Compounds other than ethylene oxide were not quantitated.

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

Sequence ID: U9B! 1902076	**Instrument:** MS1	**Batch:** B9B2804
Cal Curve (Method): 9020003 qcw 3/6/19	**Analyst:** MAL	**Date Analyzed:** 2-28-19
10% Review Sample IDs: 9022616-11	**Reviewer:** G Nash	**Date:** 3/6/19
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	✓ 3-5-19	RMB 3/5/19	qcw 3/6/19		
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)	✓ 3-5-19	RMB 3/5/19	qcw 3/6/19		U9BL
ICV(LCS) Second source calibration verification check - immediately following ICAL	The response factor ≤ ±30% DEV from calibration curve average response factor	✓ 3-5-19	RMB 3/5/19	qcw 3/6/19		U9BL
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	✓ 3-5-19	RMB 3/5/19	qcw 3/6/19		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	✓ 3-5-19	RMB 3/5/19	qcw 3/6/19		

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	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		
Canister Cleaning Certification	<3xMDL or 0.2ppbv per VOC targeted compound, whichever is lower	✓	RMB 3/5/19	N/A		
Preconcentrator Leak Check	≤ ± 0.2 psi/min	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		
Samples/Internal Standard Check	IS area within ±40% and IS RT within ±0.33 min. of most recent initial calibration	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		
COC Included and filled out	Lab receipt acknowledged, LIMS number added to COC	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		
Manual Integration and peak deletion	Conforms with ERG-SOP-097 "Procedure for Manual Integration of Chromatographic Peaks"	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		
Manual Calculation Check	One compound manual check must agree with software generated result		RMB 3/5/19	gaw 3/6/19		9022016-11, EtO $\frac{234\ (4.77)}{4414\ 8\ (0.2728)}$ = 0.0947 ppbv
Qualifiers Check	Check to make sure LIMS data flags are correct	✓ 3-5-19	RMB 3/5/19	gaw 3/6/19		

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

L19B1002 ethylene oxide

$$\frac{5443 \times 4.77}{4766 \times 0.2728} = 1.99 \text{ ppbv}$$

Compounds other than ethylene oxide were not quantitated.

ANALYSIS SEQUENCE

1902076

Instrument: ERGMS#1

Calibnration ID: 9020003

Printed: 2/28/2019 3:30:13PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
1902076-CCV1	QC		1		9B27007	8L13002		
B9B2804-BLK1	QC		2			8L13002		
9022616-07	TO-15 2019	A	3			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
9022616-08	TO-15 2019	A	4			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
9022616-11	TO-15 2019	A	5			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
9022616-12	TO-15 2019	A	6			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
9022616-13	TO-15 2019	A	7			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
9022616-14	TO-15 2019	A	8			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
B9B2804-DUP1	QC		9			8L13002		

Sample Reviewed By ~2-28-19 Date Data Processed By ~3-5-19 Date

Compounds other than ethylene oxide were not quantitated.

Sequence Name: C:\msdchem\1\sequence\L19B!.s
Comment: ANALYZE 2/28/19,9020003 exp 5/13/19, L19B!
Operator: MAH
Data Path: C:\MSDCHEM\1\DATA\L19B!\
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	L19B!001	BFB	BFB
2)	Sample	2	L19B!002	9020003	1902076-CCV1
3)	Sample	3	L19B!003	9020003	B9B2805-CCV1
4)	Sample	4	L19B!004	BFB	FLUSH
5)	Sample	5	L19B!005	9020003	B9B2805-BLK1 /B9B2804-BLK1 RMB 3/5/19
6)	Sample	6	L19B!006	9020003	9022616-07
7)	Sample	7	L19B!007	9020003	9022616-08
8)	Sample	8	L19B!008	9020003	9022616-~~09~~ 11
9)	Sample	9	L19B!009	9020003	9022616-~~10~~ 12
10)	Sample	10	L19B!010	9020003	9022616-~~11~~ 13
11)	Sample	11	L19B!011	9020003	9022616-~~12~~ 14
12)	Sample	12	L19B!012	9020003	B9B2804-DUP1
13)	Sample	13	L19B!013	9020003	9022116-01
14)	Sample	14	L19B!014	9020003	9022114-01
15)	Sample	15	L19B!015	9020003	9022117-01
16)	Sample	16	L19B!016	9020003	9022633-02
17)	Sample	17	L19B!017	9020003	9022733-01 NOT USED
18)	Sample	18	L19B!018	9020003	9022634-01
19)	Sample	19	L19B!019	9020003	9022633-01
20)	Sample	20	L19B!020	9020003	B9B2805-DUP1
21)	Sample	21	L19B!021	9020003	9022733-01
22)	Sample	22	L19B!022	9020003	B9B2805-MRL1
23)	Sample	23	L19B!023	9020003	B9B2805-MRL2
24)	Sample	24	L19B!024	9020003	B9B2805-MRL3
25)	Sample	100	OFF	FIDOFF	OFF

QCW 3/6/19

Compounds other than ethylene oxide were not quantitated.

Sample	1	BFB	BFB	L19B!001	80 ML 8L13001	1
Sample	2	1902076-CCV1	9020003	L19B!002	80 ML 8L13001,9B27007	1
Sample	3	B9B2805-CCV1	9020003	L19B!003	80 ML 8L13001,9B28003	1
Sample	4	FLUSH	BFB	L19B!004	80 ML 8L13001	1
Sample	5	B9B2805-BLK1	9020003	L19B!005	80 ML 8L13001	1
Sample	6	9022616-07	9020003	L19B!006	WEST NEIGHBORHOOD 2/24/19	1
Sample	7	9022616-08	9020003	L19B!007	WATERTOWER 2/24/19	1
Sample	8	9022616-09	9020003	L19B!008	WILLOW POND PARK 2/24/19	1
Sample	9	9022616-10	9020003	L19B!009	GOWER MS 2/24/19	1
Sample	10	9022616-11	9020003	L19B!010	HINSDALE HS 2/24/19	1
Sample	11	9022616-12	9020003	L19B!011	WB VILLAGE HALL C1 2/24/19	1
Sample	12	B9B2804-DUP1	9020003	L19B!012	WB VILLAGE HALL R1 2/24/19	1
Sample	13	9022116-01	9020003	L19B!013	RECO 2/8/19	1
Sample	14	9022114-01	9020003	L19B!014	BRCO 2/8/19	1
Sample	15	9022117-01	9020003	L19B!015	RFCO 2/8/19	1
Sample	16	9022633-02	9020003	L19B!016	BCCO 2/15/19	1
Sample	17	9022733-01 NOT USE	9020003	L19B!017	BRCO 2/14/19,CAN VALVE CLOSED	1
Sample	18	9022634-01	9020003	L19B!018	RECO 2/14/19	1
Sample	19	9022633-01	9020003	L19B!019	BCCO D1 2/15/19	1
Sample	20	B9B2805-DUP1	9020003	L19B!020	BCCO R1 2/15/19	1
Sample	21	9022733-01	9020003	L19B!021	BRCO 2/14/19,RERUN	1
Sample	22	B9B2805-MRL1	9020003	L19B!022	9B26006	1
Sample	23	B9B2805-MRL2	9020003	L19B!023	9B26007	1
Sample	24	B9B2805-MRL3	9020003	L19B!024	9B26008	1
Sample	100	OFF	FIDOFF	OFF	OFF	1

Compounds other than ethylene oxide were not quantitated.

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

Sequence Name: C:\Smart\L19B!.SEQ
Date: 03-05-2019
Time: 07:04:20
Int. Std Volume: 80 cc

Sample Name	Inlet #	Auto	Samp Pos	Cal Vol.	Std Vol.	Method	Time
BFB	1	1	0	0		C:\Smart\BFB.MPT	12:00
1902076-CCV1	2	1	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B9B2805-CCV1	1	1	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
FLUSH	1	2	250	0		C:\Smart\BFB.MPT	12:00
B9B2804-BLK1	1	2	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-07	1	3	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-08	1	4	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-11	1	5	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-12	1	6	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-13	1	7	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022616-14	1	8	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B9B2804-DUP1	1	8	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022116-01	1	9	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022114-01	1	10	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022117-01	1	11	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022633-02	1	12	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022733-01	1	13	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022634-01	1	14	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022633-01	1	15	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B9B2805-DUP1	1	15	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
9022733-01 RERUN	1	13	250		0	C:\Smart\TO-15A_MS1.MPT	12:00

3-5-19

Compounds other than ethylene oxide were not quantitated.

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

3/1/2019 2:37:01 PM
Leak Check for C:\Smart\L19B!.SEQ
Report File: C:\Smart\L19B!.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	3	---	---	1.2	1.3	0.10
1	4	---	---	1.2	1.2	0.00
1	5	---	---	1.1	1.2	0.10
1	6	---	---	1.2	1.3	0.10
1	7	---	---	1.1	1.2	0.10
1	8	---	---	1.1	1.2	0.10
1	9	---	---	1.1	1.2	0.10
1	10	---	---	1.1	1.2	0.10
1	11	---	---	1.1	1.2	0.10
1	12	---	---	1.1	1.2	0.10
1	13	---	---	1.2	1.2	0.00
1	14	---	---	1.2	1.3	0.10
1	15	---	---	1.2	1.2	0.00

3-5-19

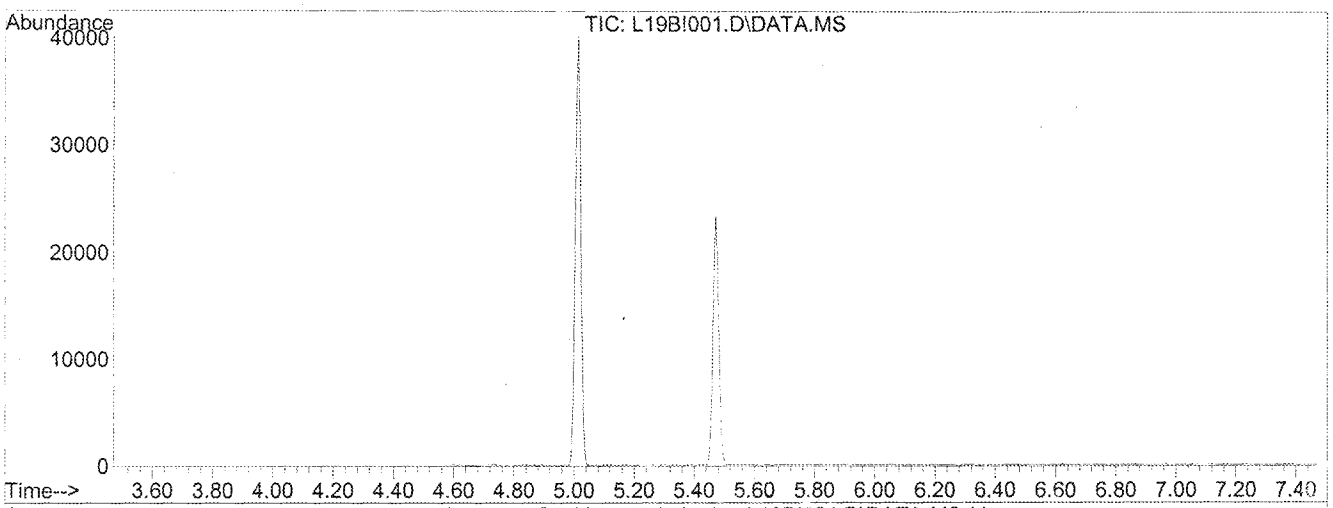
Compounds other than ethylene oxide were not quantitated.

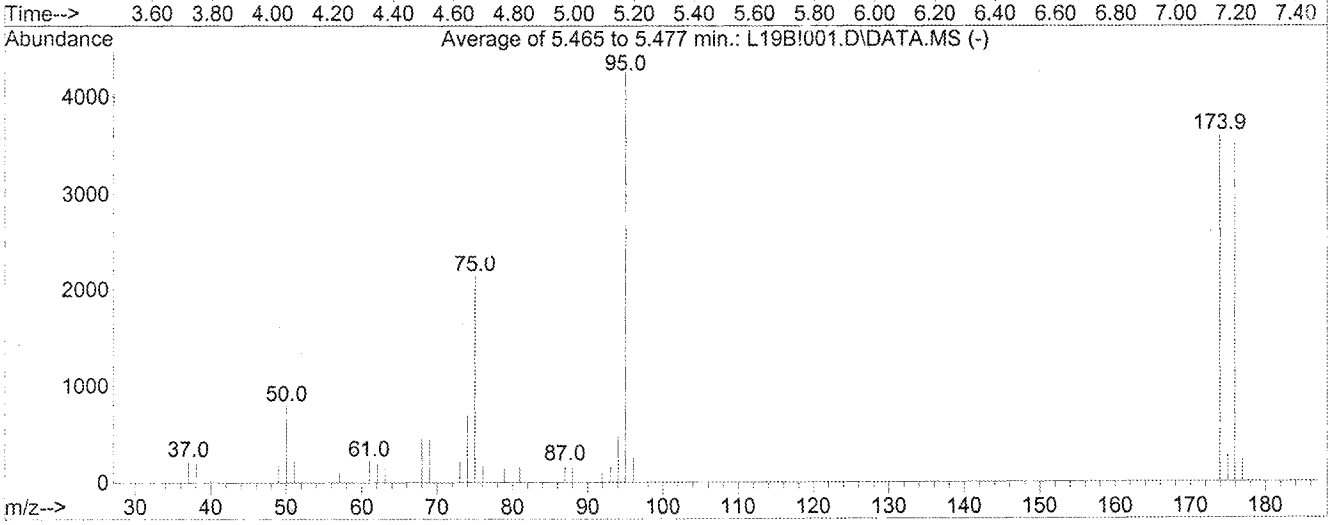
BFB

Data Path : C:\msdchem\1\DATA\L19B!\
Data File : L19B!001.D
Acq On : 28 Feb 2019 12:59 pm
Operator : MAH
Sample : BFB
Misc : 80 ML 8L13001
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\9020003.M
Title : TO-15 by Selective Ion Analysis
Last Update : Wed Feb 13 06:44:42 2019





AutoFind: Scans 144, 145, 146; Background Corrected with Scan 138

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.6	791	PASS
75	95	30	66	50.3	2141	PASS
95	95	100	100	100.0	4254	PASS
96	95	5	9	6.0	256	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	84.6	3597	PASS
175	174	4	9	8.0	289	PASS
176	174	93	101	97.9	3520	PASS
177	176	5	9	6.6	233	PASS

Compounds other than ethylene oxide were not quantitated.

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\L19B!\L19B!001.D
Tune Time : 28 Feb 2019 12:59 pm

9020003	IS Avg Area	48611	118146	86564
	+40%	68055	165404	121190
	-40%	29167	70888	51939

File	Sample	Internal Standard Responses		
L19B!002.D	1902076-CCV1	47766	114606	84016
L19B!005.D	B9B2804-BLK1	50466	128620	88121
L19B!006.D	9022316-07	44721	109580	77156
L19B!007.D	9022316-08	45045	113899	79220
L19B!008.D	9022316-11	44148	110599	75292
L19B!009.D	9022316-12	43773	107970	75113
L19B!010.D	9022316-13	43052	105940	76350
L19B!011.D	9022316-14	43730	105246	75410
L19B!012.D	B9B2804-DUP1	42810	108251	76373

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

Created: Tue Mar 05 07:24:03 2019 MS1

3-5-19

Compounds other than ethylene oxide were not quantitated.

[illegible]B\L19B!012.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	
	2/28/2019 23:41	L19B!012.D	42810		19.99		108251		23.15		76373		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	**48611**		**19.99**		**118146**		**23.15**		**86564**		**30.11**	
	2/28/2019 13:49	L19B!002.D	47766	98	19.97	-0.02	114606	97	23.15	0	84016	97	30.10	-0.01
	2/28/2019 16:33	L19B!005.D	50466	104	19.99	0	128620	109	23.15	0	88121	102	30.11	0
	2/28/2019 17:36	L19B!006.D	44721	92	19.99	0	109580	93	23.15	0	77156	89	30.09	-0.02
	2/28/2019 18:36	L19B!007.D	45045	93	19.99	0	113899	96	23.15	0	79220	92	30.09	-0.02
	2/28/2019 19:36	L19B!008.D	44148	91	19.99	0	110599	94	23.15	0	75292	87	30.09	-0.02
	2/28/2019 20:39	L19B!009.D	43773	90	19.97	-0.02	107970	91	23.15	0	75113	87	30.09	-0.02
	2/28/2019 21:39	L19B!010.D	43052	89	19.97	-0.02	105940	90	23.15	0	76350	88	30.10	-0.01
	2/28/2019 22:41	L19B!011.D	43730	90	19.97	-0.02	105246	89	23.15	0	75410	87	30.10	-0.01
	2/28/2019 23:41	L19B!012.D	42810	88	19.99	0	108251	92	23.15	0	76373	88	30.10	-0.01

3-5-19

Compounds other than ethylene oxide were not quantitated.

Analytical Standard Record
Eastern Research Group
9B27007

Description:	2.50 ppbv ICV/CCV	Expires:	03/29/19
Standard Type:	Calibration Stan	Prepared:	02/27/19
Solvent:	Scientific Air	Prepared By:	Kameron Singer
Final Volume (mls):	6000	Department:	Air Toxics
Vials:	1	Last Edit:	02/27/19 09:15 by KSS

canister# SAT028

Analyte	CAS Number	Concentration	Units
1,1,1-Trichloroethane	71-55-6	0.00247	ppmv
1,1,2,2-Tetrachloroethane	79-34-5	0.00253	ppmv
1,1,2-Trichloroethane	79-00-5	0.00248	ppmv
1,1-Dichloroethane	75-34-3	0.00243	ppmv
1,1-Dichloroethene	75-35-4	0.00244	ppmv
1,2,4-Trichlorobenzene	120-82-1	0.00248	ppmv
1,2,4-Trimethylbenzene	95-63-6	0.00238	ppmv
1,2-Dibromoethane	106-93-4	0.0025	ppmv
1,2-Dichloroethane	107-06-2	0.00249	ppmv
1,2-Dichloropropane	78-87-5	0.00253	ppmv
1,3,5-Trimethylbenzene	108-67-8	0.00252	ppmv
1,3-Butadiene	106-99-0	0.00247	ppmv
Acetonitrile	75-05-8	0.00253	ppmv
Acetylene	74-86-2	0.0024	ppmv
Acrolein	107-02-8	0.00242	ppmv
Acrylonitrile	107-13-1	0.0025	ppmv
Benzene	71-43-2	0.00251	ppmv
Bromochloromethane	74-97-5	0.00247	ppmv
Bromodichloromethane	75-27-4	0.00256	ppmv
Bromoform	75-25-2	0.00254	ppmv
Bromomethane	74-83-9	0.0025	ppmv
Carbon Disulfide	75-15-0	0.00248	ppmv
Carbon Tetrachloride	56-23-5	0.00252	ppmv
Chlorobenzene	108-90-7	0.00246	ppmv
Chloroethane	75-00-3	0.0025	ppmv
Chloroform	67-66-3	0.0025	ppmv
Chloromethane	74-87-3	0.00248	ppmv
Chloroprene	126-99-8	0.00248	ppmv
cis-1,2-Dichloroethylene	156-59-2	0.0025	ppmv
cis-1,3-Dichloropropene	10061-01-5	0.00254	ppmv

Reviewed By 3-5-19 Date

Compounds other than ethylene oxide were not quantitated.

Analytical Standard Record
Eastern Research Group
9B27007

Dibromochloromethane	124-48-1	0.00254	ppmv
Dichlorodifluoromethane	75-71-8	0.00238	ppmv
Dichloromethane	75-09-2	0.00248	ppmv
Dichlorotetrafluoroethane	76-14-2	0.00244	ppmv
Ethyl Acrylate	140-88-5	0.00254	ppmv
Ethyl tert-Butyl Ether	637-92-3	0.00257	ppmv
Ethylbenzene	100-41-4	0.0025	ppmv
Ethylene oxide	75-21-8	0.0025	ppmv
Hexachloro-1,3-butadiene	87-68-3	0.0025	ppmv
m,p-Xylene	108-38-3, 106-42-3	0.00498	ppmv
m-Dichlorobenzene	541-73-1	0.0024	ppmv
Methyl Isobutyl Ketone	108-10-1	0.00253	ppmv
Methyl Methacrylate	80-62-6	0.00254	ppmv
Methyl tert-Butyl Ether	1634-04-4	0.00254	ppmv
Naphthalene	91-20-3	0.00246	ppmv
n-Hexane	110-54-3	0.0025	ppmv
n-Octane	111-65-9	0.00252	ppmv
o-Dichlorobenzene	95-50-1	0.0025	ppmv
o-Xylene	95-47-6	0.00244	ppmv
p-Dichlorobenzene	106-46-7	0.00261	ppmv
Propylene	115-07-1	0.00245	ppmv
Styrene	100-42-5	0.0025	ppmv
tert-Amyl Methyl Ether	994-05-8	0.0026	ppmv
Tetrachloroethylene	127-18-4	0.00249	ppmv
Toluene	108-88-3	0.00244	ppmv
trans-1,2-Dichloroethylene	156-60-5	0.00246	ppmv
trans-1,3-Dichloropropene	10061-02-6	0.00246	ppmv
Trichloroethylene	79-01-6	0.00252	ppmv
Trichlorofluoromethane	75-69-4	0.0025	ppmv
Trichlorotrifluoroethane	76-13-1	0.00244	ppmv
Vinyl chloride	75-01-4	0.0025	ppmv

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
8J25001	TO-15 Secondary Stock Standard	10/25/18	** Vendor **	10/04/19	11/20/18 11:30 by RMB	30
8K20015	Ethylene Oxide Secondary Stock St	11/12/18	** Vendor **	11/12/19	11/20/18 12:14 by MH	15

Reviewed By — 3-5-19 Date

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19B!\
Data File : L19B!002.D
Acq On : 28 Feb 2019 1:49 pm
Operator : MAH
Sample : 1902076-CCV1
Misc : 80 ML 8L13001,9B27007
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 01 09:46:33 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

3-5-19

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	0.391	0.399	-2.0	100	0.00
3	CT	Propylene	0.487	0.532	-9.2	100	0.00
4	CT	Dichlorodifluoromethane	2.300	2.498	-8.6	100	0.00
5	CT	Chloromethane	0.592	0.600	-1.4	100	0.00
6	CT	Dichlorotetrafluoroethane	2.013	2.383	-18.4	100	0.00
7	CT	Vinyl Chloride	0.662	0.688	-3.9	100	0.00
8	CT	1,3-Butadiene	0.450	0.470	-4.4	100	0.00
9	CT	Ethylene oxide	0.273	0.217	20.5	100	0.00
10	CT	Bromomethane	0.627	0.675	-7.7	100	0.00
11	CT	Chloroethane	0.263	0.276	-4.9	100	0.00
12	CT	Acetonitrile	0.414	0.375	9.4	100	0.00
13	CT	Acrolein	0.209	0.184	12.0	100	0.00
14	CT	Trichlorofluoromethane	1.944	1.720	11.5	100	0.00
15	CT	Acrylonitrile	0.330	0.309	6.4	100	0.00
16	CT	1,1-Dichloroethene	0.843	0.940	-11.5	100	0.00
17	CT	Methylene Chloride	0.557	0.590	-5.9	100	0.00
18	CT	Carbon Disulfide	1.716	1.785	-4.0	100	0.00
19	CT	Trichlorotrifluoroethane	1.307	1.438	-10.0	100	0.00
20	CT	trans-1,2-Dichloroethylene	0.467	0.483	-3.4	100	0.00
21	CT	1,1-Dichloroethane	0.786	0.793	-0.9	100	0.00
22	CT	Methyl tert-Butyl Ether	1.318	1.339	-1.6	100	0.00
23	CT	Chloroprene	0.639	0.621	2.8	100	0.00
24	CT	cis-1,2-Dichloroethylene	0.620	0.608	1.9	100	0.00
25	CT	Bromochloromethane	0.335	0.333	0.6	100	0.00
26	CT	Chloroform	0.912	0.952	-4.4	100	0.00
27	CT	Ethyl tert-Butyl Ether	1.260	1.299	-3.1	100	0.00
28	CT	1,2-Dichloroethane	0.560	0.574	-2.5	100	0.00
29	ISS	IS-1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
30	CT	1,1,1-Trichloroethane	0.370	0.405	-9.5	100	0.00
31	CT	Benzene	0.529	0.555	-4.9	100	0.00
32	CT	Carbon Tetrachloride	0.396	0.485	-22.5	100	0.00
33	CT	tert-Amyl Methyl Ether	0.449	0.463	-3.1	100	0.00
34	CT	1,2-Dichloropropane	0.201	0.199	1.0	100	0.00
35	CT	Ethyl Acrylate	0.171	0.239	-39.8#	100	0.00
36	CT	Bromodichloromethane	0.356	0.338	5.1	100	0.00
37	CT	Trichloroethylene	0.252	0.240	4.8	100	0.00
38	CT	Methyl Methacrylate	0.513	0.641	-25.0	100	0.00
39	CT	cis-1,3-Dichloropropene	0.175	0.202	-15.4	100	0.00
40	CT	Methyl Isobutyl Ketone	0.377	0.394	-4.5	100	0.00
41	CT	trans-1,3-Dichloropropene	0.117	0.136	-16.2	100	0.00
42	CT	1,1,2-Trichloroethane	0.184	0.185	-0.5	100	0.00
43	ISS	IS-Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
44	CT	Toluene	0.779	0.799	-2.6	100	0.00
45	CT	Dibromochloromethane	1.529	1.604	-4.9	100	0.00
46	CT	1,2-Dibromoethane	0.292	0.305	-4.5	100	0.00
47	CT	n-Octane	0.469	0.467	0.4	100	0.00
48	CT	Tetrachloroethylene	0.375	0.379	-1.1	100	0.00

EtOH only

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L19B!\
Data File : L19B!002.D
Acq On : 28 Feb 2019 1:49 pm
Operator : MAH
Sample : 1902076-CCV1
Misc : 80 ML 8L13001,9B27007
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 01 09:46:33 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 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	0.497	0.497	0.0	100	0.00
50	CT	Ethylbenzene	0.819	0.850	-3.8	100	0.00
51	CT	m,p-Xylene	0.691	0.704	-1.9	100	0.00
52	CT	Bromoform	0.296	0.306	-3.4	100	0.00
53	CT	Styrene	0.392	0.384	2.0	100	0.00
54	CT	1,1,2,2-Tetrachloroethane	0.446	0.461	-3.4	100	0.00
55	CT	o-Xylene	0.682	0.736	-7.9	100	0.00
56	CT	1,3,5-Trimethylbenzene	0.732	0.734	-0.3	100	0.00
57	CT	1,2,4-Trimethylbenzene	0.633	0.632	0.2	100	0.00
58	CT	m-Dichlorobenzene	0.333	0.266	20.1	100	0.00
59	CT	p-Dichlorobenzene	0.271	0.223	17.7	100	0.00
60	CT	o-Dichlorobenzene	0.305	0.272	10.8	100	0.00
61	CT	1,2,4-Trichlorobenzene	0.103	0.101	1.9	100	0.00
62	CT	Hexachloro-1,3-butadiene	0.264	0.282	-6.8	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!002.D
Acq On : 28 Feb 2019 1:49 pm
Operator : MAH
Sample : 1902076-CCV1
Misc : 80 ML 8L13001,9B27007
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 01 09:46:33 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.968	66	47766	4.7700 ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.148	114	114606	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	84016	4.7400 ppbv	-0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	5.410	26	9581	2.4494 ppbv	100
3) Propylene	7.823	41	13056	2.6757 ppbv	100
4) Dichlorodifluoromethane	8.685	85	59540	2.5847 ppbv	100
5) Chloromethane	9.740	50	14893	2.5110 ppbv	100
6) Dichlorotetrafluoroethane	10.847	85	58223	2.8877 ppbv	100
7) Vinyl Chloride	11.102	62	17224	2.5964 ppbv	99
8) 1,3-Butadiene	11.766	54	11636	2.5802 ppbv	99
9) Ethylene oxide	12.378	29	5443	1.9923 ppbv	98
10) Bromomethane	12.573	94	16904	2.6927 ppbv	99
11) Chloroethane	13.266	64	6916	2.6242 ppbv	100
12) Acetonitrile	14.332	41	9510	2.2940 ppbv	98
13) Acrolein	14.610	56	4467	2.1385 ppbv	100
14) Trichlorofluoromethane	15.190	101	43050	2.2118 ppbv	99
15) Acrylonitrile	15.909	53	7740	2.3400 ppbv	99
16) 1,1-Dichloroethene	16.420	61	22967	2.7198 ppbv	99
17) Methylene Chloride	16.721	49	14648	2.6255 ppbv	97
18) Carbon Disulfide	16.907	76	44339	2.5804 ppbv	100
19) Trichlorotrifluoroethane	17.278	101	35141	2.6845 ppbv	100
20) trans-1,2-Dichloroethy...	18.313	96	11899	2.5422 ppbv	98
21) 1,1-Dichloroethane	18.607	63	19298	2.4528 ppbv	99
22) Methyl tert-Butyl Ether	18.789	73	34066	2.5816 ppbv	99
23) Chloroprene	19.514	53	15426	2.4103 ppbv	98
24) cis-1,2-Dichloroethylene	19.945	61	15217	2.4496 ppbv	99
25) Bromochloromethane	20.172	128	8232	2.4516 ppbv	98
26) Chloroform	20.398	83	23826	2.6099 ppbv	99
27) Ethyl tert-Butyl Ether	21.162	59	33440	2.6497 ppbv	100
28) 1,2-Dichloroethane	21.475	62	14307	2.5533 ppbv	100
30) 1,1,1-Trichloroethane	21.867	97	22987	2.7058 ppbv	95
31) Benzene	22.533	78	31972	2.6317 ppbv	99
32) Carbon Tetrachloride	22.768	117	28089	3.0870 ppbv	100
33) tert-Amyl Methyl Ether	23.499	73	27640	2.6790 ppbv	100
34) 1,2-Dichloropropane	23.787	63	11546	2.4998 ppbv	97
35) Ethyl Acrylate	23.870	55	13950	3.5551 ppbv	99
36) Bromodichloromethane	24.076	83	19853	2.4289 ppbv	99
37) Trichloroethylene	24.159	130	13916	2.4046 ppbv	100
38) Methyl Methacrylate	24.530	41	37375	3.1735 ppbv	99
39) cis-1,3-Dichloropropene	25.509	75	11763	2.9329 ppbv	99
40) Methyl Isobutyl Ketone	25.604	43	22914	2.6466 ppbv	99
41) trans-1,3-Dichloropropene	26.348	75	7666	2.8529 ppbv	96
42) 1,1,2-Trichloroethane	26.615	97	10559	2.4986 ppbv	100
44) Toluene	27.092	91	34541	2.5019 ppbv	99
45) Dibromochloromethane	27.733	129	72212	2.6645 ppbv	100
46) 1,2-Dibromoethane	28.137	107	13524	2.6124 ppbv	100
47) n-Octane	28.856	43	20869	2.5096 ppbv	98
48) Tetrachloroethylene	28.997	166	16744	2.5199 ppbv	99

RMB 3/5/19

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!002.D
Acq On : 28 Feb 2019 1:49 pm
Operator : MAH
Sample : 1902076-CCV1
Misc : 80 ML 8L13001,9B27007
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 01 09:46:33 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	30.172	112	21692	2.4618 ppbv	100
50) Ethylbenzene	30.897	91	37655	2.5942 ppbv	100
51) m,p-Xylene	31.222	91	62111	5.0735 ppbv	99
52) Bromoform	31.279	173	13760	2.6259 ppbv	100
53) Styrene	31.909	104	17002	2.4496 ppbv #	100
54) 1,1,2,2-Tetrachloroethane	32.062	83	20687	2.6182 ppbv	100
55) o-Xylene	32.119	91	31845	2.6357 ppbv	100
56) 1,3,5-Trimethylbenzene	34.919	105	32789	2.5261 ppbv	99
57) 1,2,4-Trimethylbenzene	35.845	105	26663	2.3751 ppbv	99
58) m-Dichlorobenzene	36.112	146	11298	1.9142 ppbv	99
59) p-Dichlorobenzene	36.290	146	10295	2.1412 ppbv	99
60) o-Dichlorobenzene	37.092	146	12048	2.2318 ppbv	100
61) 1,2,4-Trichlorobenzene	40.841	180	4430	2.4196 ppbv	99
62) Hexachloro-1,3-butadiene	41.635	225	12484	2.6699 ppbv	100

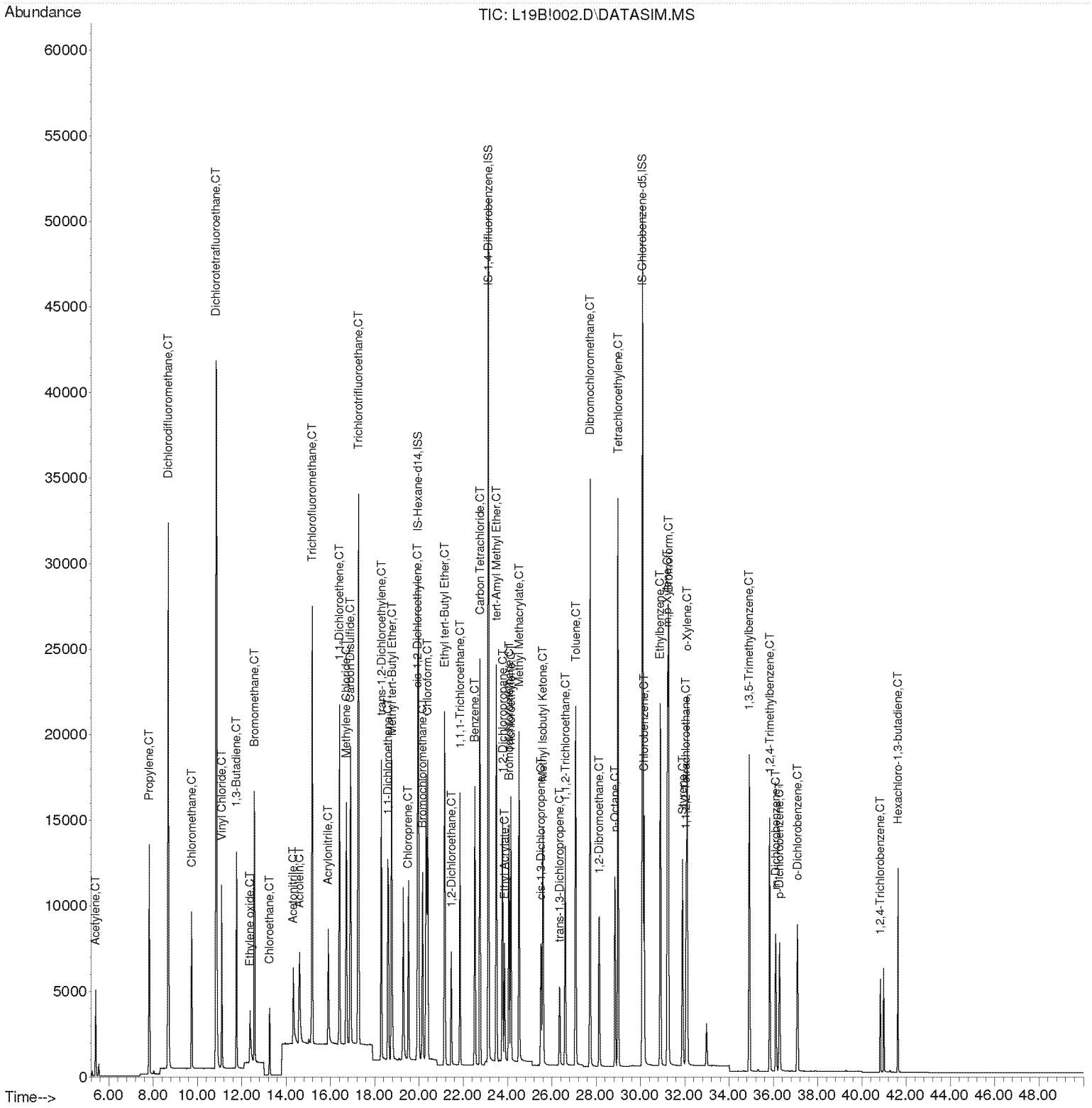
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

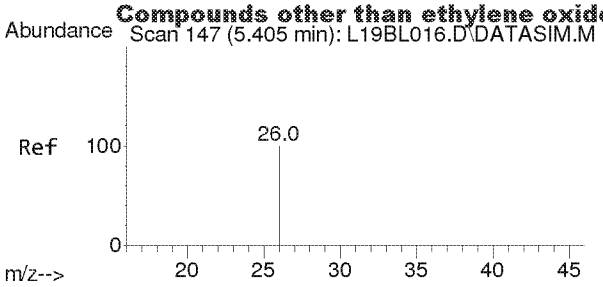
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!002.D
Acq On : 28 Feb 2019 1:49 pm
Operator : MAH
Sample : 1902076-CCV1
Misc : 80 ML 8L13001,9B27007
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 01 09:46:33 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

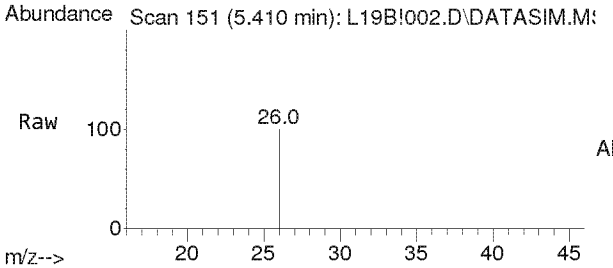


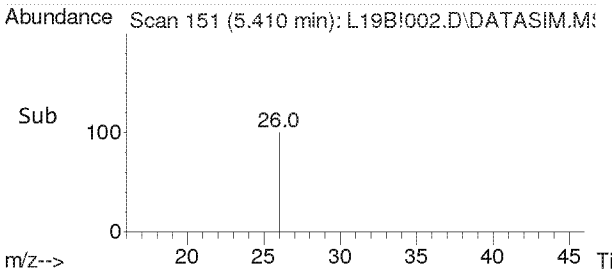
Compounds other than ethylene oxide were not quantitated.

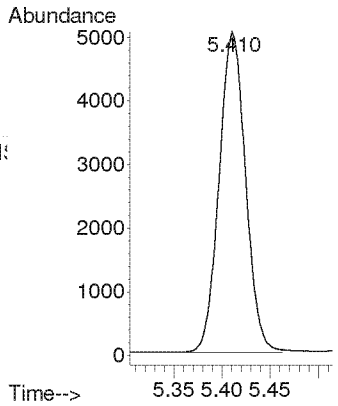


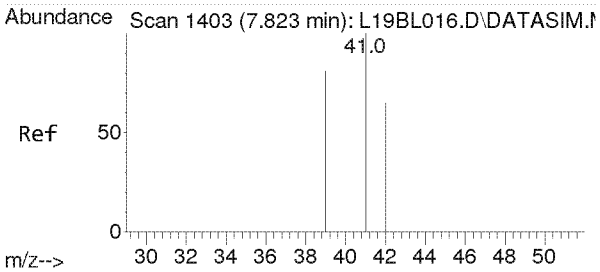
#2
Acetylene
Concen: 2.449 ppbv
RT: 5.410 min Scan# 151
Delta R.T. 0.006 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 26 Resp: 9581





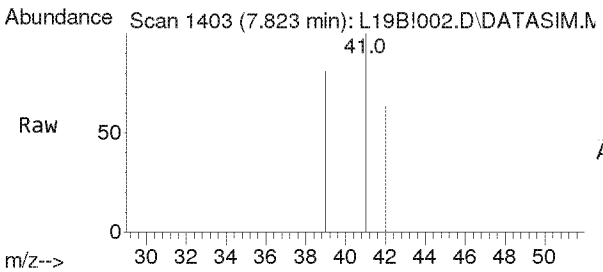


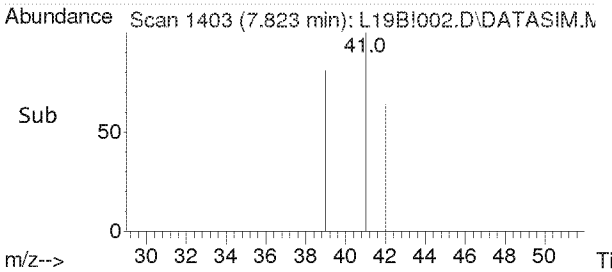


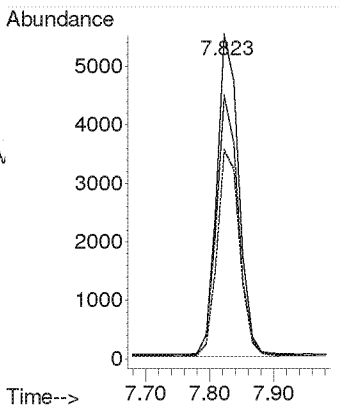
#3
Propylene
Concen: 2.676 ppbv
RT: 7.823 min Scan# 1403
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 41 Resp: 13056

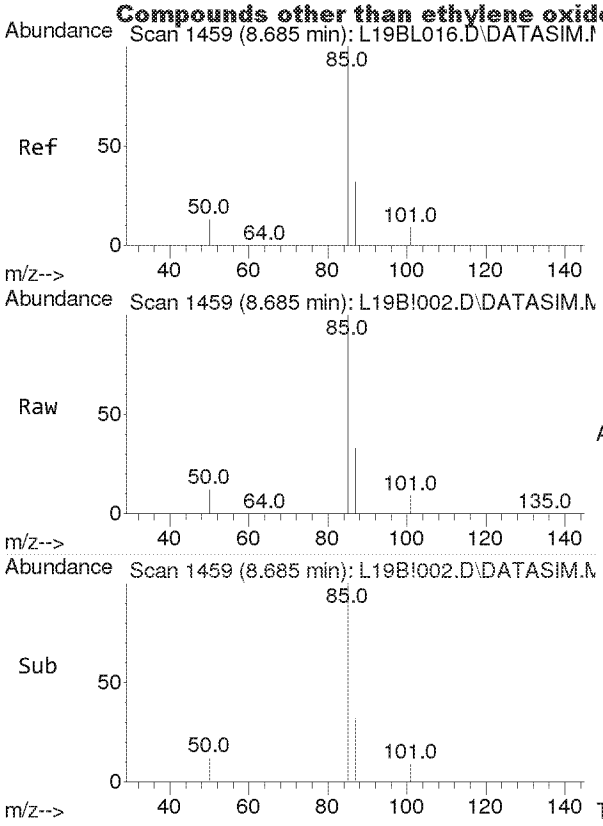
Ion	Ratio	Lower	Upper
41	100		
39	79.6	64.2	96.2
42	65.7	52.6	79.0







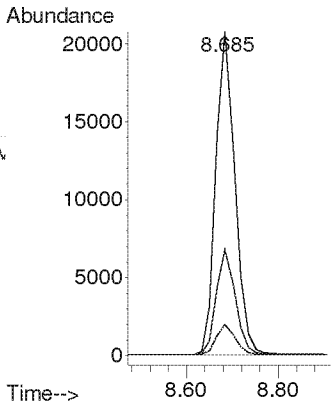
Compounds other than ethylene oxide were not quantitated.

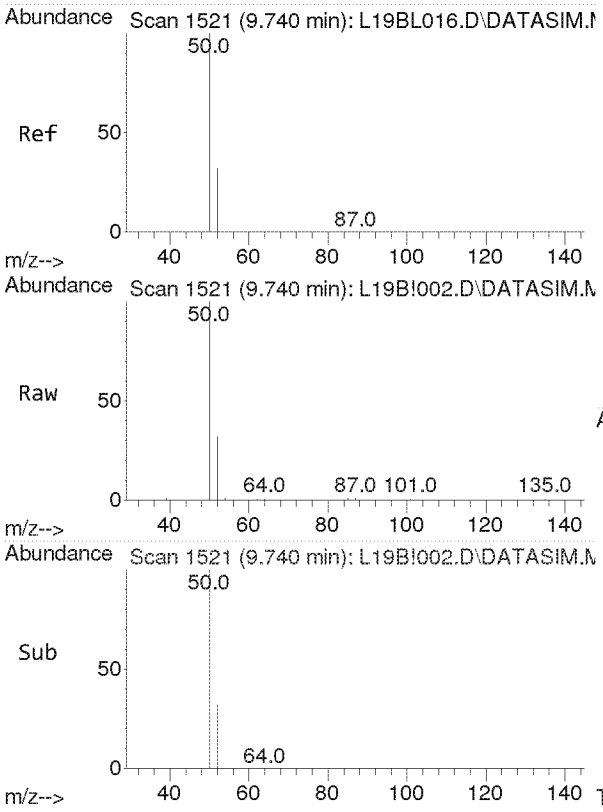


#4
Dichlorodifluoromethane
Concen: 2.585 ppbv
RT: 8.685 min Scan# 1459
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 85 Resp: 59540

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.0	39.0
101	9.1	7.3	10.9

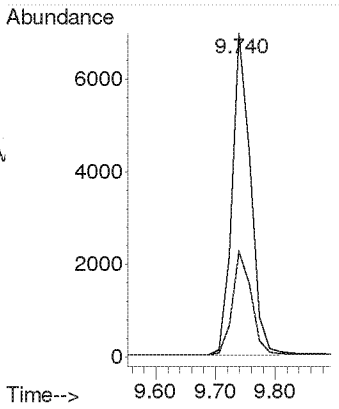




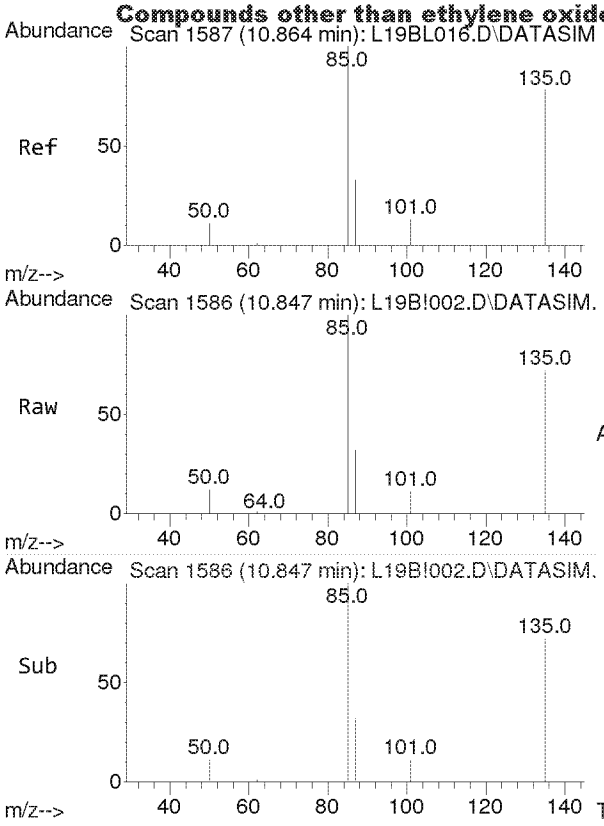
#5
Chloromethane
Concen: 2.511 ppbv
RT: 9.740 min Scan# 1521
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 50 Resp: 14893

Ion	Ratio	Lower	Upper
50	100		
52	32.8	26.1	39.1



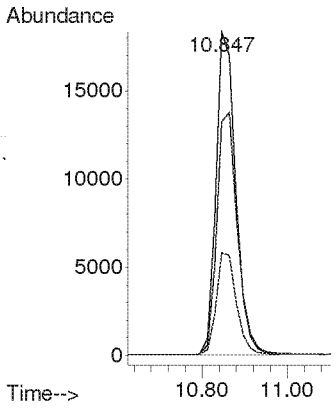
Compounds other than ethylene oxide were not quantitated.

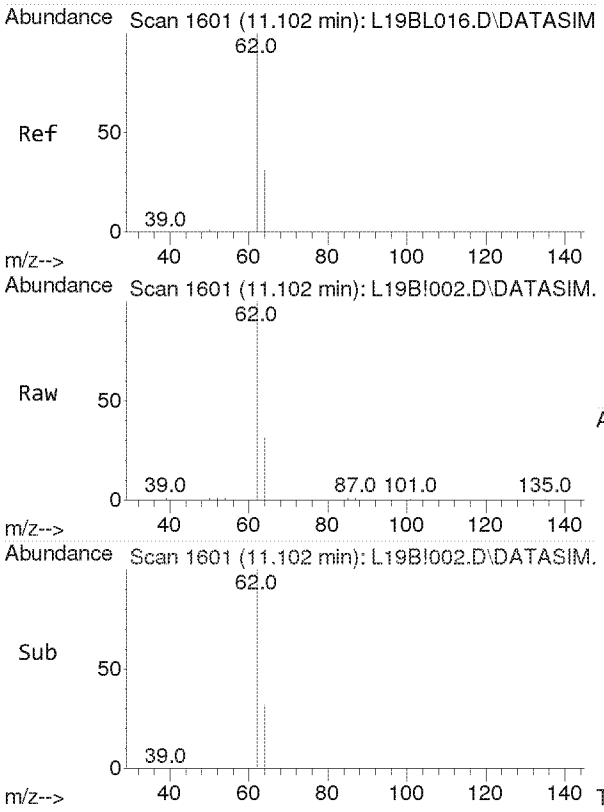


#6
Dichlorotetrafluoroethane
Concen: 2.888 ppbv
RT: 10.847 min Scan# 1586
Delta R.T. -0.017 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 85 Resp: 58223

Ion	Ratio	Lower	Upper
85	100		
135	79.1	63.2	94.8
87	32.3	25.9	38.9

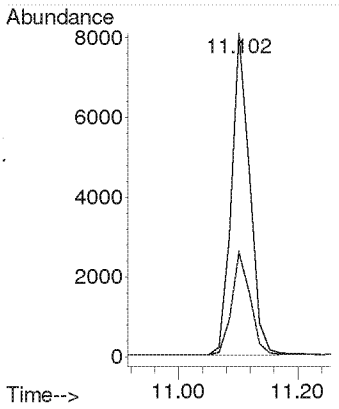




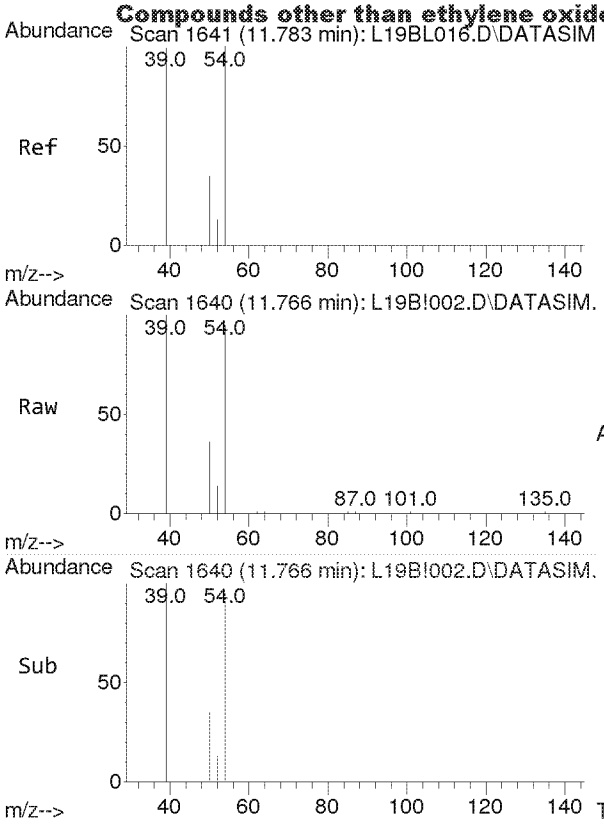
#7
Vinyl Chloride
Concen: 2.596 ppbv
RT: 11.102 min Scan# 1601
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 62 Resp: 17224

Ion	Ratio	Lower	Upper
62	100		
64	32.0	25.4	38.0



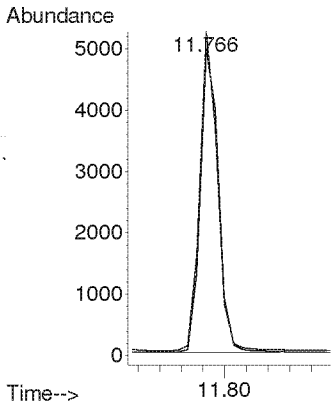
Compounds other than ethylene oxide were not quantitated.

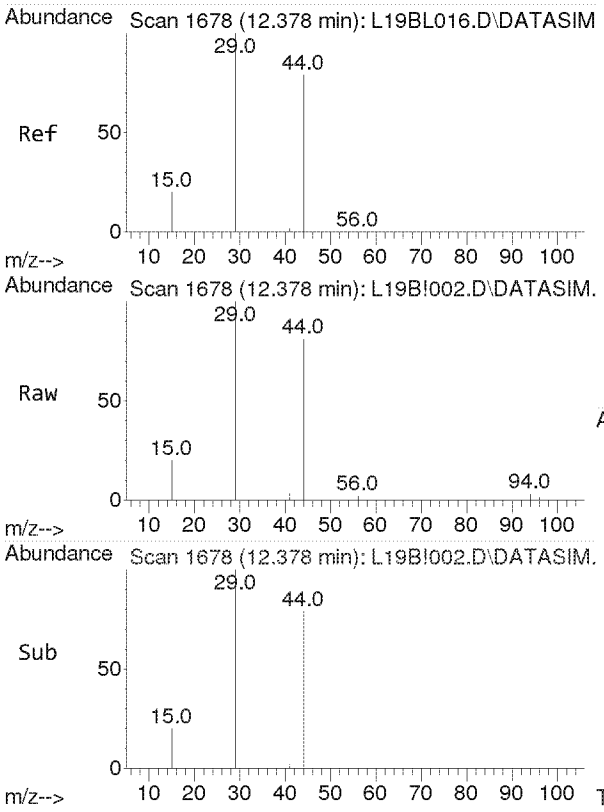


#8
1,3-Butadiene
Concen: 2.580 ppbv
RT: 11.766 min Scan# 1640
Delta R.T. -0.017 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 54 Resp: 11636

Ion	Ratio	Lower	Upper
54	100		
39	101.0	81.6	122.4

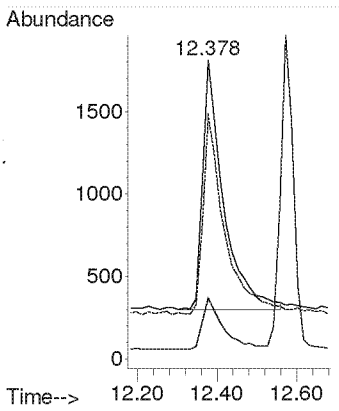




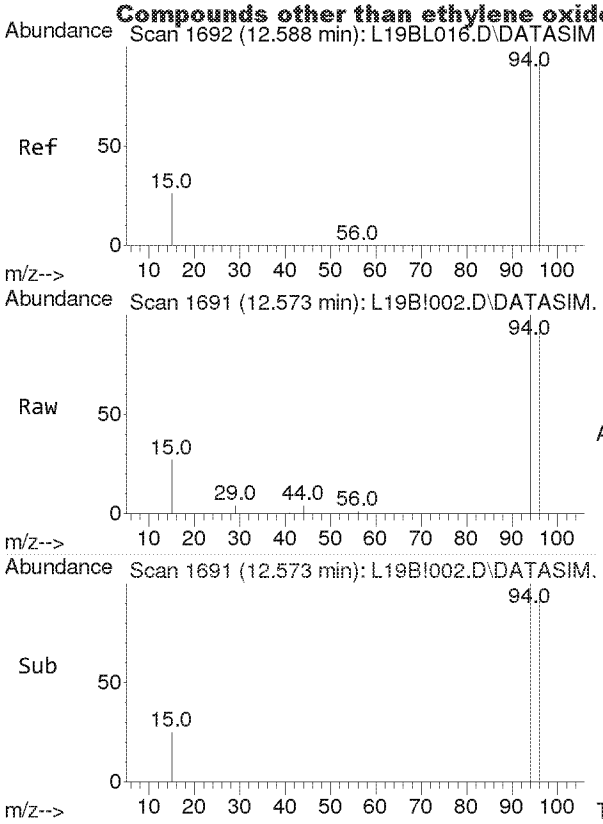
#9
Ethylene oxide
Concen: 1.992 ppbv
RT: 12.378 min Scan# 1678
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 29 Resp: 5443

Ion	Ratio	Lower	Upper
29	100		
15	20.1	16.0	24.0
44	84.2	65.4	98.2



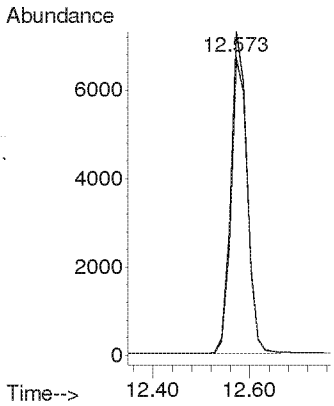
Compounds other than ethylene oxide were not quantitated.

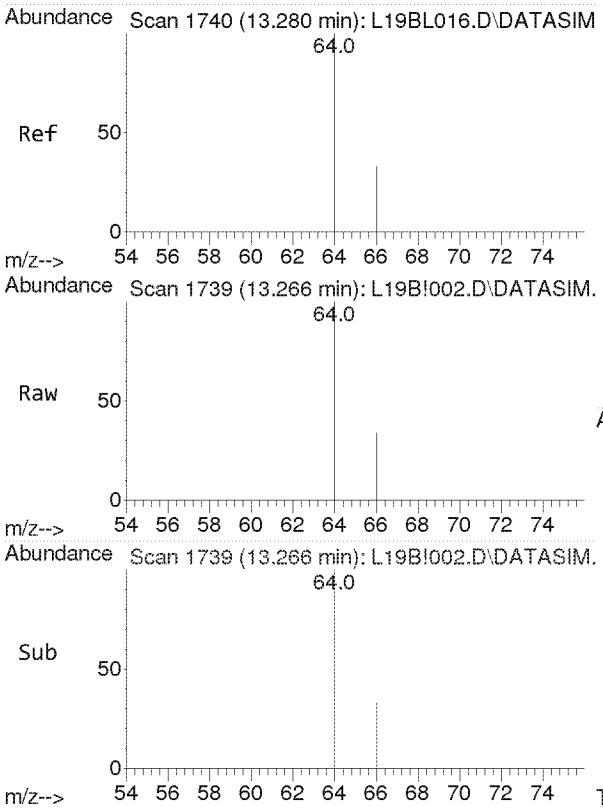


#10
Bromomethane
Concen: 2.693 ppbv
RT: 12.573 min Scan# 1691
Delta R.T. -0.015 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 94 Resp: 16904

Ion	Ratio	Lower	Upper
94	100		
96	93.8	75.5	113.3

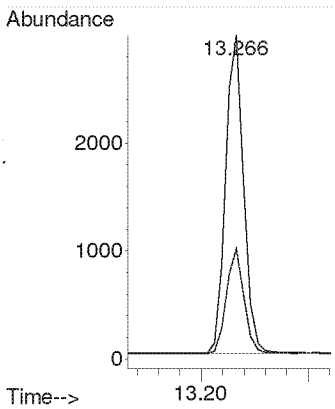




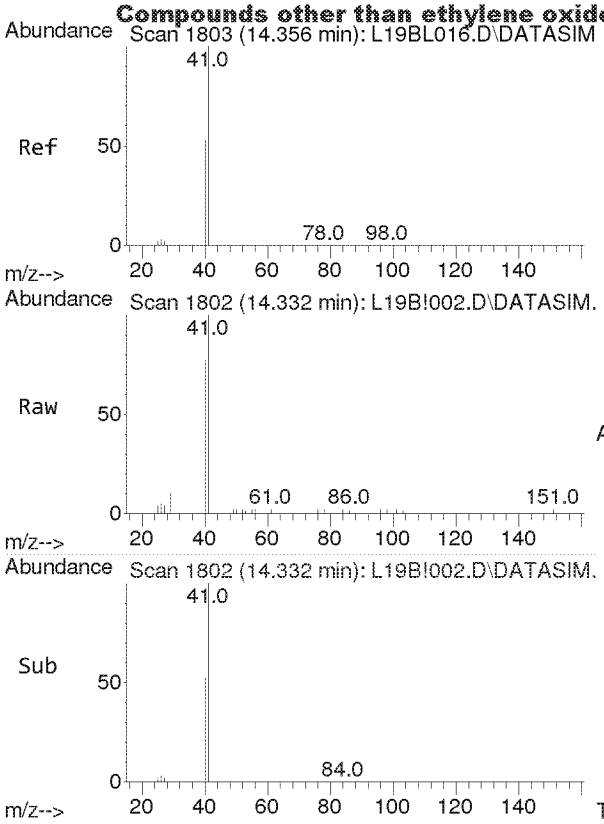
#11
Chloroethane
Concen: 2.624 ppbv
RT: 13.266 min Scan# 1739
Delta R.T. -0.014 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 64 Resp: 6916

Ion	Ratio	Lower	Upper
64	100		
66	32.1	25.8	38.6



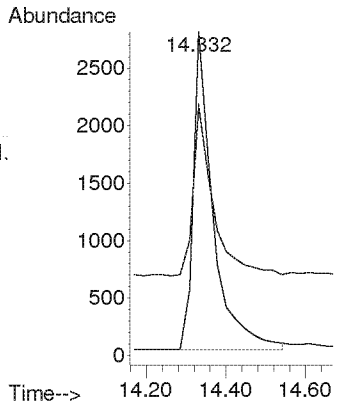
Compounds other than ethylene oxide were not quantitated.

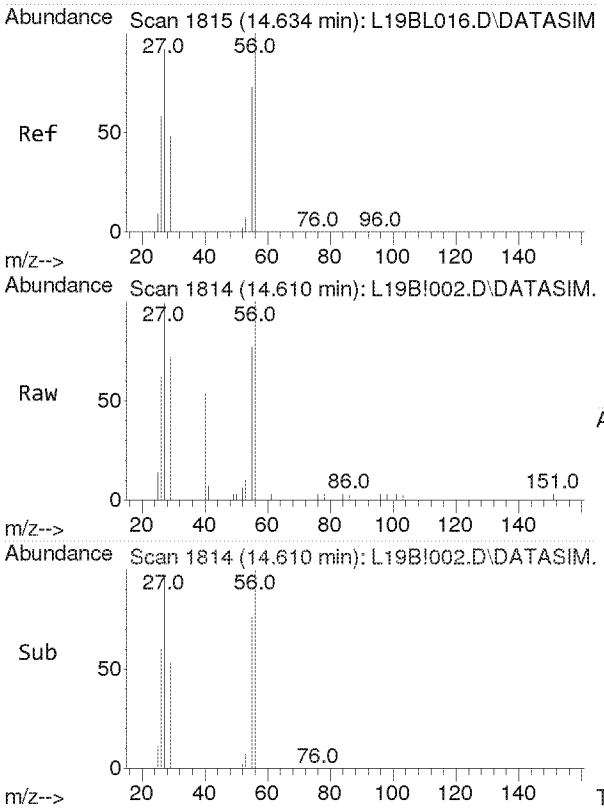


#12
Acetonitrile
Concen: 2.294 ppbv
RT: 14.332 min Scan# 1802
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 41 Resp: 9510

Ion	Ratio	Lower	Upper
41	100		
40	54.1	42.2	63.4

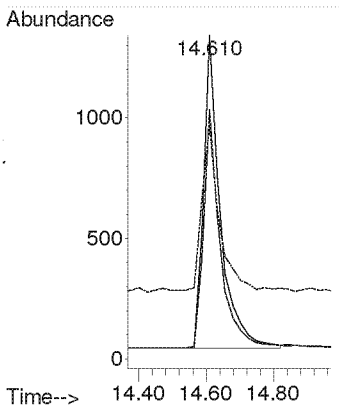




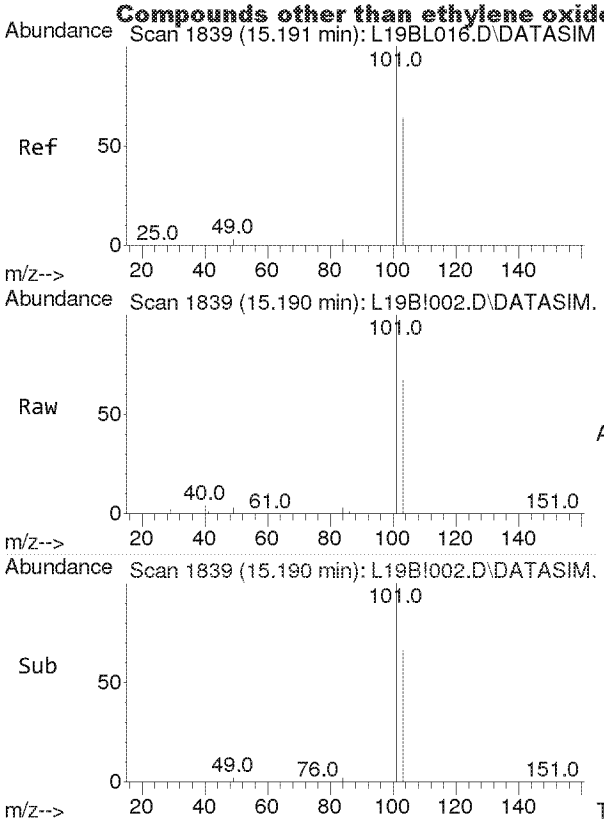
#13
Acrolein
Concen: 2.138 ppbv
RT: 14.610 min Scan# 1814
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 56 Resp: 4467

Ion	Ratio	Lower	Upper
56	100		
55	76.0	60.8	91.2
29	54.2	43.8	65.6



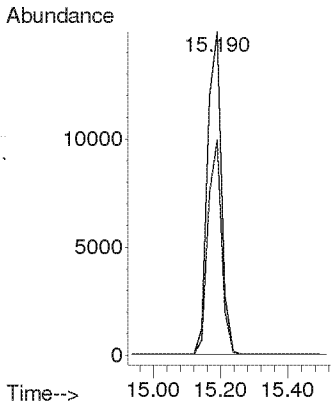
Compounds other than ethylene oxide were not quantitated.

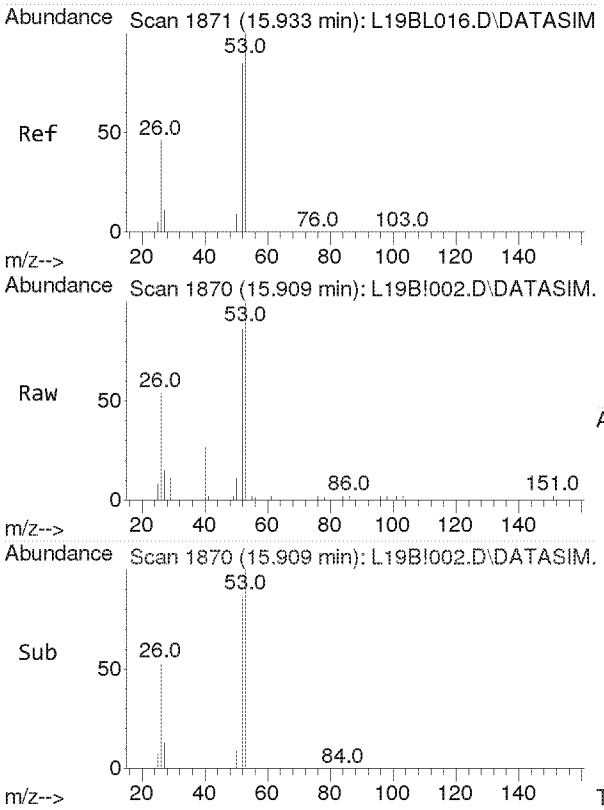


#14
Trichlorofluoromethane
Concen: 2.212 ppbv
RT: 15.190 min Scan# 1839
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:101 Resp: 43050

Ion	Ratio	Lower	Upper
101	100		
103	65.0	51.7	77.5

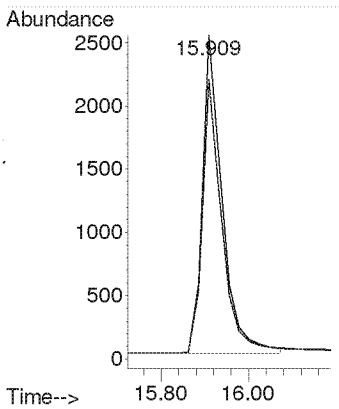




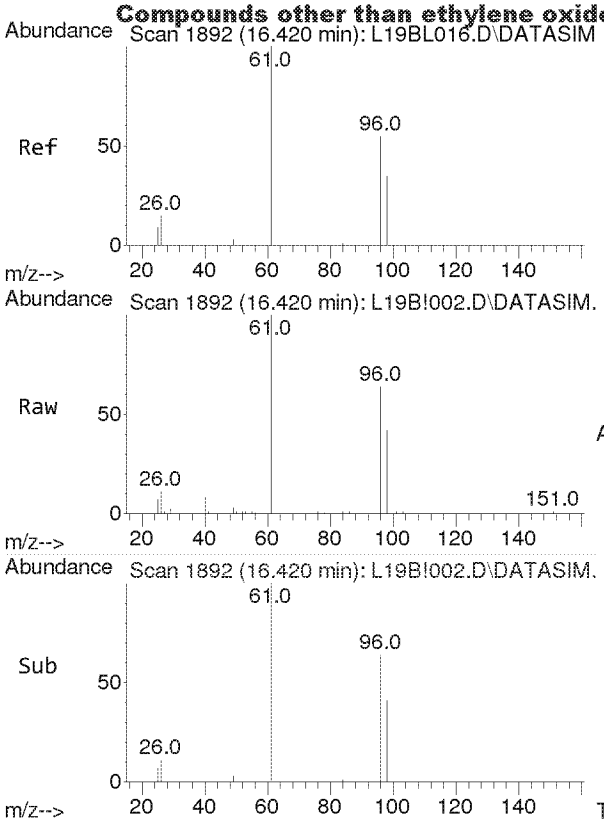
#15
Acrylonitrile
Concen: 2.340 ppbv
RT: 15.909 min Scan# 1870
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 53 Resp: 7740

Ion	Ratio	Lower	Upper
53	100		
52	85.9	69.5	104.3



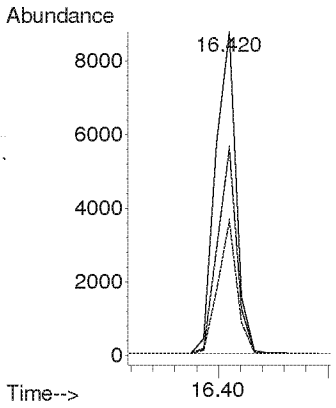
Compounds other than ethylene oxide were not quantitated.

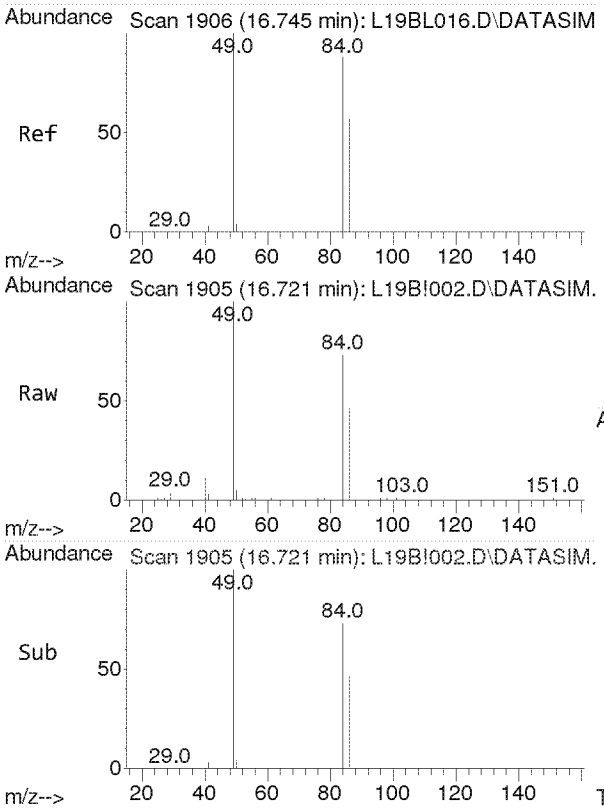


#16
1,1-Dichloroethene
Concen: 2.720 ppbv
RT: 16.420 min Scan# 1892
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 61 Resp: 22967

Ion	Ratio	Lower	Upper
61	100		
96	59.8	47.3	70.9
98	38.3	30.6	45.8

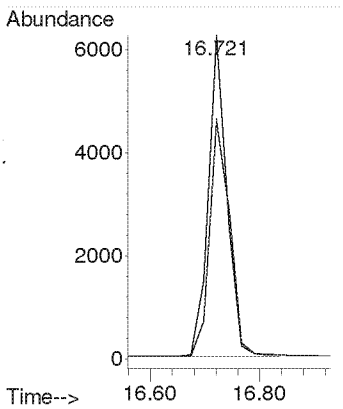




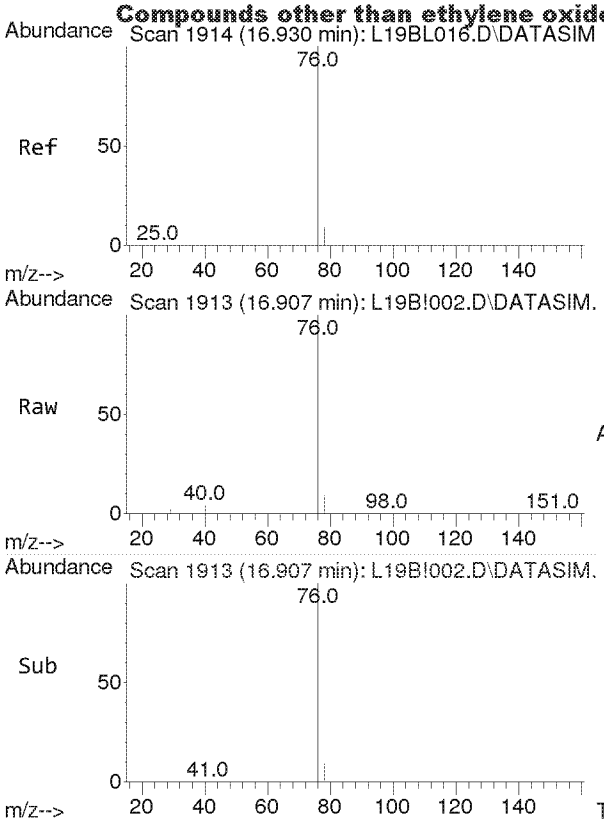
#17
Methylene Chloride
Concen: 2.625 ppbv
RT: 16.721 min Scan# 1905
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 49 Resp: 14648

Ion	Ratio	Lower	Upper
49	100		
84	80.2	54.0	100.4



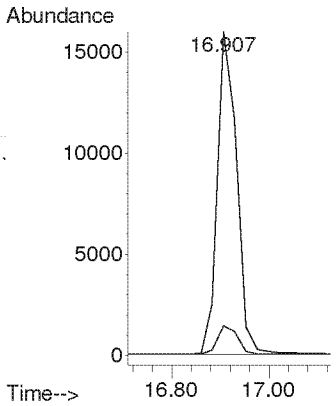
Compounds other than ethylene oxide were not quantitated.

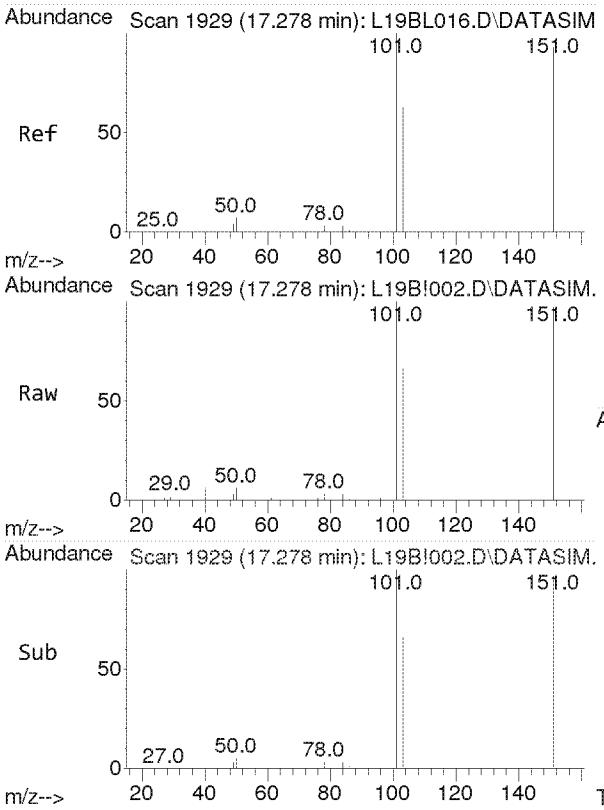


#18
Carbon Disulfide
Concen: 2.580 ppbv
RT: 16.907 min Scan# 1913
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 76 Resp: 44339

Ion	Ratio	Lower	Upper
76	100		
78	9.1	7.4	11.0

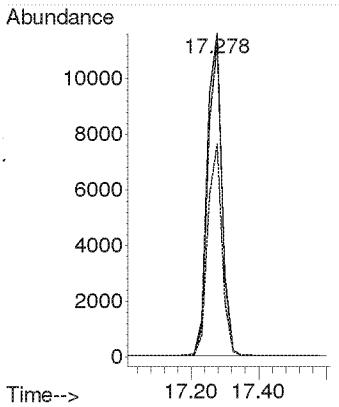




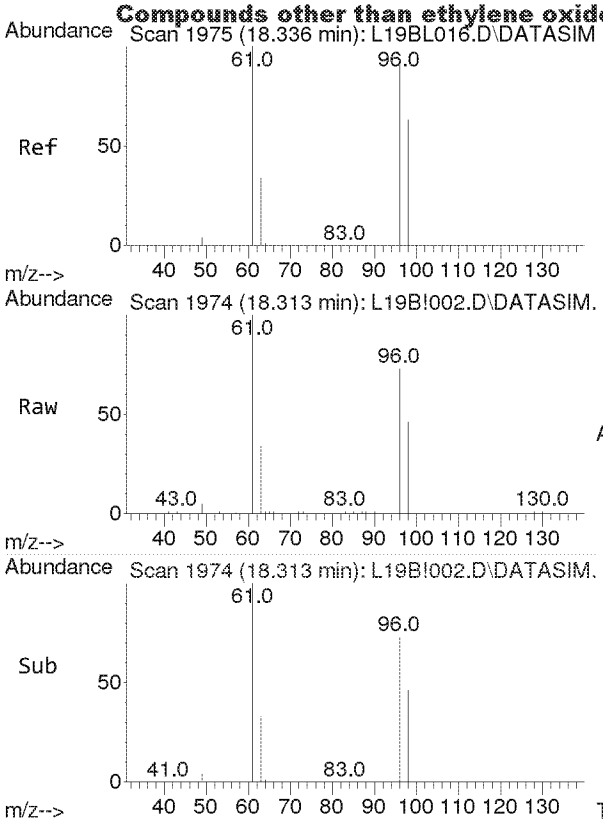
#19
Trichlorotrifluoroethane
Concen: 2.684 ppbv
RT: 17.278 min Scan# 1929
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:101 Resp: 35141

Ion	Ratio	Lower	Upper
101	100		
151	94.2	75.8	113.8
103	64.1	51.1	76.7



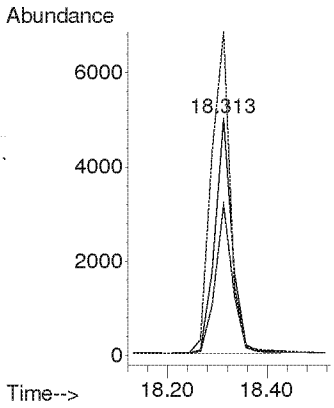
Compounds other than ethylene oxide were not quantitated.

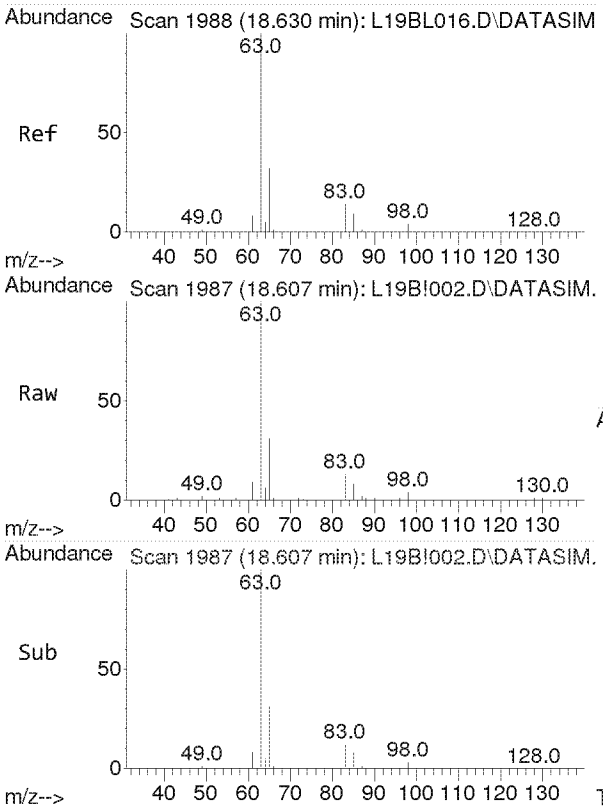


#20
trans-1,2-Dichloroethylene
Concen: 2.542 ppbv
RT: 18.313 min Scan# 1974
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 96 Resp: 11899

Ion	Ratio	Lower	Upper
96	100		
98	63.9	51.5	77.3
61	149.8	122.9	184.3

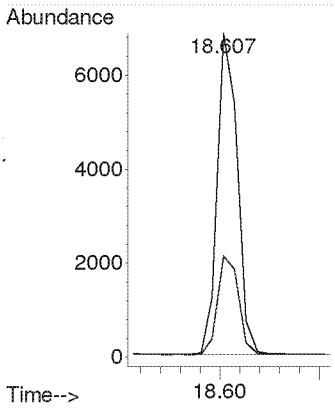




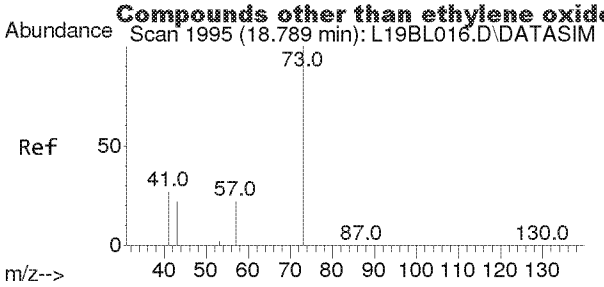
#21
1,1-Dichloroethane
Concen: 2.453 ppbv
RT: 18.607 min Scan# 1987
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 63 Resp: 19298

Ion	Ratio	Lower	Upper
63	100		
65	32.1	25.4	38.0



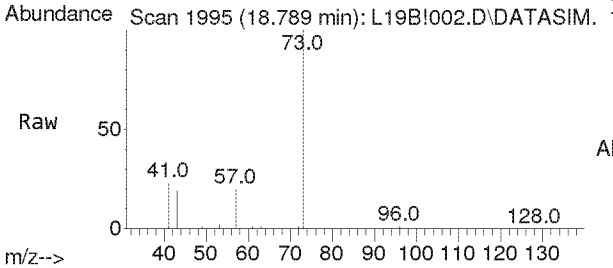
Compounds other than ethylene oxide were not quantitated.

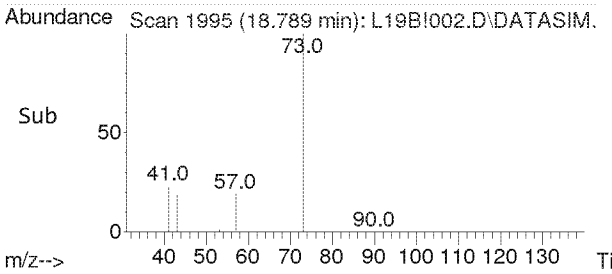


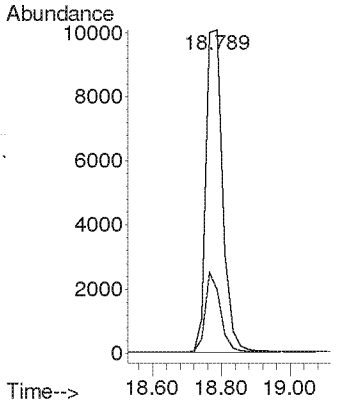
#22
Methyl tert-Butyl Ether
Concen: 2.582 ppbv
RT: 18.789 min Scan# 1995
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

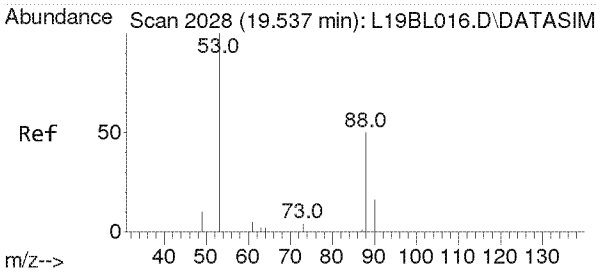
Tgt Ion: 73 Resp: 34066

Ion	Ratio	Lower	Upper
73	100		
57	22.0	18.0	27.0





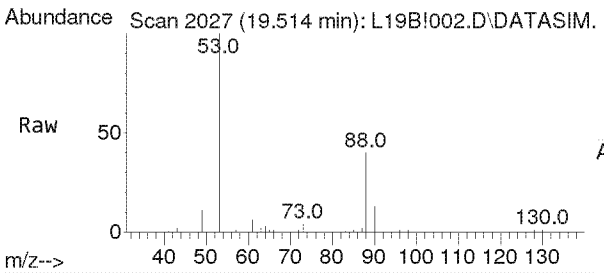


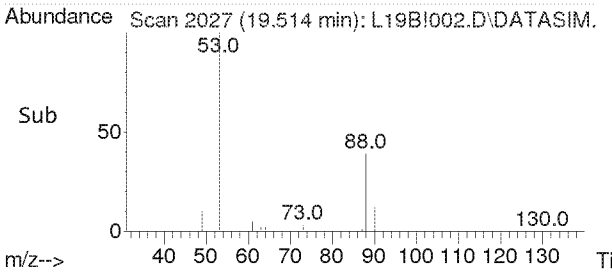


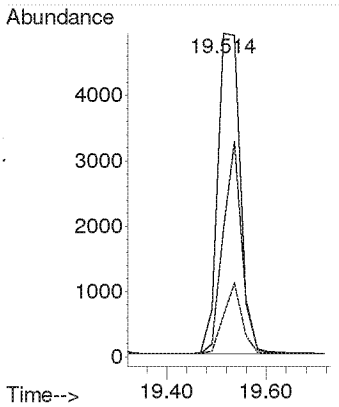
#23
Chloroprene
Concen: 2.410 ppbv
RT: 19.514 min Scan# 2027
Delta R.T. -0.023 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 53 Resp: 15426

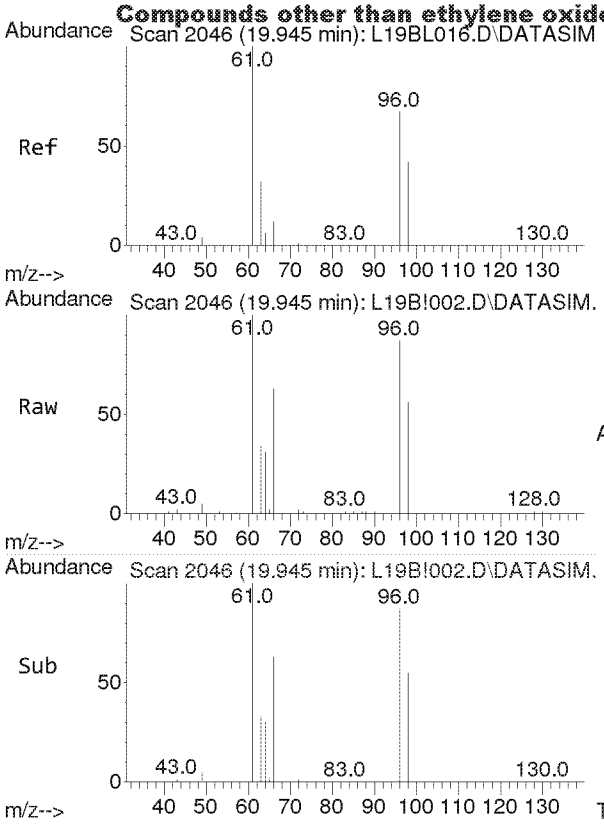
Ion	Ratio	Lower	Upper
53	100		
88	54.9	42.6	64.0
90	18.0	13.9	20.9







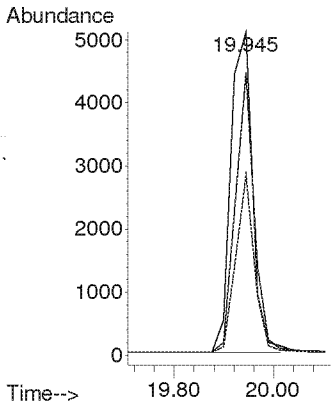
Compounds other than ethylene oxide were not quantitated.

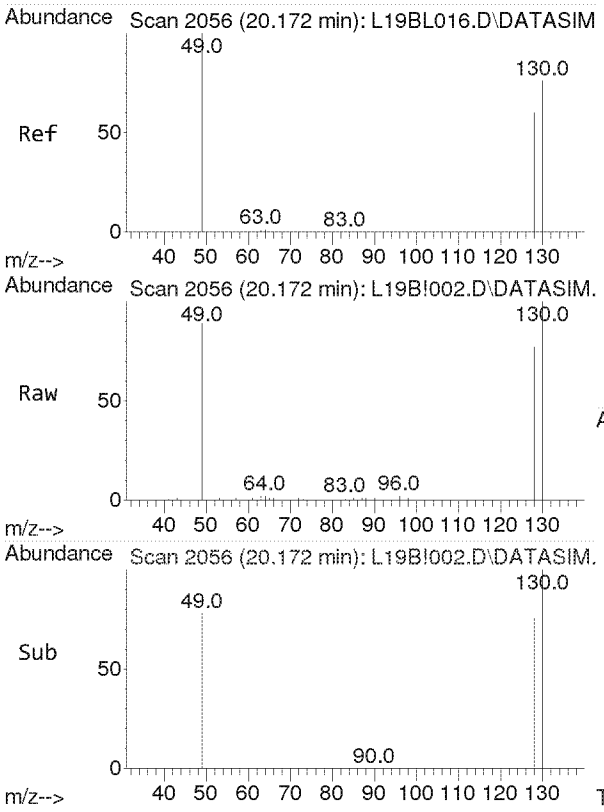


#24
cis-1,2-Dichloroethylene
Concen: 2.450 ppbv
RT: 19.945 min Scan# 2046
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 61 Resp: 15217

Ion	Ratio	Lower	Upper
61	100		
96	75.4	59.0	88.6
98	47.3	37.6	56.4

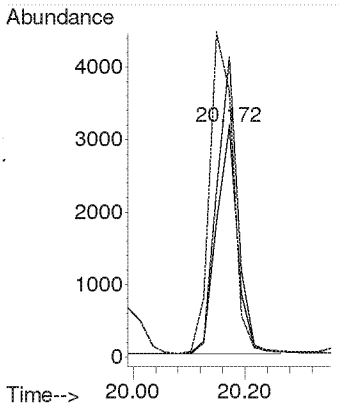




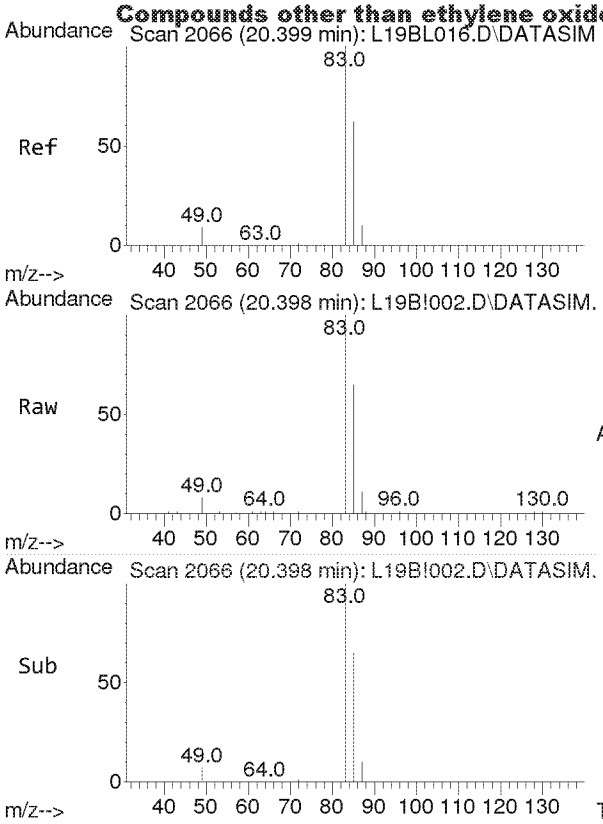
#25
Bromochloromethane
Concen: 2.452 ppbv
RT: 20.172 min Scan# 2056
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:128 Resp: 8232

Ion	Ratio	Lower	Upper
128	100		
130	129.6	103.3	154.9
49	156.8	128.3	192.5



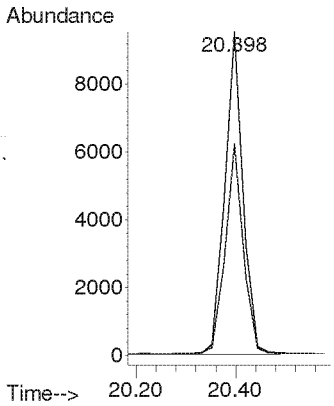
Compounds other than ethylene oxide were not quantitated.

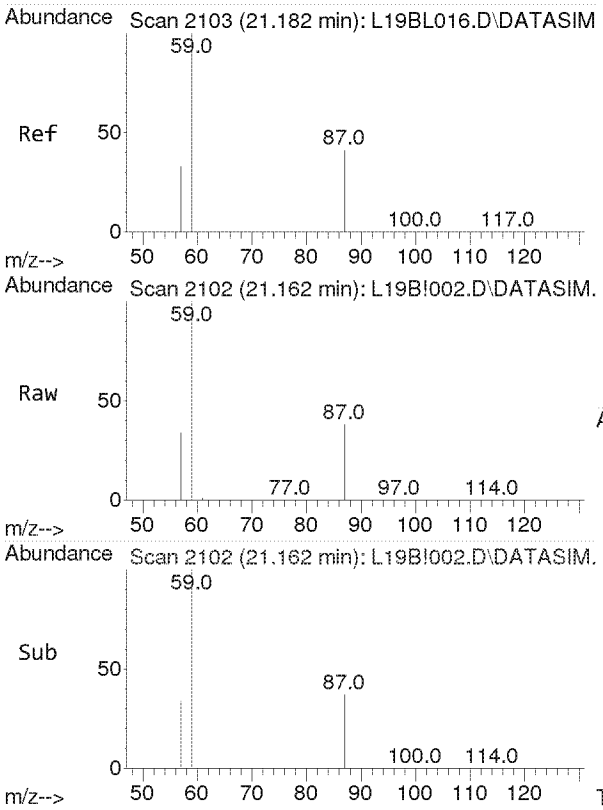


#26
Chloroform
Concen: 2.610 ppbv
RT: 20.398 min Scan# 2066
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 83 Resp: 23826

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.5	77.3

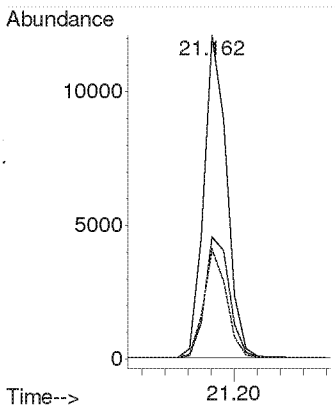




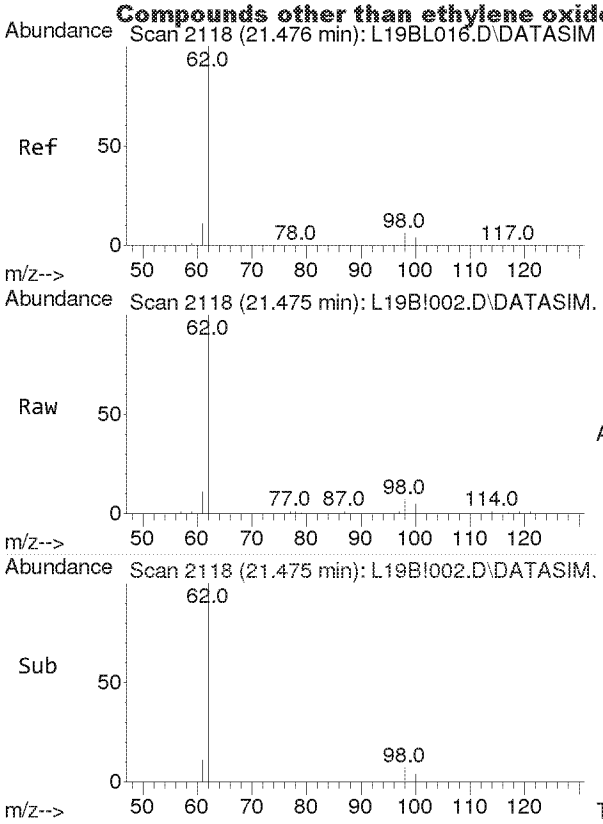
#27
Ethyl tert-Butyl Ether
Concen: 2.650 ppbv
RT: 21.162 min Scan# 2102
Delta R.T. -0.020 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 59 Resp: 33440

Ion	Ratio	Lower	Upper
59	100		
87	39.8	31.5	47.3
57	33.1	26.6	39.8



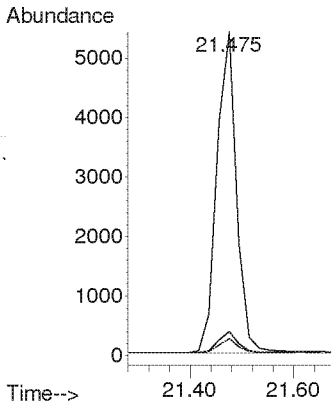
Compounds other than ethylene oxide were not quantitated.

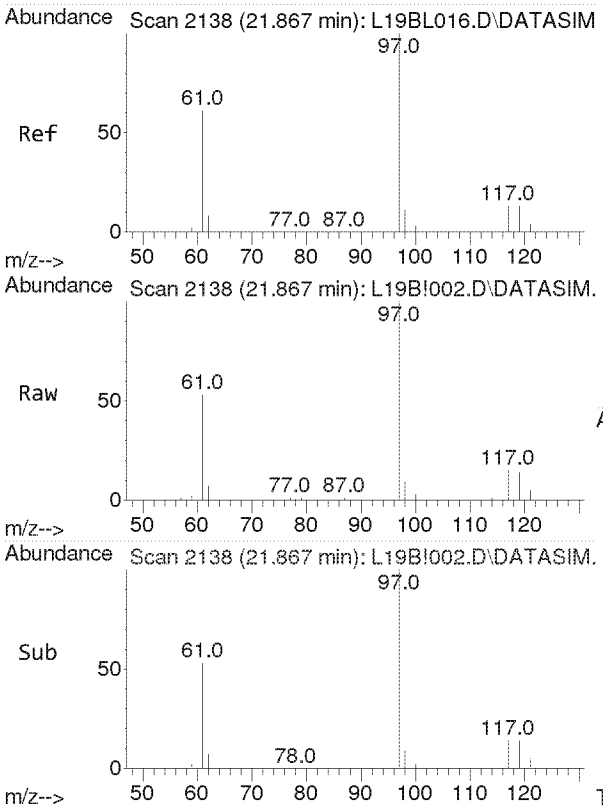


#28
1,2-Dichloroethane
Concen: 2.553 ppbv
RT: 21.475 min Scan# 2118
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 62 Resp: 14307

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.0	7.6
100	4.1	3.2	4.8

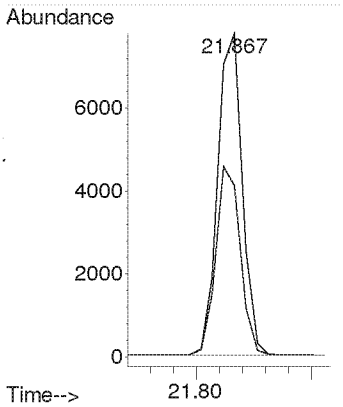




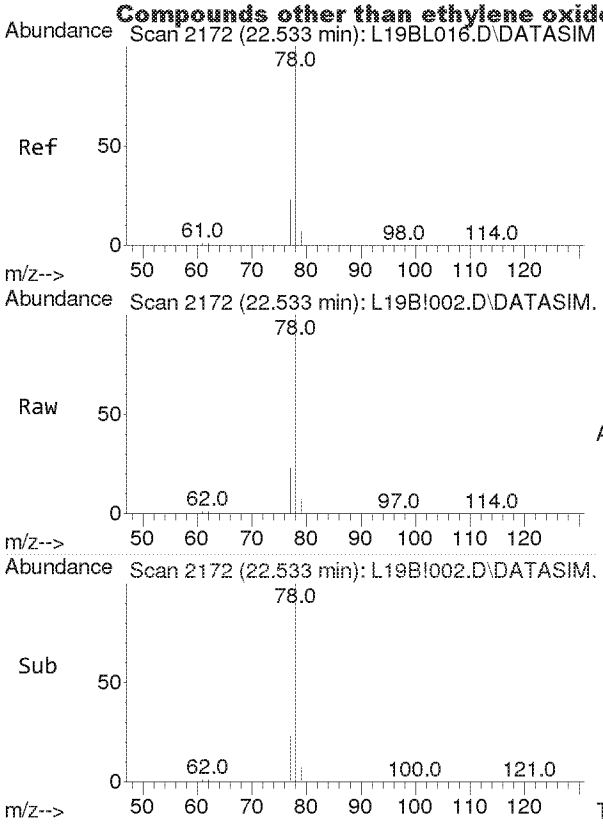
#30
1,1,1-Trichloroethane
Concen: 2.706 ppbv
RT: 21.867 min Scan# 2138
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 97 Resp: 22987

Ion	Ratio	Lower	Upper
97	100		
61	58.3	49.7	74.5



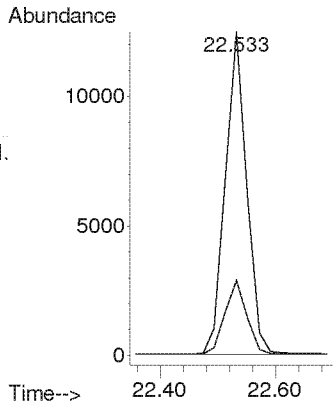
Compounds other than ethylene oxide were not quantitated.

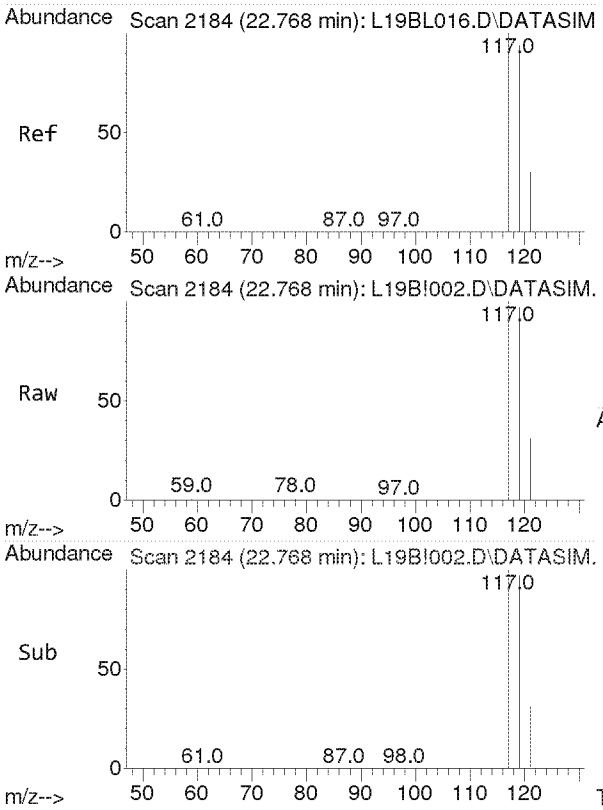


#31
Benzene
Concen: 2.632 ppbv
RT: 22.533 min Scan# 2172
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 78 Resp: 31972

Ion	Ratio	Lower	Upper
78	100		
77	23.1	18.2	27.4

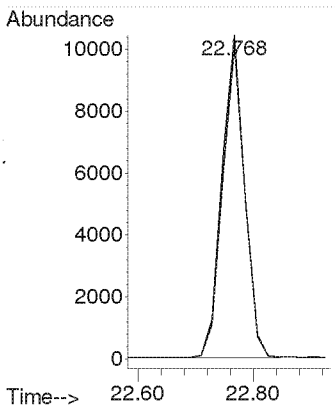




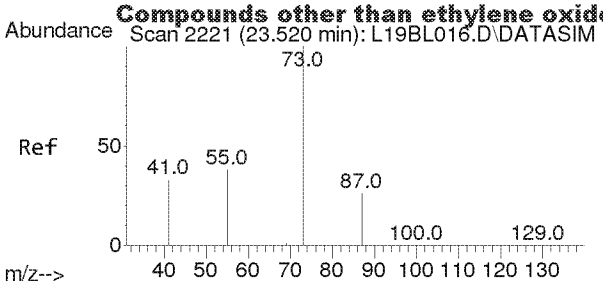
#32
Carbon Tetrachloride
Concen: 3.087 ppbv
RT: 22.768 min Scan# 2184
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:117 Resp: 28089

Ion	Ratio	Lower	Upper
117	100		
119	95.9	77.0	115.6



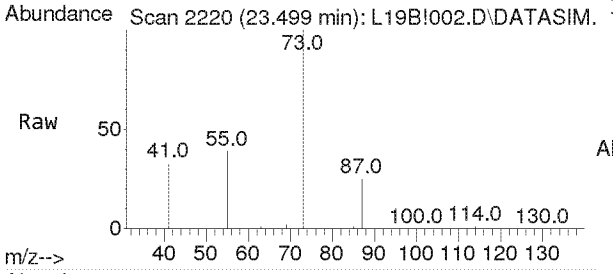
Compounds other than ethylene oxide were not quantitated.

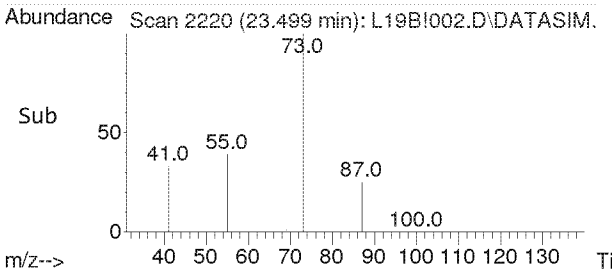


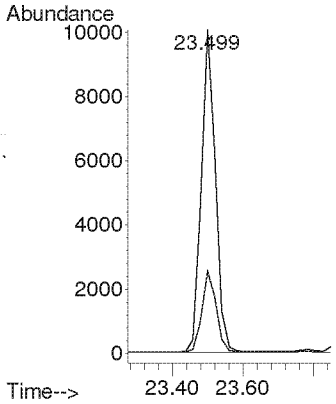
#33
tert-Amyl Methyl Ether
Concen: 2.679 ppbv
RT: 23.499 min Scan# 2220
Delta R.T. -0.021 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

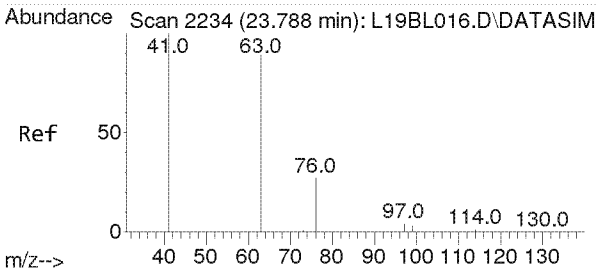
Tgt Ion: 73 Resp: 27640

Ion	Ratio	Lower	Upper
73	100		
87	25.2	20.1	30.1





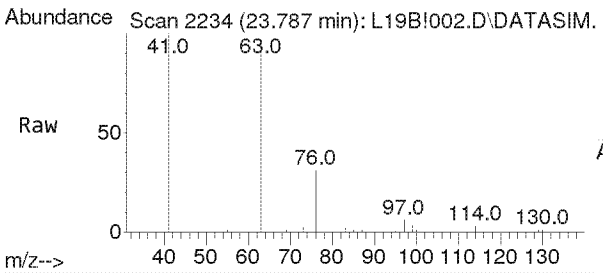


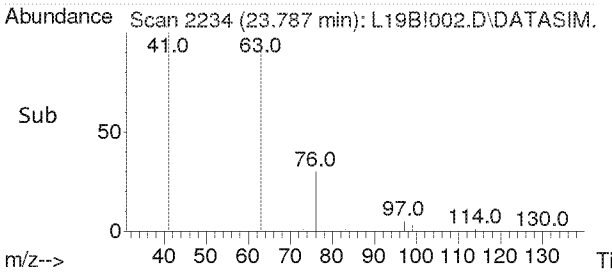


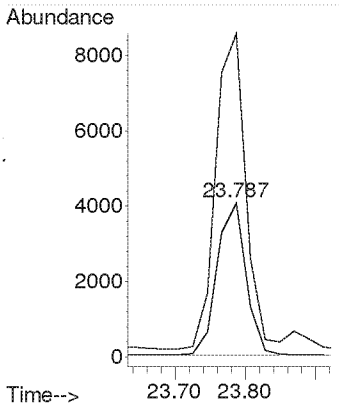
#34
1,2-Dichloropropane
Concen: 2.500 ppbv
RT: 23.787 min Scan# 2234
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 63 Resp: 11546

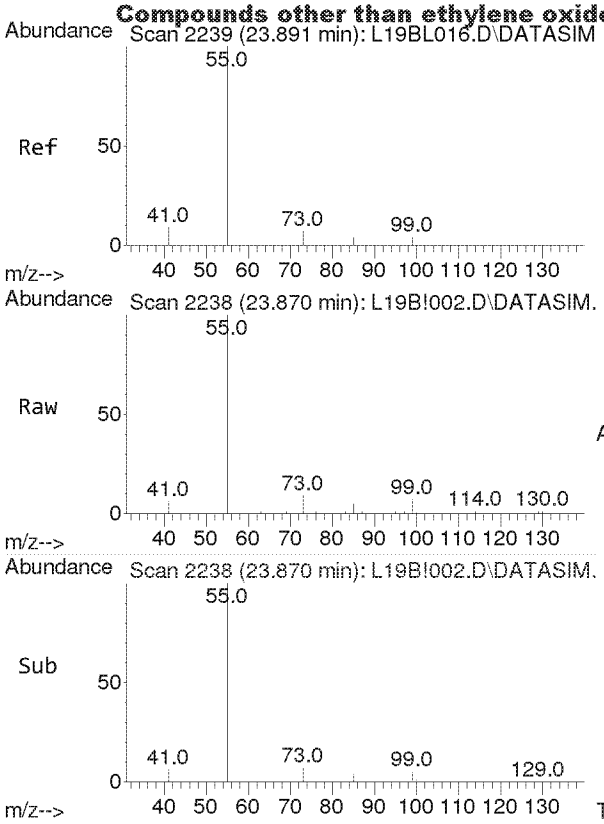
Ion	Ratio	Lower	Upper
63	100		
41	215.4	175.9	263.9







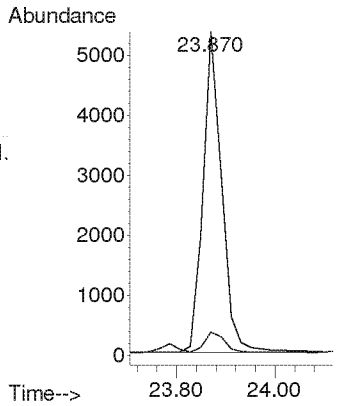
Compounds other than ethylene oxide were not quantitated.

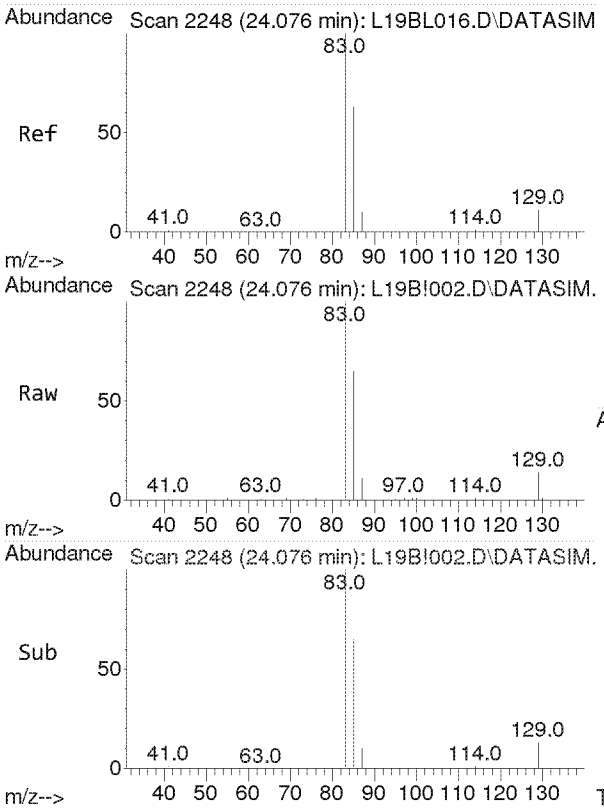


#35
Ethyl Acrylate
Concen: 3.555 ppbv
RT: 23.870 min Scan# 2238
Delta R.T. -0.021 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 55 Resp: 13950

Ion	Ratio	Lower	Upper
55	100		
99	6.7	5.0	7.6

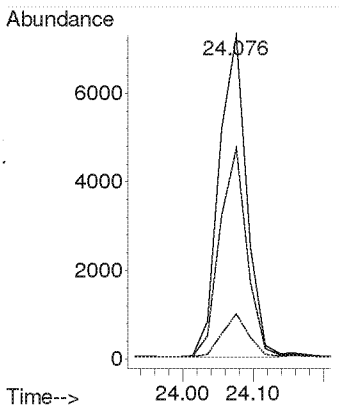




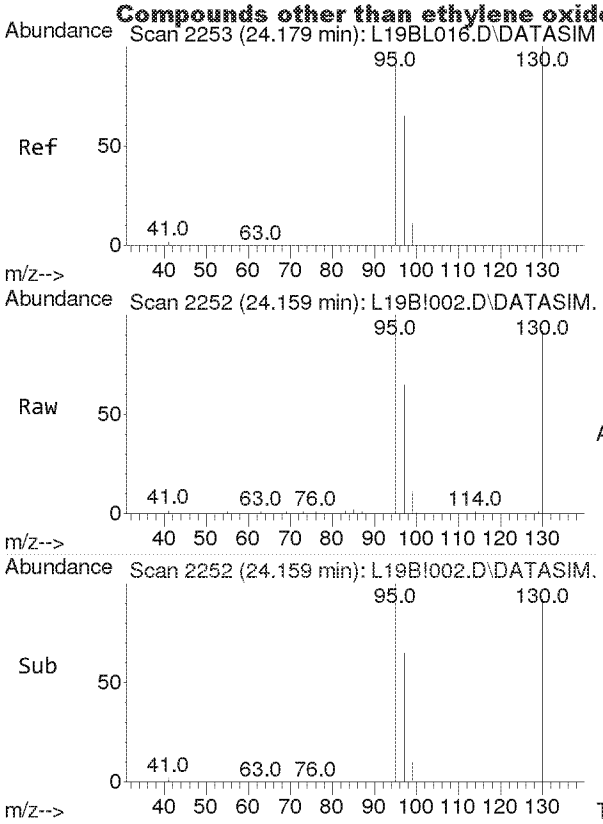
#36
Bromodichloromethane
Concen: 2.429 ppbv
RT: 24.076 min Scan# 2248
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 83 Resp: 19853

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.0	76.4
129	12.7	9.9	14.9



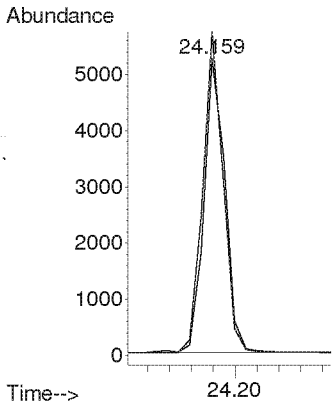
Compounds other than ethylene oxide were not quantitated.

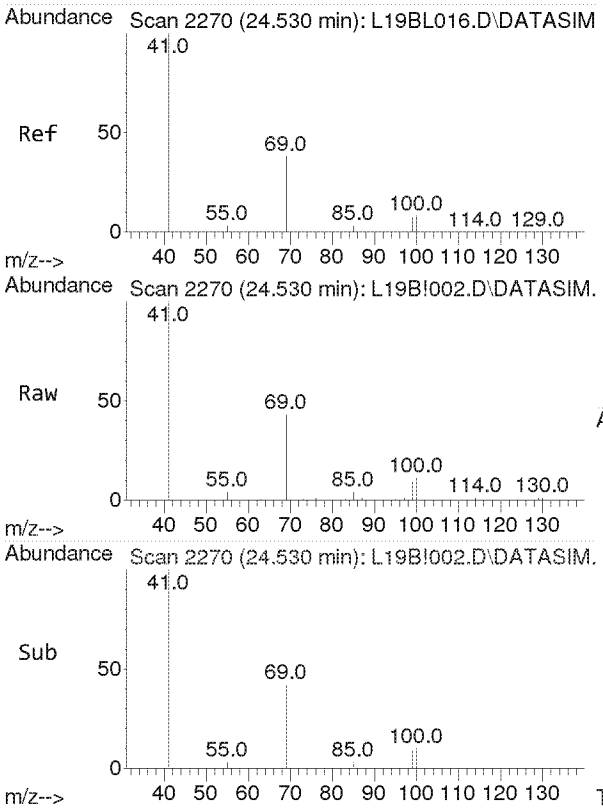


#37
Trichloroethylene
Concen: 2.405 ppbv
RT: 24.159 min Scan# 2252
Delta R.T. -0.021 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:130 Resp: 13916

Ion	Ratio	Lower	Upper
130	100		
95	105.9	84.9	127.3

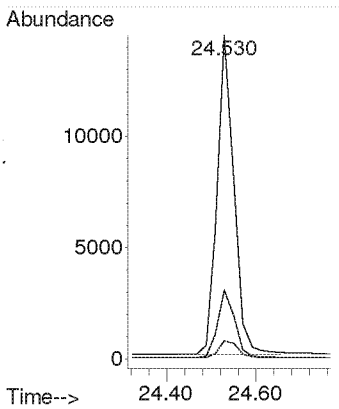




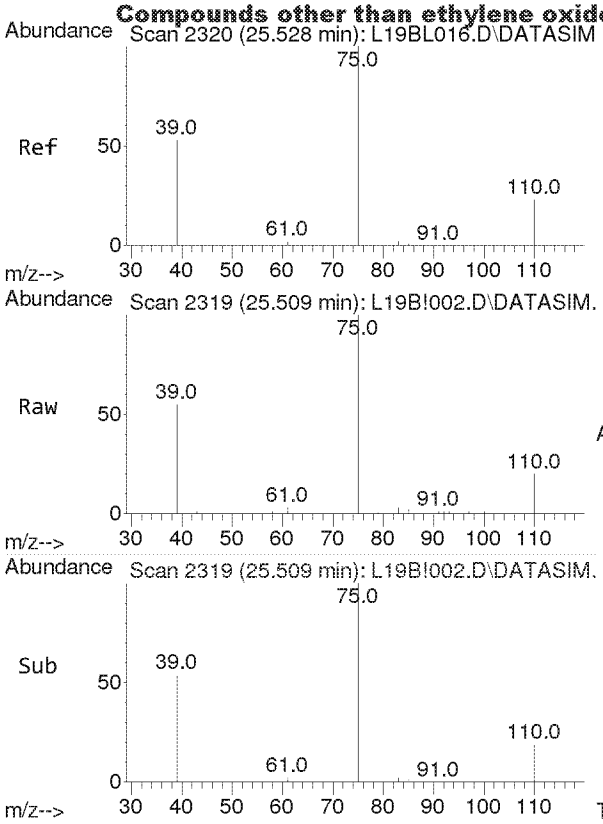
#38
Methyl Methacrylate
Concen: 3.174 ppbv
RT: 24.530 min Scan# 2270
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 41 Resp: 37375

Ion	Ratio	Lower	Upper
41	100		
69	21.7	16.8	25.2
100	5.8	4.5	6.7



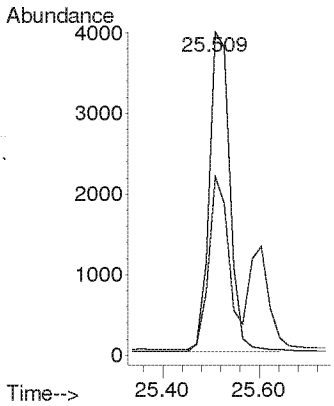
Compounds other than ethylene oxide were not quantitated.

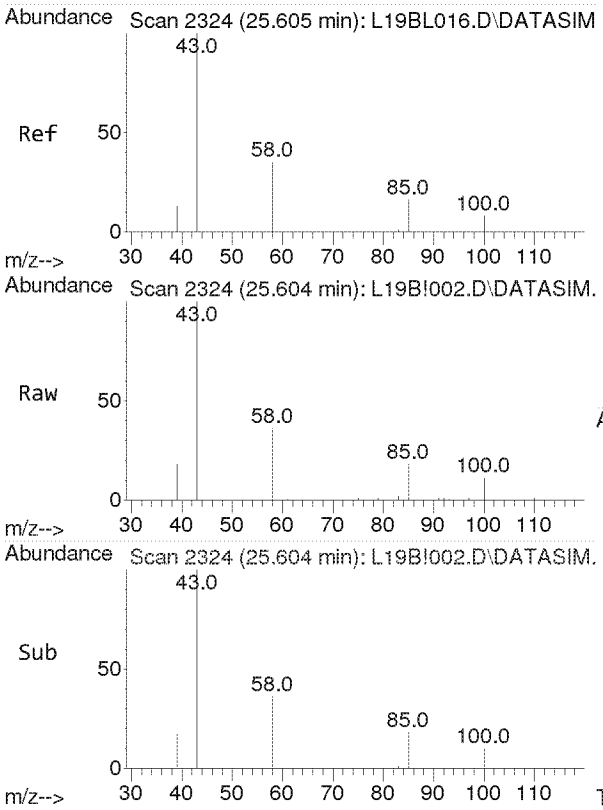


#39
cis-1,3-Dichloropropene
Concen: 2.933 ppbv
RT: 25.509 min Scan# 2319
Delta R.T. -0.019 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 75 Resp: 11763

Ion	Ratio	Lower	Upper
75	100		
39	53.7	43.4	65.0

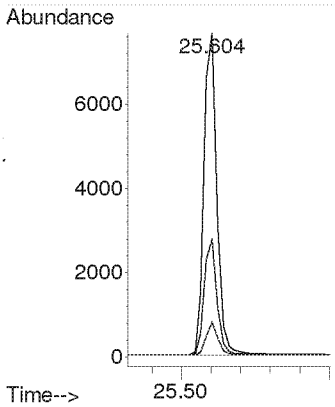




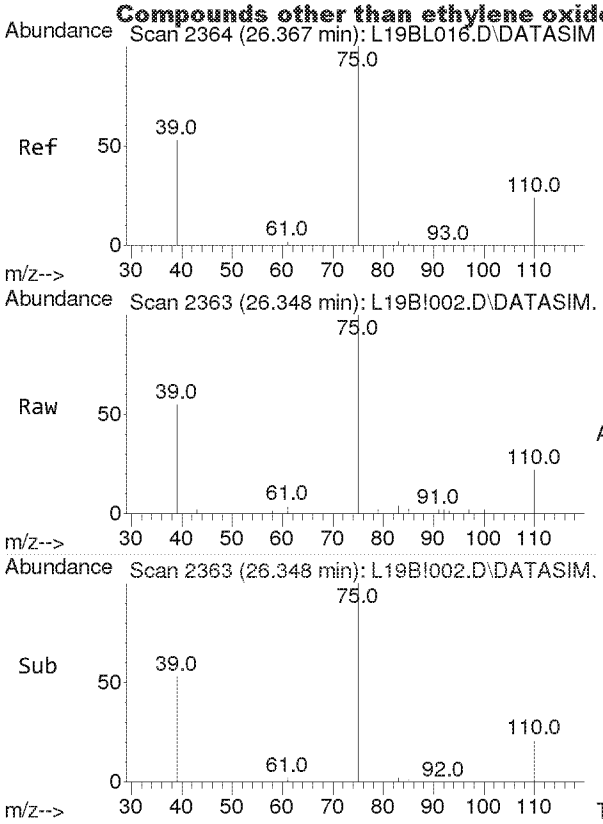
#40
Methyl Isobutyl Ketone
Concen: 2.647 ppbv
RT: 25.604 min Scan# 2324
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 43 Resp: 22914

Ion	Ratio	Lower	Upper
43	100		
58	35.4	28.0	42.0
100	9.1	7.0	10.4



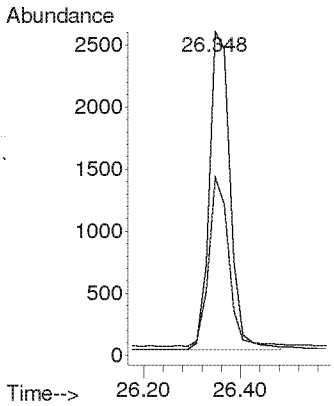
Compounds other than ethylene oxide were not quantitated.

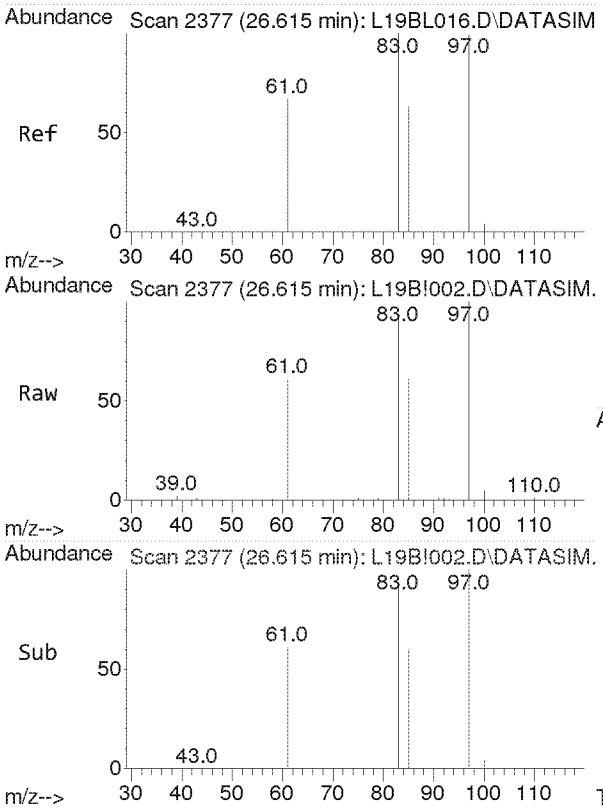


#41
trans-1,3-Dichloropropene
Concen: 2.853 ppbv
RT: 26.348 min Scan# 2363
Delta R.T. -0.019 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 75 Resp: 7666

Ion	Ratio	Lower	Upper
75	100		
39	51.0	42.9	64.3

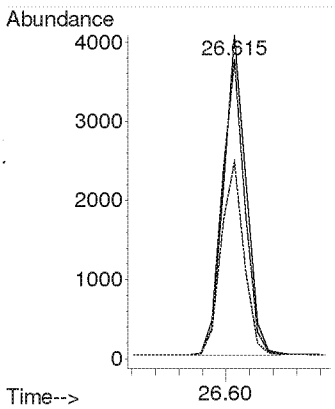




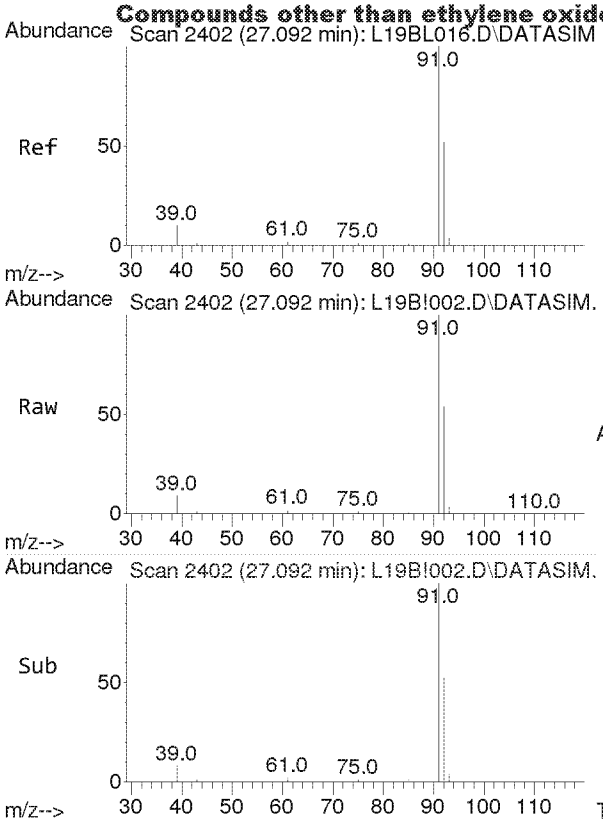
#42
1,1,2-Trichloroethane
Concen: 2.499 ppbv
RT: 26.615 min Scan# 2377
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 97 Resp: 10559

Ion	Ratio	Lower	Upper
97	100		
83	93.7	75.4	113.0
61	62.0	49.8	74.6



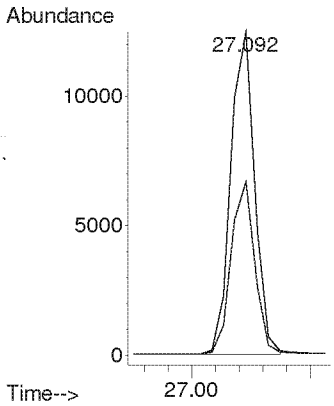
Compounds other than ethylene oxide were not quantitated.

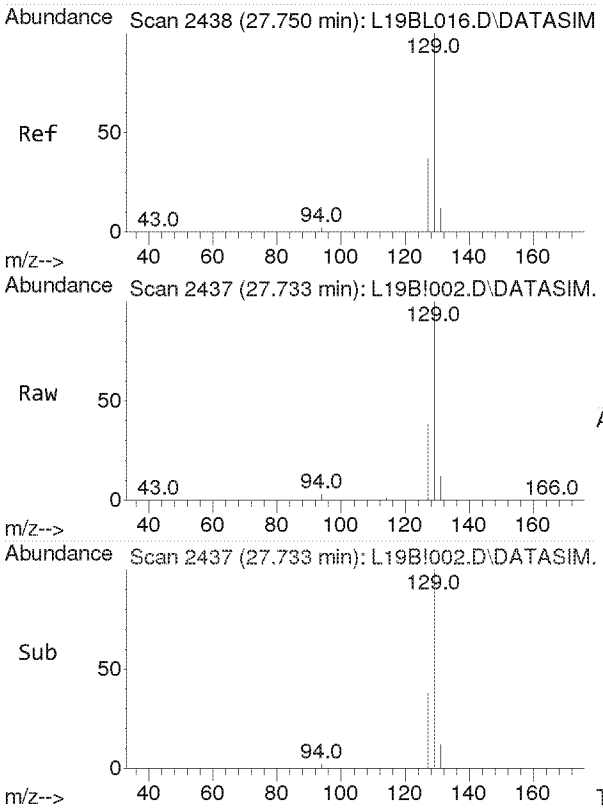


#44
Toluene
Concen: 2.502 ppbv
RT: 27.092 min Scan# 2402
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 91 Resp: 34541

Ion	Ratio	Lower	Upper
91	100		
92	52.9	42.0	63.0

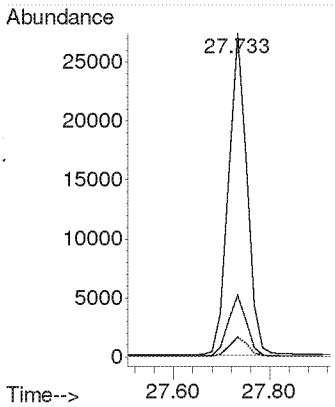




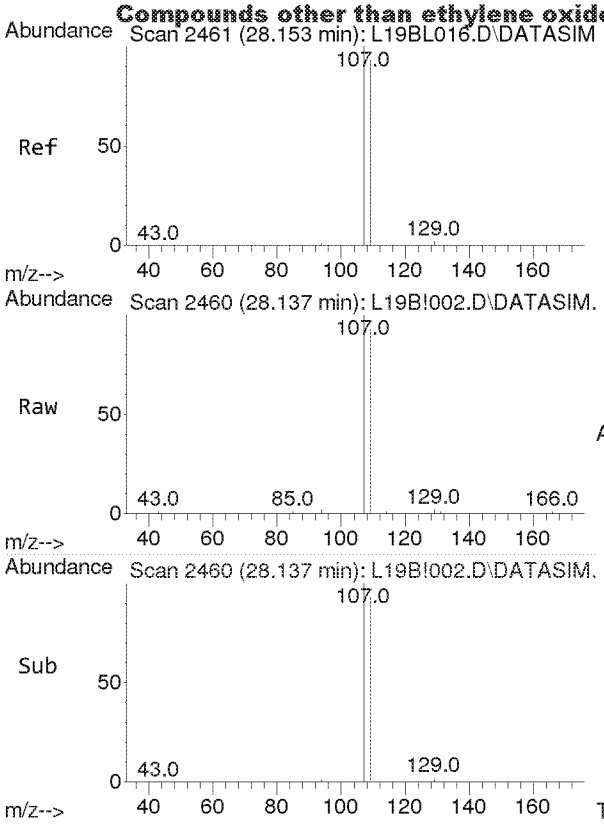
#45
Dibromochloromethane
Concen: 2.665 ppbv
RT: 27.733 min Scan# 2437
Delta R.T. -0.016 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:129 Resp: 72212

Ion	Ratio	Lower	Upper
129	100		
127	19.1	15.4	23.2
131	6.0	4.8	7.2



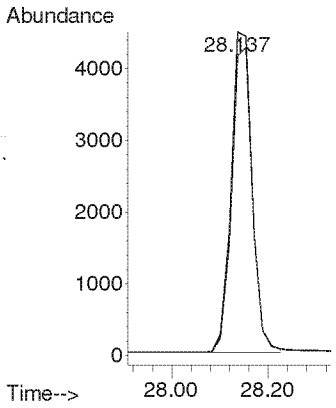
Compounds other than ethylene oxide were not quantitated.

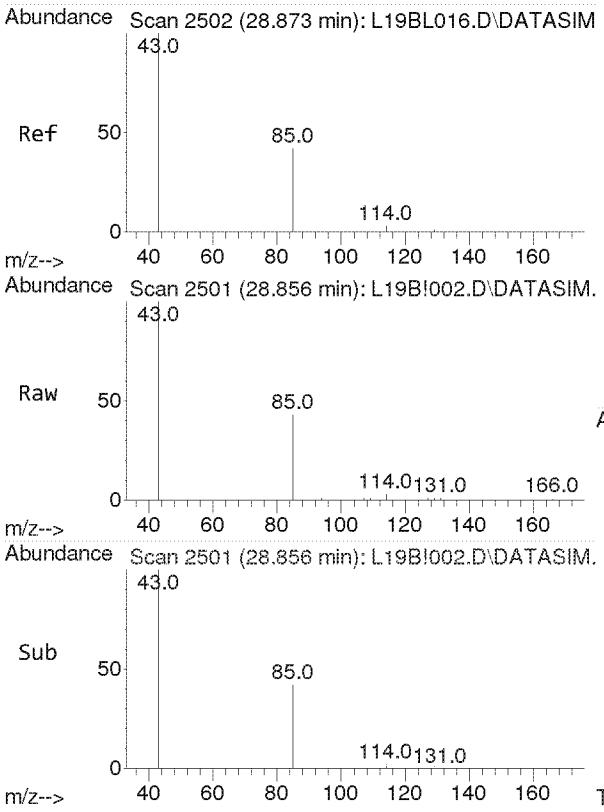


#46
1,2-Dibromoethane
Concen: 2.612 ppbv
RT: 28.137 min Scan# 2460
Delta R.T. -0.016 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:107 Resp: 13524

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.4	113.0

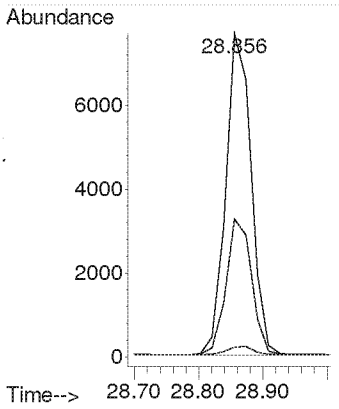




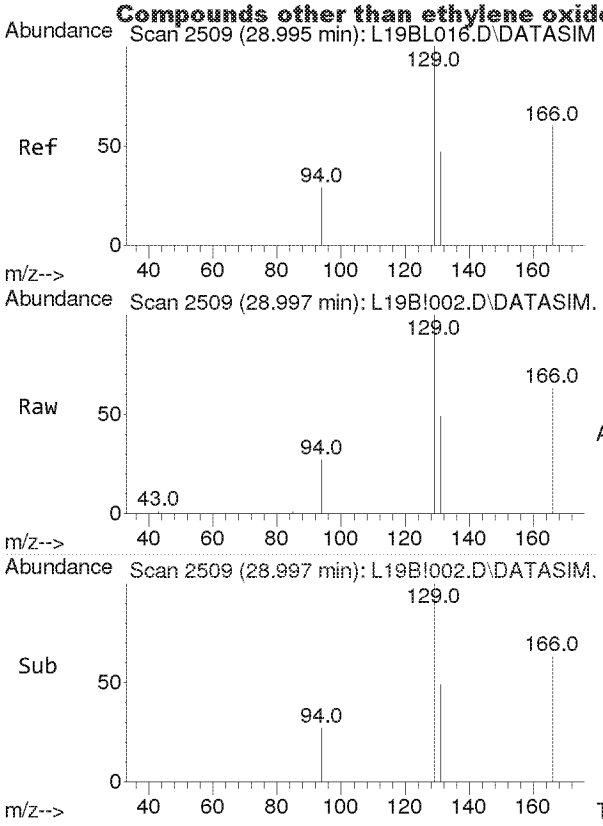
#47
n-Octane
Concen: 2.510 ppbv
RT: 28.856 min Scan# 2501
Delta R.T. -0.016 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 43 Resp: 20869

Ion	Ratio	Lower	Upper
43	100		
85	42.5	33.0	49.6
114	2.8	2.2	3.4



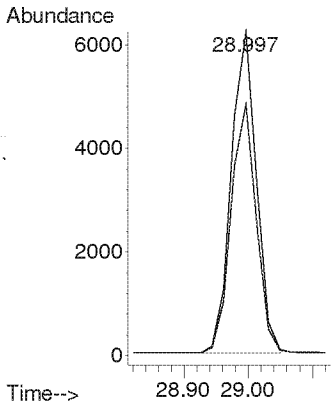
Compounds other than ethylene oxide were not quantitated.

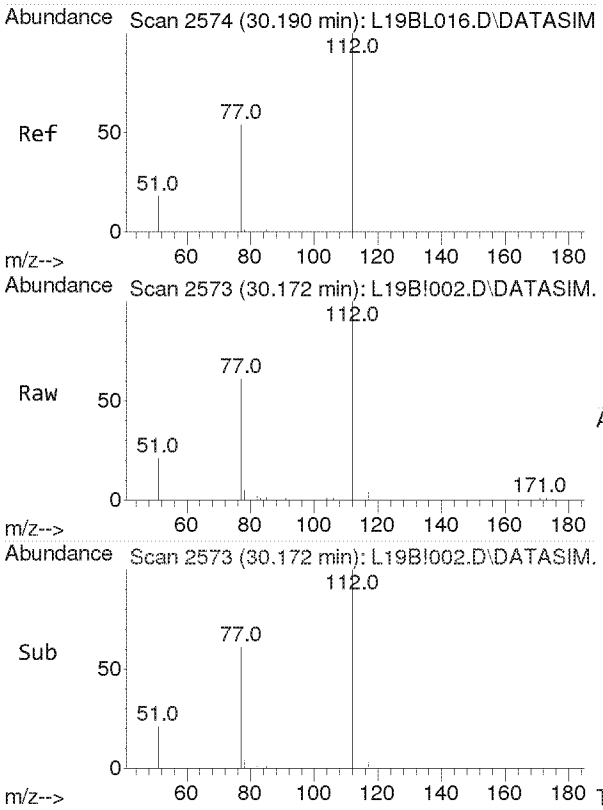


#48
Tetrachloroethylene
Concen: 2.520 ppbv
RT: 28.997 min Scan# 2509
Delta R.T. 0.001 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:166 Resp: 16744

Ion	Ratio	Lower	Upper
166	100		
131	77.8	61.5	92.3

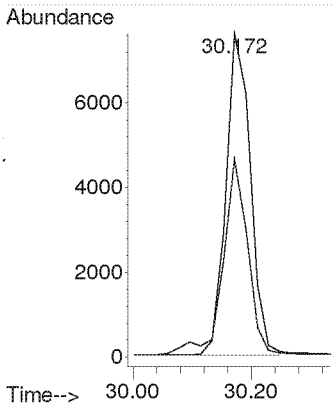




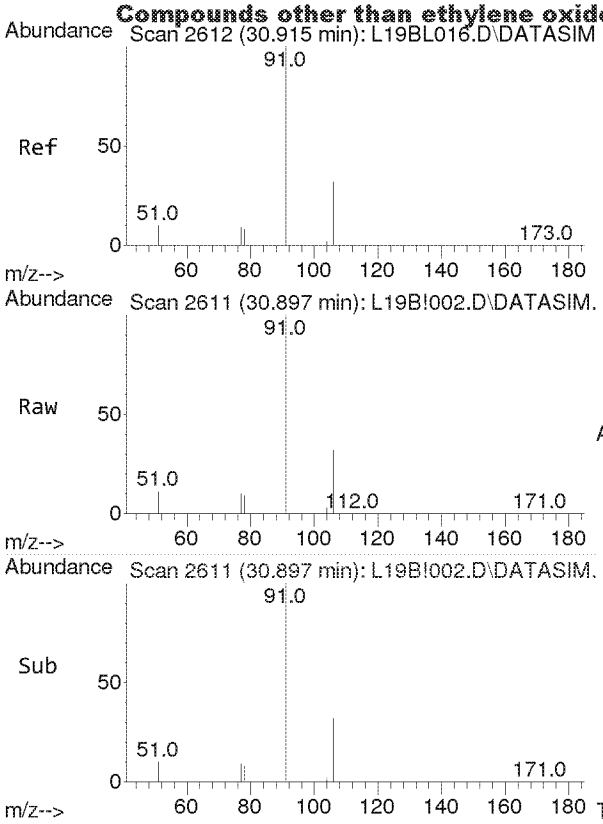
#49
Chlorobenzene
Concen: 2.462 ppbv
RT: 30.172 min Scan# 2573
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:112 Resp: 21692

Ion	Ratio	Lower	Upper
112	100		
77	59.6	47.8	71.6



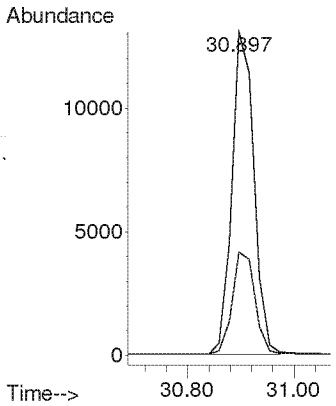
Compounds other than ethylene oxide were not quantitated.

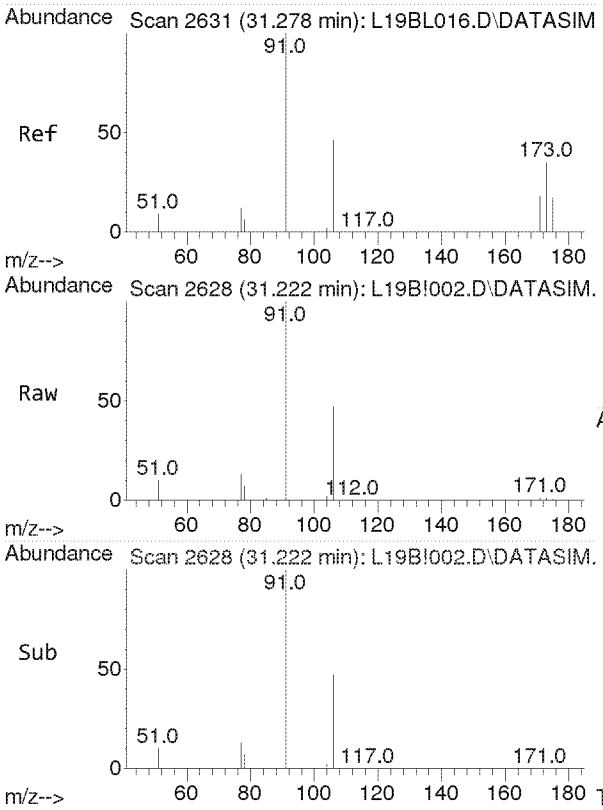


#50
Ethylbenzene
Concen: 2.594 ppbv
RT: 30.897 min Scan# 2611
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 91 Resp: 37655

Ion	Ratio	Lower	Upper
91	100		
106	32.5	26.0	39.0

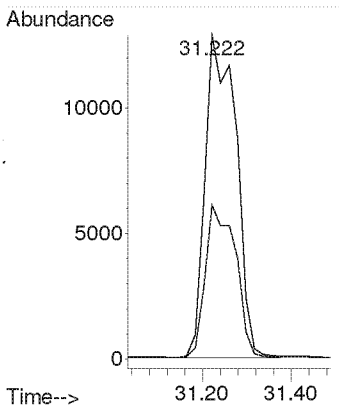




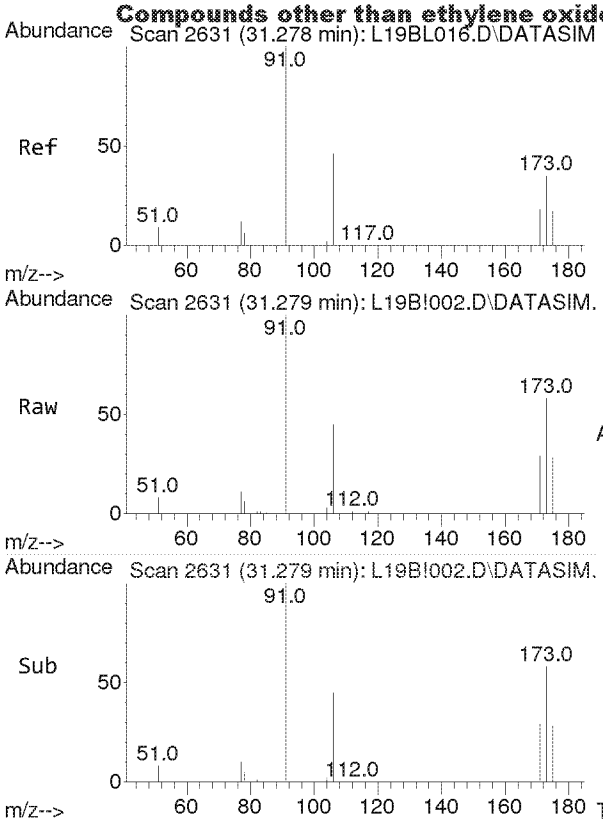
#51
m,p-Xylene
Concen: 5.073 ppbv
RT: 31.222 min Scan# 2628
Delta R.T. -0.056 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 91 Resp: 62111

Ion	Ratio	Lower	Upper
91	100		
106	46.0	37.3	55.9



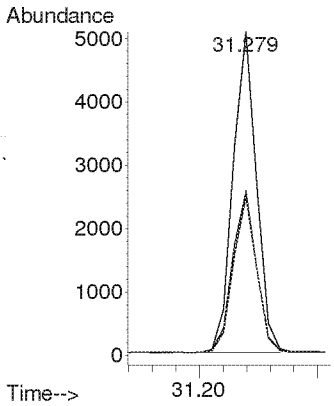
Compounds other than ethylene oxide were not quantitated.

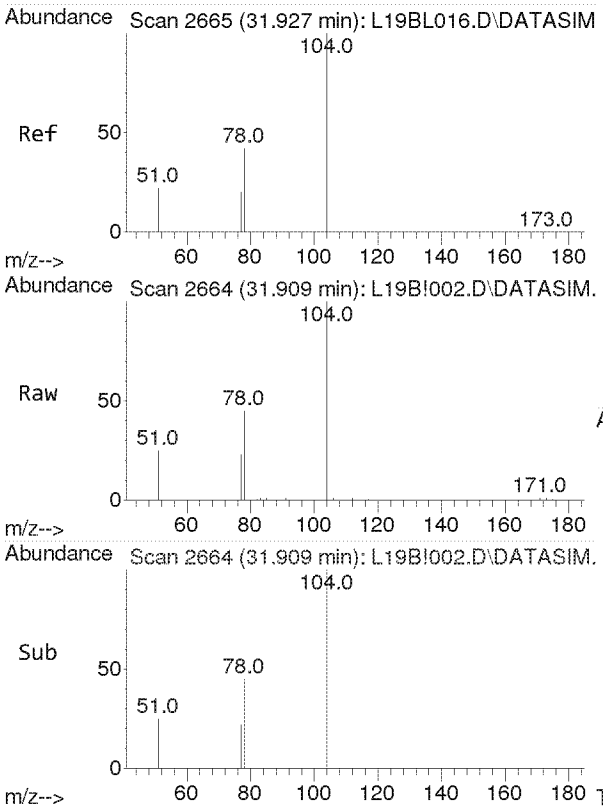


#52
Bromoform
Concen: 2.626 ppbv
RT: 31.279 min Scan# 2631
Delta R.T. 0.001 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:173 Resp: 13760

Ion	Ratio	Lower	Upper
173	100		
171	51.1	41.0	61.6
175	48.6	39.1	58.7

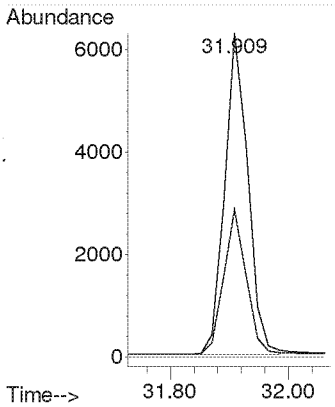




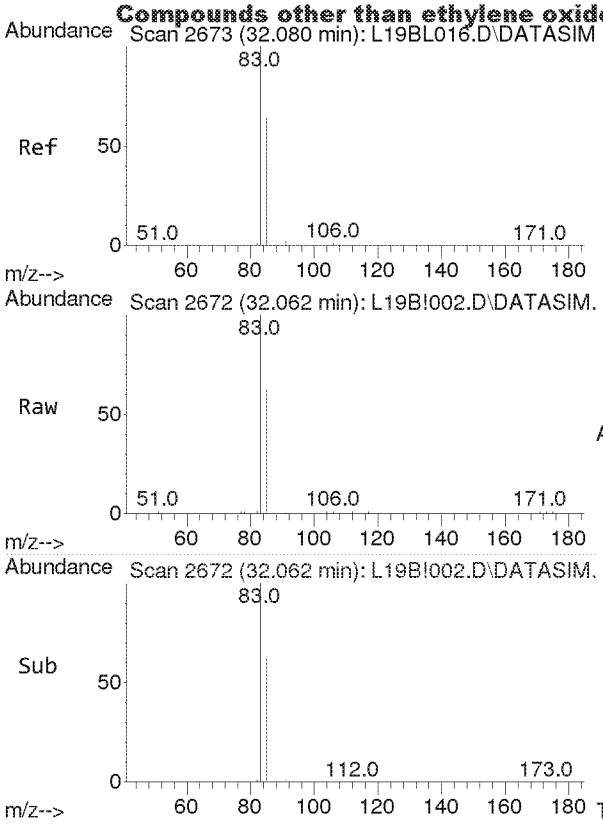
#53
Styrene
Concen: 2.450 ppbv
RT: 31.909 min Scan# 2664
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:104 Resp: 17002

Ion	Ratio	Lower	Upper
104	100		
78	44.0	35.4	53.2
103	0.0	0.0	0.0



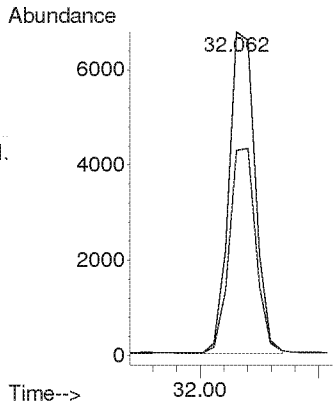
Compounds other than ethylene oxide were not quantitated.

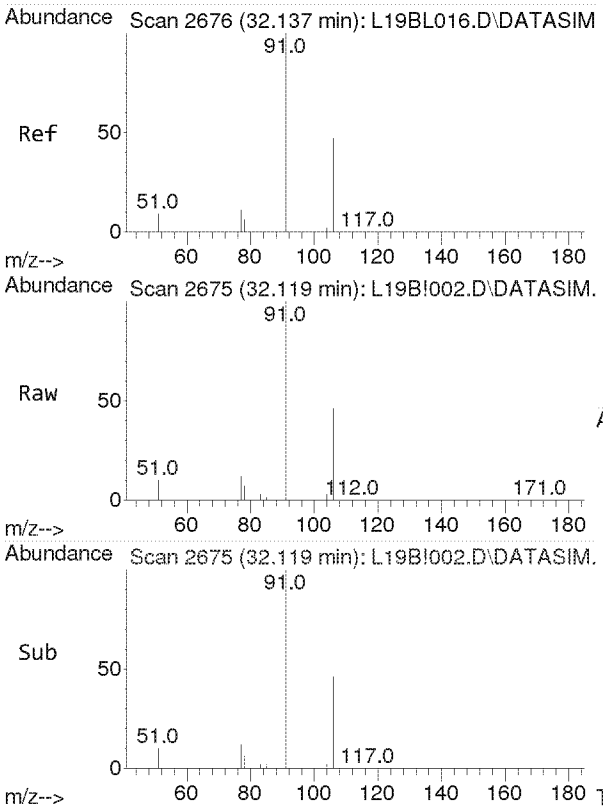


#54
1,1,2,2-Tetrachloroethane
Concen: 2.618 ppbv
RT: 32.062 min Scan# 2672
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 83 Resp: 20687

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.6	77.4

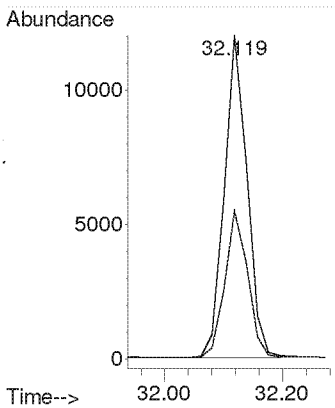




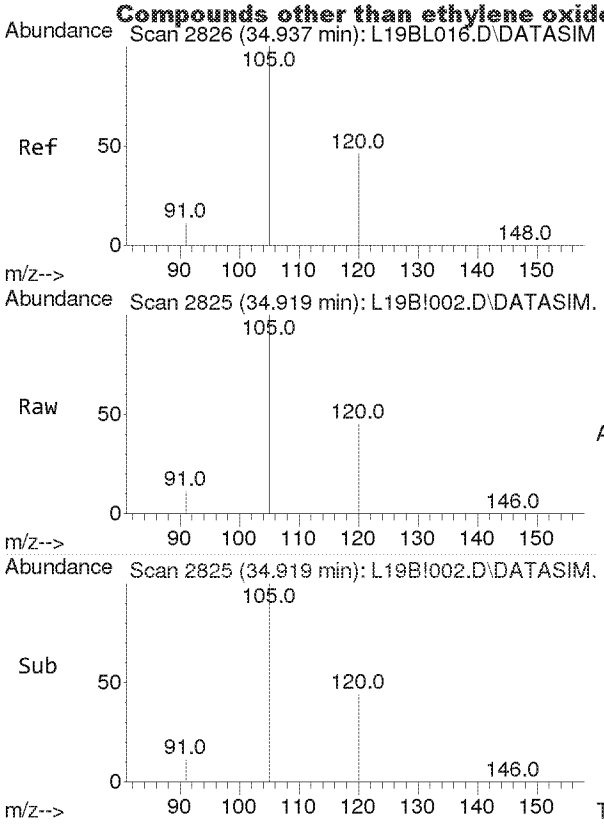
#55
o-Xylene
Concen: 2.636 ppbv
RT: 32.119 min Scan# 2675
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion: 91 Resp: 31845

Ion	Ratio	Lower	Upper
91	100		
106	45.8	36.6	55.0



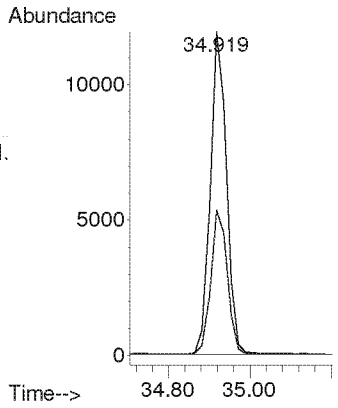
Compounds other than ethylene oxide were not quantitated.

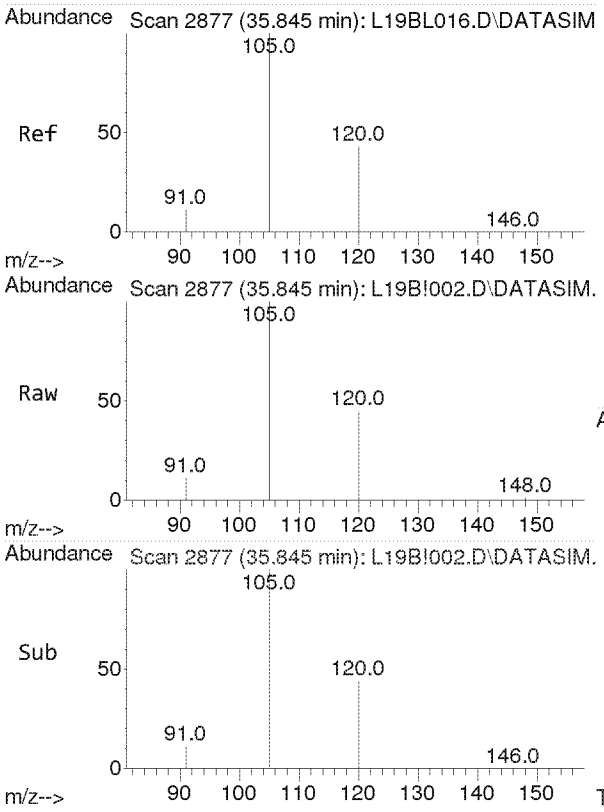


#56
1,3,5-Trimethylbenzene
Concen: 2.526 ppbv
RT: 34.919 min Scan# 2825
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:105 Resp: 32789

Ion	Ratio	Lower	Upper
105	100		
120	45.5	36.8	55.2

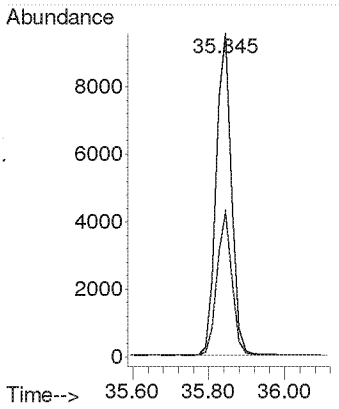




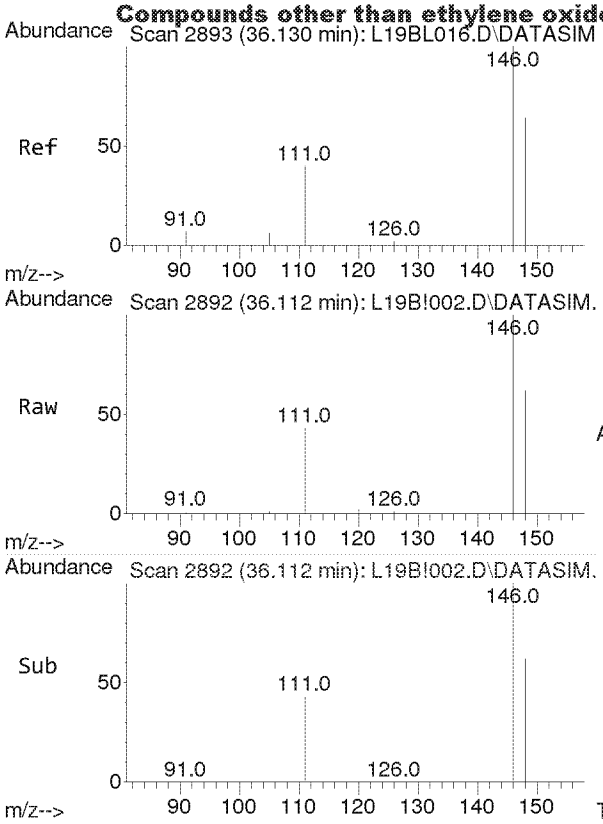
#57
1,2,4-Trimethylbenzene
Concen: 2.375 ppbv
RT: 35.845 min Scan# 2877
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:105 Resp: 26663

Ion	Ratio	Lower	Upper
105	100		
120	43.4	35.2	52.8



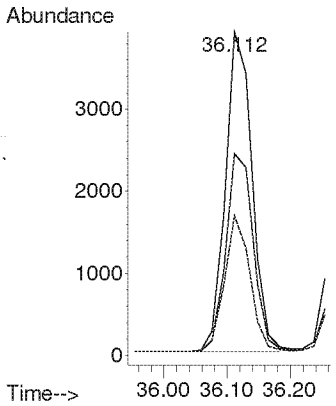
Compounds other than ethylene oxide were not quantitated.

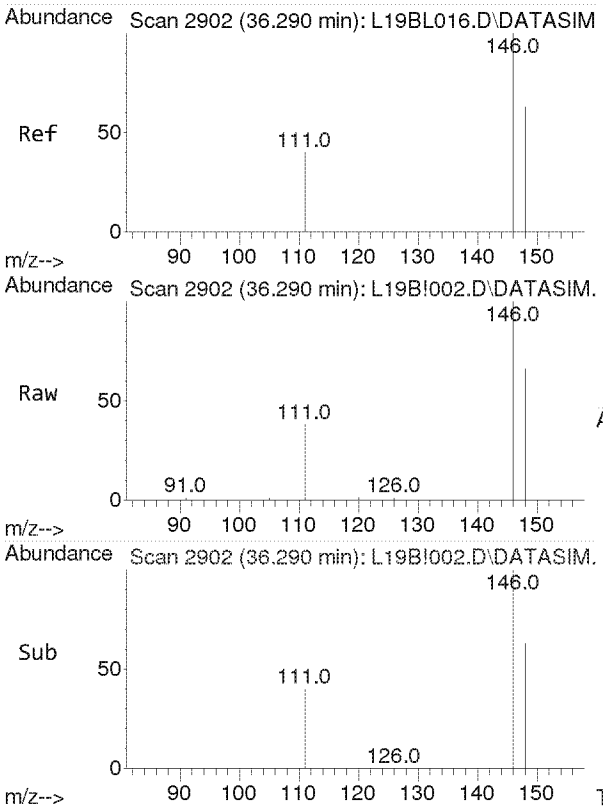


#58
m-Dichlorobenzene
Concen: 1.914 ppbv
RT: 36.112 min Scan# 2892
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:146 Resp: 11298

Ion	Ratio	Lower	Upper
146	100		
148	64.0	51.3	76.9
111	40.9	32.1	48.1

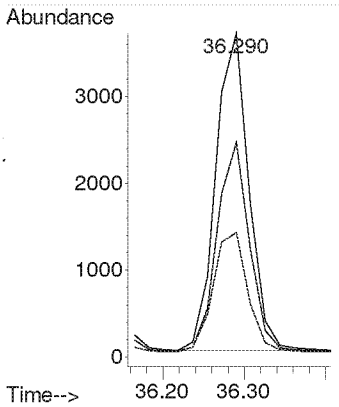




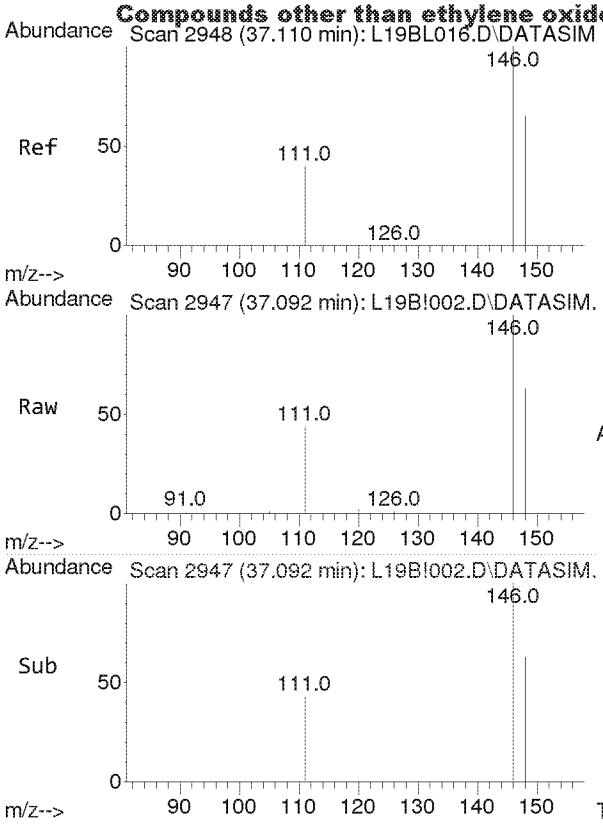
#59
p-Dichlorobenzene
Concen: 2.141 ppbv
RT: 36.290 min Scan# 2902
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:146 Resp: 10295

Ion	Ratio	Lower	Upper
146	100		
148	64.3	51.4	77.2
111	39.5	31.0	46.4



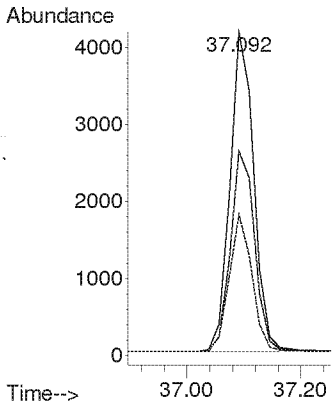
Compounds other than ethylene oxide were not quantitated.

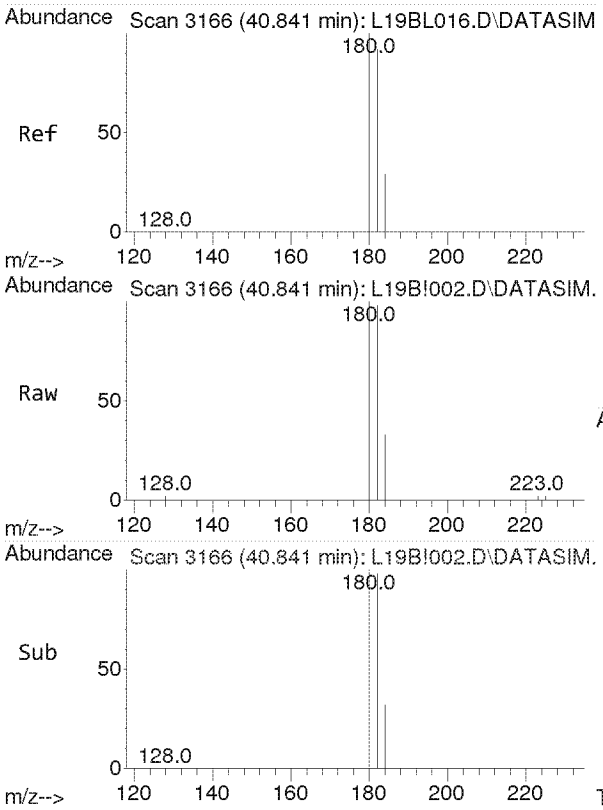


#60
o-Dichlorobenzene
Concen: 2.232 ppbv
RT: 37.092 min Scan# 2947
Delta R.T. -0.018 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:146 Resp: 12048

Ion	Ratio	Lower	Upper
146	100		
148	63.9	51.2	76.8
111	41.4	32.6	49.0

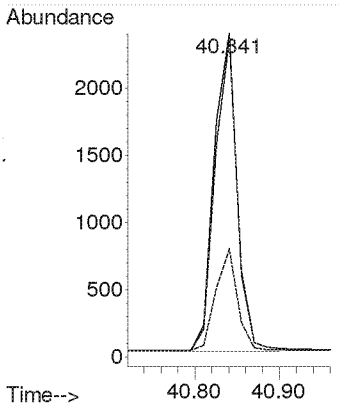




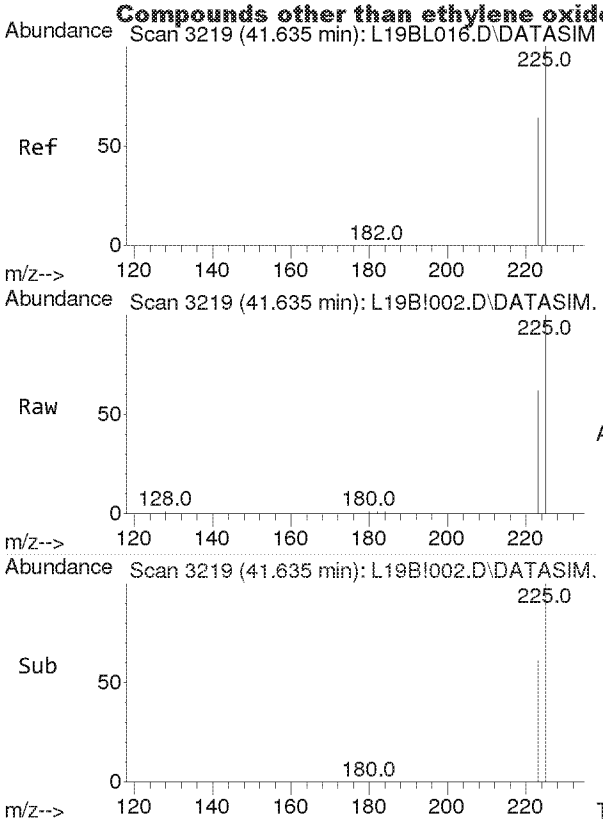
#61
1,2,4-Trichlorobenzene
Concen: 2.420 ppbv
RT: 40.841 min Scan# 3166
Delta R.T. -0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:180 Resp: 4430

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.7	113.5
184	30.8	24.2	36.2



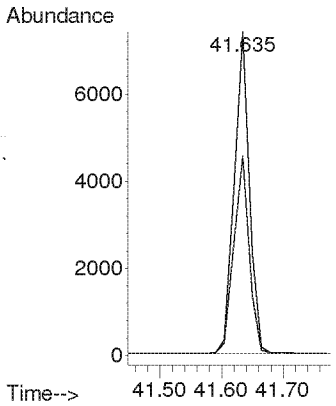
Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: 2.670 ppbv
RT: 41.635 min Scan# 3219
Delta R.T. 0.000 min
Lab File: L19B!002.D
Acq: 28 Feb 2019 1:49 pm

Tgt Ion:225 Resp: 12484

Ion	Ratio	Lower	Upper
225	100		
223	62.5	49.9	74.9



Compounds other than ethylene oxide were not quantitated.

TO-15 Method Blank and Annual Canister Certification Blank

Analyst: [illegible] Date: 3-5-19

Reviewer: RMB Date: 3/5/19

Data File Name	L19B1005.D
Operator	MAH
Acq. Method File	9020003.M
Sample Name	B9B2804-BLK1
Misc Info	80 ML 8L13001

#	Name	Target Response	Amount (ppbv)	PASS*		Blank Criteria
1)	IS-Hexane-d14	50466		NA		NA
2)	Acetylene	0	0.000	Y		0.118
3)	Propylene	53	0.010	Y		0.192
4)	Dichlorodifluoromethane	45	0.002	Y		0.082
5)	Chloromethane	50	0.008	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	487	0.027	Y	MAX	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	128620		NA		NA
29)	1,1,1-Trichloroethane	0	0.000	Y		0.041
30)	Benzene	47	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	0	0.000	Y		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	88121		NA		NA
43)	Toluene	57	0.004	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	107	0.007	Y		0.077
50)	m,p-Xylene	64	0.005	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	115	0.009	Y		0.080
55)	1,3,5-Trimethylbenzene	0	0.000	Y		0.102
56)	1,2,4-Trimethylbenzene	40	0.003	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\L19B!\
Data File : L19B!005.D
Acq On : 28 Feb 2019 4:33 pm (#1); 28-Feb-19, 16:28:03 (#2)
Operator : MAH
Sample : B9B2804-BLK1 (Sig #1); B9B2805-BLK1 (Sig #2)
Misc : 80 ML 8L13001 (Sig #1); 80 ML 8L13001 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 05 07:31:32 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

3-5-19

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	50466	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	128620	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.114	117	88121	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	
3) Propylene	7.838	41	53	0.0103 ppbv #	13
4) Dichlorodifluoromethane	8.702	85	45	0.0018 ppbv #	49
5) Chloromethane	9.757	50	50	0.0080 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.	
10) Bromomethane	0.000	94	0	N.D.	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D.	
13) Acrolein	0.000	56	0	N.D.	
14) Trichlorofluoromethane	0.000	101	0	N.D.	
15) Acrylonitrile	0.000	53	0	N.D.	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D.	
18) Carbon Disulfide	16.930	76	487	0.0268 ppbv #	94
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	22.533	78	47	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	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.	
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	27.092	91	57	0.0039 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	30.915	91	107	0.0070 ppbv #	42

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L19B!\
Data File : L19B!005.D
Acq On : 28 Feb 2019 4:33 pm (#1); 28-Feb-19, 16:28:03 (#2)
Operator : MAH
Sample : B9B2804-BLK1 (Sig #1); B9B2805-BLK1 (Sig #2)
Misc : 80 ML 8L13001 (Sig #1); 80 ML 8L13001 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 05 07:31:32 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	31.259	91	64	0.0050 ppbv #	30
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	32.118	91	115	0.0091 ppbv	94
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
57) 1,2,4-Trimethylbenzene	35.844	105	40	0.0034 ppbv #	32
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

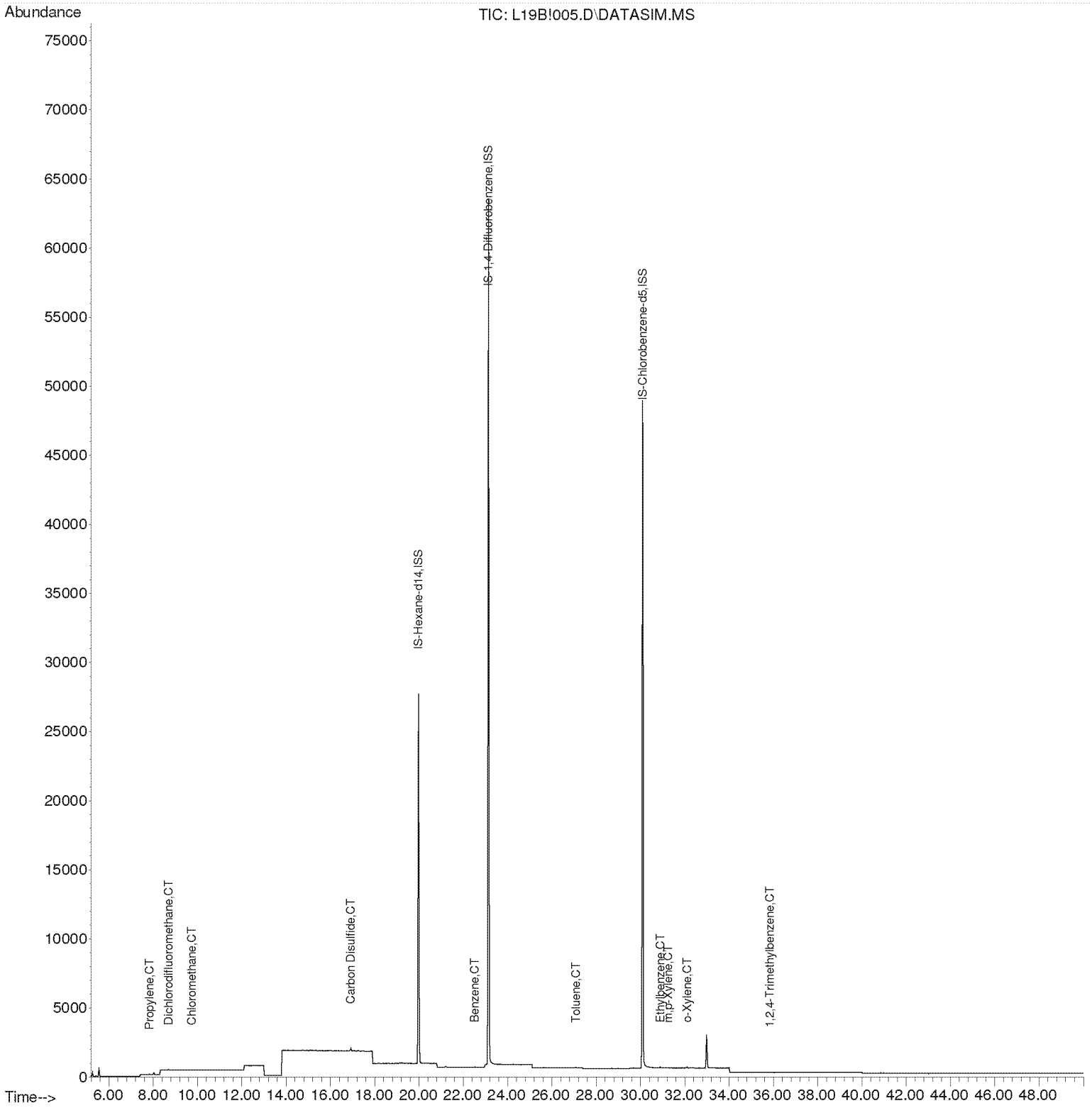
ED_002475_00000285-00050

Quantitation Report (QT Reviewed)

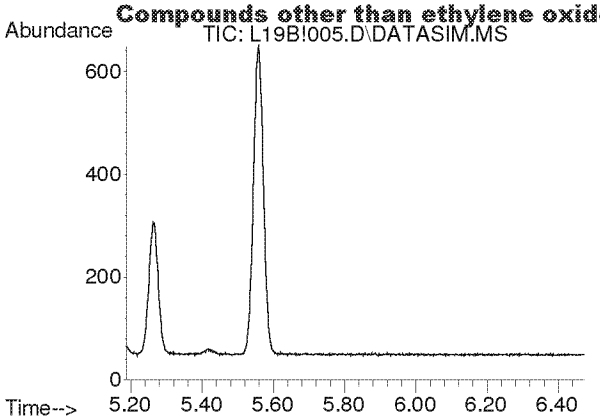
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!005.D
Acq On : 28 Feb 2019 4:33 pm
Operator : MAH
Sample : B9B2804-BLK1
Misc : 80 ML 8L13001
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 01 09:47:35 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



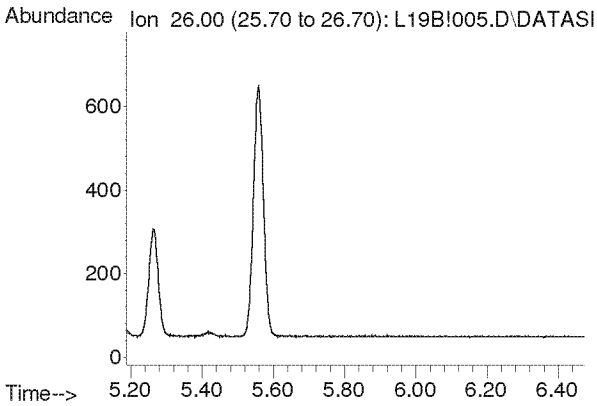
Compounds other than ethylene oxide were not quantitated.

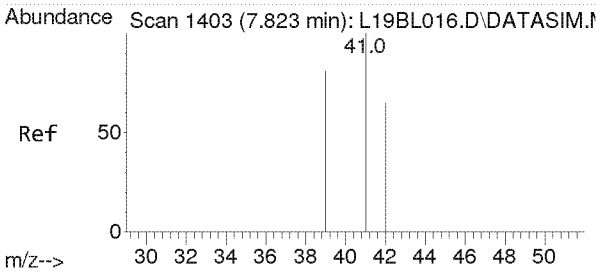


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 26

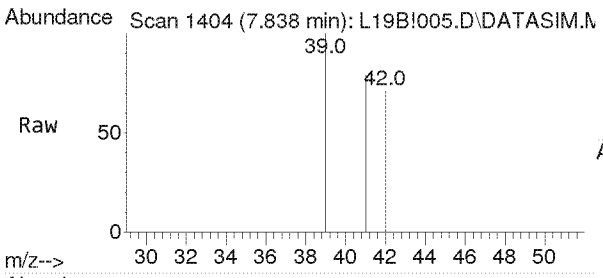


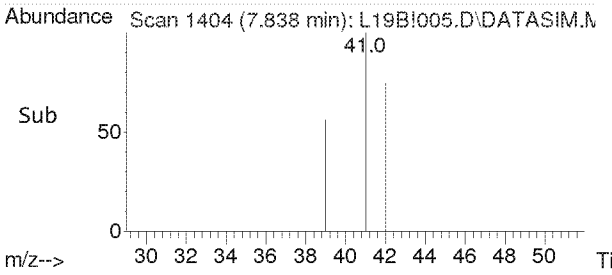


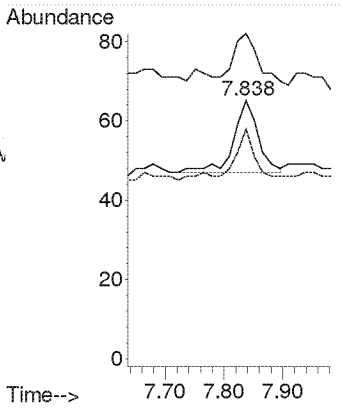
#3
Propylene
Concen: 0.010 ppbv
RT: 7.838 min Scan# 1404
Delta R.T. 0.014 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 41 Resp: 53

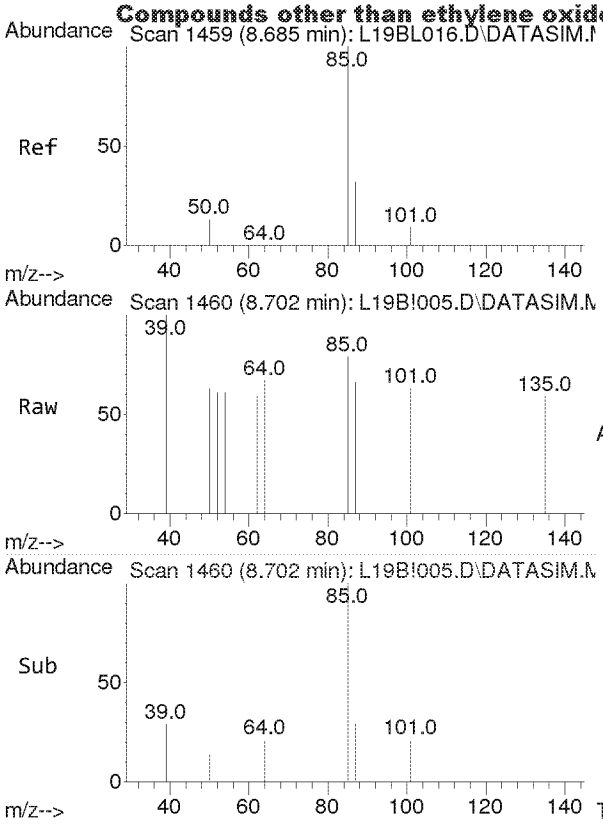
Ion	Ratio	Lower	Upper
41	100		
39	0.0	64.2	96.2#
42	0.0	52.6	79.0#







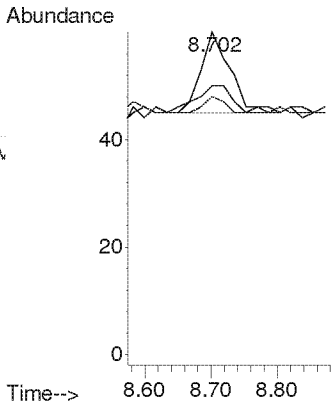
Compounds other than ethylene oxide were not quantitated.

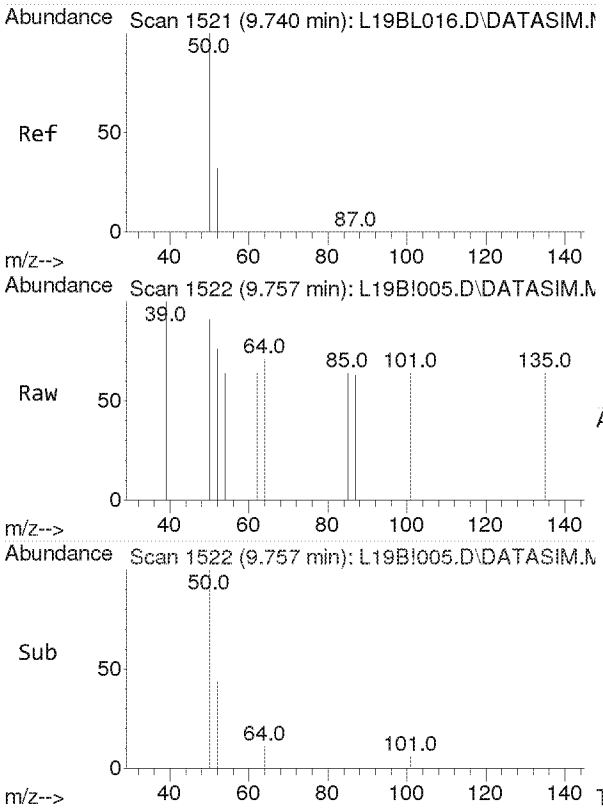


#4
Dichlorodifluoromethane
Concen: 0.002 ppbv
RT: 8.702 min Scan# 1460
Delta R.T. 0.017 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 85 Resp: 45

Ion	Ratio	Lower	Upper
85	100		
87	0.0	26.0	39.0#
101	0.0	7.3	10.9#

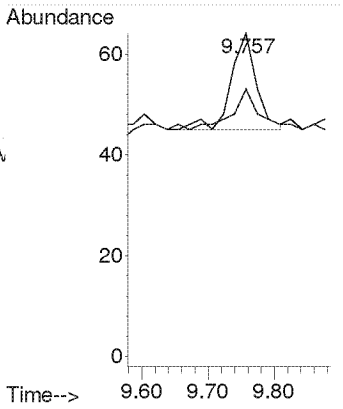




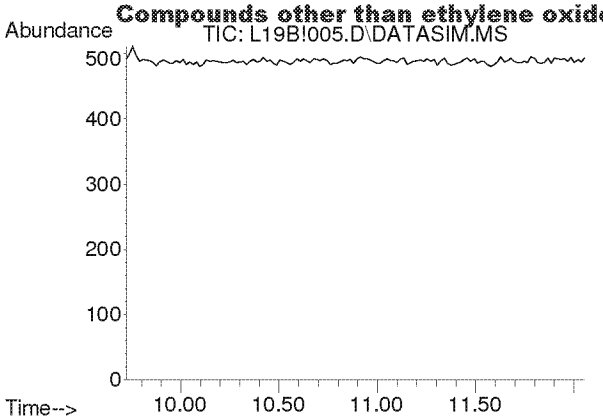
#5
Chloromethane
Concen: 0.008 ppbv
RT: 9.757 min Scan# 1522
Delta R.T. 0.017 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 50 Resp: 50

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.1	39.1#



Compounds other than ethylene oxide were not quantitated.

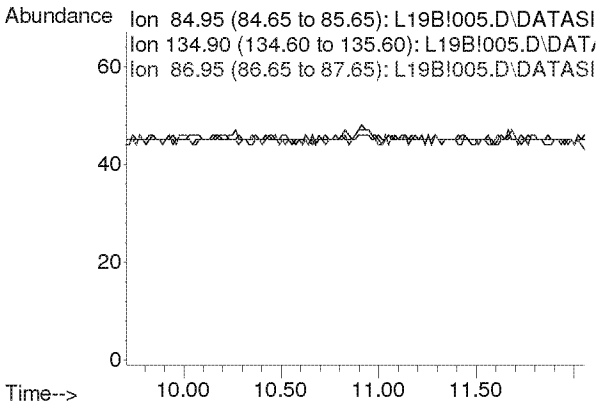


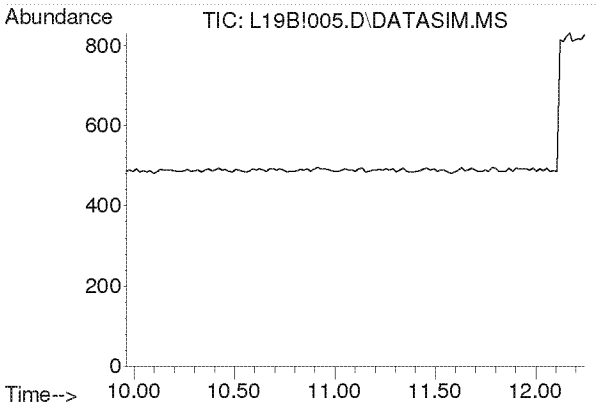
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



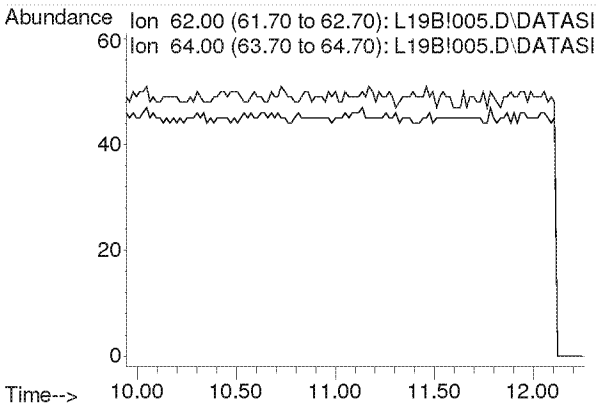


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

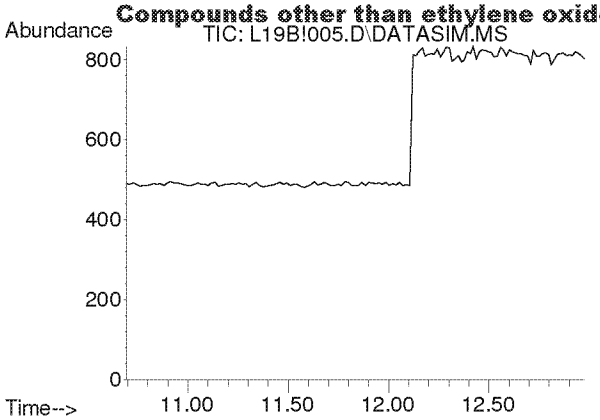
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

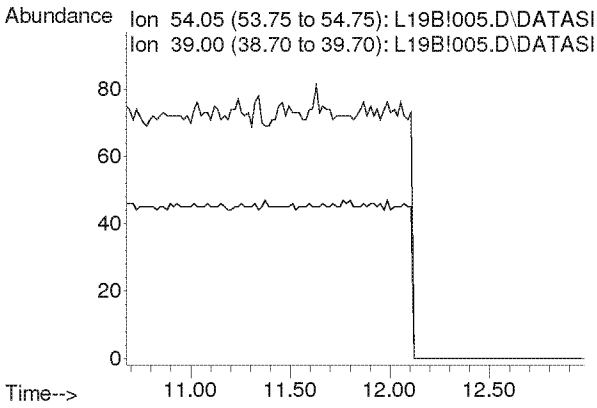


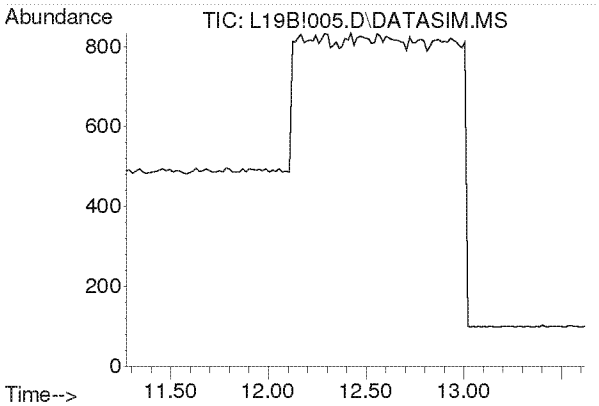
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0



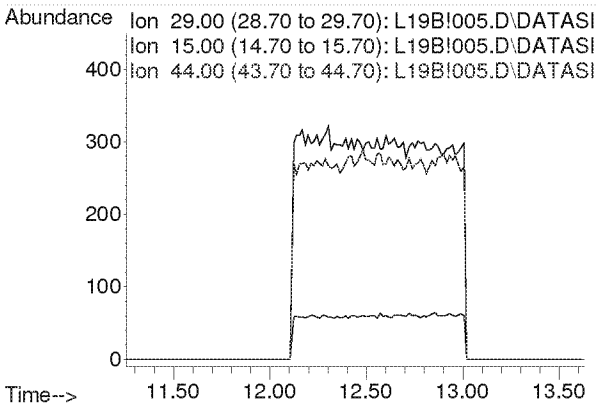


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.38 min

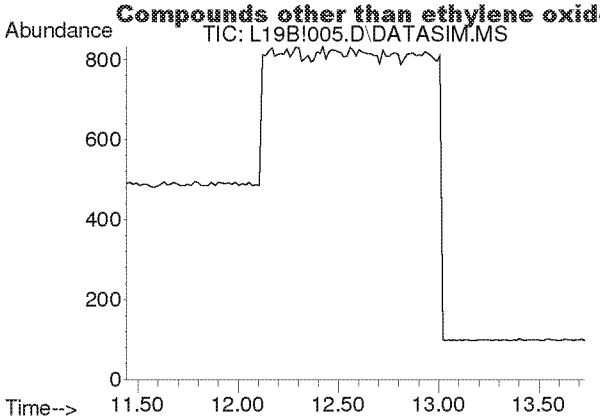
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	20.0
44	81.8



Compounds other than ethylene oxide were not quantitated.

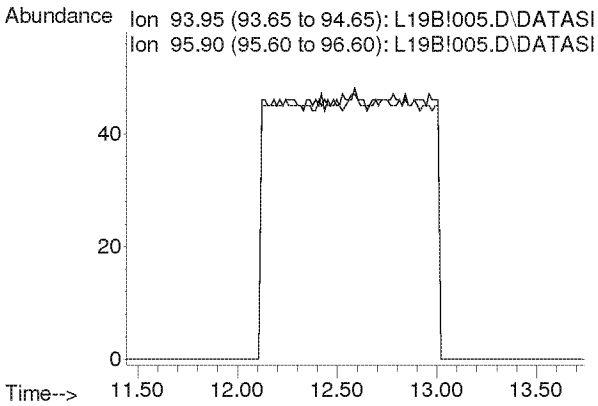


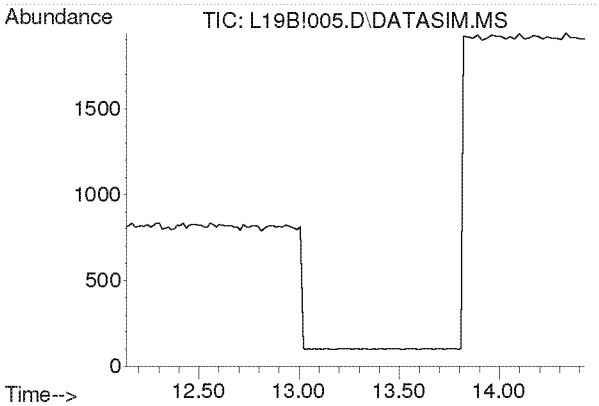
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



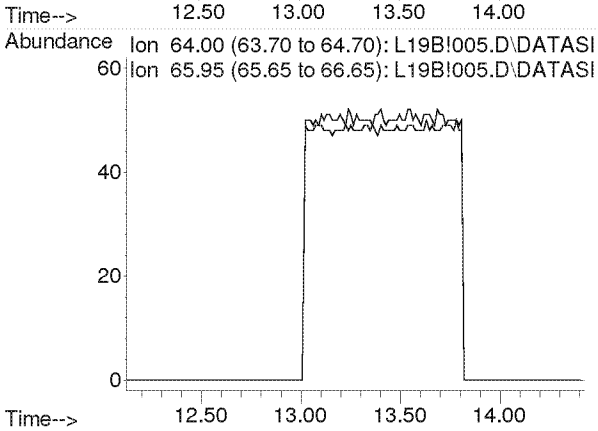


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

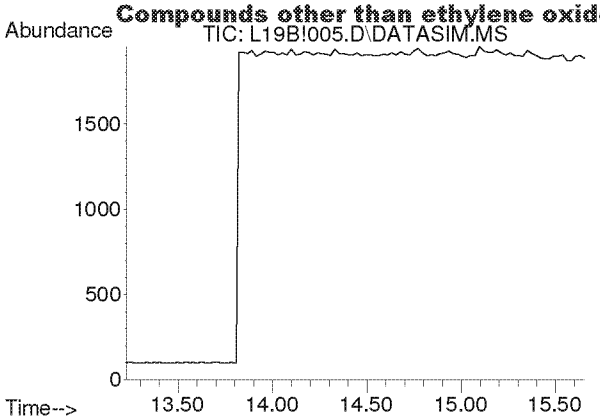
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

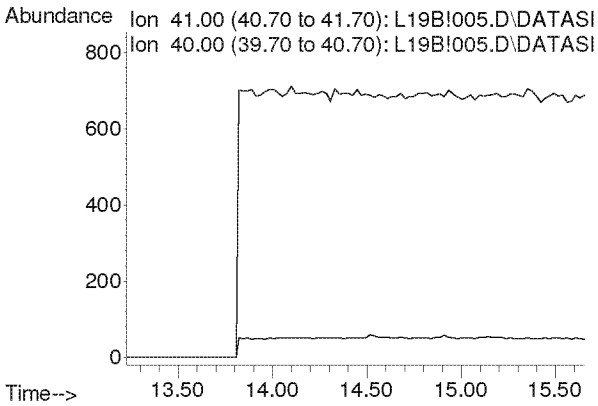


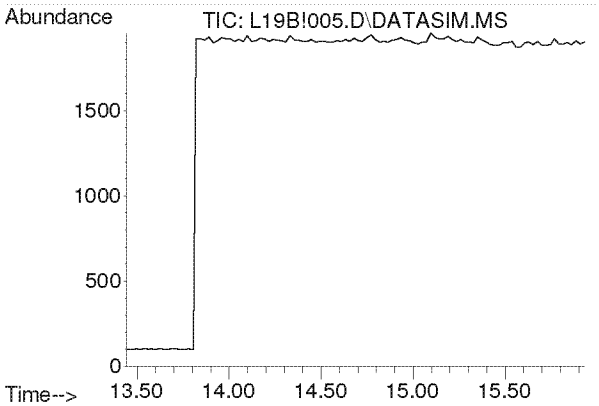
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



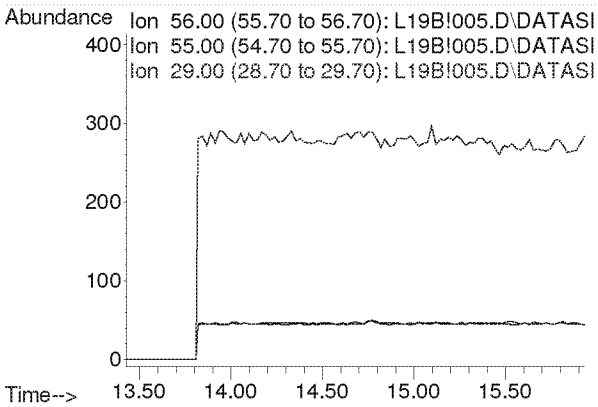


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

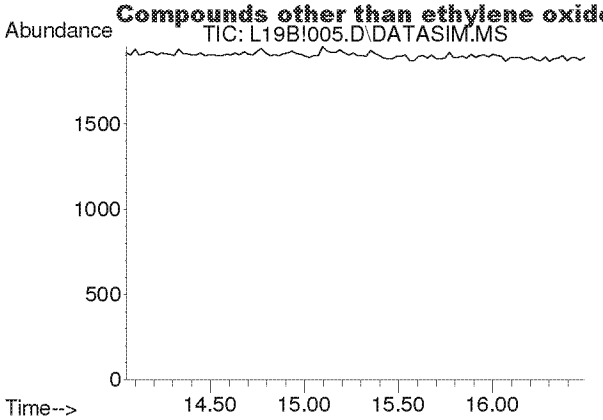
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

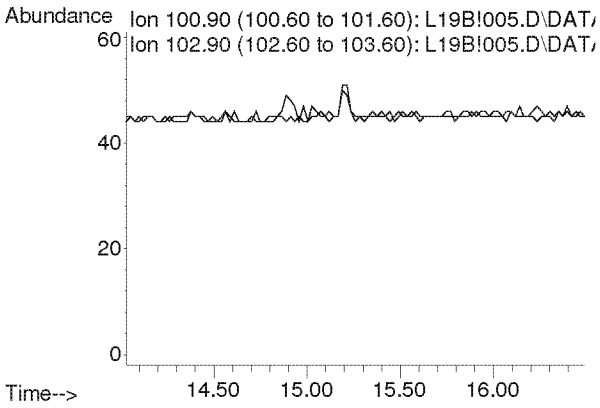


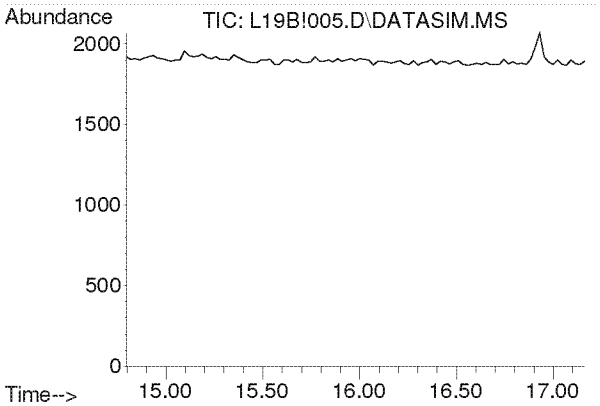
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



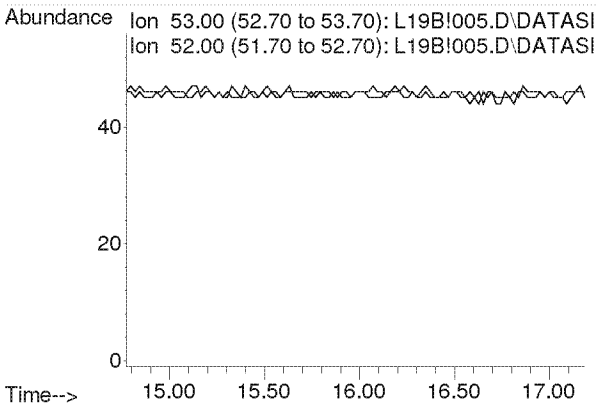


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

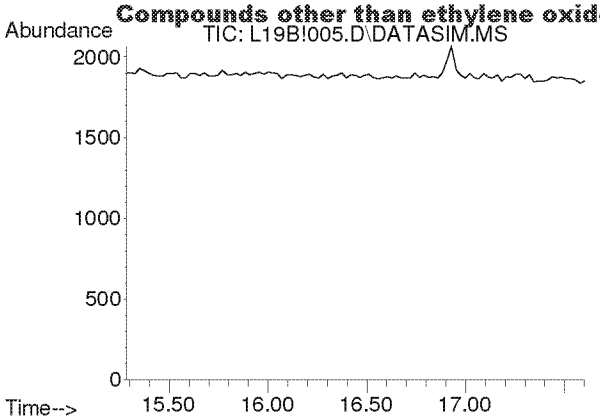
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

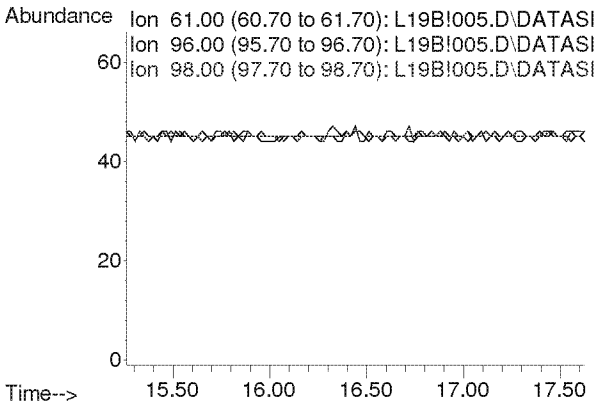


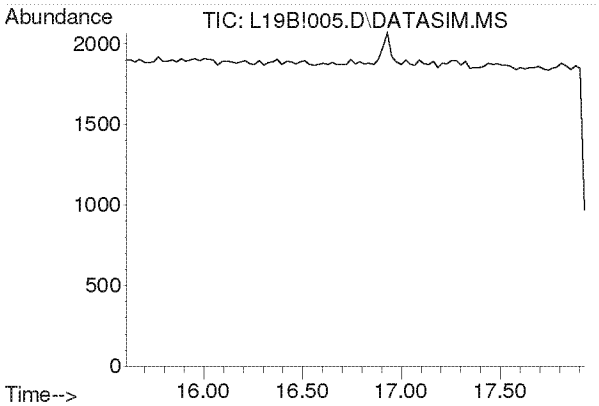
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



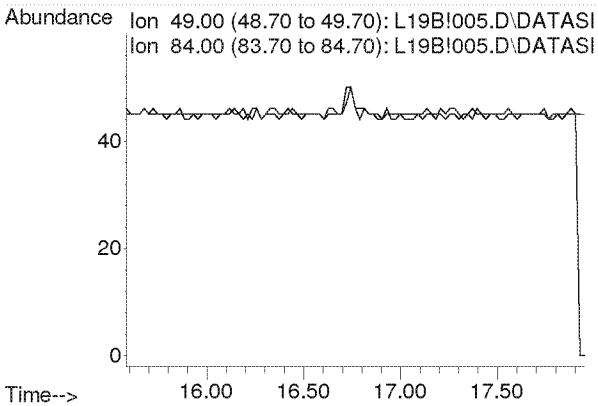


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

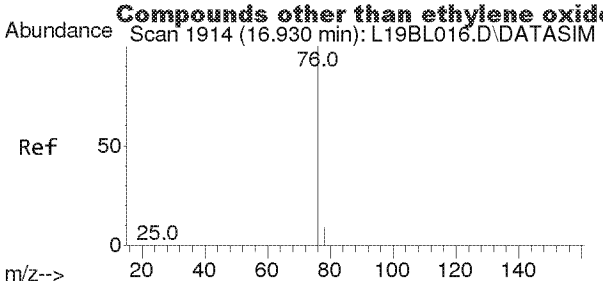
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



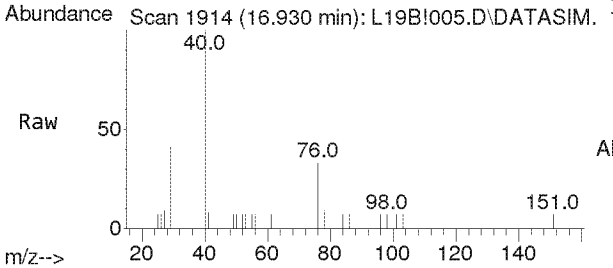
Compounds other than ethylene oxide were not quantitated.

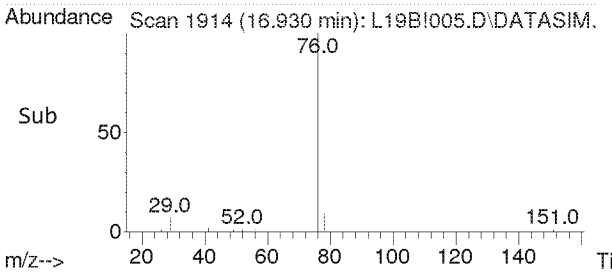


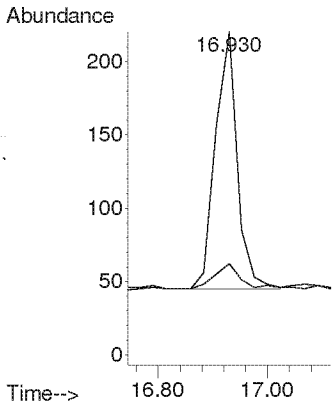
#18
Carbon Disulfide
Concen: 0.027 ppbv
RT: 16.930 min Scan# 1914
Delta R.T. 0.000 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

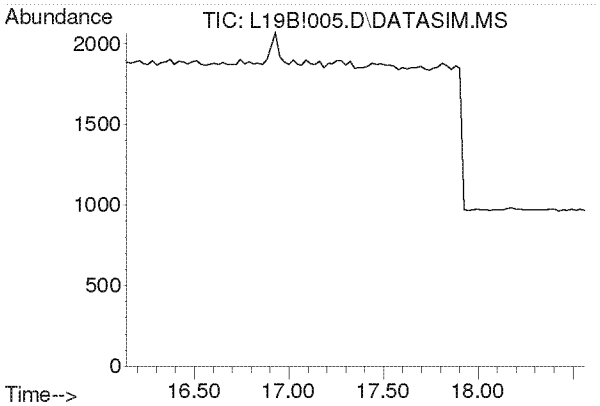
Tgt Ion: 76 Resp: 487

Ion	Ratio	Lower	Upper
76	100		
78	11.5	7.4	11.0#







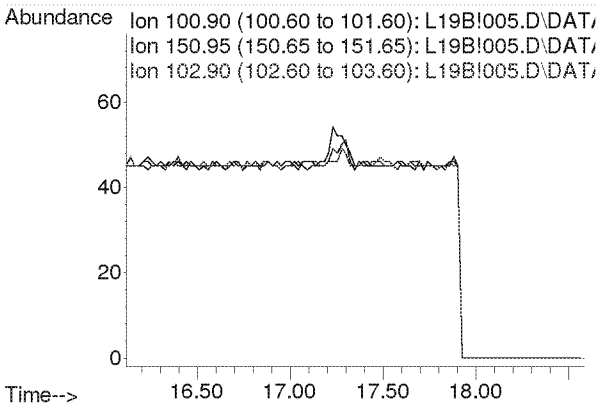


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

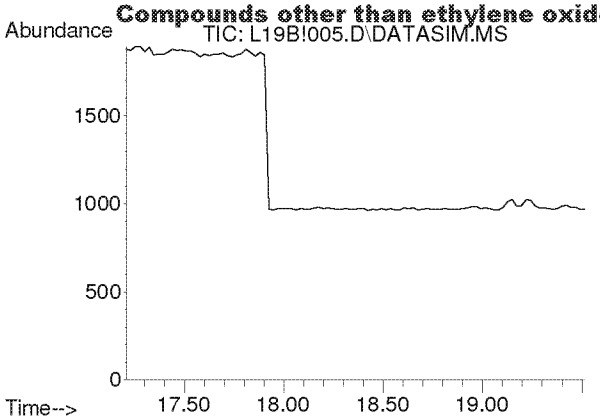
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

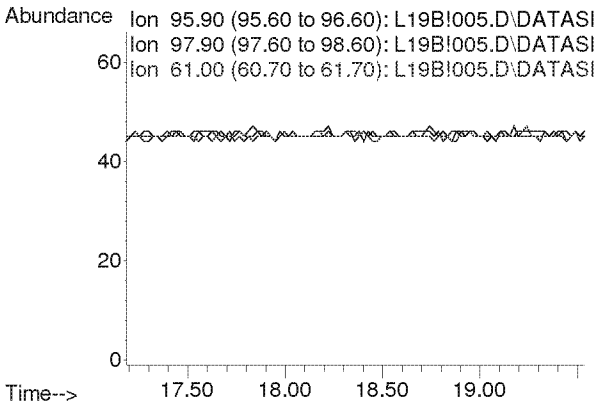


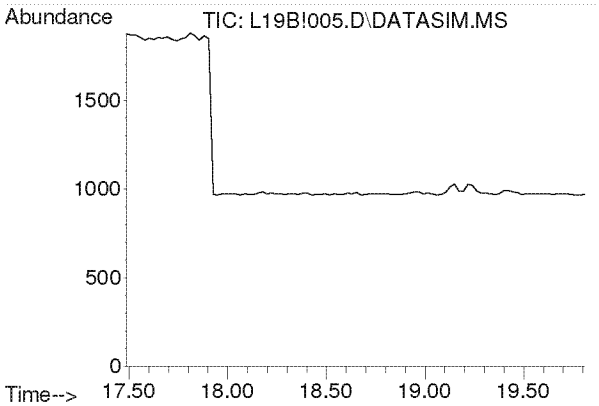
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



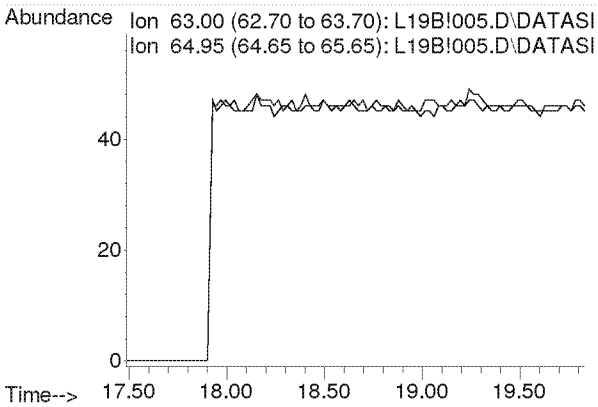


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

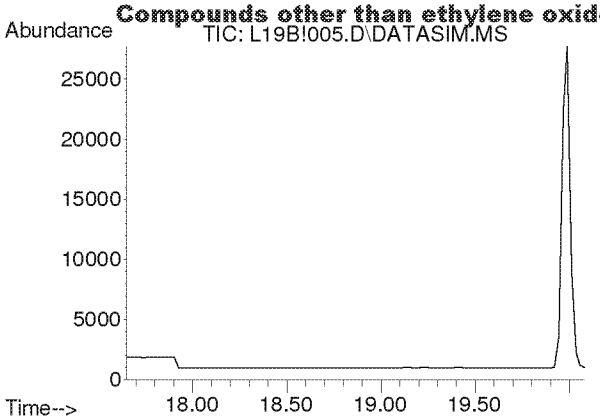
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

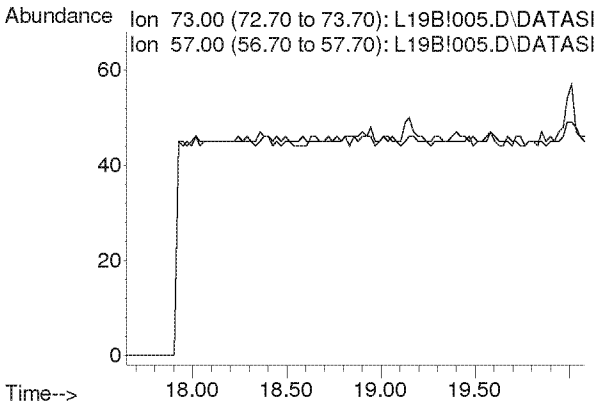


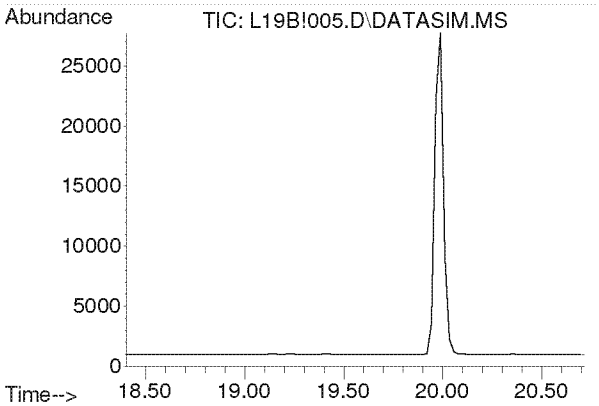
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



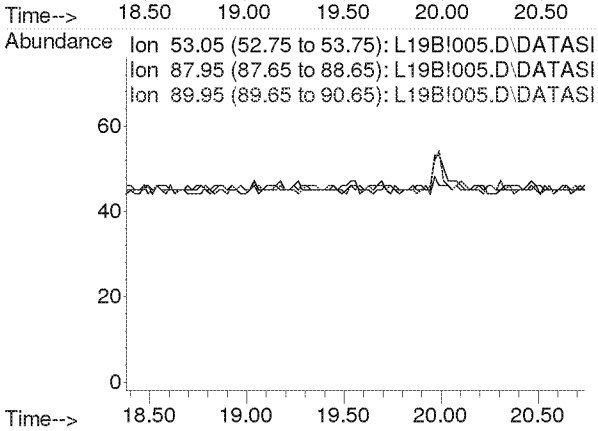


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

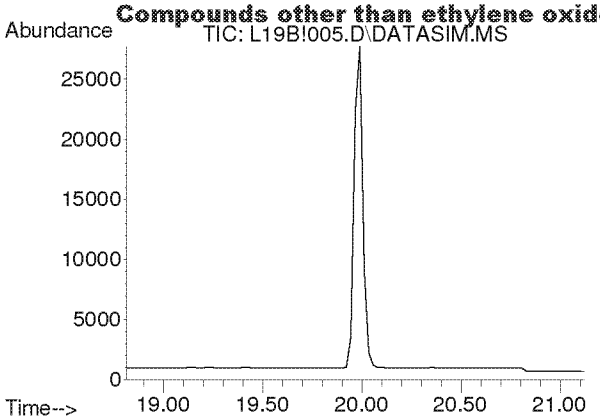
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

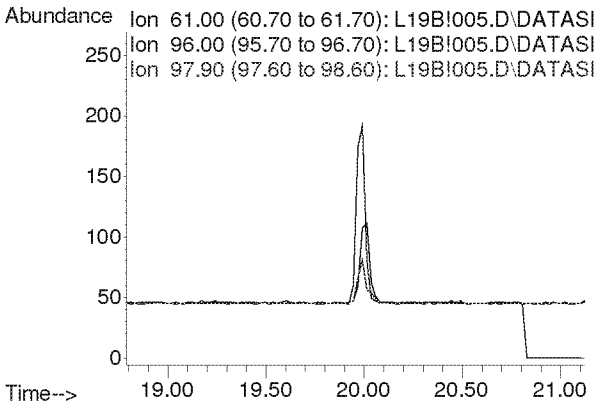


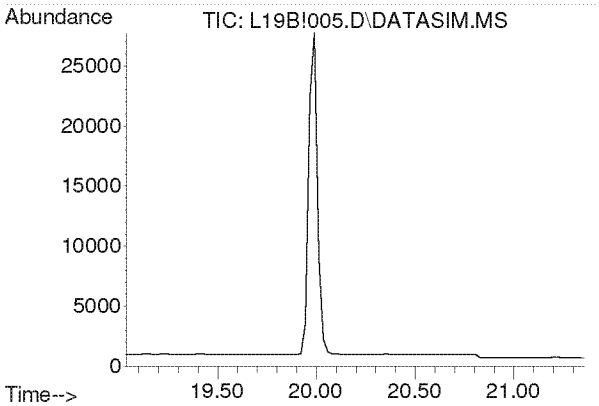
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



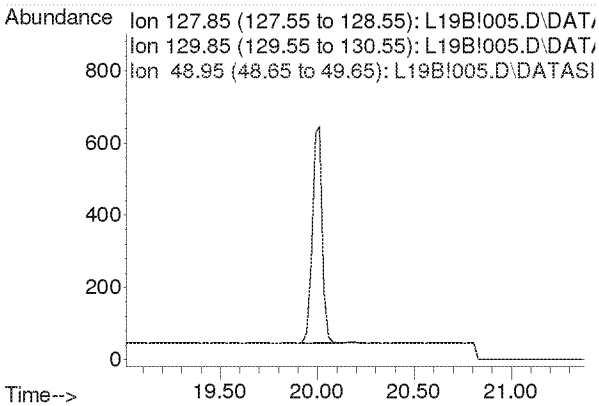


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

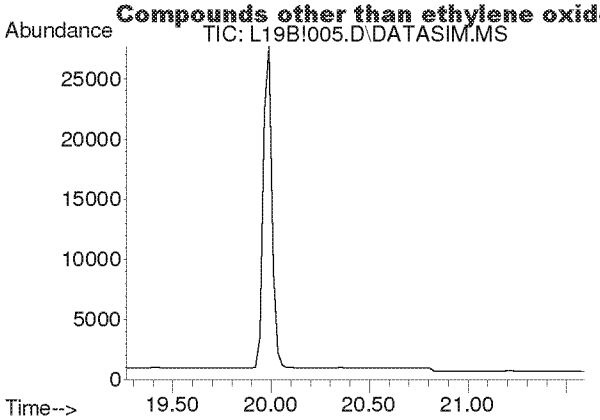
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

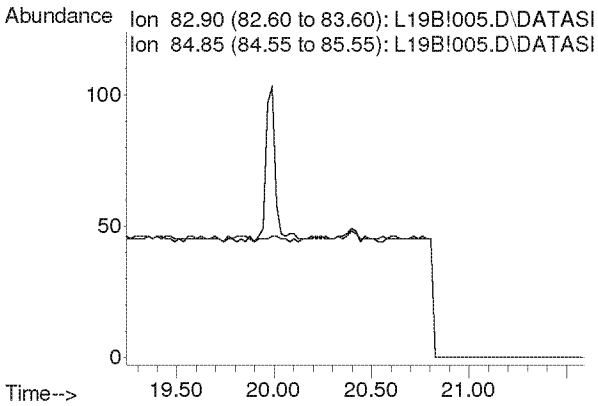


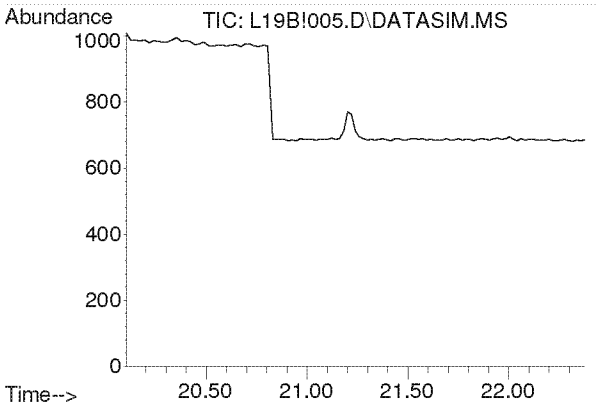
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



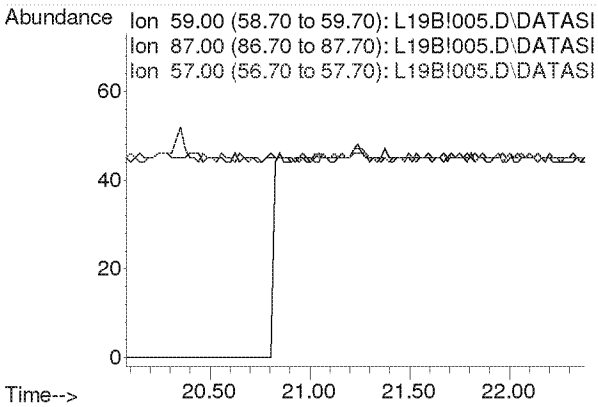


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

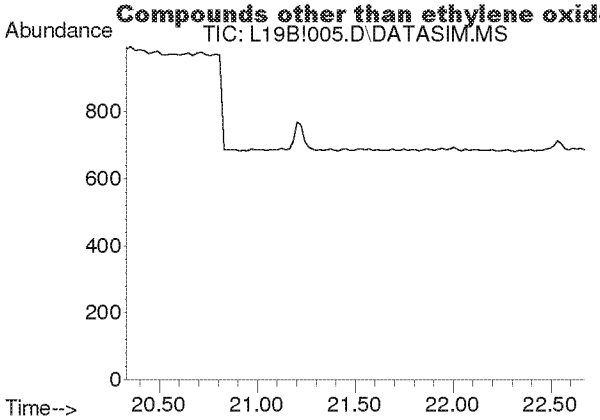
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

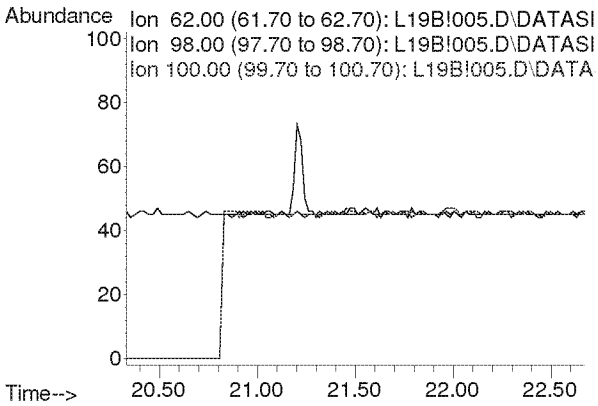


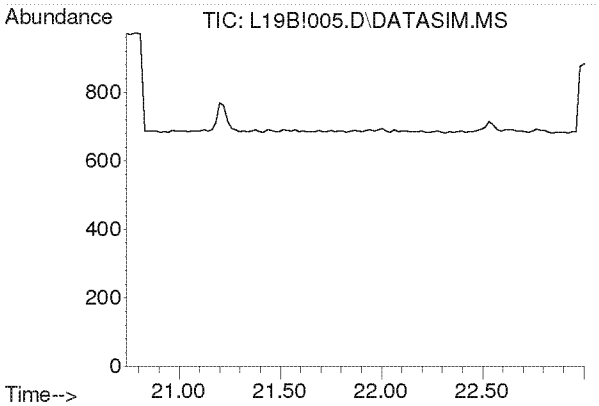
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



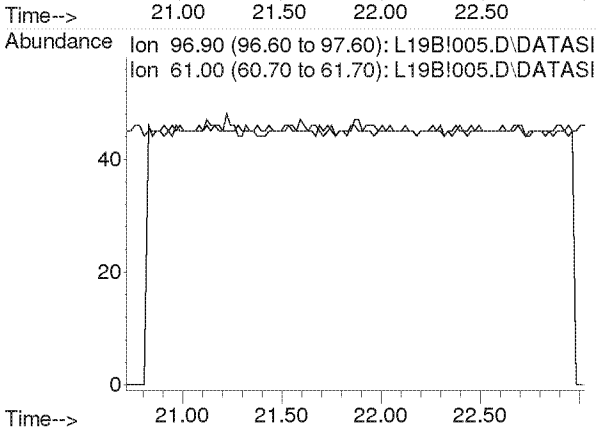


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

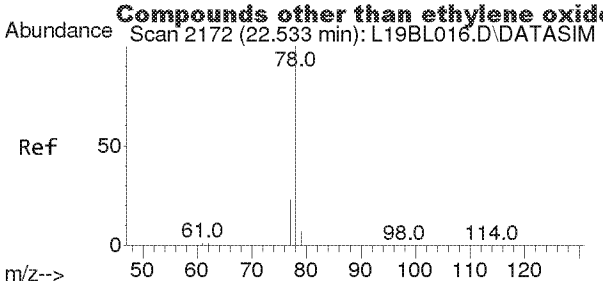
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



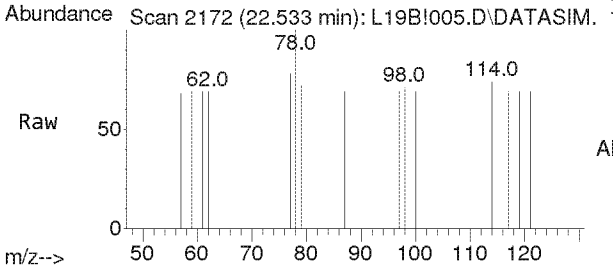
Compounds other than ethylene oxide were not quantitated.

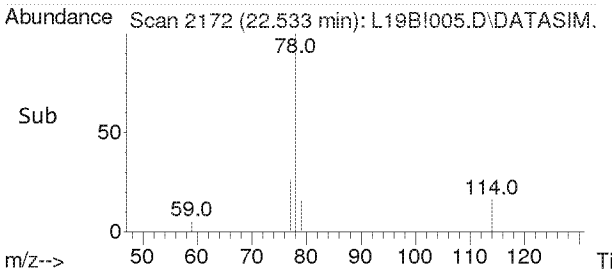


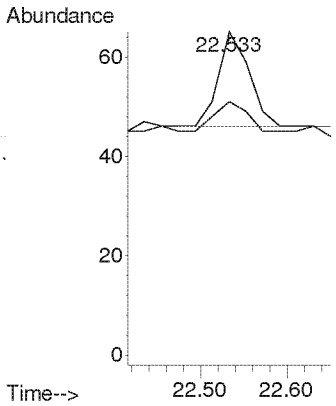
#31
Benzene
Concen: 0.003 ppbv
RT: 22.533 min Scan# 2172
Delta R.T. 0.000 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

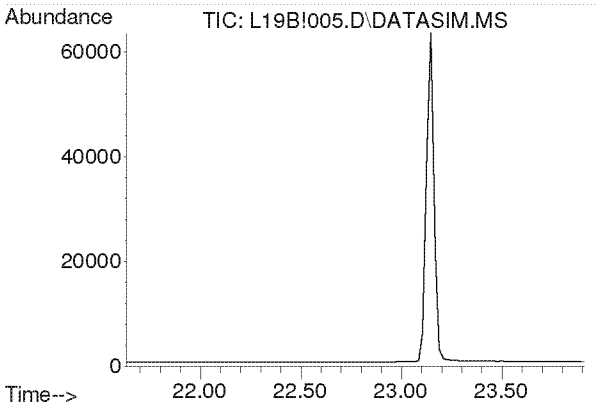
Tgt Ion: 78 Resp: 47

Ion	Ratio	Lower	Upper
78	100		
77	0.0	18.2	27.4#







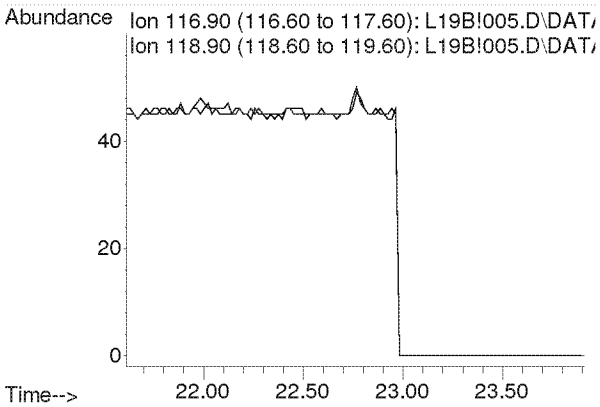


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

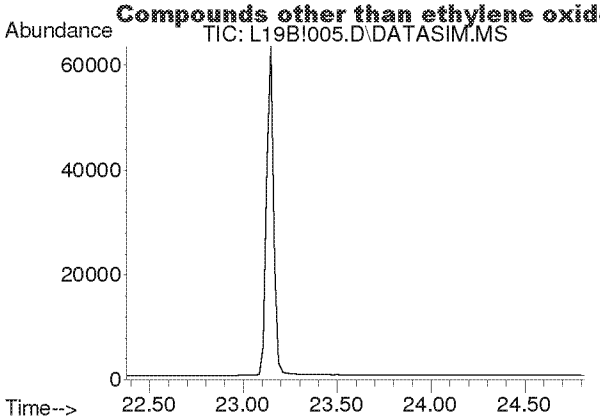
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

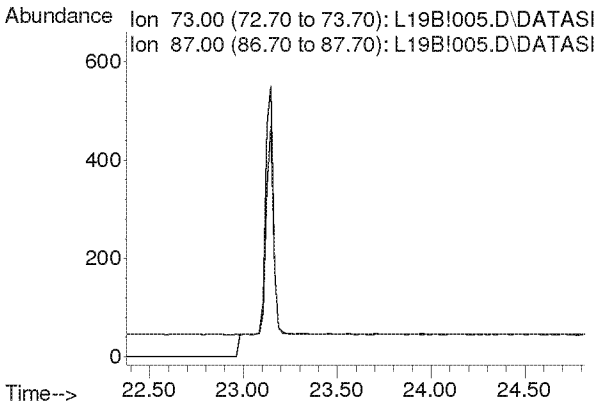


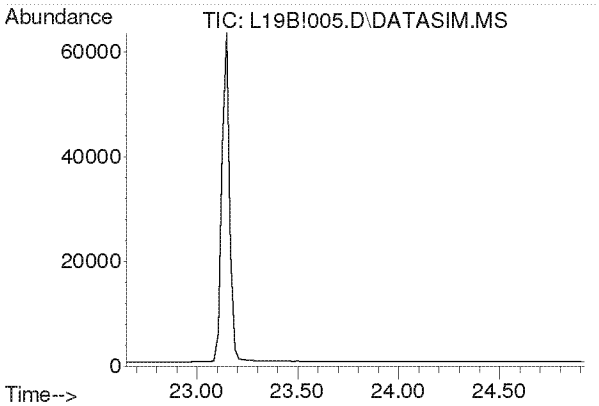
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



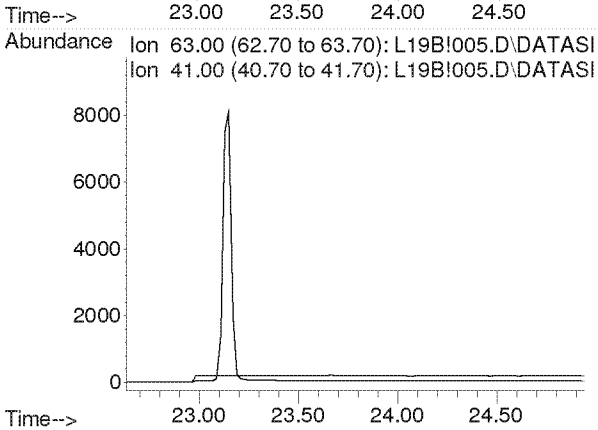


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

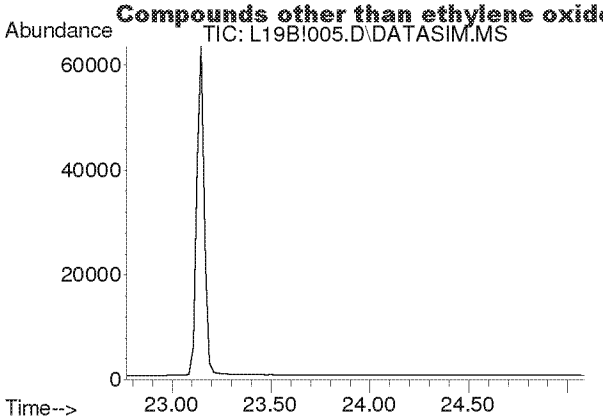
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

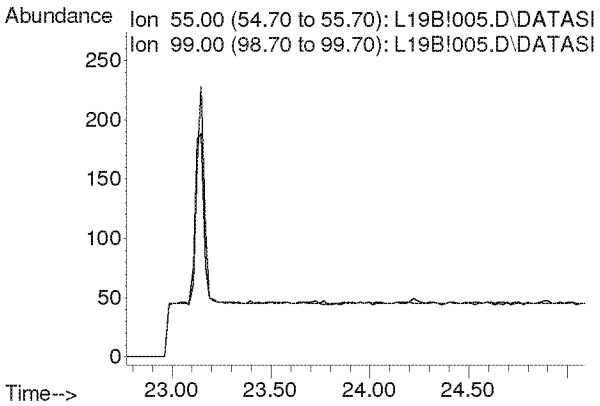


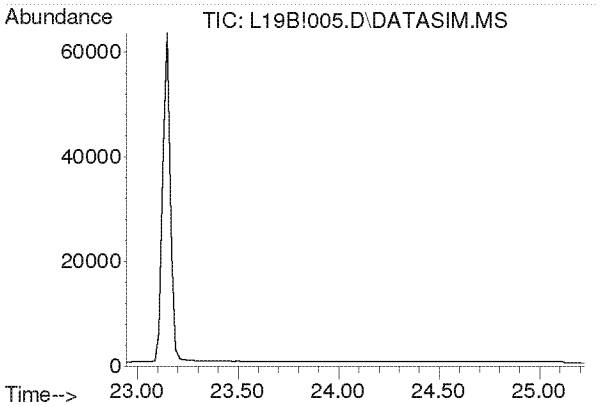
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



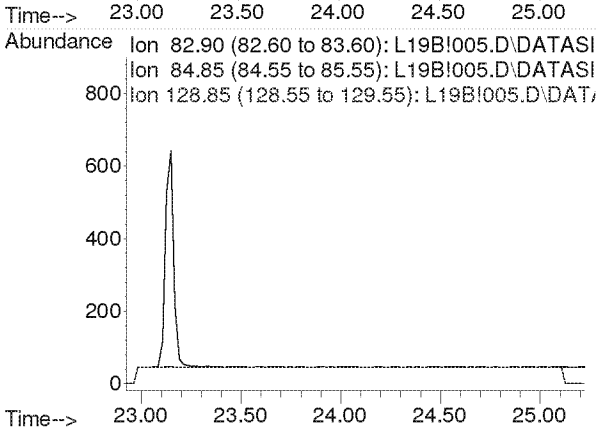


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

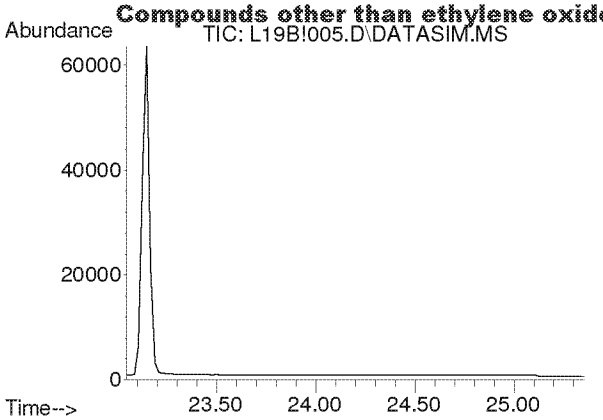
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

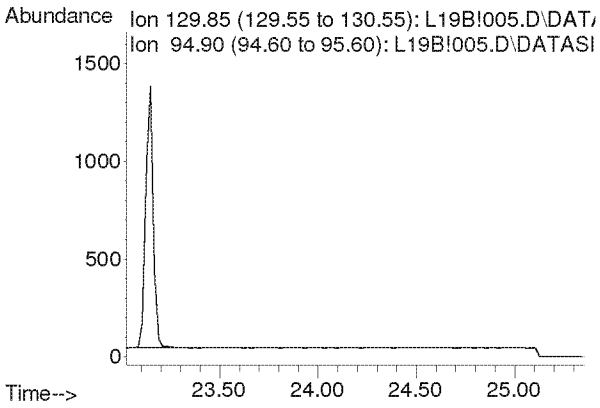


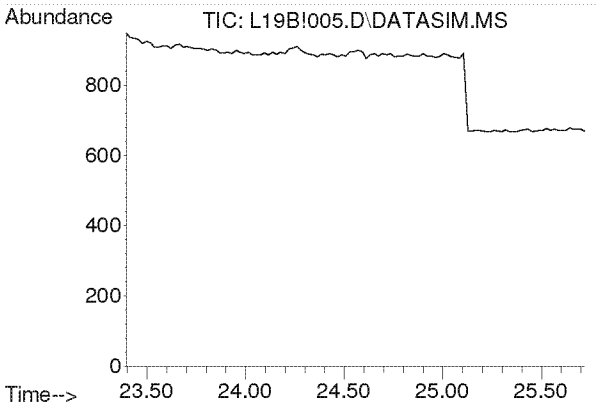
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



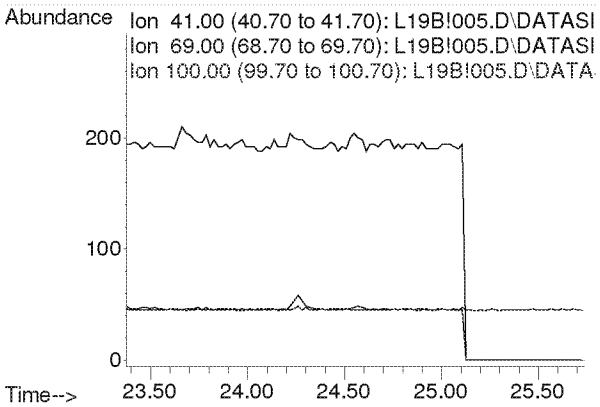


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

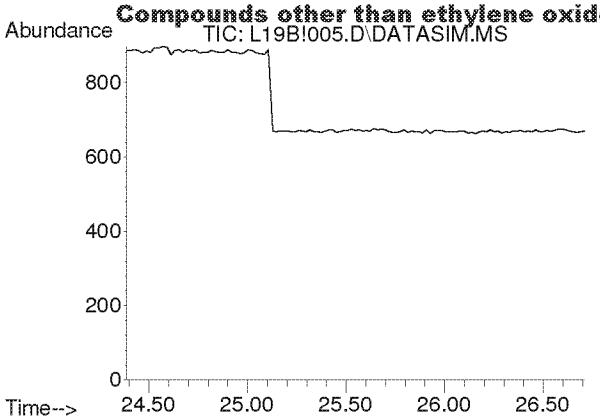
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

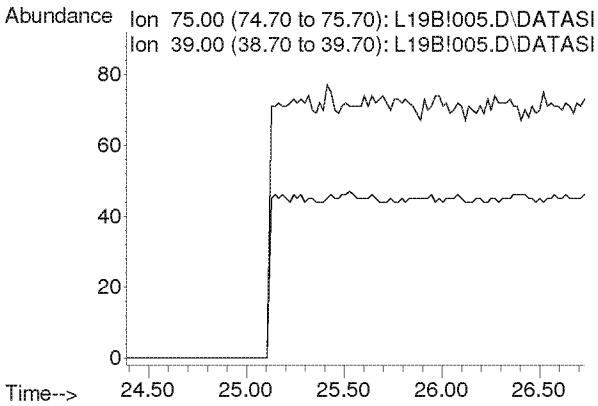


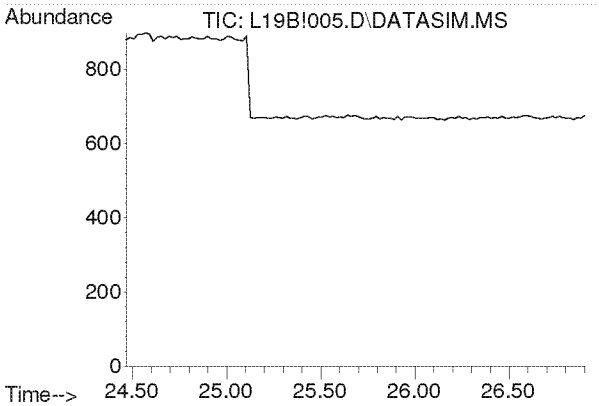
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



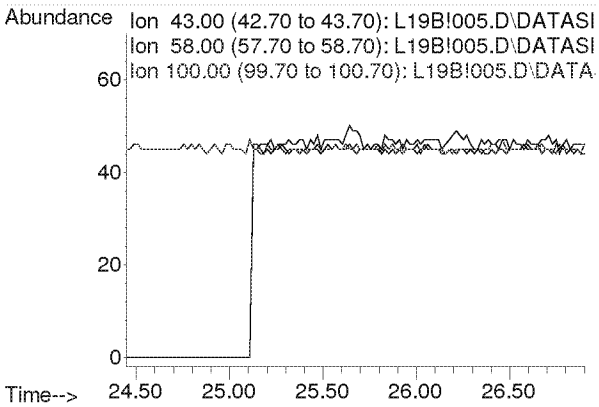


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

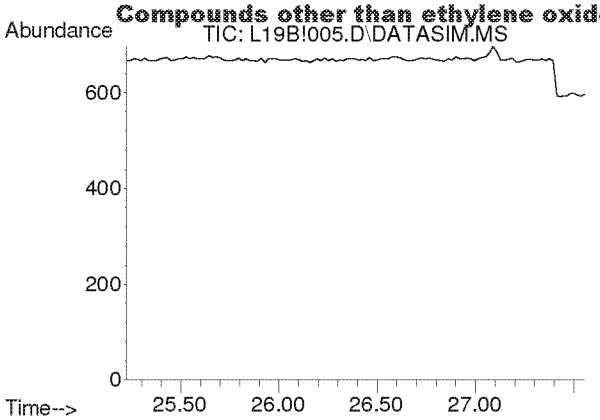
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

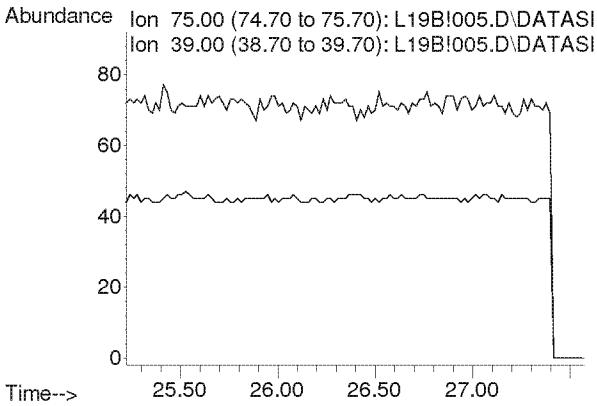


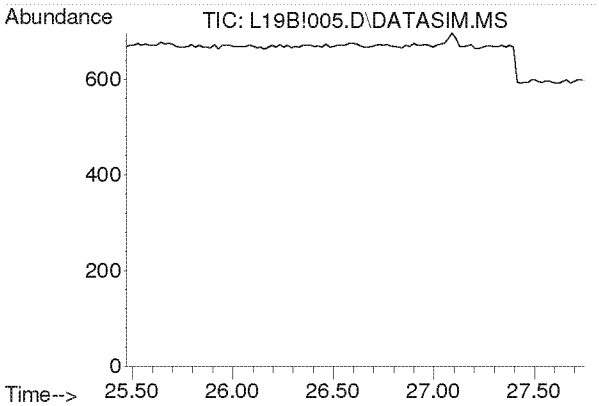
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



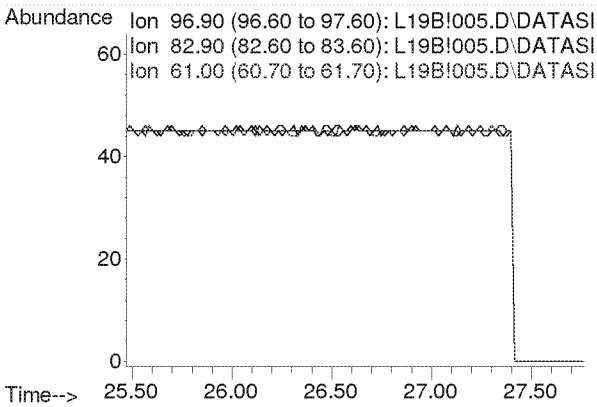


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

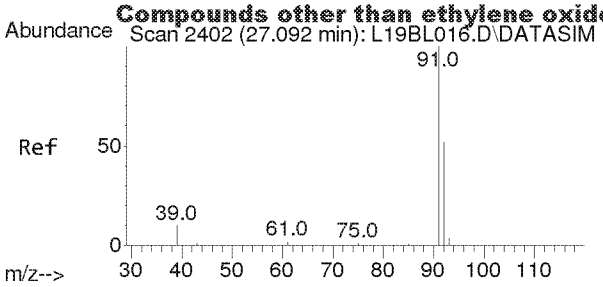
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



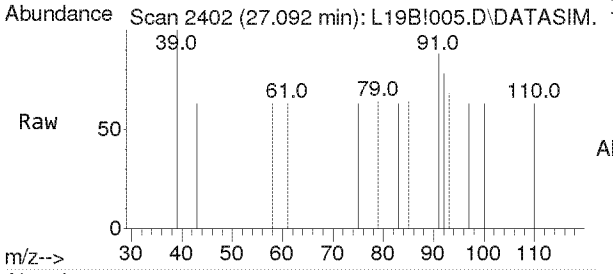
Compounds other than ethylene oxide were not quantitated.

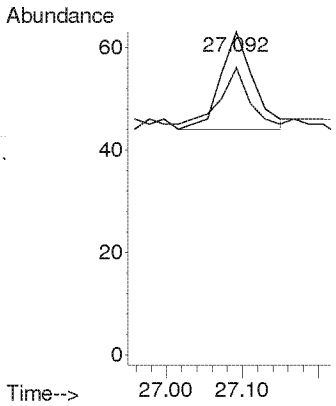


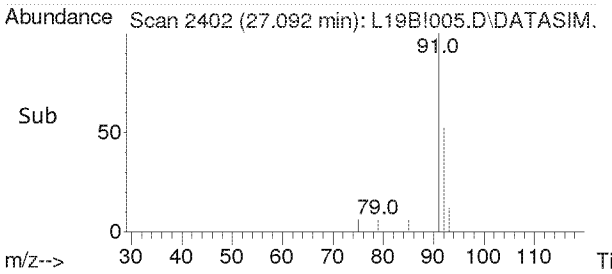
#44
Toluene
Concen: 0.004 ppbv
RT: 27.092 min Scan# 2402
Delta R.T. 0.000 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

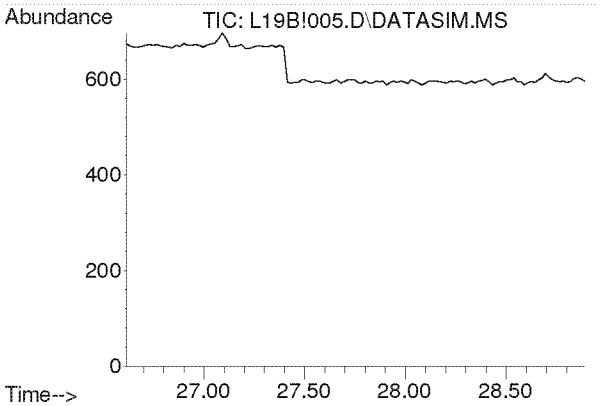
Tgt Ion: 91 Resp: 57

Ion	Ratio	Lower	Upper
91	100		
92	0.0	42.0	63.0#







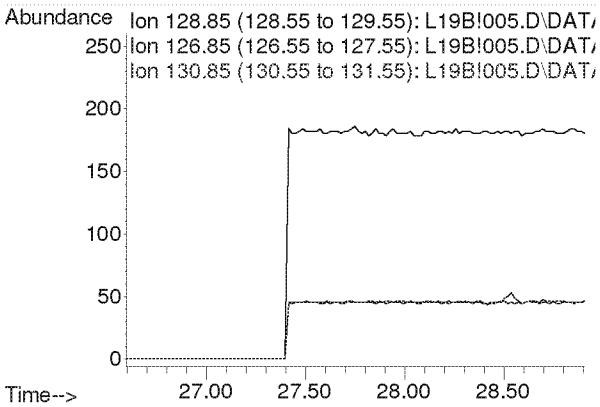


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

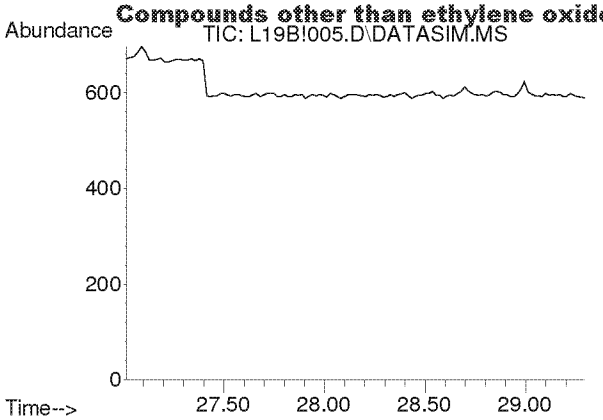
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

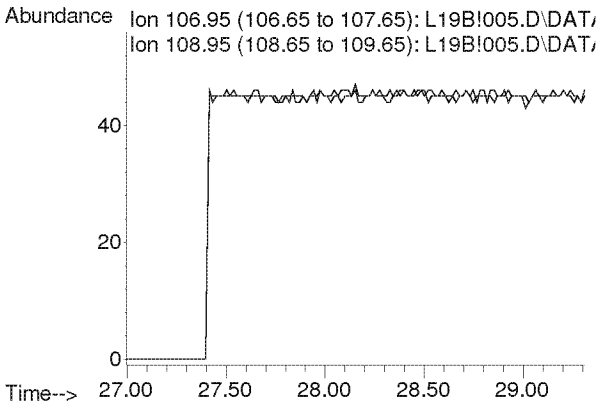


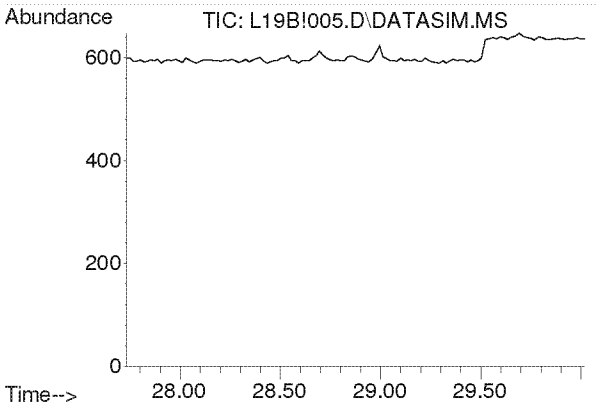
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



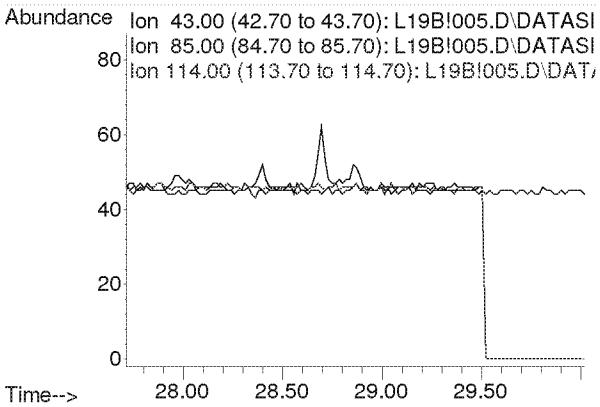


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

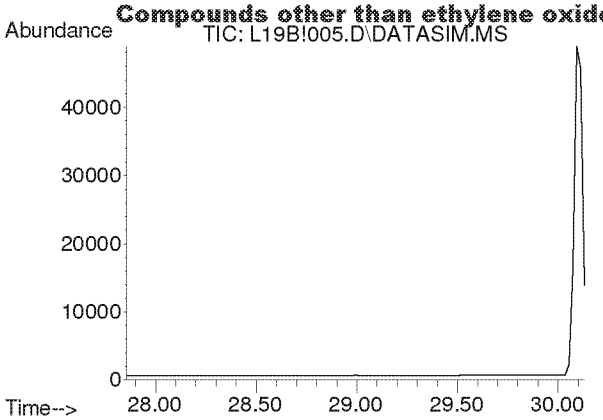
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

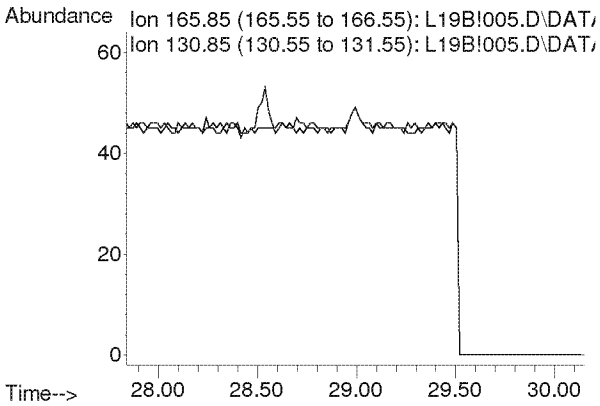


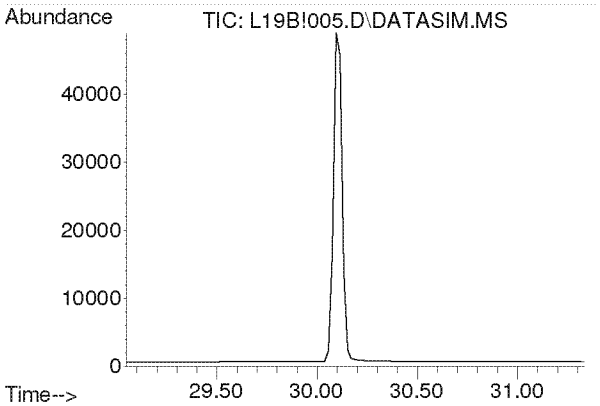
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



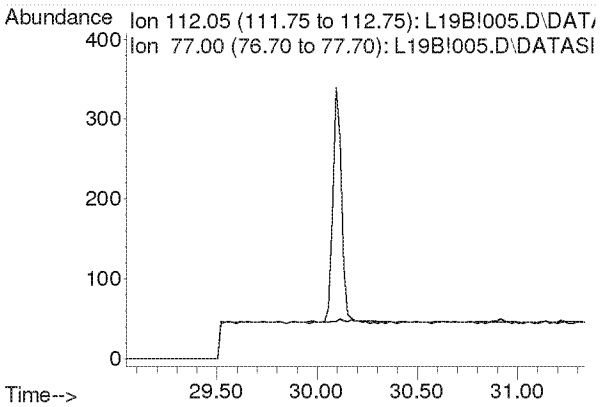


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

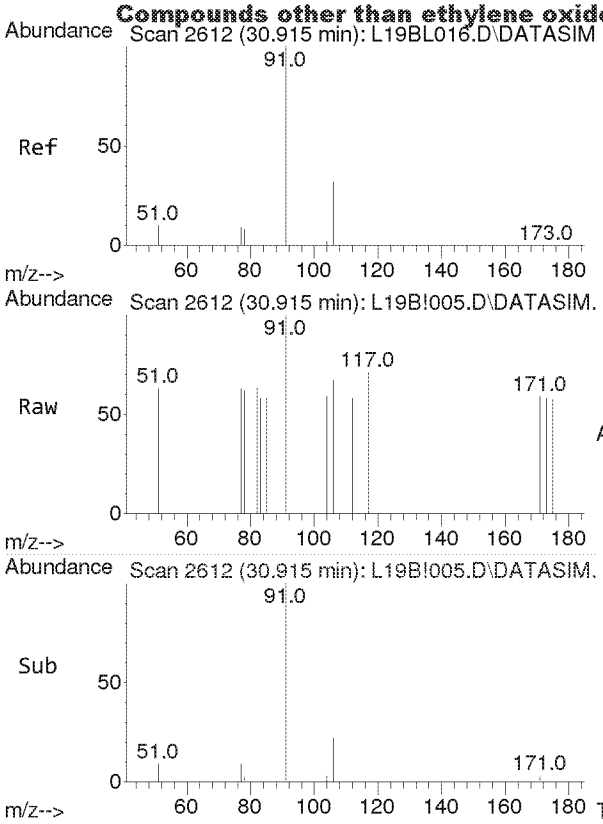
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



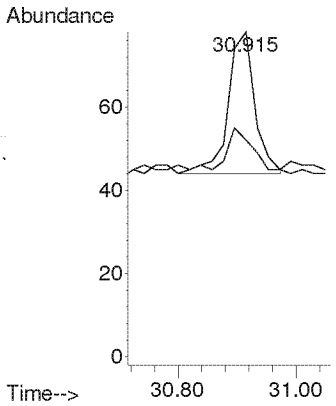
Compounds other than ethylene oxide were not quantitated.

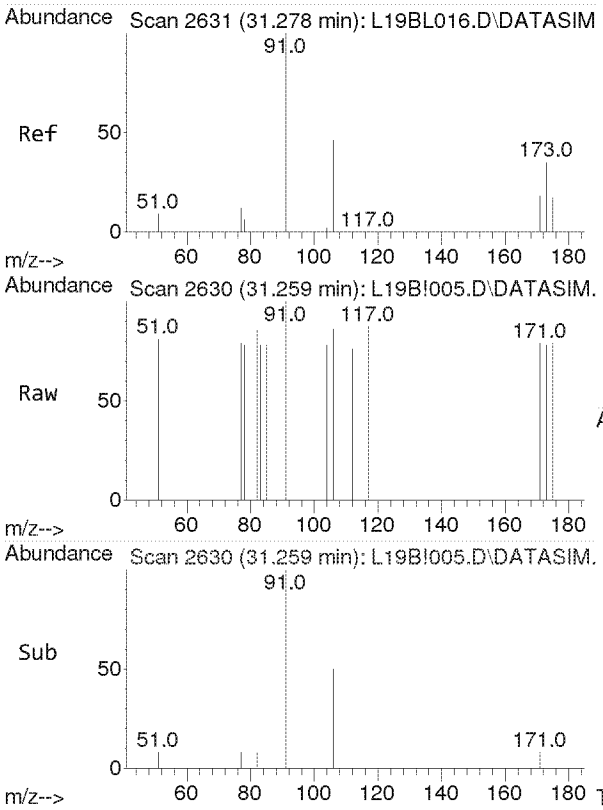


#50
Ethylbenzene
Concen: 0.007 ppbv
RT: 30.915 min Scan# 2612
Delta R.T. 0.000 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 91 Resp: 107

Ion	Ratio	Lower	Upper
91	100		
106	0.0	26.0	39.0#

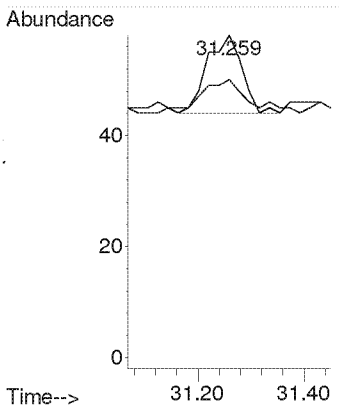




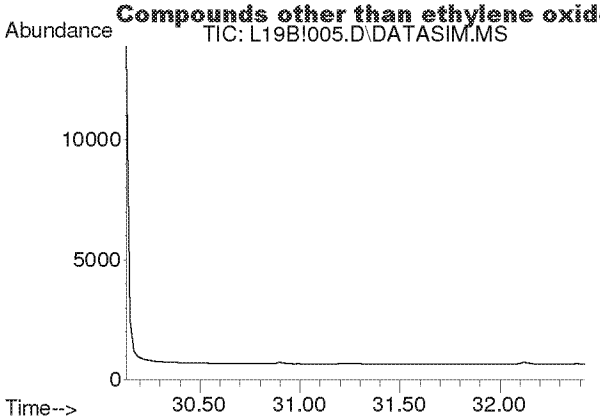
#51
m,p-Xylene
Concen: 0.005 ppbv
RT: 31.259 min Scan# 2630
Delta R.T. -0.019 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 91 Resp: 64

Ion	Ratio	Lower	Upper
91	100		
106	0.0	37.3	55.9#



Compounds other than ethylene oxide were not quantitated.

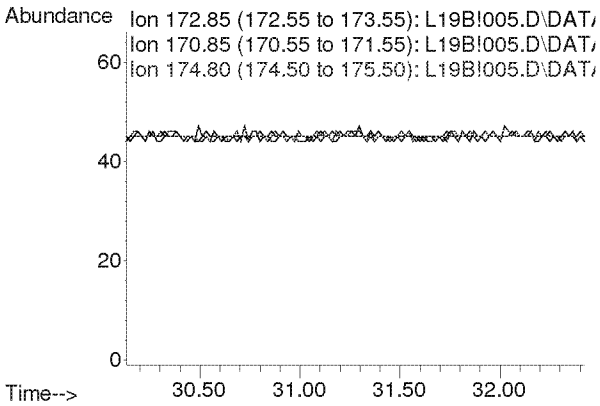


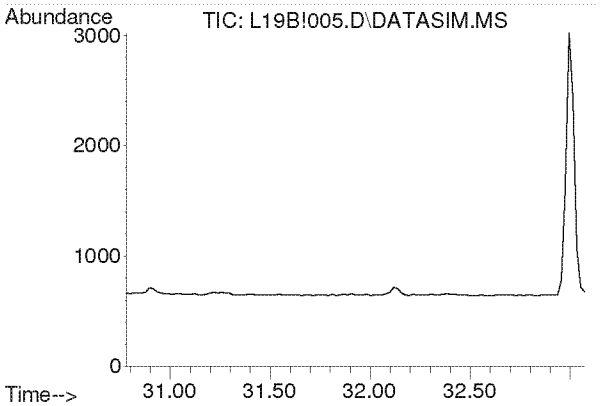
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



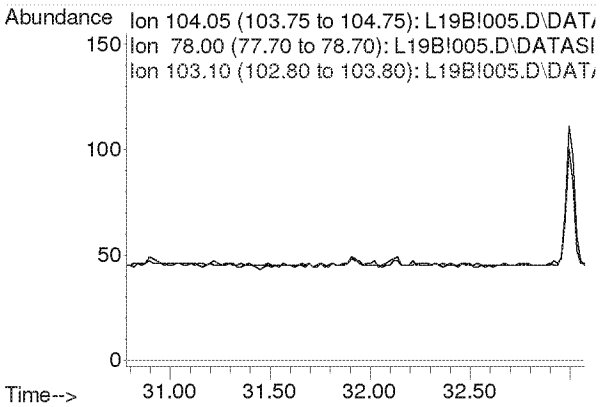


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

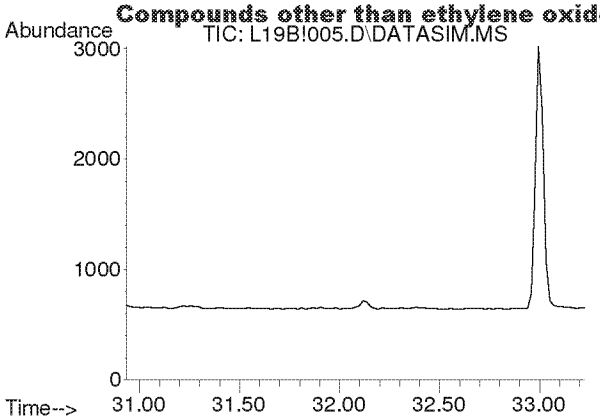
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

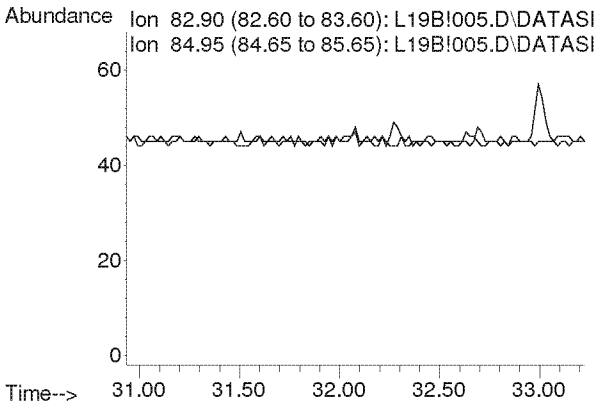


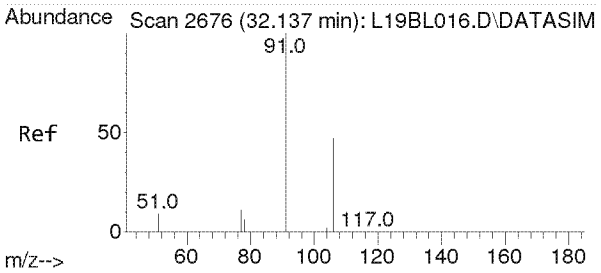
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5

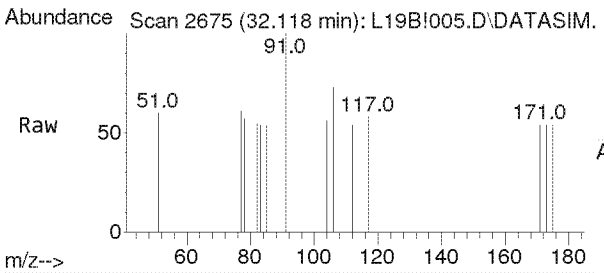


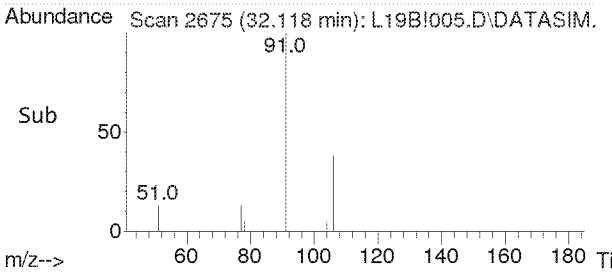


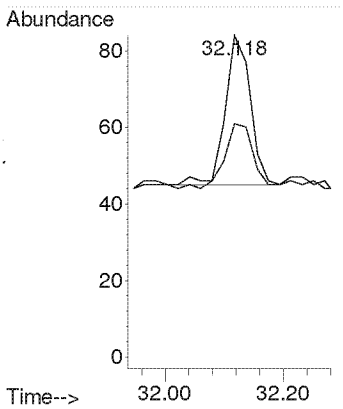
#55
o-Xylene
Concen: 0.009 ppbv
RT: 32.118 min Scan# 2675
Delta R.T. -0.019 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 91 Resp: 115

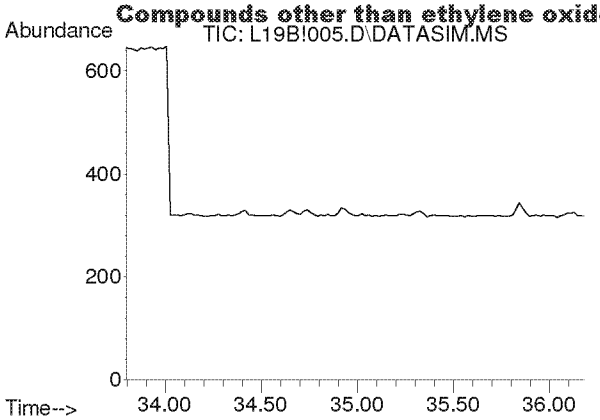
Ion	Ratio	Lower	Upper
91	100		
106	49.6	36.6	55.0







Compounds other than ethylene oxide were not quantitated.

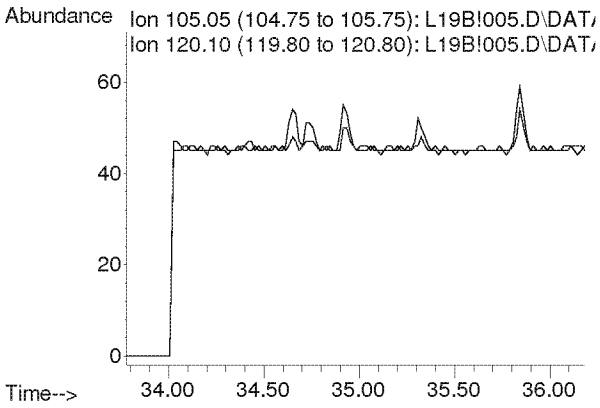


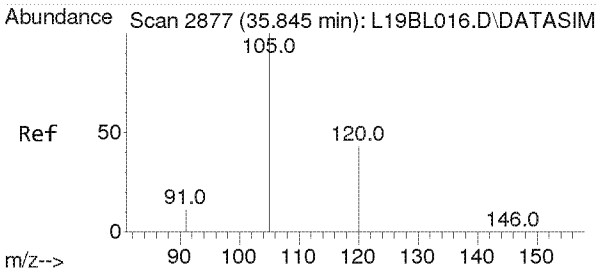
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0

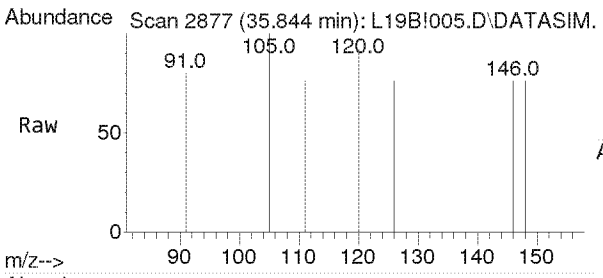


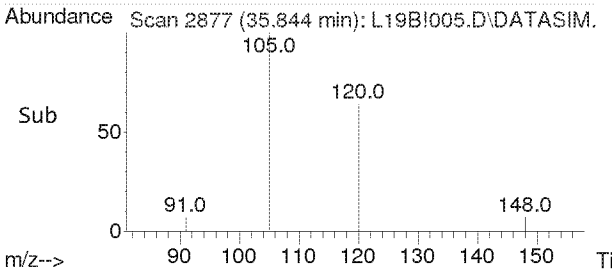


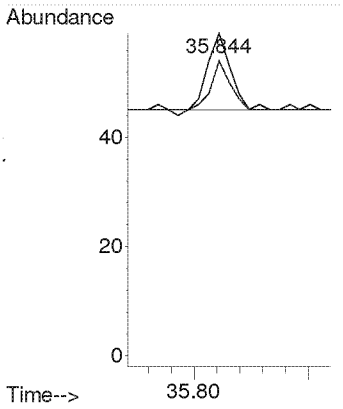
#57
1,2,4-Trimethylbenzene
Concen: 0.003 ppbv
RT: 35.844 min Scan# 2877
Delta R.T. -0.001 min
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion:105 Resp: 40

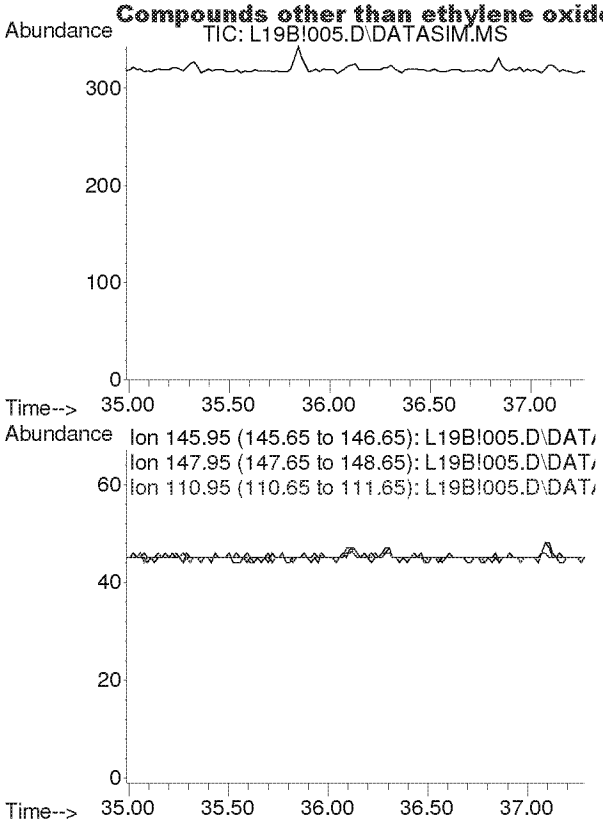
Ion	Ratio	Lower	Upper
105	100		
120	0.0	35.2	52.8#







Compounds other than ethylene oxide were not quantitated.

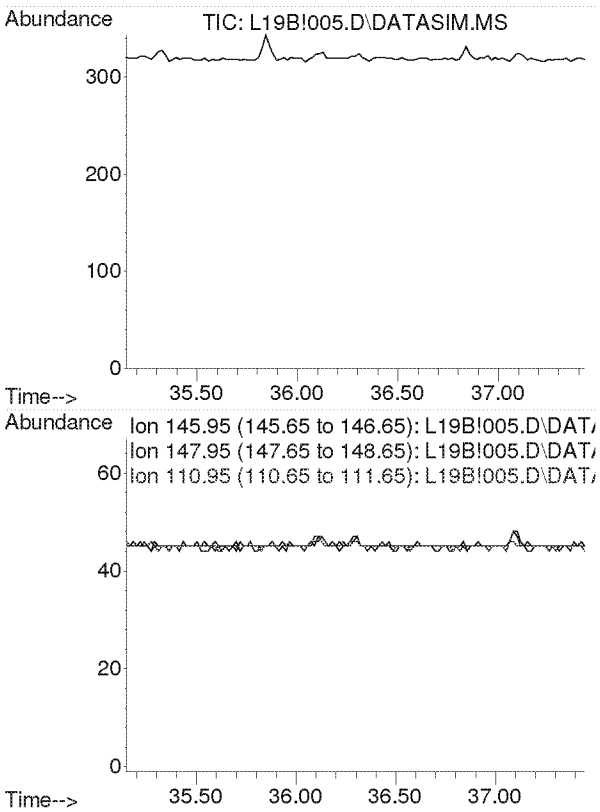


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



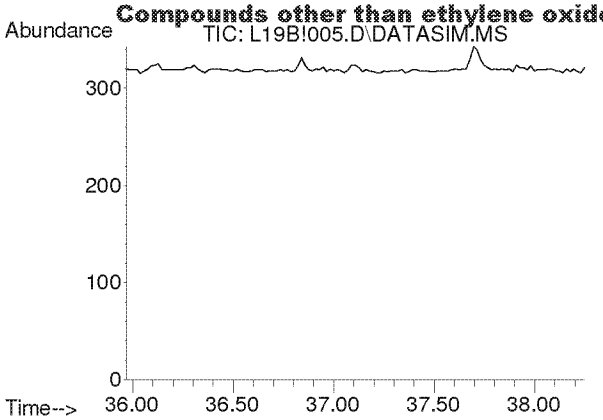
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7

Compounds other than ethylene oxide were not quantitated.

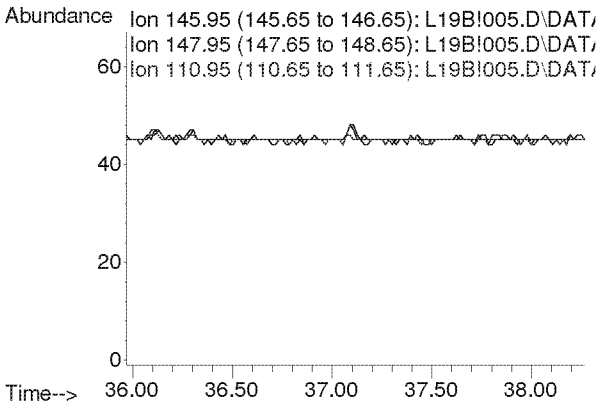


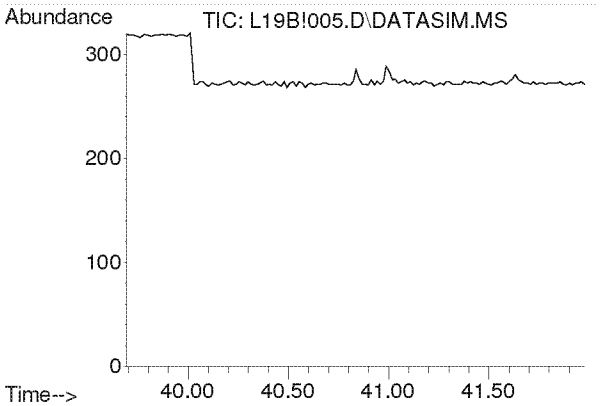
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



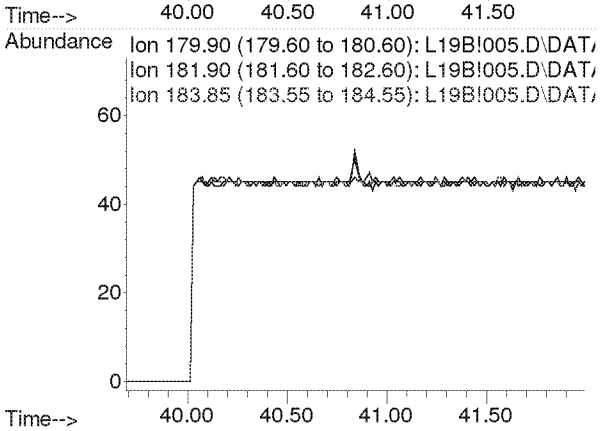


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

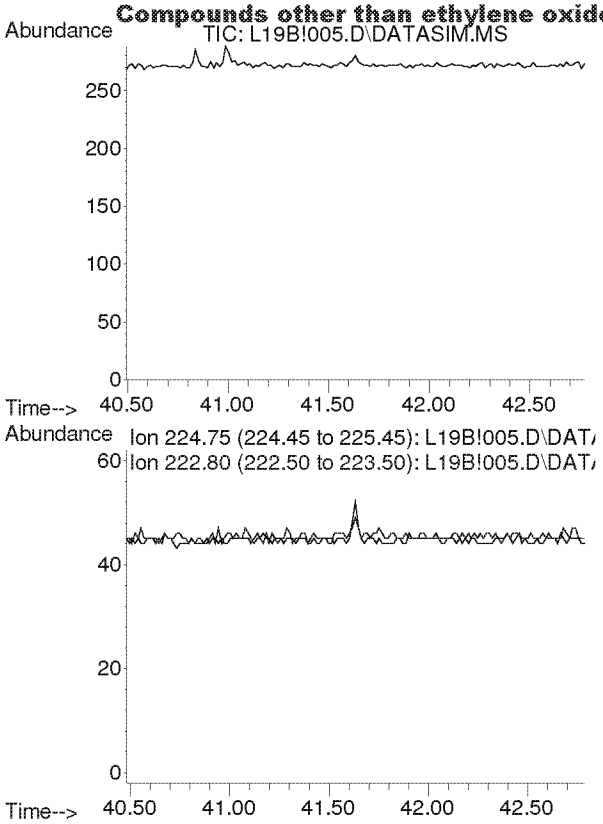
Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!005.D
Acq: 28 Feb 2019 4:33 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19B!\
Data File : L19B!006.D
Acq On : 28 Feb 2019 5:36 pm
Operator : MAH
Sample : 9022616-07
Misc : WEST NEIGHBORHOOD 2/24/19
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 05 07:36:22 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.990	66	44721	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	109580	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.094	117	77156	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	234m	0.0915 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. 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	

41 ion detected in second part of the peak not integrated RLB 3/6/19

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19B!\
Data File : L19B!006.D
Acq On : 28 Feb 2019 5:36 pm
Operator : MAH
Sample : 9022616-07
Misc : WEST NEIGHBORHOOD 2/24/19
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 05 07:36:22 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

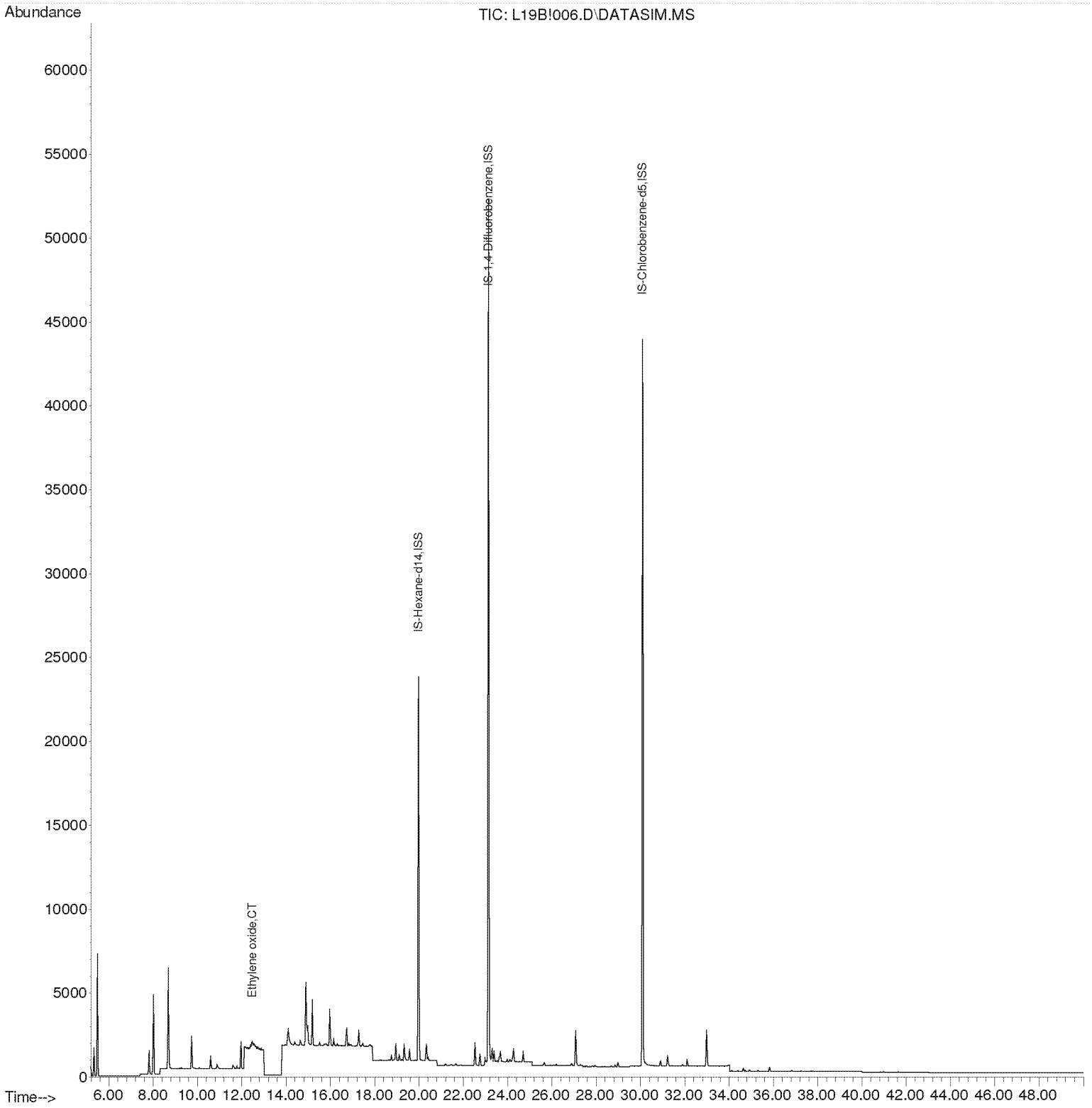
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene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

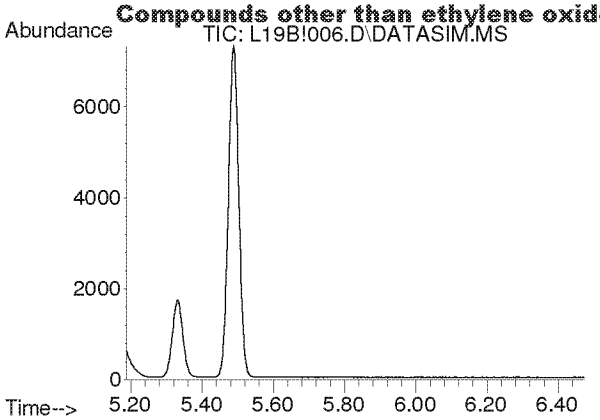
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!006.D
Acq On : 28 Feb 2019 5:36 pm
Operator : MAH
Sample : 9022616-07
Misc : WEST NEIGHBORHOOD 2/24/19
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 05 07:35:54 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



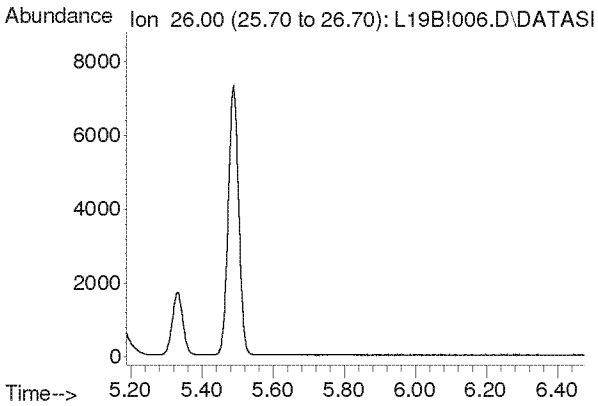
Compounds other than ethylene oxide were not quantitated.

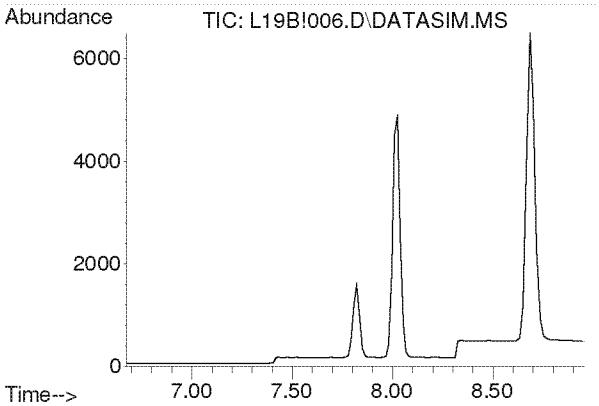


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 26



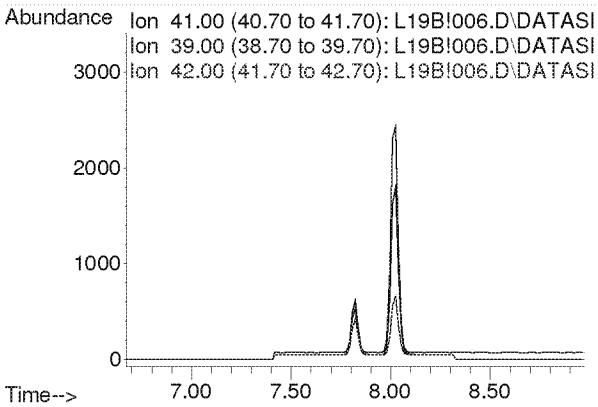


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

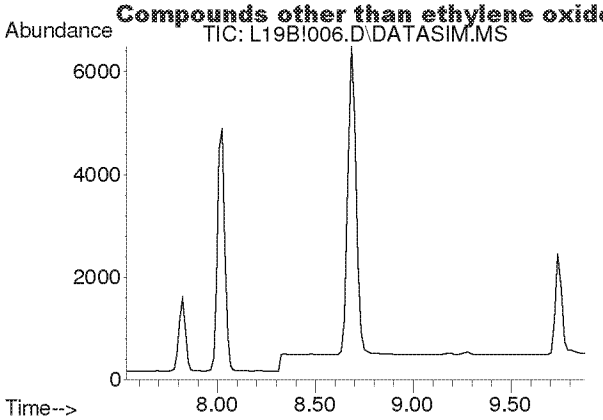
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

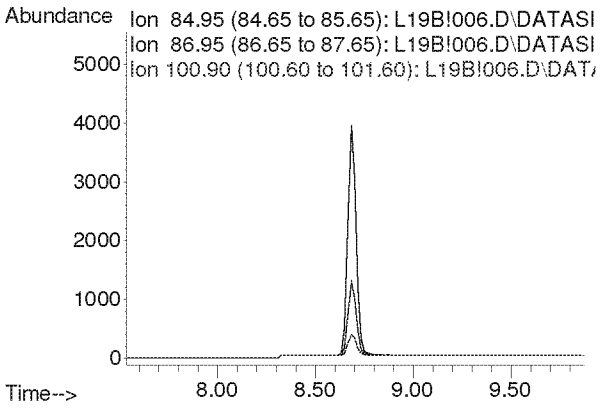


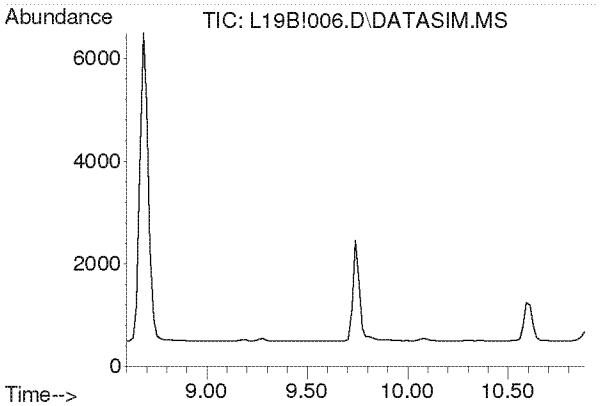
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



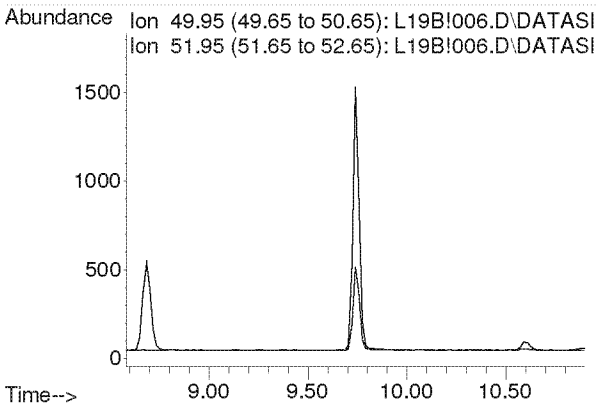


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

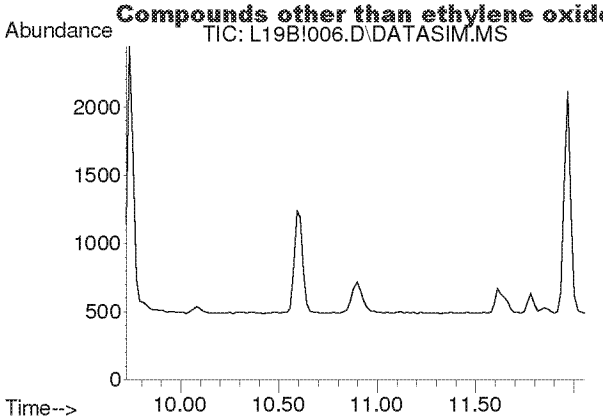
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

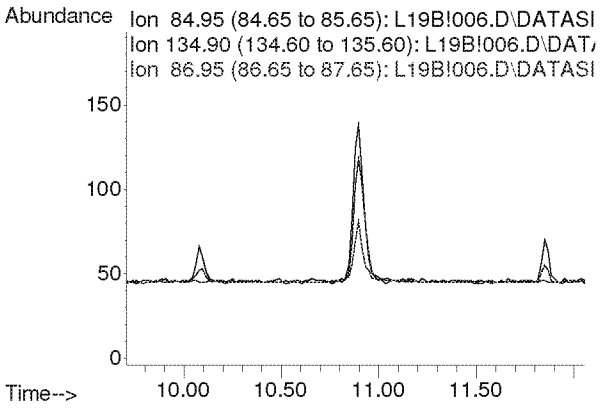


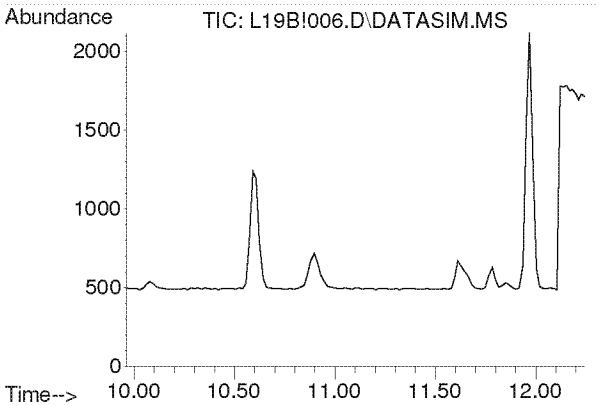
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



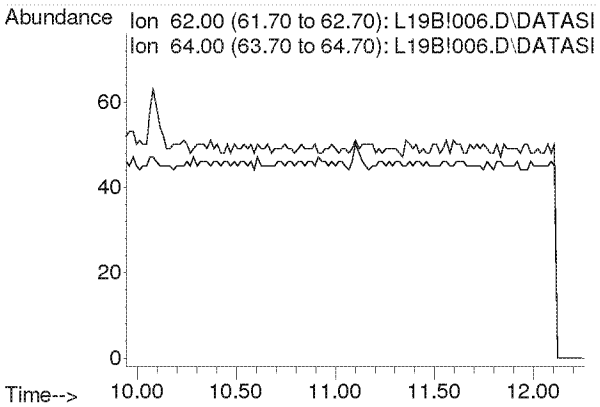


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

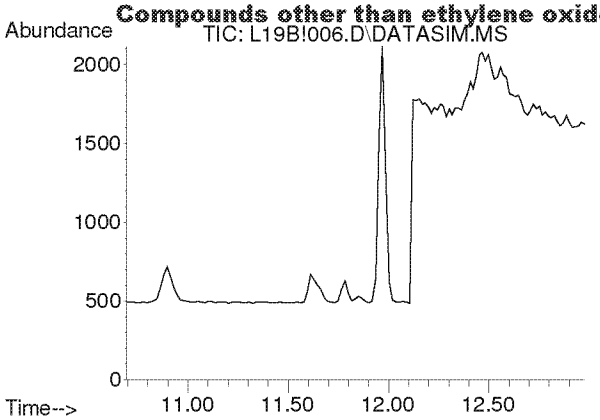
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

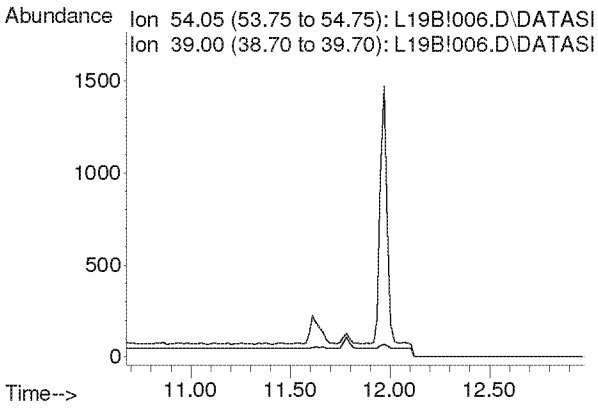


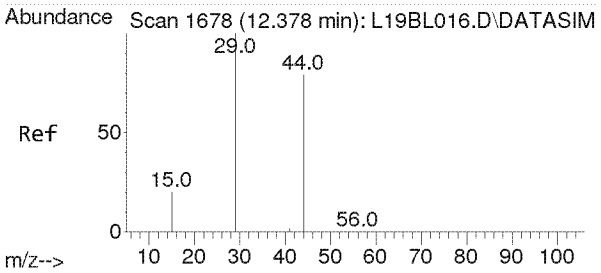
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

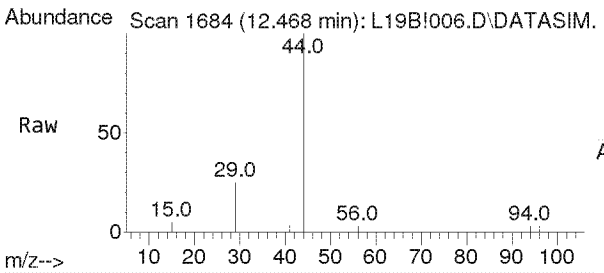


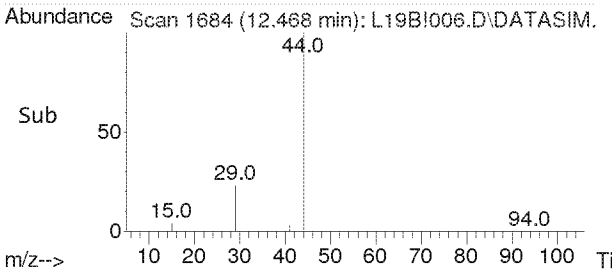


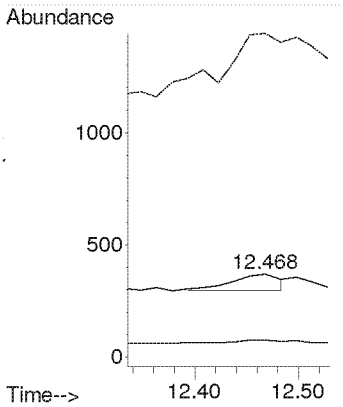
#9
Ethylene oxide
Concen: 0.091 ppbv m
RT: 12.468 min Scan# 1684
Delta R.T. 0.018 min
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 29 Resp: 234

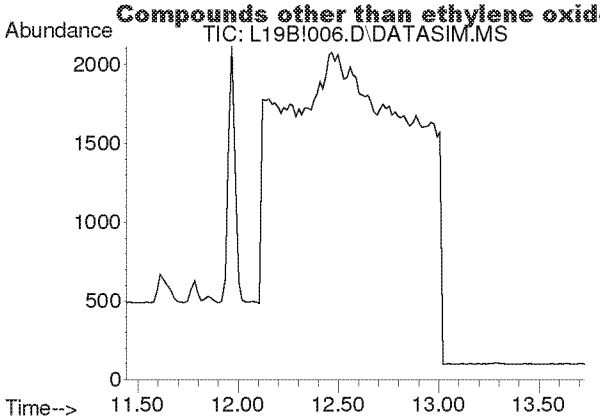
Ion	Ratio	Lower	Upper
29	100		
15	30.8	16.0	24.0#
44	1175.6	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

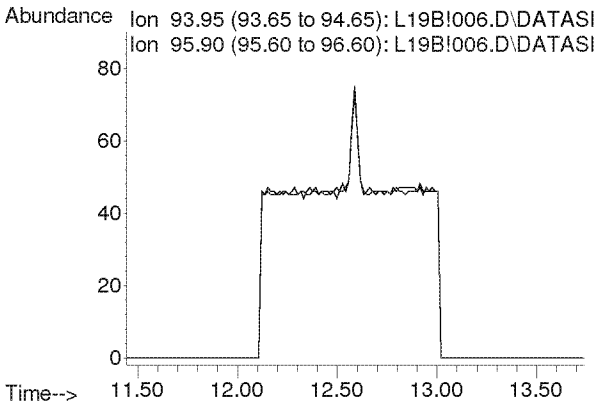


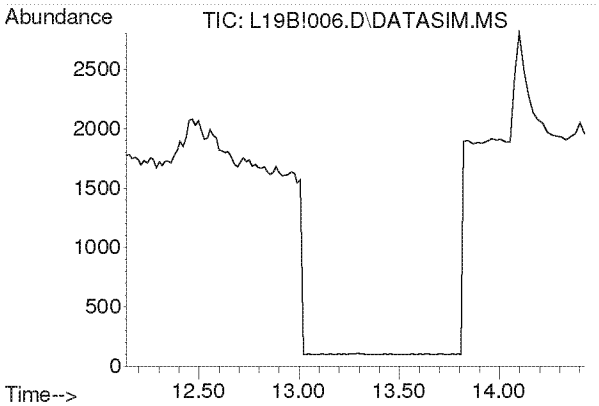
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



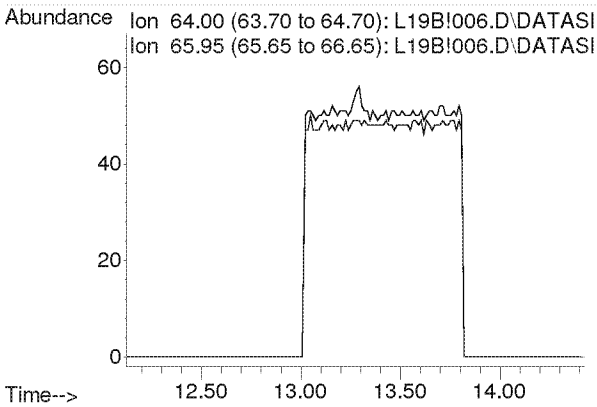


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

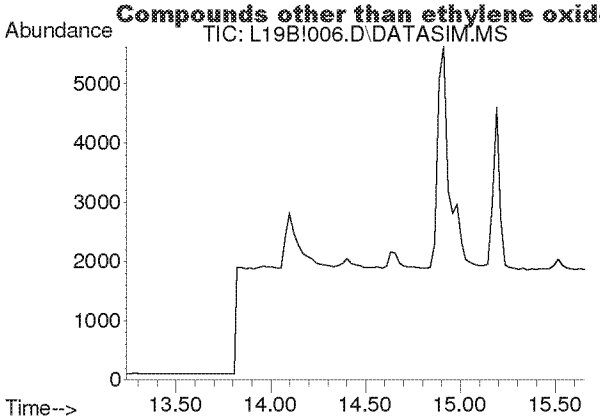
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

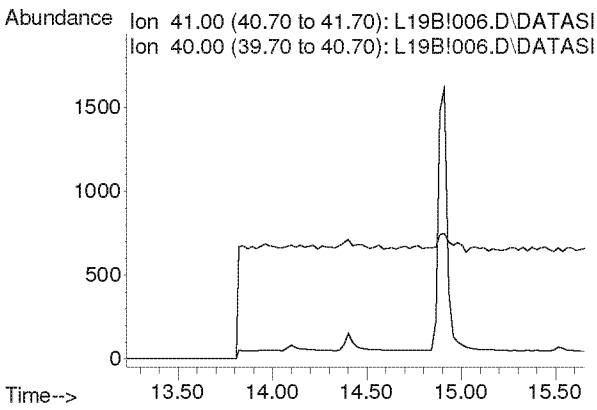


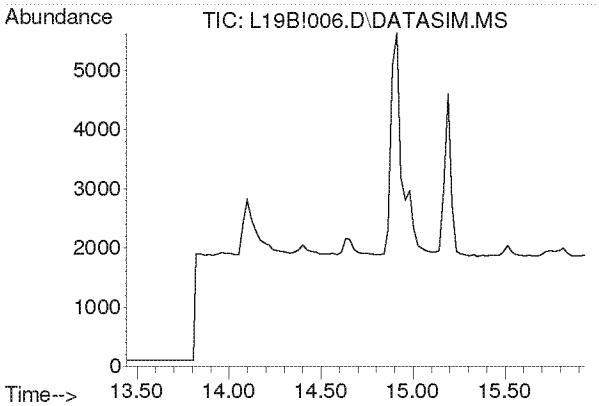
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



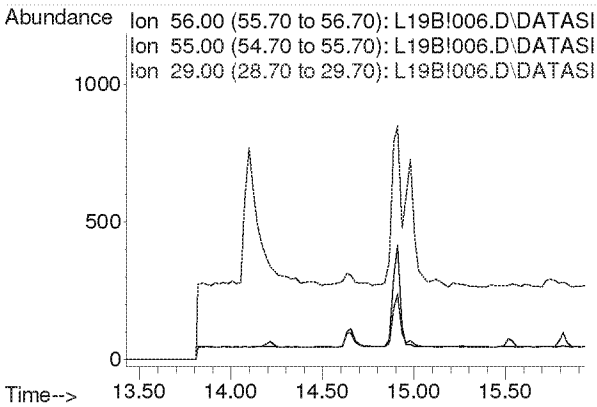


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

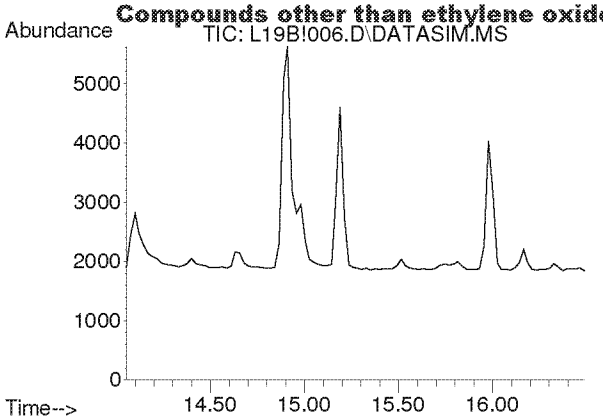
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

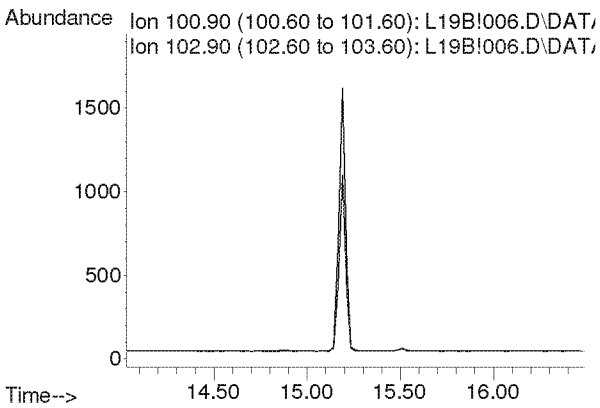


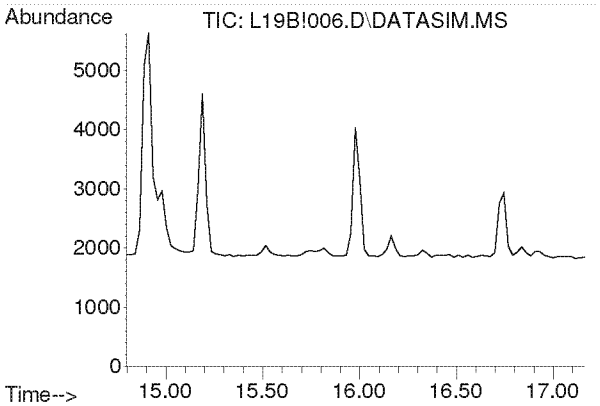
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



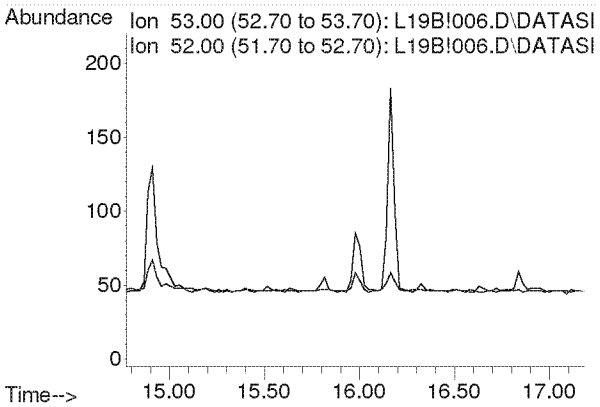


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

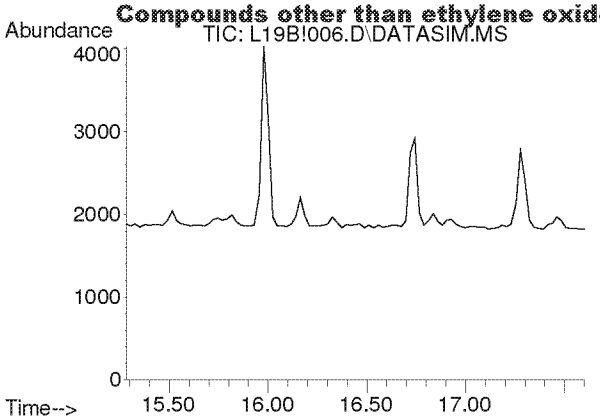
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

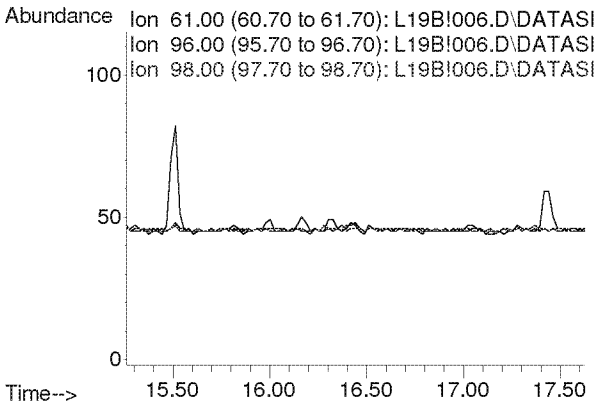


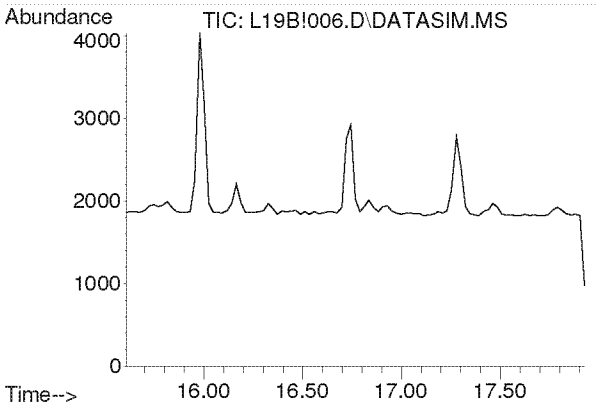
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



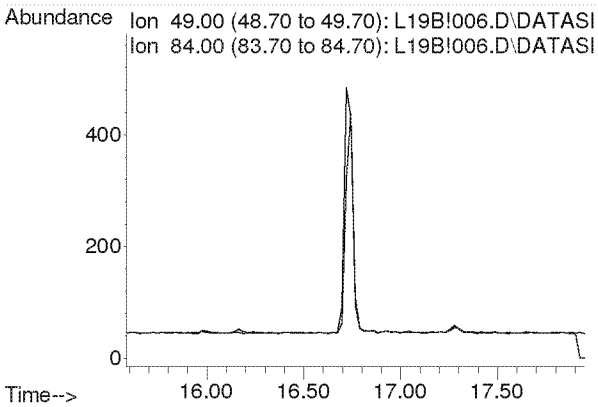


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

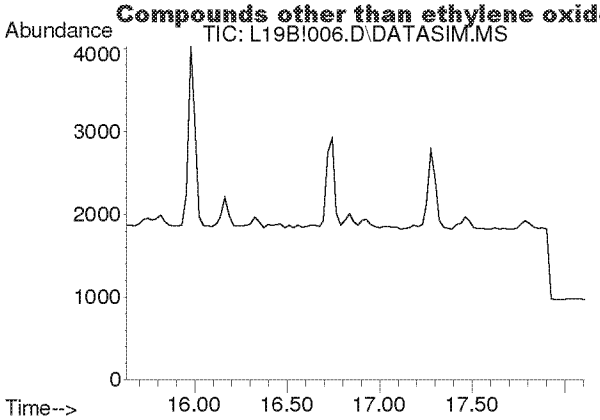
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

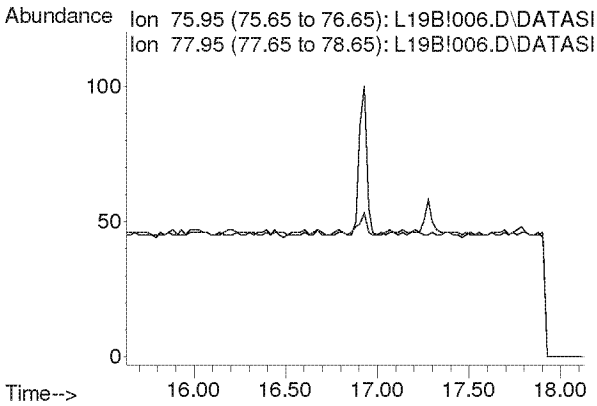


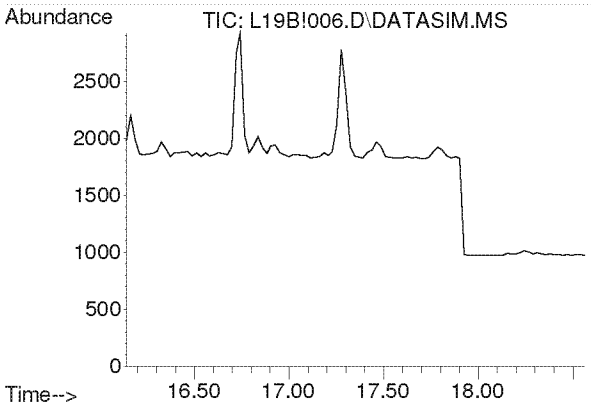
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



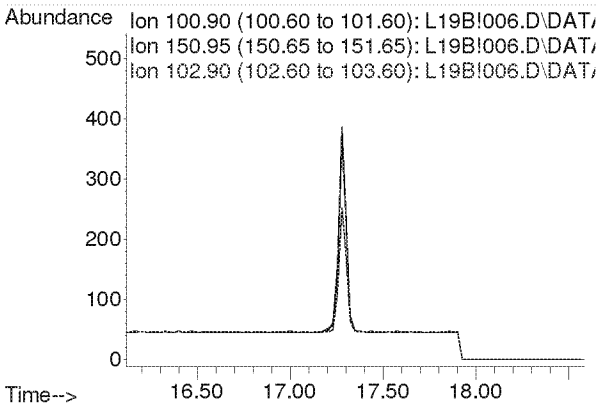


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

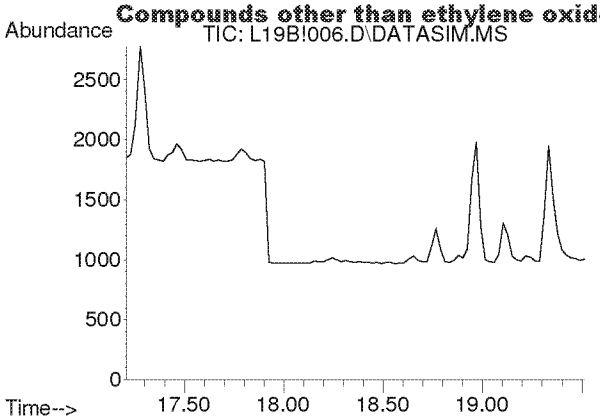
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

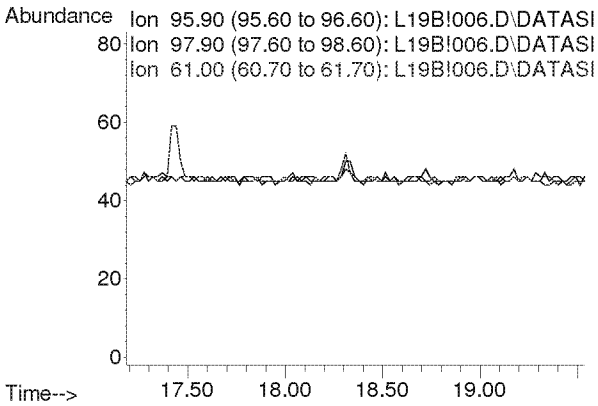


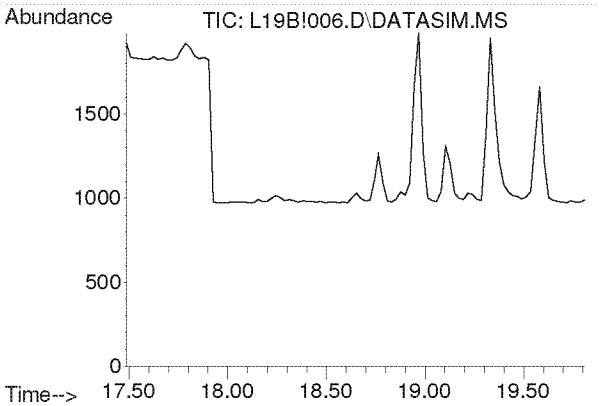
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



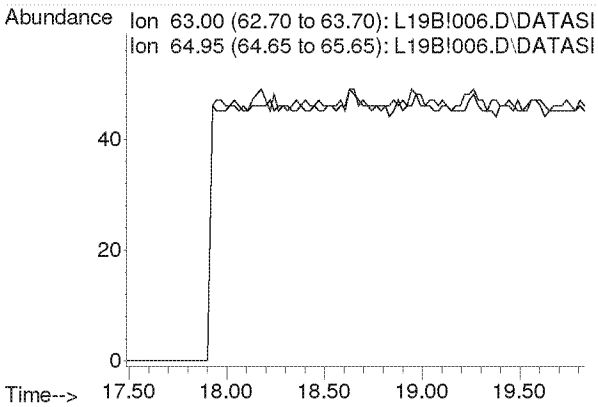


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

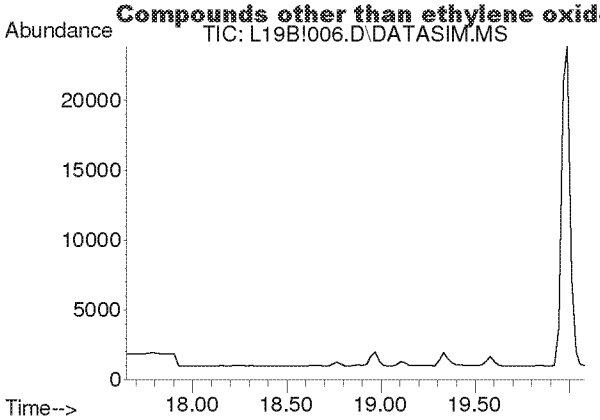
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

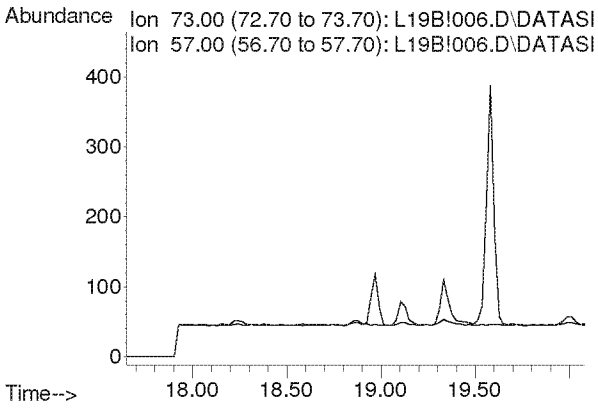


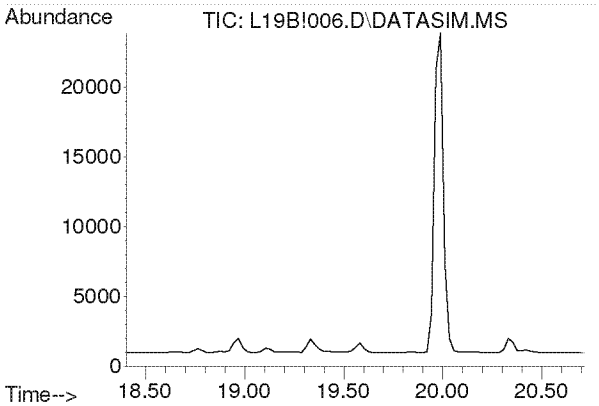
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



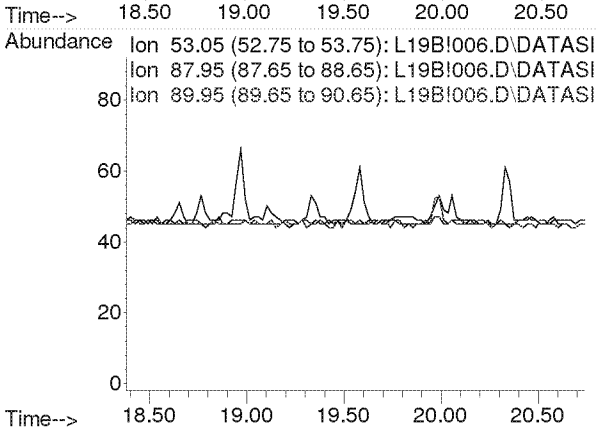


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

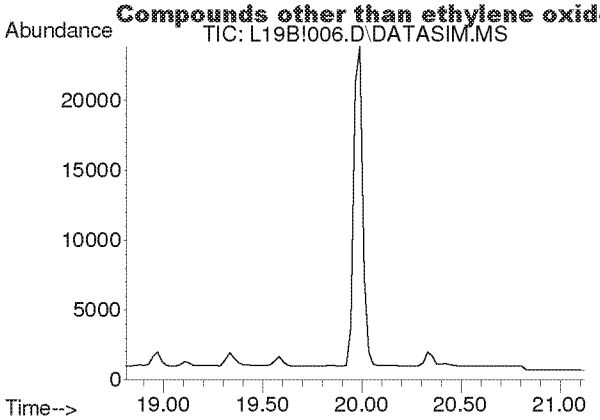
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

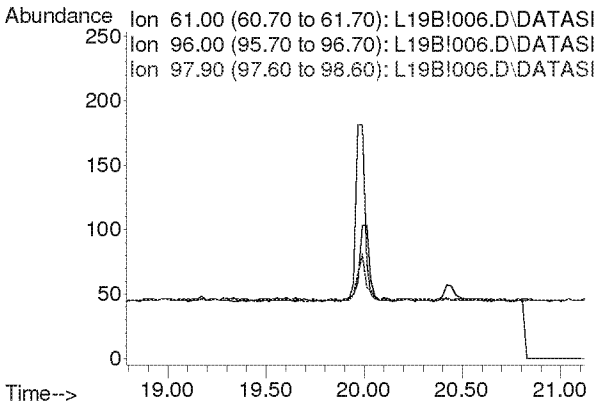


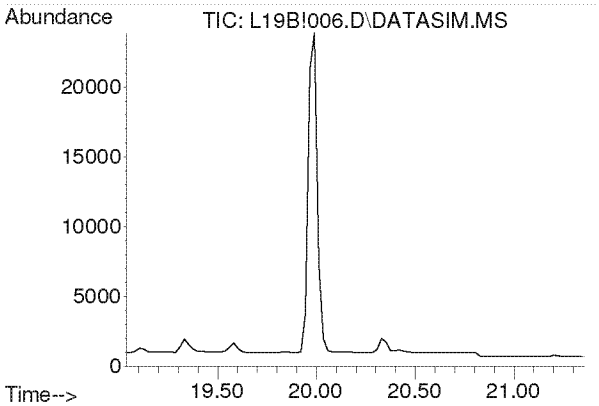
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



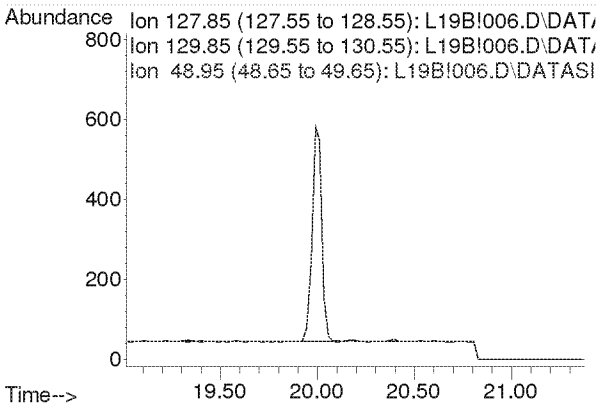


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

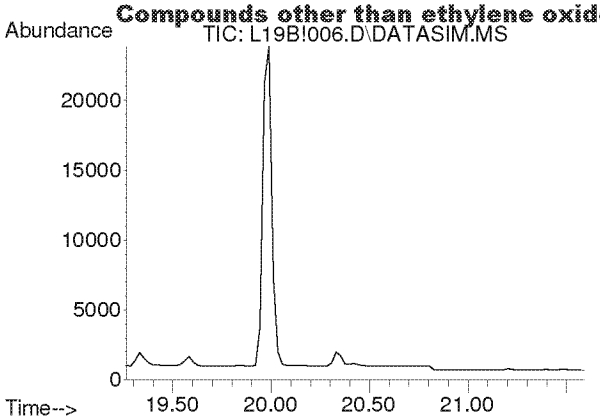
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

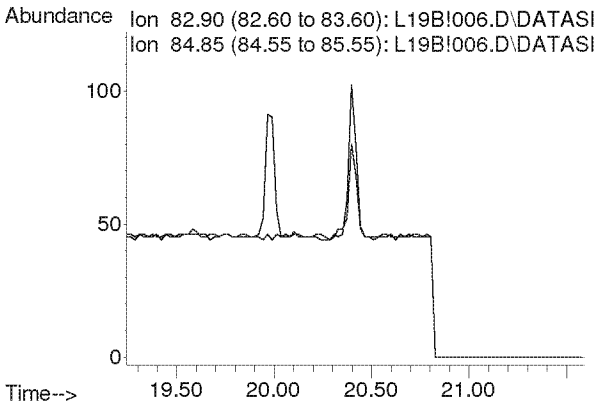


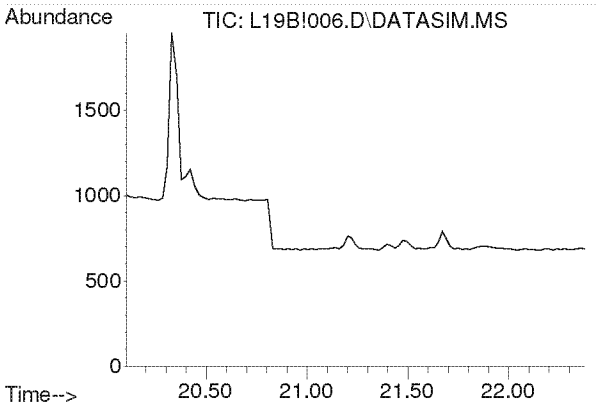
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



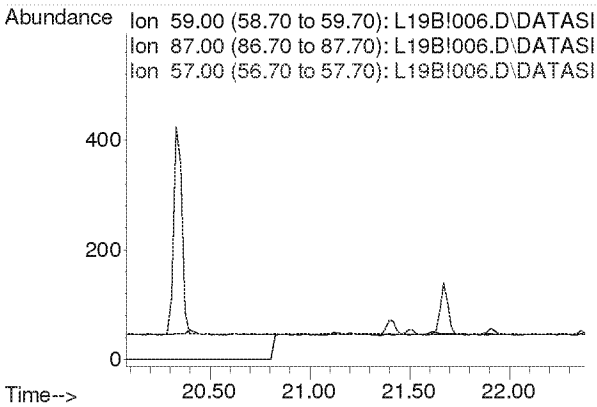


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

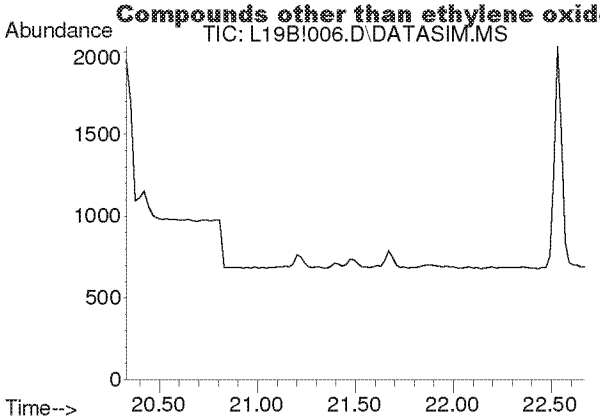
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

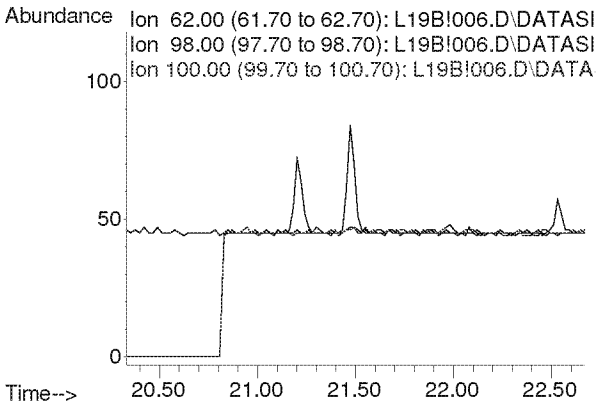


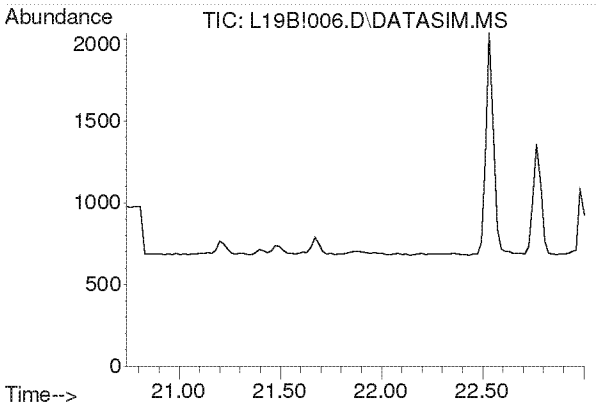
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



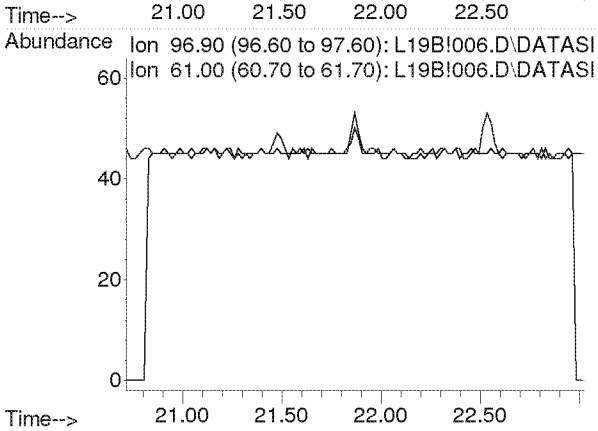


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

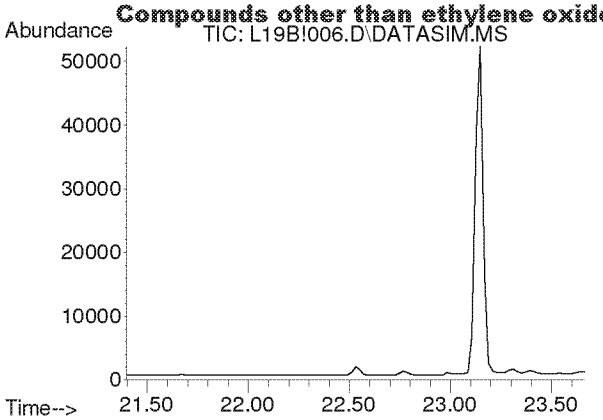
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

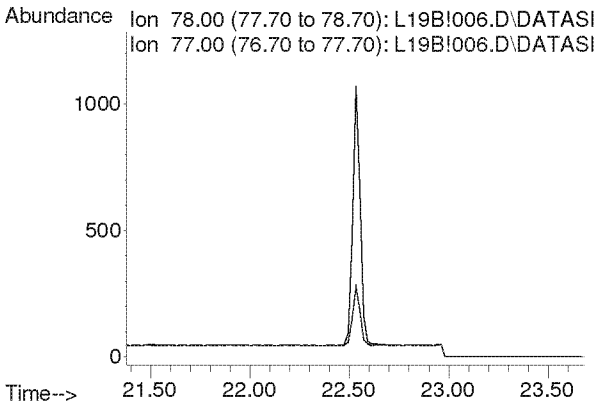


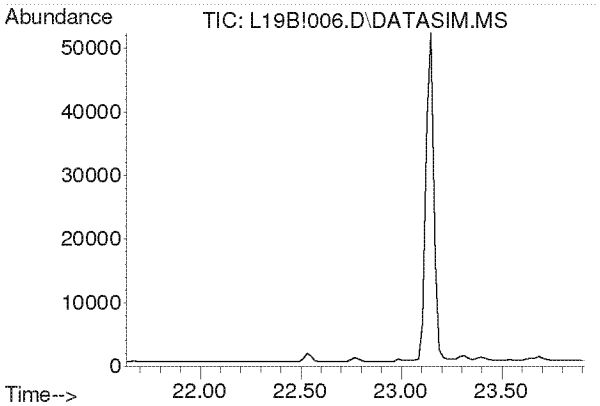
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



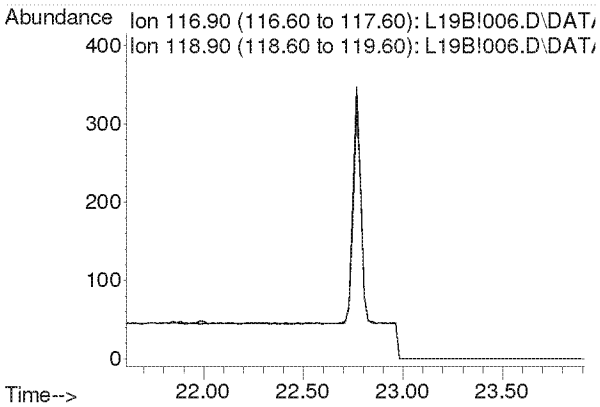


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

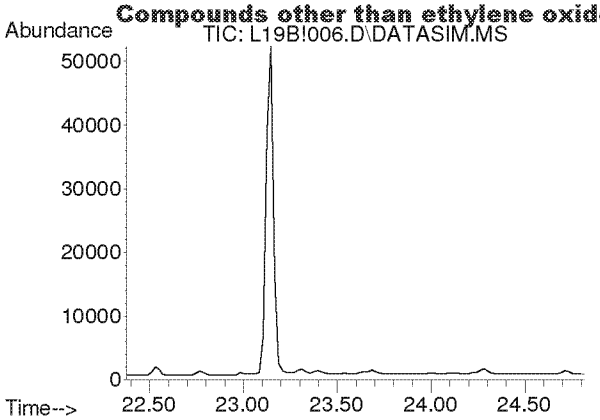
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

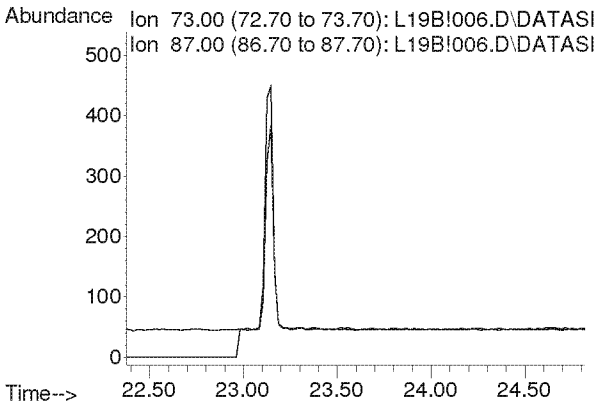


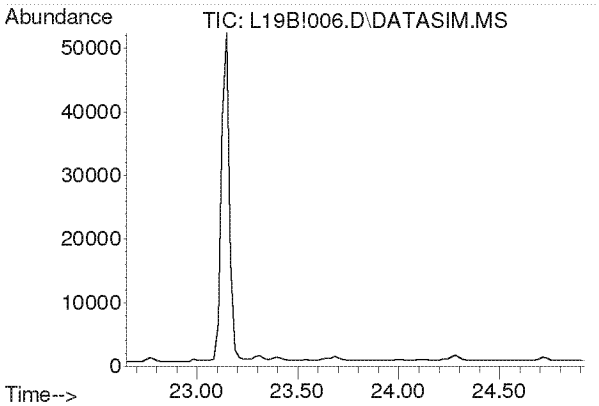
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



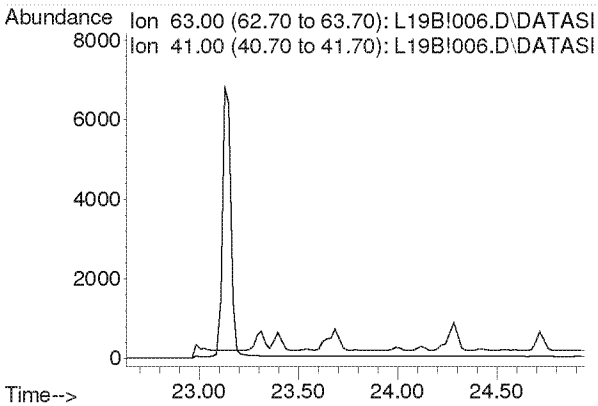


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

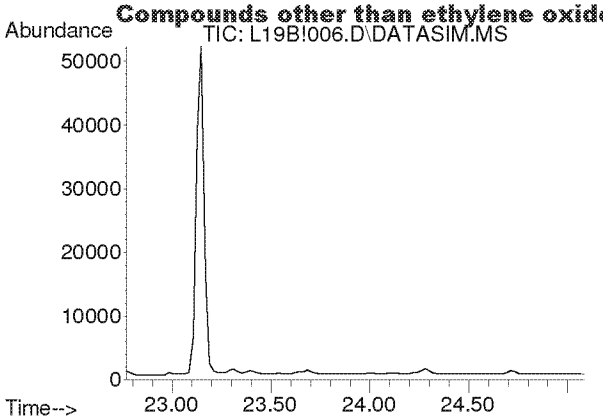
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

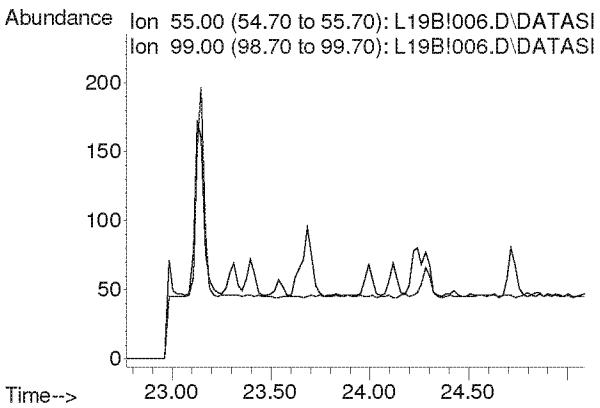


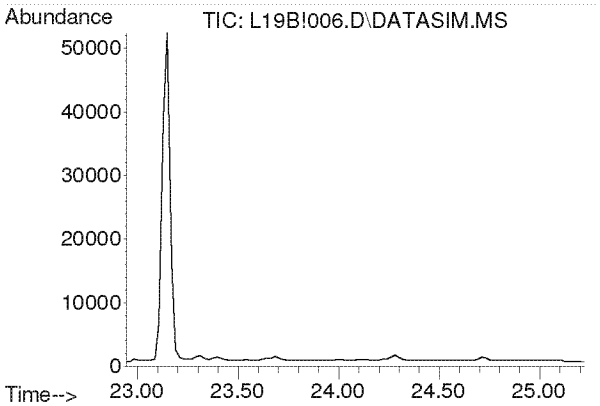
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



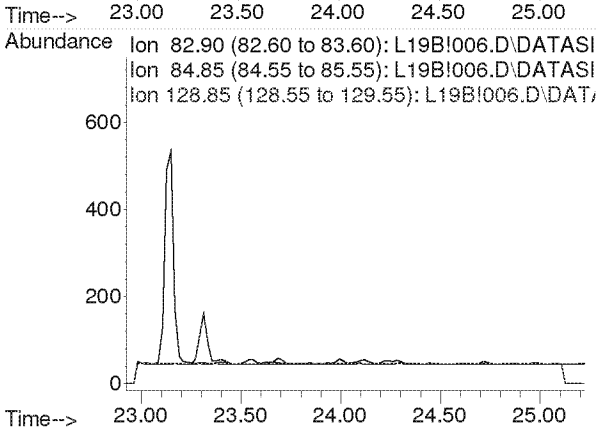


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

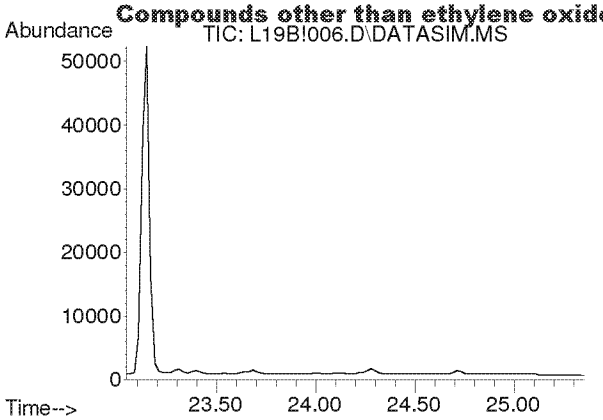
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

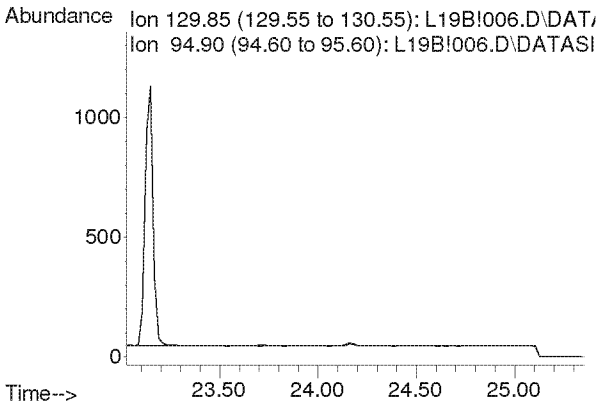


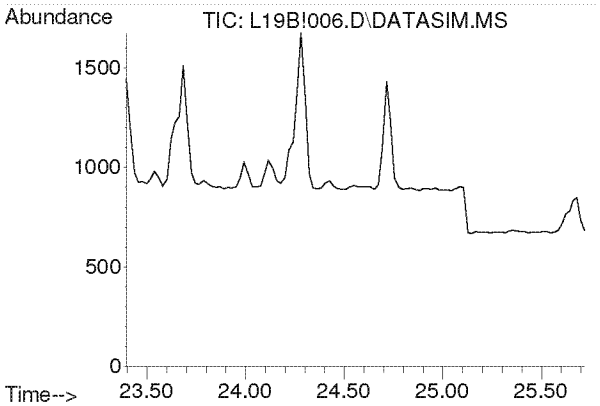
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



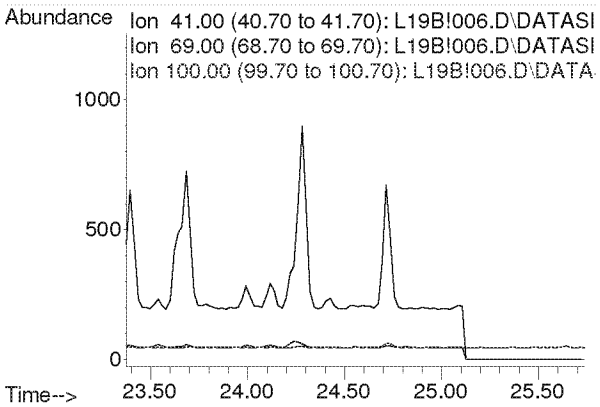


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

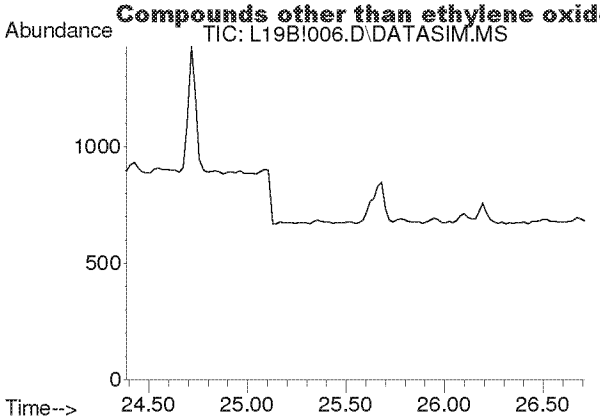
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

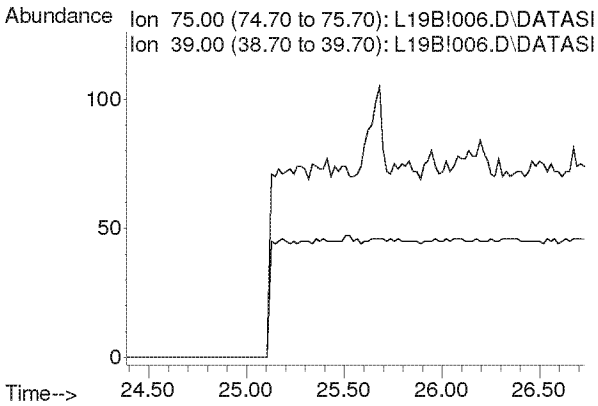


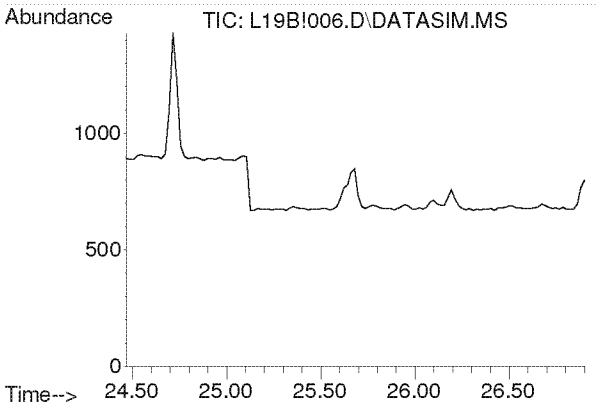
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



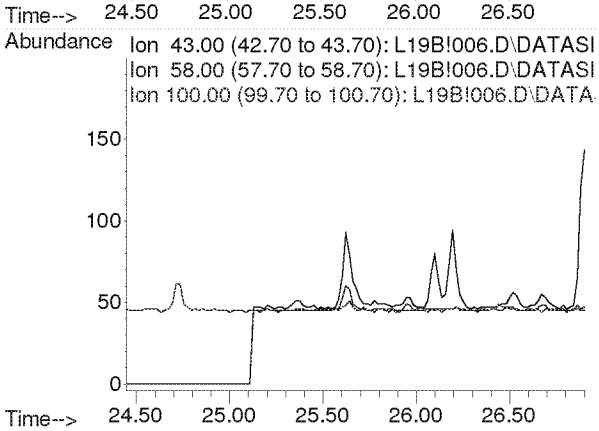


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

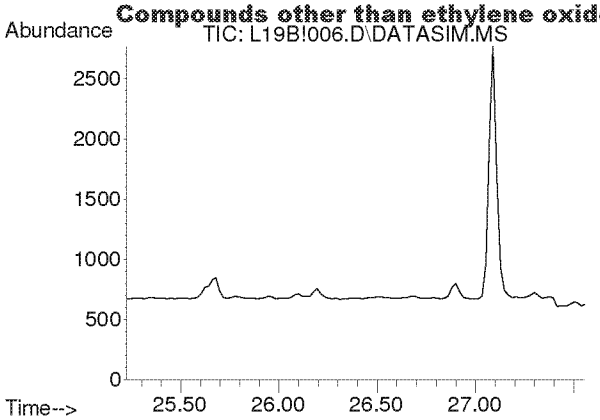
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

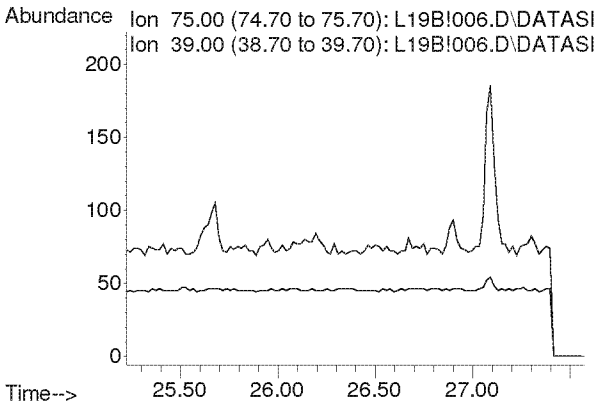


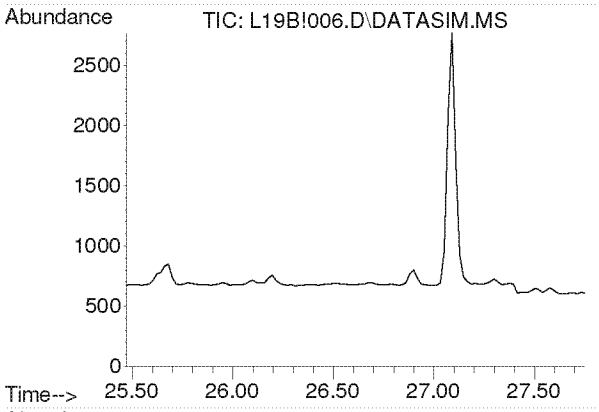
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



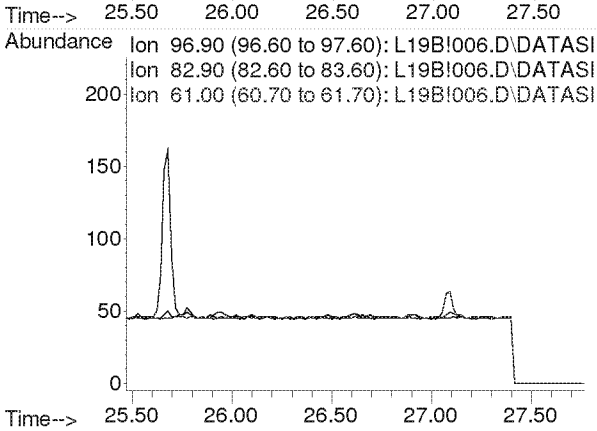


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

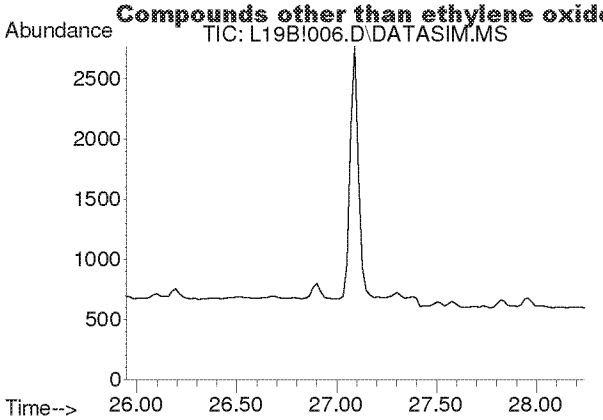
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

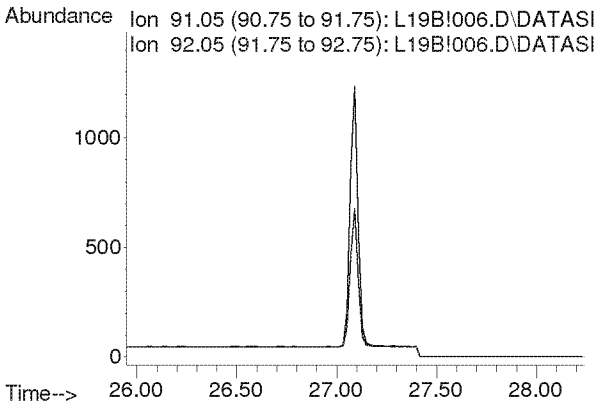


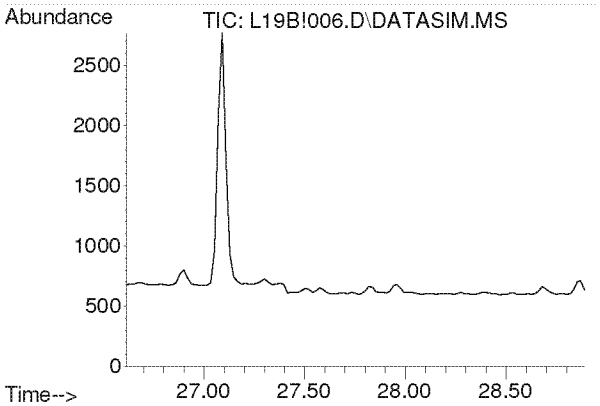
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



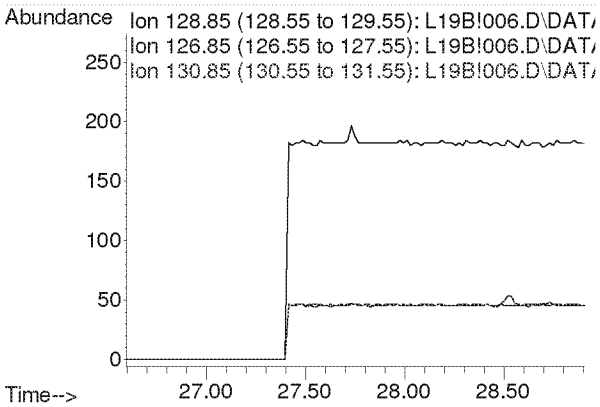


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

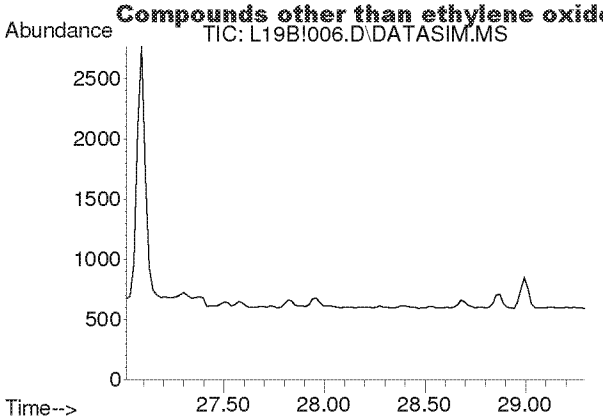
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

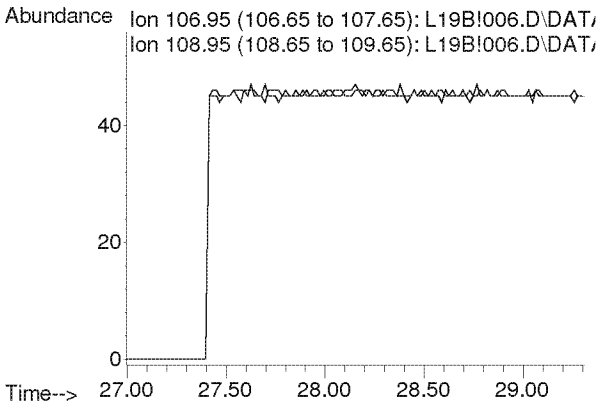


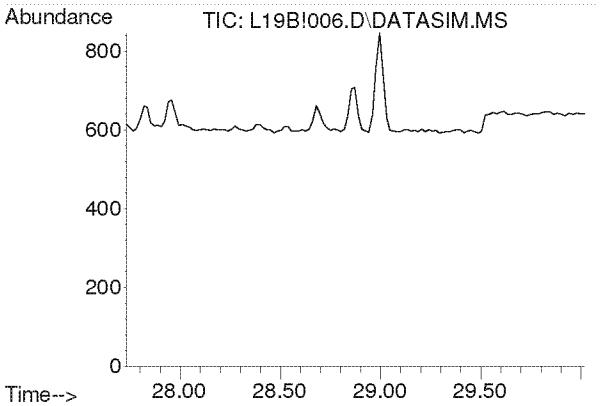
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



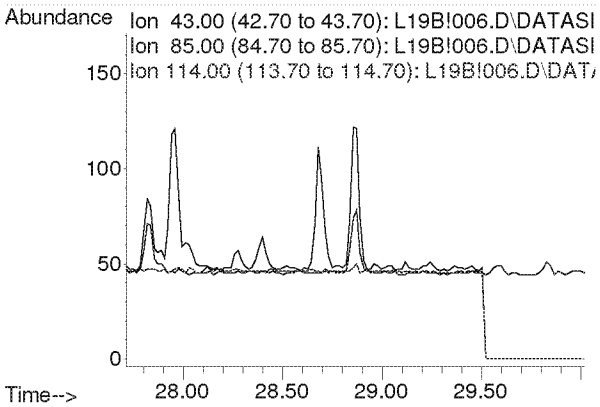


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

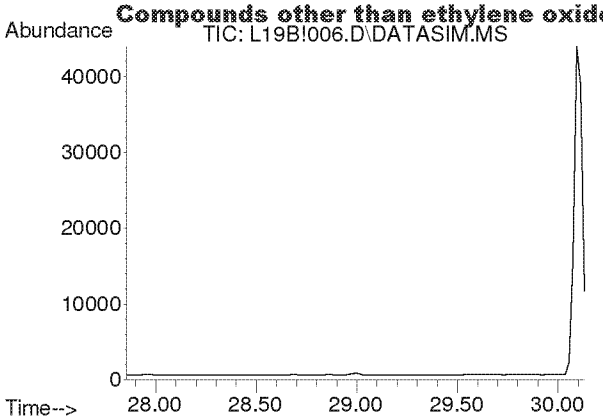
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

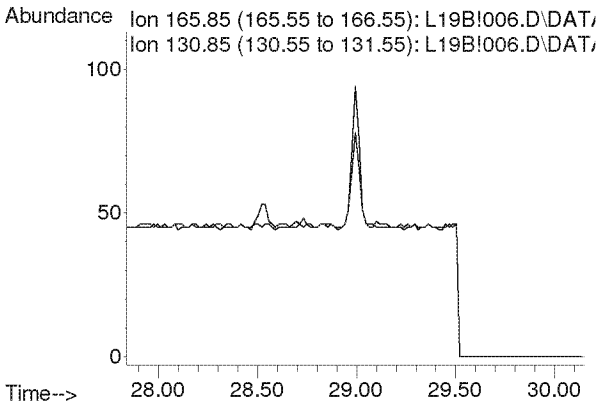


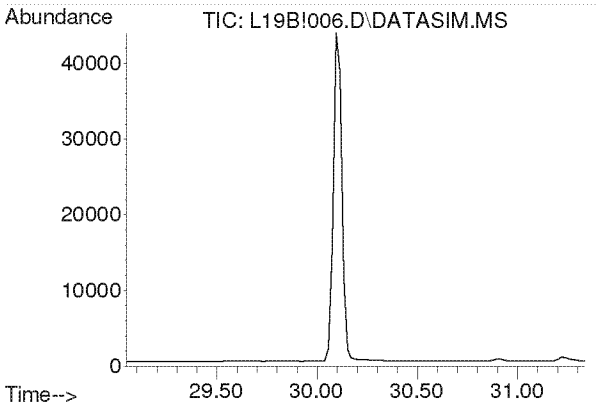
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



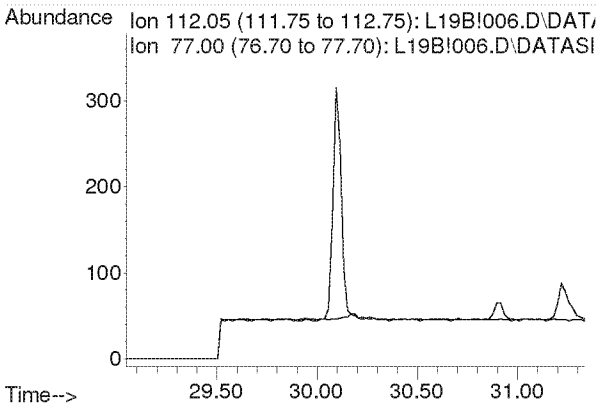


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

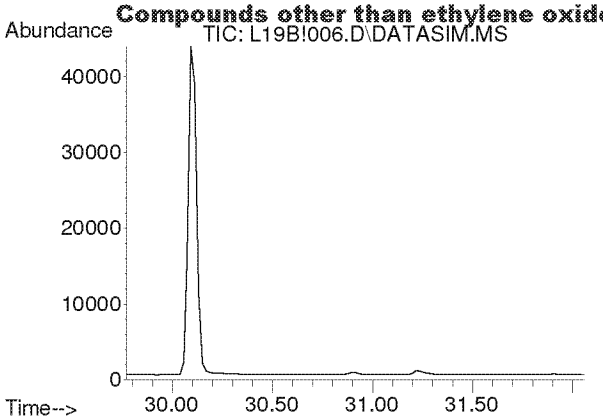
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

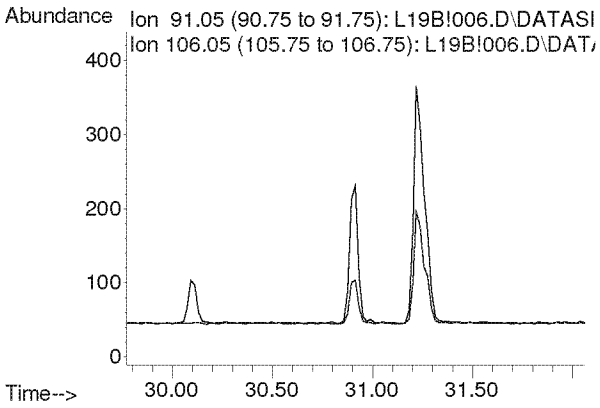


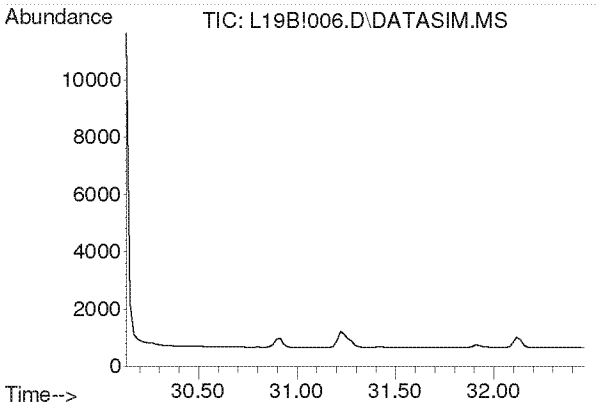
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



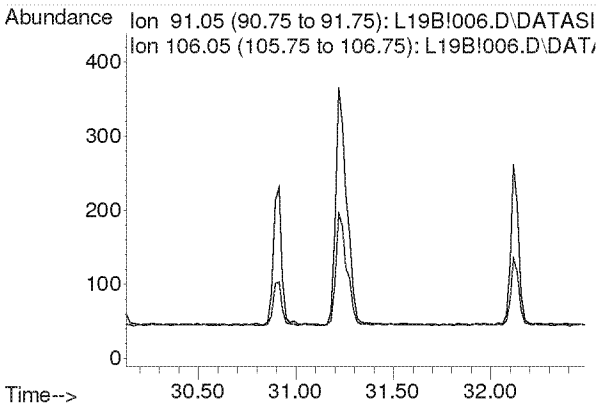


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

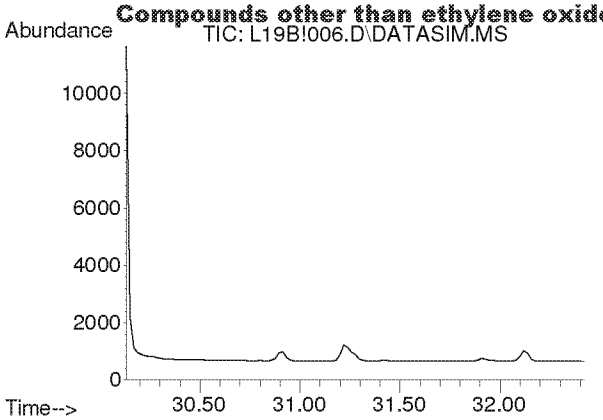
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

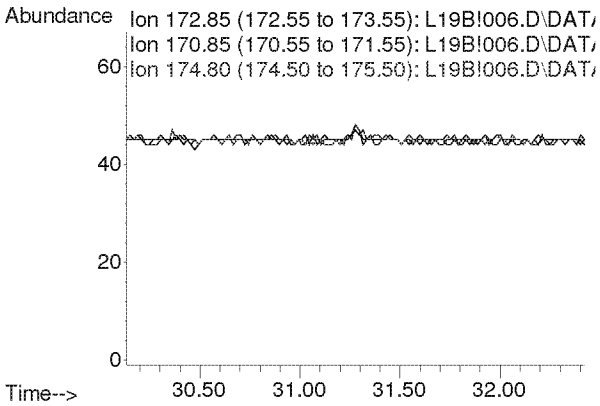


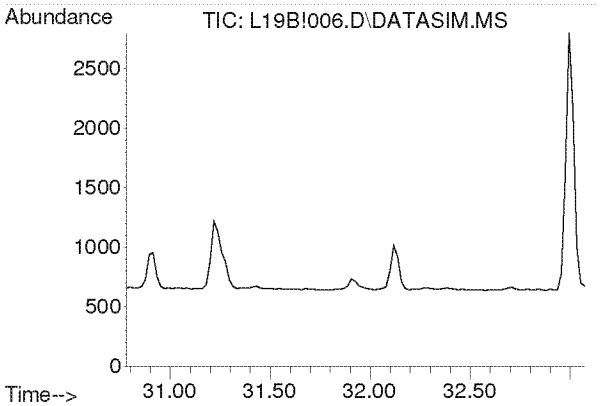
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



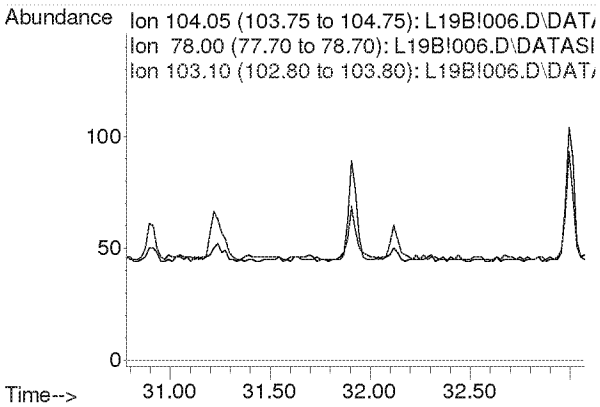


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

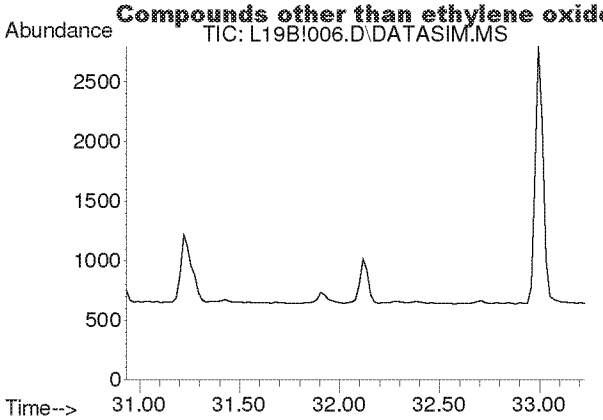
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

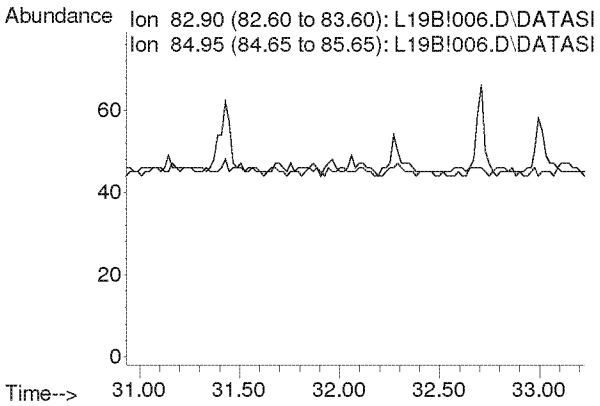


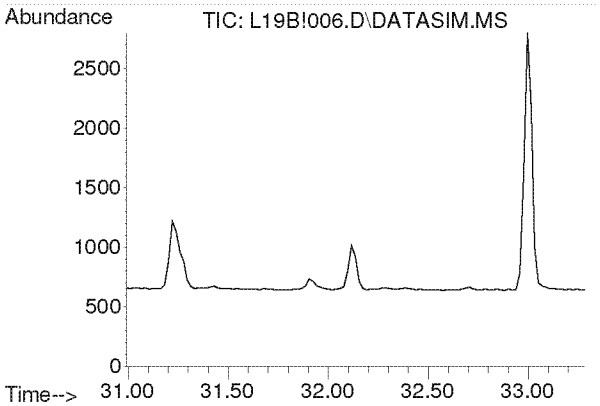
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



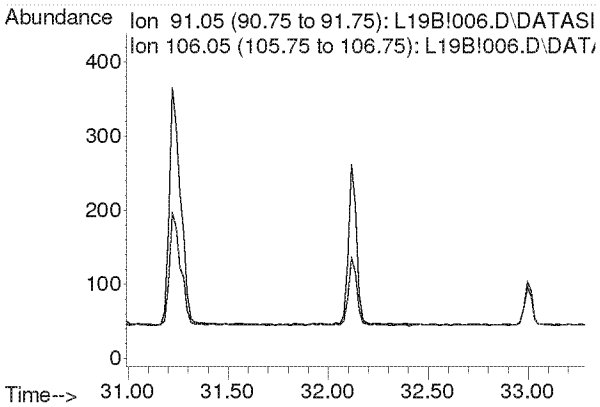


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

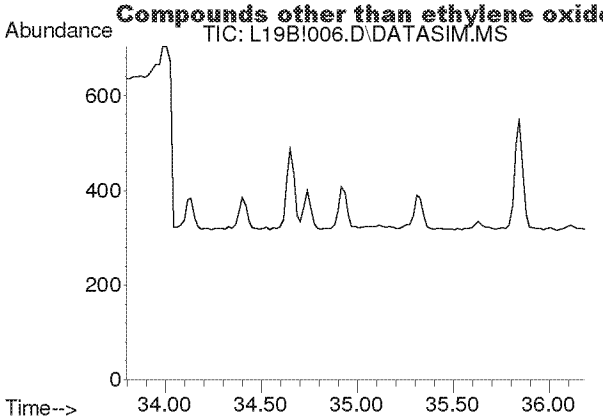
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

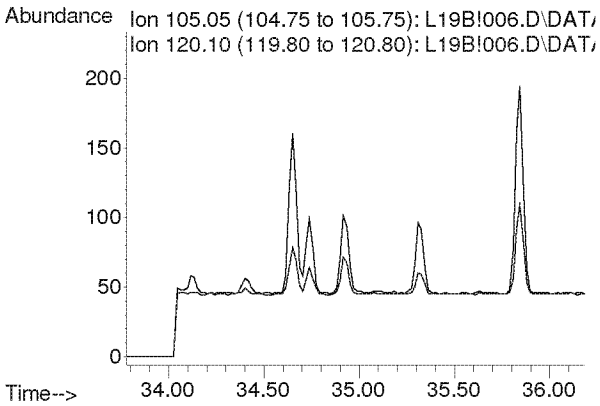


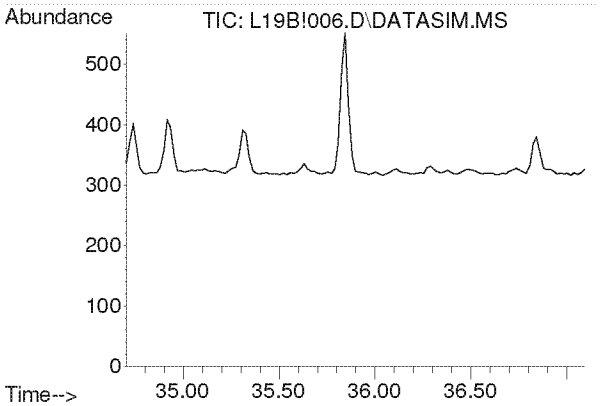
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



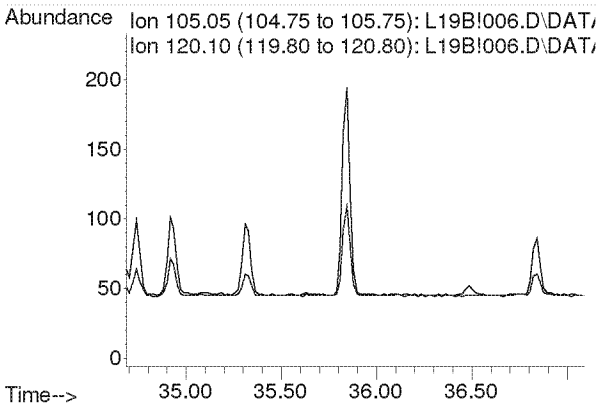


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

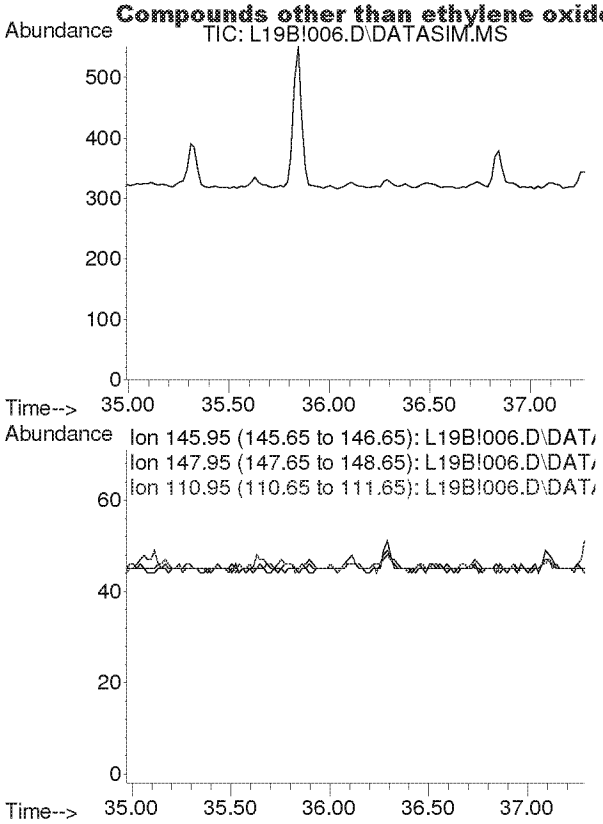
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

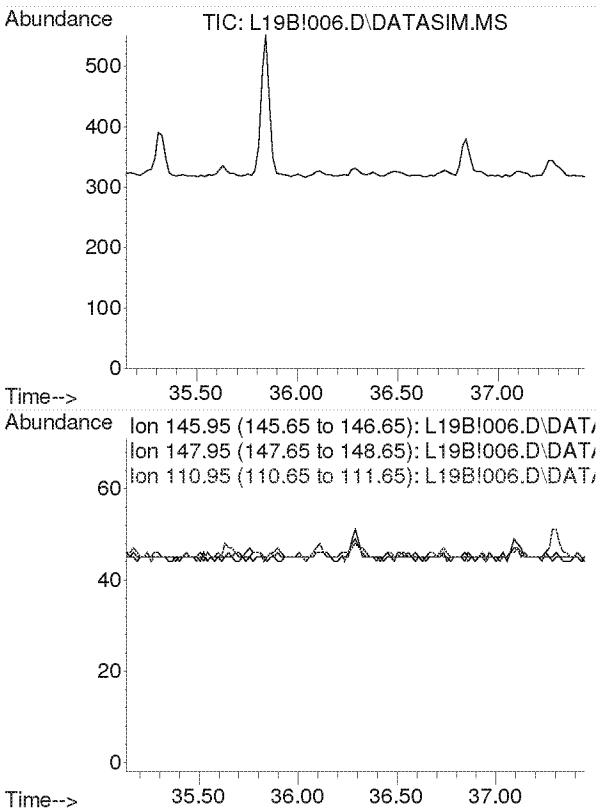


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



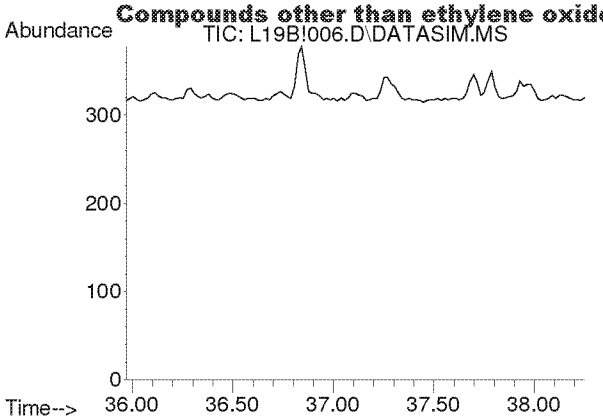
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7

Compounds other than ethylene oxide were not quantitated.

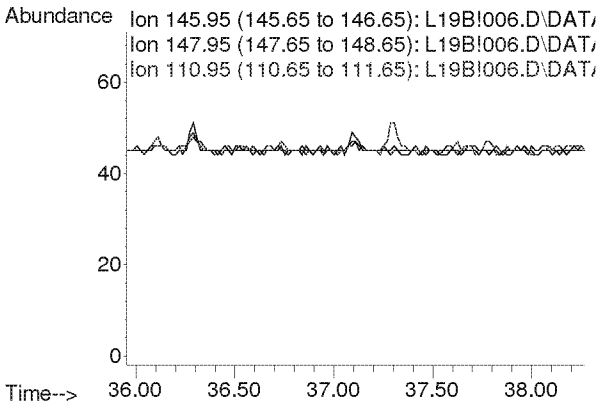


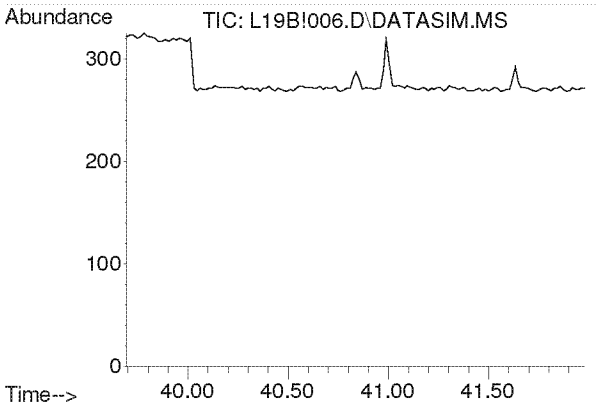
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



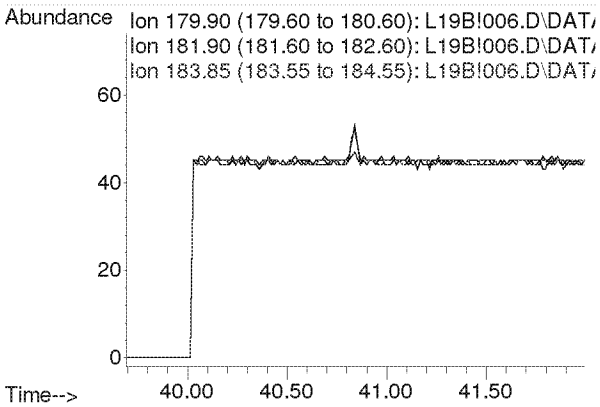


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

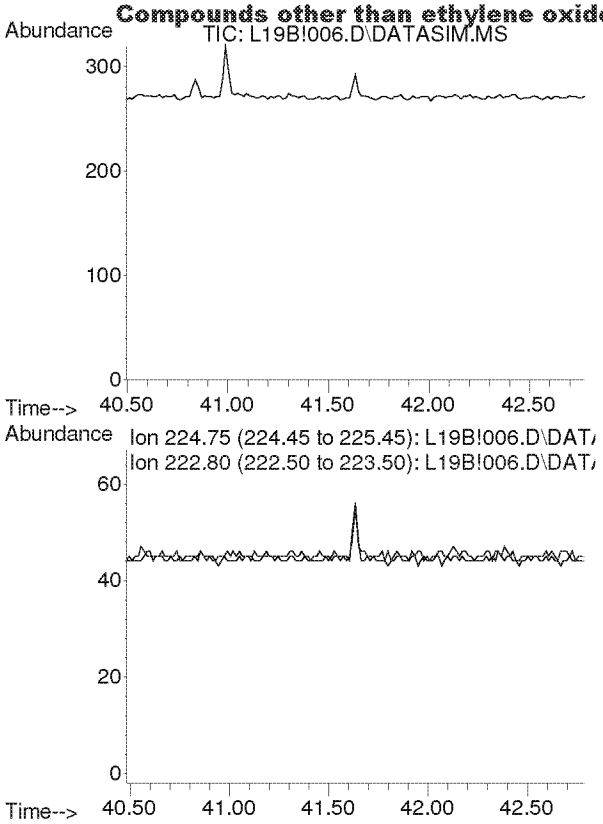
Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!006.D
Acq: 28 Feb 2019 5:36 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\L19B!\
Data File : L19B!007.D
Acq On : 28 Feb 2019 6:36 pm
Operator : MAH
Sample : 9022616-08
Misc : WATERTOWER 2/24/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 05 07:36:55 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	45045	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	113899	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	79220	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	255	0.0990 ppbv #	1
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D. 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	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. 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\L19B!\
Data File : L19B!007.D
Acq On : 28 Feb 2019 6:36 pm
Operator : MAH
Sample : 9022616-08
Misc : WATERTOWER 2/24/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 05 07:36:55 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

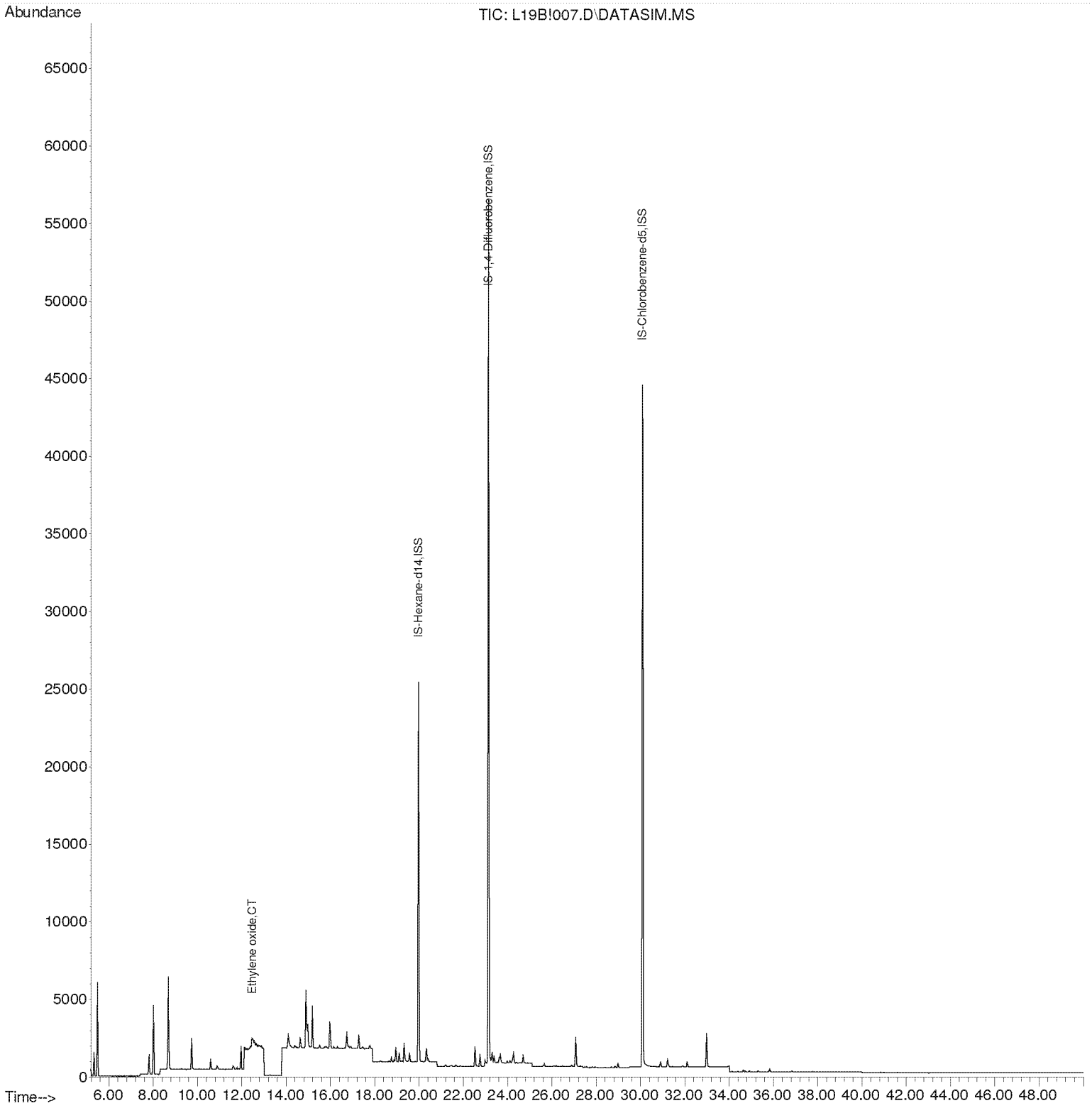
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene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

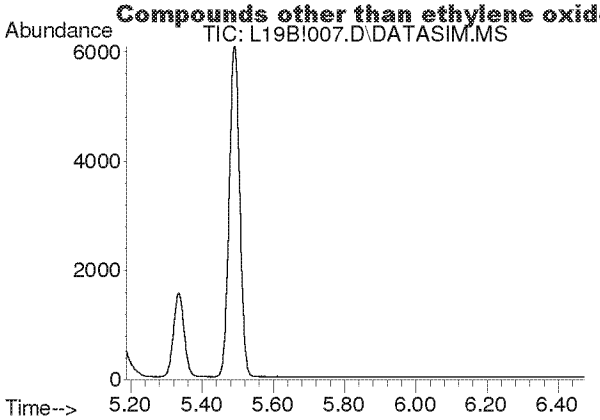
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!007.D
Acq On : 28 Feb 2019 6:36 pm
Operator : MAH
Sample : 9022616-08
Misc : WATERTOWER 2/24/19
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 01 09:48:03 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



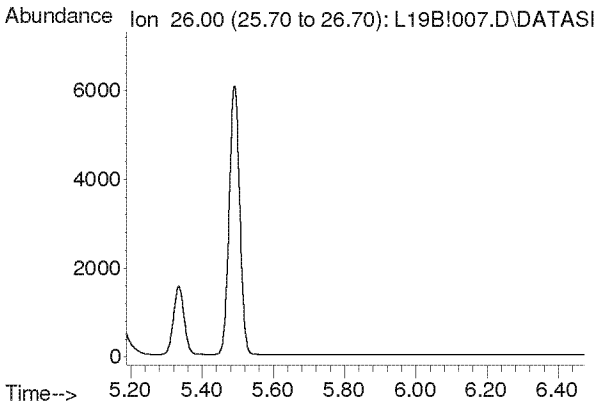
Compounds other than ethylene oxide were not quantitated.

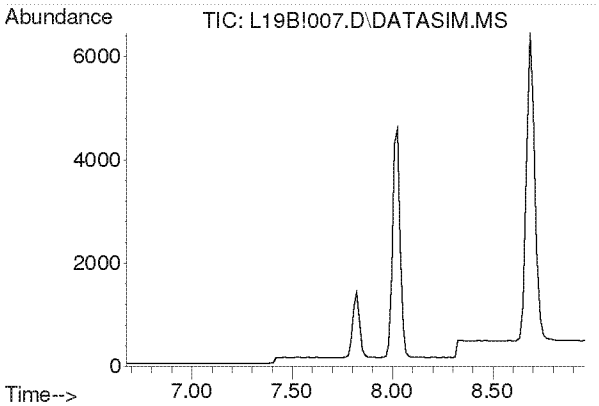


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 26



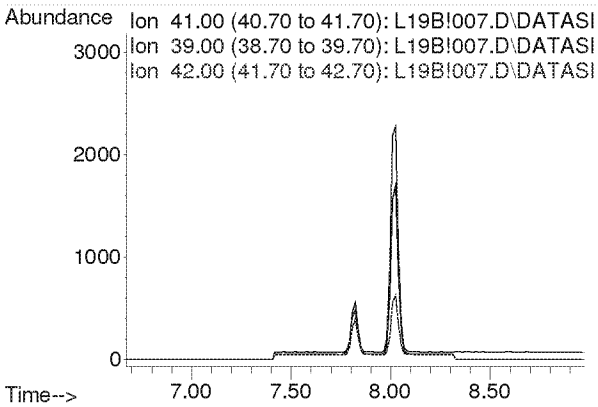


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

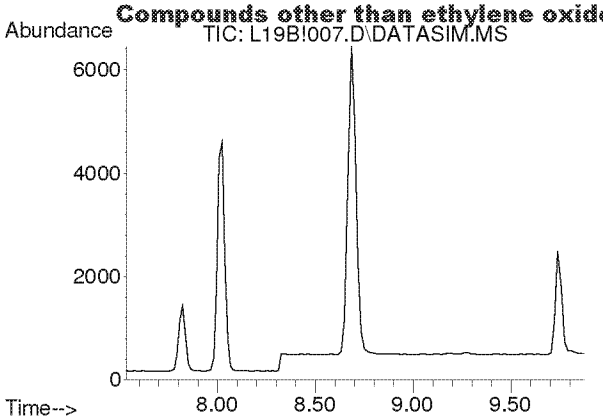
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

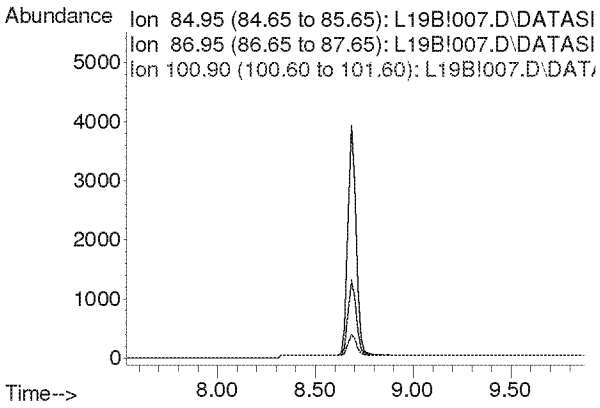


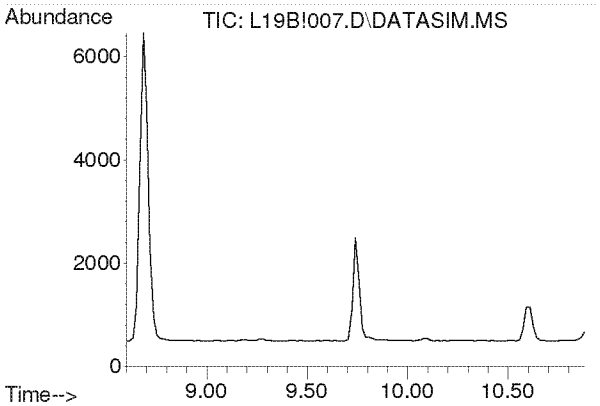
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



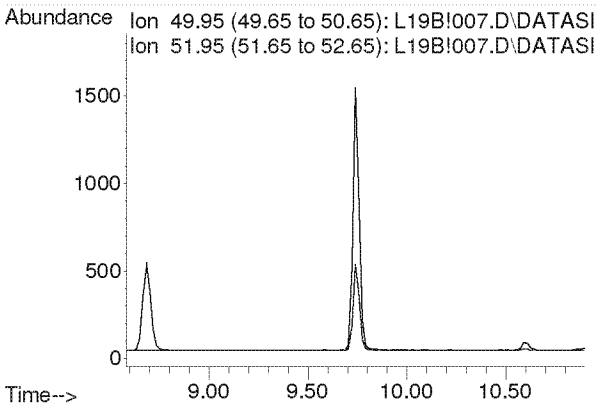


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

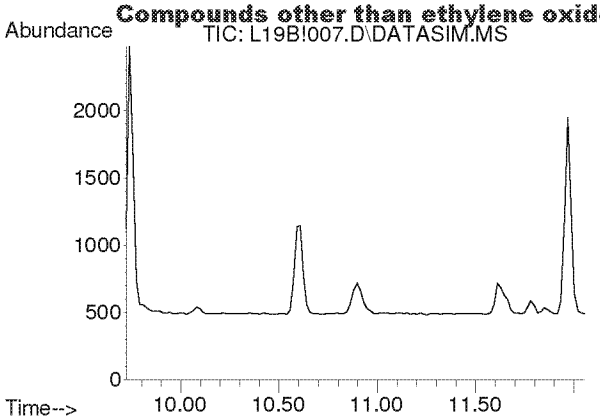
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

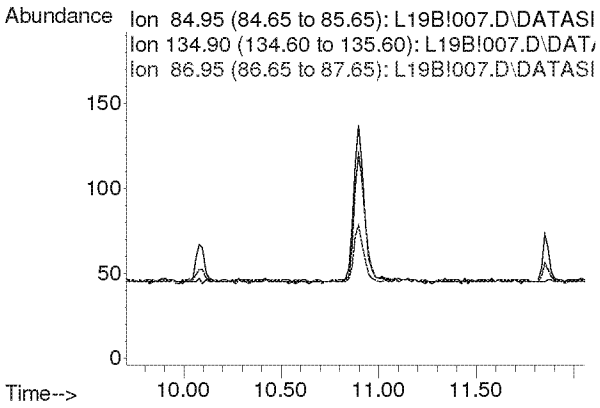


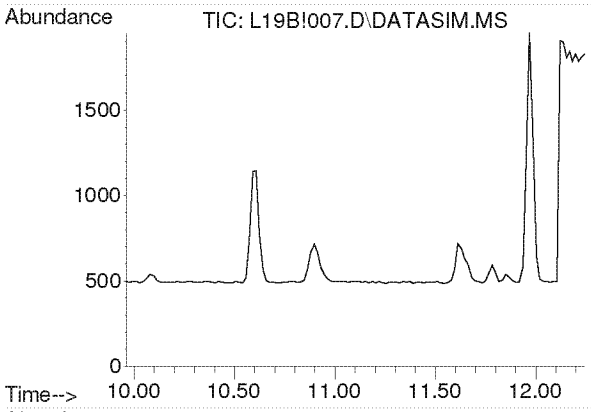
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



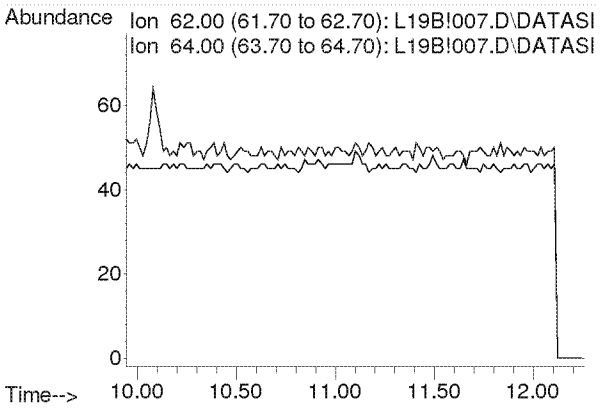


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

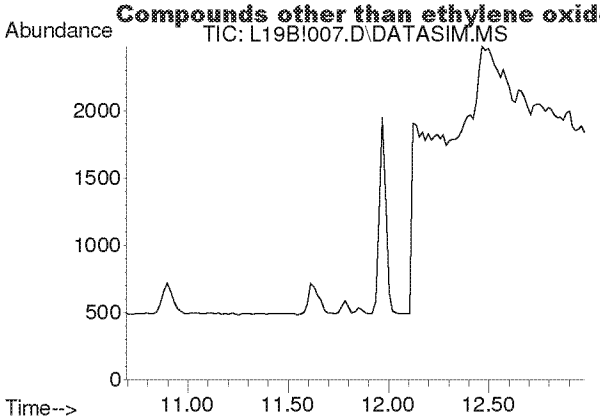
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

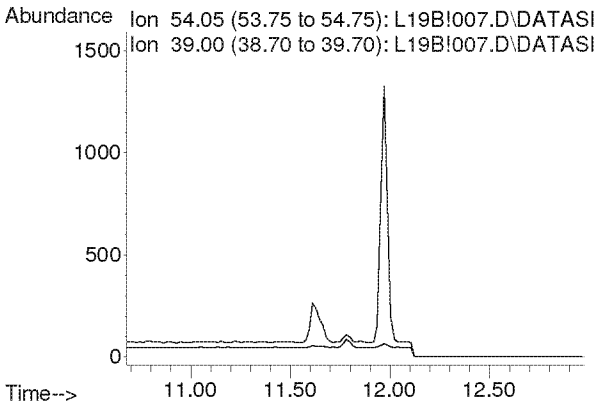


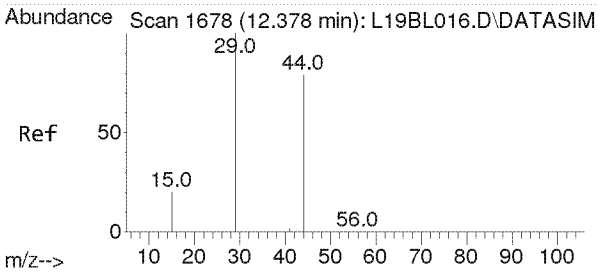
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

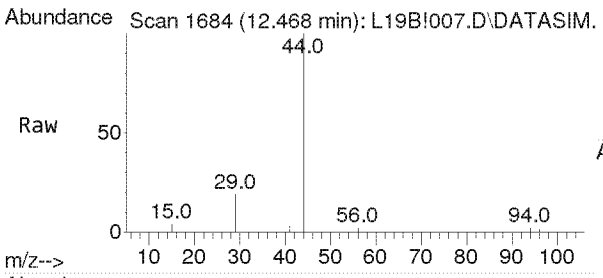


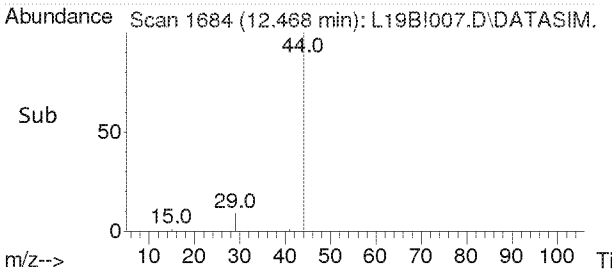


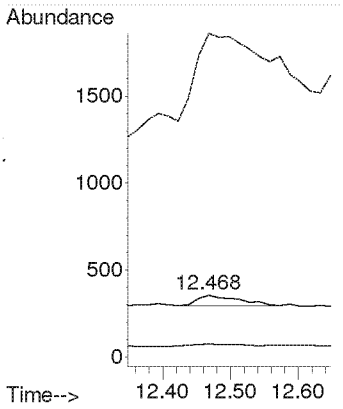
#9
Ethylene oxide
Concen: 0.099 ppbv
RT: 12.468 min Scan# 1684
Delta R.T. 0.090 min
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 29 Resp: 255

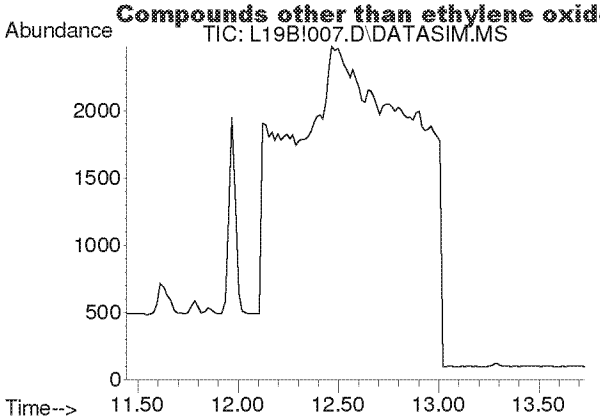
Ion	Ratio	Lower	Upper
29	100		
15	28.6	16.0	24.0#
44	1915.3	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

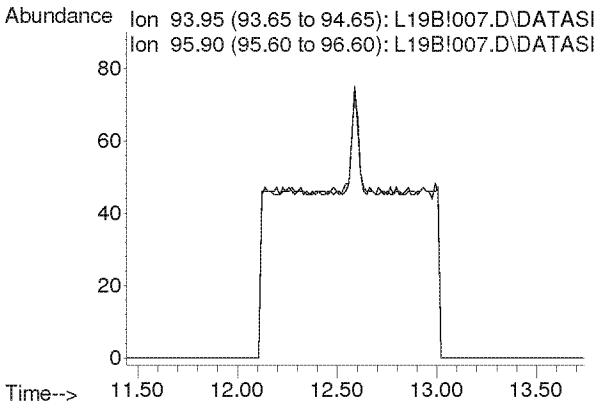


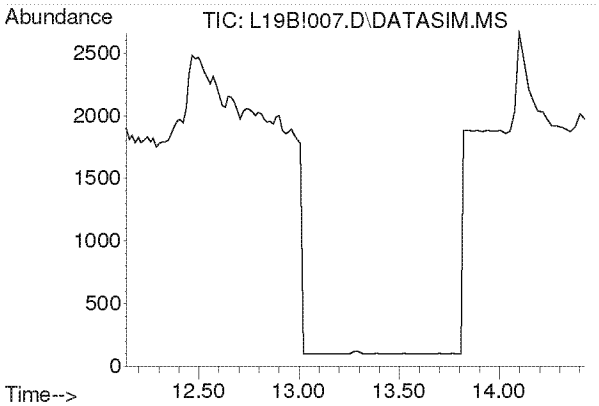
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



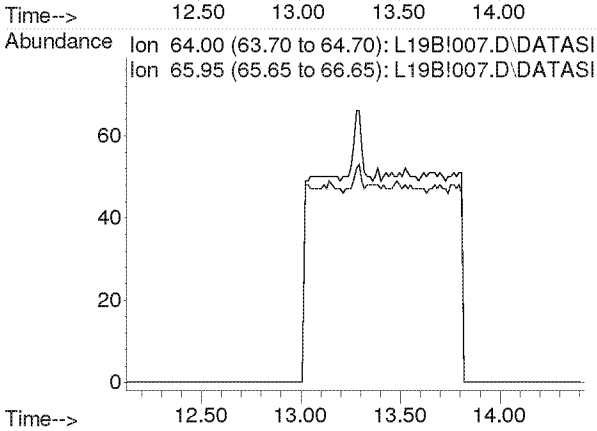


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

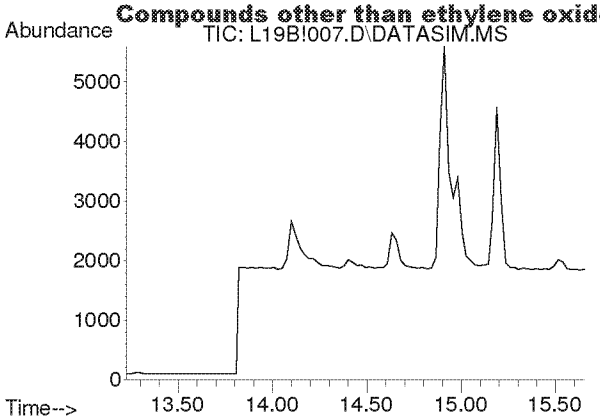
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

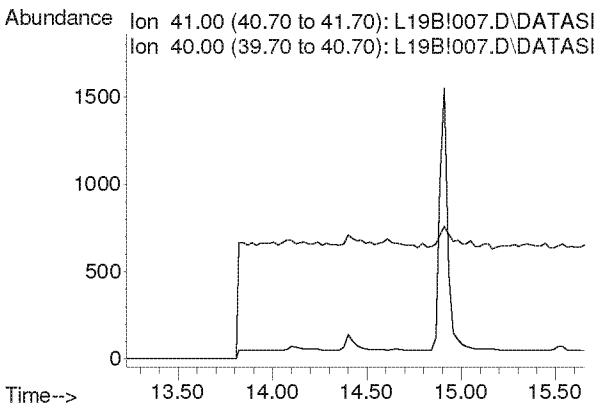


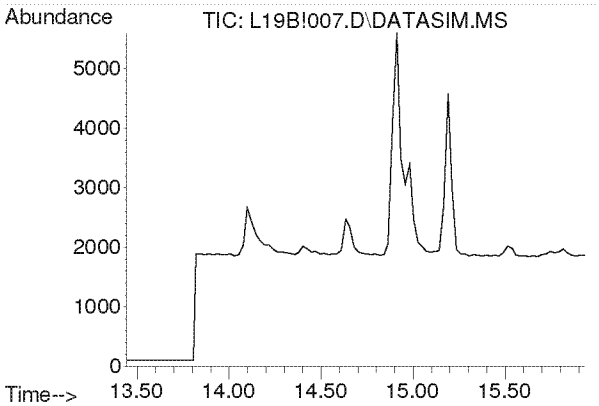
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



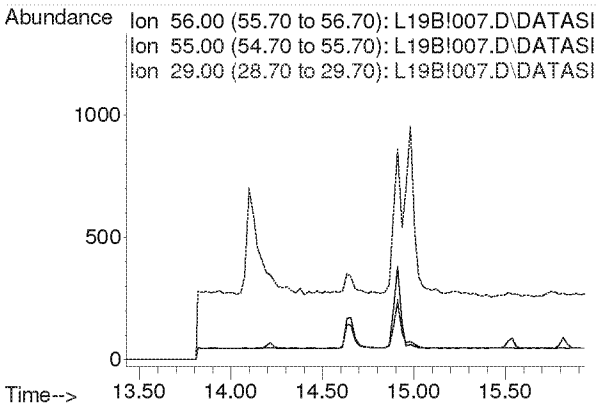


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

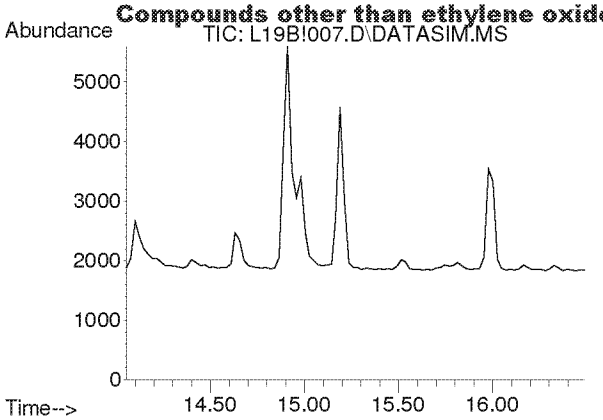
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

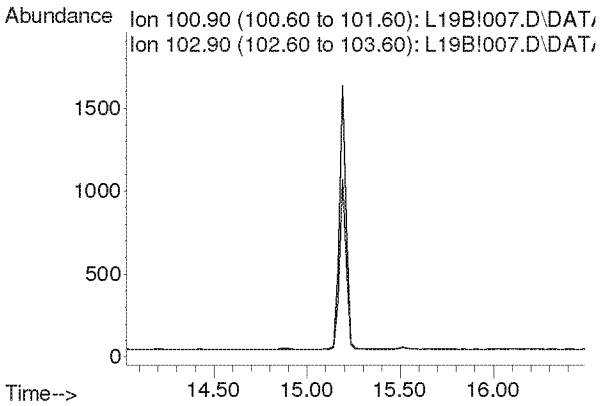


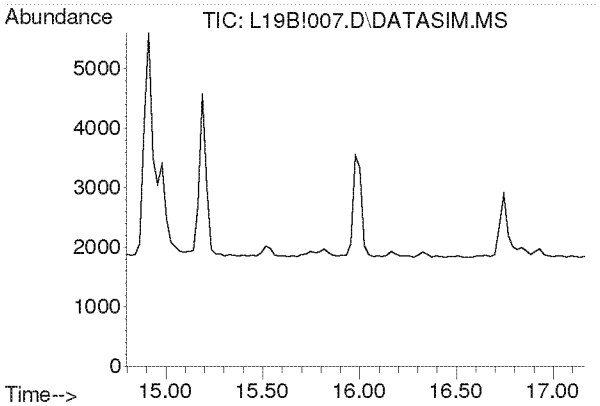
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



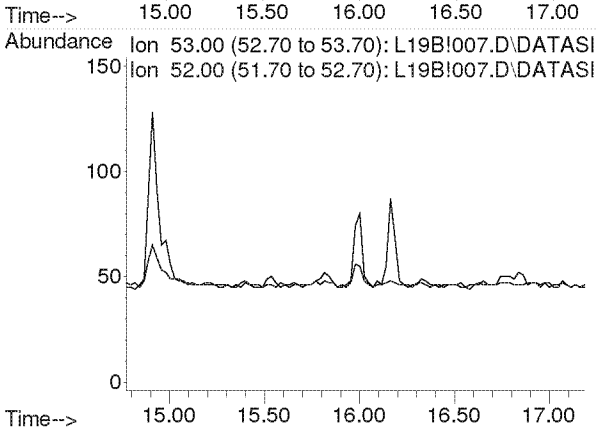


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

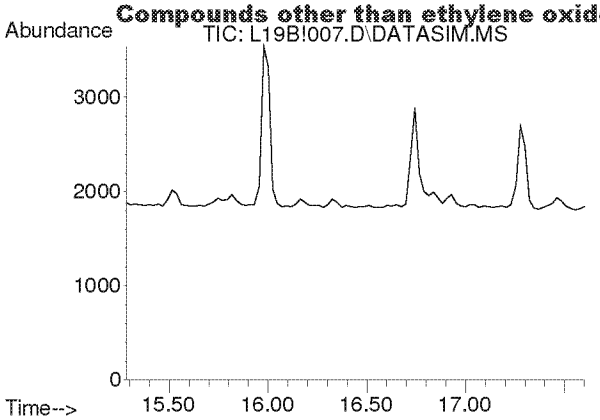
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

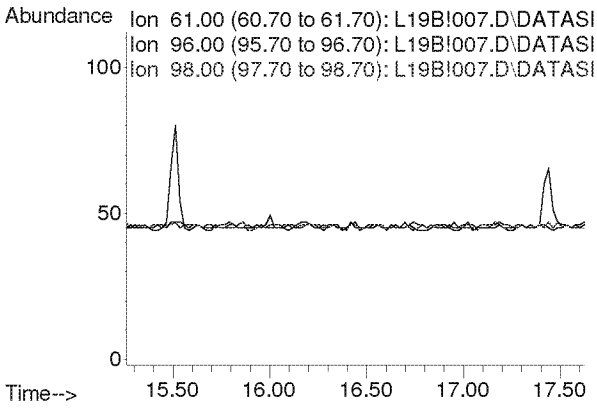


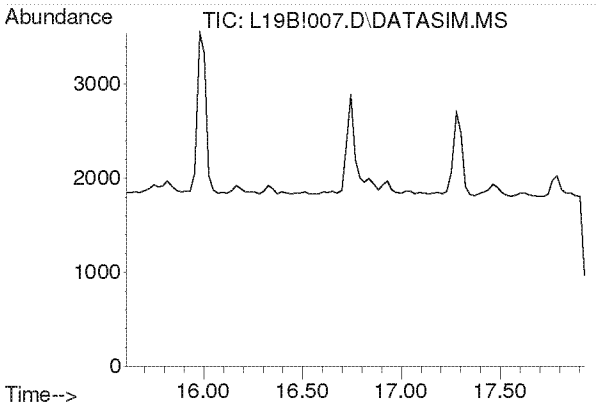
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



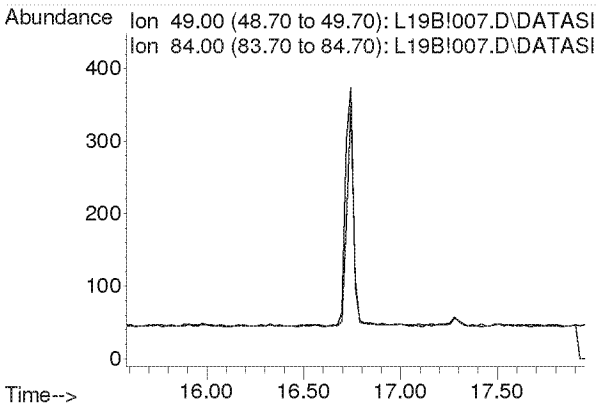


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

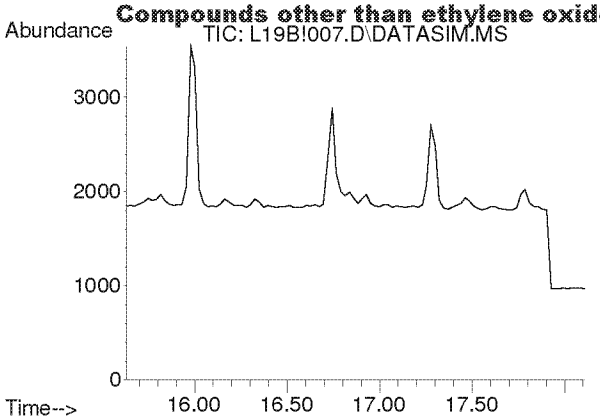
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

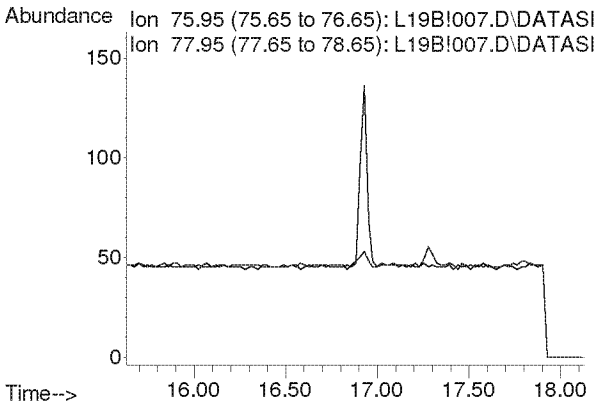


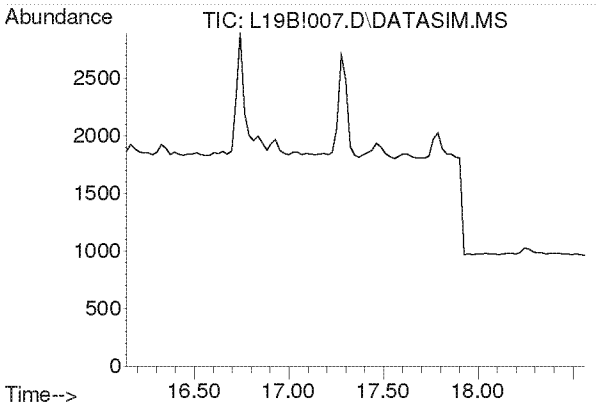
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



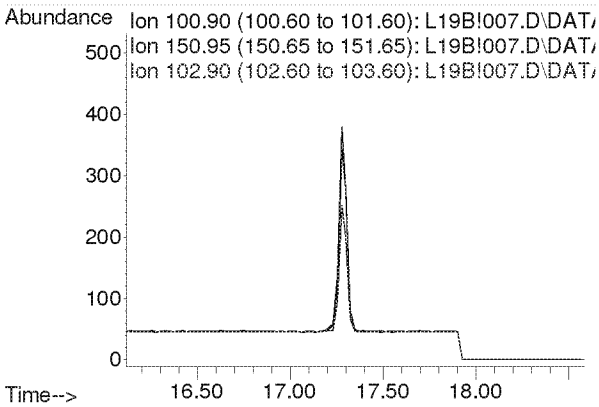


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

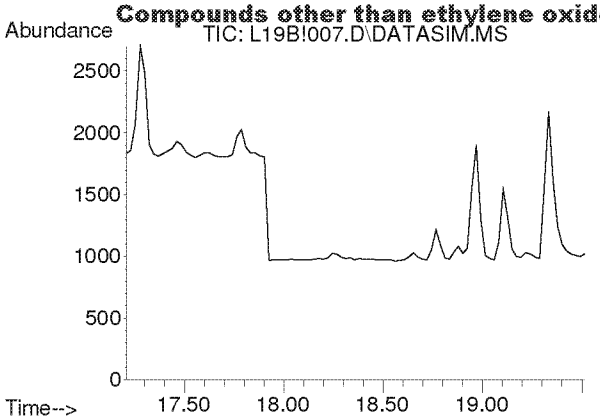
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

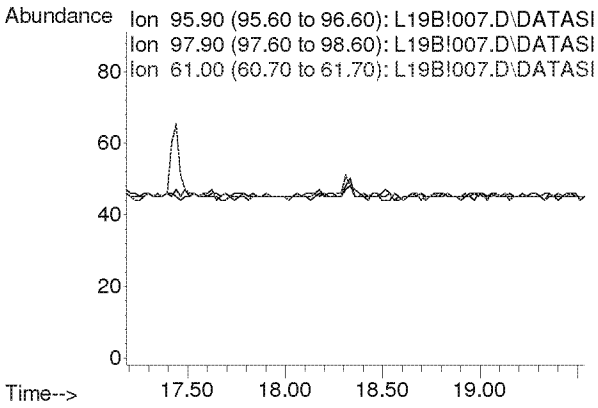


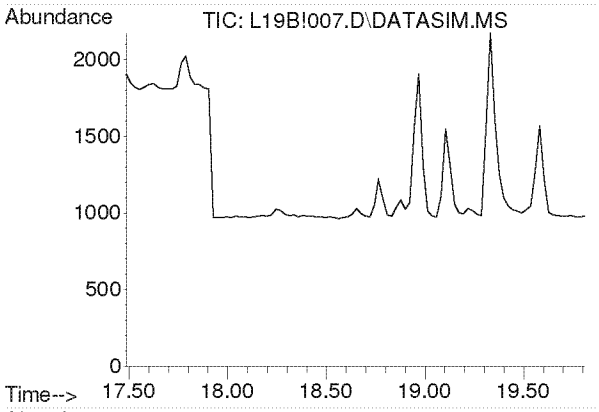
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



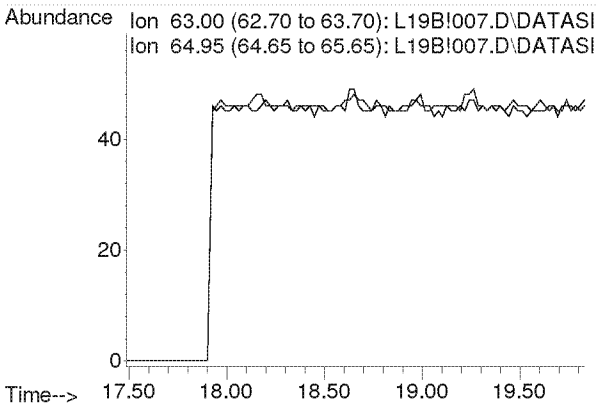


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

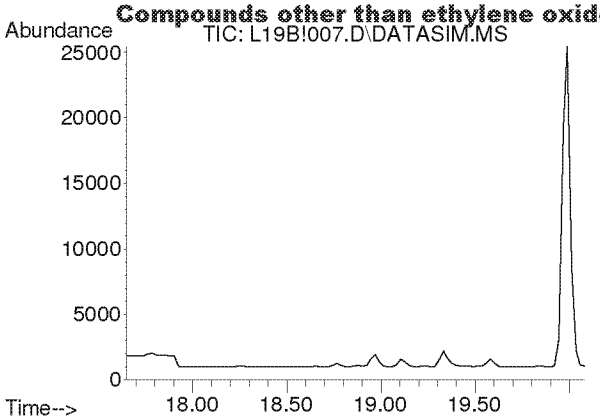
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

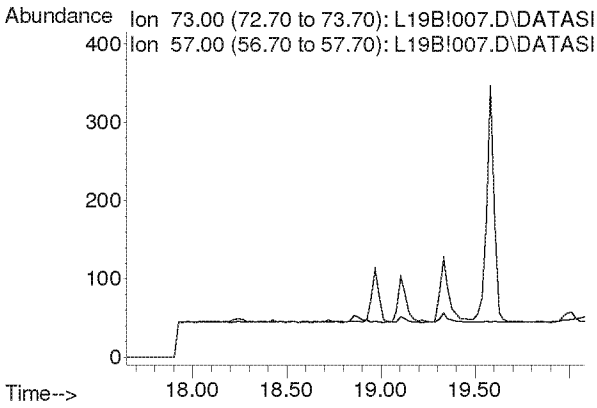


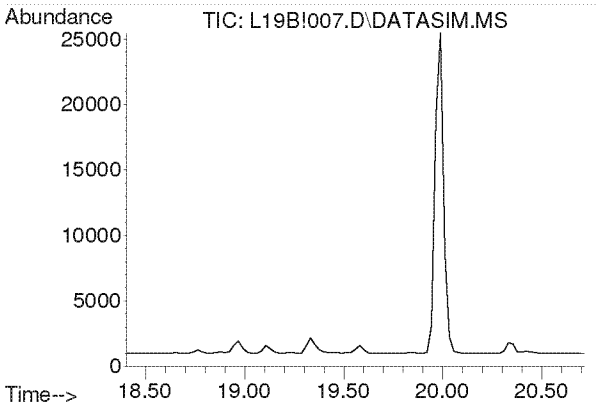
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



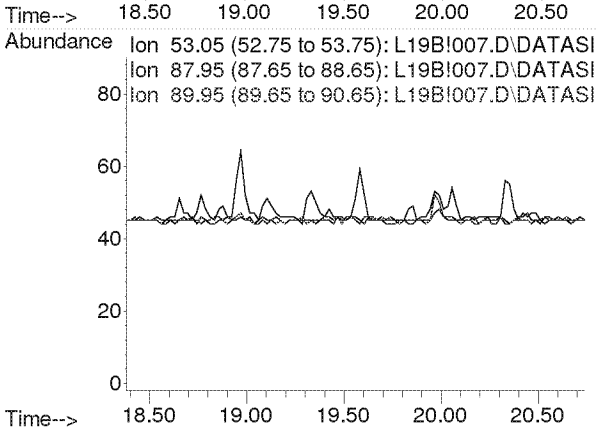


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

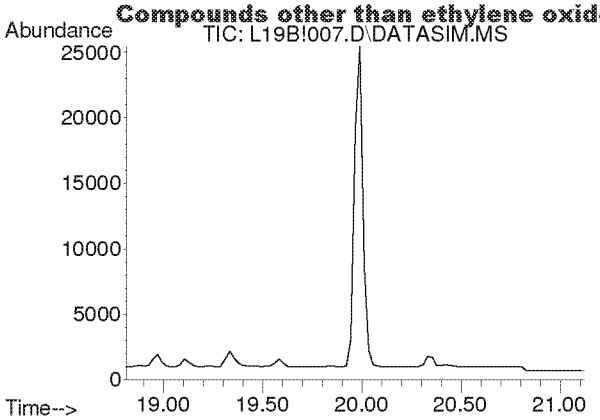
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

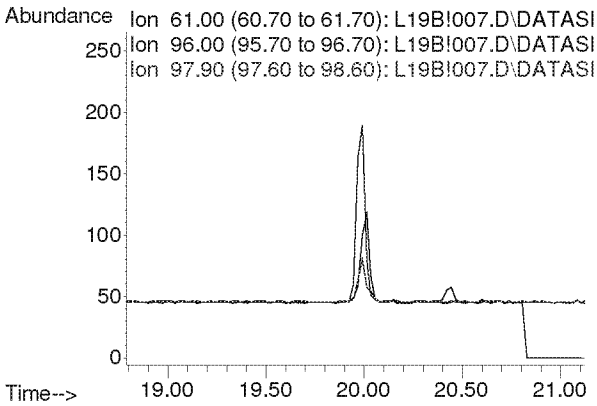


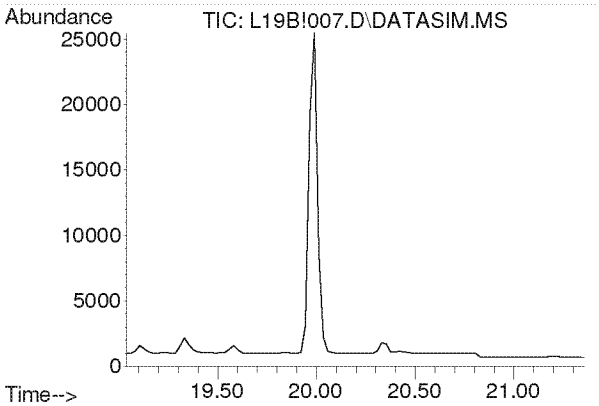
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



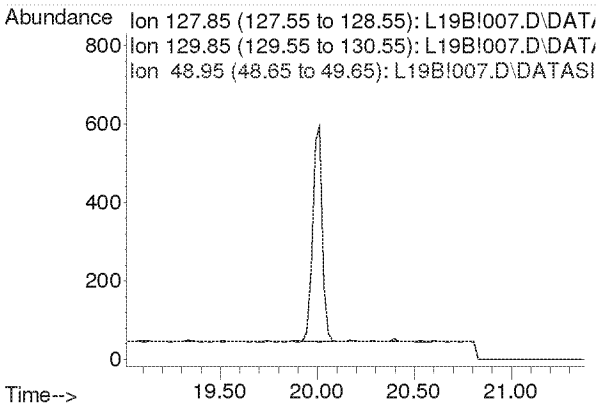


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

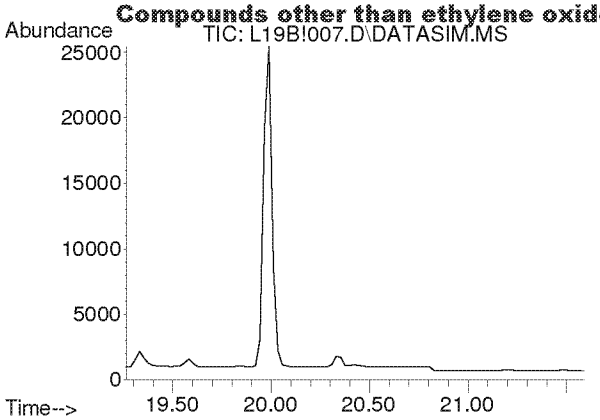
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

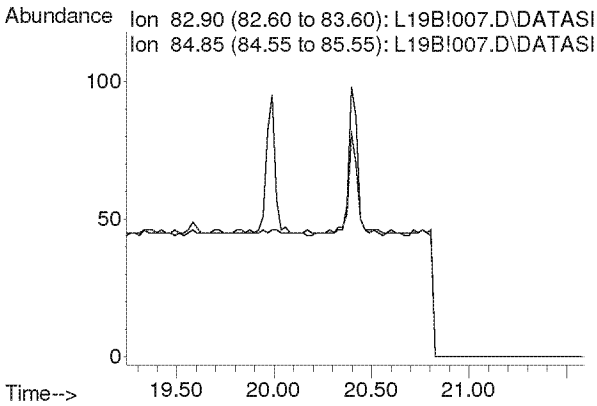


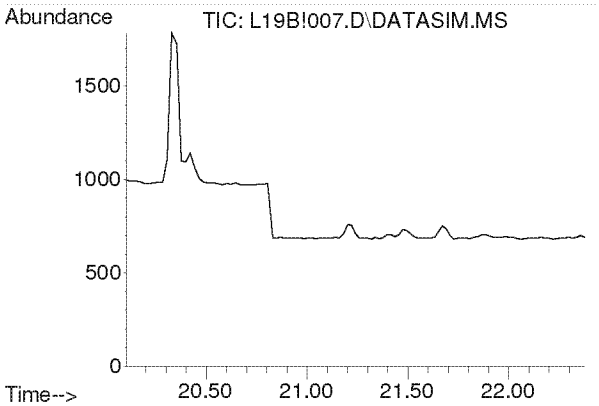
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



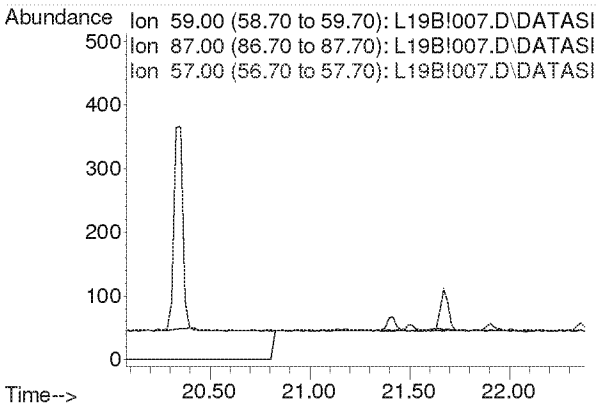


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

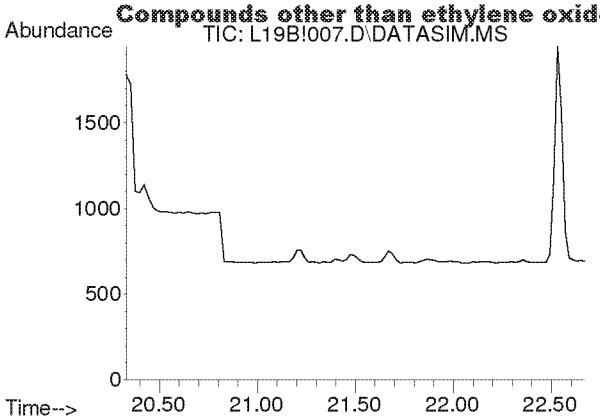
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

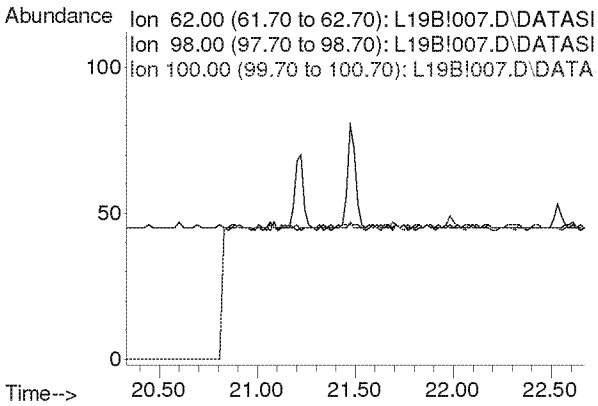


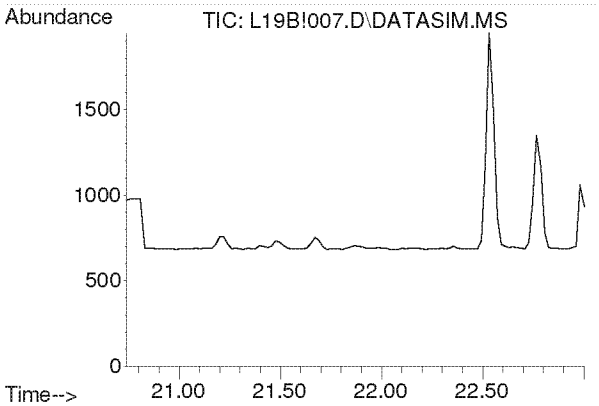
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



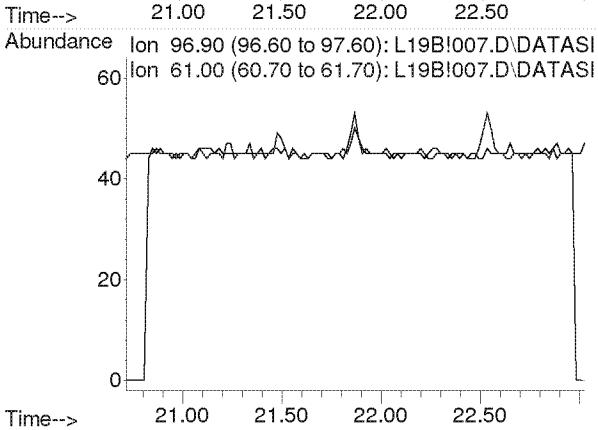


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

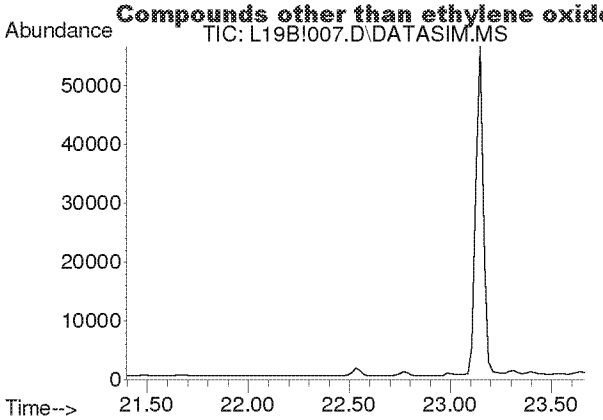
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

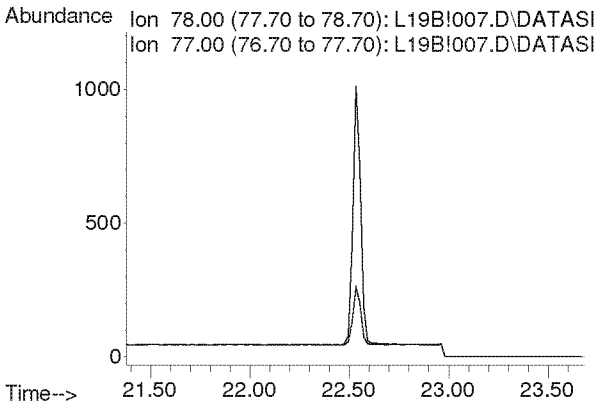


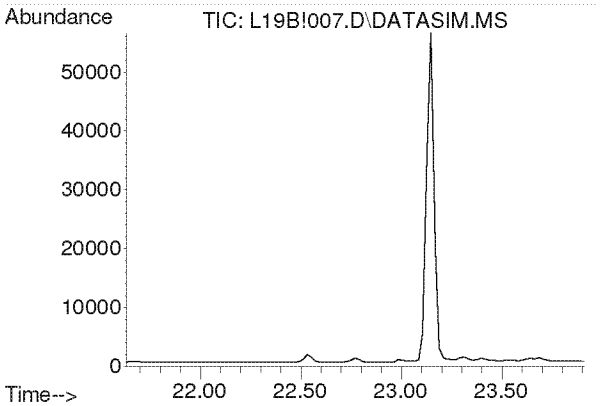
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



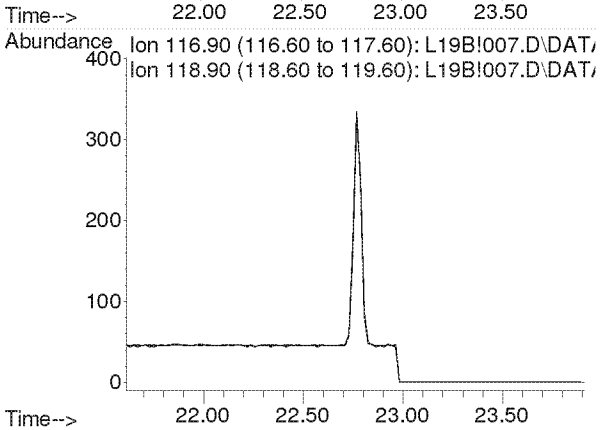


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

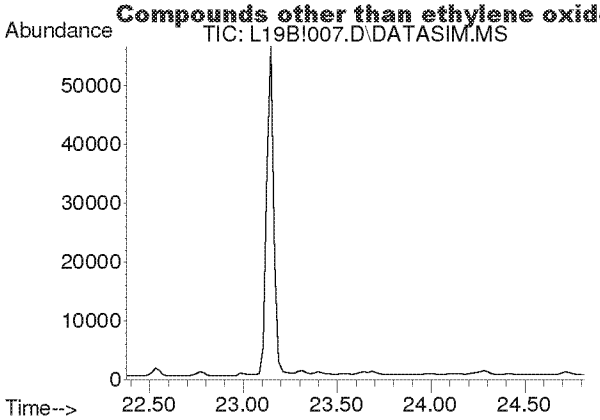
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

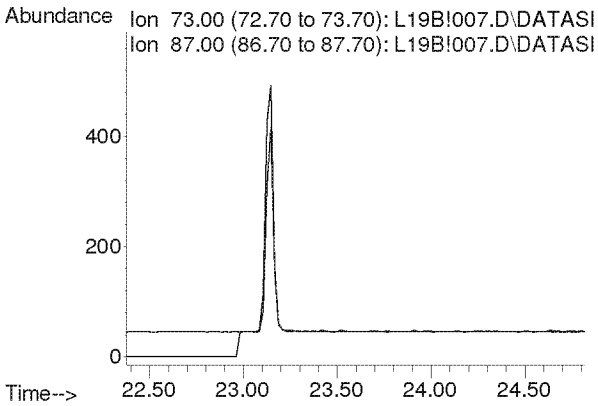


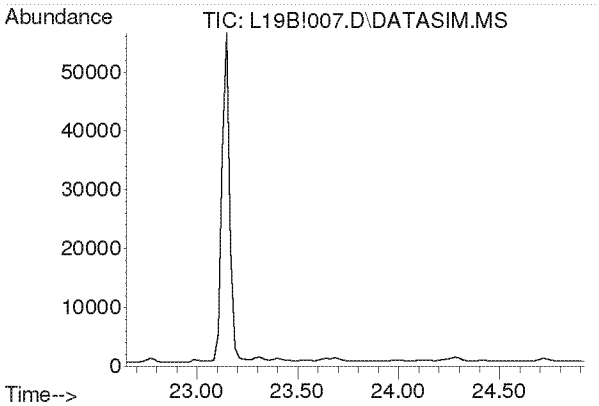
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



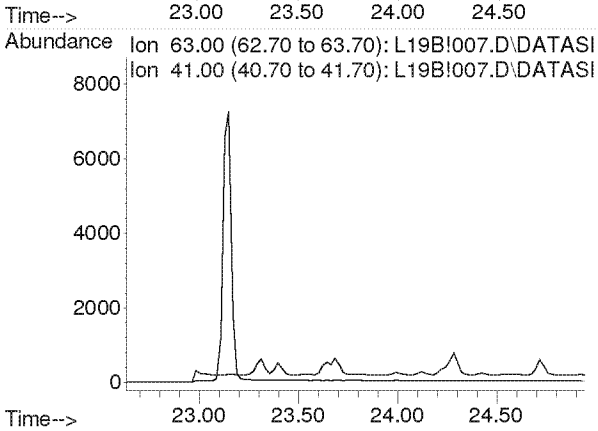


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

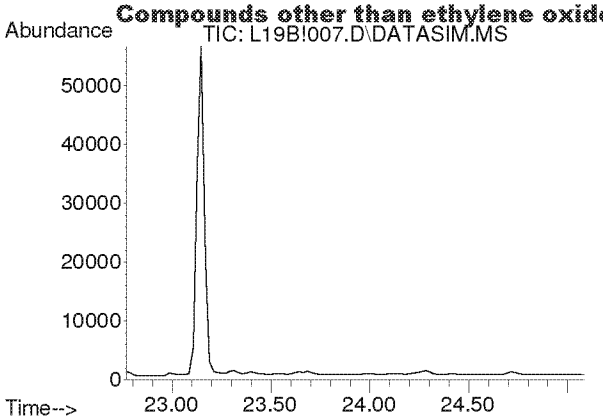
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

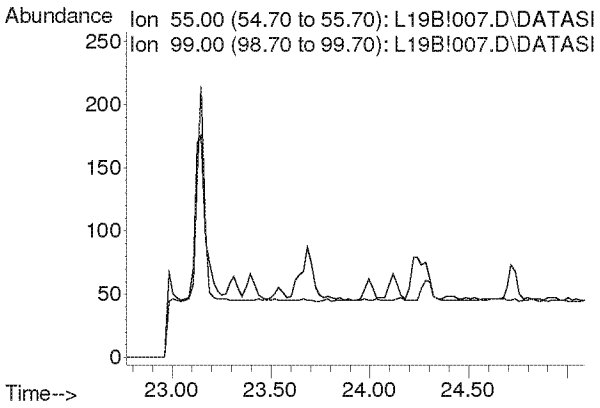


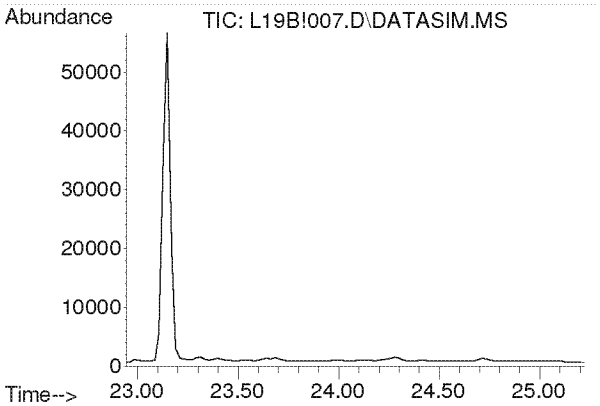
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



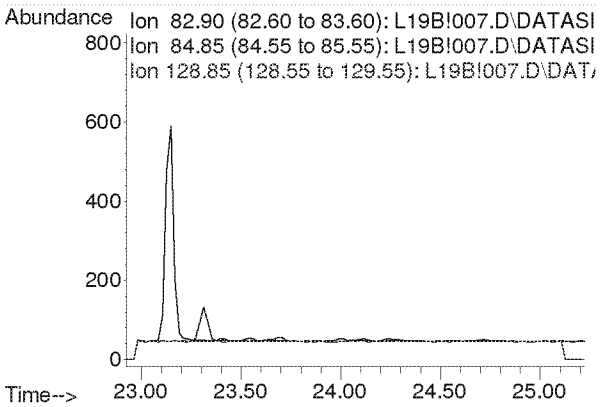


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

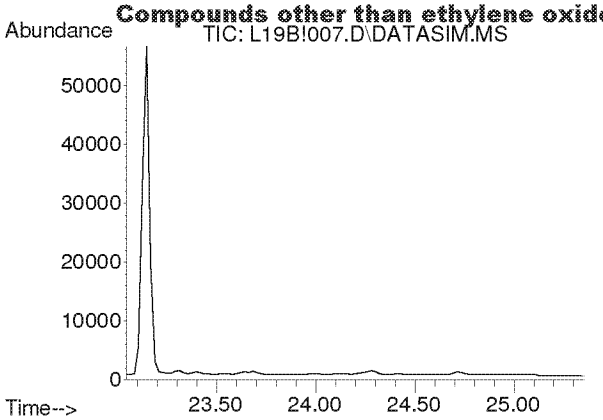
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

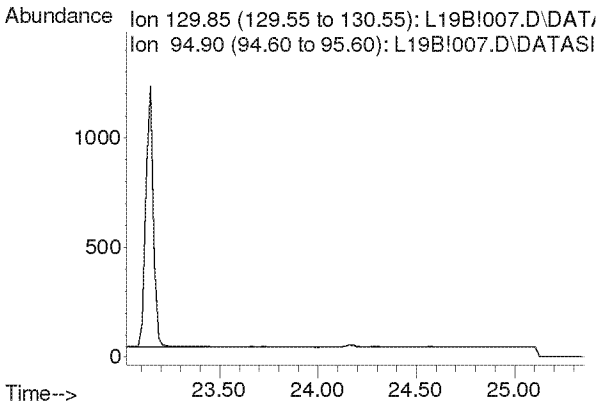


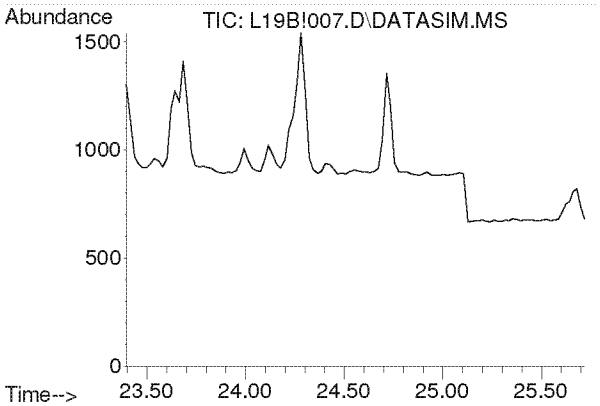
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



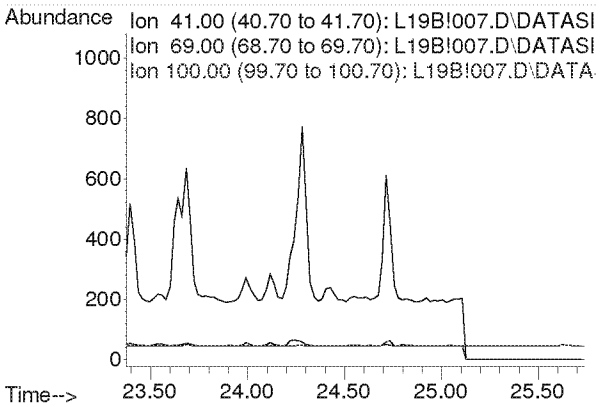


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

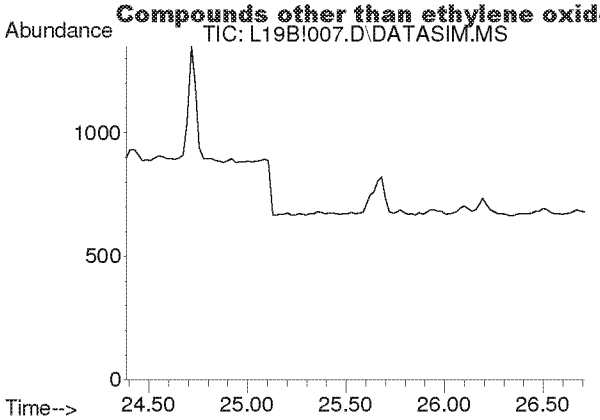
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

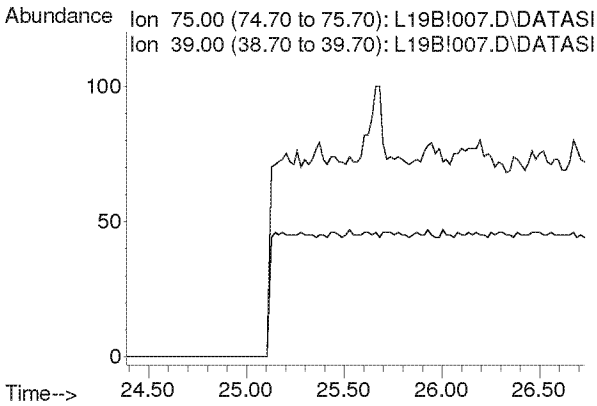


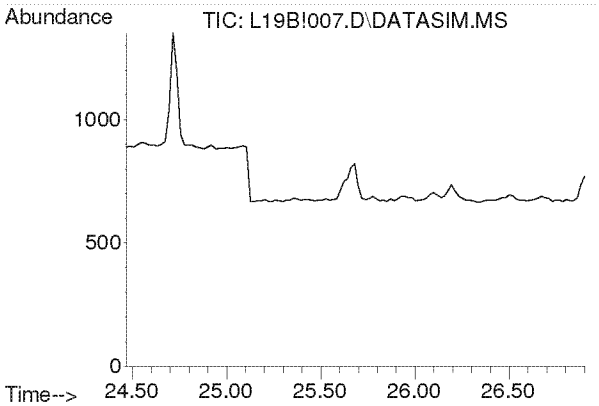
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



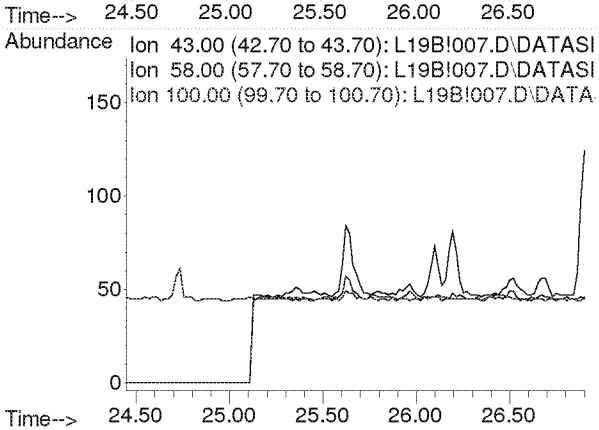


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

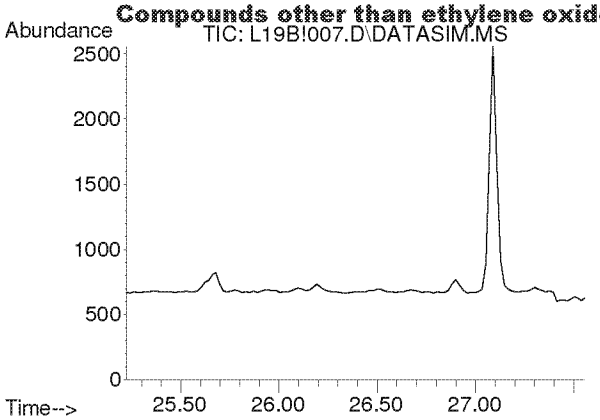
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

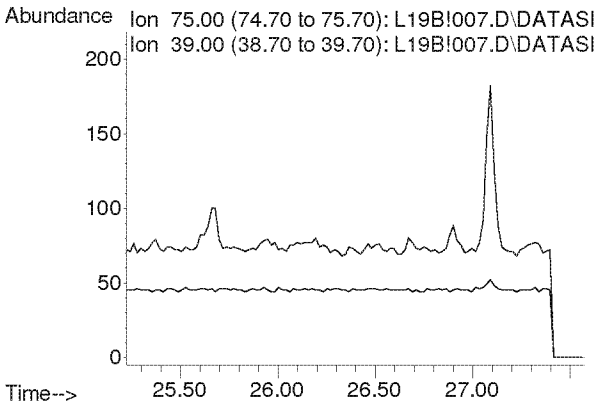


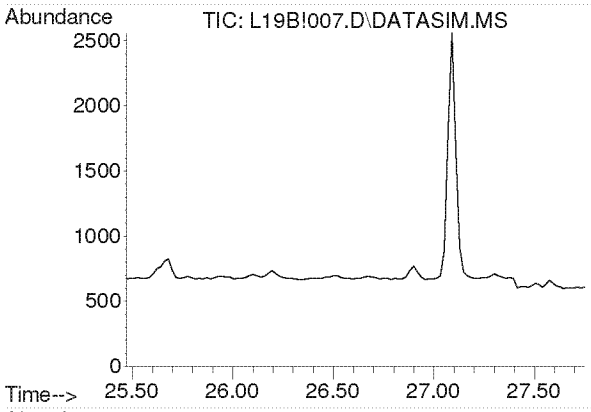
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



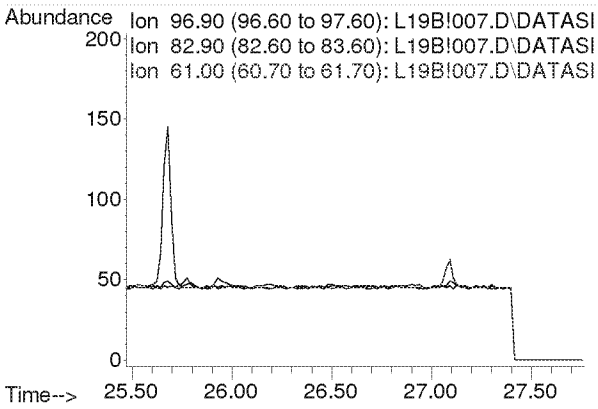


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

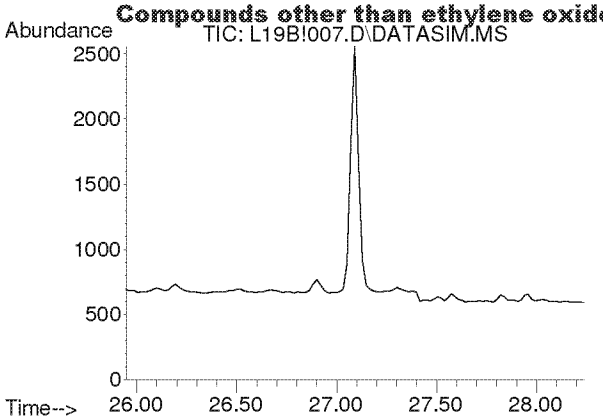
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

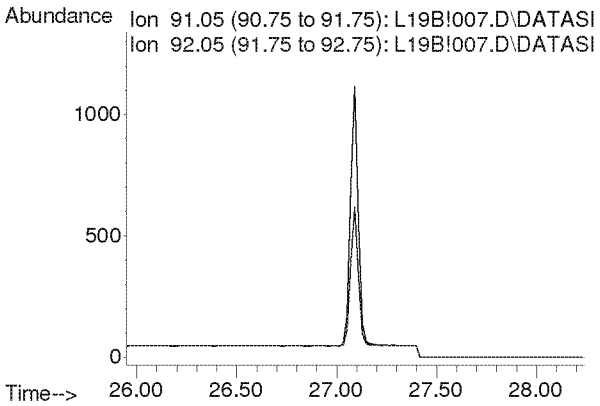


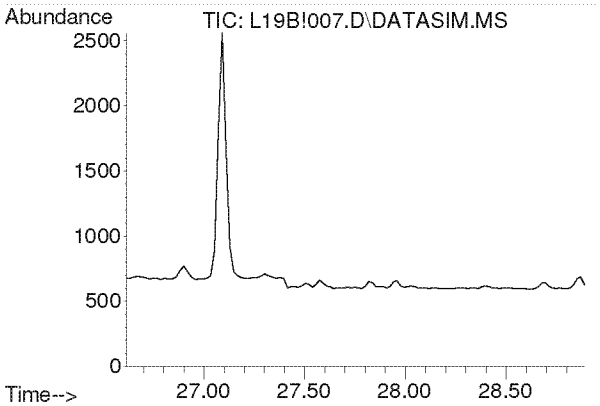
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



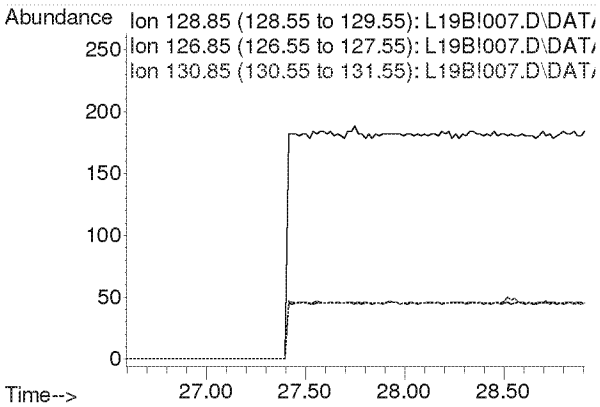


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

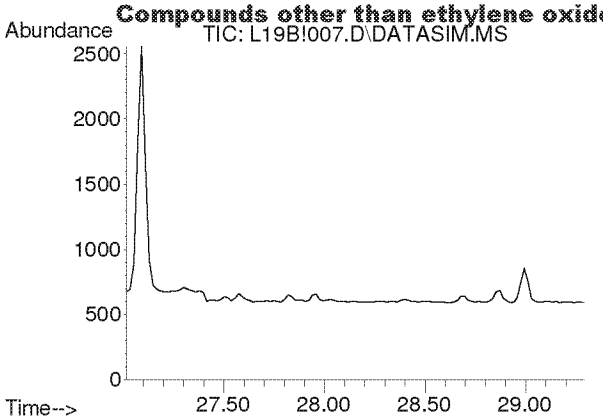
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

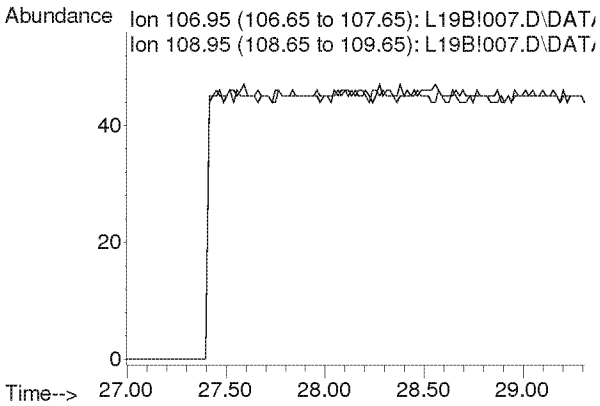


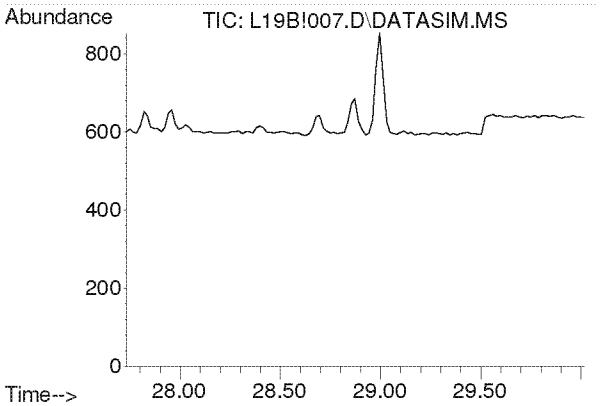
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



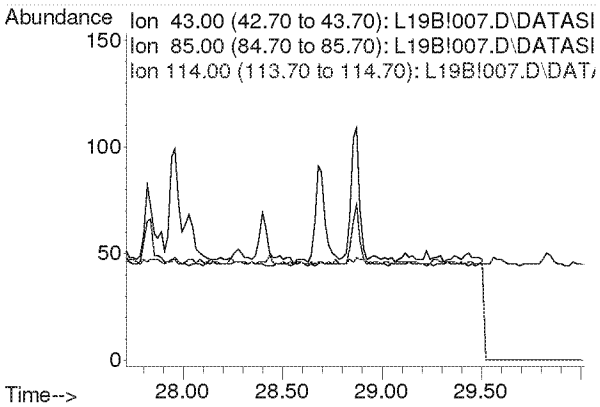


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

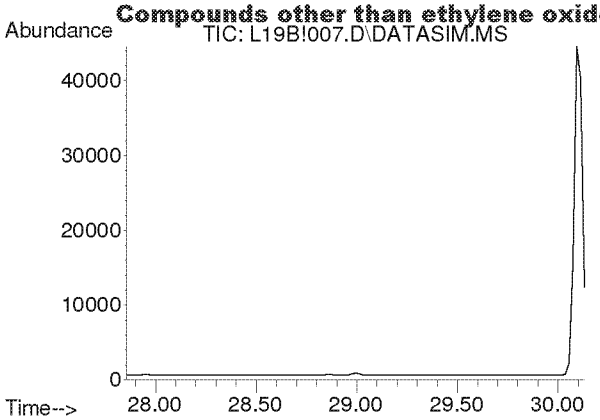
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

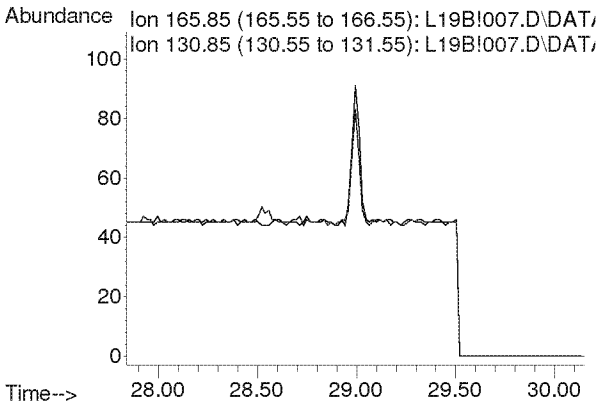


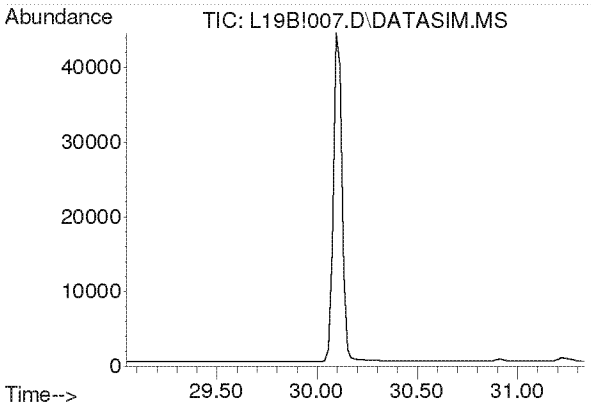
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



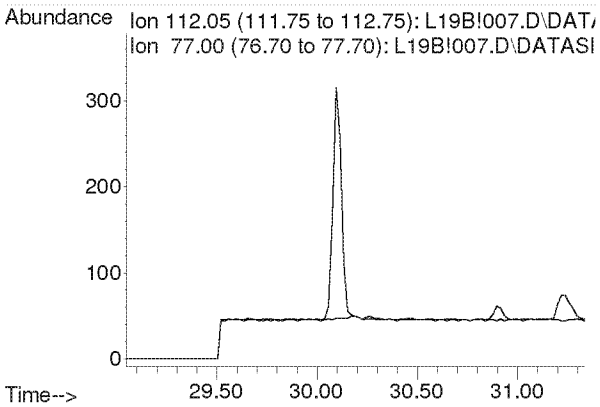


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

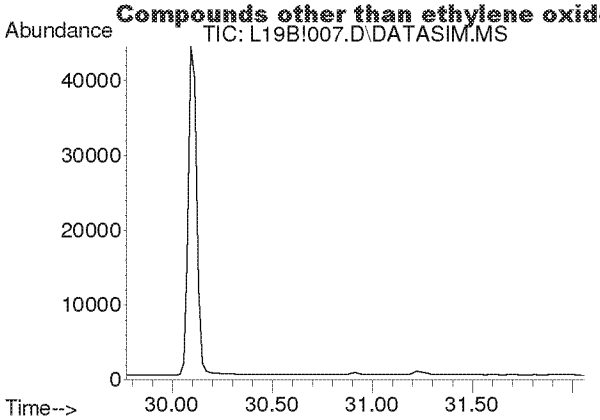
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

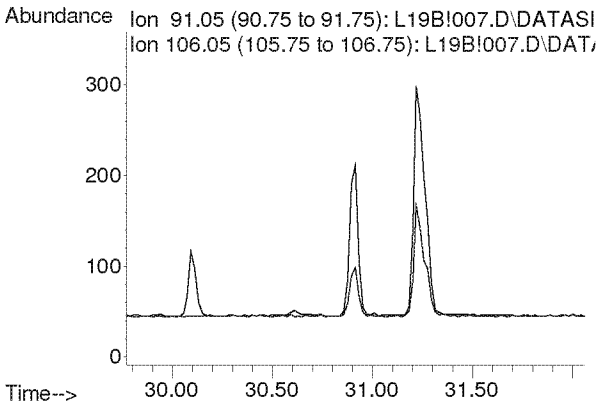


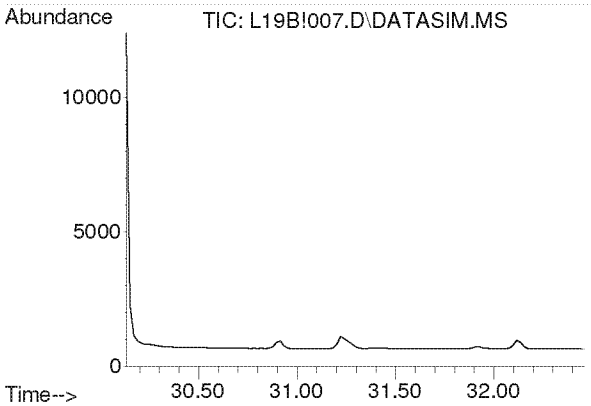
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



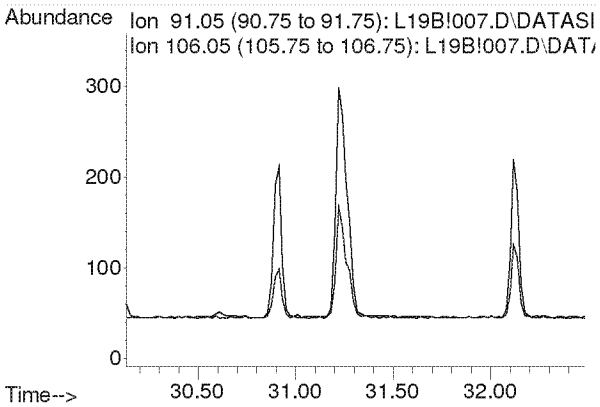


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

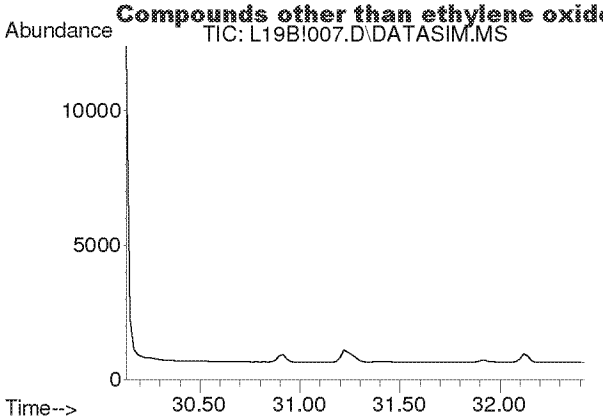
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

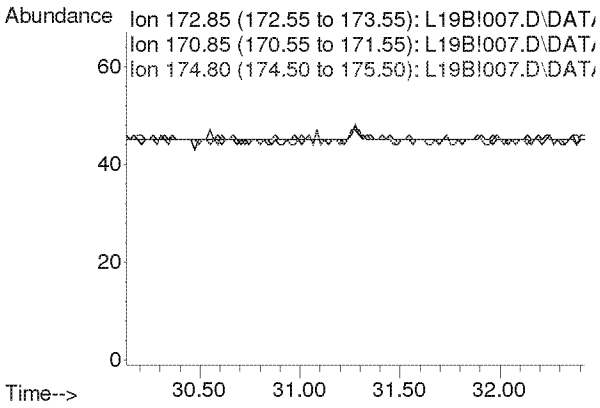


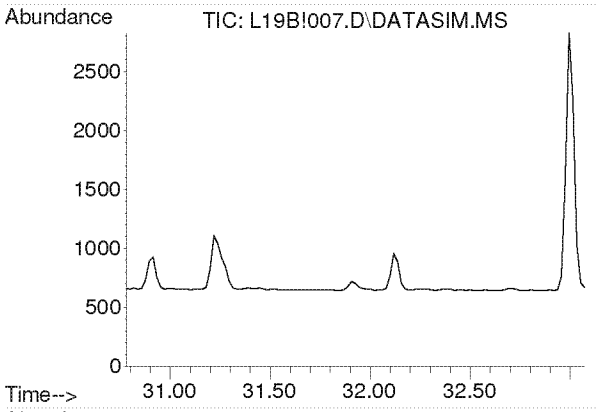
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



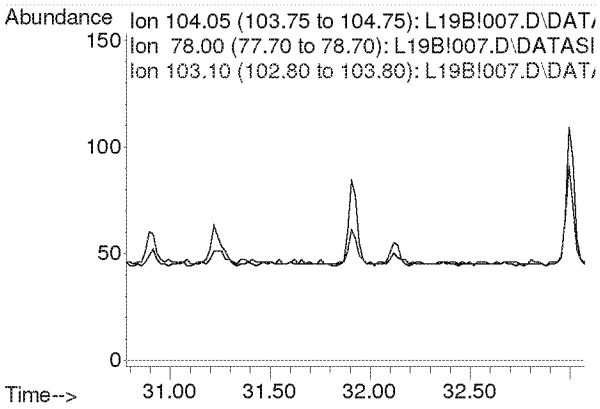


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

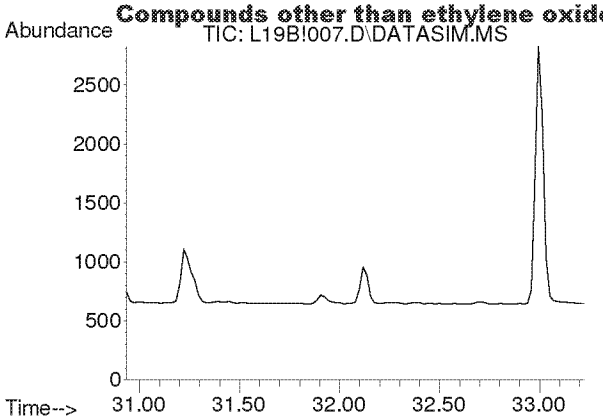
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

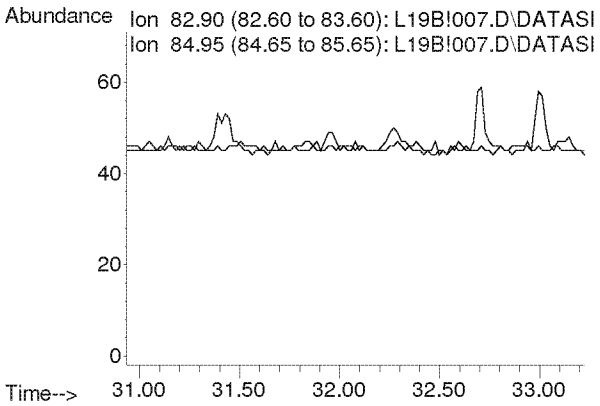


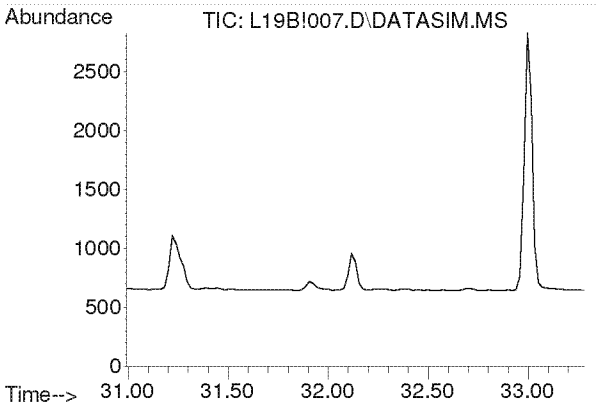
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



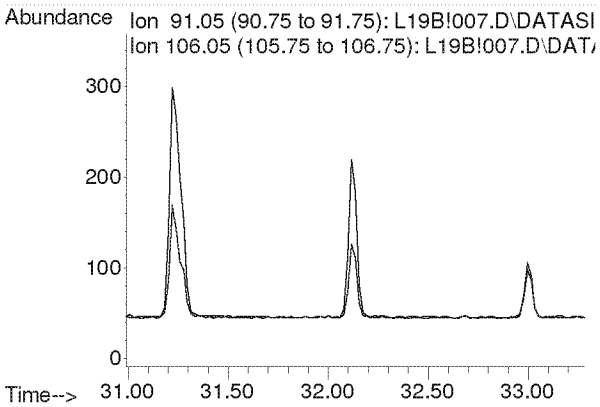


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

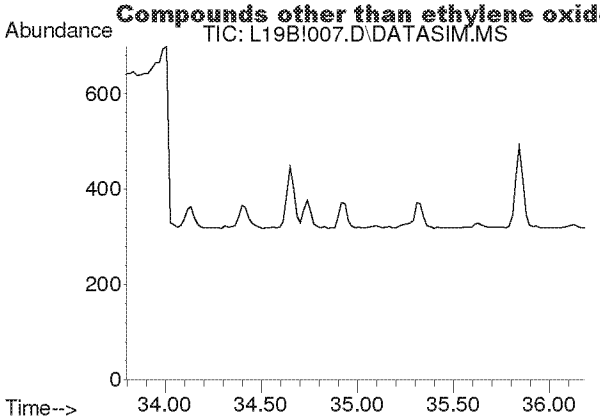
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

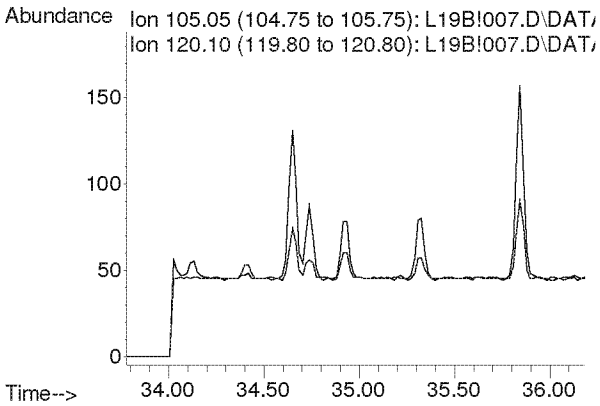


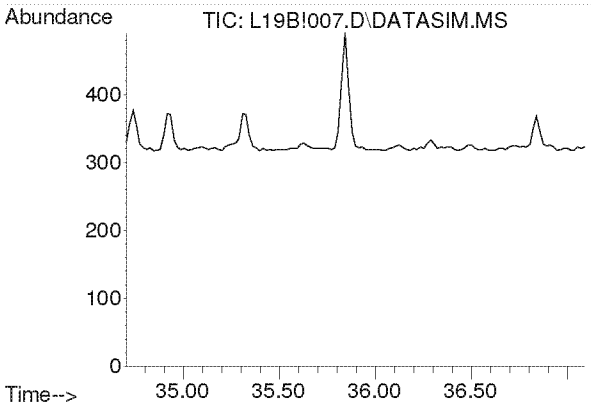
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



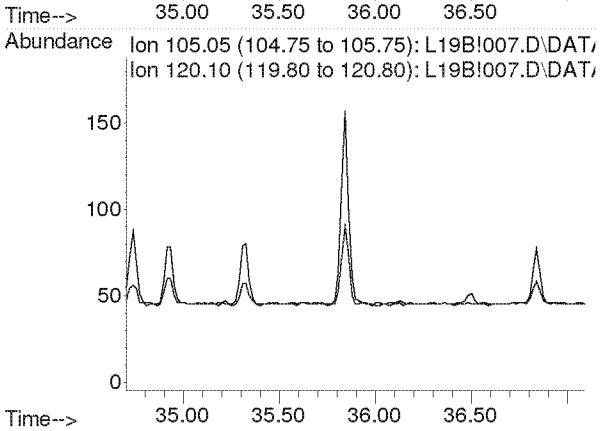


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

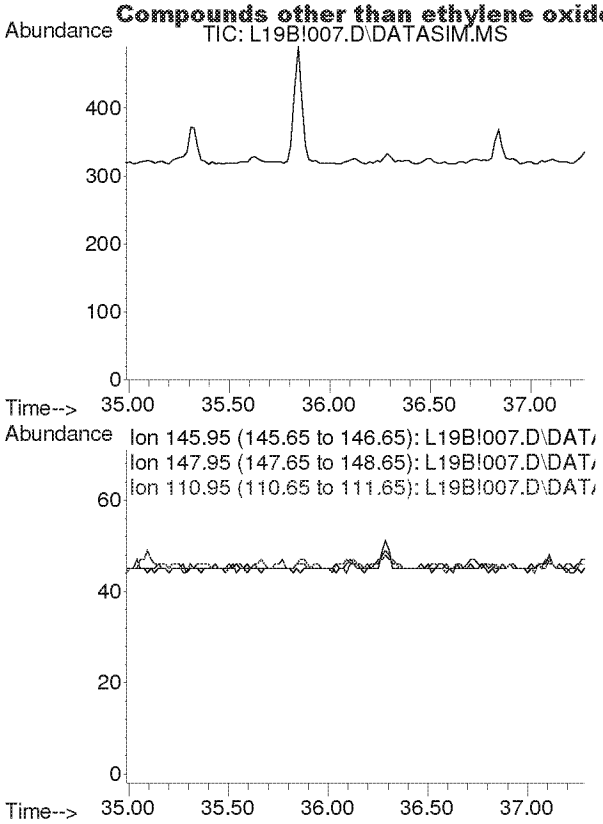
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

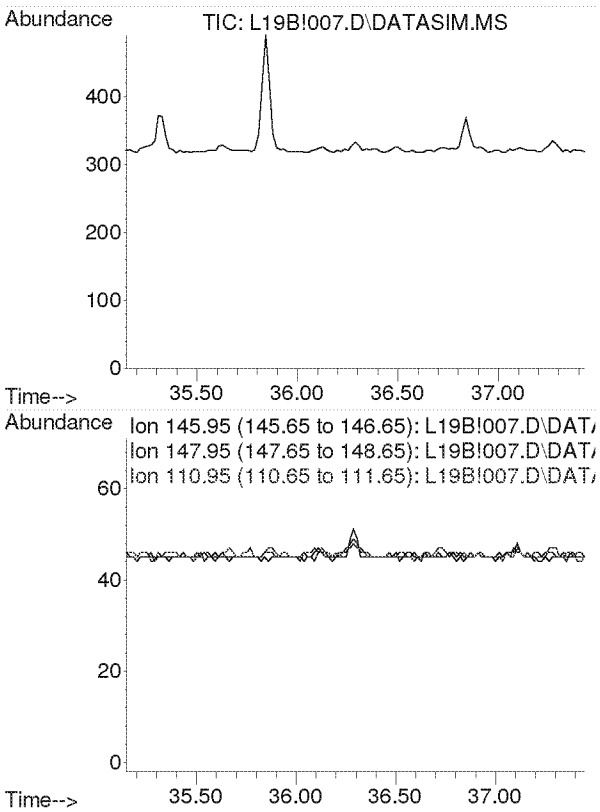


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



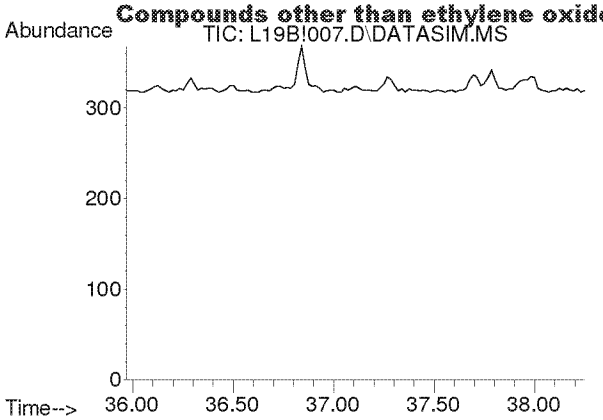
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7

Compounds other than ethylene oxide were not quantitated.

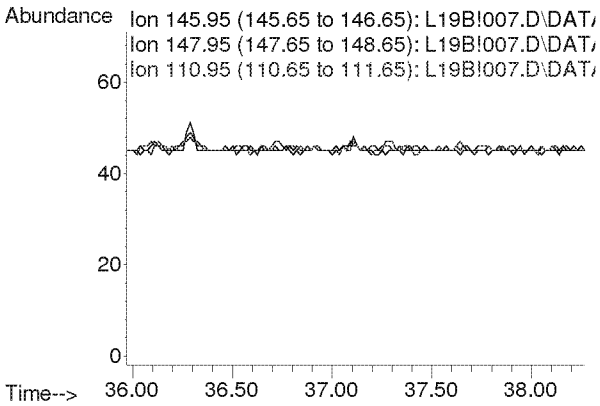


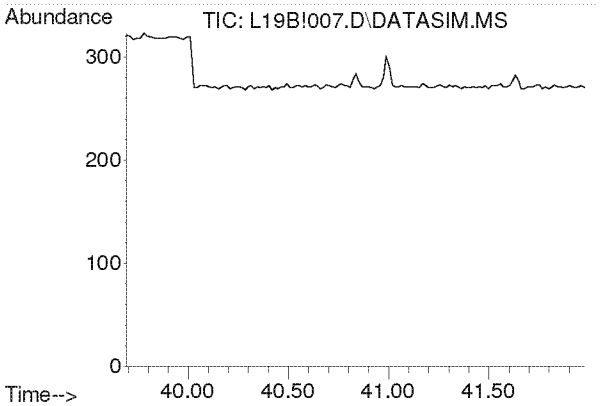
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



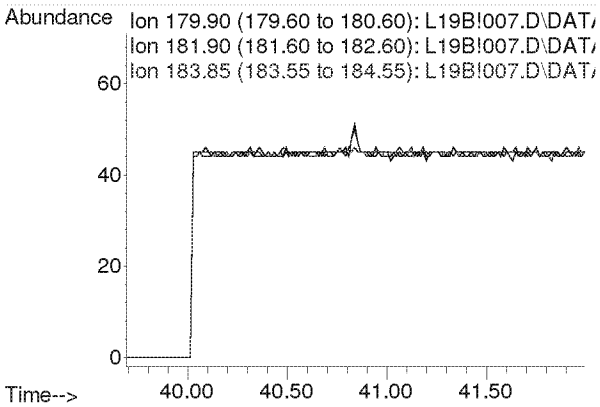


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

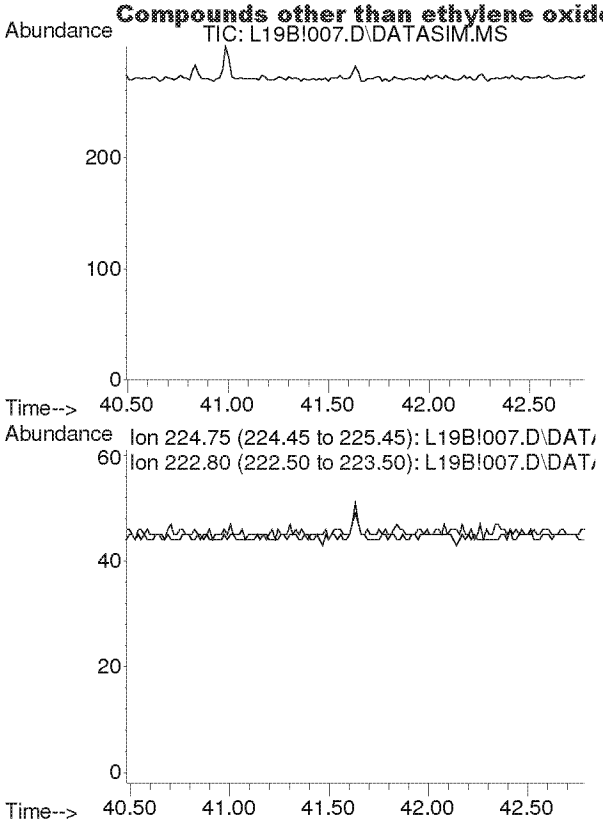
Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!007.D
Acq: 28 Feb 2019 6:36 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\L19B!\
Data File : L19B!008.D
Acq On : 28 Feb 2019 7:36 pm
Operator : MAH
Sample : 9022616-11
Misc : WILLOW POND PARK 2/24/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 05 07:37:44 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

JEMK

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.991	66	44148	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.149	114	110599	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.095	117	75292	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	12.453	29	239m 3.5-A	0.0947 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.	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\L19B!\
Data File : L19B!008.D
Acq On : 28 Feb 2019 7:36 pm
Operator : MAH
Sample : 9022616-11
Misc : WILLOW POND PARK 2/24/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 05 07:37:44 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

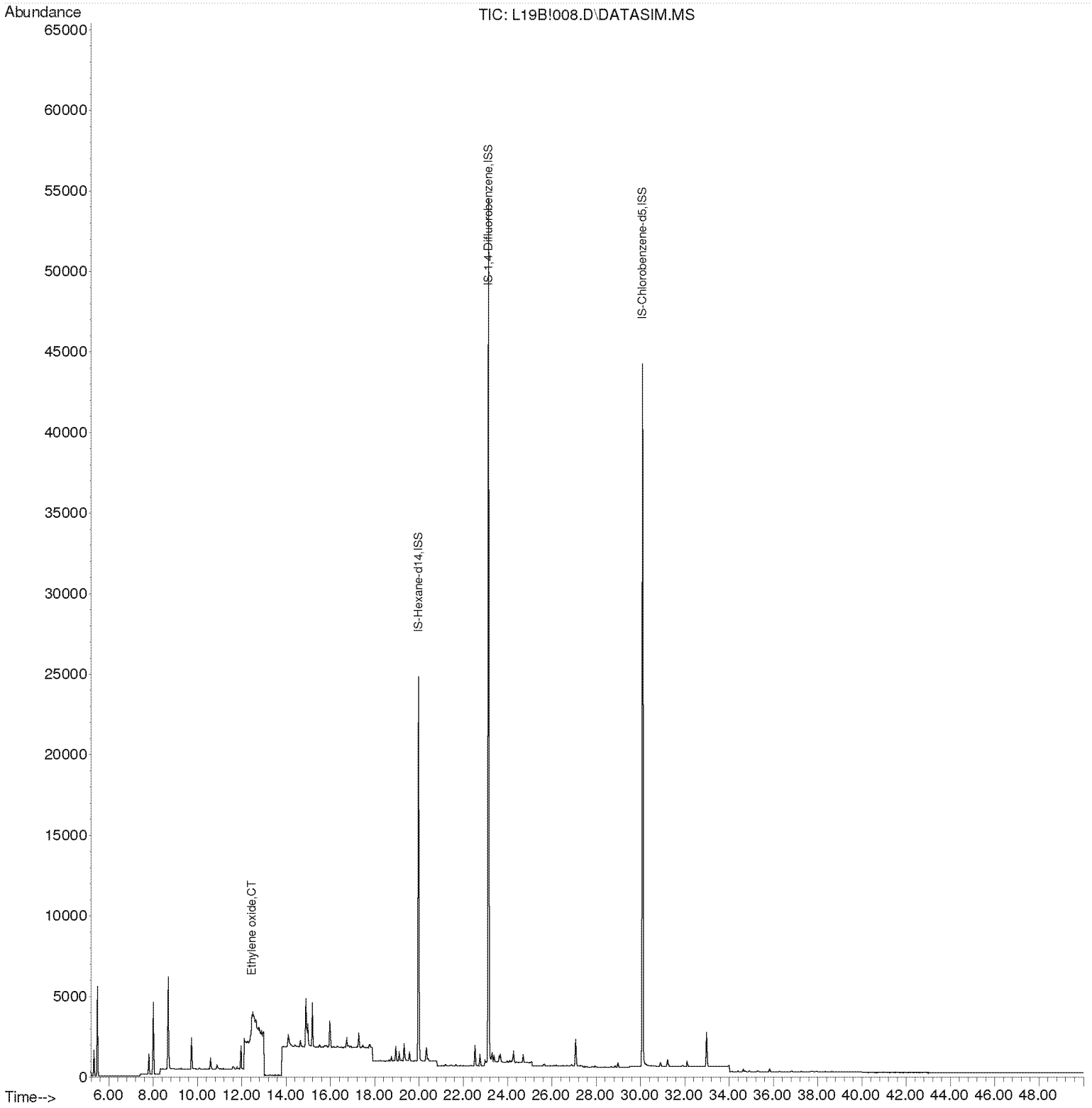
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene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

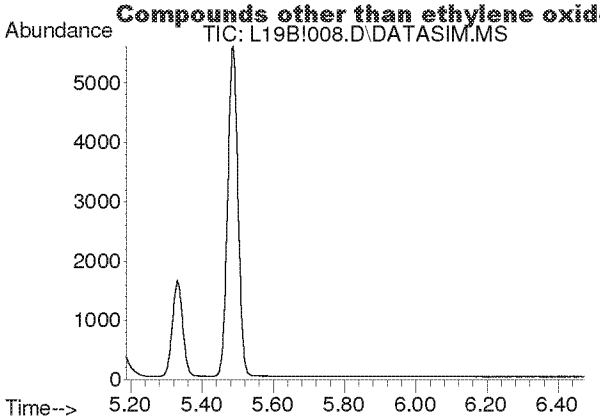
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!008.D
Acq On : 28 Feb 2019 7:36 pm
Operator : MAH
Sample : 9022616-11
Misc : WILLOW POND PARK 2/24/19
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 05 07:37:09 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



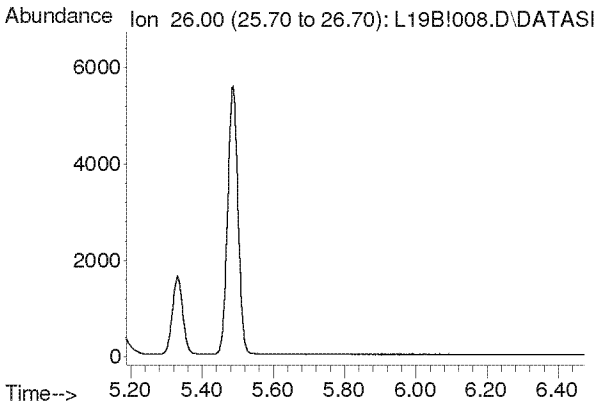
Compounds other than ethylene oxide were not quantitated.

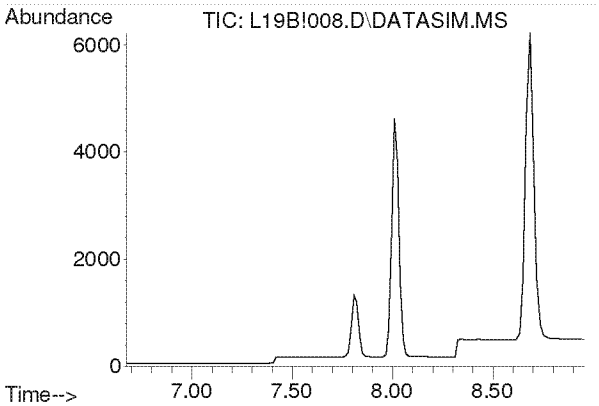


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 26



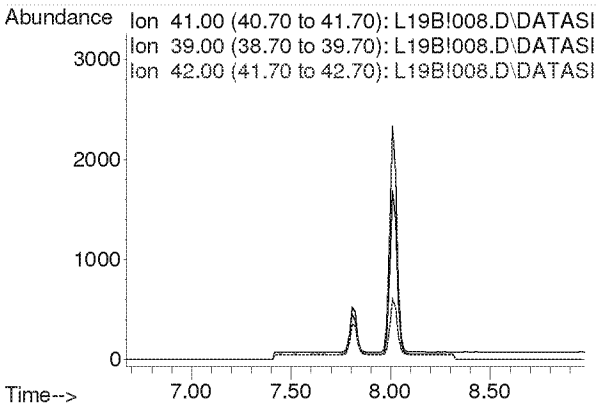


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

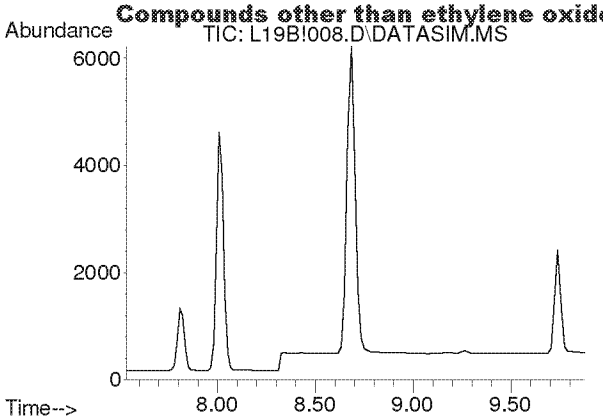
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

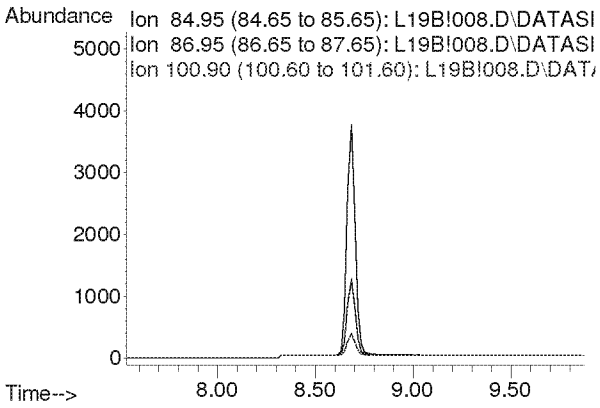


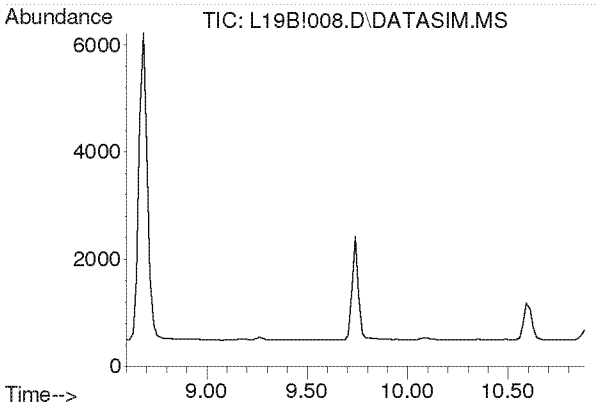
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



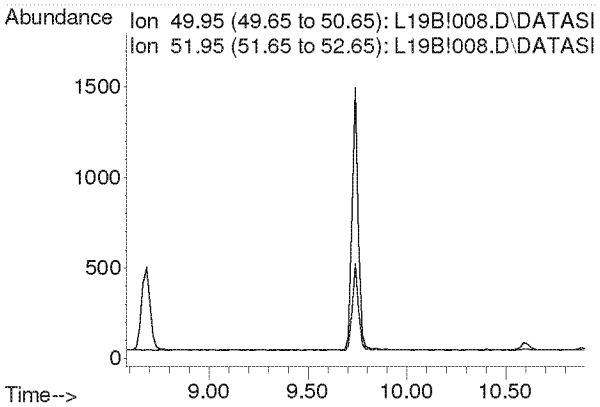


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

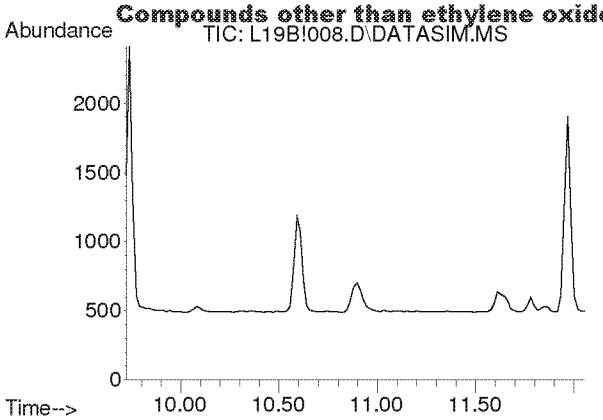
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

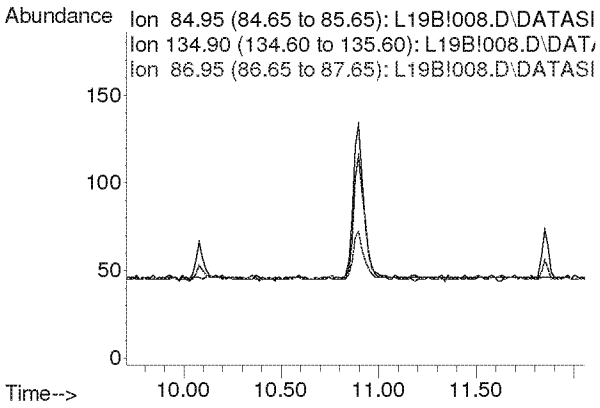


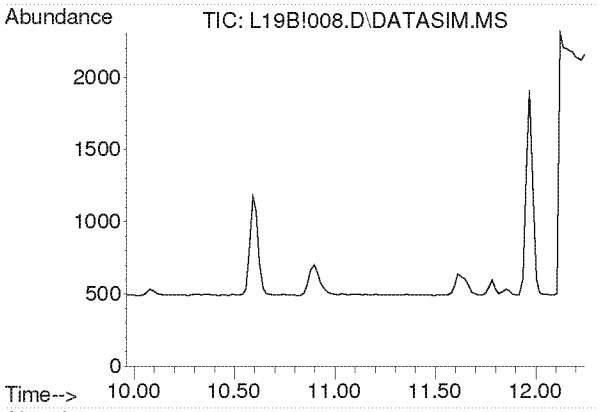
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



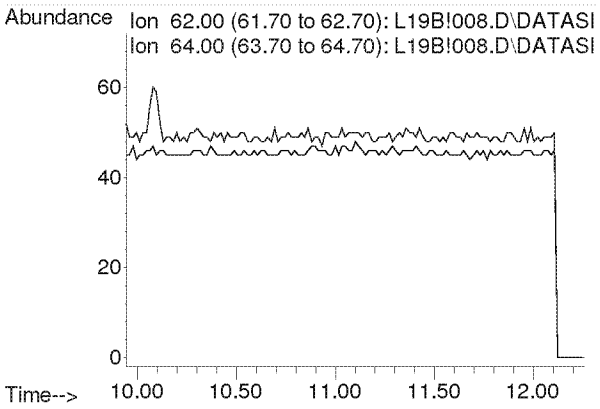


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

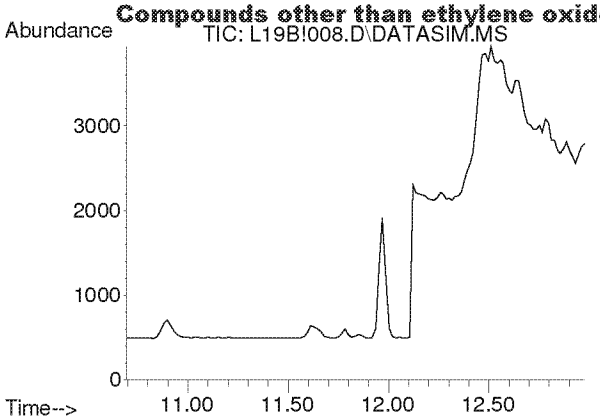
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

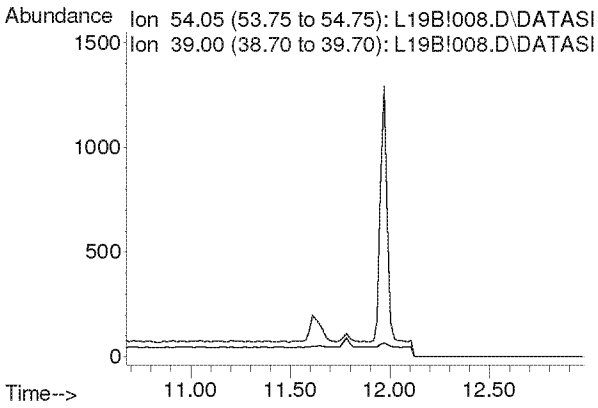


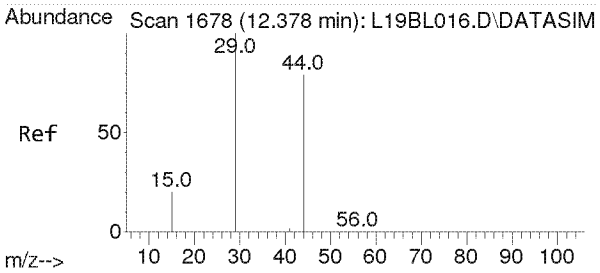
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

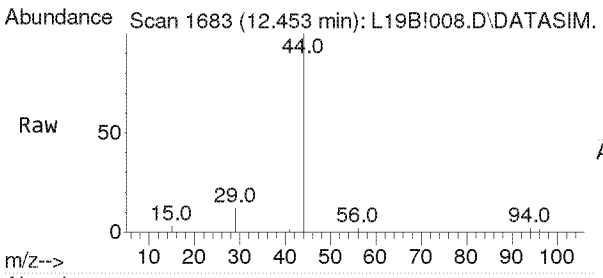


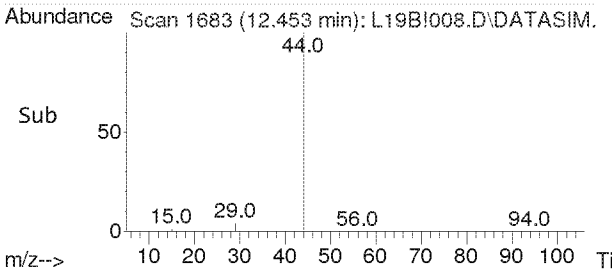


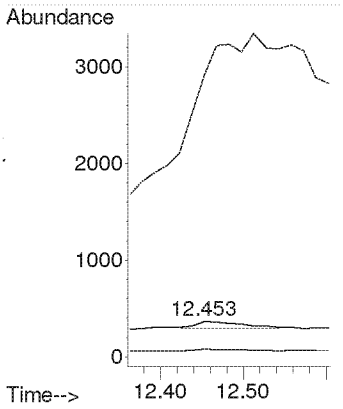
#9
Ethylene oxide
Concen: 0.095 ppbv m
RT: 12.453 min Scan# 1683
Delta R.T. 0.003 min
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 29 Resp: 239

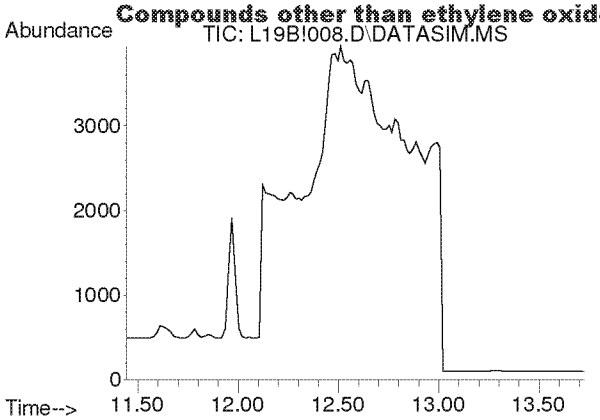
Ion	Ratio	Lower	Upper
29	100		
15	33.9	16.0	24.0#
44	7102.1	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

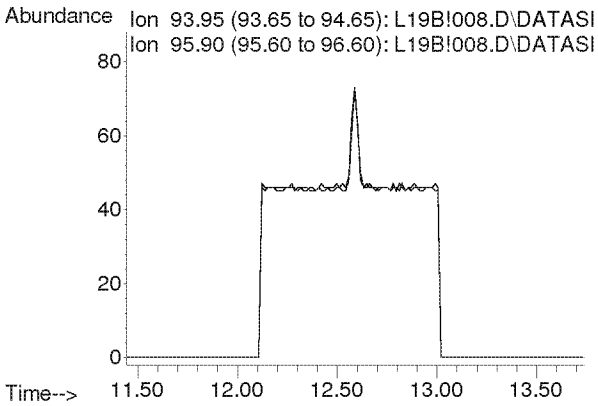


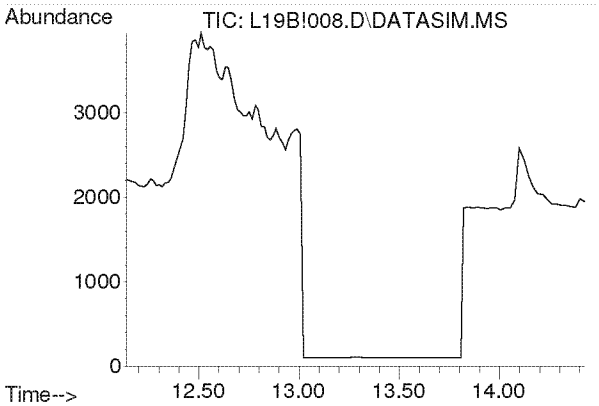
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



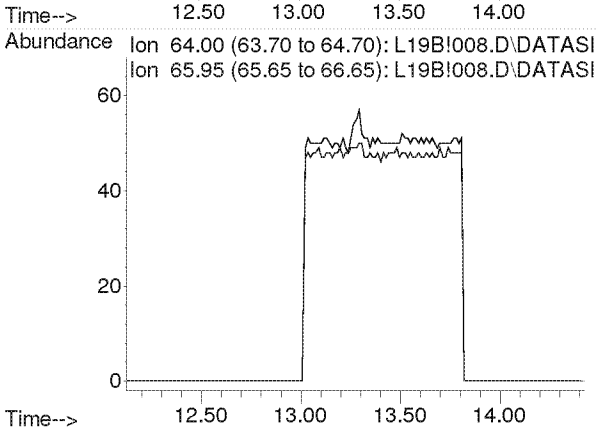


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

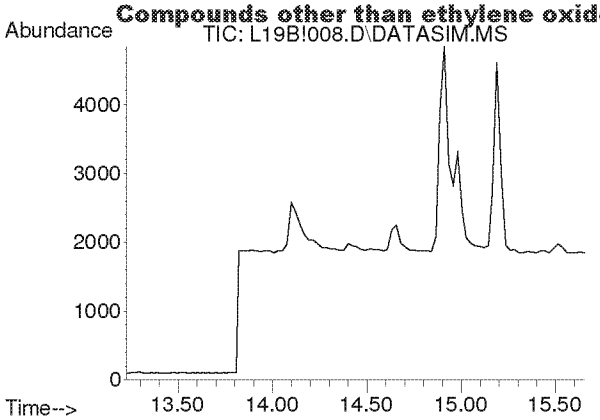
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

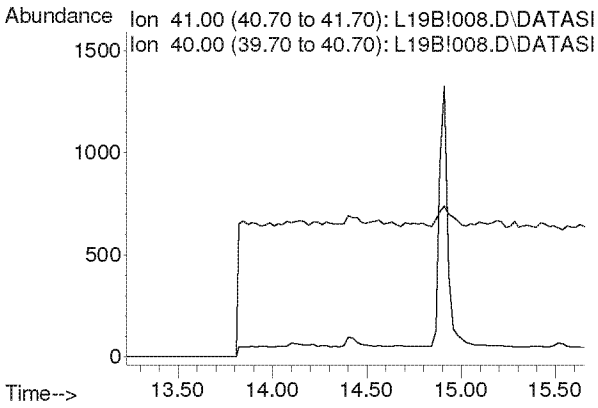


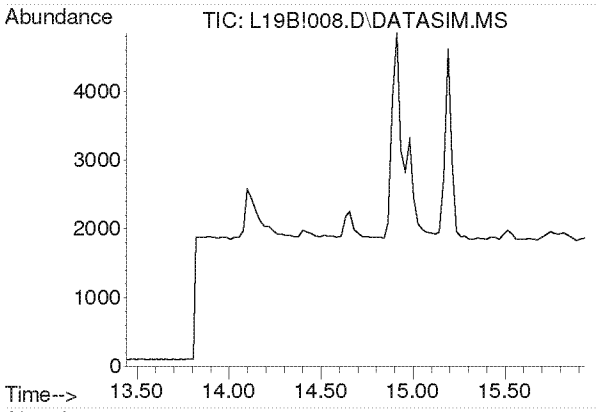
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



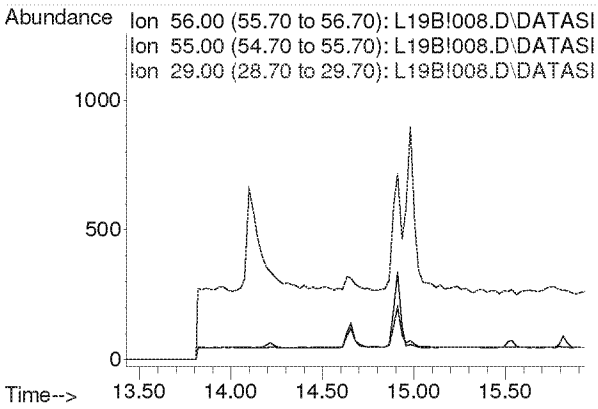


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

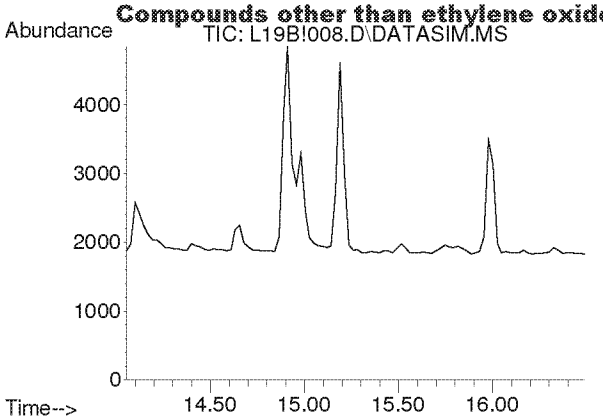
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

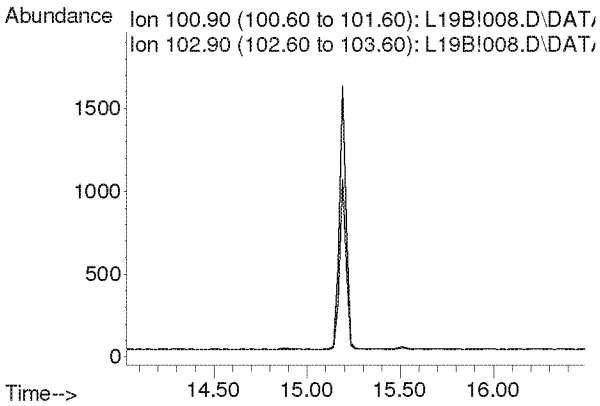


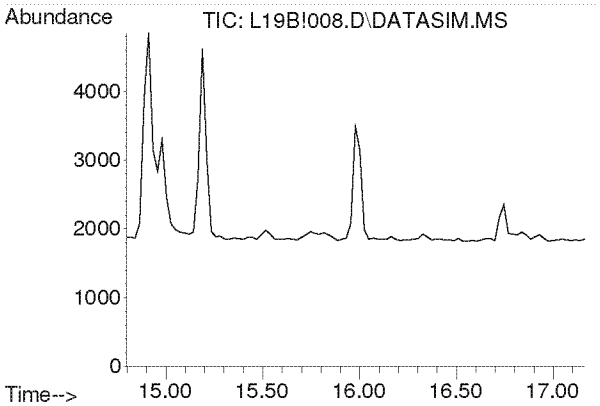
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



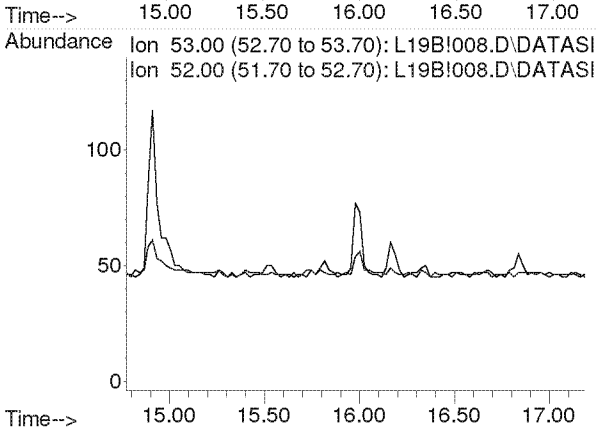


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

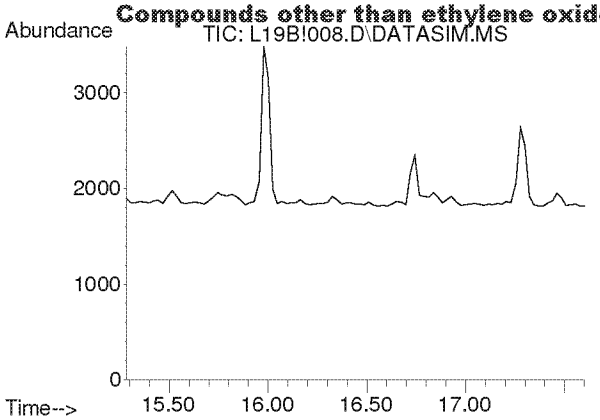
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

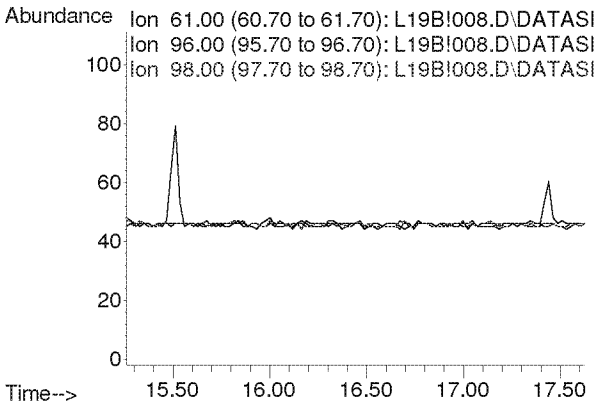


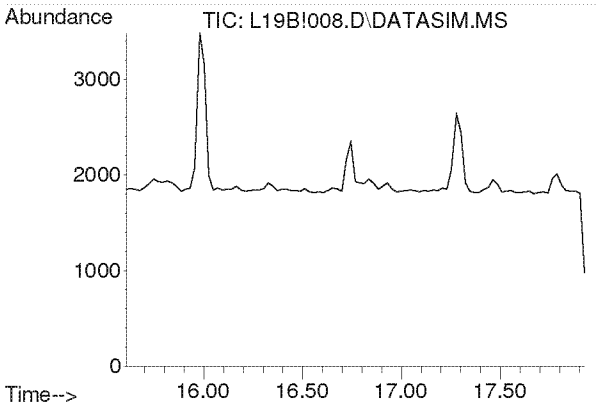
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



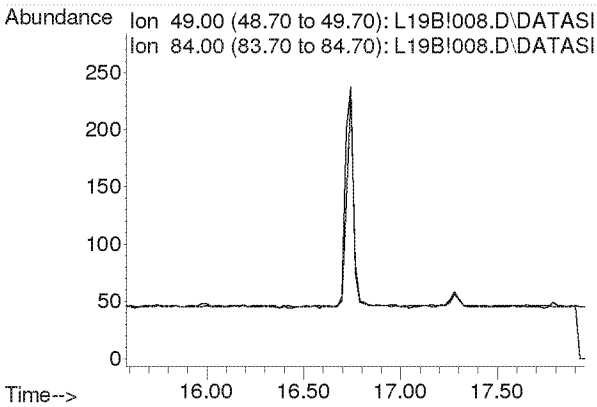


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

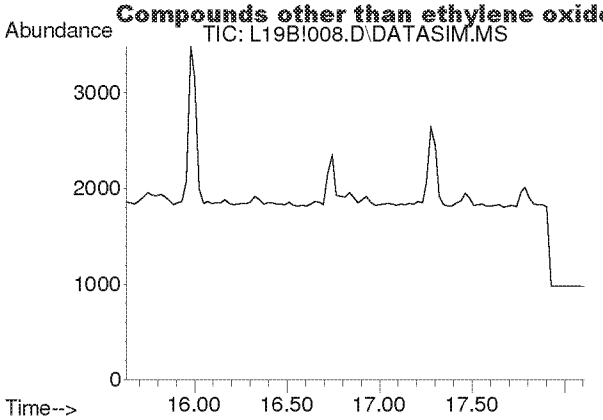
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

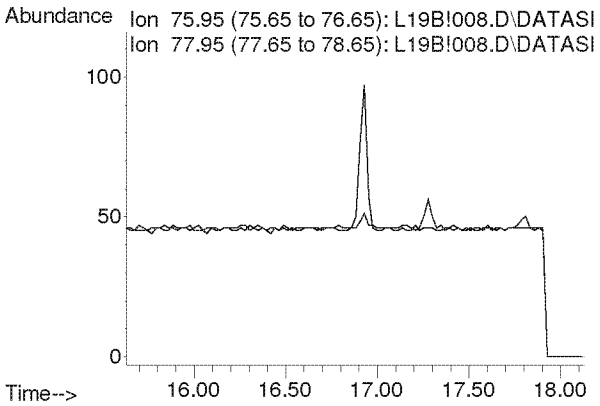


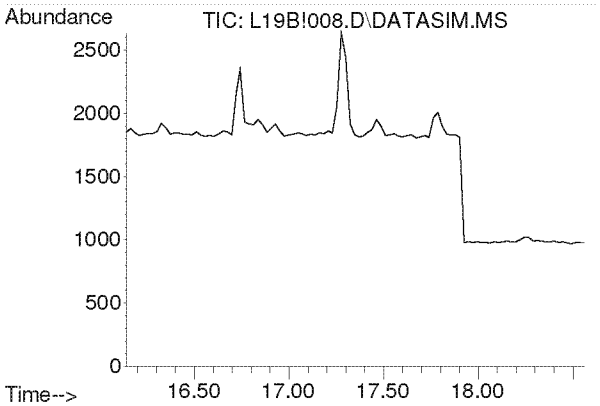
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



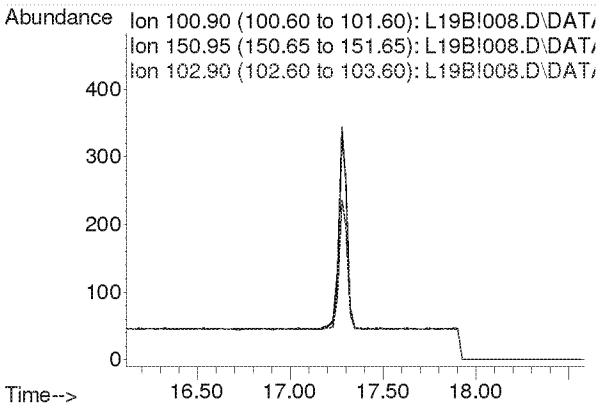


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

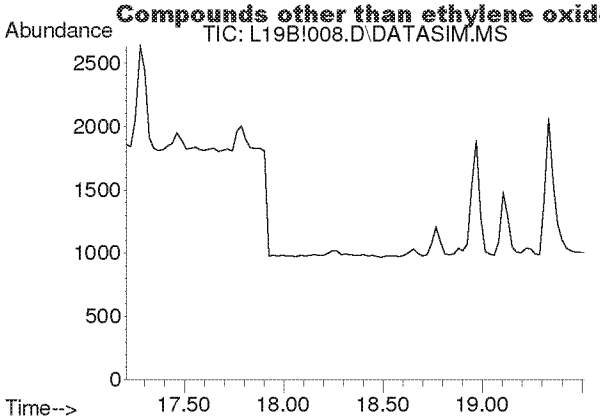
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

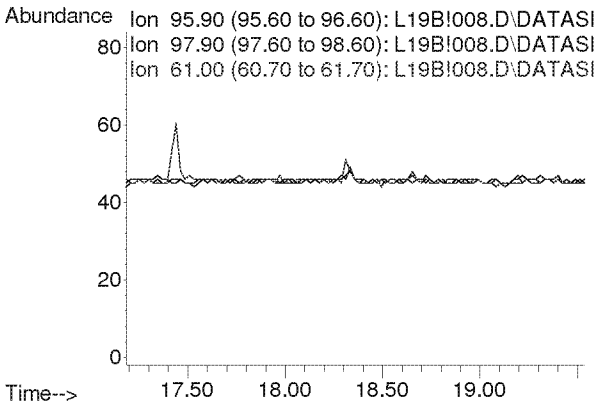


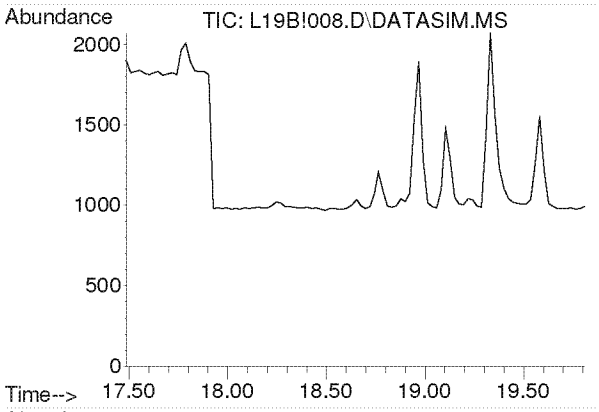
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



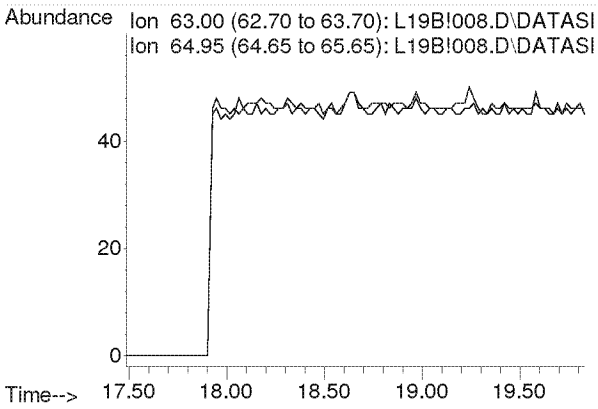


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

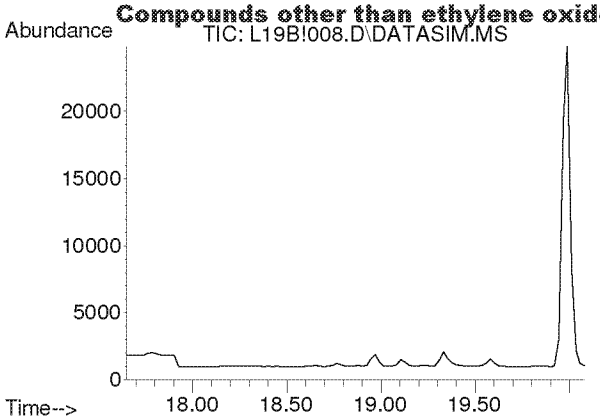
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

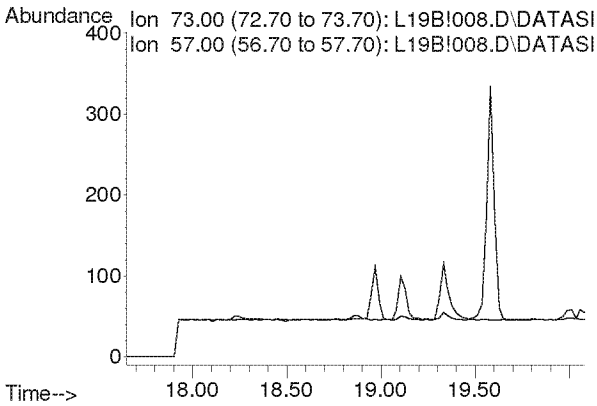


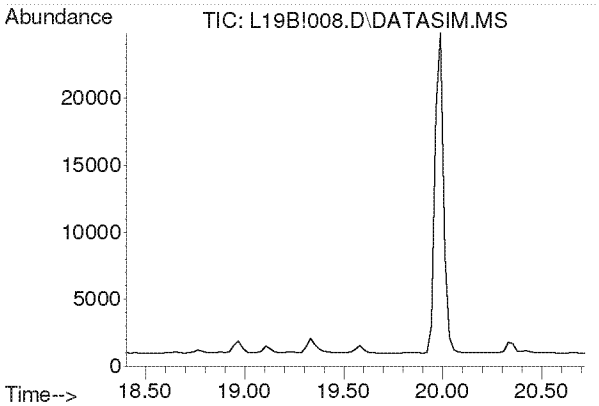
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



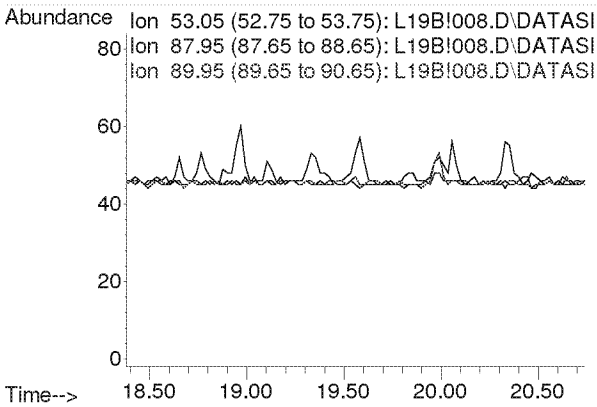


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

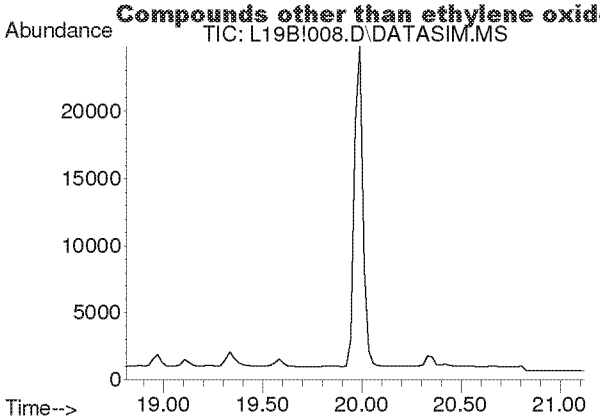
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

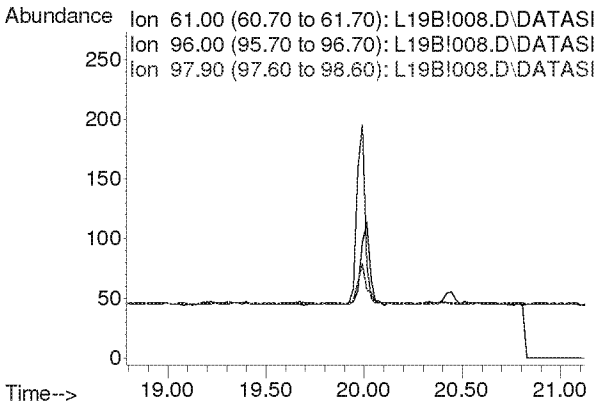


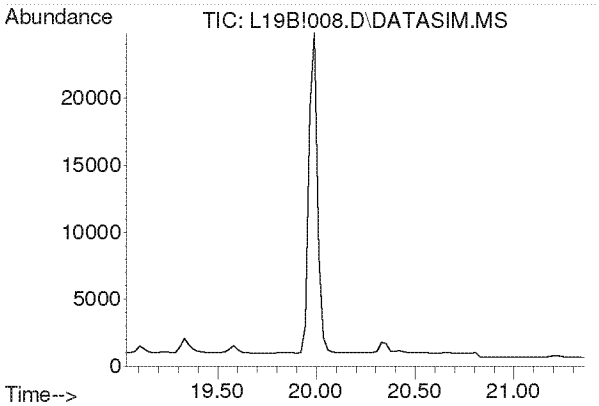
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



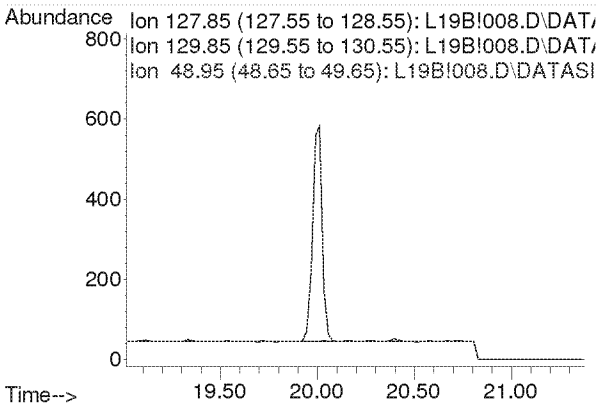


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

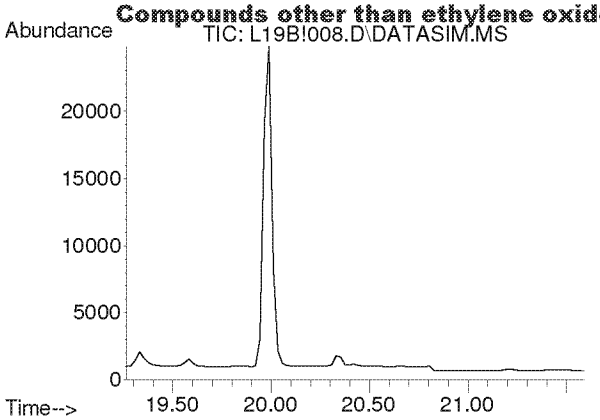
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

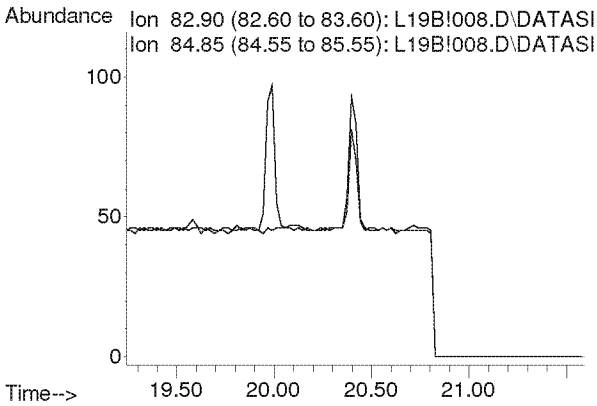


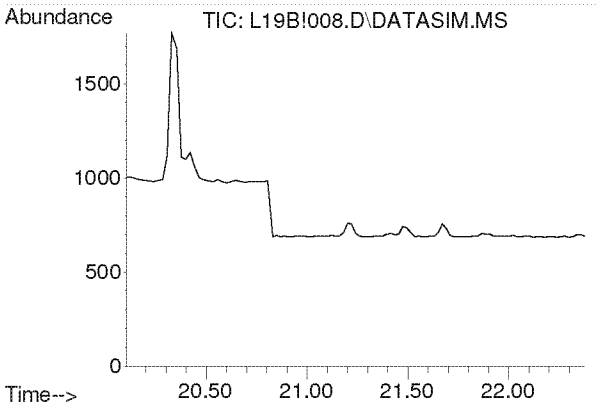
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



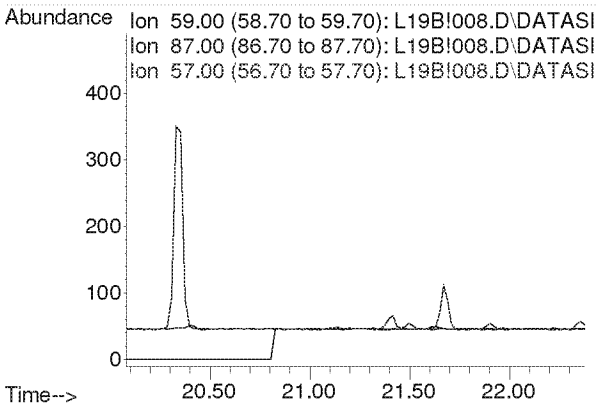


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

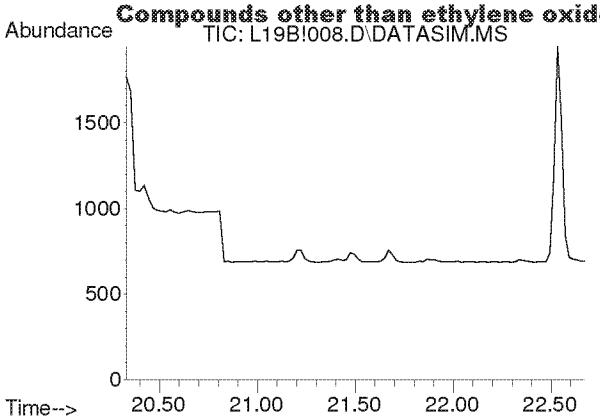
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

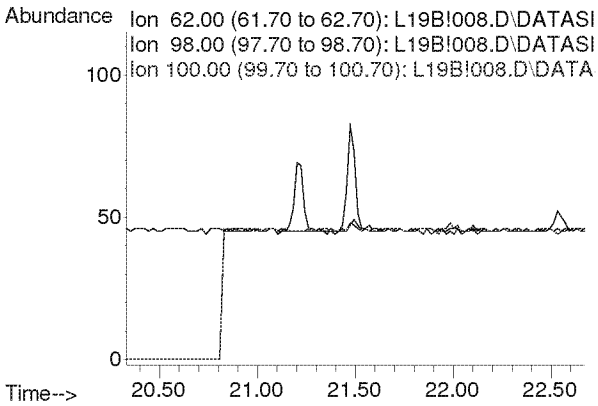


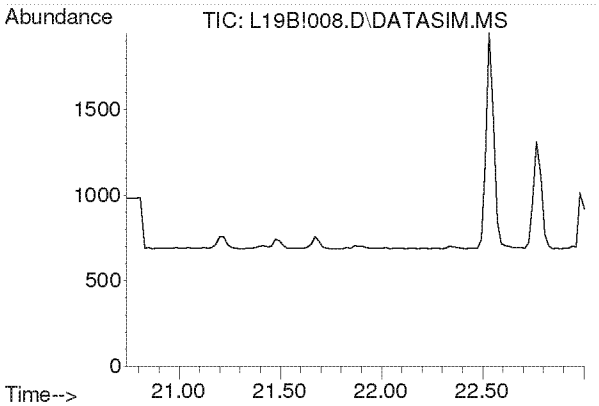
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



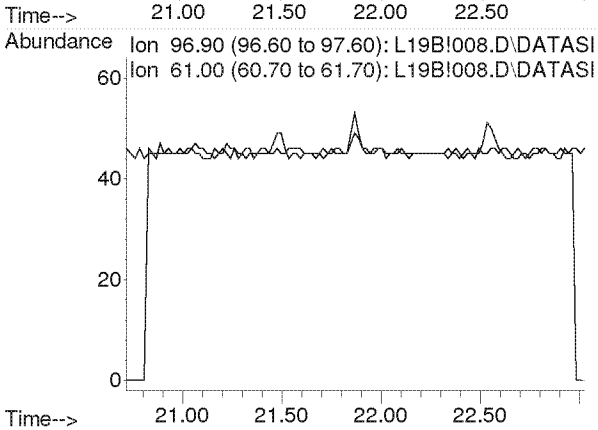


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

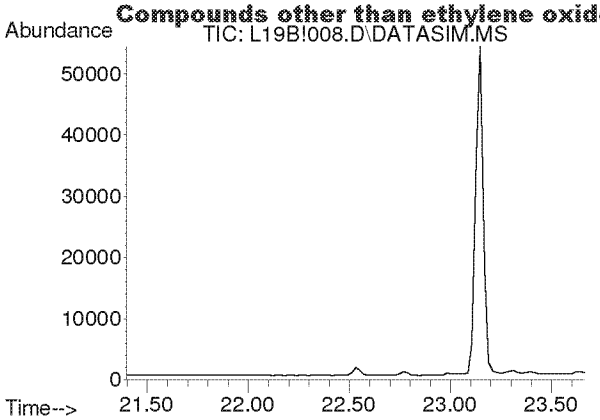
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

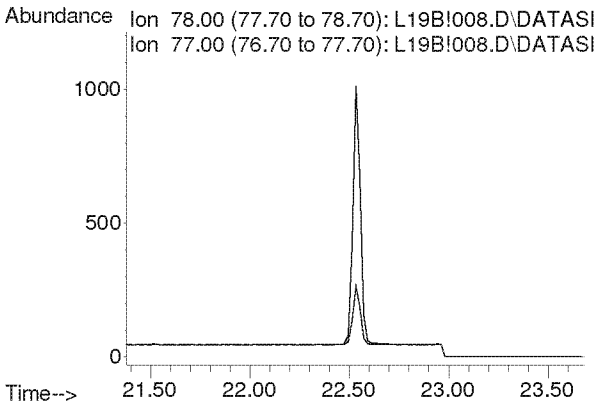


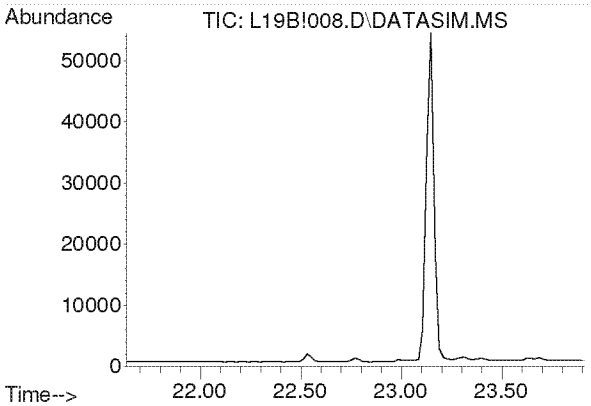
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



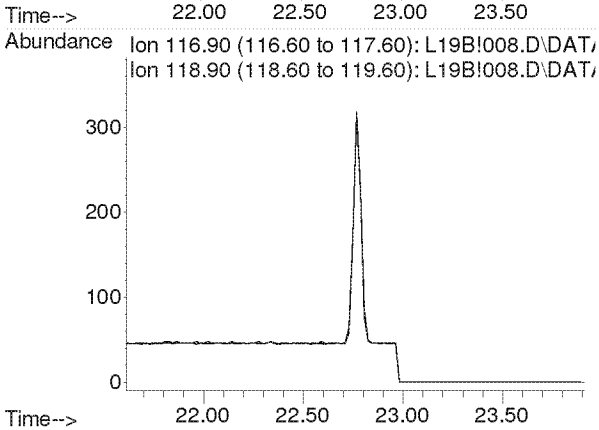


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

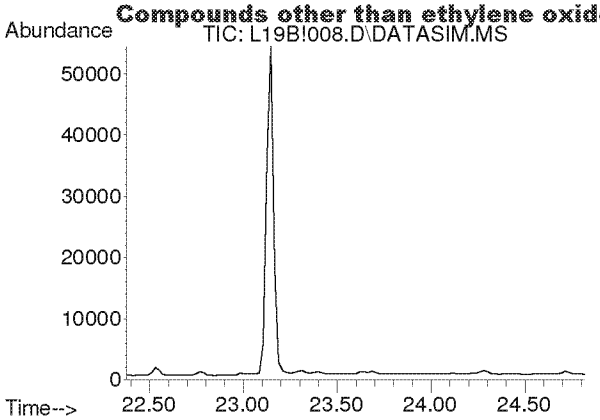
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

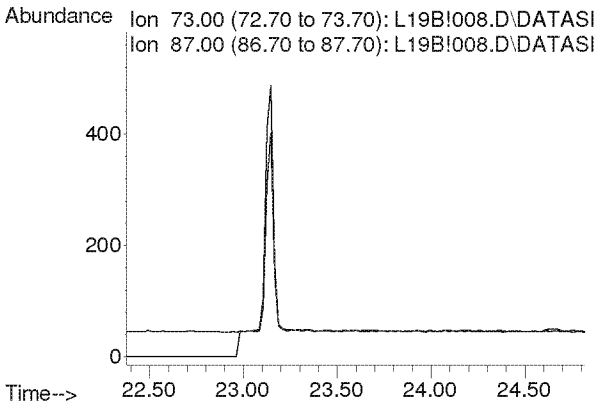


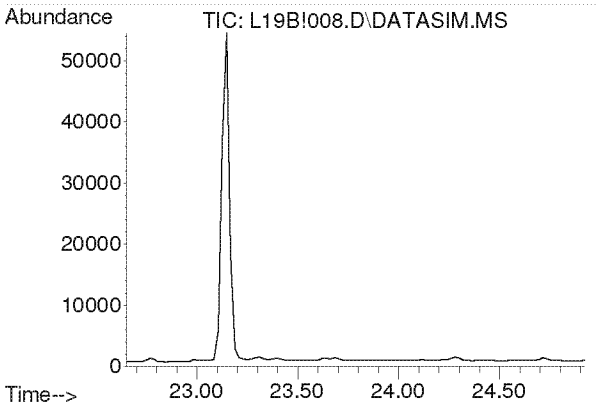
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



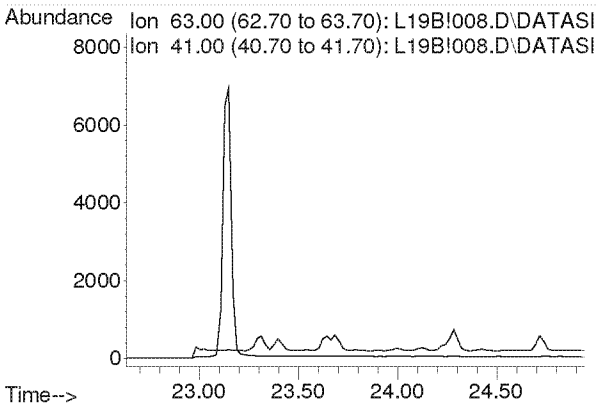


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

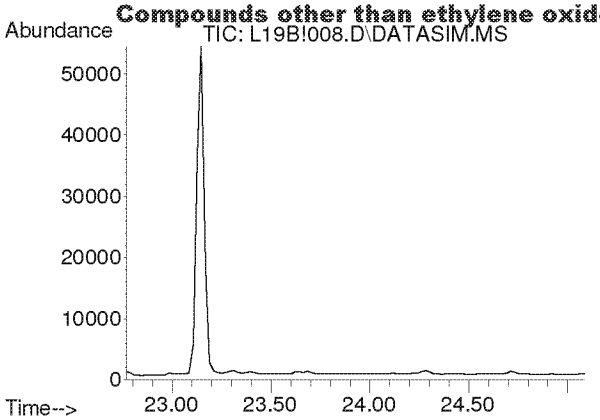
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

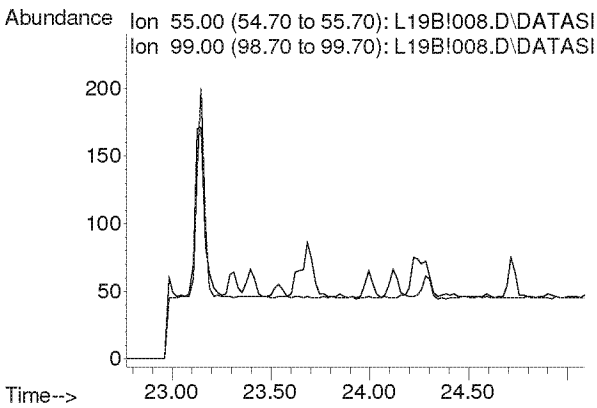


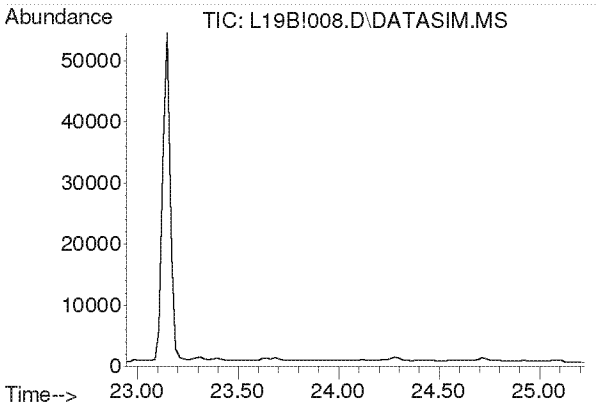
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



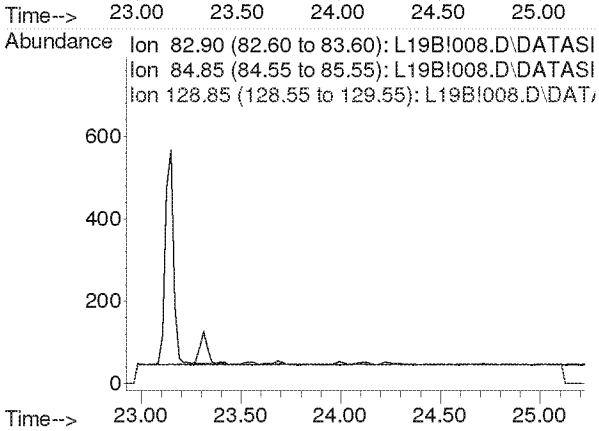


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

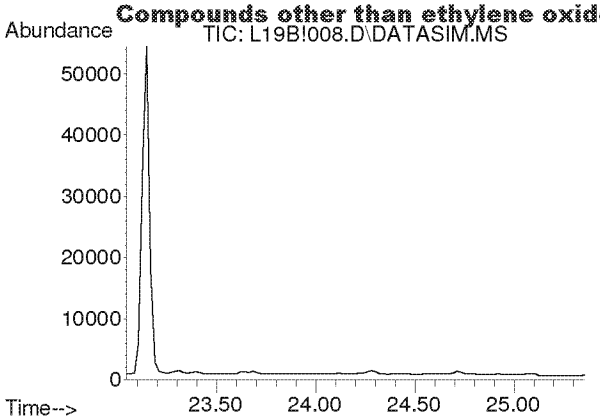
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

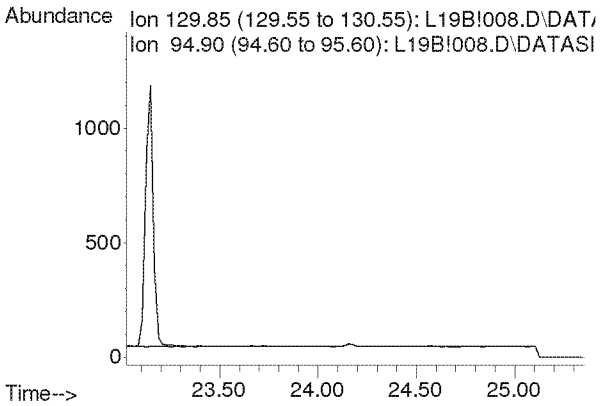


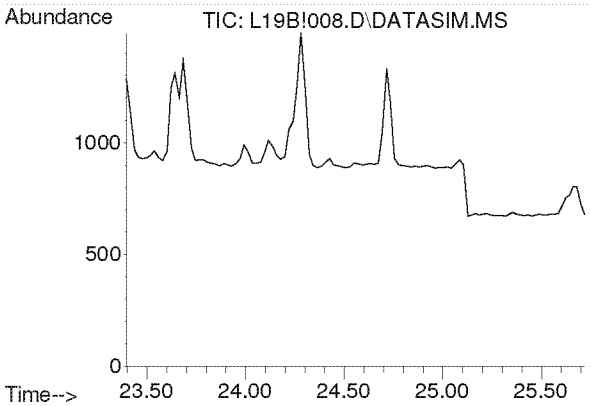
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



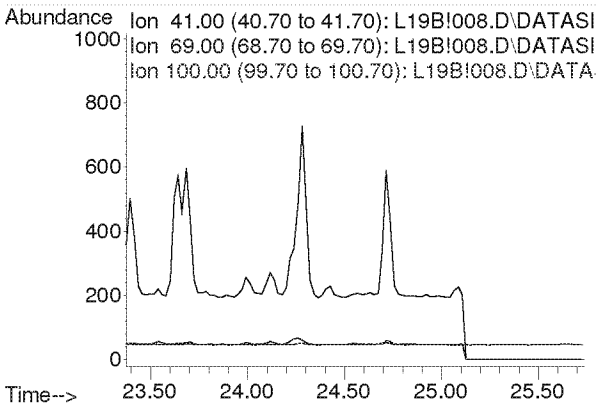


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

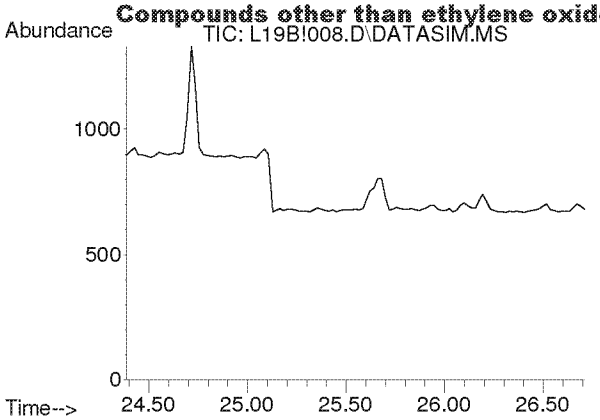
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

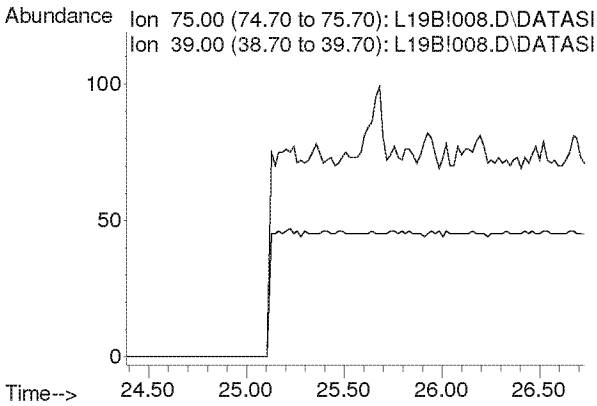


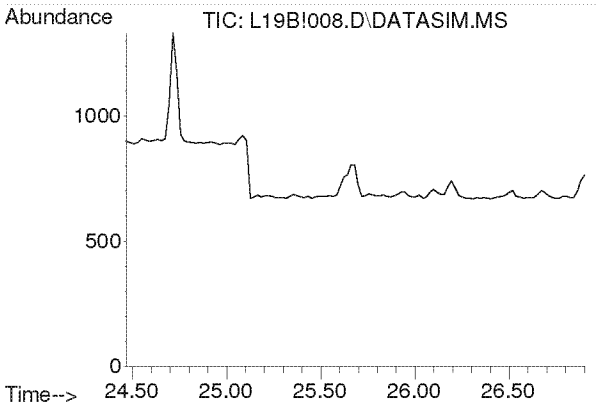
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



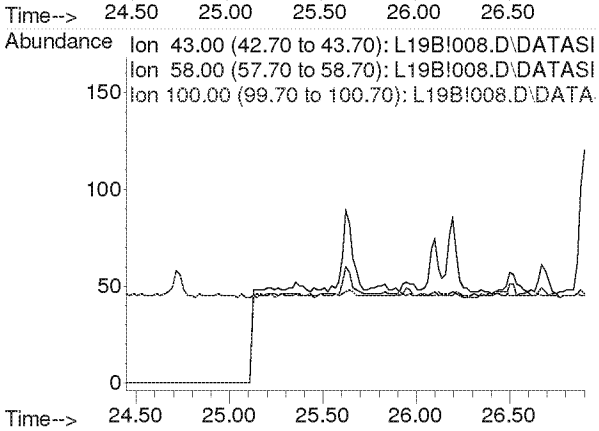


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

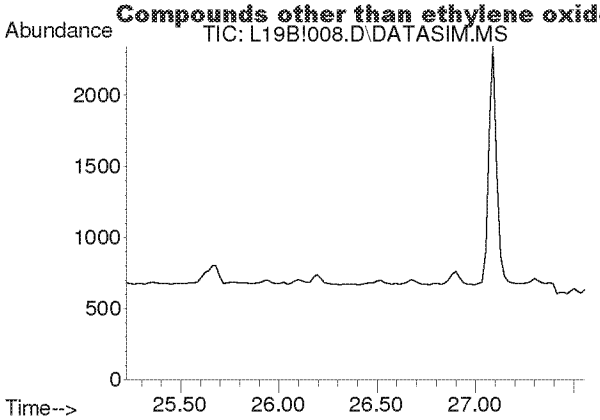
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

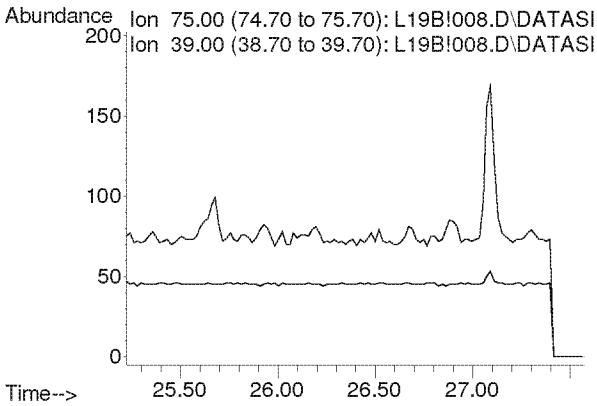


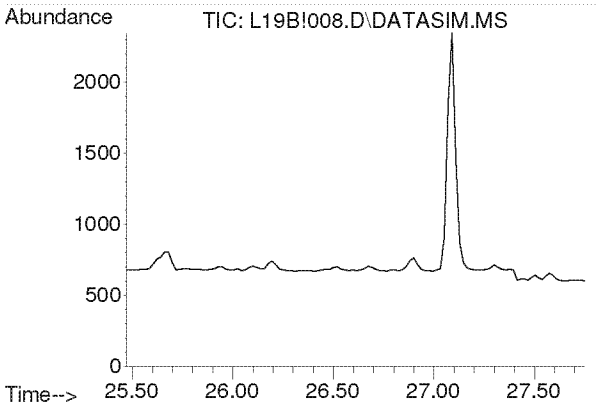
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



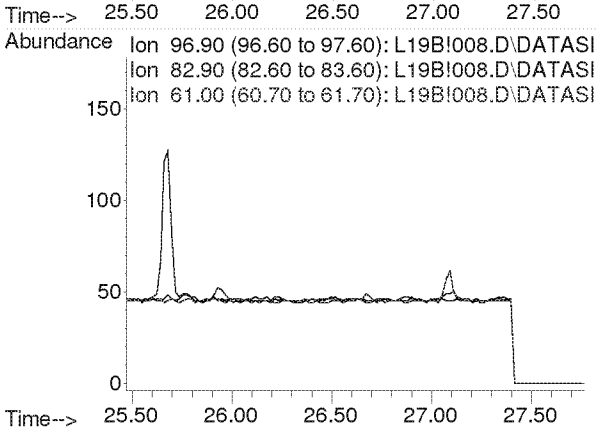


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

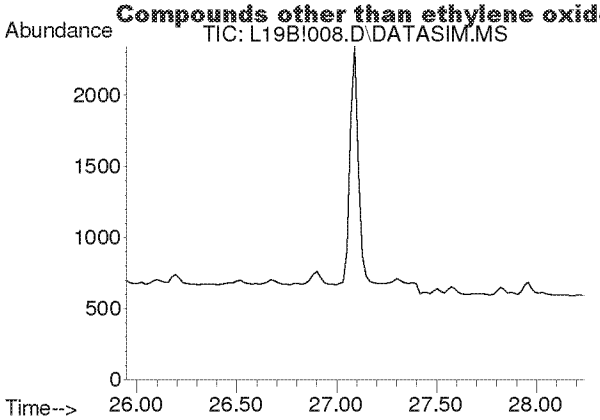
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

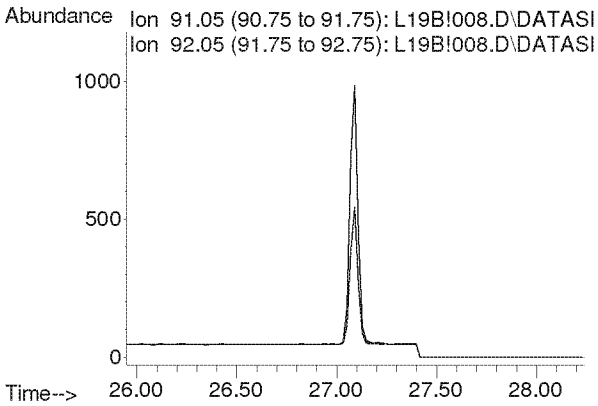


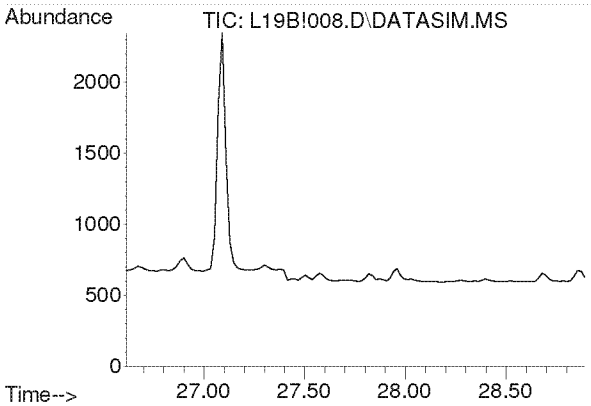
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



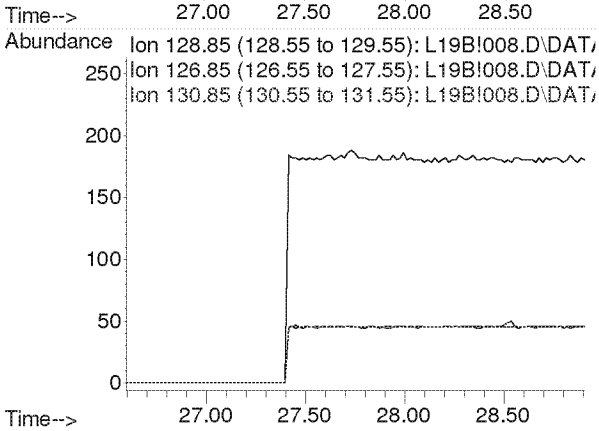


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

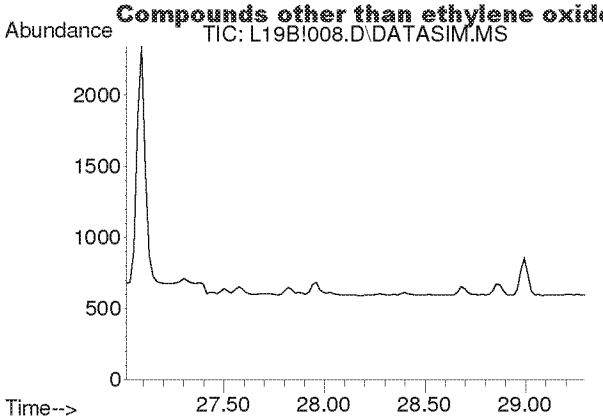
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

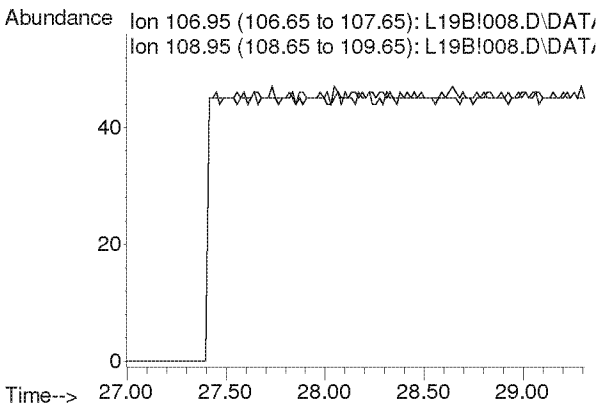


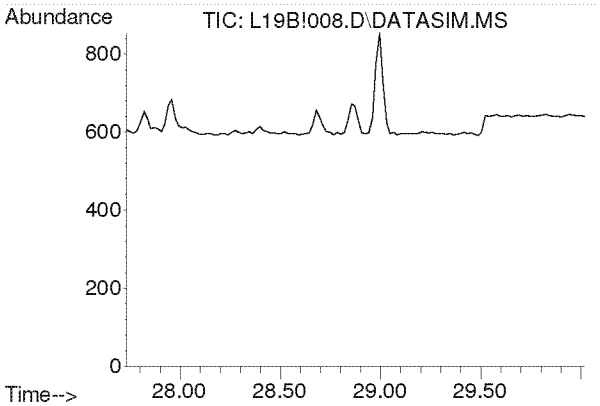
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



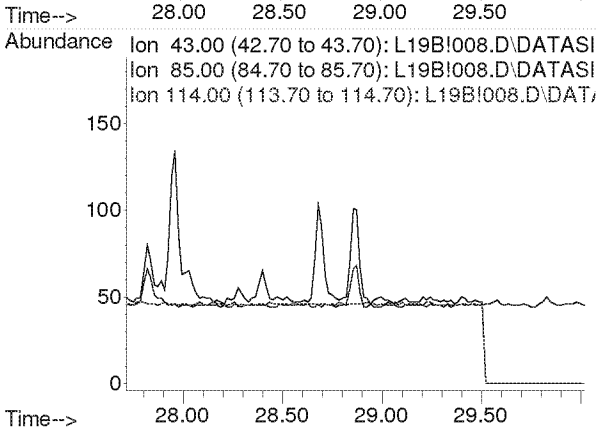


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

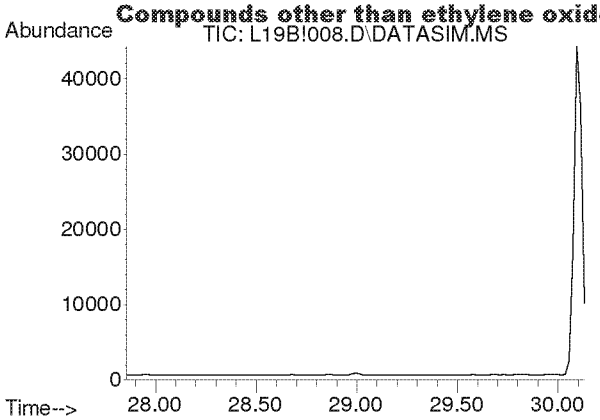
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

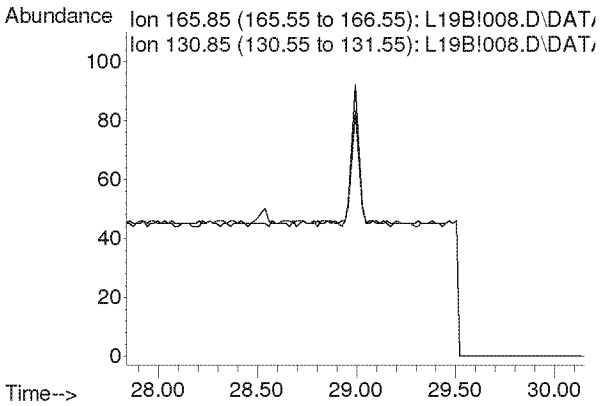


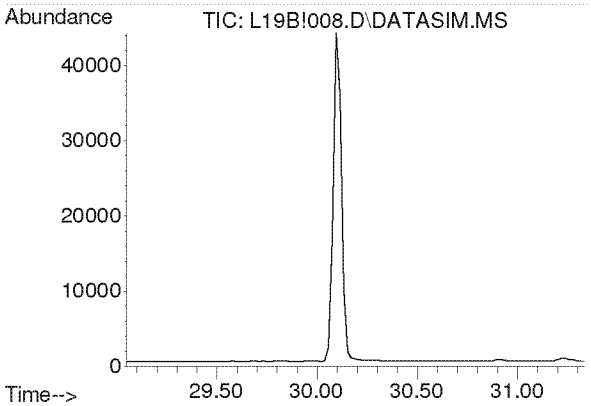
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



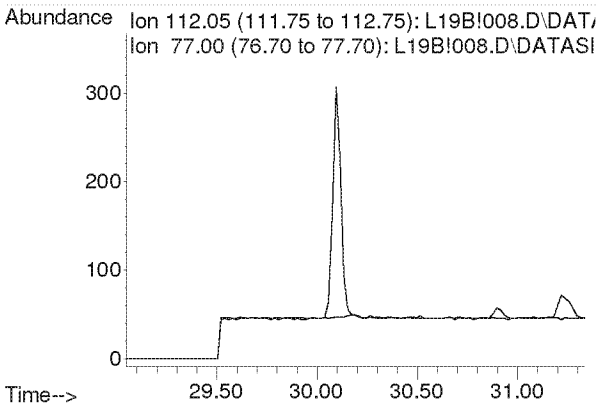


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

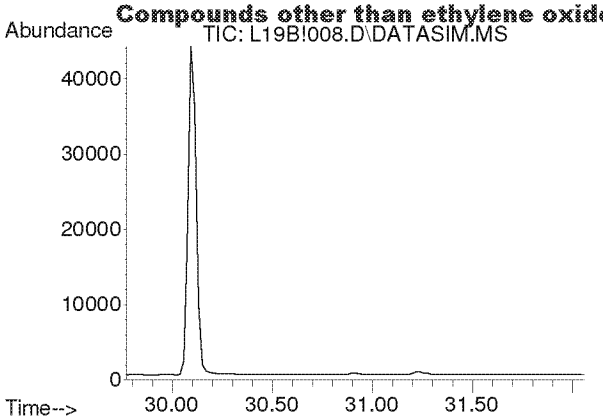
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

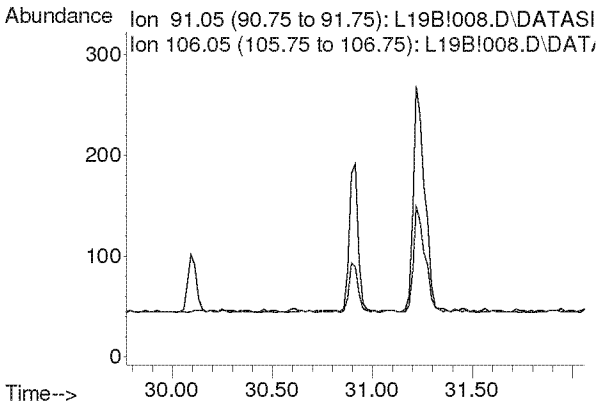


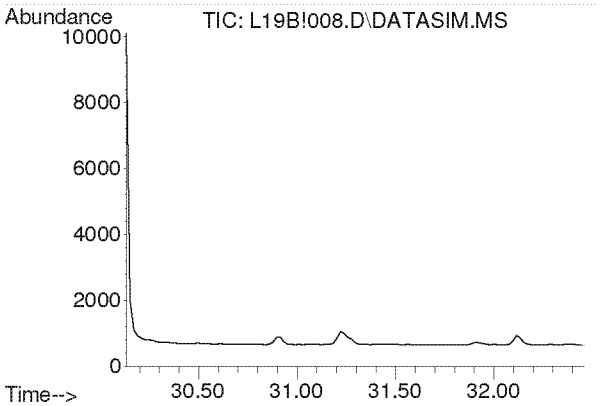
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



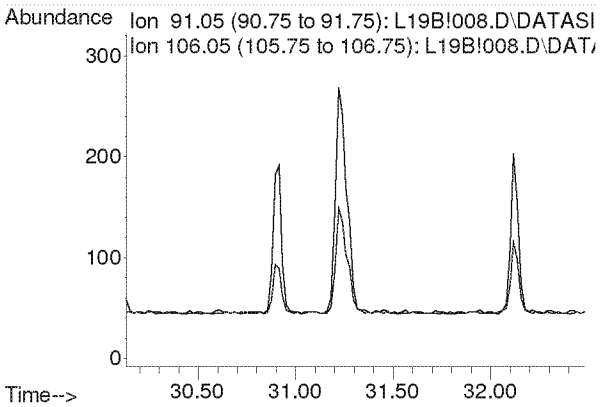


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

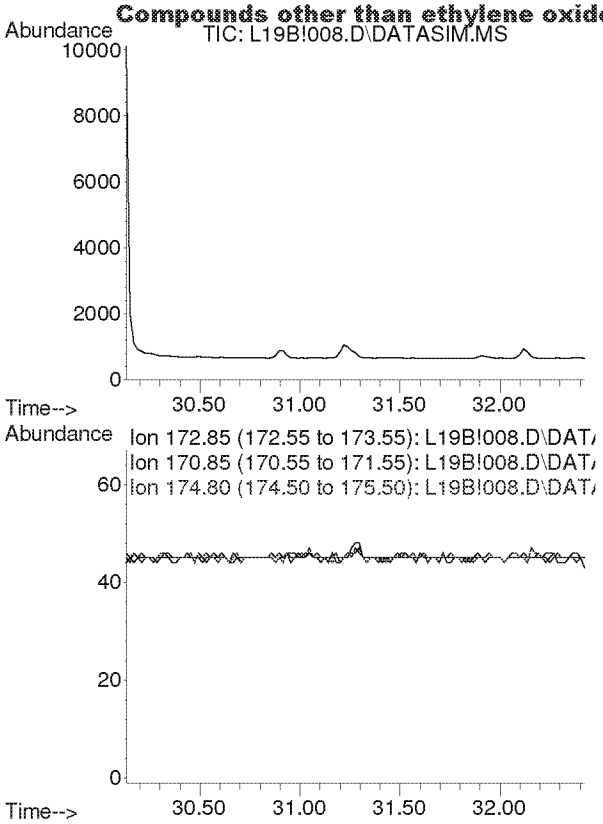
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

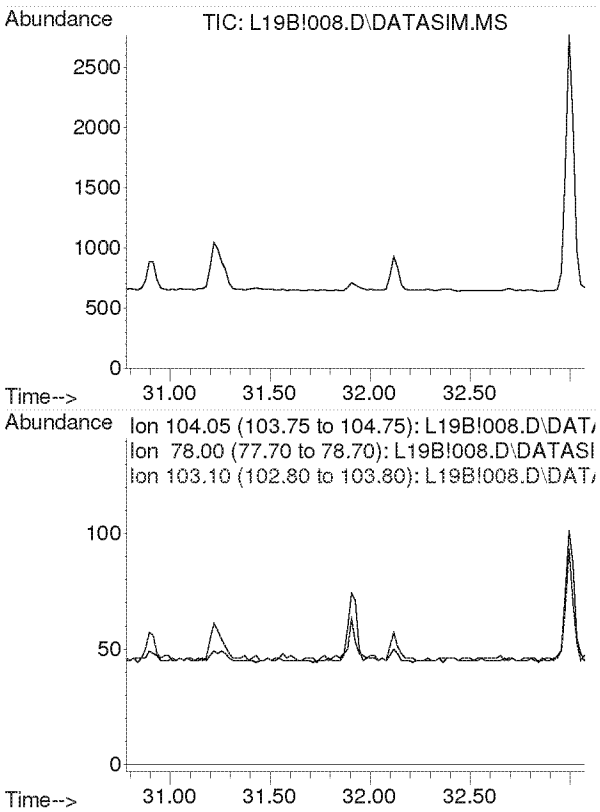


#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



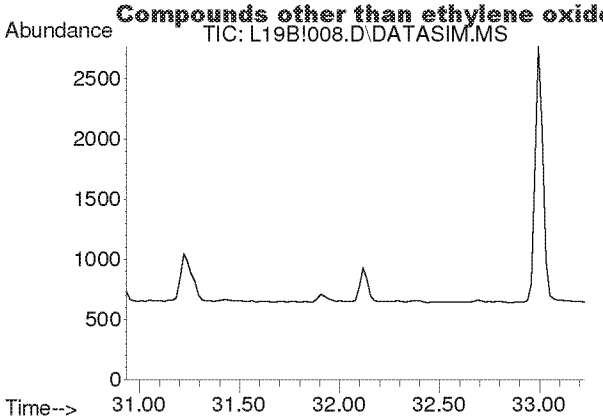
#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0

Compounds other than ethylene oxide were not quantitated.

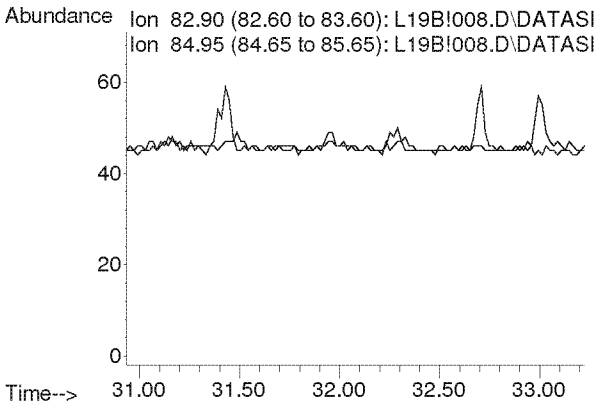


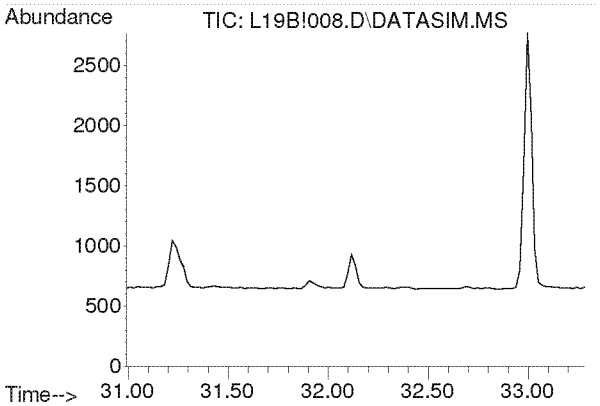
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



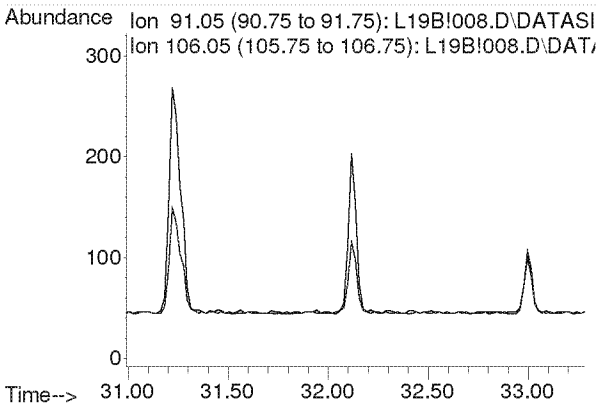


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

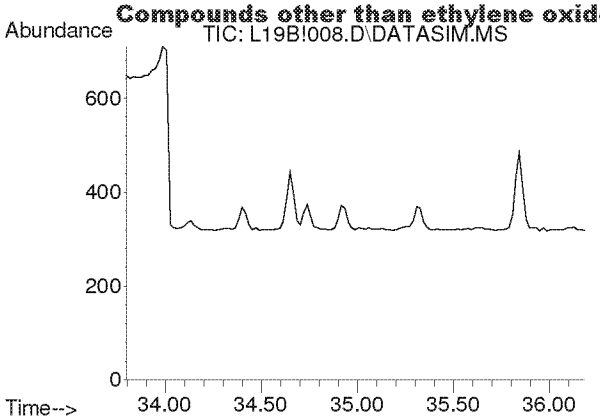
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

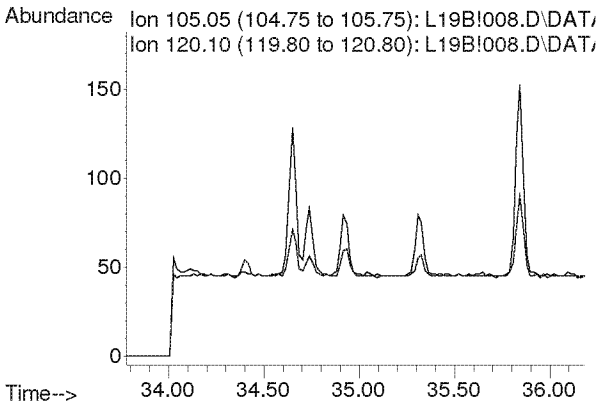


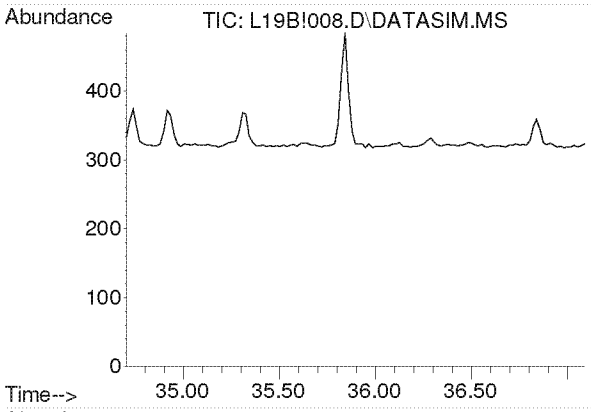
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



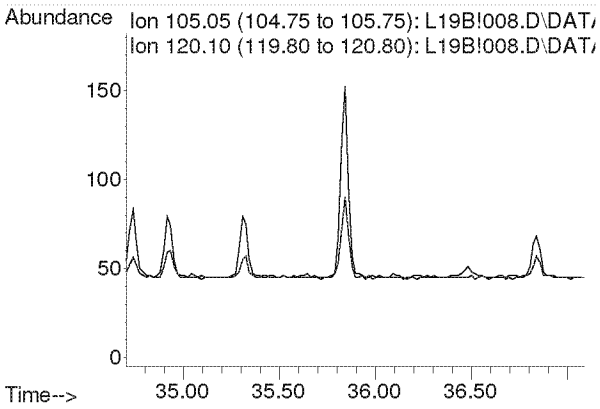


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

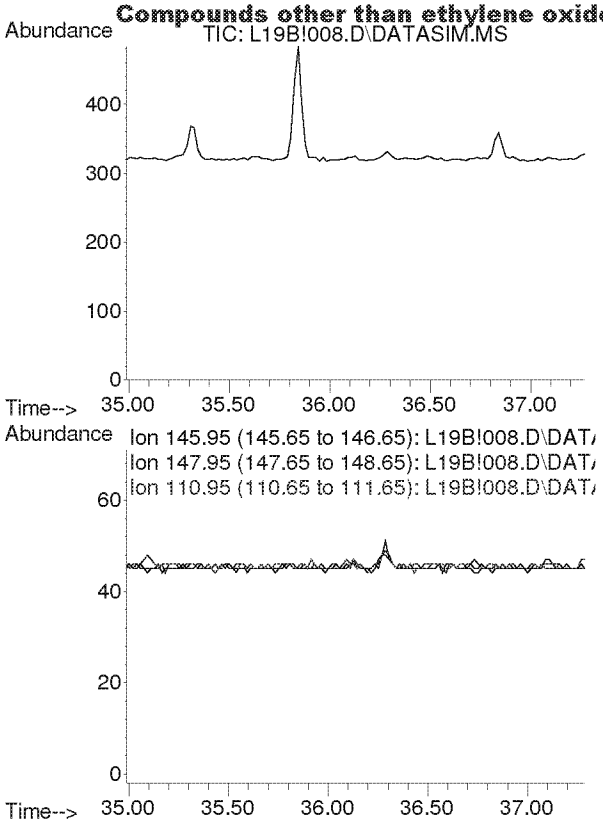
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

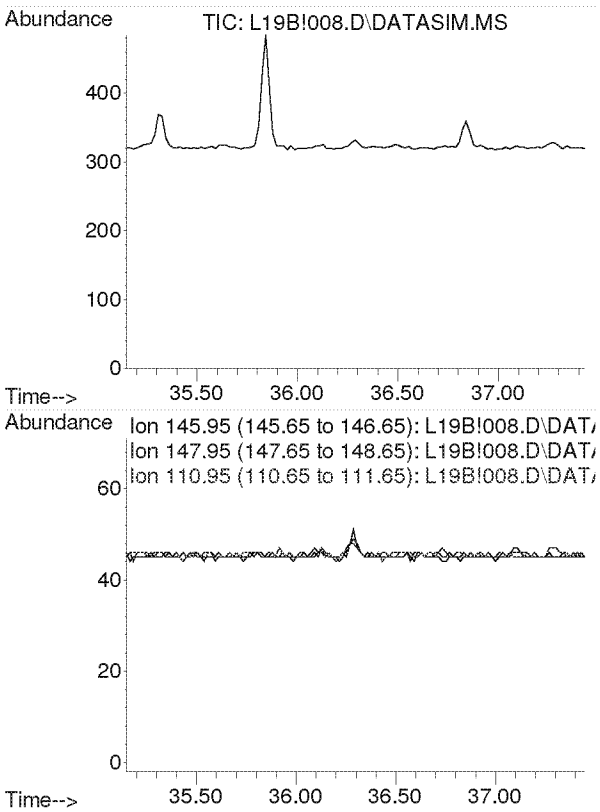


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



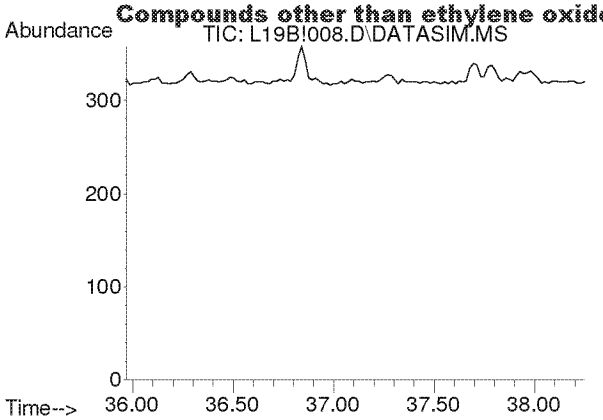
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7

Compounds other than ethylene oxide were not quantitated.

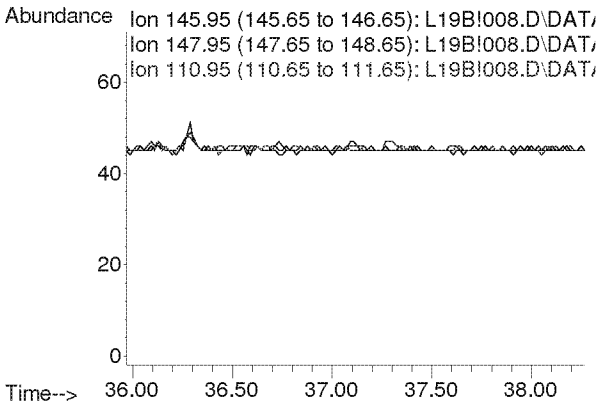


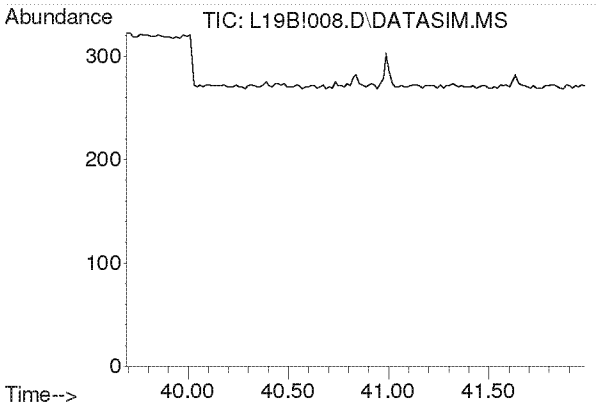
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



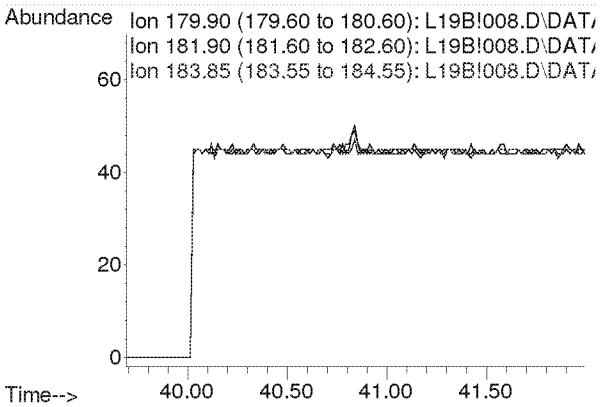


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

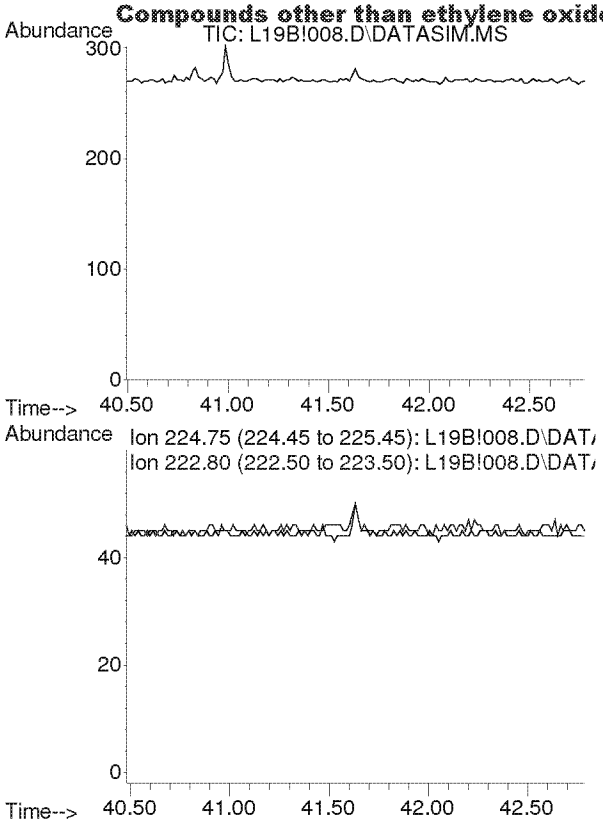
Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!008.D
Acq: 28 Feb 2019 7:36 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\L19B!\
Data File : L19B!009.D
Acq On : 28 Feb 2019 8:39 pm
Operator : MAH
Sample : 9022616-12
Misc : GOWER MS 2/24/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 05 07:38:16 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.968	66	43773	4.7700 ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.149	114	107970	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.094	117	75113	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	12.453	29	227m	0.0907 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.	
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.	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\L19B!\
Data File : L19B!009.D
Acq On : 28 Feb 2019 8:39 pm
Operator : MAH
Sample : 9022616-12
Misc : GOWER MS 2/24/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 05 07:38:16 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

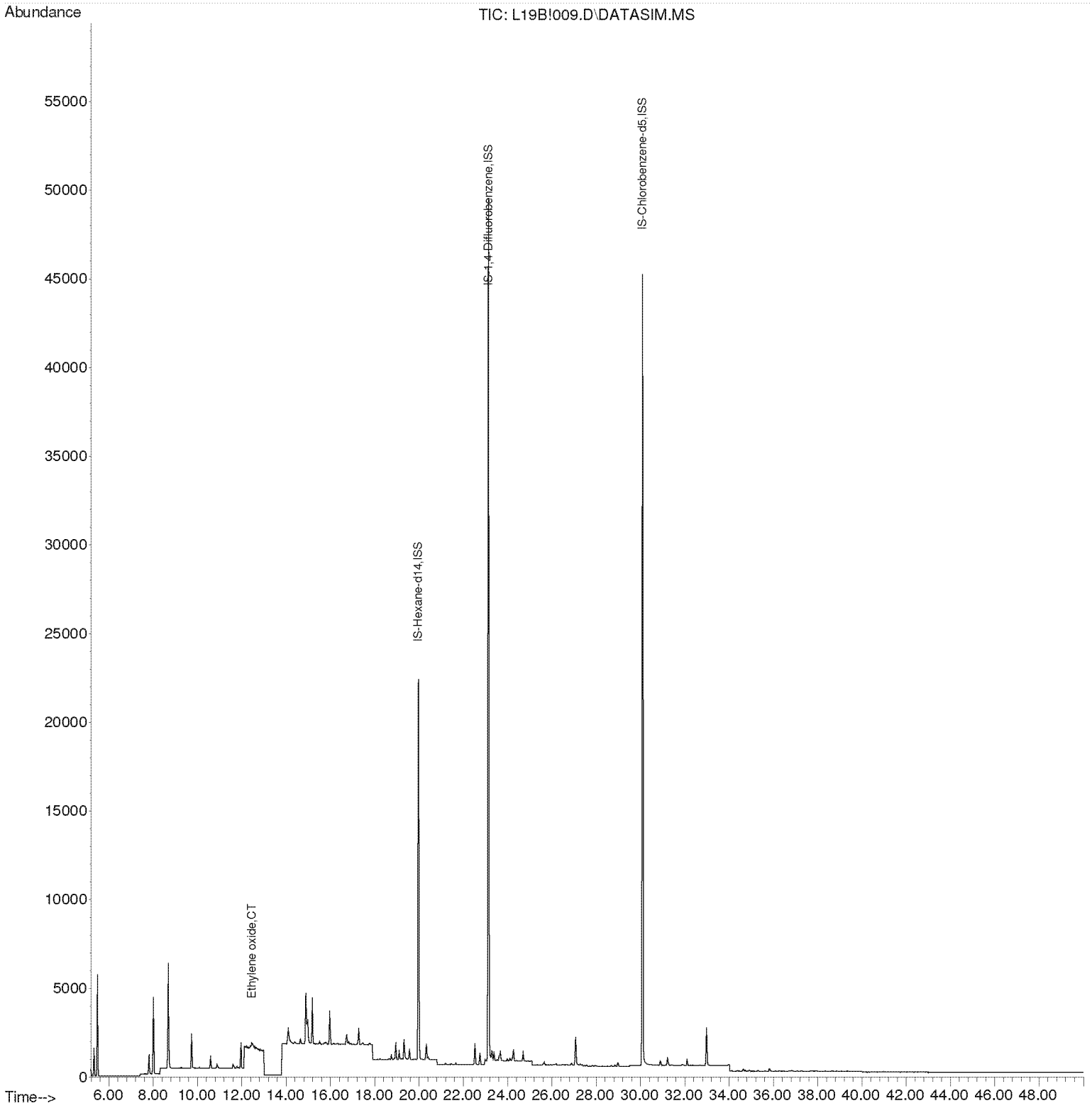
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene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

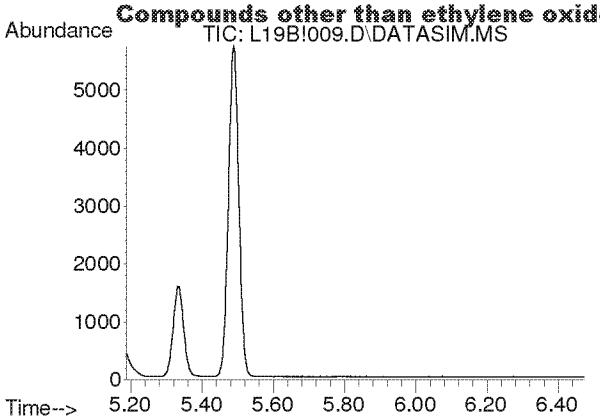
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!009.D
Acq On : 28 Feb 2019 8:39 pm
Operator : MAH
Sample : 9022616-12
Misc : GOWER MS 2/24/19
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 09:48:16 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



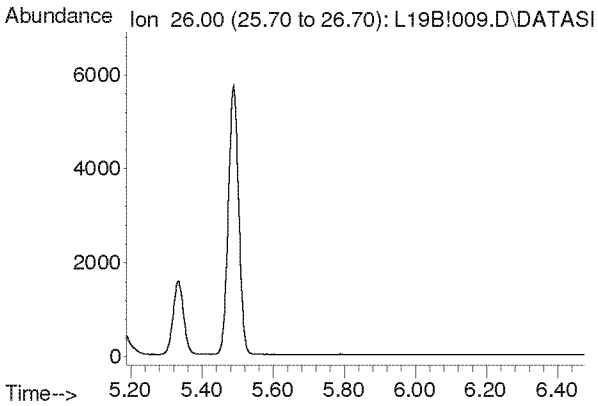
Compounds other than ethylene oxide were not quantitated.

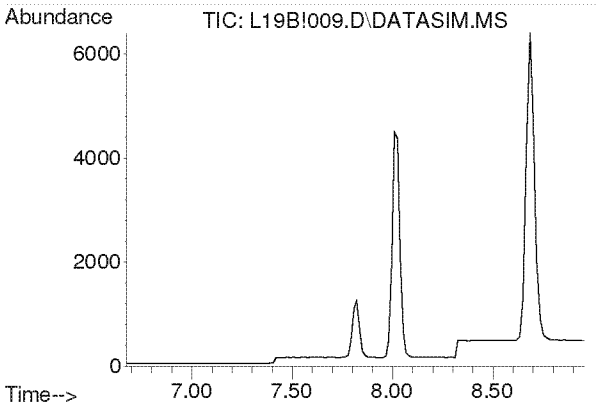


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 26



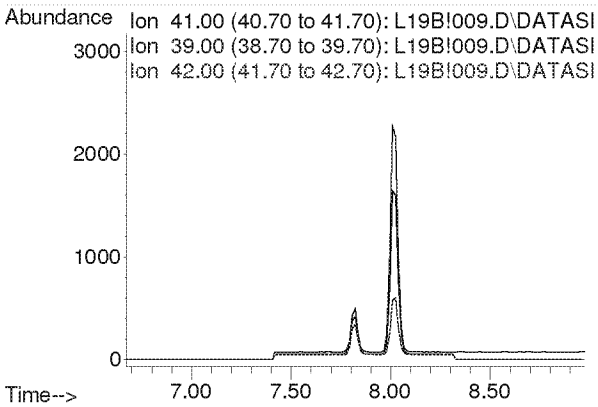


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

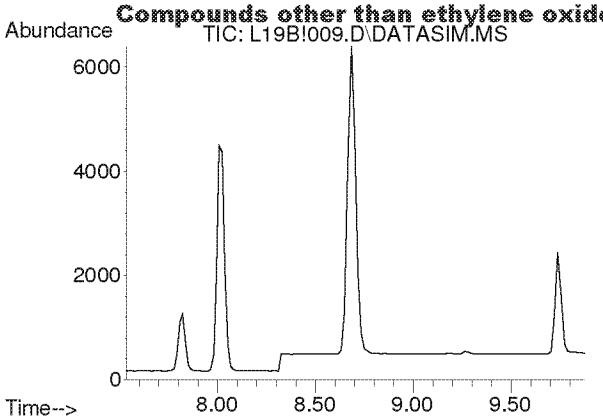
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

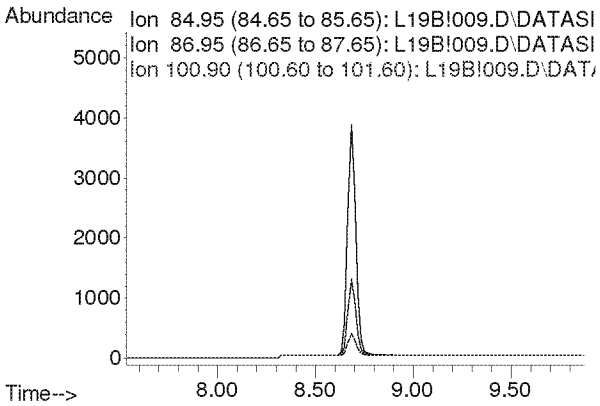


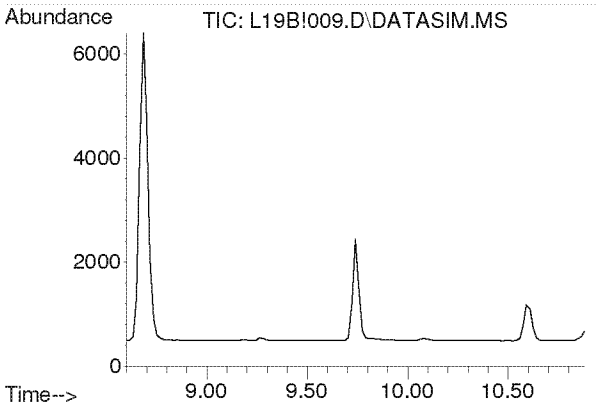
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



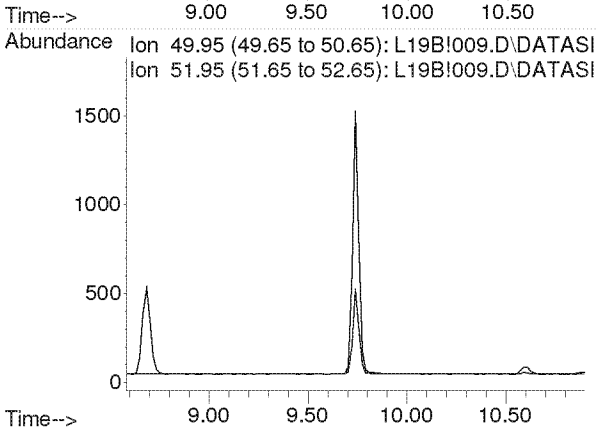


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

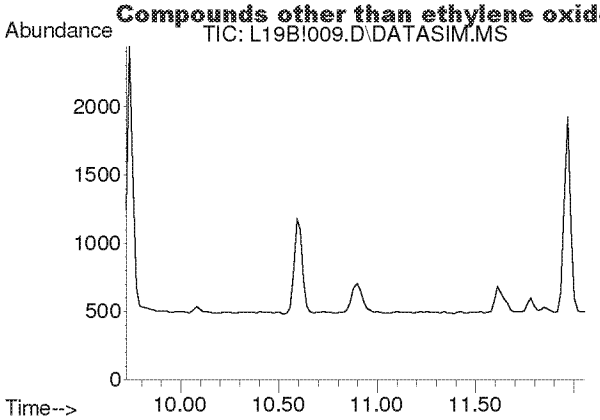
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

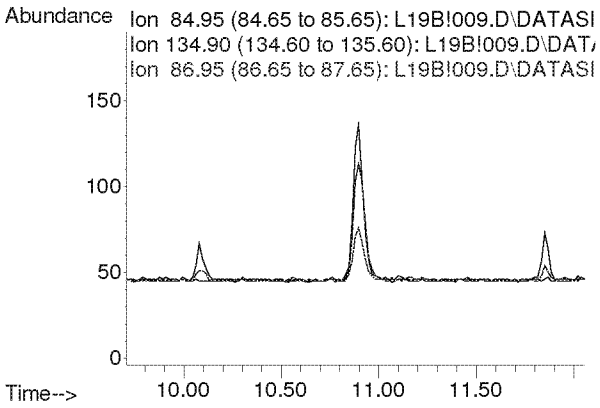


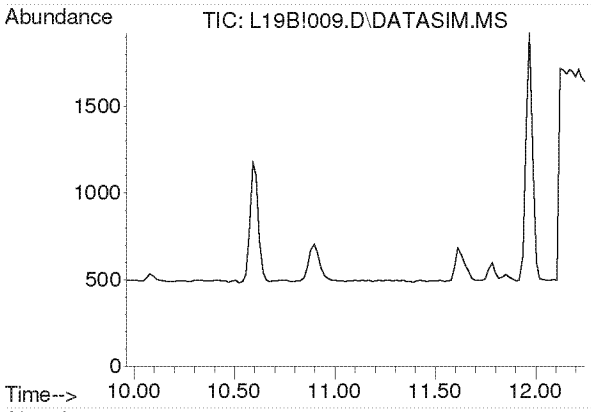
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



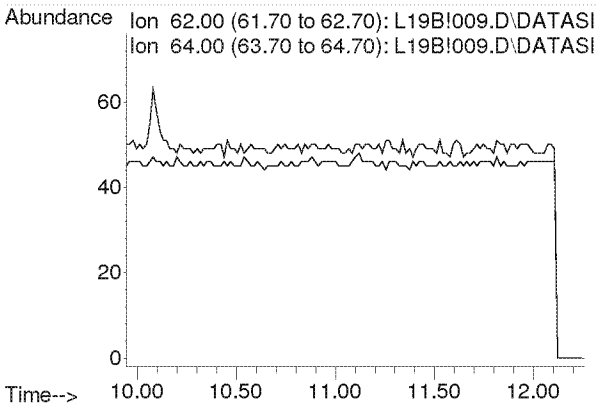


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

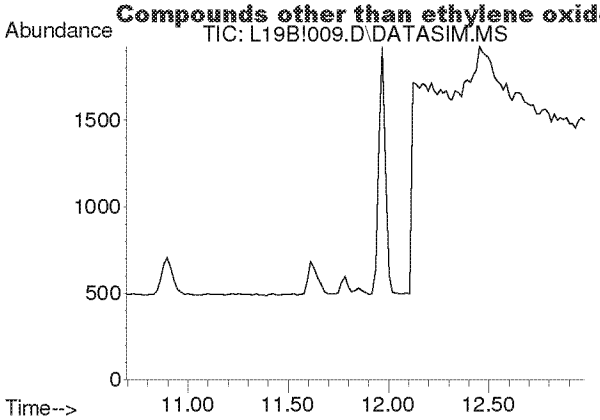
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

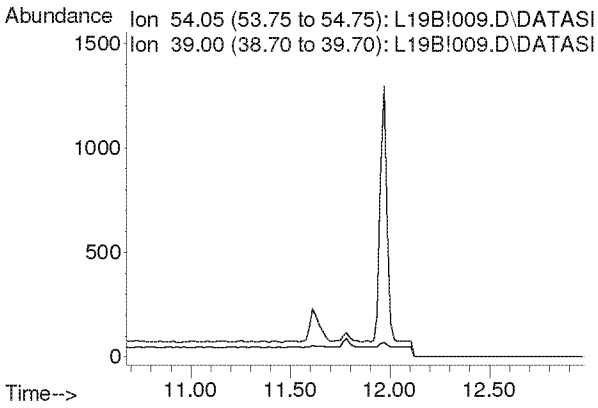


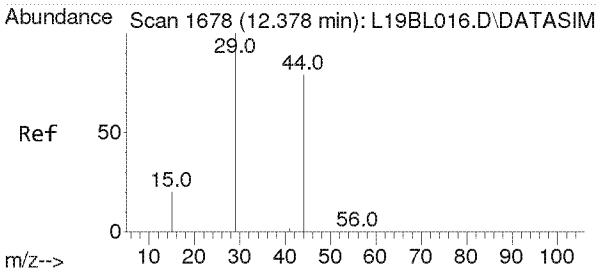
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

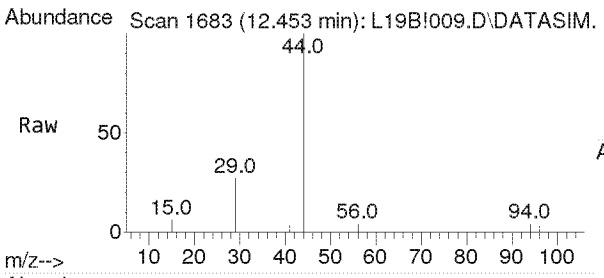


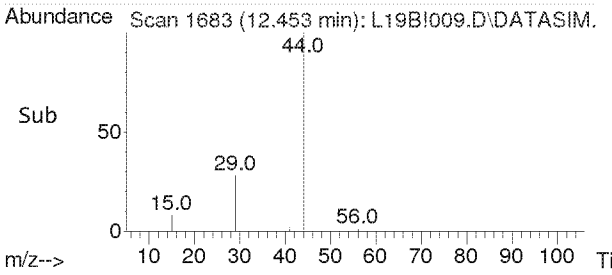


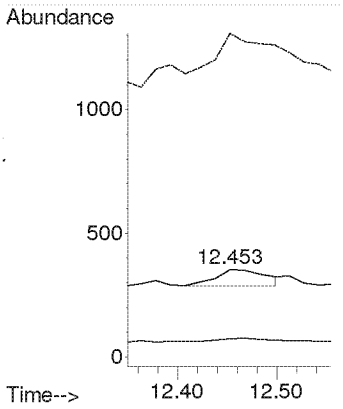
#9
Ethylene oxide
Concen: 0.091 ppbv m
RT: 12.453 min Scan# 1683
Delta R.T. 0.075 min
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 29 Resp: 227

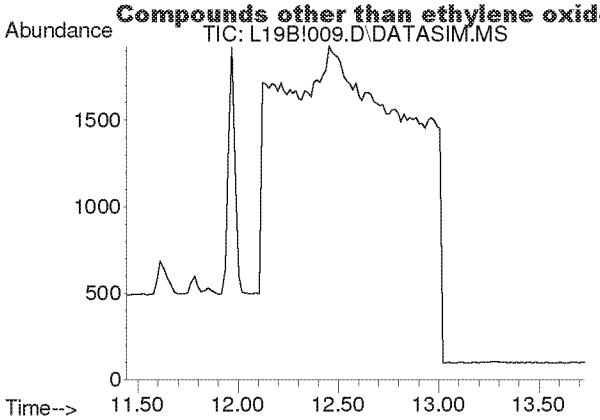
Ion	Ratio	Lower	Upper
29	100		
15	31.7	16.0	24.0#
44	398.2	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

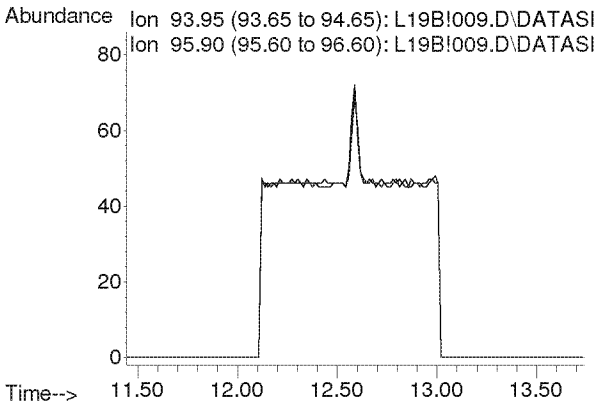


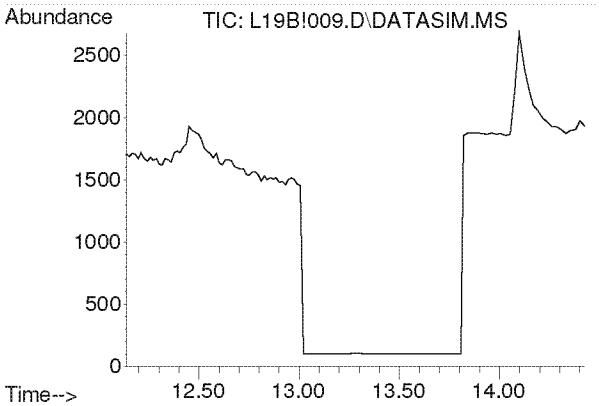
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



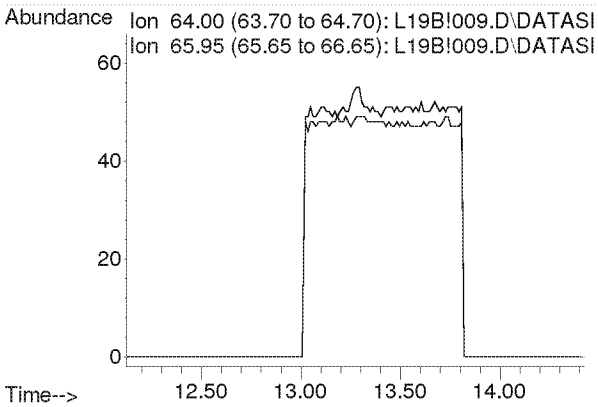


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

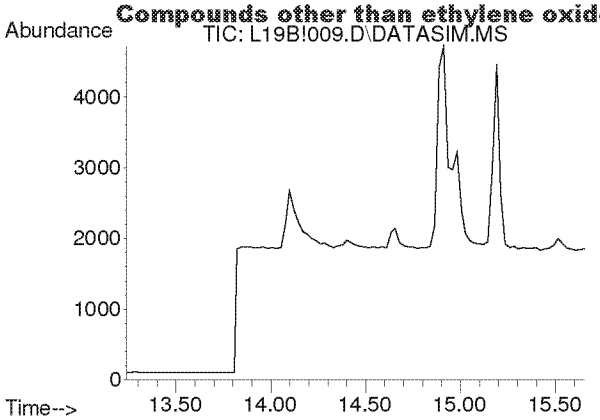
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

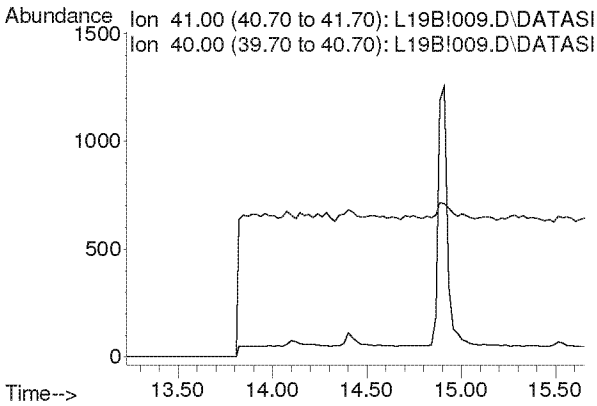


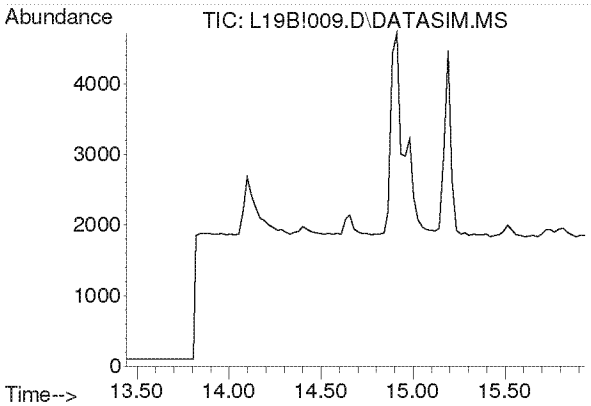
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



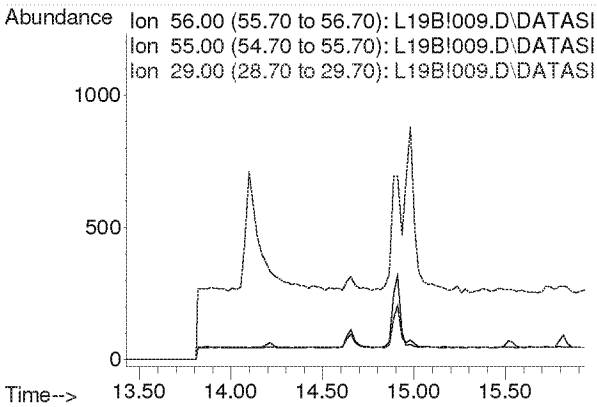


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

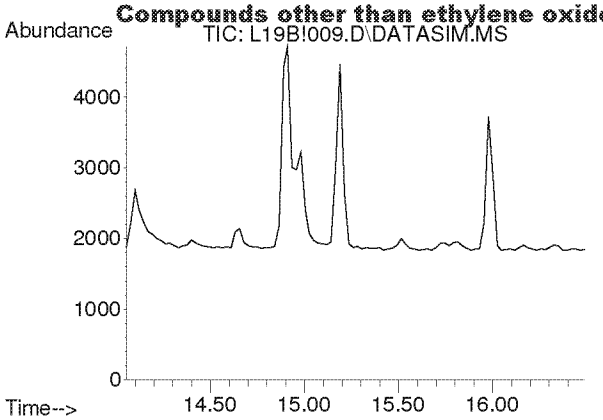
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

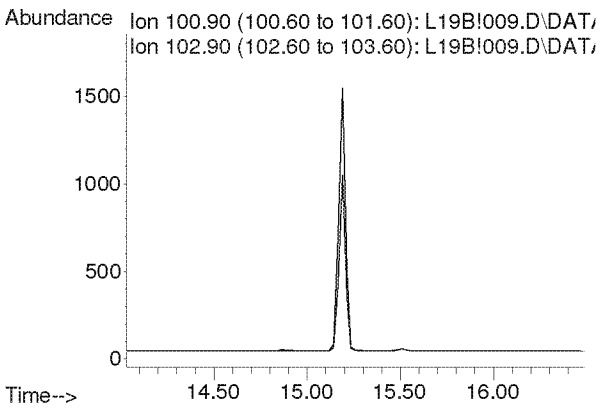


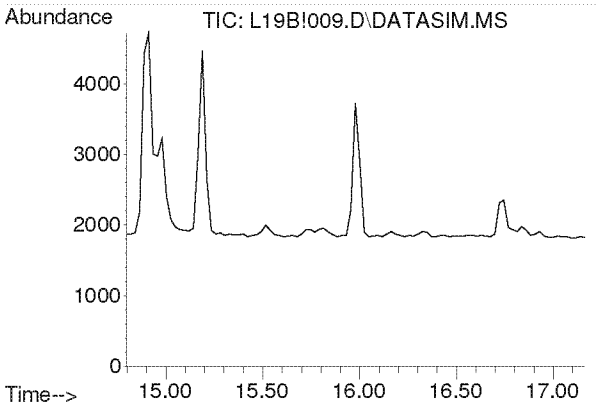
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



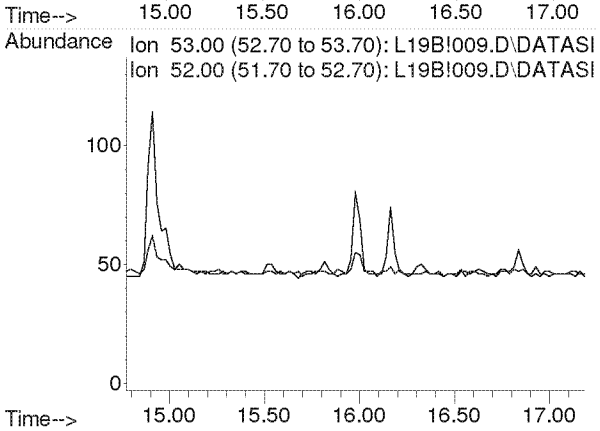


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

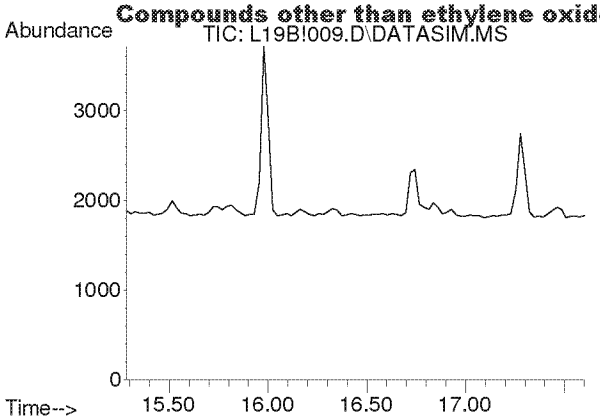
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

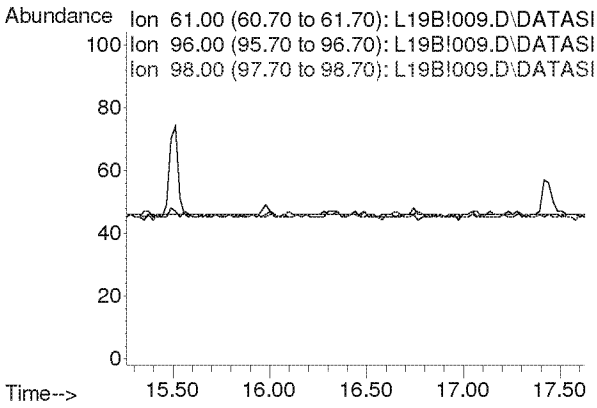


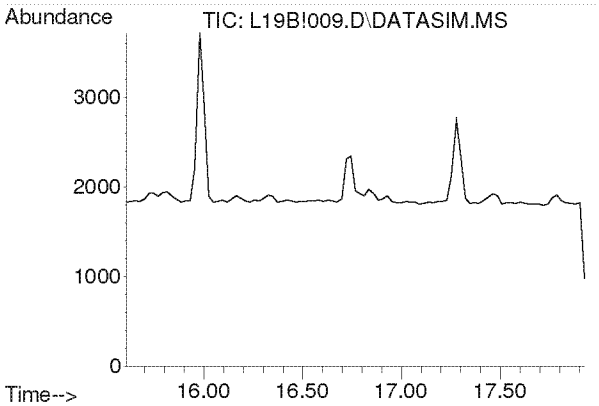
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



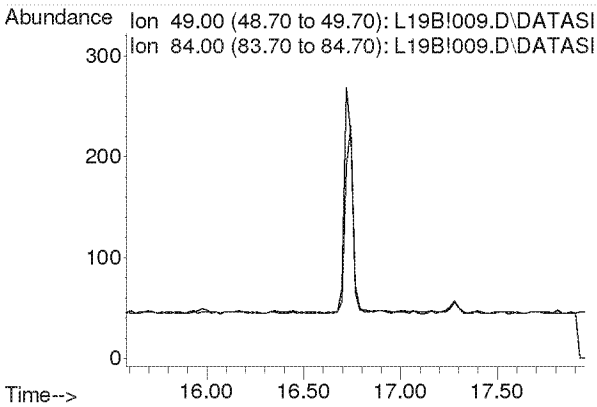


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

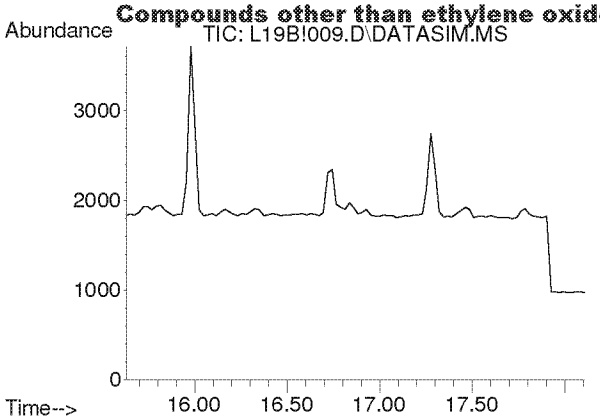
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

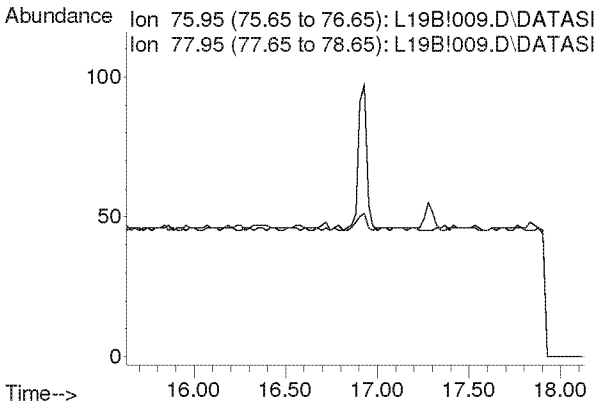


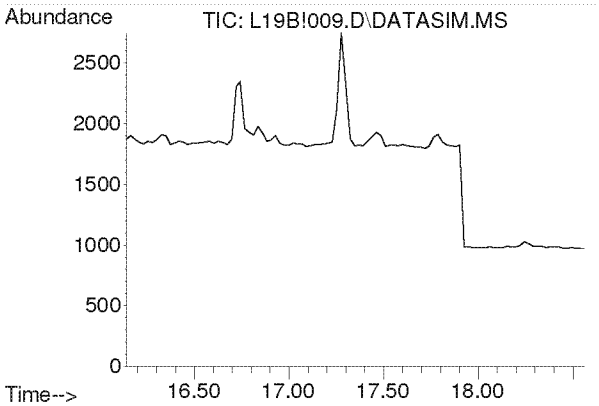
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



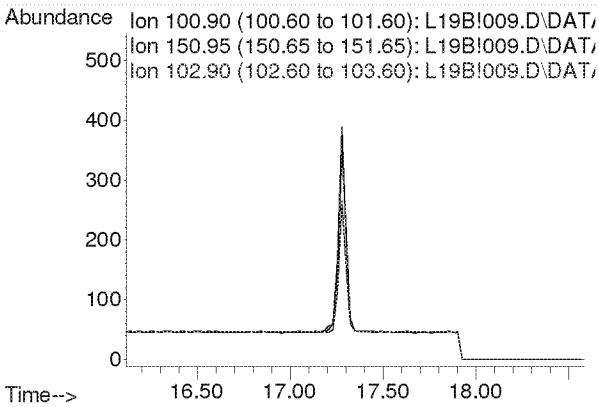


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

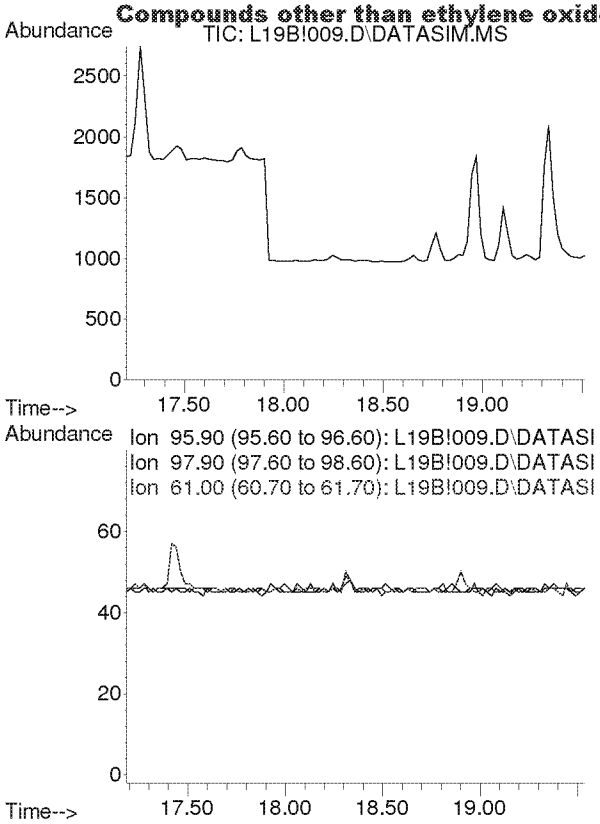
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

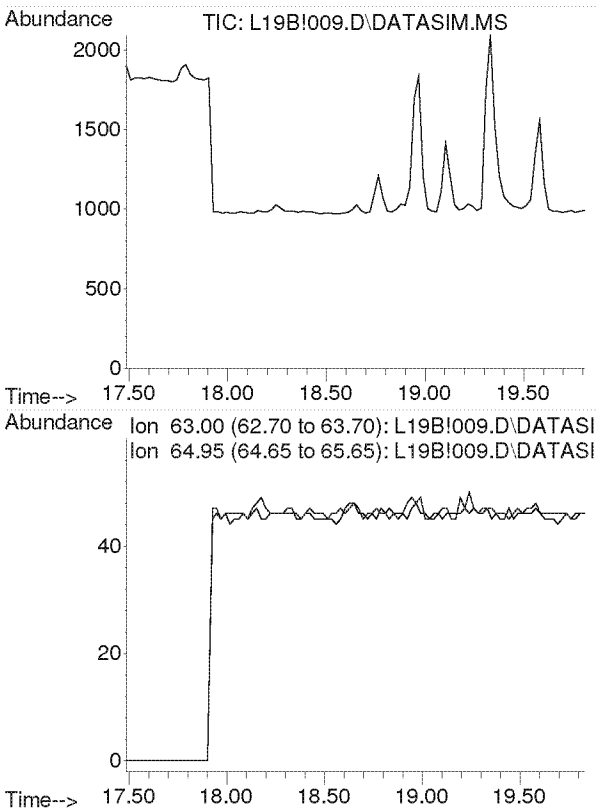


#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



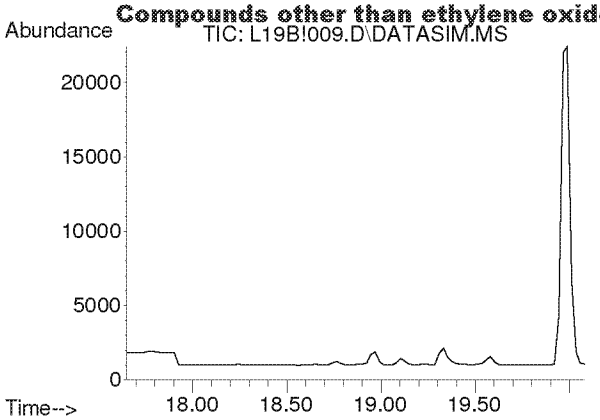
#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7

Compounds other than ethylene oxide were not quantitated.

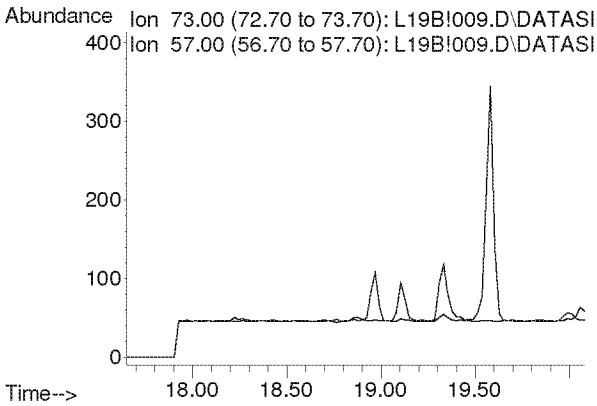


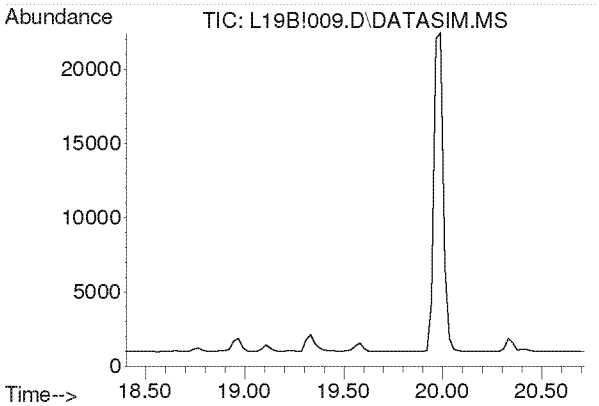
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



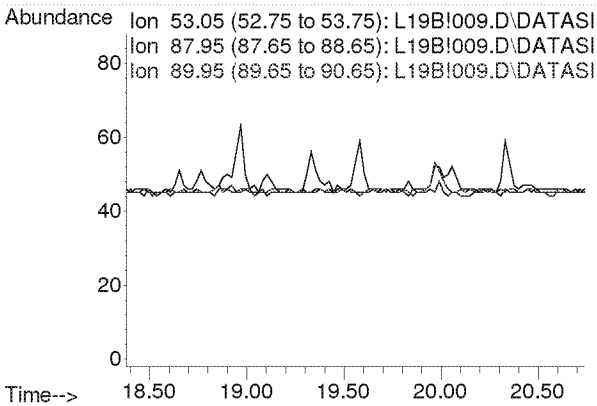


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

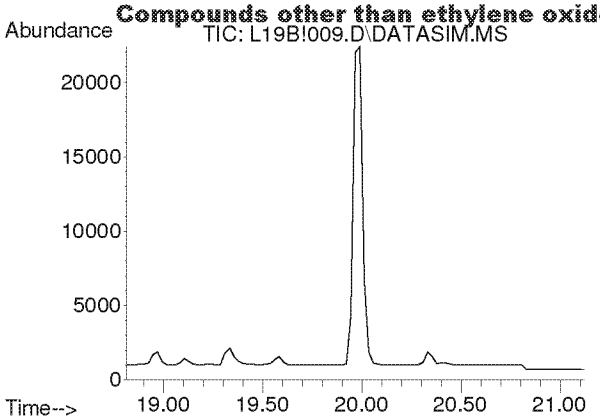
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

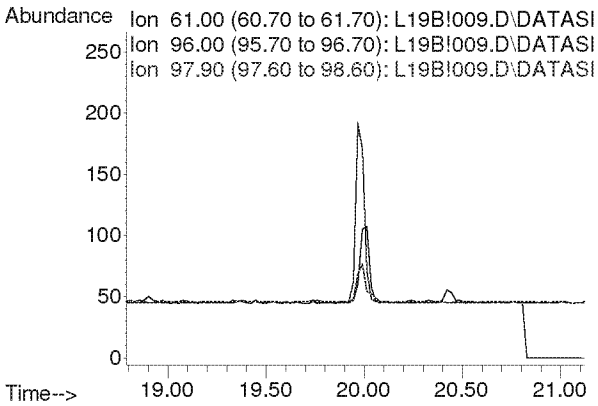


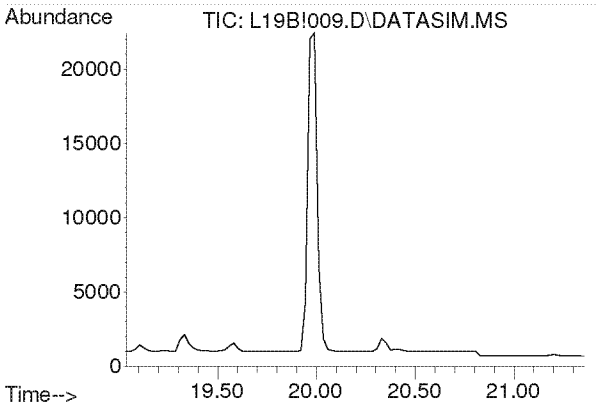
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



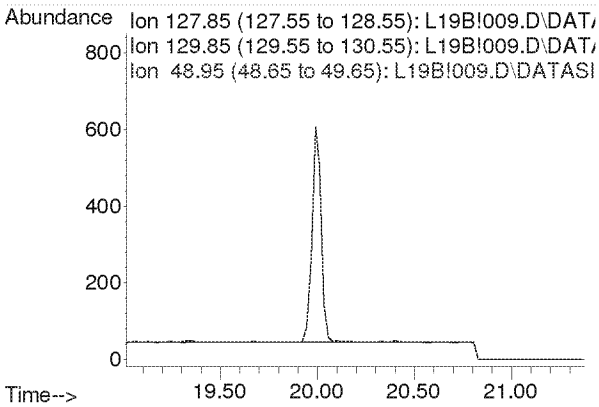


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

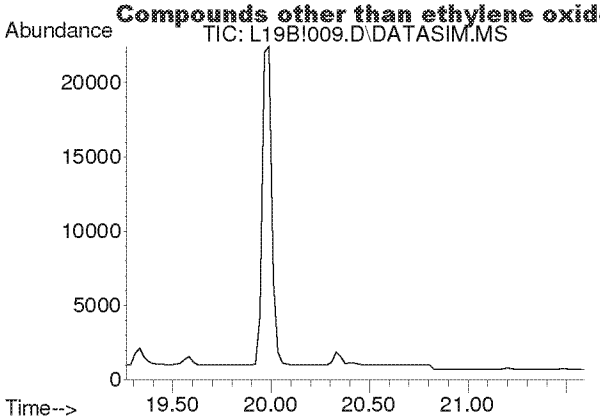
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

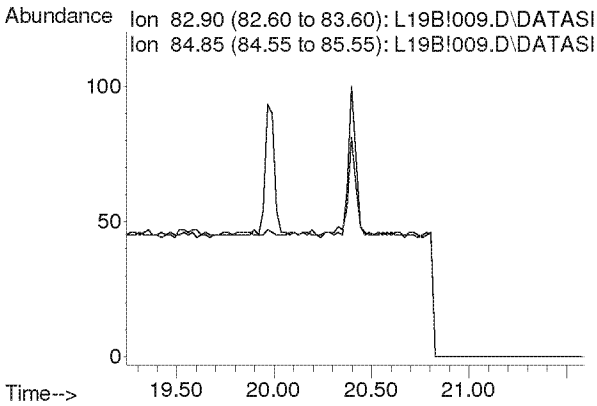


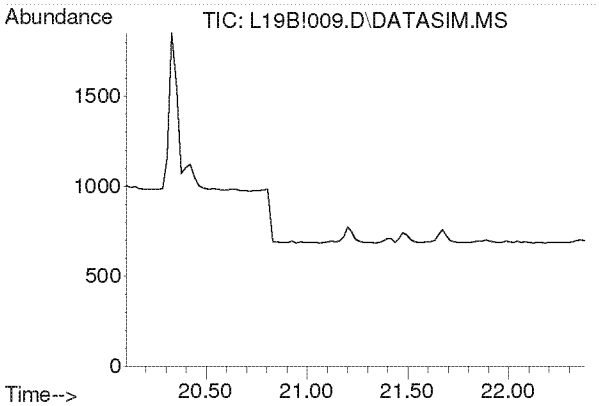
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



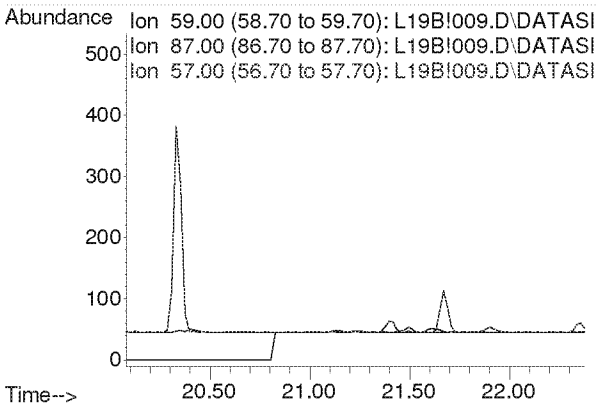


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

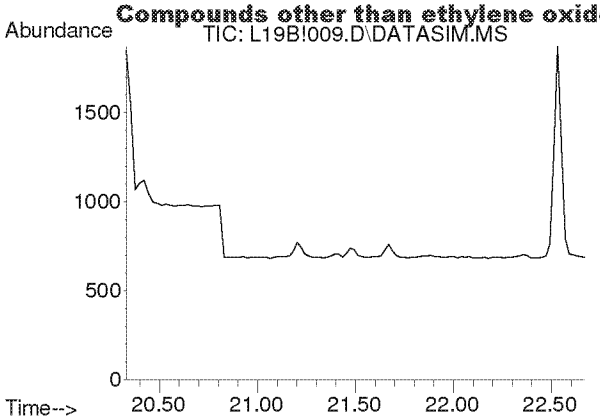
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

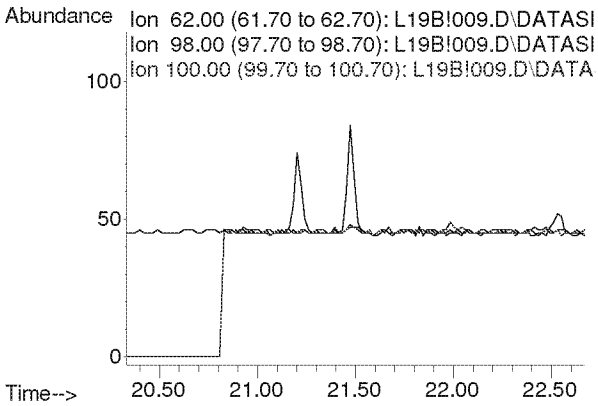


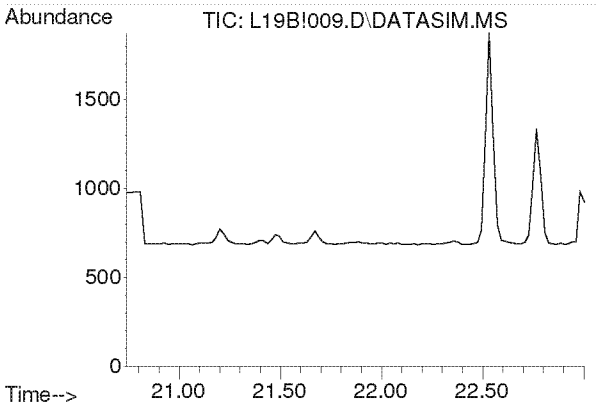
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



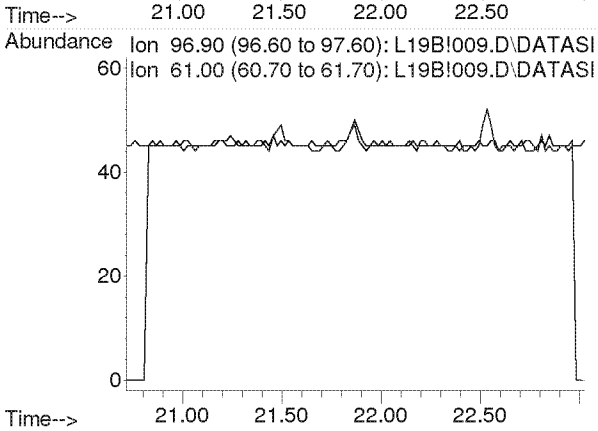


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

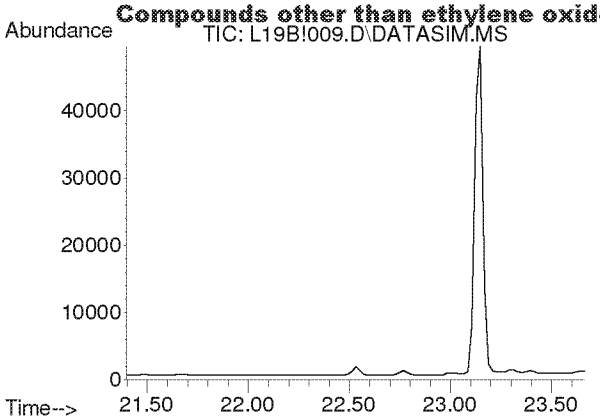
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

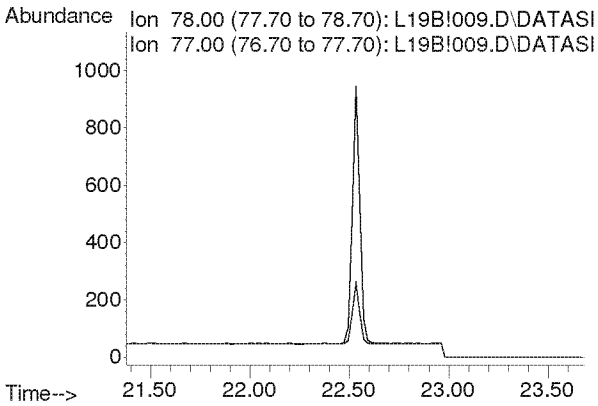


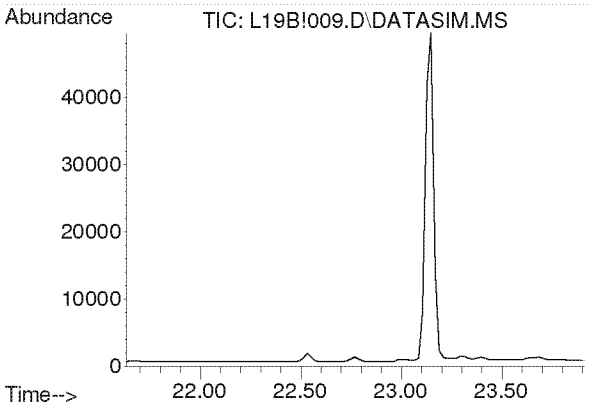
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



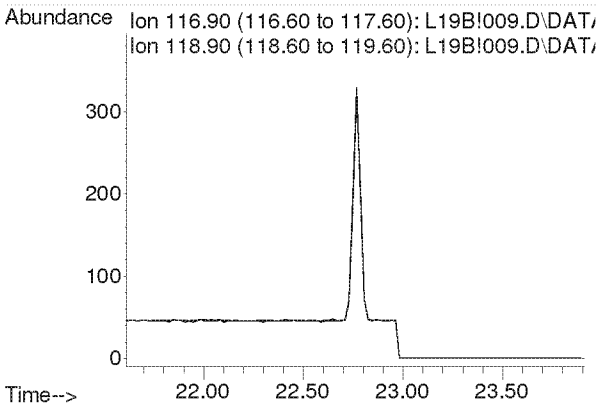


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

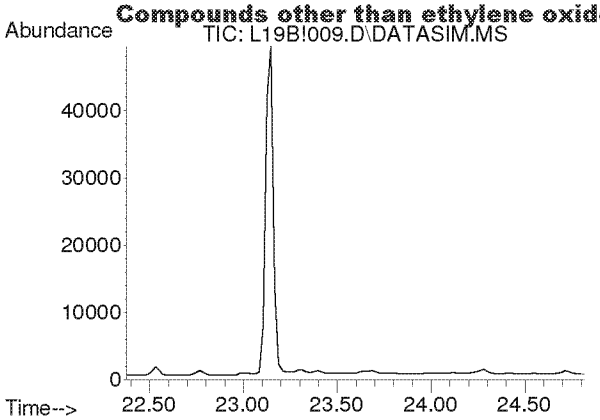
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

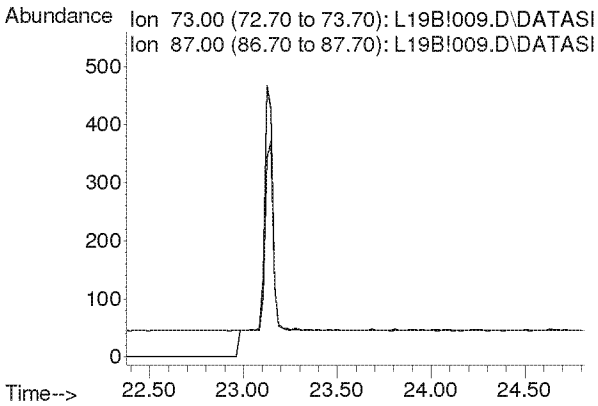


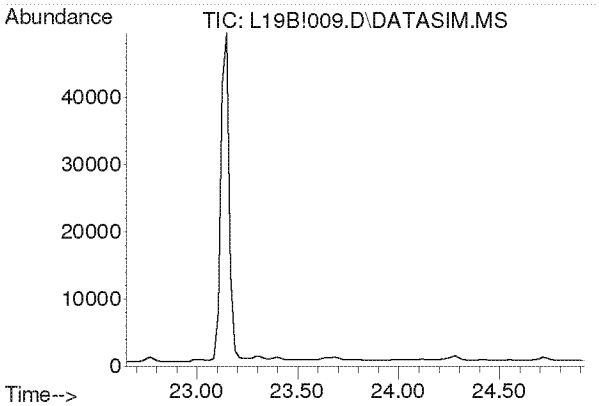
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



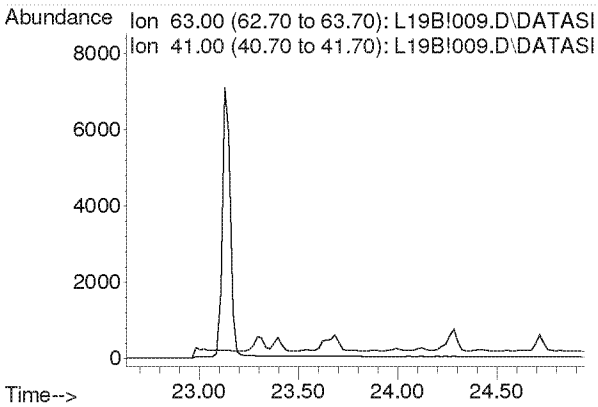


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

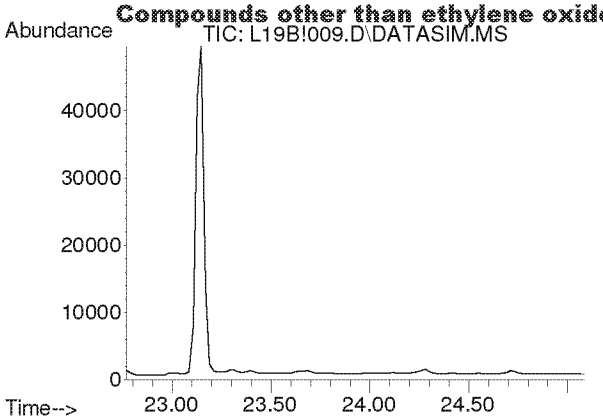
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

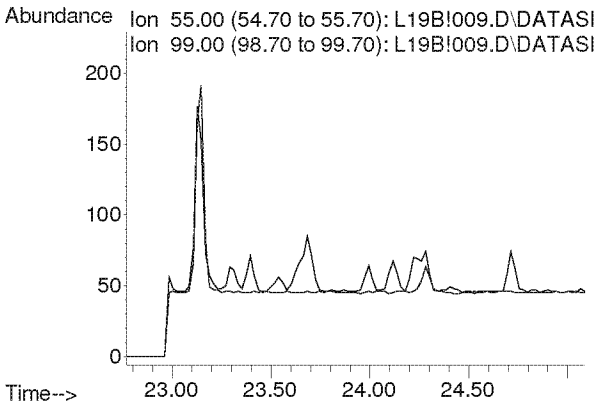


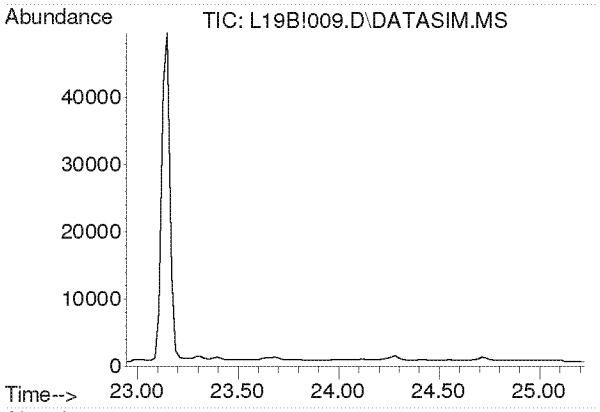
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



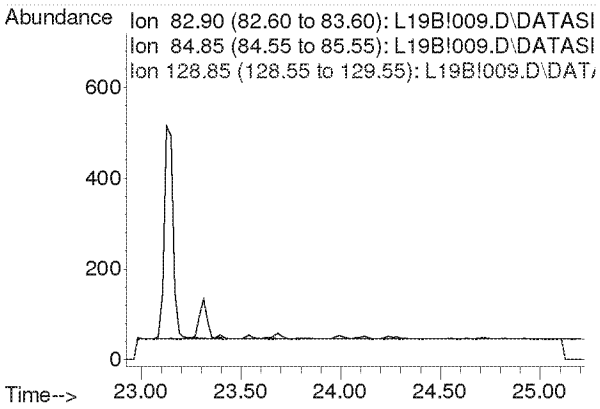


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

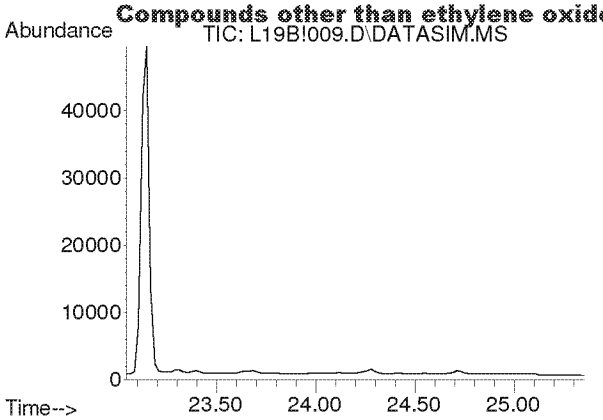
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

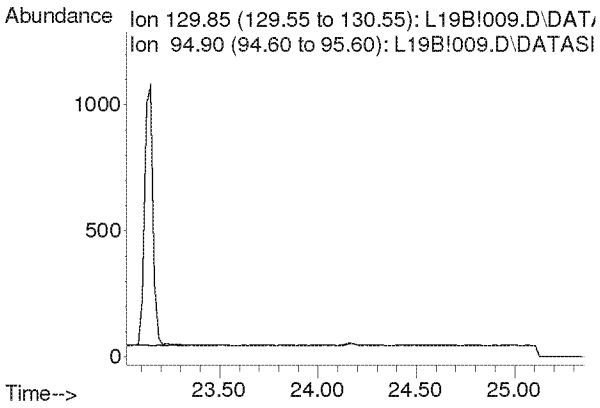


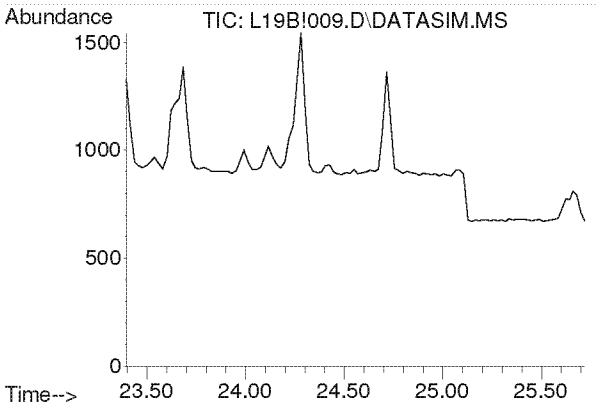
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



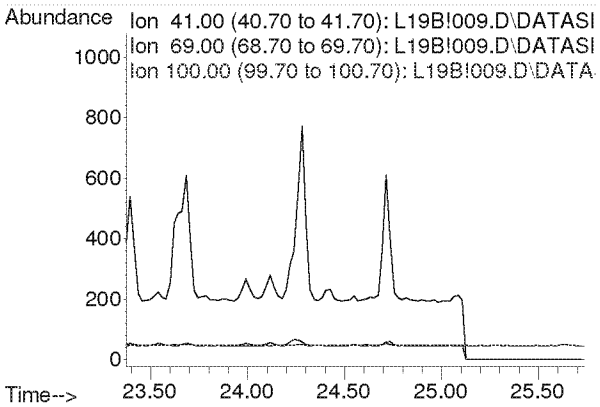


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

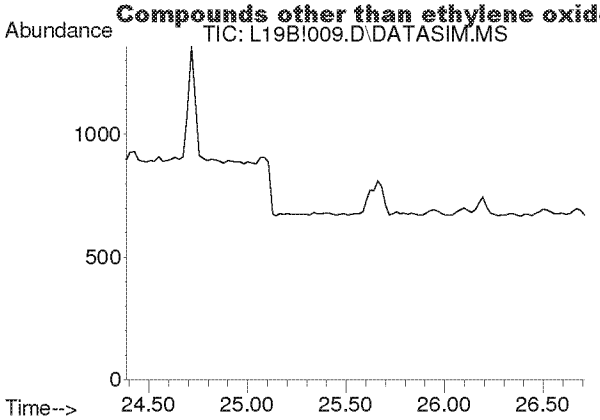
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

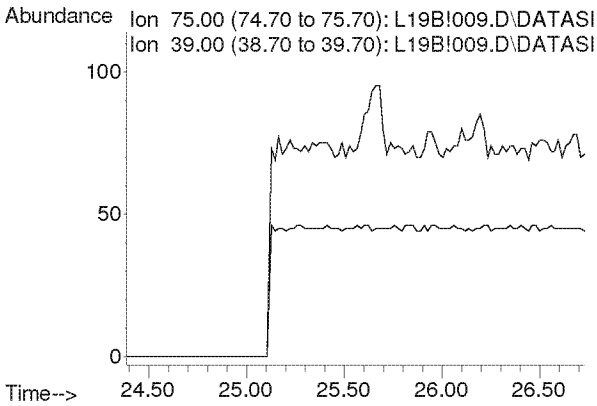


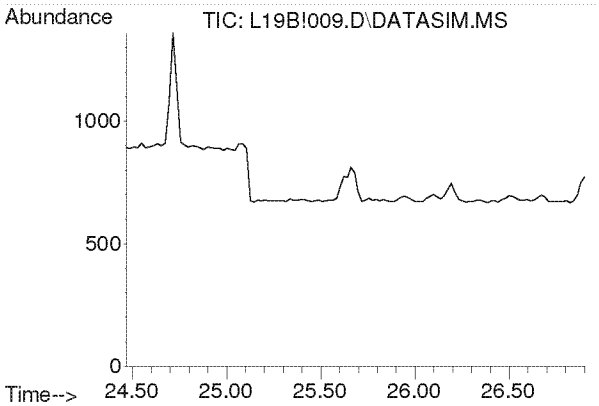
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



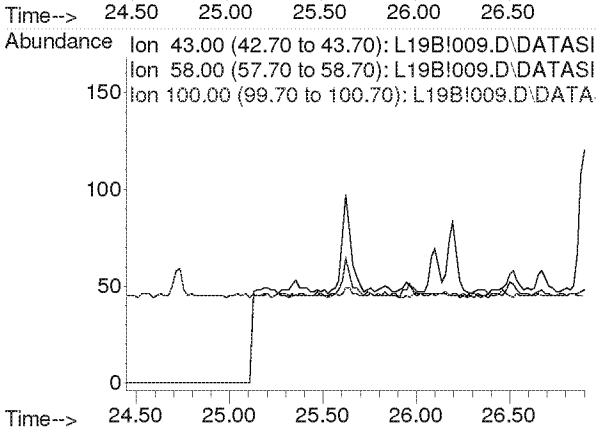


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

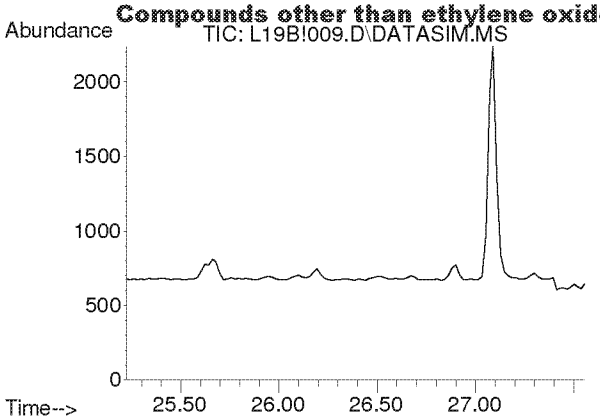
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

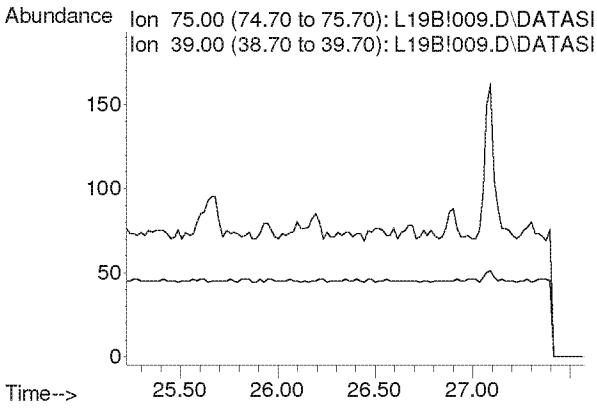


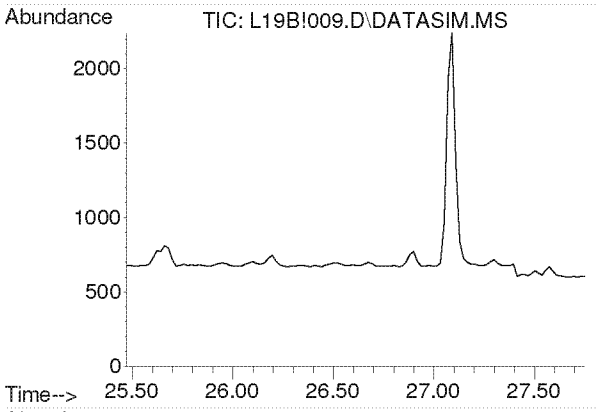
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



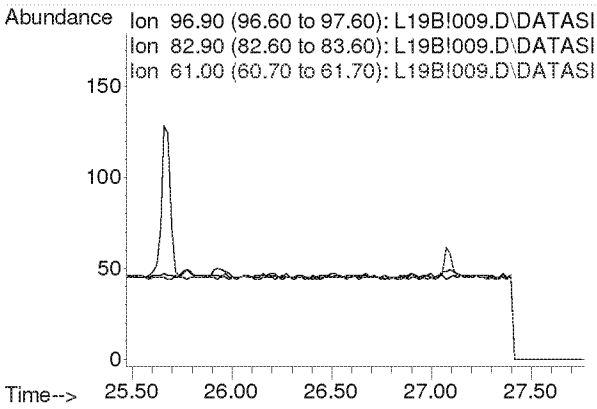


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

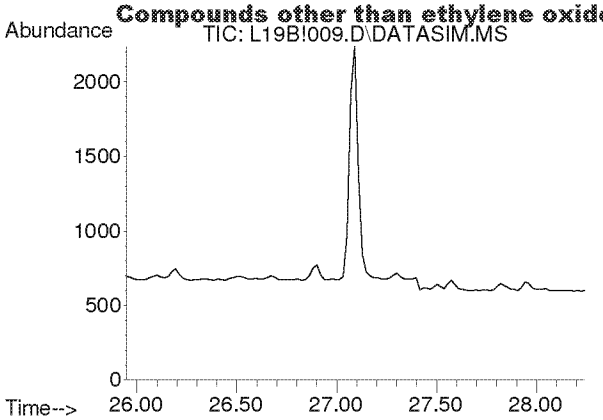
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

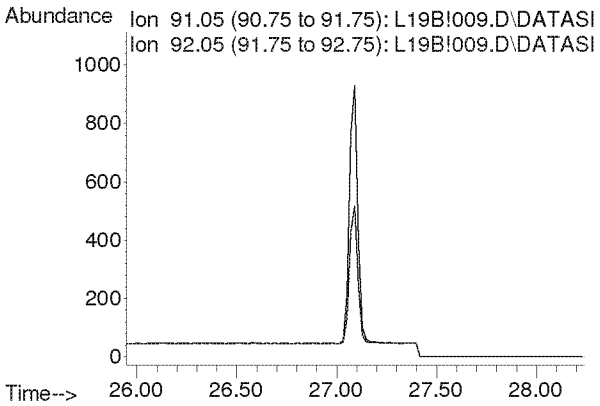


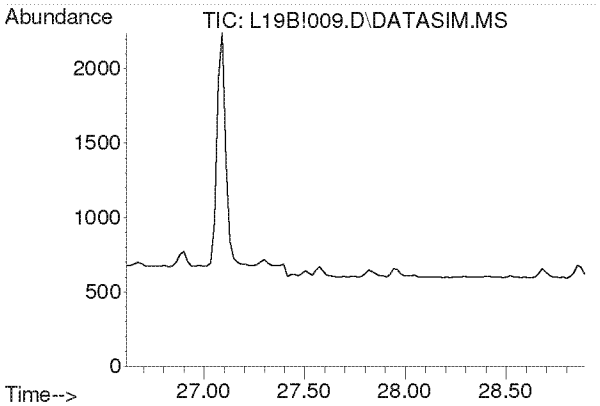
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



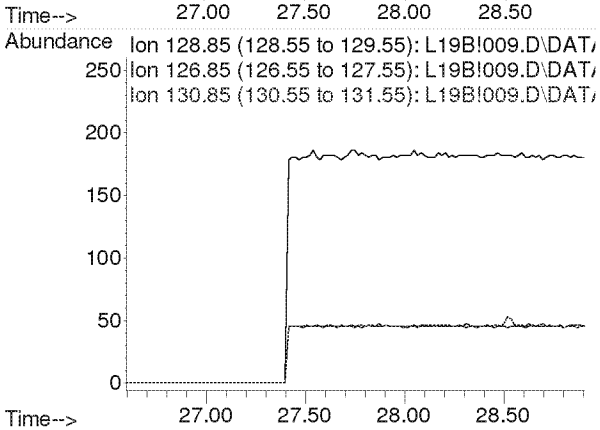


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

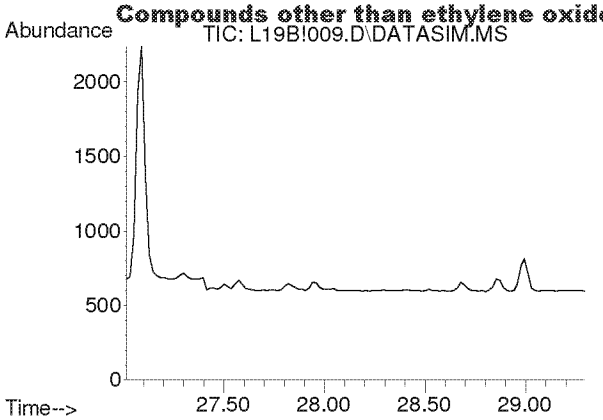
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

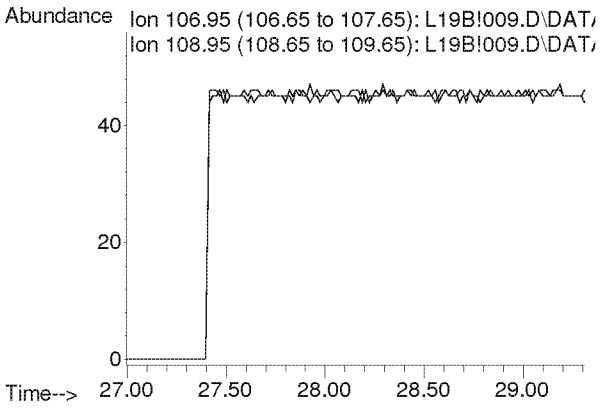


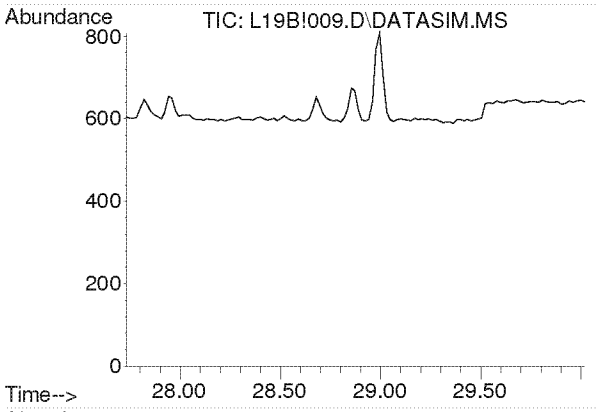
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



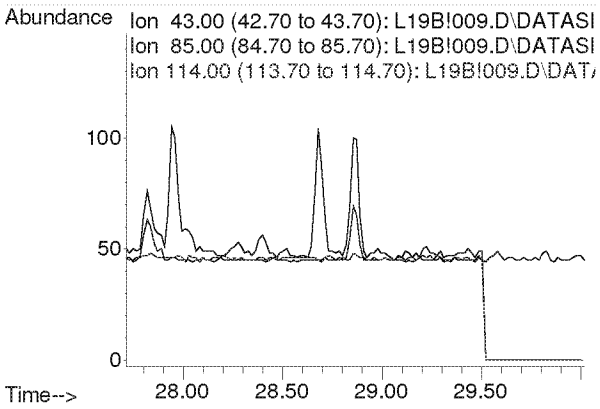


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

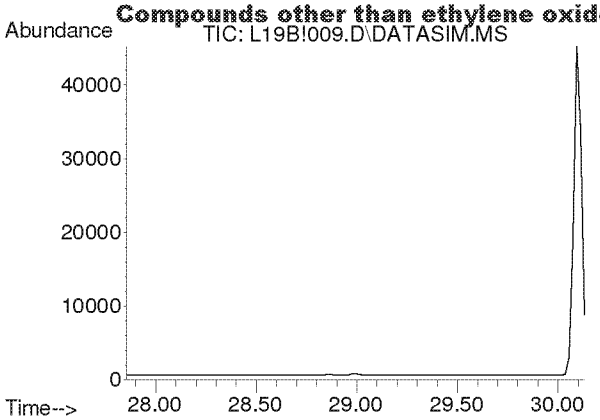
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

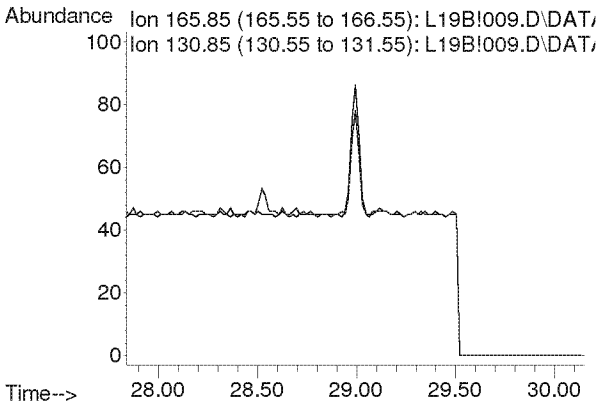


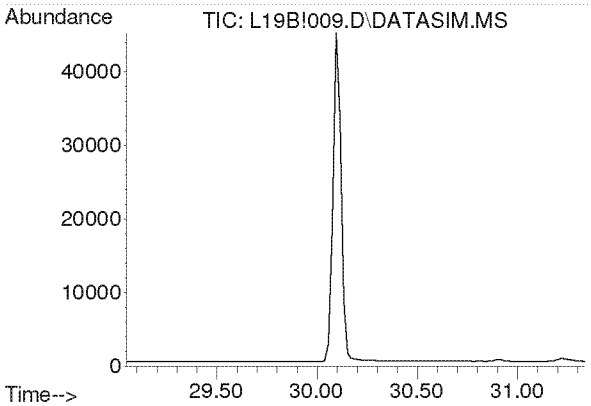
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



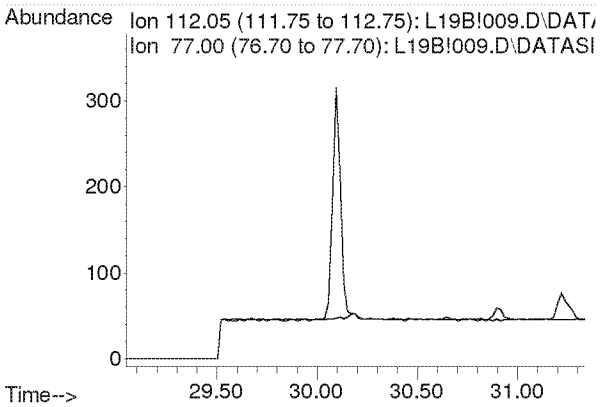


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

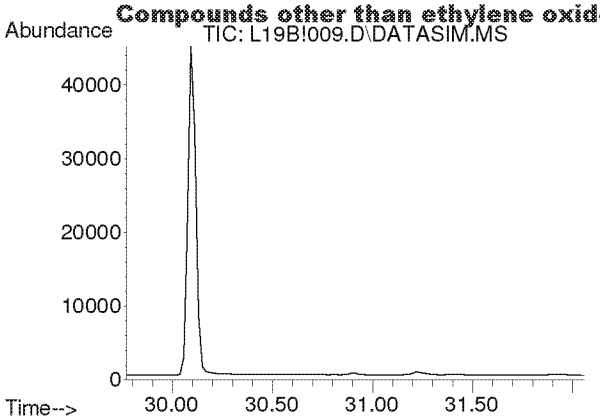
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

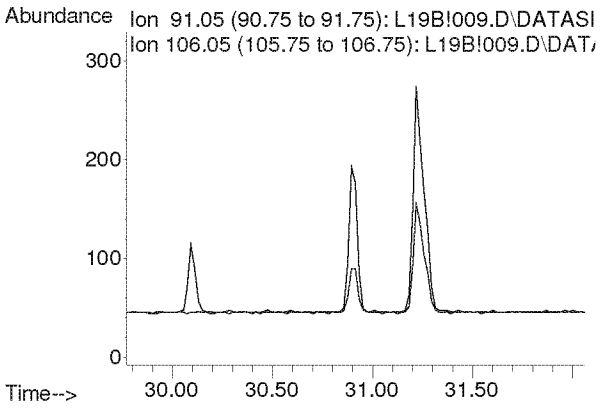


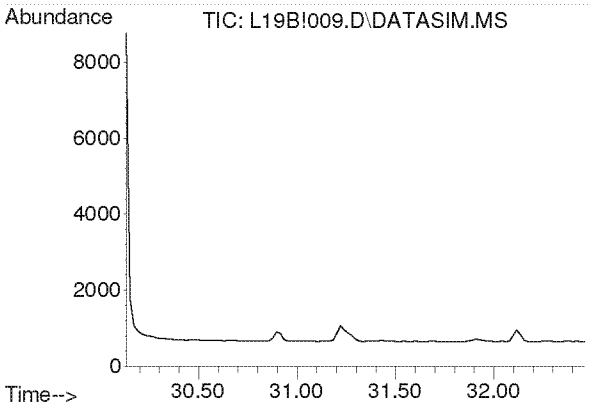
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



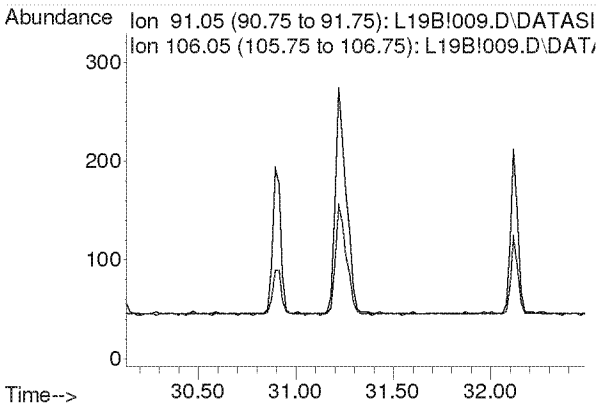


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

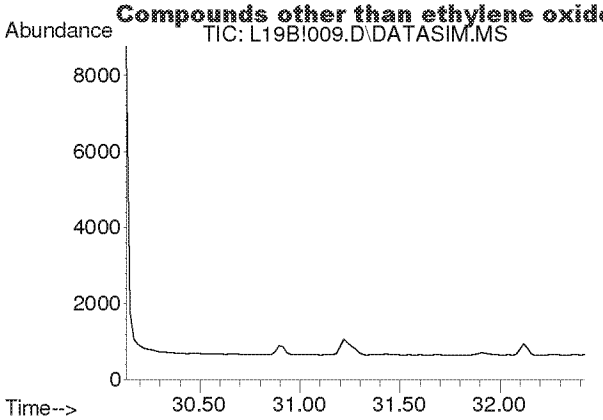
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

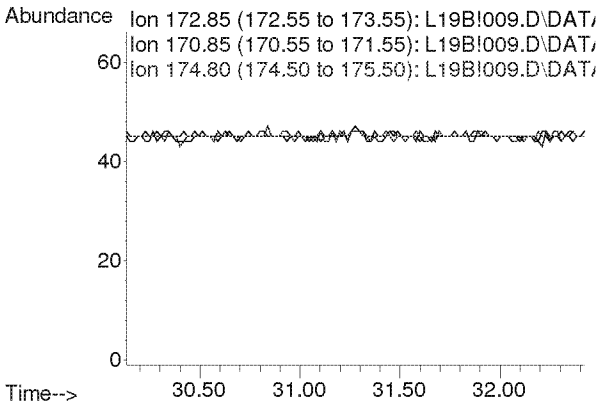


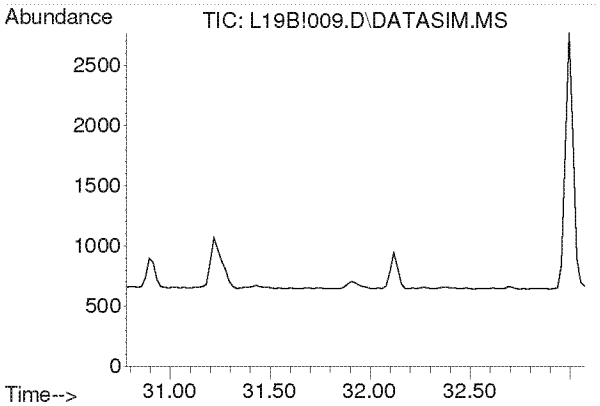
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



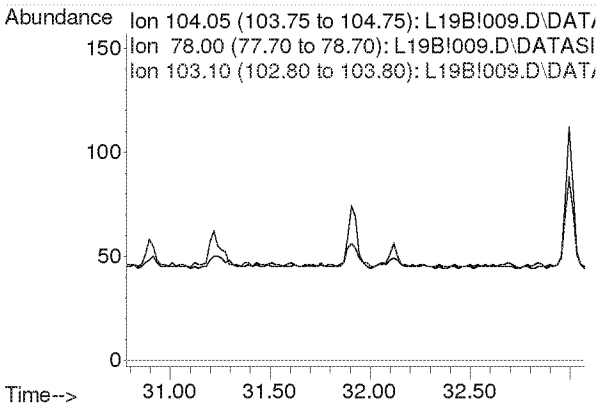


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

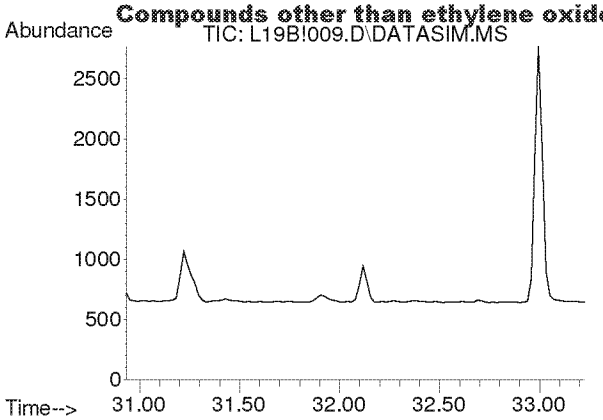
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

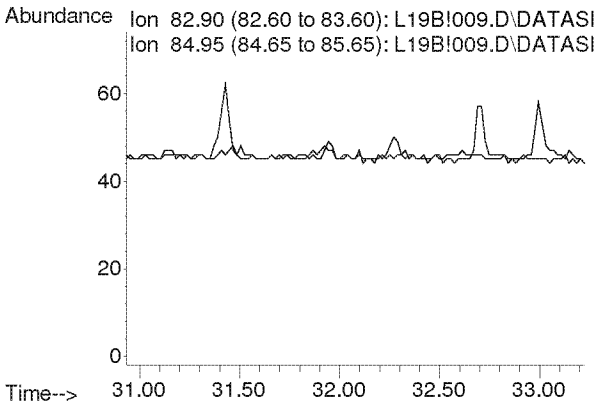


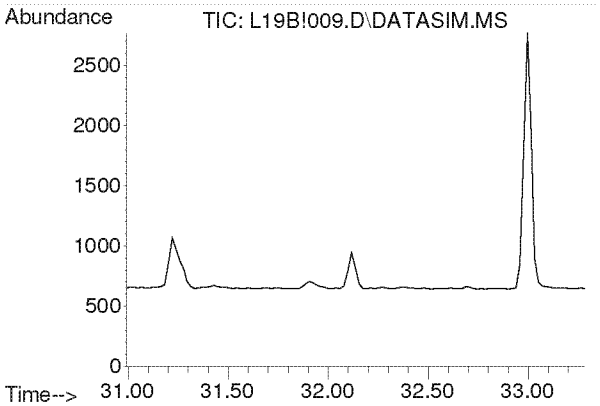
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



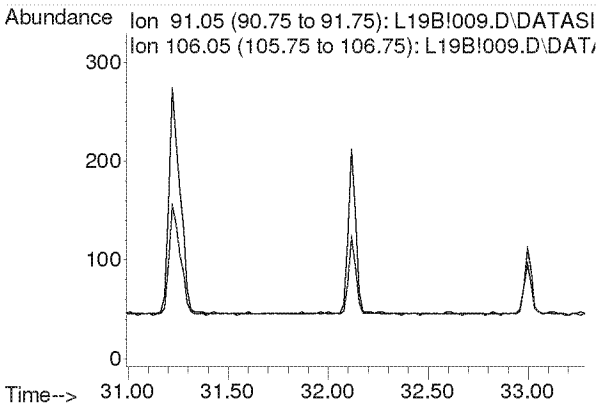


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

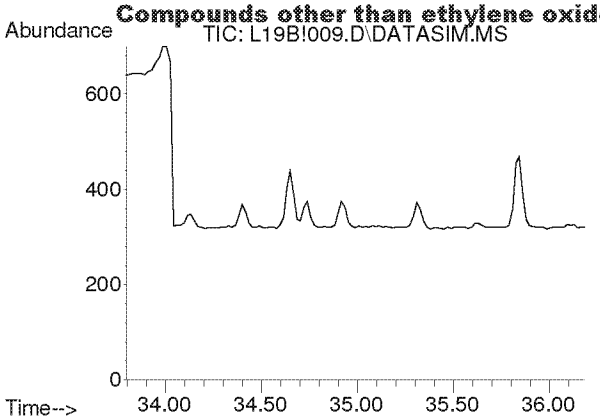
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

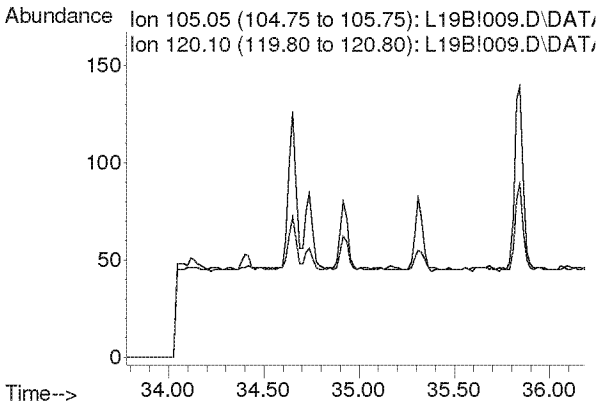


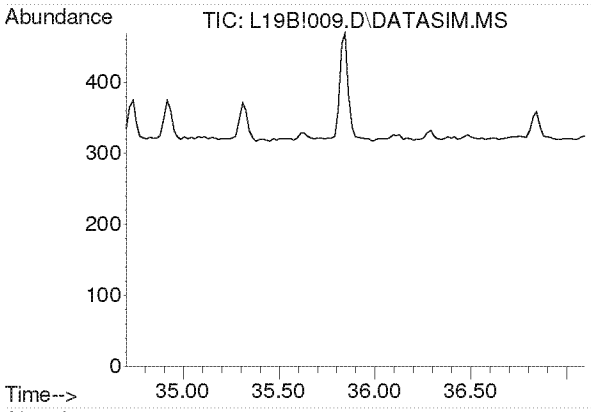
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



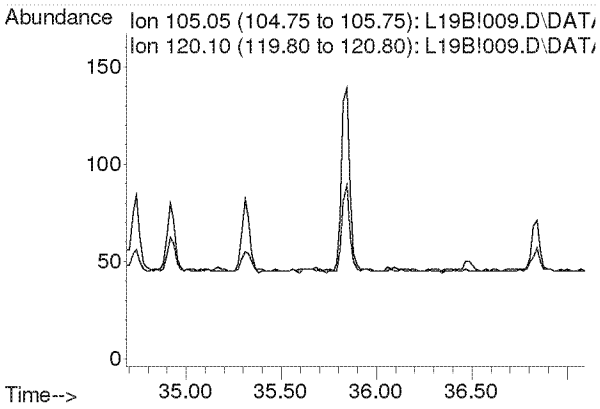


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

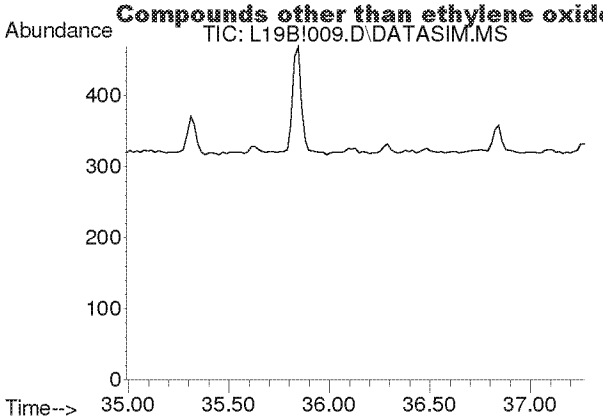
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

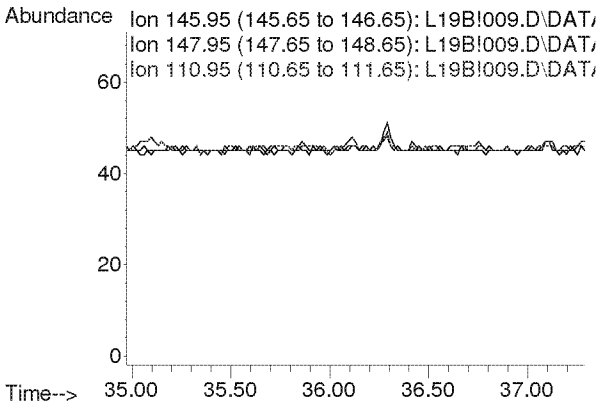


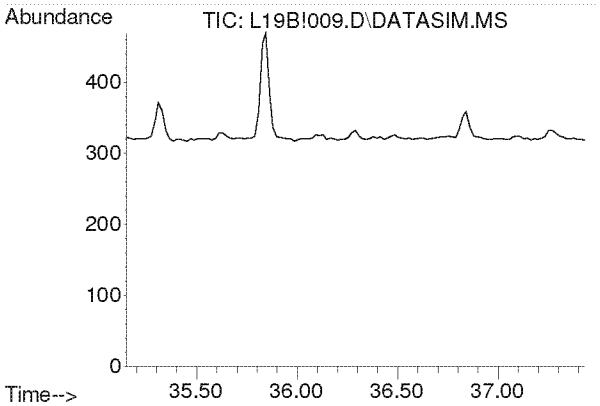
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



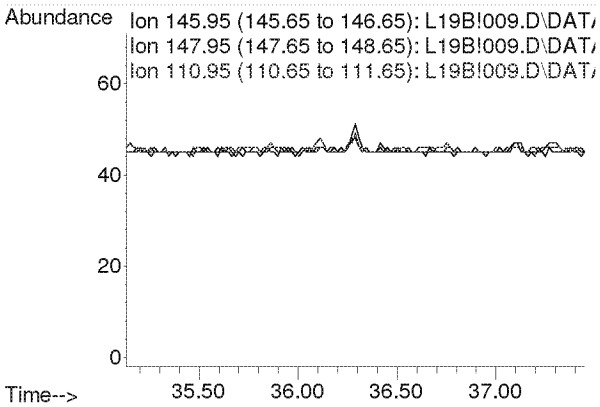


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

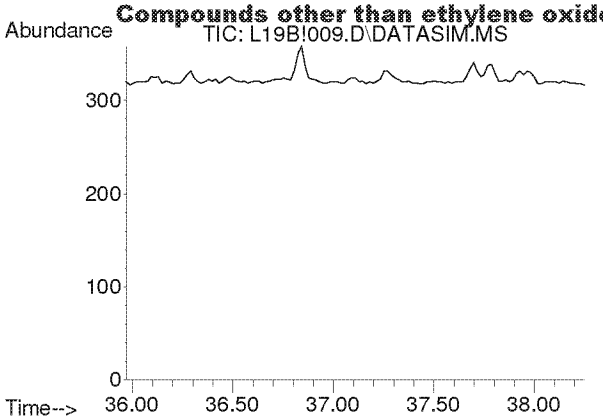
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7



Compounds other than ethylene oxide were not quantitated.

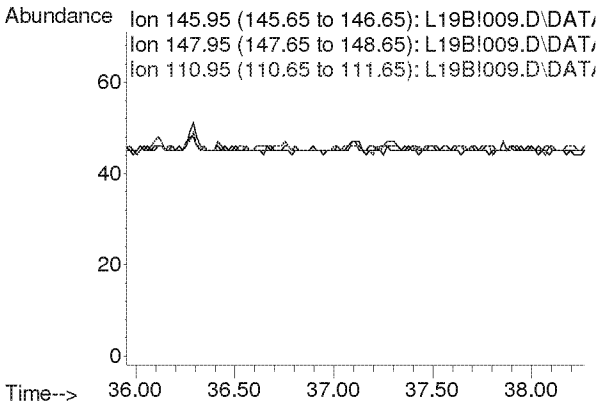


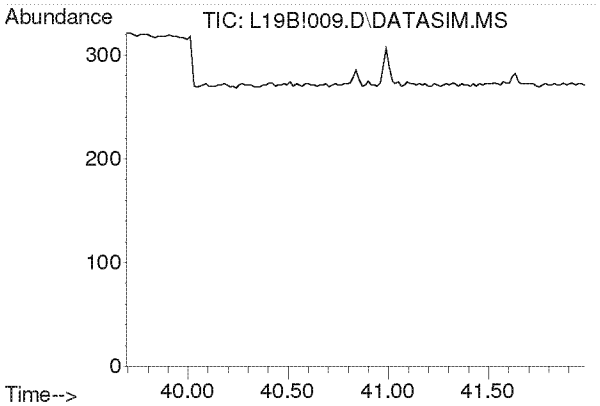
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



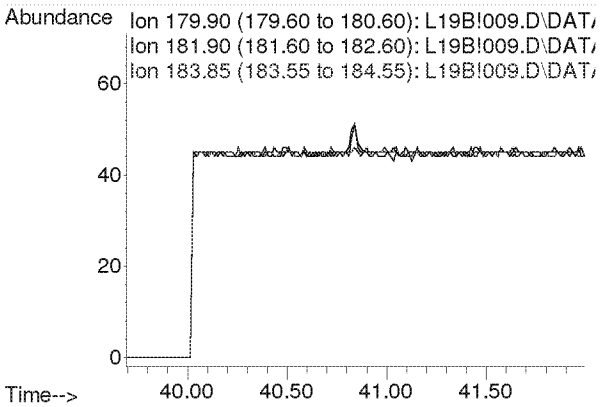


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

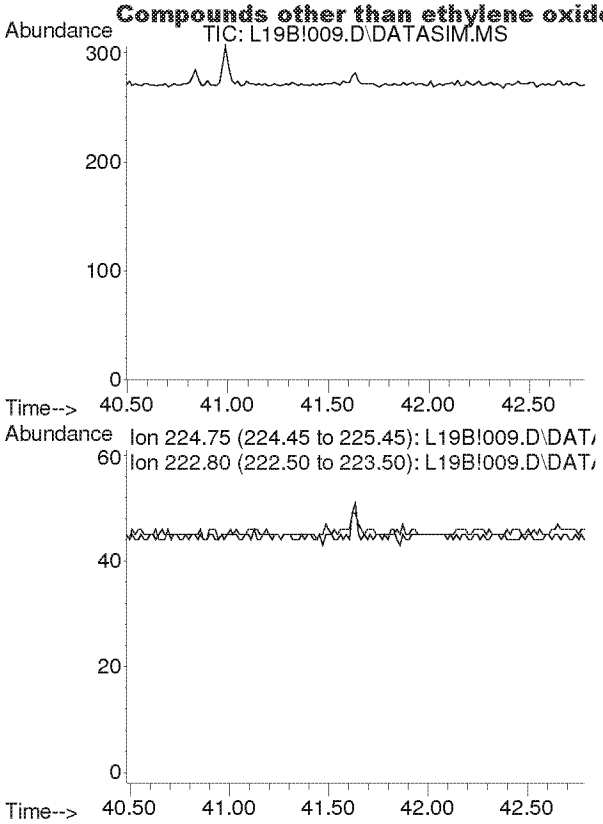
Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!009.D
Acq: 28 Feb 2019 8:39 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\L19B!\
Data File : L19B!010.D
Acq On : 28 Feb 2019 9:39 pm
Operator : MAH
Sample : 9022616-13
Misc : HINSDALE HS 2/24/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 05 07:38:52 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.970	66	43052	4.7700 ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.151	114	105940	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	76350	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	12.455	29	385m	0.1564 ppbv	
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D.	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D.	
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\L19B!\
Data File : L19B!010.D
Acq On : 28 Feb 2019 9:39 pm
Operator : MAH
Sample : 9022616-13
Misc : HINSDALE HS 2/24/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 05 07:38:52 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

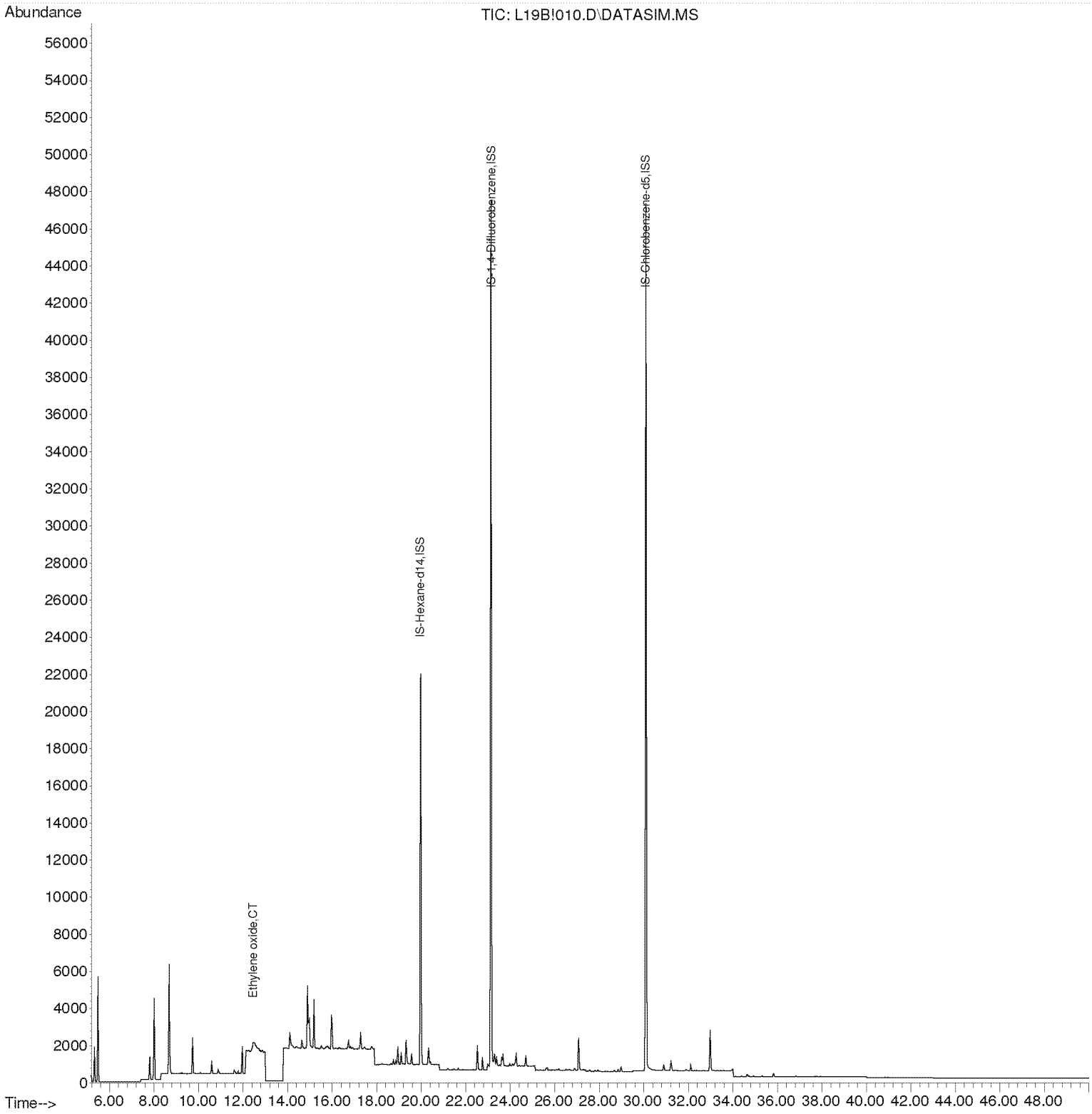
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene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

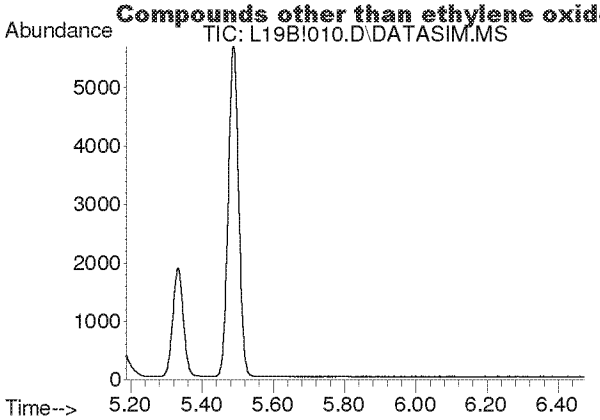
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!010.D
Acq On : 28 Feb 2019 9:39 pm
Operator : MAH
Sample : 9022616-13
Misc : HINSDALE HS 2/24/19
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 09:48:22 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



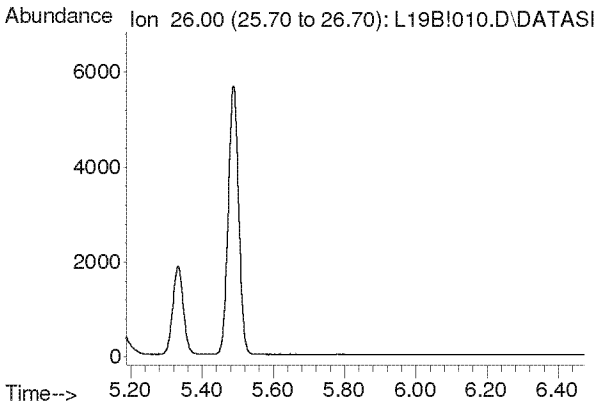
Compounds other than ethylene oxide were not quantitated.

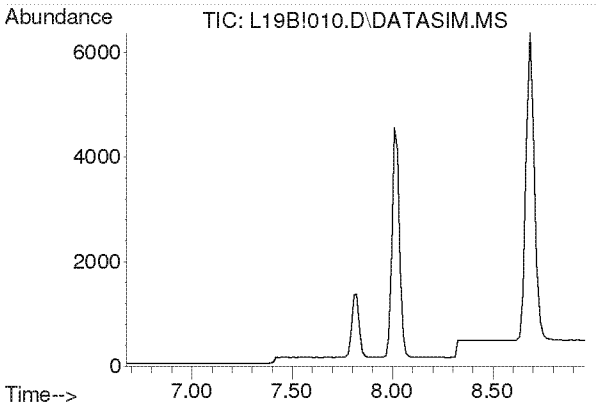


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 26



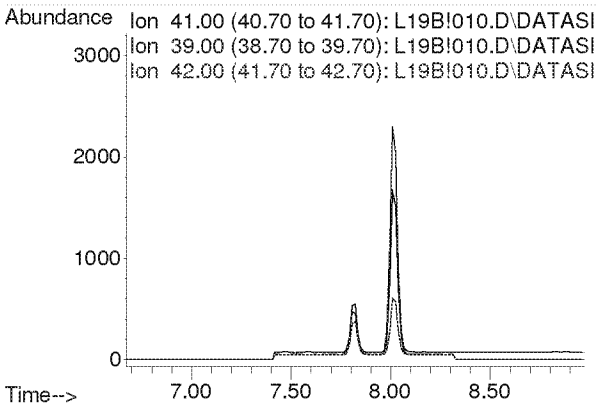


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

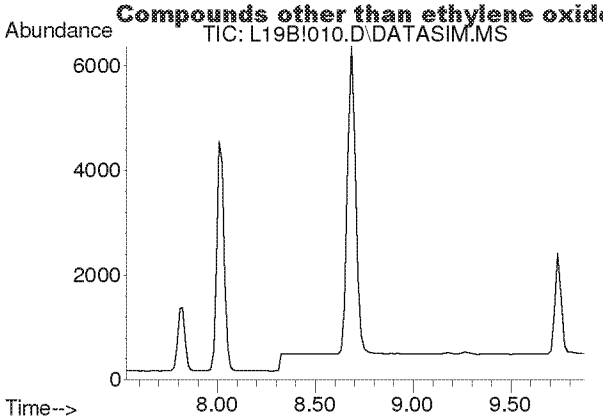
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

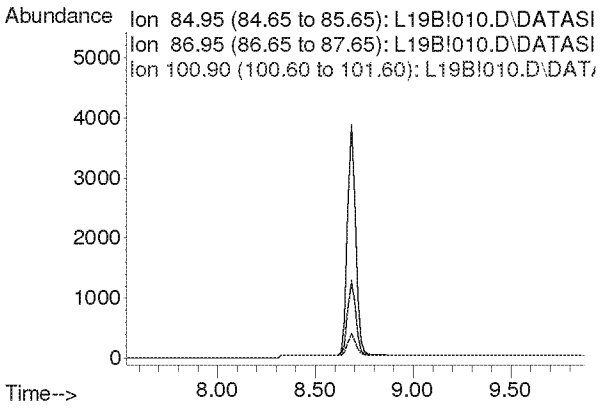


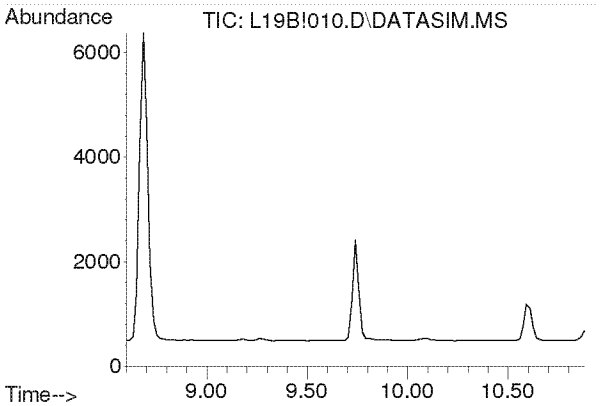
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



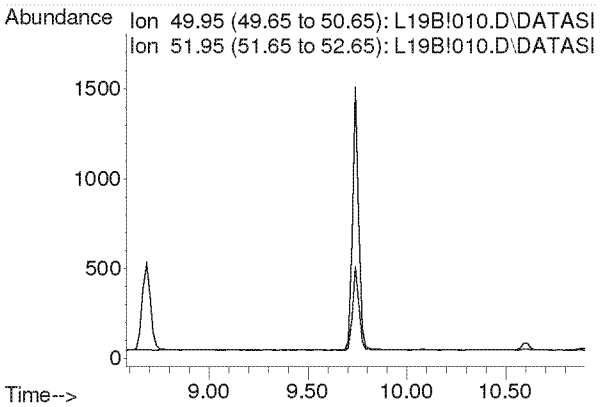


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

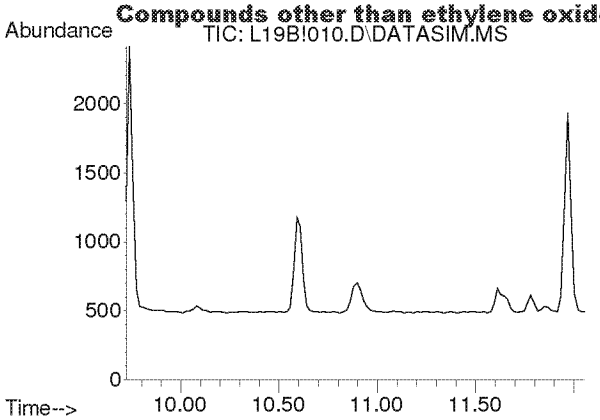
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

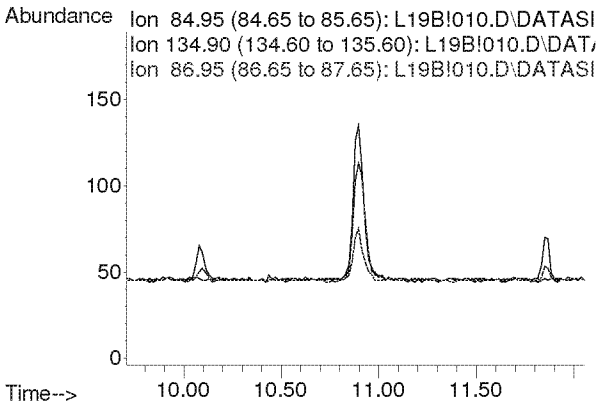


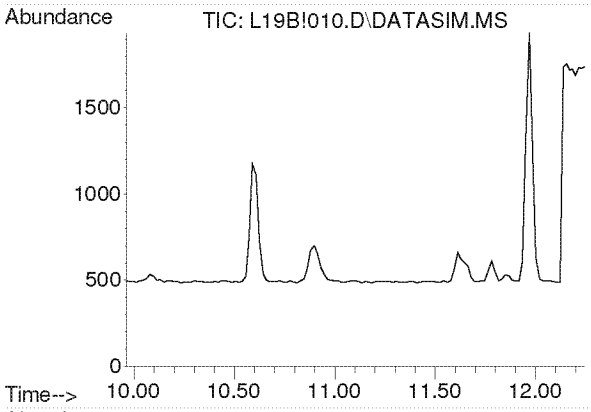
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



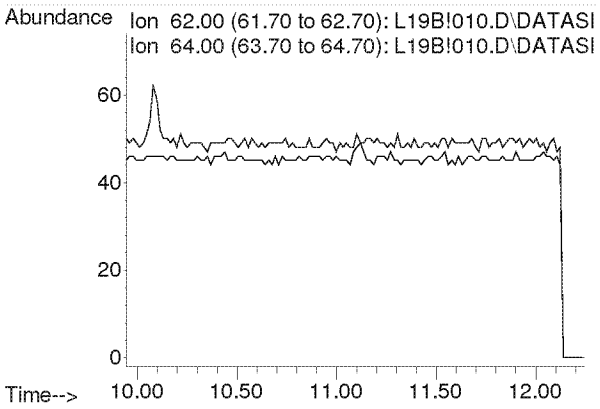


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

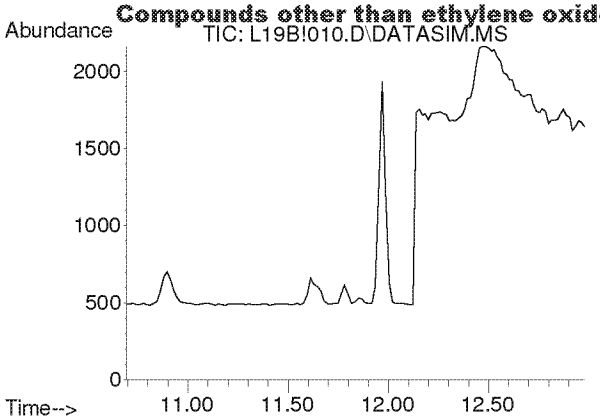
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

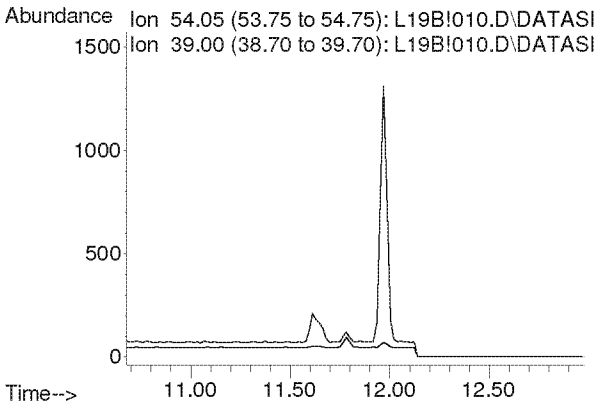


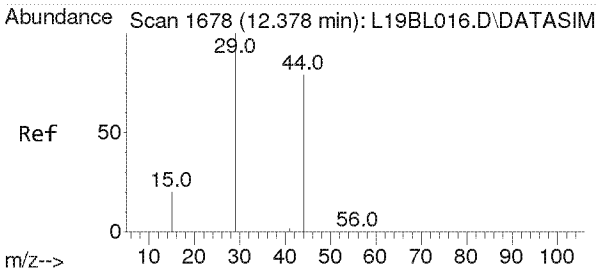
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

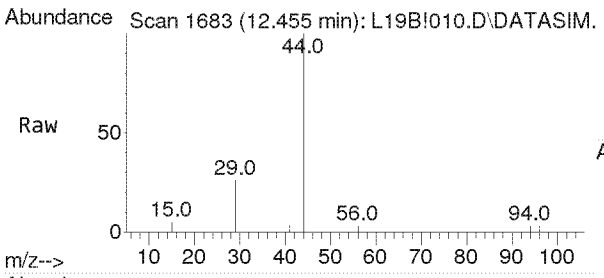


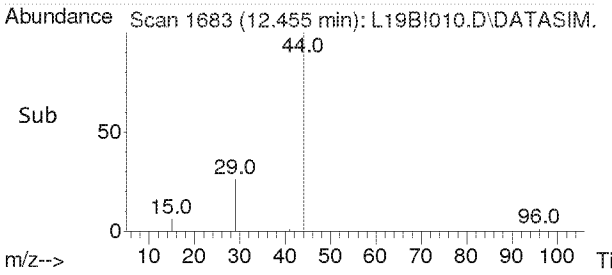


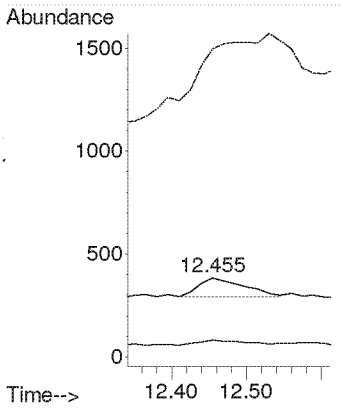
#9
Ethylene oxide
Concen: 0.156 ppbv m
RT: 12.455 min Scan# 1683
Delta R.T. 0.077 min
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 29 Resp: 385

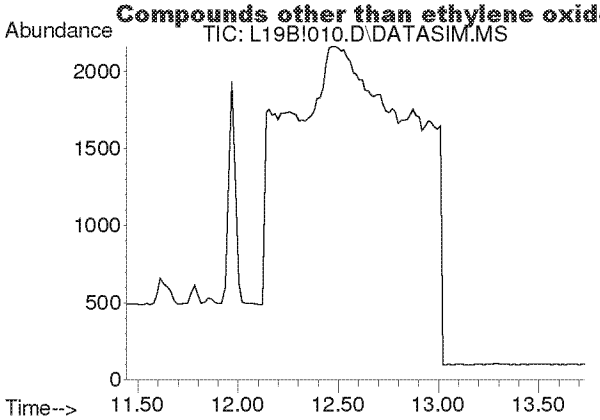
Ion	Ratio	Lower	Upper
29	100		
15	27.5	16.0	24.0#
44	0.0	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

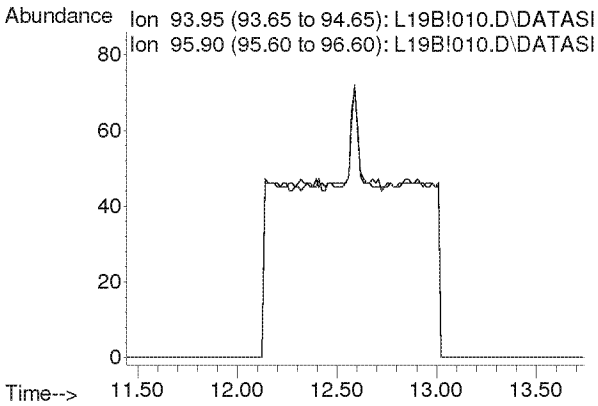


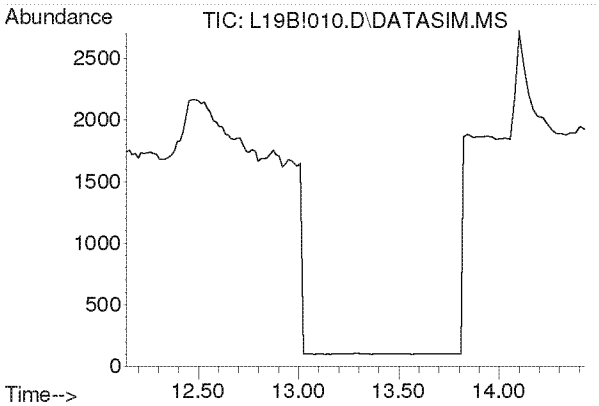
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



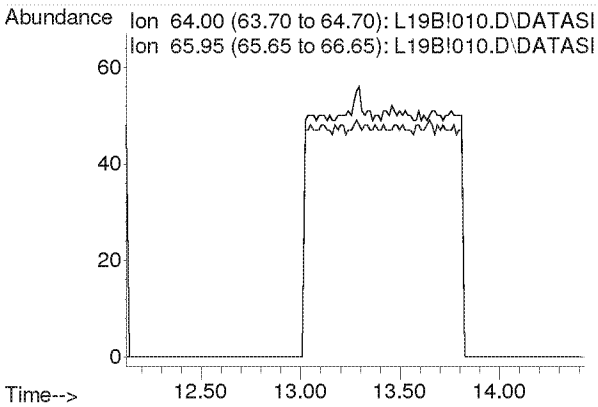


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

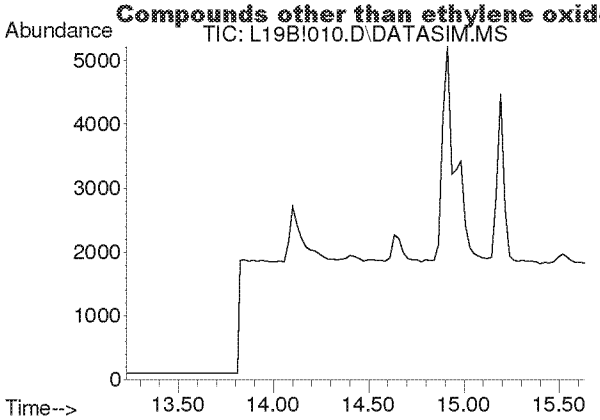
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

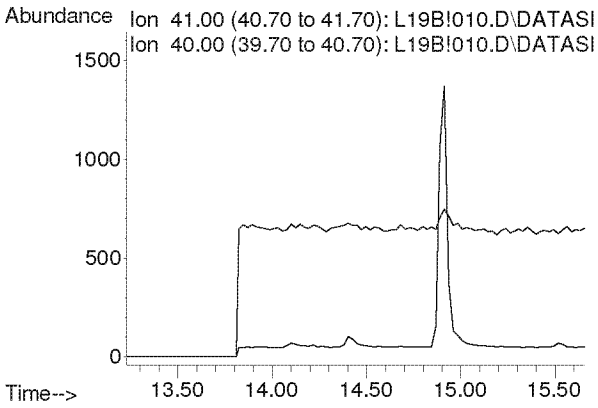


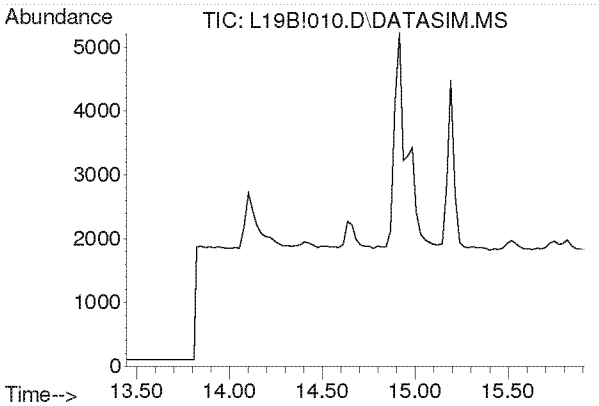
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



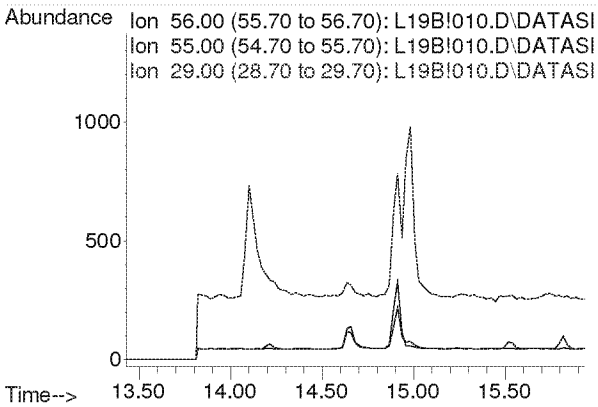


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

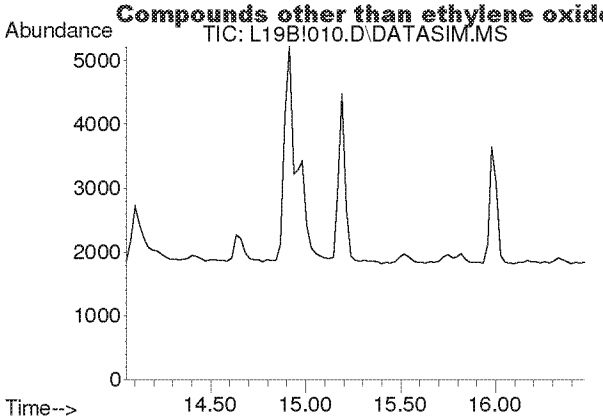
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

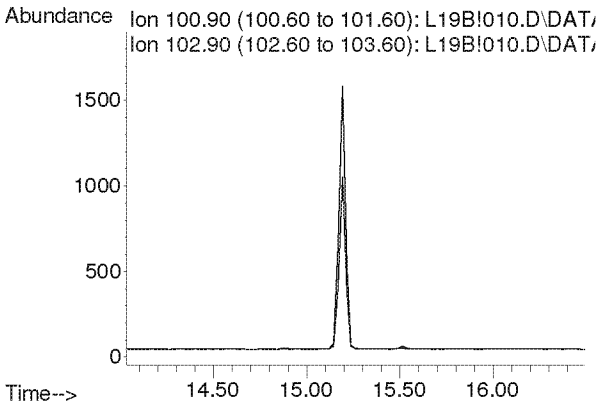


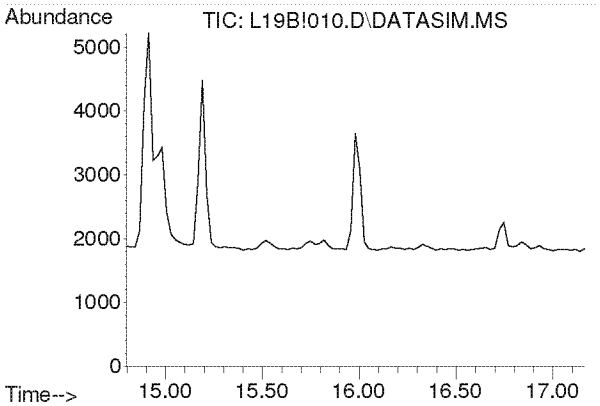
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



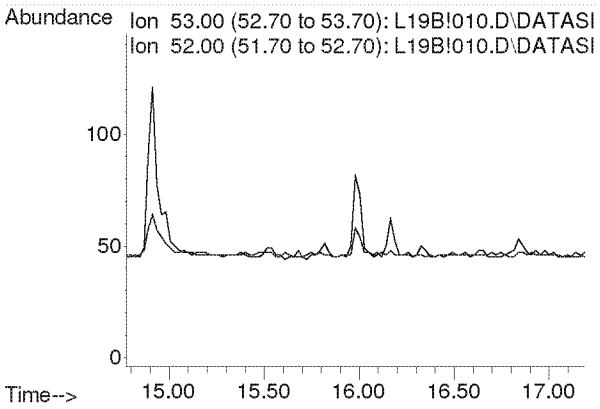


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

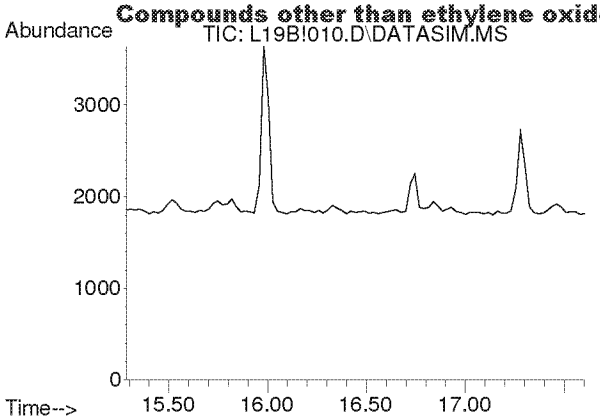
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

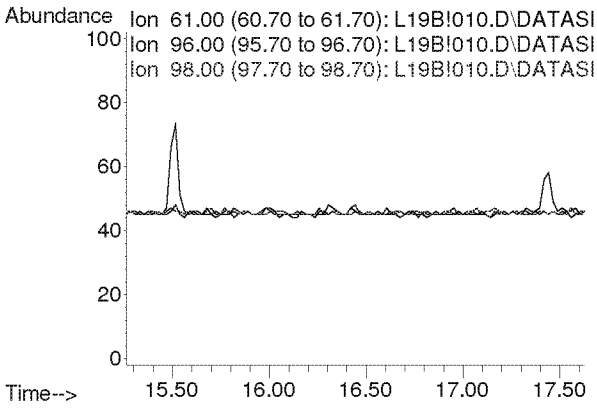


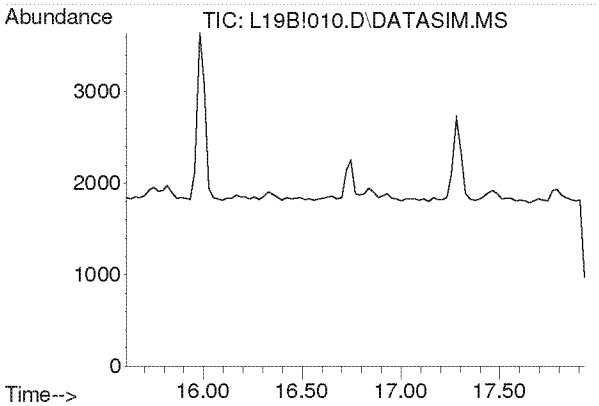
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



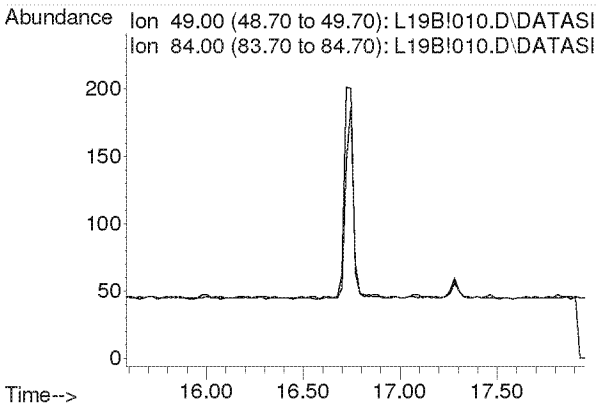


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

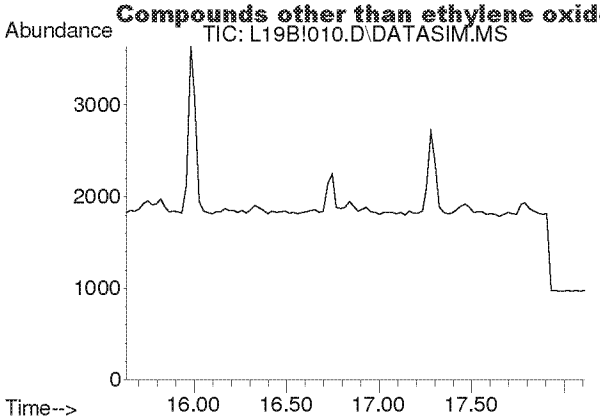
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

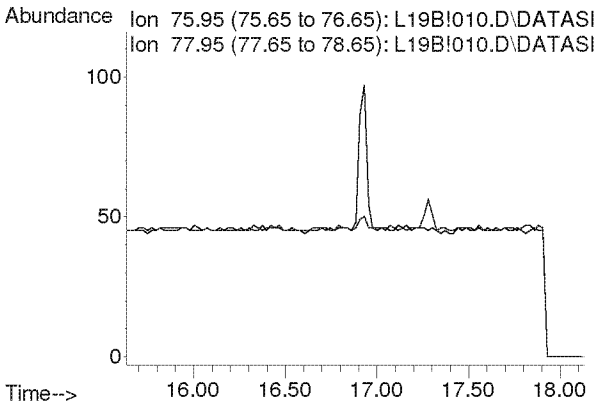


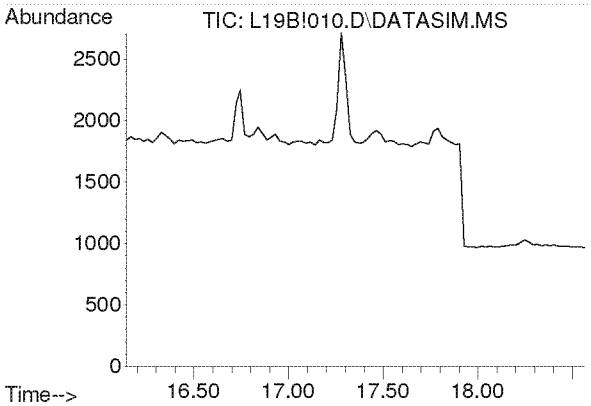
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



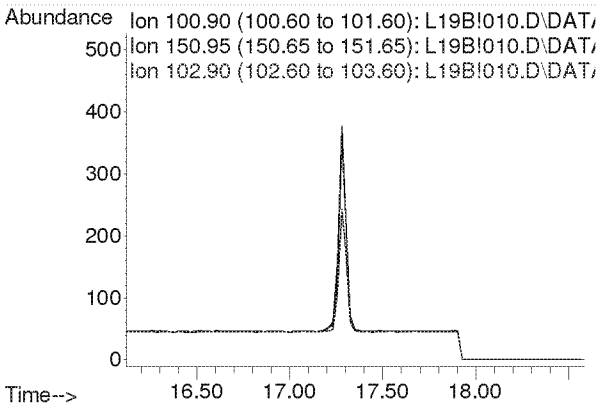


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

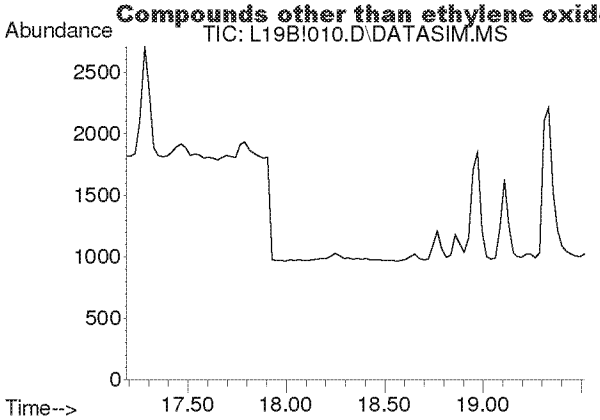
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

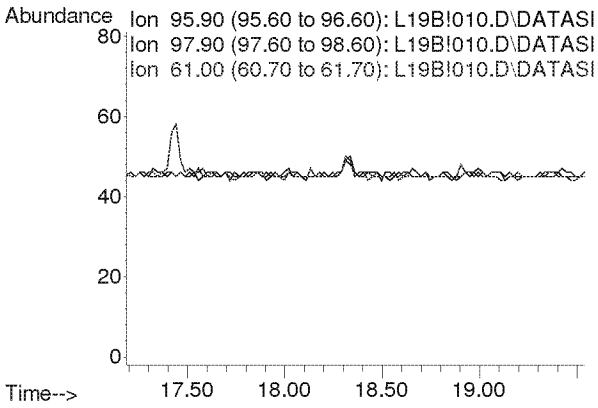


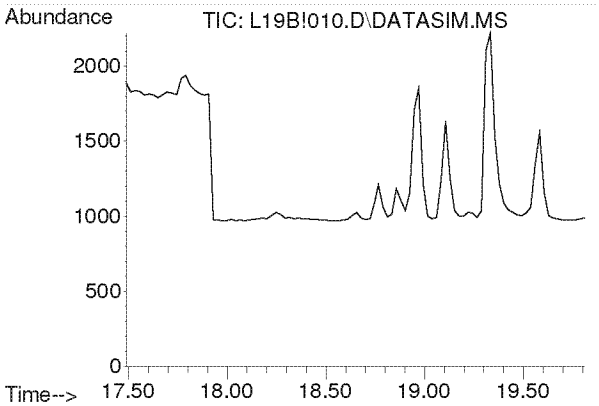
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



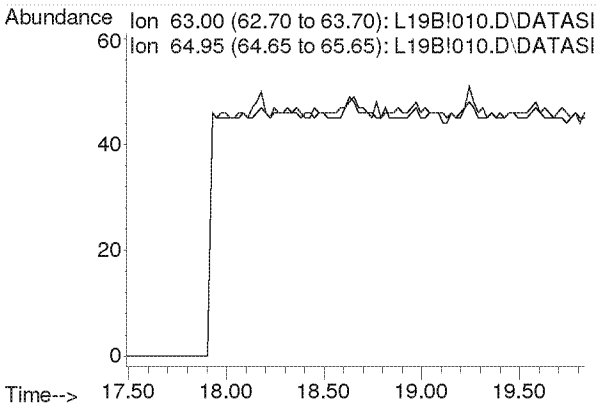


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

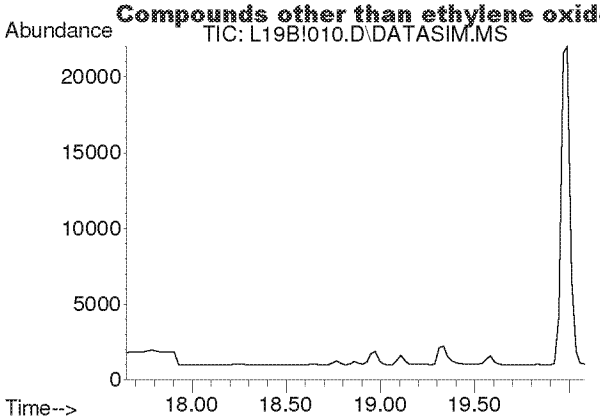
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

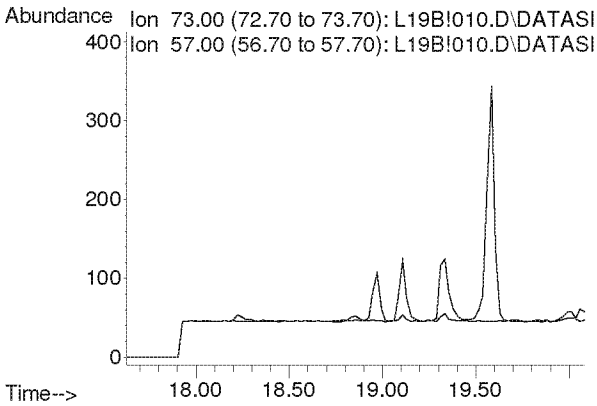


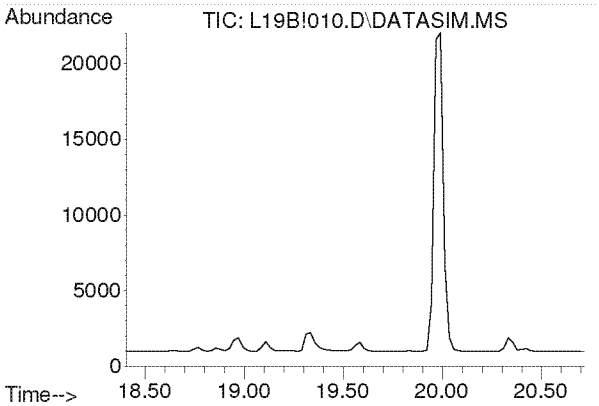
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



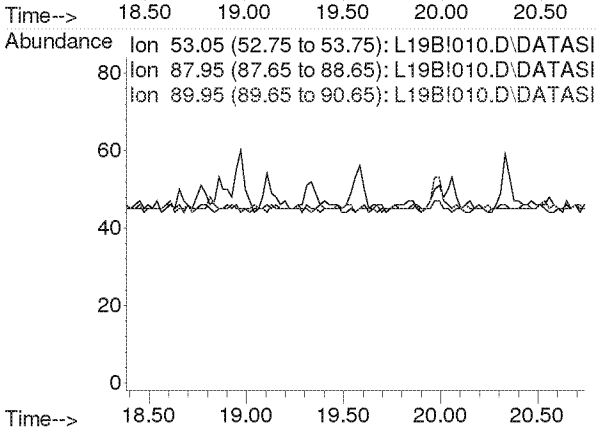


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

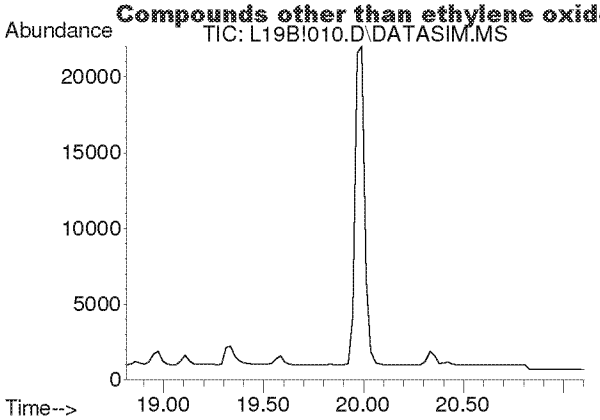
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

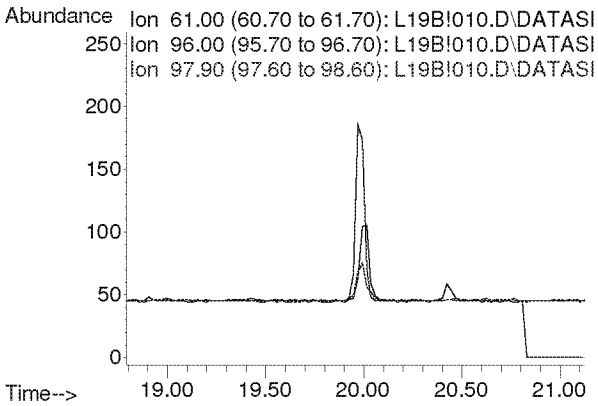


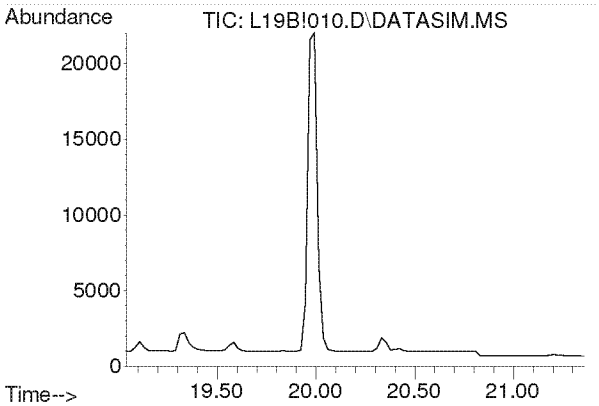
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



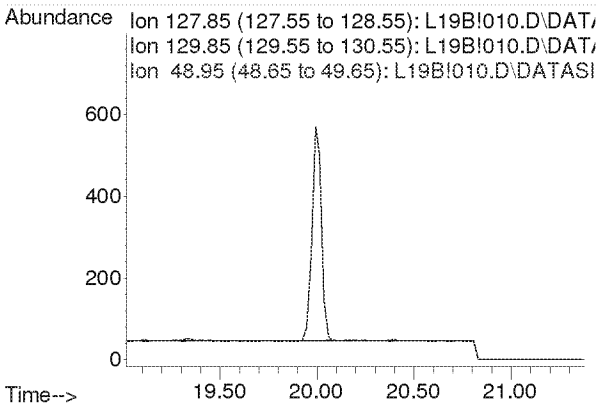


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

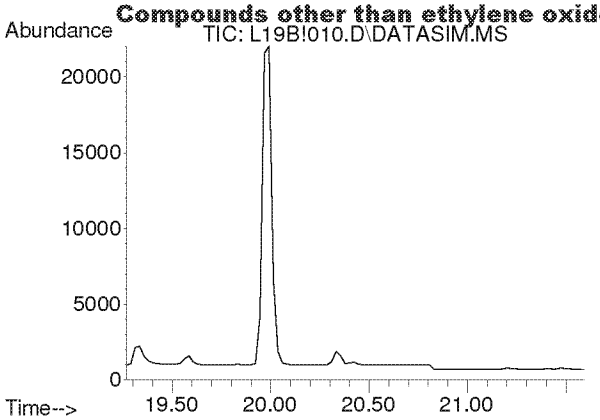
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

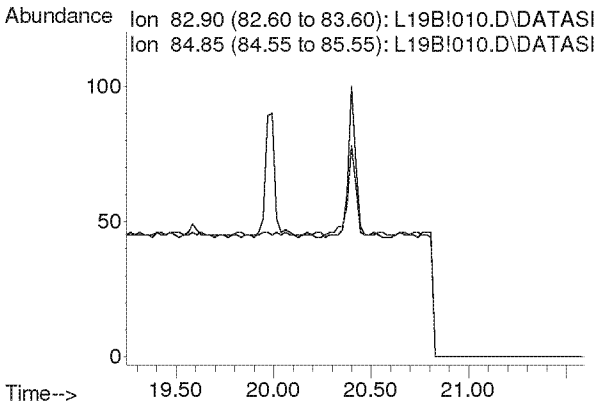


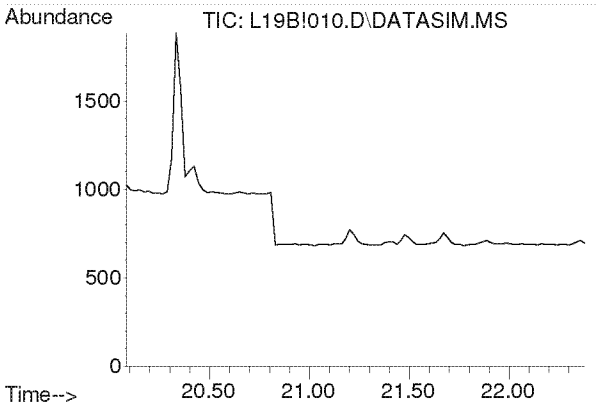
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



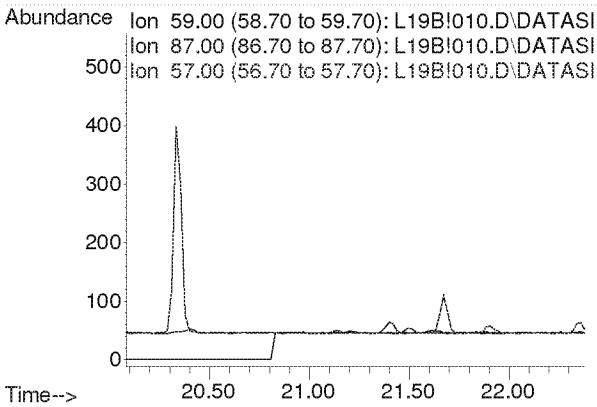


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

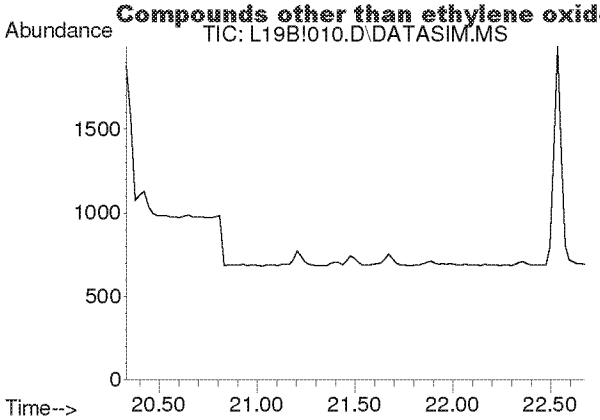
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

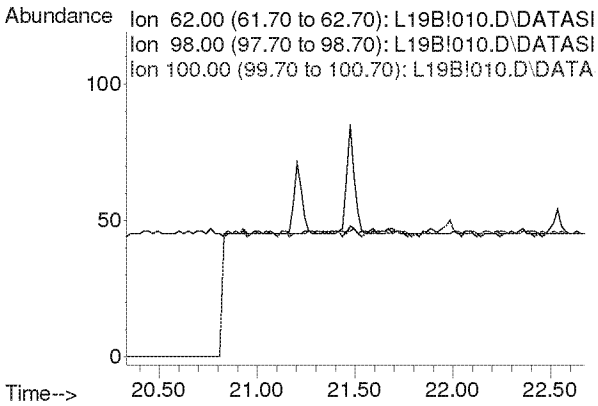


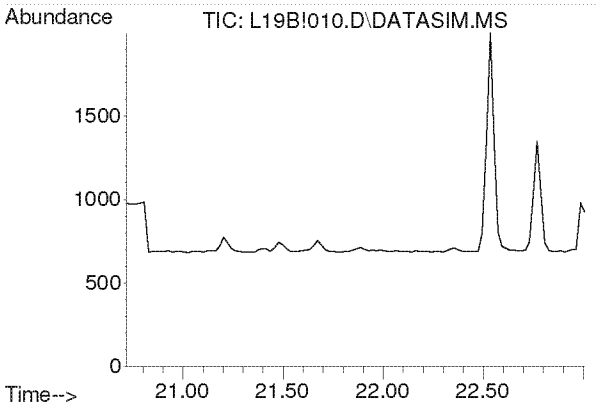
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



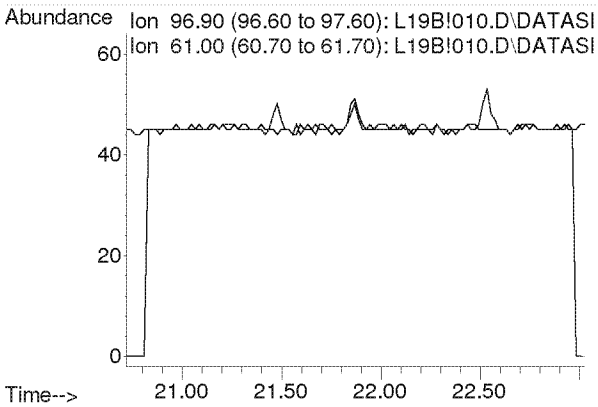


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

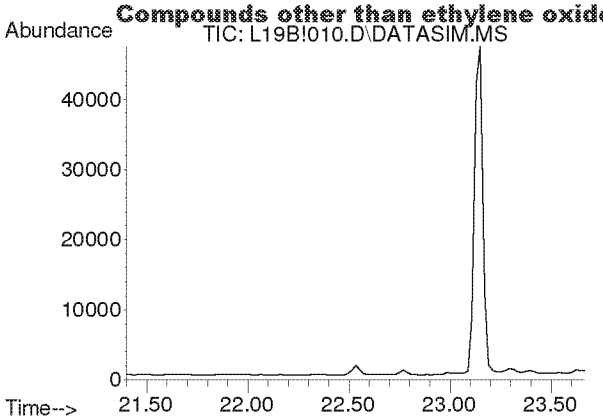
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

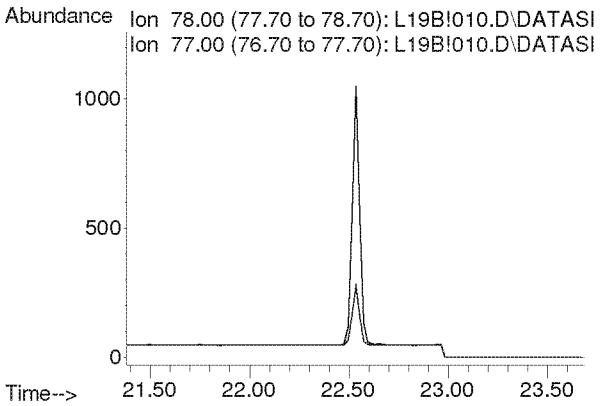


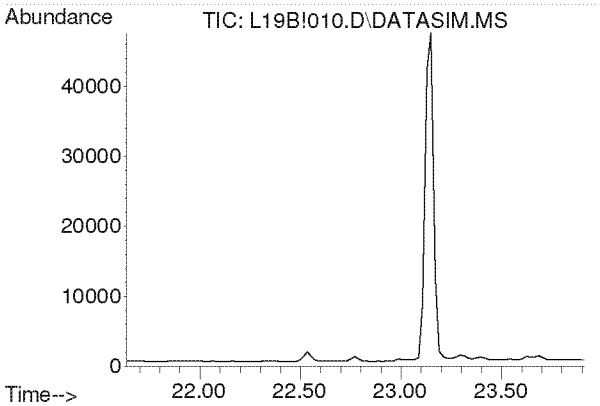
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



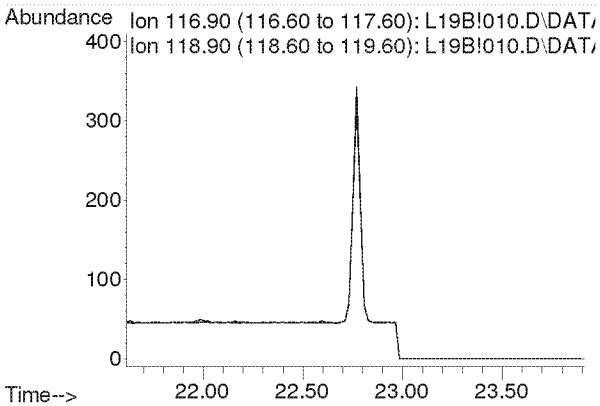


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

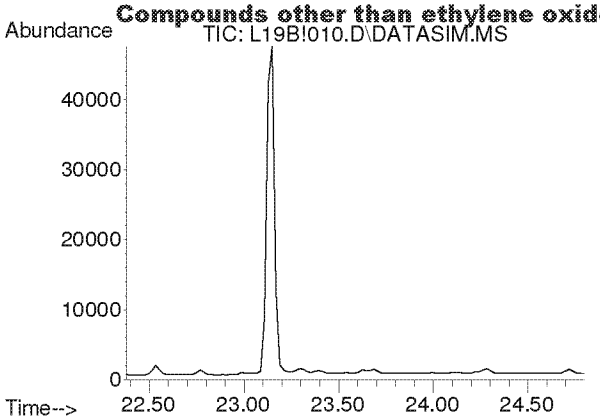
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

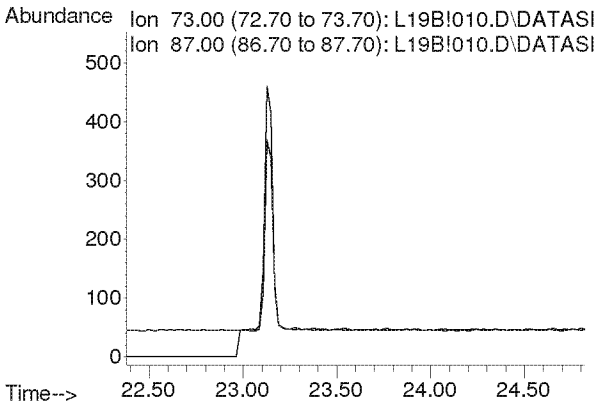


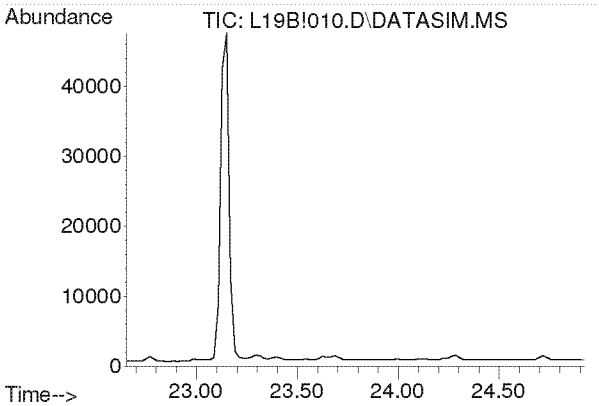
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



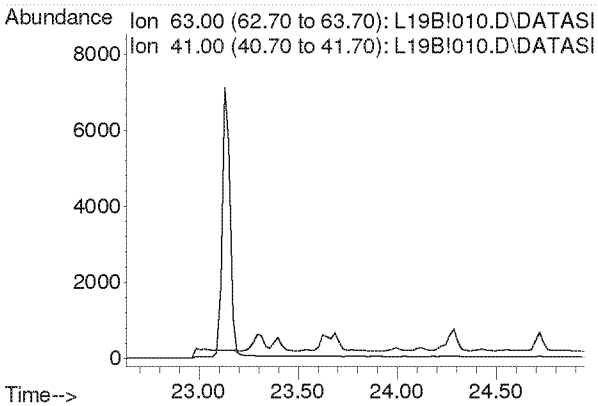


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

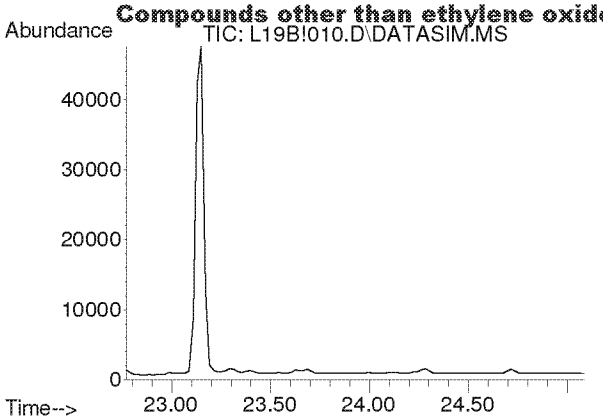
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

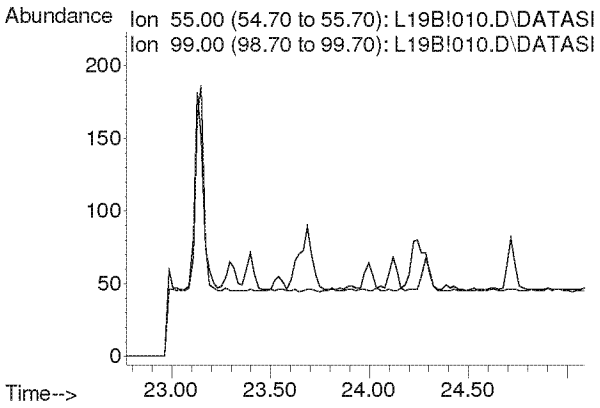


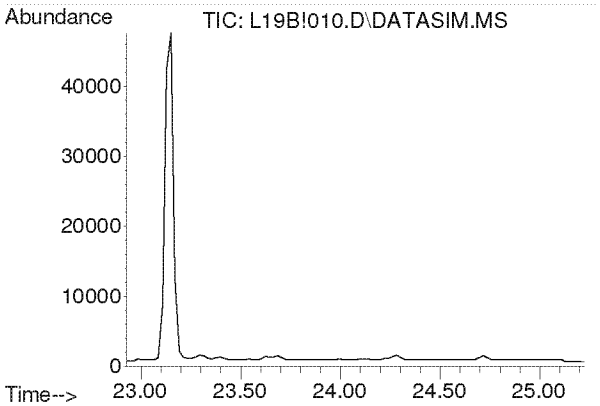
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



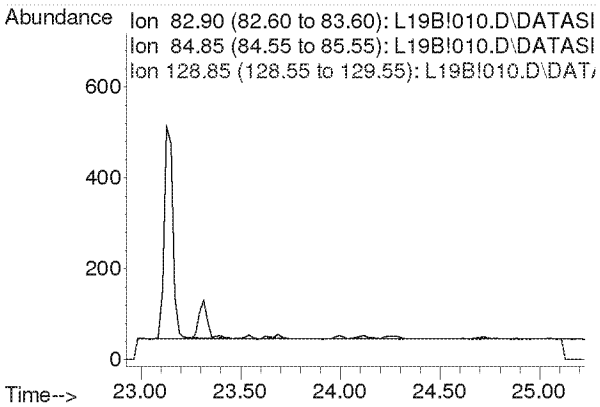


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

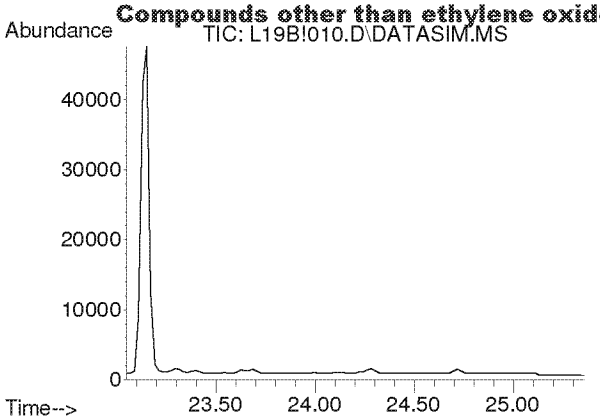
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

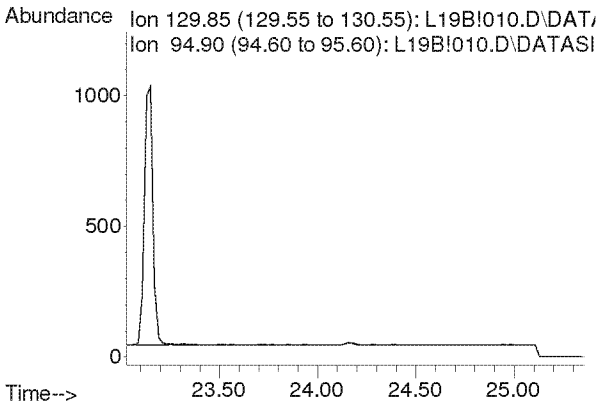


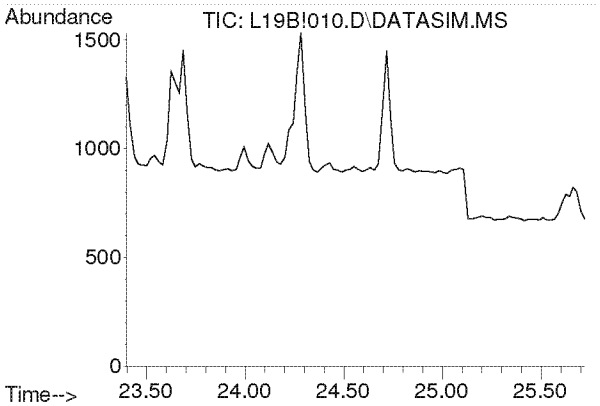
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



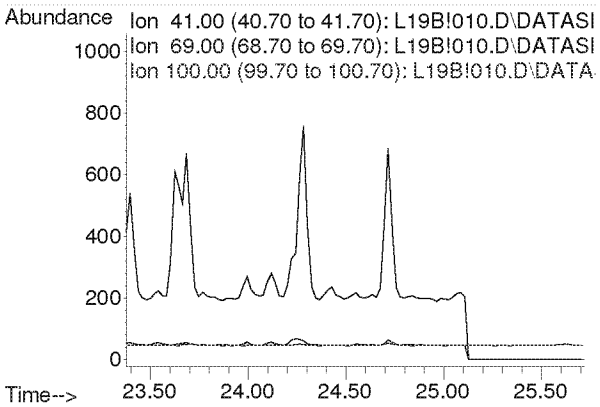


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

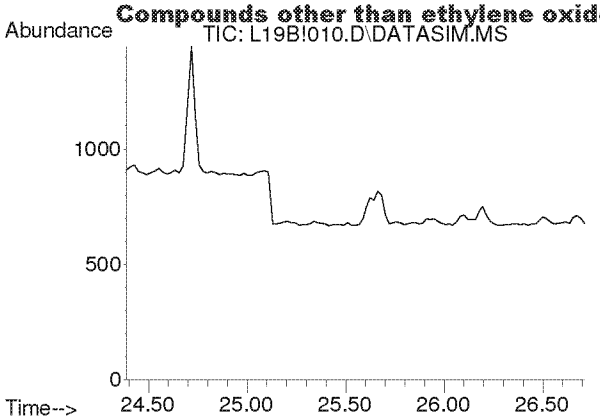
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

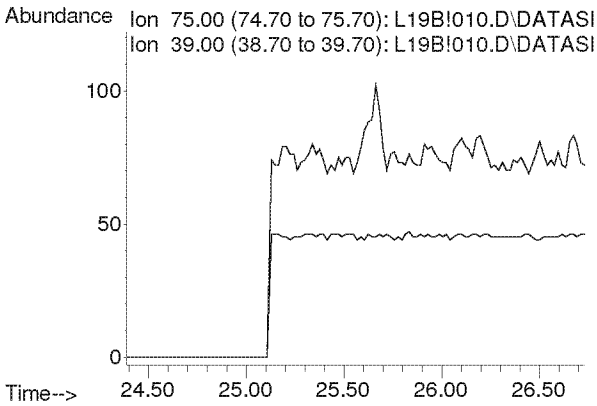


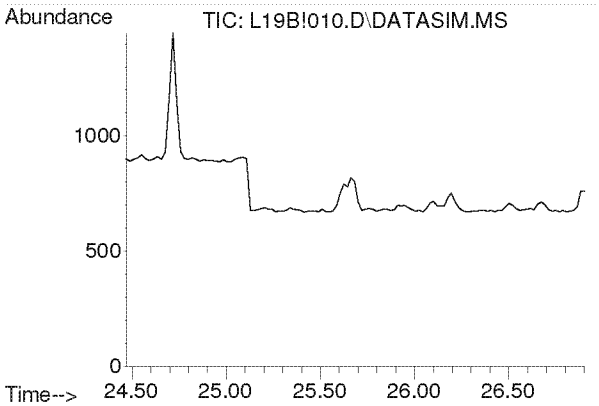
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



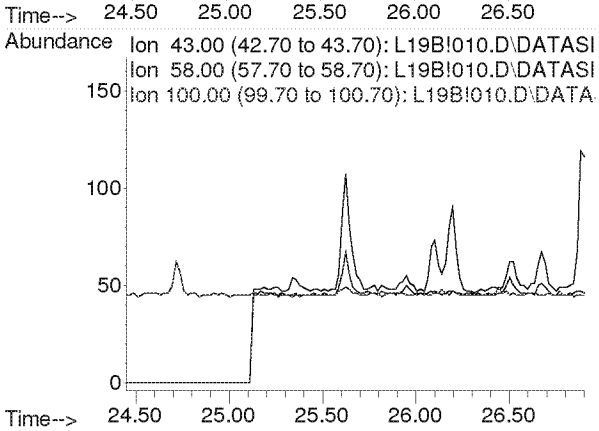


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

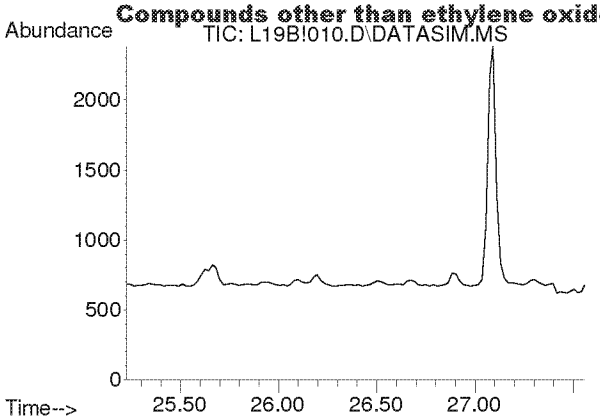
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

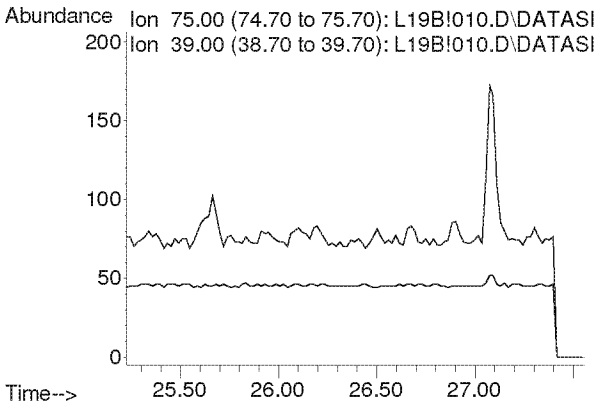


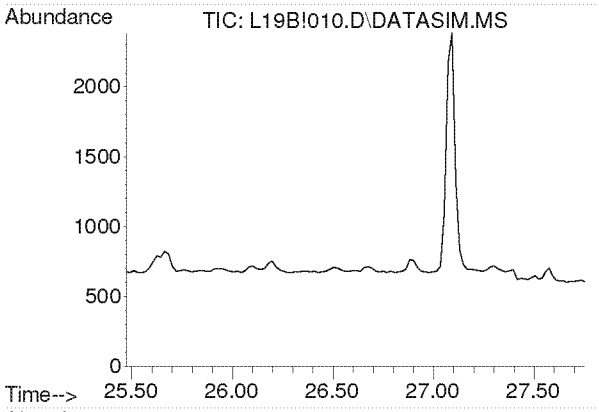
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



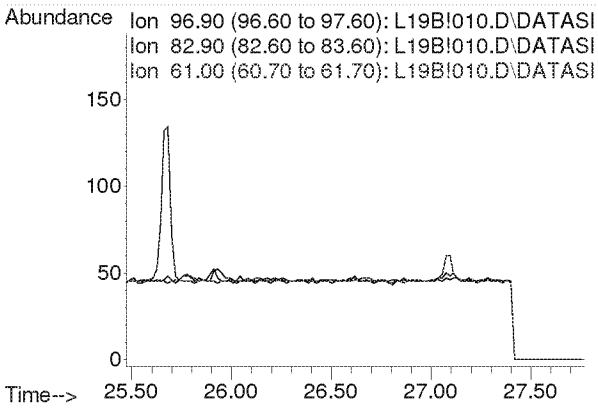


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

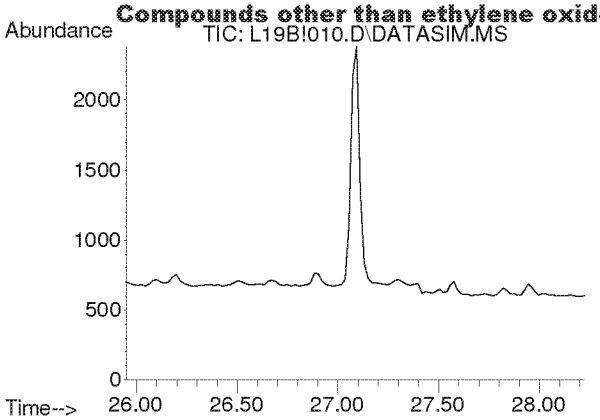
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

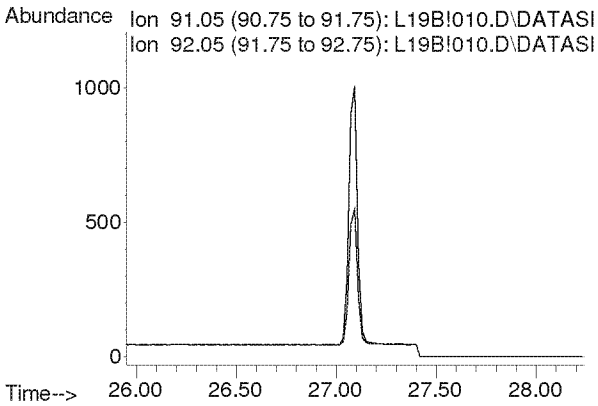


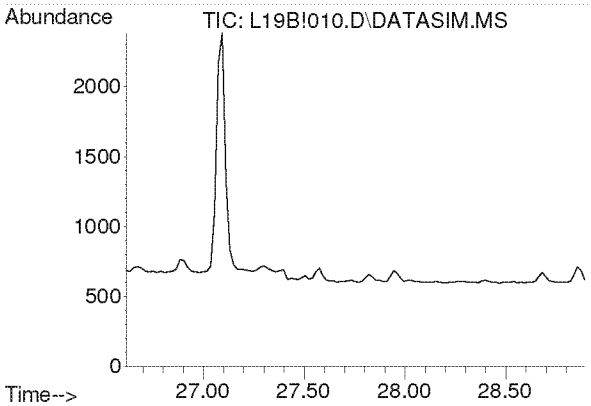
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



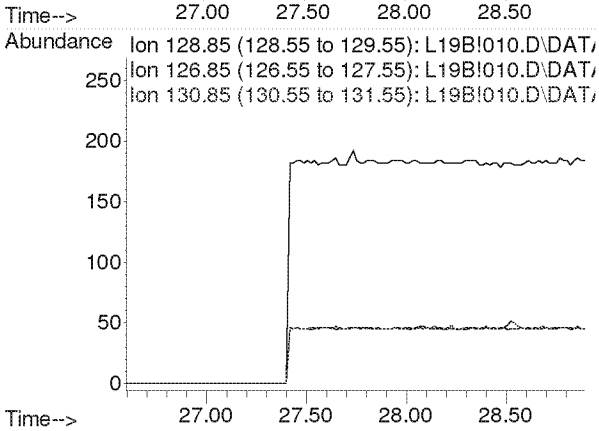


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

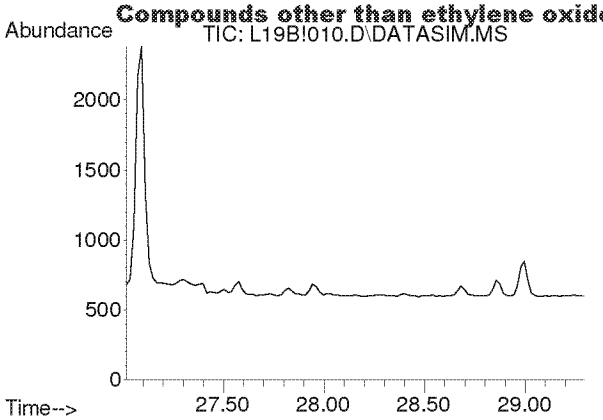
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

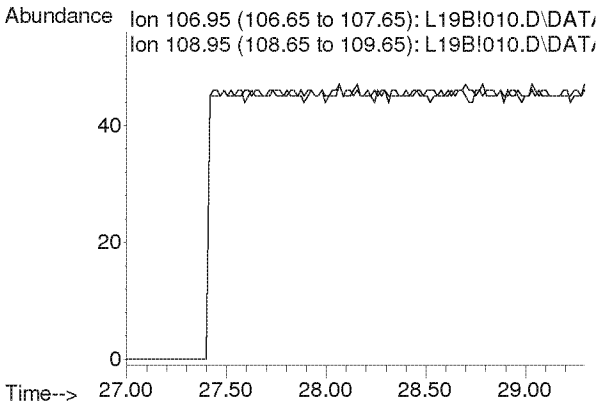


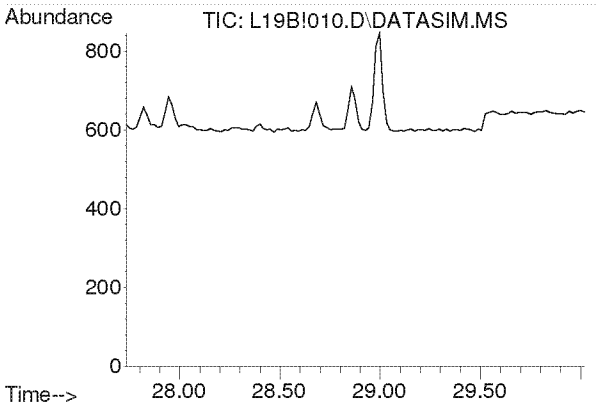
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



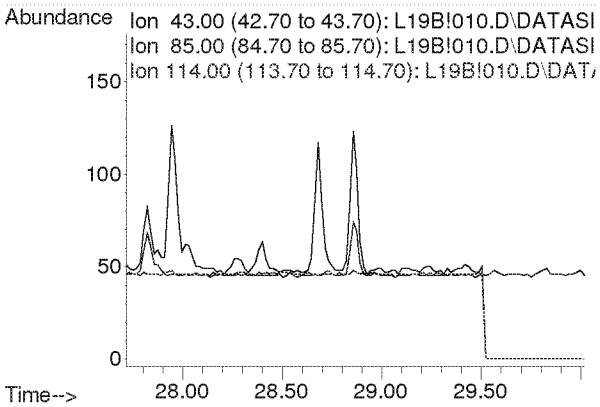


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

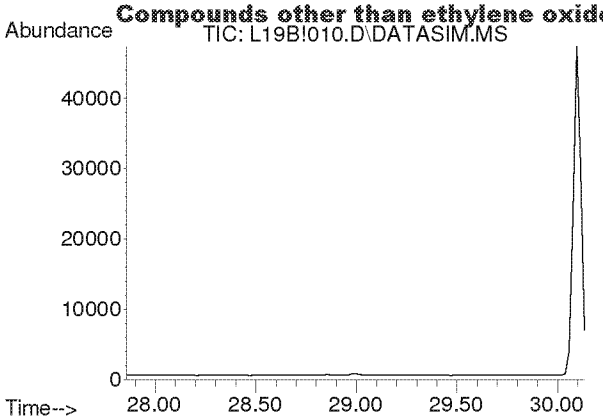
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

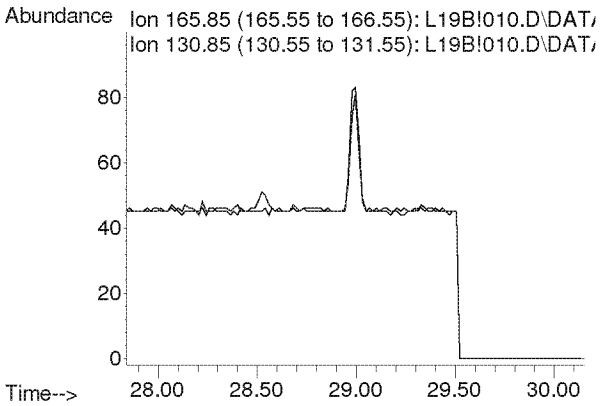


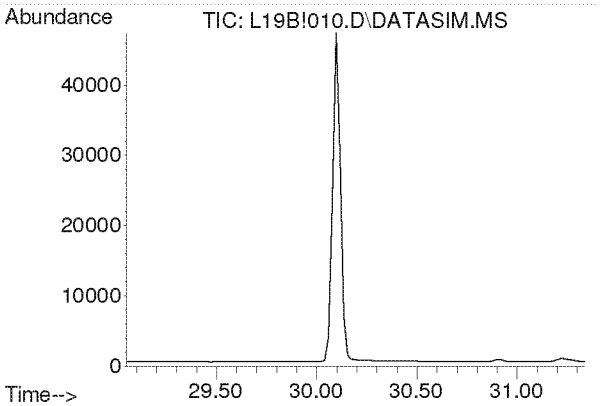
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



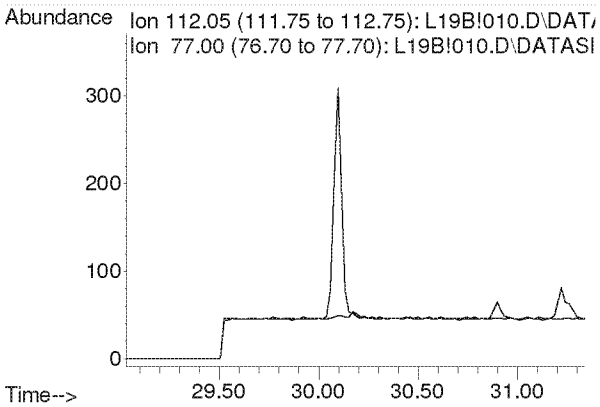


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

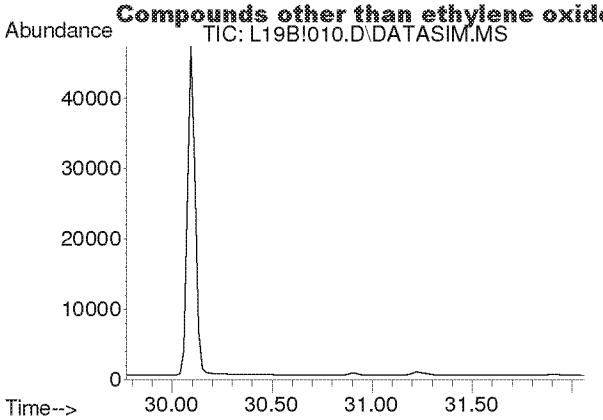
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

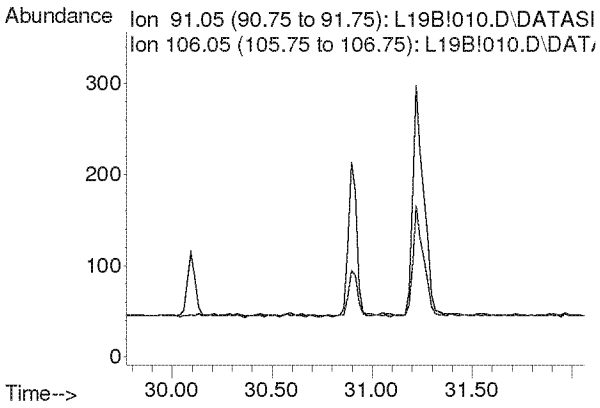


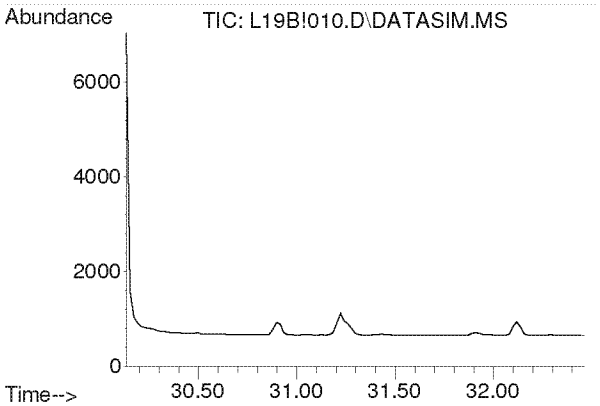
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



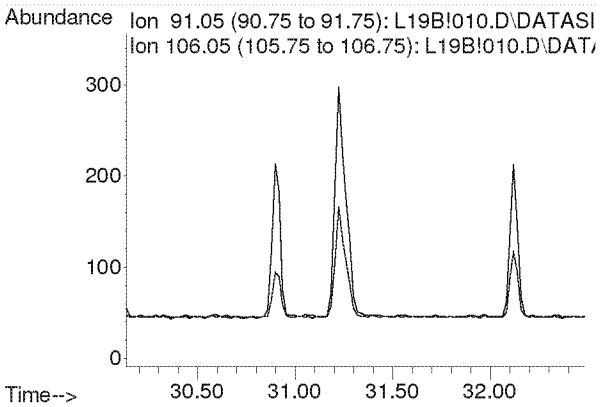


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

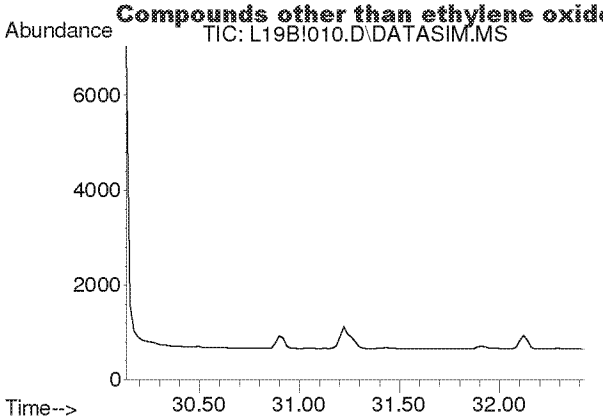
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

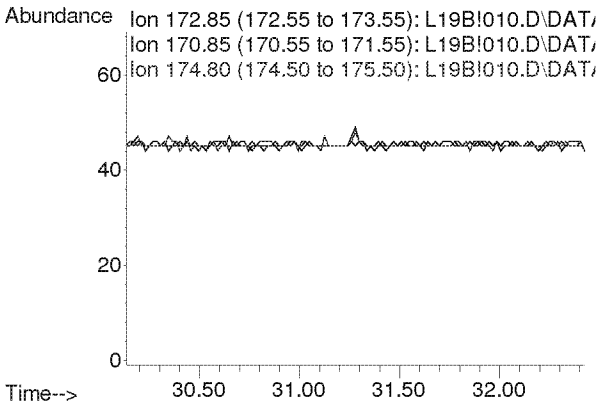


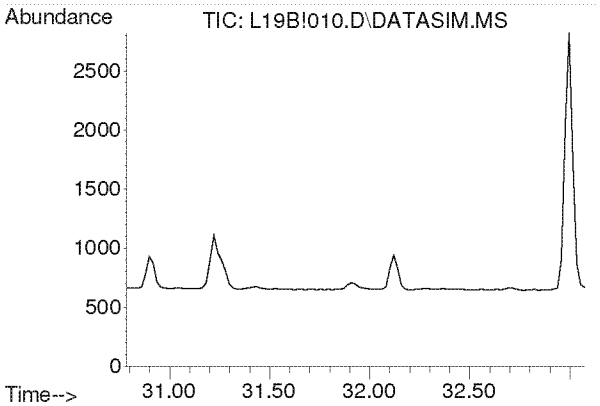
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



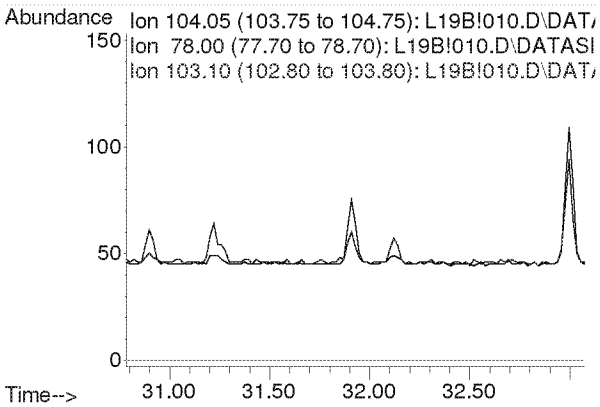


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

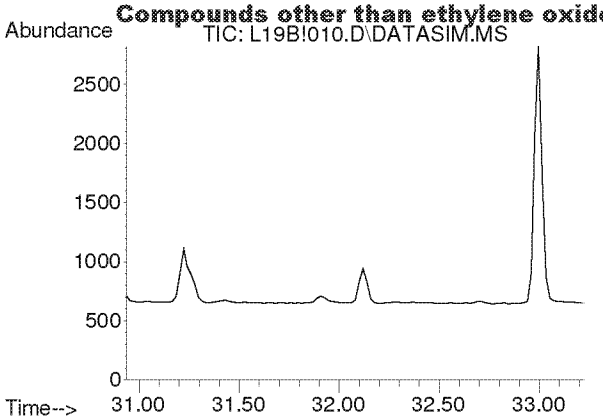
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

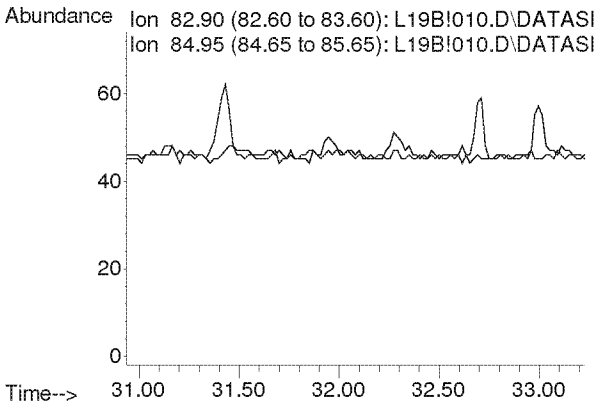


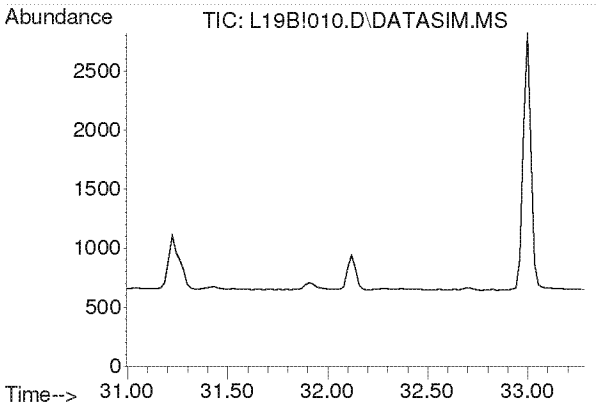
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



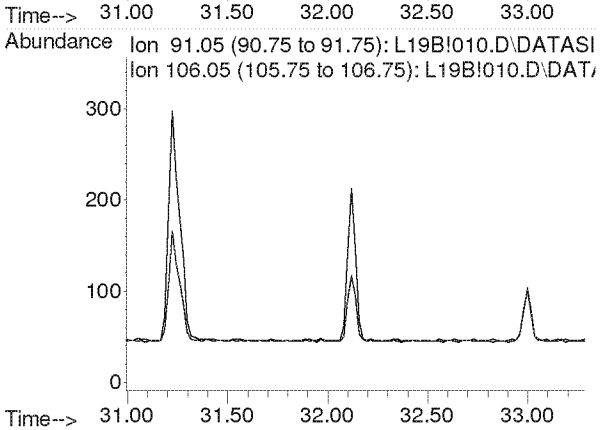


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

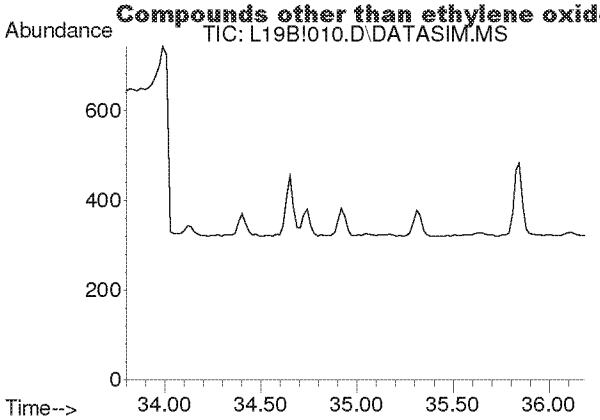
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

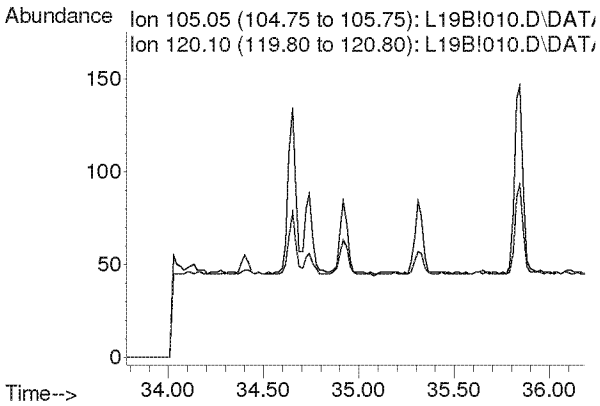


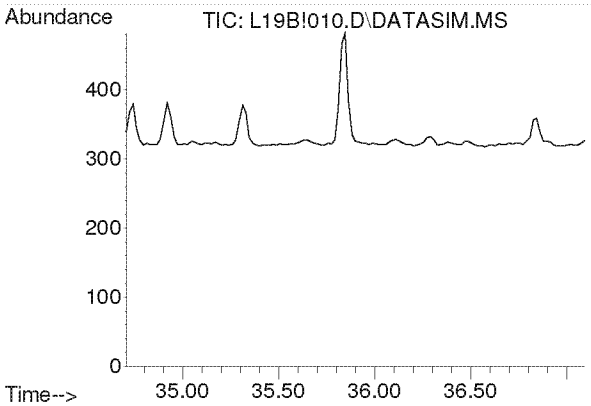
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



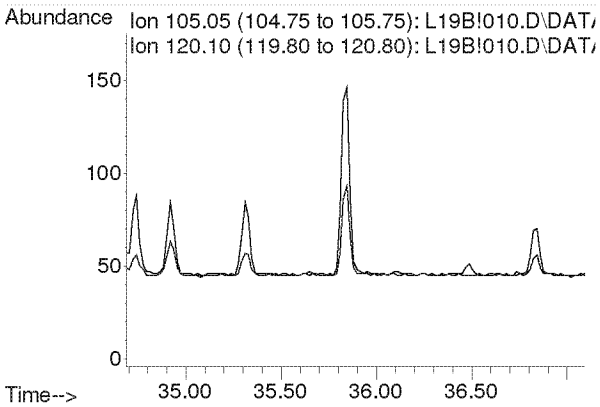


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

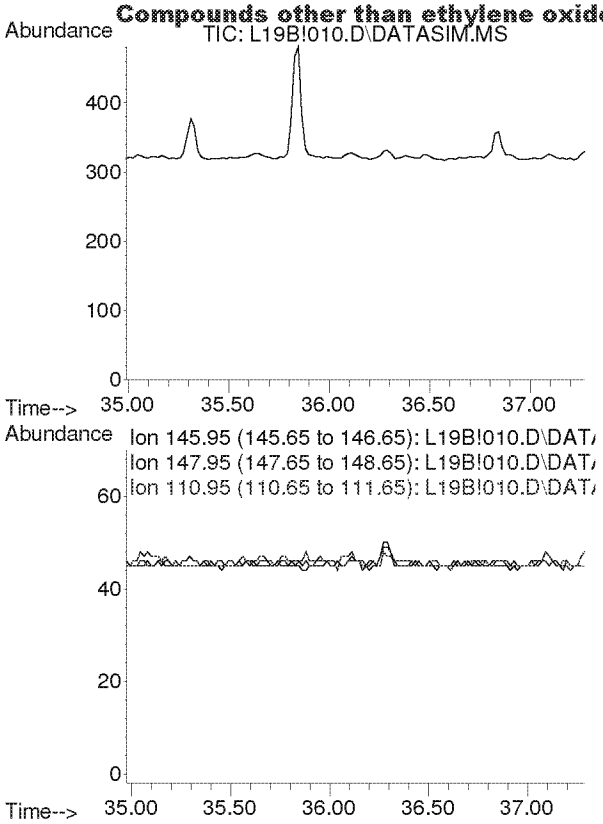
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

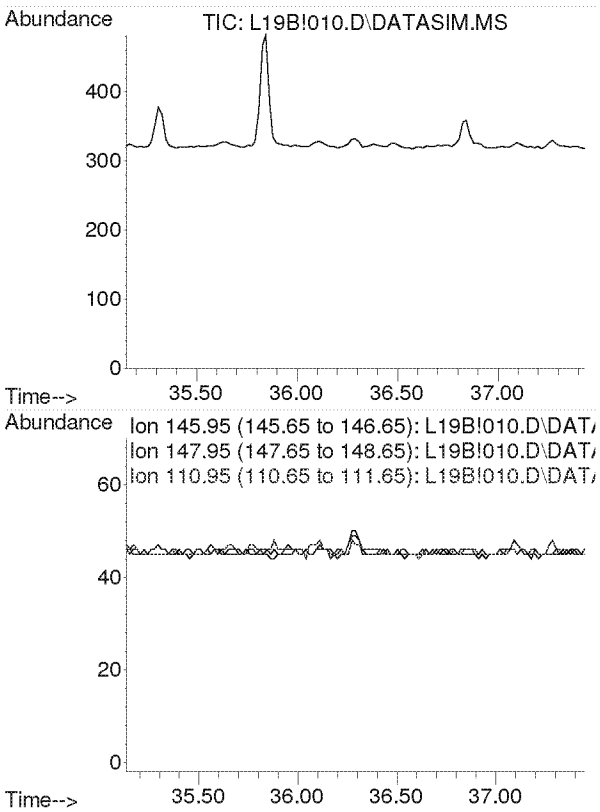


#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



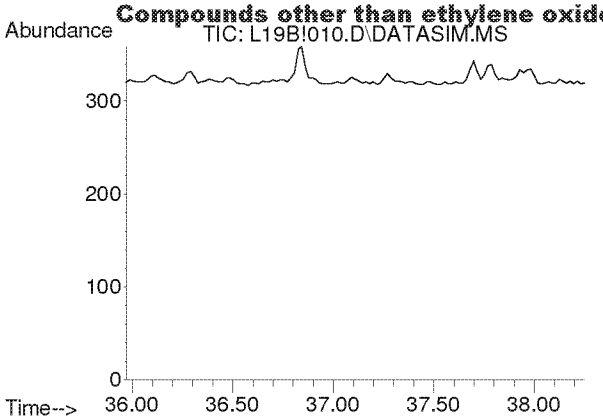
#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7

Compounds other than ethylene oxide were not quantitated.

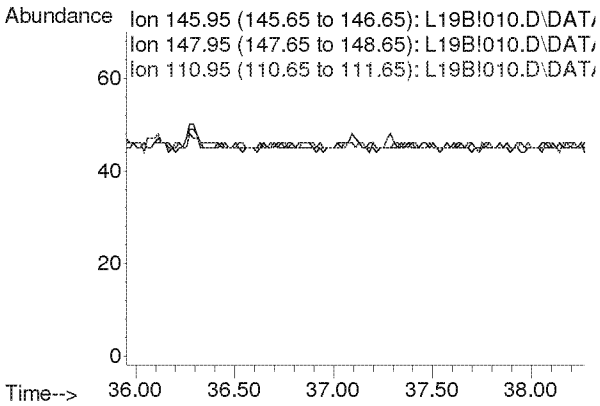


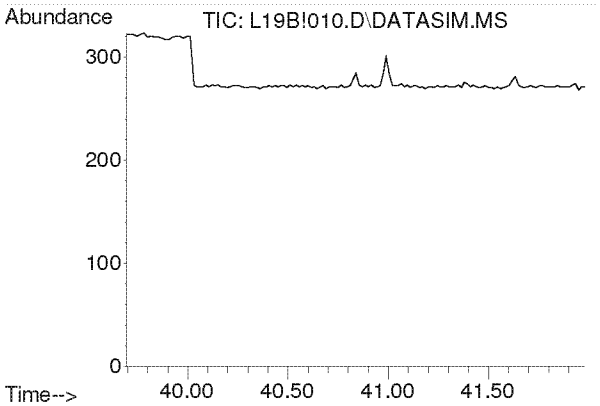
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



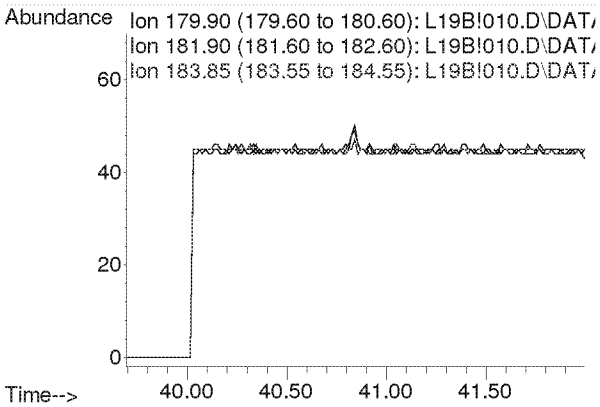


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

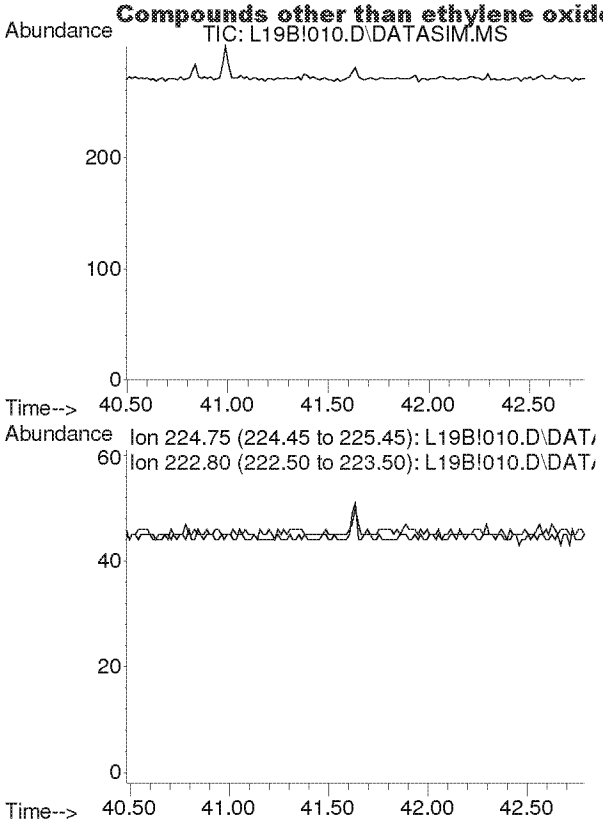
Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!010.D
Acq: 28 Feb 2019 9:39 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

NELAC Replicate Comparison Check

Comparison of Replicate Analyses

File ID		L19B1011.D	L19B1012.D		
Analyst		MAH	MAH		
Method		9020003.M	9020003.M		
Sample ID		9022316-14	B9B2804-DUP1		
Mics Comments		WB VILLAGE HAL	WB VILLAGE HALL R1 2/24/19		
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	0.071	0.079	NA	
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.

Y:\AIR TOX\TO-15 DUPTEST\DUPTEST_2019_NATTS\ETOX_2019\WB VILLAGE HALL 2_24_19.xlsx
REPTEST 2016 TEMPLATE 112016

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L19B!\
Data File : L19B!011.D
Acq On : 28 Feb 2019 10:41 pm
Operator : MAH
Sample : 9022616-14
Misc : WB VILLAGE HALL C1 2/14/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 05 07:39:29 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.970	66	43730	4.7700 ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.151	114	105246	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	75410	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	177m	0.0708 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.	
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\L19B!\
Data File : L19B!011.D
Acq On : 28 Feb 2019 10:41 pm
Operator : MAH
Sample : 9022616-14
Misc : WB VILLAGE HALL C1 2/14/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 05 07:39:29 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

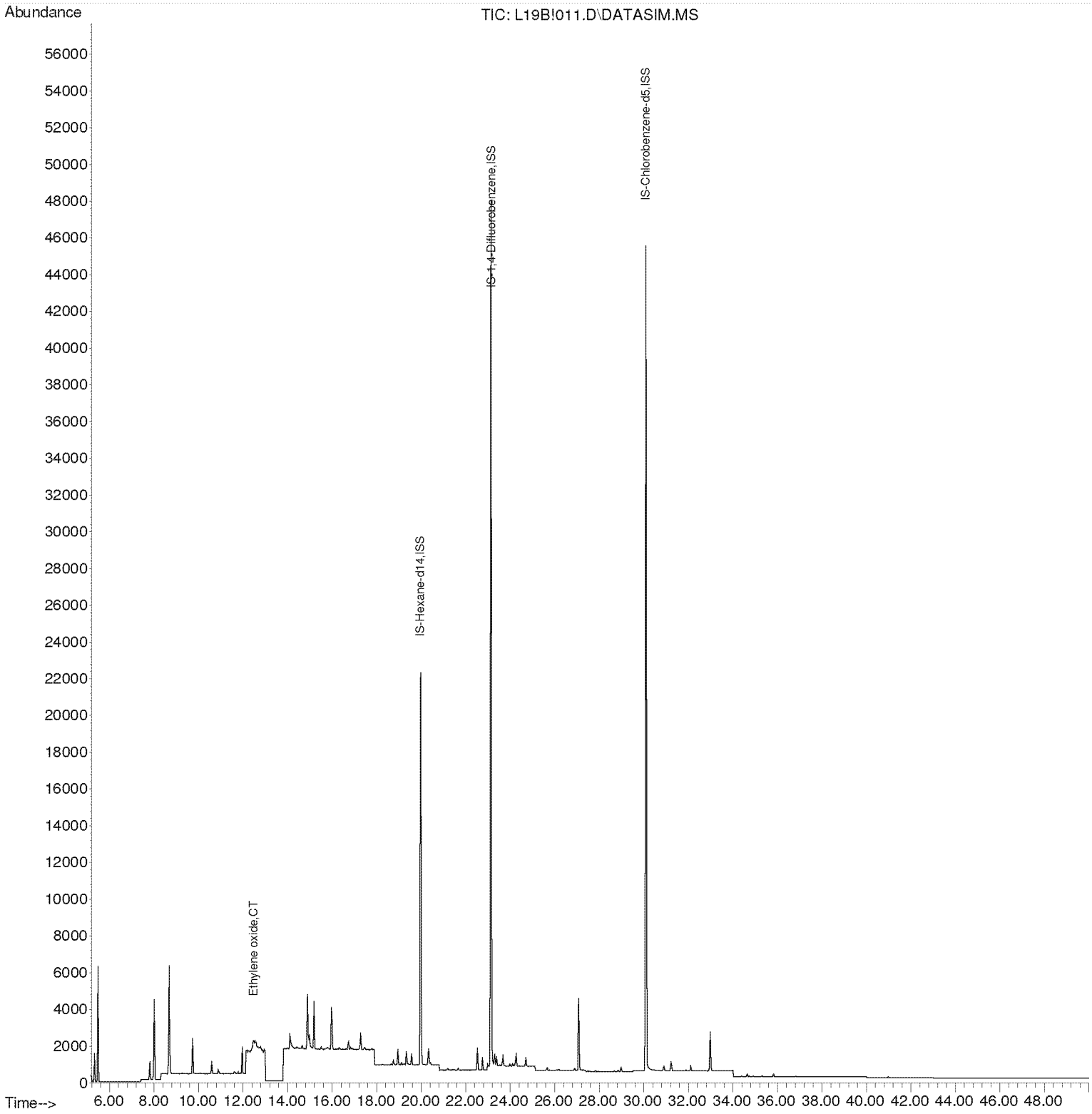
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene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

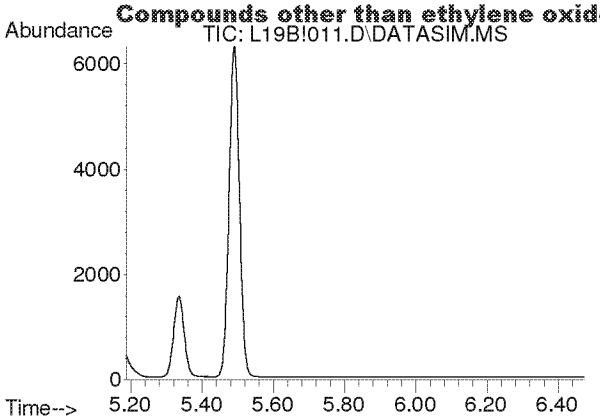
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!011.D
Acq On : 28 Feb 2019 10:41 pm
Operator : MAH
Sample : 9022616-14
Misc : WB VILLAGE HALL C1 2/24/19
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 05 07:39:05 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



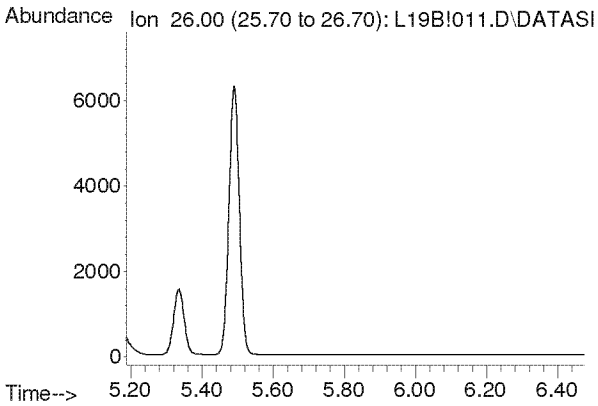
Compounds other than ethylene oxide were not quantitated.

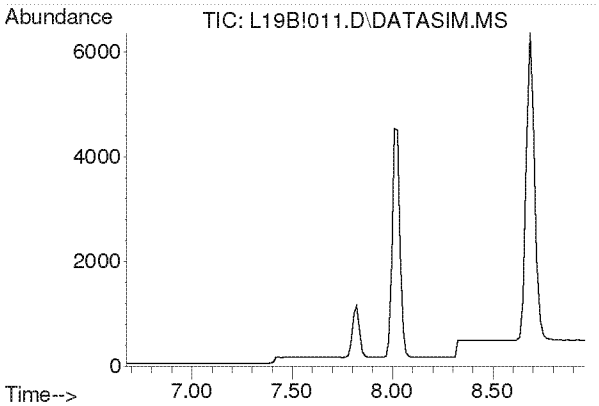


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 26



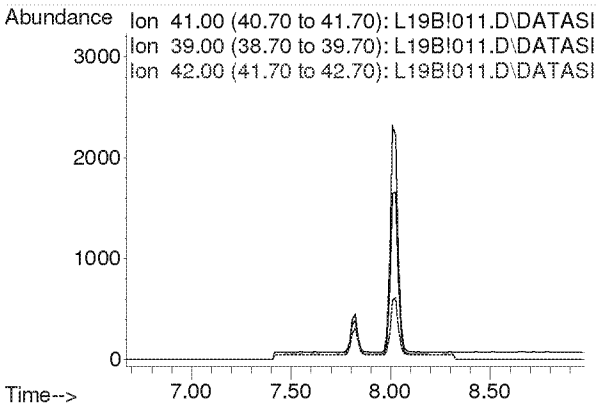


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

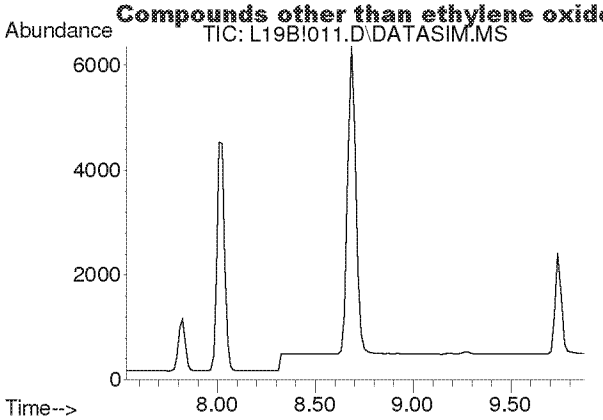
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

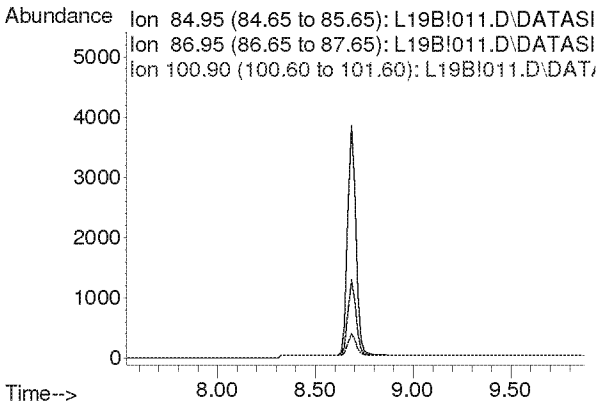


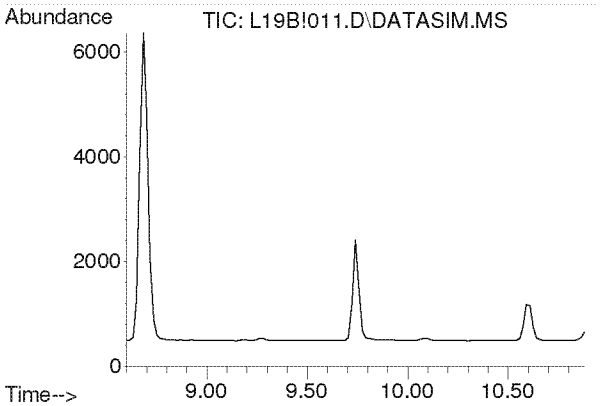
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



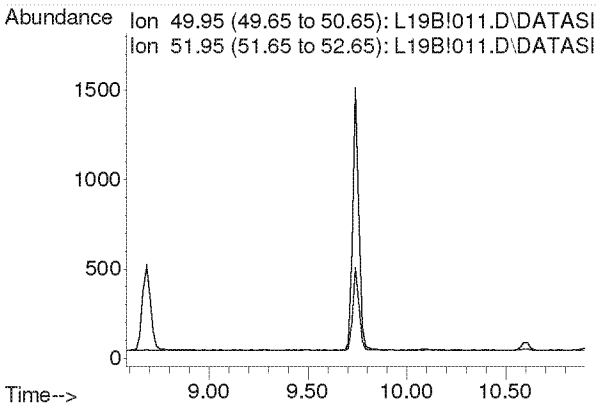


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

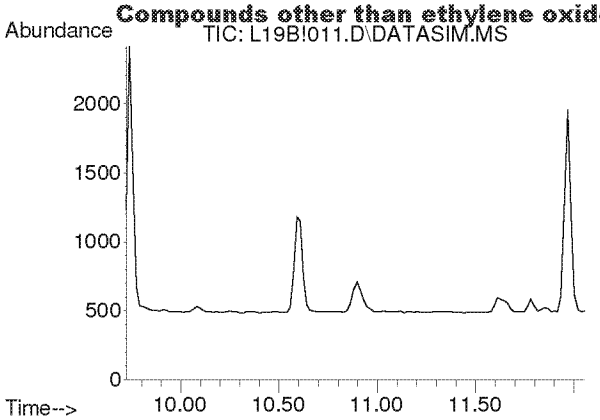
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

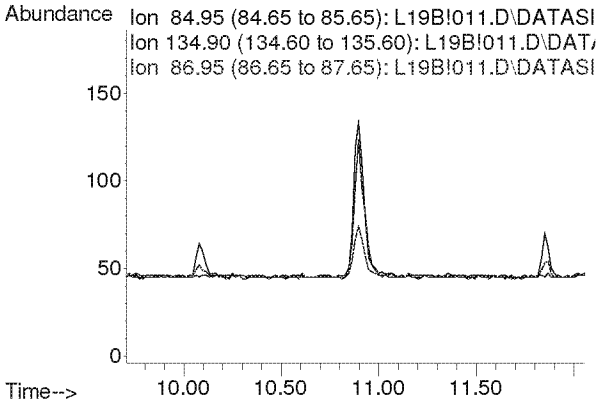


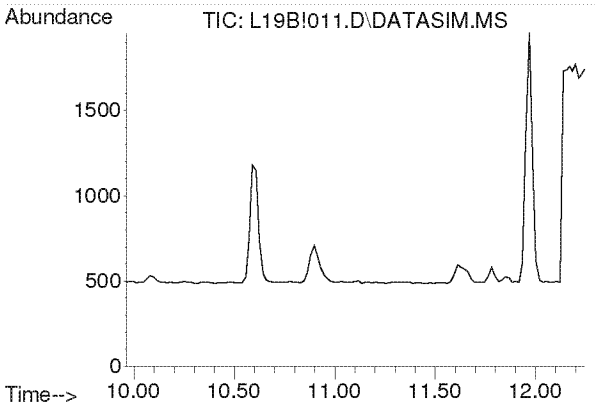
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



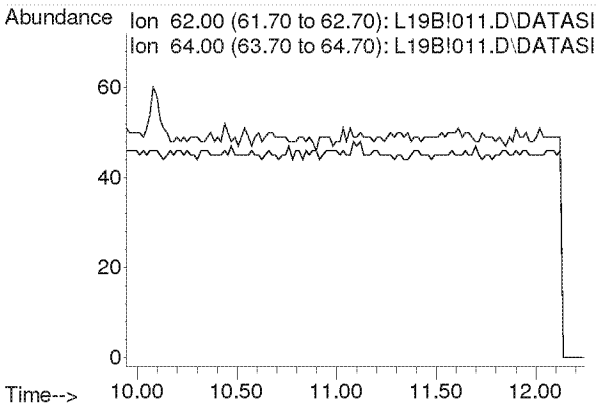


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

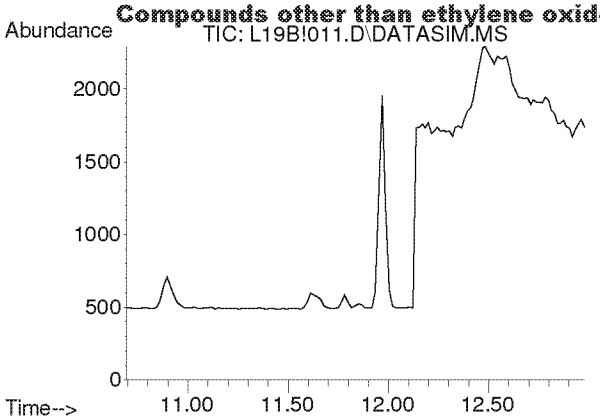
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

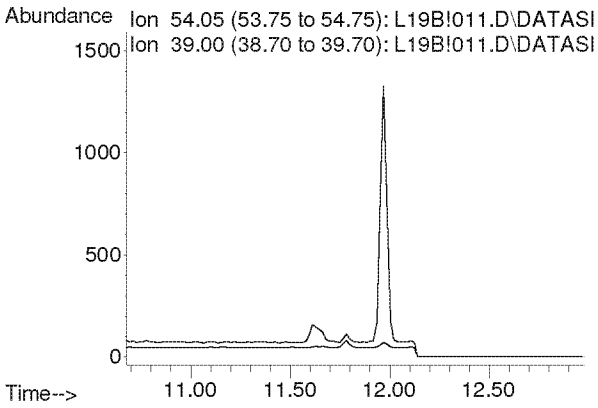


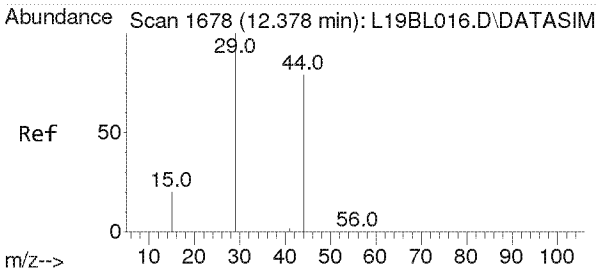
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

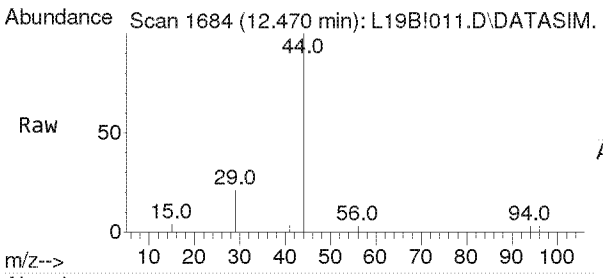


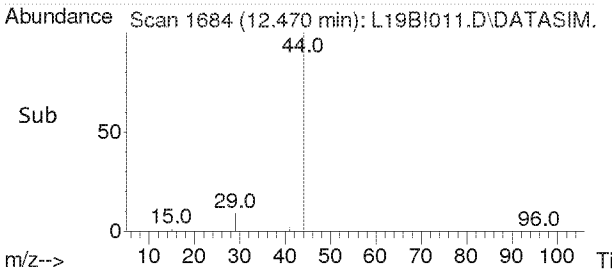


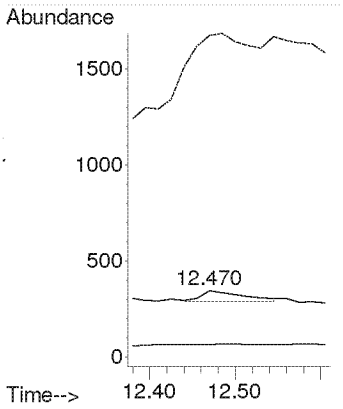
#9
Ethylene oxide
Concen: 0.071 ppbv m
RT: 12.470 min Scan# 1684
Delta R.T. 0.020 min
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 29 Resp: 177

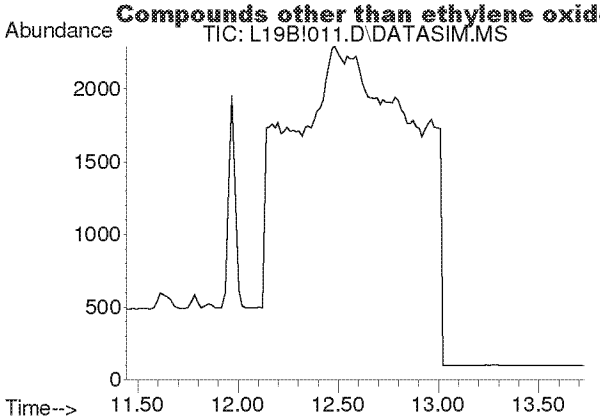
Ion	Ratio	Lower	Upper
29	100		
15	0.0	16.0	24.0#
44	3044.1	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

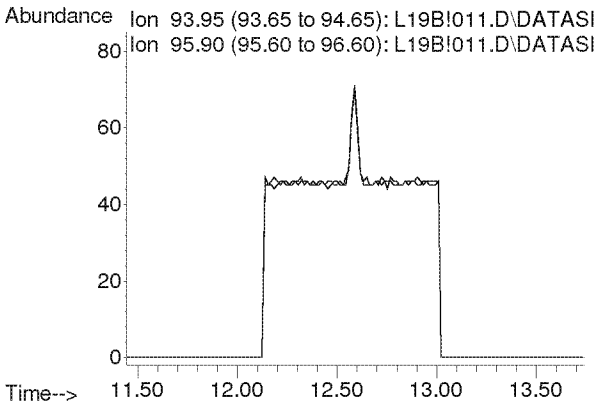


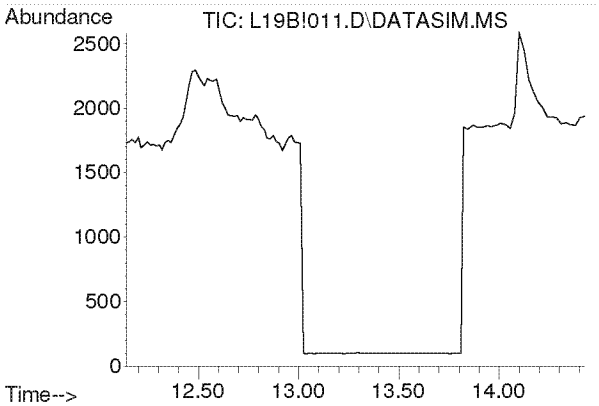
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



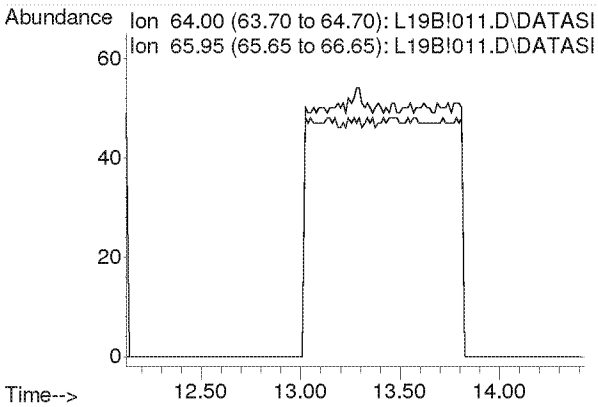


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

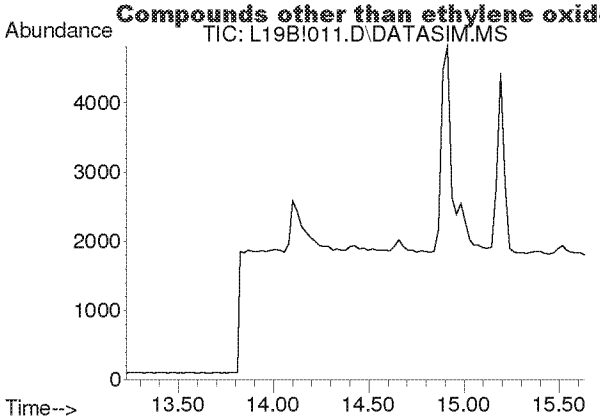
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

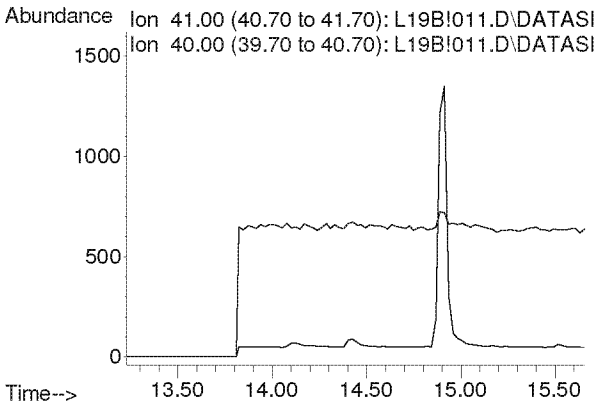


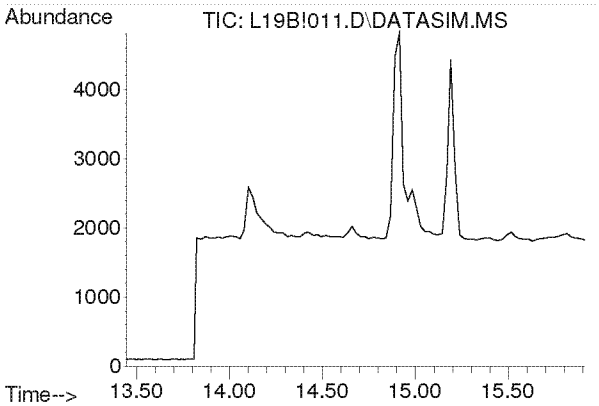
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



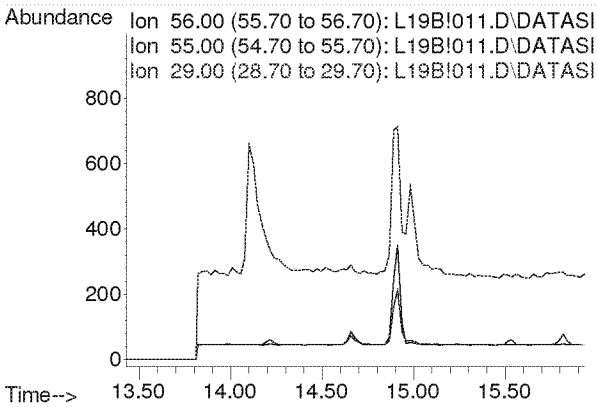


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

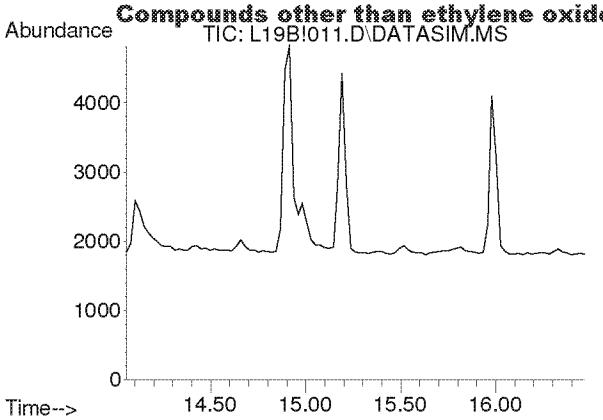
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

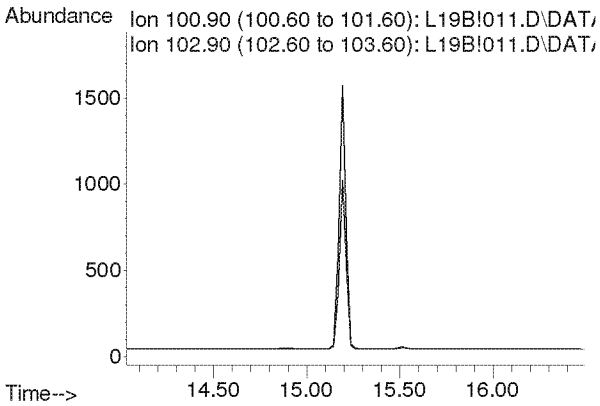


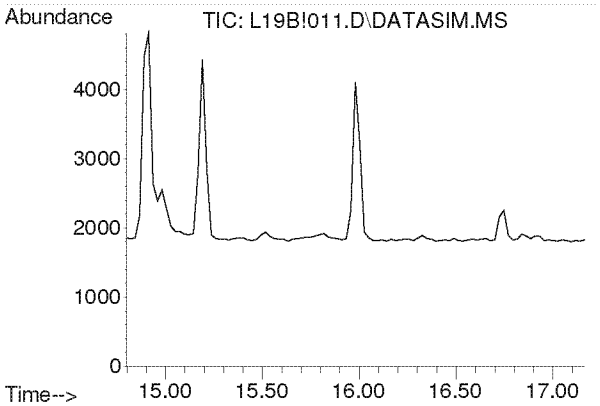
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



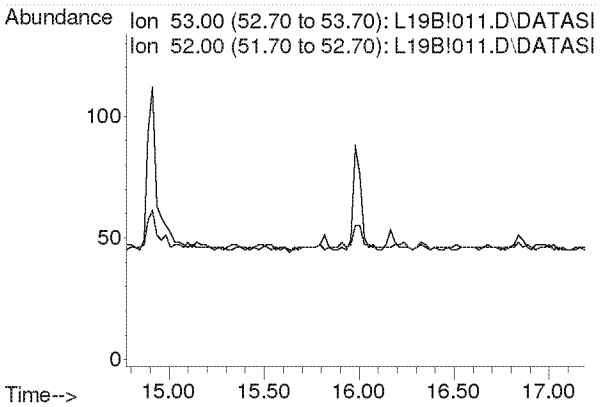


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

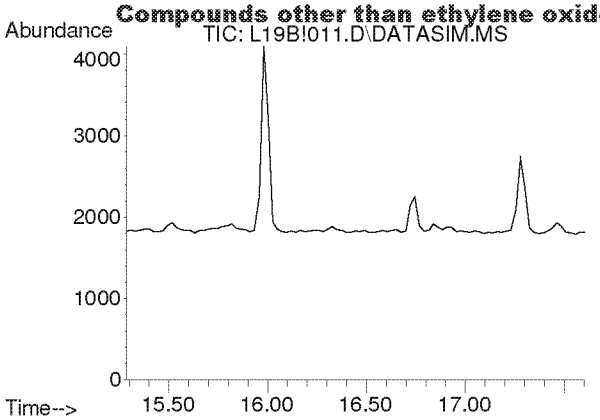
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

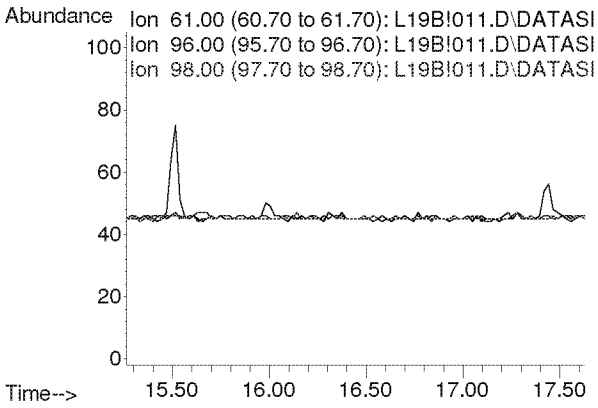


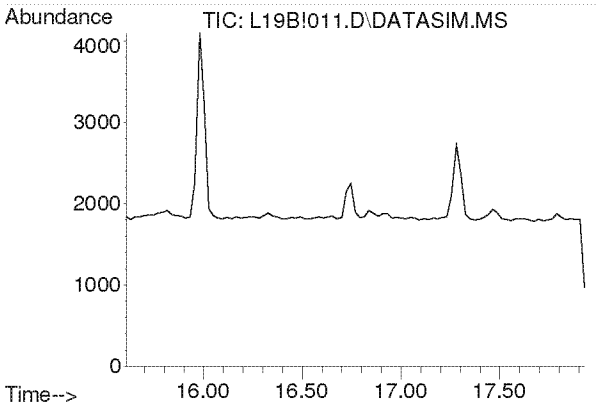
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



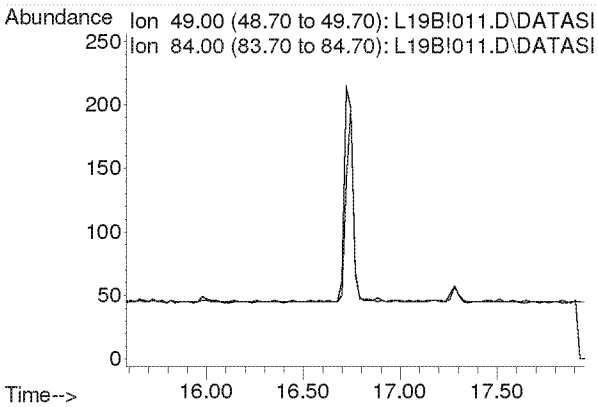


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

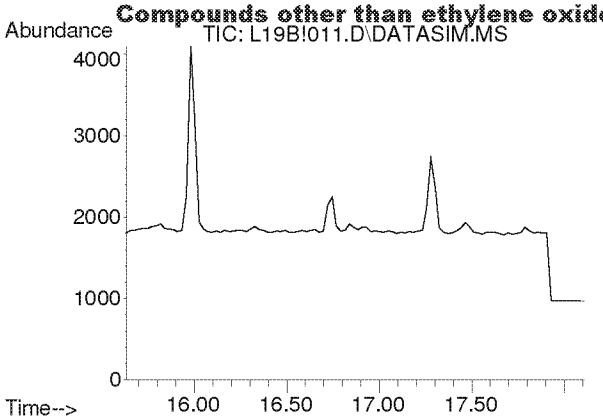
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

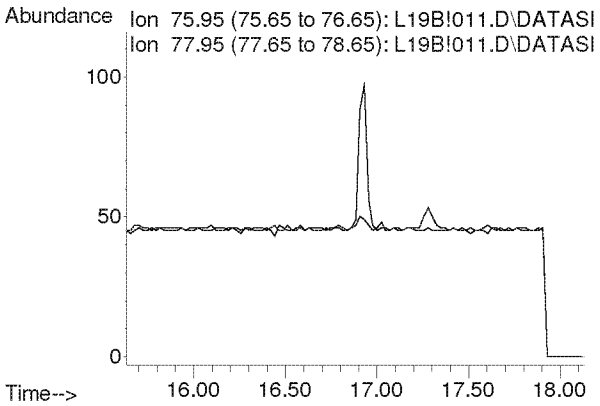


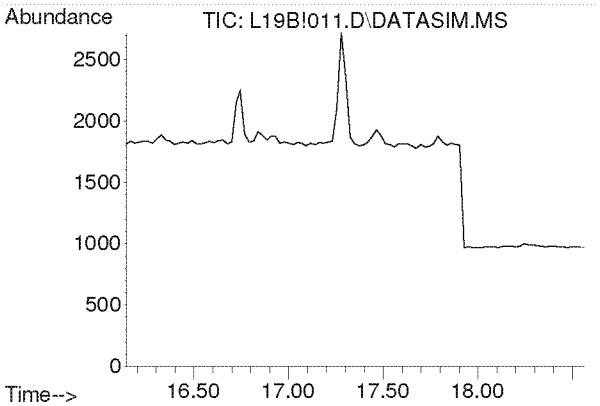
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



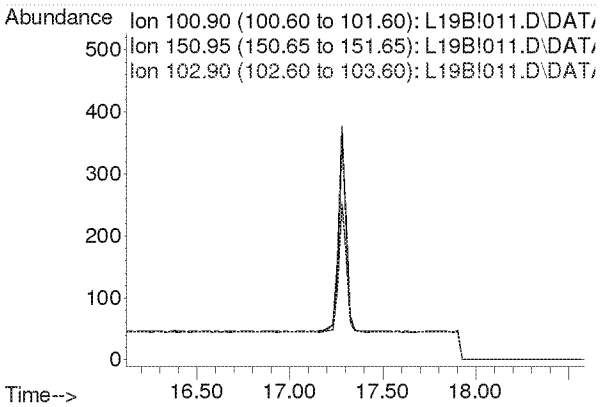


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

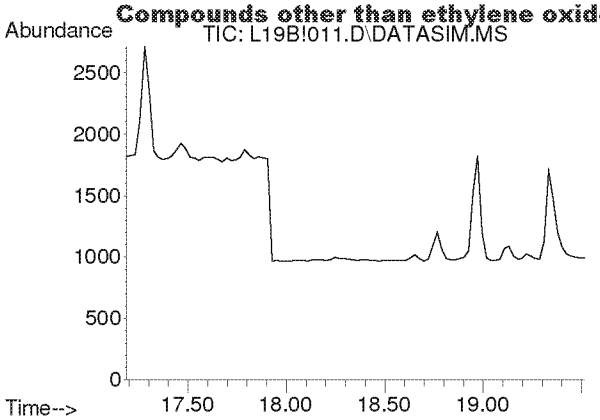
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

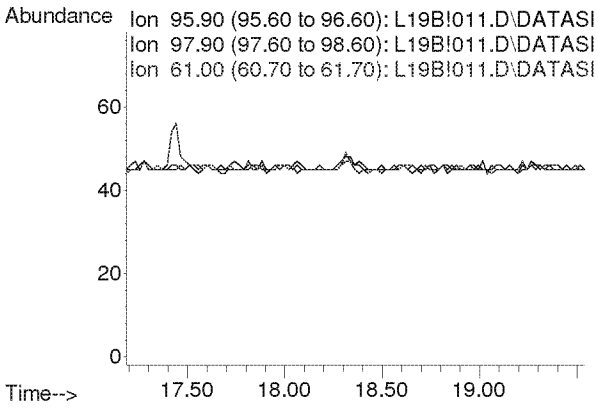


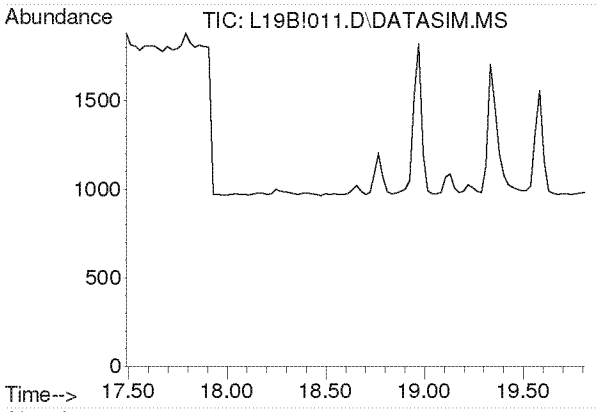
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



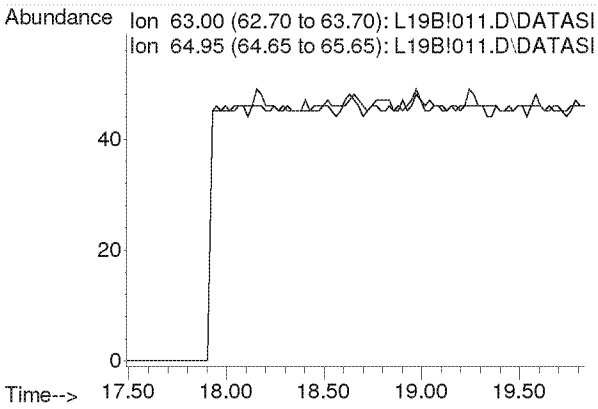


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

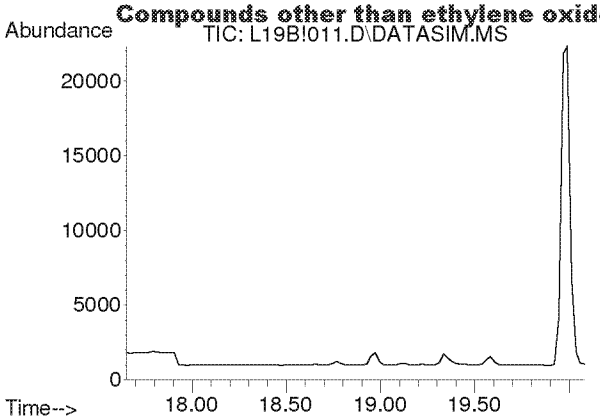
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

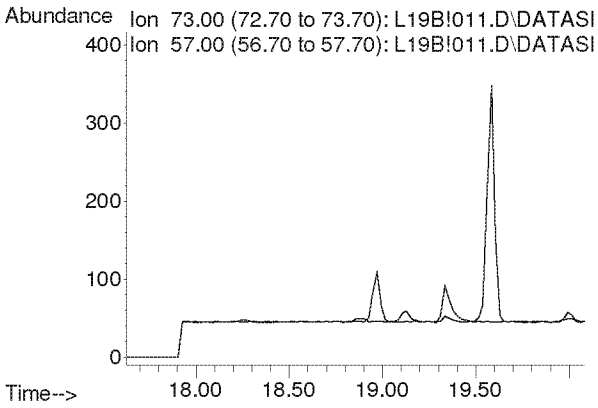


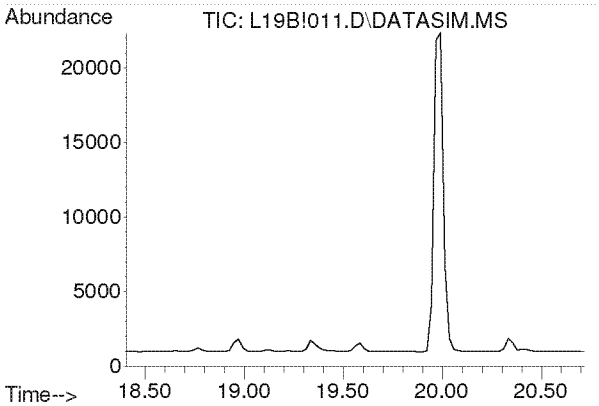
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



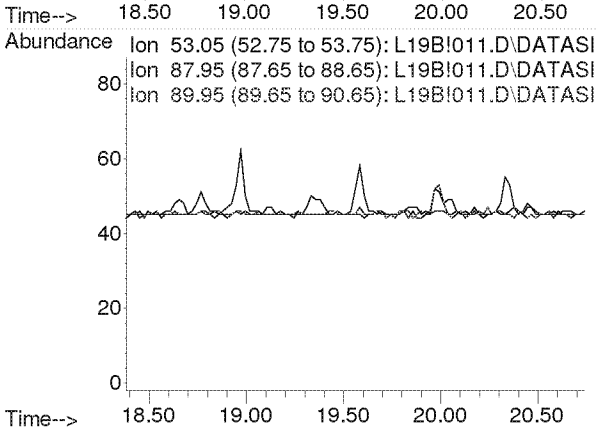


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

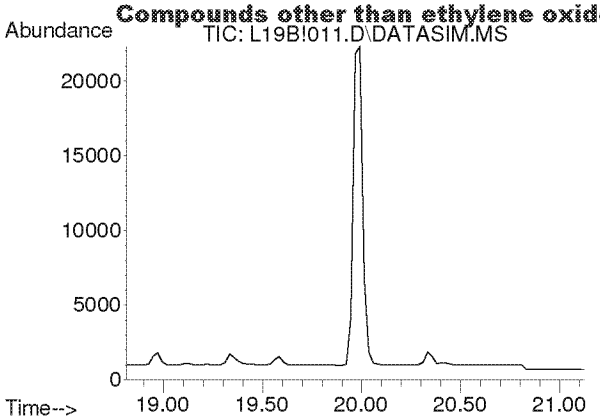
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

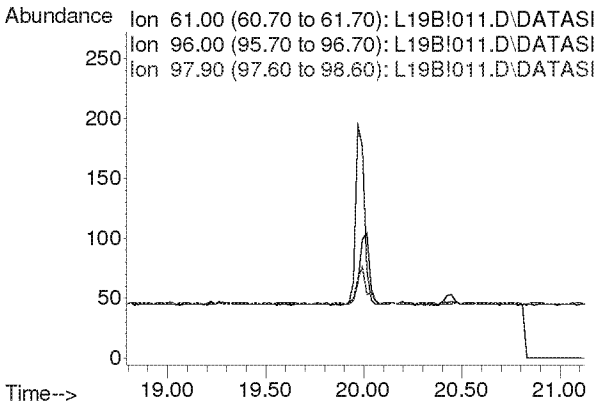


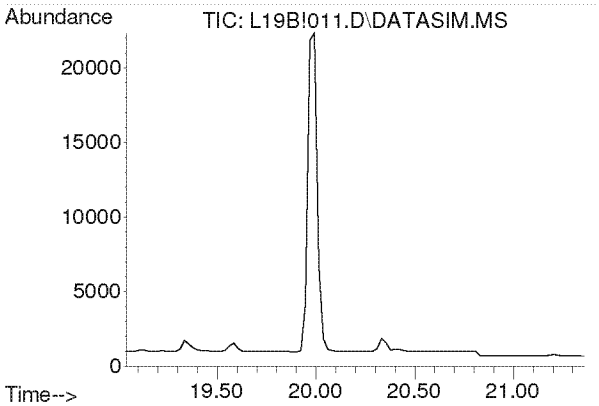
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



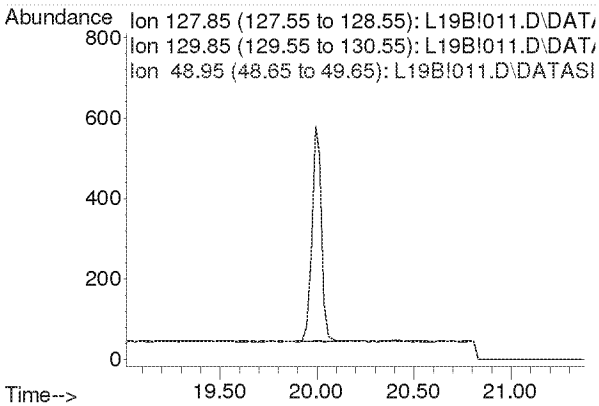


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

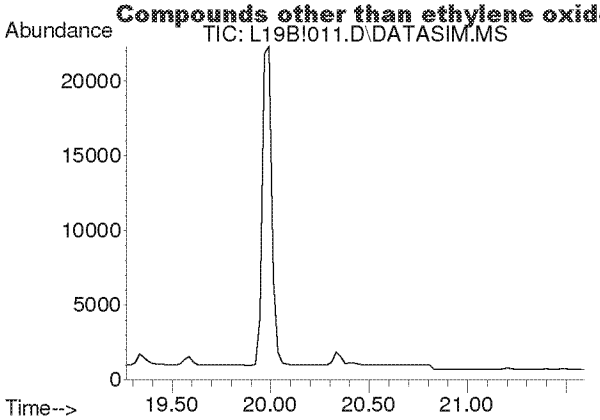
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

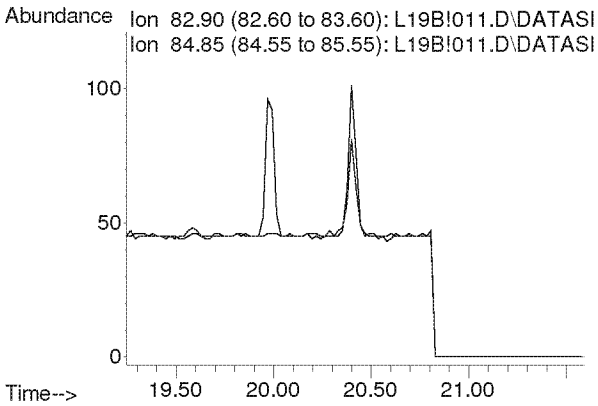


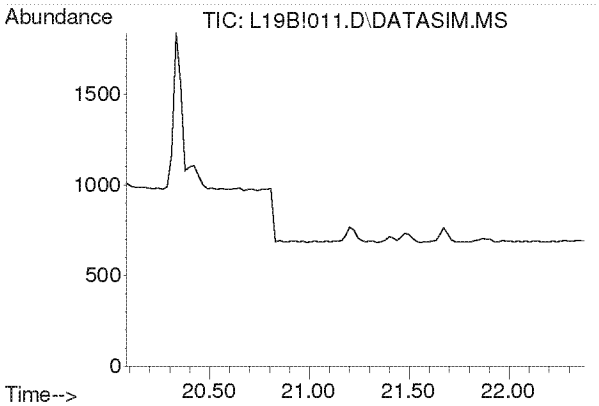
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



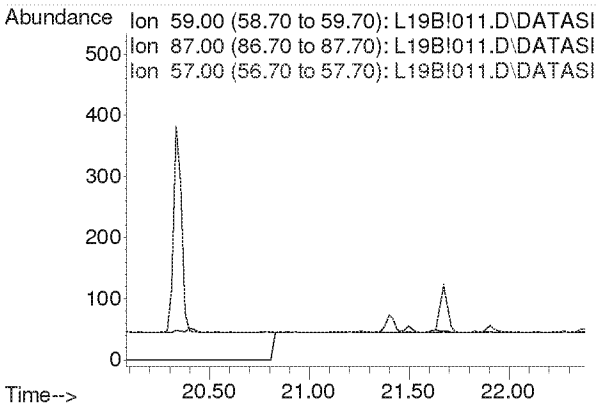


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

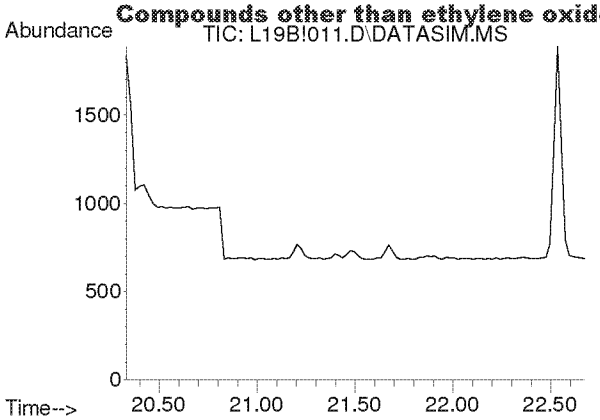
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

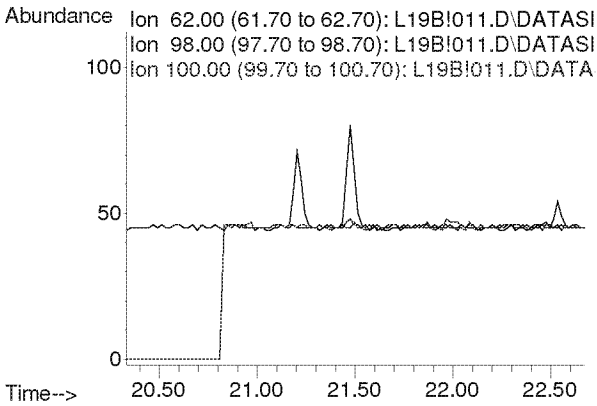


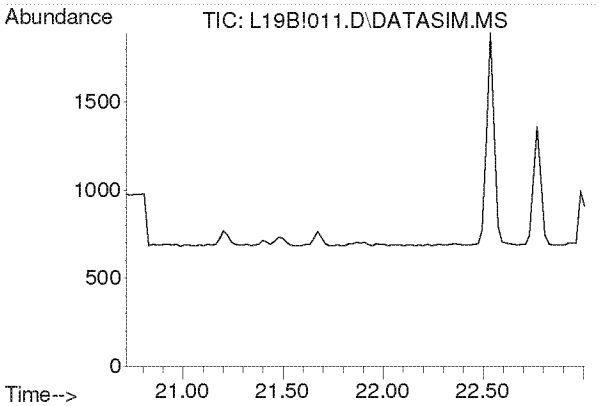
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



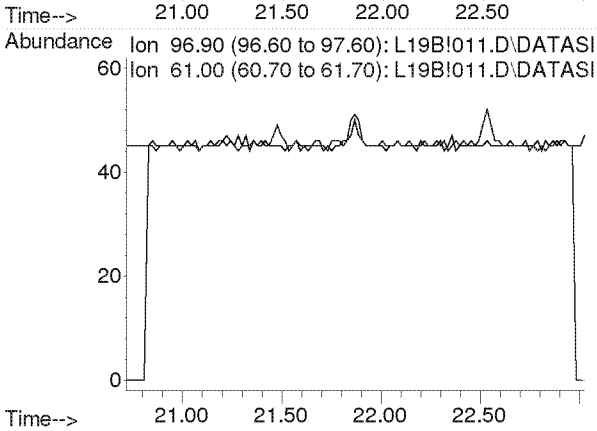


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

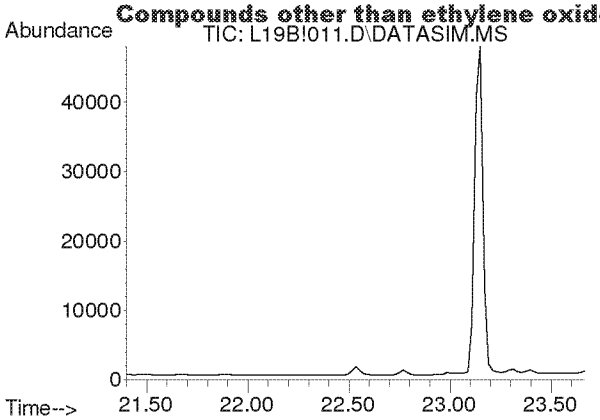
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

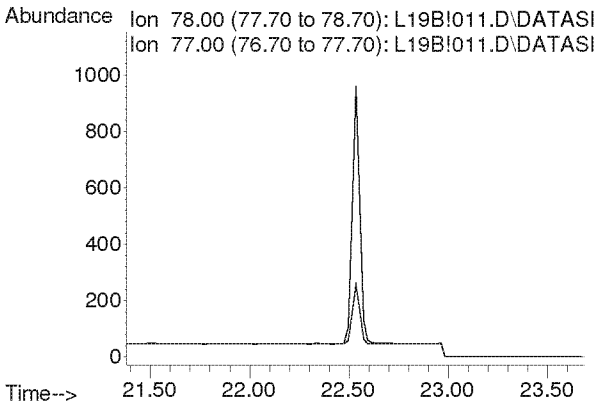


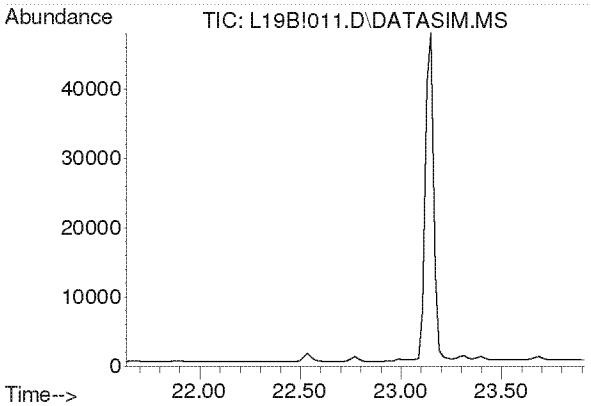
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



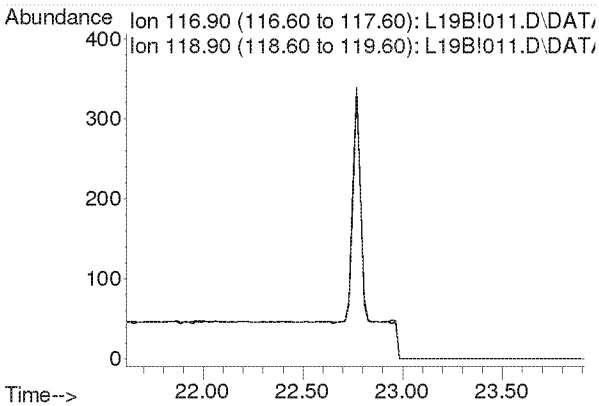


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

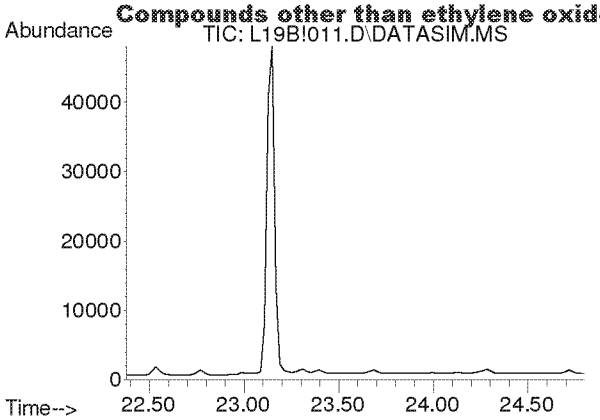
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

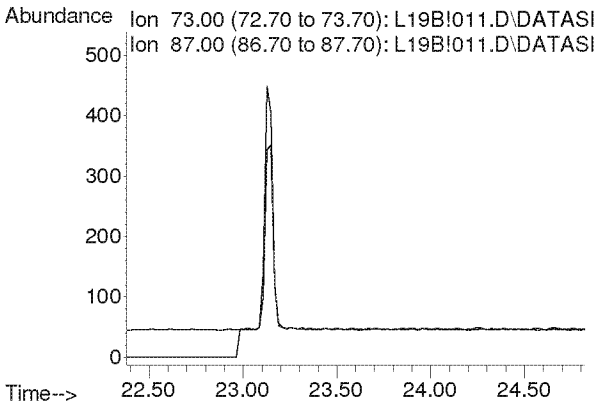


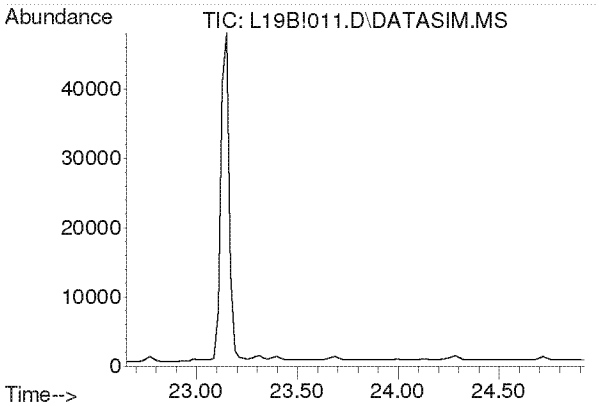
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



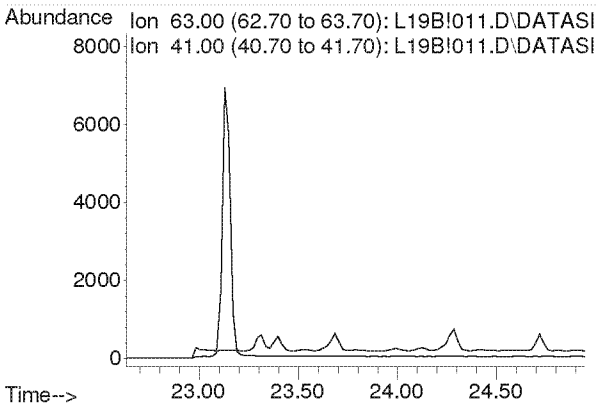


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

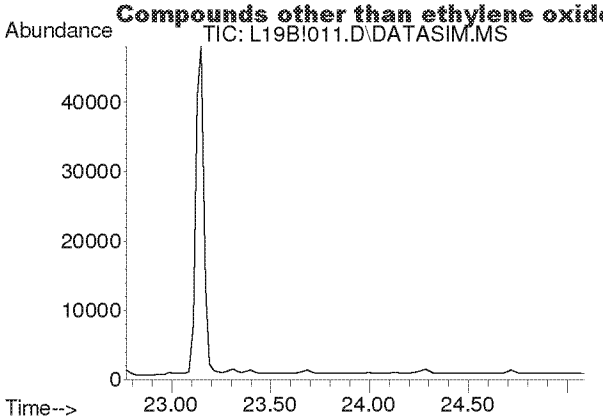
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

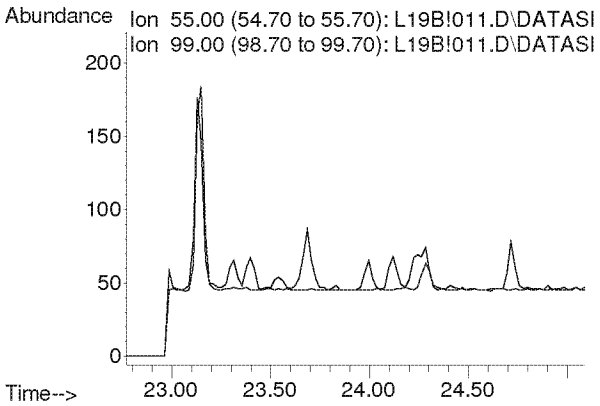


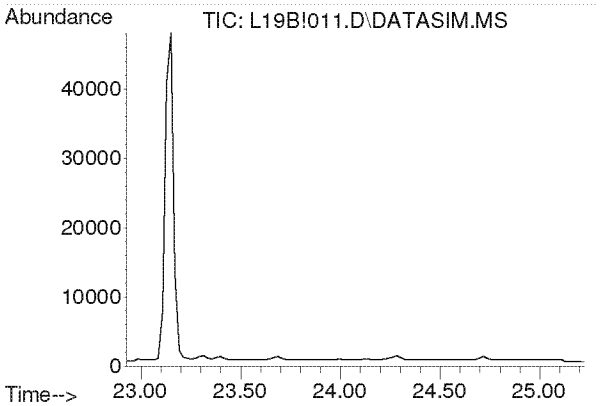
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



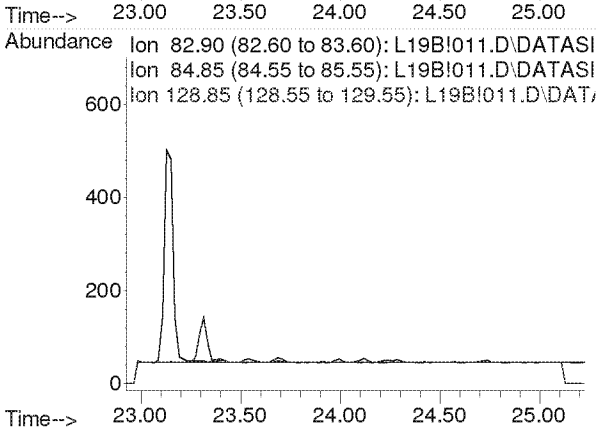


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

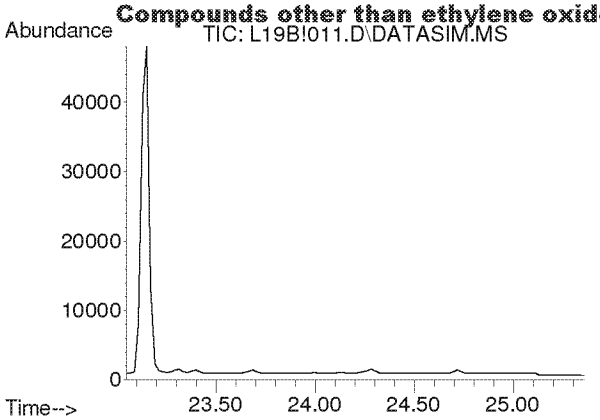
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

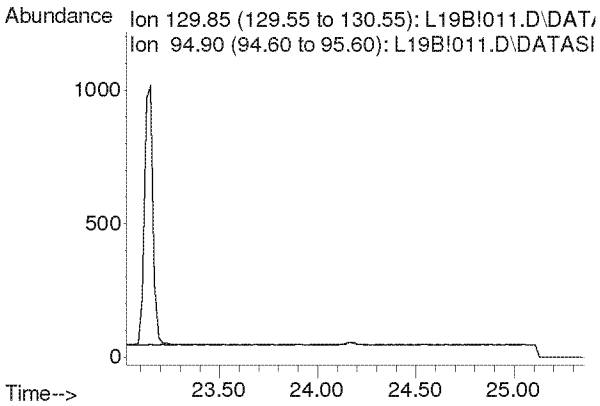


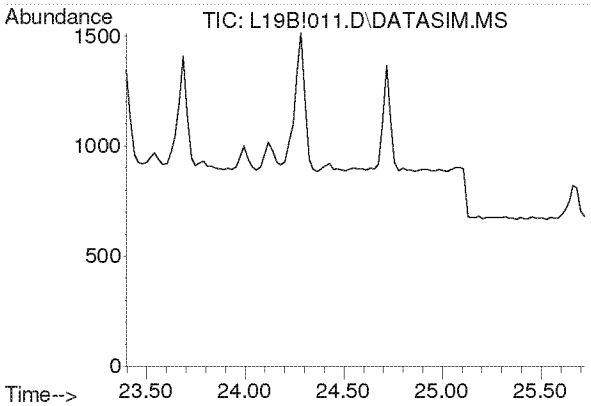
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



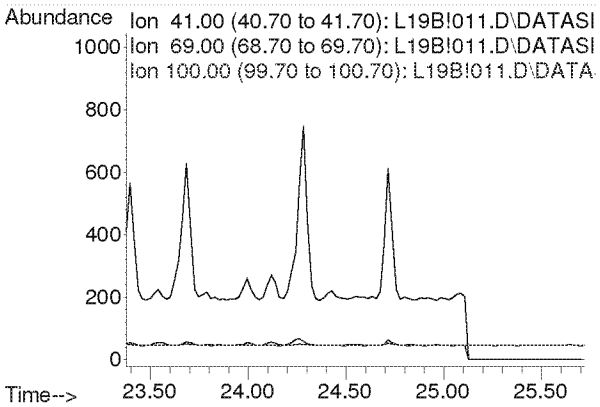


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

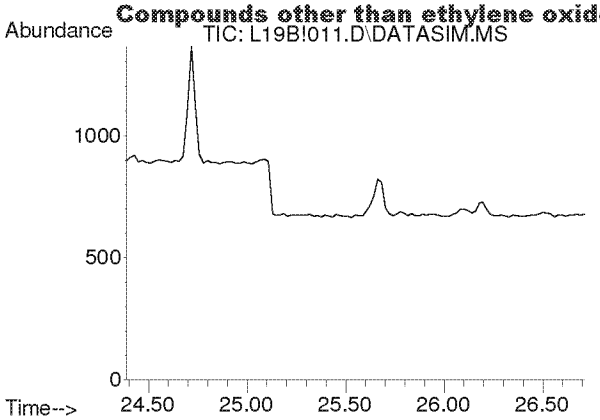
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

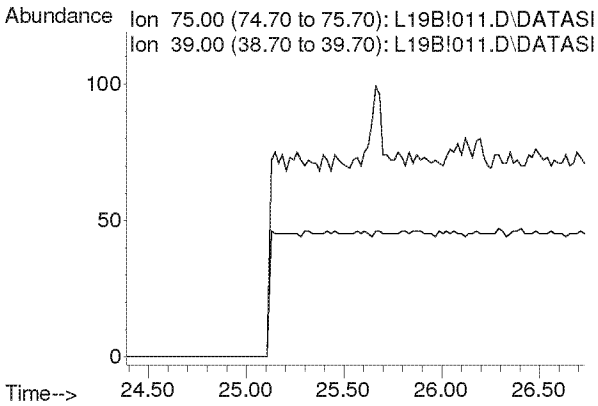


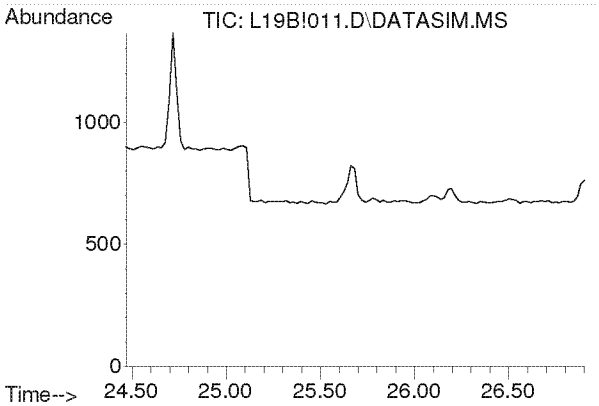
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



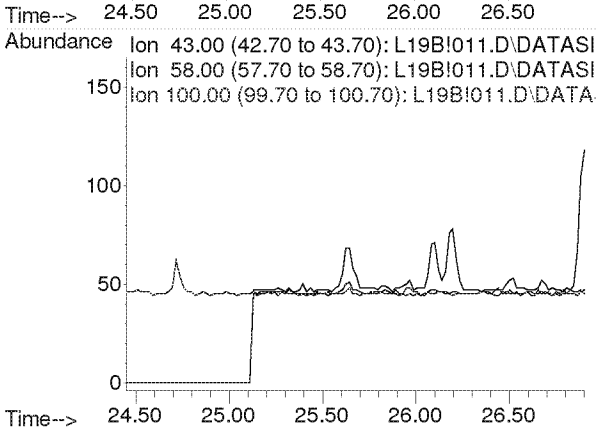


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

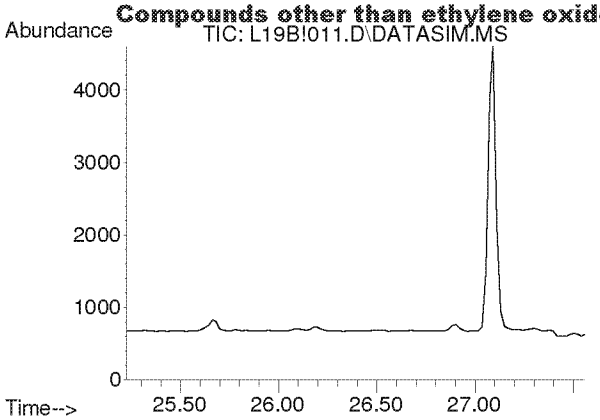
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

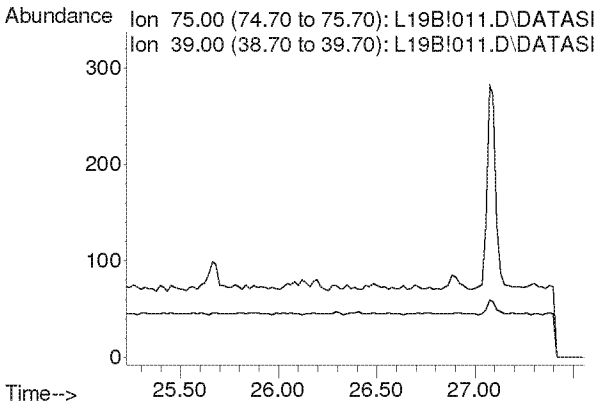


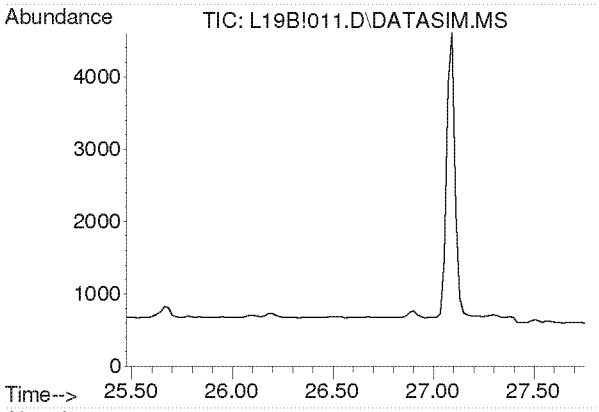
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



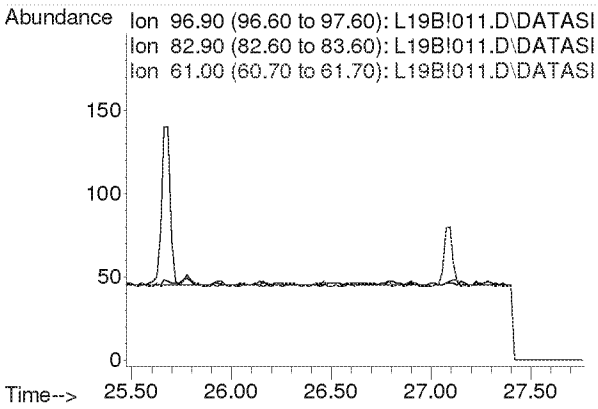


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

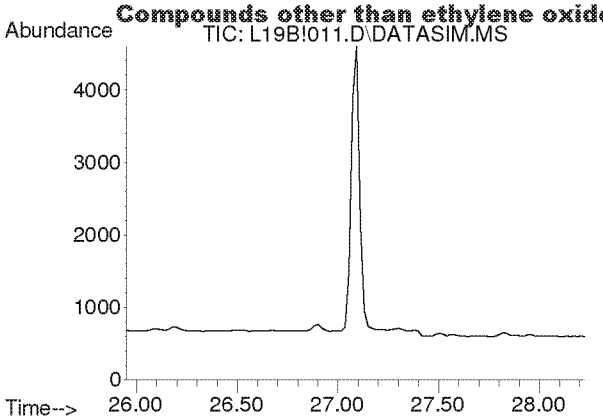
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

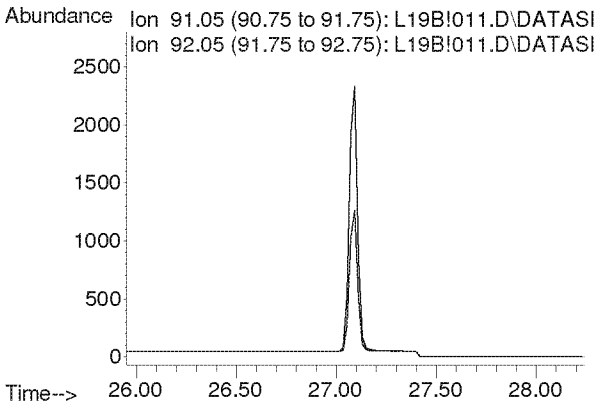


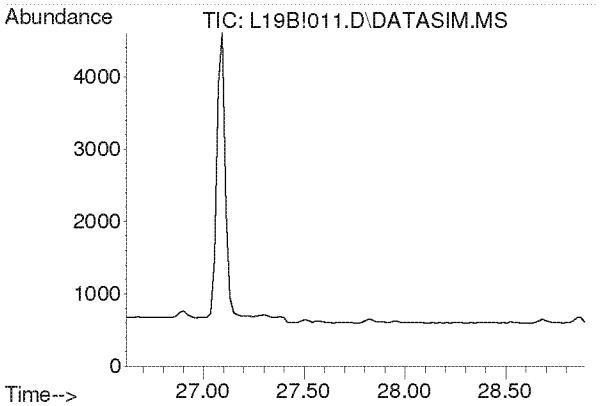
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



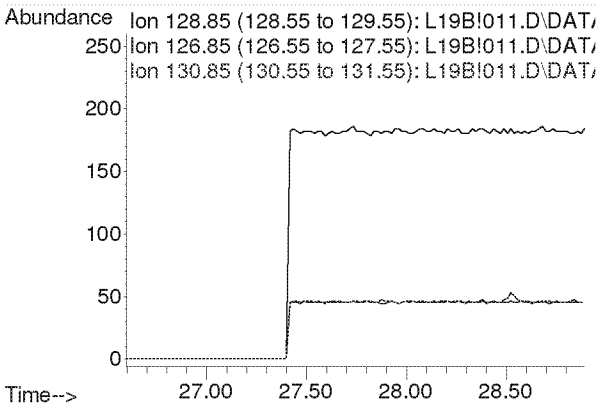


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

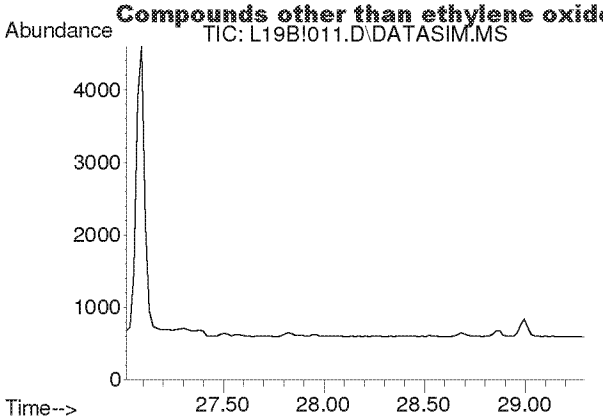
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

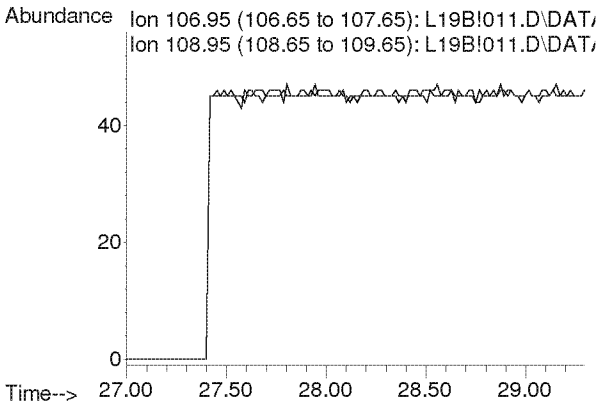


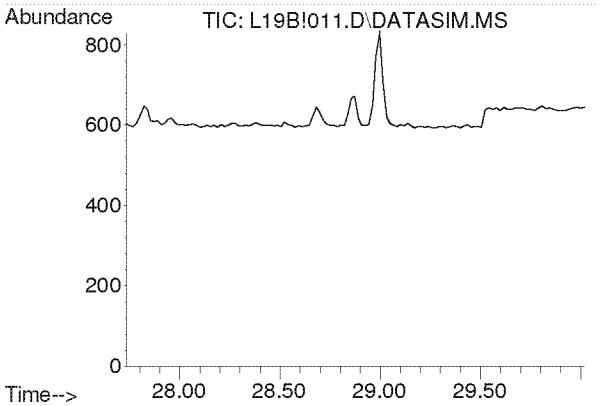
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



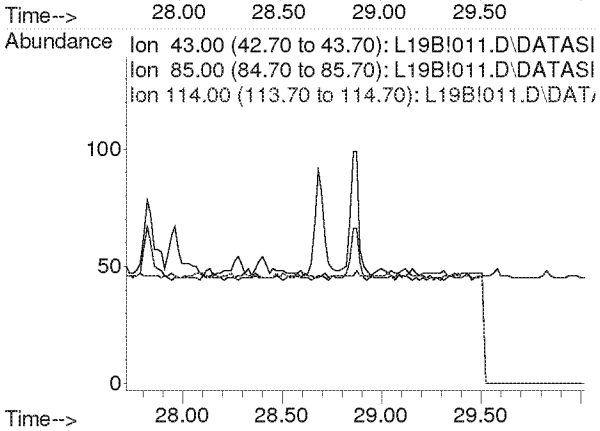


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

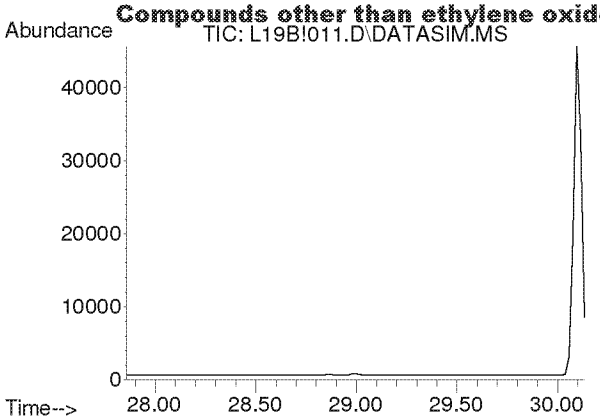
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

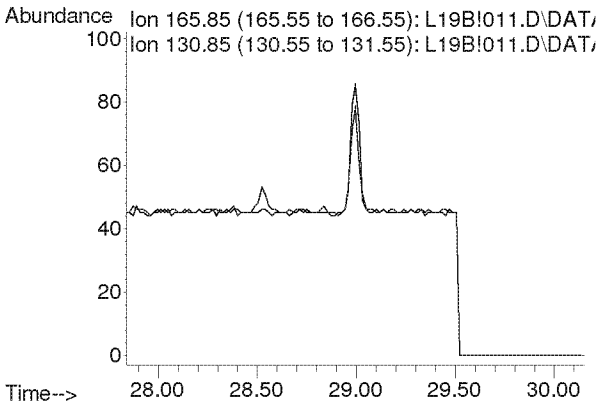


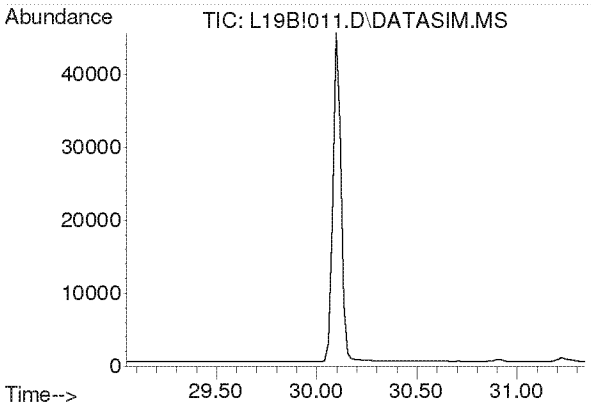
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



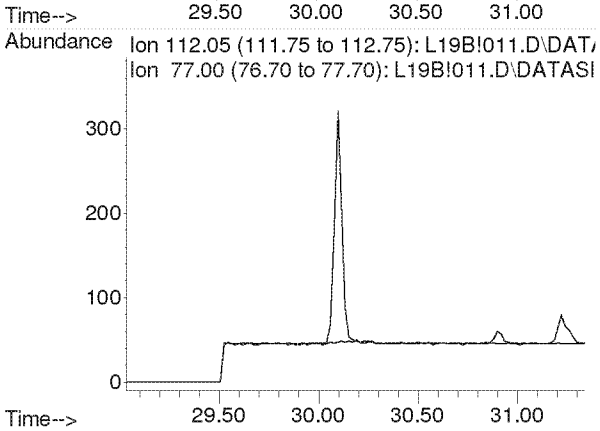


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

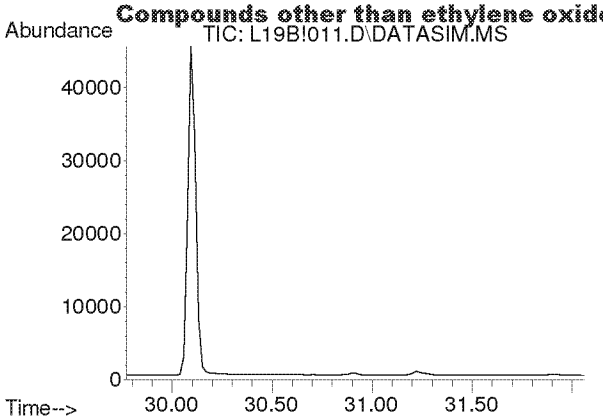
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

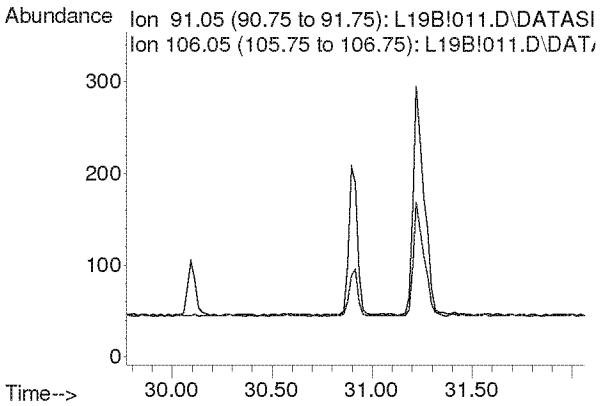


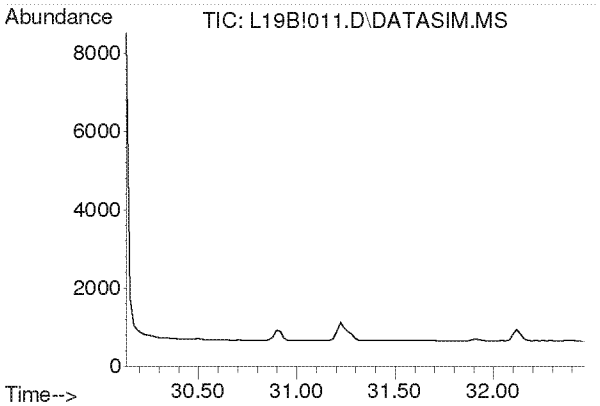
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



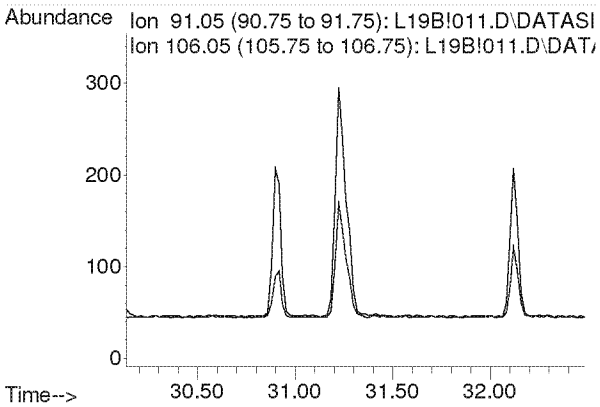


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

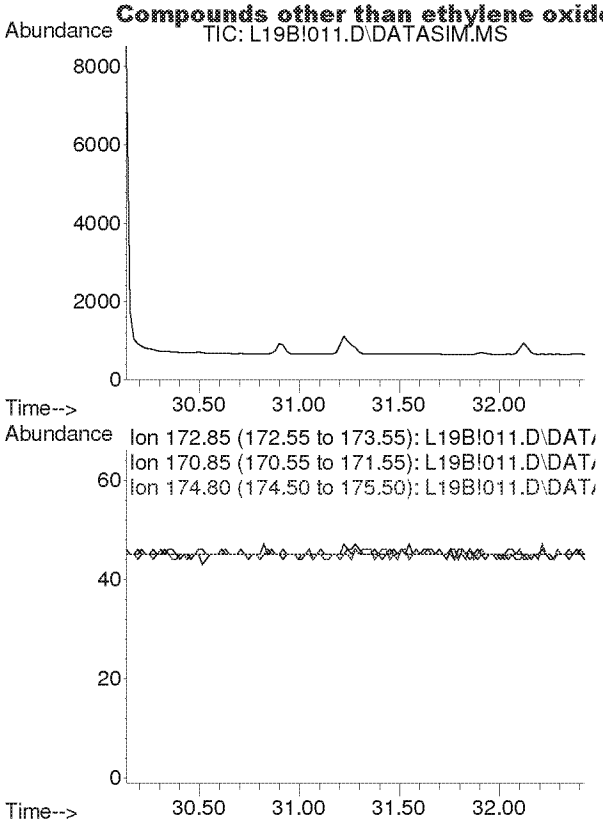
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

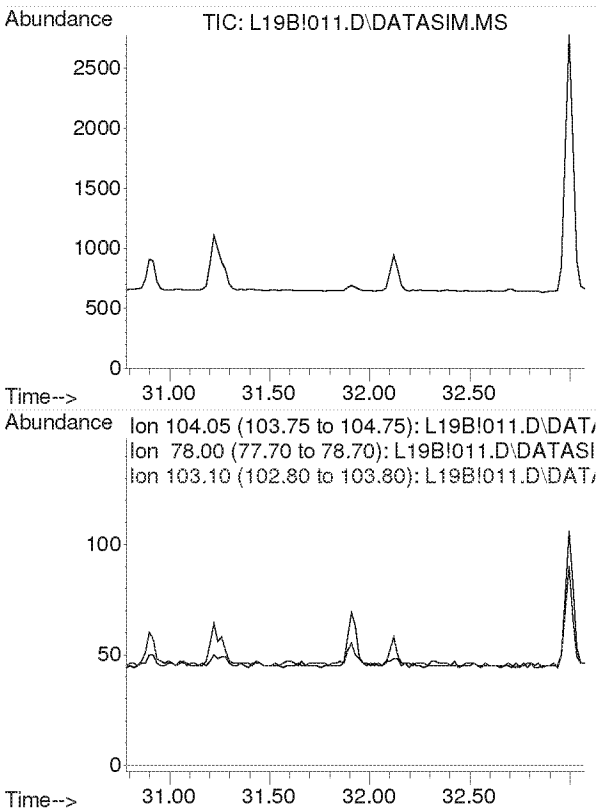


#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



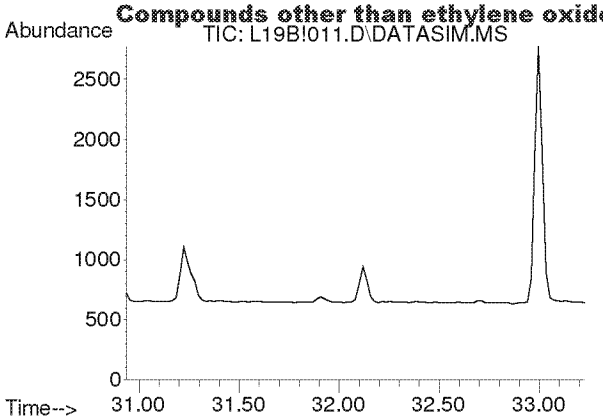
#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0

Compounds other than ethylene oxide were not quantitated.

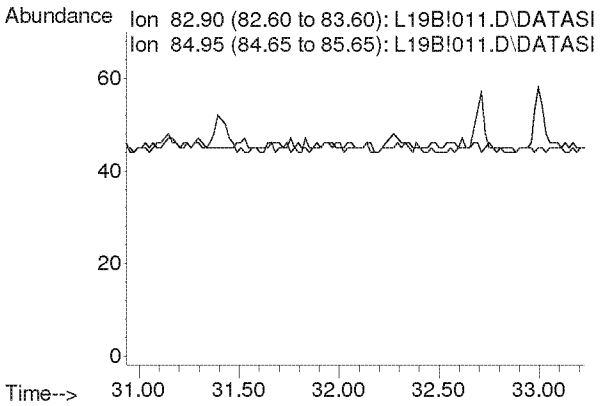


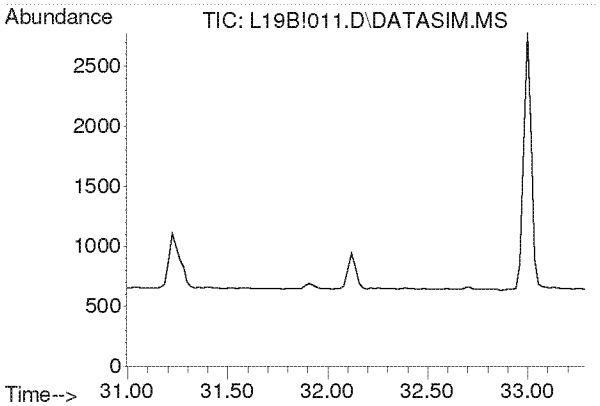
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



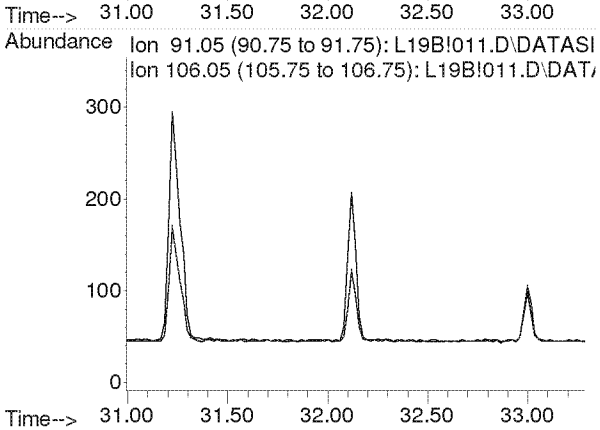


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

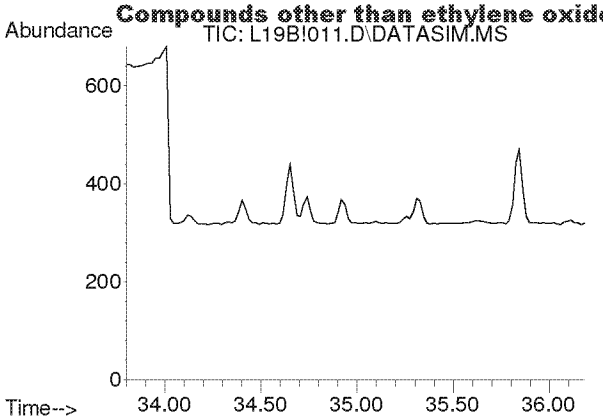
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

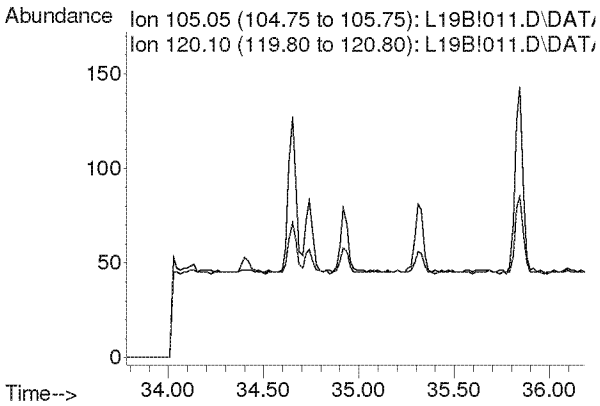


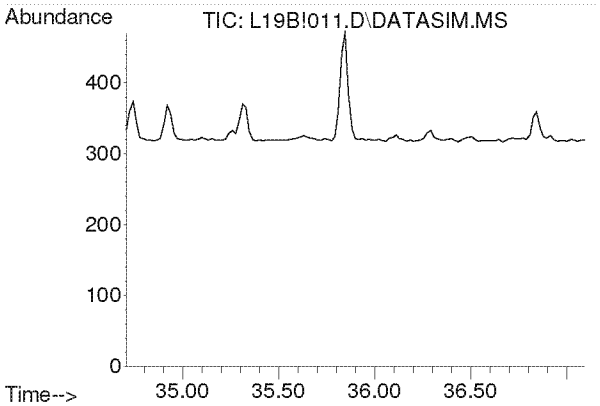
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



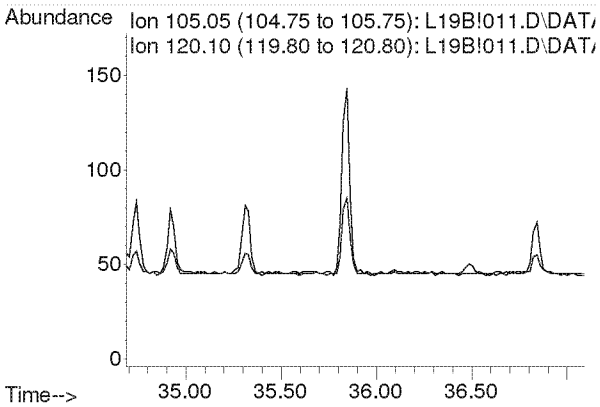


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

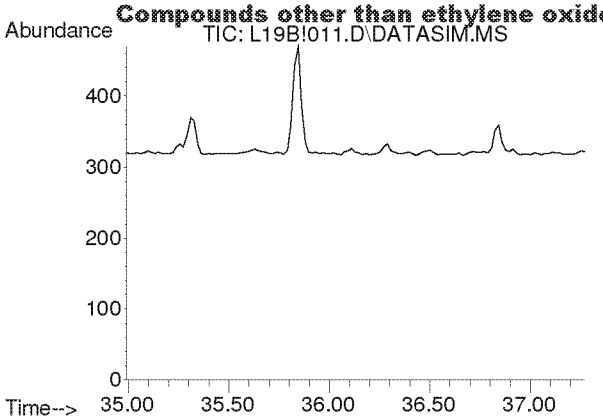
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

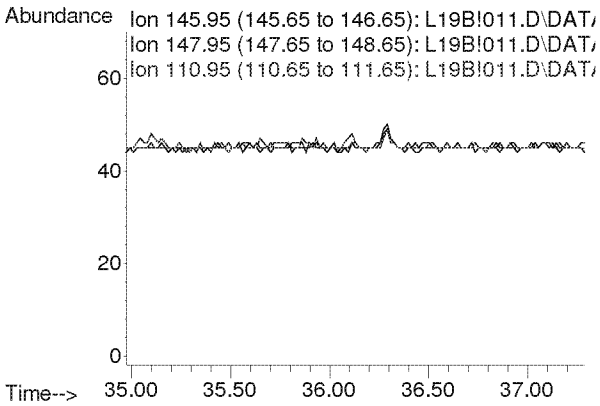


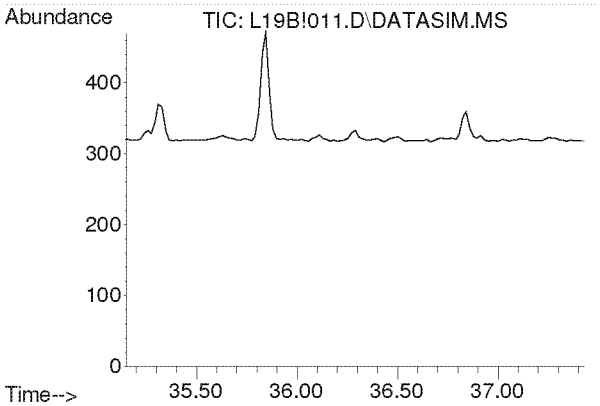
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



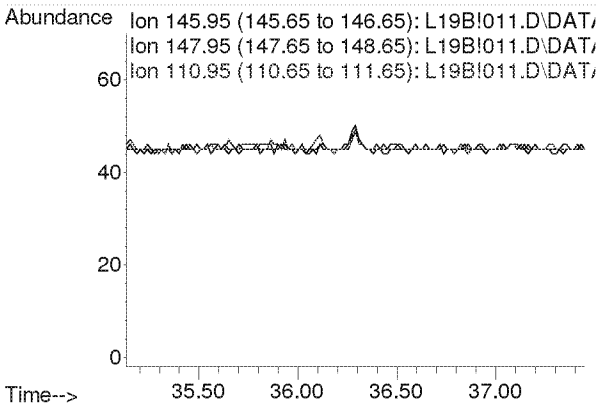


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

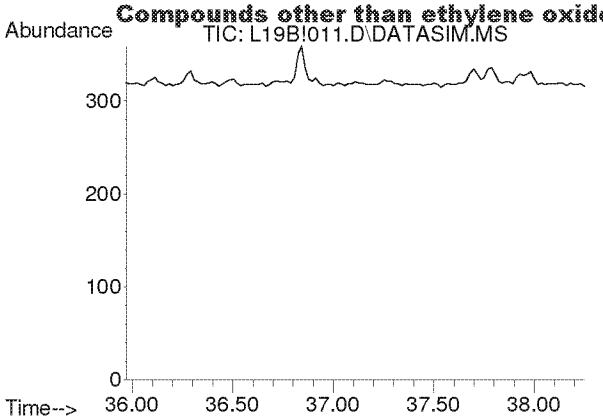
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7



Compounds other than ethylene oxide were not quantitated.

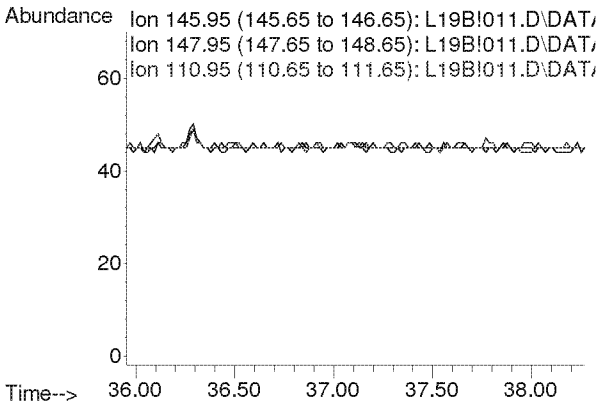


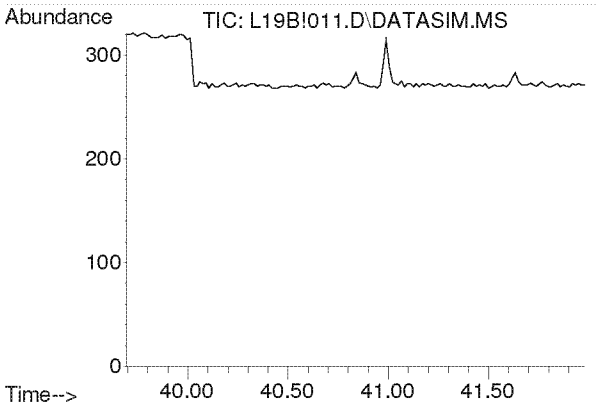
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



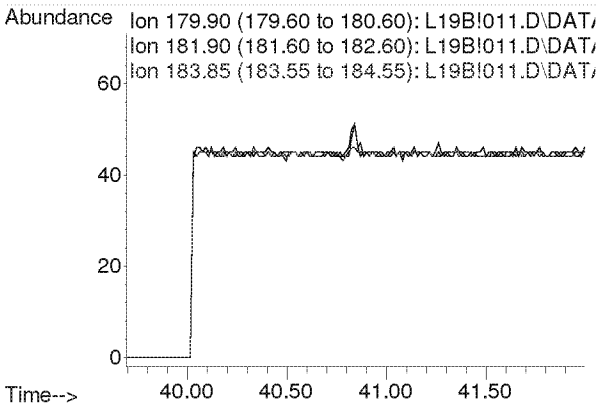


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

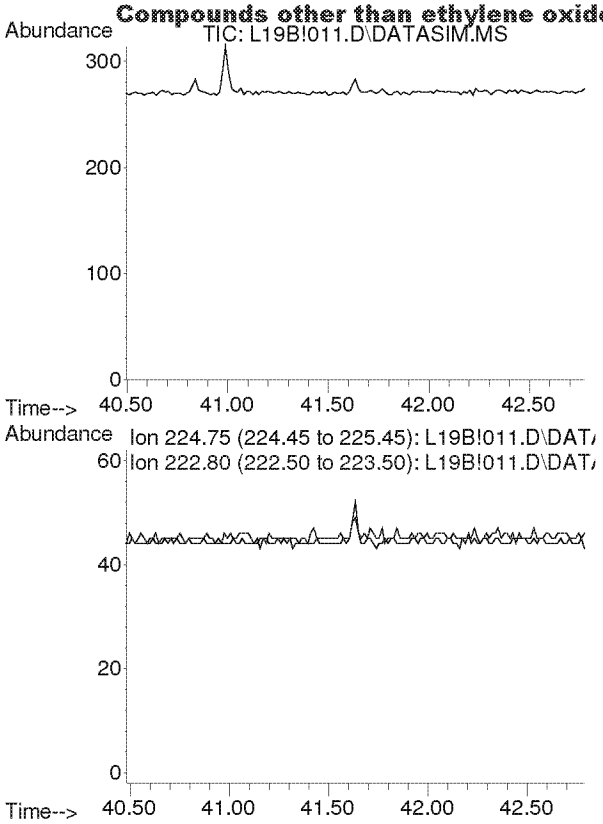
Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!011.D
Acq: 28 Feb 2019 10:41 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\L19B!\
Data File : L19B!012.D
Acq On : 28 Feb 2019 11:41 pm
Operator : MAH
Sample : B9B2804-DUP1
Misc : WB VILLAGE HALL R1 2/24/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 05 07:40:21 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.990	66	42810	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.148	114	108251	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	76373	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	12.483	29	194m	0.0792 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\L19B!\
Data File : L19B!012.D
Acq On : 28 Feb 2019 11:41 pm
Operator : MAH
Sample : B9B2804-DUP1
Misc : WB VILLAGE HALL R1 2/24/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 05 07:40:21 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration

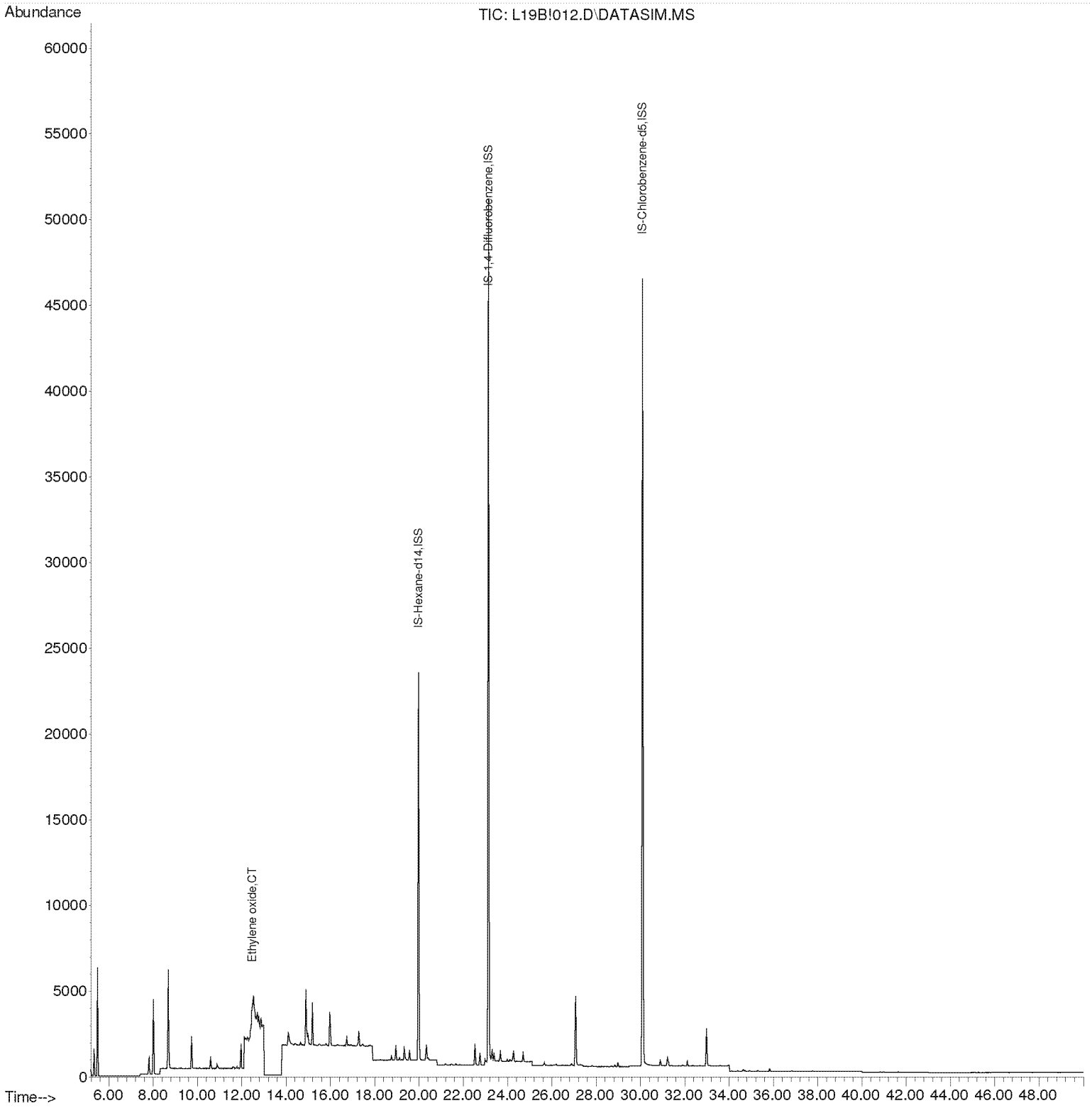
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene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

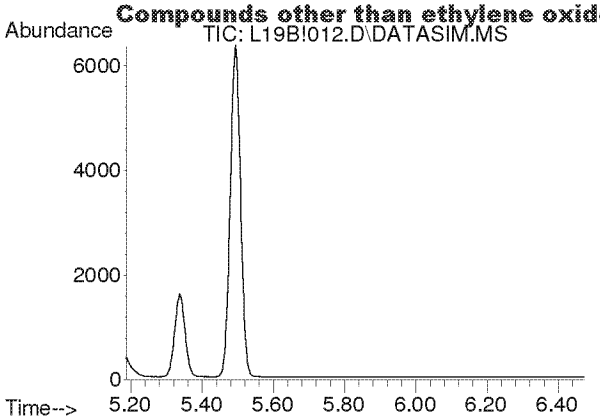
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L19B!\
Data File : L19B!012.D
Acq On : 28 Feb 2019 11:41 pm
Operator : MAH
Sample : B9B2804-DUP1
Misc : WB VILLAGE HALL R1 2/24/19
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 05 07:39:47 2019
Quant Method : C:\msdchem\1\METHODS\9020003.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Wed Feb 13 06:44:42 2019
Response via : Initial Calibration



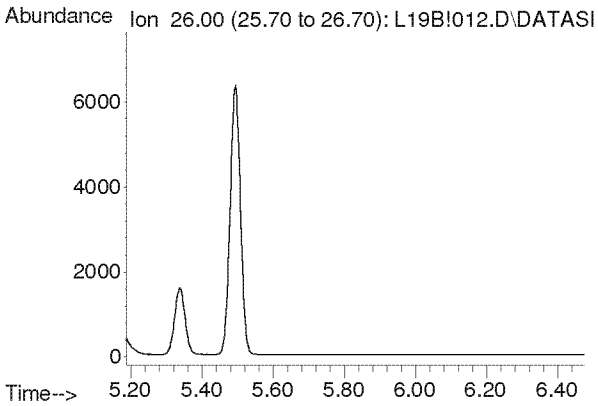
Compounds other than ethylene oxide were not quantitated.

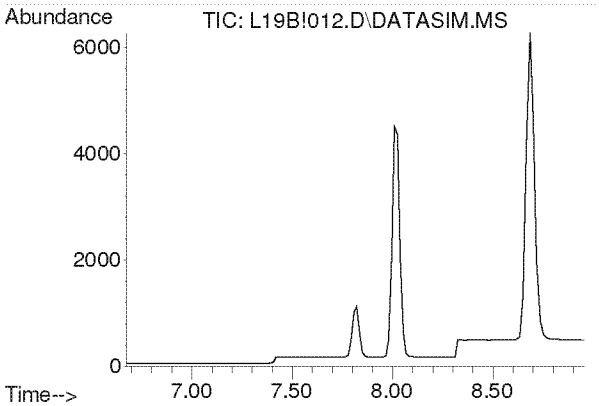


#2
Acetylene
Concen: N.D.
Expected RT: 5.40 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 26



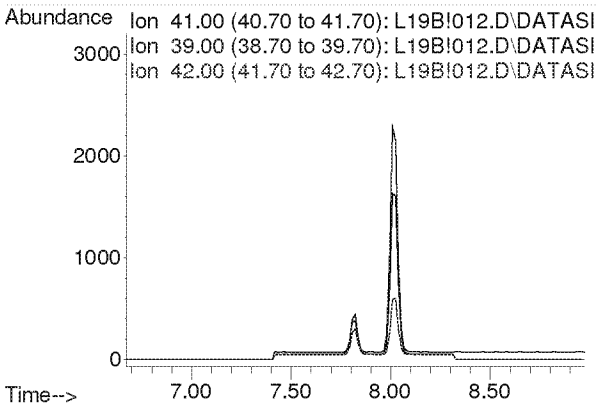


#3
Propylene
Concen: N.D.
Expected RT: 7.82 min

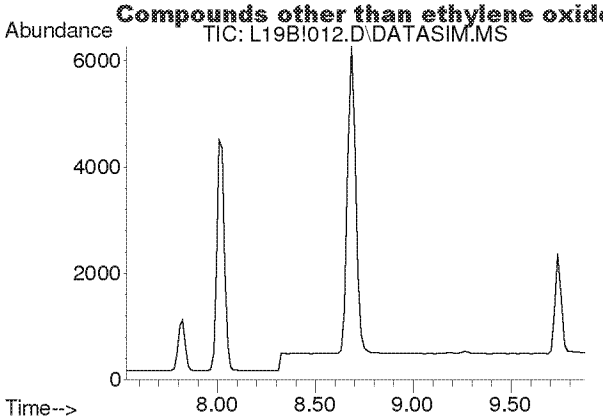
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	80.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

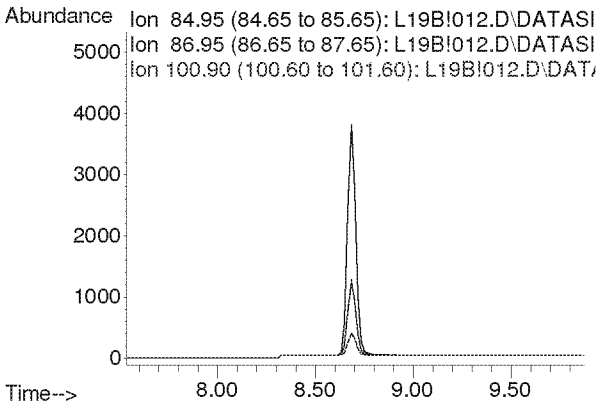


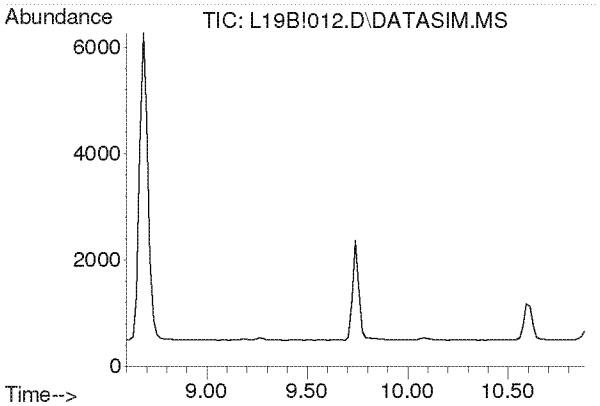
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	9.1



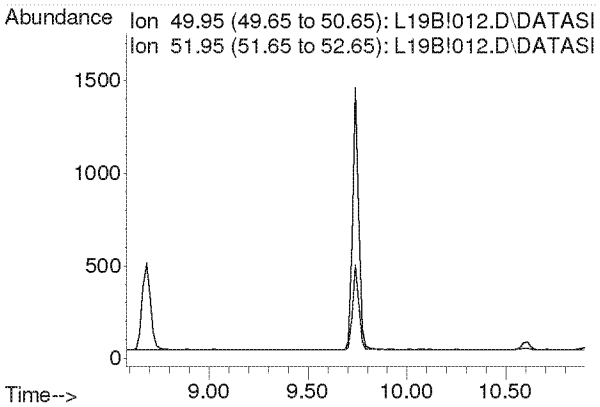


#5
Chloromethane
Concen: N.D.
Expected RT: 9.74 min

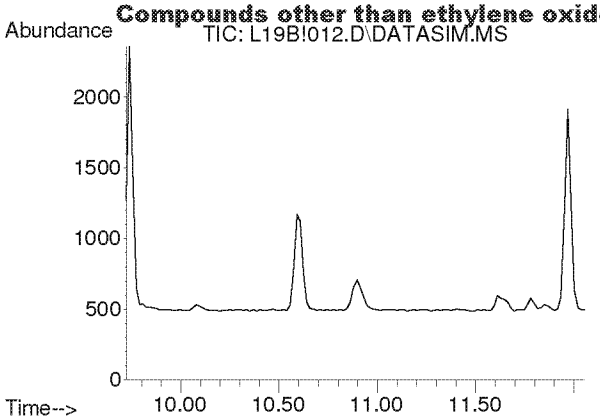
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

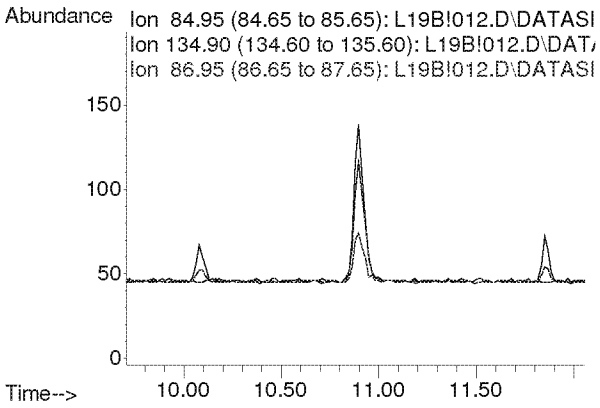


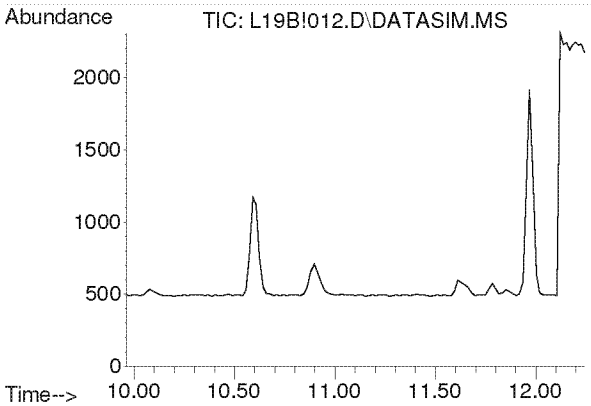
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.0
87	32.4



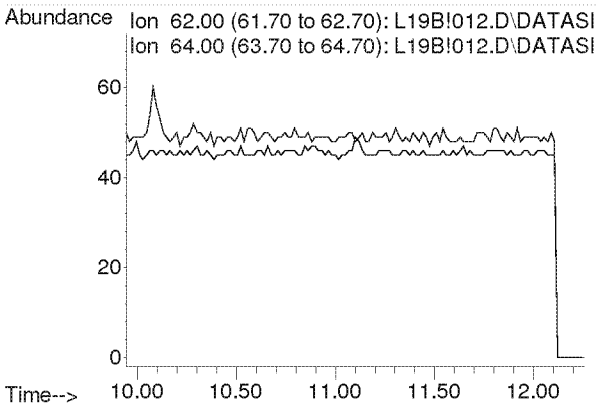


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.10 min

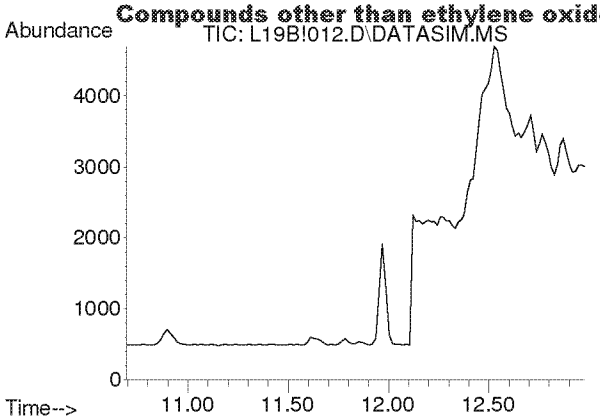
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.7



Compounds other than ethylene oxide were not quantitated.

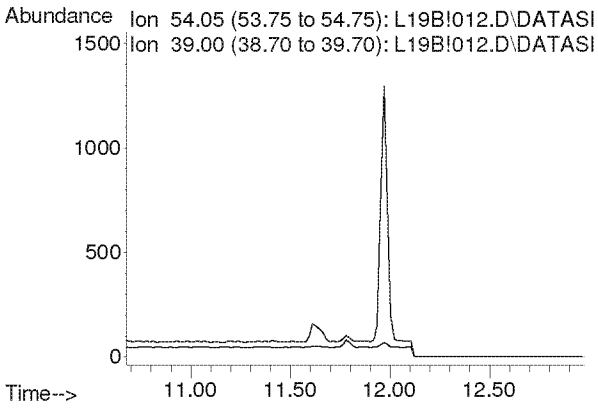


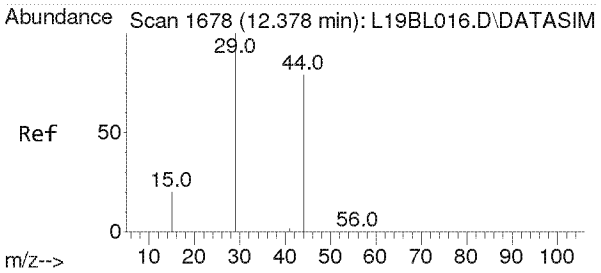
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	102.0

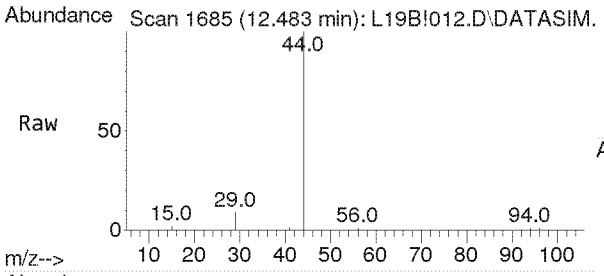


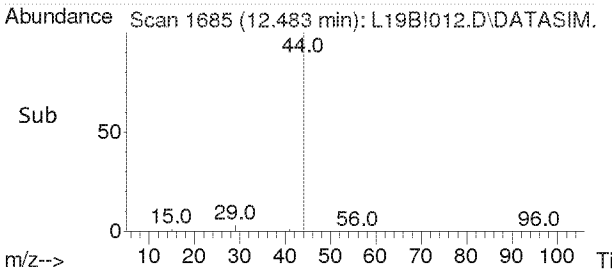


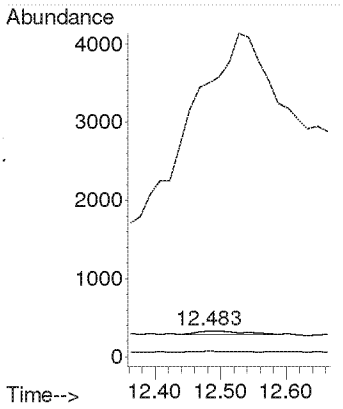
#9
Ethylene oxide
Concen: 0.079 ppbv m
RT: 12.483 min Scan# 1685
Delta R.T. 0.033 min
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 29 Resp: 194

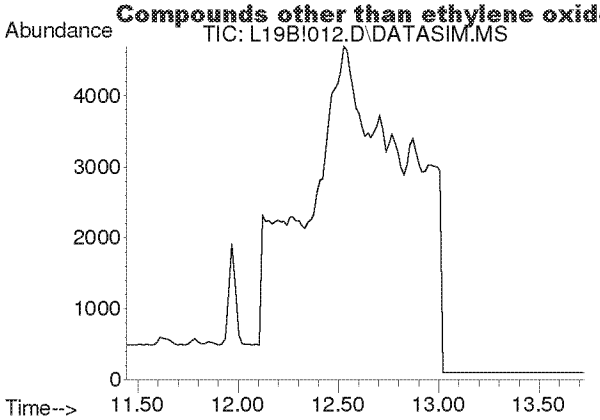
Ion	Ratio	Lower	Upper
29	100		
15	25.3	16.0	24.0#
44	11846.9	65.4	98.2#







Compounds other than ethylene oxide were not quantitated.

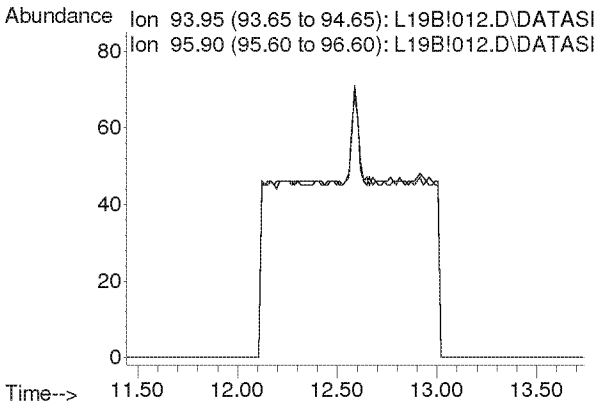


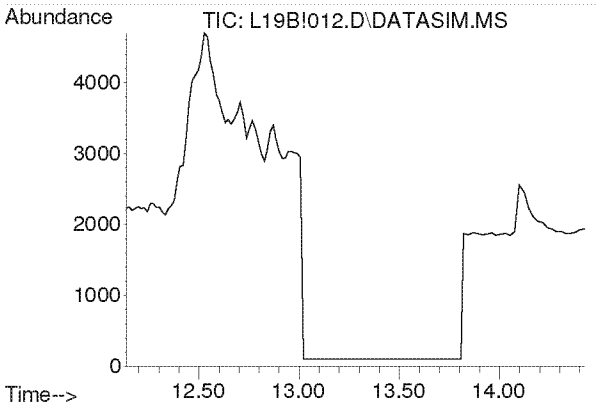
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	94.4



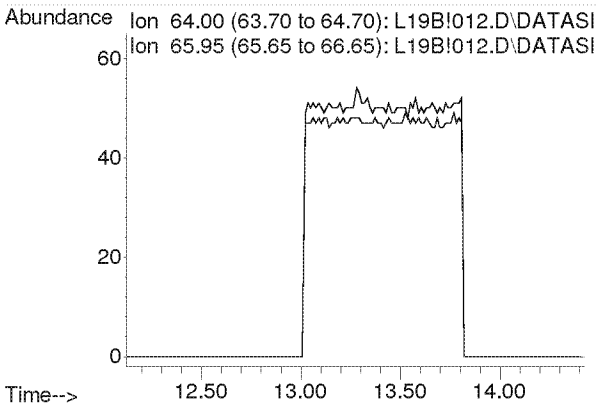


#11
Chloroethane
Concen: N.D.
Expected RT: 13.28 min

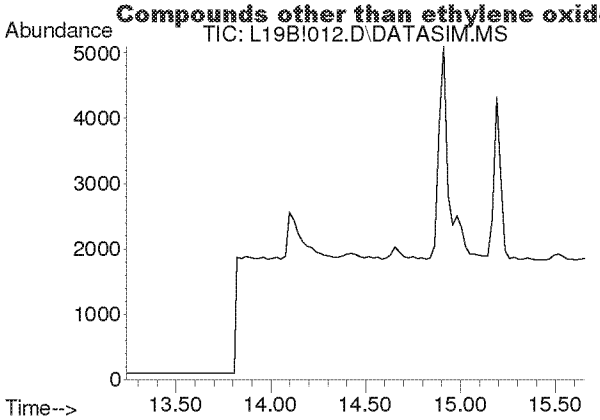
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.2



Compounds other than ethylene oxide were not quantitated.

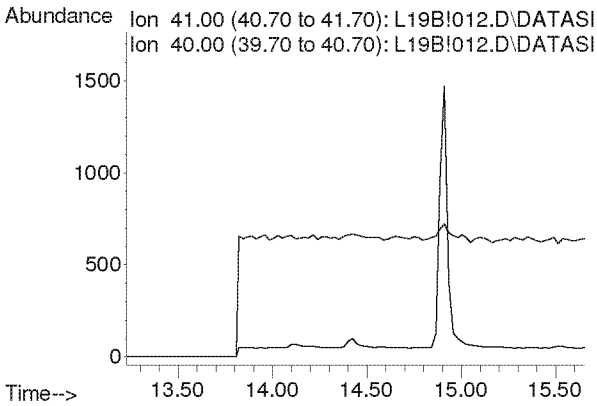


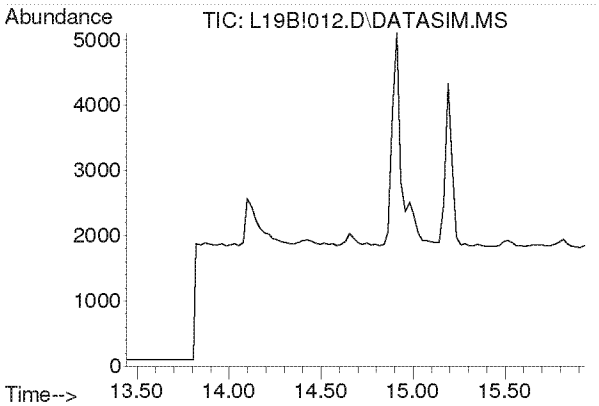
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.36 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	52.8



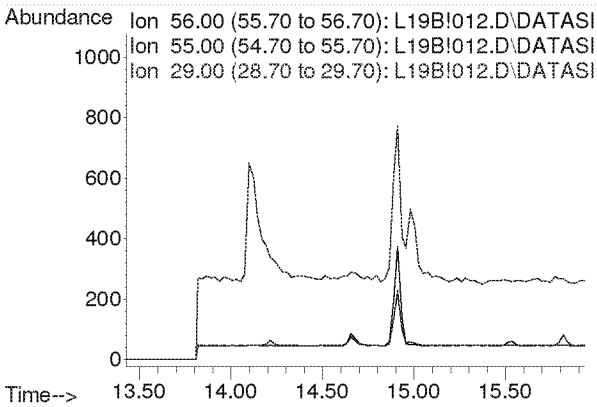


#13
Acrolein
Concen: N.D.
Expected RT: 14.63 min

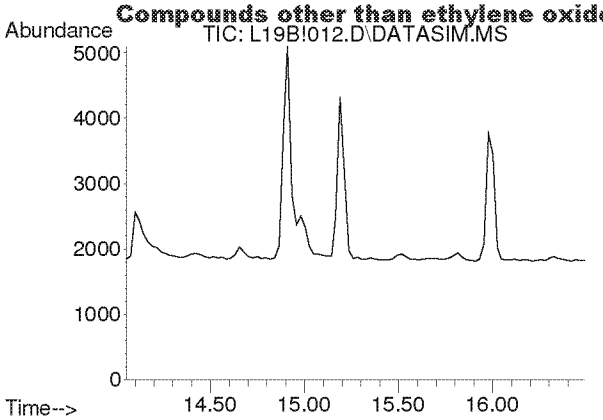
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	76.0
29	54.7



Compounds other than ethylene oxide were not quantitated.

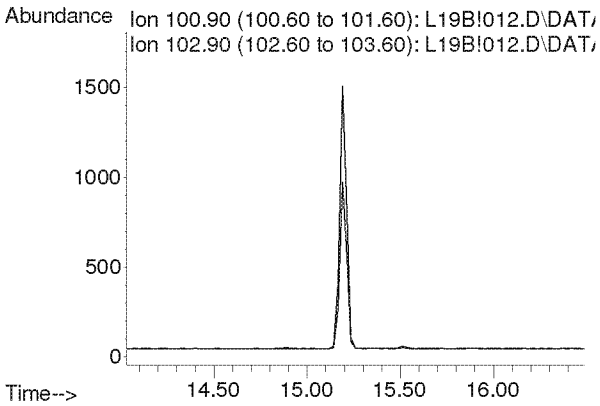


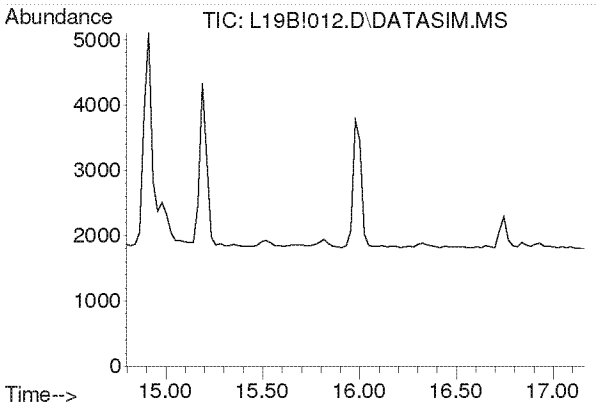
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



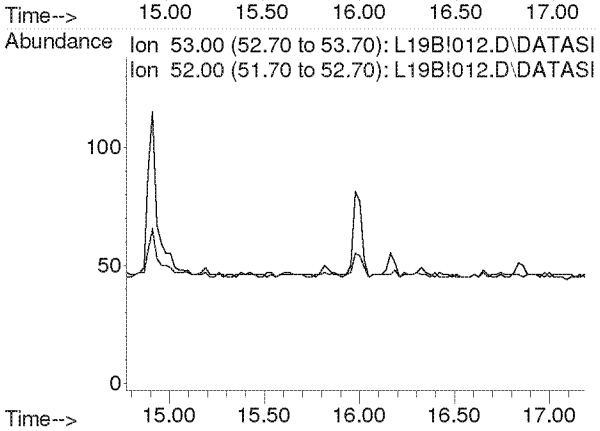


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.93 min

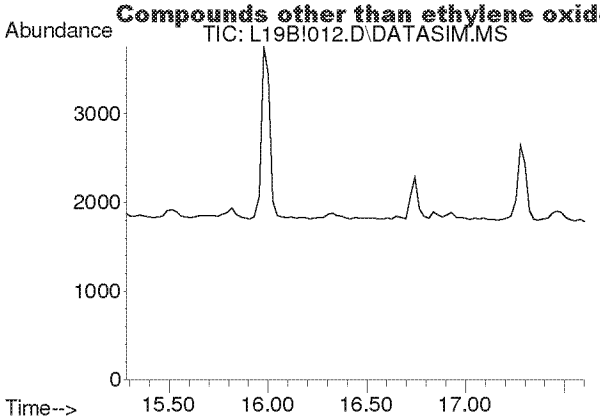
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	86.9



Compounds other than ethylene oxide were not quantitated.

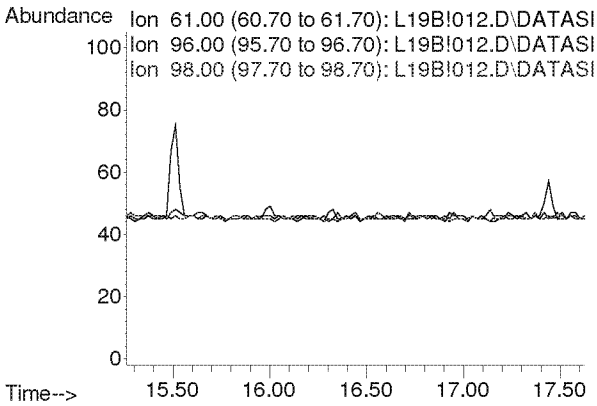


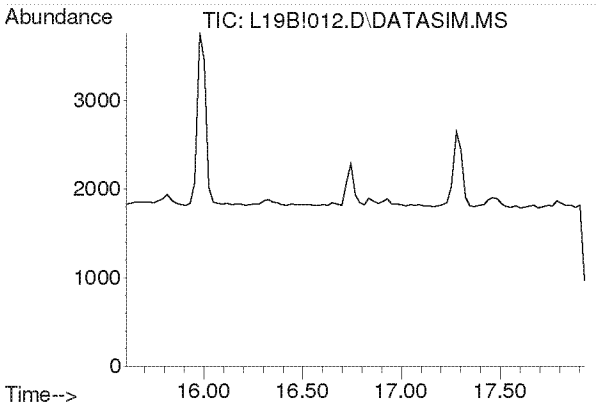
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	59.1
98	38.2



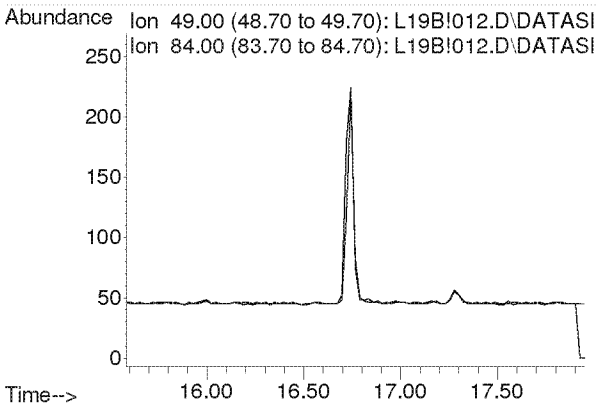


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.74 min

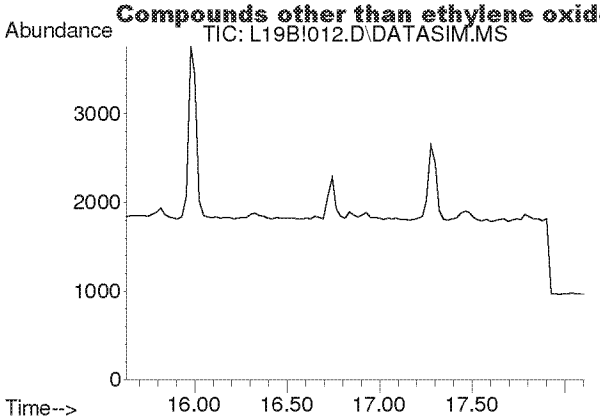
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	77.2



Compounds other than ethylene oxide were not quantitated.

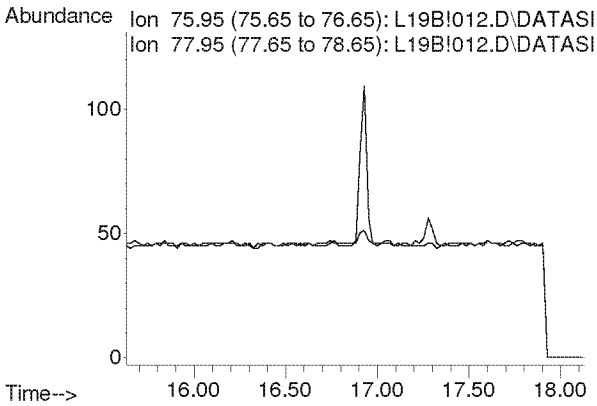


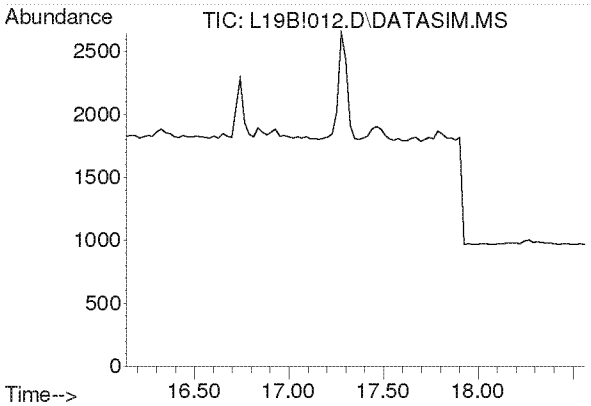
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.2



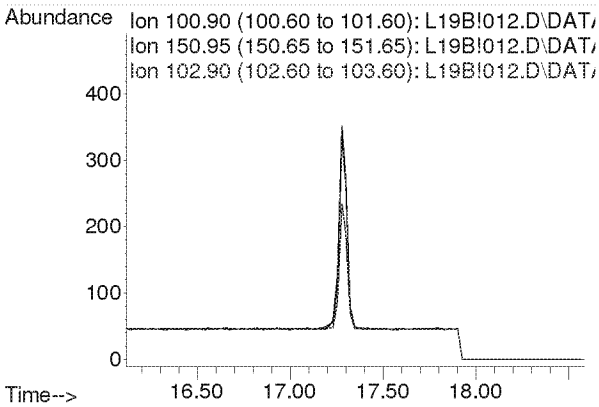


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

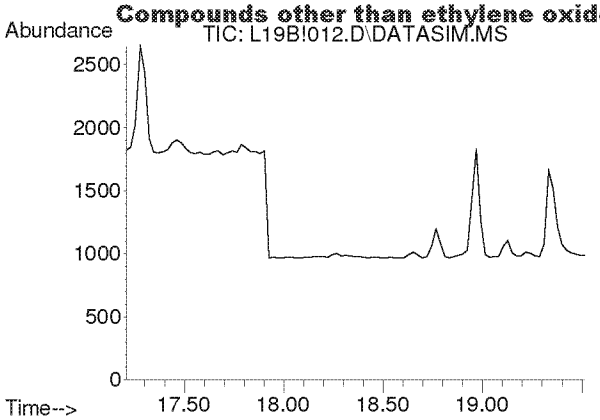
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	94.8
103	63.9



Compounds other than ethylene oxide were not quantitated.

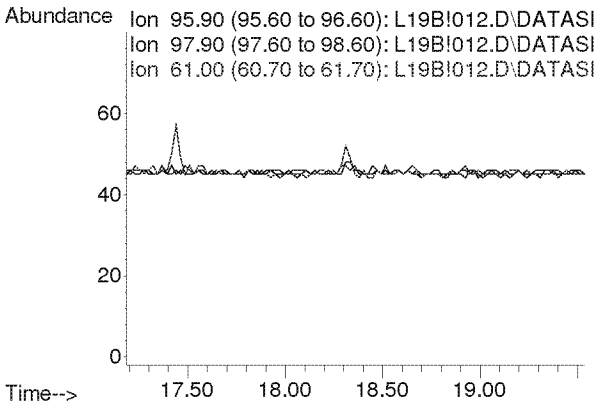


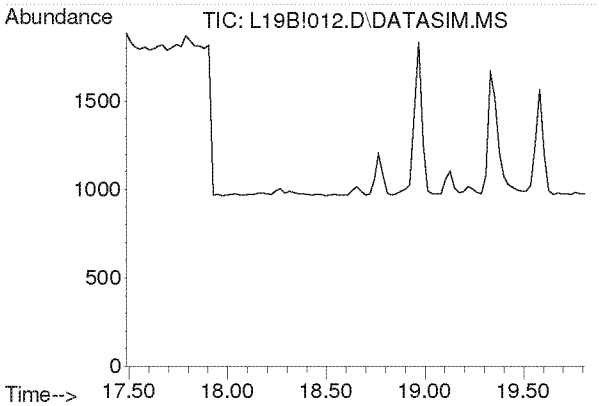
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.34 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	64.4
61	153.6



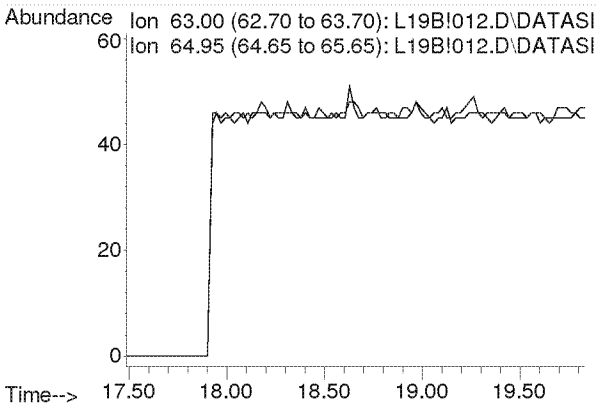


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

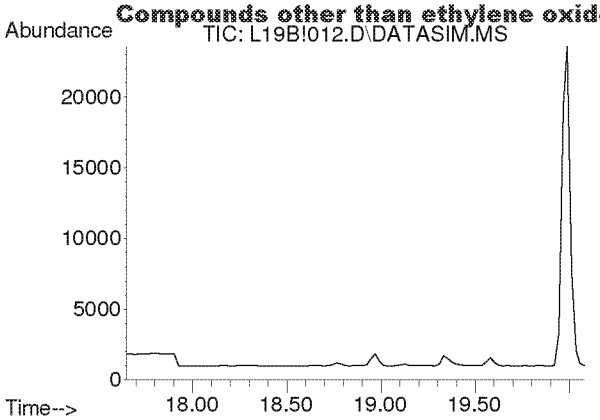
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

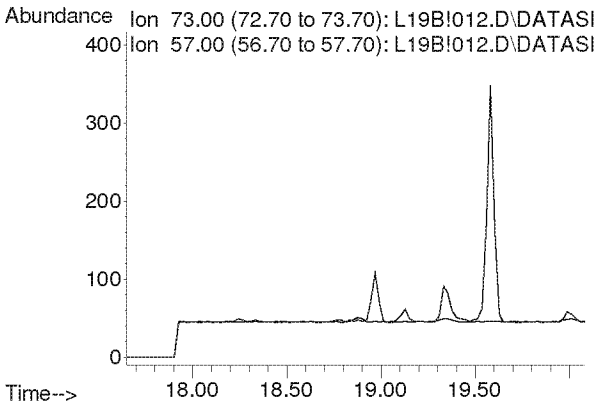


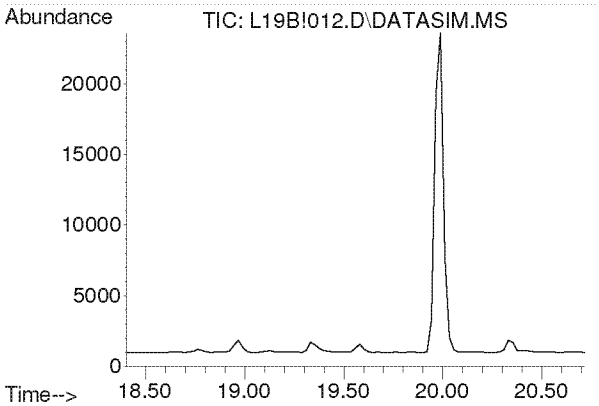
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	22.5



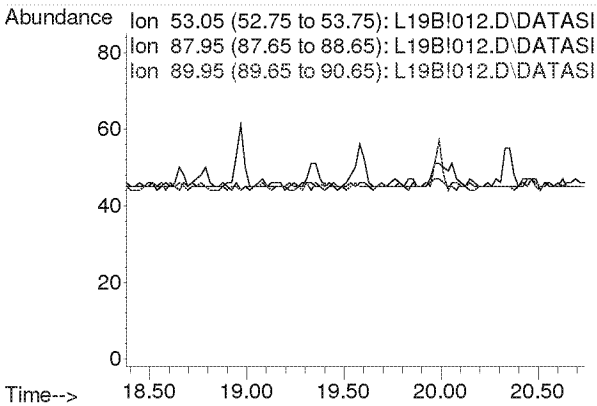


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

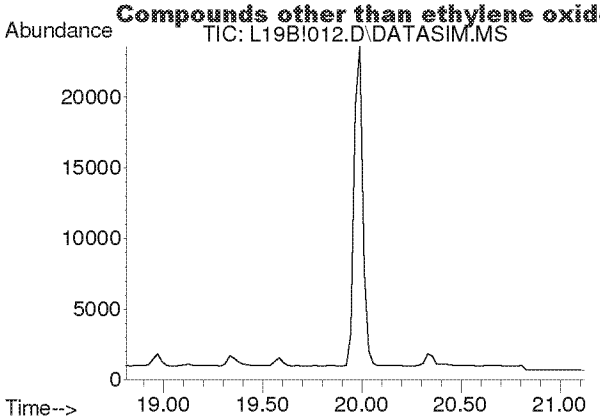
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	53.3
90	17.4



Compounds other than ethylene oxide were not quantitated.

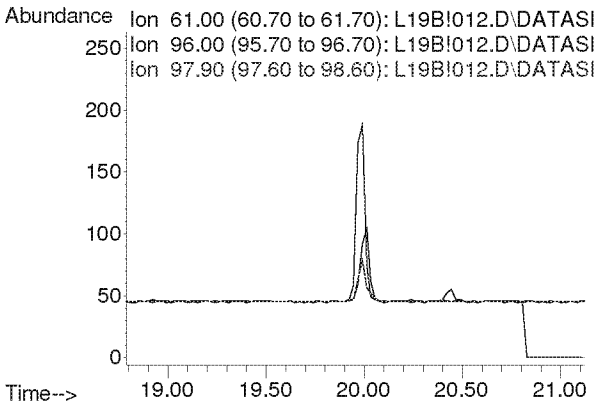


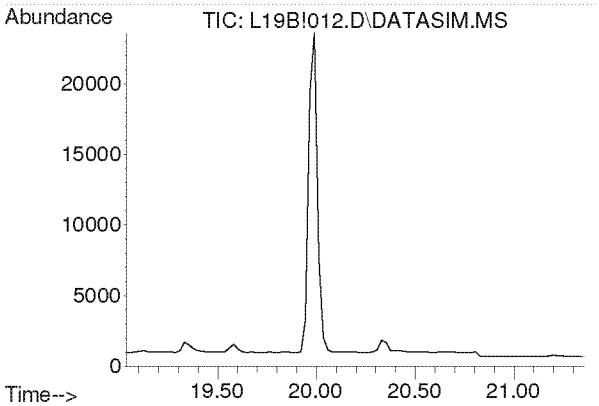
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.8
98	47.0



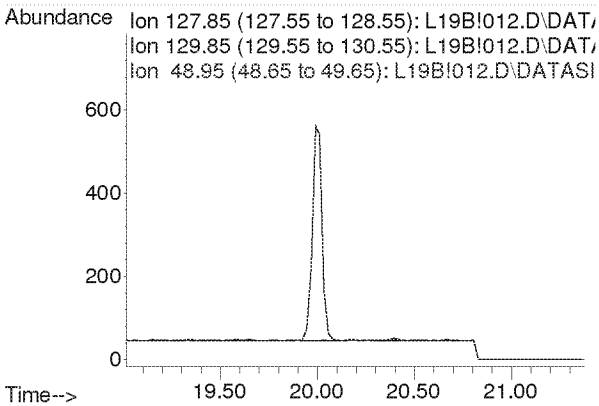


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

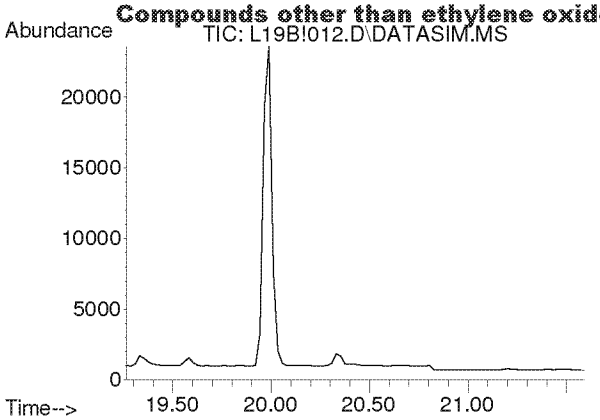
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	160.4



Compounds other than ethylene oxide were not quantitated.

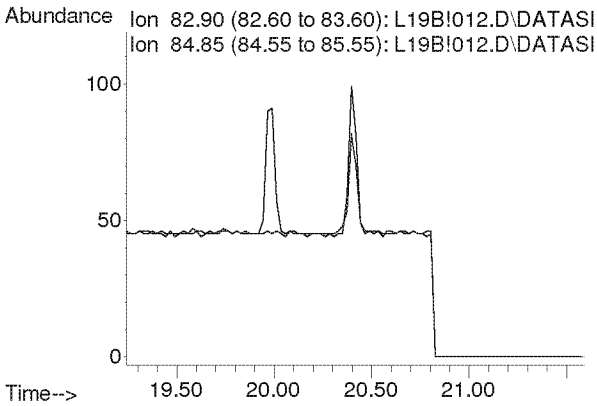


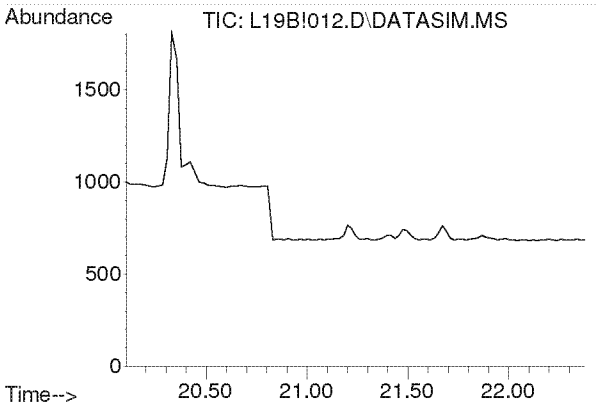
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



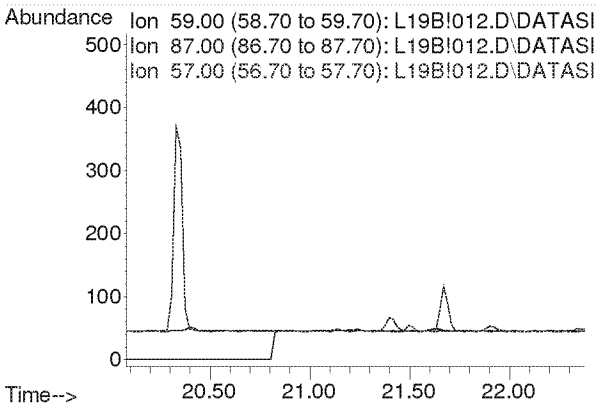


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.18 min

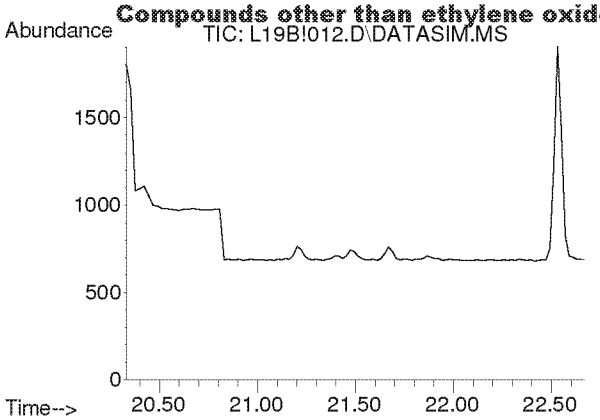
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	39.4
57	33.2



Compounds other than ethylene oxide were not quantitated.

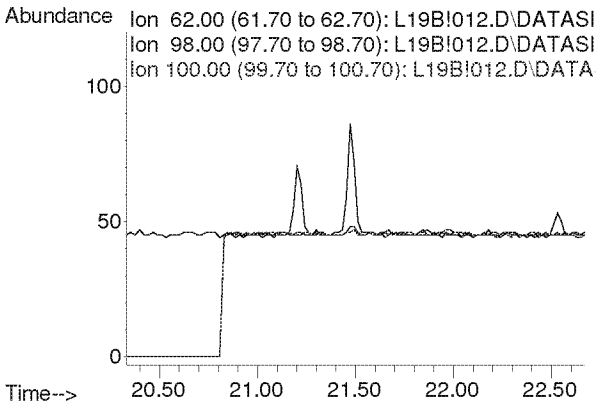


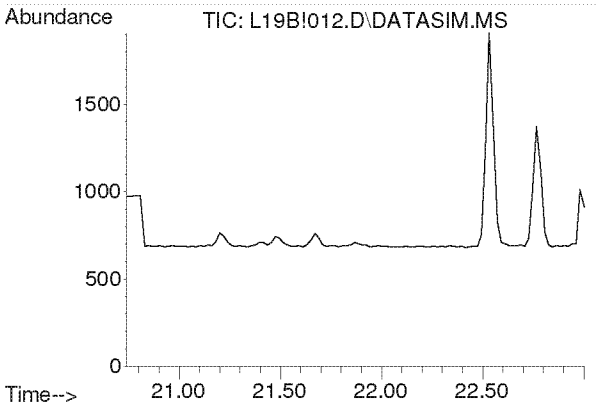
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.3
100	4.0



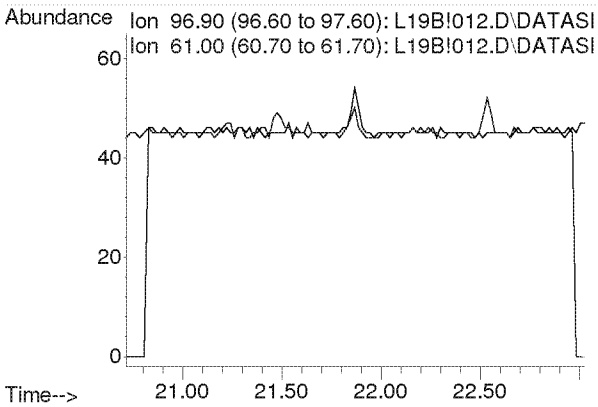


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

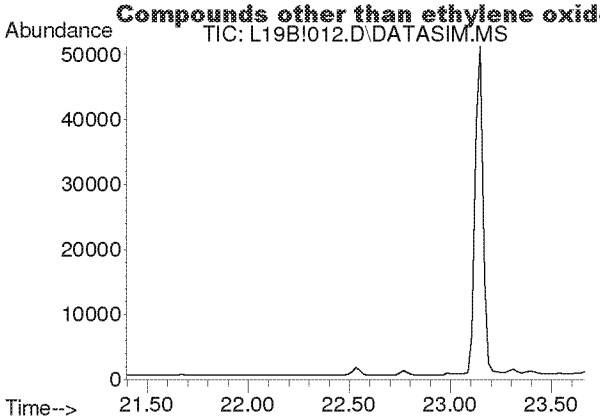
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	62.1



Compounds other than ethylene oxide were not quantitated.

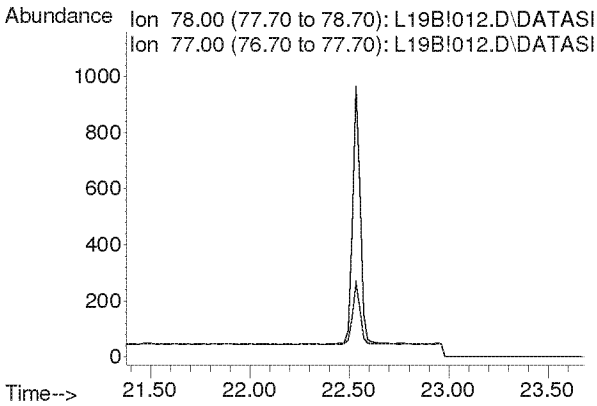


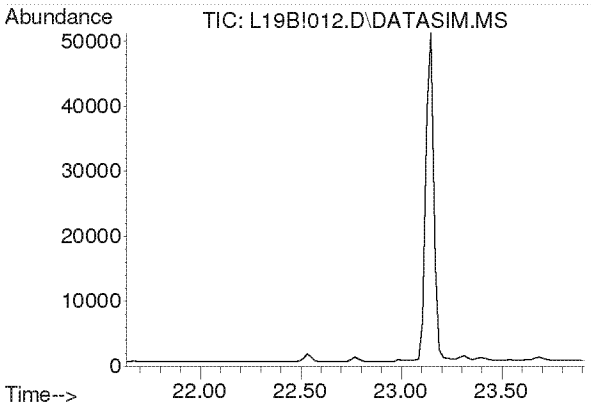
#31
Benzene
Concen: N.D.
Expected RT: 22.53 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.8



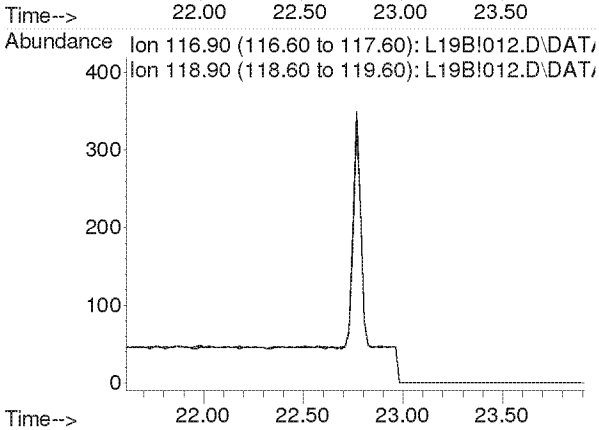


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

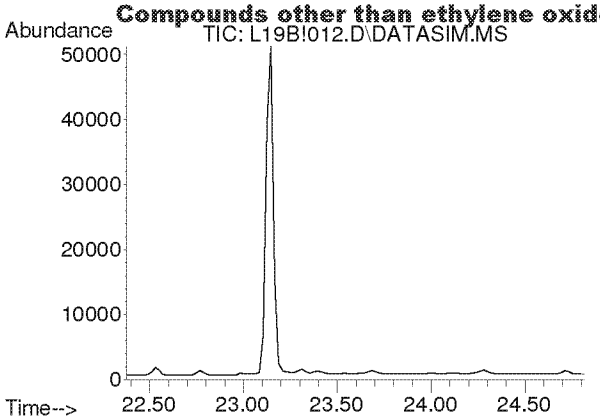
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.3



Compounds other than ethylene oxide were not quantitated.

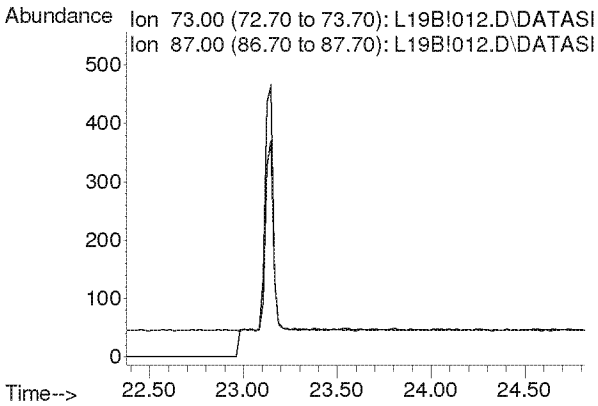


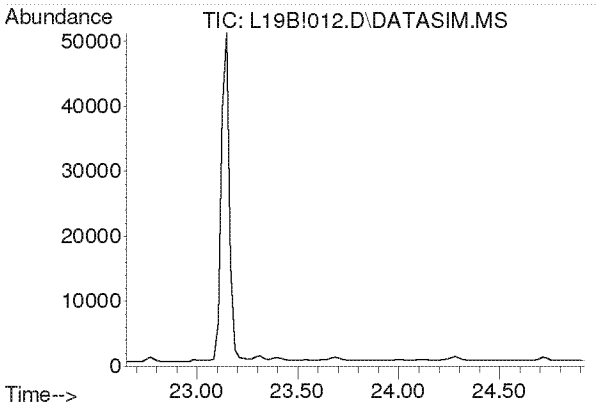
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.52 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	25.1



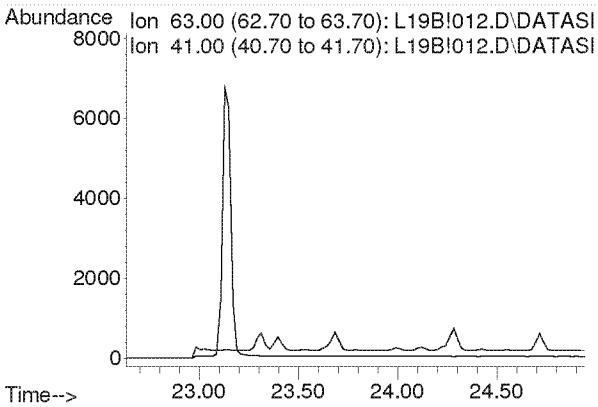


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

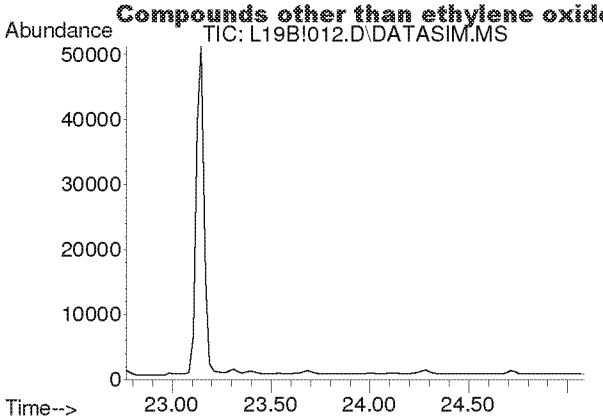
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	219.9



Compounds other than ethylene oxide were not quantitated.

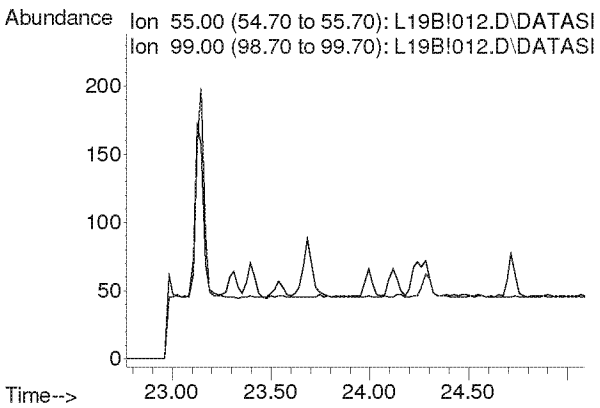


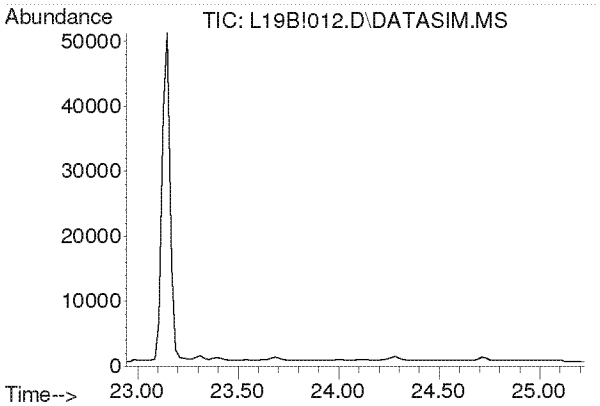
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.89 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.3



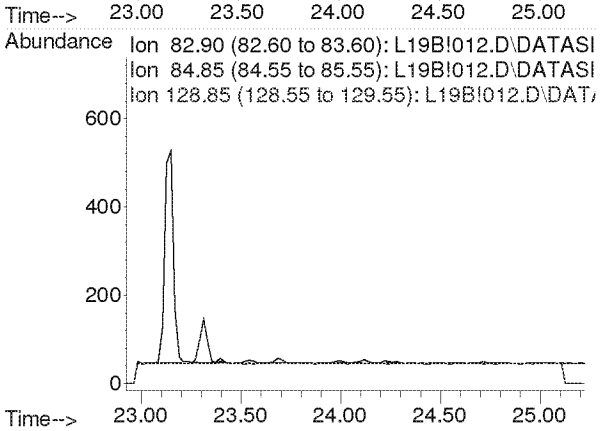


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

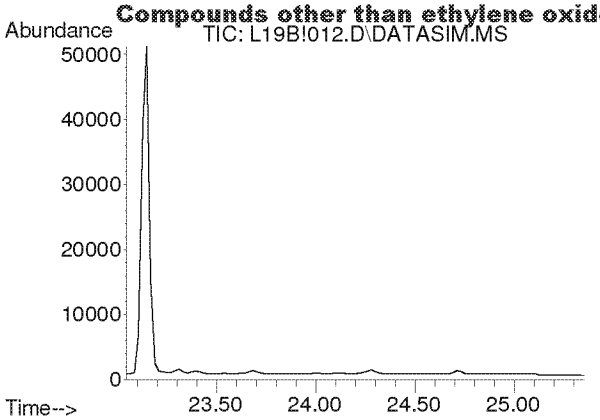
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.7
129	12.4



Compounds other than ethylene oxide were not quantitated.

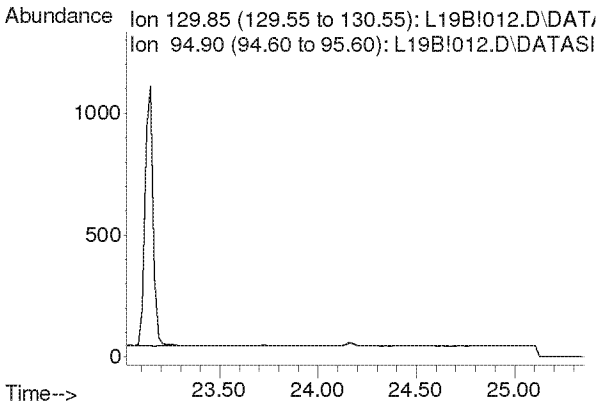


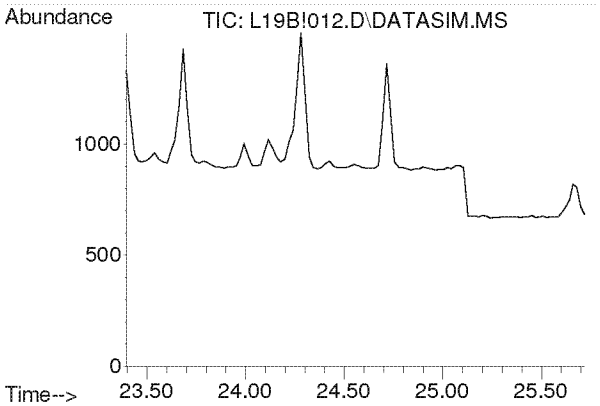
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.18 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	106.1



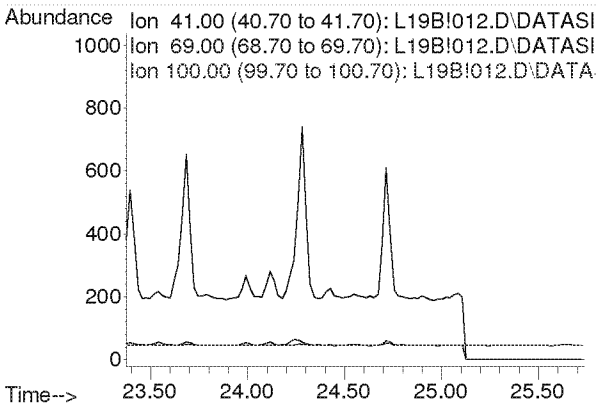


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

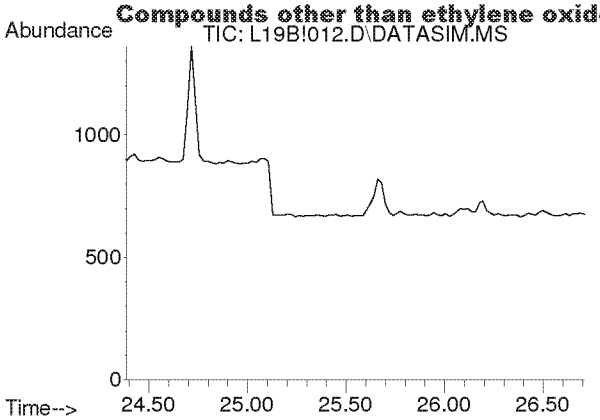
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	21.0
100	5.6



Compounds other than ethylene oxide were not quantitated.

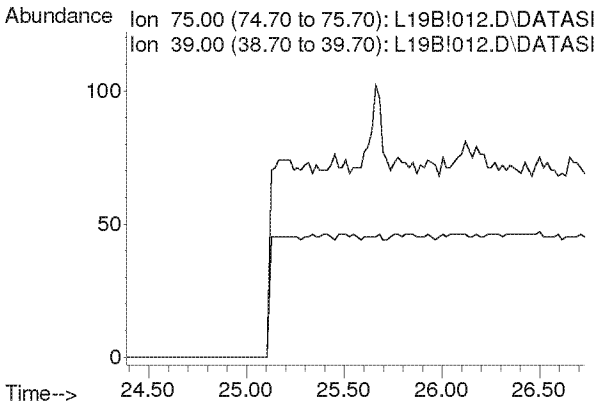


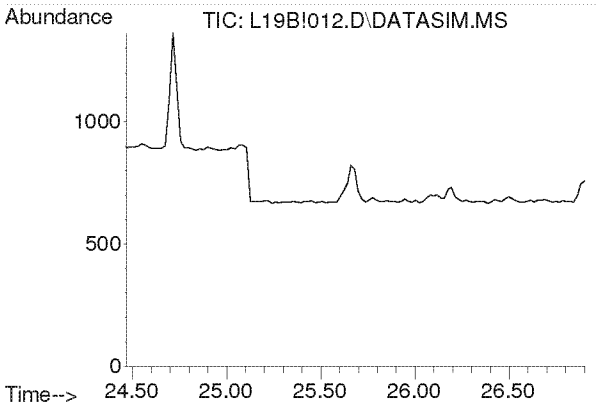
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.2



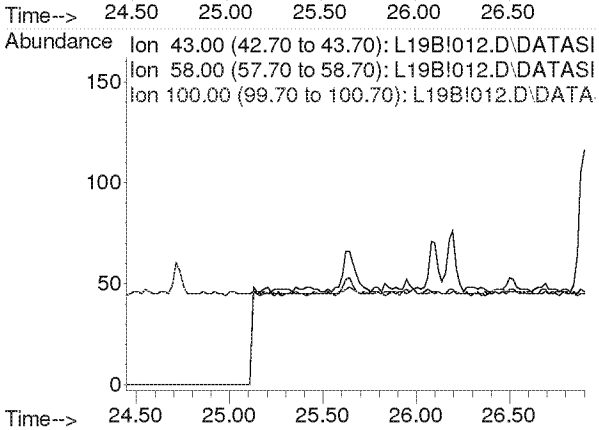


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.60 min

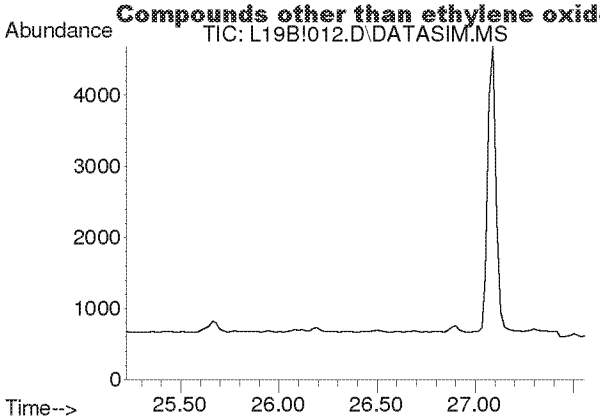
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	35.0
100	8.7



Compounds other than ethylene oxide were not quantitated.

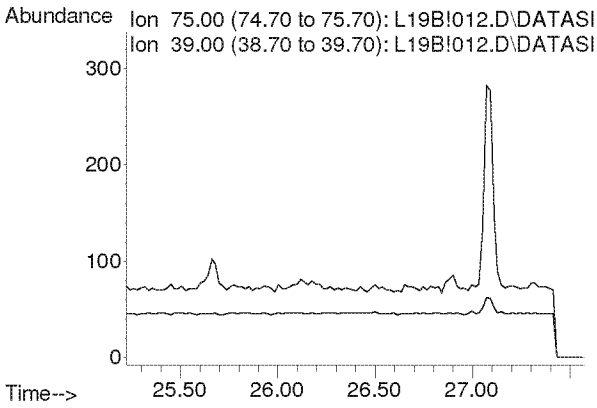


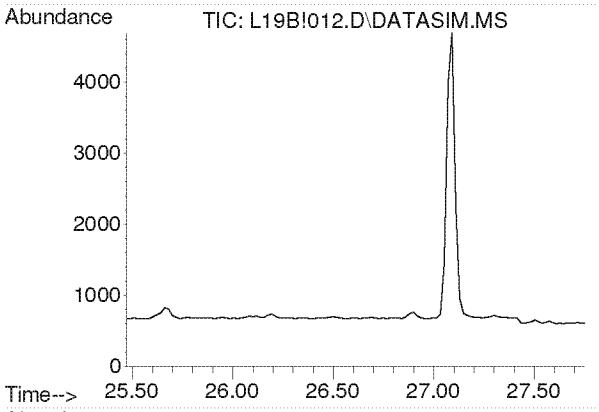
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.37 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	53.6



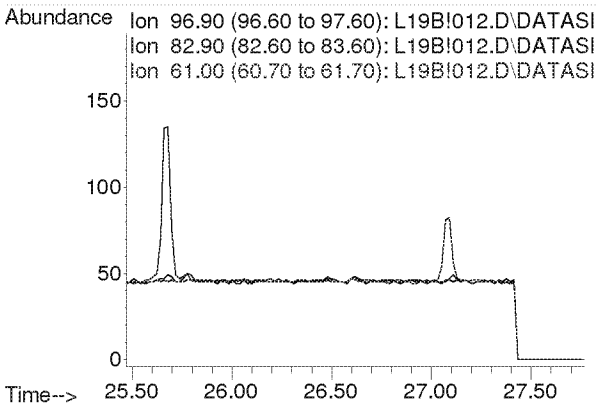


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

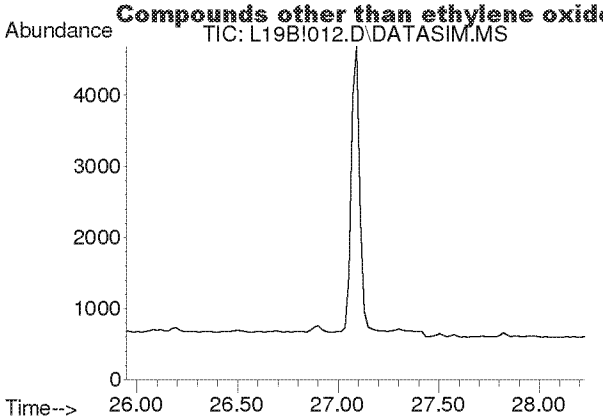
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	94.2
61	62.2



Compounds other than ethylene oxide were not quantitated.

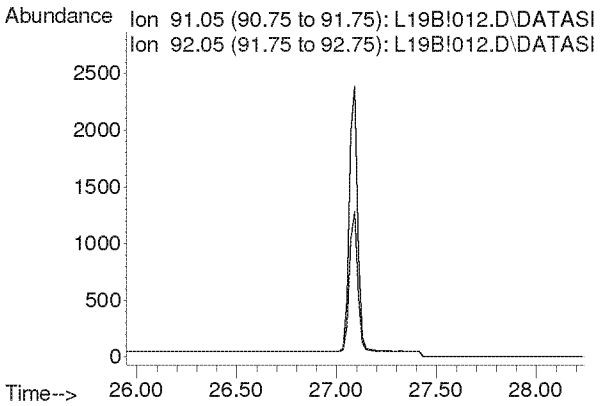


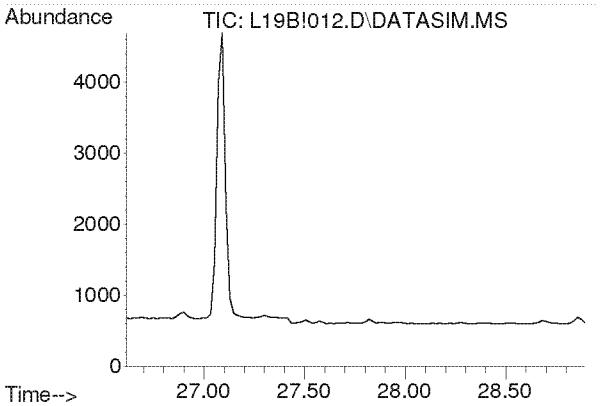
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.5



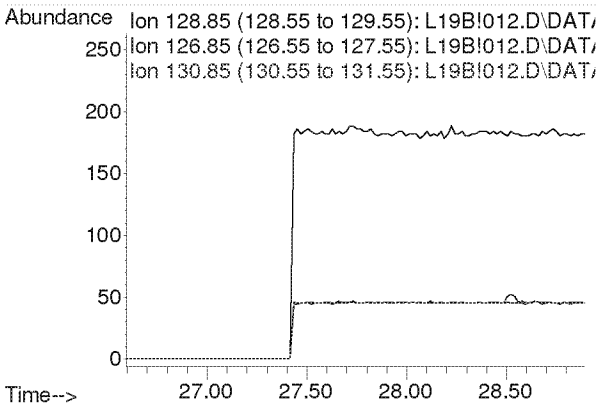


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.75 min

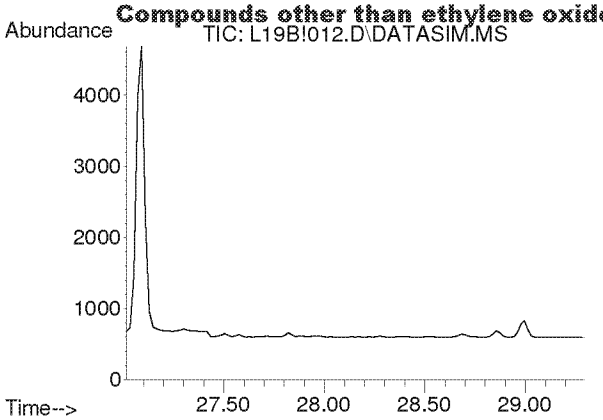
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.3
131	6.0



Compounds other than ethylene oxide were not quantitated.

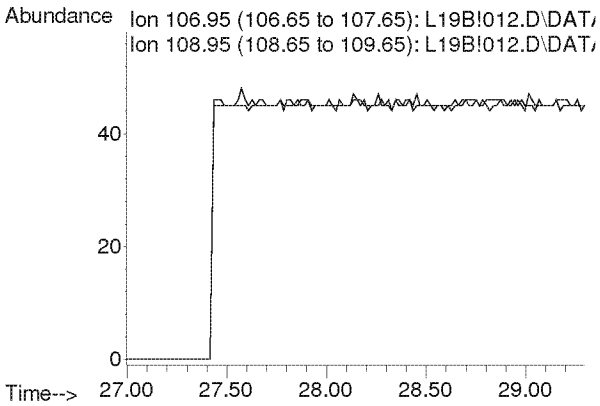


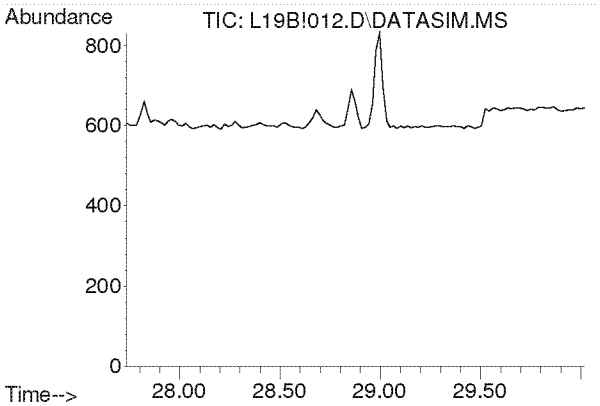
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.15 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.2



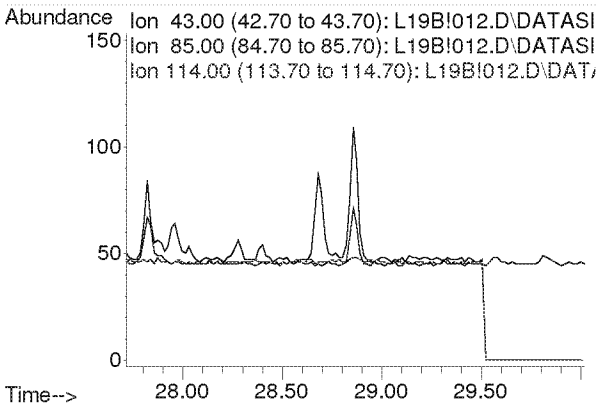


#47
n-Octane
Concen: N.D.
Expected RT: 28.87 min

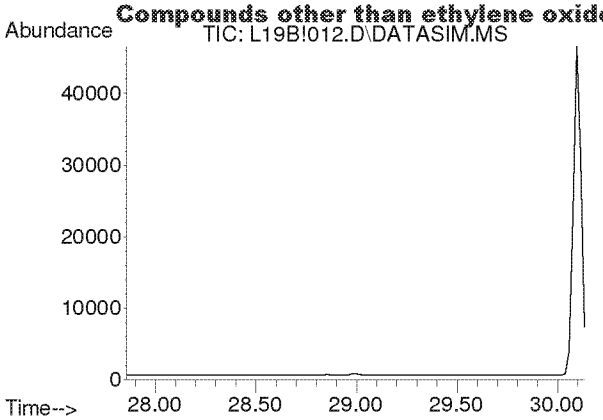
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	41.3
114	2.8



Compounds other than ethylene oxide were not quantitated.

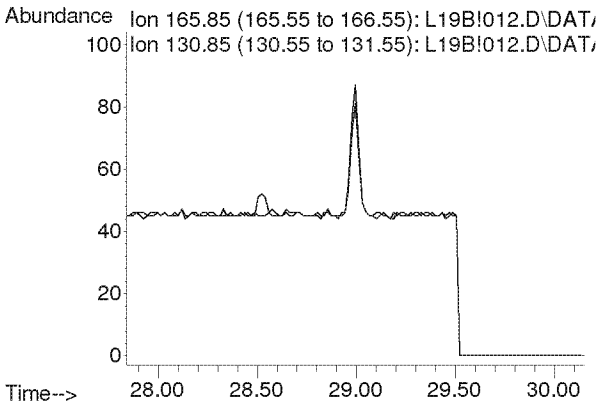


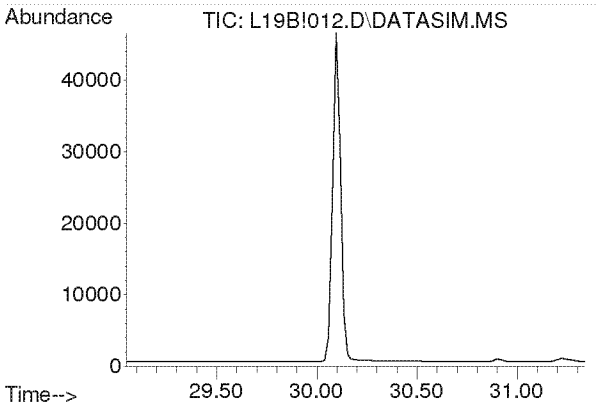
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	76.9



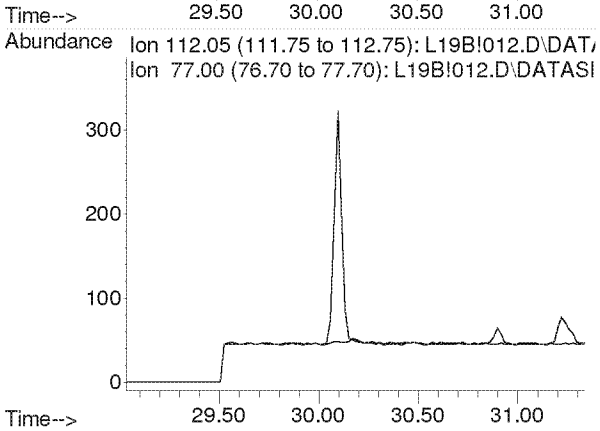


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.19 min

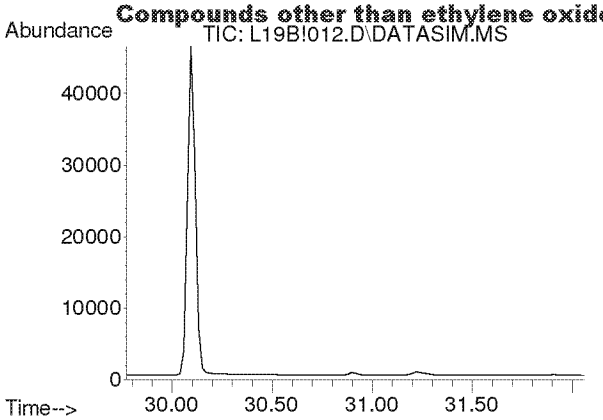
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	59.7



Compounds other than ethylene oxide were not quantitated.

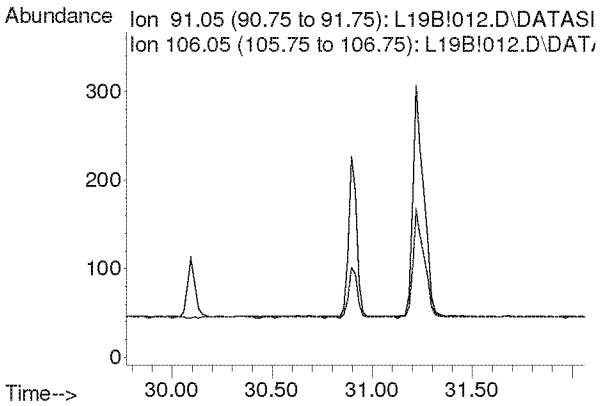


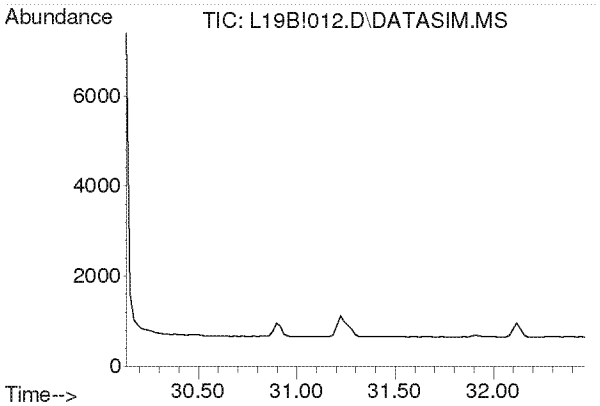
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.92 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	32.5



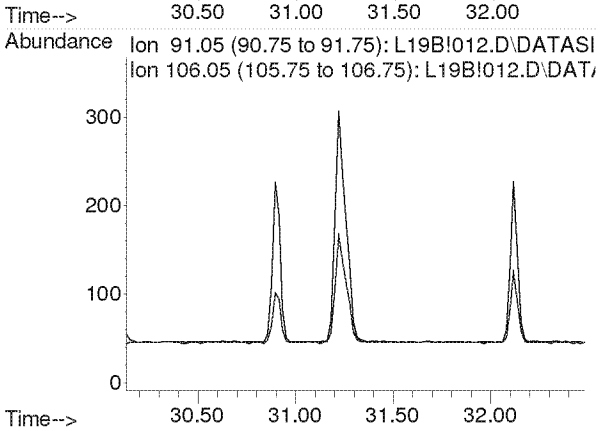


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.28 min

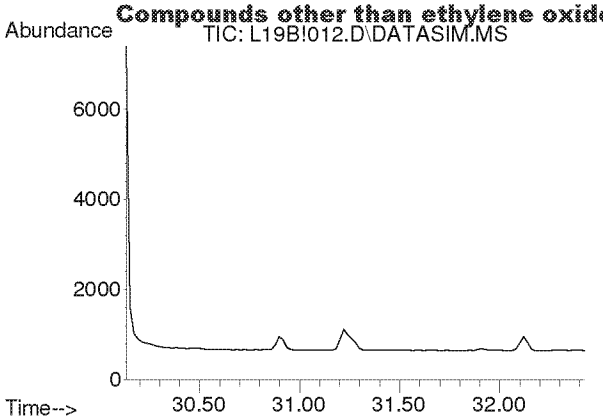
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	46.6



Compounds other than ethylene oxide were not quantitated.

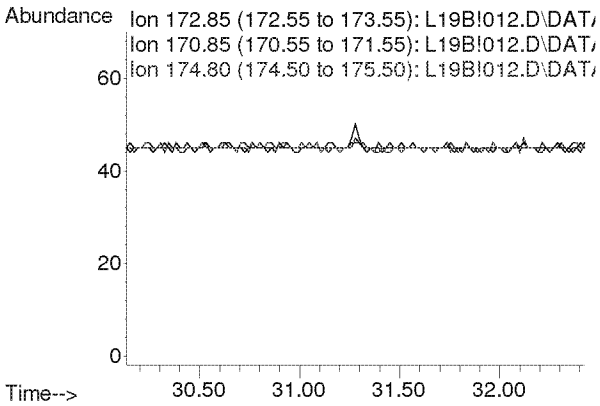


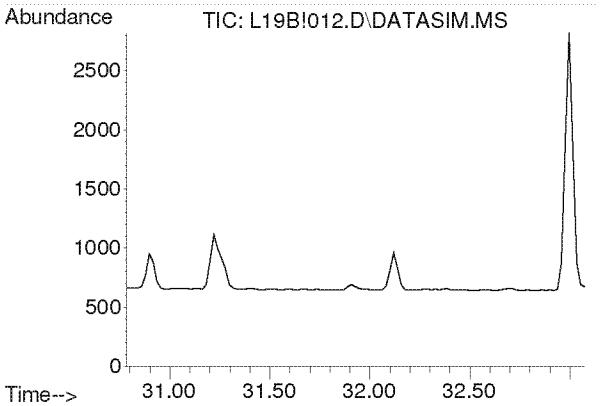
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	48.9



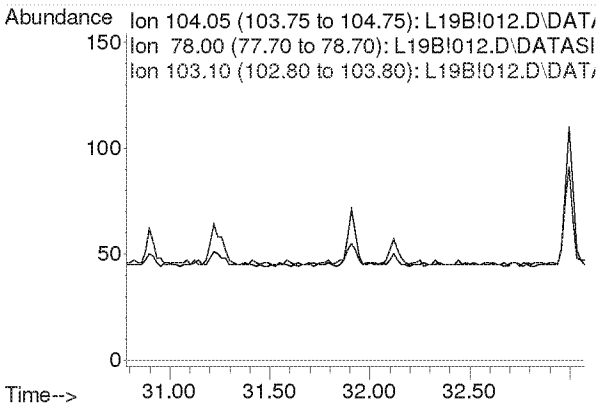


#53
Styrene
Concen: N.D.
Expected RT: 31.93 min

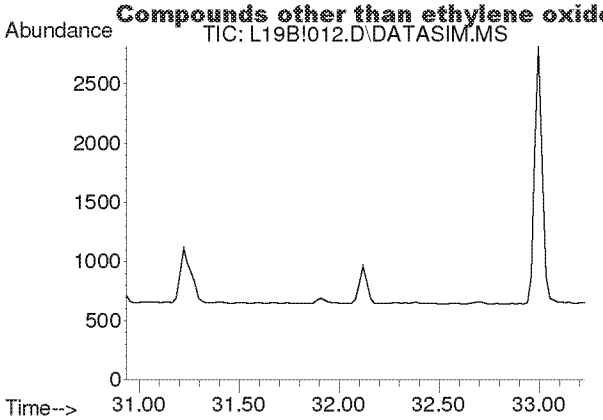
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	44.3
103	0.0



Compounds other than ethylene oxide were not quantitated.

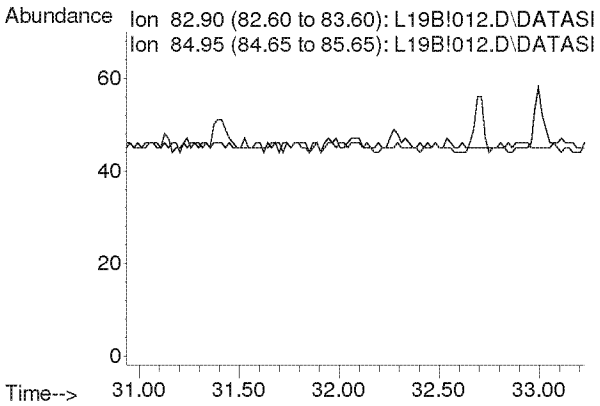


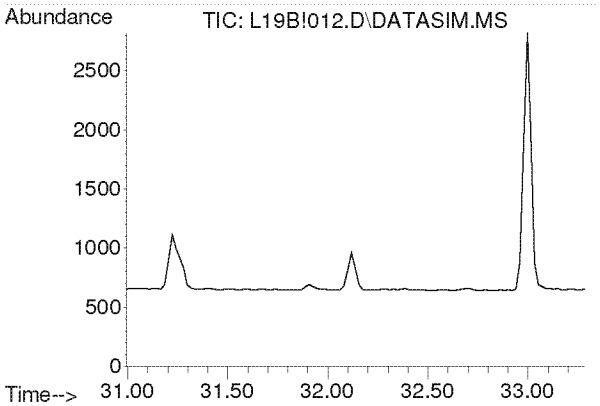
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.5



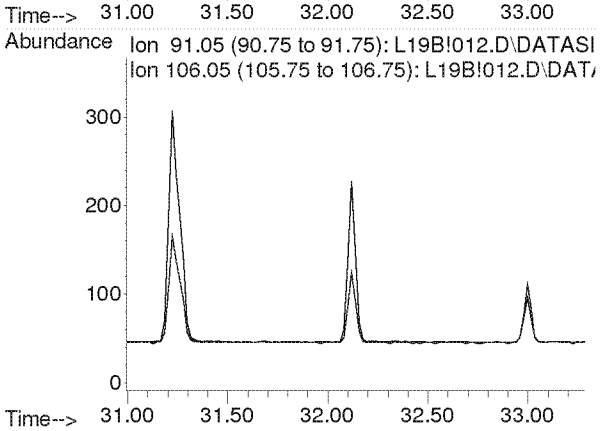


#55
o-Xylene
Concen: N.D.
Expected RT: 32.14 min

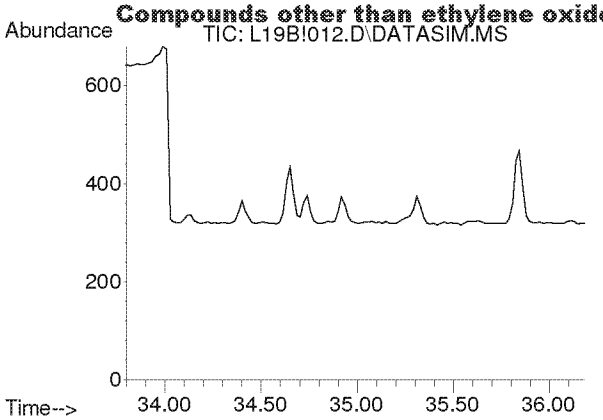
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	45.8



Compounds other than ethylene oxide were not quantitated.

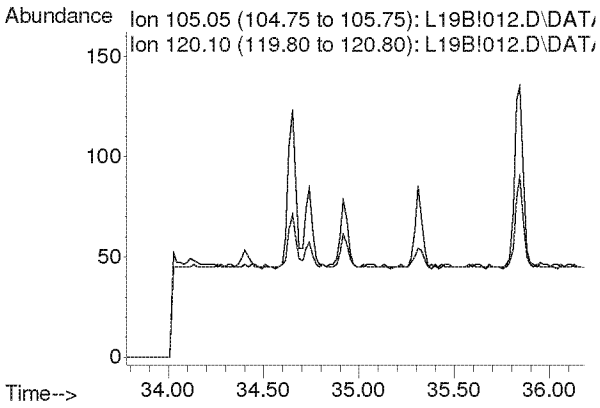


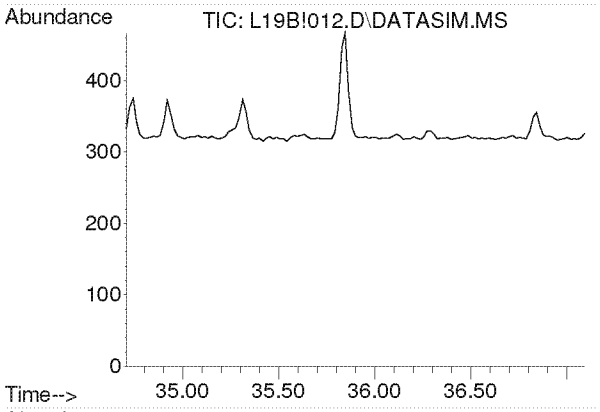
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.94 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	46.0



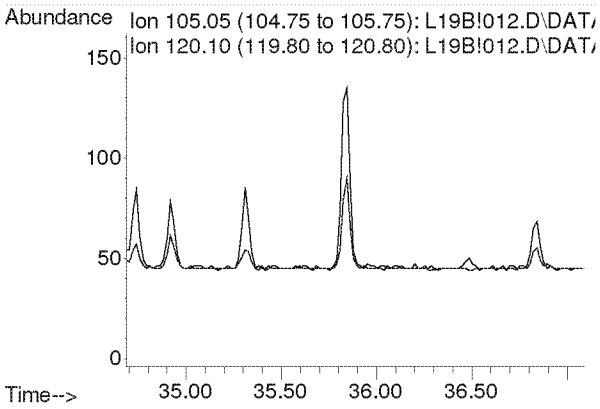


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

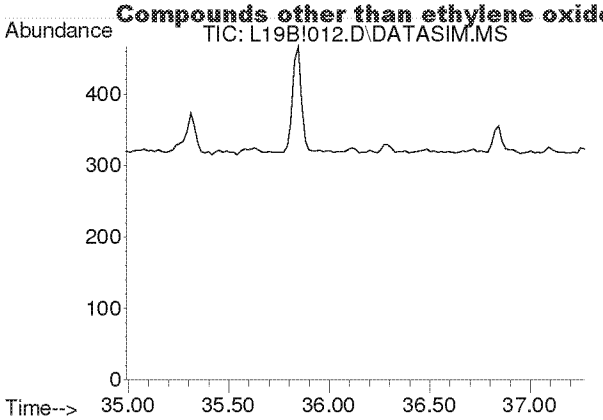
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	44.0



Compounds other than ethylene oxide were not quantitated.

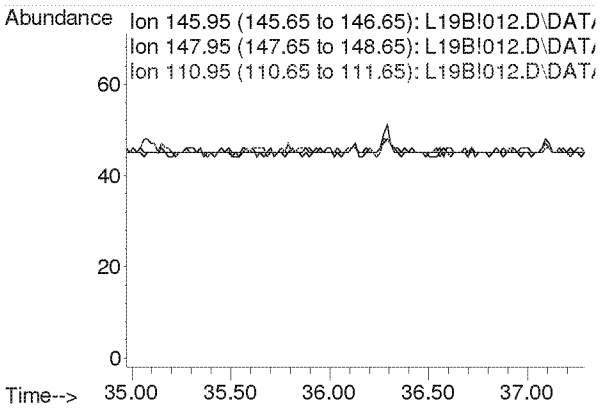


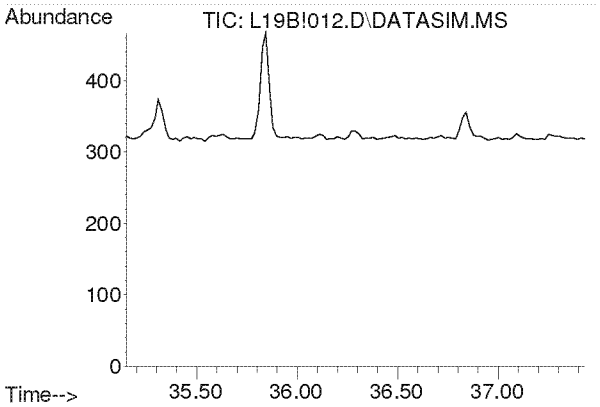
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.13 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	40.1



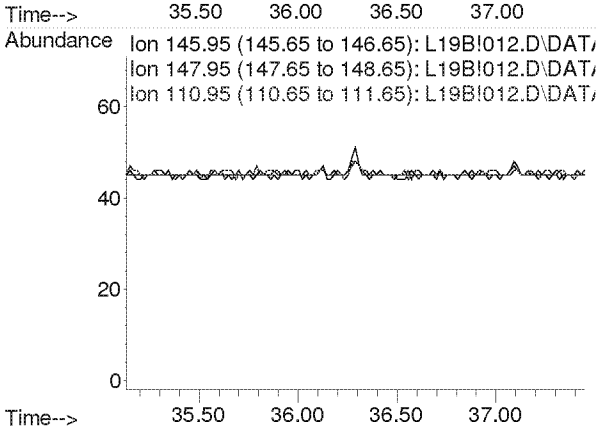


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

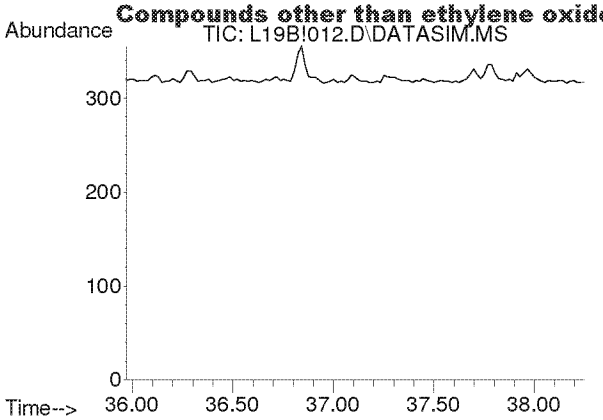
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.3
111	38.7



Compounds other than ethylene oxide were not quantitated.

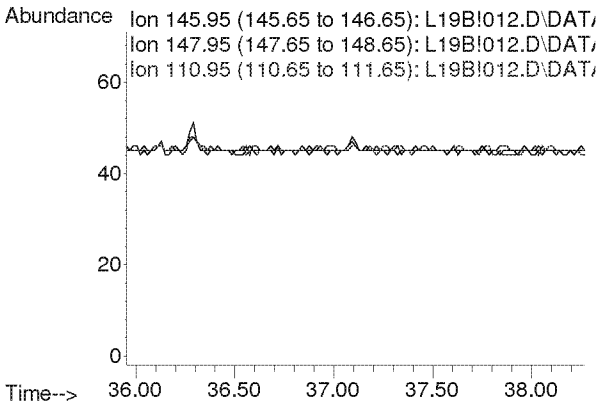


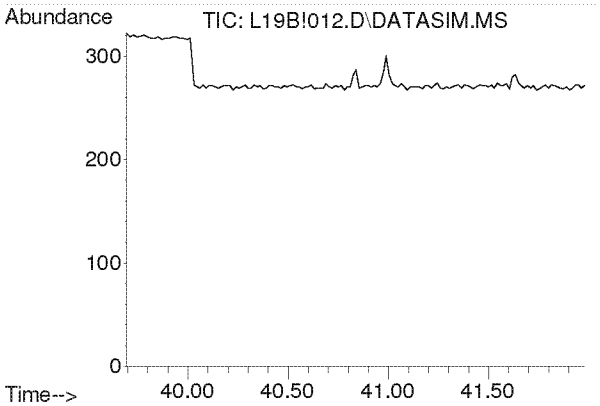
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.11 min

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.8



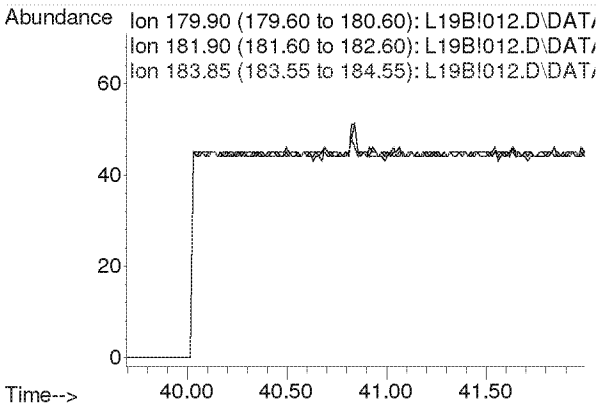


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

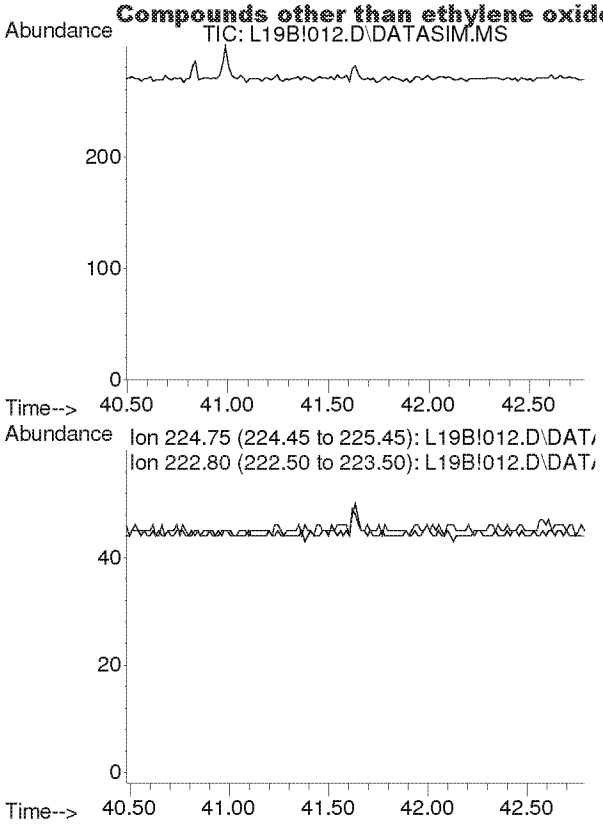
Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	94.6
184	30.2



Compounds other than ethylene oxide were not quantitated.



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

Lab File: L19B!012.D
Acq: 28 Feb 2019 11:41 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B9B2804

Eastern Research Group

Matrix: Air **Prepared using: Air Toxics - Summa Canister Prep** **Printed: 2/28/2019 3:19:36PM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments	
9022616-07 *TO-15 2019*	02/24/19 11:05	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
9022616-08 *TO-15 2019*	02/24/19 10:35	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
9022616-11 *TO-15 2019*	02/24/19 10:40	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
9022616-12 *TO-15 2019*	02/24/19 10:31	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
9022616-13 *TO-15 2019*	02/24/19 10:45	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
9022616-14 *TO-15 2019*	02/24/19 11:21	250	250	U.S. Environmental Protection Agency - OAQPS Ethylene Oxide only				Ethylene Oxide only
B9B2804-BLK1	02/25/19 08:00	250	250				t-h2-570	
B9B2804-DUP1	02/24/19 11:21	250	250		9022616-14			

3-5-19

Spiking Witnessed By Date Date

Preparation Reviewed By Date

Extracts Received By Date

Compounds other than ethylene oxide were not quantitated.

✓ 5/3

ERG Lab ID # 90226016-07

ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: West Northbrook
Canister Number: SAT111
City/State: Northbrook, IL
Lab Initial Can. Press. ("Hg): 29.7
AQS Code:
Cleaning Batch # : H1-558
Collection Date: 2/23/19
Date Can. Cleaned: 2/7/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 2/13/19

Field Setup

Received by: C Cummings
Date: 2/23/19
Operator: C Cummings
MFC Setting:
System #: 10310
Elapsed Timer Reset (Y/N):
Setup Date: 2/23/19
Canister Valve Opened (Y/N): yes 11:23 AM
Field Initial Can. Press.: -28.2 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 2/24/19
Sample Duration (3 or 24 hr): 24
Operator: Cummings/Nwa
Elapsed Time:
Field Final Can. Press.: -5 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): yes 11:05 AM
Relinquished by: CCummings
Date: 2/24/19

Lab Recovery

Received by: M
Date: 2/26/19
Lab Final Can. Press.: 3.00 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 -28.5"Hg @11:17 → 27.8"Hg @11:23
Field Setup 37°F, Rain
Field Recovery: 28°F wind GUST TO 70MPH
2/24/19

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

Y/O

ERG Lab ID # 9022616-08

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: Watertower
Canister Number: 5043
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 30
AQS Code:
Cleaning Batch # : H2-562
Collection Date: 2/23/19
Date Can. Cleaned: 2/14/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: KR
Date: 2/20/19

Field Setup

Received by: C. Cummings
Date: 2/23/19
Operator: C. Cummings
MFC Setting:
System #: 10512
Elapsed Timer Reset (Y/N):
Setup Date: 2/23/19
Canister Valve Opened (Y/N): Y @ 10:11AM
Field Initial Can. Press.: -28.9 -28.6 psig psia "Hg (Circle one)
2/23/19

Field Recovery

Recovery Date: 2/24/19
Sample Duration (3 or 24 hr): 24
Operator: [illegible]/Cummings
Elapsed Time:
Field Final Can. Press.: -5.8 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:33
Relinquished by: C. Cummings
Date: 2/24/19

Lab Recovery

Received by: M
Date: 2/26/19
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 -28.9 @ 10:25am / -28.9 @ 10:30am
Field Setup: 37°F, rain
Field Recovery: 28°F, wind

JF 2/24/19

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 9022616-11

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: Willow Pond Park
Canister Number: A21006
City/State: Willowbrook, IL
Lab Initial Can. Press. ("Hg): 30
AQS Code:
Cleaning Batch # : H2-562
Collection Date: 2/23/19
Date Can. Cleaned: 2/14/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: WR
Date: 2/20/19

Field Setup

Received by: C. Cummings
Date: 2/23/19
Operator: C. Cummings
MFC Setting:
System #: ~~A21006~~ 2/23/19 10294
Elapsed Timer Reset (Y/N):
Setup Date: 2/23/19
Canister Valve Opened (Y/N): Y @ 10:47
Field Initial Can. Press.: -28.9 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 2/24/19
Sample Duration (3 or 24 hr): 2
Operator: [illegible]
Elapsed Time: —
Field Final Can. Press.: -6.2 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:10
Relinquished by: C. Cummings
Date: 2/24/19

Lab Recovery

Received by: M
Date: 2/26/19
Lab Final Can. Press.: 5.00 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 - 29.0" Hg @ 10:37, -28.5" Hg @ 10:47 am
Field Setup: 37°F Rain
Field Recovery: 28°F, wind GUST UPTO 20MPH

2/24/19

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 9022616-12

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 MS
City/State: Park Ridge, IL
AQS Code: —
Collection Date: —
Canister Number: SAT114
Lab Initial Can. Press. ("Hg): 29.8
Cleaning Batch # : H2-558
Date Can. Cleaned: 2/7/19
Options:
SNMOC (Y/N):
TOXICS (Y/N): Y
METHANE (Y/N):
Duplicate Event (Y/N): N
Duplicate Can # : —
Relinquished by: CMB
Date: 2/14/19

Field Setup

Received by: NWH
Date: 2/23/19
Operator: NWH
System #: 16311
Setup Date: 2/23/19
MFC Setting: —
Elapsed Timer Reset (Y/N): —
Canister Valve Opened (Y/N): Y @ 10:19 AM
Field Initial Can. Press.: _____ psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 2/24/19
Operator: Cummings
Sample Duration (3 or 24 hr): 24
Elapsed Time:
Field Final Can. Press.: -7 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:31 AM
Relinquished by: C Cummings
Date: 2/24/19

Lab Recovery

Received by: M
Date: 2/26/19
Lab Final Can. Press.: 4.50 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check: 29" @ 10:12 am, -28" Hg @ 10:19 am
Temp @ deployment = 37°F Rain
" " collection = 29°F wind
2/24/19

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 # 902 2616-13

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: HINSDALE HS
Canister Number: SAT049
City/State: DARIEN, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code: —
Cleaning Batch # : H1-560
Collection Date: 2/23/19
Date Can. Cleaned: 2/11/19
Options:
SNMOC (Y/N): —
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # : —
METHANE (Y/N): —
Relinquished by: RUB
Date: 2/14/19

Field Setup

Received by: NWIA
Date: 2/23/19
Operator: NWIA
MFC Setting: —
System #: 10076
Elapsed Timer Reset (Y/N): —
Setup Date: 2/23/19
Canister Valve Opened (Y/N): Y @ 11:00AM
Field Initial Can. Press.: -28.5 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 2/24/19
Sample Duration (3 or 24 hr): 24
Operator: [illegible]
Elapsed Time: —
Field Final Can. Press.: -7 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:45
Relinquished by: [illegible]
Date: 2/24/19

Lab Recovery

Received by: [illegible]
Date: 2/26/19
Lab Final Can. Press.: 6.00 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: -28.8 "Hg @ 10:52 am → -28.8 "Hg @ 10:59
Ambient temp @ deployment = 37°F RAINY
" " " collection = 28°F windy (GUSTS UP TO 70MPH)

[illegible] 2/24/19

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 9022616-14

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: WB Village Hall
Canister Number: 19872
City/State: Wilmington, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code:
Cleaning Batch # : H1-560
Collection Date: 2/23/19
Date Can. Cleaned: 2/11/19
Options:
SNMOC (Y/N):
Duplicate Event (Y/N):
TOXICS (Y/N): y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 2/14/19

Field Setup

Received by: C. Cummings
Date: 2/23/19
Operator: Cummings/Nwia
MFC Setting:
System #: ~~10313~~ 2/24/19 10314 used
Elapsed Timer Reset (Y/N):
Setup Date: 2/23/19
Canister Valve Opened (Y/N): y @ 11:36
Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 2/24/19
Sample Duration (3 or 24 hr): 24
Operator: Nwia/Cummings
Elapsed Time:
Field Final Can. Press.: -7 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): y @ 11:21 AM
Relinquished by: C. Cummings
Date: 2/24/19

Lab Recovery

Received by: NL
Date: 2/26/19
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: -30"Hg @ 11:31, -29"Hg @ 11:36am
Field Setup 37°F, rain.
Field Recovery: 28°F rain 2/24/19 WINDY
↳ regulator 10314 used instead of regulator 10313
2/24/19

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy