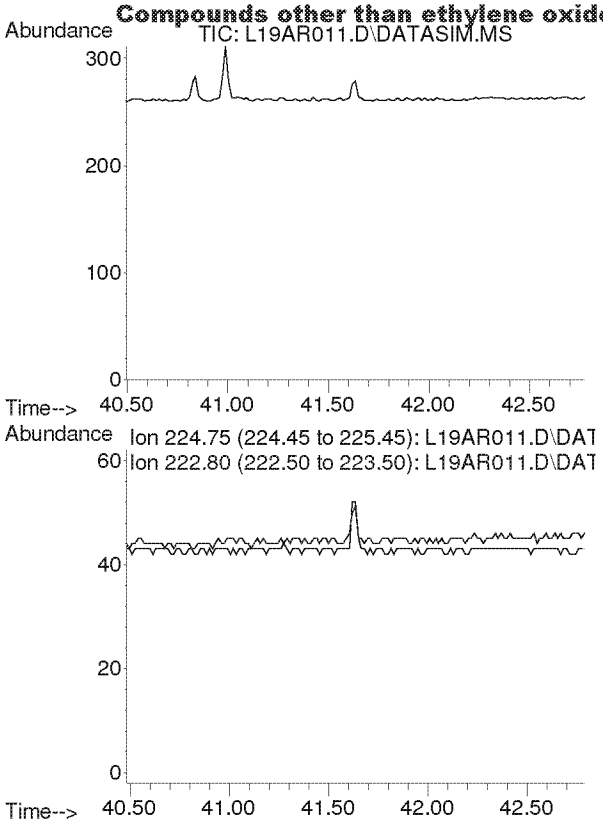
Lab File: L19AR011.D
Acq: 18 Jan 2019 9:37 pm

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: L19AR011.D
Acq: 18 Jan 2019 9:37 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 : C:\msdchem\1\DATA\L19AR\
Data File : L19AR012.D
Acq On : 18 Jan 2019 10:39 pm
Operator : MAH
Sample : B9A1806-DUP1
Misc : WB VILLAGE HALL R1 1/13/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 09:17:40 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	19.991	66	53529	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	130941	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	98074	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	12.408	29	2633	0.9523 ppbv #	3
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\L19AR\
Data File : L19AR012.D
Acq On : 18 Jan 2019 10:39 pm
Operator : MAH
Sample : B9A1806-DUP1
Misc : WB VILLAGE HALL R1 1/13/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 09:17:40 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

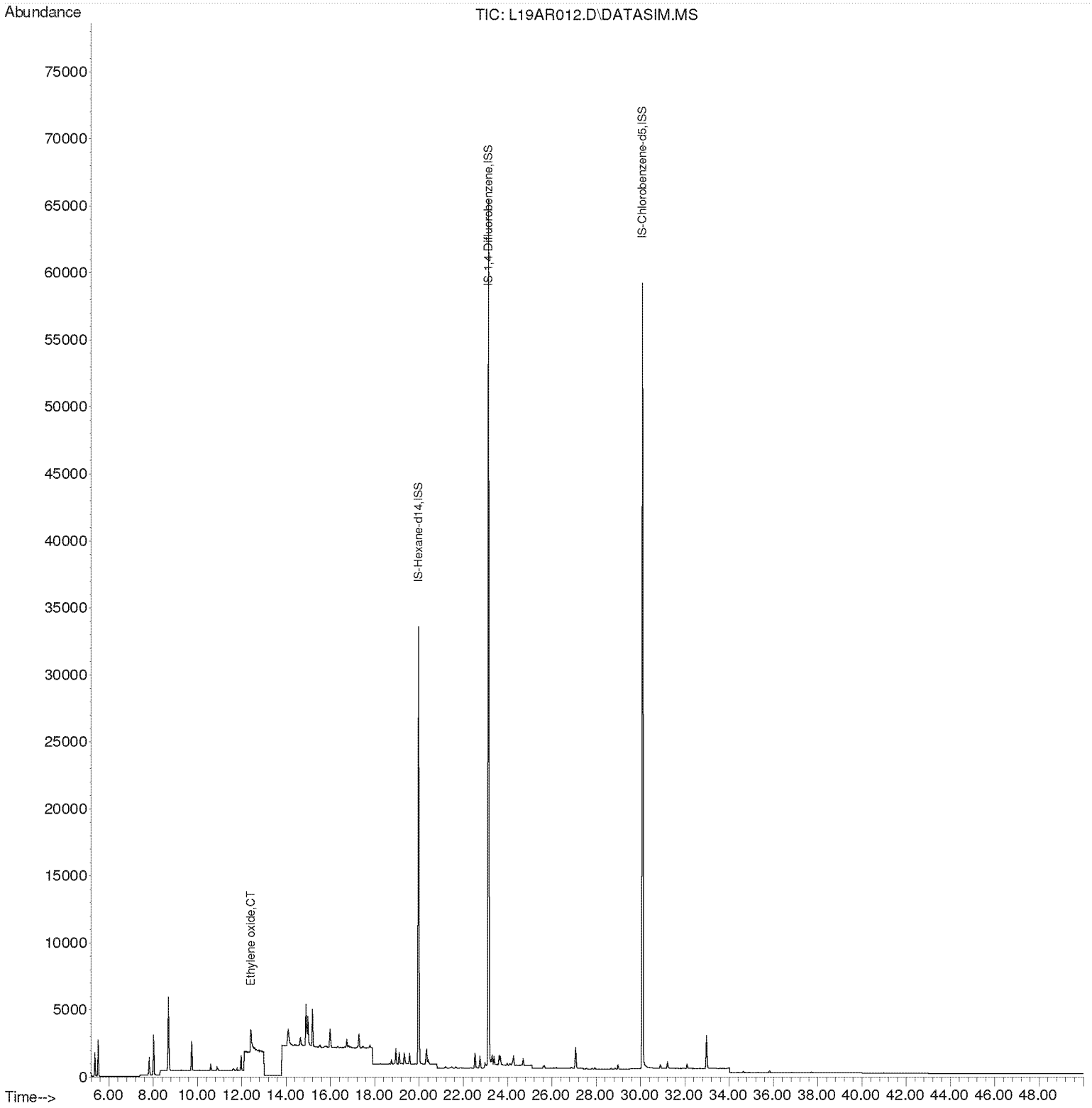
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	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

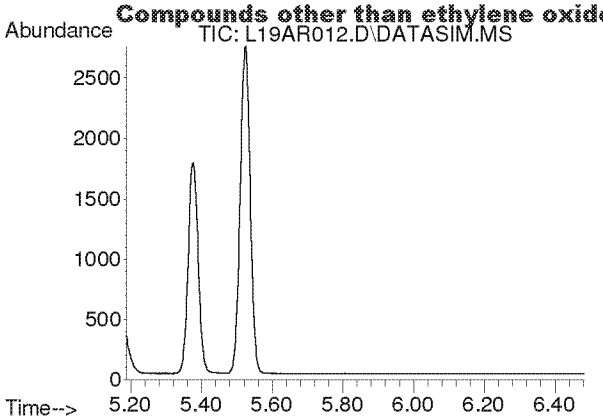
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR012.D
Acq On : 18 Jan 2019 10:39 pm
Operator : MAH
Sample : B9A1806-DUP1
Misc : WB VILLAGE HALL R1 1/13/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 23 08:39:01 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



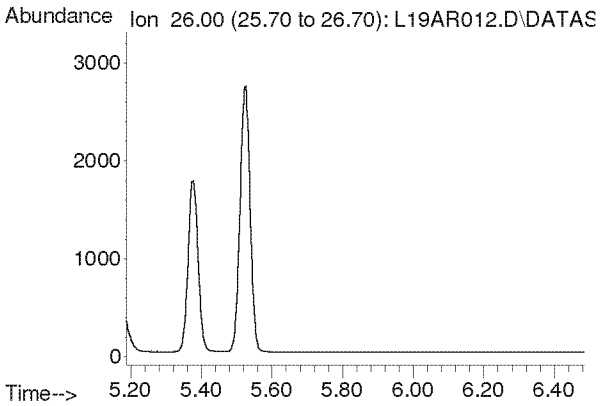
Compounds other than ethylene oxide were not quantitated.

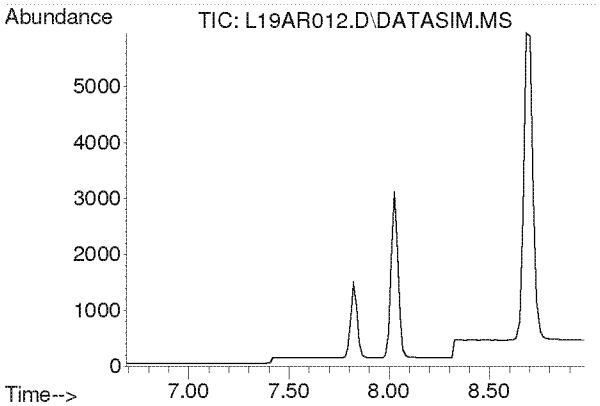


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 26



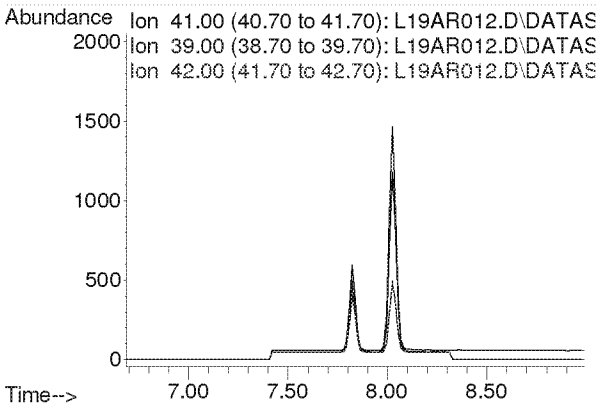


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

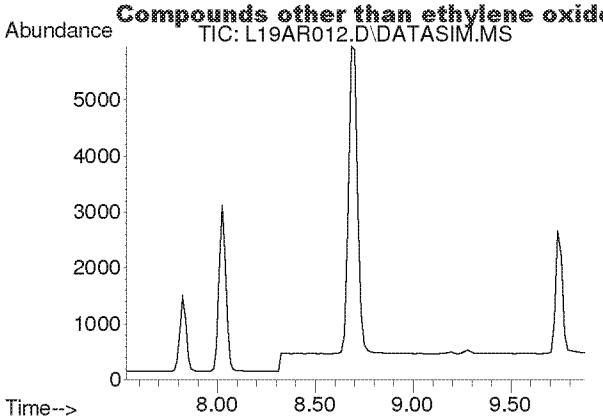
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

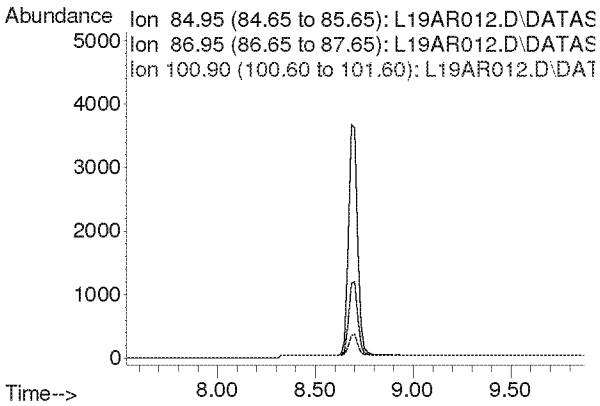


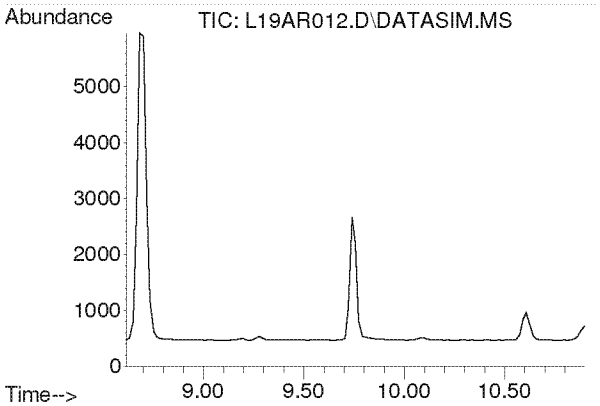
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



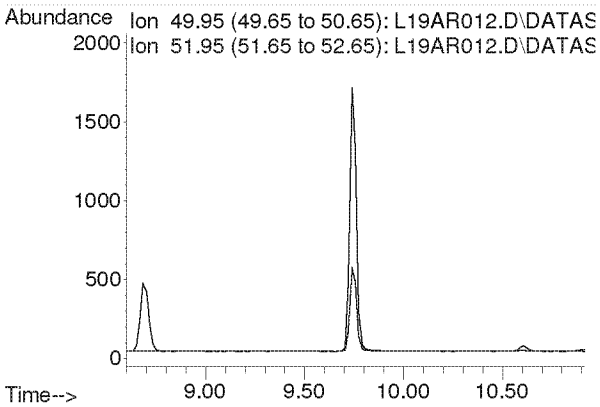


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

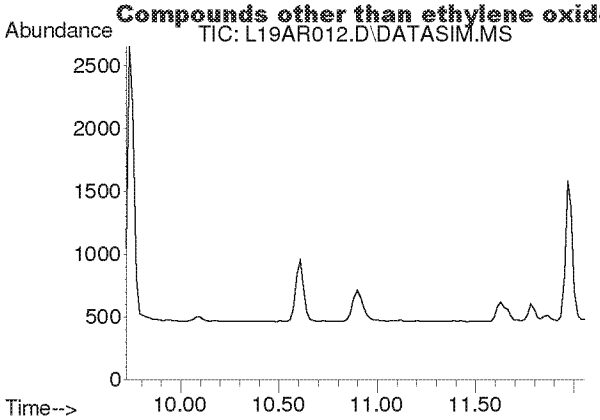
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

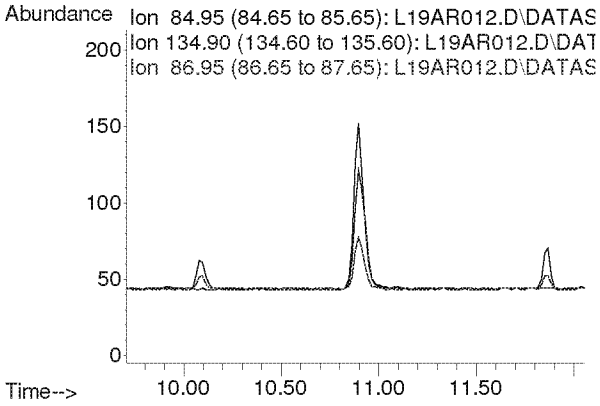


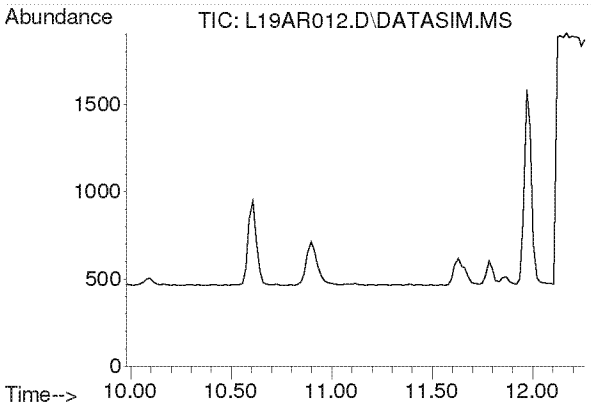
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



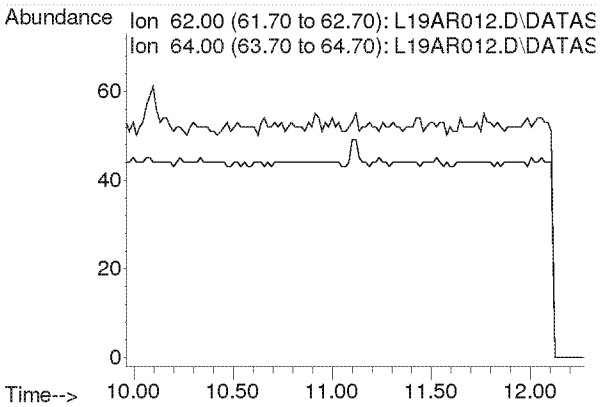


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

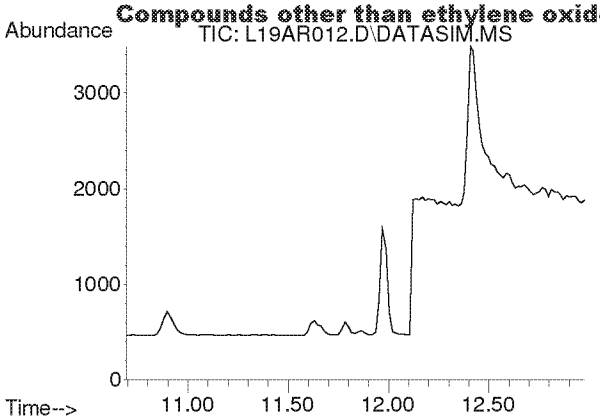
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

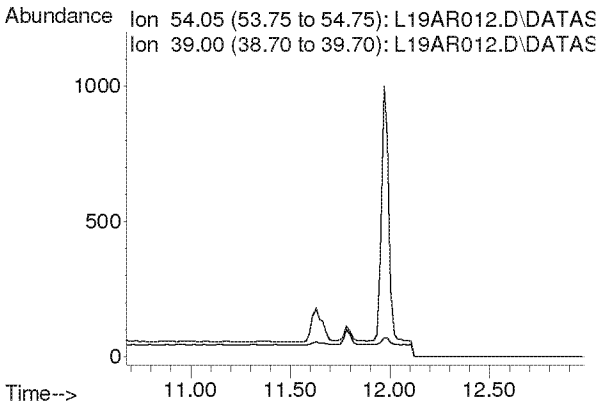


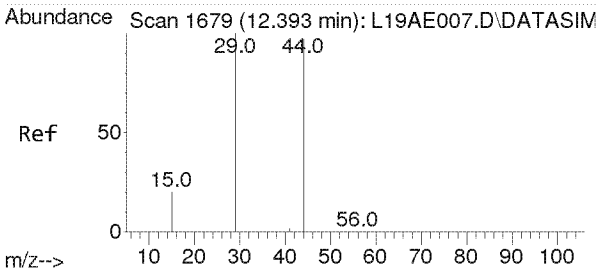
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

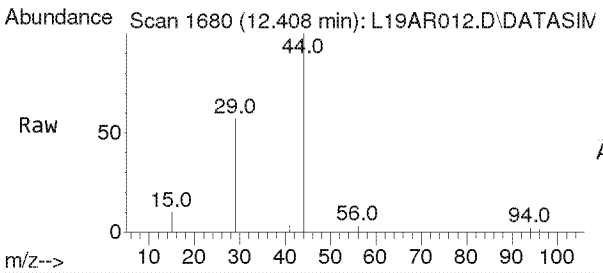


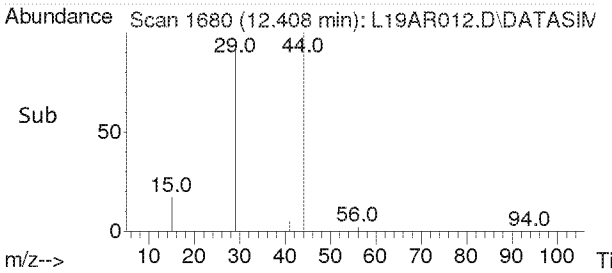


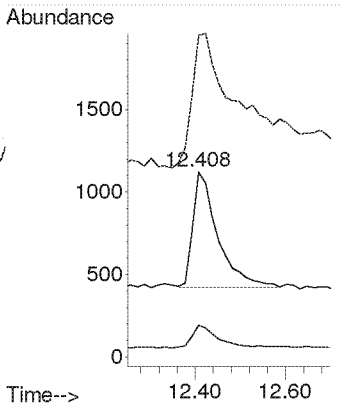
#9
Ethylene oxide
Concen: 0.952 ppbv
RT: 12.408 min Scan# 1680
Delta R.T. 0.015 min
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 29 Resp: 2633

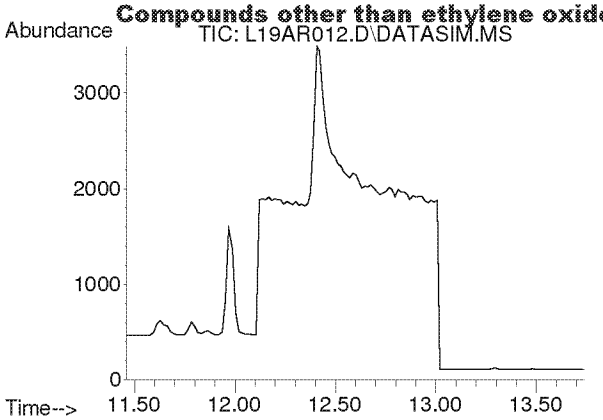
Ion	Ratio	Lower	Upper
29	100		
15	19.9	15.4	23.0
44	211.2	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

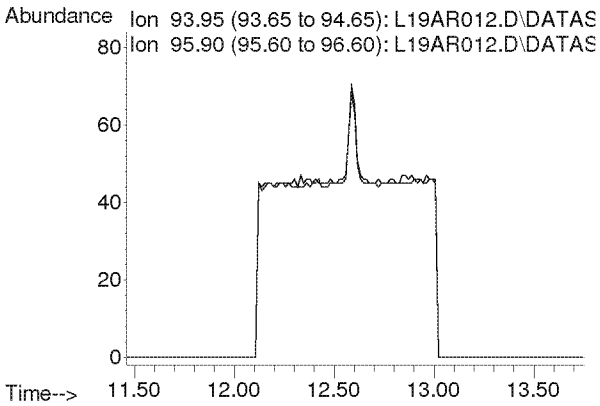


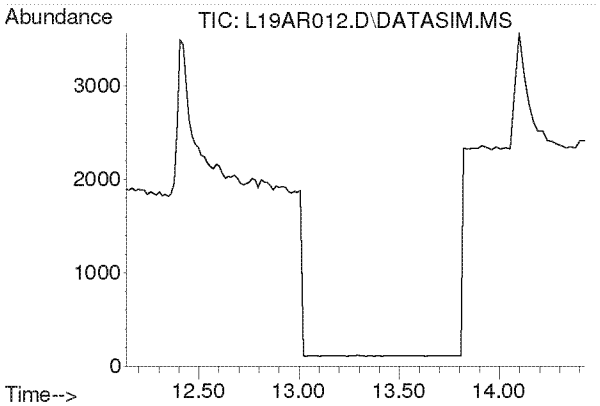
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



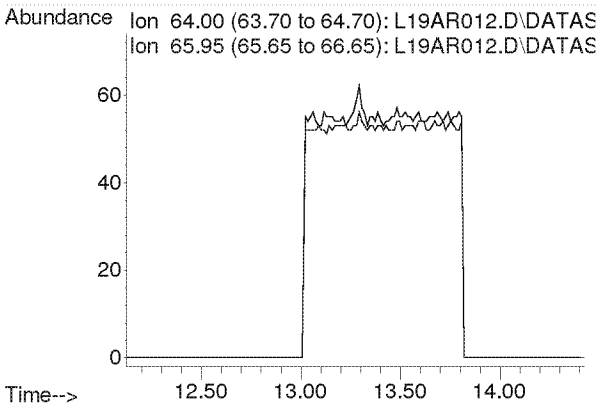


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

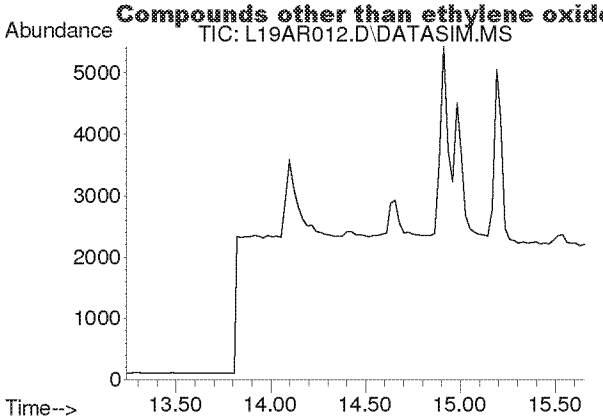
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

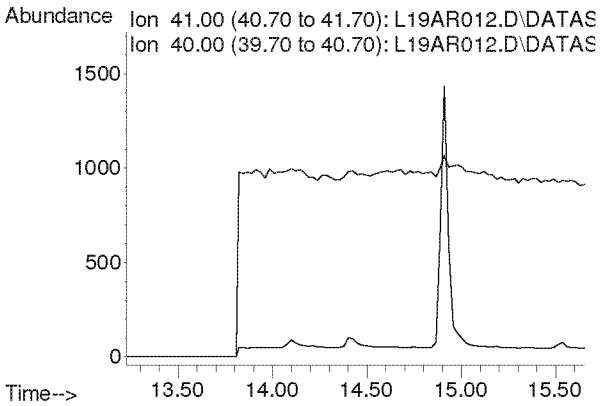


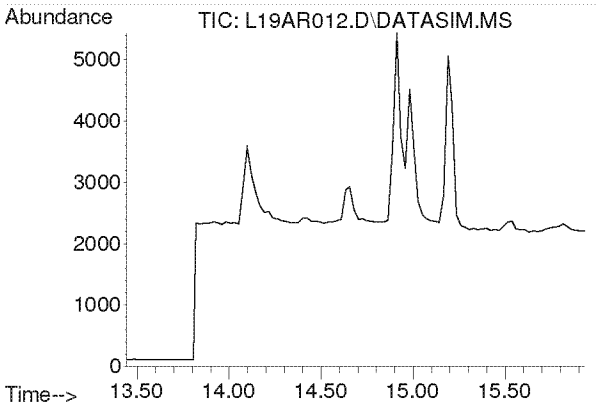
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



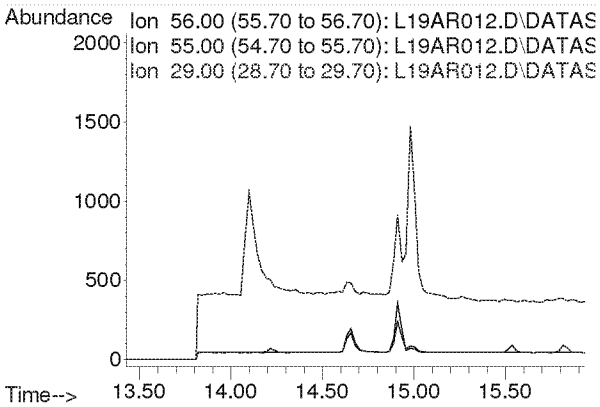


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

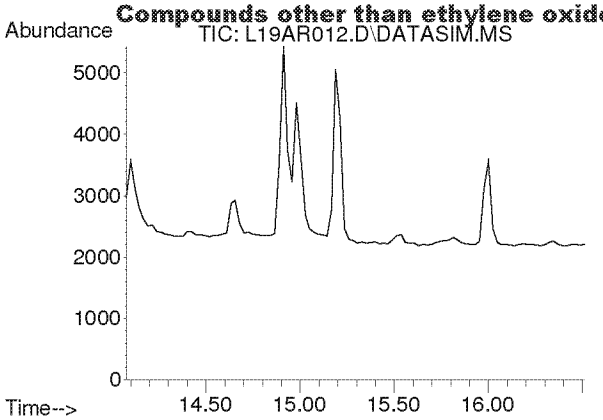
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

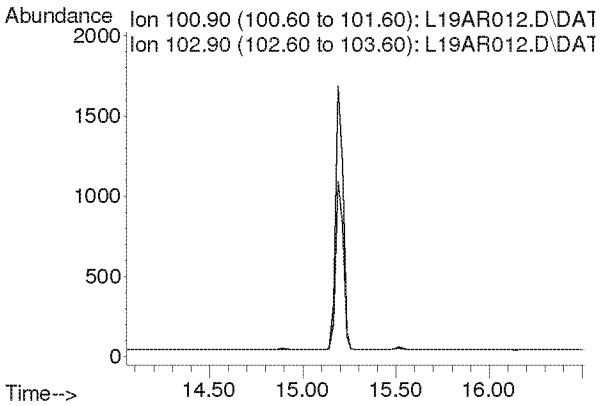


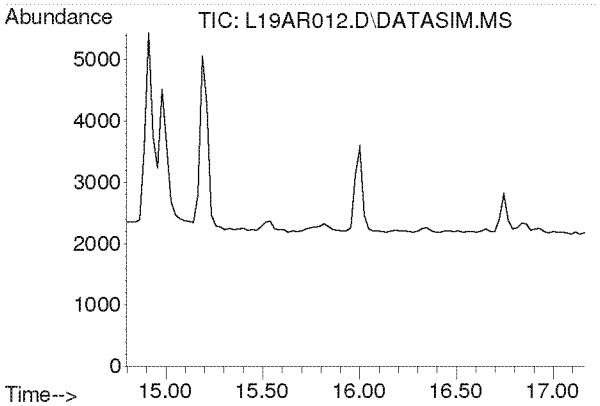
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



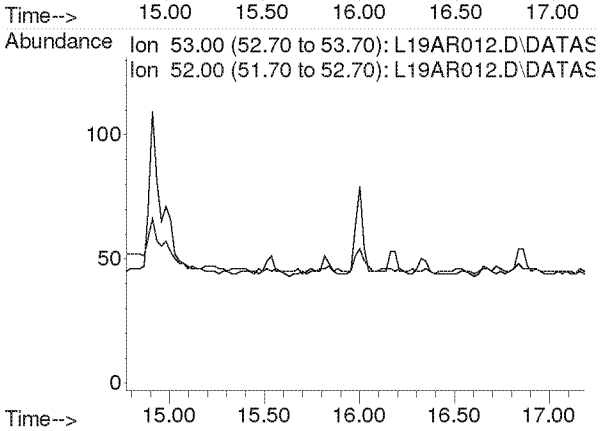


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

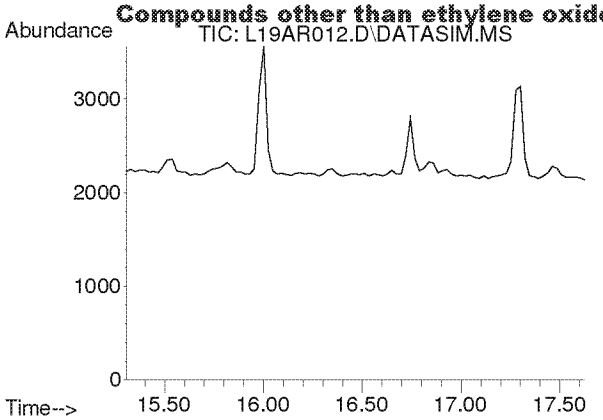
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

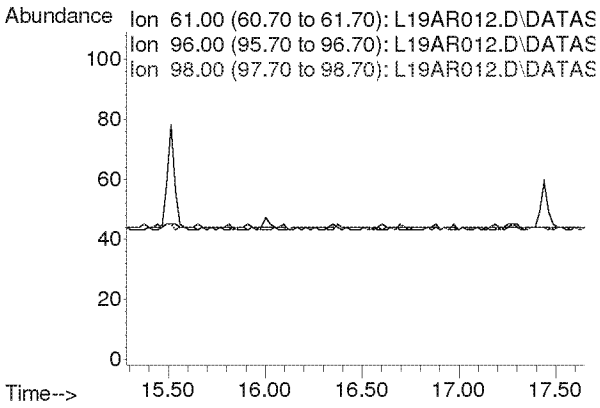


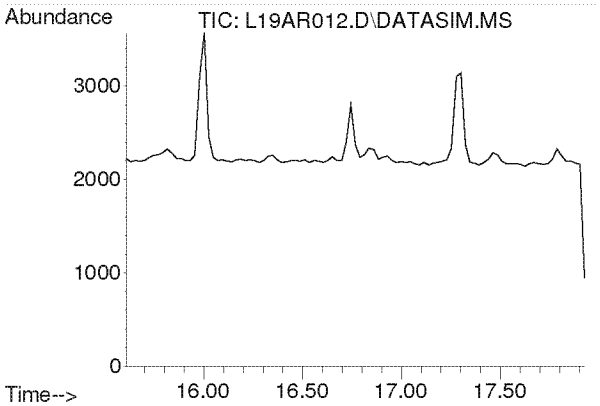
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



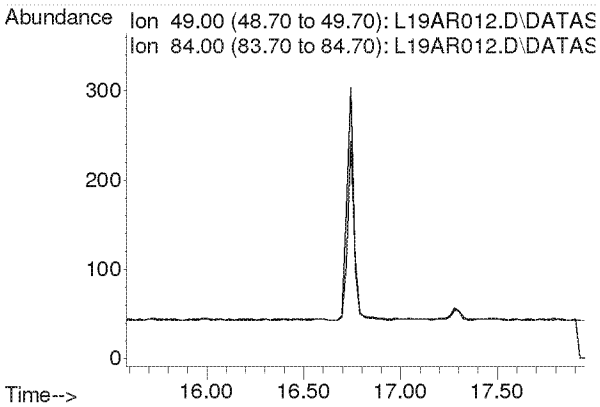


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

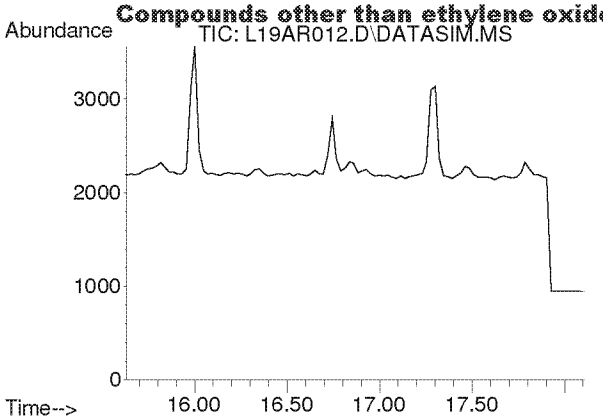
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

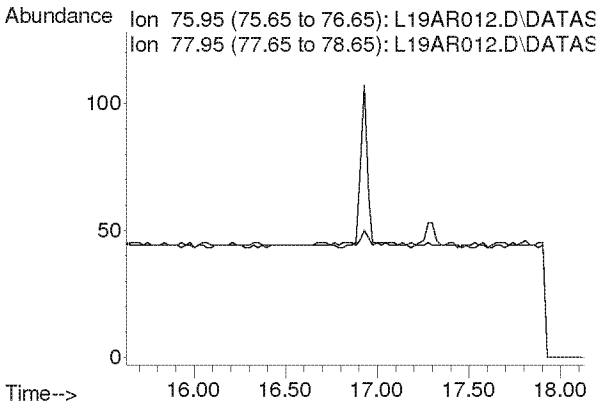


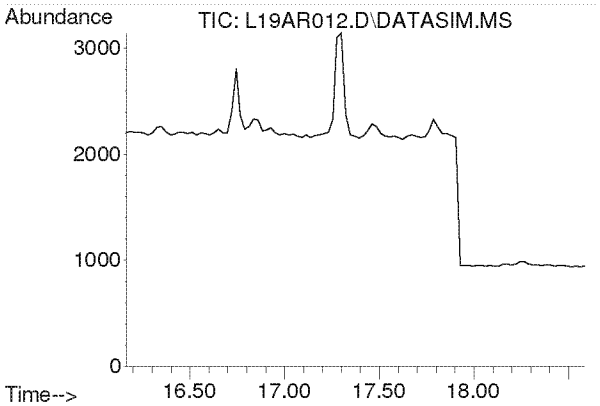
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



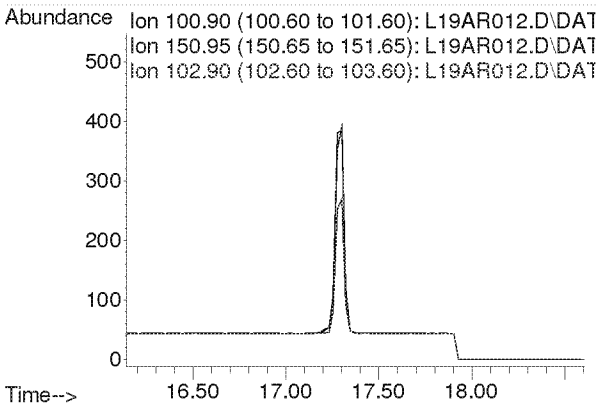


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

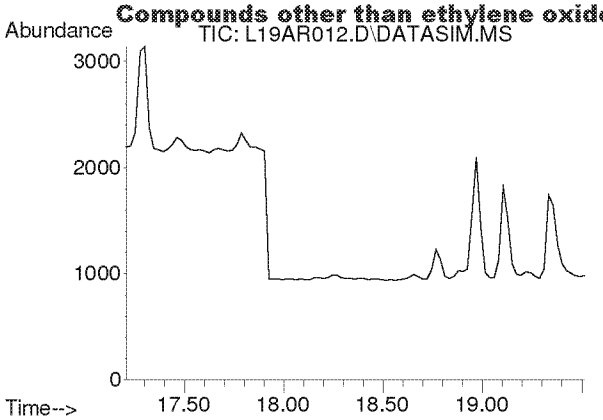
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

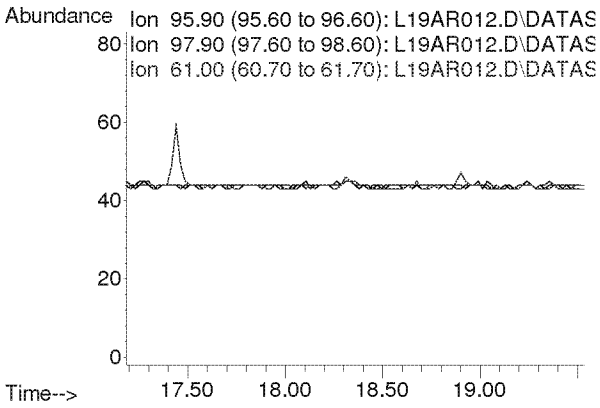


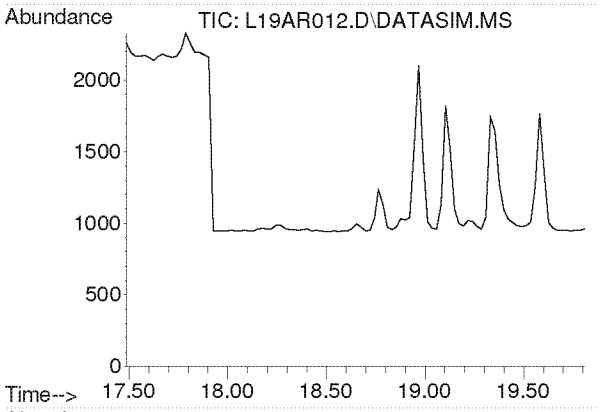
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



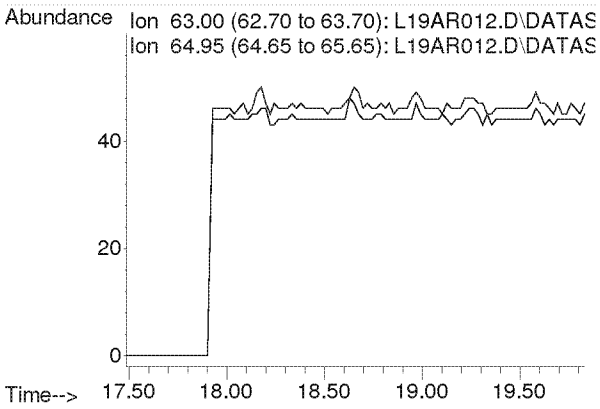


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

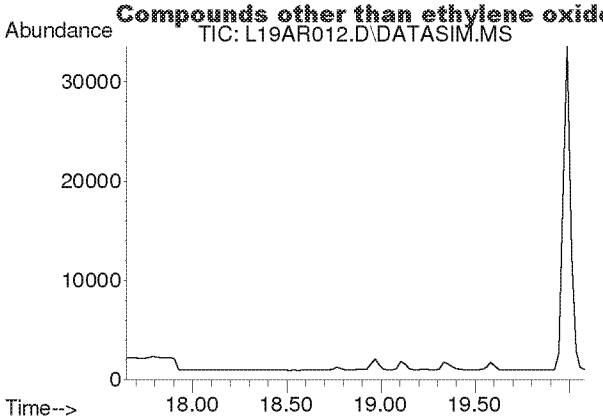
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

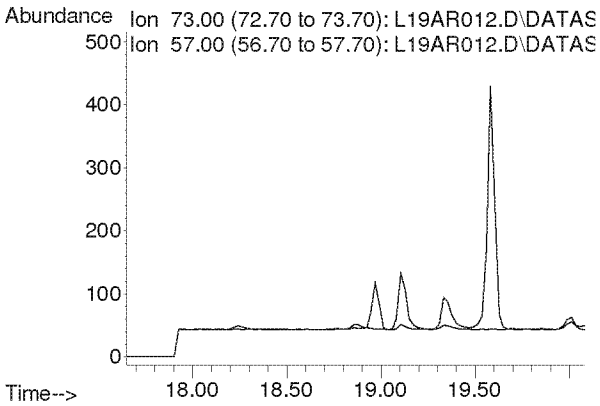


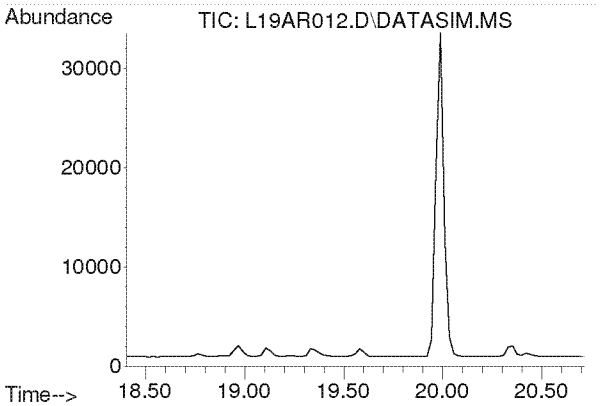
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



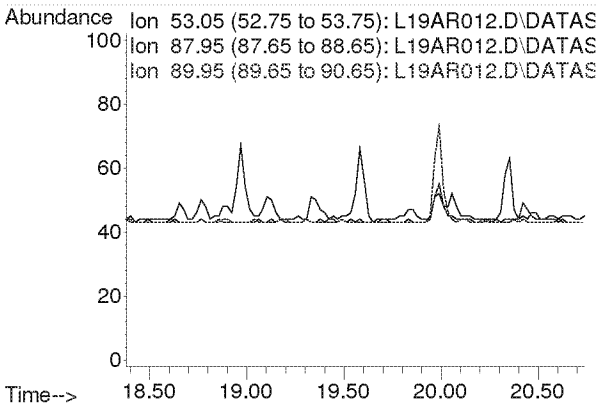


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

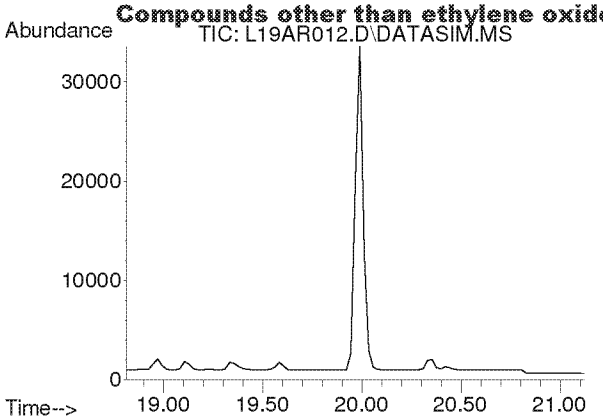
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

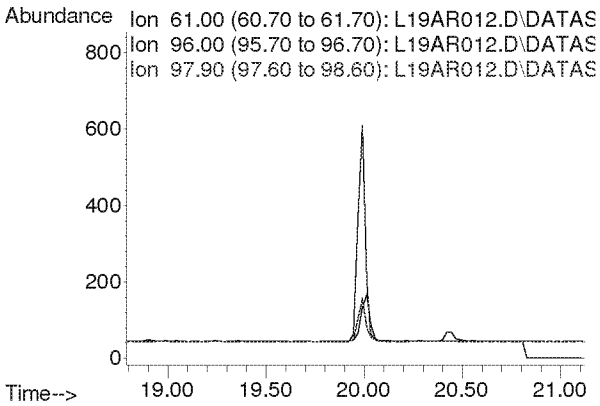


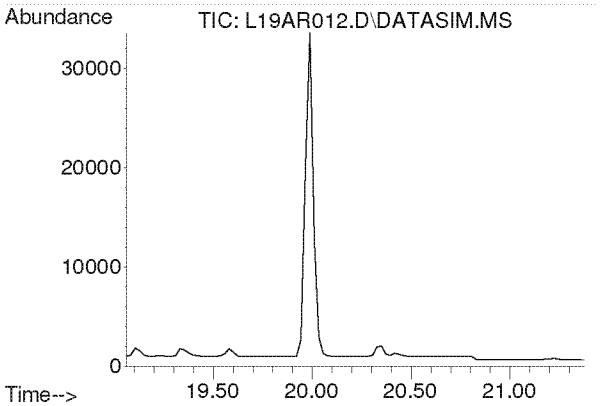
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



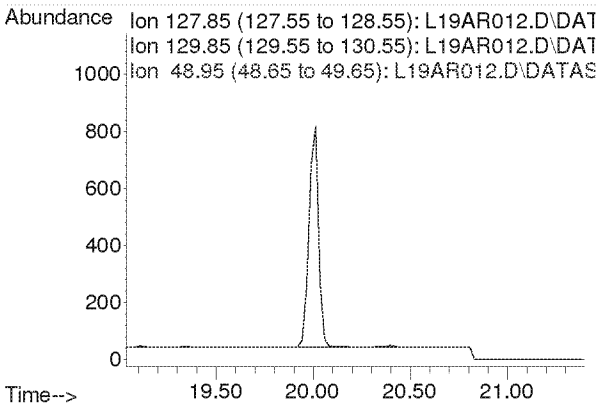


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

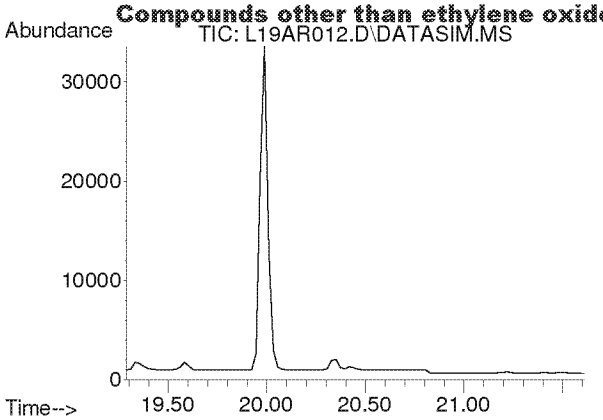
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

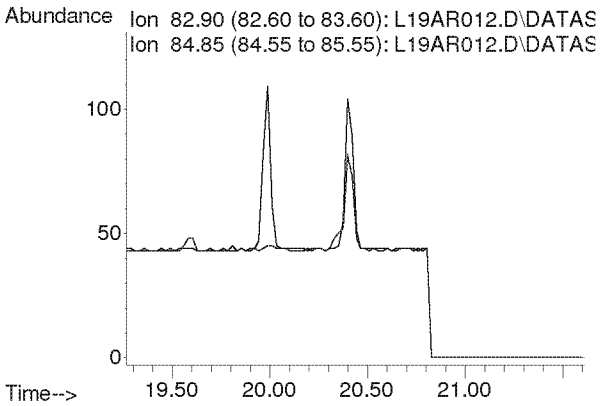


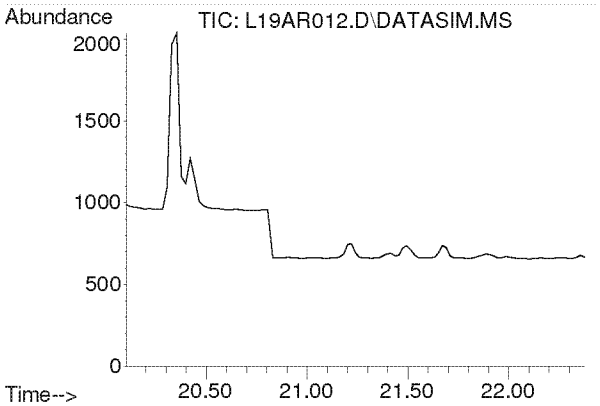
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



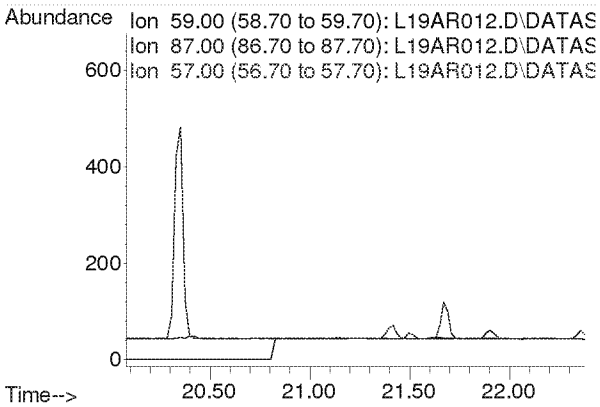


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

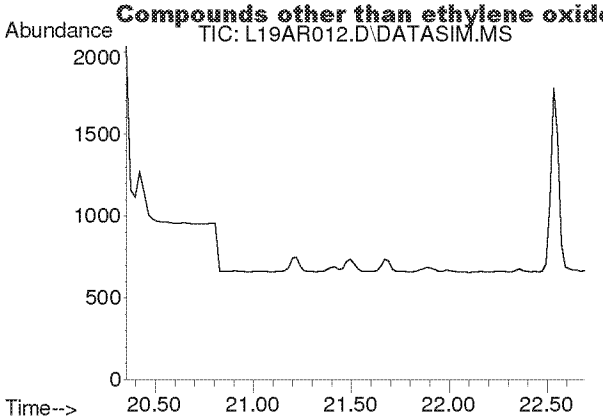
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

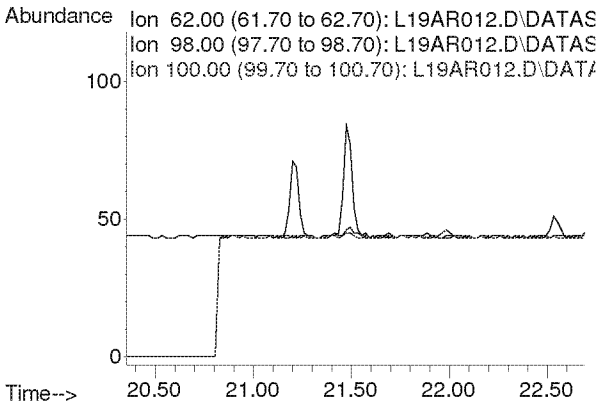


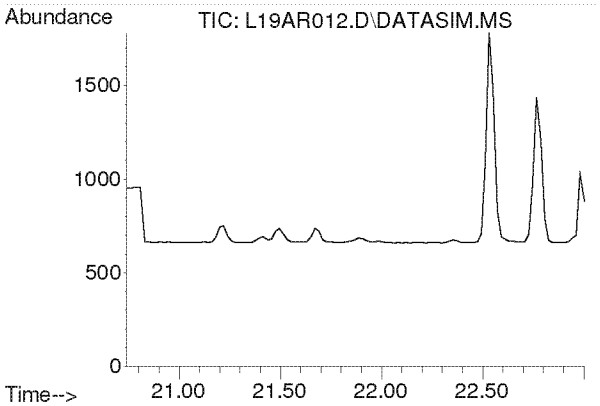
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



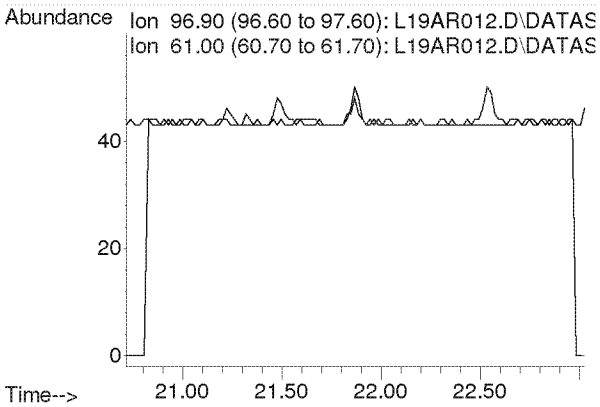


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

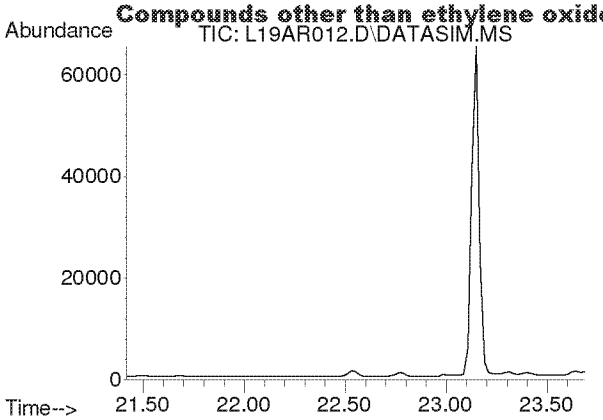
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

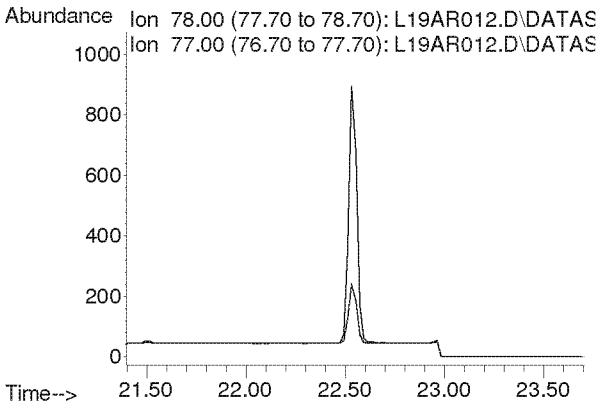


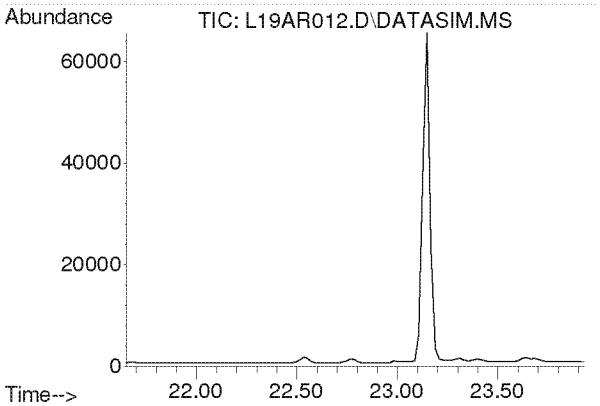
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



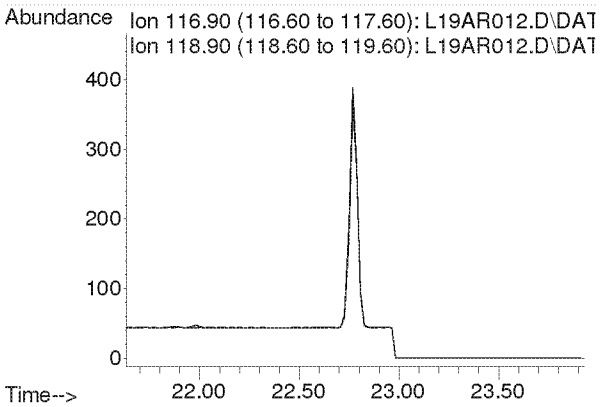


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

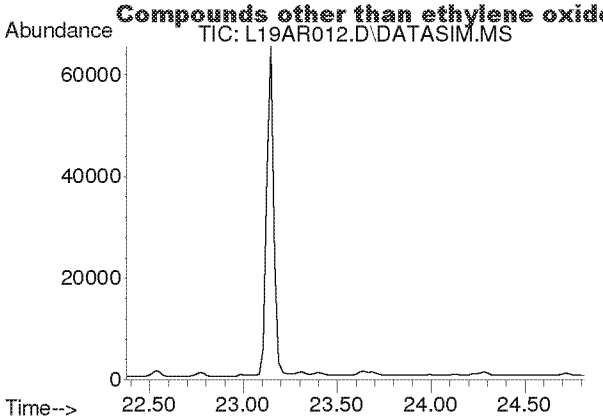
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

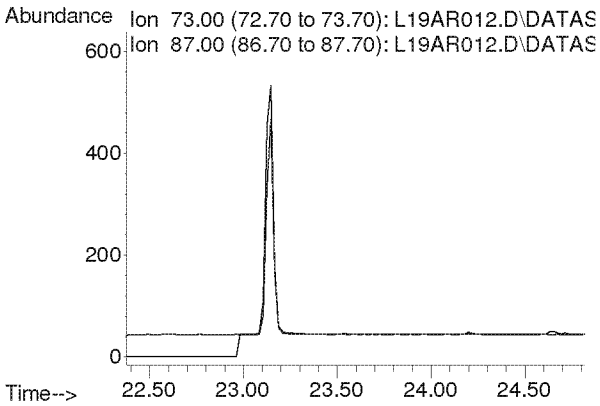


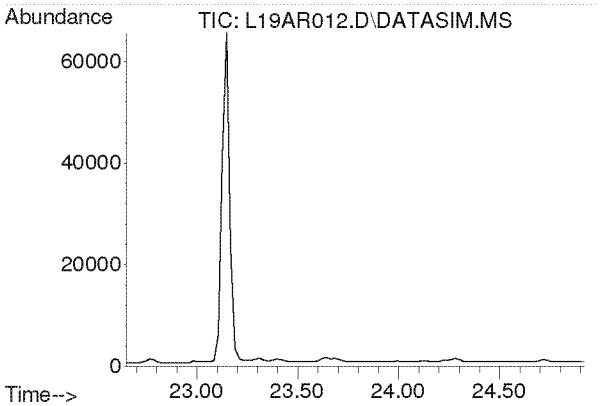
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



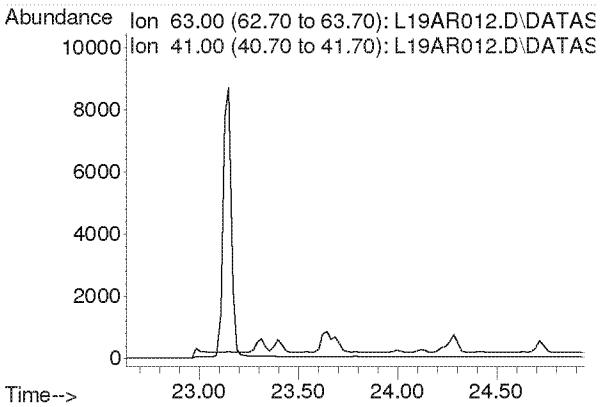


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

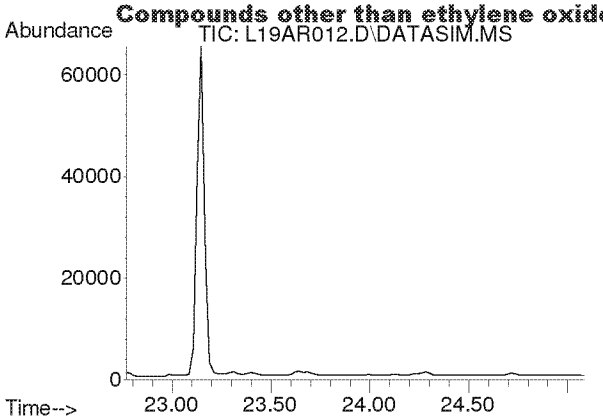
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

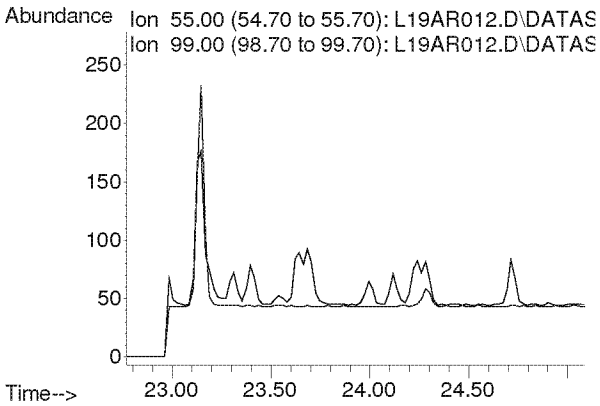


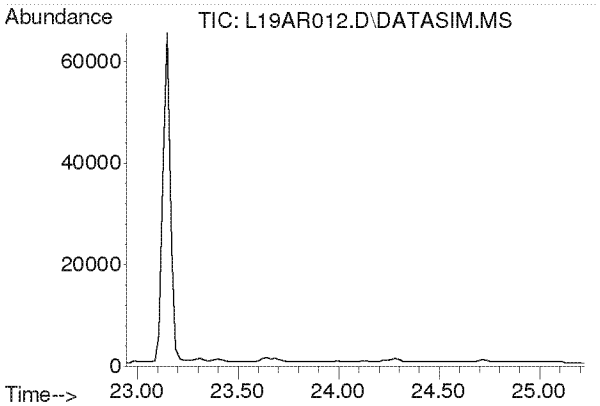
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



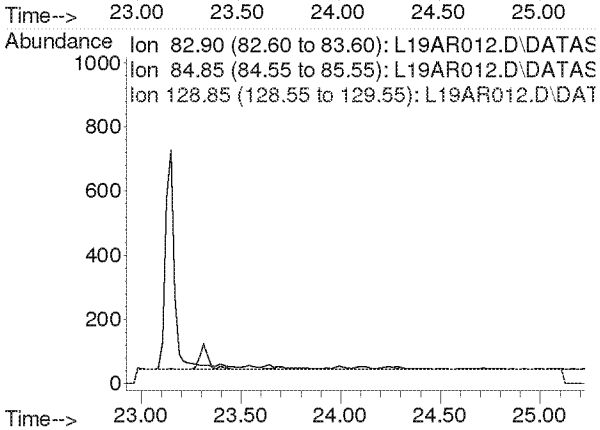


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

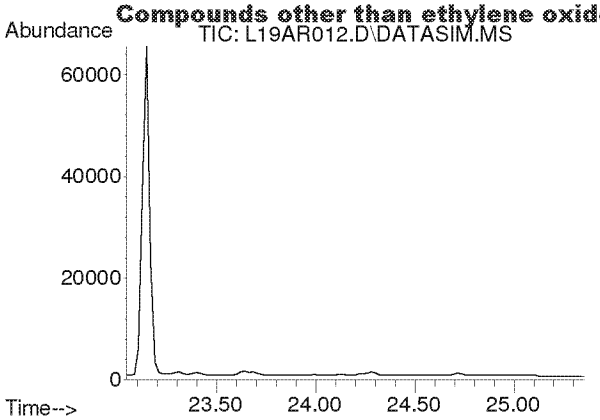
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

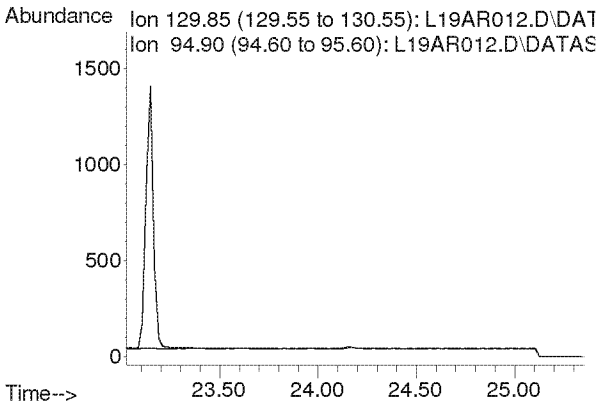


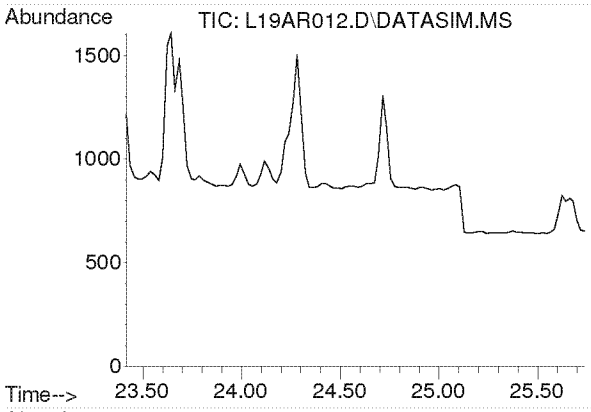
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



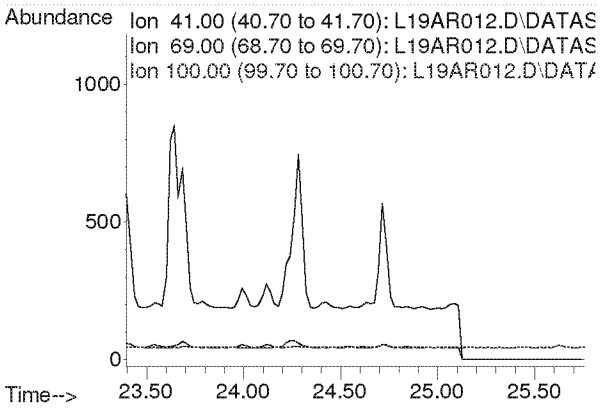


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

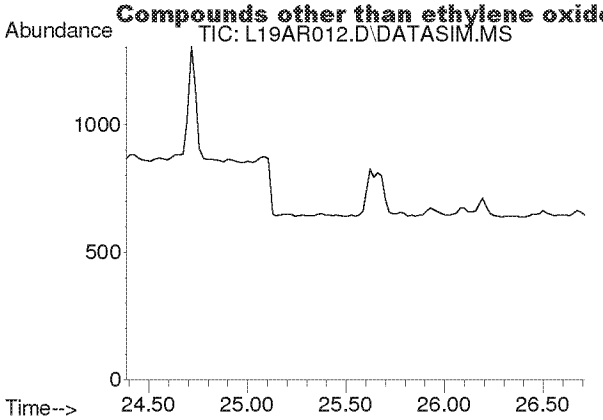
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

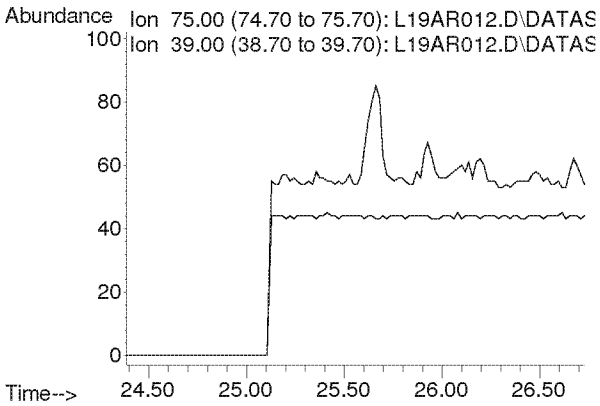


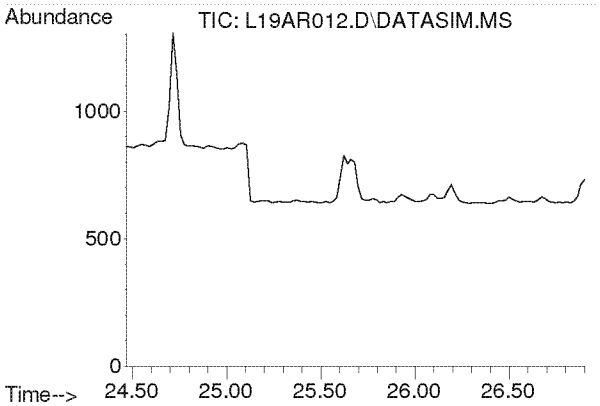
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



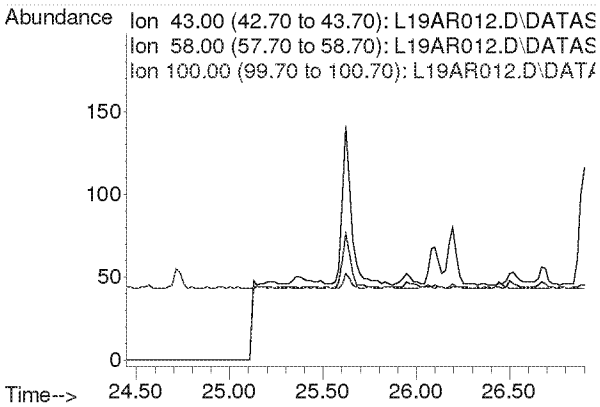


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

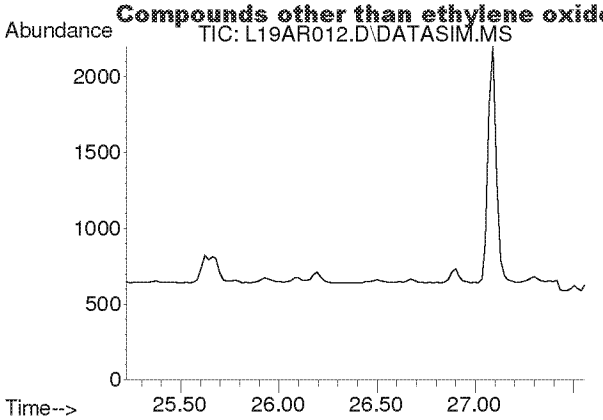
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

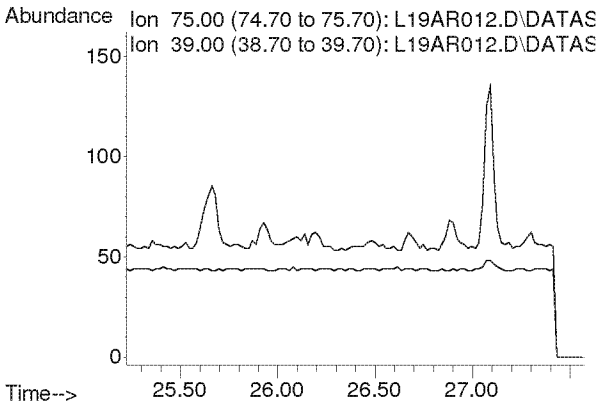


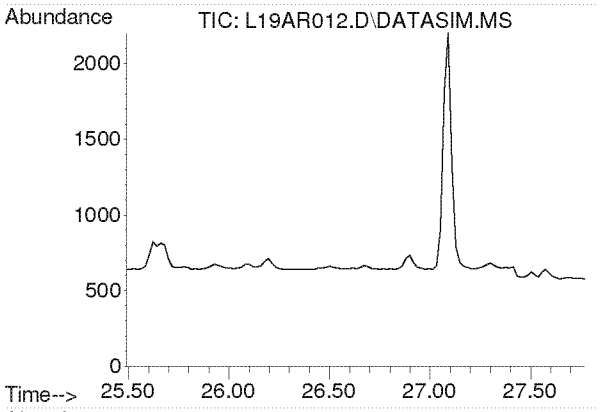
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



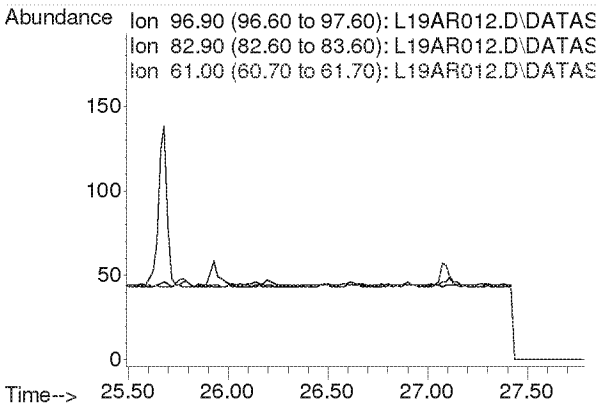


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

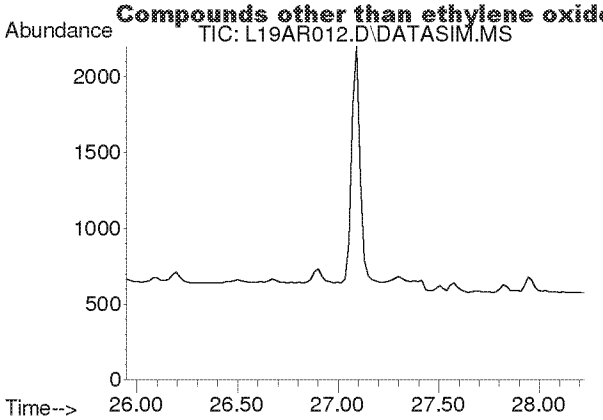
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

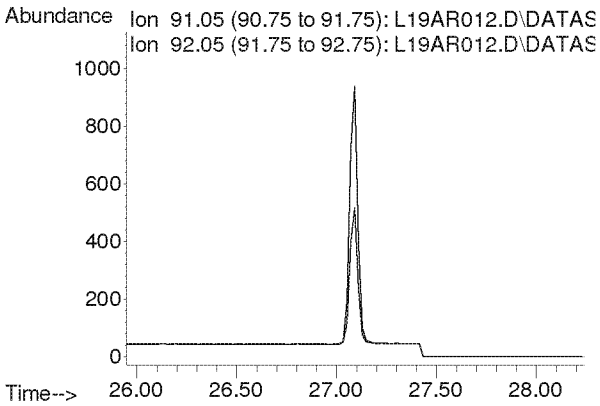


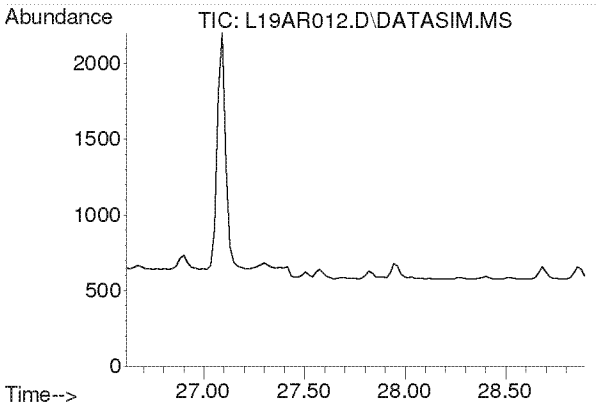
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



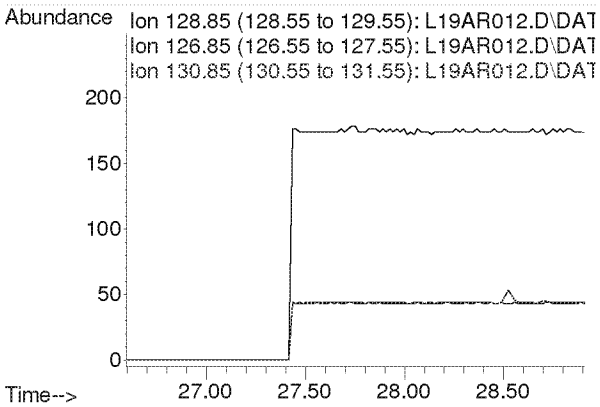


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

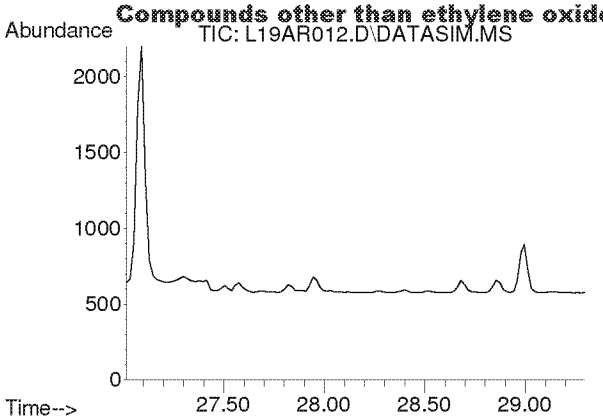
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

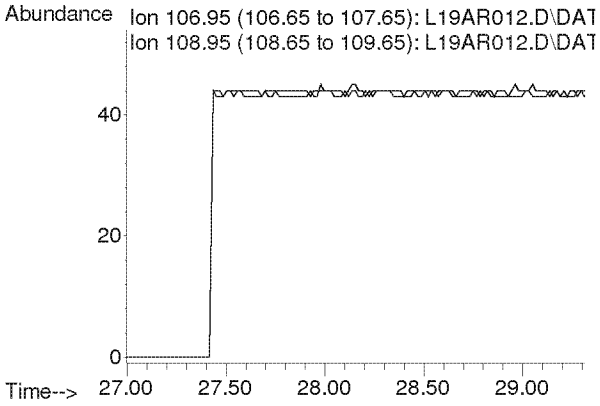


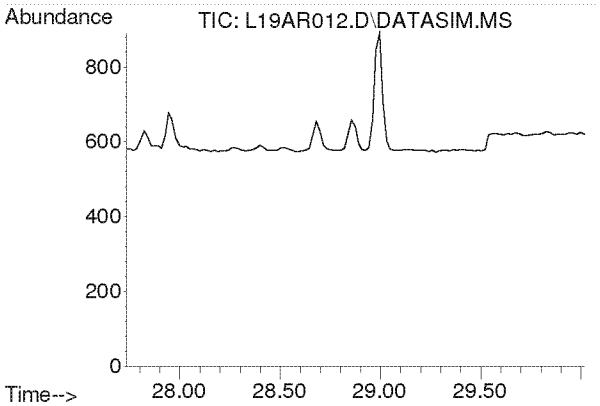
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



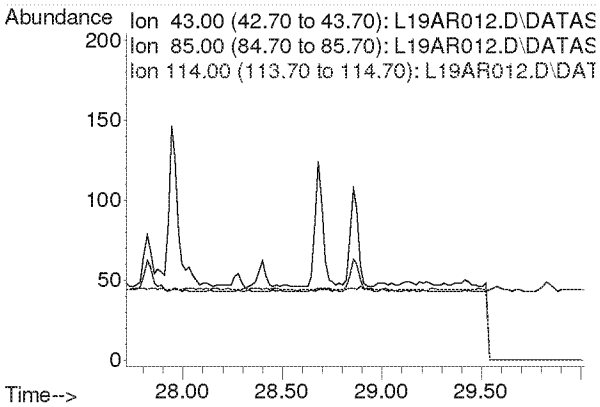


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

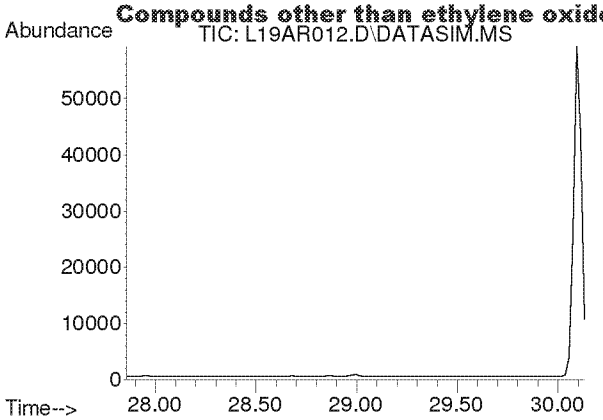
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

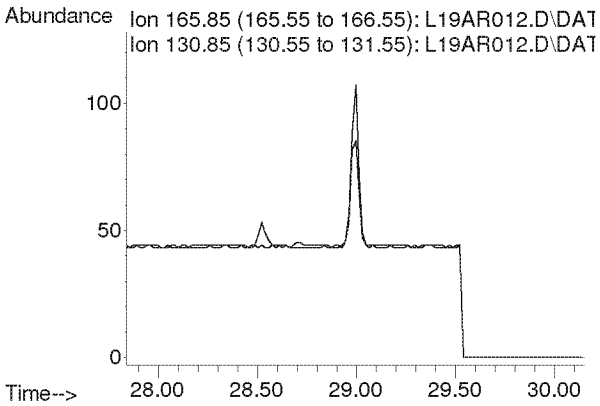


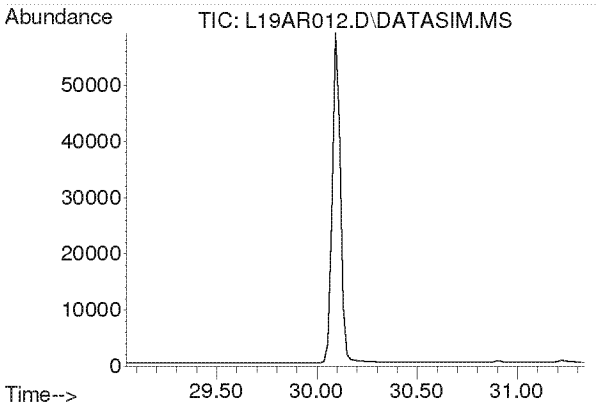
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



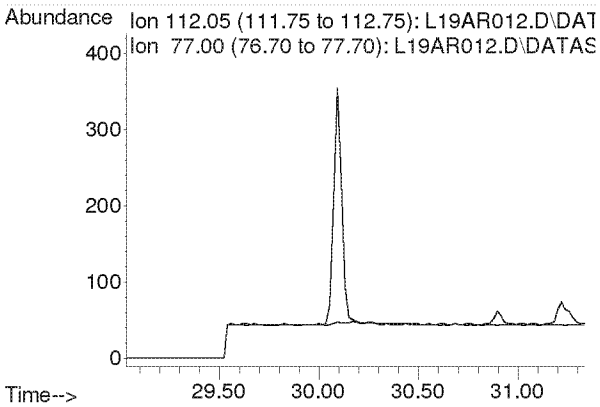


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

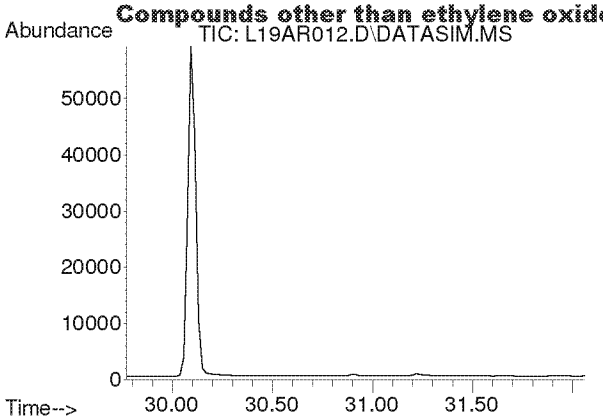
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

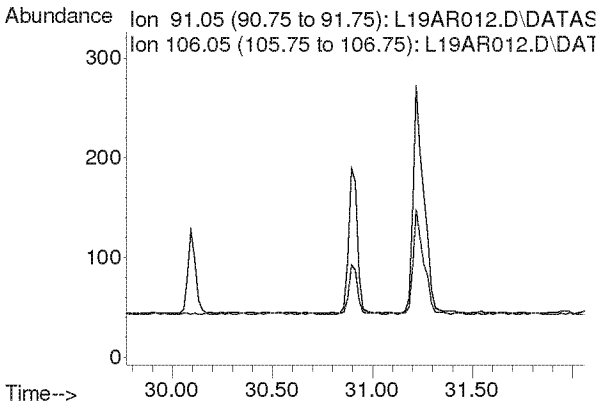


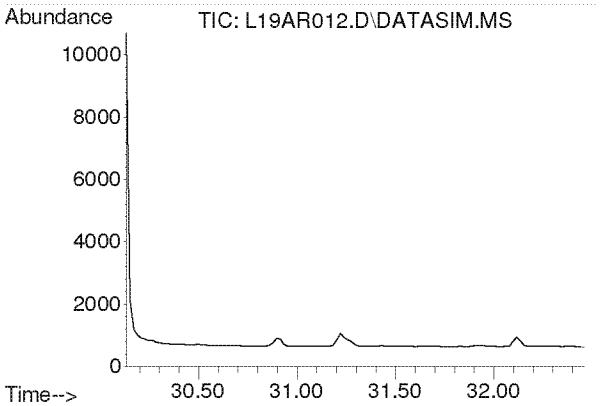
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



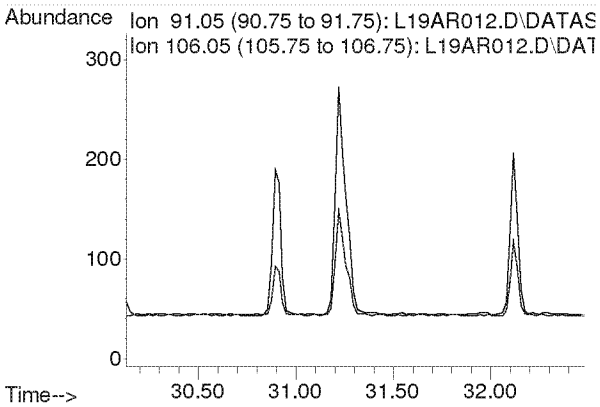


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

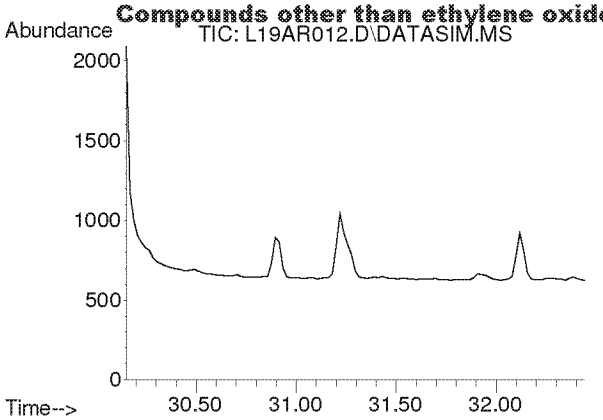
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

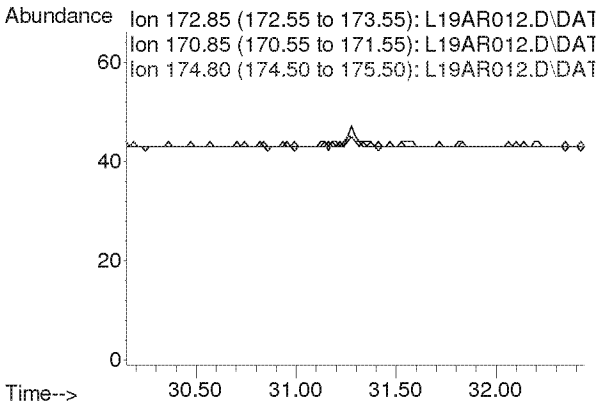


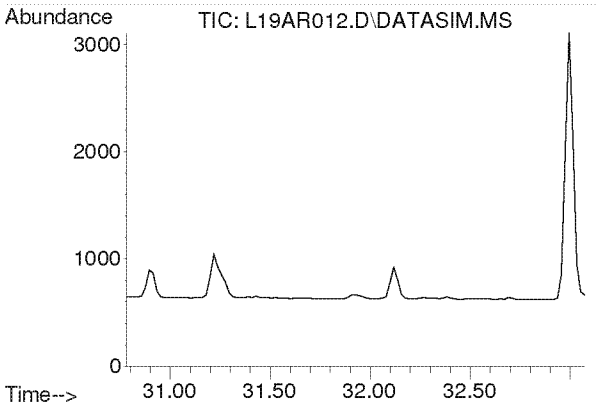
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



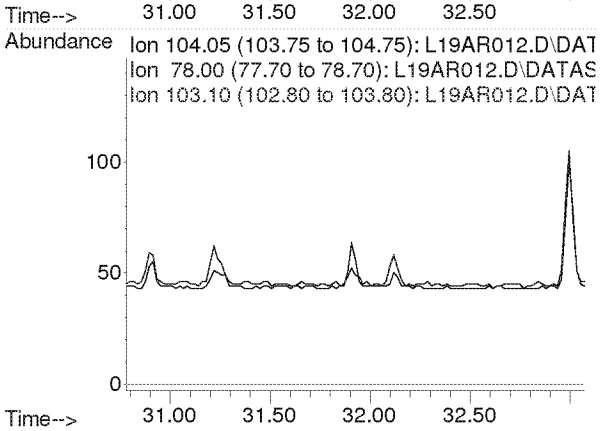


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

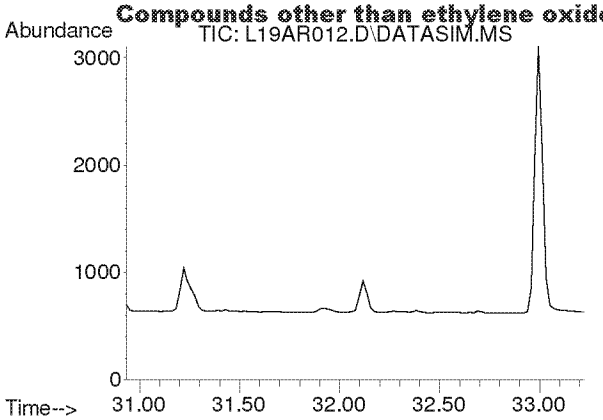
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

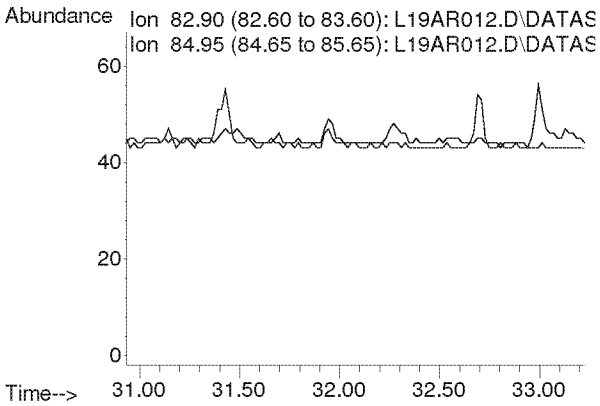


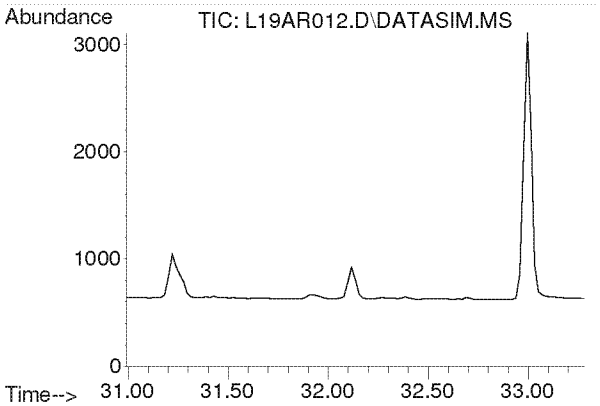
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



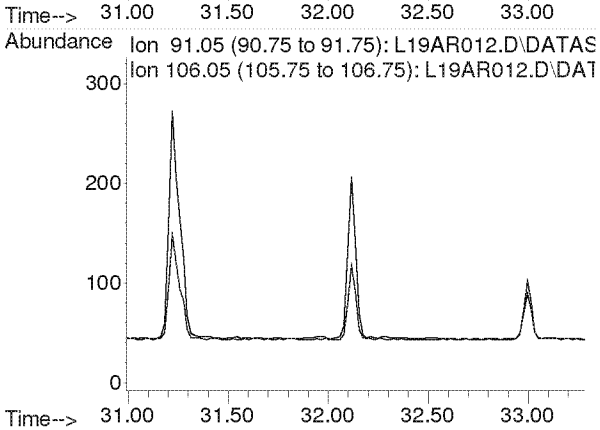


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

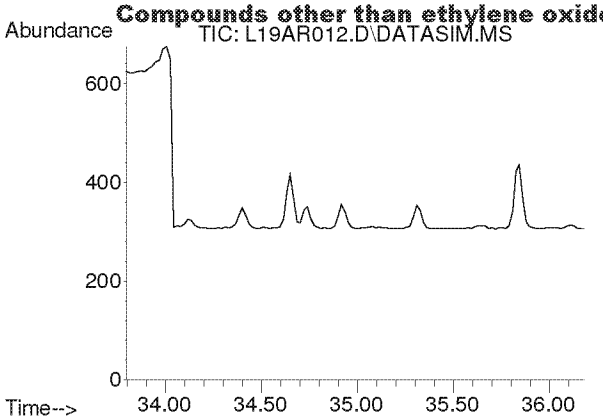
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

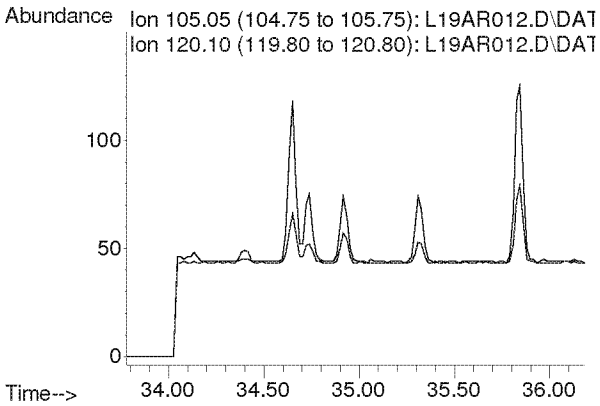


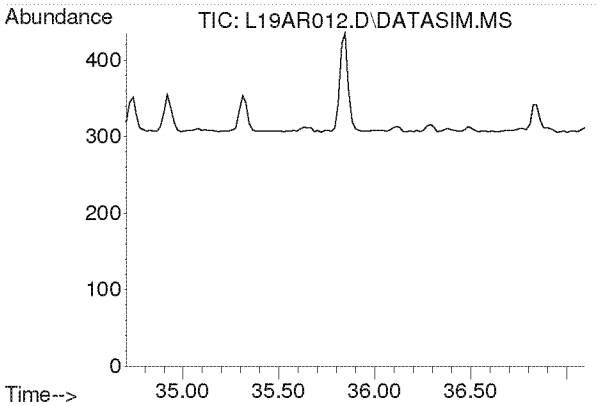
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



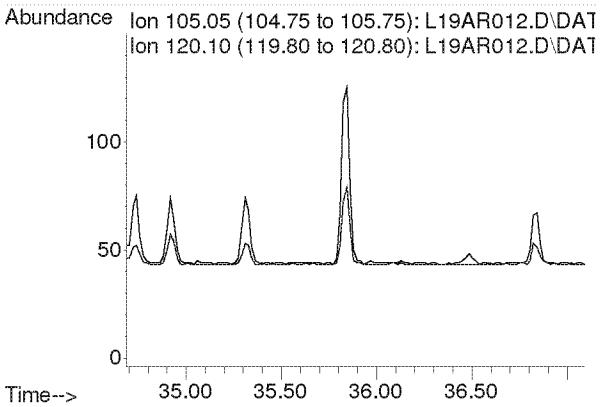


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

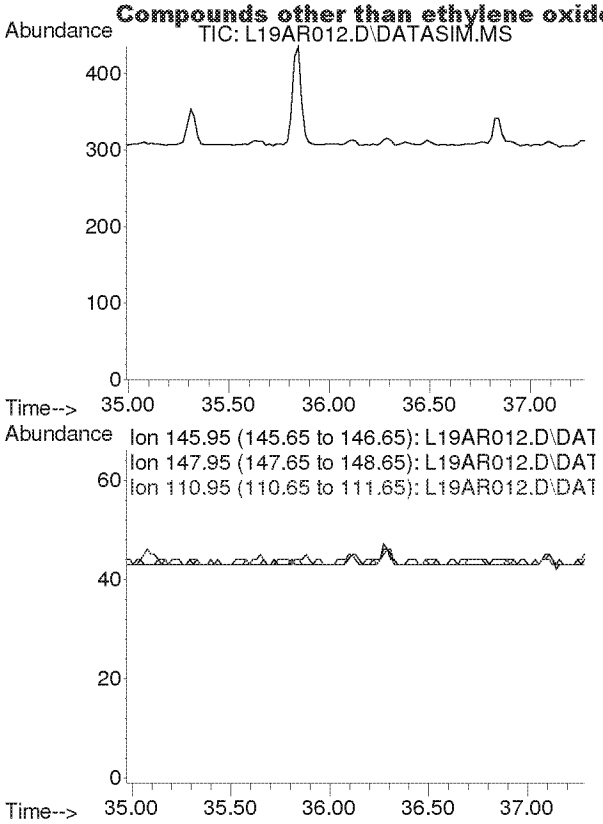
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

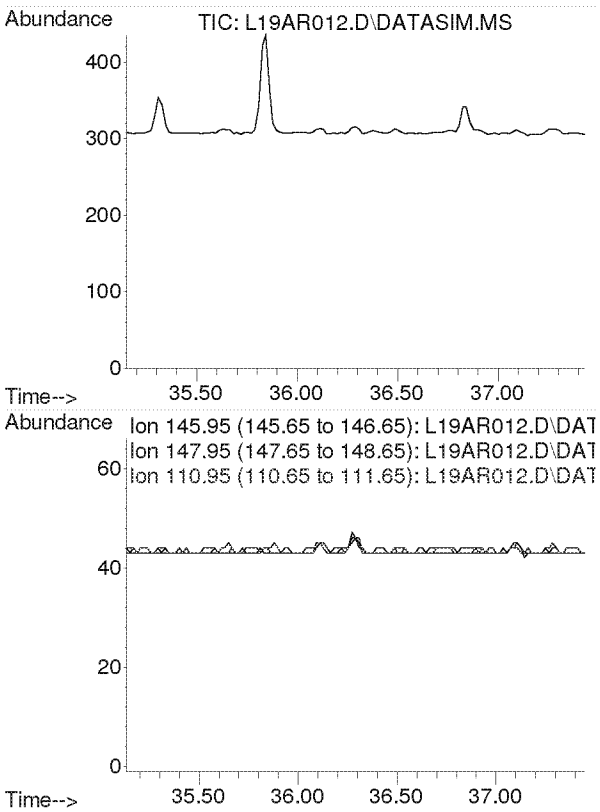


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



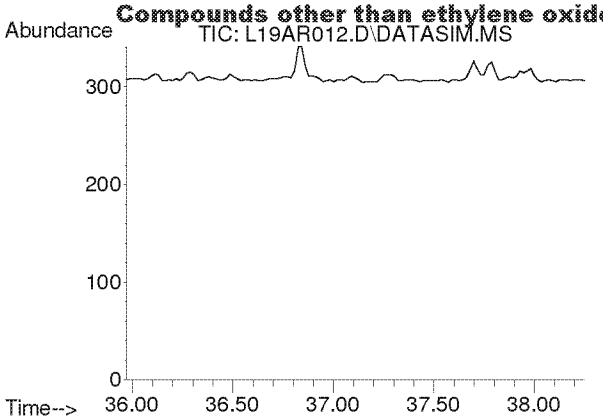
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

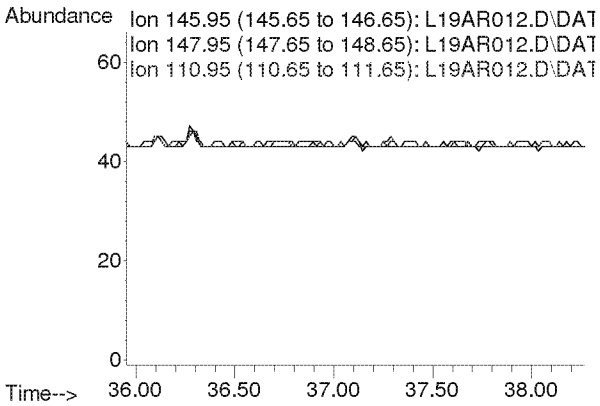


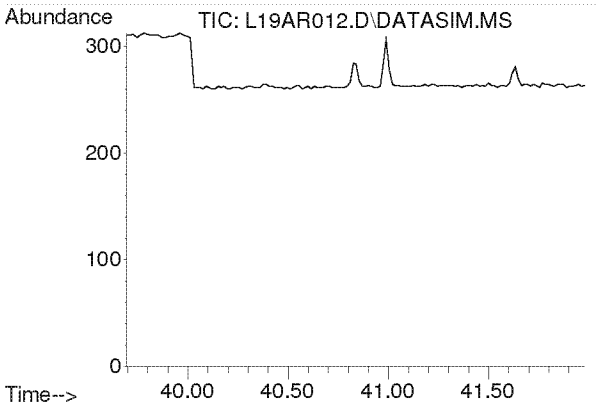
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



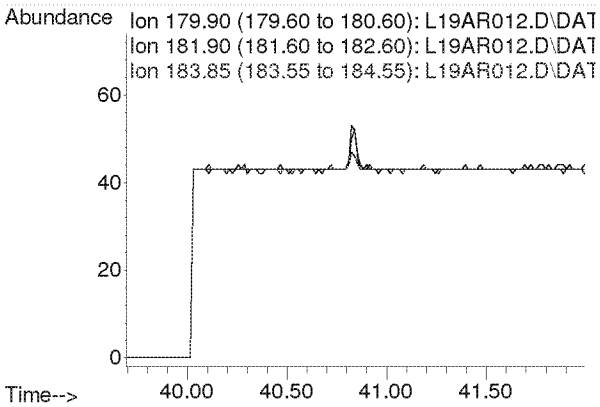


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

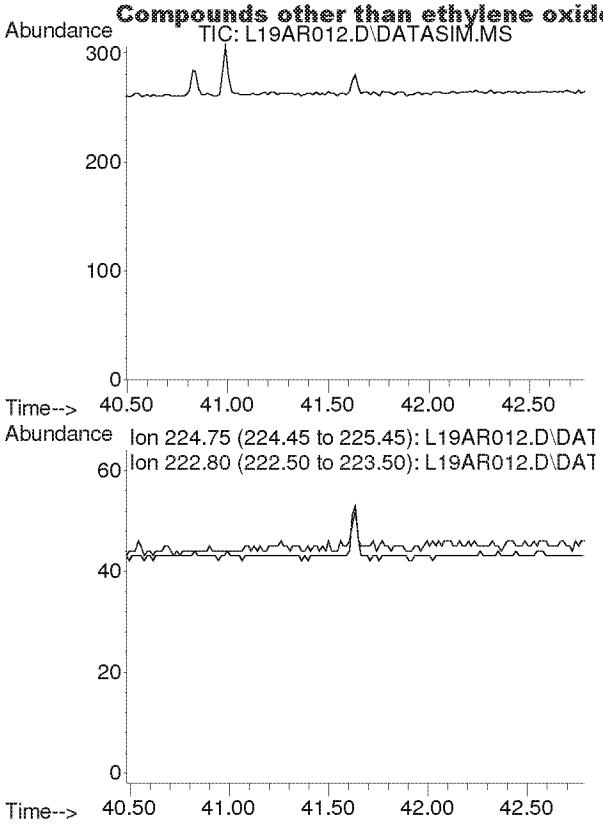
Lab File: L19AR012.D
Acq: 18 Jan 2019 10:39 pm

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: L19AR012.D
Acq: 18 Jan 2019 10:39 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\L19AR\
Data File : L19AR013.D
Acq On : 18 Jan 2019 11:41 pm
Operator : MAH
Sample : B9A1806-DUP2
Misc : WB VILLAGE HALL R2 1/13/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 09:18:07 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

d:MR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	50100	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	122574	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	94828	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	12.410	29	2488	0.9615 ppbv #	61
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\L19AR\
Data File : L19AR013.D
Acq On : 18 Jan 2019 11:41 pm
Operator : MAH
Sample : B9A1806-DUP2
Misc : WB VILLAGE HALL R2 1/13/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 09:18:07 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.	

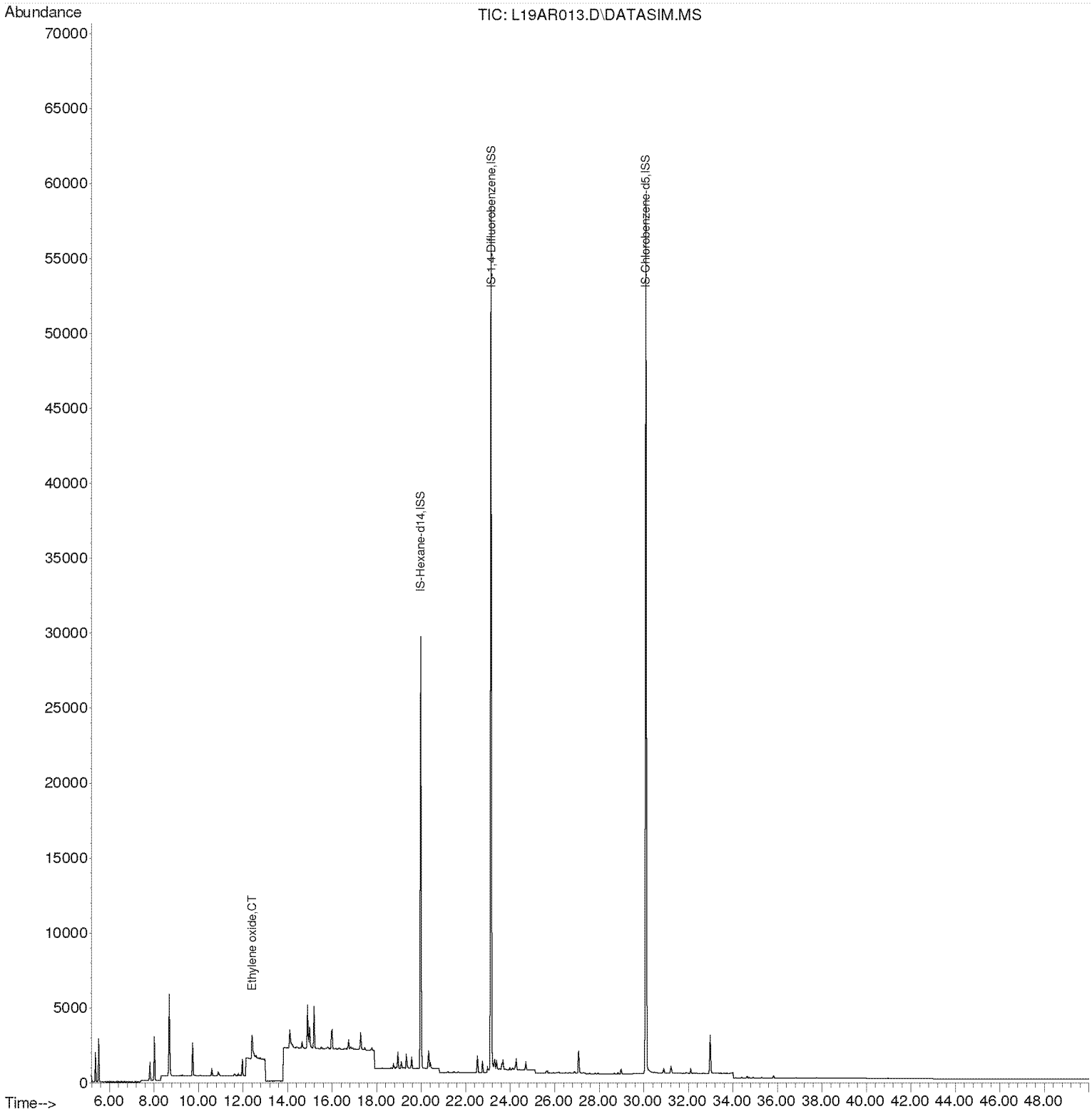
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00182

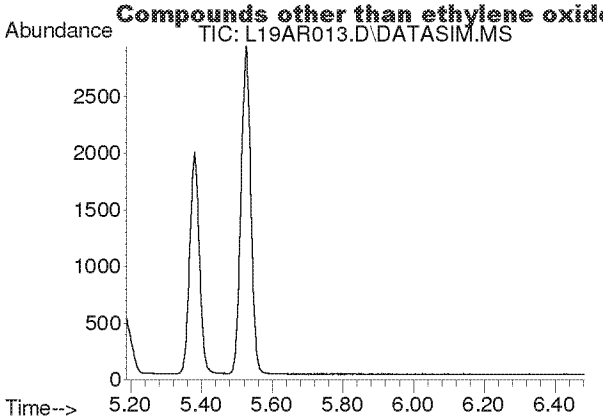
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR013.D
Acq On : 18 Jan 2019 11:41 pm
Operator : MAH
Sample : B9A1806-DUP2
Misc : WB VILLAGE HALL R2 1/13/19
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 23 08:39:08 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



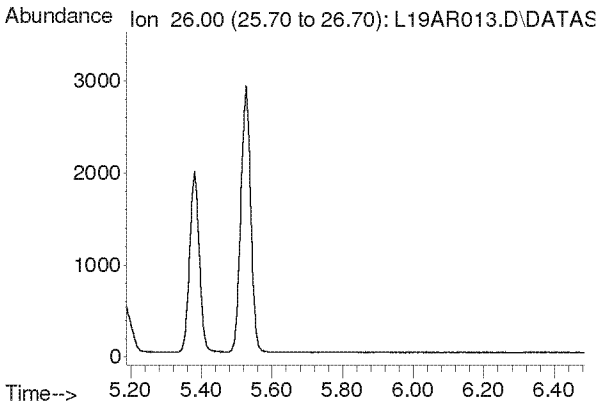
Compounds other than ethylene oxide were not quantitated.

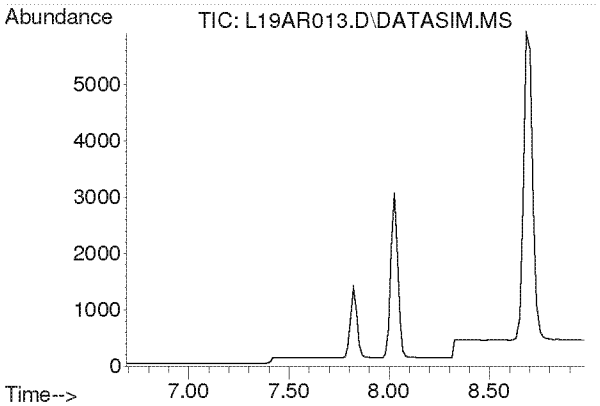


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 26



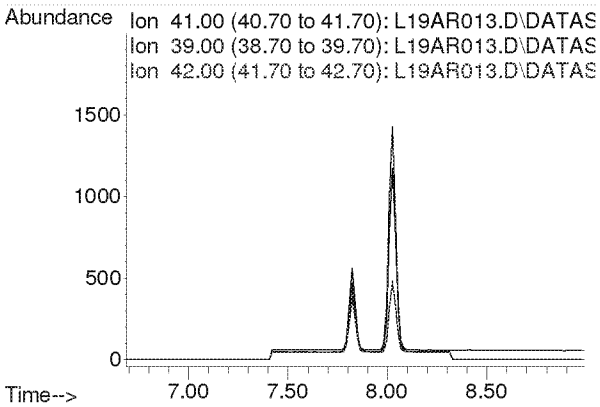


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

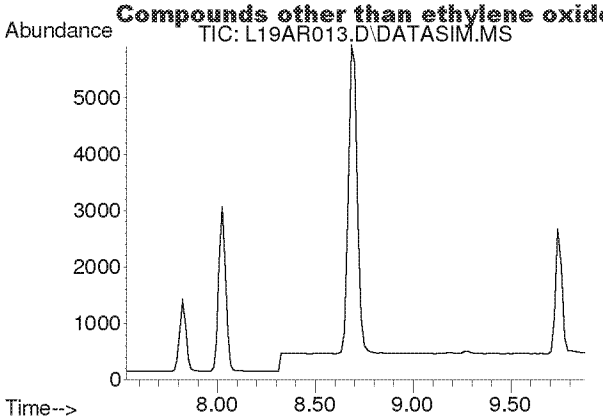
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

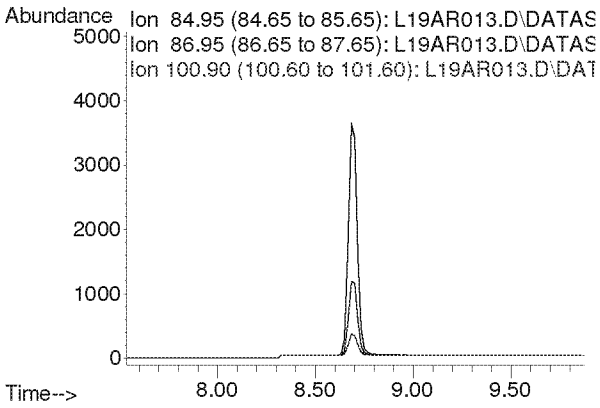


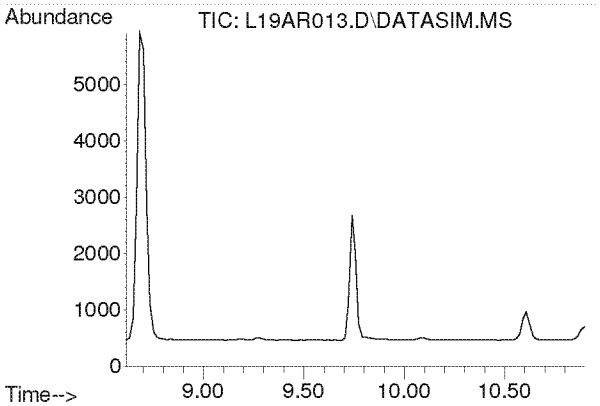
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



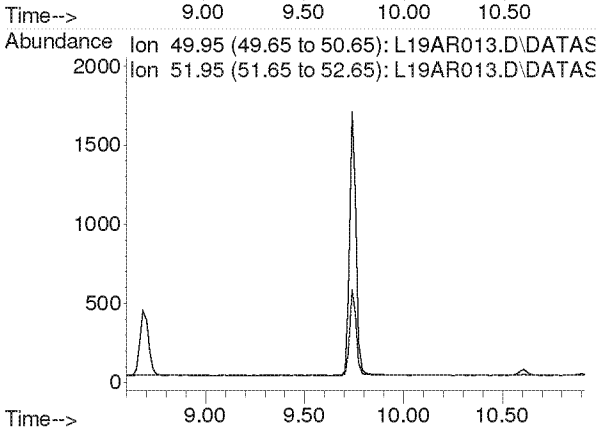


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

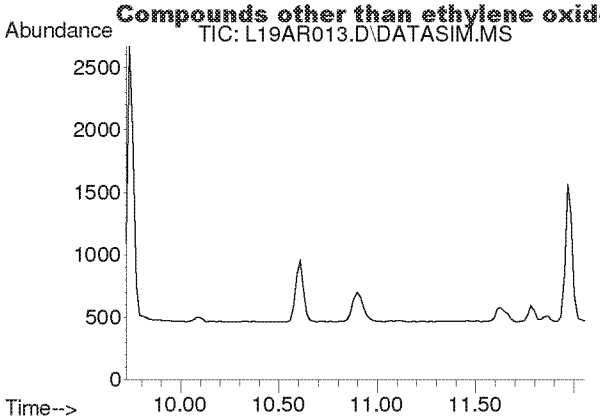
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

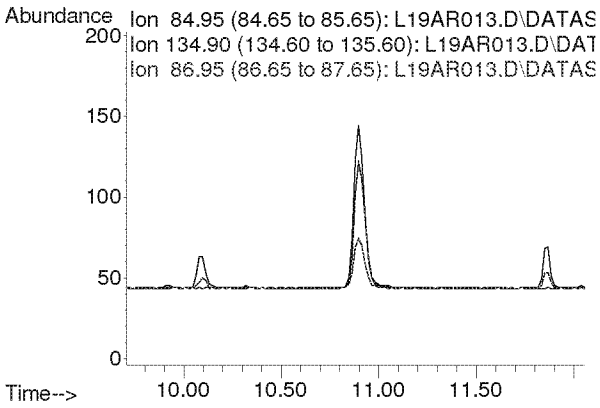


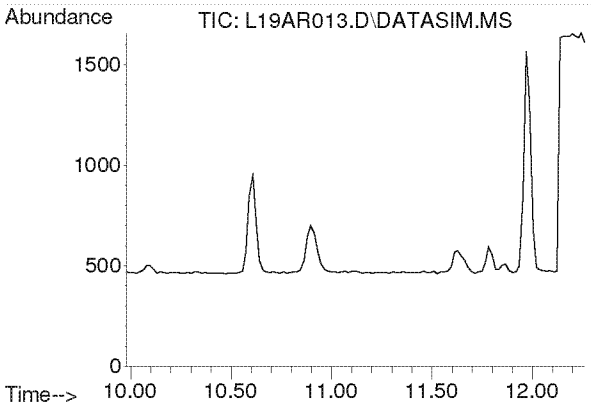
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



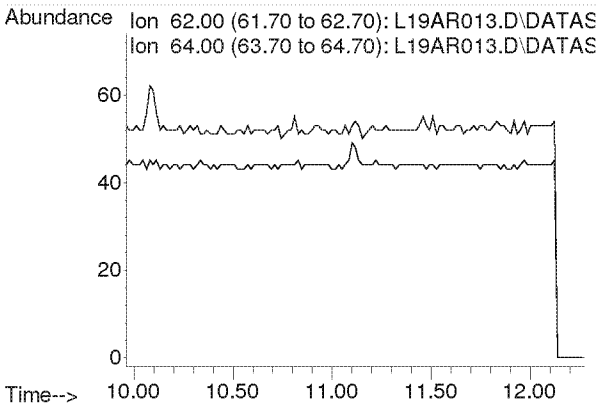


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

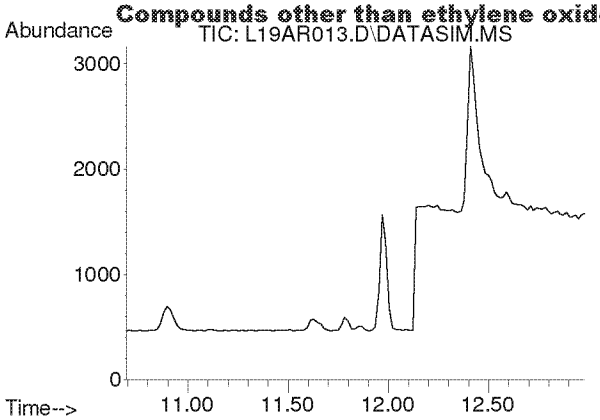
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

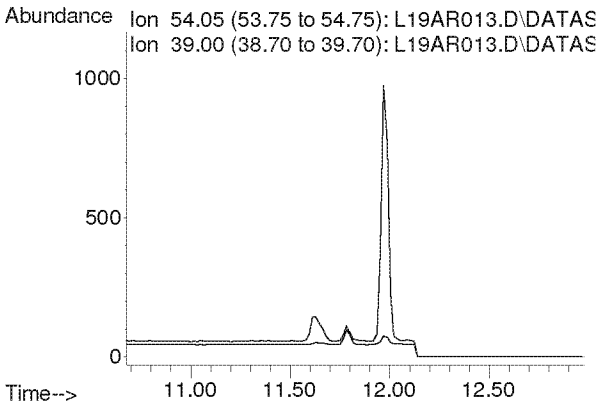


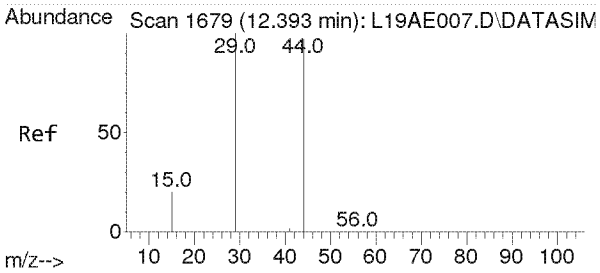
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

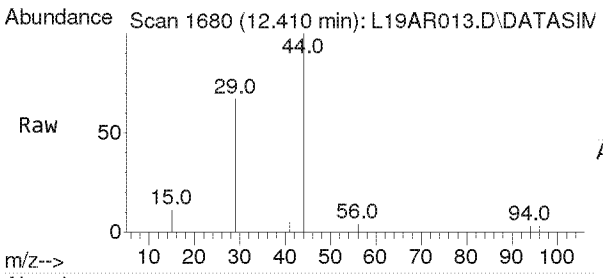


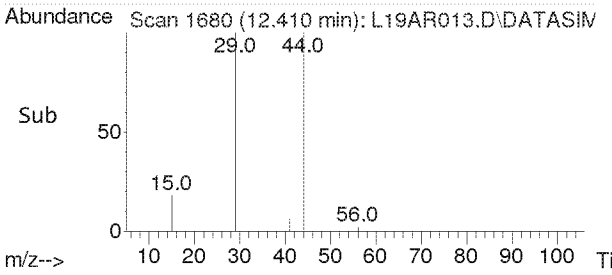


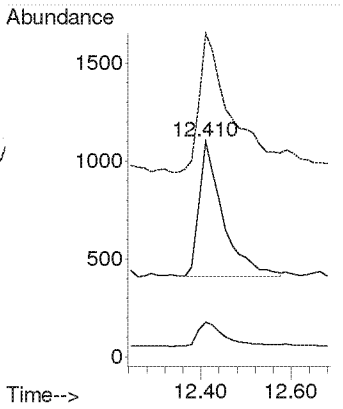
#9
Ethylene oxide
Concen: 0.961 ppbv
RT: 12.410 min Scan# 1680
Delta R.T. 0.017 min
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 29 Resp: 2488

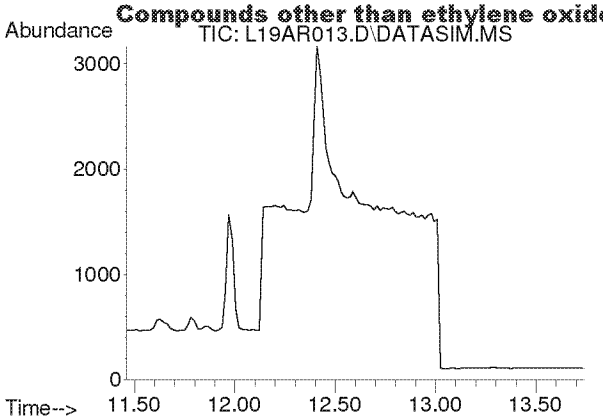
Ion	Ratio	Lower	Upper
29	100		
15	21.5	15.4	23.0
44	141.5	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

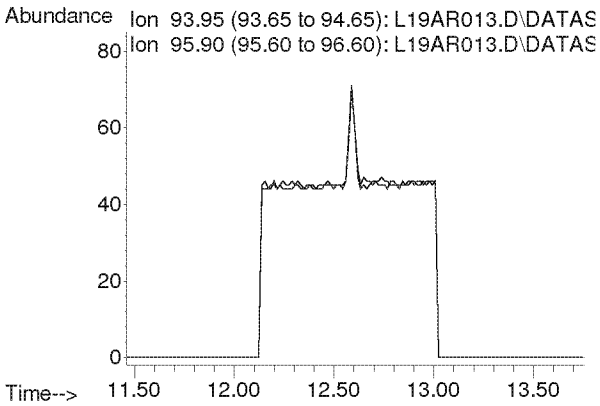


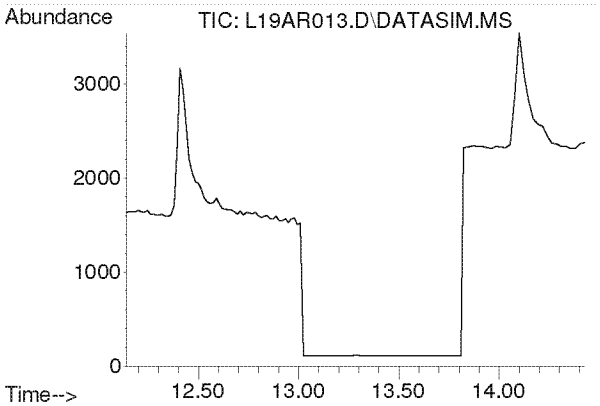
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



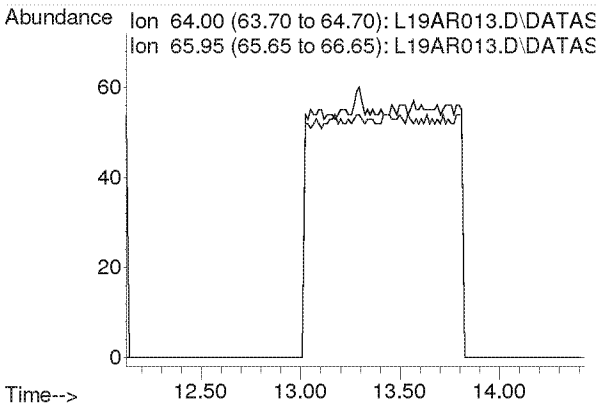


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

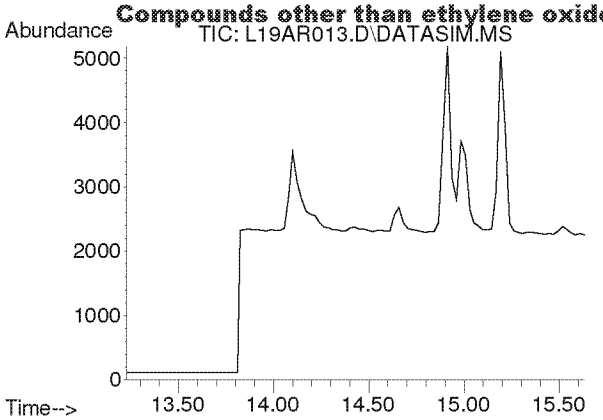
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

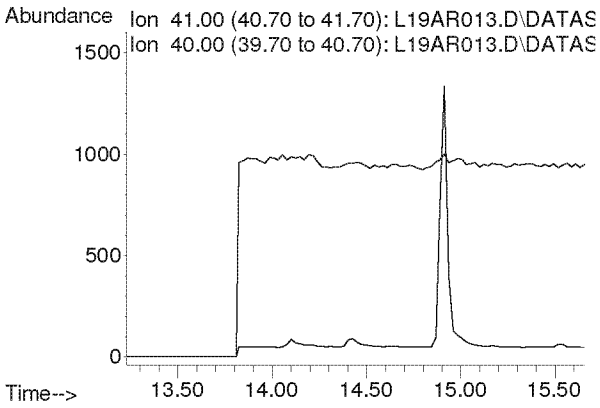


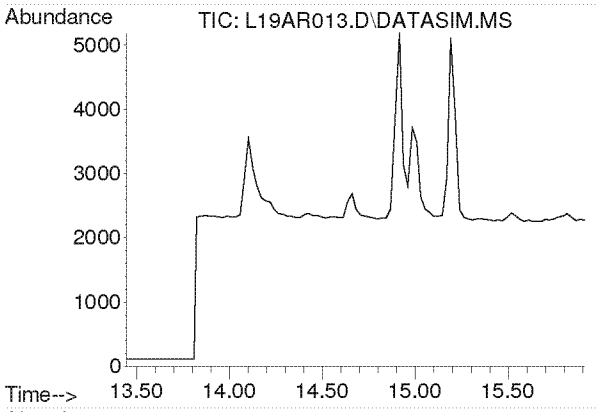
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



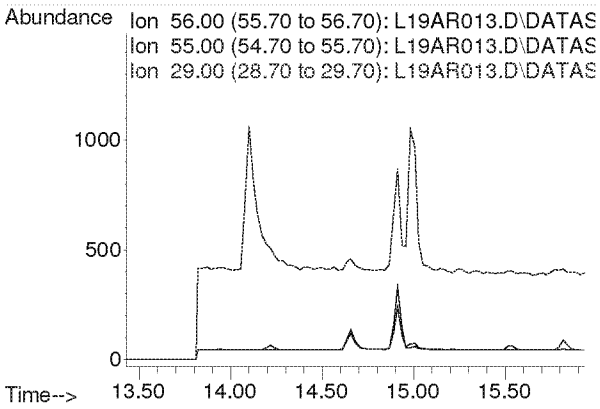


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

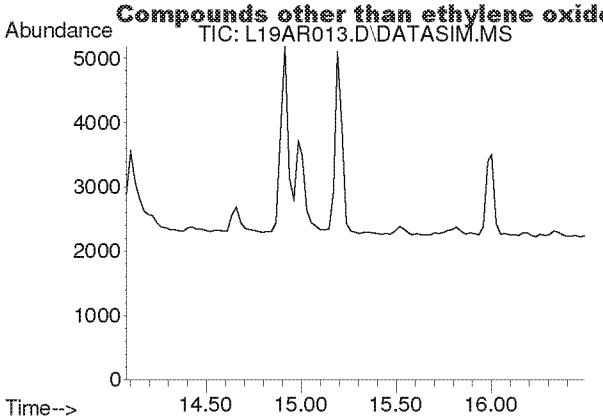
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

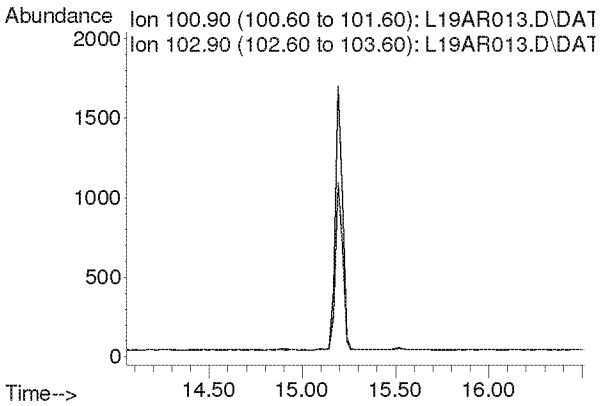


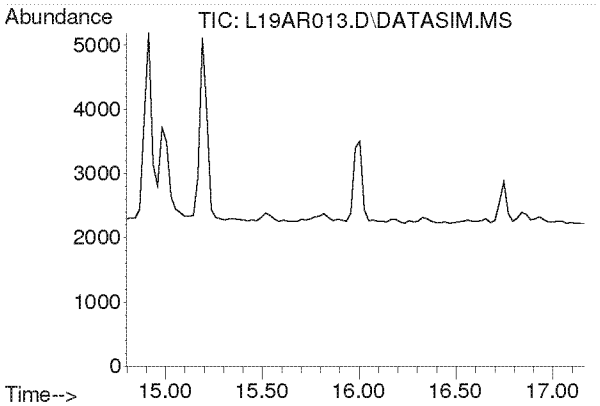
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



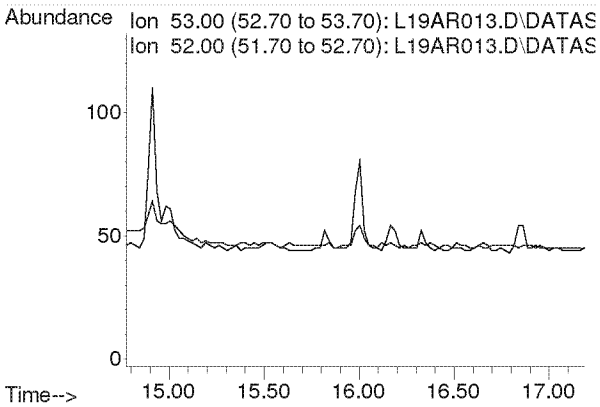


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

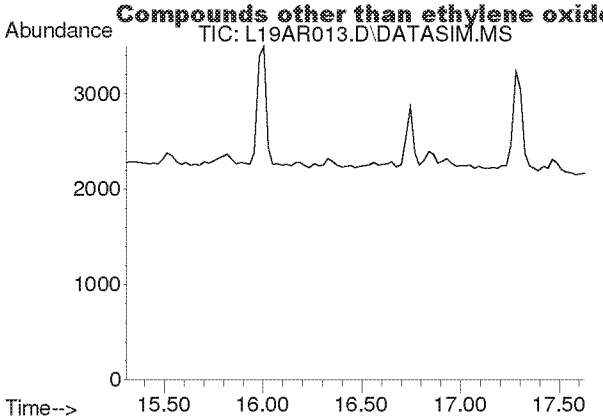
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

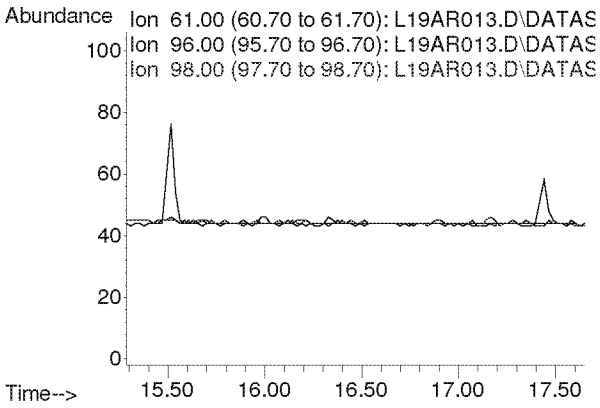


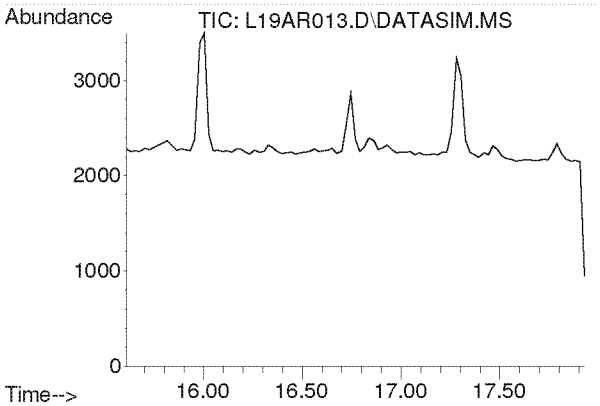
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



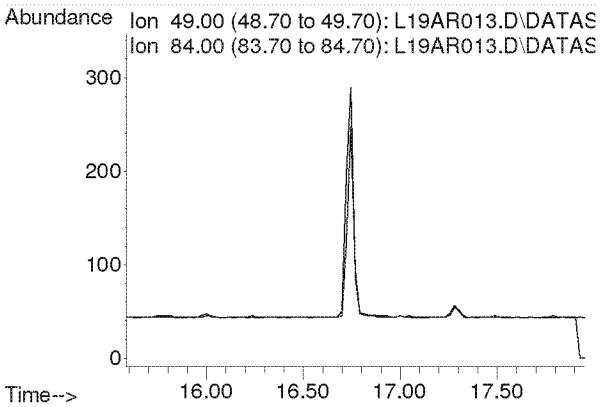


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

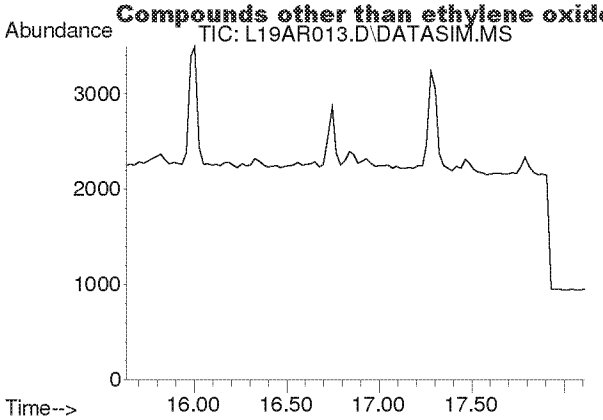
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

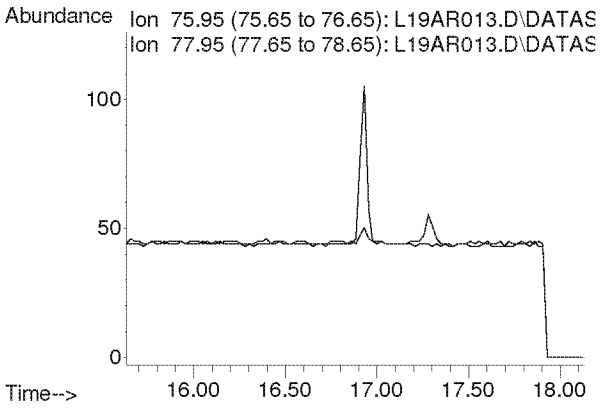


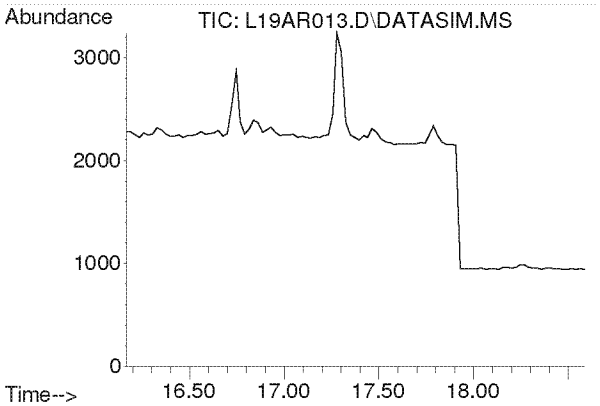
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



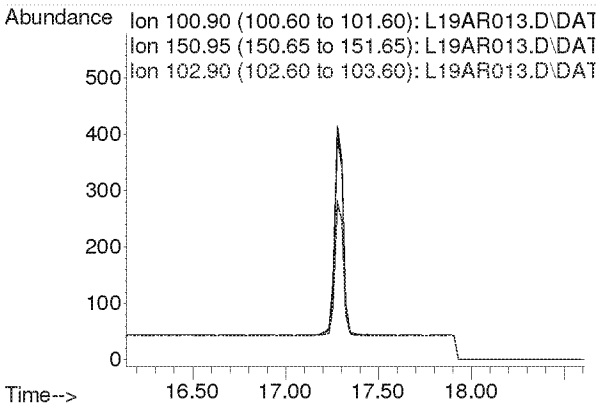


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

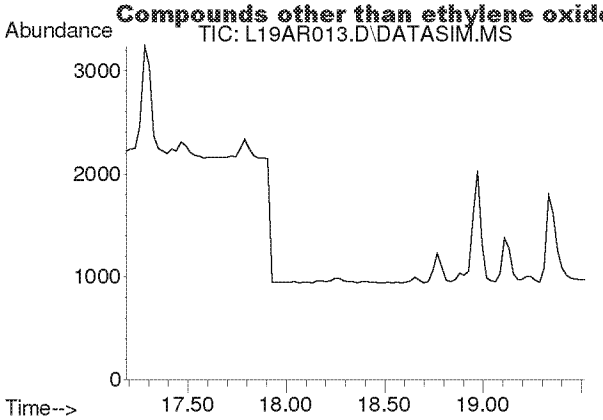
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

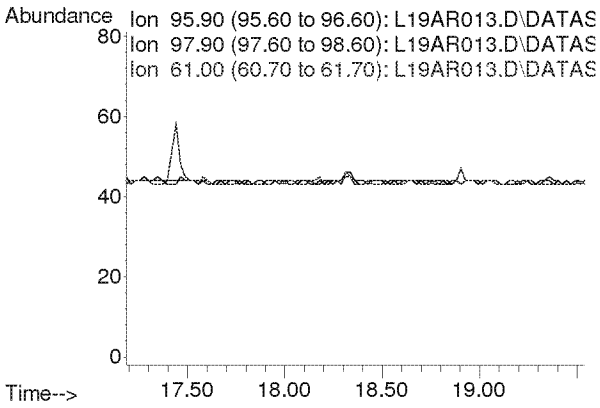


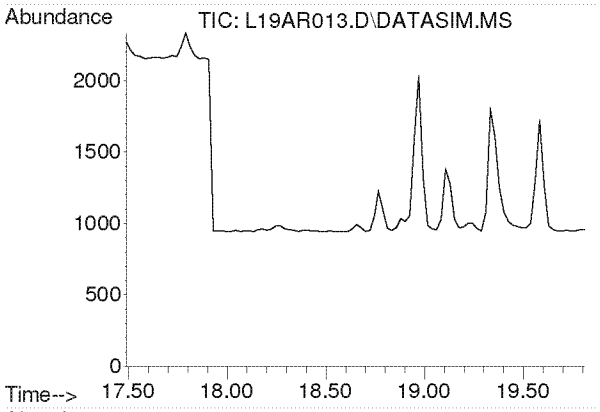
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



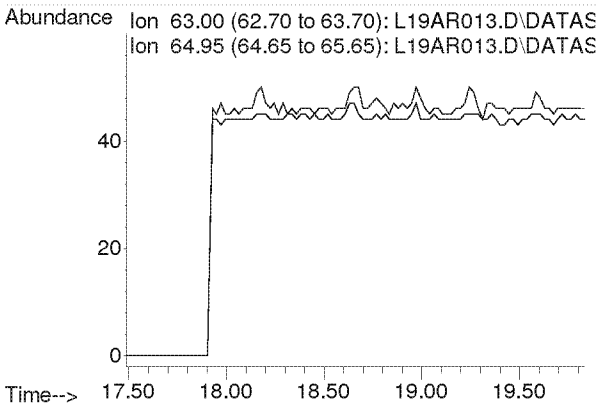


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

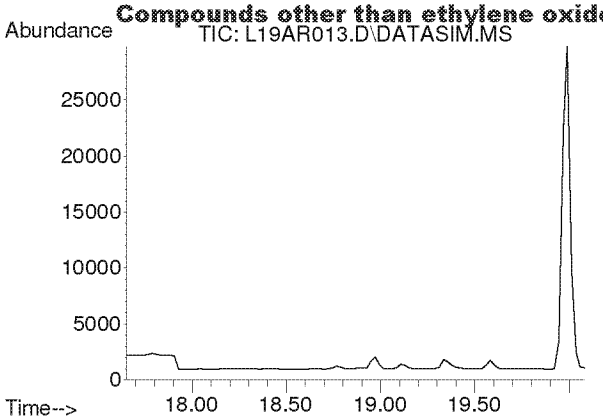
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

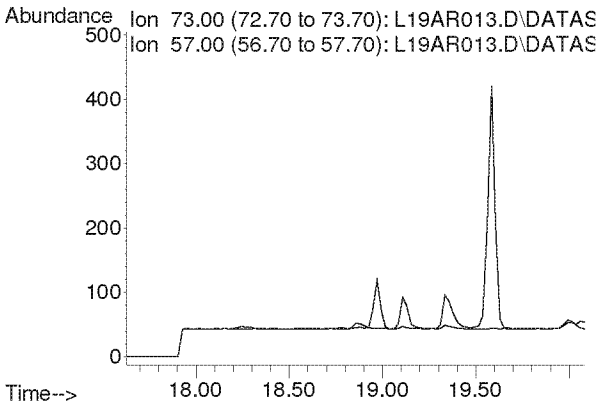


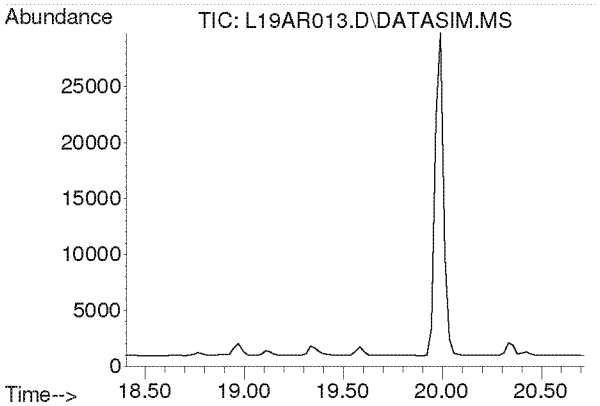
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



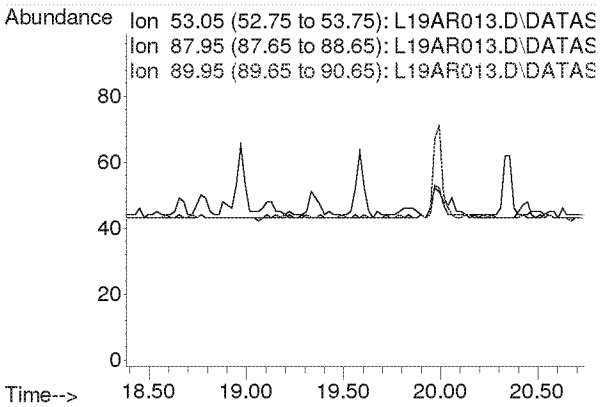


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

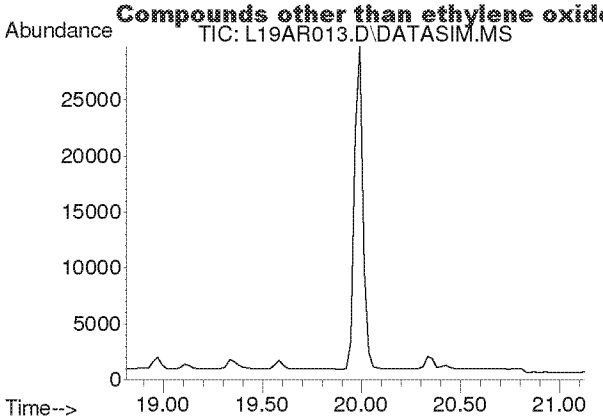
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

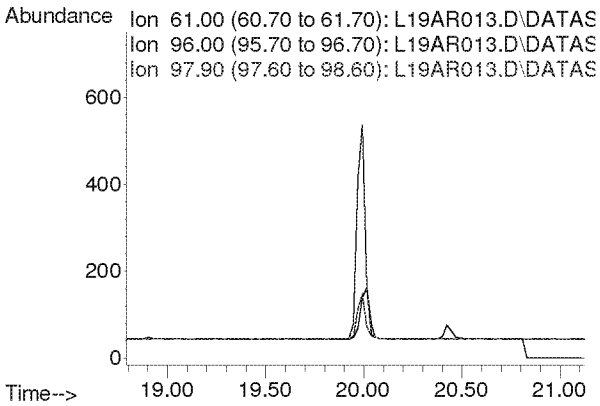


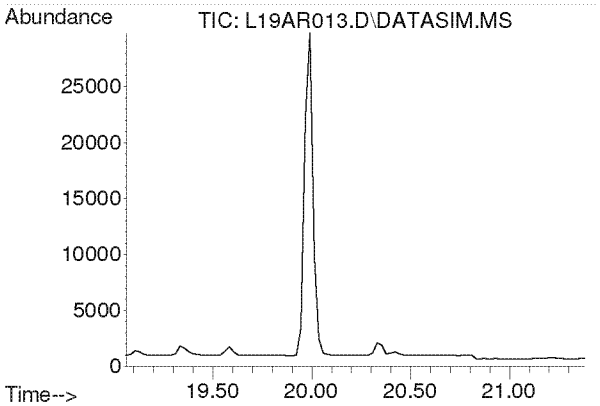
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



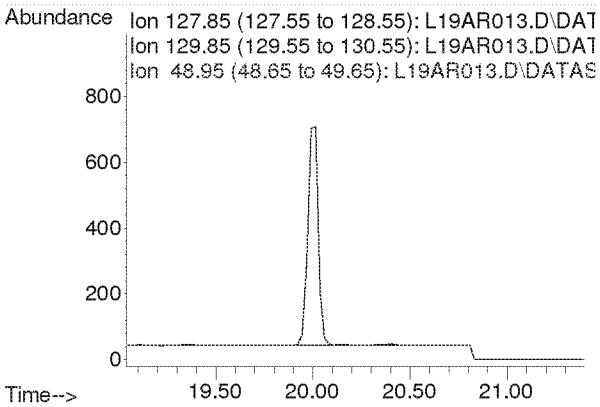


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

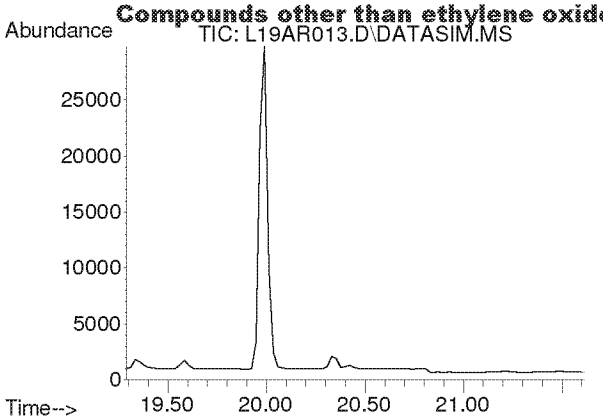
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

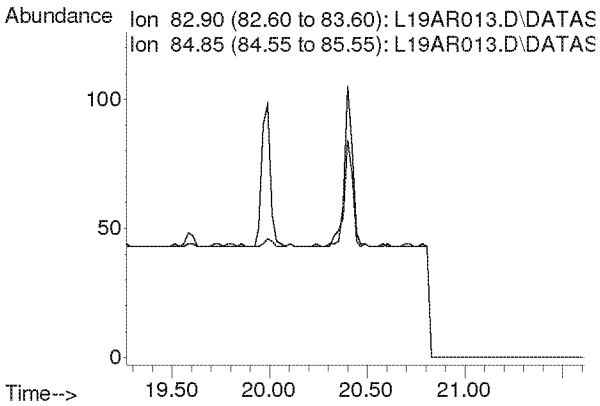


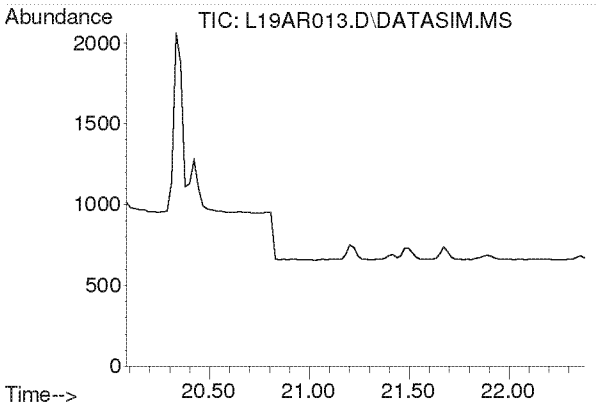
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



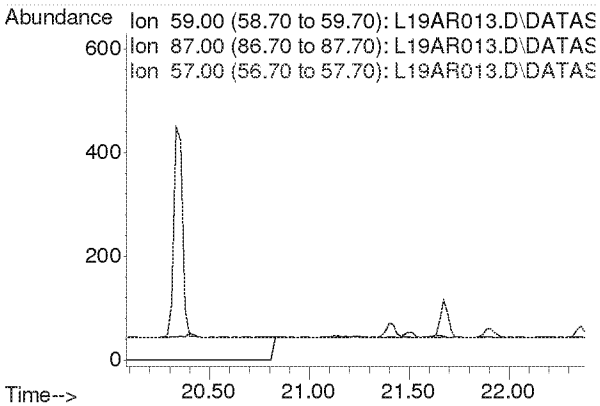


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

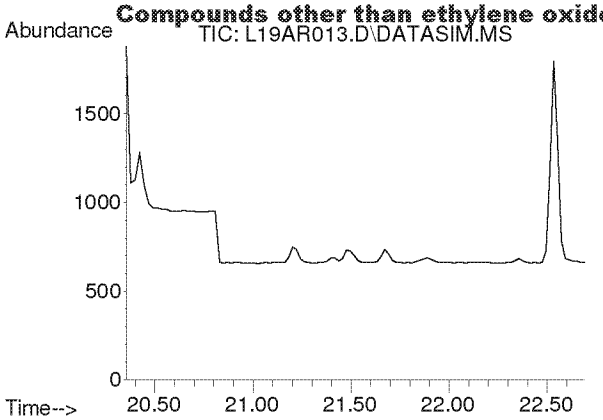
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

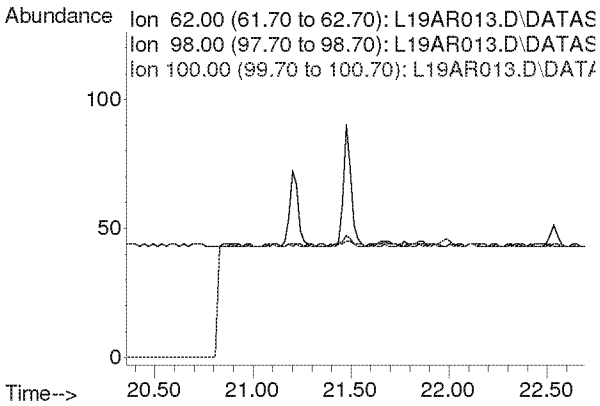


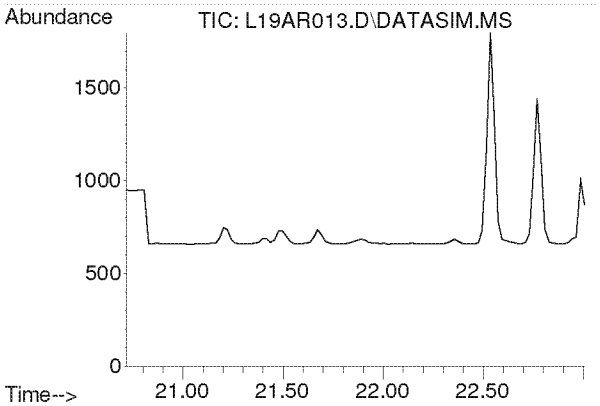
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



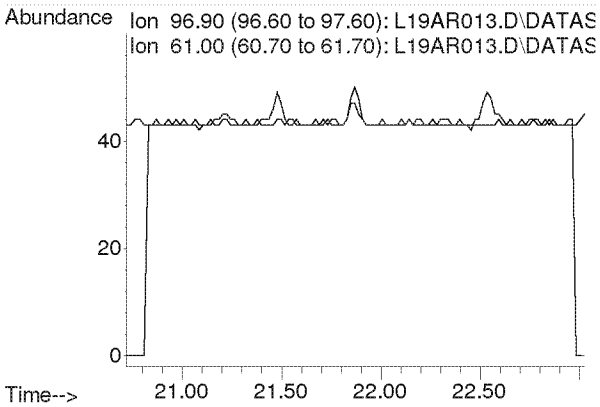


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

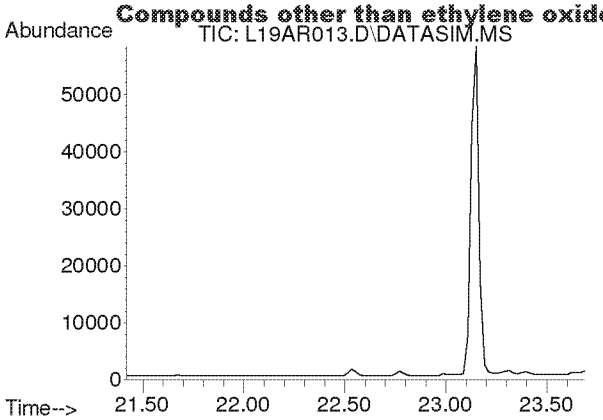
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

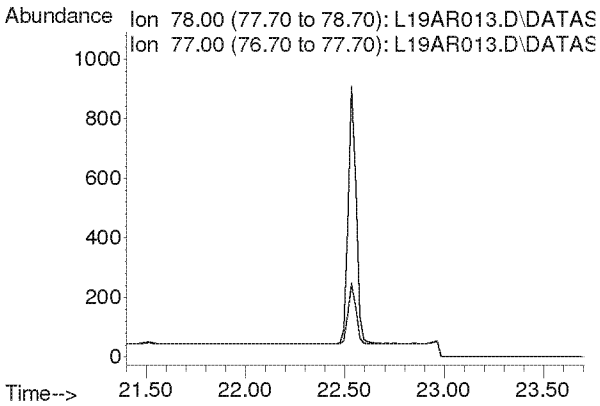


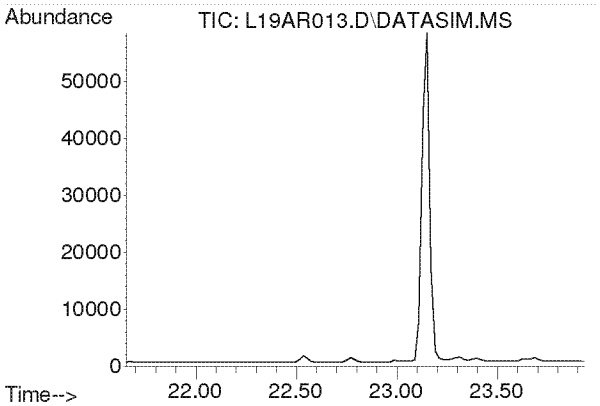
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



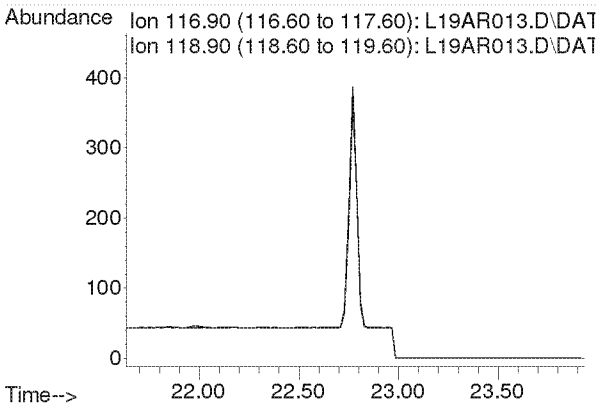


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

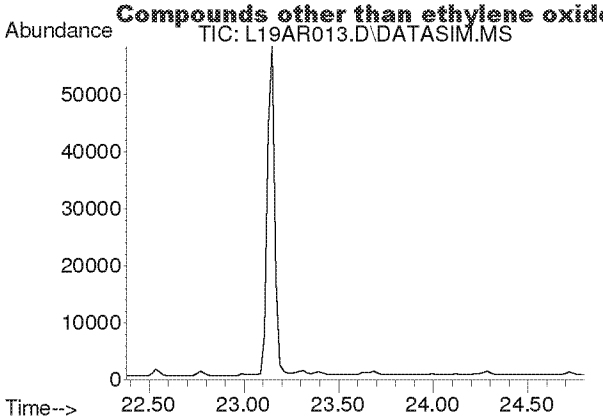
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

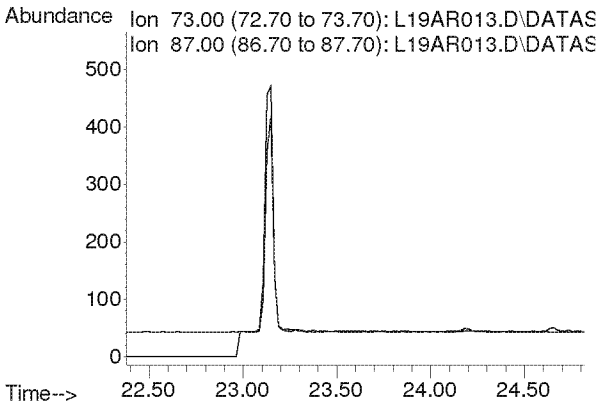


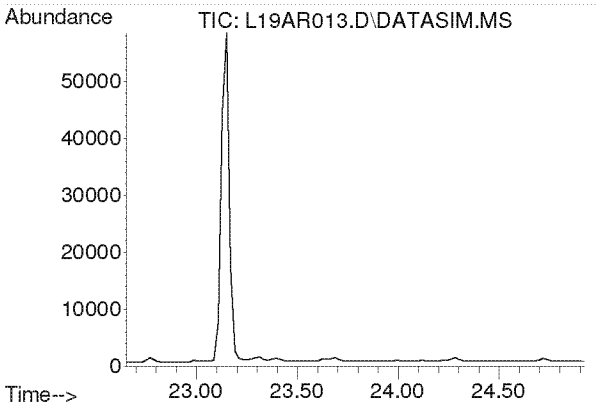
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



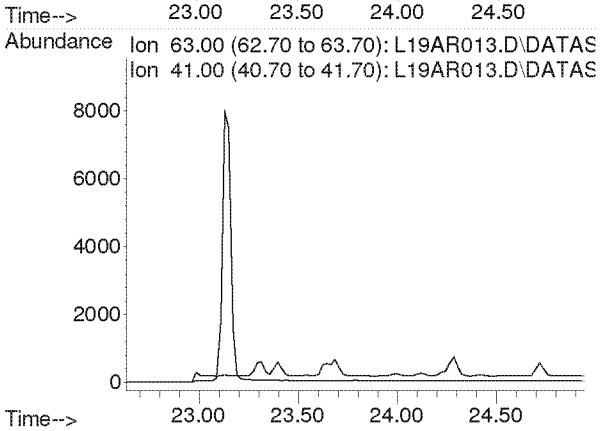


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

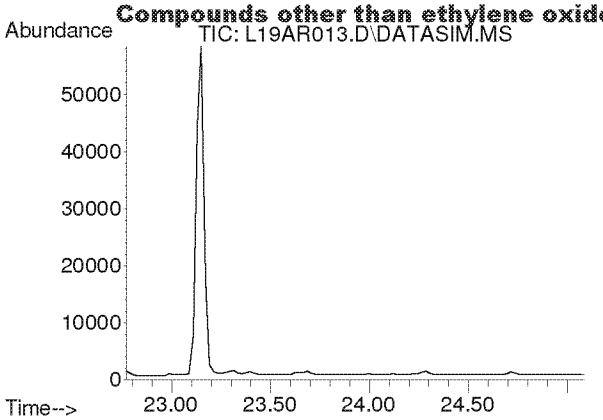
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

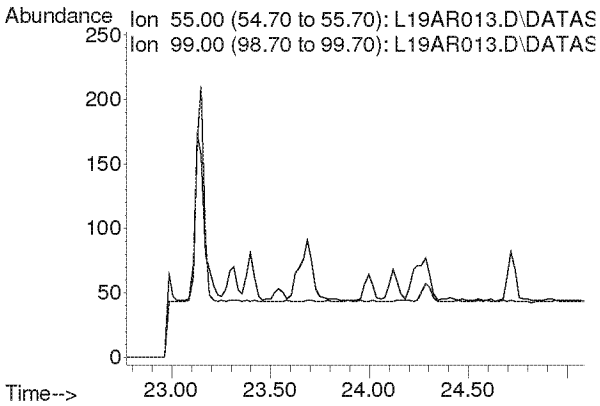


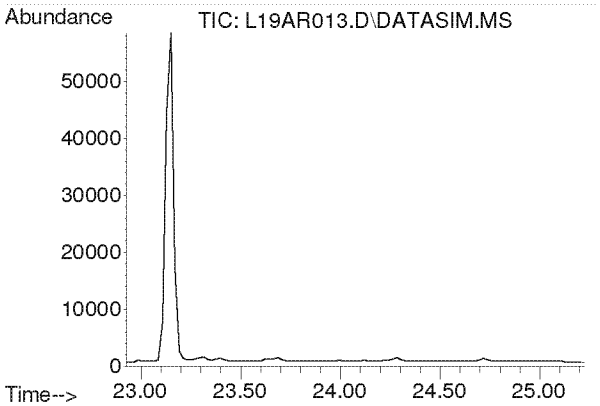
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



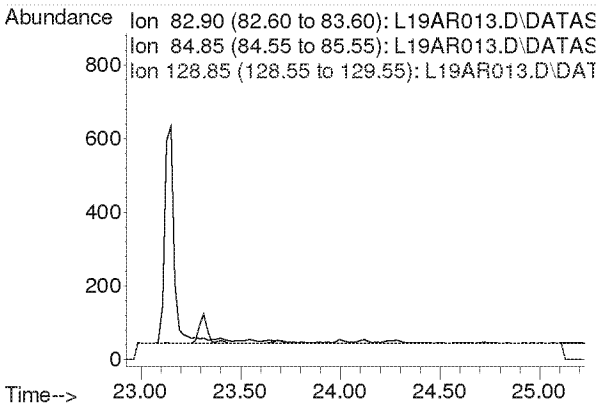


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

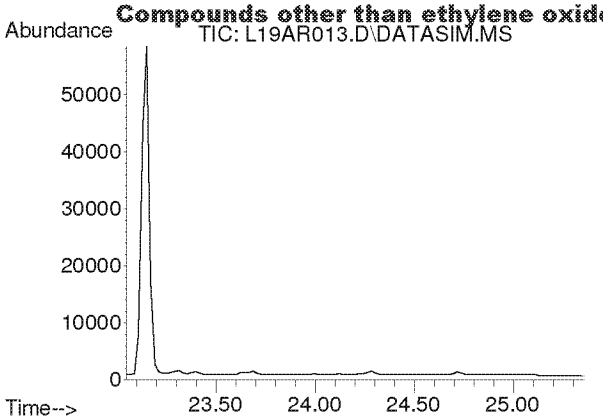
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

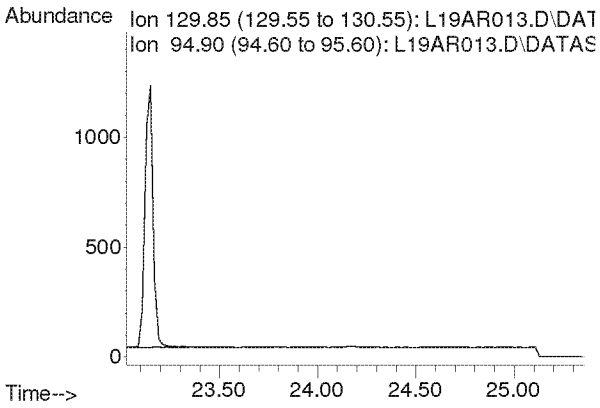


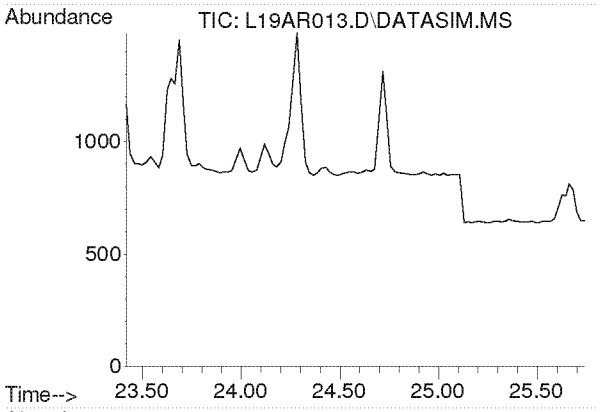
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



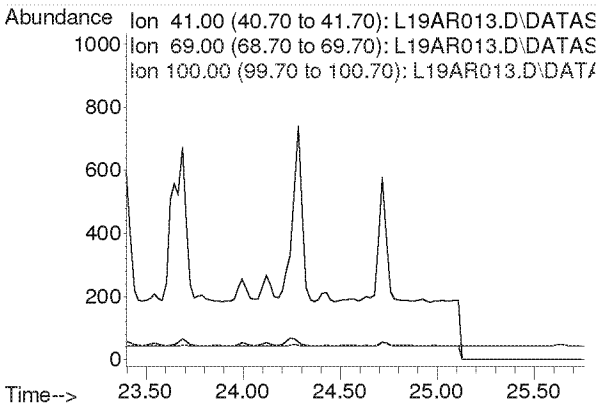


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

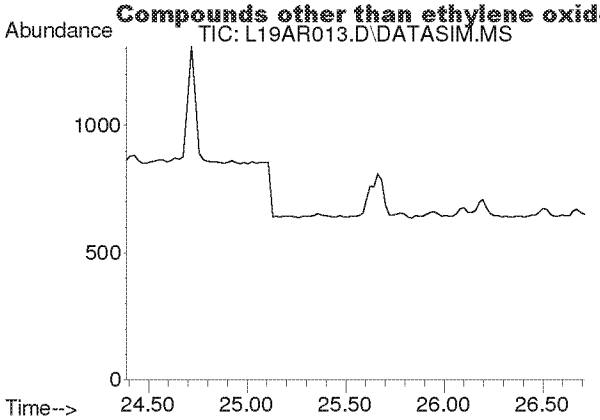
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

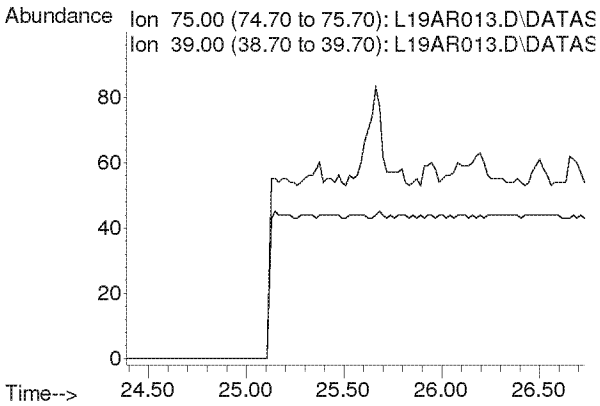


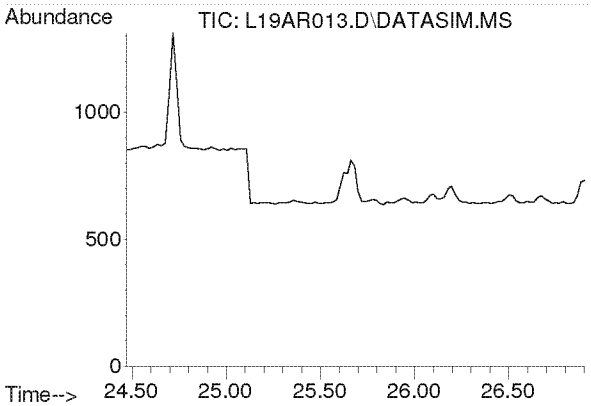
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



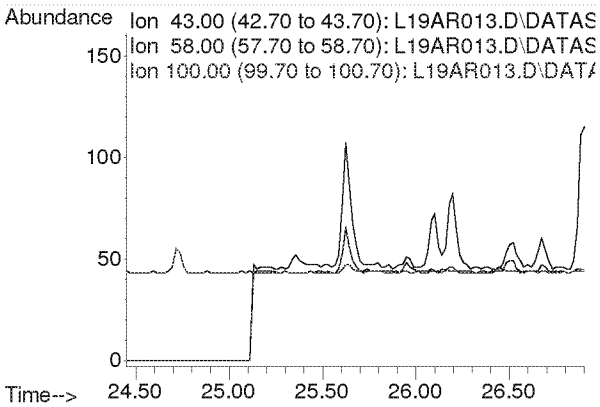


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

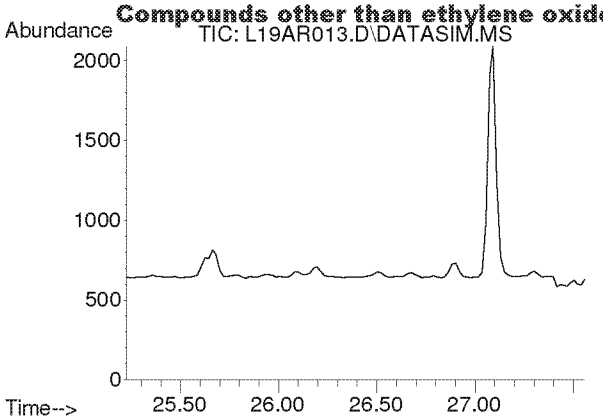
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

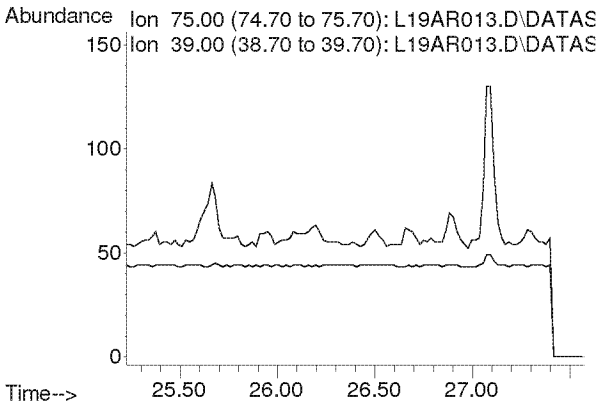


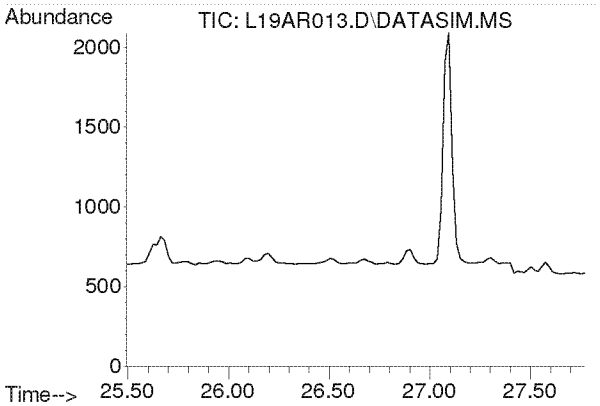
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



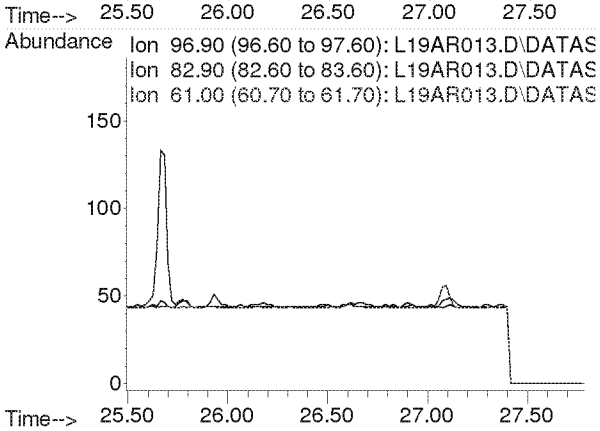


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

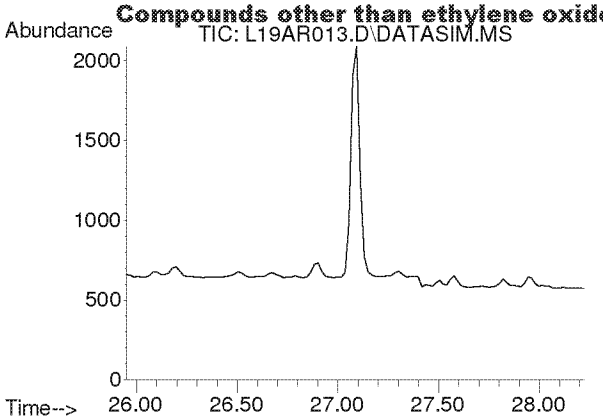
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

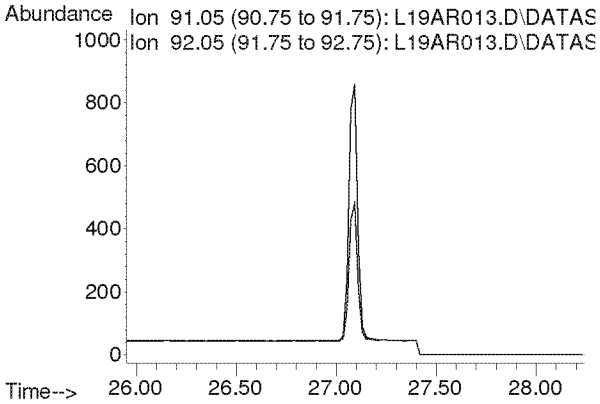


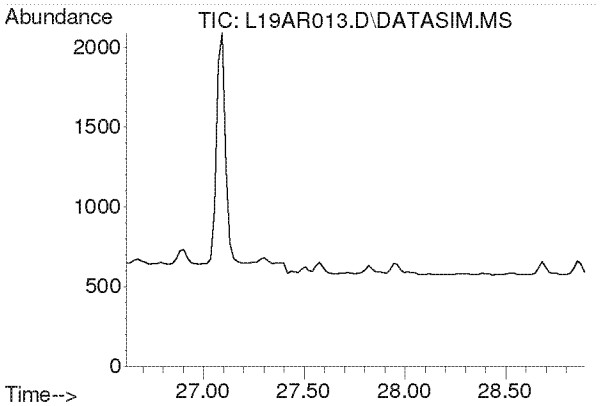
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



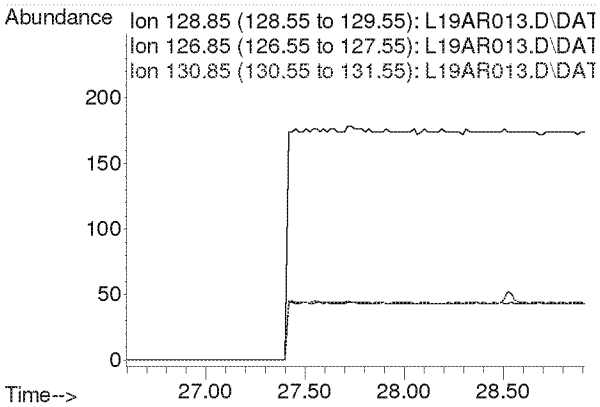


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

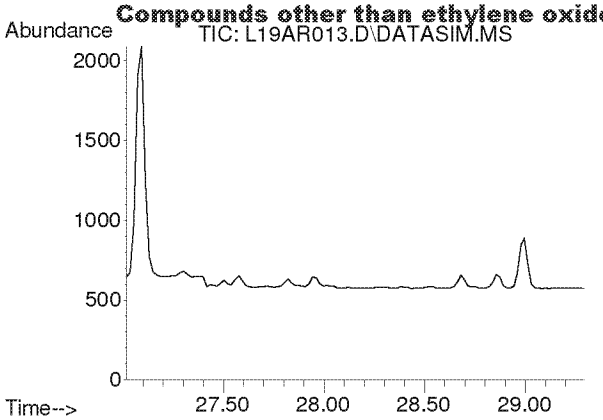
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

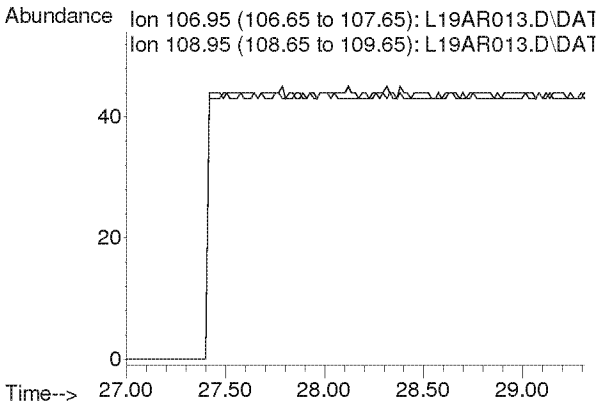


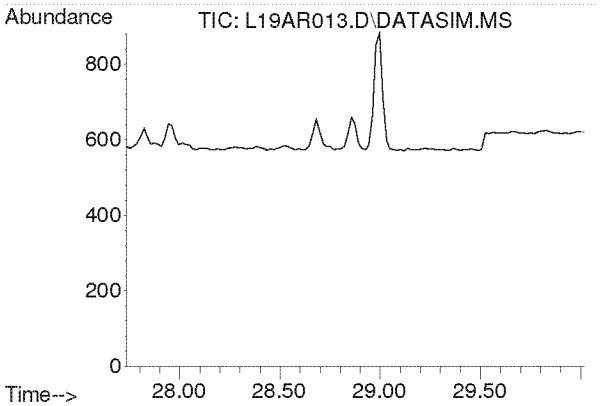
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



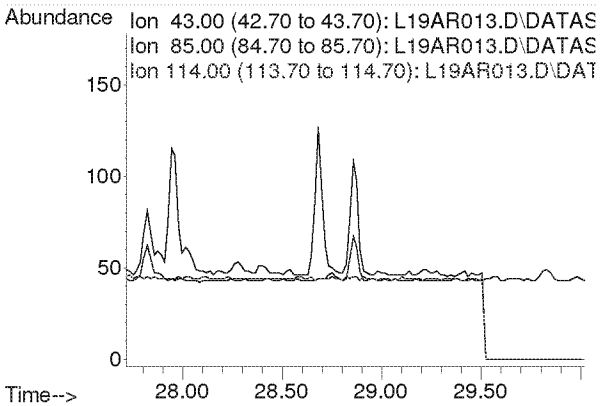


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

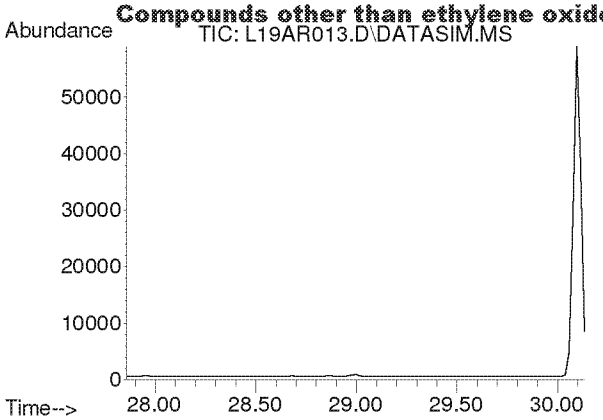
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

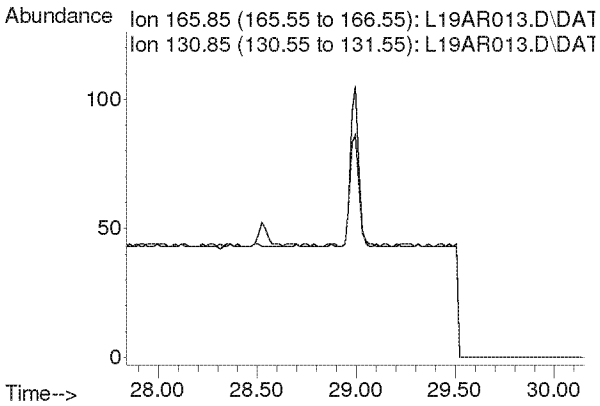


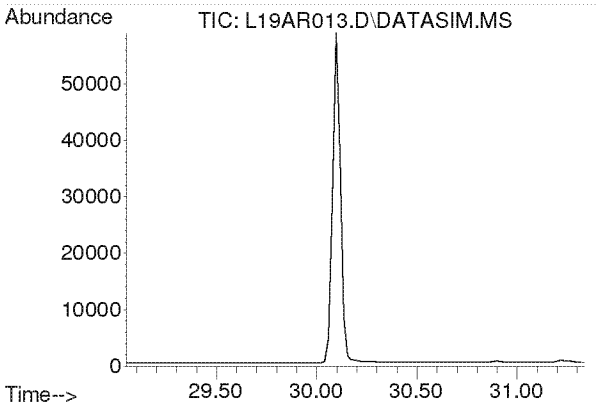
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



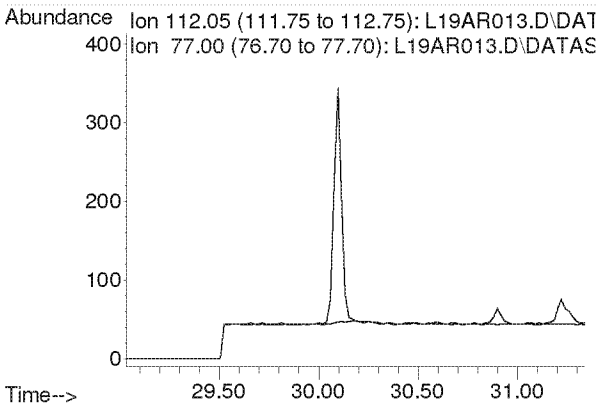


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

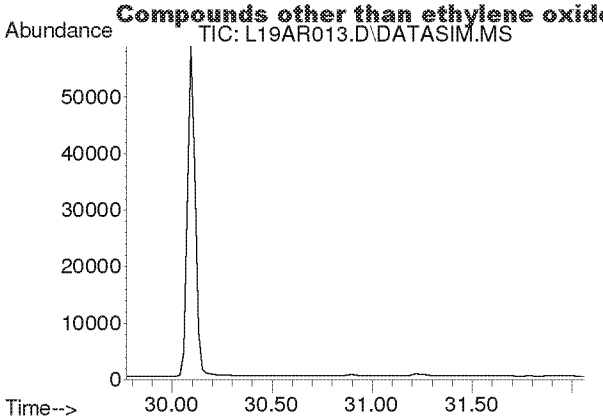
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

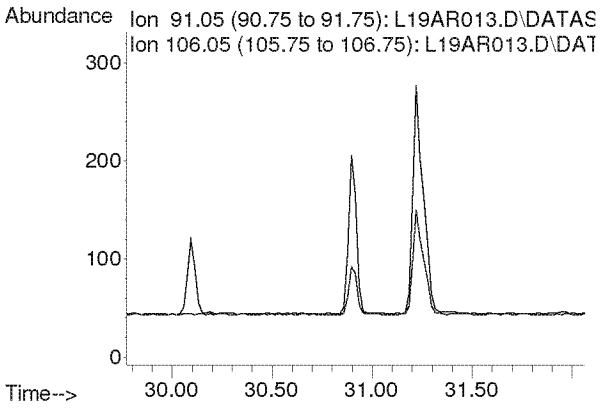


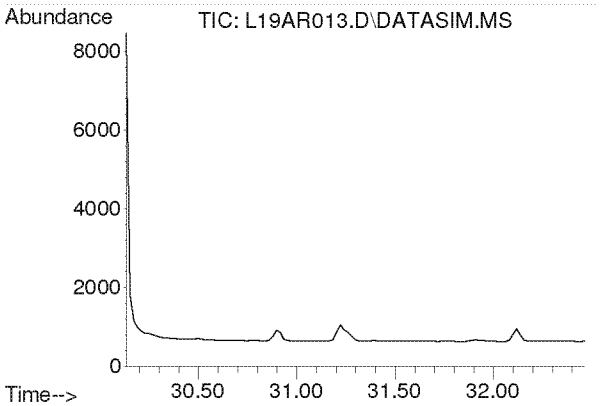
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



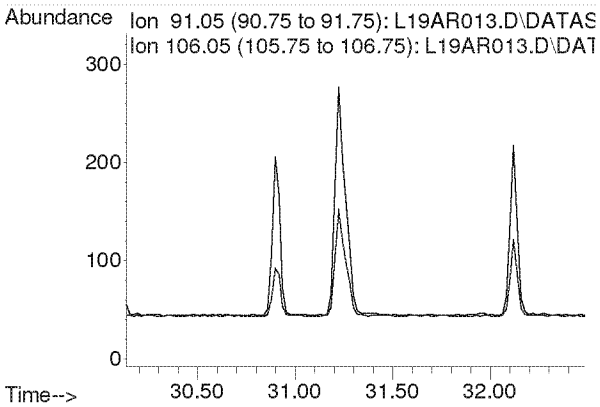


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

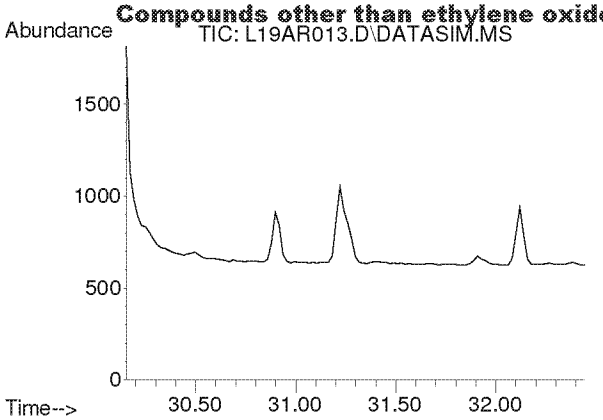
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

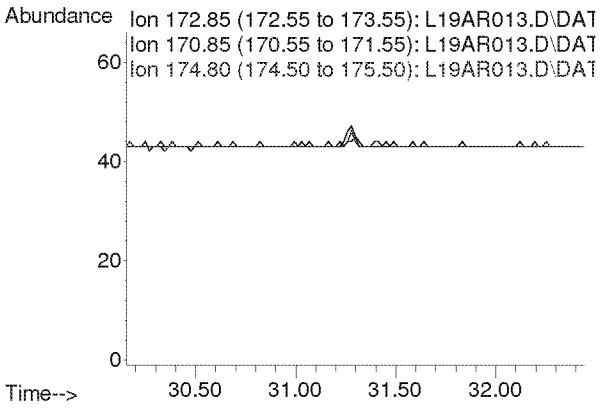


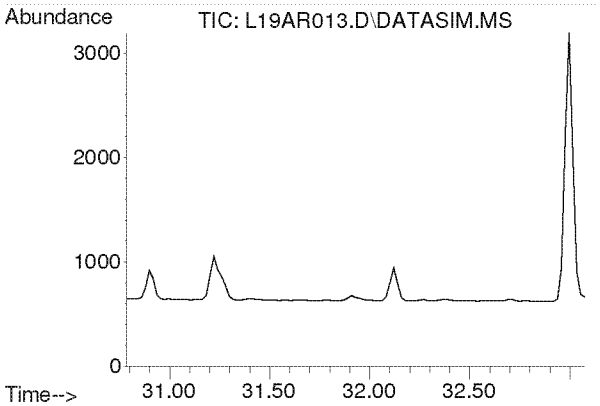
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



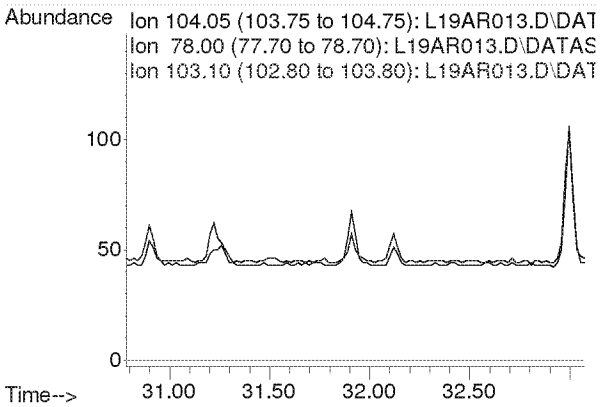


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

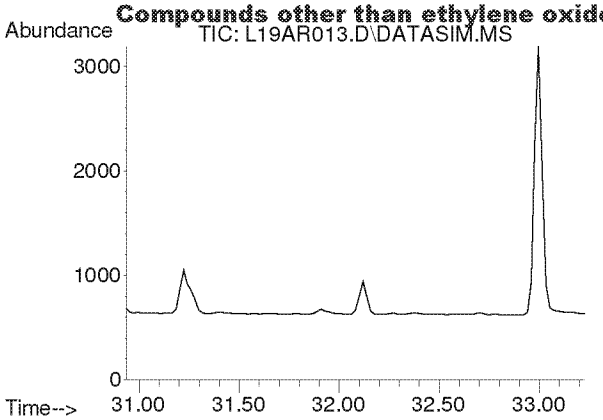
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

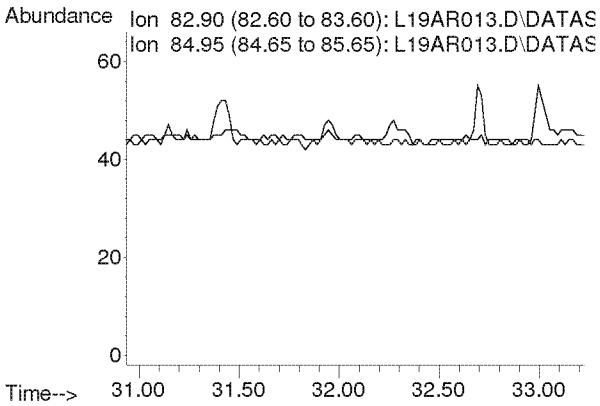


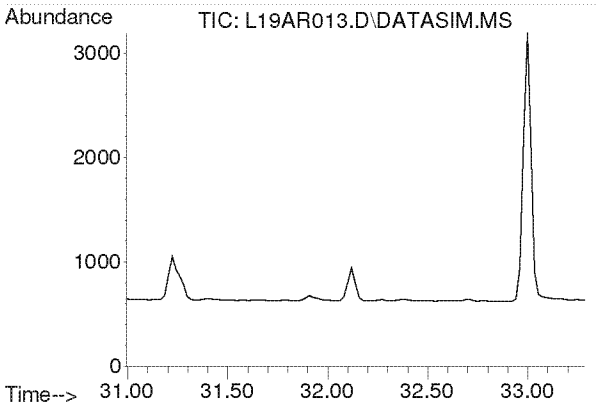
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



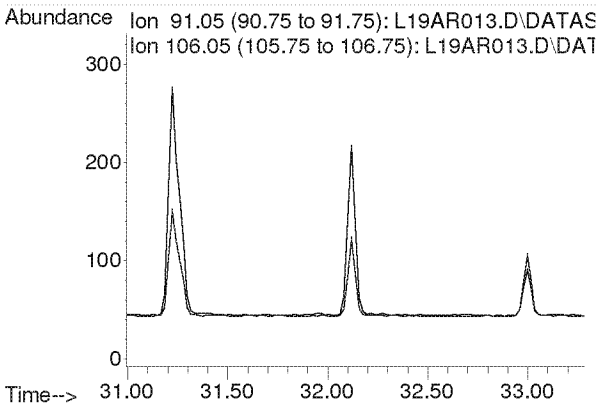


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

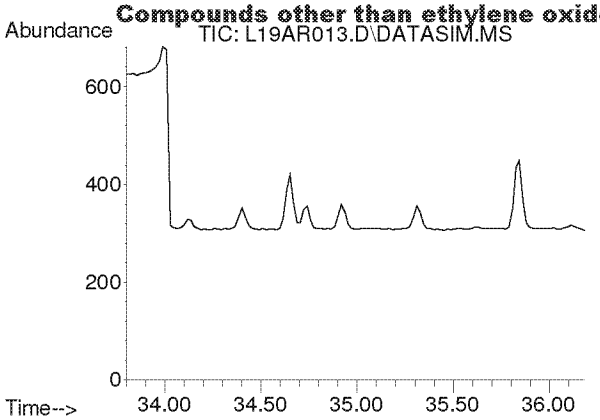
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

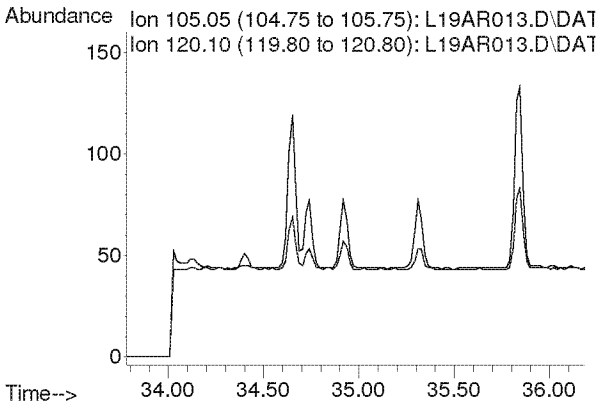


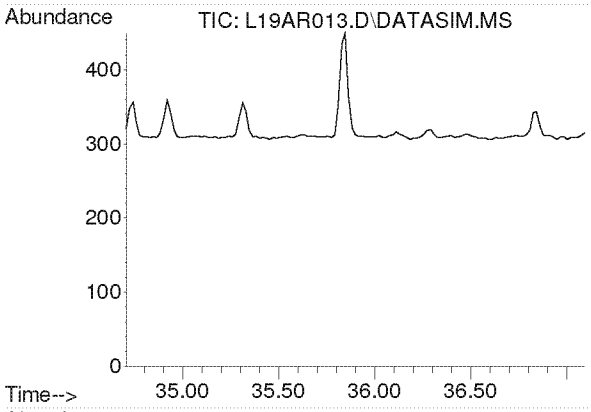
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



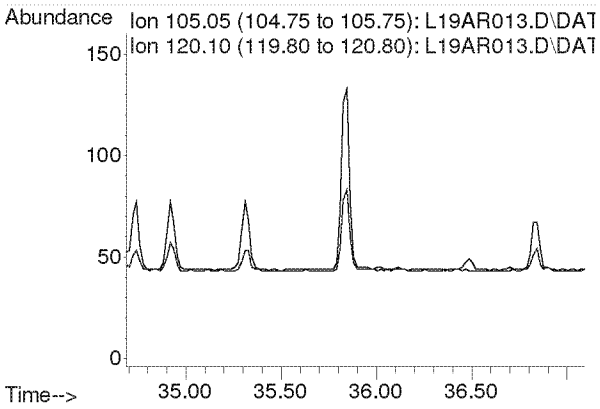


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

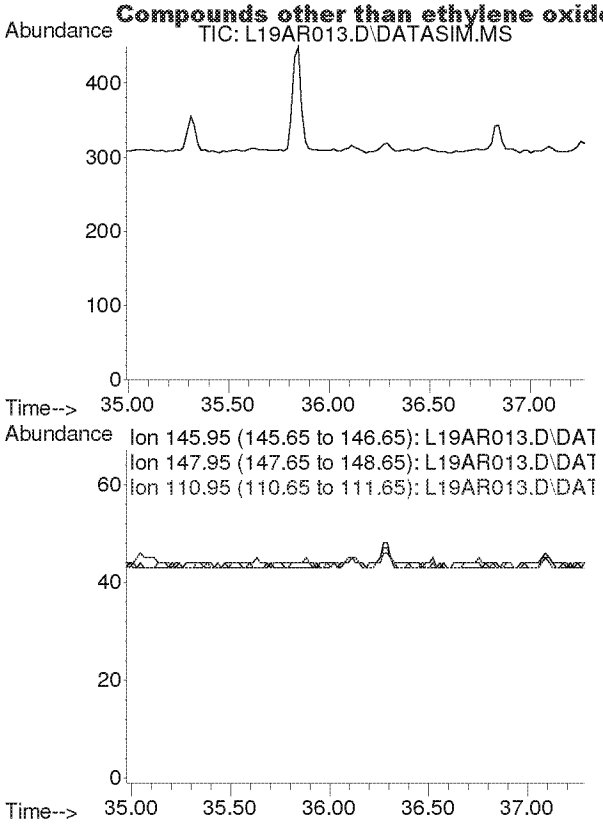
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

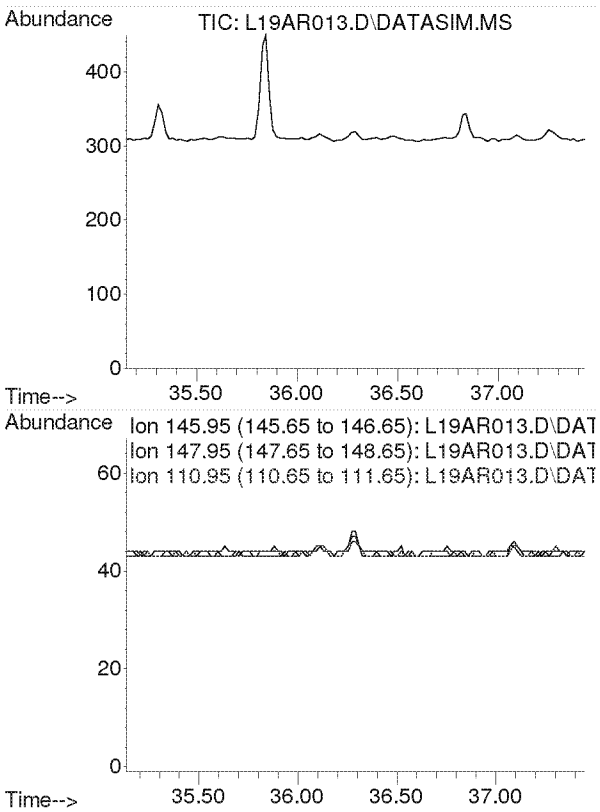


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



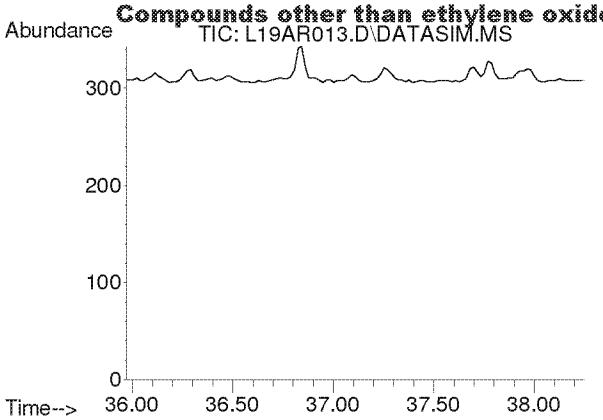
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

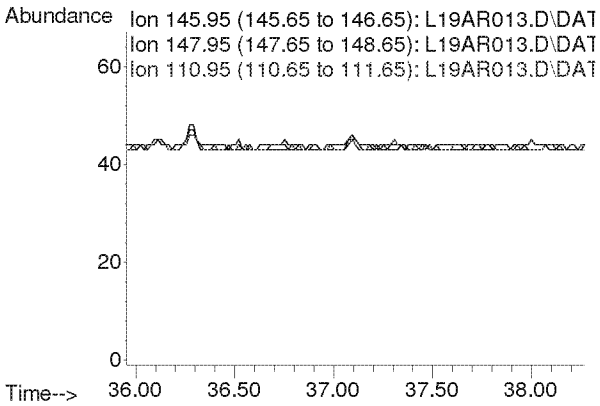


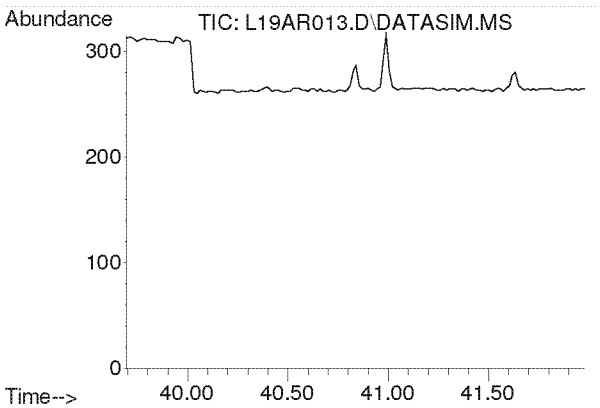
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



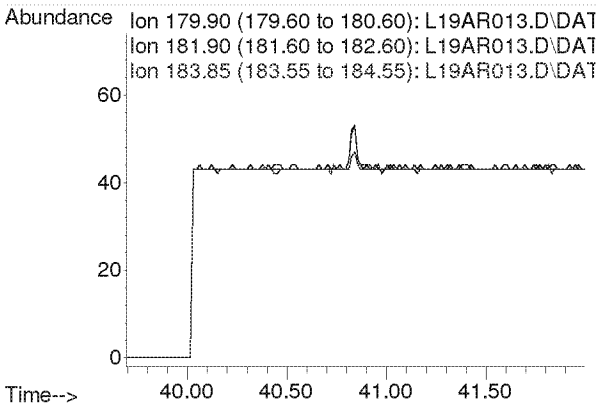


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

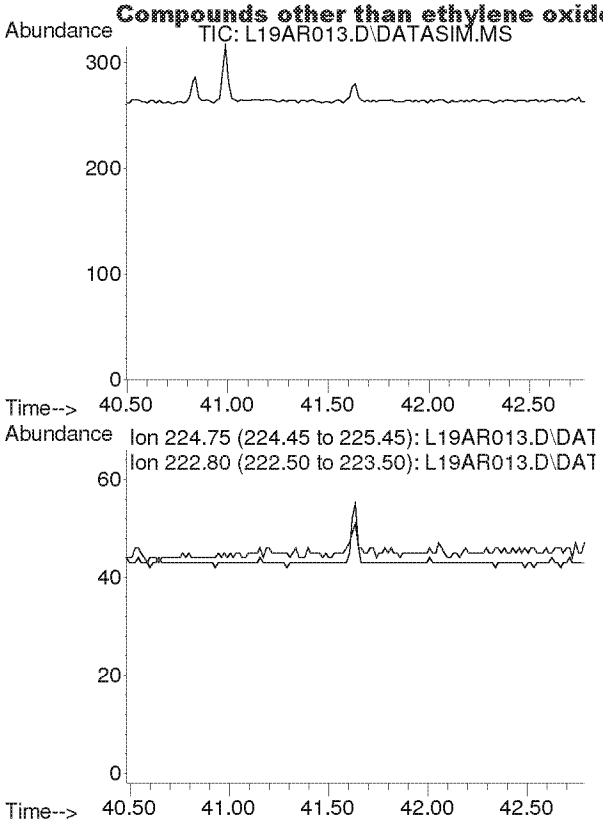
Lab File: L19AR013.D
Acq: 18 Jan 2019 11:41 pm

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: L19AR013.D
Acq: 18 Jan 2019 11:41 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\L19AR\
Data File : L19AR014.D
Acq On : 19 Jan 2019 12:41 am
Operator : MAH
Sample : 9011527-03
Misc : GOWER ES 1/13/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 09:23:32 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	51695	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	130095	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	100291	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	12.485	29	350	0.1311 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.	
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\L19AR\
Data File : L19AR014.D
Acq On : 19 Jan 2019 12:41 am
Operator : MAH
Sample : 9011527-03
Misc : GOWER ES 1/13/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 09:23:32 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

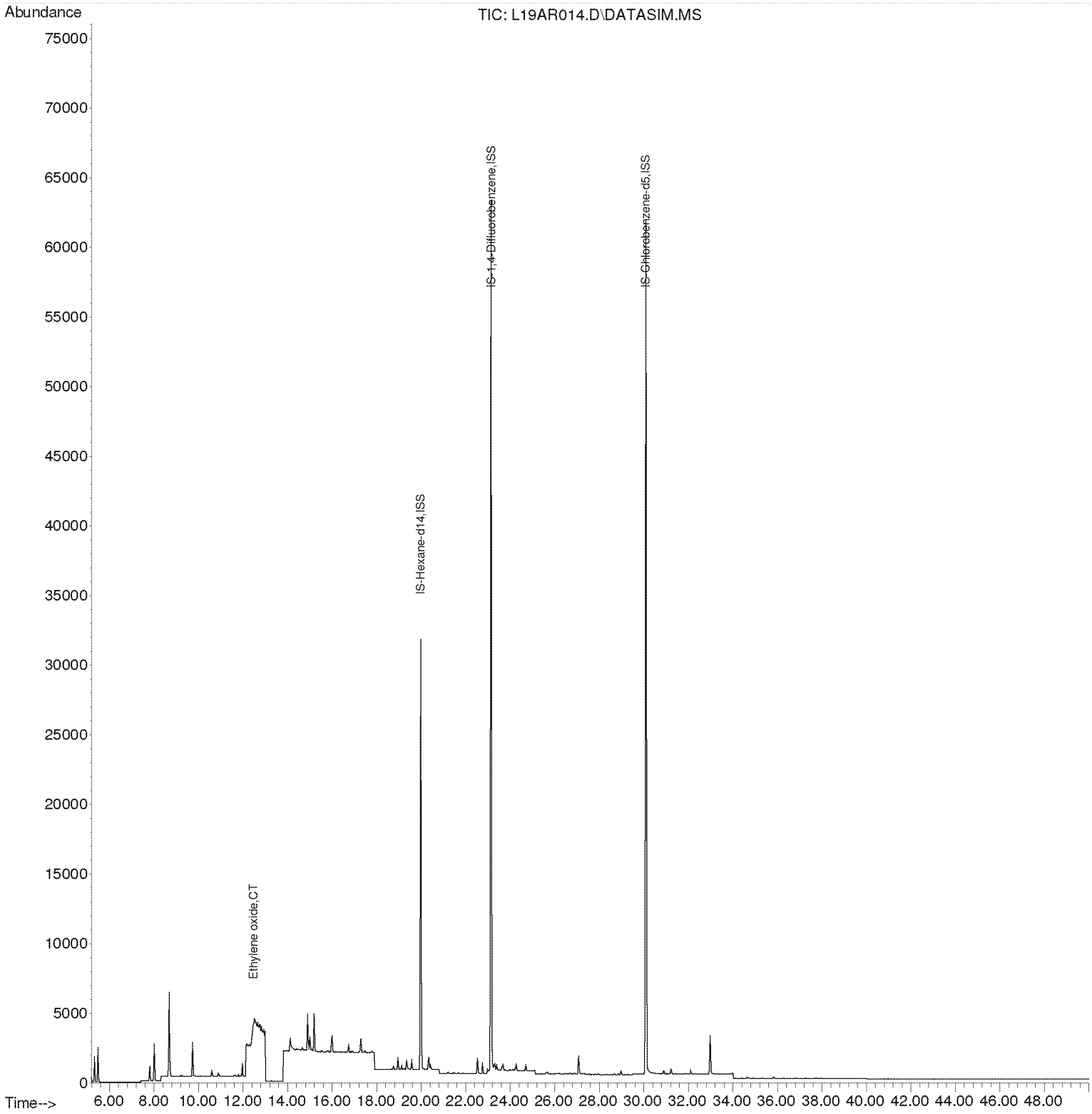
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	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

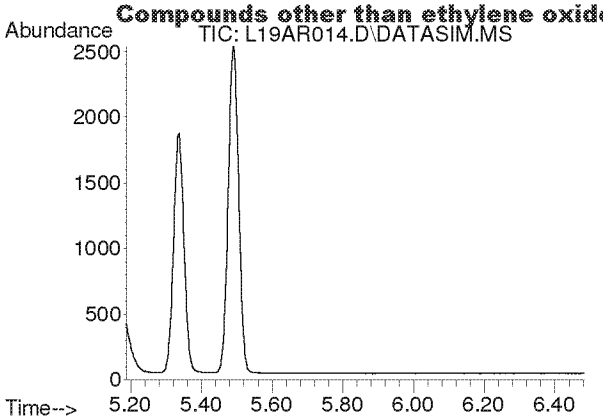
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR014.D
Acq On : 19 Jan 2019 12:41 am
Operator : MAH
Sample : 9011527-03
Misc : GOWER ES 1/13/19
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 23 08:39:15 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



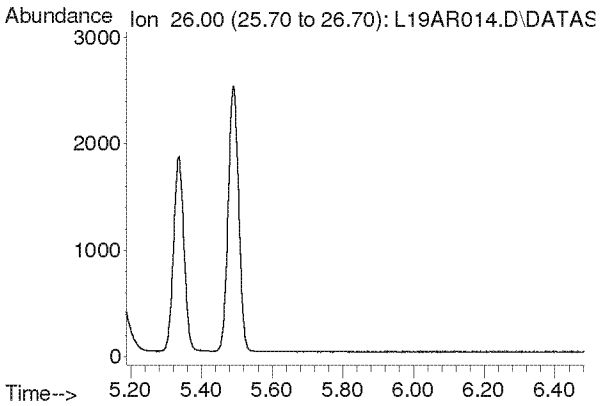
Compounds other than ethylene oxide were not quantitated.

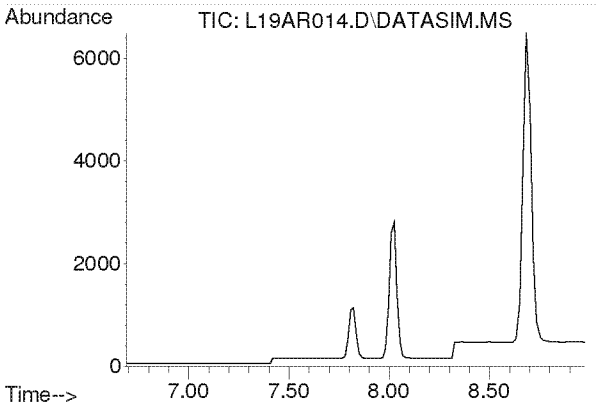


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 26



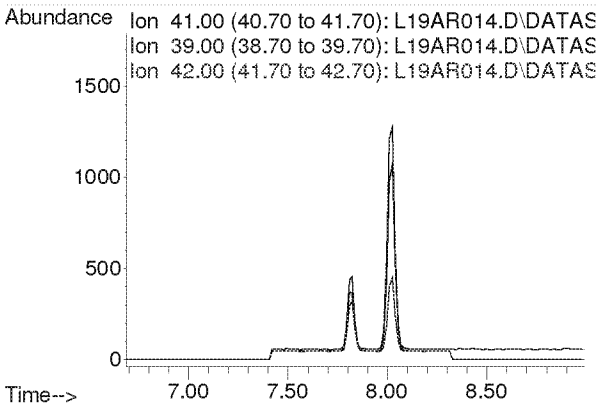


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

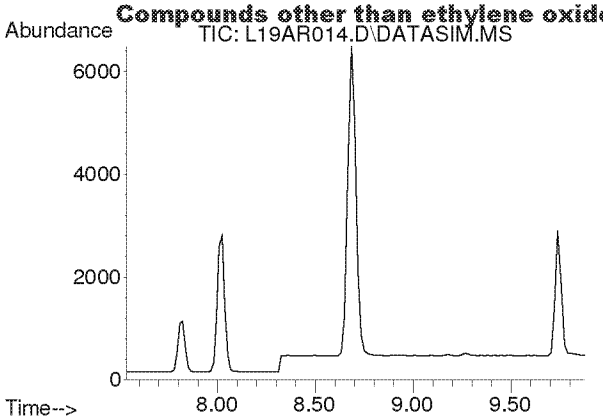
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

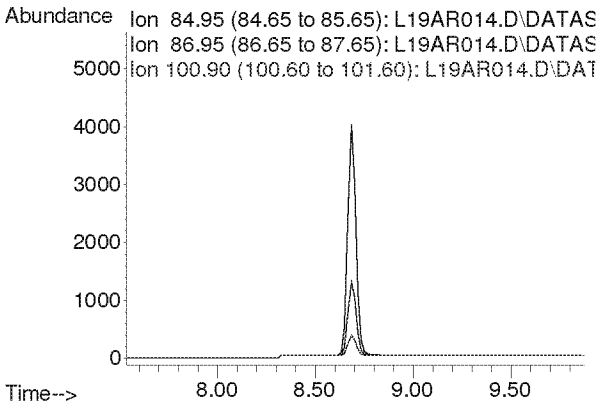


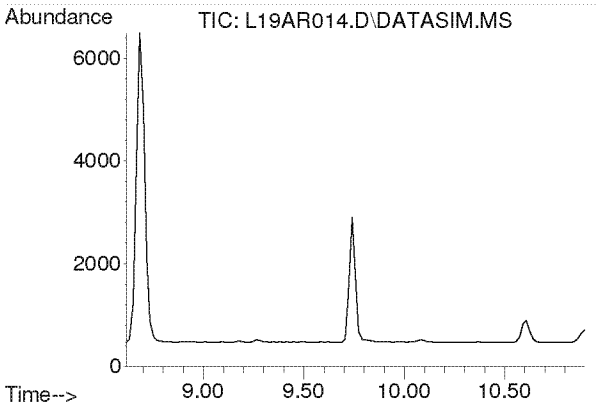
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



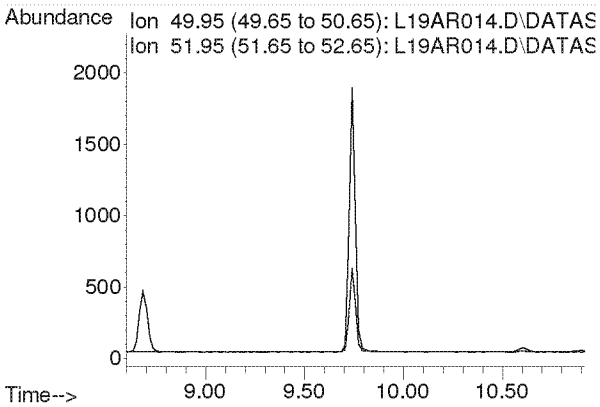


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

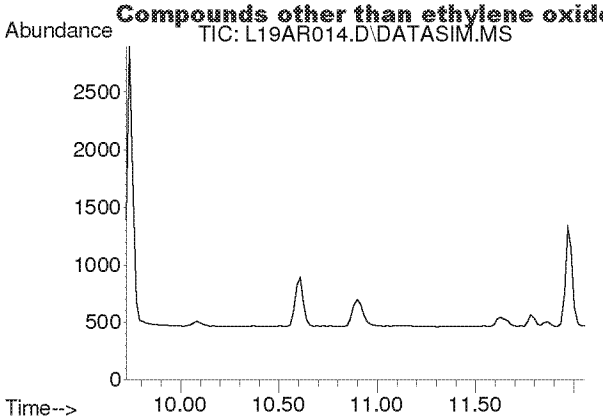
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

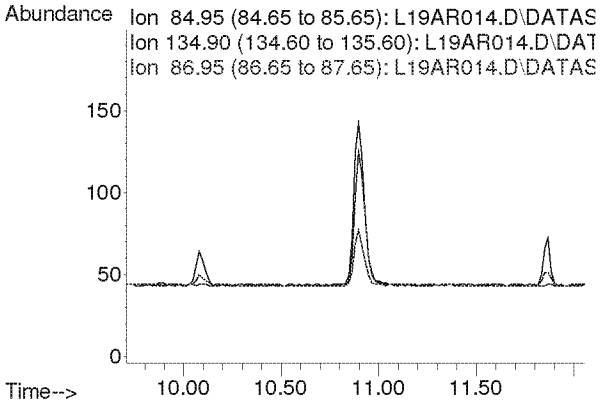


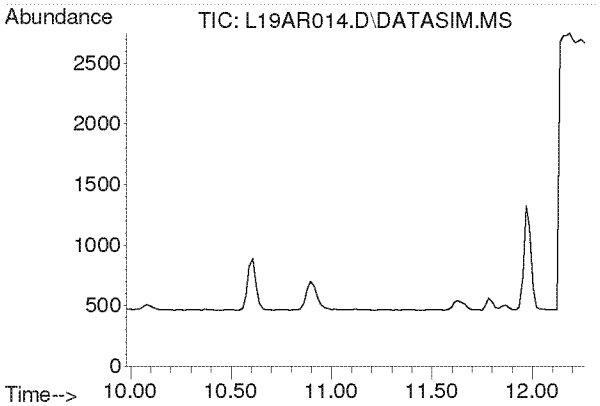
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



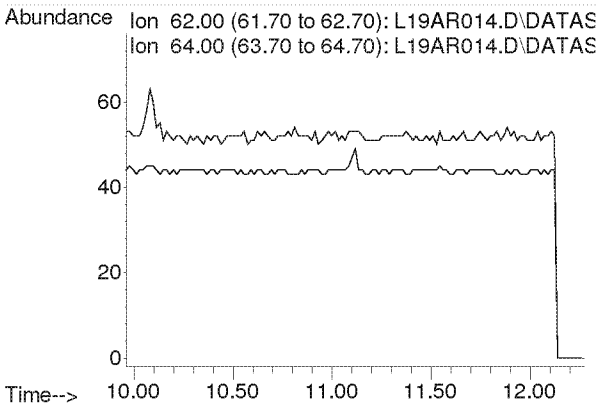


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

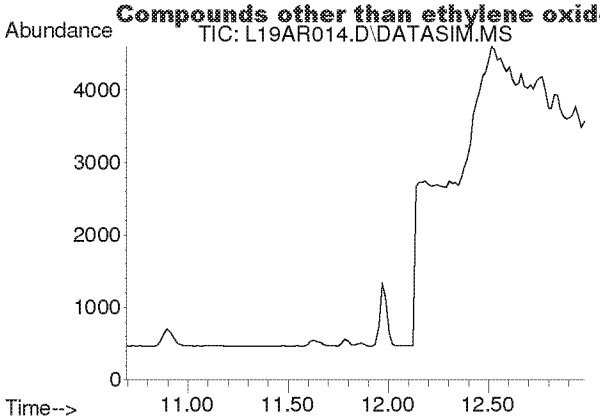
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

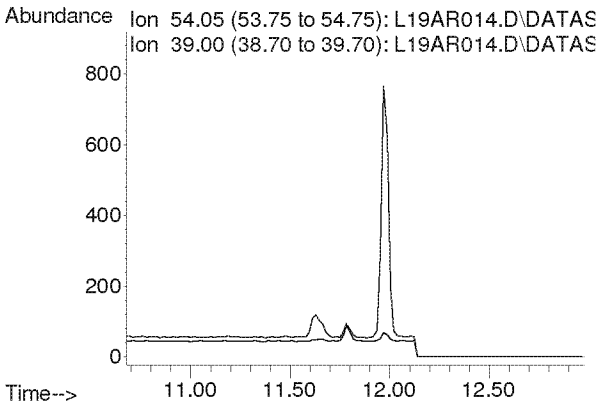


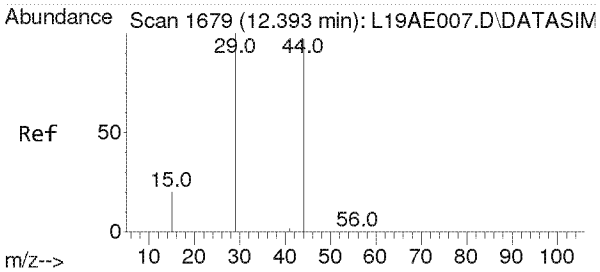
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

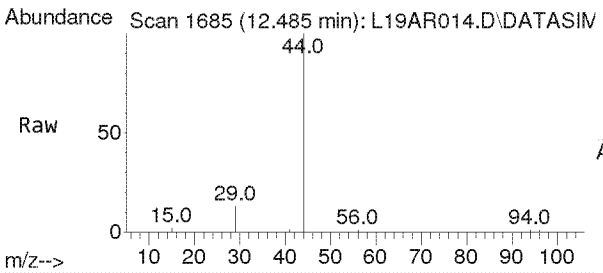


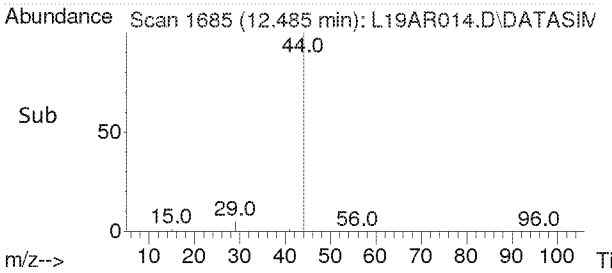


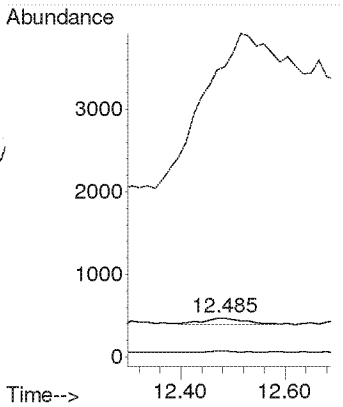
#9
Ethylene oxide
Concen: 0.131 ppbv
RT: 12.485 min Scan# 1685
Delta R.T. 0.092 min
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 29 Resp: 350

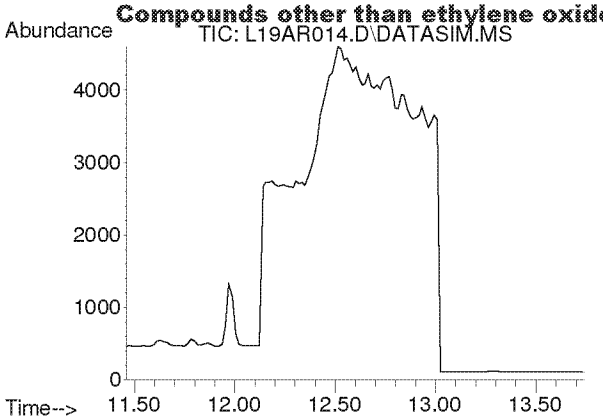
Ion	Ratio	Lower	Upper
29	100		
15	14.6	15.4	23.0#
44	4959.4	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

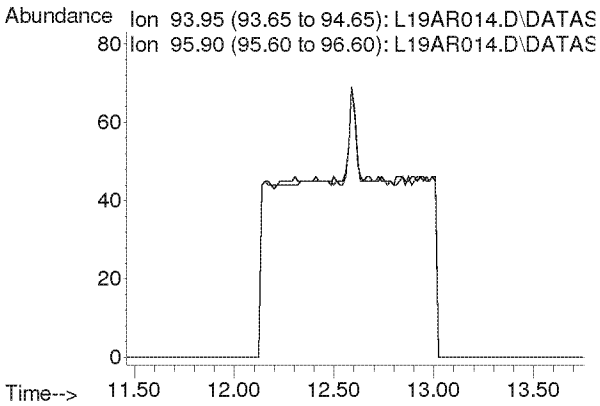


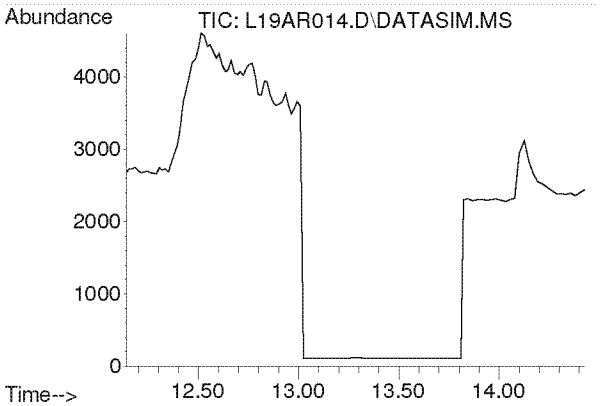
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



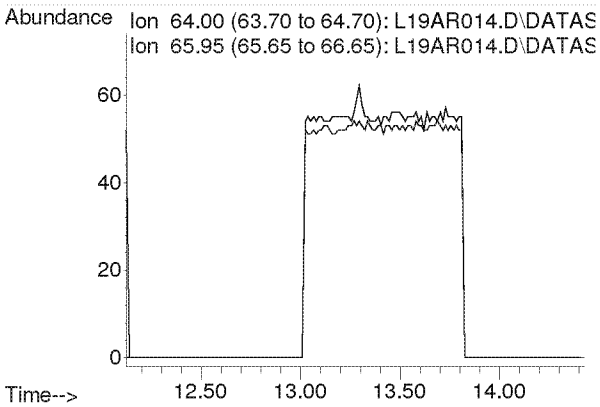


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

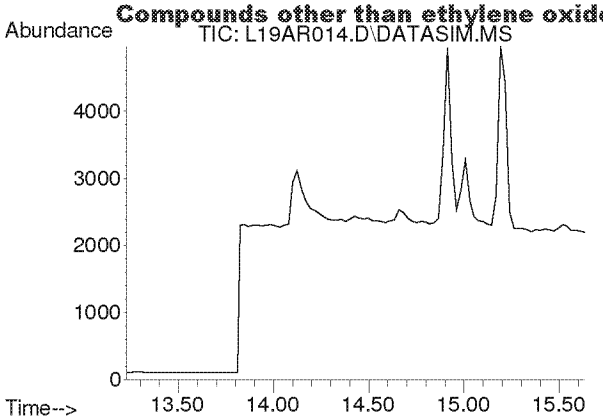
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

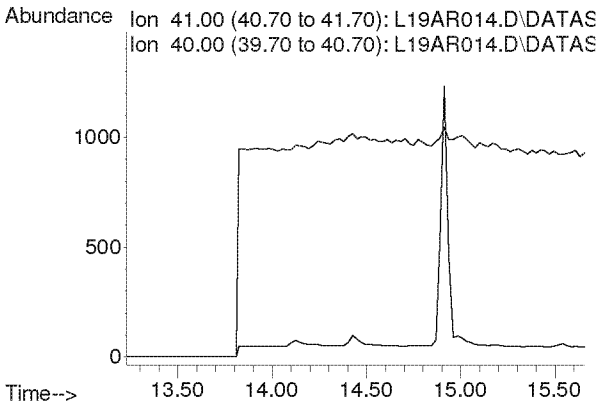


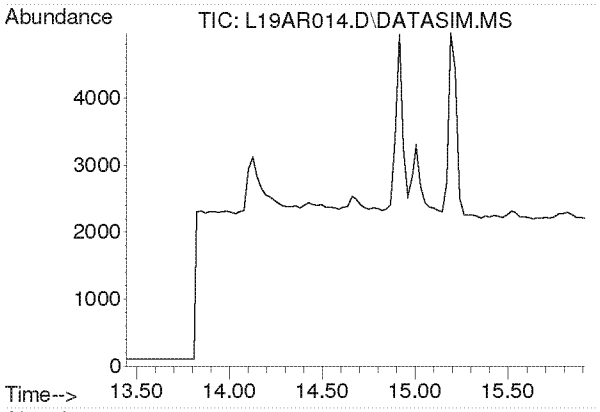
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



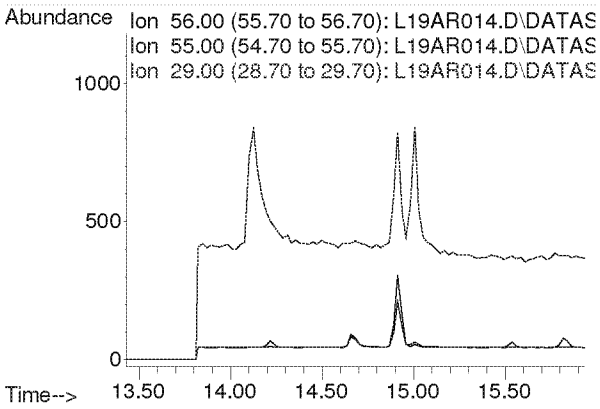


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

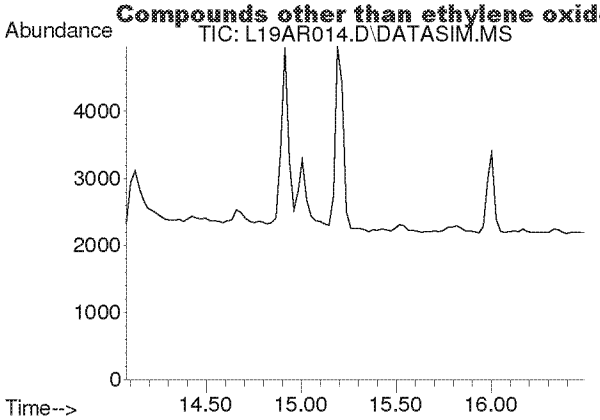
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

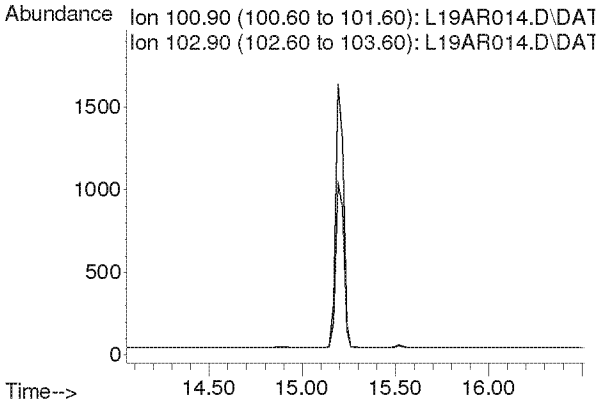


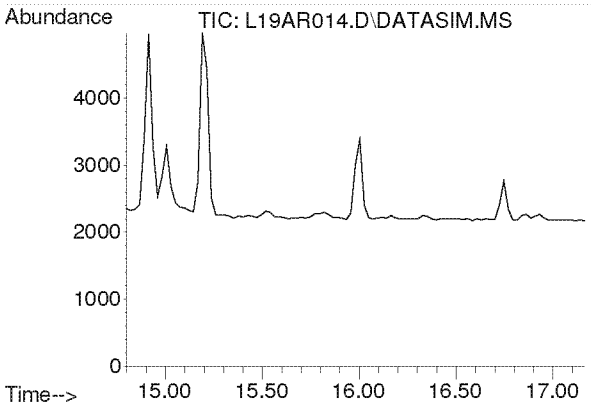
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



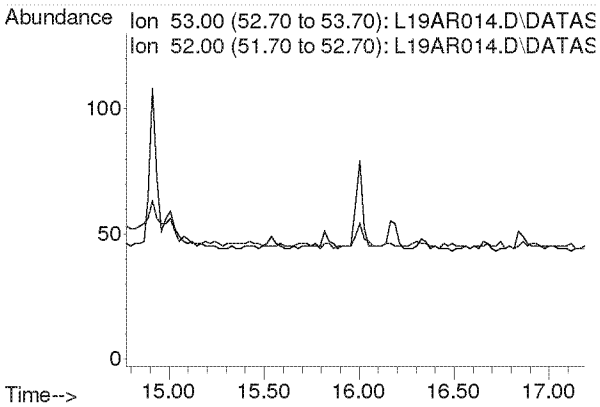


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

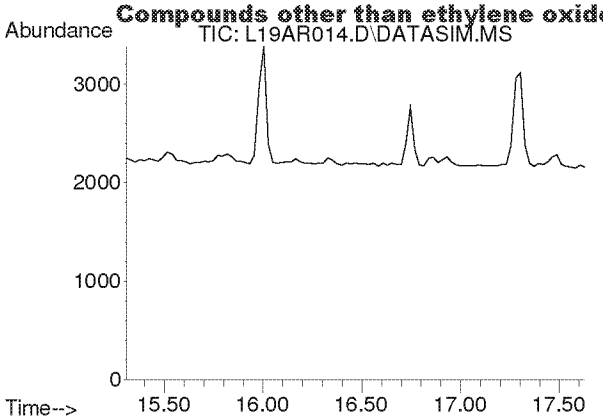
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

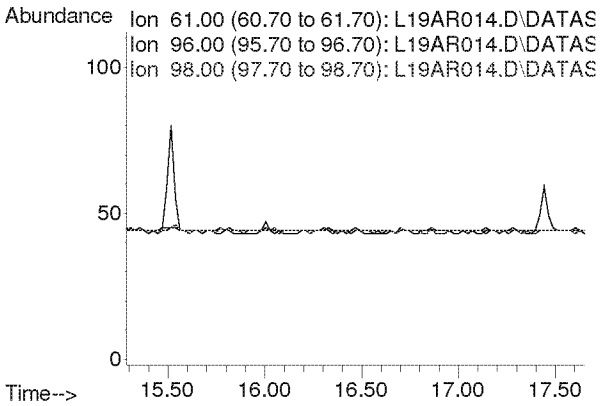


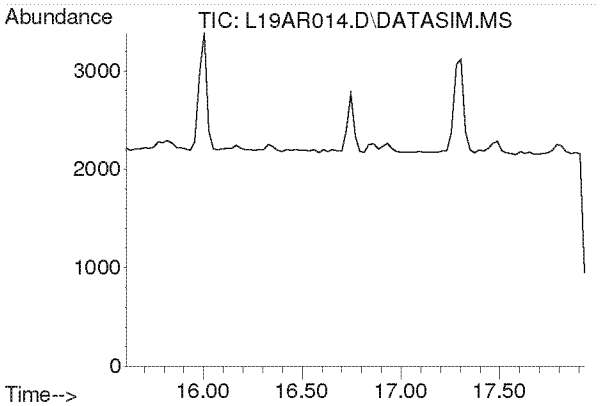
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



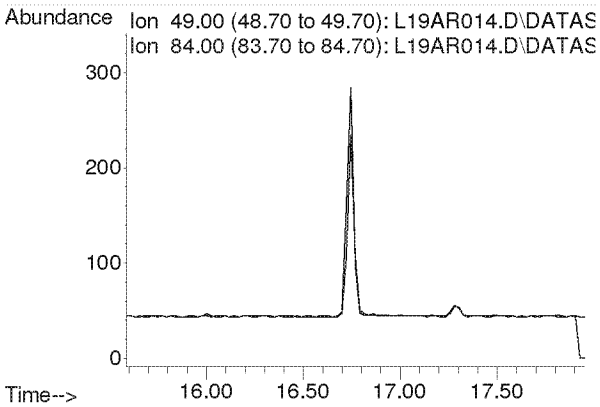


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

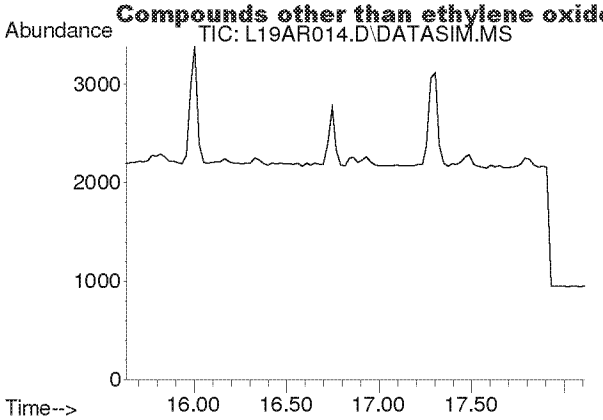
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

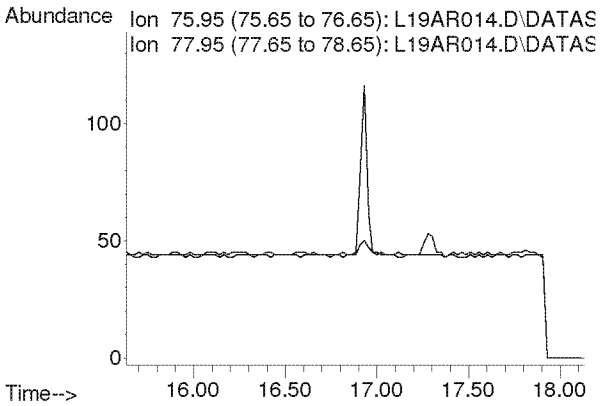


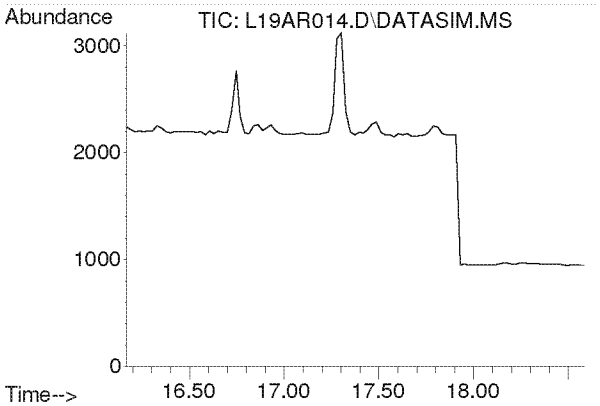
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



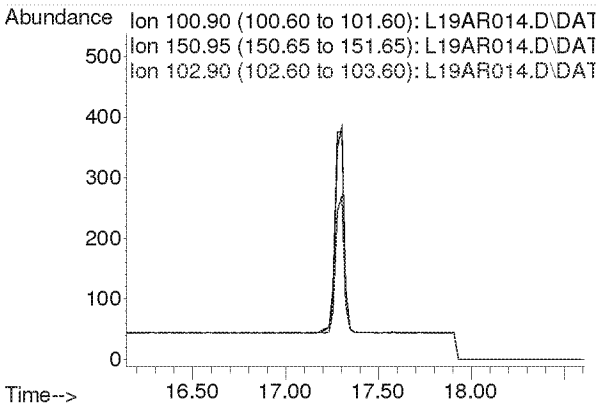


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

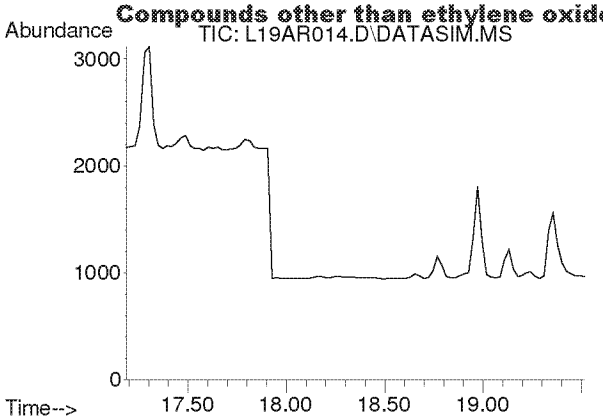
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

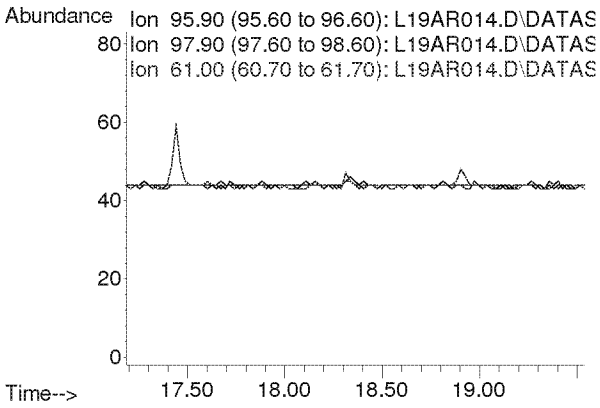


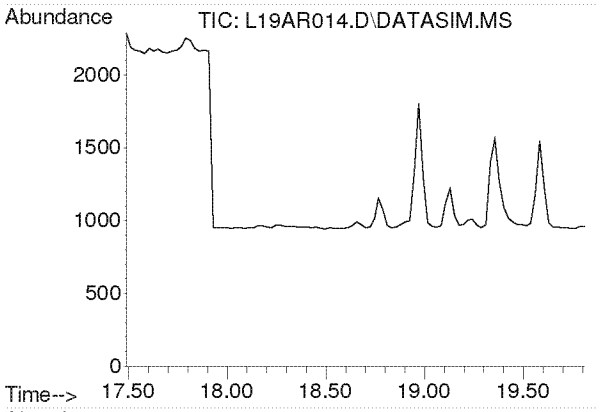
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



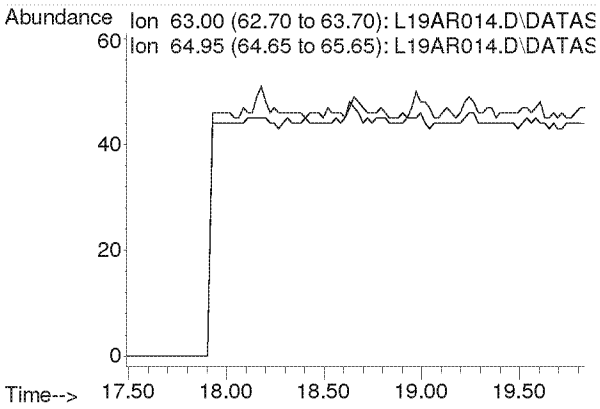


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

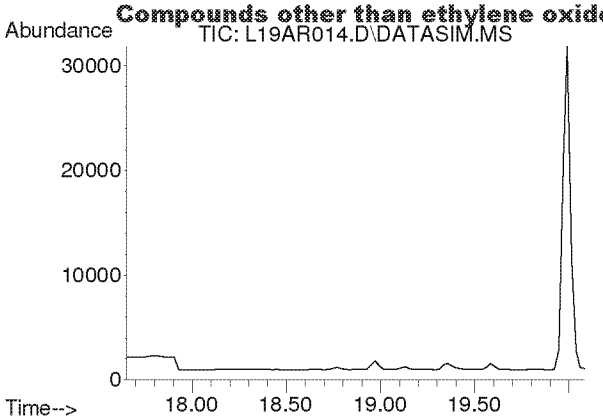
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

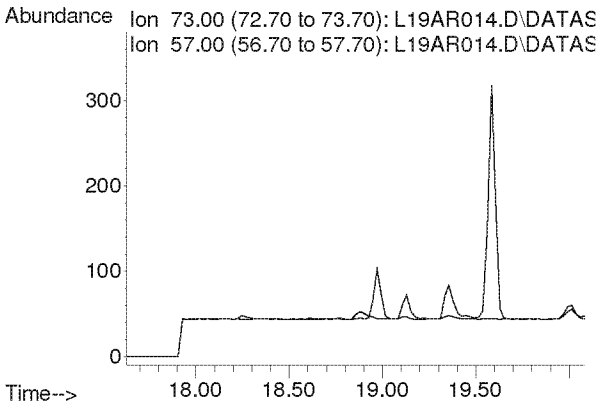


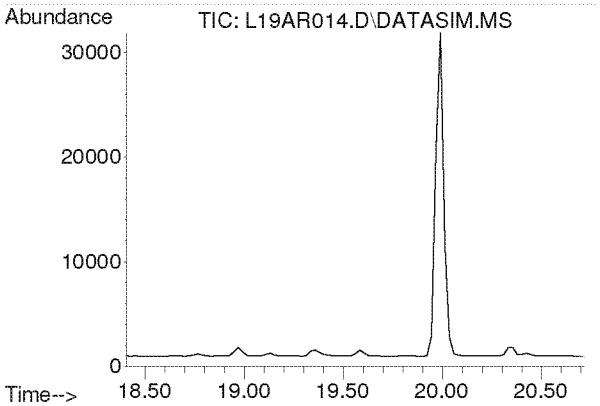
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



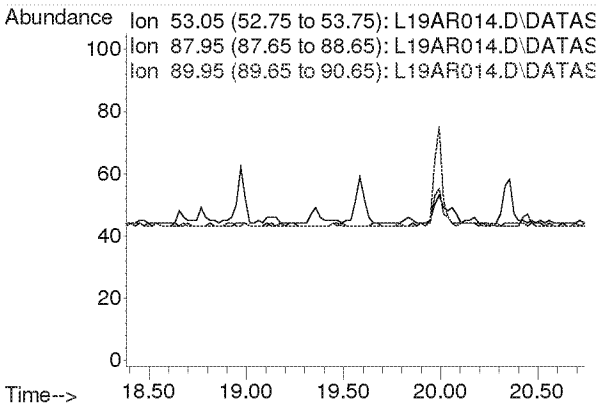


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

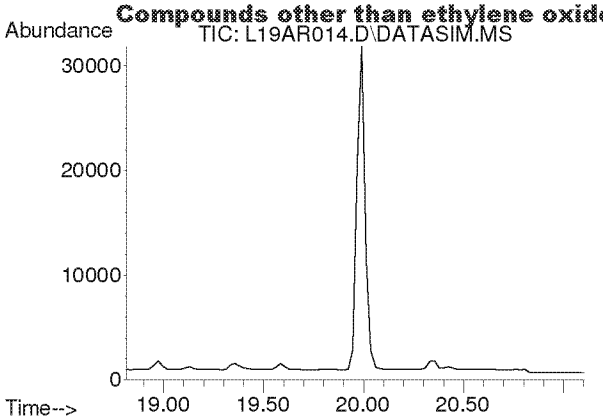
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

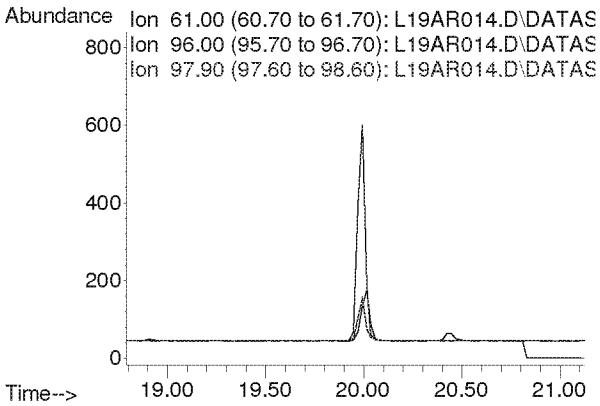


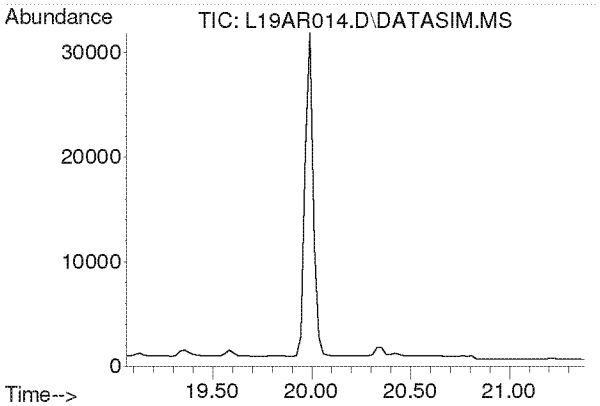
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



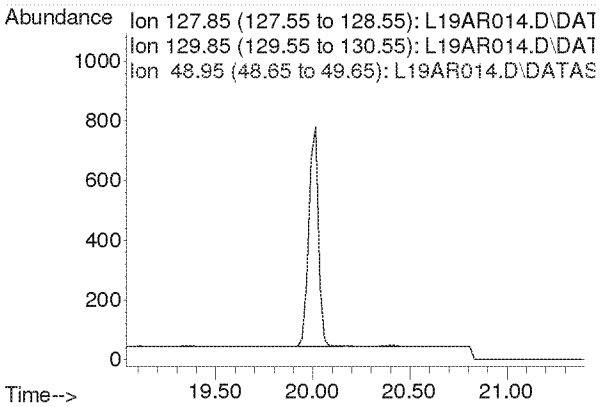


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

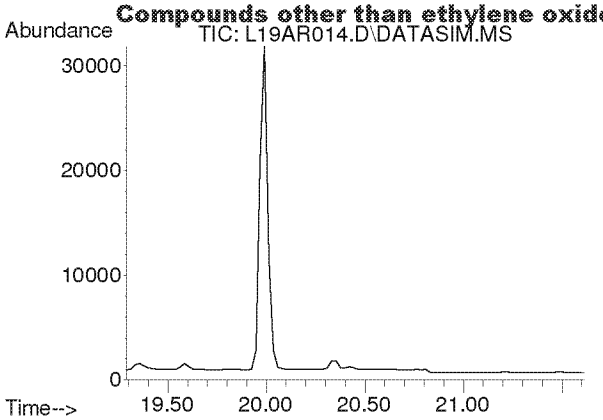
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

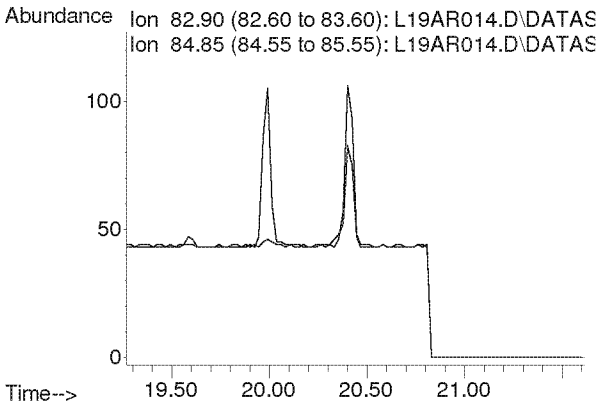


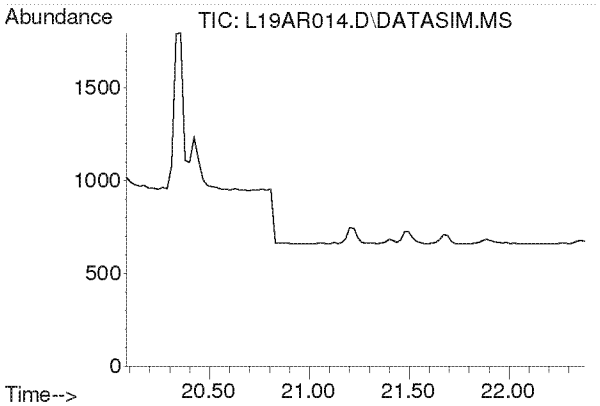
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



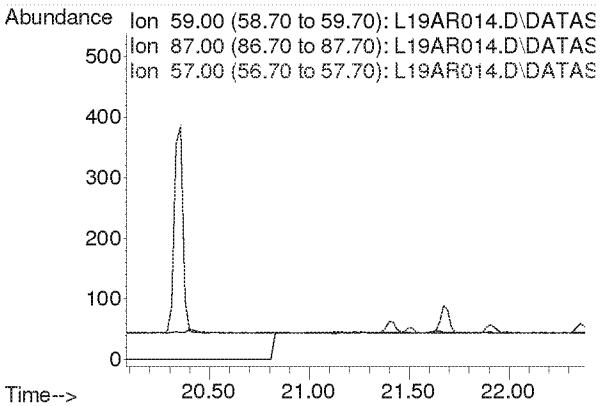


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

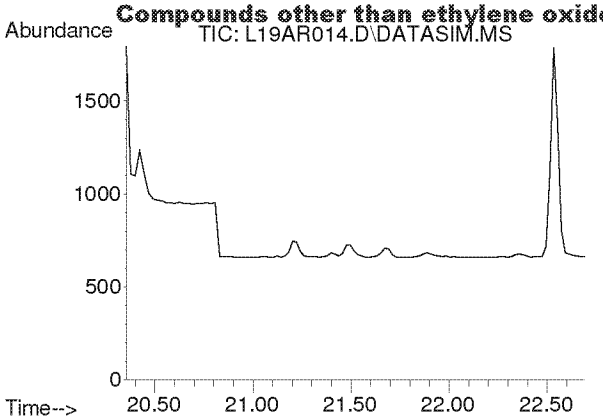
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

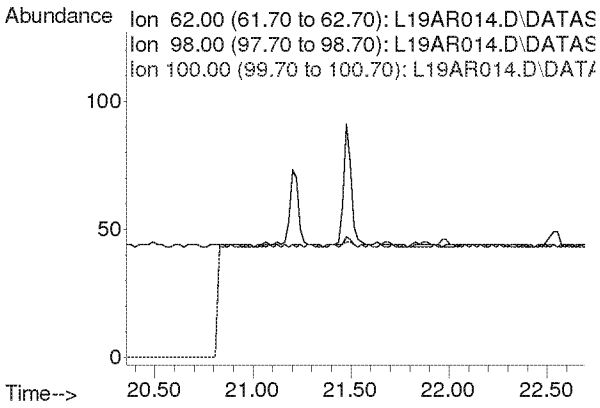


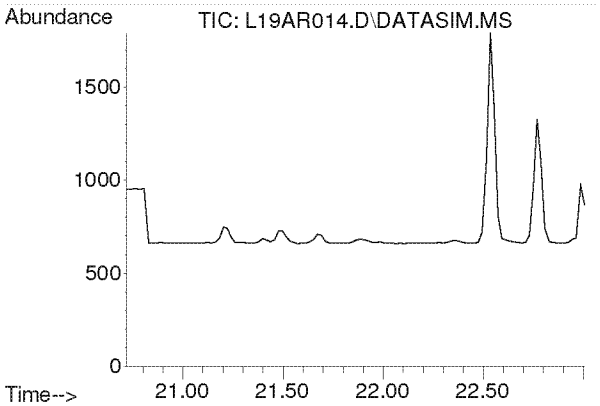
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



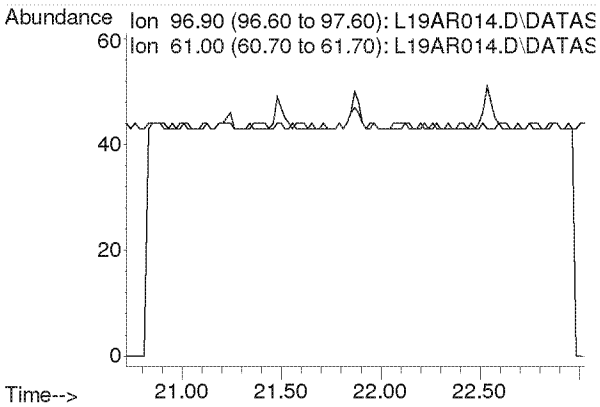


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

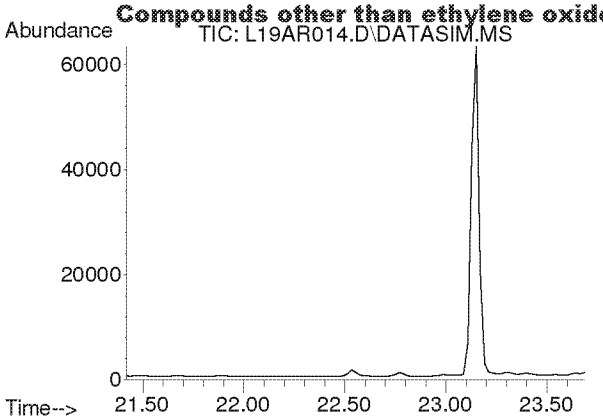
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

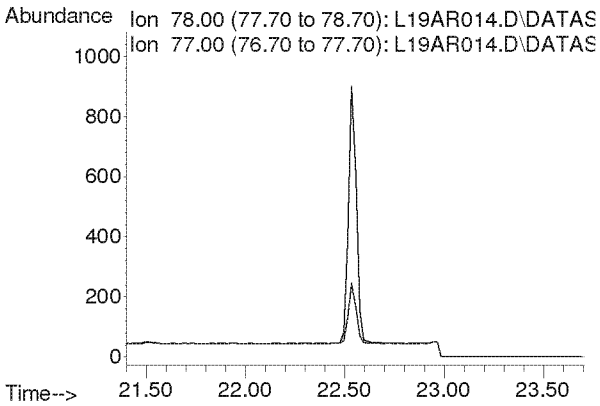


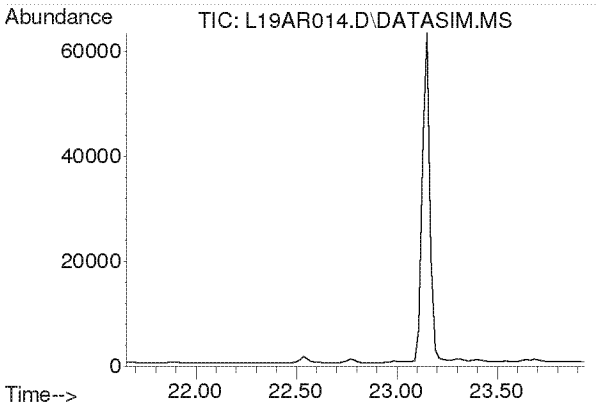
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



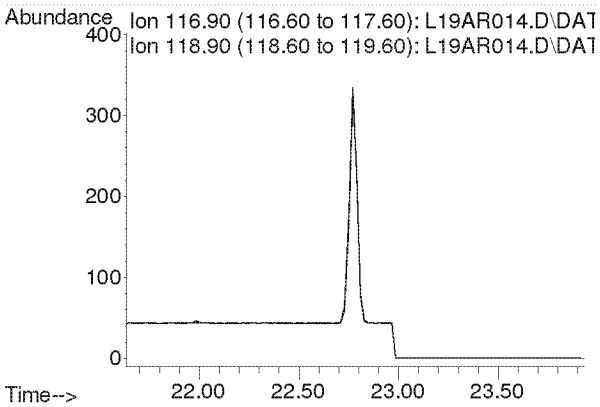


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

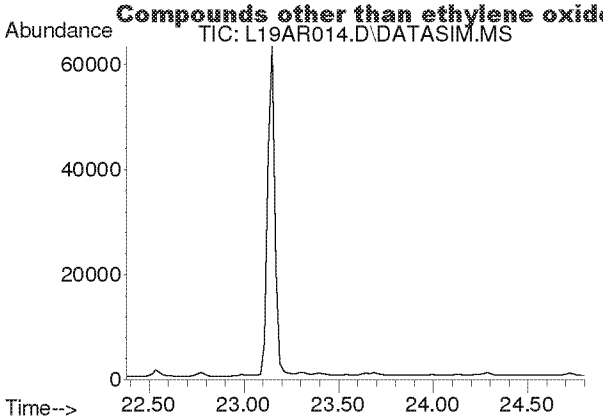
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

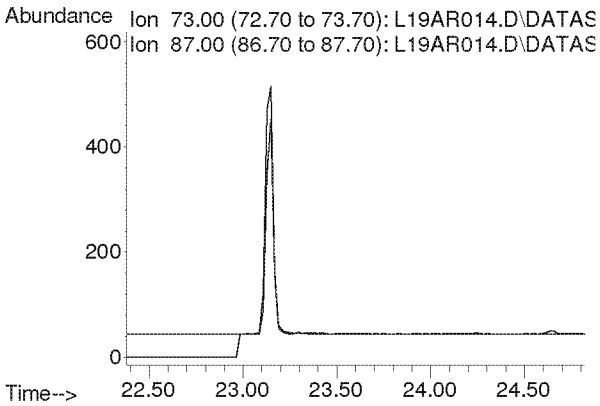


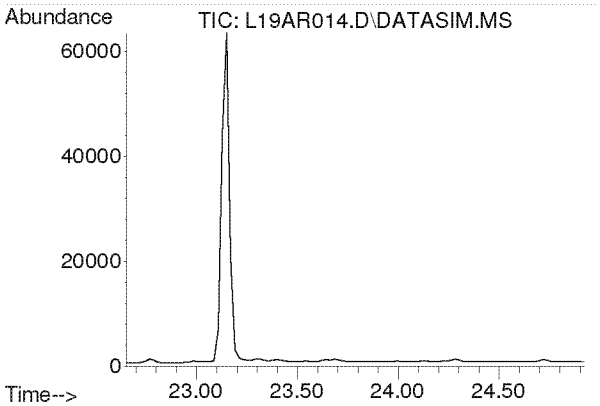
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



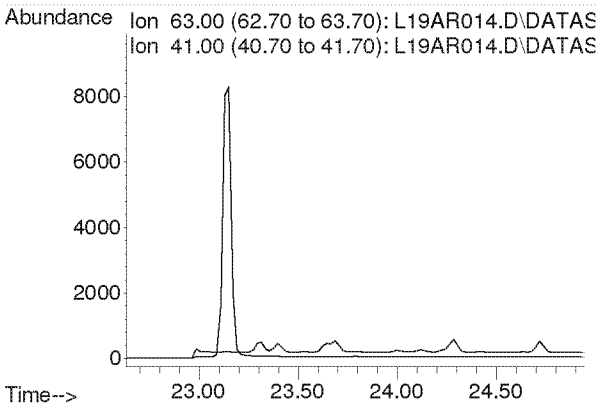


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

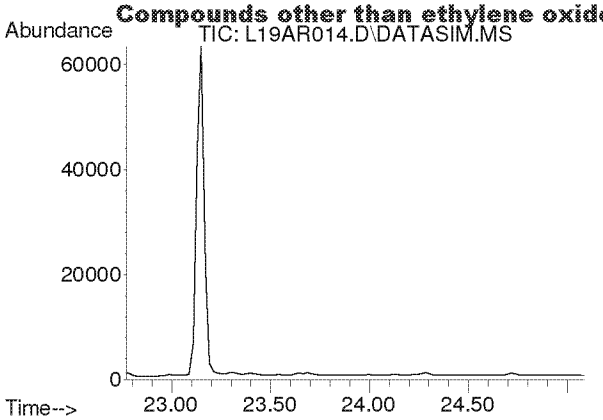
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

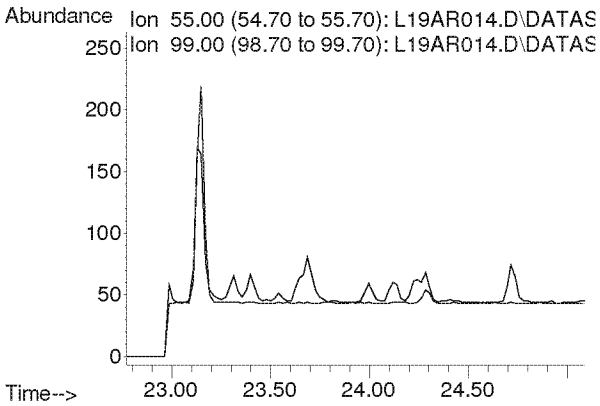


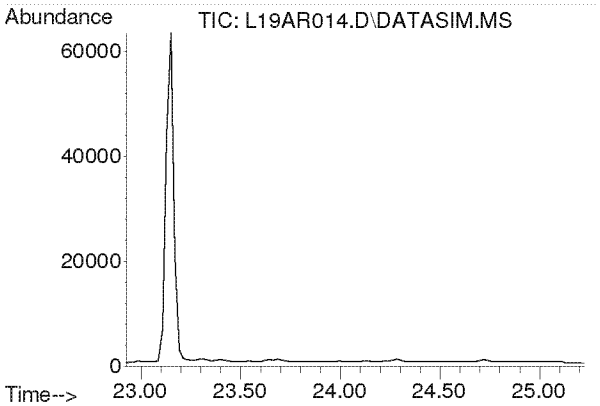
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



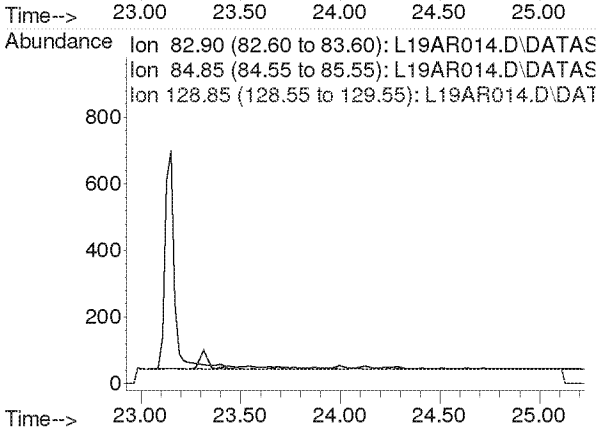


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

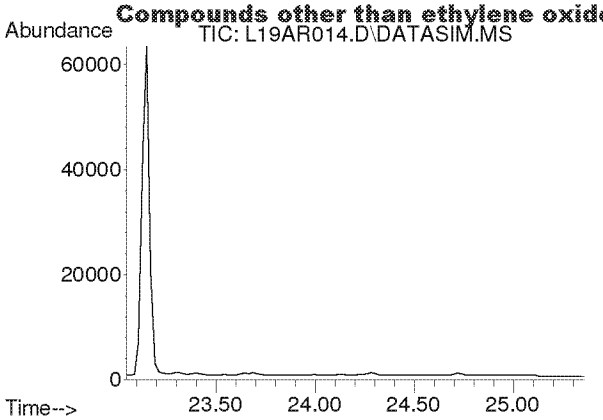
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

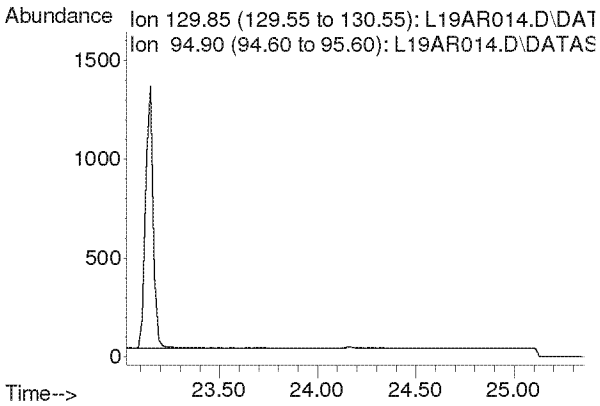


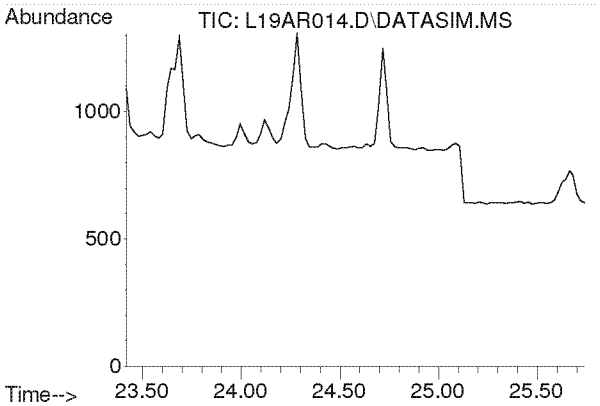
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



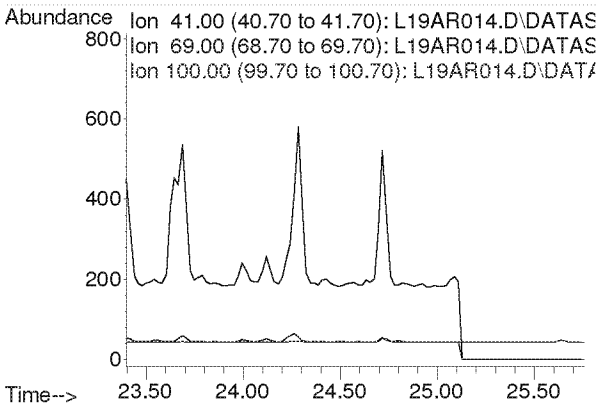


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

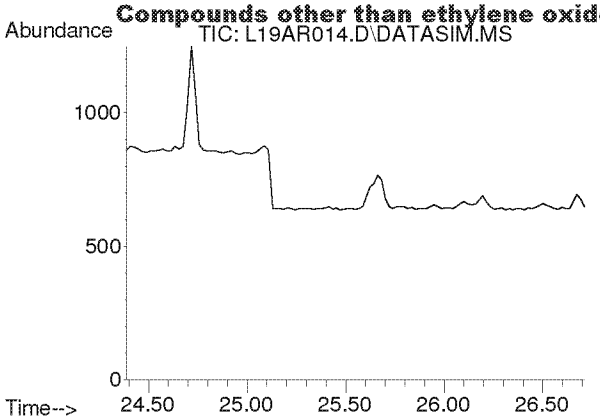
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

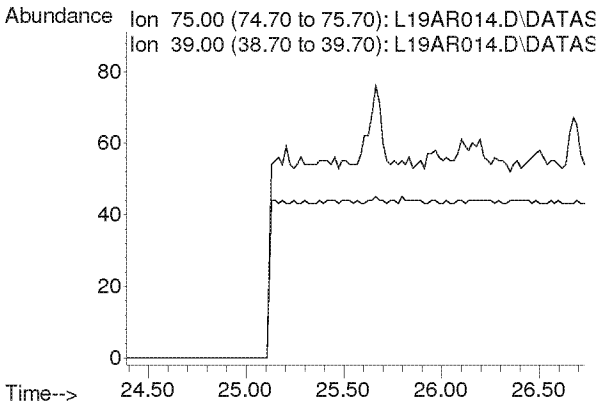


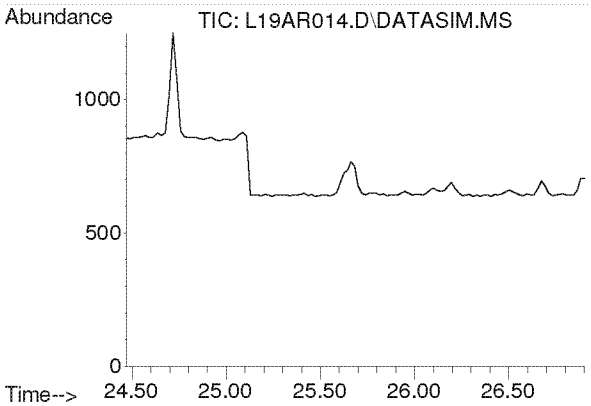
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



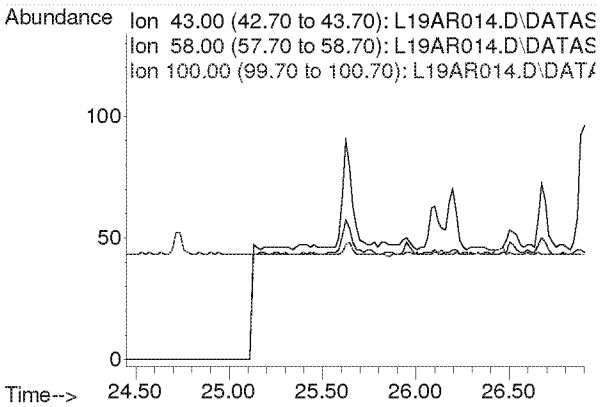


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

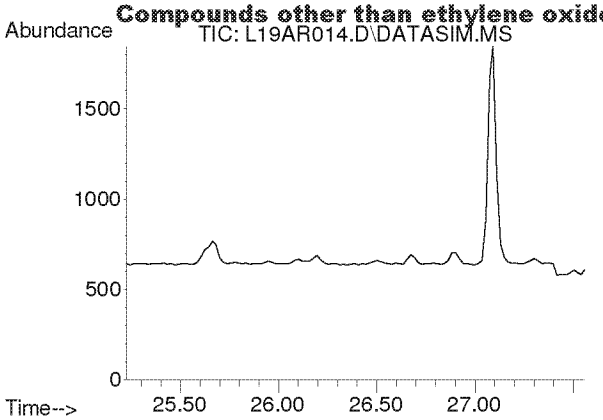
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

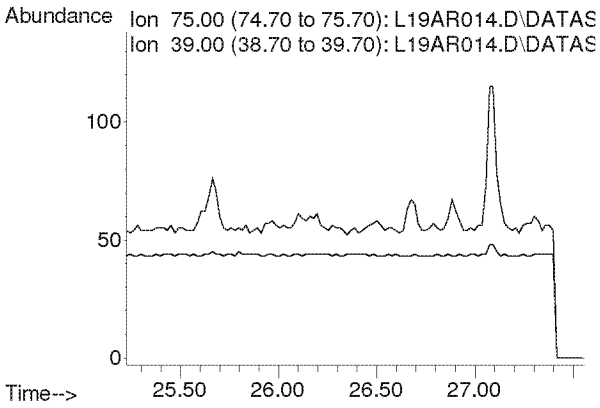


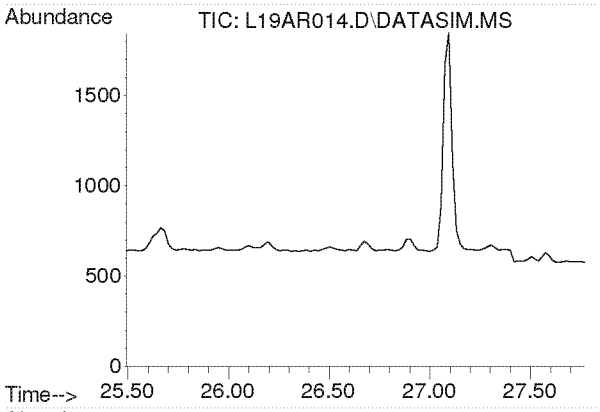
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



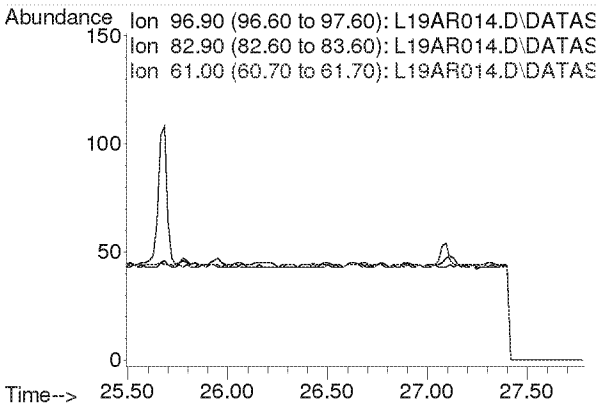


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

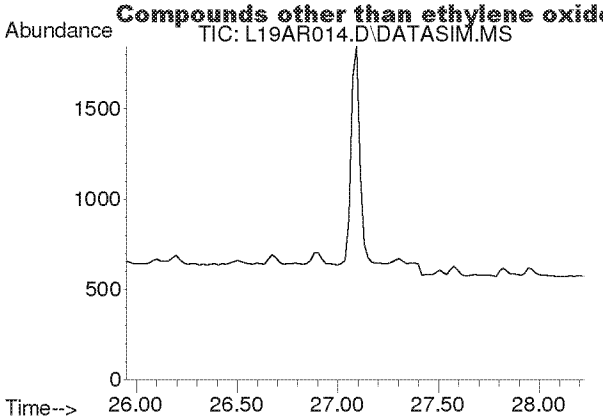
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

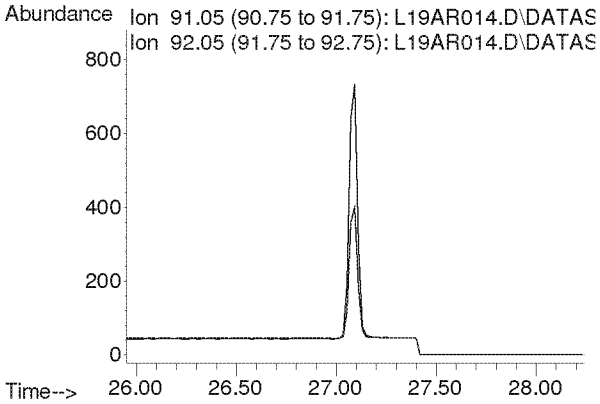


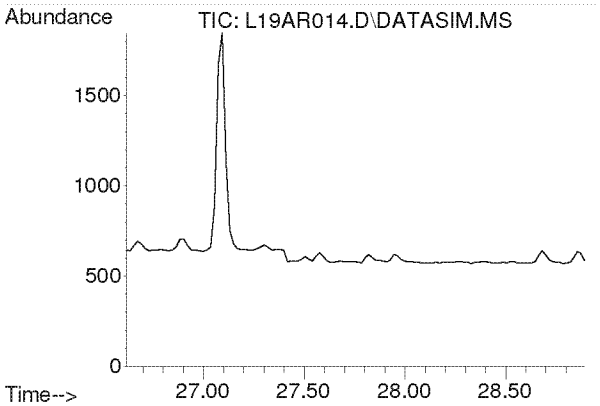
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



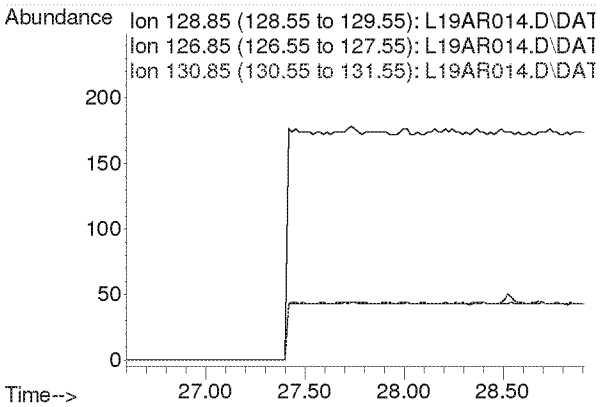


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

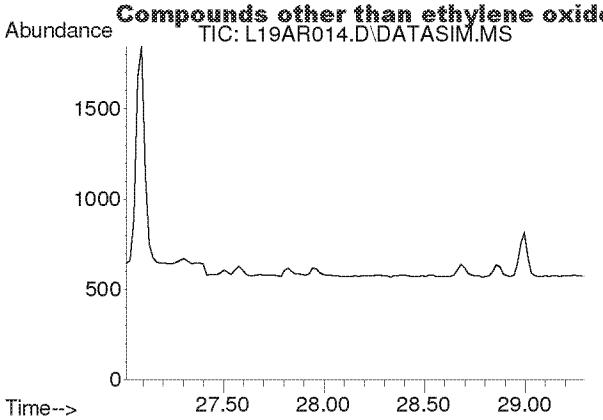
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

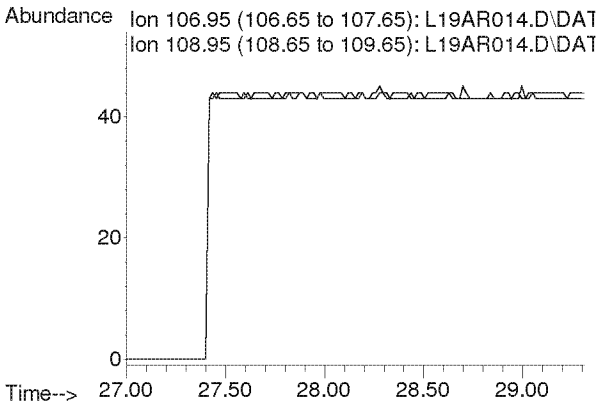


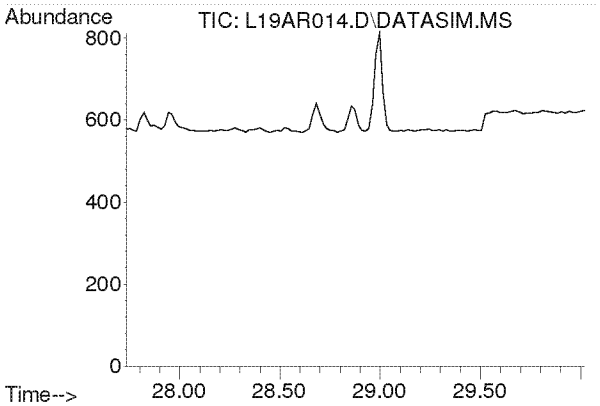
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



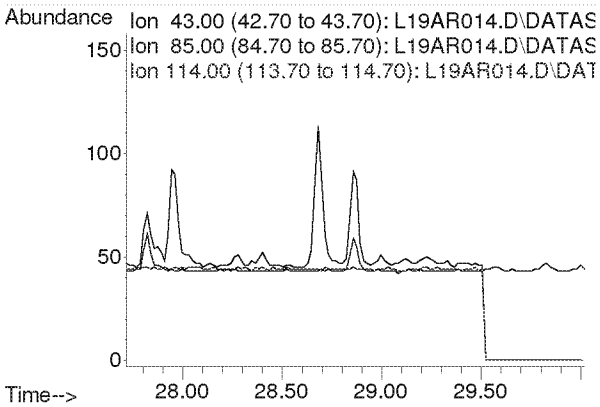


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

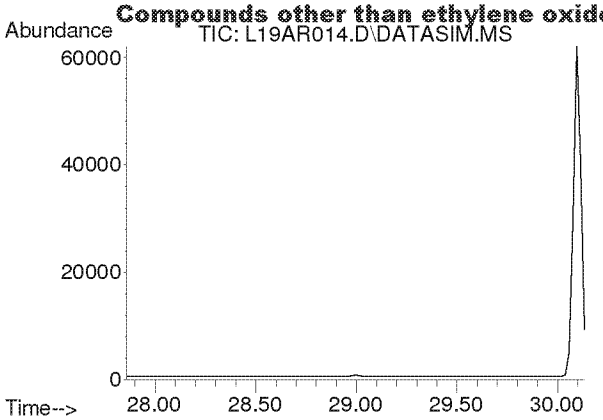
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

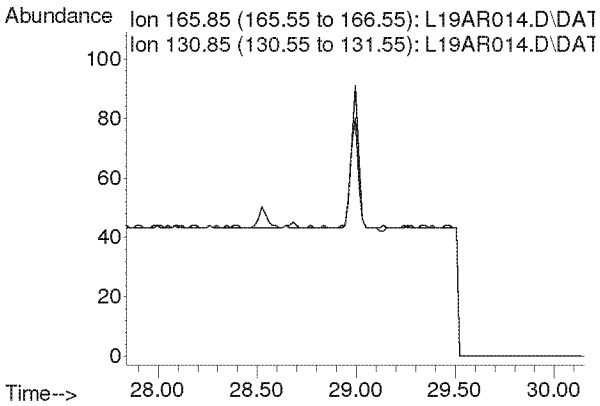


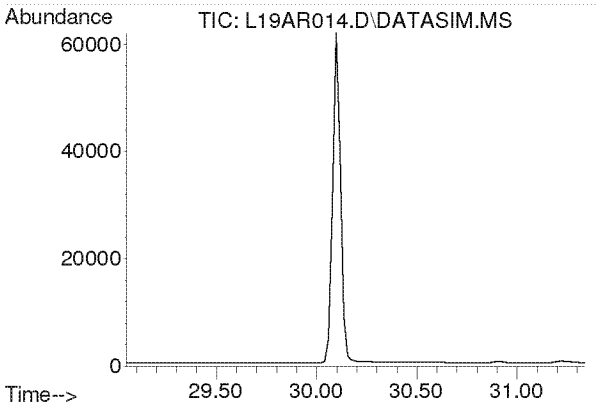
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



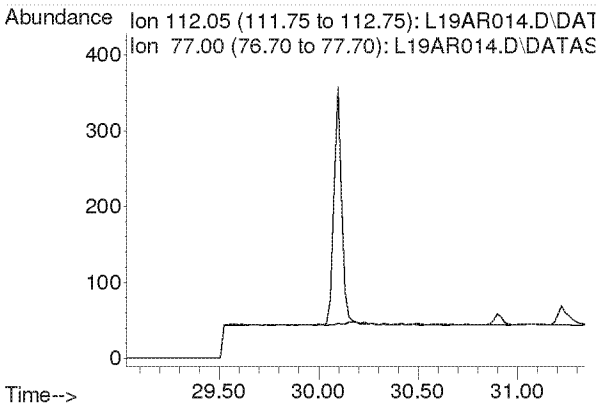


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

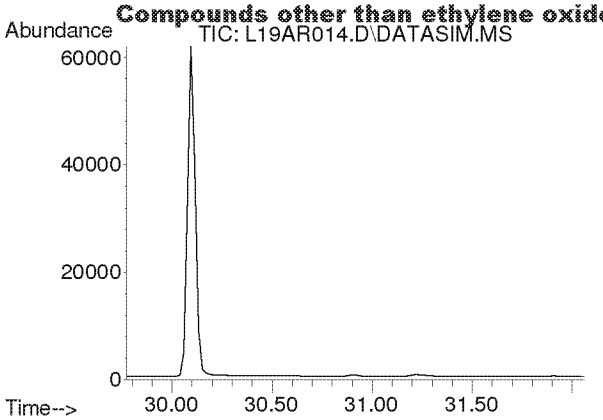
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

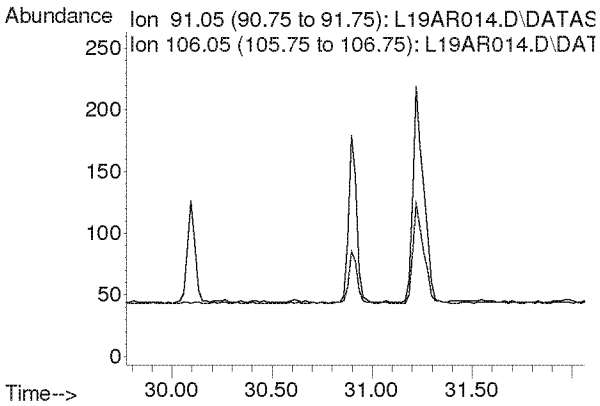


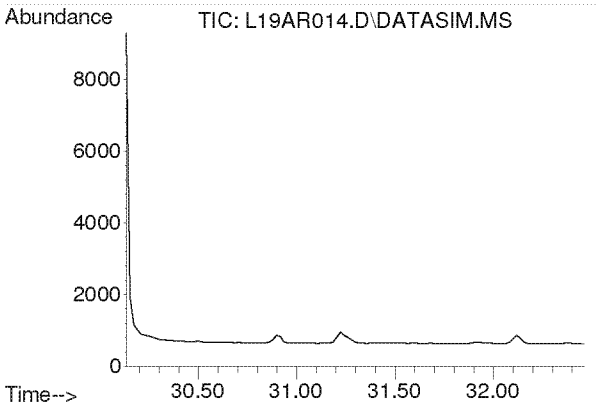
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



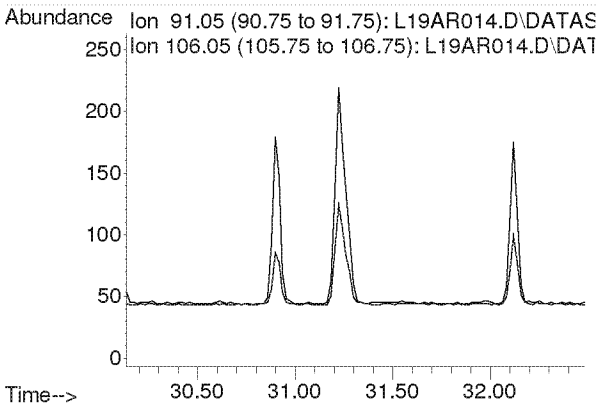


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

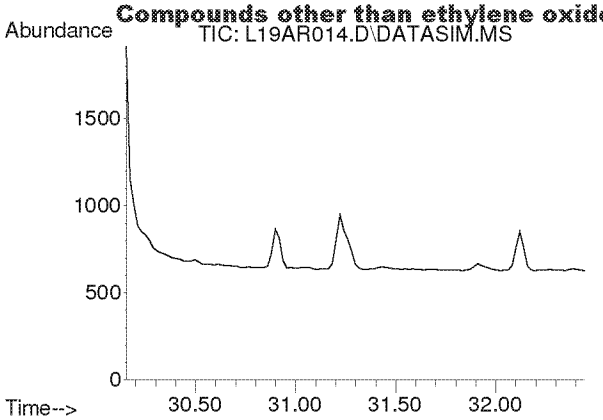
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

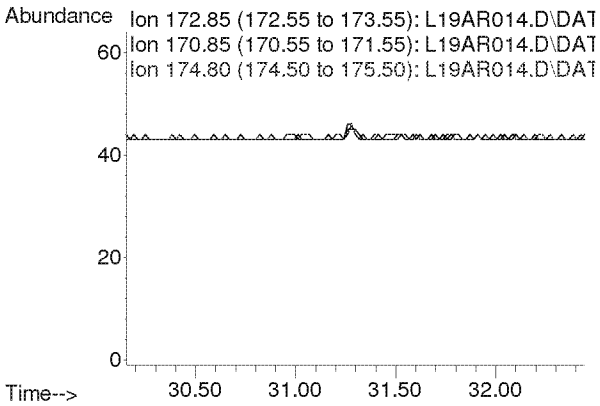


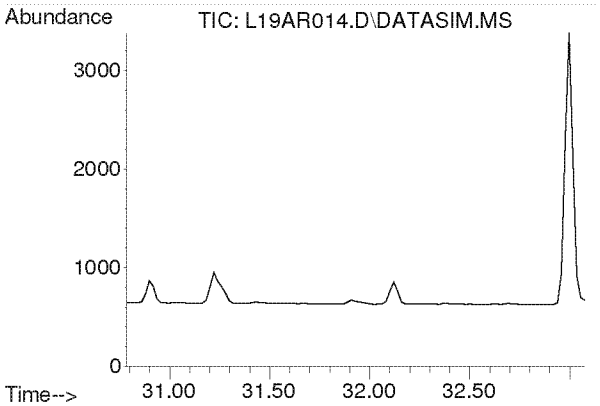
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



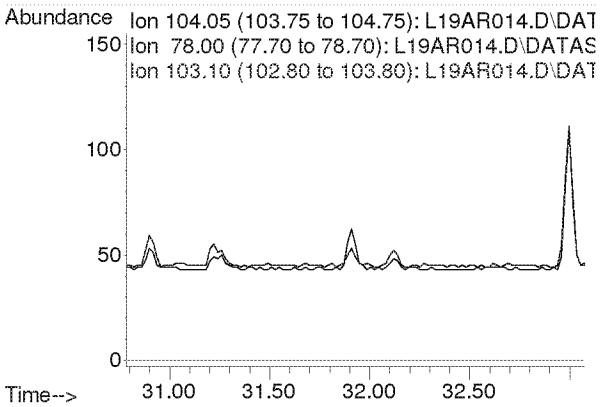


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

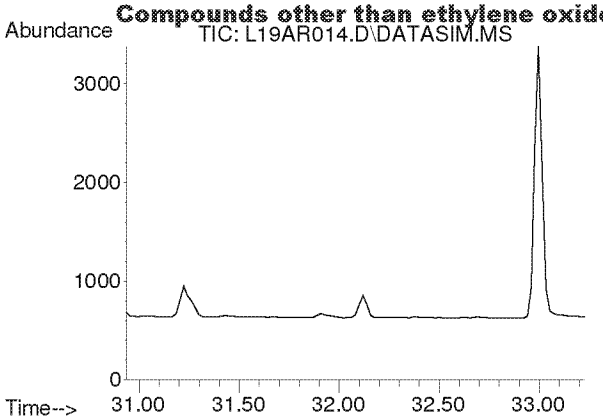
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

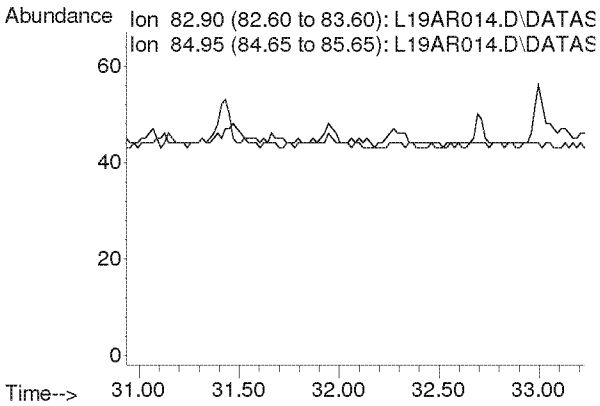


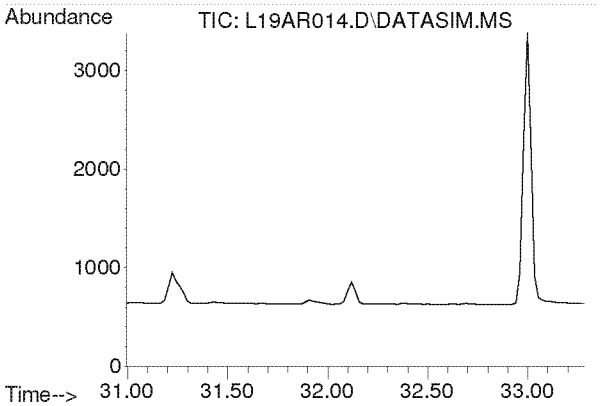
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



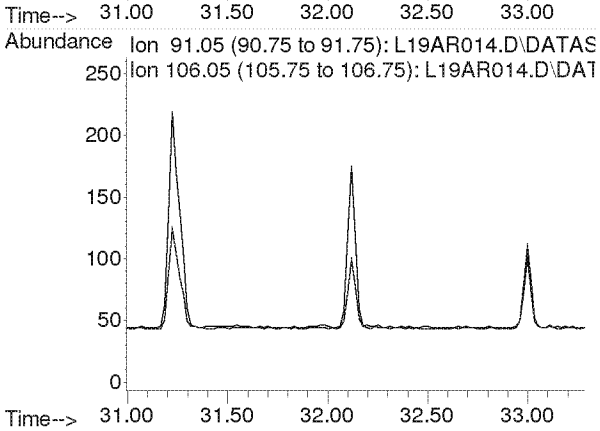


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

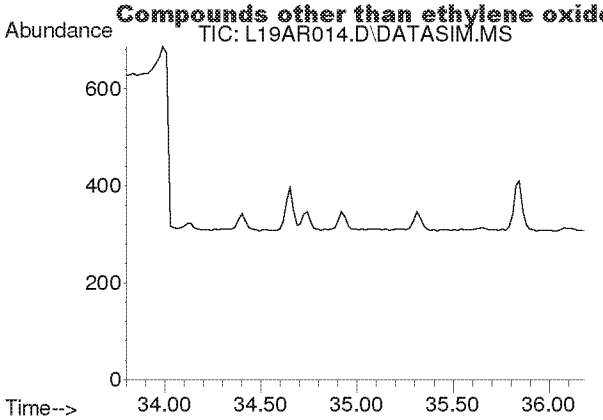
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

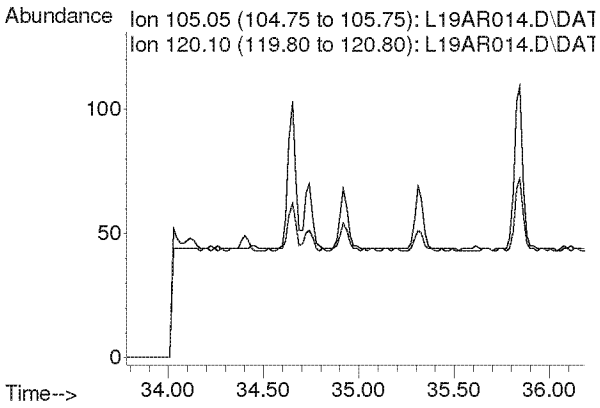


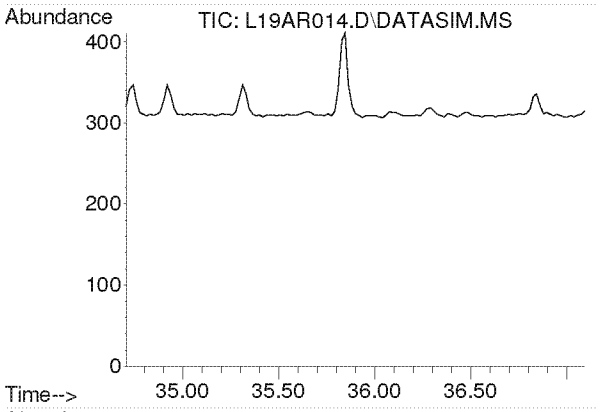
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



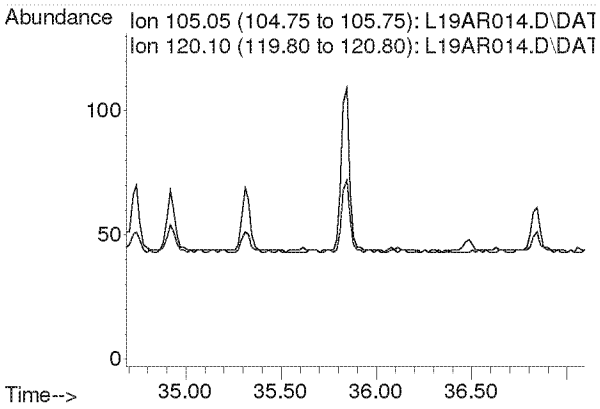


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

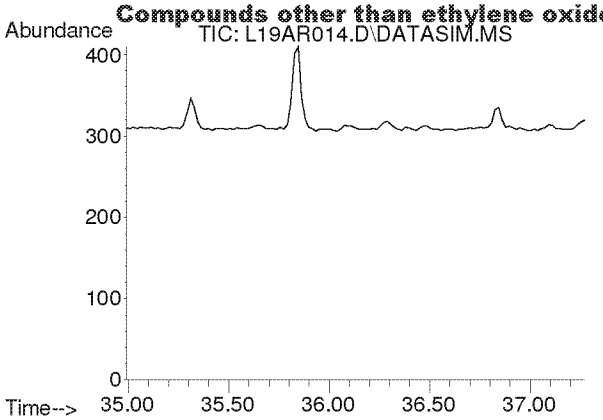
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

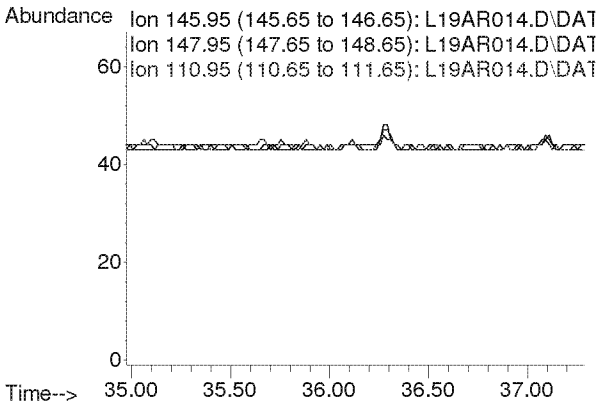


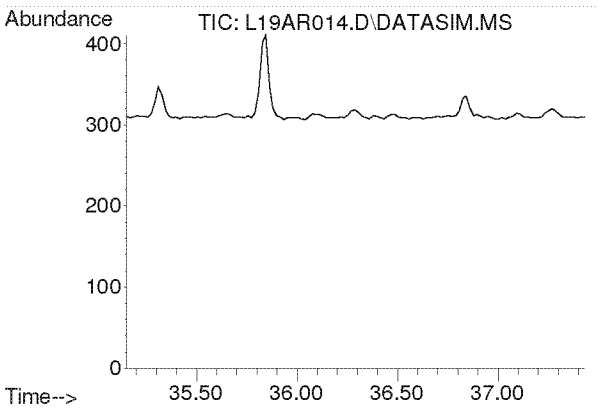
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



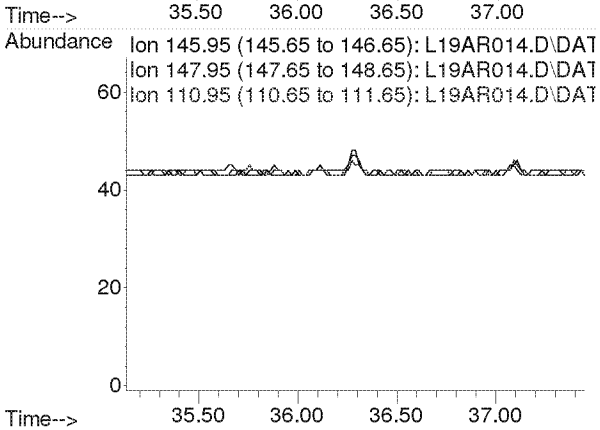


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

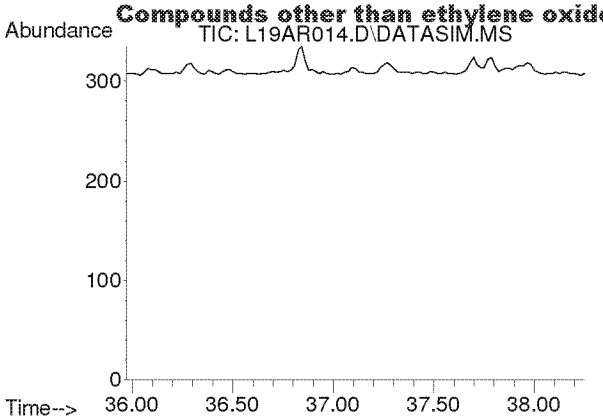
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

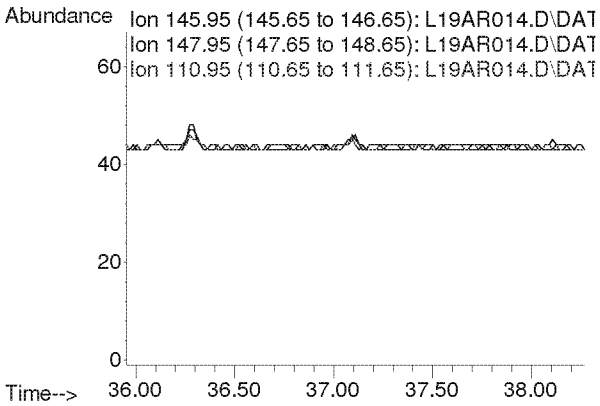


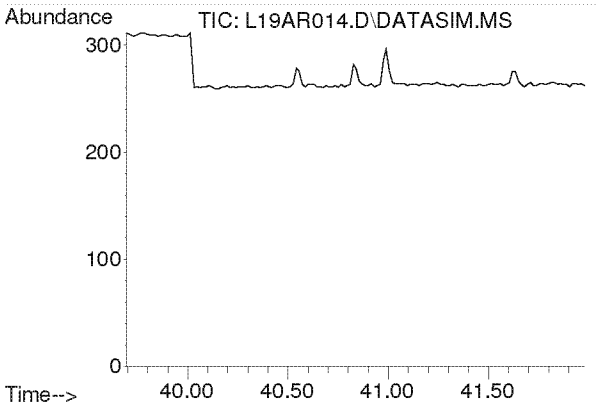
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



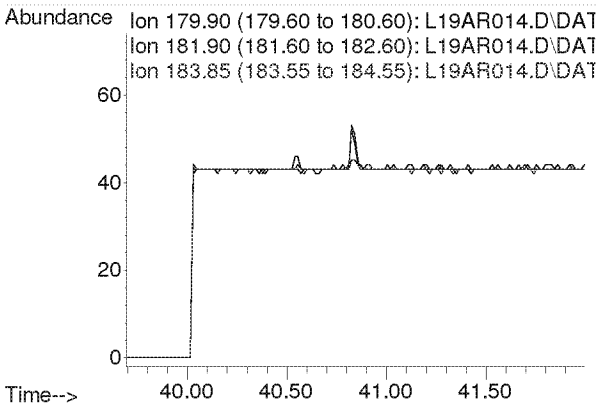


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

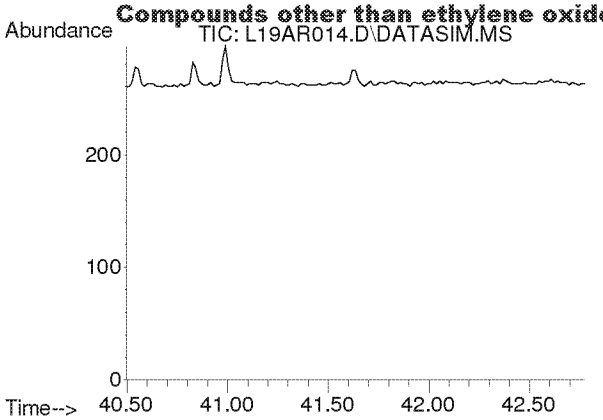
Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

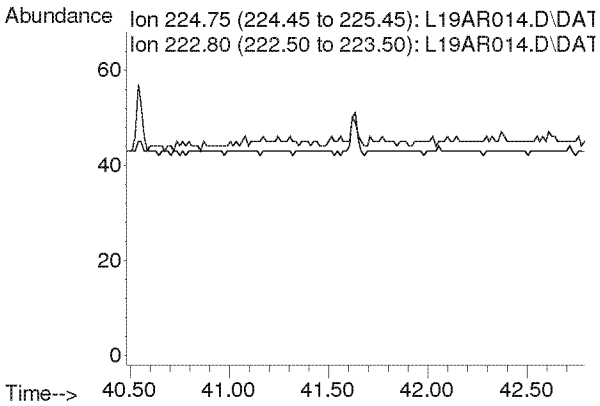


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AR014.D
Acq: 19 Jan 2019 12:41 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\L19AR\
Data File : L19AR015.D
Acq On : 19 Jan 2019 1:43 am
Operator : MAH
Sample : 9011527-04
Misc : GOWER MS 1/13/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 09:23:55 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

EPA only

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.990	66	53849	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	132131	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.094	117	101457	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	0.000	29	0	N.D. d SV	
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\L19AR\
Data File : L19AR015.D
Acq On : 19 Jan 2019 1:43 am
Operator : MAH
Sample : 9011527-04
Misc : GOWER MS 1/13/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 09:23:55 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.	

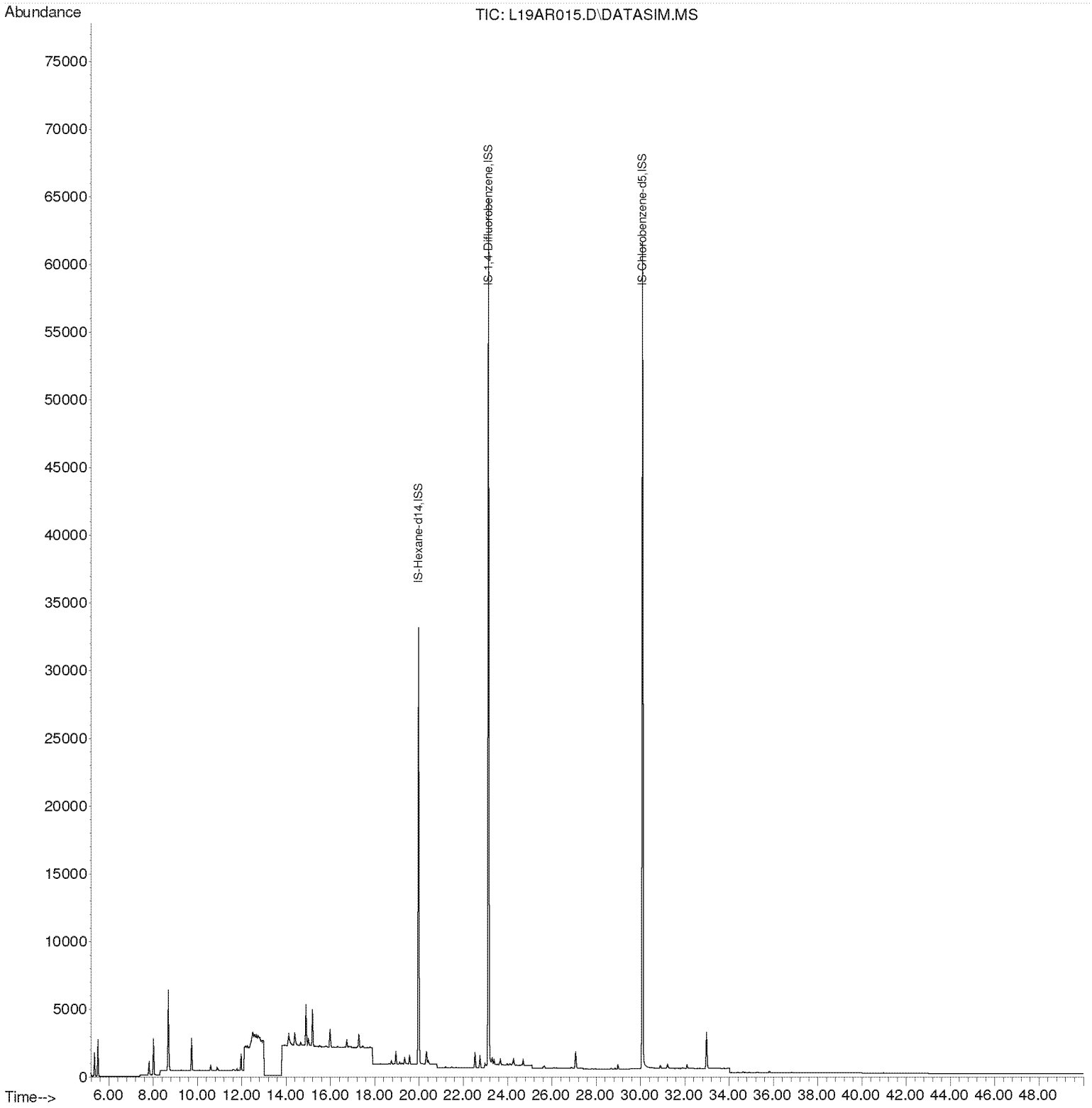
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00248

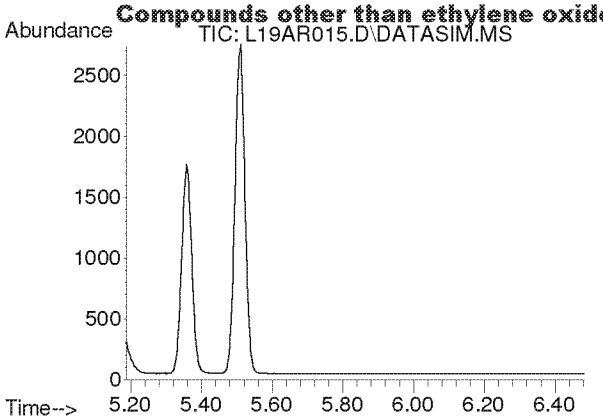
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR015.D
Acq On : 19 Jan 2019 1:43 am
Operator : MAH
Sample : 9011527-04
Misc : GOWER MS 1/13/19
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 23 08:39:21 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



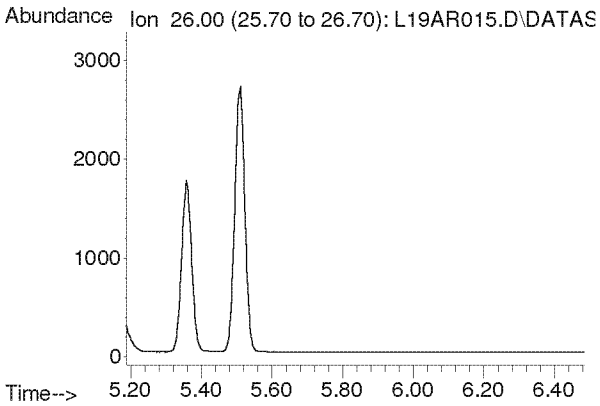
Compounds other than ethylene oxide were not quantitated.

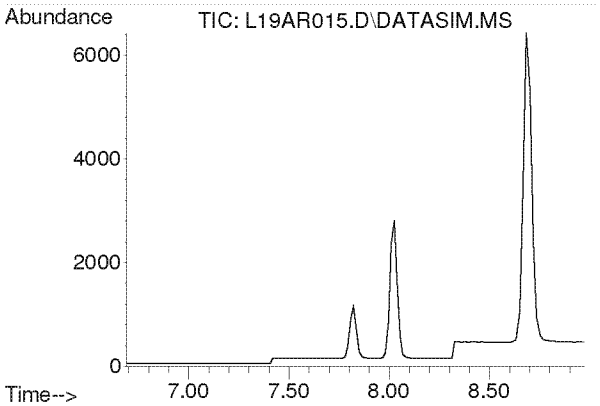


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 26



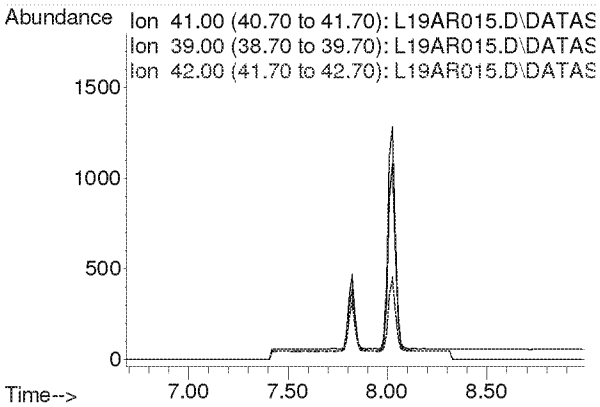


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

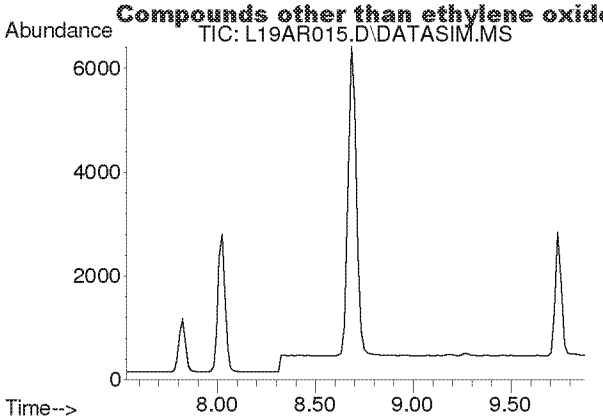
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

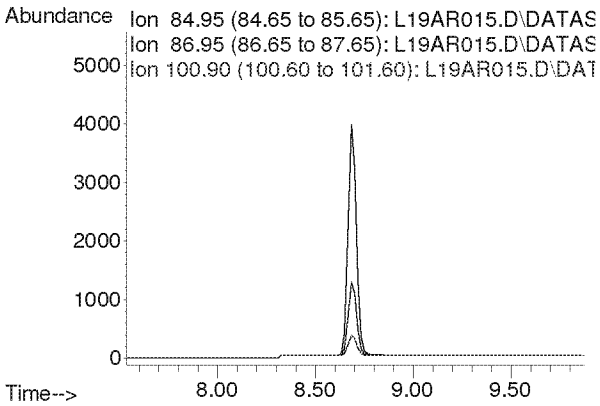


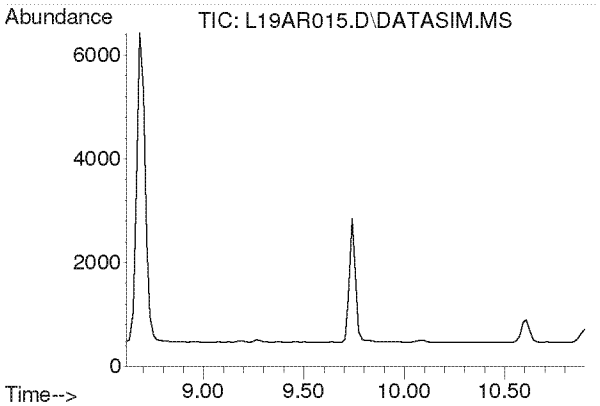
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



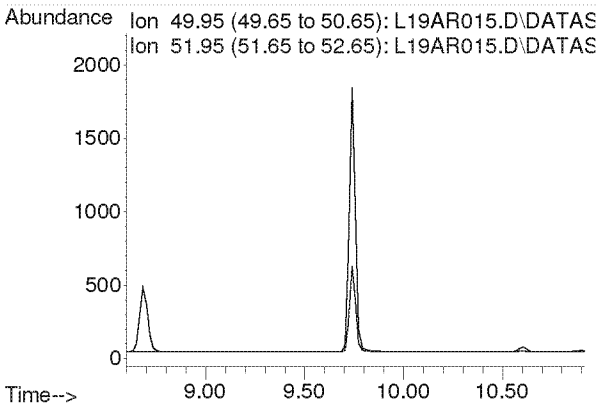


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

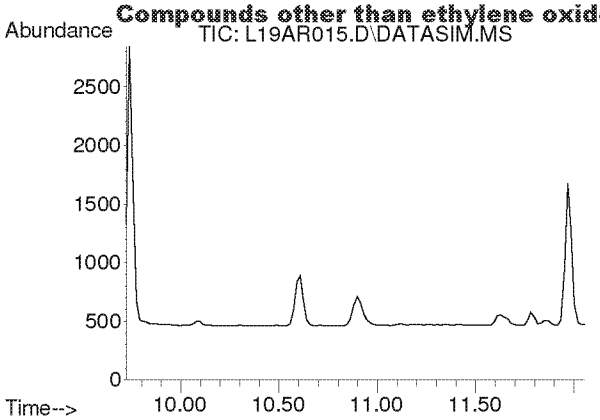
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

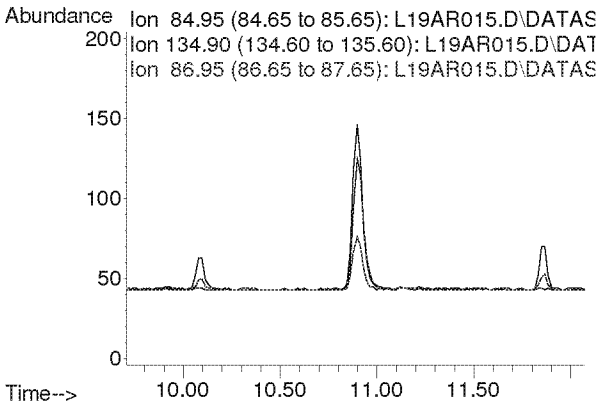


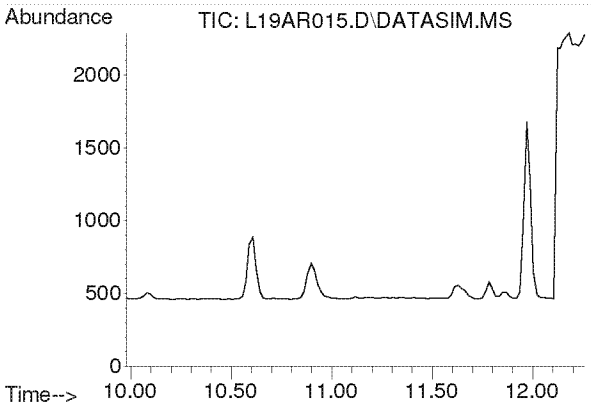
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



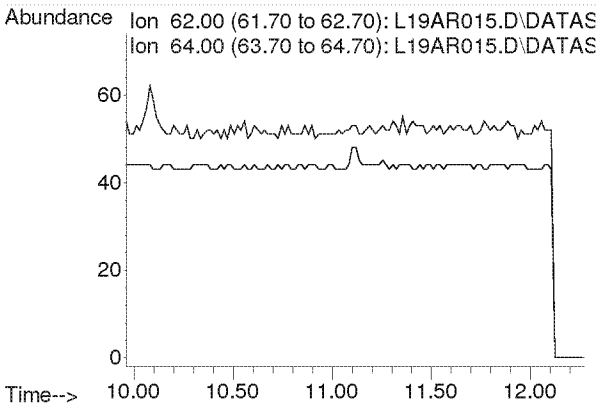


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

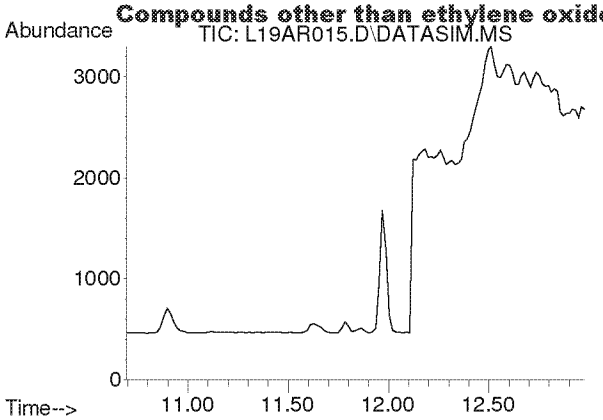
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

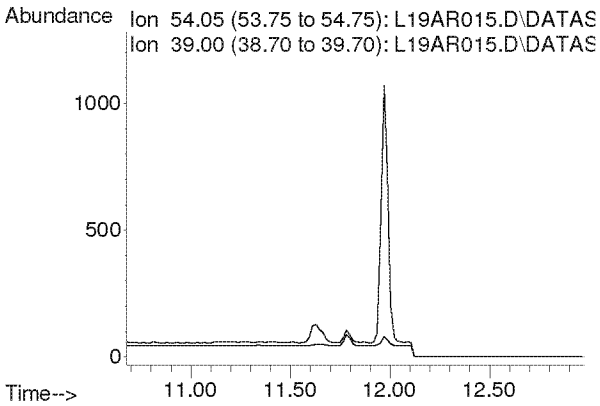


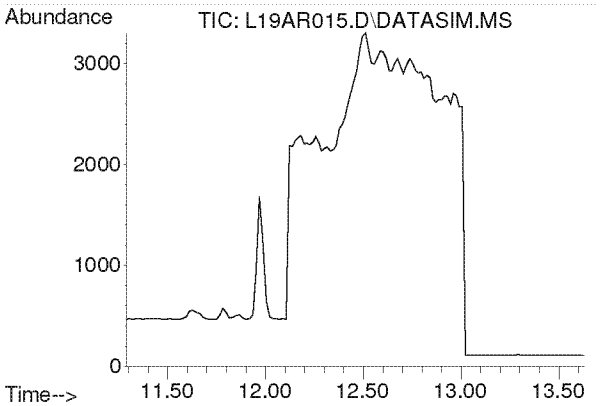
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



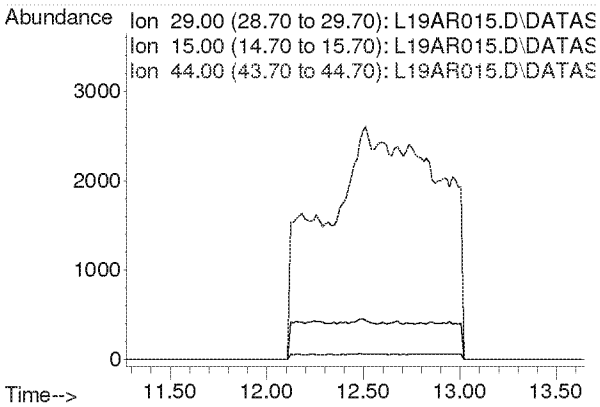


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

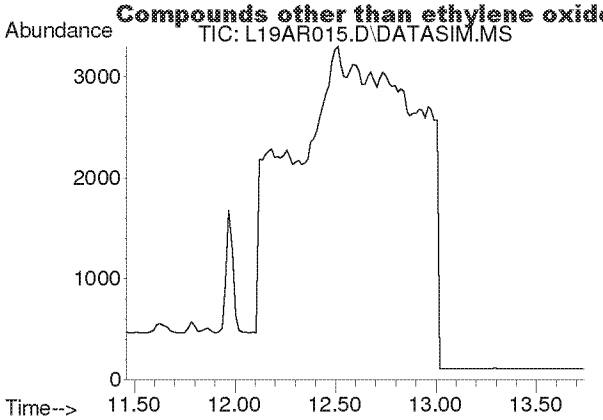
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

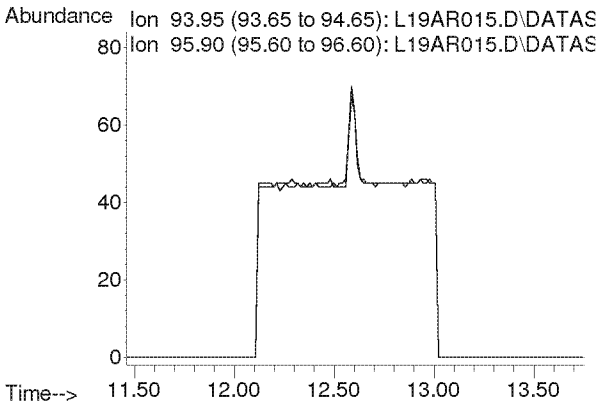


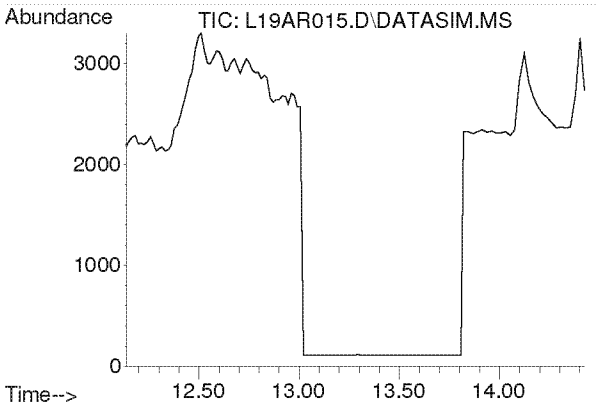
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



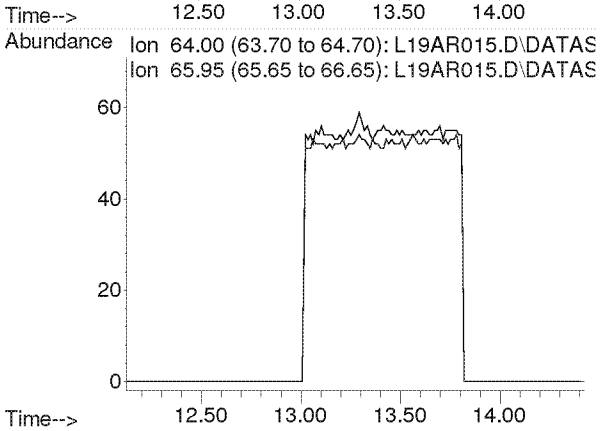


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

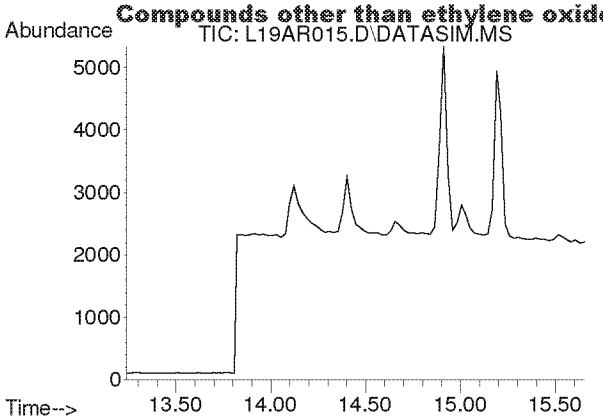
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

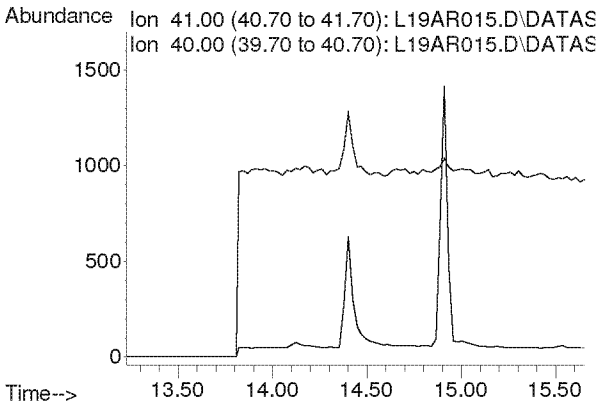


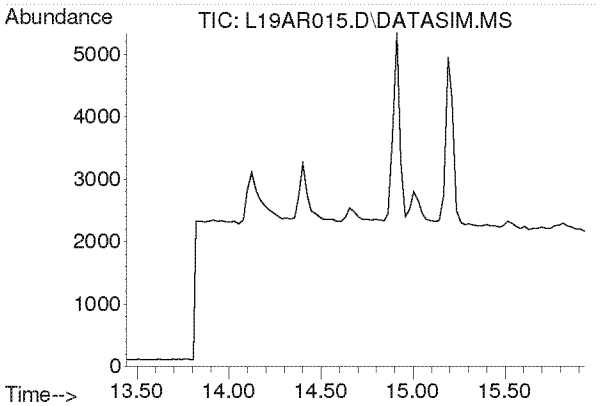
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



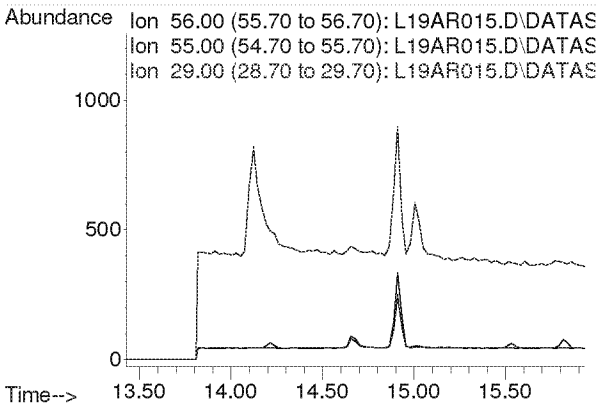


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

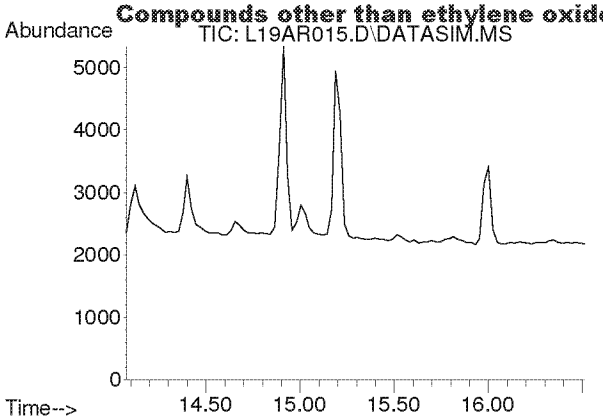
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

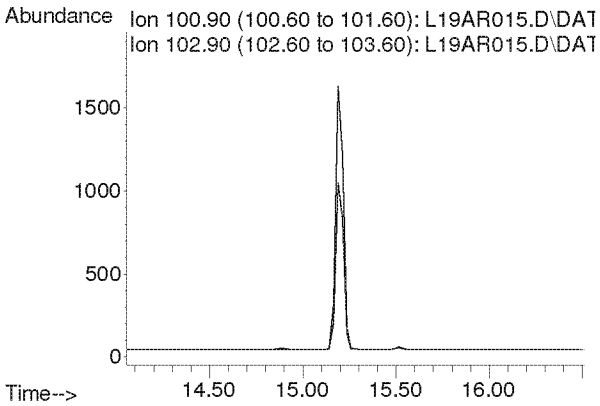


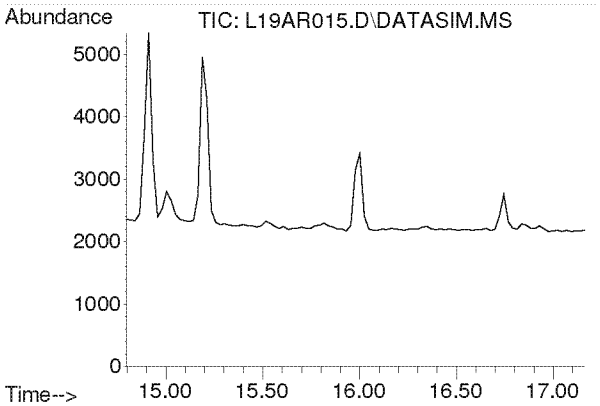
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



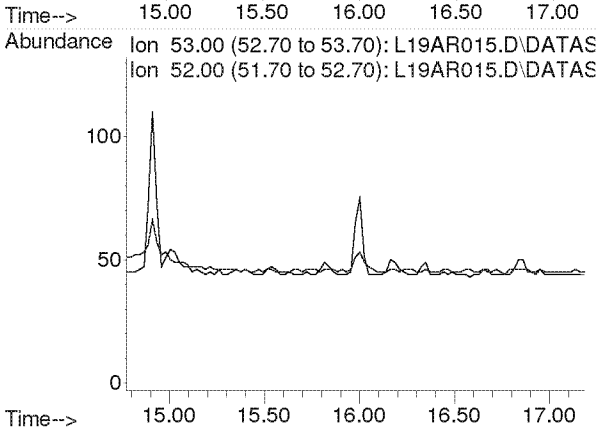


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

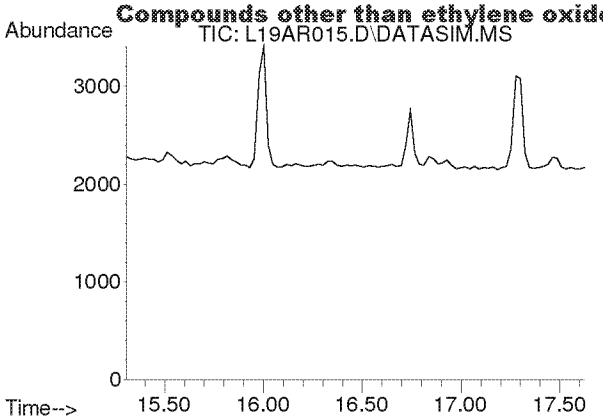
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

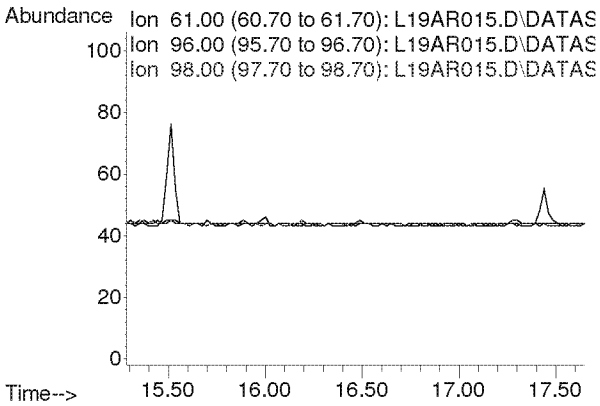


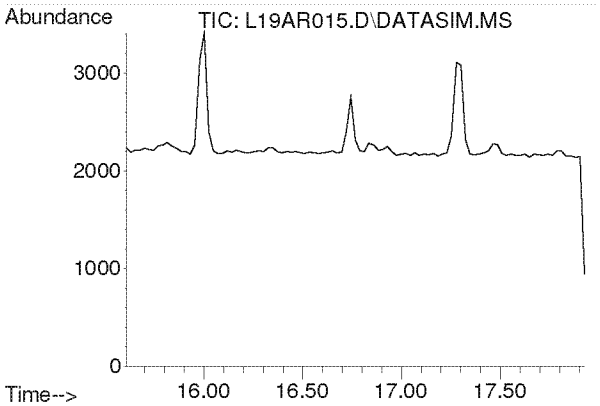
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



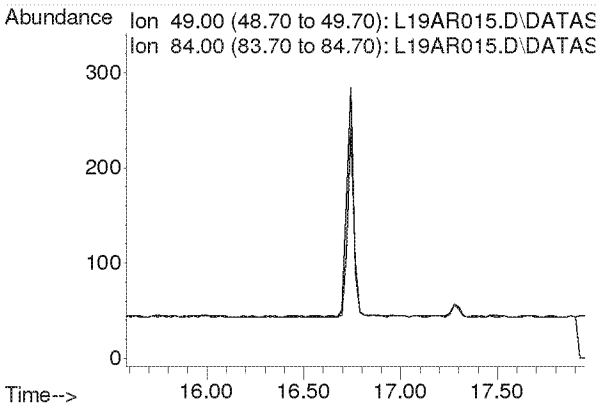


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

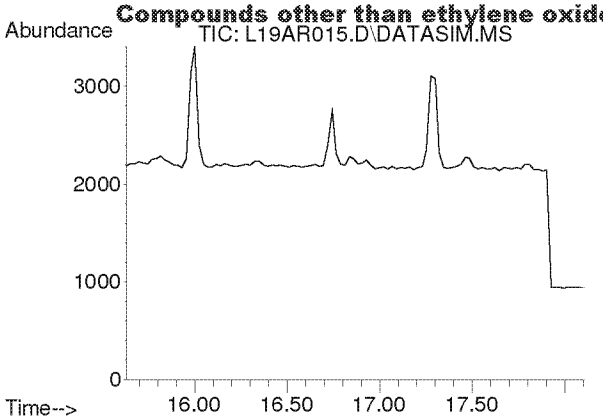
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

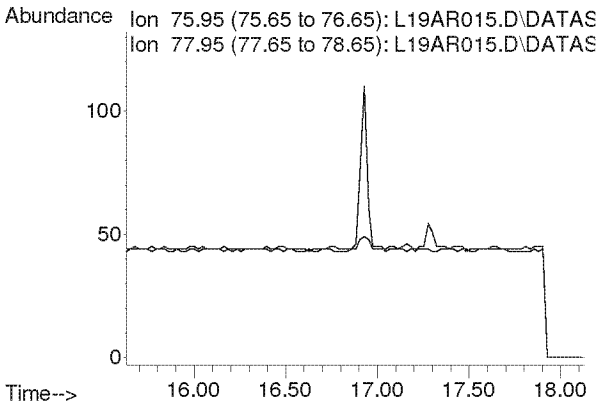


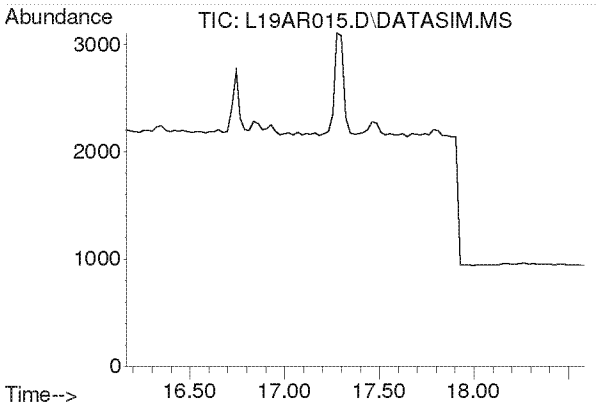
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



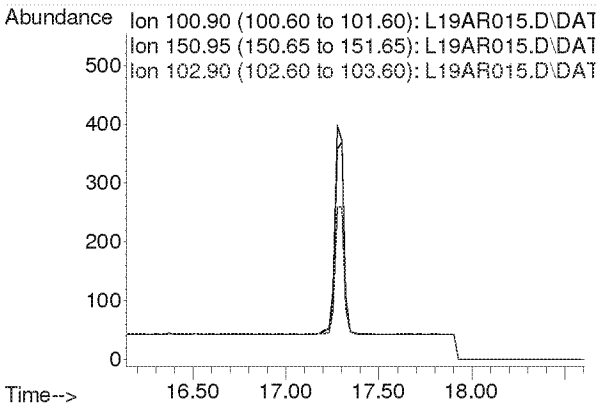


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

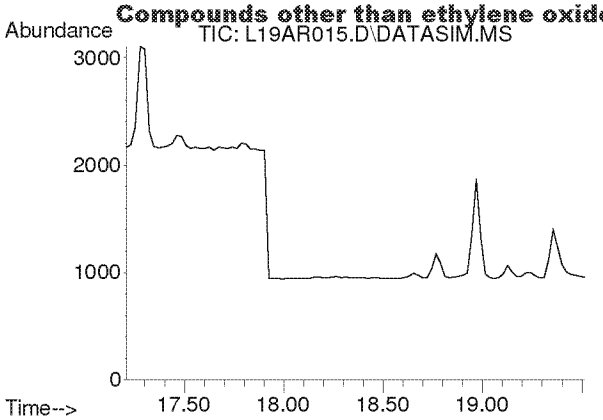
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

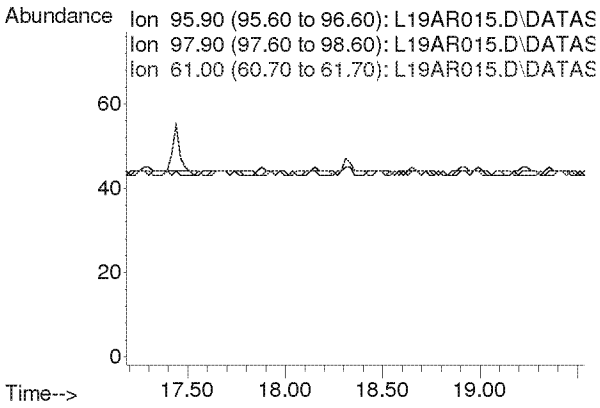


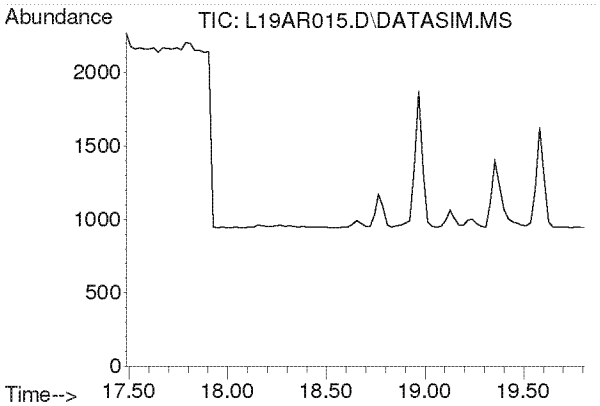
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



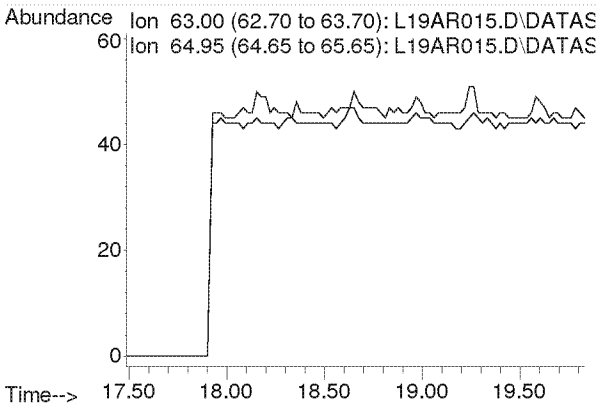


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

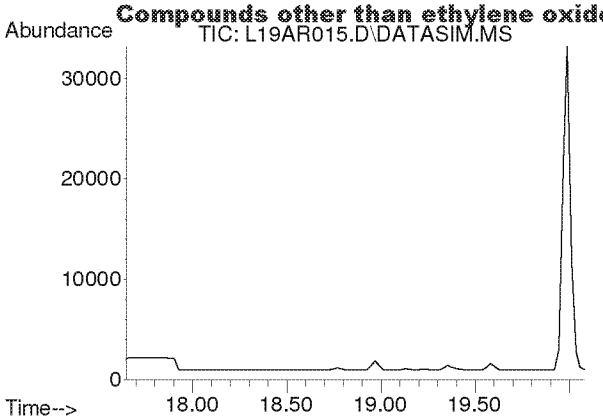
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

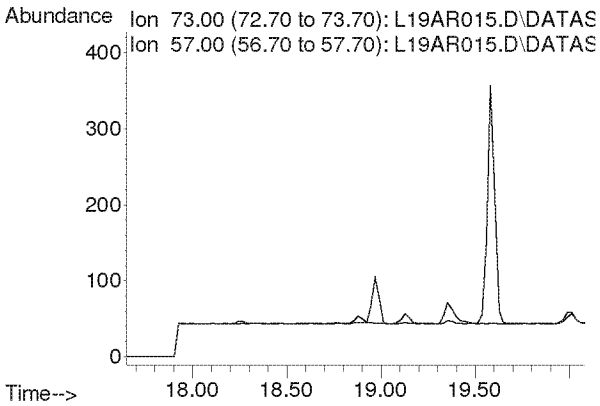


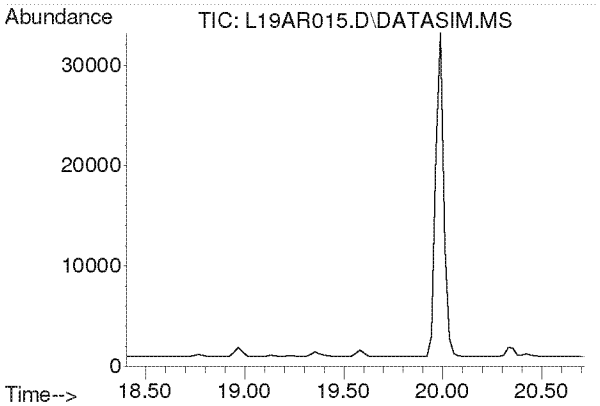
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



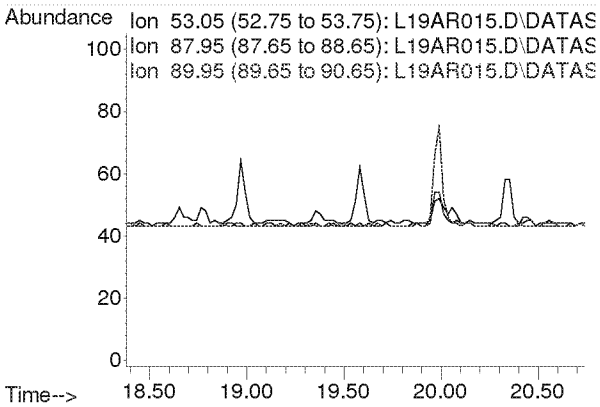


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

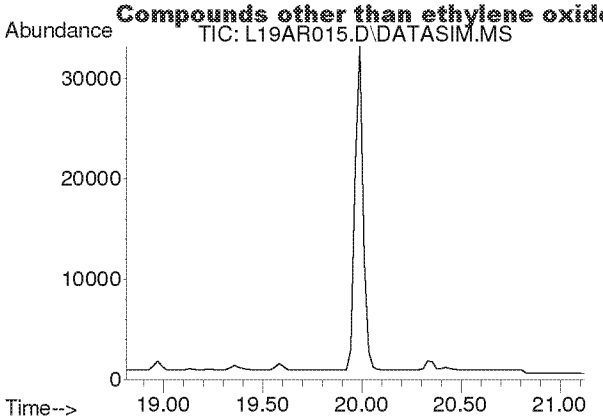
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

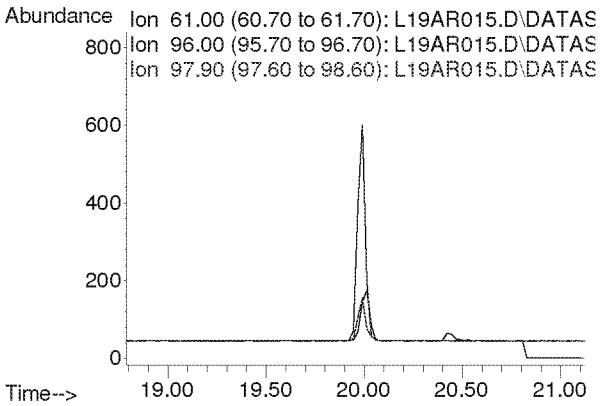


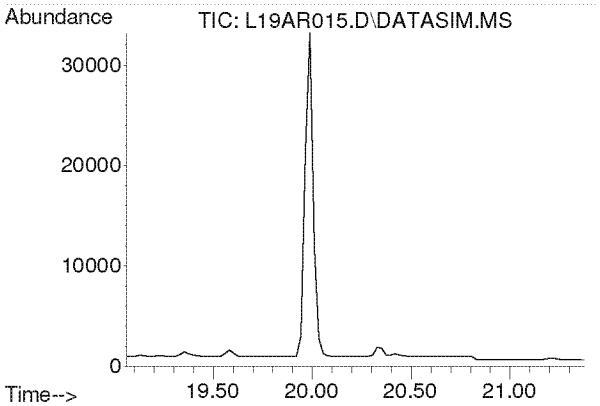
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



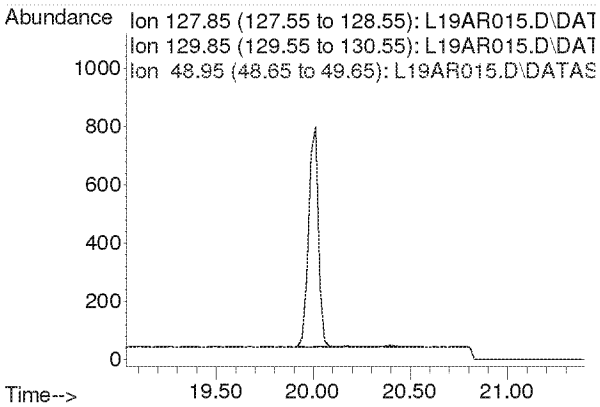


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

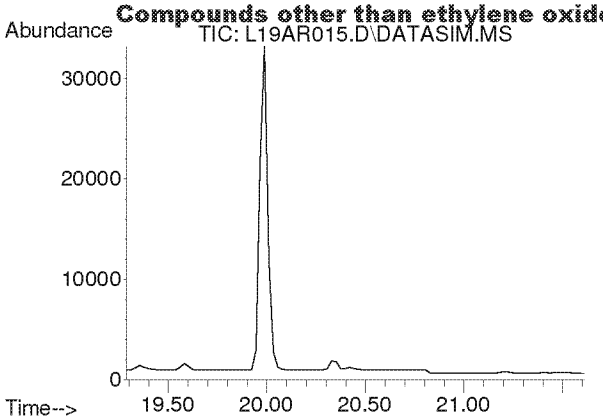
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

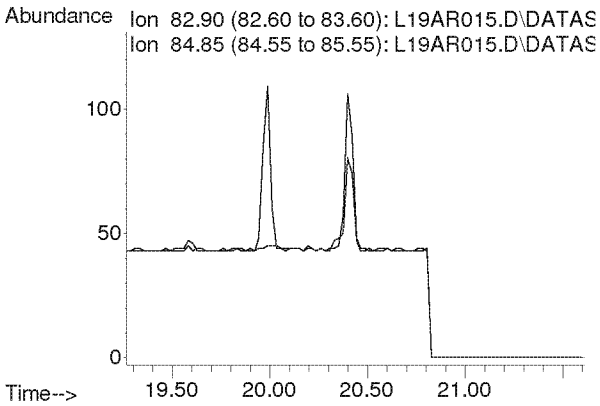


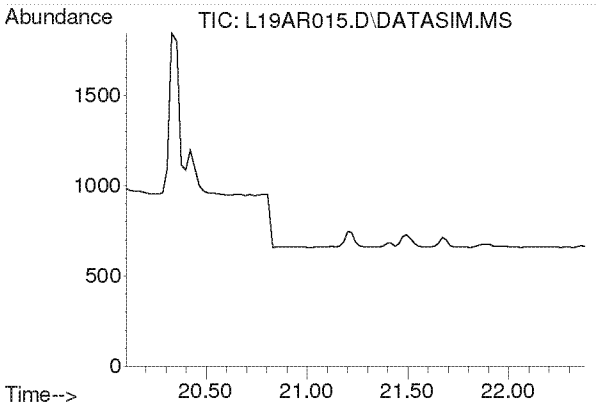
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



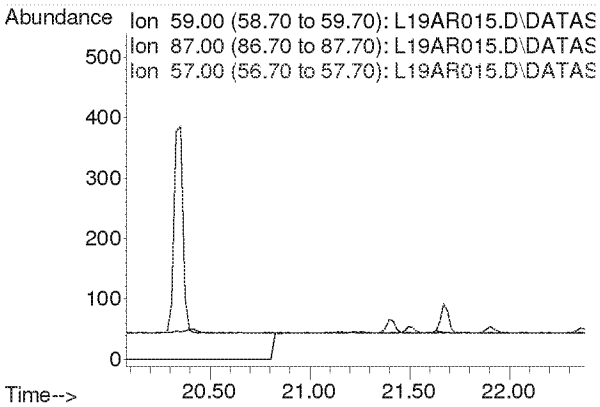


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

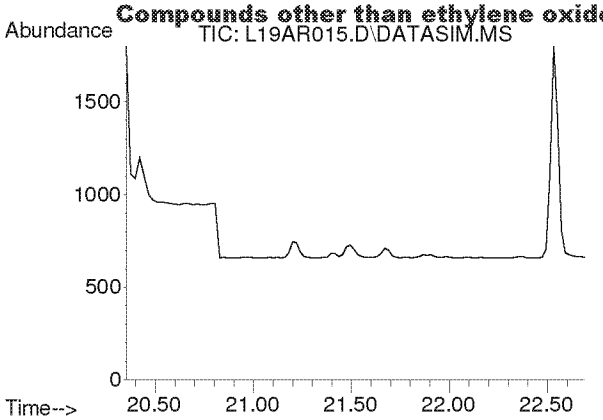
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

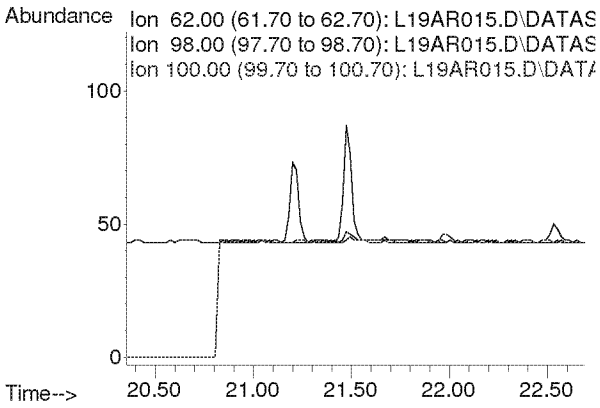


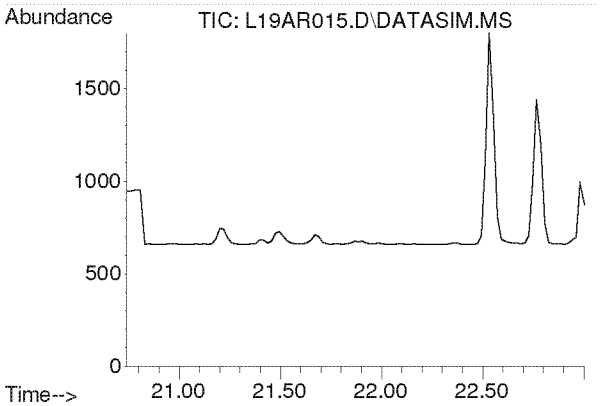
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



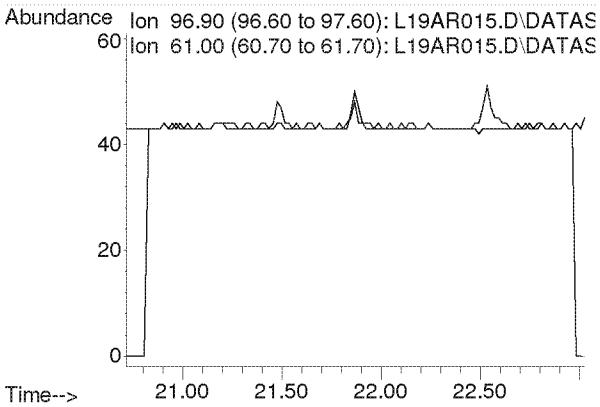


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

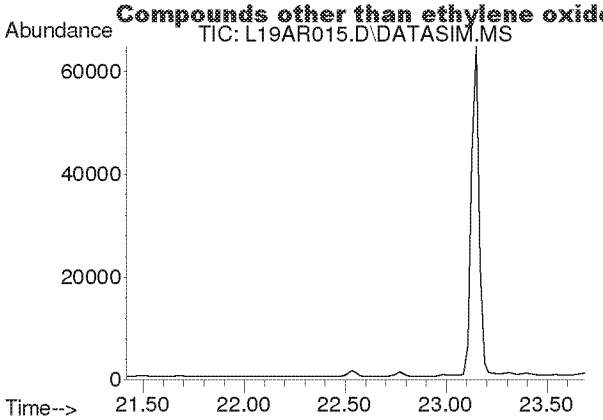
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

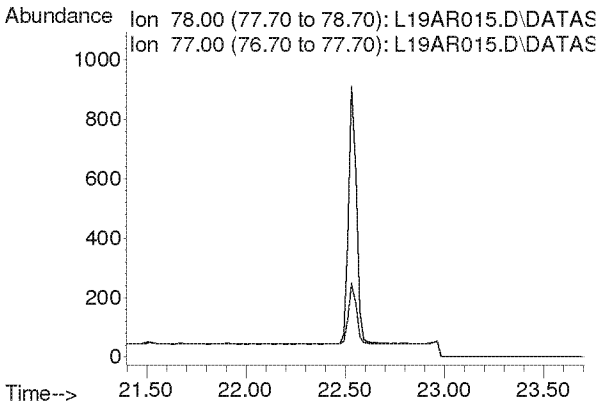


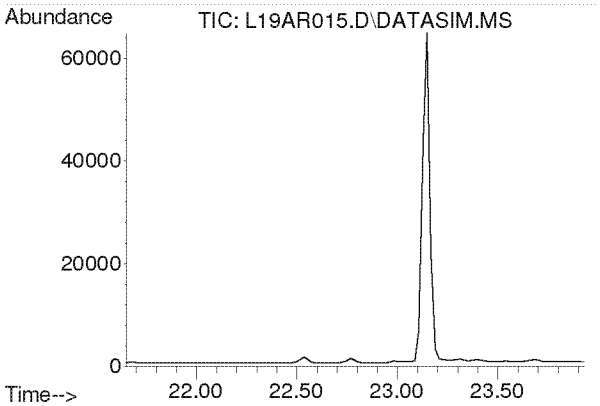
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



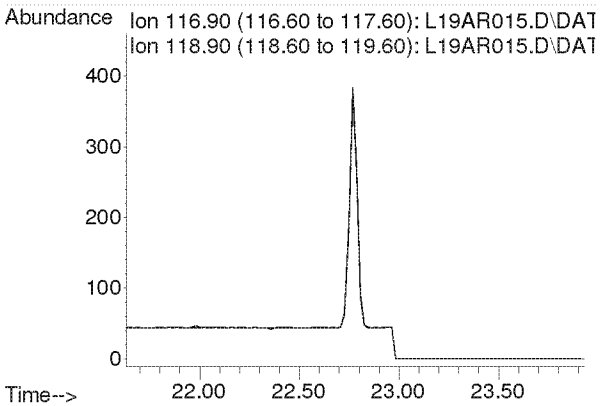


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

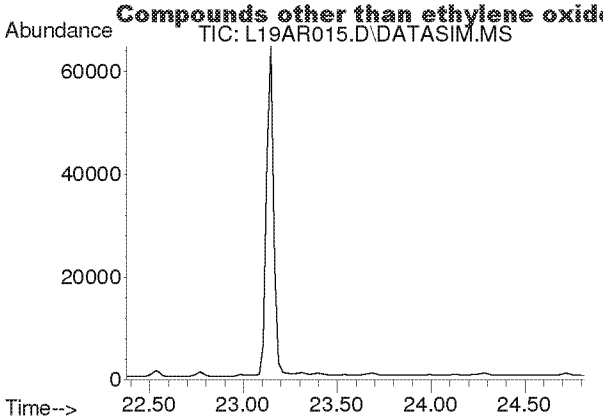
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

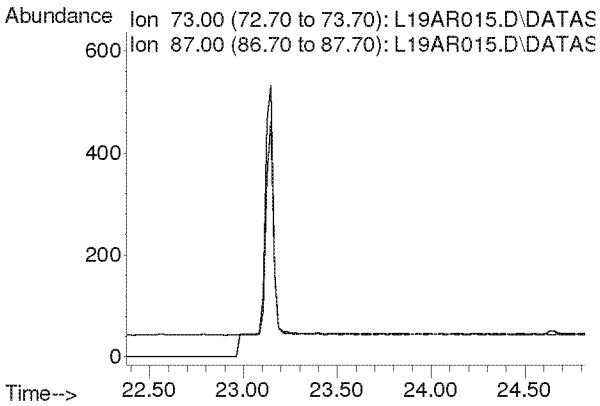


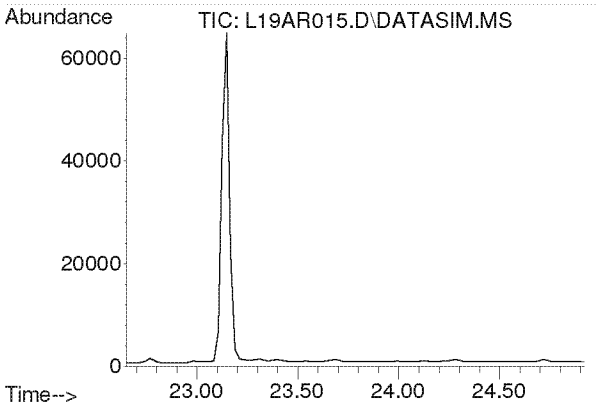
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



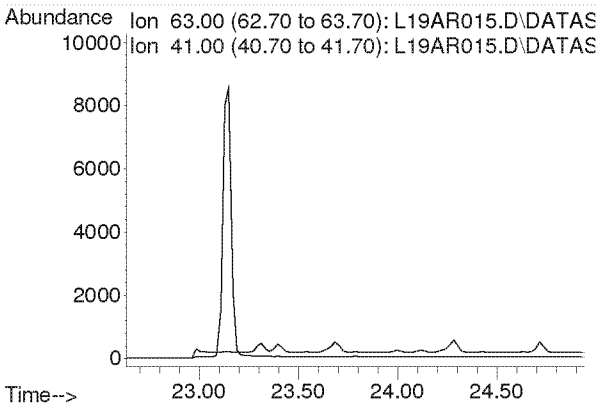


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

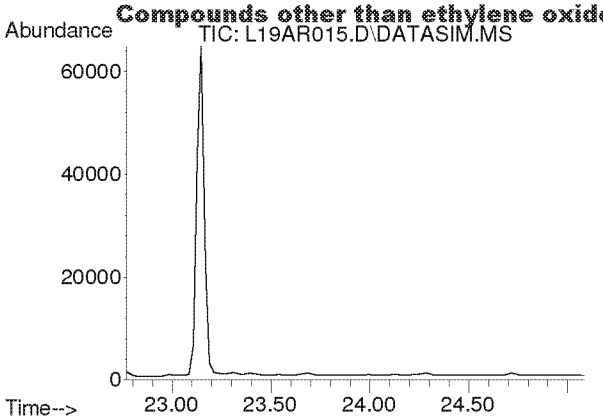
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

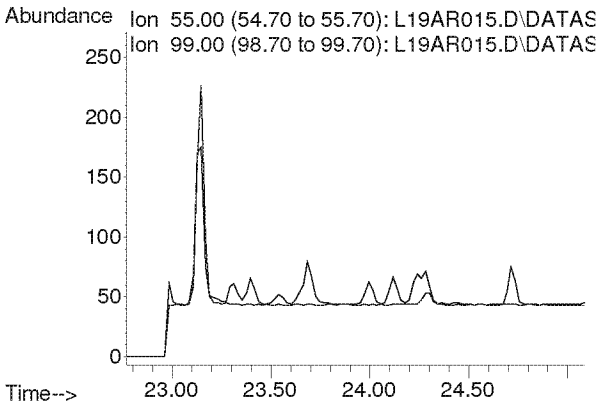


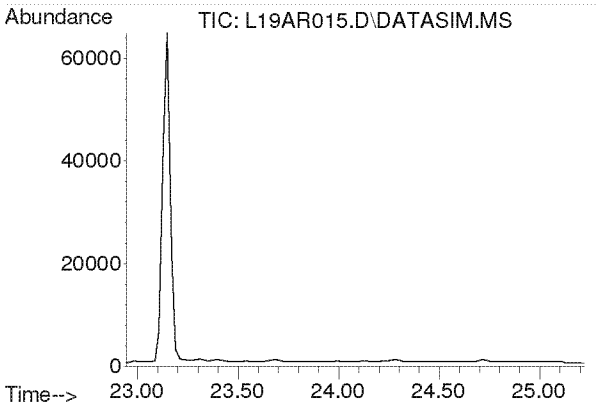
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



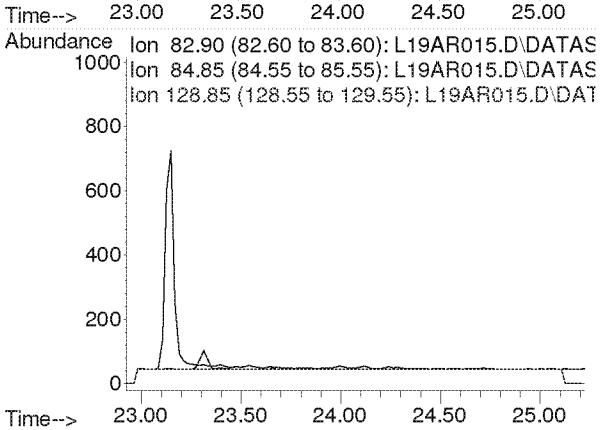


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

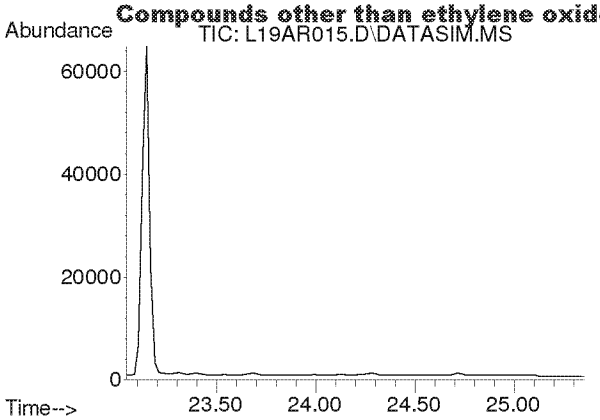
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

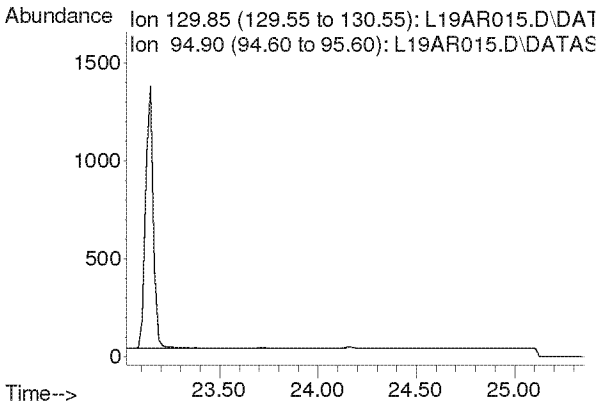


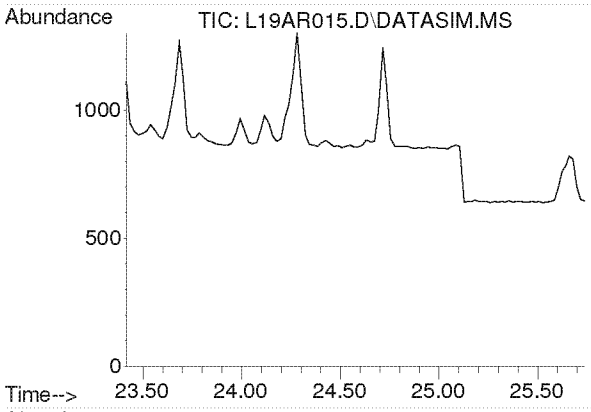
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



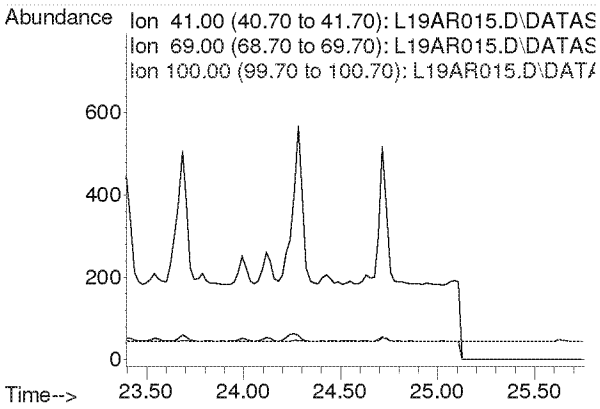


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

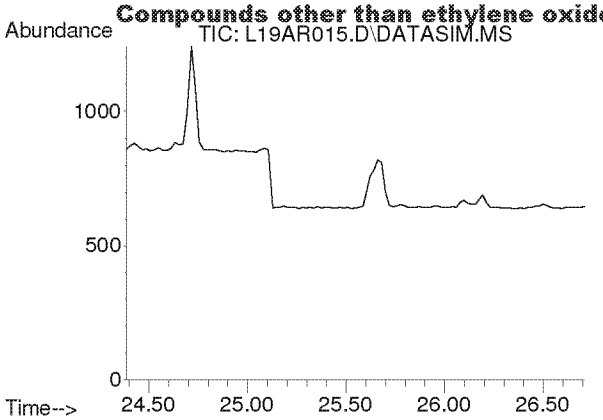
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

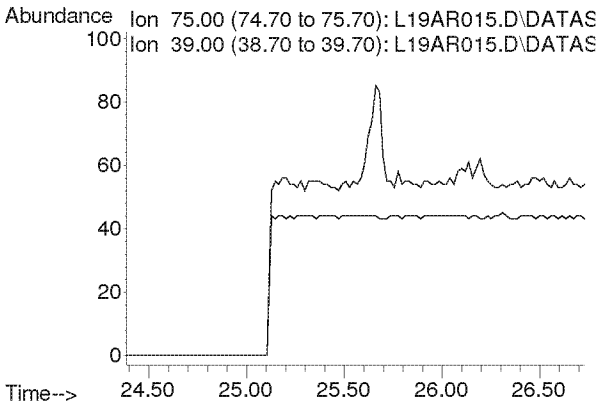


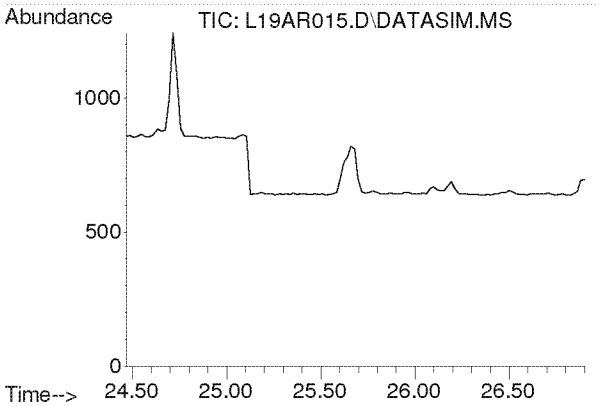
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



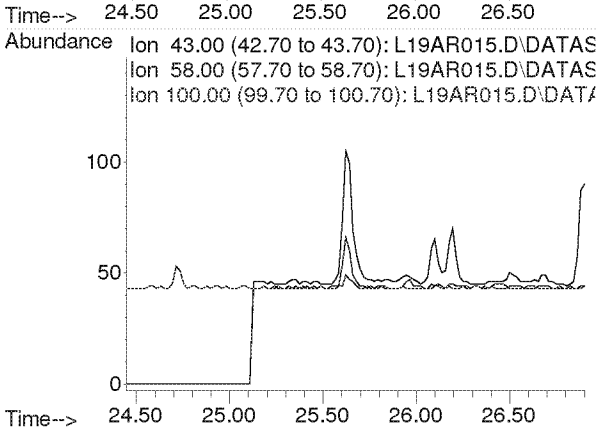


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

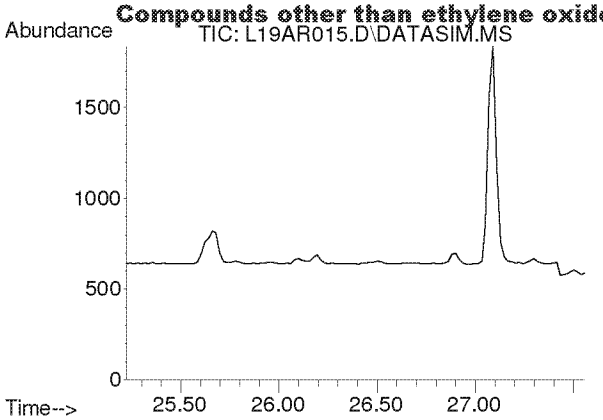
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

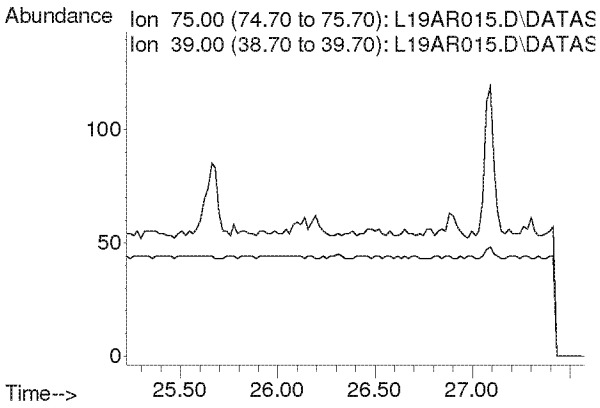


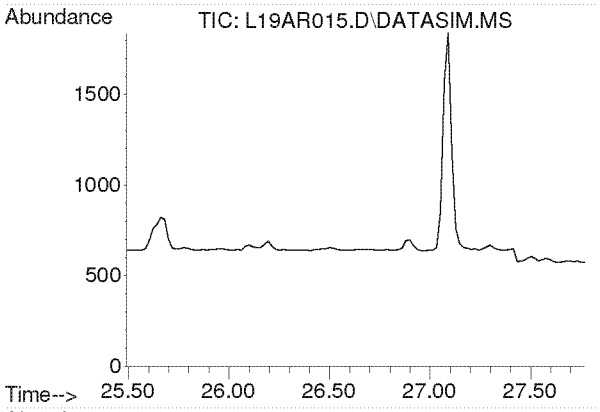
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



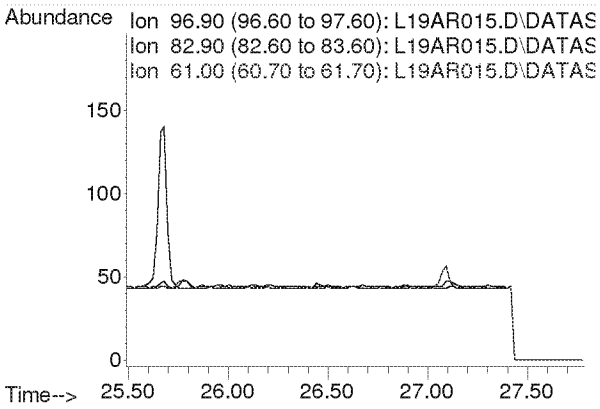


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

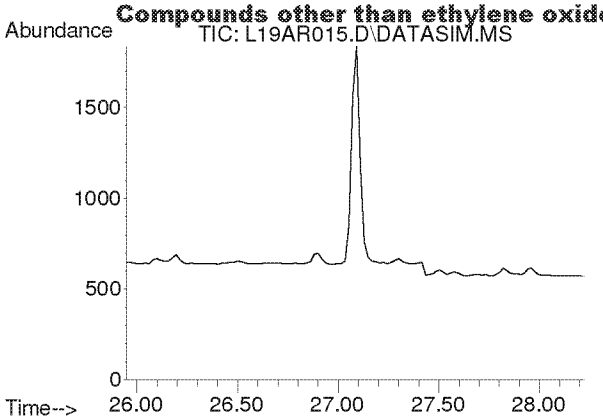
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

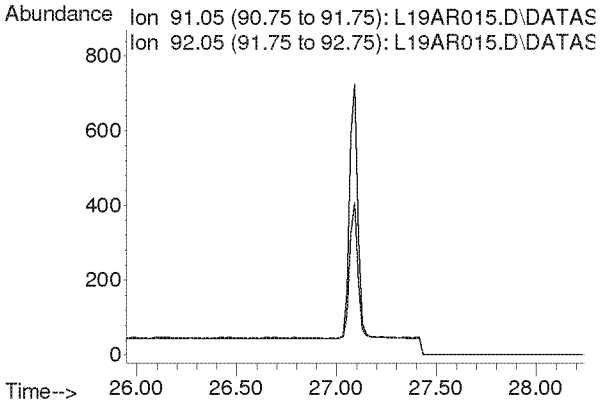


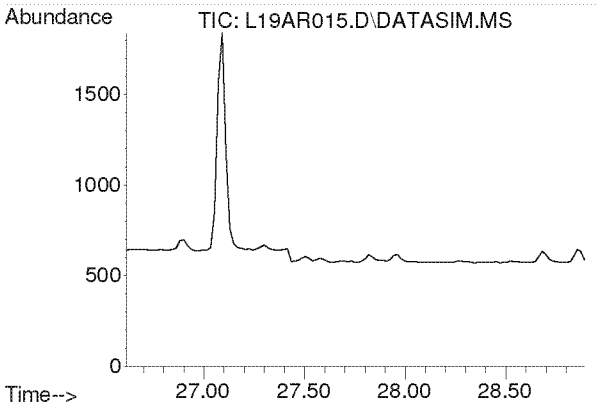
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



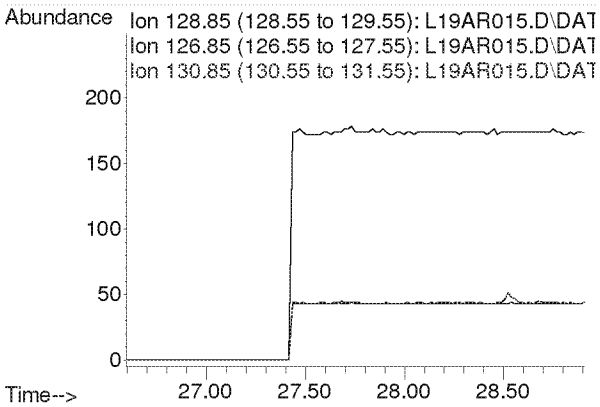


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

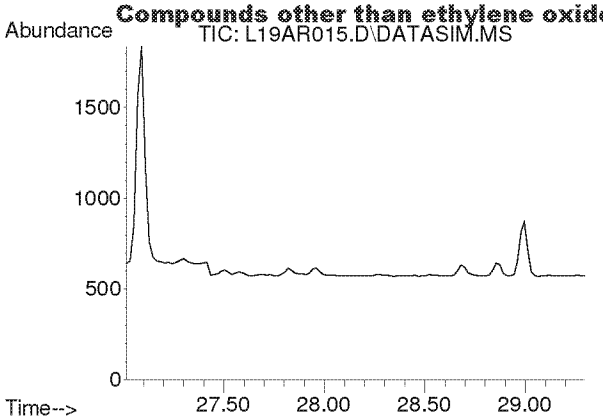
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

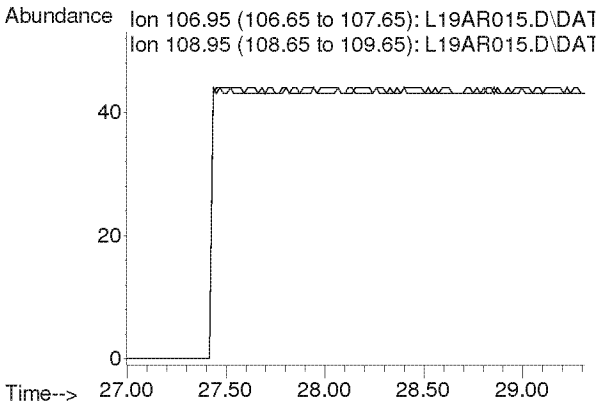


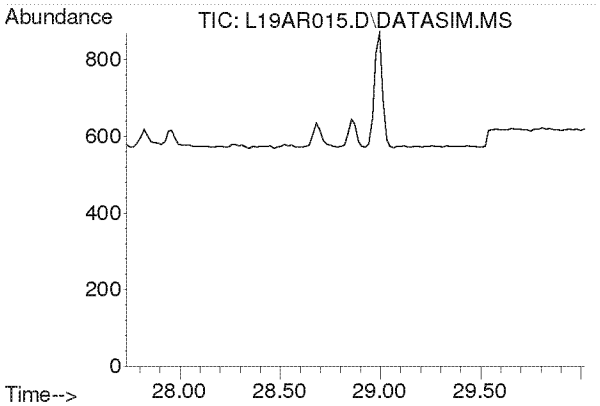
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



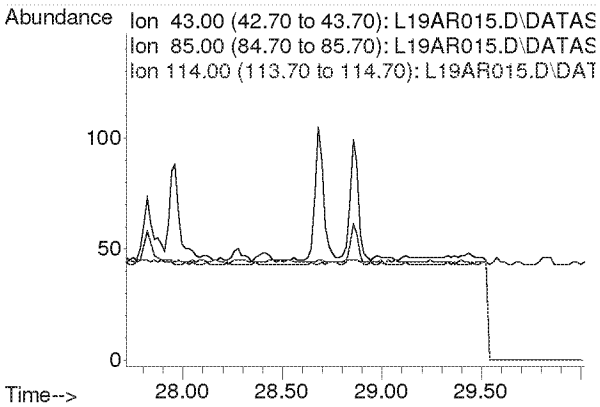


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

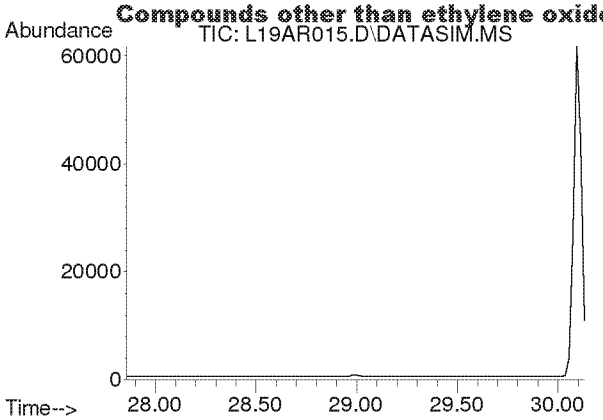
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

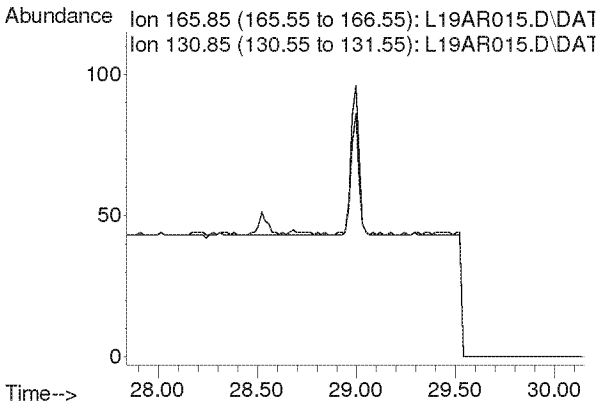


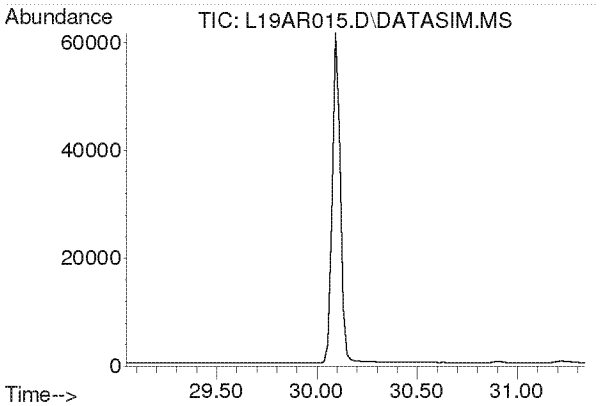
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



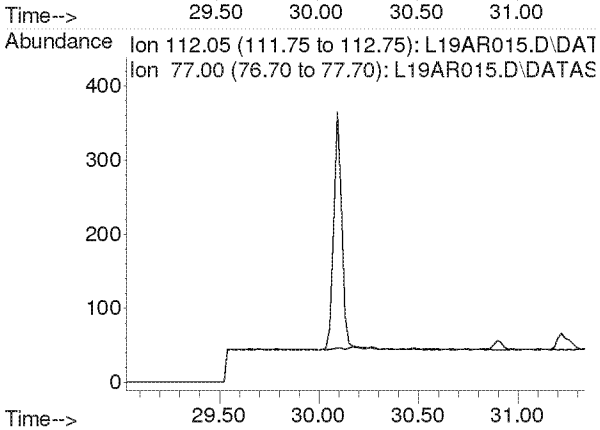


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

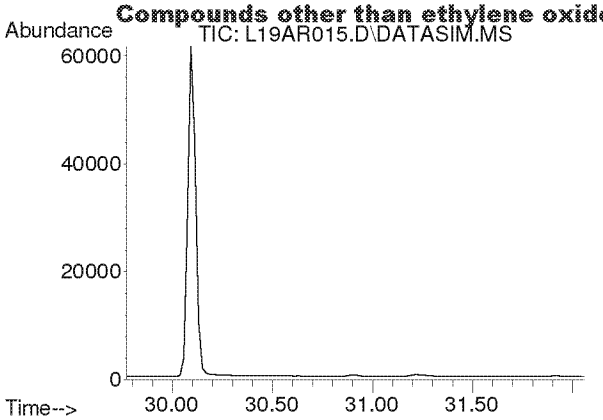
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

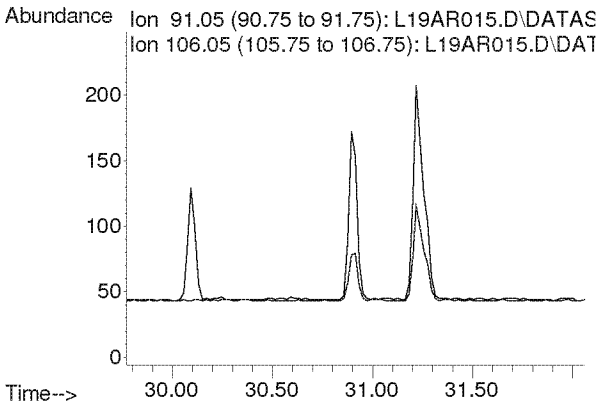


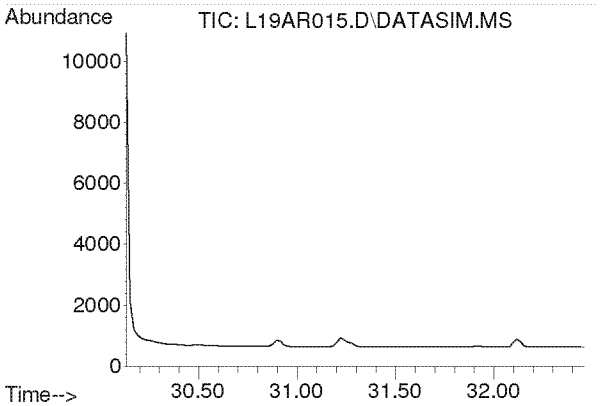
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



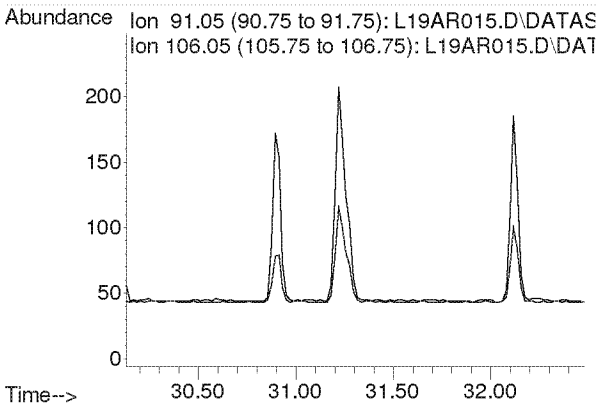


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

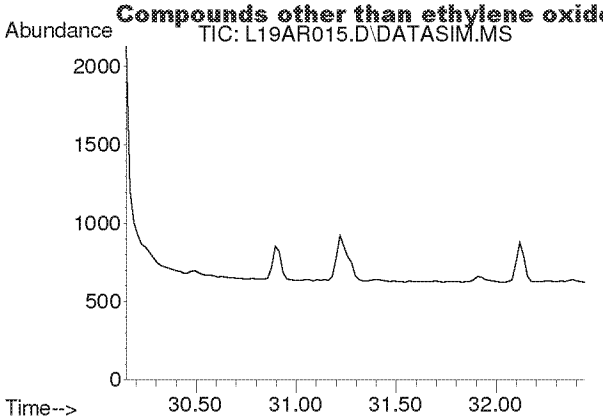
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

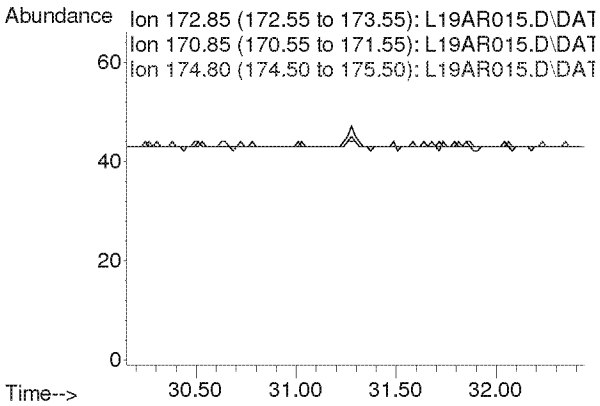


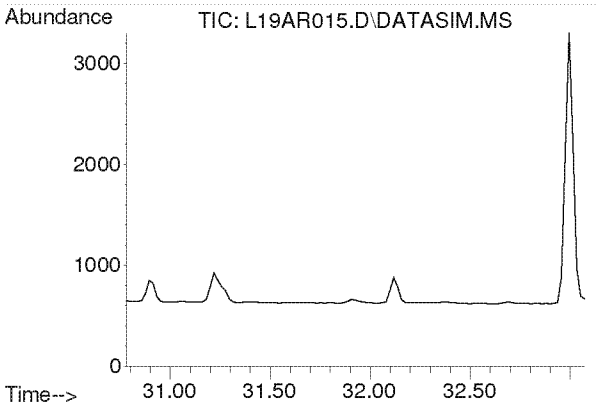
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



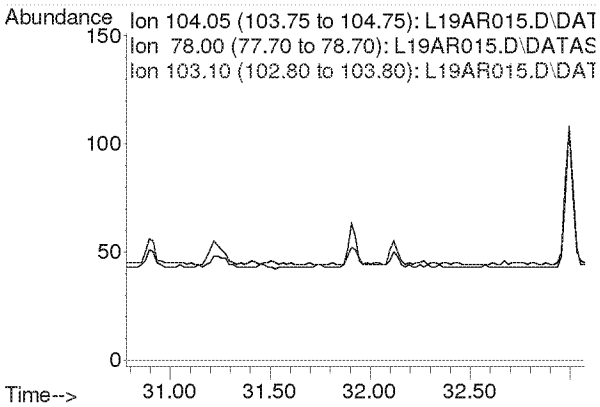


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

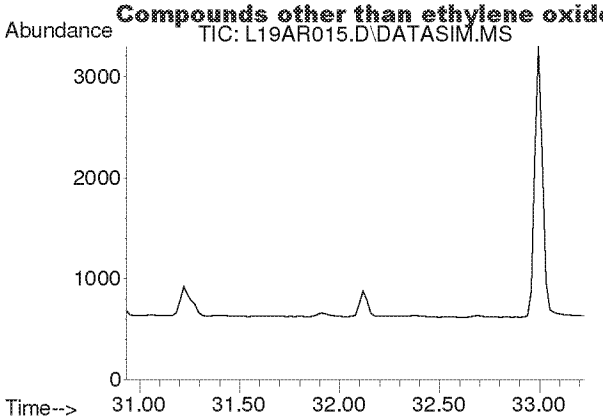
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

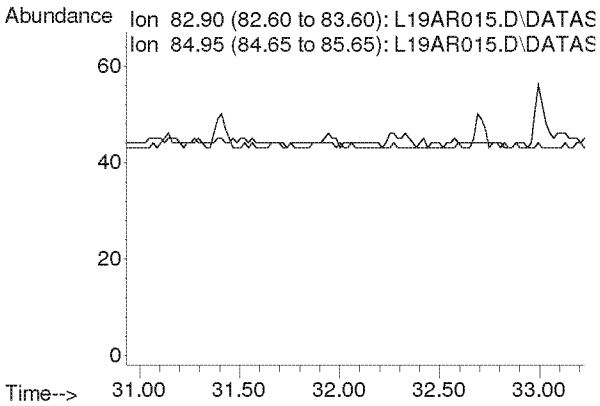


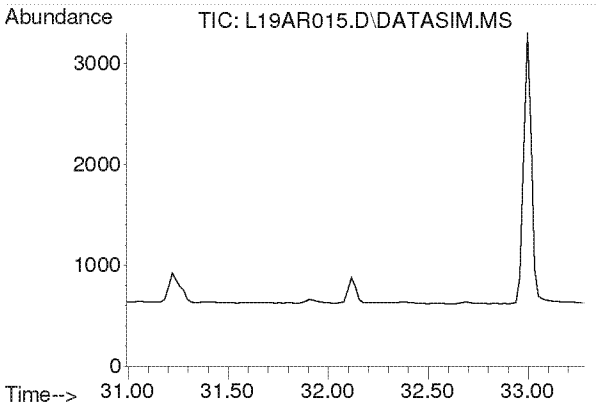
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



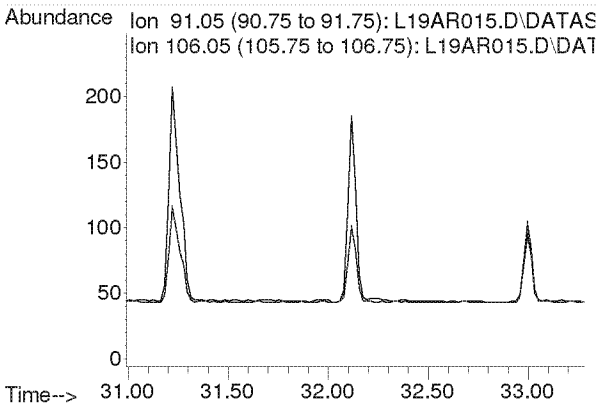


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

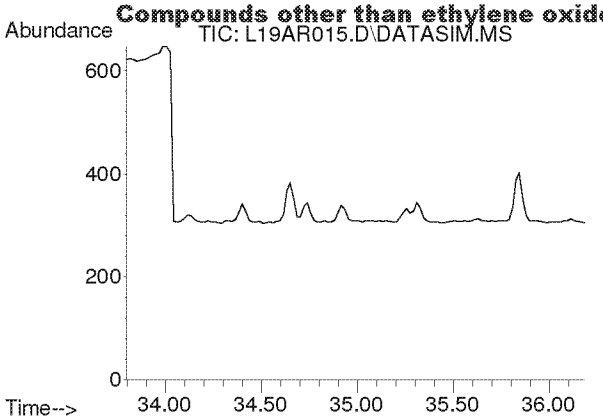
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

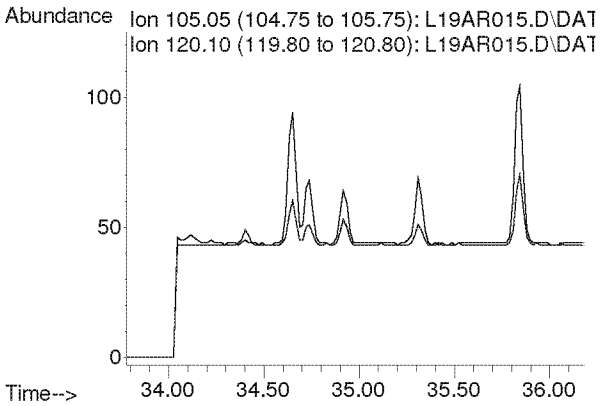


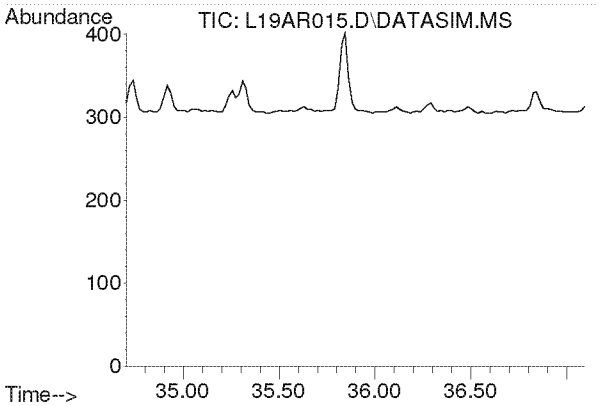
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



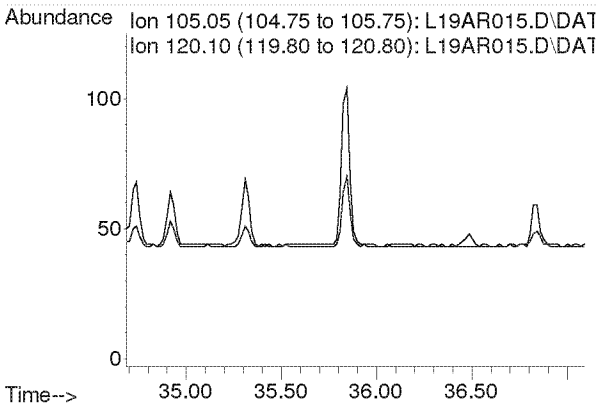


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

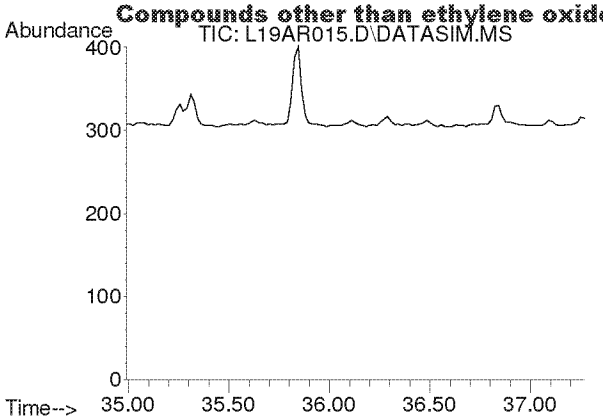
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

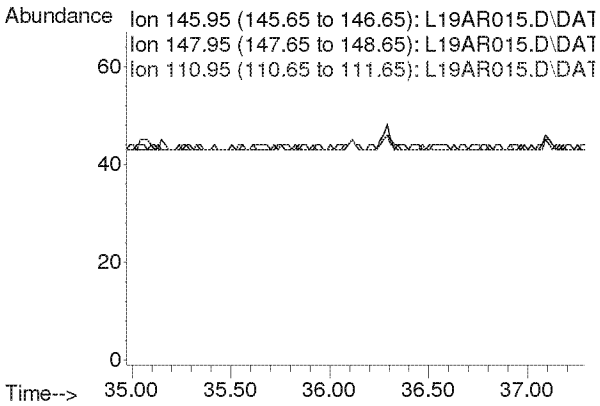


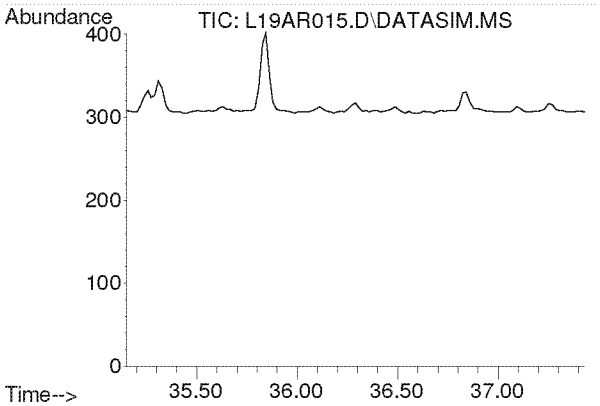
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



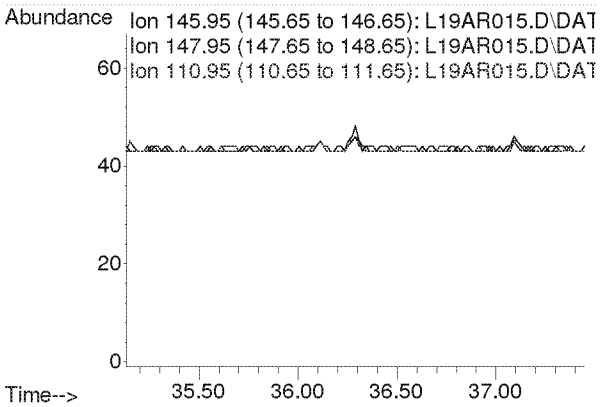


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

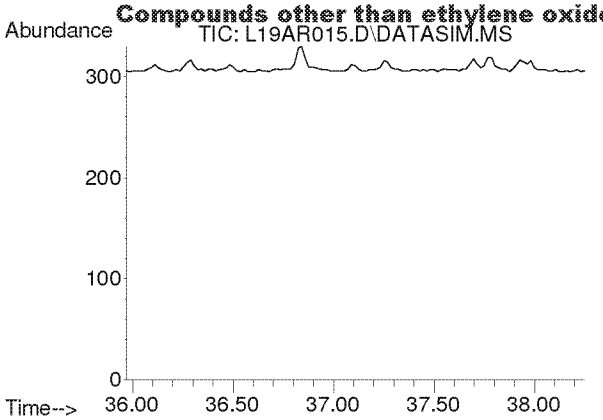
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

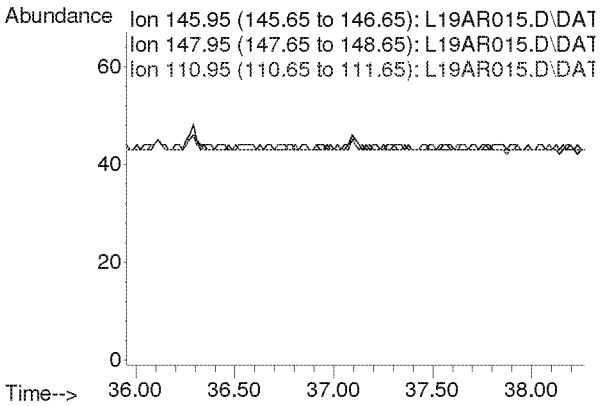


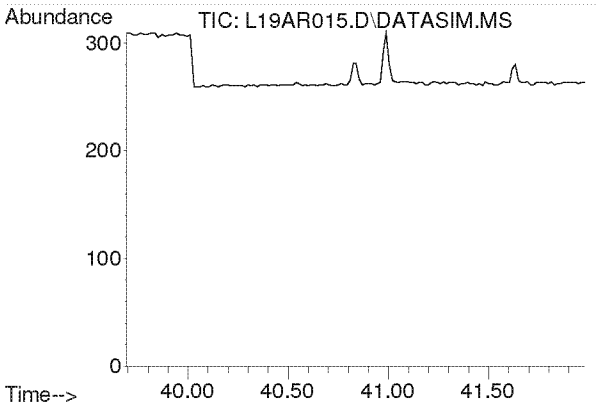
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



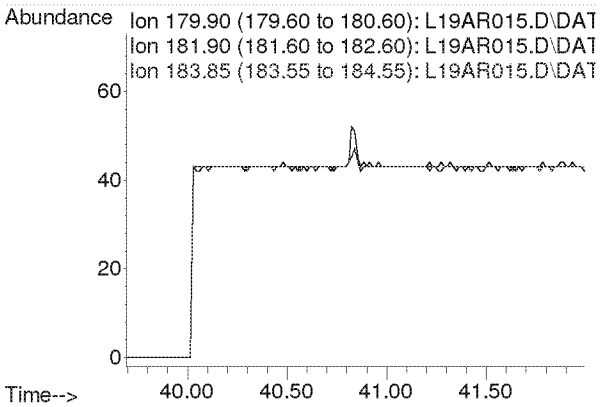


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

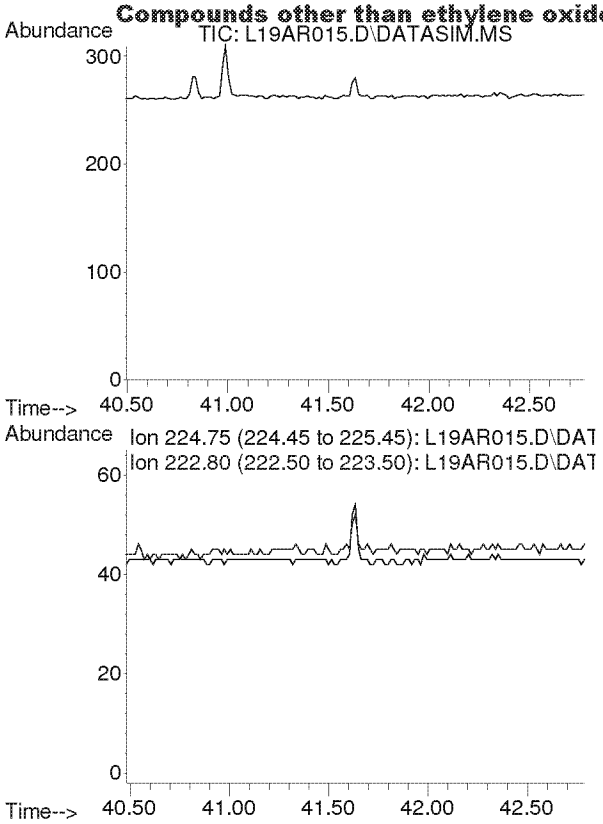
Lab File: L19AR015.D
Acq: 19 Jan 2019 1:43 am

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: L19AR015.D
Acq: 19 Jan 2019 1:43 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 : C:\msdchem\1\DATA\L19AR\
Data File : L19AR016.D
Acq On : 19 Jan 2019 2:45 am
Operator : MAH
Sample : 9011527-05
Misc : WILLOW POND PARK 1/13/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 09:24:18 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

ETO+ only

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.990	66	48601	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.148	114	116079	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	91098	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	0.000	29	0	N.D. d Su	
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	

✓ DAT 2/1/19

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AR\
Data File : L19AR016.D
Acq On : 19 Jan 2019 2:45 am
Operator : MAH
Sample : 9011527-05
Misc : WILLOW POND PARK 1/13/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 09:24:18 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

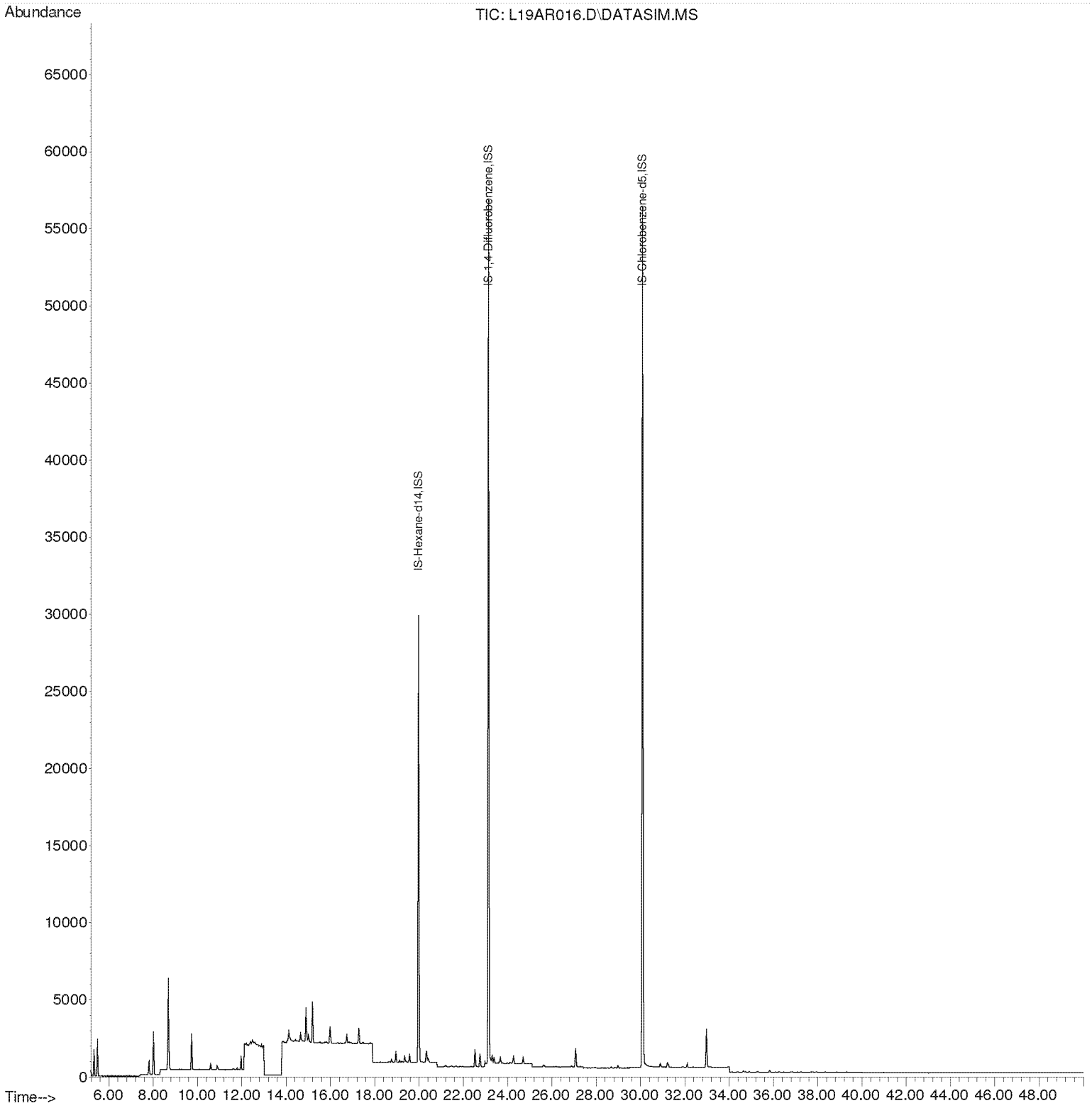
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	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

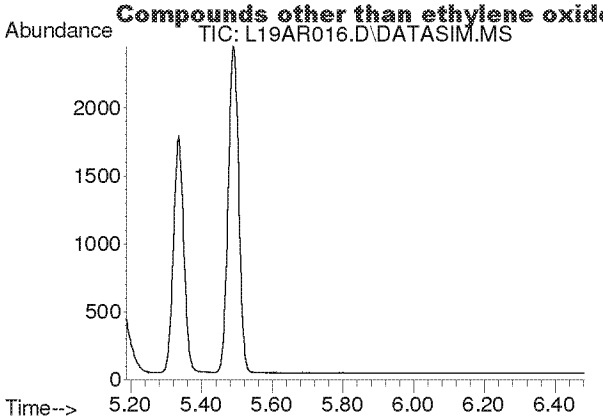
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR016.D
Acq On : 19 Jan 2019 2:45 am
Operator : MAH
Sample : 9011527-05
Misc : WILLOW POND PARK 1/13/19
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 23 08:39:30 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



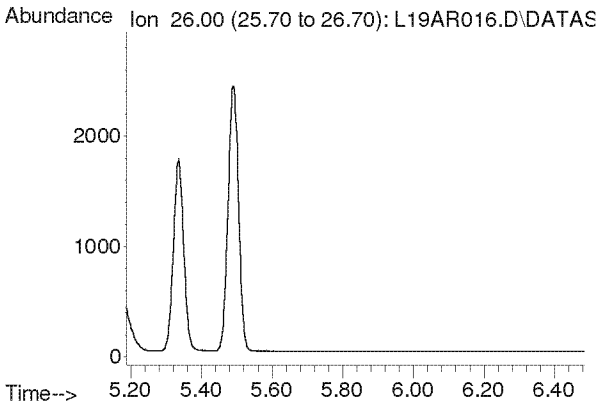
Compounds other than ethylene oxide were not quantitated.

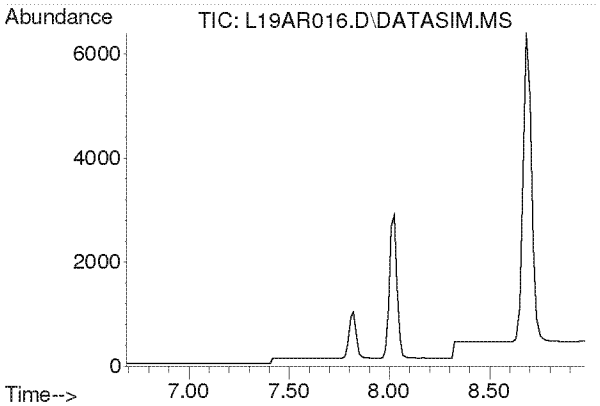


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 26



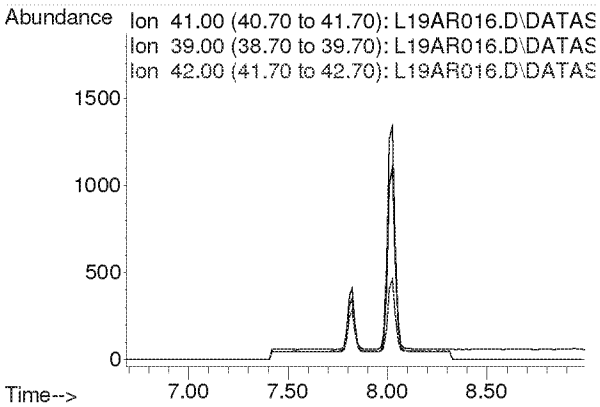


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

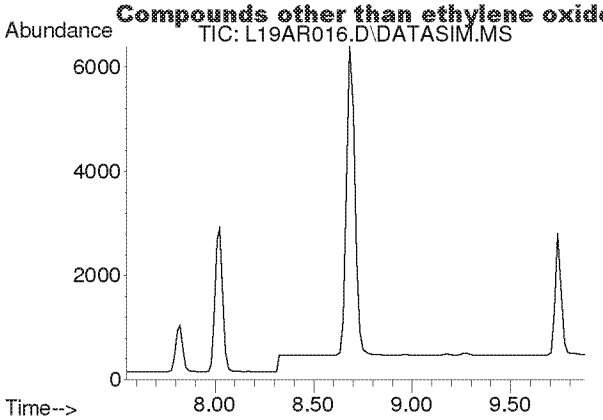
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

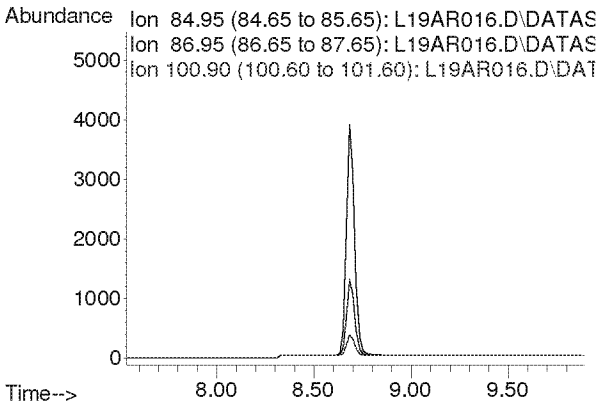


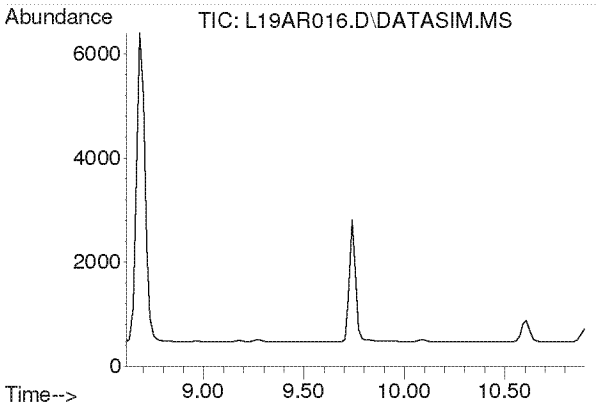
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



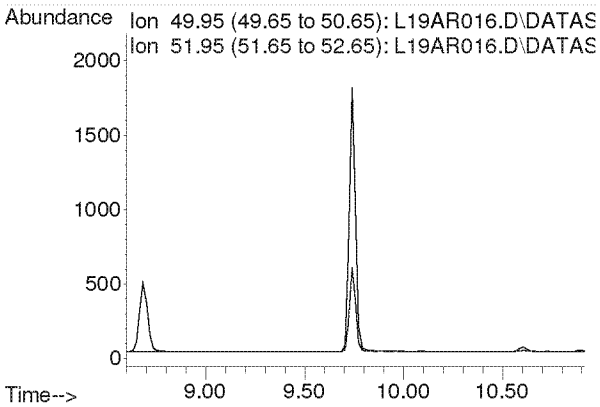


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

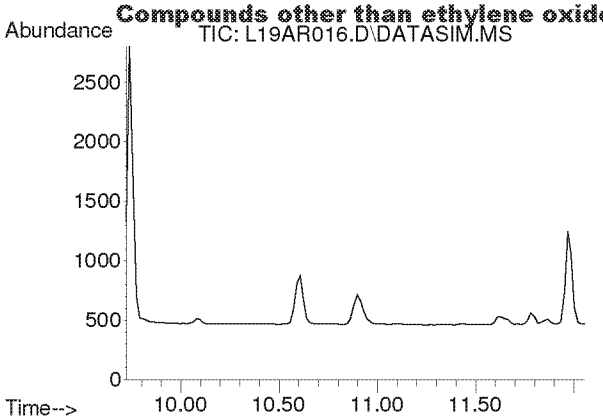
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

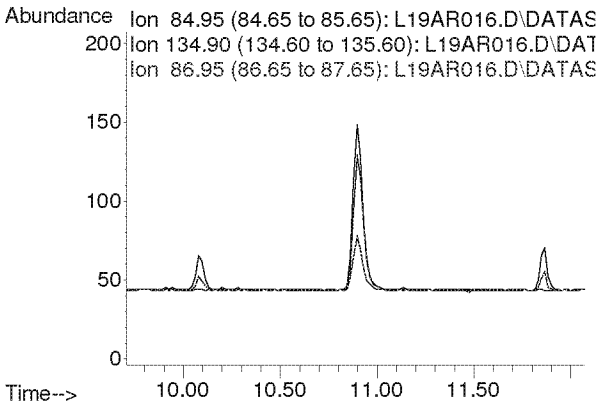


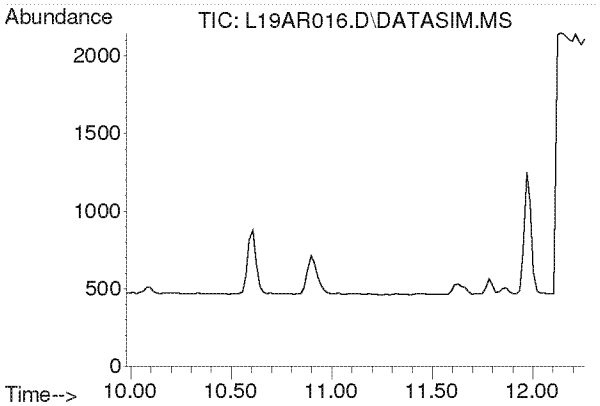
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



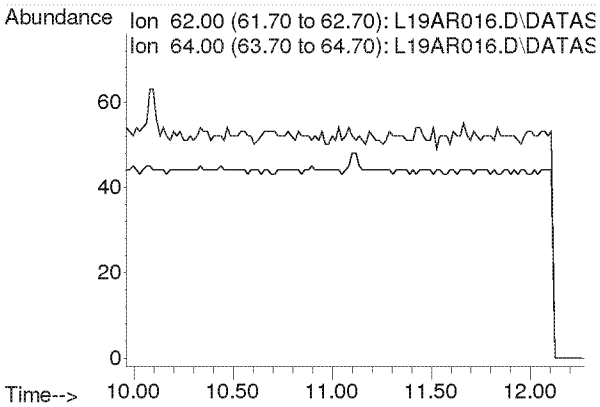


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

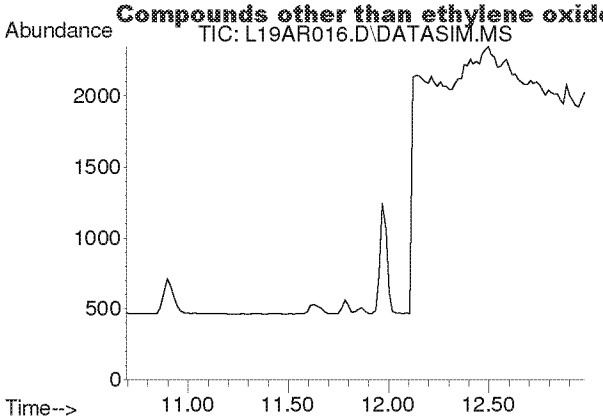
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

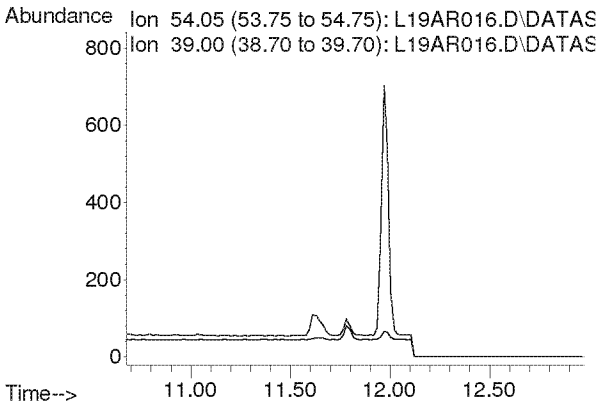


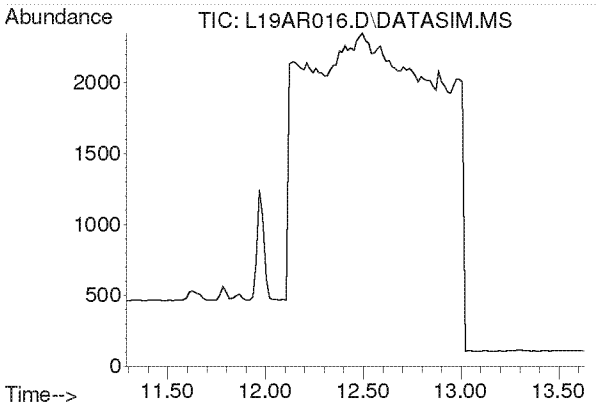
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



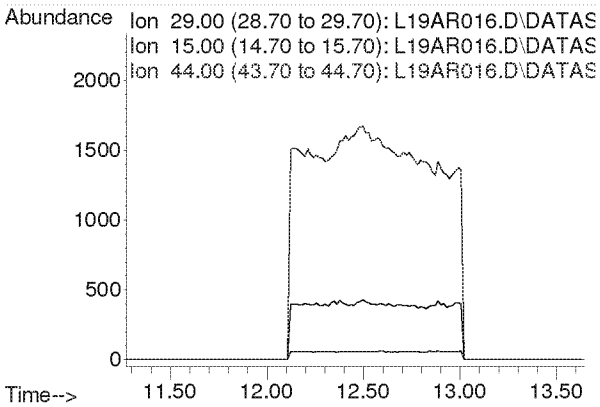


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

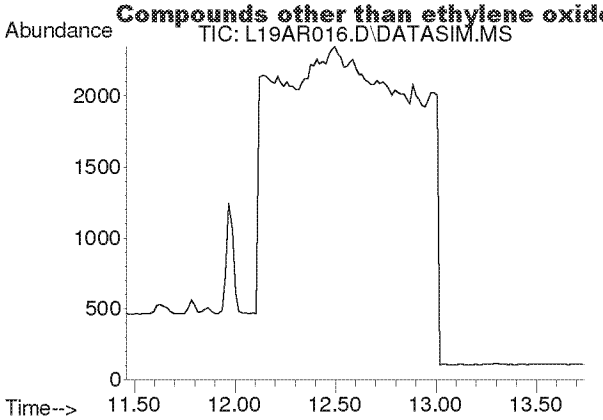
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

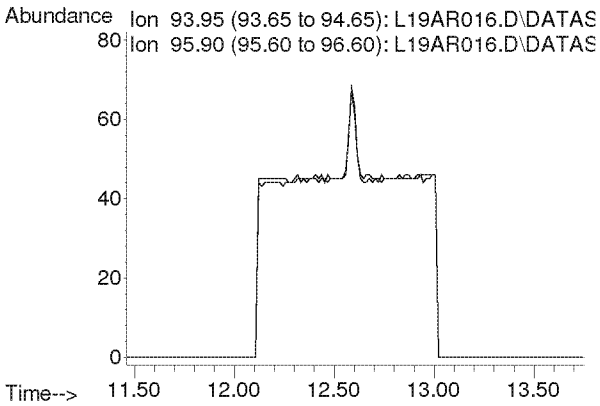


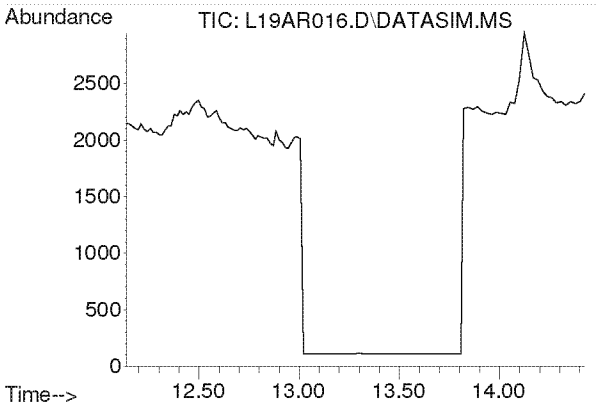
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



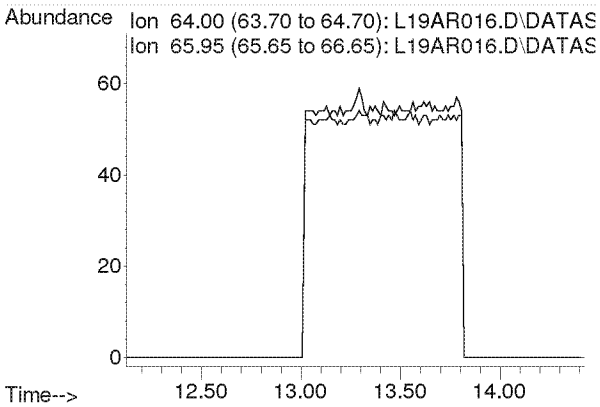


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

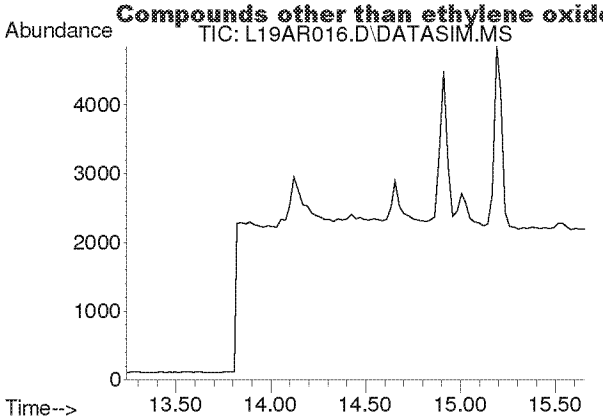
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

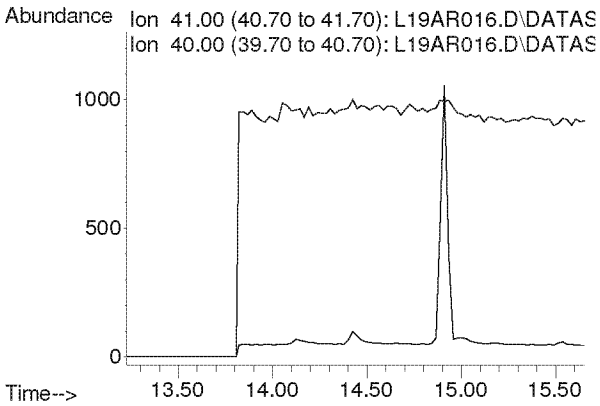


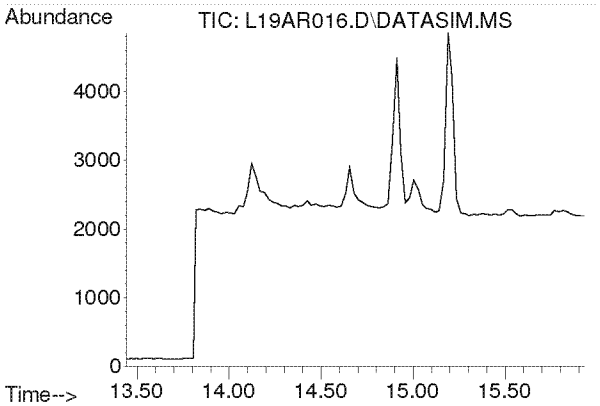
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



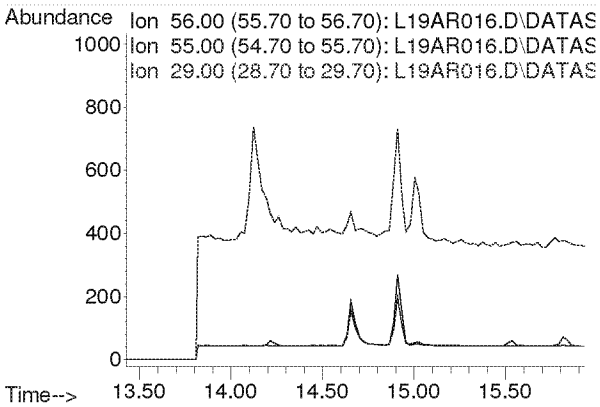


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

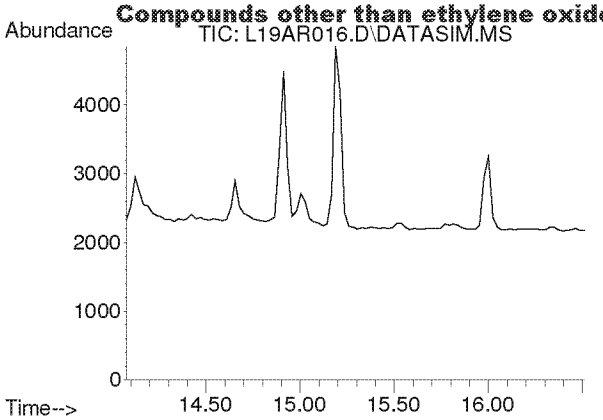
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

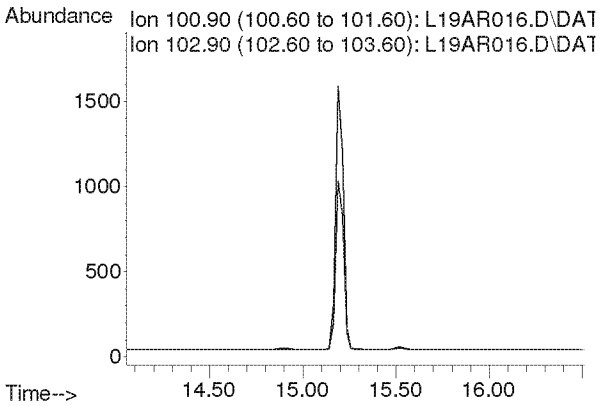


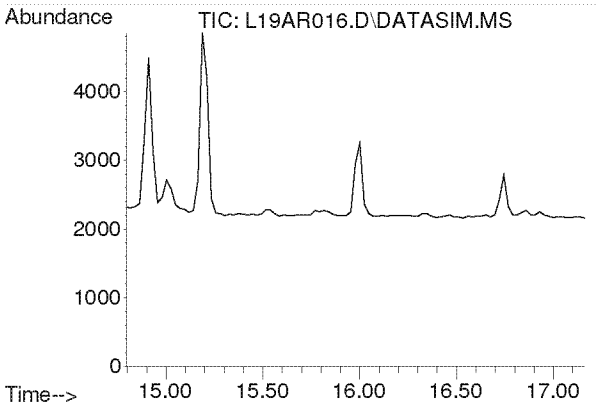
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



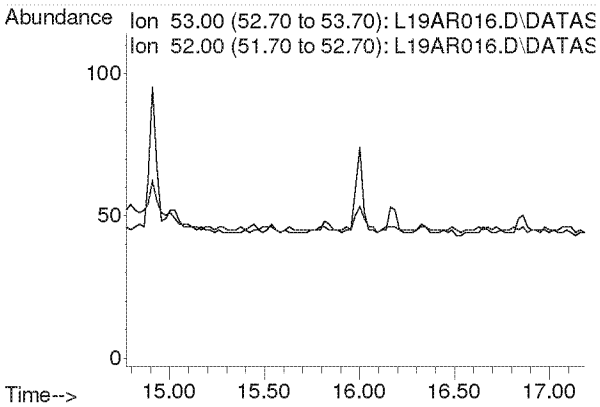


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

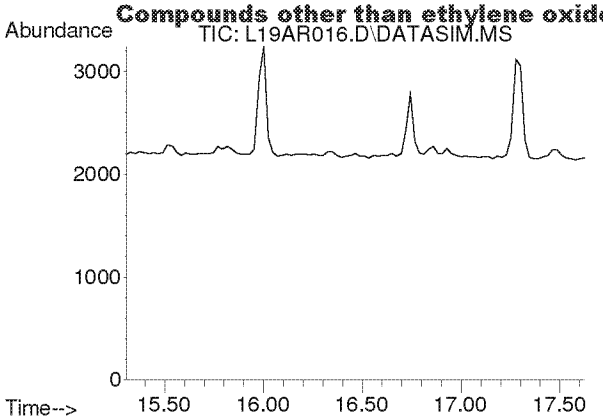
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

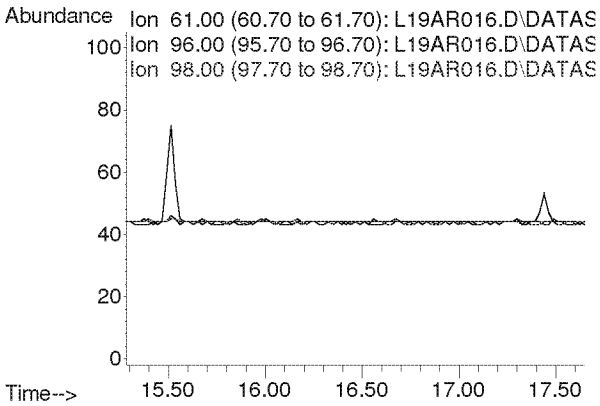


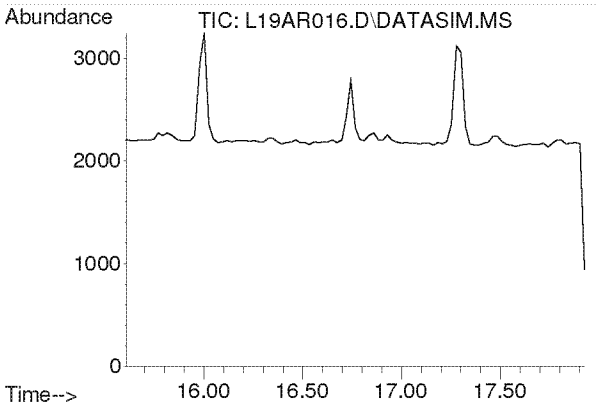
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



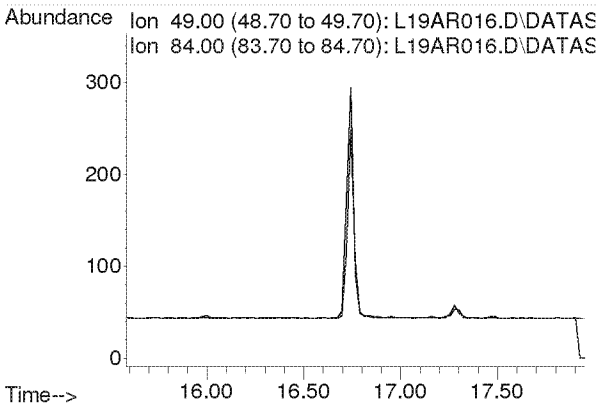


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

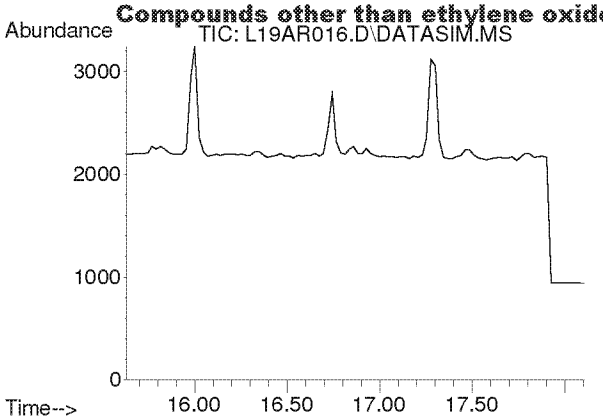
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

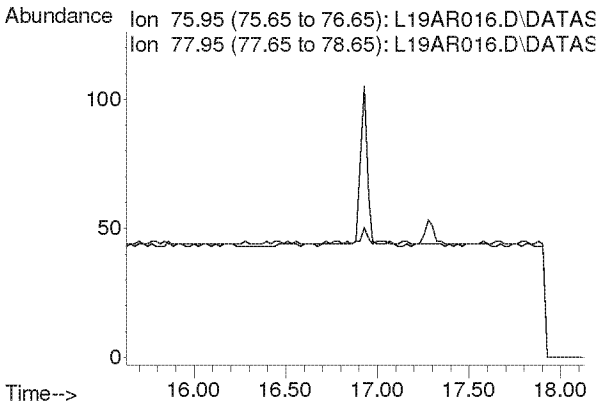


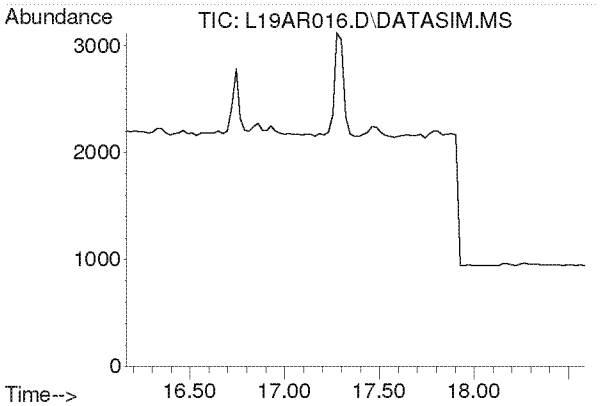
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



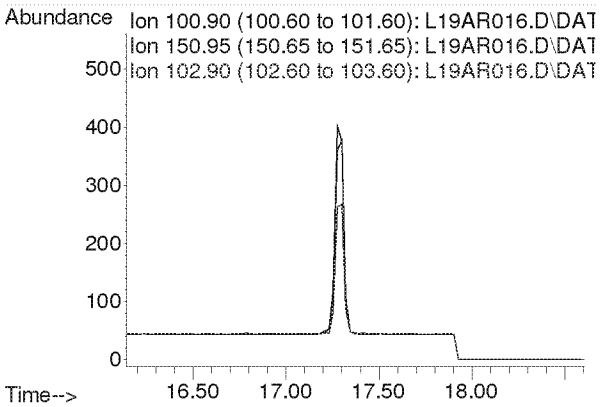


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

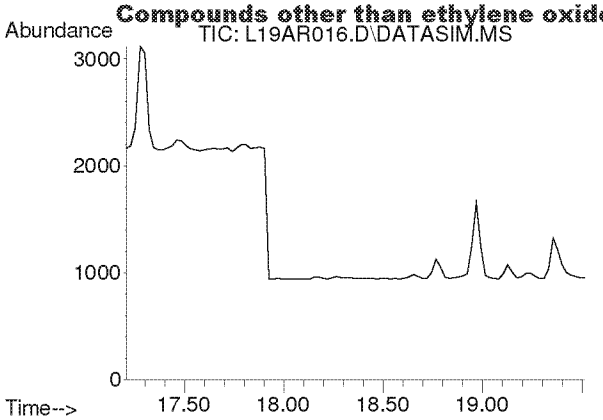
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

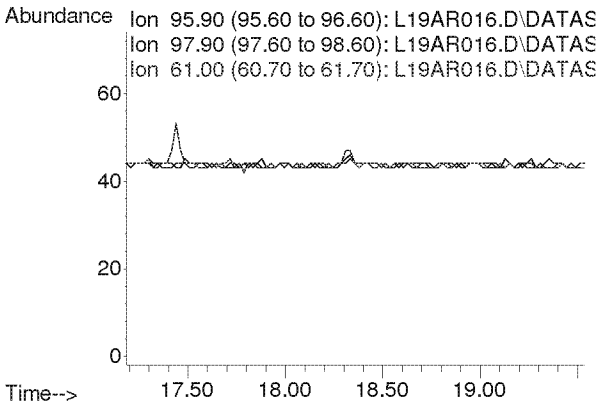


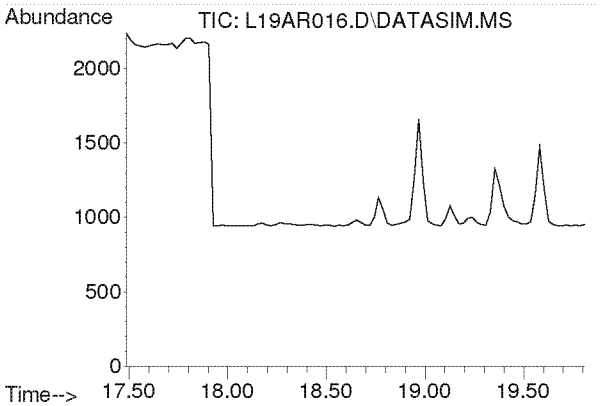
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



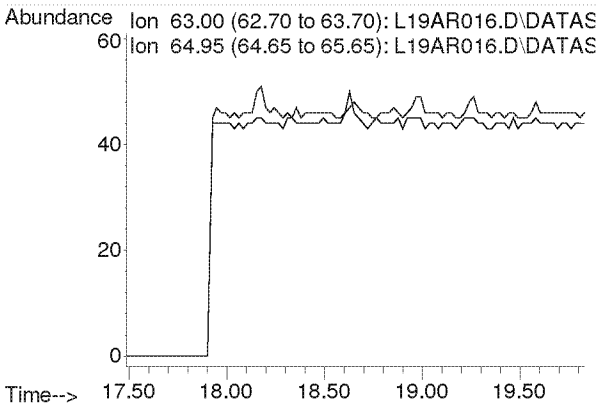


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

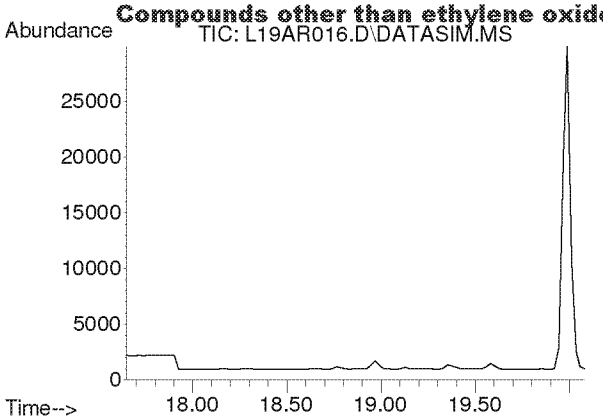
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

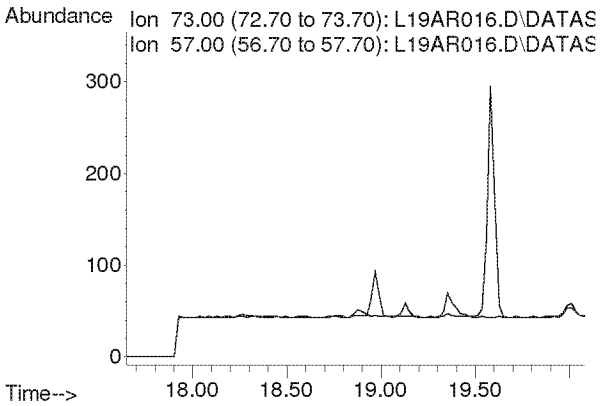


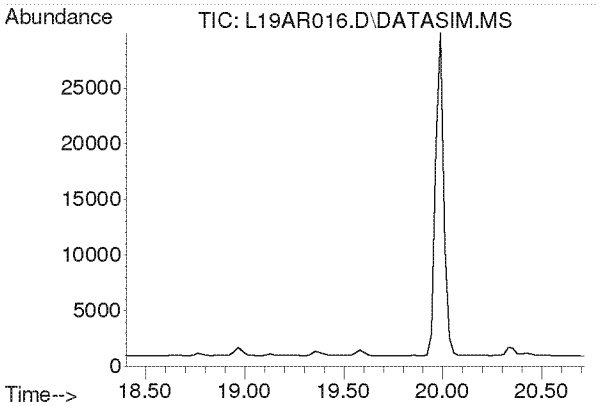
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



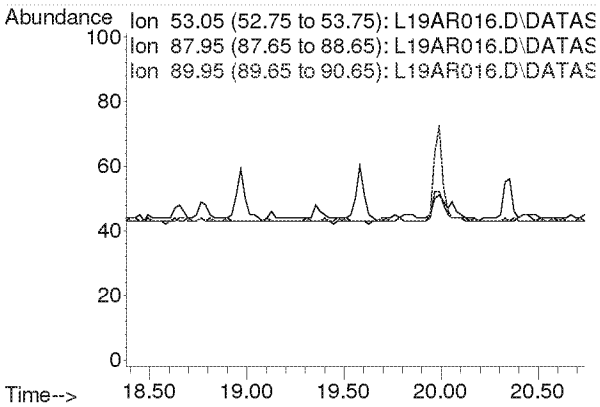


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

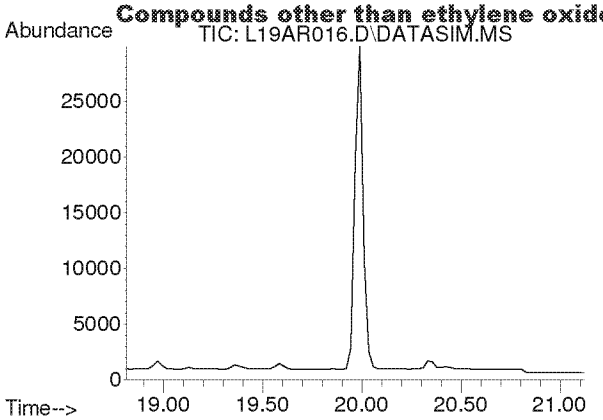
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

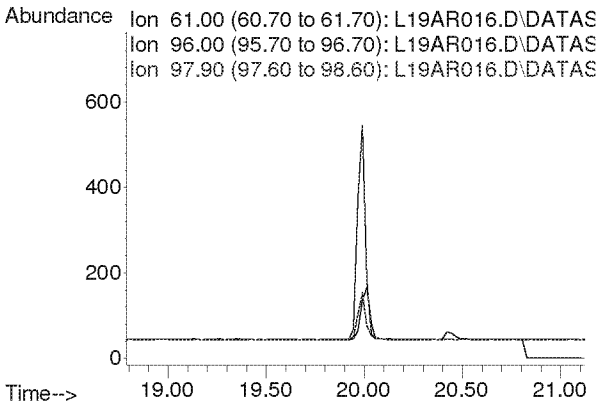


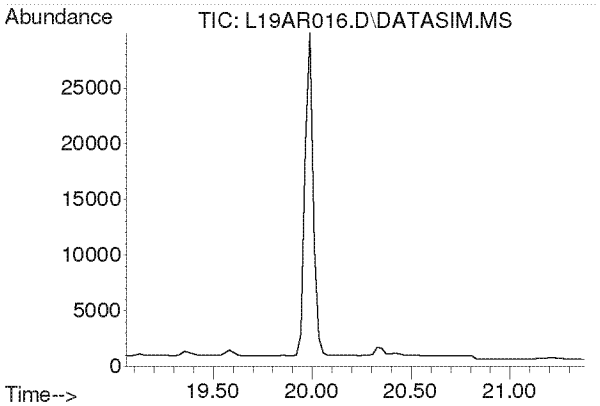
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



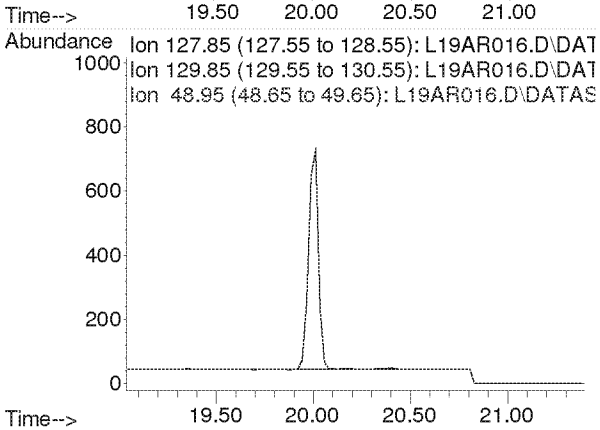


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

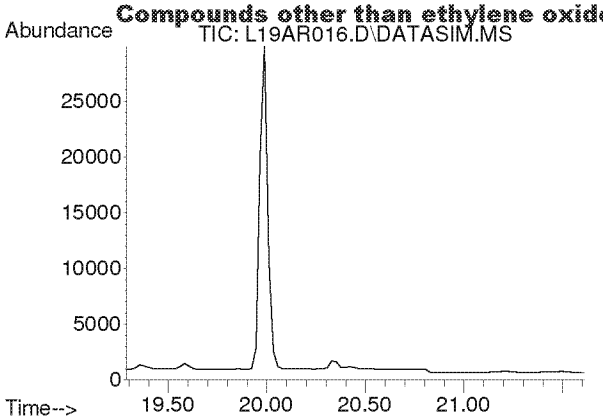
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

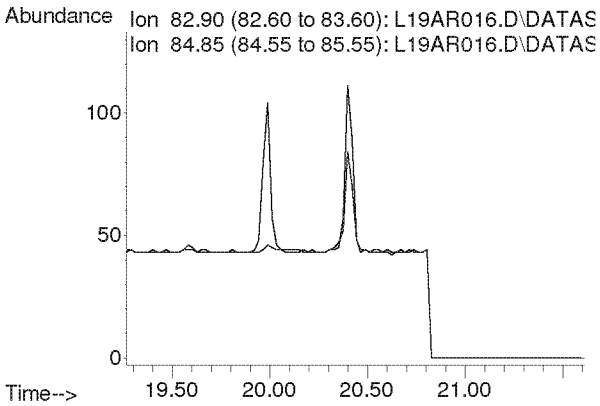


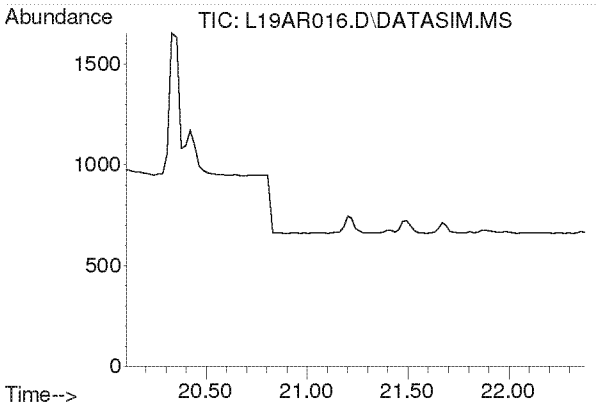
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



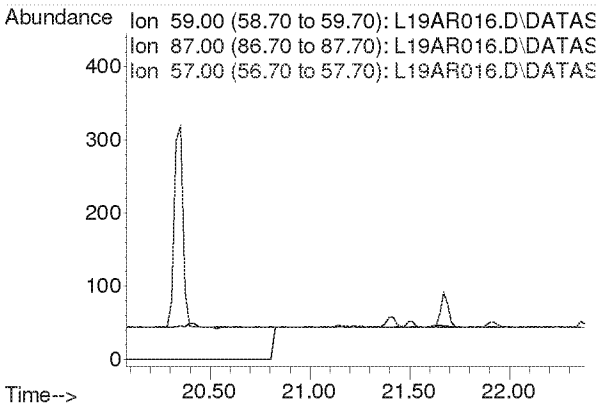


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

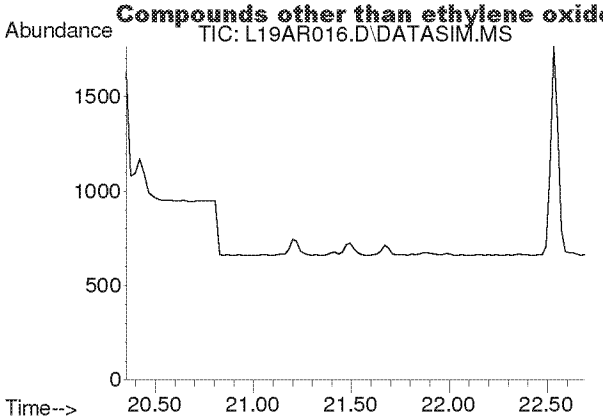
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

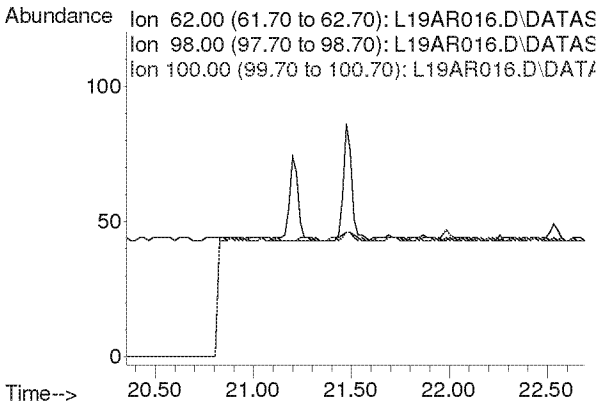


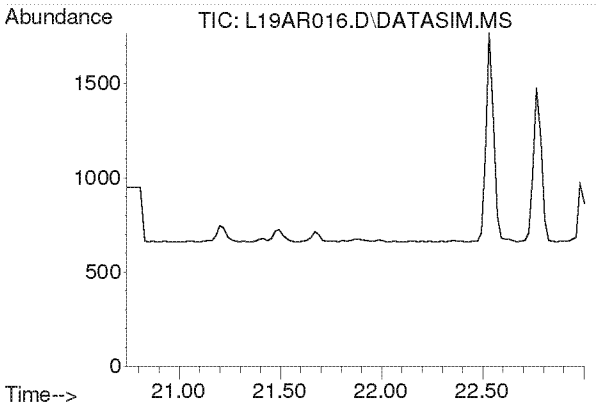
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



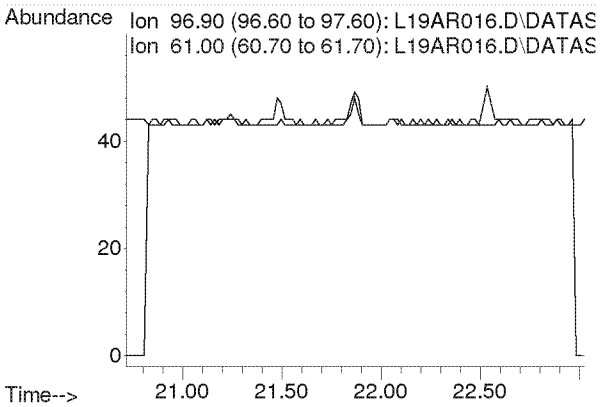


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

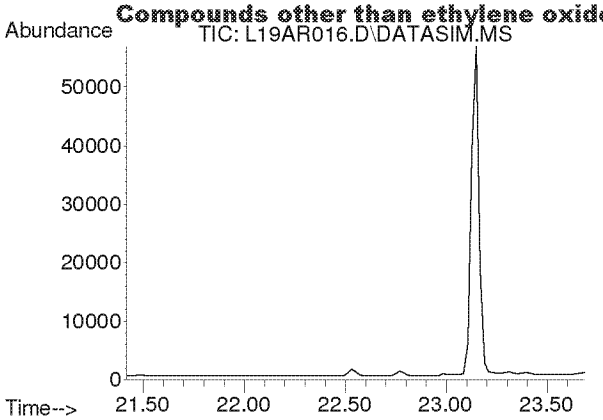
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

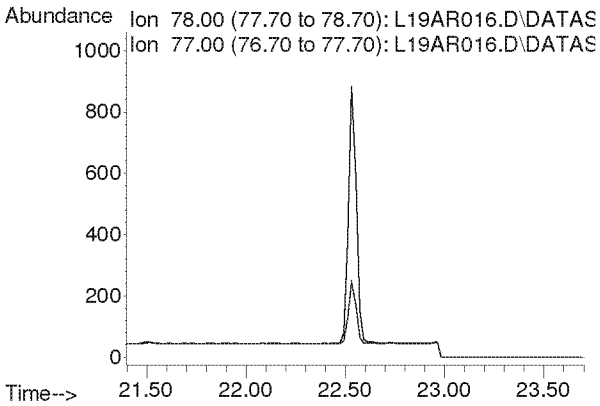


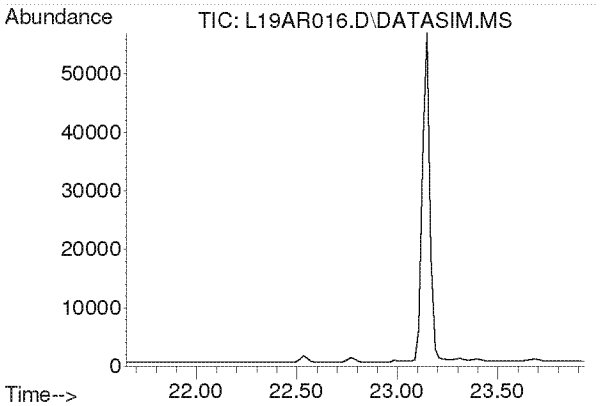
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



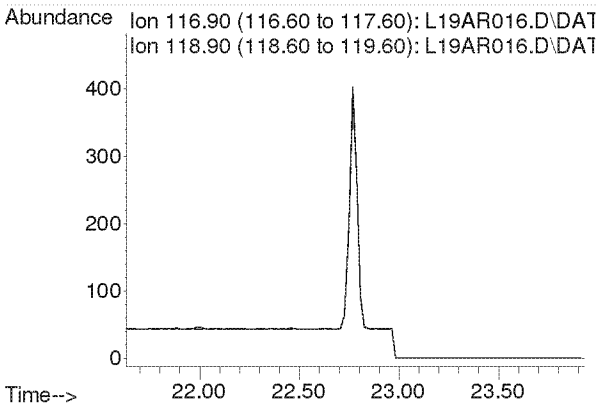


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

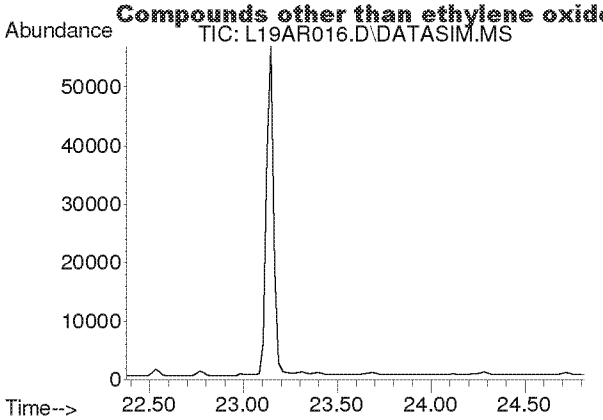
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

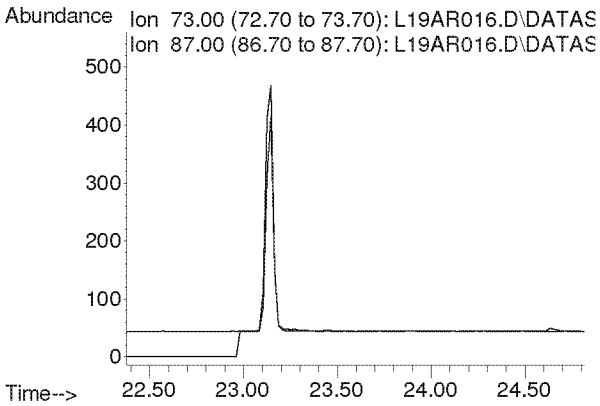


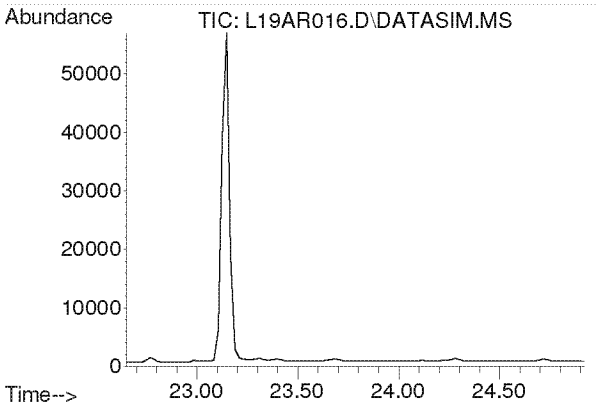
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



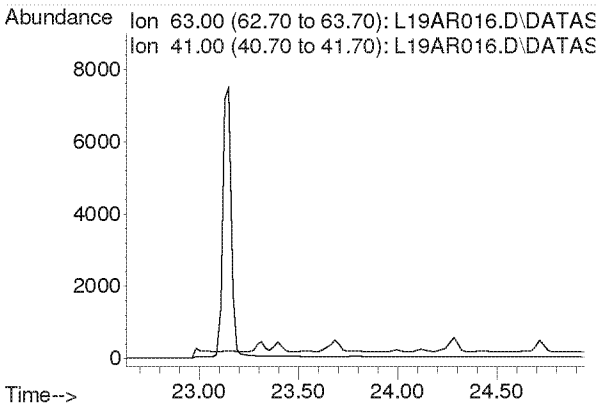


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

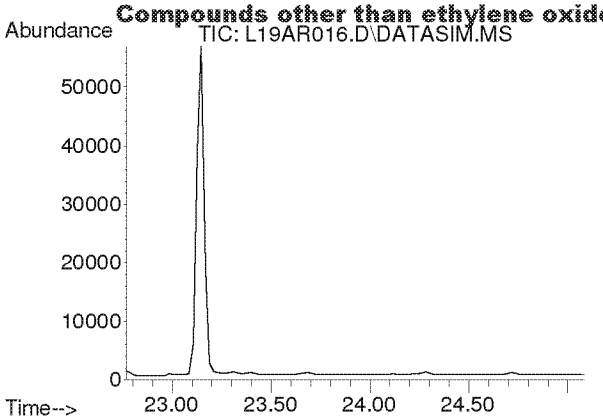
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

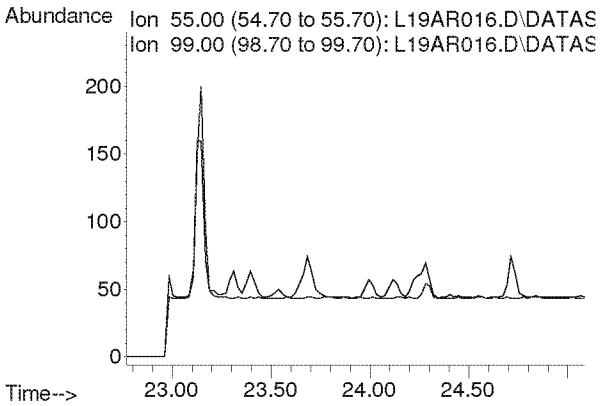


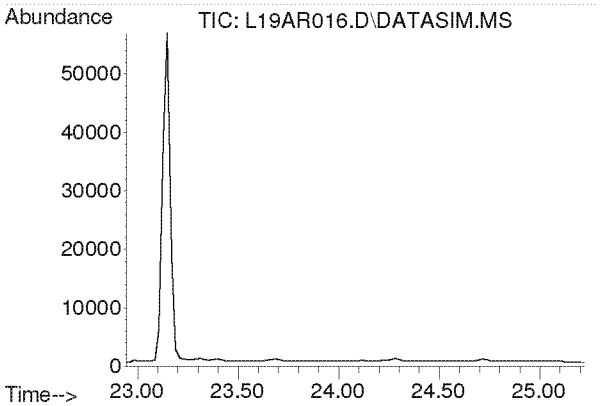
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



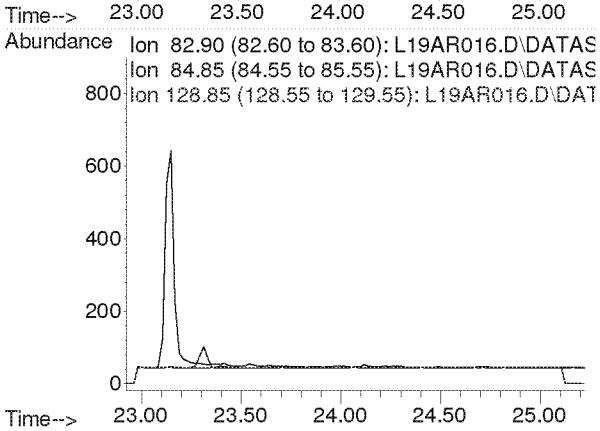


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

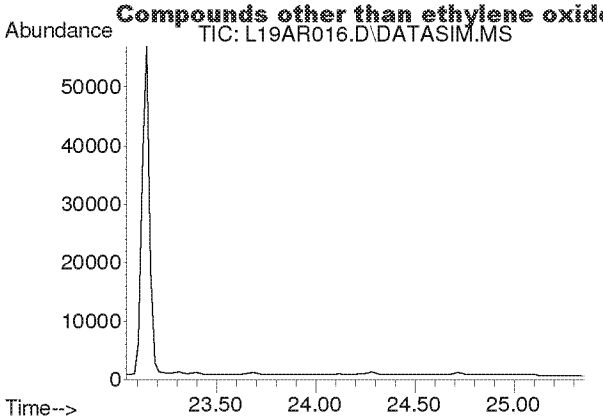
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

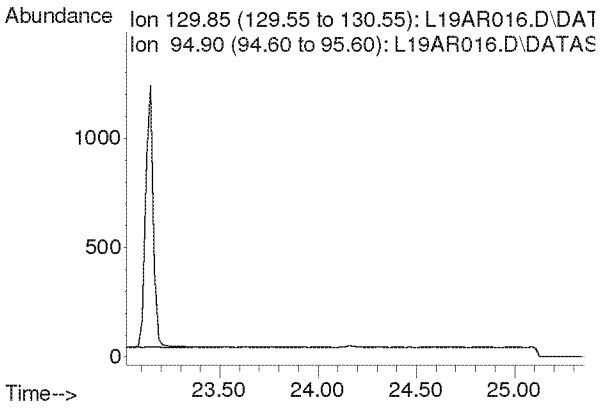


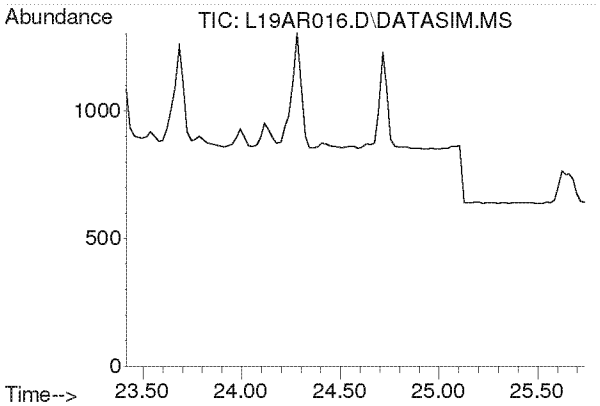
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



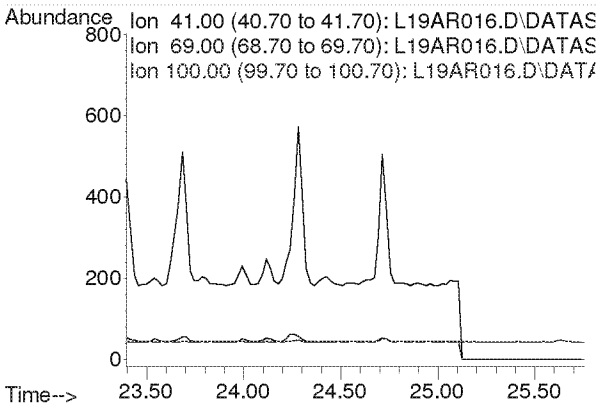


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

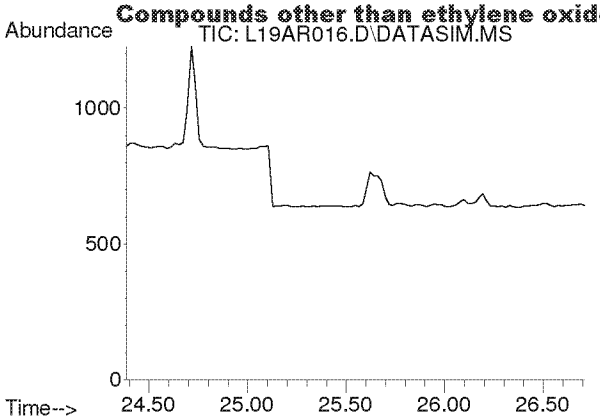
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

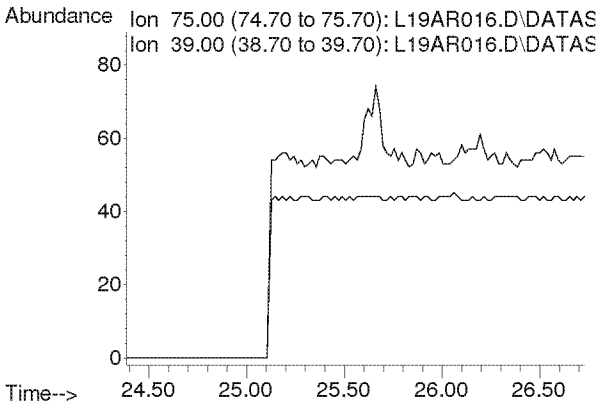


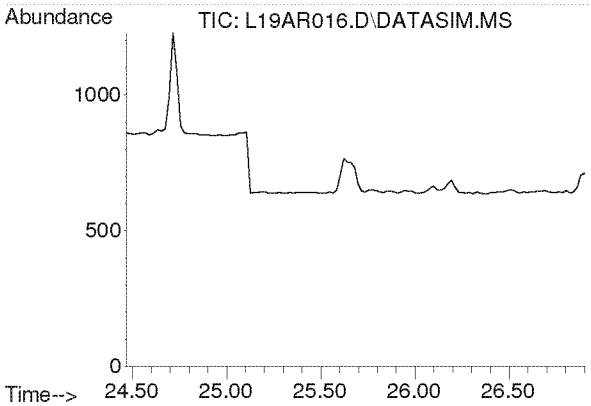
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



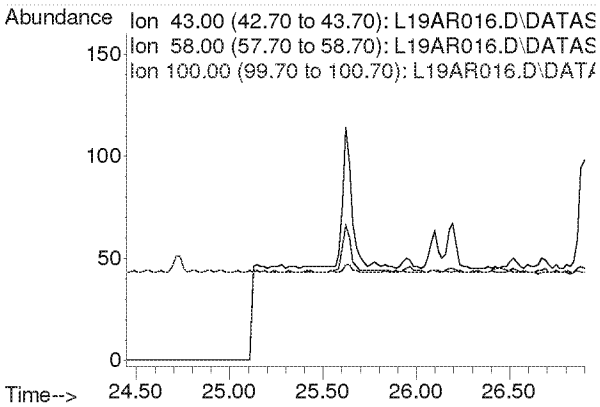


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

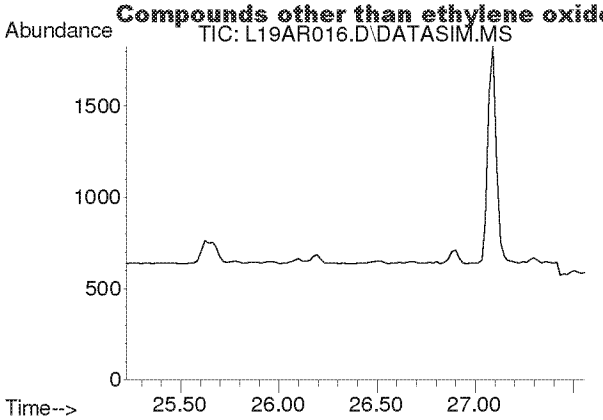
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

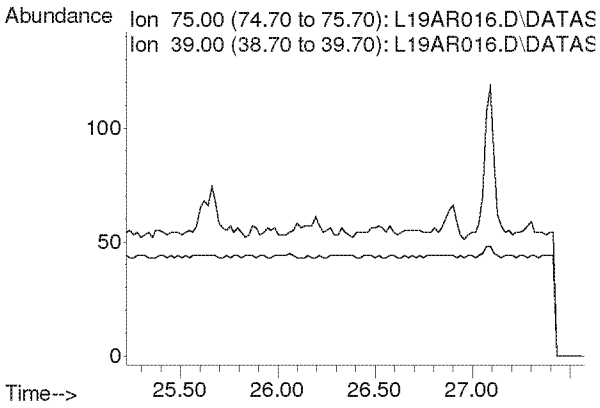


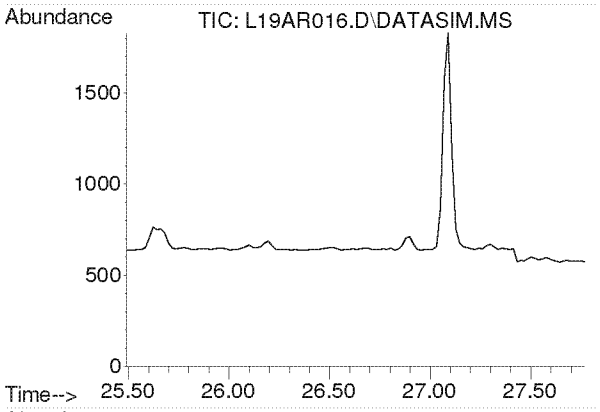
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



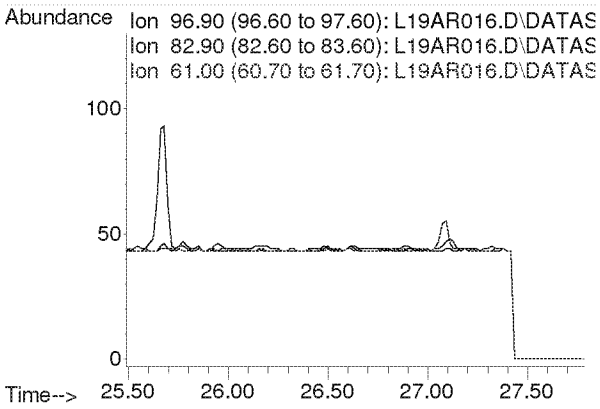


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

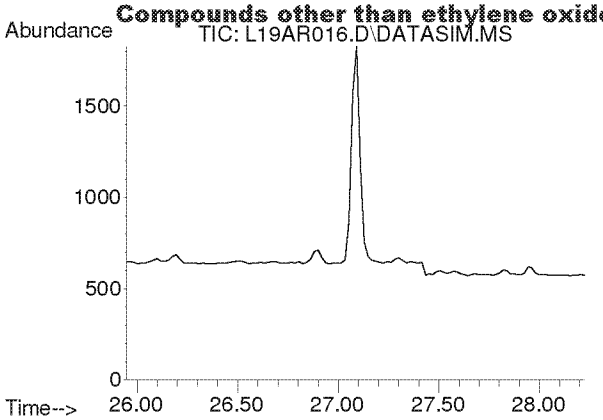
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

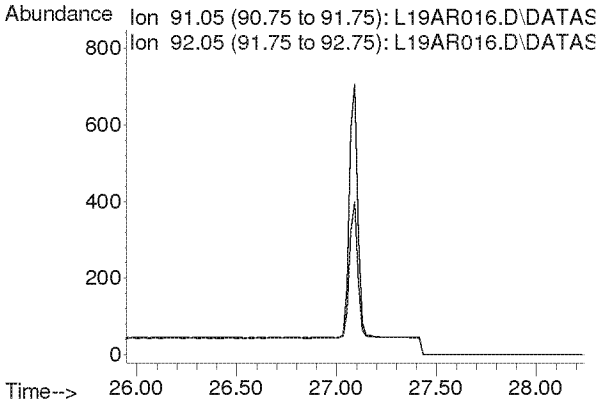


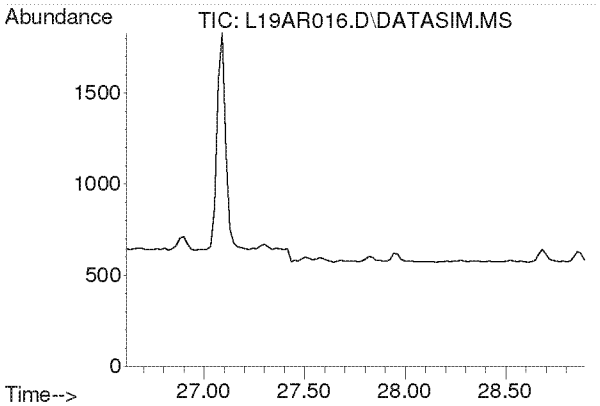
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



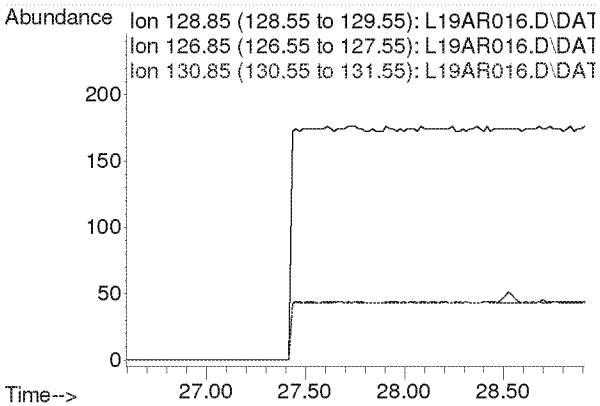


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

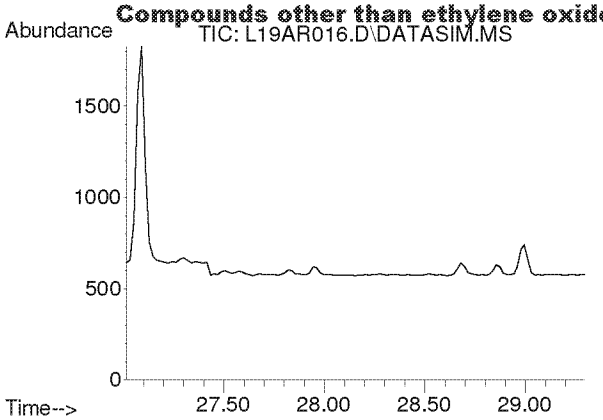
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

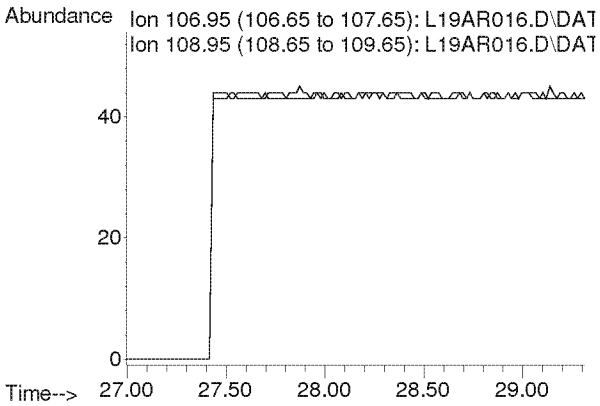


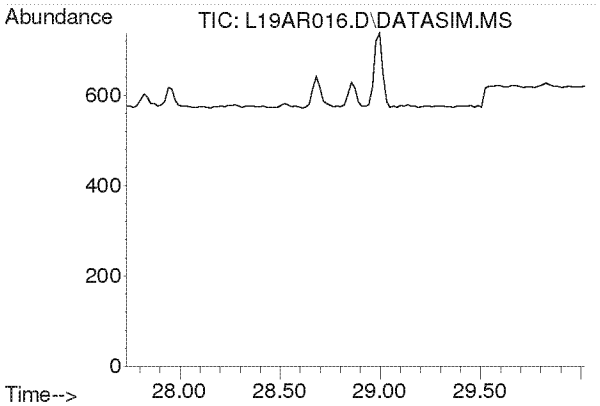
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



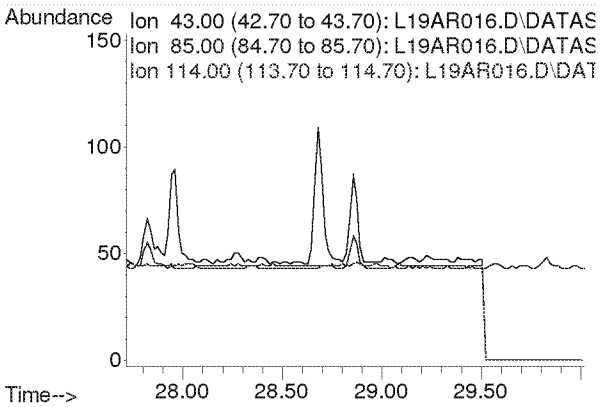


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

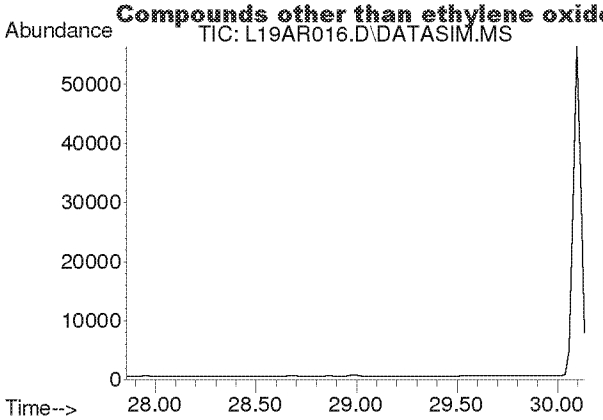
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

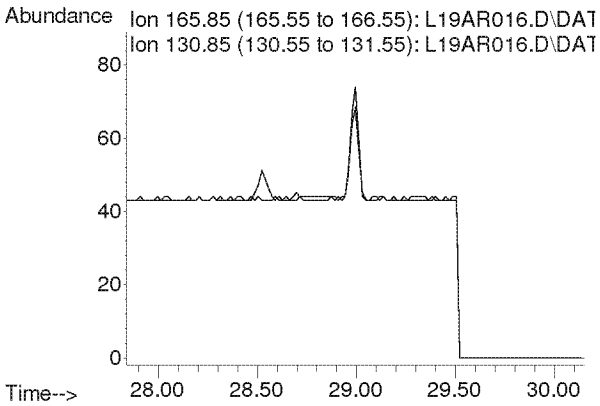


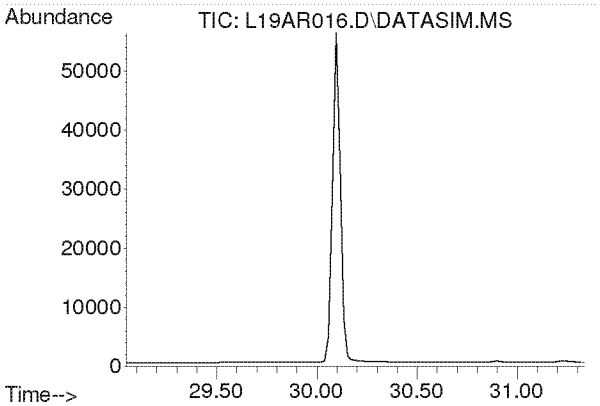
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



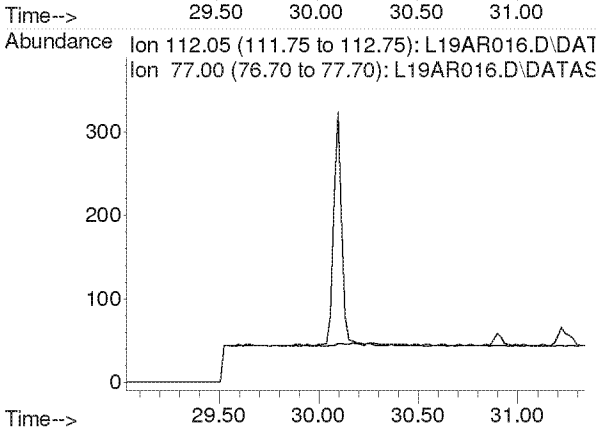


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

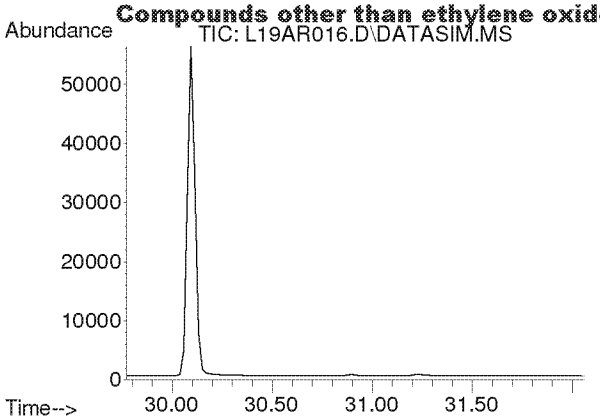
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

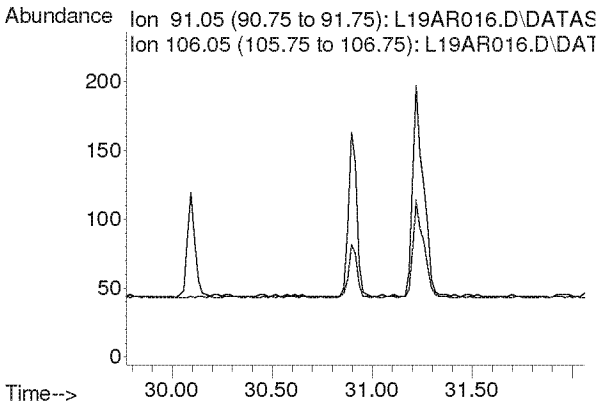


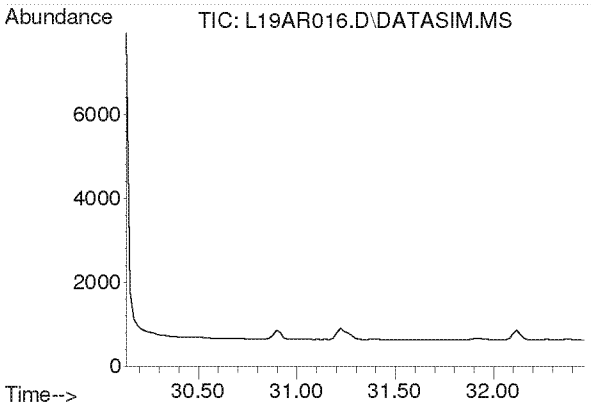
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



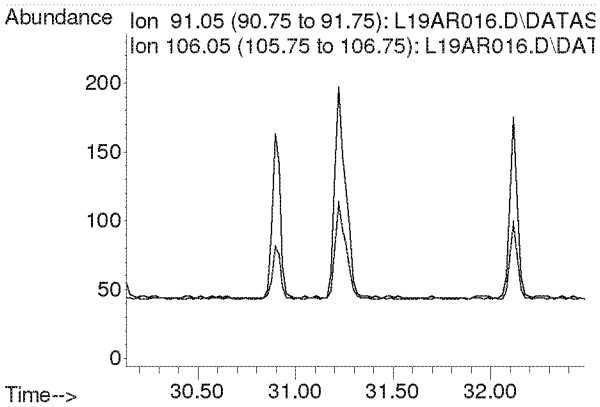


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

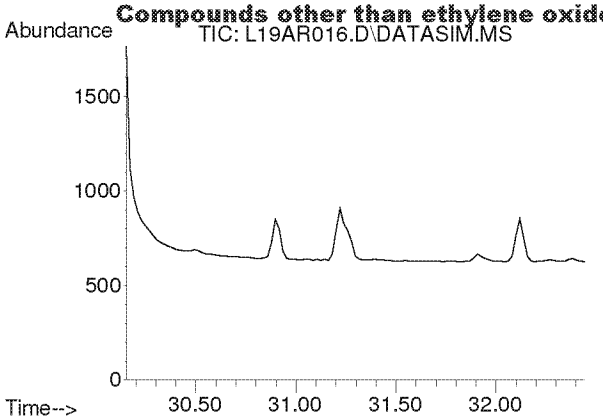
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

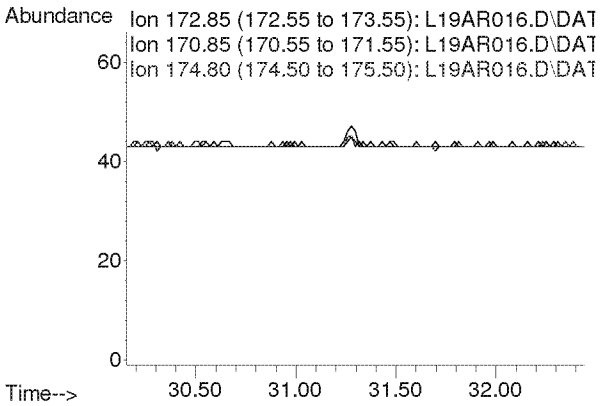


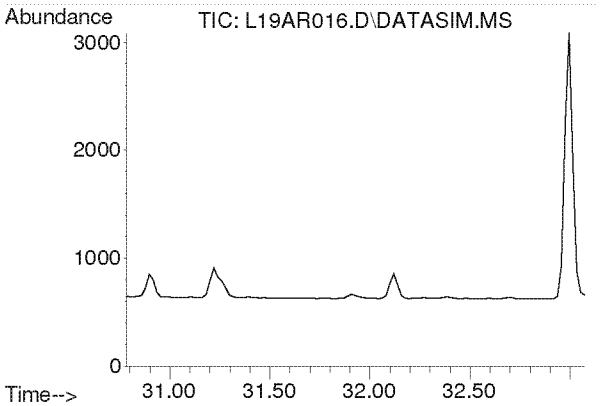
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



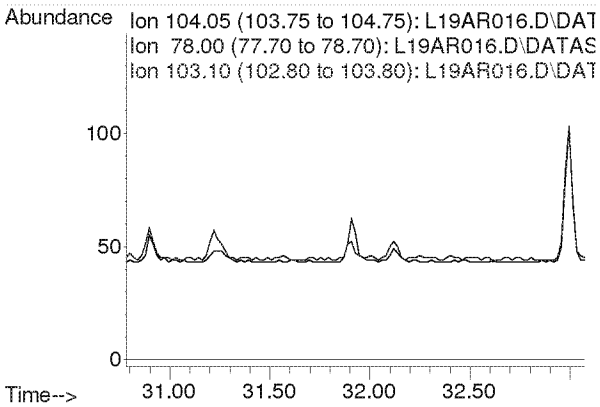


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

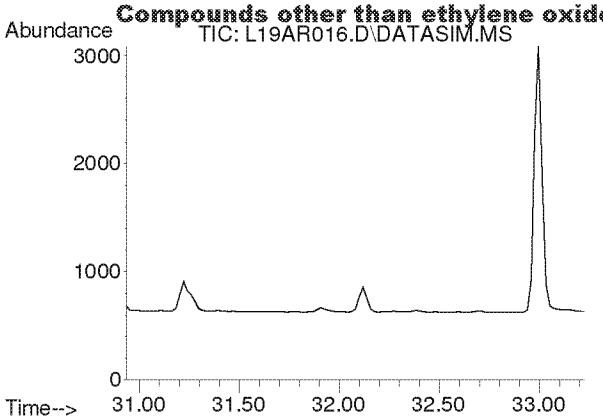
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

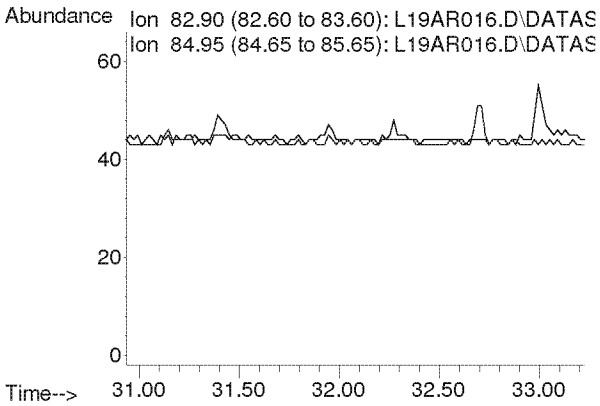


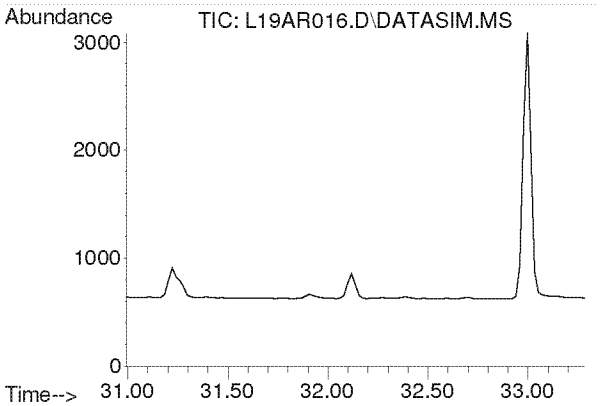
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



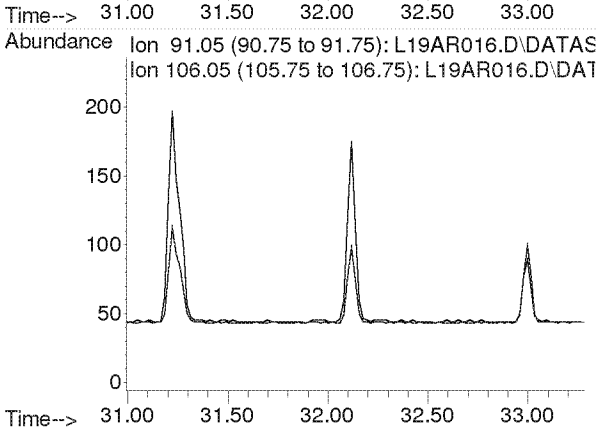


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

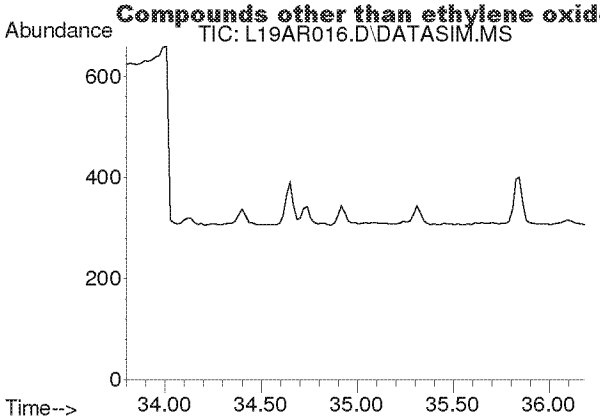
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

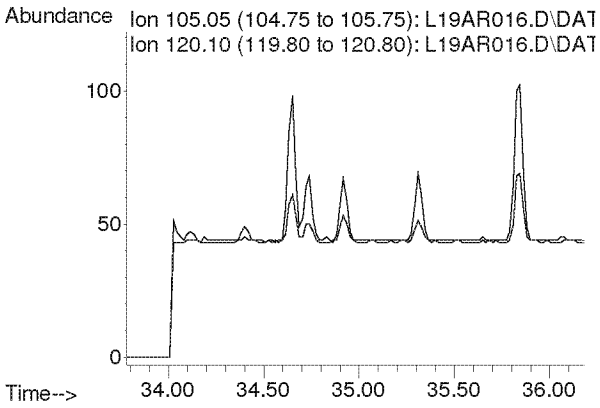


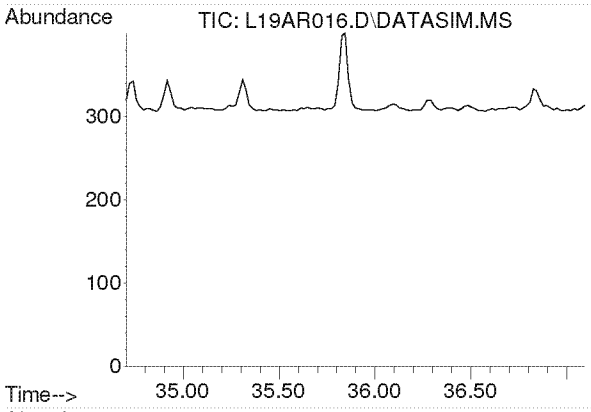
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



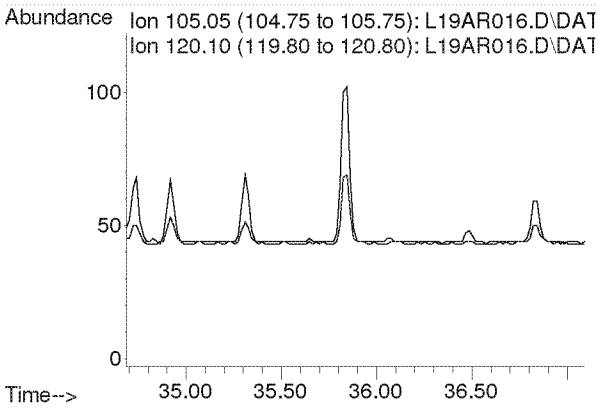


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

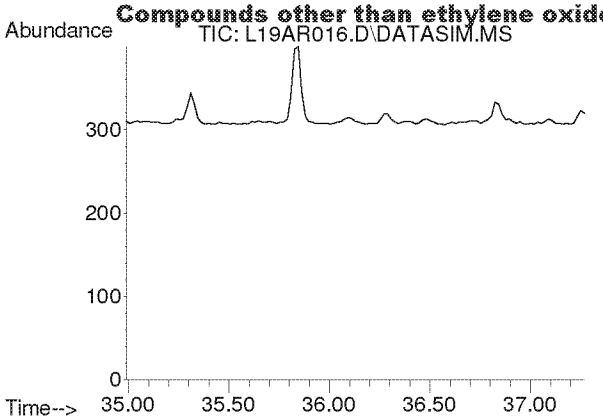
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

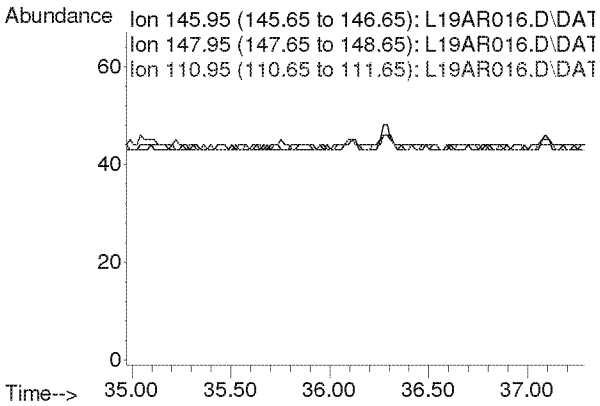


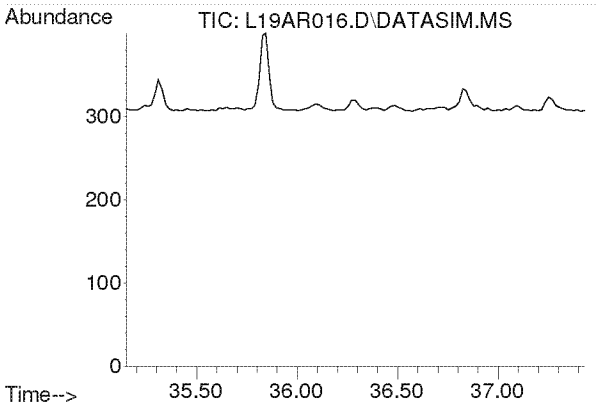
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



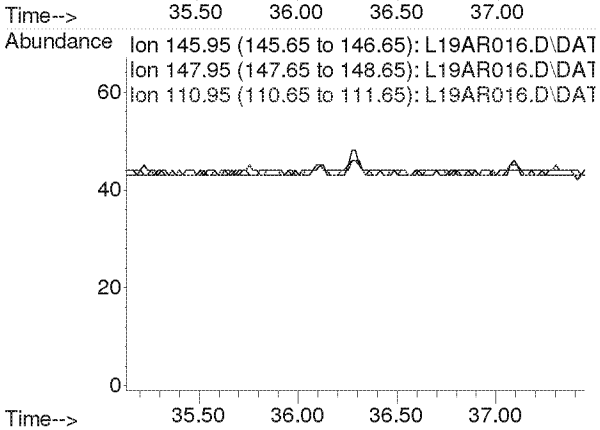


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

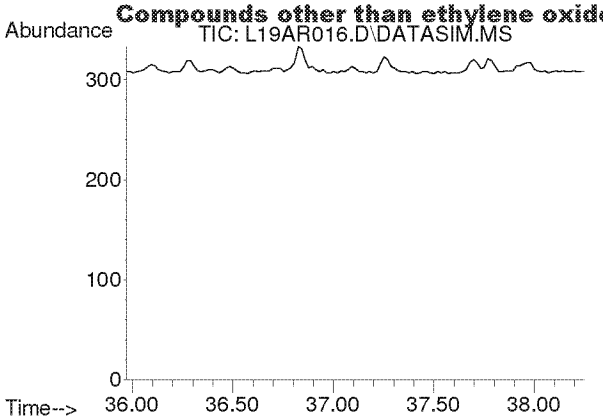
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

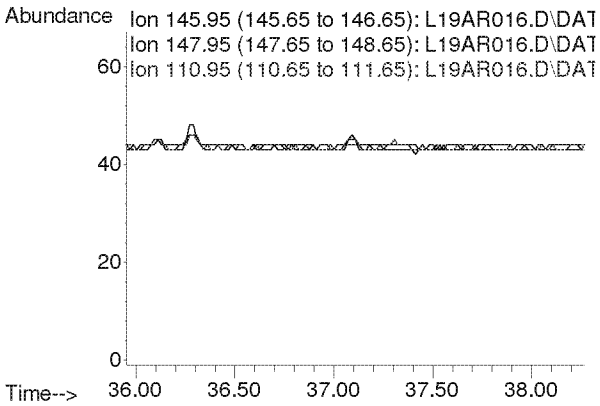


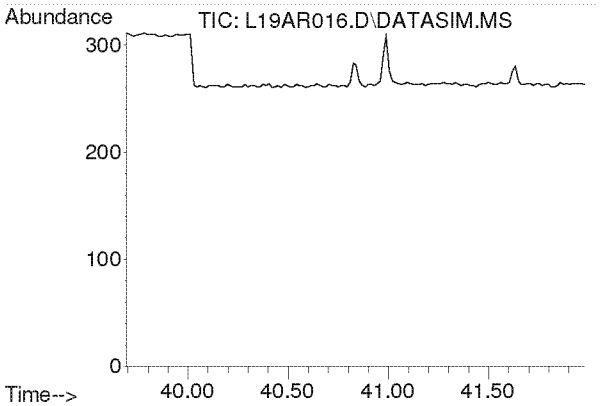
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



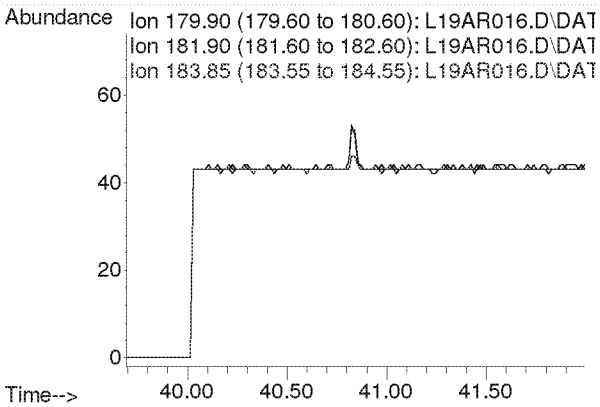


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

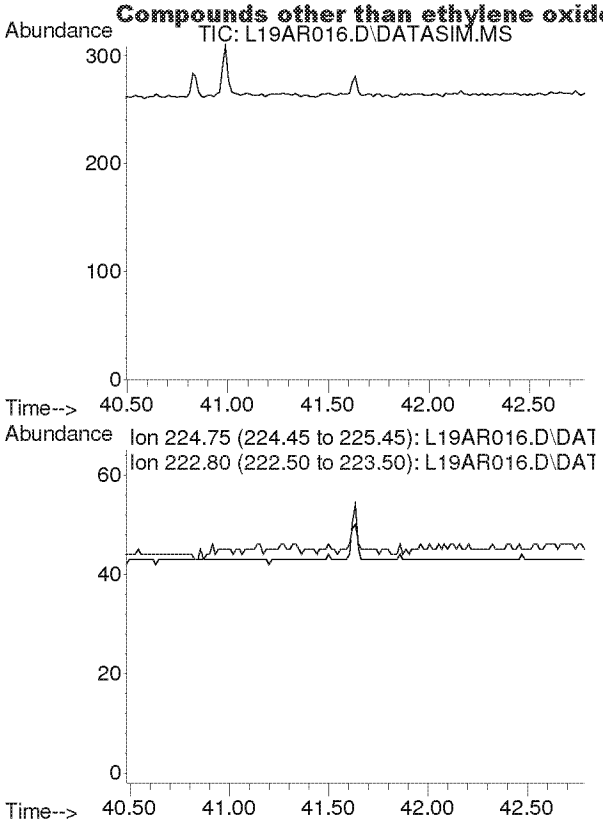
Lab File: L19AR016.D
Acq: 19 Jan 2019 2:45 am

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: L19AR016.D
Acq: 19 Jan 2019 2:45 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\L19AR\
Data File : L19AR017.D
Acq On : 19 Jan 2019 3:47 am
Operator : MAH
Sample : 9011527-06
Misc : HINSDALE S. HS 1/13/19
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 23 09:24:59 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	51574	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	126571	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	97417	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	12.468	29	390m	0.1464 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. 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\L19AR\
Data File : L19AR017.D
Acq On : 19 Jan 2019 3:47 am
Operator : MAH
Sample : 9011527-06
Misc : HINSDALE S. HS 1/13/19
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 23 09:24:59 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

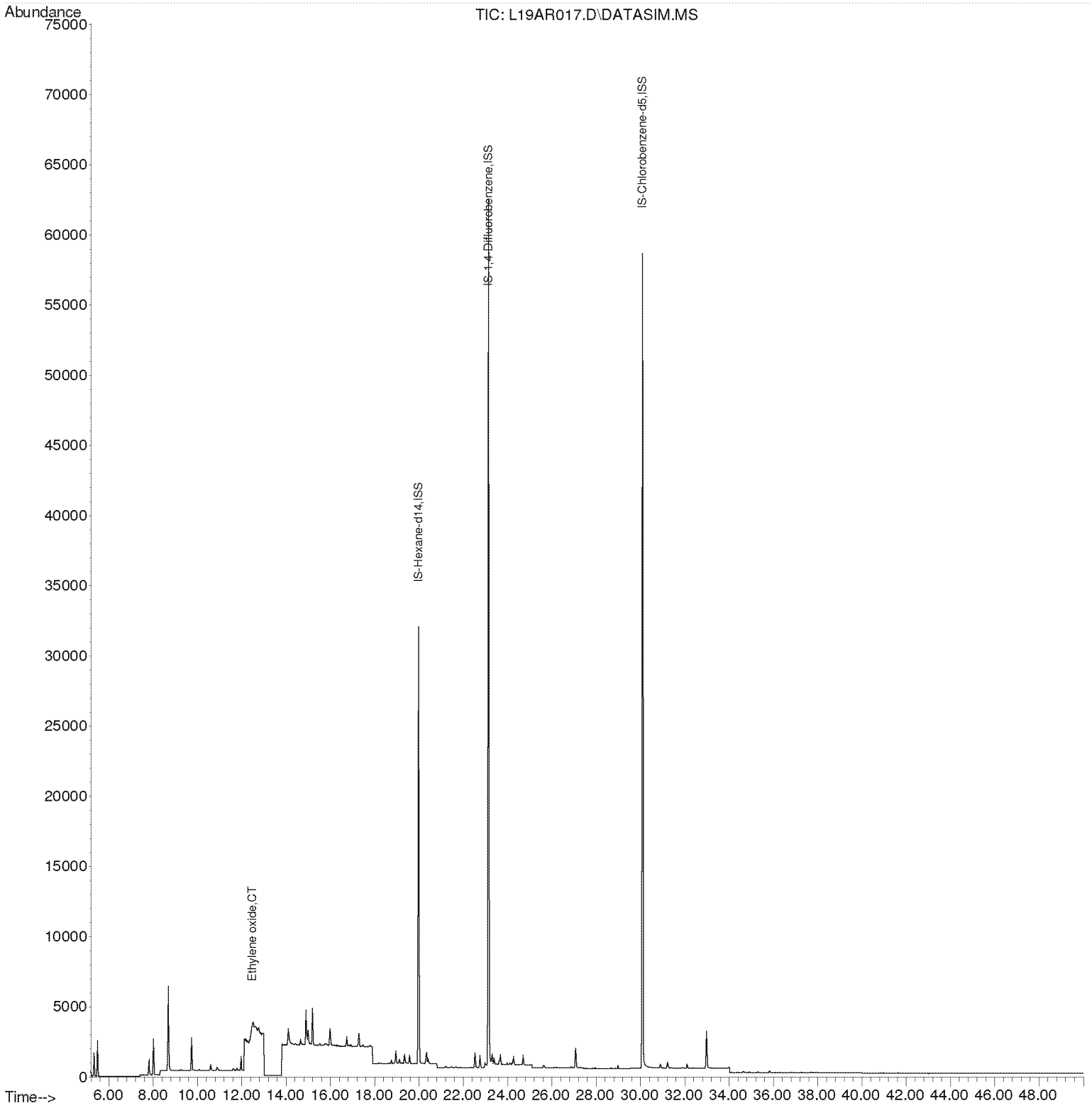
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	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

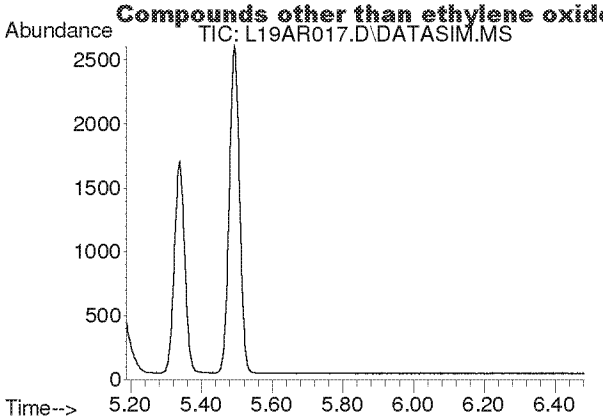
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR017.D
Acq On : 19 Jan 2019 3:47 am
Operator : MAH
Sample : 9011527-06
Misc : HINSDALE S. HS 1/13/19
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 23 08:39:37 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



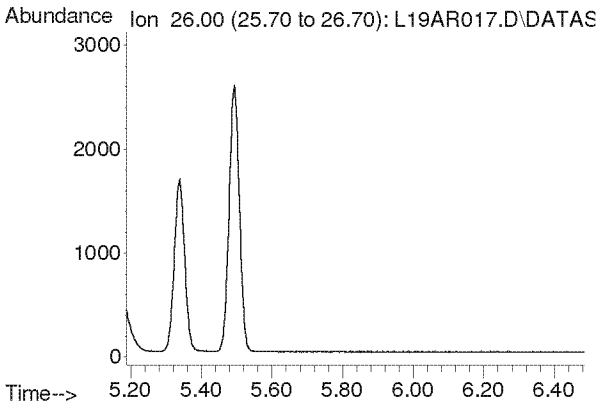
Compounds other than ethylene oxide were not quantitated.

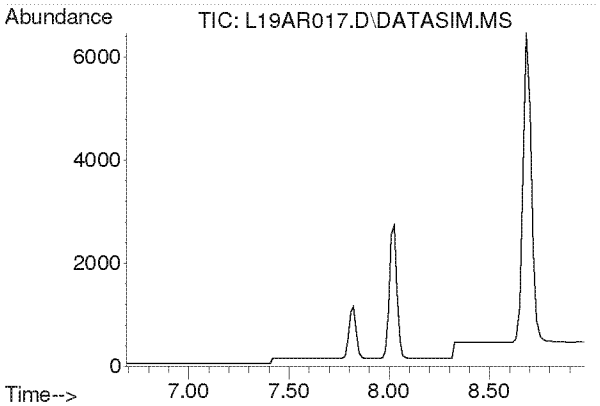


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 26



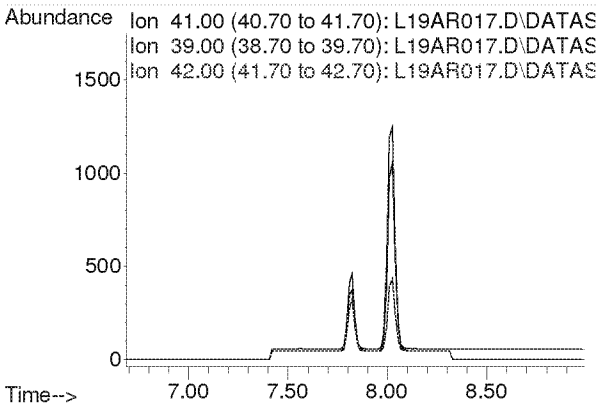


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

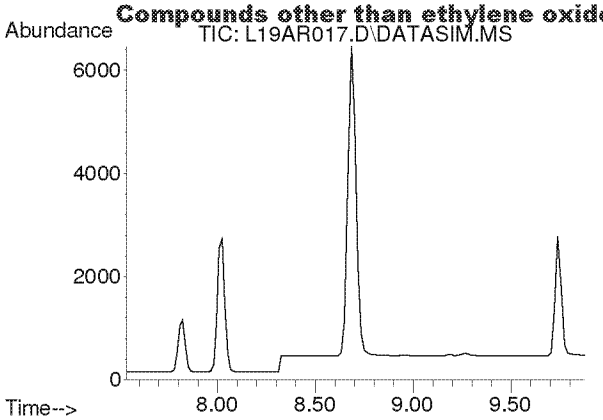
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

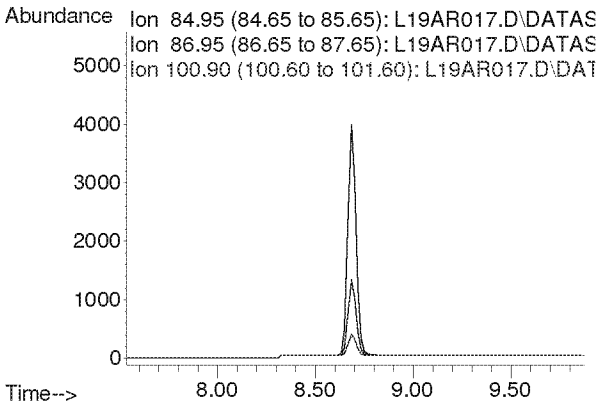


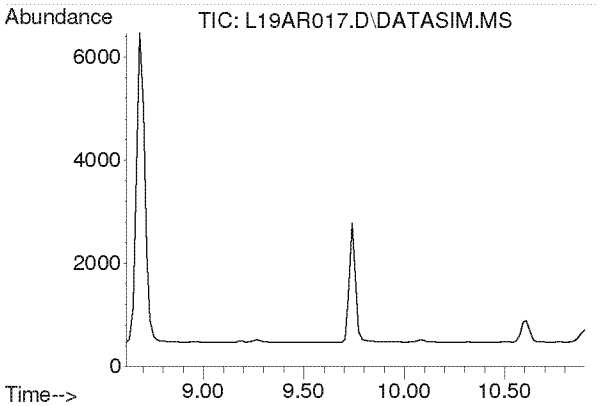
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



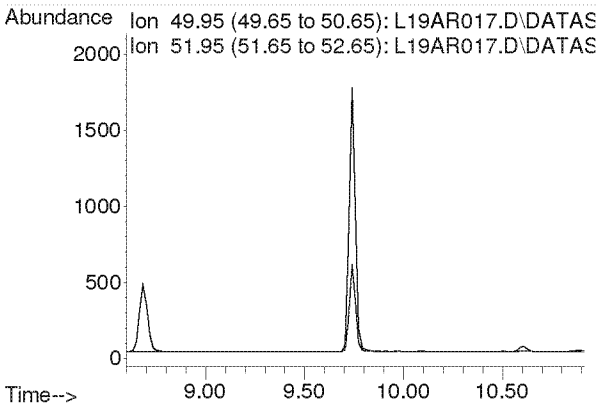


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

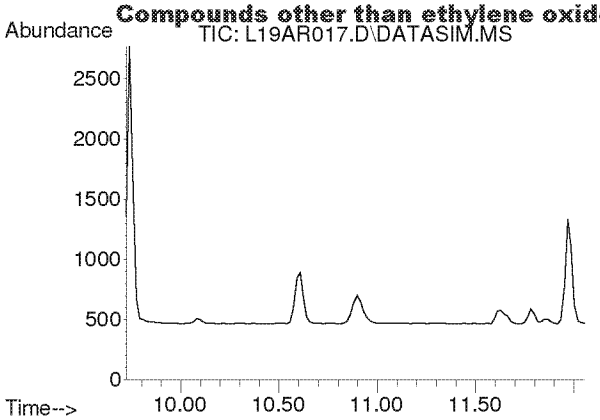
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

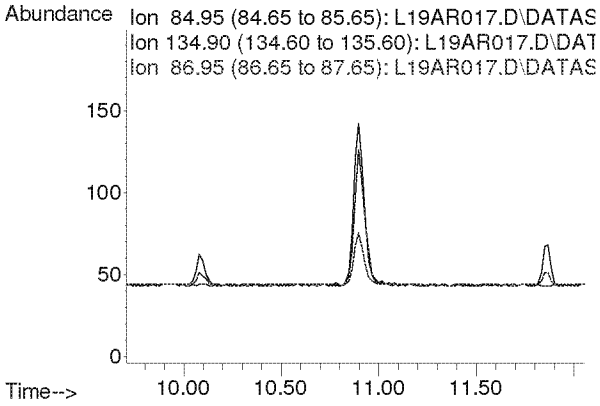


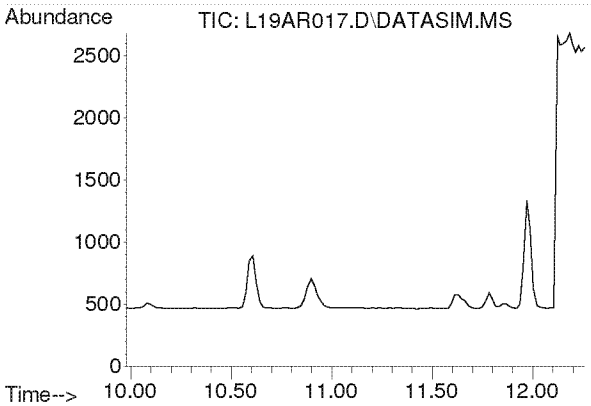
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



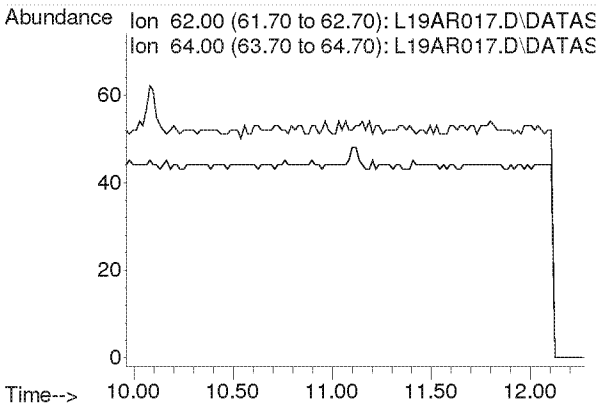


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

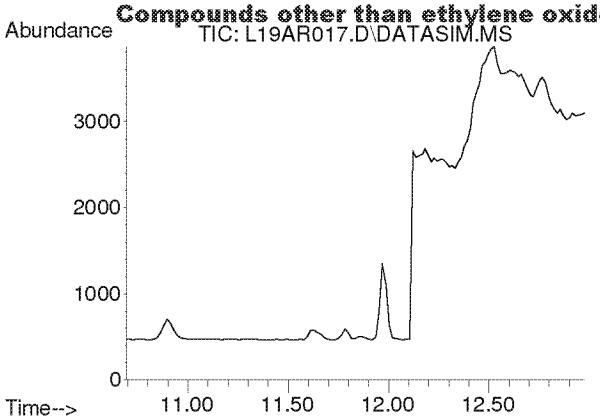
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

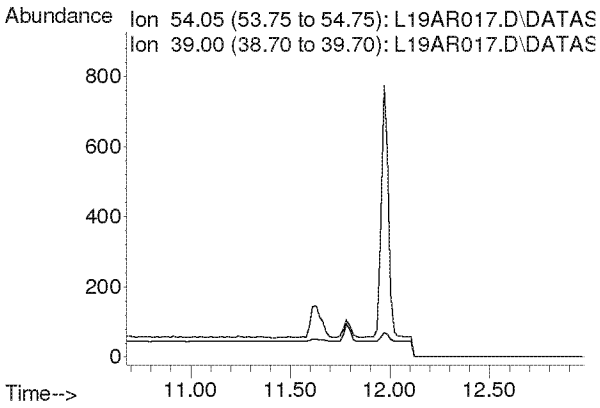


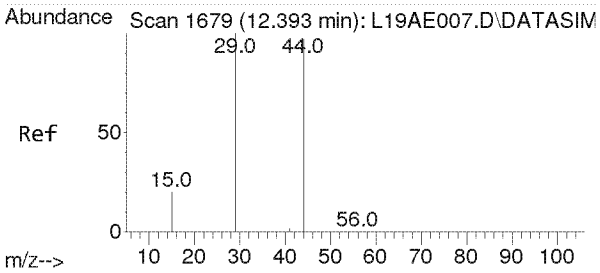
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

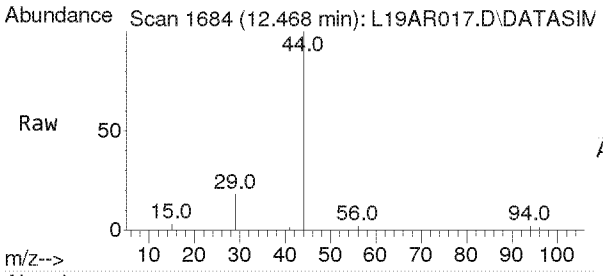


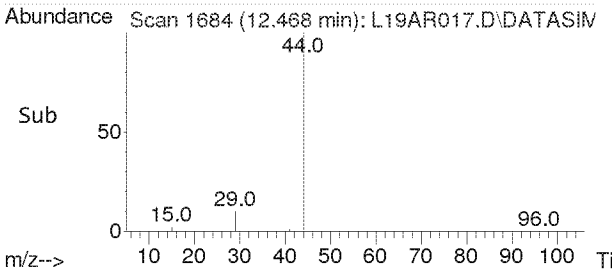


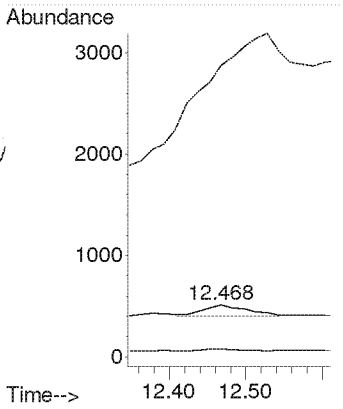
#9
Ethylene oxide
Concen: 0.146 ppbv m
RT: 12.468 min Scan# 1684
Delta R.T. 0.075 min
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 29 Resp: 390

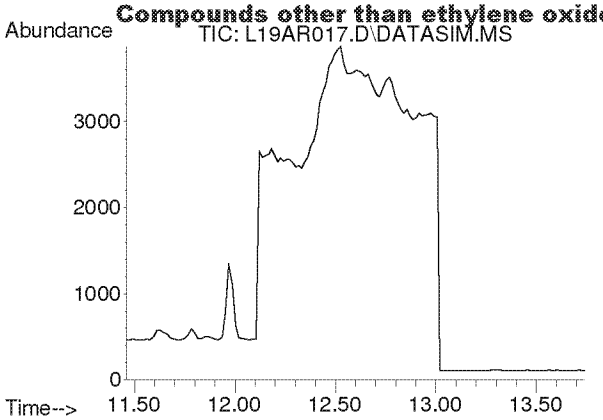
Ion	Ratio	Lower	Upper
29	100		
15	0.0	15.4	23.0#
44	0.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

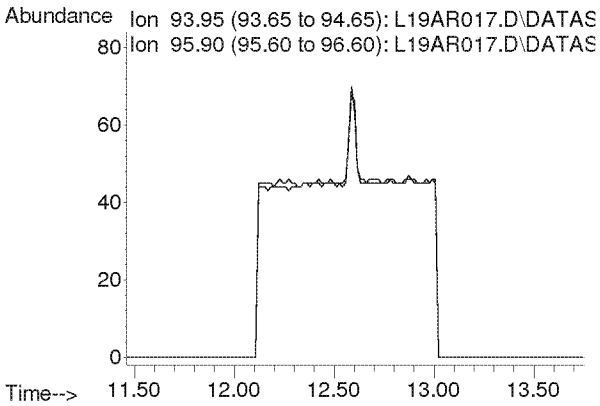


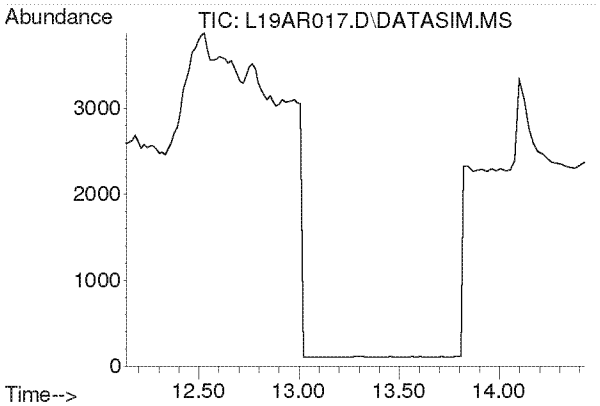
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



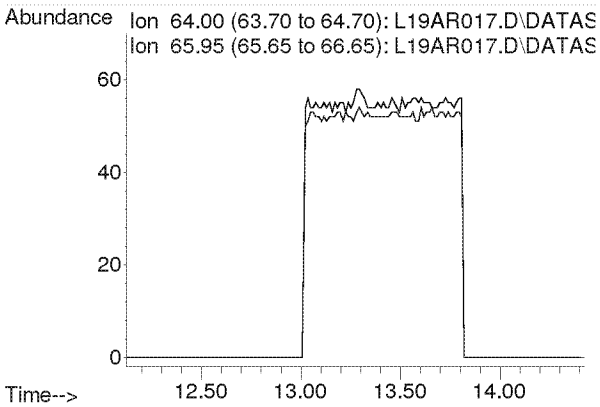


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

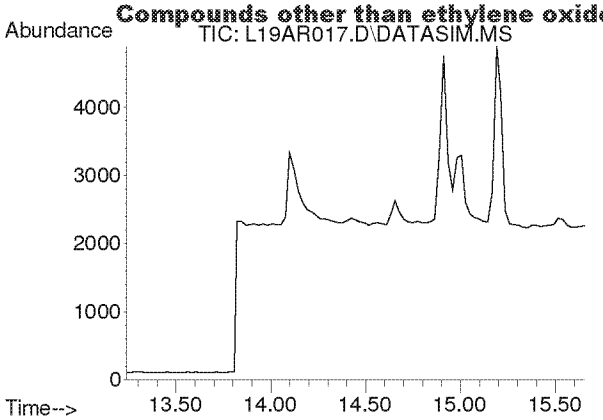
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

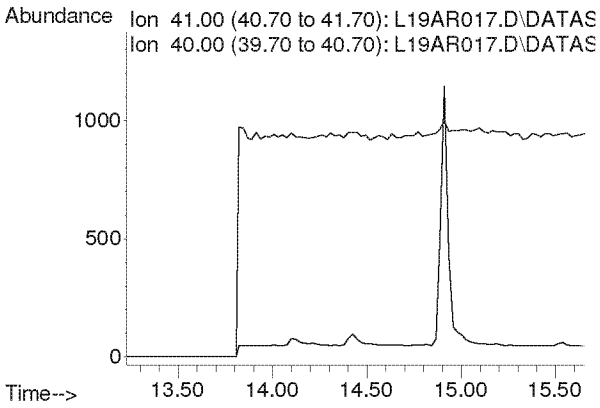


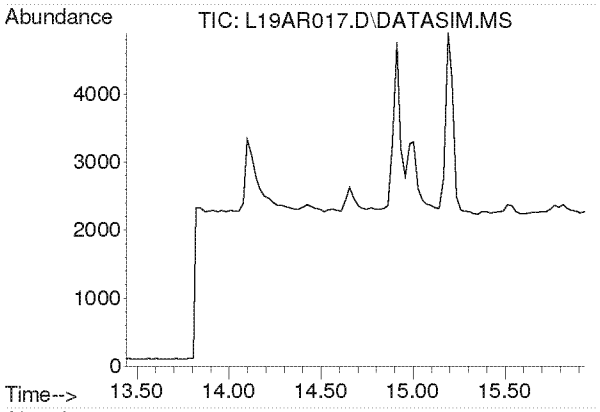
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



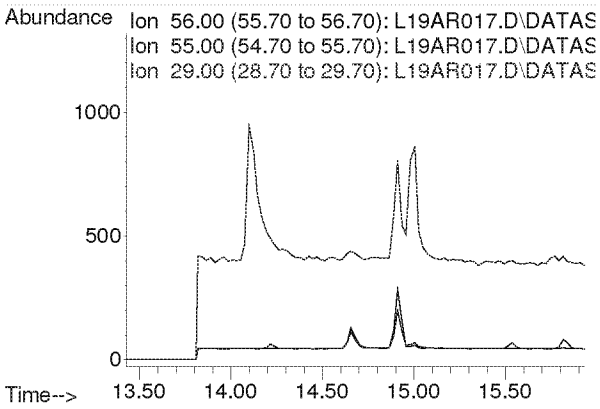


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

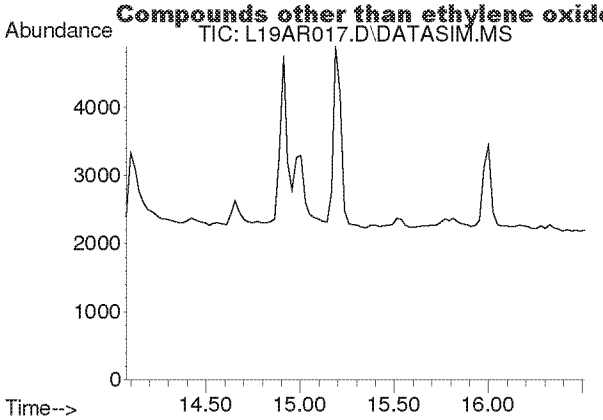
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

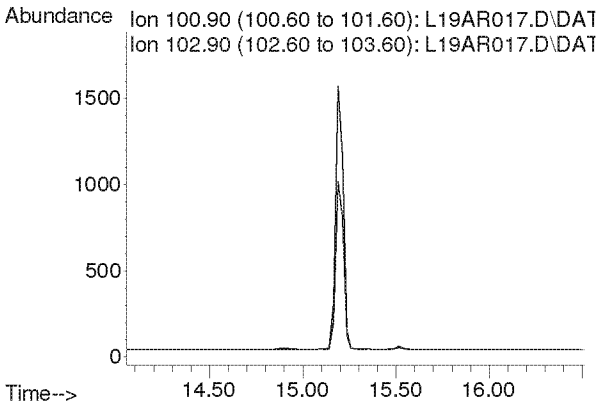


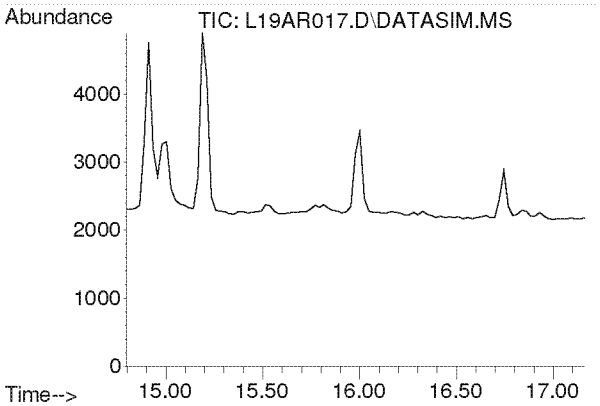
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



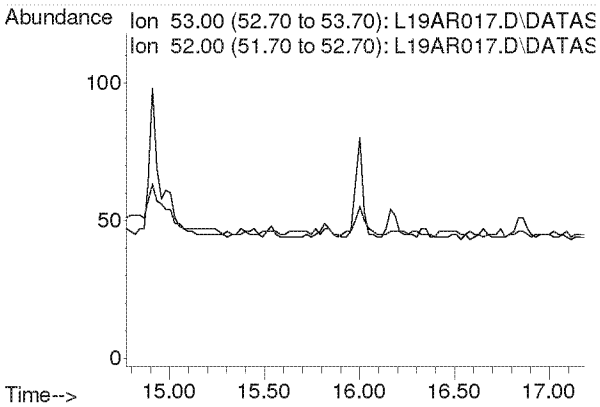


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

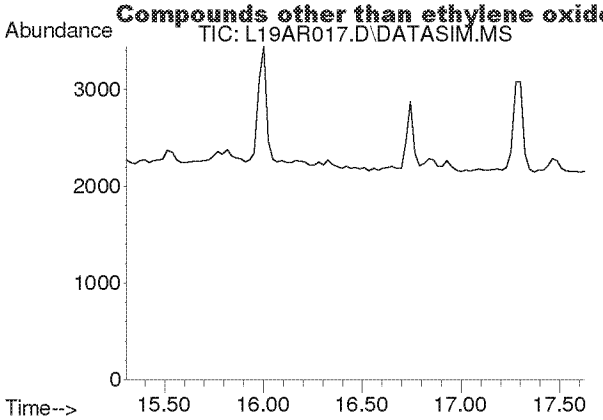
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

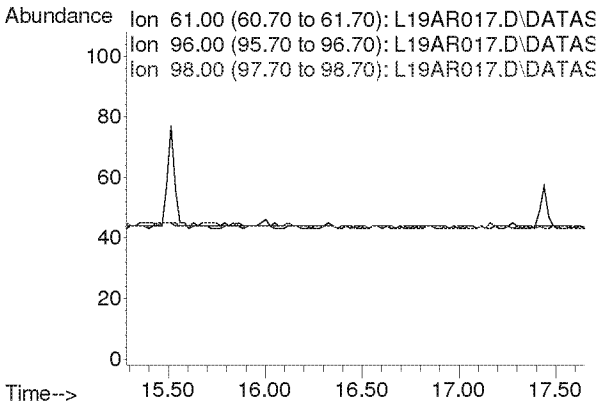


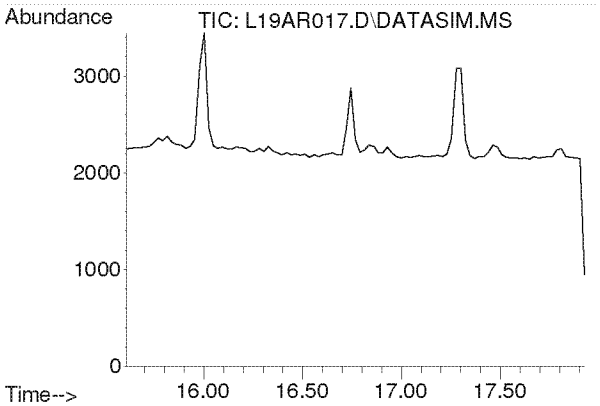
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



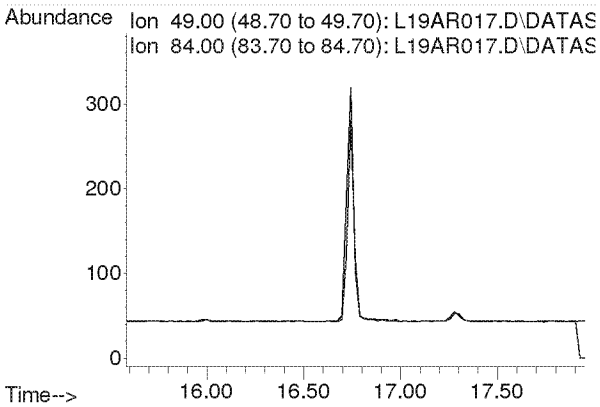


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

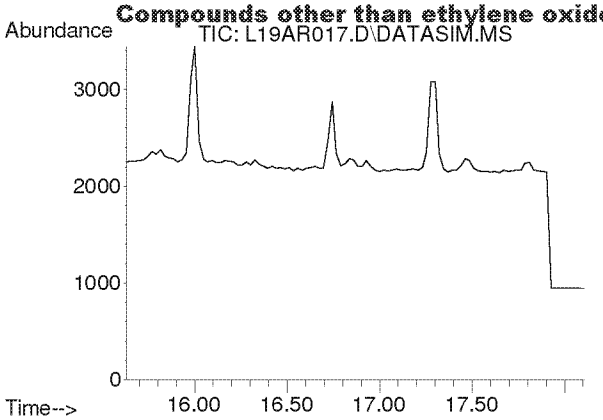
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

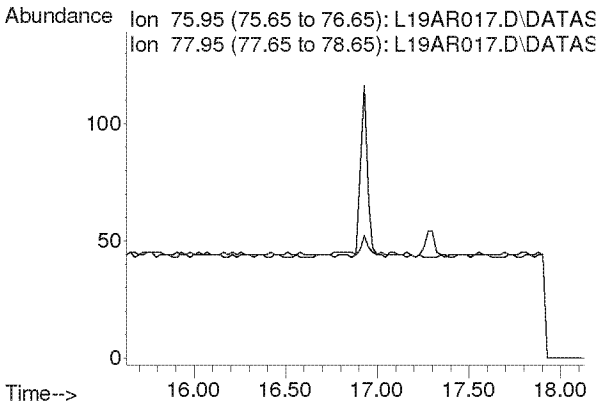


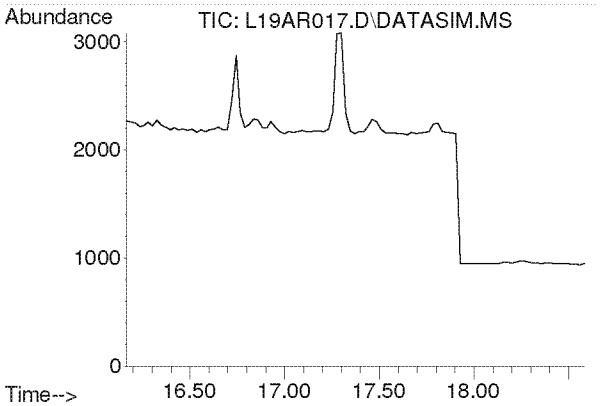
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



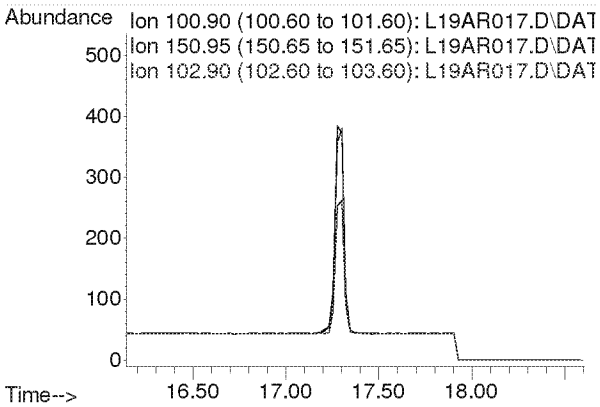


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

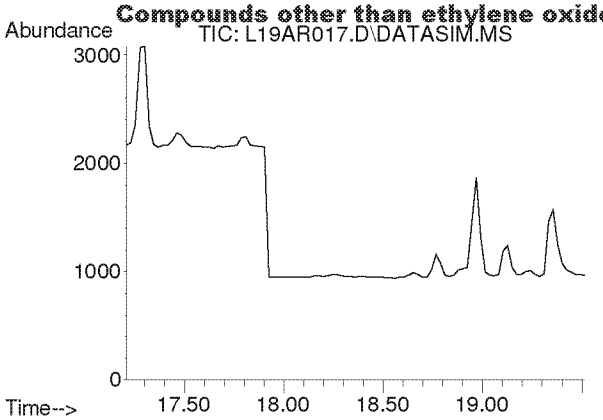
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

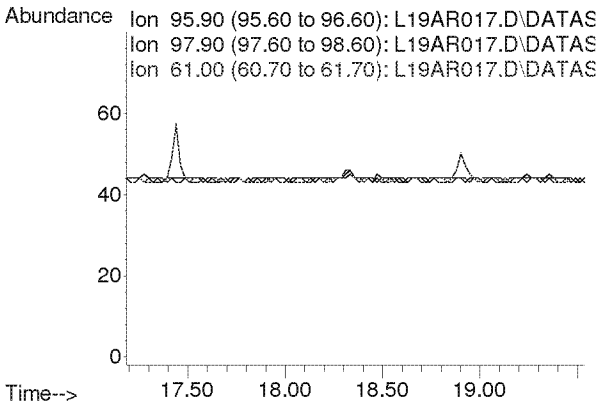


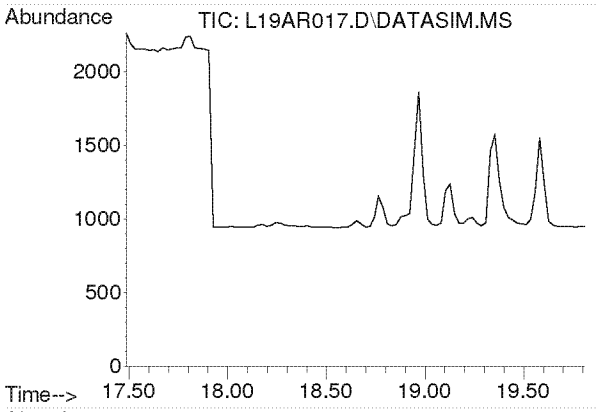
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



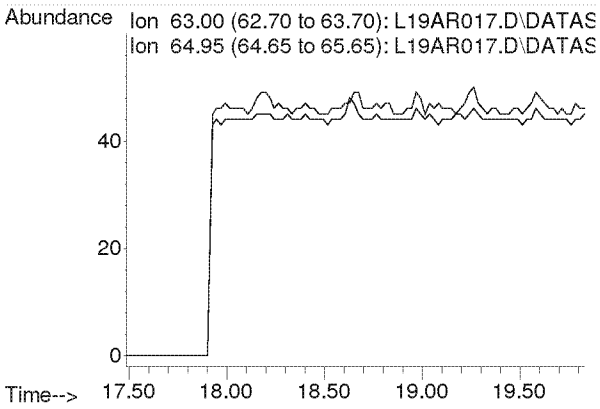


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

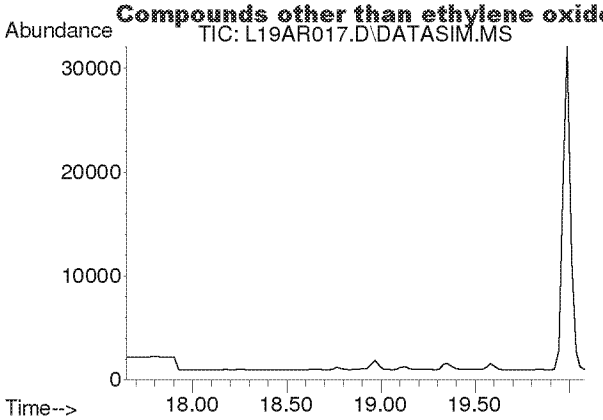
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

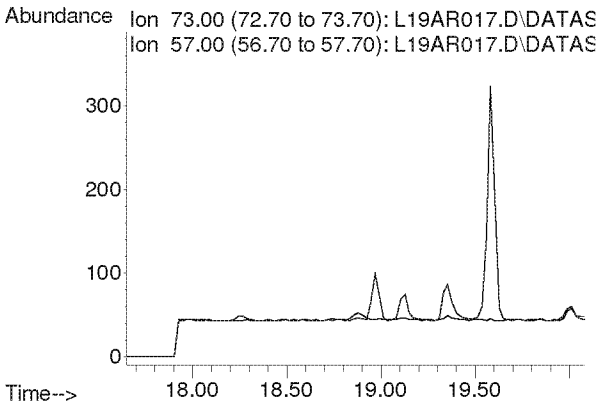


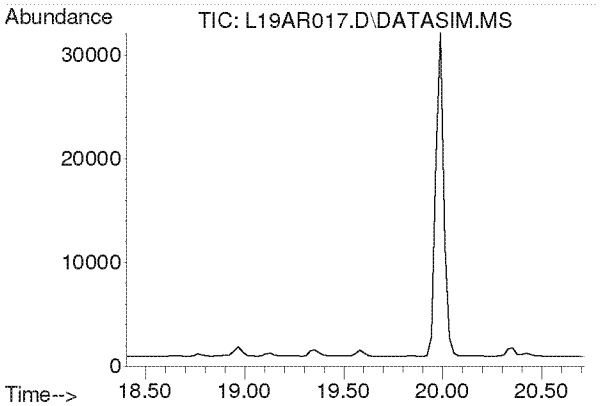
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



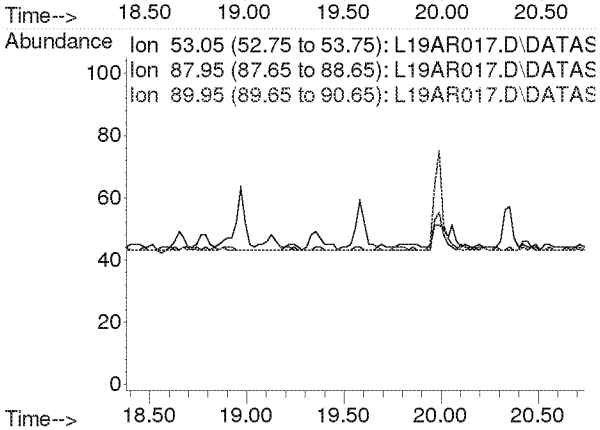


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

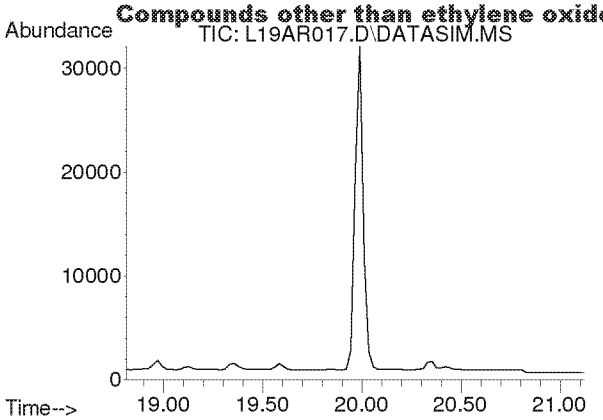
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

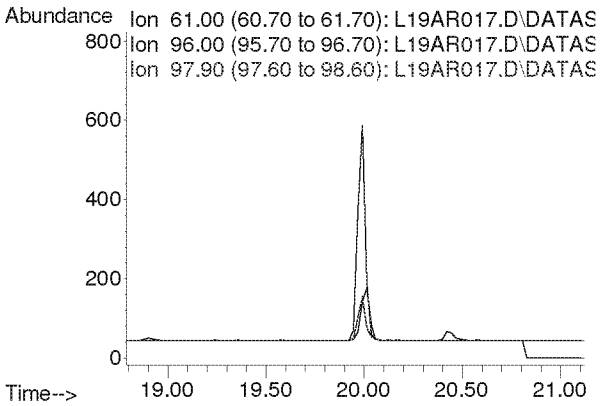


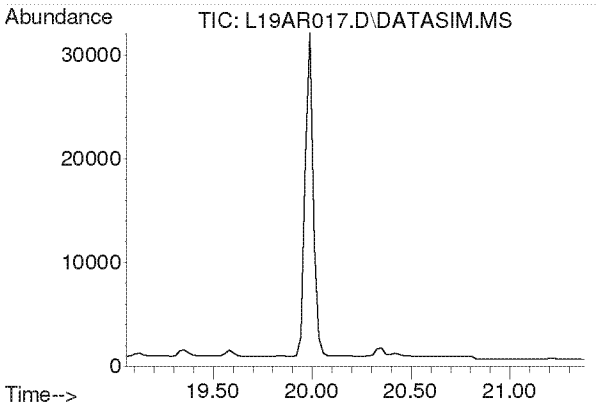
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



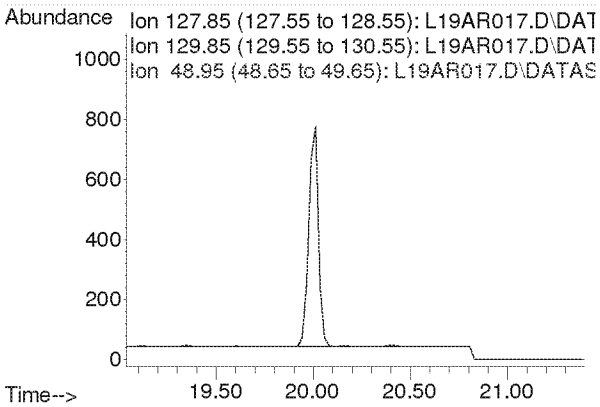


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

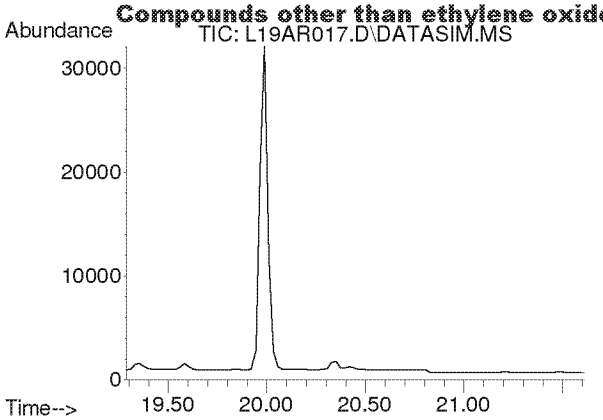
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

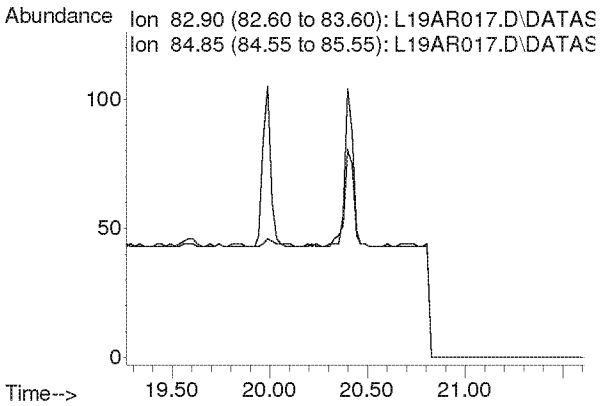


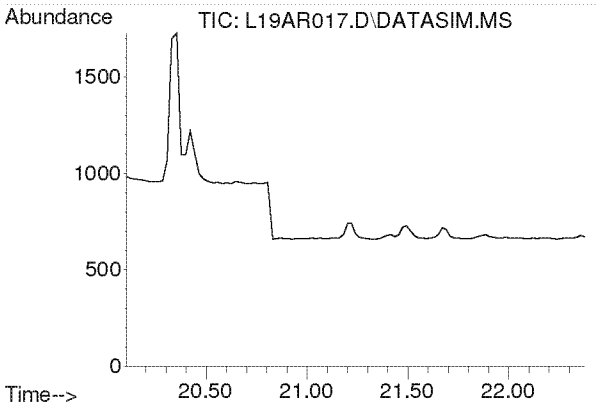
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



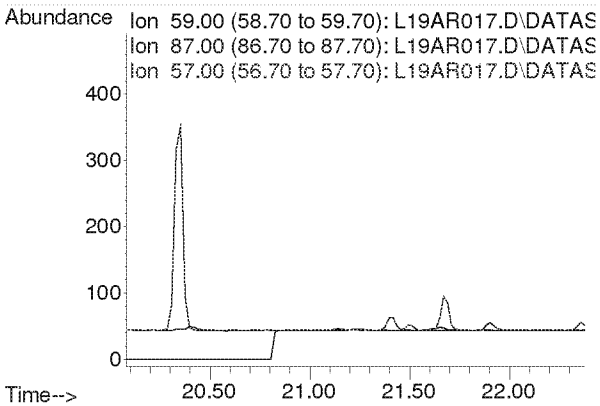


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

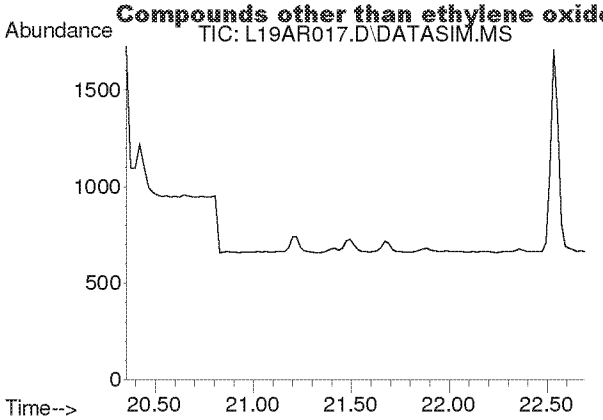
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

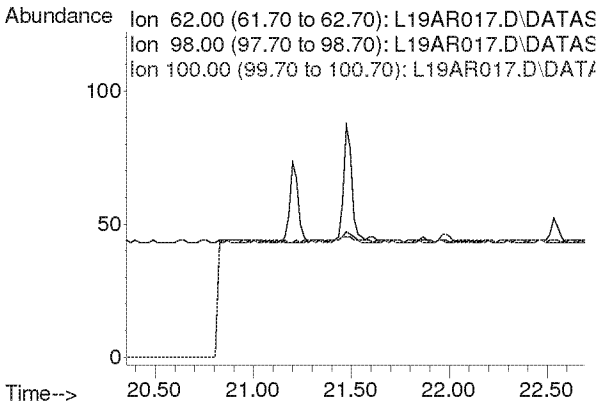


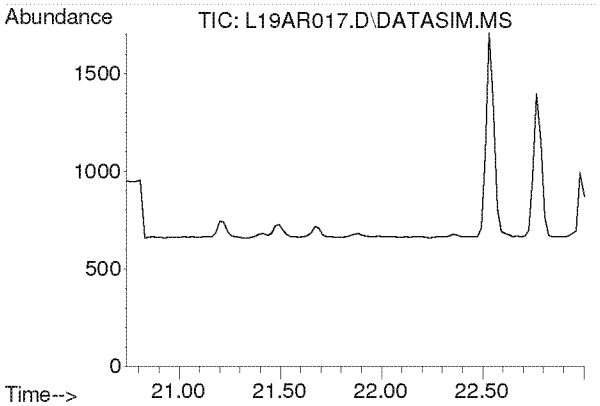
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



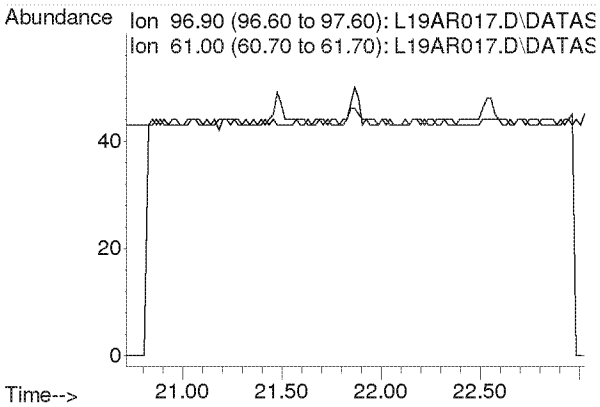


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

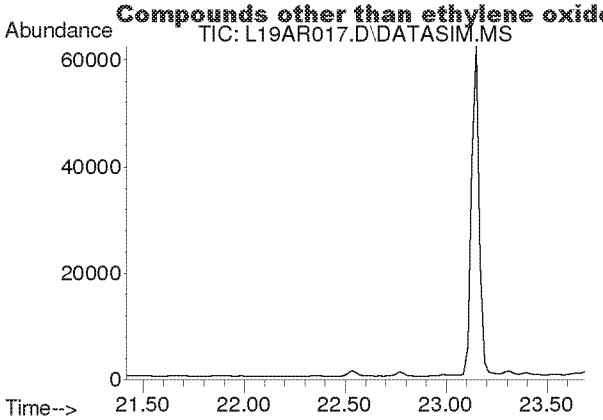
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

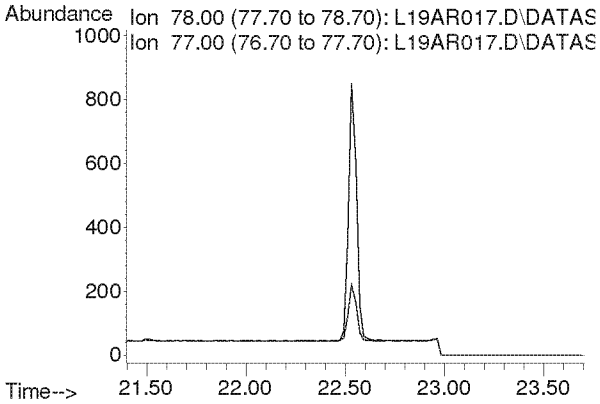


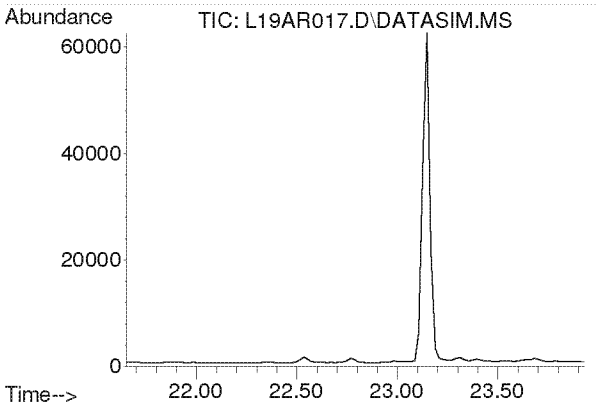
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



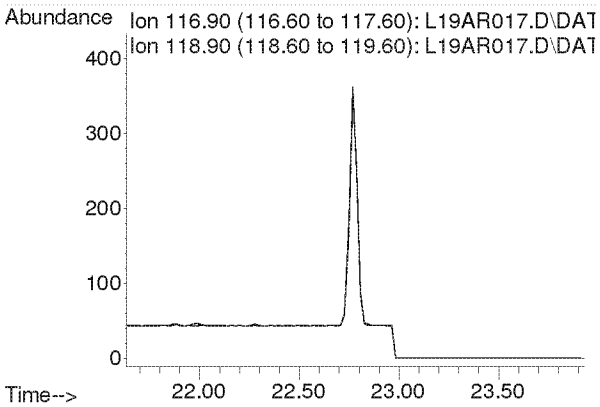


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

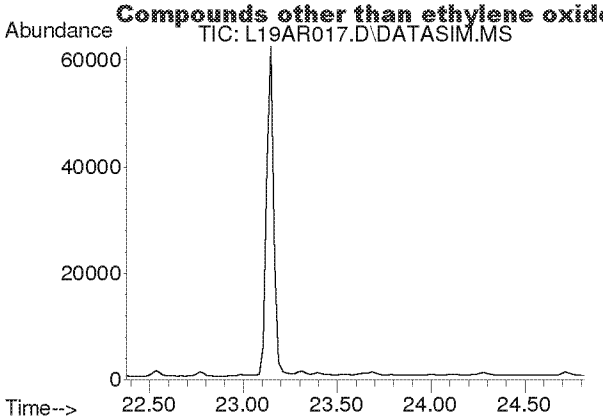
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

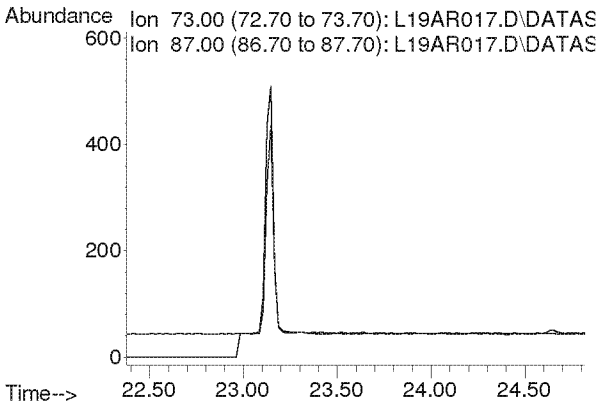


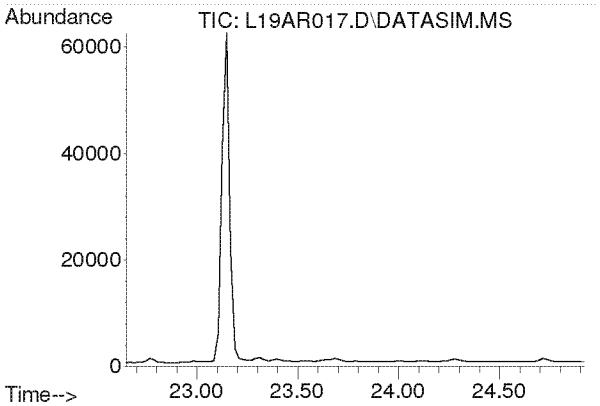
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



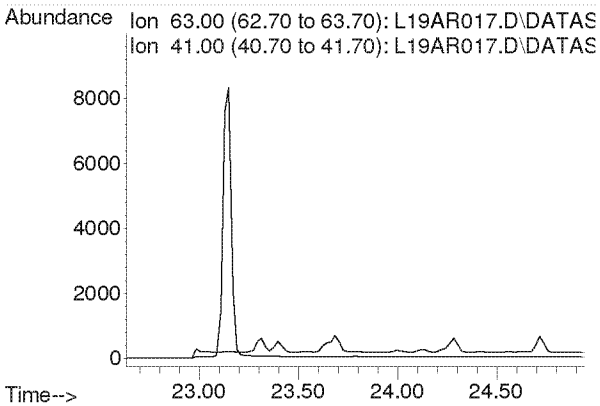


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

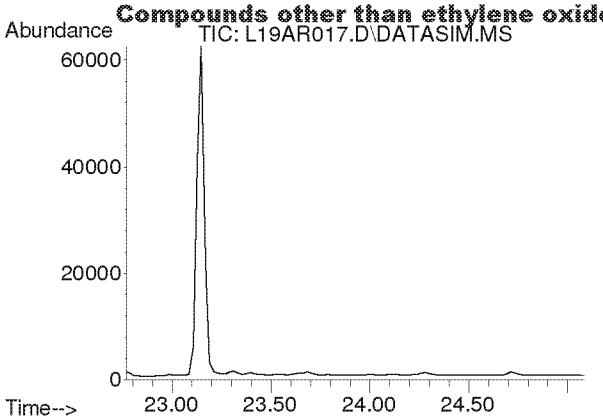
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

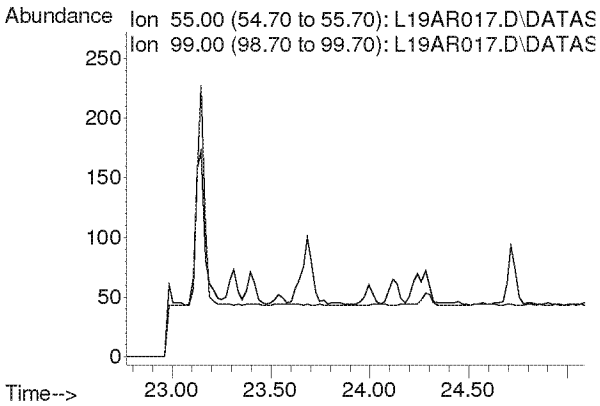


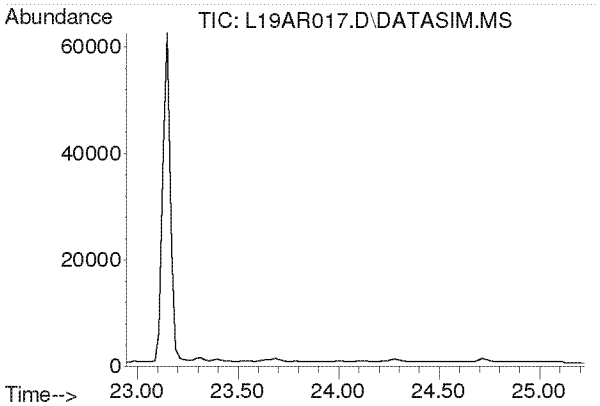
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



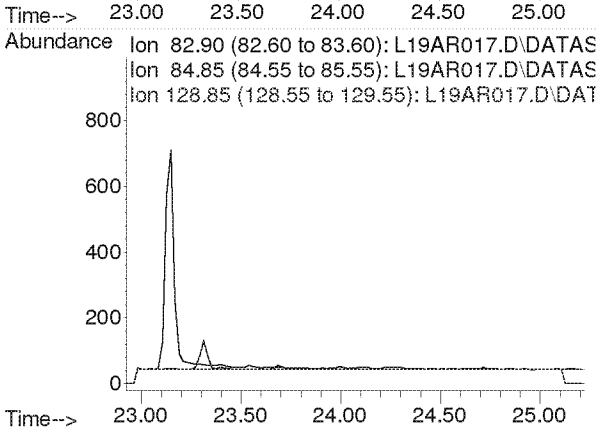


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

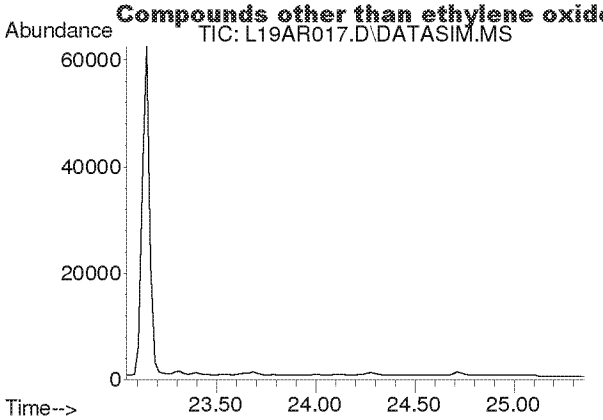
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

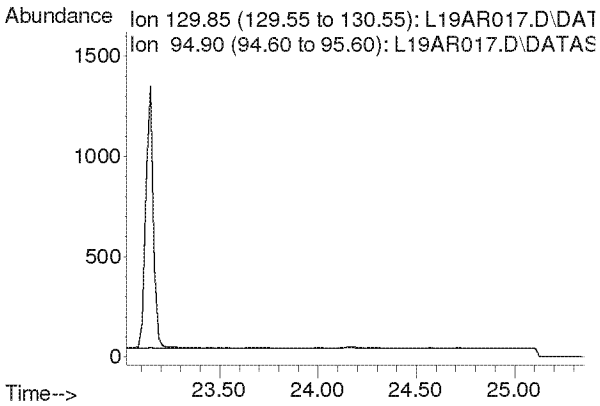


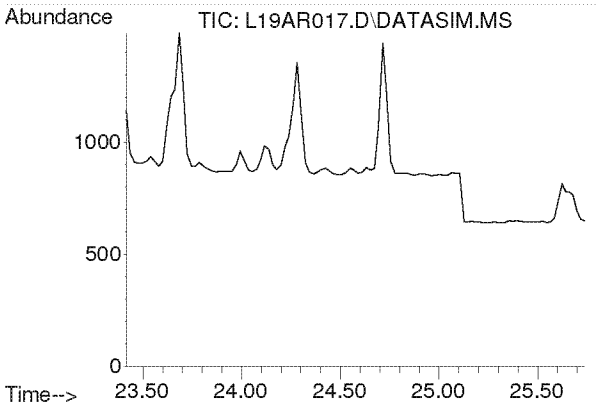
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



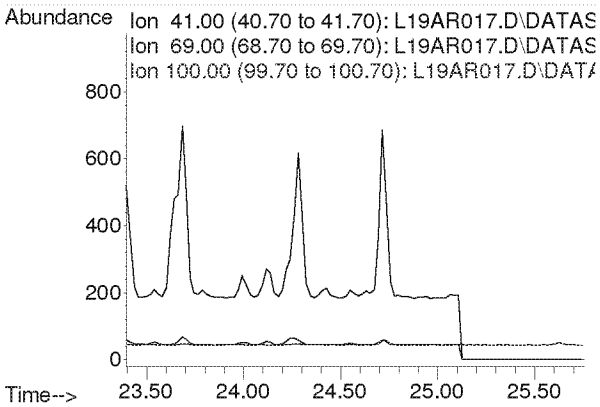


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

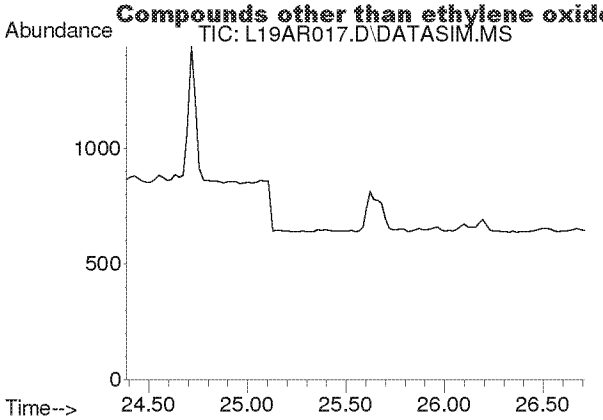
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

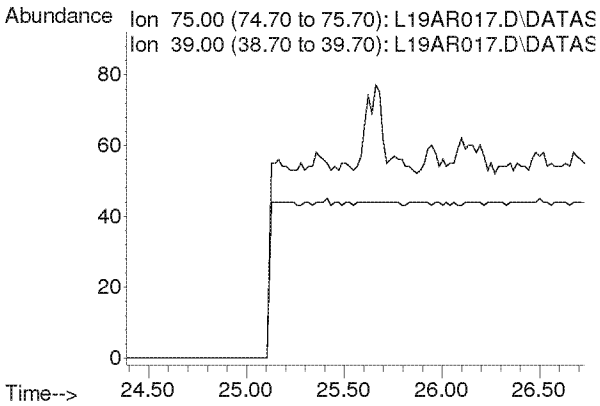


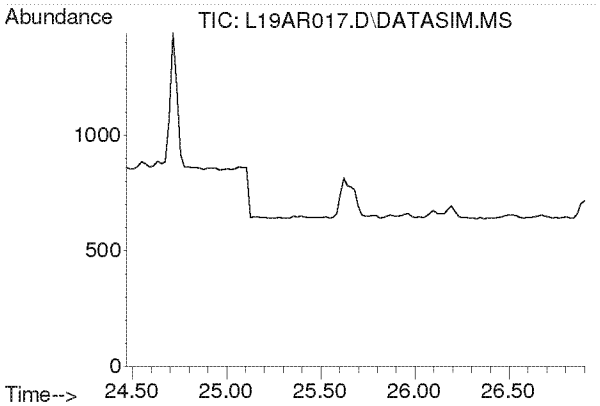
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



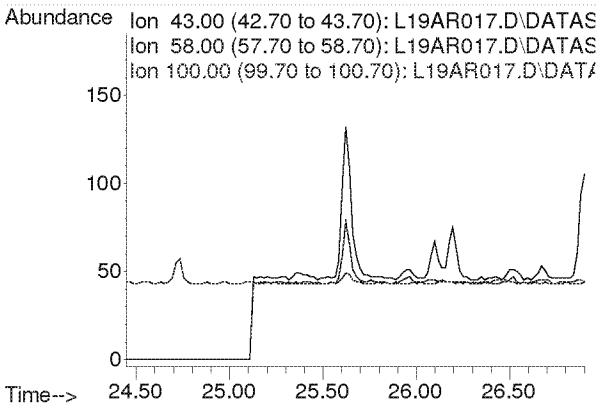


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

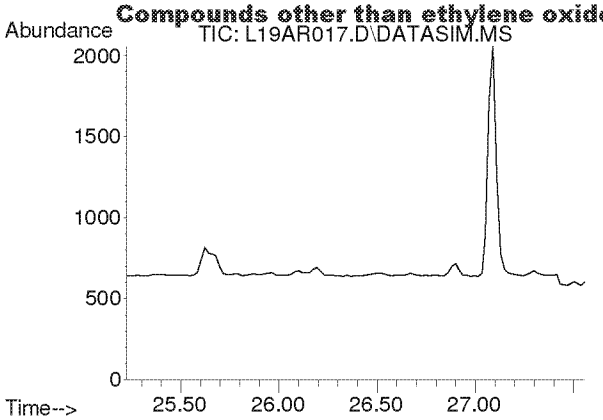
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

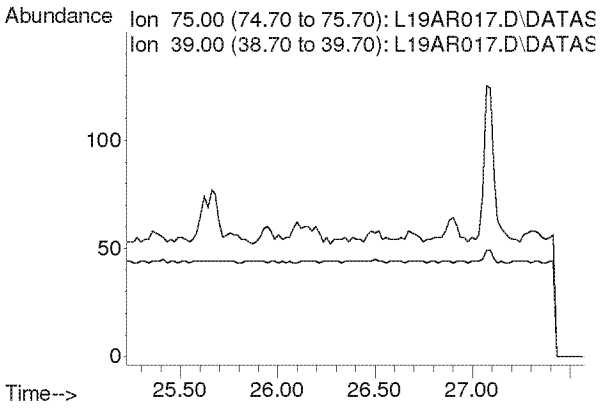


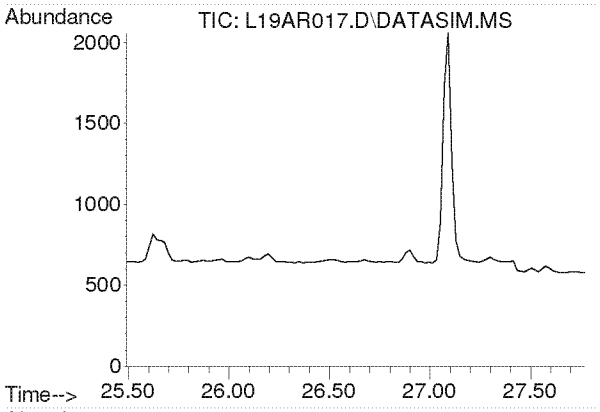
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



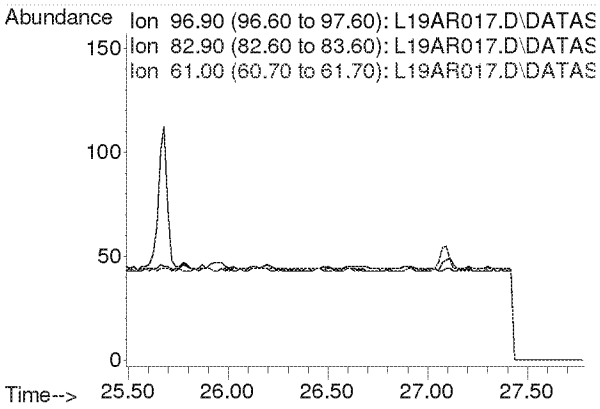


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

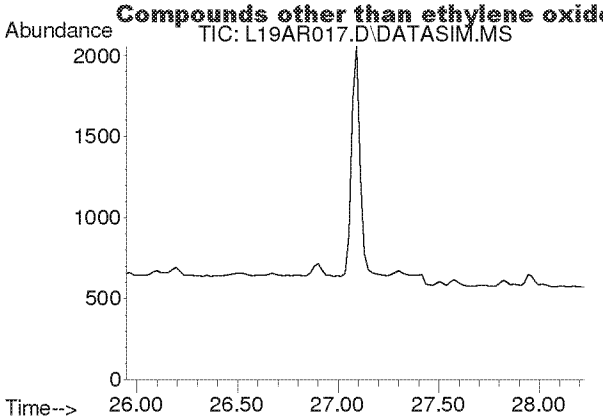
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

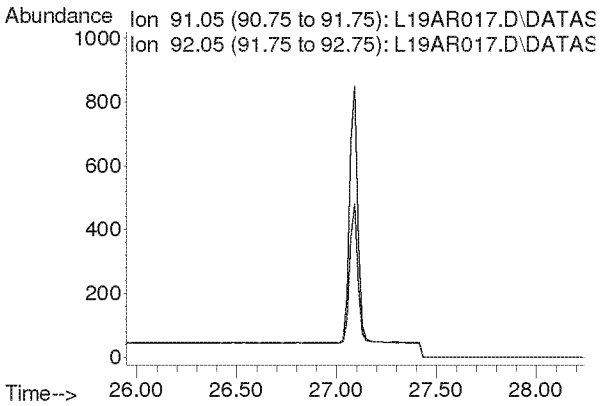


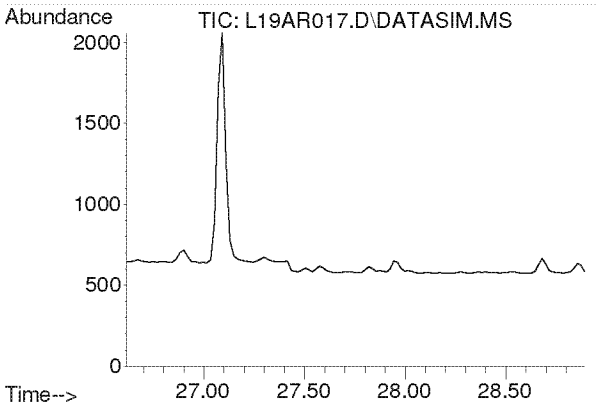
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



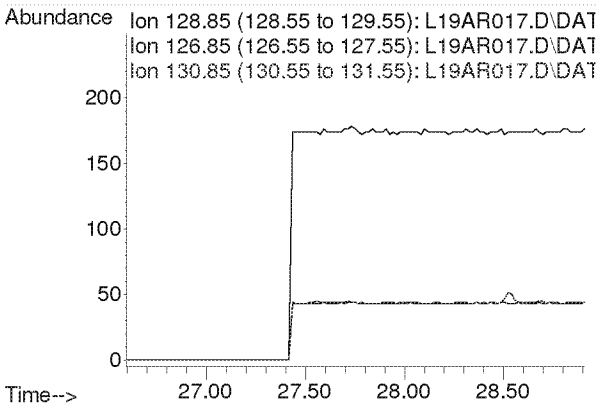


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

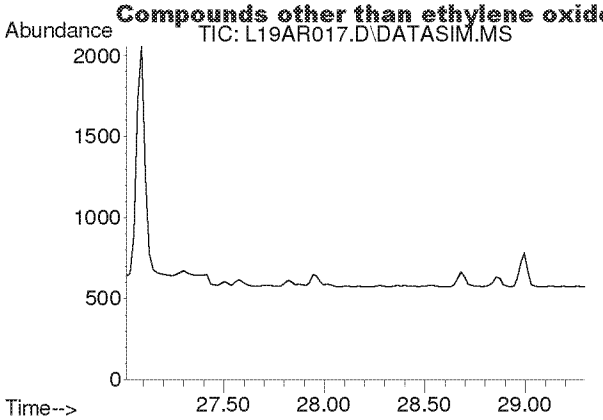
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

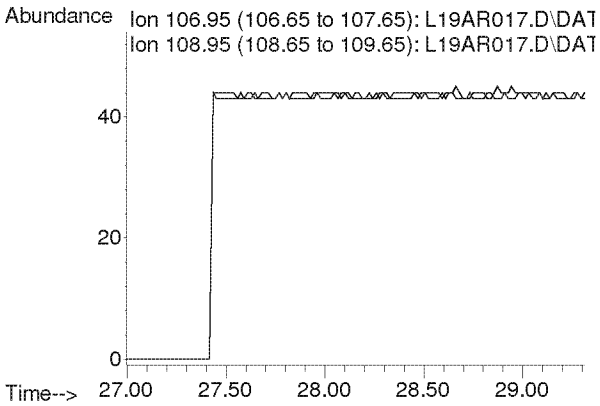


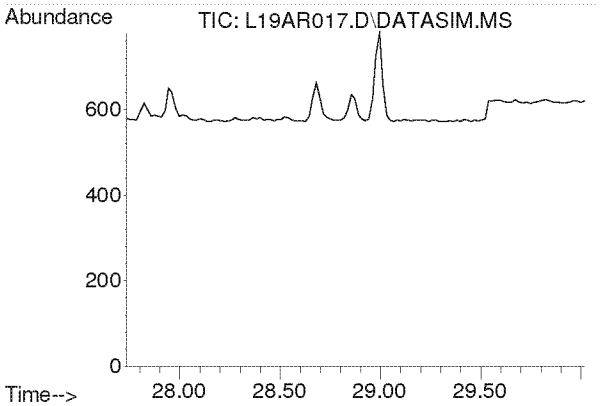
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



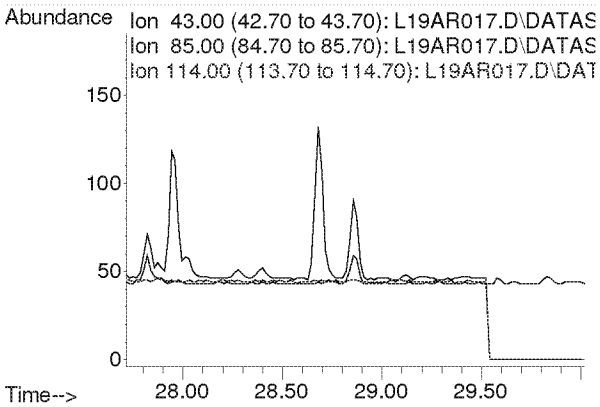


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

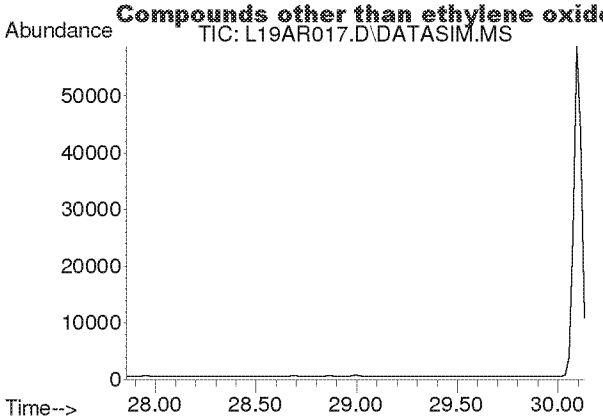
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

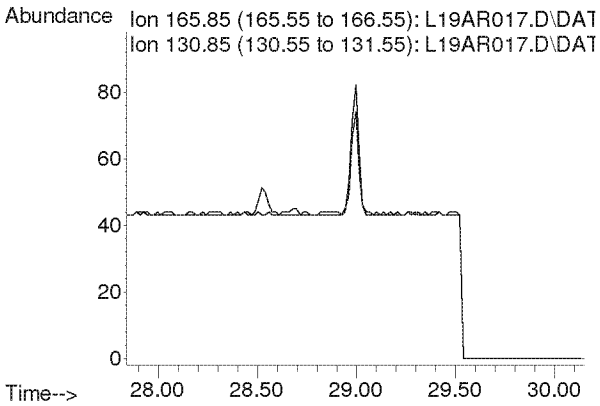


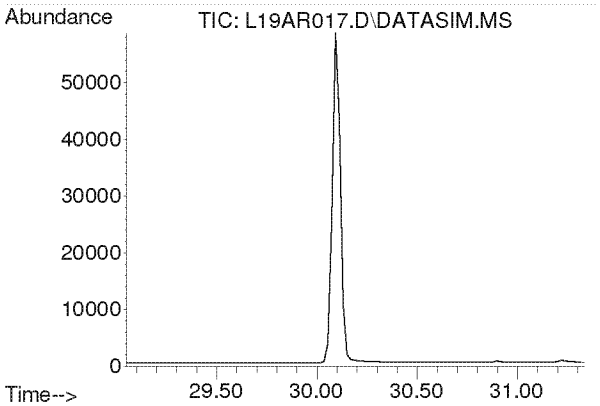
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



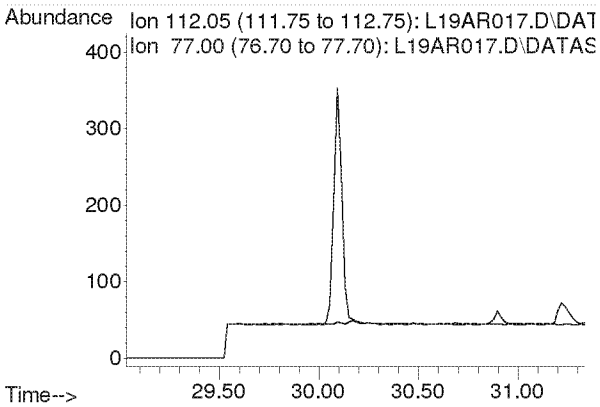


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

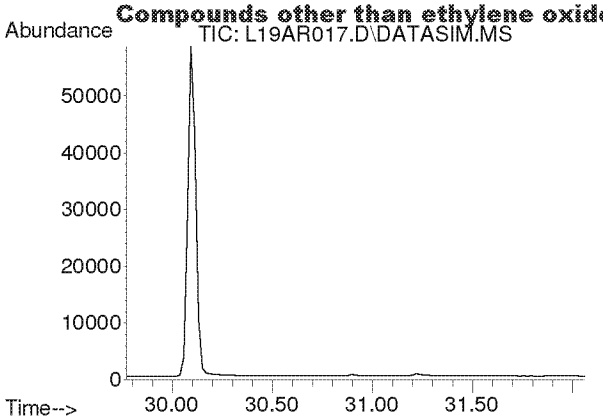
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

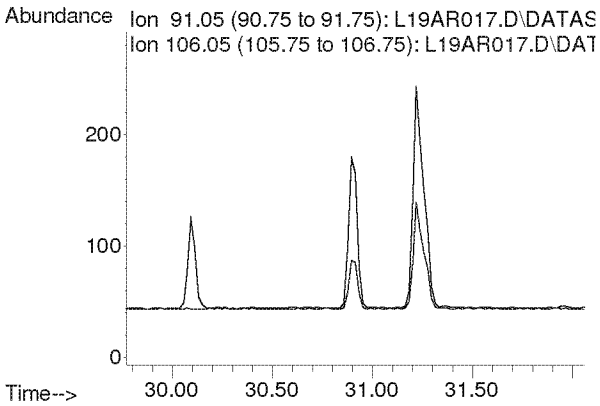


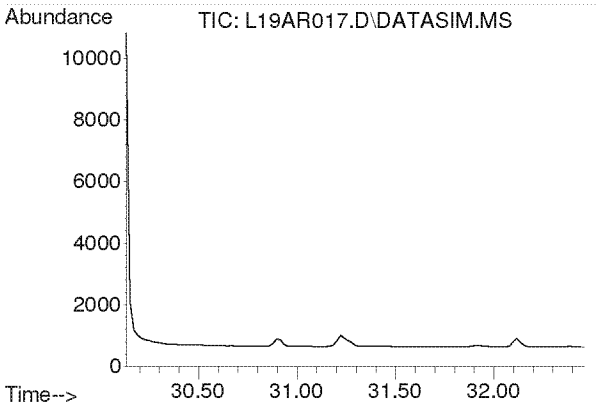
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



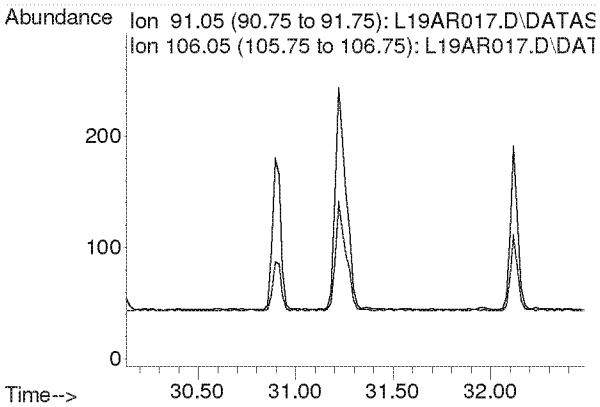


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

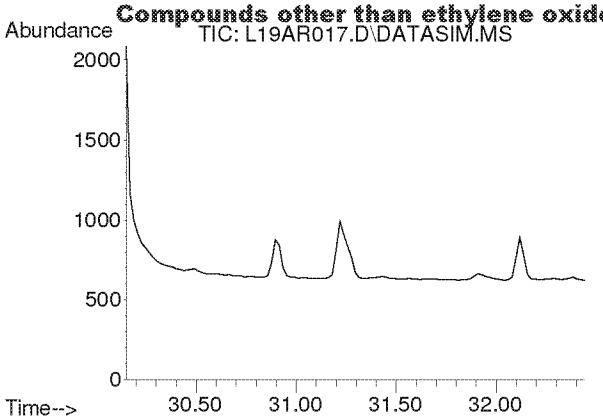
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

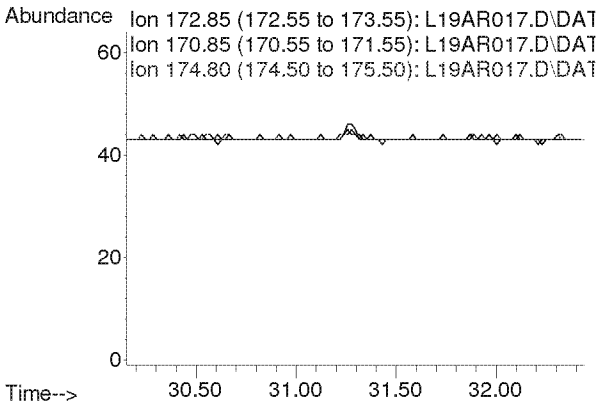


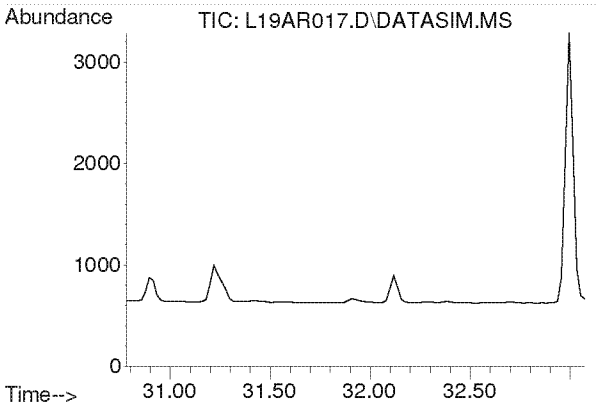
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



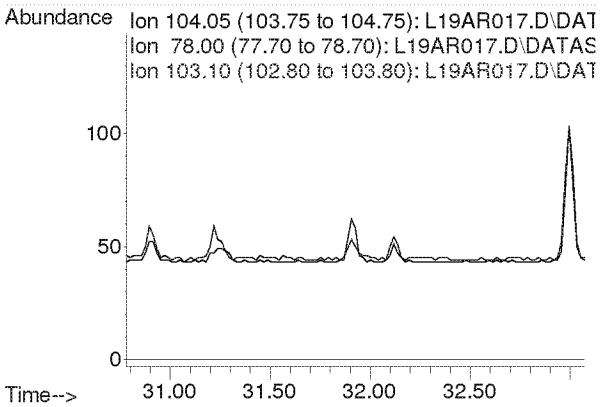


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

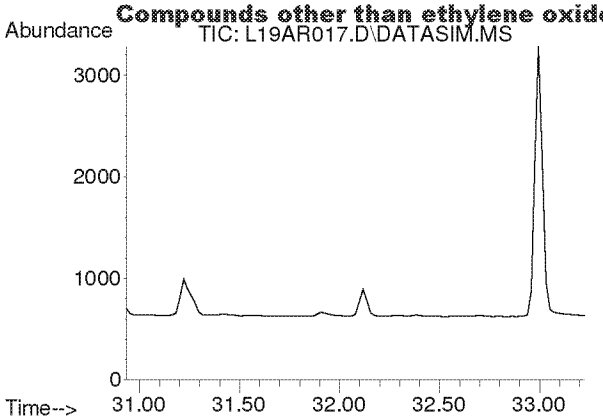
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

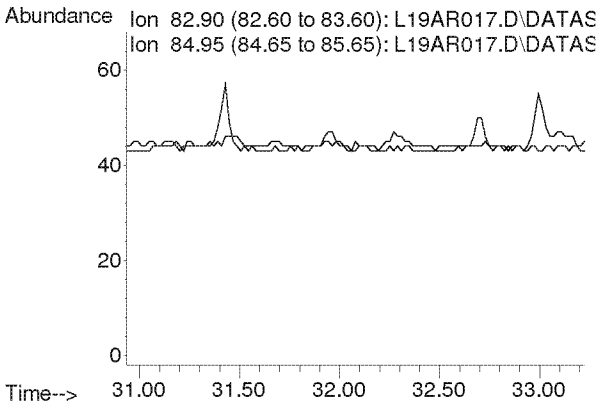


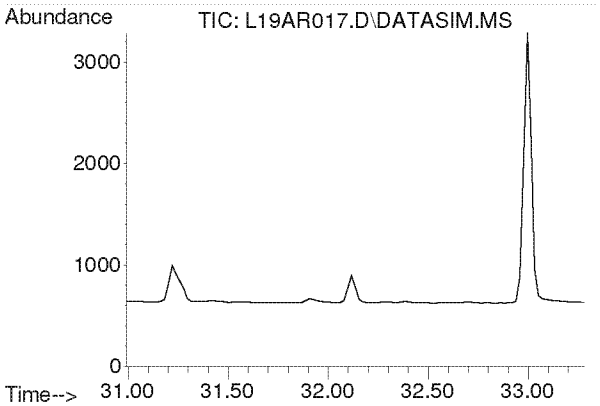
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



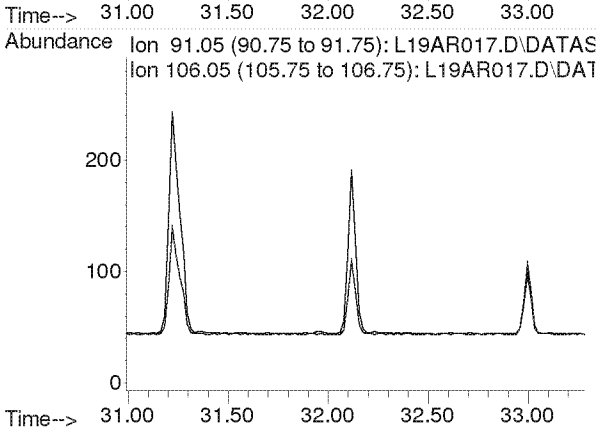


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

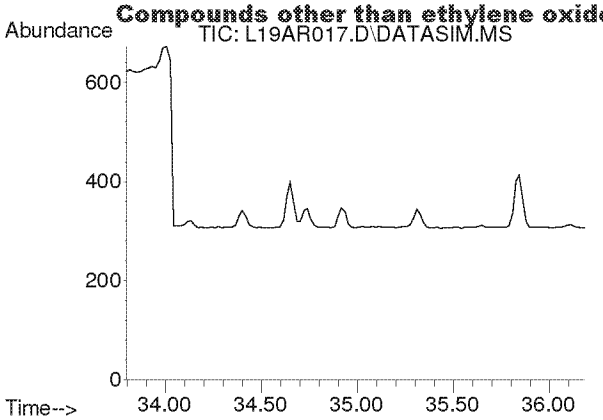
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

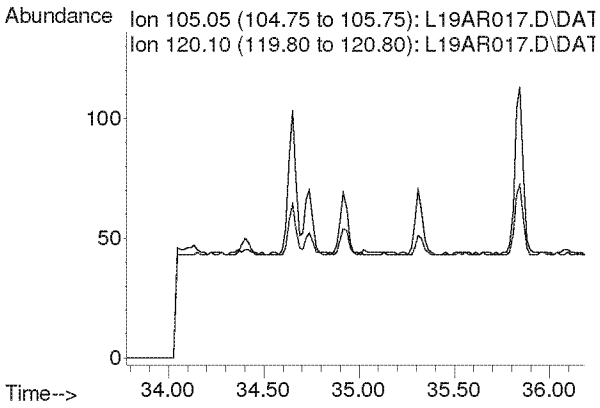


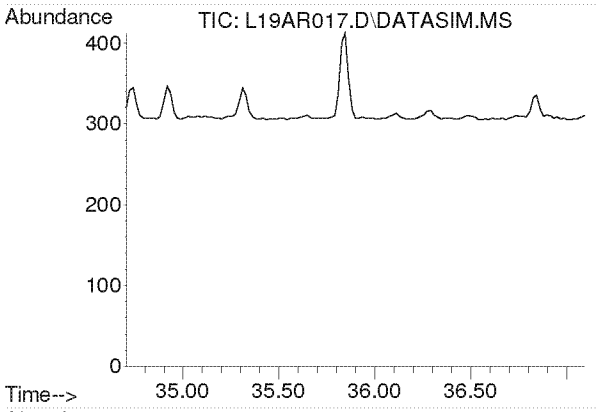
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



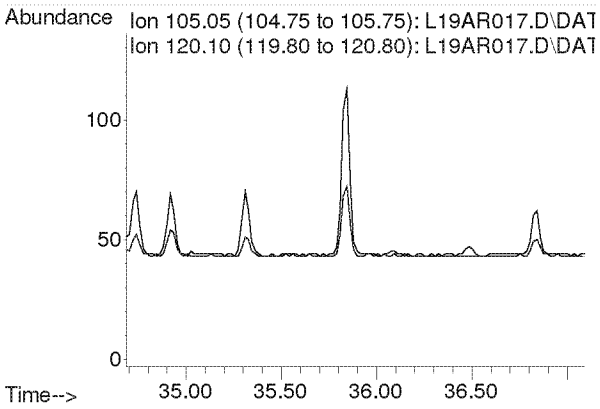


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

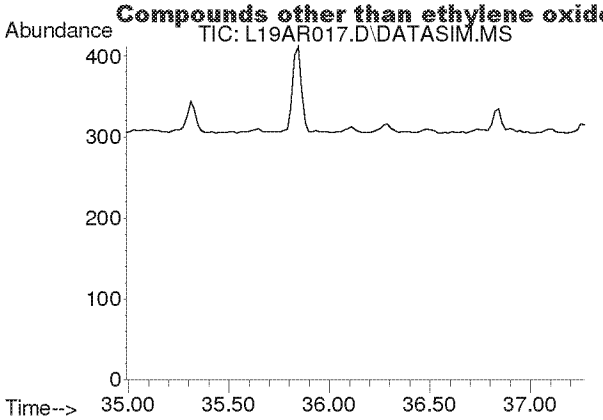
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

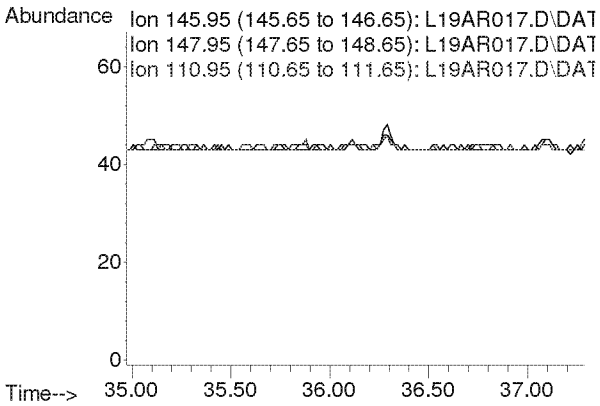


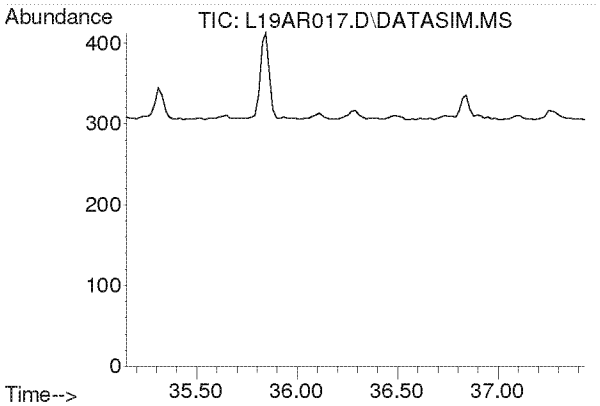
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



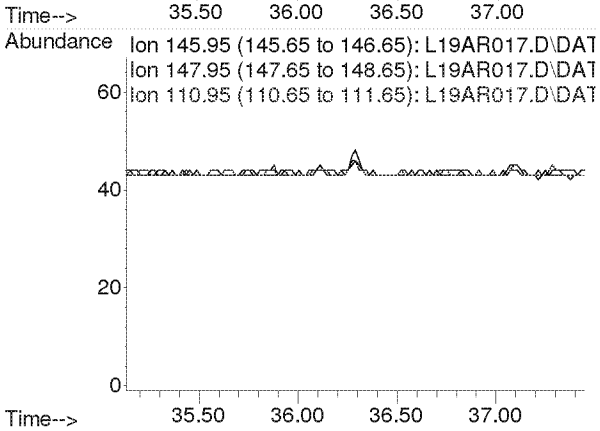


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

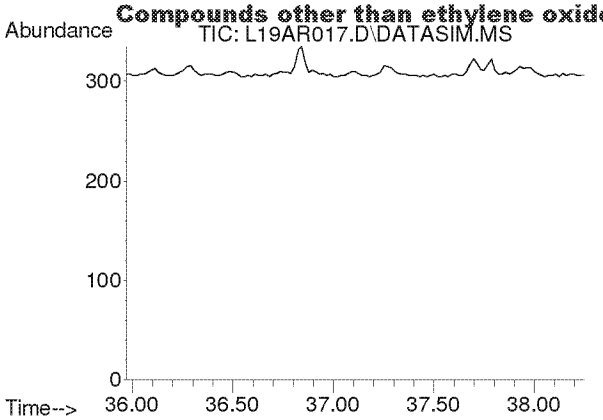
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

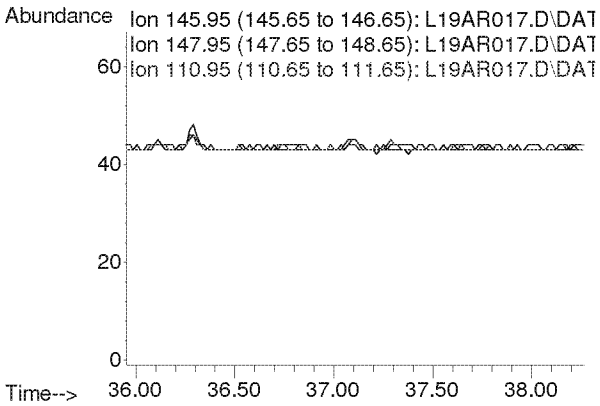


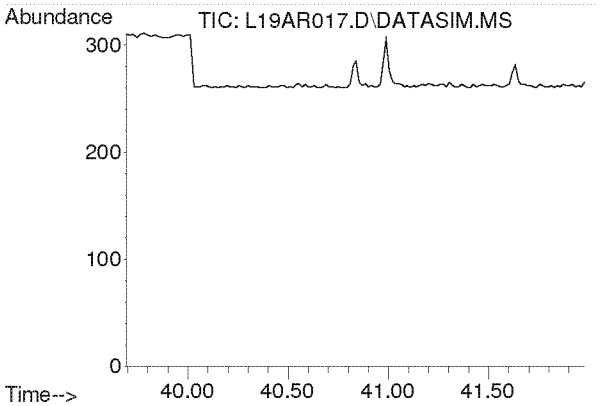
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



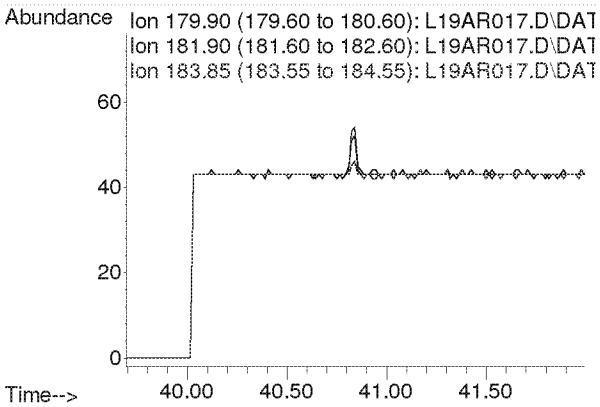


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

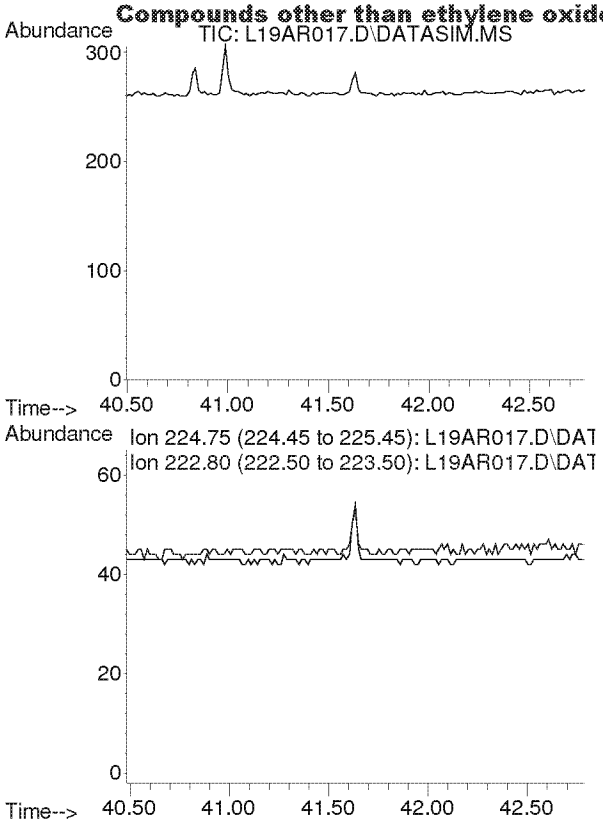
Lab File: L19AR017.D
Acq: 19 Jan 2019 3:47 am

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: L19AR017.D
Acq: 19 Jan 2019 3:47 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\L19AR\
Data File : L19AR018.D
Acq On : 19 Jan 2019 4:48 am
Operator : MAH
Sample : 9011527-07
Misc : EPA WB WAREHOUSE 1/13/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 09:25:22 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

ETOF only

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	52224	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	129560	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	99974	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	0.000	29	0	N.D. d 5	✓
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	

DBT 2/4/19

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19AR\
Data File : L19AR018.D
Acq On : 19 Jan 2019 4:48 am
Operator : MAH
Sample : 9011527-07
Misc : EPA WB WAREHOUSE 1/13/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 09:25:22 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

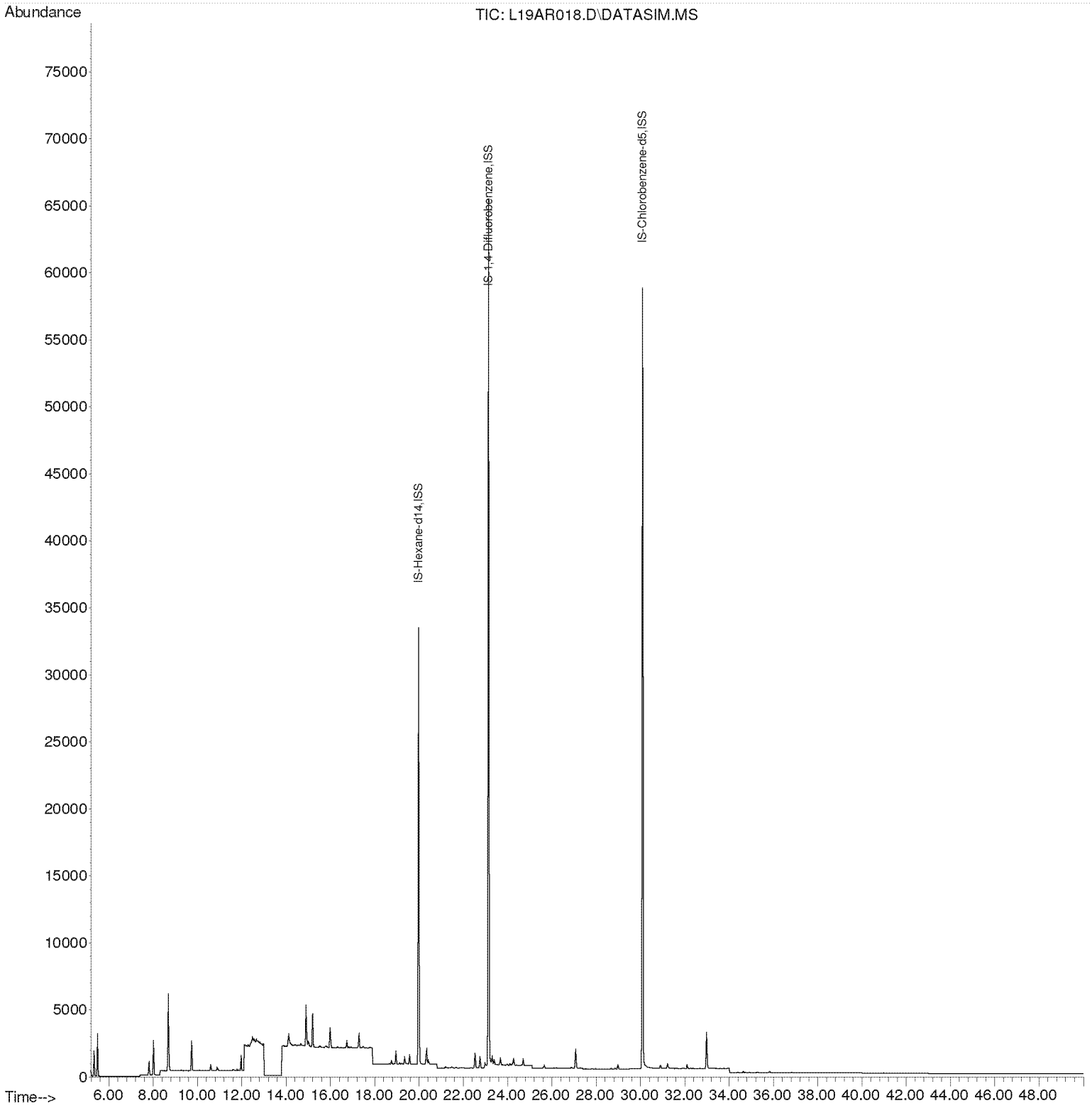
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	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

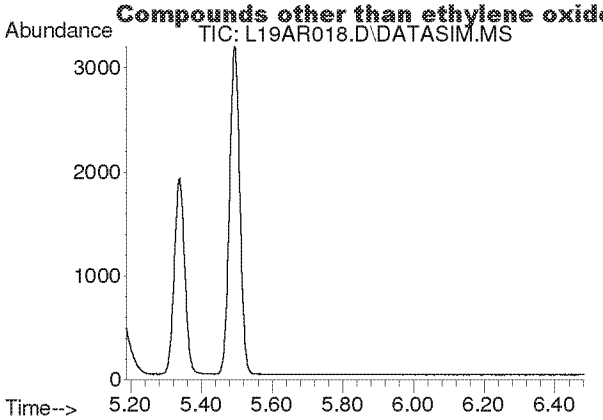
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR018.D
Acq On : 19 Jan 2019 4:48 am
Operator : MAH
Sample : 9011527-07
Misc : EPA WB WAREHOUSE 1/13/19
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 23 08:39:44 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



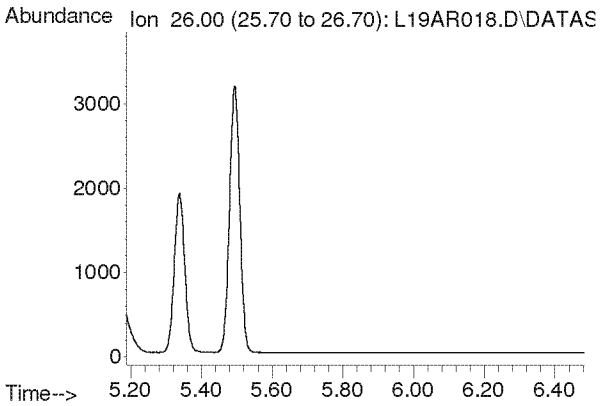
Compounds other than ethylene oxide were not quantitated.

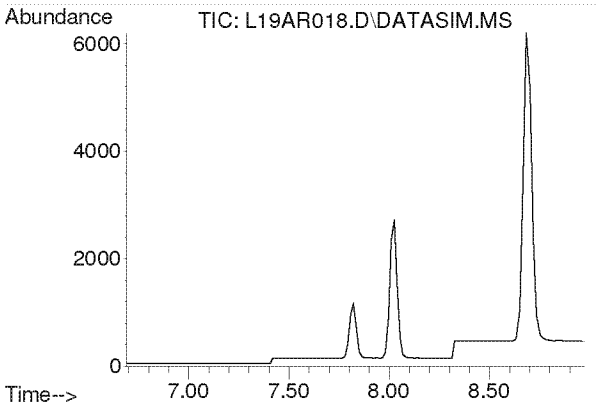


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 26



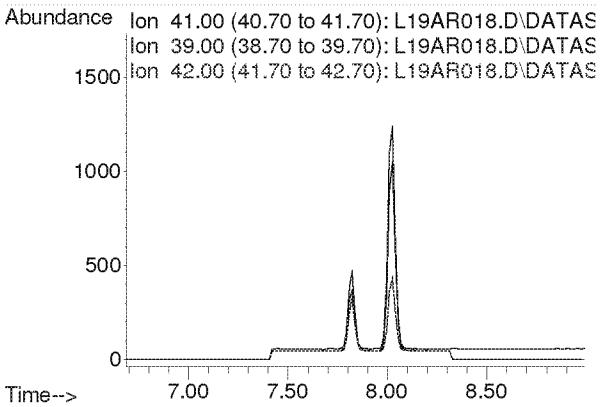


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

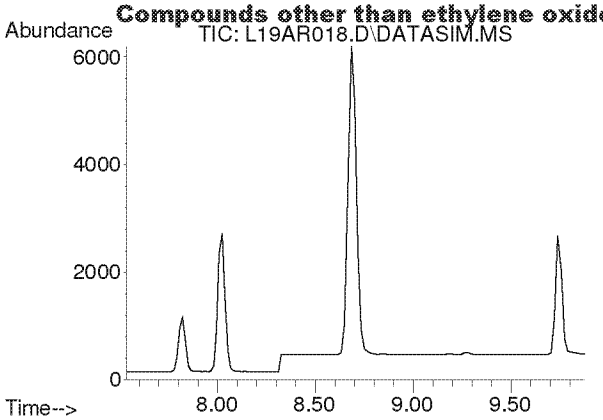
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

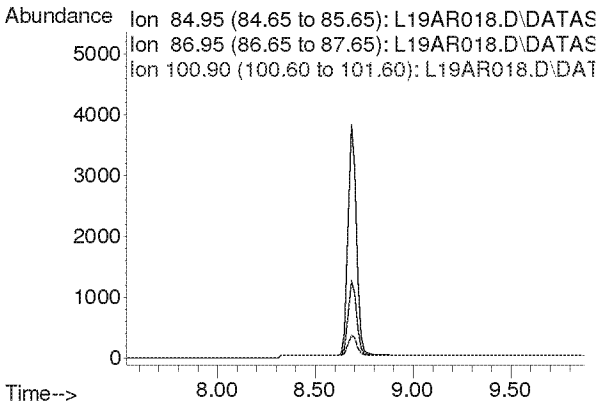


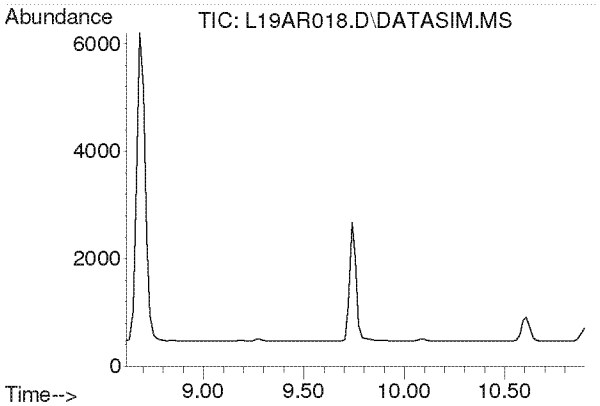
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



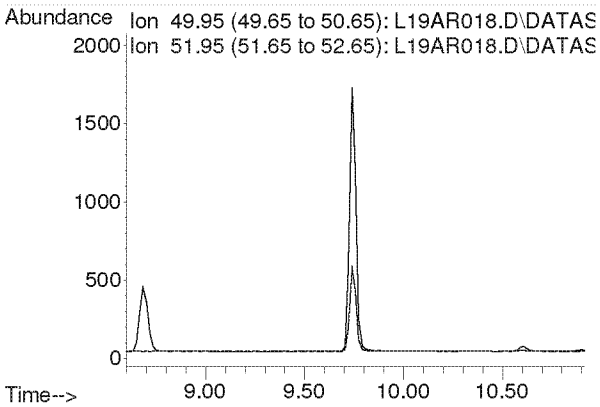


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

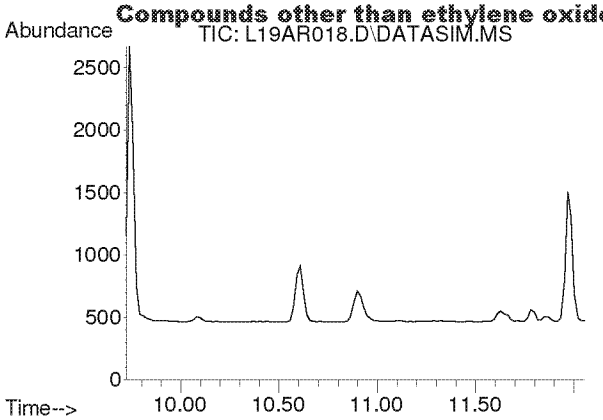
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

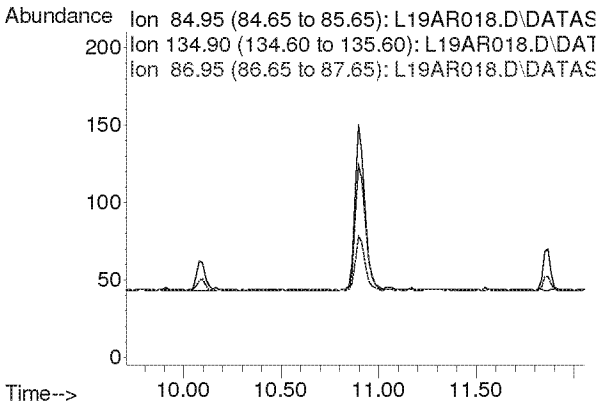


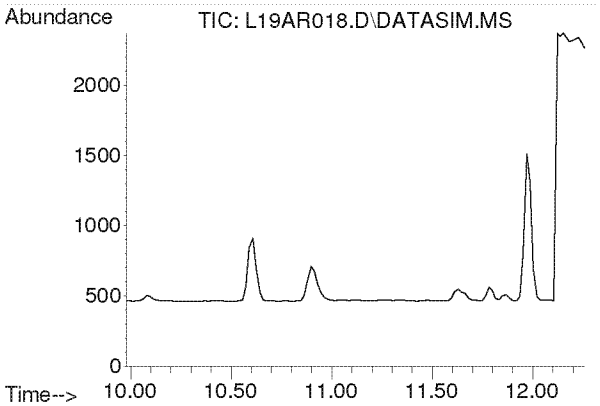
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



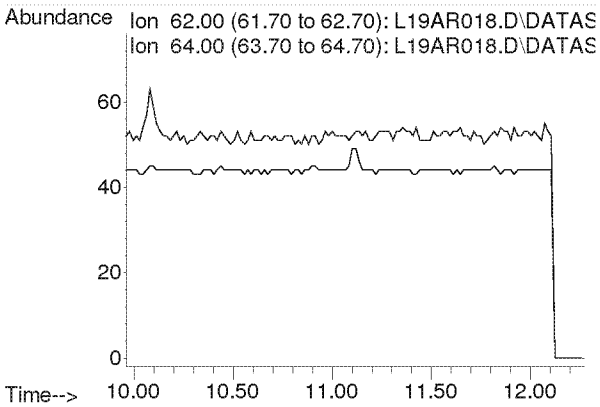


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

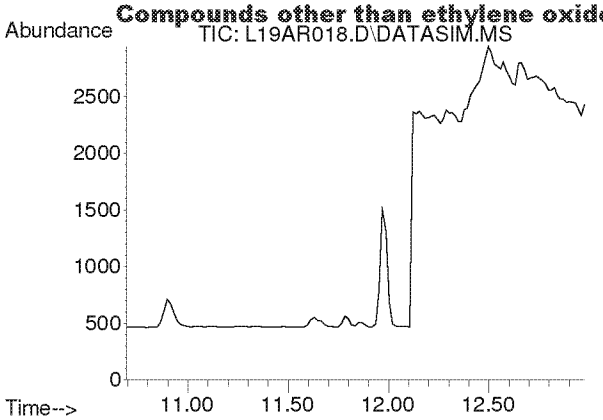
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

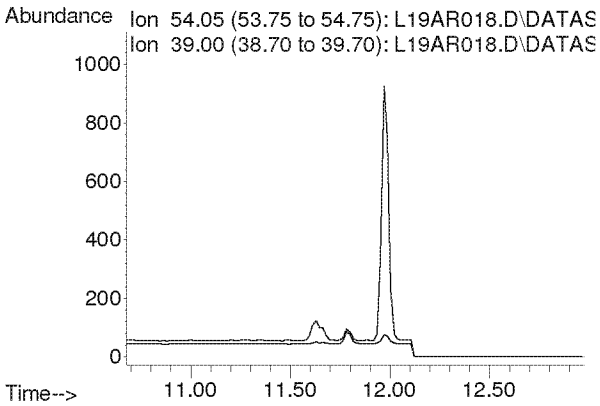


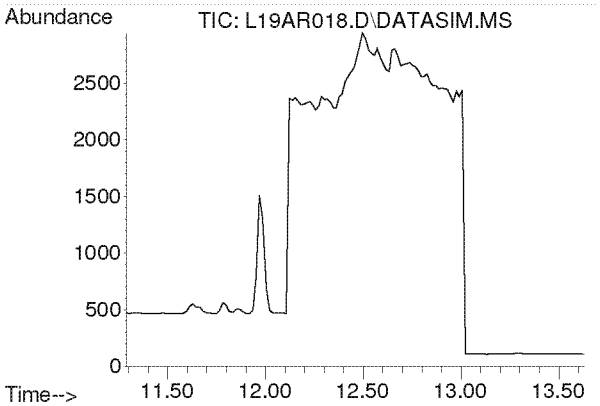
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



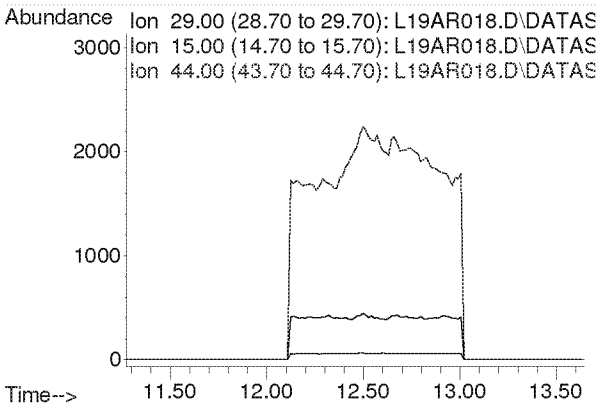


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

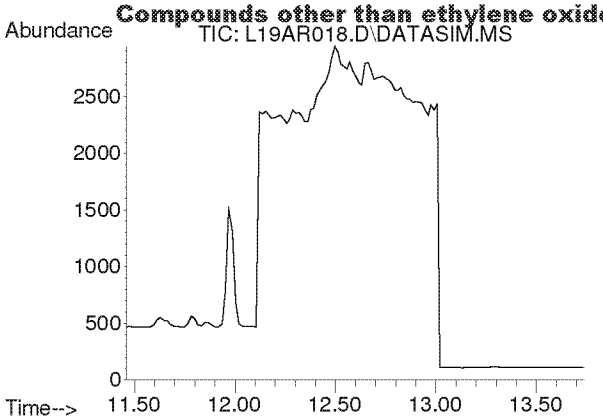
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

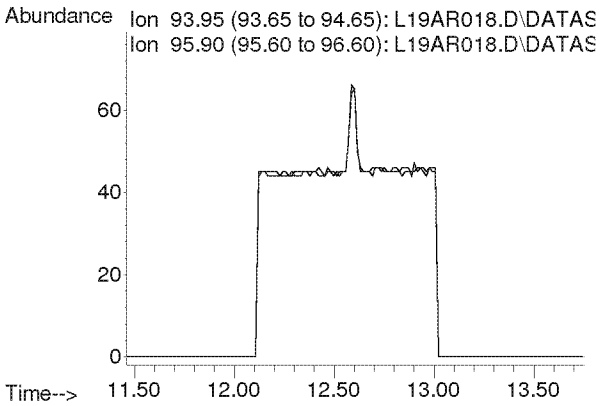


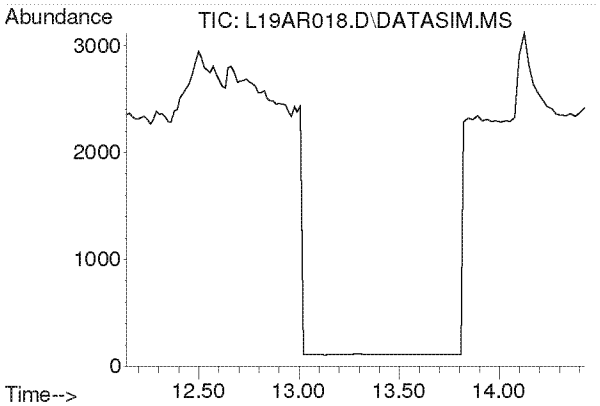
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



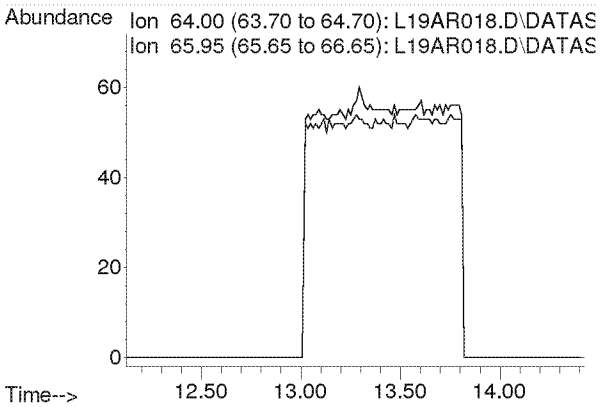


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

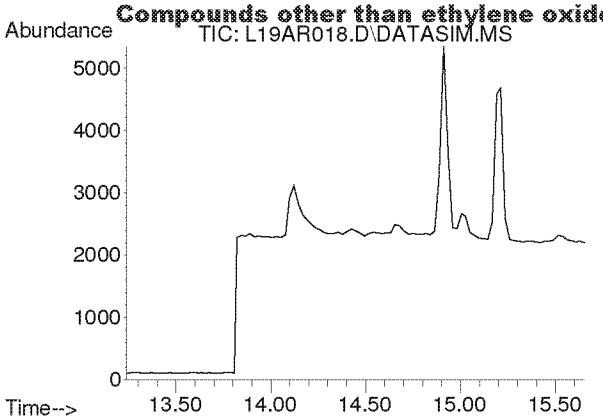
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

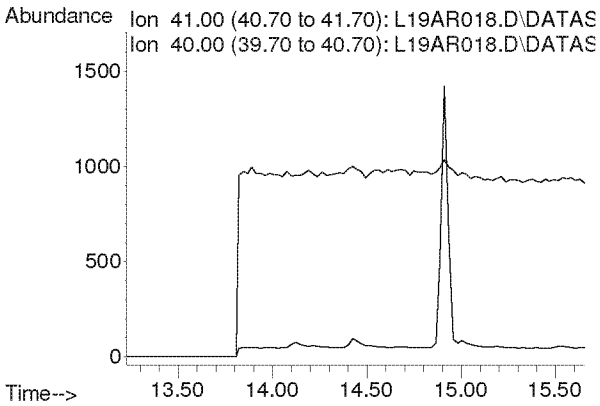


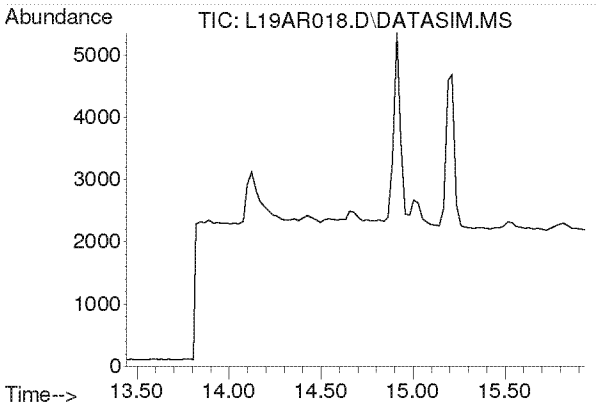
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



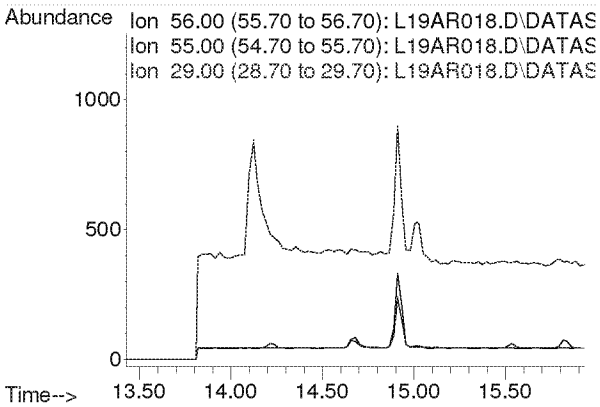


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

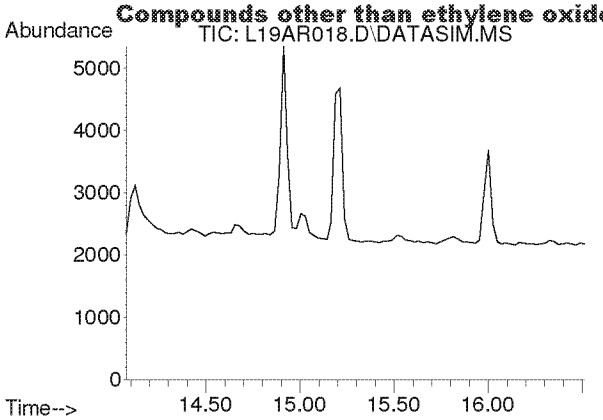
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

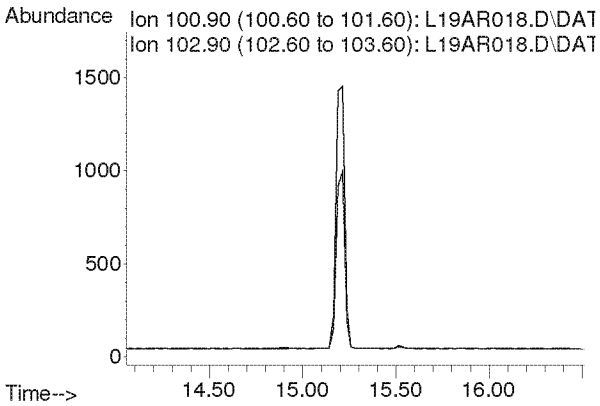


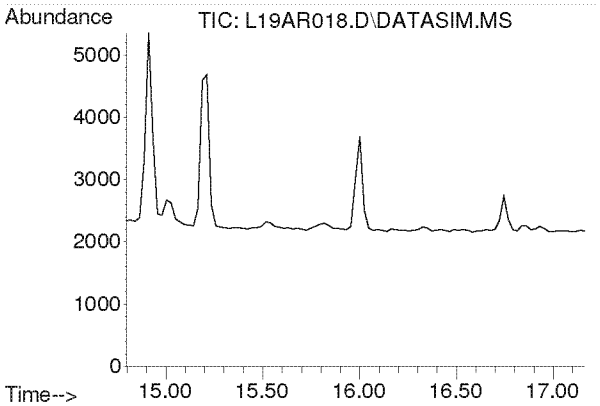
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



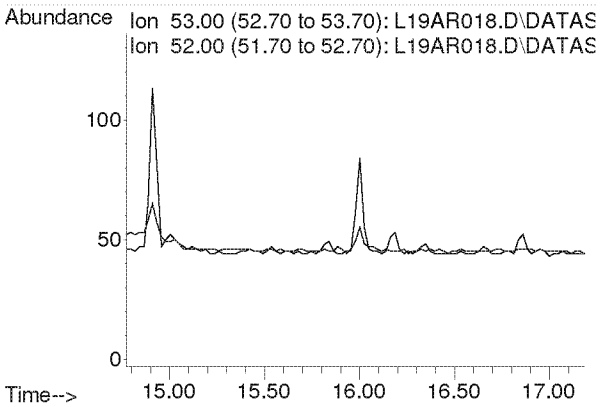


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

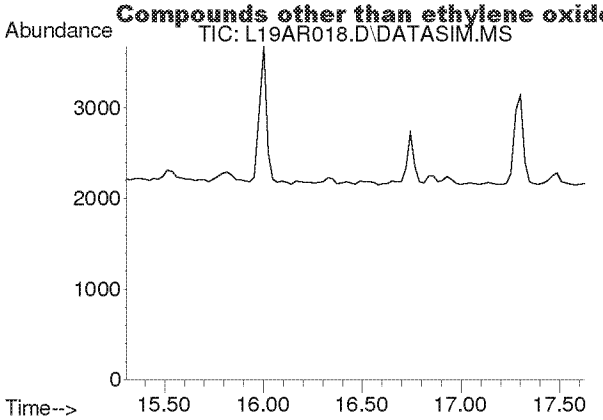
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

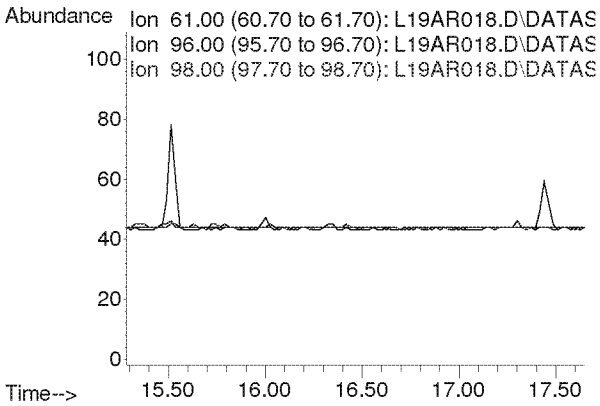


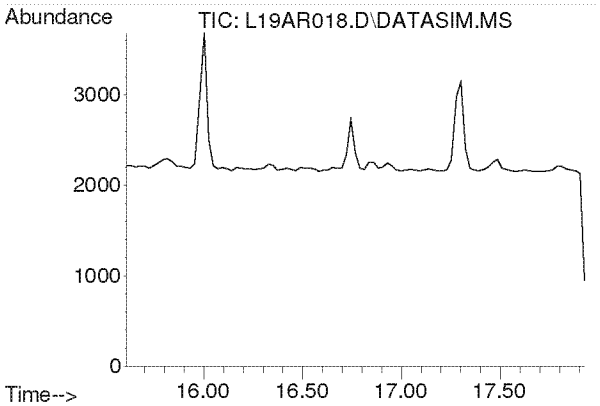
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



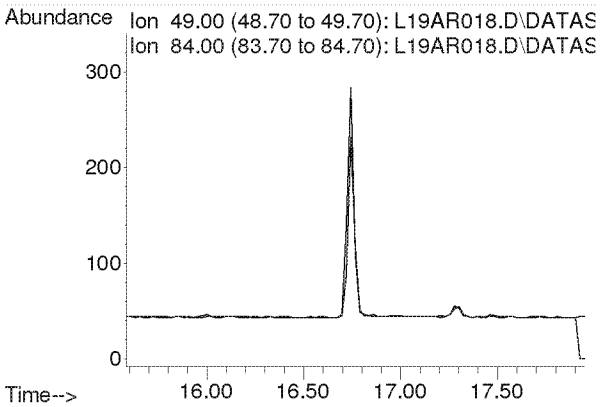


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

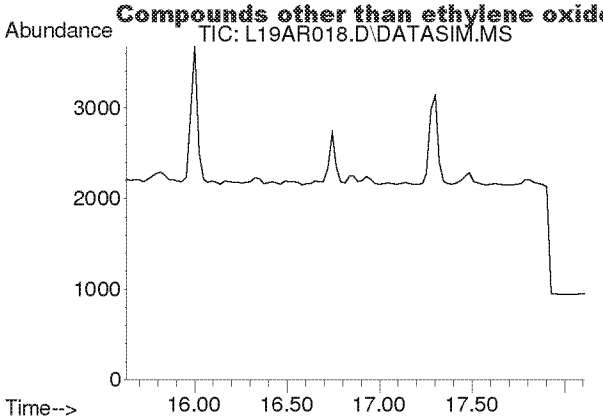
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

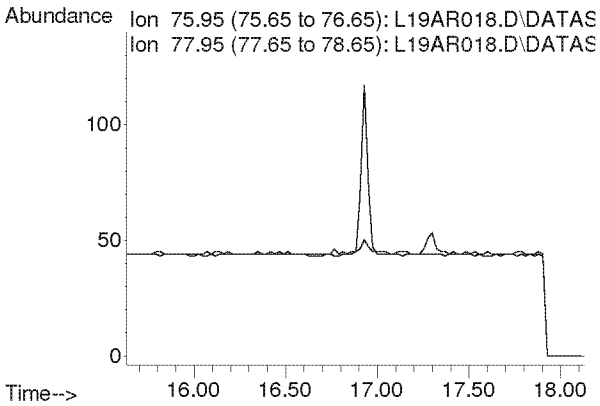


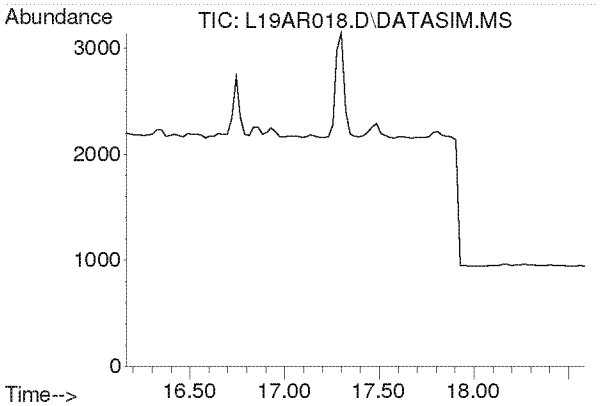
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



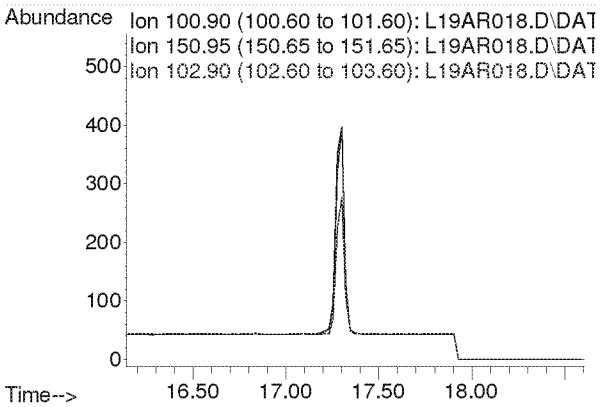


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

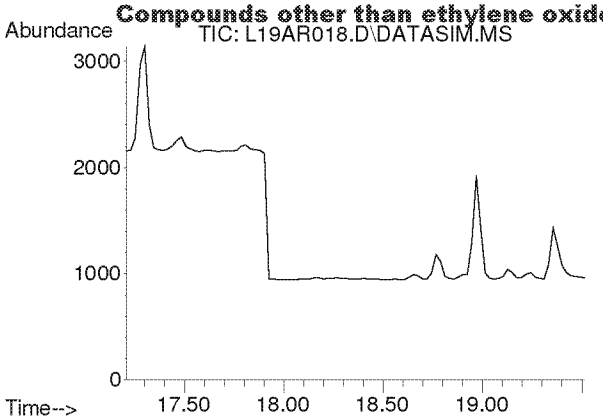
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

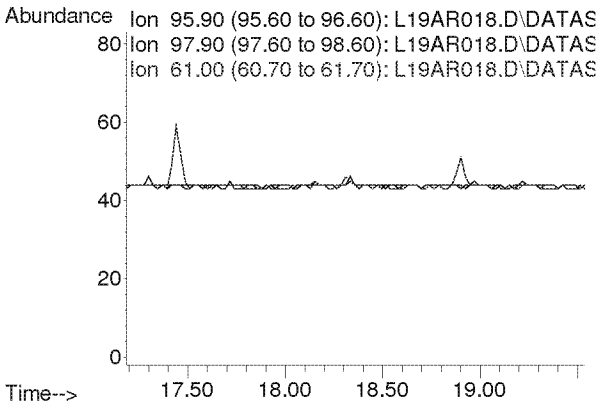


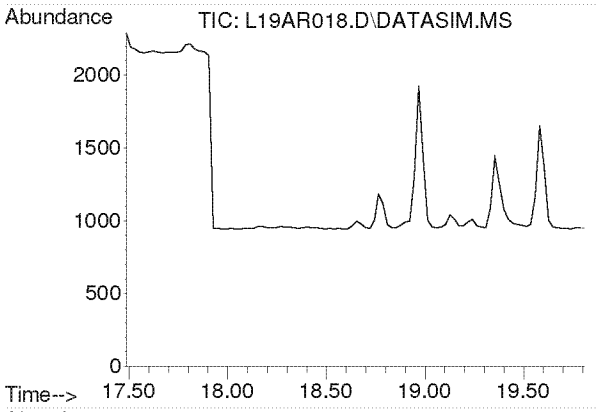
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



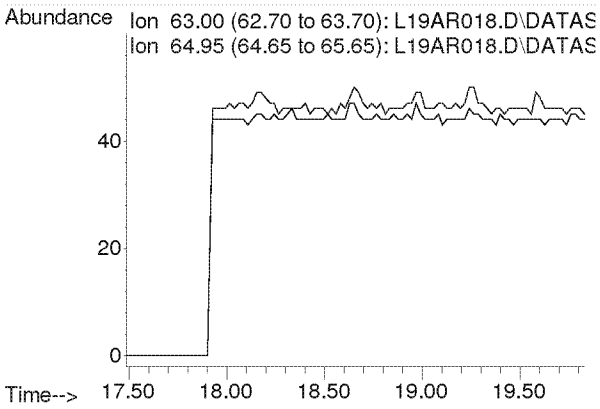


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

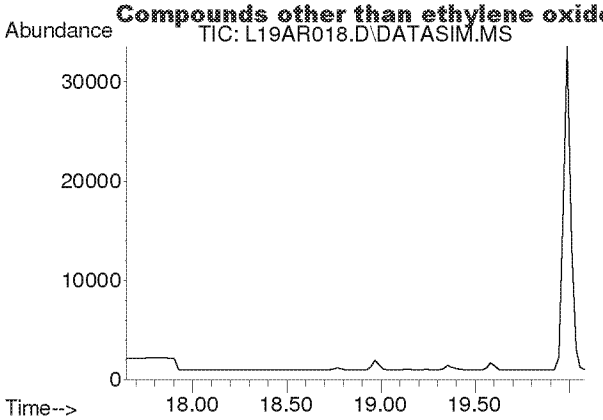
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

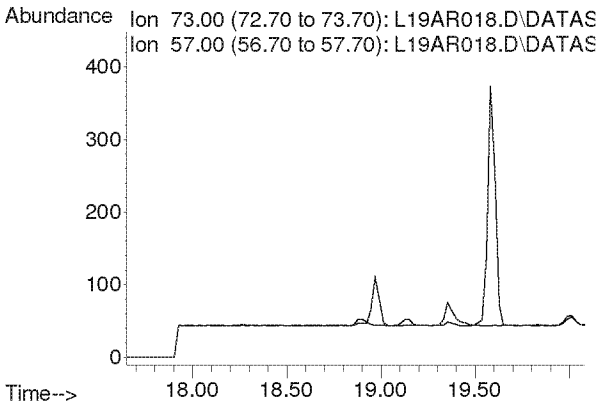


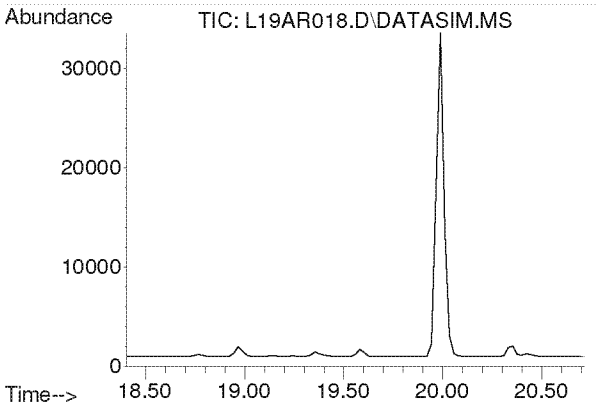
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



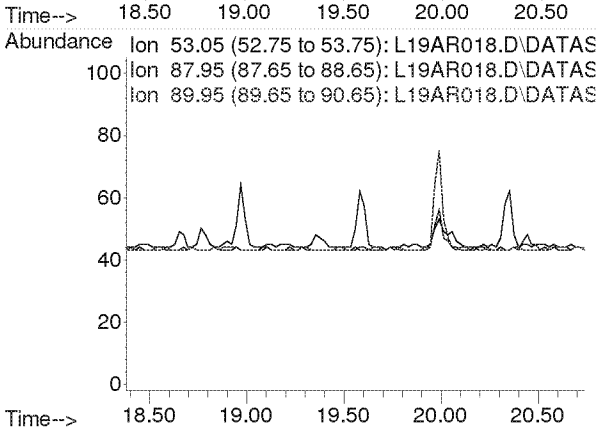


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

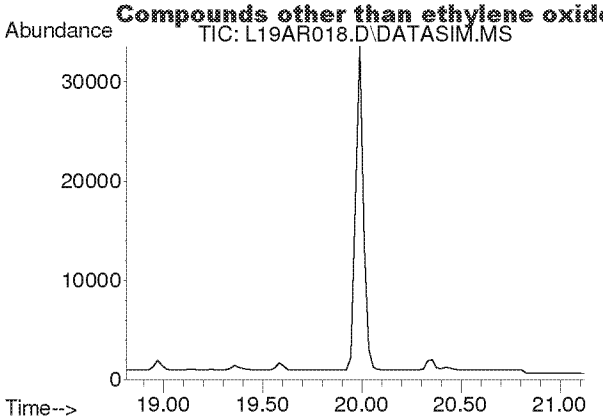
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

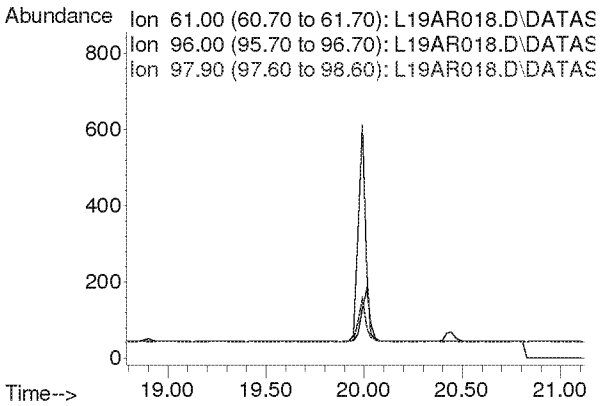


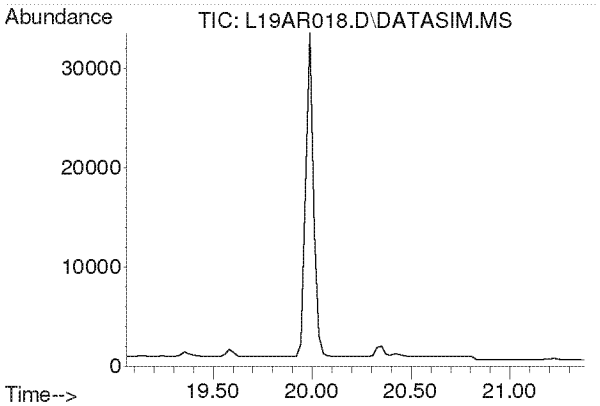
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



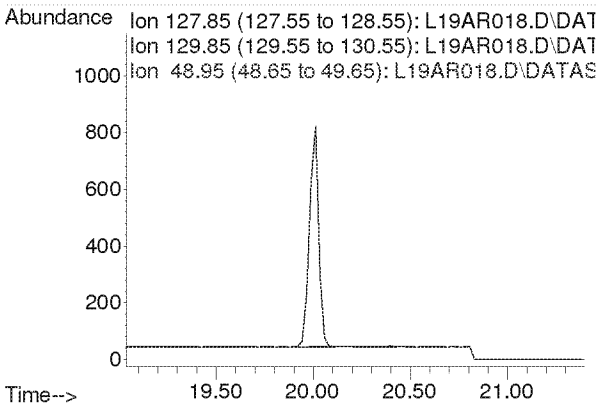


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

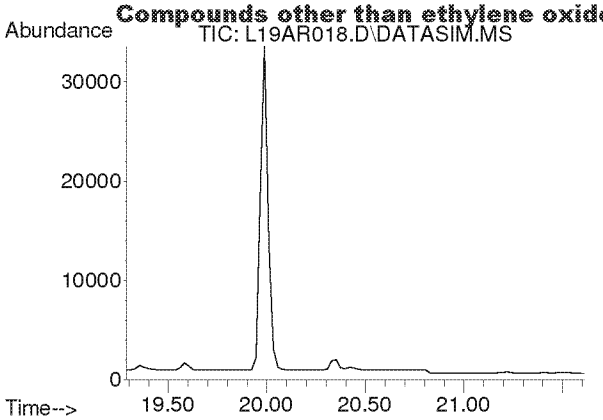
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

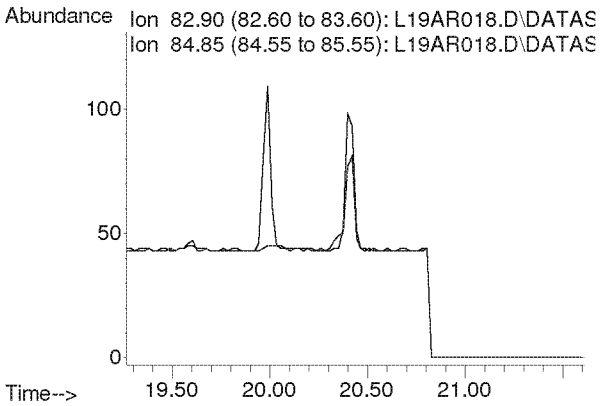


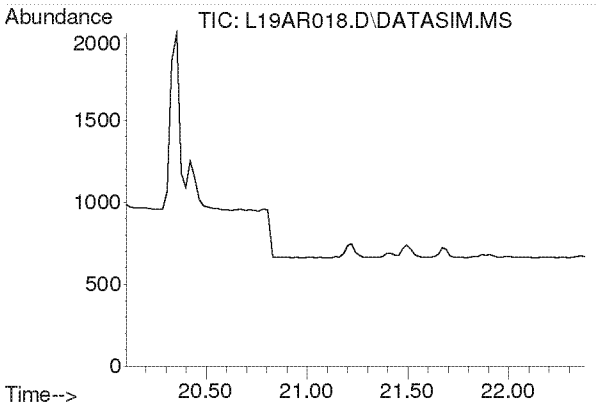
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



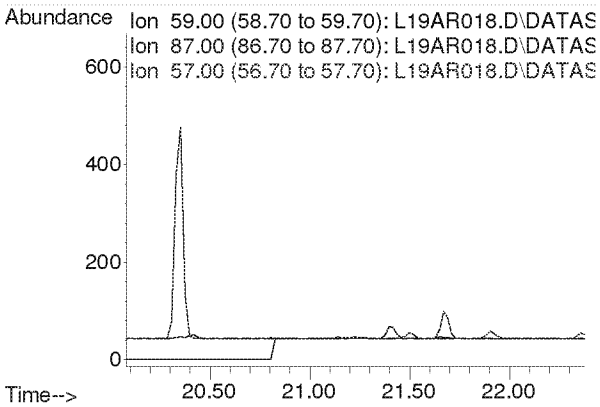


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

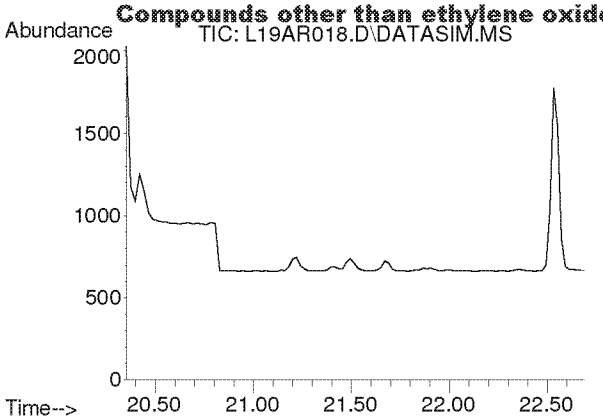
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

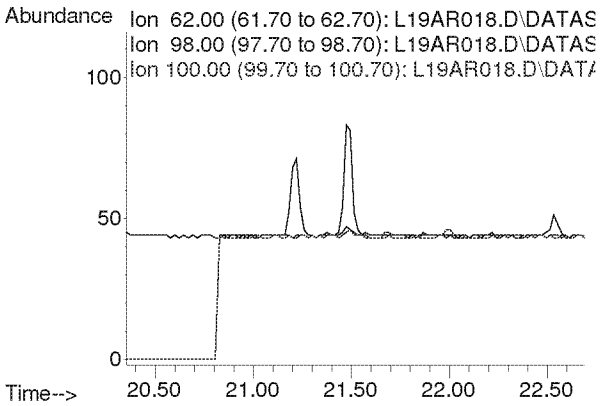


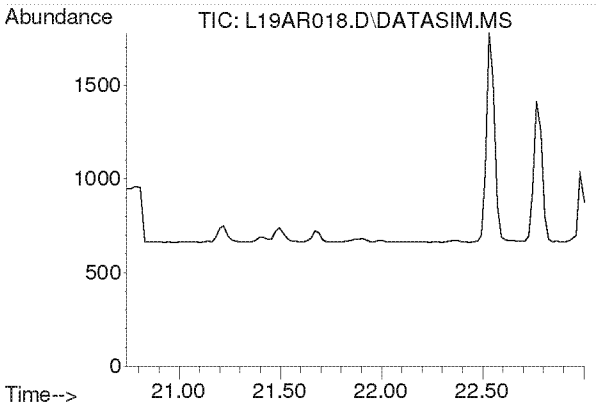
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



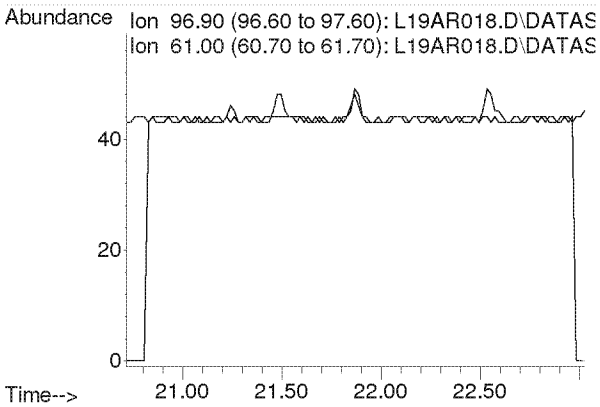


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

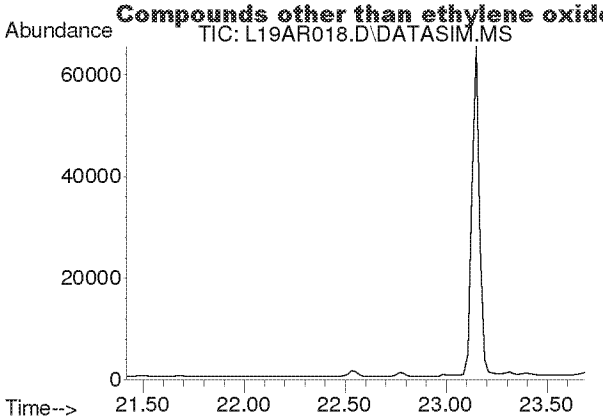
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

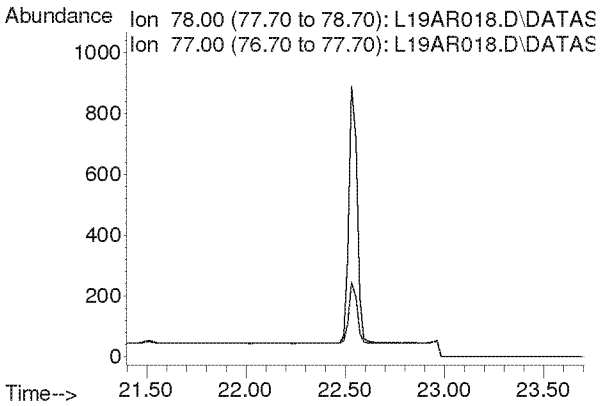


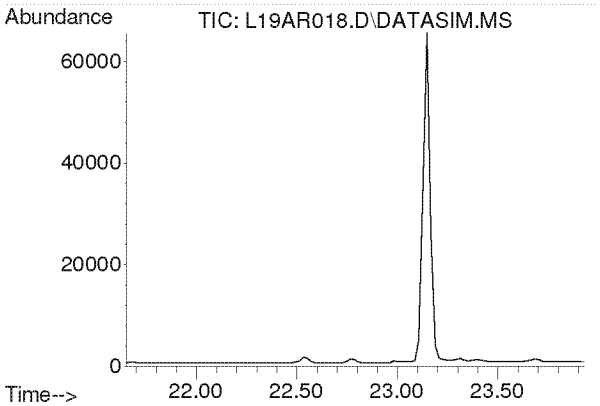
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



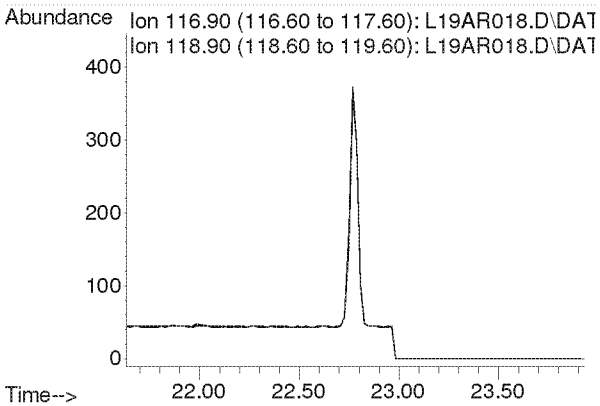


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

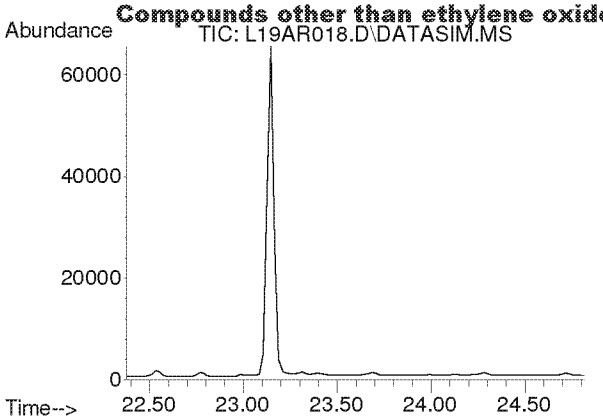
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

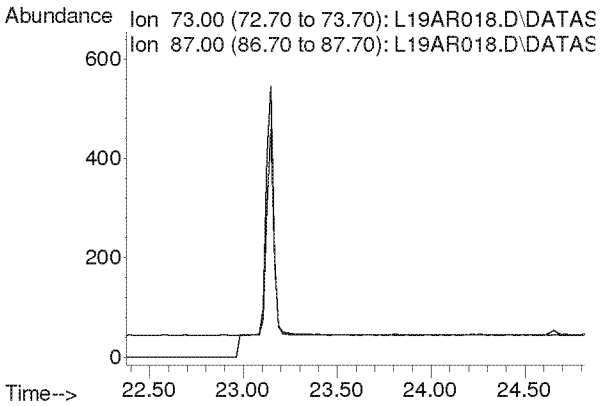


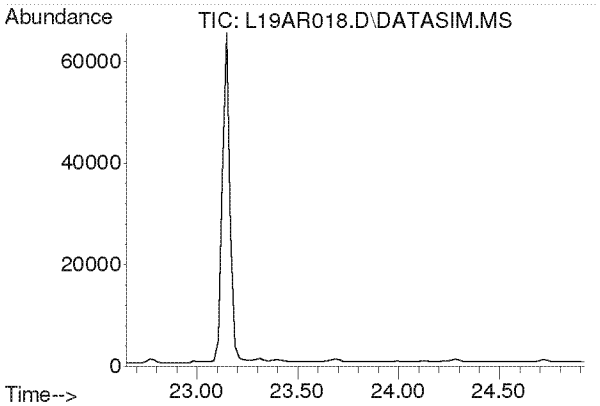
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



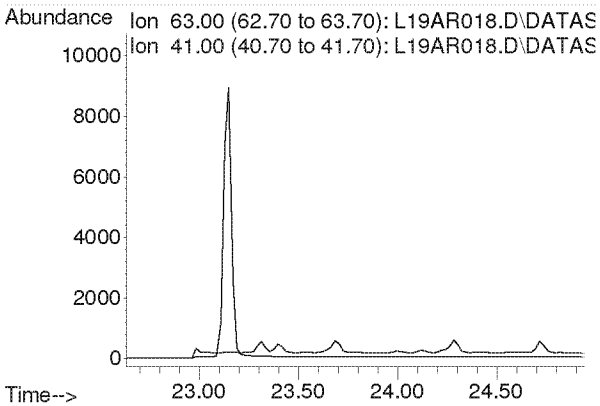


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

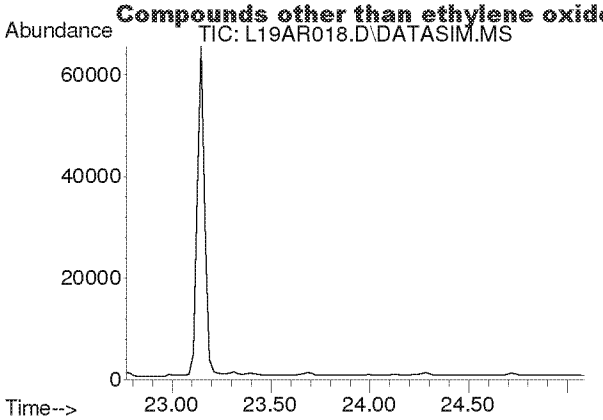
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

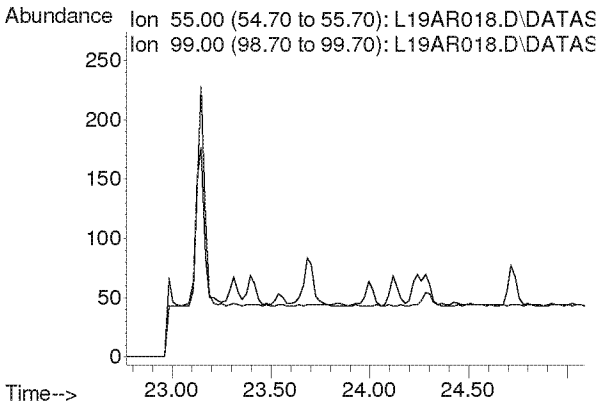


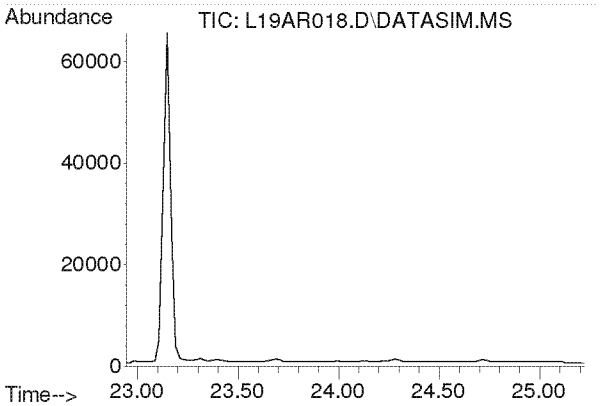
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



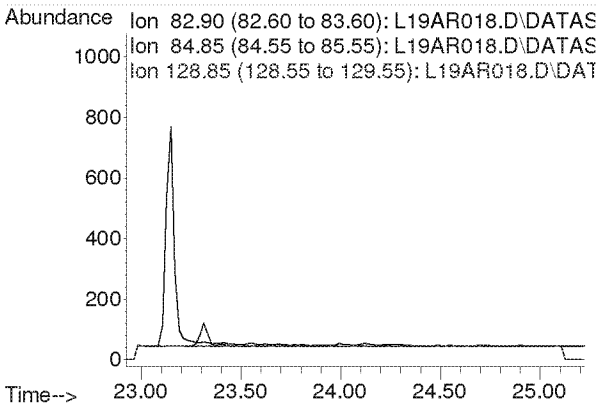


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

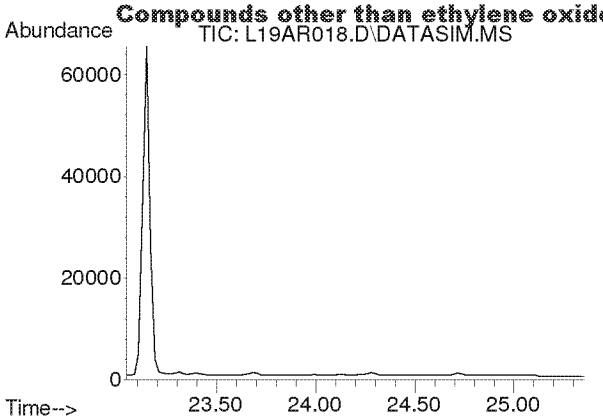
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

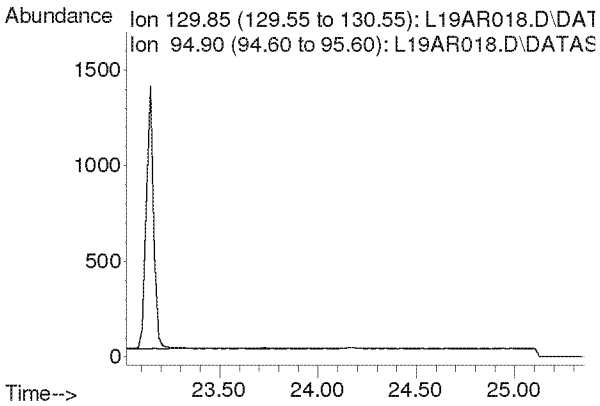


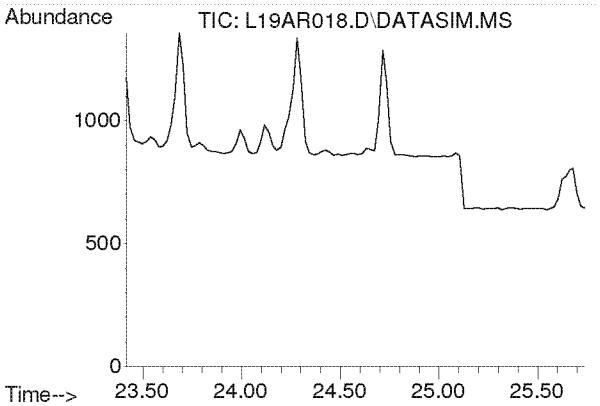
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



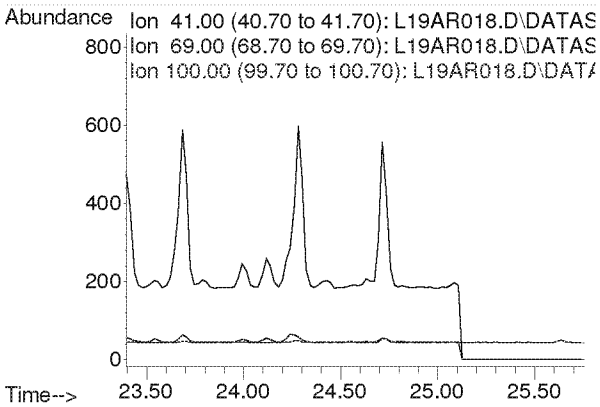


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

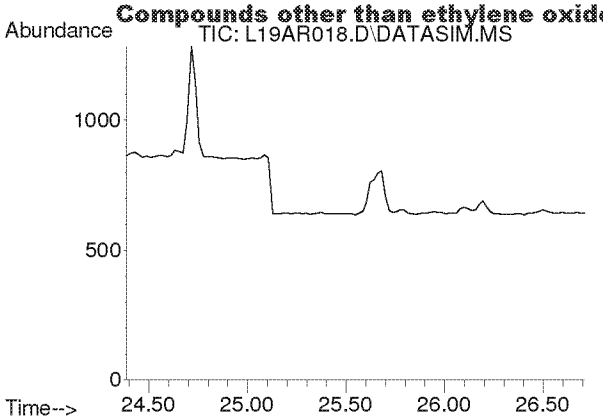
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

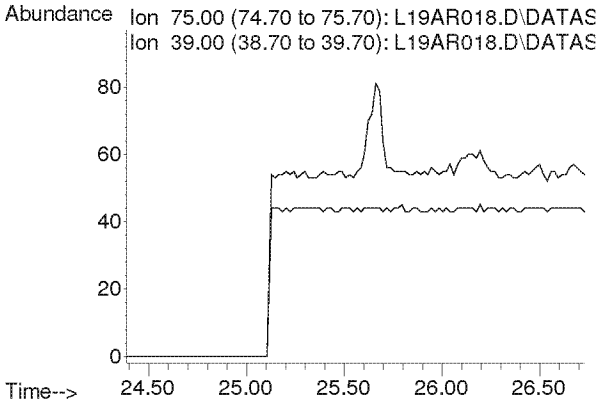


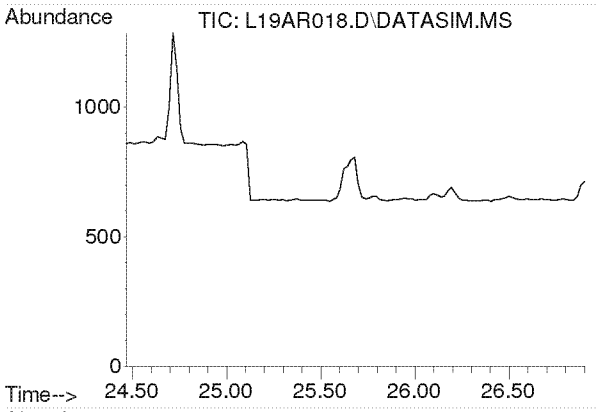
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



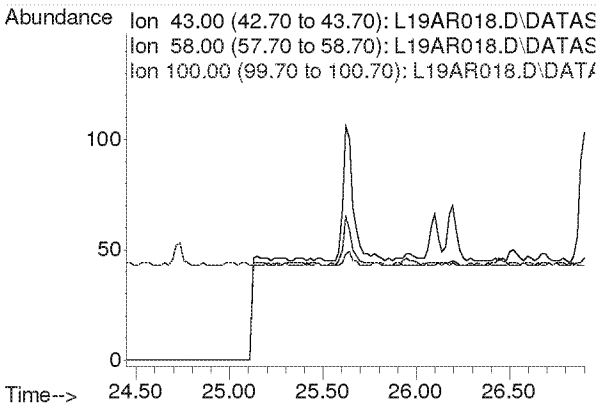


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

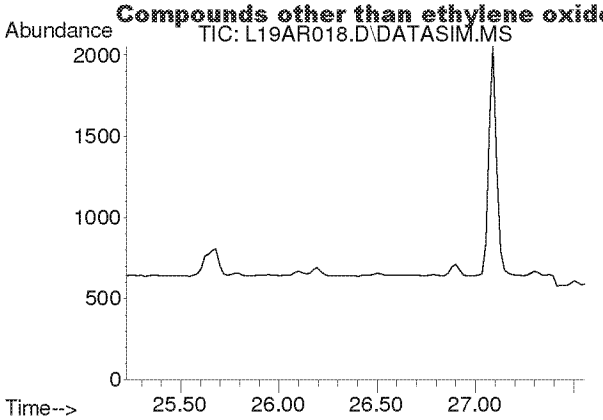
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

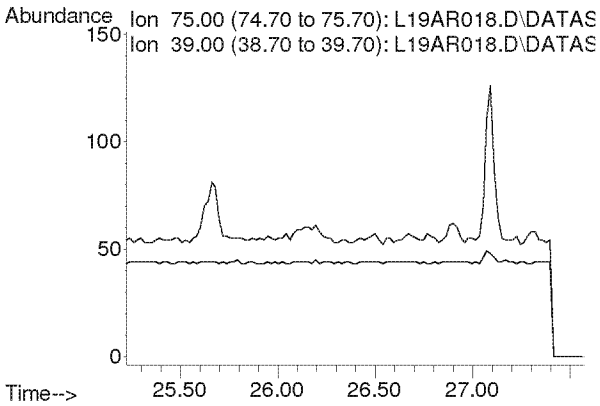


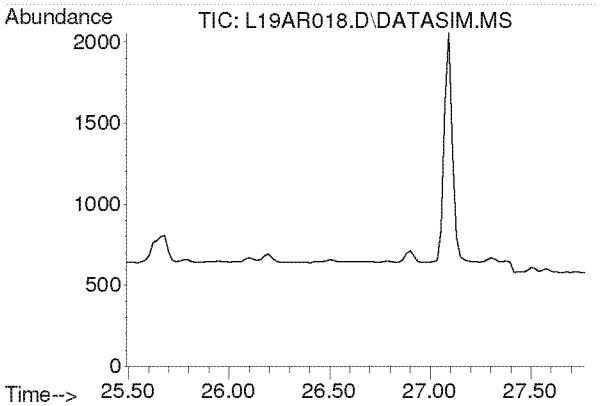
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



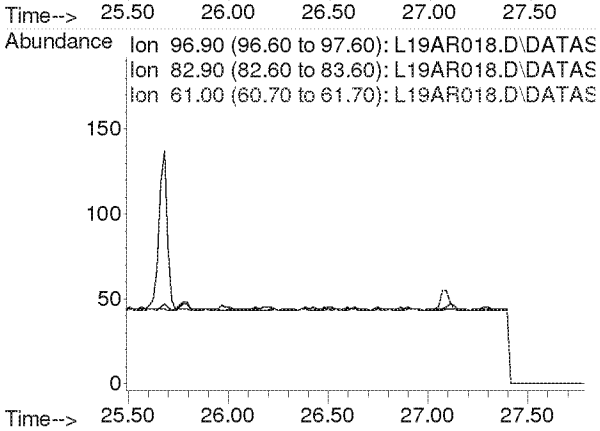


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

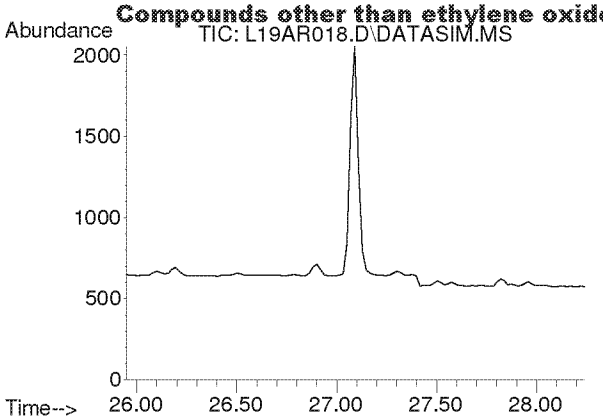
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

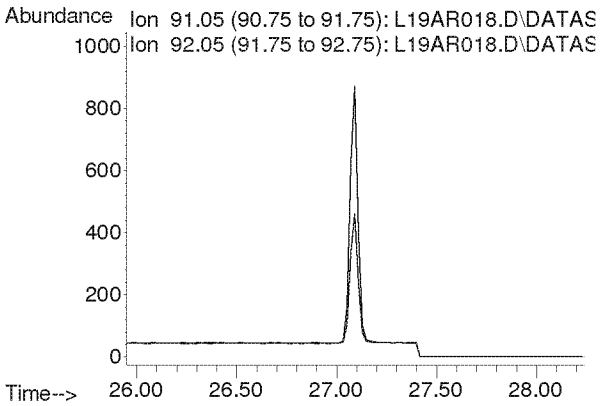


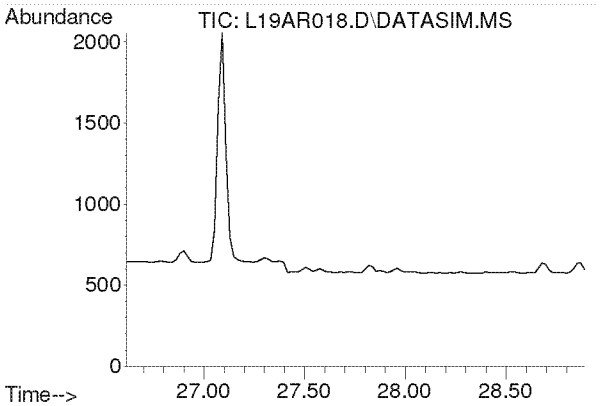
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



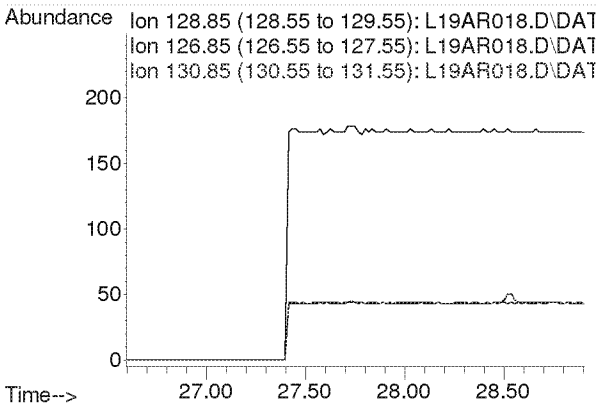


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

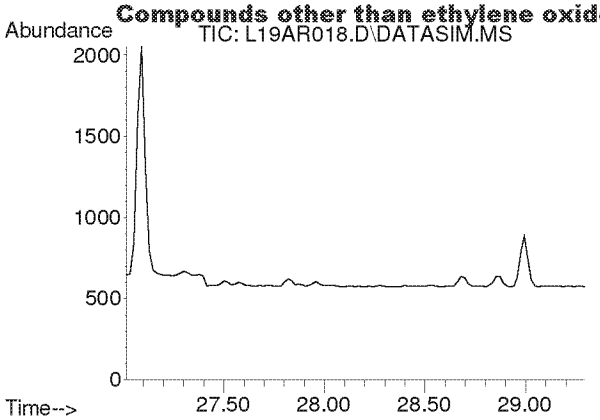
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

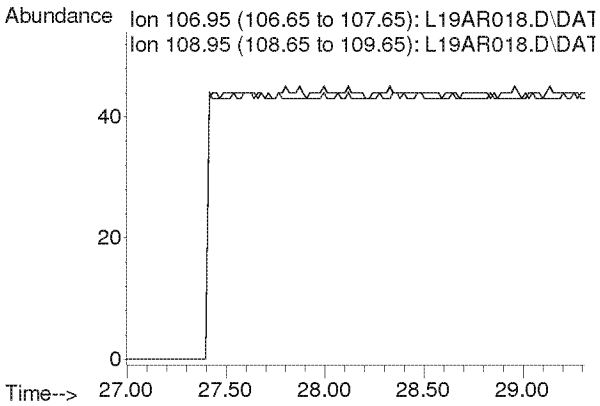


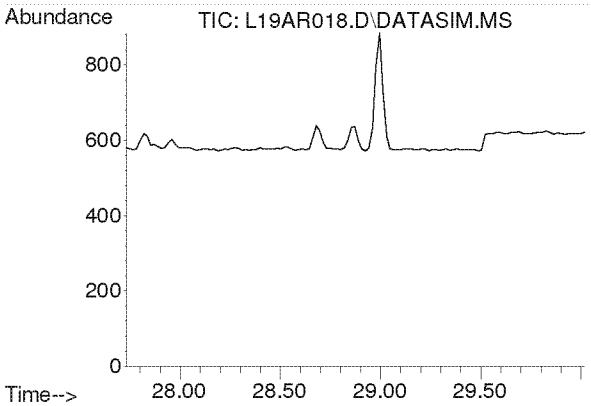
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



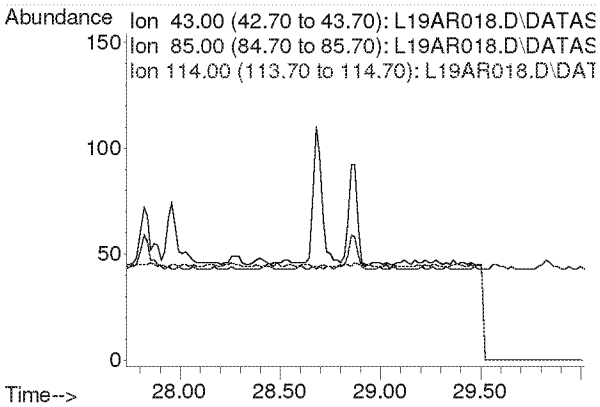


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

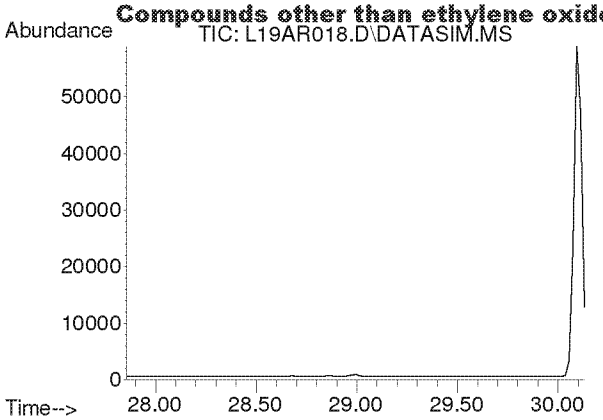
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

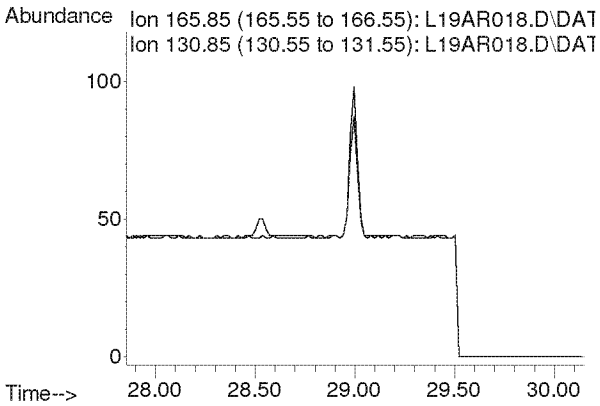


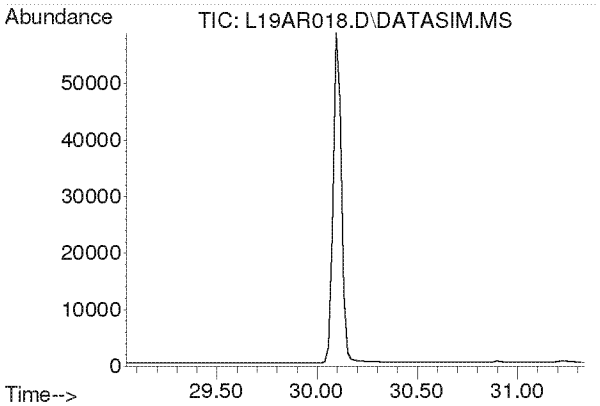
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



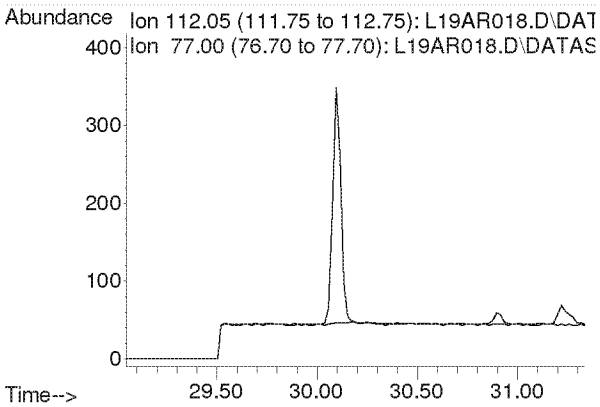


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

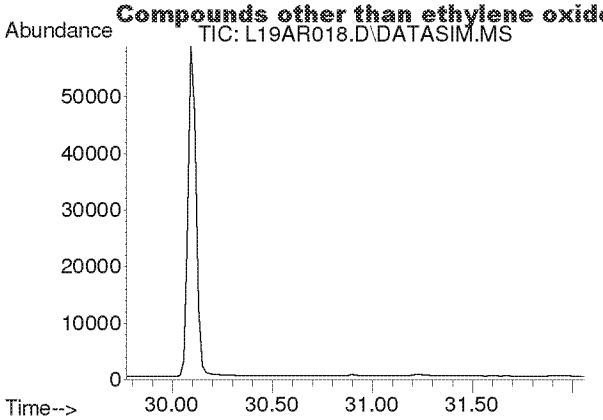
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

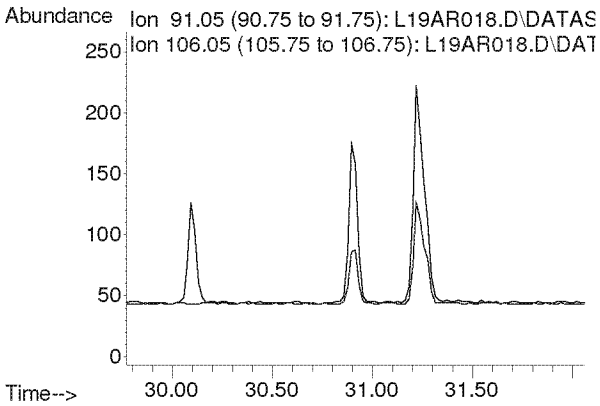


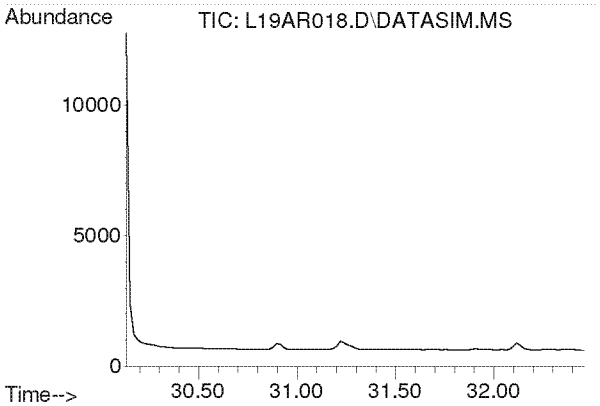
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



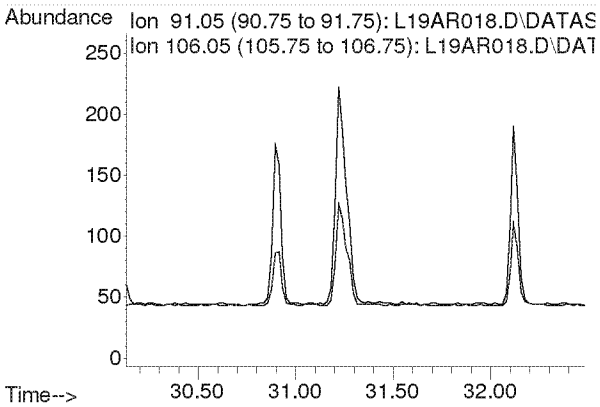


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

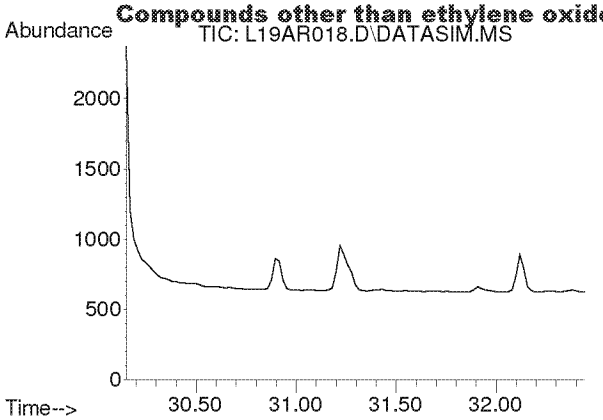
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

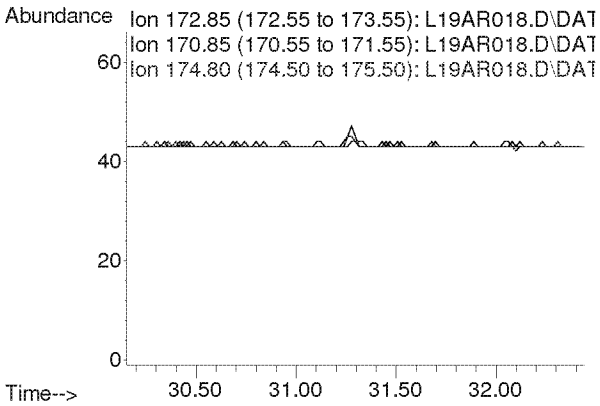


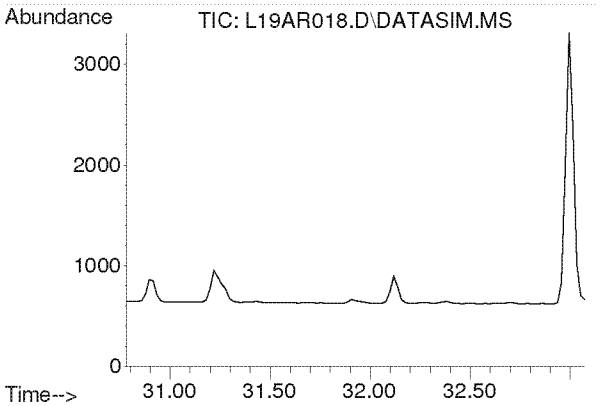
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



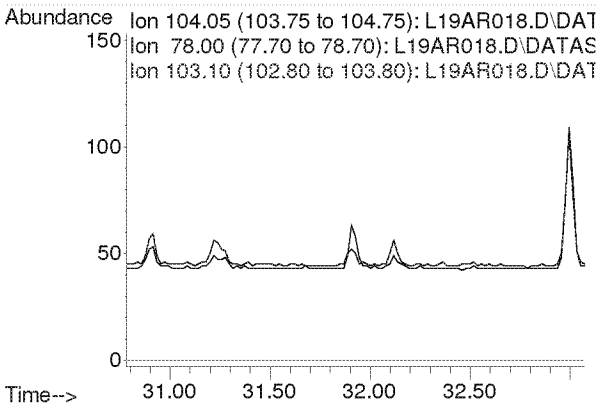


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

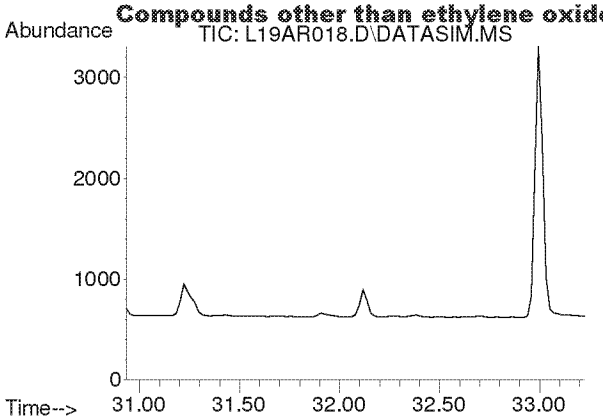
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

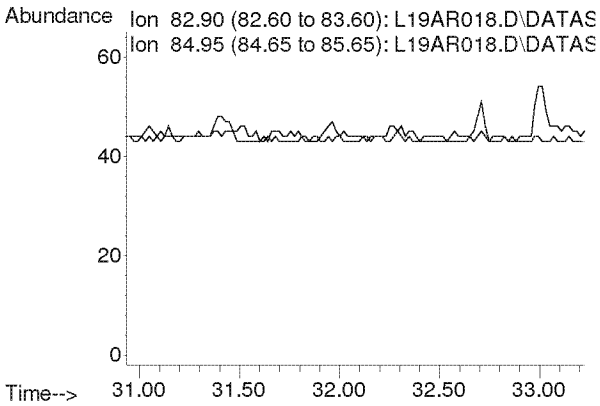


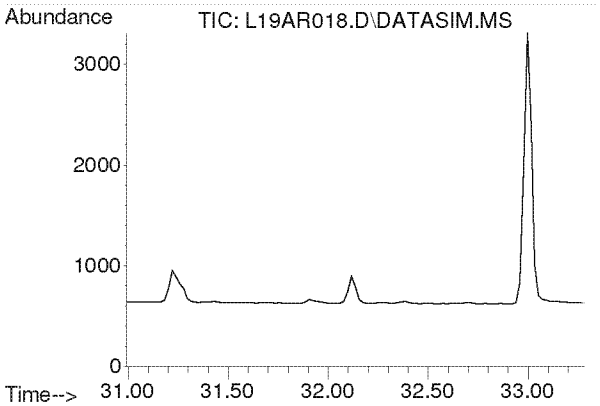
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



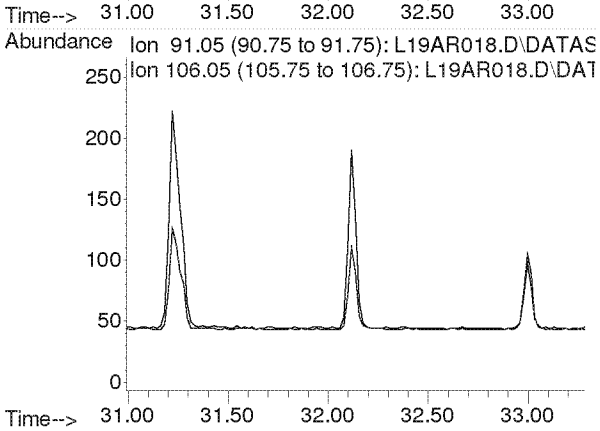


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

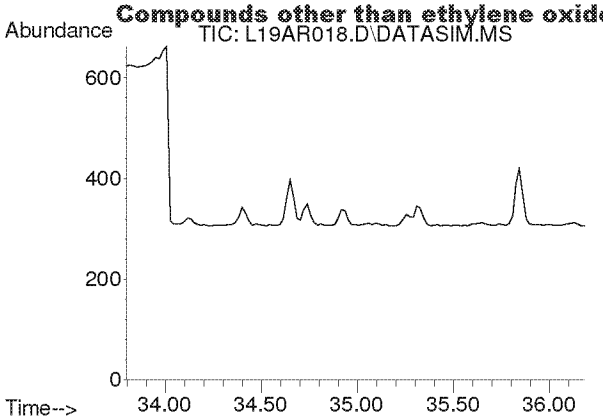
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

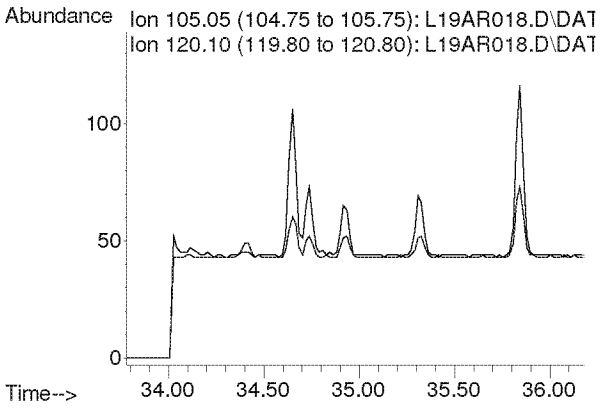


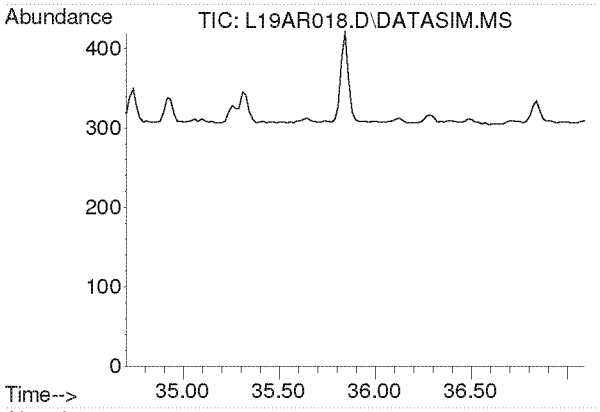
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



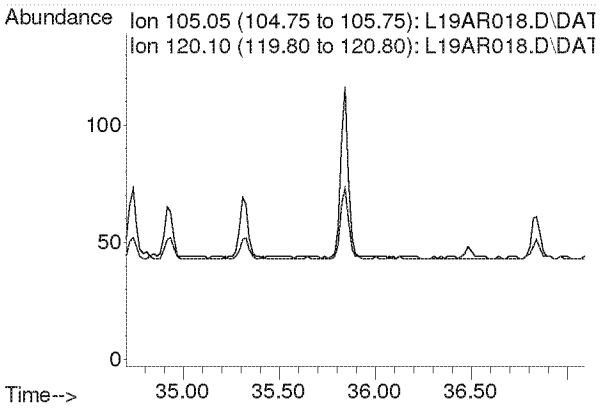


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

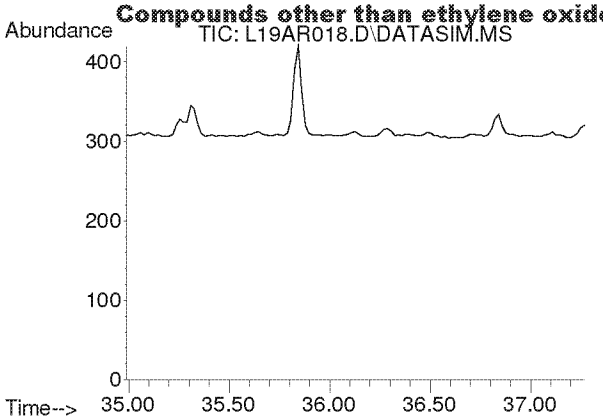
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

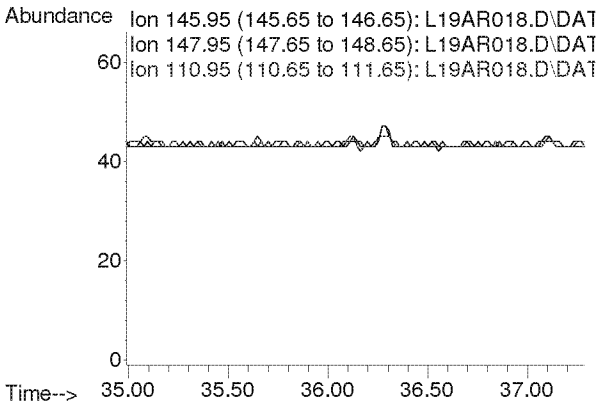


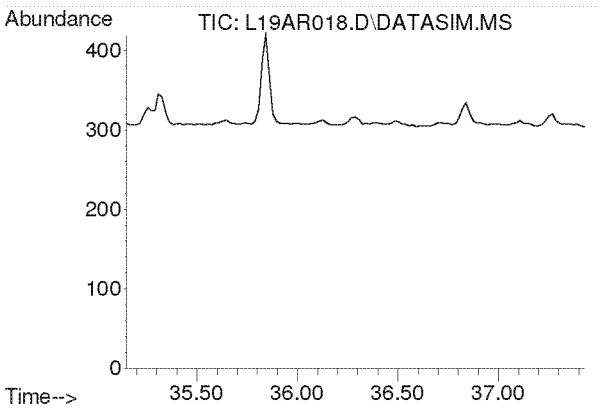
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



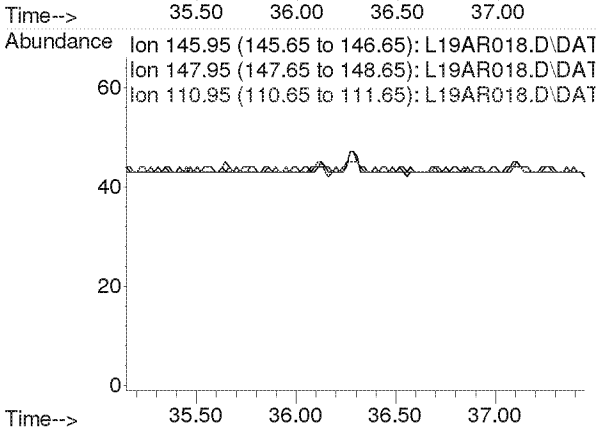


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

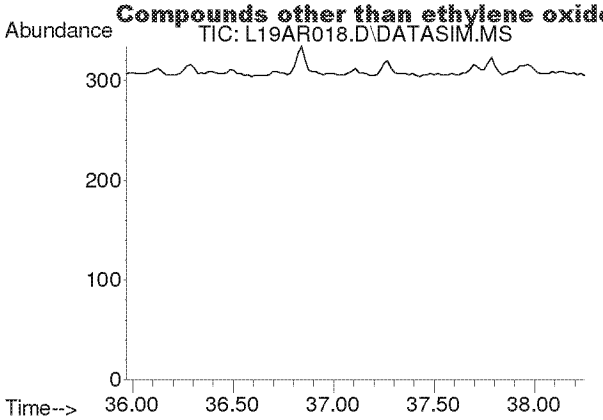
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

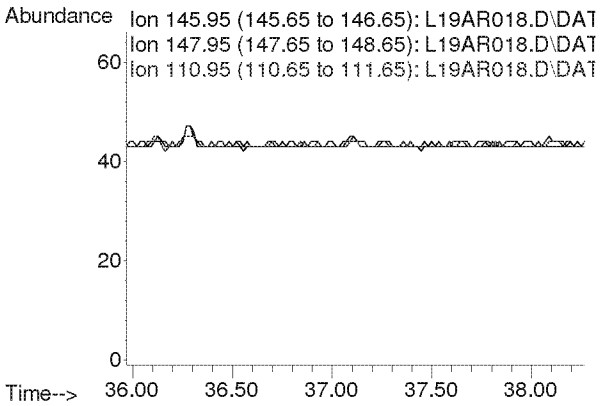


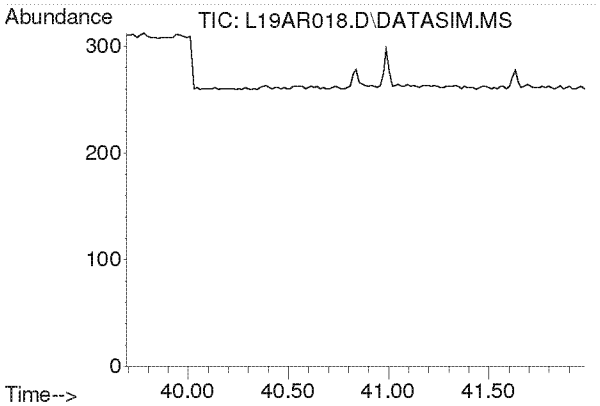
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



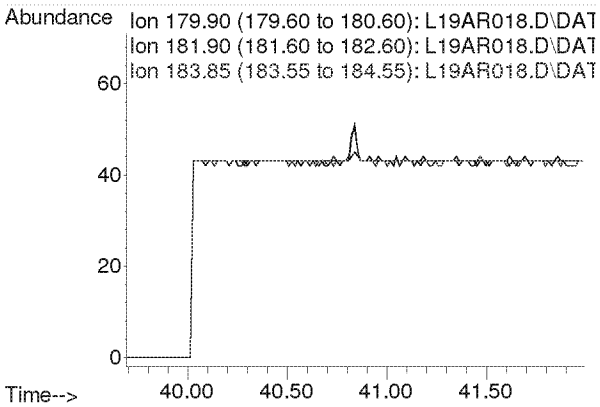


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

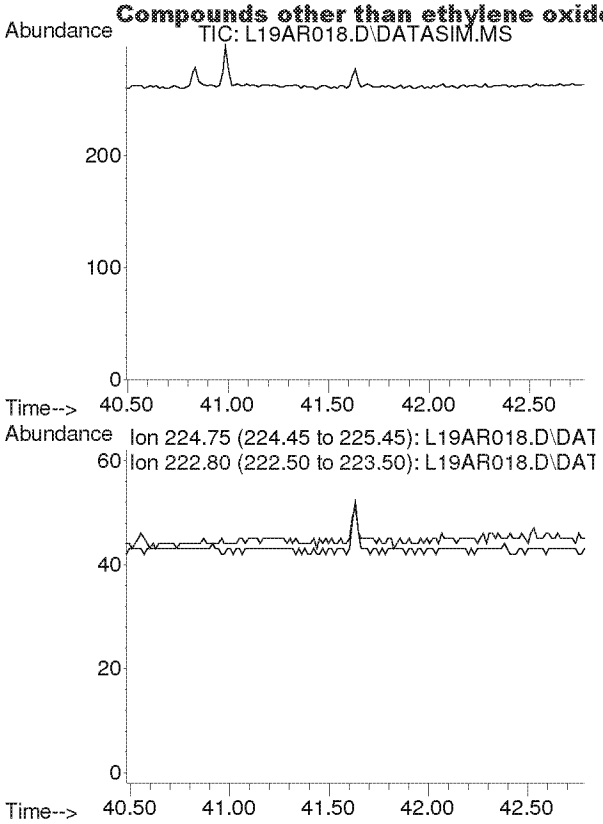
Lab File: L19AR018.D
Acq: 19 Jan 2019 4:48 am

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: L19AR018.D
Acq: 19 Jan 2019 4:48 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\L19AR\
Data File : L19AR019.D
Acq On : 19 Jan 2019 5:47 am
Operator : MAH
Sample : 9011527-08
Misc : WATER TOWER 1/13/19
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 23 09:26:04 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	52498	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	130054	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	100265	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	12.470	29	462m	0.1704 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. 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. 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\L19AR\
Data File : L19AR019.D
Acq On : 19 Jan 2019 5:47 am
Operator : MAH
Sample : 9011527-08
Misc : WATER TOWER 1/13/19
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 23 09:26:04 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.	

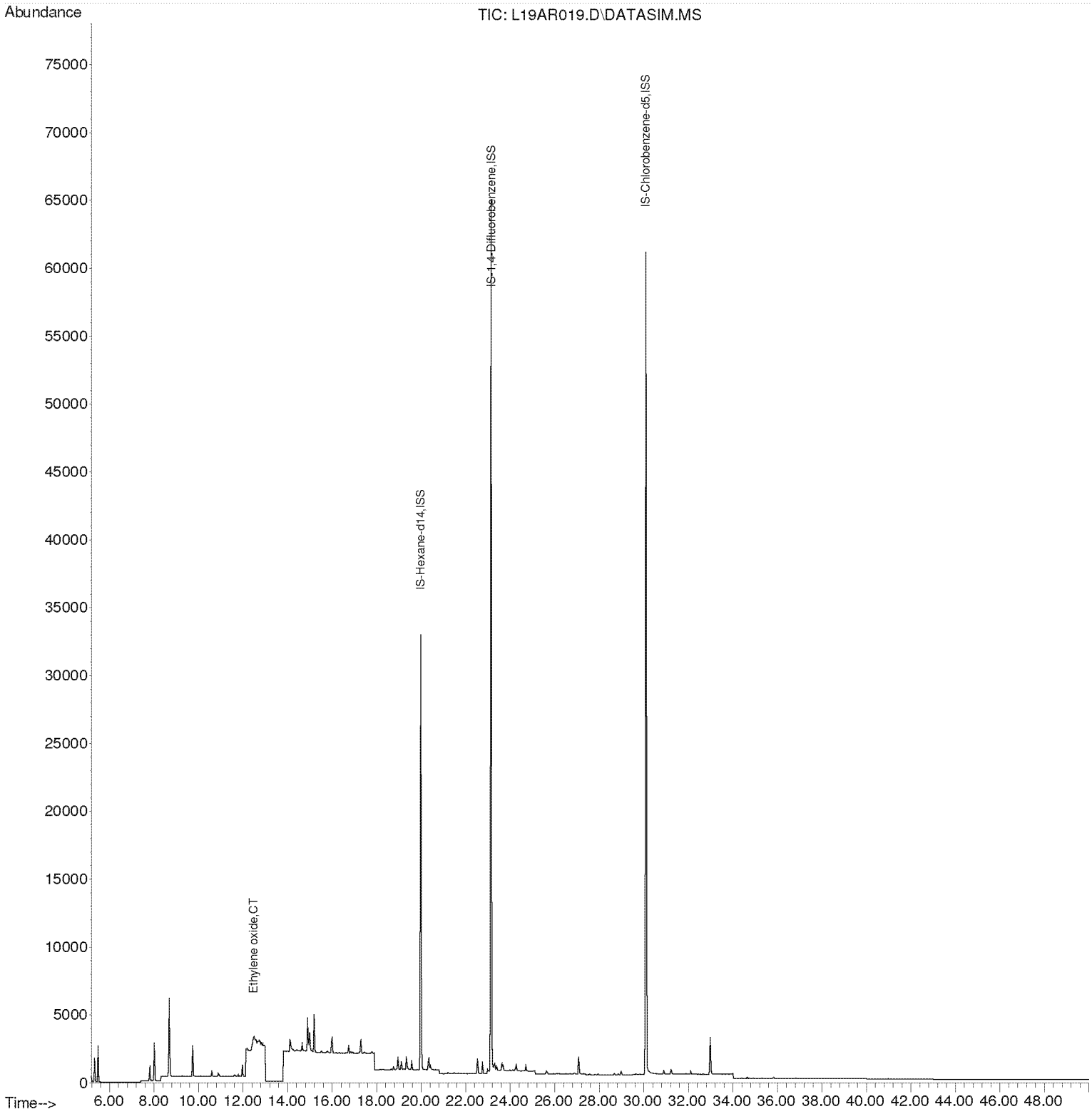
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00380

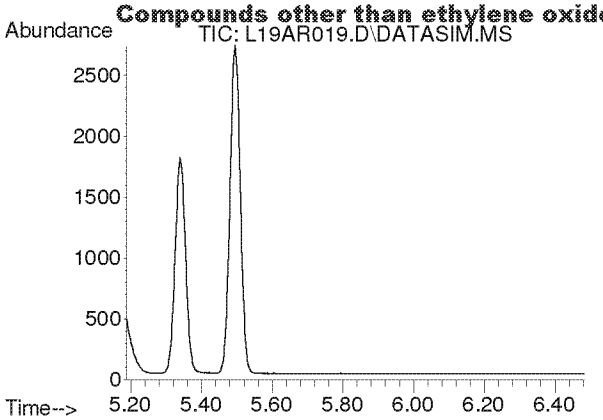
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR019.D
Acq On : 19 Jan 2019 5:47 am
Operator : MAH
Sample : 9011527-08
Misc : WATER TOWER 1/13/19
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 23 08:39:51 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



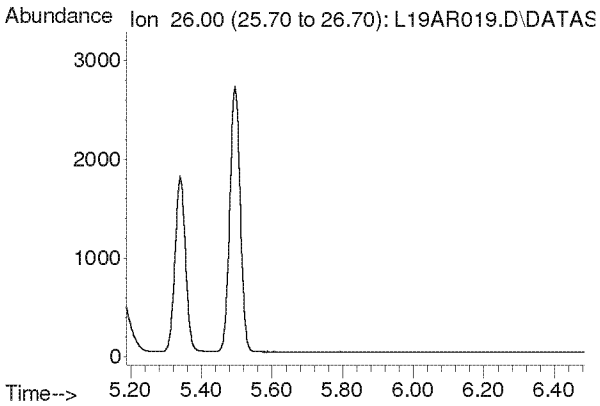
Compounds other than ethylene oxide were not quantitated.

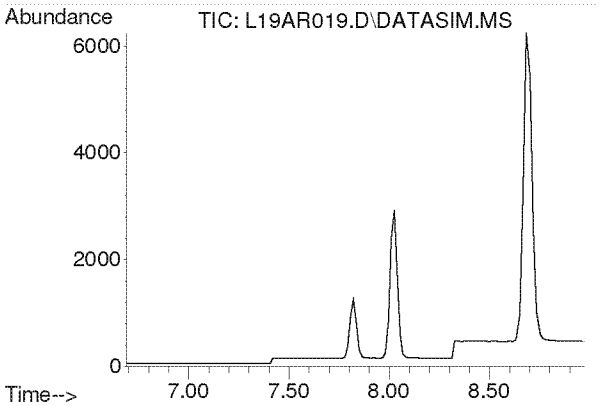


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 26



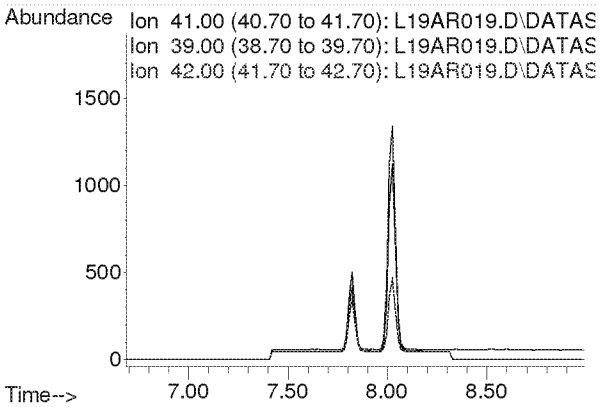


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

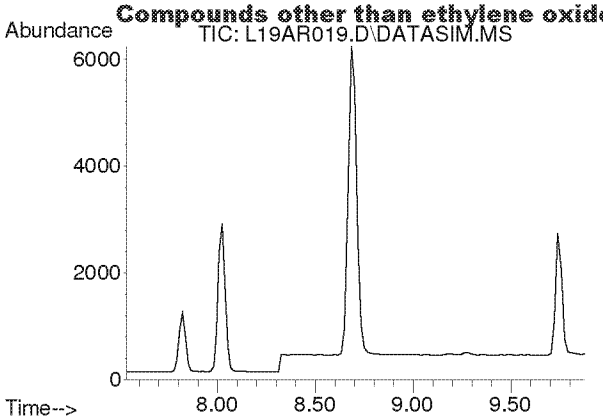
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

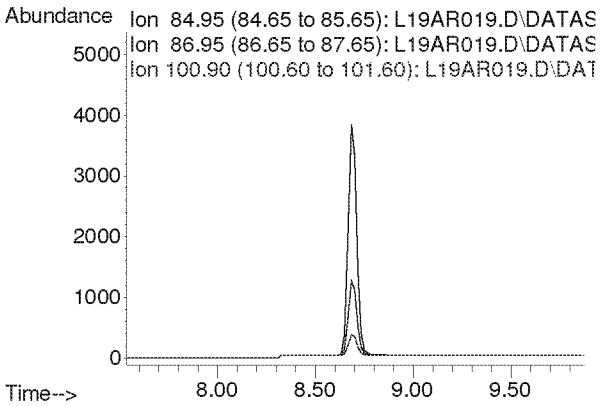


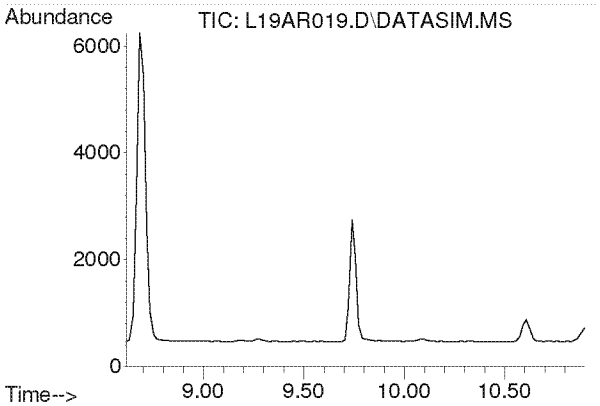
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



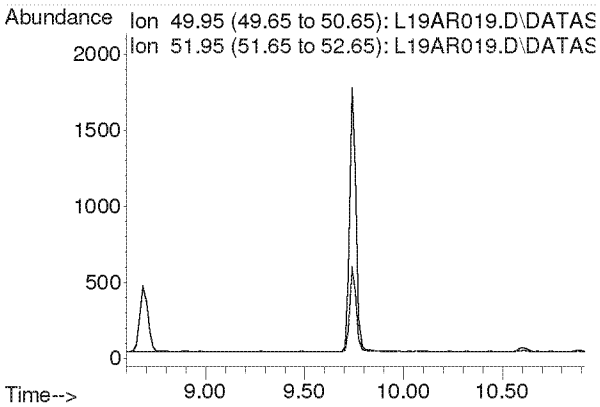


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

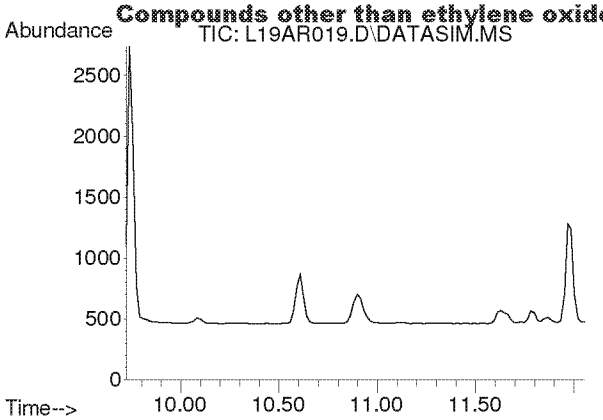
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

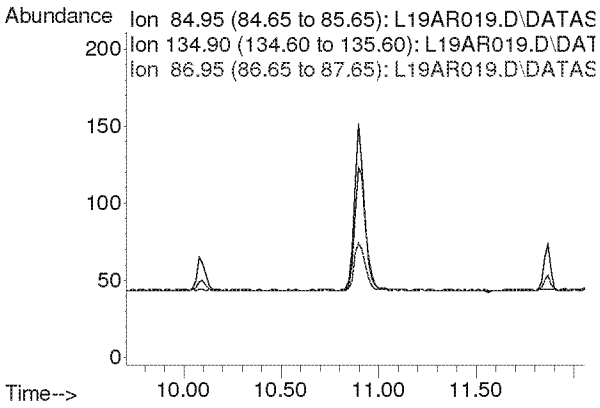


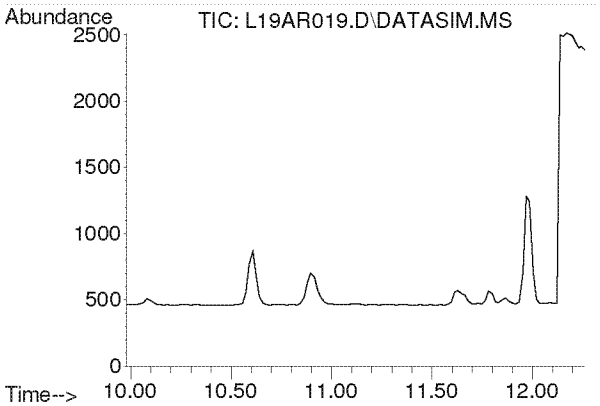
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



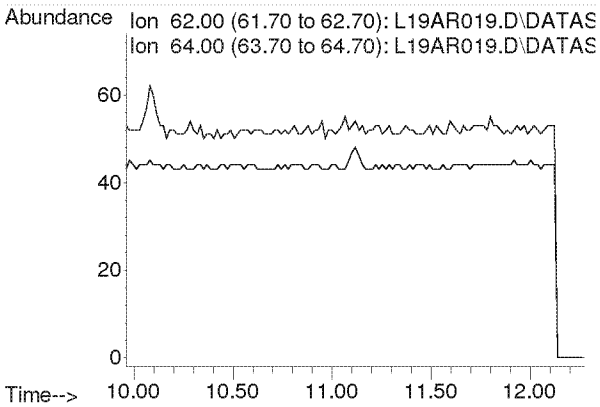


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

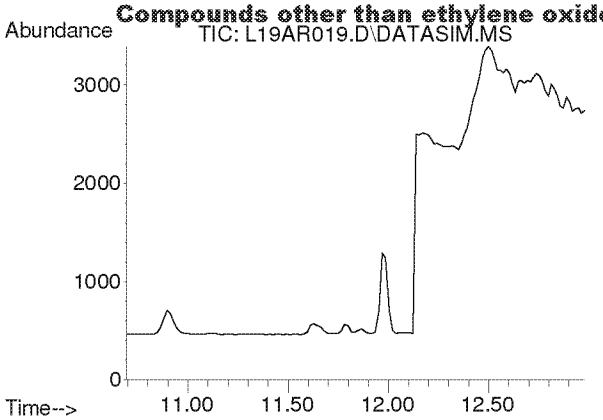
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

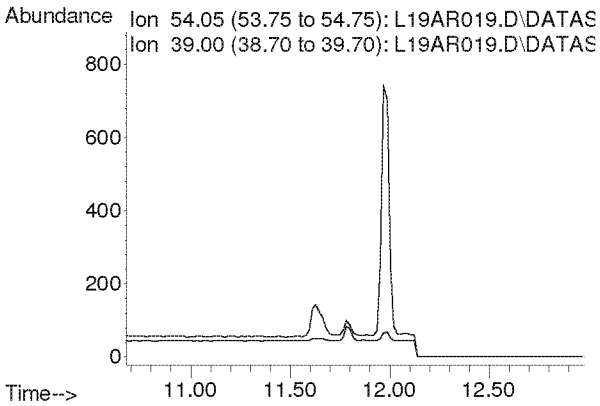


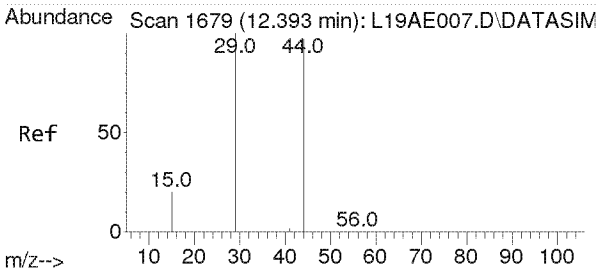
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

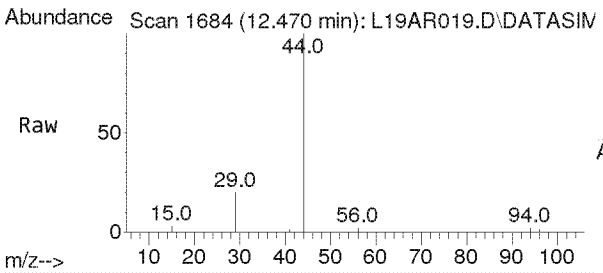


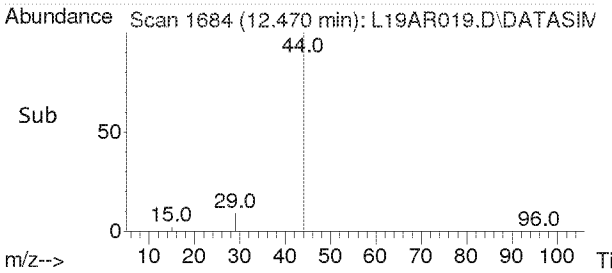


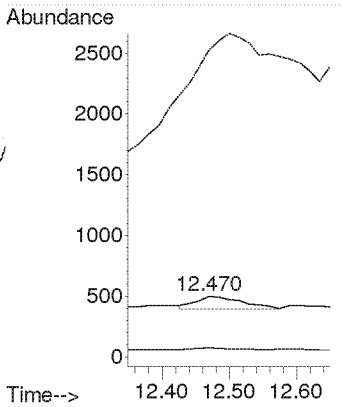
#9
Ethylene oxide
Concen: 0.170 ppbv m
RT: 12.470 min Scan# 1684
Delta R.T. 0.077 min
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 29 Resp: 462

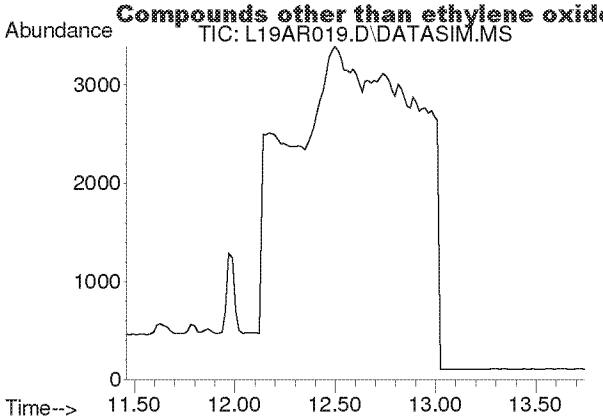
Ion	Ratio	Lower	Upper
29	100		
15	15.6	15.4	23.0
44	1969.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

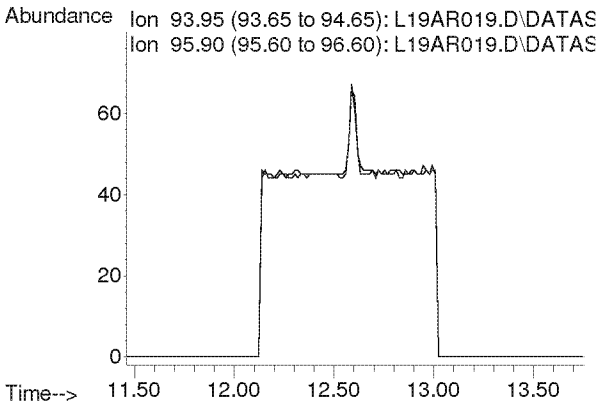


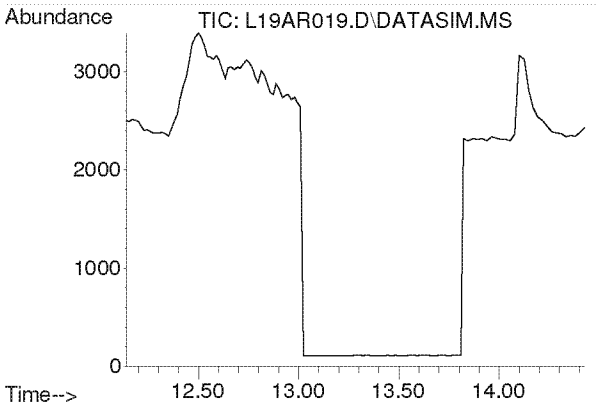
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



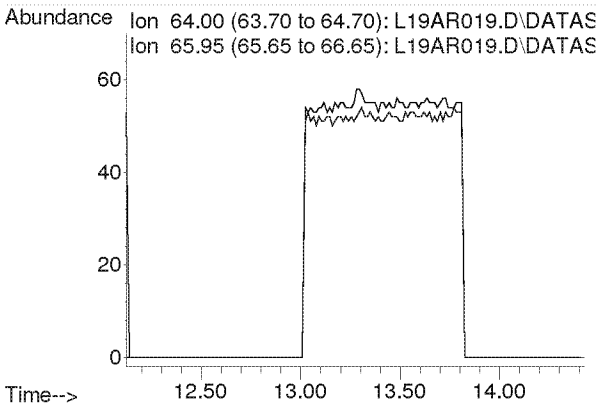


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

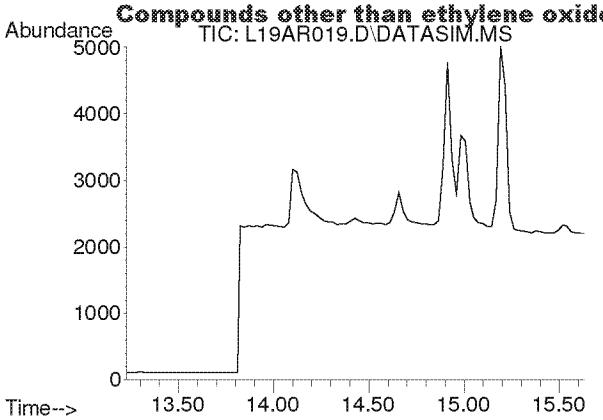
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

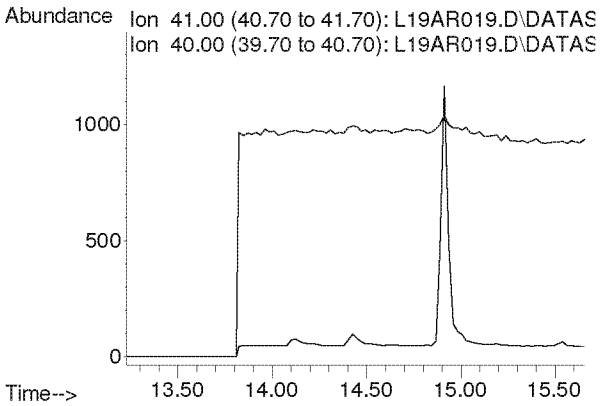


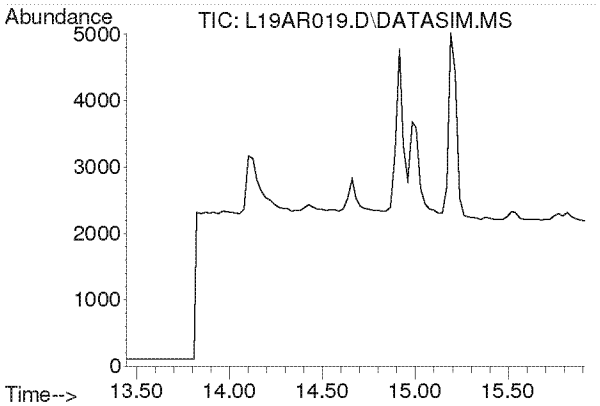
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



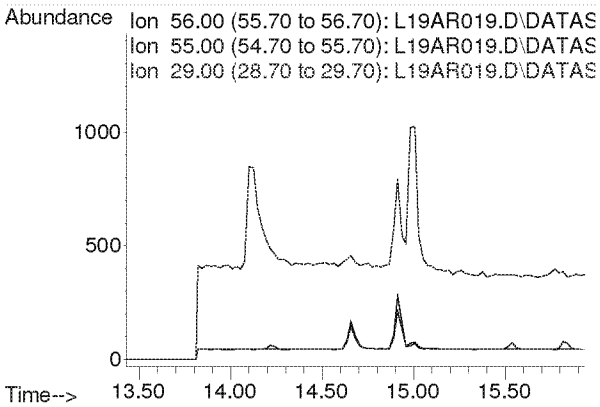


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

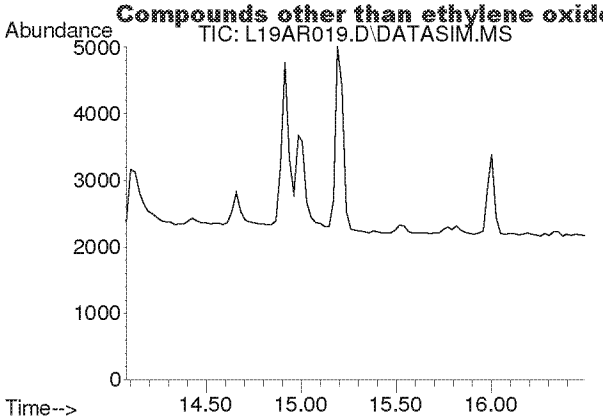
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

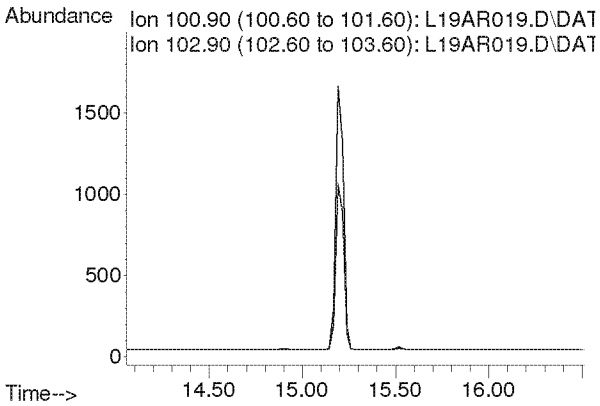


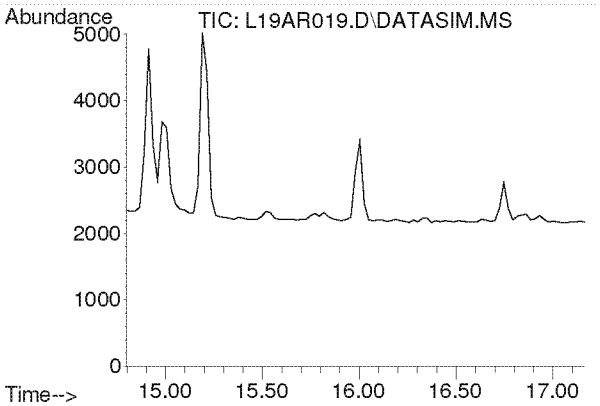
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



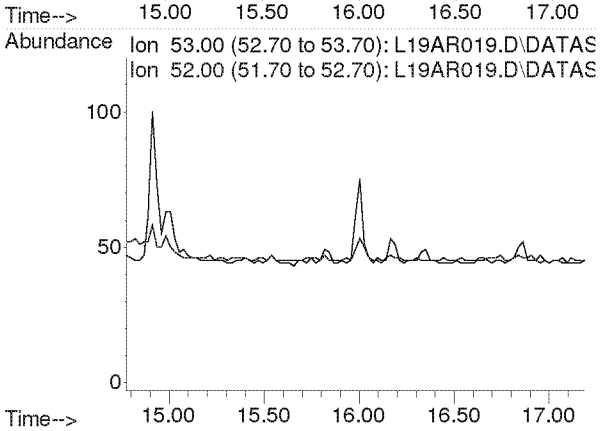


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

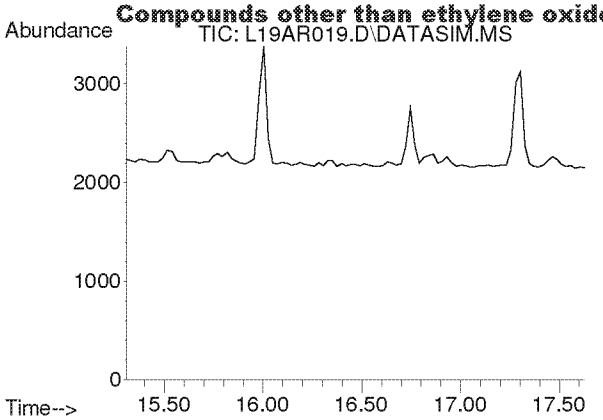
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

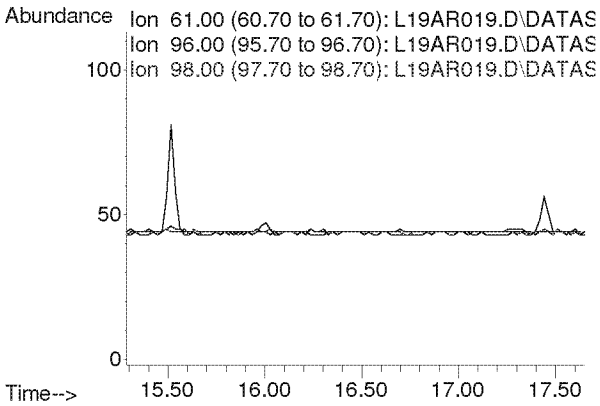


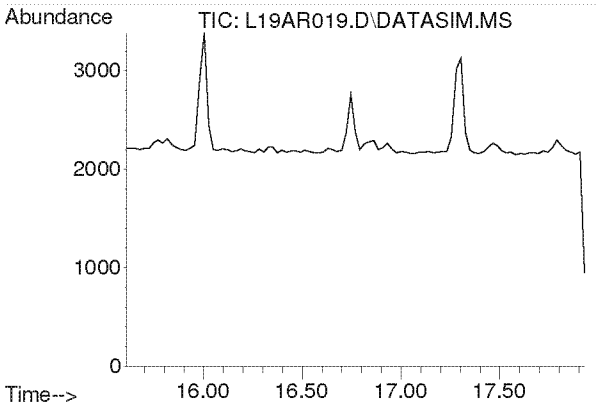
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



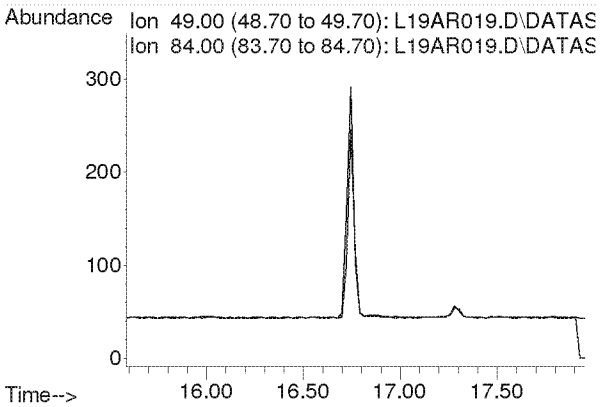


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

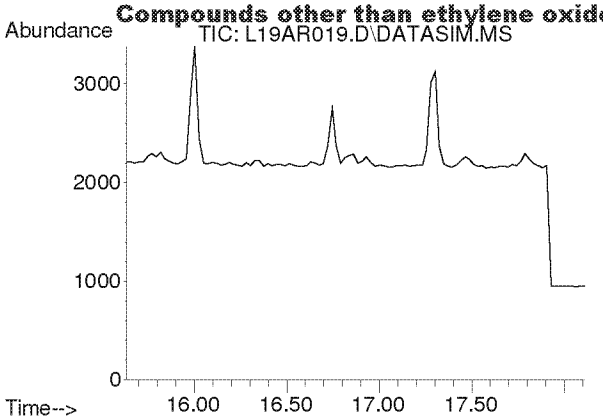
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

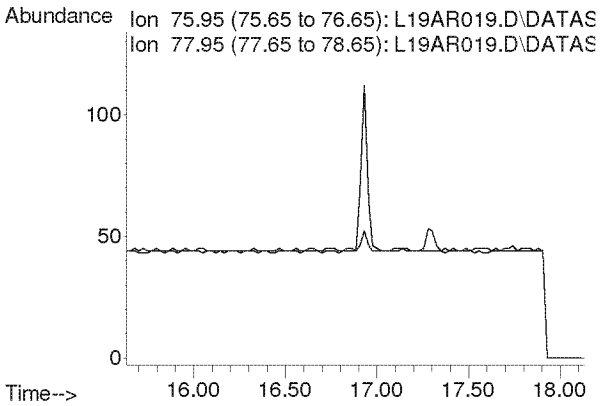


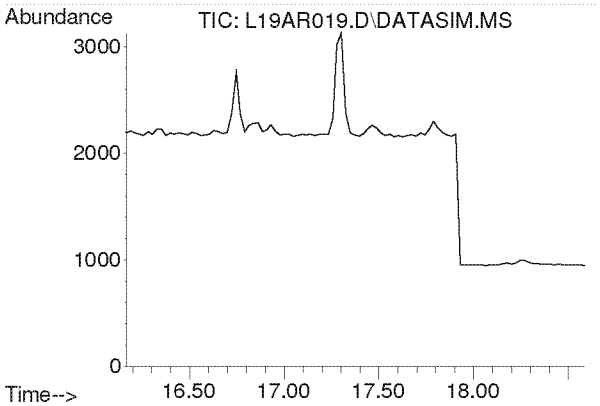
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



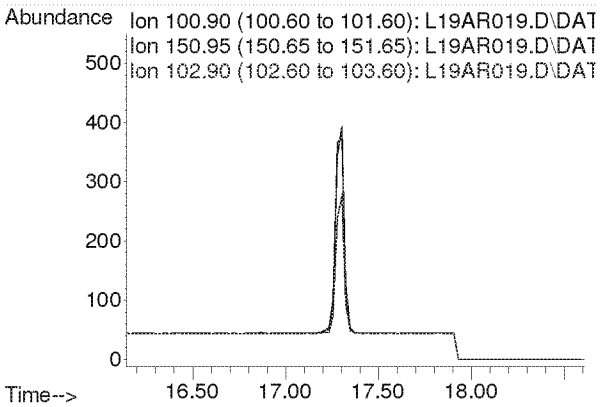


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

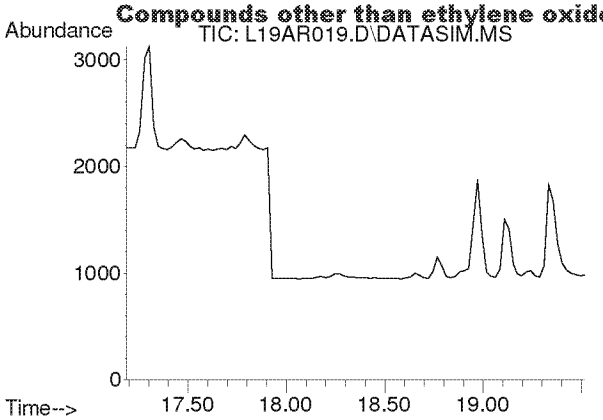
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

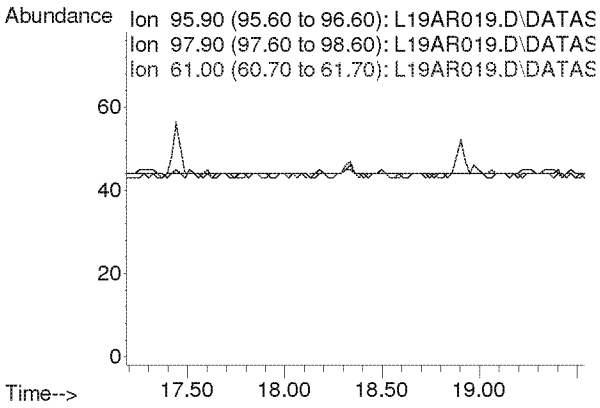


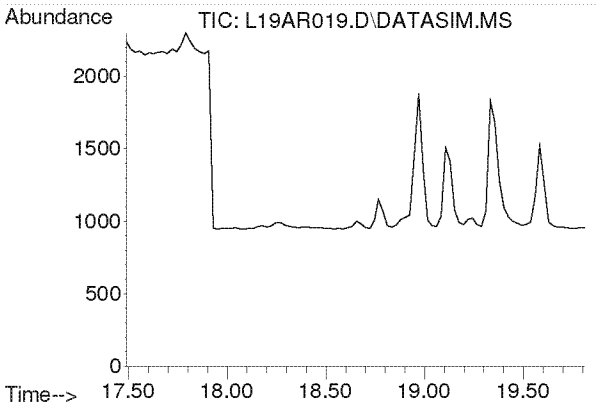
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



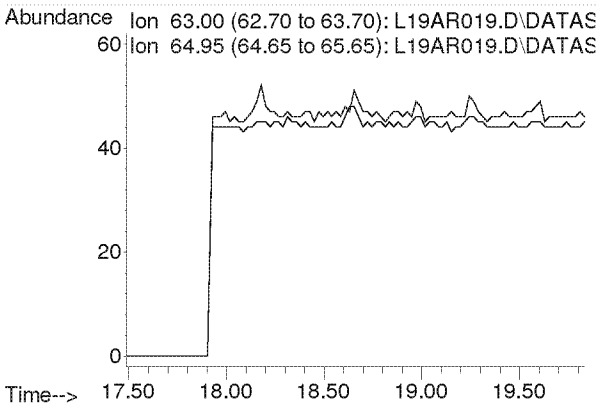


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

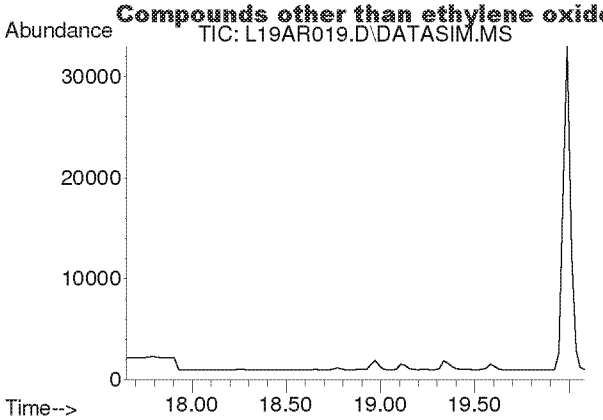
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

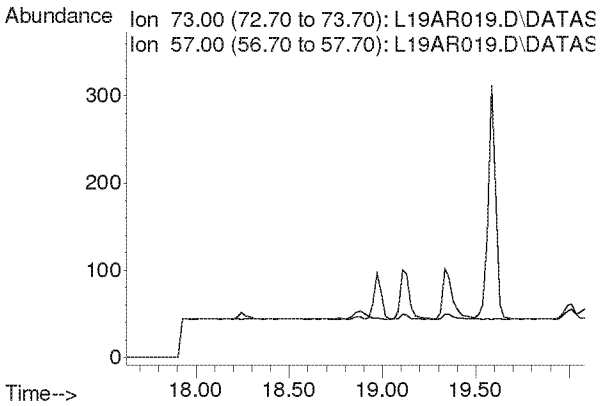


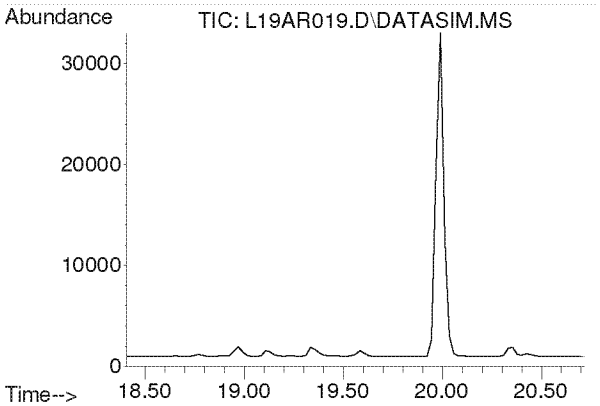
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



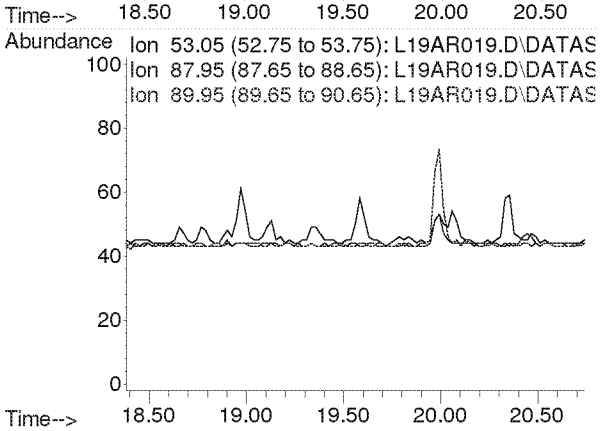


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

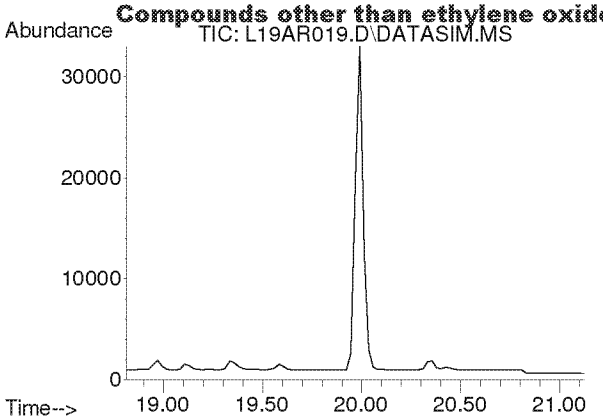
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

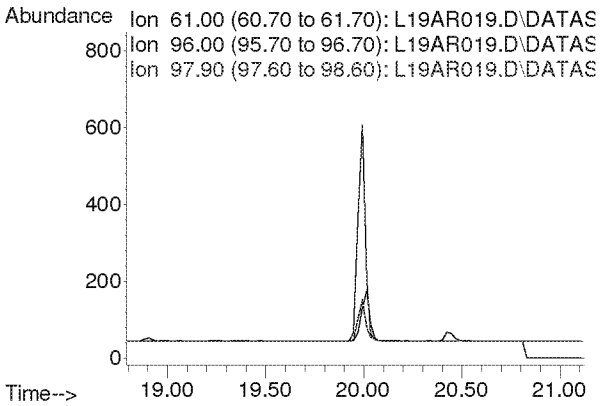


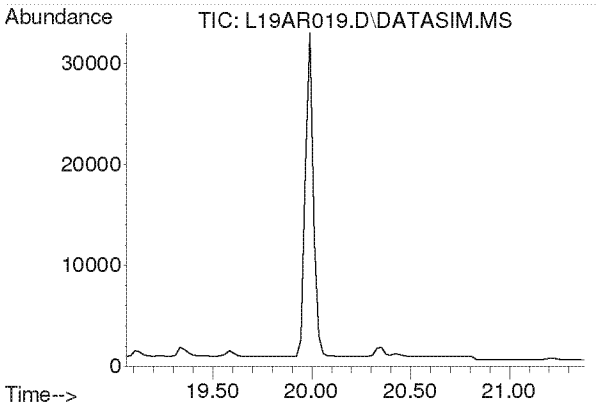
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



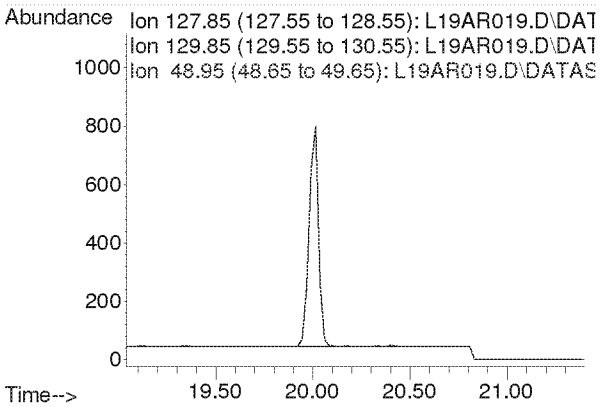


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

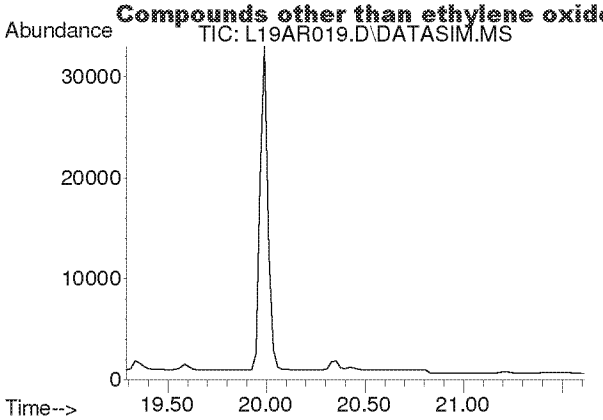
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

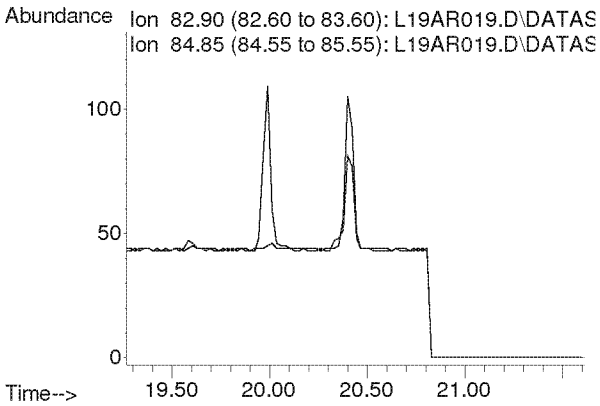


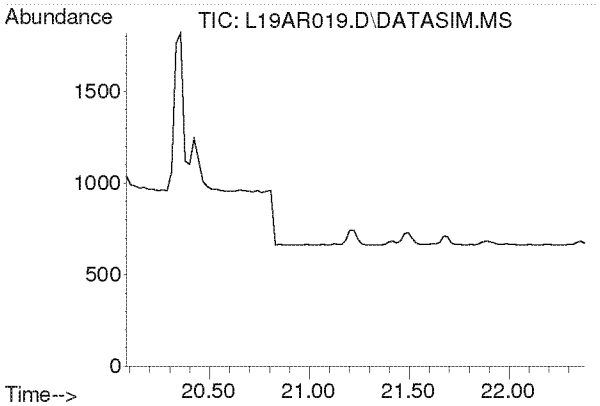
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



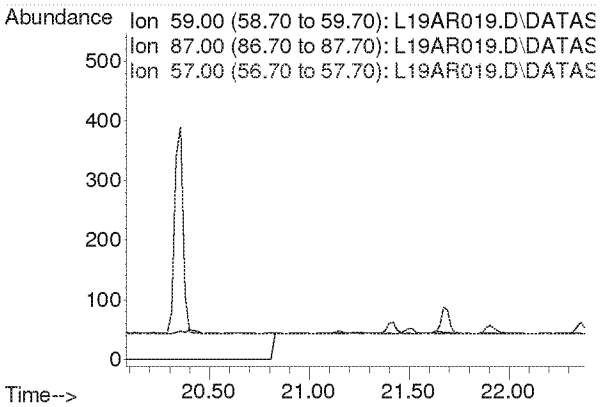


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

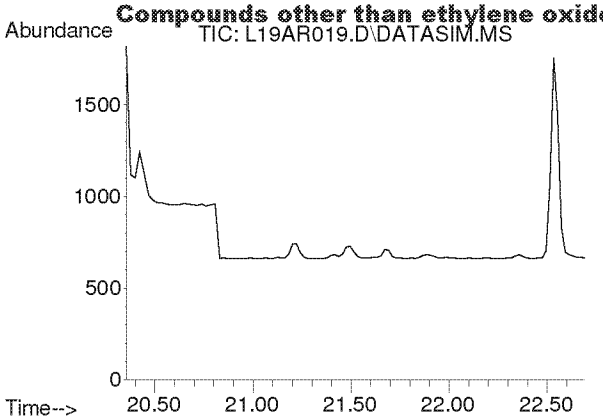
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

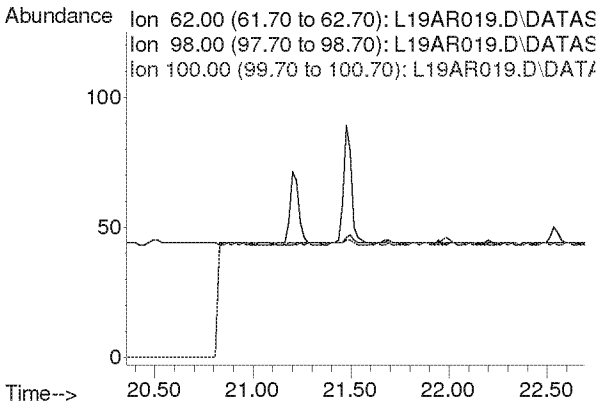


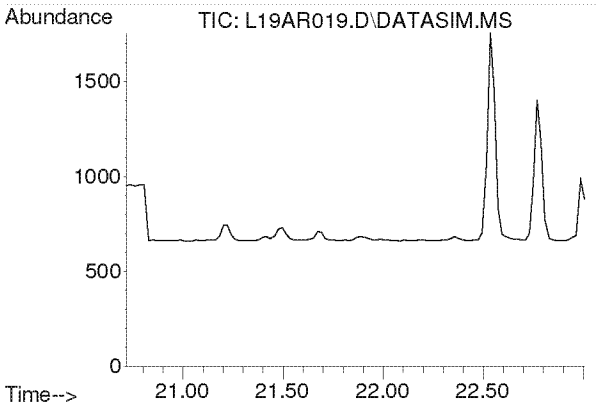
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



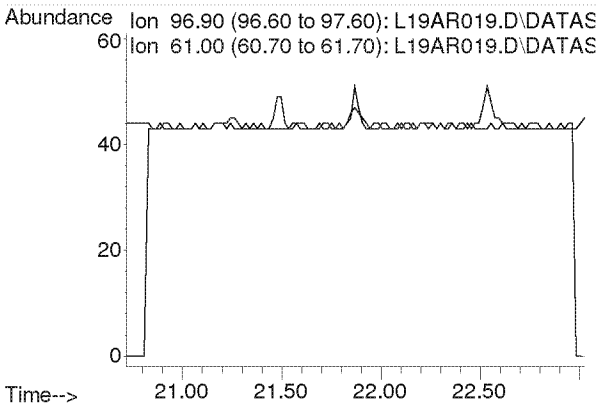


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

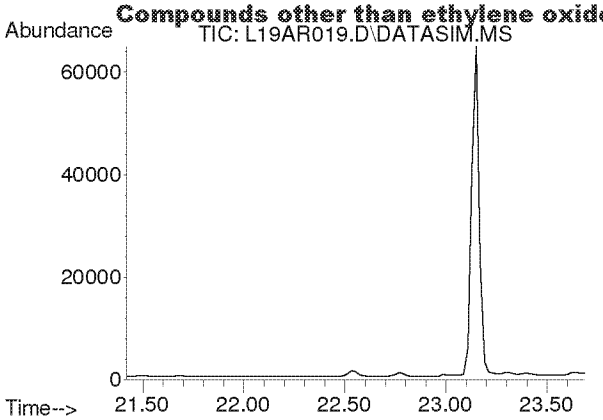
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

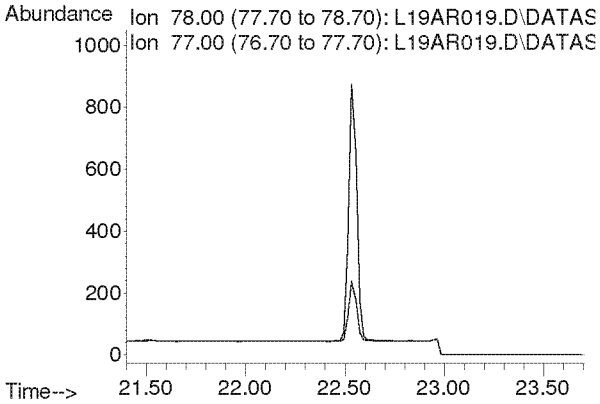


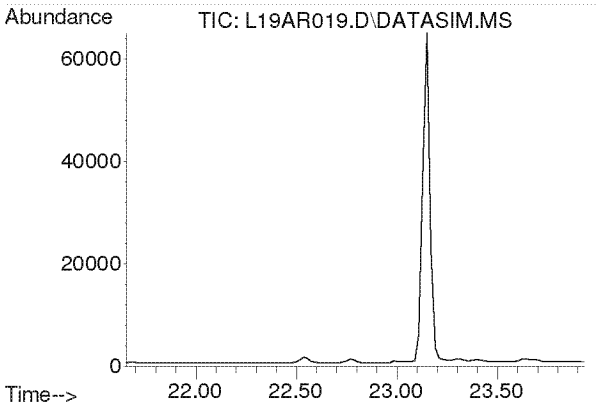
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



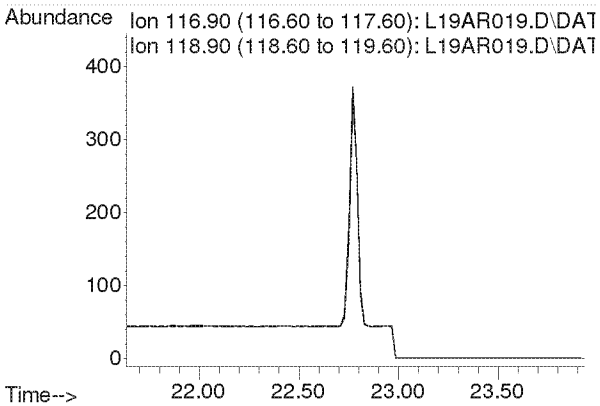


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

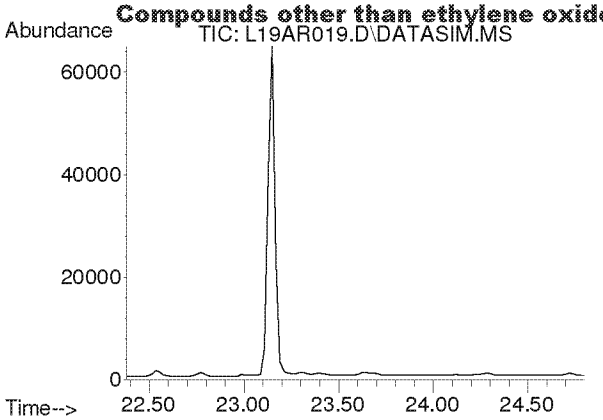
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

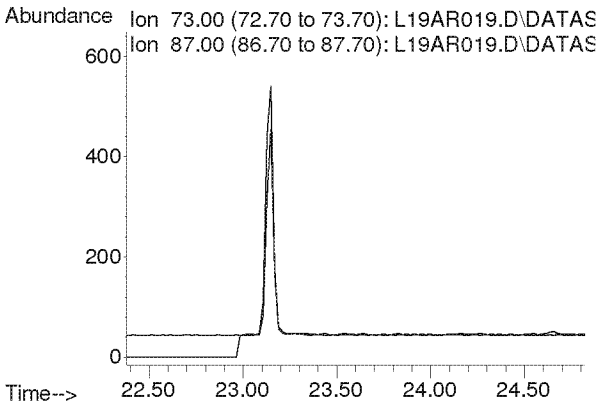


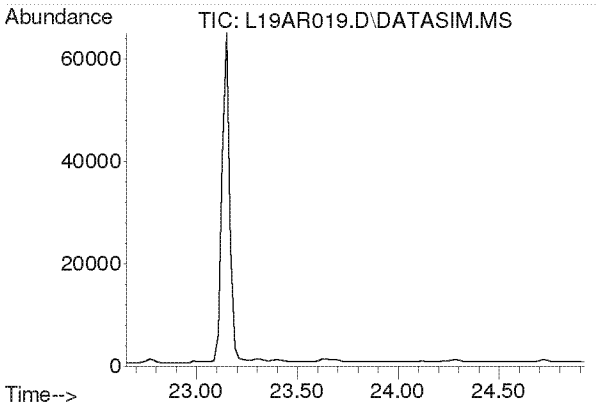
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



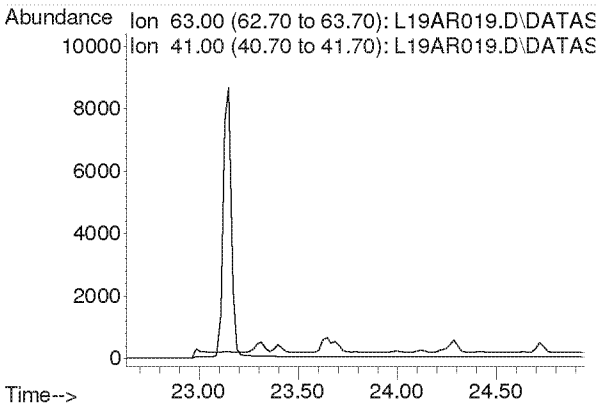


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

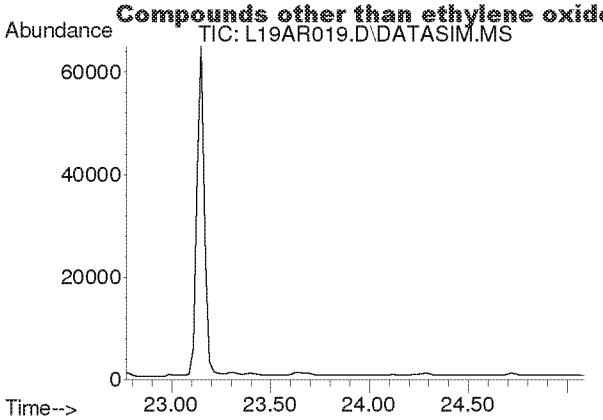
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

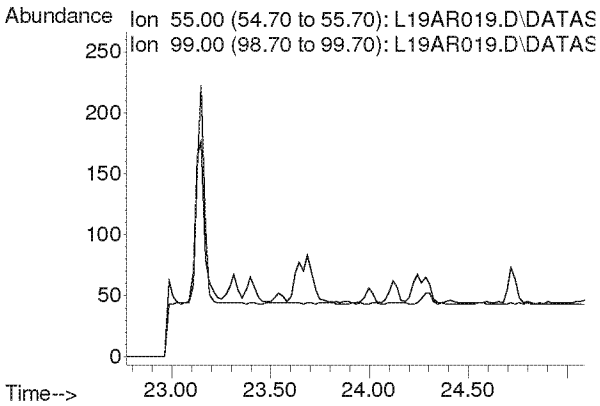


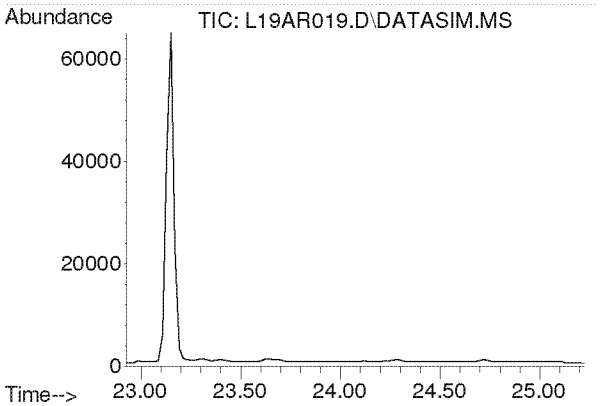
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



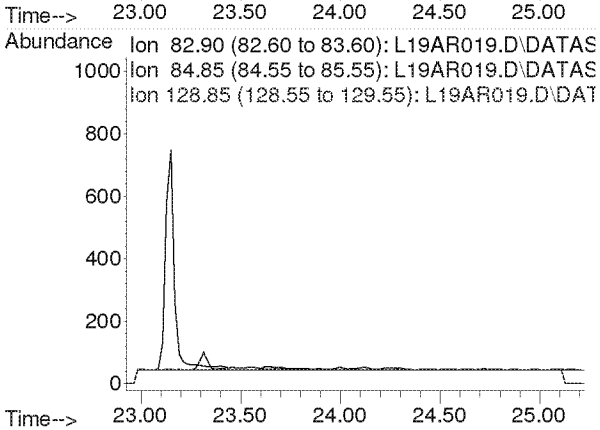


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

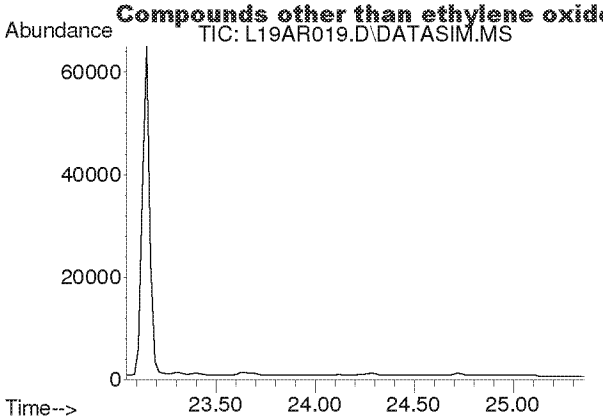
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

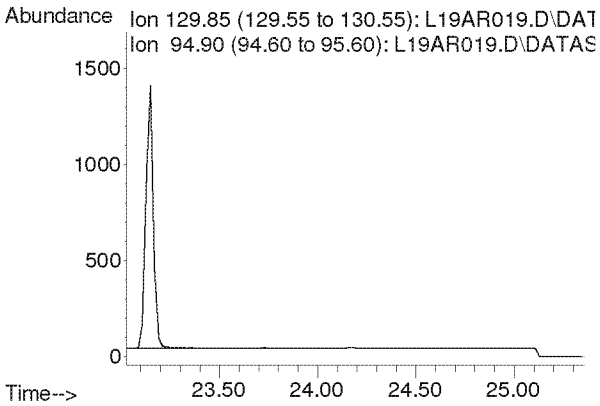


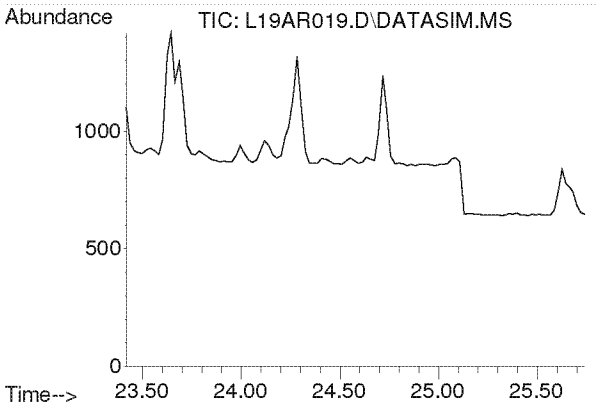
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



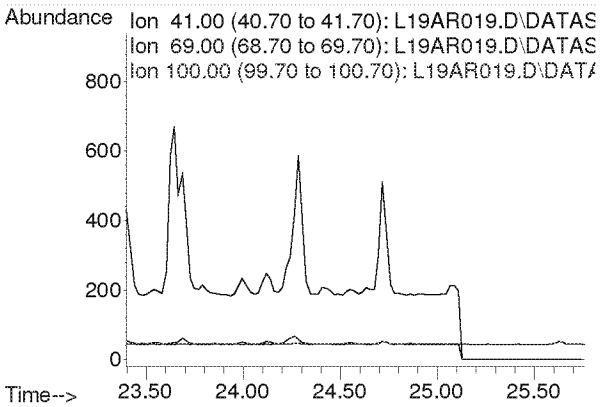


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

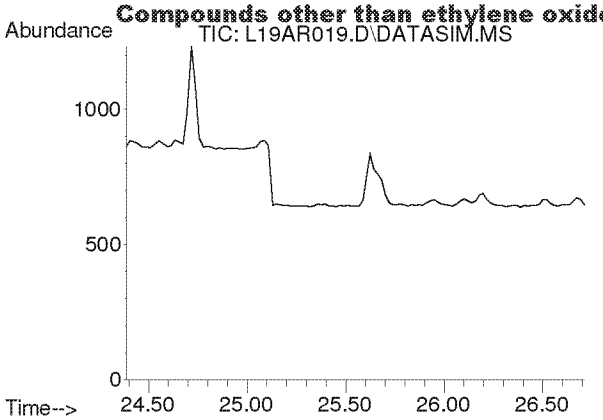
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

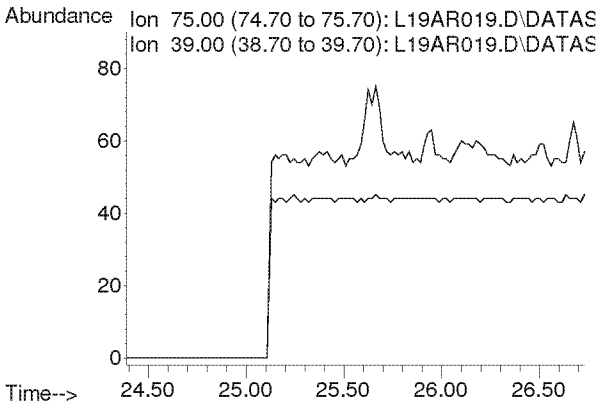


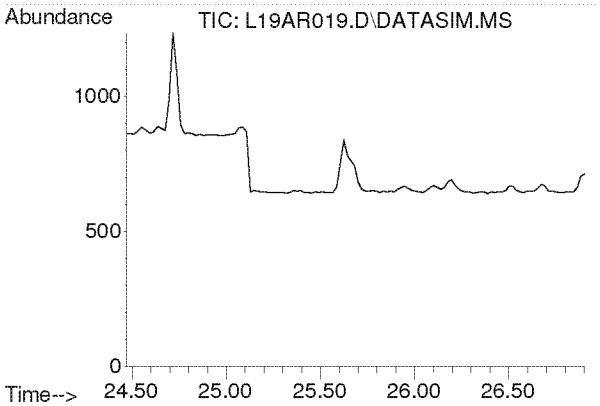
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



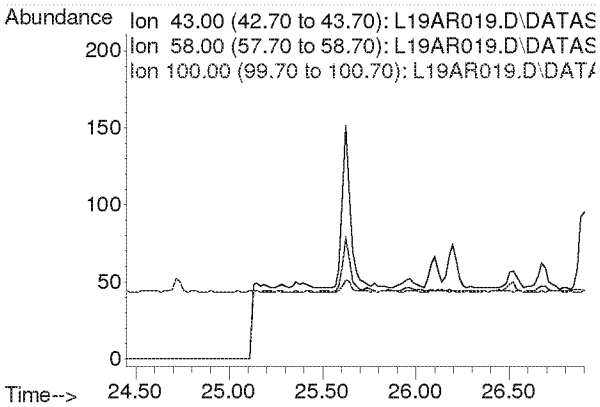


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

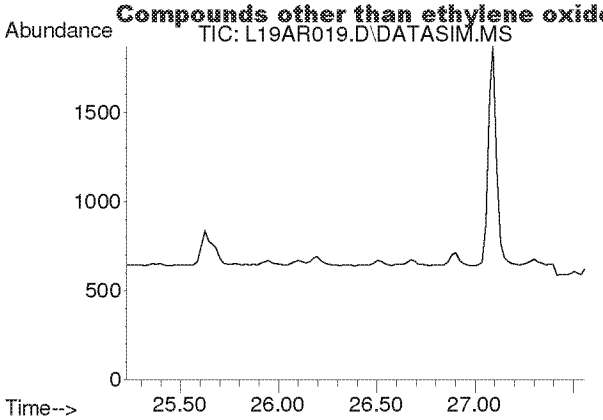
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

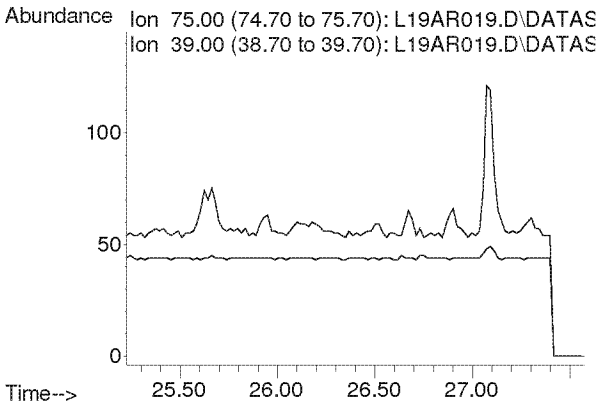


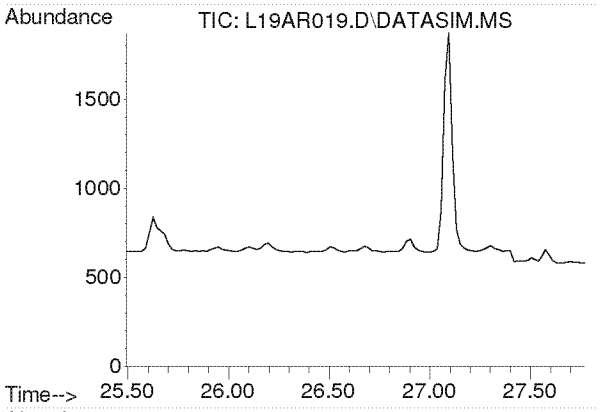
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



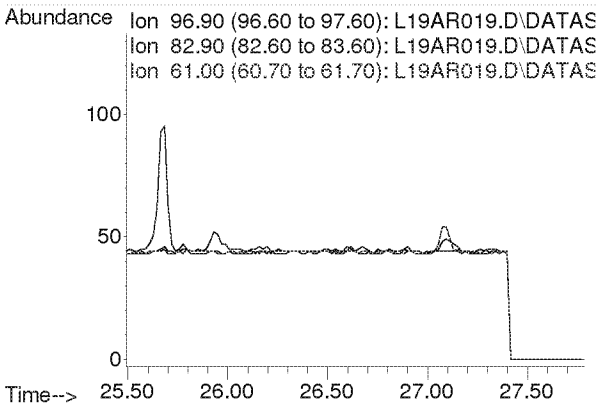


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

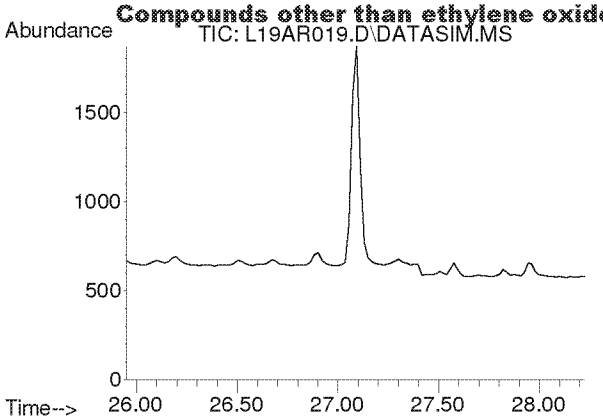
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

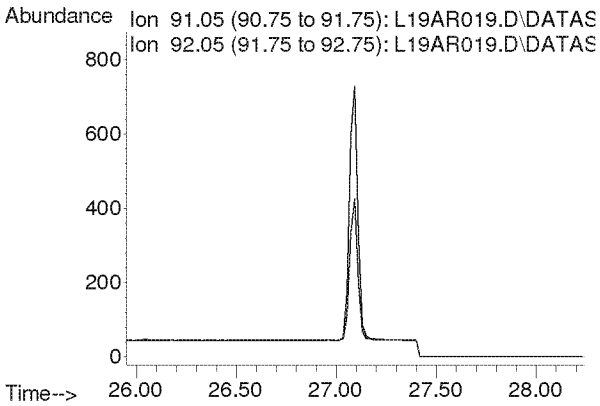


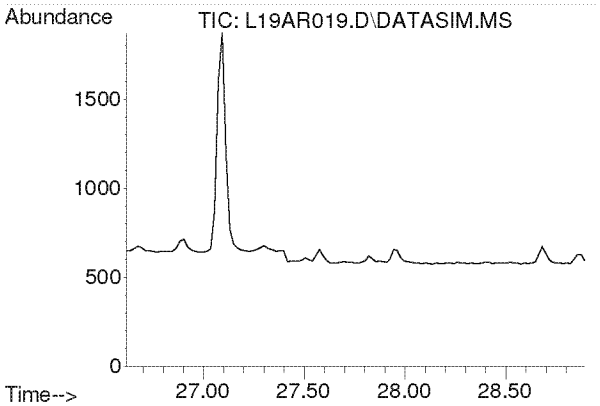
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



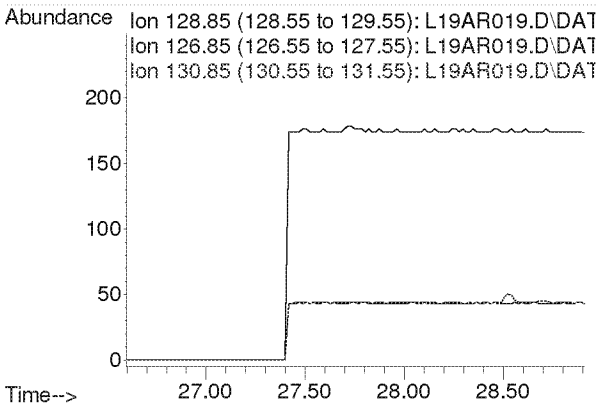


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

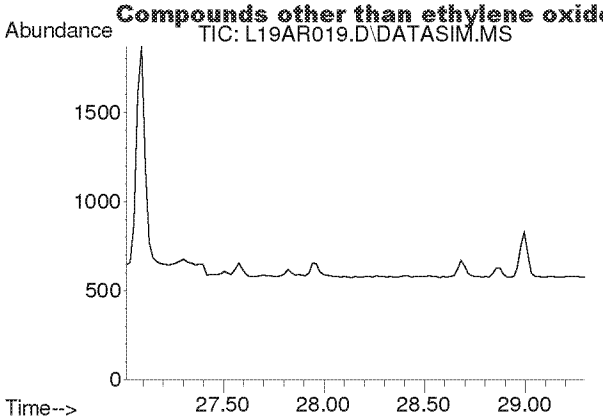
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

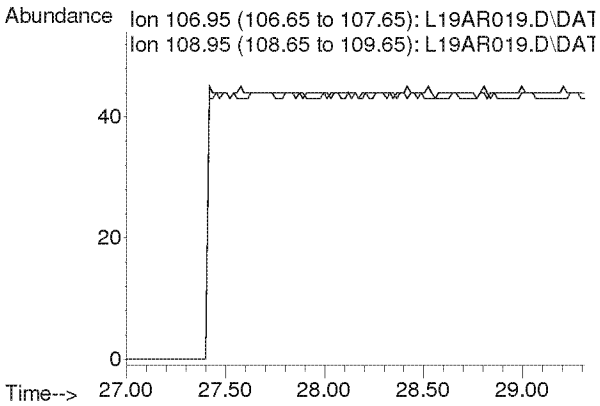


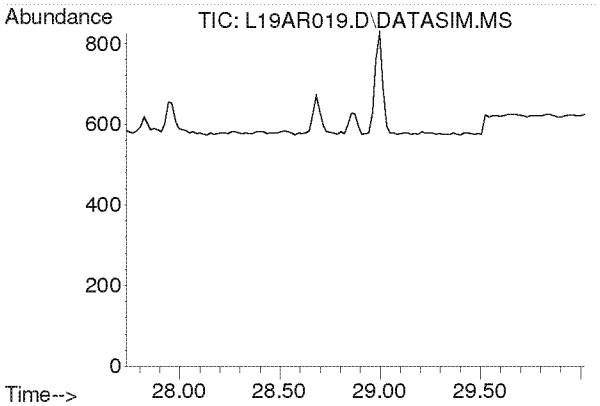
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



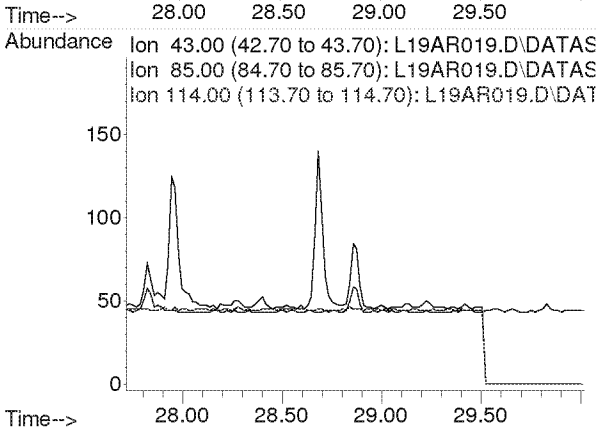


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

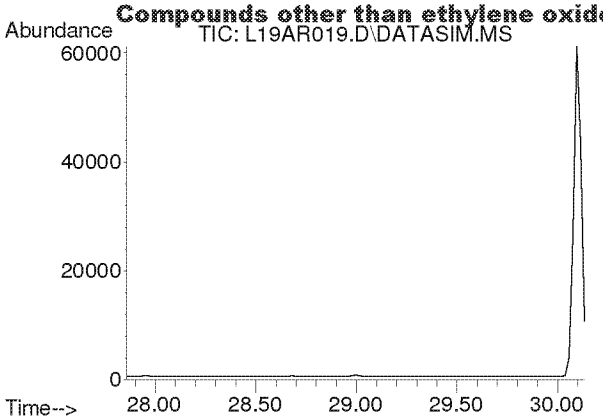
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

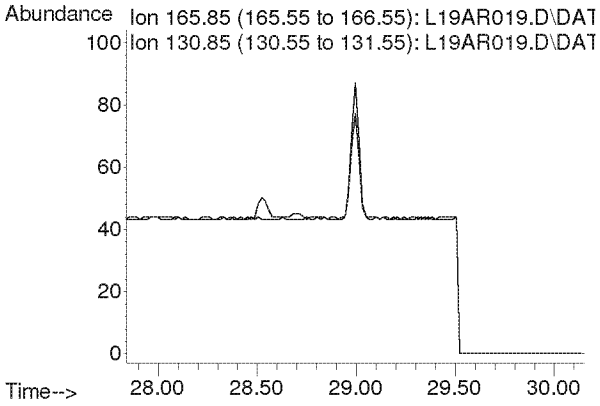


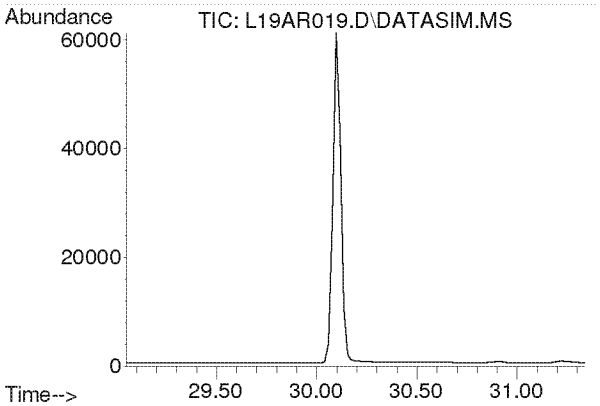
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



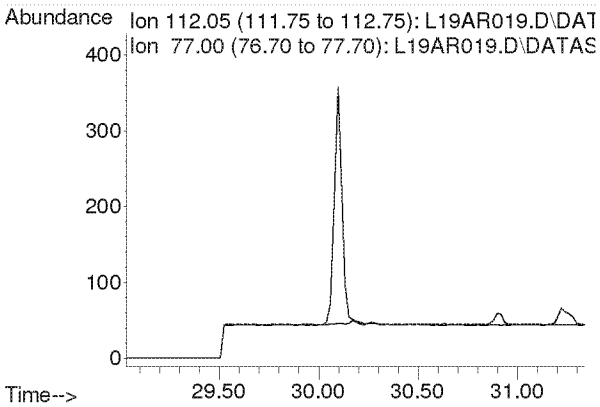


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

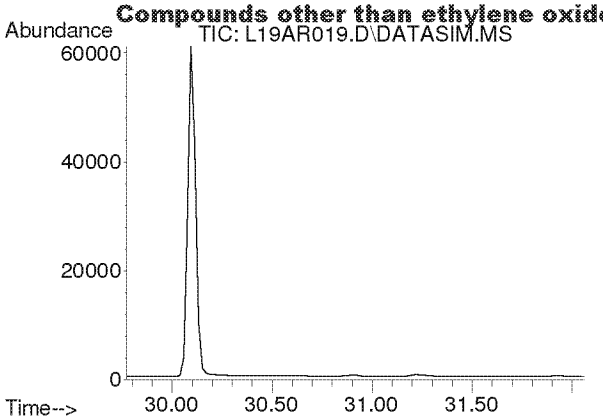
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

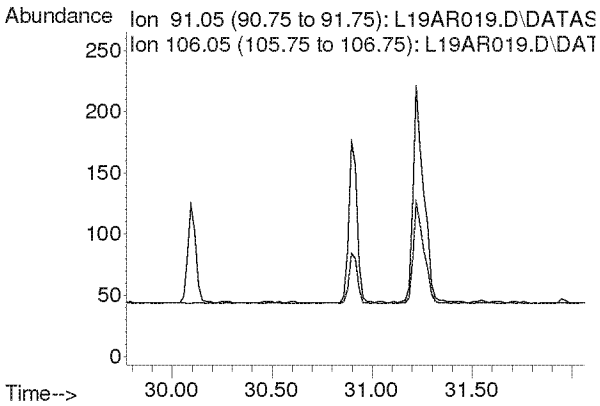


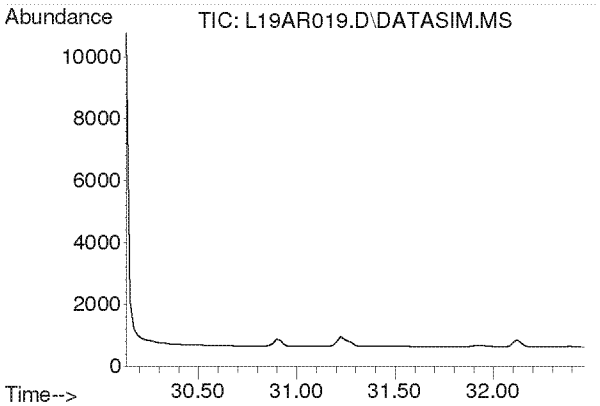
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



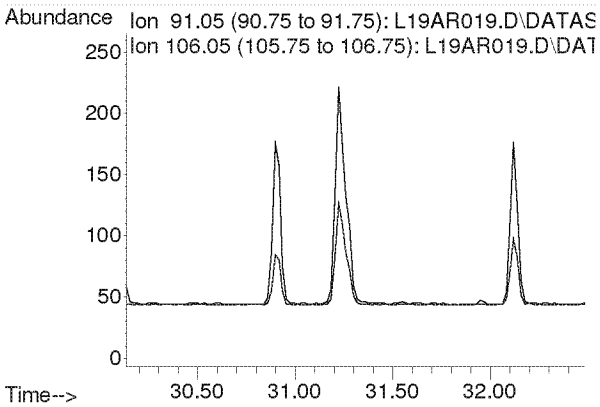


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

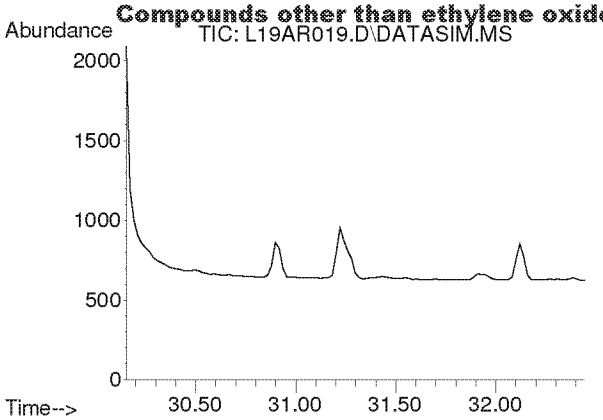
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

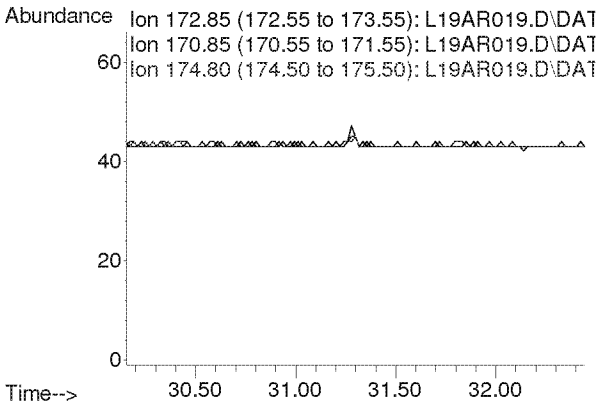


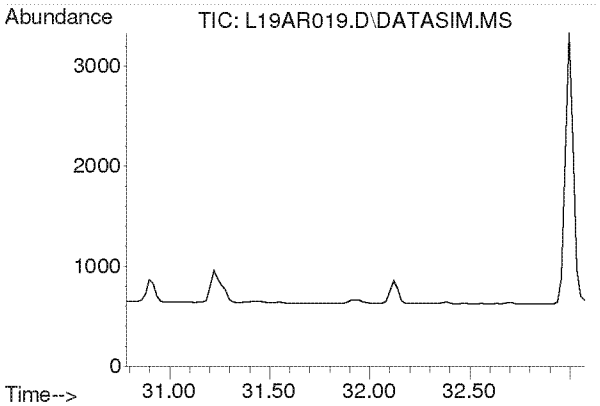
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



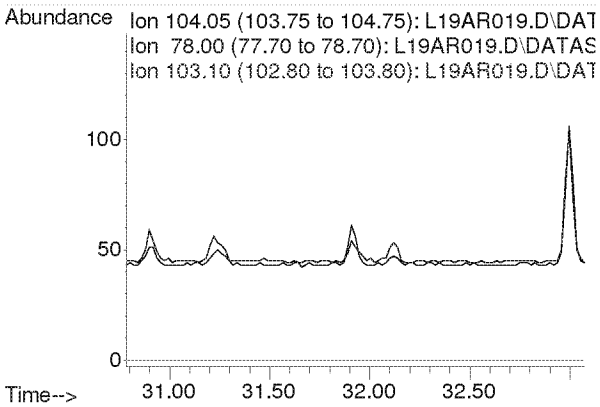


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

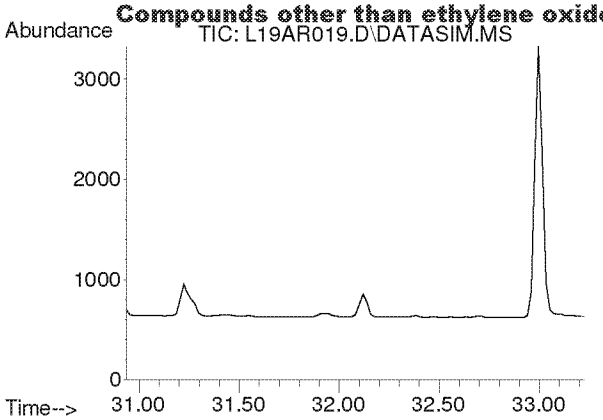
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

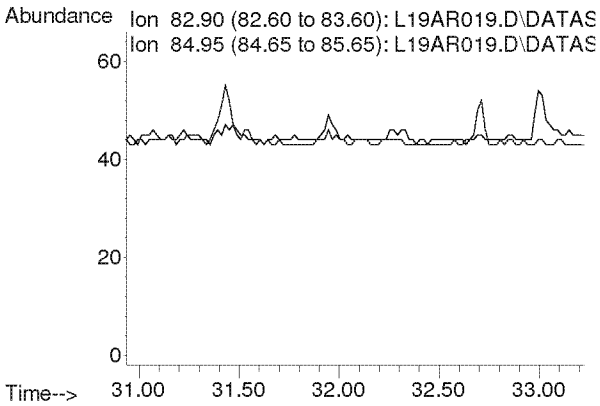


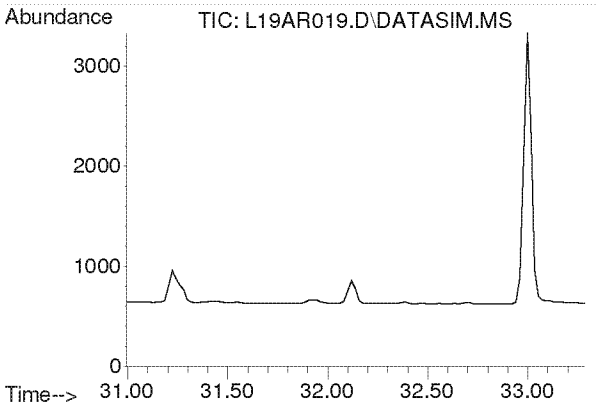
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



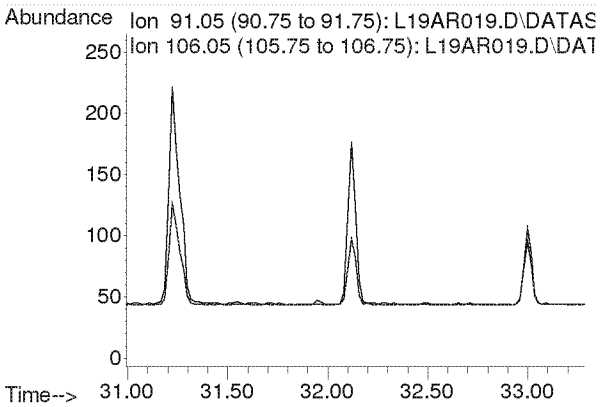


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

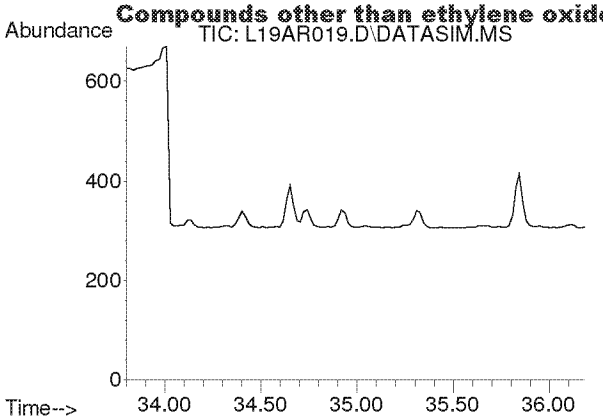
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

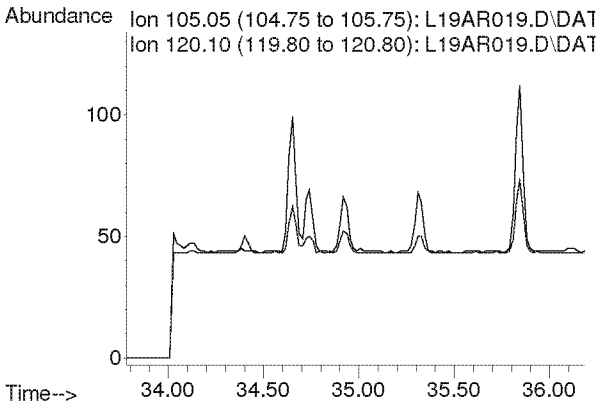


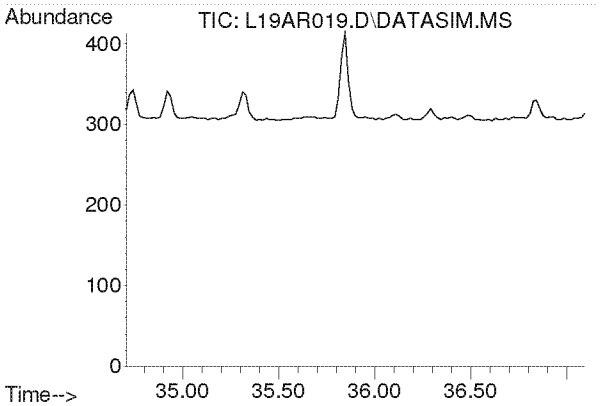
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



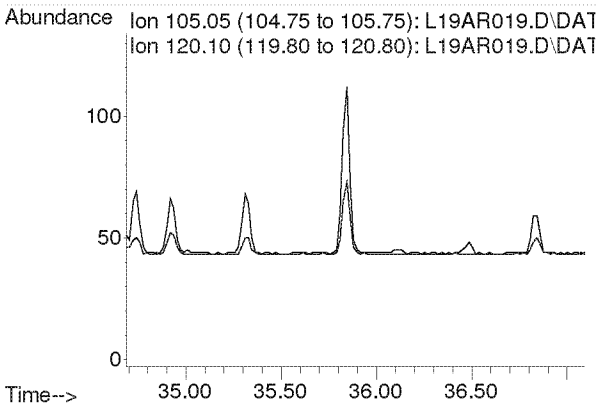


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

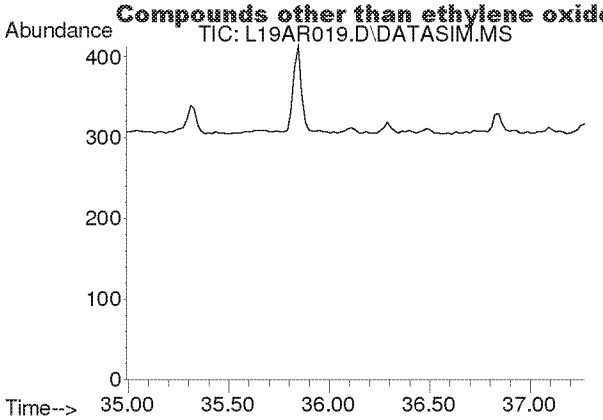
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

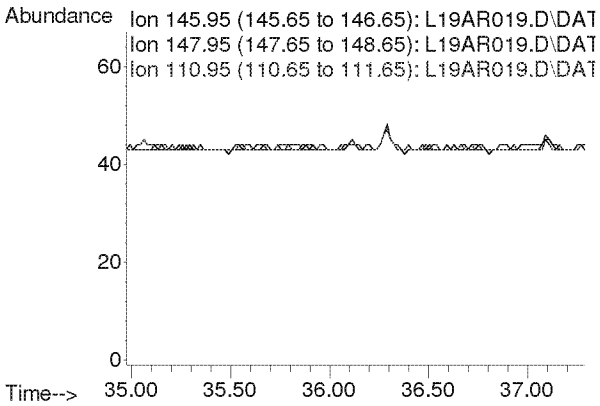


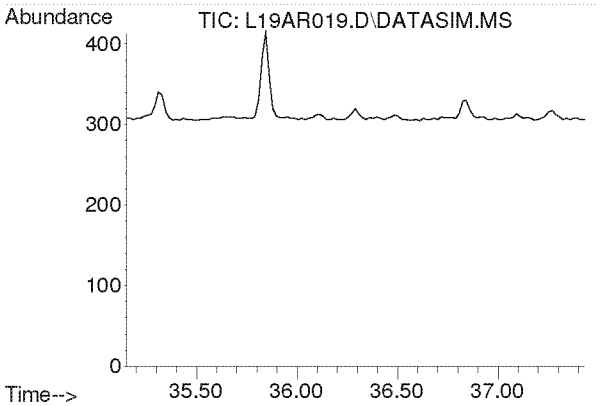
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



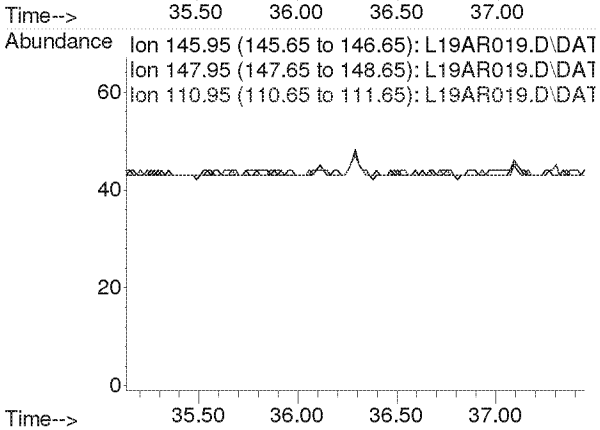


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

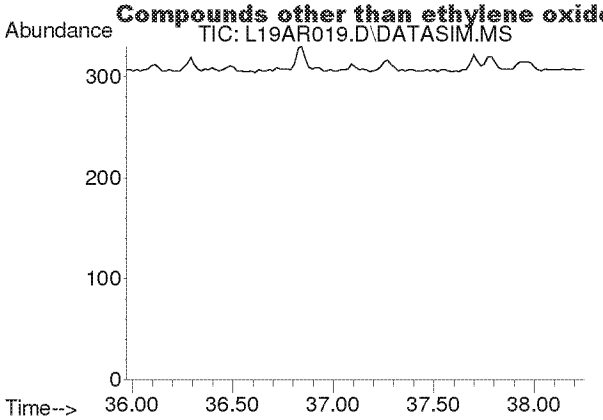
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

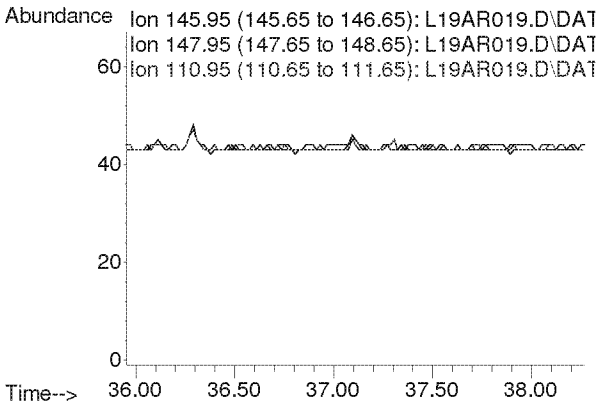


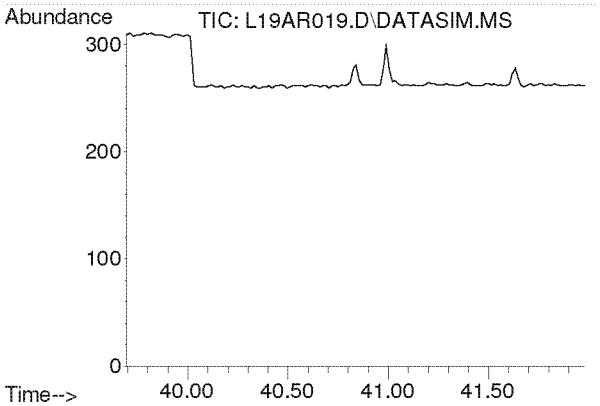
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



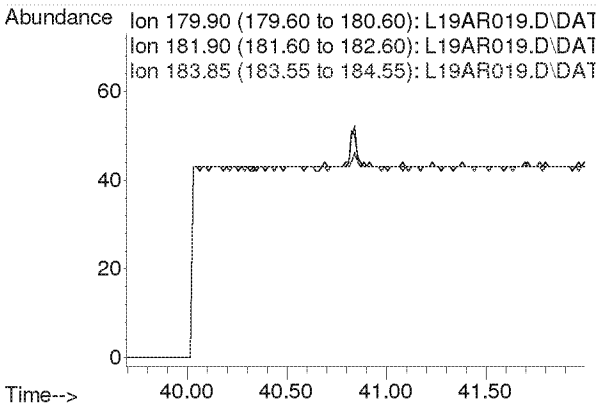


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

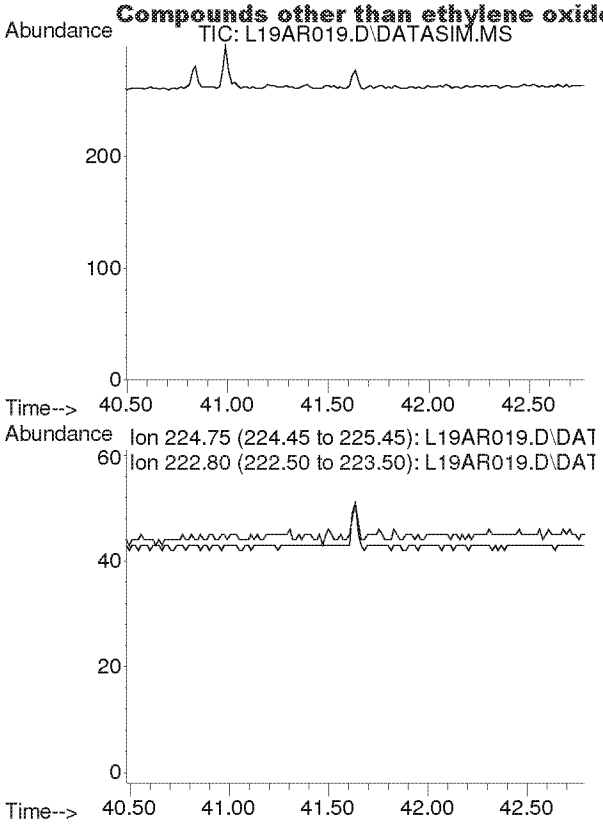
Lab File: L19AR019.D
Acq: 19 Jan 2019 5:47 am

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: L19AR019.D
Acq: 19 Jan 2019 5:47 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\L19AR\
Data File : L19AR020.D
Acq On : 19 Jan 2019 6:49 am
Operator : MAH
Sample : 9011527-09
Misc : WEST NEIGHBORHOOD 1/13/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 09:26:50 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	19.993	66	53588	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	129784	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	102591	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	12.425	29	1112m	0.4018 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. 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\L19AR\
Data File : L19AR020.D
Acq On : 19 Jan 2019 6:49 am
Operator : MAH
Sample : 9011527-09
Misc : WEST NEIGHBORHOOD 1/13/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 09:26:50 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.	

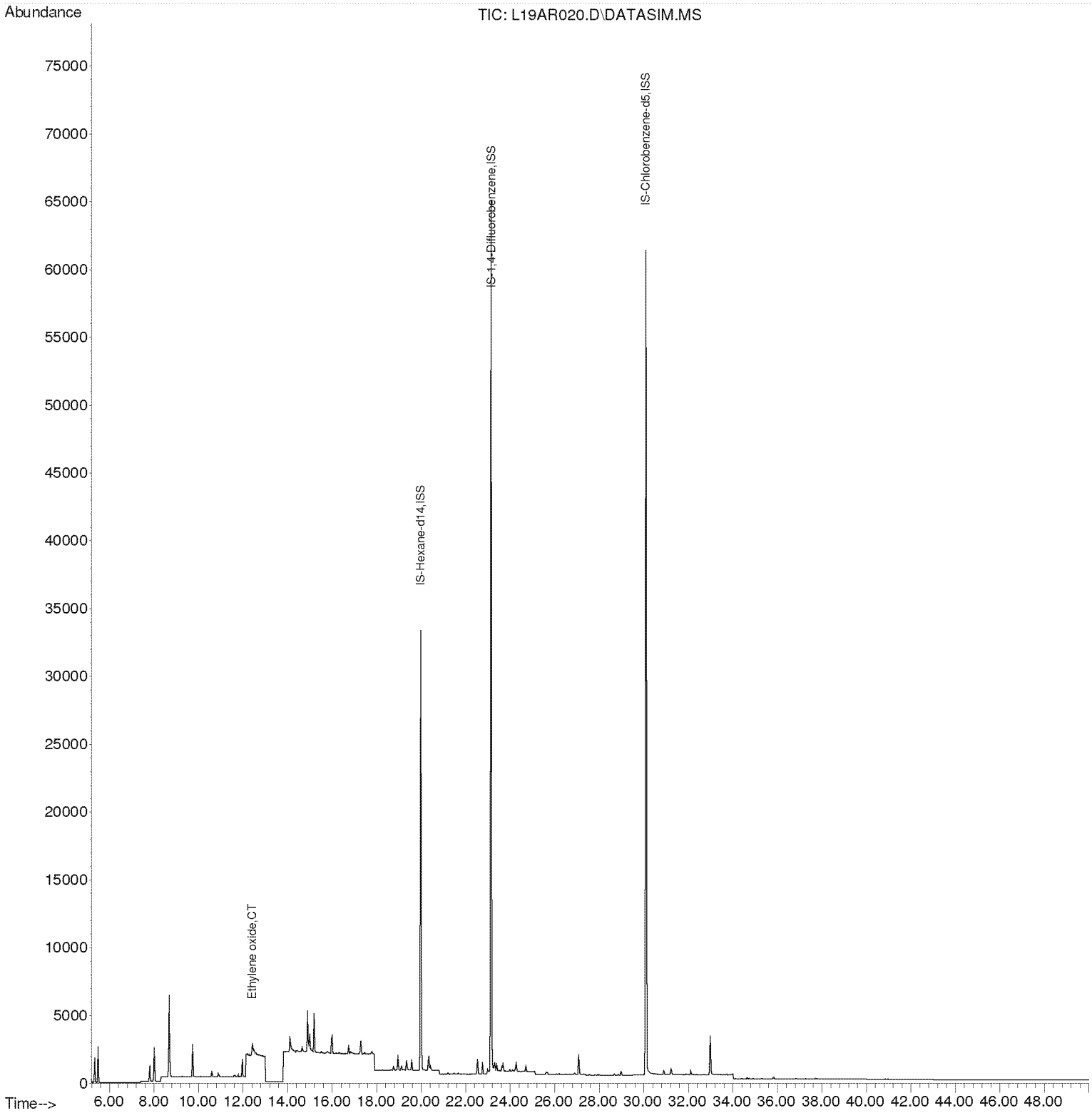
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00413

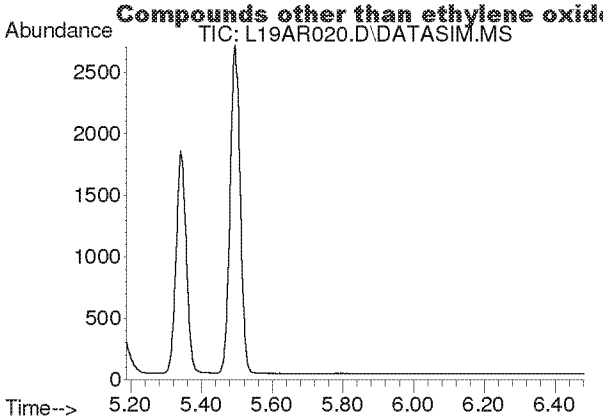
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR020.D
Acq On : 19 Jan 2019 6:49 am
Operator : MAH
Sample : 9011527-09
Misc : WEST NEIGHBORHOOD 1/13/19
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 23 08:39:58 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



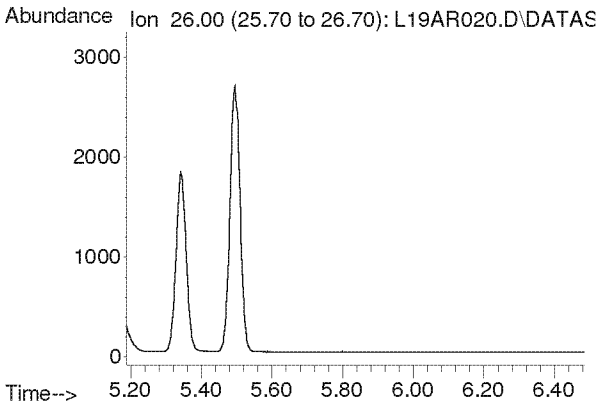
Compounds other than ethylene oxide were not quantitated.

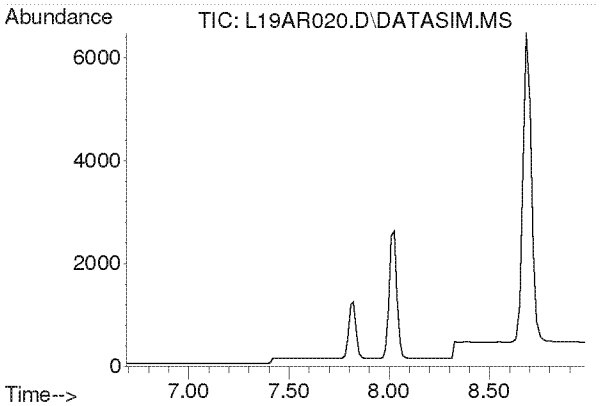


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 26



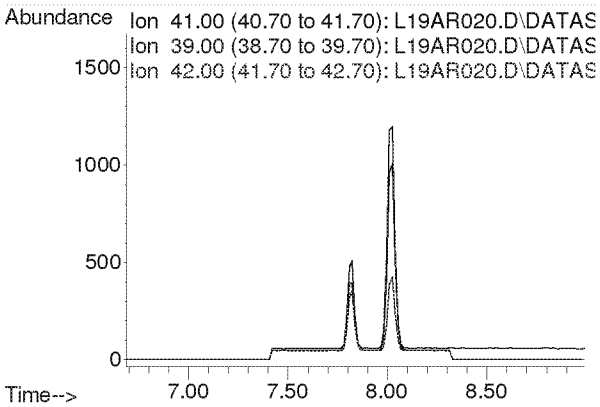


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

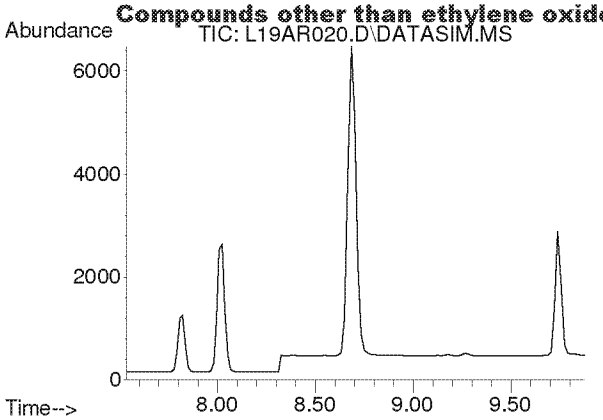
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

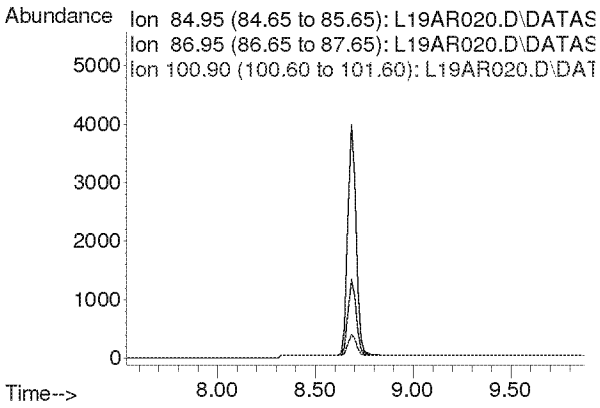


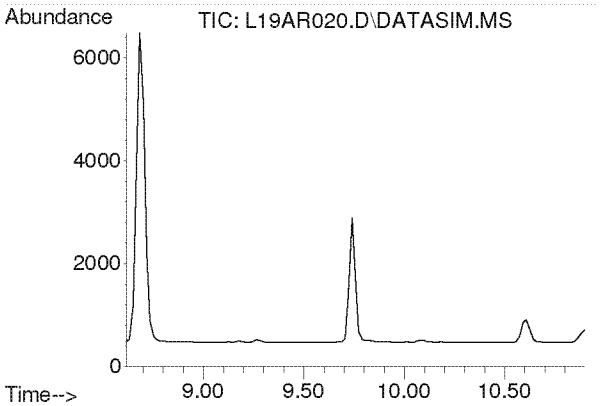
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



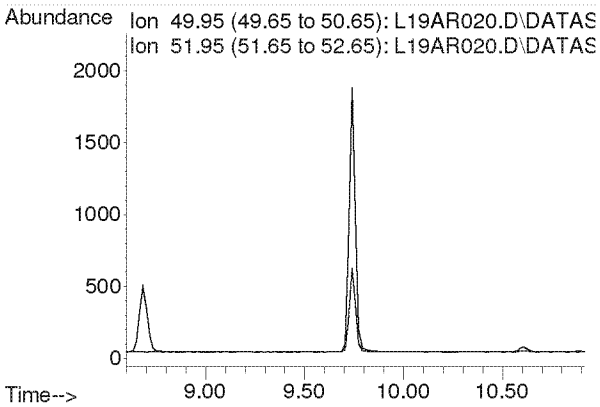


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

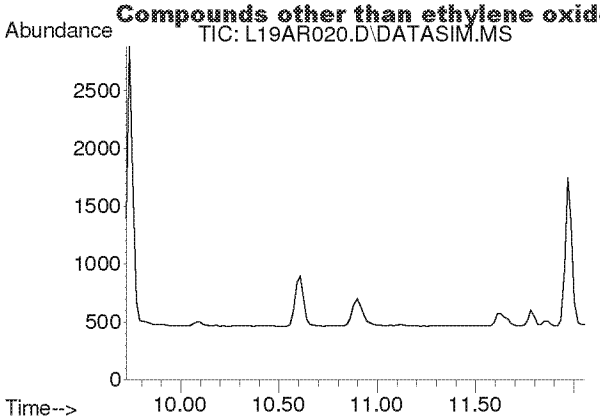
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

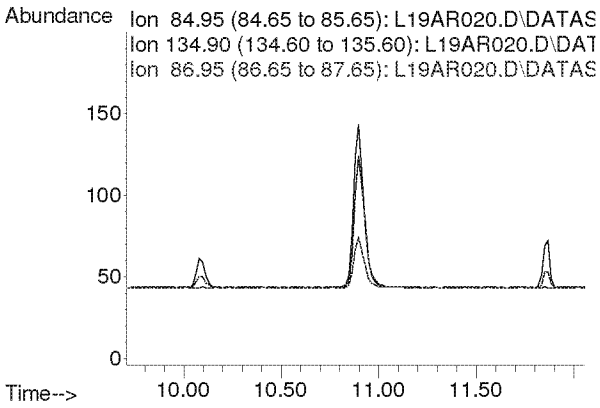


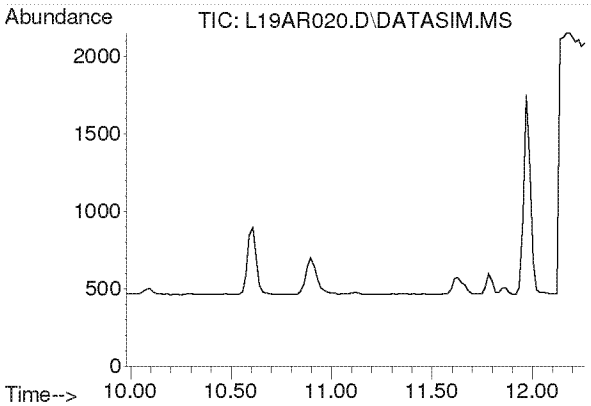
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



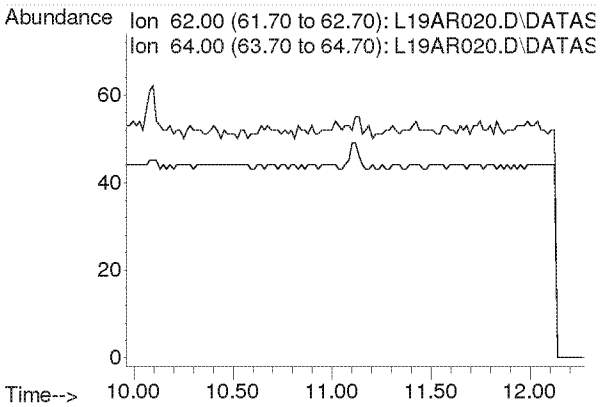


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

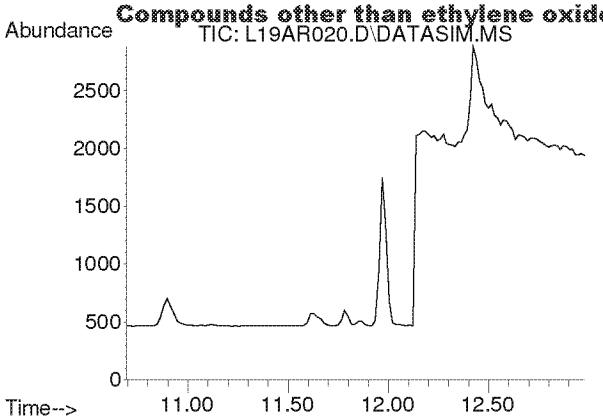
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

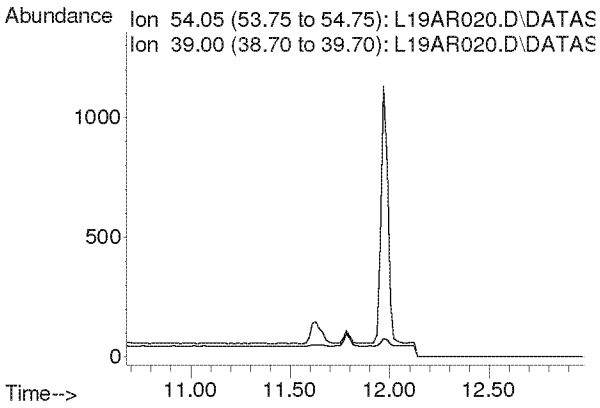


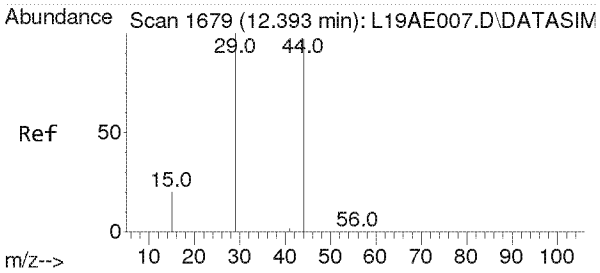
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

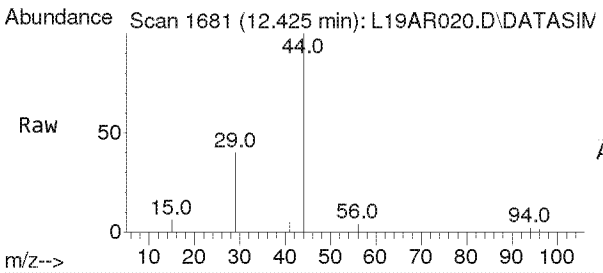


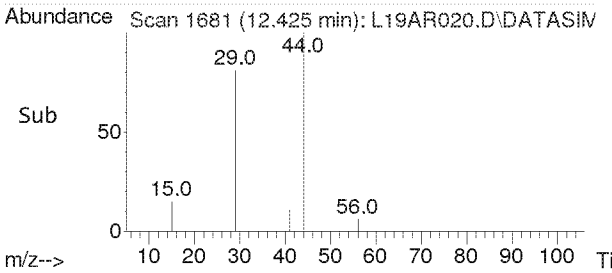


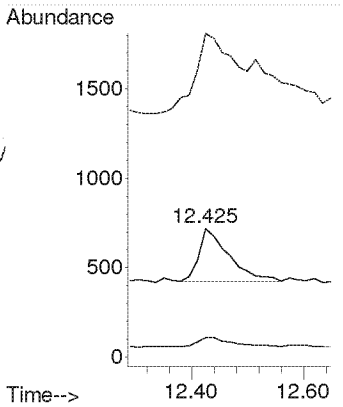
#9
Ethylene oxide
Concen: 0.402 ppbv m
RT: 12.425 min Scan# 1681
Delta R.T. 0.032 min
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 29 Resp: 1112

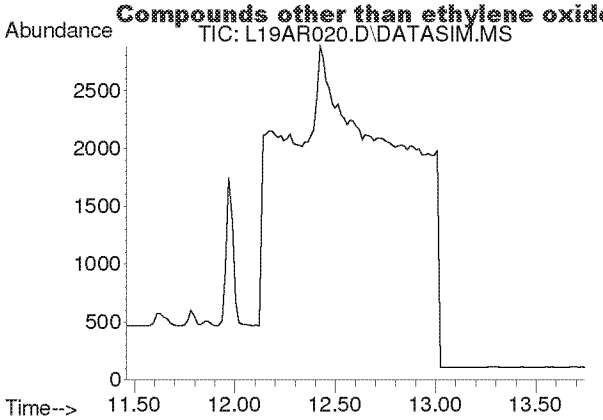
Ion	Ratio	Lower	Upper
29	100		
15	18.2	15.4	23.0
44	302.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

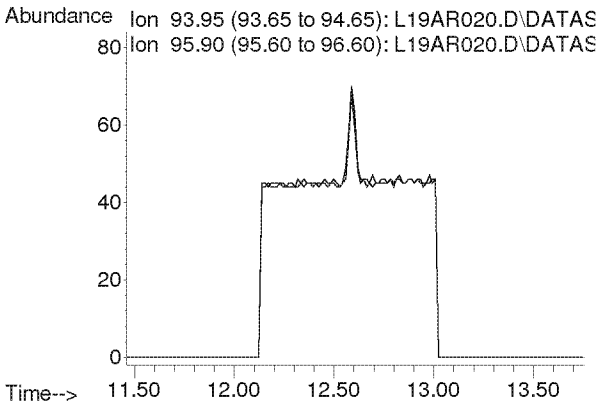


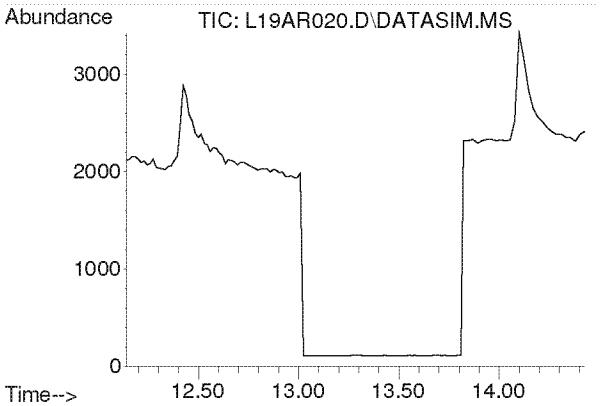
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



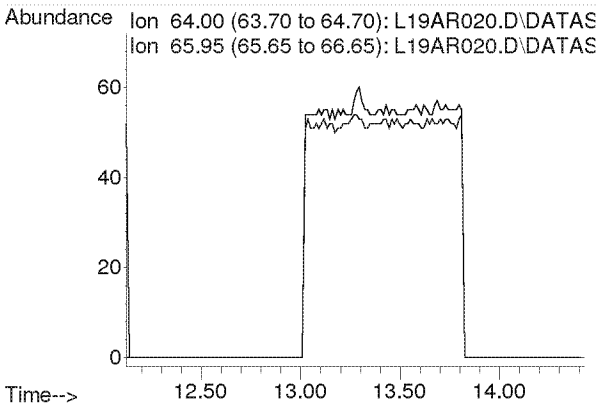


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

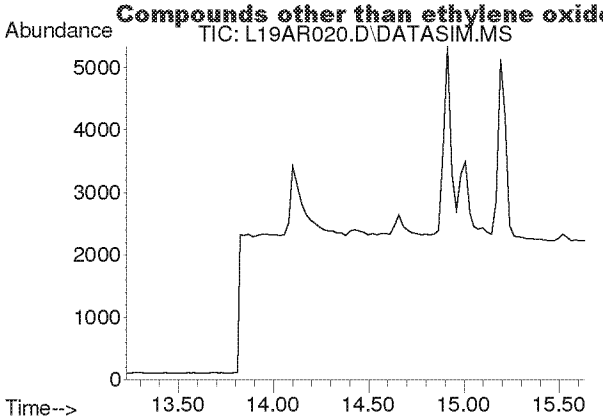
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

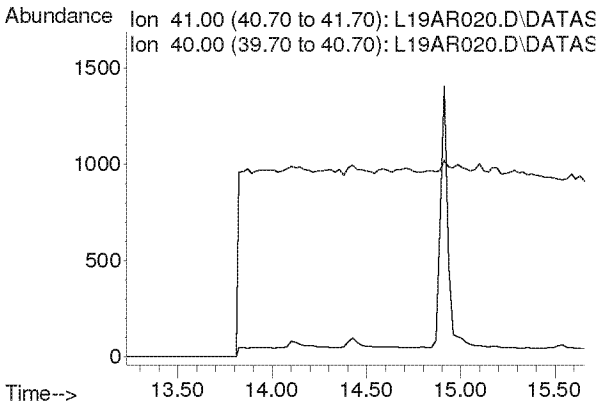


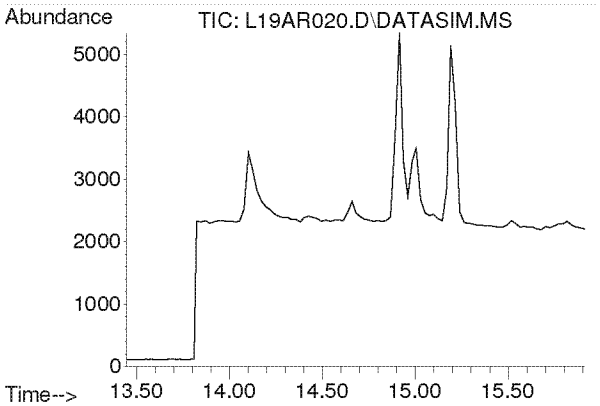
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



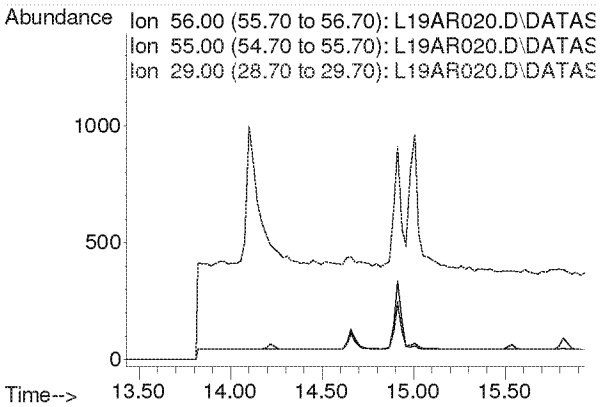


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

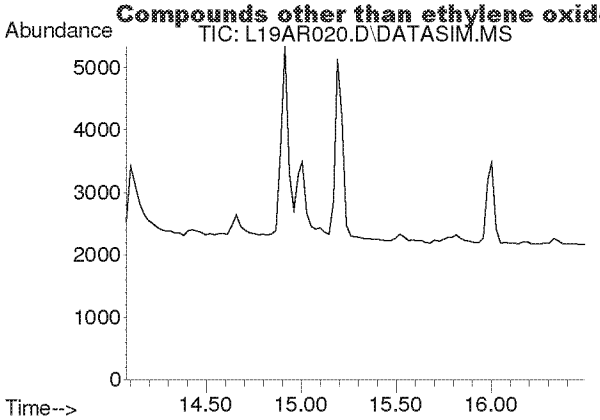
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

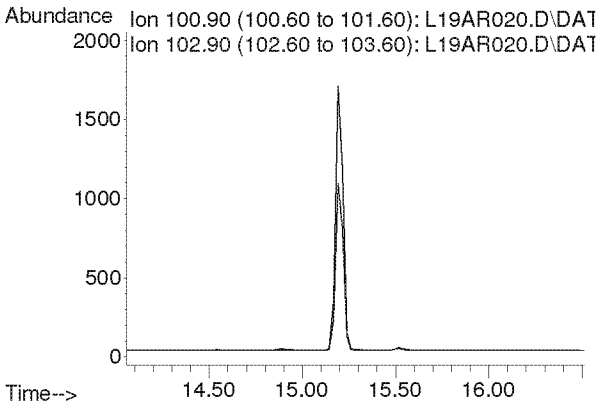


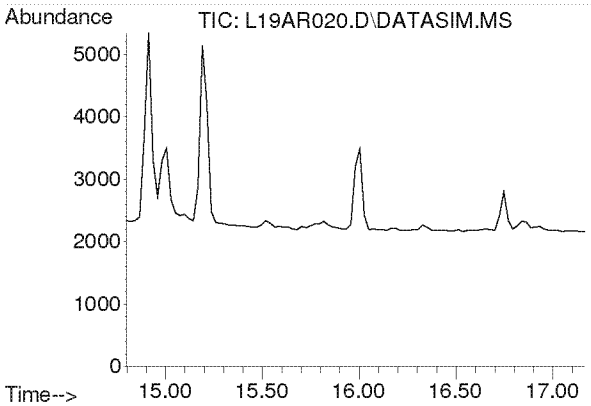
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



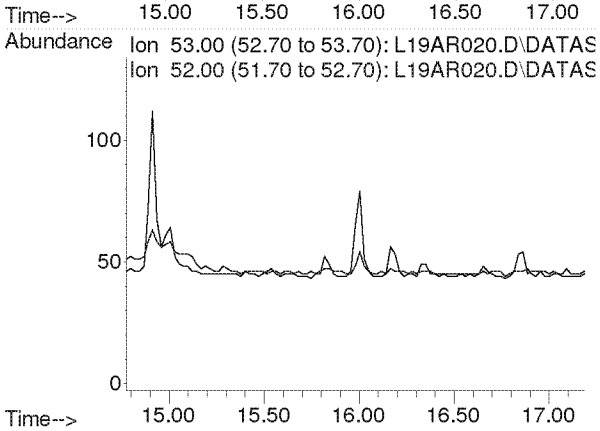


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

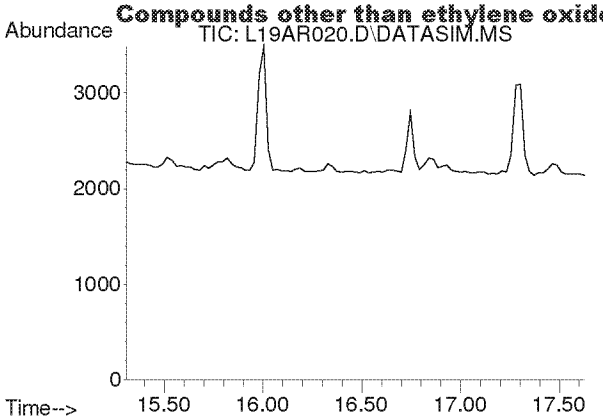
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

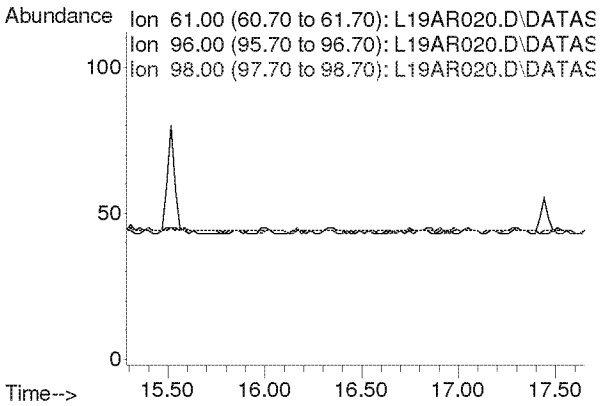


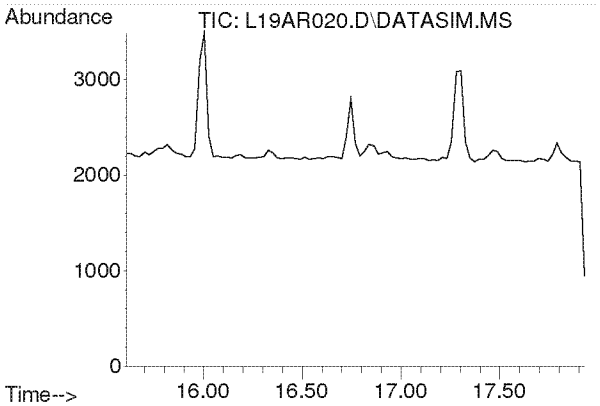
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



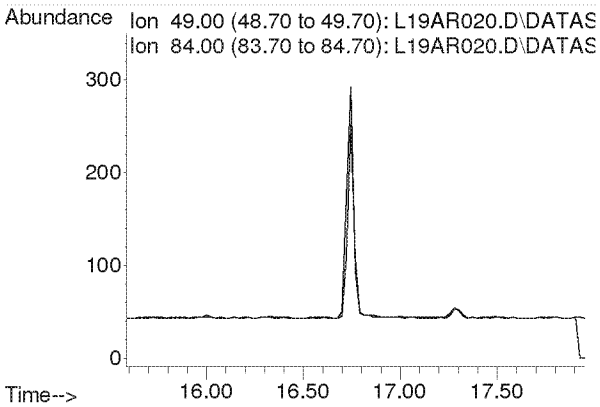


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

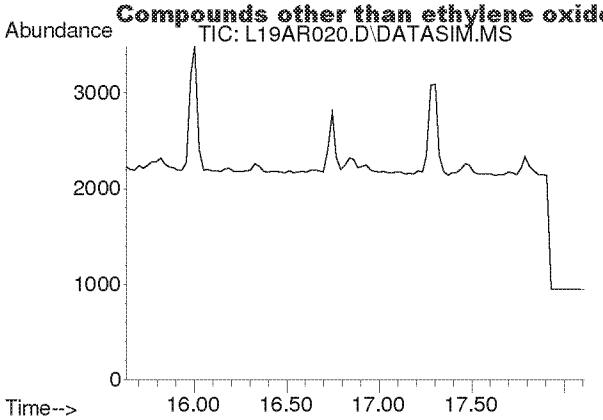
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

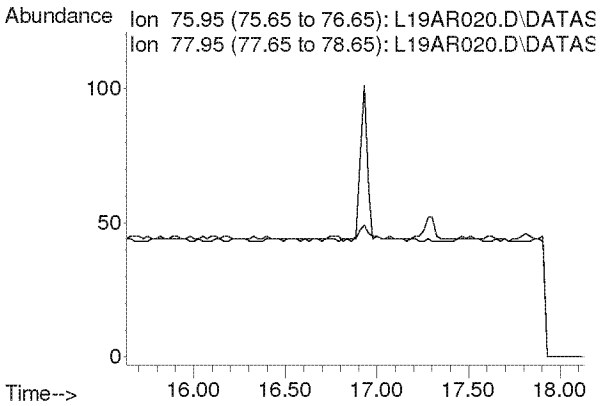


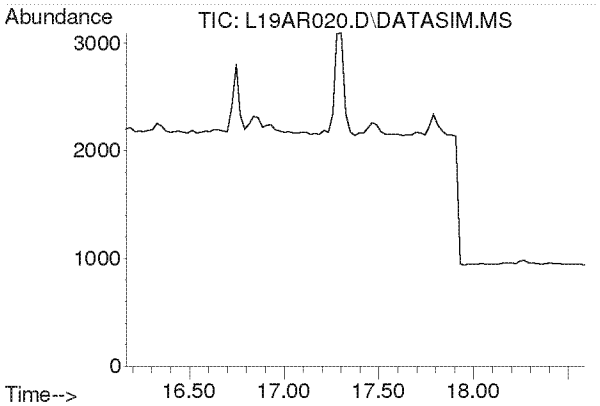
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



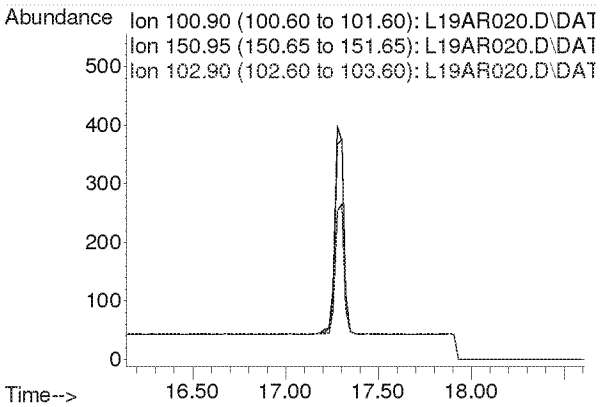


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

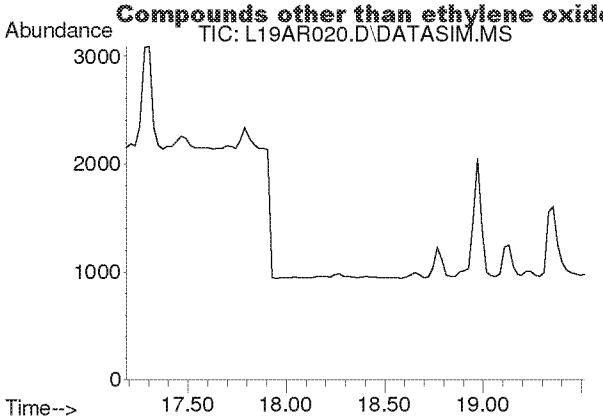
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

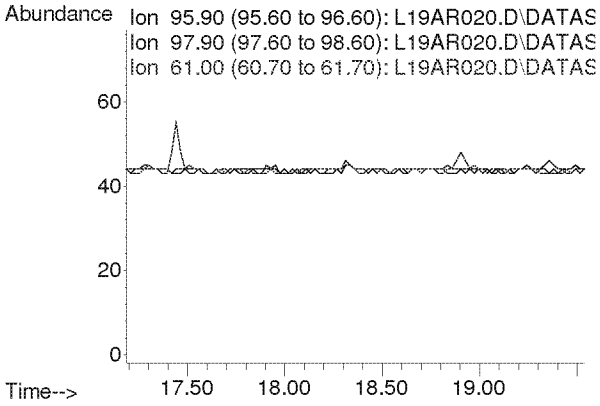


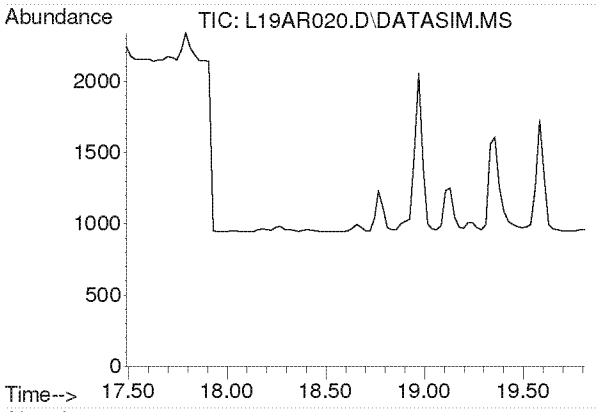
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



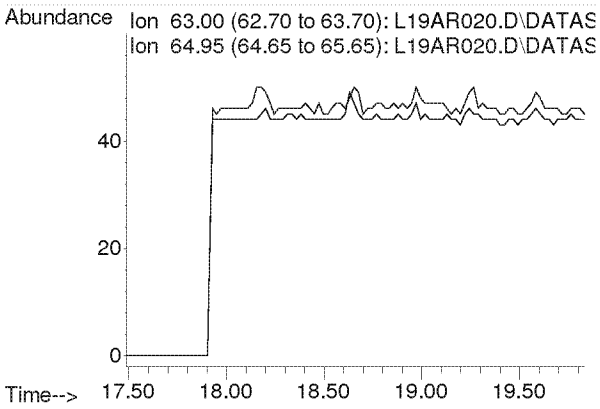


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

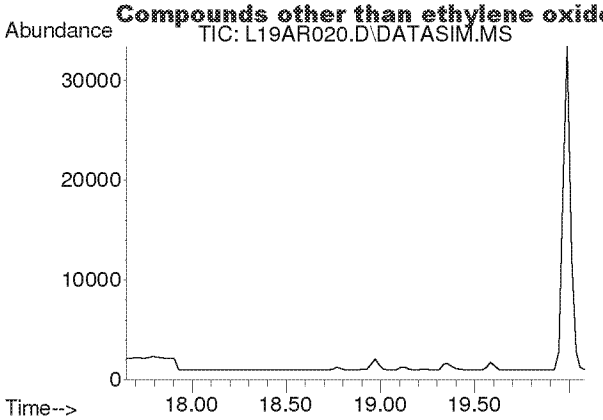
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

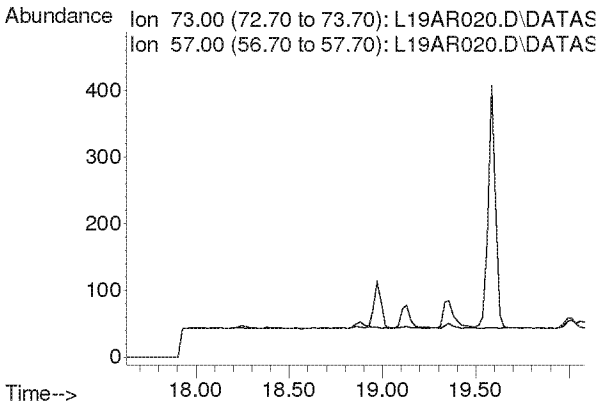


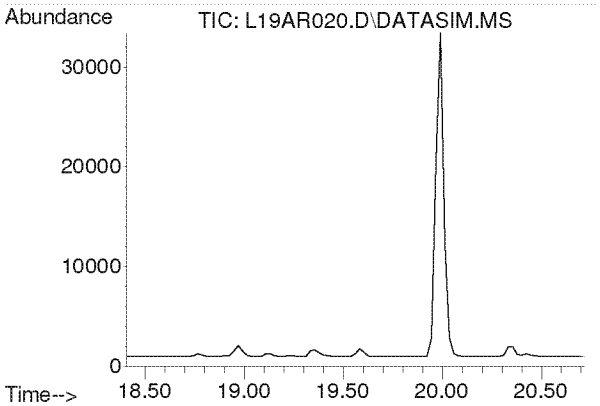
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



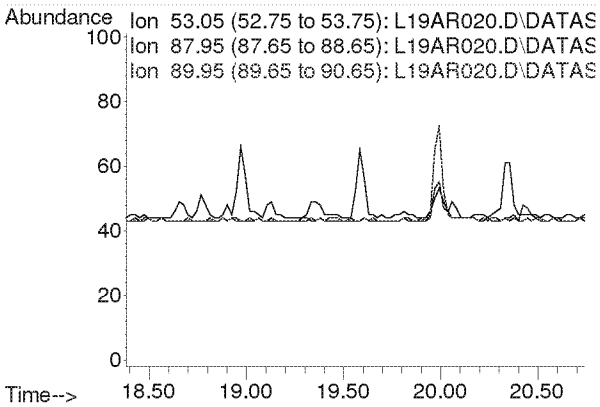


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

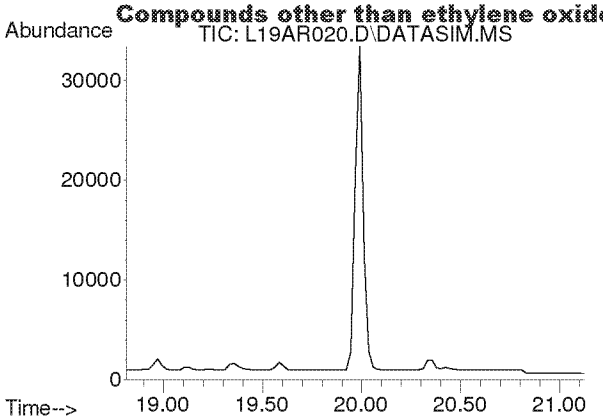
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

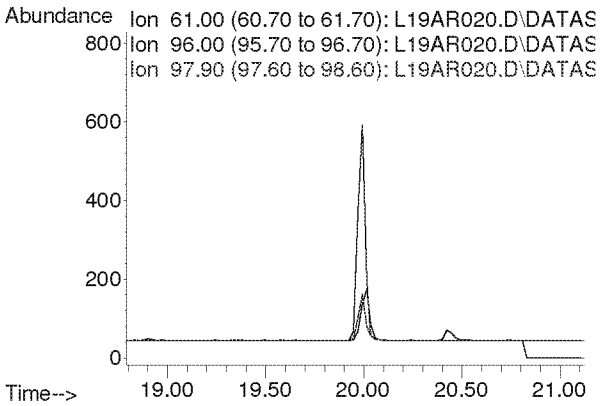


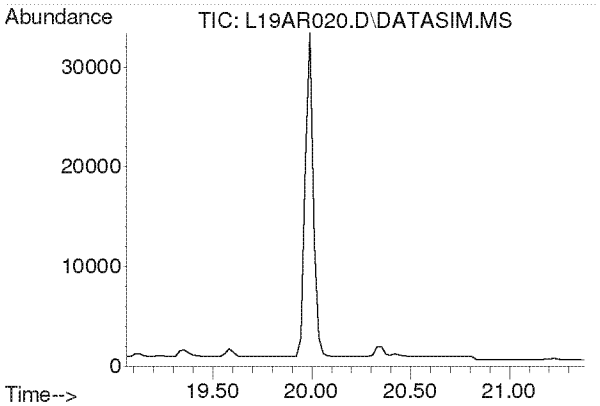
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



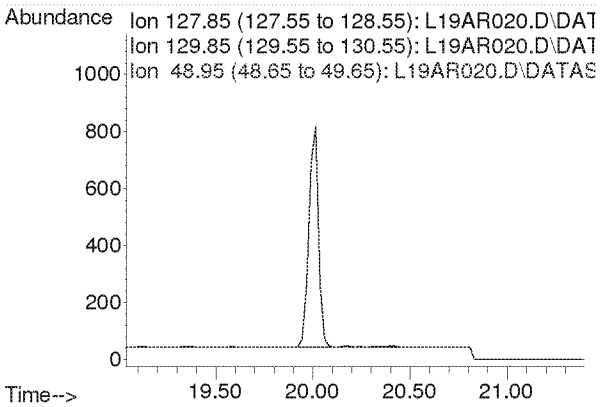


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

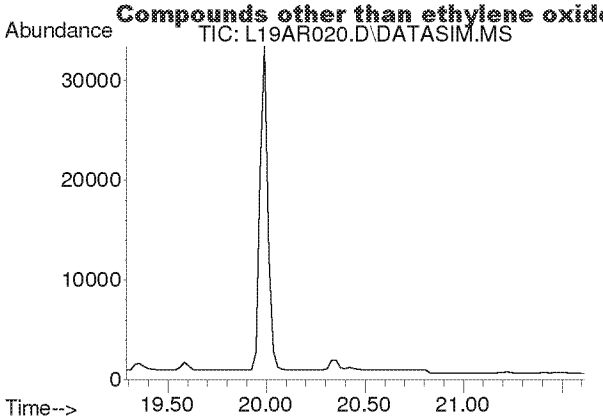
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

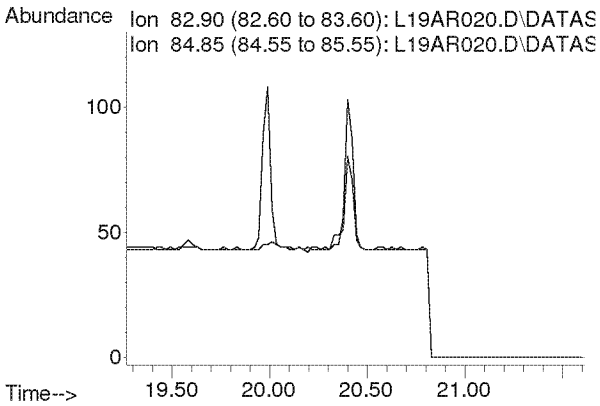


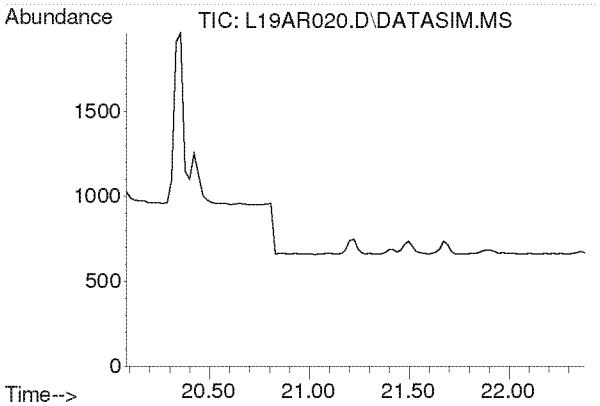
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



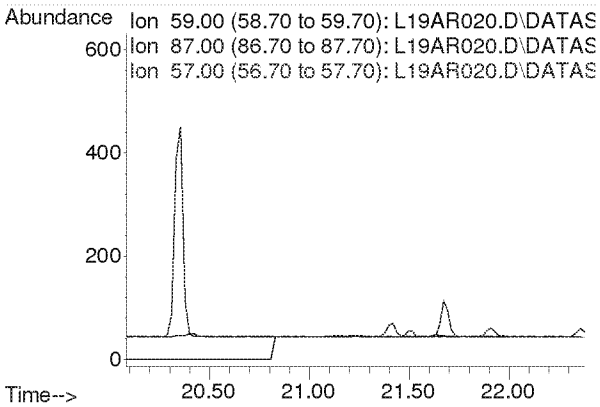


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

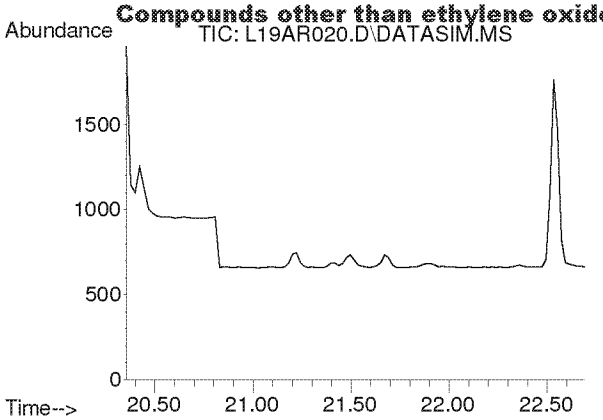
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

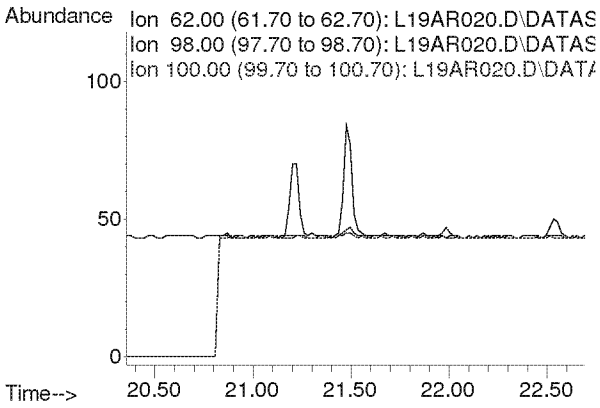


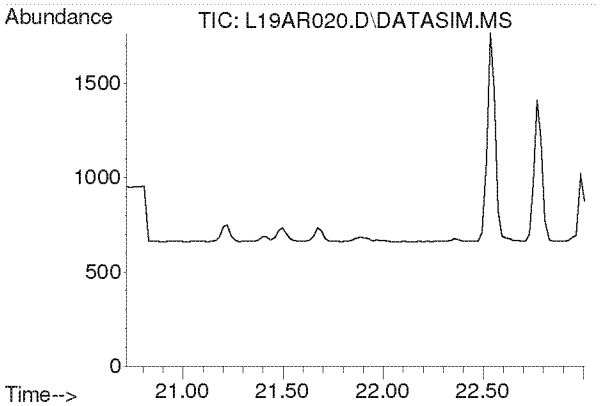
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



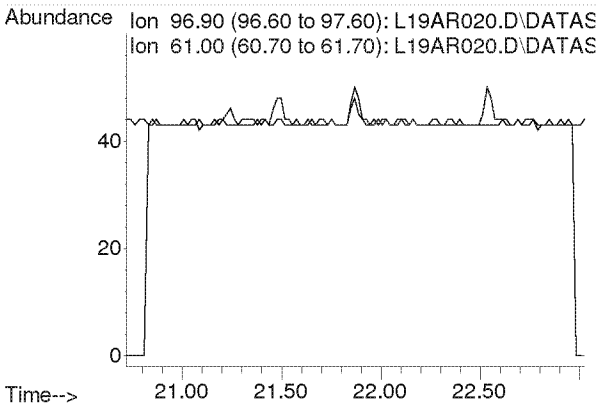


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

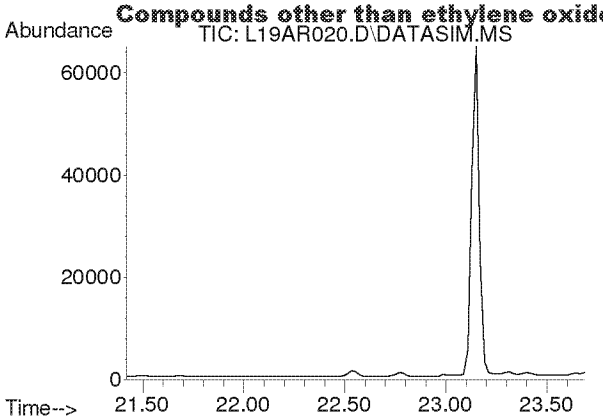
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

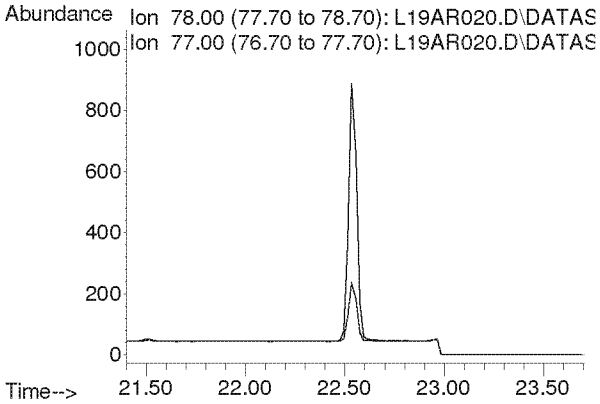


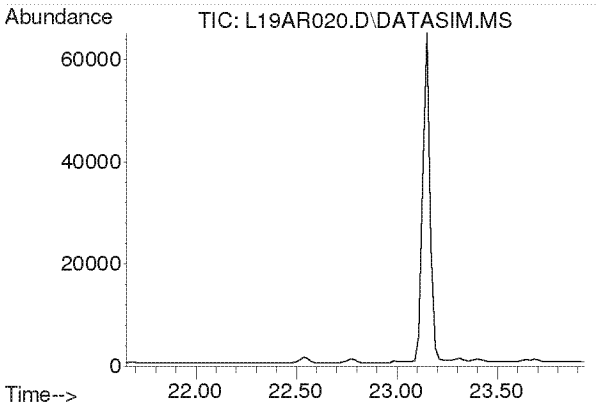
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



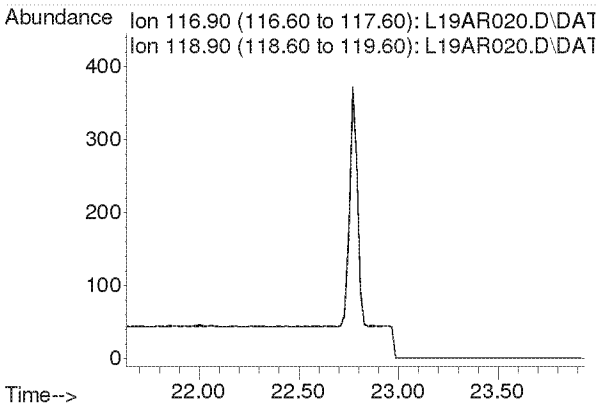


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

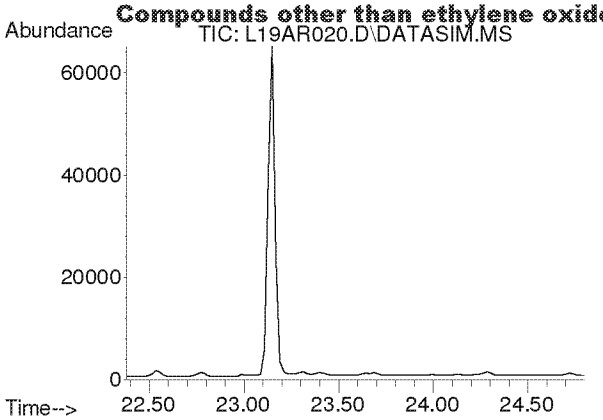
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

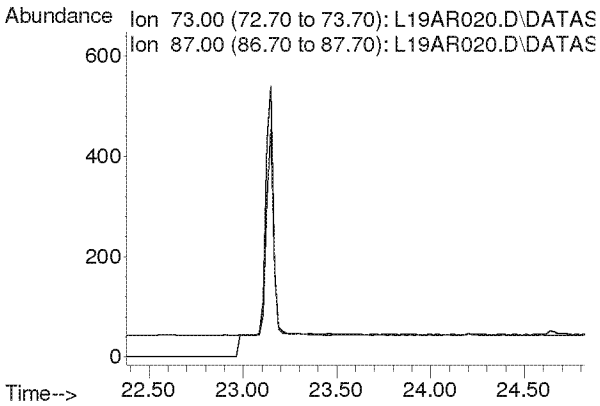


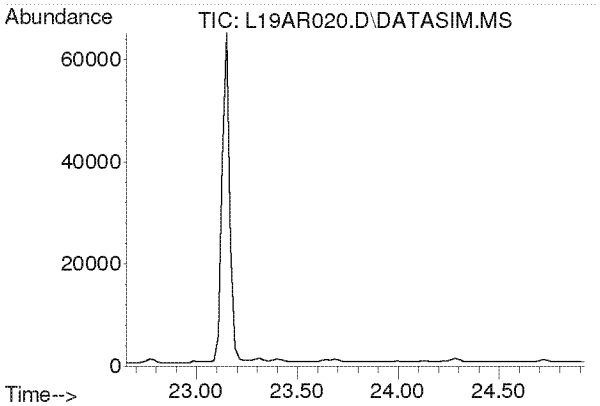
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



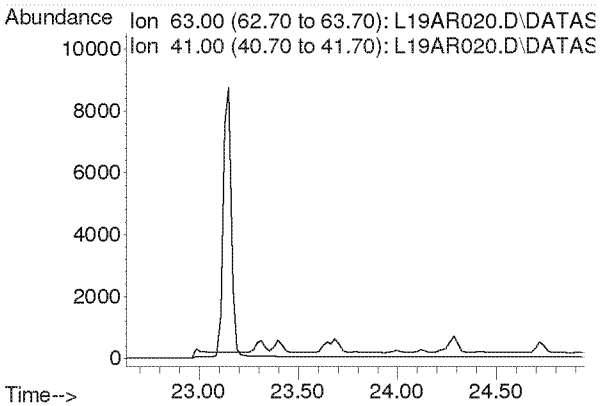


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

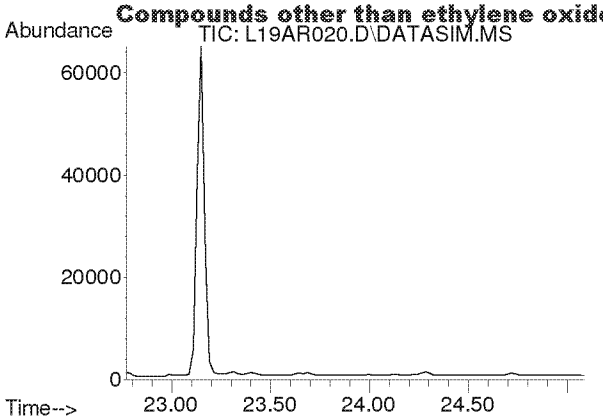
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

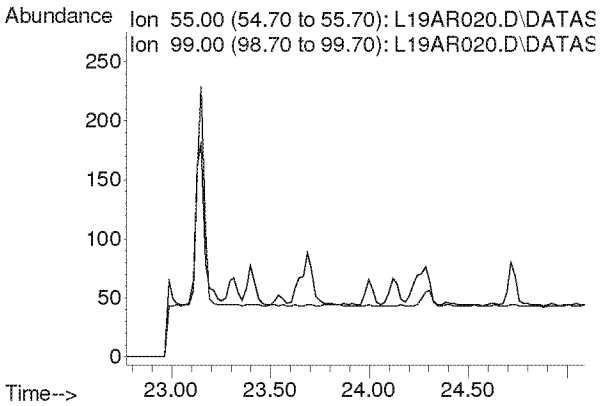


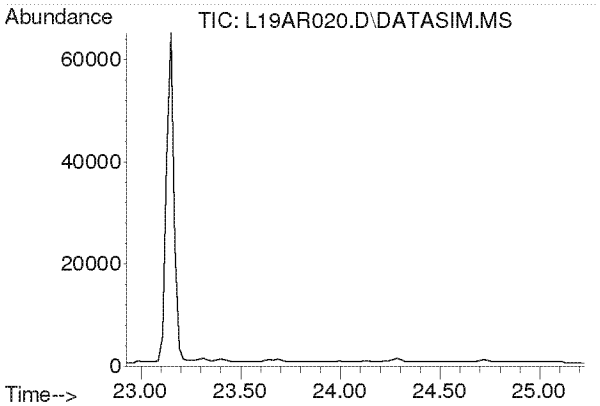
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



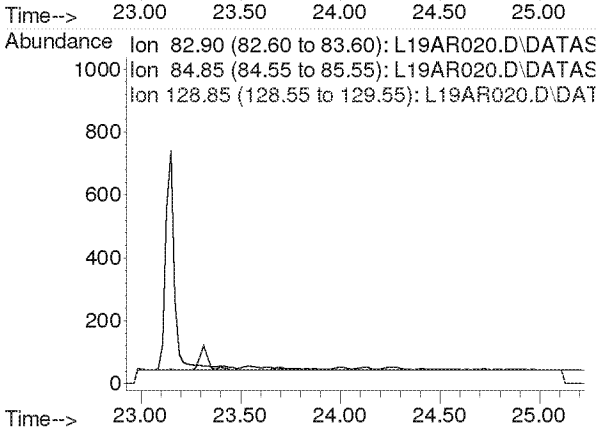


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

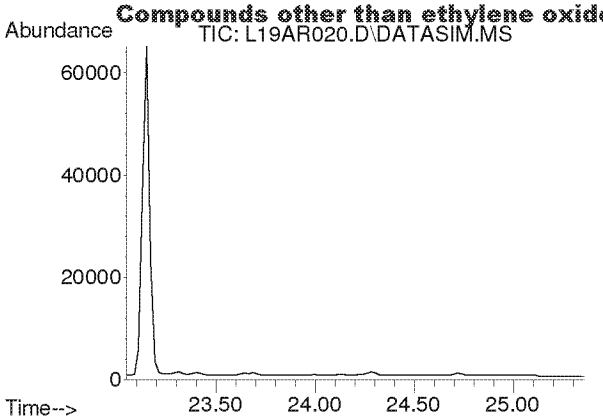
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

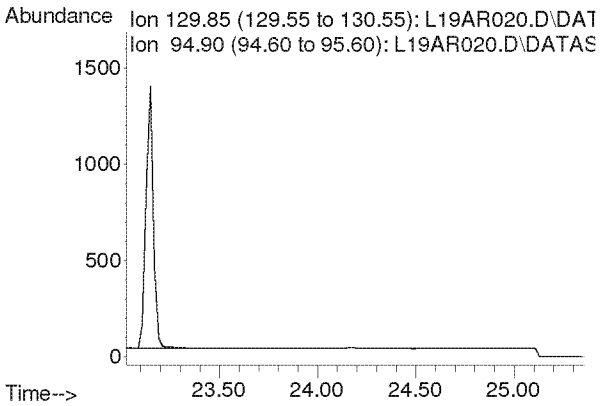


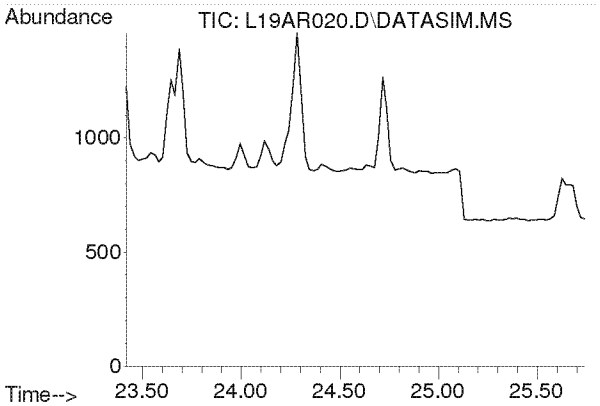
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



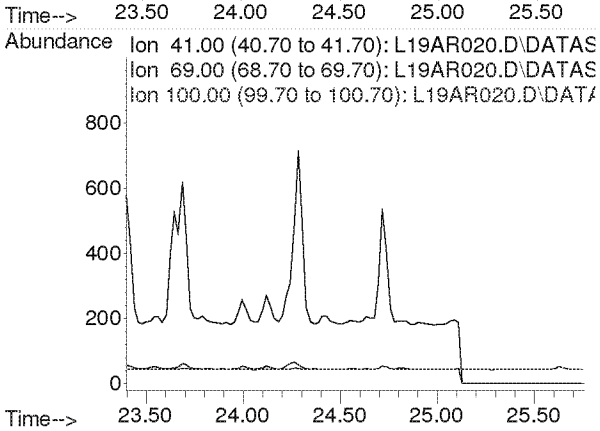


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

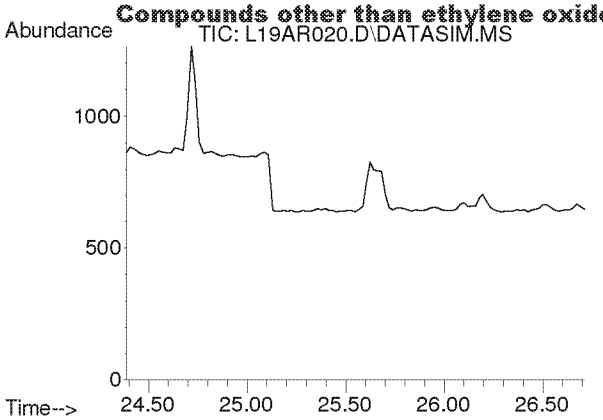
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

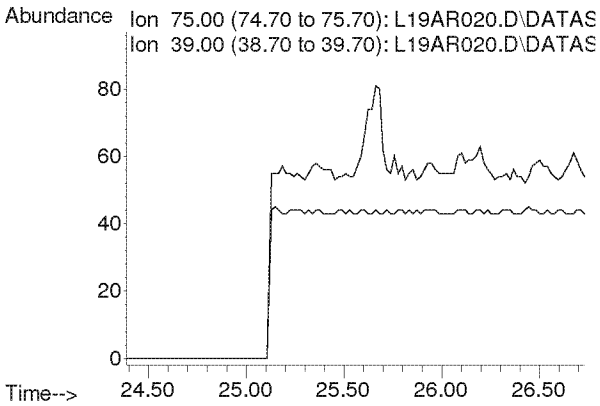


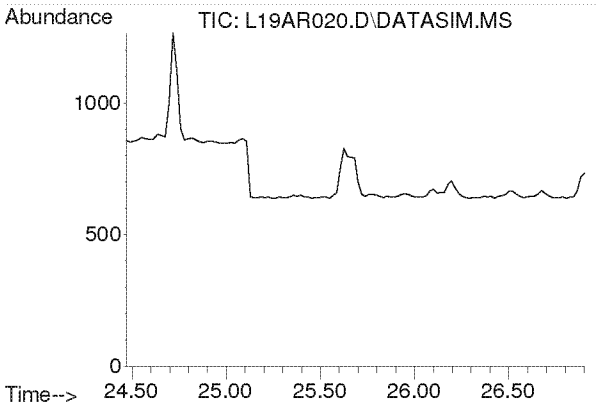
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



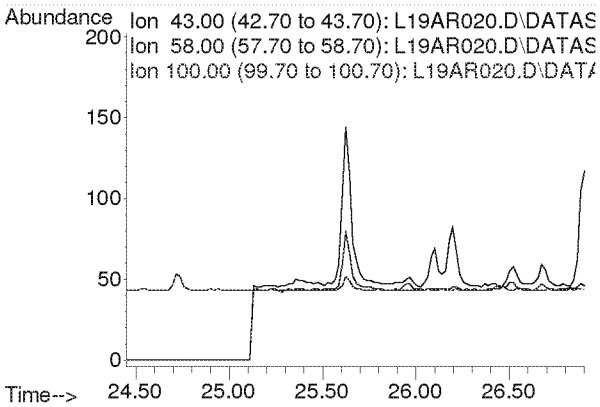


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

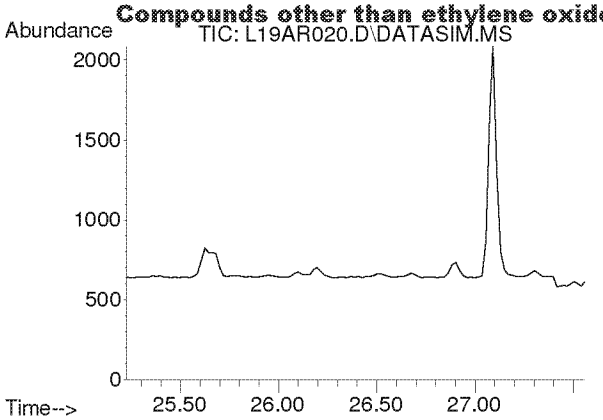
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

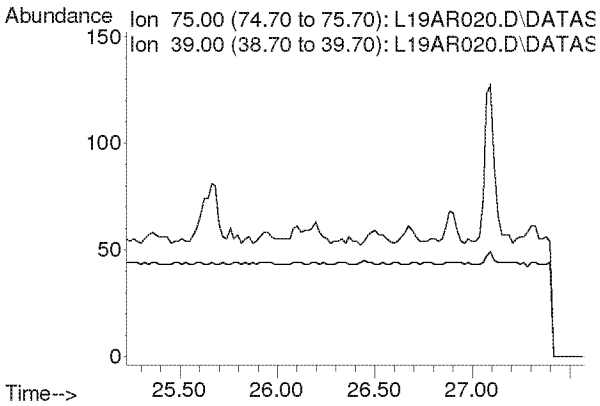


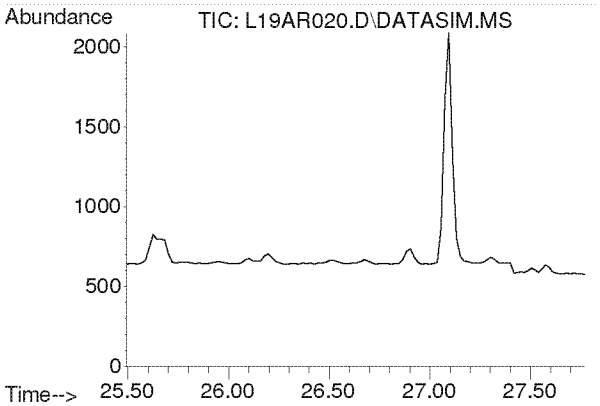
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



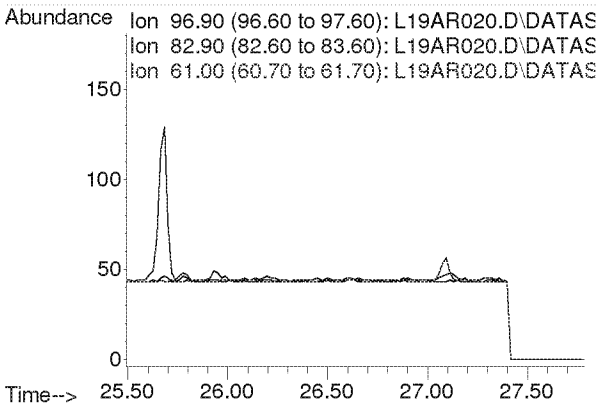


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

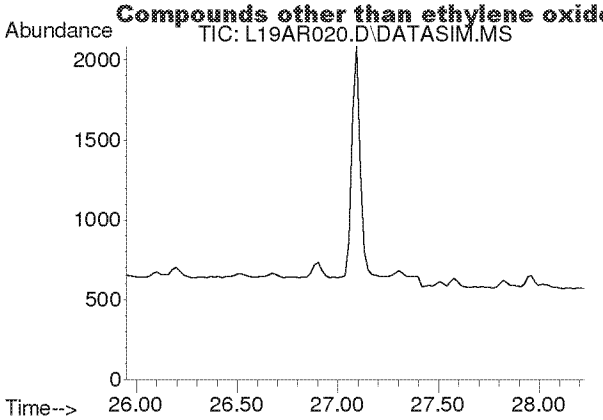
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

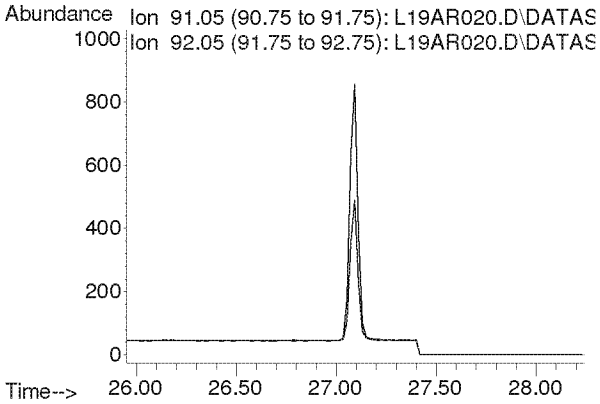


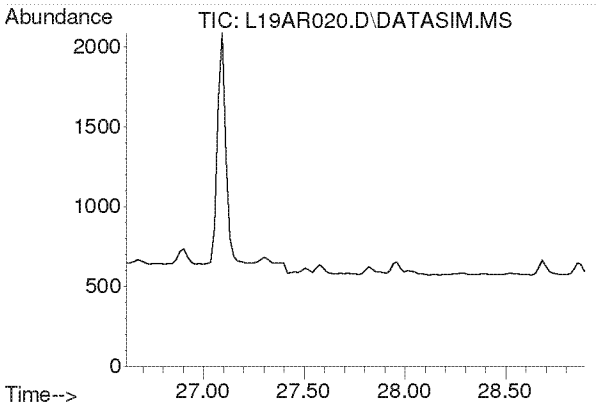
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



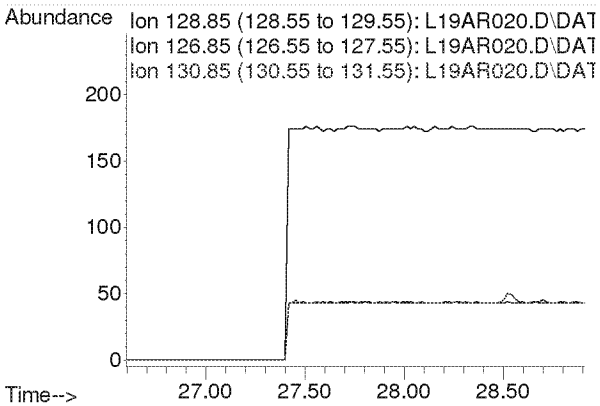


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

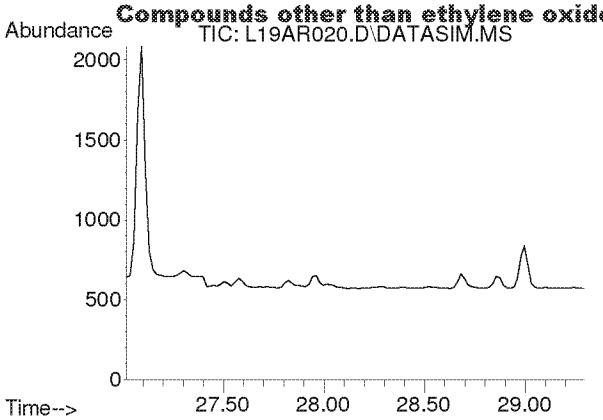
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

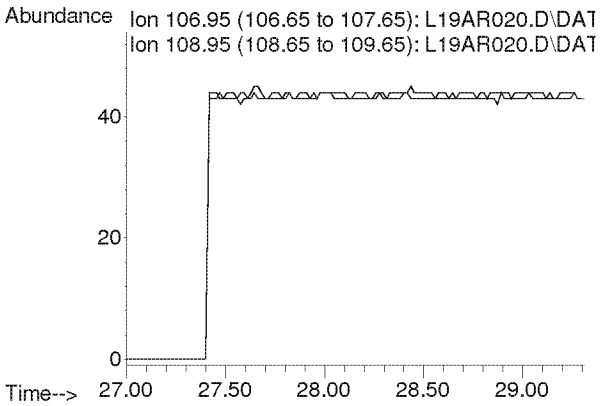


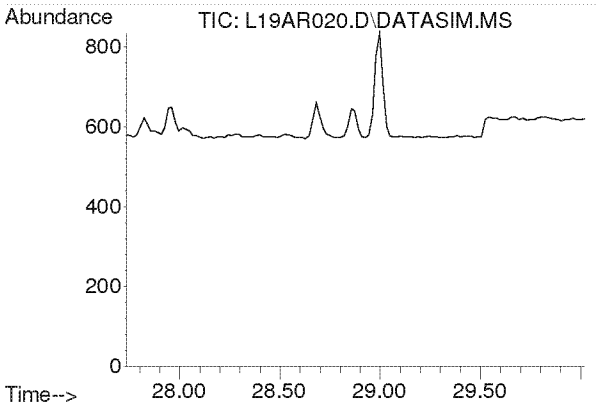
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



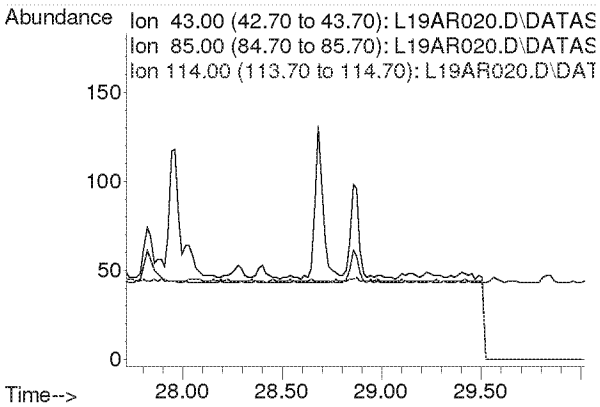


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

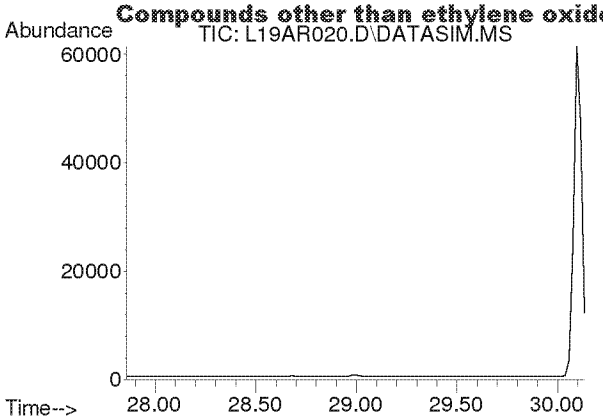
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

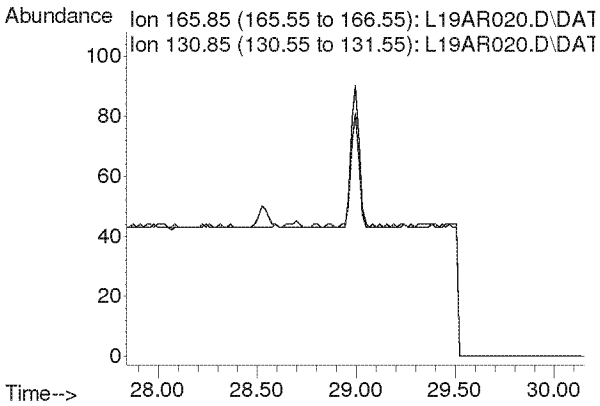


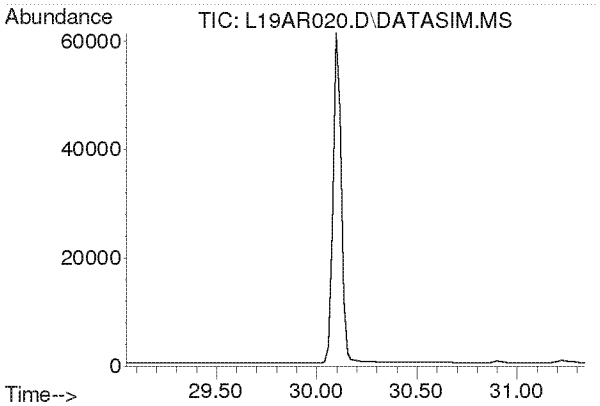
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



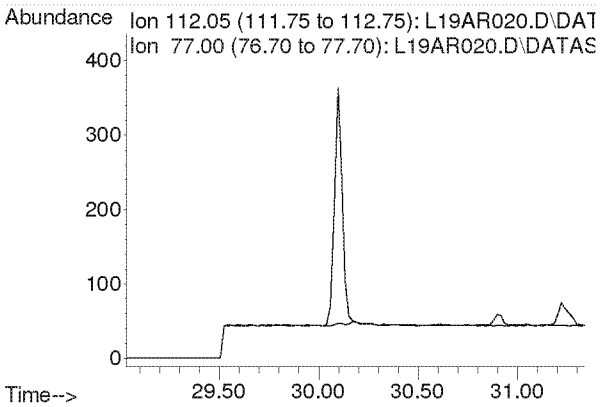


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

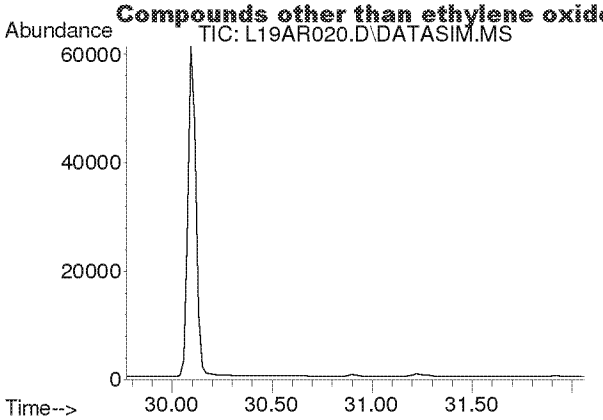
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

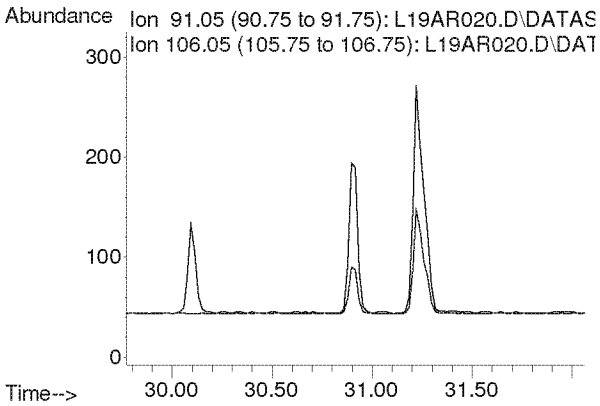


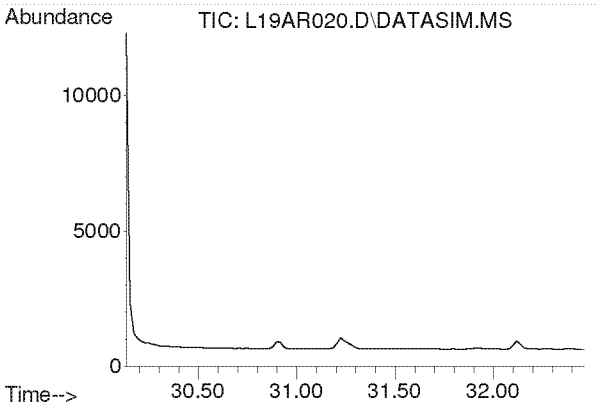
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



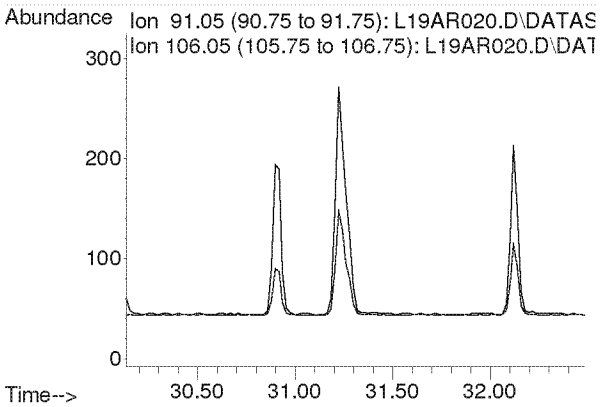


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

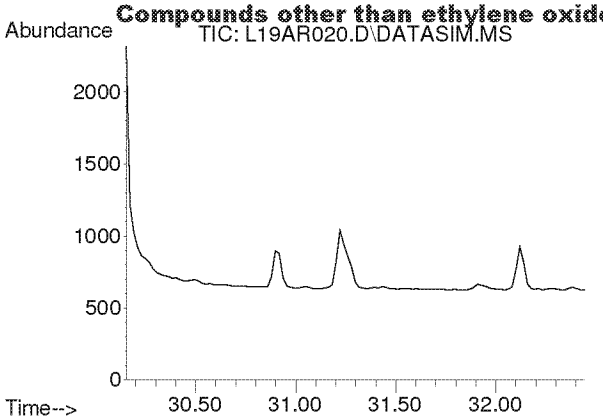
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

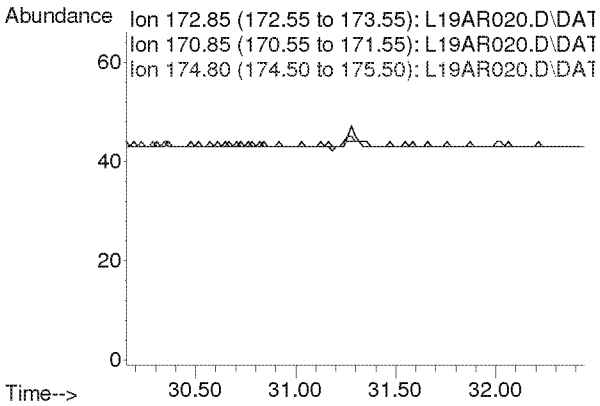


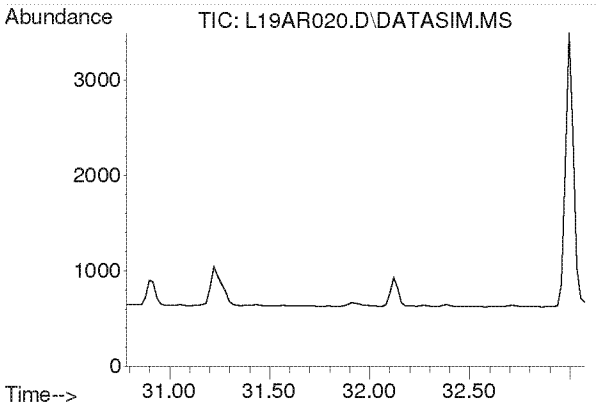
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



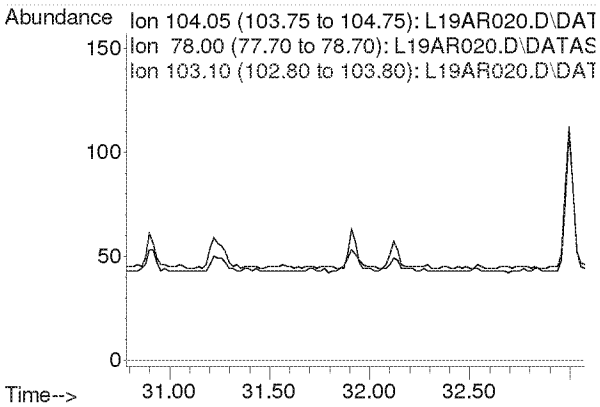


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

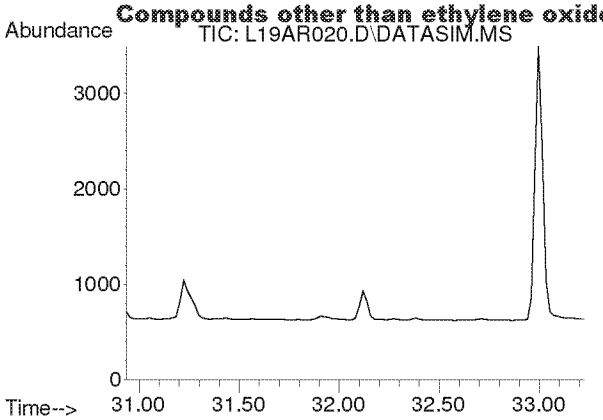
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

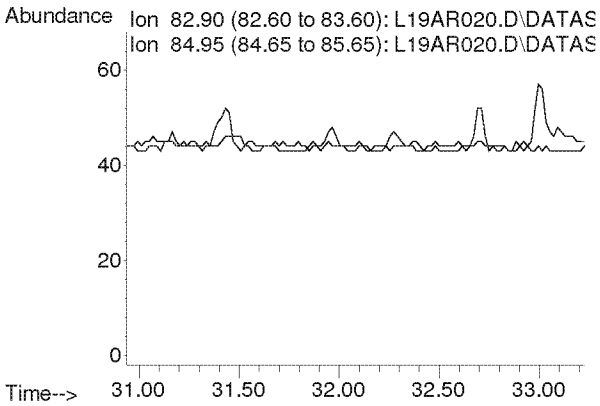


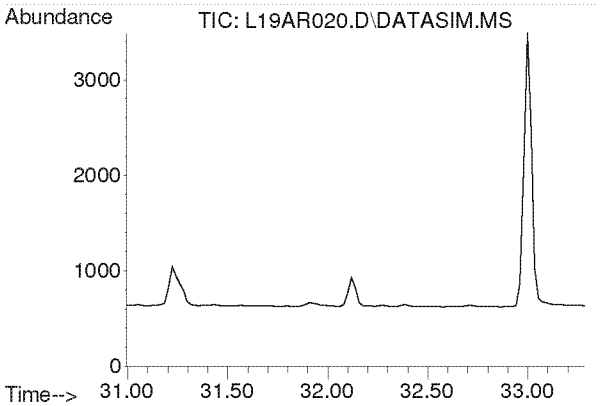
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



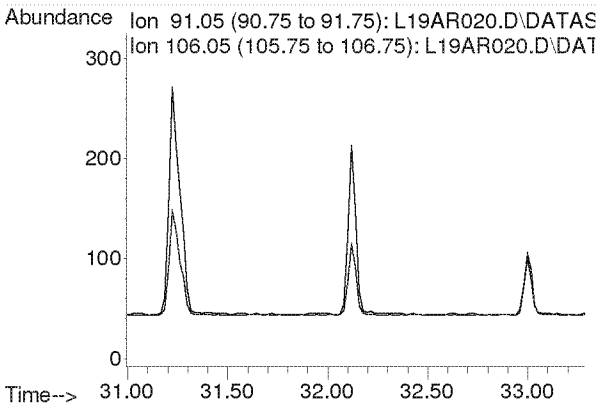


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

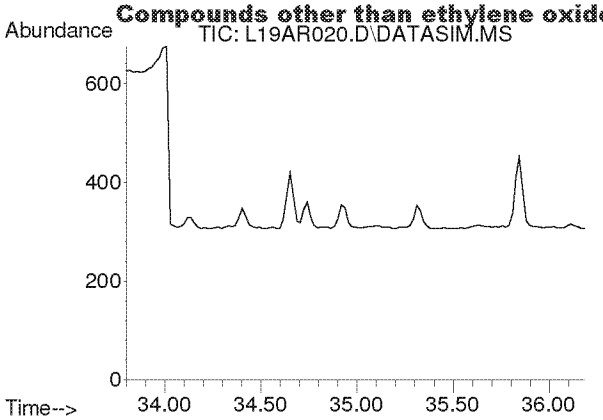
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

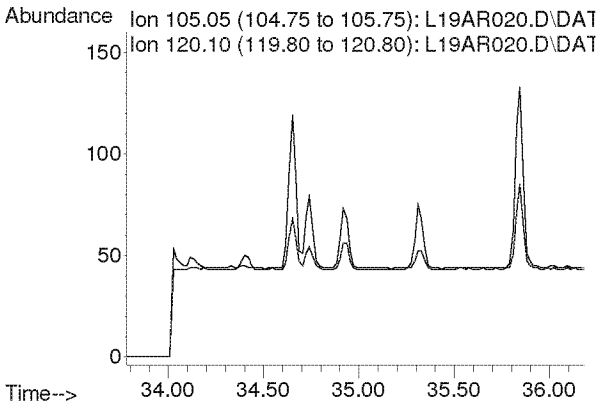


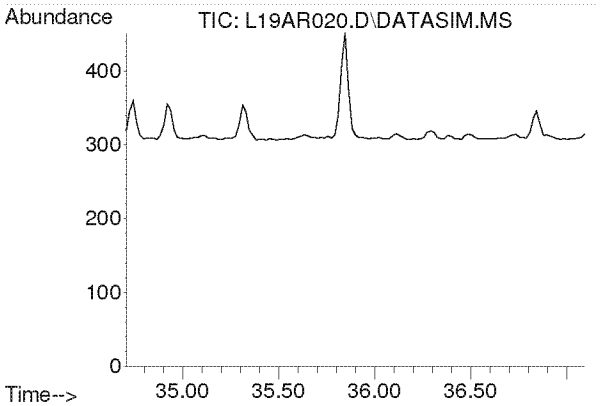
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



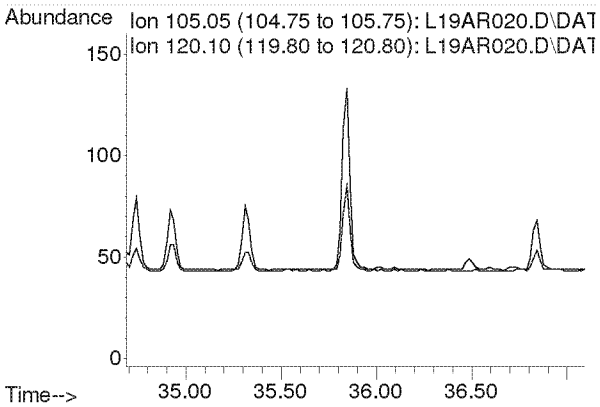


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

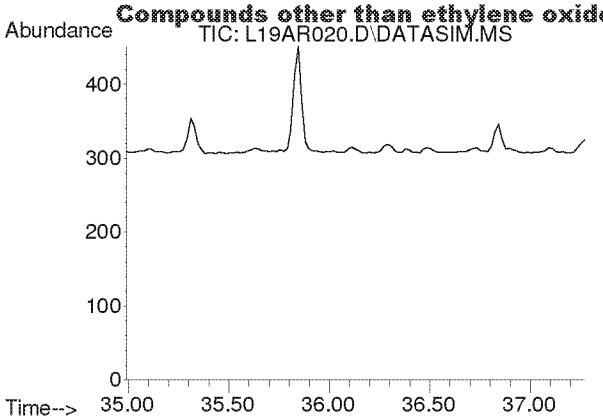
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

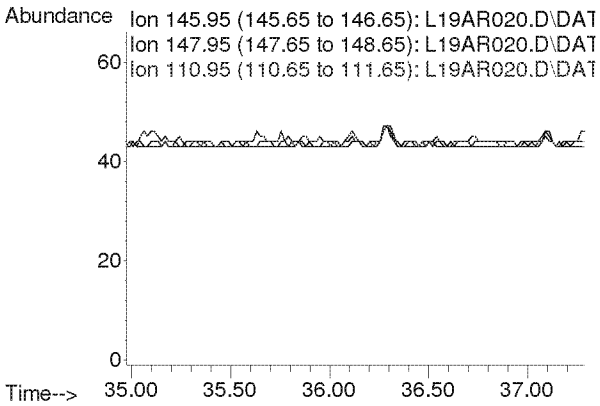


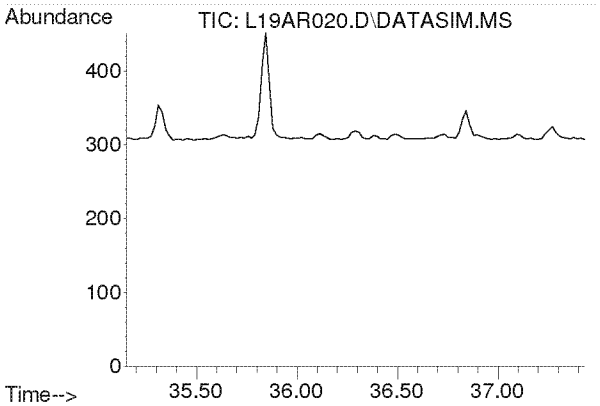
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



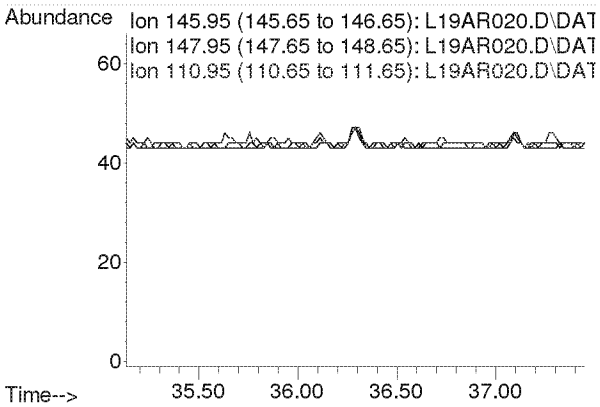


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

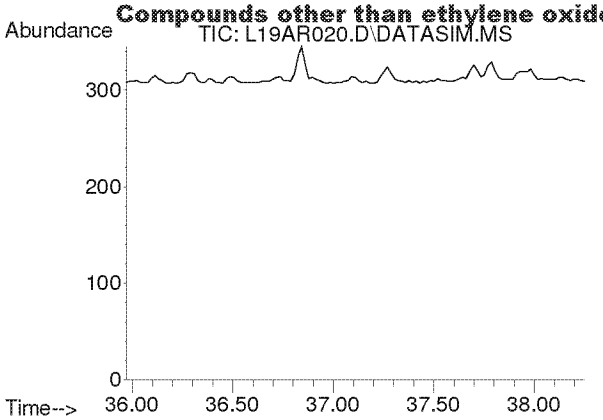
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

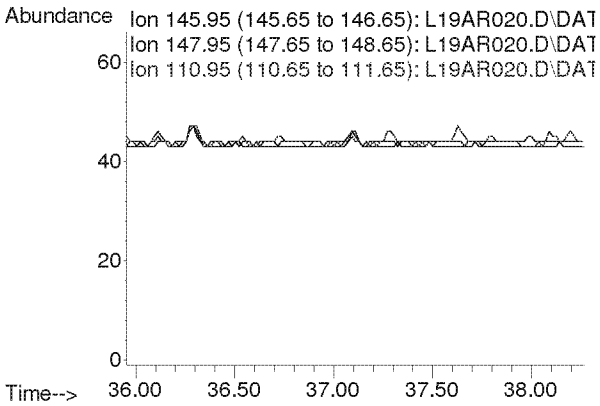


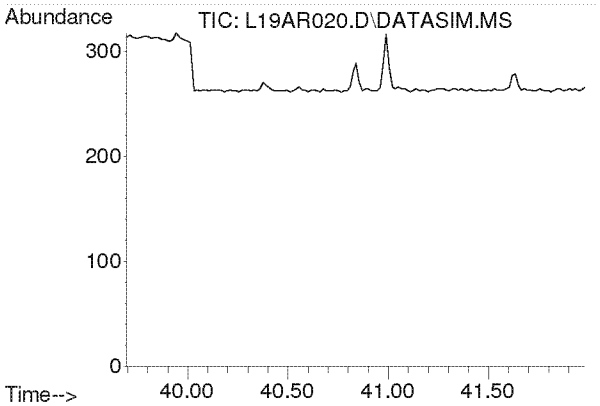
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



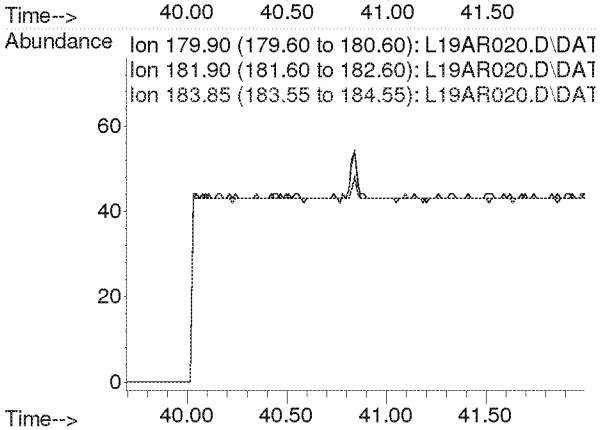


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

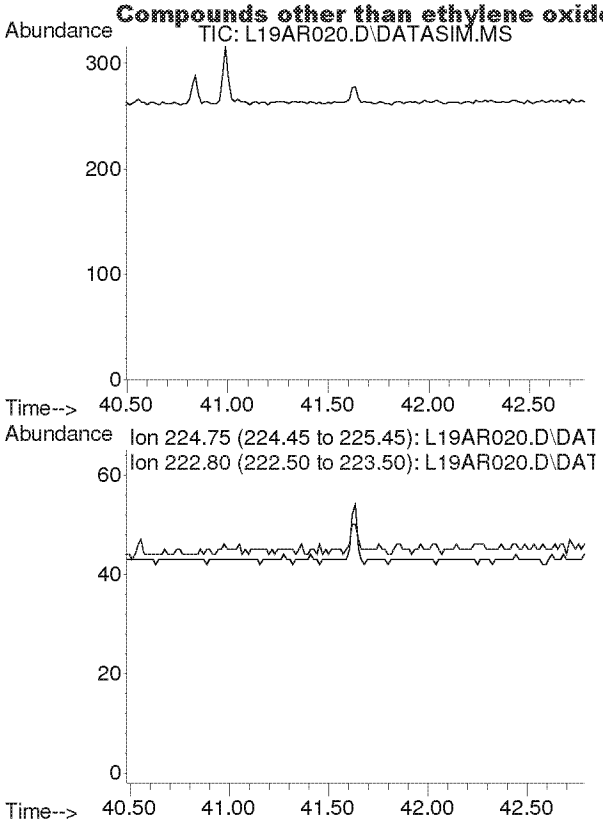
Lab File: L19AR020.D
Acq: 19 Jan 2019 6:49 am

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: L19AR020.D
Acq: 19 Jan 2019 6:49 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\L19AR\
Data File : L19AR021.D
Acq On : 19 Jan 2019 7:52 am
Operator : MAH
Sample : 9011701-01
Misc : HINSDALE S.HS 1/16/19
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 23 09:27:24 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	49647	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	120380	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	93802	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	12.470	29	338	0.1318 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.	
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. 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\L19AR\
Data File : L19AR021.D
Acq On : 19 Jan 2019 7:52 am
Operator : MAH
Sample : 9011701-01
Misc : HINSDALE S.HS 1/16/19
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 23 09:27:24 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

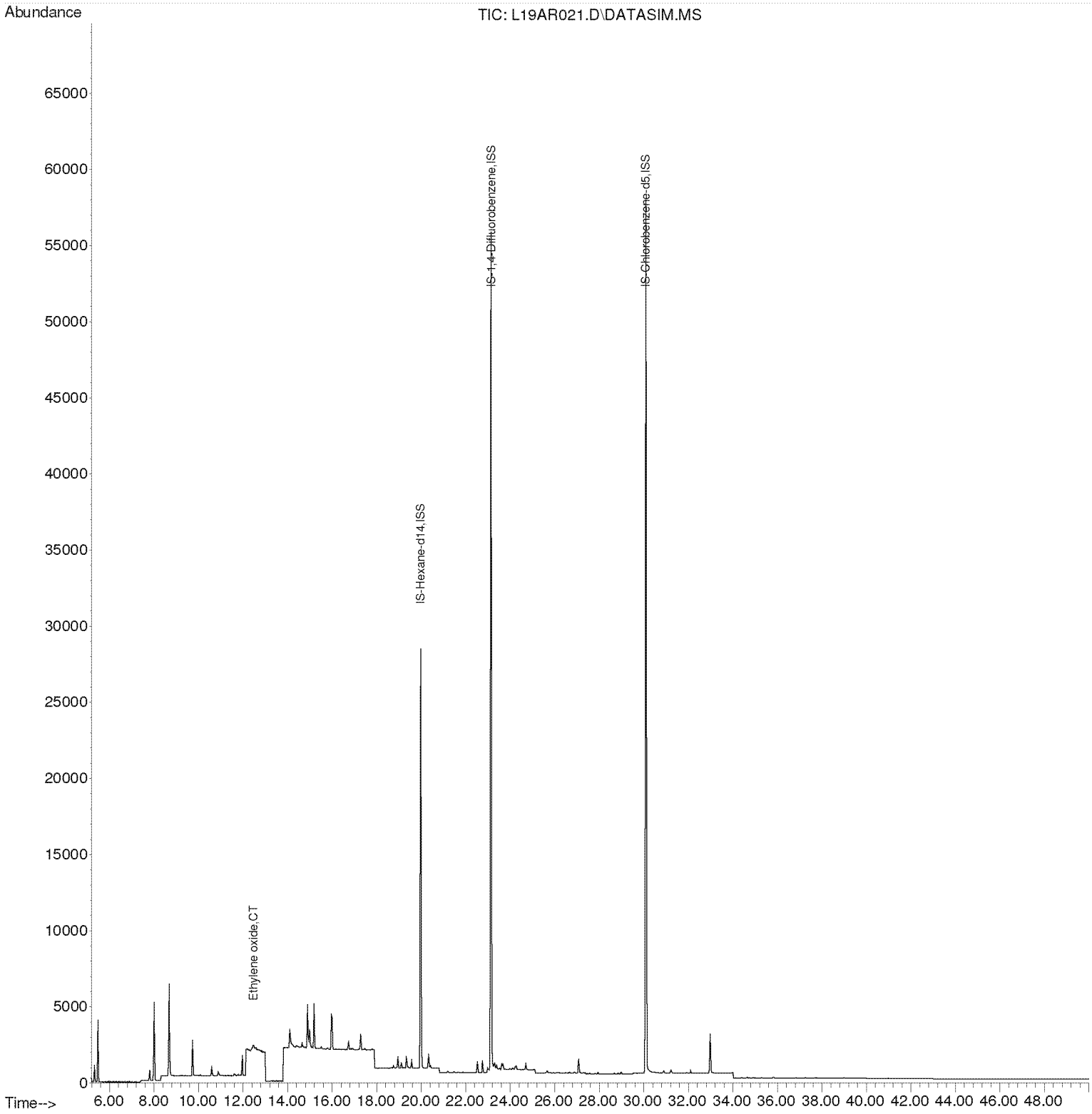
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene	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

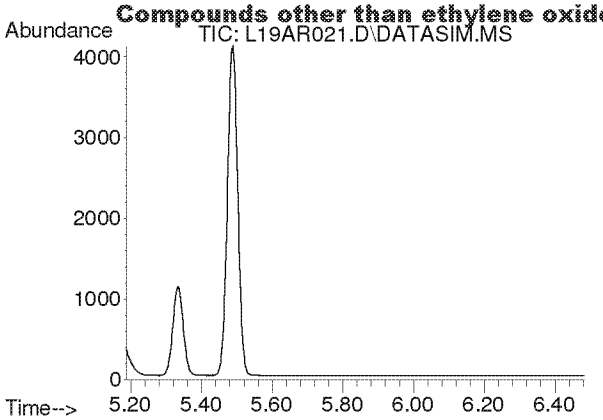
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR021.D
Acq On : 19 Jan 2019 7:52 am
Operator : MAH
Sample : 9011701-01
Misc : HINSDALE S.HS 1/16/19
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 23 08:40:04 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



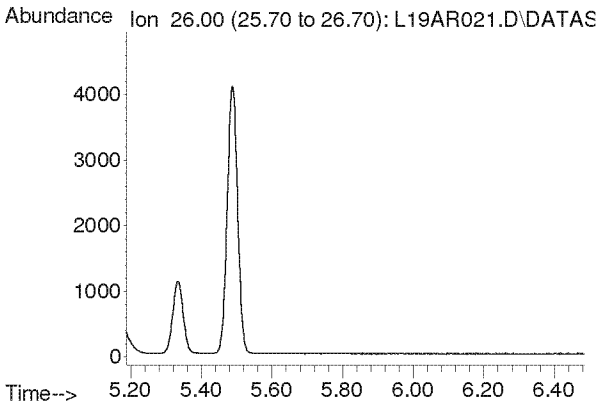
Compounds other than ethylene oxide were not quantitated.

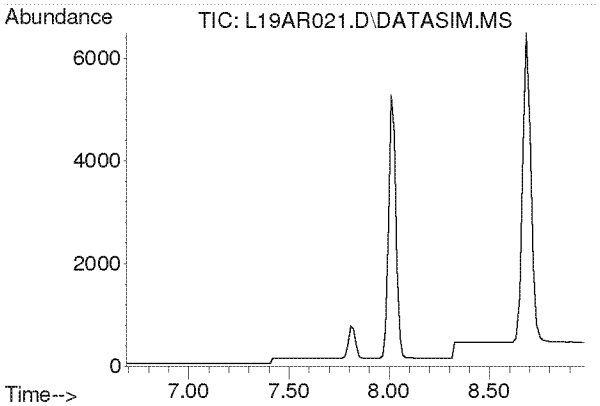


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 26



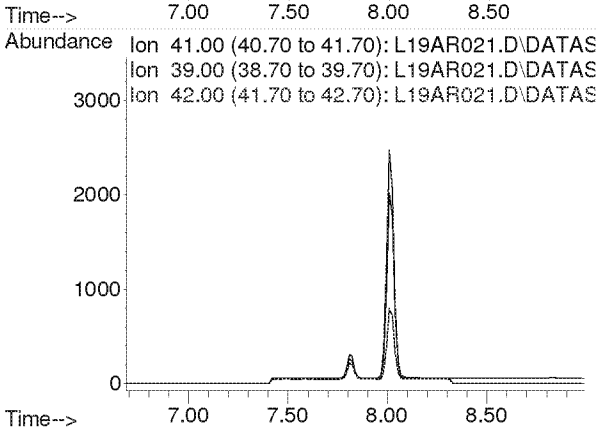


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

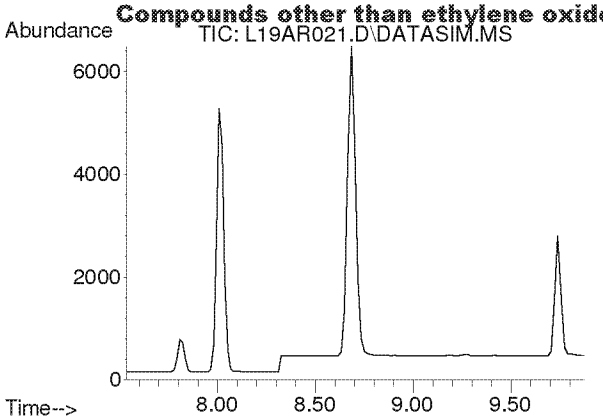
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

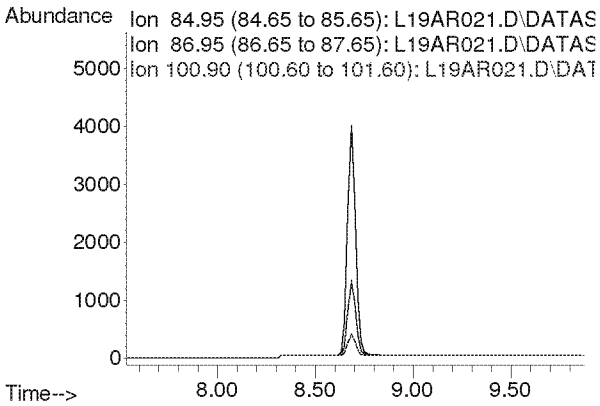


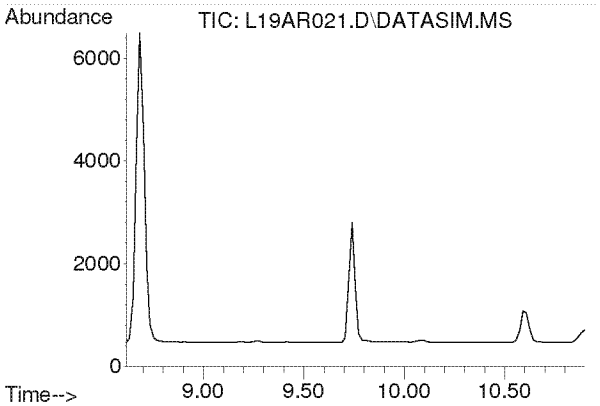
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



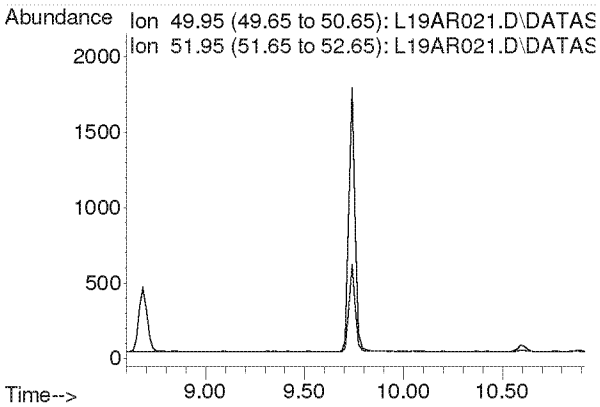


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

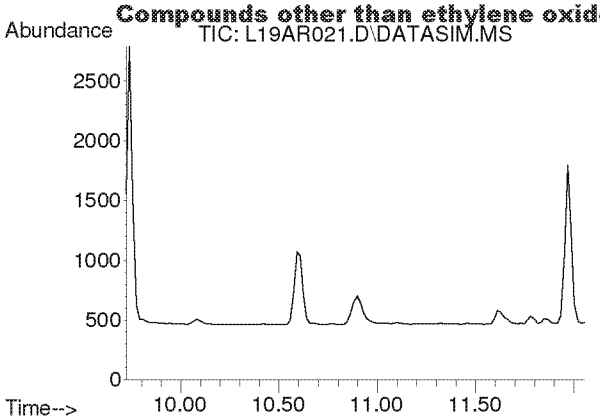
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

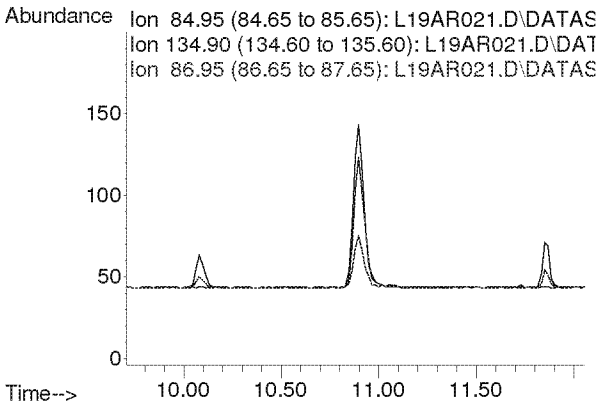


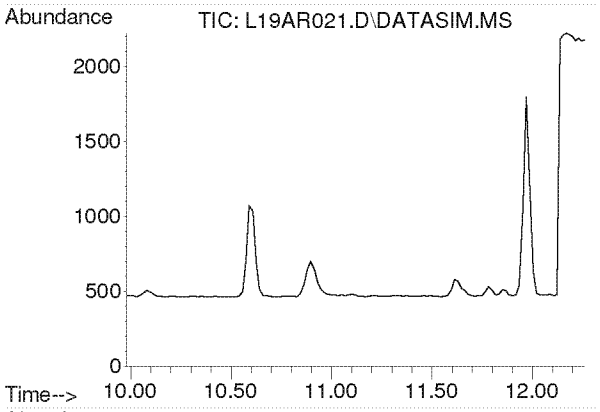
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



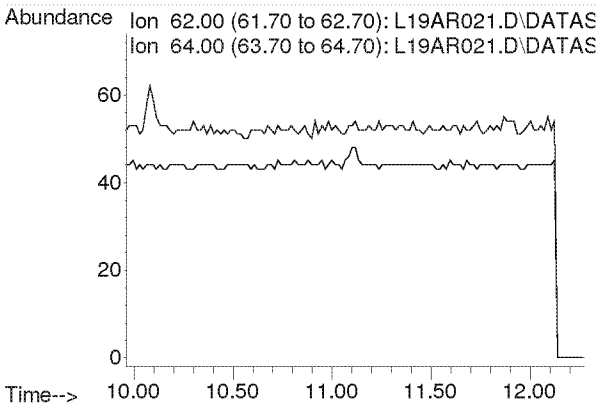


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

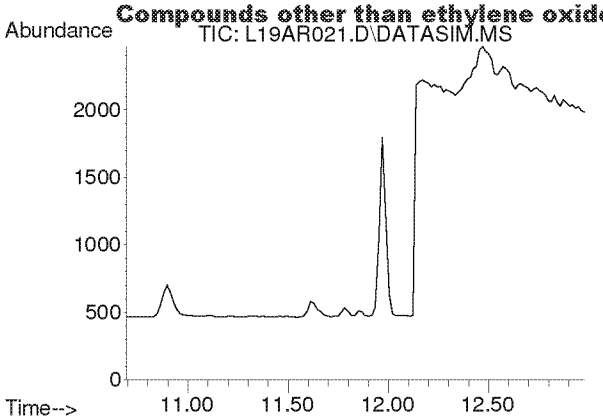
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

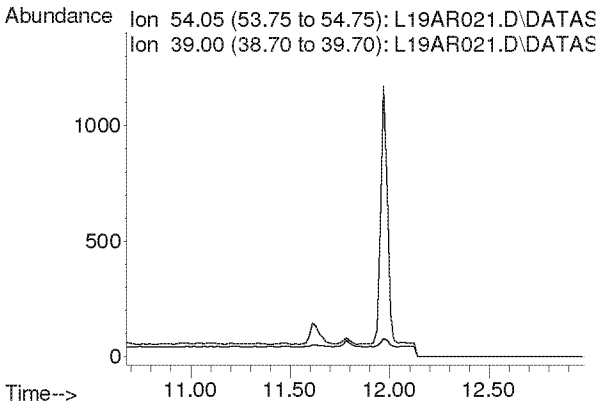


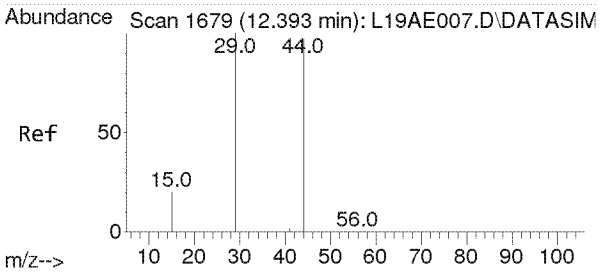
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

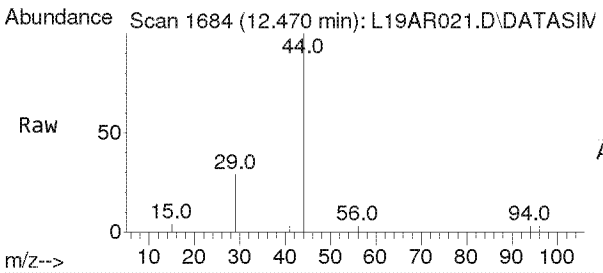


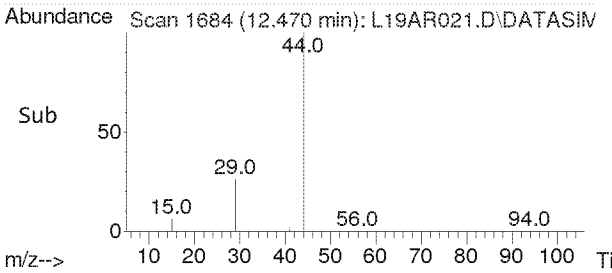


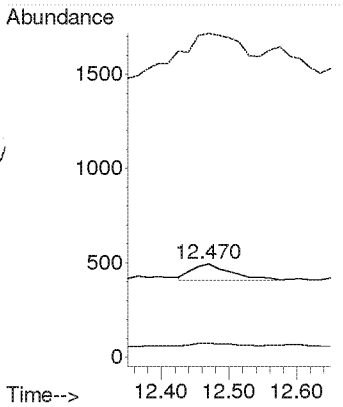
#9
Ethylene oxide
Concen: 0.132 ppbv
RT: 12.470 min Scan# 1684
Delta R.T. 0.077 min
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 29 Resp: 338

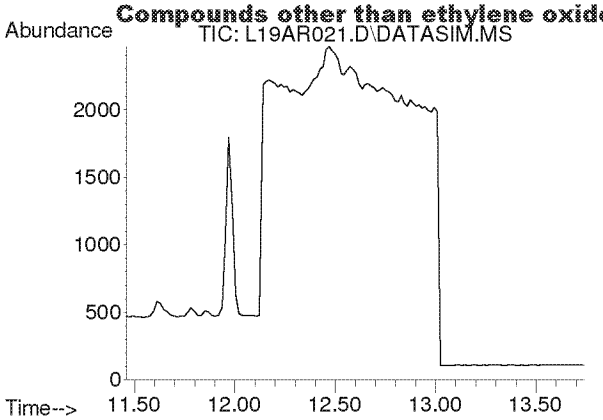
Ion	Ratio	Lower	Upper
29	100		
15	20.4	15.4	23.0
44	747.6	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

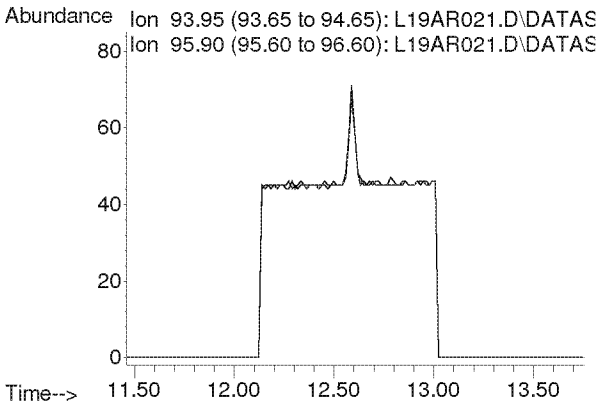


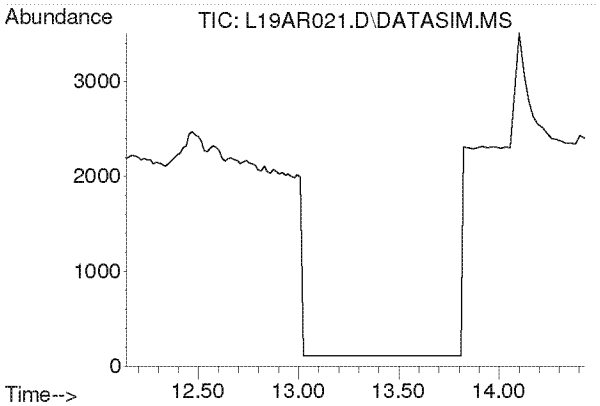
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



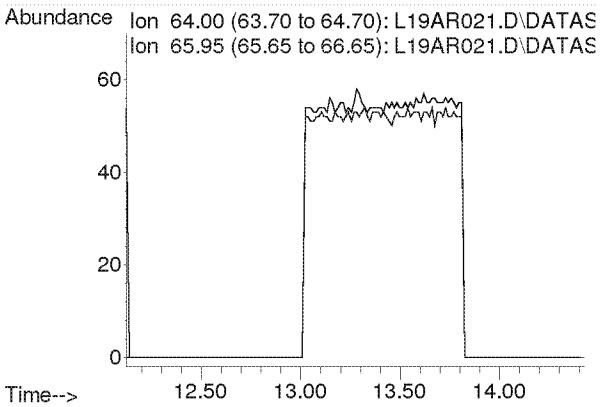


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

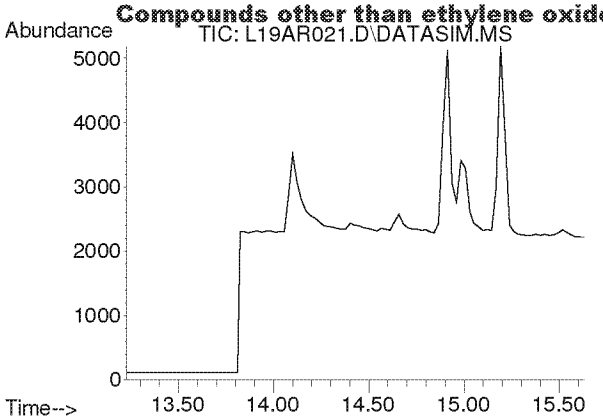
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

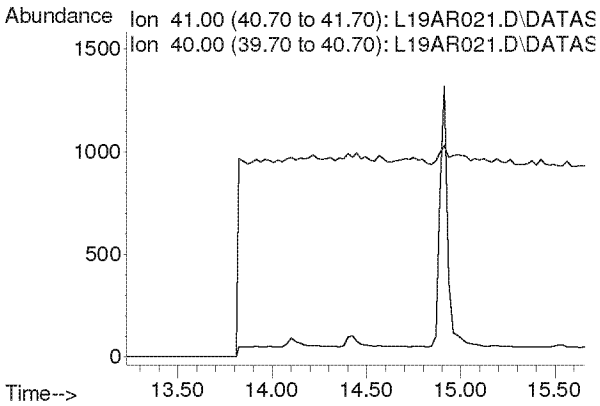


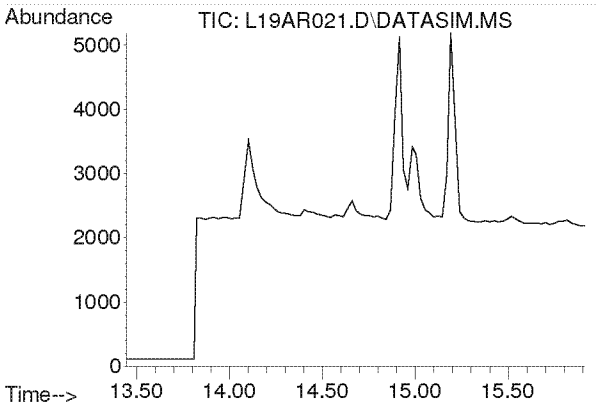
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



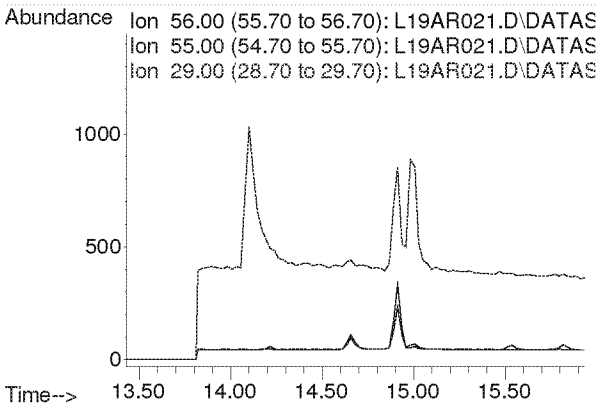


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

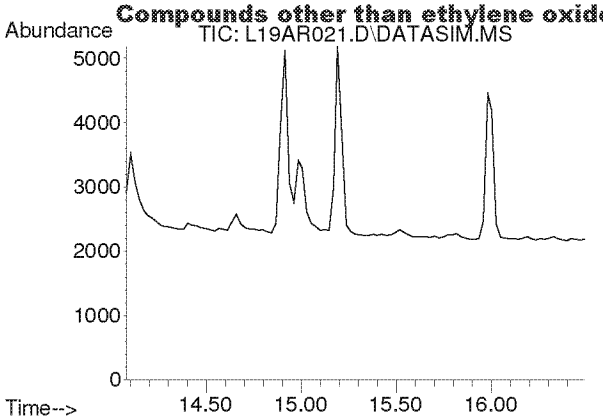
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

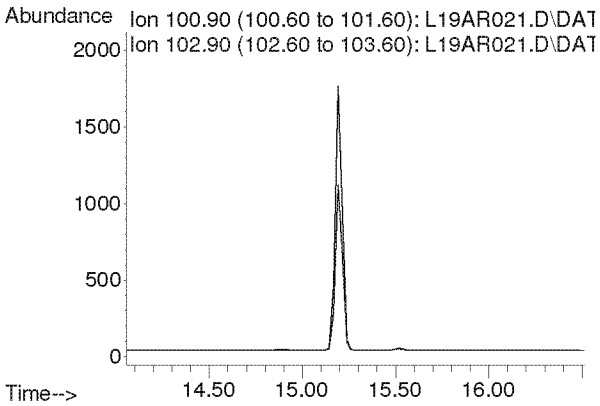


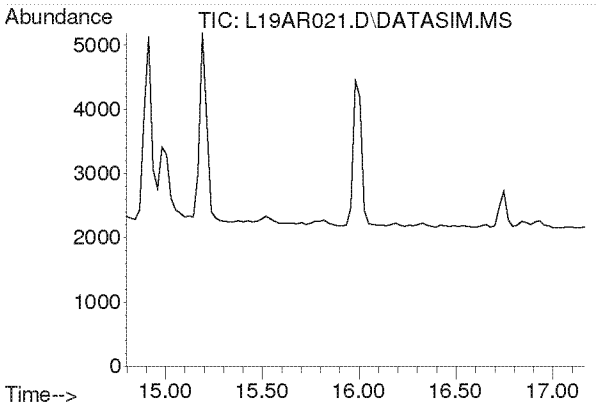
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



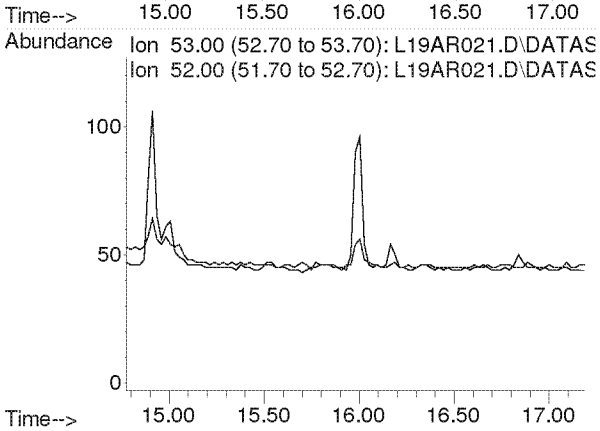


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

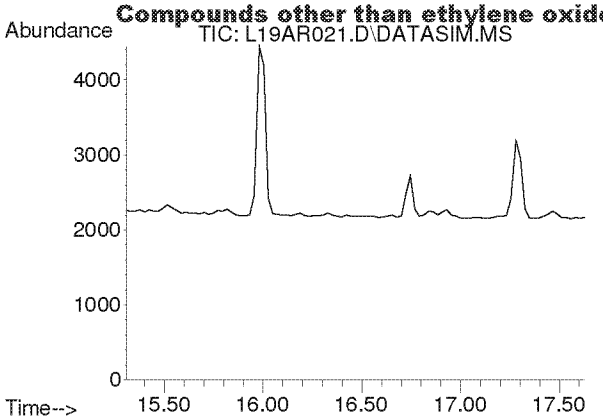
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

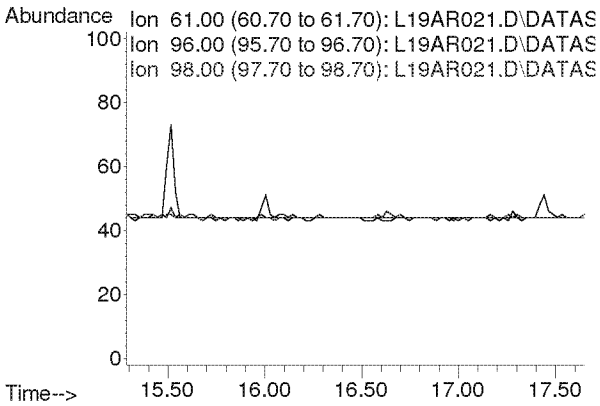


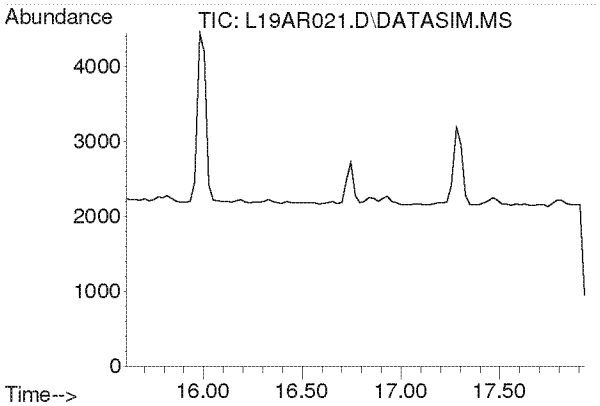
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



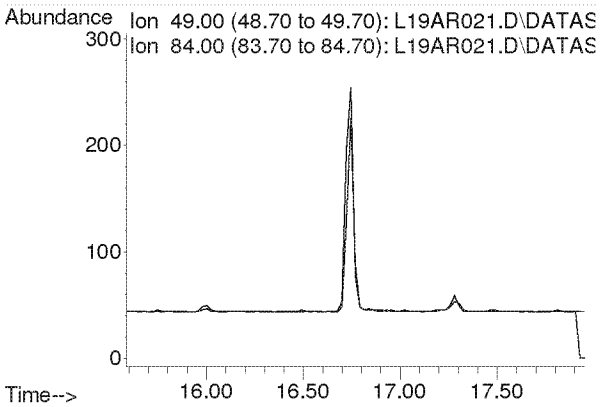


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

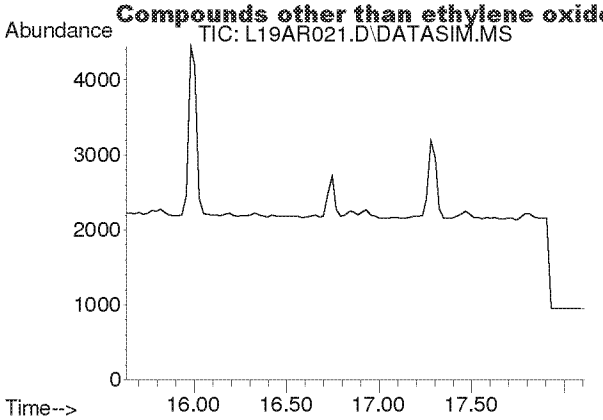
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

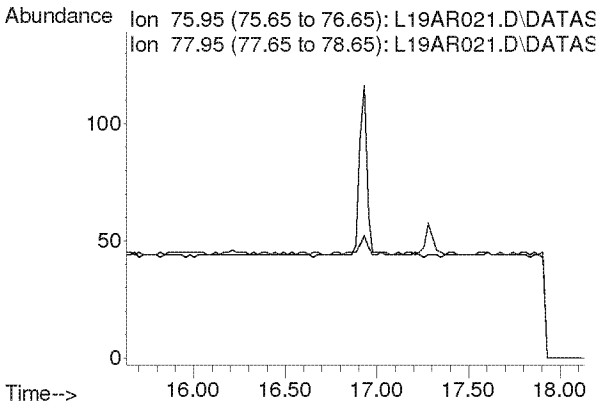


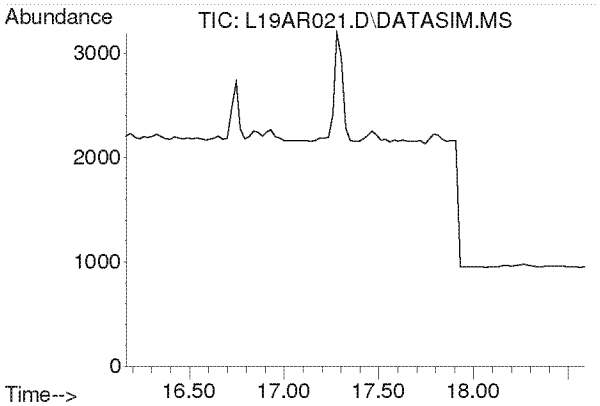
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



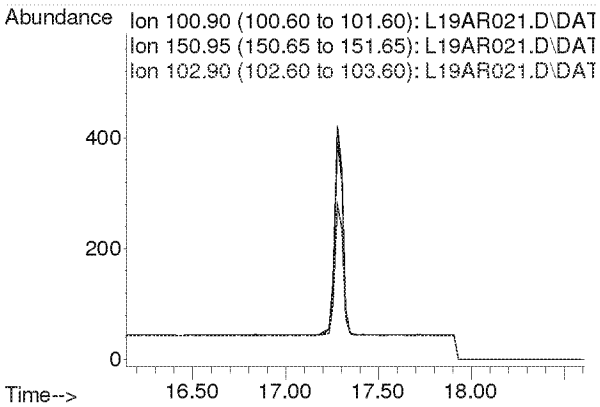


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

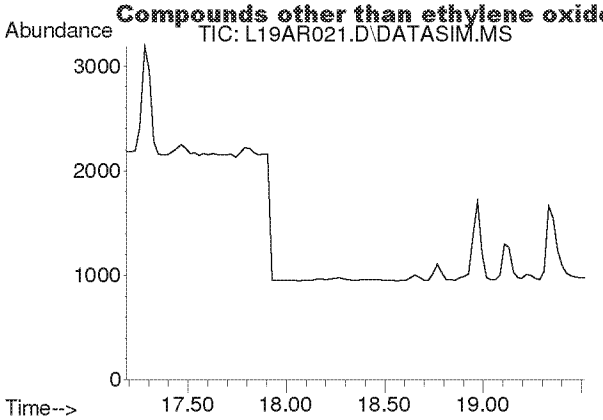
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

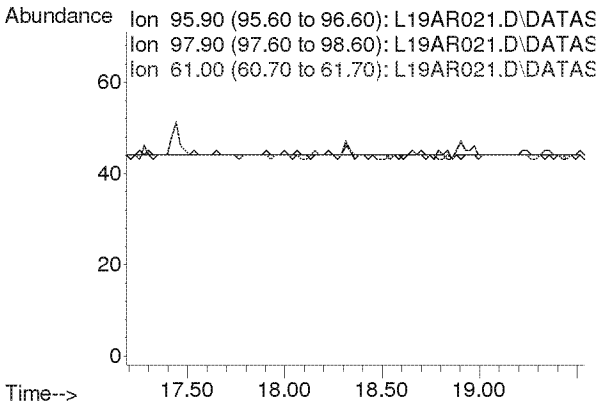


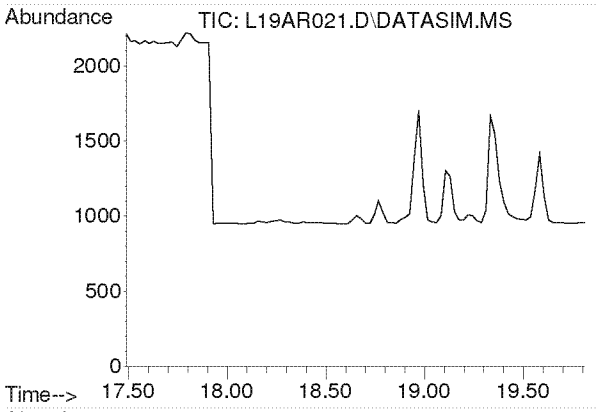
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



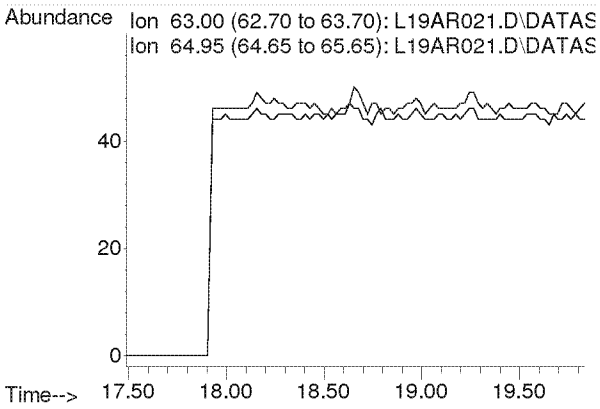


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

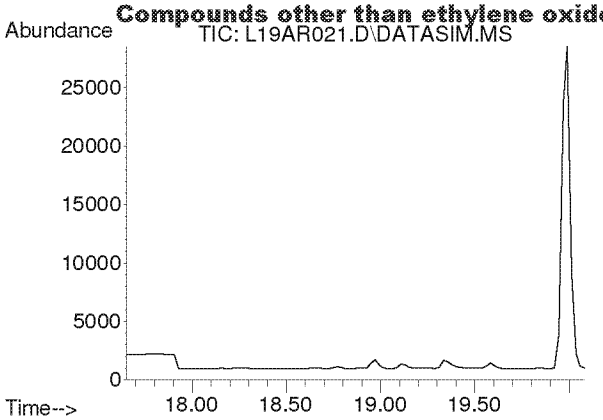
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

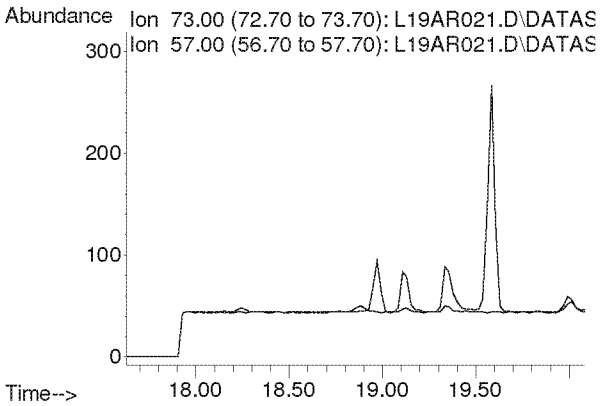


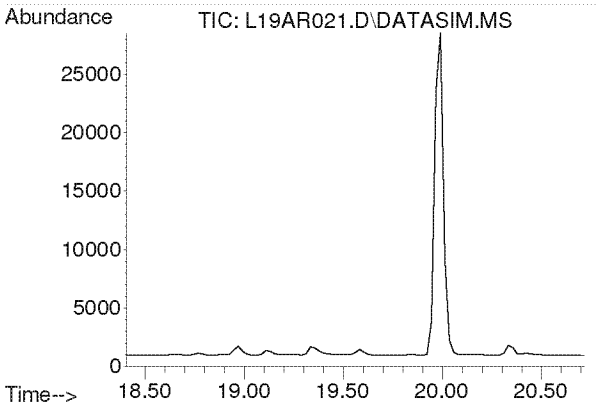
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



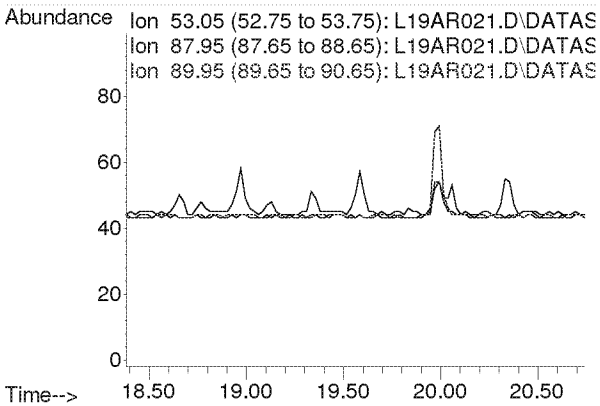


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

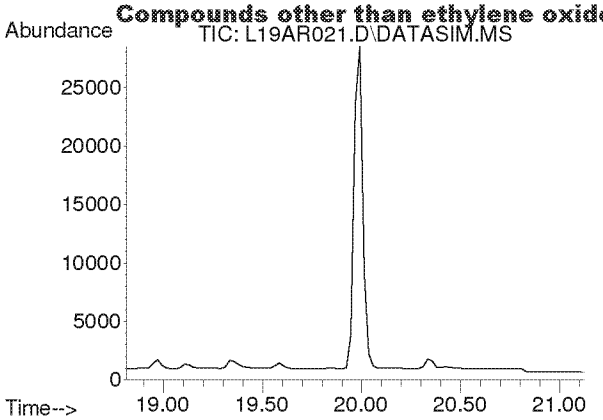
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

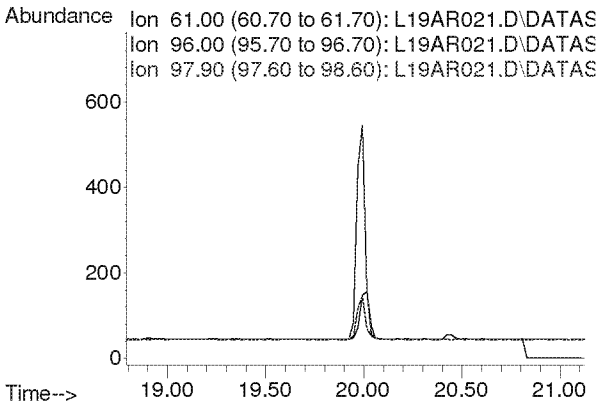


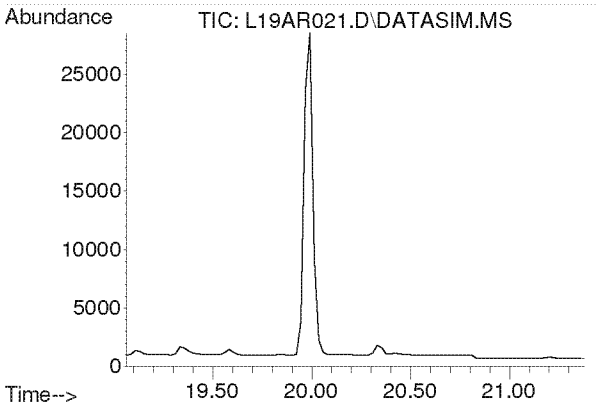
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



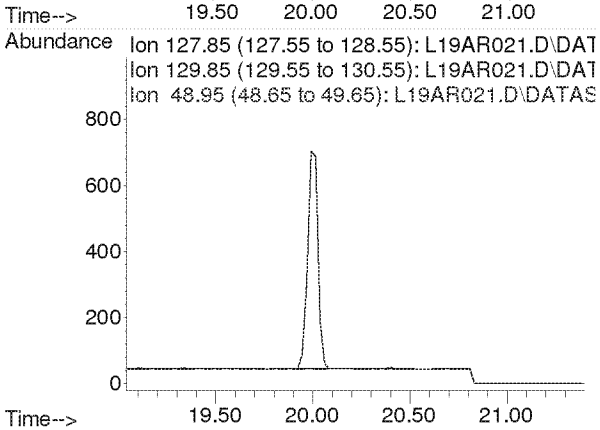


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

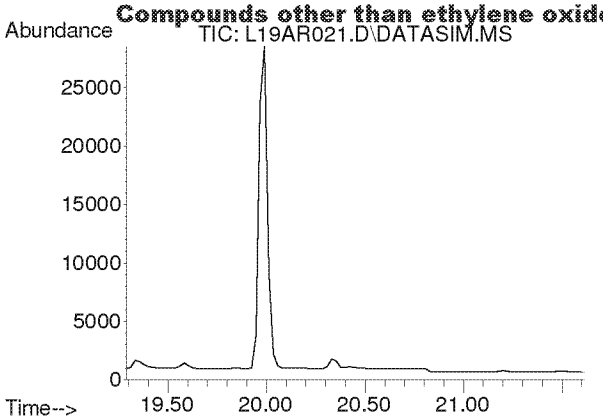
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

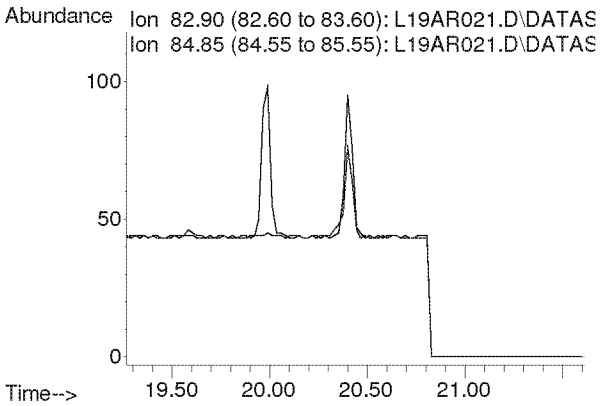


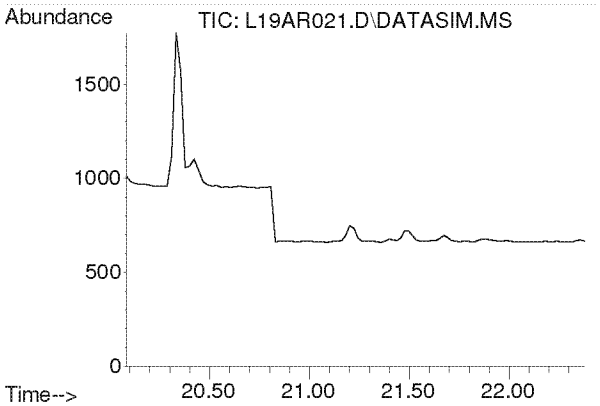
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



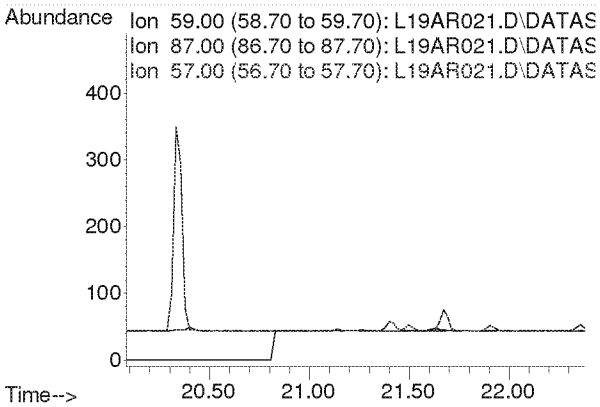


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

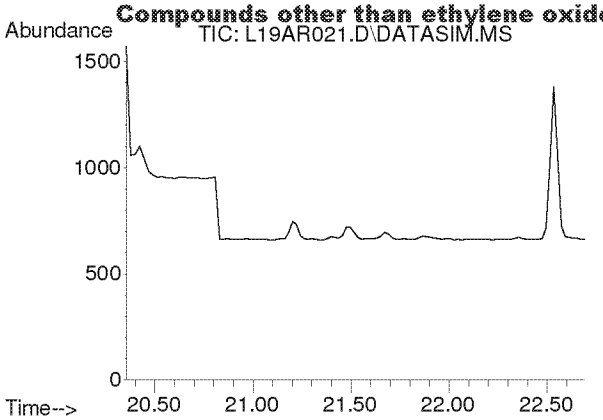
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

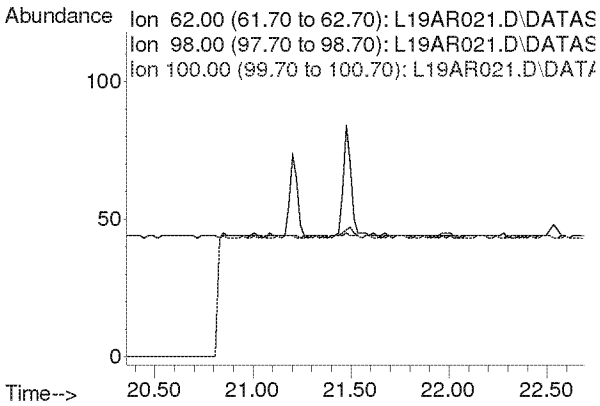


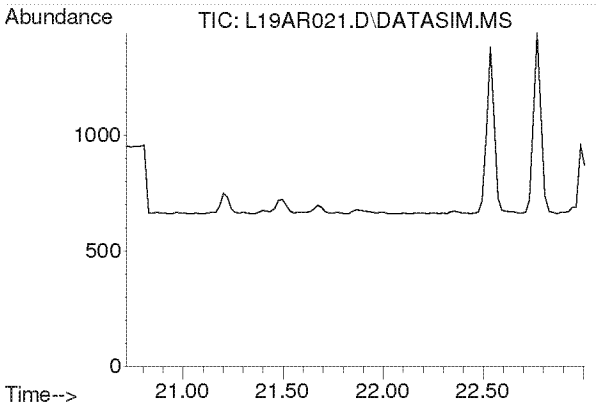
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



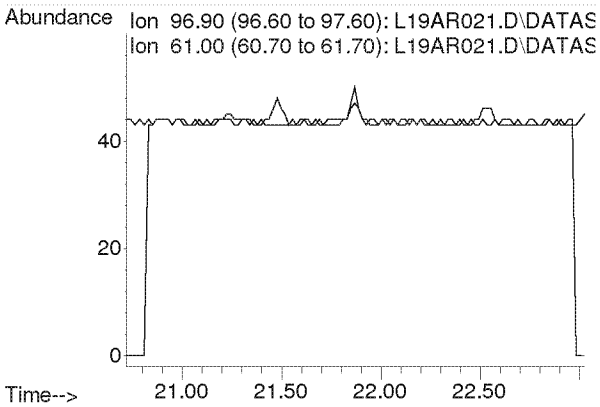


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

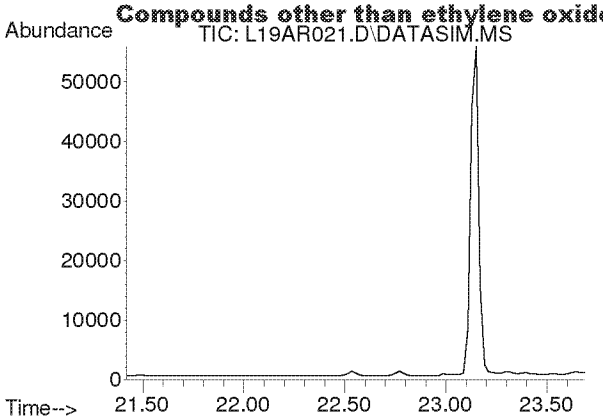
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

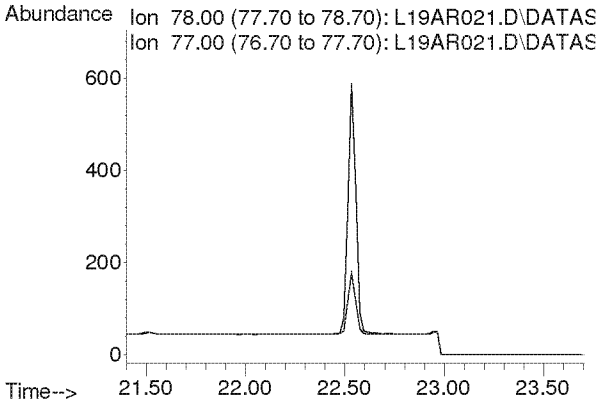


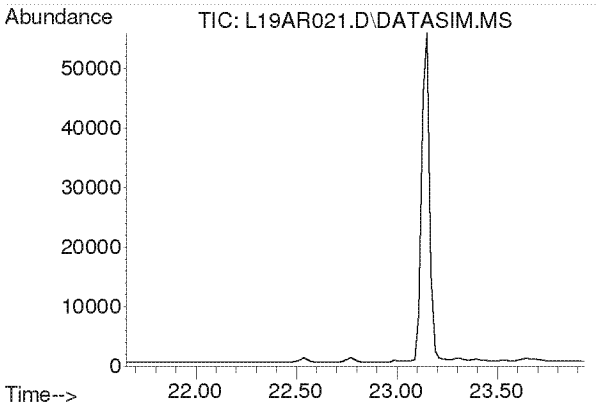
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



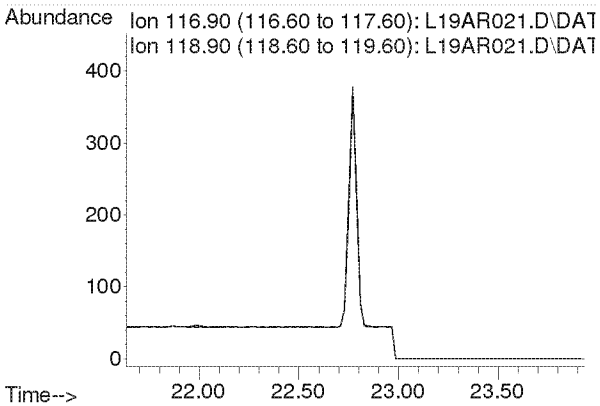


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

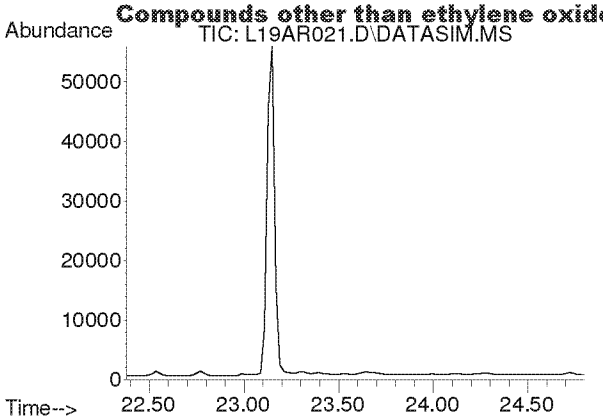
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

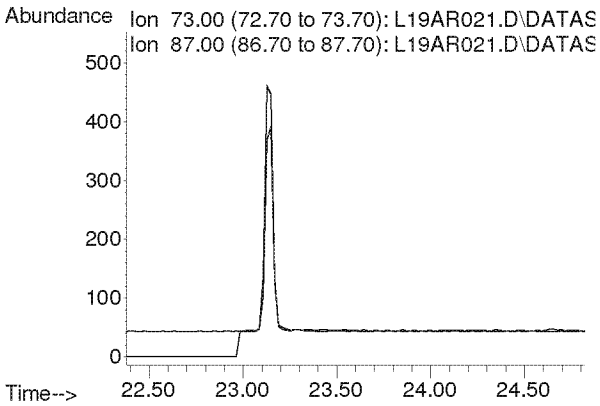


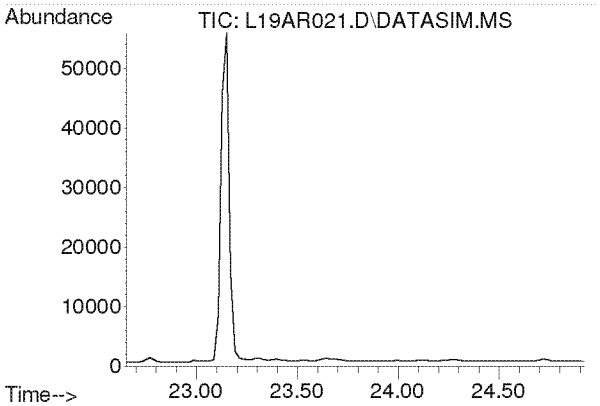
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



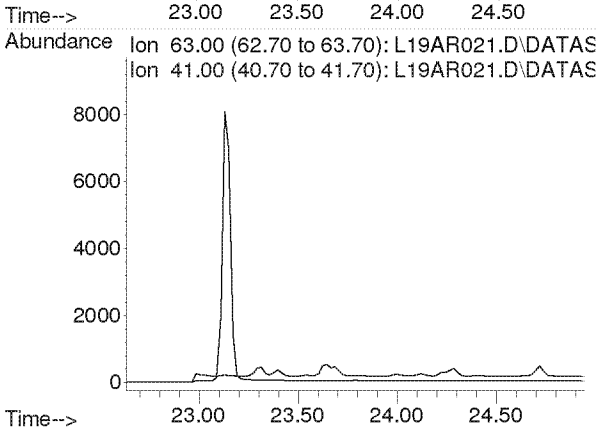


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

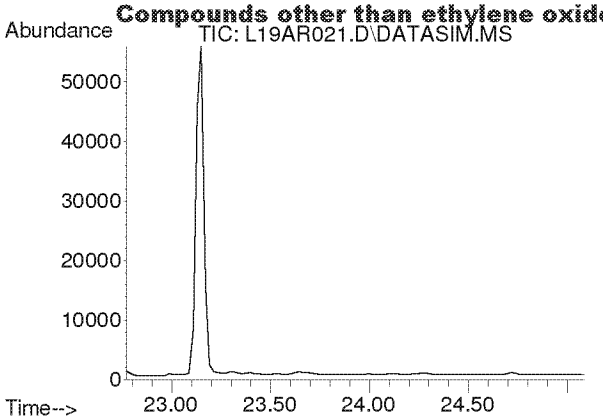
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

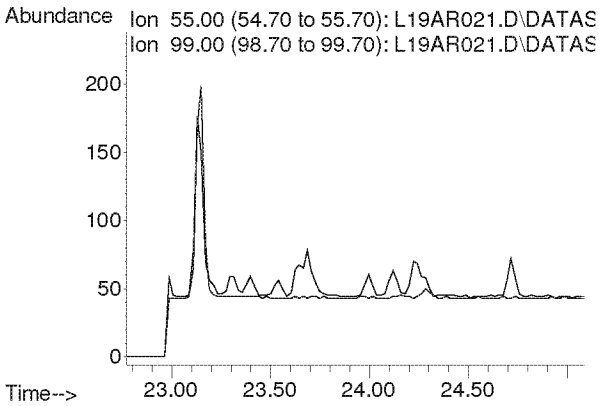


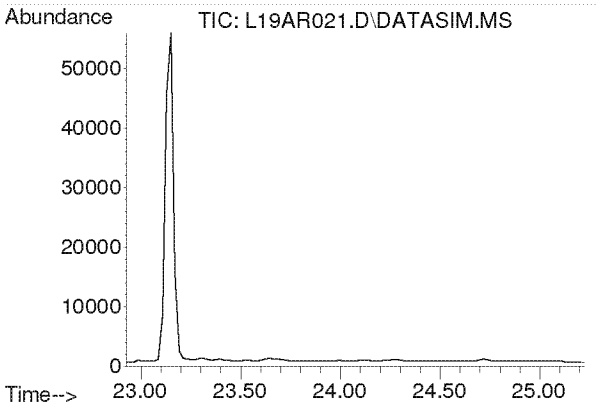
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



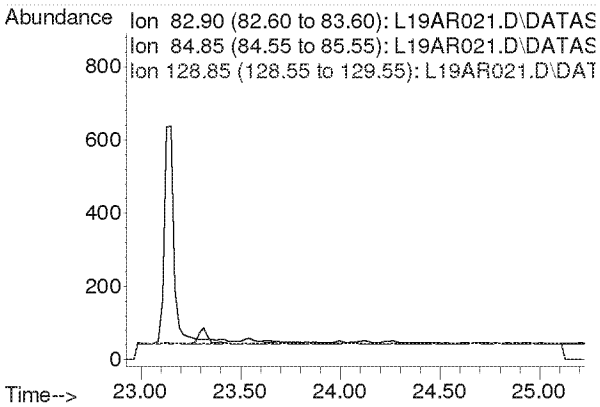


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

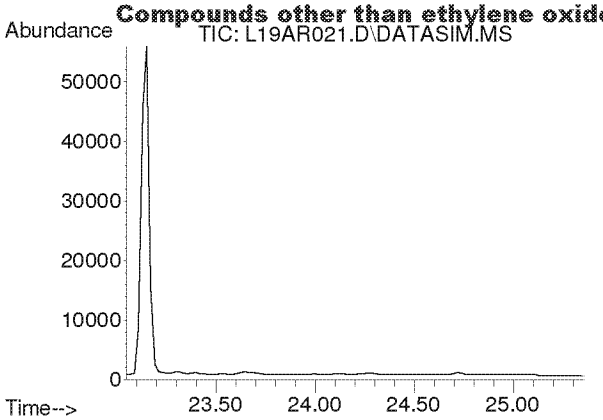
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

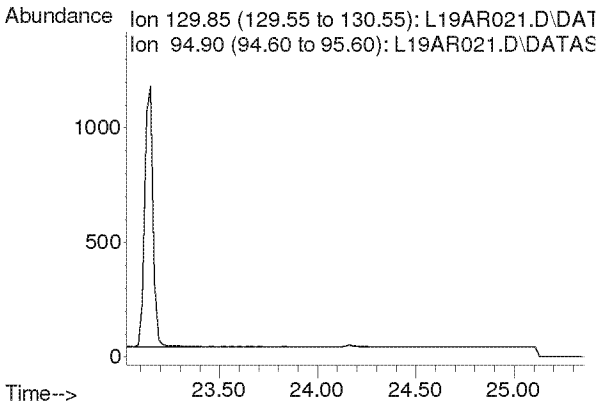


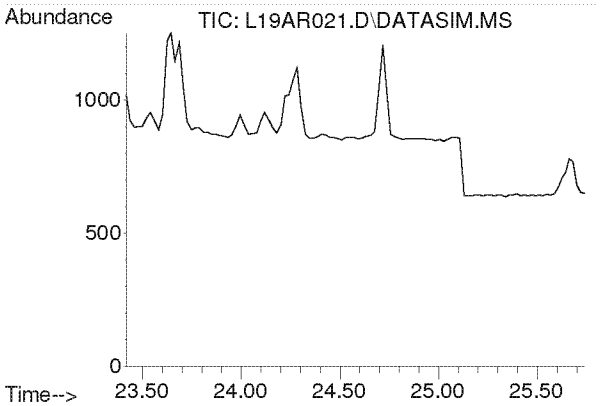
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



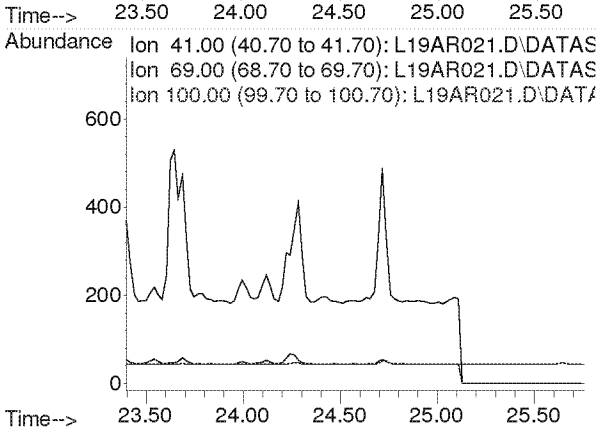


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

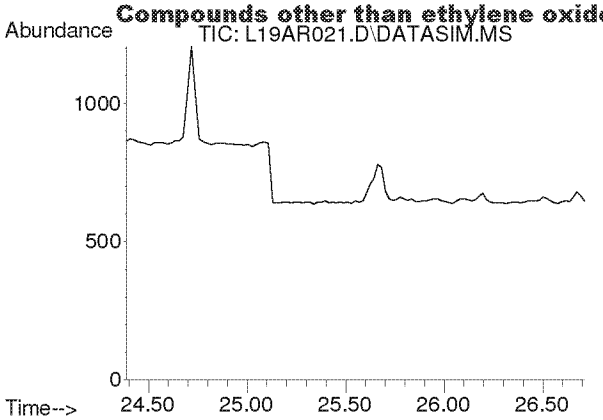
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

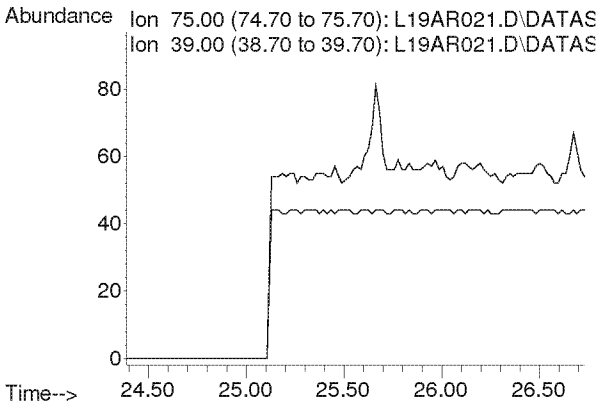


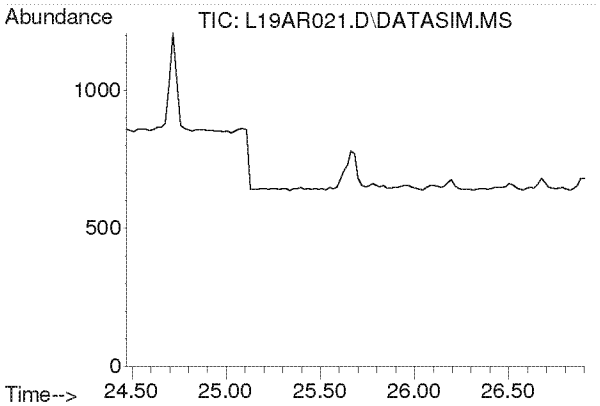
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



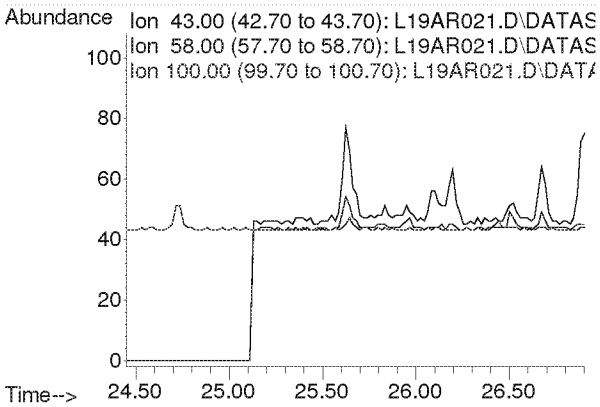


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

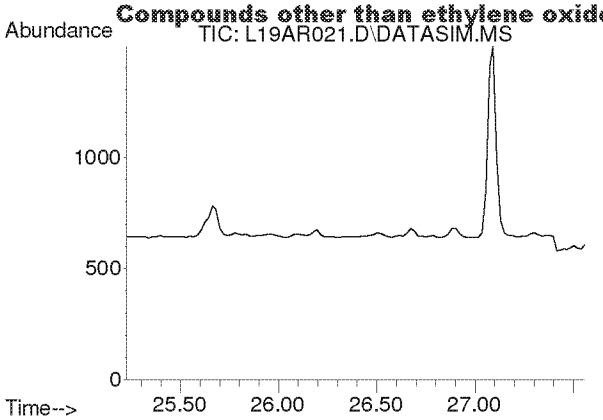
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

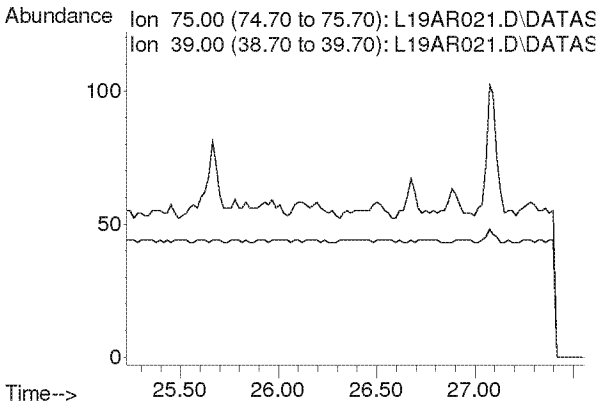


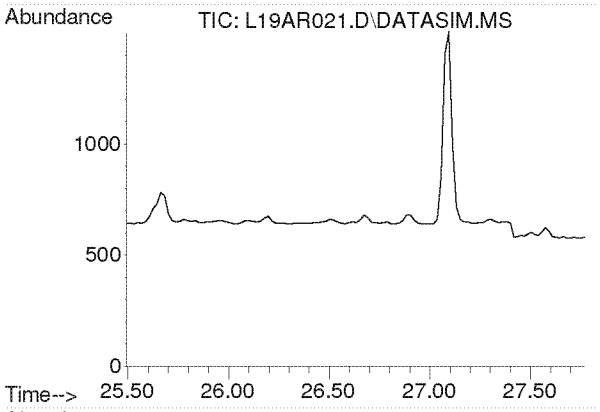
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



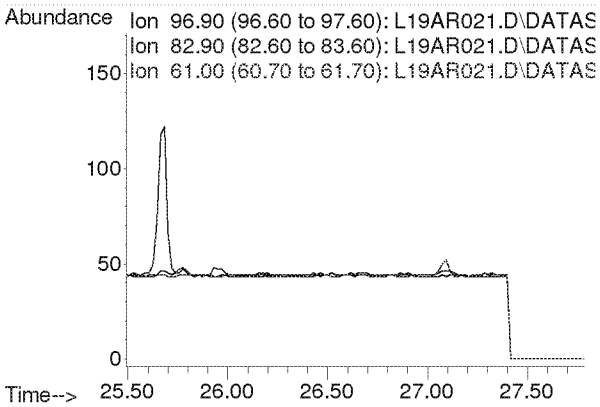


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

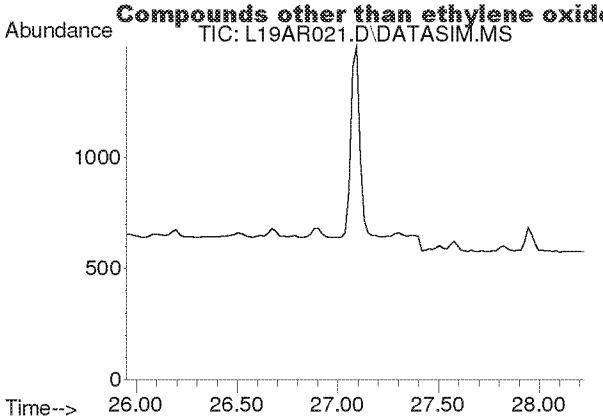
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

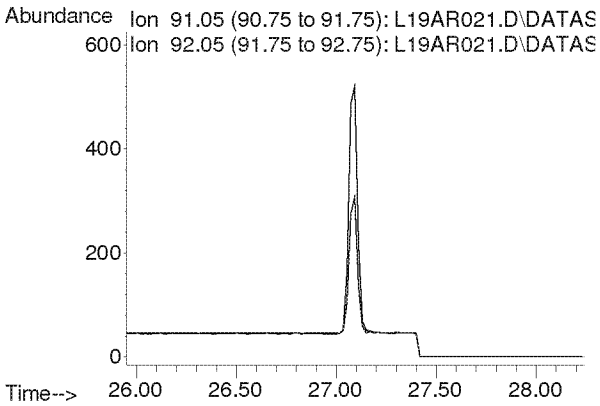


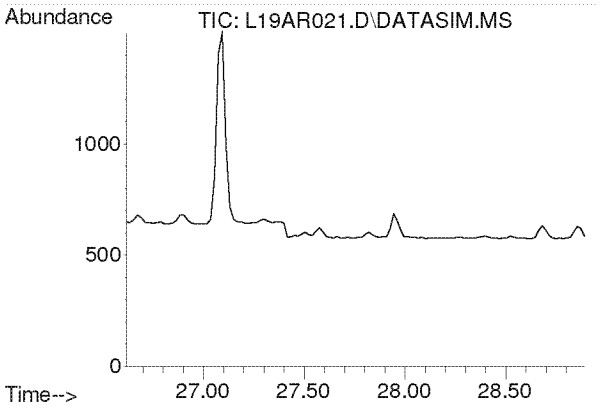
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



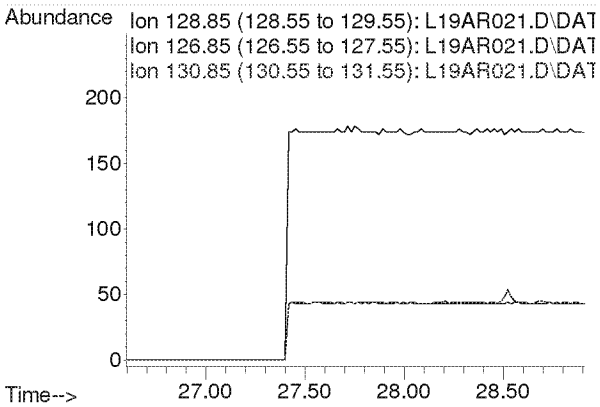


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

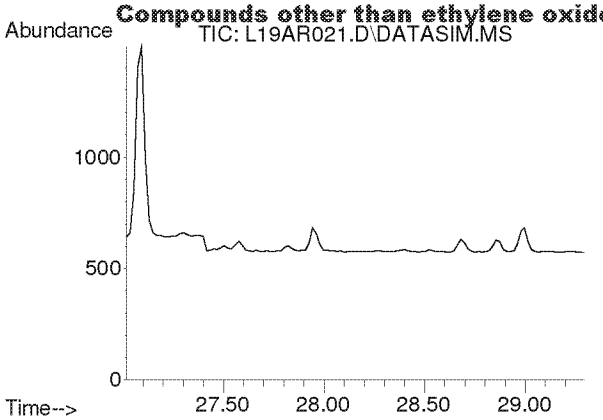
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

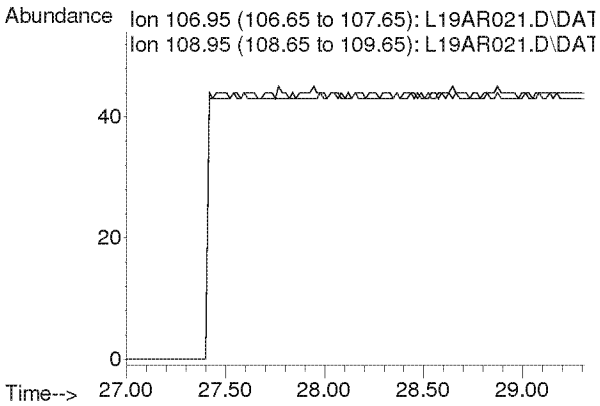


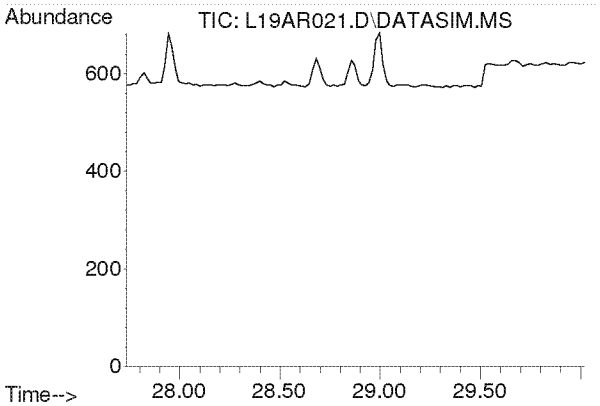
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



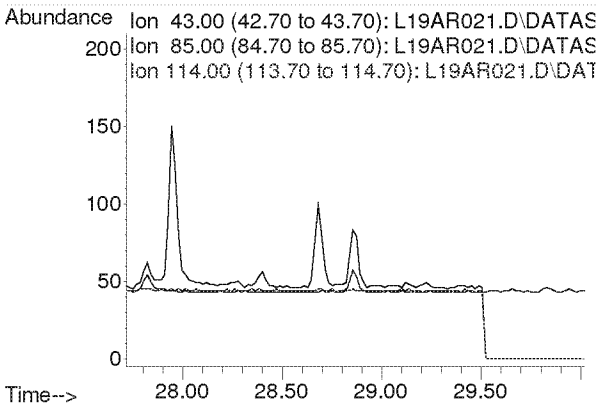


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

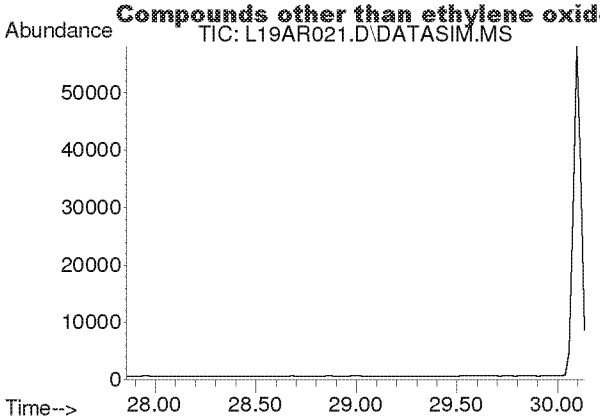
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

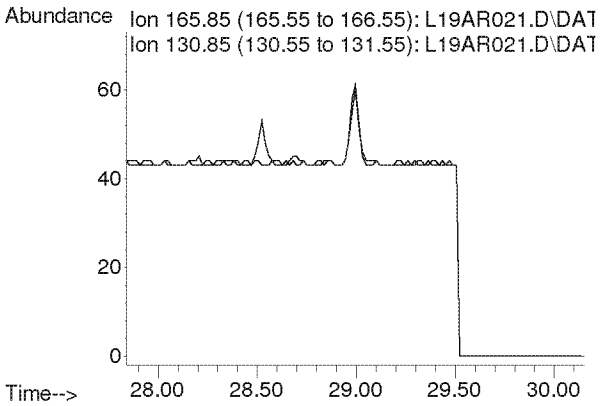


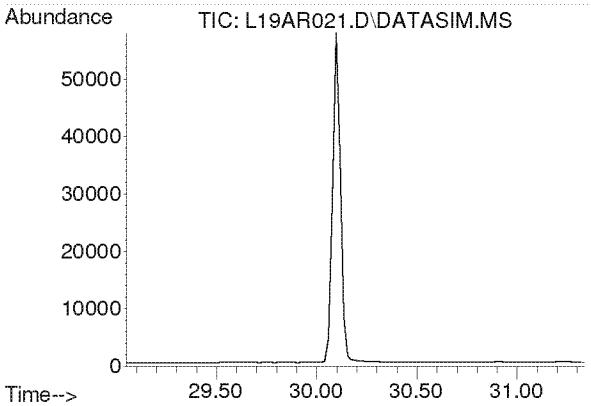
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



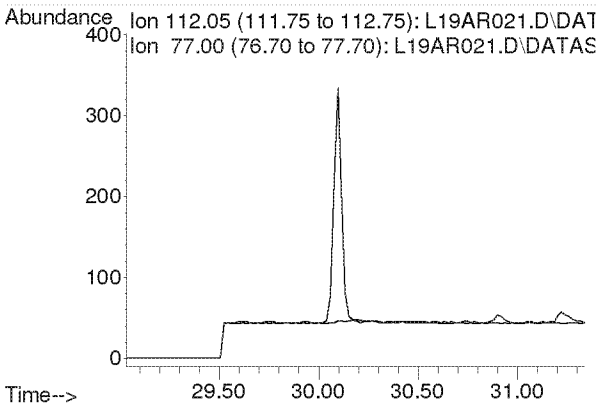


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

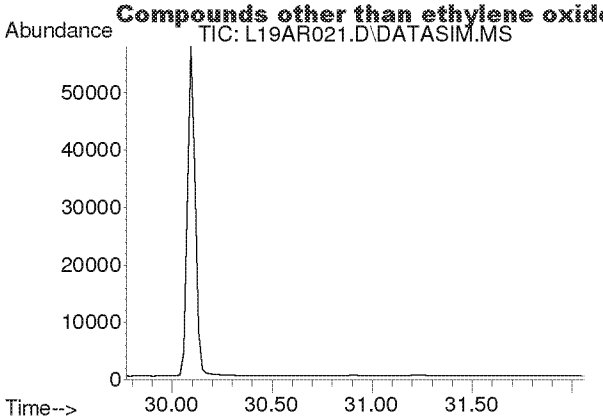
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

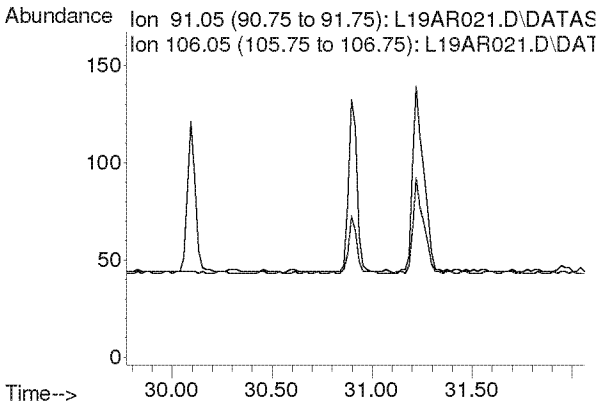


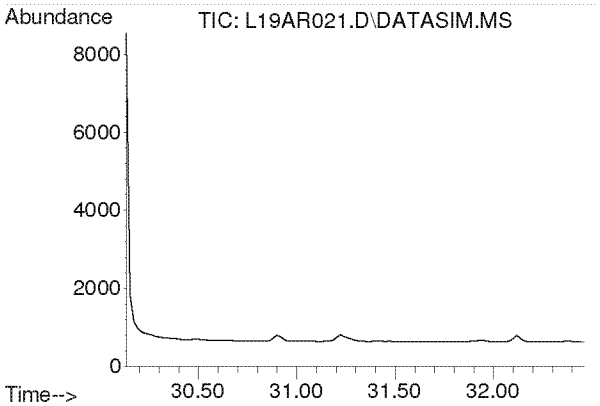
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



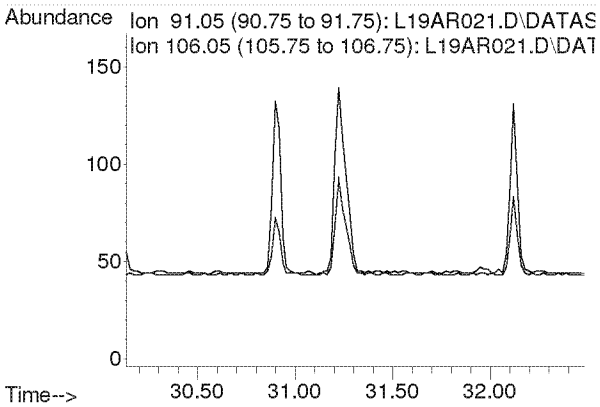


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

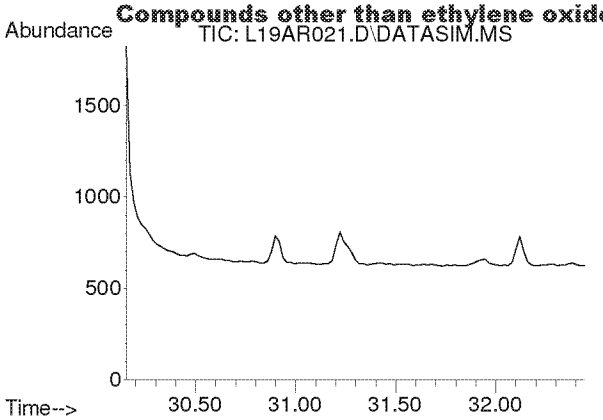
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

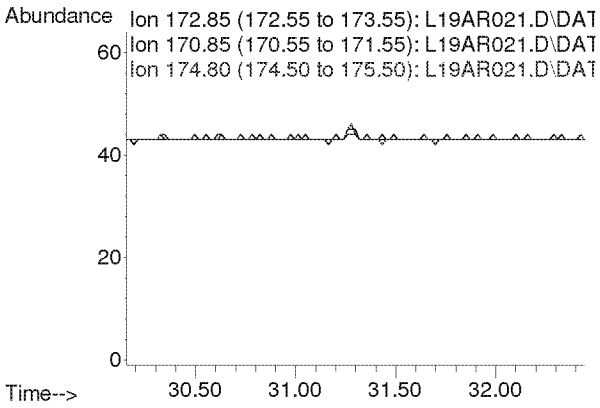


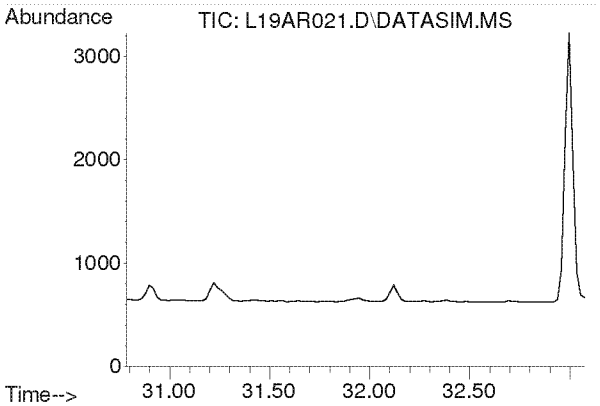
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



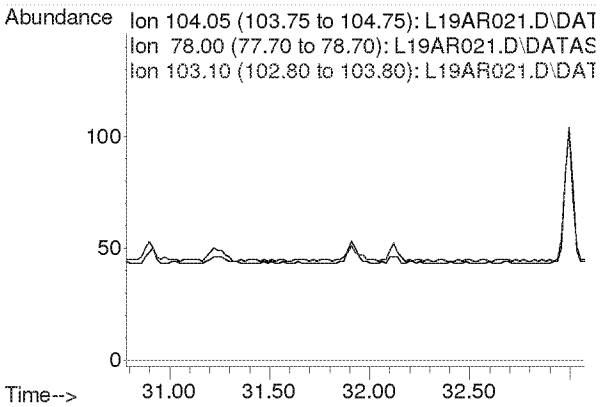


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

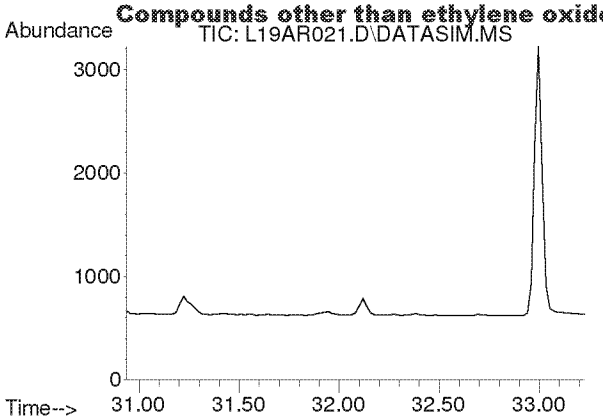
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

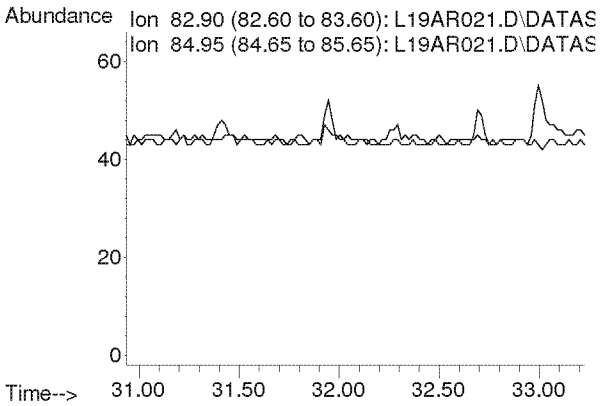


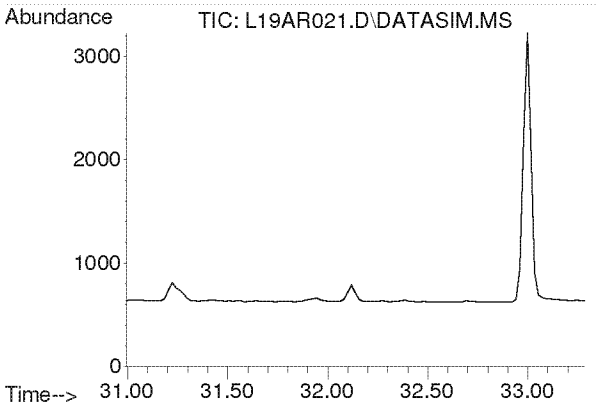
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



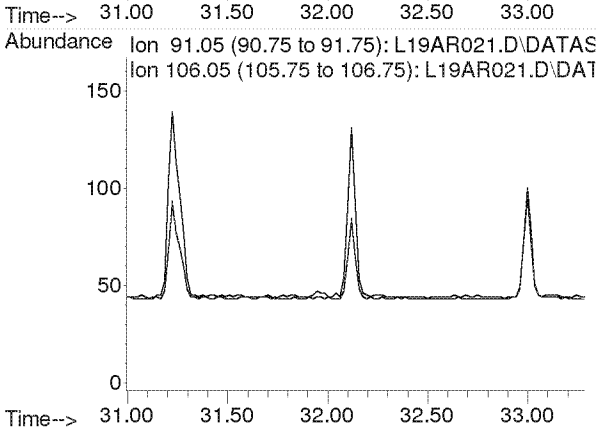


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

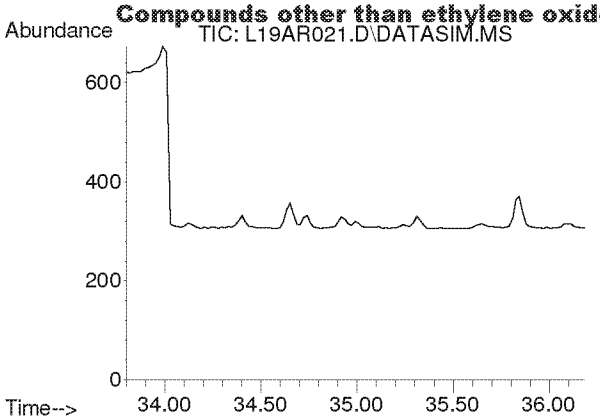
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

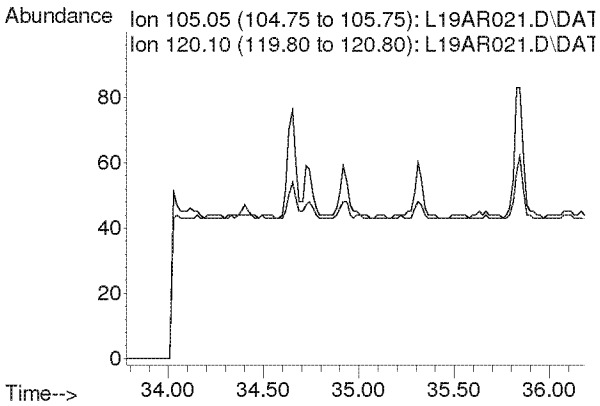


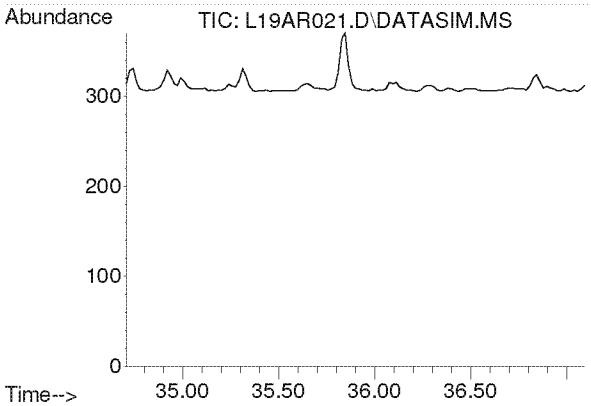
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



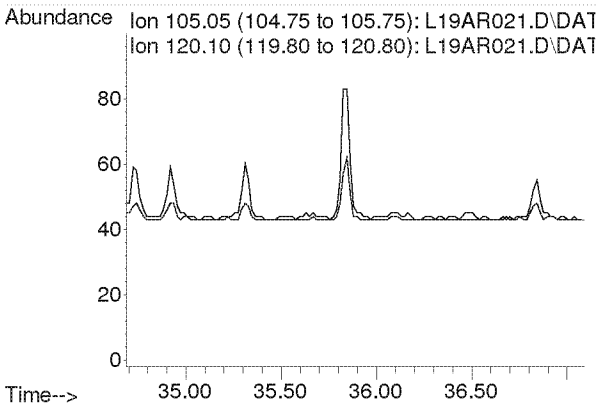


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

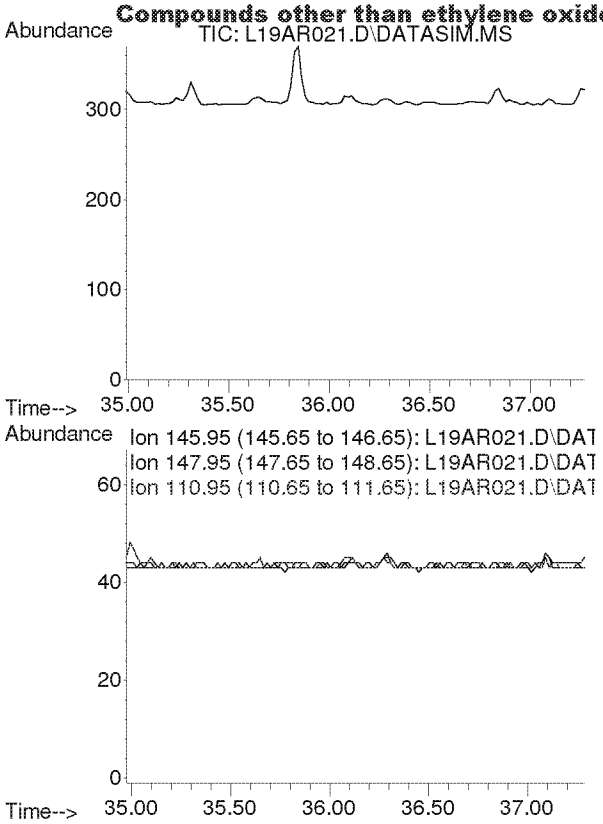
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

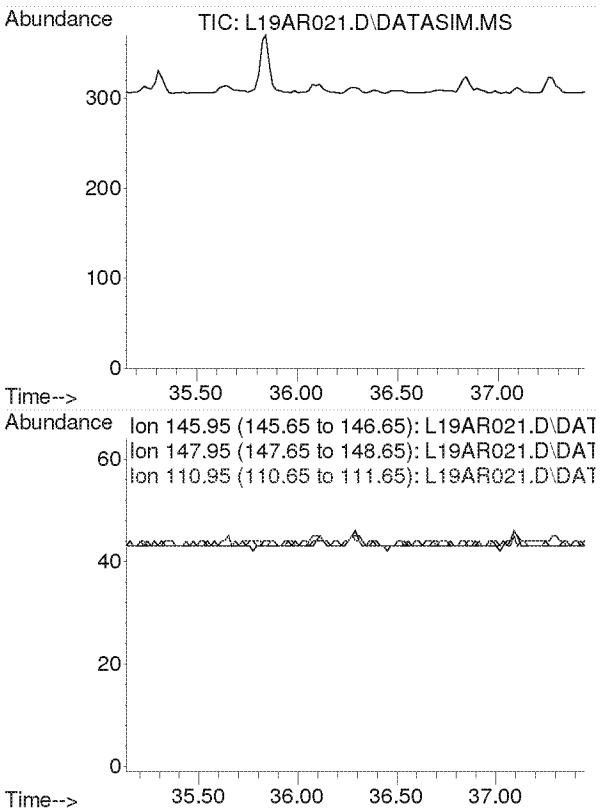


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



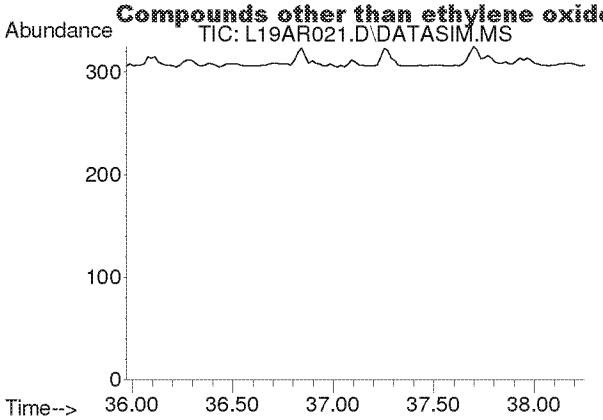
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3

Compounds other than ethylene oxide were not quantitated.

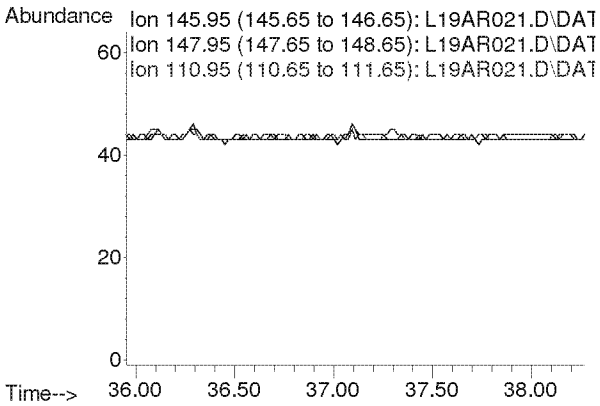


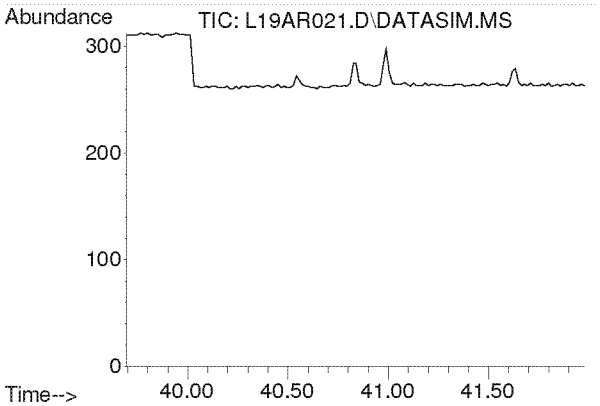
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



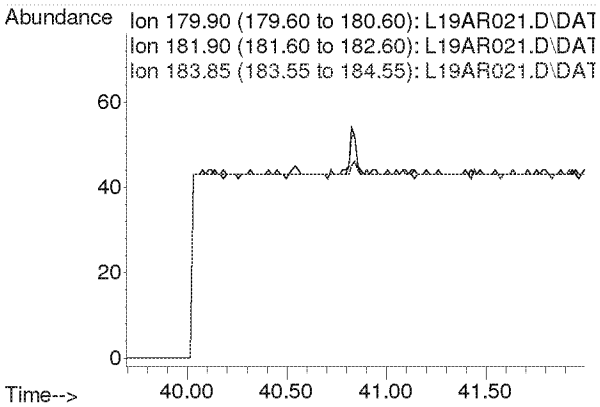


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

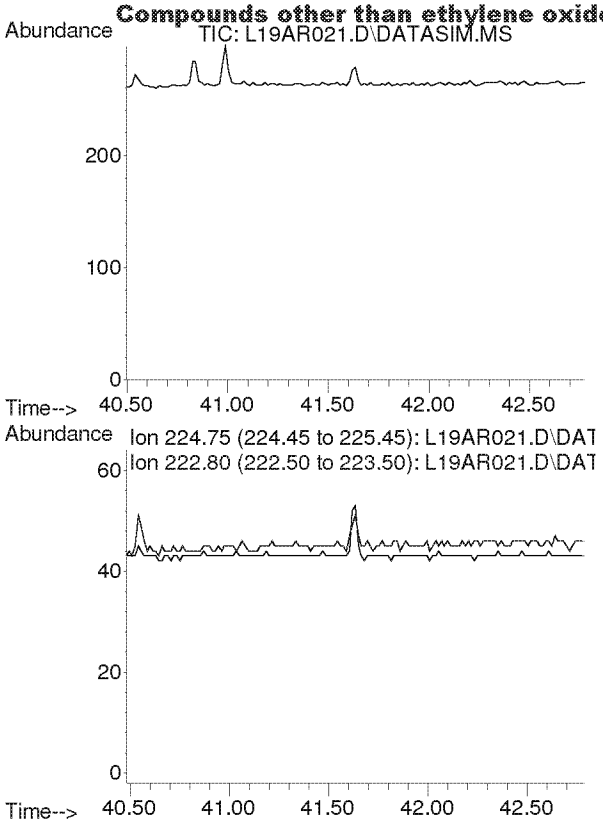
Lab File: L19AR021.D
Acq: 19 Jan 2019 7:52 am

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: L19AR021.D
Acq: 19 Jan 2019 7:52 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\L19AR\
Data File : L19AR022.D
Acq On : 19 Jan 2019 8:54 am
Operator : MAH
Sample : 9011701-02
Misc : WATER TOWER 1/16/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 09:27:47 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

ETOX ons

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	51025	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	124484	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	97462	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	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. 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\L19AR\
Data File : L19AR022.D
Acq On : 19 Jan 2019 8:54 am
Operator : MAH
Sample : 9011701-02
Misc : WATER TOWER 1/16/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 09:27:47 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.	

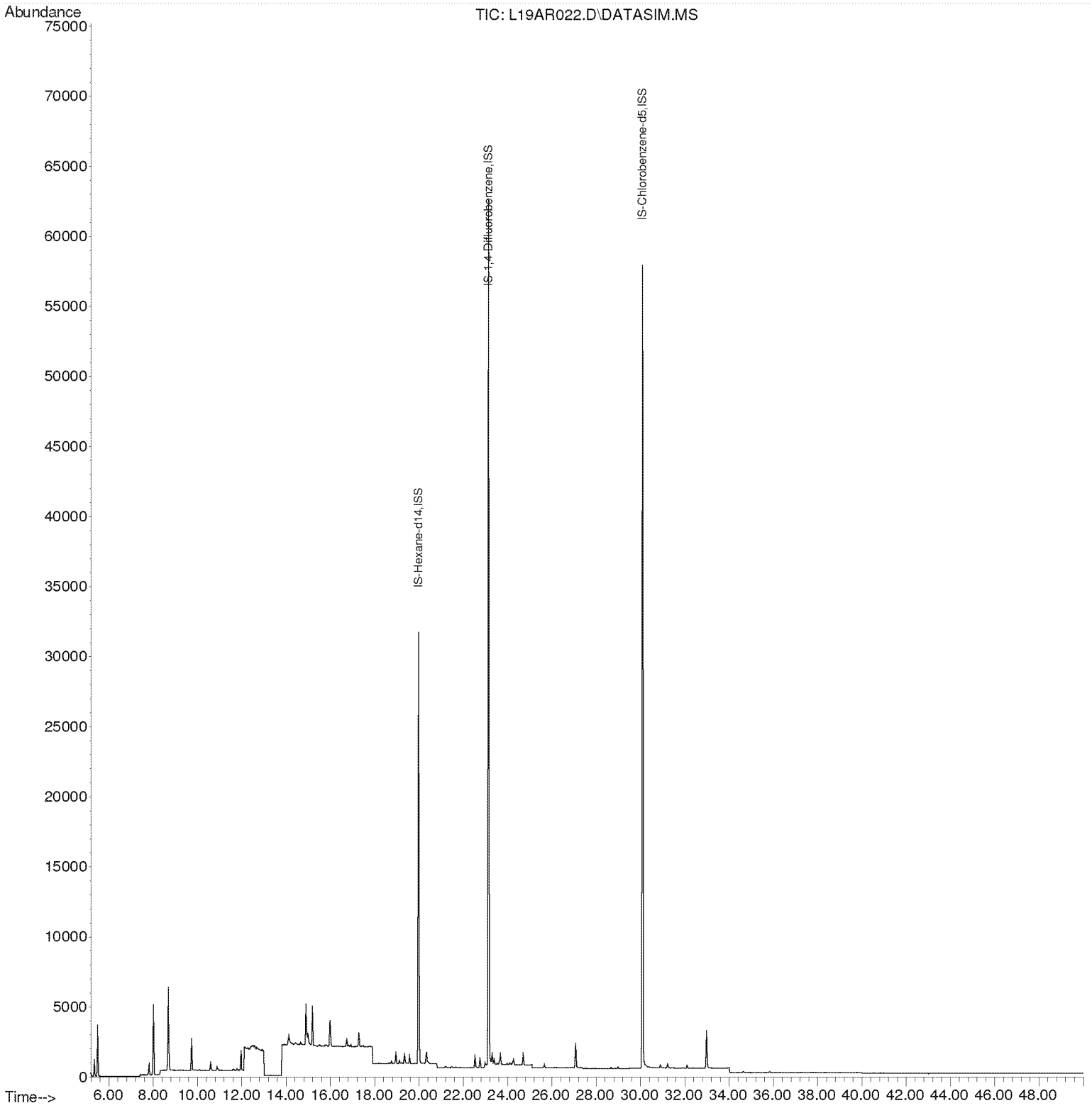
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00479

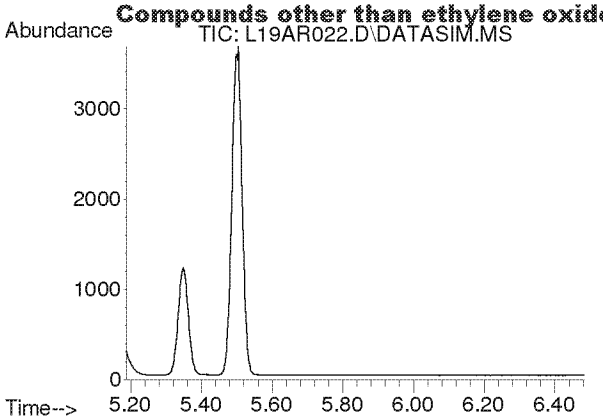
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR022.D
Acq On : 19 Jan 2019 8:54 am
Operator : MAH
Sample : 9011701-02
Misc : WATER TOWER 1/16/19
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 23 08:40:10 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



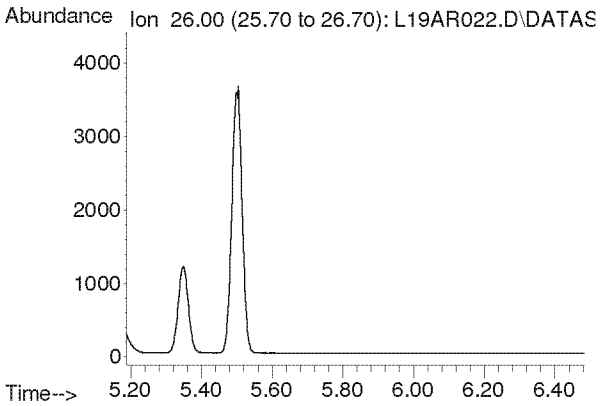
Compounds other than ethylene oxide were not quantitated.

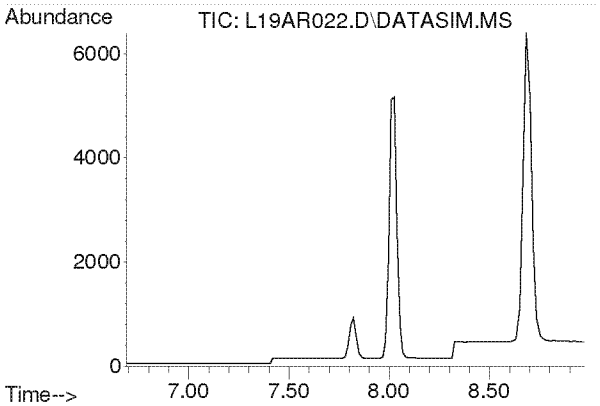


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 26



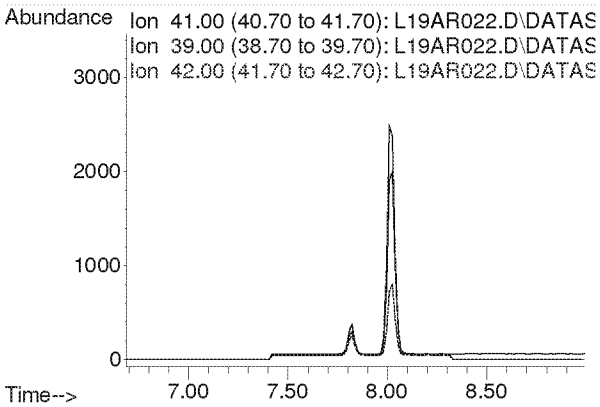


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

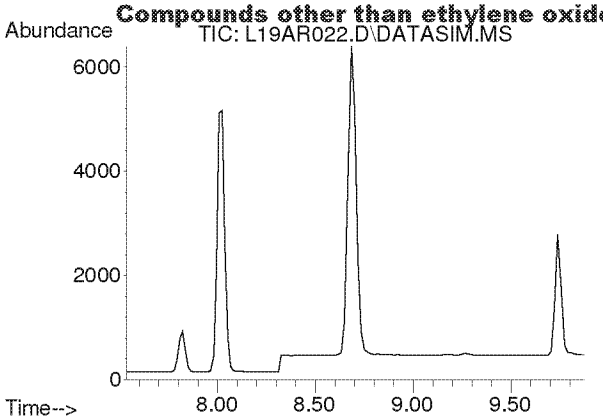
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

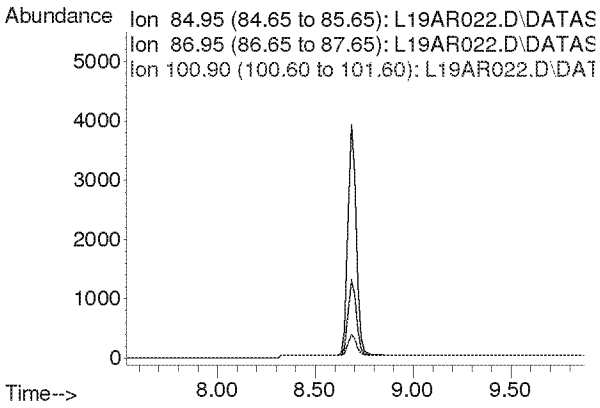


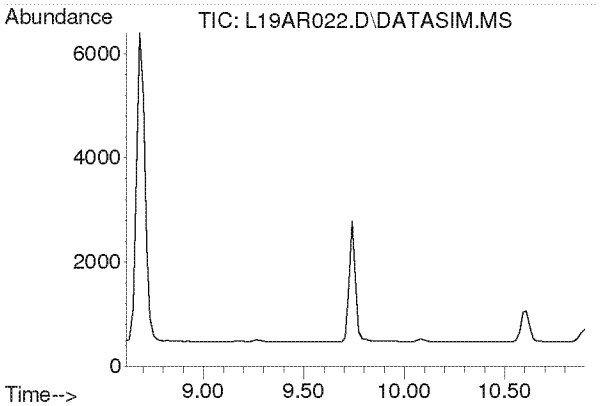
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



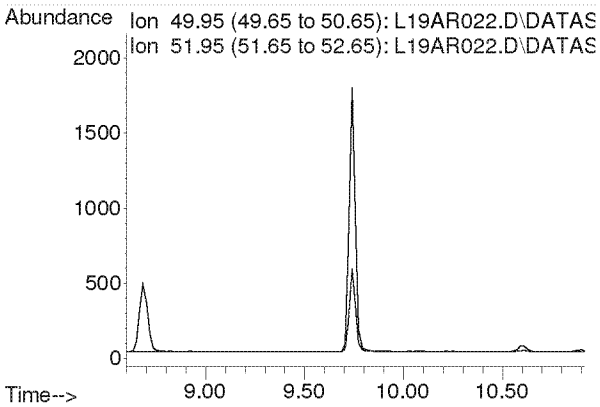


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

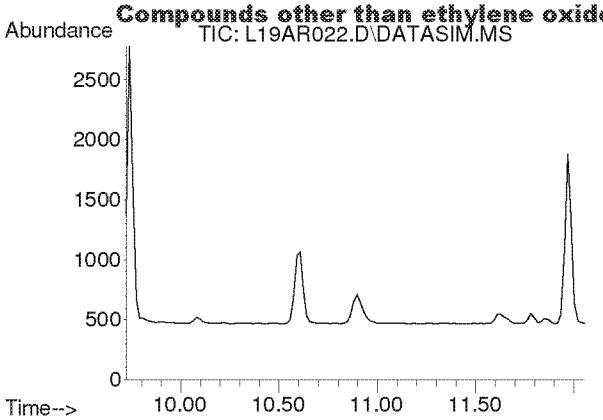
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

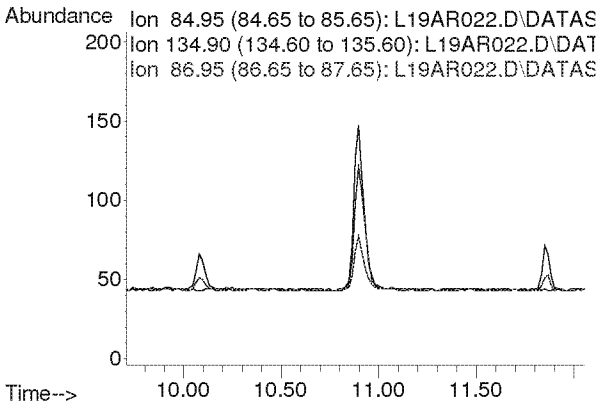


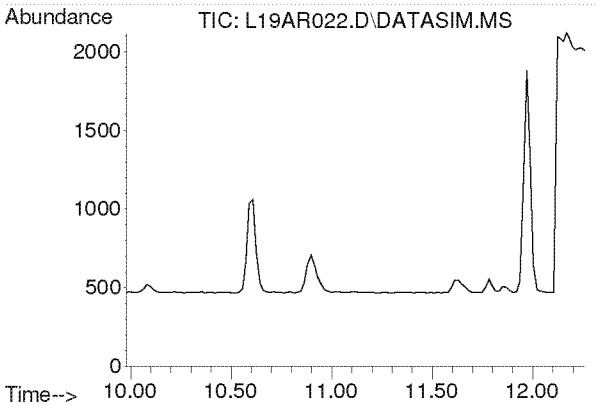
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



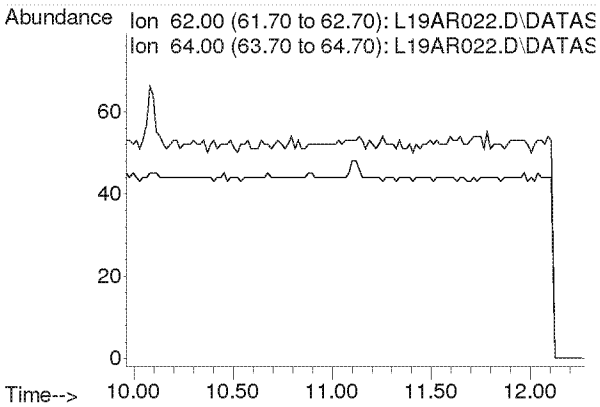


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

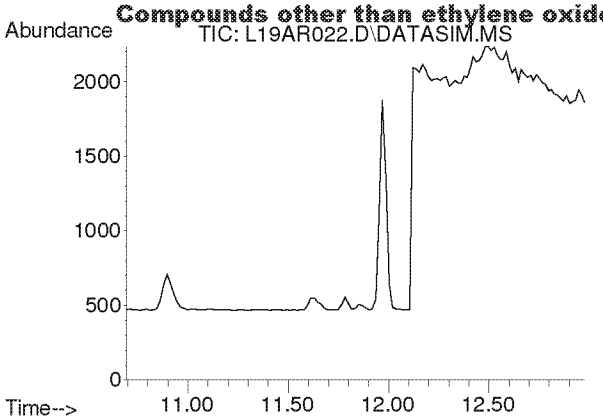
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

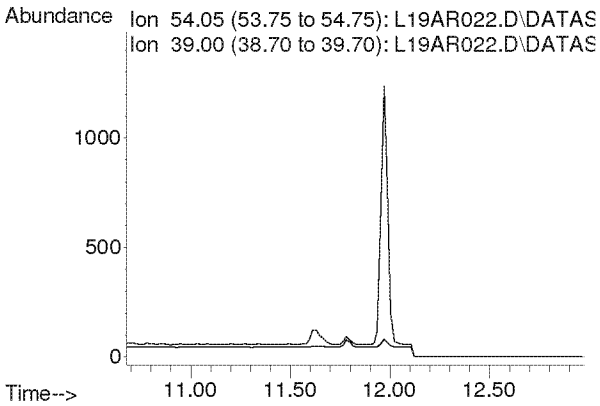


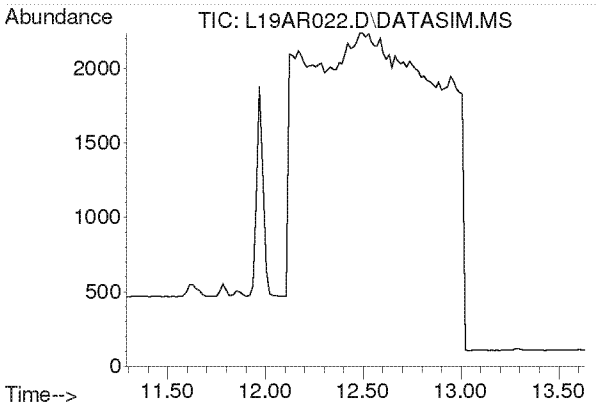
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3



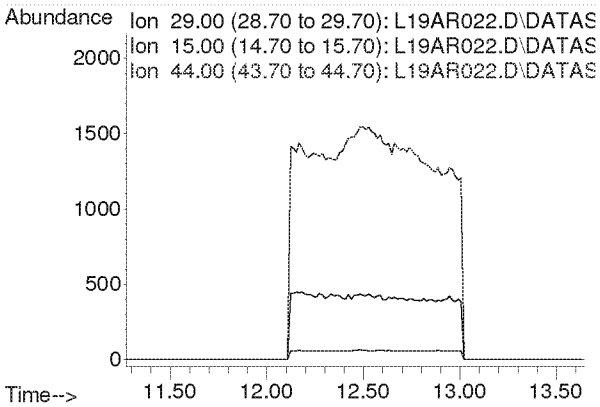


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.39 min

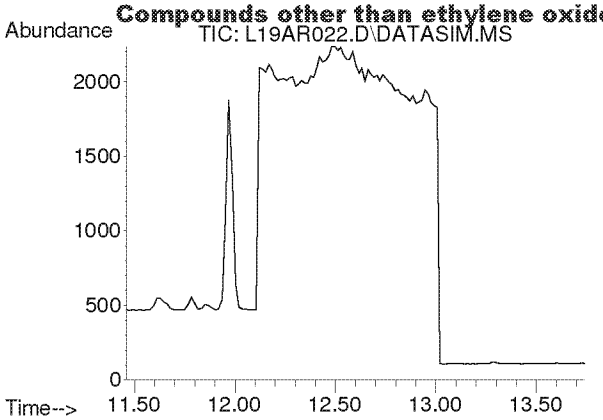
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	19.2
44	96.8



Compounds other than ethylene oxide were not quantitated.

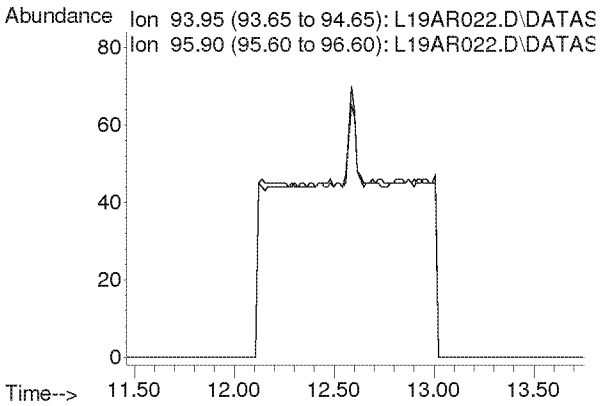


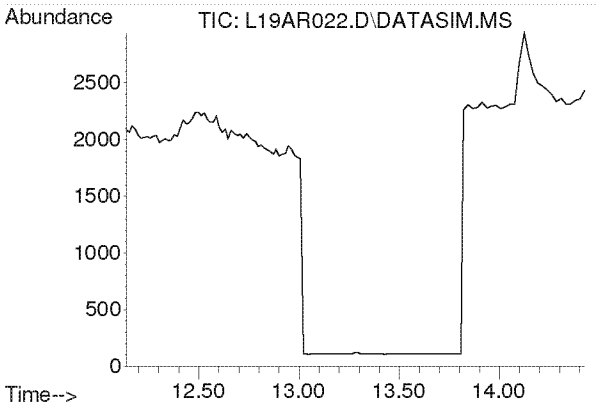
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



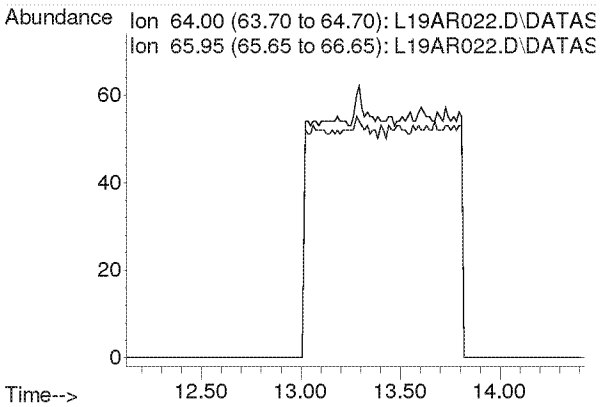


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

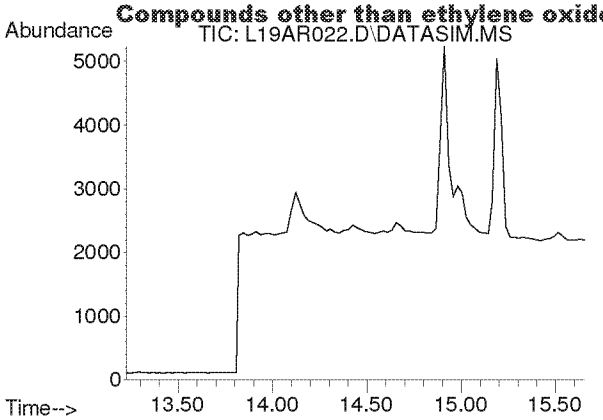
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

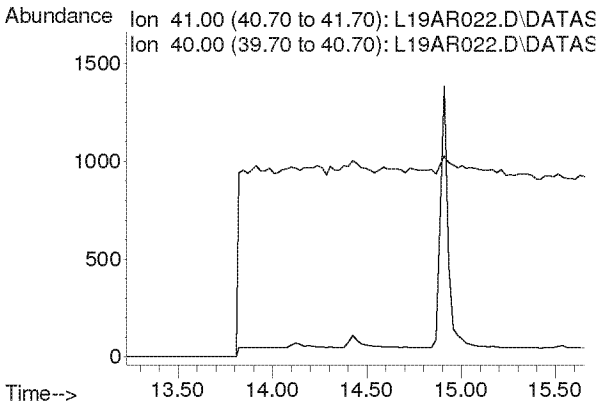


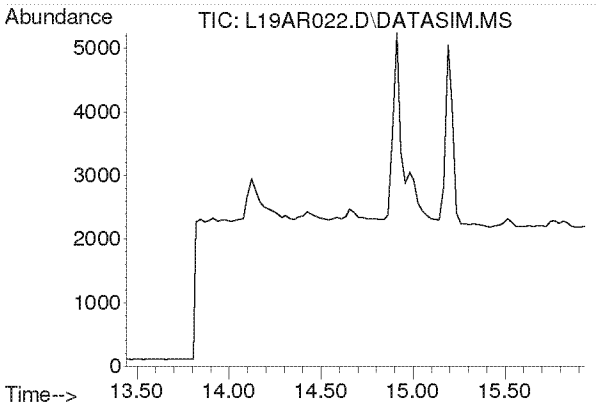
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



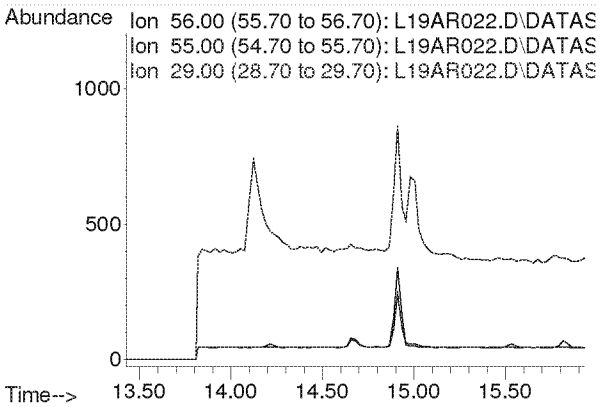


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

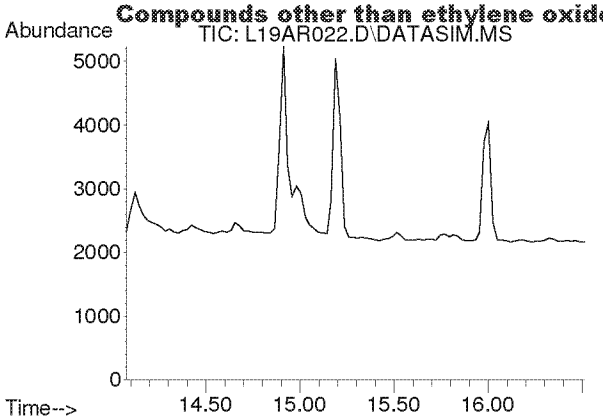
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

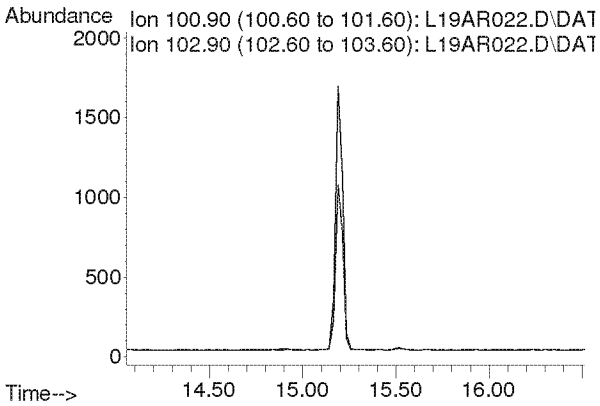


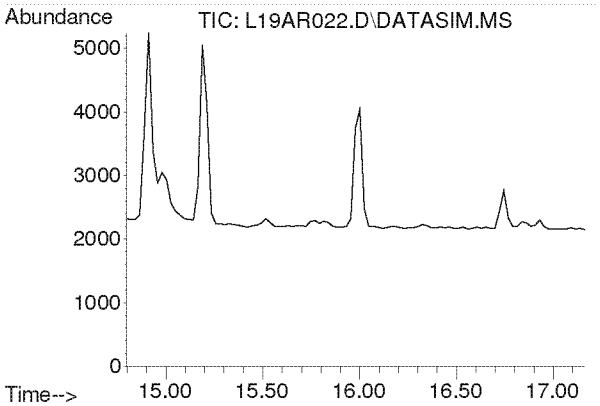
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



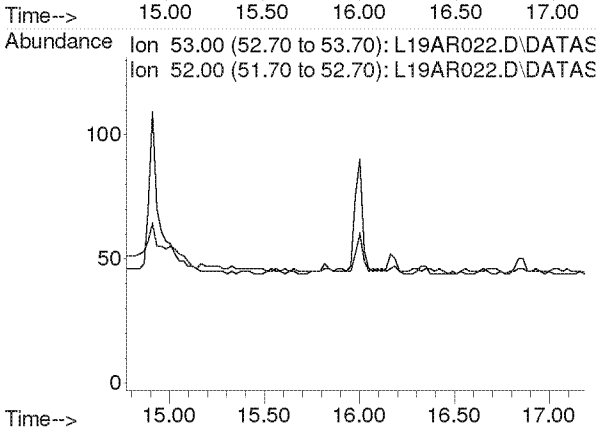


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

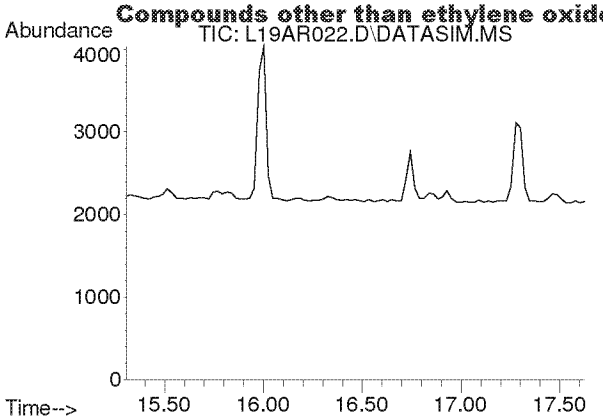
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

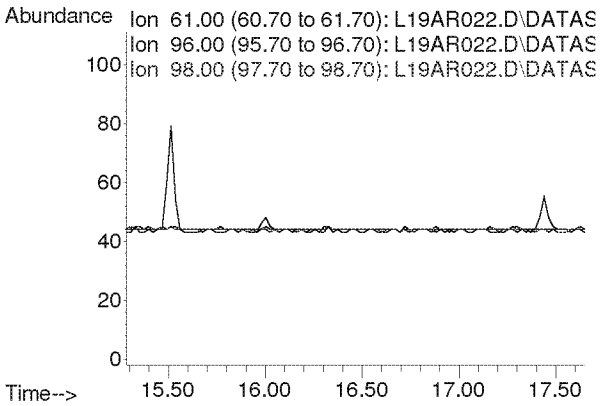


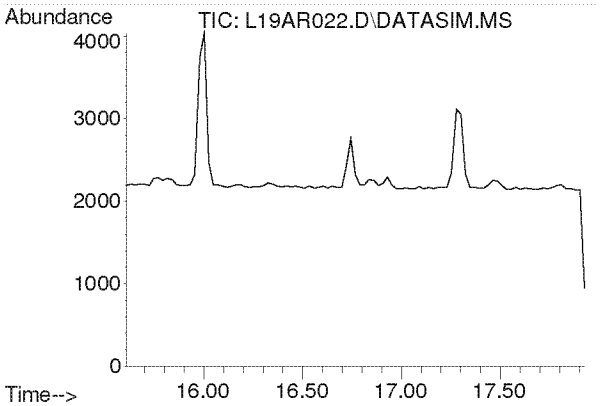
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



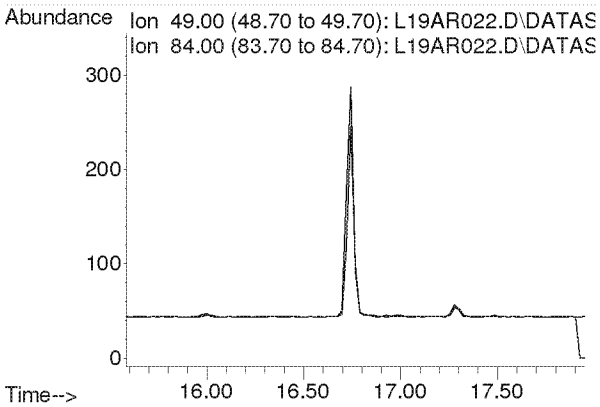


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

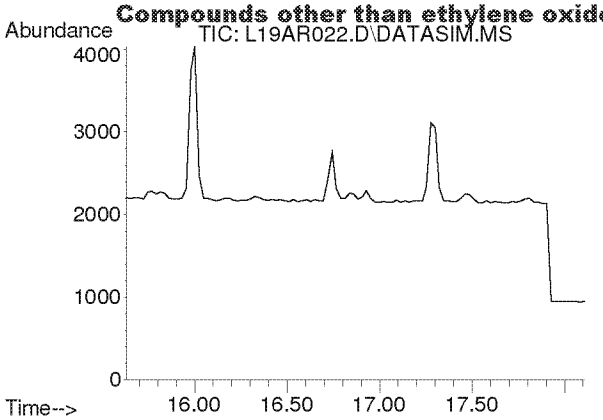
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

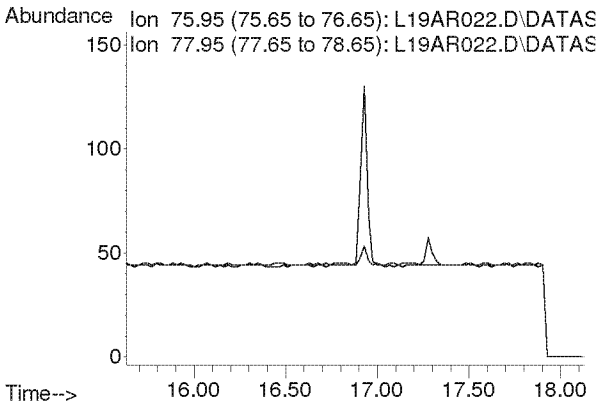


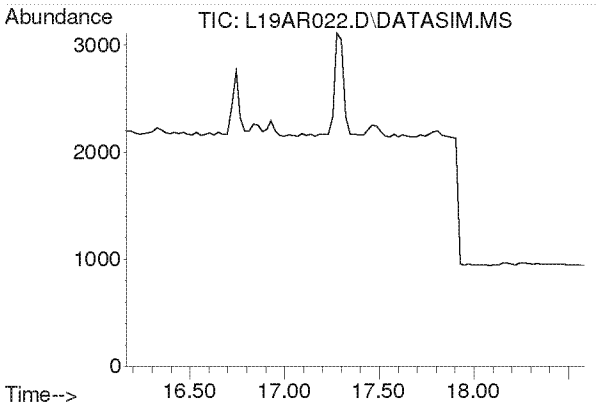
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



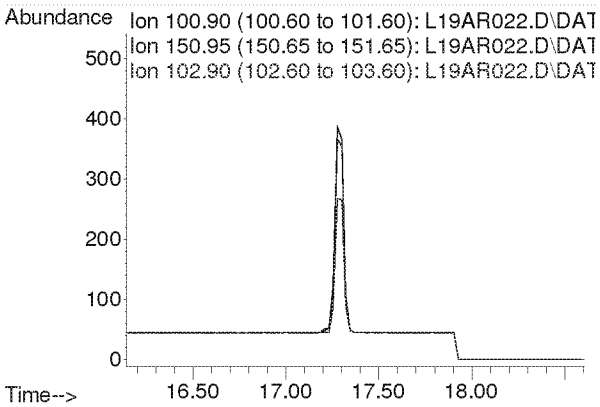


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

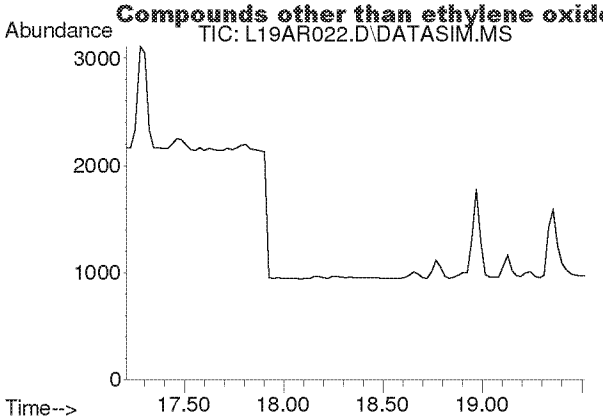
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

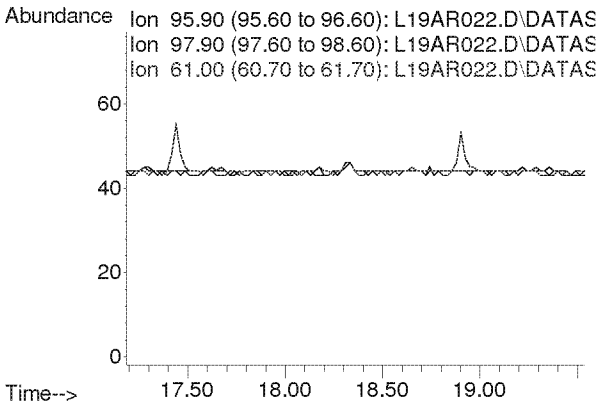


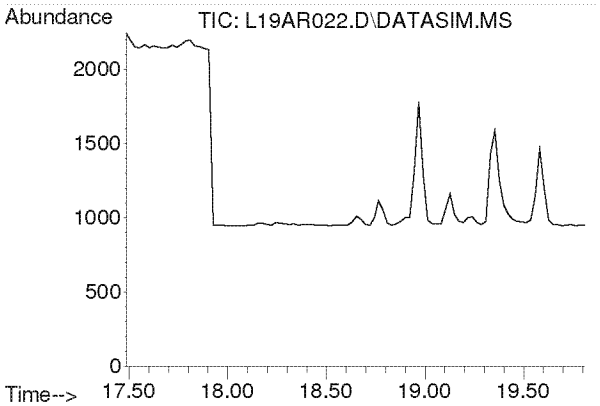
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



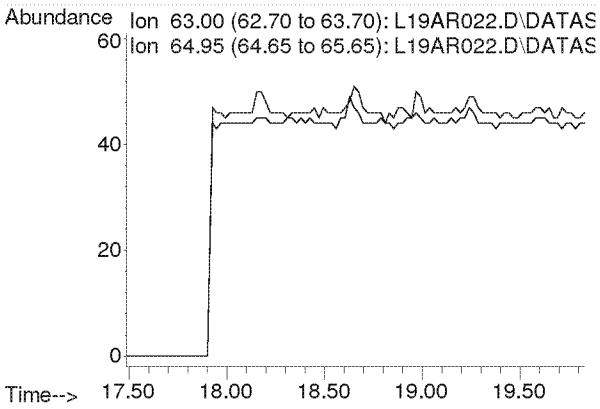


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

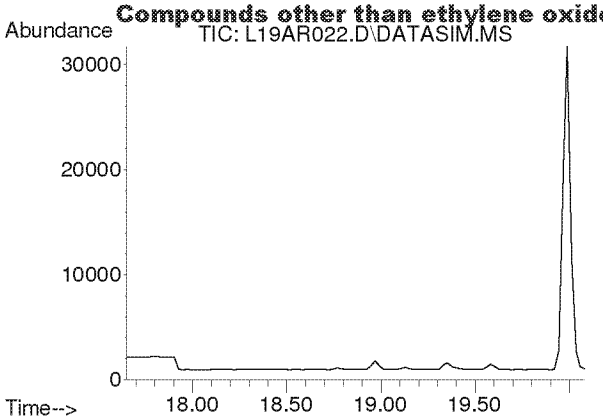
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

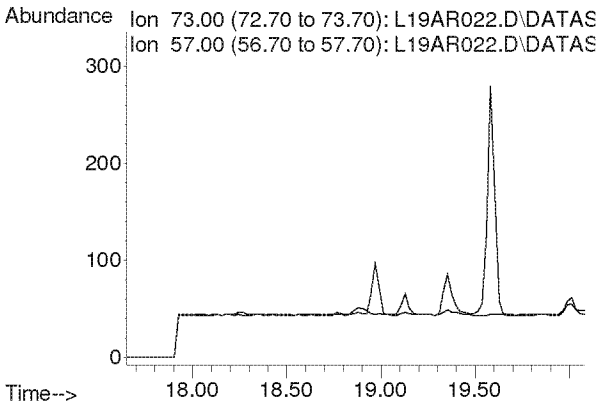


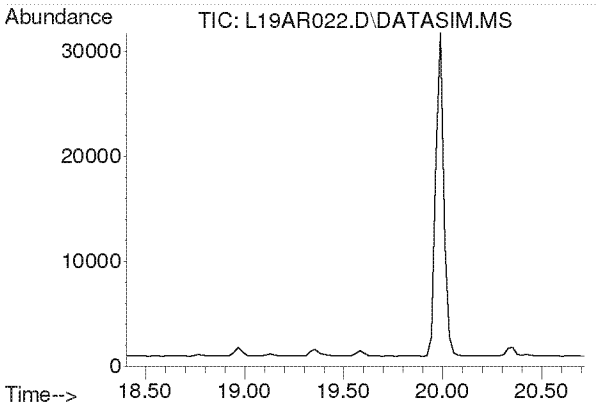
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



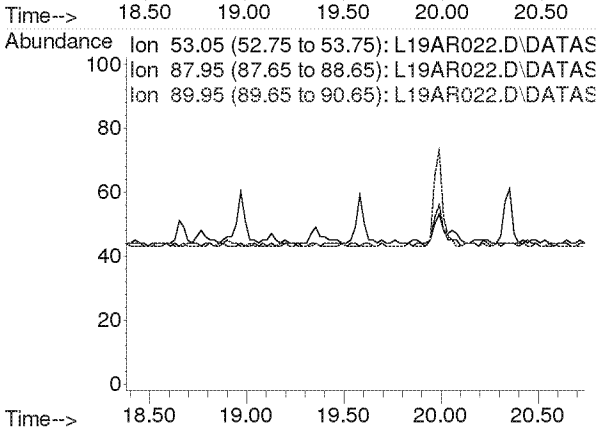


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

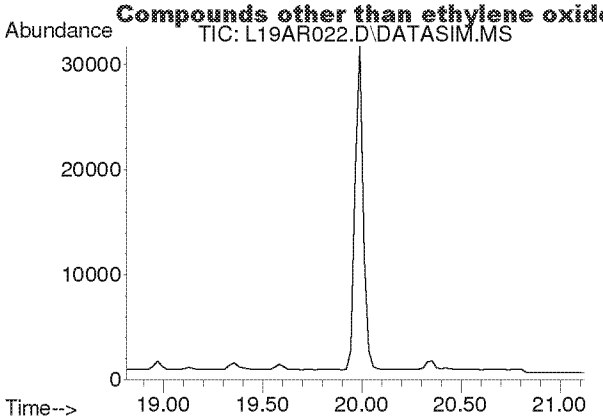
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

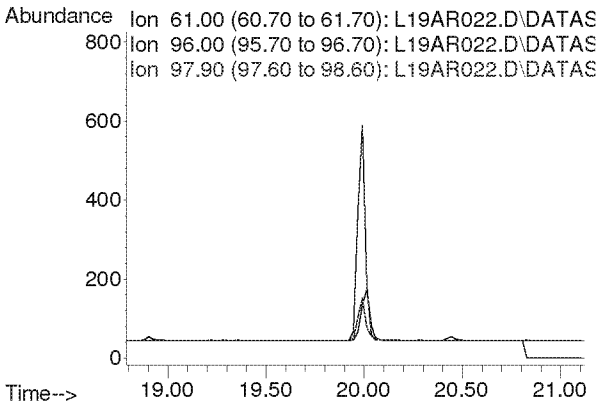


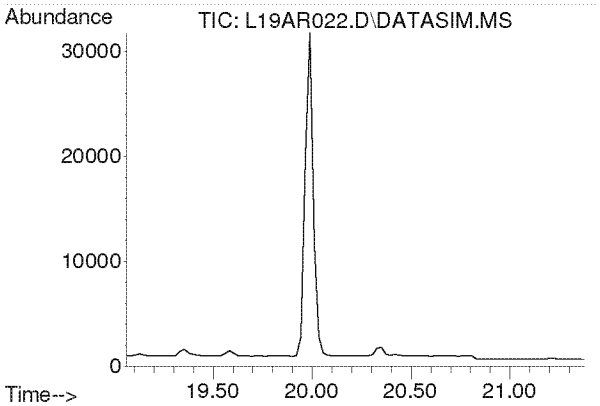
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



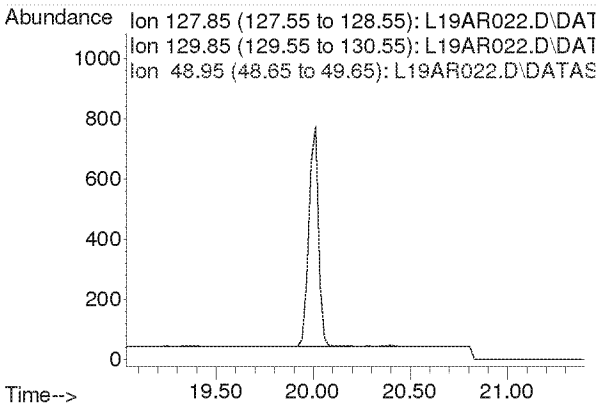


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

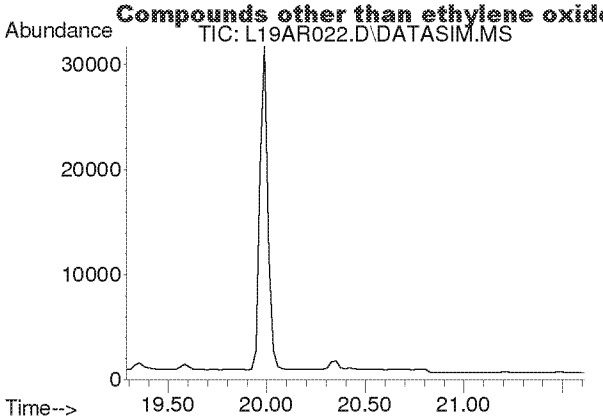
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

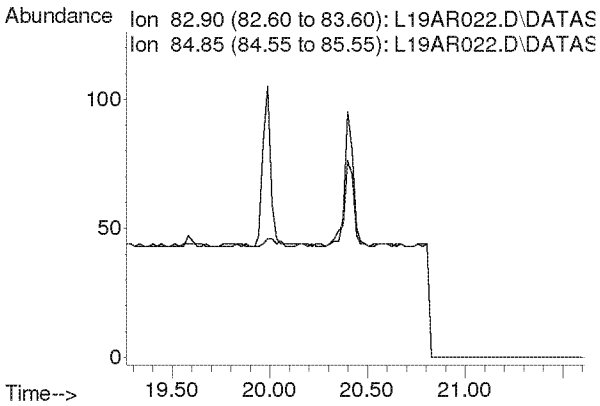


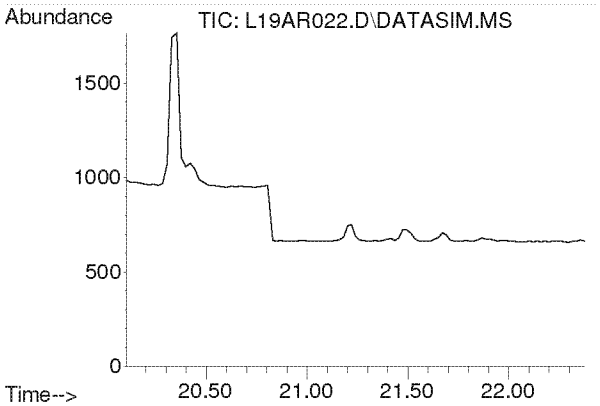
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



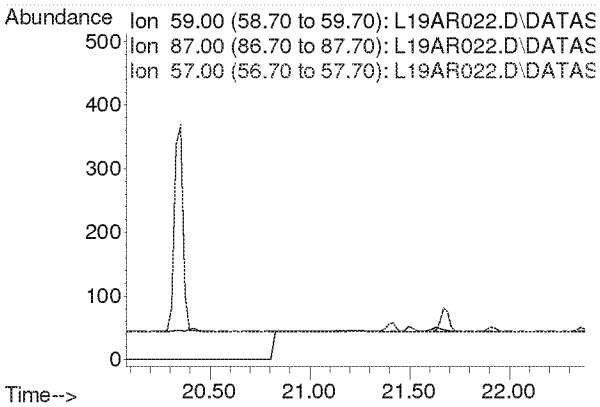


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

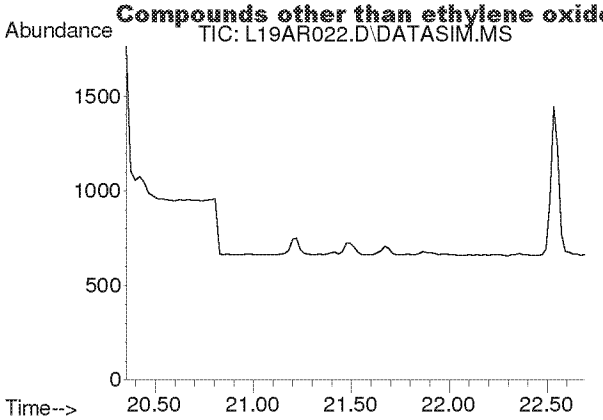
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

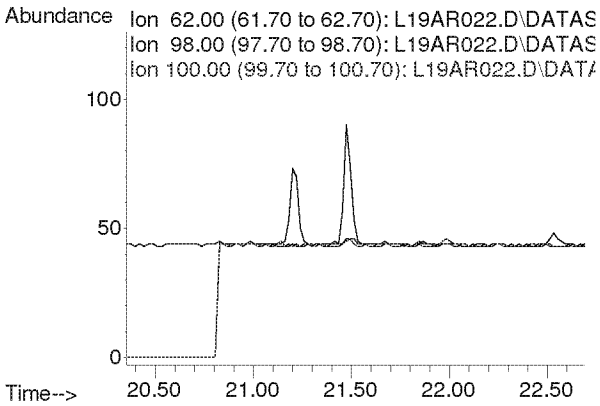


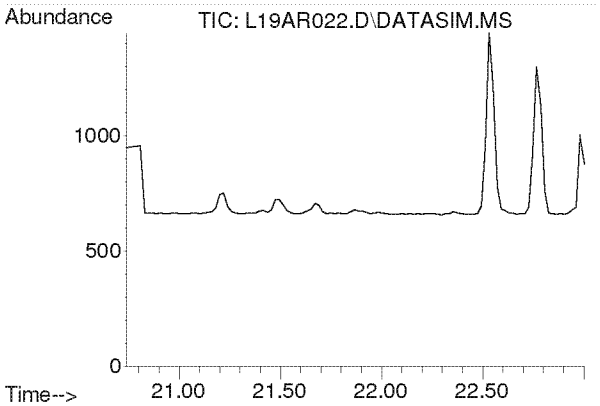
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



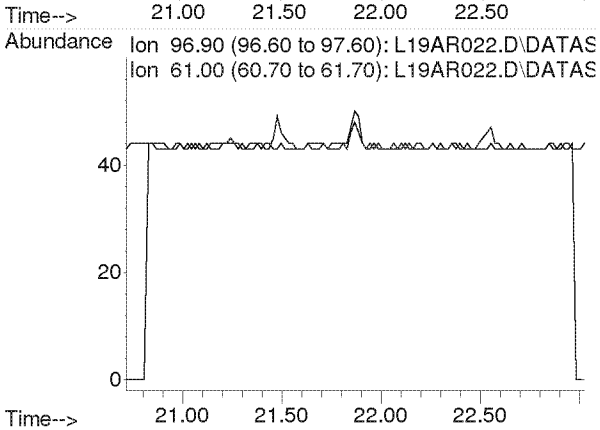


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

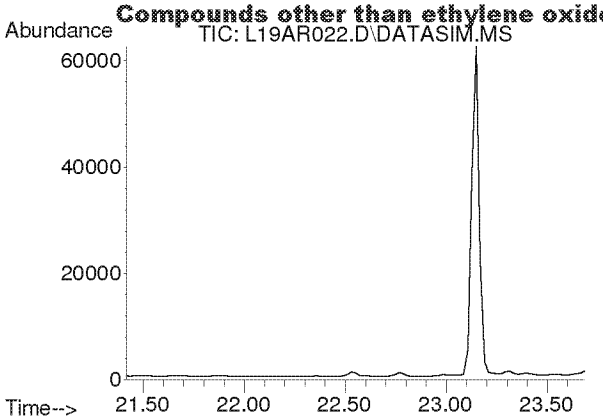
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

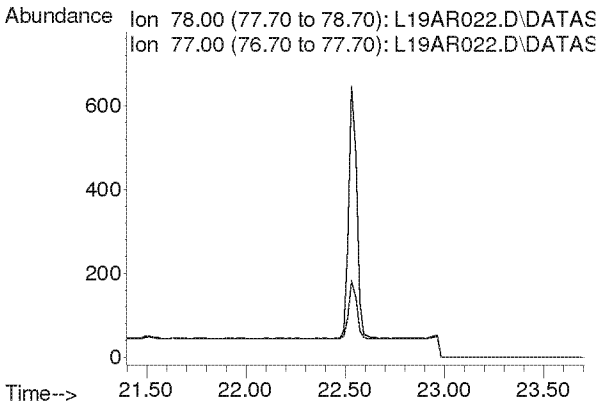


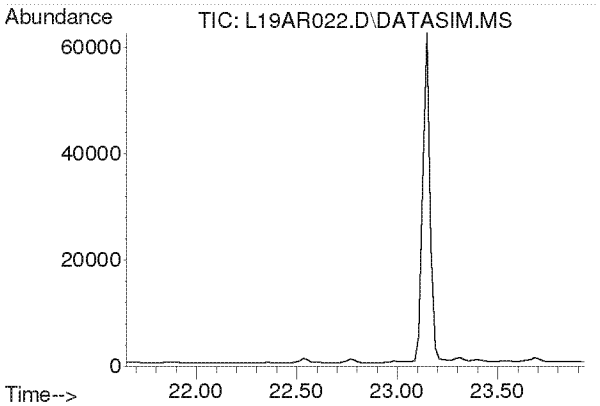
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



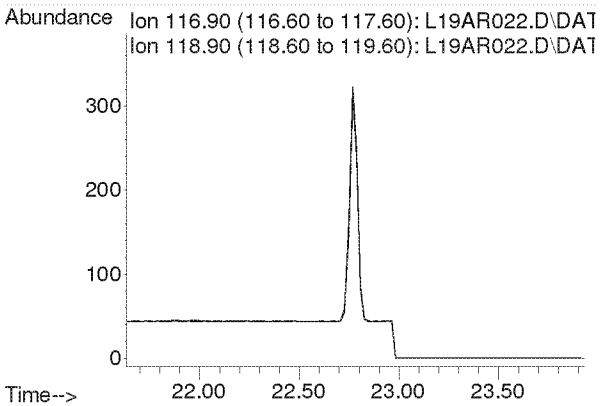


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

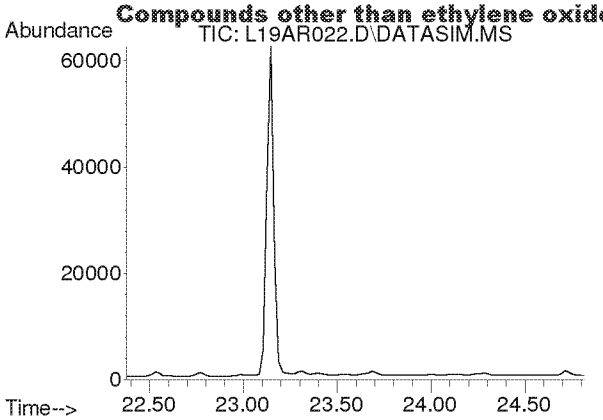
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

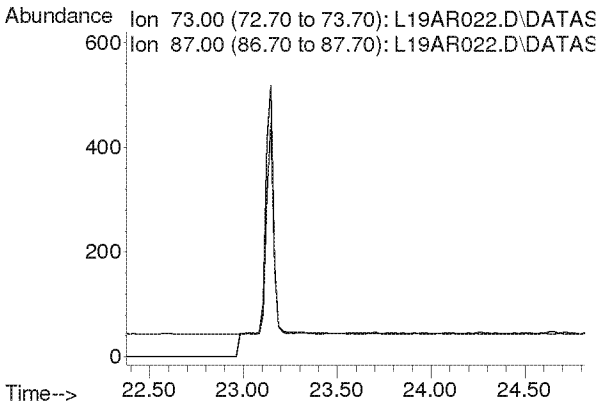


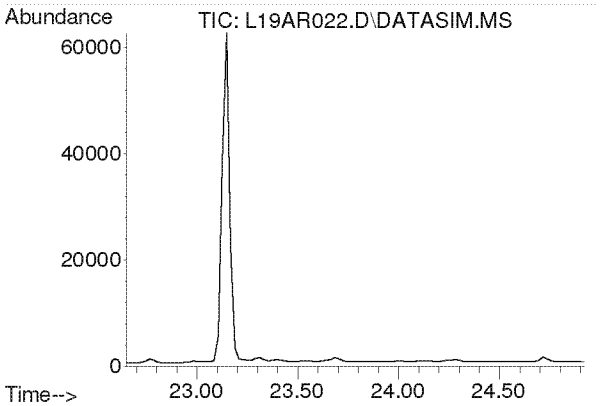
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



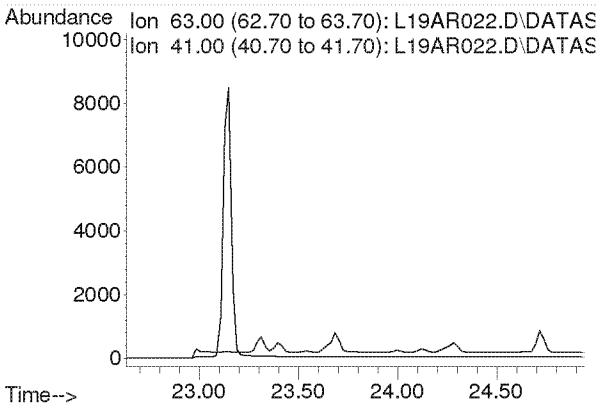


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

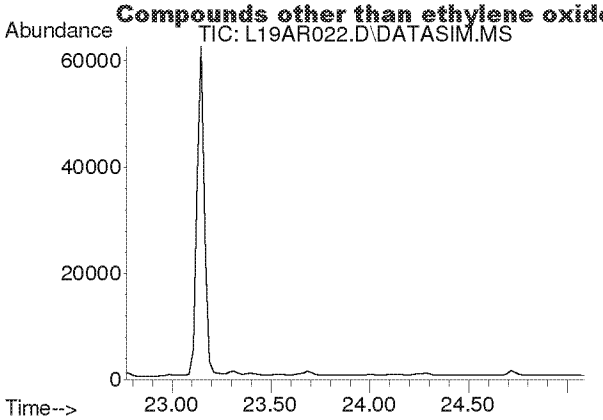
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

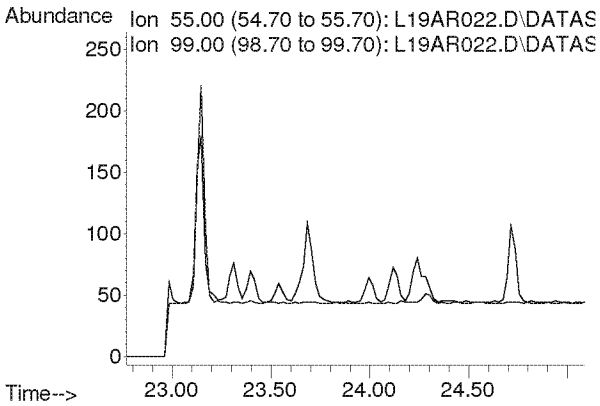


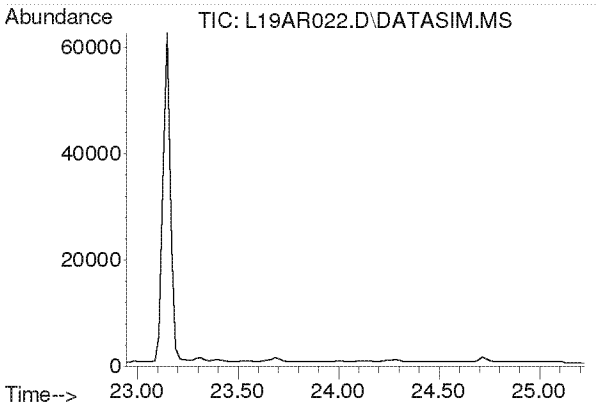
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



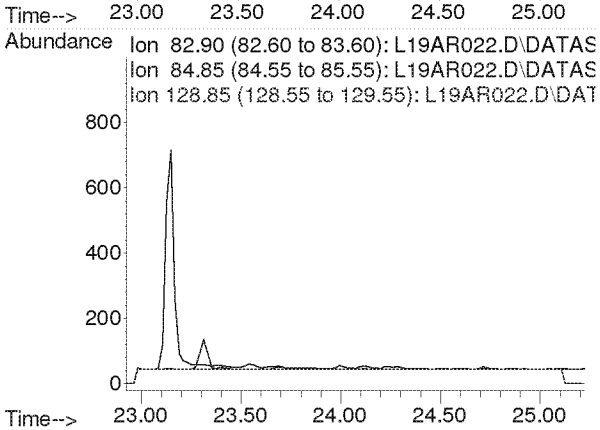


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

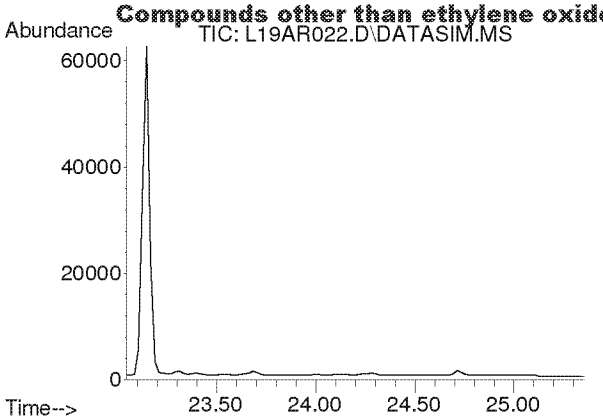
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

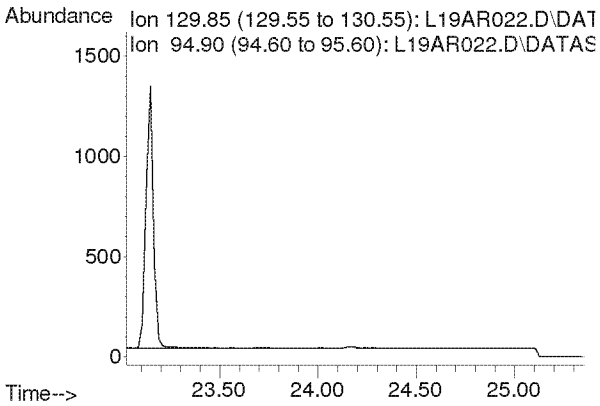


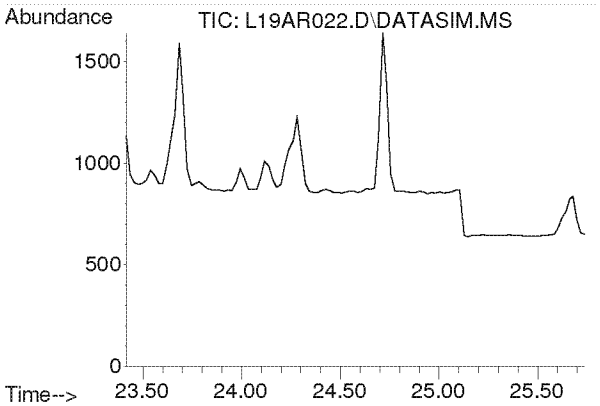
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



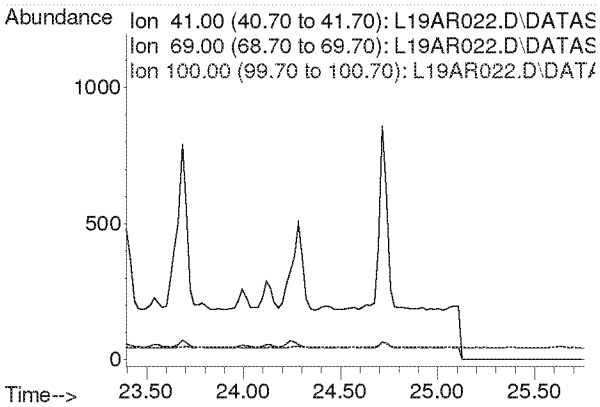


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

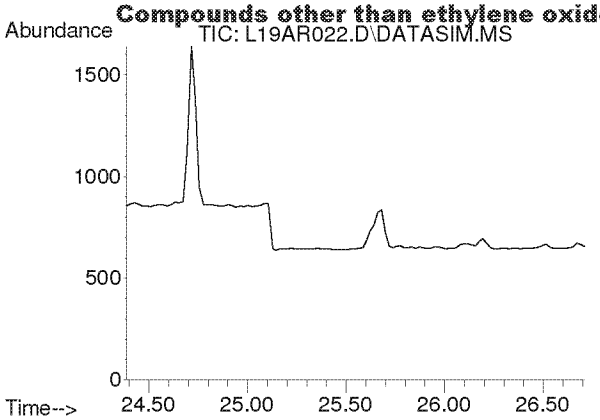
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

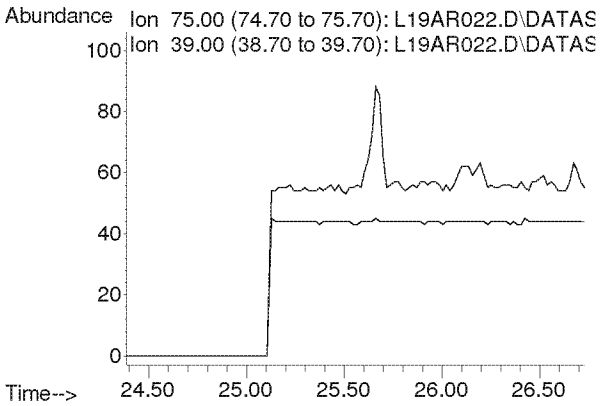


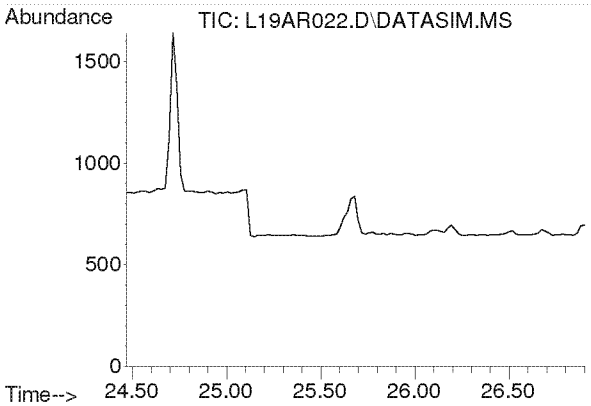
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



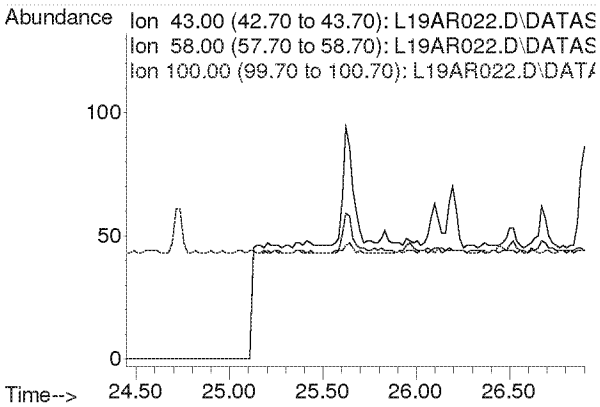


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

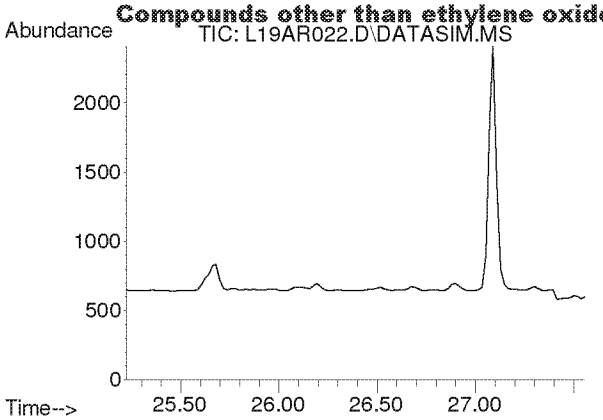
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

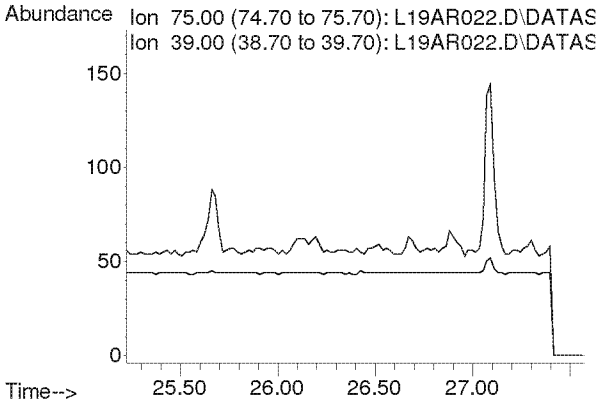


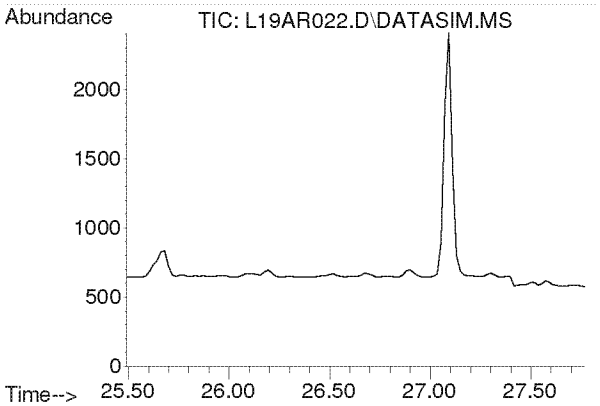
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



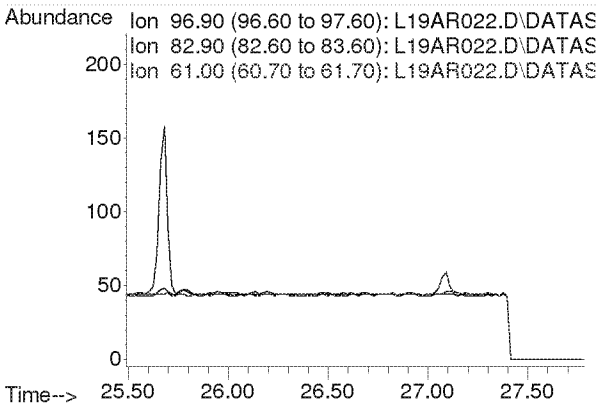


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

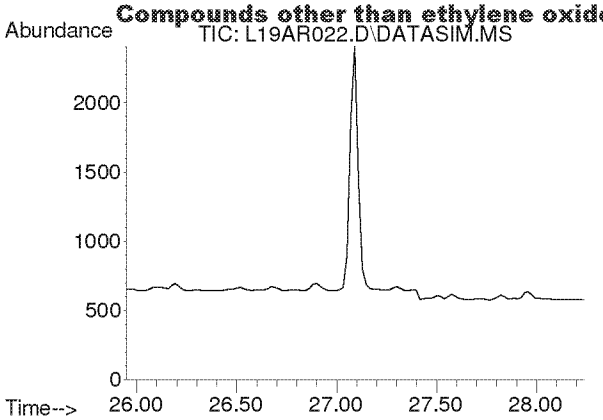
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

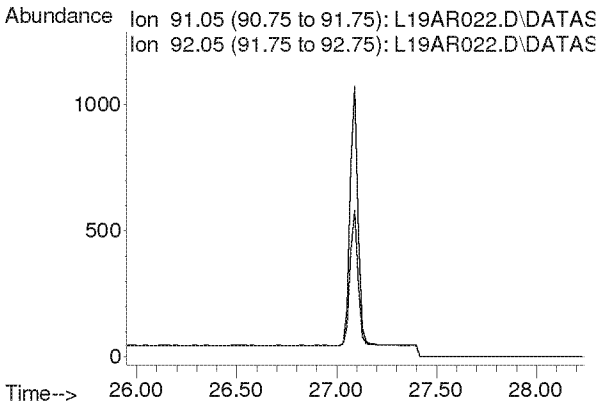


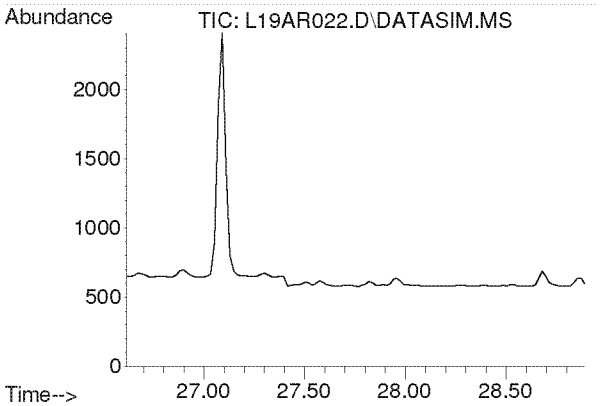
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



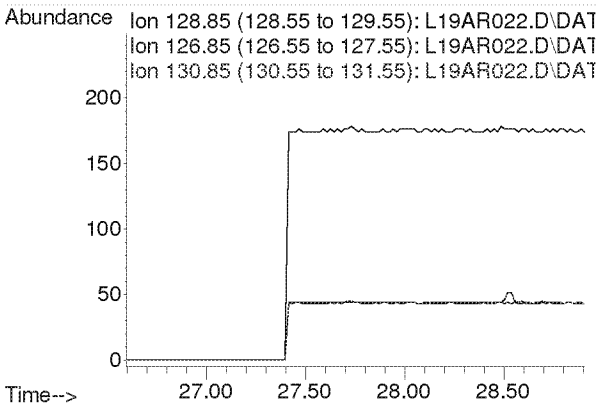


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

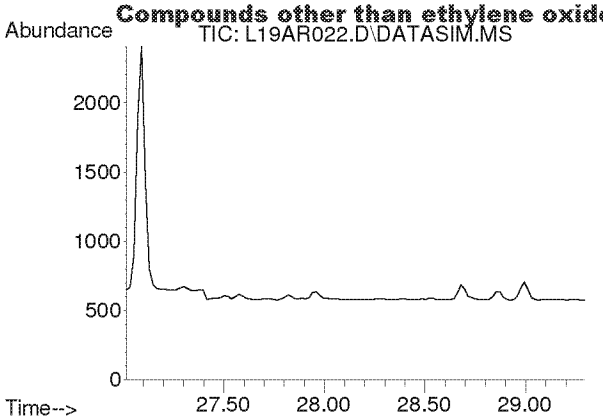
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

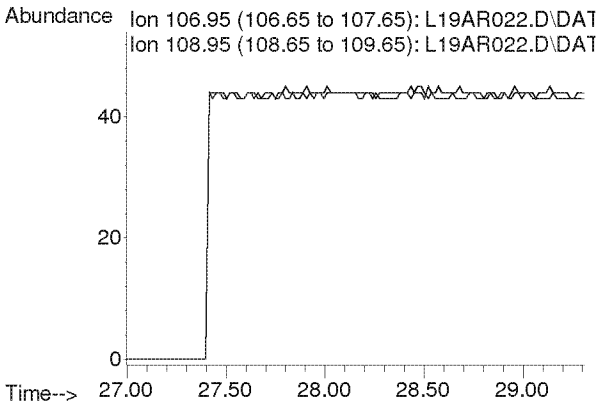


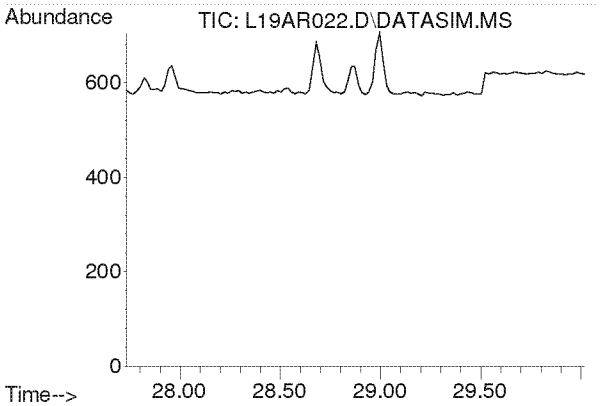
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



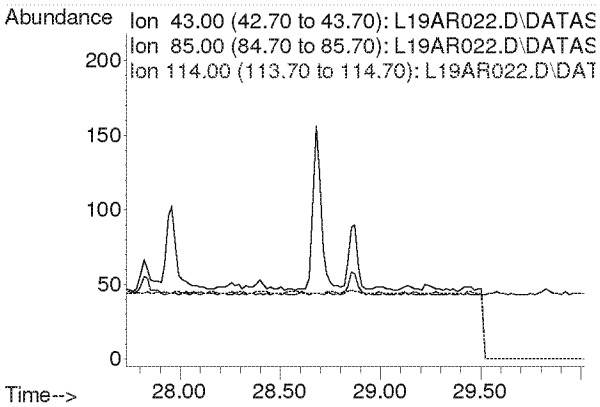


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

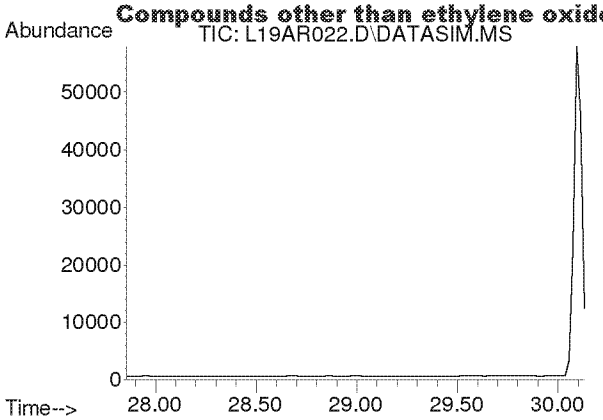
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

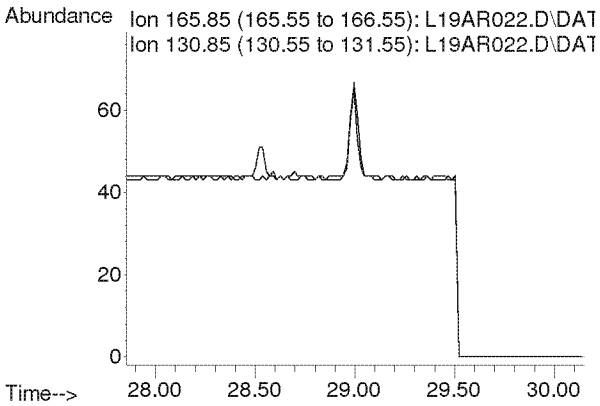


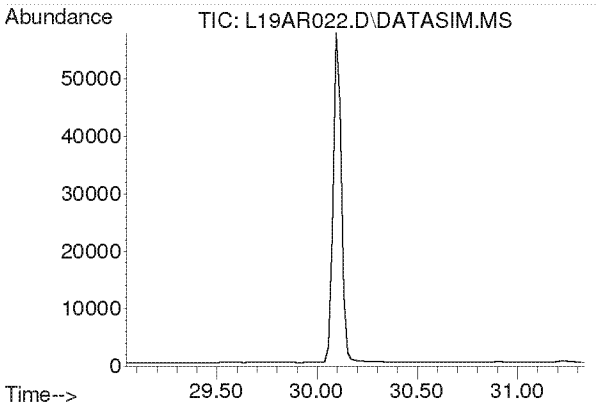
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



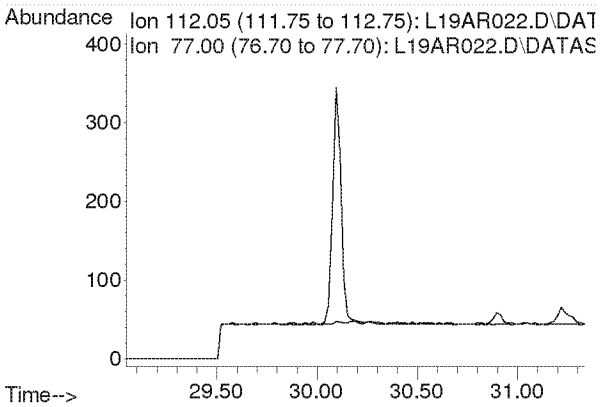


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

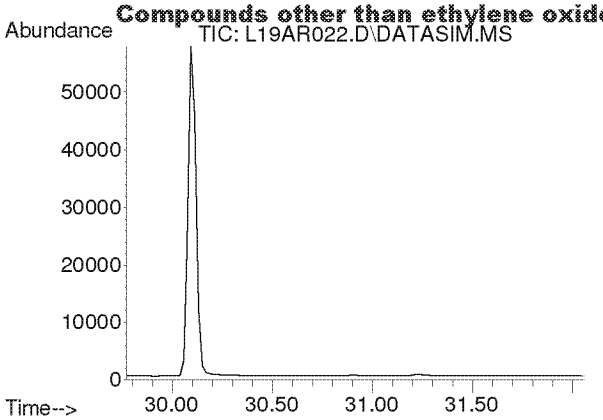
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

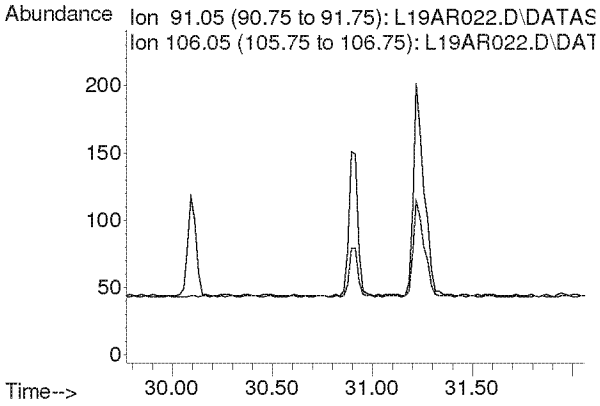


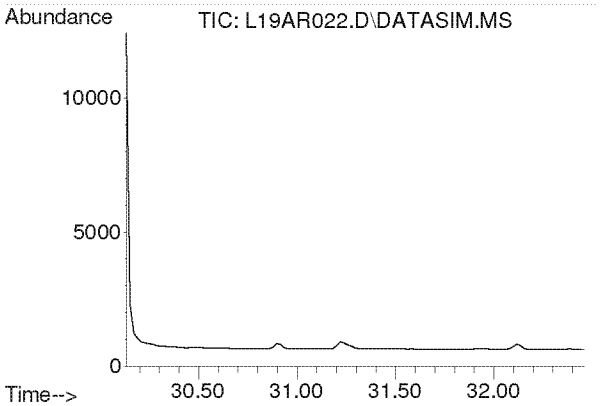
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



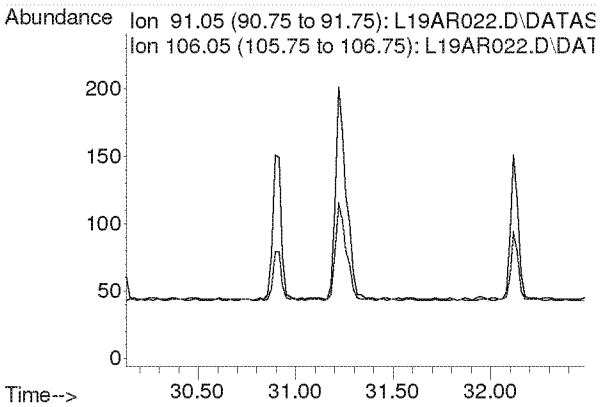


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

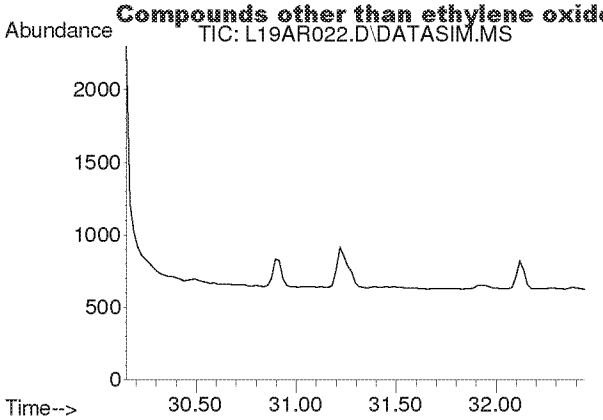
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

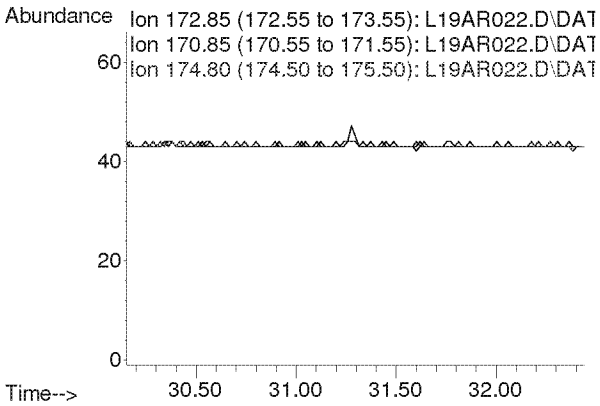


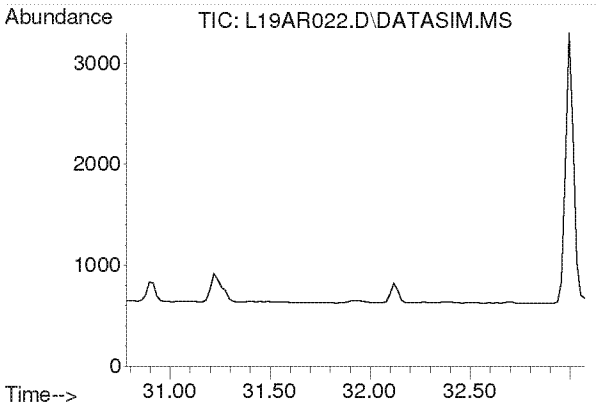
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



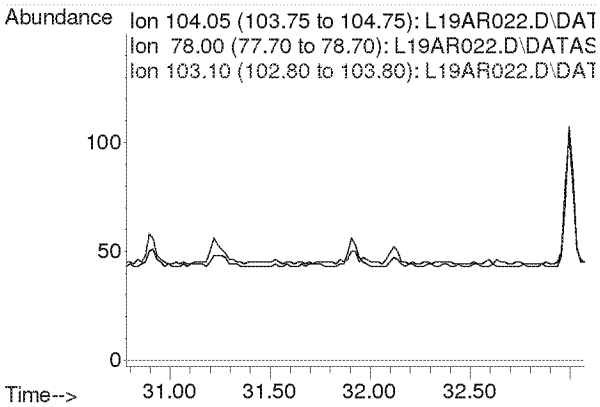


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

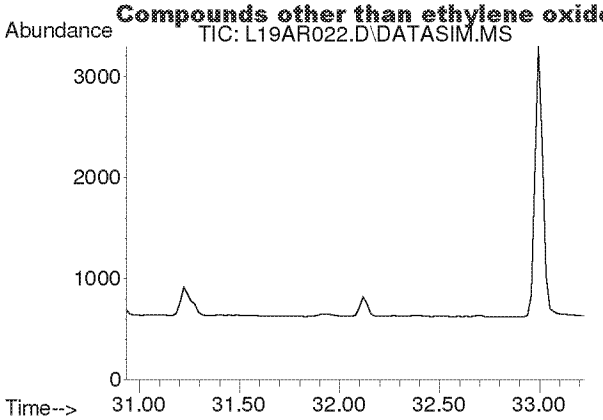
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

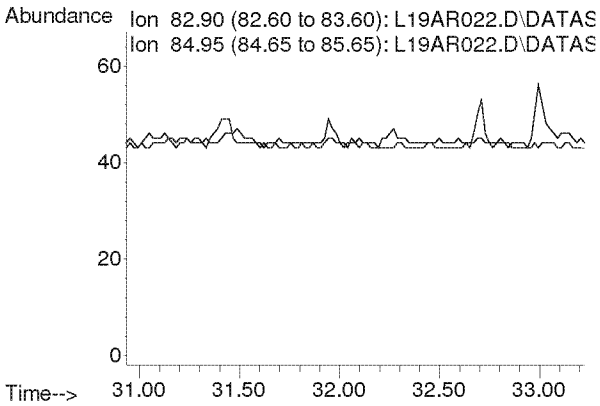


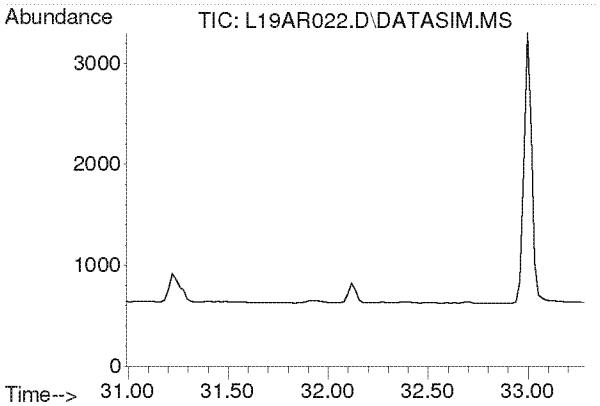
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



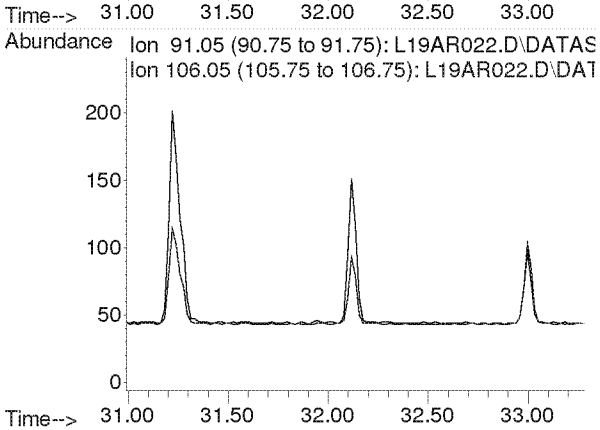


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

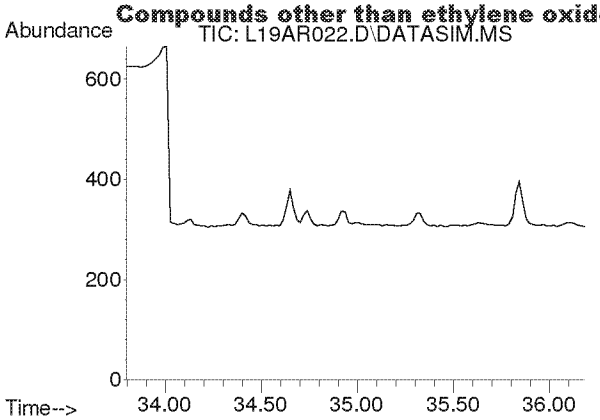
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

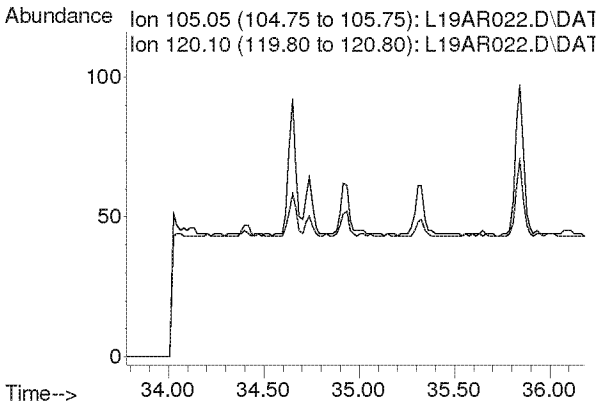


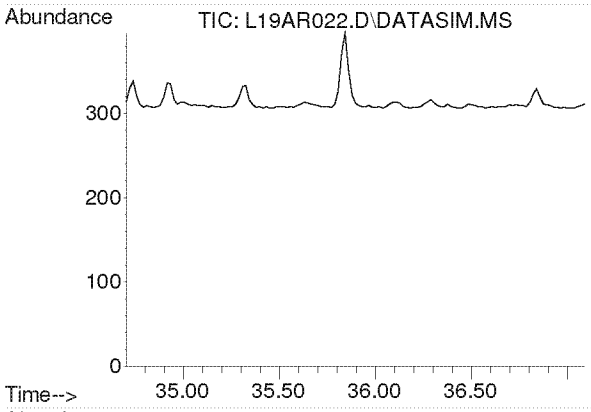
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



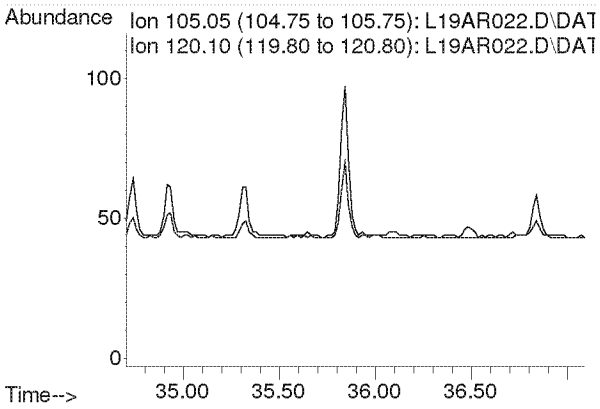


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

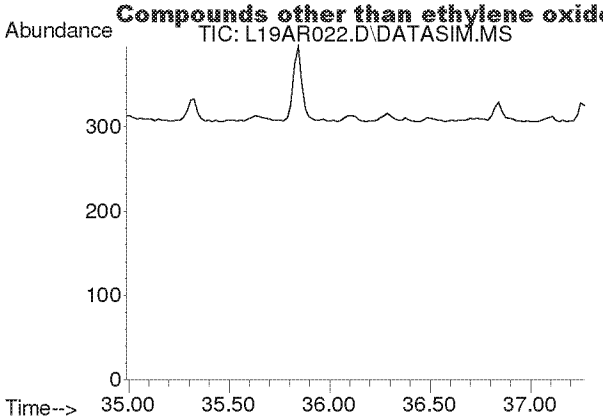
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

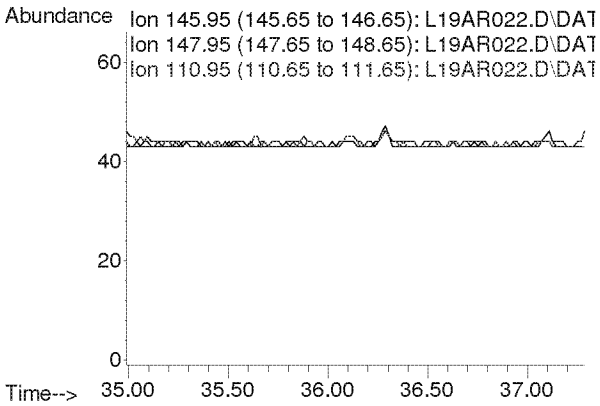


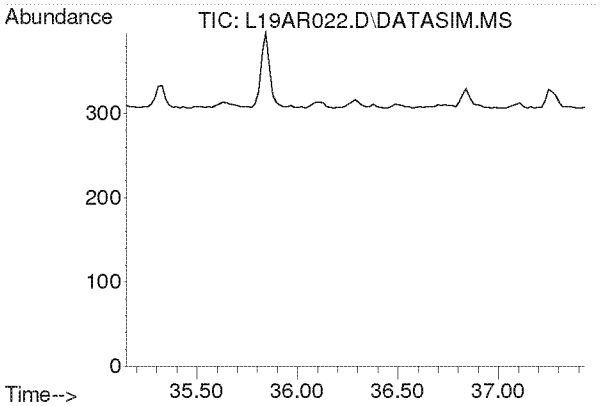
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



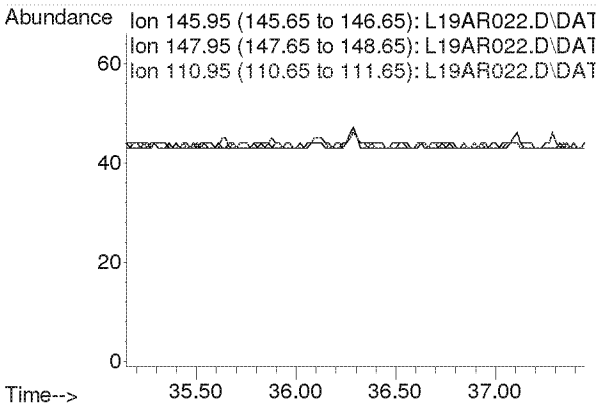


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

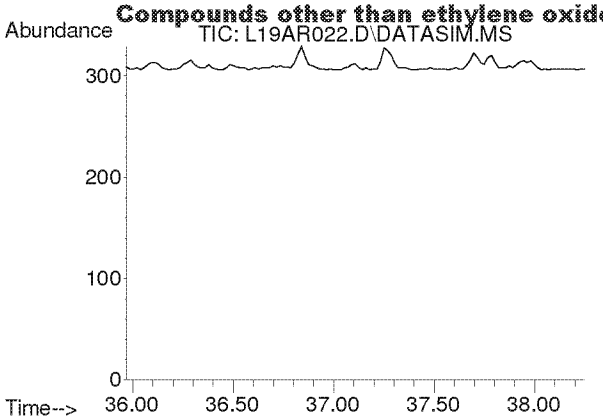
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

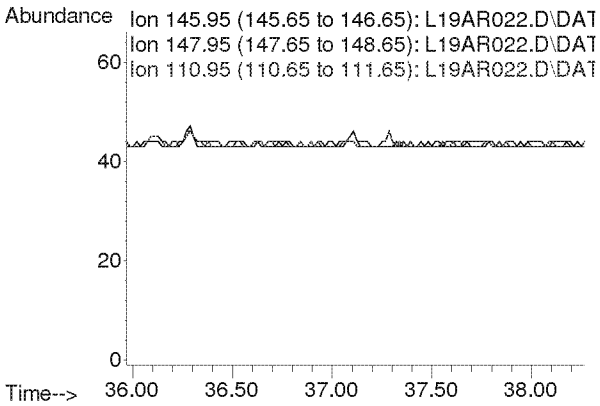


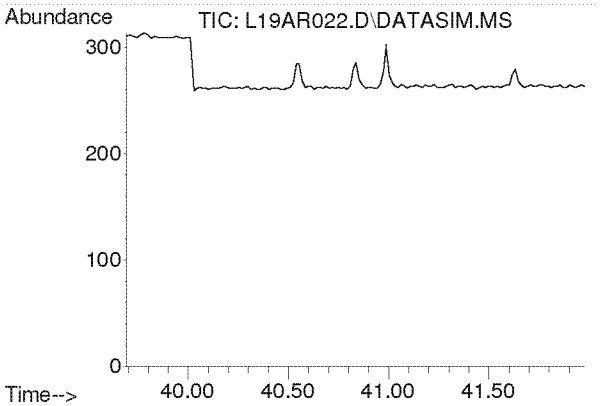
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



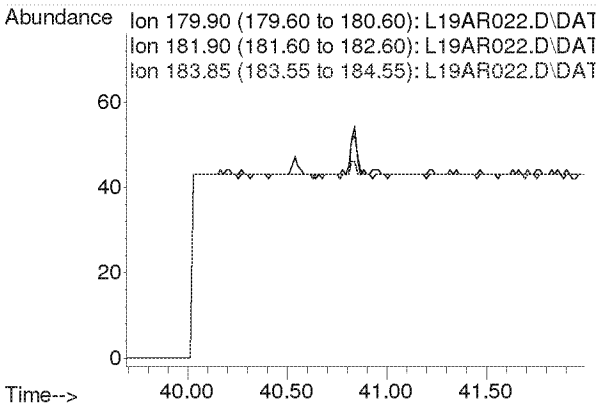


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

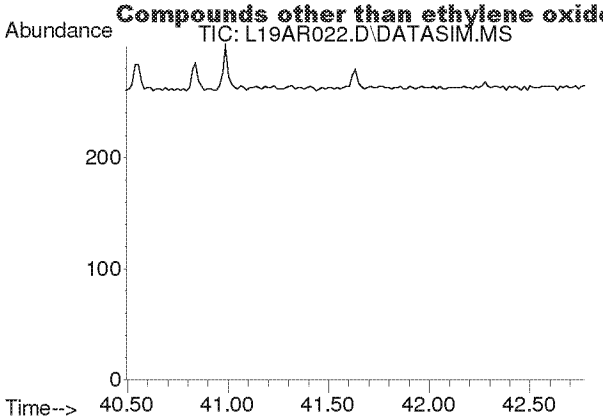
Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 am

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.0
184	30.5



Compounds other than ethylene oxide were not quantitated.

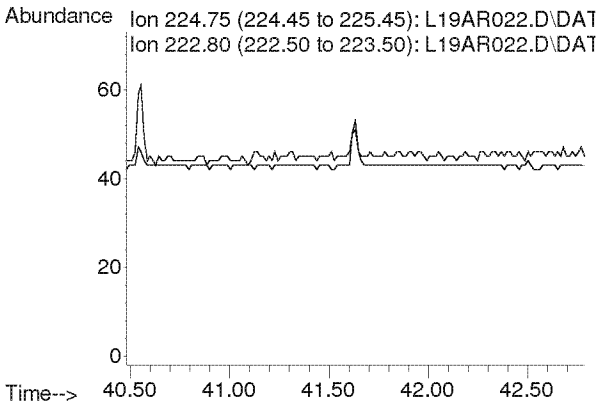


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.63 min

Lab File: L19AR022.D
Acq: 19 Jan 2019 8:54 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\L19AR\
Data File : L19AR023.D
Acq On : 19 Jan 2019 9:56 am
Operator : MAH
Sample : 9011701-03
Misc : WEST NEIGHBORHOOD 1/16/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 09:28:37 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	52482	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	128505	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	98104	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	12.470	29	179m 1-21-19	0.0660 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. 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\L19AR\
Data File : L19AR023.D
Acq On : 19 Jan 2019 9:56 am
Operator : MAH
Sample : 9011701-03
Misc : WEST NEIGHBORHOOD 1/16/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 09:28:37 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.		

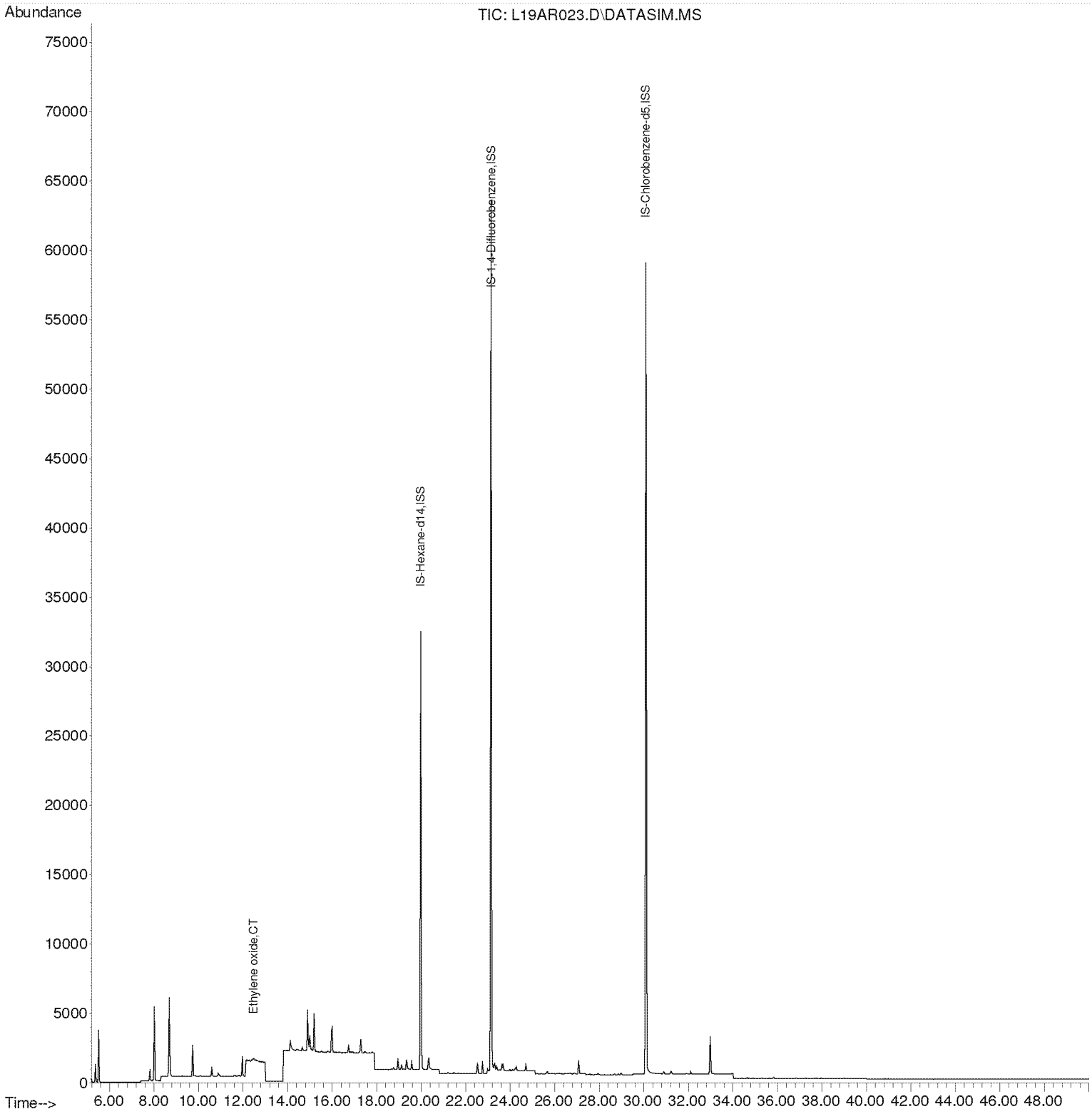
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000317-00512

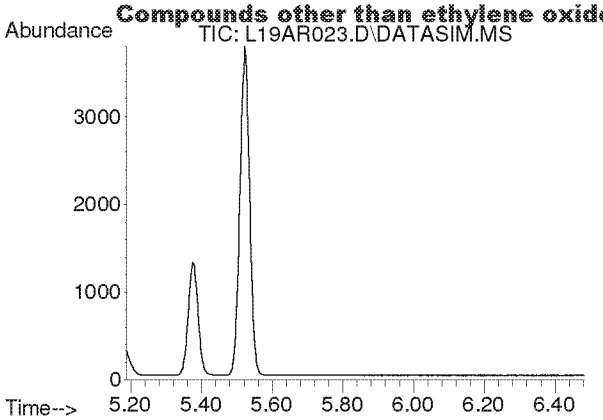
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19AR\
Data File : L19AR023.D
Acq On : 19 Jan 2019 9:56 am
Operator : MAH
Sample : 9011701-03
Misc : WEST NEIGHBORHOOD 1/16/19
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 23 08:40:16 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



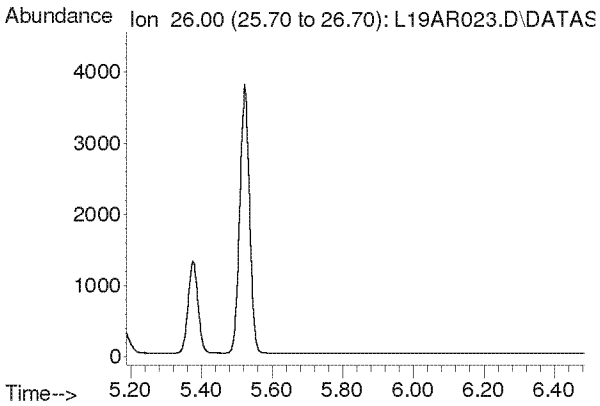
Compounds other than ethylene oxide were not quantitated.

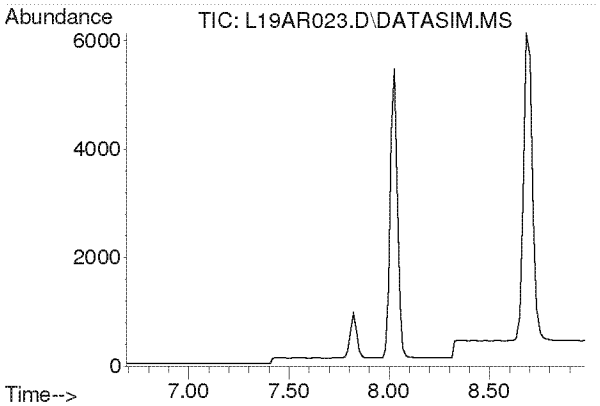


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 26



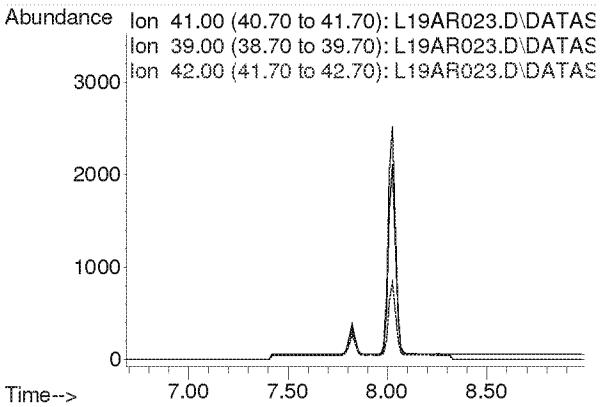


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

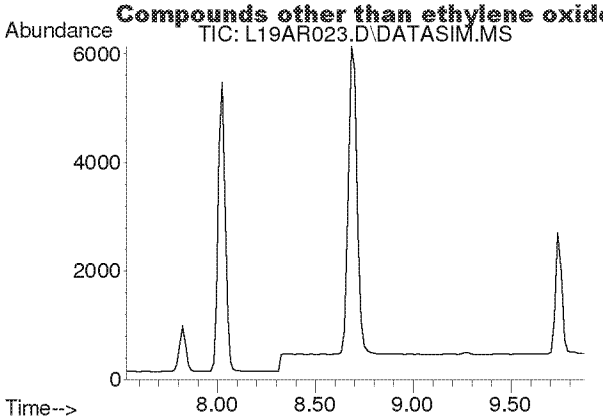
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	77.0
42	65.8



Compounds other than ethylene oxide were not quantitated.

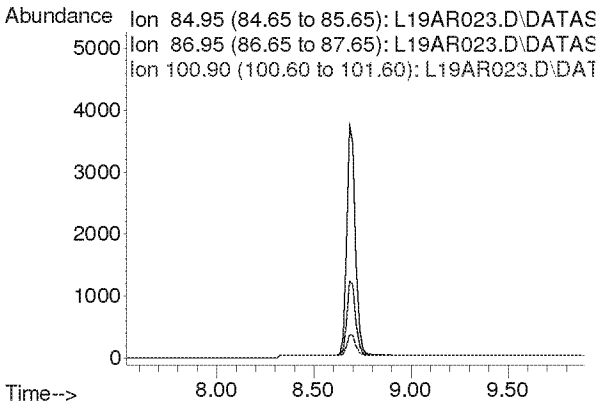


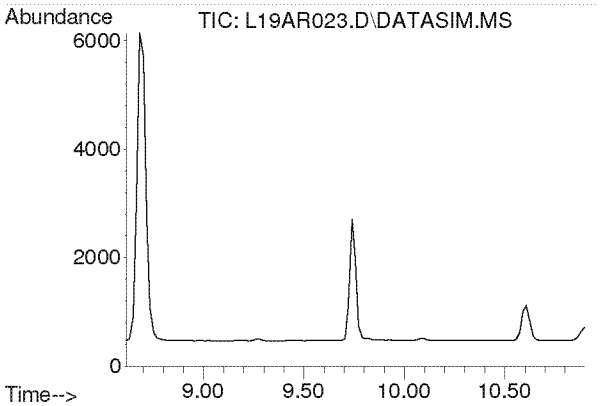
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



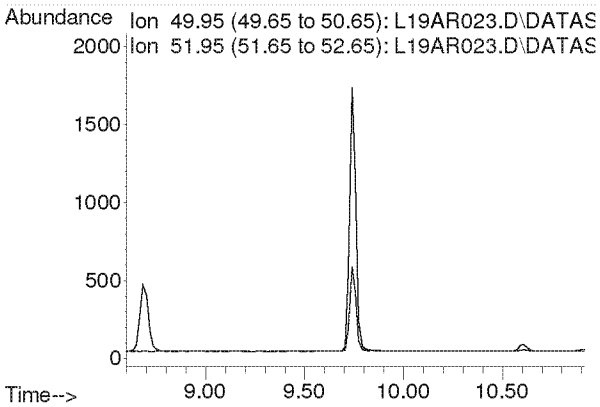


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

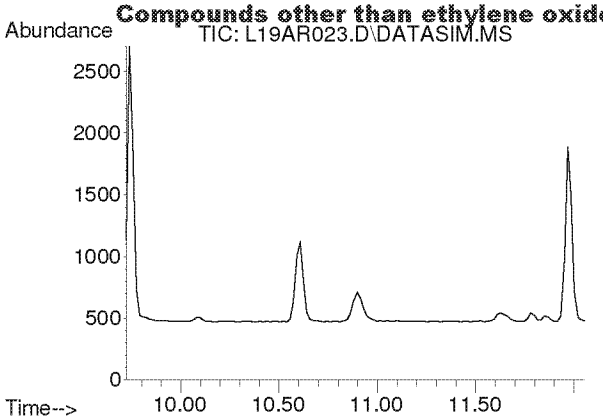
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.4



Compounds other than ethylene oxide were not quantitated.

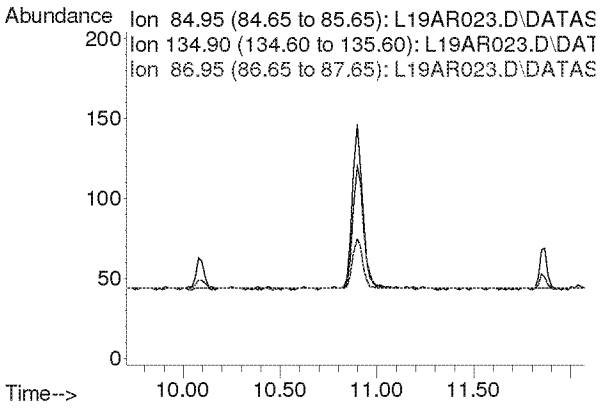


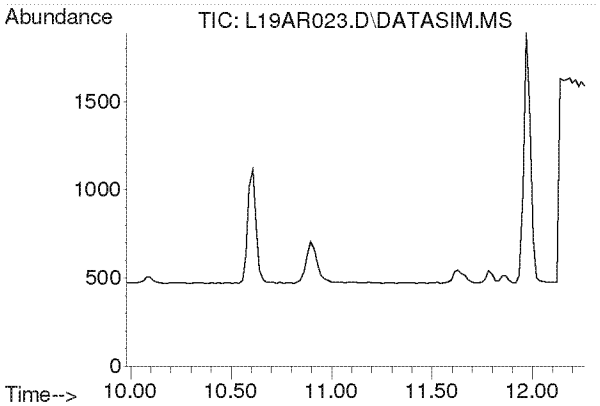
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.5
87	32.2



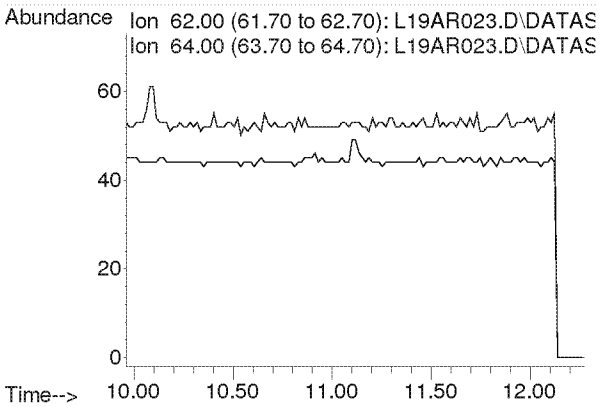


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

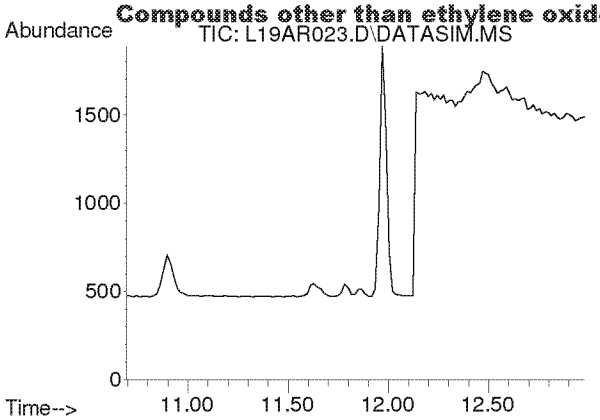
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	32.1



Compounds other than ethylene oxide were not quantitated.

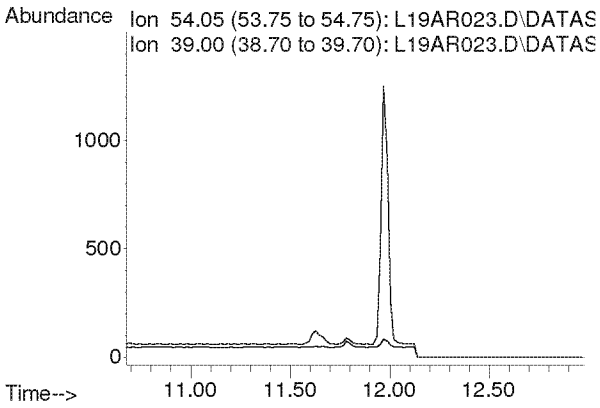


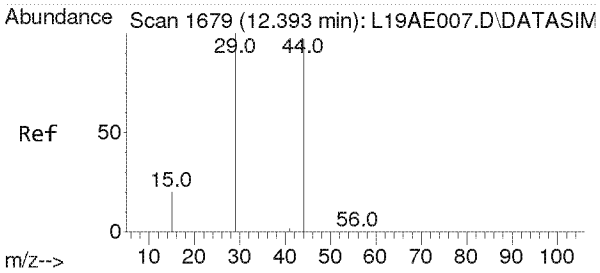
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	103.3

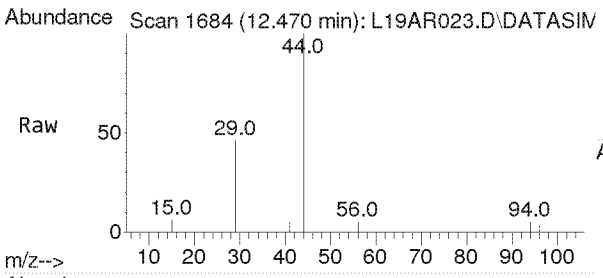


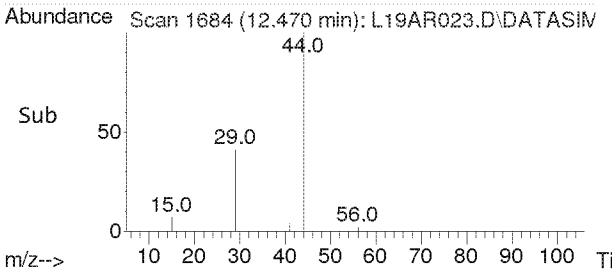


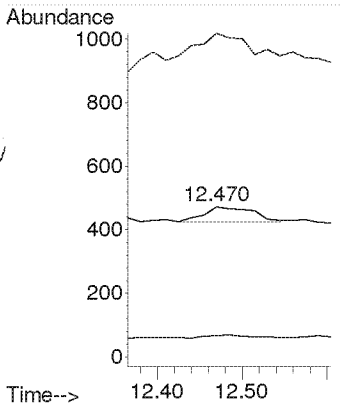
#9
Ethylene oxide
Concen: 0.066 ppbv m
RT: 12.470 min Scan# 1684
Delta R.T. 0.077 min
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 29 Resp: 179

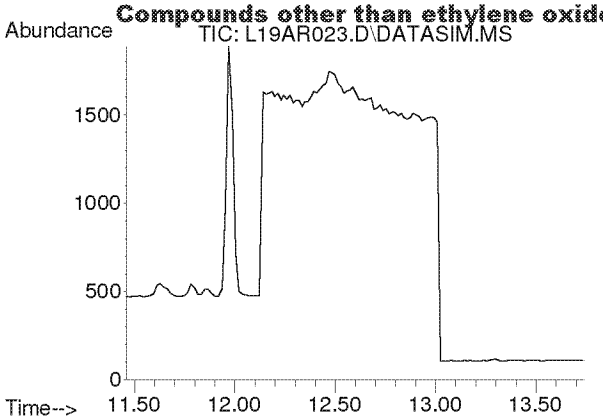
Ion	Ratio	Lower	Upper
29	100		
15	0.0	15.4	23.0#
44	0.0	77.4	116.2#







Compounds other than ethylene oxide were not quantitated.

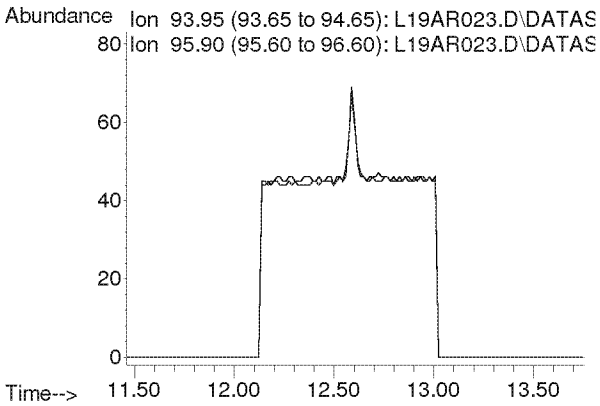


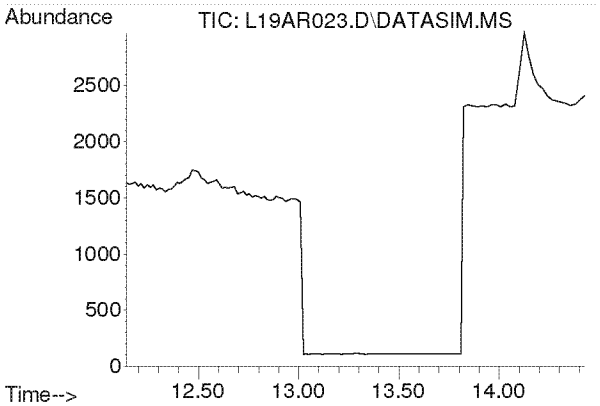
#10
Bromomethane
Concen: N.D.
Expected RT: 12.60 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.3



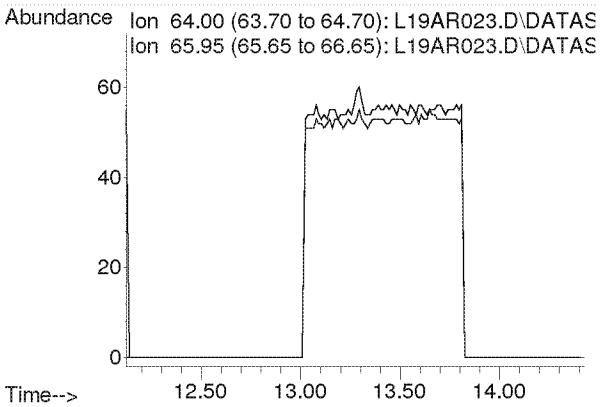


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

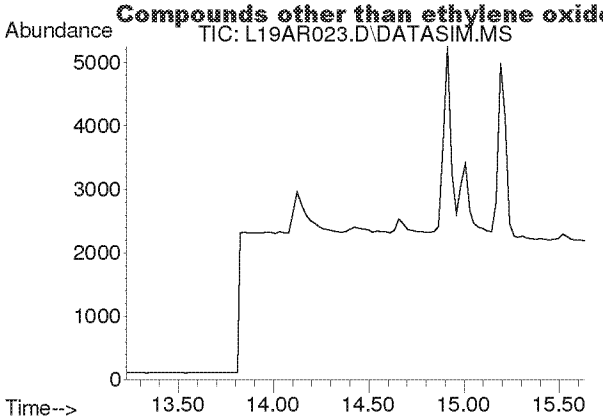
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.4



Compounds other than ethylene oxide were not quantitated.

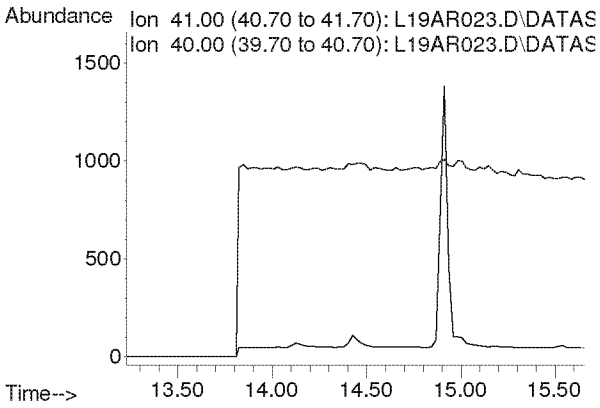


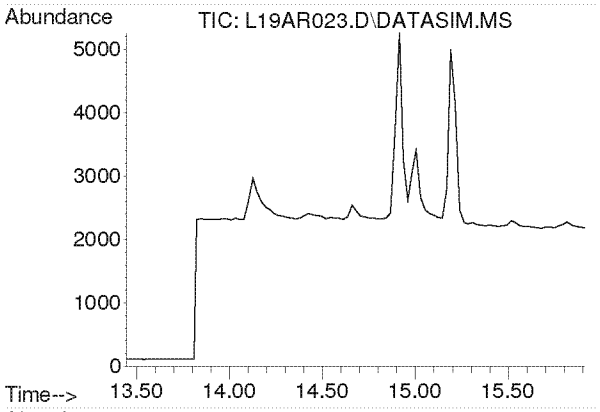
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	53.2



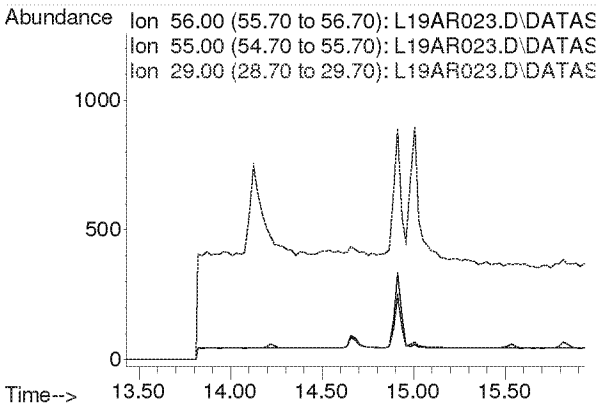


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

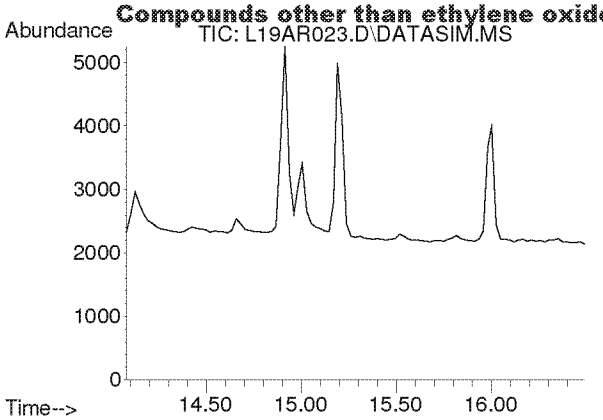
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.5
29	44.9



Compounds other than ethylene oxide were not quantitated.

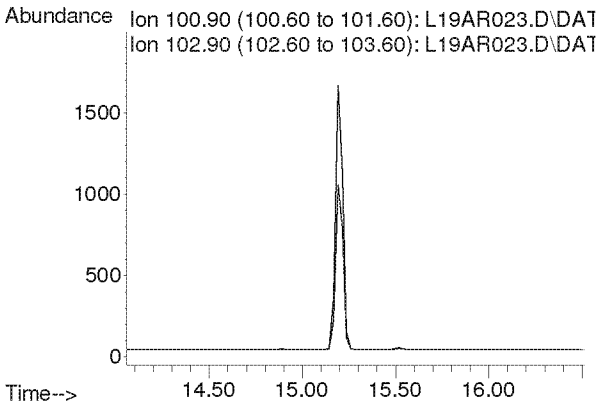


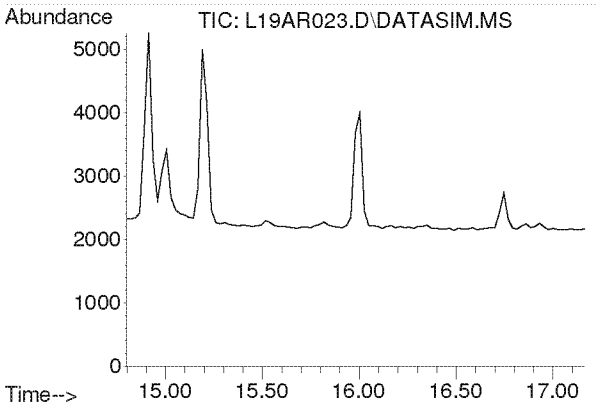
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.21 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



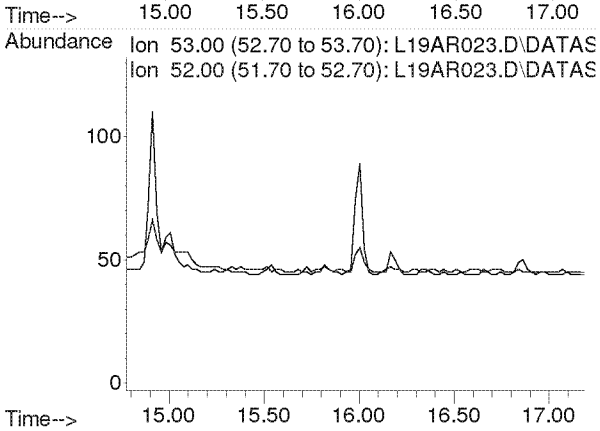


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

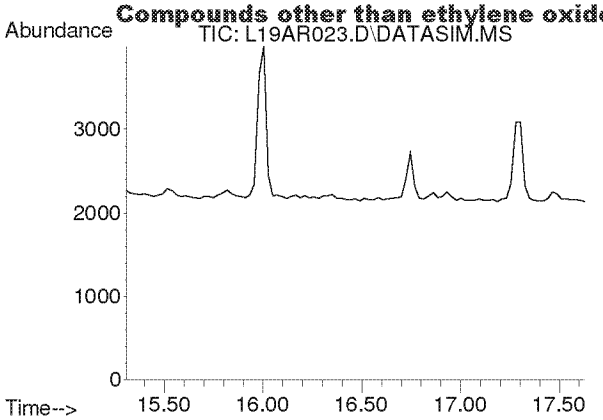
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	84.7



Compounds other than ethylene oxide were not quantitated.

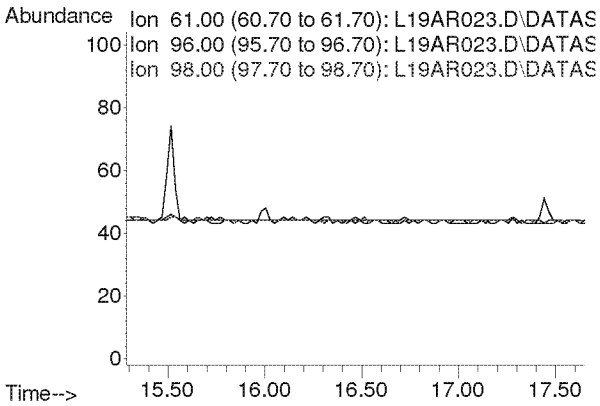


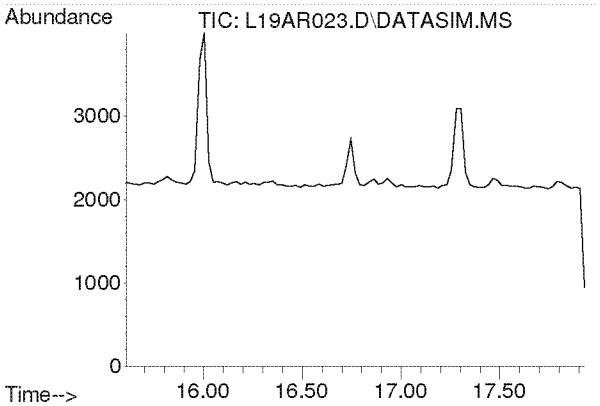
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.44 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.5
98	38.1



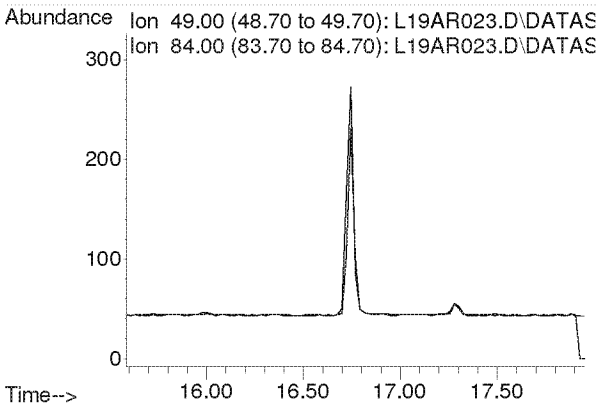


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

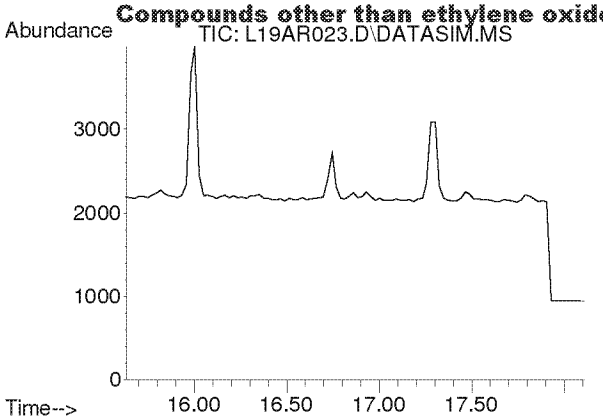
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.3



Compounds other than ethylene oxide were not quantitated.

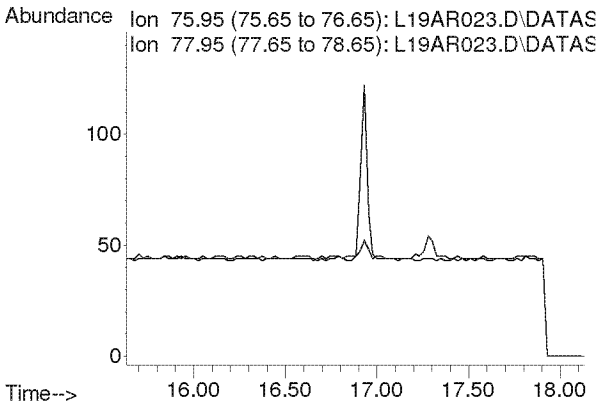


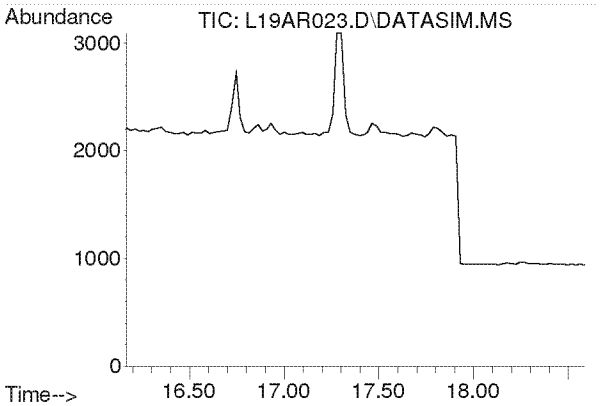
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.0



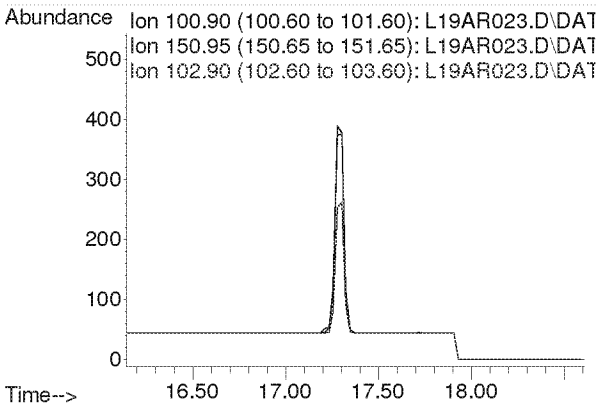


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.30 min

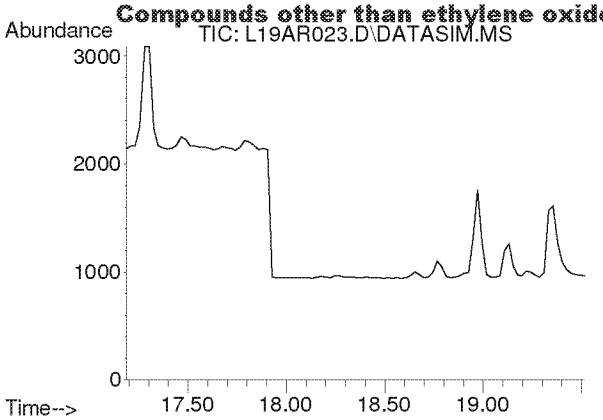
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.4
103	63.9



Compounds other than ethylene oxide were not quantitated.

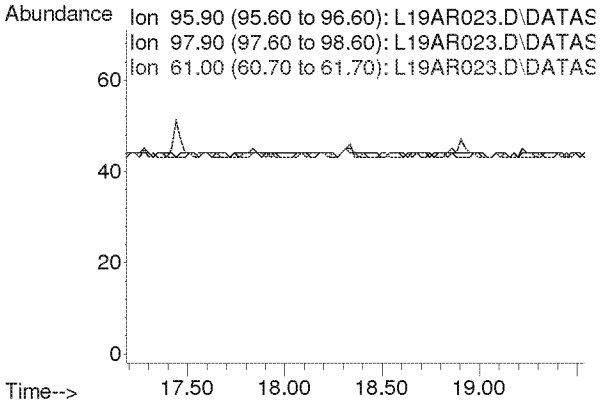


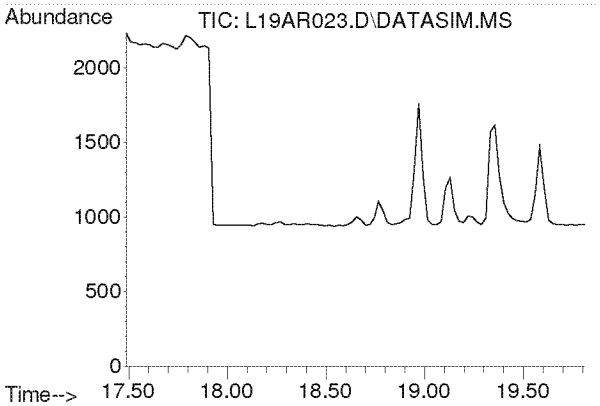
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.6
61	156.5



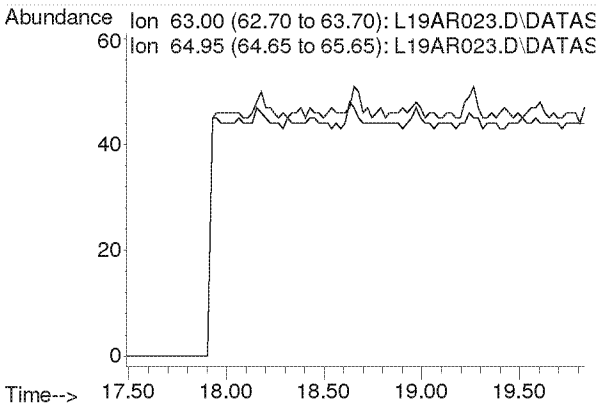


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

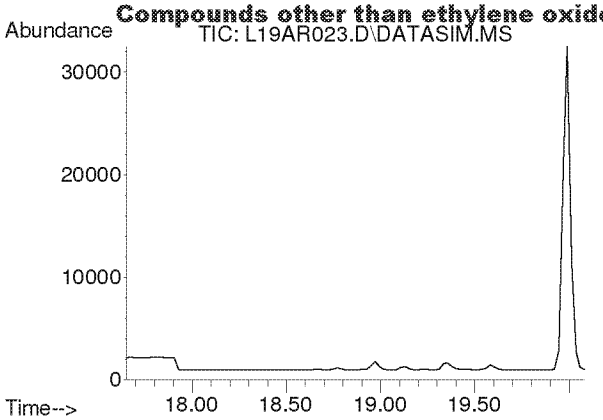
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

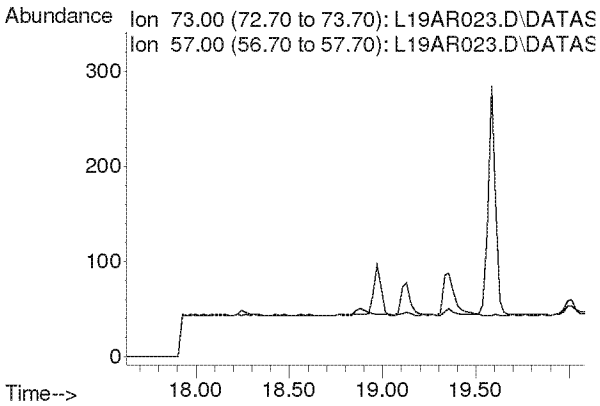


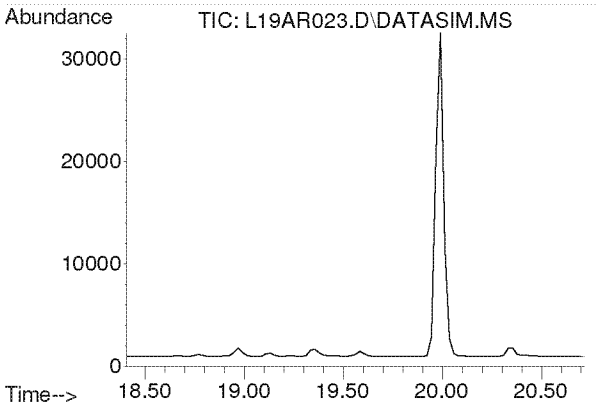
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.6



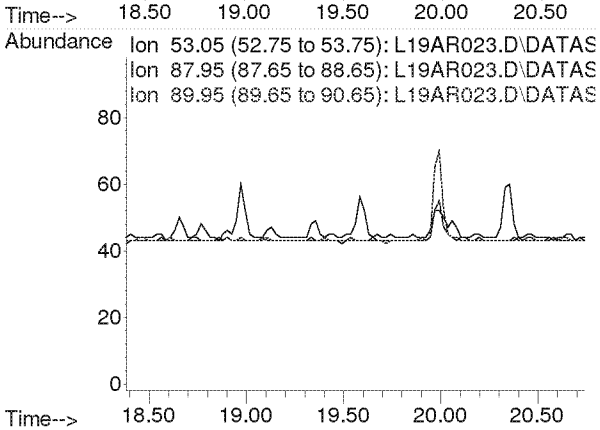


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

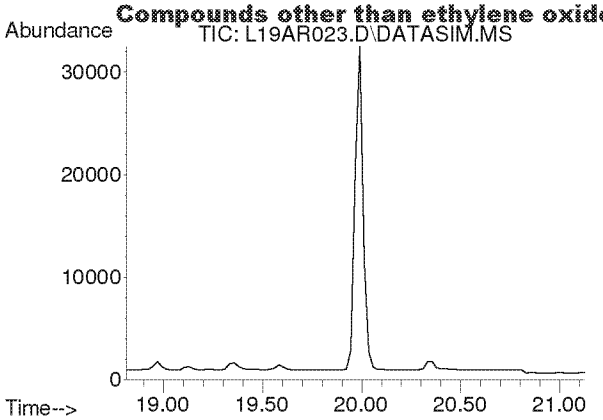
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	54.0
90	17.3



Compounds other than ethylene oxide were not quantitated.

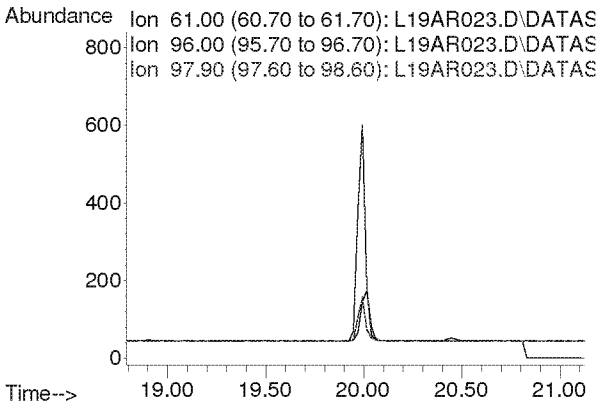


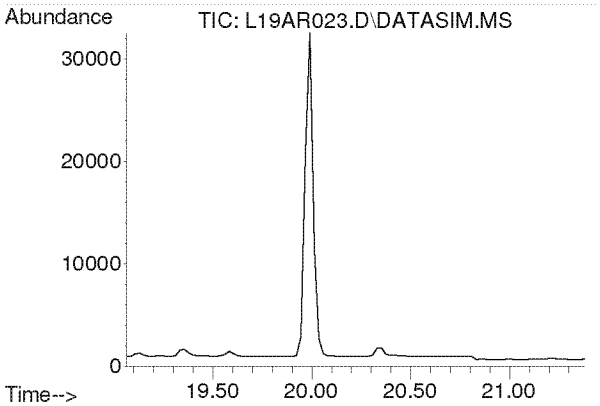
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	75.7
98	46.4



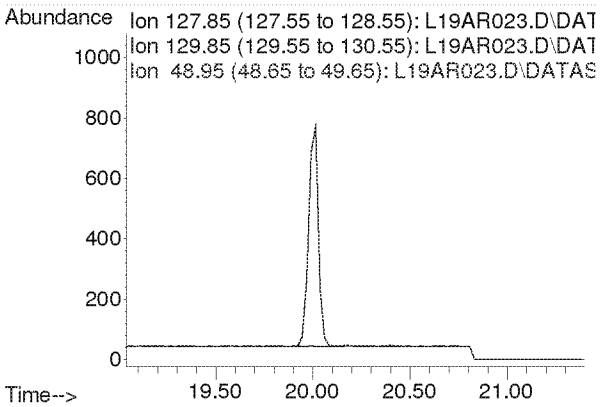


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.19 min

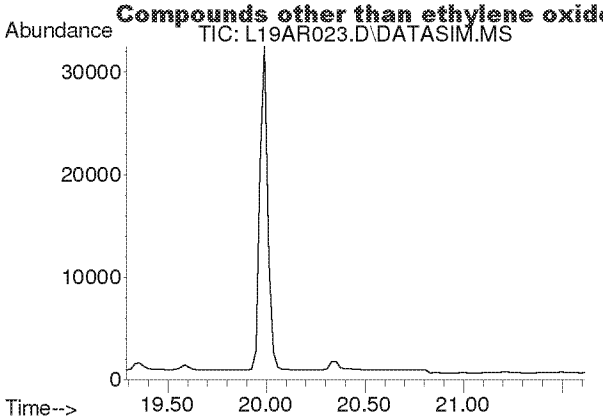
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	130.4
49	170.8



Compounds other than ethylene oxide were not quantitated.

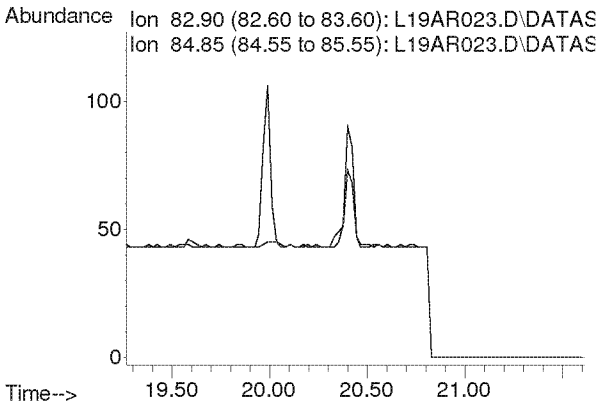


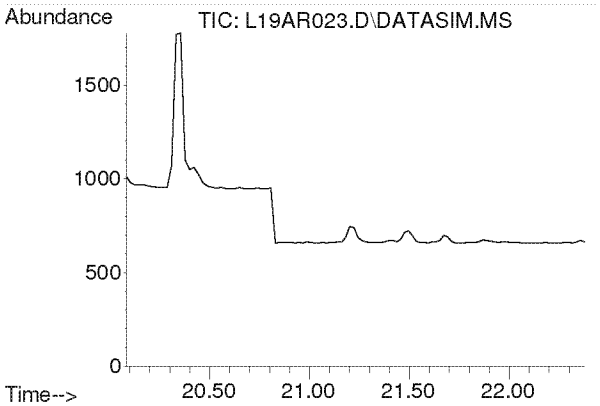
#26
Chloroform
Concen: N.D.
Expected RT: 20.42 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



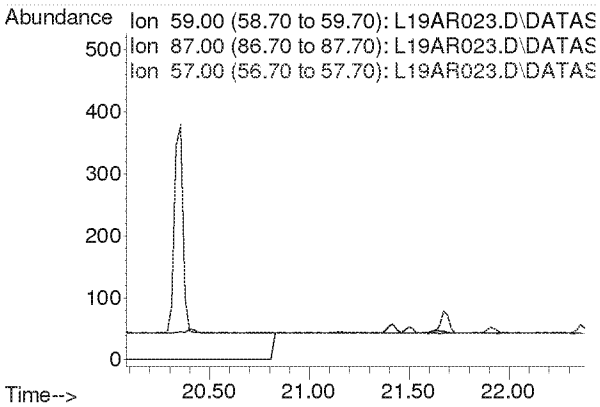


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

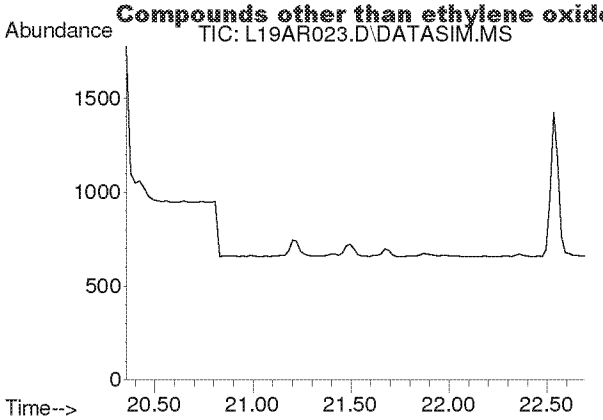
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.8
57	34.3



Compounds other than ethylene oxide were not quantitated.

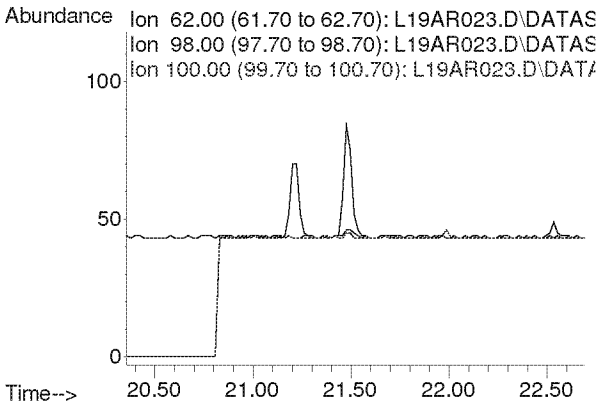


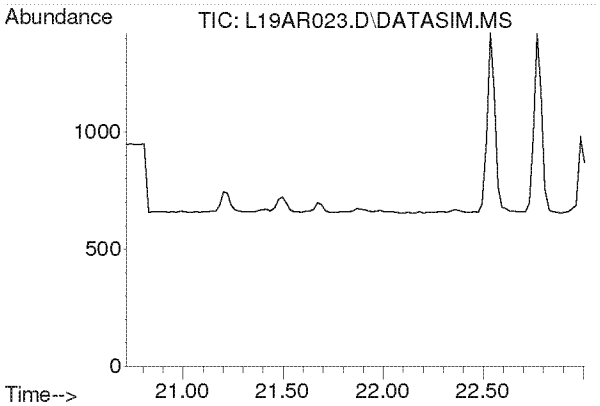
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.50 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.8
100	4.2



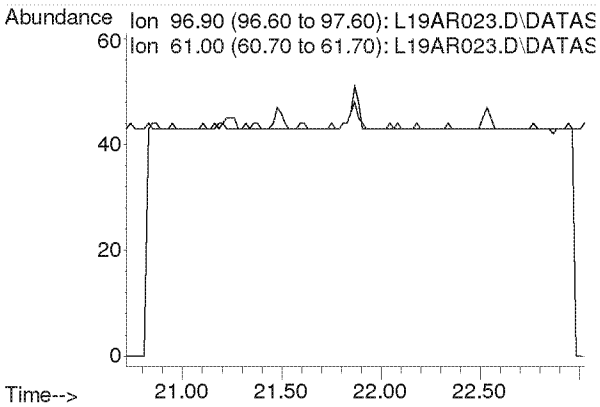


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

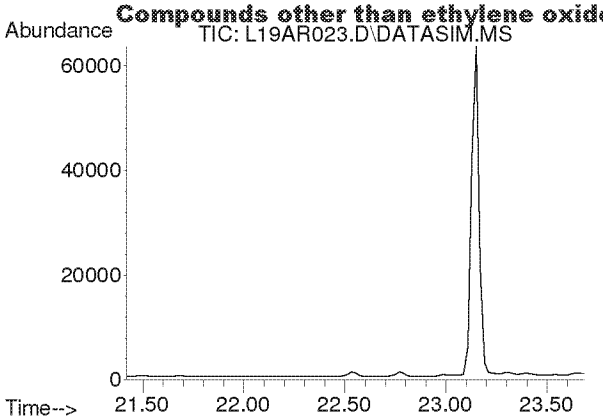
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	58.6



Compounds other than ethylene oxide were not quantitated.

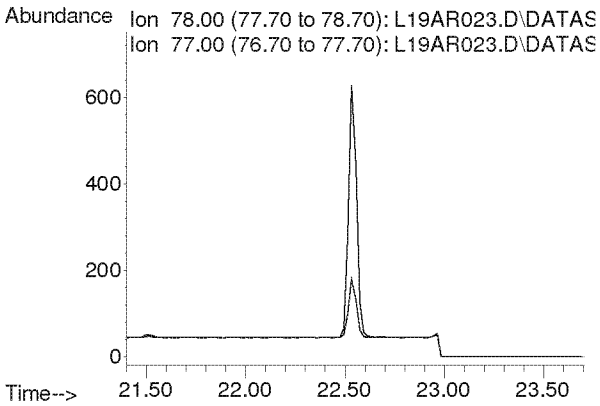


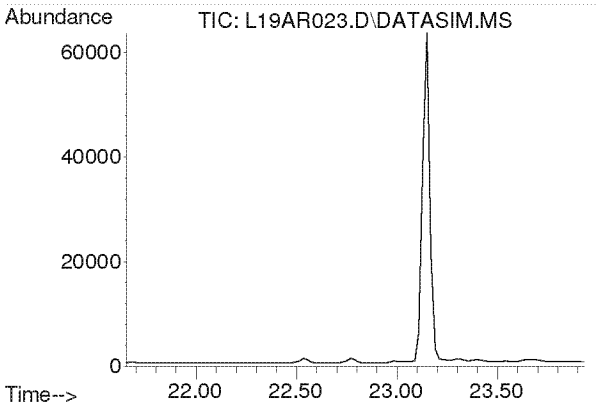
#31
Benzene
Concen: N.D.
Expected RT: 22.55 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.9



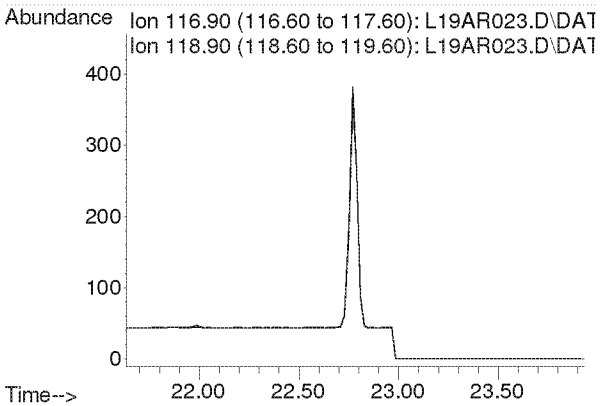


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.79 min

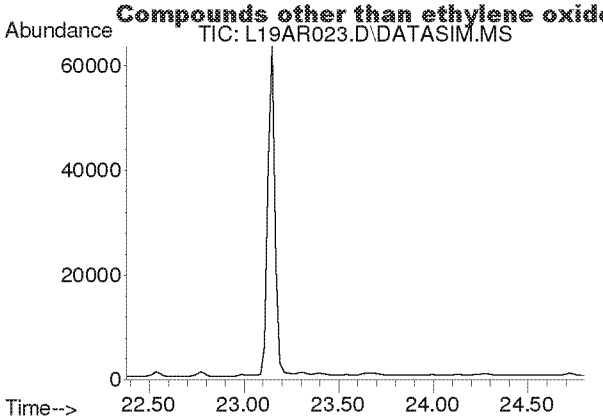
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

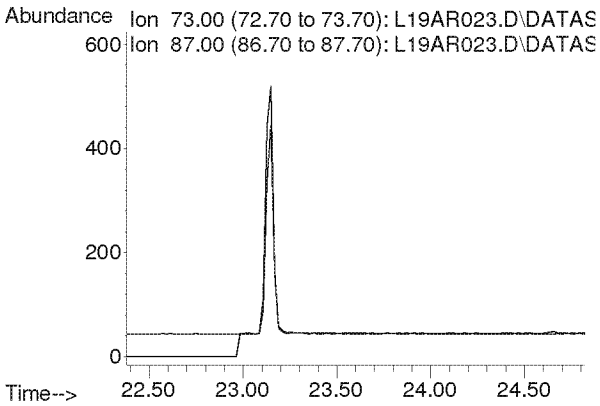


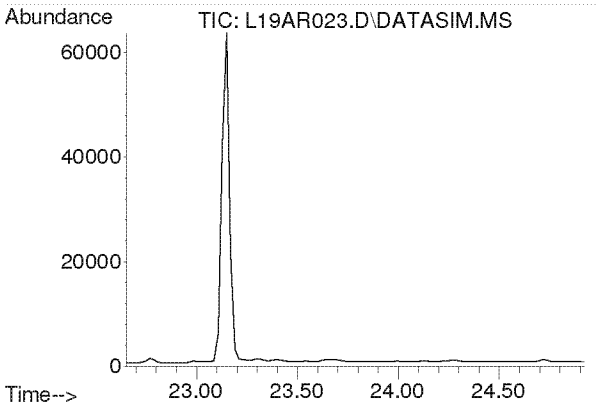
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.8



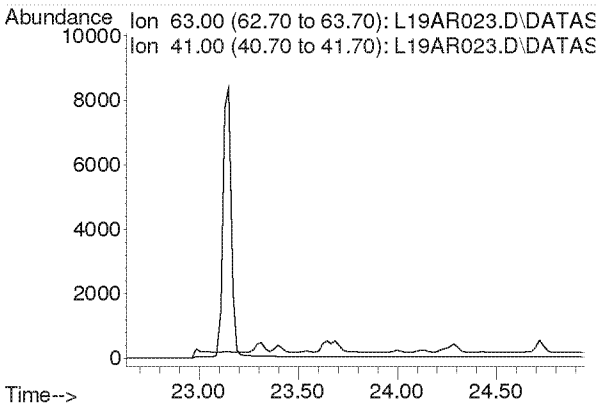


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

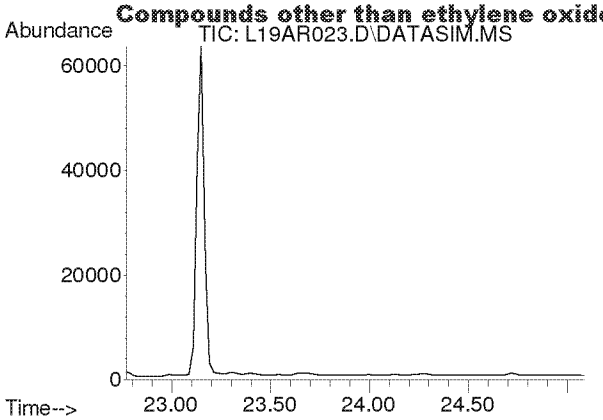
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	196.0



Compounds other than ethylene oxide were not quantitated.

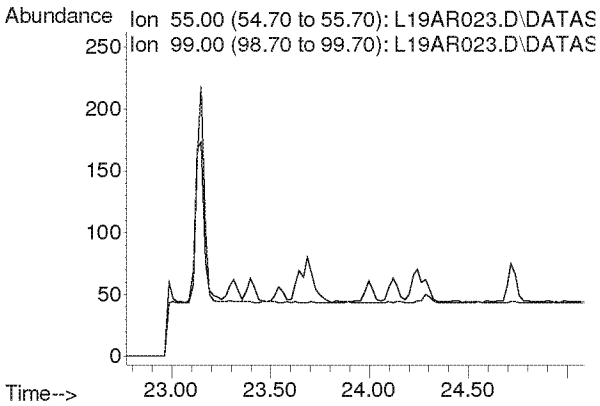


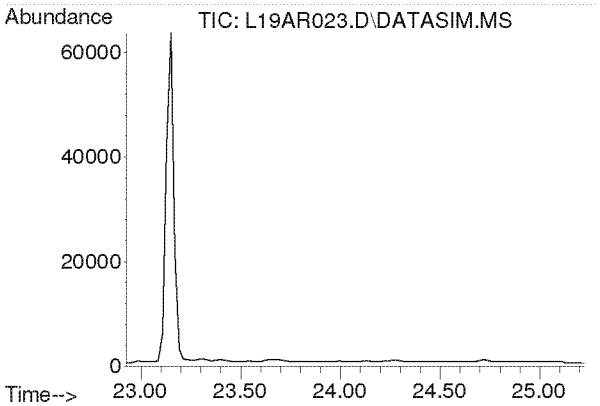
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.0



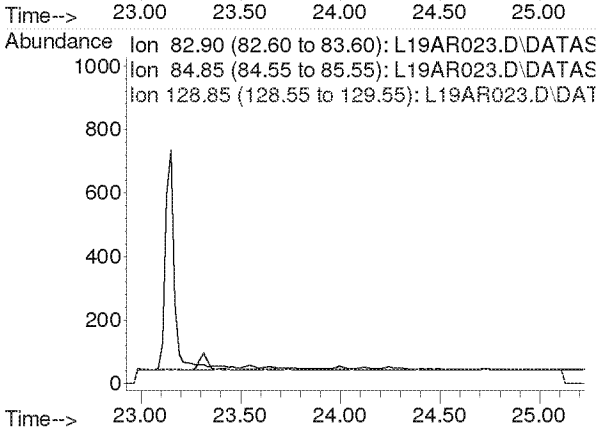


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

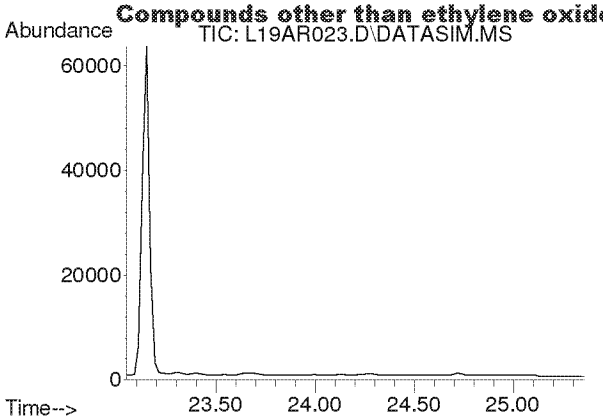
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9
129	12.5



Compounds other than ethylene oxide were not quantitated.

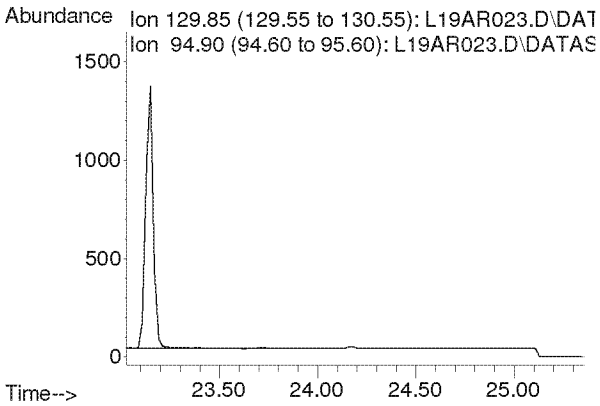


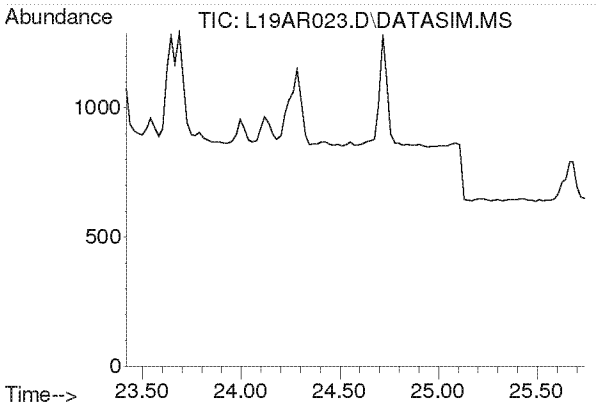
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	108.6



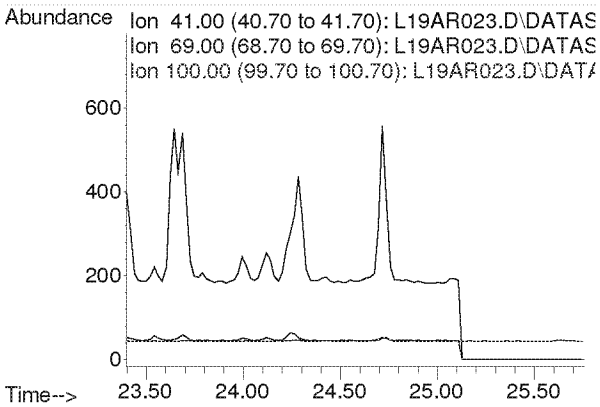


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.55 min

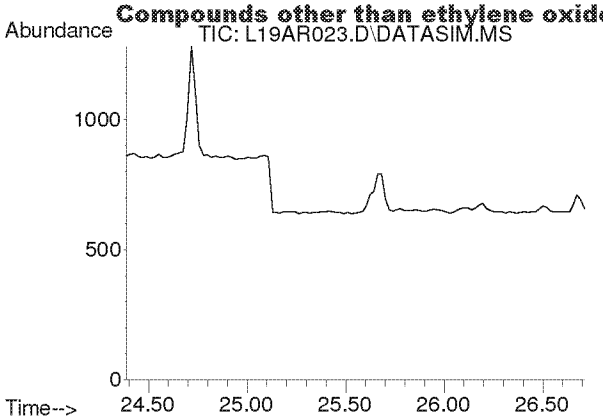
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	20.7
100	5.3



Compounds other than ethylene oxide were not quantitated.

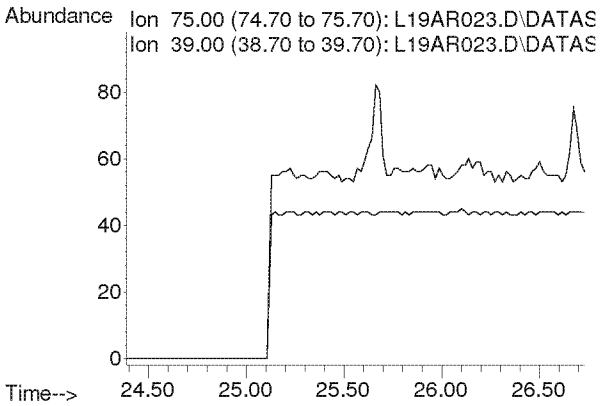


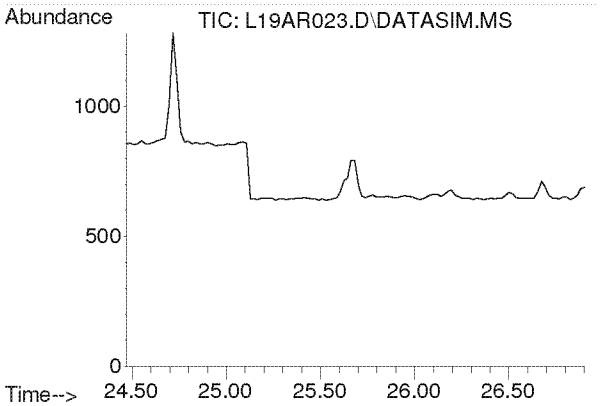
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.3



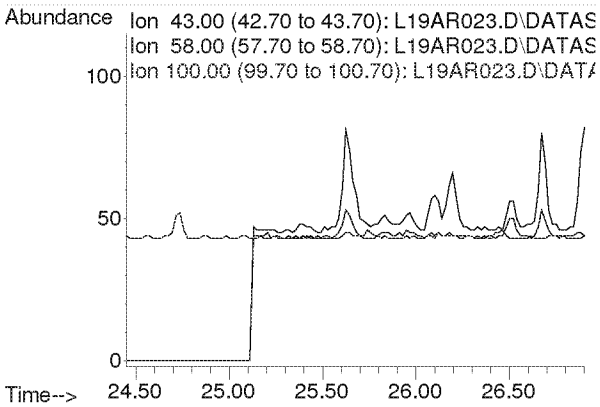


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

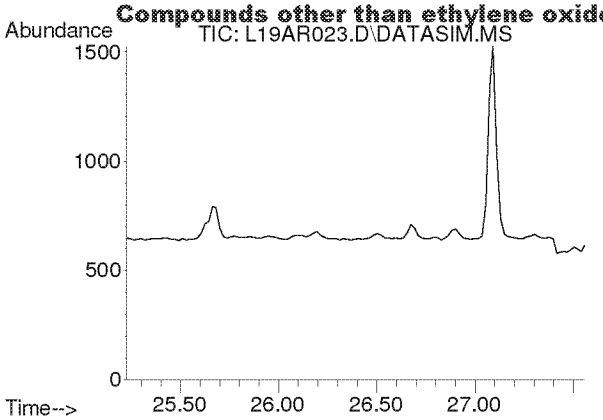
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.5
100	8.1



Compounds other than ethylene oxide were not quantitated.

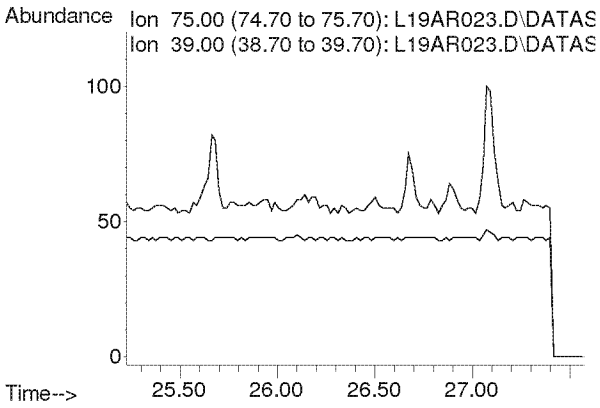


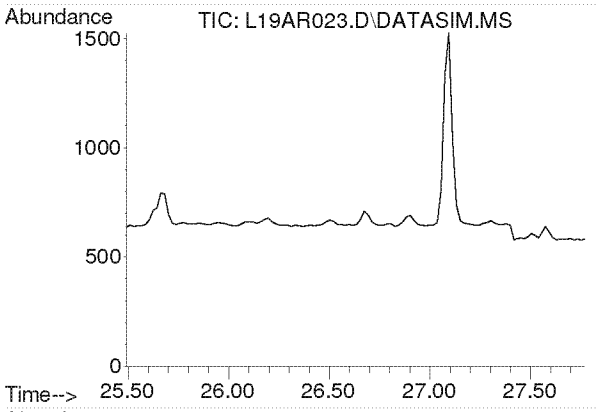
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	48.8



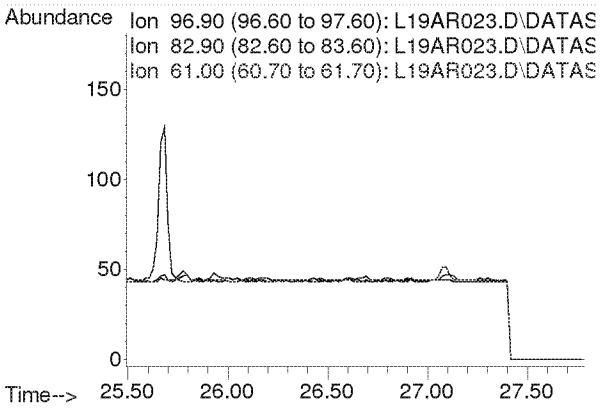


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.63 min

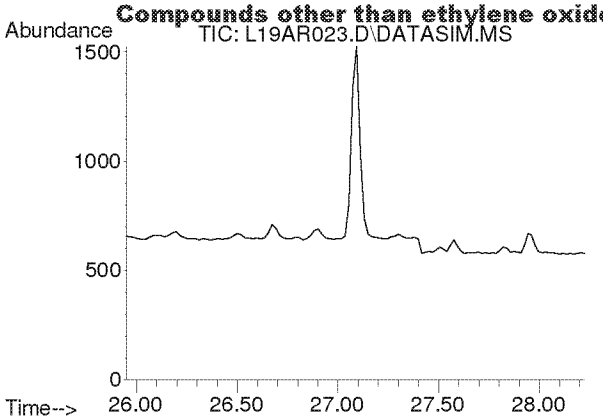
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.6
61	61.4



Compounds other than ethylene oxide were not quantitated.

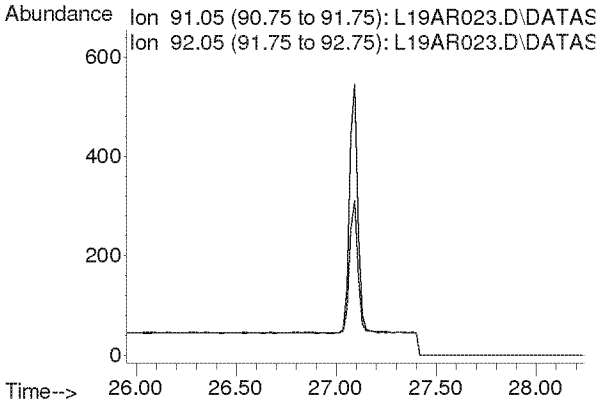


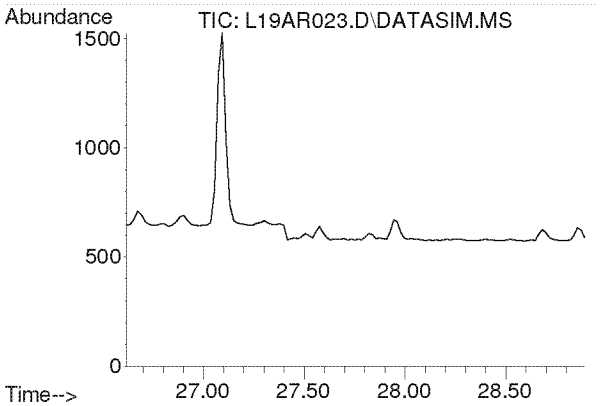
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



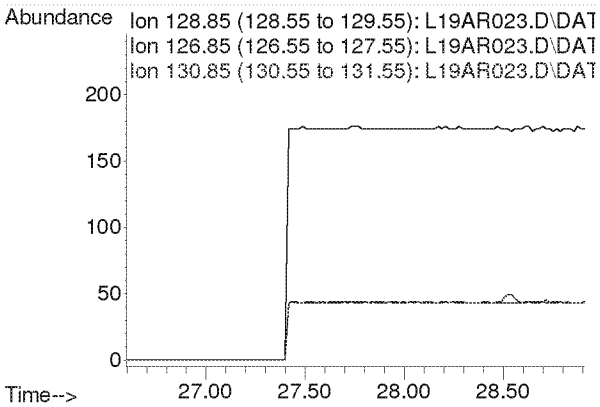


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

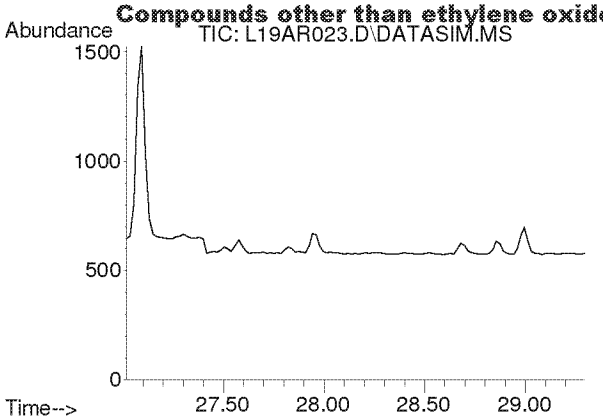
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

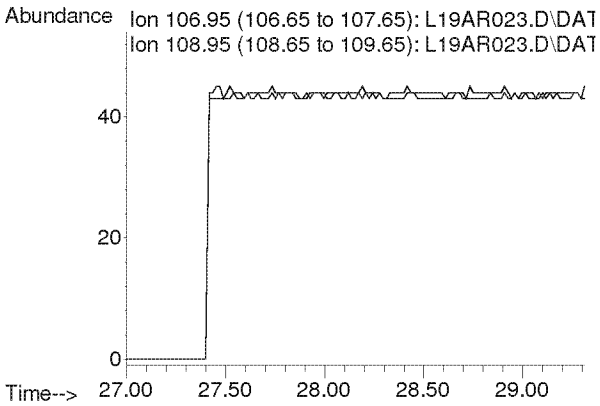


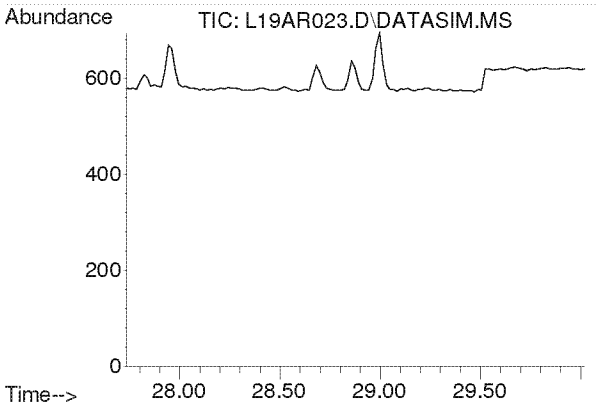
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.3



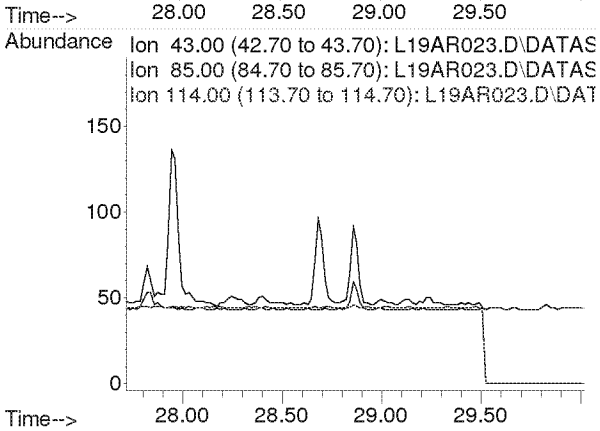


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

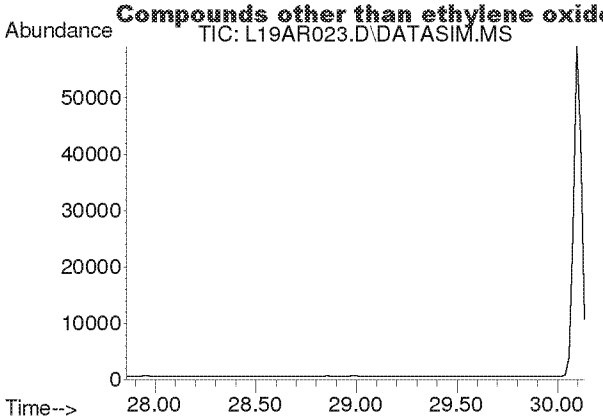
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.6
114	2.3



Compounds other than ethylene oxide were not quantitated.

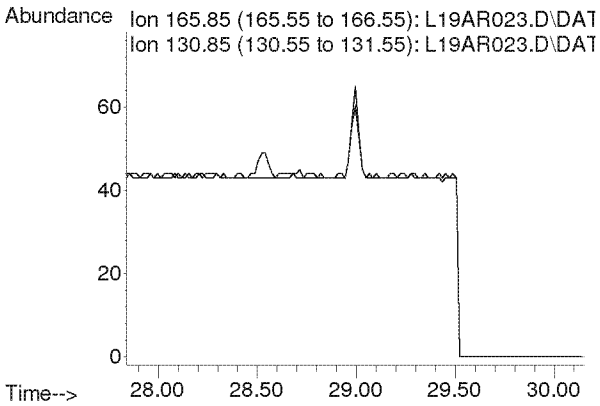


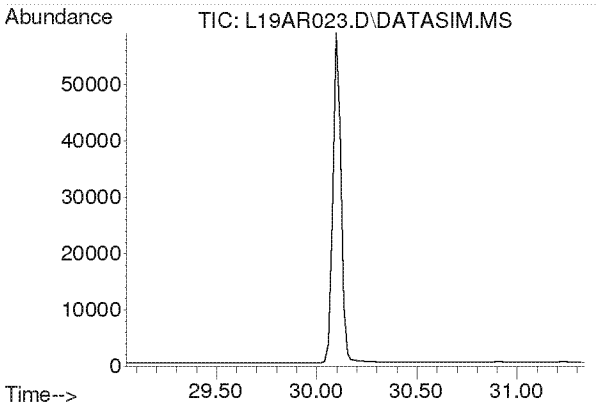
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



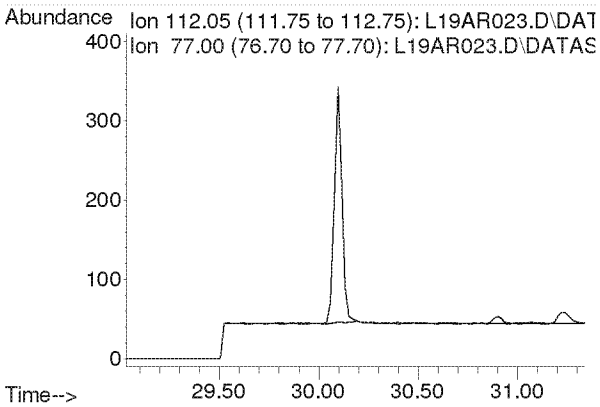


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

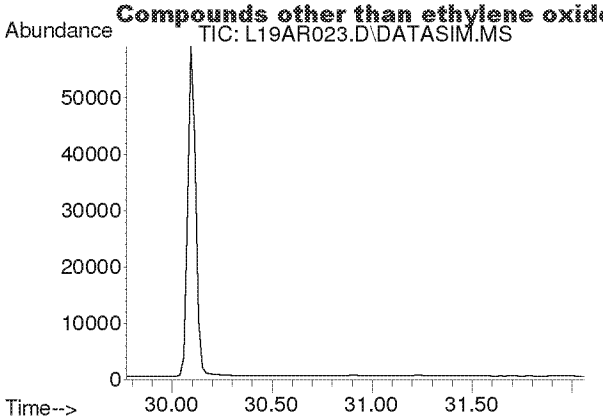
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	61.2



Compounds other than ethylene oxide were not quantitated.

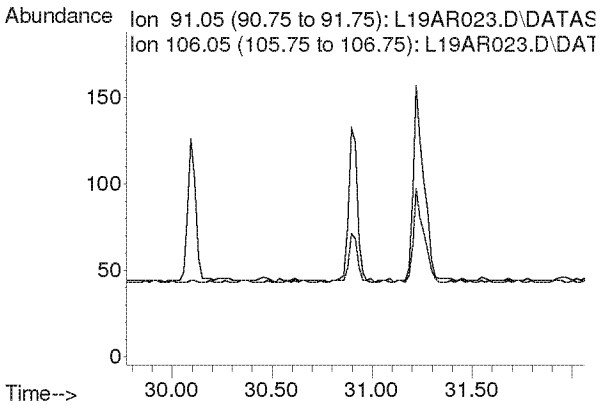


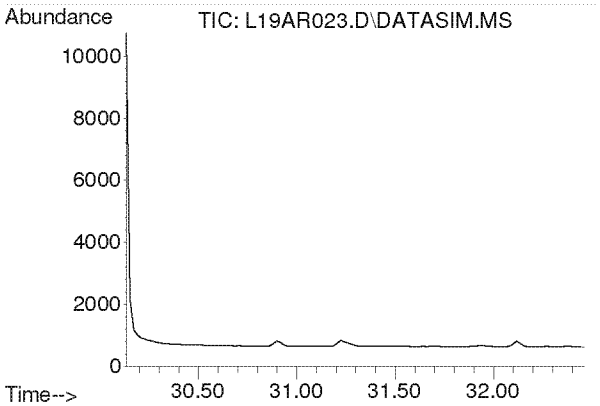
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.7



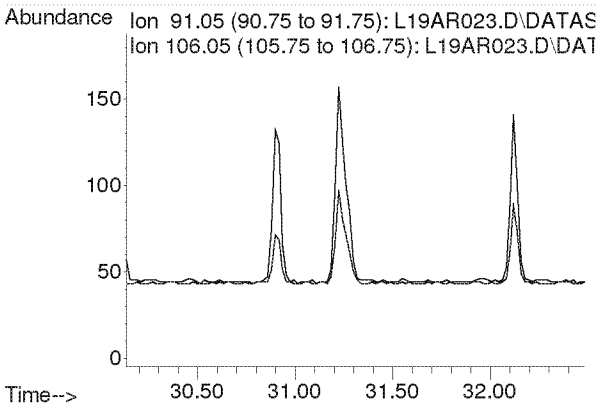


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

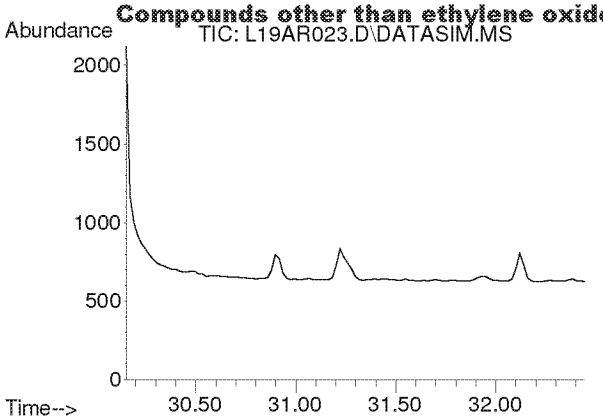
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.6



Compounds other than ethylene oxide were not quantitated.

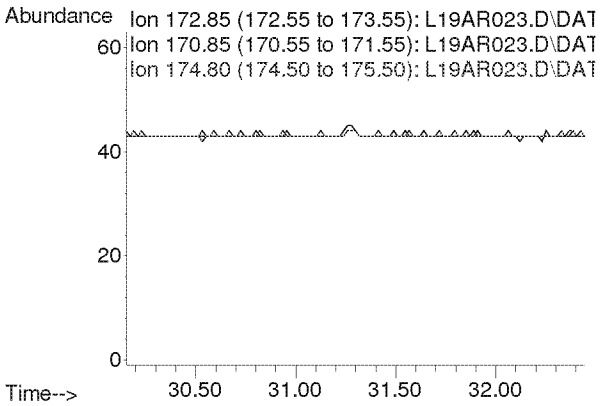


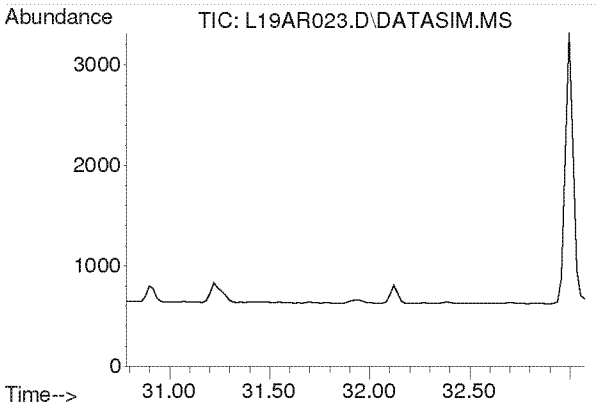
#52
Bromoform
Concen: N.D.
Expected RT: 31.30 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.4
175	48.9



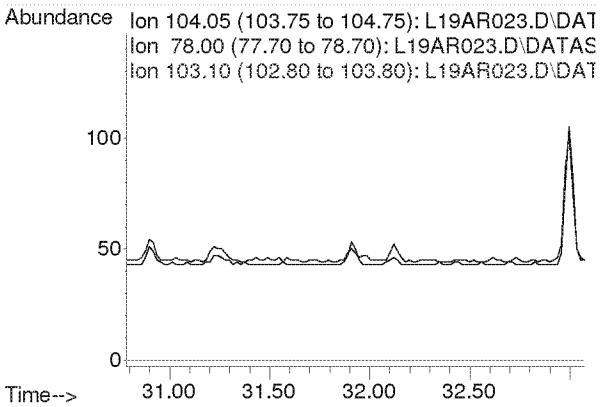


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

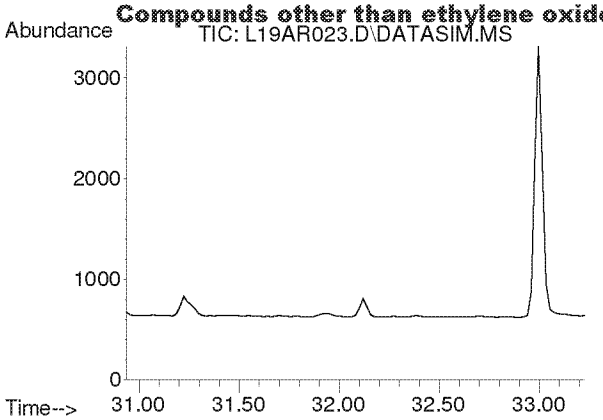
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.8
103	0.0



Compounds other than ethylene oxide were not quantitated.

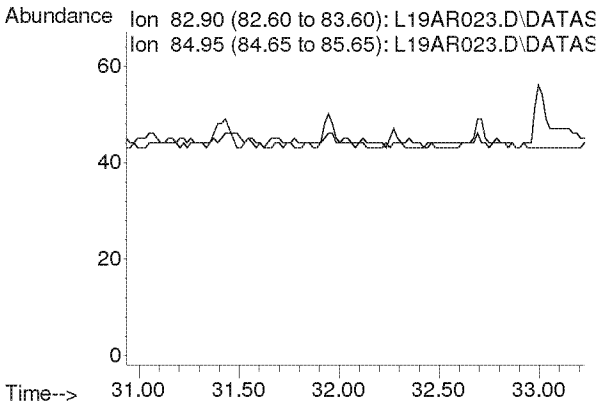


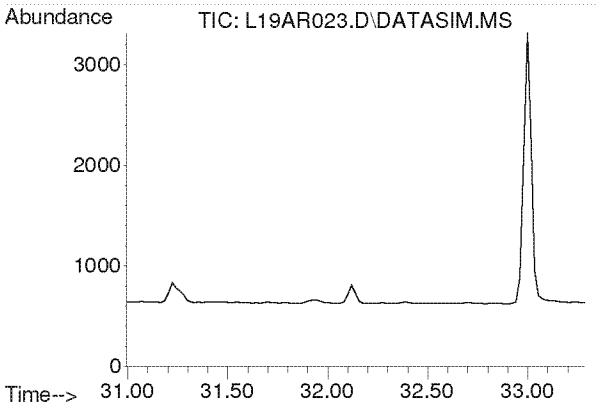
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0



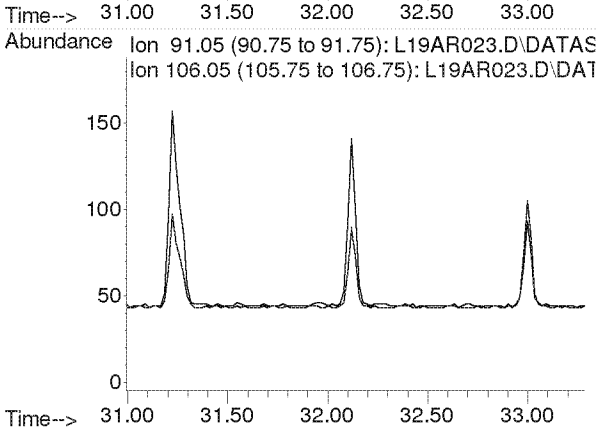


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

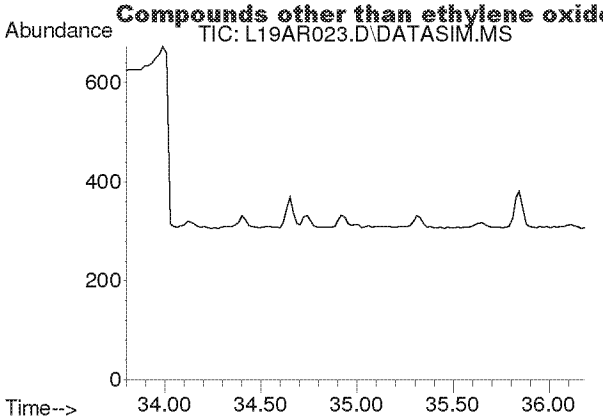
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.8



Compounds other than ethylene oxide were not quantitated.

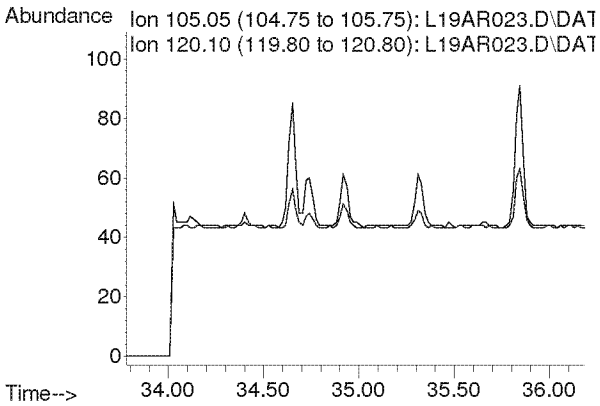


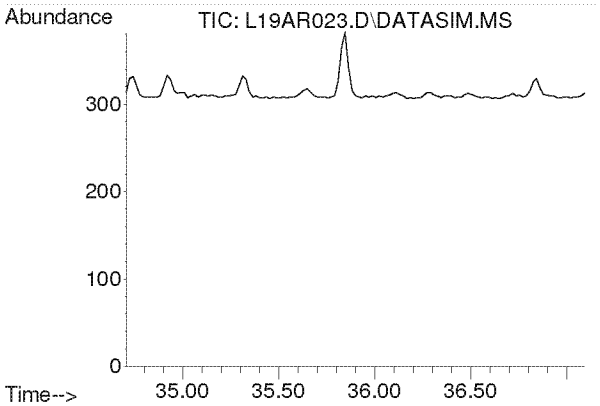
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



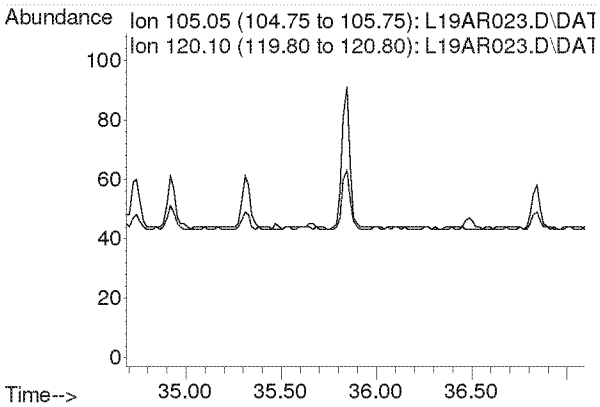


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

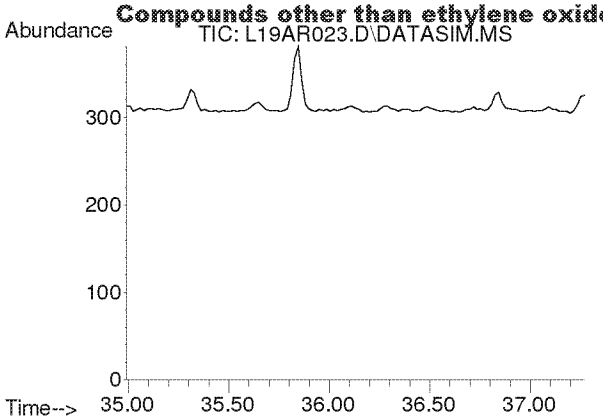
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.9



Compounds other than ethylene oxide were not quantitated.

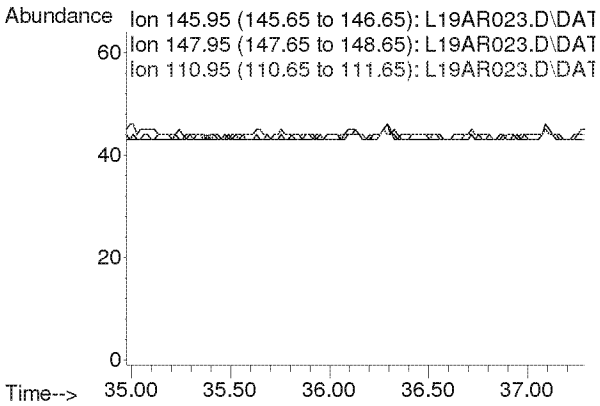


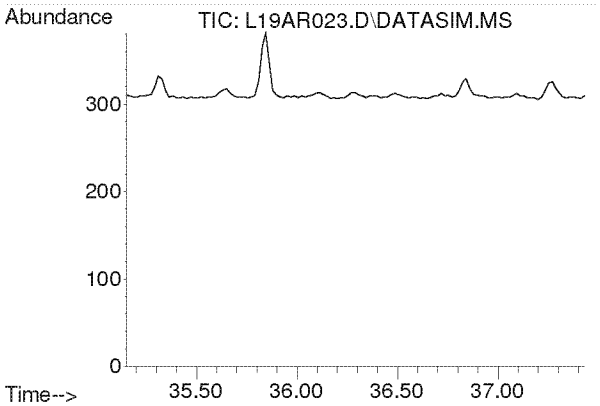
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.5



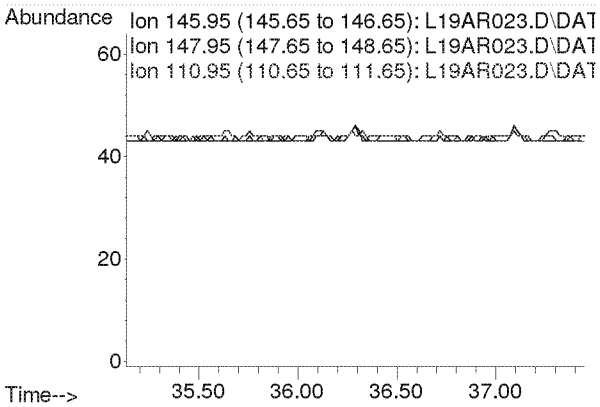


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

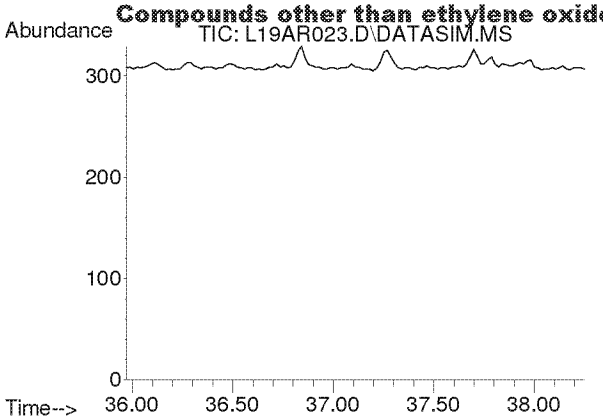
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	63.9
111	39.3



Compounds other than ethylene oxide were not quantitated.

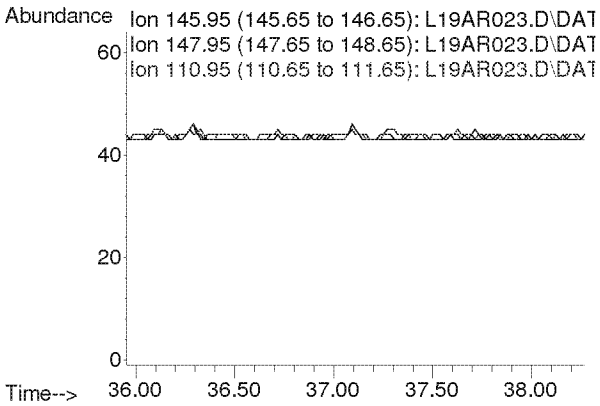


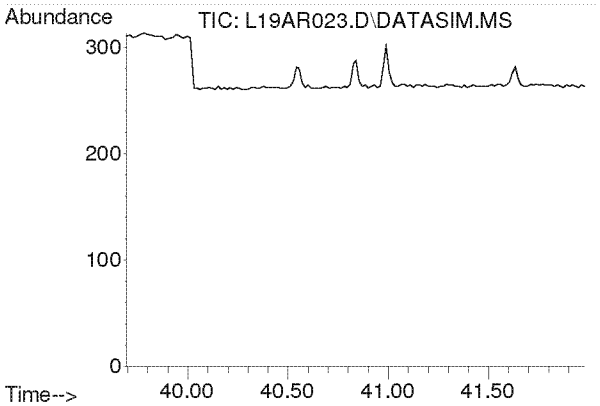
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.7



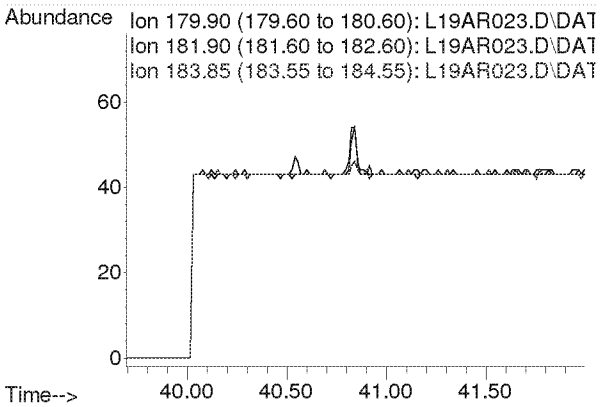


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

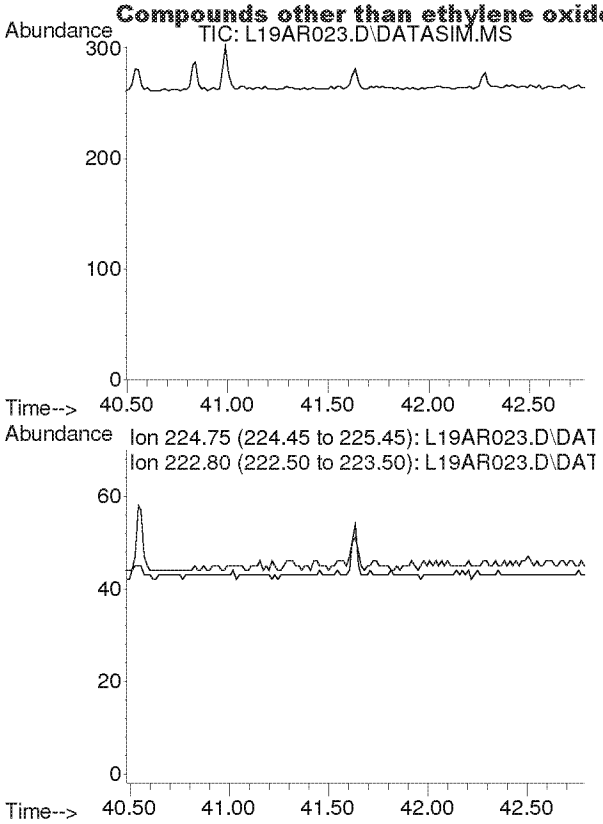
Lab File: L19AR023.D
Acq: 19 Jan 2019 9:56 am

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: L19AR023.D
Acq: 19 Jan 2019 9:56 am

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B9A1806

Eastern Research Group

Matrix: Air **Prepared using: Air Toxics - Summa Canister Prep** **rinted: 1/31/2019 11:37:24AM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments
9011118-09 *TO-15 2019*	01/14/19 08:00	250	250	ERG			
9011118-10 *TO-15 2019*	01/14/19 08:00	250	250	ERG			
9011118-11 *TO-15 2019*	01/14/19 08:00	250	250	ERG			
9011118-12 *TO-15 2019*	01/14/19 08:00	250	250	ERG			
9011527-01 *TO-15 2019*	01/13/19 09:29	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-02 *TO-15 2019*	01/13/19 09:29	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-03 *TO-15 2019*	01/13/19 10:22	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-04 *TO-15 2019*	01/13/19 09:38	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-05 *TO-15 2019*	01/13/19 09:55	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-06 *TO-15 2019*	01/13/19 10:14	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-07 *TO-15 2019*	01/13/19 09:23	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-08 *TO-15 2019*	01/13/19 09:46	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011527-09 *TO-15 2019*	01/13/19 10:31	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only
9011701-01 *TO-15 2019*	01/16/19 10:27	250	250	U.S. Environmental Protection Agency - OAQPS	Ethylene Oxide only		Ethylene Oxide only

Spiking Witnessed By Date

Randy Bowe 1/31/19

Preparation Reviewed By Date

Extracts Received By Date

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B9A1806

Eastern Research Group

Matrix: Air **Prepared using: Air Toxics - Summa Canister Prep** **Printed: 1/31/2019 11:37:24AM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments	
9011701-02 *TO-15 2019*	01/16/19 10:07	250	250	U.S. Environmental Protection Agency - OAQPS		Ethylene Oxide only		Ethylene Oxide only
9011701-03 *TO-15 2019*	01/16/19 10:45	250	250	U.S. Environmental Protection Agency - OAQPS		Ethylene Oxide only		Ethylene Oxide only
B9A1806-BLK1	01/14/19 08:00	250	250					
B9A1806-DUP1	01/13/19 09:29	250	250		9011527-01			
B9A1806-DUP2	01/13/19 09:29	250	250		9011527-02			

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

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 # 9011527.01

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: WB Village Hall
Canister Number: S142
City/State: W Hollywood, IL
Lab Initial Can. Press. ("Hg): 30.0
AQS Code:
Cleaning Batch # : HI-533
Collection Date: 1/12/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): Y
TOXICS (Y/N): Y
Duplicate Can # : SAT061
METHANE (Y/N):
Relinquished by: RUB
Date: 1/7/19

Field Setup

Received by: C. Cummings
Date: 1/12/19
Operator: C. Cummings
MFC Setting:
System #: 10313
Elapsed Timer Reset (Y/N):
Setup Date: 1/12/19
Canister Valve Opened (Y/N): Y @ 09:27
Field Initial Can. Press.: -29.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19
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): Y @ 09:29
Relinquished by: C. Cummings
Date: 1/13/19

Lab Recovery

Received by: NC
Date: 1/15/19
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 -29.5 09:16, -29 @ 09:21
Field Setup: 30°F [illegible]
Field Recovery: 29°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 # 901152702

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: WB Village Hall Duplicate

Canister Number: SAT061

City/State: Willowbrook, IL

Lab Initial Can. Press. ("Hg): 30.0

AQS Code:

Cleaning Batch # : H1-533

Collection Date: 1/12/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): y

TOXICS (Y/N): y

Duplicate Can # : 5143

METHANE (Y/N):

Relinquished by: [illegible]

Date: 1/7/19

Field Setup

Received by: C. Cummings

Date: 1/12/19

Operator: C. Cummings

MFC Setting:

System #: 103

Elapsed Timer Reset (Y/N):

Setup Date: 1/12/19

Canister Valve Opened (Y/N): y @ 09:37

Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19

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 @ 09:29

Relinquished by: C. Cummings

Date: 1/13/19

Lab Recovery

Received by: LR

Date: 1/15/19

Lab Final Can. Press.: 3.5 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

2nd leak check after tightening fitting

Comments: Leak Check [illegible], -28@ 09:21, -30@ 09:22, -31.5@09:27

Field Setup: 30°F snow

Field Recovery: 29°F

mst

White: Sample Traveler

Canary: Lab Copy

Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 901152703

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: Cover ES
Canister Number: A21054
City/State: Wilsbrook, IL
Lab Initial Can. Press. ("Hg): 30.0
AQS Code:
Cleaning Batch # : H1 - 533
Collection Date: 1/12/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/9/19

Field Setup

Received by: C. Cummings
Date: 1/12/19
Operator: C. Cummings
MFC Setting:
System #: 10293
Elapsed Timer Reset (Y/N):
Setup Date: 1/12/19
Canister Valve Opened (Y/N): Y @ 10:22
Field Initial Can. Press.: -28.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19
Sample Duration (3 or 24 hr): 24
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: -4.5 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:22
Relinquished by: C. Cummings
Date: 1/13/19

Lab Recovery

Received by: LR
Date: 1/15/19
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 @ 10:24 -28.5 @ 10:29
Field Setup: 30°F SNOW
Field Recovery: 29°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 # 9011527-04

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Gower MS

Canister Number: 19666

City/State: Burr Ridge

Lab Initial Can. Press. ("Hg): 30.0

AQS Code:

Cleaning Batch # : H1-533

Collection Date: 1/12/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): N

TOXICS (Y/N): y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/7/19

Field Setup

Received by: C. Cummings

Date: 1/14/19

Operator: C. Cummings

MFC Setting:

System #: 6311

Elapsed Timer Reset (Y/N):

Setup Date: 1/13/19

Canister Valve Opened (Y/N): y @ 09:39

Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: -5.5 psig psia "Hg (Circle one)

Status: VALID VOID (Circle one)

Canister Valve Closed (Y/N): y @ 09:39

Relinquished by: C. Cummings

Date: 1/13/19

Lab Recovery

Received by: KK

Date: 1/15/19

Lab Final Can. Press.: 3 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 @ 09:34, -30 @ 09:39

Field Setup: 30°F Snow

Field Recovery: 29°F

MJC

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 # 9011527-05

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Willow Pond Park
Canister Number: 19645
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 30.0
AQS Code:
Cleaning Batch # : H1-533
Collection Date: 1/12/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RUB
Date: 1/7/19

Field Setup

Received by: C. Cummings
Date: 1/12/19
Operator: C. Cummings
MFC Setting:
System #: 10294
Elapsed Timer Reset (Y/N):
Setup Date: 1/12/19
Canister Valve Opened (Y/N): Y @ 10:03
Field Initial Can. Press.: -29.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19
Sample Duration (3 or 24 hr): 24
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: -4.5 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 09:55
Relinquished by: C. Cummings
Date: 1/13/19

Lab Recovery

Received by: KR
Date: 1/15/19
Lab Final Can. Press.: 3.5 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 -29.5 @ 09:58 | -29.5 @ 10:03
Field Setup 30°F snow
Field Recovery 29°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 # 901152706

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Hinsdale S High School

Canister Number: SAT170

City/State: Darien IL

Lab Initial Can. Press. ("Hg): 30.0

AQS Code:

Cleaning Batch # : H1-533

Collection Date: 1/12/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): N

TOXICS (Y/N): Y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/7/19

Field Setup

Received by: C. Cummings

Date: 1/12/19

Operator: C. Cummings

MFC Setting:

System #: 10076

Elapsed Timer Reset (Y/N):

Setup Date: 1/12/19

Canister Valve Opened (Y/N): ye 10:17

Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: -5.5 psig psia "Hg (Circle one)

Status: VALID VOID (Circle one)

Canister Valve Closed (Y/N): y @ 10:14

Relinquished by: C. Cummings

Date: 1/13/19

Lab Recovery

Received by: KR

Date: 1/15/19

Lab Final Can. Press.: 3 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 @ 10:12 -29 @ 10:17

Field Setup: 30°F snow

Field Recovery: 29°F

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 # 901152707

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: EPA WB Warehouse

Canister Number: 19665

City/State: Willowbrook, IL

Lab Initial Can. Press. ("Hg): 30.0

AQS Code:

Cleaning Batch # : H1-533

Collection Date: 1/12/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): N

TOXICS (Y/N): Y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/7/19

Field Setup

Received by: C. Cummings

Date: 1/12/19

Operator: C. Cummings

MFC Setting:

System #: 10314

Elapsed Timer Reset (Y/N):

Setup Date: 1/12/19

Canister Valve Opened (Y/N): Y @ 09:11

Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19

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): Y @ 09:23

Relinquished by: C. Cummings

Date: 1/13/19

Lab Recovery

Received by: KR

Date: 1/15/19

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: Lab Check: -30 @ 09:05, -29.5 @ 09:10

Field Setup: 30°F snow

Field Recovery: 29°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 # 9011527-08

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Watertower
Canister Number: SAT012
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 30.0
AQS Code:
Cleaning Batch # : H1-533
Collection Date: 1/12/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/7/19

Field Setup

Received by: C. Cummings
Date: 1/12/19
Operator: C. Cummings
MFC Setting:
System #: 10312
Elapsed Timer Reset (Y/N):
Setup Date: 1/12/19
Canister Valve Opened (Y/N): y @ 09:52
Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19
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 @ 09:46
Relinquished by: C. Cummings
Date: 1/13/19

Lab Recovery

Received by: LC
Date: 1/15/19
Lab Final Can. Press.: 3 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 @ 09:46 -29.95 09:52
Field Setup 30°F snow
Field ~~Setup~~ Recovery 29°F
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 # 9011527-09

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: West Neighborhood
Canister Number: SAT145
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 30.0
AQS Code:
Cleaning Batch # : H1-533
Collection Date: 1/12/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/7/19

Field Setup

Received by: C. Cummings
Date: 1/12/19
Operator: C. Cummings
MFC Setting:
System #: 10310
Elapsed Timer Reset (Y/N):
Setup Date: 1/12/19
Canister Valve Opened (Y/N): Y @ 10:40
Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/13/19
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 @ 10:31
Relinquished by: C. Cummings
Date: 1/13/19

Lab Recovery

Received by: KC
Date: 1/15/19
Lab Final Can. Press.: 3.5 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 -29 @ 10:35, -29 @ 10:40
Field setup: 30°F SNOW Slight Metallic Smell [illegible]
Field Recovery: 29°F
MSC ✓

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 # 9011701-01

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Hinsdale S. Highschool

Canister Number: A21119

City/State: Dover, IL

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H2-534

Collection Date: 1/15/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): N

TOXICS (Y/N): y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: RMB

Date: 1/9/19

Field Setup

Received by: C. Cummings

Date: 1/15/19

Operator: C. Cummings

MFC Setting:

System #: 10076

Elapsed Timer Reset (Y/N):

Setup Date: 1/15/19

Canister Valve Opened (Y/N): y @ 10:39

Field Initial Can. Press.: -28.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/16/19

Sample Duration (3 or 24 hr): 24

Operator: C. Cummings

Elapsed Time:

Field Final Can. Press.: [illegible].5 psig psia "Hg (Circle one)

Status: VALID VOID (Circle one)

Canister Valve Closed (Y/N): y @ 10:27

Relinquished by: C. Cummings

Date: 1/16/19

Lab Recovery

Received by: RB

Date: 1/17/19

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" Hg @ 10:33, -28 "Hg @ 10:39

Field Setup: 28°F

Field Recovery: 32°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 # 901701-02

601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Waterlower

Canister Number: 171

City/State: Willowbrook, IL

Lab Initial Can. Press. ("Hg): 29.7

AQS Code:

Cleaning Batch # : H2-534

Collection Date: 1/15/19

Date Can. Cleaned: 1/3/19

Options:

SNMOC (Y/N):

Duplicate Event (Y/N): N

TOXICS (Y/N): Y

Duplicate Can # :

METHANE (Y/N):

Relinquished by: KMB

Date: 1/9/19

Field Setup

Received by: C. Cummings

Date: 1/15/19

Operator: C. Cummings

MFC Setting:

System #: 10312

Elapsed Timer Reset (Y/N):

Setup Date: 1/15/19

Canister Valve Opened (Y/N): yes 10:17

Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/16/19

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): yes

Relinquished by: C. Cummings

Date: 1/16/19

Lab Recovery

Received by: KB

Date: 1/17/19

Lab Final Can. Press.: 3.50 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"Hg @ 10:12am, -29"Hg @ 10:17am

Field Setup: 28°F

Field Recovery: 32°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 # 901701-03

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: West Neighborhood
Canister Number: 707
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : HZ-534
Collection Date: 1/15/19
Date Can. Cleaned: 1/3/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 1/9/19

Field Setup

Received by: C. Cummings
Date: 1/15/19
Operator: C. Cummings
MFC Setting:
System #: 10310
Elapsed Timer Reset (Y/N):
Setup Date: 1/15/19
Canister Valve Opened (Y/N): y @ 11:00
Field Initial Can. Press.: -28.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 1/16/19
Sample Duration (3 or 24 hr): 24
Operator: C. Cummings
Elapsed Time:
Field Final Can. Press.: -3 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): y @ 10:45
Relinquished by: C. Cummings
Date: 1/16/19

Lab Recovery

Received by: KB
Date: 1/17/19
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: -28.5"Hg @ 10:55am, -28.5"Hg @ 11:00am
Field Setup: 28°F
Field Recovery: 32°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy