Compounds other than ethylene oxide were not quantitated.

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

Sequence ID:	U8L1 1812063	**Instrument:**	MS1	**Batch:**	BBL2304
Cal Curve (Method):	8120004	**Analyst:**	MAL	**Date Analyzed:**	12-28-18
10% Review Sample IDs:		**Reviewer:**		**Date:**	
Optional Additional Review Sample IDs:		**Reviewer:**		**Date:**	

Parameter	Acceptance Criteria	Analyst Check (Initials and Date)	Task Lead/Data (Initials and Date)	10% QA Review (Initials and Date)	Optional Additional QA Review (Initials and Date)	Comments
BFB Instrument Tune Performance Check – one per analysis sequence	Evaluation criteria presented in Section 16.1.1	1-3-19	RUB 1/7/19			
Initial calibration with a minimum of 5 points - quarterly	1)RSD of response factors < ±30% with two exceptions of up to ±40% (non-Tier I compounds) 2) IS response < ±40% of mean 3) RRTs for target peaks ±0.06 units from mean RRT 4) IS RTs within 20sec of mean 5) Each calibration standard within ±30% of nominal conc (for Tier I compounds)	1-3-19	RUB 1/7/19			U8LS
ICV(LCS) Second source calibration verification check - immediately following ICAL	The response factor ≤ ±30% DEV from calibration curve average response factor	1-3-19	RUB 1/7/19			U8LS
Continuing calibration verification (CCV), approximately mid-point of the calibration curve – one per analysis sequence	The response factor ≤ ±30% DEV from calibration curve average response factor	1-3-19	RUB 1/7/19			2nd source
Method Blank Analysis – one per analysis sequence	1) < 3xMDL or 0.2ppbv, whichever is lower 2) Internal Standard (IS) area response within < ±40% and IS Retention Time (RT) within ±0.33 min. of most recent initial calibration	1-3-19	RUB 1/7/19			

Compounds other than ethylene oxide were not quantitated.

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

Parameter	Acceptance Criteria	Analyst Check (Initials and Date)	Task Lead/Data (Initials and Date)	10% QA Review (Initials and Date)	Optional Additional QA Review (Initials and Date)	Comments
Replicate Analysis – one per analysis sequence /Duplicate Sample	< 25% RPD for compounds greater than 5 times the MDL	1-3-19	RMB 1/7/19			
Canister Cleaning Certification	<3xMDL or 0.2ppbv per VOC targeted compound, whichever is lower	—	RMB 1/7/19			
Preconcentrator Leak Check	≤ ± 0.2 psi/min	1-3-19	RMB 1/7/19			
Samples/Internal Standard Check	IS area within ±40% and IS RT within ±0.33 min. of most recent initial calibration	1-3-19	RMB 1/7/19			
COC Included and filled out	Lab receipt acknowledged, LIMS number added to COC	1-3-19	RMB 1/7/19			
Manual Integration and peak deletion	Conforms with ERG-SOP-097 "Procedure for Manual Integration of Chromatographic Peaks"	1-3-19	RMB 1/7/19			
Manual Calculation Check	One compound manual check must agree with software generated result		RMB 1/7/19			
Qualifiers Check	Check to make sure LIMS data flags are correct	1-3-19	RMB 1/7/19			

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

L18L1002
ethylene oxide $\frac{6746 \times 4.77}{62952 \times 0.2851} = 1.79$ ppbv

Compounds other than ethylene oxide were not quantitated.

ANALYSIS SEQUENCE

1812063

Instrument: ERGMS#1

Calibnration ID: 8120004

Printed: 12/28/2018 3:50:27PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
1812063-CCV1	QC		1		8L26002	8L13002		
B8L2804-BLK1	QC		2			8L13002		
8121821-03	TO-15 2018	A	3			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
8121821-04	TO-15 2018	A	4			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
B8L2804-DUP1	QC		5			8L13002		
B8L2804-DUP2	QC		6			8L13002		
8121821-05	TO-15 2018	A	7			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
8121821-06	TO-15 2018	A	8			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
8121821-07	TO-15 2018	A	9			8L13002	U.S. Environmental Protection Agency - OAQ	Ethylene Oxide only
8120609-01	TO-15 2018	A	10			8L13002	U.S. Environmental Protection Agency, Regio	
8120716-01	TO-15 2018	A	11			8L13002	U.S. Environmental Protection Agency, Regio	
8120714-01	TO-15 2018	A	12			8L13002	U.S. Environmental Protection Agency, Regio	

Samples Loaded By 12-28-18 Date

Data Processed By 1-3-19 Date

ED_002475_00000320-00003

Compounds other than ethylene oxide were not quantitated.

Sequence Name: C:\msdchem\1\sequence\L18L!.s
Comment: ANALYZE 12/28/18,8120004 exp 3/19/19, L18L!
Operator: MAH
Data Path: C:\MSDCHEM\1\DATA\L18L!\
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	L18L!001	BFB	BFB
2)	Sample	2	L18L!002	8120004	1812063-CCV1
3)	Sample	3	L18L!003	8120004	B8L2805-CCV1
4)	Sample	4	L18L!004	8120004	B8L2804-BLK1
5)	Sample	5	L18L!005	8120004	8121821-03
6)	Sample	6	L18L!006	8120004	8121821-04
7)	Sample	7	L18L!007	8120004	B8L2804-DUP1
8)	Sample	8	L18L!008	8120004	B8L2804-DUP2
9)	Sample	9	L18L!009	8120004	8121821-05
10)	Sample	10	L18L!010	8120004	8121821-06
11)	Sample	11	L18L!011	8120004	8121821-07
12)	Sample	12	L18L!012	8120004	8120609-01
13)	Sample	13	L18L!013	8120004	8120716-01
14)	Sample	14	L18L!014	8120004	8120714-01
15)	Sample	15	L18L!015	8120004	8121228-01
16)	Sample	16	L18L!016	8120004	8121229-01
17)	Sample	17	L18L!017	8120004	8121229-02
18)	Sample	18	L18L!018	8120004	8121229-02 REP
19)	Sample	19	L18L!019	8120004	8121229-03
20)	Sample	20	L18L!020	8120004	8121230-01
21)	Sample	21	L18L!021	8120004	8121231-01
22)	Sample	100	OFF	FIDOFF	OFF

1-3-19

Compounds other than ethylene oxide were not quantitated.

Sample	1	BFB	BFB	L18L!001	80 ML 8L13001	1
Sample	2	1812063-CCV1	8120004	L18L!002	80 ML 8L13001,8L26002	1
Sample	3	B8L2805-CCV1	8120004	L18L!003	80 ML 8L13001,8L27002	1
Sample	4	B8L2804-BLK1	8120004	L18L!004	80 ML 8L13001	1
Sample	5	8121821-03	8120004	L18L!005	WB VILLAGE HALL C1 12/14/18	1
Sample	6	8121821-04	8120004	L18L!006	WB VILLAGE HALL C2 12/14/18	1
Sample	7	B8L2804-DUP1	8120004	L18L!007	WB VILLAGE HALL R1 12/14/18	1
Sample	8	B8L2804-DUP2	8120004	L18L!008	WB VILLAGE HALL R2 12/14/18	1
Sample	9	8121821-05	8120004	L18L!009	GOWER ES 12/14/18	1
Sample	10	8121821-06	8120004	L18L!010	HINSDALE HS 12/14/18	1
Sample	11	8121821-07	8120004	L18L!011	WATER TOWER 12/14/18	1
Sample	12	8120609-01	8120004	L18L!012	NBIL 12/4/18	1
Sample	13	8120716-01	8120004	L18L!013	MAOK 12/4/18	1
Sample	14	8120714-01	8120004	L18L!014	NROK 12/4/18	1
Sample	15	8121228-01	8120004	L18L!015	BRCO 12/4/18	1
Sample	16	8121229-01	8120004	L18L!016	BCCO 12/4/18	1
Sample	17	8121229-02	8120004	L18L!017	BCCO 12/5/18	1
Sample	18	8121229-02 REP	8120004	L18L!018	BCCO 12/5/18 NELAC REP	1
Sample	19	8121229-03	8120004	L18L!019	BCCO 12/5/18	1
Sample	20	8121230-01	8120004	L18L!020	BCCO 12/4/18	1
Sample	21	8121231-01	8120004	L18L!021	RECO 12/4/18	1
Sample	100	OFF	FIDOFF	OFF	OFF	1

1.2.19

Compounds other than ethylene oxide were not quantitated.

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

Sequence Name: C:\Smart\L18L!.SEQ
Date: 01-02-2019
Time: 09:33:15
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
1812063-CCV1	2	1	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
SNMOC-CCV1	1	1	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B8L2804-BLK1	1	2	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121821-03	1	3	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121821-04	1	4	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B8L2804-DUP1	1	3	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
B8L2804-DUP2	1	4	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121821-05	1	5	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121821-06	1	6	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121821-07	1	7	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8120609-01	1	8	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8120716-01	1	9	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8120714-01	1	10	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121228-01	1	11	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121229-01	1	12	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121229-02	1	13	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121229-02 REP	1	13	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121229-03	1	14	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121230-01	1	15	250		0	C:\Smart\TO-15A_MS1.MPT	12:00
8121231-01	1	16	250		0	C:\Smart\TO-15A_MS1.MPT	12:00

1-3-19

Compounds other than ethylene oxide were not quantitated.

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

1/2/2019 10:02:51 AM
Leak Check for C:\Smart\L18L!.SEQ
Report File: C:\Smart\L18L!.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	---	---	1.2	1.2	0.00
1	6	---	---	1.1	1.2	0.10
1	7	---	---	1.2	1.6	0.40
1	8	---	---	1.1	1.2	0.10
1	9	---	---	1.1	1.2	0.10
1	10	---	---	1.2	1.2	0.00
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	1.2	0.00
1	15	---	---	1.1	1.2	0.10
1	16	---	---	1.2	1.2	0.00

M-5-19

Compounds other than ethylene oxide were not quantitated.

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

1/2/2019 10:13:55 AM
Leak Check for C:\Smart\L18L!.SEQ
Report File: C:\Smart\L18L!.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	7	---	---	1.2	1.4	0.20 --

open/closed valve several ~~several~~ times - retest - good

1-3-19

Compounds other than ethylene oxide were not quantitated.

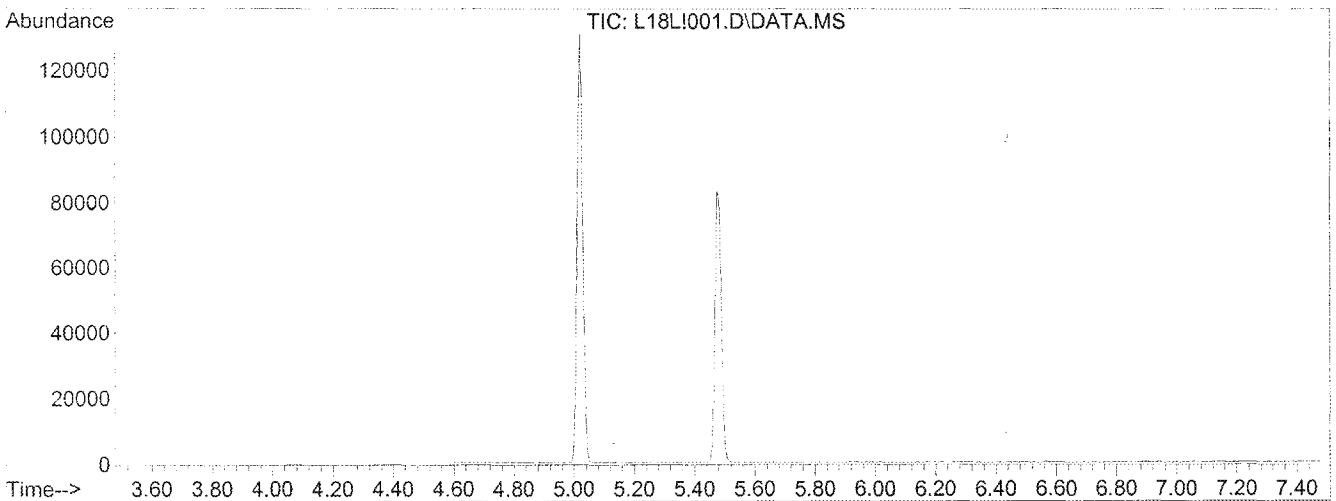
BFB

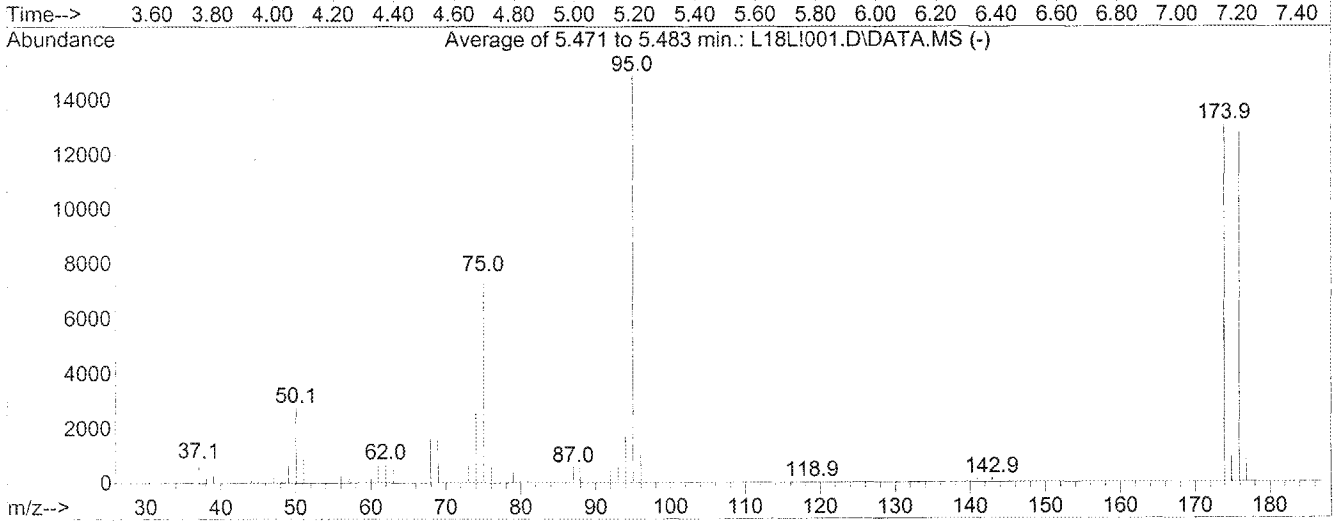
Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!001.D
Acq On : 28 Dec 2018 10:22 am
Operator : MAH
Sample : BFB
Misc : 80 ML 8L13001
ALS Vial : 1 Sample Multiplier: 1

7-2-19

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\8120004.M
Title : TO-15 by Selective Ion Analysis
Last Update : Thu Dec 20 06:20:47 2018





AutoFind: Scans 145, 146, 147; Background Corrected with Scan 139

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.3	2752	PASS
75	95	30	66	50.3	7552	PASS
95	95	100	100	100.0	15001	PASS
96	95	5	9	6.9	1039	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.1	13068	PASS
175	174	4	9	7.1	929	PASS
176	174	93	101	97.8	12780	PASS
177	176	5	9	6.9	887	PASS

Compounds other than ethylene oxide were not quantitated.

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\L18L!\L18L!001.D
Tune Time : 28 Dec 2018 10:22 am

8120004	IS Avg Area	61164	145160	104175
	+40%	85629	203224	145845
	-40%	36698	87096	62505

File	Sample	Internal Standard Responses		
L18L!002.D	1812063-CCV1	62952	146790	111588
L18L!004.D	B8L2804-BLK1	58062	140061	95936
L18L!005.D	8121821-03	58855	142664	105766
L18L!006.D	8121821-04	57116	136374	100335
L18L!007.D	B8L2804-DUP1	59411	141881	100484
L18L!008.D	B8L2804-DUP2	57624	140751	101601
L18L!009.D	8121821-05	56417	132549	103302
L18L!010.D	8121821-06	55823	132320	101917
L18L!011.D	8121821-07	57620	138883	108406
L18L!012.D	8120609-01	56134	138833	104455
L18L!013.D	8120716-01	56448	140341	104371
L18L!014.D	8120714-01	56227	135893	102943

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

Created: Thu Jan 03 13:10:27 2019 MS1

1-3-19

Compounds other than ethylene oxide were not quantitated.

Analytical Standard Record
Eastern Research Group
8L26002

Description:	2.50 ppbv ICV/CCV	Expires:	01/25/19
Standard Type:	Calibration Stan	Prepared:	12/26/18
Solvent:	Scientific Air	Prepared By:	Mitch Howell
Final Volume (mls):	6000	Department:	Air Toxics
Vials:	1	Last Edit:	12/26/18 13:29 by MH

canister# 3224

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 1-3-19 Date

Compounds other than ethylene oxide were not quantitated.

Analytical Standard Record
Eastern Research Group
8L26002

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 1-3-19 Date

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L18L!\
Data File : L18L!002.D
Acq On : 28 Dec 2018 11:12 am
Operator : MAH
Sample : 1812063-CCV1
Misc : 80 ML 8L13001,8L26002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:04:40 2019
Quant Method : C:\msdchem\1\METHODS\8120004_ICV.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Jan 03 13:02:56 2019
Response via : Initial Calibration

1-3-19

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	0.402	0.383	4.7	100	0.00
3	CT	Propylene	0.478	0.493	-3.1	100	0.00
4	CT	Dichlorodifluoromethane	2.036	2.038	-0.1	100	0.00
5	CT	Chloromethane	0.595	0.586	1.5	100	0.00
6	CT	Dichlorotetrafluoroethane	1.881	2.085	-10.8	100	0.00
7	CT	Vinyl Chloride	0.638	0.632	0.9	100	0.00
8	CT	1,3-Butadiene	0.422	0.416	1.4	100	0.00
9	CT	Ethylene oxide	0.285	0.204	28.4	100	0.00
10	CT	Bromomethane	0.628	0.632	-0.6	100	0.00
11	CT	Chloroethane	0.277	0.281	-1.4	100	0.00
12	CT	Acetonitrile	0.489	0.443	9.4	100	0.00
13	CT	Acrolein	0.274	0.205	25.2	100	0.00
14	CT	Trichlorofluoromethane	1.866	1.680	10.0	100	0.00
15	CT	Acrylonitrile	0.384	0.356	7.3	100	0.00
16	CT	1,1-Dichloroethene	0.862	0.935	-8.5	100	0.00
17	CT	Methylene Chloride	0.618	0.636	-2.9	100	0.00
18	CT	Carbon Disulfide	1.810	1.839	-1.6	100	0.00
19	CT	Trichlorotrifluoroethane	1.338	1.399	-4.6	100	0.00
20	CT	trans-1,2-Dichloroethylene	0.485	0.481	0.8	100	0.00
21	CT	1,1-Dichloroethane	0.881	0.870	1.2	100	0.00
22	CT	Methyl tert-Butyl Ether	1.284	1.279	0.4	100	0.00
23	CT	Chloroprene	0.631	0.625	1.0	100	0.00
24	CT	cis-1,2-Dichloroethylene	0.682	0.656	3.8	100	0.00
25	CT	Bromochloromethane	0.367	0.348	5.2	100	0.00
26	CT	Chloroform	1.010	1.022	-1.2	100	0.00
27	CT	Ethyl tert-Butyl Ether	1.351	1.369	-1.3	100	0.00
28	CT	1,2-Dichloroethane	0.612	0.608	0.7	100	0.00
29	ISS	IS-1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
30	CT	1,1,1-Trichloroethane	0.426	0.422	0.9	100	0.00
31	CT	Benzene	0.583	0.622	-6.7	100	0.00
32	CT	Carbon Tetrachloride	0.464	0.519	-11.9	100	0.00
33	CT	tert-Amyl Methyl Ether	0.493	0.497	-0.8	100	0.00
34	CT	1,2-Dichloropropane	0.243	0.246	-1.2	100	0.00
35	CT	Ethyl Acrylate	0.325	0.329	-1.2	100	0.00
36	CT	Bromodichloromethane	0.449	0.392	12.7	100	0.00
37	CT	Trichloroethylene	0.275	0.259	5.8	100	0.00
38	CT	Methyl Methacrylate	0.903	0.884	2.1	100	0.00
39	CT	cis-1,3-Dichloropropene	0.216	0.235	-8.8	100	0.00
40	CT	Methyl Isobutyl Ketone	0.482	0.463	3.9	100	0.00
41	CT	trans-1,3-Dichloropropene	0.160	0.168	-5.0	100	0.00
42	CT	1,1,2-Trichloroethane	0.209	0.218	-4.3	100	0.00
43	ISS	IS-Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
44	CT	Toluene	0.844	0.849	-0.6	100	0.00
45	CT	Dibromochloromethane	2.000	1.858	7.1	100	0.00
46	CT	1,2-Dibromoethane	0.335	0.345	-3.0	100	0.00
47	CT	n-Octane	0.542	0.510	5.9	100	0.00
48	CT	Tetrachloroethylene	0.421	0.448	-6.4	100	0.00

ED_002475_00000320-00013

Compounds other than ethylene oxide were not quantitated.

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\L18L!\
Data File : L18L!002.D
Acq On : 28 Dec 2018 11:12 am
Operator : MAH
Sample : 1812063-CCV1
Misc : 80 ML 8L13001,8L26002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:04:40 2019
Quant Method : C:\msdchem\1\METHODS\8120004_ICV.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Jan 03 13:02:56 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	0.543	0.551	-1.5	100	0.00
50	CT	Ethylbenzene	0.873	0.884	-1.3	100	0.00
51	CT	m,p-Xylene	0.750	0.752	-0.3	100	0.00
52	CT	Bromoform	0.379	0.386	-1.8	100	0.00
53	CT	Styrene	0.381	0.393	-3.1	100	0.00
54	CT	1,1,2,2-Tetrachloroethane	0.531	0.525	1.1	100	0.00
55	CT	o-Xylene	0.737	0.767	-4.1	100	0.00
56	CT	1,3,5-Trimethylbenzene	0.720	0.706	1.9	100	0.00
57	CT	1,2,4-Trimethylbenzene	0.607	0.605	0.3	100	0.00
58	CT	m-Dichlorobenzene	0.320	0.315	1.6	100	0.00
59	CT	p-Dichlorobenzene	0.244	0.266	-9.0	100	0.00
60	CT	o-Dichlorobenzene	0.299	0.308	-3.0	100	0.00
61	CT	1,2,4-Trichlorobenzene	0.117	0.143	-22.2	100	0.00
62	CT	Hexachloro-1,3-butadiene	0.425	0.378	11.1	100	0.00

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

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L18L!\
Data File : L18L!002.D
Acq On : 28 Dec 2018 11:12 am
Operator : MAH
Sample : 1812063-CCV1
Misc : 80 ML 8L13001,8L26002
ALS Vial : 2 Sample Multiplier: 1

7319

Quant Time: Jan 03 13:05:18 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) IS-Hexane-d14	19.970	66	62952	4.7700	ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.150	114	146790	4.9900	ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	111588	4.7400	ppbv	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Acetylene	5.404	26	12174	2.2928	ppbv	100
3) Propylene	7.823	41	15950	2.5283	ppbv	100
4) Dichlorodifluoromethane	8.685	85	64015	2.3826	ppbv	100
5) Chloromethane	9.740	50	19211	2.4482	ppbv	99
6) Dichlorotetrafluoroethane	10.847	85	67207	2.7071	ppbv	99
7) Vinyl Chloride	11.102	62	20899	2.4829	ppbv	100
8) 1,3-Butadiene	11.766	54	13556	2.4339	ppbv	100
9) Ethylene oxide	12.380	29	6746	1.7928	ppbv	95
10) Bromomethane	12.575	94	20897	2.5203	ppbv	100
11) Chloroethane	13.254	64	9274	2.5385	ppbv	100
12) Acetonitrile	14.334	41	14808	2.2954	ppbv	97
13) Acrolein	14.612	56	6538	1.8049	ppbv	97
14) Trichlorofluoromethane	15.169	101	55434	2.2507	ppbv	100
15) Acrylonitrile	15.911	53	11750	2.3213	ppbv	100
16) 1,1-Dichloroethene	16.422	61	30104	2.6477	ppbv	100
17) Methylene Chloride	16.723	49	20831	2.5543	ppbv	100
18) Carbon Disulfide	16.909	76	60180	2.5190	ppbv	100
19) Trichlorotrifluoroethane	17.257	101	45055	2.5524	ppbv	100
20) trans-1,2-Dichloroethy...	18.315	96	15617	2.4414	ppbv	100
21) 1,1-Dichloroethane	18.609	63	27888	2.3988	ppbv	100
22) Methyl tert-Butyl Ether	18.768	73	42868	2.5301	ppbv	100
23) Chloroprene	19.516	53	20446	2.4535	ppbv	99
24) cis-1,2-Dichloroethylene	19.924	61	21637	2.4032	ppbv	99
25) Bromochloromethane	20.174	128	11352	2.3442	ppbv	100
26) Chloroform	20.400	83	33717	2.5292	ppbv	99
27) Ethyl tert-Butyl Ether	21.164	59	46424	2.6033	ppbv	100
28) 1,2-Dichloroethane	21.477	62	19969	2.4723	ppbv	100
30) 1,1,1-Trichloroethane	21.849	97	30635	2.4457	ppbv	99
31) Benzene	22.535	78	45908	2.6788	ppbv	100
32) Carbon Tetrachloride	22.770	117	38475	2.8203	ppbv	99
33) tert-Amyl Methyl Ether	23.501	73	37988	2.6191	ppbv	99
34) 1,2-Dichloropropane	23.789	63	18279	2.5618	ppbv	94
35) Ethyl Acrylate	23.872	55	24550	2.5653	ppbv	100
36) Bromodichloromethane	24.078	83	29505	2.2360	ppbv	100
37) Trichloroethylene	24.161	130	19224	2.3787	ppbv	100
38) Methyl Methacrylate	24.532	41	66027	2.4863	ppbv	100
39) cis-1,3-Dichloropropene	25.511	75	17536	2.7573	ppbv	99
40) Methyl Isobutyl Ketone	25.587	43	34490	2.4332	ppbv	100
41) trans-1,3-Dichloropropene	26.350	75	12125	2.5730	ppbv	98
42) 1,1,2-Trichloroethane	26.617	97	15874	2.5802	ppbv	99
44) Toluene	27.094	91	48752	2.4534	ppbv	100
45) Dibromochloromethane	27.734	129	111120	2.3602	ppbv	100
46) 1,2-Dibromoethane	28.137	107	20307	2.5731	ppbv	100
47) n-Octane	28.857	43	30217	2.3669	ppbv	100
48) Tetrachloroethylene	28.997	166	26243	2.6464	ppbv	100
49) Chlorobenzene	30.173	112	31827	2.4912	ppbv	99
50) Ethylbenzene	30.898	91	51955	2.5294	ppbv	100

Compounds other than ethylene oxide were not quantitated (Reviewed)

Data Path : C:\MSDCHEM\1\DATA\L18L!\
Data File : L18L!002.D
Acq On : 28 Dec 2018 11:12 am
Operator : MAH
Sample : 1812063-CCV1
Misc : 80 ML 8L13001,8L26002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:05:18 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	31.222	91	88509	5.0147 ppbv	100
52) Bromoform	31.280	173	23059	2.5839 ppbv	100
53) Styrene	31.910	104	23120	2.5756 ppbv #	100
54) 1,1,2,2-Tetrachloroethane	32.062	83	31261	2.5031 ppbv	99
55) o-Xylene	32.120	91	44051	2.5406 ppbv	100
56) 1,3,5-Trimethylbenzene	34.919	105	41883	2.4723 ppbv	100
57) 1,2,4-Trimethylbenzene	35.846	105	33889	2.3704 ppbv	100
58) m-Dichlorobenzene	36.113	146	17754	2.3582 ppbv	100
59) p-Dichlorobenzene	36.291	146	16328	2.8441 ppbv	99
60) o-Dichlorobenzene	37.093	146	18104	2.5678 ppbv	100
61) 1,2,4-Trichlorobenzene	40.841	180	8357	3.0455 ppbv	99
62) Hexachloro-1,3-butadiene	41.635	225	22255	2.2237 ppbv	100

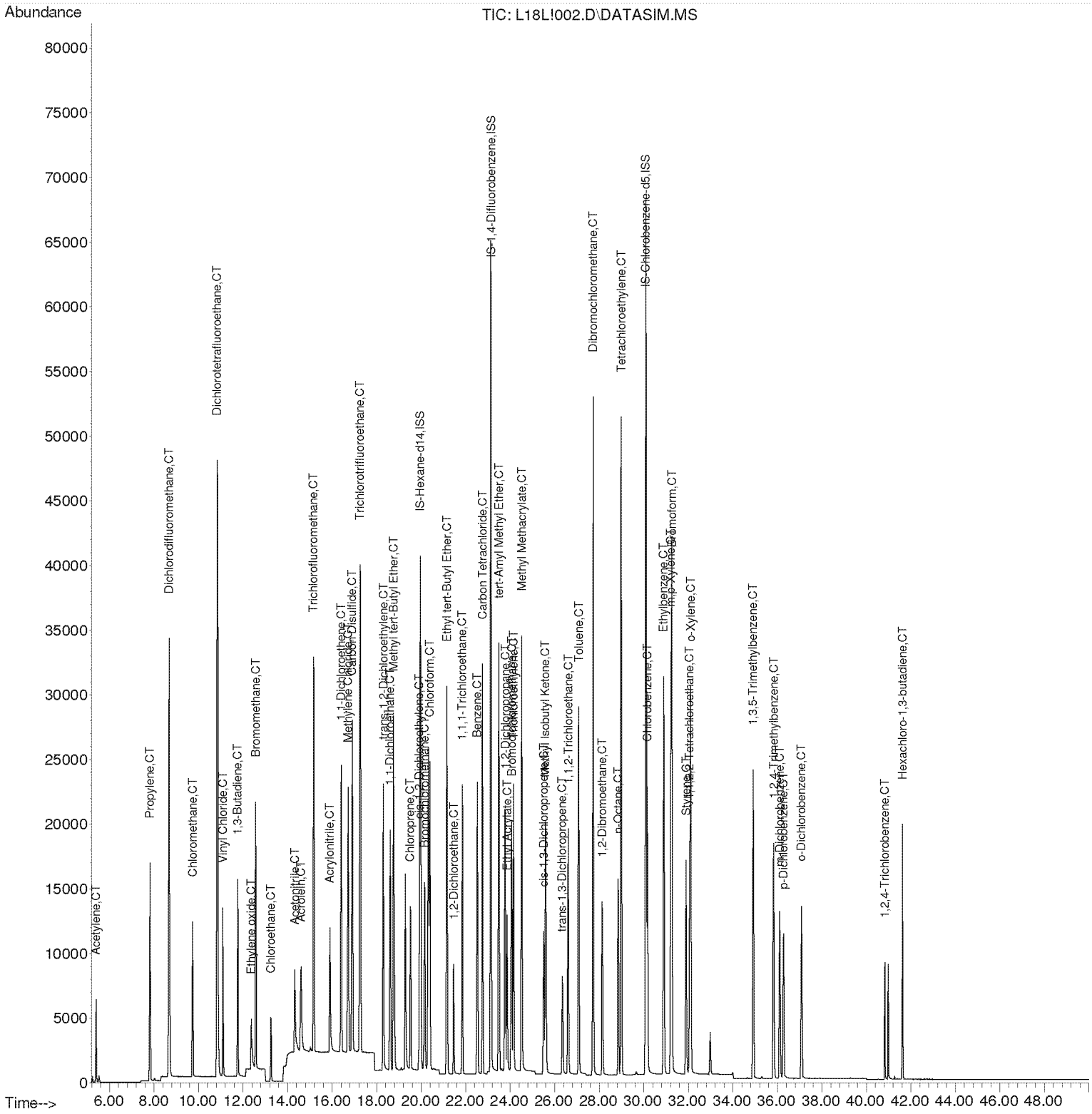
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

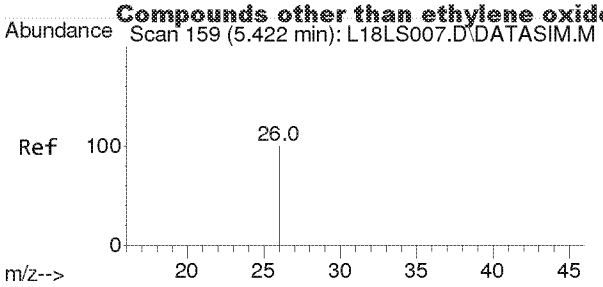
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!002.D
Acq On : 28 Dec 2018 11:12 am
Operator : MAH
Sample : 1812063-CCV1
Misc : 80 ML 8L13001,8L26002
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 03 13:05:18 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

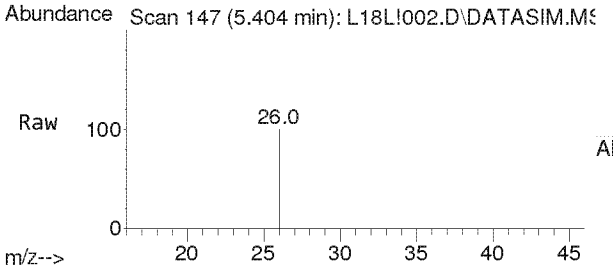


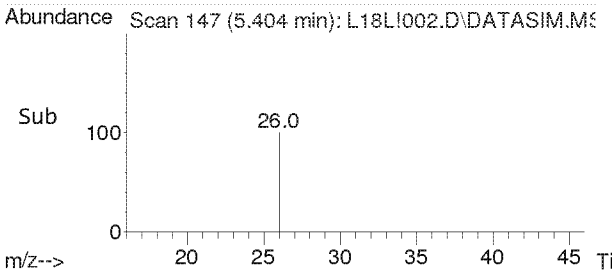
Compounds other than ethylene oxide were not quantitated.

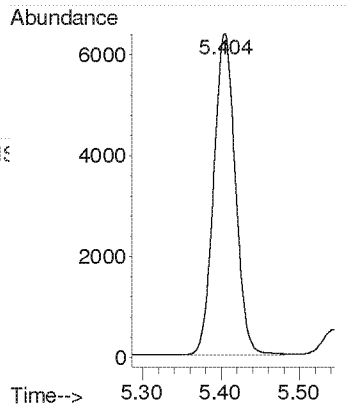


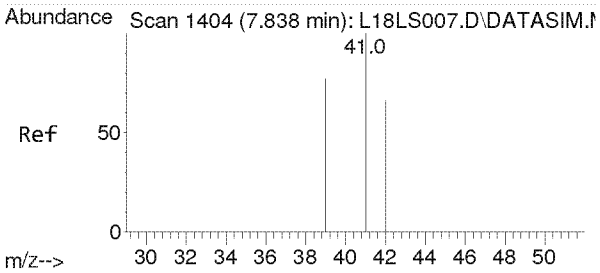
#2
Acetylene
Concen: 2.293 ppbv
RT: 5.404 min Scan# 147
Delta R.T. -0.018 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 26 Resp: 12174





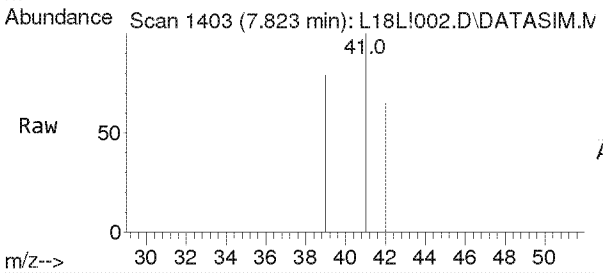


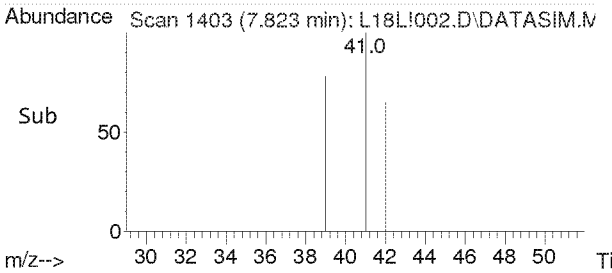


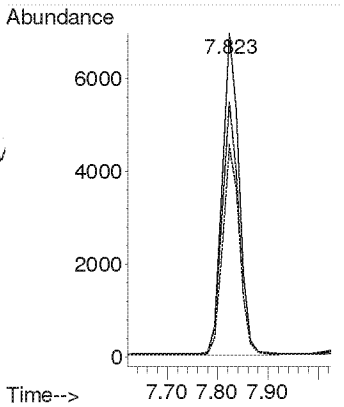
#3
Propylene
Concen: 2.528 ppbv
RT: 7.823 min Scan# 1403
Delta R.T. -0.015 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 41 Resp: 15950

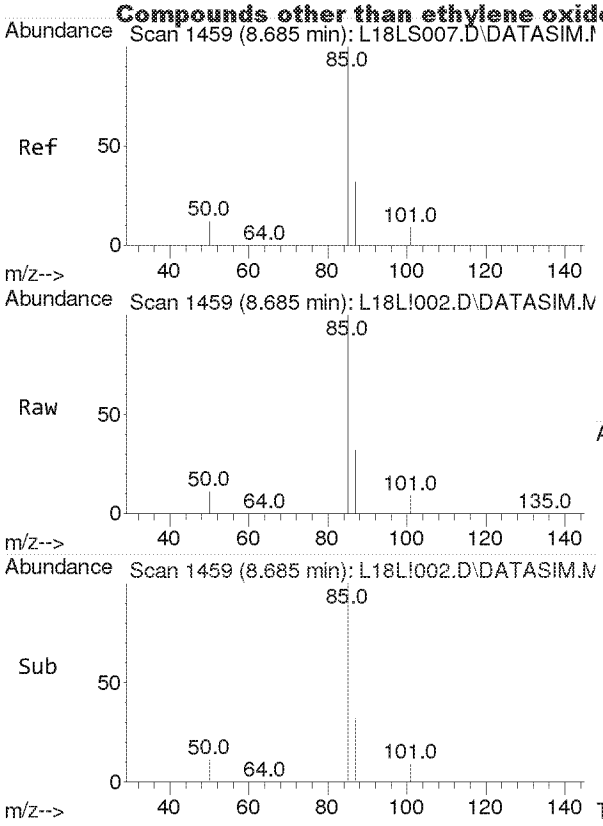
Ion	Ratio	Lower	Upper
41	100		
39	77.6	62.6	93.8
42	65.7	52.6	79.0







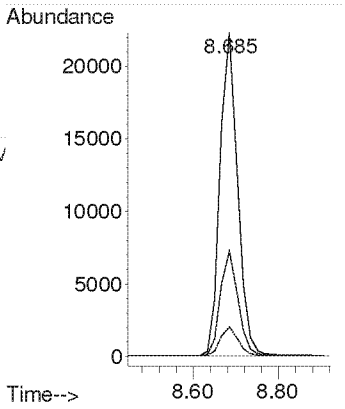
Compounds other than ethylene oxide were not quantitated.

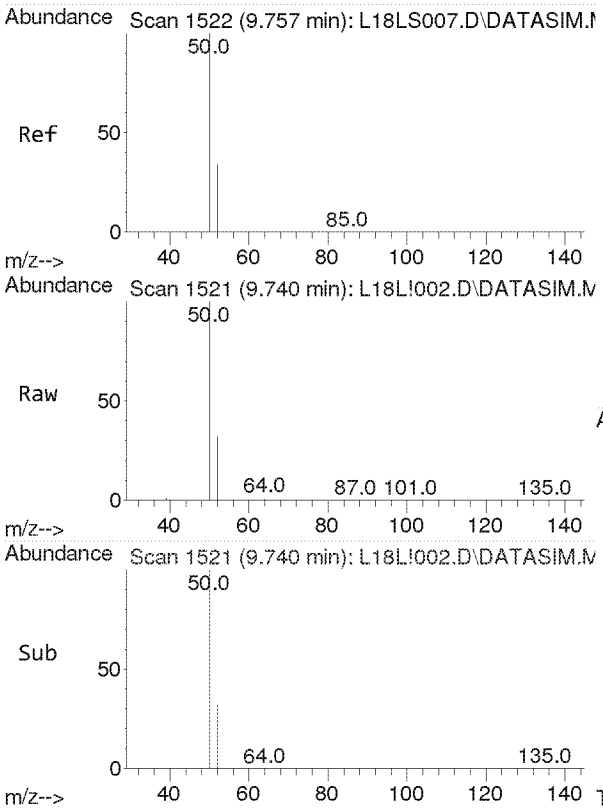


#4
Dichlorodifluoromethane
Concen: 2.383 ppbv
RT: 8.685 min Scan# 1459
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 85 Resp: 64015

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.0	39.0
101	8.9	7.1	10.7

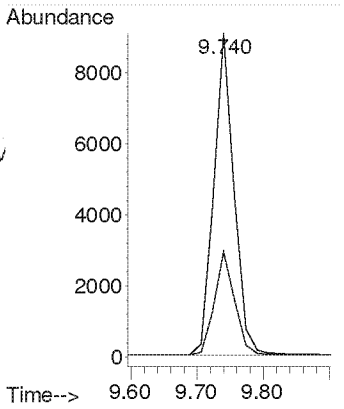




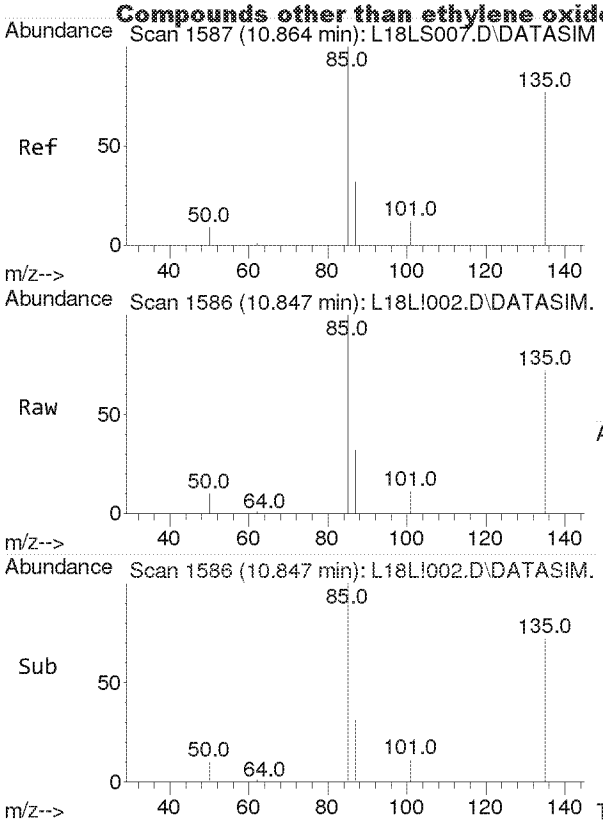
#5
Chloromethane
Concen: 2.448 ppbv
RT: 9.740 min Scan# 1521
Delta R.T. -0.017 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 50 Resp: 19211

Ion	Ratio	Lower	Upper
50	100		
52	32.3	26.1	39.1



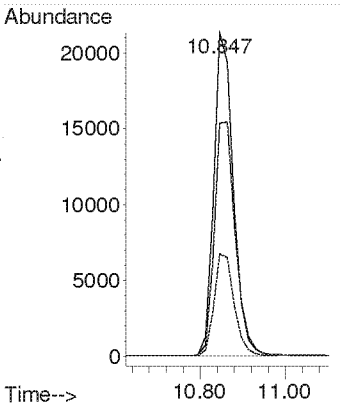
Compounds other than ethylene oxide were not quantitated.

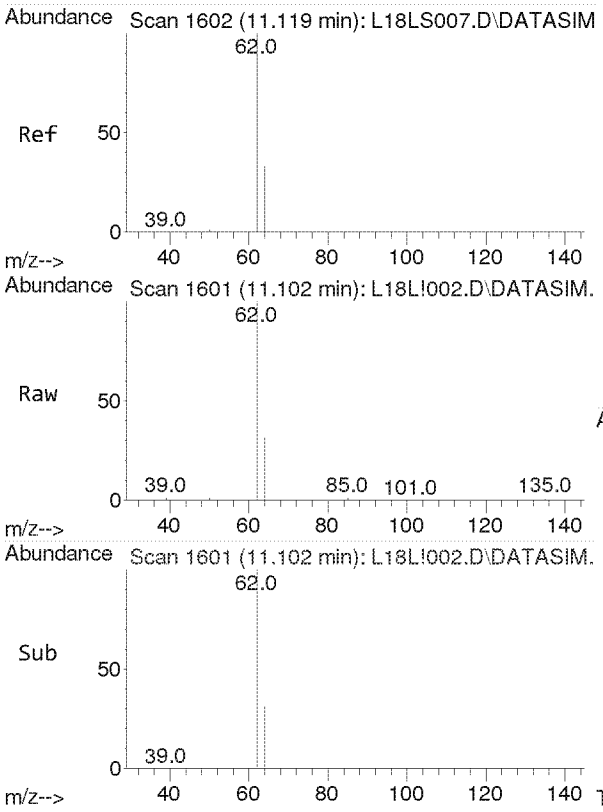


#6
Dichlorotetrafluoroethane
Concen: 2.707 ppbv
RT: 10.847 min Scan# 1586
Delta R.T. -0.017 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 85 Resp: 67207

Ion	Ratio	Lower	Upper
85	100		
135	78.3	63.3	94.9
87	32.3	25.7	38.5

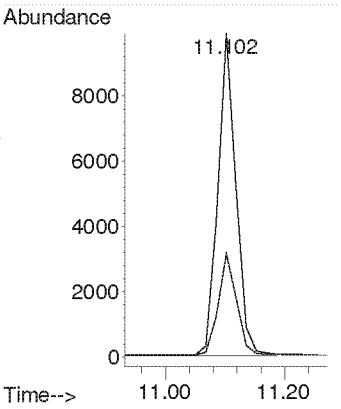




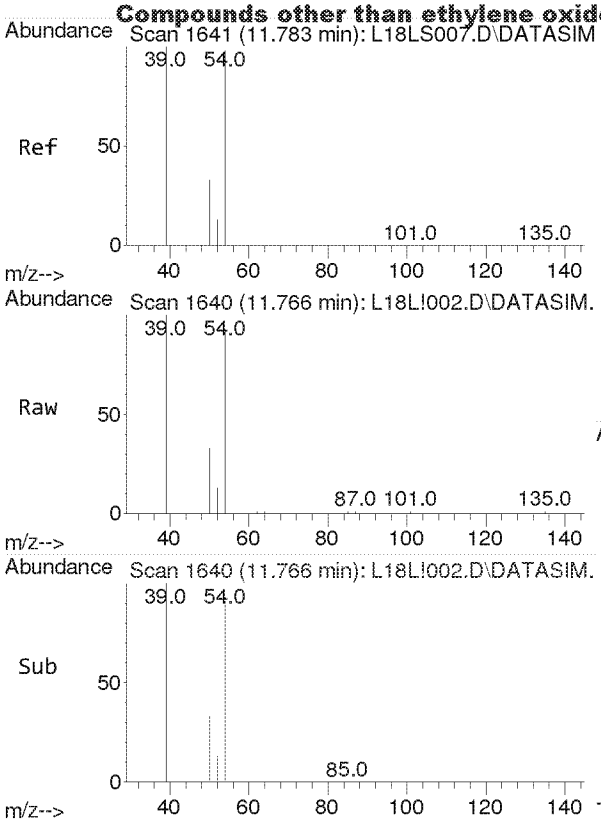
#7
Vinyl Chloride
Concen: 2.483 ppbv
RT: 11.102 min Scan# 1601
Delta R.T. -0.017 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 62 Resp: 20899

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.2



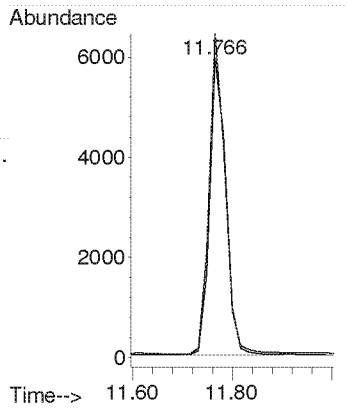
Compounds other than ethylene oxide were not quantitated.

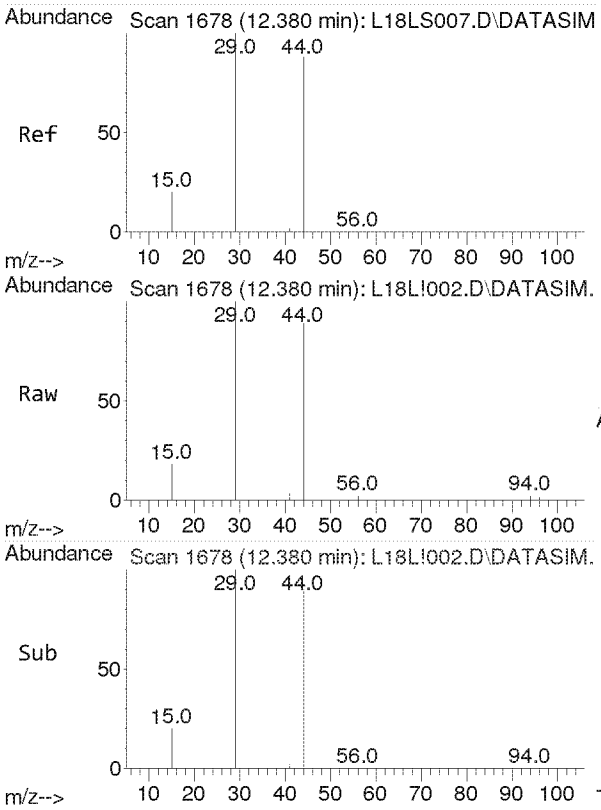


#8
1,3-Butadiene
Concen: 2.434 ppbv
RT: 11.766 min Scan# 1640
Delta R.T. -0.017 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 54 Resp: 13556

Ion	Ratio	Lower	Upper
54	100		
39	105.7	84.3	126.5

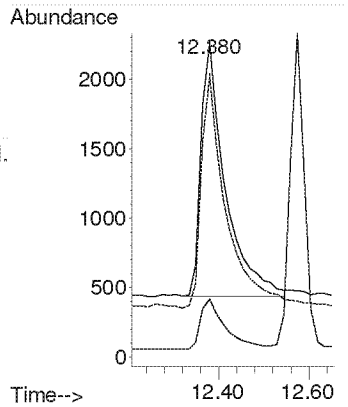




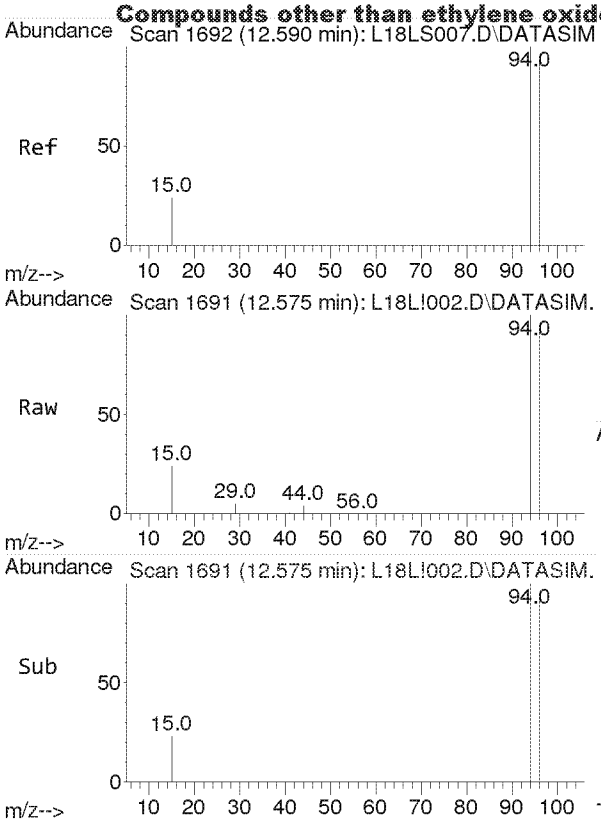
#9
Ethylene oxide
Concen: 1.793 ppbv
RT: 12.380 min Scan# 1678
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 29 Resp: 6746

Ion	Ratio	Lower	Upper
29	100		
15	20.4	16.2	24.4
44	95.2	72.0	108.0



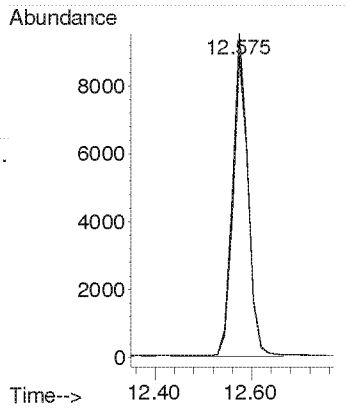
Compounds other than ethylene oxide were not quantitated.

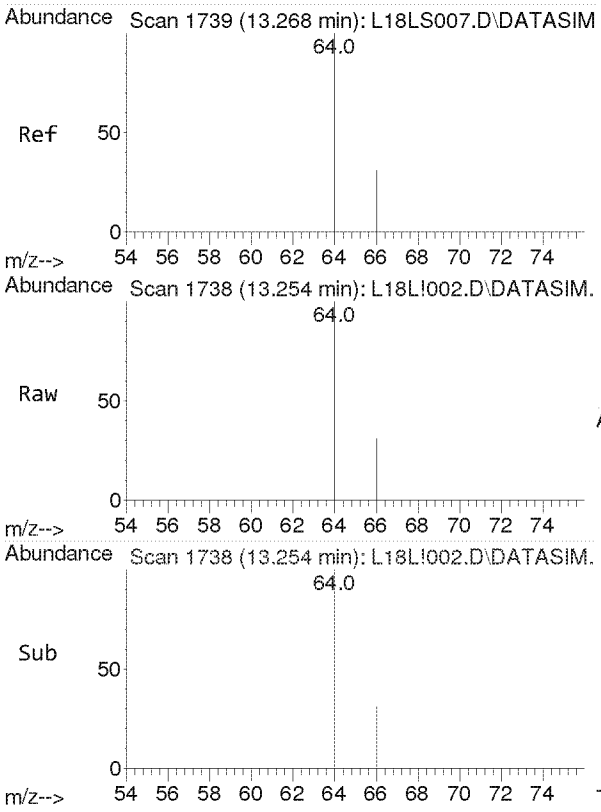


#10
Bromomethane
Concen: 2.520 ppbv
RT: 12.575 min Scan# 1691
Delta R.T. -0.015 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 94 Resp: 20897

Ion	Ratio	Lower	Upper
94	100		
96	93.8	75.1	112.7

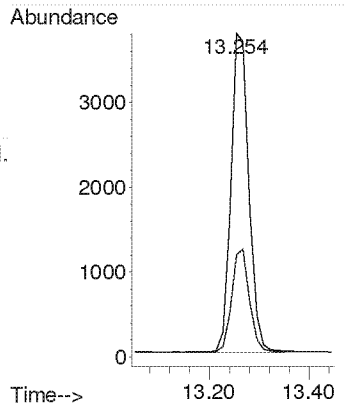




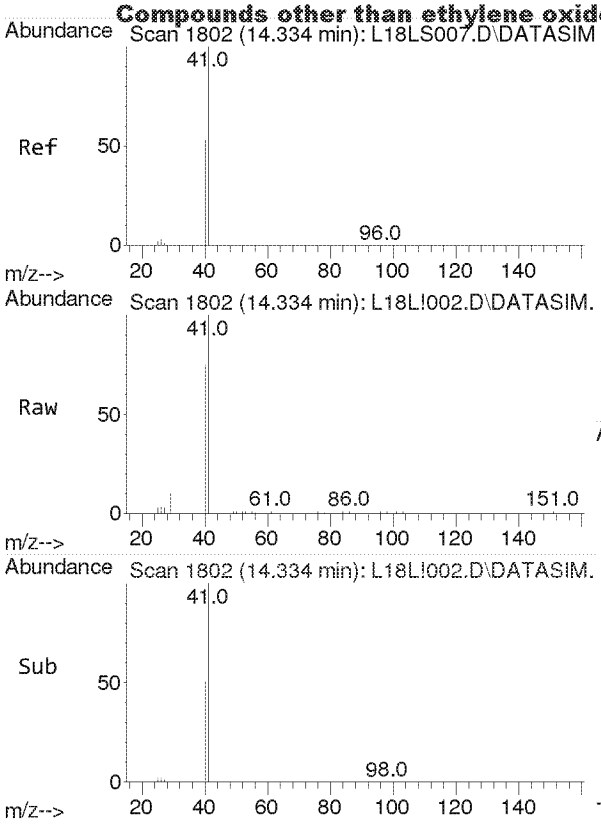
#11
Chloroethane
Concen: 2.539 ppbv
RT: 13.254 min Scan# 1738
Delta R.T. -0.014 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 64 Resp: 9274

Ion	Ratio	Lower	Upper
64	100		
66	31.8	25.6	38.4



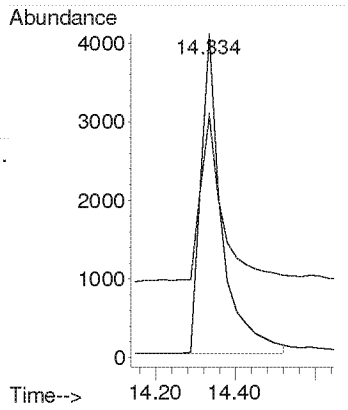
Compounds other than ethylene oxide were not quantitated.

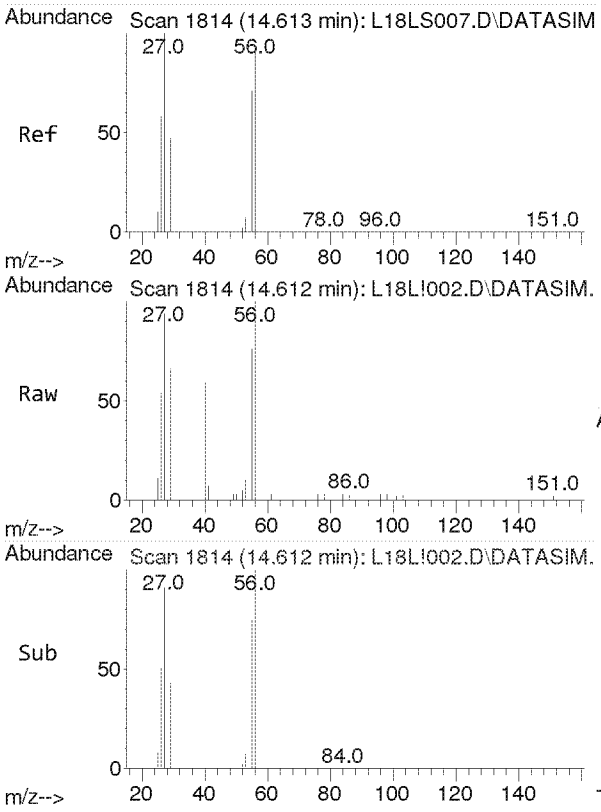


#12
Acetonitrile
Concen: 2.295 ppbv
RT: 14.334 min Scan# 1802
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 41 Resp: 14808

Ion	Ratio	Lower	Upper
41	100		
40	53.2	40.7	61.1

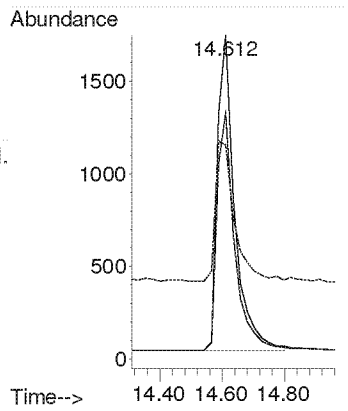




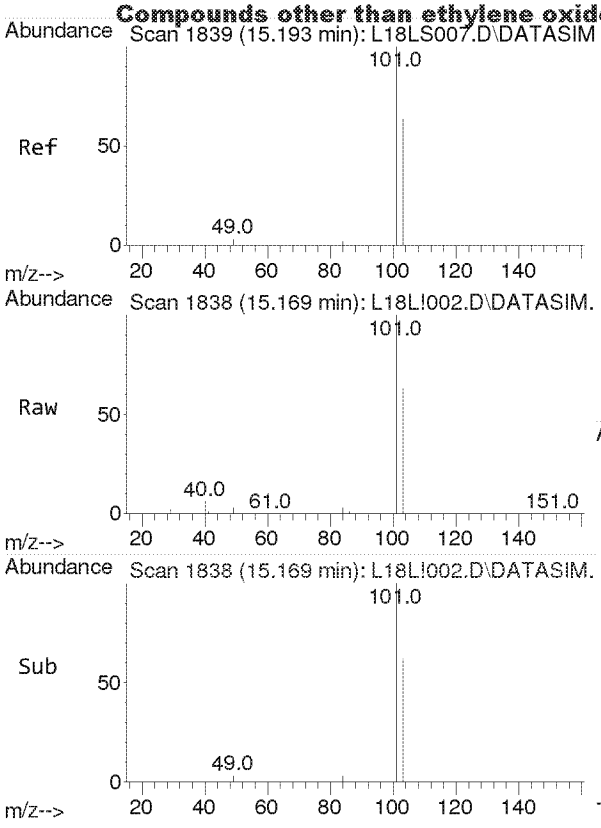
#13
Acrolein
Concen: 1.805 ppbv
RT: 14.612 min Scan# 1814
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 56 Resp: 6538

Ion	Ratio	Lower	Upper
56	100		
55	76.9	60.3	90.5
29	49.1	42.3	63.5



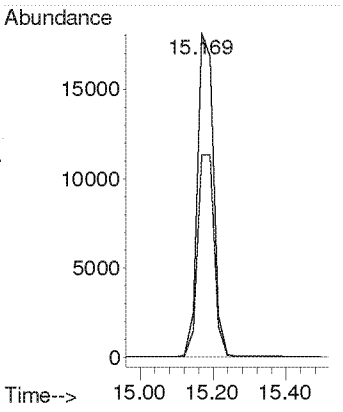
Compounds other than ethylene oxide were not quantitated.

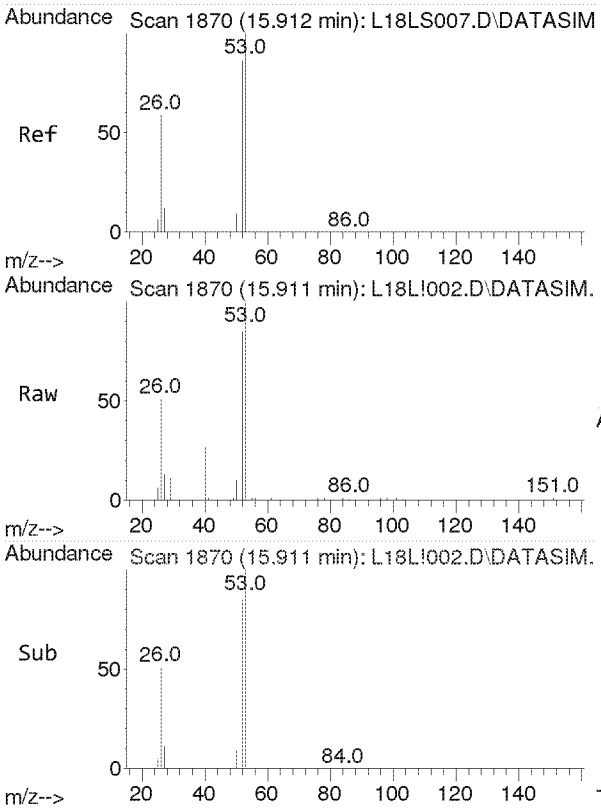


#14
Trichlorofluoromethane
Concen: 2.251 ppbv
RT: 15.169 min Scan# 1838
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:101 Resp: 55434

Ion	Ratio	Lower	Upper
101	100		
103	64.8	51.7	77.5

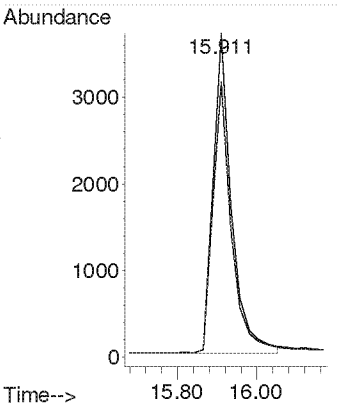




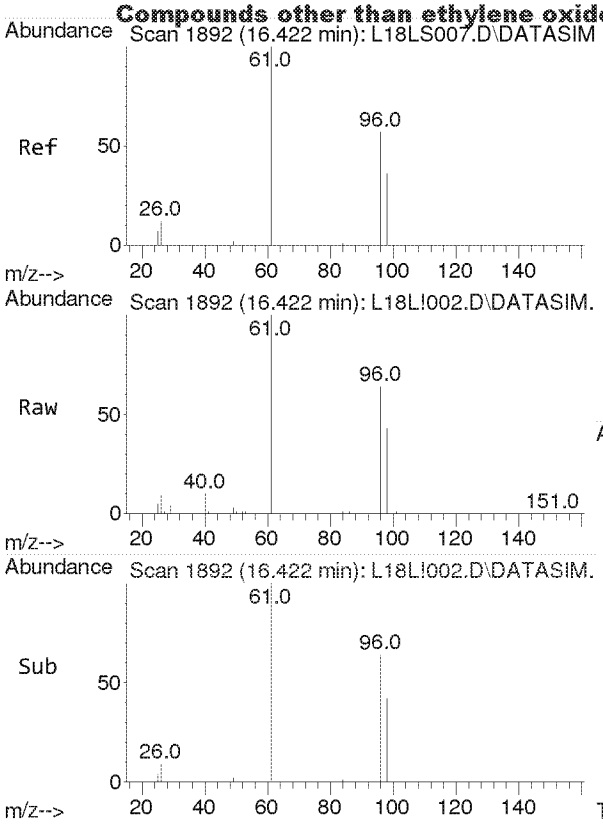
#15
Acrylonitrile
Concen: 2.321 ppbv
RT: 15.911 min Scan# 1870
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 53 Resp: 11750

Ion	Ratio	Lower	Upper
53	100		
52	85.8	68.3	102.5



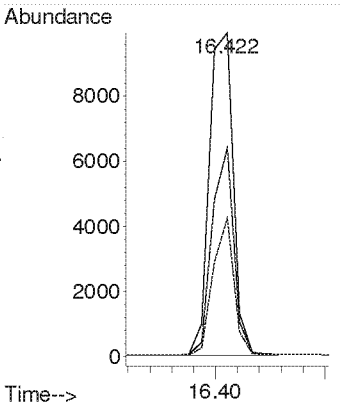
Compounds other than ethylene oxide were not quantitated.

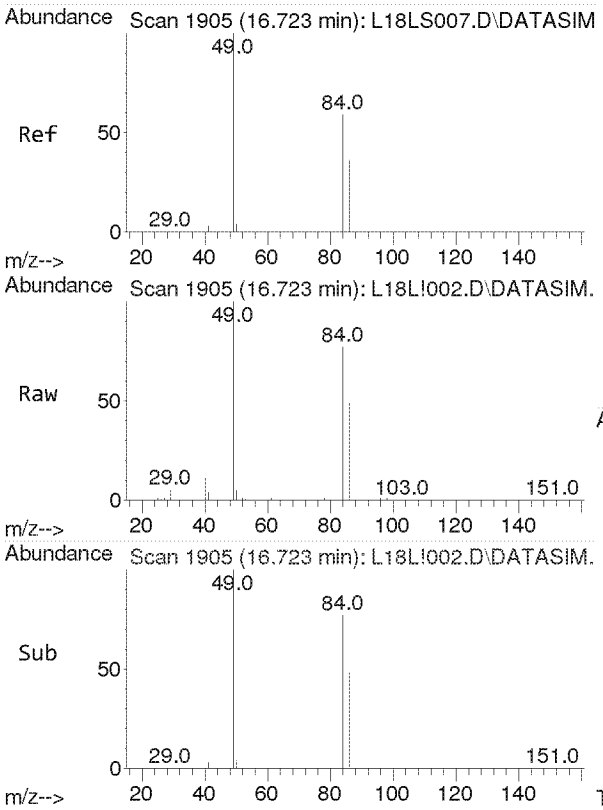


#16
1,1-Dichloroethene
Concen: 2.648 ppbv
RT: 16.422 min Scan# 1892
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 61 Resp: 30104

Ion	Ratio	Lower	Upper
61	100		
96	58.5	46.6	70.0
98	37.2	29.9	44.9

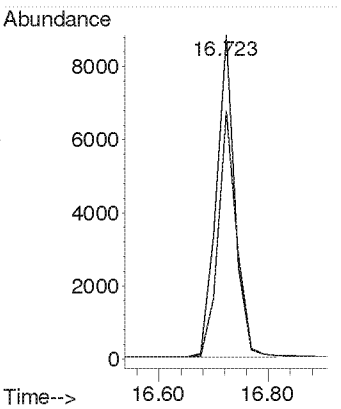




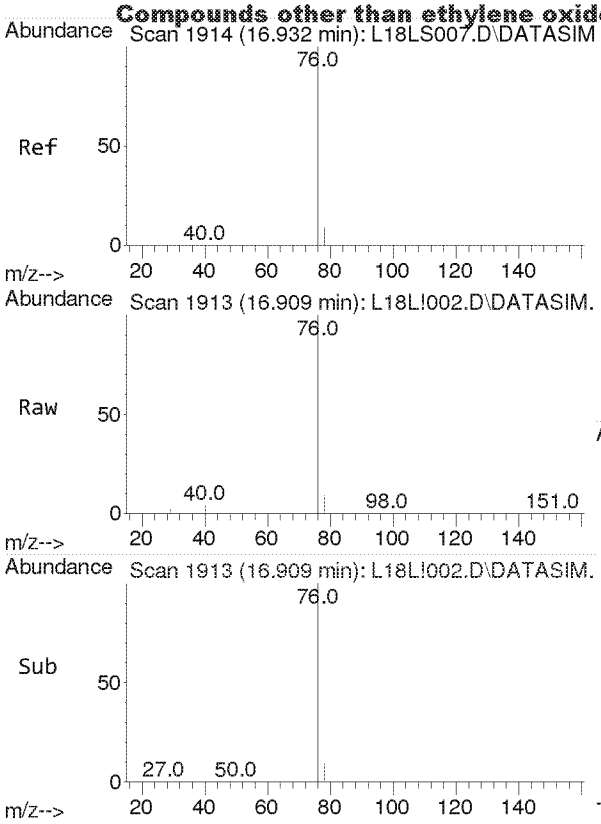
#17
Methylene Chloride
Concen: 2.554 ppbv
RT: 16.723 min Scan# 1905
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 49 Resp: 20831

Ion	Ratio	Lower	Upper
49	100		
84	76.7	53.5	99.3



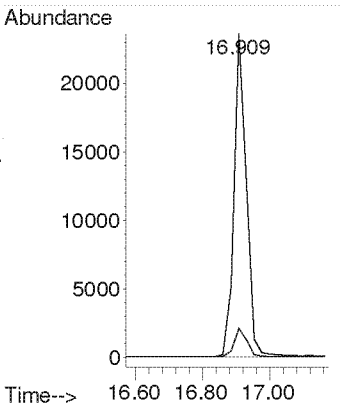
Compounds other than ethylene oxide were not quantitated.

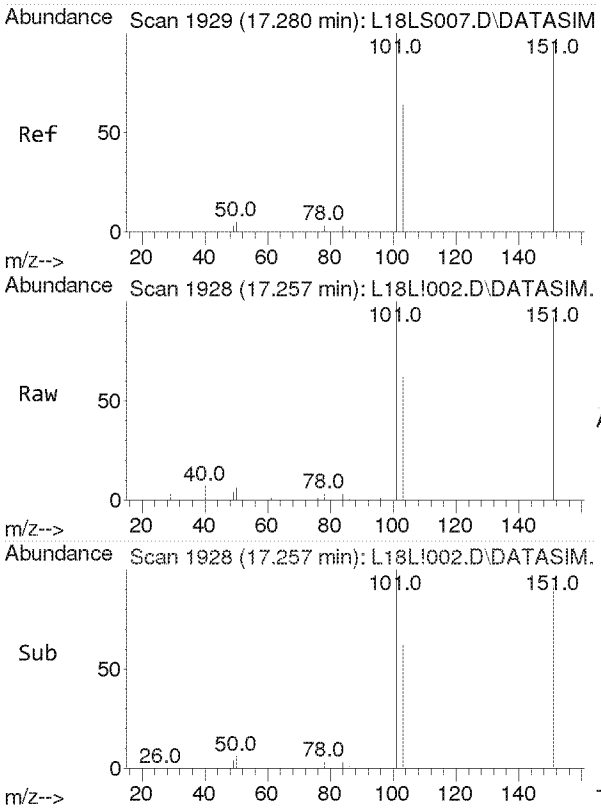


#18
Carbon Disulfide
Concen: 2.519 ppbv
RT: 16.909 min Scan# 1913
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 76 Resp: 60180

Ion	Ratio	Lower	Upper
76	100		
78	9.0	7.3	10.9

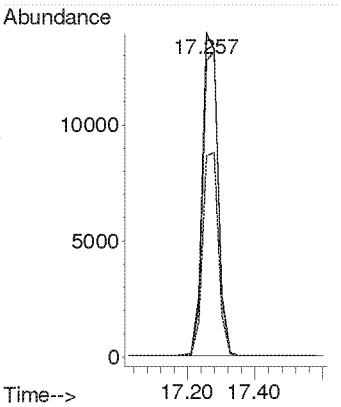




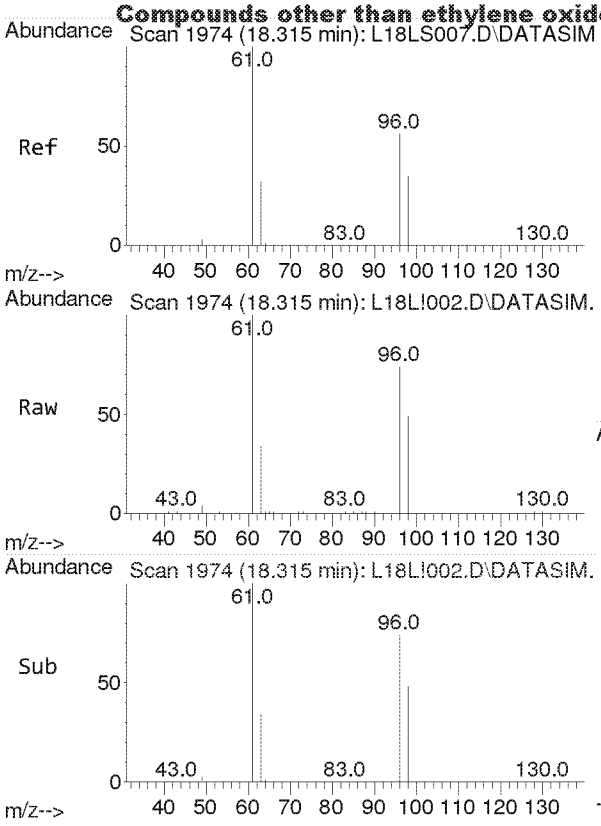
#19
Trichlorotrifluoroethane
Concen: 2.552 ppbv
RT: 17.257 min Scan# 1928
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:101 Resp: 45055

Ion	Ratio	Lower	Upper
101	100		
151	95.2	76.2	114.4
103	64.2	51.3	76.9



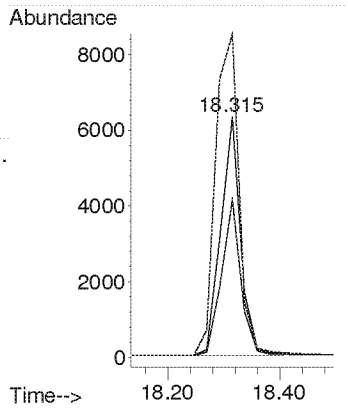
Compounds other than ethylene oxide were not quantitated.

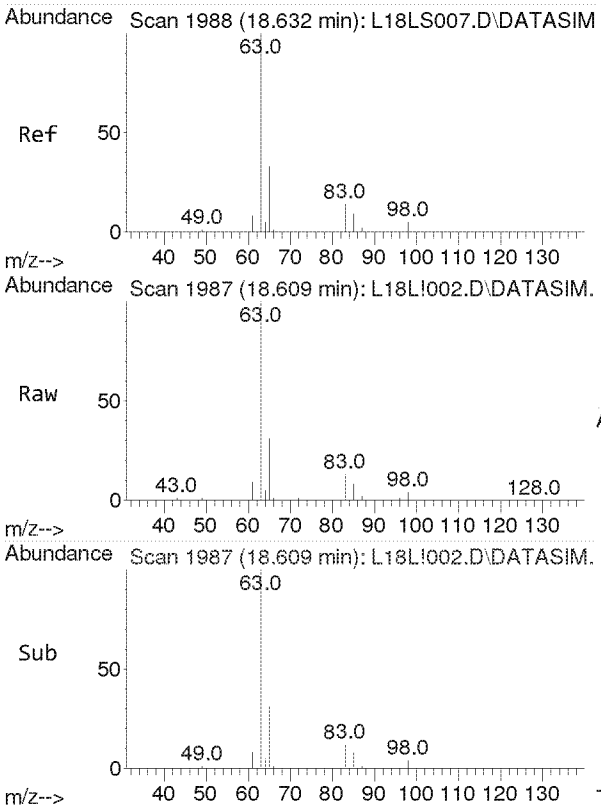


#20
trans-1,2-Dichloroethylene
Concen: 2.441 ppbv
RT: 18.315 min Scan# 1974
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 96 Resp: 15617

Ion	Ratio	Lower	Upper
96	100		
98	63.8	51.0	76.4
61	158.9	127.4	191.0

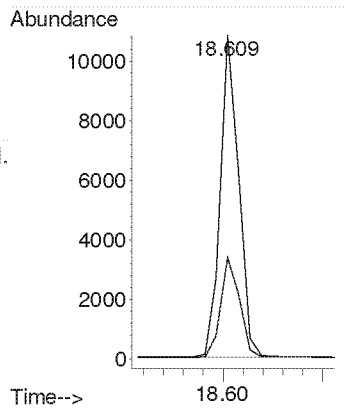




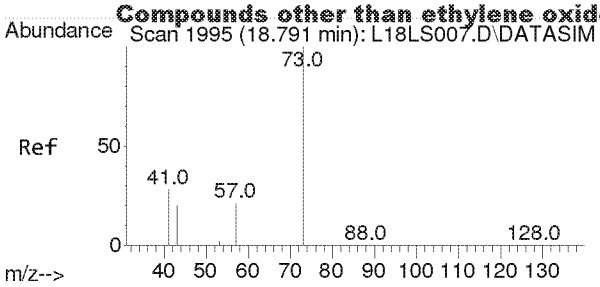
#21
1,1-Dichloroethane
Concen: 2.399 ppbv
RT: 18.609 min Scan# 1987
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 63 Resp: 27888

Ion	Ratio	Lower	Upper
63	100		
65	31.7	25.4	38.0



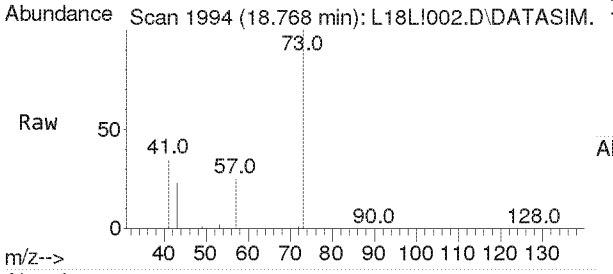
Compounds other than ethylene oxide were not quantitated.

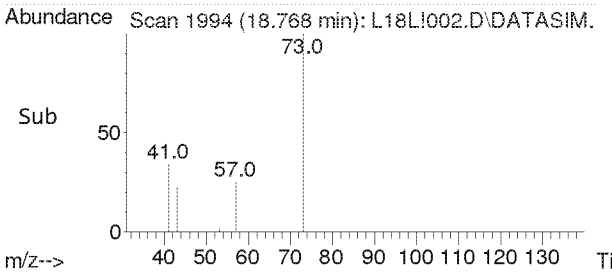


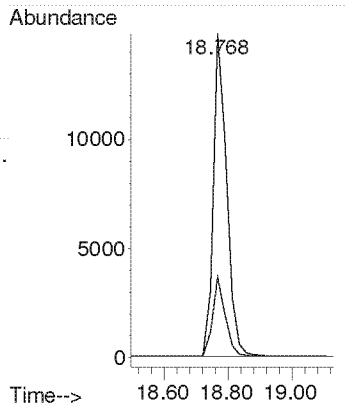
#22
Methyl tert-Butyl Ether
Concen: 2.530 ppbv
RT: 18.768 min Scan# 1994
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

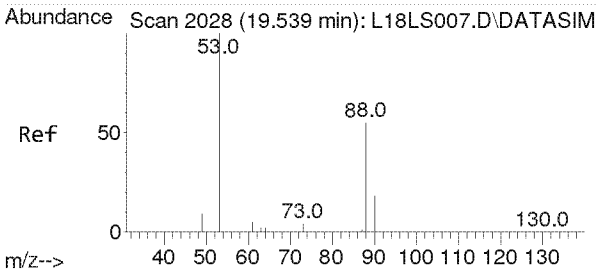
Tgt Ion: 73 Resp: 42868

Ion	Ratio	Lower	Upper
73	100		
57	23.5	18.7	28.1





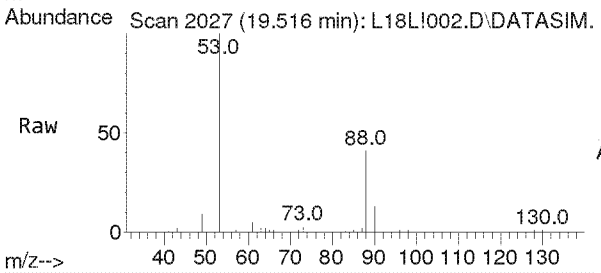


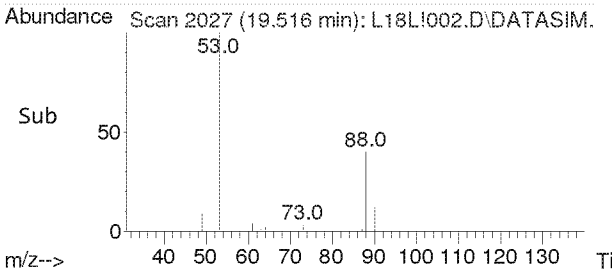


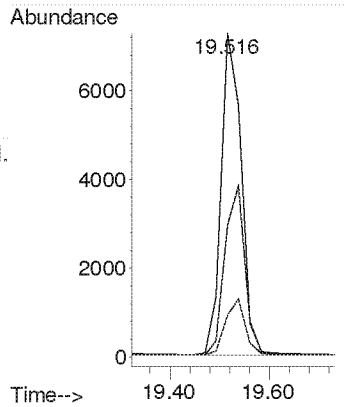
#23
Chloroprene
Concen: 2.454 ppbv
RT: 19.516 min Scan# 2027
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 53 Resp: 20446

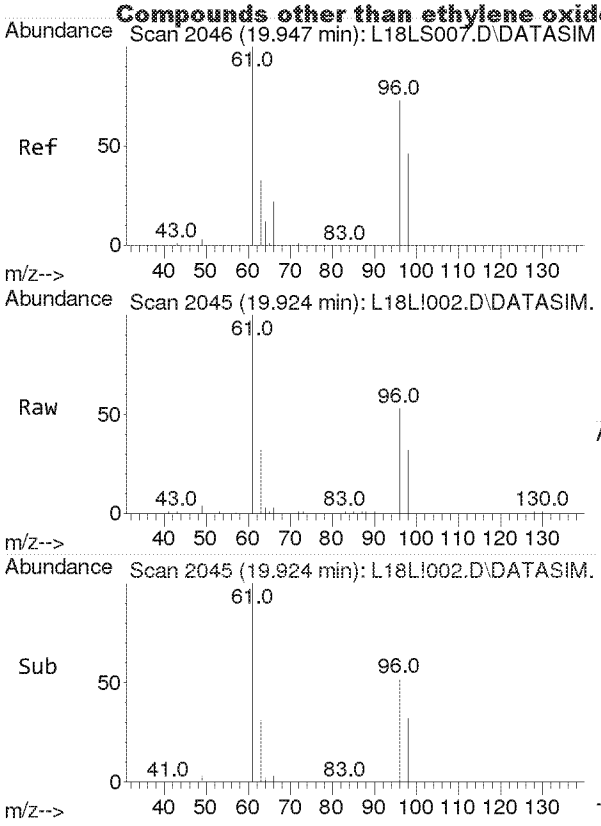
Ion	Ratio	Lower	Upper
53	100		
88	52.6	41.4	62.2
90	16.8	13.4	20.2







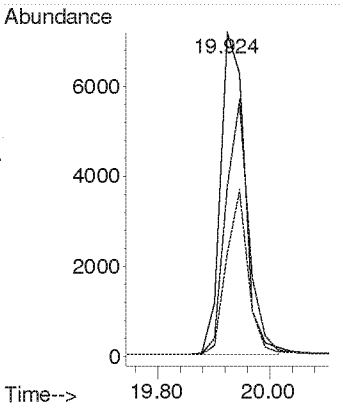
Compounds other than ethylene oxide were not quantitated.

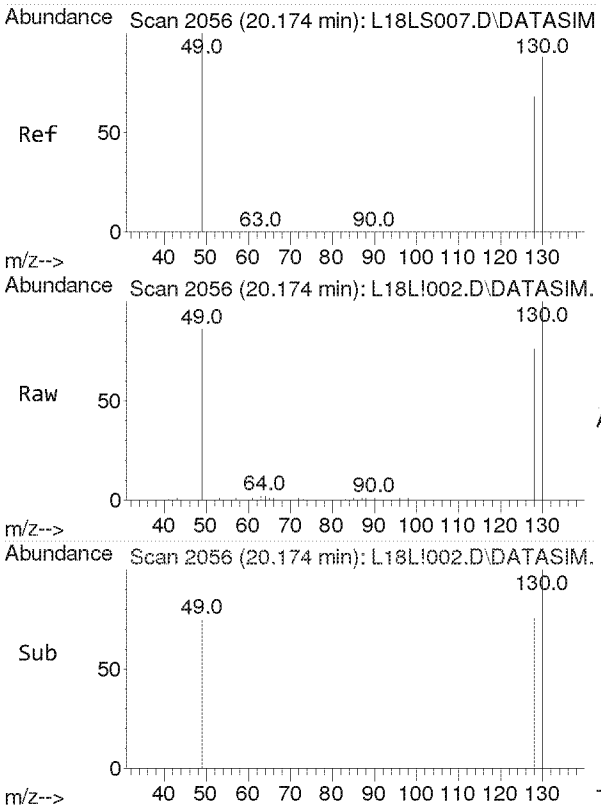


#24
cis-1,2-Dichloroethylene
Concen: 2.403 ppbv
RT: 19.924 min Scan# 2045
Delta R.T. -0.023 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 61 Resp: 21637

Ion	Ratio	Lower	Upper
61	100		
96	74.8	59.0	88.4
98	45.5	36.2	54.2

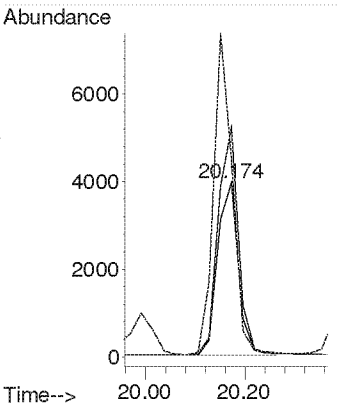




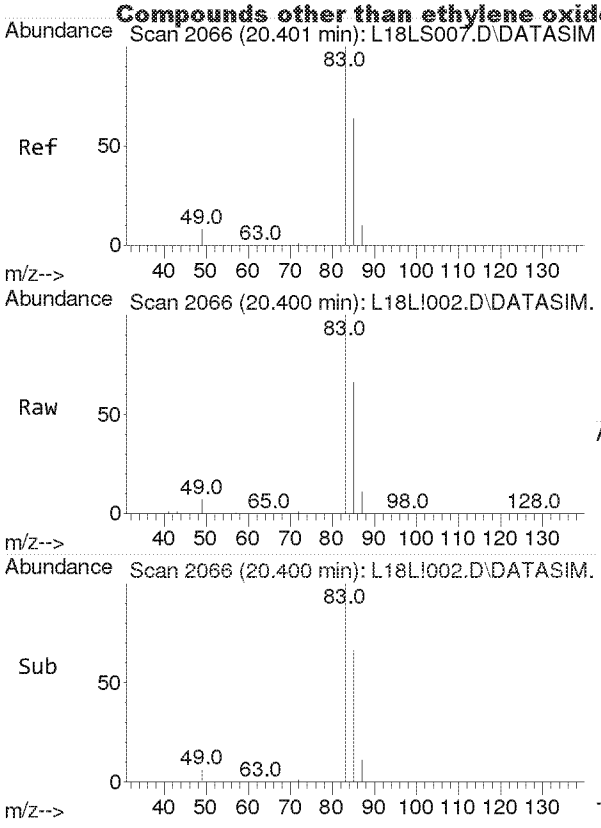
#25
Bromochloromethane
Concen: 2.344 ppbv
RT: 20.174 min Scan# 2056
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:128 Resp: 11352

Ion	Ratio	Lower	Upper
128	100		
130	129.3	103.3	154.9
49	170.7	137.0	205.4



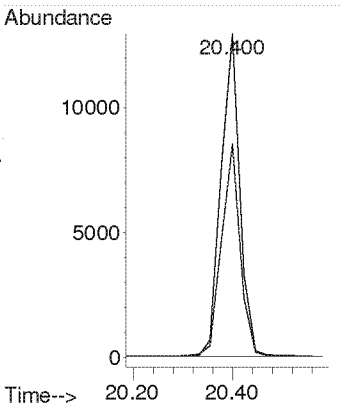
Compounds other than ethylene oxide were not quantitated.

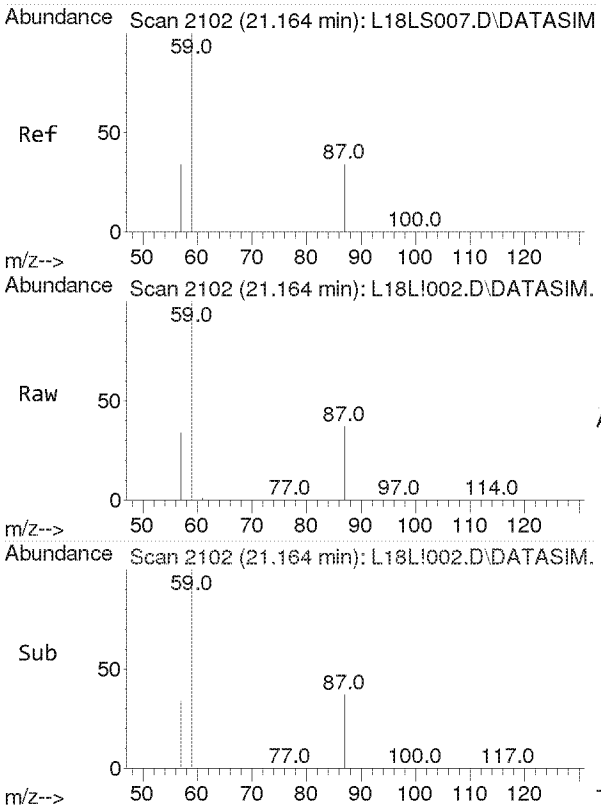


#26
Chloroform
Concen: 2.529 ppbv
RT: 20.400 min Scan# 2066
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 83 Resp: 33717

Ion	Ratio	Lower	Upper
83	100		
85	65.4	51.5	77.3

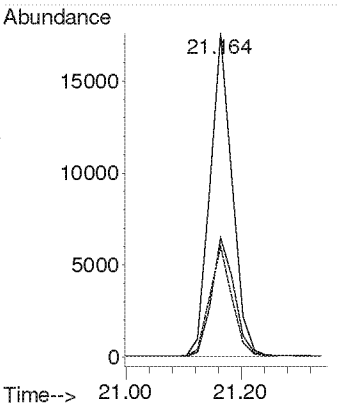




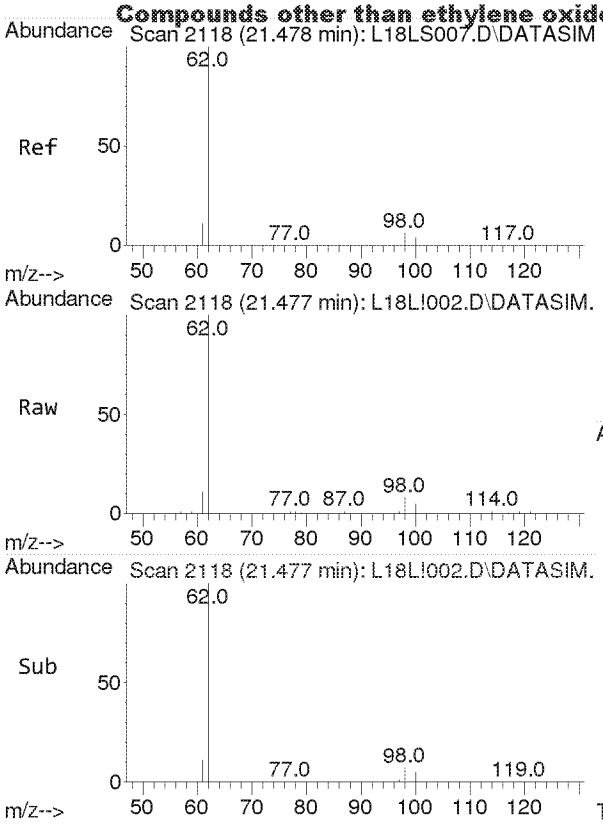
#27
Ethyl tert-Butyl Ether
Concen: 2.603 ppbv
RT: 21.164 min Scan# 2102
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 59 Resp: 46424

Ion	Ratio	Lower	Upper
59	100		
87	37.4	30.0	45.0
57	34.0	27.0	40.6



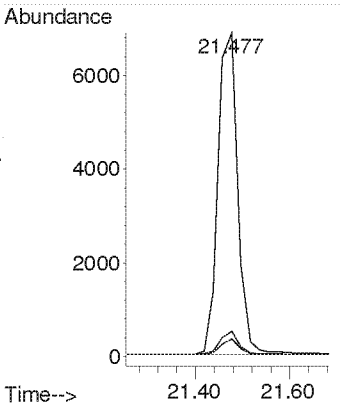
Compounds other than ethylene oxide were not quantitated.

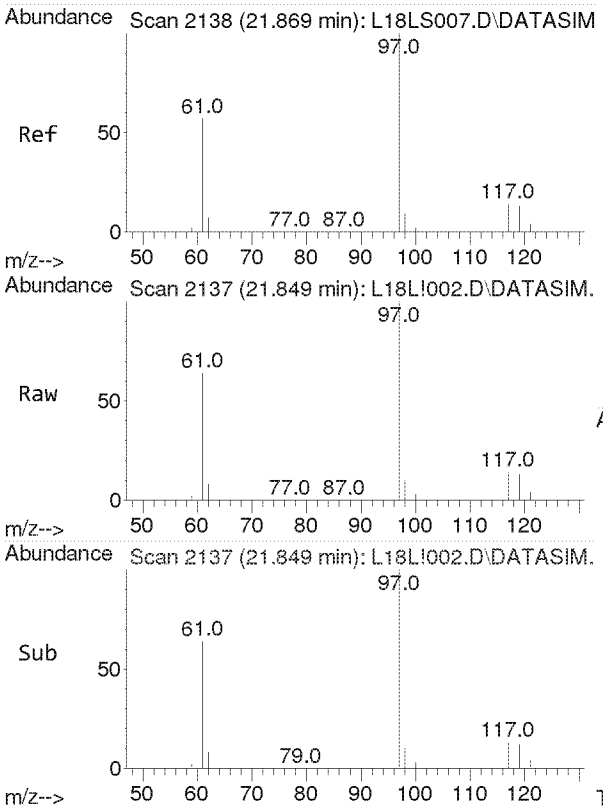


#28
1,2-Dichloroethane
Concen: 2.472 ppbv
RT: 21.477 min Scan# 2118
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 62 Resp: 19969

Ion	Ratio	Lower	Upper
62	100		
98	6.5	5.1	7.7
100	4.2	3.2	4.8

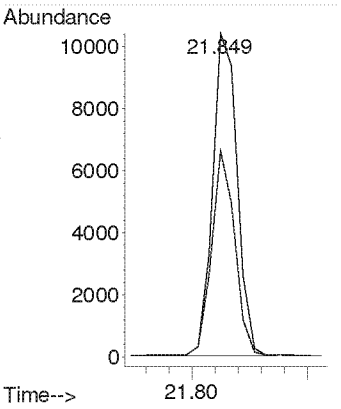




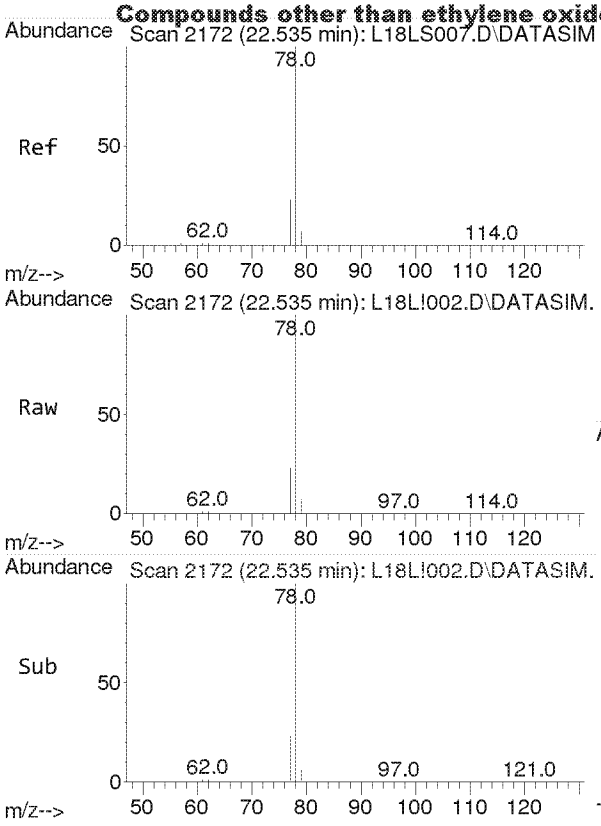
#30
1,1,1-Trichloroethane
Concen: 2.446 ppbv
RT: 21.849 min Scan# 2137
Delta R.T. -0.020 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 97 Resp: 30635

Ion	Ratio	Lower	Upper
97	100		
61	59.7	48.4	72.6



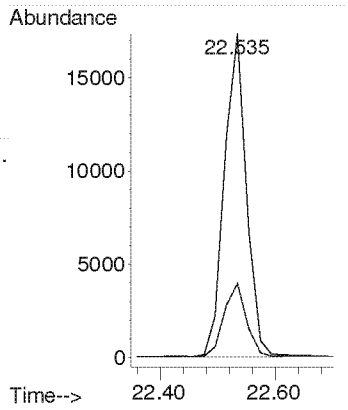
Compounds other than ethylene oxide were not quantitated.

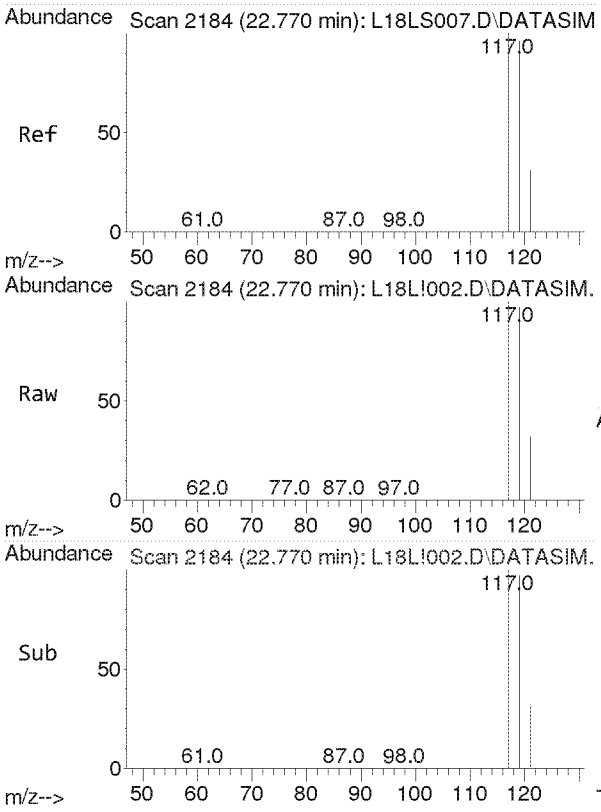


#31
Benzene
Concen: 2.679 ppbv
RT: 22.535 min Scan# 2172
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 78 Resp: 45908

Ion	Ratio	Lower	Upper
78	100		
77	22.7	18.2	27.2

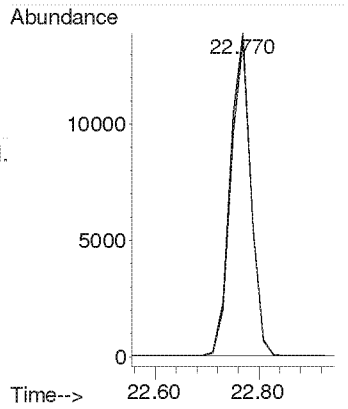




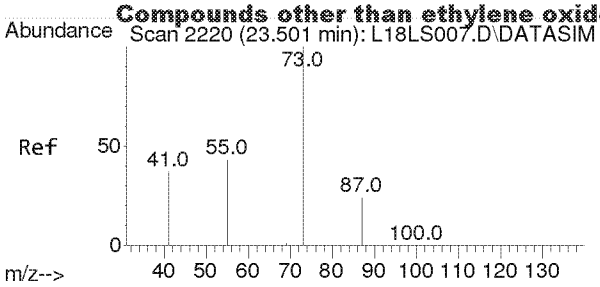
#32
Carbon Tetrachloride
Concen: 2.820 ppbv
RT: 22.770 min Scan# 2184
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:117 Resp: 38475

Ion	Ratio	Lower	Upper
117	100		
119	95.7	77.2	115.8



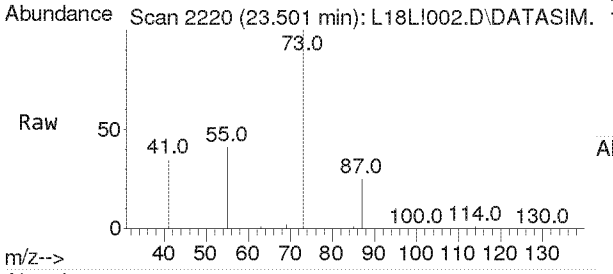
Compounds other than ethylene oxide were not quantitated.

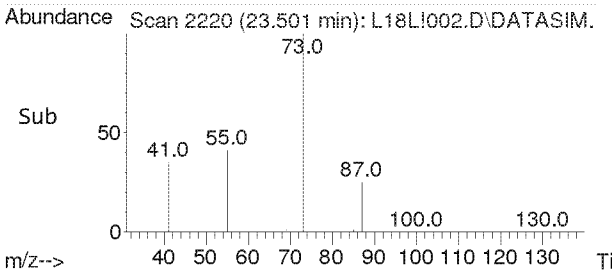


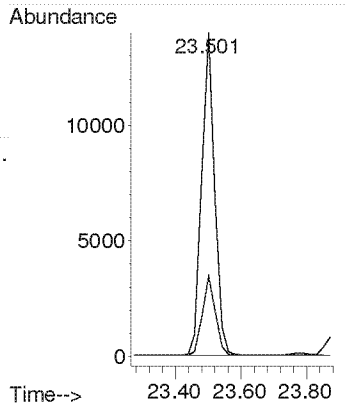
#33
tert-Amyl Methyl Ether
Concen: 2.619 ppbv
RT: 23.501 min Scan# 2220
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

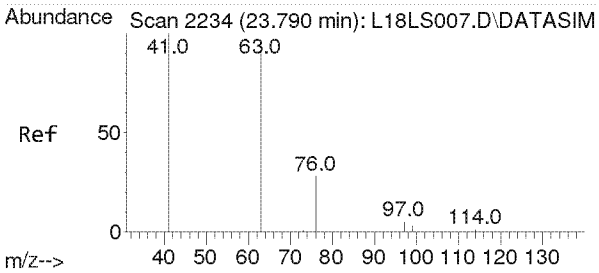
Tgt Ion: 73 Resp: 37988

Ion	Ratio	Lower	Upper
73	100		
87	24.5	19.9	29.9





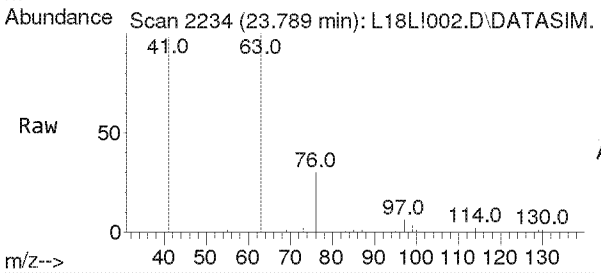


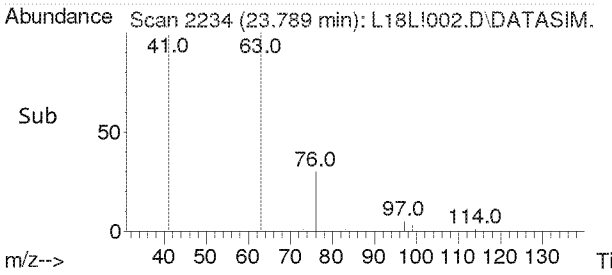


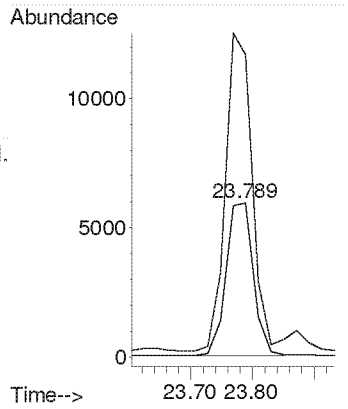
#34
1,2-Dichloropropane
Concen: 2.562 ppbv
RT: 23.789 min Scan# 2234
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 63 Resp: 18279

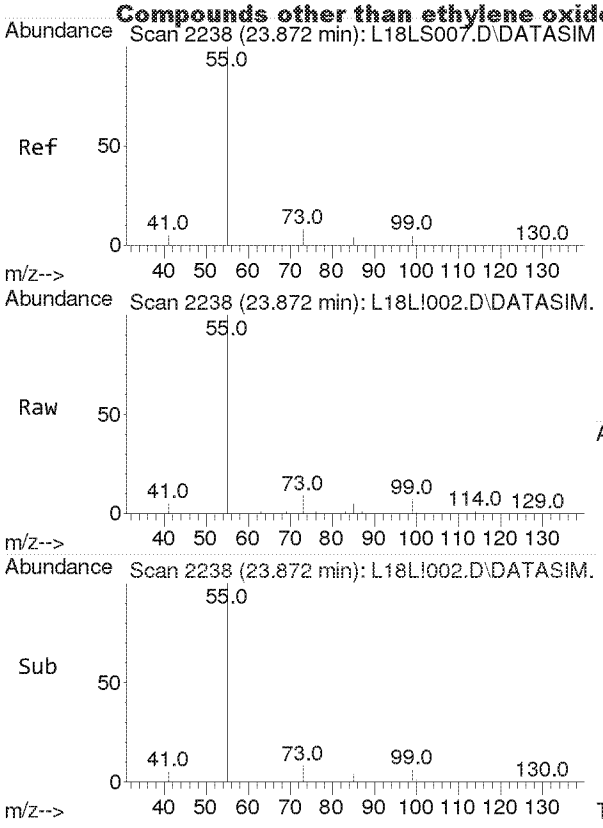
Ion	Ratio	Lower	Upper
63	100		
41	202.7	170.2	255.4







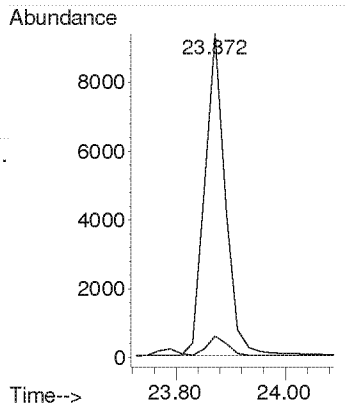
Compounds other than ethylene oxide were not quantitated.

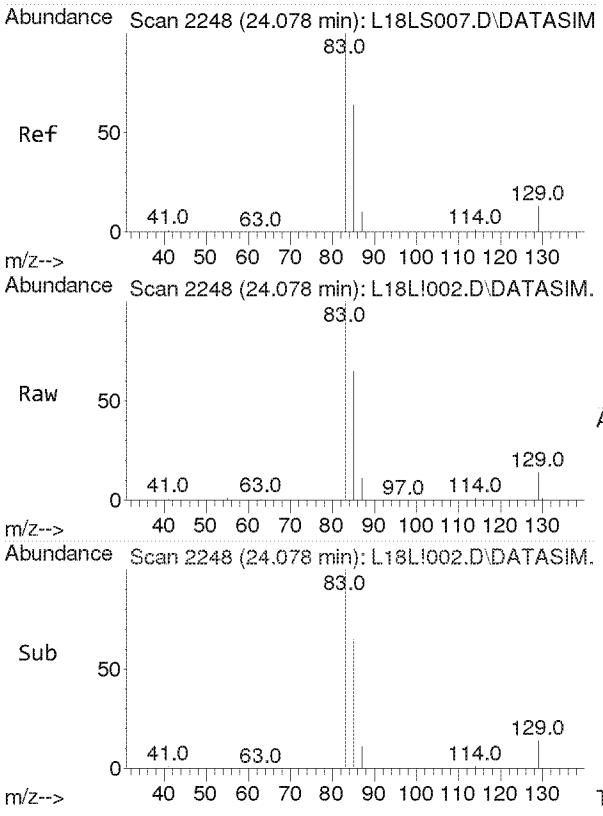


#35
Ethyl Acrylate
Concen: 2.565 ppbv
RT: 23.872 min Scan# 2238
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 55 Resp: 24550

Ion	Ratio	Lower	Upper
55	100		
99	6.0	4.9	7.3

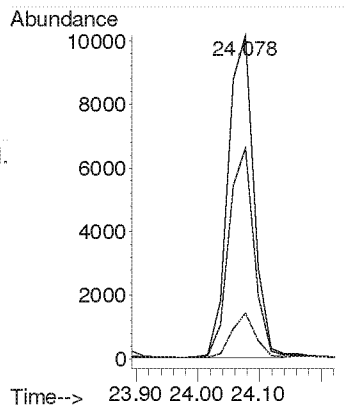




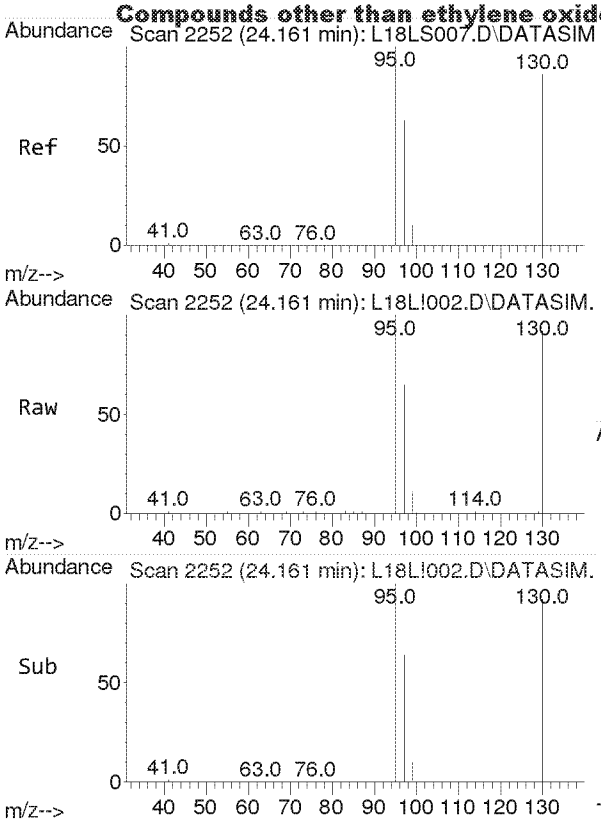
#36
Bromodichloromethane
Concen: 2.236 ppbv
RT: 24.078 min Scan# 2248
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 83 Resp: 29505

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.2	76.8
129	12.6	9.9	14.9



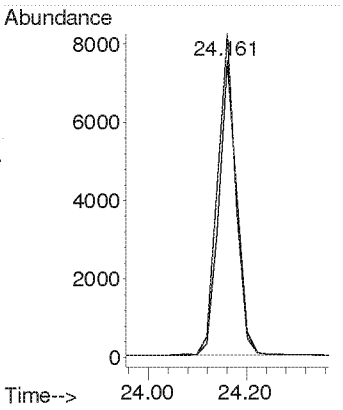
Compounds other than ethylene oxide were not quantitated.

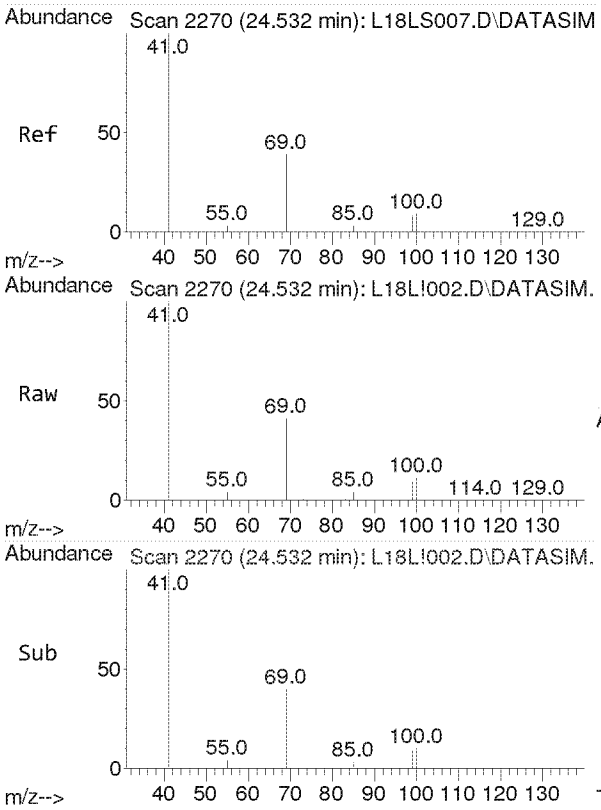


#37
Trichloroethylene
Concen: 2.379 ppbv
RT: 24.161 min Scan# 2252
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:130 Resp: 19224

Ion	Ratio	Lower	Upper
130	100		
95	110.8	88.2	132.4

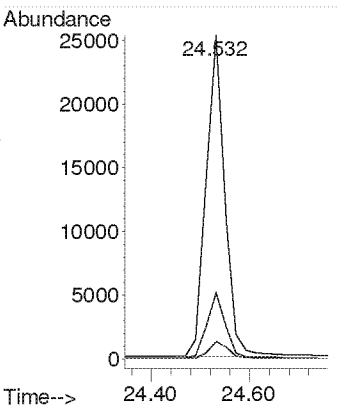




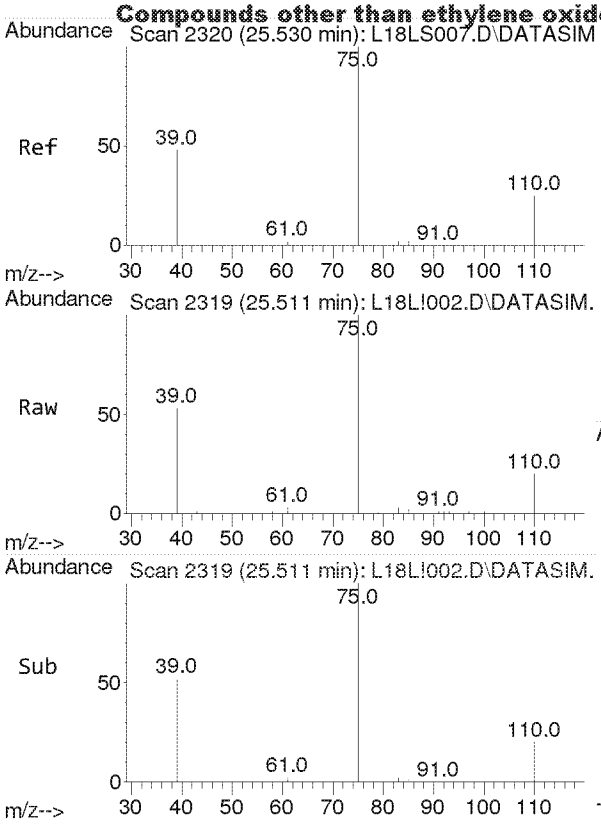
#38
Methyl Methacrylate
Concen: 2.486 ppbv
RT: 24.532 min Scan# 2270
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 41 Resp: 66027

Ion	Ratio	Lower	Upper
41	100		
69	20.1	15.9	23.9
100	5.3	4.2	6.2



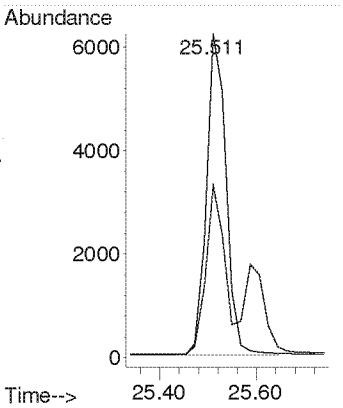
Compounds other than ethylene oxide were not quantitated.

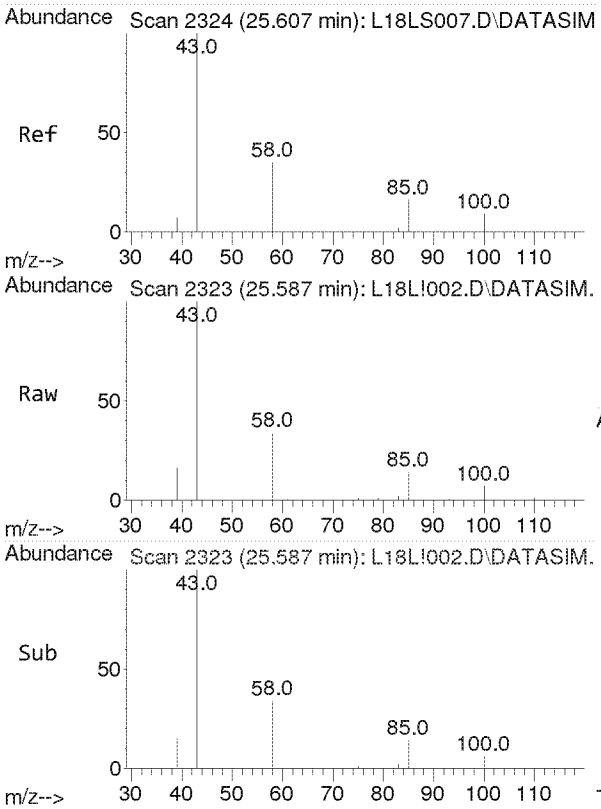


#39
cis-1,3-Dichloropropene
Concen: 2.757 ppbv
RT: 25.511 min Scan# 2319
Delta R.T. -0.019 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 75 Resp: 17536

Ion	Ratio	Lower	Upper
75	100		
39	53.8	43.5	65.3

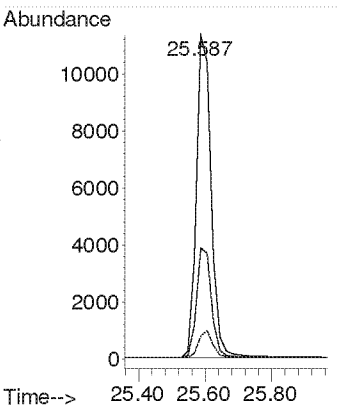




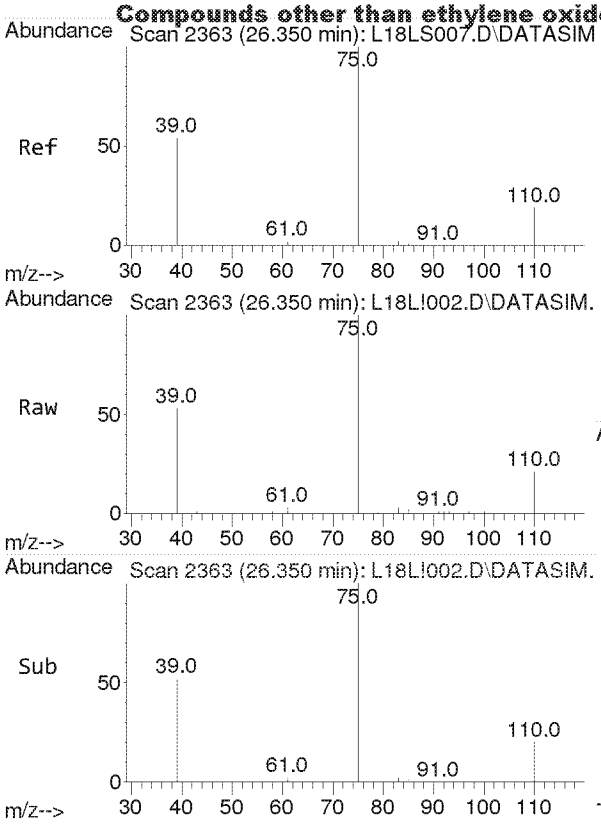
#40
Methyl Isobutyl Ketone
Concen: 2.433 ppbv
RT: 25.587 min Scan# 2323
Delta R.T. -0.019 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 43 Resp: 34490

Ion	Ratio	Lower	Upper
43	100		
58	34.5	27.4	41.0
100	7.9	6.3	9.5



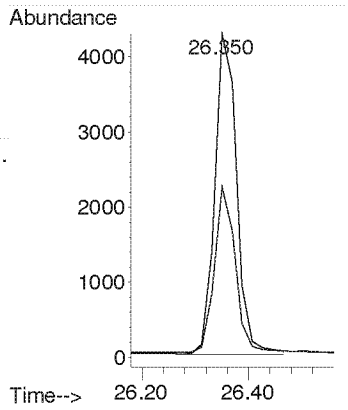
Compounds other than ethylene oxide were not quantitated.

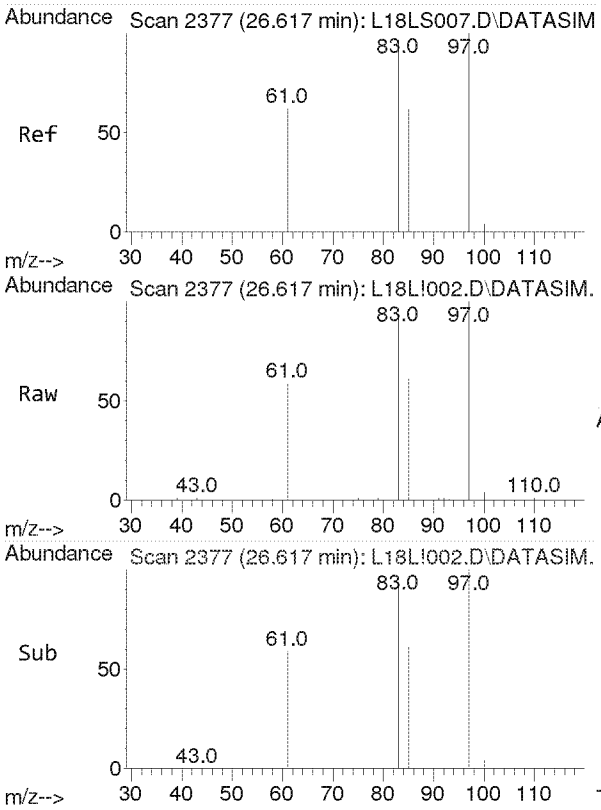


#41
trans-1,3-Dichloropropene
Concen: 2.573 ppbv
RT: 26.350 min Scan# 2363
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 75 Resp: 12125

Ion	Ratio	Lower	Upper
75	100		
39	49.3	40.7	61.1

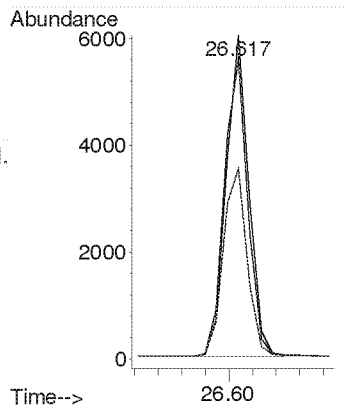




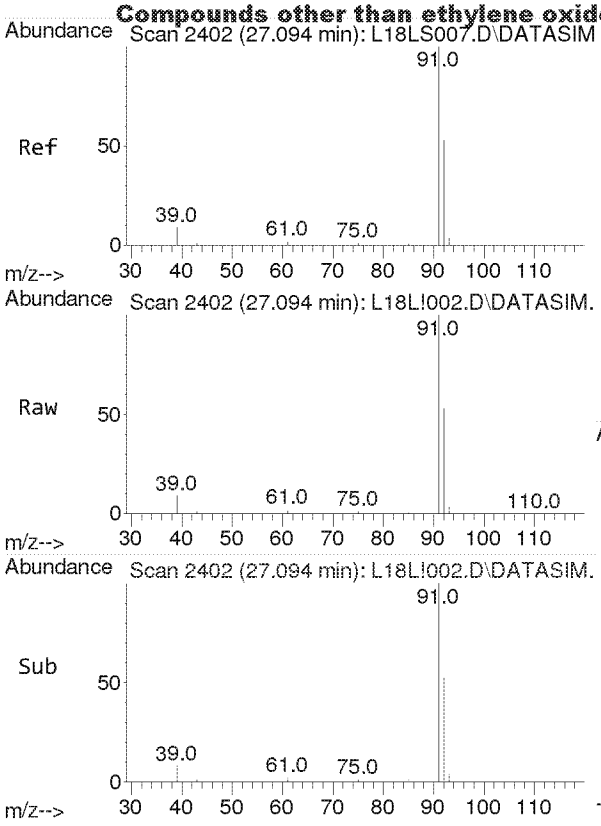
#42
1,1,2-Trichloroethane
Concen: 2.580 ppbv
RT: 26.617 min Scan# 2377
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 97 Resp: 15874

Ion	Ratio	Lower	Upper
97	100		
83	96.0	76.9	115.3
61	62.1	50.8	76.2



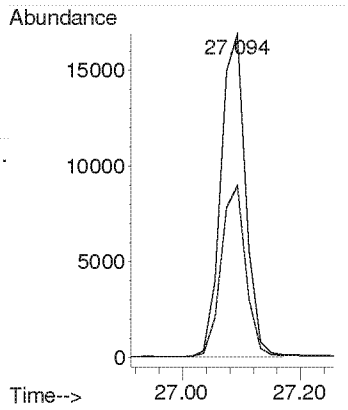
Compounds other than ethylene oxide were not quantitated.

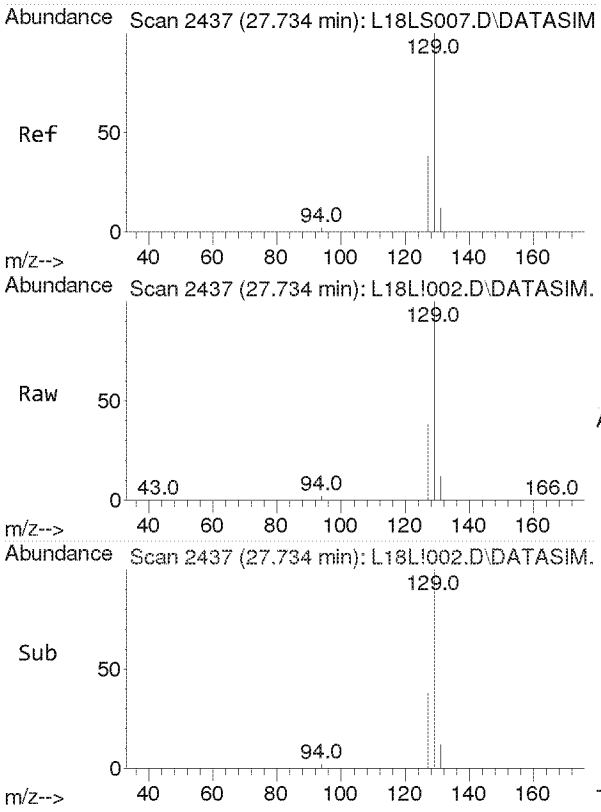


#44
Toluene
Concen: 2.453 ppbv
RT: 27.094 min Scan# 2402
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 91 Resp: 48752

Ion	Ratio	Lower	Upper
91	100		
92	52.6	42.1	63.1

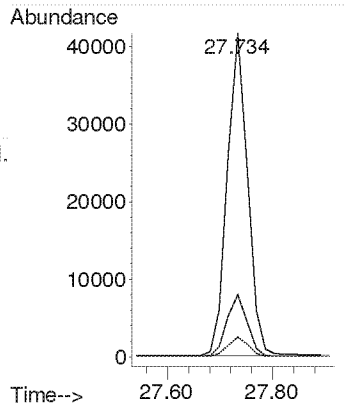




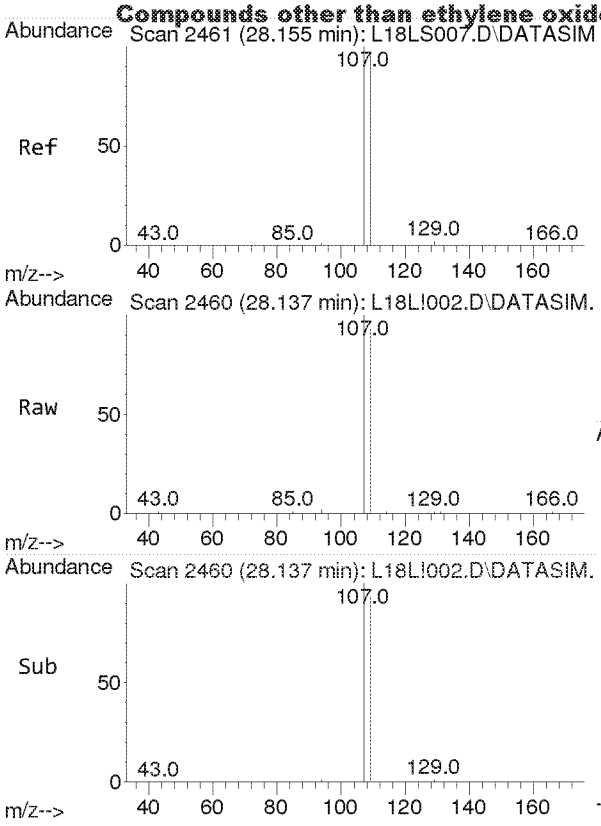
#45
Dibromochloromethane
Concen: 2.360 ppbv
RT: 27.734 min Scan# 2437
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:129 Resp: 111120

Ion	Ratio	Lower	Upper
129	100		
127	19.2	15.4	23.0
131	6.0	4.8	7.2



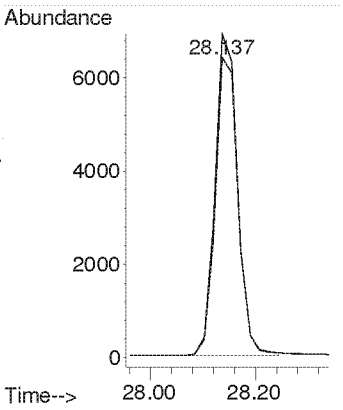
Compounds other than ethylene oxide were not quantitated.

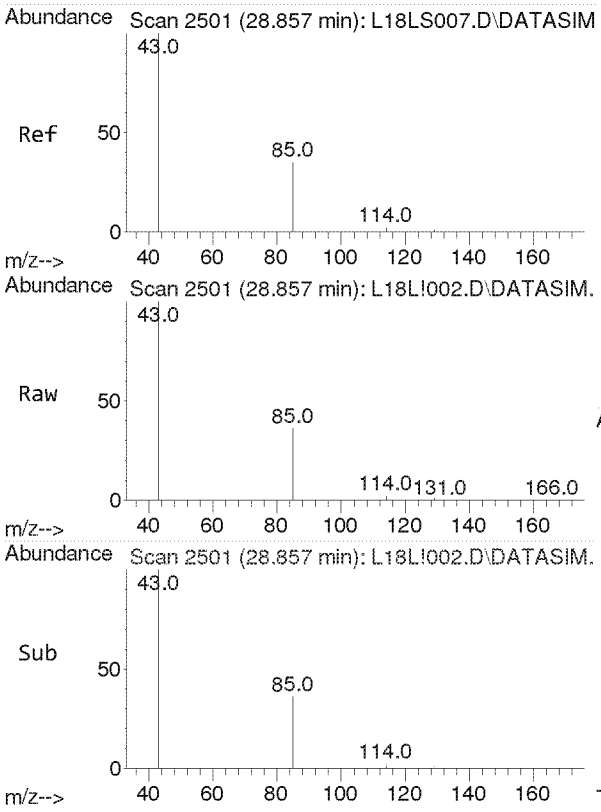


#46
1,2-Dibromoethane
Concen: 2.573 ppbv
RT: 28.137 min Scan# 2460
Delta R.T. -0.018 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:107 Resp: 20307

Ion	Ratio	Lower	Upper
107	100		
109	94.0	75.6	113.4

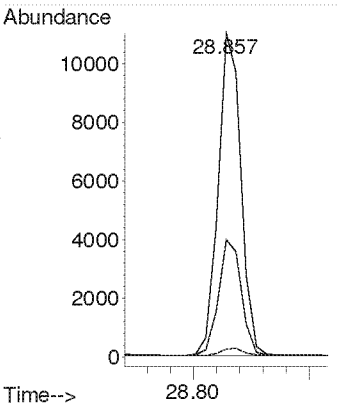




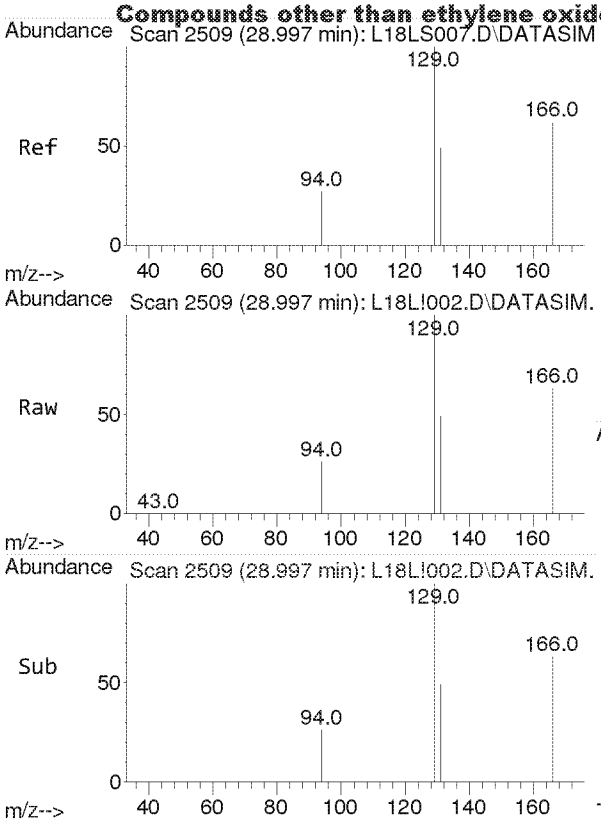
#47
n-Octane
Concen: 2.367 ppbv
RT: 28.857 min Scan# 2501
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 43 Resp: 30217

Ion	Ratio	Lower	Upper
43	100		
85	36.1	28.8	43.2
114	2.2	1.8	2.6



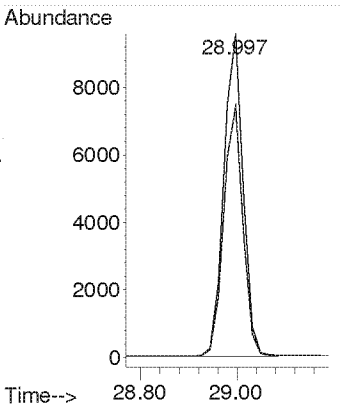
Compounds other than ethylene oxide were not quantitated.

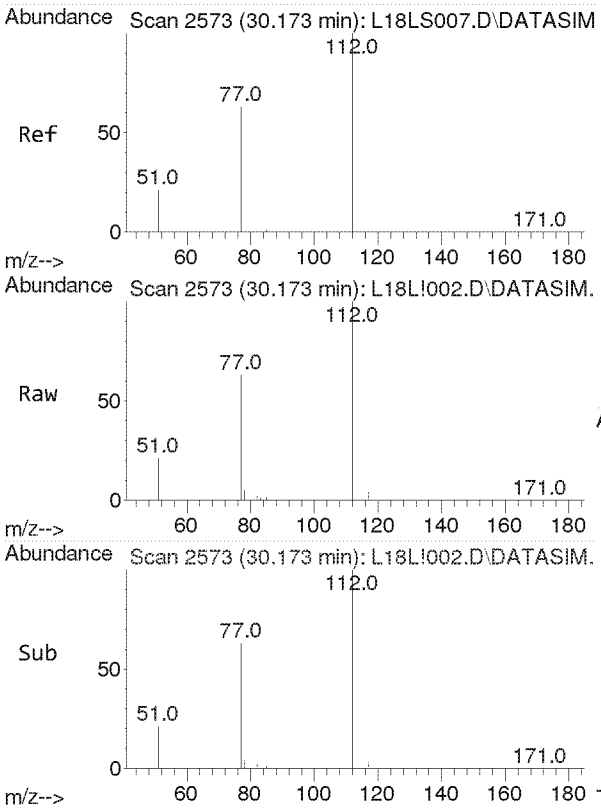


#48
Tetrachloroethylene
Concen: 2.646 ppbv
RT: 28.997 min Scan# 2509
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:166 Resp: 26243

Ion	Ratio	Lower	Upper
166	100		
131	77.8	62.6	93.8

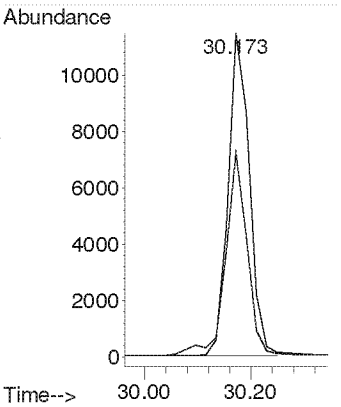




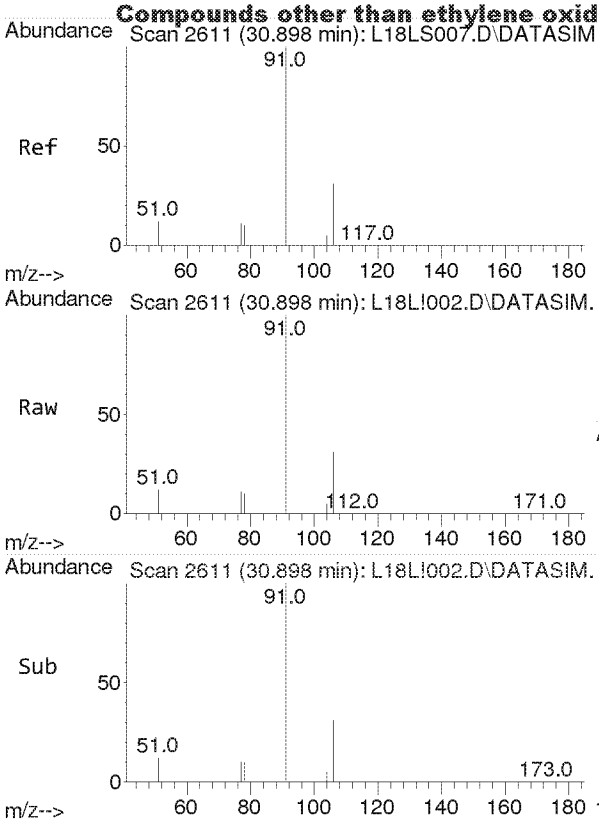
#49
Chlorobenzene
Concen: 2.491 ppbv
RT: 30.173 min Scan# 2573
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:112 Resp: 31827

Ion	Ratio	Lower	Upper
112	100		
77	62.1	50.4	75.6



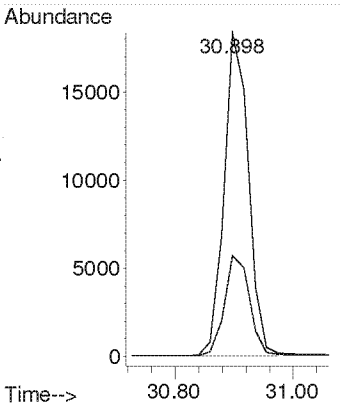
Compounds other than ethylene oxide were not quantitated.

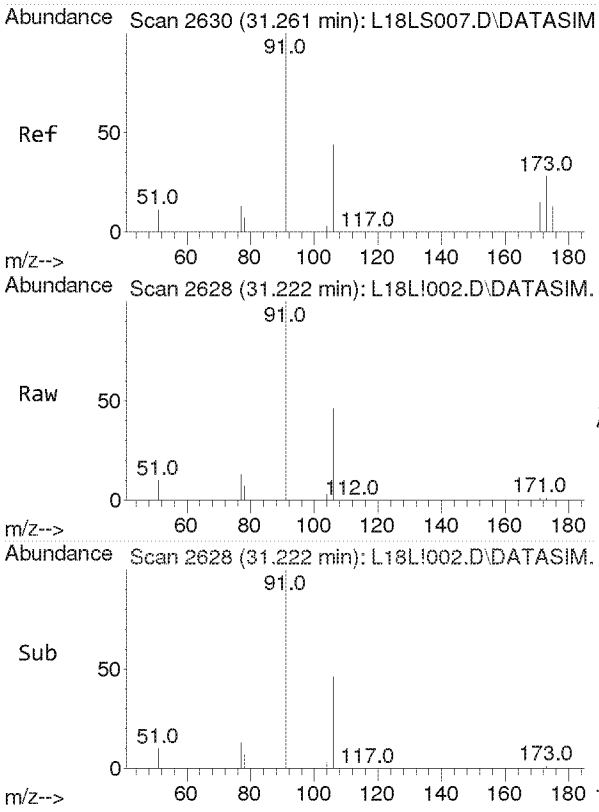


#50
Ethylbenzene
Concen: 2.529 ppbv
RT: 30.898 min Scan# 2611
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 91 Resp: 51955

Ion	Ratio	Lower	Upper
91	100		
106	31.8	25.4	38.2

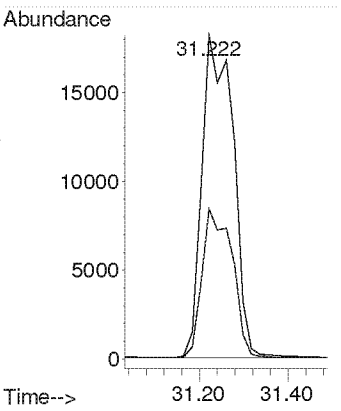




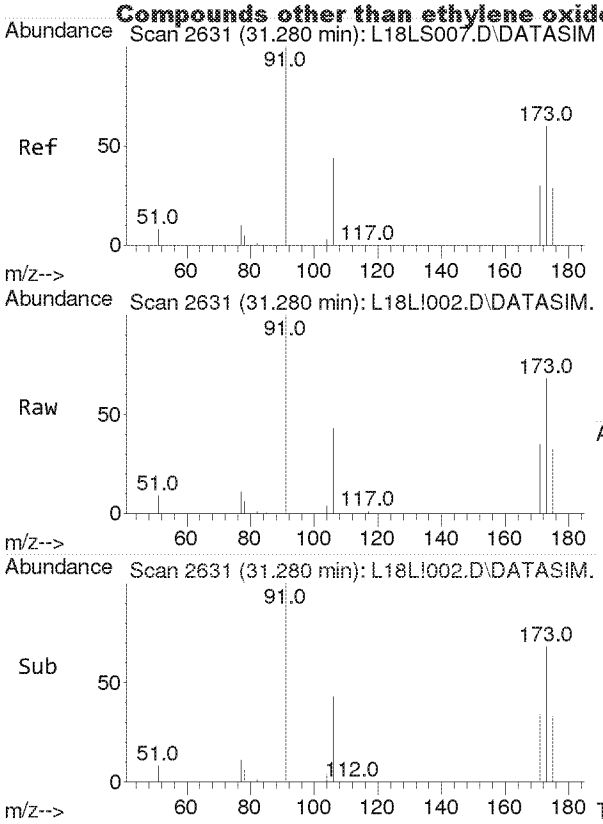
#51
m,p-Xylene
Concen: 5.015 ppbv
RT: 31.222 min Scan# 2628
Delta R.T. -0.038 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 91 Resp: 88509

Ion	Ratio	Lower	Upper
91	100		
106	44.6	35.5	53.3



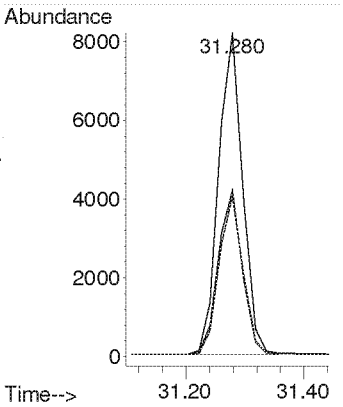
Compounds other than ethylene oxide were not quantitated.

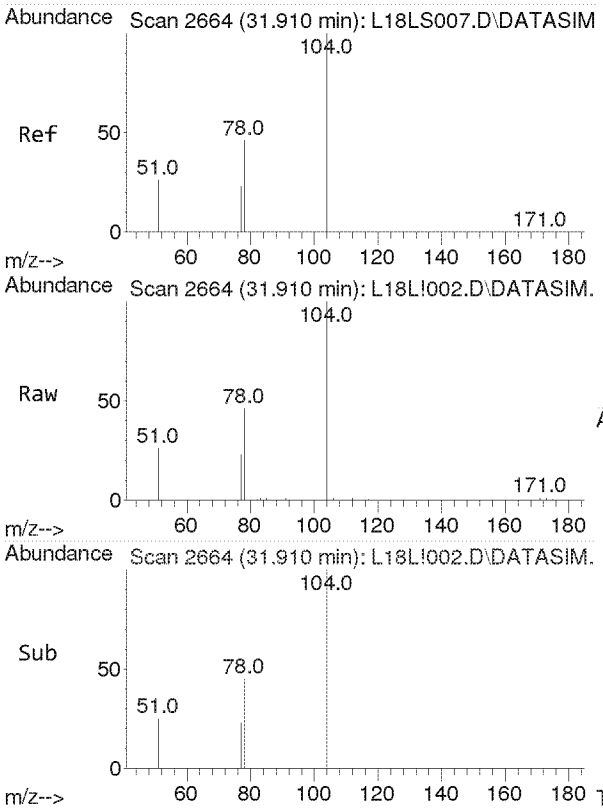


#52
Bromoform
Concen: 2.584 ppbv
RT: 31.280 min Scan# 2631
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:173 Resp: 23059

Ion	Ratio	Lower	Upper
173	100		
171	51.1	41.0	61.6
175	49.1	39.2	58.8

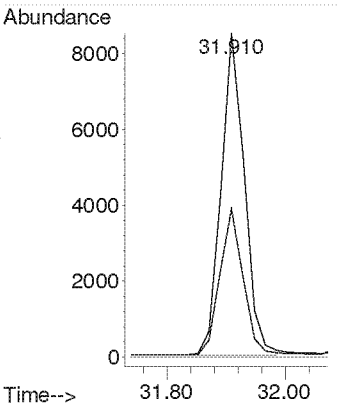




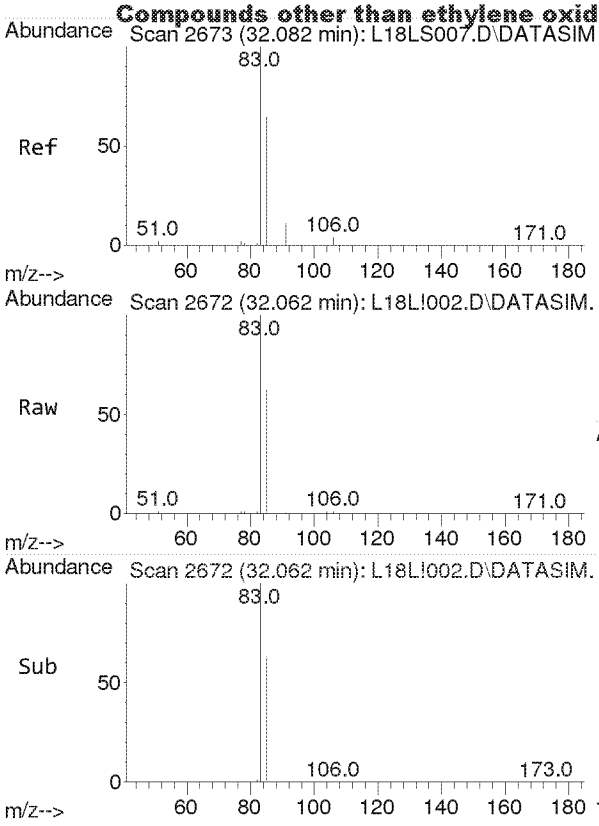
#53
Styrene
Concen: 2.576 ppbv
RT: 31.910 min Scan# 2664
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:104 Resp: 23120

Ion	Ratio	Lower	Upper
104	100		
78	45.3	36.5	54.7
103	0.0	0.0	0.0



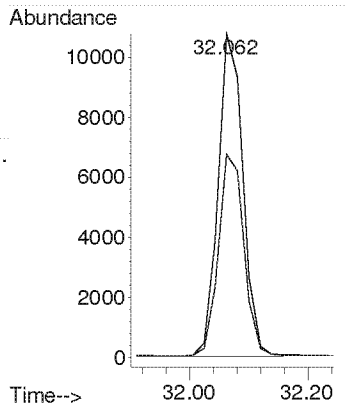
Compounds other than ethylene oxide were not quantitated.

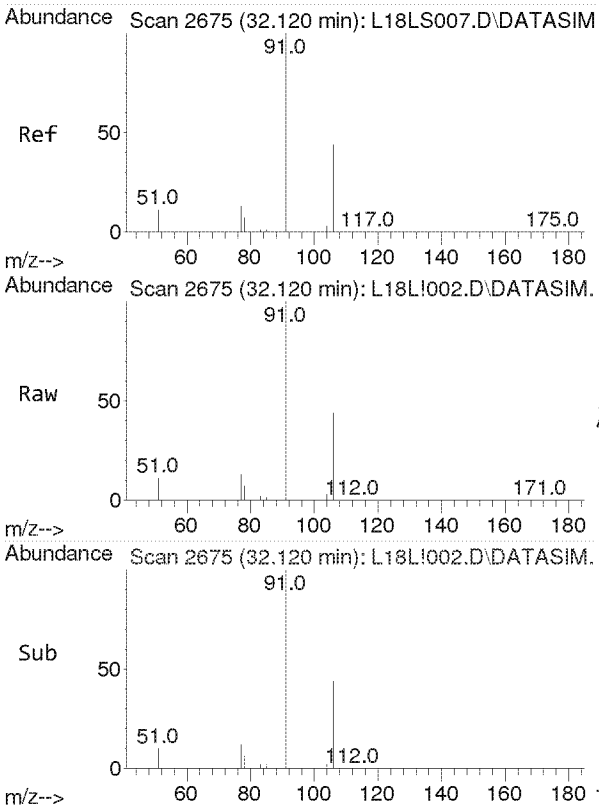


#54
1,1,2,2-Tetrachloroethane
Concen: 2.503 ppbv
RT: 32.062 min Scan# 2672
Delta R.T. -0.019 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 83 Resp: 31261

Ion	Ratio	Lower	Upper
83	100		
85	64.4	51.1	76.7

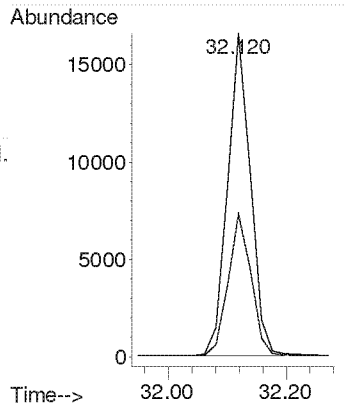




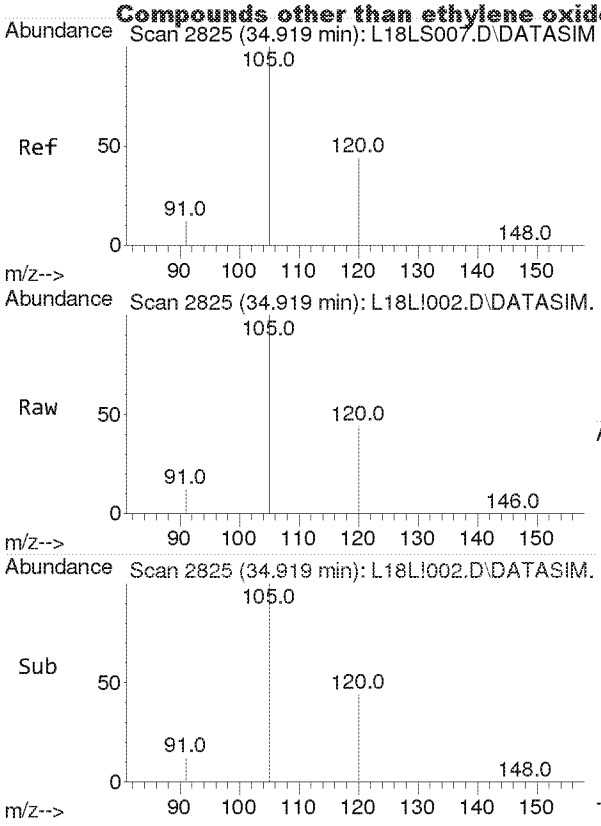
#55
o-Xylene
Concen: 2.541 ppbv
RT: 32.120 min Scan# 2675
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion: 91 Resp: 44051

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.0



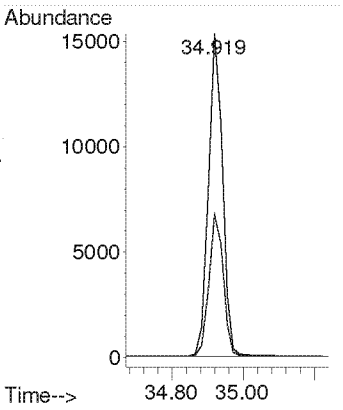
Compounds other than ethylene oxide were not quantitated.

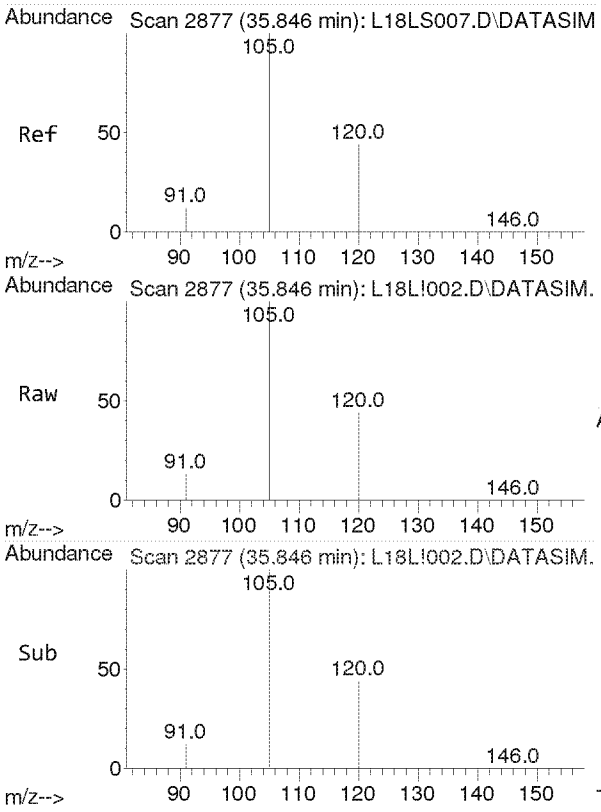


#56
1,3,5-Trimethylbenzene
Concen: 2.472 ppbv
RT: 34.919 min Scan# 2825
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:105 Resp: 41883

Ion	Ratio	Lower	Upper
105	100		
120	44.8	36.0	54.0

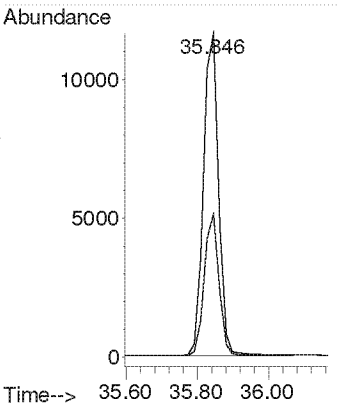




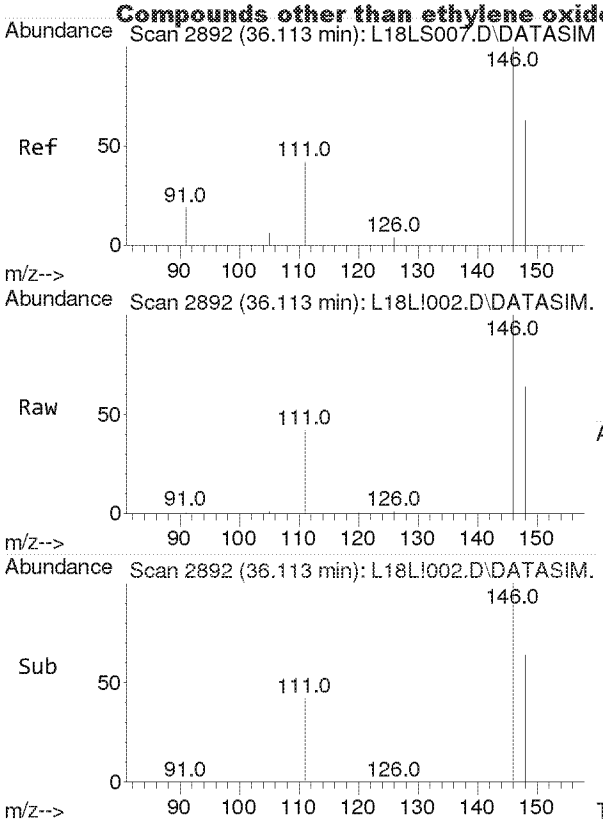
#57
1,2,4-Trimethylbenzene
Concen: 2.370 ppbv
RT: 35.846 min Scan# 2877
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:105 Resp: 33889

Ion	Ratio	Lower	Upper
105	100		
120	42.8	34.2	51.4



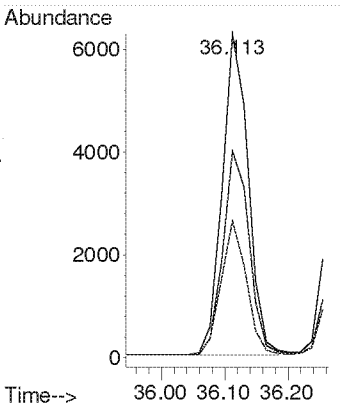
Compounds other than ethylene oxide were not quantitated.

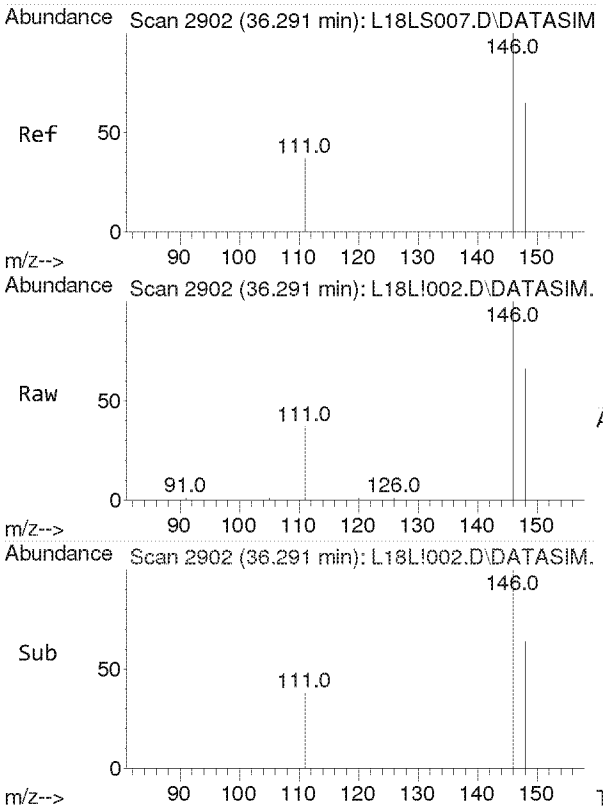


#58
m-Dichlorobenzene
Concen: 2.358 ppbv
RT: 36.113 min Scan# 2892
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:146 Resp: 17754

Ion	Ratio	Lower	Upper
146	100		
148	64.3	51.2	76.8
111	40.9	32.4	48.6

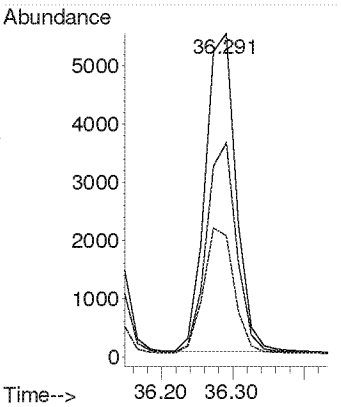




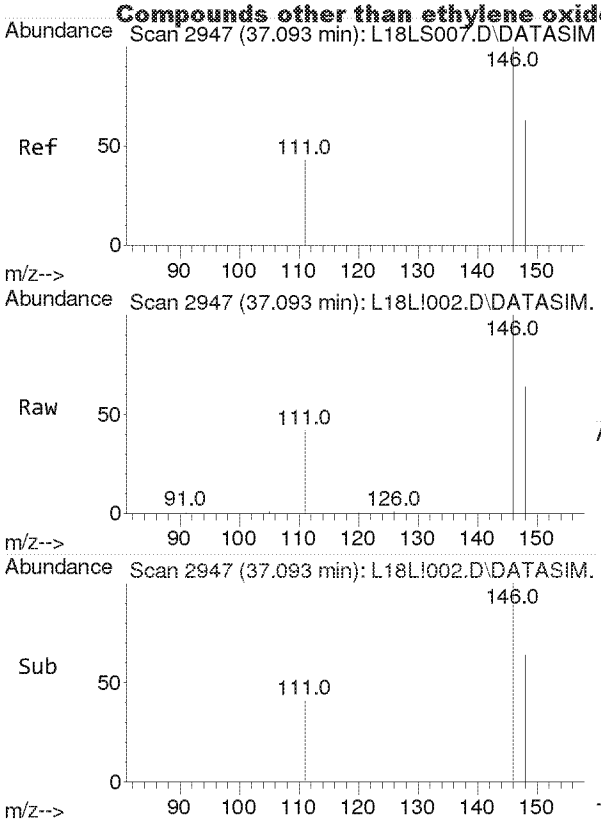
#59
p-Dichlorobenzene
Concen: 2.844 ppbv
RT: 36.291 min Scan# 2902
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:146 Resp: 16328

Ion	Ratio	Lower	Upper
146	100		
148	64.5	51.2	76.8
111	39.1	31.6	47.4



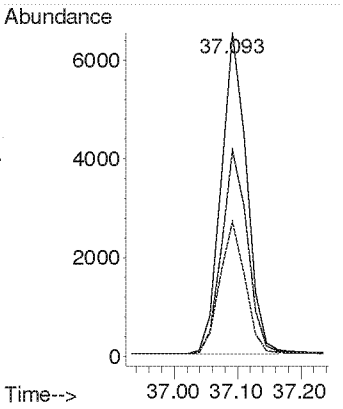
Compounds other than ethylene oxide were not quantitated.

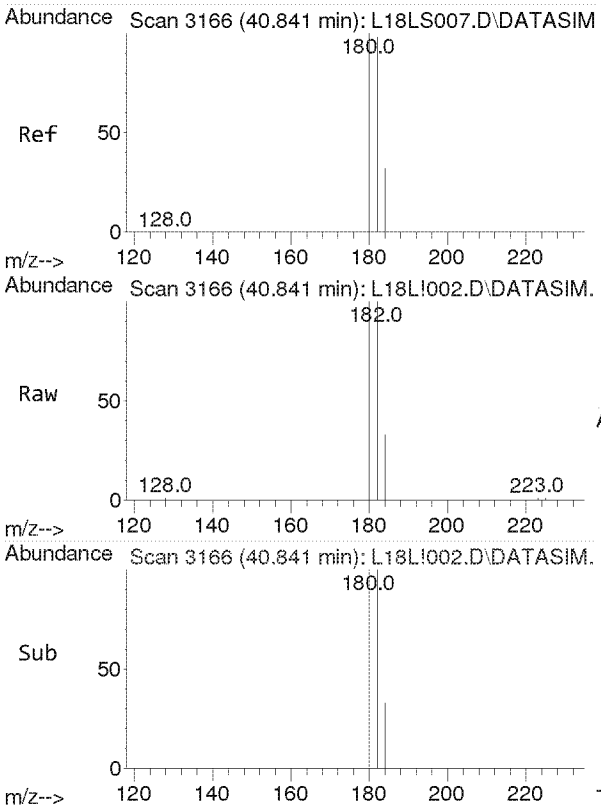


#60
o-Dichlorobenzene
Concen: 2.568 ppbv
RT: 37.093 min Scan# 2947
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:146 Resp: 18104

Ion	Ratio	Lower	Upper
146	100		
148	64.0	51.3	76.9
111	41.2	33.1	49.7

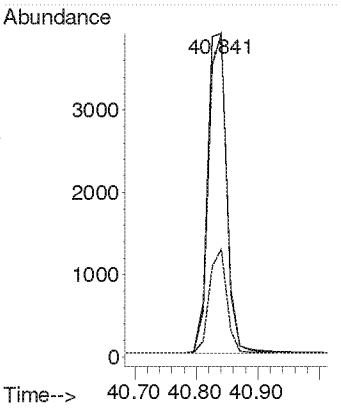




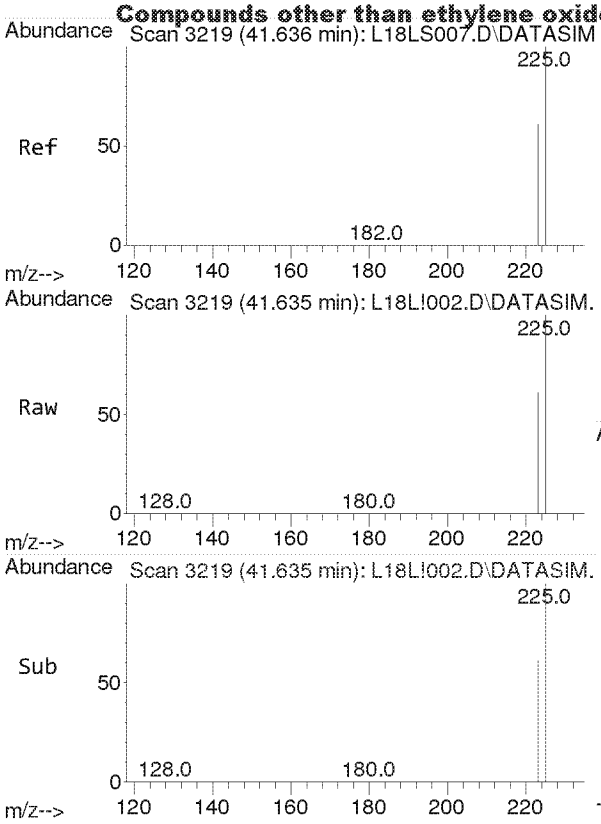
#61
1,2,4-Trichlorobenzene
Concen: 3.046 ppbv
RT: 40.841 min Scan# 3166
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:180 Resp: 8357

Ion	Ratio	Lower	Upper
180	100		
182	95.7	76.1	114.1
184	30.3	24.6	36.8



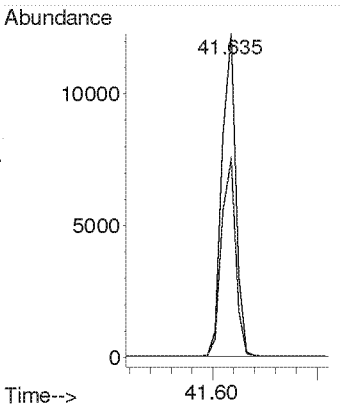
Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: 2.224 ppbv
RT: 41.635 min Scan# 3219
Delta R.T. -0.000 min
Lab File: L18L!002.D
Acq: 28 Dec 2018 11:12 am

Tgt Ion:225 Resp: 22255

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: C Date: 1-3-19
Reviewer: RMB Date: 1/7/19

Data File Name	L18L!004.D
Operator	MAH
Acq. Method File	8120004.M
Sample Name	B8L2804-BLK1
Misc Info	80 ML 8L13001

#	Name	Target Response	Amount (ppbv)	PASS*		Blank Criteria
1)	IS-Hexane-d14	58062		NA		NA
2)	Acetylene	0	0.000	Y		0.118
3)	Propylene	92	0.016	Y		0.192
4)	Dichlorodifluoromethane	46	0.002	Y		0.082
5)	Chloromethane	65	0.009	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	125	0.037	Y	MAX	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	32	0.004	Y		0.043
17)	Carbon Disulfide	498	0.023	Y		0.200
18)	Trichlorotrifluoroethane	0	0.000	Y		0.029
19)	trans-1,2-Dichloroethylene	0	0.000	Y		0.040
20)	1,1-Dichloroethane	0	0.000	Y		0.043
21)	Methyl tert-Butyl Ether	0	0.000	Y		0.031
22)	Chloroprene	0	0.000	Y		0.039
23)	cis-1,2-Dichloroethylene	0	0.000	Y		0.056
24)	Bromochloromethane	0	0.000	Y		0.040
25)	Chloroform	0	0.000	Y		0.039
26)	Ethyl tert-Butyl Ether	0	0.000	Y		0.033
27)	1,2-Dichloroethane	0	0.000	Y		0.042
28)	IS-1,4-Difluorobenzene	140061		NA		NA
29)	1,1,1-Trichloroethane	0	0.000	Y		0.041
30)	Benzene	85	0.005	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	65	0.005	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	95936		NA		NA
43)	Toluene	92	0.005	Y		0.200
44)	Dibromochloromethane	0	0.000	Y		0.046
45)	1,2-Dibromoethane	0	0.000	Y		0.057
46)	n-Octane	44	0.004	Y		0.097
47)	Tetrachloroethylene	0	0.000	Y		0.044
48)	Chlorobenzene	0	0.000	Y		0.058
49)	Ethylbenzene	88	0.005	Y		0.077
50)	m,p-Xylene	49	0.003	Y		0.108
51)	Bromoform	0	0.000	Y		0.053
52)	Styrene	0	0.000	Y		0.109
53)	1,1,2,2-Tetrachloroethane	0	0.000	Y		0.063
54)	o-Xylene	112	0.008	Y		0.080
55)	1,3,5-Trimethylbenzene	0	0.000	Y		0.102
56)	1,2,4-Trimethylbenzene	42	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\L18L!\
Data File : L18L!004.D
Acq On : 28 Dec 2018 2:30 pm
Operator : MAH
Sample : B8L2804-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 03 13:16:34 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

1-3-19

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	58062	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.150	114	140061	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.115	117	95936	4.7400 ppbv	0.02

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D.	
3) Propylene	7.837	41	92	0.0158 ppbv	89
4) Dichlorodifluoromethane	8.701	85	46	0.0019 ppbv #	49
5) Chloromethane	9.757	50	65	0.0090 ppbv #	42
6) Dichlorotetrafluoroethane	0.000	85	0	N.D.	
7) Vinyl Chloride	0.000	62	0	N.D.	
8) 1,3-Butadiene	0.000	54	0	N.D.	
9) Ethylene oxide	0.000	29	0	N.D. d 5✓	
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	14.728	56	125	0.0374 ppbv #	58
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	16.746	49	32	0.0043 ppbv #	73
18) Carbon Disulfide	16.932	76	498	0.0226 ppbv	96
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d 5✓	
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 5✓	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D.	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D.	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
31) Benzene	22.535	78	85	0.0052 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 5✓	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D.	
40) Methyl Isobutyl Ketone	25.644	43	65	0.0048 ppbv #	64
41) trans-1,3-Dichloropropene	0.000	75	0	N.D.	
42) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
44) Toluene	27.094	91	92	0.0054 ppbv	93
45) Dibromochloromethane	0.000	129	0	N.D.	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	28.874	43	44	0.0040 ppbv #	42
48) Tetrachloroethylene	0.000	166	0	N.D.	
49) Chlorobenzene	0.000	112	0	N.D.	
50) Ethylbenzene	30.917	91	88	0.0050 ppbv	96

Compounds other than ethylene oxide were not quantitated

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!004.D
Acq On : 28 Dec 2018 2:30 pm
Operator : MAH
Sample : B8L2804-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 03 13:16:34 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

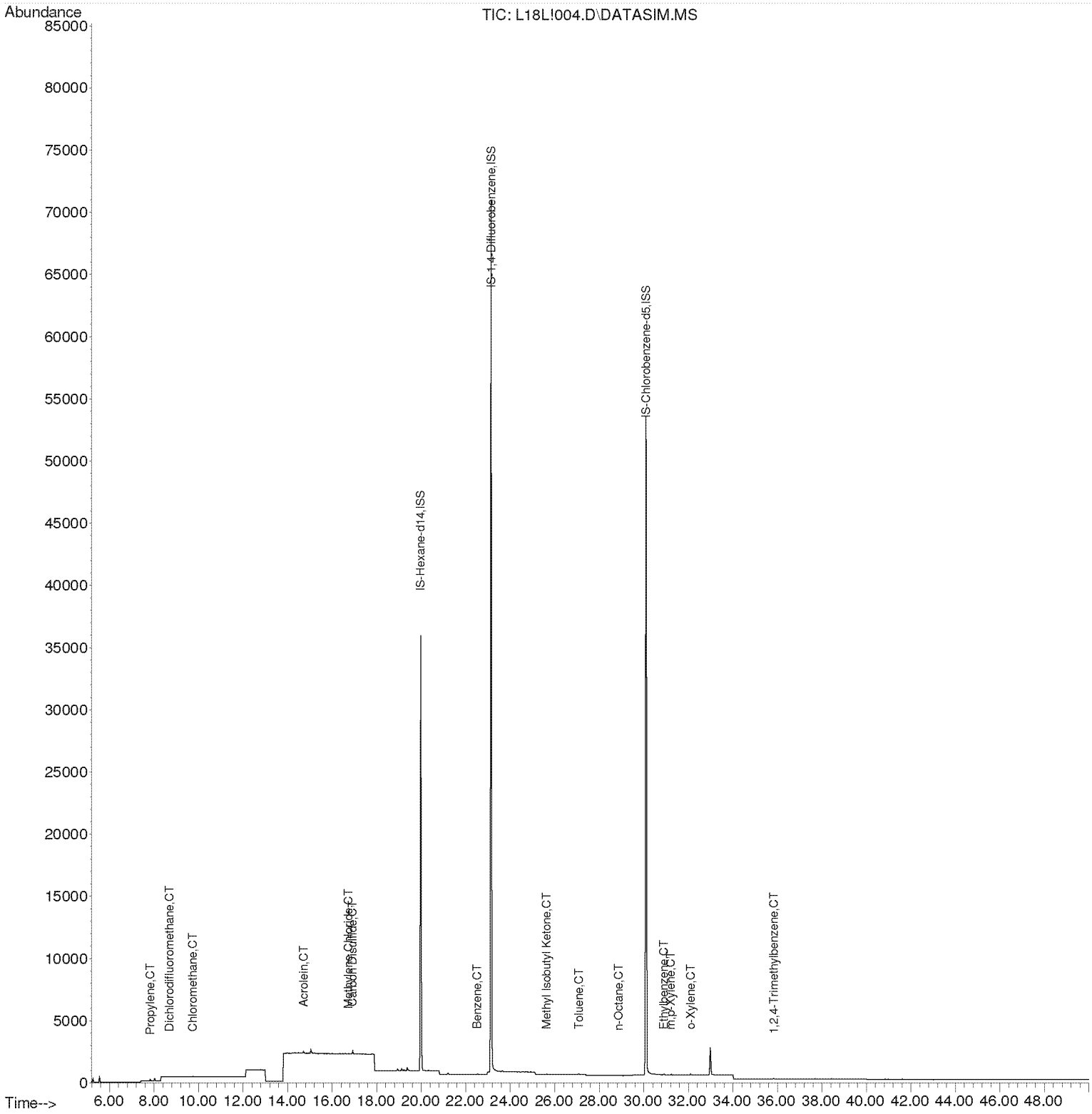
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	31.222	91	49	0.0032 ppbv #	32
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	32.119	91	112	0.0075 ppbv	99
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
57) 1,2,4-Trimethylbenzene	35.845	105	42	0.0034 ppbv #	33
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

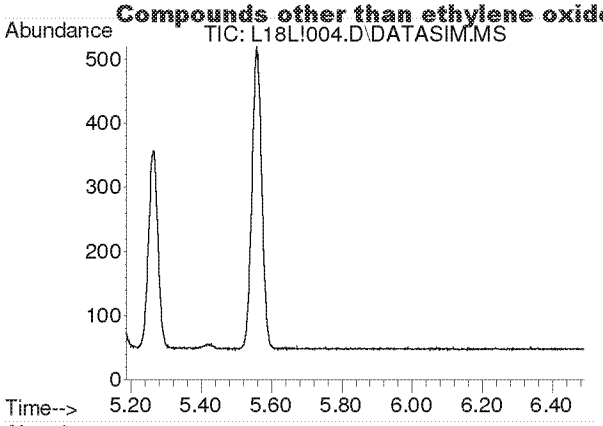
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!004.D
Acq On : 28 Dec 2018 2:30 pm
Operator : MAH
Sample : B8L2804-BLK1
Misc : 80 ML 8L13001
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 03 13:05:48 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



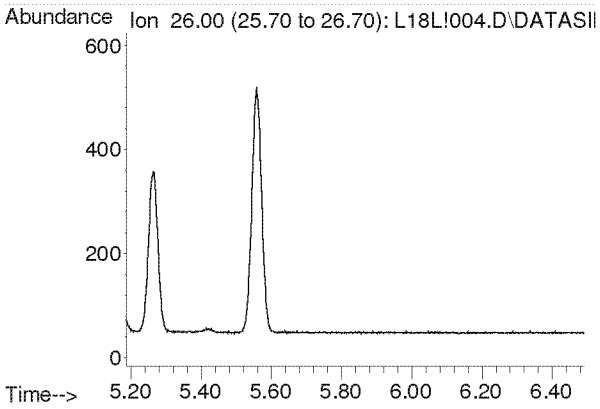
Compounds other than ethylene oxide were not quantitated.

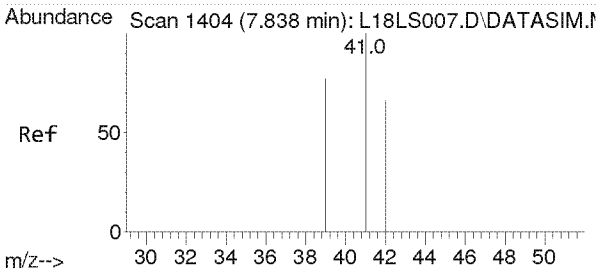


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 26

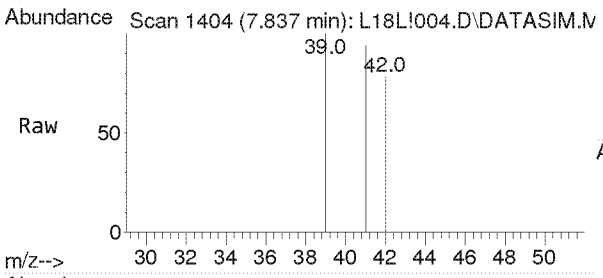


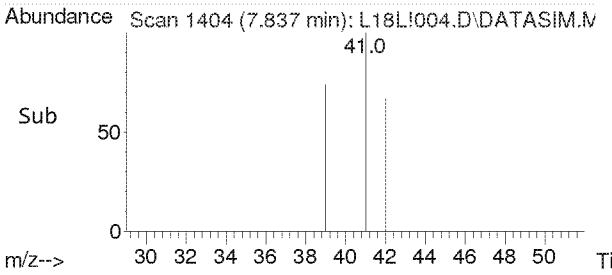


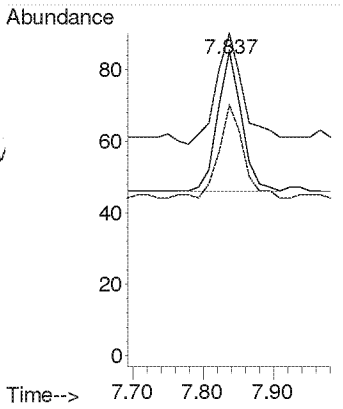
#3
Propylene
Concen: 0.016 ppbv
RT: 7.837 min Scan# 1404
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 41 Resp: 92

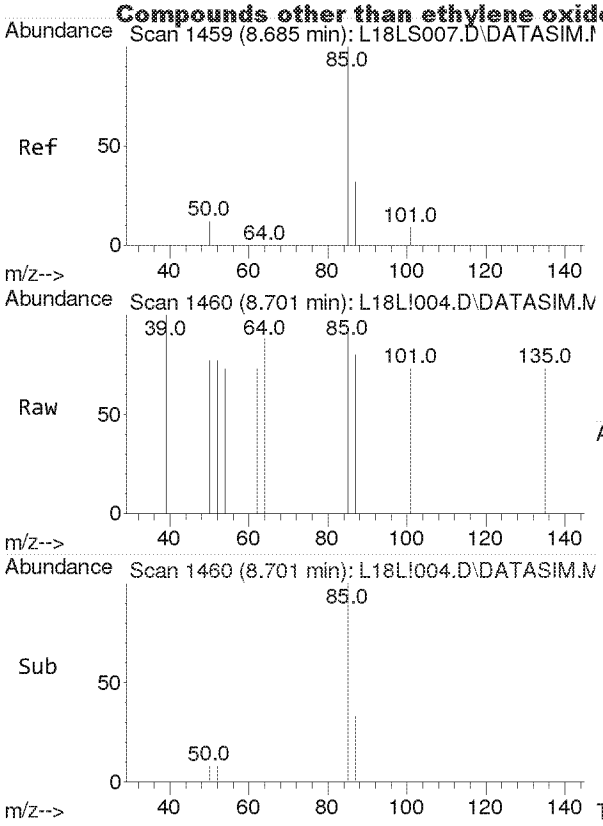
Ion	Ratio	Lower	Upper
41	100		
39	92.4	62.6	93.8
42	69.6	52.6	79.0







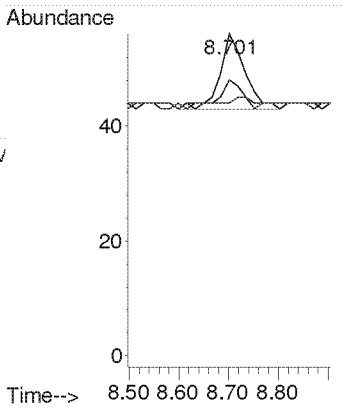
Compounds other than ethylene oxide were not quantitated.

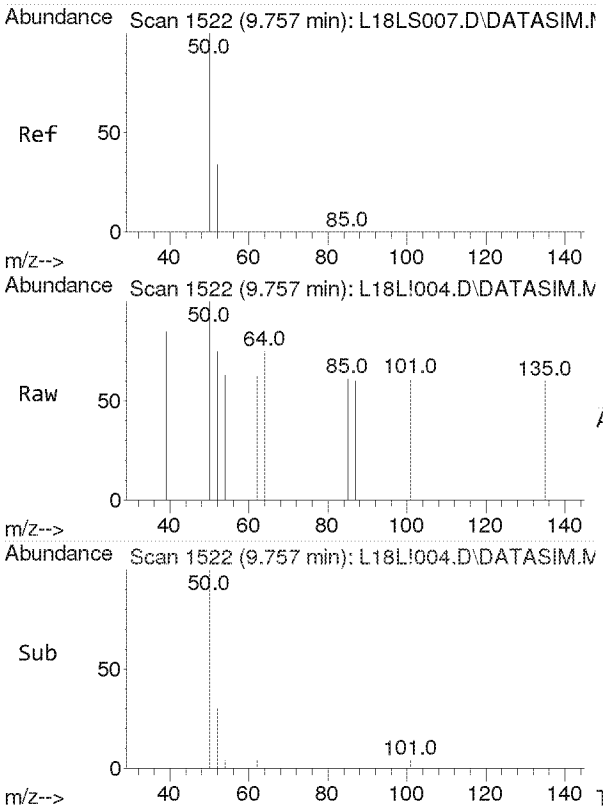


#4
Dichlorodifluoromethane
Concen: 0.002 ppbv
RT: 8.701 min Scan# 1460
Delta R.T. 0.017 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 85 Resp: 46

Ion	Ratio	Lower	Upper
85	100		
87	0.0	26.0	39.0#
101	0.0	7.1	10.7#

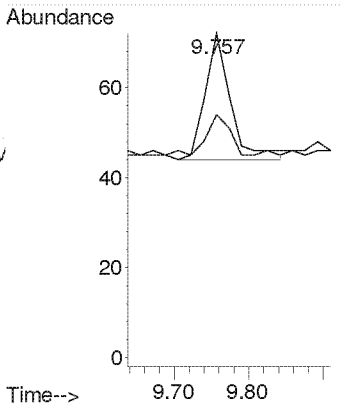




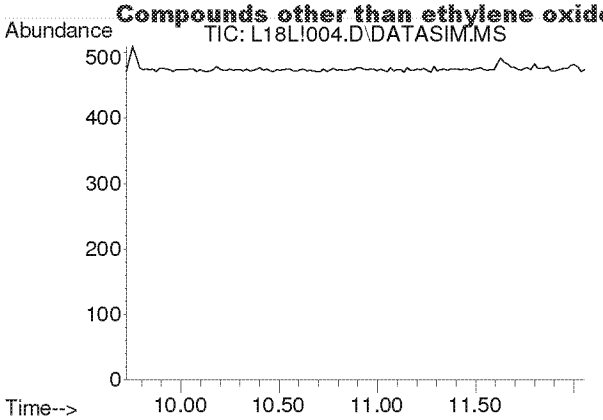
#5
Chloromethane
Concen: 0.009 ppbv
RT: 9.757 min Scan# 1522
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 50 Resp: 65

Ion	Ratio	Lower	Upper
50	100		
52	0.0	26.1	39.1#



Compounds other than ethylene oxide were not quantitated.

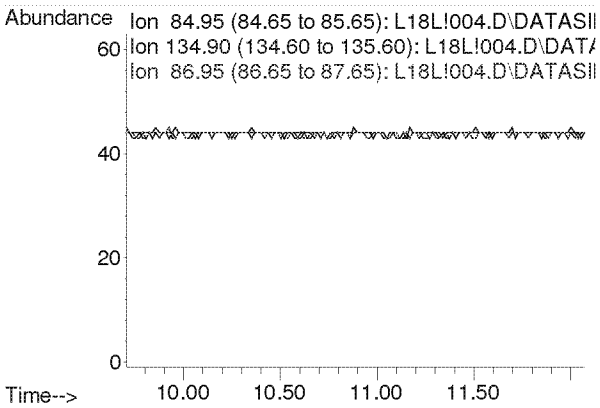


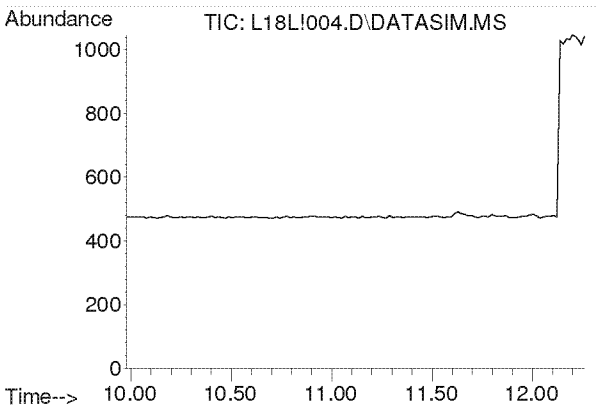
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



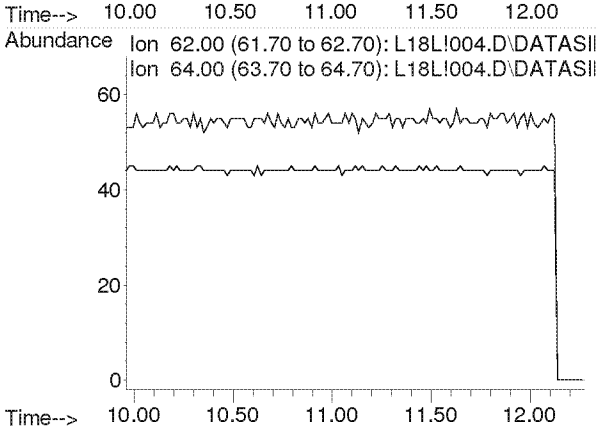


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

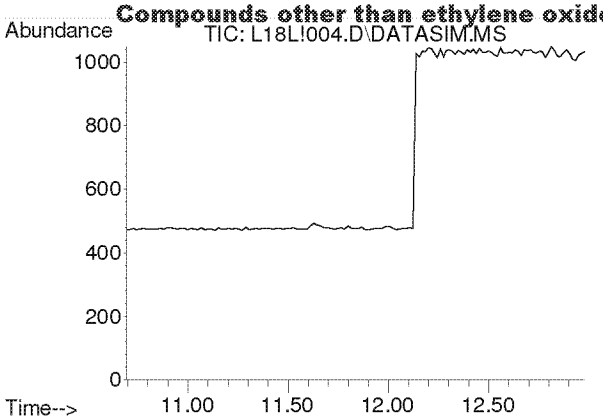
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

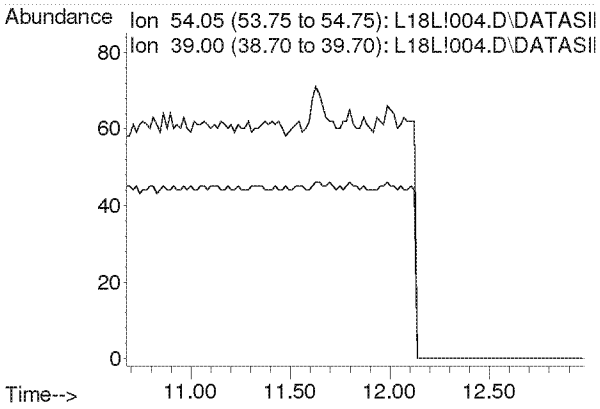


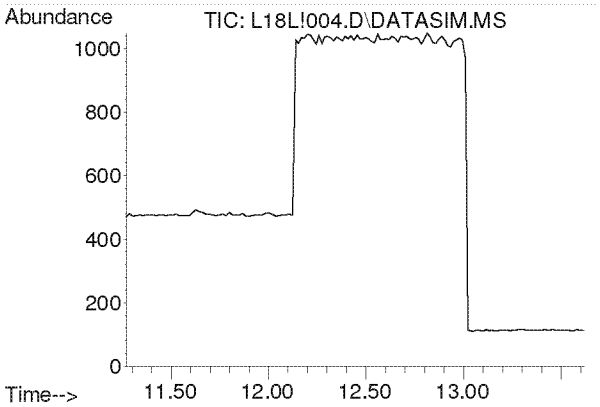
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4



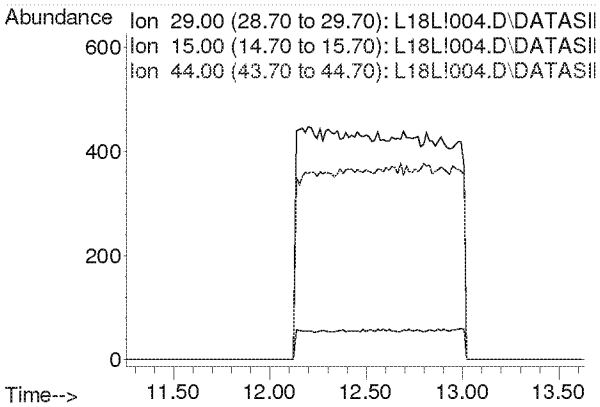


#9
Ethylene oxide
Concen: N.D.
Expected RT: 12.38 min

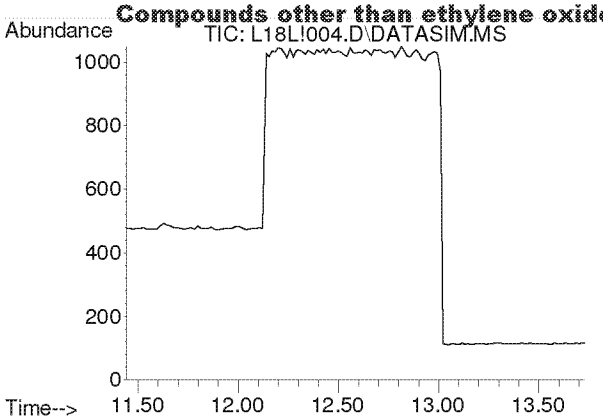
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 29

Sig	Exp Ratio
29	100
15	20.3
44	90.0



Compounds other than ethylene oxide were not quantitated.

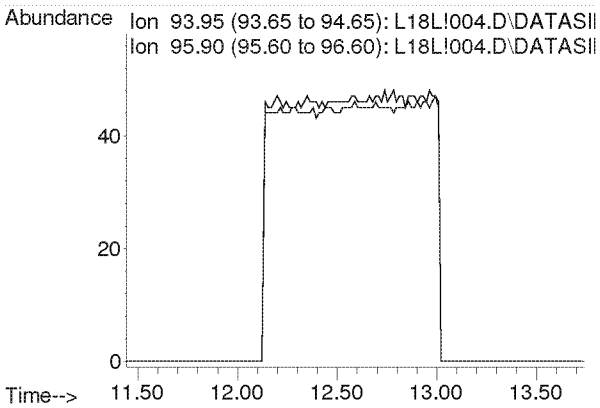


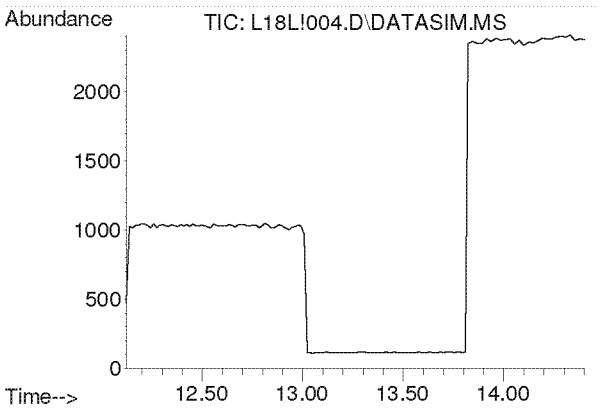
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



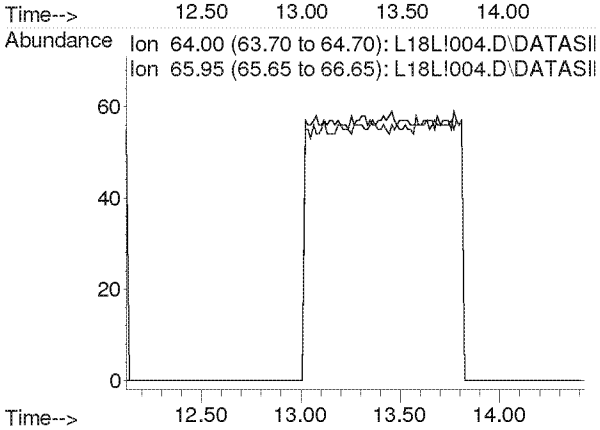


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

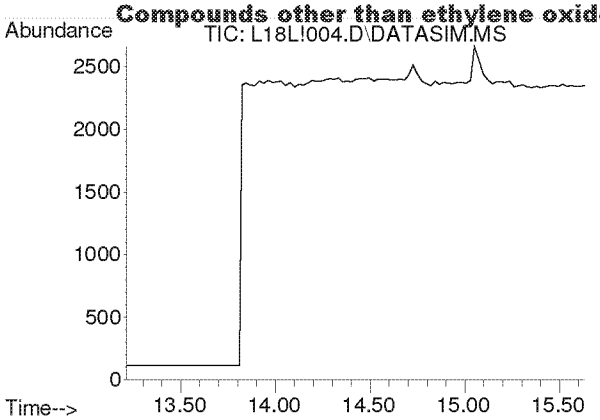
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

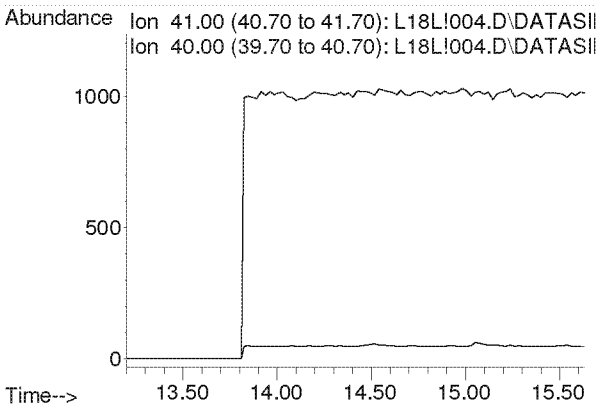


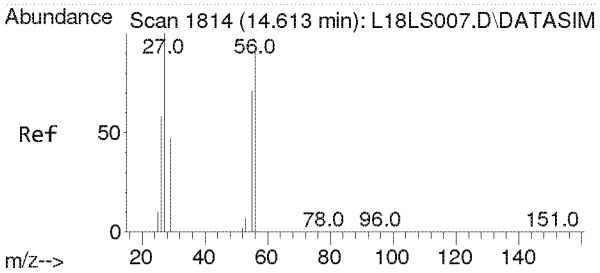
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9

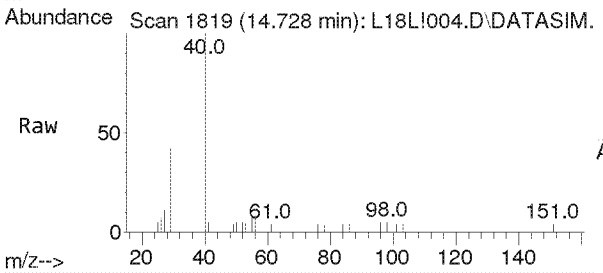


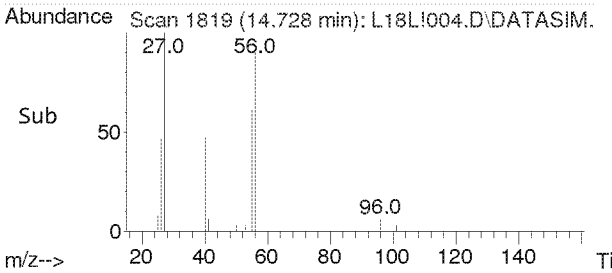


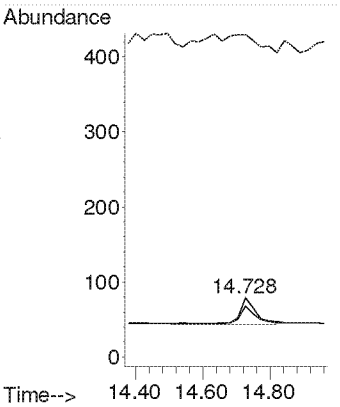
#13
Acrolein
Concen: 0.037 ppbv
RT: 14.728 min Scan# 1819
Delta R.T. 0.116 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 56 Resp: 125

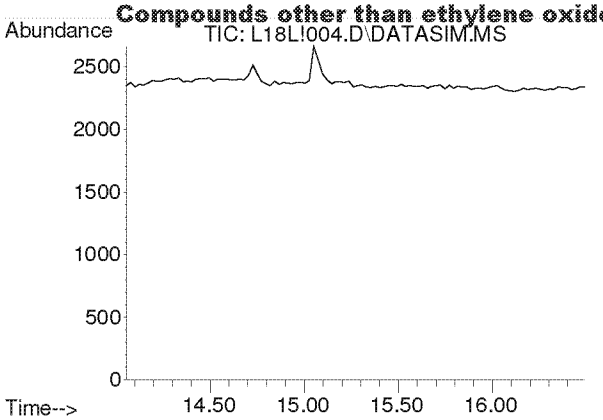
Ion	Ratio	Lower	Upper
56	100		
55	59.2	60.3	90.5#
29	0.0	42.3	63.5#







Compounds other than ethylene oxide were not quantitated.

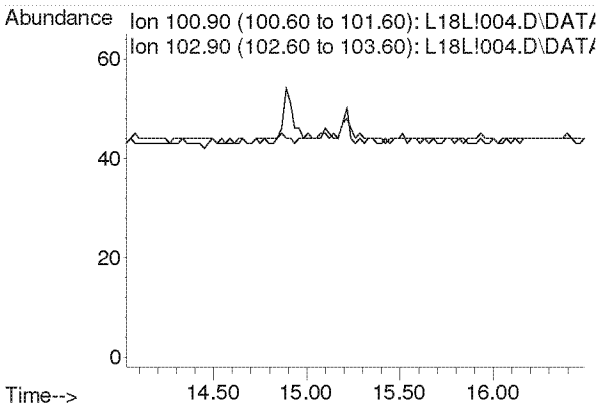


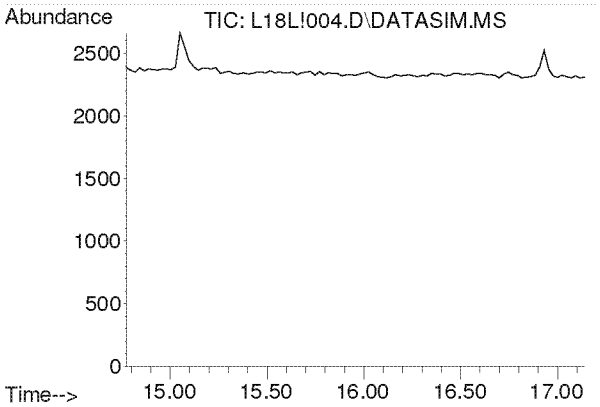
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



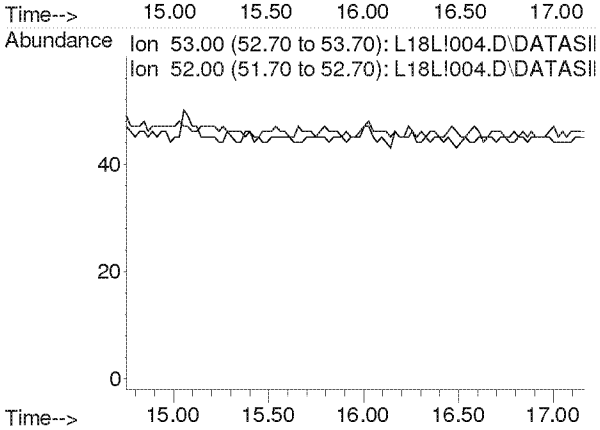


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

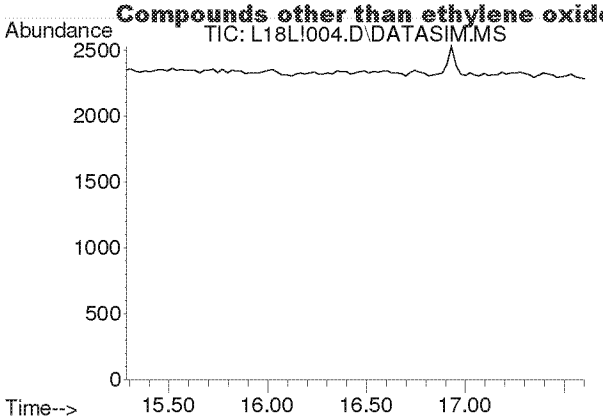
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

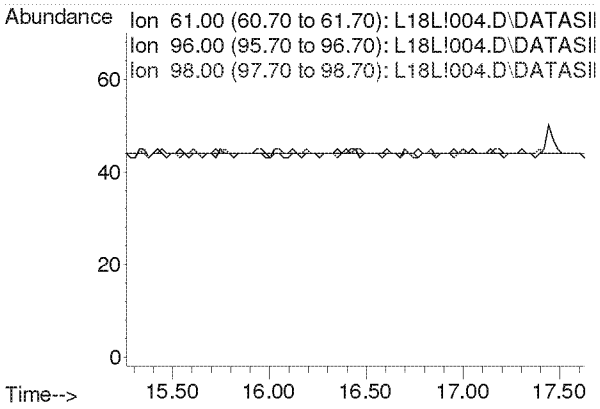


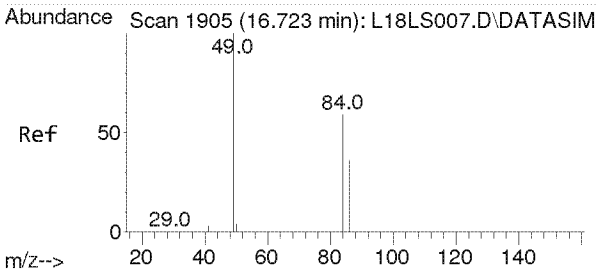
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4

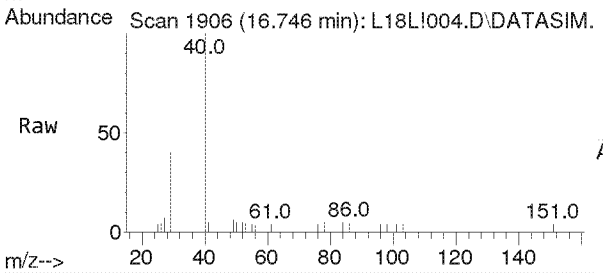


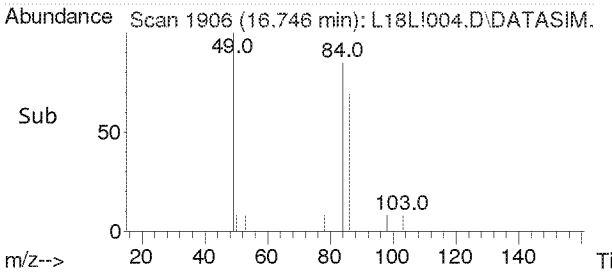


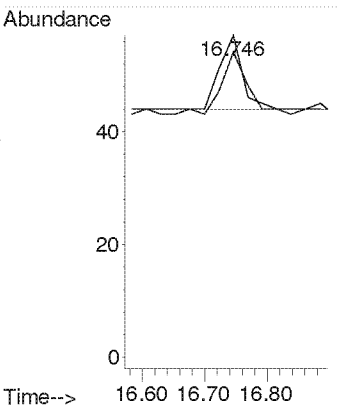
#17
Methylene Chloride
Concen: 0.004 ppbv
RT: 16.746 min Scan# 1906
Delta R.T. 0.023 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 49 Resp: 32

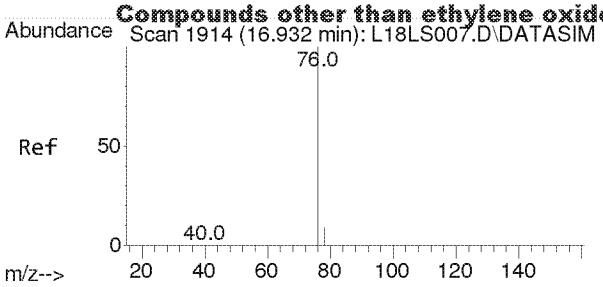
Ion	Ratio	Lower	Upper
49	100		
84	100.0	53.5	99.3#







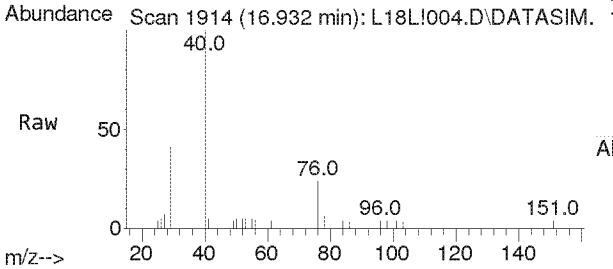
Compounds other than ethylene oxide were not quantitated.

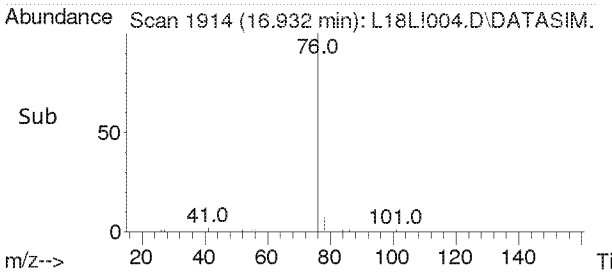


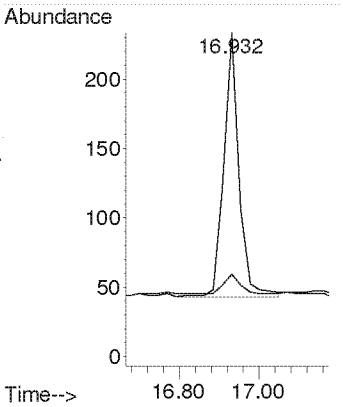
#18
Carbon Disulfide
Concen: 0.023 ppbv
RT: 16.932 min Scan# 1914
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

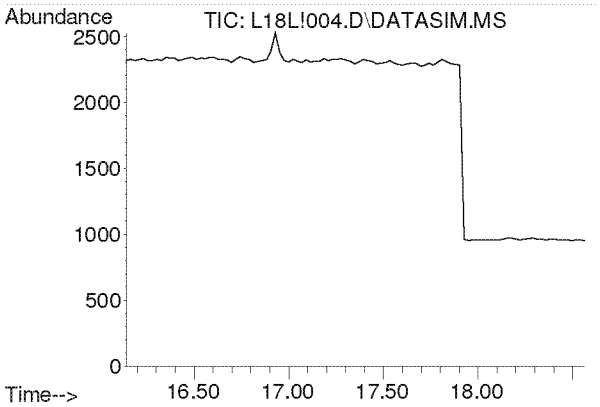
Tgt Ion: 76 Resp: 498

Ion	Ratio	Lower	Upper
76	100		
78	7.6	7.3	10.9







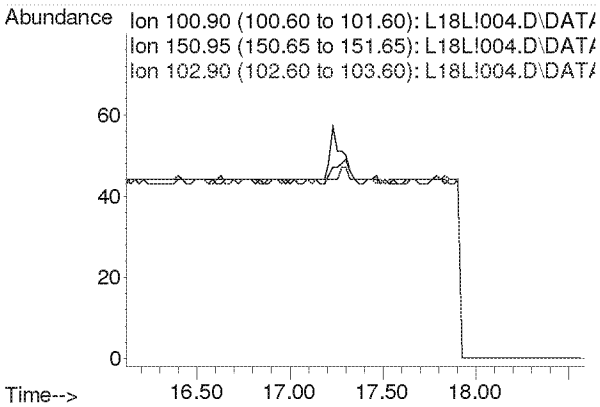


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

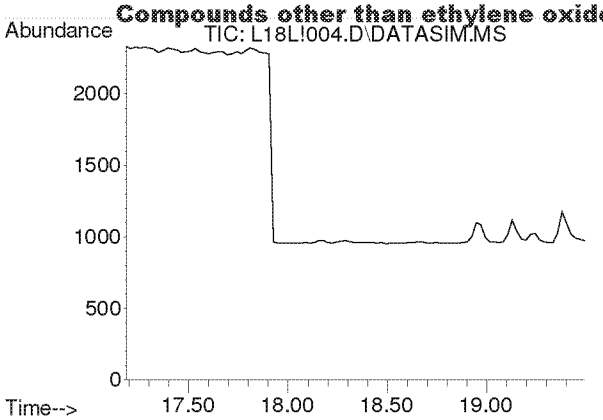
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

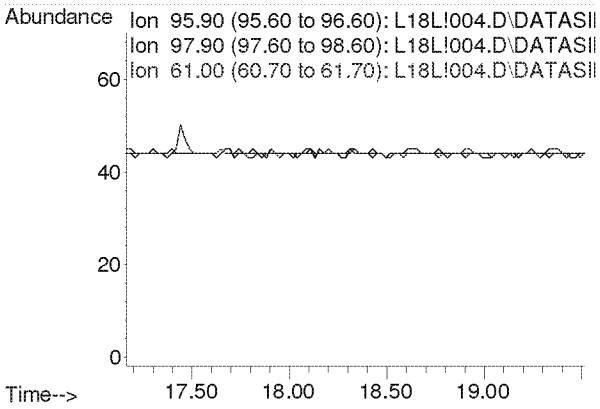


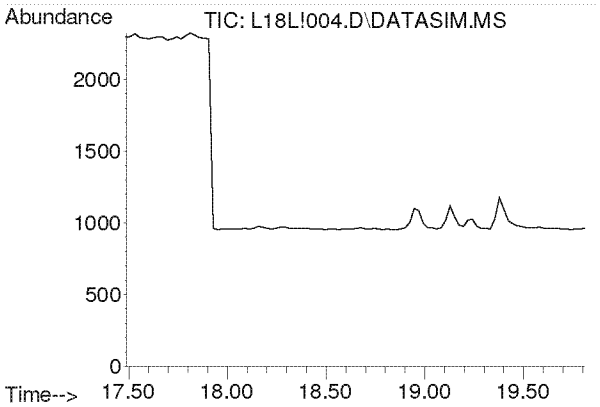
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



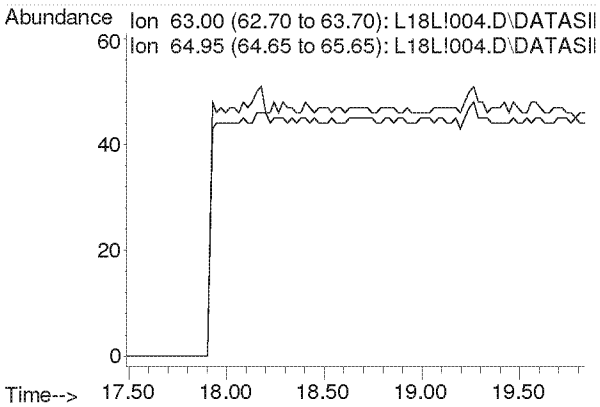


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

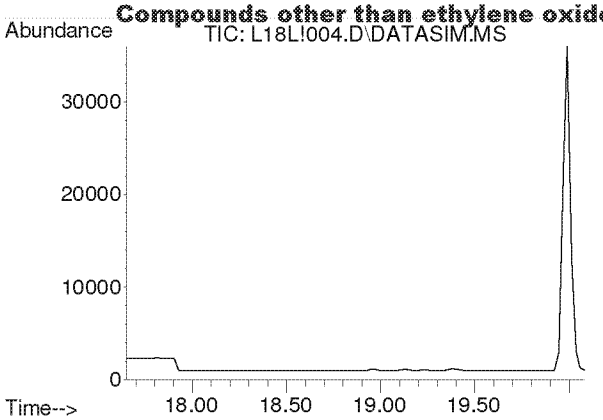
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

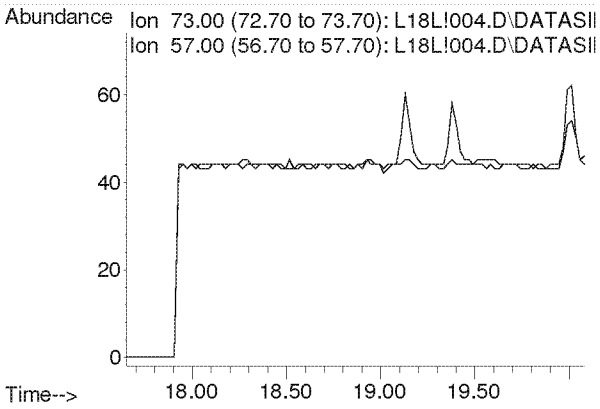


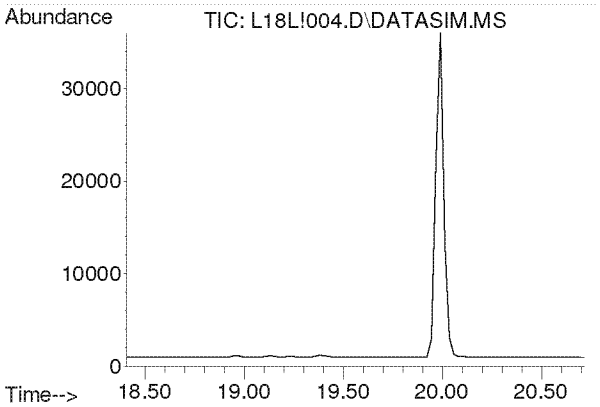
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



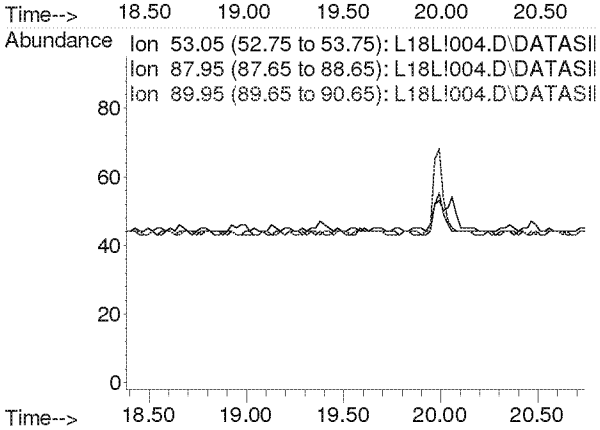


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

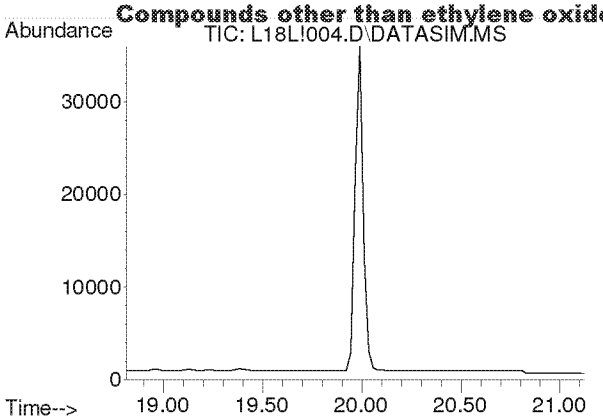
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

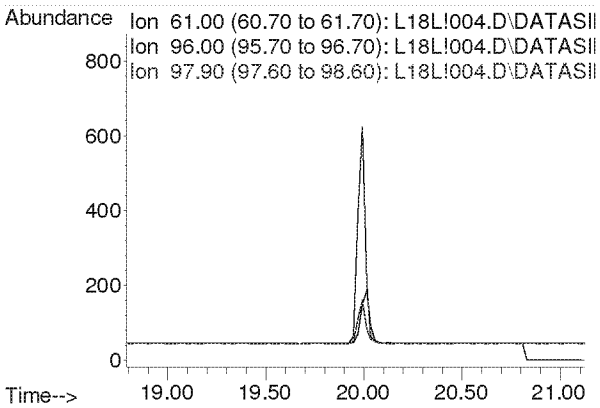


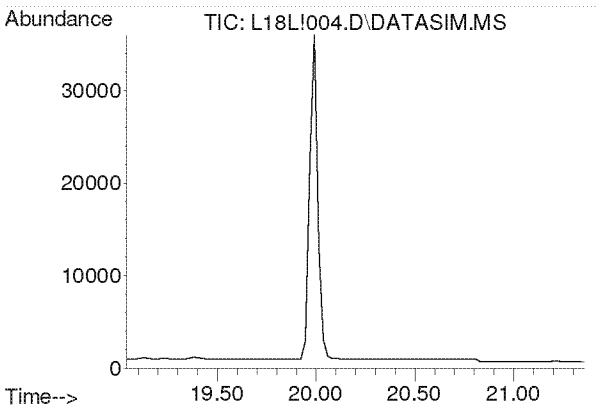
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



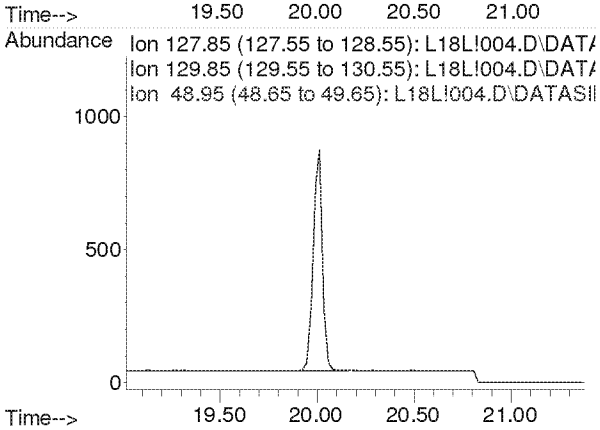


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

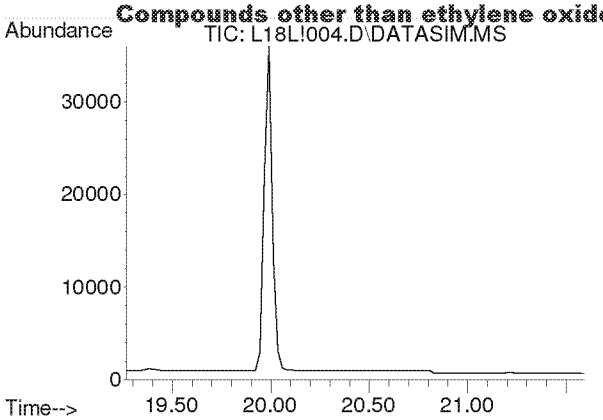
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

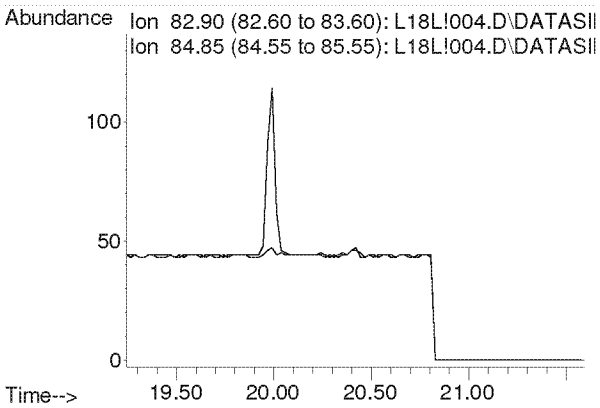


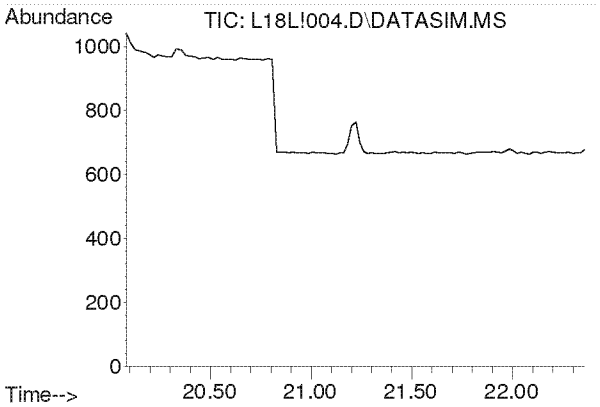
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



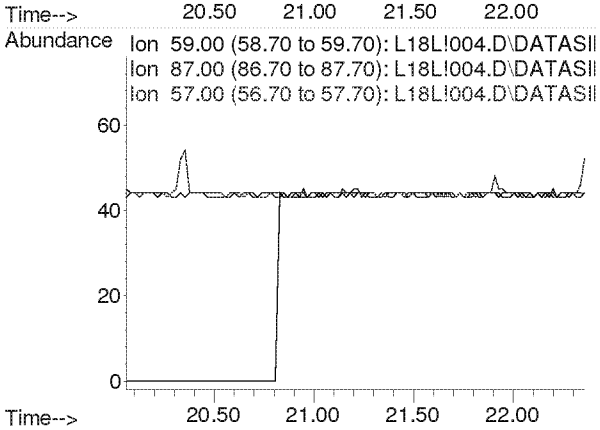


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

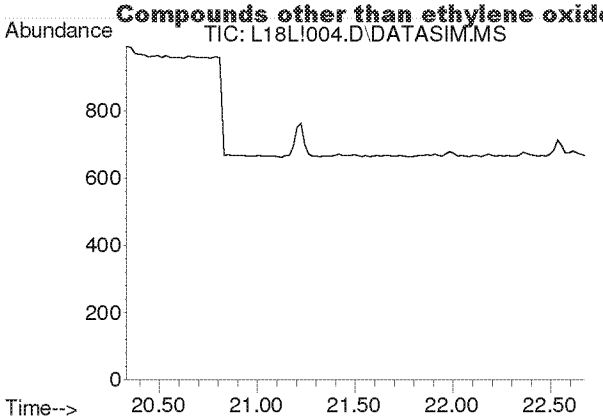
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

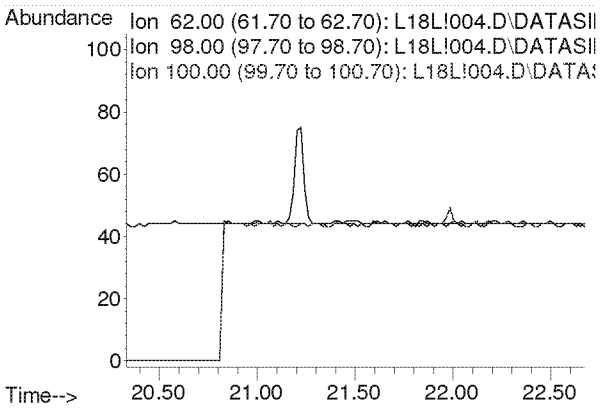


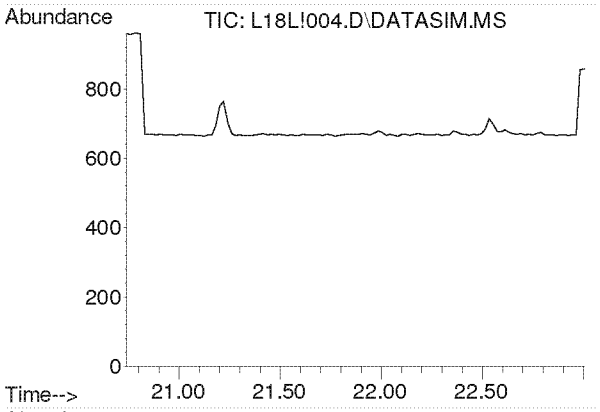
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



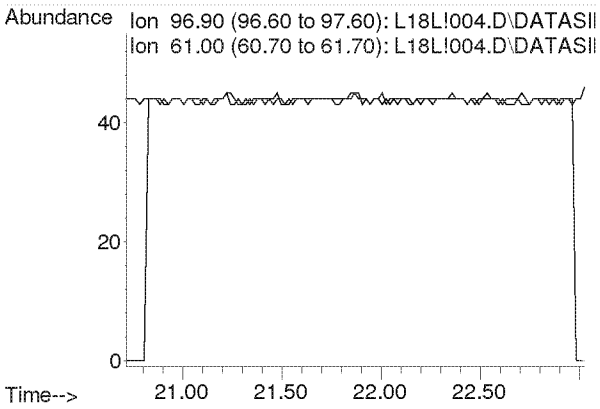


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

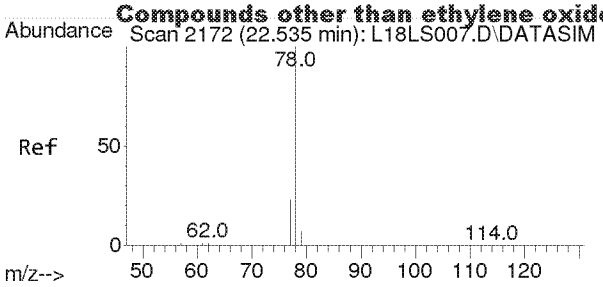
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



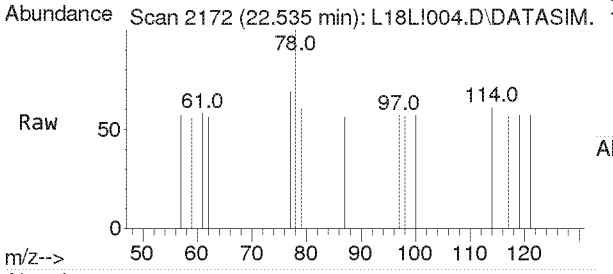
Compounds other than ethylene oxide were not quantitated.

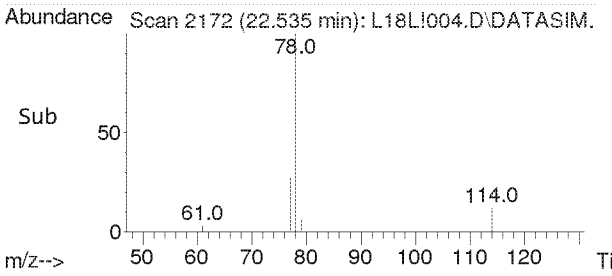


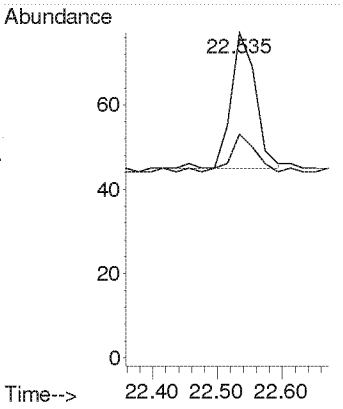
#31
Benzene
Concen: 0.005 ppbv
RT: 22.535 min Scan# 2172
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

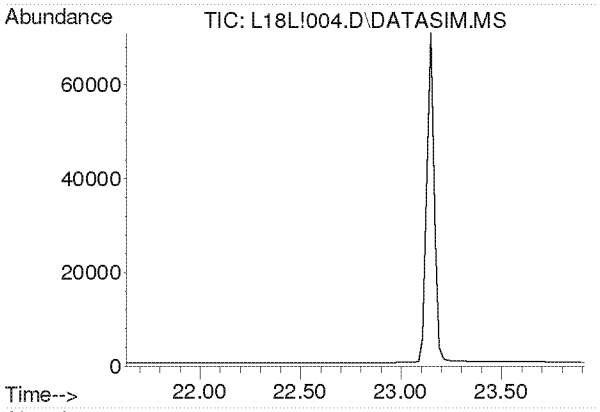
Tgt Ion: 78 Resp: 85

Ion	Ratio	Lower	Upper
78	100		
77	0.0	18.2	27.2#







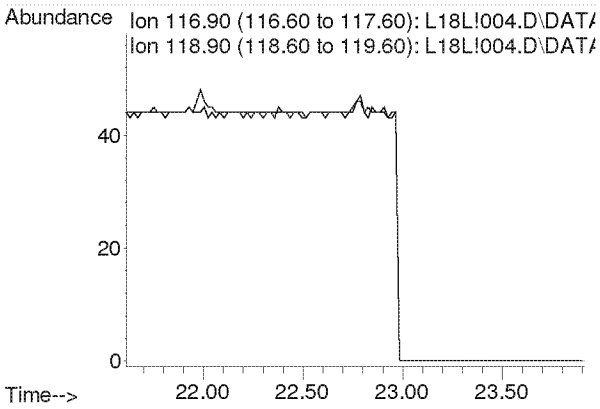


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

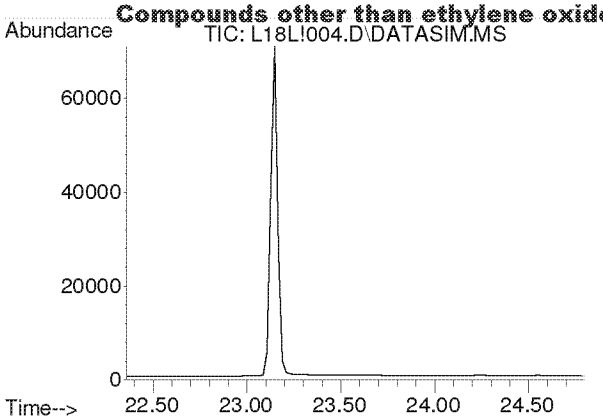
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

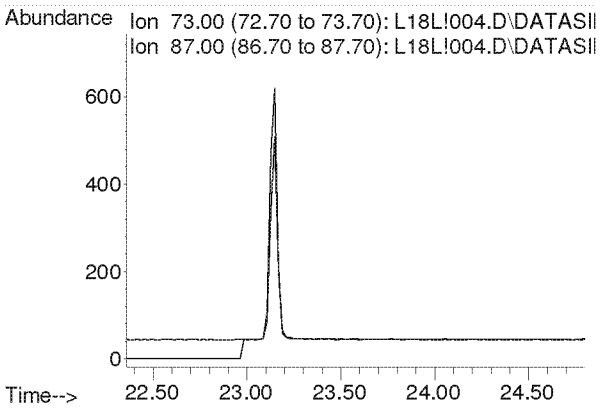


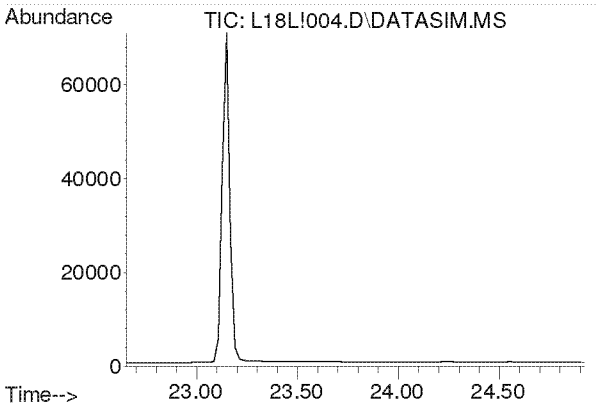
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



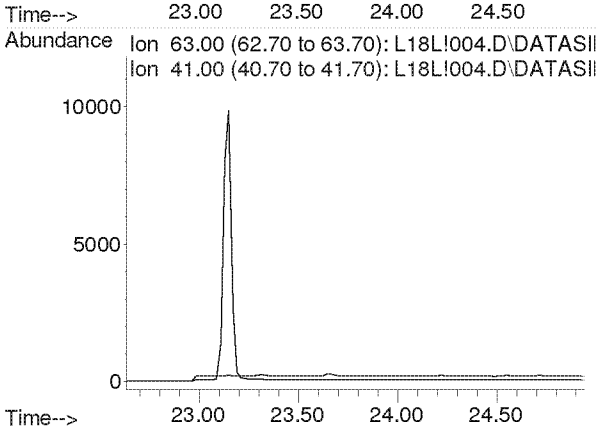


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

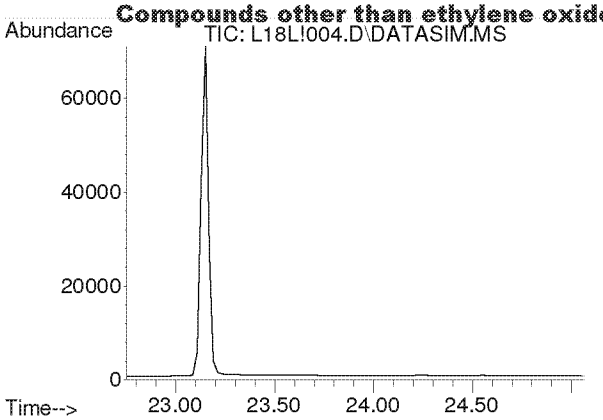
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

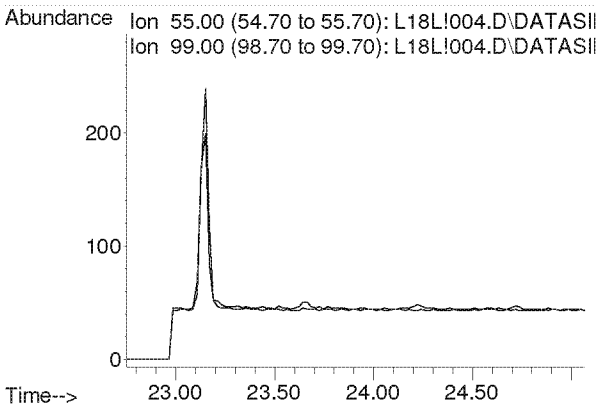


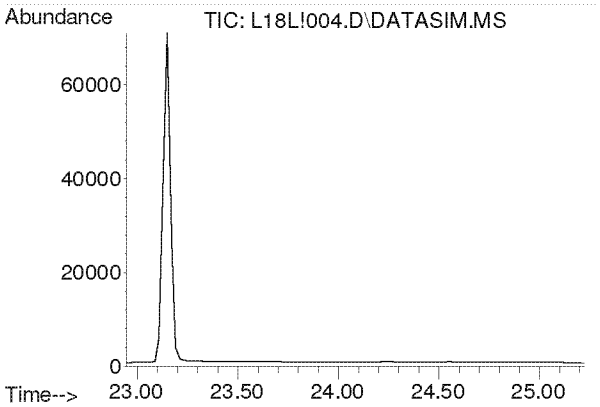
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



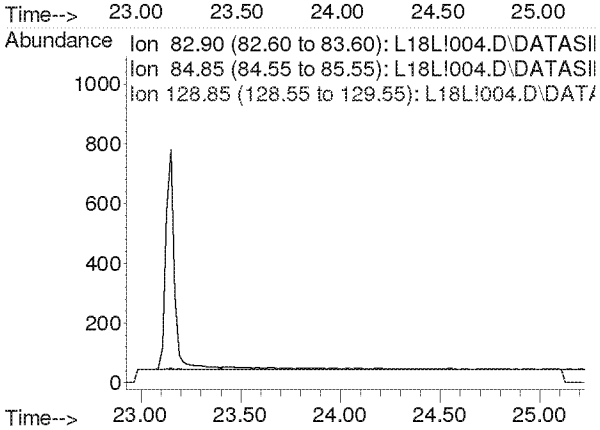


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

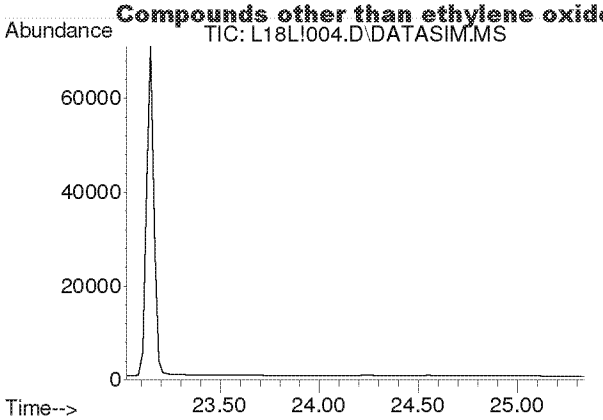
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

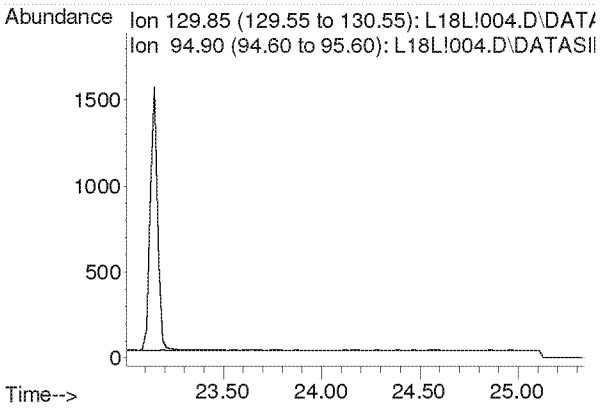


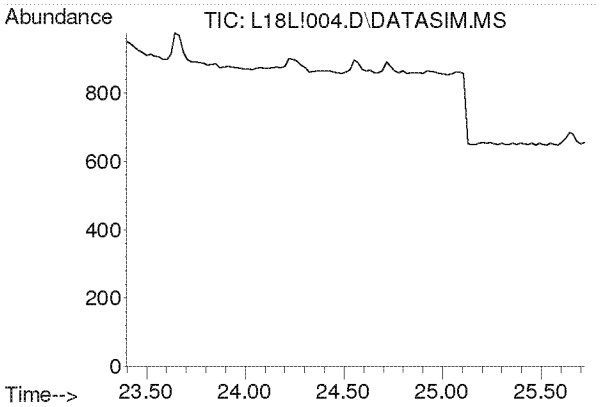
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



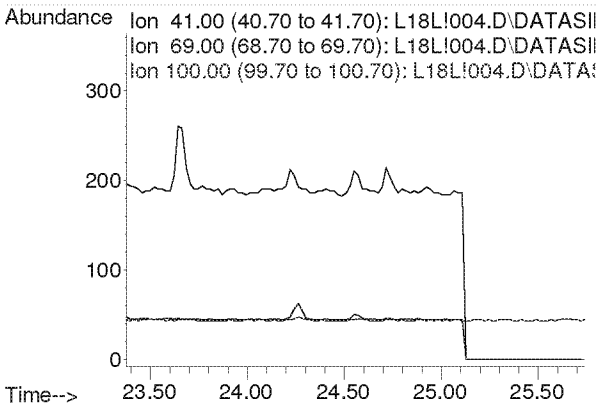


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

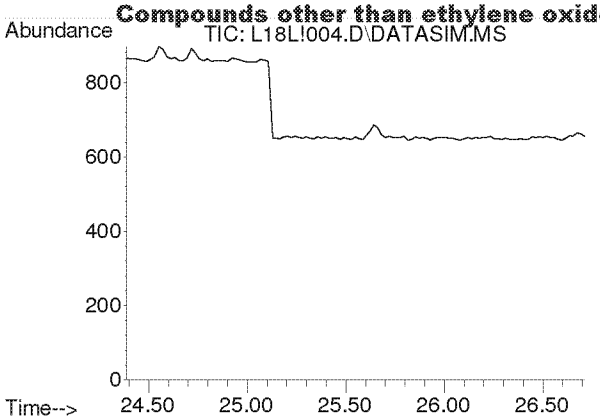
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

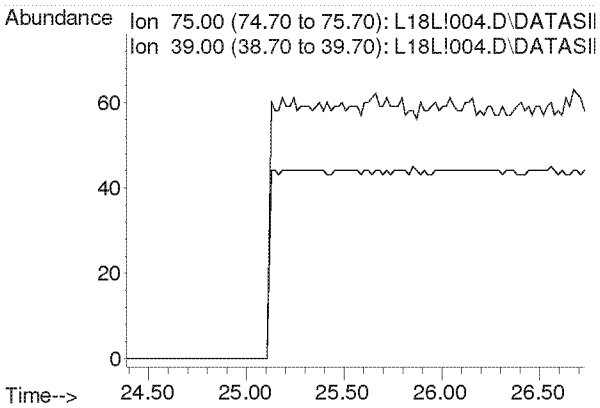


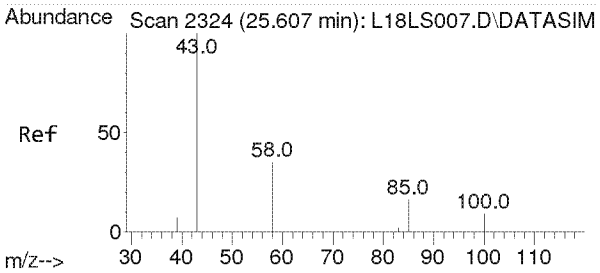
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4

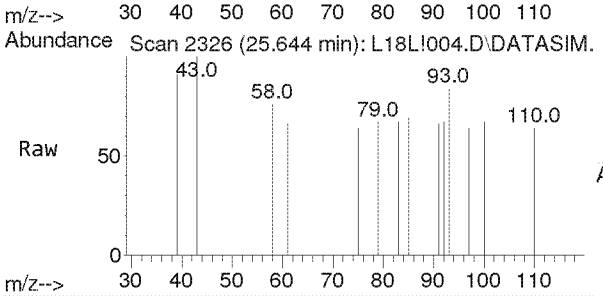


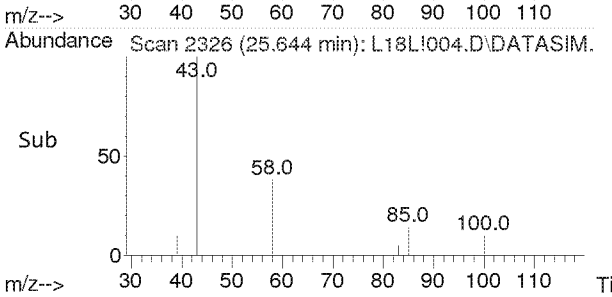


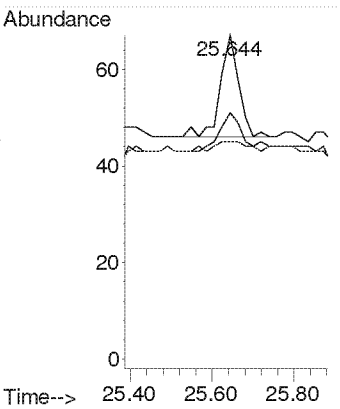
#40
Methyl Isobutyl Ketone
Concen: 0.005 ppbv
RT: 25.644 min Scan# 2326
Delta R.T. 0.038 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 43 Resp: 65

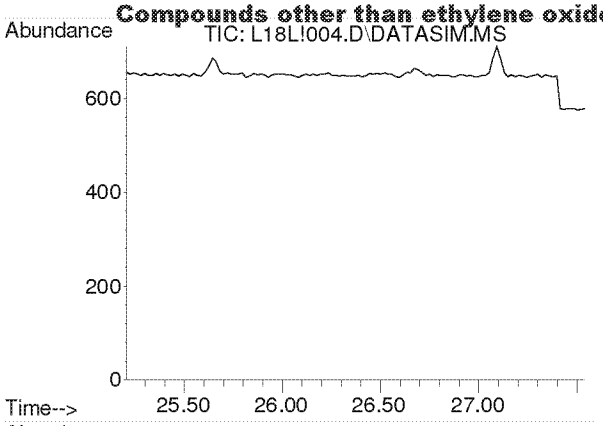
Ion	Ratio	Lower	Upper
43	100		
58	56.9	27.4	41.0#
100	0.0	6.3	9.5#







Compounds other than ethylene oxide were not quantitated.

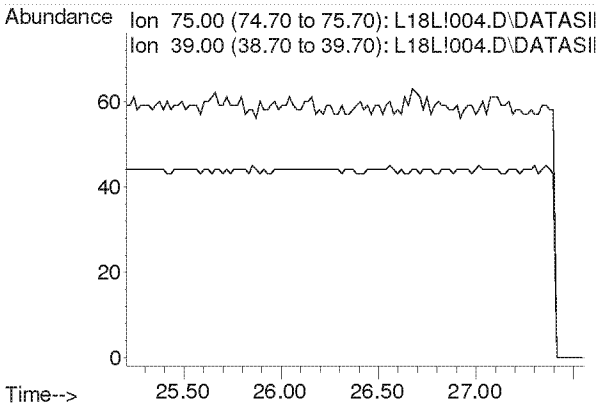


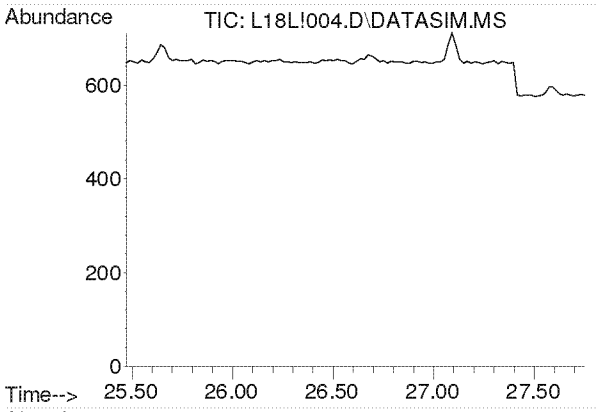
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



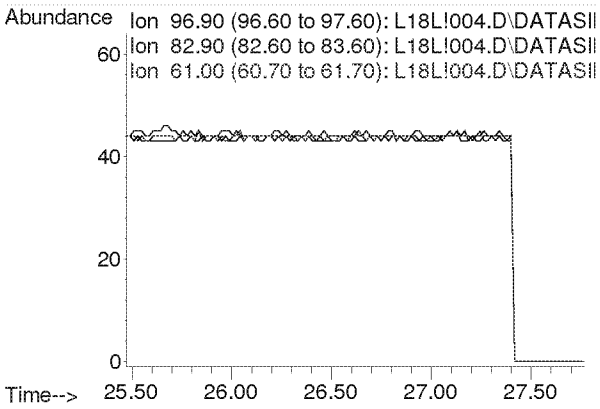


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

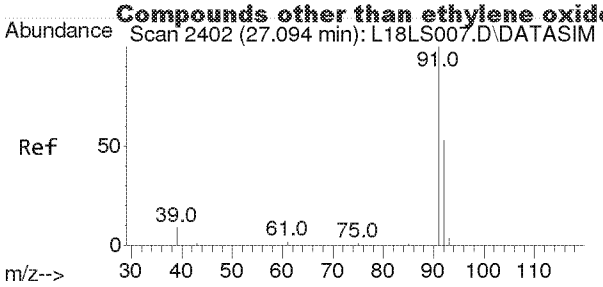
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



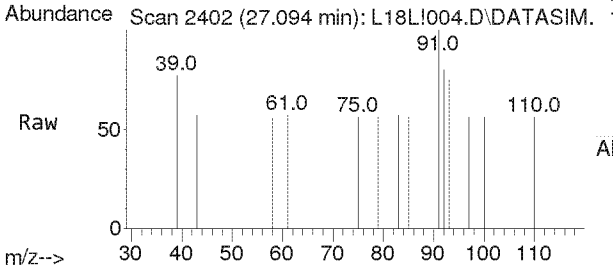
Compounds other than ethylene oxide were not quantitated.

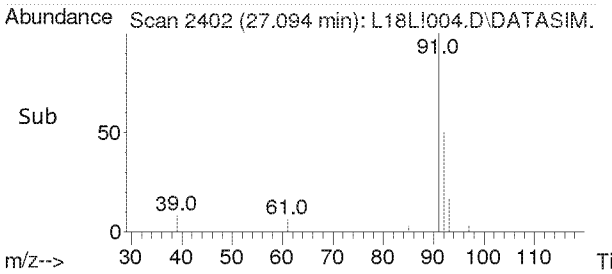


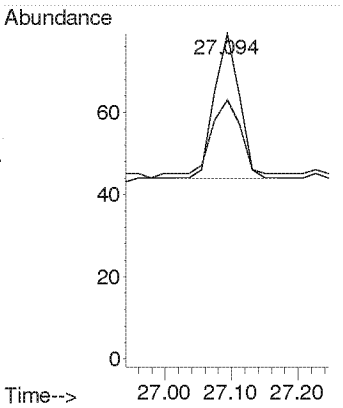
#44
Toluene
Concen: 0.005 ppbv
RT: 27.094 min Scan# 2402
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

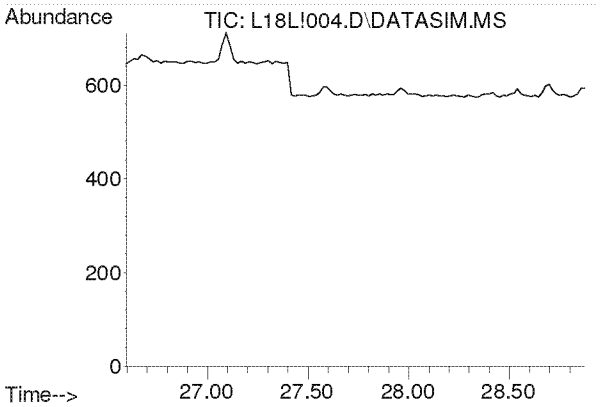
Tgt Ion: 91 Resp: 92

Ion	Ratio	Lower	Upper
91	100		
92	57.6	42.1	63.1







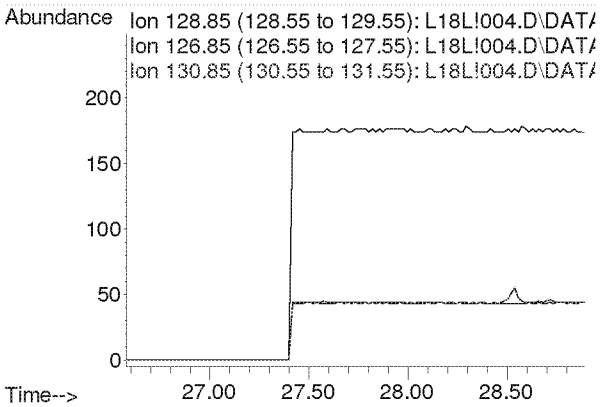


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

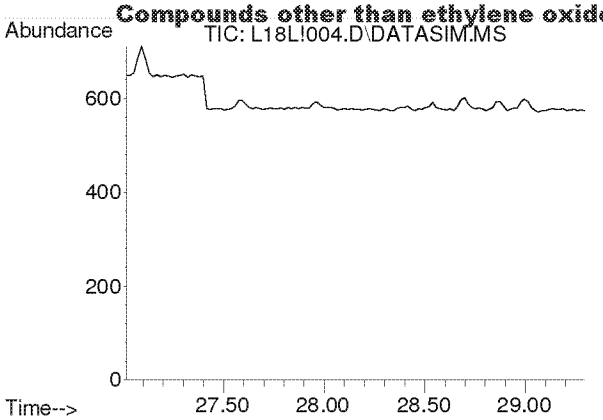
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

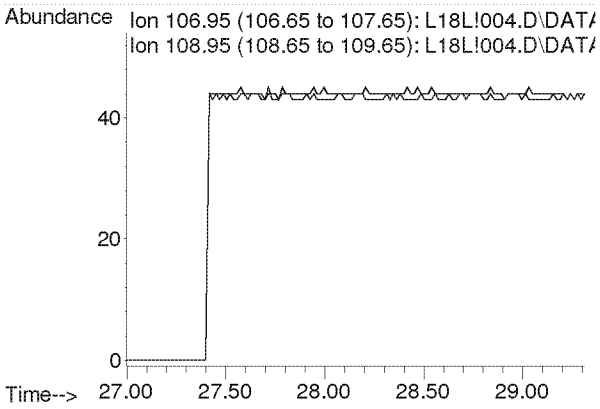


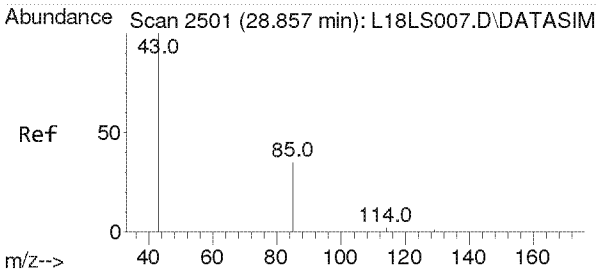
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5

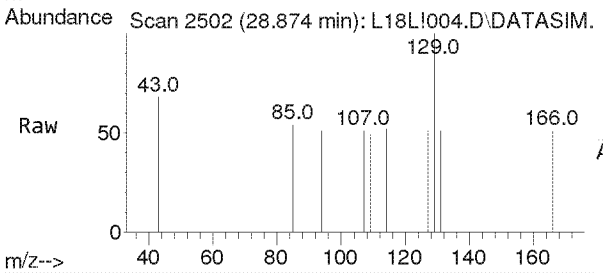


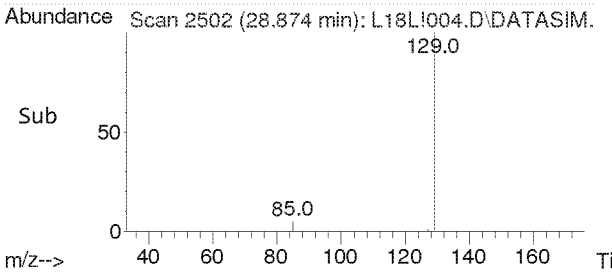


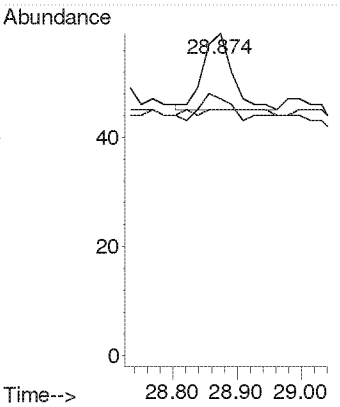
#47
n-Octane
Concen: 0.004 ppbv
RT: 28.874 min Scan# 2502
Delta R.T. 0.017 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 43 Resp: 44

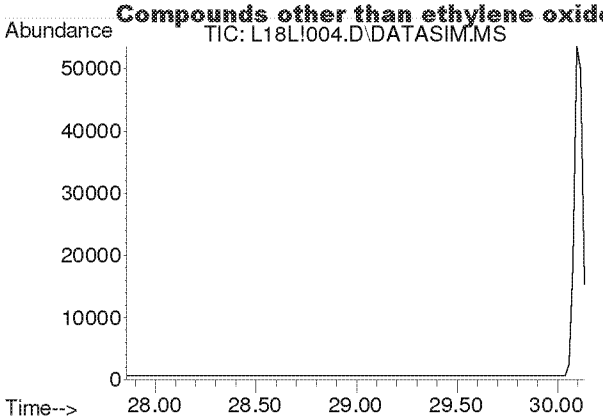
Ion	Ratio	Lower	Upper
43	100		
85	0.0	28.8	43.2#
114	0.0	1.8	2.6#







Compounds other than ethylene oxide were not quantitated.

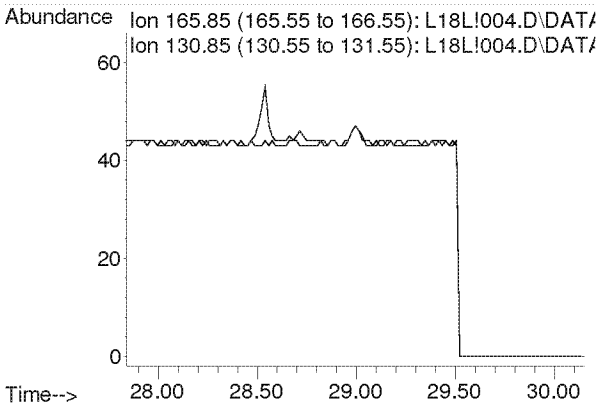


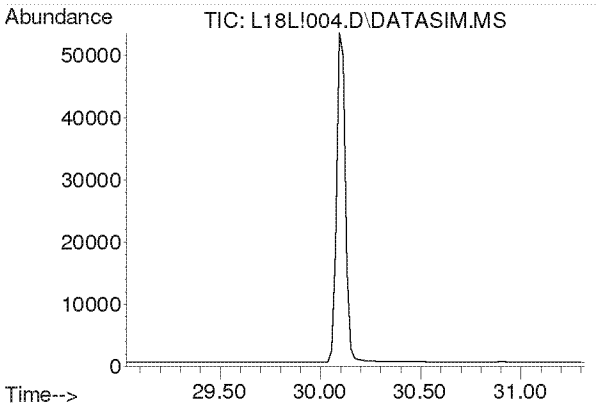
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



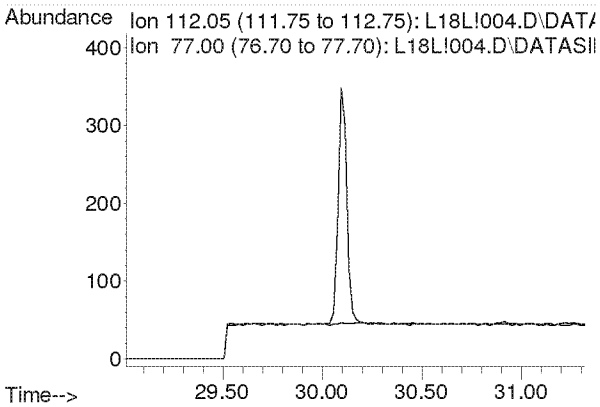


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

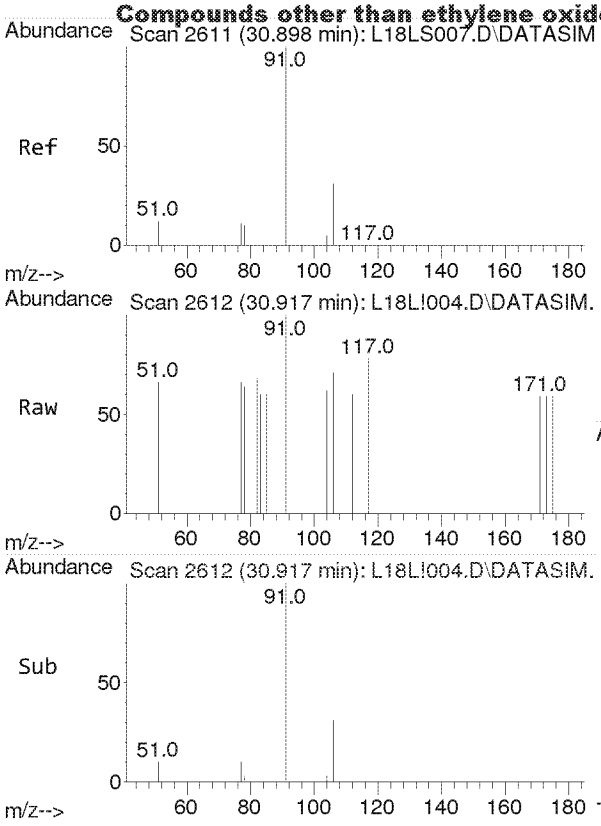
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



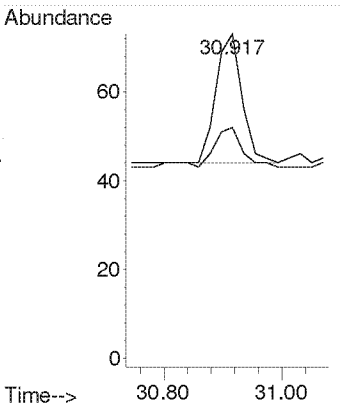
Compounds other than ethylene oxide were not quantitated.

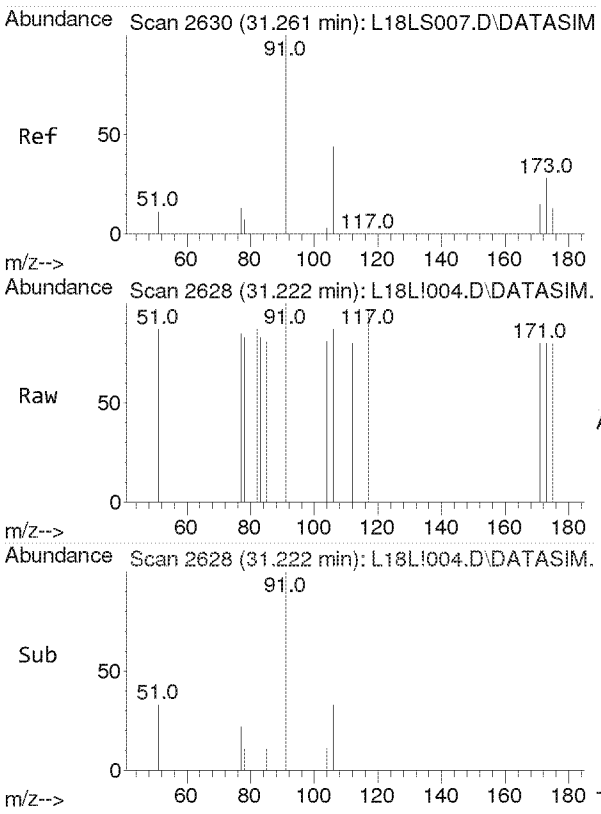


#50
Ethylbenzene
Concen: 0.005 ppbv
RT: 30.917 min Scan# 2612
Delta R.T. 0.019 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 91 Resp: 88

Ion	Ratio	Lower	Upper
91	100		
106	34.1	25.4	38.2

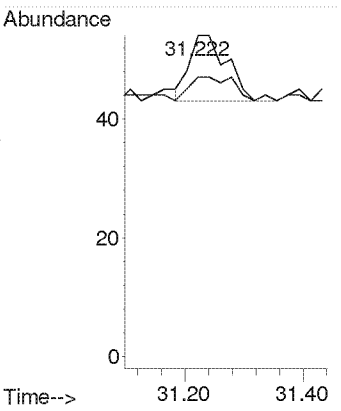




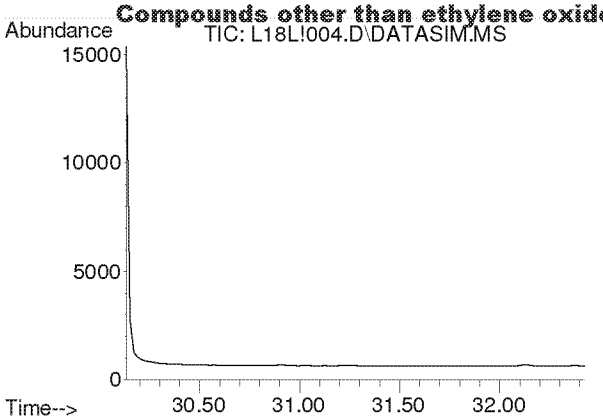
#51
m,p-Xylene
Concen: 0.003 ppbv
RT: 31.222 min Scan# 2628
Delta R.T. -0.039 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 91 Resp: 49

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.5	53.3#



Compounds other than ethylene oxide were not quantitated.

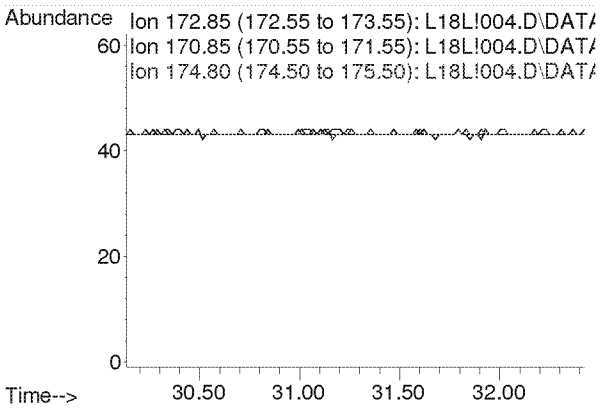


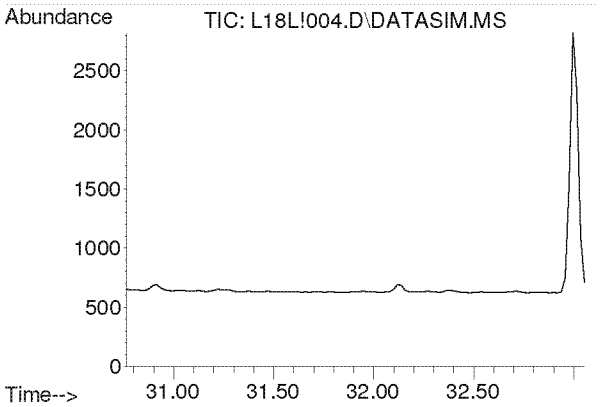
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



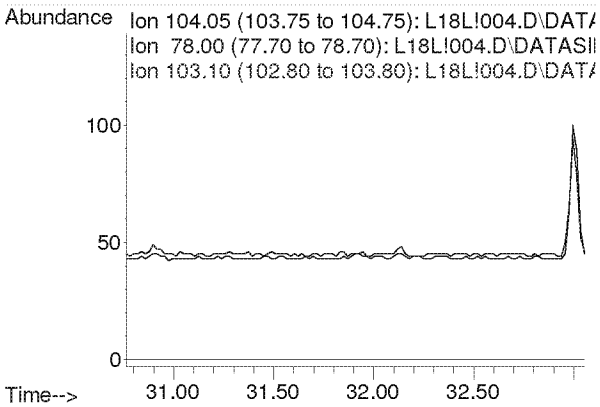


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

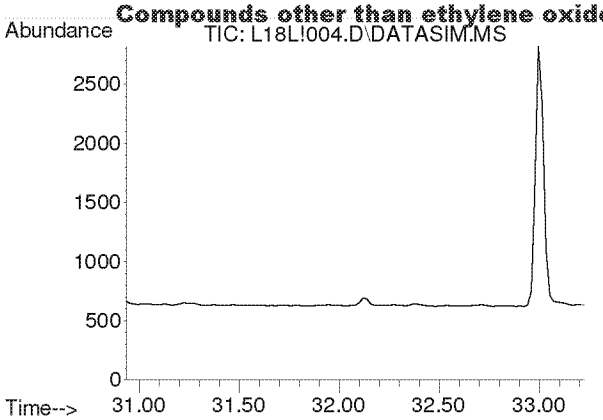
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

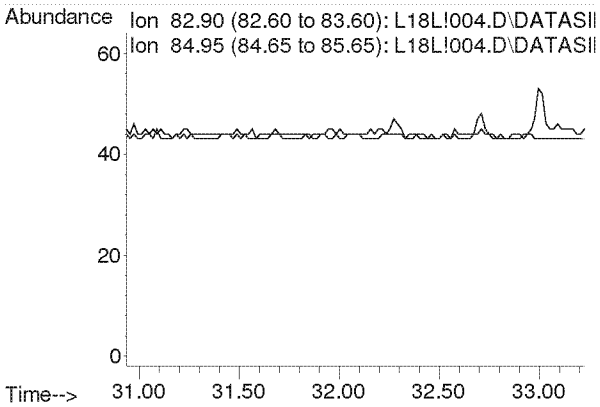


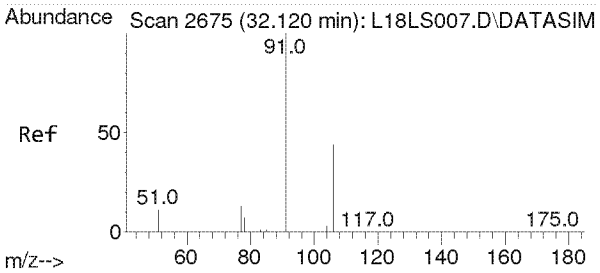
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9

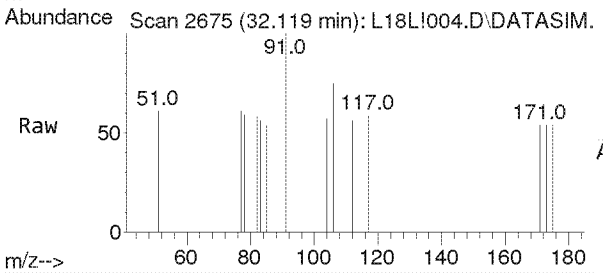


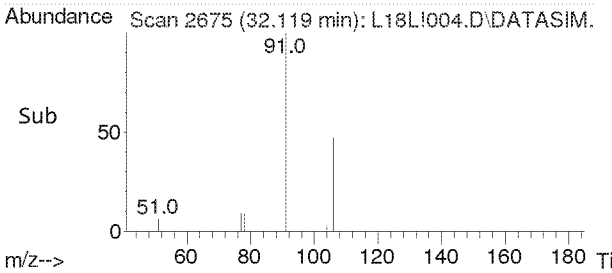


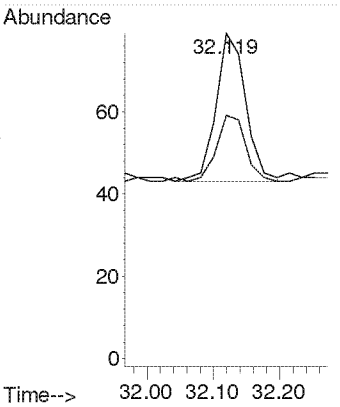
#55
o-Xylene
Concen: 0.008 ppbv
RT: 32.119 min Scan# 2675
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 91 Resp: 112

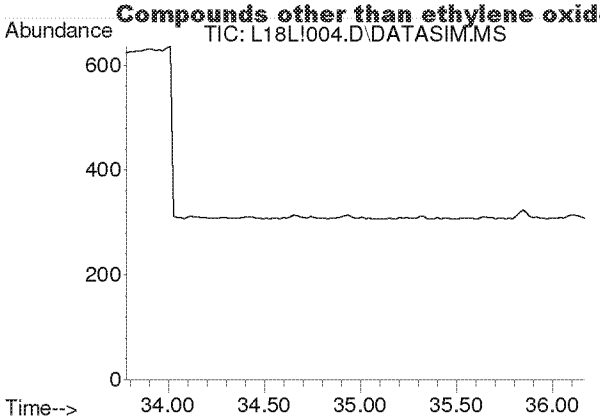
Ion	Ratio	Lower	Upper
91	100		
106	44.6	35.4	53.0







Compounds other than ethylene oxide were not quantitated.

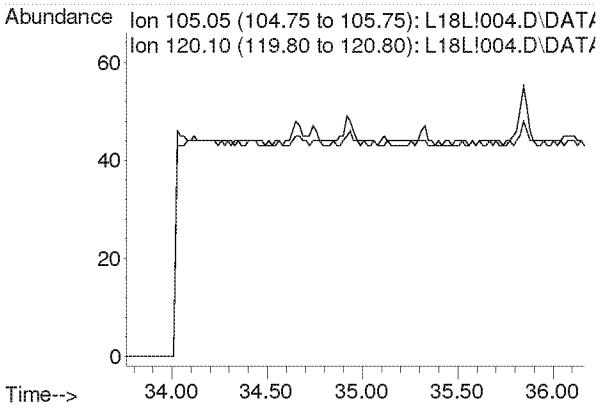


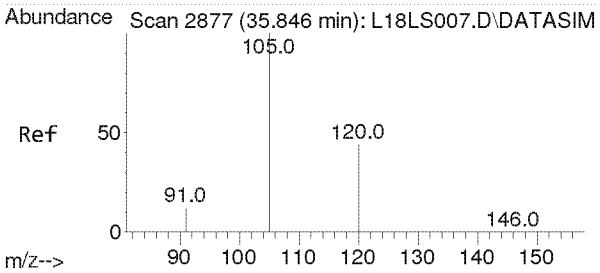
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0

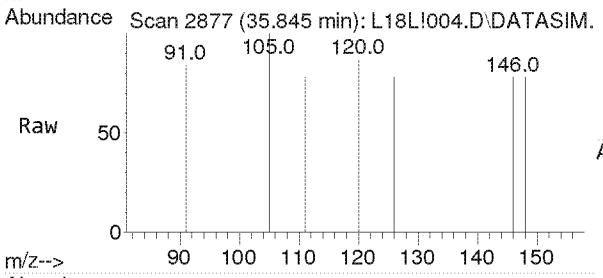


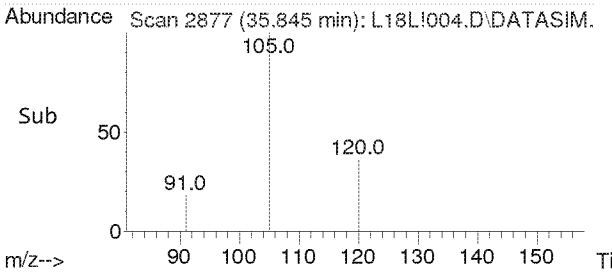


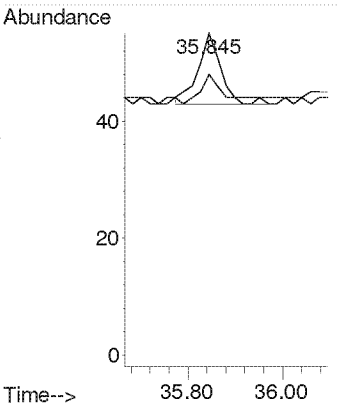
#57
1,2,4-Trimethylbenzene
Concen: 0.003 ppbv
RT: 35.845 min Scan# 2877
Delta R.T. -0.000 min
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion:105 Resp: 42

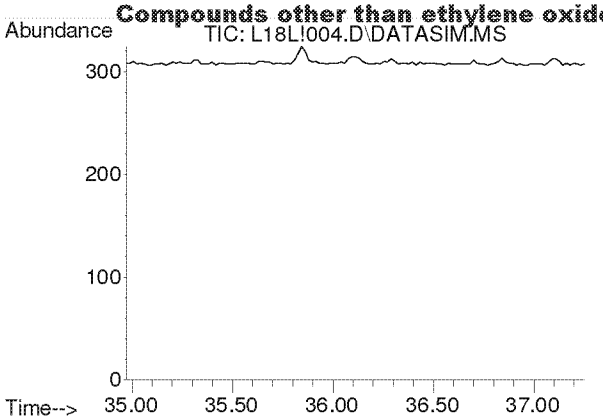
Ion	Ratio	Lower	Upper
105	100		
120	0.0	34.2	51.4#







Compounds other than ethylene oxide were not quantitated.

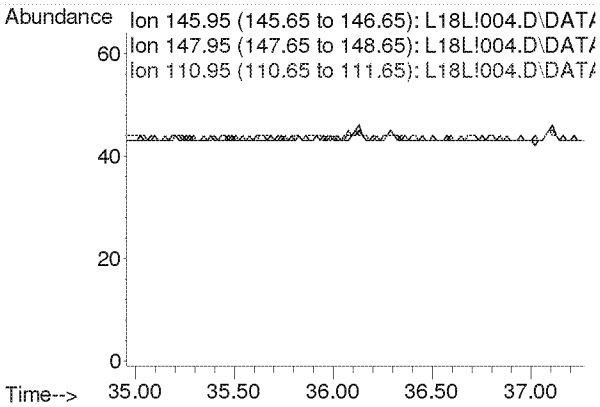


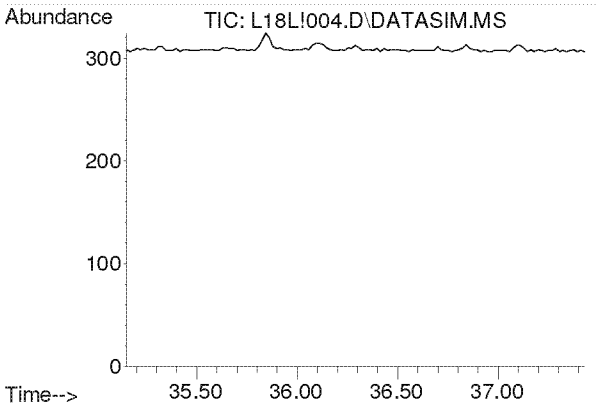
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



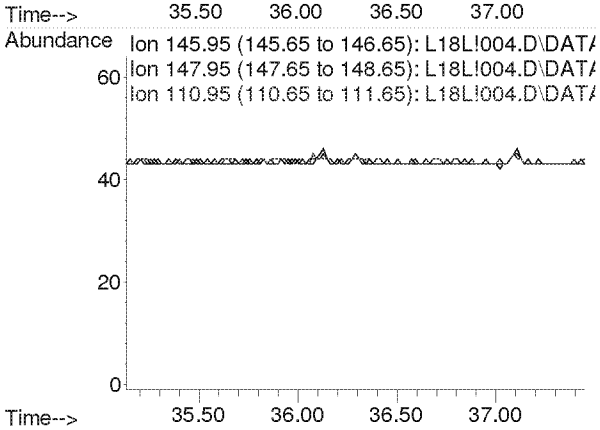


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

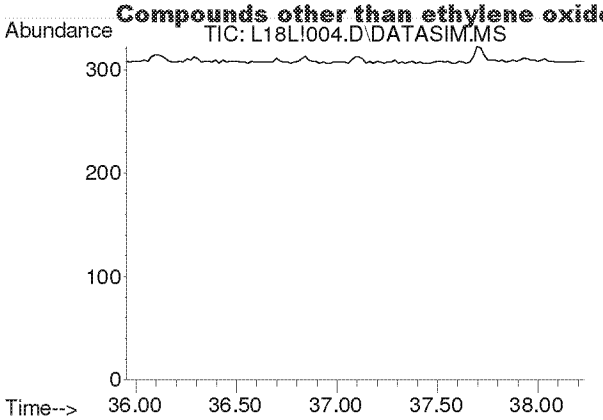
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

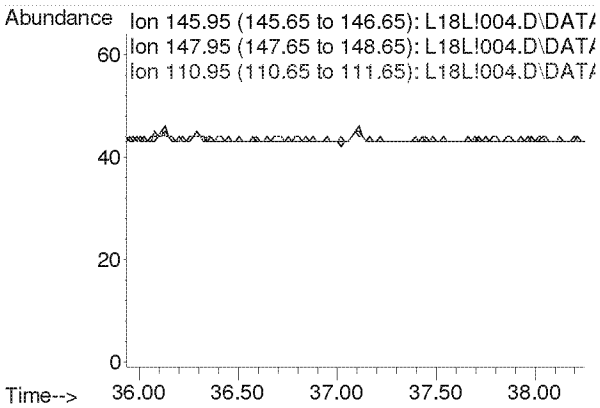


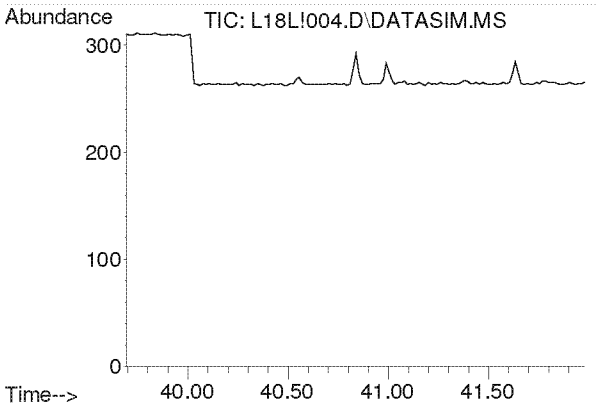
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



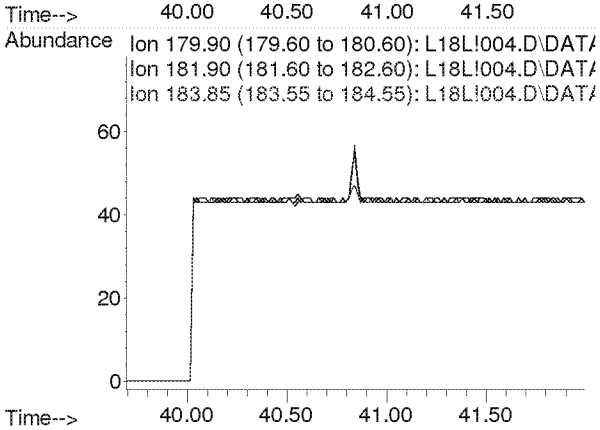


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

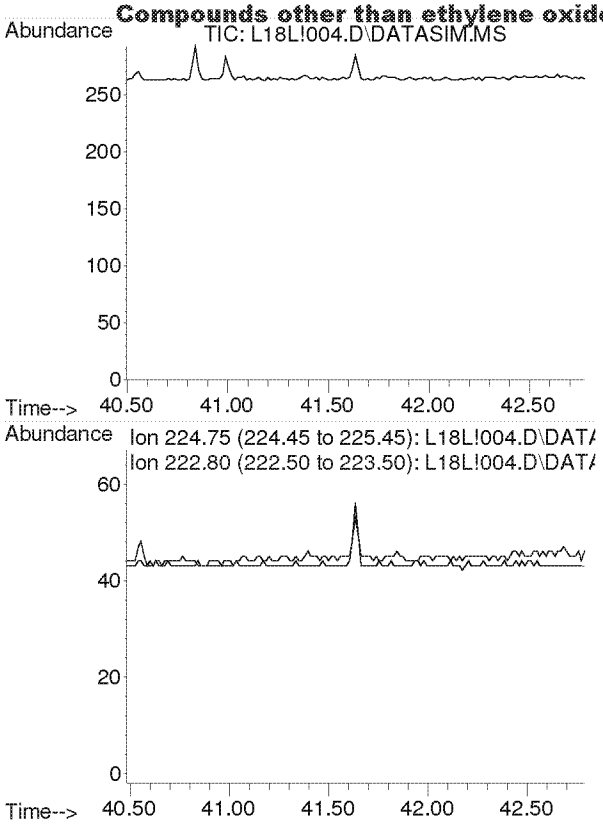
Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!004.D
Acq: 28 Dec 2018 2:30 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Duplicate Comparison Check

Comparison of Duplicate Samples

		D1	D2		
File ID		L18L005.D	L18L006.D		
Analyst		MAH	MAH		
Method		8120004.M	8120004.M		
Sample ID		8121821-03	8121821-04		
Mics Comments		VILLAGE HALL 12/	WB VILLAGE HALL C2 12/14/18		
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	1.132	1.183	4.41	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

1-3-19

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

Compounds other than ethylene oxide were not quantitated.

Duplicate Comparison Check

Comparison of Replicate Analyses

		D1	R1		
File ID		L18L0005.D	L18L0007.D		
Analyst		MAH	MAH		
Method		8120004.M	8120004.M		
Sample ID		8121821-03	B8L2804-DUP1		
Mics Comments		VILLAGE HALL	WB VILLAGE HALL R1 12/14/18		
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	1.132	1.075	5.17	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl Isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

Comparison of Replicate Analyses

		D2	R2		
File ID		L18L0006.D	L18L0008.D		
Analyst		MAH	MAH		
Method		8120004.M	8120004.M		
Sample ID		8121821-04	B8L2804-DUP2		
Mics Comments		WB VILLAGE H	WB VILLAGE HALL R2 12/14/18		
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	1.183	1.128	4.76	Y
Bromomethane	0.0115	0	0	NA	
Chloroethane	0.0249	0	0	NA	
Acetonitrile	0.0163	0	0	NA	
Acrolein	0.2250	0	0	NA	
Trichlorofluoromethane	0.0116	0	0	NA	
Acrylonitrile	0.0106	0	0	NA	
1,1-Dichloroethene	0.0119	0	0	NA	
Dichloromethane	0.0144	0	0	NA	
Carbon Disulfide	0.0768	0	0	NA	
Trichlorotrifluoroethane	0.0098	0	0	NA	
trans-1,2-Dichloroethylene	0.0134	0	0	NA	
1,1-Dichloroethane	0.0143	0	0	NA	
Methyl tert-Butyl Ether	0.0103	0	0	NA	
Chloroprene	0.0129	0	0	NA	
cis-1,2-Dichloroethylene	0.0186	0	0	NA	
Bromochloromethane	0.0133	0	0	NA	
Chloroform	0.0129	0	0	NA	
Ethyl tert-Butyl Ether	0.0109	0	0	NA	
1,2-Dichloroethane	0.0139	0	0	NA	
IS-1,4-Difluorobenzene	NA			NA	
1,1,1-Trichloroethane	0.0137	0	0	NA	
Benzene	0.0145	0	0	NA	
Carbon Tetrachloride	0.0133	0	0	NA	
tert-Amyl Methyl Ether	0.0124	0	0	NA	
1,2-Dichloropropane	0.0203	0	0	NA	
Ethyl Acrylate	0.0235	0	0	NA	
Bromodichloromethane	0.0165	0	0	NA	
Trichloroethylene	0.0150	0	0	NA	
Methyl Methacrylate	0.1000	0	0	NA	
cis-1,3-Dichloropropene	0.0197	0	0	NA	
Methyl Isobutyl Ketone	0.0237	0	0	NA	
trans-1,3-Dichloropropene	0.0195	0	0	NA	
1,1,2-Trichloroethane	0.0190	0	0	NA	
IS-Chlorobenzene-d5	NA			NA	
Toluene	0.1300	0	0	NA	
Dibromochloromethane	0.0154	0	0	NA	
1,2-Dibromoethane	0.0189	0	0	NA	
n-Octane	0.0323	0	0	NA	
Tetrachloroethylene	0.0146	0	0	NA	
Chlorobenzene	0.0192	0	0	NA	
Ethylbenzene	0.0258	0	0	NA	
m,p-Xylene	0.0360	0	0	NA	
Bromoform	0.0177	0	0	NA	
Styrene	0.0363	0	0	NA	
1,1,2,2-Tetrachloroethane	0.0209	0	0	NA	
o-Xylene	0.0268	0	0	NA	
1,3,5-Trimethylbenzene	0.0340	0	0	NA	
1,2,4-Trimethylbenzene	0.0268	0	0	NA	
m-Dichlorobenzene	0.0182	0	0	NA	
p-Dichlorobenzene	0.0200	0	0	NA	
o-Dichlorobenzene	0.0206	0	0	NA	
1,2,4-Trichlorobenzene	0.2490	0	0	NA	
Hexachloro-1,3-butadiene	0.0274	0	0	NA	

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

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!005.D
Acq On : 28 Dec 2018 3:31 pm
Operator : MAH
Sample : 8121821-03
Misc : VILLAGE HALL C1 12/14/18
ALS Vial : 5 Sample Multiplier: 1

1-3-19
d-MK

Quant Time: Jan 03 13:19:53 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	58855	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	142664	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	105766	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. d	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.395	29	3982	1.1319 ppbv #	22
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. 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. d	
21) 1,1-Dichloroethane	0.000	63	0	N.D. d	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D. d	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D. d	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. 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. d	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. d	
38) Methyl Methacrylate	0.000	41	0	N.D. d	
39) cis-1,3-Dichloropropene	0.000	75	0	N.D. 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. 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. 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\L18L!\
Data File : L18L!005.D
Acq On : 28 Dec 2018 3:31 pm
Operator : MAH
Sample : 8121821-03
Misc : VILLAGE HALL C1 12/14/18
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:19:53 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

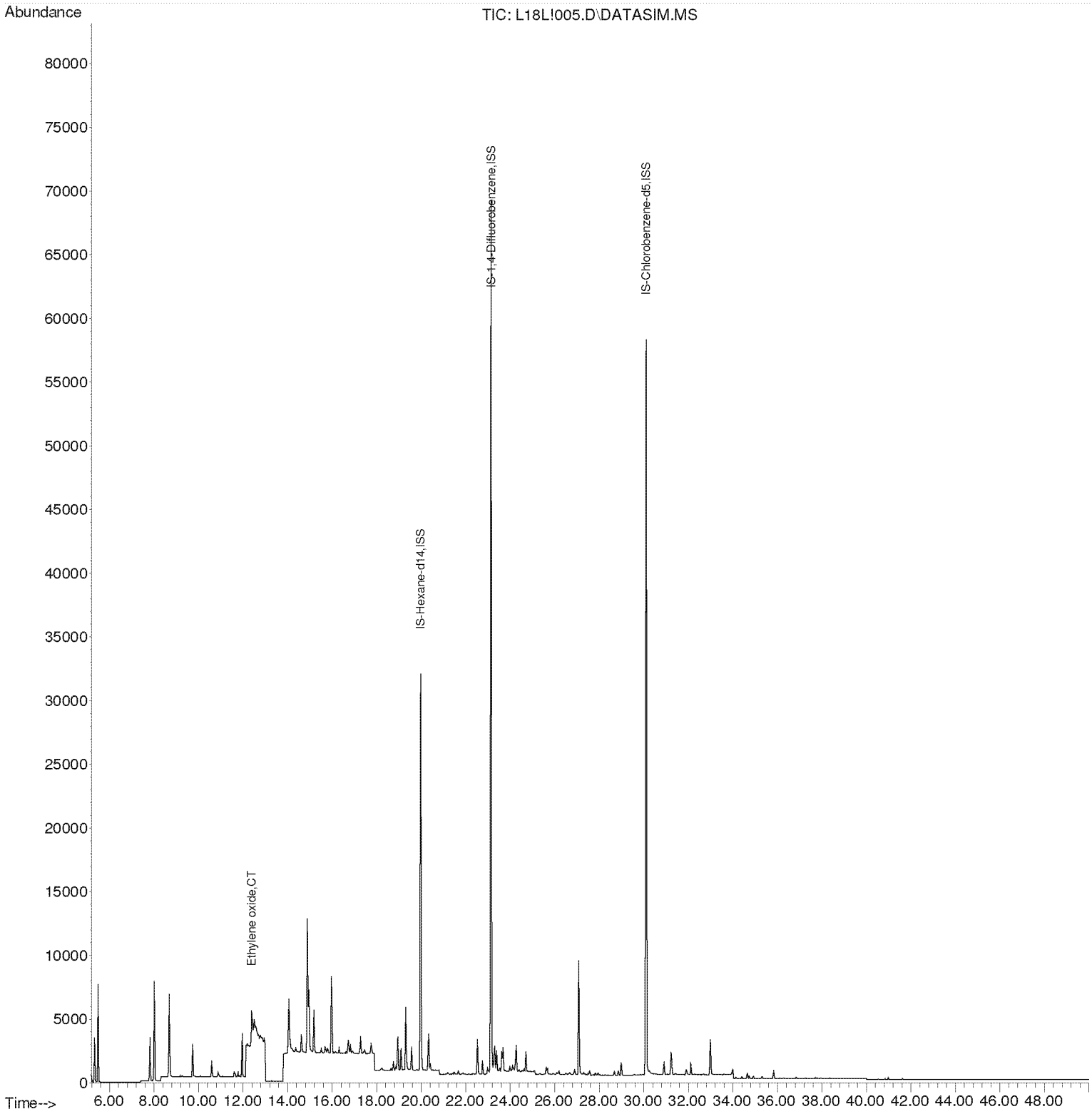
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D. d	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene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

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

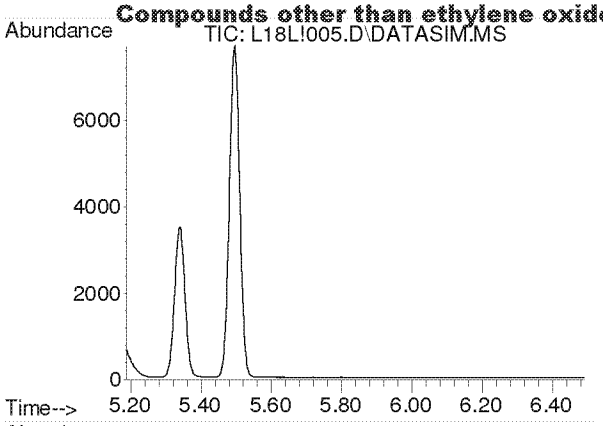
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!005.D
Acq On : 28 Dec 2018 3:31 pm
Operator : MAH
Sample : 8121821-03
Misc : VILLAGE HALL C1 12/14/18
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 03 13:07:02 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



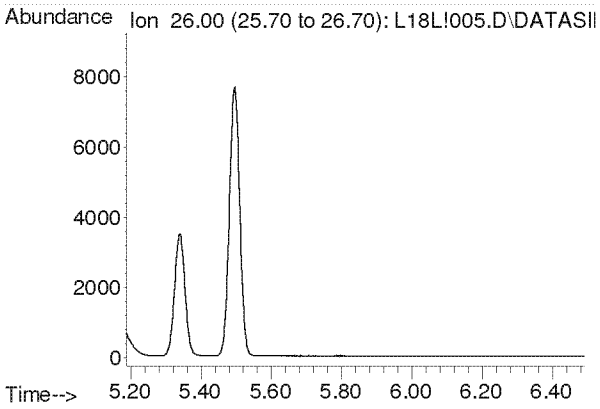
Compounds other than ethylene oxide were not quantitated.

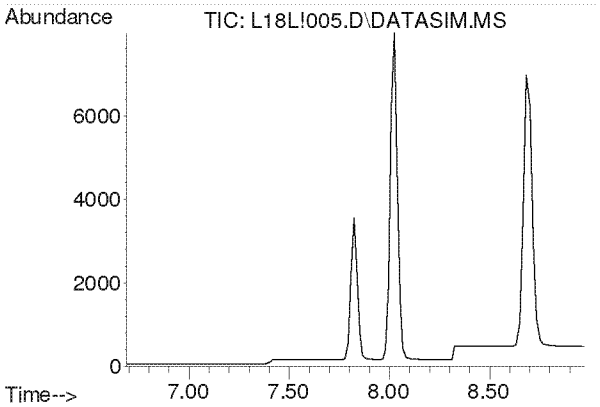


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 26



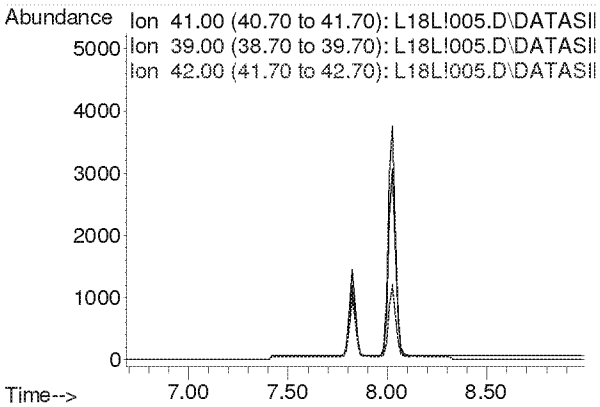


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

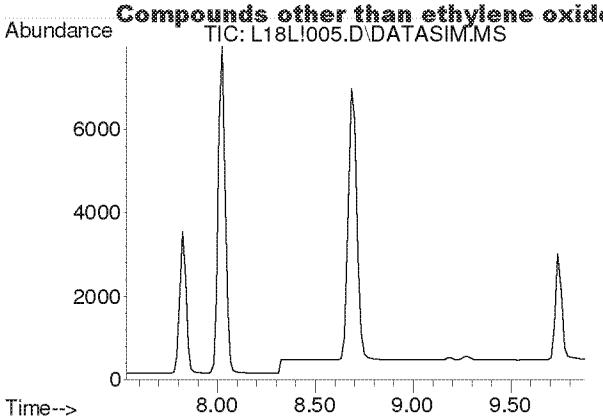
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

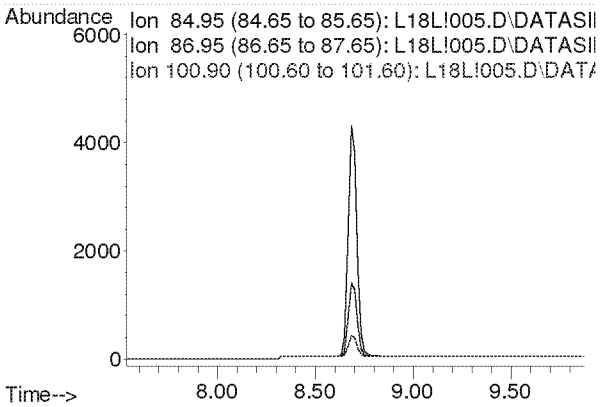


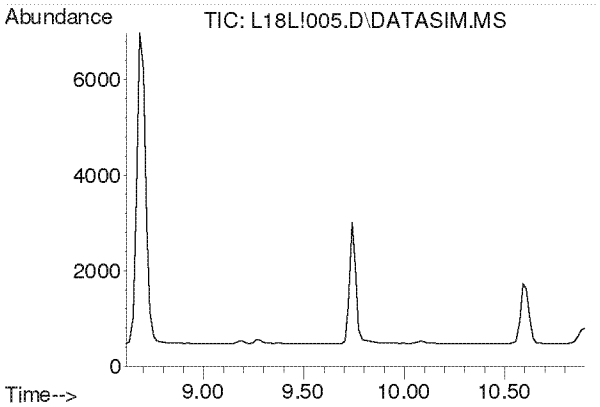
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



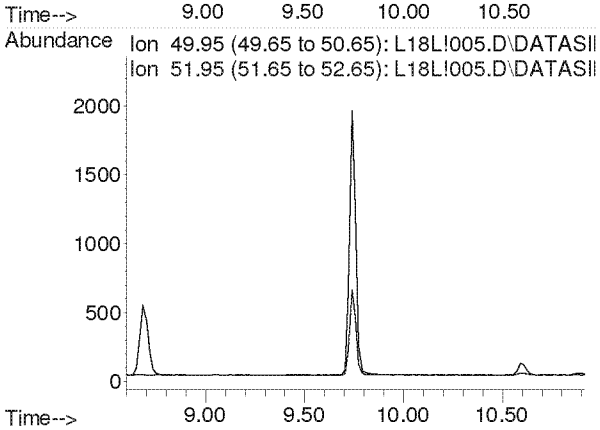


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

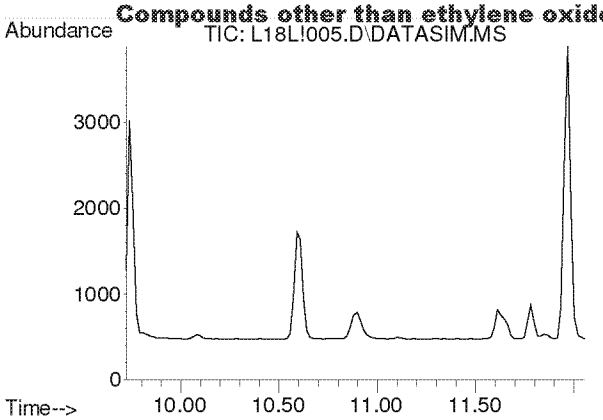
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

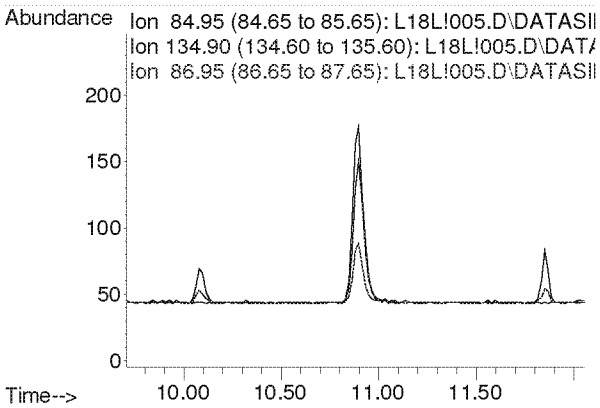


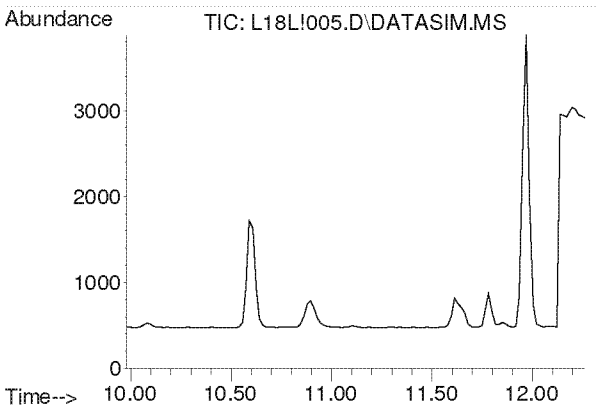
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



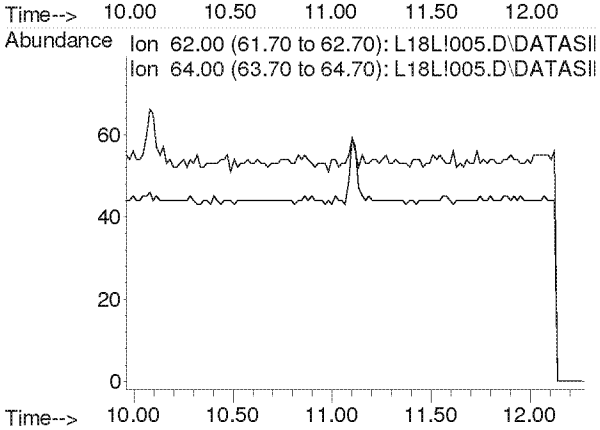


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

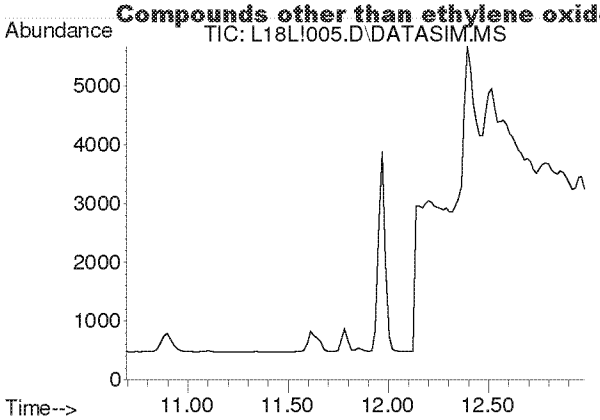
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

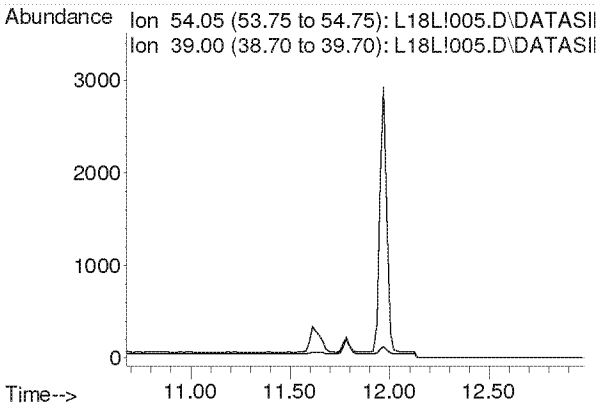


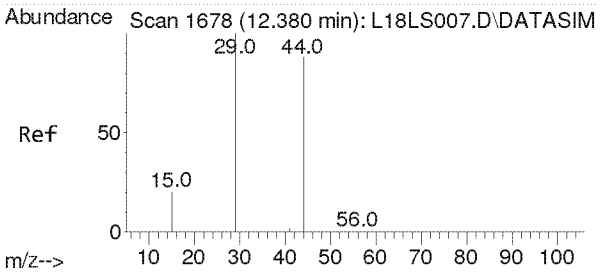
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

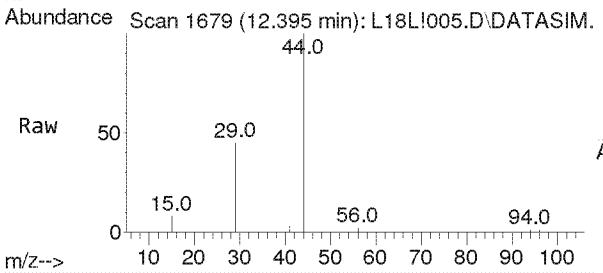


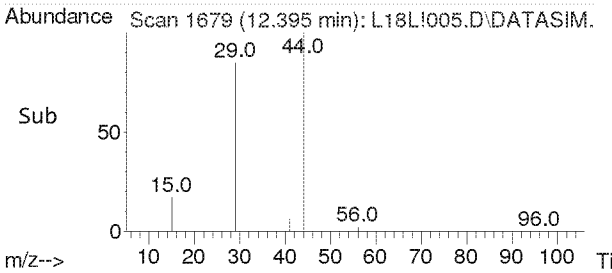


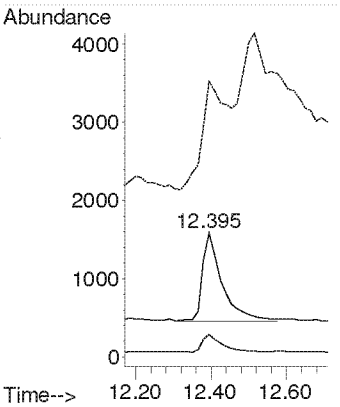
#9
Ethylene oxide
Concen: 1.132 ppbv
RT: 12.395 min Scan# 1679
Delta R.T. 0.015 min
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 29 Resp: 3982

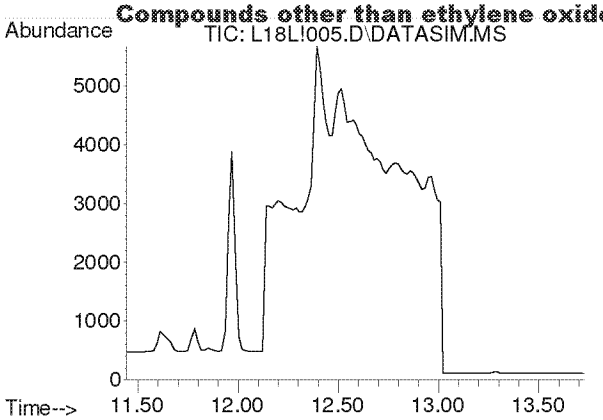
Ion	Ratio	Lower	Upper
29	100		
15	20.0	16.2	24.4
44	0.0	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

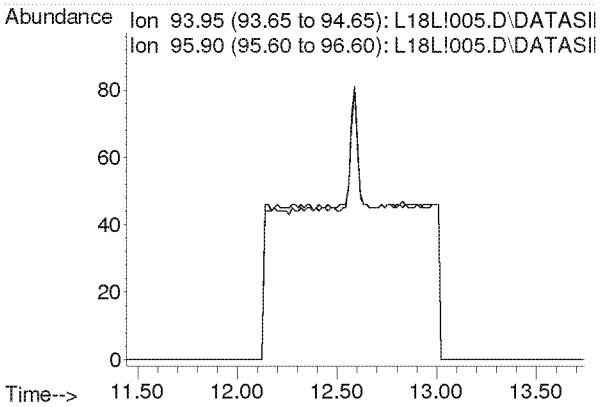


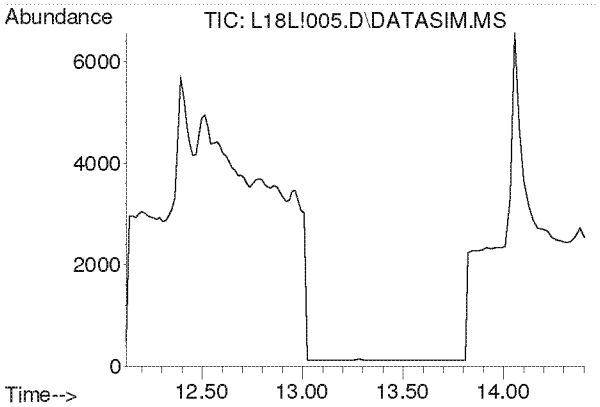
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



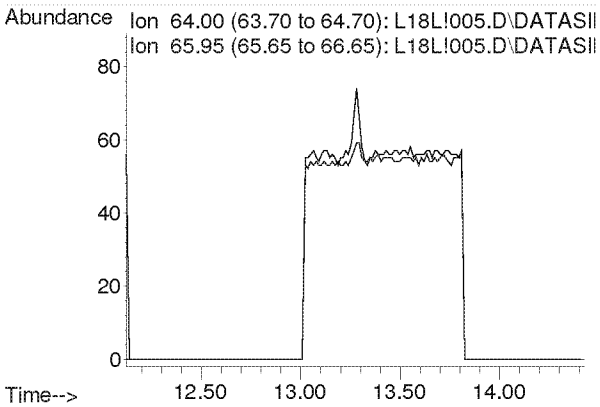


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

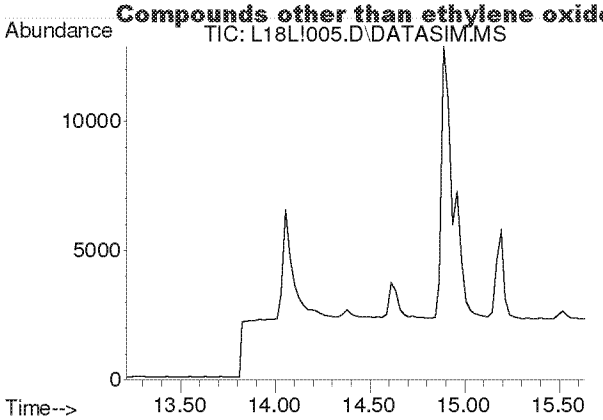
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

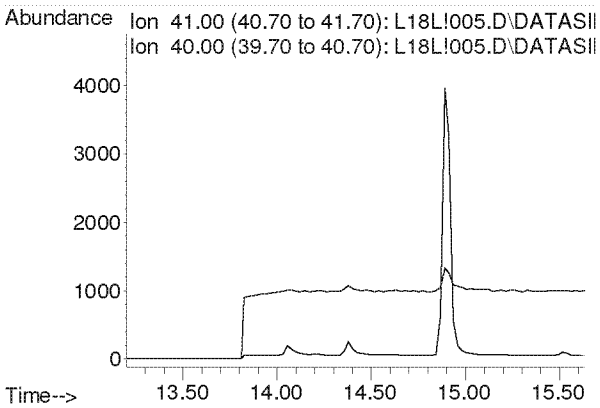


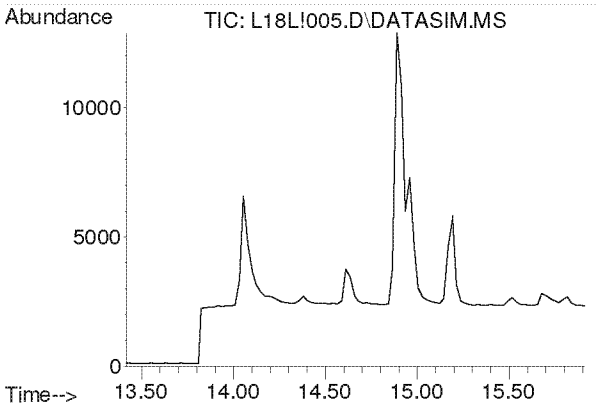
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



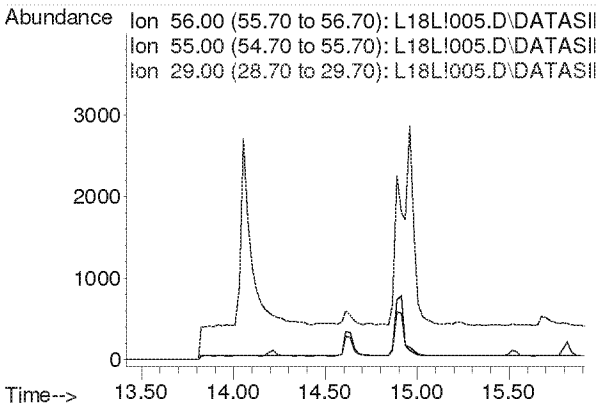


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

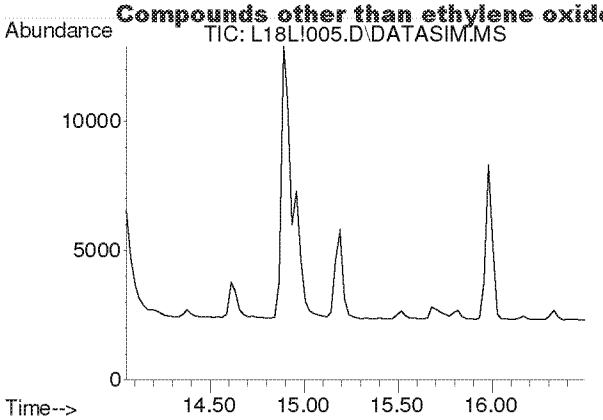
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

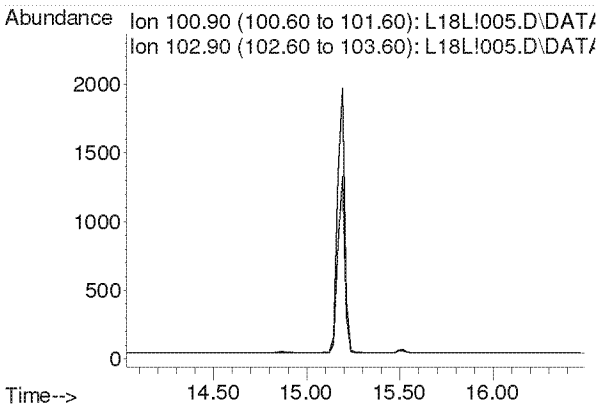


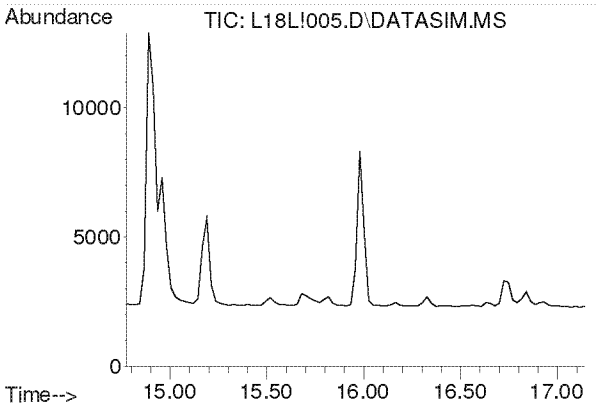
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



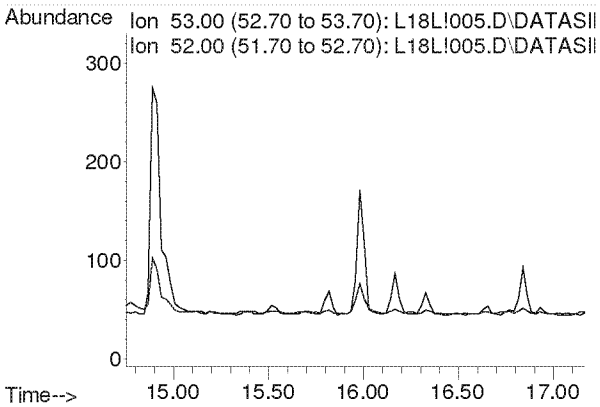


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

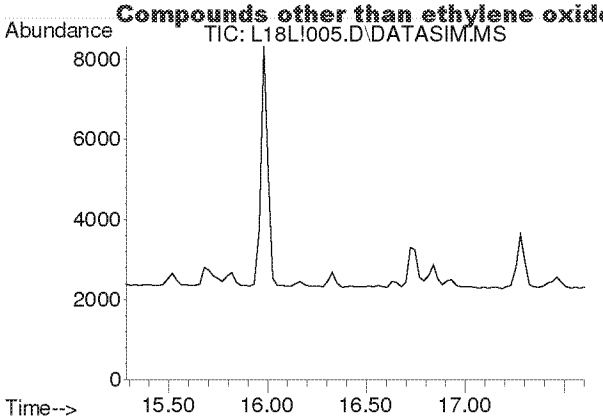
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

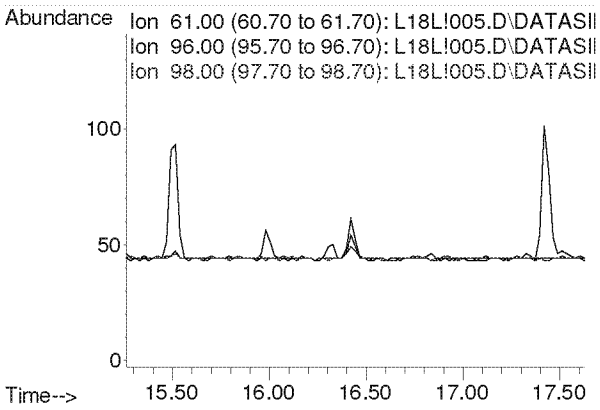


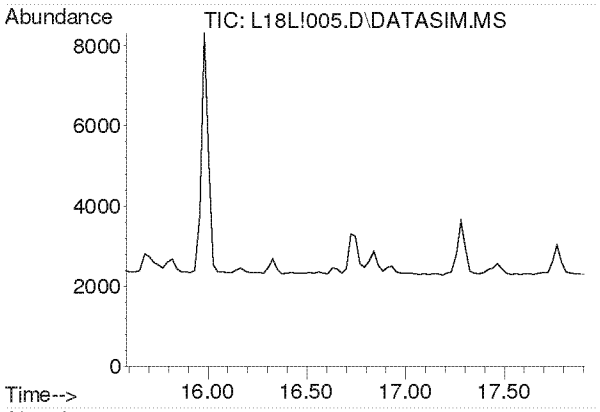
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



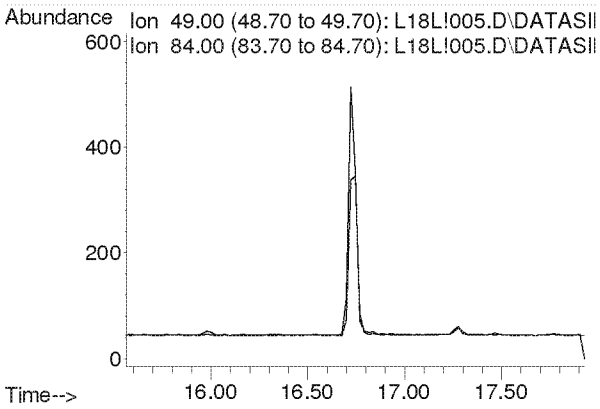


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

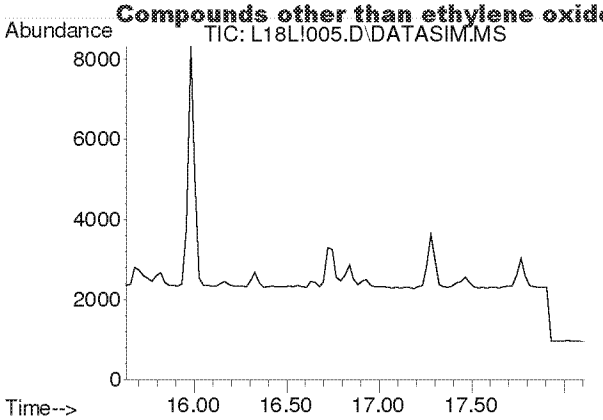
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

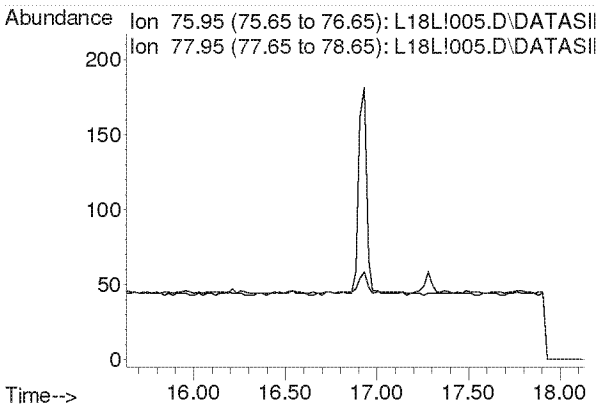


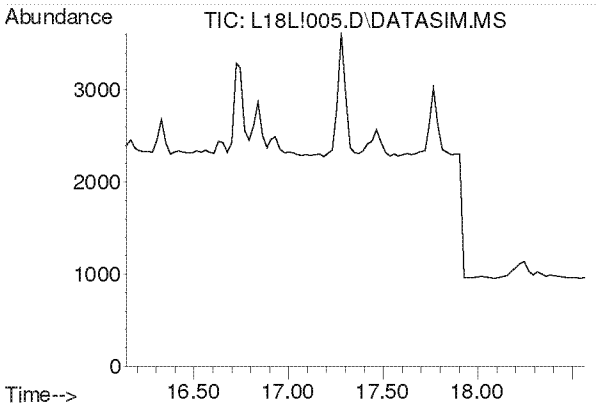
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



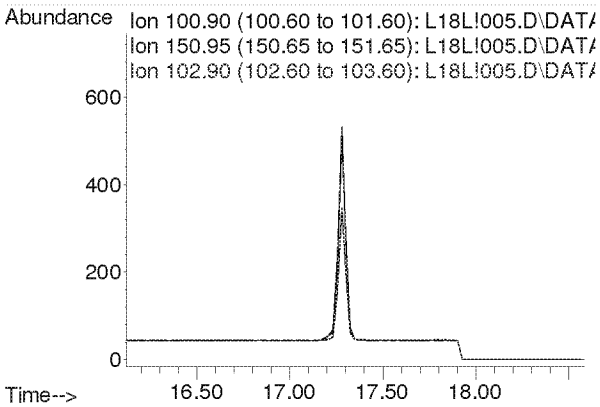


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

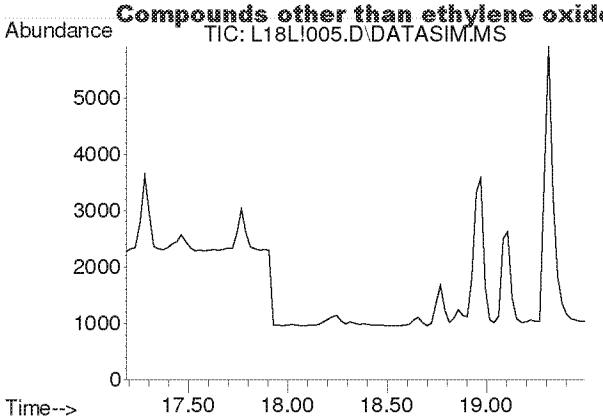
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

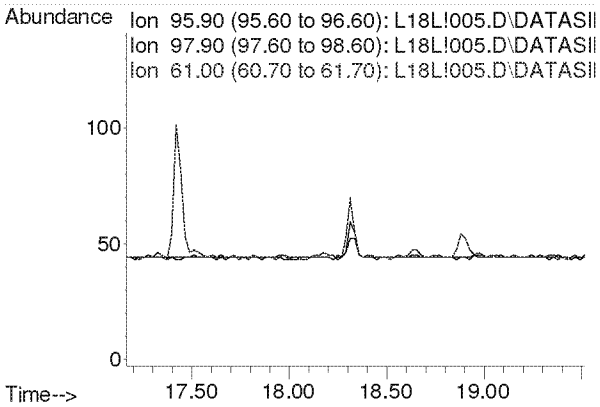


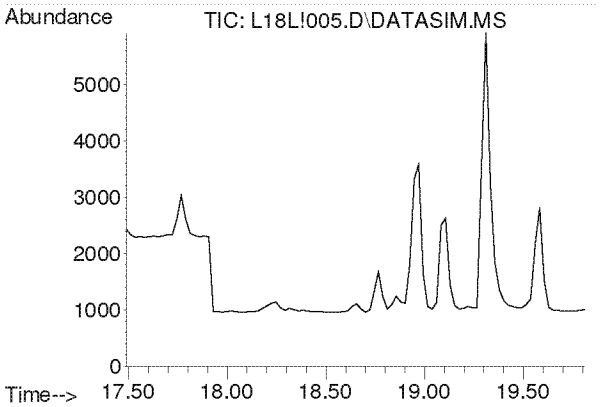
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



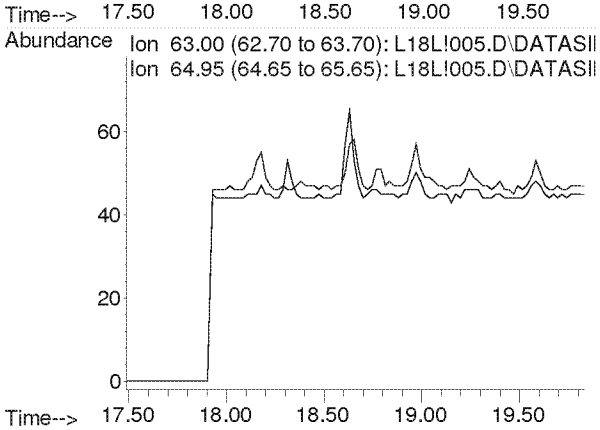


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

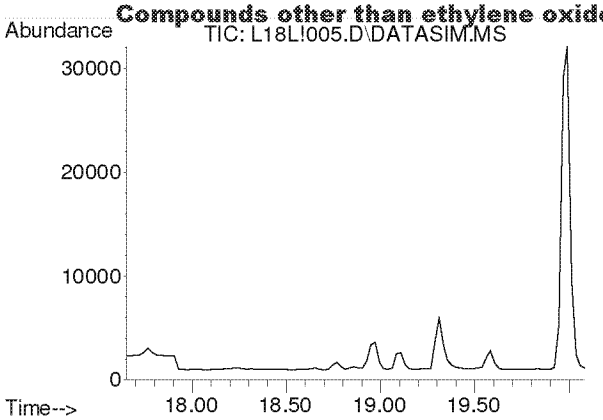
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

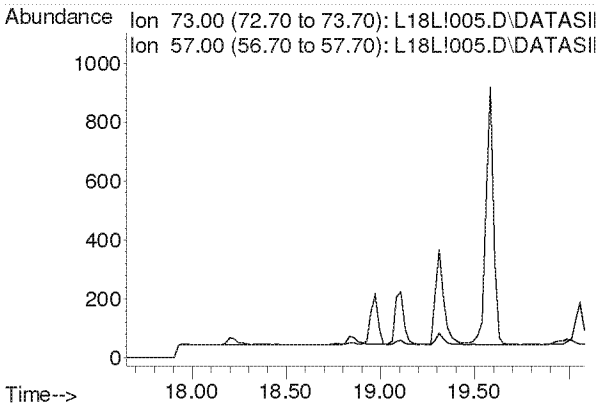


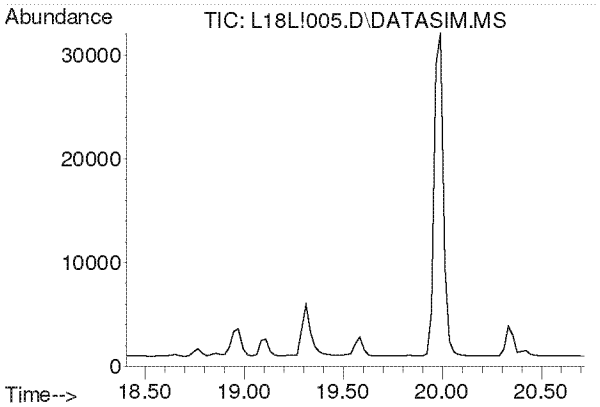
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



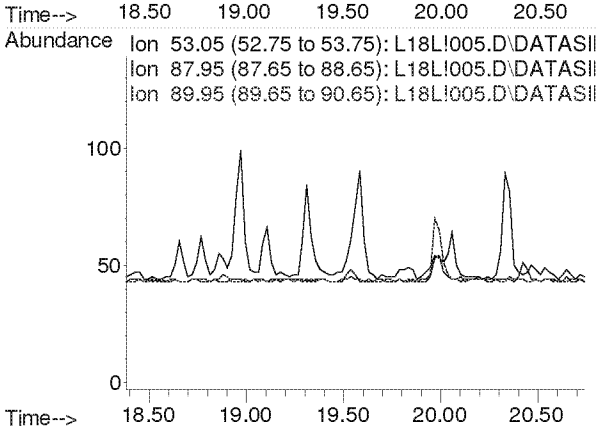


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

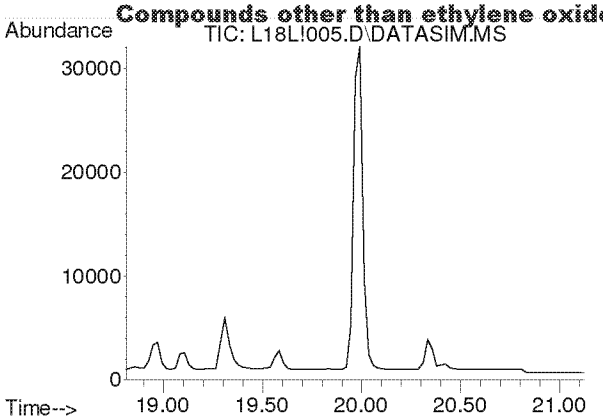
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

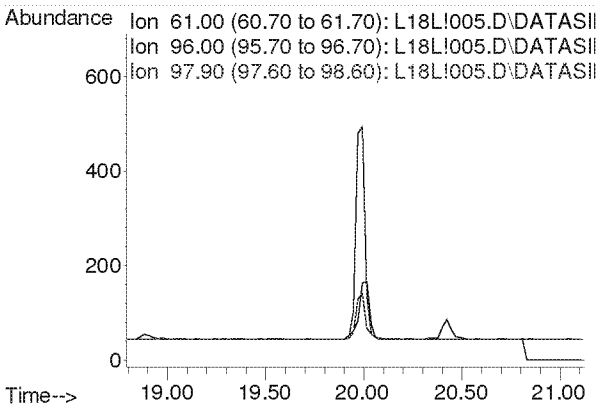


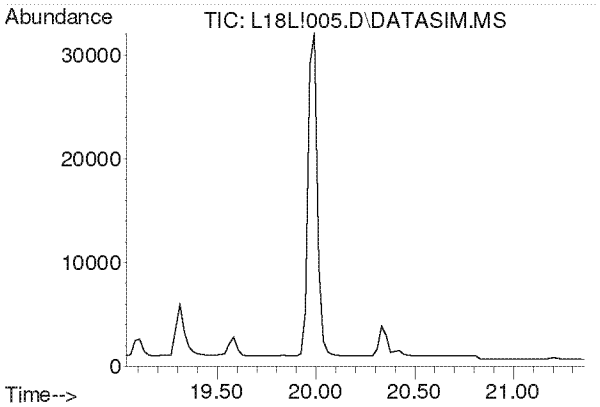
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



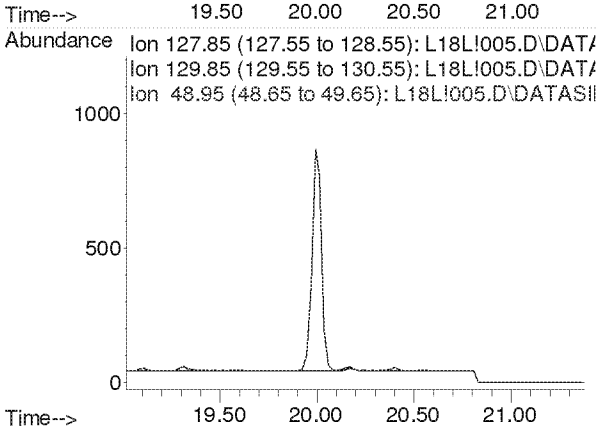


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

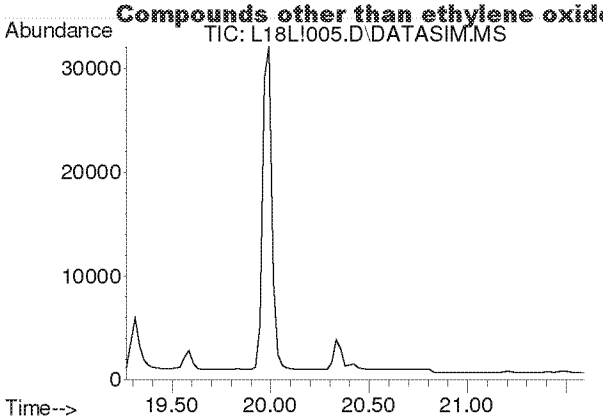
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

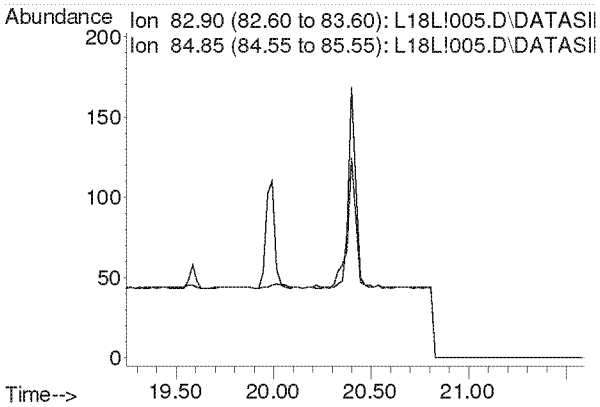


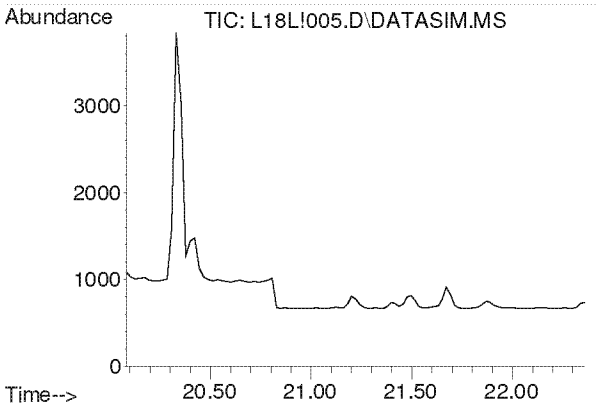
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



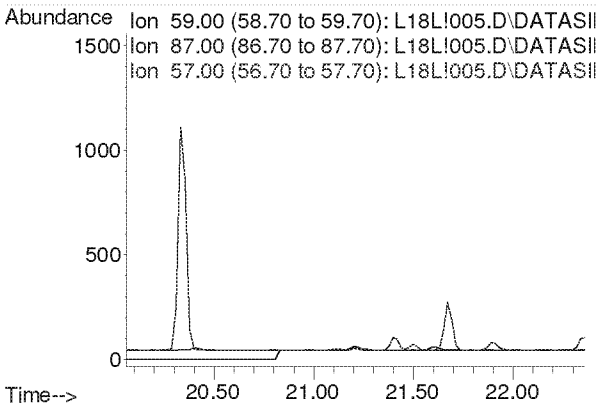


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

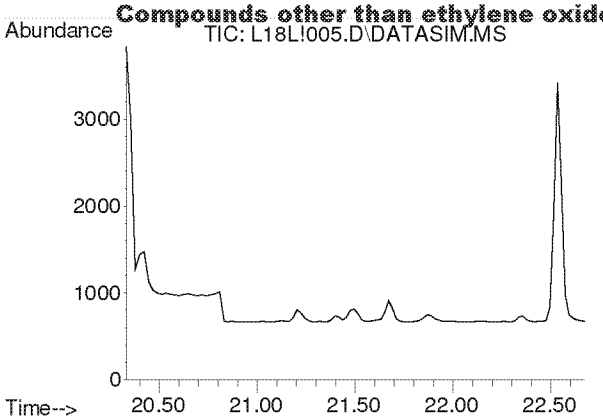
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

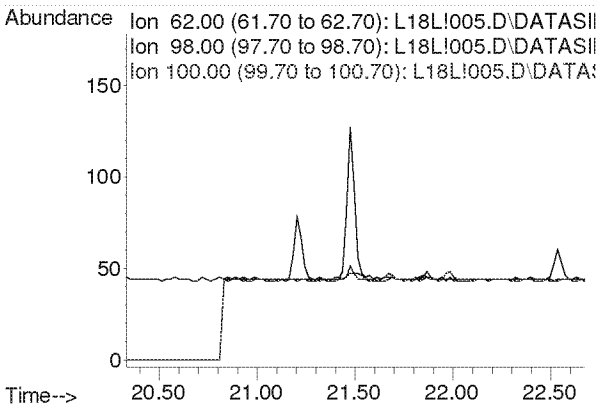


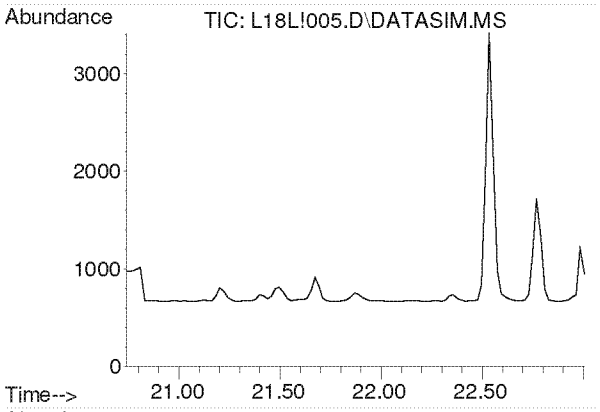
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



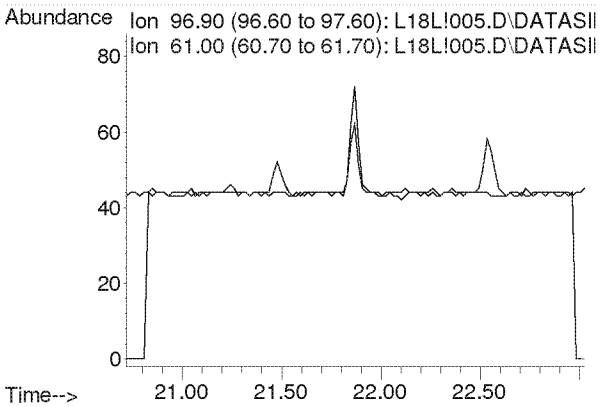


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

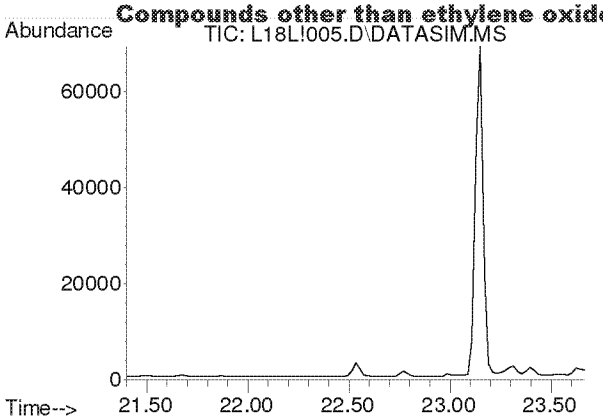
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

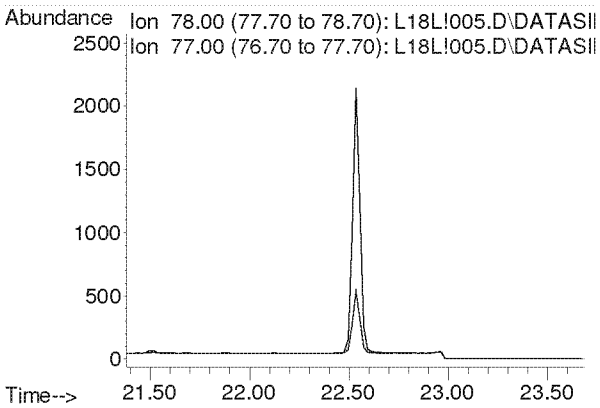


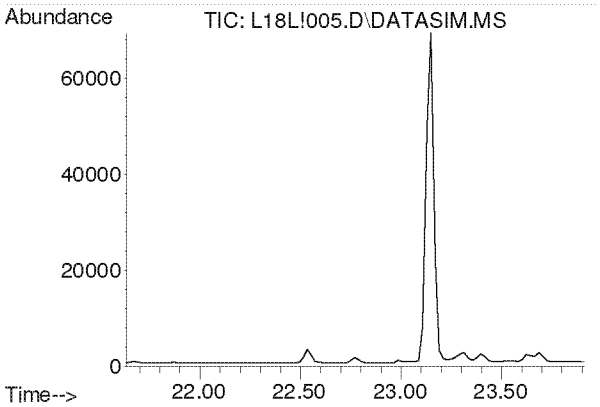
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



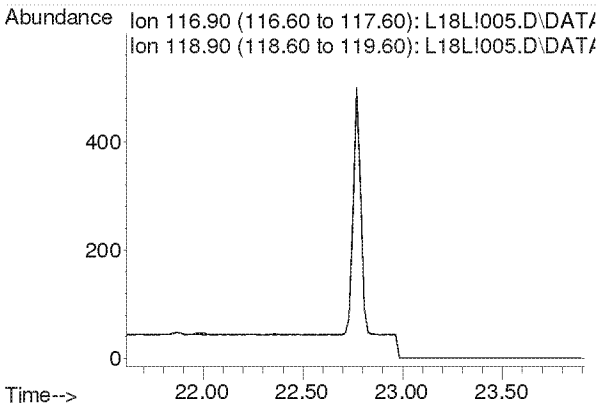


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

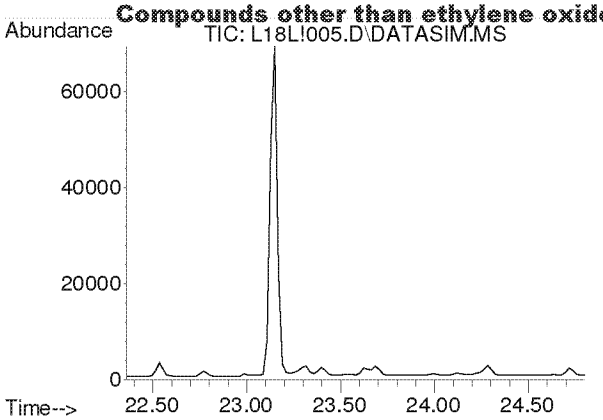
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

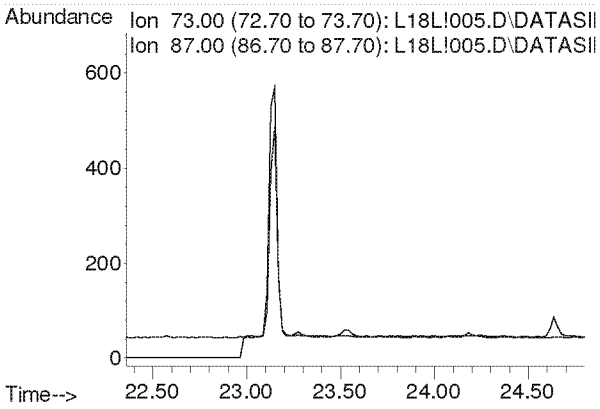


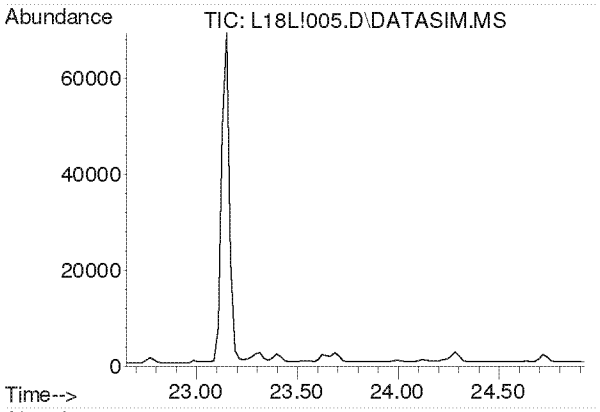
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



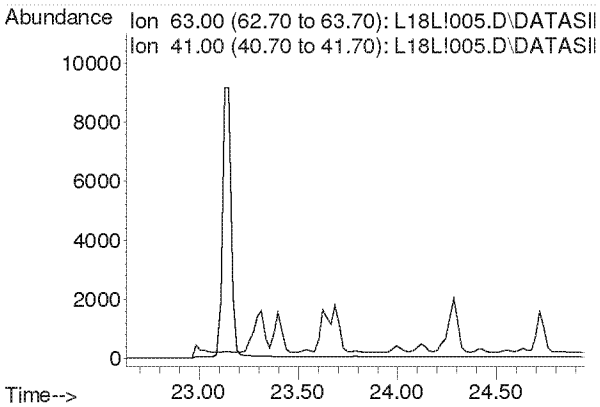


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

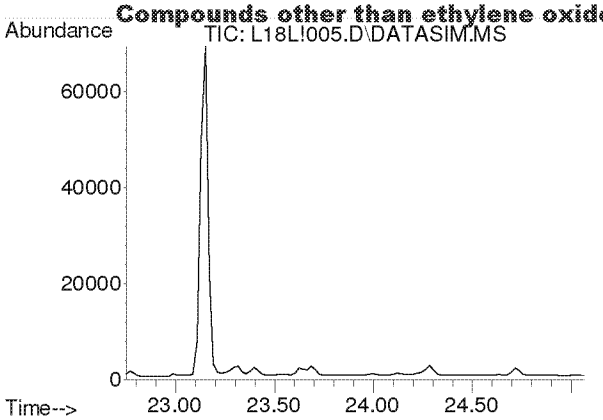
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

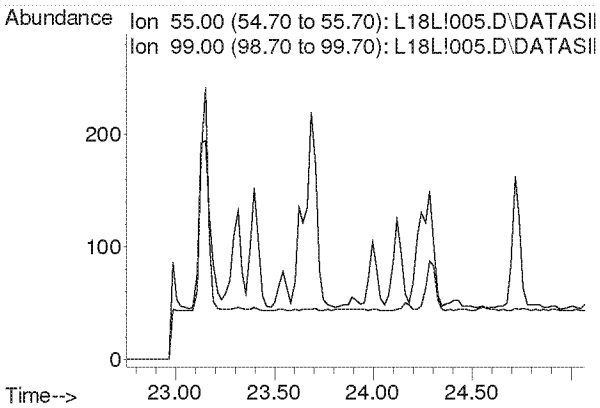


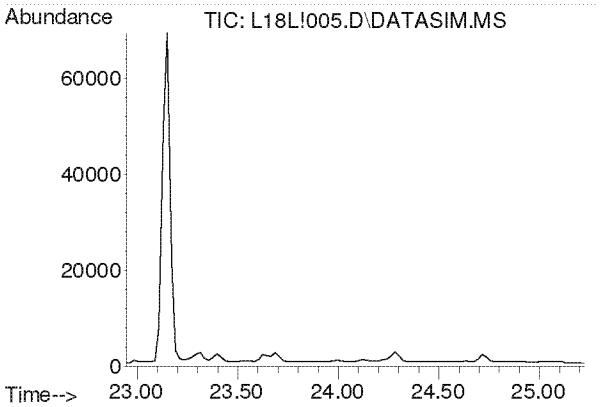
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



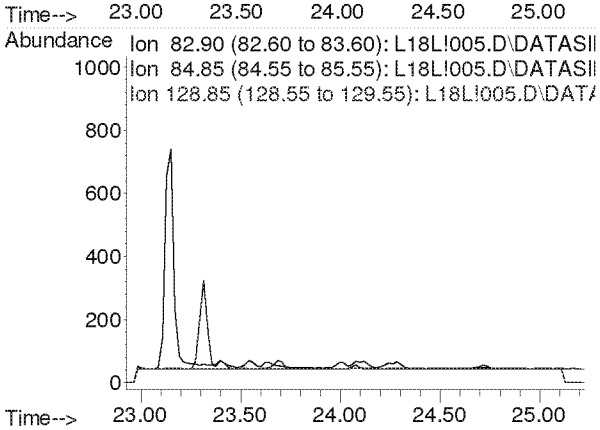


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

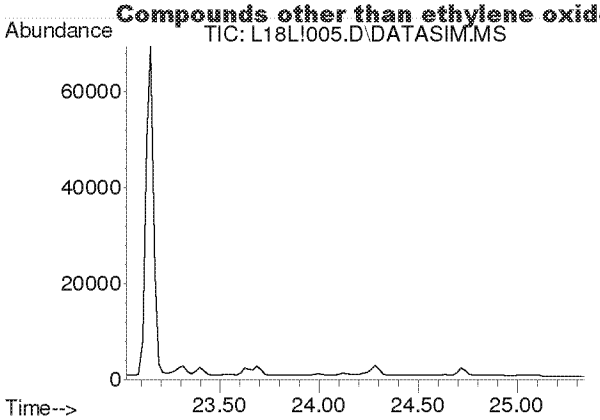
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

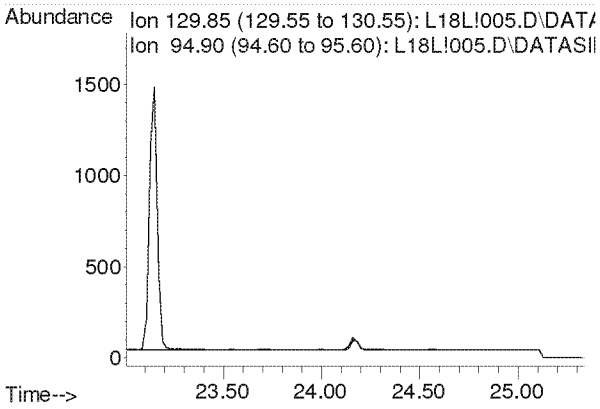


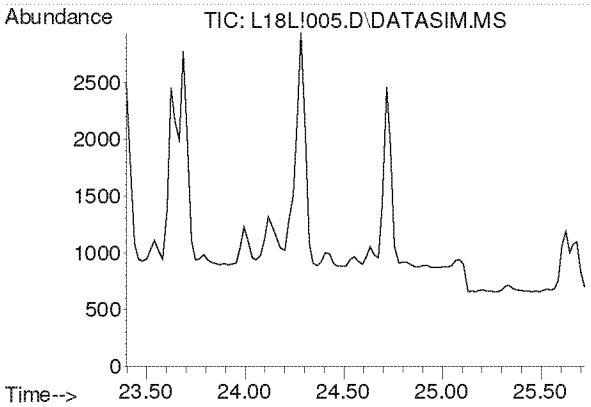
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



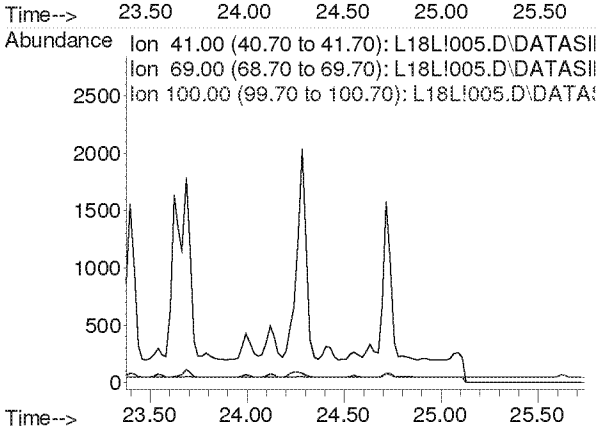


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

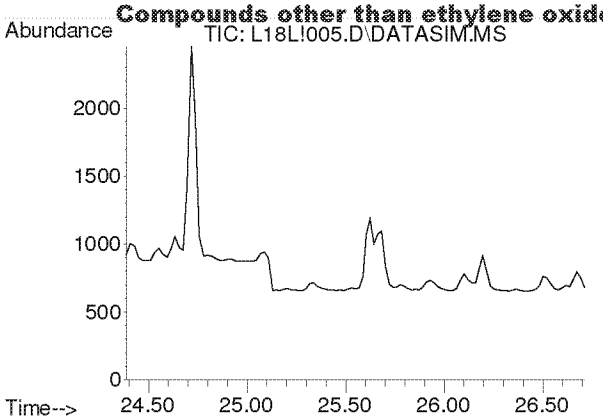
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

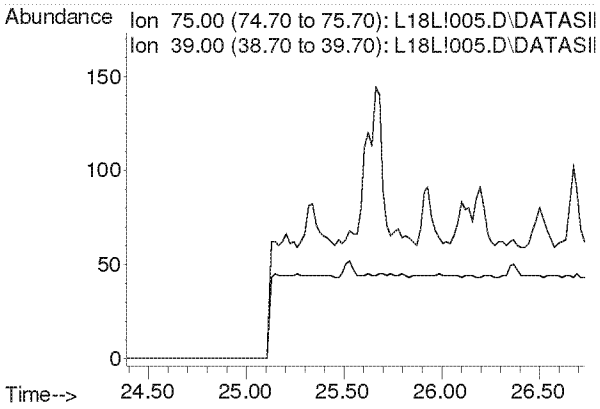


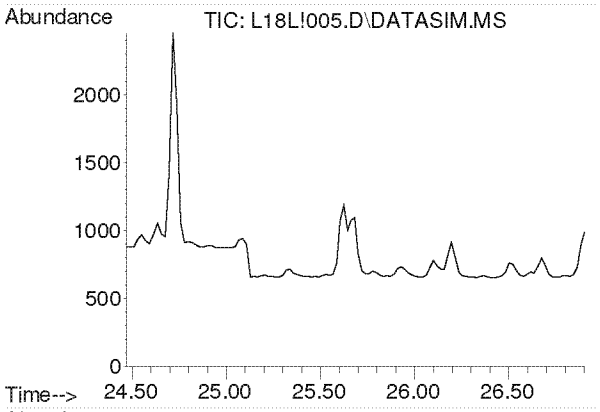
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



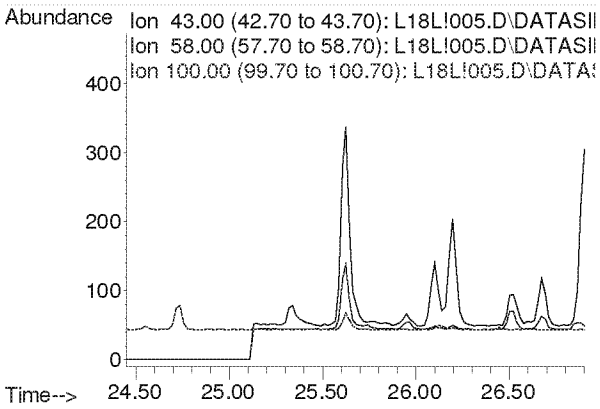


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

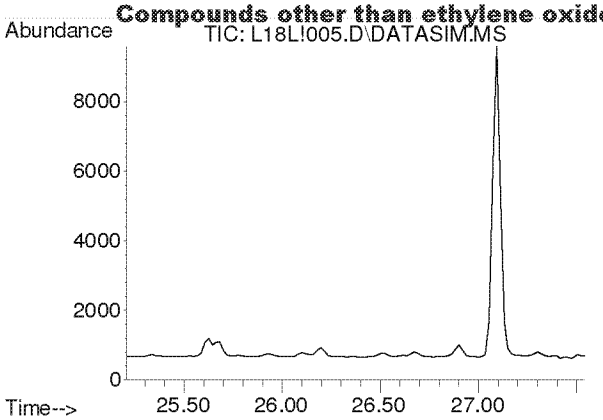
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

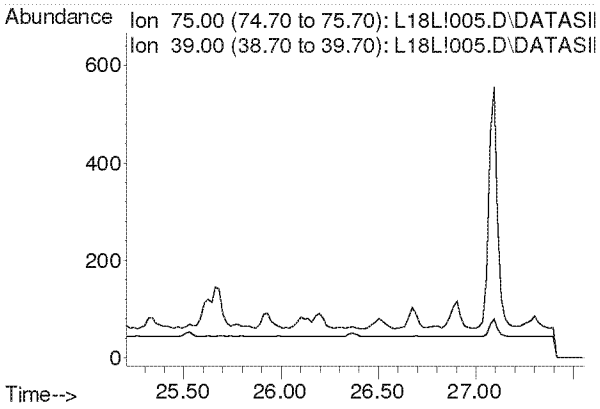


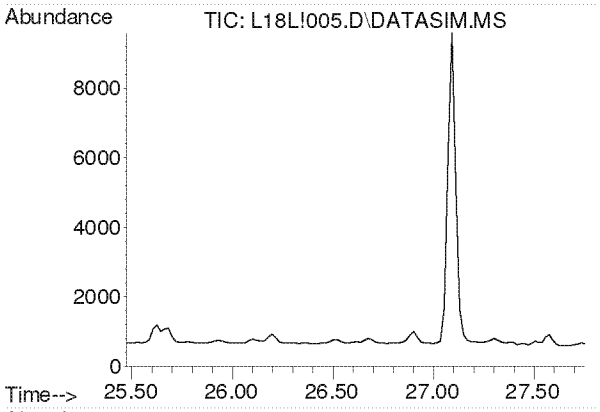
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



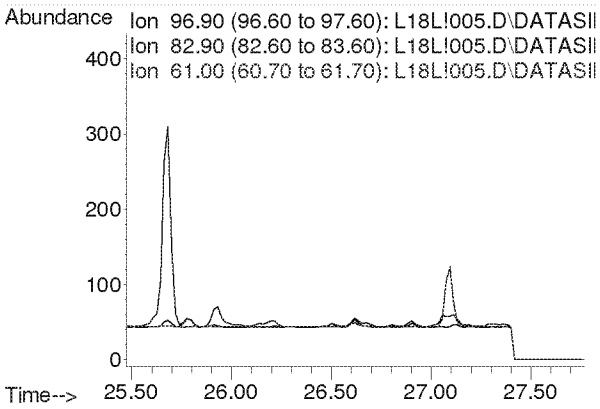


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

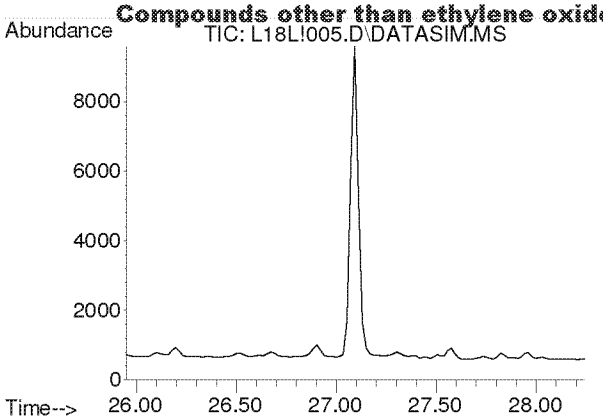
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

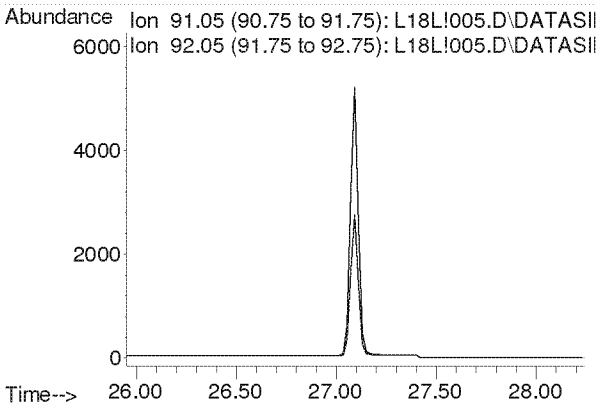


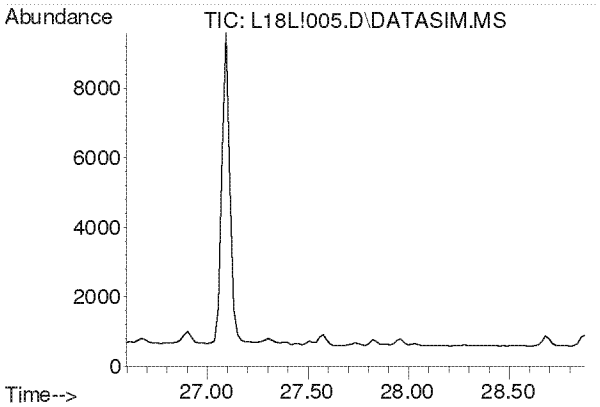
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



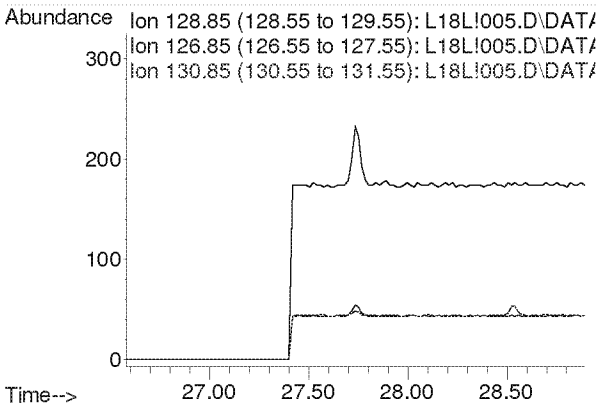


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

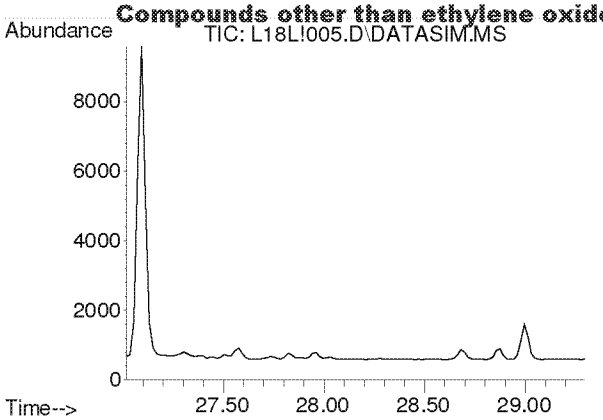
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

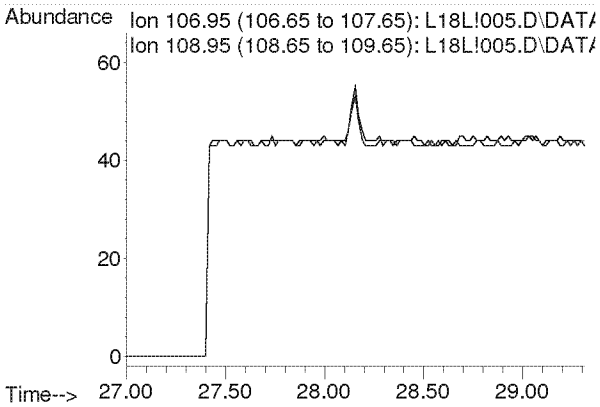


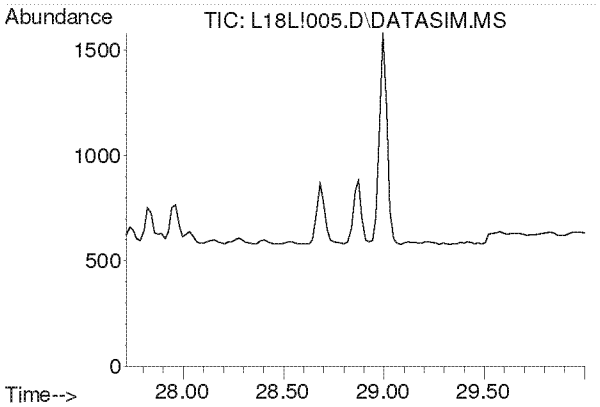
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



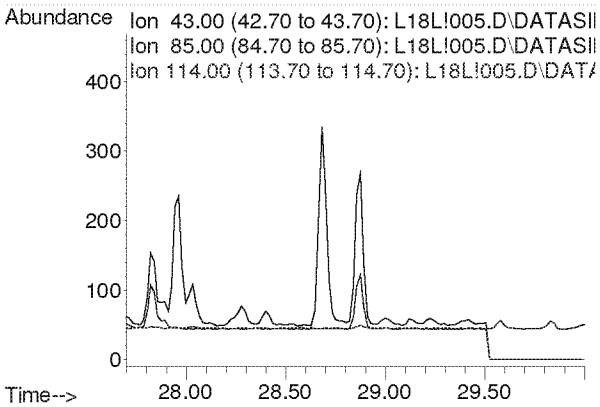


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

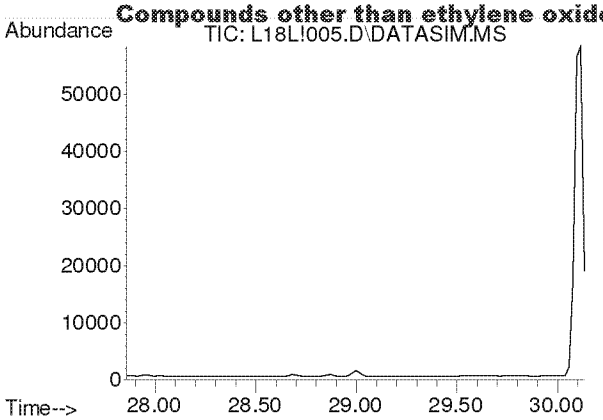
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

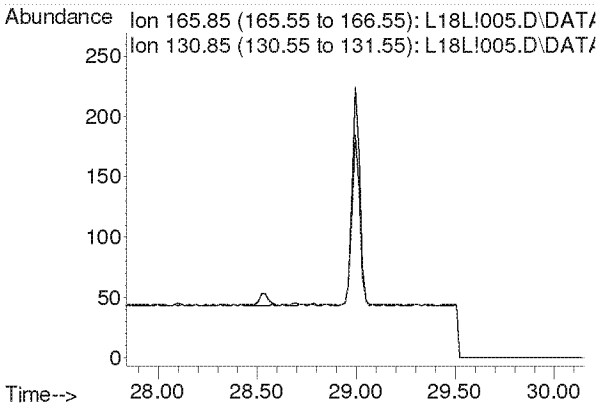


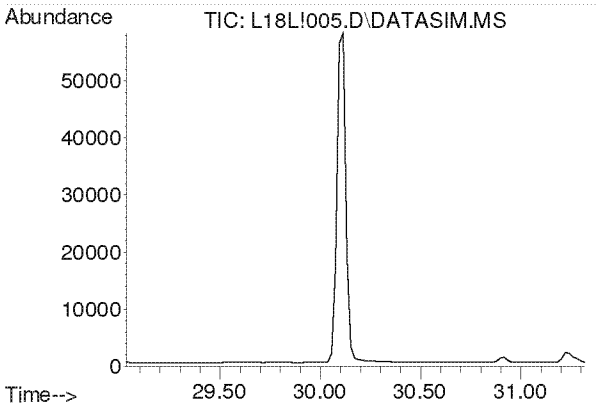
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



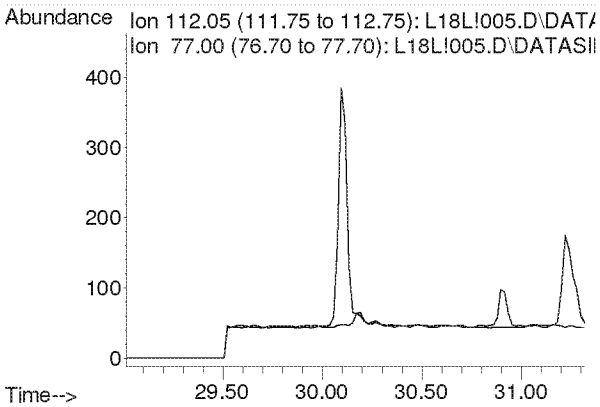


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

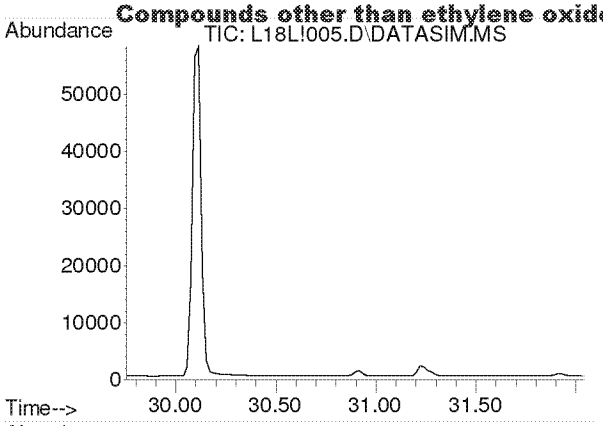
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

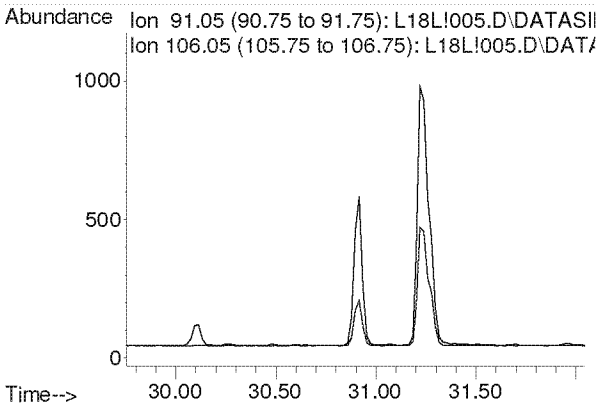


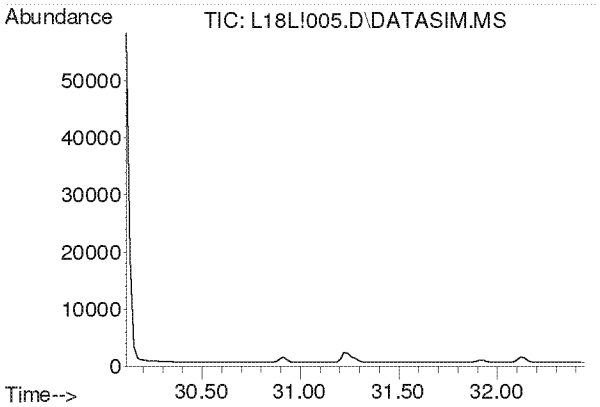
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



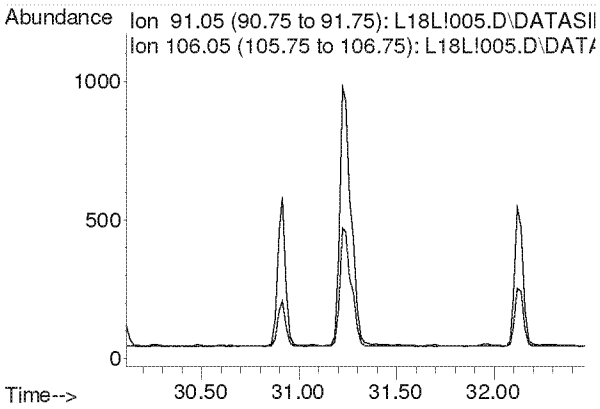


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

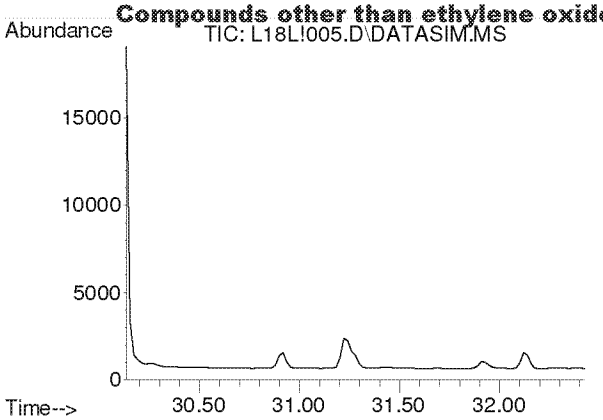
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

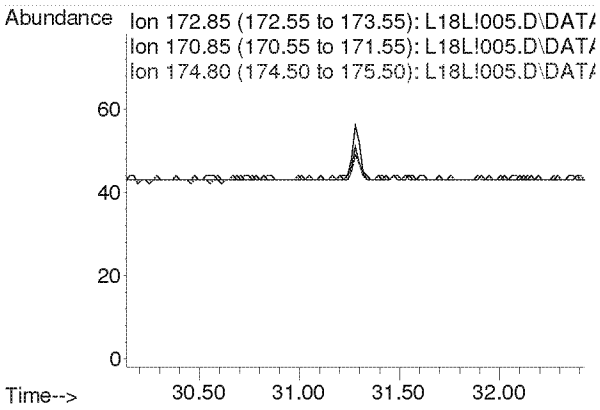


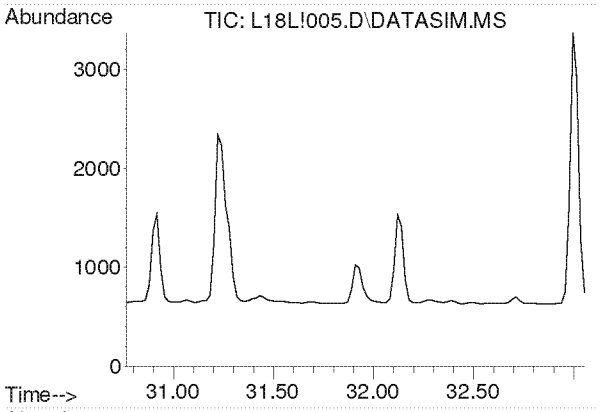
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



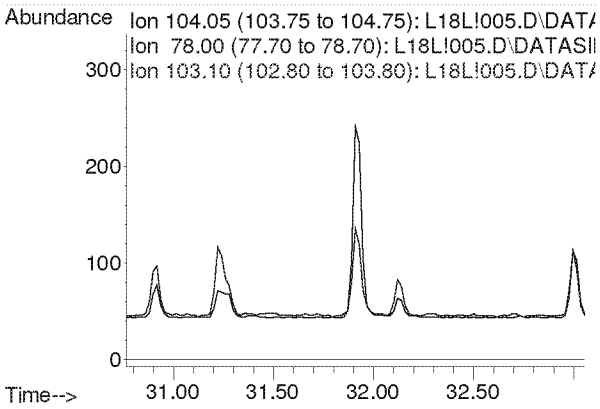


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

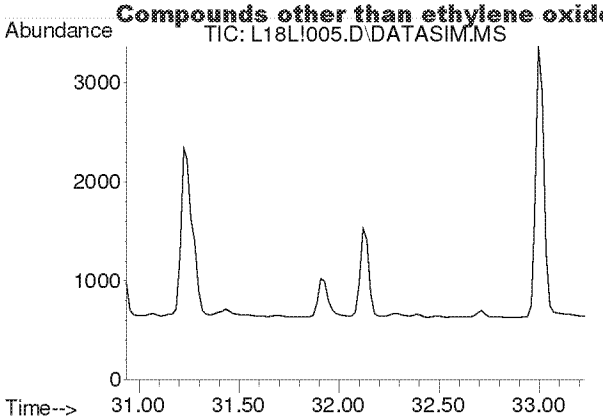
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

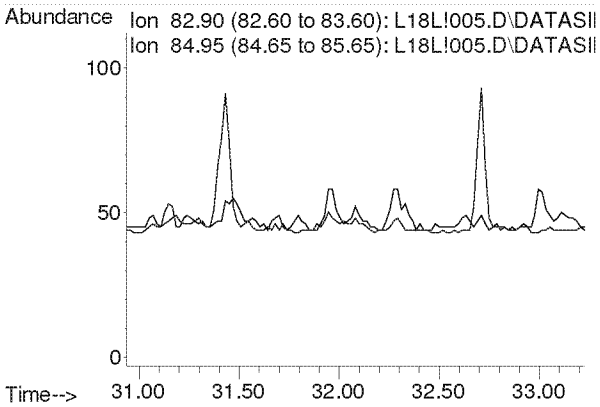


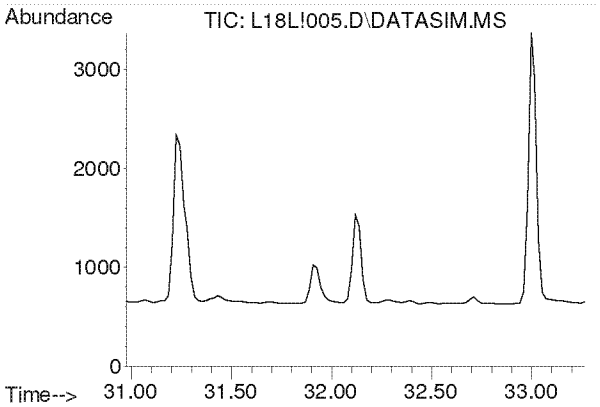
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



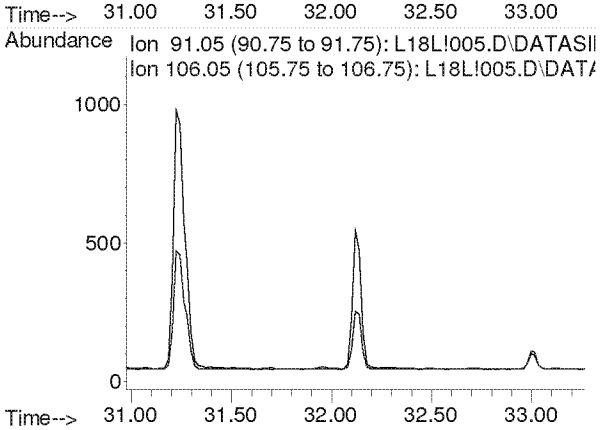


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

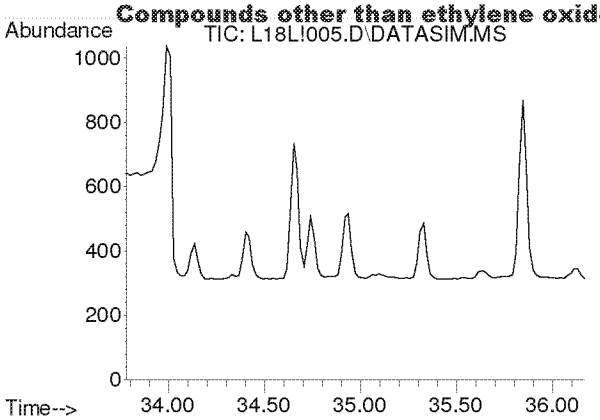
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

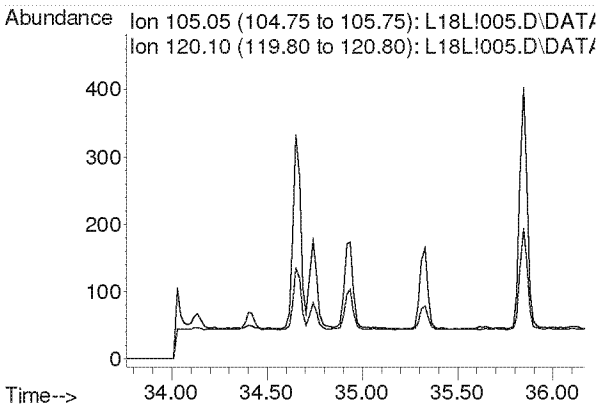


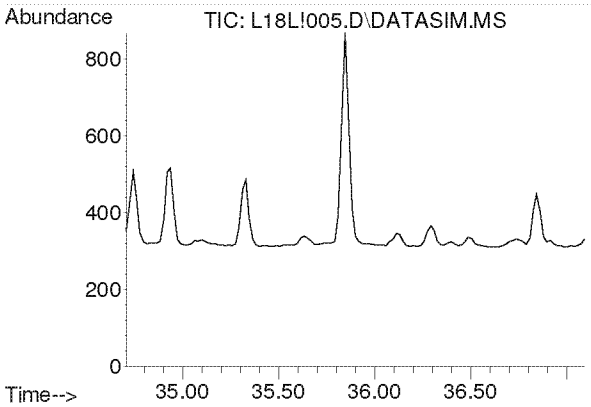
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



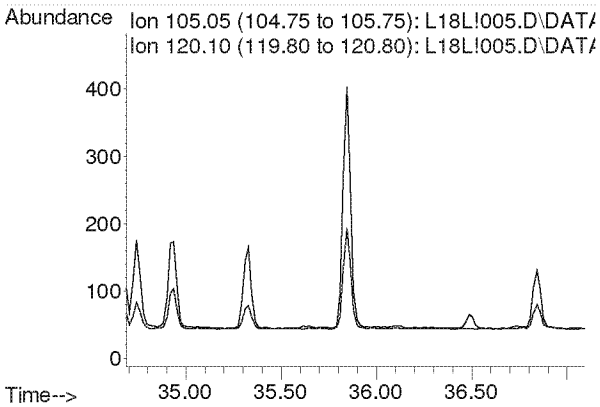


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

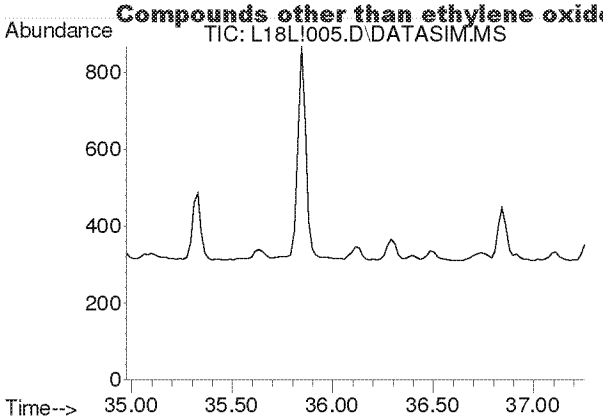
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

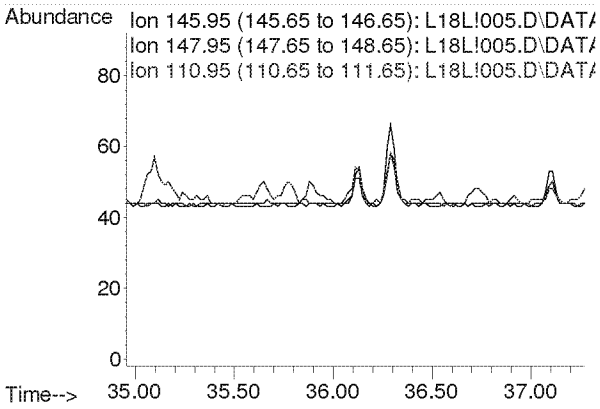


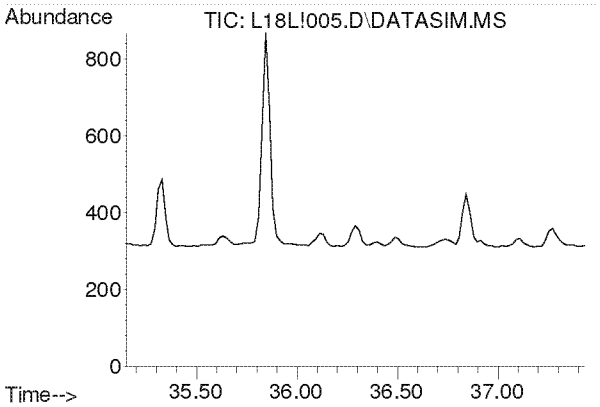
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



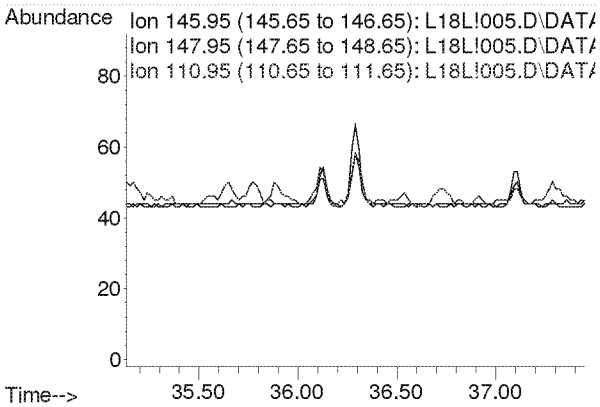


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

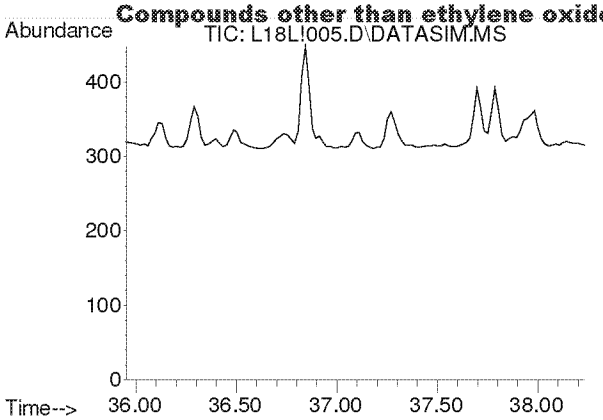
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

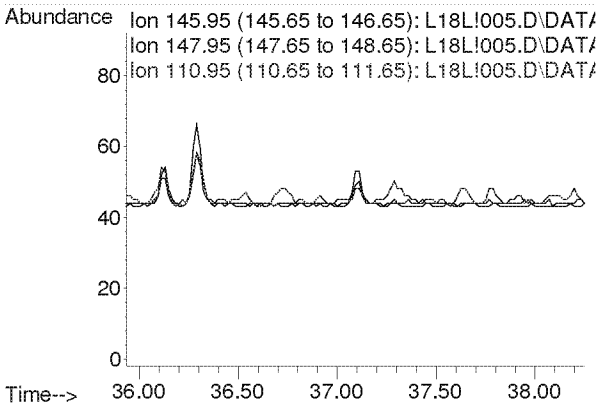


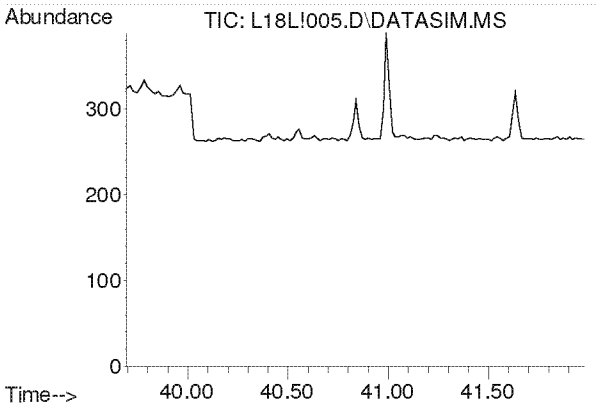
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



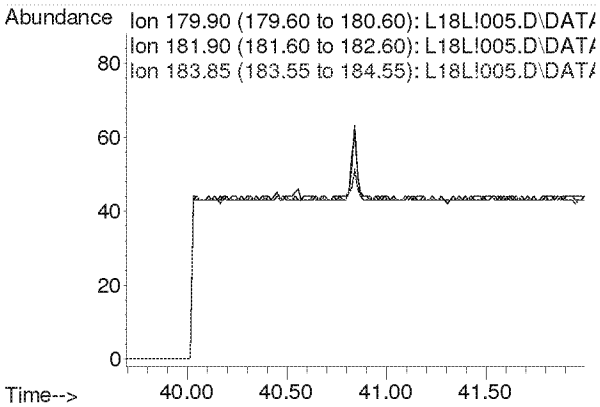


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

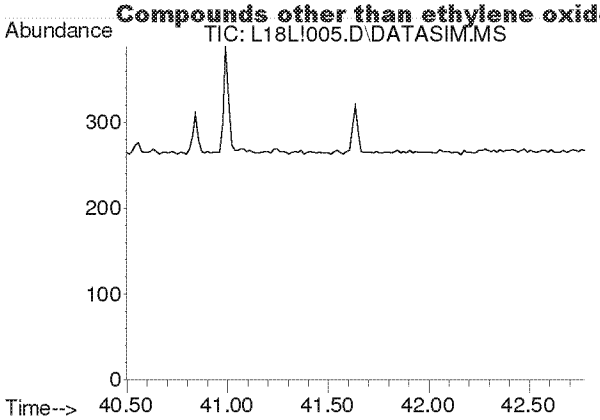
Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.

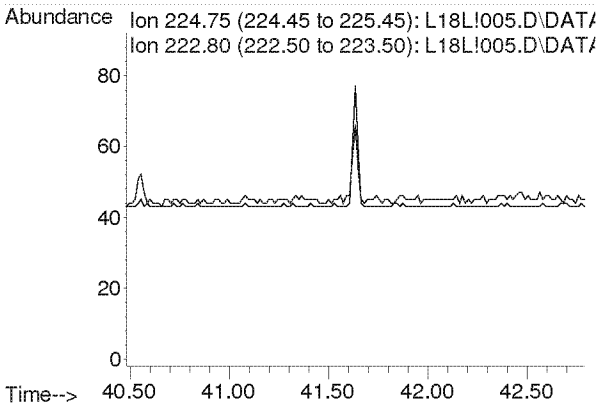


#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!005.D
Acq: 28 Dec 2018 3:31 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4



Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!006.D
Acq On : 28 Dec 2018 4:33 pm
Operator : MAH
Sample : 8121821-04
Misc : WB VILLAGE HALL C2 12/14/18
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:20:24 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.970	66	57116	4.7700 ppbv	-0.02
29) IS-1,4-Difluorobenzene	23.150	114	136374	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.096	117	100335	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D. d	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.395	29	4038	1.1828 ppbv #	41
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. 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. d	
21) 1,1-Dichloroethane	0.000	63	0	N.D. d	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D. d	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D. d	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. 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. d	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. d	
46) 1,2-Dibromoethane	0.000	107	0	N.D. 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. d	
50) Ethylbenzene	0.000	91	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantification Report 1 (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!006.D
Acq On : 28 Dec 2018 4:33 pm
Operator : MAH
Sample : 8121821-04
Misc : WB VILLAGE HALL C2 12/14/18
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:20:24 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

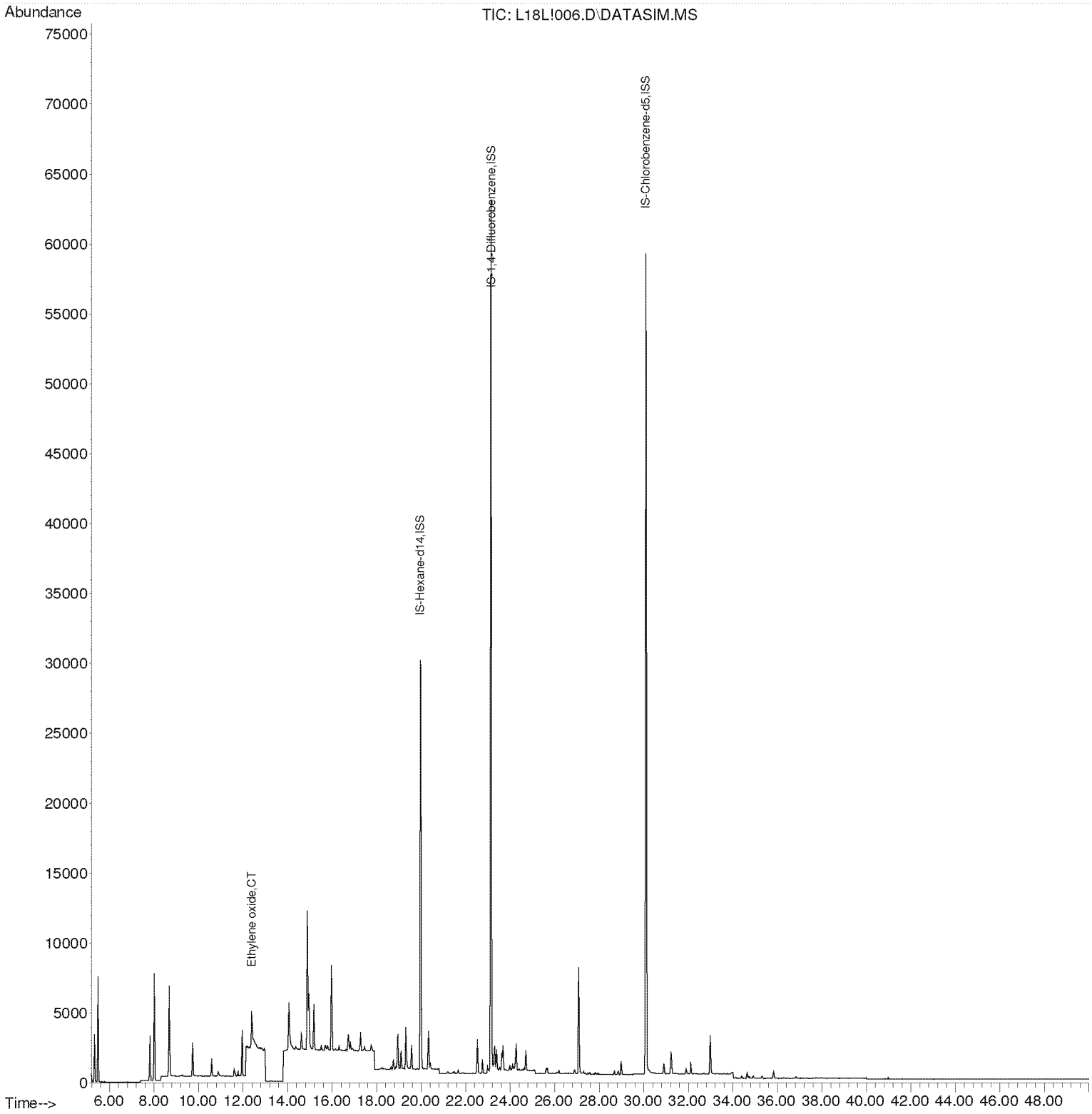
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene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

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

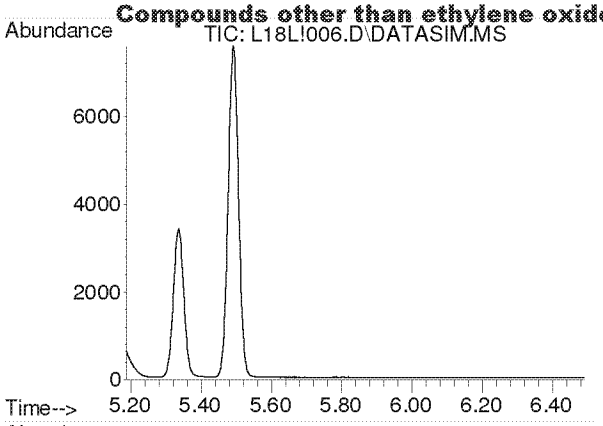
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!006.D
Acq On : 28 Dec 2018 4:33 pm
Operator : MAH
Sample : 8121821-04
Misc : WB VILLAGE HALL C2 12/14/18
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 03 13:07:10 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



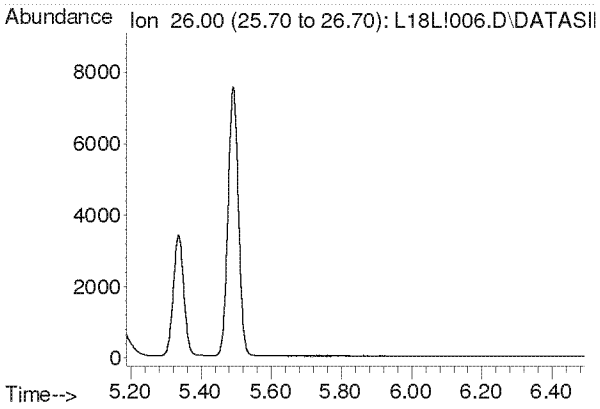
Compounds other than ethylene oxide were not quantitated.

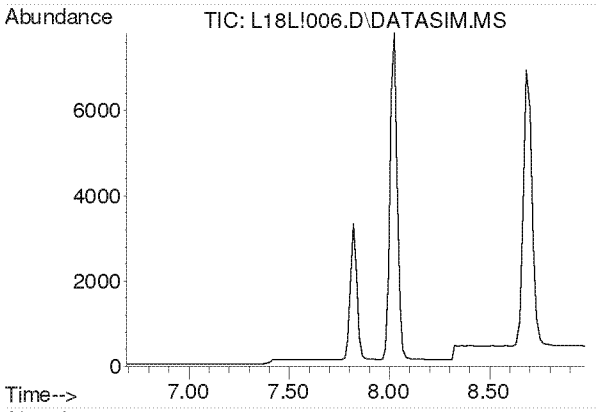


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 26



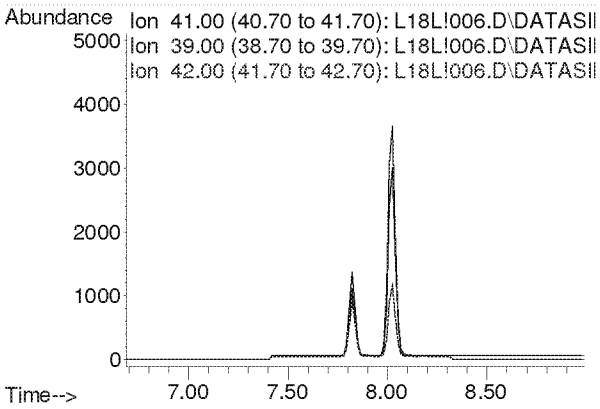


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

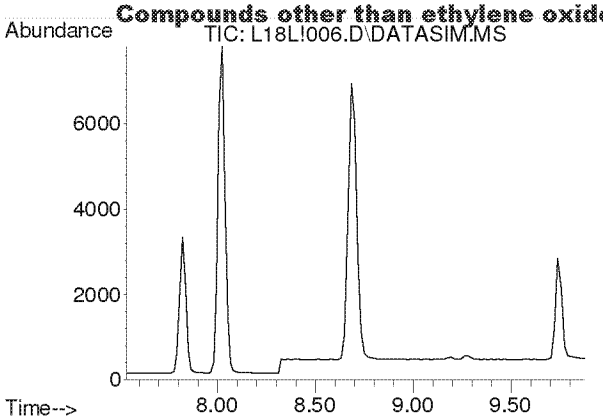
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

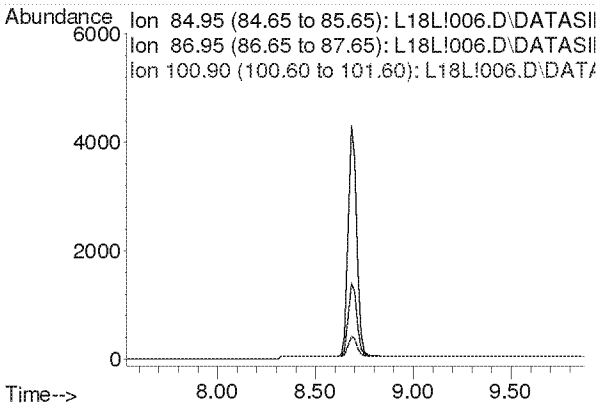


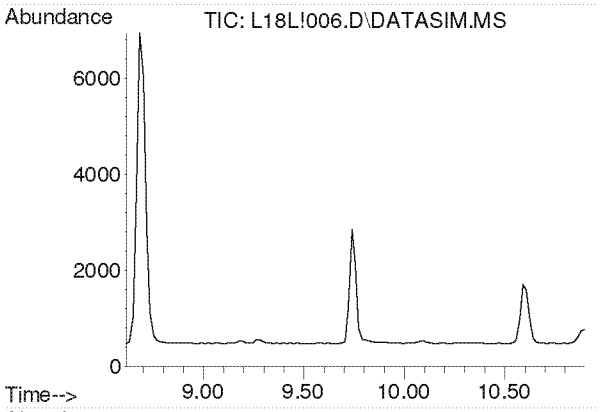
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



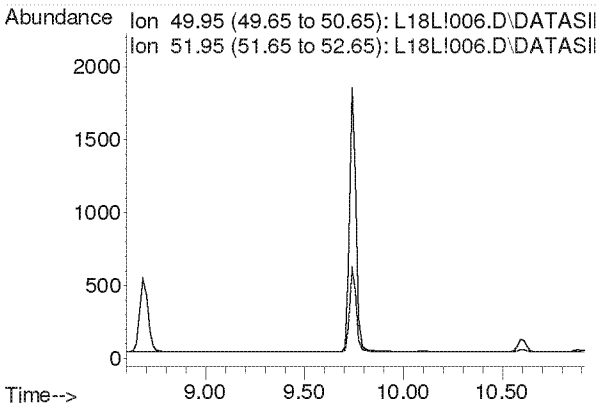


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

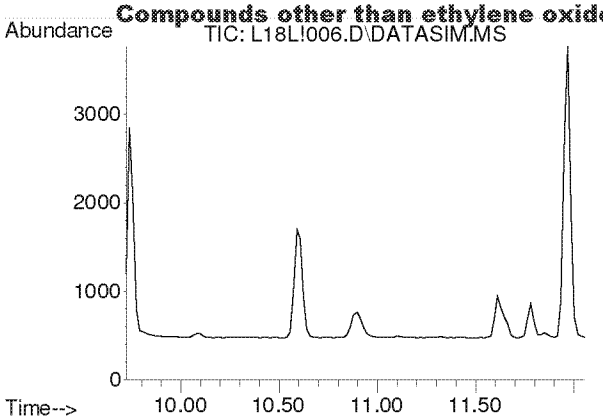
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

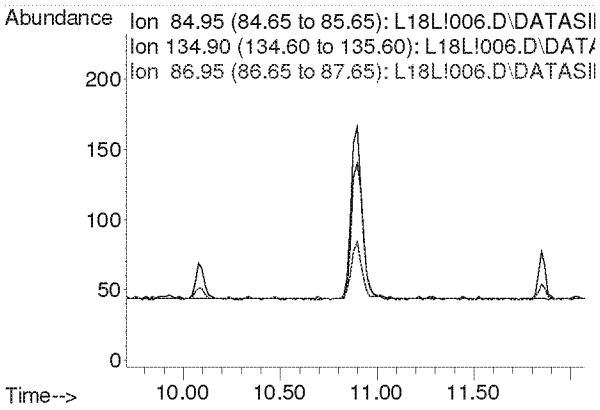


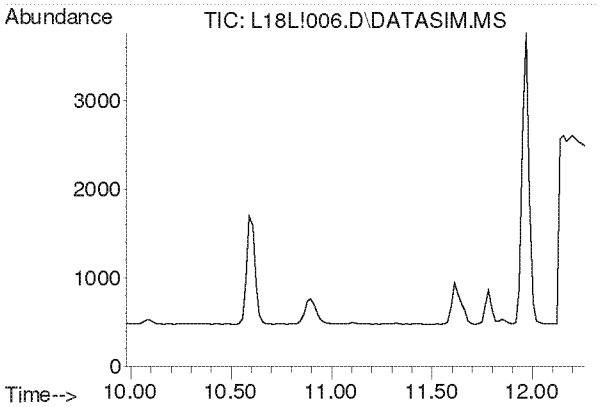
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



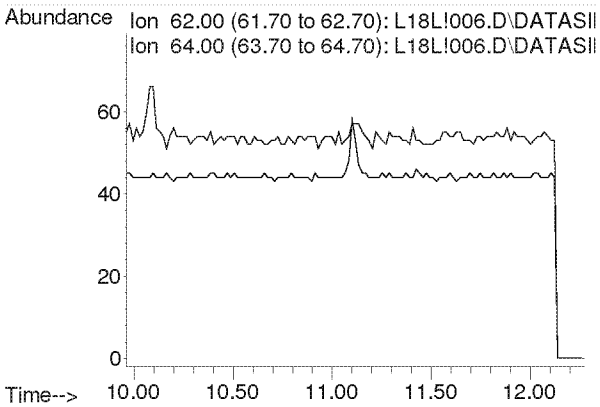


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

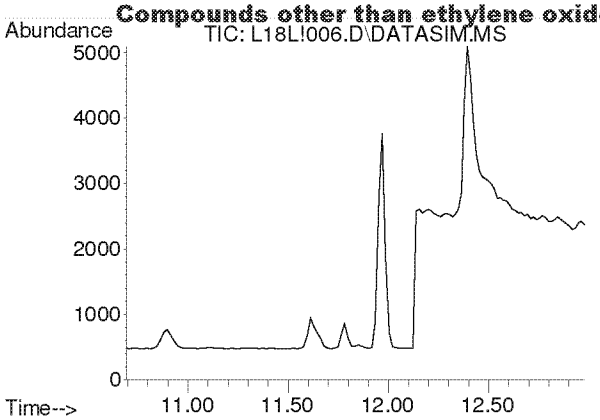
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

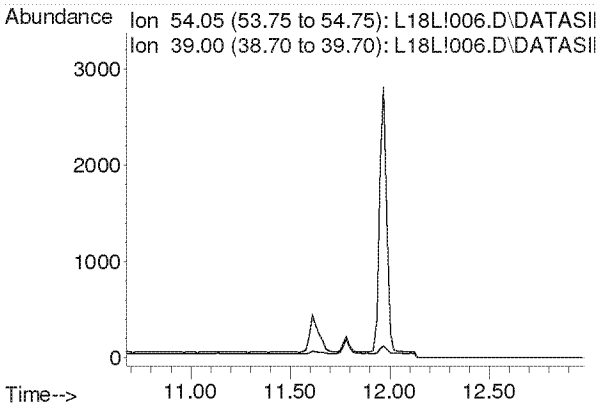


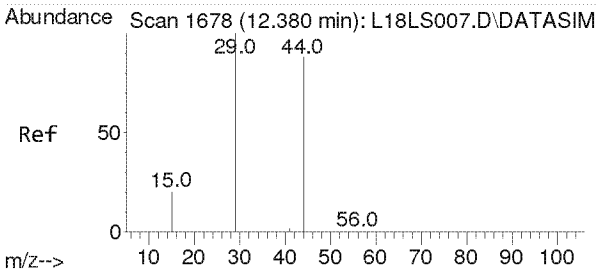
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

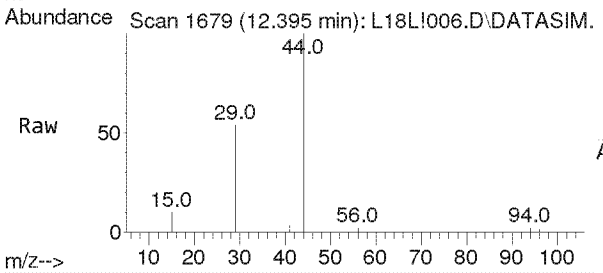


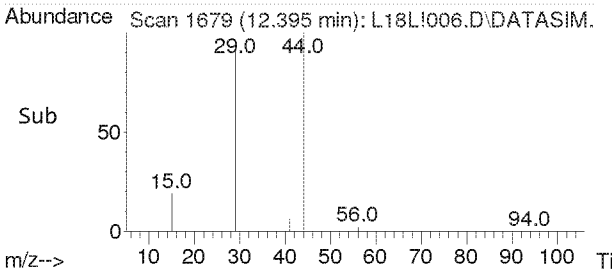


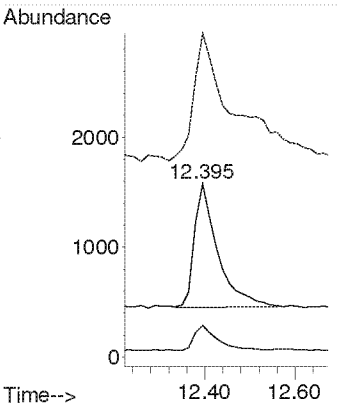
#9
Ethylene oxide
Concen: 1.183 ppbv
RT: 12.395 min Scan# 1679
Delta R.T. 0.015 min
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 29 Resp: 4038

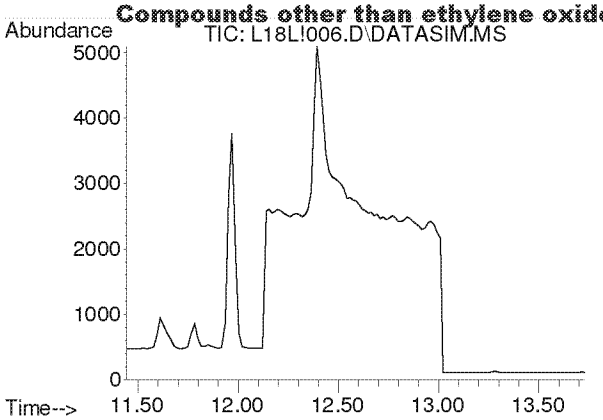
Ion	Ratio	Lower	Upper
29	100		
15	20.0	16.2	24.4
44	158.2	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

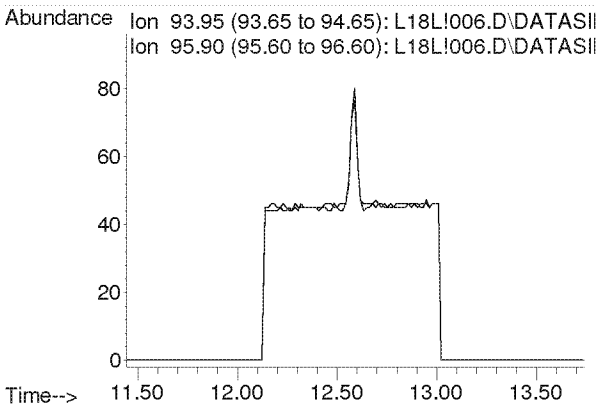


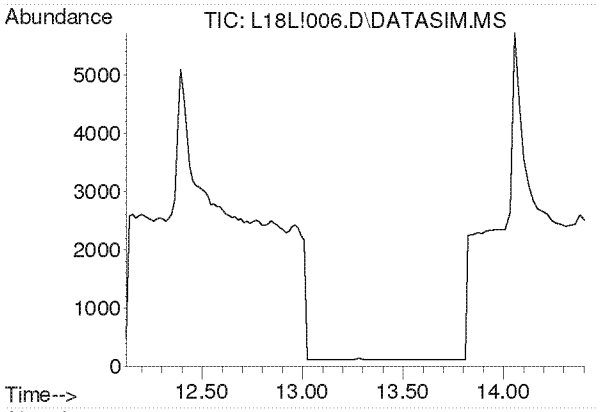
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



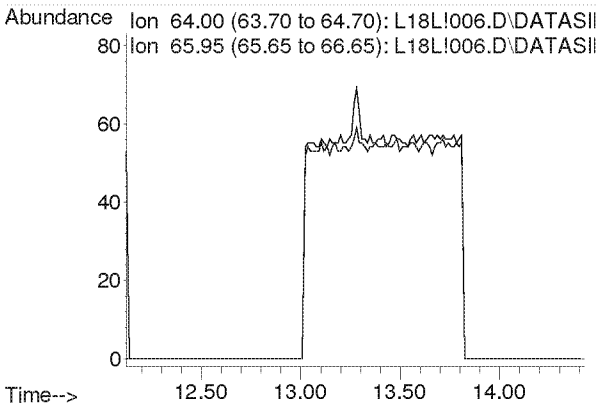


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

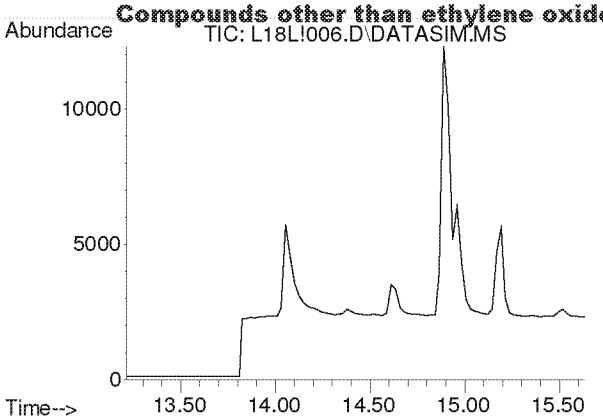
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

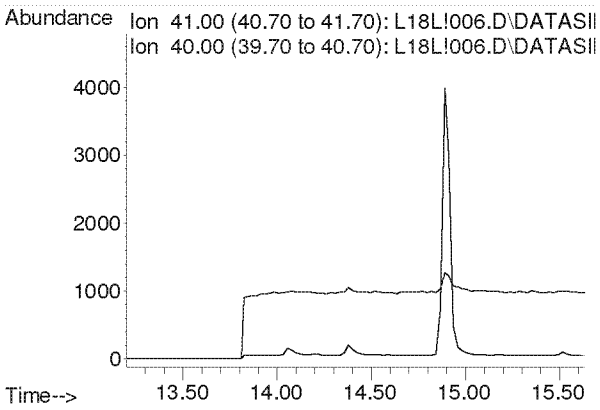


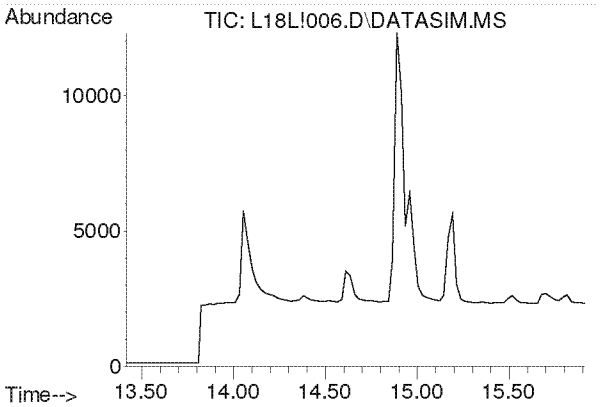
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



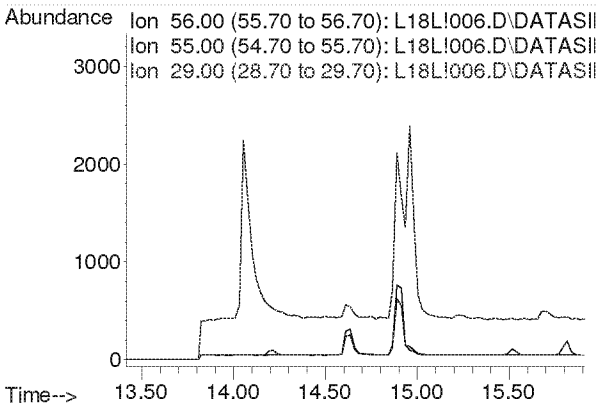


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

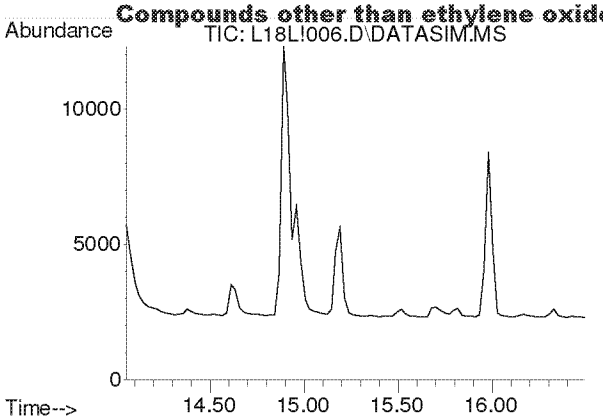
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

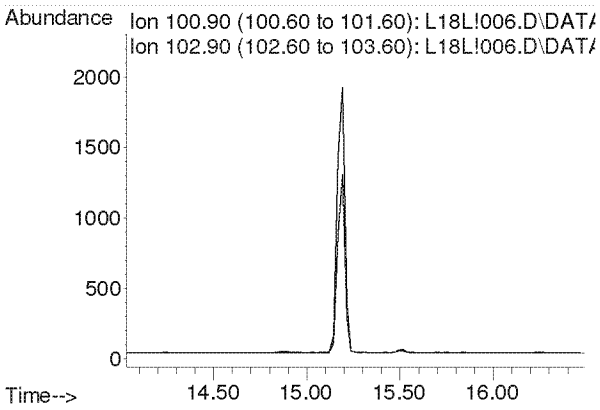


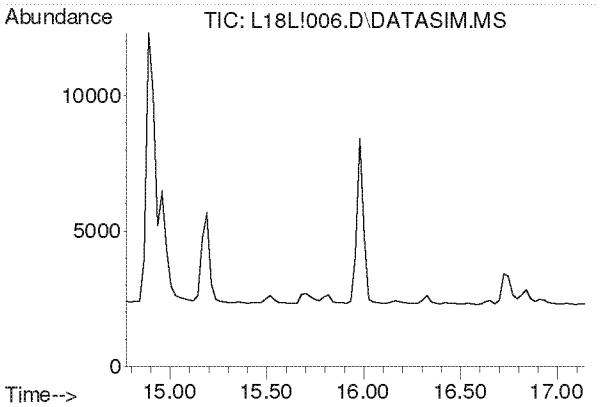
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



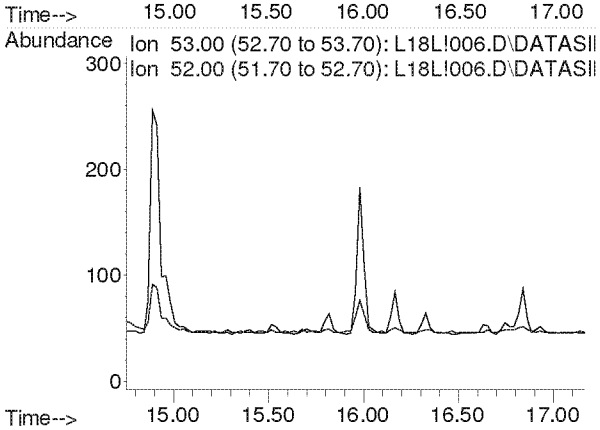


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

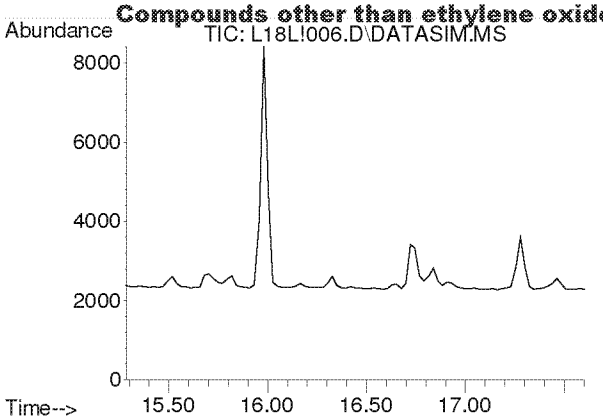
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

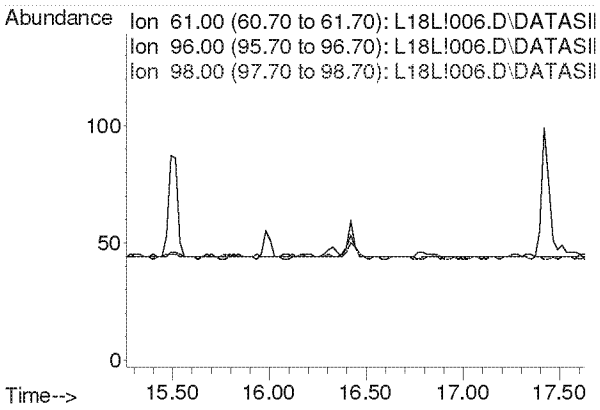


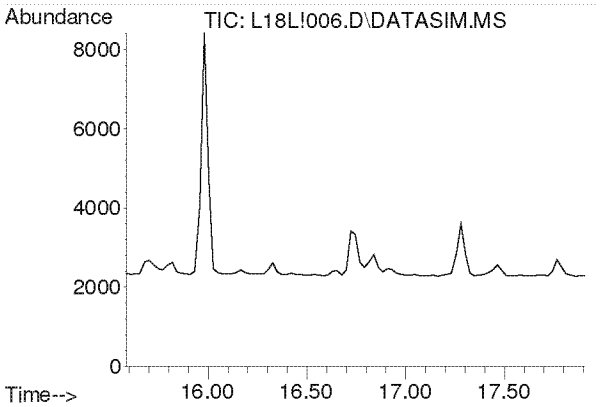
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



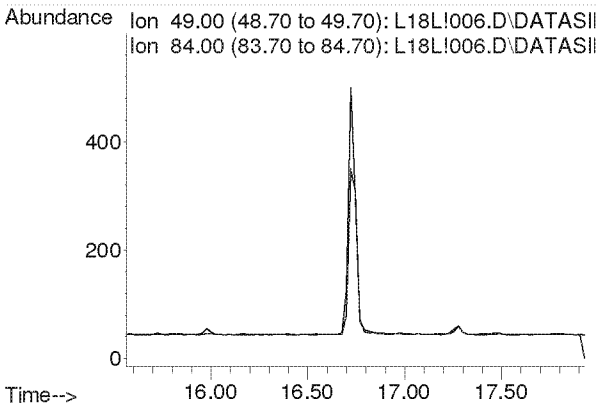


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

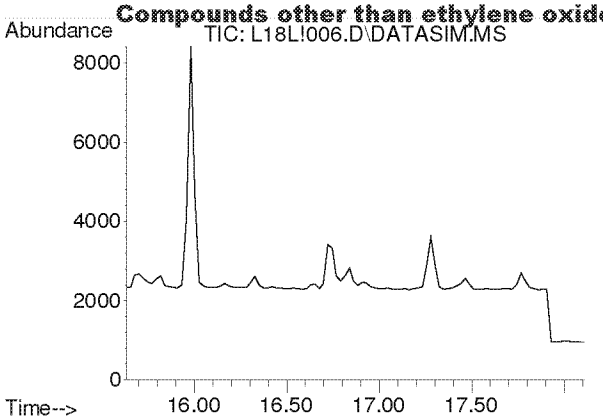
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

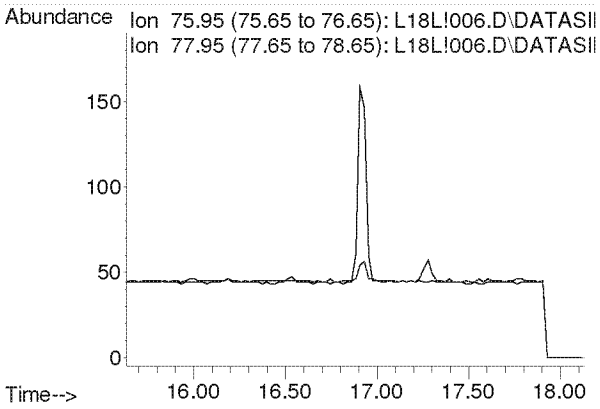


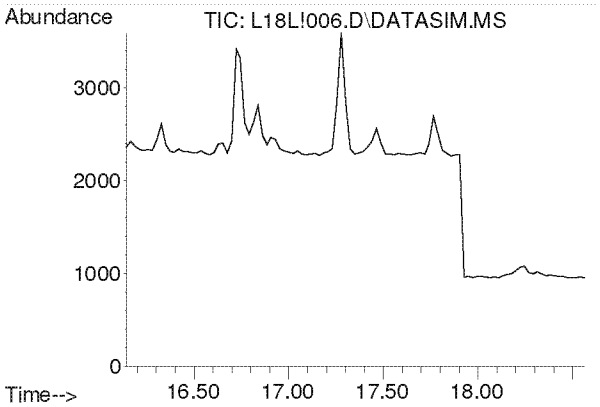
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



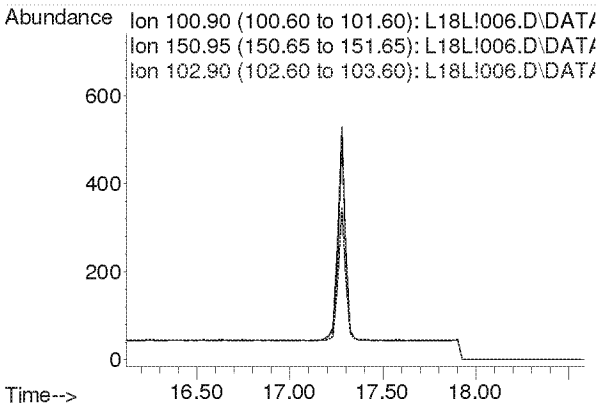


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

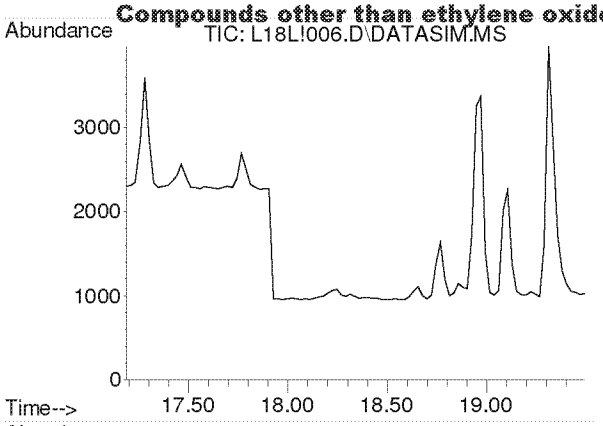
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

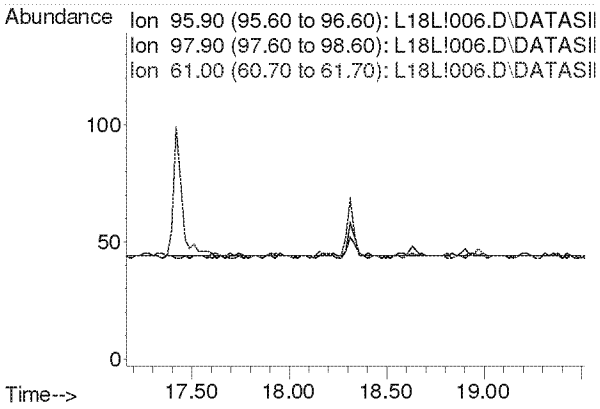


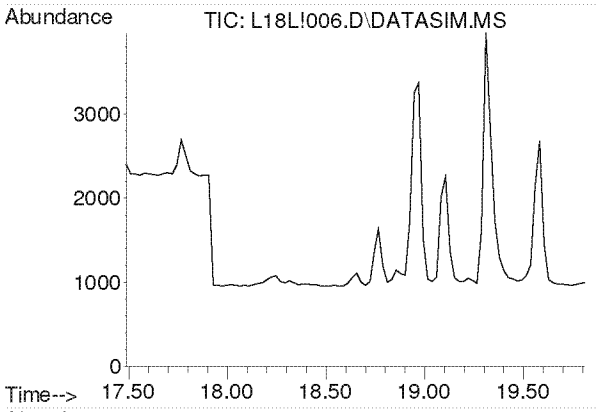
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



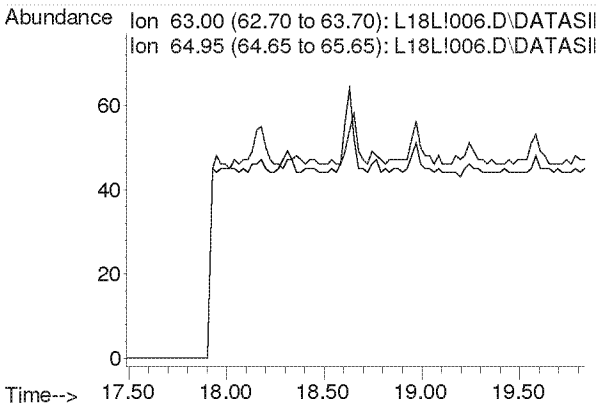


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

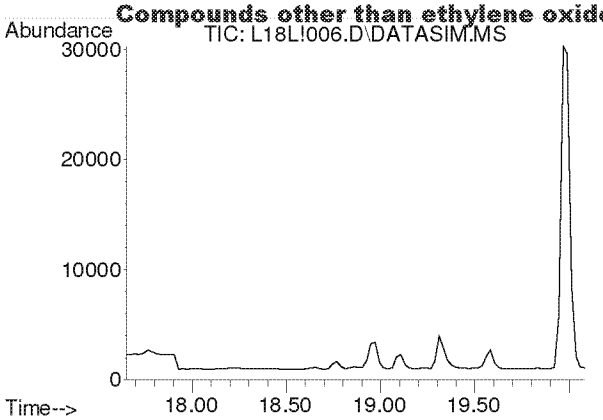
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

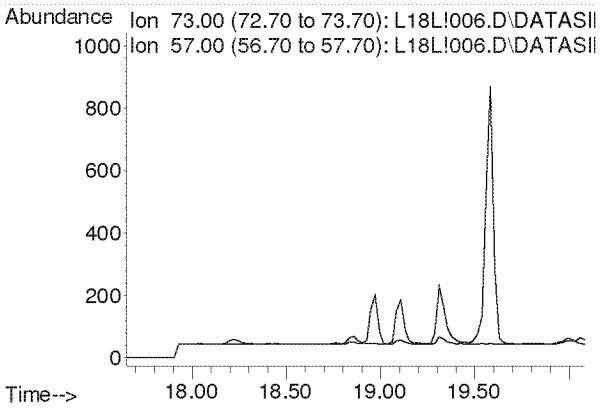


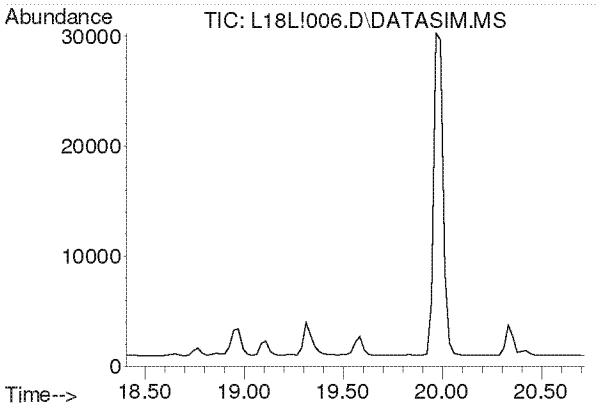
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



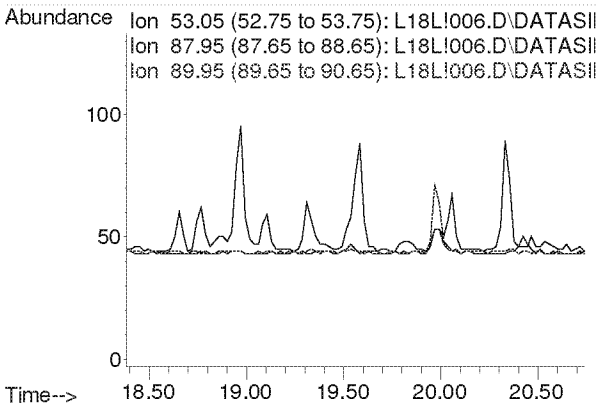


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

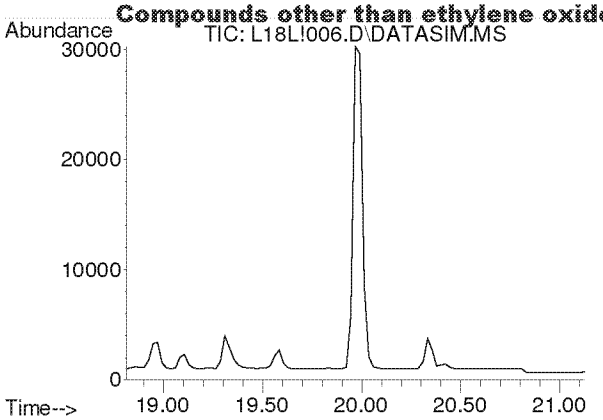
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

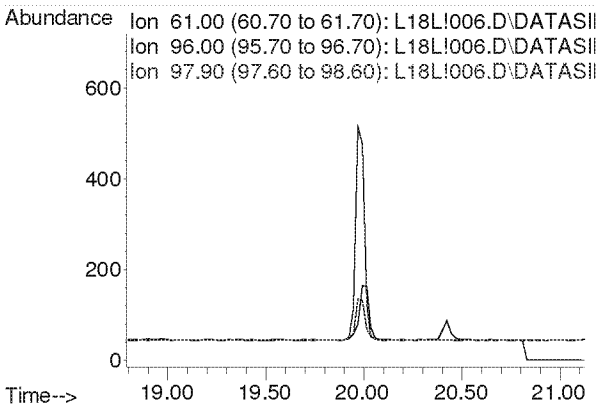


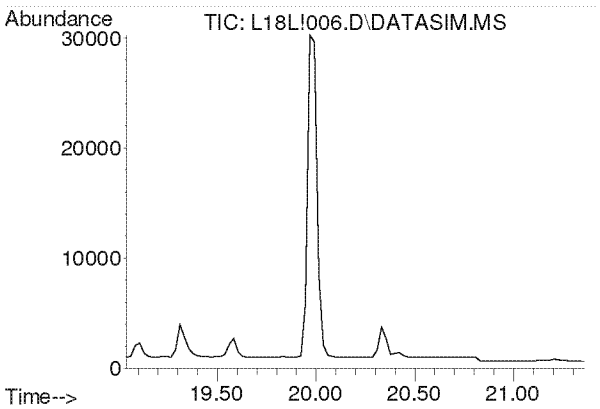
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



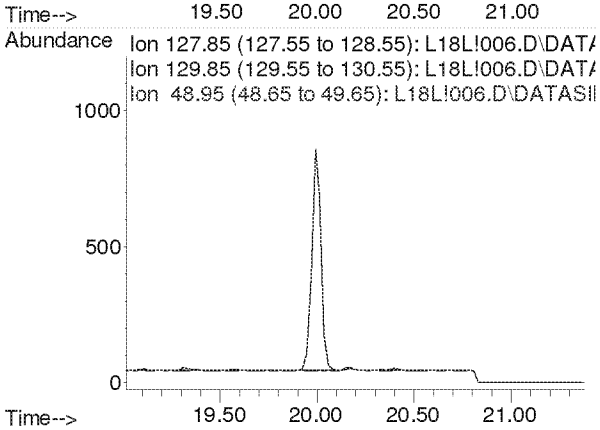


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

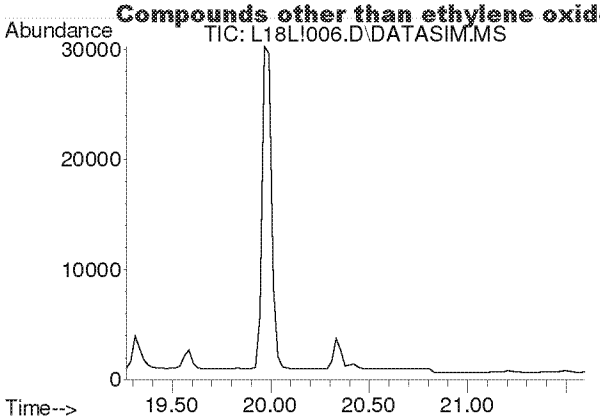
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

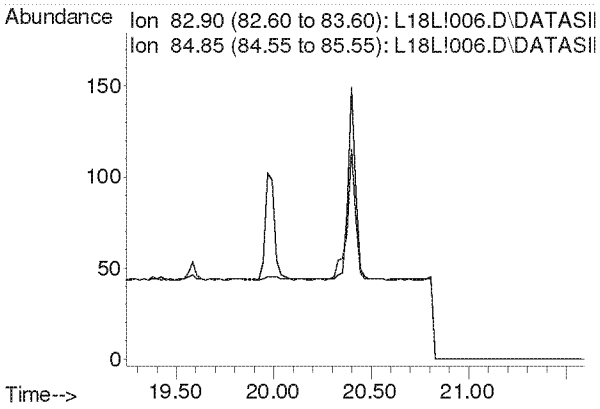


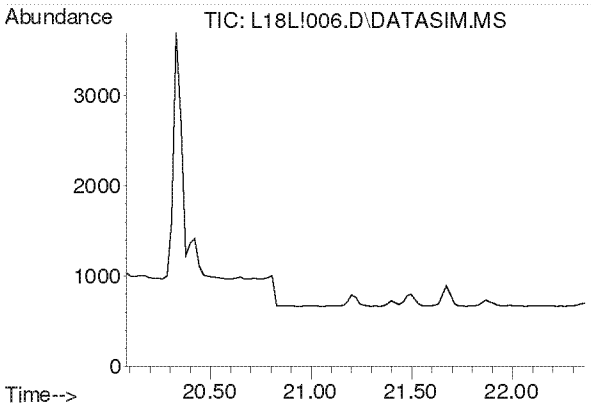
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



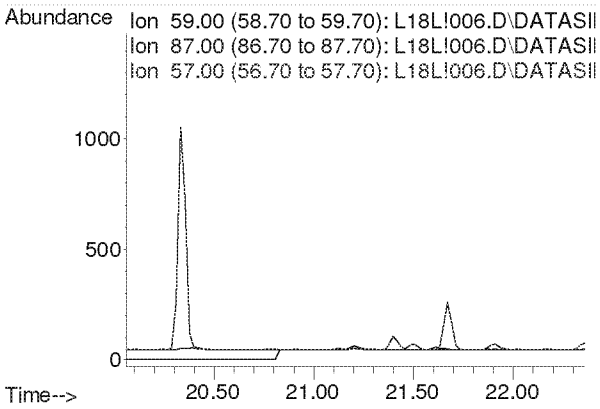


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

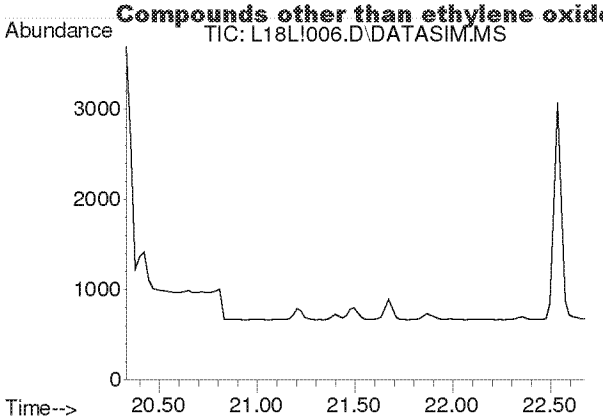
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

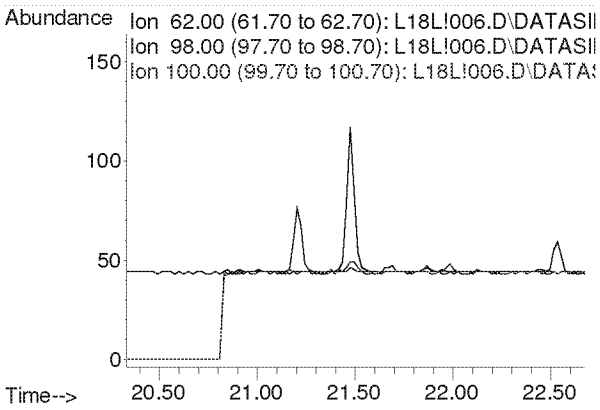


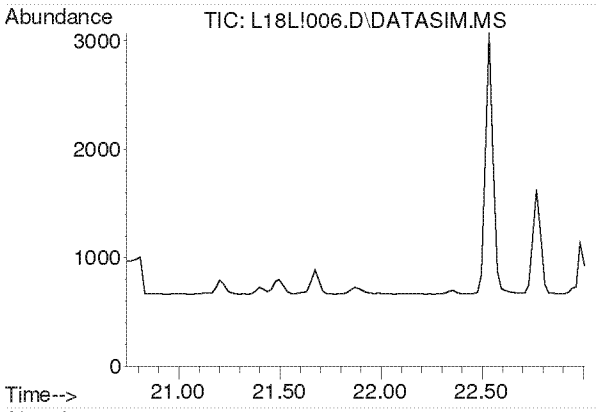
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



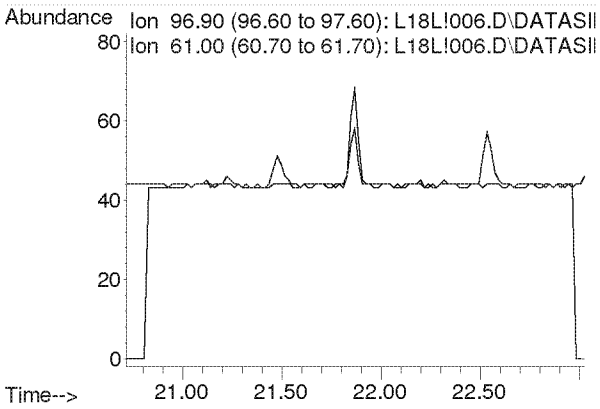


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

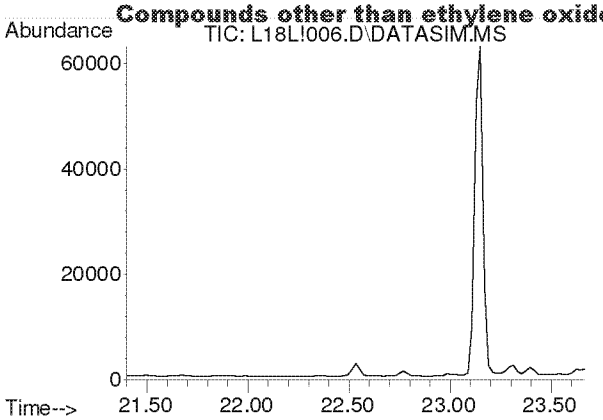
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

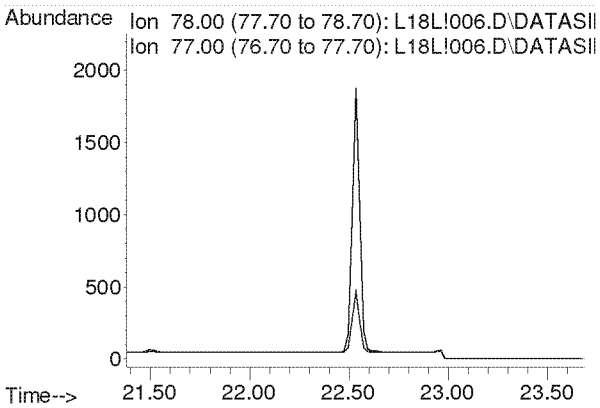


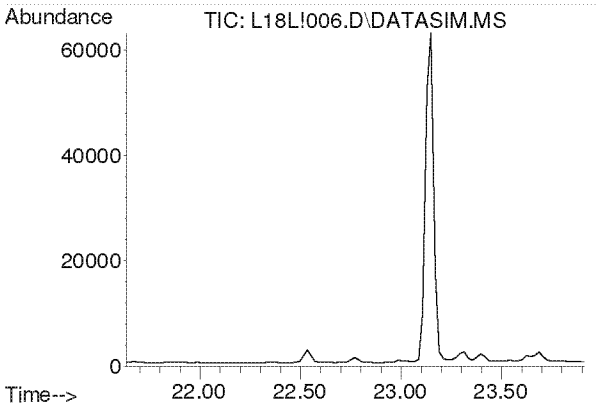
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



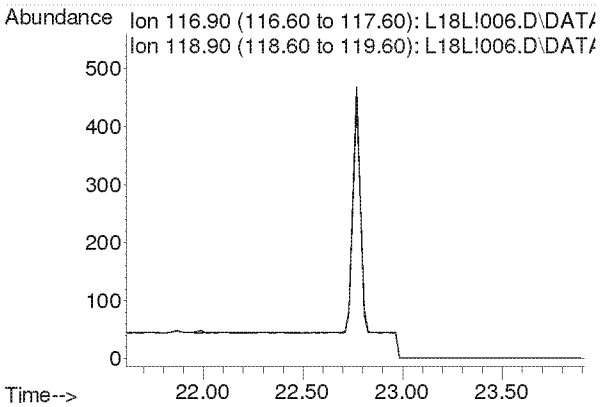


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

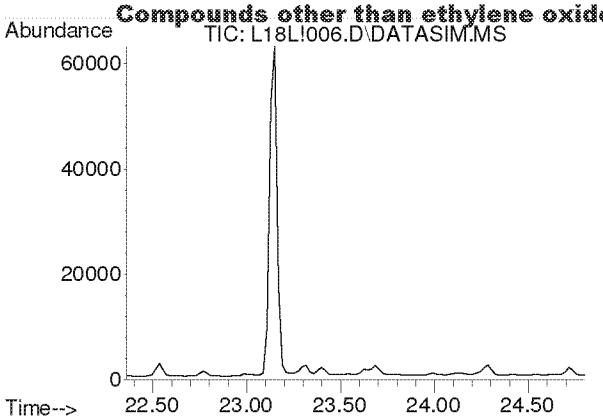
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

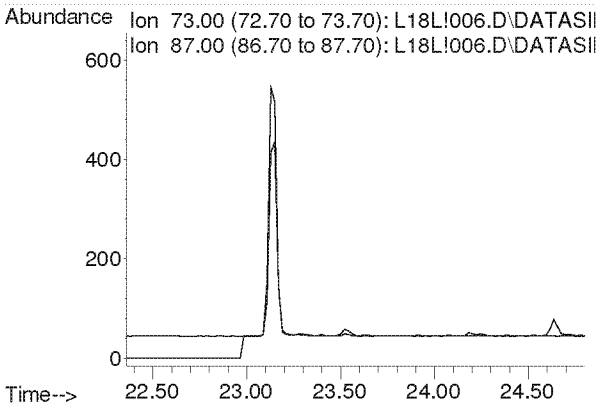


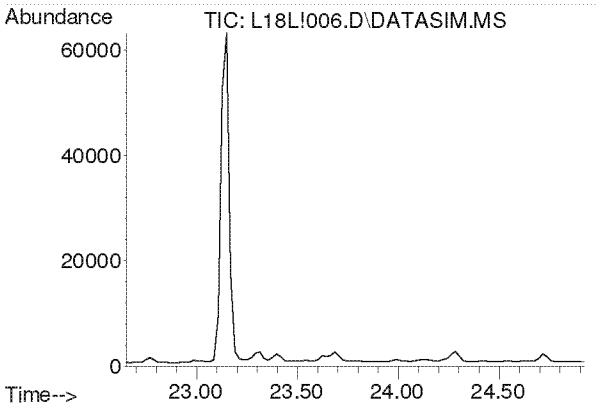
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



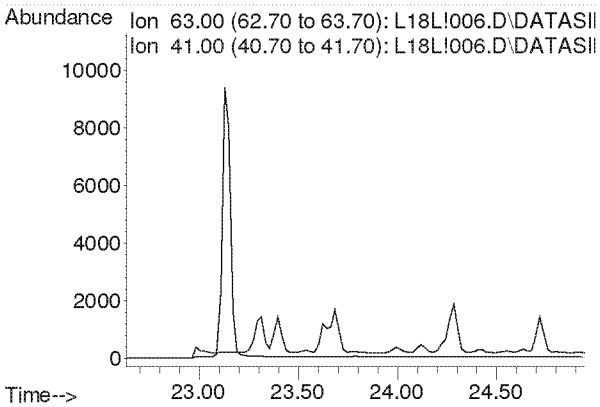


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

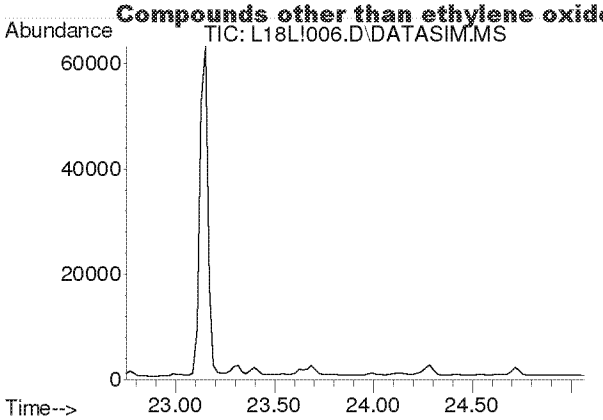
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

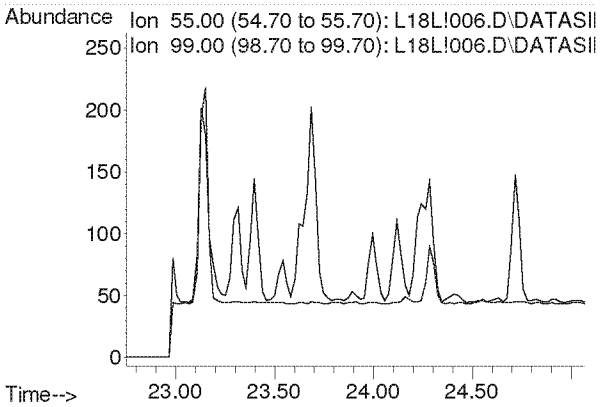


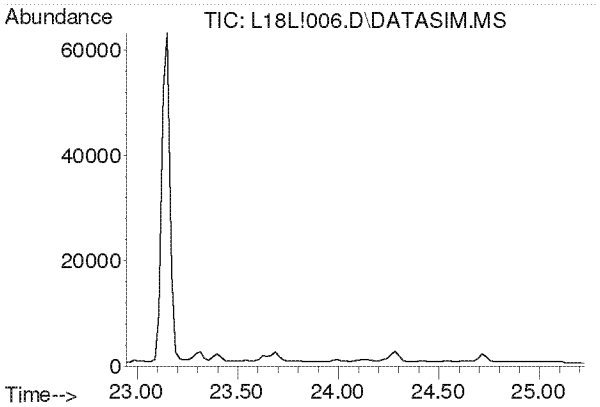
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



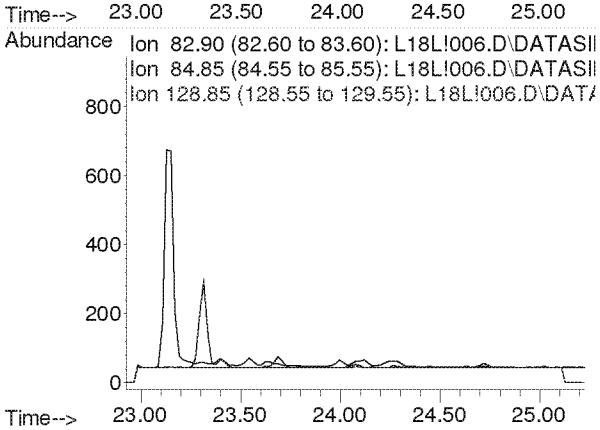


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

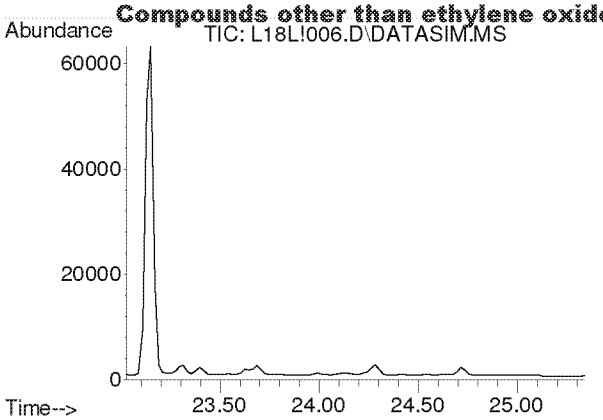
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

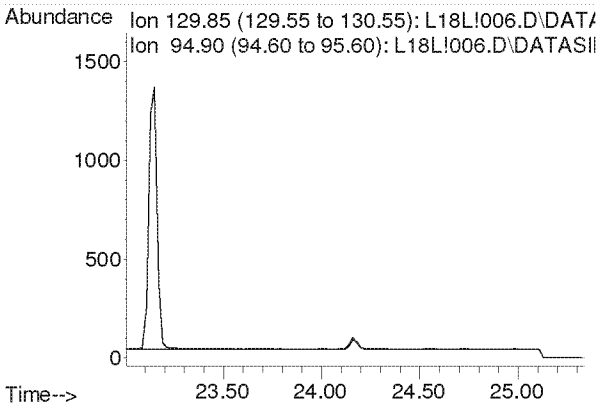


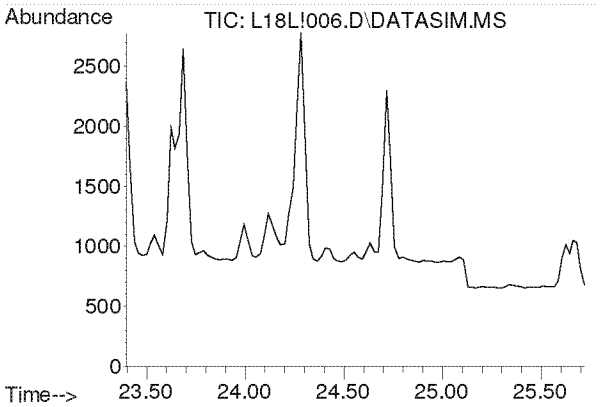
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



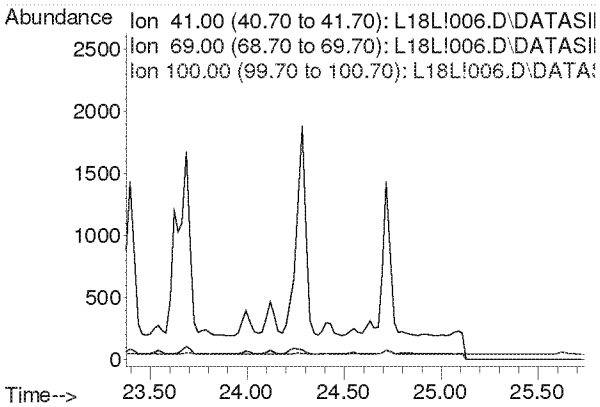


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

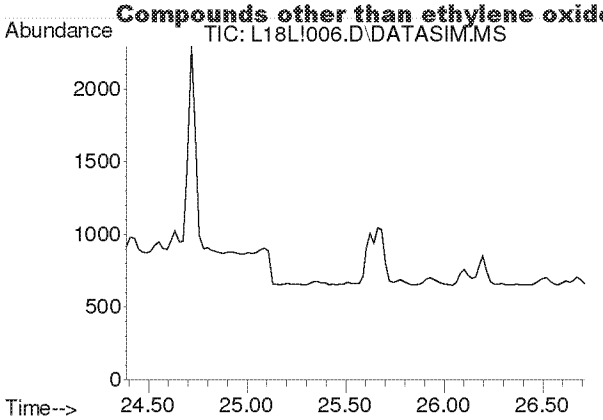
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

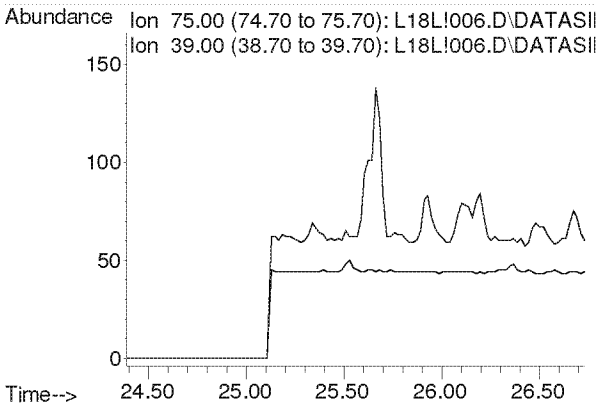


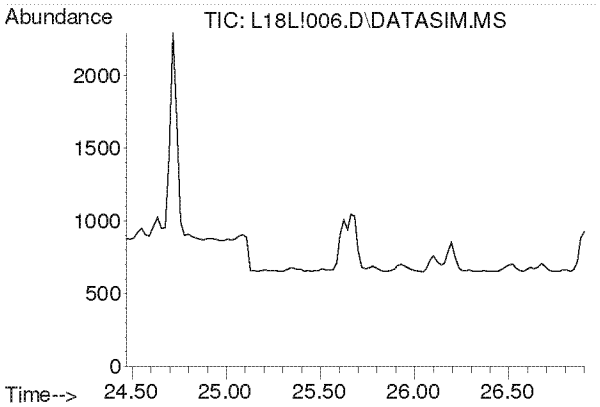
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



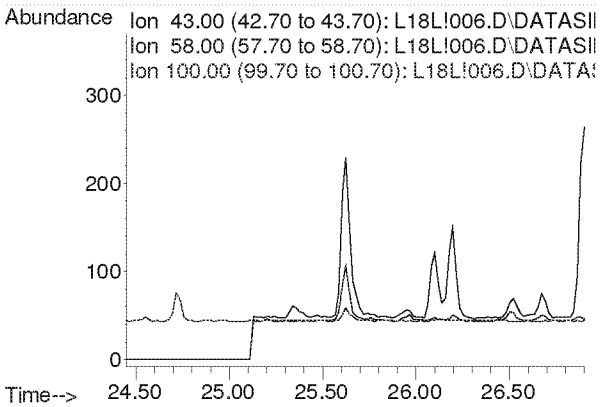


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

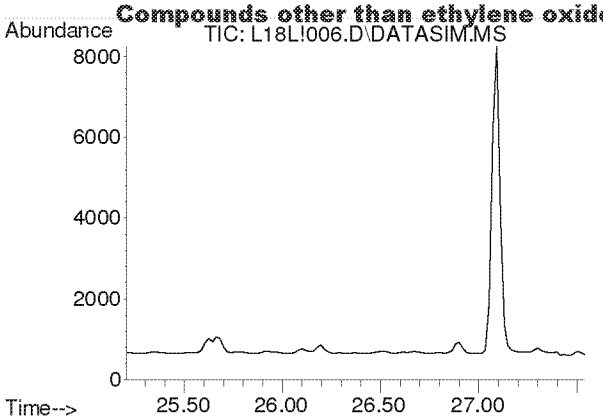
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

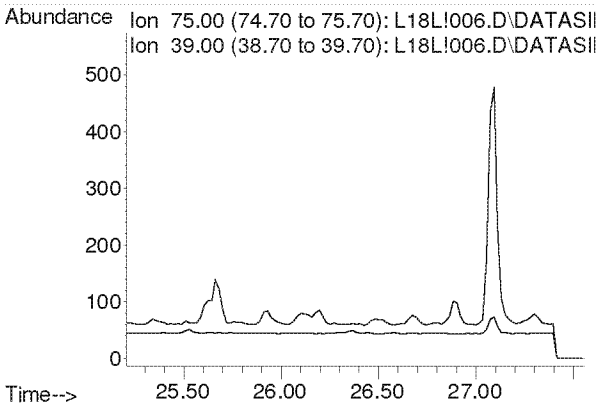


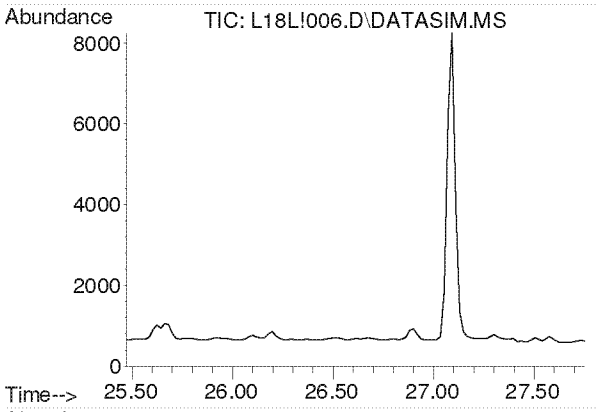
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



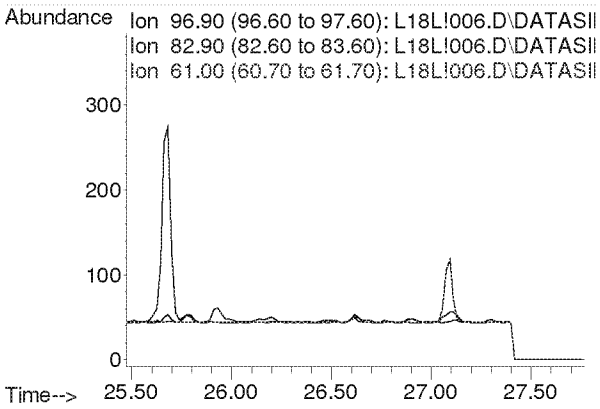


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

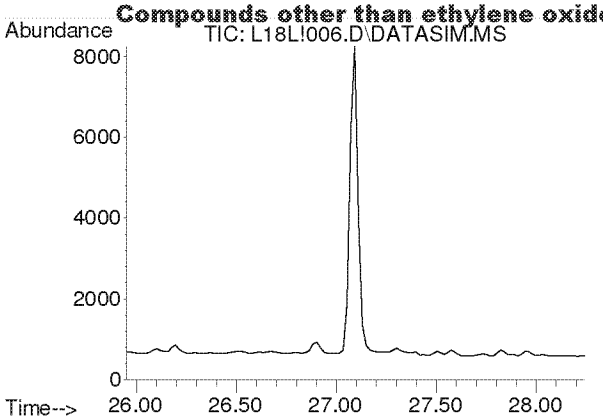
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

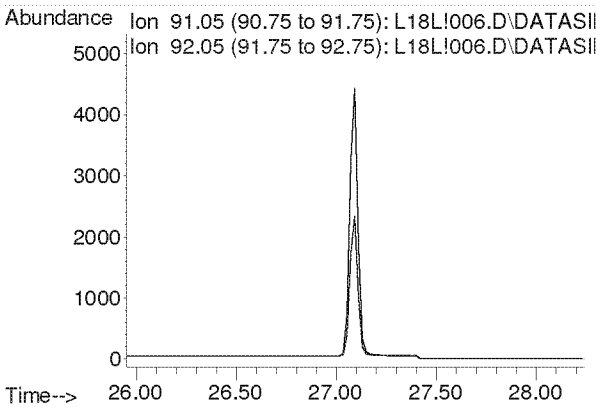


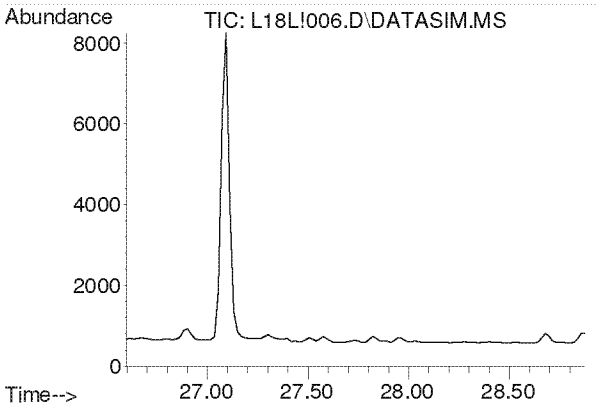
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



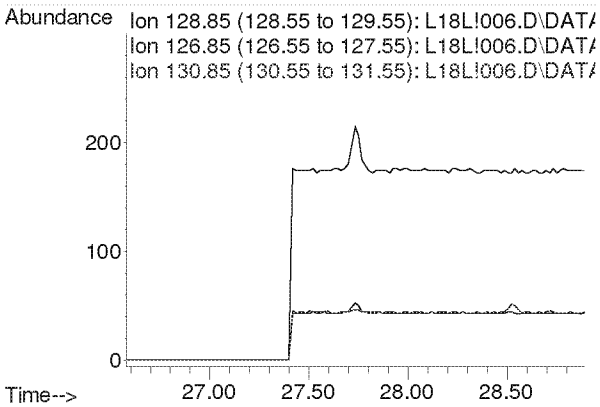


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

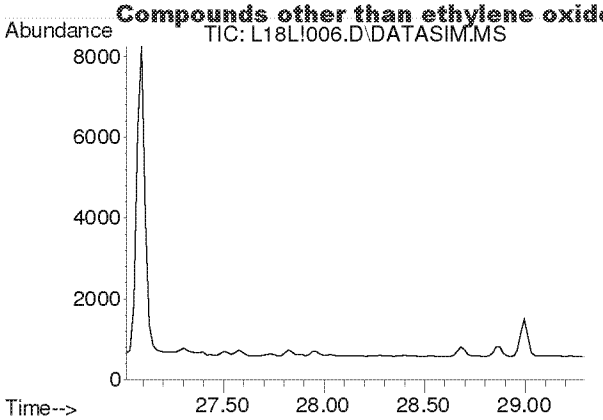
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

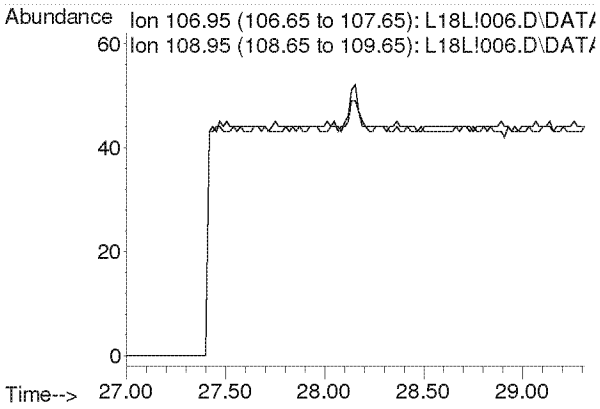


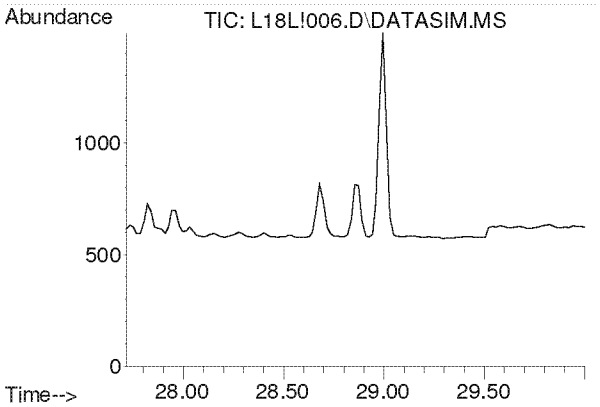
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



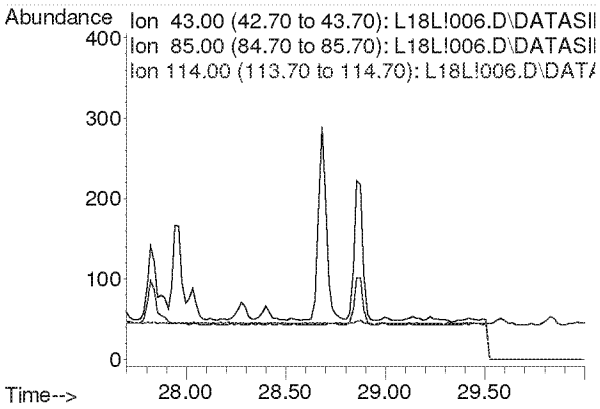


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

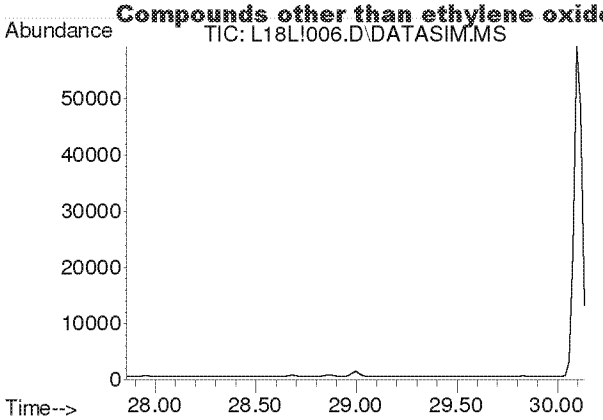
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

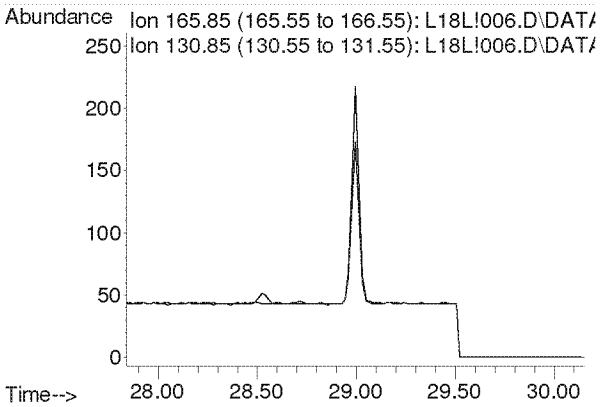


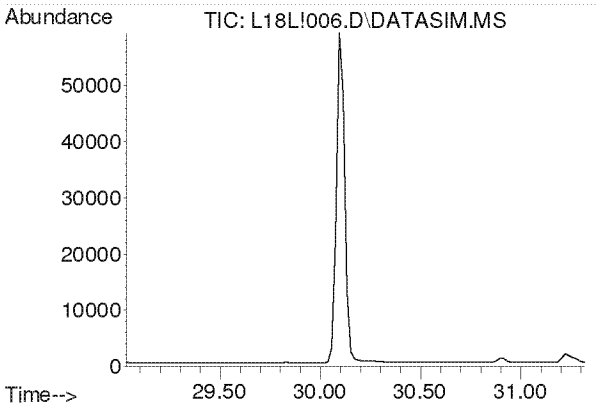
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



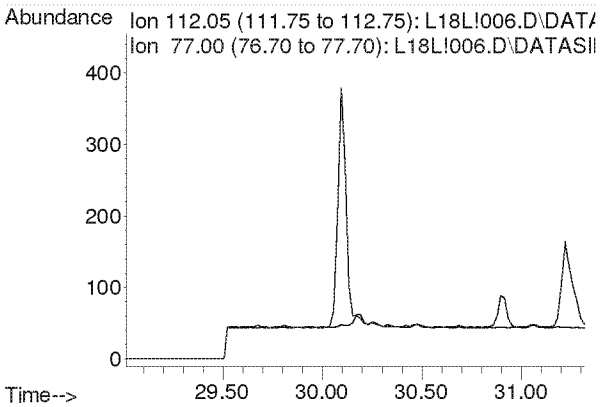


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

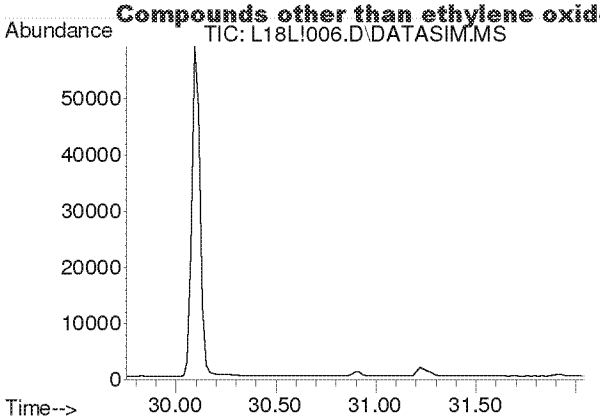
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

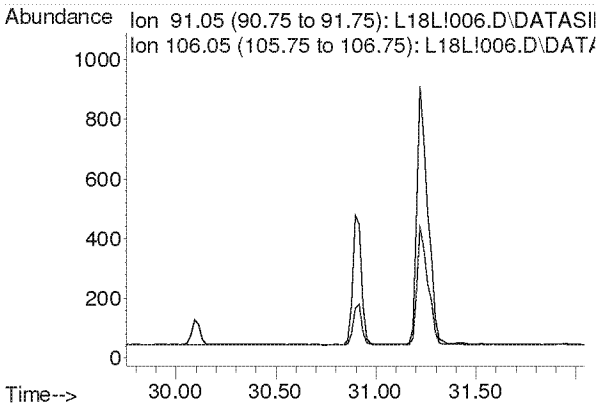


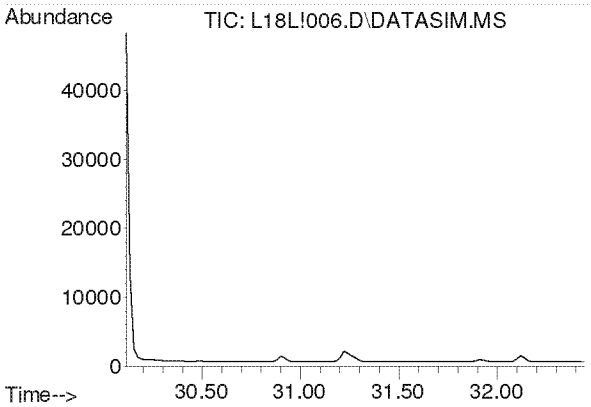
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



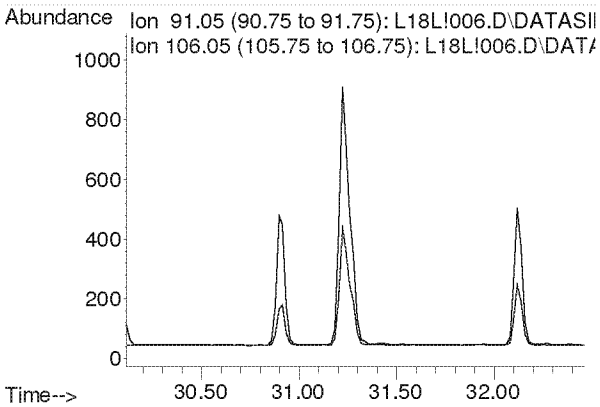


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

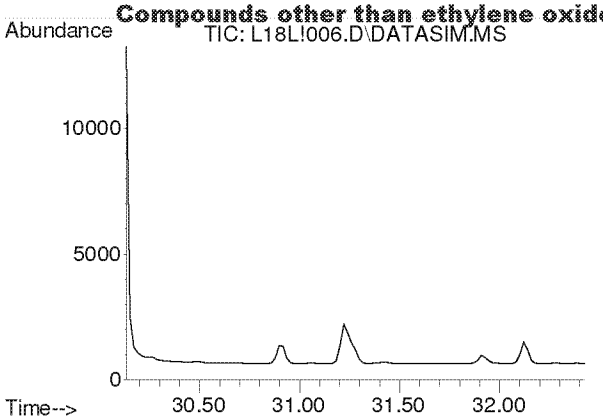
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

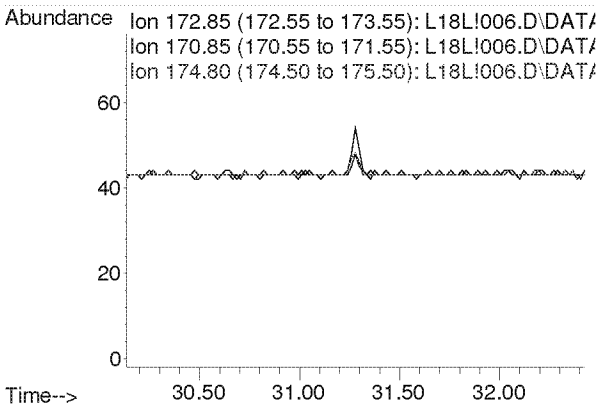


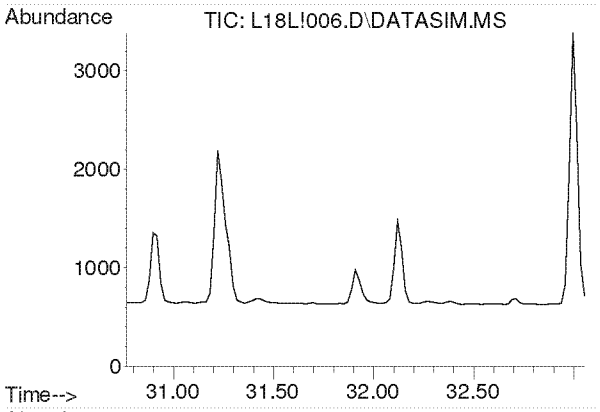
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



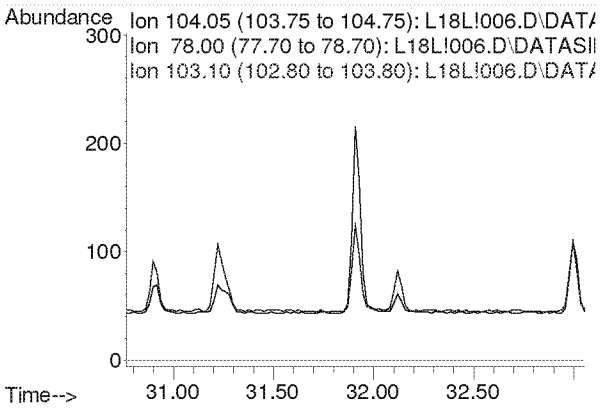


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

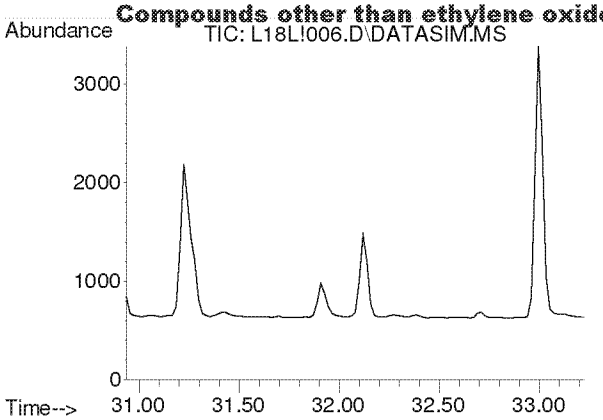
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

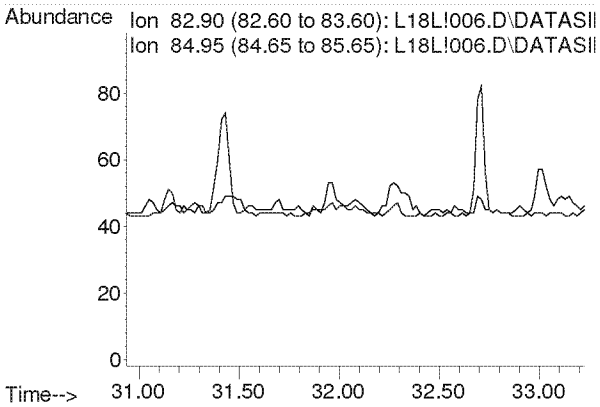


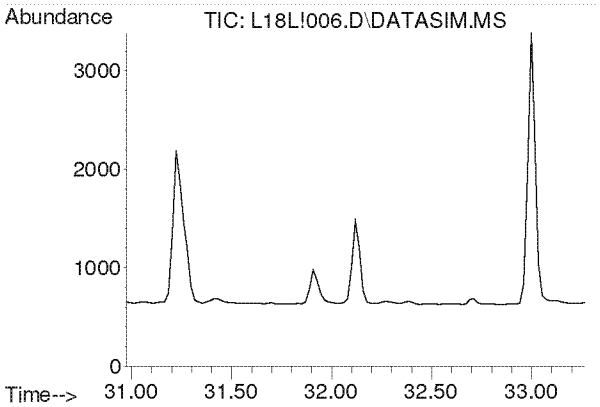
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



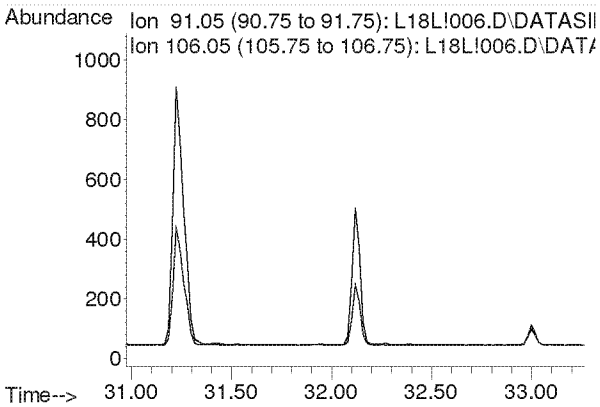


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

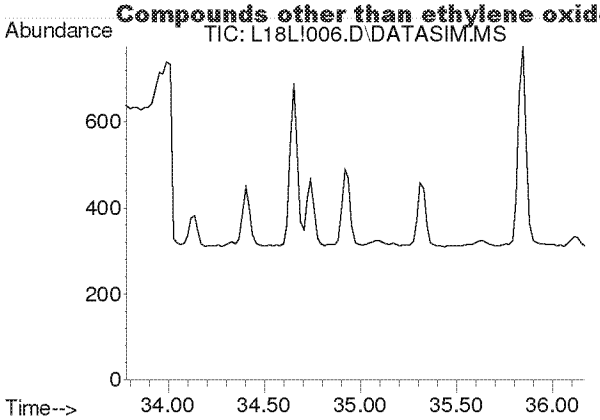
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

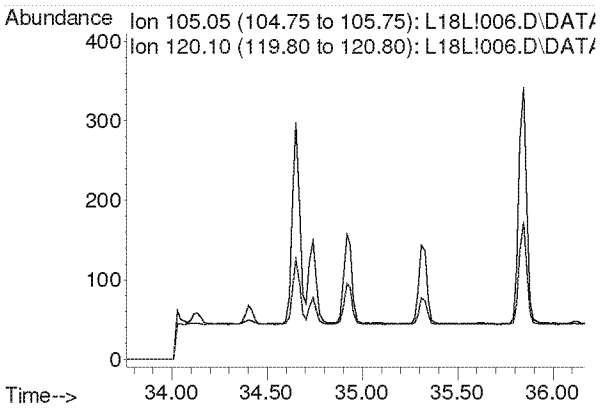


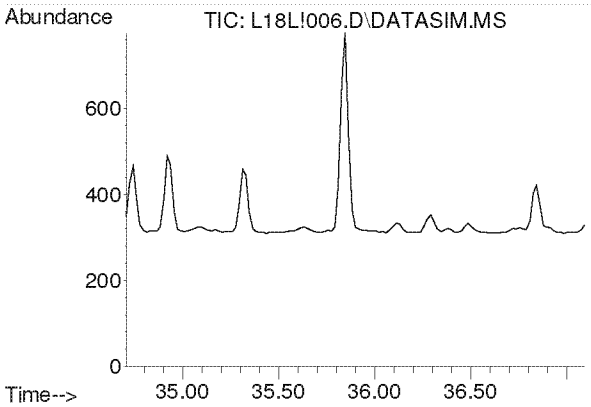
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



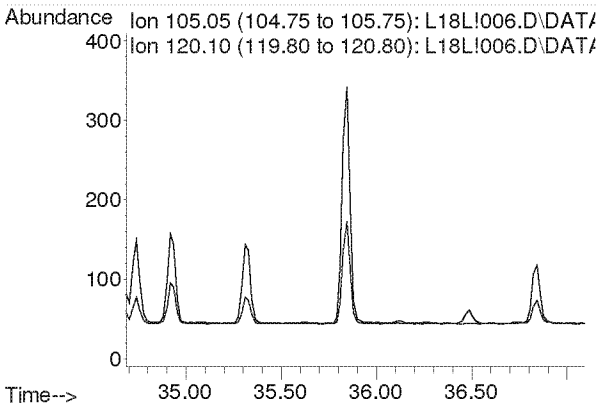


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

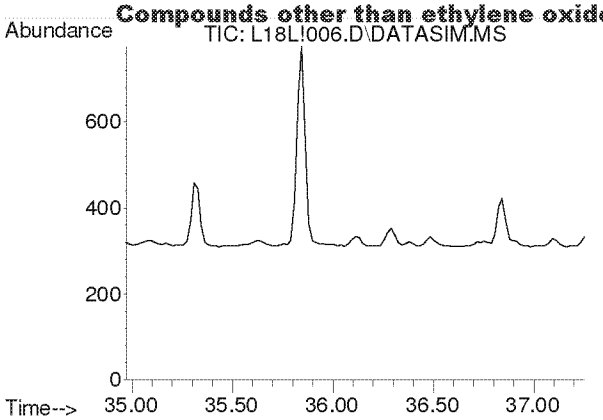
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

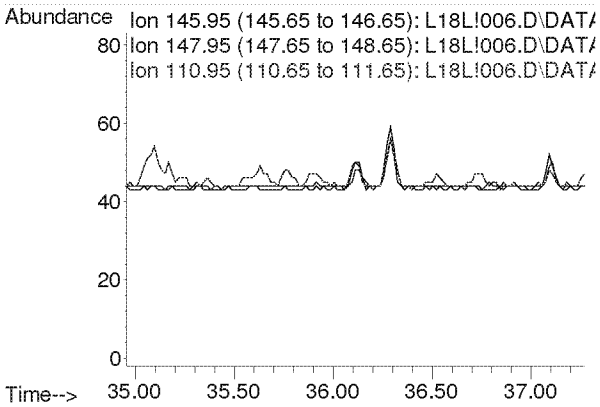


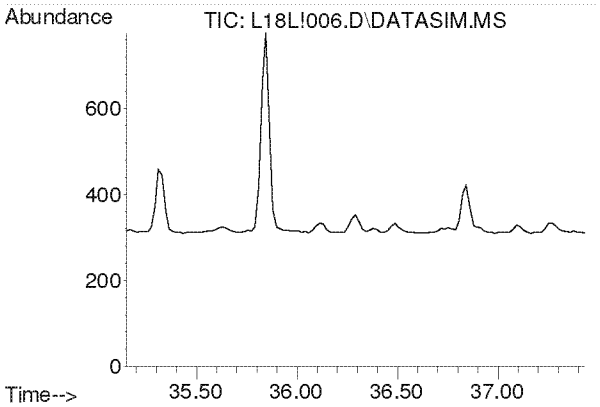
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



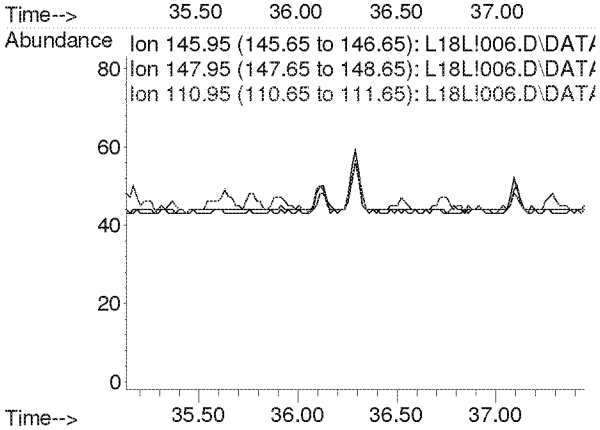


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

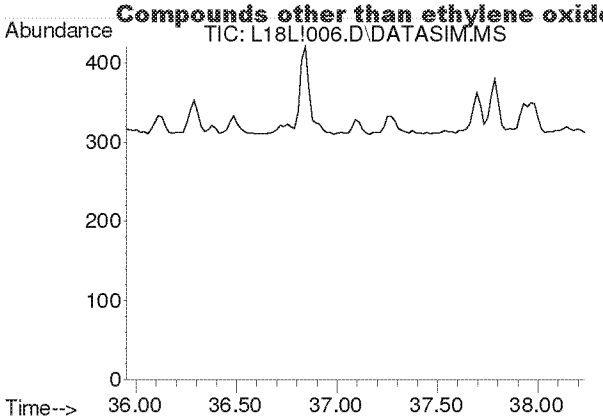
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

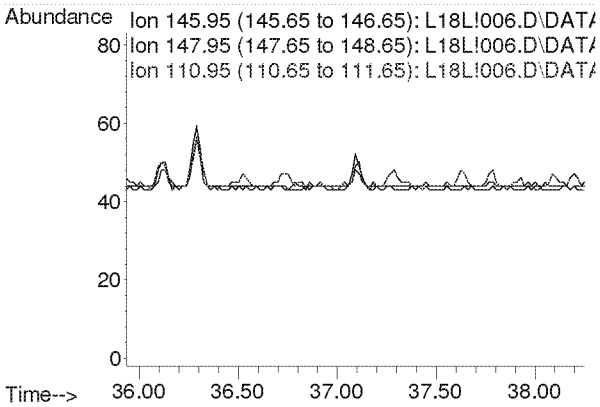


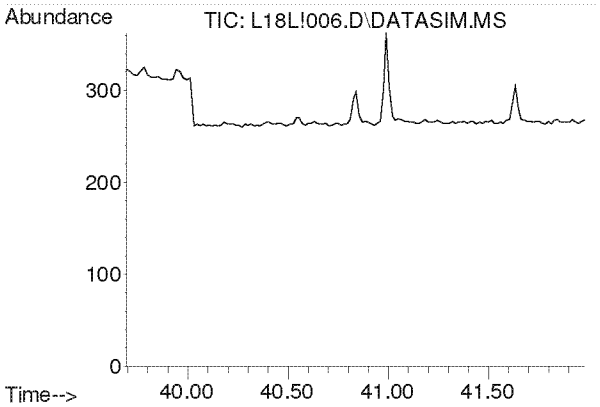
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



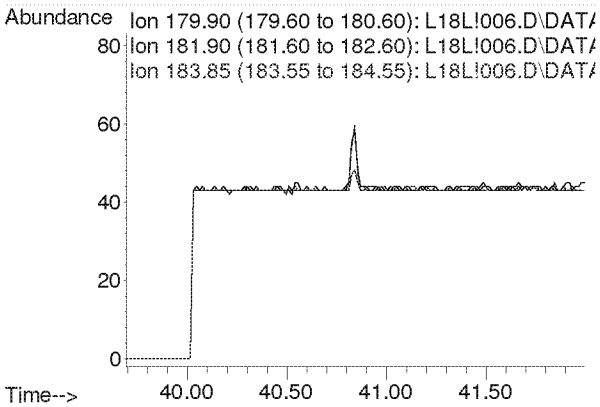


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

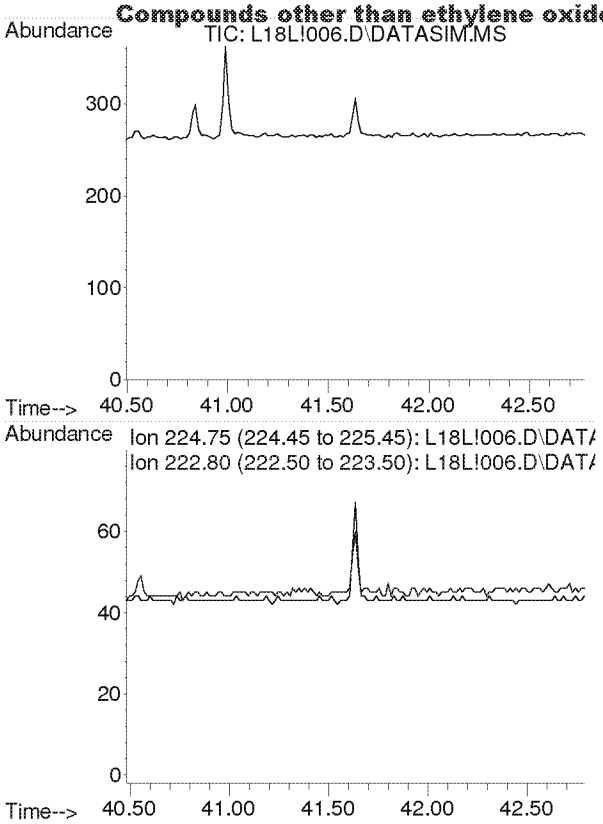
Lab File: L18L!006.D
Acq: 28 Dec 2018 4:33 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!006.D
Acq: 28 Dec 2018 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 : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!007.D
Acq On : 28 Dec 2018 5:34 pm
Operator : MAH
Sample : B8L2804-DUP1
Misc : WB VILLAGE HALL R1 12/14/18
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:07:16 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

d= Not Reported RLB 1/7/19

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	59411	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	141881	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	100484	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	12.395	29	3741m	1.0535 ppbv	
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. d	
21) 1,1-Dichloroethane	0.000	63	0	N.D. d	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. 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	

RLB 1/7/19

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!007.D
Acq On : 28 Dec 2018 5:34 pm
Operator : MAH
Sample : B8L2804-DUP1
Misc : WB VILLAGE HALL R1 12/14/18
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:07:16 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

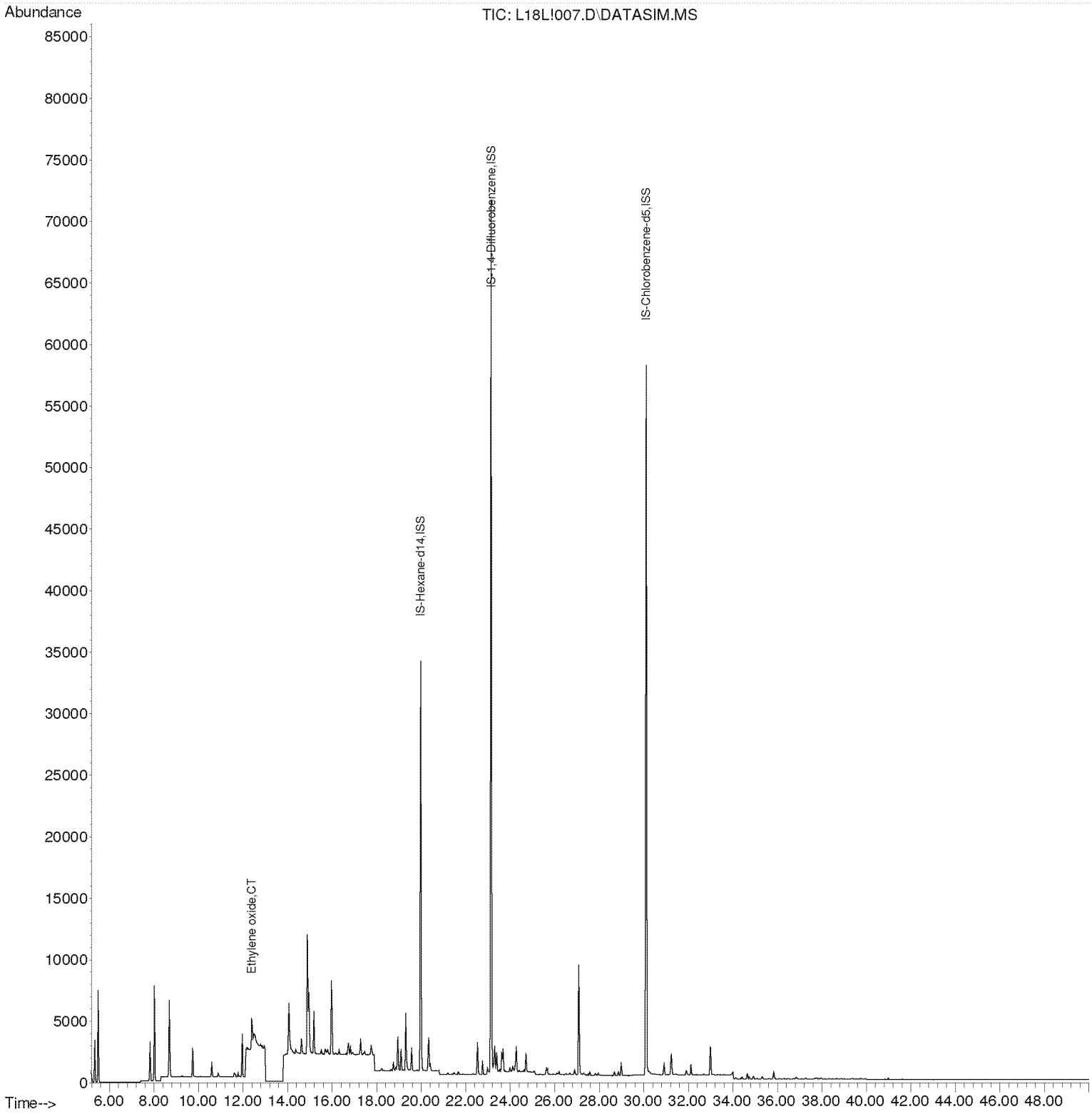
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D. d	
50) Ethylbenzene	0.000	91	0	N.D. d	
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D. 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. d	

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

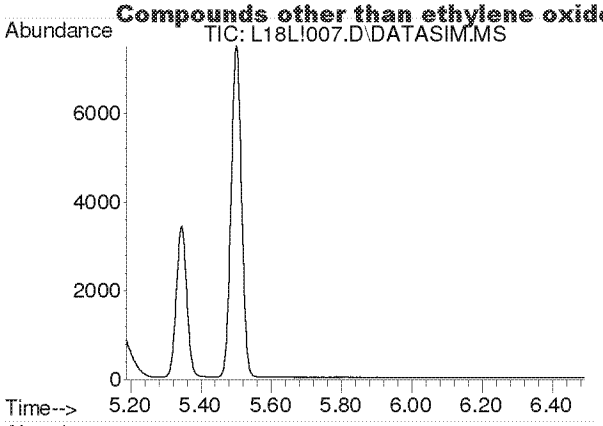
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!007.D
Acq On : 28 Dec 2018 5:34 pm
Operator : MAH
Sample : B8L2804-DUP1
Misc : WB VILLAGE HALL R1 12/14/18
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 03 13:07:16 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



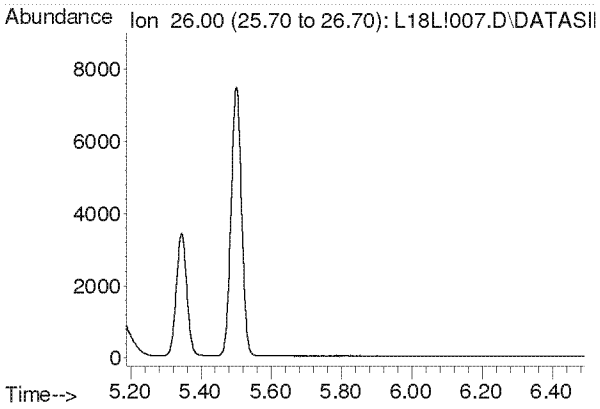
Compounds other than ethylene oxide were not quantitated.

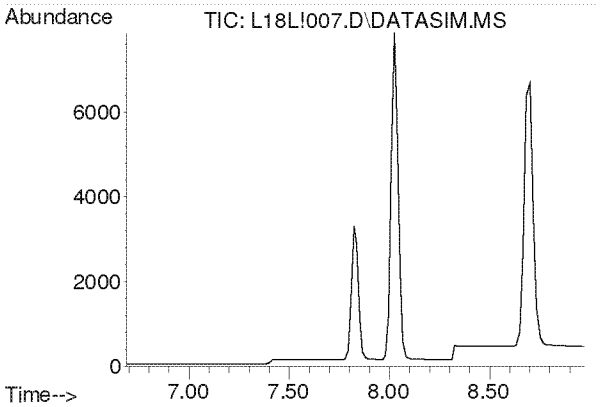


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 26



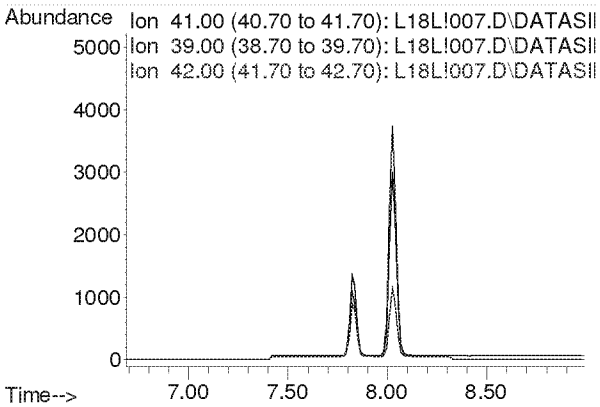


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

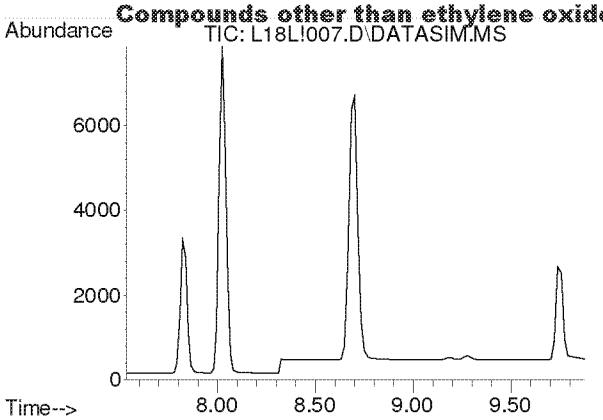
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

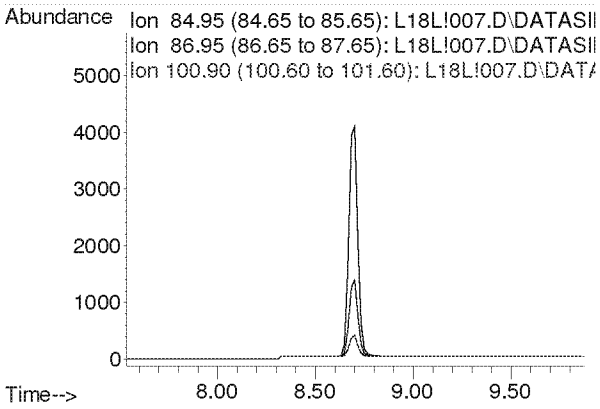


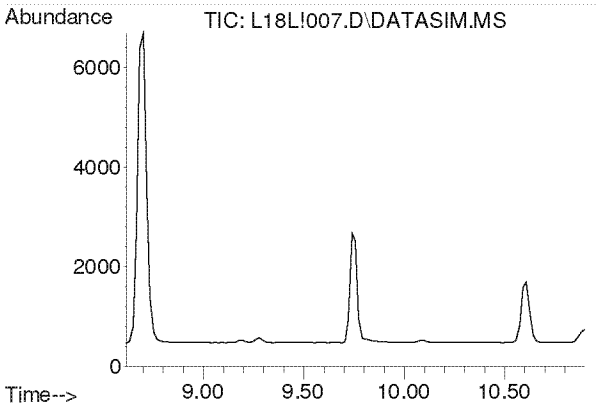
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



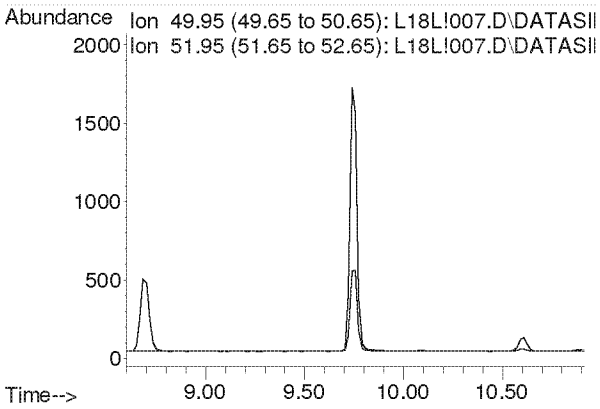


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

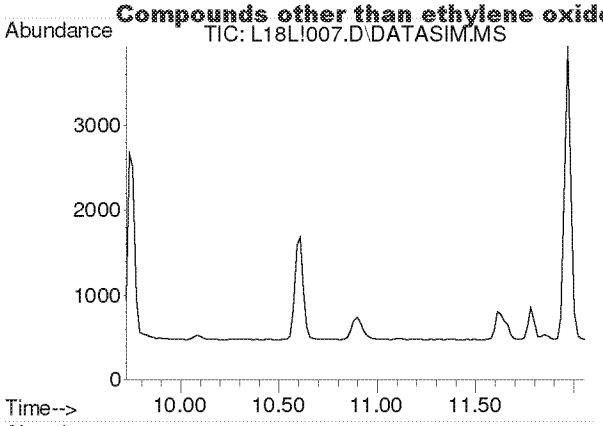
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

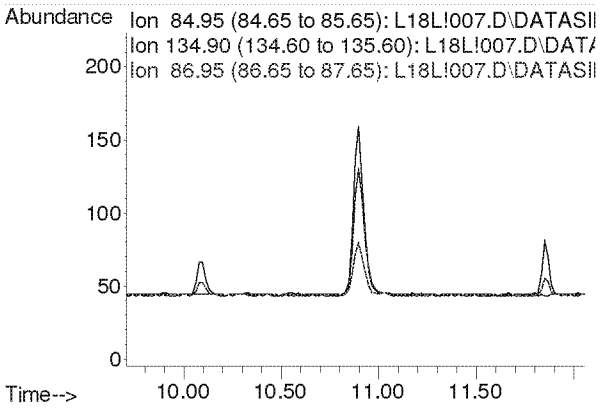


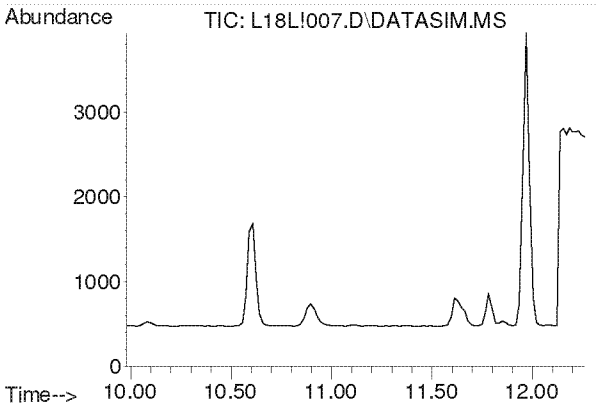
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



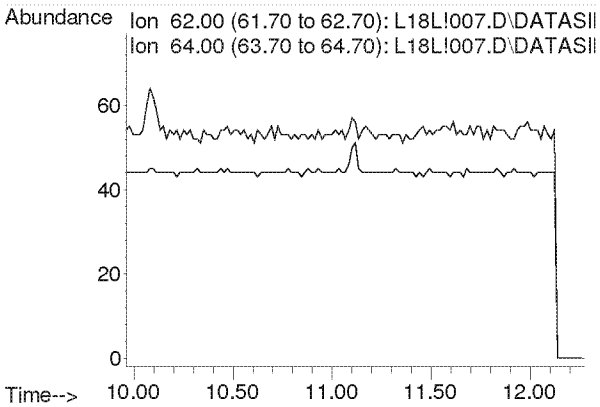


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

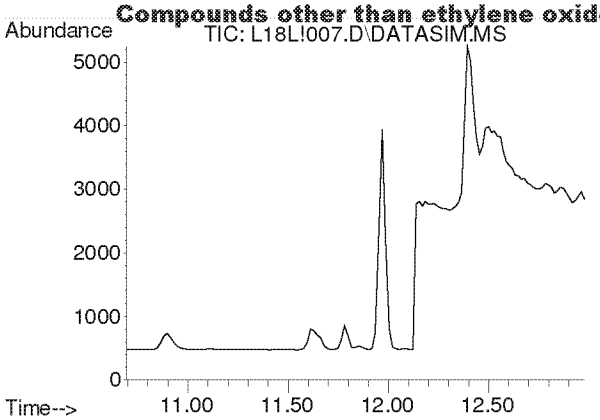
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

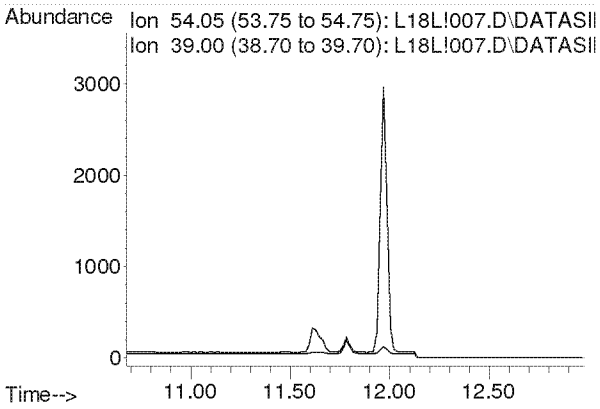


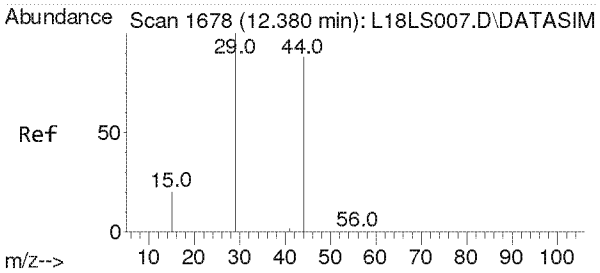
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

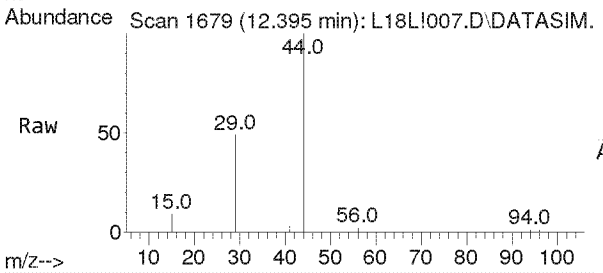


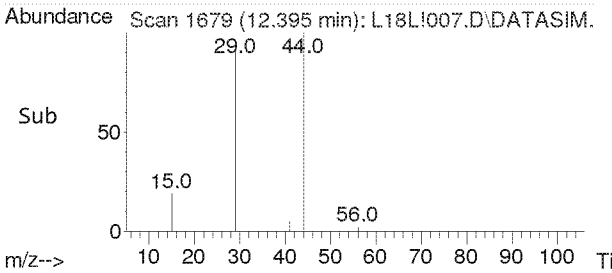


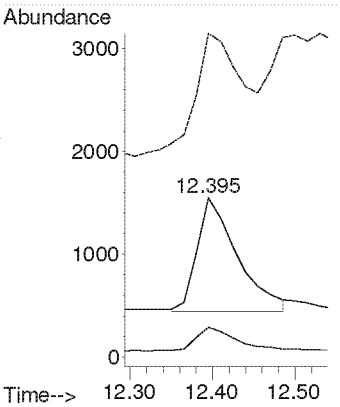
#9
Ethylene oxide
Concen: 1.053 ppbv m
RT: 12.395 min Scan# 1679
Delta R.T. 0.015 min
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 29 Resp: 3741

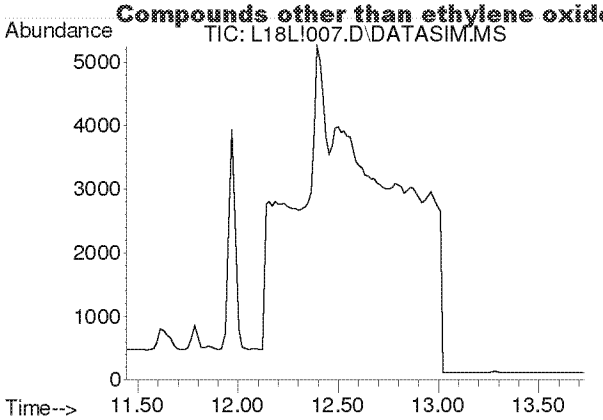
Ion	Ratio	Lower	Upper
29	100		
15	21.5	16.2	24.4
44	338.9	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

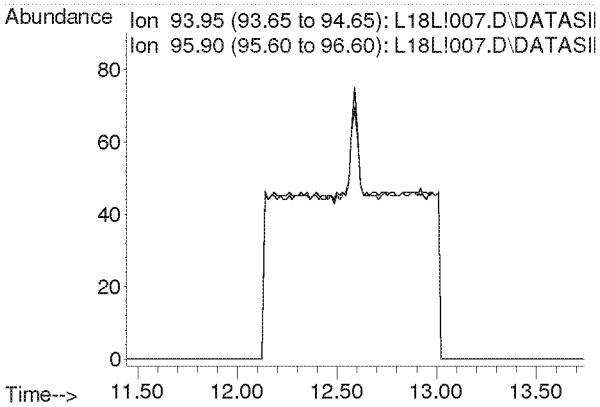


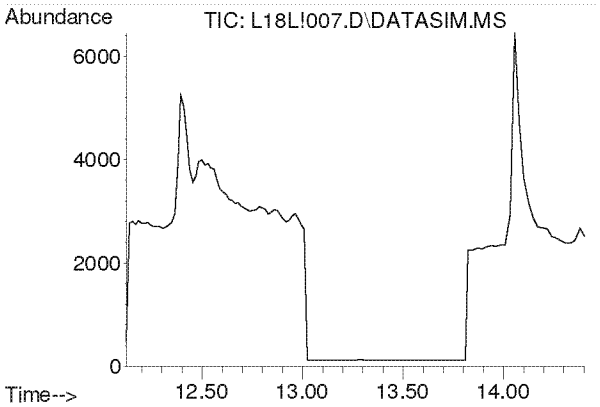
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



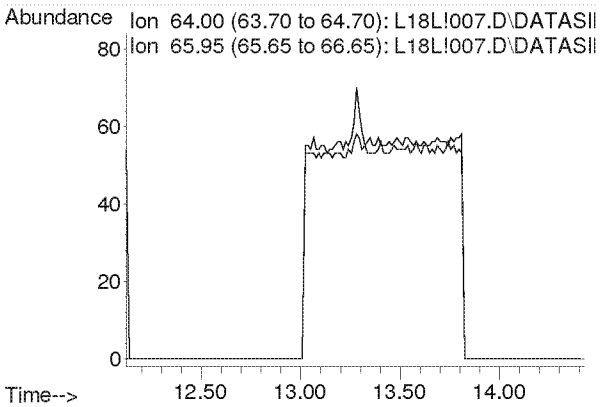


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

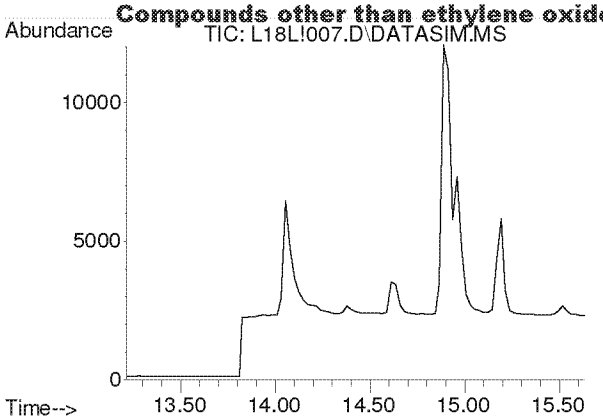
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

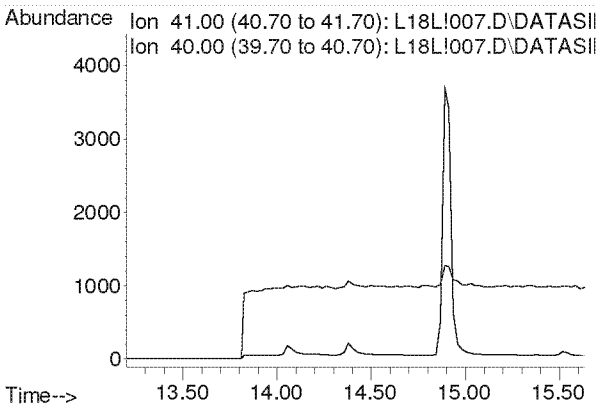


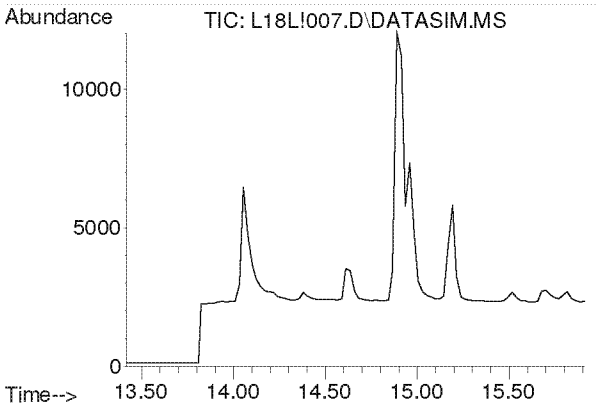
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



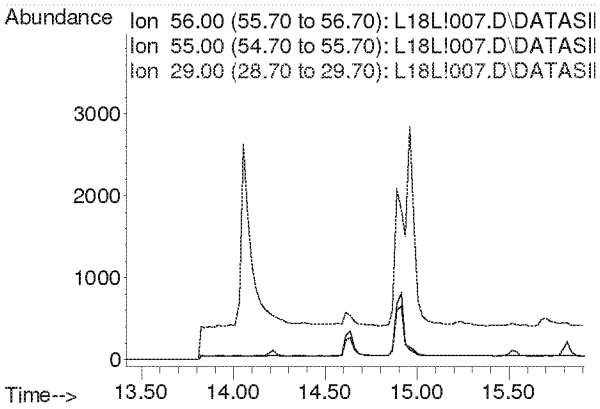


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

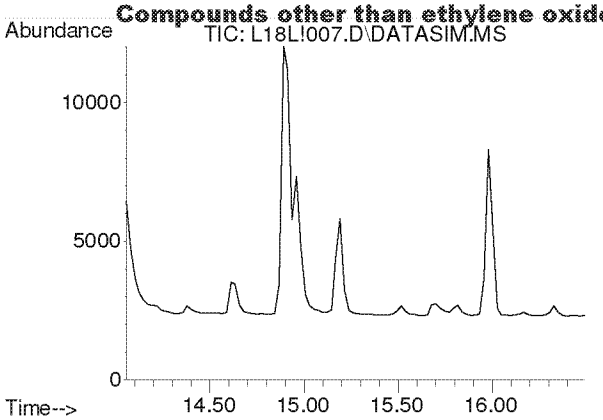
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

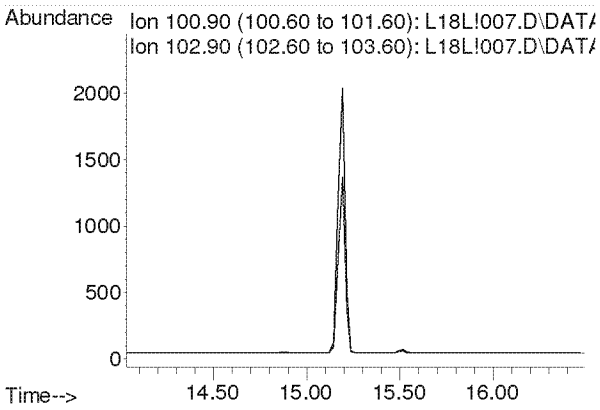


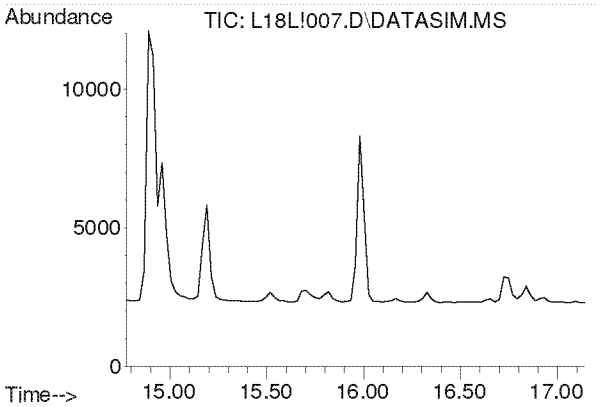
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



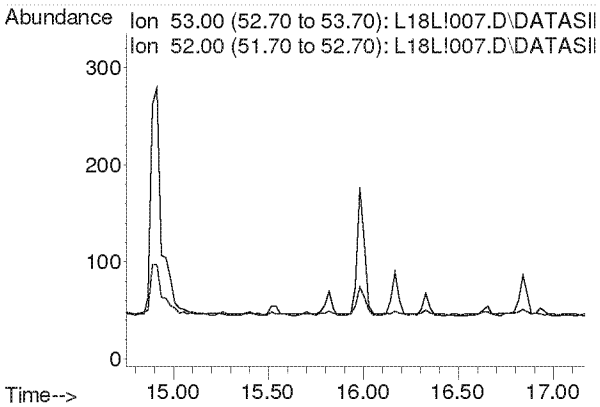


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

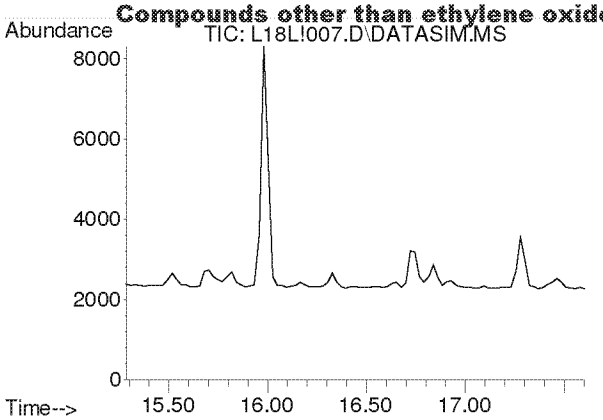
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

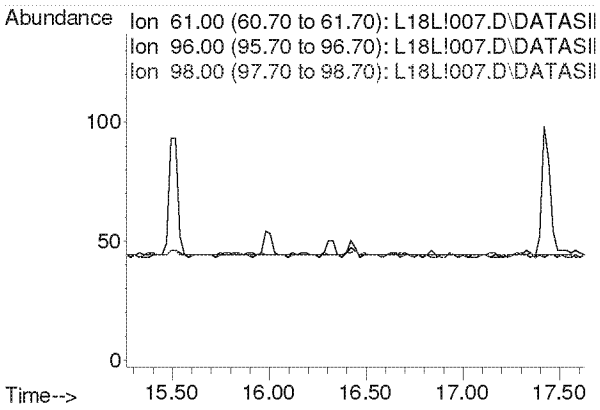


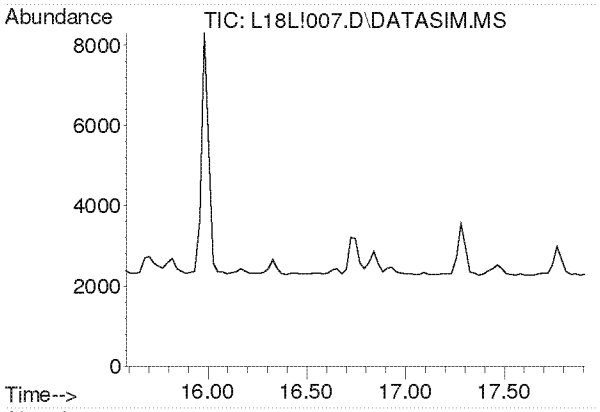
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



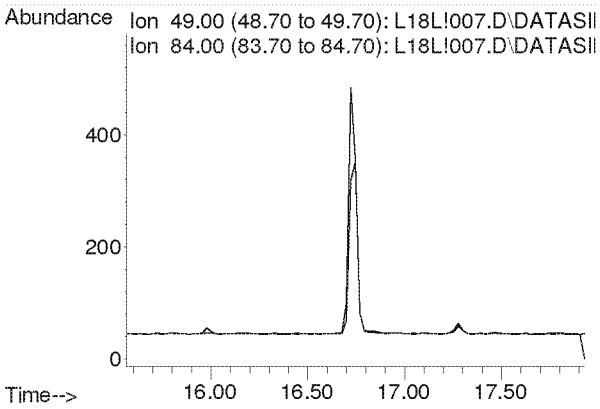


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

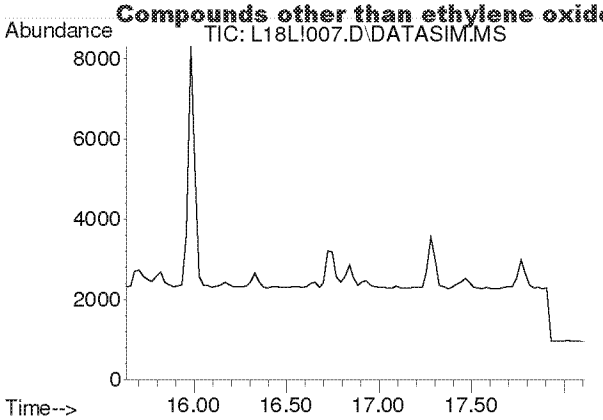
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

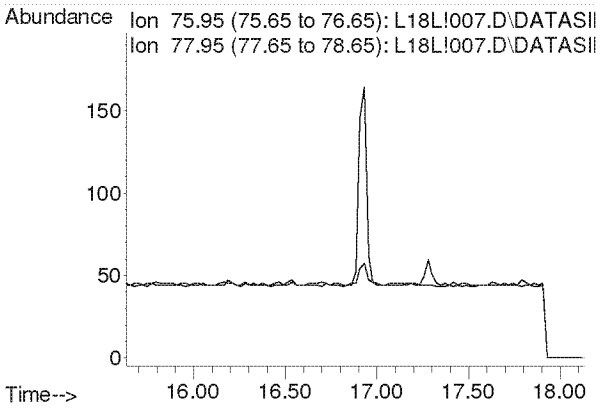


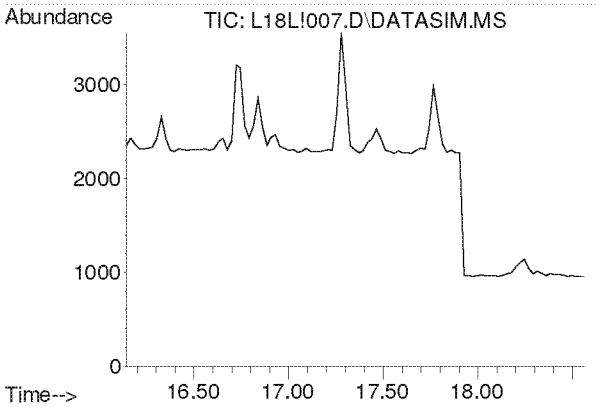
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



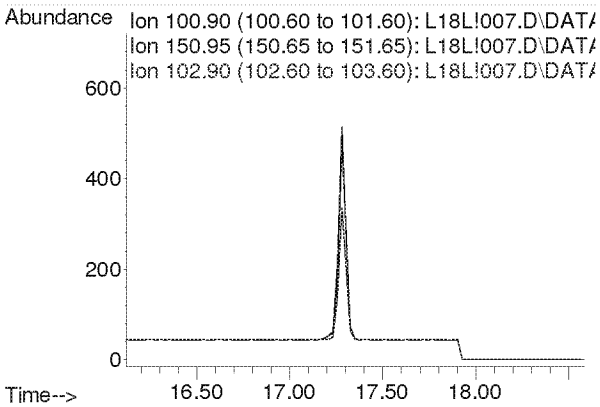


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

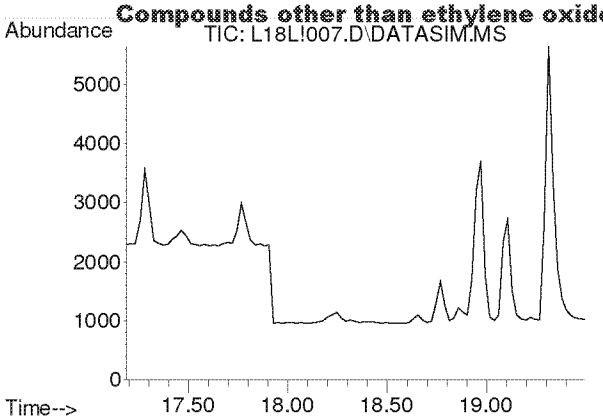
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

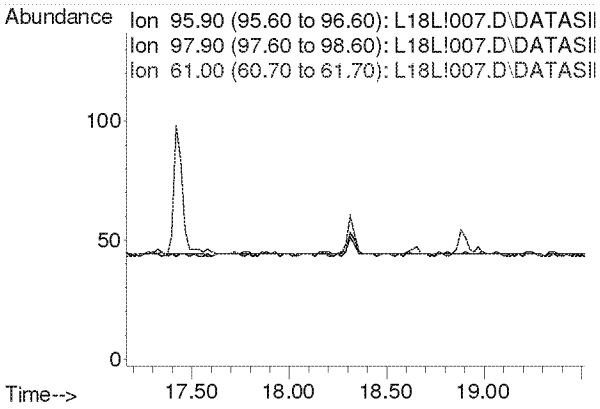


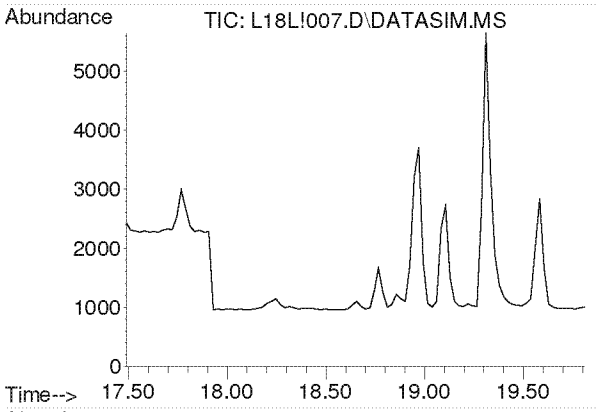
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



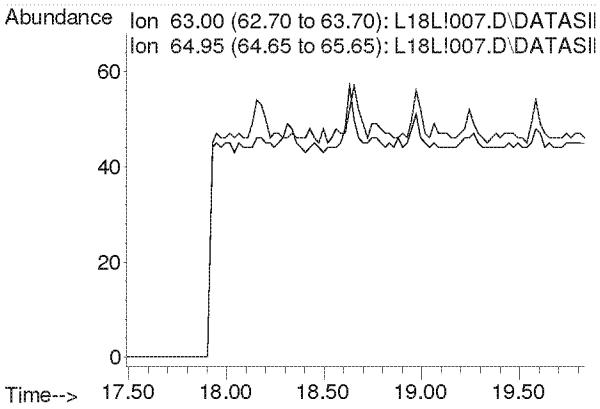


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

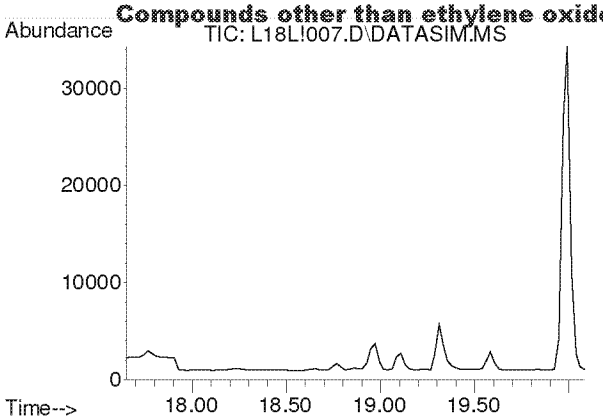
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

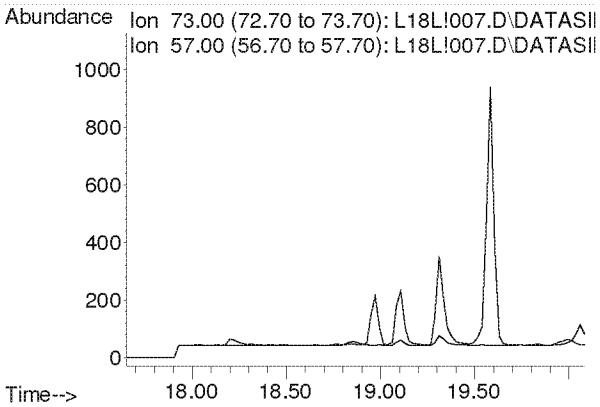


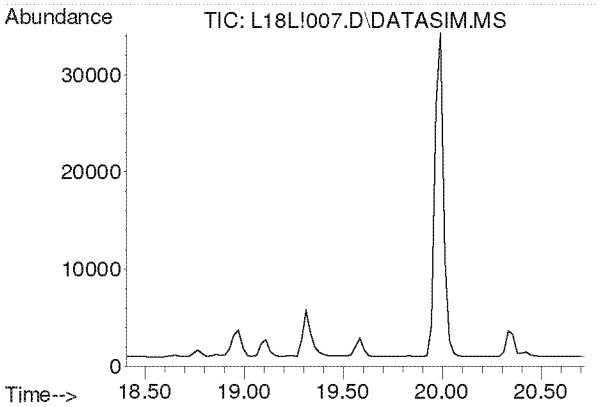
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



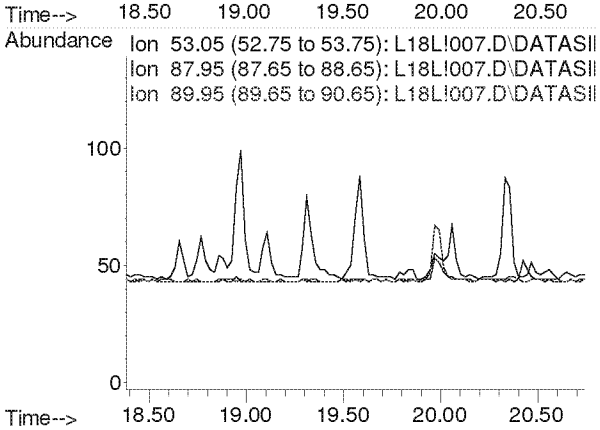


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

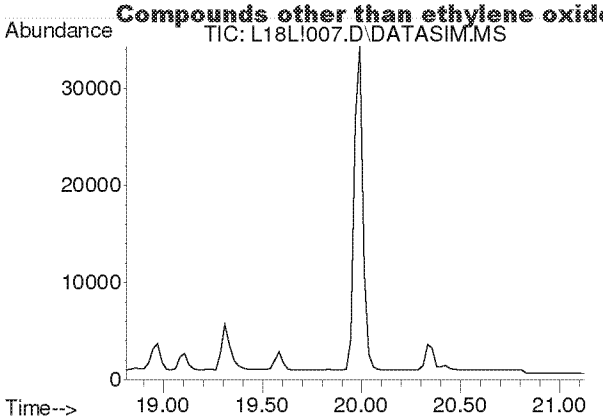
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

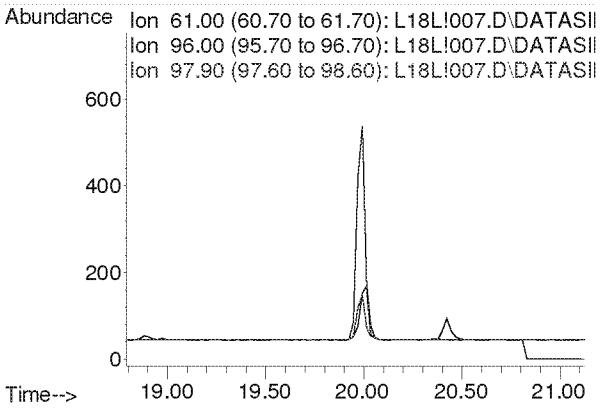


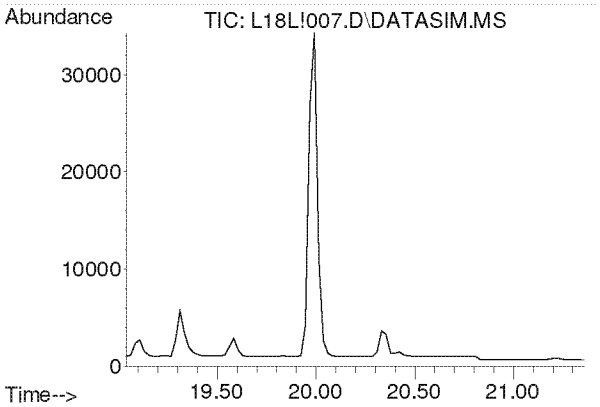
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



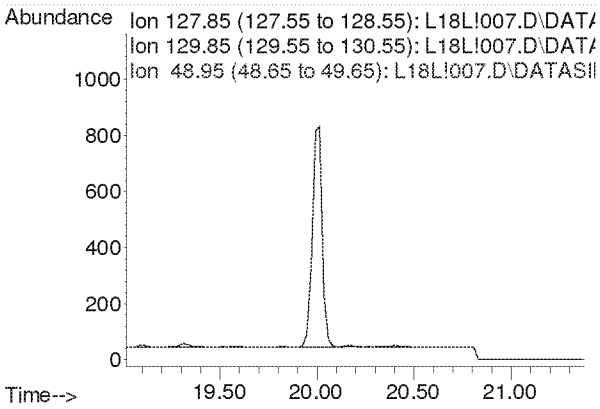


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

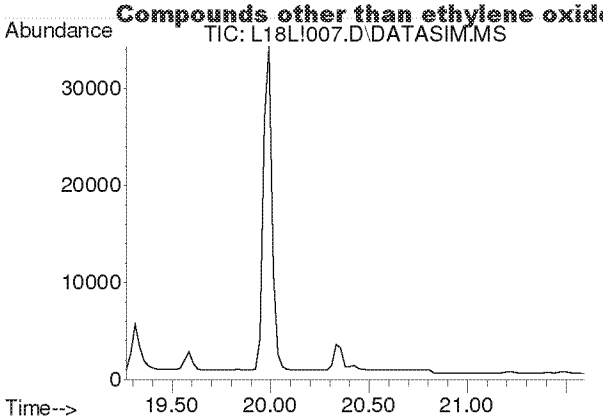
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

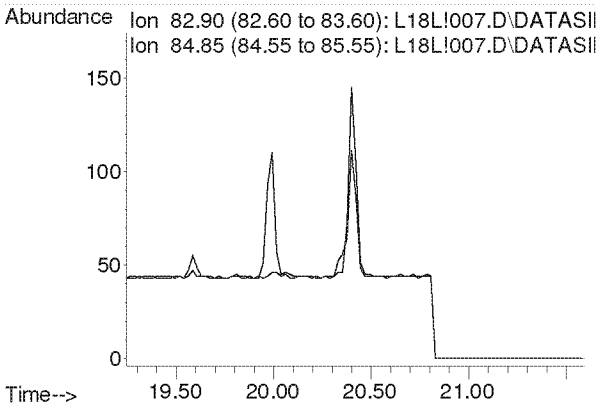


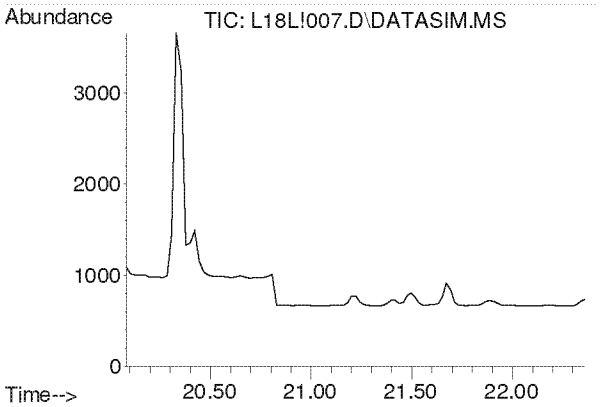
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



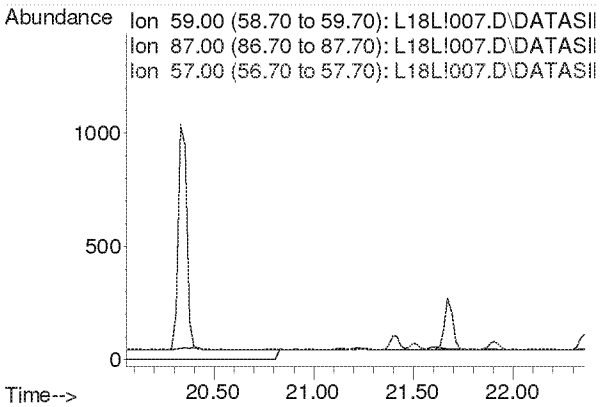


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

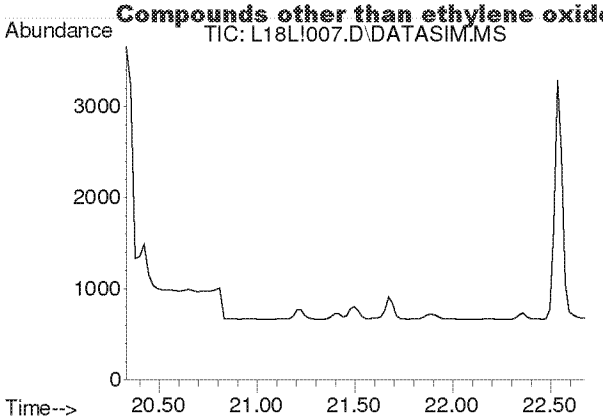
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

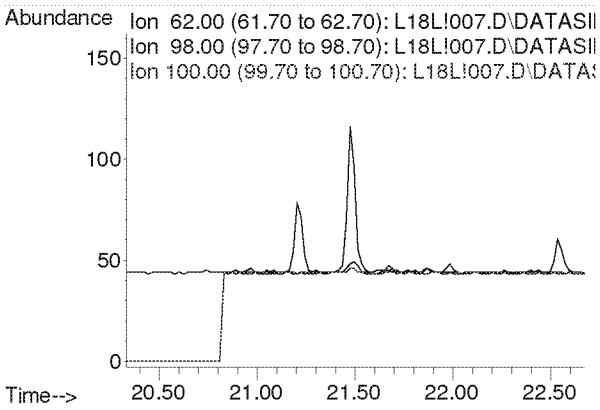


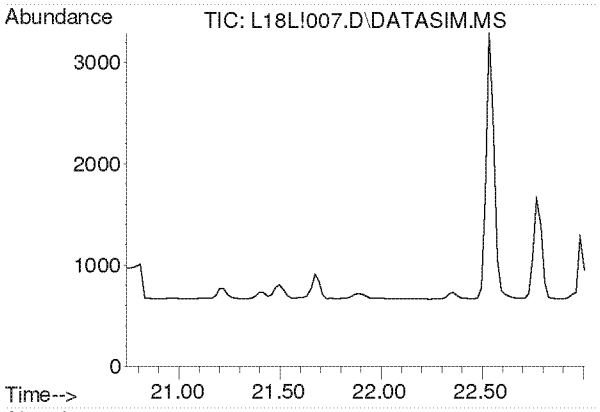
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



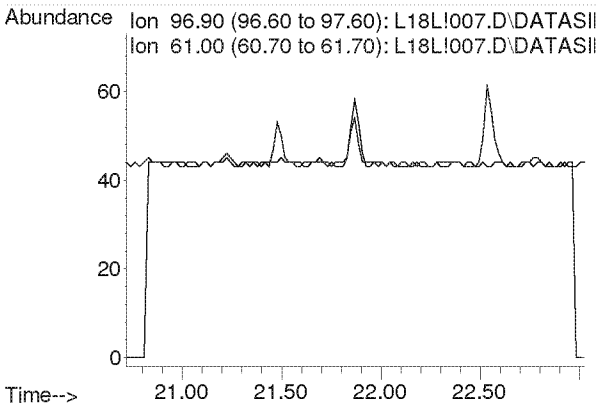


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

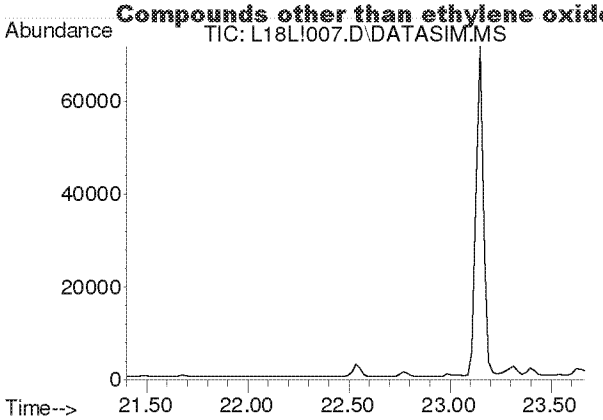
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

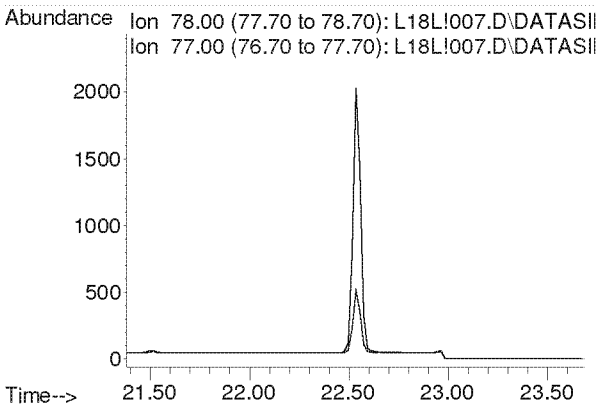


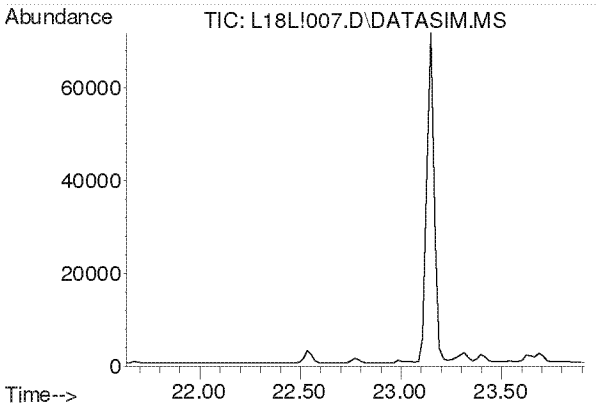
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



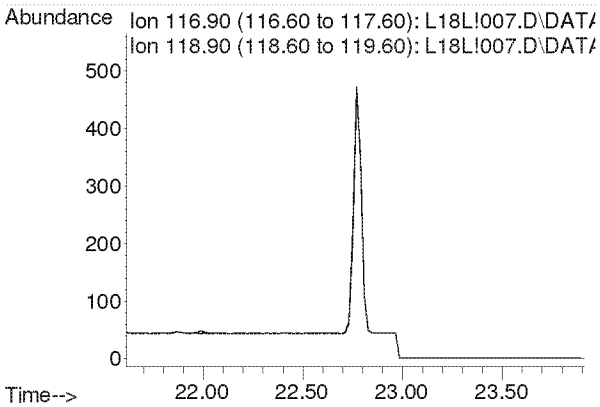


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

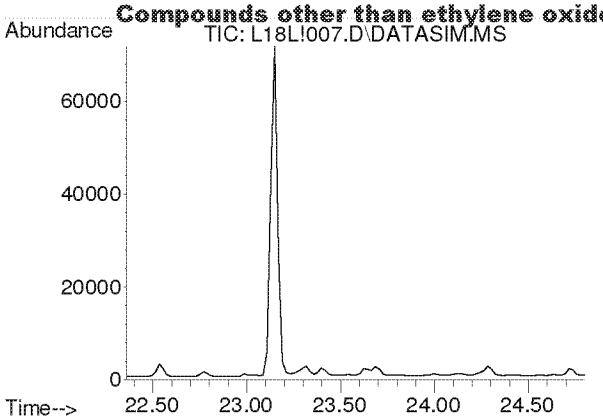
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

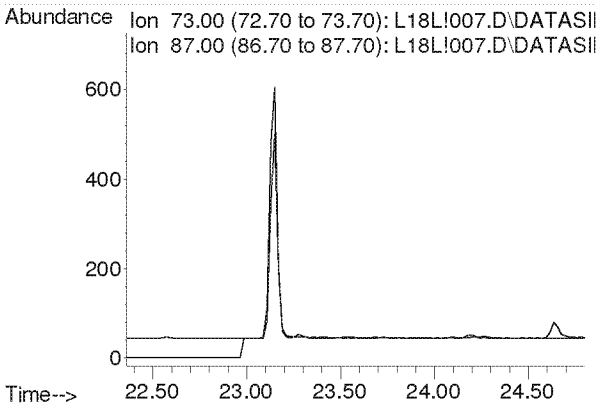


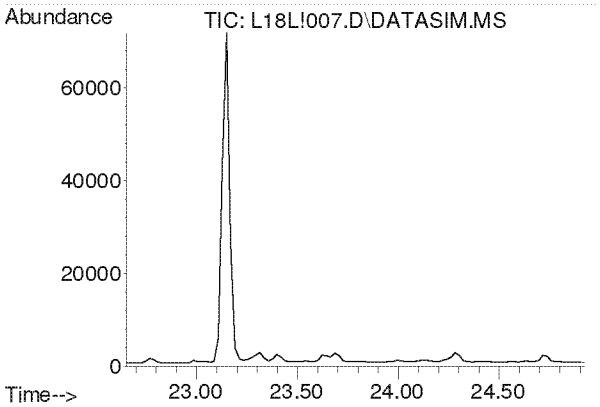
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



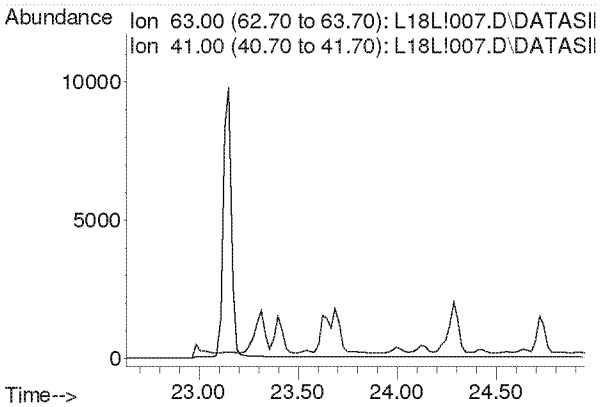


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

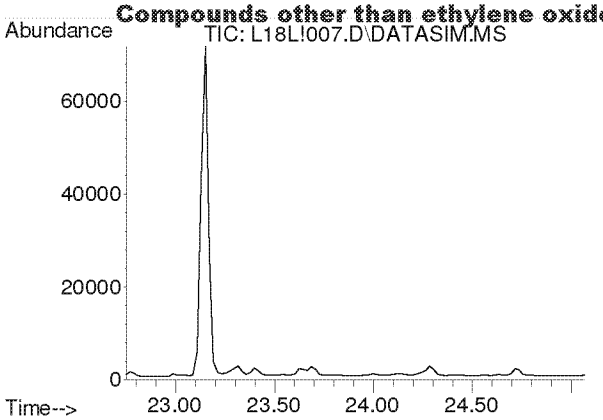
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

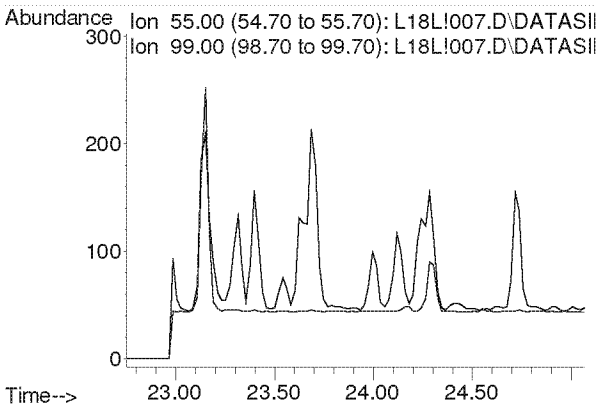


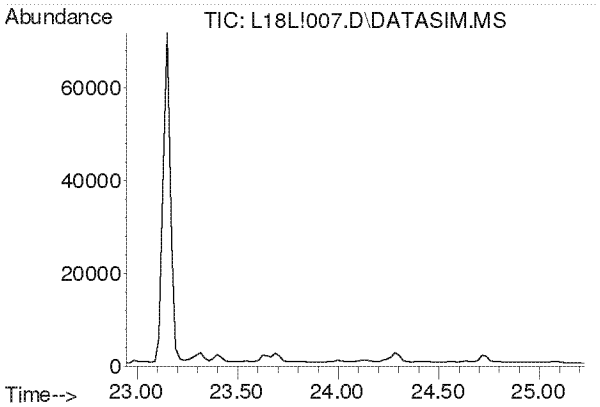
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



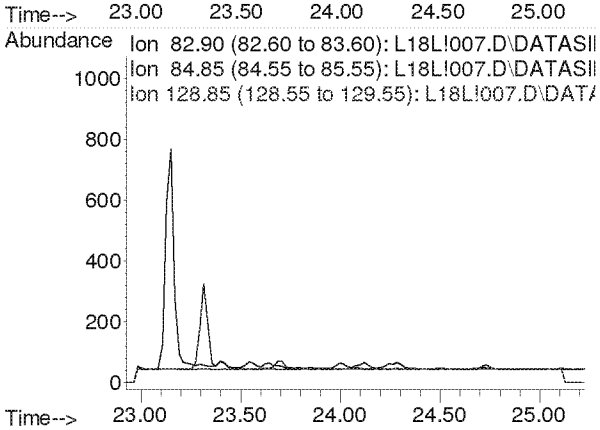


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

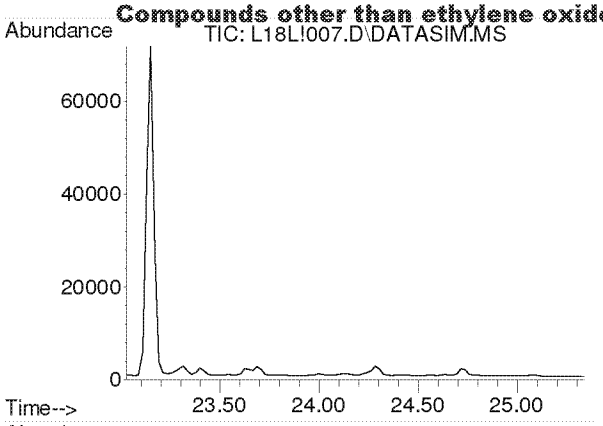
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

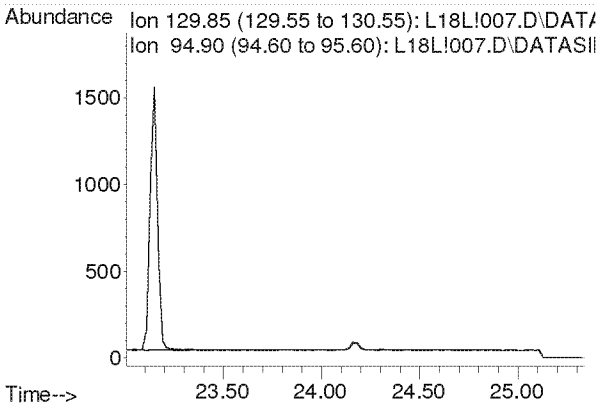


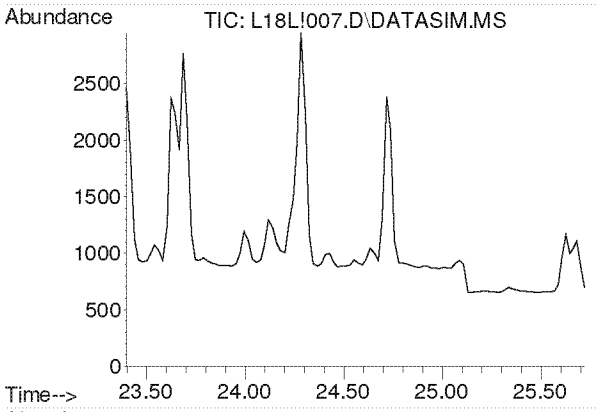
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



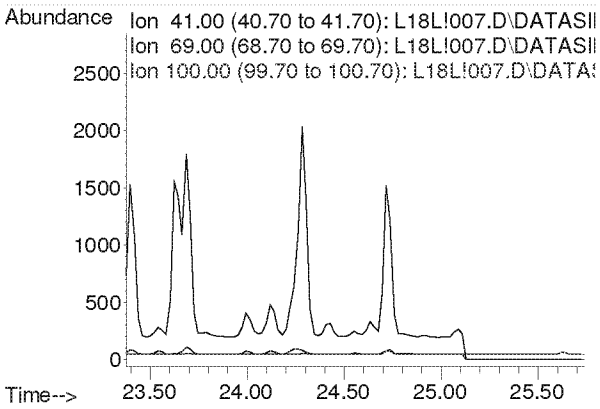


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

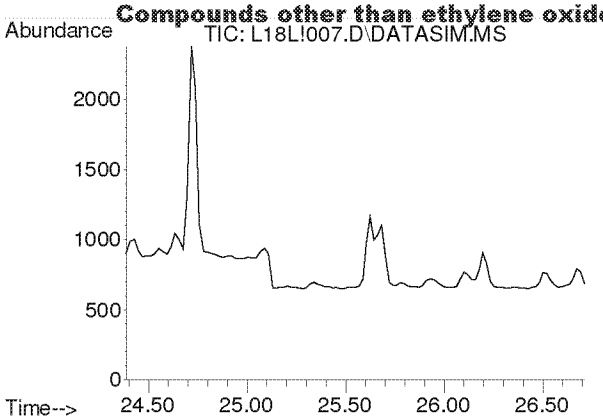
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

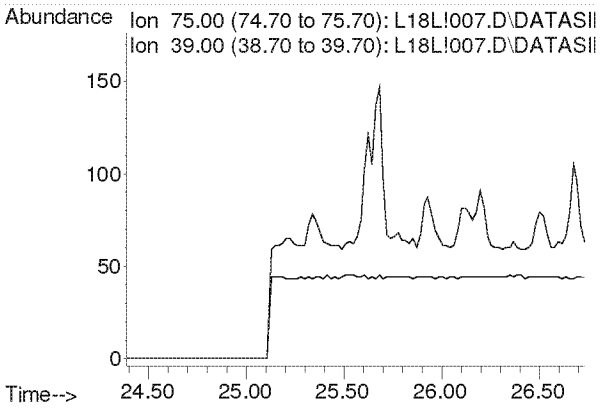


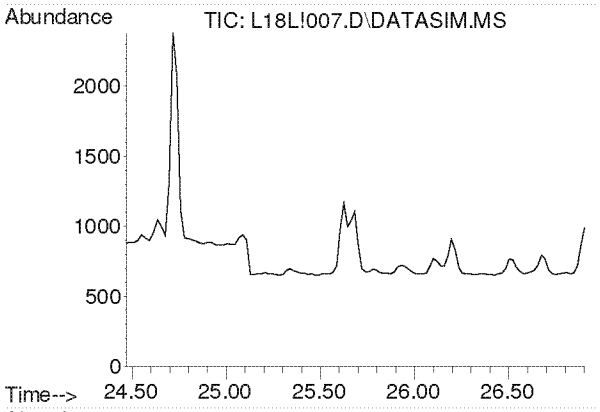
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



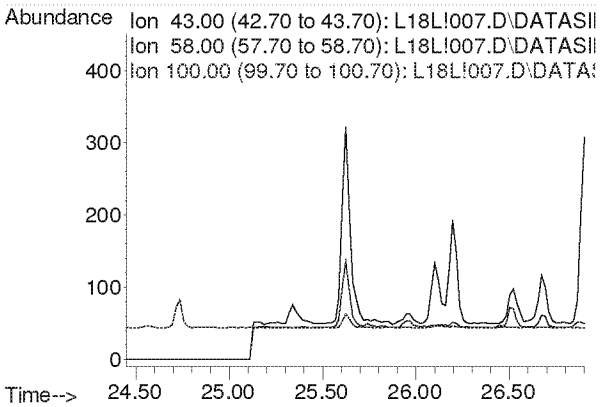


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

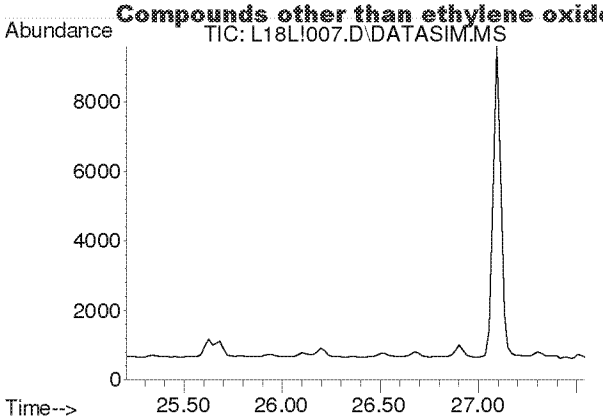
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

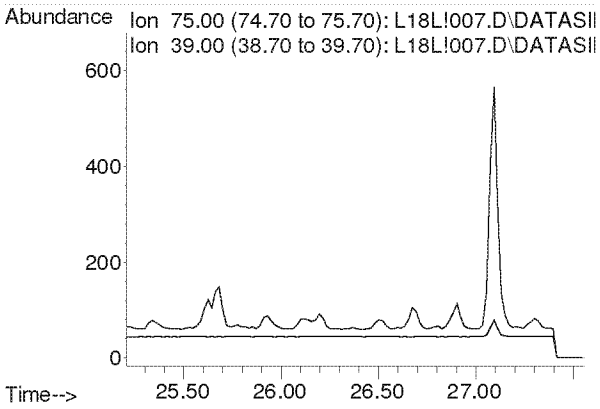


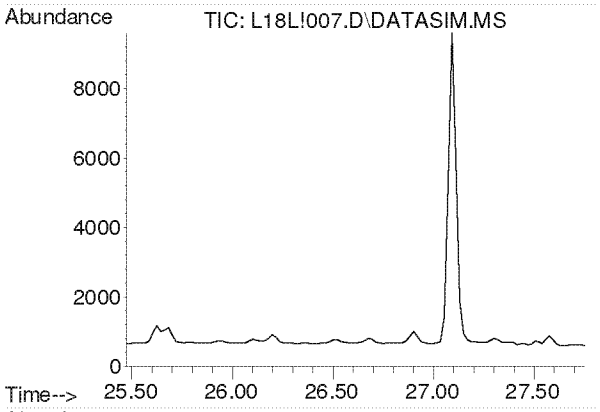
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



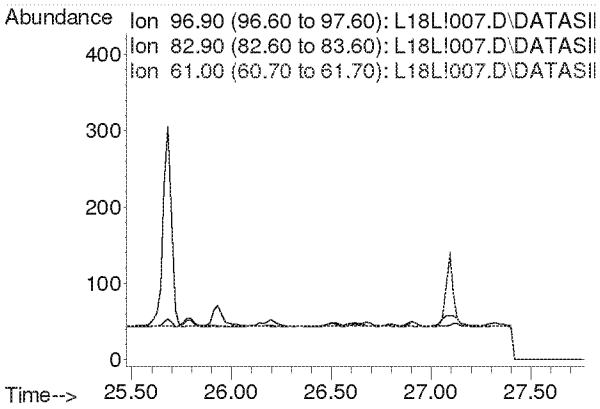


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

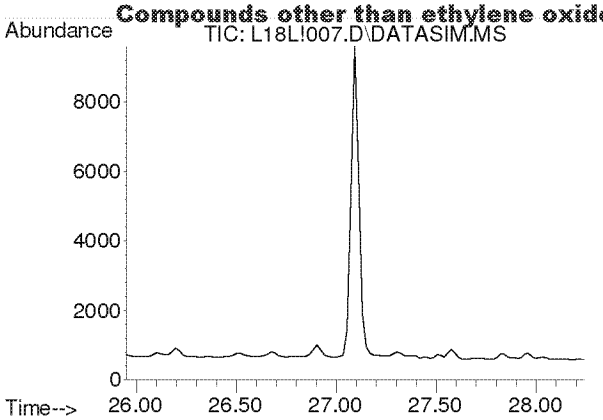
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

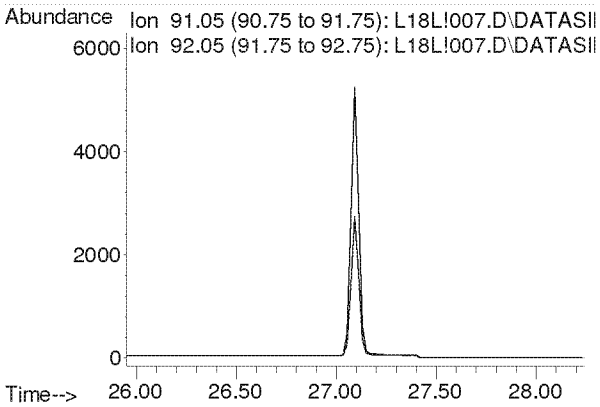


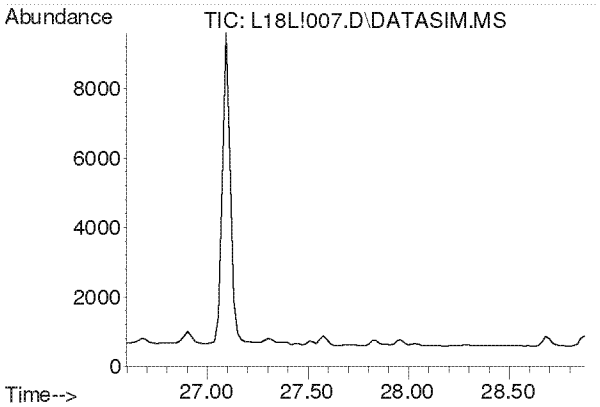
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



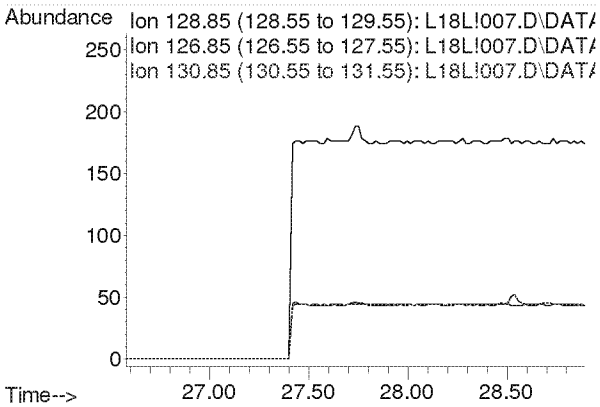


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

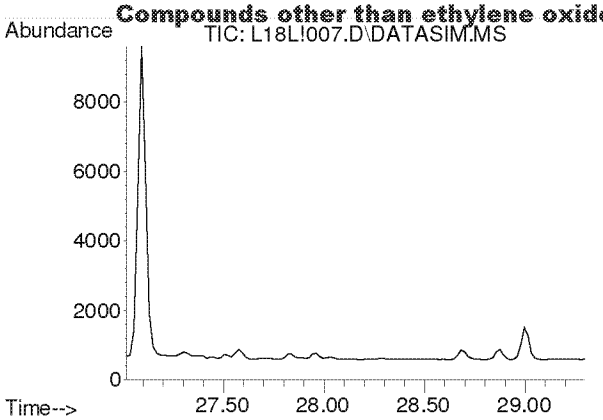
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

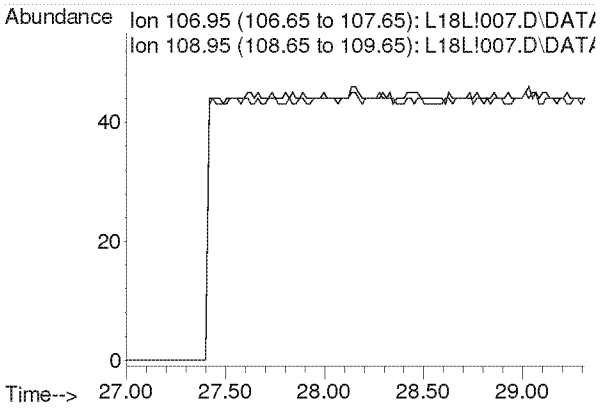


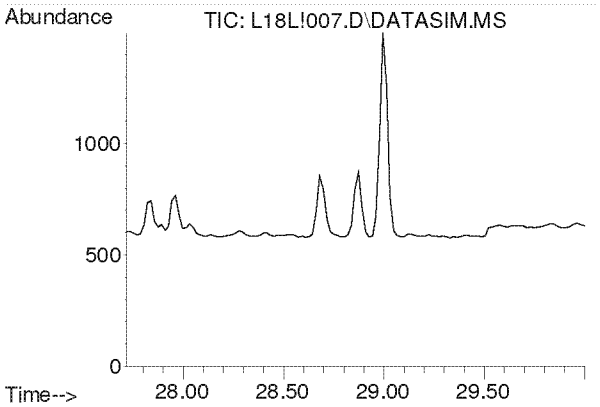
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



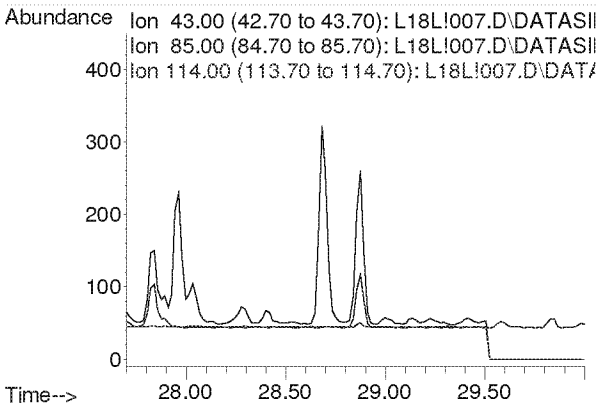


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

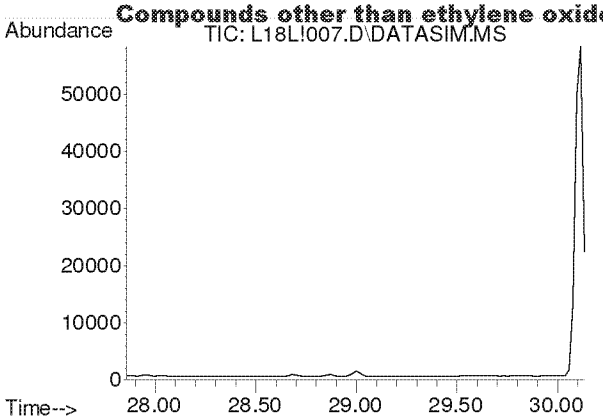
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

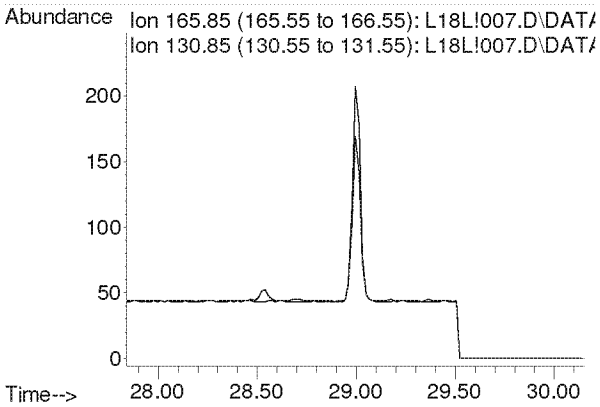


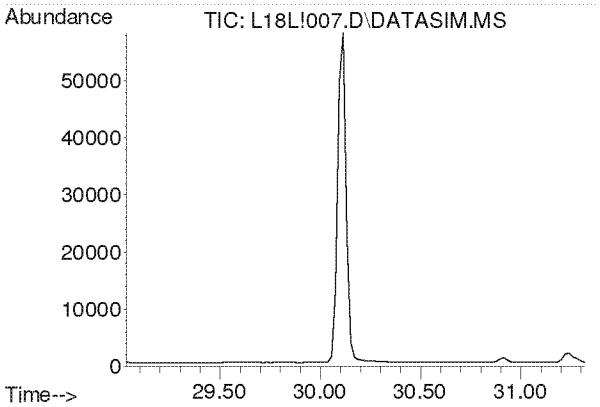
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



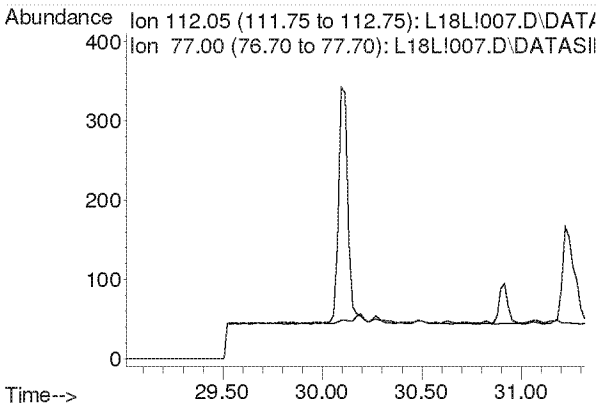


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

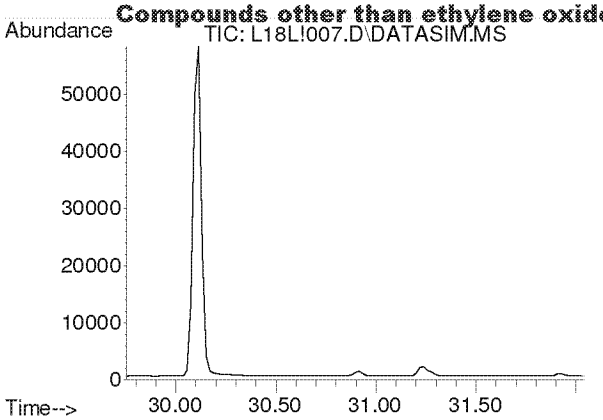
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

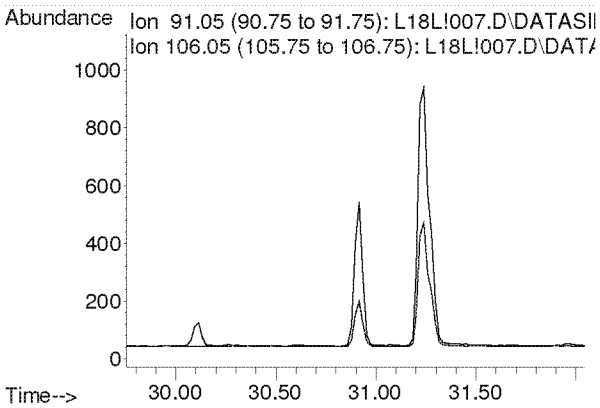


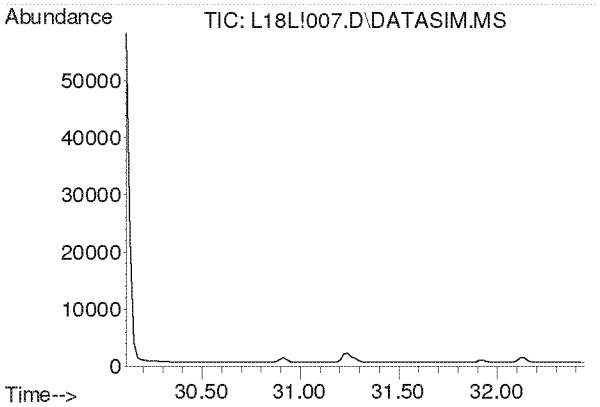
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



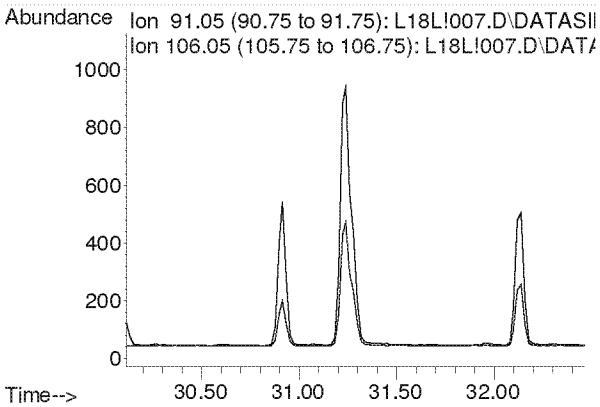


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

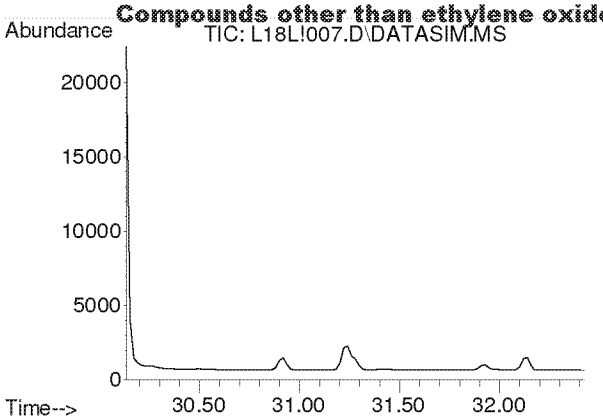
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

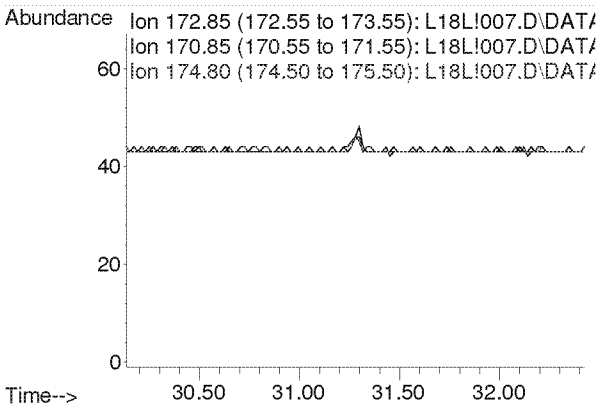


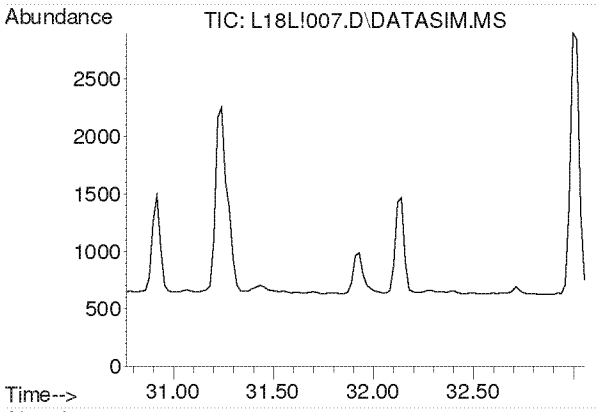
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



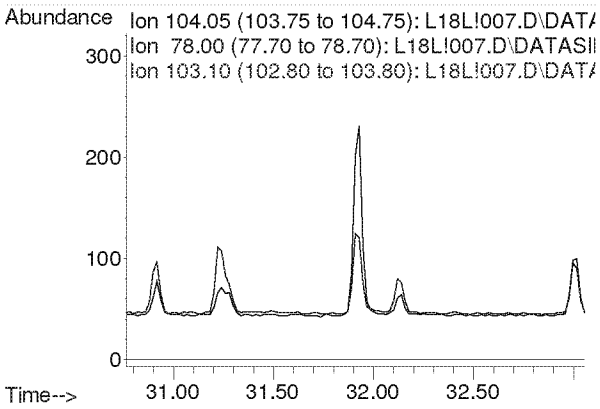


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

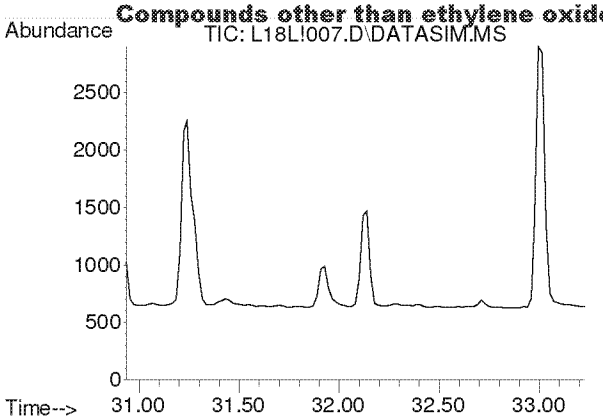
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

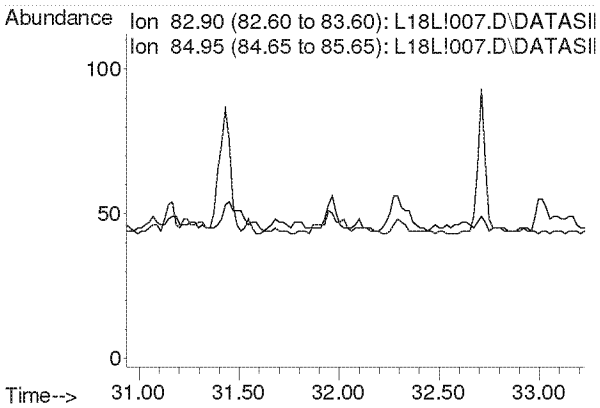


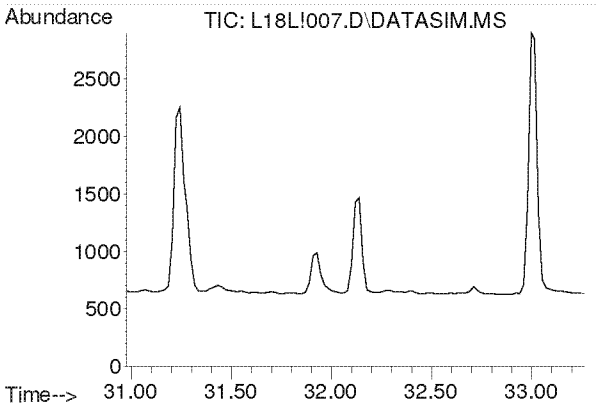
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



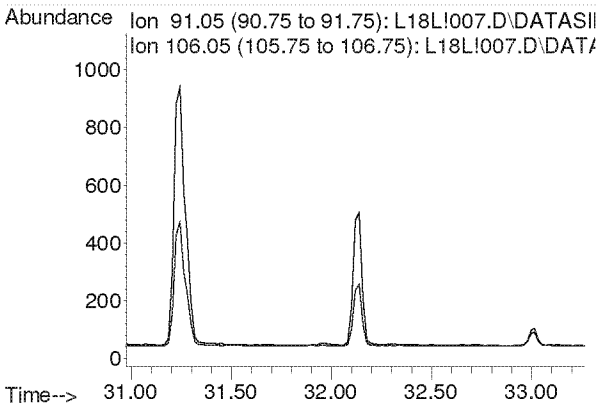


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

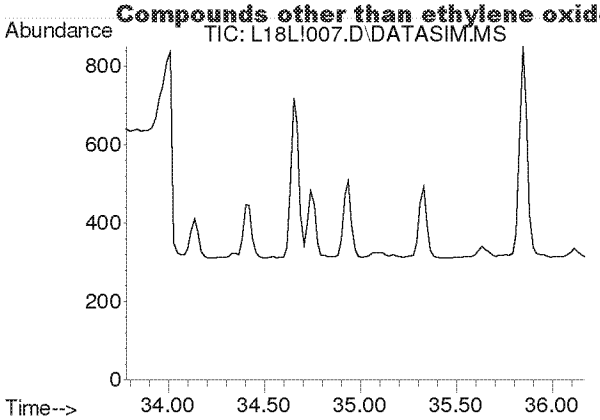
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

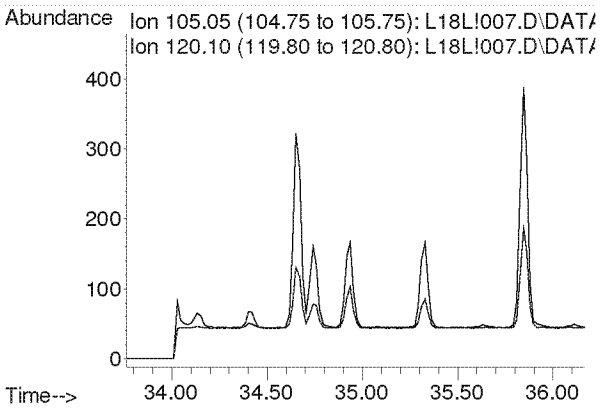


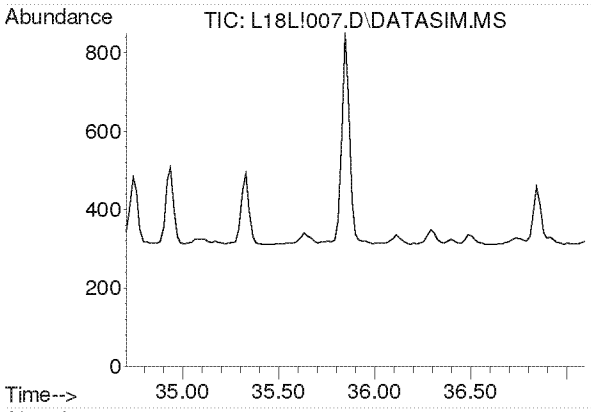
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



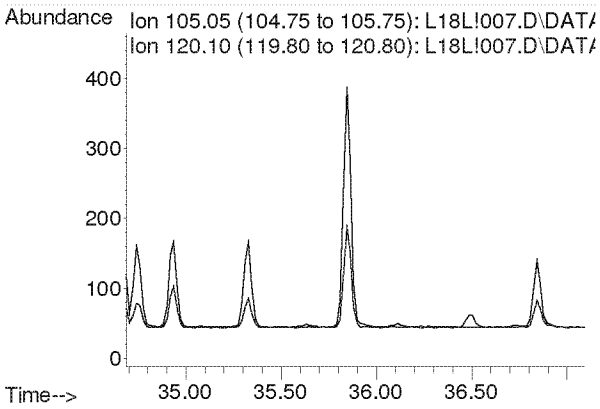


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

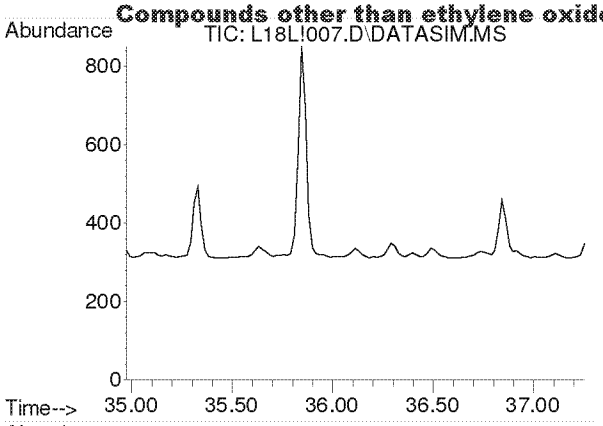
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

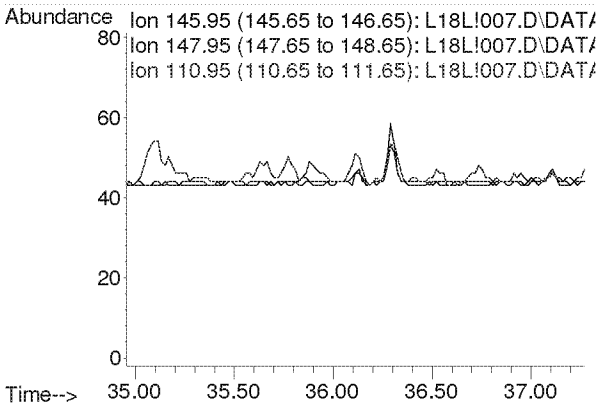


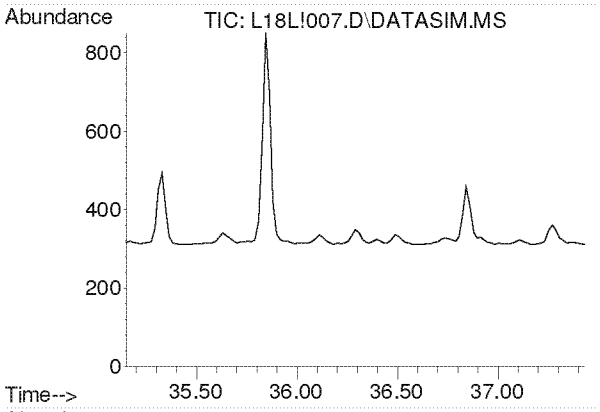
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



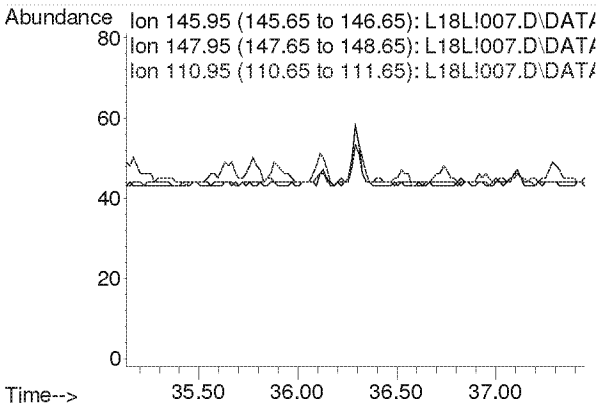


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

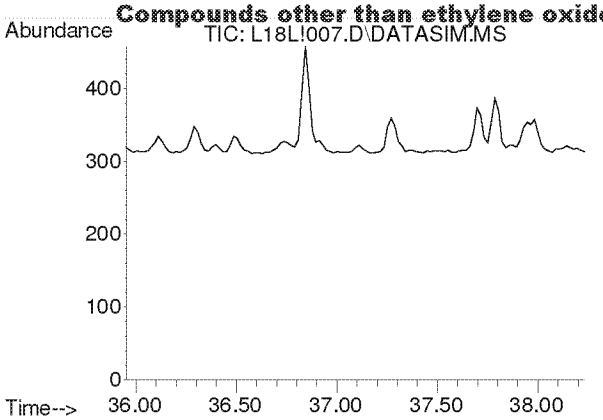
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

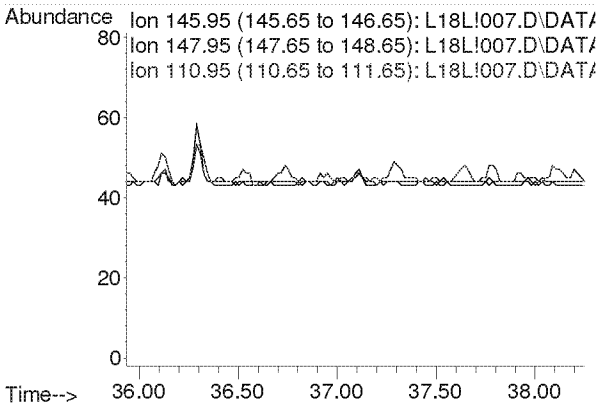


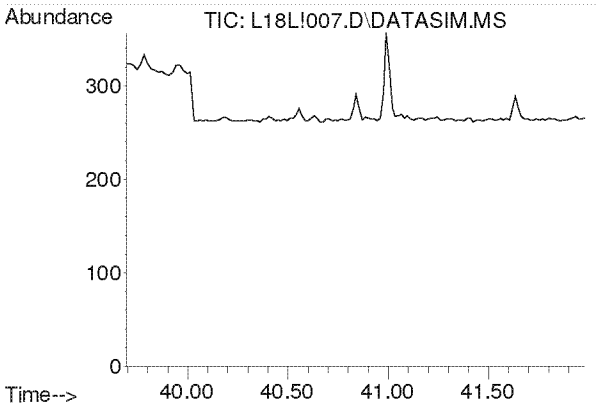
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



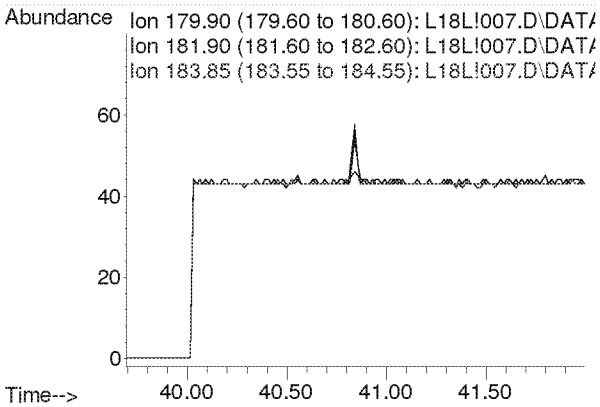


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

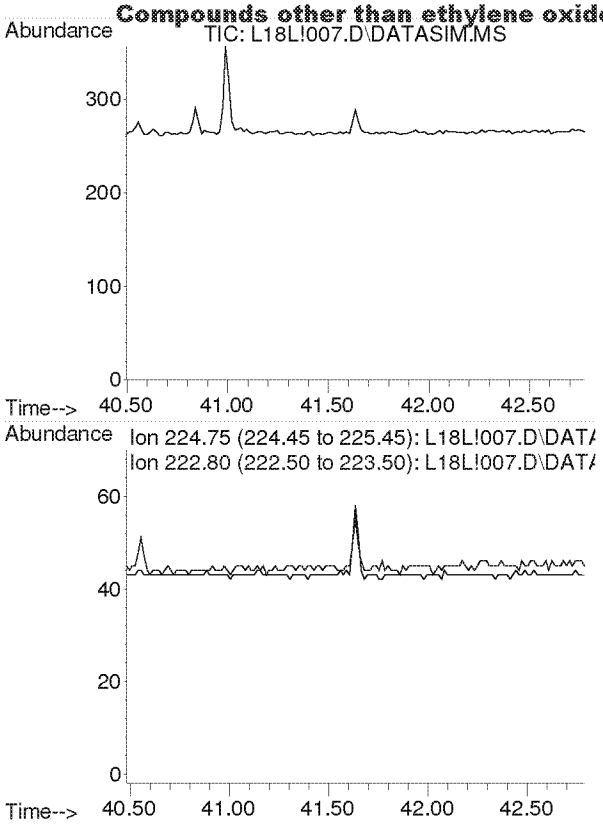
Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!007.D
Acq: 28 Dec 2018 5:34 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\L18L!\
Data File : L18L!008.D
Acq On : 28 Dec 2018 6:34 pm
Operator : MAH
Sample : B8L2804-DUP2
Misc : WB VILLAGE HALL R2 12/14/18
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:21:18 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

d-NK

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	57624	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	140751	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	101601	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	12.395	29	3886	1.1283 ppbv #	22
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. d	
21) 1,1-Dichloroethane	0.000	63	0	N.D. d	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. 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\L18L!\
Data File : L18L!008.D
Acq On : 28 Dec 2018 6:34 pm
Operator : MAH
Sample : B8L2804-DUP2
Misc : WB VILLAGE HALL R2 12/14/18
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:21:18 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

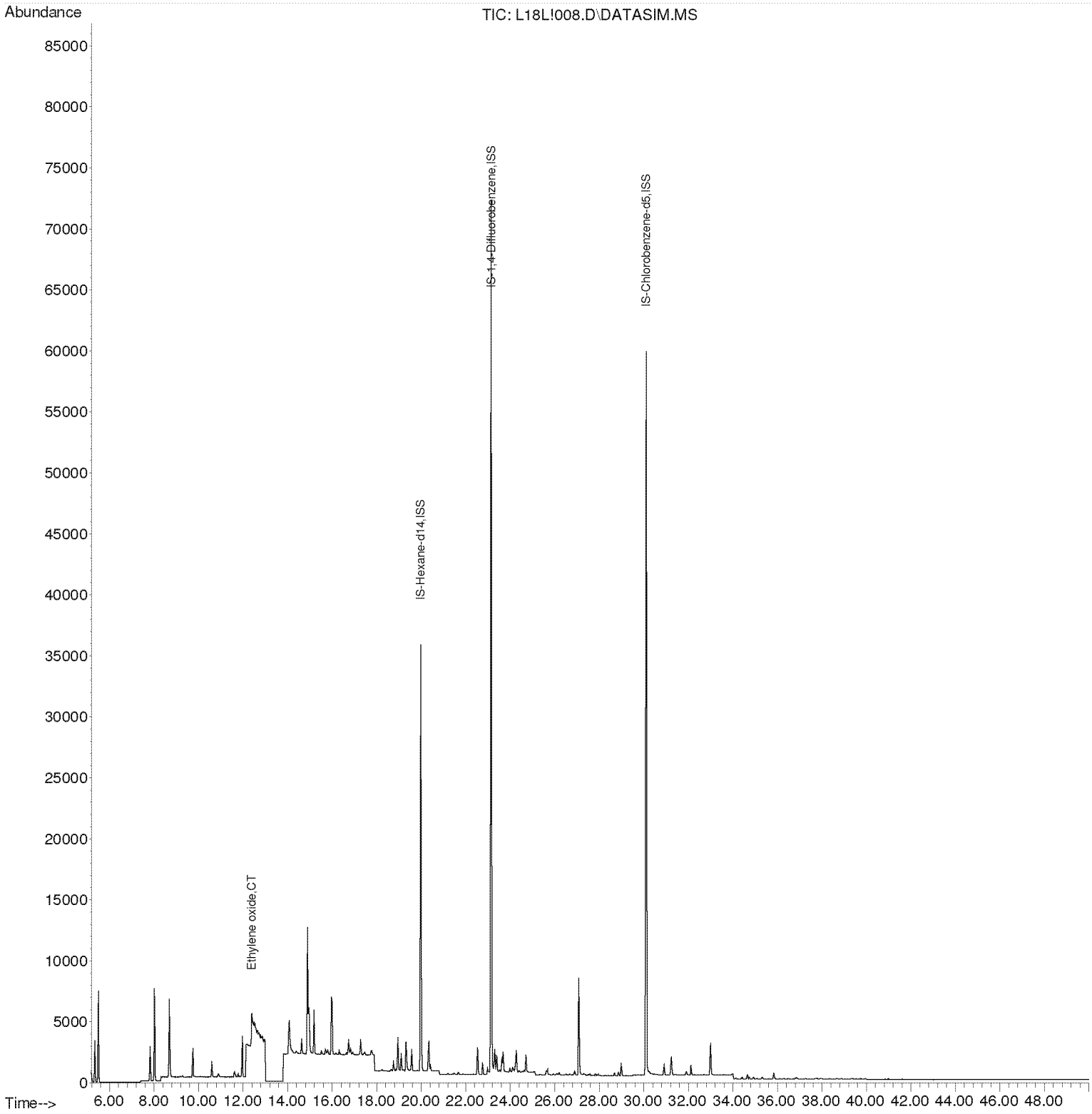
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) m,p-Xylene	0.000	91	0	N.D.	d
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D.	d
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D.	d
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	d
57) 1,2,4-Trimethylbenzene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

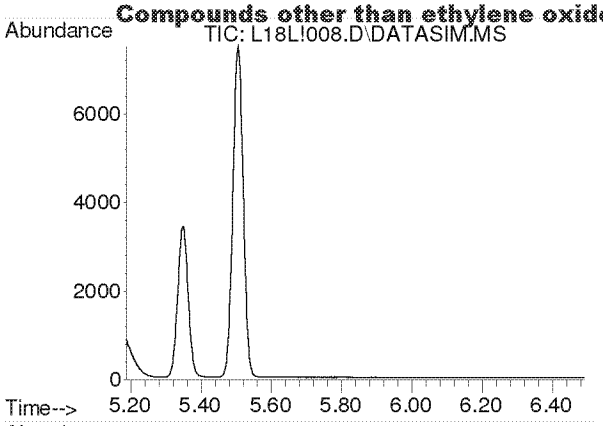
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!008.D
Acq On : 28 Dec 2018 6:34 pm
Operator : MAH
Sample : B8L2804-DUP2
Misc : WB VILLAGE HALL R2 12/14/18
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 03 13:07:23 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



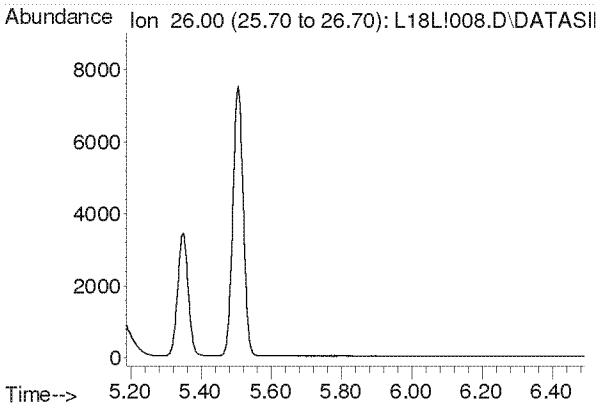
Compounds other than ethylene oxide were not quantitated.

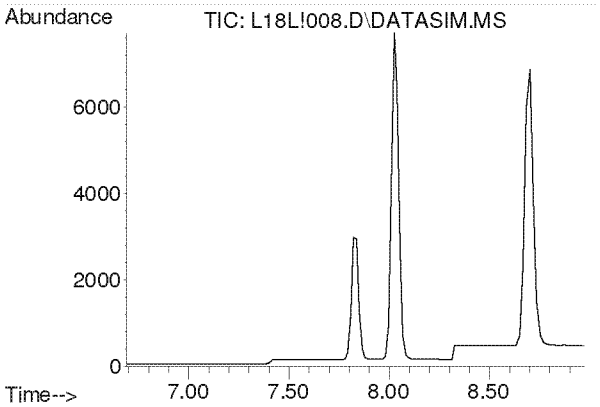


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 26



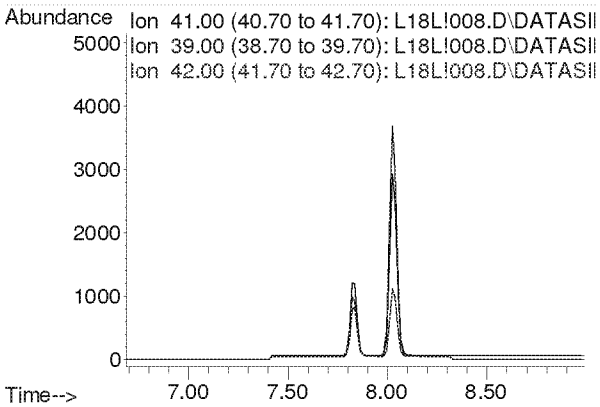


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

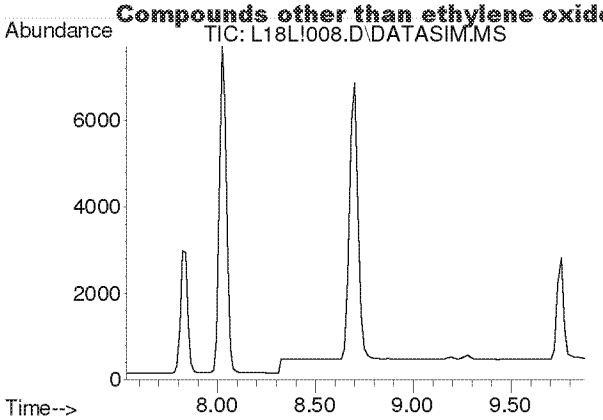
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

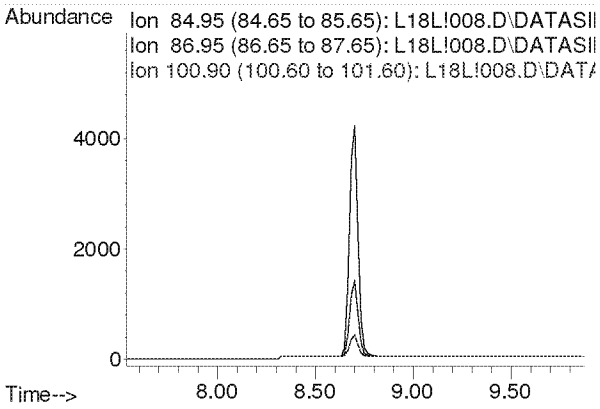


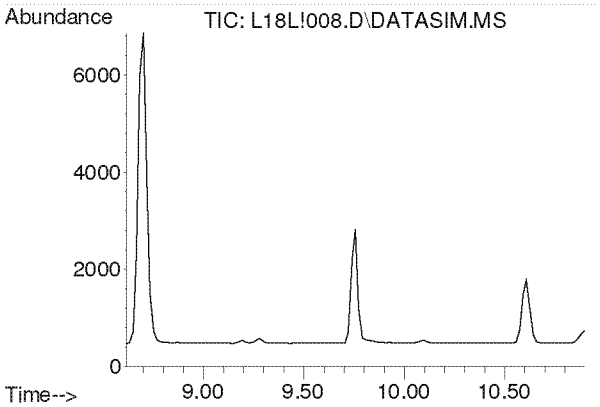
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



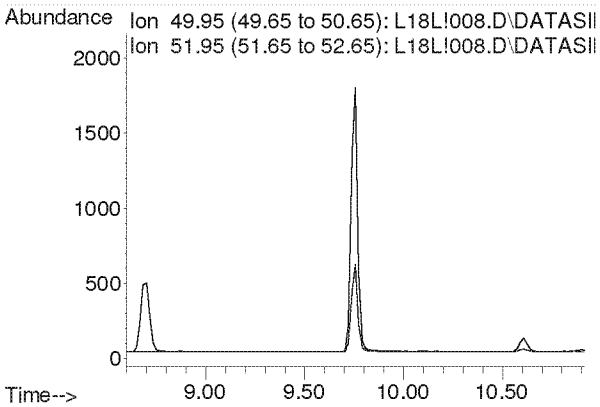


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

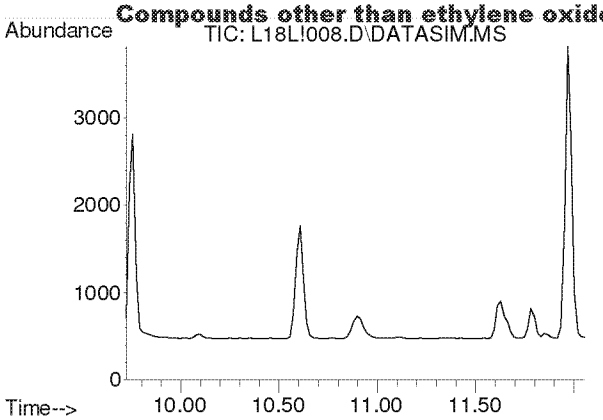
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

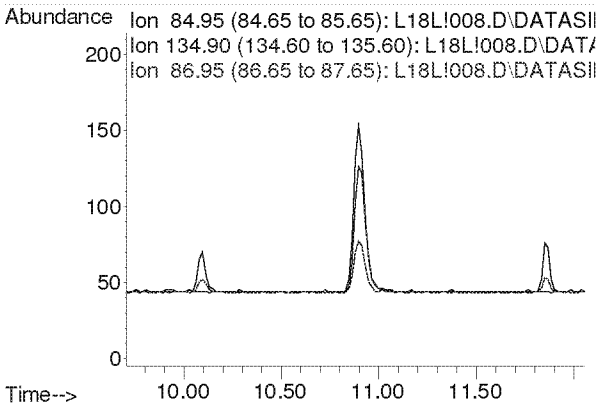


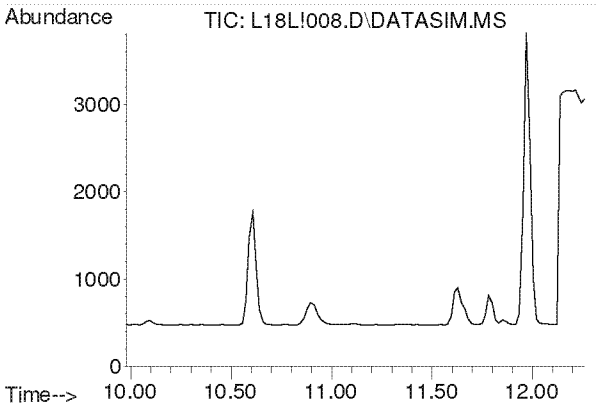
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



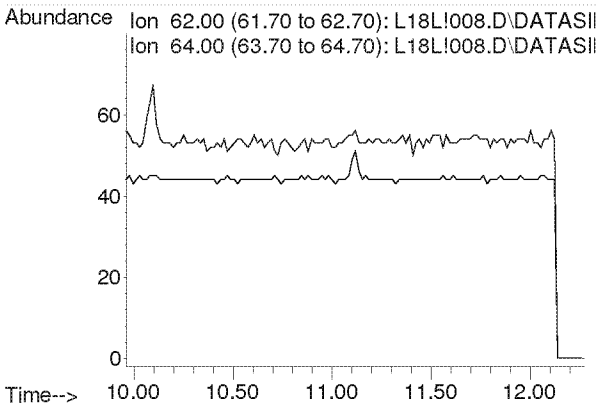


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

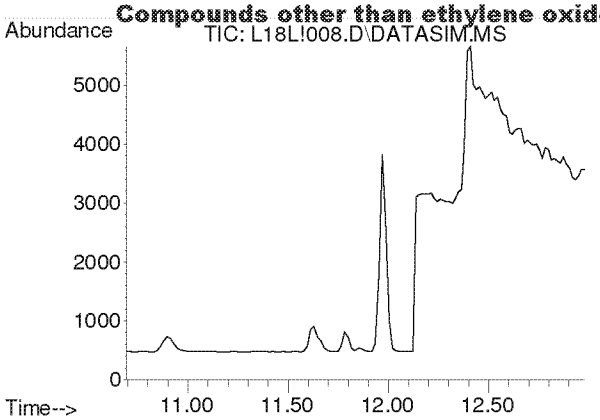
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

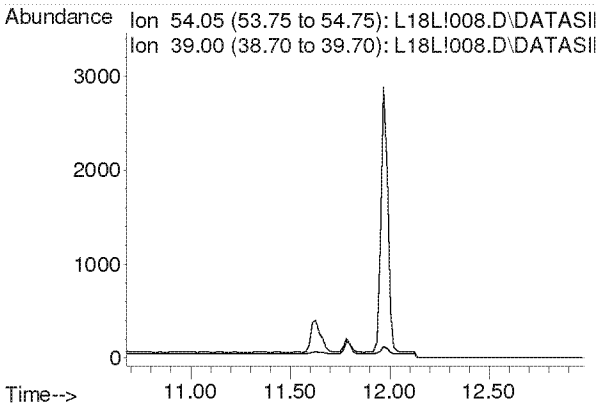


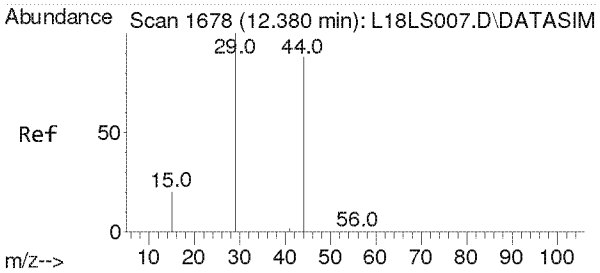
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

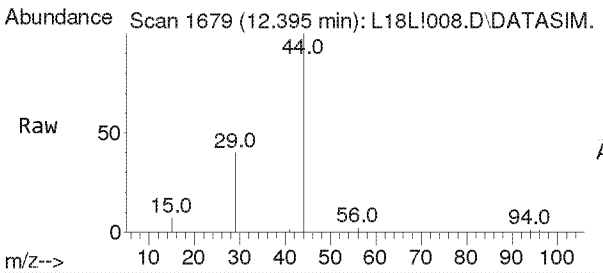


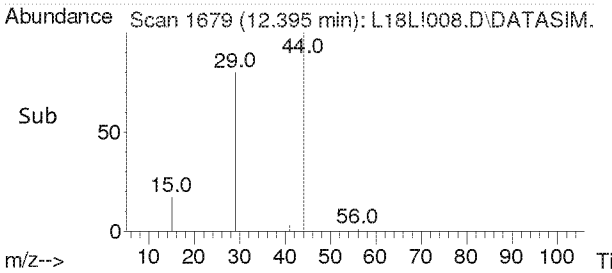


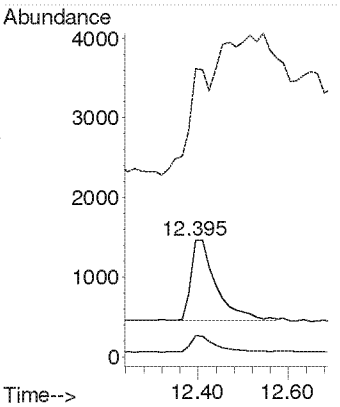
#9
Ethylene oxide
Concen: 1.128 ppbv
RT: 12.395 min Scan# 1679
Delta R.T. 0.015 min
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 29 Resp: 3886

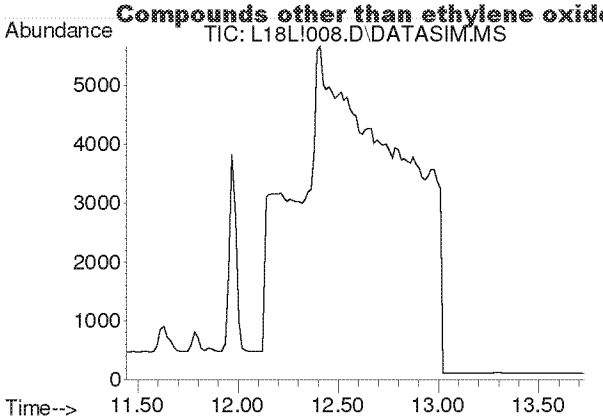
Ion	Ratio	Lower	Upper
29	100		
15	21.0	16.2	24.4
44	0.0	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

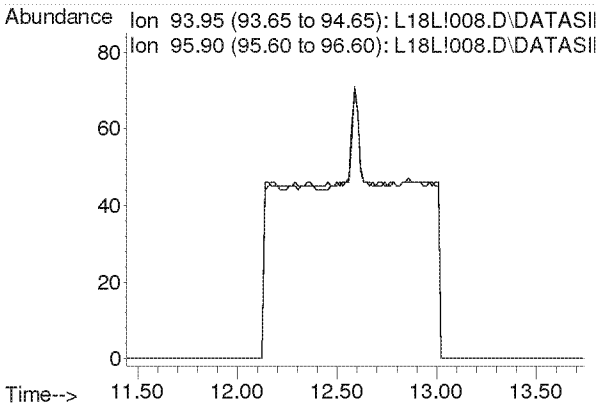


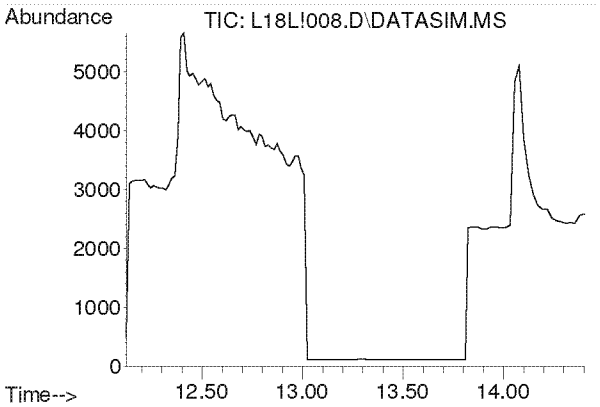
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



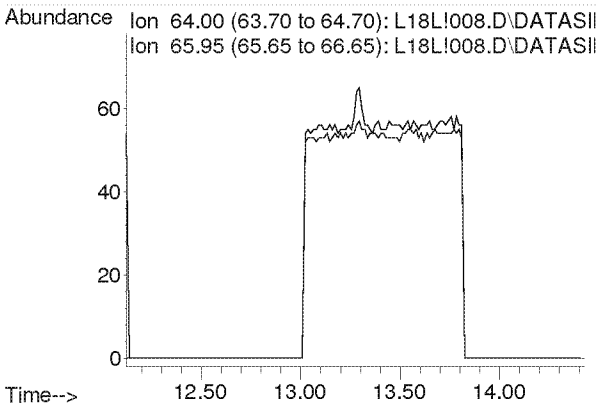


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

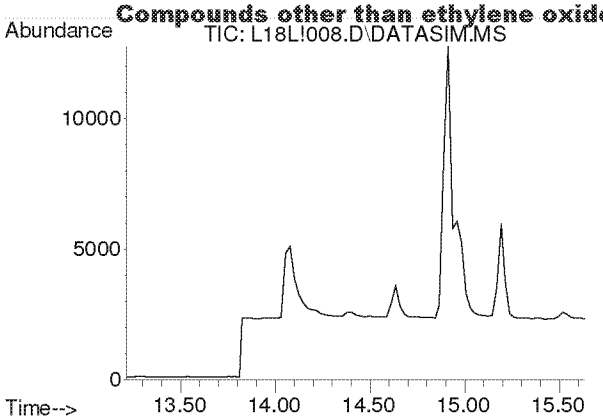
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

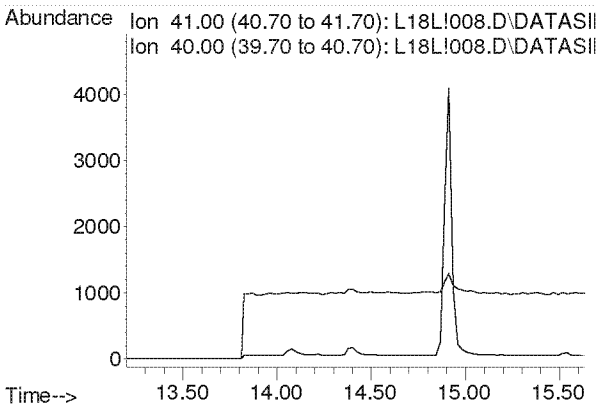


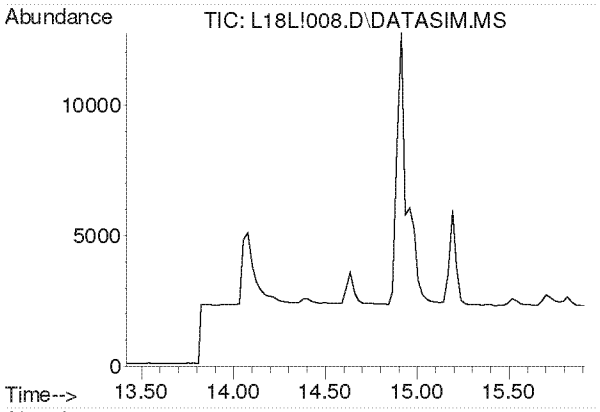
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



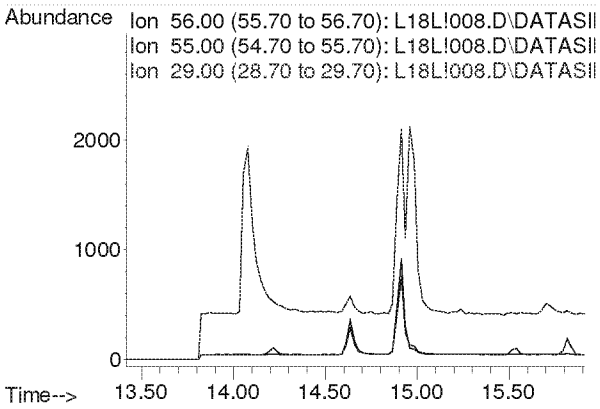


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

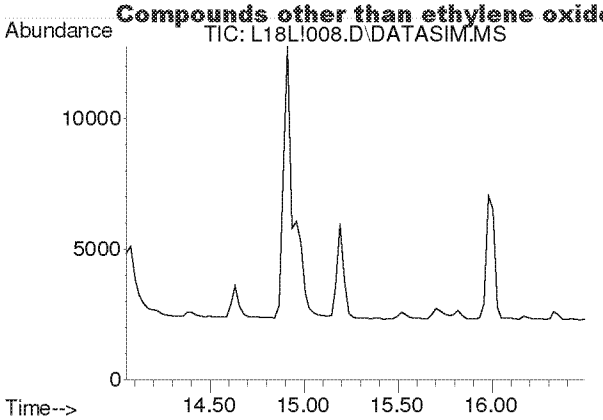
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

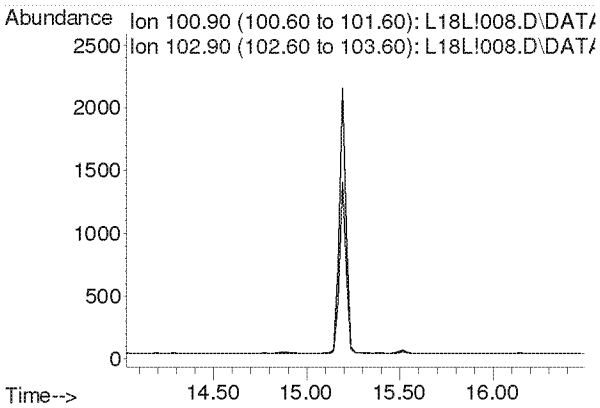


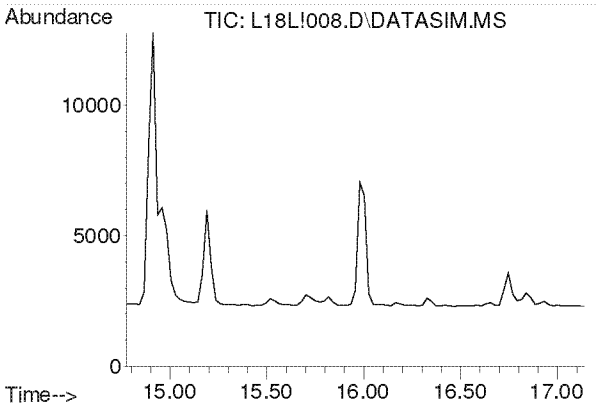
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



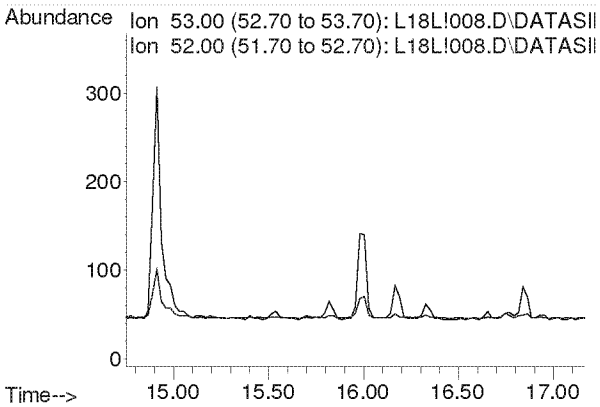


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

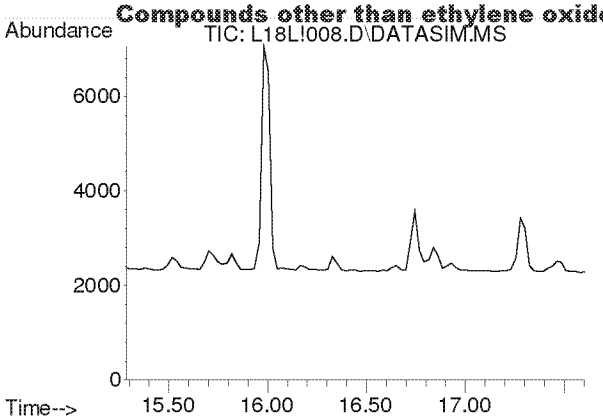
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

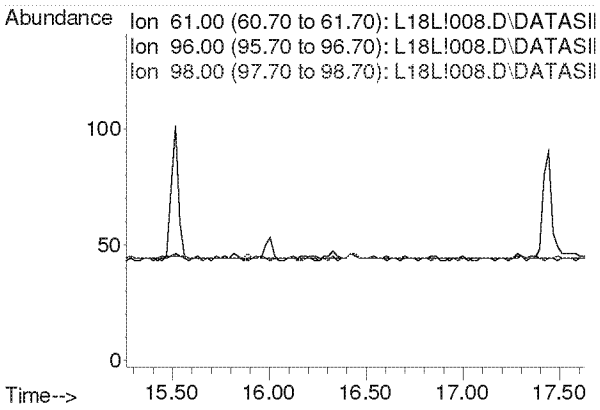


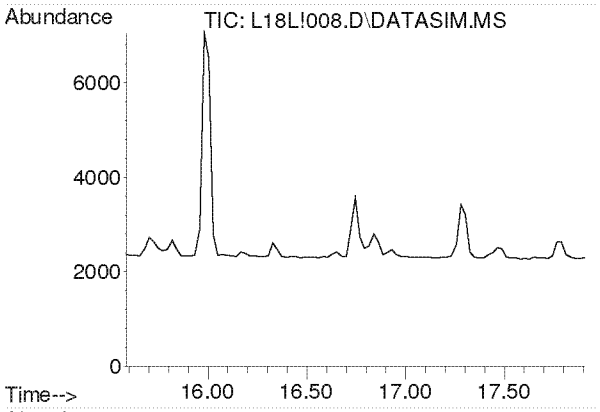
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



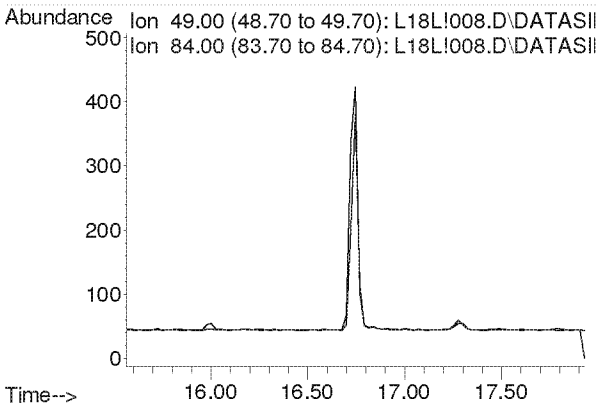


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

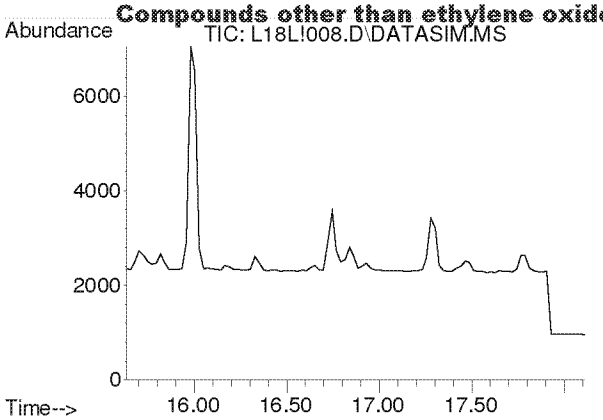
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

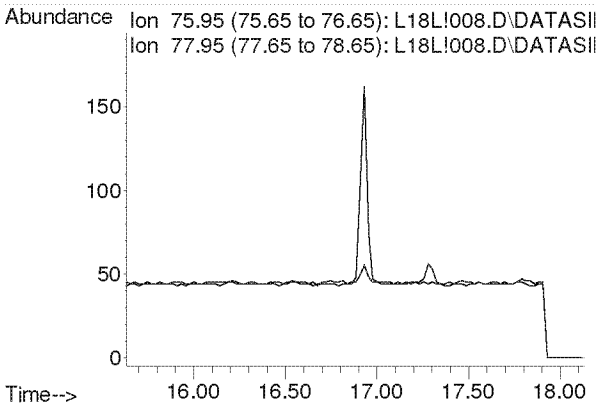


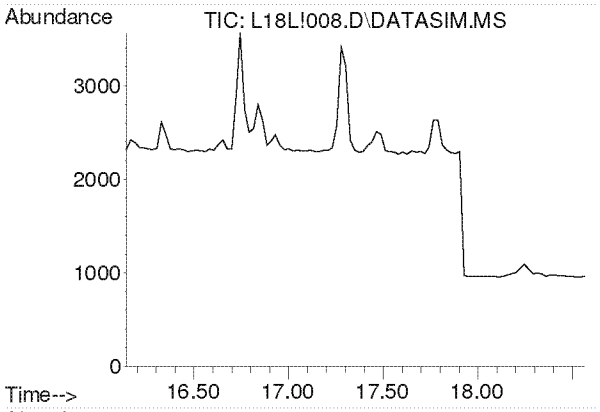
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



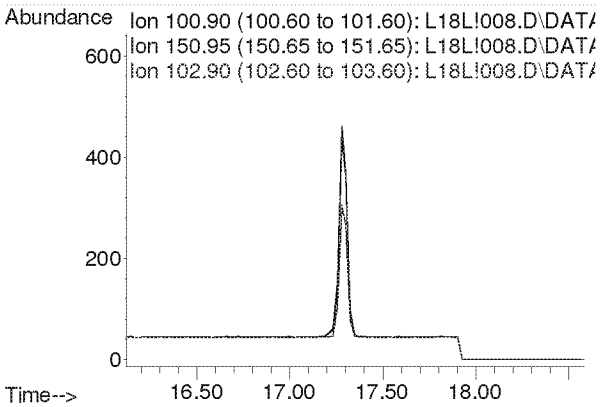


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

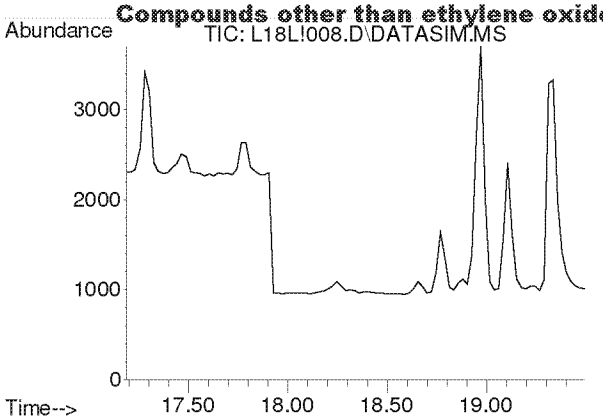
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

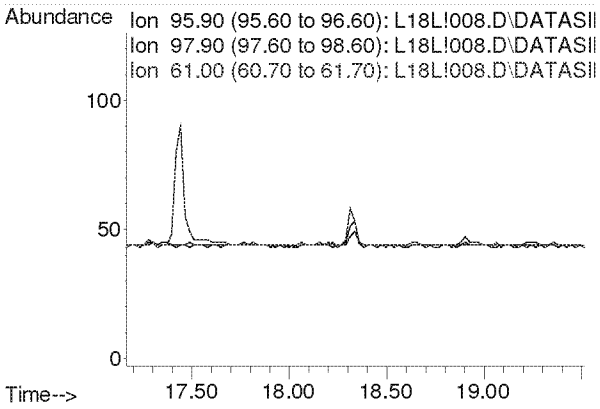


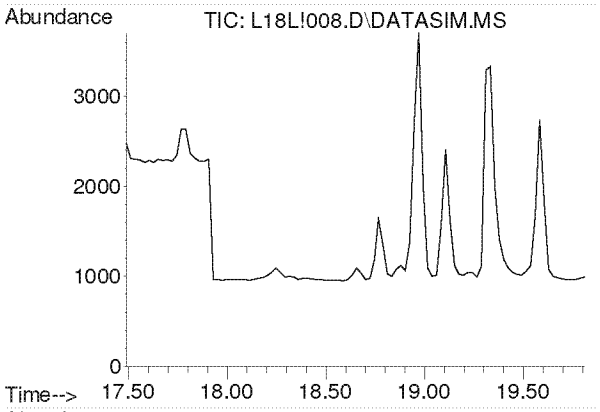
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



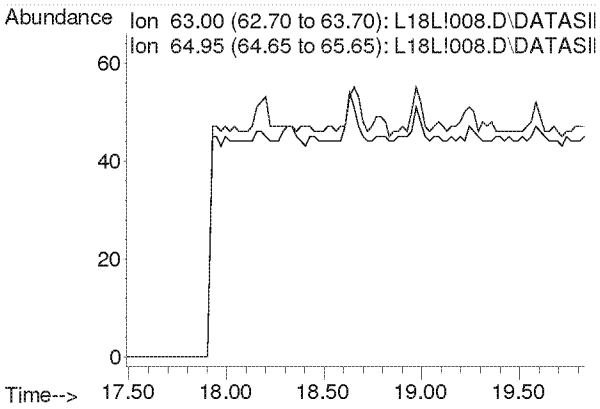


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

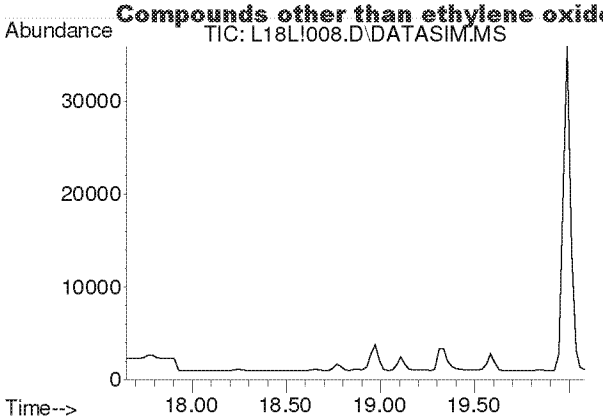
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

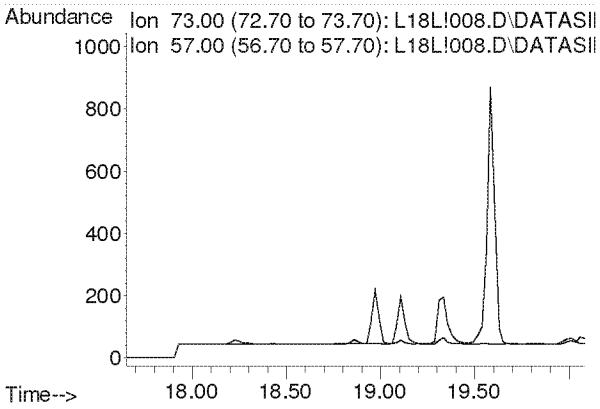


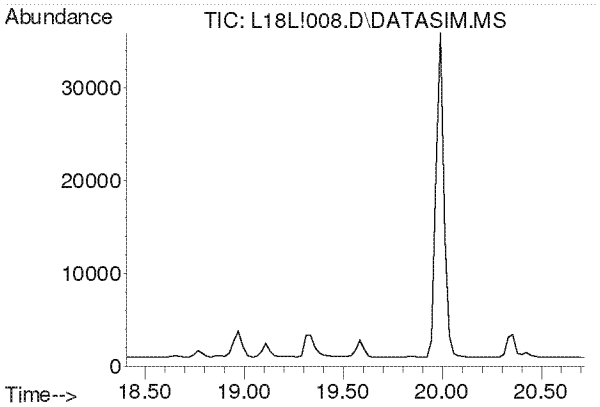
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



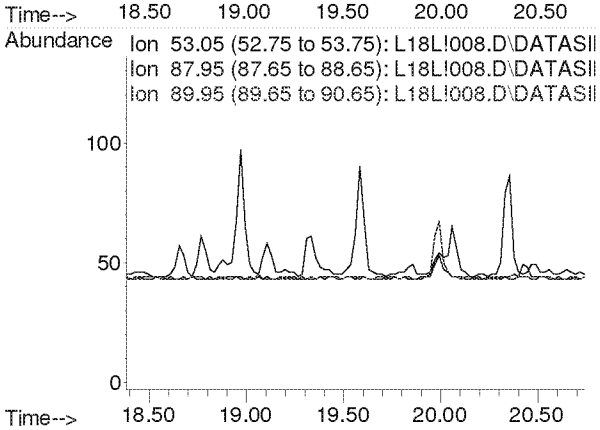


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

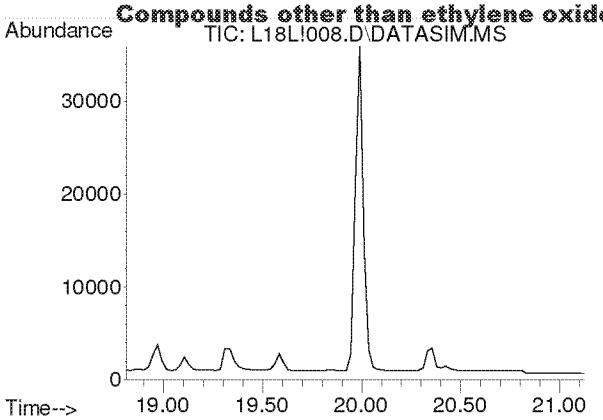
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

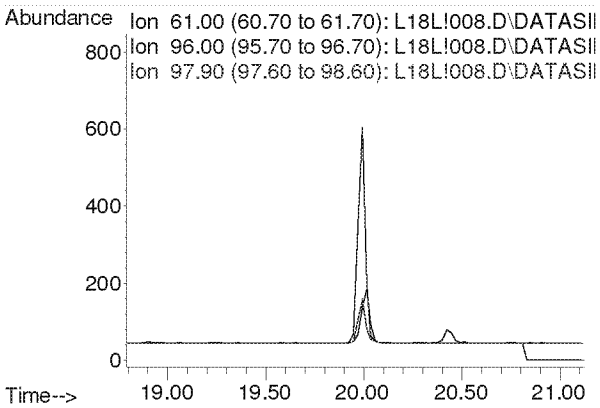


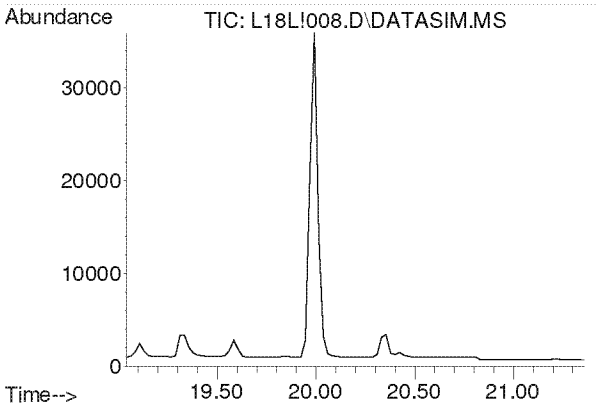
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



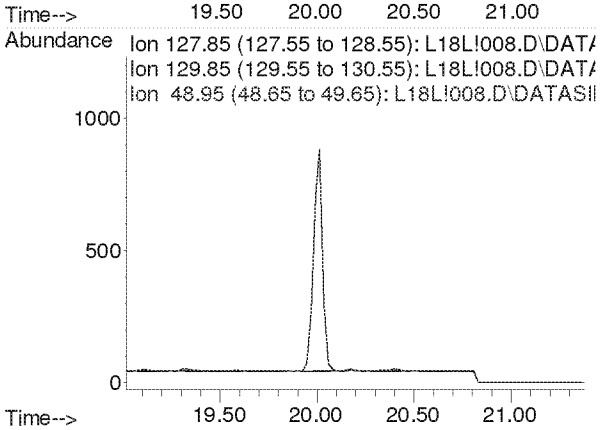


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

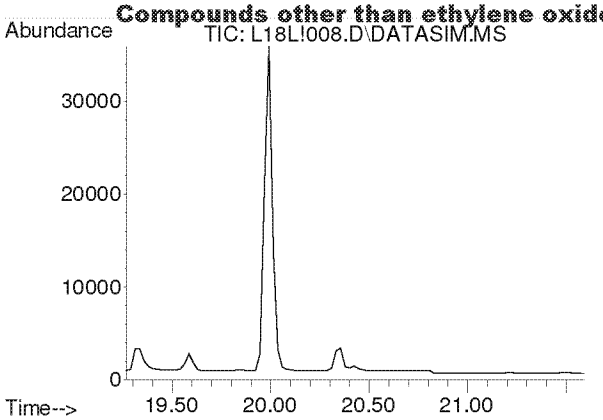
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

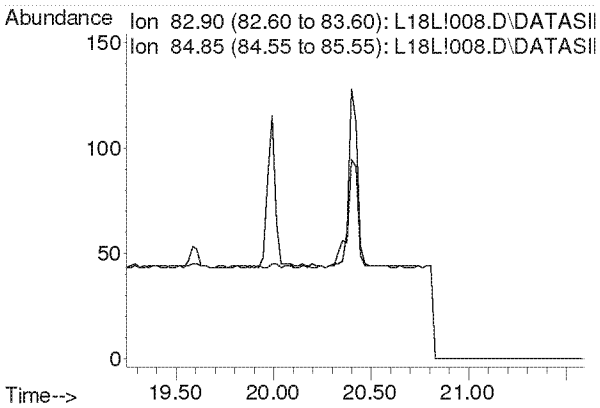


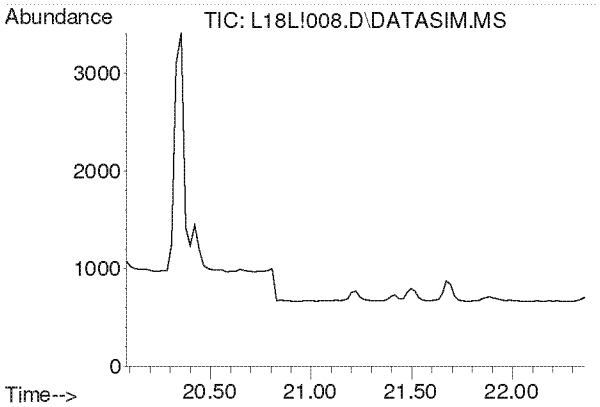
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



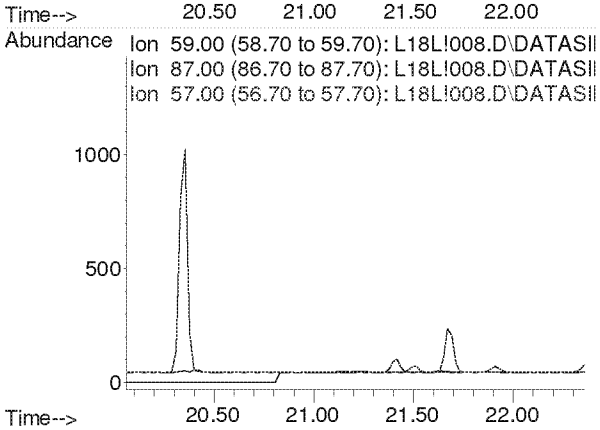


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

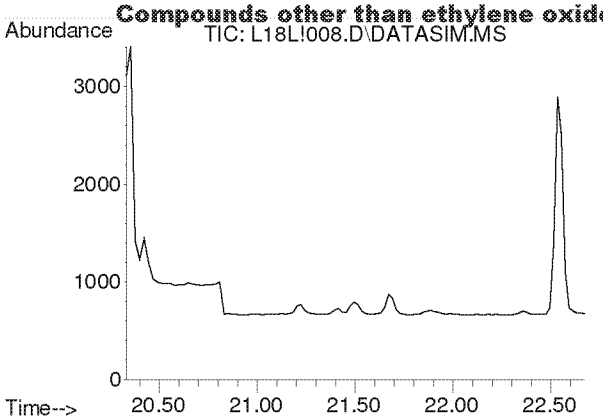
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

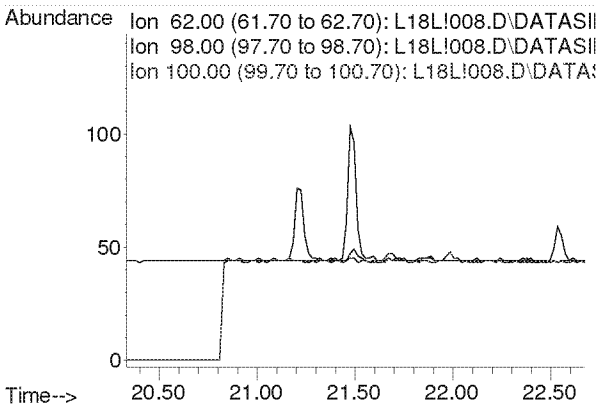


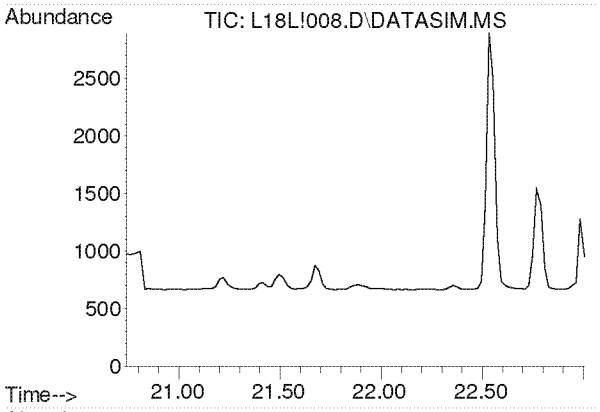
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



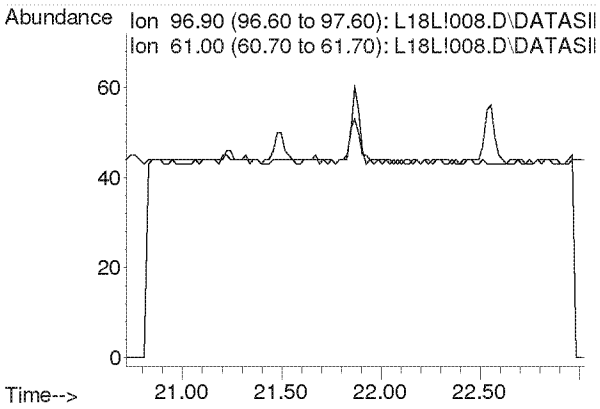


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

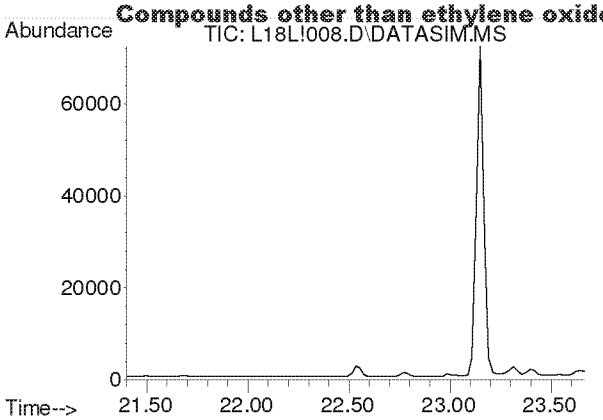
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

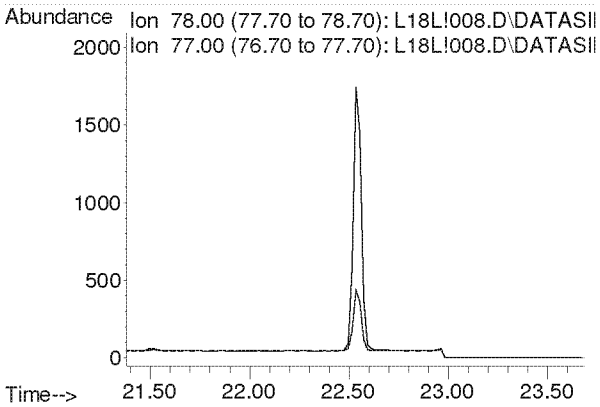


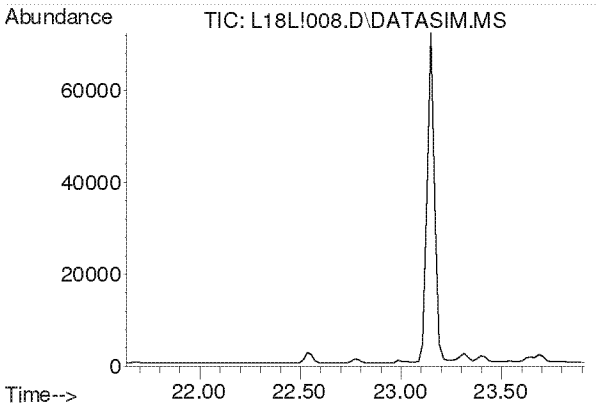
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



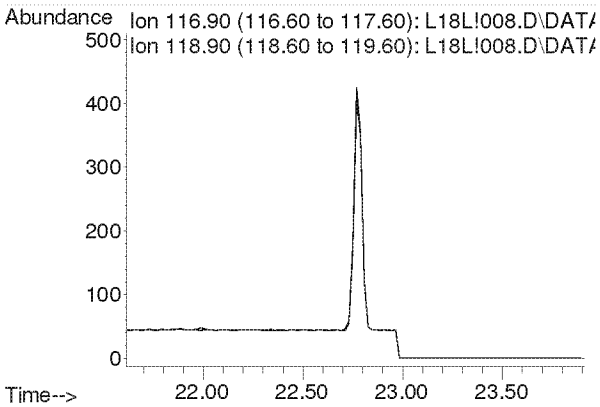


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

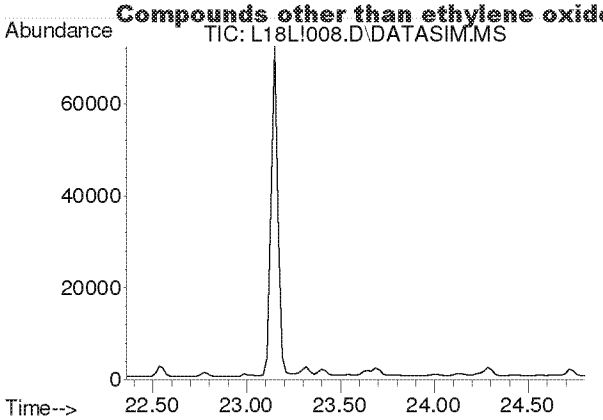
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

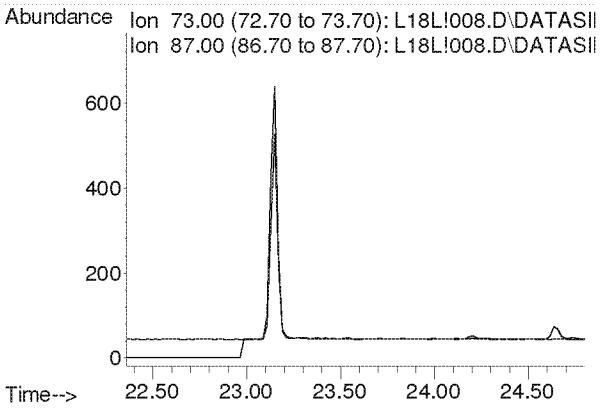


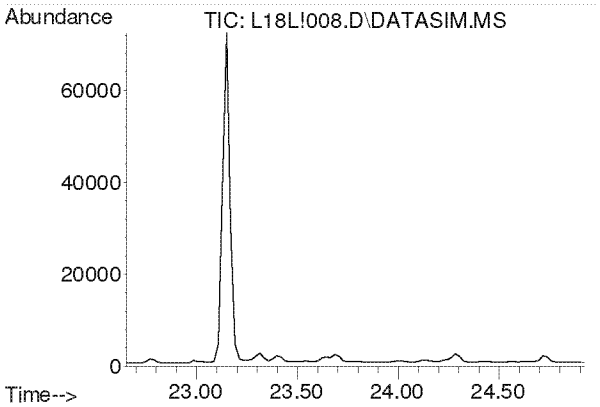
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



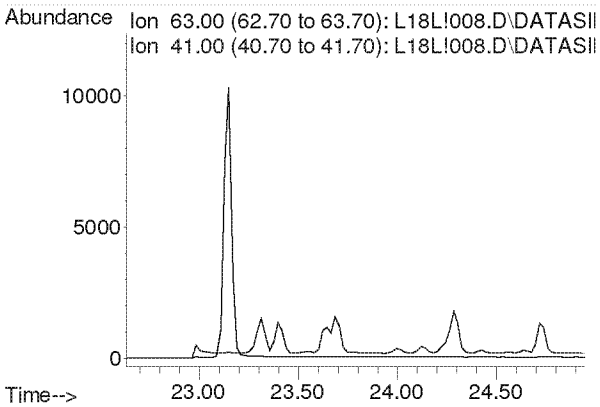


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

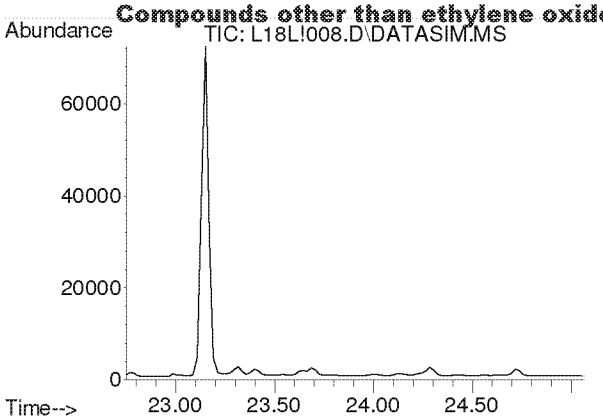
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

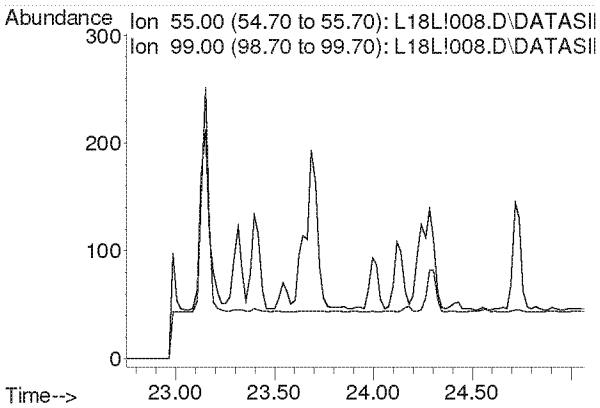


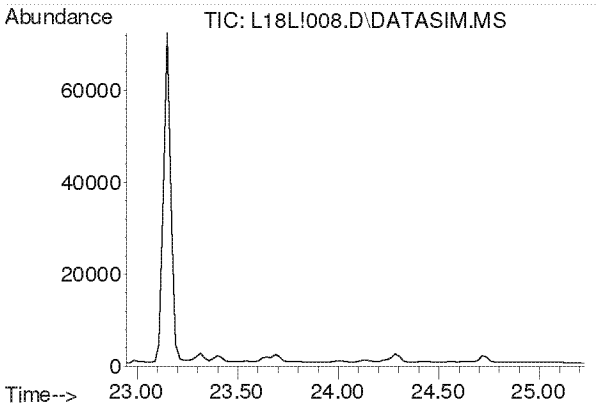
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



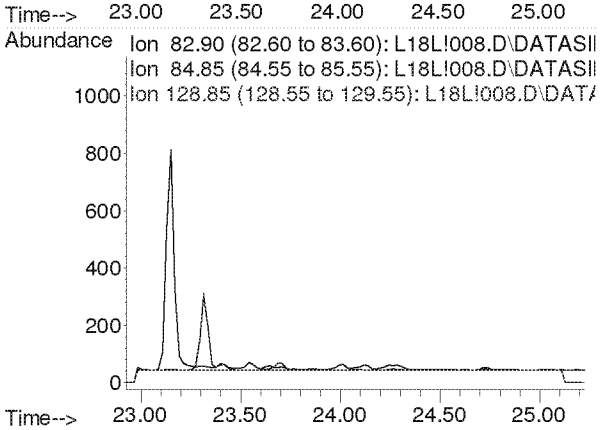


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

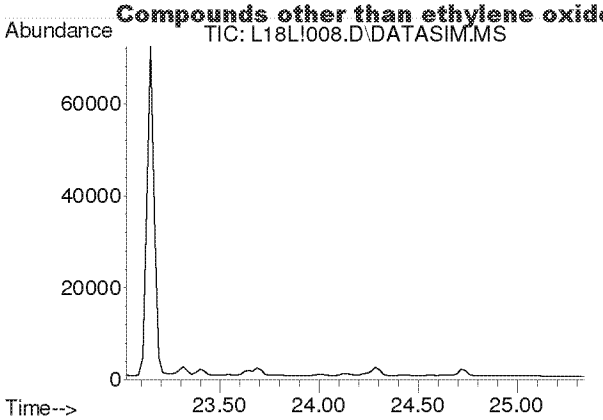
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

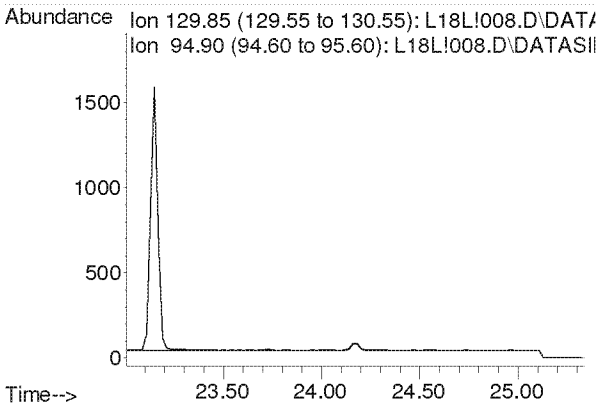


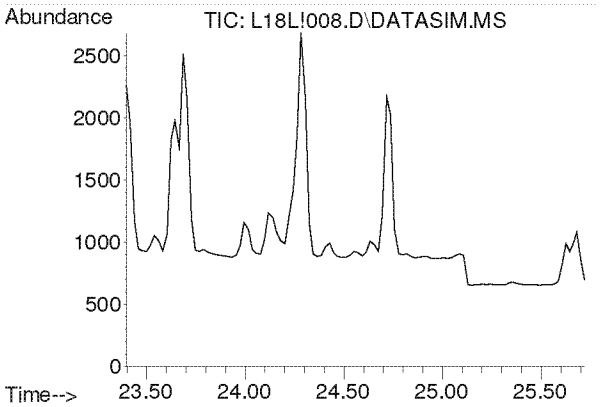
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



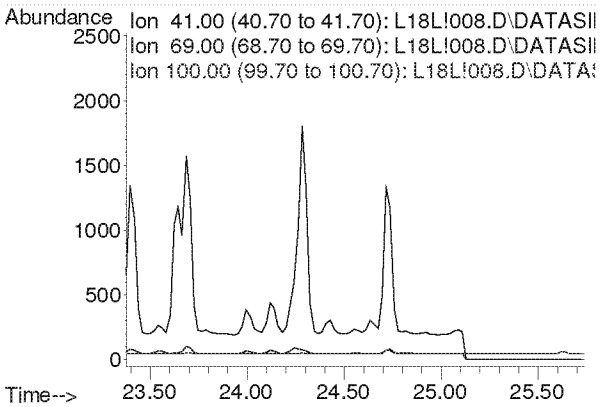


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

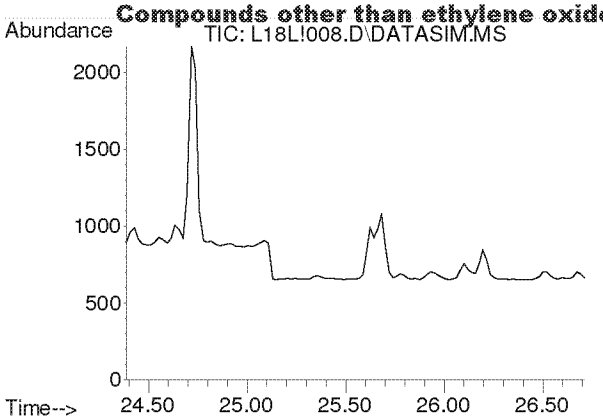
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

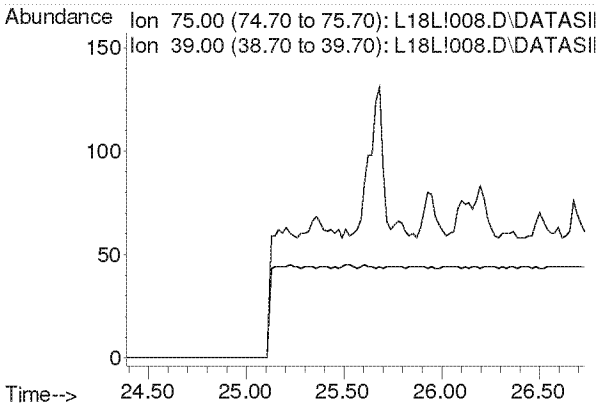


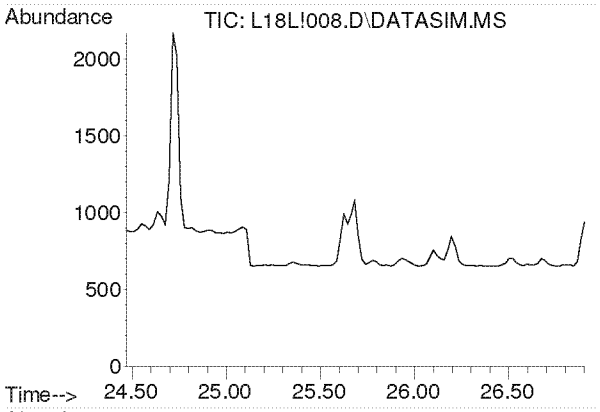
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



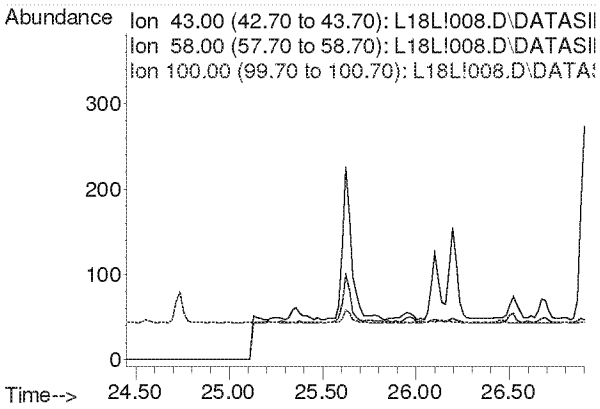


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

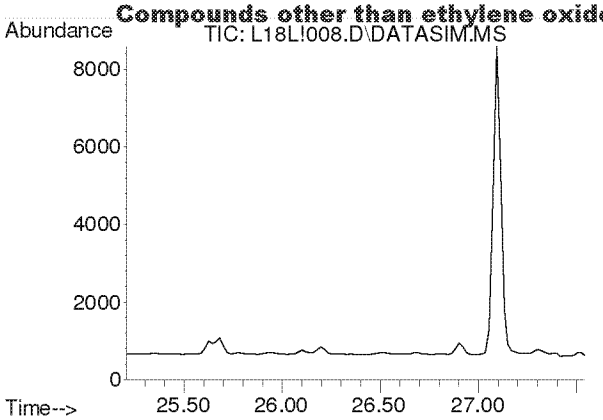
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

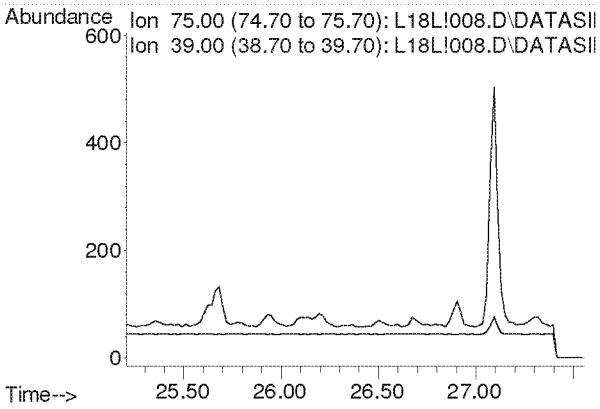


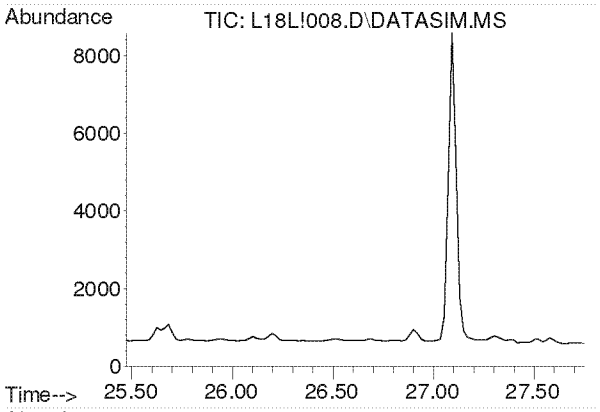
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



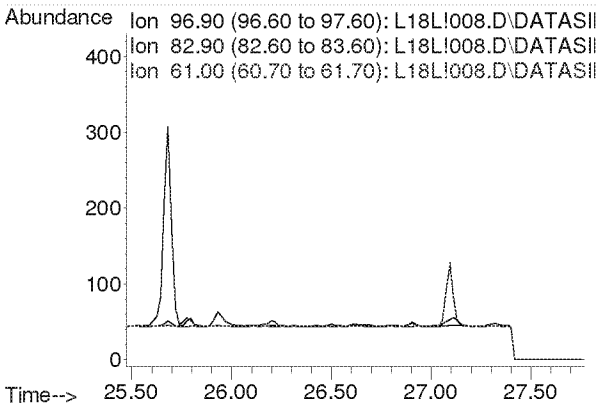


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

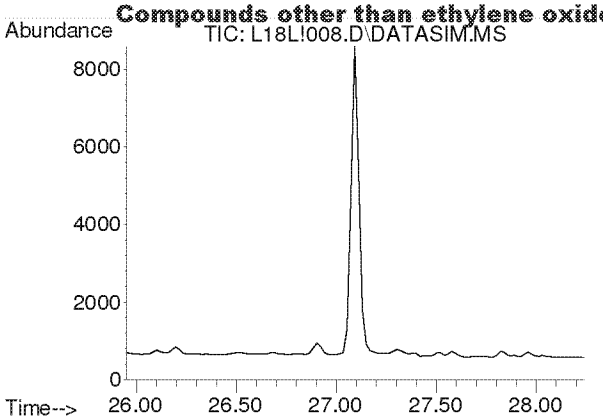
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

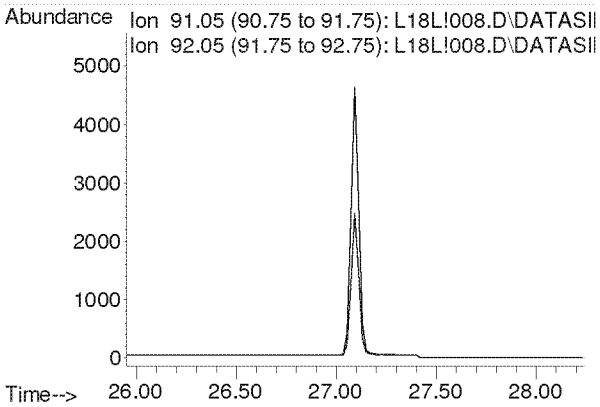


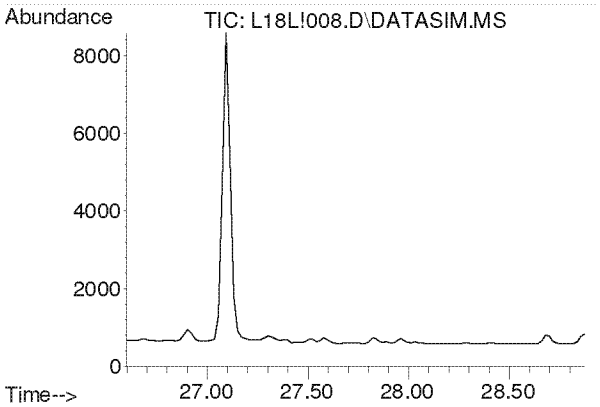
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



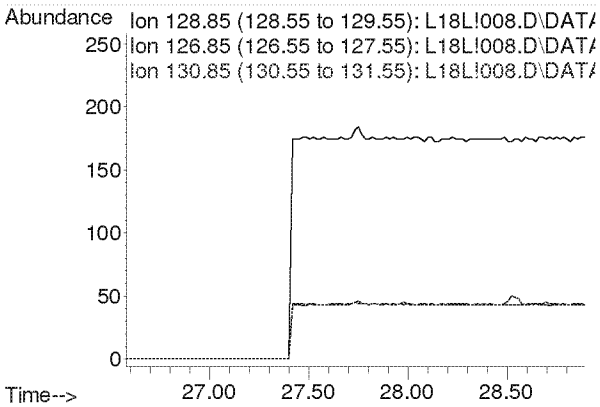


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

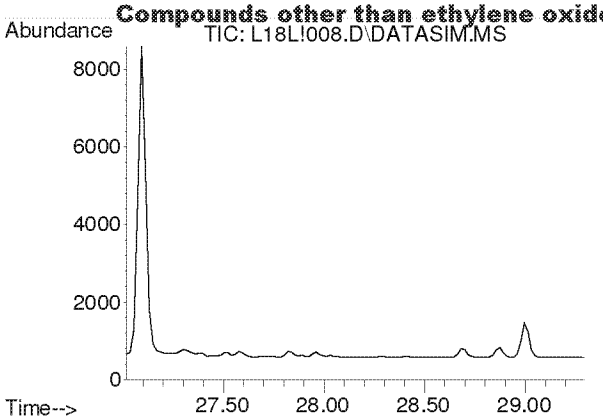
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

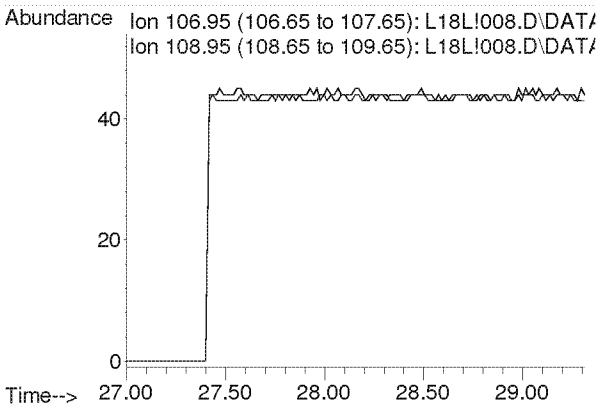


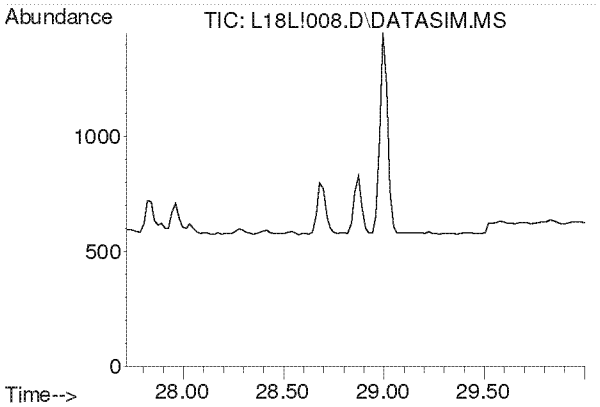
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



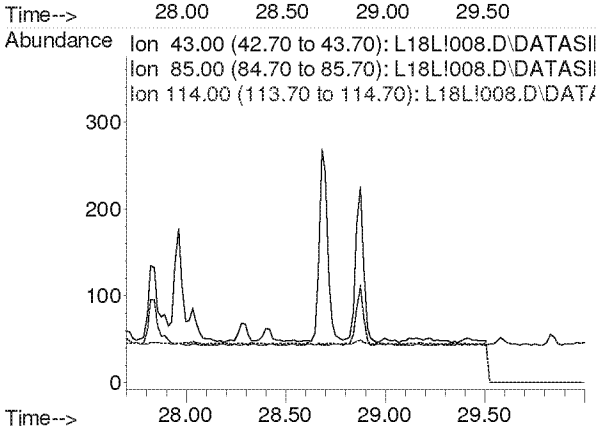


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

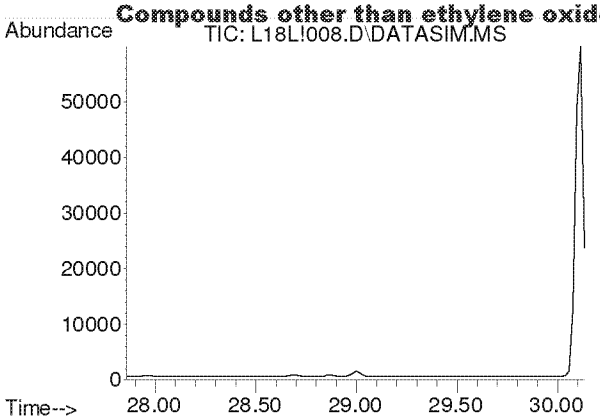
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

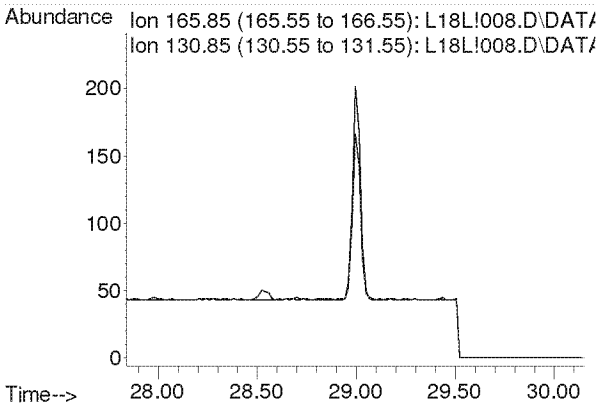


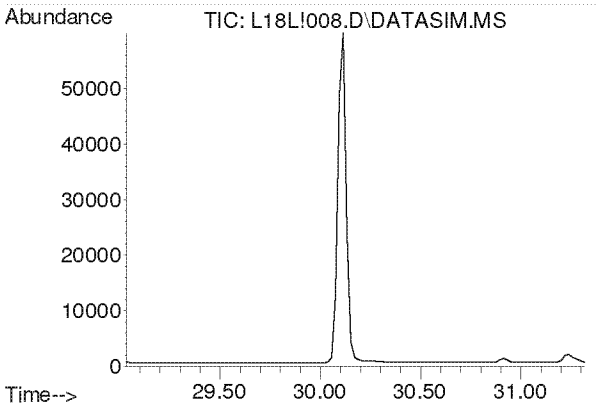
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



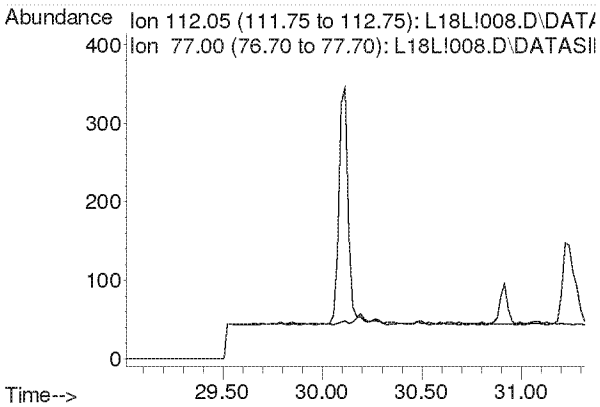


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

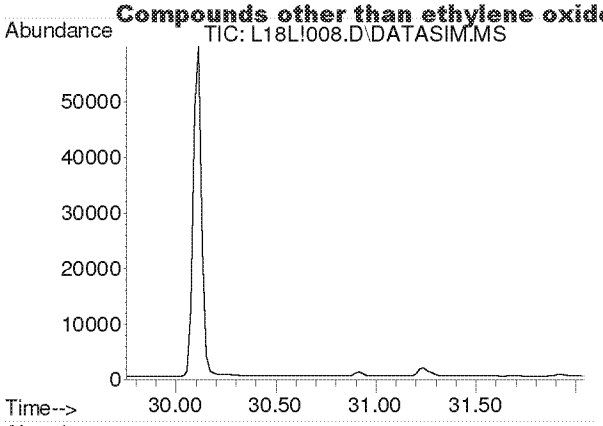
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

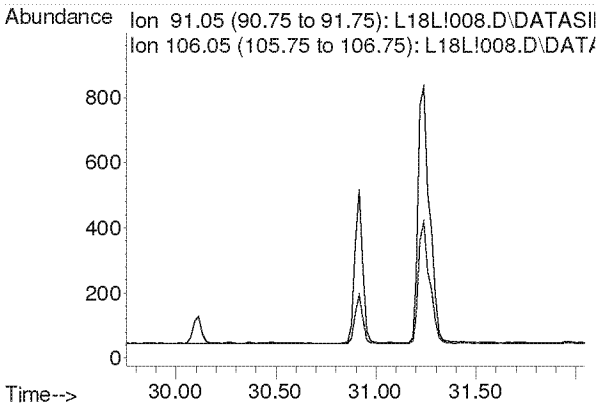


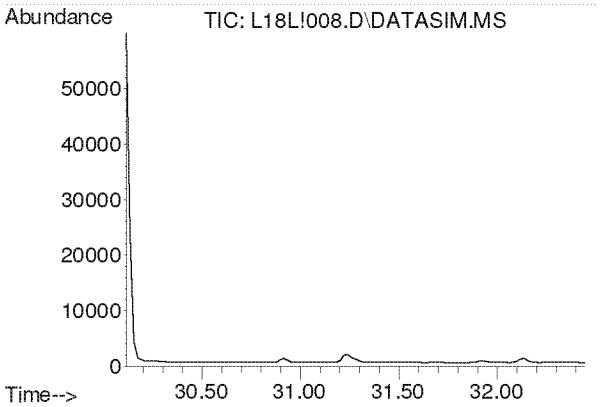
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



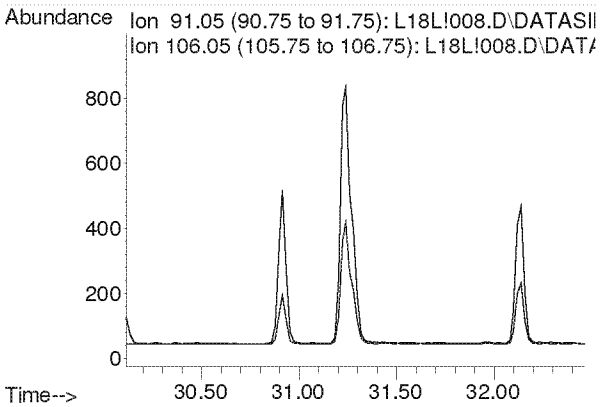


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

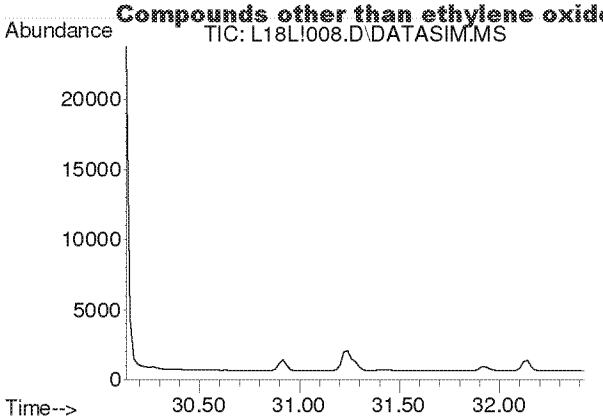
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

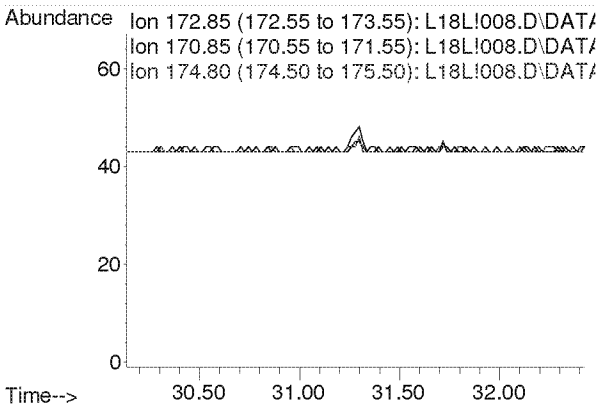


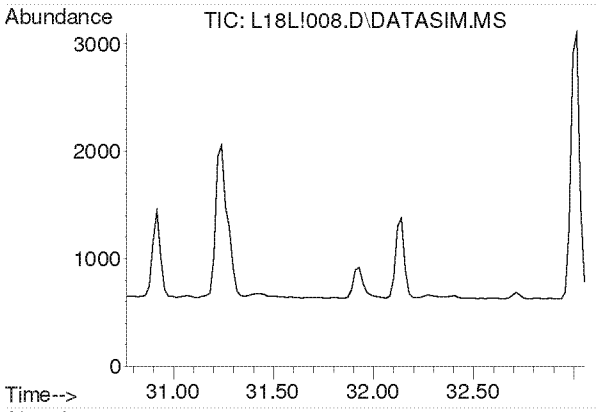
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



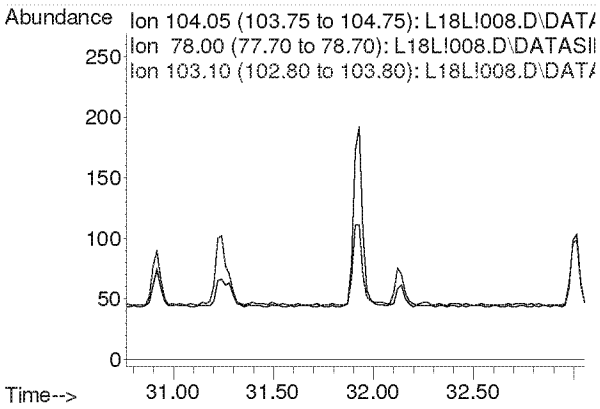


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

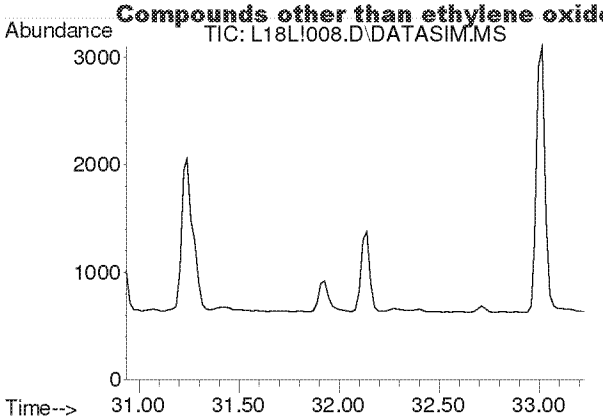
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

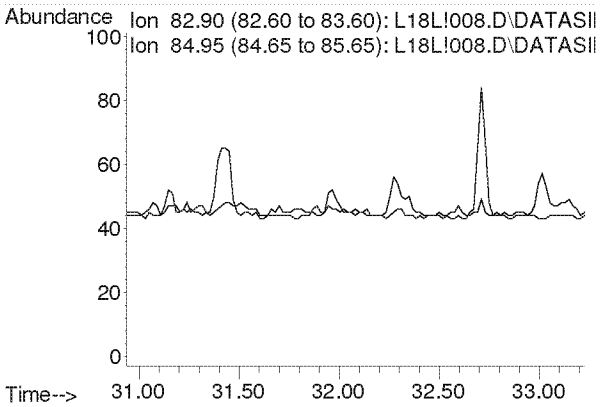


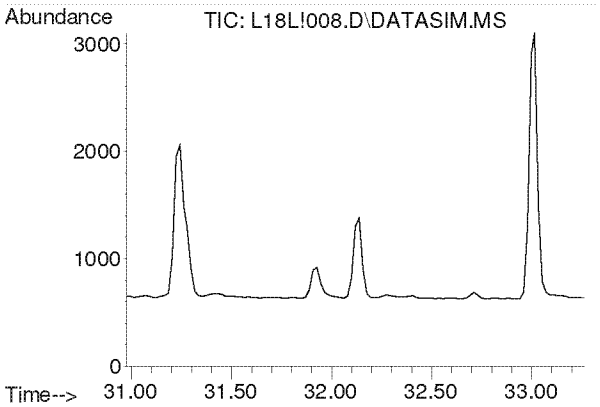
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



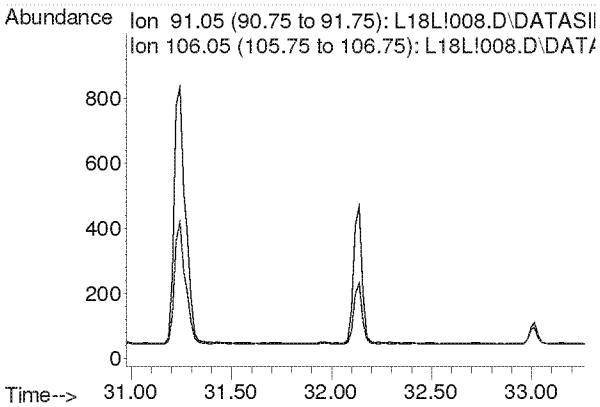


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

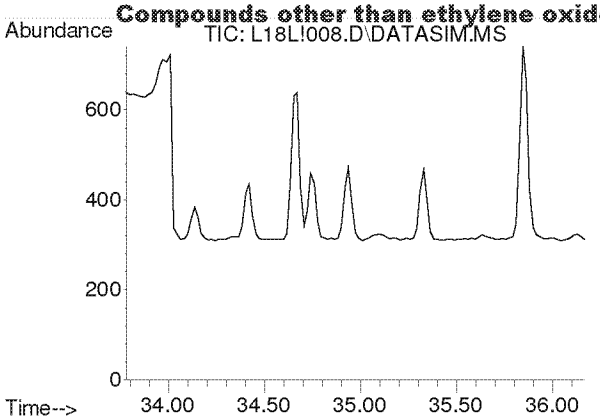
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

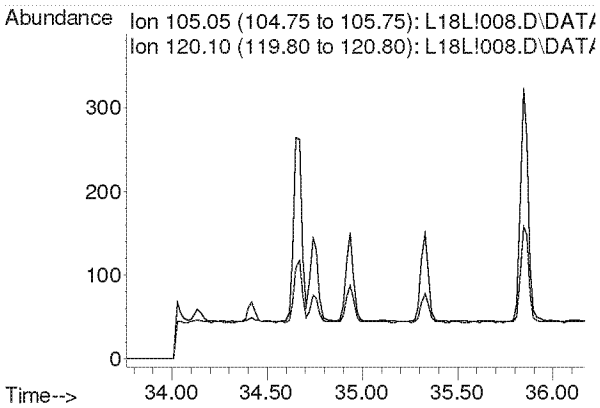


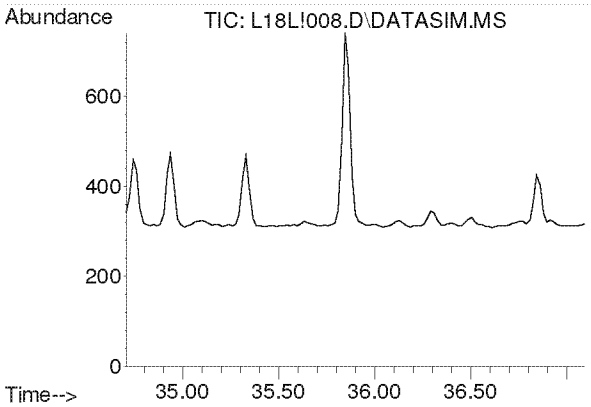
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



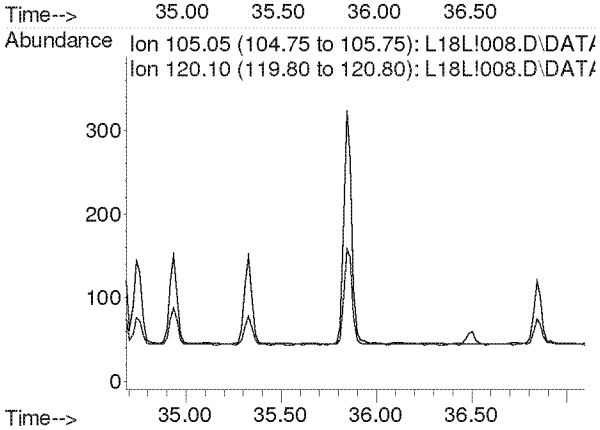


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

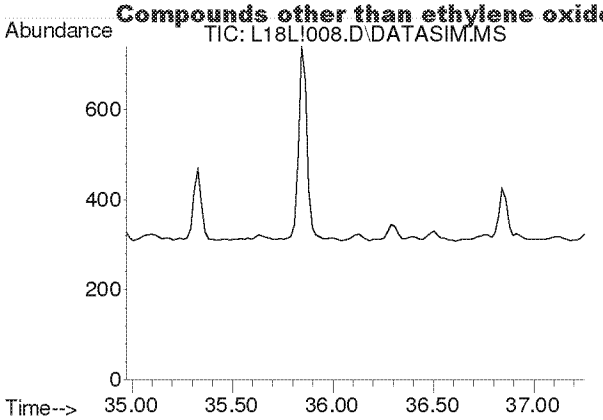
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

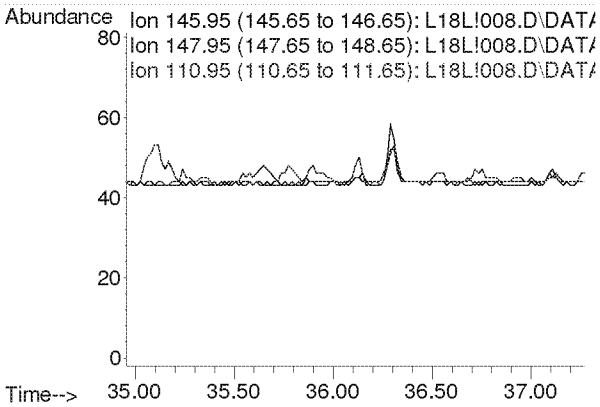


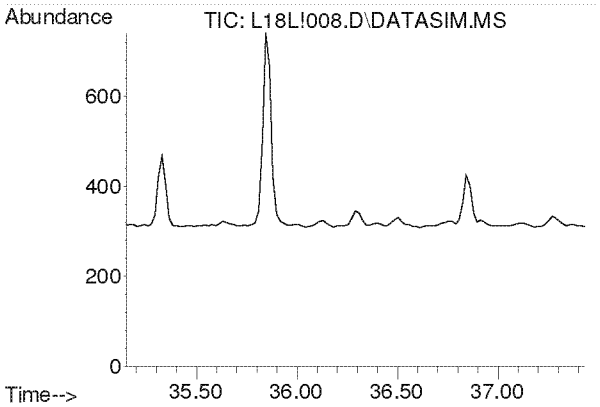
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



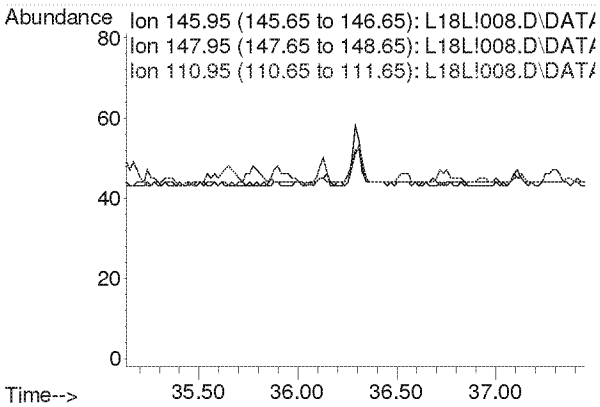


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

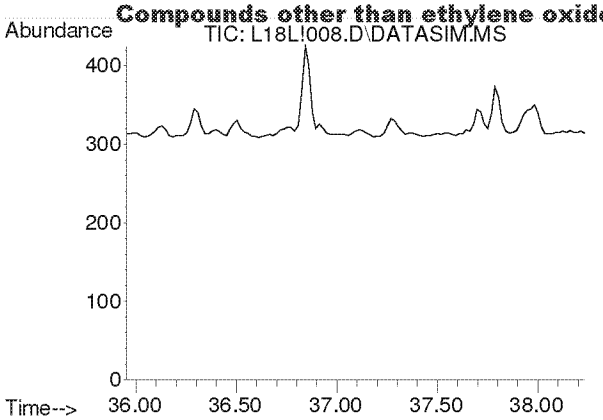
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

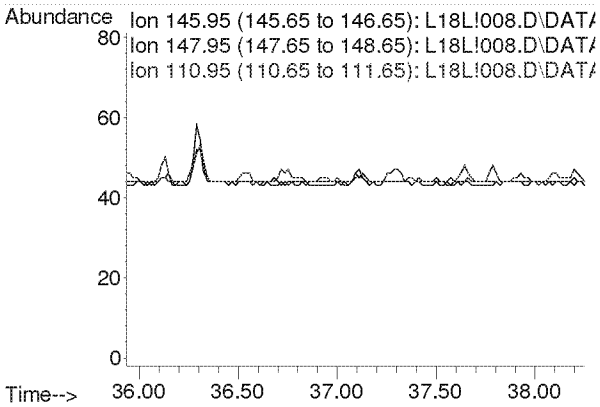


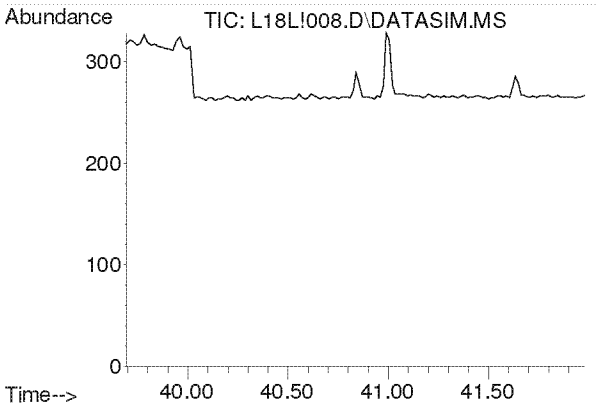
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



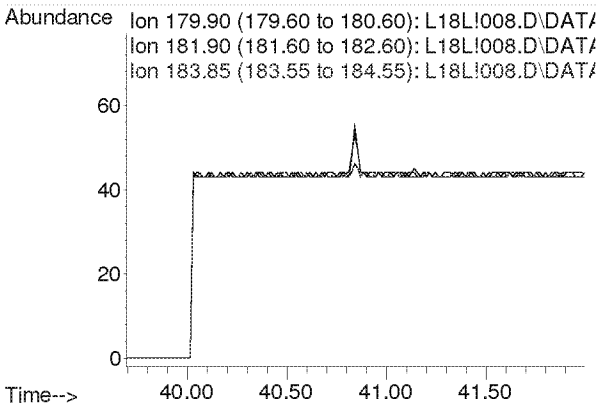


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

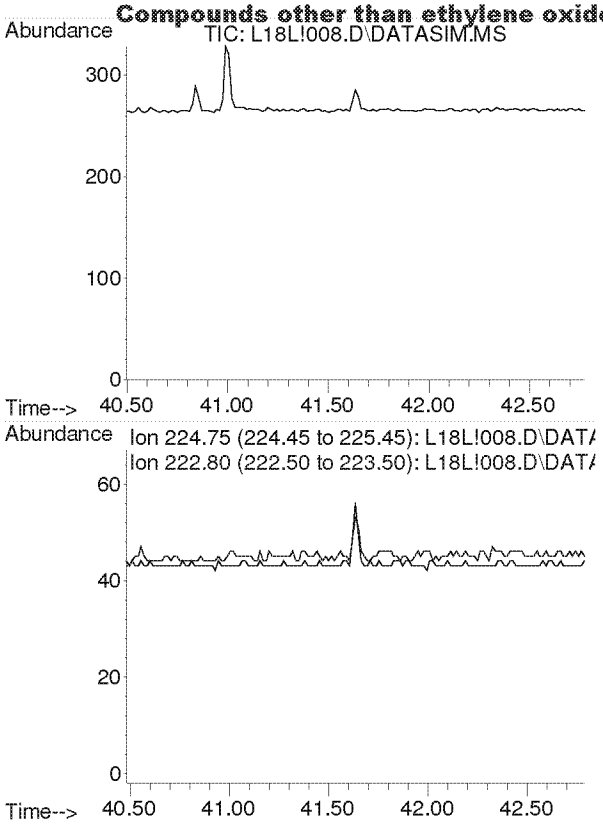
Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!008.D
Acq: 28 Dec 2018 6:34 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\L18L!\
Data File : L18L!009.D
Acq On : 28 Dec 2018 7:35 pm
Operator : MAH
Sample : 8121821-05 Middle School
Misc : GOWER XX 12/14/18
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 03 13:24:49 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

AMR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	56417	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	132549	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.097	117	103302	4.7400 ppbv	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Acetylene	0.000	26	0	N.D. d	
3) Propylene	0.000	41	0	N.D. d	
4) Dichlorodifluoromethane	0.000	85	0	N.D. d	
5) Chloromethane	0.000	50	0	N.D. d	
6) Dichlorotetrafluoroethane	0.000	85	0	N.D. d	
7) Vinyl Chloride	0.000	62	0	N.D. d	
8) 1,3-Butadiene	0.000	54	0	N.D. d	
9) Ethylene oxide	12.440	29	474m	0.1406 ppbv	
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. d	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. 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. d	
50) Ethylbenzene	0.000	91	0	N.D. d	

ED_002475_00000320-00216

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L18L!\
Data File : L18L!009.D
Acq On : 28 Dec 2018 7:35 pm
Operator : MAH
Sample : 8121821-05
Misc : GOWER ES 12/14/18
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 03 13:24:49 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
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.	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.	

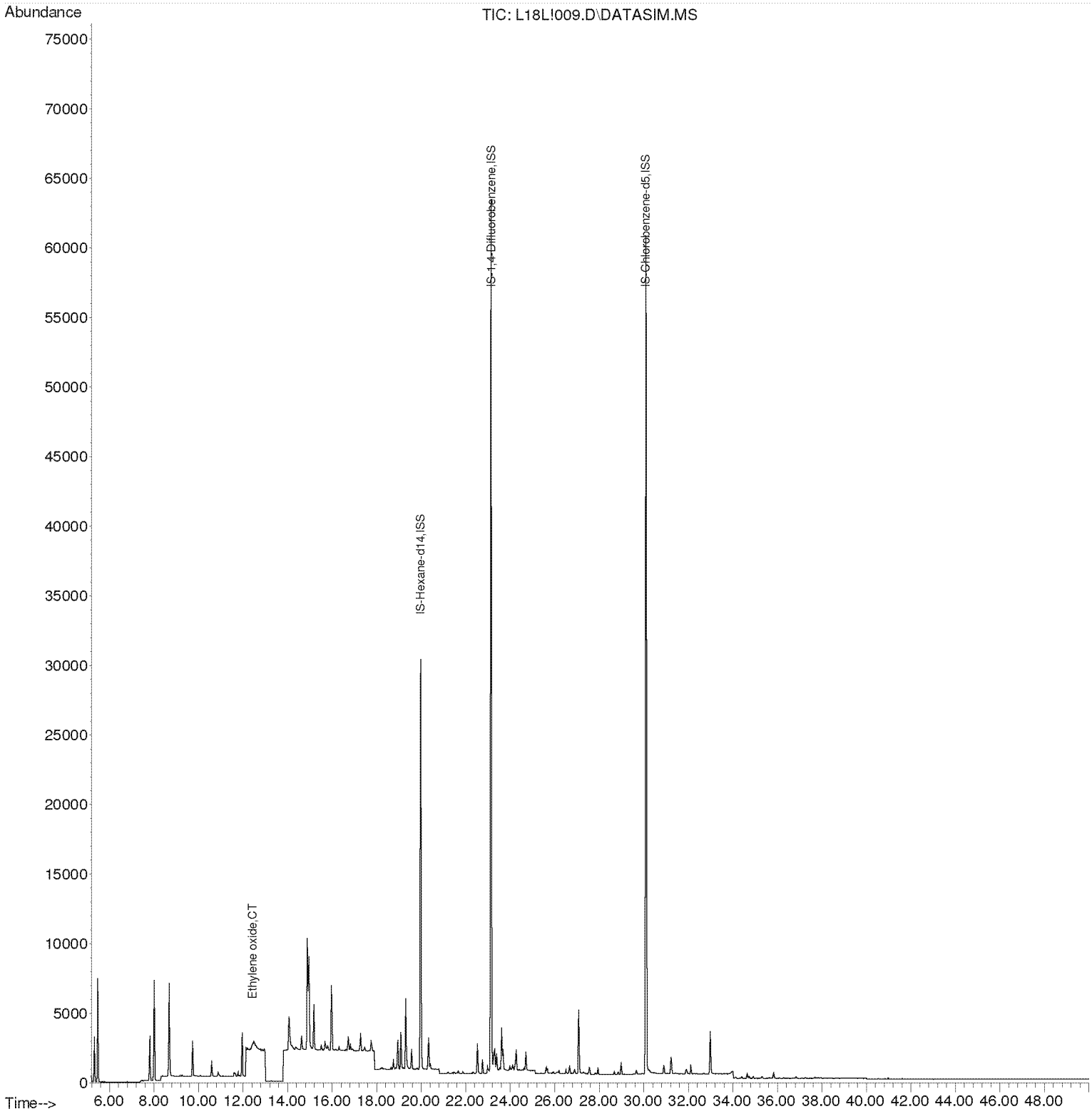
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ED_002475_00000320-00217

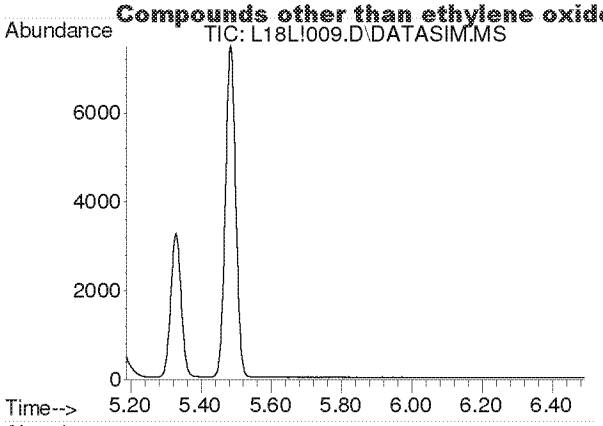
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!009.D
Acq On : 28 Dec 2018 7:35 pm
Operator : MAH
Sample : 8121821-05
Misc : GOWER ES 12/14/18
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 03 13:07:29 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



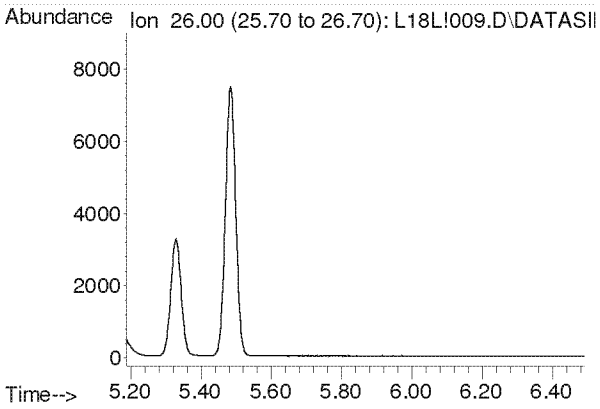
Compounds other than ethylene oxide were not quantitated.

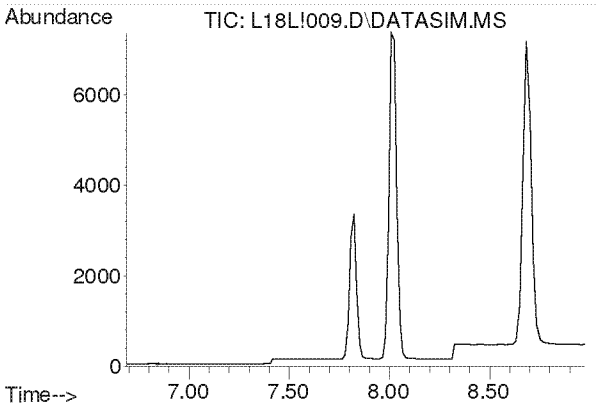


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 26



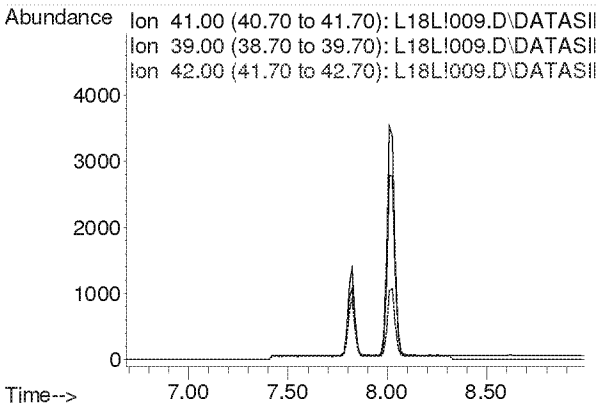


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

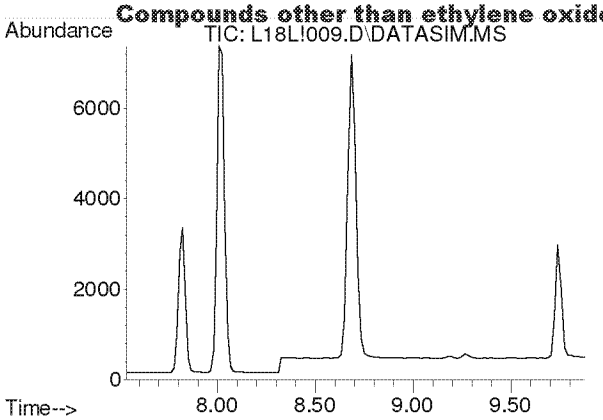
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

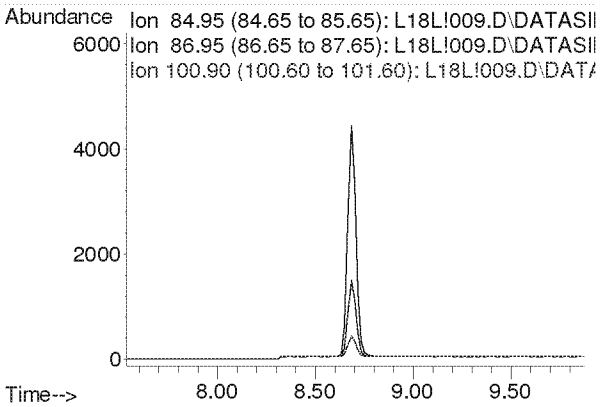


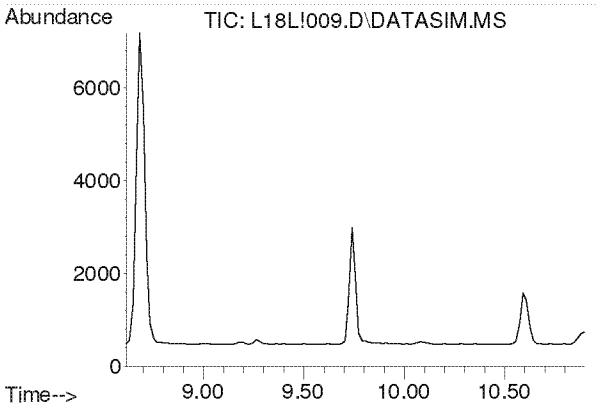
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



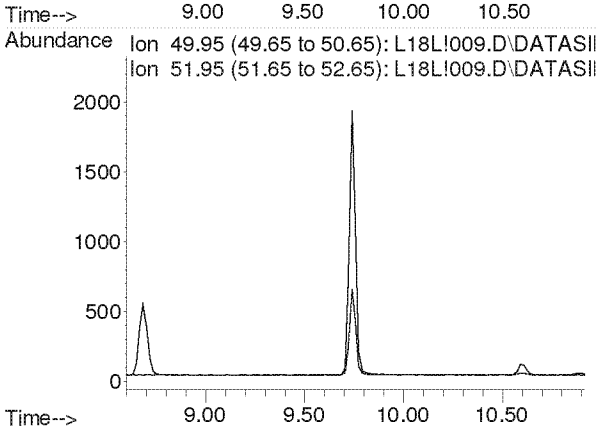


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

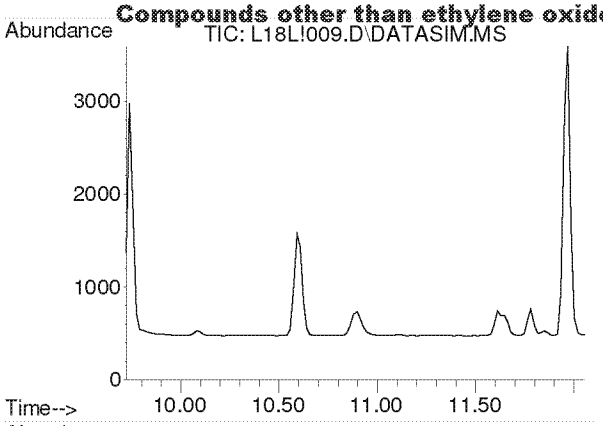
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

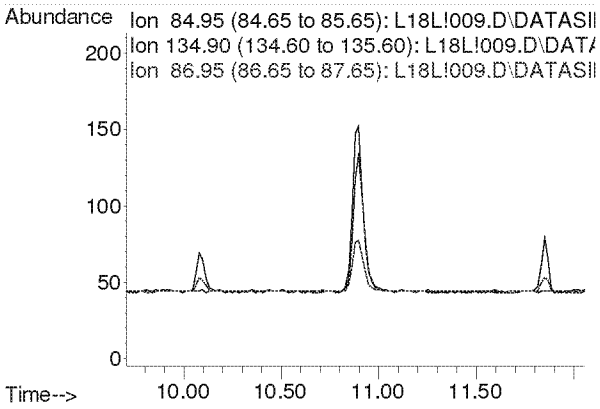


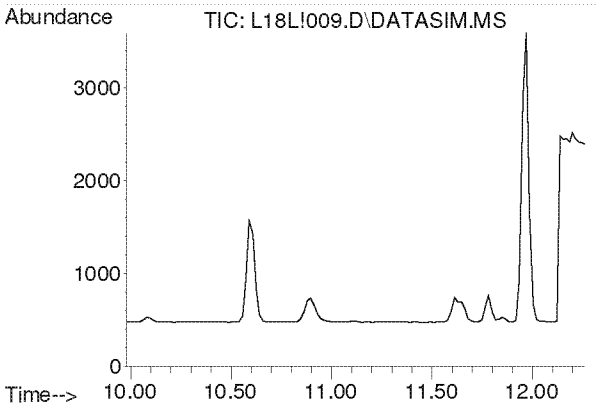
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



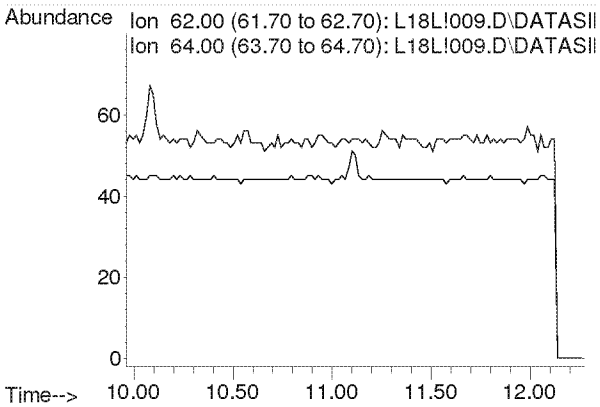


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

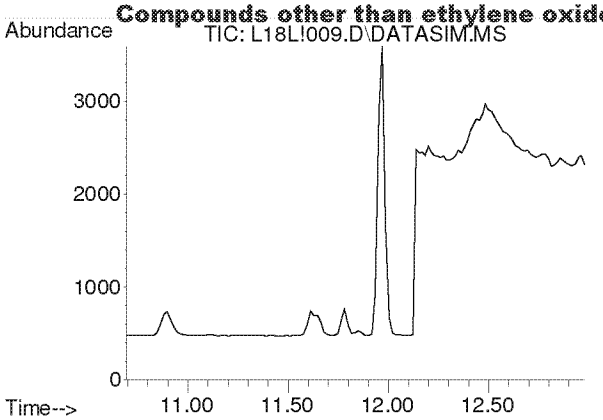
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

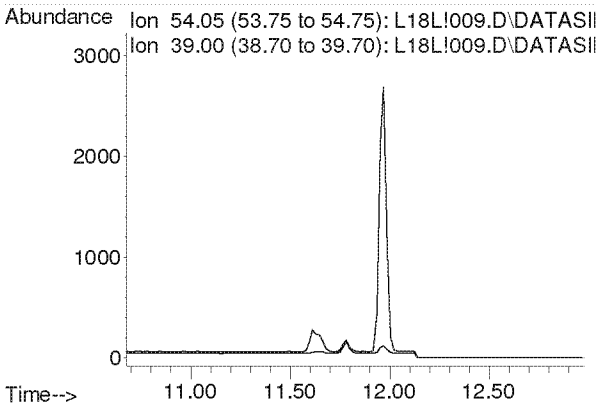


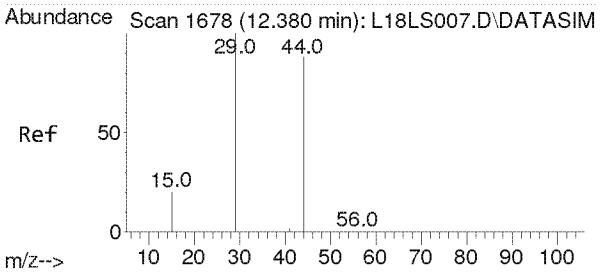
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

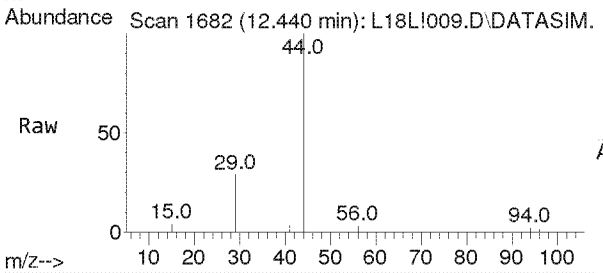


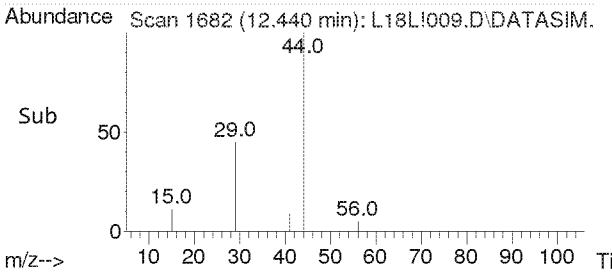


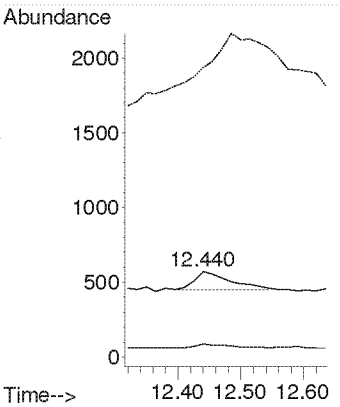
#9
Ethylene oxide
Concen: 0.141 ppbv m
RT: 12.440 min Scan# 1682
Delta R.T. 0.060 min
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 29 Resp: 474

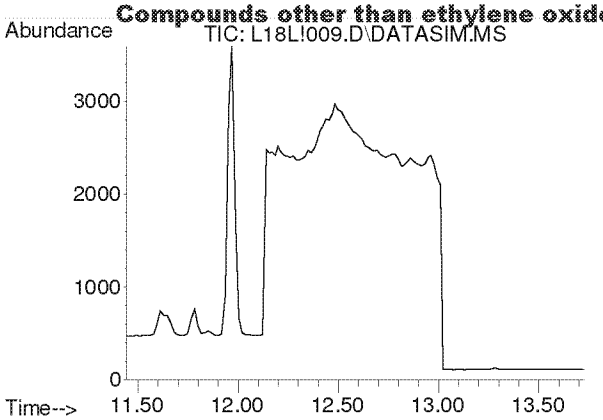
Ion	Ratio	Lower	Upper
29	100		
15	0.0	16.2	24.4#
44	0.0	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

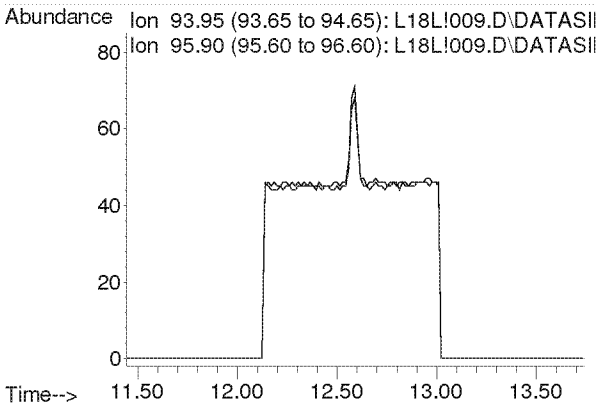


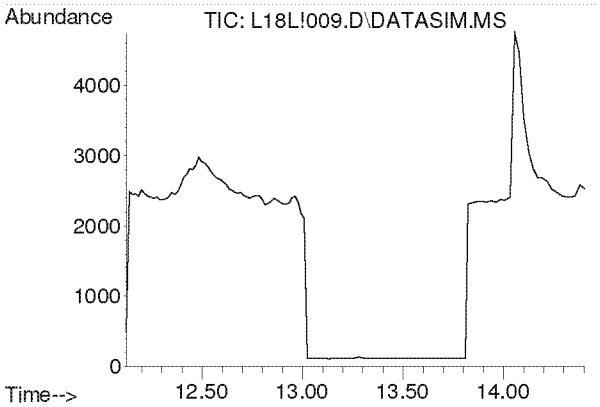
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



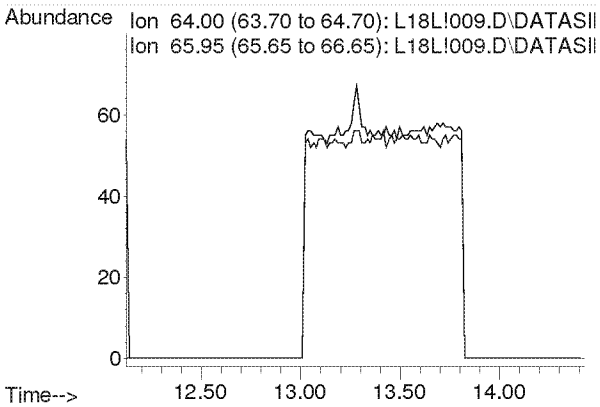


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

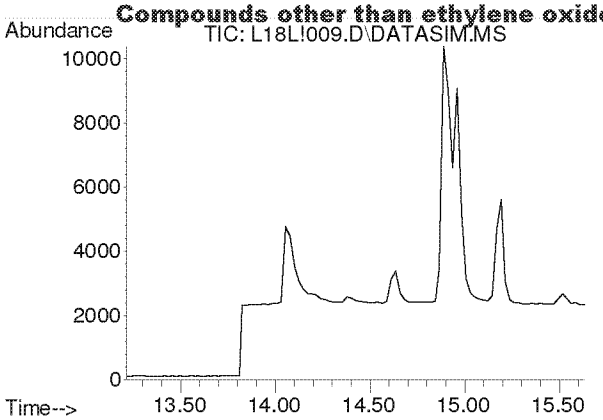
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

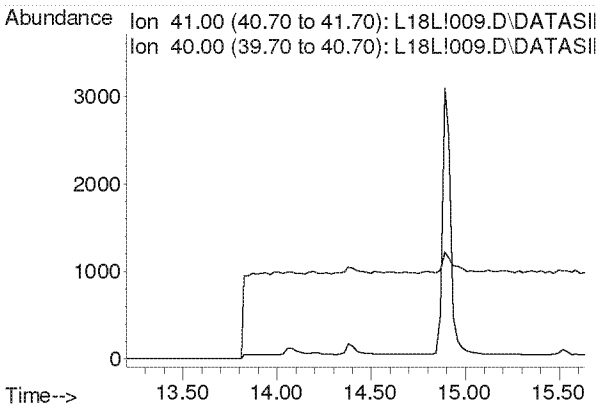


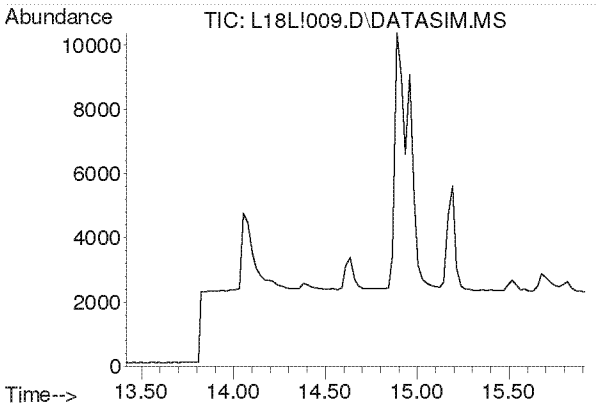
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



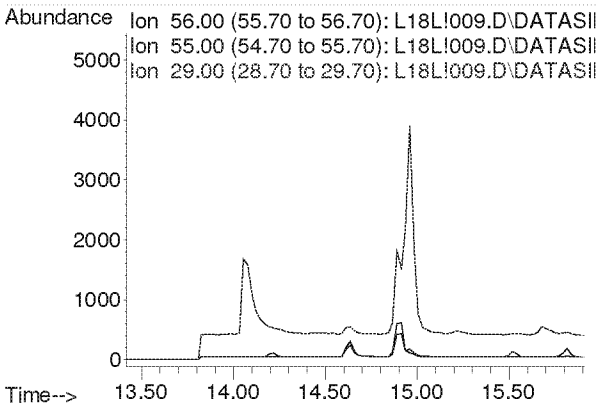


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

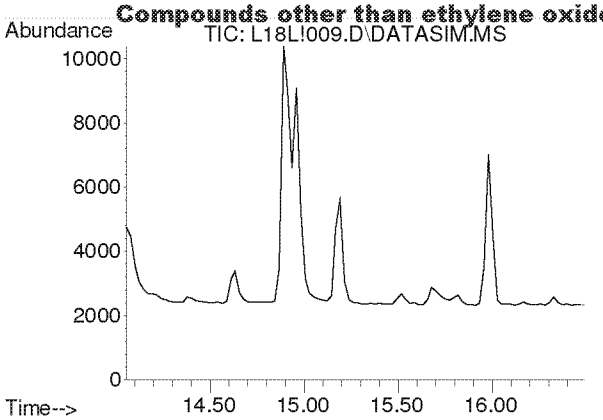
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

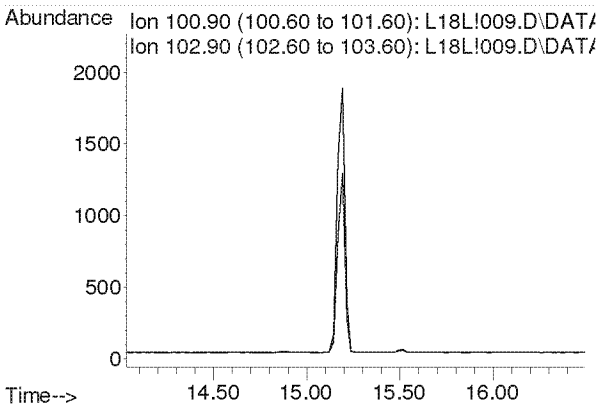


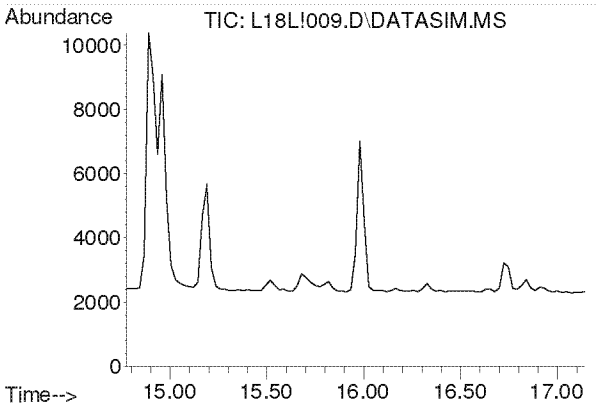
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



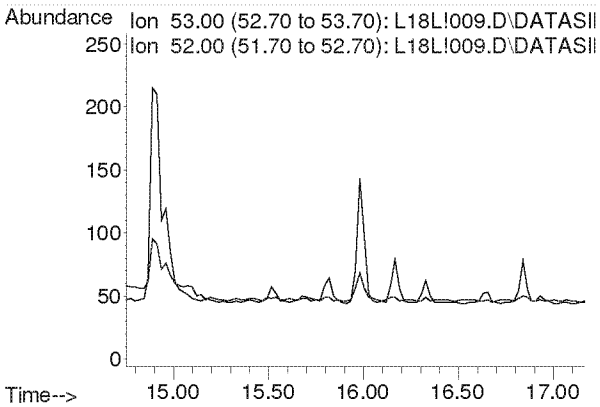


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

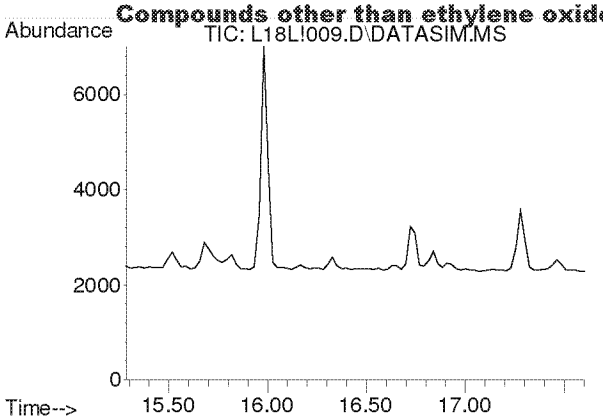
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

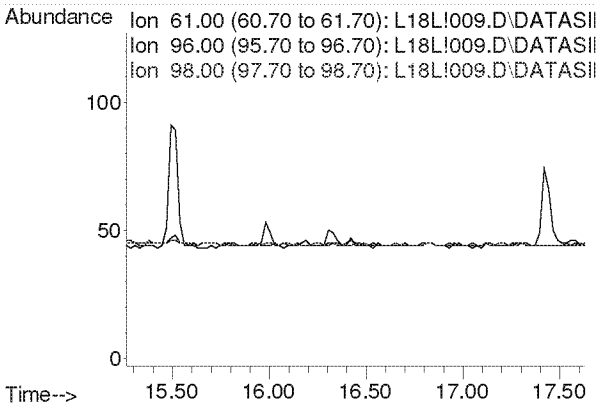


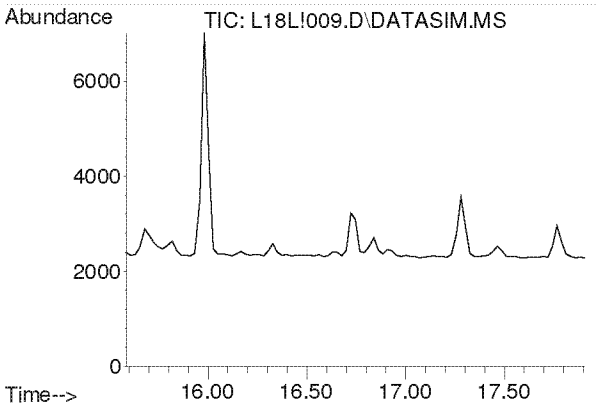
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



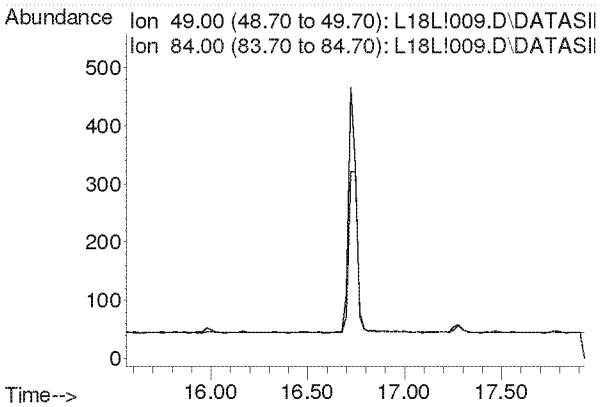


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

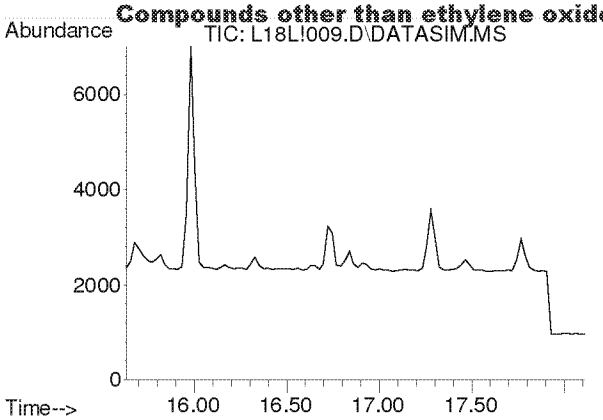
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

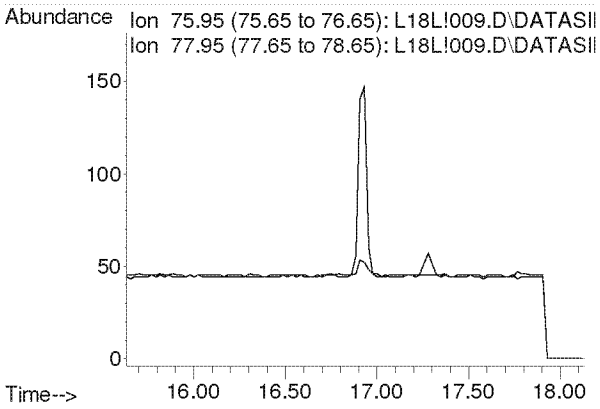


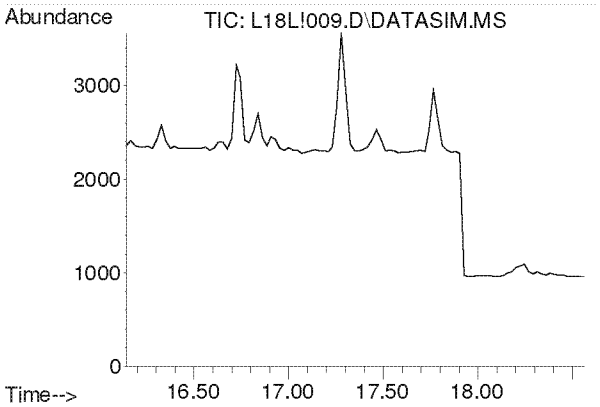
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



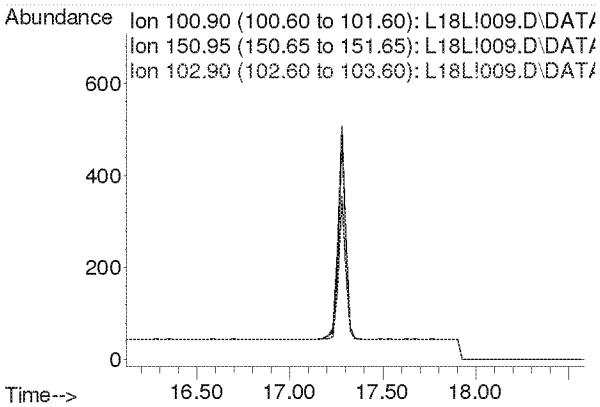


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

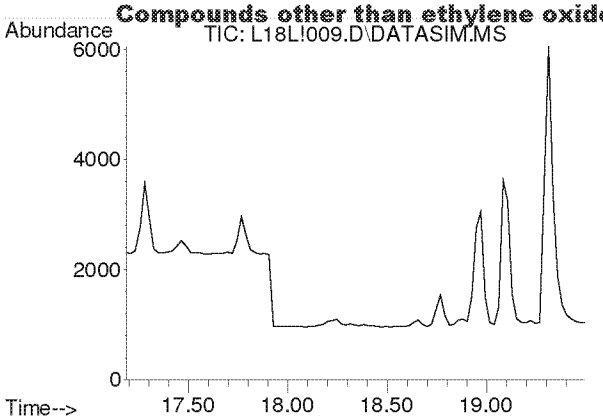
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

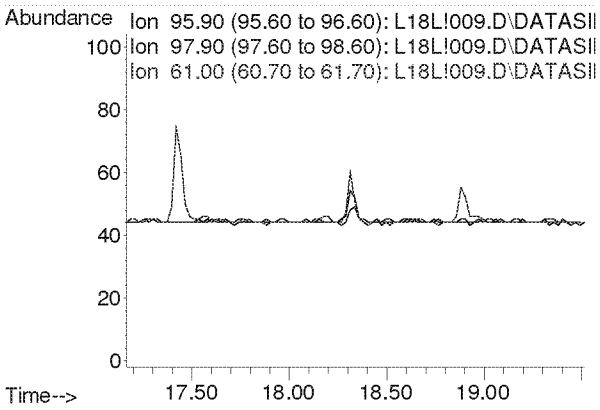


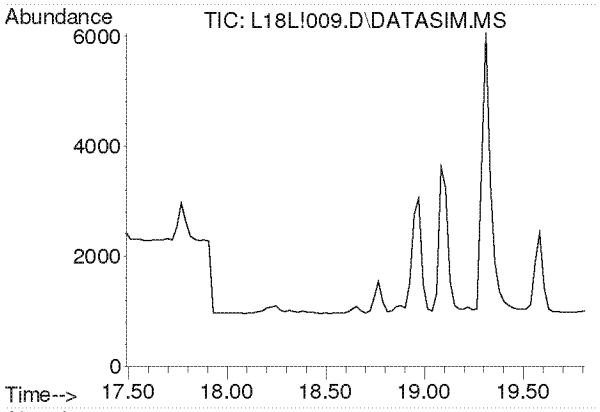
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



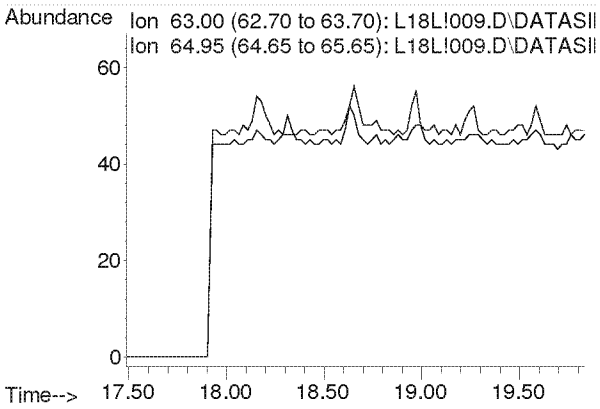


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

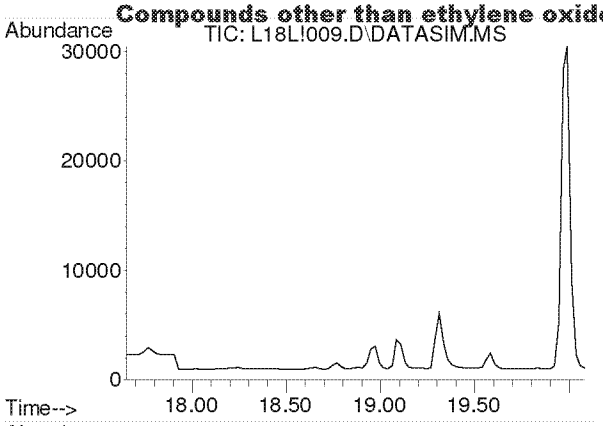
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

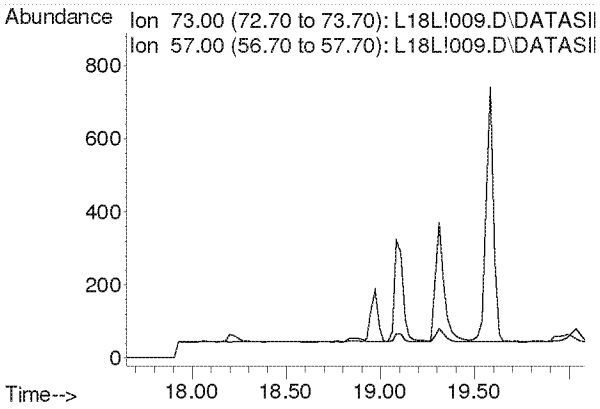


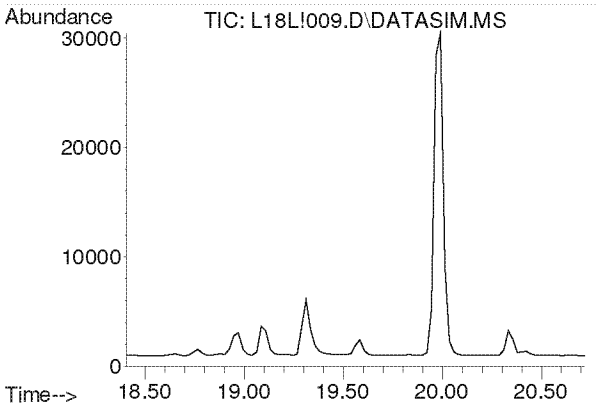
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



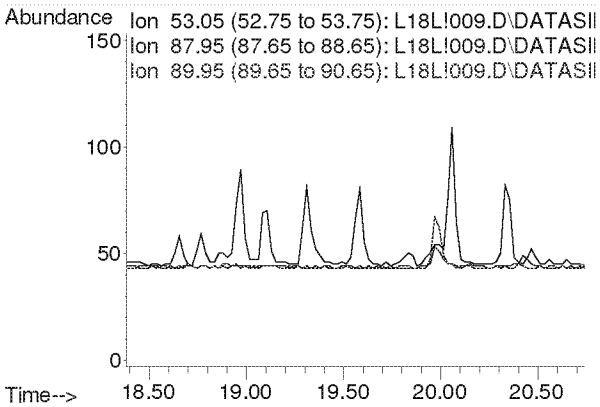


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

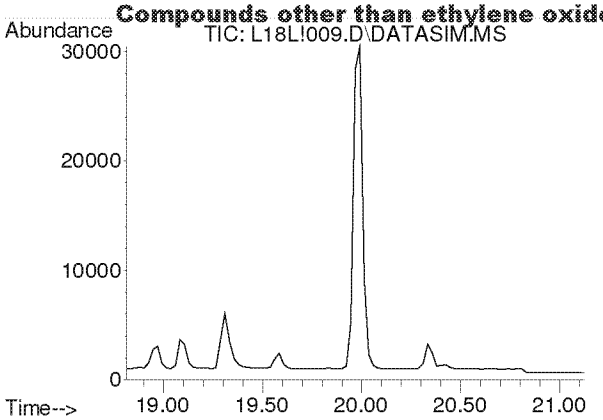
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

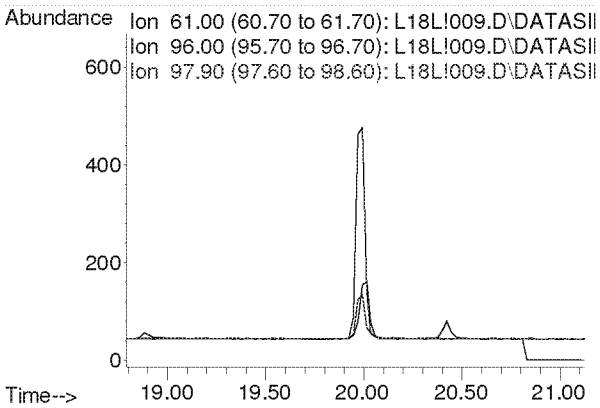


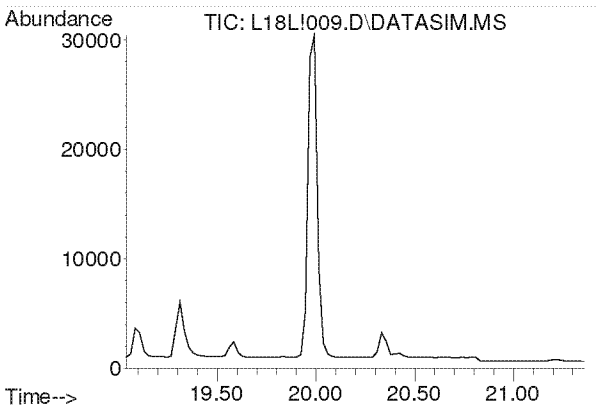
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



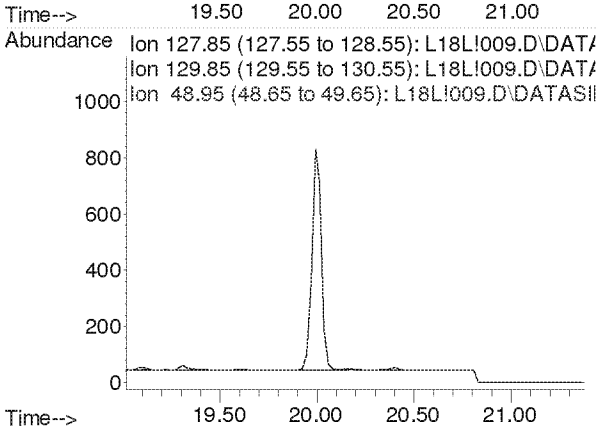


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

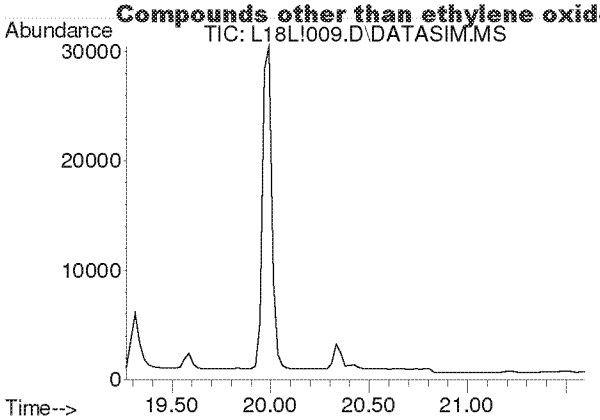
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

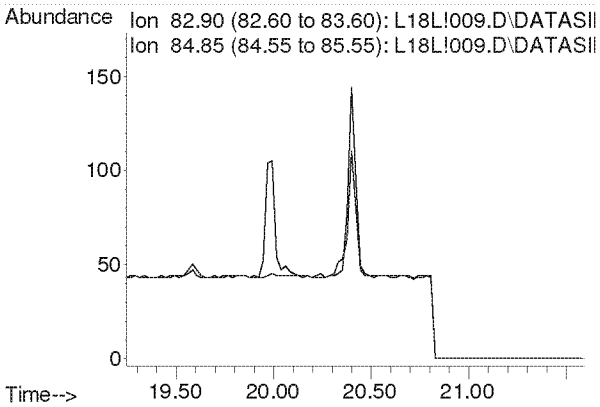


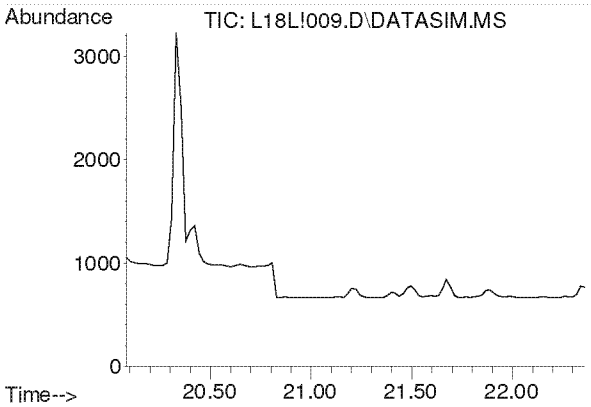
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



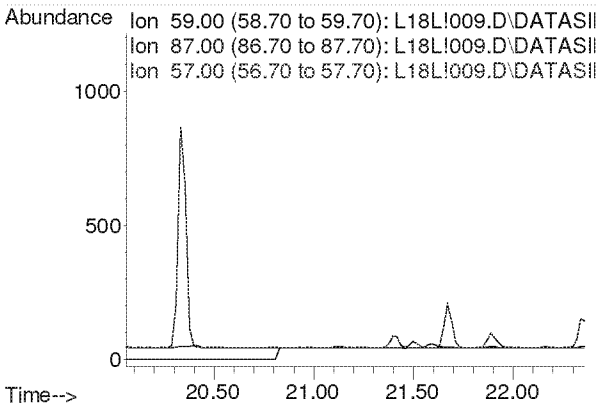


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

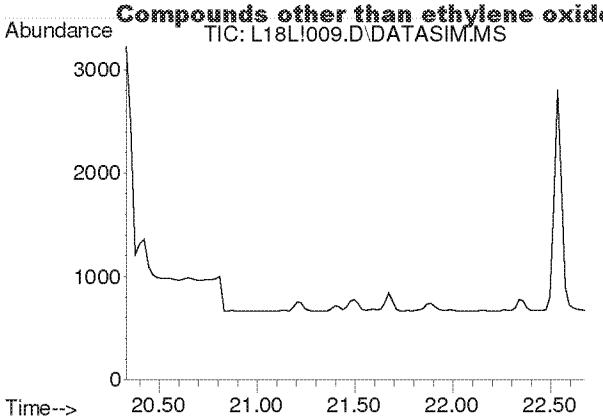
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

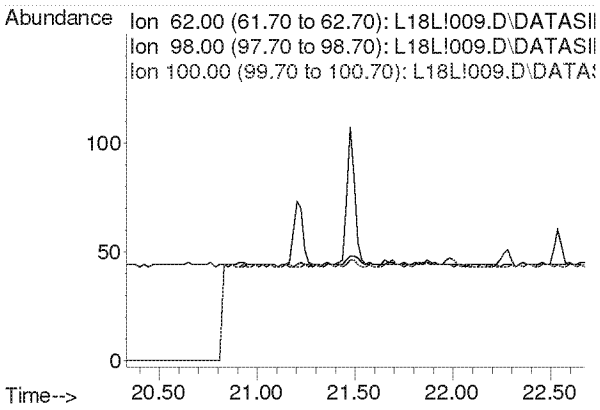


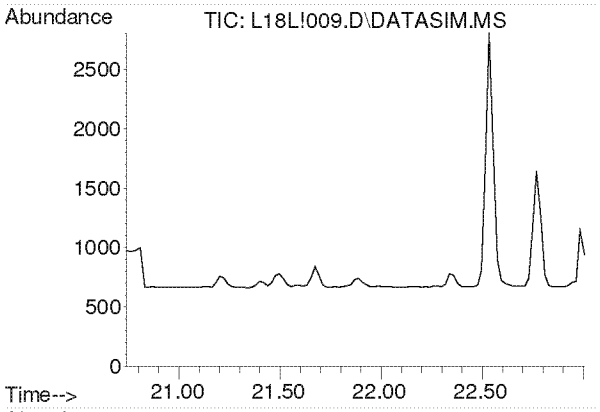
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



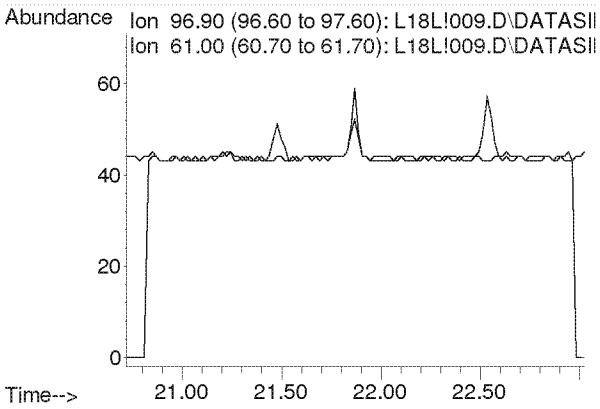


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

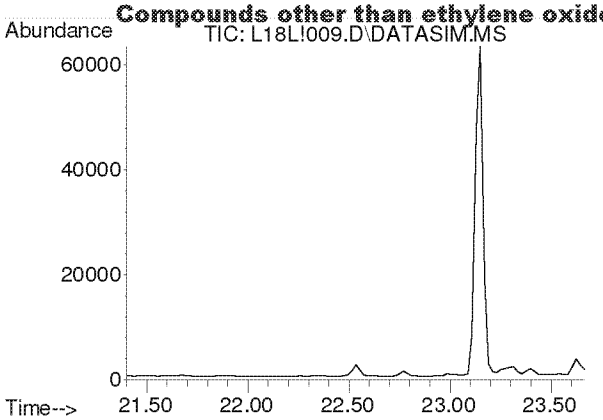
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

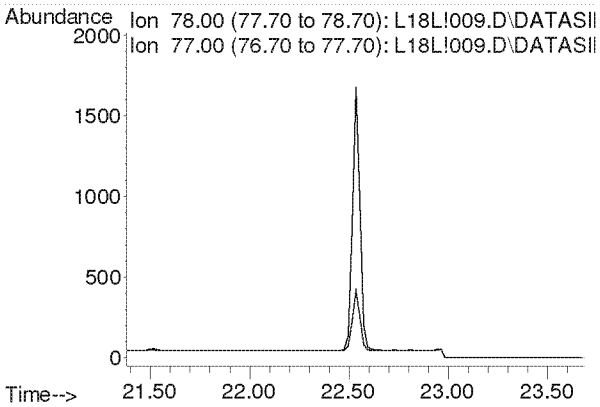


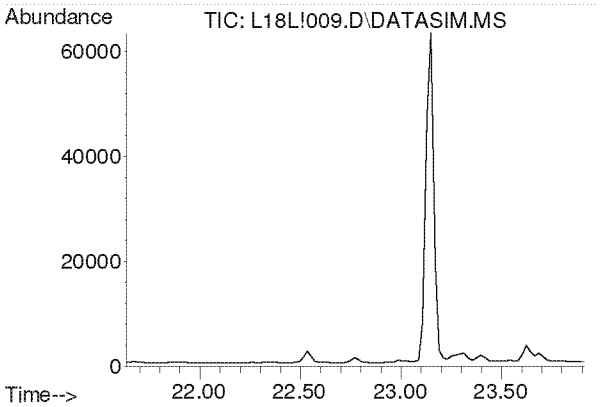
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



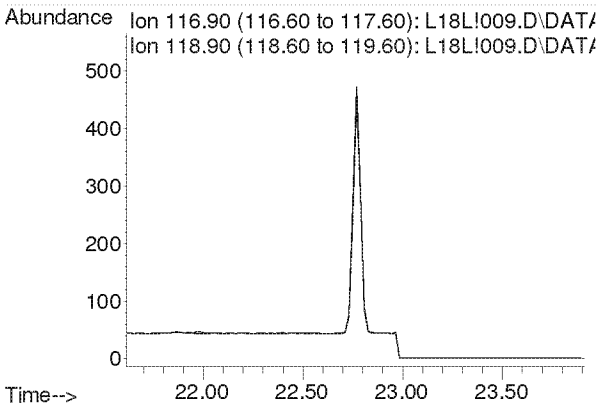


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

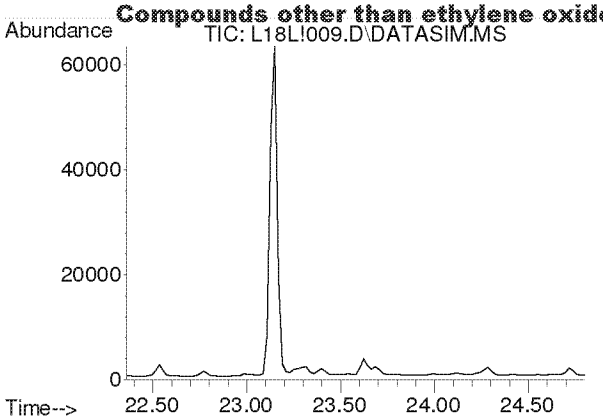
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

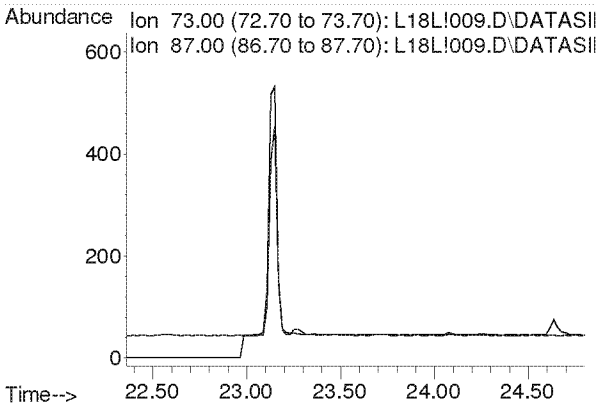


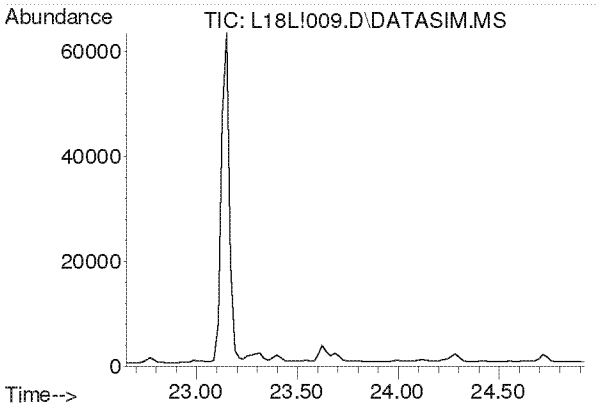
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



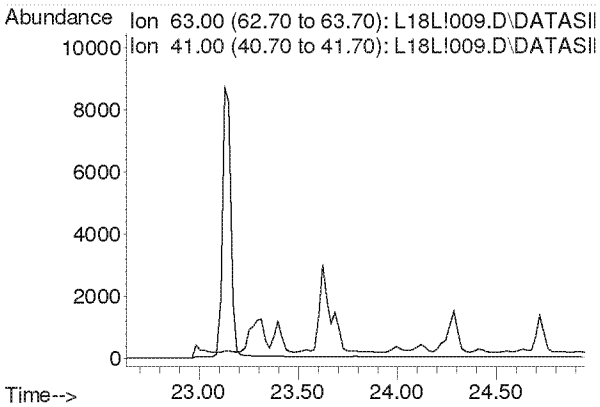


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

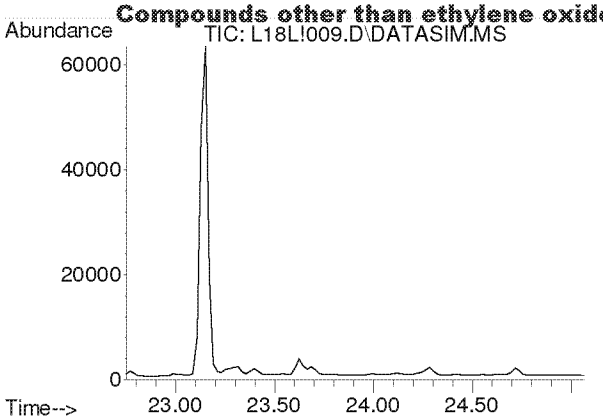
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

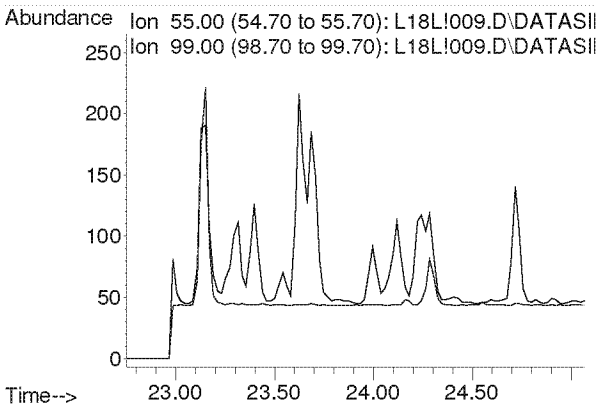


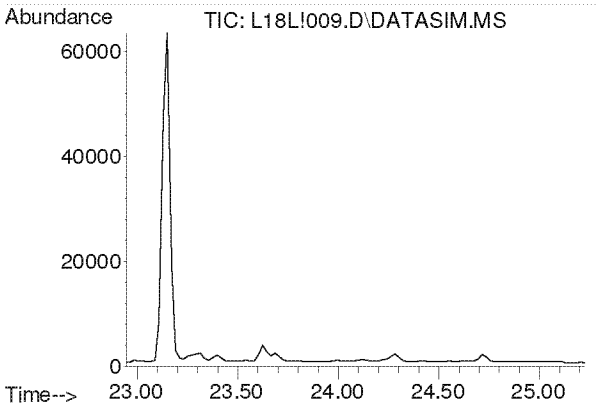
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



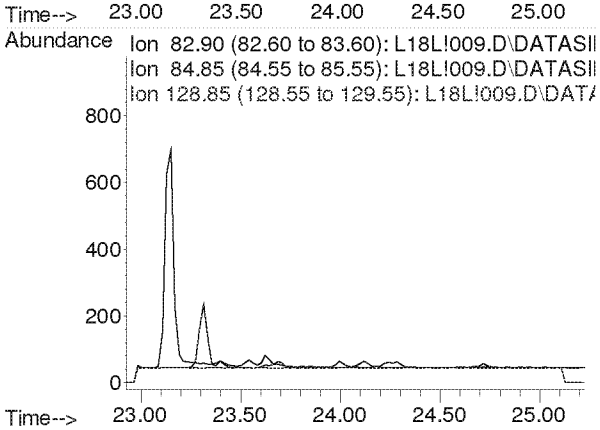


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

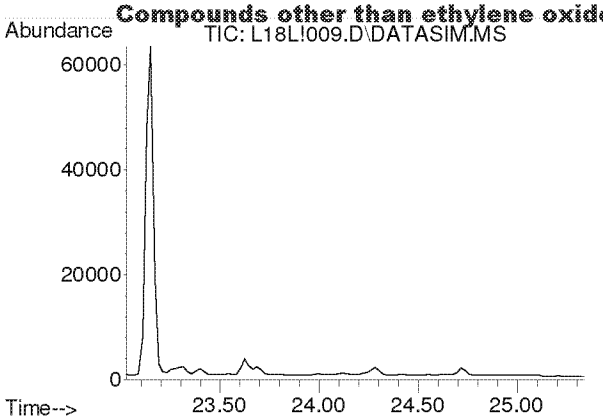
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

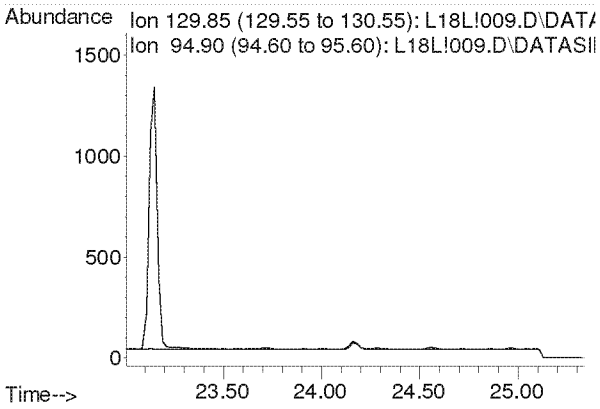


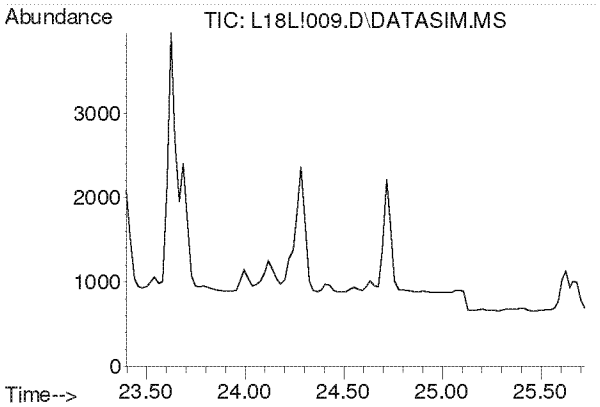
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



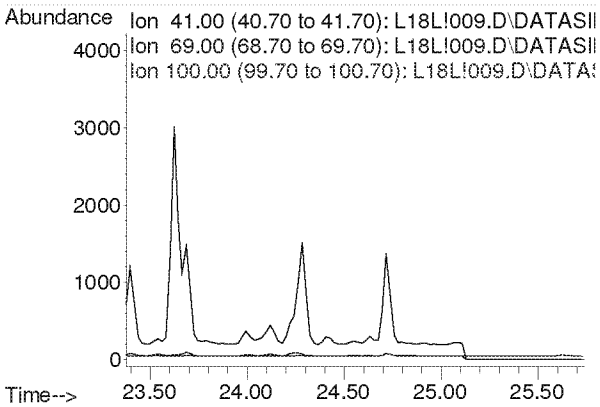


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

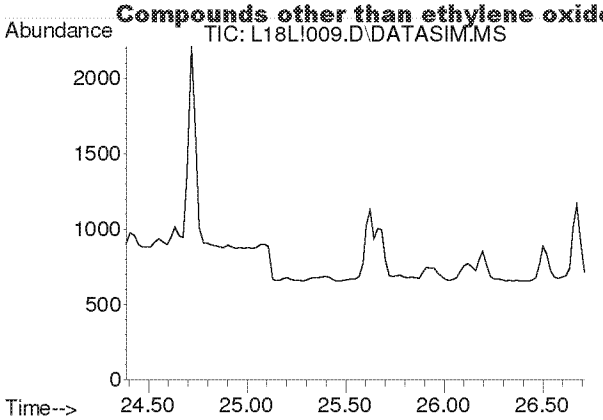
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

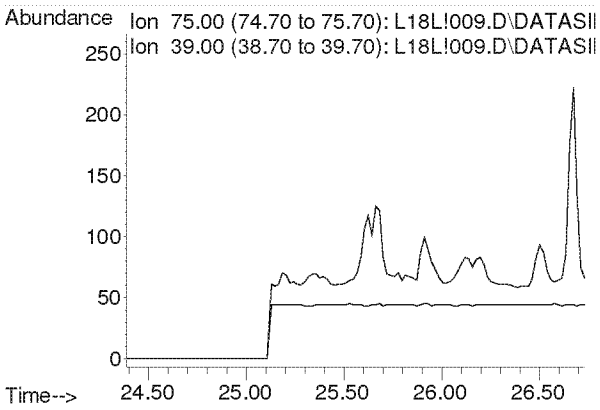


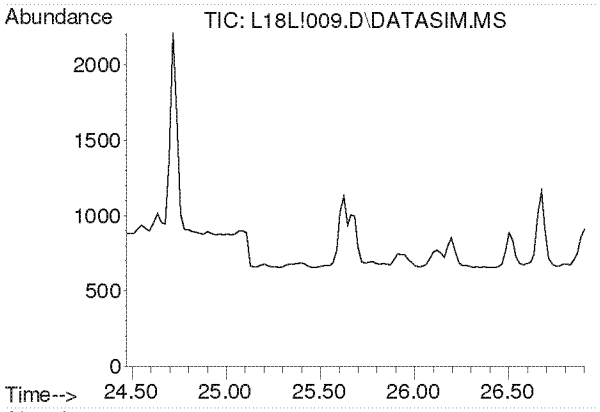
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



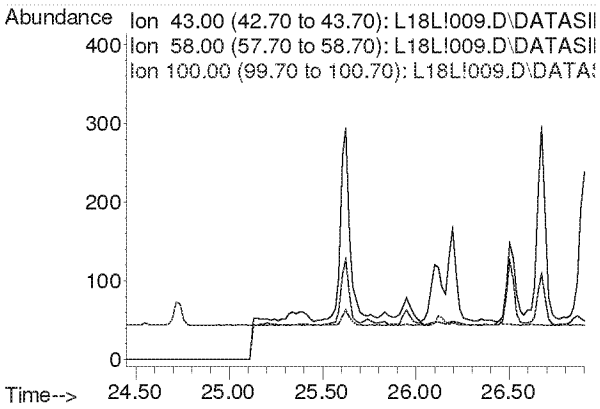


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

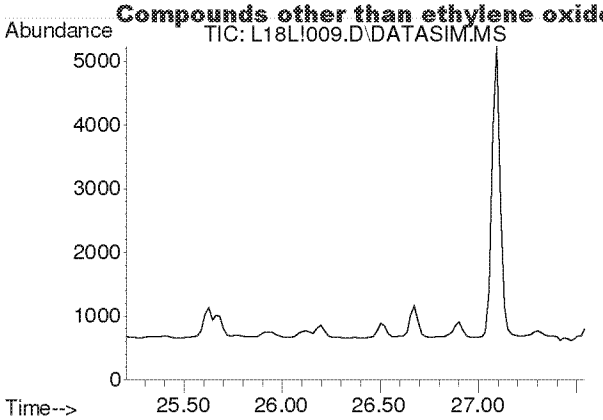
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

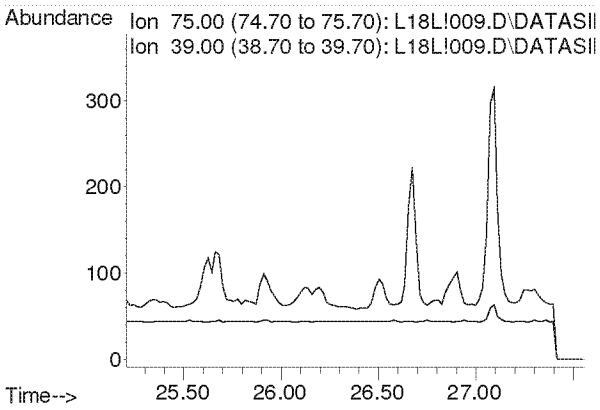


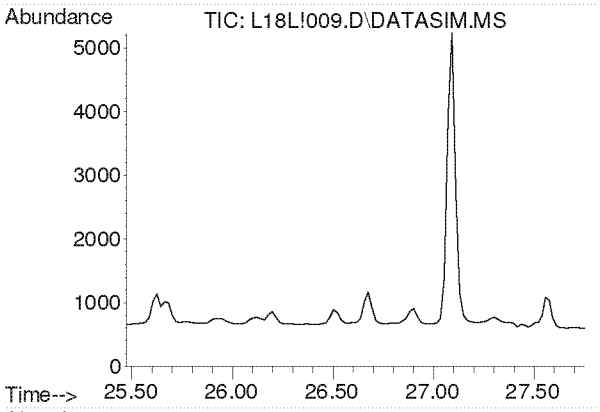
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



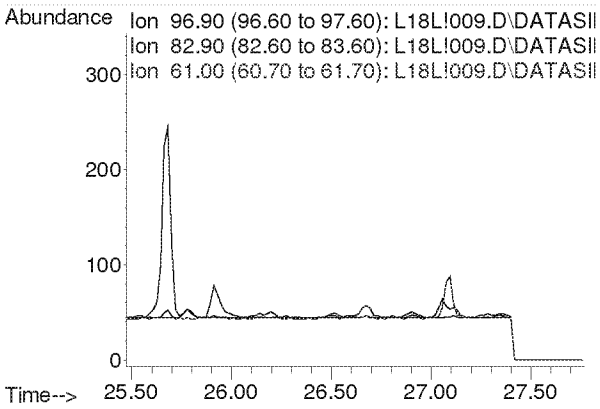


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

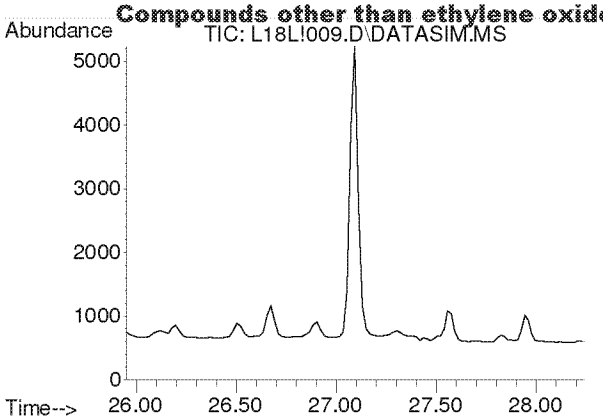
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

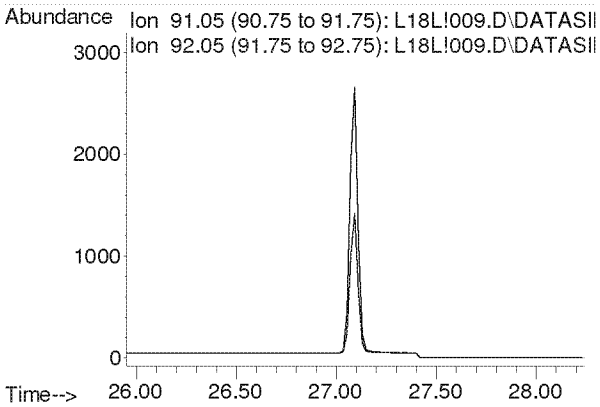


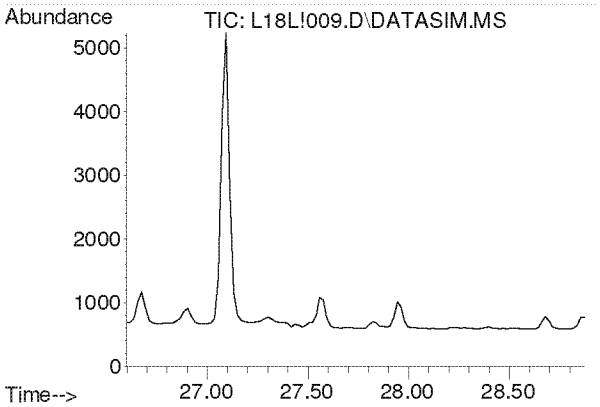
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



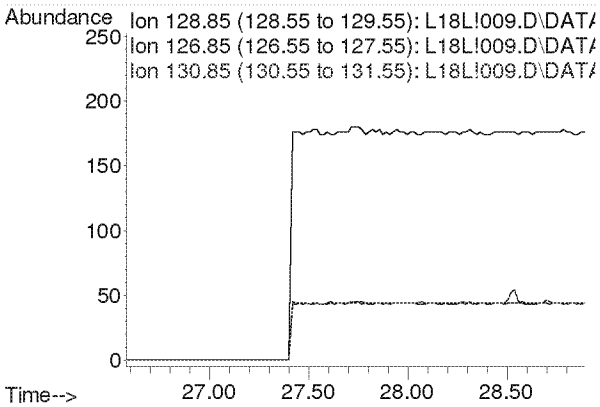


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

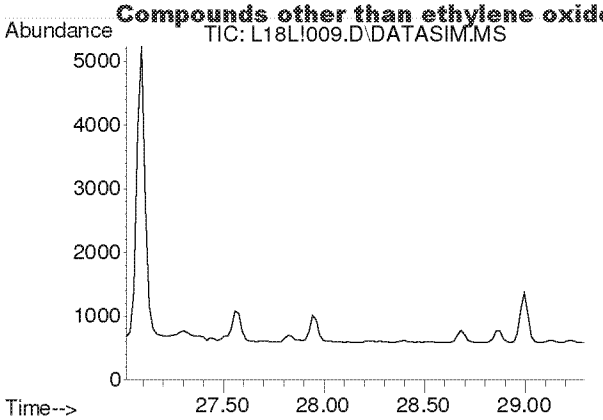
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

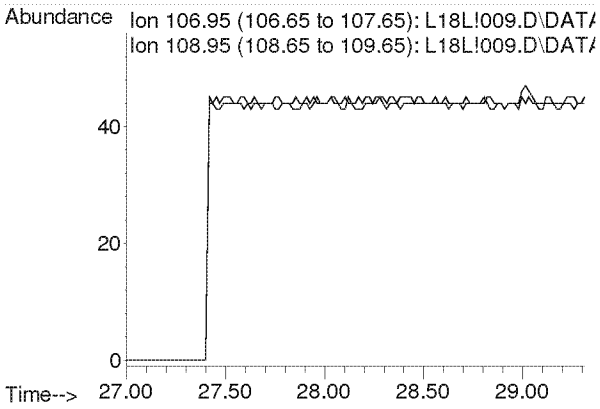


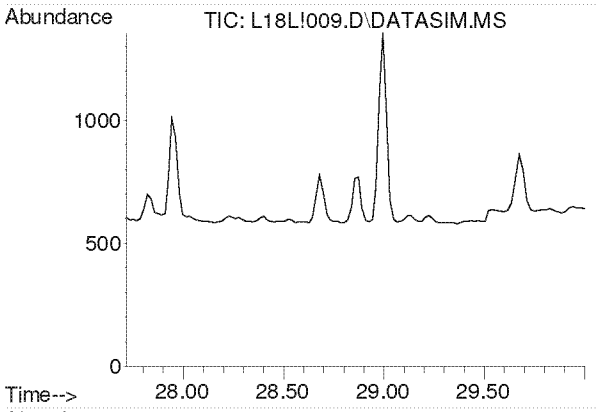
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



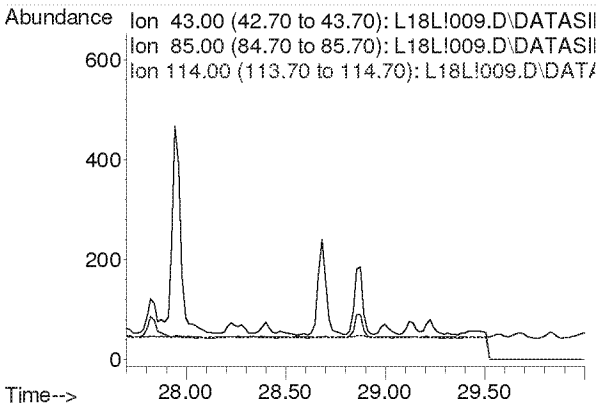


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

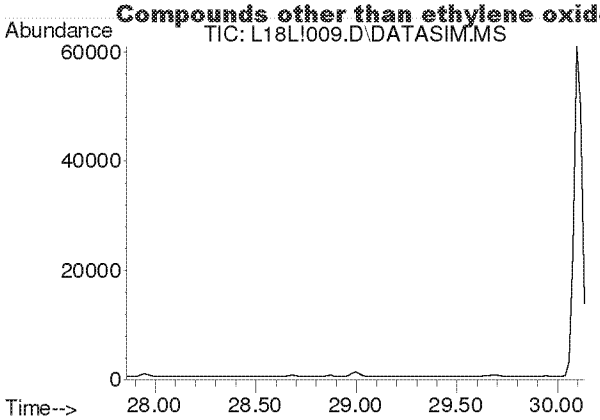
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

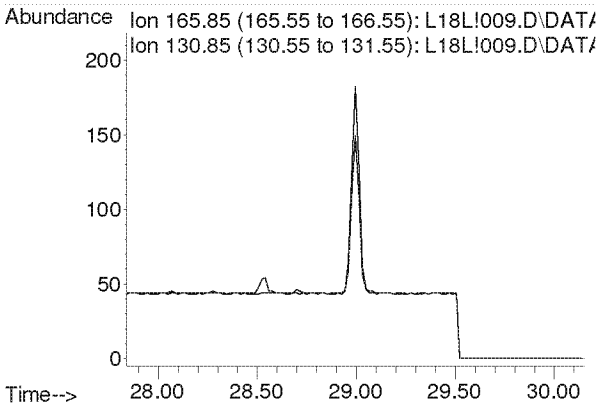


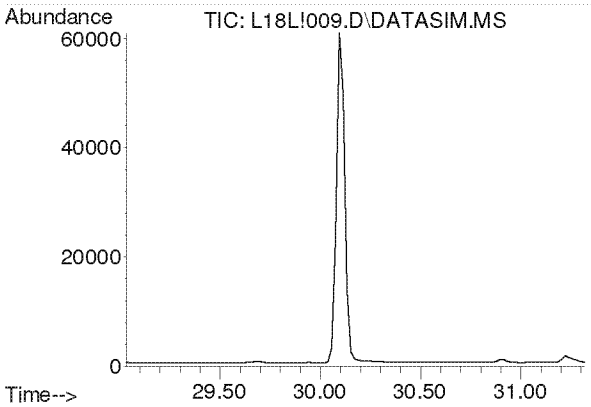
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



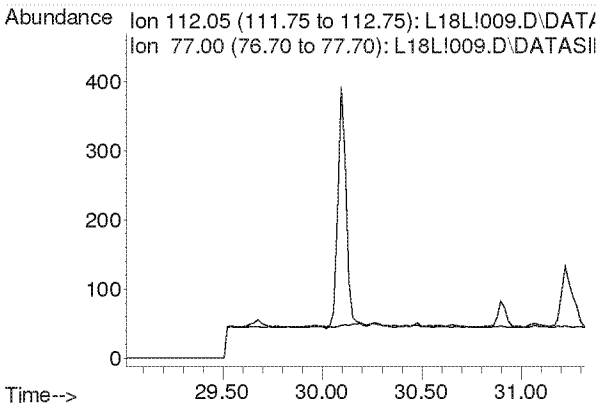


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

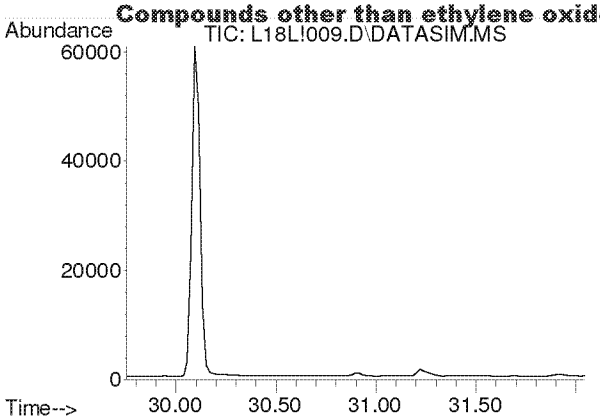
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

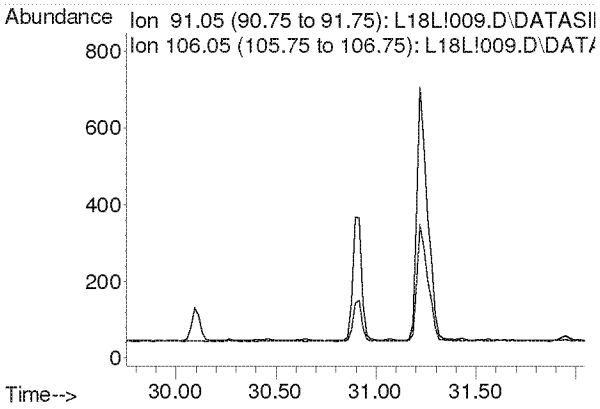


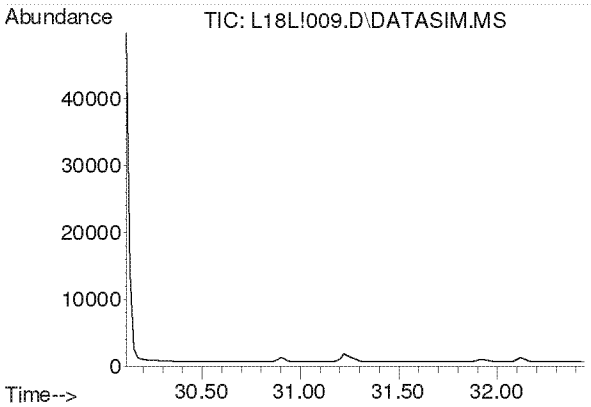
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



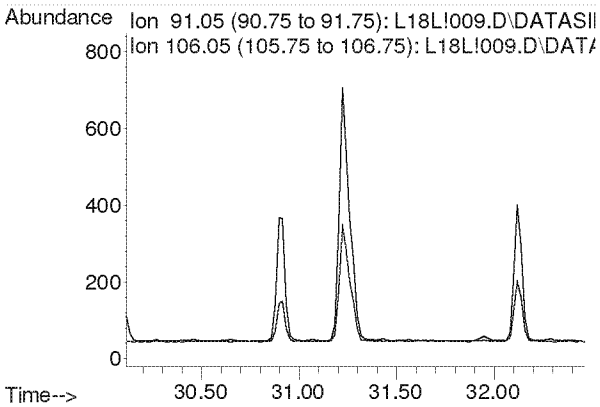


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

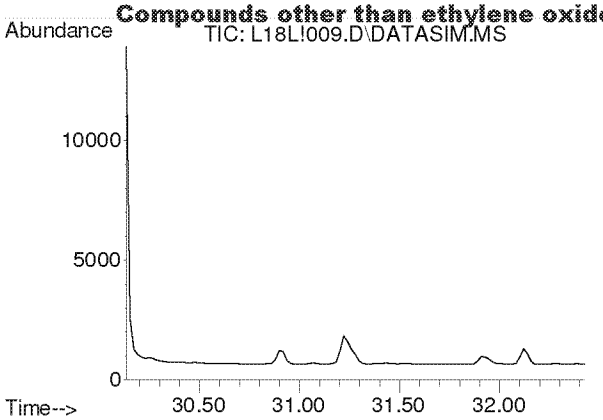
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

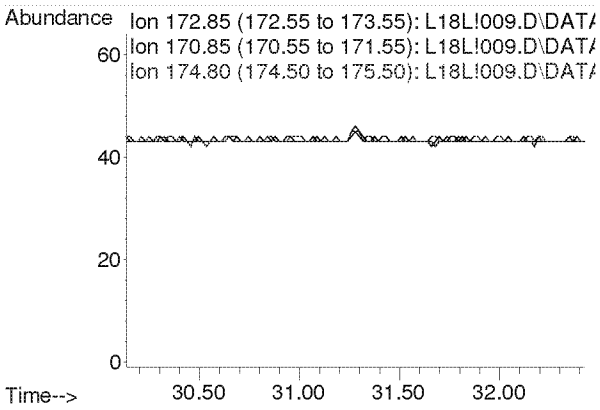


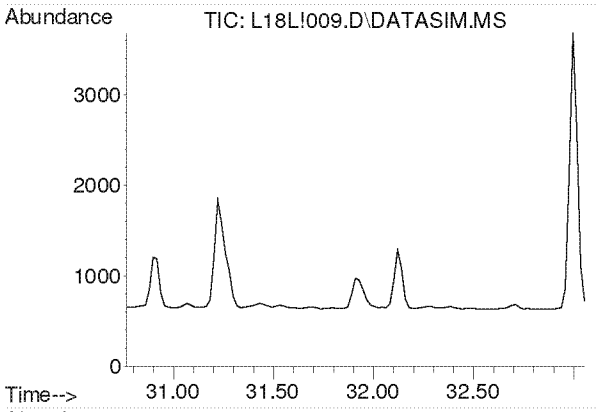
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



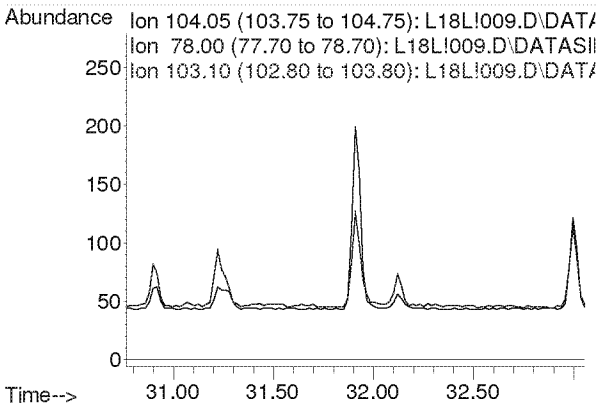


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

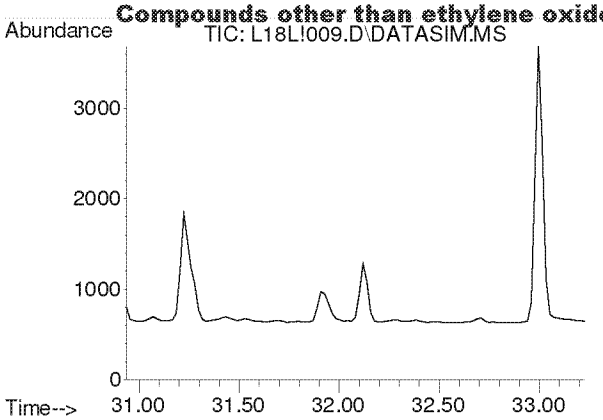
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

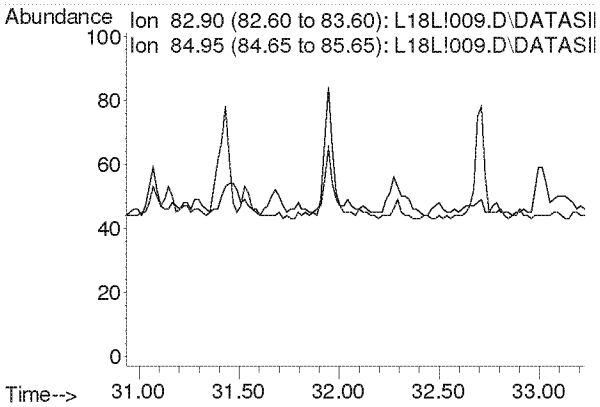


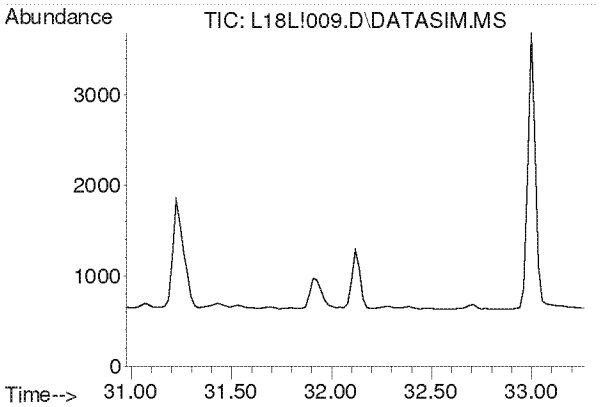
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



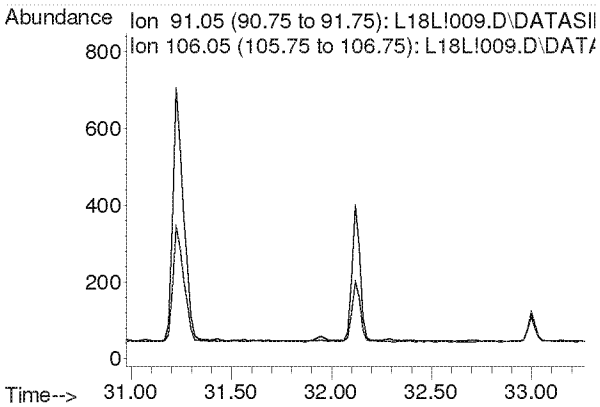


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

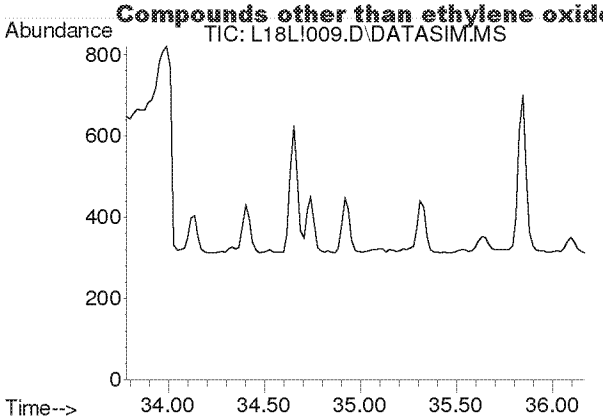
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

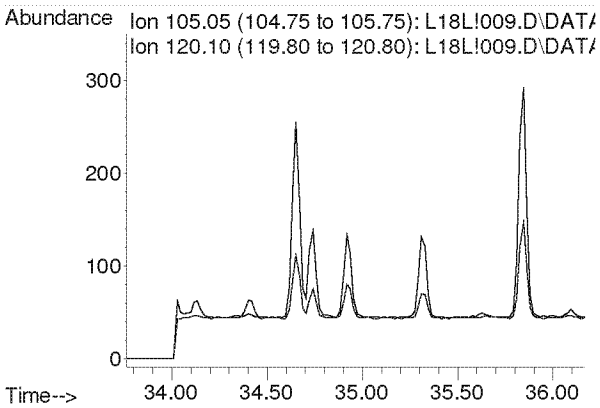


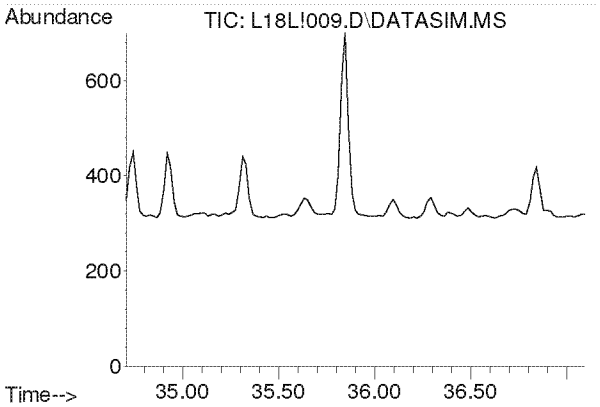
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



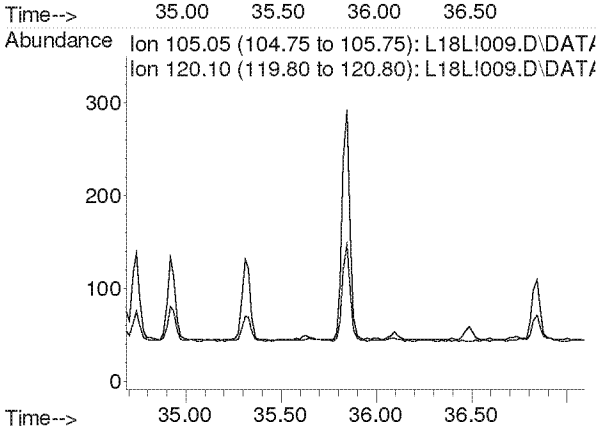


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

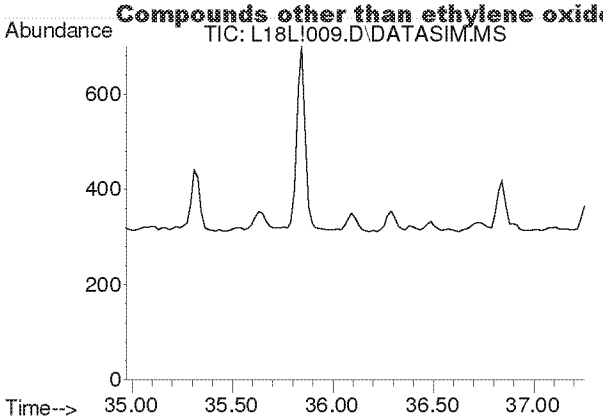
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

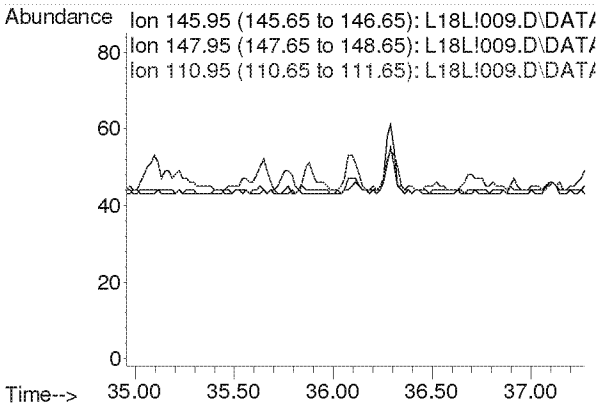


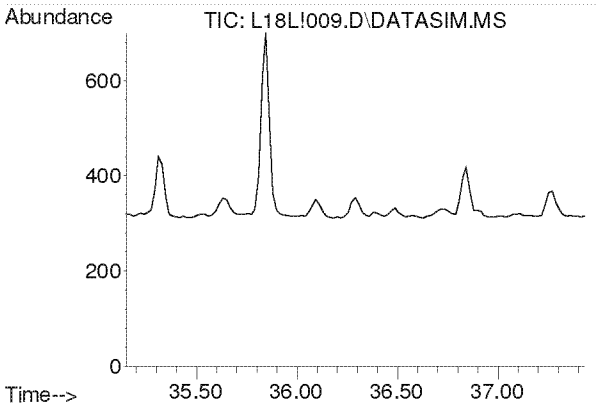
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



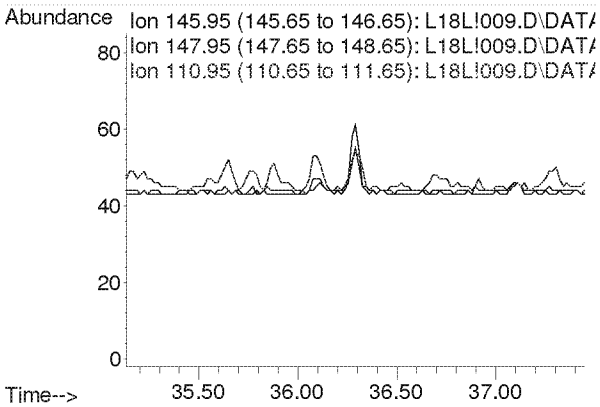


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

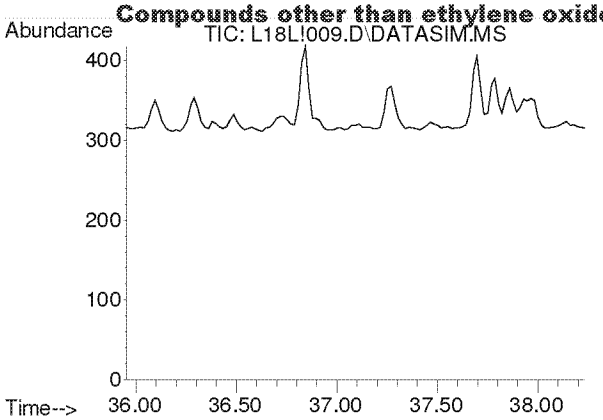
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

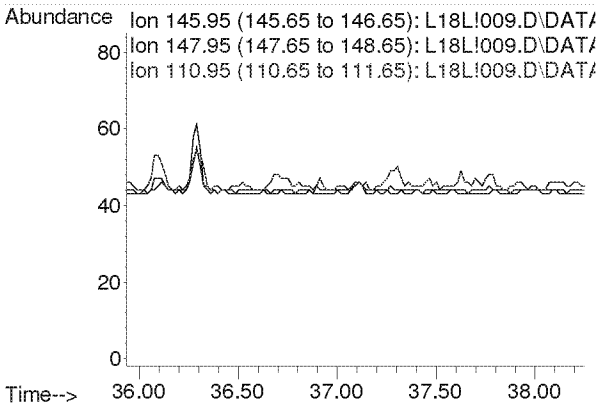


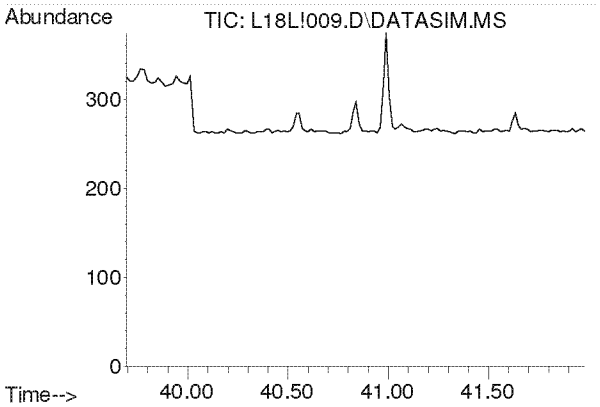
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



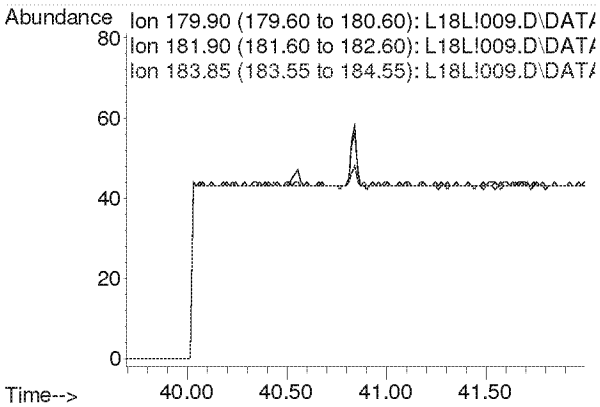


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

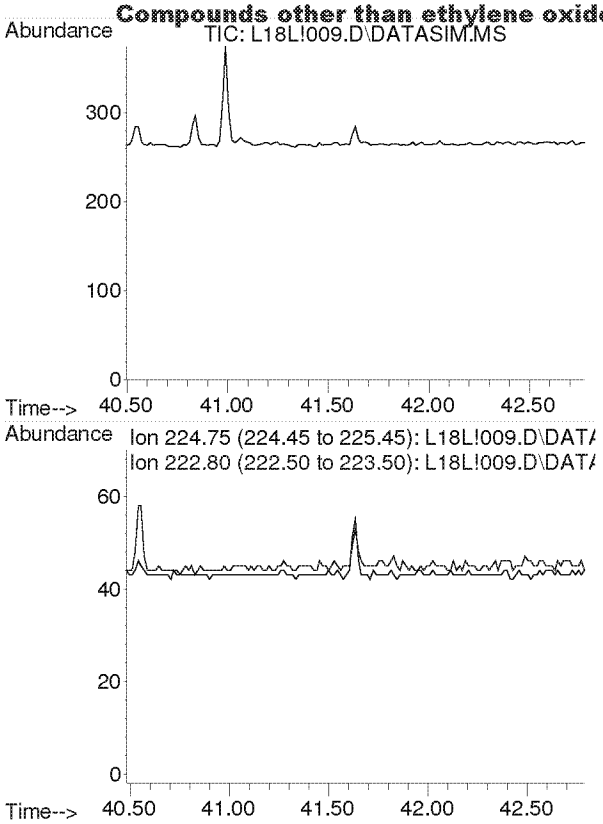
Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!009.D
Acq: 28 Dec 2018 7:35 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!010.D
Acq On : 28 Dec 2018 8:36 pm
Operator : MAH
Sample : 8121821-06
Misc : HINSDALE HS 12/14/18
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 03 13:07:35 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.992	66	55823	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.150	114	132320	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.115	117	101917	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	450m	0.1349 ppbv	RMB 1/8/19
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D. d	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. d	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!010.D
Acq On : 28 Dec 2018 8:36 pm
Operator : MAH
Sample : 8121821-06
Misc : HINSDALE HS 12/14/18
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 03 13:07:35 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

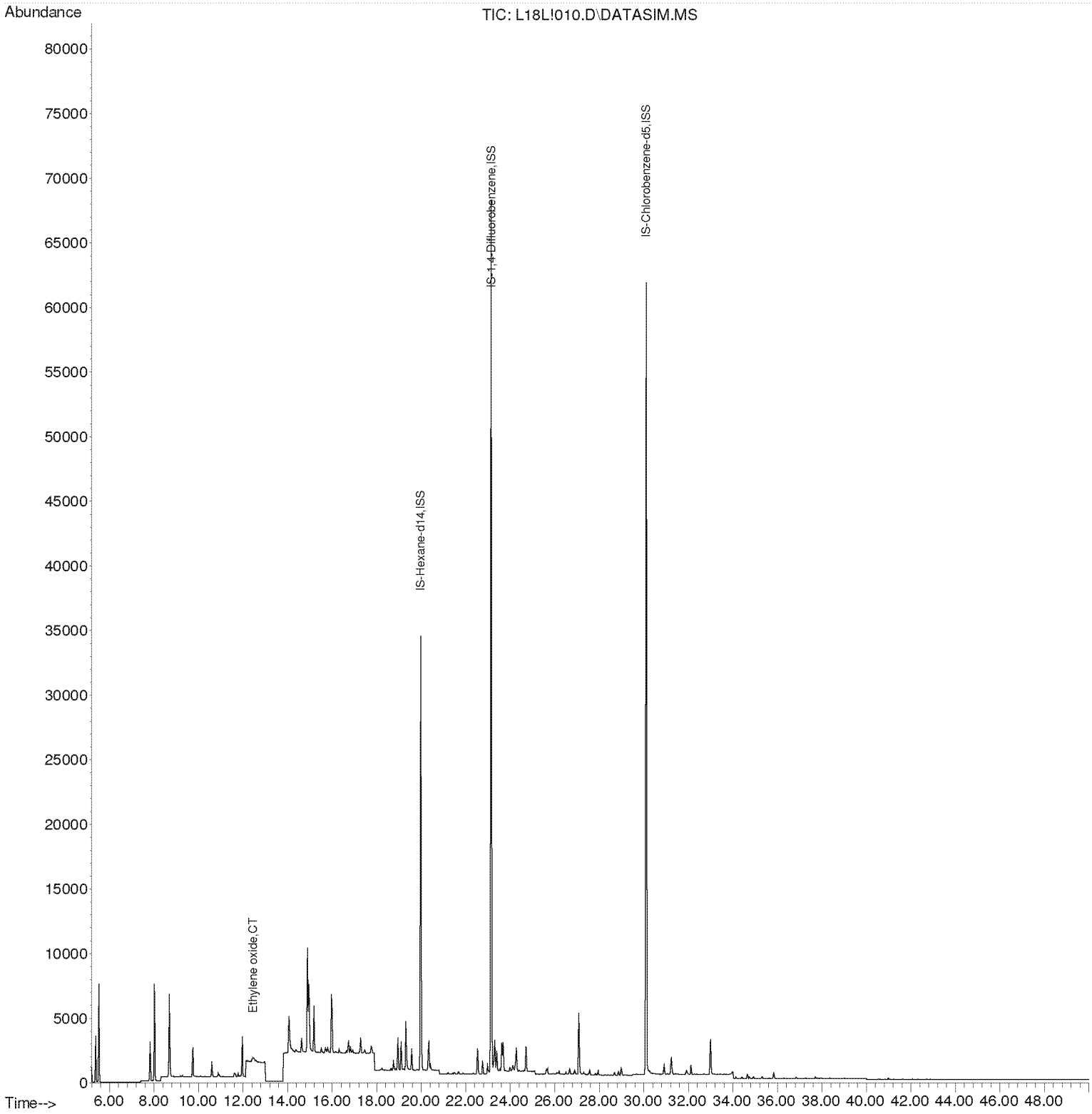
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorobenzene	0.000	112	0	N.D. d	
50) Ethylbenzene	0.000	91	0	N.D. d	
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D. d	
60) o-Dichlorobenzene	0.000	146	0	N.D.	
61) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
62) Hexachloro-1,3-butadiene	0.000	225	0	N.D.	

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

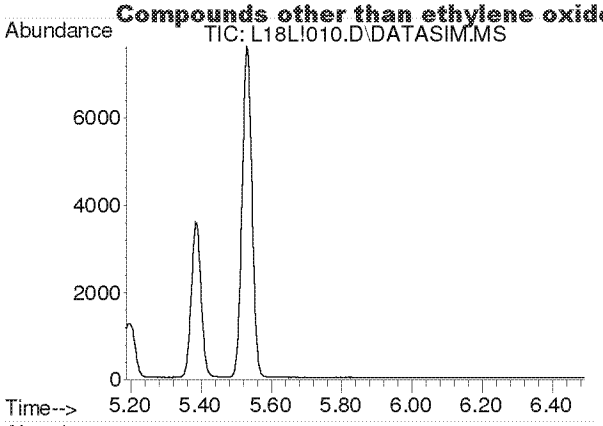
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!010.D
Acq On : 28 Dec 2018 8:36 pm
Operator : MAH
Sample : 8121821-06
Misc : HINSDALE HS 12/14/18
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 03 13:07:35 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



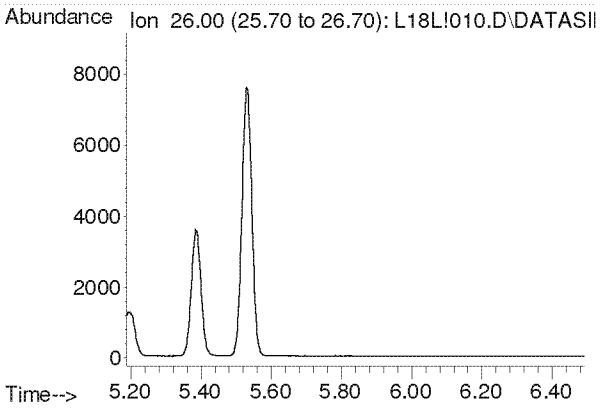
Compounds other than ethylene oxide were not quantitated.

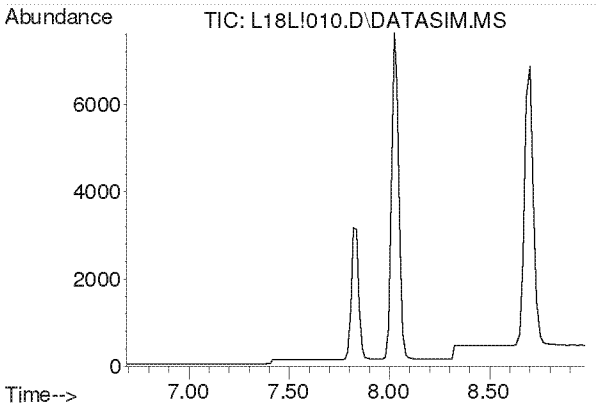


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 26



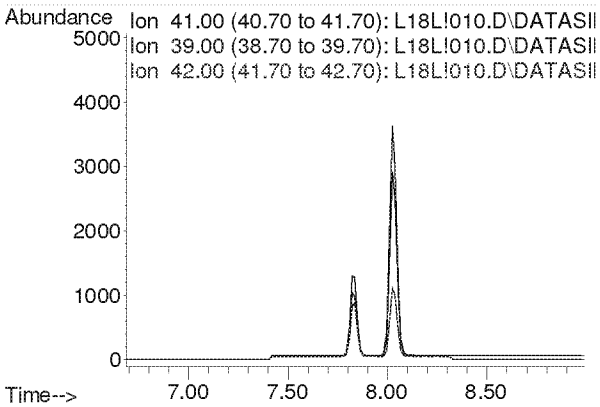


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

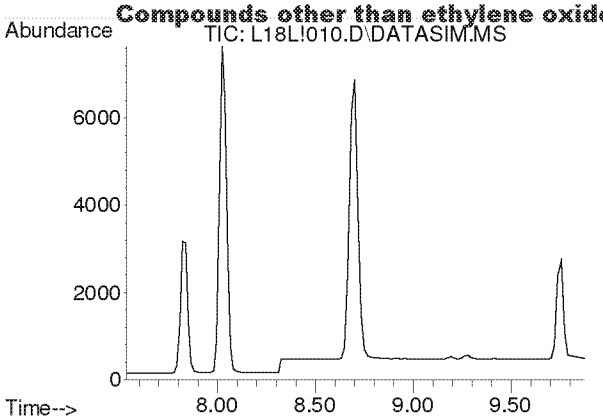
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

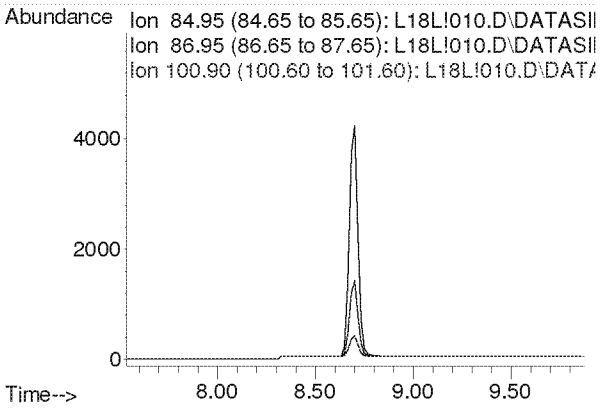


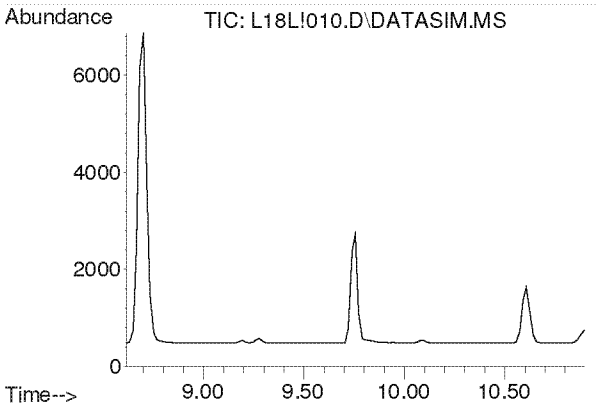
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



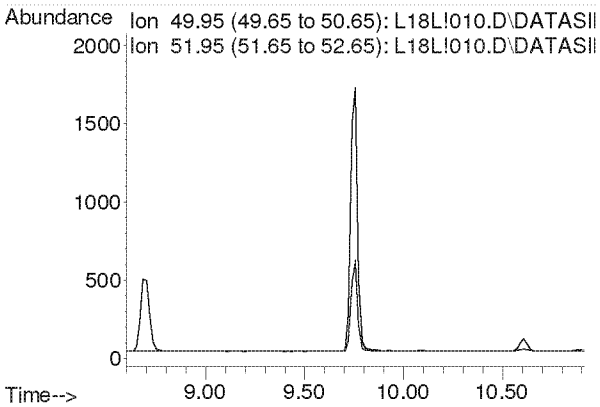


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

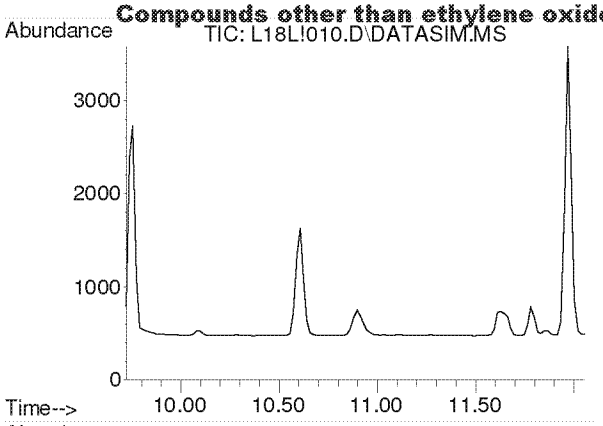
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

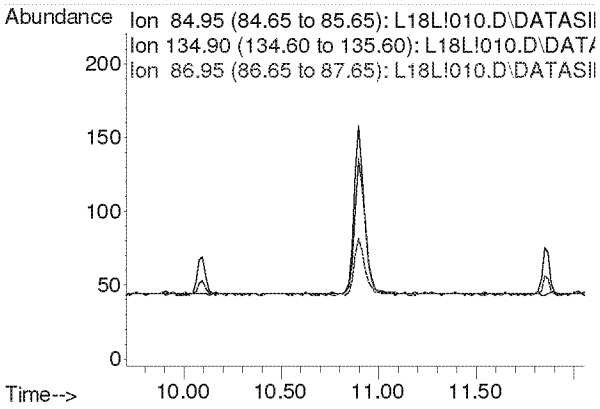


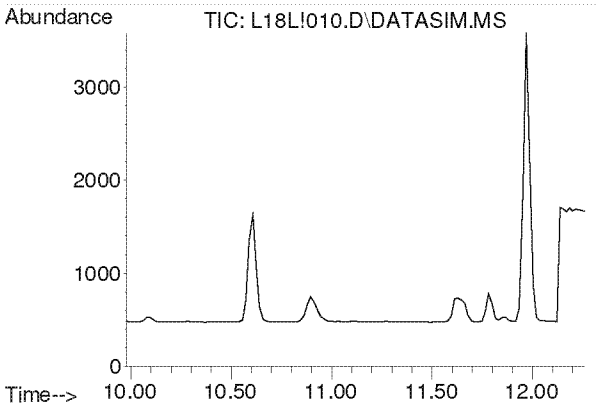
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



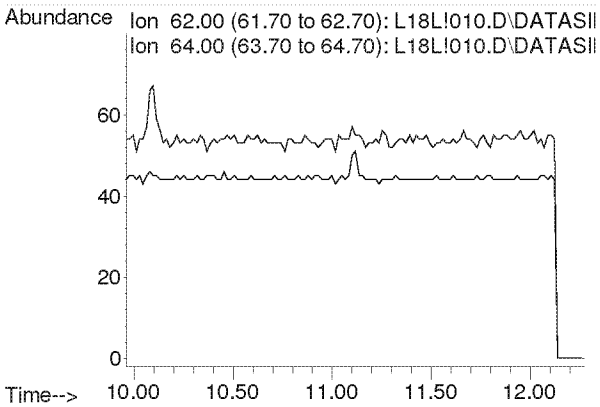


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

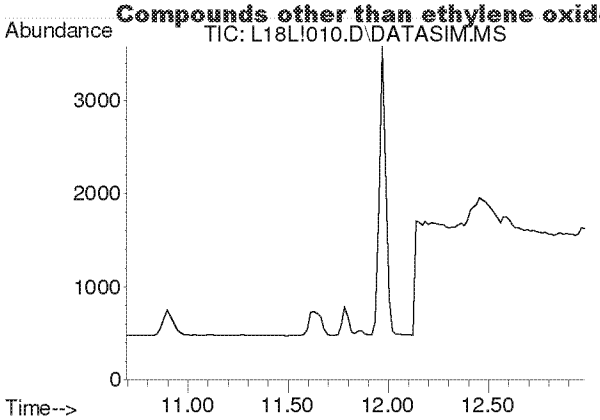
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

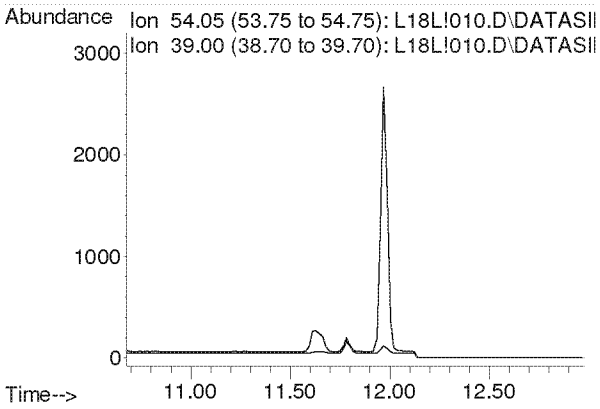


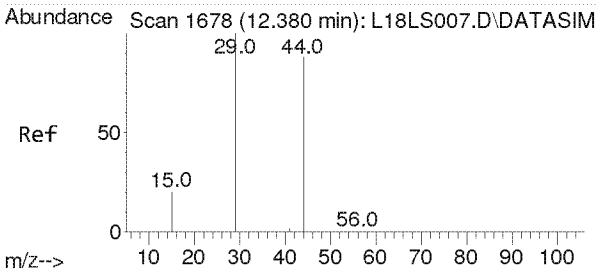
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

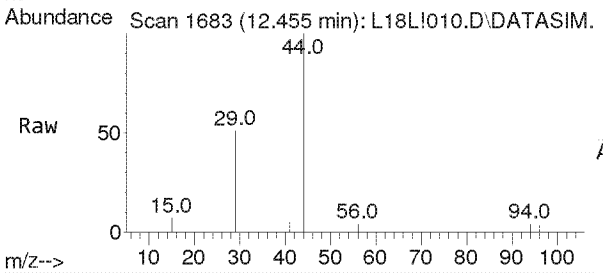


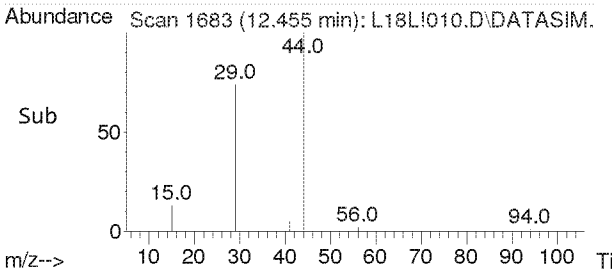


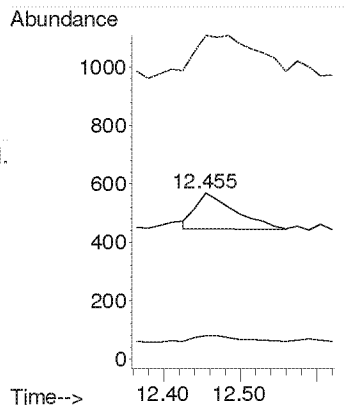
#9
Ethylene oxide
Concen: 0.135 ppbv m
RT: 12.455 min Scan# 1683
Delta R.T. 0.075 min
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 29 Resp: 450

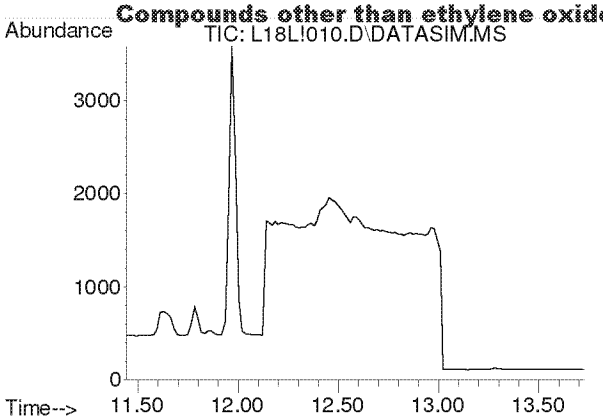
Ion	Ratio	Lower	Upper
29	100		
15	0.0	16.2	24.4#
44	29.6	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

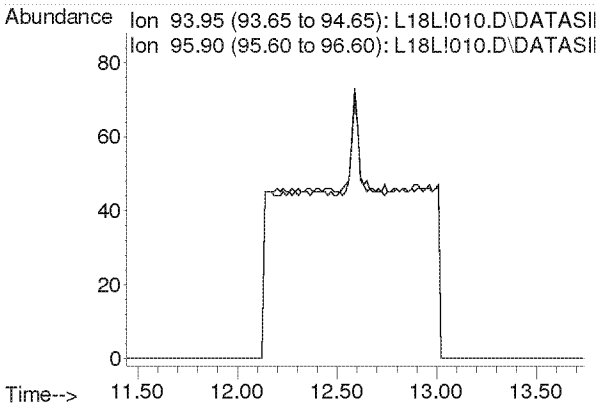


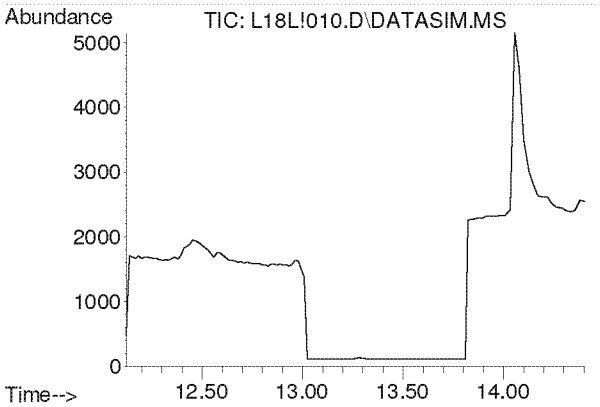
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



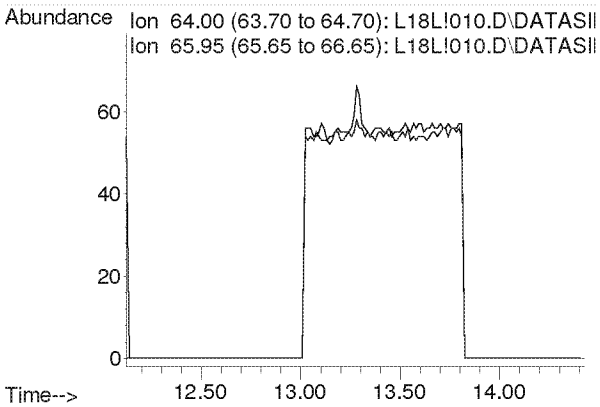


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

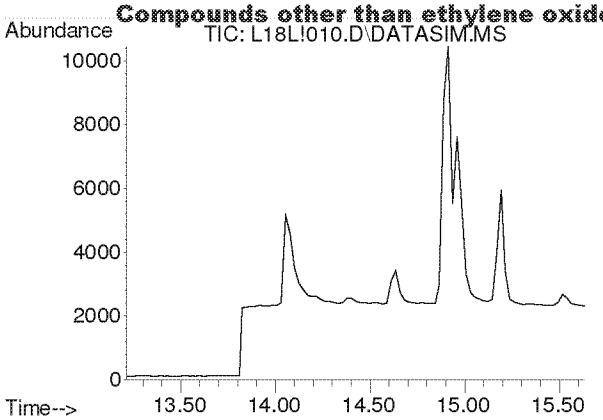
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

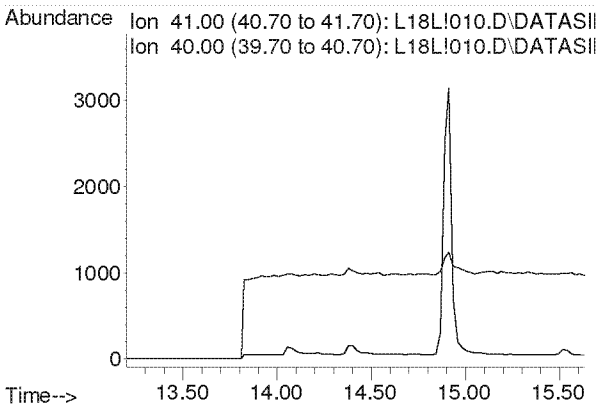


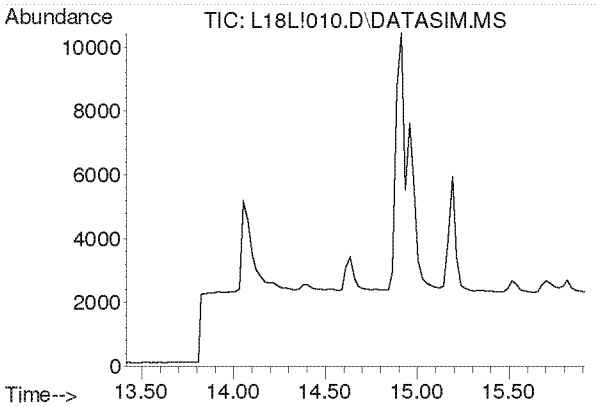
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



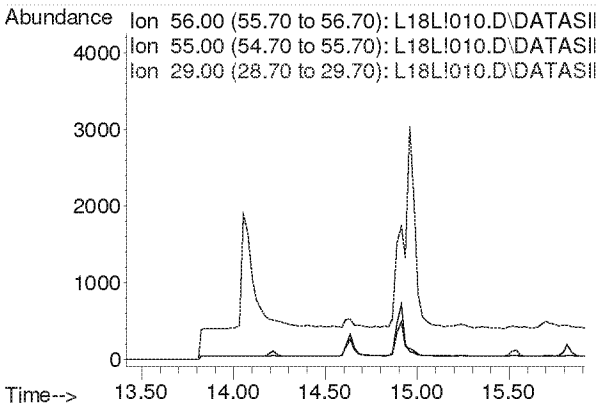


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

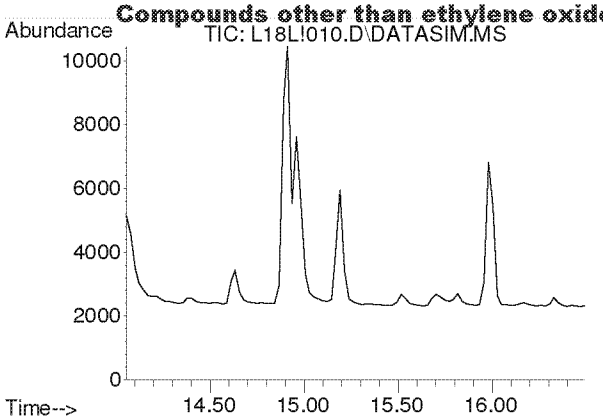
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

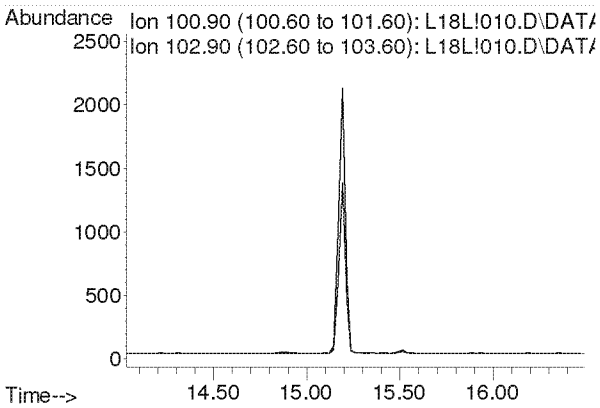


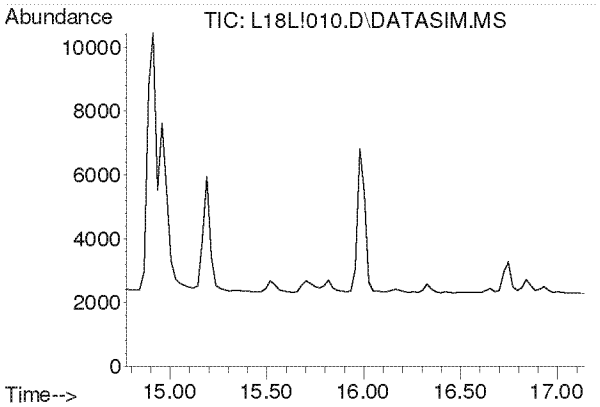
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



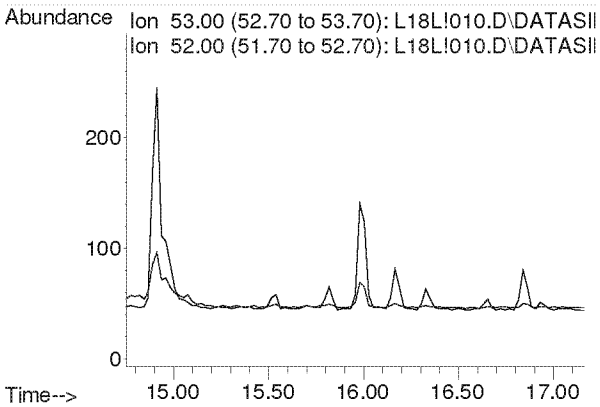


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

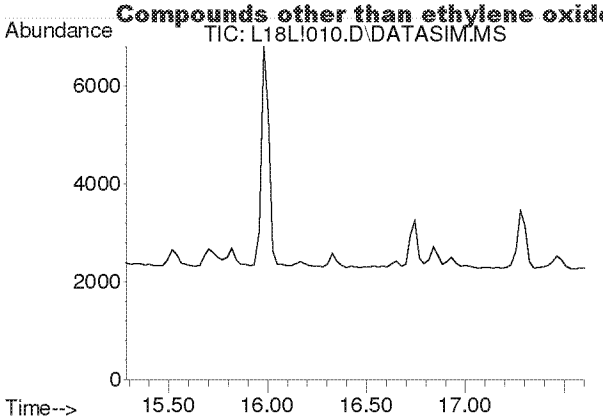
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

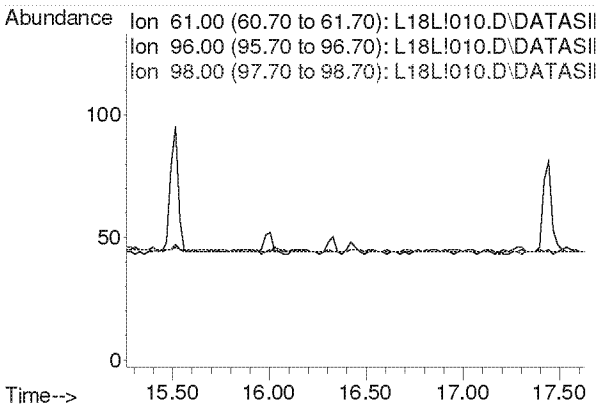


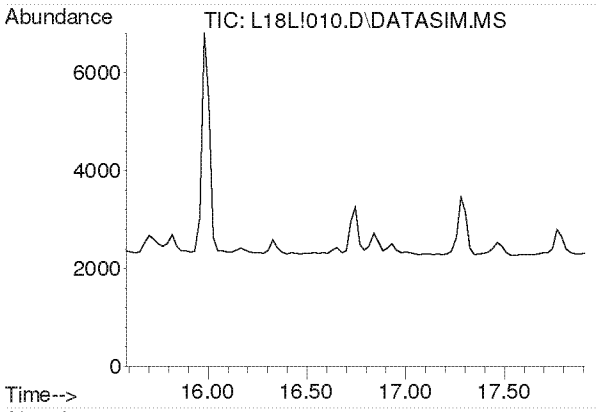
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



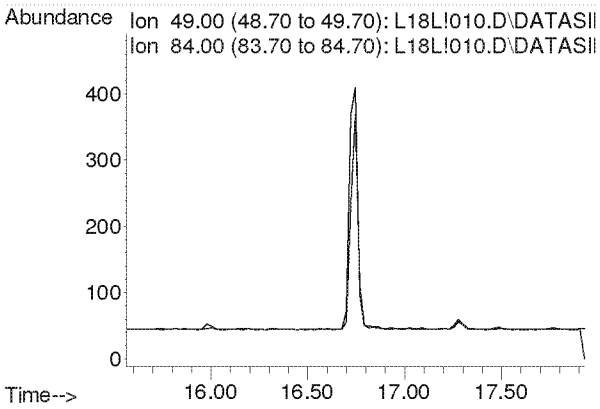


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

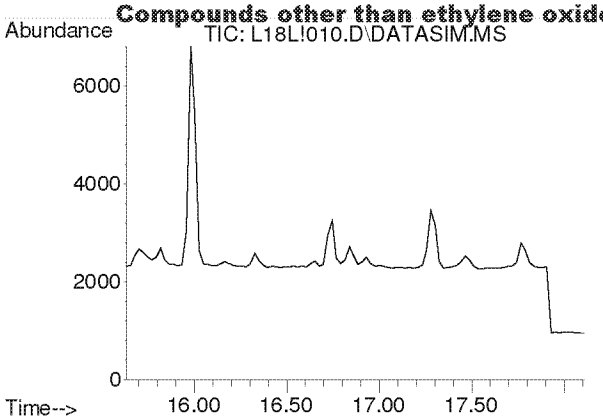
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

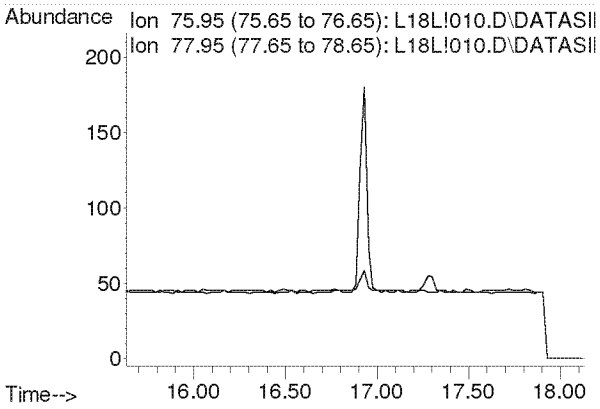


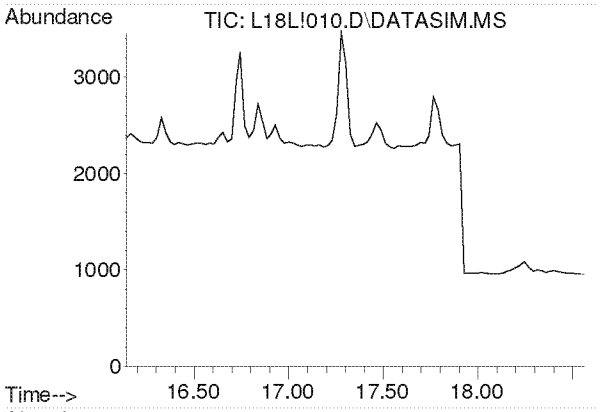
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



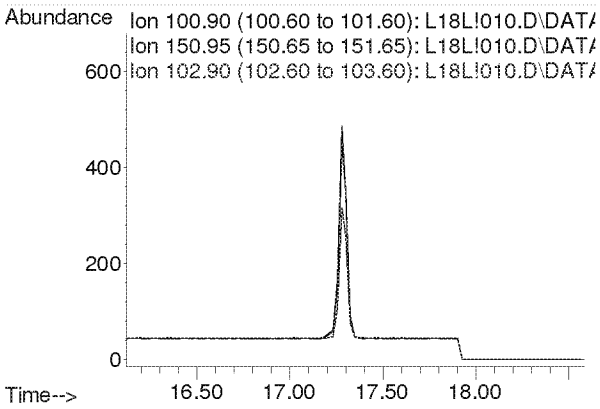


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

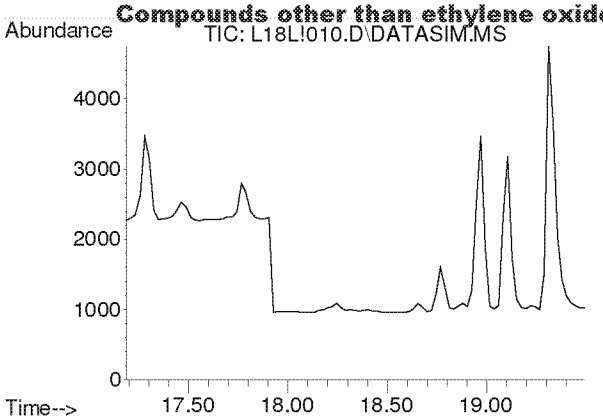
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

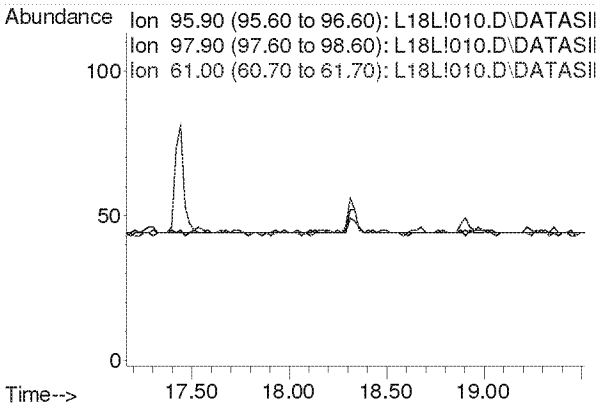


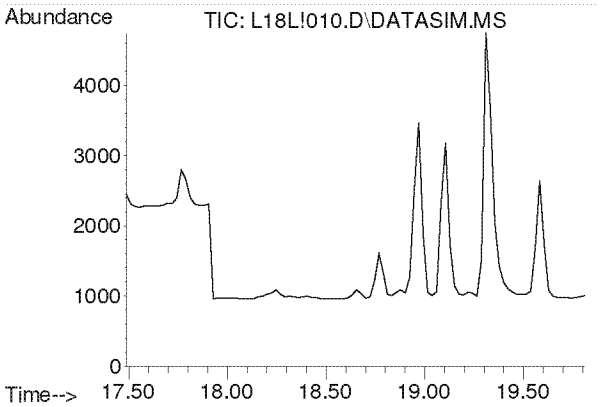
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



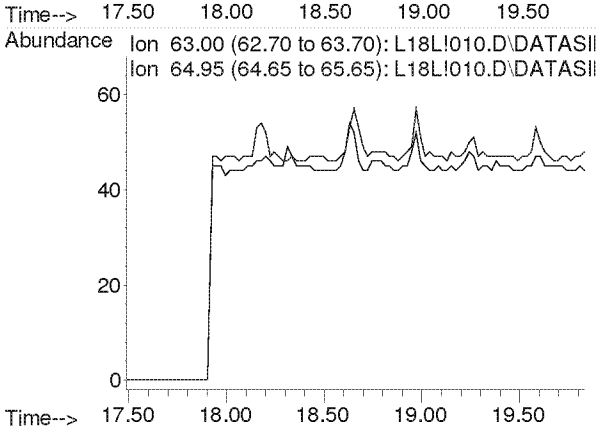


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

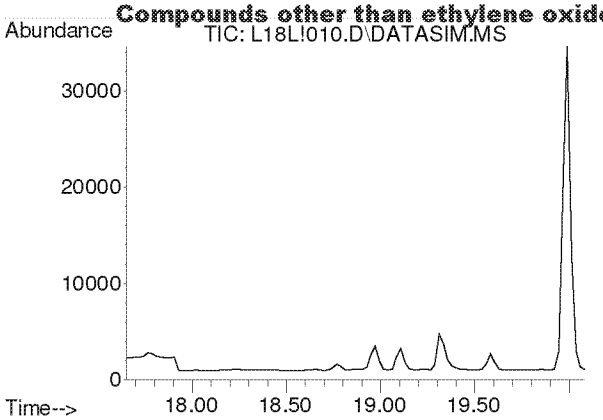
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

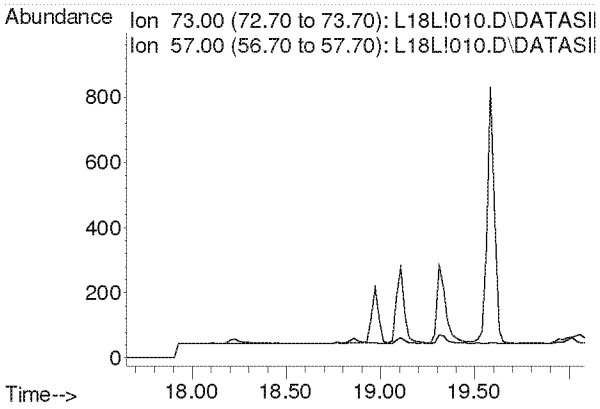


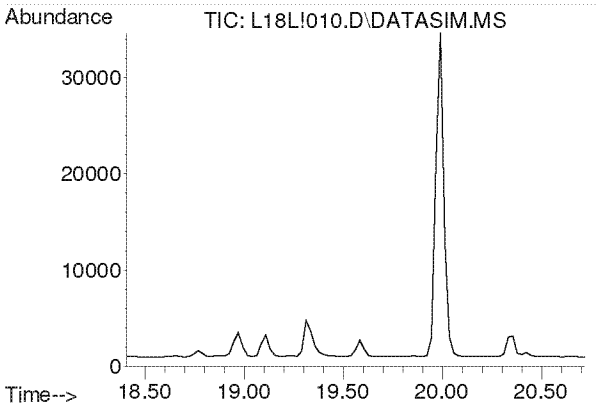
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



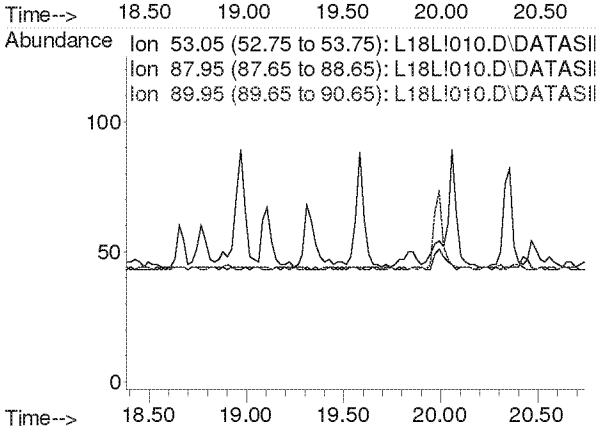


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

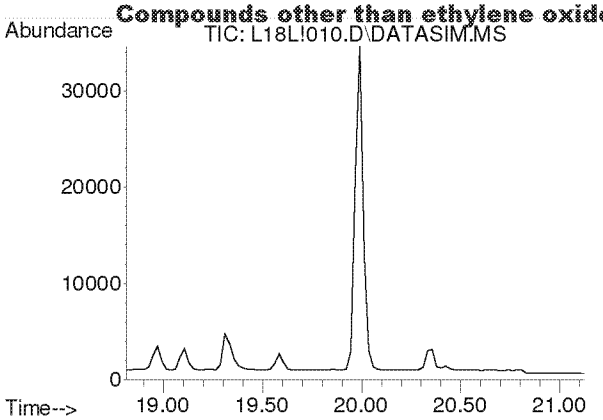
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

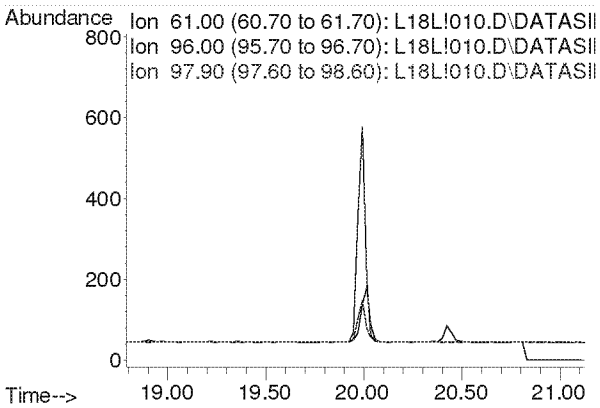


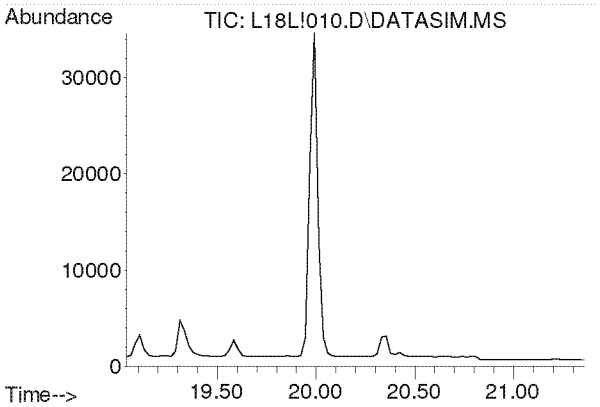
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



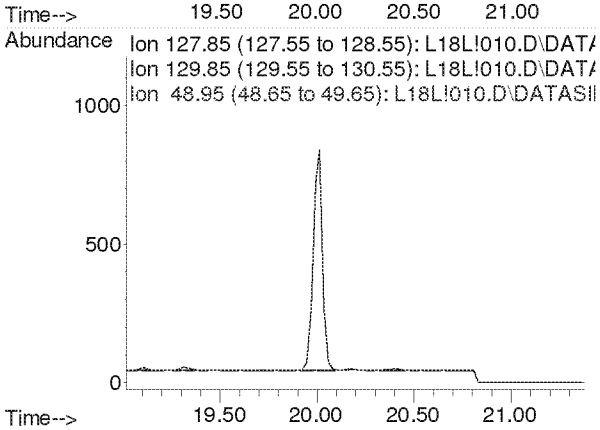


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

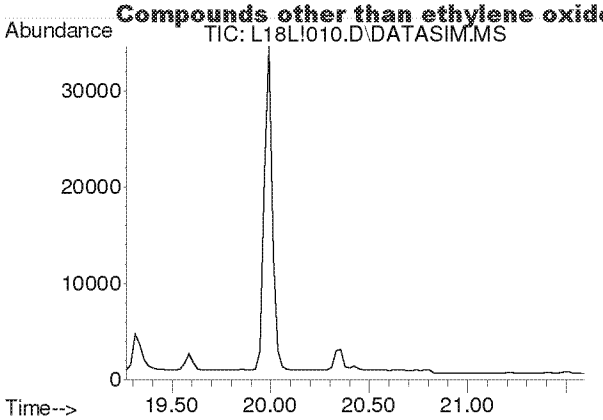
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

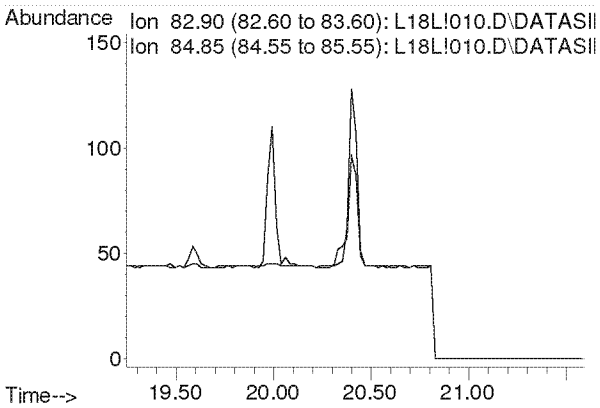


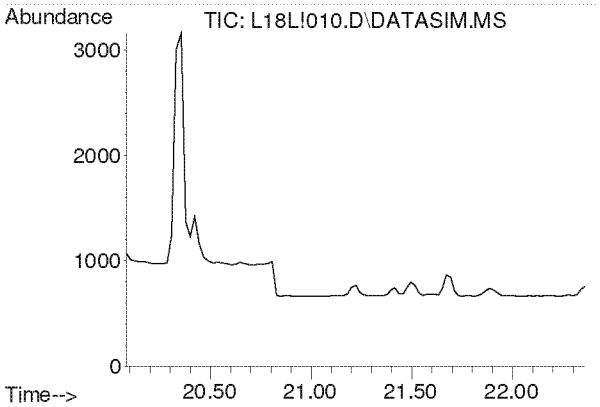
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



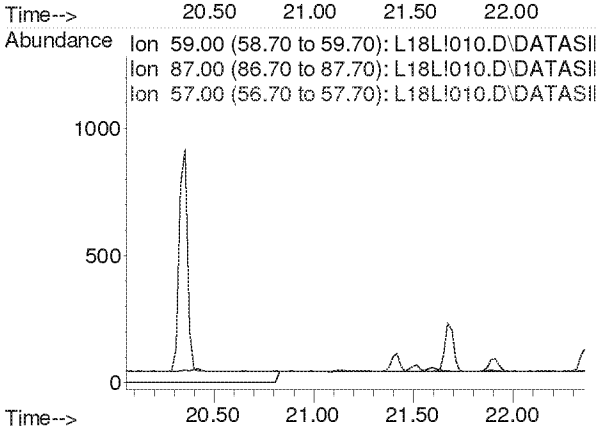


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

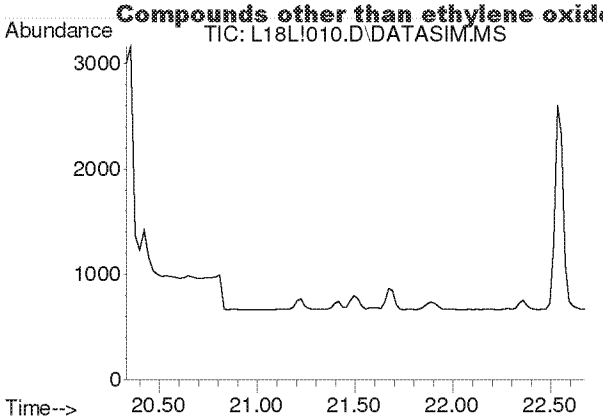
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

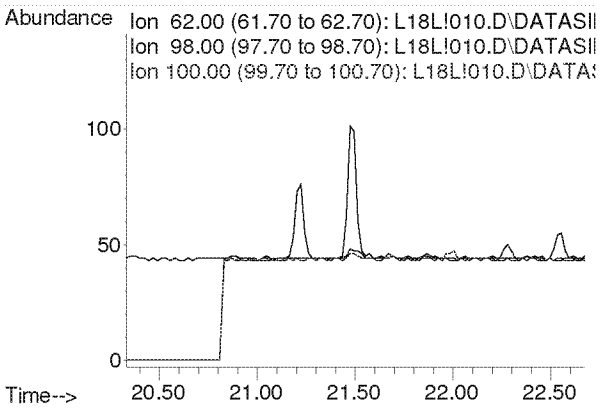


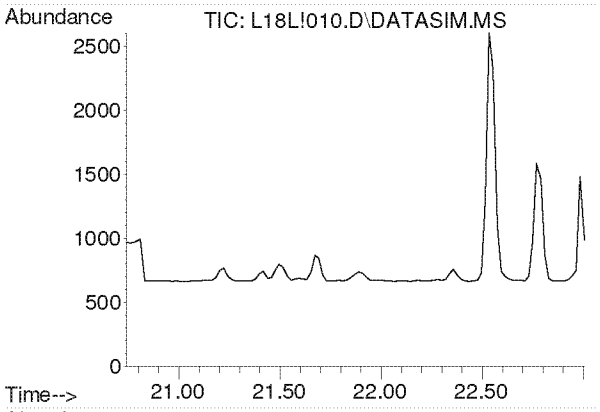
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



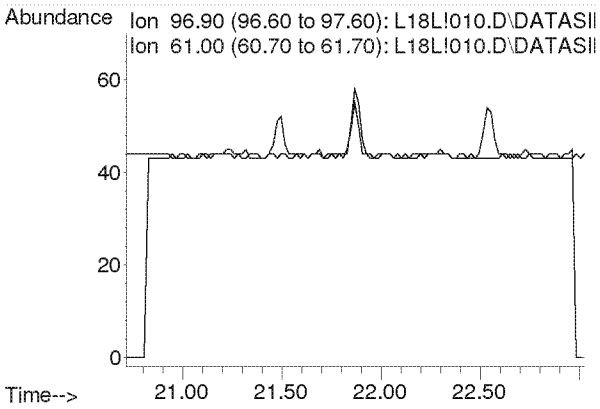


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

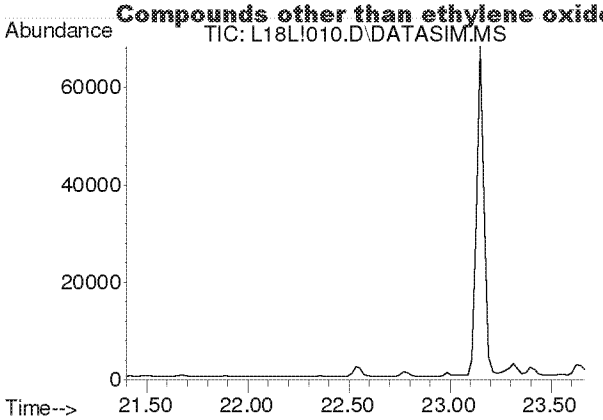
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

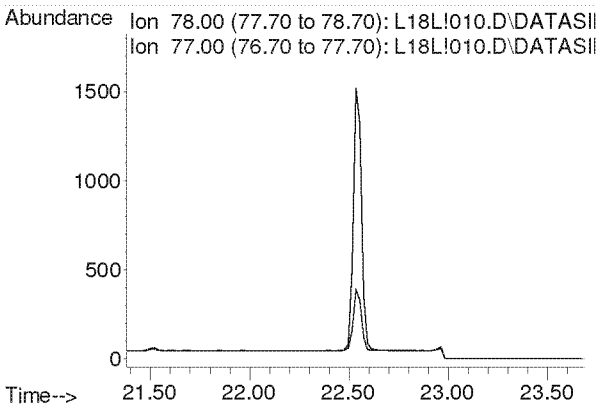


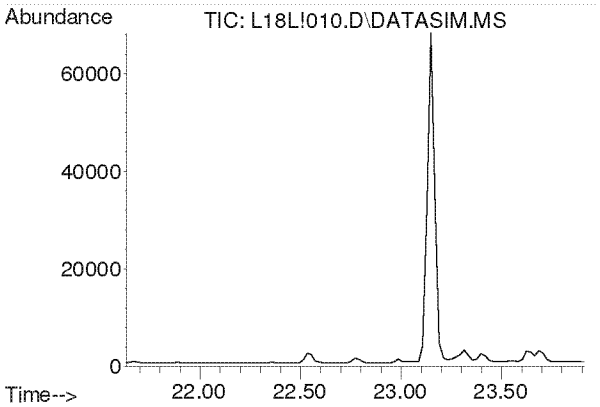
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



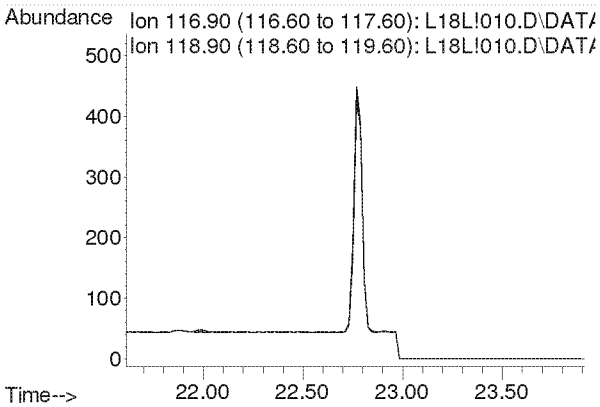


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

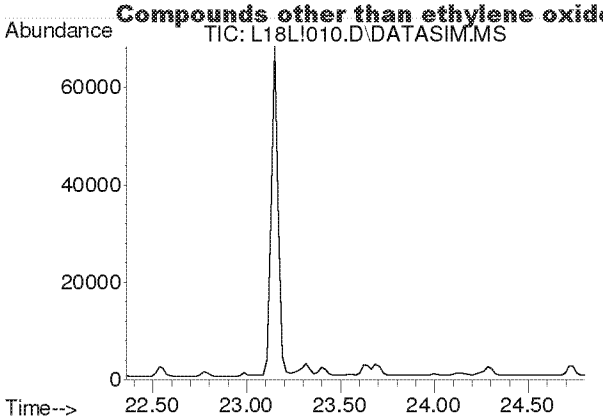
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

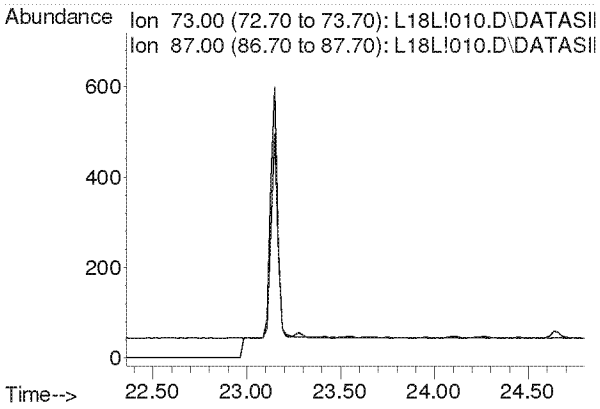


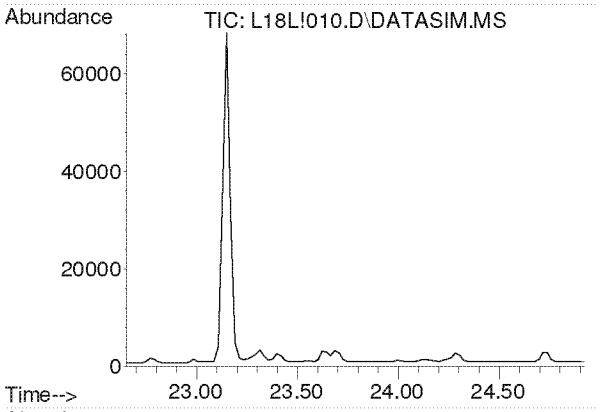
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



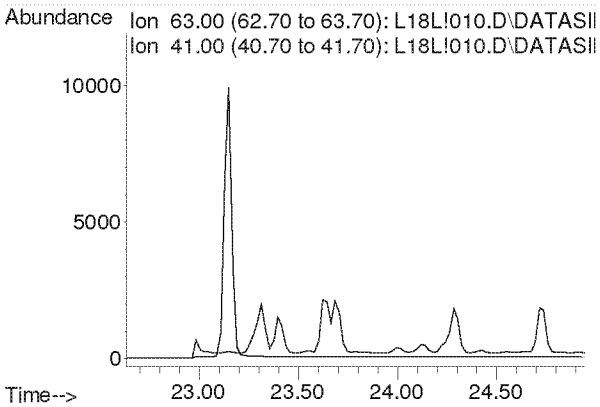


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

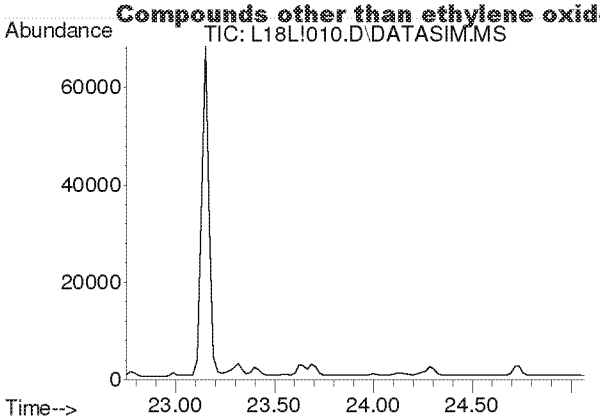
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

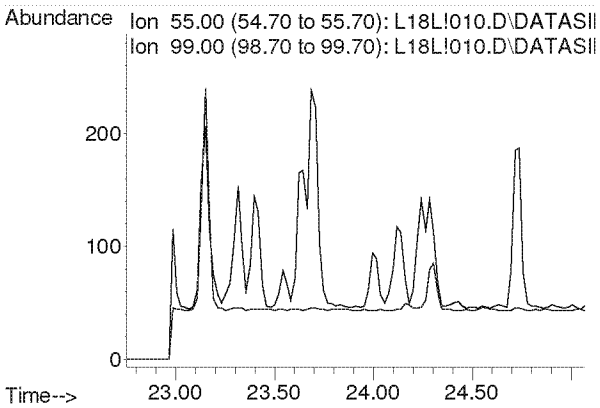


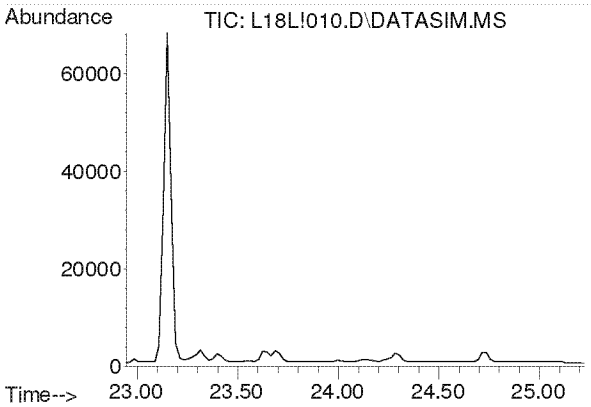
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



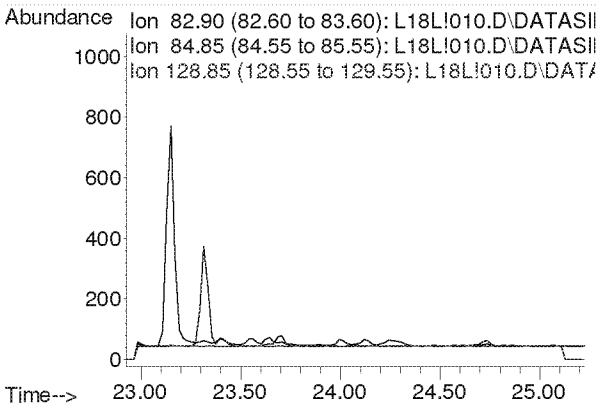


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

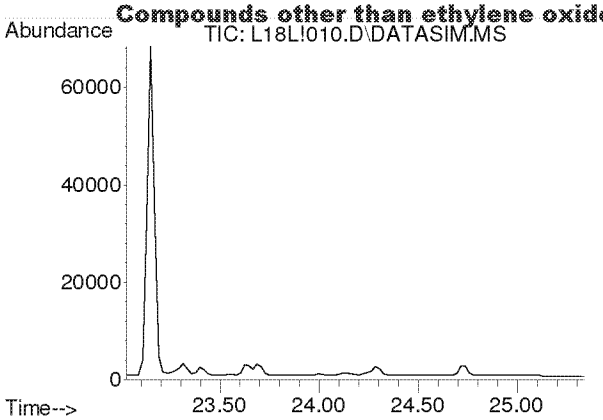
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

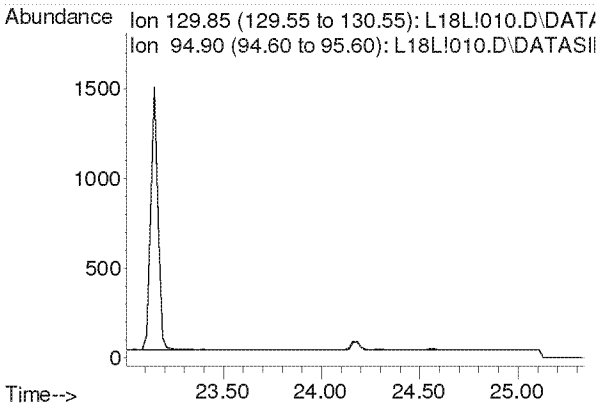


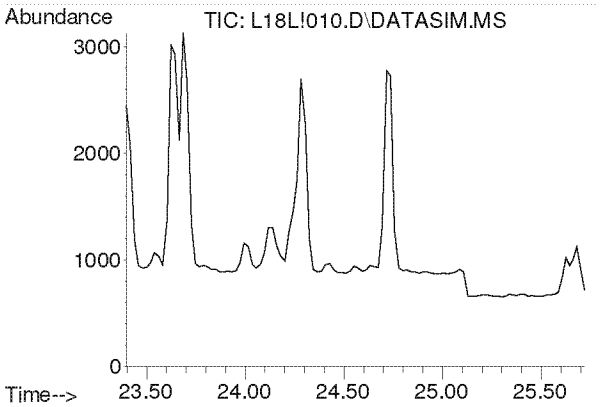
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



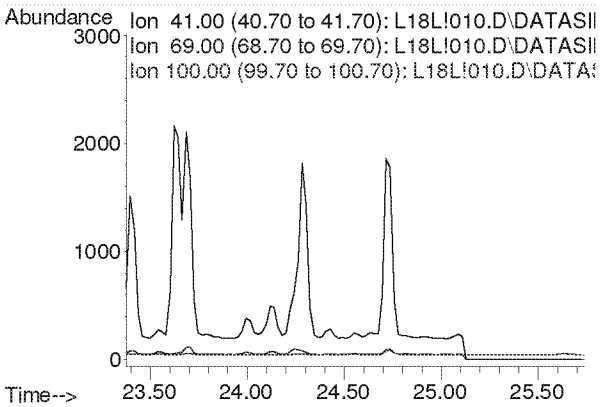


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

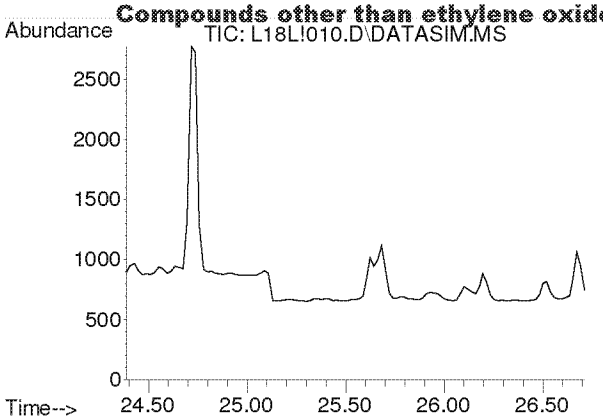
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

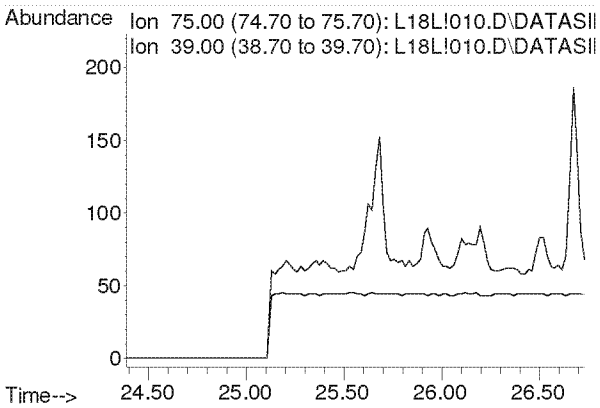


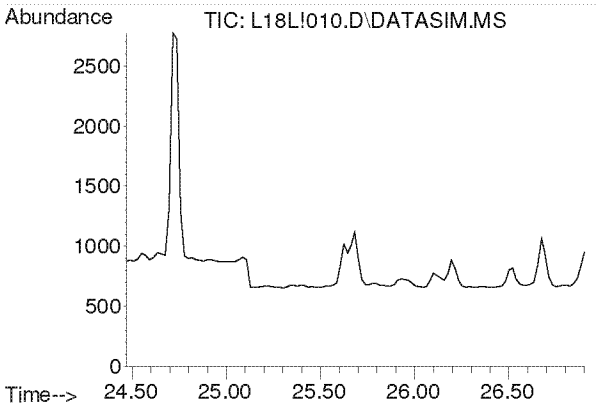
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



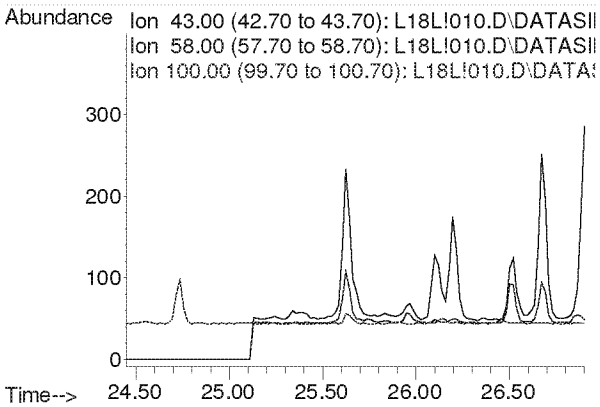


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

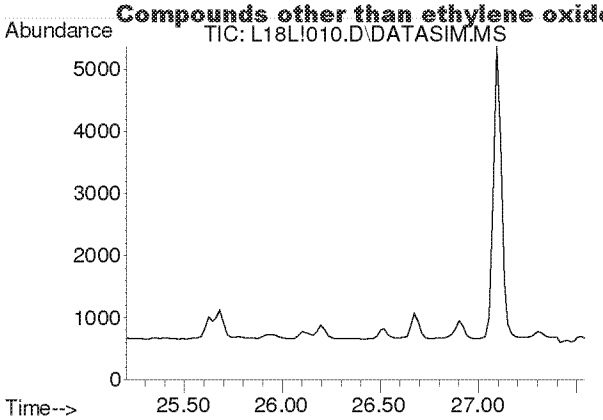
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

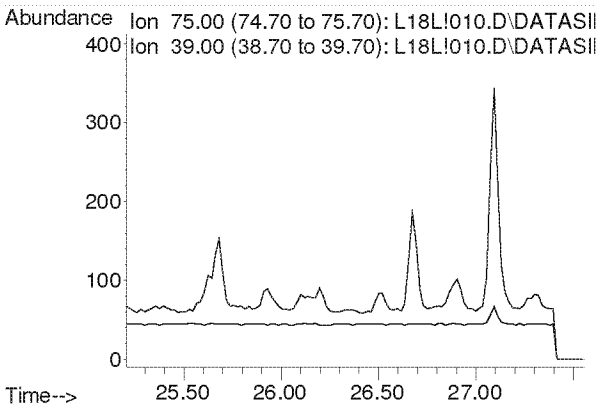


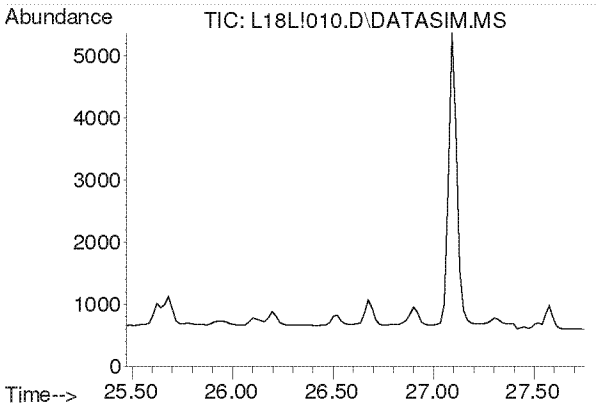
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



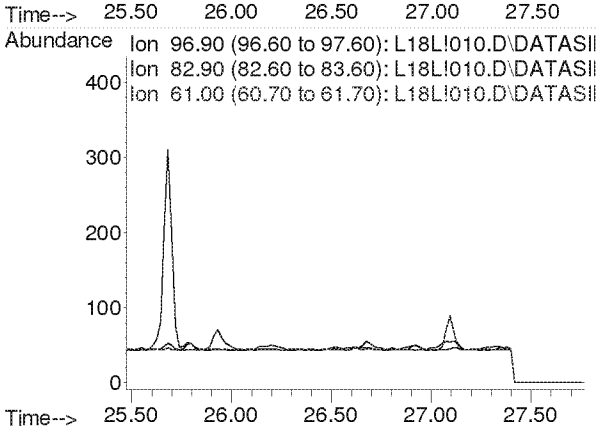


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

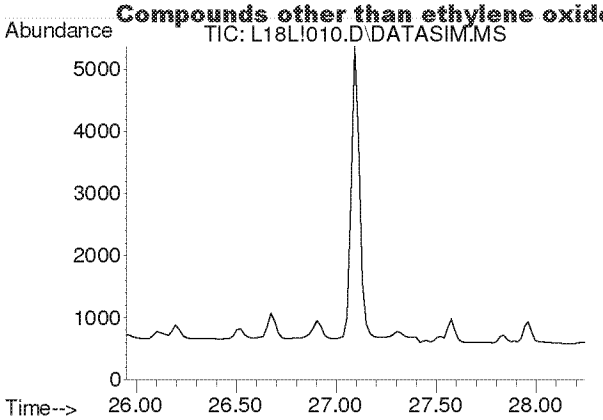
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

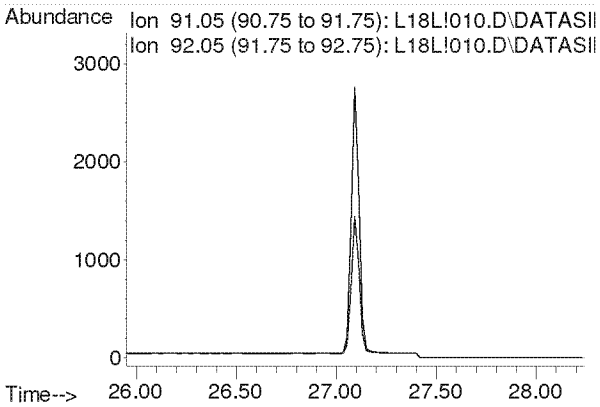


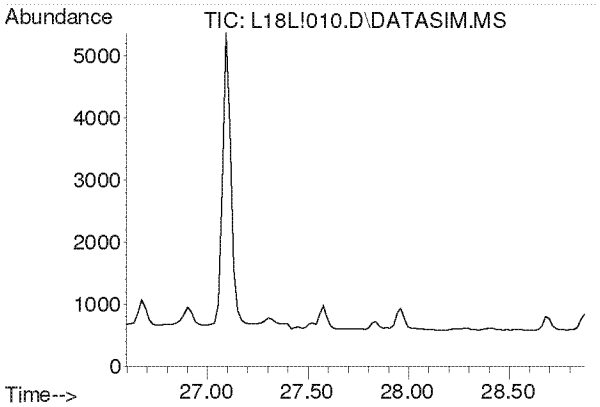
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



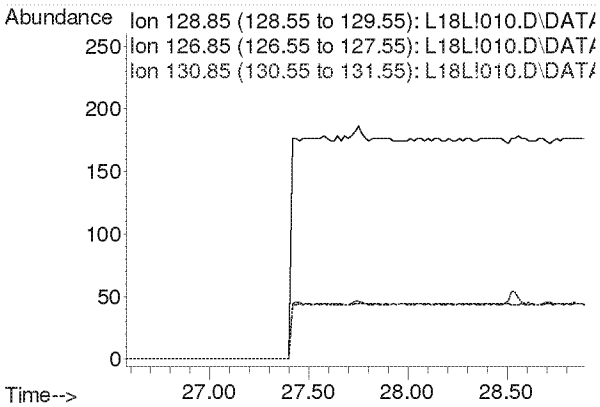


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

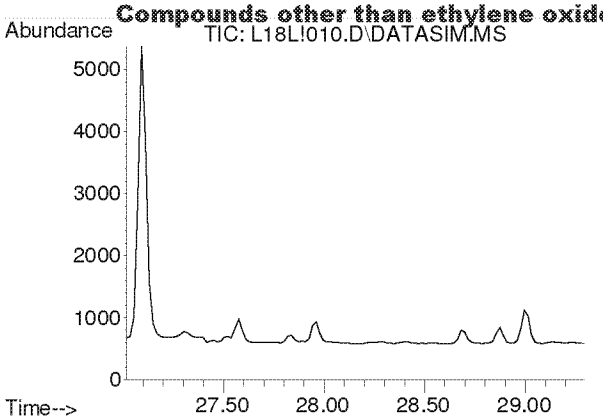
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

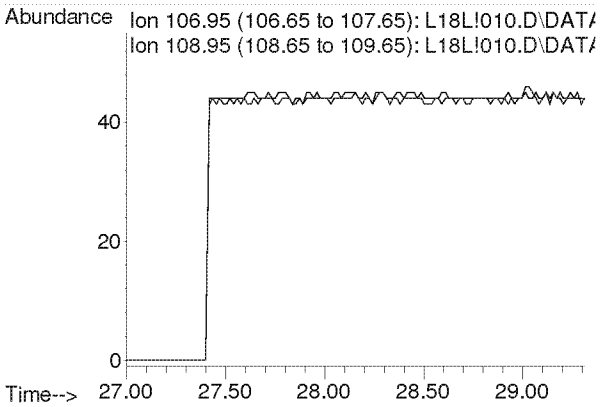


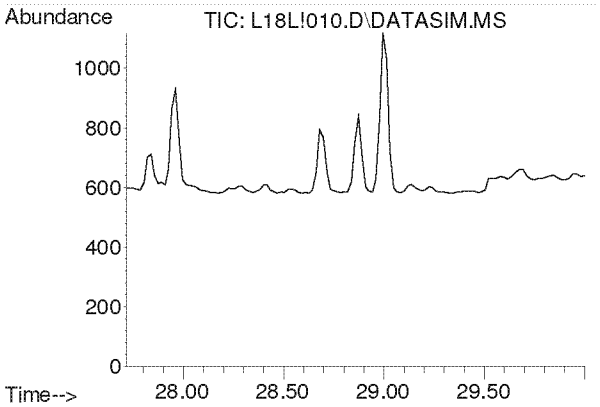
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



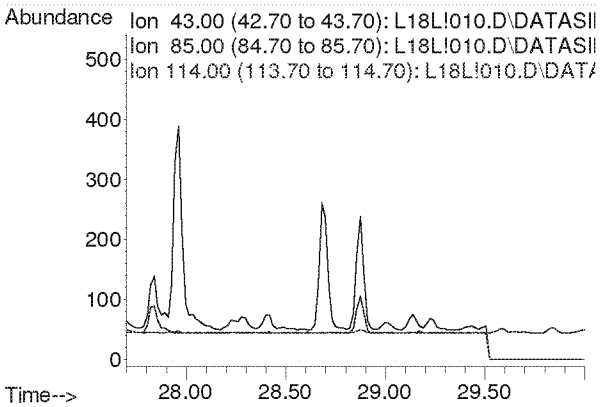


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

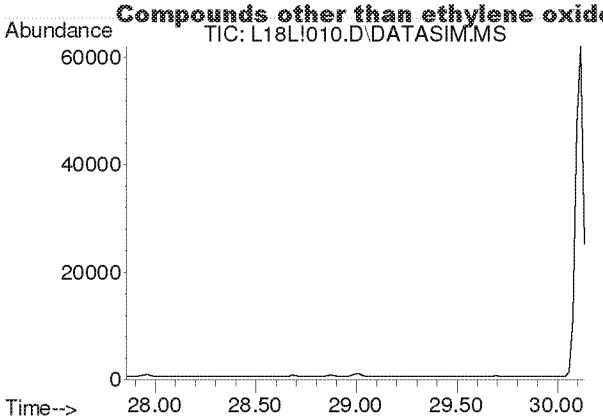
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

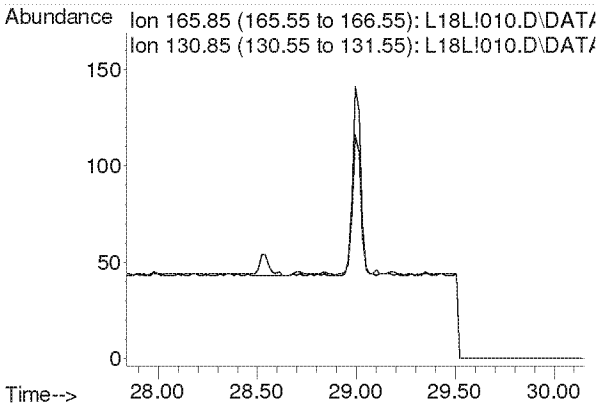


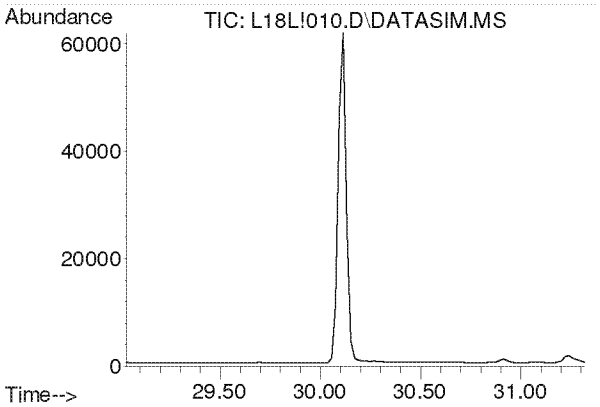
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



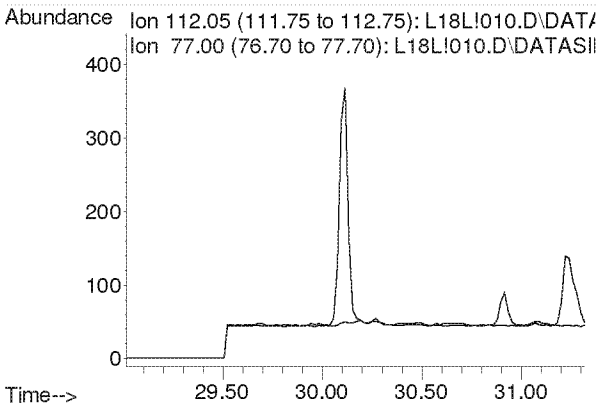


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

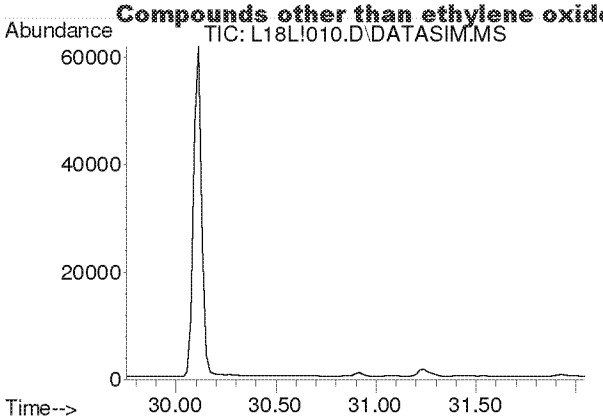
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

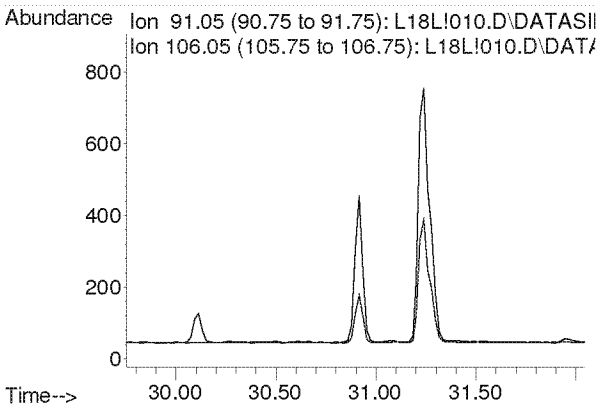


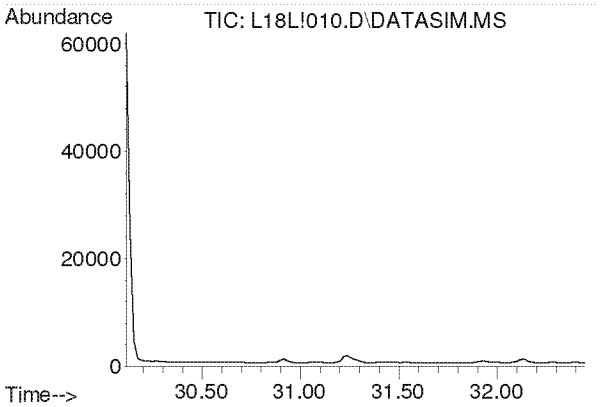
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



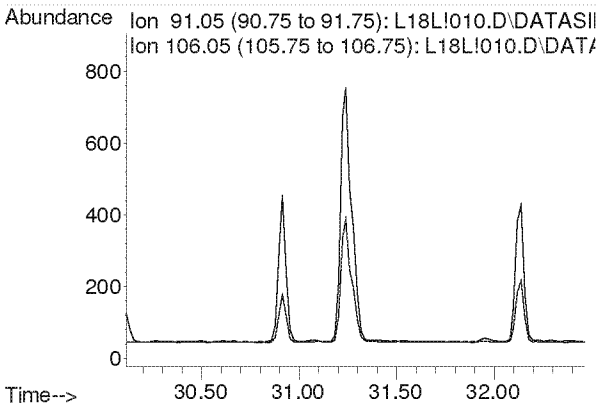


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

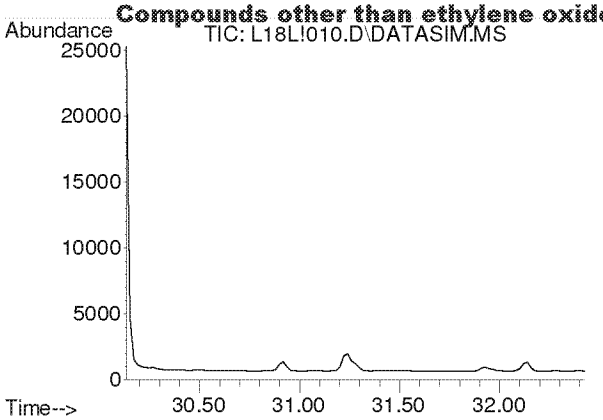
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

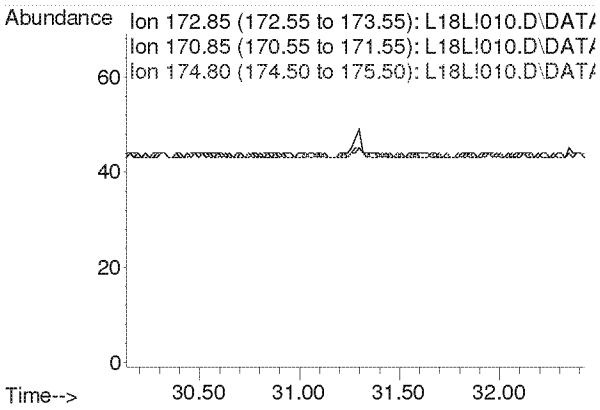


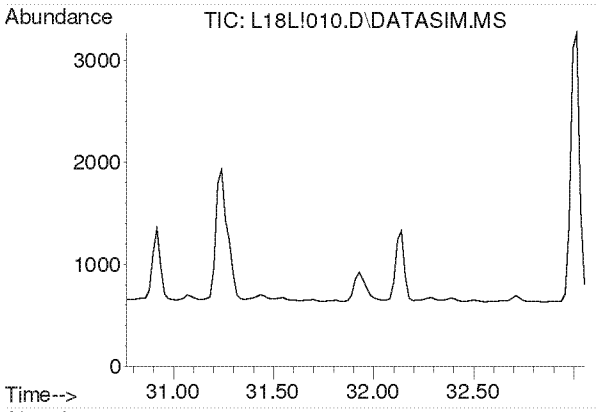
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



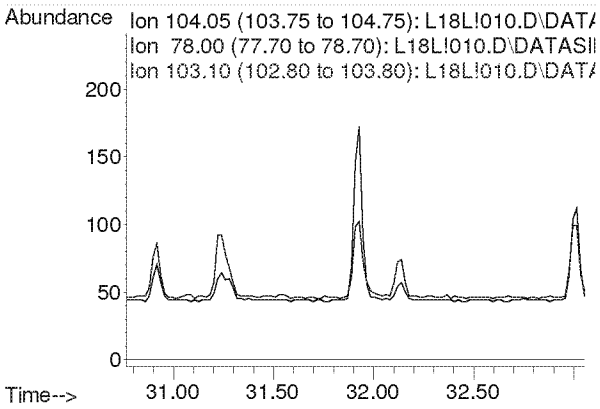


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

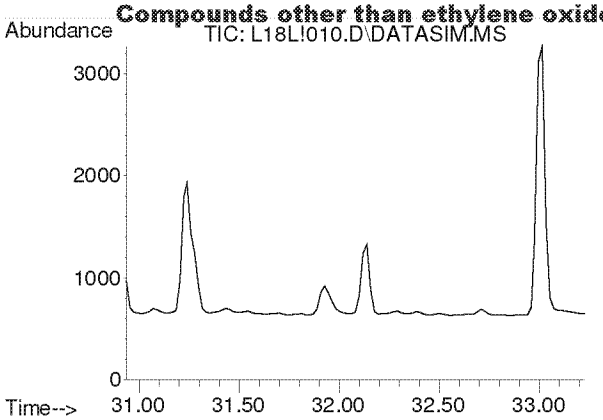
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

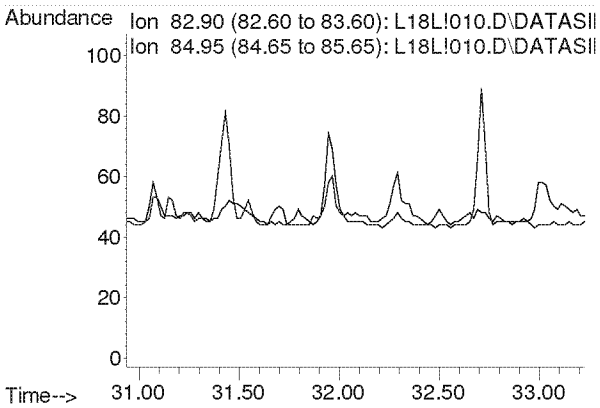


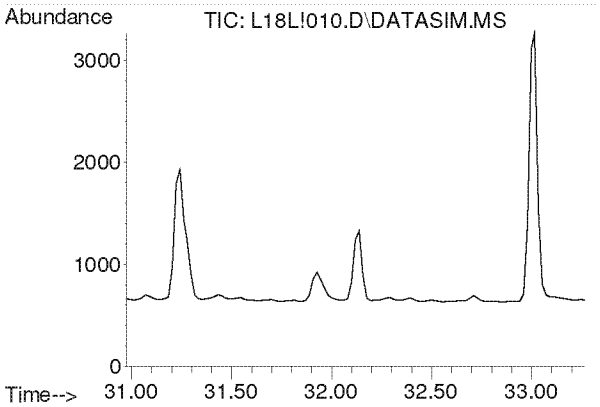
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



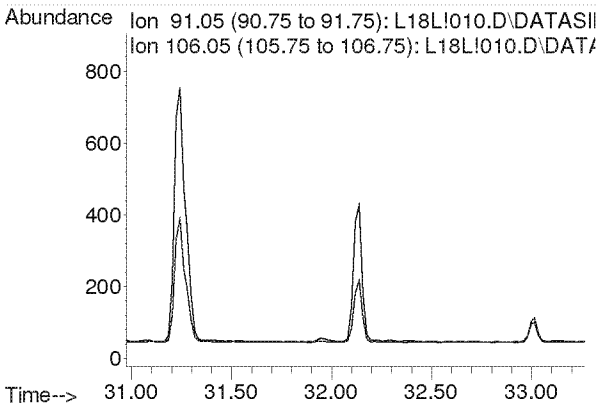


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

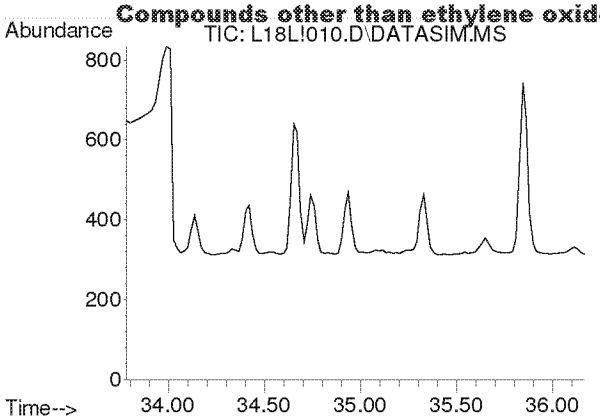
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

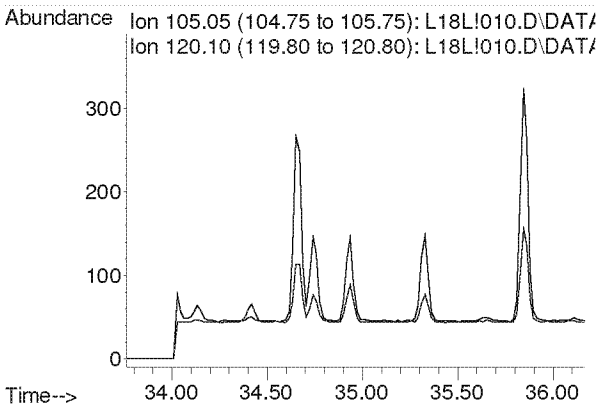


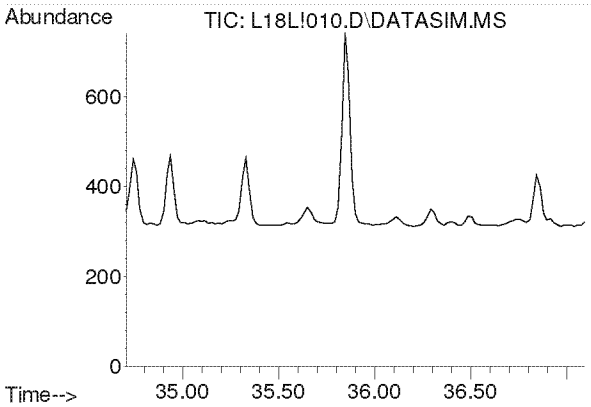
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



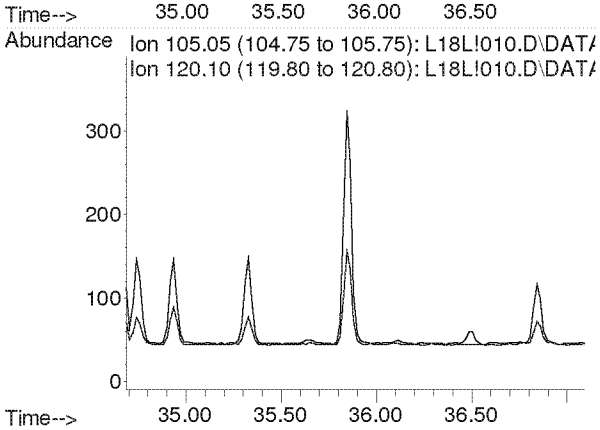


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

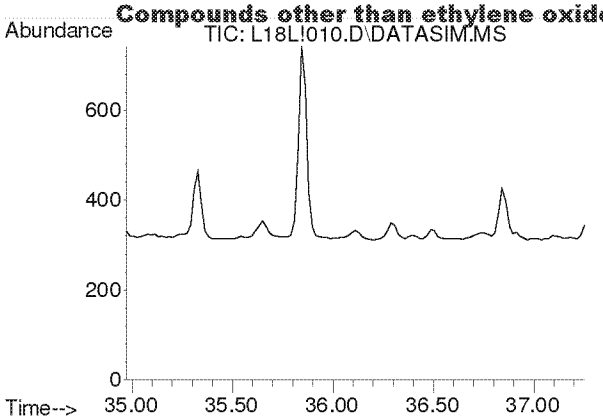
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

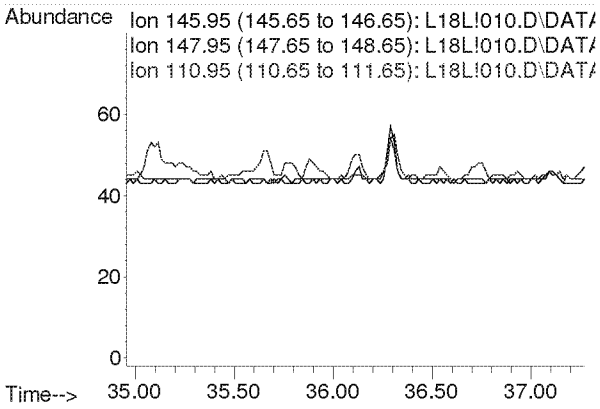


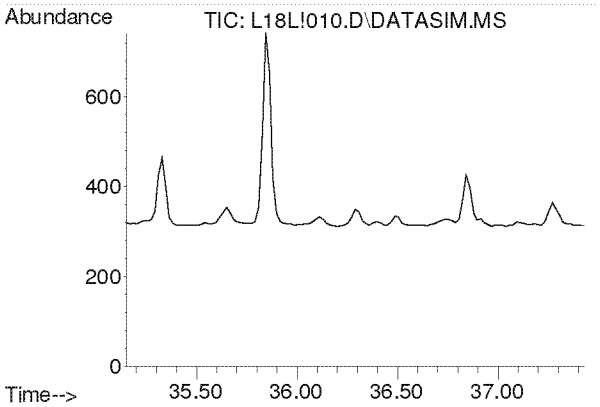
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



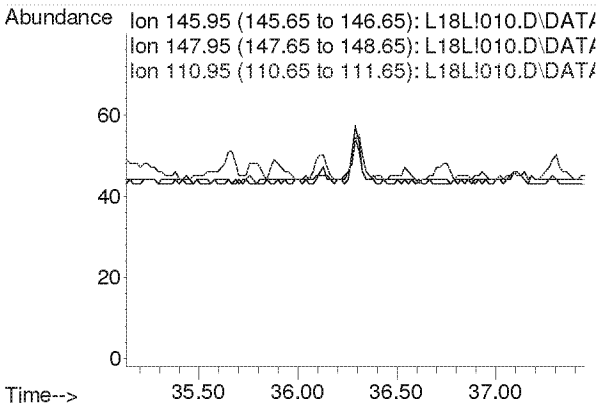


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

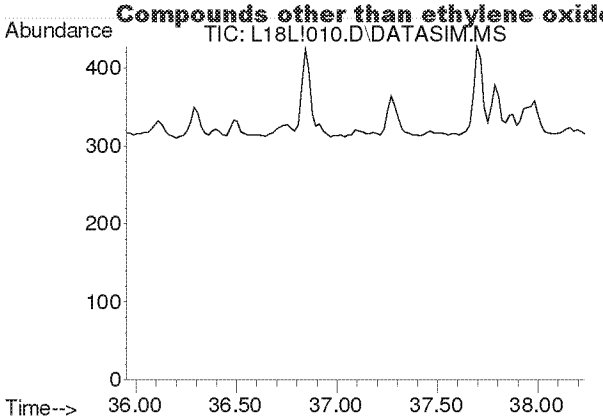
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

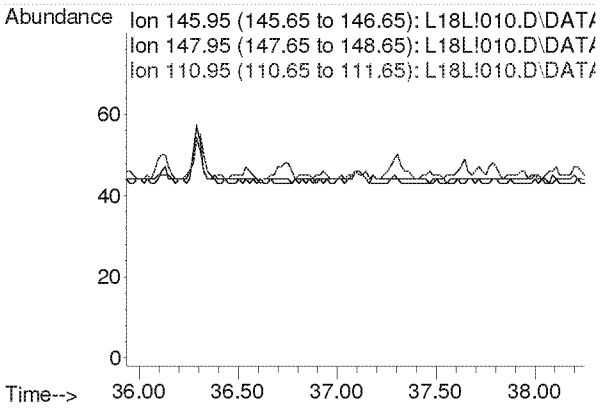


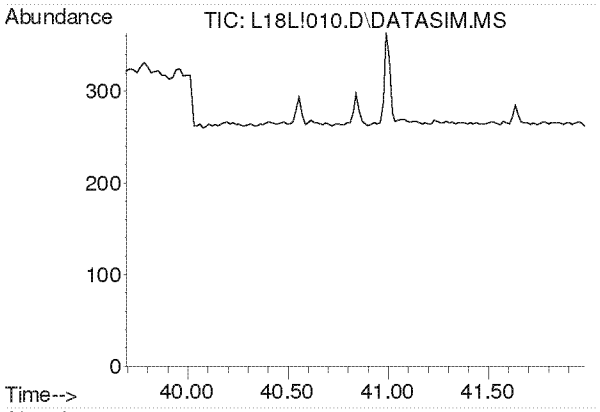
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



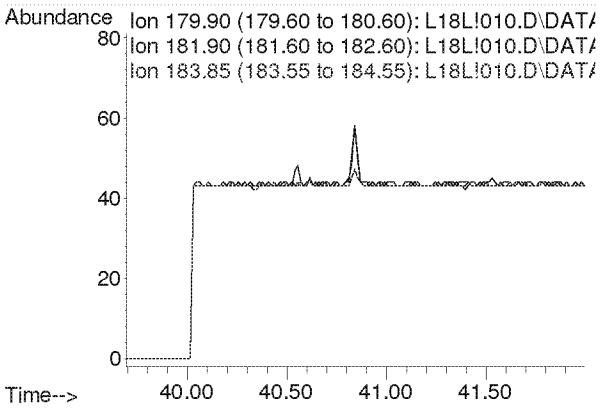


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

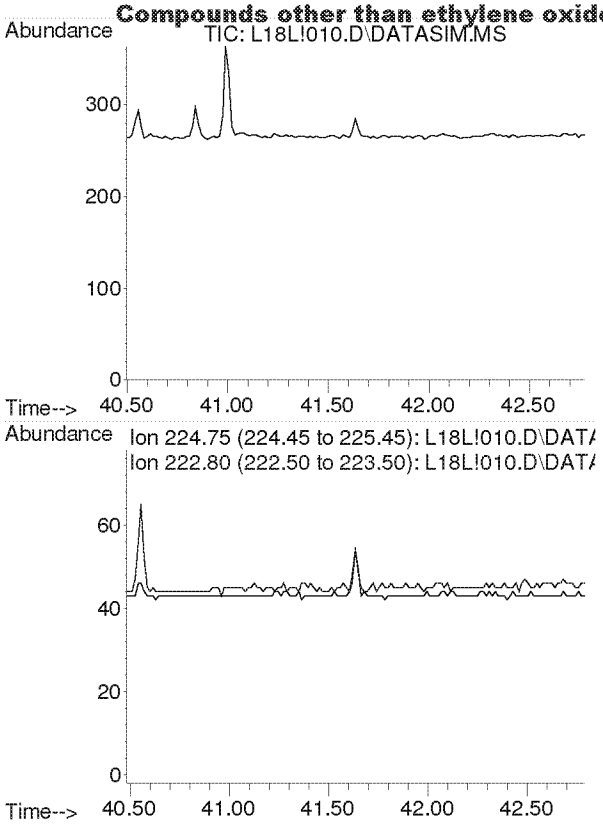
Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!010.D
Acq: 28 Dec 2018 8:36 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 : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!011.D
Acq On : 28 Dec 2018 9:38 pm
Operator : MAH
Sample : 8121821-07
Misc : WATER TOWER 12/14/18
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 03 13:07:42 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) IS-Hexane-d14	19.993	66	57620	4.7700 ppbv	0.00
29) IS-1,4-Difluorobenzene	23.151	114	138883	4.9900 ppbv	0.00
43) IS-Chlorobenzene-d5	30.116	117	108406	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	403m	0.1170 ppbv	
10) Bromomethane	0.000	94	0	N.D. d	
11) Chloroethane	0.000	64	0	N.D.	
12) Acetonitrile	0.000	41	0	N.D. d	
13) Acrolein	0.000	56	0	N.D. d	
14) Trichlorofluoromethane	0.000	101	0	N.D. d	
15) Acrylonitrile	0.000	53	0	N.D. d	
16) 1,1-Dichloroethene	0.000	61	0	N.D.	
17) Methylene Chloride	0.000	49	0	N.D. d	
18) Carbon Disulfide	0.000	76	0	N.D. d	
19) Trichlorotrifluoroethane	0.000	101	0	N.D. d	
20) trans-1,2-Dichloroethy...	0.000	96	0	N.D.	
21) 1,1-Dichloroethane	0.000	63	0	N.D.	
22) Methyl tert-Butyl Ether	0.000	73	0	N.D. d	
23) Chloroprene	0.000	53	0	N.D. d	
24) cis-1,2-Dichloroethylene	0.000	61	0	N.D. d	
25) Bromochloromethane	0.000	128	0	N.D.	
26) Chloroform	0.000	83	0	N.D. d	
27) Ethyl tert-Butyl Ether	0.000	59	0	N.D.	
28) 1,2-Dichloroethane	0.000	62	0	N.D. d	
30) 1,1,1-Trichloroethane	0.000	97	0	N.D. d	
31) Benzene	0.000	78	0	N.D. d	
32) Carbon Tetrachloride	0.000	117	0	N.D. d	
33) tert-Amyl Methyl Ether	0.000	73	0	N.D.	
34) 1,2-Dichloropropane	0.000	63	0	N.D. d	
35) Ethyl Acrylate	0.000	55	0	N.D.	
36) Bromodichloromethane	0.000	83	0	N.D. d	
37) Trichloroethylene	0.000	130	0	N.D. 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. d	
46) 1,2-Dibromoethane	0.000	107	0	N.D.	

ED_002475_00000320-00282

Compounds other than ethylene oxide were not quantitated.

Quantitation Report (QT Reviewed)

Path : Y:\MASS SPEC 1 DATA\L18L!\
File : L18L!011.D
Acq On : 28 Dec 2018 9:38 pm
Operator : MAH
Sample : 8121821-07
Misc 1 : WATER TOWER 12/14/18
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 03 13:07:42 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration

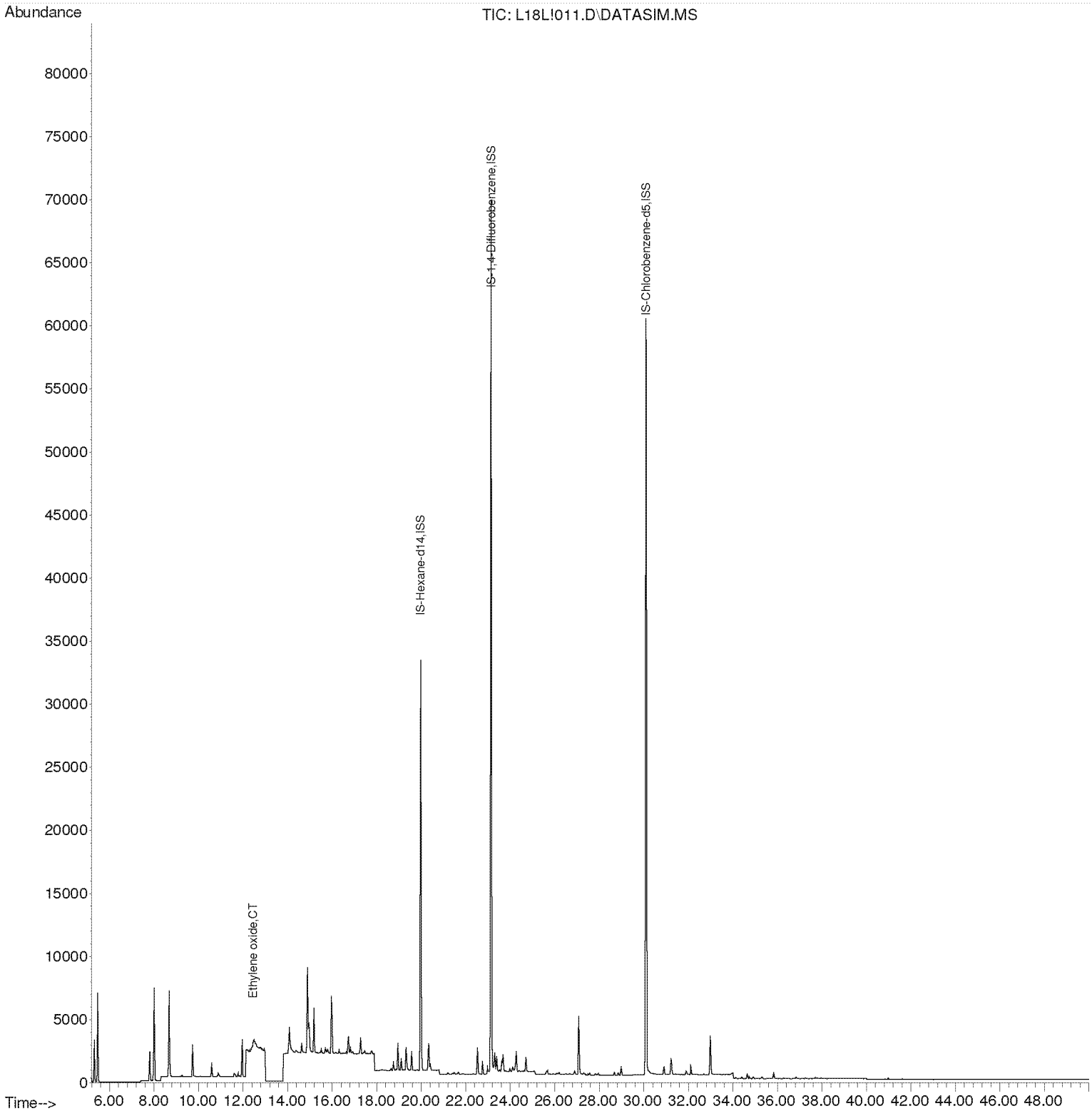
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
47) n-Octane	0.000	43	0	N.D. d	
48) Tetrachloroethylene	0.000	166	0	N.D. d	
49) Chlorobenzene	0.000	112	0	N.D. d	
50) Ethylbenzene	0.000	91	0	N.D. d	
51) m,p-Xylene	0.000	91	0	N.D. d	
52) Bromoform	0.000	173	0	N.D.	
53) Styrene	0.000	104	0	N.D. d	
54) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
55) o-Xylene	0.000	91	0	N.D. d	
56) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
57) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
58) m-Dichlorobenzene	0.000	146	0	N.D.	
59) p-Dichlorobenzene	0.000	146	0	N.D. 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. d	

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

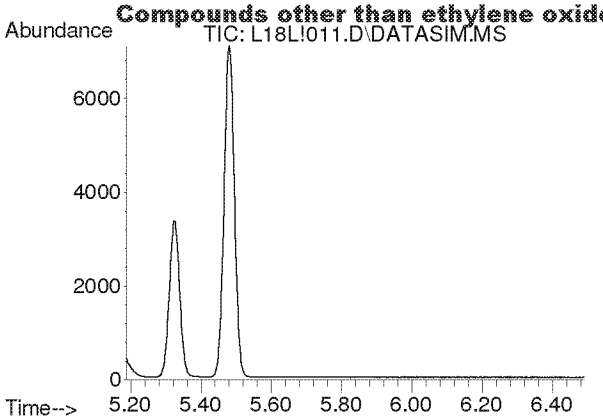
Compounds other than ethylene oxide were not quantitated.

Data Path : Y:\MASS SPEC 1 DATA\L18L!\
Data File : L18L!011.D
Acq On : 28 Dec 2018 9:38 pm
Operator : MAH
Sample : 8121821-07
Misc : WATER TOWER 12/14/18
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 03 13:07:42 2019
Quant Method : C:\msdchem\1\METHODS\8120004.M
Quant Title : TO-15 by Selective Ion Analysis
QLast Update : Thu Dec 20 06:20:47 2018
Response via : Initial Calibration



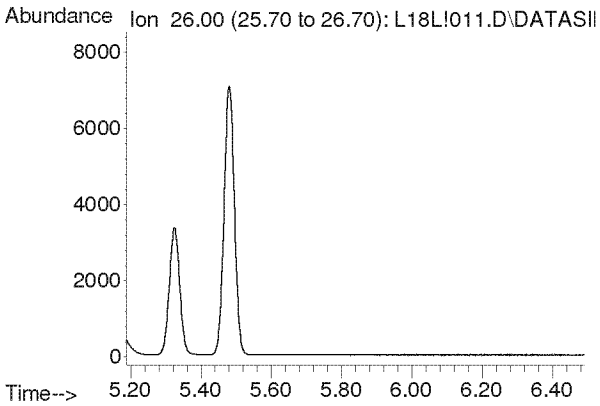
Compounds other than ethylene oxide were not quantitated.

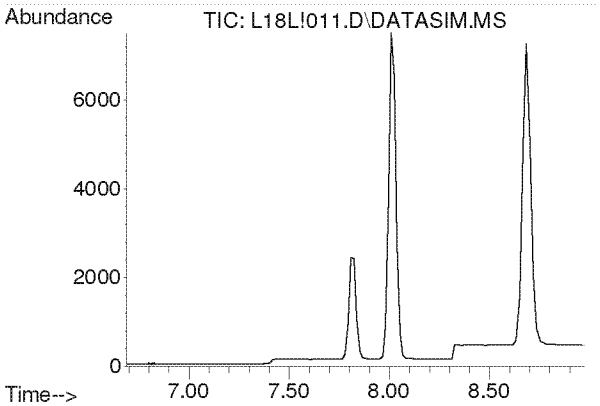


#2
Acetylene
Concen: N.D.
Expected RT: 5.42 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 26



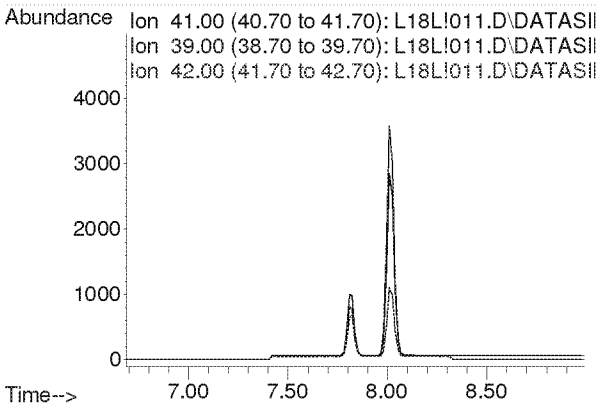


#3
Propylene
Concen: N.D.
Expected RT: 7.84 min

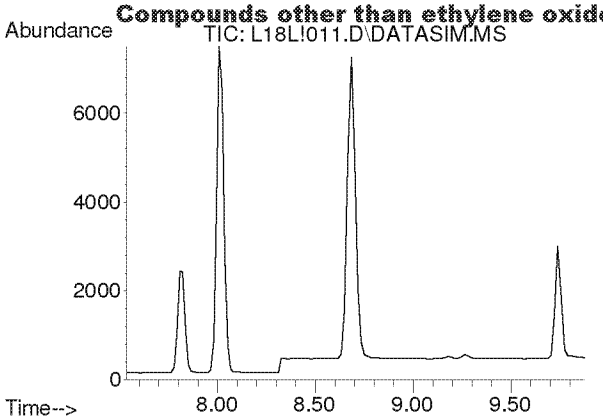
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
39	78.2
42	65.8



Compounds other than ethylene oxide were not quantitated.

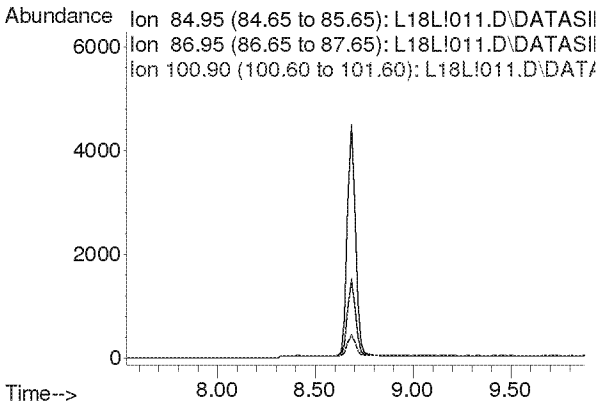


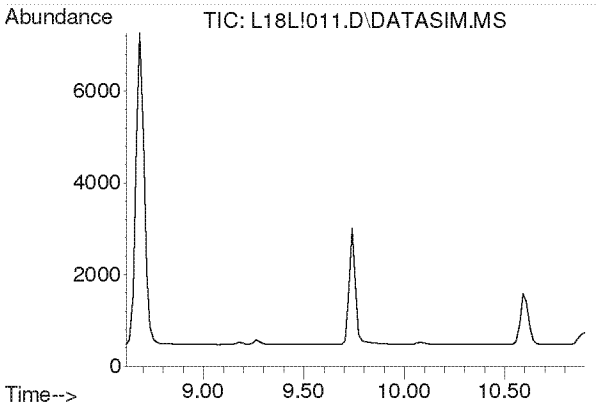
#4
Dichlorodifluoromethane
Concen: N.D.
Expected RT: 8.68 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
87	32.5
101	8.9



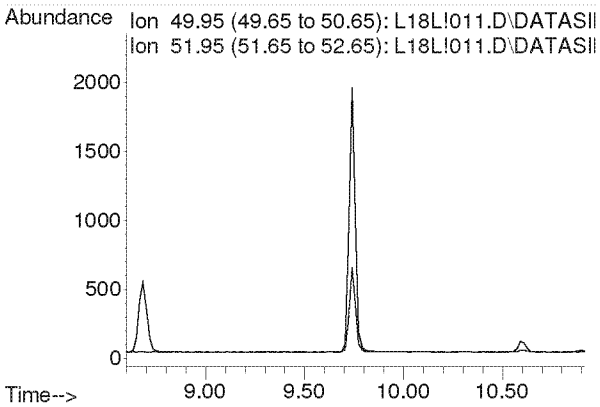


#5
Chloromethane
Concen: N.D.
Expected RT: 9.76 min

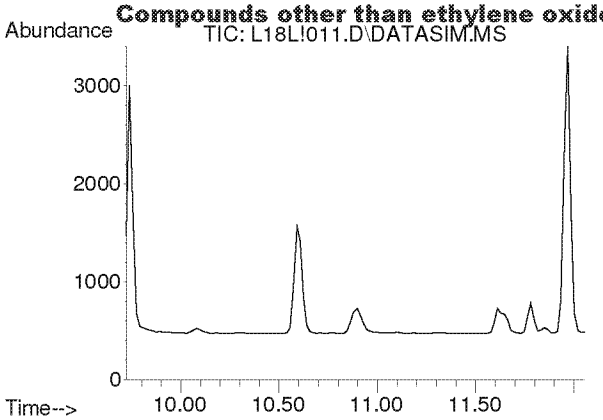
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 50

Sig	Exp Ratio
50	100
52	32.6



Compounds other than ethylene oxide were not quantitated.

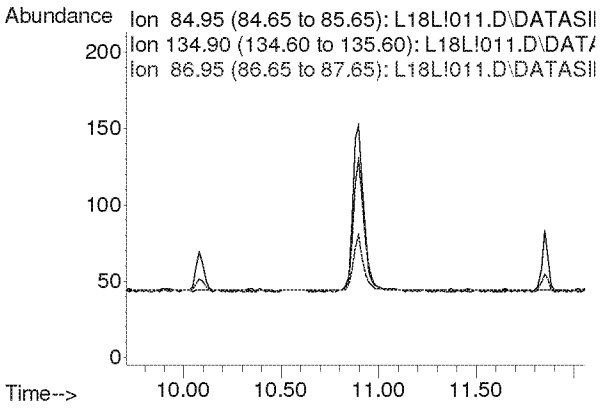


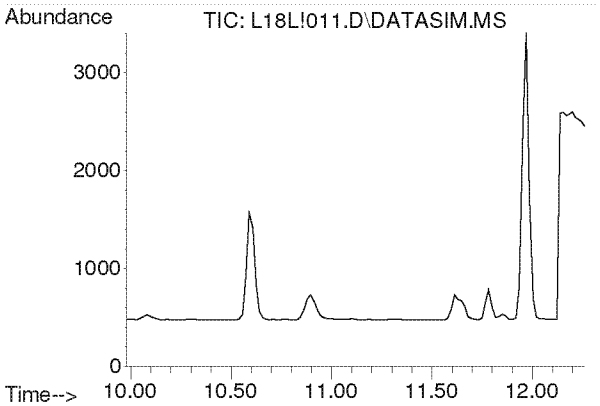
#6
Dichlorotetrafluoroethane
Concen: N.D.
Expected RT: 10.86 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 85

Sig	Exp Ratio
85	100
135	79.1
87	32.1



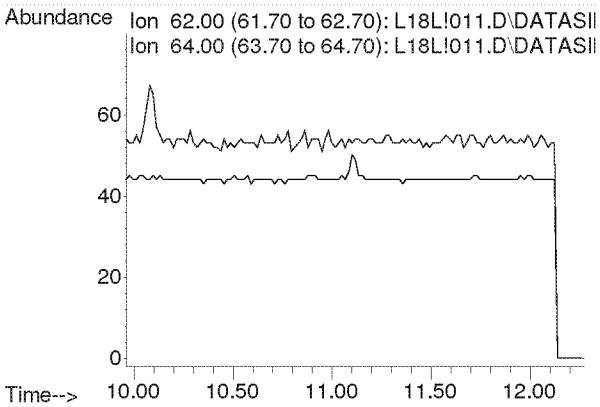


#7
Vinyl Chloride
Concen: N.D.
Expected RT: 11.12 min

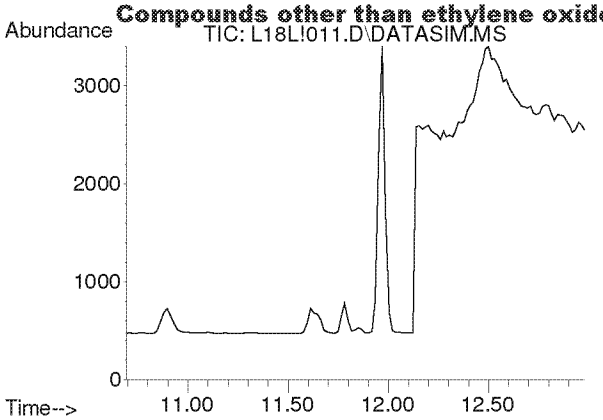
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
64	31.8



Compounds other than ethylene oxide were not quantitated.

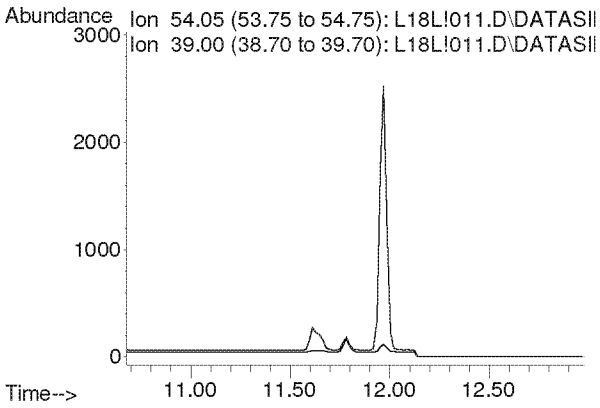


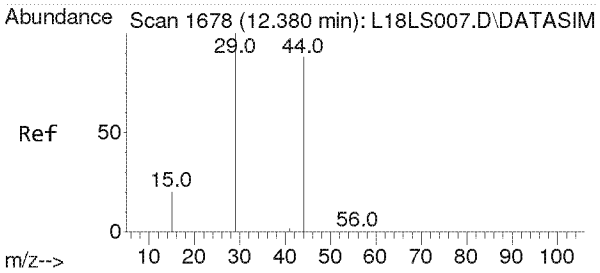
#8
1,3-Butadiene
Concen: N.D.
Expected RT: 11.78 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 54

Sig	Exp Ratio
54	100
39	105.4

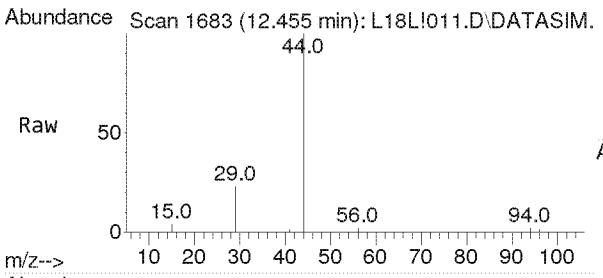


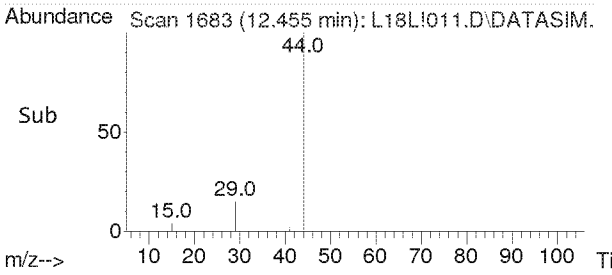


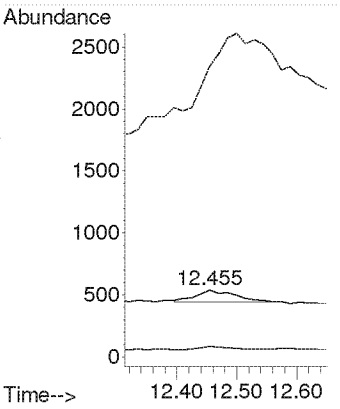
#9
Ethylene oxide
Concen: 0.117 ppbv m
RT: 12.455 min Scan# 1683
Delta R.T. 0.075 min
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 29 Resp: 403

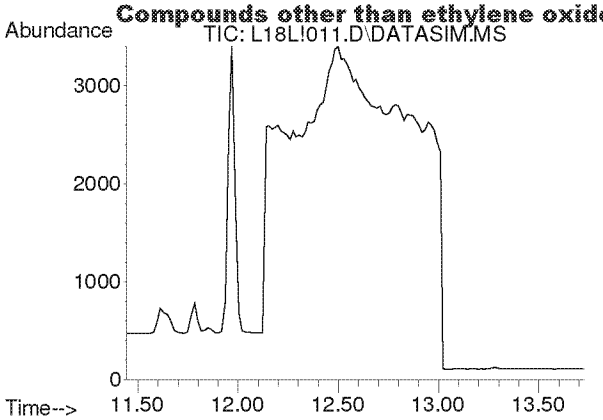
Ion	Ratio	Lower	Upper
29	100		
15	0.0	16.2	24.4#
44	0.0	72.0	108.0#







Compounds other than ethylene oxide were not quantitated.

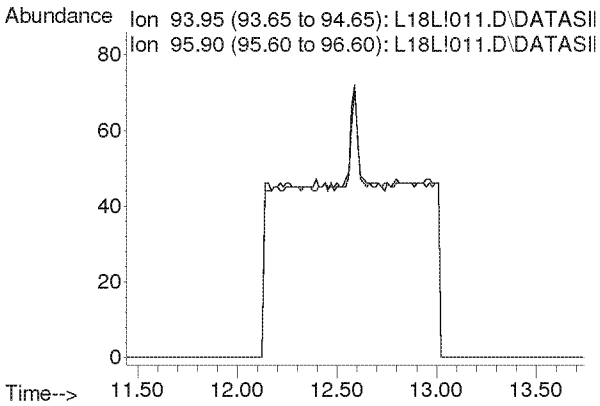


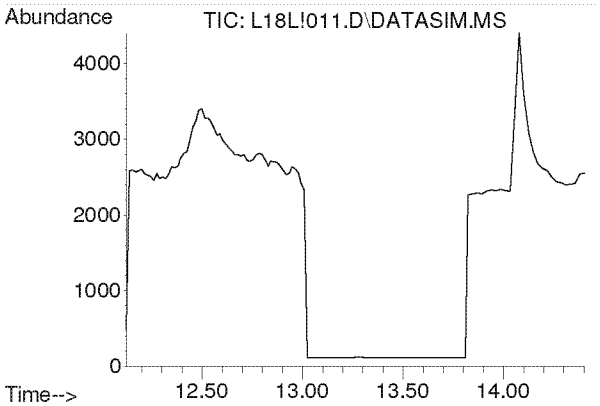
#10
Bromomethane
Concen: N.D.
Expected RT: 12.59 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 94

Sig	Exp Ratio
94	100
96	93.9



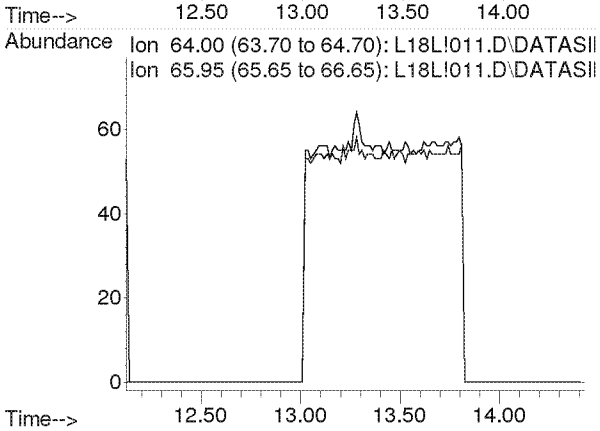


#11
Chloroethane
Concen: N.D.
Expected RT: 13.27 min

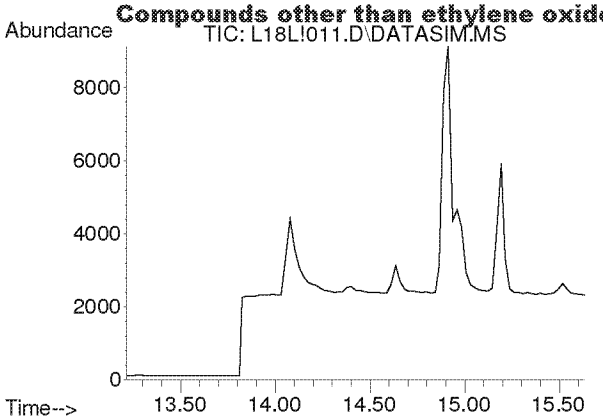
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 64

Sig	Exp Ratio
64	100
66	32.0



Compounds other than ethylene oxide were not quantitated.

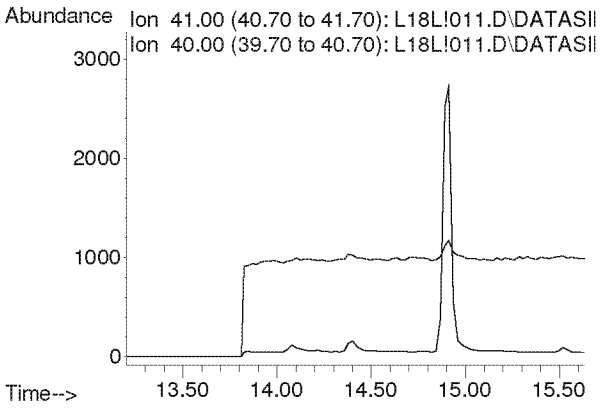


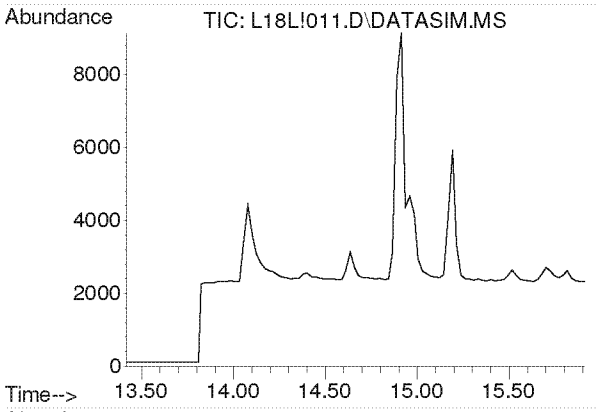
#12
Acetonitrile
Concen: N.D.
Expected RT: 14.33 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
40	50.9



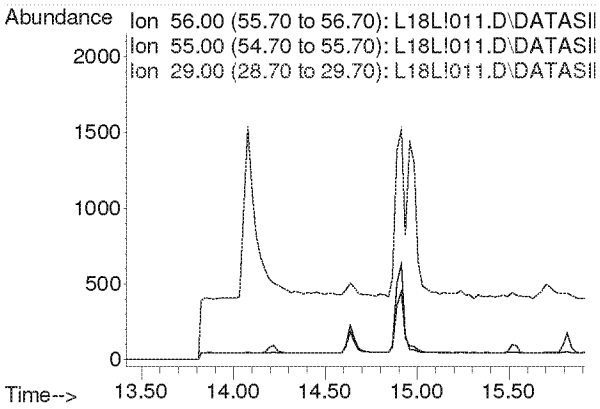


#13
Acrolein
Concen: N.D.
Expected RT: 14.61 min

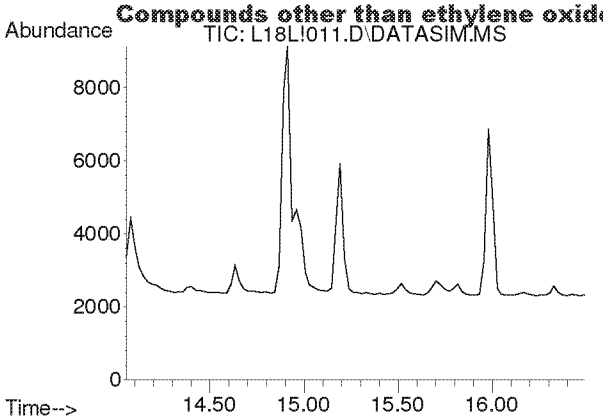
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 56

Sig	Exp Ratio
56	100
55	75.4
29	52.9



Compounds other than ethylene oxide were not quantitated.

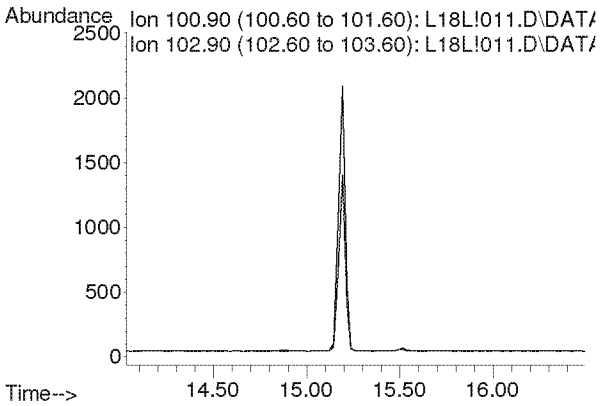


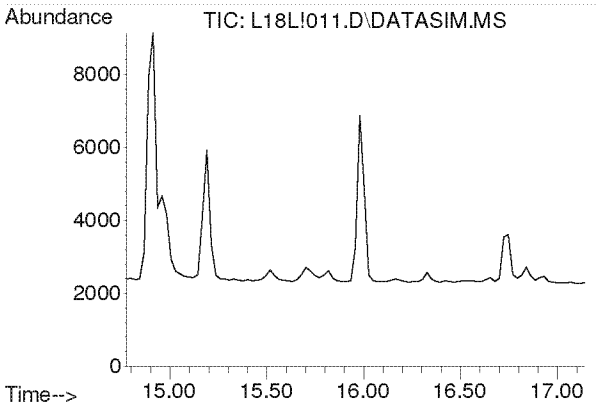
#14
Trichlorofluoromethane
Concen: N.D.
Expected RT: 15.19 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
103	64.6



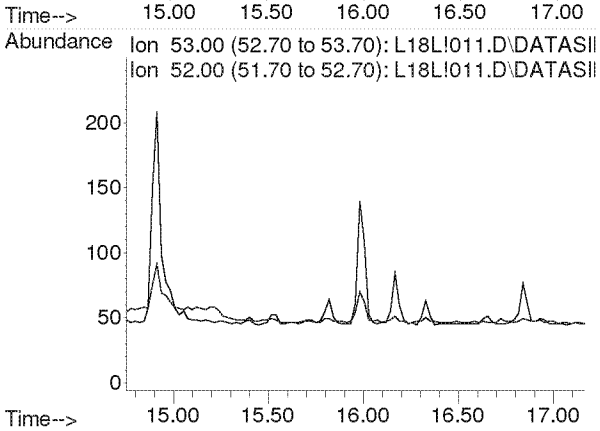


#15
Acrylonitrile
Concen: N.D.
Expected RT: 15.91 min

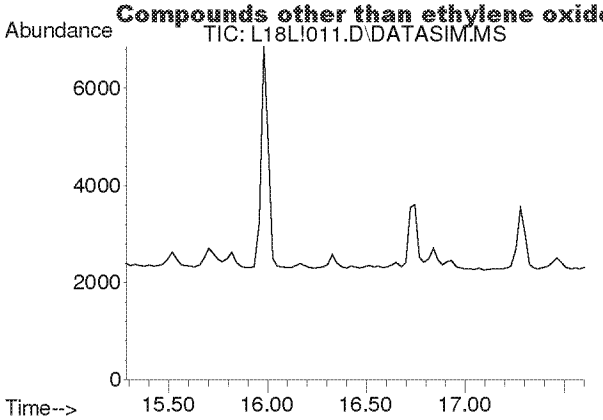
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
52	85.4



Compounds other than ethylene oxide were not quantitated.

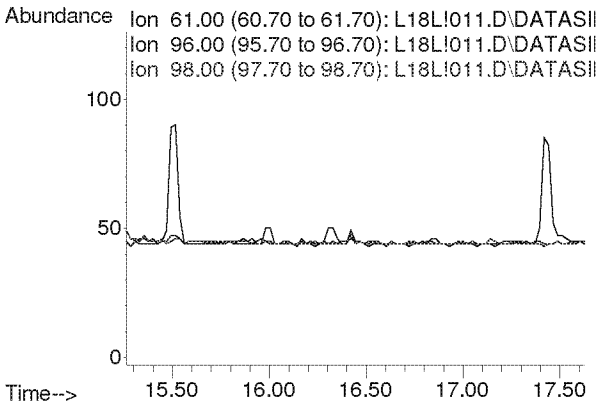


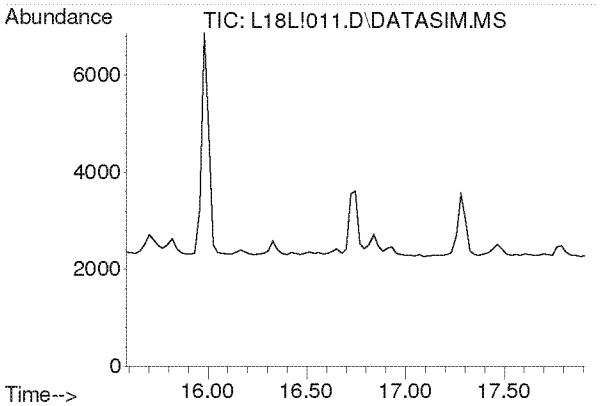
#16
1,1-Dichloroethene
Concen: N.D.
Expected RT: 16.42 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	58.3
98	37.4



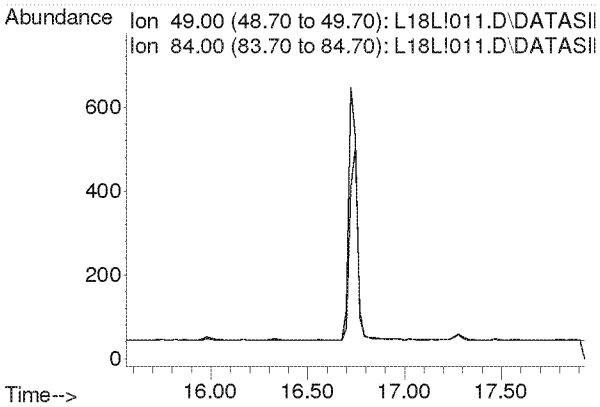


#17
Methylene Chloride
Concen: N.D.
Expected RT: 16.72 min

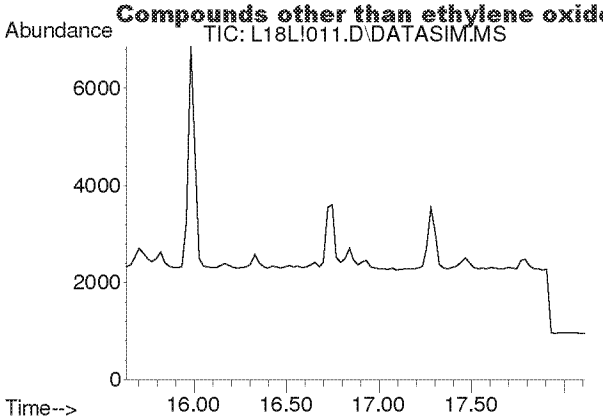
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 49

Sig	Exp Ratio
49	100
84	76.4



Compounds other than ethylene oxide were not quantitated.

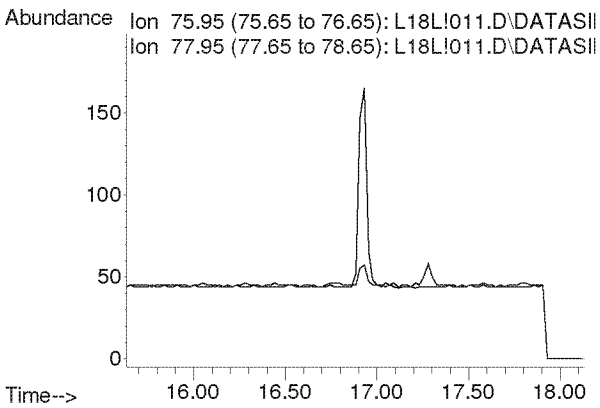


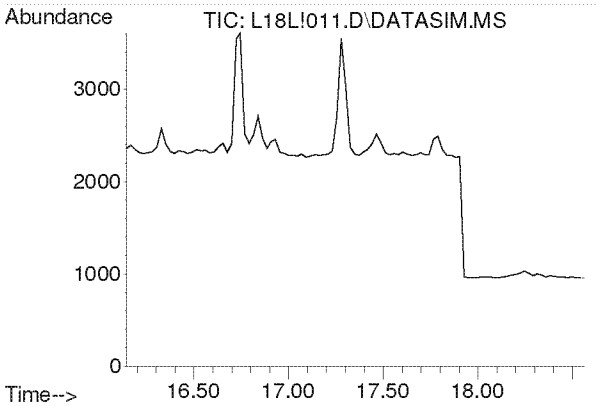
#18
Carbon Disulfide
Concen: N.D.
Expected RT: 16.93 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 76

Sig	Exp Ratio
76	100
78	9.1



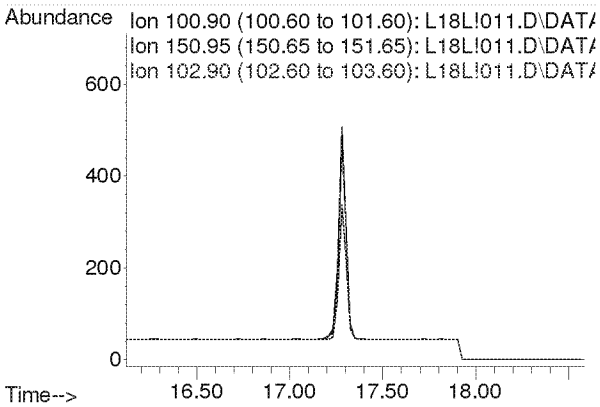


#19
Trichlorotrifluoroethane
Concen: N.D.
Expected RT: 17.28 min

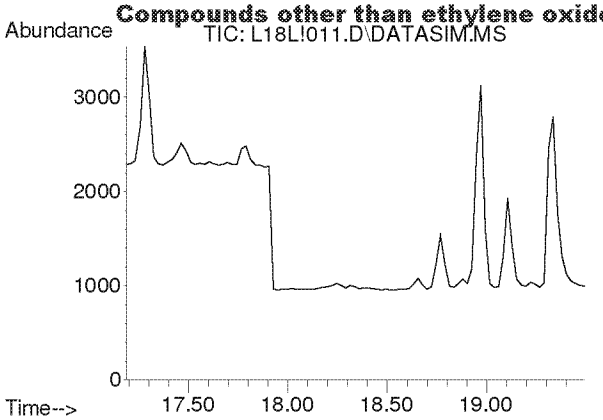
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 101

Sig	Exp Ratio
101	100
151	95.3
103	64.1



Compounds other than ethylene oxide were not quantitated.

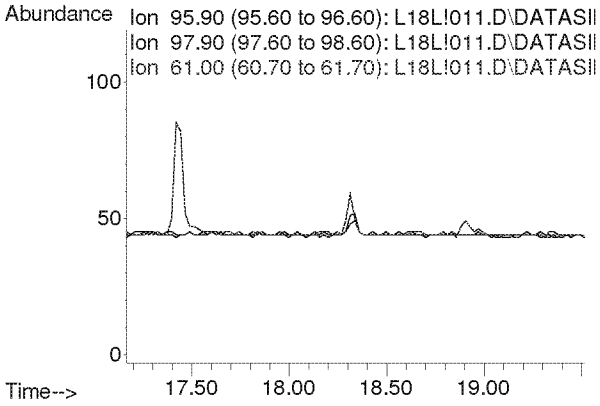


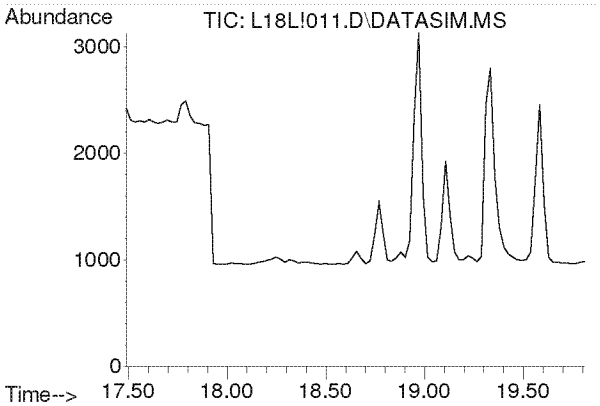
#20
trans-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 18.31 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 96

Sig	Exp Ratio
96	100
98	63.7
61	159.2



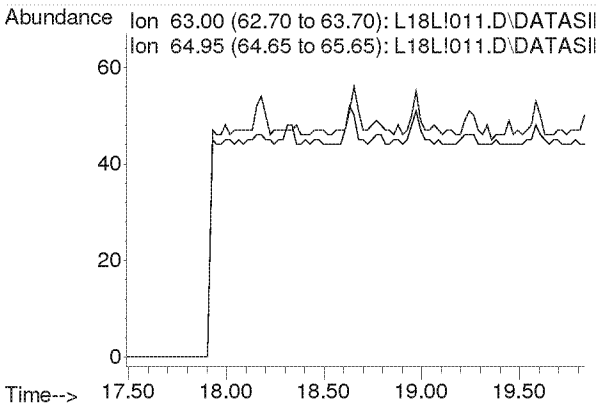


#21
1,1-Dichloroethane
Concen: N.D.
Expected RT: 18.63 min

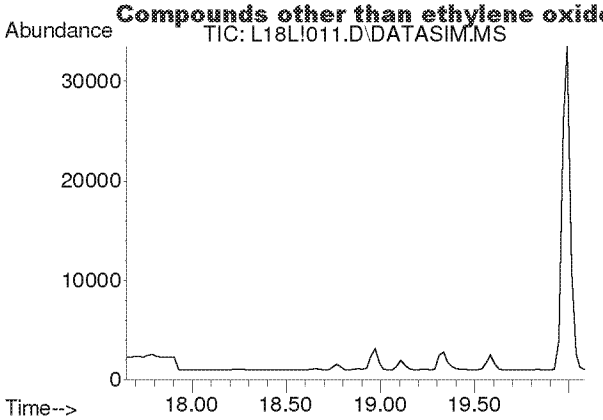
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
65	31.7



Compounds other than ethylene oxide were not quantitated.

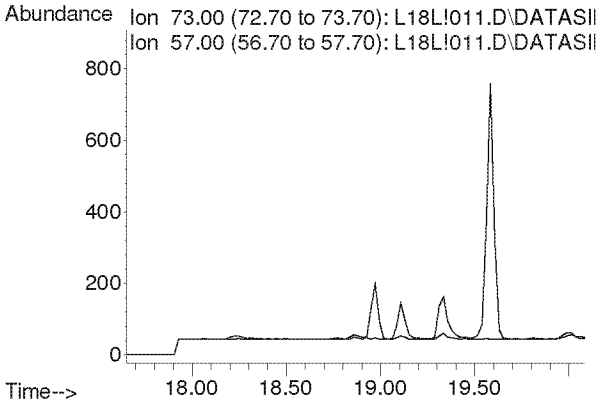


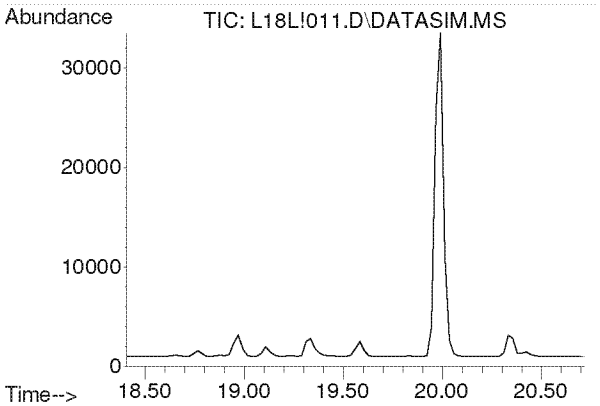
#22
Methyl tert-Butyl Ether
Concen: N.D.
Expected RT: 18.79 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
57	23.4



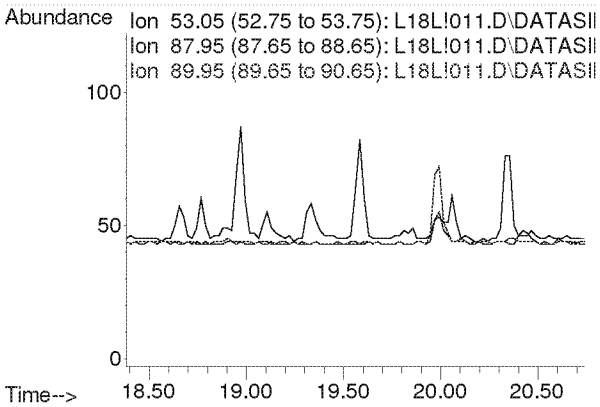


#23
Chloroprene
Concen: N.D.
Expected RT: 19.54 min

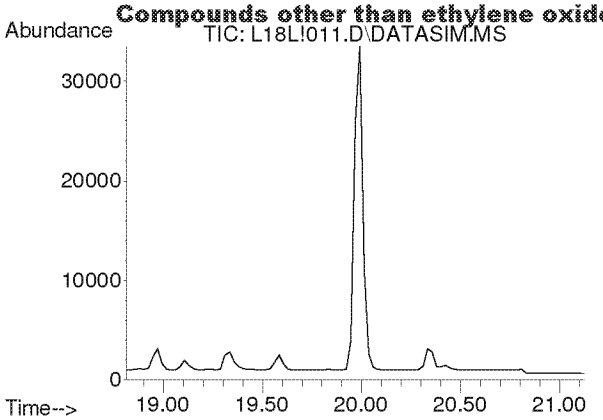
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 53

Sig	Exp Ratio
53	100
88	51.8
90	16.8



Compounds other than ethylene oxide were not quantitated.

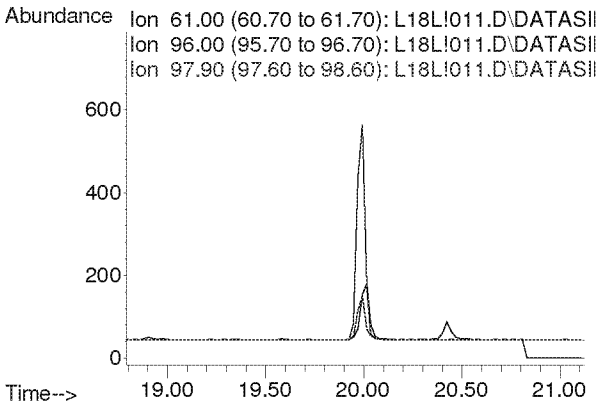


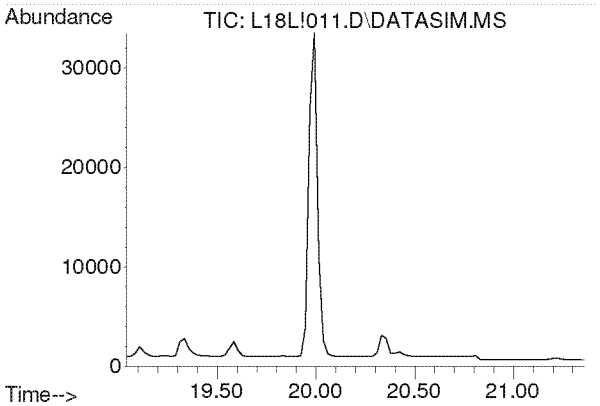
#24
cis-1,2-Dichloroethylene
Concen: N.D.
Expected RT: 19.95 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 61

Sig	Exp Ratio
61	100
96	73.7
98	45.2



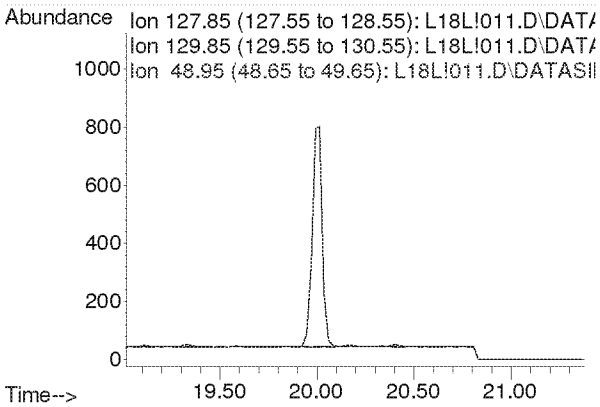


#25
Bromochloromethane
Concen: N.D.
Expected RT: 20.17 min

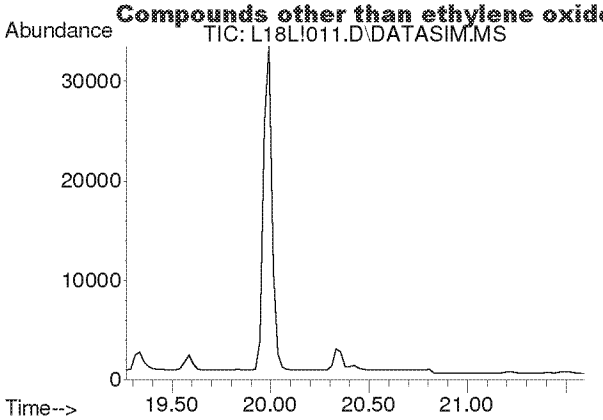
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 128

Sig	Exp Ratio
128	100
130	129.1
49	171.2



Compounds other than ethylene oxide were not quantitated.

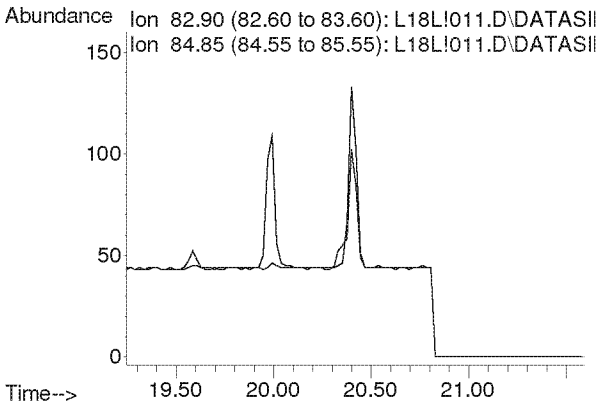


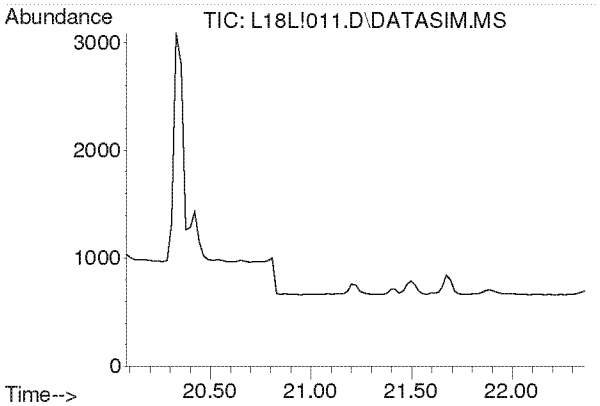
#26
Chloroform
Concen: N.D.
Expected RT: 20.40 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.4



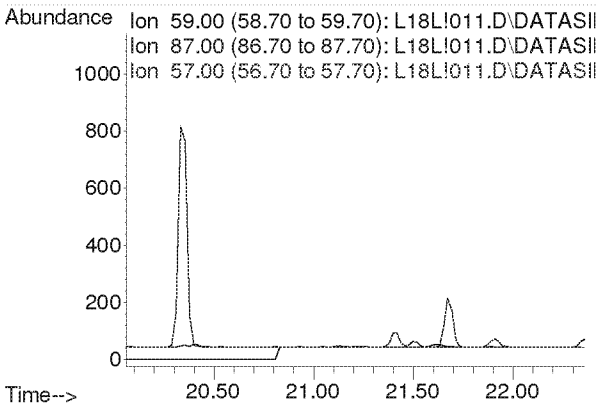


#27
Ethyl tert-Butyl Ether
Concen: N.D.
Expected RT: 21.16 min

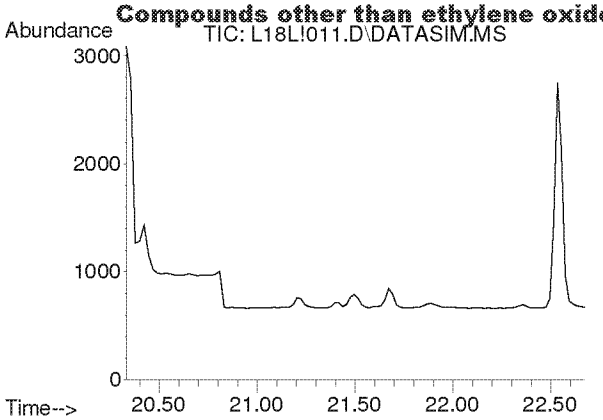
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 59

Sig	Exp Ratio
59	100
87	37.5
57	33.8



Compounds other than ethylene oxide were not quantitated.

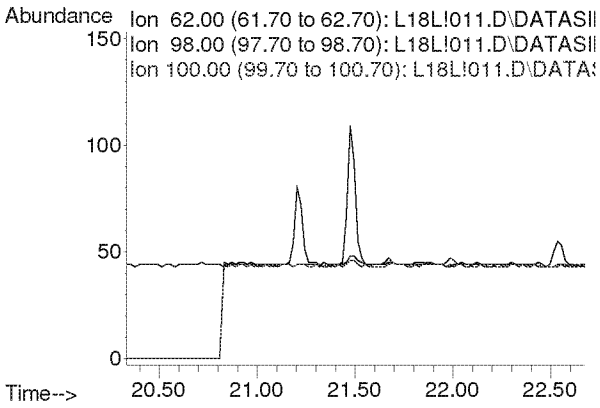


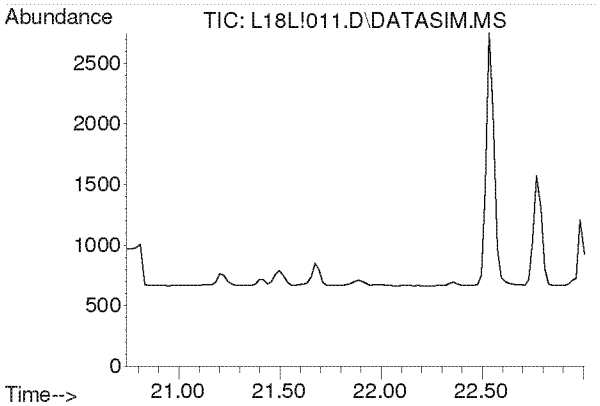
#28
1,2-Dichloroethane
Concen: N.D.
Expected RT: 21.48 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 62

Sig	Exp Ratio
62	100
98	6.4
100	4.0



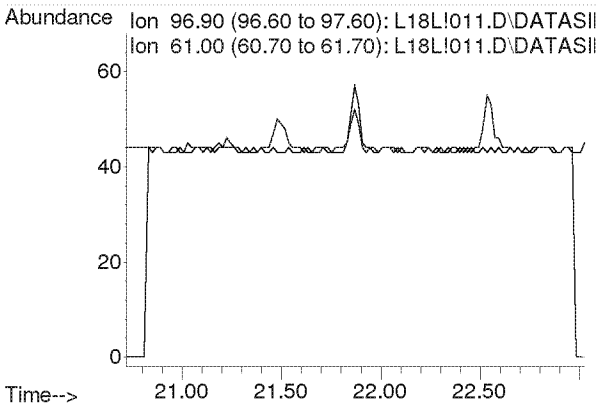


#30
1,1,1-Trichloroethane
Concen: N.D.
Expected RT: 21.87 min

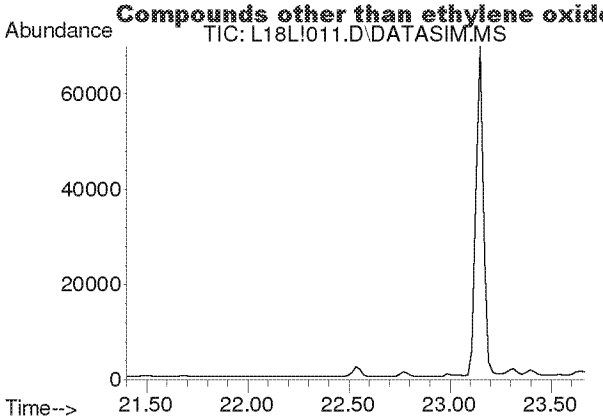
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
61	60.5



Compounds other than ethylene oxide were not quantitated.

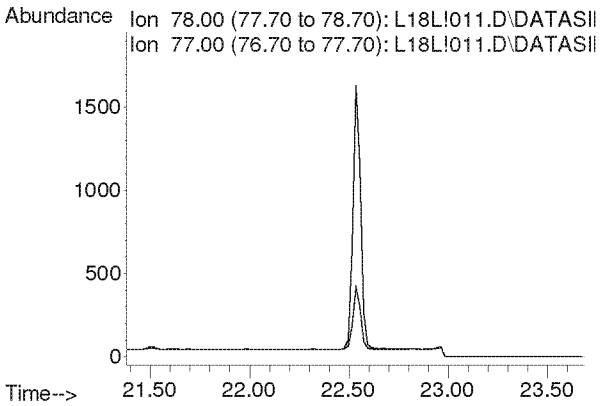


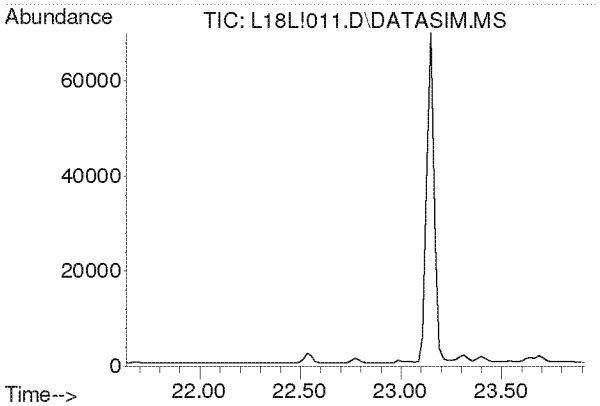
#31
Benzene
Concen: N.D.
Expected RT: 22.54 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 78

Sig	Exp Ratio
78	100
77	22.7



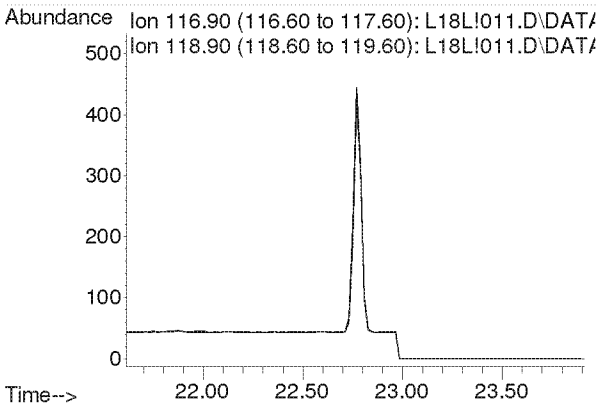


#32
Carbon Tetrachloride
Concen: N.D.
Expected RT: 22.77 min

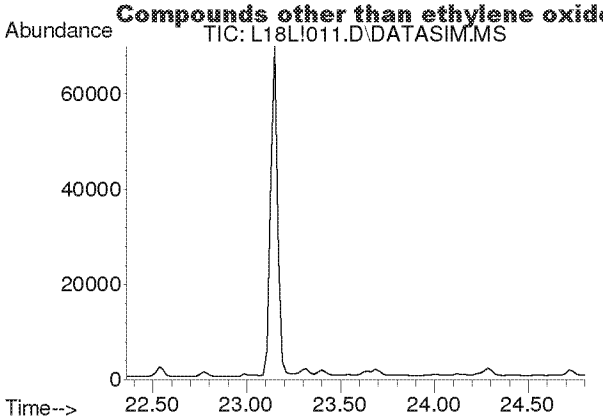
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 117

Sig	Exp Ratio
117	100
119	96.5



Compounds other than ethylene oxide were not quantitated.

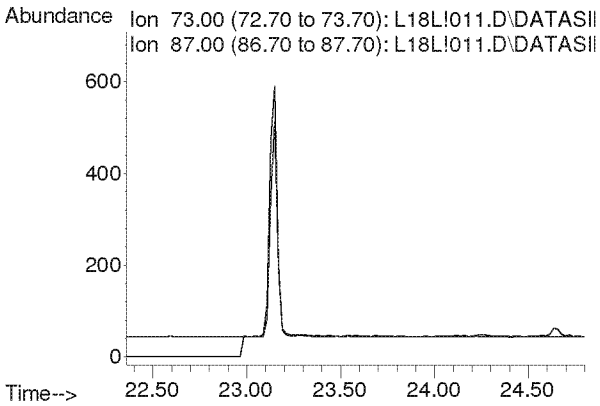


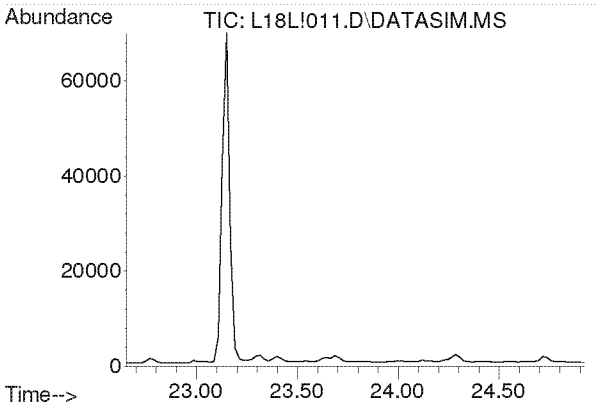
#33
tert-Amyl Methyl Ether
Concen: N.D.
Expected RT: 23.50 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 73

Sig	Exp Ratio
73	100
87	24.9



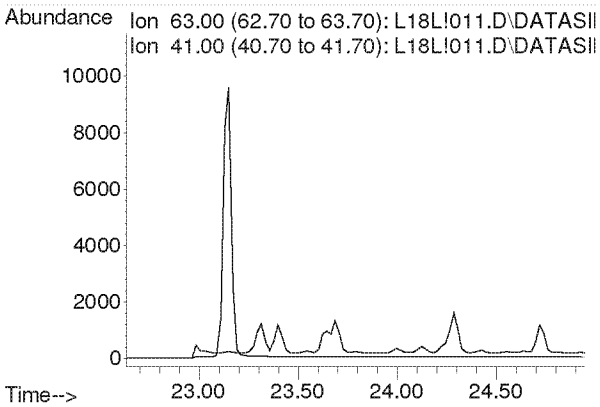


#34
1,2-Dichloropropane
Concen: N.D.
Expected RT: 23.79 min

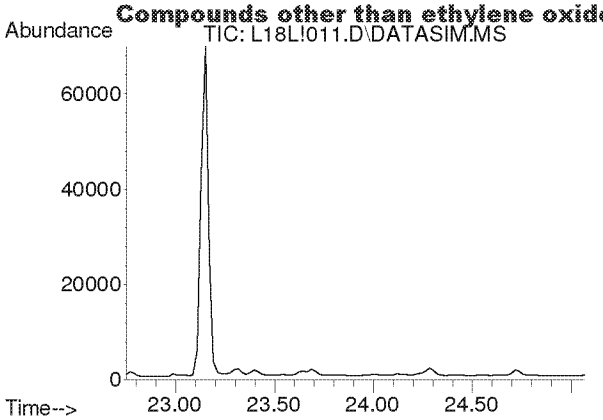
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 63

Sig	Exp Ratio
63	100
41	212.8



Compounds other than ethylene oxide were not quantitated.

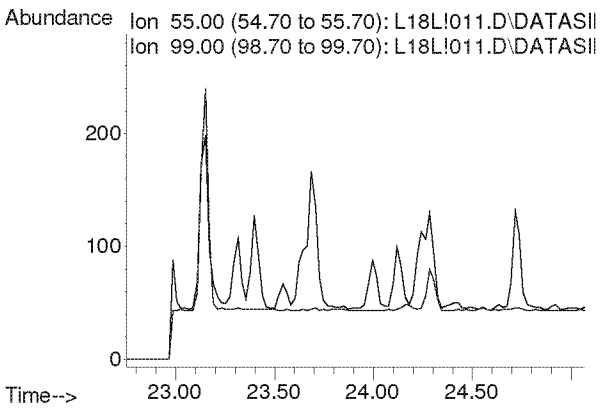


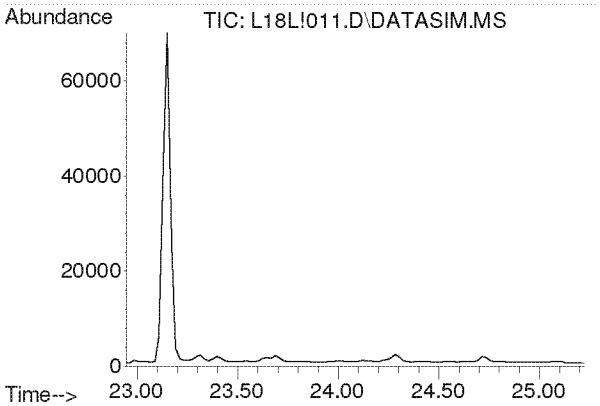
#35
Ethyl Acrylate
Concen: N.D.
Expected RT: 23.87 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 55

Sig	Exp Ratio
55	100
99	6.1



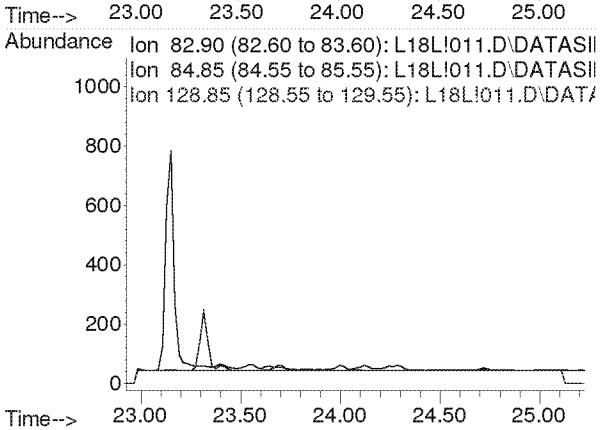


#36
Bromodichloromethane
Concen: N.D.
Expected RT: 24.08 min

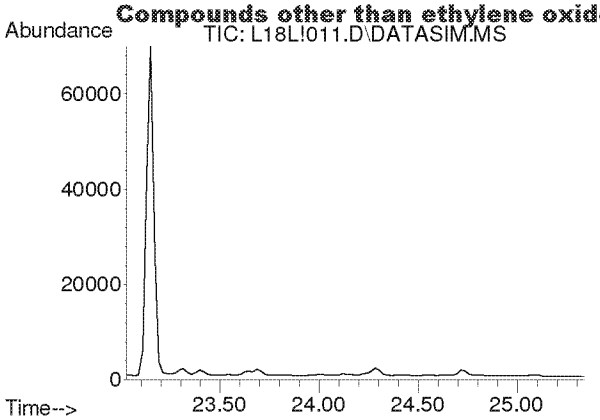
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	64.0
129	12.4



Compounds other than ethylene oxide were not quantitated.

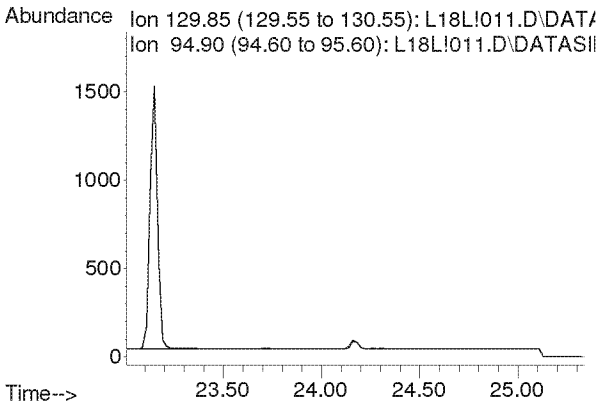


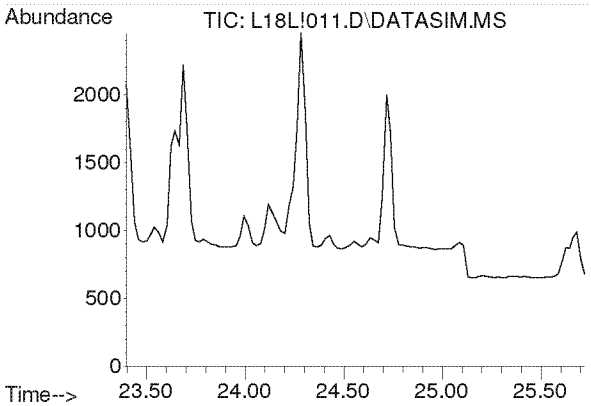
#37
Trichloroethylene
Concen: N.D.
Expected RT: 24.16 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 130

Sig	Exp Ratio
130	100
95	110.3



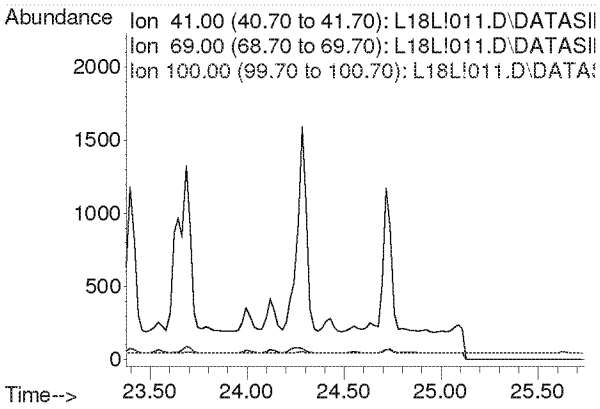


#38
Methyl Methacrylate
Concen: N.D.
Expected RT: 24.53 min

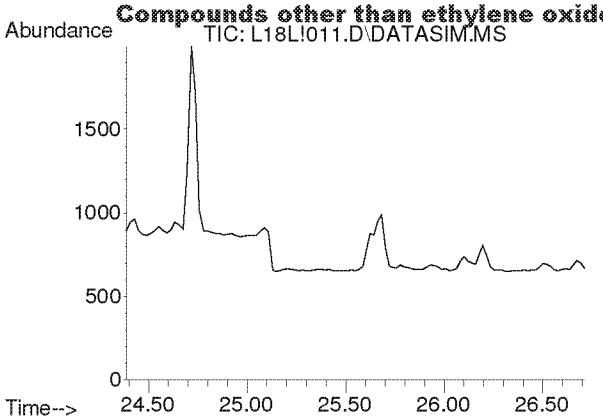
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 41

Sig	Exp Ratio
41	100
69	19.9
100	5.2



Compounds other than ethylene oxide were not quantitated.

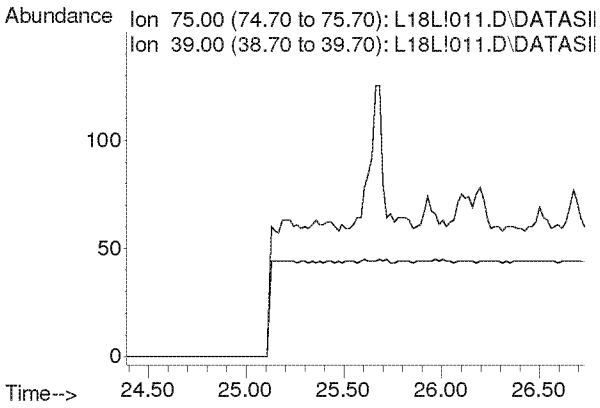


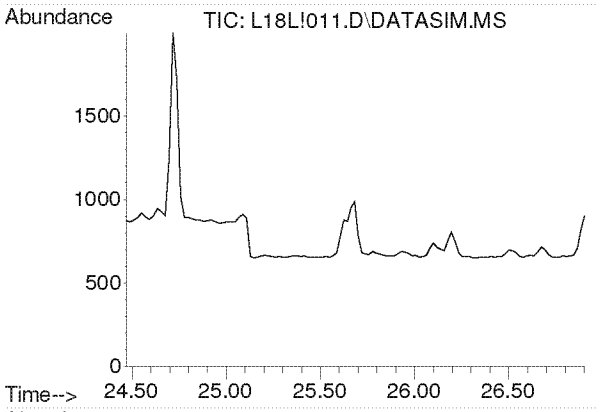
#39
cis-1,3-Dichloropropene
Concen: N.D.
Expected RT: 25.53 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	54.4



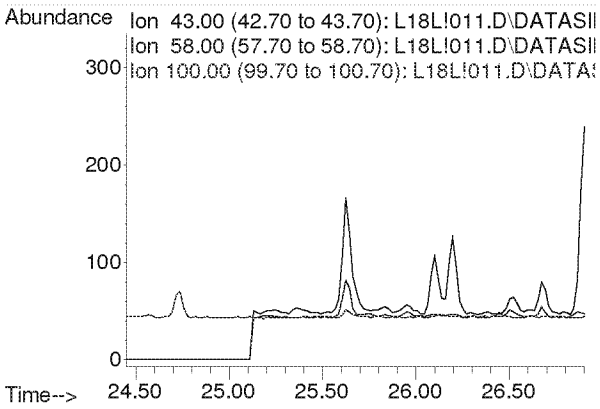


#40
Methyl Isobutyl Ketone
Concen: N.D.
Expected RT: 25.61 min

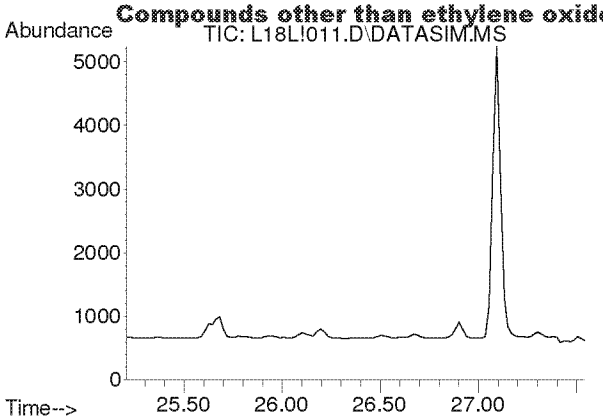
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
58	34.2
100	7.9



Compounds other than ethylene oxide were not quantitated.

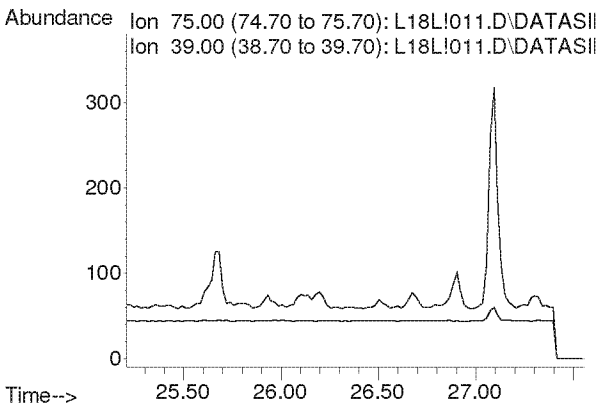


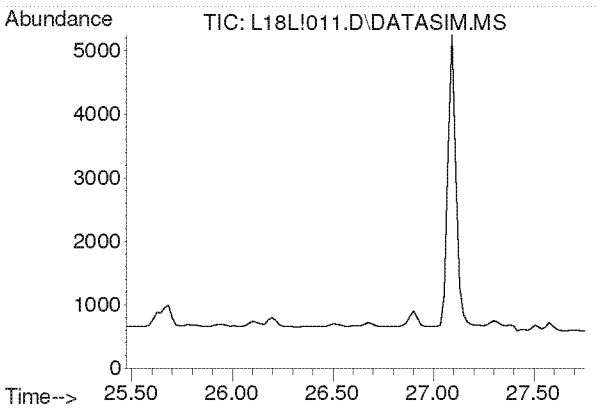
#41
trans-1,3-Dichloropropene
Concen: N.D.
Expected RT: 26.35 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 75

Sig	Exp Ratio
75	100
39	50.9



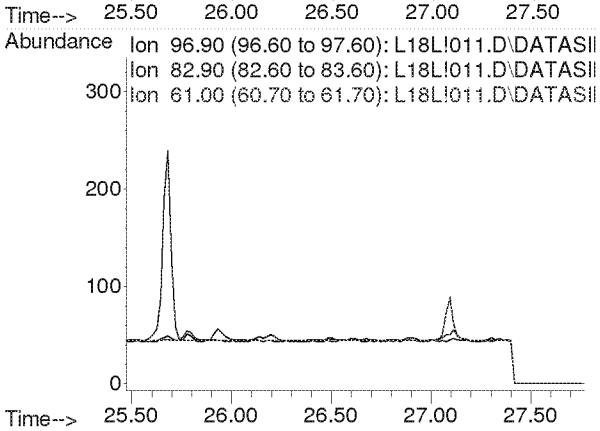


#42
1,1,2-Trichloroethane
Concen: N.D.
Expected RT: 26.62 min

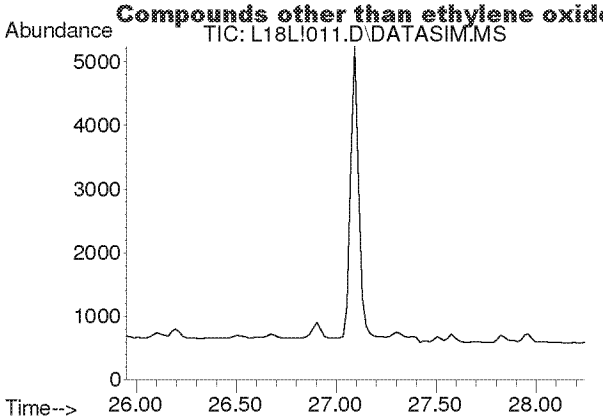
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 97

Sig	Exp Ratio
97	100
83	96.1
61	63.5



Compounds other than ethylene oxide were not quantitated.

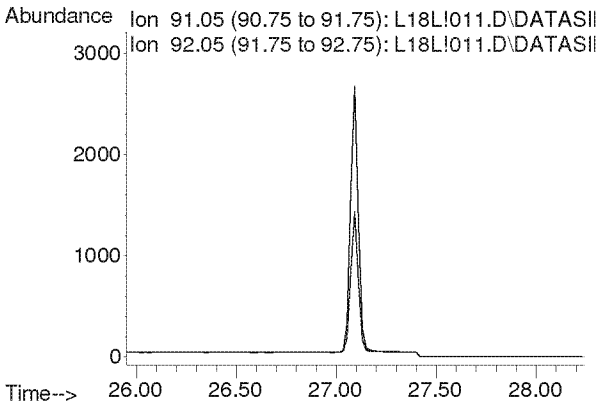


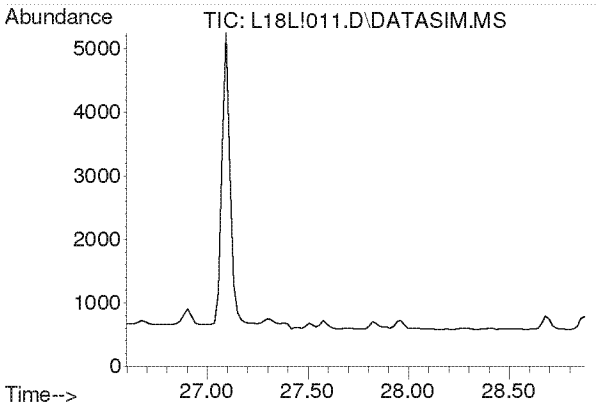
#44
Toluene
Concen: N.D.
Expected RT: 27.09 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
92	52.6



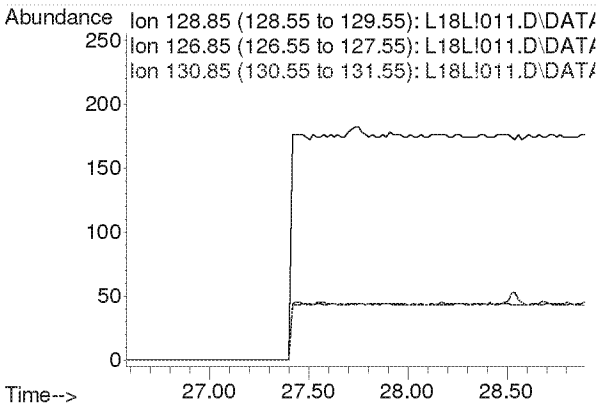


#45
Dibromochloromethane
Concen: N.D.
Expected RT: 27.73 min

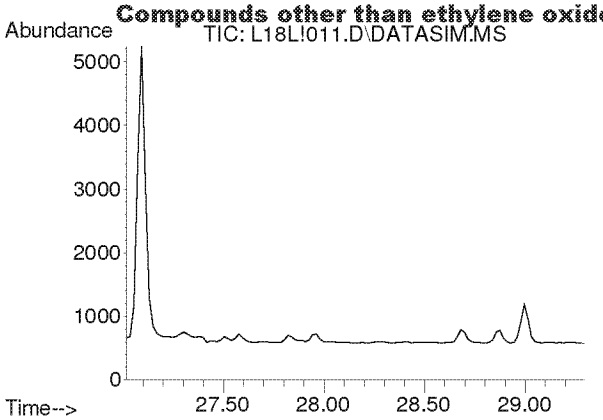
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 129

Sig	Exp Ratio
129	100
127	19.2
131	6.0



Compounds other than ethylene oxide were not quantitated.

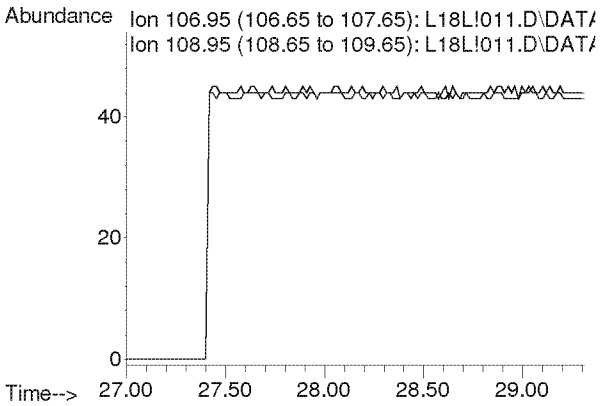


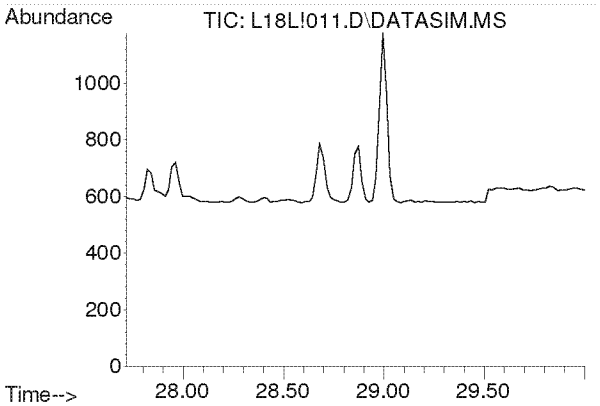
#46
1,2-Dibromoethane
Concen: N.D.
Expected RT: 28.16 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 107

Sig	Exp Ratio
107	100
109	94.5



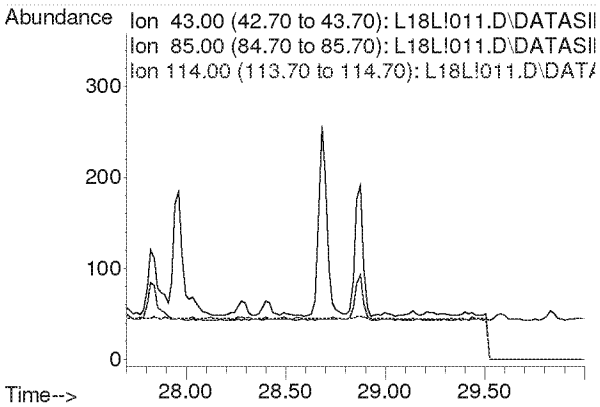


#47
n-Octane
Concen: N.D.
Expected RT: 28.86 min

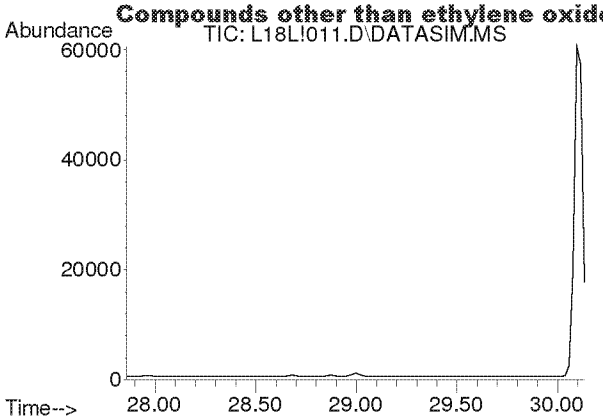
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 43

Sig	Exp Ratio
43	100
85	36.0
114	2.2



Compounds other than ethylene oxide were not quantitated.

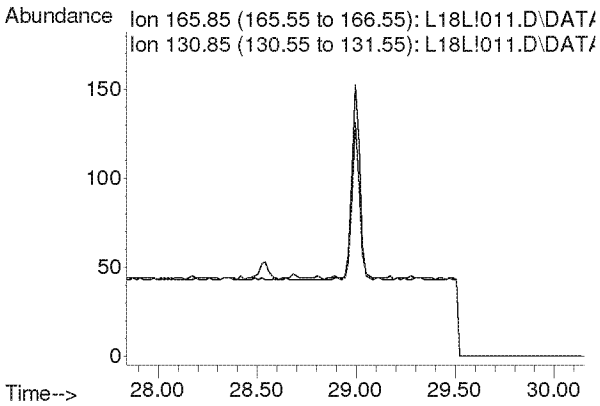


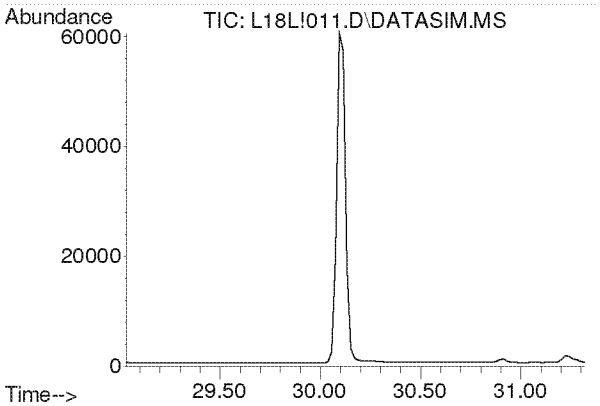
#48
Tetrachloroethylene
Concen: N.D.
Expected RT: 29.00 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 166

Sig	Exp Ratio
166	100
131	78.2



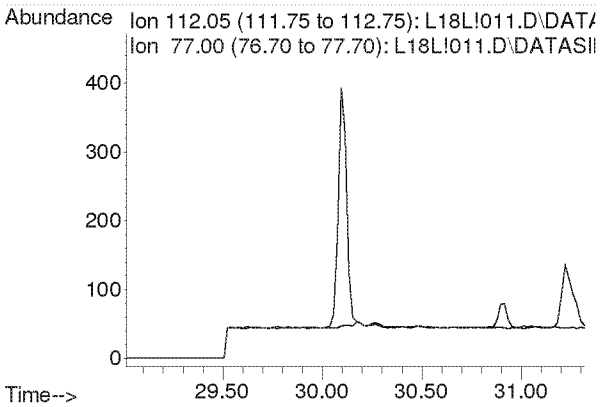


#49
Chlorobenzene
Concen: N.D.
Expected RT: 30.17 min

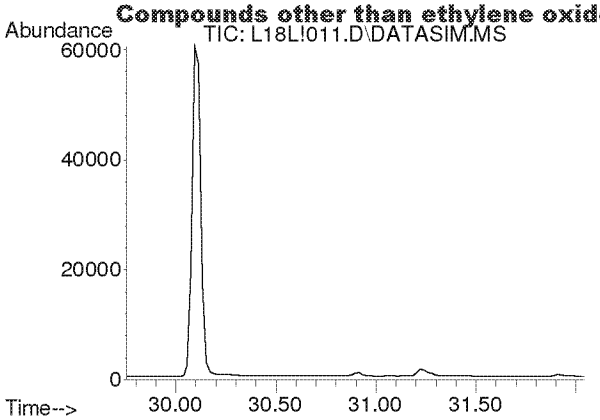
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 112

Sig	Exp Ratio
112	100
77	63.0



Compounds other than ethylene oxide were not quantitated.

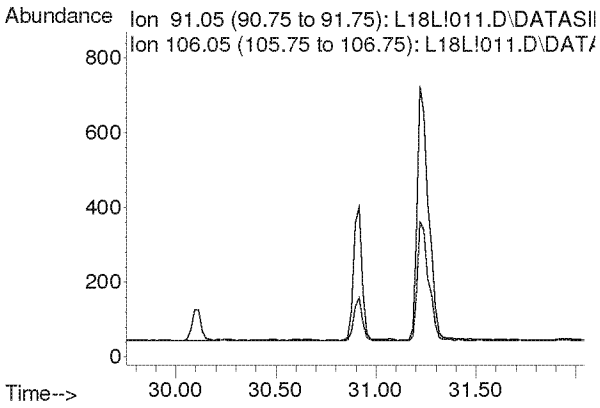


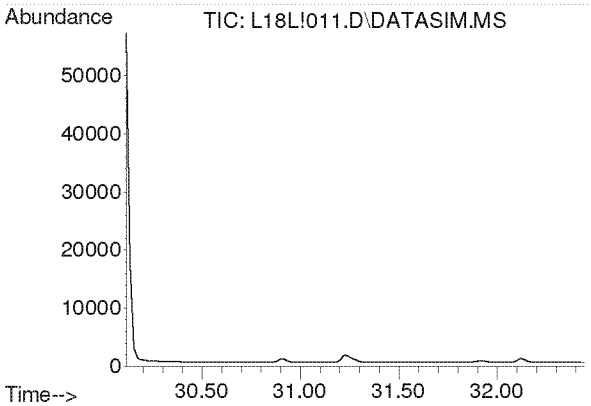
#50
Ethylbenzene
Concen: N.D.
Expected RT: 30.90 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	31.8



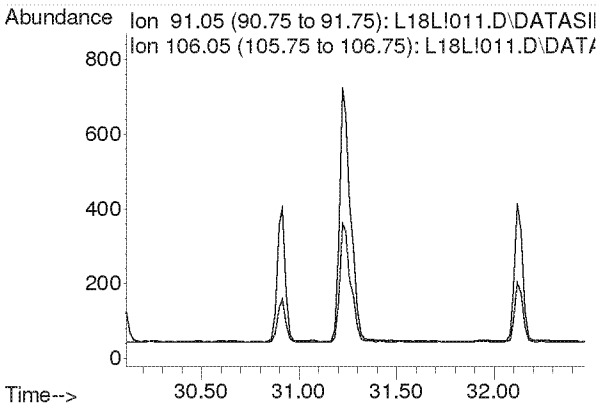


#51
m,p-Xylene
Concen: N.D.
Expected RT: 31.26 min

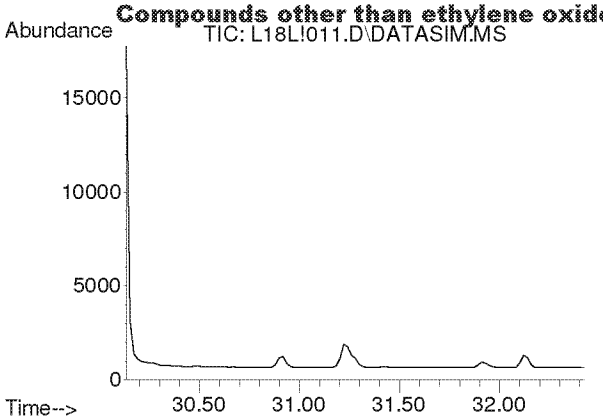
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.4



Compounds other than ethylene oxide were not quantitated.

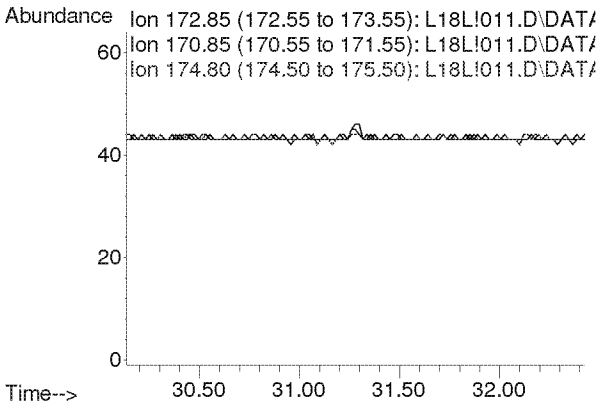


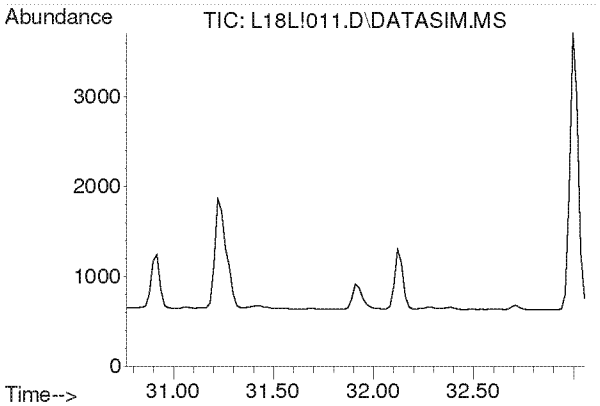
#52
Bromoform
Concen: N.D.
Expected RT: 31.28 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 173

Sig	Exp Ratio
173	100
171	51.3
175	49.0



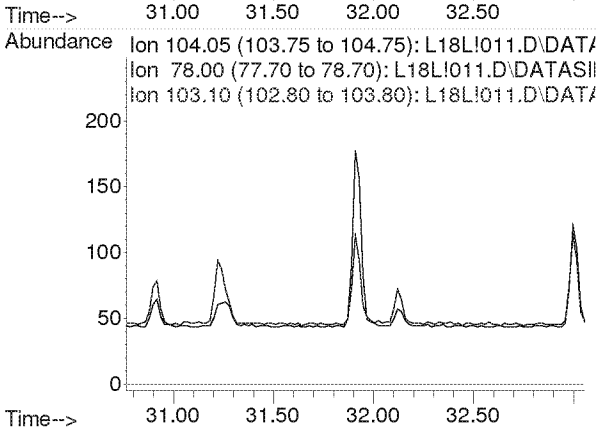


#53
Styrene
Concen: N.D.
Expected RT: 31.91 min

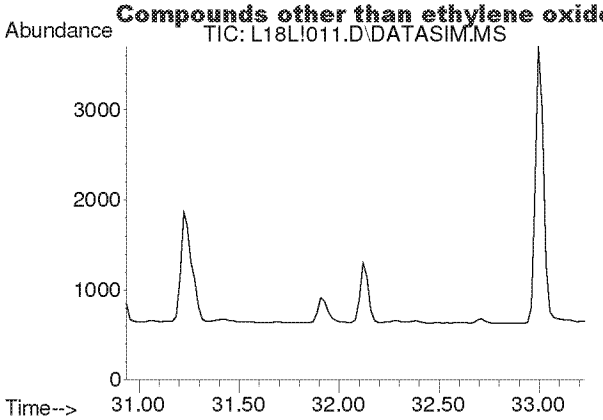
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 104

Sig	Exp Ratio
104	100
78	45.6
103	0.0



Compounds other than ethylene oxide were not quantitated.

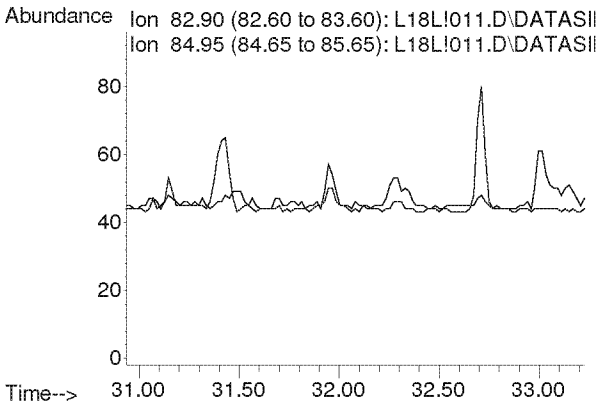


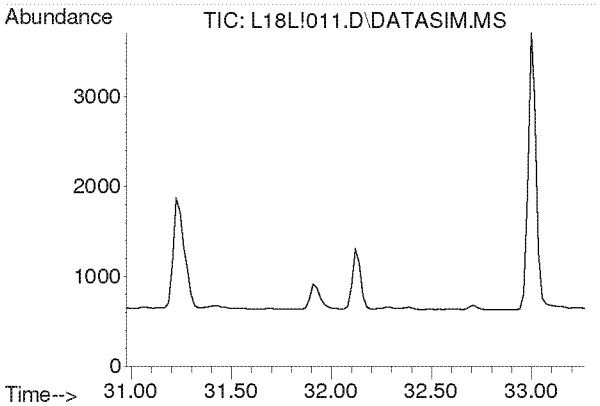
#54
1,1,2,2-Tetrachloroethane
Concen: N.D.
Expected RT: 32.08 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 83

Sig	Exp Ratio
83	100
85	63.9



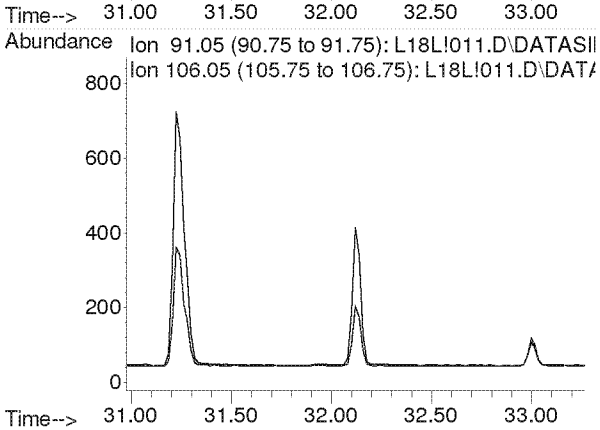


#55
o-Xylene
Concen: N.D.
Expected RT: 32.12 min

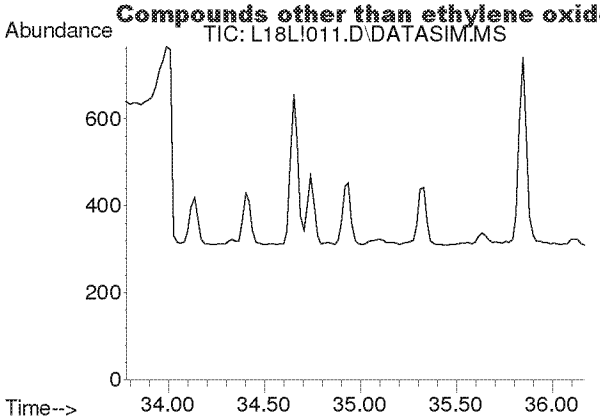
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 91

Sig	Exp Ratio
91	100
106	44.2



Compounds other than ethylene oxide were not quantitated.

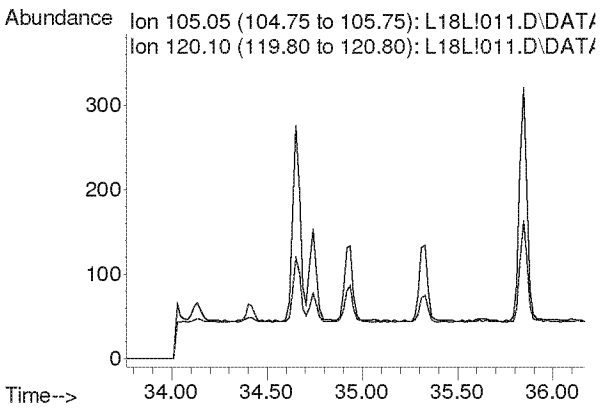


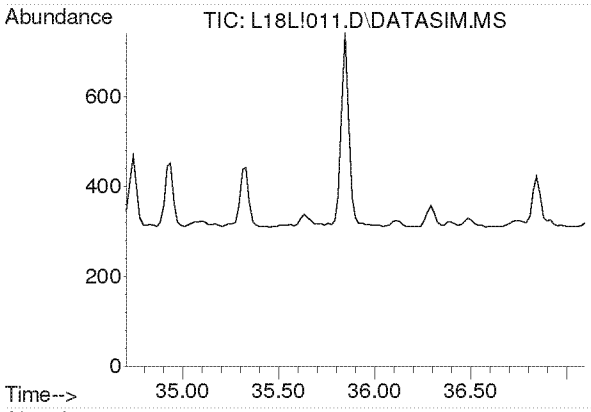
#56
1,3,5-Trimethylbenzene
Concen: N.D.
Expected RT: 34.92 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	45.0



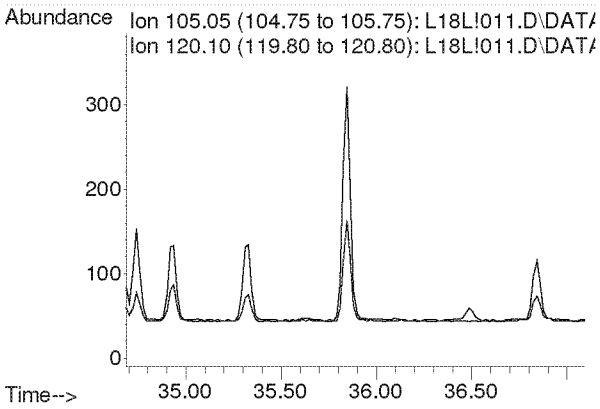


#57
1,2,4-Trimethylbenzene
Concen: N.D.
Expected RT: 35.85 min

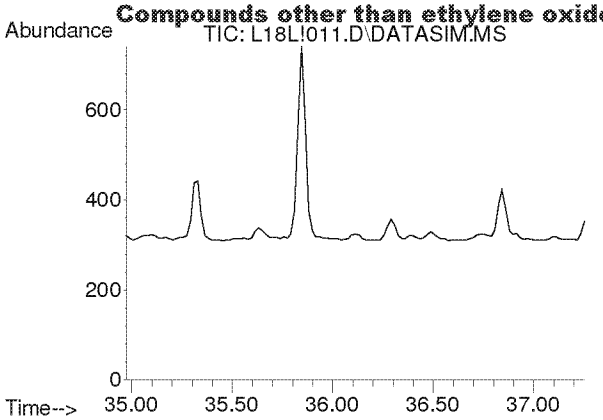
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 105

Sig	Exp Ratio
105	100
120	42.8



Compounds other than ethylene oxide were not quantitated.

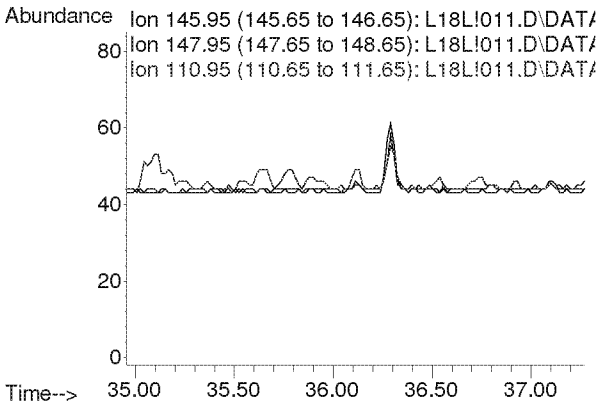


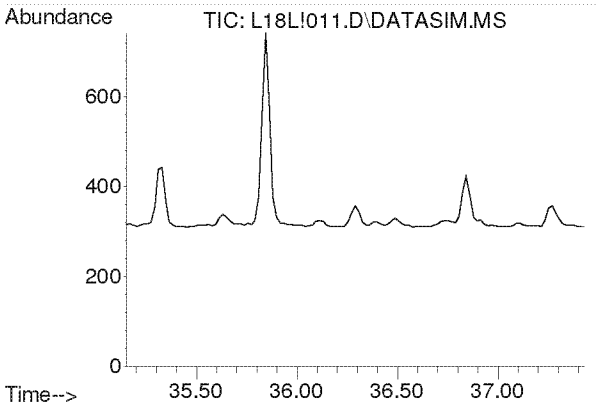
#58
m-Dichlorobenzene
Concen: N.D.
Expected RT: 36.11 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	40.5



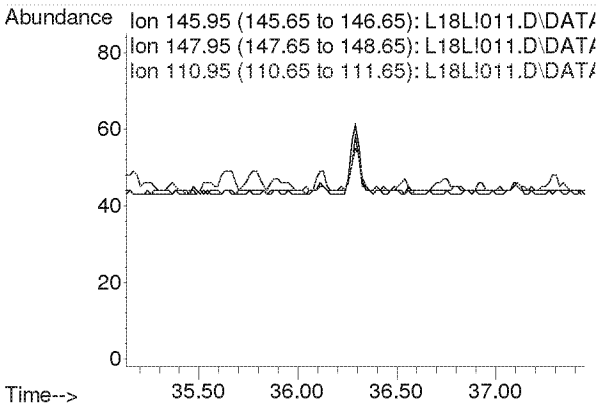


#59
p-Dichlorobenzene
Concen: N.D.
Expected RT: 36.29 min

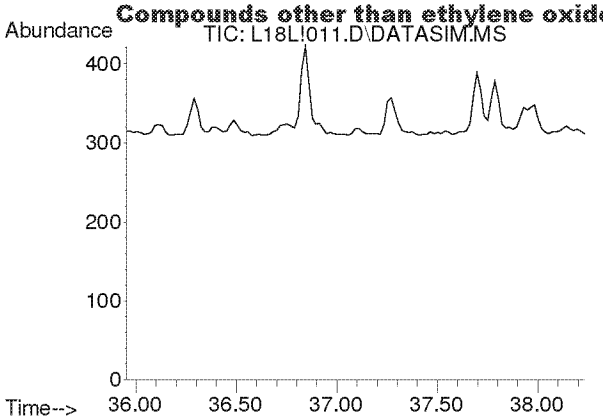
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.0
111	39.5



Compounds other than ethylene oxide were not quantitated.

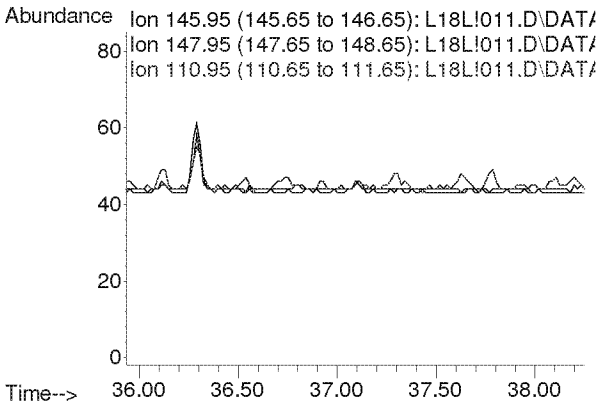


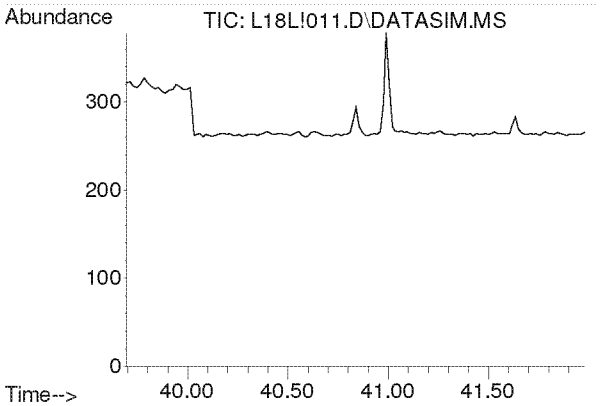
#60
o-Dichlorobenzene
Concen: N.D.
Expected RT: 37.09 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 146

Sig	Exp Ratio
146	100
148	64.1
111	41.4



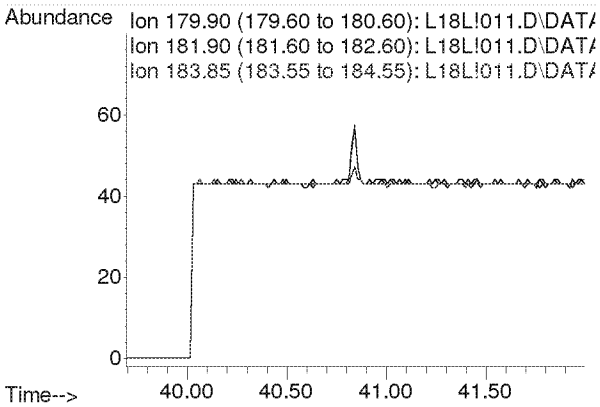


#61
1,2,4-Trichlorobenzene
Concen: N.D.
Expected RT: 40.84 min

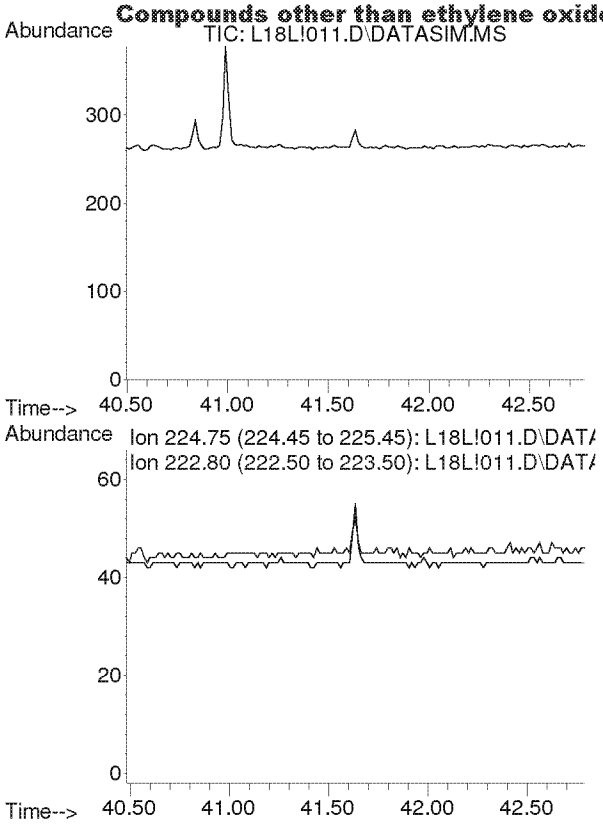
Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 180

Sig	Exp Ratio
180	100
182	95.1
184	30.7



Compounds other than ethylene oxide were not quantitated.



#62
Hexachloro-1,3-butadiene
Concen: N.D.
Expected RT: 41.64 min

Lab File: L18L!011.D
Acq: 28 Dec 2018 9:38 pm

Tgt Ion: 225

Sig	Exp Ratio
225	100
223	62.4

Compounds other than ethylene oxide were not quantitated.

PREPARATION BENCH SHEET

B8L2804

Eastern Research Group

Matrix: Air **Prepared using: Air Toxics - Summa Canister Prep** **inted: 12/28/2018 3:48:27PM**

Lab Number	Prepared	Initial (ml)	Final (ml)	Spike ID	Source ID	ul Spike	Comments	
8120609-01 *TO-15 2018*	12/04/18 23:59	250	250	U.S. Environmental Protection Agency, Region 5				
8120714-01 *TO-15 2018*	12/04/18 23:59	250	250	U.S. Environmental Protection Agency, Region 6				
8120716-01 *TO-15 2018*	12/04/18 23:59	250	250	U.S. Environmental Protection Agency, Region 6				
8121821-03 *TO-15 2018*	12/14/18 09:37	250	250	U.S. Environmental Protection Agency - OAQPS			Ethylene Oxide only	Ethylene Oxide only
8121821-04 *TO-15 2018*	12/14/18 09:37	250	250	U.S. Environmental Protection Agency - OAQPS			Ethylene Oxide only	Ethylene Oxide only
8121821-05 *TO-15 2018*	12/14/18 09:50	250	250	U.S. Environmental Protection Agency - OAQPS			Ethylene Oxide only	Ethylene Oxide only
8121821-06 *TO-15 2018*	12/14/18 10:23	250	250	U.S. Environmental Protection Agency - OAQPS			Ethylene Oxide only	Ethylene Oxide only
8121821-07 *TO-15 2018*	12/14/18 10:03	250	250	U.S. Environmental Protection Agency - OAQPS			Ethylene Oxide only	Ethylene Oxide only
B8L2804-BLK1	12/18/18 08:00	250	250				h2-525	
B8L2804-DUP1	12/14/18 09:37	250	250		8121821-03			
B8L2804-DUP2	12/14/18 09:37	250	250		8121821-04			

Spiking Witnessed By Date

Preparation Reviewed By 1-3-19 Date

Extracts Received By Date

Compounds other than ethylene oxide were not quantitated. 3

ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 8121821-03

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: WBVILLAGEHALL
Canister Number: SAT002
City/State: WILLOWBROOK, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code:
Cleaning Batch # : H1-514
Collection Date: 12/13/18
Date Can. Cleaned: 11/29/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): Y
TOXICS (Y/N): Y
Duplicate Can # : SAT085
METHANE (Y/N):
Relinquished by: RMB
Date: 12/11/18

Field Setup

Received by: NWIA
Date: 12/13/18
Operator: NWIA
MFC Setting:
System #: 10313
Elapsed Timer Reset (Y/N):
Setup Date: 12/13/18
Canister Valve Opened (Y/N): Y @ 9:43am
Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 12/14/18
Sample Duration (3 or 24 hr): 24
Operator: DELISIO
Elapsed Time:
Field Final Can. Press.: -4.0 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 9:37
Relinquished by: [signature]
Date: 12/14/18

Lab Recovery

Received by: BHC
Date: 12-19-18
Lab Final Can. Press.: 2.5 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check @ 9:35am
Ambient temp @ deployment = ~~25°C~~ (most likely 25°F) Delisio
" " " collection = 39°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

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ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 8121821-04

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: WBVILLAGE HALL - DUP
Canister Number: SAT085
City/State: WILLOW BROOK, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code:
Cleaning Batch # : H2-514
Collection Date: 12/13/18
Date Can. Cleaned: 11/29/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): Y
TOXICS (Y/N): Y
Duplicate Can # : SAT002
METHANE (Y/N):
Relinquished by: RMB
Date: 12/11/18

Field Setup

Received by: NWIA
Date: 12/13/18
Operator: NWIA
MFC Setting:
System #: 10215
Elapsed Timer Reset (Y/N):
Setup Date: 12/13/18
Canister Valve Opened (Y/N): Y @ ~~9:35 am~~ 9:45 am
Field Initial Can. Press.: -29 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 12/14/18
Sample Duration (3 or 24 hr): 24
Operator: DeLisio
Elapsed Time:
Field Final Can. Press.: -6.0 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 9:39
Relinquished by: Edward DeLisio
Date: 12/14/18

Lab Recovery

Received by: BHC
Date: 12-18-18
Lab Final Can. Press.: 4.0 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 @ ~~9:35 am~~ 9:45 am -29 "Hg
Ambient temp @ deployment = 25°F
" " " collection = 39°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 8121821-05

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: GOWER MS
Canister Number: SAT057
City/State: BURR RIDGE, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code:
Cleaning Batch # : H1-514
Collection Date: 12/13/18
Date Can. Cleaned: 11/29/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RYB
Date: 12/11/18

Field Setup

Received by: NWIA
Date: 12/13/18
Operator: NWIA
MFC Setting:
System #: 10311
Elapsed Timer Reset (Y/N):
Setup Date: 12/13/18
Canister Valve Opened (Y/N): Y@
Field Initial Can. Press.: -30 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 12/14/18
Sample Duration (3 or 24 hr): 24
Operator: Delisio
Elapsed Time:
Field Final Can. Press.: -5.0 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y@950
Relinquished by: [signature]
Date: 12/14/18

Lab Recovery

Received by: BHC
Date: 12-18-18
Lab Final Can. Press.: 2.5 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check @ [illegible] 9:37 am - 27.3 [illegible]
Ambient temp @ deployment = 25°F
" " " collection = 39°F
Canister open time not filled in. Estimate open time to between 943 am and 1014 am - dictated by open times of 2 canisters that bracket this site.

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

on 12/13/18

Compounds other than ethylene oxide were not quantitated.

ERG Lab ID # 8121821-06

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: Hinsdale H.S.
Canister Number: SAT089
City/State: Darien, IL
Lab Initial Can. Press. ("Hg): 29.8
AQS Code:
Cleaning Batch # : H1-514
Collection Date: 12/13/18
Date Can. Cleaned: 11/29/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: MB
Date: 12/11/18

Field Setup

Received by: Qazzaz
Date: 12/13/18
Operator: Qazzaz
MFC Setting:
System #: 10076
Elapsed Timer Reset (Y/N):
Setup Date: 12/13/18
Canister Valve Opened (Y/N): Y @ 10:44 am
Field Initial Can. Press.: -28.8 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 12/14/18
Sample Duration (3 or 24 hr): 24
Operator: Qazzaz
Elapsed Time:
Field Final Can. Press.: -7.0 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:23 am
Relinquished by: [signature]
Date: 12/14/18

Lab Recovery

Received by: BHC
Date: 12-18-18
Lab Final Can. Press.: 5.5 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check: 10:38 am = -28.8 in Hg; 10:43 = -28.8 in Hg
Ambient temp @ deployment = 25°F
" " @ collection = 39°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy

Compounds other than ethylene oxide were not quantitated.

-14 7

ERG
Eastern Research Group, Inc.
601 Keystone Park Drive, Suite 700, Morrisville, NC 27560

ERG Lab ID # 8121821-07

AIR TOXICS SAMPLE CHAIN OF CUSTODY

Lab Pre-Sampling

Site Code: Water Tower
Canister Number: A21042
City/State: Willowbrook, PC
Lab Initial Can. Press. ("Hg): 29.8
AQS Code: ——
Cleaning Batch # : H2-514
Collection Date: 12/13/18
Date Can. Cleaned: 11/29/18
Options:
SNMOC (Y/N):
Duplicate Event (Y/N): N
TOXICS (Y/N): Y
Duplicate Can # :
METHANE (Y/N):
Relinquished by: RMB
Date: 12/11/18

Field Setup

Received by: Qazzar
Date: 12/13/18
Operator: Qazzar
MFC Setting:
System #: 10312
Elapsed Timer Reset (Y/N):
Setup Date: 12/13/18
Canister Valve Opened (Y/N): Y @ 10:14 am
Field Initial Can. Press.: -28.2 psig psia "Hg (Circle one)

Field Recovery

Recovery Date: 12/14/18
Sample Duration (3 or 24 hr): 24
Operator: Qazzar
Elapsed Time:
Field Final Can. Press.: -5.0 psig psia "Hg (Circle one)
Status: VALID VOID (Circle one)
Canister Valve Closed (Y/N): Y @ 10:03 am
Relinquished by: [illegible]
Date: 12/14/18

Lab Recovery

Received by: BHC
Date: 12-18-18
Lab Final Can. Press.: 3.5 psig "Hg (Circle one)
Converted to psia:
Status: VALID VOID (Circle one)
Gauge: 1 2 (Circle one)
If void, why:

Samples stored in Air Tox Lab (Room 130)

5-2016

Comments: Leak check @ 10:01 am = -29 in Hg; 10:12 am = 21.0 in Hg
Ambient temp @ deployment = 25°F
" " @ collection = 39°F

White: Sample Traveler
Canary: Lab Copy
Pink: Field Copy