

**APPENDIX H JULY 2009 SOIL VAPOR QUALITY ASSESSMENT REPORT – LITTLE FALLS
PONDS PROPERTY**



SOIL VAPOR QUALITY ASSESSMENT REPORT

**Little Falls Ponds Property
Former Dennison/Monarch Systems Site
New Windsor, NY
VCA No. D3-0006-99-04**

**Prepared for:
Avery Dennison Corporation
7 Bishop Street
Framingham, MA 01702**

**Prepared by:
The Johnson Company
100 State Street, Suite 600
Montpelier, VT 05602
Project No. 1-0145-5**

JULY 2009



TABLE OF CONTENTS

1.0 BACKGROUND	1
2.0 SOIL VAPOR MONITORING POINTS INSTALLATION	2
3.0 SOIL VAPOR MONITORING POINTS SAMPLING	4
4.0 SOIL VAPOR QUALITY RESULTS	5

LIST OF FIGURES

- Figure 1 Planned Soil Vapor Sampling Locations
Figure 2 PCE in Soil Vapor and PCE Concentrations in Groundwater
Figure 3 TCE in Soil Vapor and TCE Concentrations in Groundwater
Figure 4 TCA in Soil Vapor and TCA Concentrations in Groundwater

LIST OF APPENDICES

- Appendix A Field Notes and Soil Vapor Point Construction Logs
Appendix B Laboratory Results
Appendix C Data Usability Summary Report

1.0 BACKGROUND

This report documents results of a Soil Vapor Quality Assessment (SVQA) performed by The Johnson Company, Inc. (JCO) on May 20, 2009 at the Little Falls Ponds property portion of the Former Dennison/Monarch Systems Site (the Site) in New Windsor, New York (see Figure 1) on behalf Avery Dennison Corporation (Avery). Site investigation and remediation activities for the Site are being performed by Avery per Voluntary Cleanup Agreement No. D3-0006-99-04. This SVQA was performed per the Scope of Work approved by the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) on May 14, 2009. The purpose of the SVQA is to characterize the nature and extent, if any, of volatile organic compounds (VOC) in soil vapor proximate to the eastern boundary of the Little Falls Ponds property.

The *Pre-Design Investigation Report* (PDI Report) submitted to NYSDEC on May 2, 2008 describes the results of a comprehensive characterization of geology and contaminant hydrogeology of the Site. The characterization results included delineation of the nature and extent of groundwater contamination associated with the Site as well as the detection of groundwater contamination migrating from off-Site, non-Avery sources located on or near 3 Ruscitti Road. These results are discussed herein in the context of the soil vapor quality data resulting from this SVQA.

This SVQA was conducted concurrently with comprehensive surface water (SW) and groundwater (GW) quality monitoring performed for the Site, the third comprehensive SW/GW monitoring event performed since submission of the *Pre-Design Investigation Report* (PDI Report) to NYSDEC on May 2, 2008. Groundwater concentrations continue to appear steady in the vicinity of the Little Falls Ponds, as documented in the July 2009 Monthly Progress Summary to be submitted to NYSDEC. Further SW/GW monitoring is scheduled to be performed in Fall 2009. The data also continue to support migration of VOC onto Avery property and the Little Falls Ponds property from the off-Site source(s) located on or near 3 Ruscitti Road.

2.0 SOIL VAPOR MONITORING POINTS INSTALLATION

Figure 1 shows the location of the six soil vapor sampling locations specified in the approved Scope of Work. The locations are oriented in a linear pattern near the eastern boundary of the Little Falls Ponds property, as directed by NYSDEC and NYSDOH during the meeting held with Avery and JCO at New Paltz, New York on February 10, 2009.

Prior to the installation of the soil vapor monitoring points, depth to groundwater was estimated by gauging depth to water in proximate water table monitoring wells, J14-UC01, J15-UC01, J17-UC01, and J21-UC01, for soil vapor monitoring points SV-LFP-1 (water table at 3.4 feet below ground surface (bgs)), SV-LFP-2 (0.8 feet bgs), SV-LFP-4 (4.1 feet bgs), and SV-LFP-6 (12.4 feet bgs), respectively. At soil vapor monitoring point locations SV-LFP-3 and SV-LFP-5, the depth to groundwater was determined by observation of moisture conditions in open hand-augered holes. At location SV-LFP-3, the hand auger was refused at 2.8 feet bgs, and the hole was observed to be dry. At location SV-LFP-5, moist clayey soils were observed at 3.6 feet bgs, thus the hole was terminated to be completed above that depth.

The soil vapor probes were installed as described in the field notes and soil vapor point construction logs in Appendix A. Each monitoring point typically consists of a 0.25 inch-diameter 6 inch-long AT86 Geoprobe® series double woven stainless steel wire screen implant. These implants are isolated at their designed sample depth and connected to Teflon® tubing and a needle valve at the surface. The terminations of the tubing are contained in a protective flush-mount casing in a concrete seal. The annular material around the screen is filled with filter sand and the annular space surrounding the subsurface Teflon ® tubing is sealed with hydrated bentonite to ensure the integrity of the sampling point.

At location SV-LFP-1, the soil vapor probe was constructed at a depth of 1.0-1.8 feet bgs, as the hand auger refused at 1.8 feet bgs. Thus, the bottom of the probe installation is estimated to be approximately 1.6 feet above the water table, and is located in gravelly sand.

Two installation locations were attempted at SV-LFP-2; however, both borings contained water at approximately 0.5 feet bgs, and black silty muck was observed from 0.6 to at least 2.0

feet bgs. A soil vapor probe was not installed since there is inadequate thickness of unsaturated soils to accommodate construction of the probe. Further attempts east of the proposed location of SV-LFP-2 were not attempted due to absence of property boundary markers (the attempted holes were as far upland as possible while apparently remaining on the Little Falls Ponds property). The soils located further east near the potential property boundary appeared saturated and wet at ground surface; thus, collection of a soil vapor sample would not be feasible.

At location SV-LFP-3, the soil vapor probe was installed at approximately 2.0-2.8 feet bgs in gravelly sand (the hand auger was refused at 2.8 feet bgs). Based on visual estimation of elevation difference between the First Little Falls Pond and the ground surface at the installation location, the bottom of the probe installation is estimated to be approximately one foot above the water table.

At location SV-LFP-4, the soil vapor probe is installed at approximately 2.3-3.0 feet bgs in gravelly sand. The bottom of the probe installation is approximately one foot above the water table.

At location SV-LFP-5, the soil vapor probe is installed at approximately 2.8-3.8 feet bgs in silty fine sand, transitioning to silty clay at approximately 3.6 feet bgs. The bottom of the probe installation is within one foot of the water table based on observation of moist soils and mottling of clay at the termination depth.

At location SV-LFP-6, the anticipated depth to groundwater and nature of the fill materials present at that location precluded use of a hand auger to install the monitoring point. Therefore, a jackhammer was used to advance a six-inch stainless-steel SolinstTM drivepoint sampler affixed to Teflon tubing within black iron pipe. Multiple attempts were made to advance below 9.5 feet bgs; however, the probe was refused. Thus, the open interval for soil vapor sample collection is 9.0 to 9.5 feet bgs, approximately 3 feet above the estimated water table position. Based on the apparent surface soils at the bottom of the slope, which is adjacent to the Third Little Falls Pond, the soils at the depth of the probe installation are estimated to be clayey in nature. Geologic samples were not collected during the installation of the adjacent

monitoring well J21-UC01 due to the equipment available at the time of installation, and the type of equipment capable of well installation on the relatively steep slope.

3.0 SOIL VAPOR MONITORING POINTS SAMPLING

All soil vapor monitoring points were purged prior to sampling using a peristaltic pump connected to the sample tubing and set at a flow rate that did not exceed 0.2 liters per minute as specified by NYSDOH guidance. Purging was performed for 3-5 minutes at each location to attempt removal of three equivalent probe and tubing pore volumes. At locations of relatively low permeability, such as the clayey soils of SV-LFP-6, the actual rate of purging is dependent upon the yield of the formation.

The samples were collected using individual laboratory certified-clean evacuated 6-liter SUMMA® canisters. Pre-calibrated flow regulators were attached to the evacuated canisters to control the duration of sampling to be approximately one hour. The vacuum in the sample canisters was noted at the commencement of sampling, and observed over the sampling period. To achieve optimal detection limits for analytes while still ensuring adequate terminal vacuum to assess the integrity of the container upon receipt at the laboratory, the laboratory recommended an end-of-sampling canister vacuum target of -6 inches of mercury (Hg). At location SV-LFP-1, the canister vacuum declined from -30 inches Hg to -6 inches Hg over a sampling period of 69 minutes. At location SV-LFP-3, the canister vacuum declined from -31 inches Hg to -6 inches Hg over a sampling period of 67 minutes. At location SV-LFP-4, the canister vacuum declined from -34 inches Hg to -6 inches Hg over a sampling period of 52 minutes; and at location SV-LFP-5, the canister vacuum declined from -31 inches Hg to -6 inches Hg over a period of 63 minutes. At location SV-LFP-6, no decline in vacuum was observed from -31 inches Hg over the entire hour that sampling was attempted. Thus, no sample was obtained from location SV-LFP-6, presumably due to the very low permeability of the clayey soils believed to be present.

All samples were transported under intact chain-of-custody seal to Air Toxics, Ltd., a New York State-certified lab, for analyses using modified EPA Method TO-15. A trip blank accompanied all of the VOC samples through the entire sampling event and subsequent transport

to the laboratory. The target compound list for analyses included all 11 VOCs previously detected in groundwater samples collected during 2006-2008 by The Johnson Company on the Little Falls Ponds property: tetrachloroethene (PCE); trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), vinyl chloride, 1,1,1-trichloroethane (TCA), 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), chloroform, bromodichloromethane, toluene, and Freon 113,

4.0 SOIL VAPOR QUALITY RESULTS

Results are provided in Appendix B, and summarized herein. A Data Usability Summary Report (DUSR) is provided in Appendix C. The DUSR concludes the data are representative of soil vapor conditions at the sampling locations and meet criteria for data quality and data use. Resampling or reanalysis of the existing samples is not recommended.

Of the 11 target analytes, five were detected in one or more of the soil vapor samples: PCE, TCE, TCA, chloroform, and toluene.

PCE was detected at two of the four sampled locations, as shown on Figure 2. The nature and extent of PCE in groundwater, as delineated during the Pre-Design Investigation (PDI) sampling (presented in the May 2008 PDI Report), is also shown on Figure 2. The location of highest detection of PCE, SV-LFP-1 at $8.0 \mu\text{g}/\text{m}^3$, is proximate to the portion of the groundwater PCE plume that appears to be emanating from a non-Avery source(s) on or near 3 Ruscitti Road. The ratio of PCE/TCE at location SV-LFP-1, 1.4, is also more indicative of the characteristics of the groundwater contaminant plume emanating from the vicinity of the 3 Ruscitti Road property than the Avery Dennison property. Detailed descriptions of these plumes are presented in the May 2008 PDI Report; however, the approximate PCE/TCE concentration ratio in groundwater beneath Ruscitti Road within the plume from the 3 Ruscitti Road sources is generally greater than one, whereas the PCE/TCE concentration ratio in groundwater beneath Ruscitti Road within the Avery plume is generally less than 0.01.

At location SV-LFP-3, PCE was also detected in soil vapor at concentrations ($1.6 \mu\text{g}/\text{m}^3$) exceeding the respective detected TCE soil vapor concentration ($1.4 \mu\text{g}/\text{m}^3$), suggesting the

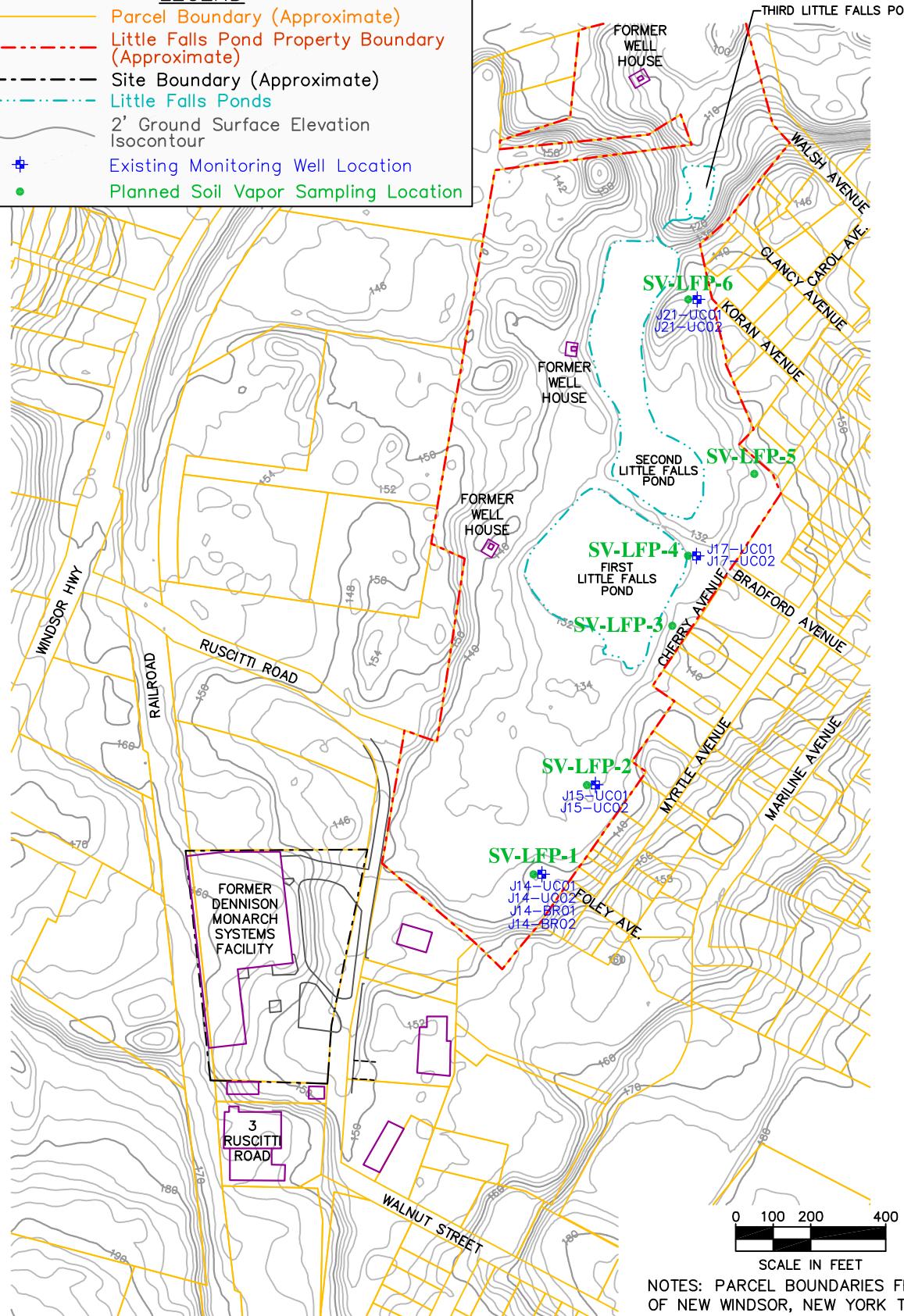
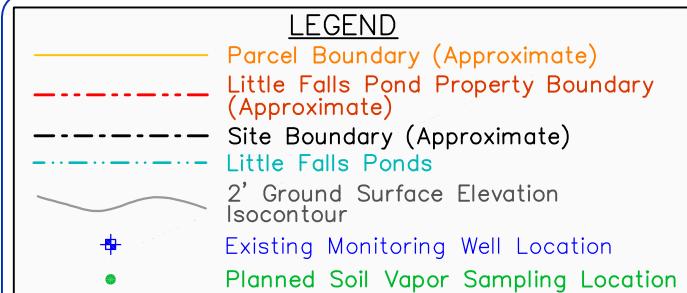
plume arising from the vicinity of the 3 Ruscitti Road property also the primary source, if not the only source, of the soil vapor contamination detected at this location. The nature and extent of the groundwater contaminant plume from the source area on or near 3 Ruscitti Road has not yet been delineated.

TCE was detected in samples SV-LFP-1 and SV-LFP-3 at concentrations of 5.8 $\mu\text{g}/\text{m}^3$ and 1.4 $\mu\text{g}/\text{m}^3$, respectively, as shown on Figure 2. No detections of TCE have been noted in groundwater samples collected from monitoring wells immediately proximate to these locations in four previous sampling events. As stated above, the nature and distribution of TCE and PCE in groundwater suggests the primary source of the PCE and TCE in soil vapor, if not the only source, is the groundwater contaminant plume arising from the source(s) on or near 3 Ruscitti Road.

TCA was detected in only one sample: SV-LFP-4, located approximately 200 feet north of SV-LFP-3, at a concentration of 1.5 $\mu\text{g}/\text{m}^3$ (see Figure 3). No detections of TCA have been noted in groundwater samples from the monitoring wells proximate to this location. PCE and TCE were not detected at this location.

Chloroform was detected at three sample locations; SV-LFP-1 at 3.5 $\mu\text{g}/\text{m}^3$, SV-LFP-3 at 1.0 $\mu\text{g}/\text{m}^3$, and SV-LVP-4 at 2.7 $\mu\text{g}/\text{m}^3$. Chloroform was not detected in groundwater from water table monitoring wells proximate to these locations.

Toluene was detected in all four sample locations; SV-LFP-1 at 160 $\mu\text{g}/\text{m}^3$, SV-LFP-3 at 77 $\mu\text{g}/\text{m}^3$, SV-LFP-4 at 9.7 $\mu\text{g}/\text{m}^3$, and SV-LFP-5 at 16 $\mu\text{g}/\text{m}^3$. Toluene was not detected in groundwater from water table monitoring wells proximate to these locations.



0 100 200 400
SCALE IN FEET

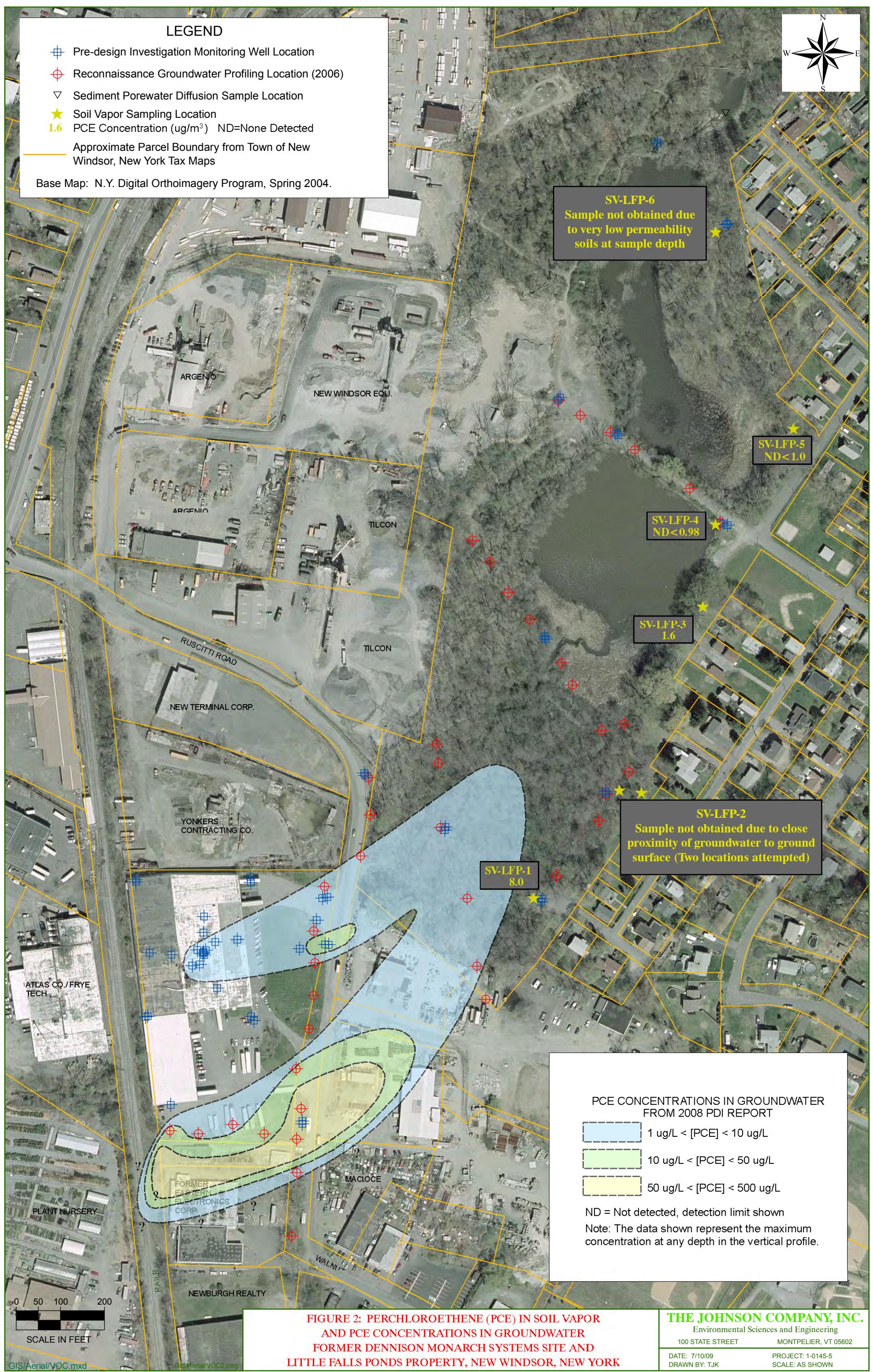
NOTES: PARCEL BOUNDARIES FROM TOWN OF NEW WINDSOR, NEW YORK TAX MAPS & ELEVATIONS FROM ORANGE COUNTY WATER AUTHORITY, MARCH 2006.

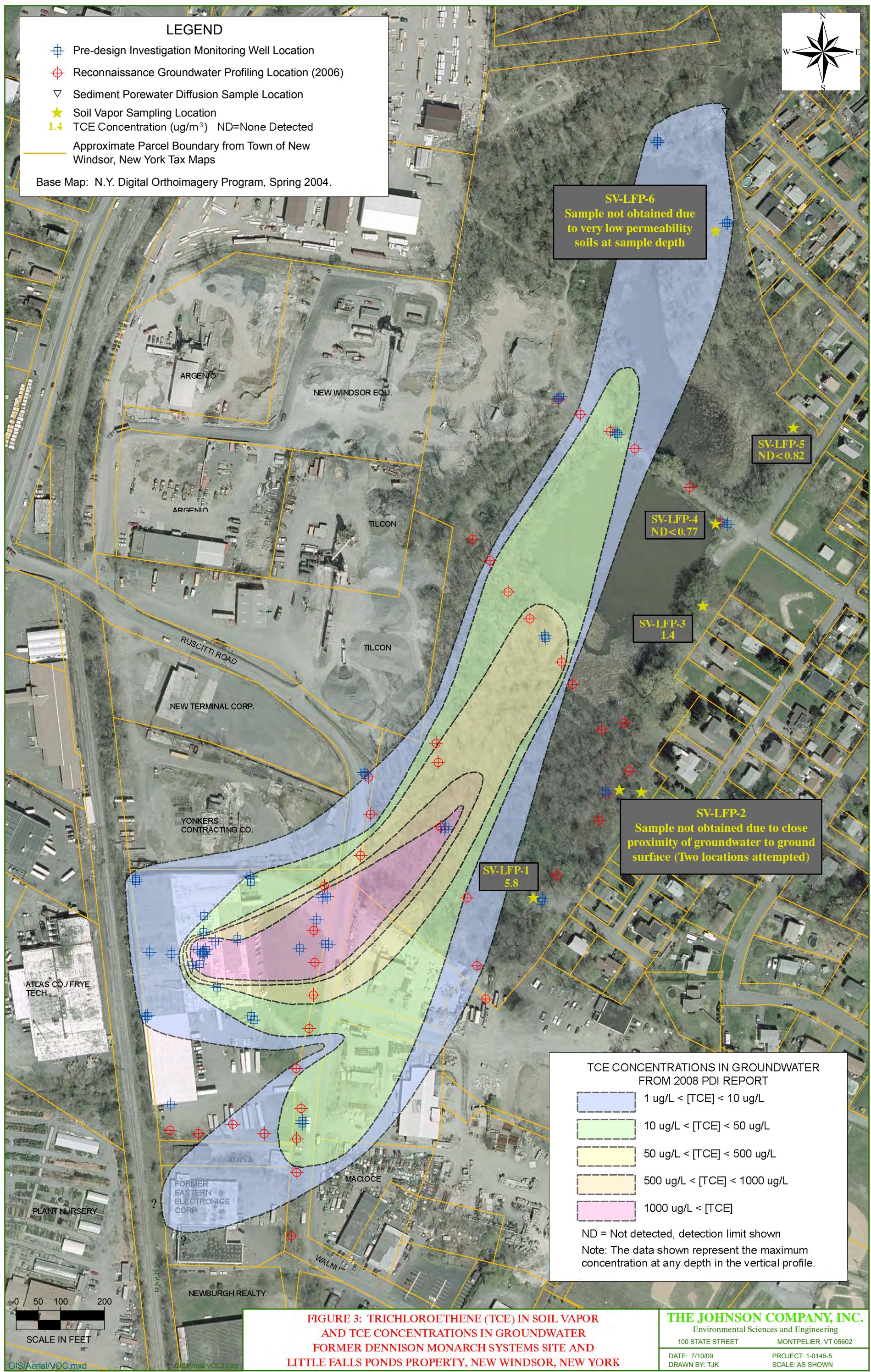
FIGURE 1
PLANNED SOIL VAPOR SAMPLING LOCATIONS
FORMER DENNISON MONARCH SYSTEMS SITE

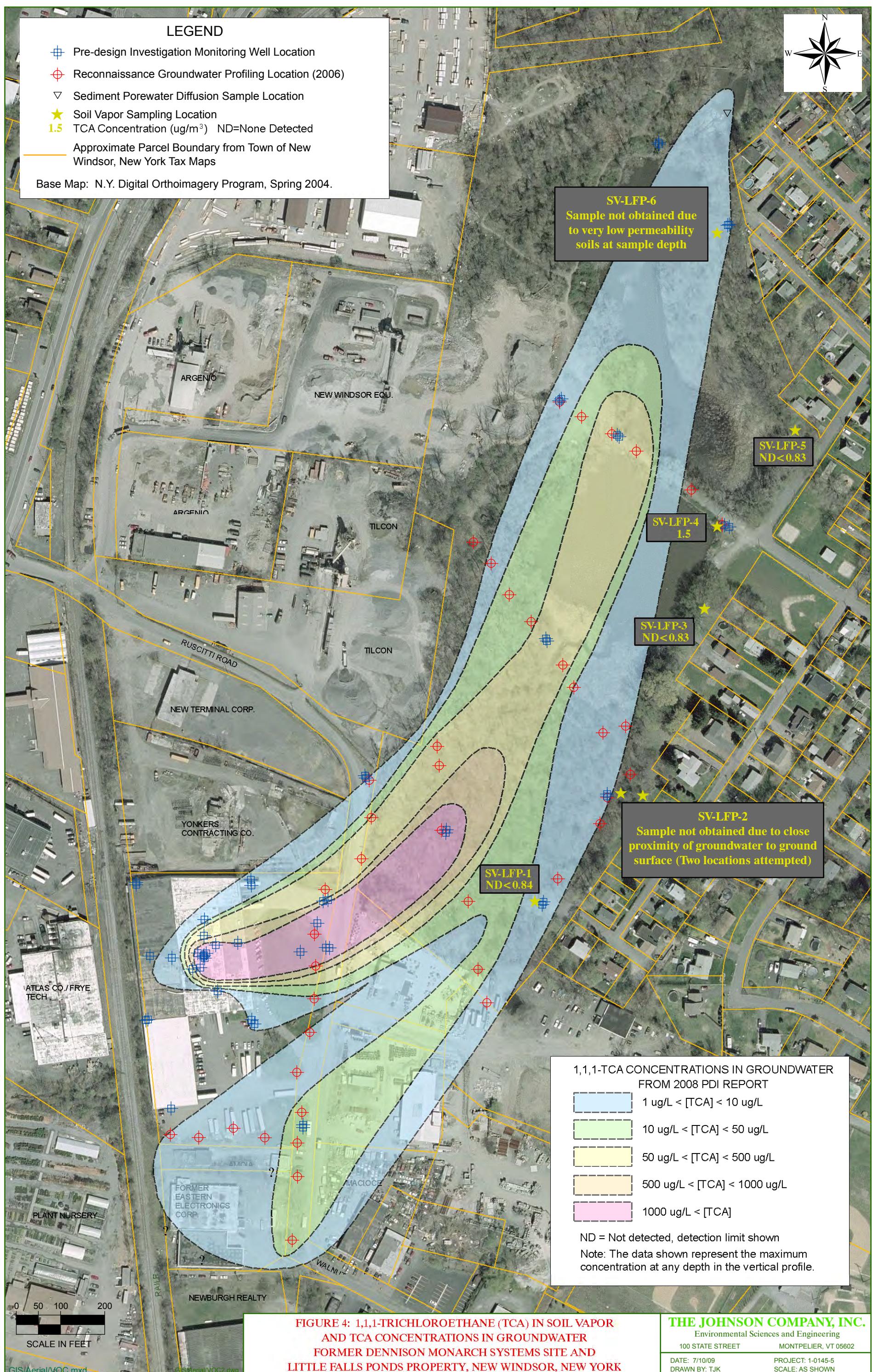


100 State Street, Suite 600
Montpelier, VT 05602

Drawn by: TJK	Date: 5/5/09
Chkd by: CMT	Date: 5/5/09
Scale: 1"=400'	
Project: 1-0145-5	







APPENDIX A

FIELD NOTES AND
SOIL VAPOR POINT CONSTRUCTION LOGS

130 Location New Windsor NY Date 5/19/09
 Project / Client Avery Dennison 1-0145-5
 Twp

131 Location New Windsor NY Date 5/19/09
 Project / Client Avery Dennison 1-0145-5
 Twp

on site 7:20

Picked up concrete & supplies pre site arrival.

Weather: clear cool low 40's

~~Topsoil Notes~~

~~Location~~ ~~(Bore)~~ = 65

J14 uc01 (wt) 3.18 3.45

J15 uc01 (wt) 1.44 0.78

J13 uc01 (wt) 3.74 4.12

J21 uc01 (wt) 15.56 12.37

J15 ac02 (wt) 1.74

J14 uc02 (wt) 3.95

J17 uc02 (wt) 2.14

J21 uc02 (wt) 15.17

~~Total~~
~~Twp 5/19/09~~ 91.10

PJD Calibration 0.0 Bkgd.
 100 PPM Span gas = 100.1 PPM over
 ISO Butylene gas Pipe P/N GP11010
 Lot # QD7503D EFP. Date 3/18/2011

[SV-LFP-1]	Set up @ J24 monitoring wells Self point to 2.0' no soil 1.8' Bgs Rental on cobbles/gravel. Soils wet gravelly sand. PJD screen of Boring 0.0 ppm Bkgd. Sand to 1.05' Bgs. = 0.1 above screen. Bentonite to 0.75' Bgs Back fill with native.
[SV-LFP-2]	J15 Monitoring well C. Luster Hand augered to 2.0' Bgs. water seeps in to 1.9' Bgs will check again 0-0.6' Black silty mud. 0.6-2.0' light gray fine sandy silt. Installed 2nd J15-LFP-2
	Hand augered to 2.0' refusal moved north 1.5' Hand augered to 2.0' Bgs. (refusal) w/ 1/2" lat open hole sift to check in etc PJD 0.0 - 0.1 ppm in boring 0.0 in Bounding Zone

132 Location New Windsor NY Date 5/19/09
Project / Client Army Garrison 1-0145-5
Trew

SY - LFP-4 Breathing Zone 0.0 ppm
Hand augered to 5.2' Bgs PTD in Boring
at 0.1 ppm. Will let open hole screen
for check for water.
0-3.2' Dr gravelly sand. (L:11)
2 Borings @ 5V - LFP-2 Water = 0.5' Bgs
Bore hole reading 0.0 ppm
Breathing zone 0.0 ppm

SY - LFP-5
0-0.9' Br moist grit & s. roots.
0.9-3.6' Gray/Tan moist Silt/1/4" fgs
grades to Gray moist s: 1/4" o/sy
with mottles through out.
Bore hole reading 0.0 ppm
Breathing zone 0.0 ppm

SY - LFP-3
Open hole to 2.8'. Sand to 1.95' Bgs.
install project 2.8'. Sand to 0.7'.
granular Bentonite cement + to 0.0'.
Cement road box in to 0.0'.
Cement Rd Box in 1.0-0.0

SY - LFP-2 water in both borings to 0.5' Bgs.
TJm Schreyer w/NY DEC would like point & moved
to new location. Property issues.

Location New Windsor NY Date 5/19/09
Project / Client Army Garrison 1-0145-5
Trew

133

Location New Windsor NY Date 5/19/09
Project / Client Army Garrison 1-0145-5
Trew

JZ1 V It's all Bgs SR-LFP-6
w/c or
mult. attempts to install 1"
soil test probe to 9-10' Bgs
Set soil test 0.5' x 1' ss probe to
9.5' w/ Jack hammer + JPI. iron
pipe, very hard driving below 5' Bgs.
Lost 1' upper point during first attempt.

Purge SV - LFP-6 at 2000 ml/min
start 17:04 - 17:07

SV - LFP-4

set screen 2.5' - 3.0'
Sand to 2.3' Bent to 2.0
Bentonite Cement + 1.0'.
Cement Rd Box in 1.0-0.0

checked for a new location (as per 11/10 pp)
for SV - LFP-2 and location close to property line.
Could not find a suitable lateral location
because of unclear property boundaries. Wet
sat soils are up close to property boundary

134 Location New Windsor NY Date 5/29/09
 Project / Client Avery Dennison 1-0145-5
 TRC

135 Location New Windsor NY Date 5/20/09
 Project / Client Avery Dennison 1-0145-5
 TRC

SV-LFP-5
 Open boring to 3.8'
 Screen 3.8 - 3.3'
 Sand to 2.8', Granular Bent. 2.6'
 Bentonite/Cement to 10'
 Cement 0.7 - 0.0'
 Fill 0.7 - 1.0'

Purge location	Time
SV-LFP-1	4 minutes w/pur pump
SV-LFP-3	3 min.
SV-LFP-4	4 min
SV-LFP-5	4 min
SV-LFP-6	5 min.

on Site 6:30
 Weather sunny clear 50°
 Calibrate PID
 100 ppm Spn gas = 100 ppm over
 Set up @ J21 to collect summa
 Canister sample PID: 0.0 ppm Breathing
 Canister # Reg H Location Start
 SC416 SC416 J21 6:45
 SV-LFP-6 No vacuum drop after
 45 minutes.
 7:45 (1.0 hrs) Vacuum @ -31" mercury

SV-LFP-3	Cansler # 34424 PID = 0.0 ppm 8:01 Start -6" Hg end 8:08 Stop
SV-LFP-5	Cansler # 96109 8:12 Start -31" Hg end 9:15 Stop

off site 18:45

136 Location New Windsor NY Date 5/20/09
Project / Client Avery Dennison 1-0145-S
TBD

137
Location _____
Date _____
Project / Client _____

J17
[SV-LFP-4] canister # 4169 PTD = 0.0ppm
8:23 Start -34' -6'
9:15 STOP

[SV-LFP-1] (J14) canister # 12025
8:01:30 Start -30" Hg start -6" Hg end
9:10:30 STOP

[SV-LFP-6] @ 9:55 regulator reading
-31" Hg will try different canister

New Canister # 20941
start @ 9:56 -31" start
stop @ 10:09 -31" end
clogged sample tip.

Tried new different Regulator
Canister # 20941 Regulator # 913
start 10:14 -30" Hg
stop 10:24 -30" Hg

off site 11:10

Soil Gas Well Construction Log

pg. 1/1

Project Name: Avery Dennison
 Project Number: 1-0145-5
 Site Location: New Windsor NY

The Johnson Company, Inc.
 100 State Street, Suite 600
 Montpelier, VT 05602
 Tel. (802) 229-4600

Well ID: SV-LFP-1

Field Personnel: TRO

Recorded by: TRO

Permit Number: —

Installation Date: 5/19/09

Driller: TCO

Drilling Method: Hand Auger

Drilling Fluid: —

Fluid Loss During Drilling: —

Ambient PID Reading: 0.0 ppm

Borehole PID Reading: 0.0 ppm

Well Construction Details: (all measurements relative to ground surface)

Riser Pipe

Material: SS, $\frac{1}{8}$ " Tubing

Protective Casing

Material: Rd Box, Concrete

Sandpack

Material: Filter Sand

Slab Thickness: — NA —

Top: 1.05'

Bottom: 1.80'

Material Under Slab: — NA —

Screen

Material: SS mesh

Road Box Seal: Concrete

Top: 1.1'

Bottom: 1.8' BGS

Annular Seal

Material: Hydrated Bentonite

Length: 0.5'

Diameter: 0.5"

Top: 0.75'

Bottom: 1.05'

Secondary Seal

Material: —

Top: —

Bottom: —

Notes: Riser off of Geoprobe Screen - $\frac{1}{8}$ " Tubing to make quick connect

Integrity Testing:

Date Completed:

Injection pressure:

Time	Sampling Rate	Concentration

Tracer Type:

Tracer Grade:

Tracer Gas Detection Meter:

Model:

Serial:

Sampling Details:

Sampler: TCO/TRO

Method: Summa Canister w/1 hr Reg. JCO #: —

Sample ID	Date	Time Started	Time Ended	Summa Canister #	Vacuum at Start	Vacuum at End	COC
SV-LFP-1	5/20/09	8:01:30	9:10:30	12025	-30"	-6"	Air Toxics 10fl

5/19/09

Notes: Set up peristaltic pump to purge vapor point.
 Pump set at ~ 180-200 ml/min purged for 4 minutes.

Soil Gas Well Construction Log

pg. 1/1

Project Name: Avery Dennison
 Project Number: 1-0145-5
 Site Location: New Windsor NY

The Johnson Company, Inc.
 100 State Street, Suite 600
 Montpelier, VT 05602
 Tel. (802) 229-4600

Well ID: SV-LFP-3

Field Personnel: TRo

Recorded by: TRo

Permit Number: —

Installation Date: 5/19/09

Driller: JCo

Drilling Method: Hand Augered

Drilling Fluid: —

Fluid Loss During Drilling: —

Ambient PID Reading: 0.0 ppm

Borehole PID Reading: 0.0 ppm

Well Construction Details: (all measurements relative to ground surface)

Riser Pipe

Material: $\frac{1}{8}$ " SS Tubing

Protective Casing

Material:

Sandpack

Material: Filter Sand

Slab Thickness: — NA —

Top: 1.95'

Bottom: 2.80'

Material Under Slab: — NA —

Screen

Material: SS, mesh

Road Box Seal: Cement

Top: 2.2'

Bottom: 2.8'

Annular Seal

Material: Bentonite

Length: 0.5'

Diameter: $\frac{1}{2}$ "

Top: 0.7'

Bottom: 1.95'

Secondary Seal

Material: —

Top: —

Bottom: —

Notes: SS Geoprobe wire mesh screen to $\frac{1}{8}$ " SS Tubing to male quick connect

Integrity Testing:

Date Completed:

Injection pressure:

Time	Sampling Rate	Concentration

Tracer Type:

Tracer Grade:

Tracer Gas Detection Meter:

Model:

Serial:

Sampling Details:

Sampler: JCo/TRo

Method: Summa Canister 1 hr Reg. JCO #: —

Sample ID	Date	Time Started	Time Ended	Summa Canister #	Vacuum at Start	Vacuum at End	COC
SV-LFP-3	5/20/09	8:01	9:08	34424	-31"	-6"	AirToxics 10f1

Notes: Purged vapor point w/ peristaltic pump set @ ≈ 200 ml/minute for 3 min.

Soil Gas Well Construction Log

pg. 1/1

Project Name: Avery Dennison
 Project Number: 1-0145-5
 Site Location: New Windsor, NY

The Johnson Company, Inc.
 100 State Street, Suite 600
 Montpelier, VT 05602
 Tel. (802) 229-4600

Well ID: SV-LFP-4

Field Personnel: TRO

Recorded by: TRO

Permit Number: —

Installation Date: 5/19/09

Driller: JCO

Drilling Method: Hand Auger

Drilling Fluid: —

Fluid Loss During Drilling: —

Ambient PID Reading: 0.0 ppm

Borehole PID Reading: 0 - 0.1 ppm

Well Construction Details: (all measurements relative to ground surface)

Riser Pipe

Material: $\frac{1}{8}$ " SS Tubing

Protective Casing

Material: Cast Iron Rd. Box

Sandpack

Material: Filter Sand

Slab Thickness: —

Top: 2.3'

Bottom: 3.0'

Material Under Slab: —

Screen

Material: SS wire mesh

Road Box Seal: Concrete

Top: 2.5'

Bottom: 3.0'

TRO 5/19/09

Length: 0.5'

Diameter: $\frac{1}{2}$ "

Annular Seal Material: Cement/Bentonite

Top: 2.0'

Secondary Seal

Material: Cement/Bentonite

Top: 1.0'

Bottom: 2.0'

Notes: SS Geoprobe wire mesh screen to $\frac{1}{8}$ " SS Tubing to make quick connect

Integrity Testing:

Date Completed:

Injection pressure:

Time	Sampling Rate	Concentration

Tracer Type:

Tracer Grade:

Tracer Gas Detection Meter:

Model:

Serial:

Sampling Details:

Sampler: JCO/TRO

Method: Summa Canisters w/ 1hr Reg. JCO #: —

Sample ID	Date	Time Started	Time Ended	Summa Canister #	Vacuum at Start	Vacuum at End	COC
SV-LFP-4	5/20/09	8:23	9:15	4169 TRO 5/20/09	-34"	-6"	Air Toxics 10f1

Notes: Purged Vapor point w/ peristaltic pump
 at a flow rate \approx 180-200 ml/min
 Purged for 4 minutes.

Soil Gas Well Construction Log

pg. 1/1

Project Name: Avery Dennison

Project Number: 1-0145-15

Site Location: New Windsor NY

The Johnson Company, Inc.

100 State Street, Suite 600

Montpelier, VT 05602

Tel. (802) 229-4600

Well ID: SV-LFP-5

Field Personnel: TRO

Recorded by: TRO

Permit Number: —

Installation Date: 5/19/09

Driller: JCO

Drilling Method: Hand Auger

Drilling Fluid: —

Fluid Loss During Drilling: —

Ambient PID Reading: 0.0 ppm

Borehole PID Reading: 0.0 ppm

Well Construction Details: (all measurements relative to ground surface)

Riser Pipe

Material: $\frac{1}{8}$ " SS Tubing

Sandpack

Material: Filter Sand

Top: 2.8'

Bottom: 3.8'

Screen

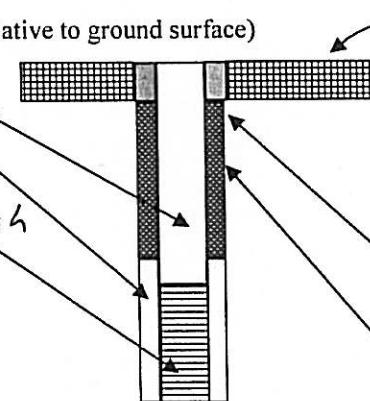
Material: SS wire mesh

Top: 3.3'

Bottom: 3.8'

Length: 0.5'

Diameter: $\frac{1}{2}$ "



Protective Casing

Material: Cast Iron Rd. Box

Slab Thickness: —

Material Under Slab: —

Road Box Seal: cement

Annular Seal

Material: Dry Bentonite

Top: 2.6'

Bottom: 2.8'

Secondary Seal

Material: Bentonite/Cement

Top: 1.0

Bottom: 2.6'

Notes: SS Geoprobe wire mesh screen to $\frac{1}{8}$ " SSTubing to male quick connect.

Integrity Testing:

Date Completed:

Injection pressure:

Time	Sampling Rate	Concentration

Tracer Type:

Tracer Grade:

Tracer Gas Detection Meter:

Model:

Serial:

Sampling Details:

Sampler: JCO/TRO

Method: Summa Canisters JCO #: _
w/1 hr res.

Sample ID	Date	Time Started	Time Ended	Summa Canister #	Vacuum at Start	Vacuum at End	COC
SV-LFP-5	5/20/09	8:12	9:15	96109	-31"	-6"	AirToxics 10 ⁶

Notes: Purged Vapor point w/ peristaltic pump

Pump set @ ≈ 180-200 ml/min. purge time 4 minutes

Soil Gas Well Construction Log

pg. 1/1

Project Name: Avery Dennison

Project Number: 1-0145-3

Site Location: New Windsor NY

The Johnson Company, Inc.

100 State Street, Suite 600

Montpelier, VT 05602

Tel. (802) 229-4600

Well ID: SV-LFP-6

Field Personnel: TRC

Recorded by: TRC

Permit Number: —

Installation Date: 5/19/09

Driller: TRC

Drilling Method: Jack hammer
Hand Auger

Drilling Fluid: —

Fluid Loss During Drilling: —

Ambient PID Reading: 0.0 ppm

Borehole PID Reading: 0.0 ppm

Well Construction Details: (all measurements relative to ground surface)

Riser Pipe

Material: BL iron pipe

Sandpack

Material: Teflon tubing

Top: —

Bottom: —

Screen

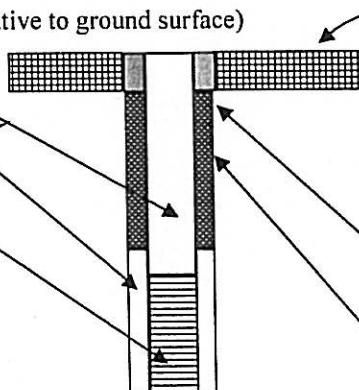
Material: Solinst

Top: 9.0'

Bottom: 9.5'

Length: 0.5'

Diameter: 1.0"



Protective Casing

Material: Cast Iron Box

Slab Thickness: —

Material Under Slab: —

Road Box Seal: Cement

Annular Seal Material: Bentonite

Top: — Bottom: —

Secondary Seal Material: —

Top: — Bottom: —

Notes: Probe Solinst screen on BL Iron Pipe to = 9.5' w/Jackhammer

Integrity Testing:

Date Completed: Injection pressure: —

Tracer Type: Tracer Grade: —

Tracer Gas Detection Meter: —

Model: —

Serial: —

Time	Sampling Rate	Concentration

Sampling Details:

Sampler: TRC

Method: —

JCO #: —

Sample ID	Date	Time Started	Time Ended	Summa Canister #	Vacuum at Start	Vacuum at End	COC
SV-LFP-6	5/20/09	6:45	7:45	SC416	-31"	-31"	No Sample
No	Sample	Collector					

Clogged Tip. No Sample collected

Notes:

Purged vapor point w/ peristaltic pump at a flow rate ≈ 180-200 ml/min.
for ≈ 5 minutes to purge vapor point

Air Toxics LTD.

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

The Johnson Company, Inc.
100 State Street, Suite 600
Montpelier, VT 05602

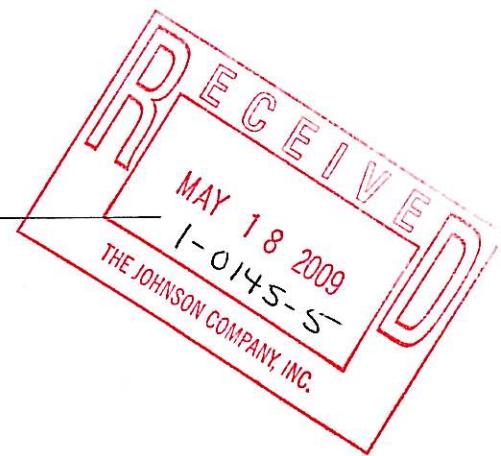
Phone: (802) 229-4600
Fax: (802) 229-5876
www.johnsonco.com

Date: 5/16/2009 Time: 1:14 AM To: Scheduler @ 18022295876
 Premier Locating Page: 1-001

PREMIER

Utility Services

Date: 05/15/2009 20:53:54



To: THE JOHNSON COMPANY
 Fax: (802)-229-5876 ext.
 Attn: TOM OSBORNE

We are responding to your request to locate our facilities in the area specified on
 Ticket#: 514915506800
 Street: MYRTLE AVE
 Town: NEW WINDSOR /T
 Remarks : AERIAL CATV
 The described work area is CLEARED for TWCBL-HUDSON VALLEY

We are responding to your request to locate our facilities in the area specified on
 Ticket#: 514915506500
 Street: FOLEY AVE
 Town: NEW WINDSOR /T
 Remarks : NO CATV PRESENCE
 The described work area is CLEARED for TWCBL-HUDSON VALLEY

We are responding to your request to locate our facilities in the area specified on
 Ticket#: 514915506600
 Street: CHERRY AVE
 Town: NEW WINDSOR /T
 Remarks : NO CATV PRESENCE
 The described work area is CLEARED for TWCBL-HUDSON VALLEY

If you have any questions regarding this report, please call (800) 262-8600. Thank you.

Premier Utility Services

**Please note: There may be other Utilities or private facilities present in the area owned by
 the Property Owner. This applies to all the above tickets.**

*****Private Property Locates Available Upon Request*****

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on

Ticket#: 05149-155-065-00

Street: FOLEY AVE

Town: NEW WINDSOR VT

Remarks: GAS MARKED TO E.O.M. ON FOLEY INCLUDING SVC'S



The described work area is:

CLEARED for: CHG / SOUTH - ELEC
MARKED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050 Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on
Ticket#: 05149-155-066-00

Street: CHERRY AVE
Town: NEW WINDSOR VT

Remarks:

The described work area is:

CLEARED for: CHG / SOUTH - ELEC
CLEARED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050 Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on

Ticket#: 05149-155-067-00

Street: CHERRY AVE

Town: NEW WINDSOR VT

Remarks:

The described work area is:

CLEARED for: CHG / SOUTH - ELEC

CLEARED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050 Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on

Ticket# 05149-155-068-00

Street: MYRTLE AVE

Town: NEW WINDSOR VT

Remarks: GAS MARKED TO E.O.M. ON FOLEY INCLUDING SVC'S

The described work area is:

CLEARED for: CHG / SOUTH - ELEC
MARKED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050. Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on

Ticket#: 05149-155-069-00

Street: CHERRY AVE

Town: NEW WINDSOR VT

Remarks:

The described work area is:

CLEARED for: CHG / SOUTH - ELEC

CLEARED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050 Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

ProTek Locating, Inc.

Utility Locating Solutions

To: THE JOHNSON COMPANY
Attn: TOM OSBORNE
Fax: (802)-229-5876 ext.

We are responding to your request to locate our facilities in the area specified on

Ticket# 05149-155-070-00

Street: KORAN AVE

Town: NEW WINDSOR VT

Remarks:

The described work area is:

CLEARED for: CHG / SOUTH - ELEC

CLEARED for: CHG / SOUTH - GAS

If you have any questions regarding this report, please call (718) 472-2304 or (845) 462-0050 Thank you.

Protek Locating, Inc .

Please note: There may be other Utilities or private facilities present in the area owned by the Property Owner.

*****Private Property Locates Available Upon Request*****

www.proteklocating.com

APPENDIX B

LABORATORY RESULTS

APPENDIX B:

**Laboratory Summary Report and Comprehensive Validation Package for
Workorder #0905582**

7/20/2009

Mr. Chris Turner
The Johnson Company
100 State Street
Suite 600
Montpelier VT 05602

Project Name: Avery Dennison NY

Project #: 1-0145-5
Workorder #: 0905582R1

Dear Mr. Chris Turner

The following report includes the data for the above referenced project for sample(s) received on 5/26/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

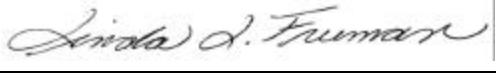
WORK ORDER #: 0905582R1

Work Order Summary

CLIENT:	Mr. Chris Turner The Johnson Company 100 State Street Suite 600 Montpelier, VT 05602	BILL TO:	Accounts Payable The Johnson Company 100 State Street Montpelier, VT 05602
PHONE:	603.232.2974	P.O. #	
FAX:	802.229.5876	PROJECT #	1-0145-5 Avery Dennison NY
DATE RECEIVED:	05/26/2009	CONTACT:	Bryanna Langley
DATE COMPLETED:	06/04/2009		
DATE REISSUED:	07/20/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	Trip Blank	Modified TO-15	4.8 psi	5 psi
02A	SV-LFP-1	Modified TO-15	4.0 "Hg	5 psi
03A	SV-LFP-3	Modified TO-15	3.5 "Hg	5 psi
04A	SV-LFP-4	Modified TO-15	2.0 "Hg	5 psi
05A	SV-LFP-5	Modified TO-15	3.5 "Hg	5 psi
05AA	SV-LFP-5 Lab Duplicate	Modified TO-15	3.5 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA

CERTIFIED BY:



DATE: 07/20/09

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
Modified TO-15
The Johnson Company
Workorder# 0905582R1**

Five 6 Liter Summa Canister (100% Certified) samples were received on May 26, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	TO-15	ATL Modifications
ICAL %RSD acceptance criteria	+/- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+/- 30% Difference	</= 30% Difference with four allowed out up to </=40%; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. A signature and date were not provided.

Analytical Notes

There were no analytical discrepancies.

THE WORK ORDER WAS REISSUED PER CLIENT REQUEST ON JULY 20, 2009 TO ADD THE FOLLOWING INFORMATION TO THE NARRATIVE:

THE COLUMN USED FOR ANALYSIS WAS A 60M COLUMN WITH A FILM THICKNESS OF 0.18 UM.

ALSO, AS PART OF THIS REISSUE, DATA FILES INCLUDED IN THE VALIDATION PACKAGE WERE UPDATED TO DISPLAY THE PROPER ION RATIOS USED FOR IDENTIFICATION OF THE COMPOUNDS.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Trip Blank

Lab ID#: 0905582R1-01A

No Detections Were Found.

Client Sample ID: SV-LFP-1

Lab ID#: 0905582R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.16	0.72	0.76	3.5
Trichloroethene	0.16	1.1	0.83	5.8
Toluene	0.16	43	0.58	160
Tetrachloroethene	0.16	1.2	1.0	8.0

Client Sample ID: SV-LFP-3

Lab ID#: 0905582R1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.15	0.20	0.74	1.0
Trichloroethene	0.15	0.26	0.82	1.4
Toluene	0.15	20	0.57	77
Tetrachloroethene	0.15	0.24	1.0	1.6

Client Sample ID: SV-LFP-4

Lab ID#: 0905582R1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.14	0.56	0.70	2.7
1,1,1-Trichloroethane	0.14	0.27	0.78	1.5
Toluene	0.14	2.6	0.54	9.7

Client Sample ID: SV-LFP-5

Lab ID#: 0905582R1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.15	4.2	0.57	16



Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-5 Lab Duplicate

Lab ID#: 0905582R1-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.15	4.0	0.57	15



Client Sample ID: Trip Blank

Lab ID#: 0905582R1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060113	Date of Collection:	5/13/09 1/1/1990	
Dil. Factor:	1.00	Date of Analysis:	6/1/09 05:09 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



Client Sample ID: SV-LFP-1

Lab ID#: 0905582R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060114	Date of Collection: 5/20/09 8:01:00 AM		
Dil. Factor:	1.55	Date of Analysis: 6/1/09 05:52 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.61	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Chloroform	0.16	0.72	0.76	3.5
1,1,1-Trichloroethane	0.16	Not Detected	0.84	Not Detected
Trichloroethene	0.16	1.1	0.83	5.8
Bromodichloromethane	0.16	Not Detected	1.0	Not Detected
Toluene	0.16	43	0.58	160
Tetrachloroethene	0.16	1.2	1.0	8.0

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	106	70-130



Client Sample ID: SV-LFP-3

Lab ID#: 0905582R1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060115	Date of Collection: 5/20/09 8:01:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 06:29 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	0.20	0.74	1.0
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	0.26	0.82	1.4
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	20	0.57	77
Tetrachloroethene	0.15	0.24	1.0	1.6

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130



Client Sample ID: SV-LFP-4

Lab ID#: 0905582R1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060116	Date of Collection: 5/20/09 8:23:00 AM		
Dil. Factor:	1.44	Date of Analysis: 6/1/09 07:10 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.14	Not Detected	0.37	Not Detected
Freon 113	0.14	Not Detected	1.1	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.14	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
Chloroform	0.14	0.56	0.70	2.7
1,1,1-Trichloroethane	0.14	0.27	0.78	1.5
Trichloroethene	0.14	Not Detected	0.77	Not Detected
Bromodichloromethane	0.14	Not Detected	0.96	Not Detected
Toluene	0.14	2.6	0.54	9.7
Tetrachloroethene	0.14	Not Detected	0.98	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	109	70-130



Client Sample ID: SV-LFP-5

Lab ID#: 0905582R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060117	Date of Collection: 5/20/09 8:12:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 07:54 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	Not Detected	0.74	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	4.2	0.57	16
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	105	70-130



Client Sample ID: SV-LFP-5 Lab Duplicate

Lab ID#: 0905582R1-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060118	Date of Collection: 5/20/09 8:12:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 09:38 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	Not Detected	0.74	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	4.0	0.57	15
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	110	70-130



Client Sample ID: Lab Blank

Lab ID#: 0905582R1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060107	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	6/1/09 12:28 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	105	70-130



Client Sample ID: CCV

Lab ID#: 0905582R1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/1/09 09:18 AM

Compound	%Recovery
Vinyl Chloride	94
Freon 113	86
1,1-Dichloroethene	97
1,1-Dichloroethane	98
cis-1,2-Dichloroethene	99
Chloroform	94
1,1,1-Trichloroethane	104
Trichloroethene	98
Bromodichloromethane	105
Toluene	96
Tetrachloroethylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	114	70-130



Client Sample ID: LCS

Lab ID#: 0905582R1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/1/09 10:10 AM

Compound	%Recovery
Vinyl Chloride	92
Freon 113	93
1,1-Dichloroethene	105
1,1-Dichloroethane	99
cis-1,2-Dichloroethene	97
Chloroform	94
1,1,1-Trichloroethane	104
Trichloroethene	99
Bromodichloromethane	105
Toluene	101
Tetrachloroethylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	110	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of every kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of sample. D.O.T. Hotline (800) 467-4922

Project Manager Glen Kite

Collected by: (Print and Sign) T. Osborne

Company The Johnson Co.

Email _____

Address 120 State St. Suite 600

City Montpelier

State VT Zip 05630

Phone (802) 229-4600

Fax (802) 229-5876

Project Info:	Turn Around Time:		Lab Use Only Pressurized by:	
	P.O. #	Project #	Normal	Date:
Project Name	<u>Every Dominion NY</u>		Rush	Pressurization Gas:
				N ₂ He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final
OFA-Trip Blank	33785	5/13-09	-	-	TD-15	29.5"	5.0"	-	-
OFA-SV-LFP-1	12025	5-20-09	8:01	-	-	-30"	-6"	-	-
OFA-SV-LFP-3	34424	5/20/09	8:01	-	-	-31"	-6"	-	-
OFA-SV-LFP-4	4169	5/20/09	8:23	-	-	-34"	-6"	-	-
OFA-SV-LFP-5	96109	5/20/09	8:42	-	TO-15	-31"	-6"	-	-

Relinquished by: (signature) Date/Time

Received by: (signature)
Eric J. Jr. 5/26/09 09:20

Notes:
Shipped FedEx overnight

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Lab: Shipper Name Air Bell

Temp (°C)

Condition

Custody Seals intact?

Work Order #

Lab Use Only ✓

Temp (°C) 24

Condition Good

Custody Seals Intact? Yes

Work Order # 0905582

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1



Electronic Comprehensive Validation Package (eCVP)

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 0905582R1

	Page Nos.	
	From	To
1. Work Order Cover Page & Laboratory Narrative		
a. <u>Lumen Validation Report</u>	1	4
2. Sample Results and Raw Data (Organized by Sample)		
a. ATL Sample Results Form	--	--
b. Target Compound Raw Data	5	60
-Internal Standard Area and Retention Time Summary		
-Surrogate Recovery Summary (If Applicable)		
-Chromatogram(s) and Ion Profiles (If Applicable)		
3. QC Results and Raw Data		
a. Method Blank (Results+ Raw Data)	61	67
b. Surrogate Recover Summary Form (If Applicable)	68	68
c. Internal Standard Summary Form (If Applicable)	69	69
d. Duplicate Results Summary Sheet	70	70
e. Matrix Spike/Matrix Spike Duplicate (Results + Raw Data)	--	--
f. Initial Calibration Data (Summary Sheet + Raw Data)	71	183
g. MDL Study (If Applicable)	--	--
h. Continuing Calibration Verification Data (Summary Sheet)	184	198
i. Second Source LCS(Summary + Raw Data)	199	286
j. Extraction Logs	--	--
k. Instrument Run Logs/Software Verification	287	288
l. GC/MS Tune (Results + Raw Data)	289	297
4. Shipping/Receiving Documents		
a. Login Receipt Summary Sheet	298	299
b. Chain-of-Custody Records	300	300
c. Sample Log-In Sheet	301	301
d. Misc Shipping/Receiving Records (list of individual records) <u>Sample Receipt Discrepancy Report</u>	302	304
5. Other Records (describe or list)		
a. <u>Manual Spectral Defense</u>	--	--
b. <u>Manual Integrations</u>	--	--
c. <u>Manual Calculations</u>	--	--
d. <u>Canister Dilution Factors</u>	305	307
e. <u>Laboratory Corrective Action Request</u>	--	--
f. <u>CAS Number Reference</u>	308	308
g. <u>Variance Table</u>	--	--
h. <u>Canister Certification</u>	309	315
i. <u>Data Review Check Sheet</u>	316	317

Comments:

Completed by:

Kara McKiernan

(Signature)

Kara McKiernan / Document Control

7/21/09

(Print Name & Title)

(Date)

WORK ORDER #: 0905582R1

Work Order Summary

CLIENT:	Mr. Chris Turner The Johnson Company 100 State Street Suite 600 Montpelier, VT 05602	BILL TO:	Accounts Payable The Johnson Company 100 State Street Montpelier, VT 05602	
PHONE:	603.232.2974	P.O. #		
FAX:	802.229.5876	PROJECT #	1-0145-5 Avery Dennison NY	
DATE RECEIVED:	05/26/2009	CONTACT:	Bryanna Langley	
DATE COMPLETED:	06/04/2009			
DATE REISSUED:	07/20/2009			
<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	Trip Blank	Modified TO-15	4.8 psi	5 psi
02A	SV-LFP-1	Modified TO-15	4.0 "Hg	5 psi
03A	SV-LFP-3	Modified TO-15	3.5 "Hg	5 psi
04A	SV-LFP-4	Modified TO-15	2.0 "Hg	5 psi
05A	SV-LFP-5	Modified TO-15	3.5 "Hg	5 psi
05AA	SV-LFP-5 Lab Duplicate	Modified TO-15	3.5 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA

CERTIFIED BY:



DATE: 07/20/09

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE
Modified TO-15
The Johnson Company
Workorder# 0905582R1**

Five 6 Liter Summa Canister (100% Certified) samples were received on May 26, 2009. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	TO-15	ATL Modifications
ICAL %RSD acceptance criteria	+/- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+/- 30% Difference	</= 30% Difference with four allowed out up to </=40%; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

The Chain of Custody (COC) was not relinquished properly. A signature and date were not provided.

Analytical Notes

There were no analytical discrepancies.

THE WORK ORDER WAS REISSUED PER CLIENT REQUEST ON JULY 20, 2009 TO ADD THE FOLLOWING INFORMATION TO THE NARRATIVE:

THE COLUMN USED FOR ANALYSIS WAS A 60M COLUMN WITH A FILM THICKNESS OF 0.18 UM.

ALSO, AS PART OF THIS REISSUE, DATA FILES INCLUDED IN THE VALIDATION PACKAGE WERE UPDATED TO DISPLAY THE PROPER ION RATIOS USED FOR IDENTIFICATION OF THE COMPOUNDS.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample		Sample Extract		
					Holding Time (Days)	Analyzed	Date Analyzed	Holding Time (Days)	Sample Condition
Trip Blank	0905582R1-01A	5/13/2009	5/26/2009	NA	19	6/ 1/2009	NA		Good
SV-LFP-1	0905582R1-02A	5/20/2009	5/26/2009	NA	12	6/ 1/2009	NA		Good
SV-LFP-3	0905582R1-03A	5/20/2009	5/26/2009	NA	12	6/ 1/2009	NA		Good
SV-LFP-4	0905582R1-04A	5/20/2009	5/26/2009	NA	12	6/ 1/2009	NA		Good
SV-LFP-5	0905582R1-05A	5/20/2009	5/26/2009	NA	12	6/ 1/2009	NA		Good
SV-LFP-5 Lab Duplicate	0905582R1-05AA	5/20/2009	5/26/2009	NA	12	6/ 1/2009	NA		Good
Lab Blank	0905582R1-06A	NA	NA	NA	NA	6/ 1/2009	NA		Good
CCV	0905582R1-07A	NA	NA	NA	NA	6/ 1/2009	NA		Good
LCS	0905582R1-08A	NA	NA	NA	NA	6/ 1/2009	NA		Good

Sample Results and Raw Data



Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Trip Blank

Lab ID#: 0905582R1-01A

No Detections Were Found.



Client Sample ID: Trip Blank

Lab ID#: 0905582R1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060113	Date of Collection:	5/13/09 1/1/1990	
Dil. Factor:	1.00	Date of Analysis:	6/1/09 05:09 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060113.d

Lab Smp Id: 0905582-01A

Inj Date : 01-JUN-2009 17:09

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #33785

Misc Info : 4.8psi-->4.8psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.566 13.535 (1.000) 130 212442 10.0000 80.00- 120.00 100.00
 13.566 13.535 (1.000) 128 160514 48.68- 108.68 75.56
 13.535 13.535 (1.000) 49 258814 95.19- 155.19 121.83

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 866471 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 127572 0.00- 44.37 14.72

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1034774 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 494220 18.45- 78.45 47.76

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.055) 65 284991 9.92671 9.927 80.00- 120.00 100.00
 14.313 14.313 (1.055) 67 133629 23.75- 83.75 46.89

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 818708 9.76504 9.765 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 83500 0.00- 40.00 10.20

CONCENTRATIONS
ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	547962		37.97-	97.97	66.93
--------	--------	---------	-----	--------	--	--------	-------	-------

\$ 77 Bromofluorobenzene CAS #: 460-00-4

20.535	20.509	(1.078)	174	633121	9.25533	9.255	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	701734		75.52-	135.52	110.84	
20.535	20.535	(1.078)	176	623107		65.11-	125.11	98.42	

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060113.d
Lab Smp Id: 0905582-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 4.8psi-->4.8psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	212442	-6.45
52 1,4-Difluorobenze	914413	548648	1280178	866471	-5.24
68 Chlorobenzene-d5	1165555	699333	1631777	1034774	-11.22

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.57	0.23
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

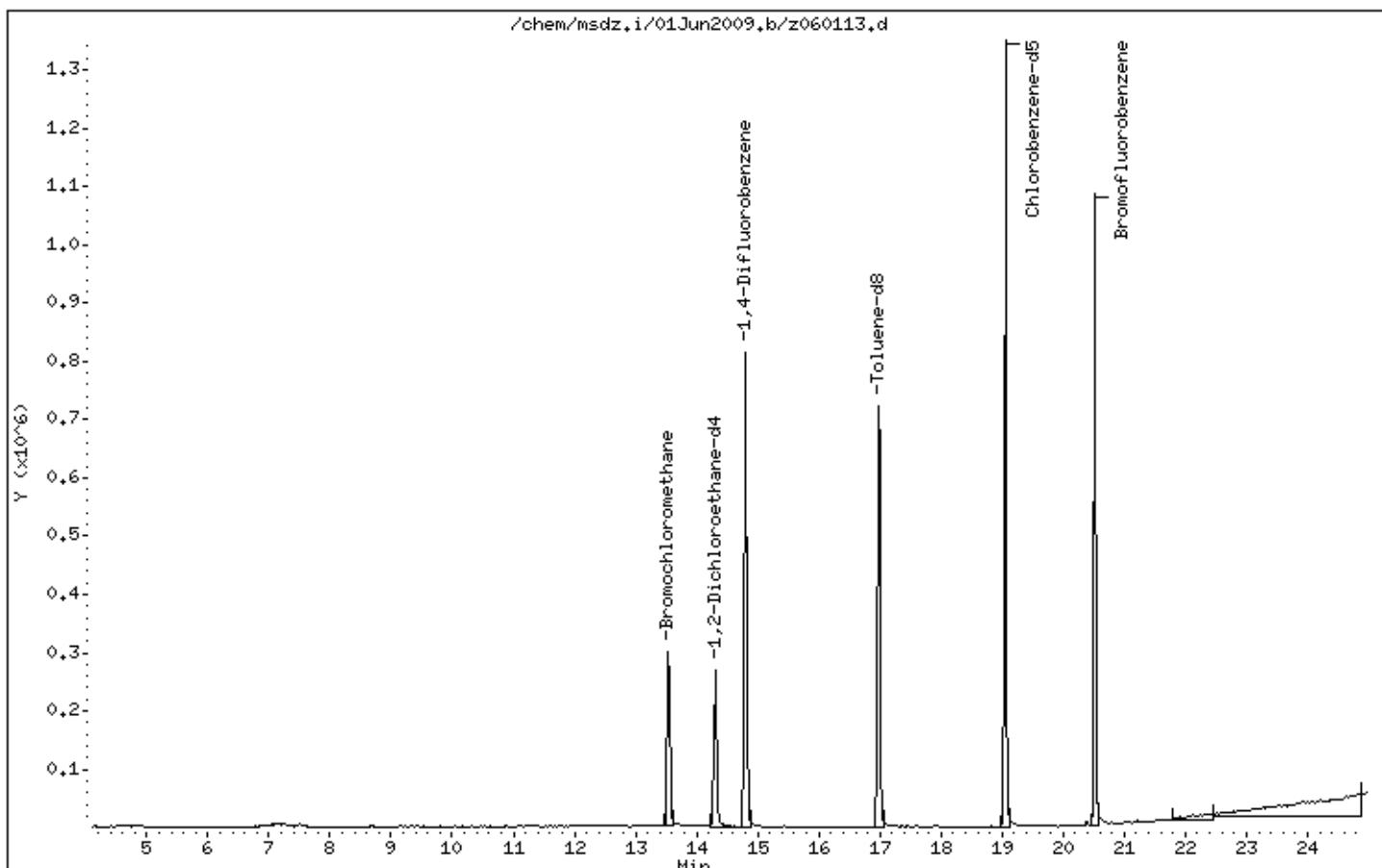
Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-01A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 4.8psi-->4.8psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.927	99.27	70-130
\$ 59 Toluene-d8	10.000	9.765	97.65	70-130
\$ 77 Bromofluorobenzene	10.000	9.255	92.55	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060113.d
Date : 01-JUN-2009 17:09
Client ID:
Sample Info: 500mL #33785

Instrument: msdz.i
Operator: kr
Column diameter: 0.32

Column phase: RTx-624





Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-1

Lab ID#: 0905582R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.16	0.72	0.76	3.5
Trichloroethene	0.16	1.1	0.83	5.8
Toluene	0.16	43	0.58	160
Tetrachloroethene	0.16	1.2	1.0	8.0



Client Sample ID: SV-LFP-1

Lab ID#: 0905582R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060114	Date of Collection: 5/20/09 8:01:00 AM		
Dil. Factor:	1.55	Date of Analysis: 6/1/09 05:52 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
Freon 113	0.16	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.61	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Chloroform	0.16	0.72	0.76	3.5
1,1,1-Trichloroethane	0.16	Not Detected	0.84	Not Detected
Trichloroethene	0.16	1.1	0.83	5.8
Bromodichloromethane	0.16	Not Detected	1.0	Not Detected
Toluene	0.16	43	0.58	160
Tetrachloroethene	0.16	1.2	1.0	8.0

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	106	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060114.d

Lab Smp Id: 0905582-02A

Inj Date : 01-JUN-2009 17:52

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #12025

Misc Info : 4.0 "Hg-->5psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.55000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 229837 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 170161 48.68- 108.68 74.04
 13.535 13.535 (1.000) 49 266631 95.19- 155.19 116.01

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 913345 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 130309 0.00- 44.37 14.27

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1149362 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 541110 18.45- 78.45 47.08

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 296975 9.56125 9.561 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 142765 23.75- 83.75 48.07

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 880003 9.95745 9.957 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 92786 0.00- 40.00 10.54

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	609003		37.97-	97.97	69.20
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\$ 77 Bromofluorobenzene

20.535	20.509	(1.078)	174	808722	10.6437	10.644	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	900039			75.52-	135.52	111.29
20.535	20.535	(1.078)	176	774617			65.11-	125.11	95.78

40 Chloroform

13.627	13.627	(1.007)	83	38530	0.46394	0.7191	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	23638			36.03-	96.03	61.35

53 Trichloroethene

15.164	15.136	(1.024)	130	43087	0.69017	1.070	80.00-	120.00	100.00
15.164	15.136	(1.024)	95	34298			57.99-	117.99	79.60
15.164	15.136	(1.024)	97	24108			26.05-	86.05	55.95

60 Toluene

17.086	17.086	(1.154)	91	4135690	28.0304	43.447	80.00-	120.00	100.00
17.086	17.086	(1.154)	92	2469293			29.72-	89.72	59.71

63 Tetrachloroethene

17.857	17.857	(0.937)	166	72702	0.75669	1.173	80.00-	120.00	100.00
17.857	17.857	(0.937)	129	47226			38.22-	98.22	64.96
17.857	17.857	(0.937)	131	45321			36.62-	96.62	62.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060114.d
Lab Smp Id: 0905582-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 4.0 "Hg-->5psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	229837	1.21
52 1,4-Difluorobenze	914413	548648	1280178	913345	-0.12
68 Chlorobenzene-d5	1165555	699333	1631777	1149362	-1.39

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

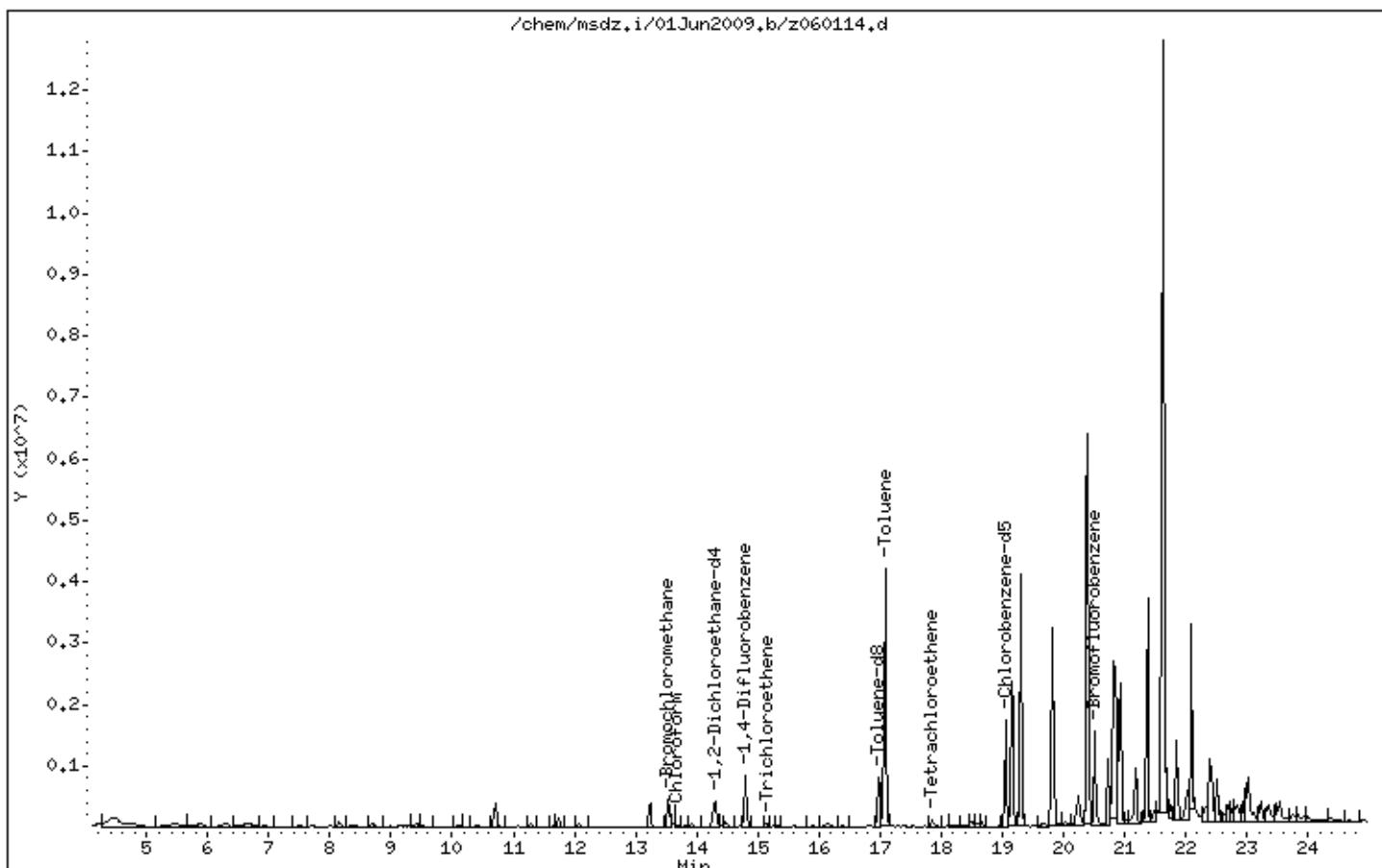
Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-02A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 4.0 "Hg-->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.561	95.61	70-130
\$ 59 Toluene-d8	10.000	9.957	99.57	70-130
\$ 77 Bromofluorobenzene	10.000	10.644	106.44	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060114.d
Date : 01-JUN-2009 17:52
Client ID:
Sample Info: 500mL #12025

Instrument: msdz.i
Operator: kr
Column phase: RTx-624
Column diameter: 0.32

Page 1



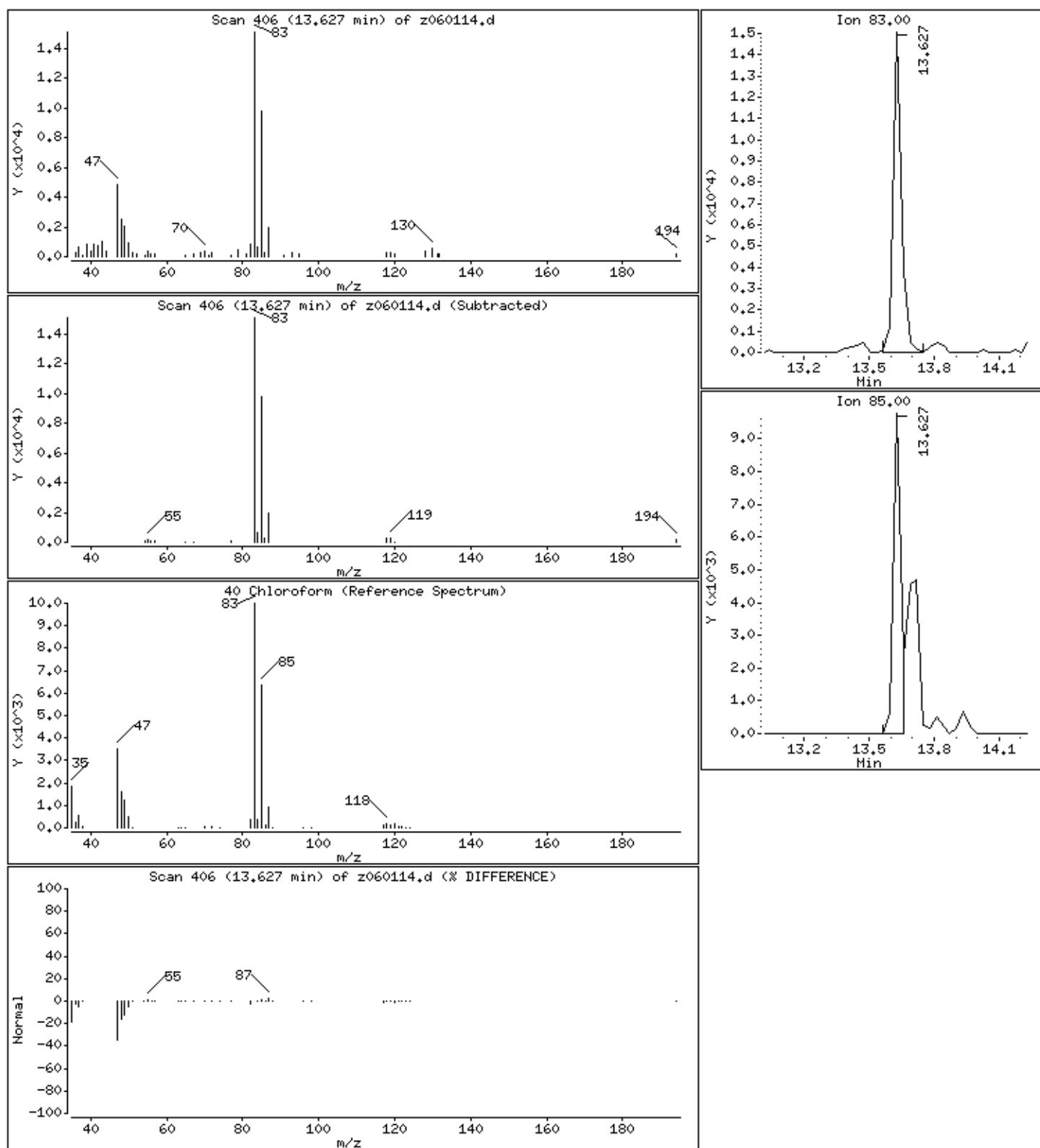
Data File: /chem/msdz.i/01Jun2009.b/z060114.d
Date : 01-JUN-2009 17:52
Client ID:
Sample Info: 500mL #12025

Instrument: msdz.i
Operator: kr
Column phase: RTx-624
Column diameter: 0.32

Page 2

40 Chloroform

Concentration: 0.7191 PPBV



Date : 01-JUN-2009 17:52

Client ID:

Instrument: msdz.i

Sample Info: 500mL #12025

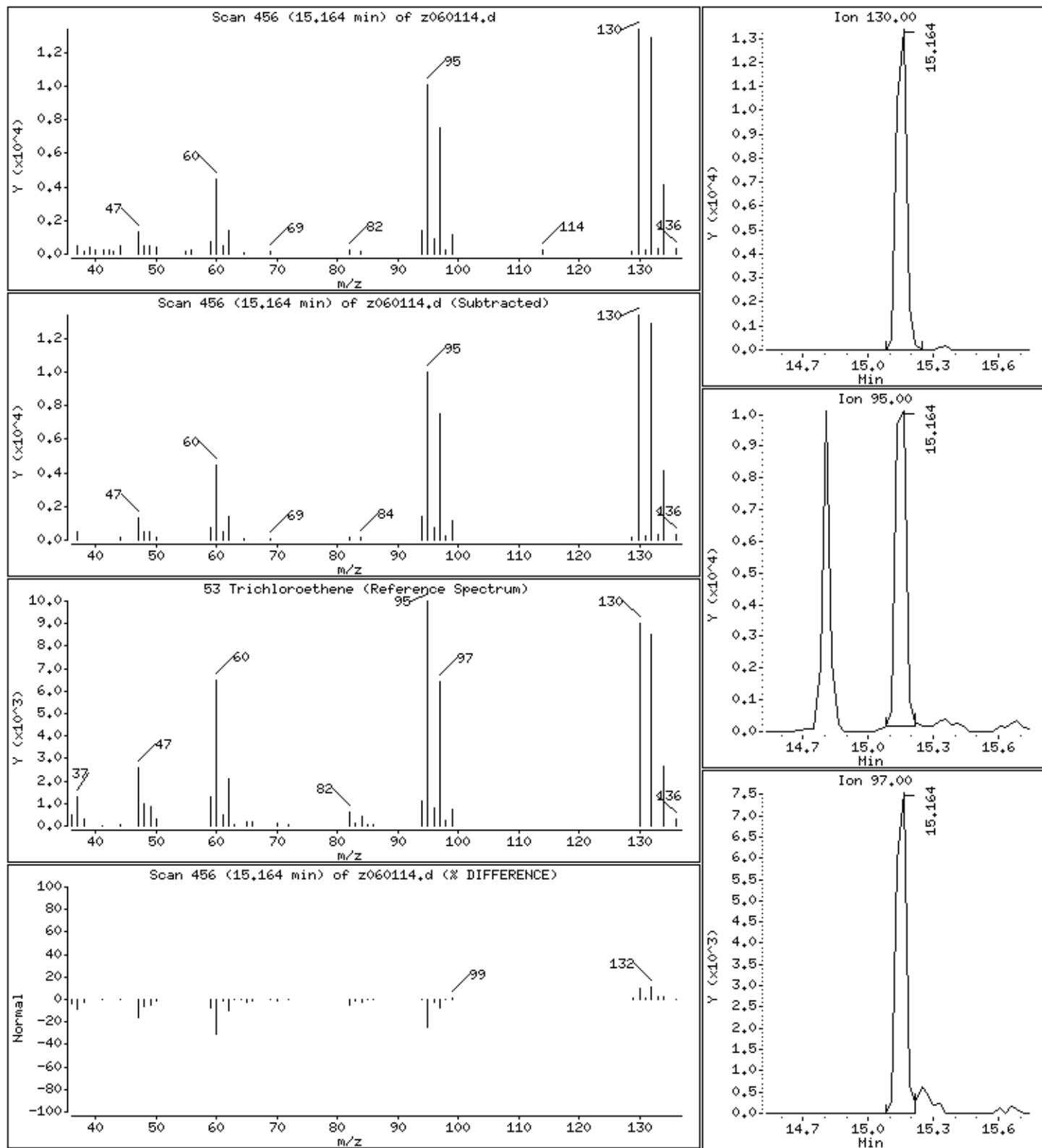
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

53 Trichloroethene

Concentration: 1.070 PPBV



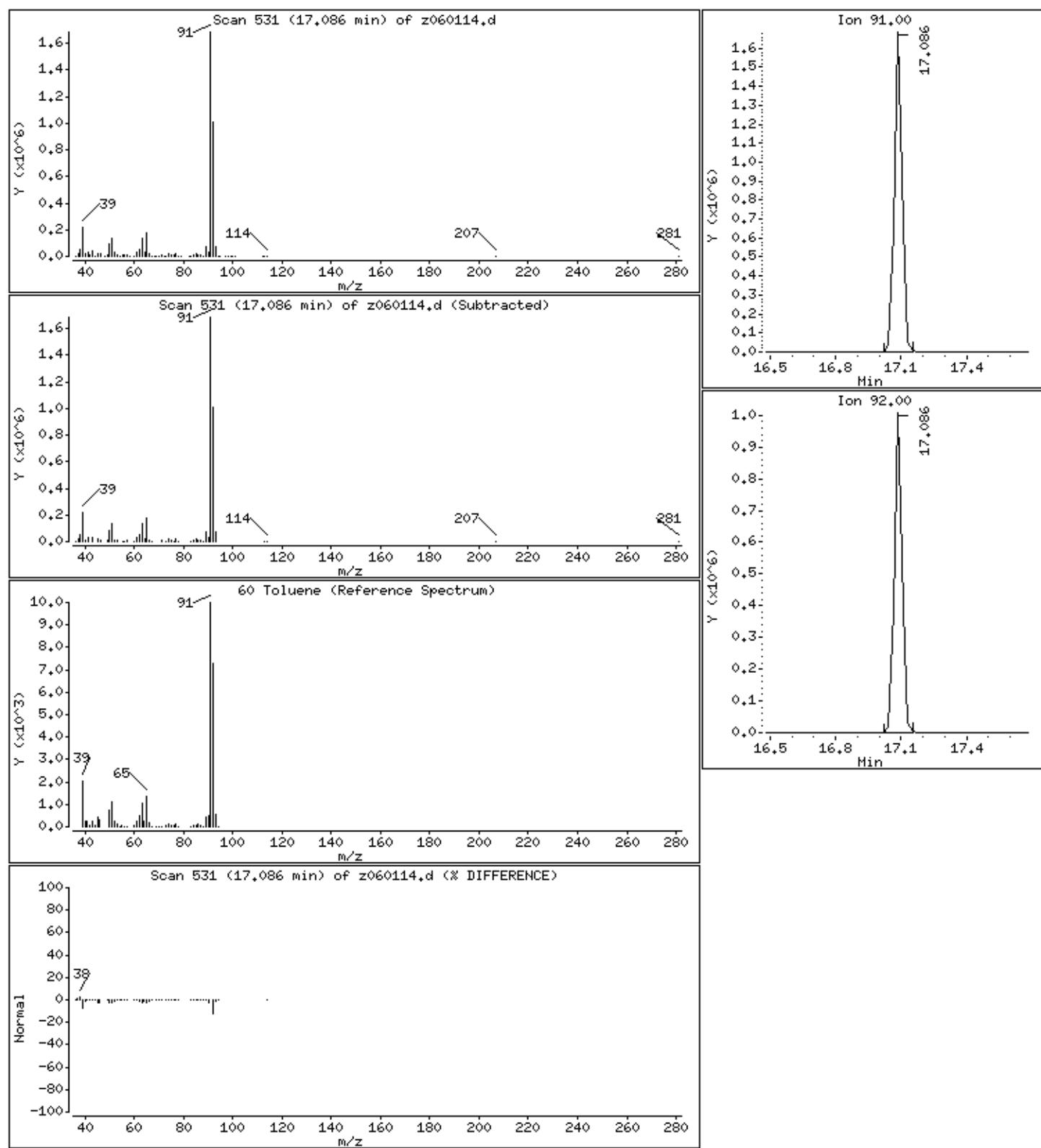
Data File: /chem/msdz.i/01Jun2009.b/z060114.d
Date : 01-JUN-2009 17:52
Client ID:
Sample Info: 500mL #12025

Instrument: msdz.i
Operator: kr
Column phase: RTx-624
Column diameter: 0.32

Page 4

60 Toluene

Concentration: 43.447 PPBV



Date : 01-JUN-2009 17:52

Client ID:

Instrument: msdz.i

Sample Info: 500mL #12025

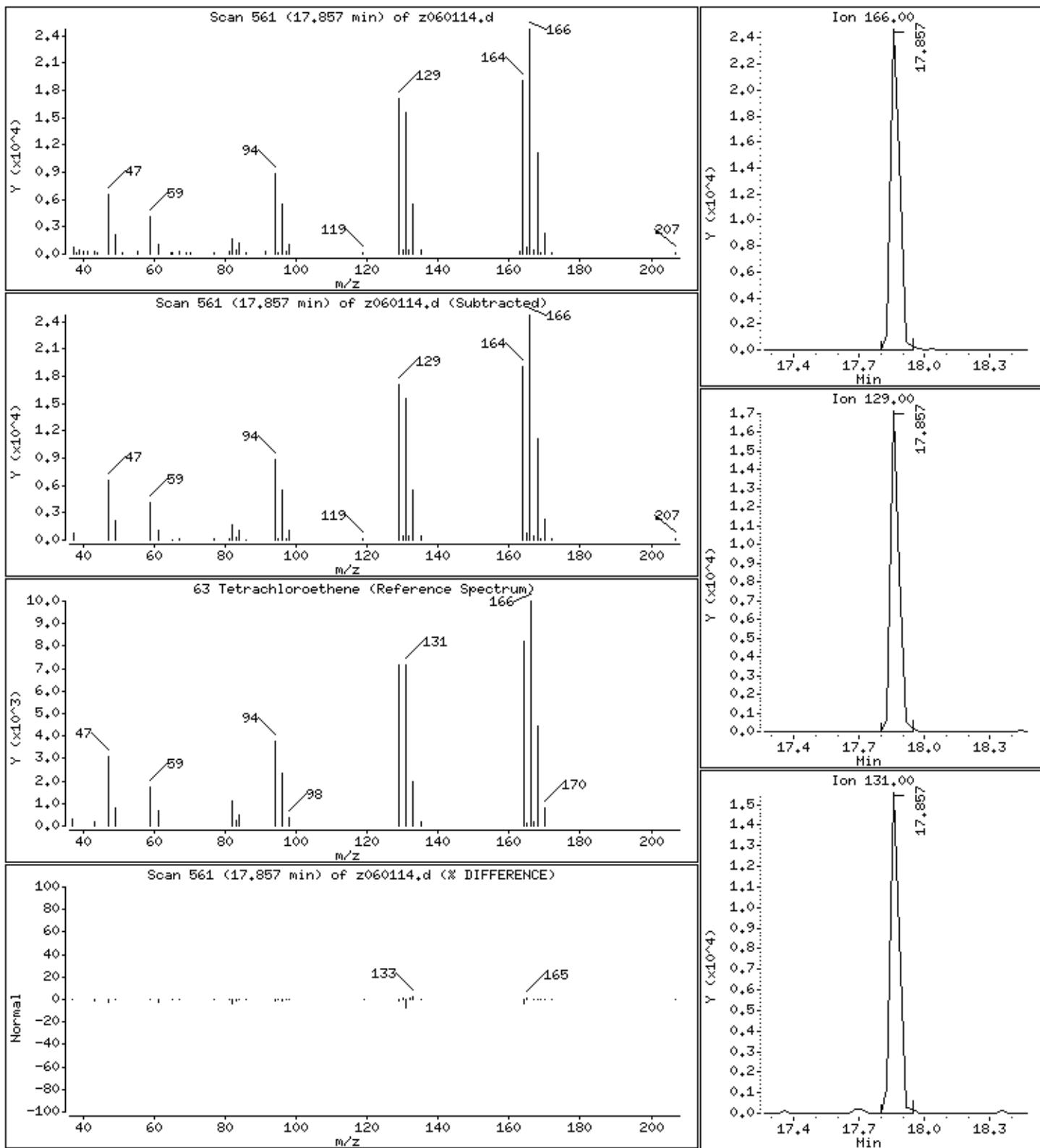
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

63 Tetrachloroethene

Concentration: 1,173 PPBV





Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-3

Lab ID#: 0905582R1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.15	0.20	0.74	1.0
Trichloroethene	0.15	0.26	0.82	1.4
Toluene	0.15	20	0.57	77
Tetrachloroethene	0.15	0.24	1.0	1.6



Client Sample ID: SV-LFP-3

Lab ID#: 0905582R1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060115	Date of Collection: 5/20/09 8:01:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 06:29 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	0.20	0.74	1.0
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	0.26	0.82	1.4
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	20	0.57	77
Tetrachloroethene	0.15	0.24	1.0	1.6

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060115.d

Lab Smp Id: 0905582-03A

Inj Date : 01-JUN-2009 18:29

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #34425

Misc Info : 3.5 "Hg-->5psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.52000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 228911 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 171905 48.68- 108.68 75.10
 13.535 13.535 (1.000) 49 293459 95.19- 155.19 128.20

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 928173 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 131106 0.00- 44.37 14.13

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1191595 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 567270 18.45- 78.45 47.61

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 303493 9.81062 9.811 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 144790 23.75- 83.75 47.71

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 883266 9.83471 9.835 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 92968 0.00- 40.00 10.53

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	599112		37.97-	97.97	67.83
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\$ 77 Bromofluorobenzene

20.535	20.509	(1.078)	174	821649	10.4306	10.430	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	901620		75.52-	135.52	109.73	
20.535	20.535	(1.078)	176	789618		65.11-	125.11	96.10	

40 Chloroform

13.627	13.627	(1.007)	83	11185	0.13522	0.2055	80.00-	120.00	100.00
13.689	13.627	(1.011)	85	18495		36.03-	96.03	165.36	

53 Trichloroethene

15.164	15.136	(1.024)	130	10808	0.17036	0.2589	80.00-	120.00	100.00
15.164	15.136	(1.024)	95	9799		57.99-	117.99	90.66	
15.164	15.136	(1.024)	97	6010		26.05-	86.05	55.61	

60 Toluene

17.086	17.086	(1.154)	91	2006679	13.3834	20.343	80.00-	120.00	100.00
17.086	17.086	(1.154)	92	1193376		29.72-	89.72	59.47	

63 Tetrachloroethene

17.857	17.857	(0.937)	166	15611	0.15672	0.2382	80.00-	120.00	100.00
17.857	17.857	(0.937)	129	9484		38.22-	98.22	60.75	
17.857	17.857	(0.937)	131	9538		36.62-	96.62	61.10	

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060115.d
Lab Smp Id: 0905582-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5" Hg-->5psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	228911	0.80
52 1,4-Difluorobenze	914413	548648	1280178	928173	1.50
68 Chlorobenzene-d5	1165555	699333	1631777	1191595	2.23

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

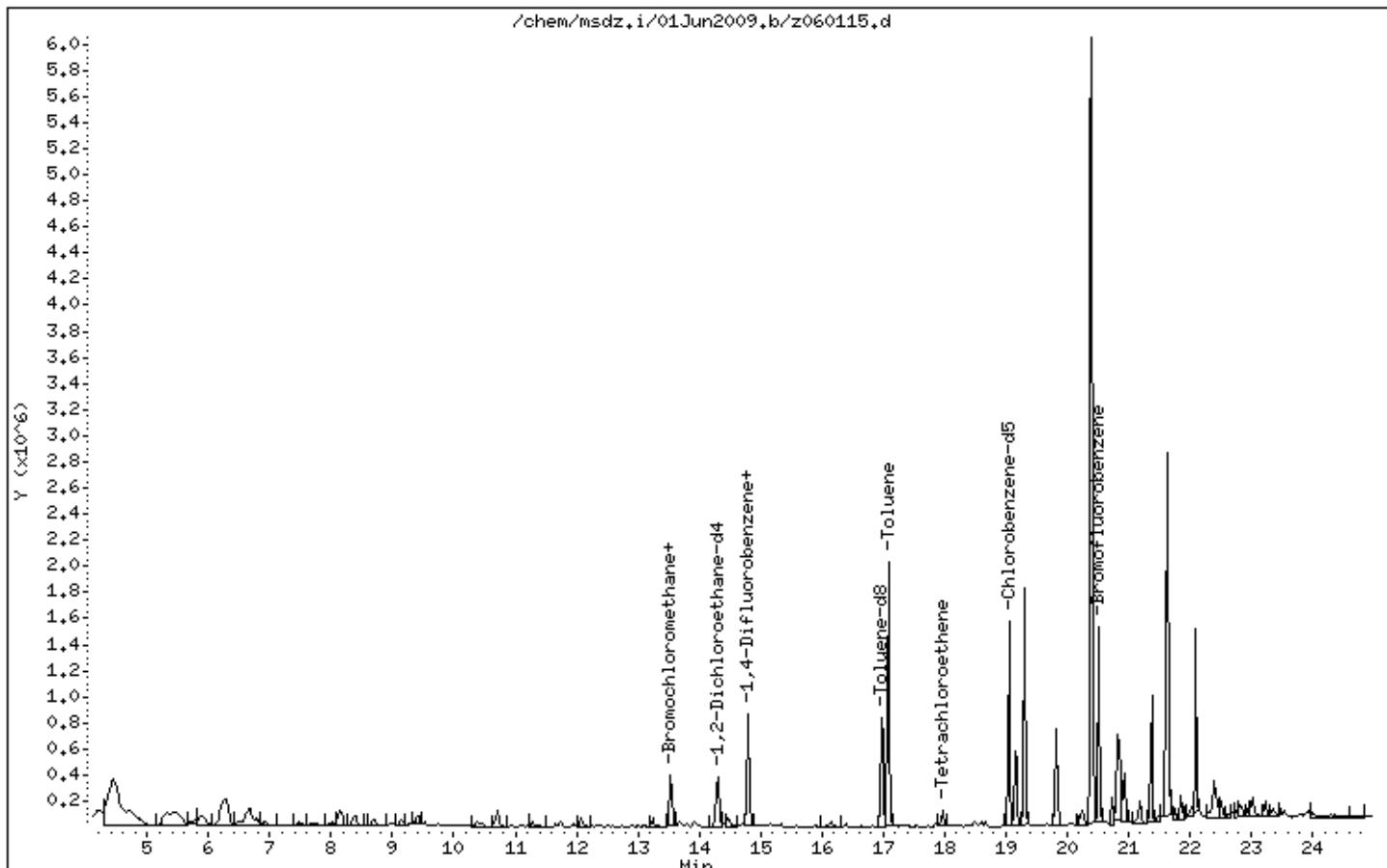
Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-03A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5 "Hg-->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.811	98.11	70-130
\$ 59 Toluene-d8	10.000	9.835	98.35	70-130
\$ 77 Bromofluorobenzene	10.000	10.430	104.31	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060115.d
Date : 01-JUN-2009 18:29
Client ID:
Sample Info: 500mL #34425

Instrument: msdz.i
Operator: kr
Column phase: RTx-624
Column diameter: 0.32

Page 1



Data File: /chem/msdz.i/01Jun2009.b/z060115.d

Page 2

Date : 01-JUN-2009 18:29

Client ID:

Instrument: msdz.i

Sample Info: 500mL #34425

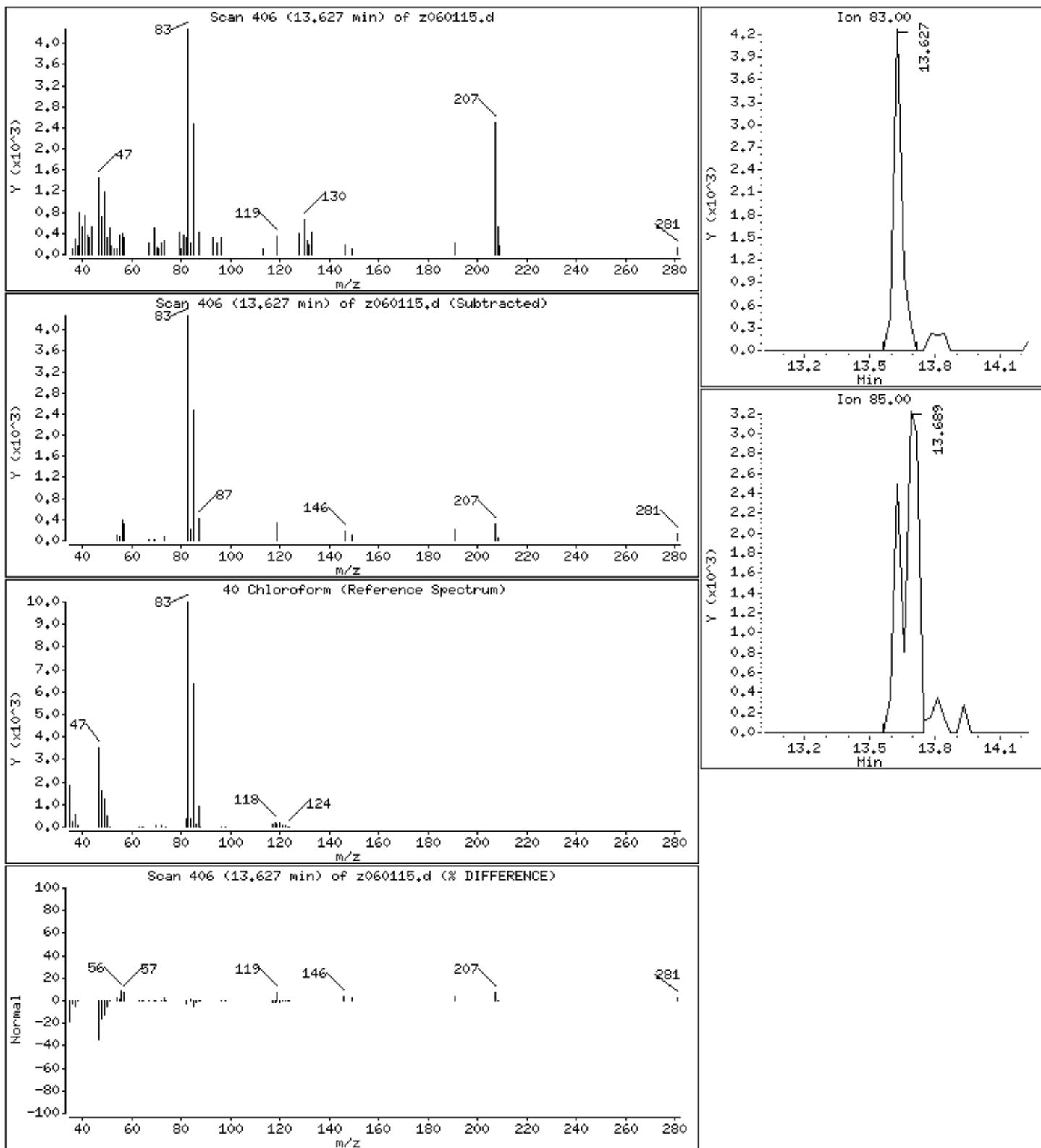
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

40 Chloroform

Concentration: 0.2055 PPBV



Date : 01-JUN-2009 18:29

Client ID:

Instrument: msdz.i

Sample Info: 500mL #34425

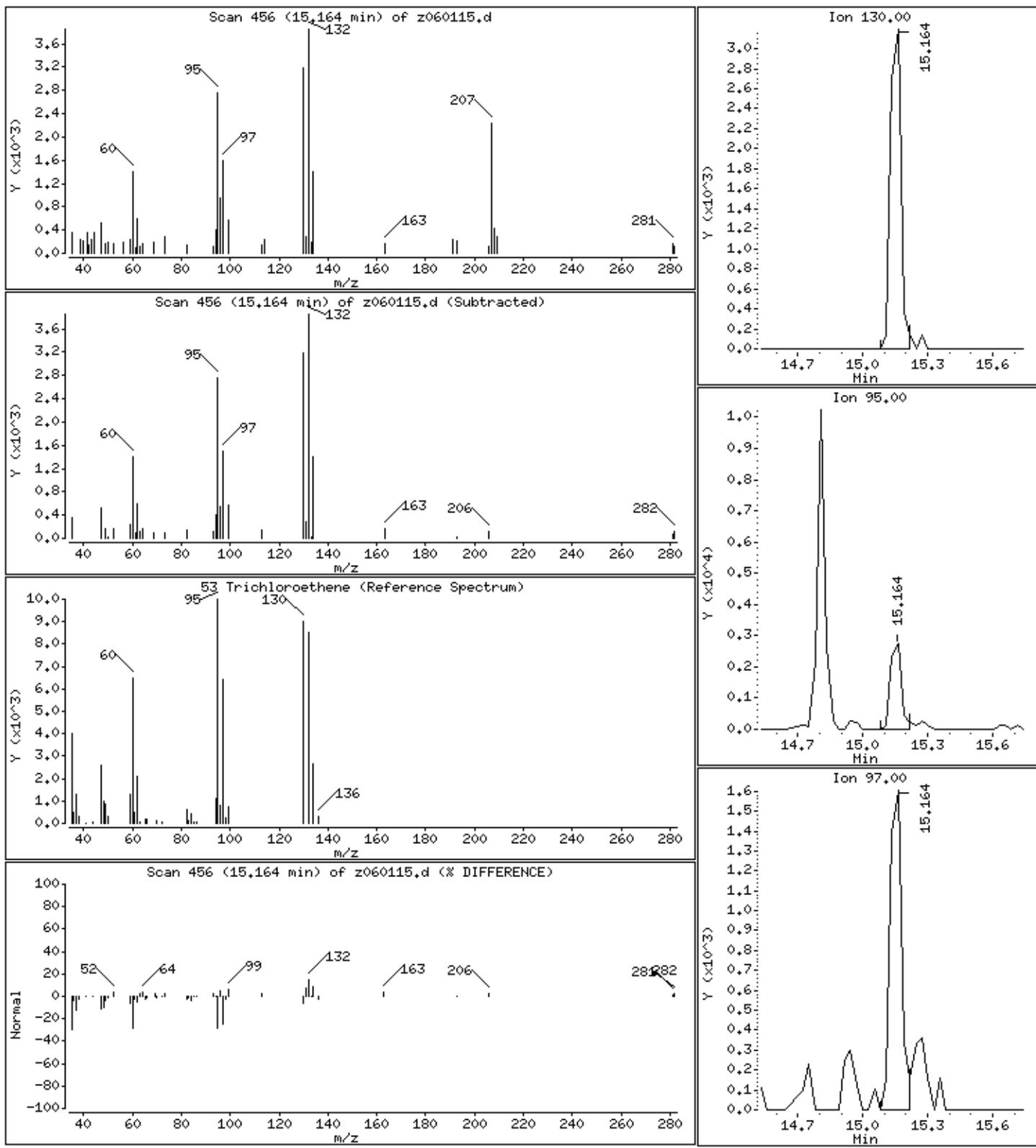
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

53 Trichloroethene

Concentration: 0.2589 PPBV



Date : 01-JUN-2009 18:29

Client ID:

Instrument: msdz.i

Sample Info: 500mL #34425

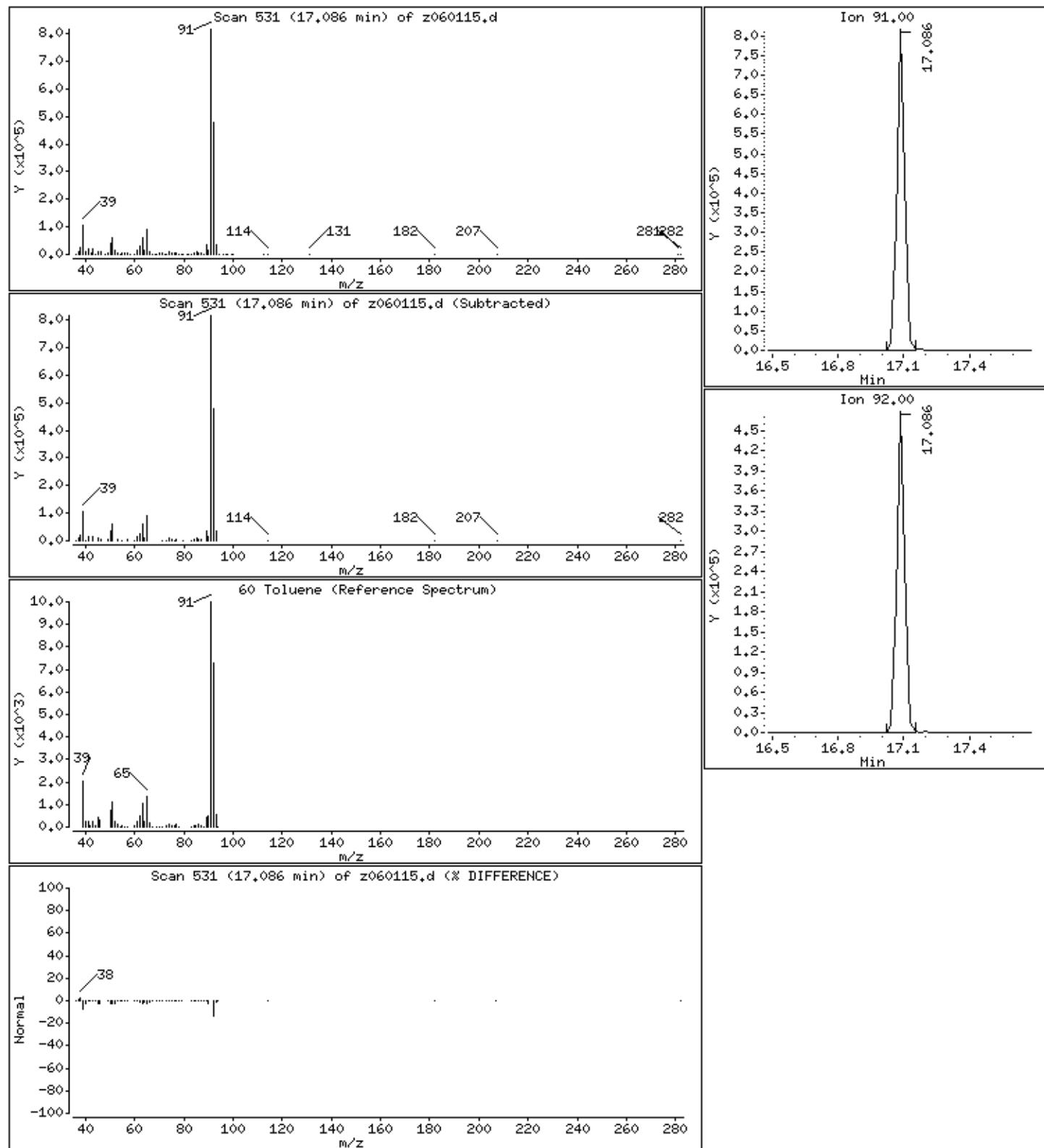
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

60 Toluene

Concentration: 20.343 PPBV



Date : 01-JUN-2009 18:29

Client ID:

Instrument: msdz.i

Sample Info: 500mL #34425

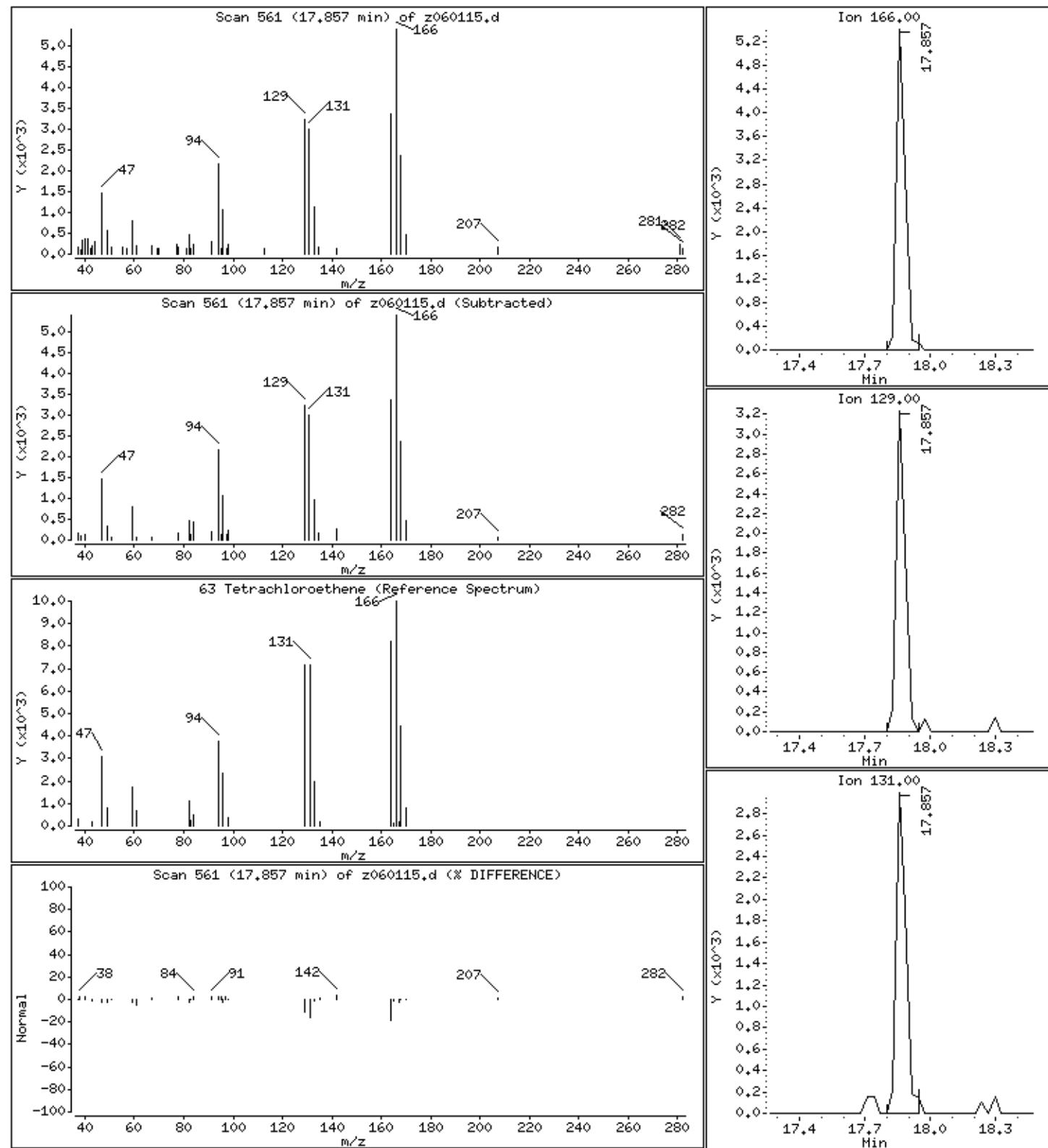
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

63 Tetrachloroethene

Concentration: 0.2382 PPBV





Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-4

Lab ID#: 0905582R1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.14	0.56	0.70	2.7
1,1,1-Trichloroethane	0.14	0.27	0.78	1.5
Toluene	0.14	2.6	0.54	9.7



Client Sample ID: SV-LFP-4

Lab ID#: 0905582R1-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060116	Date of Collection: 5/20/09 8:23:00 AM		
Dil. Factor:	1.44	Date of Analysis: 6/1/09 07:10 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.14	Not Detected	0.37	Not Detected
Freon 113	0.14	Not Detected	1.1	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.14	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
Chloroform	0.14	0.56	0.70	2.7
1,1,1-Trichloroethane	0.14	0.27	0.78	1.5
Trichloroethene	0.14	Not Detected	0.77	Not Detected
Bromodichloromethane	0.14	Not Detected	0.96	Not Detected
Toluene	0.14	2.6	0.54	9.7
Tetrachloroethene	0.14	Not Detected	0.98	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	109	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060116.d

Lab Smp Id: 0905582-04A

Inj Date : 01-JUN-2009 19:10

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #4169

Misc Info : 2.0 "Hg-->5psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.44000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 226327 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 173512 48.68- 108.68 76.66
 13.535 13.535 (1.000) 49 277419 95.19- 155.19 122.57

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 895801 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 127979 0.00- 44.37 14.29

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1082078 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 515507 18.45- 78.45 47.64

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 293621 9.59987 9.600 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 140376 23.75- 83.75 47.81

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 830159 9.57742 9.577 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 81513 0.00- 40.00 9.82

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	556437		37.97-	97.97	67.03
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\$ 77 Bromofluorobenzene

CAS #:	460-00-4								
20.535	20.509	(1.078)	174	779741	10.9004	10.900	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	865600		75.52-	135.52	111.01	
20.535	20.535	(1.078)	176	766852		65.11-	125.11	98.35	

40 Chloroform

CAS #:	67-66-3								
13.627	13.627	(1.007)	83	31925	0.39037	0.5621	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	21788		36.03-	96.03	68.25	

43 1,1,1-Trichloroethane

CAS #:	71-55-6								
13.812	13.812	(1.020)	97	15037	0.18630	0.2683	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	8754		35.11-	95.11	58.22	

60 Toluene

CAS #:	108-88-3								
17.086	17.086	(1.154)	91	258516	1.78646	2.572	80.00-	120.00	100.00
17.086	17.086	(1.154)	92	154418		29.72-	89.72	59.73	

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060116.d
Lab Smp Id: 0905582-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 2.0 "Hg-->5psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	226327	-0.33
52 1,4-Difluorobenze	914413	548648	1280178	895801	-2.04
68 Chlorobenzene-d5	1165555	699333	1631777	1082078	-7.16

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

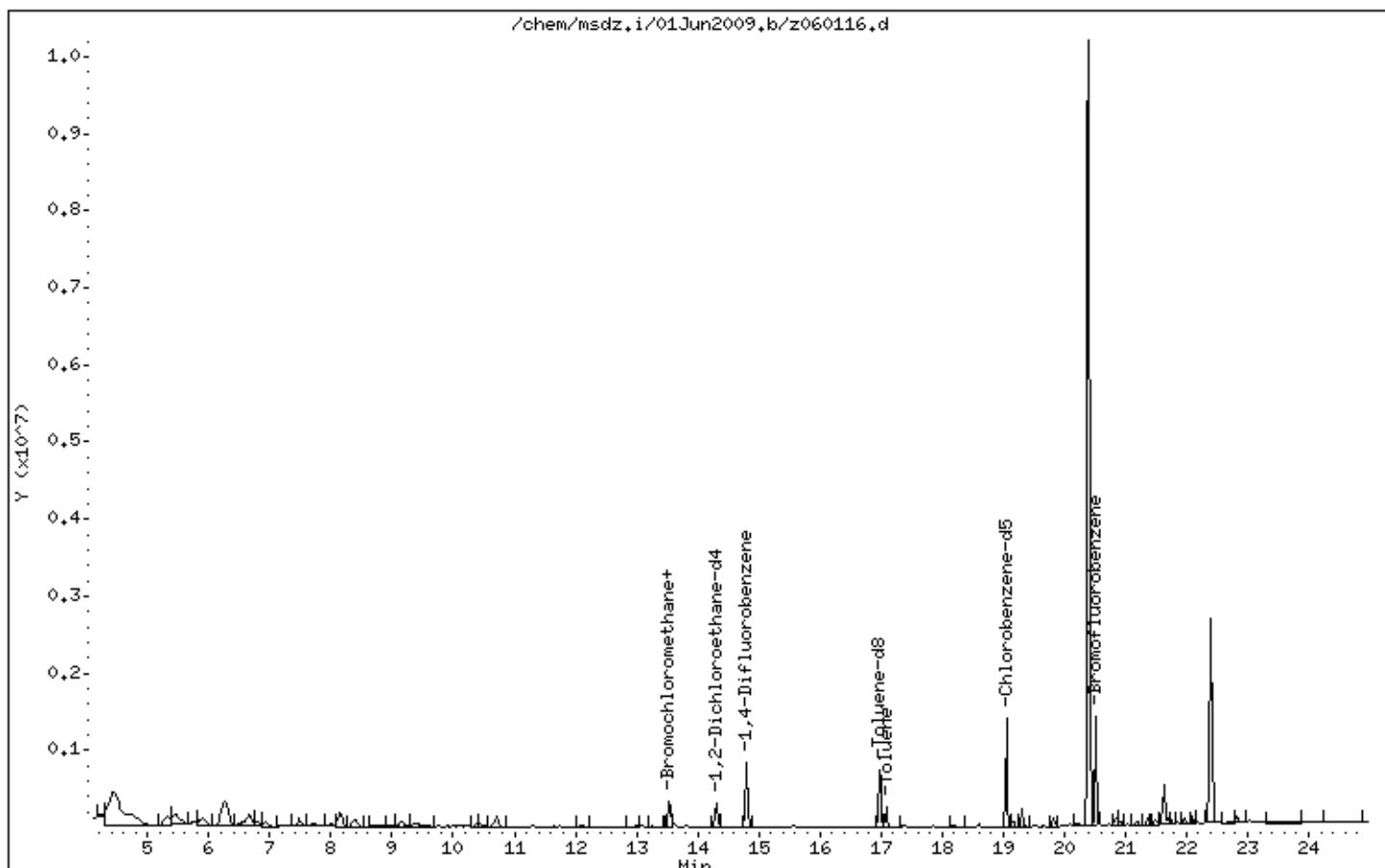
Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-04A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 2.0 "Hg-->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.600	96.00	70-130
\$ 59 Toluene-d8	10.000	9.577	95.77	70-130
\$ 77 Bromofluorobenzene	10.000	10.900	109.00	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060116.d
Date : 01-JUN-2009 19:10
Client ID:
Sample Info: 500mL #4169

Instrument: msdz.i
Operator: kr
Column phase: RTx-624
Column diameter: 0.32

Page 1



Data File: /chem/msdz.i/01Jun2009.b/z060116.d

Page 2

Date : 01-JUN-2009 19:10

Client ID:

Instrument: msdz.i

Sample Info: 500mL #4169

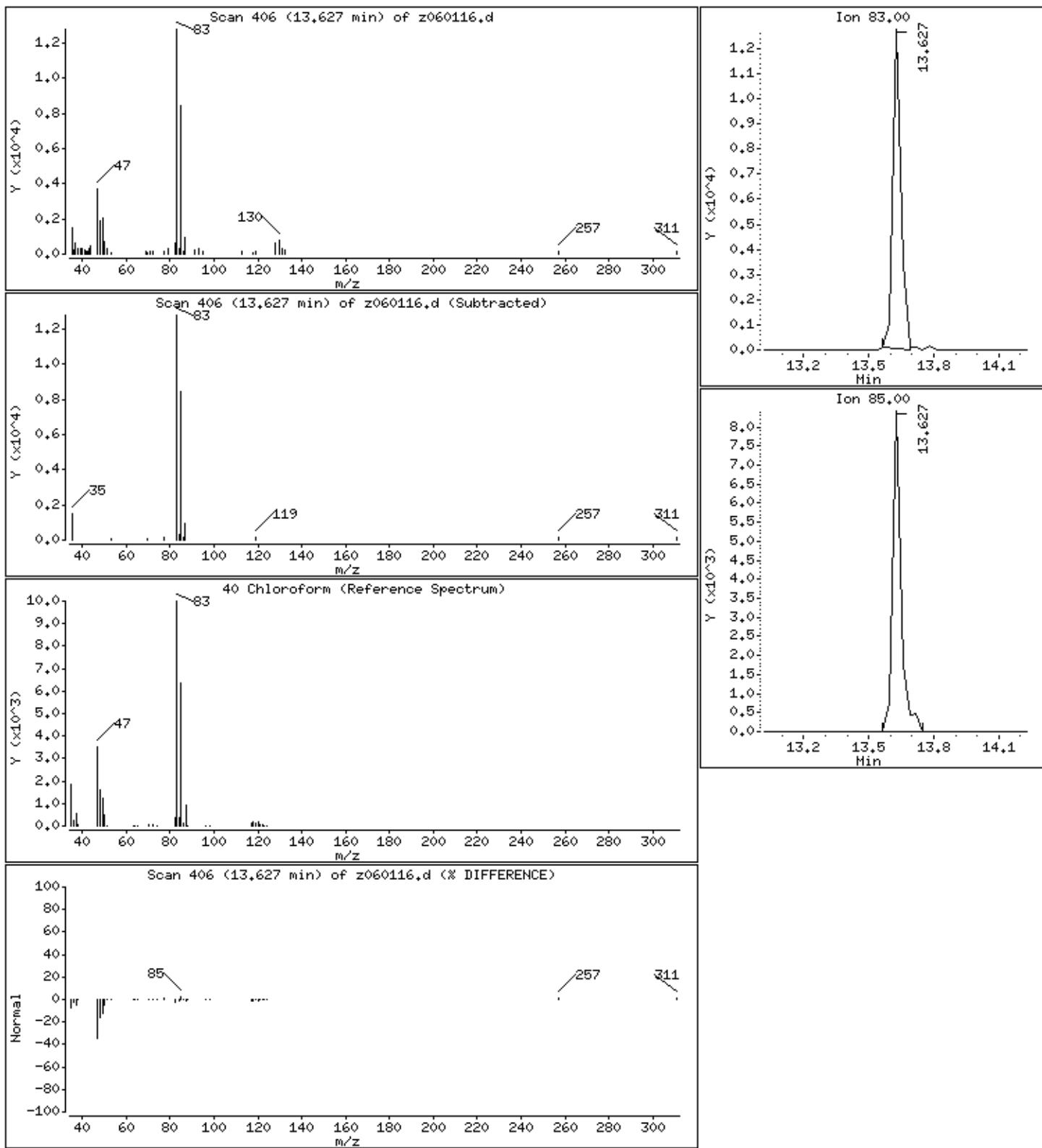
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

40 Chloroform

Concentration: 0.5621 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060116.d

Page 3

Date : 01-JUN-2009 19:10

Client ID:

Instrument: msdz.i

Sample Info: 500mL #4169

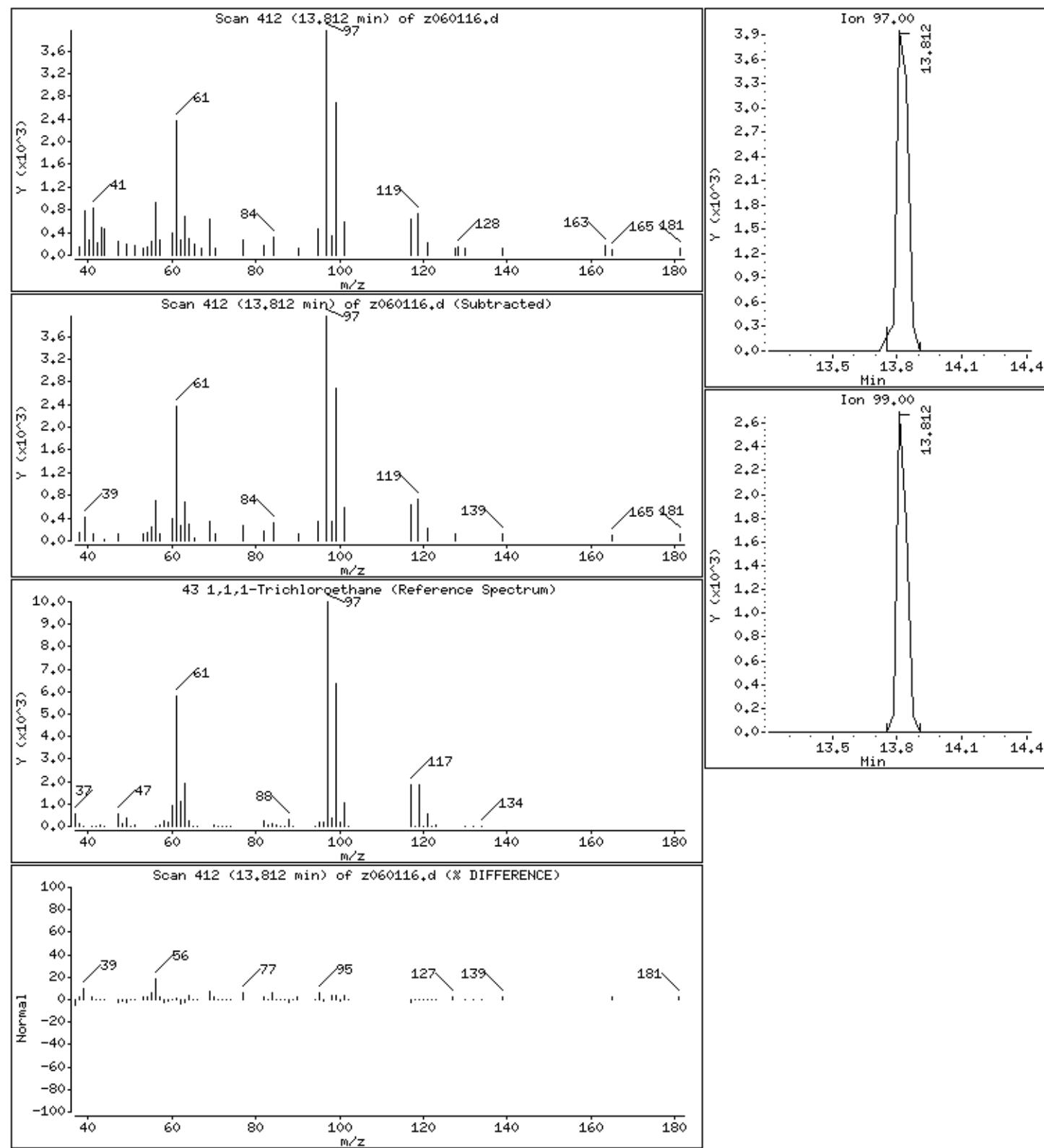
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

43 1,1,1-Trichloroethane

Concentration: 0.2683 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060116.d

Page 4

Date : 01-JUN-2009 19:10

Client ID:

Instrument: msdz.i

Sample Info: 500mL #4169

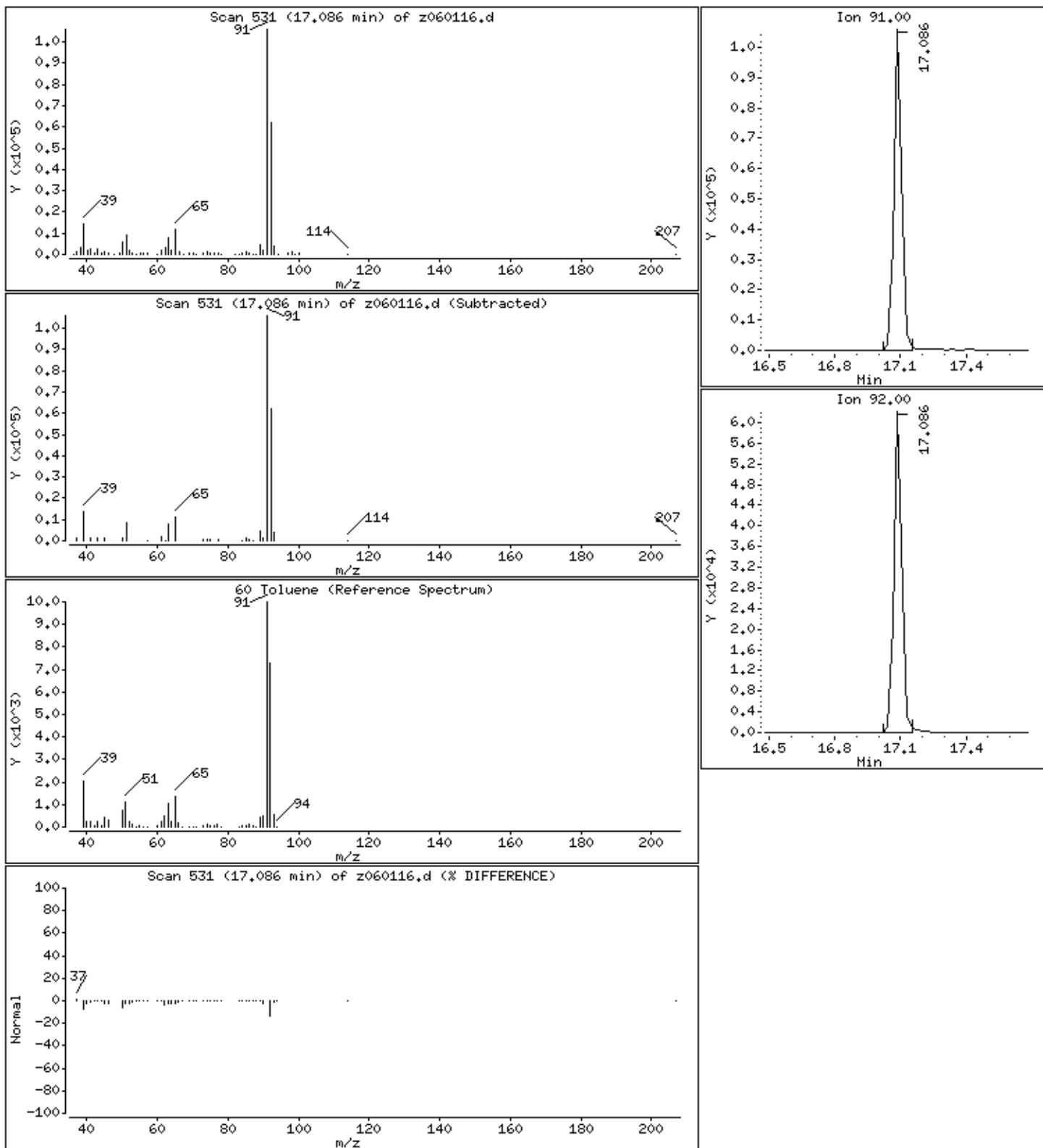
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

60 Toluene

Concentration: 2,572 PPBV





Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-5

Lab ID#: 0905582R1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.15	4.2	0.57	16



Client Sample ID: SV-LFP-5

Lab ID#: 0905582R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060117	Date of Collection: 5/20/09 8:12:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 07:54 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	Not Detected	0.74	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	4.2	0.57	16
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	105	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060117.d

Lab Smp Id: 0905582-05A

Inj Date : 01-JUN-2009 19:54

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #96109

Misc Info : 3.5 "Hg-->5psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.52000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 220282 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 168017 48.68- 108.68 76.27
 13.535 13.535 (1.000) 49 258100 95.19- 155.19 117.17

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 886816 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 123597 0.00- 44.37 13.94

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1092610 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 505432 18.45- 78.45 46.26

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 296810 9.97043 9.970 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 139308 23.75- 83.75 46.94

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 830963 9.68383 9.684 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 85590 0.00- 40.00 10.30

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974 (1.146)	100	555638		37.97-	97.97	66.87
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\$ 77 Bromofluorobenzene CAS #: 460-00-4
20.509 20.509 (1.076) 174 760805 10.5332 10.533 80.00- 120.00 100.00
20.509 20.509 (1.076) 95 834235 75.52- 135.52 109.65
20.509 20.535 (1.076) 176 741938 65.11- 125.11 97.52

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 396972 2.77104 4.212 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 230036 29.72- 89.72 57.95

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060117.d
Lab Smp Id: 0905582-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5" Hg-->5psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	220282	-3.00
52 1,4-Difluorobenze	914413	548648	1280178	886816	-3.02
68 Chlorobenzene-d5	1165555	699333	1631777	1092610	-6.26

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-05A
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5 "Hg-->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.970	99.70	70-130
\$ 59 Toluene-d8	10.000	9.684	96.84	70-130
\$ 77 Bromofluorobenzene	10.000	10.533	105.33	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060117.d

Page 1

Date : 01-JUN-2009 19:54

Client ID:

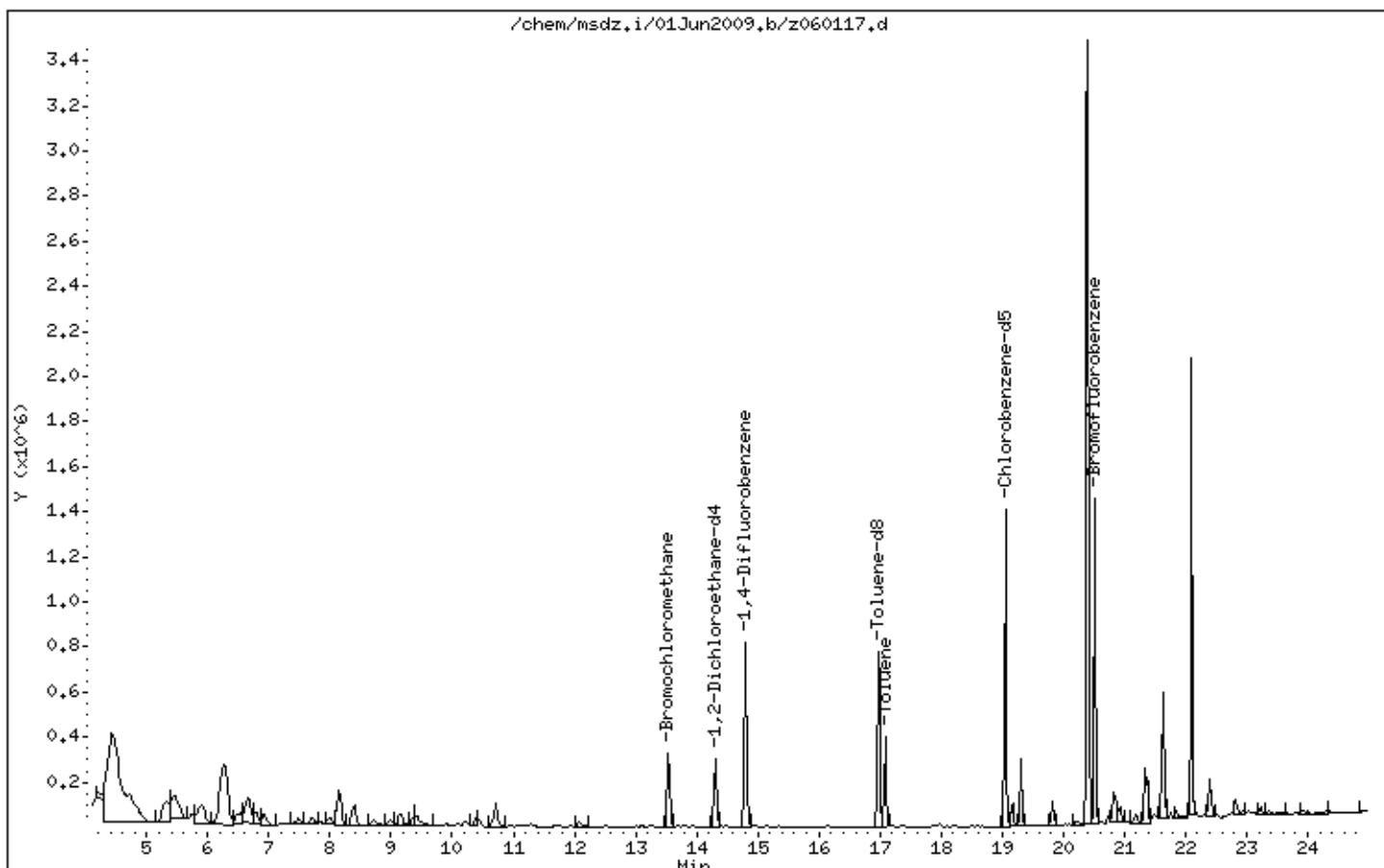
Instrument: msdz.i

Sample Info: 500mL #96109

Operator: kr

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdz.i/01Jun2009.b/z060117.d
Date : 01-JUN-2009 19:54
Client ID:
Sample Info: 500mL #96109

Page 2

Instrument: msdz.i

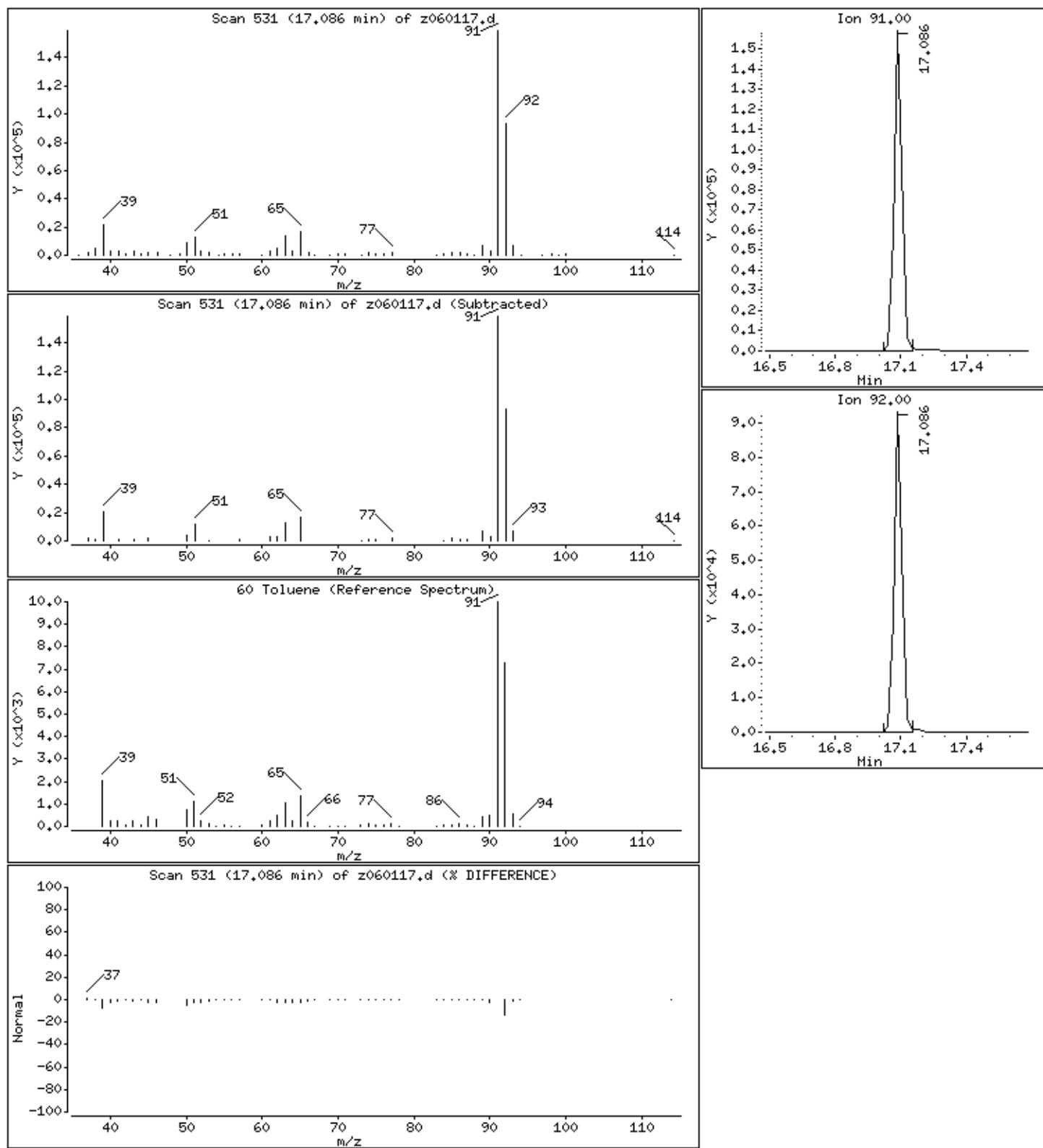
Operator: kr

Column phase: RTx-624

Column diameter: 0.32

60 Toluene

Concentration: 4.212 PPBV





Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-LFP-5 Lab Duplicate

Lab ID#: 0905582R1-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.15	4.0	0.57	15



Client Sample ID: SV-LFP-5 Lab Duplicate

Lab ID#: 0905582R1-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060118	Date of Collection: 5/20/09 8:12:00 AM		
Dil. Factor:	1.52	Date of Analysis: 6/1/09 09:38 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Freon 113	0.15	Not Detected	1.2	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Chloroform	0.15	Not Detected	0.74	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
Trichloroethene	0.15	Not Detected	0.82	Not Detected
Bromodichloromethane	0.15	Not Detected	1.0	Not Detected
Toluene	0.15	4.0	0.57	15
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	110	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060118.d

Lab Smp Id: 0905582-05AA

Inj Date : 01-JUN-2009 21:38

Operator : kr Inst ID: msdz.i

Smp Info : 500mL #96109

Misc Info : 3.5 "Hg-->5psi

Comment :

Method : /chem/msdz.i/01Jun2009.b/z0910520a.m

Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD

Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d

Als bottle: 1

Dil Factor: 1.52000

Integrator: HP RTE Compound Sublist: The12936.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 214186 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 165168 48.68- 108.68 77.11
 13.535 13.535 (1.000) 49 258191 95.19- 155.19 120.55

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 859279 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 118794 0.00- 44.37 13.82

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1059414 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 507311 18.45- 78.45 47.89

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 292150 10.0932 10.093 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 133833 23.75- 83.75 45.81

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 795748 9.57063 9.571 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 81581 0.00- 40.00 10.25

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974 (1.146)	100	534350	37.97-	97.97	67.15
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\$ 77 Bromofluorobenzene CAS #: 460-00-4
20.509 20.509 (1.076) 174 773602 11.0459 11.046 80.00- 120.00 100.00
20.509 20.509 (1.076) 95 855661 75.52- 135.52 110.61
20.509 20.535 (1.076) 176 743553 65.11- 125.11 96.12

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 370128 2.66645 4.053 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 216211 29.72- 89.72 58.42

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060118.d
Lab Smp Id: 0905582-05AA
Analysis Type: VOA
Quant Type: ISTD
Operator: kr
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5" Hg-->5psi

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	214186	-5.68
52 1,4-Difluorobenze	914413	548648	1280178	859279	-6.03
68 Chlorobenzene-d5	1165555	699333	1631777	1059414	-9.11

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 0905582-05AA
Level: LOW Operator: kr
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: The12936.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 3.5 "Hg-->5psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	10.093	100.93	70-130
\$ 59 Toluene-d8	10.000	9.571	95.71	70-130
\$ 77 Bromofluorobenzene	10.000	11.046	110.46	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060118.d

Page 1

Date : 01-JUN-2009 21:38

Client ID:

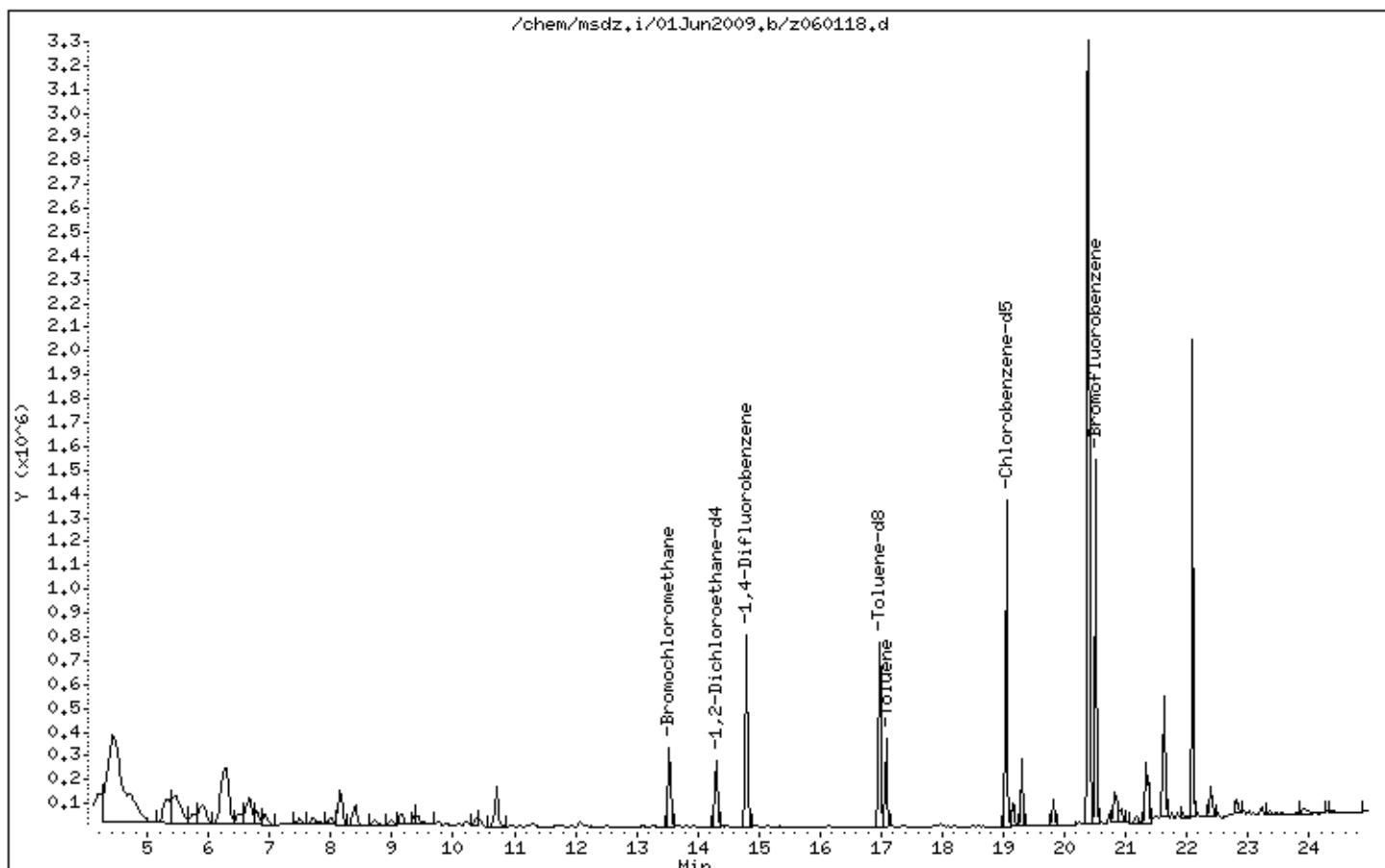
Instrument: msdz.i

Sample Info: 500mL #96109

Operator: kr

Column phase: RTx-624

Column diameter: 0.32



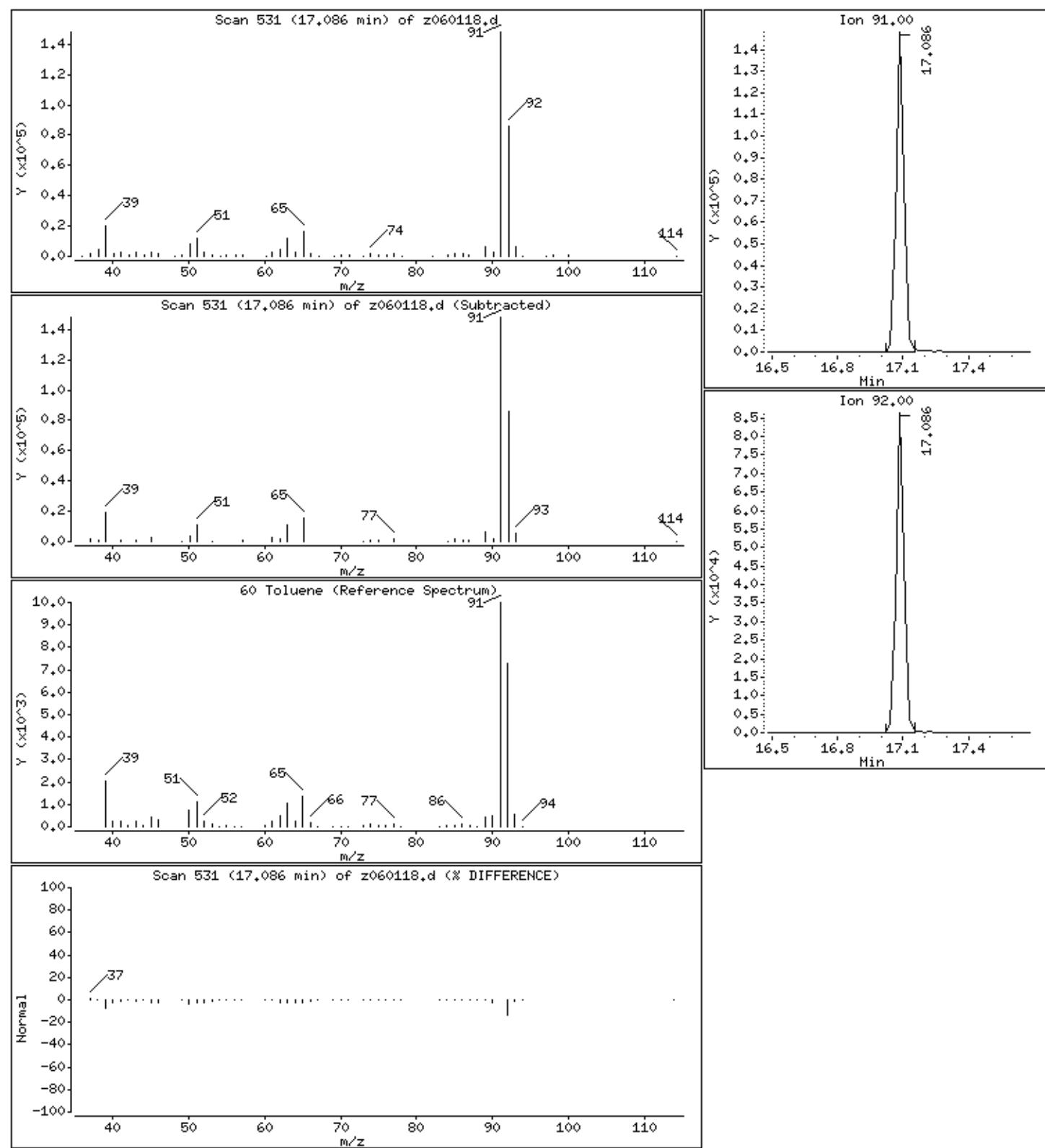
Data File: /chem/msdz.i/01Jun2009.b/z060118.d
Date : 01-JUN-2009 21:38
Client ID:
Sample Info: 500mL #96109

Instrument: msdz.i
Operator: kr
Column diameter: 0.32

Column phase: RTx-624

Concentration: 4.053 PPBV

60 Toluene



QC Results and Raw Data



Client Sample ID: Lab Blank

Lab ID#: 0905582R1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060107	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	6/1/09 12:28 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	105	70-130

Report Date: 20-Jul-2009 16:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060107.d
 Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
 Inj Date : 01-JUN-2009 12:28
 Operator : ej Inst ID: msdz.i
 Smp Info : 500mL #1588;Lab Blank;Lab Blank
 Misc Info : humid
 Comment :
 Method : /chem/msdz.i/01Jun2009.b/z0910520a.m
 Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD
 Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AT09.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.565 13.535 (1.000) 130 207656 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 156241 48.68- 108.68 75.24
 13.535 13.535 (1.000) 49 252507 95.19- 155.19 121.60

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 838094 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 120261 0.00- 44.37 14.35

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1030606 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 476010 18.45- 78.45 46.19

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.312 14.313 (1.055) 65 285311 10.1669 10.167 80.00- 120.00 100.00
 14.312 14.313 (1.055) 67 138773 23.75- 83.75 48.64

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 771567 9.51437 9.514 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 72745 0.00- 40.00 9.43

CONCENTRATIONS
ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	513923		37.97-	97.97	66.61
--------	--------	---------	-----	--------	--	--------	-------	-------

\$ 77 Bromofluorobenzene CAS #: 460-00-4
20.534 20.509 (1.078) 174 716131 10.5112 10.511 80.00- 120.00 100.00
20.509 20.509 (1.076) 95 771611 75.52- 135.52 107.75
20.534 20.535 (1.078) 176 689895 65.11- 125.11 96.34

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060107.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ej
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: humid

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	207656	-8.56
52 1,4-Difluorobenze	914413	548648	1280178	838094	-8.35
68 Chlorobenzene-d5	1165555	699333	1631777	1030606	-11.58

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.57	0.23
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

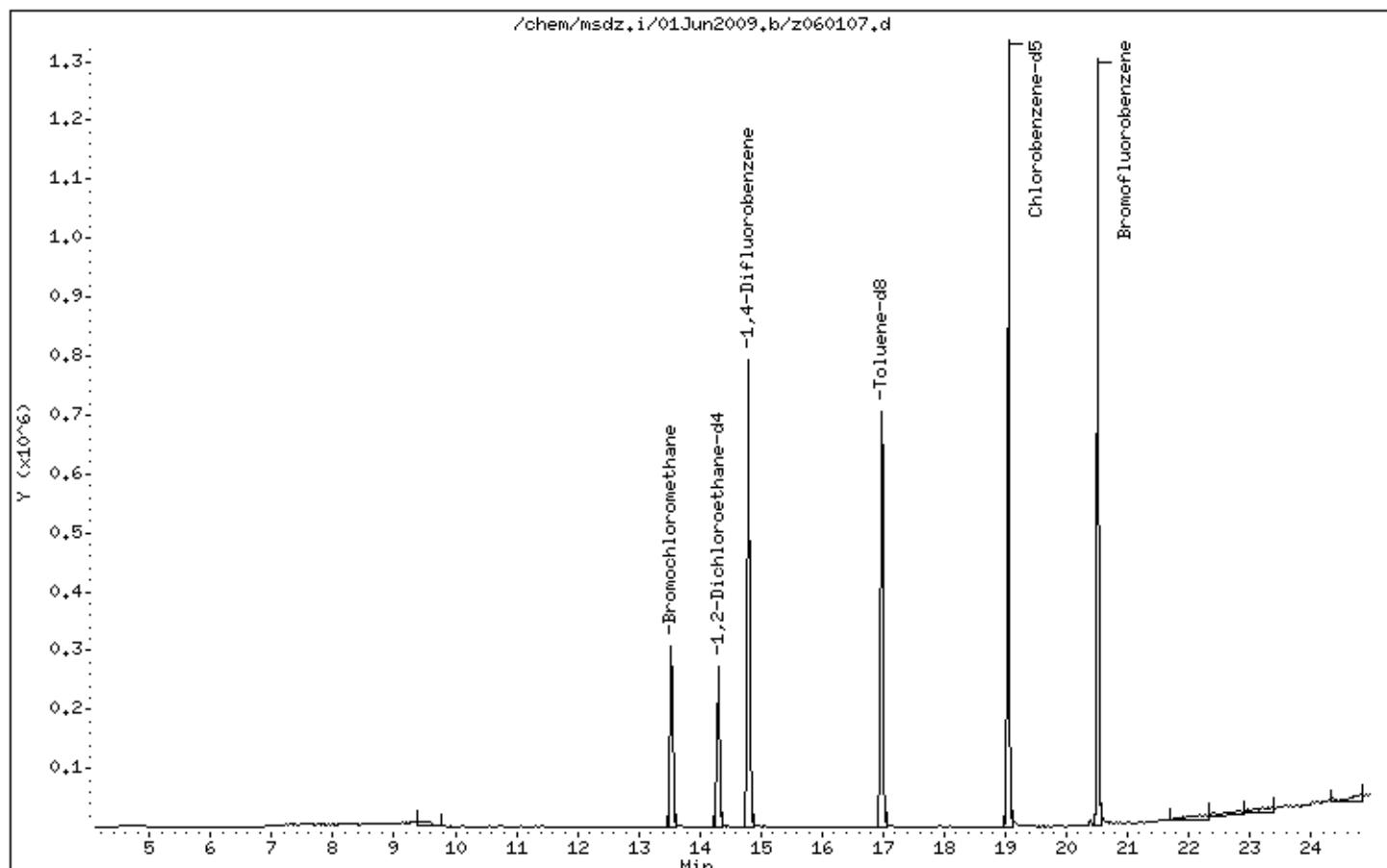
Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: ej
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	10.167	101.67	70-130
\$ 59 Toluene-d8	10.000	9.514	95.14	70-130
\$ 77 Bromofluorobenzene	10.000	10.511	105.11	70-130

Data File: /chem/msdz.i/01Jun2009.b/z060107.d
Date : 01-JUN-2009 12:28
Client ID: Lab Blank
Sample Info: 500mL #1588;Lab Blank;Lab Blank
Column phase: RTx-624

Instrument: msdz.i
Operator: ej
Column diameter: 0.32

Page 1



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED.

SDG No.: 0905582R1

CLIENT SAMPLE NO.	SURROGATE % RECOVERY						#	TOTAL OUT
	1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		
01 Trip Blank	99		98		92			0
02 SV-LFP-1	96		100		106			0
03 SV-LFP-3	98		98		104			0
04 SV-LFP-4	96		96		109			0
05 SV-LFP-5	100		97		105			0
06 SV-LFP-5 Lab Duplicate	101		96		110			0
07 Lab Blank	102		95		105			0
08 CCV	104		100		114			0
09 LCS	101		99		110			0
10								0
11								0
12								0
13								0
14								0
15								0
16								0
17								0
18								0
19								0
20								0
21								0
22								0
23								0
24								0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	AIR TOXICS, LTD	SDG No:	0905582R1
Lab File ID:	z060103.d	Date Analyzed:	06/01/2009
Instrument ID:	msdz.i	Time Analyzed:	09:18 AM

	Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
24-HOUR STD	1165555		19.06		914413		14.81		227085		13.53	
UPPER LIMIT	1631777		19.39		1280178		15.14		317919		13.86	
LOWER LIMIT	699333		18.73		548648		14.48		136251		13.20	
CLIENT SAMPLE NO												
01 Trip Blank	1034774		19.06		866471		14.81		212442		13.57	
02 SV-LFP-1	1149362		19.06		913345		14.81		229837		13.53	
03 SV-LFP-3	1191595		19.06		928173		14.81		228911		13.53	
04 SV-LFP-4	1082078		19.06		895801		14.81		226327		13.53	
05 SV-LFP-5	1092610		19.06		886816		14.81		220282		13.53	
06 SV-LFP-5 Lab Duplicate	1059414		19.06		859279		14.81		214186		13.53	
07 Lab Blank	1030606		19.05		838094		14.81		207656		13.57	
08 CCV	1165555		19.06		914413		14.81		227085		13.53	
09 LCS	1171248		19.06		930628		14.81		235728		13.53	
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: z060118.d & z060117.d

Lab Sample ID: 05A & 05AA

Dilution: 1.52 & 1.52

Client Sample ID: &

Date Analyzed: 6/1/09 & 6/1/09

CAS Number	Compound	Original		Duplicate		RPD	Result Less Than 5X RL
		Amount	Flags	Amount	Flags		
71-55-6	1,1,1-Trichloroethane	ND	U	ND	U	0	
75-34-3	1,1-Dichloroethane	ND	U	ND	U	0	
75-35-4	1,1-Dichloroethene	ND	U	ND	U	0	
75-27-4	Bromodichloromethane	ND	U	ND	U	0	
67-66-3	Chloroform	ND	U	ND	U	0	
156-59-2	cis-1,2-Dichloroethene	ND	U	ND	U	0	
76-13-1	Freon 113	ND	U	ND	U	0	
127-18-4	Tetrachloroethene	ND	U	ND	U	0	
108-88-3	Toluene	4.212		4.053		3.8	
79-01-6	Trichloroethene	ND	U	ND	U	0	
75-01-4	Vinyl Chloride	ND	U	ND	U	0	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Calibration File Names:

Level 4: /chem/msdz.i/20May2009.b/z052010.d
 Level 5: /chem/msdz.i/20May2009.b/z052020.d
 Level 6: /chem/msdz.i/20May2009.b/z052012.d
 Level 7: /chem/msdz.i/20May2009.b/z052013.d
 Level 8: /chem/msdz.i/20May2009.b/z052014.d
 Level 9: /chem/msdz.i/20May2009.b/z052015.d
 Level 10: /chem/msdz.i/20May2009.b/z052016.d
 Level 11: /chem/msdz.i/20May2009.b/z052017.d

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	—	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF	
181 Freon134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
1 Propylene	+++++	+++++	1.40196	1.33511	1.50625	1.46346		
	1.48316	1.52990					1.45331	4.988
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
3 Dichlorodifluoromethane/Fr12	5.82485	6.93449	5.58731	5.32372	5.67435	5.04638		
	5.13438	5.03225					5.56971	11.257
4 Freon 114	3.84188	4.88031	4.10093	4.04622	4.17878	3.87097		
	3.89432	3.82901					4.08030	8.539
5 Chloromethane	+++++	2.09731	1.96228	1.86085	1.92077	1.73326		
	1.92812	1.75458					1.89388	6.618
179 Butane	+++++	+++++	0.34301	0.31816	0.36817	0.33111		
	0.33695	0.34573					0.34052	4.912

Air Toxics Ltd.

INITIAL CALIBRATION DATA

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 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	RRF	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	_____		
	-----	-----	-----	-----	-----	-----	-----		
	20.000	40.000							
	Level 10	Level 11							
6 Vinyl Chloride	+++++	2.06953	1.58167	1.61016	1.81447	1.69322			
	1.76509	1.76618					1.75719	9.220	
8 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
7 1,3-Butadiene	+++++	1.83706	1.18432	1.17408	1.32024	1.26182			
	1.30644	1.32131					1.34361	16.828	
9 Bromomethane	+++++	2.09950	1.60127	1.40592	1.51754	1.43015			
	1.44737	1.44451					1.56375	15.688	
10 Chloroethane	+++++	0.96970	0.71815	0.70451	0.74847	0.73199			
	0.75555	0.77381					0.77174	11.706	
11 Isopentane	+++++	+++++	1.24166	1.22318	1.25476	1.12883			
	1.18013	1.16374					1.19872	4.093	
12 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
13 Trichlorofluoromethane/Fr11	3.98289	5.24546	3.86428	3.95982	4.65491	3.66441			
	3.62049	3.45790					4.05627	14.808	
14 Ethanol	+++++	+++++	1.09323	0.61059	0.87677	0.63327			
	0.68372	0.70860					0.76770	24.101	
16 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

Air Toxics Ltd.

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 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound		0.05000	0.10000	0.50000	2.000	5.000	10.000	____		% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF			
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	20.000	40.000								
	Level 10	Level 11								
15 1,1-Dichloroethene	+++++	0.78768	1.13997	0.89070	0.96383	0.90580				
	0.91787	0.88196						0.92683	11.654	
17 Freon 113	3.06089	3.54437	3.07351	2.89782	2.78066	2.41386				
	2.30503	2.13639						2.77657	16.876	
18 Pentane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
187 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
20 Acetone	+++++	+++++	1.00428	0.79901	0.81659	0.79773				
	0.69201	0.70172						0.80189	14.033	
19 Carbon Disulfide	+++++	4.37079	4.06519	4.10492	4.38915	4.19723				
	4.23344	4.22445						4.22645	2.881	
21 2-Propanol	+++++	+++++	2.44565	2.14699	2.47807	2.56338				
	2.74339	2.97736						2.55914	11.027	
22 3-Chloroprene	+++++	+++++	0.50084	0.57161	0.64375	0.62785				
	0.66779	0.65655						0.61140	10.433	
169 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
23 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	

Air Toxics Ltd.

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 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	RRF	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	-----		
	-----	-----	-----	-----	-----	-----	-----		
	20.000	40.000							
	-----	-----	-----	-----	-----	-----	-----		
	Level 10	Level 11							
24 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	-----		
	+++++	+++++					+++++	+++++	
25 Methylene Chloride	+++++	1.44962	1.22039	1.19296	1.29302	1.19261	-----		
	-----	-----	-----	-----	-----	-----	-----		
	1.22369	1.20295					1.25361	7.422	
26 tert-butyl alcohol	+++++	+++++	2.09951	2.69581	2.05775	3.01088	-----		
	-----	-----	-----	-----	-----	-----	-----		
	3.17531	3.08924					2.68808	18.573	
27 MTBE	+++++	0.90647	1.79911	3.50476	1.55697	3.72758	-----		
	-----	-----	-----	-----	-----	-----	-----		
	3.22391	3.23080					2.56423	43.501	<-
28 trans-1,2-Dichloroethene	+++++	1.10714	0.99488	1.04068	1.11019	1.03496	-----		
	-----	-----	-----	-----	-----	-----	-----		
	1.06573	1.04266					1.05660	3.909	
29 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	-----		
	+++++	+++++					+++++	+++++	
30 Hexane	+++++	1.93904	1.97682	1.98572	2.35422	2.29385	-----		
	-----	-----	-----	-----	-----	-----	-----		
	2.34778	2.43903					2.19092	9.768	
32 Isopropyl ether	+++++	+++++	4.43280	4.84715	5.63345	5.61221	-----		
	-----	-----	-----	-----	-----	-----	-----		
	5.85388	6.15944					5.42315	12.007	
31 1,1-Dichloroethane	+++++	3.10722	2.45018	2.77533	2.94146	2.73376	-----		
	-----	-----	-----	-----	-----	-----	-----		
	2.79852	2.81782					2.80347	7.164	
33 Vinyl Acetate	+++++	+++++	0.14583	0.22481	0.19471	0.28584	-----		
	-----	-----	-----	-----	-----	-----	-----		
	0.27451	0.32611					0.24197	27.310	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	RRF	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9			
	-----	-----	-----	-----	-----	-----			
	20.000	40.000							
	Level 10	Level 11							
34 Chlorprene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
171 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
35 Ethyl-tert-butyl ether	+++++	+++++	1.90807	4.93367	2.55742	5.06969			
	5.39133	5.75066						4.26847	37.836 <-
183 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
36 cis-1,2-Dichloroethene	+++++	1.02197	1.00294	1.06528	1.07868	0.99687			
	1.03763	1.03007						1.03335	2.927
37 2-Butanone	+++++	0.43496	0.58226	0.87863	0.94183	0.89239			
	0.93501	0.72877						0.77055	25.560
175 Ethyl Acetate	+++++	+++++	0.19084	0.19018	0.29095	0.23497			
	0.23540	0.23882						0.23019	16.214
38 Tetrahydrofuran	+++++	+++++	1.92967	1.84311	2.07872	2.01414			
	2.13414	2.18473						2.03075	6.321
188 2-Chloroethylvinylether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
40 Chloroform	+++++	4.41538	3.55948	3.50839	3.61158	3.35429			
	3.41622	3.42863						3.61342	10.088

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound		0.05000	0.10000	0.50000	2.000	5.000	10.000	____		% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF			
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	20.000	40.000								
	Level 10	Level 11								
42 Cyclohexane	+++++	2.26690	1.83832	2.18188	2.32925	2.23040				
	2.23899	2.21355						2.18561	7.318	
41 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
43 1,1,1-Trichloroethane	3.34834	3.63209	3.46659	3.49940	3.73622	3.57198				
	3.66130	3.61405						3.56625	3.458	
44 Carbon Tetrachloride	3.57409	3.07359	4.10846	4.34758	5.01075	4.76732				
	4.86208	4.93744						4.33516	16.325	
184 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
189 1,1-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
45 2,2,4-Trimethylpentane	+++++	2.56260	2.04530	2.30925	2.53414	2.38708				
	2.48624	2.57299						2.41394	7.835	
46 Benzene	+++++	1.46485	1.16315	1.27947	1.28949	1.26018				
	1.22069	1.19757						1.26791	7.727	
48 tert-amyl methyl ether	+++++	+++++	0.52593	0.93677	0.62692	1.07542				
	1.08189	1.11541						0.89372	28.566	
49 1,2-Dichloroethane	+++++	0.85429	0.62111	0.66491	0.69106	0.67411				
	0.64866	0.65076						0.68641	11.250	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound		0.05000	0.10000	0.50000	2.000	5.000	10.000	____		% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF			
	-----	-----	-----	-----	-----	-----	-----			
	20.000	40.000								
	Level 10	Level 11								
50 Heptane	+++++	0.33226	0.30430	0.35351	0.39467	0.38604				
	0.38534	0.39697						0.36473	9.788	
51 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
53 Trichloroethene	0.71024	0.67669	0.65461	0.69085	0.71077	0.68634				
	0.67508	0.66360						0.68352	2.962	
167 Methylcyclohexane	+++++	+++++	2.59575	3.12719	3.45073	3.26760				
	3.37901	3.35707						3.19623	9.839	
54 1,2-Dichloropropane	+++++	0.51030	0.40973	0.39719	0.44547	0.43717				
	0.43245	0.43948						0.43882	8.204	
55 1,4-Dioxane	+++++	0.27217	0.28830	0.30312	0.32009	0.32688				
	0.32332	0.32198						0.30798	6.796	
56 Bromodichloromethane	0.79425	0.80505	0.75033	0.82583	0.93779	0.91273				
	0.91771	0.92181						0.85819	8.414	
57 cis-1,3-Dichloropropene	+++++	0.47625	0.46829	0.57236	0.66605	0.67440				
	0.67529	0.69164						0.60347	16.194	
58 4-Methyl-2-pentanone	+++++	0.73705	0.78493	0.97264	1.06479	1.12439				
	1.16146	1.21234						1.00823	18.400	
65 Octane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
 End Cal Date : 21-MAY-2009 08:21
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound		0.05000	0.10000	0.50000	2.000	5.000	10.000	____		% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF			
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	20.000	40.000								
	Level 10	Level 11								
60 Toluene	+++++	1.61676	1.48532	1.60636	1.68508	1.64977				
	1.63501	1.62959						1.61541	3.885	
61 trans-1,3-Dichloropropene	+++++	0.37763	0.50842	0.50349	0.77730	0.61607				
	0.62434	0.63389						0.57730	22.022	
62 1,1,2-Trichloroethane	0.48543	0.61295	0.47371	0.50523	0.55351	0.52527				
	0.50686	0.50213						0.52064	8.539	
63 Tetrachloroethene	0.77832	0.82640	0.84796	0.82307	0.91365	0.86263				
	0.83651	0.79893						0.83593	4.921	
74 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++						+++++	+++++	
64 2-Hexanone	+++++	+++++	0.28917	0.40365	0.47869	0.49180				
	0.49845	0.50555						0.44455	19.045	
66 Dibromochloromethane	0.70357	0.79624	0.80833	0.88498	1.01200	0.99200				
	0.98612	0.97804						0.89516	12.828	
67 1,2-Dibromoethane	0.81637	0.84719	0.85284	0.85794	0.97530	0.92897				
	0.91928	0.89124						0.88614	5.910	
69 Chlorobenzene	+++++	1.77388	1.60722	1.60087	1.73145	1.60246				
	1.59356	1.56574						1.63931	4.853	
70 Ethyl Benzene	+++++	0.80939	0.73588	0.79335	0.89767	0.85560				
	0.85014	0.81748						0.82279	6.288	

Air Toxics Ltd.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdz.i/20May2009.b/z0910520a.m
Cal Date : 21-May-2009 10:04 ejakob
Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	—	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF	
	20.000	40.000						
	Level 10	Level 11						
180 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
174 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
71 m,p-Xylene	+++++	0.98629	0.80733	0.97652	1.10021	1.08185		
	1.07245	1.04318					1.00969	9.991
72 o-Xylene	+++++	0.75554	0.86559	0.98883	1.10605	1.06737		
	1.06430	1.02100					0.98124	12.881
73 Styrene	+++++	1.11711	1.05919	1.27121	1.54150	1.56881		
	1.58478	1.54201					1.38352	16.527
75 Bromoform	0.67202	0.63730	0.70580	0.85661	1.03339	1.04971		
	1.09435	1.11448					0.89546	22.510
177 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
76 Cumene	+++++	2.25761	2.50102	2.87921	3.18855	3.12427		
	3.09866	2.67860					2.81828	12.525
79 1,1,2,2-Tetrachloroethane	1.66699	1.59655	1.50668	1.55427	1.68558	1.63004		
	1.59242	1.55461					1.59839	3.785
186 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
End Cal Date : 21-MAY-2009 08:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdz.i/20May2009.b/z0910520a.m
Cal Date : 21-May-2009 10:04 ejakob
Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	—	RRF	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	—		
	20.000	40.000	—	—	—	—	—		
	Level 10	Level 11							
80 Propylbenzene	+++++	3.24107	3.15858	3.49347	3.92859	3.85911			
	3.82827	2.73888						3.46400	12.771
78 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
176 Decane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
82 4-Ethyltoluene	+++++	2.90036	2.75053	3.14132	3.56119	3.47453			
	3.50769	2.65408						3.14139	12.120
172 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
83 1,3,5-Trimethylbenzene	+++++	2.41518	2.53244	2.62699	2.95061	2.84158			
	2.82377	2.91849						2.72987	7.540
182 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
81 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
84 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++						+++++	+++++
85 1,2,4-Trimethylbenzene	+++++	1.86080	2.14427	2.30852	2.65259	2.62925			
	2.63215	2.74464						2.42460	13.568

Air Toxics Ltd.

INITIAL CALIBRATION DATA

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 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF	
	-----	-----	-----	-----	-----	-----	-----	-----
	20.000	40.000						
	Level 10	Level 11						
185 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
86 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
87 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
88 1,3-Dichlorobenzene	2.40563	1.91211	1.86522	1.86197	2.04213	2.03060		
	2.06047	2.16527					2.04292	8.842
173 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
89 1,4-Dichlorobenzene	2.51856	2.08835	1.80963	1.87012	2.08732	2.09796		
	2.09236	2.22201					2.09829	10.310
90 alpha-chlorotoluene	+++++	0.94399	1.15785	1.37154	1.64629	1.83975		
	1.92943	2.08230					1.56731	26.961
91 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
92 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
93 1,2-Dichlorobenzene	2.49080	1.81640	1.80662	1.81966	2.00622	1.96433		
	2.02197	2.12339					2.00617	11.323

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
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 Quant Method : ISTD
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 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/msdz.i/20May2009.b/z0910520a.m
 Cal Date : 21-May-2009 10:04 ejakob
 Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	RRF	
	-----	-----	-----	-----	-----	-----	-----	
	20.000	40.000						
	Level 10	Level 11						
94 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
95 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
168 1,2-dibromo-3-chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
97 1,2,4-Trichlorobenzene	+++++	+++++	0.80157	0.76351	0.84706	0.94763		
	0.98522	1.00911					0.89235	11.451
98 Hexachlorobutadiene	+++++	+++++	0.63850	0.60223	0.68380	0.69227		
	0.70198	0.72473					0.67392	6.701
99 Naphthalene	+++++	+++++	1.44944	1.48955	1.66265	2.03337		
	2.13419	2.19629					1.82758	18.259
96 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
170 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
\$ 47 1,2-Dichloroethane-d4	1.34454	1.35023	1.35878	1.30129	1.32347	1.28880		
	1.41286	1.43128					1.35140	3.697
\$ 59 Toluene-d8	0.94174	0.94752	0.94919	0.96998	0.98081	0.97258		
	0.98923	0.98985					0.96761	1.984

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 20-MAY-2009 15:05
End Cal Date : 21-MAY-2009 08:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdz.i/20May2009.b/z0910520a.m
Cal Date : 21-May-2009 10:04 ejakob
Curve Type : Average

Compound	0.05000	0.10000	0.50000	2.000	5.000	10.000	____	RRF	% RSD
	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9			
	-----	-----	-----	-----	-----	-----	-----		
	20.000	40.000							
	Level 10	Level 11							
\$ 77 Bromofluorobenzene	0.66603	0.65890	0.65697	0.63672	0.66985	0.65704			
	0.67341	0.66965					0.66107	1.770	

Calibration History

Method : /chem/msdz.i/20May2009.b/z0910520a.m
Start Cal Date: 20-MAY-2009 15:05
End Cal Date : 21-MAY-2009 08:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 0.05000		
20-MAY-2009 15:05	Level05	/chem/msdz.i/20May2009.b/z052010.d

Cal Level: 5 , Cal Amount: 0.10000		
21-MAY-2009 08:21	Level#1	/chem/msdz.i/20May2009.b/z052020.d

Cal Level: 6 , Cal Amount: 0.50000		
20-MAY-2009 16:22	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052012.d

Cal Level: 7 , Cal Amount: 2.00000		
20-MAY-2009 17:00	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052013.d

Cal Level: 8 , Cal Amount: 5.00000		
20-MAY-2009 17:58	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052014.d

Cal Level: 9 , Cal Amount: 10.00000		
20-MAY-2009 18:34	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052015.d

Cal Level: 10 , Cal Amount: 20.00000		
20-MAY-2009 19:42	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052016.d

Cal Level: 11 , Cal Amount: 40.00000		
20-MAY-2009 21:14	HILOcrvENSR	/chem/msdz.i/20May2009.b/z052017.d

+-----+-----+-----+

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 9

+-----+-----+-----+
| Ccal Level: 9 , Ccal Amount: 10.000 |

+=====+=====+=====+
| 20-MAY-2009 18:34 | HILOcrvENSR | /chem/msdz.i/20May2009.b/z052015a.d |

+-----+-----+-----+
| Ccal Level: 8 , Ccal Amount: 5.000 |

+=====+=====+=====+
| 20-MAY-2009 17:58 | HILOcrvENSR | /chem/msdz.i/20May2009.b/z052014a.d |

+-----+-----+-----+
| Ccal Level: 9 , Ccal Amount: 10.000 |

+=====+=====+=====+
| 20-MAY-2009 18:34 | HILOcrvENSR | /chem/msdz.i/20May2009.b/z052015.d |

+-----+-----+-----+

m/z	ION ABUNDANCE CRITERIA	% REL. ABUNDANCE
50	15.0 - 40.0% of mass 95	22.34
75	30.0 - 60.0% of mass 95	40.51
95	Base peak, 100.00% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.62
173	Less than 2.0% of mass 174	(0.66) ¹
174	5.0 - 100% of mass 95	(0.11) ¹
175	5.0 - 9.0% of mass 174	(7.15) ¹
176	Greater than 95.0% but less than 101.0% of mass 174	(96.56) ¹
177	5.0 - 9.0% of mass 176	(6.33) ²

¹ - value in parenthesis is % mass 174² - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: $\frac{357.10}{358.24} = 0.98$

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{Blank}}} \times \frac{\text{Conc. is}}{\text{RRF}} = \frac{(\text{Area}_{\text{sample}} / \text{Area}_{\text{Blank}})}{(\text{Conc. is} / \text{RRF})}$$

Reported Result 11%

Method: _____

User	Batch	Sample/Clean Name	Conc.	Pressure	Ant. Injected	RF	Loaded by	Date Analyzed	Time Analyzed	Retained by	Comments
✓	2152005	DBE Toluene	14.76-16.0	50mL	10	750	5-29-09	11:42	11:42	TB	
✓	06	System Blank	-	-	50mL				12:15	TB	
✓	07	ICAL #1754-233	0.05ppbv	0.003ppbv	30mL				12:08	BO	
✓	08	-	-	-	0.01 ppbv	100mL			13:49	BS	
✓	09	-	-	-	0.02 ppbv	200mL			14:23	BS	
✓	10	-	-	-	0.05 ppbv	50mL			15:03	BS	
✓	11	ICAL #1754-234	2 ppbv	0.1 ppbv	100mL				15:07	BS	
✓	12	-	-	-	0.5 ppbv	125mL	✓	✓	16:32	BS	

BFB Injection Date: 5-20-09
 BFB Injection Time: 11:42
 BFB File ID: 2052005
 Tekmar Purge Flow: 14.7ml/min
 Vacuum: 6.9 x 10^-4

IS/S Std.#:	<u>1754-78</u>	Exp. Date:	<u>6/30/09</u>
BCM	<u>22.8120</u>	35	<u>3024</u>
1,4-DFB	<u>1702385</u>	14	<u>33121</u>
CB-d5	<u>1576949</u>	178	<u>3184</u>

Verified CCV IS vs ICAL mid-point (-40%ID) 11:42 minutes

NOAH Cart #: _____ File #: _____

File ID:	
Compound:	
Initials:	

② Air Toxics Ltd.

MSD-Z

Logbook #: 1724

9	✓	Z0520	1.3	T _{CAL} #1754-234	20ppm	2.0ppm	500mL	1.00	PM	5-20-04	1700	05	
10	✓		14	T _{CAL} #1754-196	50ppm	5.0ppm	500mL				1758	05	
11	✓		15		50ppm	10ppm	100mL				1834	05	
12	✓		16		10ppm	20ppm	200mL				1942	05	
13	✓		17		40ppm	400ppm	400mL				214	05	
14	✗		18	System Blank	1500	Humid	500mL	1.00			2303		
15	✓		19		↓	↓					2303		
16	✓		20	T _{CAL} Level 5 # 1754-234	0.1ppm	25mL					0005		
17	✓		21	ICM #1754-205	50ppm	100mL					0821		
18	✓		22								0923		
19			23										
20			24										
21			25										
22			26										
23			27										
24			28										
25			29										
26			30										
27			31										

Comments: # AN 0483163 44.2 mL/m = 50mL

$$21.9 \text{ mL/m} = 25 \text{ mL}$$

F/M SN # 1-01074 EXP 6-09

5-21-05

Signature

5-21-05

Date

Air Toxics Ltd.
 Modified EPA Methods TO-14A/TO-15 Low Level
 Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane	1,4-Difluorobenzene	Chlorobenzene-d5
Target Compounds:	Target Compounds:	Target Compounds:
Freon 12	Benzene	trans-1,3-Dichloropropene
Freon 114	1,2-Dichloroethane	1,1,2-Trichloroethane
Chloromethane	Heptane	Tetrachloroethylene
Vinyl Chloride	Trichloroethene	2-Hexanone
1,3-Butadiene	1,2-Dichloropropane	Dibromochloromethane
Bromomethane	1,4-Dioxane	1,2-Dibromoethane (EDB)
Chloroethane	Bromodichloromethane	Chlorobenzene
Freon 11	cis-1,3-Dichloropropene	Ethyl Benzene
Ethanol	4-Methyl-2-pentanone	m,p-Xylene
Freon 113	Toluene	o-Xylene
1,1-Dichloroethene		Styrene
Acetone		Bromoform
2-Propanol		Cumene
Carbon Disulfide		1,1,2,2-Tetrachloroethane
Methylene Chloride		Propylbenzene
Methyl tert-butyl ether		4-Ethyltoluene
trans-1,2-Dichloroethene		1,3,5-Trimethylbenzene
Hexane		1,2,4-Trimethylbenzene
1,1-Dichloroethane		1,3-Dichlorobenzene
2-Butanone (Methyl Ethyl Ketone)		1,4-Dichlorobenzene
cis-1,2-Dichloroethene		alpha-Chlorotoluene
Tetrahydrofuran		1,2-Dichlorobenzene
Chloroform		1,2,4-Trichlorobenzene
1,1,1-Trichloroethane		Hexachlorobutadiene
Cyclohexane		
Carbon Tetrachloride		
Surrogates:	Surrogates:	Surrogates:
1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene

Initial Calibration Narrative

An initial calibration curve was analyzed on 05/20/09 on MSD-Z. The instrument was set up to do Full Scan and Selective Ion Monitoring (SIM) simultaneously.

The 0.1ppbv level of this ICAL was reanalyzed due to the anomalous unacceptable linearity for MTBE.

Report Date: 21-May-2009 09:52

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052021.d
 Lab Smp Id: LCS-1 Client Smp ID: LCS-1
 Inj Date : 21-MAY-2009 09:23
 Operator : ej Inst ID: msdz.i
 Smp Info : 100ML #1754-205 50PPBV
 Misc Info : 10PPBV
 Comment :
 Method : /chem/msdz.i/20May2009.b/z0910520a.m
 Meth Date : 21-May-2009 09:52 dmendoza Quant Type: ISTD
 Cal Date : 21-MAY-2009 08:21 Cal File: z052020.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AT09.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

 CONCENTRATIONS
 ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 310321 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 232754 0.00- 30.00 75.00
 13.535 13.535 (1.000) 49 396020 0.00- 30.00 127.62

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1238448 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 187307 0.00- 30.00 15.12

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1544022 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 734229 0.00- 30.00 47.55

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.312 14.313 (1.057) 65 411870 9.82118 9.821 80.00- 120.00 100.00
 14.312 14.313 (1.057) 67 215767 0.00- 30.00 52.39

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1251861 10.4467 10.447 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 120674 0.00- 30.00 9.64

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	827781		38.83-	98.83	66.12
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\$ 77 Bromofluorobenzene

20.509	20.535	(1.076)	174	1025735	10.0492	10.049	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1172724			84.56-	144.56	114.33
20.509	20.535	(1.076)	176	1006269			66.40-	126.40	98.10

1 Propylene

4.449	4.449	(0.329)	41	426322	9.45298	9.453	80.00-	120.00	100.00
4.449	4.449	(0.329)	42	279878			0.00-	30.00	65.65
4.449	4.449	(0.329)	39	383277			0.00-	30.00	89.90

3 Dichlorodifluoromethane/Fr12

4.835	4.835	(0.357)	85	1519099	8.78905	8.789	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	489154			2.29-	62.29	32.20

4 Freon 114

5.919	5.919	(0.437)	135	1157466	9.14123	9.141	80.00-	120.00	100.00
5.919	5.919	(0.437)	85	1356852			0.00-	30.00	117.23
5.919	5.919	(0.437)	137	351595			0.00-	30.00	30.38

5 Chloromethane

6.112	6.112	(0.452)	50	540034	9.18877	9.189	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	159291			0.00-	30.00	29.50

6 Vinyl Chloride

6.780	6.781	(0.501)	62	478425	8.77373	8.774	80.00-	120.00	100.00
6.780	6.781	(0.501)	64	149858			0.83-	60.83	31.32

7 1,3-Butadiene

6.971	6.971	(0.515)	54	346165	8.30230	8.302	80.00-	120.00	100.00
6.971	6.971	(0.515)	39	452453			0.00-	30.00	130.70

9 Bromomethane

8.148	8.148	(0.602)	94	428976	8.84005	8.840	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	405622			63.57-	123.57	94.56

10 Chloroethane

8.562	8.562	(0.633)	64	225346	9.40953	9.410	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	73024			0.00-	30.00	32.41
8.562	8.562	(0.633)	66	67824			0.00-	30.00	30.10

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	1110353	8.82111	8.821	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	719361			33.44-	93.44	64.79

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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14 Ethanol CAS #: 64-17-5

10.104	10.105	(0.747)	45	190866	8.01174	8.012	80.00-	120.00	100.00
10.104	10.105	(0.747)	43	52947			0.00-	30.00	27.74

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	303543	10.5538	10.554	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	824685			0.00-	30.00	271.69
10.442	10.442	(0.771)	96	480883			0.00-	30.00	158.42

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	798035	9.26195	9.262	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	510480			33.10-	93.10	63.97
10.442	10.442	(0.771)	101	889258			0.00-	30.00	111.43

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	1275857	9.72781	9.728	80.00-	120.00	100.00
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20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	201272	8.08831	8.088	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	934612			0.00-	30.00	464.35

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	877610	11.0509	11.051	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	212121			0.00-	30.00	24.17
11.061	11.061	(0.817)	59	28720			0.00-	30.00	3.27

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	191962	10.1176	10.118	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	677608			0.00-	30.00	352.99

25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	398814	10.2518	10.252	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	575298			0.00-	30.00	144.25
11.418	11.418	(0.844)	51	170764			0.00-	30.00	42.82

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	1101629	13.8442	13.844	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	282735			0.00-	30.00	25.67
11.747	11.747	(0.868)	41	404759			0.00-	30.00	36.74

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	314572	9.59393	9.594	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	744448			0.00-	30.00	236.65
11.775	11.775	(0.870)	96	511325			0.00-	30.00	162.55

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	707579	10.4073	10.407	80.00-	120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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30 Hexane (continued)

12.077	12.077	(0.892)	43	534660		0.00-	30.00	75.56
12.077	12.077	(0.892)	86	118376		0.00-	30.00	16.73

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	879899	10.1141	10.114	80.00- 120.00	100.00
12.434	12.434	(0.919)	65	274407		0.00-	30.00	31.19

33 Vinyl Acetate

CAS #: 108-05-4

12.488	12.489	(0.923)	86	85240	11.3520	11.352	80.00- 120.00	100.00
12.488	12.489	(0.923)	43	609575		0.00-	30.00	715.13
12.488	12.489	(0.923)	42	59579		0.00-	30.00	69.90

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	325992	10.1660	10.166	80.00- 120.00	100.00
13.225	13.225	(0.977)	61	797192		0.00-	30.00	244.54
13.225	13.225	(0.977)	96	499369		129.61-	189.61	153.18

37 2-Butanone

CAS #: 78-93-3

13.245	13.246	(0.979)	72	275675	11.5288	11.529	80.00- 120.00	100.00
13.245	13.246	(0.979)	43	2880575		0.00-	30.00	1044.92
13.245	13.246	(0.979)	57	76402		0.00-	30.00	27.71

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	620703	9.84954	9.850	80.00- 120.00	100.00
13.535	13.535	(1.000)	71	209246		0.00-	30.00	33.71
13.535	13.535	(1.000)	72	219807		0.00-	30.00	35.41

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	1082616	9.65483	9.655	80.00- 120.00	100.00
13.627	13.627	(1.007)	85	709372		0.00-	30.00	65.52

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	695092	10.2484	10.248	80.00- 120.00	100.00
13.812	13.812	(1.020)	56	774473		0.00-	30.00	111.42
13.812	13.812	(1.020)	41	545907		0.00-	30.00	78.54

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	1147282	10.3669	10.367	80.00- 120.00	100.00
13.812	13.812	(1.020)	99	718793		0.00-	30.00	62.65

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	1514864	11.2605	11.260	80.00- 120.00	100.00
13.997	13.997	(1.034)	117	1566551		0.00-	30.00	103.41

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	1507385	9.59967	9.600	80.00- 120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (PPBV)	(PPBV)	TARGET RANGE	RATIO
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46 Benzene (continued)

14.285	14.285 (0.965)	77	350280		0.00-	30.00	23.24
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45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.257	14.258 (1.053)	56	745257 9.94873	9.949	80.00-	120.00	100.00
14.257	14.258 (1.053)	57	2353138		0.00-	30.00	315.75
14.257	14.258 (1.053)	41	844390		0.00-	30.00	113.30

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395 (0.972)	62	844952 9.93960	9.940	80.00-	120.00	100.00
14.395	14.395 (0.972)	64	261175		0.00-	30.00	30.91

50 Heptane

CAS #: 142-82-5

14.477	14.477 (0.978)	57	469650 10.3975	10.397	80.00-	120.00	100.00
14.477	14.477 (0.978)	100	179411		0.00-	30.00	38.20
14.477	14.477 (0.978)	43	1038054		0.00-	30.00	221.03

53 Trichloroethene

CAS #: 79-01-6

15.163	15.136 (1.024)	130	841559 9.94155	9.942	80.00-	120.00	100.00
15.136	15.136 (1.022)	95	734709		0.00-	30.00	87.30
15.136	15.136 (1.022)	97	467575		0.00-	30.00	55.56

54 1,2-Dichloropropane

CAS #: 78-87-5

15.520	15.521 (1.048)	63	530282 9.75748	9.757	80.00-	120.00	100.00
15.520	15.521 (1.048)	62	369229		0.00-	30.00	69.63
15.520	15.521 (1.048)	41	477752		58.92-	118.92	90.09

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658 (1.057)	88	386032 10.1210	10.121	80.00-	120.00	100.00
15.658	15.658 (1.057)	58	270432		0.00-	30.00	70.05
15.658	15.658 (1.057)	57	92510		0.00-	30.00	23.96

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905 (1.074)	83	1157923 10.8948	10.895	80.00-	120.00	100.00
15.905	15.905 (1.074)	85	737768		0.00-	30.00	63.71

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.615	16.616 (1.122)	75	821560 10.9928	10.993	80.00-	120.00	100.00
16.615	16.616 (1.122)	77	260853		0.00-	30.00	31.75
16.615	16.616 (1.122)	39	595696		40.93-	100.93	72.51

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795 (1.134)	43	1422158 11.3897	11.390	80.00-	120.00	100.00
16.795	16.795 (1.134)	58	462780		0.00-	30.00	32.54
16.795	16.795 (1.134)	85	215926		0.00-	30.00	15.18

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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60 Toluene CAS #: 108-88-3

17.086	17.086	(1.154)	91	2138325	10.6884	10.688	80.00- 120.00	100.00
17.086	17.086	(1.154)	92	1258664			0.00- 30.00	58.86

61 trans-1,3-Dichloropropene CAS #: 10061-02-6

17.467	17.467	(0.917)	75	936201	10.5029	10.503	80.00- 120.00	100.00
17.467	17.467	(0.917)	77	290877			0.00- 30.00	31.07
17.467	17.467	(0.917)	39	614283			35.92- 95.92	65.61

62 1,1,2-Trichloroethane CAS #: 79-00-5

17.740	17.741	(0.931)	97	774190	9.63071	9.631	80.00- 120.00	100.00
17.740	17.741	(0.931)	99	497278			0.00- 30.00	64.23
17.740	17.741	(0.931)	83	620133			49.05- 109.05	80.10

63 Tetrachloroethene CAS #: 127-18-4

17.857	17.857	(0.937)	166	1316631	10.2009	10.201	80.00- 120.00	100.00
17.857	17.857	(0.937)	129	905106			0.00- 30.00	68.74
17.857	17.857	(0.937)	131	887972			36.65- 96.65	67.44

64 2-Hexanone CAS #: 591-78-6

18.003	18.003	(0.945)	58	737764	10.7484	10.748	80.00- 120.00	100.00
18.003	18.003	(0.945)	43	1564328			0.00- 30.00	212.04
18.003	18.003	(0.945)	100	176337			0.00- 30.00	23.90

66 Dibromochloromethane CAS #: 124-48-1

18.294	18.294	(0.960)	129	1520801	11.0032	11.003	80.00- 120.00	100.00
18.294	18.294	(0.960)	127	1152596			0.00- 30.00	75.79

67 1,2-Dibromoethane CAS #: 106-93-4

18.498	18.498	(0.971)	107	1359221	9.93423	9.934	80.00- 120.00	100.00
18.498	18.498	(0.971)	109	1301401			0.00- 30.00	95.75

69 Chlorobenzene CAS #: 108-90-7

19.103	19.103	(1.003)	112	2439347	9.63738	9.637	80.00- 120.00	100.00
19.103	19.103	(1.003)	114	775492			0.00- 30.00	31.79
19.079	19.079	(1.001)	77	1187240			20.36- 80.36	48.67

70 Ethyl Benzene CAS #: 100-41-4

19.151	19.151	(1.005)	106	1259740	9.91607	9.916	80.00- 120.00	100.00
19.151	19.151	(1.005)	91	3634098			0.00- 30.00	288.48

71 m,p-Xylene CAS #: 108-38-3

19.320	19.320	(1.014)	106	1628410	10.4453	10.445	80.00- 120.00	100.00
19.296	19.320	(1.013)	91	2907653			0.00- 30.00	178.56

72 o-Xylene CAS #: 95-47-6

19.826	19.826	(1.040)	106	1631079	10.7658	10.766	80.00- 120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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72 o-Xylene (continued)

19.826	19.826	(1.040)	91	3089088	0.00-	30.00	189.39
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	2623174	12.2797	12.280	80.00-	120.00	100.00
19.850	19.850	(1.042)	78	1069267		0.00-	30.00		40.76

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	1657488	11.9881	11.988	80.00-	120.00	100.00
20.148	20.148	(1.057)	171	862461		0.00-	30.00		52.03

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	4871293	11.1946	11.194	80.00-	120.00	100.00
20.251	20.251	(1.063)	120	1383789		0.00-	30.00		28.41

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	2415887	9.78904	9.789	80.00-	120.00	100.00
20.689	20.689	(1.086)	85	1558327		0.00-	30.00		64.50

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	5895656	11.0230	11.023	80.00-	120.00	100.00
20.741	20.741	(1.088)	120	1478959		0.00-	30.00		25.09

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	5325080	10.9787	10.979	80.00-	120.00	100.00
20.870	20.870	(1.095)	120	1665285		0.00-	30.00		31.27

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	4414460	10.4733	10.473	80.00-	120.00	100.00
20.947	20.947	(1.099)	120	2329522		0.00-	30.00		52.77

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	3995733	10.6734	10.673	80.00-	120.00	100.00
21.386	21.386	(1.122)	120	2008529		0.00-	30.00		50.27

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.772	21.773	(1.143)	146	3083555	9.77566	9.776	80.00-	120.00	100.00
21.772	21.773	(1.143)	148	1963399		0.00-	30.00		63.67
21.772	21.773	(1.143)	111	1091660		0.00-	30.00		35.40

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	3128165	9.65542	9.655	80.00-	120.00	100.00
21.876	21.876	(1.148)	148	1967959		0.00-	30.00		62.91
21.850	21.850	(1.147)	111	1076843		0.00-	30.00		34.42

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	3728619	15.4078	15.408	80.00-	120.00	100.00(R)
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	871712		0.00-	30.00	23.38
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93 1,2-Dichlorobenzene

22.288	22.288	(1.170)	146	2965183	9.57259	CAS #: 95-50-1	9.572	80.00-	120.00	100.00
22.288	22.288	(1.170)	148	1875418			33.79-	93.79		63.25
22.288	22.288	(1.170)	111	1117059			8.12-	68.12		37.67

97 1,2,4-Trichlorobenzene

24.042	24.042	(1.262)	180	1767396	12.8276	CAS #: 120-82-1	12.828	80.00-	120.00	100.00
24.042	24.042	(1.262)	182	1680017			0.00-	30.00		95.06

98 Hexachlorobutadiene

24.119	24.120	(1.266)	225	1226203	11.7842	CAS #: 87-68-3	11.784	80.00-	120.00	100.00
24.119	24.120	(1.266)	223	780658			0.00-	30.00		63.66

99 Naphthalene

24.352	24.352	(1.278)	128	3603537	12.7702	CAS #: 91-20-3	12.770	80.00-	120.00	100.00
24.352	24.352	(1.278)	127	428267			0.00-	30.00		11.88

179 Butane

6.711	6.694	(0.496)	58	90876	8.59988	CAS #: 106-97-8	8.600	80.00-	120.00	100.00
6.694	6.694	(0.495)	43	799584			0.00-	30.00		879.86

11 Isopentane

8.687	8.687	(0.642)	57	336435	9.04426	CAS #: 78-78-4	9.044	80.00-	120.00	100.00
8.687	8.687	(0.642)	43	575892			0.00-	30.00		171.17
8.687	8.687	(0.642)	42	491745			0.00-	30.00		146.16

167 Methylcyclohexane

15.328	15.328	(1.133)	83	1018267	10.2663	CAS #: 108-87-2	10.266	80.00-	120.00	100.00
15.328	15.328	(1.133)	98	515720			0.00-	30.00		50.65
15.328	15.328	(1.133)	55	820705			0.00-	30.00		80.60

26 tert-butyl alcohol

11.665	11.665	(0.862)	59	908791	10.8946	CAS #: 75-65-0	10.894	80.00-	120.00	100.00
11.665	11.665	(0.862)	41	274720			0.00-	30.00		30.23
11.665	11.665	(0.862)	57	98401			0.00-	30.00		10.83

32 Isopropyl ether

12.434	12.434	(0.919)	45	1694448	10.0685	CAS #: 108-20-3	10.068	80.00-	120.00	100.00
12.434	12.434	(0.919)	87	381186			0.00-	30.00		22.50
12.434	12.434	(0.919)	59	157620			0.00-	30.00		9.30

35 Ethyl-tert-butyl ether

12.900	12.900	(0.953)	59	1486372	11.2213	CAS #: 637-92-3	11.221	80.00-	120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.900	12.900	(0.953)	87	576149		0.00-	30.00	38.76
12.900	12.900	(0.953)	41	389412		0.00-	30.00	26.20

175 Ethyl Acetate

CAS #: 141-78-6

13.245	13.246	(0.979)	70	102202	14.3072	14.307	80.00-	120.00	100.00(R)
13.245	13.246	(0.979)	43	2880575			0.00-	30.00	2818.51
13.225	13.225	(0.977)	61	797192			0.00-	30.00	780.02

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	1309406	11.8303	11.830	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	323922			0.00-	30.00	24.74
14.367	14.367	(0.970)	55	410680			0.00-	30.00	31.36

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052021.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: ej
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 10PPBV

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	310321	-5.42
52 1,4-Difluorobenze	1302885	781731	1824039	1238448	-4.95
68 Chlorobenzene-d5	1586849	952109	2221589	1544022	-2.70

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 20May2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Level: LOW Operator: ej
Data Type: MS DATA SampleType: LCS
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 10PPBV

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
3 Dichlorodifluorome	10.000	8.789	87.89	70-130
1 Propylene	10.000	9.453	94.53	60-140
4 Freon 114	10.000	9.141	91.41	70-130
5 Chloromethane	10.000	9.189	91.89	70-130
6 Vinyl Chloride	10.000	8.774	87.74	70-130
7 1,3-Butadiene	10.000	8.302	83.02	60-140
9 Bromomethane	10.000	8.840	88.40	70-130
10 Chloroethane	10.000	9.410	94.10	70-130
13 Trichlorofluoromet	10.000	8.821	88.21	70-130
14 Ethanol	11.000	8.012	72.83	60-140
17 Freon 113	10.000	9.262	92.62	70-130
15 1,1-Dichloroethene	10.000	10.554	105.54	70-130
20 Acetone	10.000	8.088	80.88	60-140
19 Carbon Disulfide	10.000	9.728	97.28	60-140
21 2-Propanol	10.000	11.051	110.51	60-140
22 3-Chloroprene	10.000	10.118	101.18	60-140
25 Methylene Chloride	10.000	10.252	102.52	70-130
27 MTBE	10.000	13.844	138.44	60-140
28 trans-1,2-Dichloro	10.000	9.594	95.94	60-140
30 Hexane	10.000	10.407	104.07	60-140
31 1,1-Dichloroethane	10.000	10.114	101.14	70-130
33 Vinyl Acetate	10.000	11.352	113.52	60-140
36 cis-1,2-Dichloroet	10.000	10.166	101.66	70-130
37 2-Butanone	10.000	11.529	115.29	60-140
38 Tetrahydrofuran	10.000	9.850	98.50	60-140
40 Chloroform	10.000	9.655	96.55	70-130
42 Cyclohexane	10.000	10.248	102.48	60-140
43 1,1,1-Trichloroeth	10.000	10.367	103.67	70-130
44 Carbon Tetrachlori	10.000	11.260	112.60	70-130
45 2,2,4-Trimethylpen	10.000	9.949	99.49	60-140
46 Benzene	10.000	9.600	96.00	70-130
50 Heptane	10.000	10.397	103.97	60-140
49 1,2-Dichloroethane	10.000	9.940	99.40	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
53 Trichloroethene	10.000	9.942	99.42	70-130
54 1,2-Dichloropropan	10.000	9.757	97.57	70-130
55 1,4-Dioxane	10.000	10.121	101.21	60-140
56 Bromodichlorometha	10.000	10.895	108.95	60-140
57 cis-1,3-Dichloropr	10.000	10.993	109.93	70-130
58 4-Methyl-2-pentano	10.000	11.390	113.90	60-140
60 Toluene	10.000	10.688	106.88	70-130
61 trans-1,3-Dichloro	10.000	10.503	105.03	70-130
62 1,1,2-Trichloroeth	10.000	9.631	96.31	70-130
64 2-Hexanone	10.000	10.748	107.48	60-140
63 Tetrachloroethene	10.000	10.201	102.01	70-130
66 Dibromochlorometha	10.000	11.003	110.03	60-140
67 1,2-Dibromoethane	10.000	9.934	99.34	70-130
69 Chlorobenzene	10.000	9.637	96.37	70-130
70 Ethyl Benzene	10.000	9.916	99.16	70-130
71 m,p-Xylene	10.000	10.445	104.45	70-130
72 o-Xylene	10.000	10.766	107.66	70-130
73 Styrene	10.000	12.280	122.80	70-130
75 Bromoform	10.000	11.988	119.88	60-140
76 Cumene	10.000	11.194	111.95	60-140
79 1,1,2,2-Tetrachlor	10.000	9.789	97.89	70-130
80 Propylbenzene	10.000	11.023	110.23	70-130
82 4-Ethyltoluene	10.000	10.979	109.79	60-140
83 1,3,5-Trimethylben	10.000	10.473	104.73	70-130
85 1,2,4-Trimethylben	10.000	10.673	106.73	70-130
88 1,3-Dichlorobenzen	10.000	9.776	97.76	70-130
89 1,4-Dichlorobenzen	10.000	9.655	96.55	70-130
90 alpha-chlorotoluen	10.000	15.408	154.08*	70-130
93 1,2-Dichlorobenzen	10.000	9.572	95.73	70-130
97 1,2,4-Trichloroben	10.000	12.828	128.28	70-130
98 Hexachlorobutadien	10.000	11.784	117.84	70-130
99 Naphthalene	10.000	12.770	127.70	60-140
11 Isopentane	10.000	9.044	90.44	60-140
179 Butane	10.000	8.600	86.00	60-140
167 Methylcyclohexane	10.000	10.266	102.66	60-140
26 tert-butyl alcohol	10.000	10.894	108.95	60-140
32 Isopropyl ether	10.000	10.068	100.69	60-140
35 Ethyl-tert-butyl e	10.000	11.221	112.21	60-140
175 Ethyl Acetate	10.000	14.307	143.07*	60-140
48 tert-amyl methyl e	10.000	11.830	118.30	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	9.821	98.21	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 59 Toluene-d8	10.000	10.447	104.47	70-130
\$ 77 Bromofluorobenzene	10.000	10.049	100.49	70-130

Data File: /chem/msdz.i/20May2009.b/z052021.d

Page 1

Date : 21-MAY-2009 09:23

Client ID: LCS-1

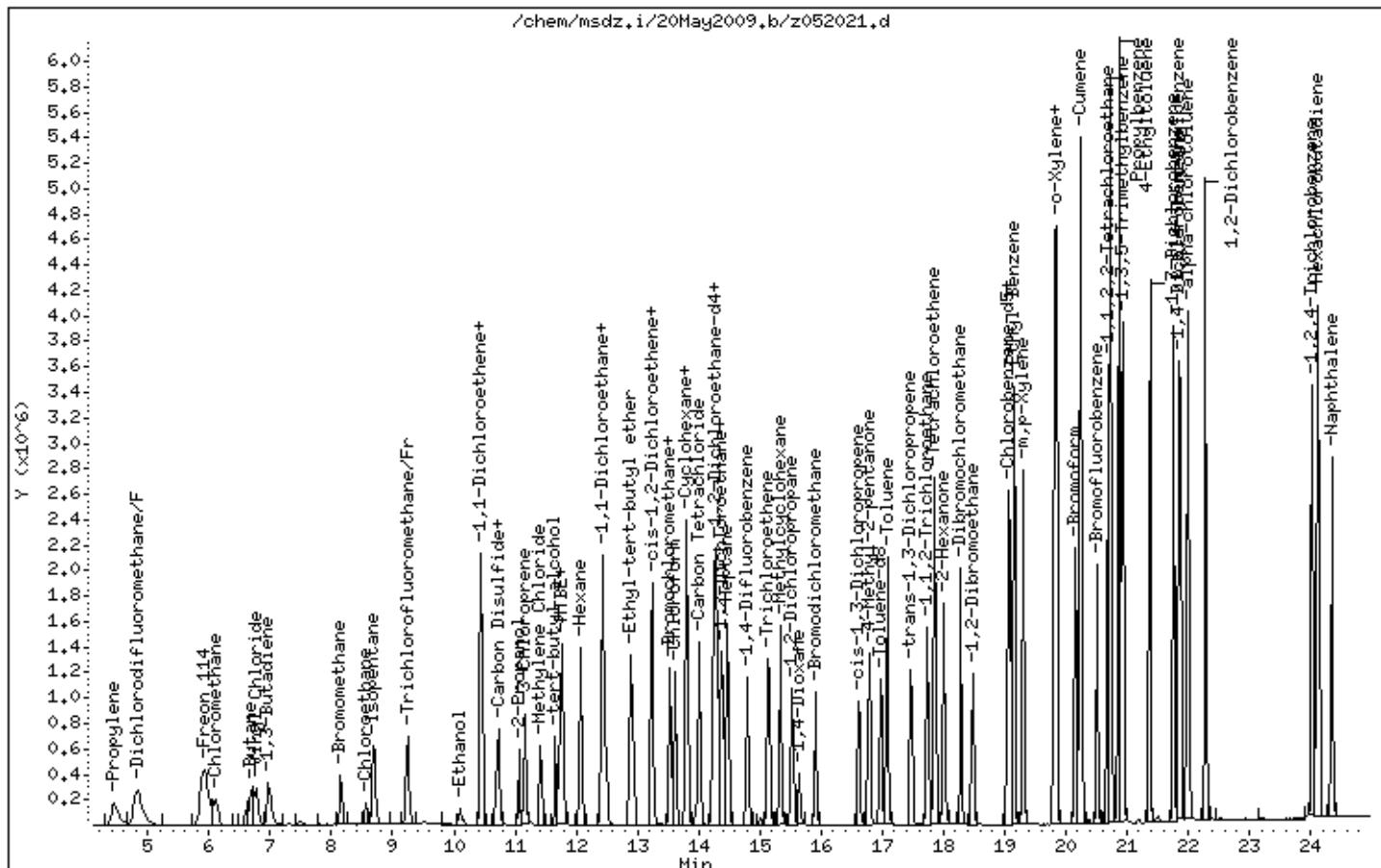
Instrument: msdz.i

Sample Info: 100ML #1754-205 50PPBV

Operator: ej

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 07:26

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052010.d

Lab Smp Id: ICAL

Inj Date : 20-MAY-2009 15:05

Operator : tjs Inst ID: msdz.i

Smp Info : 500ml #1754-233 0.05ppbv ICAL

Misc Info : 0.05ppbv

Comment :

Method : /chem/msdz.i/20May2009.b/z0910520a.m

Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD

Cal Date : 20-MAY-2009 15:05 Cal File: z052010.d

Als bottle: 1 Calibration Sample, Level: 4

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: Level05.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.565 13.535 (1.000) 130 295012 10.0000 80.00- 120.00 100.00
 13.565 13.535 (1.000) 128 226910 0.00- 30.00 76.92
 13.535 13.535 (1.000) 49 371773 0.00- 30.00 126.02

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1204665 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 175691 0.00- 30.00 14.58

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1477035 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 710467 0.00- 30.00 48.10

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.312 14.313 (1.055) 65 396655 10.0000 10.212 80.00- 120.00 100.00
 14.312 14.313 (1.055) 67 190772 0.00- 30.00 48.10

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1134476 10.0000 9.839 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 117256 0.00- 30.00 10.34

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	768738		38.83-	98.83	67.76
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\$ 77 Bromofluorobenzene CAS #: 460-00-4

20.534	20.535	(1.078)	174	983750	10.0000	10.068	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1111976			84.56-	144.56	113.03
20.534	20.535	(1.078)	176	950625			66.40-	126.40	96.63

3 Dichlorodifluoromethane/Fr12 CAS #: 75-71-8

4.859	4.835	(0.358)	85	8592	0.05000	0.05358	80.00-	120.00	100.00(a)
4.811	4.835	(0.355)	87	2082			2.29-	62.29	24.23

4 Freon 114 CAS #: 76-14-2

5.895	5.919	(0.435)	135	5667	0.05000	0.04981	80.00-	120.00	100.00(a)
5.919	5.919	(0.436)	85	6669			0.00-	30.00	117.68
5.919	5.919	(0.436)	137	2063			0.00-	30.00	36.40

13 Trichlorofluoromethane/Fr11 CAS #: 75-69-4

9.246	9.246	(0.682)	101	5875	0.05000	0.05208	80.00-	120.00	100.00(a)
9.246	9.246	(0.682)	103	4085			33.44-	93.44	69.53

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.770)	151	4515	0.05000	0.05591	80.00-	120.00	100.00(a)
10.466	10.442	(0.772)	153	3307			33.10-	93.10	73.24
10.466	10.442	(0.772)	101	5954			0.00-	30.00	131.87

43 1,1,1-Trichloroethane CAS #: 71-55-6

13.843	13.812	(1.020)	97	4939	0.05000	0.04838	80.00-	120.00	100.00(a)
13.843	13.812	(1.020)	99	2884			0.00-	30.00	58.39

44 Carbon Tetrachloride CAS #: 56-23-5

13.997	13.997	(1.032)	119	5272	0.05000	0.04285	80.00-	120.00	100.00(a)
13.997	13.997	(1.032)	117	4784			0.00-	30.00	90.74

53 Trichloroethene CAS #: 79-01-6

15.164	15.136	(1.024)	130	4278	0.05000	0.05086	80.00-	120.00	100.00(a)
15.164	15.136	(1.024)	95	3922			0.00-	30.00	91.68
15.164	15.136	(1.024)	97	2601			0.00-	30.00	60.80

56 Bromodichloromethane CAS #: 75-27-4

15.905	15.905	(1.074)	83	4784	0.05000	0.04653	80.00-	120.00	100.00(a)
15.905	15.905	(1.074)	85	2917			0.00-	30.00	60.97

62 1,1,2-Trichloroethane CAS #: 79-00-5

17.740	17.741	(0.931)	97	3585	0.05000	0.04803	80.00-	120.00	100.00(a)
17.770	17.741	(0.933)	99	2618			0.00-	30.00	73.03

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

62 1,1,2-Trichloroethane (continued)

17.770	17.741	(0.933)	83	2375			49.05-	109.05	66.25
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63 Tetrachloroethene

CAS #: 127-18-4

17.857	17.857	(0.937)	166	5748	0.05000	0.04743	80.00-	120.00	100.00(a)
17.857	17.857	(0.937)	129	2970			0.00-	30.00	51.67
17.857	17.857	(0.937)	131	4616			36.65-	96.65	80.31

66 Dibromochloromethane

CAS #: 124-48-1

18.294	18.294	(0.960)	129	5196	0.05000	0.04149	80.00-	120.00	100.00(a)
18.294	18.294	(0.960)	127	4829			0.00-	30.00	92.94

67 1,2-Dibromoethane

CAS #: 106-93-4

18.498	18.498	(0.971)	107	6029	0.05000	0.04677	80.00-	120.00	100.00(a)
18.498	18.498	(0.971)	109	4990			0.00-	30.00	82.77

75 Bromoform

CAS #: 75-25-2

20.148	20.148	(1.057)	173	4963	0.05000	0.03903	80.00-	120.00	100.00(a)
20.173	20.148	(1.059)	171	2441			0.00-	30.00	49.18

79 1,1,2,2-Tetrachloroethane

CAS #: 79-34-5

20.689	20.689	(1.086)	83	12311	0.05000	0.05056	80.00-	120.00	100.00(a)
20.689	20.689	(1.086)	85	8934			0.00-	30.00	72.57

88 1,3-Dichlorobenzene

CAS #: 541-73-1

21.772	21.773	(1.143)	146	17766	0.05000	0.05423	80.00-	120.00	100.00(a)
21.772	21.773	(1.143)	148	13149			0.00-	30.00	74.01
21.772	21.773	(1.143)	111	6275			0.00-	30.00	35.32

89 1,4-Dichlorobenzene

CAS #: 106-46-7

21.876	21.876	(1.148)	146	18600	0.05000	0.05456	80.00-	120.00	100.00(a)
21.876	21.876	(1.148)	148	13483			0.00-	30.00	72.49
21.876	21.850	(1.148)	111	6476			0.00-	30.00	34.82

93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	18395	0.05000	0.05591	80.00-	120.00	100.00(a)
22.288	22.288	(1.170)	148	10232			33.79-	93.79	55.62
22.288	22.288	(1.170)	111	6560			8.12-	68.12	35.66

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052010.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: tjs
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 0.05ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	295012	-10.09
52 1,4-Difluorobenze	1302885	781731	1824039	1204665	-7.54
68 Chlorobenzene-d5	1586849	952109	2221589	1477035	-6.92

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.57	0.23
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdz.i/20May2009.b/z052010.d

Page 1

Date : 20-MAY-2009 15:05

Client ID:

Instrument: msdz.i

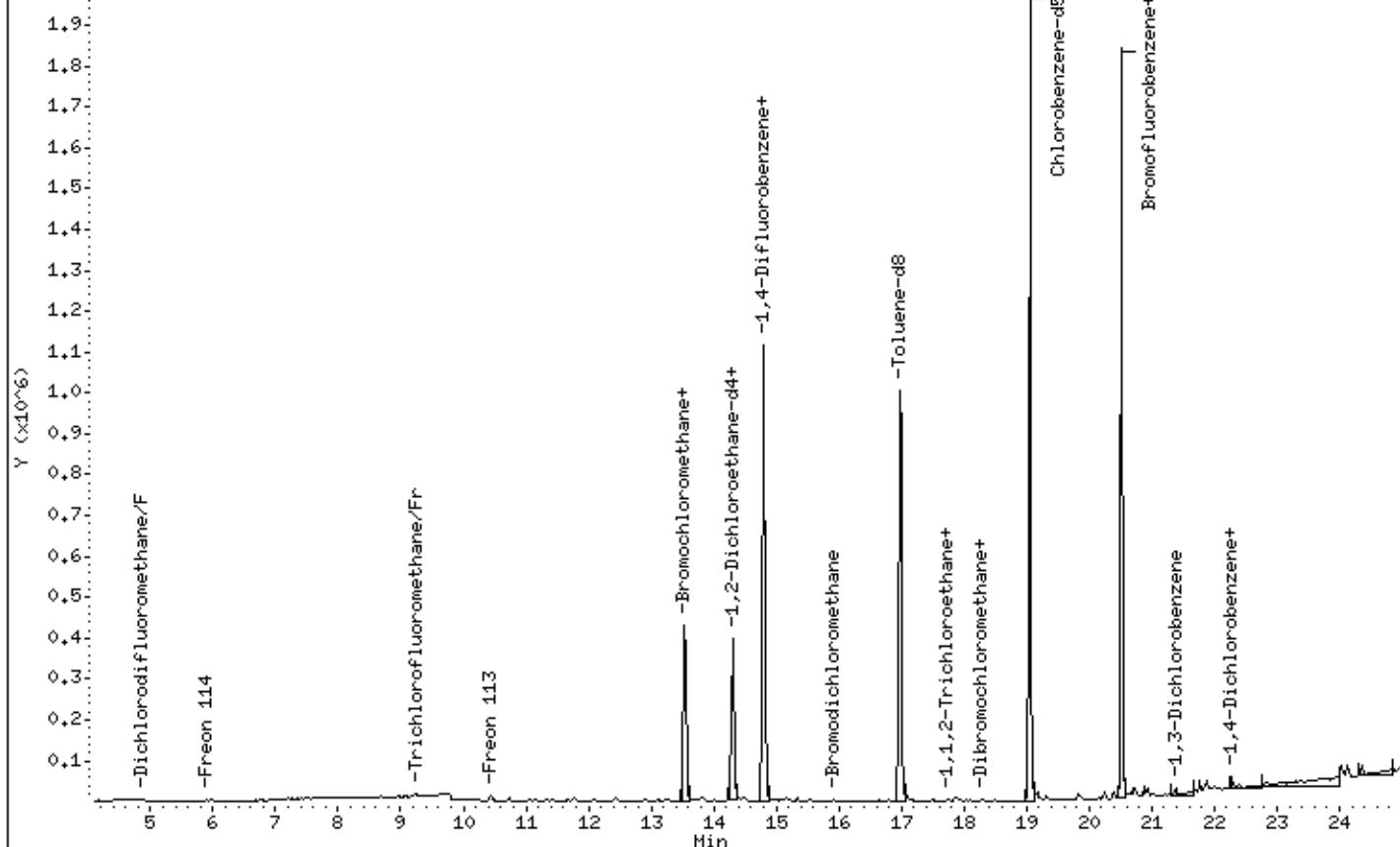
Sample Info: 500ml #1754-233 0.05ppbv ICAL

Operator: tjs

Column phase: RTx-624

Column diameter: 0.32

/chem/msdz.i/20May2009.b/z052010.d



Report Date: 21-May-2009 08:51

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052020.d
 Lab Smp Id: ICAL Level 5 Client Smp ID: ICAL
 Inj Date : 21-MAY-2009 08:21
 Operator : ej Inst ID: msdz.i
 Smp Info : 25mL #1754-234
 Misc Info : 2.0ppbv-0.1ppbv
 Comment :
 Method : /chem/msdz.i/20May2009.b/z0910520a.m
 Meth Date : 21-May-2009 08:51 dmendoza Quant Type: ISTD
 Cal Date : 21-MAY-2009 08:21 Cal File: z052020.d
 Als bottle: 1 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: Level#1.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 273589 10.0000 70.00- 130.00 100.00
 13.535 13.535 (1.000) 128 207325 0.00- 30.00 75.78
 13.535 13.535 (1.000) 49 349457 0.00- 30.00 127.73

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1125029 10.0000 70.00- 130.00 100.00
 14.807 14.807 (1.000) 88 167059 0.00- 30.00 14.85

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1375966 10.0000 70.00- 130.00 100.00
 19.055 19.055 (1.000) 82 657152 0.00- 30.00 47.76

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.312 14.312 (1.057) 65 369409 10.0000 9.991 70.00- 130.00 100.00
 14.312 14.312 (1.057) 67 175365 0.00- 30.00 47.47

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1065993 10.0000 9.792 70.00- 130.00 100.00
 16.974 16.974 (1.146) 70 102047 0.00- 30.00 9.57

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	712997		38.83-	98.83	66.89
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\$ 77 Bromofluorobenzene

20.509	20.509	(1.076)	174	906618	10.0000	9.967	70.00-	130.00	100.00
20.509	20.509	(1.076)	95	1005899		84.56-	144.56		110.95
20.509	20.509	(1.076)	176	871976		66.40-	126.40		96.18

3 Dichlorodifluoromethane/Fr12

4.859	4.859	(0.359)	85	18972	0.10000	0.1245	70.00-	130.00	100.00
4.859	4.859	(0.359)	87	7482		2.29-	62.29		39.44

4 Freon 114

5.943	5.943	(0.439)	135	13352	0.10000	0.1196	70.00-	130.00	100.00
5.943	5.943	(0.439)	85	17114		0.00-	30.00		128.18
5.943	5.943	(0.439)	137	5151		0.00-	30.00		38.58

5 Chloromethane

6.112	6.112	(0.452)	50	5738	0.10000	0.1107	70.00-	130.00	100.00
6.136	6.136	(0.453)	52	2237		0.00-	30.00		38.99

6 Vinyl Chloride

6.780	6.780	(0.501)	62	5662	0.10000	0.1178	70.00-	130.00	100.00
6.780	6.780	(0.501)	64	1357		0.83-	60.83		23.97

7 1,3-Butadiene

6.971	6.971	(0.515)	54	5026	0.10000	0.1367	70.00-	130.00	100.00
6.989	6.989	(0.516)	39	5411		0.00-	30.00		107.66

9 Bromomethane

8.148	8.148	(0.602)	94	5744	0.10000	0.1343	70.00-	130.00	100.00
8.148	8.148	(0.602)	96	5038		63.57-	123.57		87.71

10 Chloroethane

8.583	8.583	(0.634)	64	2653	0.10000	0.1256	70.00-	130.00	100.00
8.562	8.562	(0.633)	49	728		0.00-	30.00		27.44
8.562	8.562	(0.633)	66	952		0.00-	30.00		35.88

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	14351	0.10000	0.1293	70.00-	130.00	100.00
9.246	9.246	(0.683)	103	9162		33.44-	93.44		63.84

17 Freon 113

10.466	10.466	(0.773)	151	9697	0.10000	0.1276	70.00-	130.00	100.00
10.442	10.442	(0.771)	153	6088		33.10-	93.10		62.78
10.442	10.442	(0.771)	101	11434		0.00-	30.00		117.91

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

15 1,1-Dichloroethene CAS #: 75-35-4
10.442 10.442 (0.771) 98 2155 0.10000 0.08499 70.00- 130.00 100.00(a)
10.442 10.442 (0.771) 61 6867 0.00- 30.00 318.65
10.442 10.442 (0.771) 96 4429 0.00- 30.00 205.52

19 Carbon Disulfide CAS #: 75-15-0
10.755 10.755 (0.795) 76 11958 0.10000 0.1034 70.00- 130.00 100.00

25 Methylene Chloride CAS #: 75-09-2
11.445 11.445 (0.846) 84 3966 0.10000 0.1156 70.00- 130.00 100.00
11.445 11.445 (0.846) 49 6525 0.00- 30.00 164.52
11.418 11.418 (0.844) 51 1993 0.00- 30.00 50.25

27 MTBE CAS #: 1634-04-4
11.747 11.747 (0.868) 73 2480 0.10000 0.03535 70.00- 130.00 100.00(a)
11.747 11.747 (0.868) 57 705 0.00- 30.00 28.43
11.747 11.747 (0.868) 41 2045 0.00- 30.00 82.46

28 trans-1,2-Dichloroethene CAS #: 156-60-5
11.802 11.802 (0.872) 98 3029 0.10000 0.1048 70.00- 130.00 100.00
11.802 11.802 (0.872) 61 6358 0.00- 30.00 209.90
11.802 11.802 (0.872) 96 5014 0.00- 30.00 165.53

30 Hexane CAS #: 110-54-3
12.077 12.077 (0.892) 57 5305 0.10000 0.08850 70.00- 130.00 100.00(a)
12.077 12.077 (0.892) 43 5222 0.00- 30.00 98.44
12.077 12.077 (0.892) 86 655 0.00- 30.00 12.35

31 1,1-Dichloroethane CAS #: 75-34-3
12.434 12.434 (0.919) 63 8501 0.10000 0.1108 70.00- 130.00 100.00
12.434 12.434 (0.919) 65 2670 0.00- 30.00 31.41

37 2-Butanone CAS #: 78-93-3
13.287 13.287 (0.982) 72 1190 0.10000 0.05645 70.00- 130.00 100.00(a)
13.266 13.266 (0.980) 43 13624 0.00- 30.00 1144.87
12.900 12.900 (0.953) 57 1577 0.00- 30.00 132.52

36 cis-1,2-Dichloroethene CAS #: 156-59-2
13.245 13.245 (0.979) 98 2796 0.10000 0.09890 70.00- 130.00 100.00(a)
13.245 13.245 (0.979) 61 6397 0.00- 30.00 228.79
13.245 13.245 (0.979) 96 4259 129.61- 189.61 152.32

40 Chloroform CAS #: 67-66-3
13.627 13.627 (1.007) 83 12080 0.10000 0.1222 70.00- 130.00 100.00
13.627 13.627 (1.007) 85 6316 0.00- 30.00 52.28

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

43 1,1,1-Trichloroethane CAS #: 71-55-6
13.812 13.812 (1.020) 97 9937 0.10000 0.1018 70.00- 130.00 100.00
13.812 13.812 (1.020) 99 7533 0.00- 30.00 75.81

42 Cyclohexane CAS #: 110-82-7
13.812 13.812 (1.020) 84 6202 0.10000 0.1037 70.00- 130.00 100.00
13.812 13.812 (1.020) 56 6827 0.00- 30.00 110.08
13.812 13.812 (1.020) 41 6250 0.00- 30.00 100.77

44 Carbon Tetrachloride CAS #: 56-23-5
13.997 13.997 (1.034) 119 8409 0.10000 0.07090 70.00- 130.00 100.00(a)
13.997 13.997 (1.034) 117 7973 0.00- 30.00 94.82

45 2,2,4-Trimethylpentane CAS #: 540-84-1
14.257 14.257 (1.053) 56 7011 0.10000 0.1062 70.00- 130.00 100.00
14.257 14.257 (1.053) 57 15781 0.00- 30.00 225.09
14.257 14.257 (1.053) 41 9147 0.00- 30.00 130.47

46 Benzene CAS #: 71-43-2
14.285 14.285 (0.965) 78 16480 0.10000 0.1155 70.00- 130.00 100.00
14.285 14.285 (0.965) 77 3964 0.00- 30.00 24.05

49 1,2-Dichloroethane CAS #: 107-06-2
14.395 14.395 (0.972) 62 9611 0.10000 0.1244 70.00- 130.00 100.00
14.395 14.395 (0.972) 64 3058 0.00- 30.00 31.82

50 Heptane CAS #: 142-82-5
14.477 14.477 (0.978) 57 3738 0.10000 0.09110 70.00- 130.00 100.00(a)
14.477 14.477 (0.978) 100 1375 0.00- 30.00 36.78
14.477 14.477 (0.978) 43 7179 0.00- 30.00 192.05

53 Trichloroethene CAS #: 79-01-6
15.164 15.164 (1.024) 130 7613 0.10000 0.09900 70.00- 130.00 100.00(a)
15.164 15.164 (1.024) 95 8026 0.00- 30.00 105.42
15.164 15.164 (1.024) 97 4296 0.00- 30.00 56.43

54 1,2-Dichloropropane CAS #: 78-87-5
15.520 15.520 (1.048) 63 5741 0.10000 0.1163 70.00- 130.00 100.00
15.520 15.520 (1.048) 62 3015 0.00- 30.00 52.52
15.520 15.520 (1.048) 41 5582 58.92- 118.92 97.23

55 1,4-Dioxane CAS #: 123-91-1
15.685 15.685 (1.059) 88 3062 0.10000 0.08837 70.00- 130.00 100.00(a)
15.685 15.685 (1.059) 58 2934 0.00- 30.00 95.82
15.658 15.658 (1.057) 57 622 0.00- 30.00 20.31

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

56 Bromodichloromethane CAS #: 75-27-4
15.932 15.932 (1.076) 83 9057 0.10000 0.09381 70.00- 130.00 100.00(a)
15.905 15.905 (1.074) 85 5571 0.00- 30.00 61.51

57 cis-1,3-Dichloropropene CAS #: 10061-01-5
16.638 16.638 (1.124) 75 5358 0.10000 0.07892 70.00- 130.00 100.00(a)
16.638 16.638 (1.124) 77 1512 0.00- 30.00 28.22
16.638 16.638 (1.124) 39 5116 40.93- 100.93 95.48

58 4-Methyl-2-pentanone CAS #: 108-10-1
16.795 16.795 (1.134) 43 8292 0.10000 0.07310 70.00- 130.00 100.00(a)
16.795 16.795 (1.134) 58 2269 0.00- 30.00 27.36
16.817 16.817 (1.136) 85 1276 0.00- 30.00 15.39

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 18189 0.10000 0.1001 70.00- 130.00 100.00
17.086 17.086 (1.154) 92 11991 0.00- 30.00 65.92

61 trans-1,3-Dichloropropene CAS #: 10061-02-6
17.489 17.489 (0.918) 75 5196 0.10000 0.06541 70.00- 130.00 100.00(a)
17.489 17.489 (0.918) 77 1961 0.00- 30.00 37.74
17.489 17.489 (0.918) 39 6641 35.92- 95.92 127.81

62 1,1,2-Trichloroethane CAS #: 79-00-5
17.740 17.740 (0.931) 97 8434 0.10000 0.1177 70.00- 130.00 100.00
17.740 17.740 (0.931) 99 5416 0.00- 30.00 64.22
17.740 17.740 (0.931) 83 5750 49.05- 109.05 68.18

63 Tetrachloroethene CAS #: 127-18-4
17.857 17.857 (0.937) 166 11371 0.10000 0.09886 70.00- 130.00 100.00(a)
17.857 17.857 (0.937) 129 9713 0.00- 30.00 85.42
17.857 17.857 (0.937) 131 8331 36.65- 96.65 73.27

66 Dibromochloromethane CAS #: 124-48-1
18.294 18.294 (0.960) 129 10956 0.10000 0.08895 70.00- 130.00 100.00(a)
18.294 18.294 (0.960) 127 8639 0.00- 30.00 78.85

67 1,2-Dibromoethane CAS #: 106-93-4
18.498 18.498 (0.971) 107 11657 0.10000 0.09560 70.00- 130.00 100.00(a)
18.498 18.498 (0.971) 109 11549 0.00- 30.00 99.07

69 Chlorobenzene CAS #: 108-90-7
19.103 19.103 (1.003) 112 24408 0.10000 0.1082 70.00- 130.00 100.00
19.079 19.079 (1.001) 114 8557 0.00- 30.00 35.06
19.055 19.055 (1.000) 77 21666 20.36- 80.36 88.77

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
70	Ethyl Benzene				CAS #: 100-41-4			
19.151	19.151	(1.005)	106	11137	0.10000	0.09837	70.00- 130.00	100.00(a)
19.151	19.151	(1.005)	91	30496		0.00-	30.00	273.83
71	m,p-Xylene				CAS #: 108-38-3			
19.320	19.320	(1.014)	106	13571	0.10000	0.09768	70.00- 130.00	100.00(a)
19.320	19.320	(1.014)	91	22772		0.00-	30.00	167.80
72	o-Xylene				CAS #: 95-47-6			
19.826	19.826	(1.040)	106	10396	0.10000	0.07700	70.00- 130.00	100.00(a)
19.826	19.826	(1.040)	91	19606		0.00-	30.00	188.59
73	Styrene				CAS #: 100-42-5			
19.850	19.850	(1.042)	104	15371	0.10000	0.08074	70.00- 130.00	100.00(a)
19.850	19.850	(1.042)	78	7257		0.00-	30.00	47.21
75	Bromoform				CAS #: 75-25-2			
20.148	20.148	(1.057)	173	8769	0.10000	0.07117	70.00- 130.00	100.00(a)
20.148	20.148	(1.057)	171	5063		0.00-	30.00	57.74
76	Cumene				CAS #: 98-82-8			
20.251	20.251	(1.063)	105	31064	0.10000	0.08011	70.00- 130.00	100.00(a)
20.251	20.251	(1.063)	120	9169		0.00-	30.00	29.52
79	1,1,2,2-Tetrachloroethane				CAS #: 79-34-5			
20.689	20.689	(1.086)	83	21968	0.10000	0.09988	70.00- 130.00	100.00(a)
20.689	20.689	(1.086)	85	12649		0.00-	30.00	57.58
80	Propylbenzene				CAS #: 103-65-1			
20.741	20.741	(1.088)	91	44596	0.10000	0.09356	70.00- 130.00	100.00(a)
20.741	20.741	(1.088)	120	9932		0.00-	30.00	22.27
82	4-Ethyltoluene				CAS #: 622-96-8			
20.870	20.870	(1.095)	105	39908	0.10000	0.09233	70.00- 130.00	100.00(a)
20.870	20.870	(1.095)	120	10689		0.00-	30.00	26.78
83	1,3,5-Trimethylbenzene				CAS #: 108-67-8			
20.947	20.947	(1.099)	105	33232	0.10000	0.08847	70.00- 130.00	100.00(a)
20.947	20.947	(1.099)	120	16025		0.00-	30.00	48.22
85	1,2,4-Trimethylbenzene				CAS #: 95-63-6			
21.386	21.386	(1.122)	105	25604	0.10000	0.07675	70.00- 130.00	100.00(a)
21.386	21.386	(1.122)	120	13254		0.00-	30.00	51.77
88	1,3-Dichlorobenzene				CAS #: 541-73-1			
21.772	21.772	(1.143)	146	26310	0.10000	0.09360	70.00- 130.00	100.00(a)

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

88 1,3-Dichlorobenzene (continued)

21.772	21.772	(1.143)	148	16417		0.00-	30.00	62.40
21.772	21.772	(1.143)	111	9666		0.00-	30.00	36.74

89 1,4-Dichlorobenzene

CAS #: 106-46-7

21.876	21.876	(1.148)	146	28735	0.10000	0.09953	70.00-	130.00	100.00(a)
21.876	21.876	(1.148)	148	16555			0.00-	30.00	57.61
21.876	21.876	(1.148)	111	10351			0.00-	30.00	36.02

90 alpha-chlorotoluene

CAS #: 100-44-7

22.005	22.005	(1.155)	91	12989	0.10000	0.06023	70.00-	130.00	100.00(a)
22.005	22.005	(1.155)	126	3152			0.00-	30.00	24.27

93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	24993	0.10000	0.09054	70.00-	130.00	100.00(a)
22.288	22.288	(1.170)	148	17424			33.79-	93.79	69.72
22.288	22.288	(1.170)	111	9052			8.12-	68.12	36.22

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Report Date: 21-May-2009 08:51

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i

Calibration Date: 20-MAY-2009

Lab File ID: z052020.d

Calibration Time: 18:34

Lab Smp Id: ICAL Level 5

Client Smp ID: ICAL

Analysis Type: VOA

Level: LOW

Quant Type: ISTD

Sample Type: AIR

Operator: ej

Method File: /chem/msdz.i/20May2009.b/z0910520a.m

Misc Info: 2.0ppbv-0.1ppbv

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	273589	-16.62
52 1,4-Difluorobenze	1302885	781731	1824039	1125029	-13.65
68 Chlorobenzene-d5	1586849	952109	2221589	1375966	-13.29

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

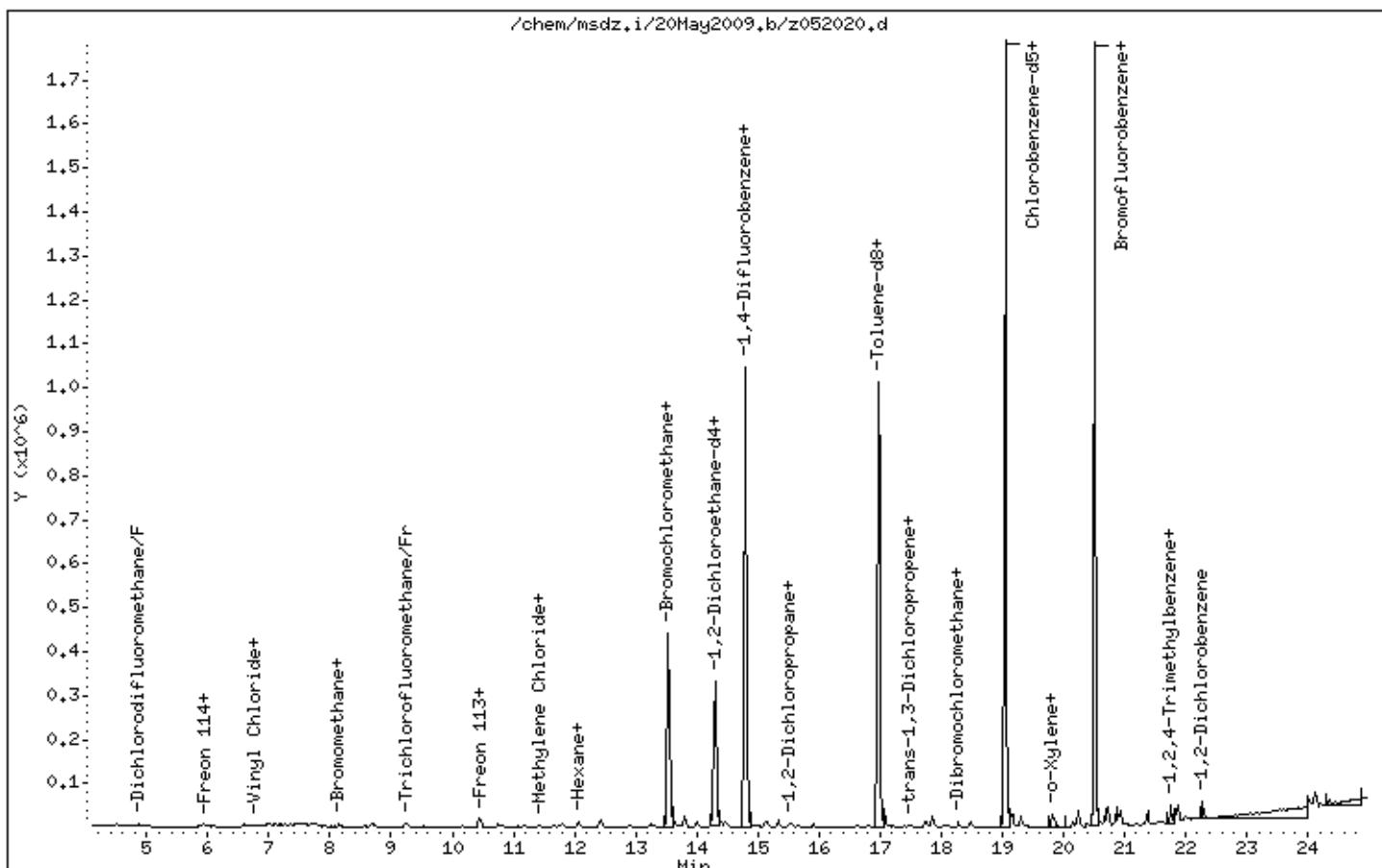
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdz.i/20May2009.b/z052020.d
Date : 21-MAY-2009 08:21
Client ID: ICAL
Sample Info: 25mL #1754-234

Instrument: msdz.i
Operator: ej
Column phase: RTx-624
Column diameter: 0.32

Page 1



Report Date: 21-May-2009 07:55

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052012.d

Lab Smp Id: ICAL

Inj Date : 20-MAY-2009 16:22

Operator : tjs Inst ID: msdz.i

Smp Info : 125ml #1754-234 2ppbv ICAL

Misc Info : 0.5ppbv

Comment :

Method : /chem/msdz.i/20May2009.b/z0910520a.m

Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD

Cal Date : 20-MAY-2009 16:22 Cal File: z052012.d

Als bottle: 1 Calibration Sample, Level: 6

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 299937 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 230967 0.00- 30.00 77.01
 13.535 13.535 (1.000) 49 356668 0.00- 30.00 118.91

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1220818 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 176837 0.00- 30.00 14.49

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1455560 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 714143 0.00- 30.00 49.06

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 407548 10.0000 10.155 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 189228 0.00- 30.00 46.43

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1158786 10.0000 9.992 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 114244 0.00- 30.00 9.86

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	782586			38.83-	98.83	67.53
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\$ 77 Bromofluorobenzene CAS #: 460-00-4

20.509	20.535	(1.076)	174	956263	10.0000	10.027	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1098854			84.56-	144.56	114.91
20.509	20.535	(1.076)	176	921108			66.40-	126.40	96.32

1 Propylene CAS #: 115-07-1

4.473	4.449	(0.330)	41	21025	0.50000	0.4893	80.00-	120.00	100.00(a)
4.473	4.449	(0.330)	42	16174			0.00-	30.00	76.93
4.449	4.449	(0.329)	39	20460			0.00-	30.00	97.31

3 Dichlorodifluoromethane/Fr12 CAS #: 75-71-8

4.835	4.835	(0.357)	85	83792	0.50000	0.5077	80.00-	120.00	100.00
4.859	4.835	(0.359)	87	27605			2.29-	62.29	32.94

4 Freon 114 CAS #: 76-14-2

5.920	5.919	(0.437)	135	61501	0.50000	0.5045	80.00-	120.00	100.00
5.895	5.919	(0.436)	85	76308			0.00-	30.00	124.08
5.895	5.919	(0.436)	137	20918			0.00-	30.00	34.01

5 Chloromethane CAS #: 74-87-3

6.112	6.112	(0.452)	50	29428	0.50000	0.5336	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	8130			0.00-	30.00	27.63

6 Vinyl Chloride CAS #: 75-01-4

6.781	6.781	(0.501)	62	23720	0.50000	0.4835	80.00-	120.00	100.00(a)
6.781	6.781	(0.501)	64	7809			0.83-	60.83	32.92

7 1,3-Butadiene CAS #: 106-99-0

6.989	6.971	(0.516)	54	17761	0.50000	0.4620	80.00-	120.00	100.00(a)
6.972	6.971	(0.515)	39	26891			0.00-	30.00	151.40

9 Bromomethane CAS #: 74-83-9

8.148	8.148	(0.602)	94	24014	0.50000	0.4976	80.00-	120.00	100.00(a)
8.148	8.148	(0.602)	96	23463			63.57-	123.57	97.71

10 Chloroethane CAS #: 75-00-3

8.562	8.562	(0.633)	64	10770	0.50000	0.4833	80.00-	120.00	100.00(a)
8.562	8.562	(0.633)	49	3334			0.00-	30.00	30.96
8.562	8.562	(0.633)	66	3824			0.00-	30.00	35.51

13 Trichlorodifluoromethane/Fr11 CAS #: 75-69-4

9.246	9.246	(0.683)	101	57952	0.50000	0.4848	80.00-	120.00	100.00(a)
9.246	9.246	(0.683)	103	39891			33.44-	93.44	68.83

RT	EXP RT	(REL RT)	MASS	AMOUNTS		CAL-AMT	ON-COL	TARGET	RANGE	RATIO
				RESPONSE	(PPBV)					
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14	Ethanol					CAS #:	64-17-5			
0.105	10.105	(0.747)	45	16395	0.50000	0.6332	80.00-	120.00	100.00	
0.105	10.105	(0.747)	43	5393			0.00-	30.00	32.89	
17	Freon 113					CAS #:	76-13-1			
0.442	10.442	(0.771)	151	46093	0.50000	0.5244	80.00-	120.00	100.00	
0.442	10.442	(0.771)	153	28833			33.10-	93.10	62.55	
0.442	10.442	(0.771)	101	47332			0.00-	30.00	102.69	
15	1,1-Dichloroethene					CAS #:	75-35-4			
0.442	10.442	(0.771)	98	17096	0.50000	0.5941	80.00-	120.00	100.00	
0.442	10.442	(0.771)	61	36712			0.00-	30.00	214.74	
0.442	10.442	(0.771)	96	21070			0.00-	30.00	123.25	
20	Acetone					CAS #:	67-64-1			
0.707	10.707	(0.791)	58	15061	0.50000	0.5573	80.00-	120.00	100.00	
0.707	10.707	(0.791)	43	78908			0.00-	30.00	523.92	
22	3-Chloroprene					CAS #:	107-05-1			
1.171	11.171	(0.825)	76	7511	0.50000	0.4437	80.00-	120.00	100.00	
1.171	11.171	(0.825)	41	28883			0.00-	30.00	384.54	
21	2-Propanol					CAS #:	67-63-0			
1.061	11.061	(0.817)	45	36677	0.50000	0.4882	80.00-	120.00	100.00	
1.061	11.061	(0.817)	43	14204			0.00-	30.00	38.73	
1.089	11.061	(0.819)	59	698			0.00-	30.00	1.90	
19	Carbon Disulfide					CAS #:	75-15-0			
0.731	10.731	(0.793)	76	60965	0.50000	0.5048	80.00-	120.00	100.00	
25	Methylene Chloride					CAS #:	75-09-2			
1.418	11.418	(0.844)	84	18302	0.50000	0.5389	80.00-	120.00	100.00	
1.418	11.418	(0.844)	49	27630			0.00-	30.00	150.97	
1.418	11.418	(0.844)	51	9133			0.00-	30.00	49.90	
27	MTBE					CAS #:	1634-04-4			
1.747	11.747	(0.868)	73	26981	0.50000	0.4071	80.00-	120.00	100.00	
1.747	11.747	(0.868)	57	7855			0.00-	30.00	29.11	
1.747	11.747	(0.868)	41	11131			0.00-	30.00	41.25	
28	trans-1,2-Dichloroethene					CAS #:	156-60-5			
1.775	11.775	(0.870)	98	14920	0.50000	0.4962	80.00-	120.00	100.00	
1.775	11.775	(0.870)	61	31980			0.00-	30.00	214.34	
1.775	11.775	(0.870)	96	25818			0.00-	30.00	173.04	
30	Hexane					CAS #:	110-54-3			
2.077	12.077	(0.892)	57	29646	0.50000	0.4962	80.00-	120.00	100.00	

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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30 Hexane (continued)

12.077	12.077	(0.892)	43	24009		0.00-	30.00	80.99
12.077	12.077	(0.892)	86	4734		0.00-	30.00	15.97

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	36745	0.50000	0.4537	80.00-	120.00	100.00(a)
12.434	12.434	(0.919)	65	13134			0.00-	30.00	35.74

33 Vinyl Acetate

CAS #: 108-05-4

12.516	12.489	(0.925)	86	2187	0.50000	0.3378	80.00-	120.00	100.00(a)
12.516	12.489	(0.925)	43	8235			0.00-	30.00	376.54
12.434	12.489	(0.919)	42	3541			0.00-	30.00	161.91

37 2-Butanone

CAS #: 78-93-3

13.266	13.246	(0.980)	72	8732	0.50000	0.4242	80.00-	120.00	100.00(a)
13.266	13.246	(0.980)	43	89285			0.00-	30.00	1022.50
13.266	13.246	(0.980)	57	2975			0.00-	30.00	34.07

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	15041	0.50000	0.4665	80.00-	120.00	100.00(a)
13.225	13.225	(0.977)	61	32276			0.00-	30.00	214.59
13.225	13.225	(0.977)	96	21090			129.61-	189.61	140.22

38 Tetrahydrofuran

CAS #: 109-99-9

13.566	13.535	(1.002)	42	28939	0.50000	0.4893	80.00-	120.00	100.00(a)
13.566	13.535	(1.002)	71	7573			0.00-	30.00	26.17
13.566	13.535	(1.002)	72	11232			0.00-	30.00	38.81

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	53381	0.50000	0.4982	80.00-	120.00	100.00(a)
13.627	13.627	(1.007)	85	33727			0.00-	30.00	63.18

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	51988	0.50000	0.4927	80.00-	120.00	100.00(a)
13.812	13.812	(1.020)	99	34045			0.00-	30.00	65.49

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	27569	0.50000	0.4610	80.00-	120.00	100.00(a)
13.812	13.812	(1.020)	56	32429			0.00-	30.00	117.63
13.812	13.812	(1.020)	41	25630			0.00-	30.00	92.97

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	61614	0.50000	0.5010	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	65781			0.00-	30.00	106.76

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	30673	0.50000	0.4486	80.00-	120.00	100.00(a)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	92020		0.00-	30.00	300.00
14.258	14.258	(1.053)	41	35808		0.00-	30.00	116.74

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	71000	0.50000	0.4687	80.00-	120.00	100.00(a)
14.285	14.285	(0.965)	77	16928			0.00-	30.00	23.84

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	37913	0.50000	0.4551	80.00-	120.00	100.00(a)
14.395	14.395	(0.972)	64	10580			0.00-	30.00	27.91

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	18575	0.50000	0.4623	80.00-	120.00	100.00(a)
14.505	14.477	(0.980)	100	8476			0.00-	30.00	45.63
14.477	14.477	(0.978)	43	42288			0.00-	30.00	227.66

53 Trichloroethene

CAS #: 79-01-6

15.164	15.136	(1.024)	130	39958	0.50000	0.4649	80.00-	120.00	100.00(a)
15.164	15.136	(1.024)	95	34487			0.00-	30.00	86.31
15.164	15.136	(1.024)	97	24412			0.00-	30.00	61.09

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	25010	0.50000	0.4536	80.00-	120.00	100.00(a)
15.521	15.521	(1.048)	62	16300			0.00-	30.00	65.17
15.521	15.521	(1.048)	41	23764			58.92-	118.92	95.02

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	17598	0.50000	0.4729	80.00-	120.00	100.00(a)
15.658	15.658	(1.057)	58	10478			0.00-	30.00	59.54
15.658	15.658	(1.057)	57	4741			0.00-	30.00	26.94

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	45801	0.50000	0.4568	80.00-	120.00	100.00(a)
15.905	15.905	(1.074)	85	28847			0.00-	30.00	62.98

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.638	16.616	(1.124)	75	28585	0.50000	0.4441	80.00-	120.00	100.00(a)
16.638	16.616	(1.124)	77	9160			0.00-	30.00	32.04
16.638	16.616	(1.124)	39	22785			40.93-	100.93	79.71

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	47913	0.50000	0.4613	80.00-	120.00	100.00(a)
16.795	16.795	(1.134)	58	16687			0.00-	30.00	34.83
16.795	16.795	(1.134)	85	7584			0.00-	30.00	15.83

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
60	Toluene				CAS #: 108-88-3			
17.086	17.086	(1.154)	91	90665	0.50000	0.4725	80.00- 120.00	100.00(a)
17.086	17.086	(1.154)	92	54645			0.00- 30.00	60.27
61	trans-1,3-Dichloropropene				CAS #: 10061-02-6			
17.489	17.467	(0.918)	75	37002	0.50000	0.4571	80.00- 120.00	100.00(a)
17.489	17.467	(0.918)	77	10153			0.00- 30.00	27.44
17.489	17.467	(0.918)	39	19609			35.92- 95.92	52.99
62	1,1,2-Trichloroethane				CAS #: 79-00-5			
17.741	17.741	(0.931)	97	34476	0.50000	0.4666	80.00- 120.00	100.00(a)
17.741	17.741	(0.931)	99	21815			0.00- 30.00	63.28
17.741	17.741	(0.931)	83	29839			49.05- 109.05	86.55
63	Tetrachloroethene				CAS #: 127-18-4			
17.857	17.857	(0.937)	166	61713	0.50000	0.5041	80.00- 120.00	100.00
17.857	17.857	(0.937)	129	41473			0.00- 30.00	67.20
17.857	17.857	(0.937)	131	40210			36.65- 96.65	65.16
64	2-Hexanone				CAS #: 591-78-6			
18.003	18.003	(0.945)	58	21045	0.50000	0.3703	80.00- 120.00	100.00(a)
18.003	18.003	(0.945)	43	42246			0.00- 30.00	200.74
18.003	18.003	(0.945)	100	4932			0.00- 30.00	23.44
66	Dibromochloromethane				CAS #: 124-48-1			
18.294	18.294	(0.960)	129	58829	0.50000	0.5147	80.00- 120.00	100.00
18.294	18.294	(0.960)	127	41988			0.00- 30.00	71.37
67	1,2-Dibromoethane				CAS #: 106-93-4			
18.499	18.498	(0.971)	107	62068	0.50000	0.4940	80.00- 120.00	100.00(a)
18.499	18.498	(0.971)	109	56042			0.00- 30.00	90.29
69	Chlorobenzene				CAS #: 108-90-7			
19.103	19.103	(1.003)	112	116970	0.50000	0.5071	80.00- 120.00	100.00
19.103	19.103	(1.003)	114	35589			0.00- 30.00	30.43
19.079	19.079	(1.001)	77	65661			20.36- 80.36	56.13
70	Ethyl Benzene				CAS #: 100-41-4			
19.151	19.151	(1.005)	106	53556	0.50000	0.4813	80.00- 120.00	100.00(a)
19.151	19.151	(1.005)	91	156690			0.00- 30.00	292.57
71	m,p-Xylene				CAS #: 108-38-3			
19.320	19.320	(1.014)	106	58756	0.50000	0.4265	80.00- 120.00	100.00(a)
19.320	19.320	(1.014)	91	108803			0.00- 30.00	185.18
72	o-Xylene				CAS #: 95-47-6			
19.826	19.826	(1.040)	106	62996	0.50000	0.4722	80.00- 120.00	100.00(a)

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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72 o-Xylene (continued)

19.826	19.826	(1.040)	91	113689		0.00-	30.00	180.47
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	77086	0.50000	0.4198	80.00-	120.00	100.00(a)
19.850	19.850	(1.042)	78	36863		0.00-	30.00	47.82	

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	51367	0.50000	0.4762	80.00-	120.00	100.00(a)
20.148	20.148	(1.057)	171	28749		0.00-	30.00	55.97	

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	182019	0.50000	0.4661	80.00-	120.00	100.00(a)
20.251	20.251	(1.063)	120	50524		0.00-	30.00	27.76	

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	109653	0.50000	0.4800	80.00-	120.00	100.00(a)
20.689	20.689	(1.086)	85	71234		0.00-	30.00	64.96	

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	229875	0.50000	0.4672	80.00-	120.00	100.00(a)
20.741	20.741	(1.088)	120	64131		0.00-	30.00	27.90	

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	200178	0.50000	0.4815	80.00-	120.00	100.00(a)
20.870	20.870	(1.095)	120	64338		0.00-	30.00	32.14	

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	184306	0.50000	0.4941	80.00-	120.00	100.00(a)
20.947	20.947	(1.099)	120	94082		0.00-	30.00	51.05	

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	156056	0.50000	0.4937	80.00-	120.00	100.00(a)
21.386	21.386	(1.122)	120	73589		0.00-	30.00	47.16	

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.773	21.773	(1.143)	146	135747	0.50000	0.4744	80.00-	120.00	100.00(a)
21.773	21.773	(1.143)	148	84204		0.00-	30.00	62.03	
21.773	21.773	(1.143)	111	49145		0.00-	30.00	36.20	

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	131701	0.50000	0.4344	80.00-	120.00	100.00(a)
21.876	21.876	(1.148)	148	81514		0.00-	30.00	61.89	
21.876	21.876	(1.148)	111	46848		0.00-	30.00	35.57	

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	84266	0.50000	0.4515	80.00-	120.00	100.00(a)
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AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
90 alpha-chlorotoluene (continued)								
22.005	22.005	(1.155)	126	19461		0.00-	30.00	23.09

93 1,2-Dichlorobenzene								
22.288	22.288	(1.170)	146	131482	0.50000	0.4685	80.00- 120.00	100.00(a)
22.288	22.288	(1.170)	148	81782		33.79-	93.79	62.20
22.288	22.288	(1.170)	111	49173		8.12-	68.12	37.40

97 1,2,4-Trichlorobenzene								
24.042	24.042	(1.262)	180	58337	0.50000	0.4582	80.00- 120.00	100.00(a)
24.042	24.042	(1.262)	182	52642		0.00-	30.00	90.24

98 Hexachlorobutadiene								
24.120	24.120	(1.266)	225	46469	0.50000	0.4798	80.00- 120.00	100.00(a)
24.120	24.120	(1.266)	223	29442		0.00-	30.00	63.36

99 Naphthalene								
24.352	24.352	(1.278)	128	105487	0.50000	0.4162	80.00- 120.00	100.00(a)
24.352	24.352	(1.278)	127	14175		0.00-	30.00	13.44

179 Butane								
6.694	6.694	(0.495)	58	5144	0.50000	0.5088	80.00- 120.00	100.00
6.711	6.694	(0.496)	43	43349		0.00-	30.00	842.71

11 Isopentane								
8.687	8.687	(0.642)	57	18621	0.50000	0.5238	80.00- 120.00	100.00
8.687	8.687	(0.642)	43	31970		0.00-	30.00	171.69
8.707	8.687	(0.643)	42	29593		0.00-	30.00	158.92

167 Methylcyclohexane								
15.328	15.328	(1.133)	83	38928	0.50000	0.4427	80.00- 120.00	100.00(a)
15.328	15.328	(1.133)	98	20526		0.00-	30.00	52.73
15.328	15.328	(1.133)	55	33916		0.00-	30.00	87.12

26 tert-butyl alcohol								
11.665	11.665	(0.862)	59	31486	0.50000	0.4108	80.00- 120.00	100.00(a)
11.665	11.665	(0.862)	41	13886		0.00-	30.00	44.10
11.665	11.665	(0.862)	57	3693		0.00-	30.00	11.73

32 Isopropyl ether								
12.434	12.434	(0.919)	45	66478	0.50000	0.4413	80.00- 120.00	100.00
12.434	12.434	(0.919)	87	15024		0.00-	30.00	22.60
12.434	12.434	(0.919)	59	7107		0.00-	30.00	10.69

35 Ethyl-tert-butyl ether								
12.901	12.900	(0.953)	59	28615	0.50000	0.2734	80.00- 120.00	100.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.901	12.900	(0.953)	87	14339			0.00-	30.00	50.11
12.901	12.900	(0.953)	41	10797			0.00-	30.00	37.73

175 Ethyl Acetate

CAS #: 141-78-6

13.266	13.246	(0.980)	70	2862	0.50000	0.4482	80.00-	120.00	100.00
13.266	13.246	(0.980)	43	89285			0.00-	30.00	3119.67
13.225	13.225	(0.977)	61	32276			0.00-	30.00	1127.74

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	32103	0.50000	0.3284	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	6993			0.00-	30.00	21.78
14.367	14.367	(0.970)	55	14179			0.00-	30.00	44.17

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052012.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: tjs
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 0.5ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	299937	-8.59
52 1,4-Difluorobenze	1302885	781731	1824039	1220818	-6.30
68 Chlorobenzene-d5	1586849	952109	2221589	1455560	-8.27

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdz.i/20May2009.b/z052012.d

Page 1

Date : 29-MAY-2009 16:22

Client ID:

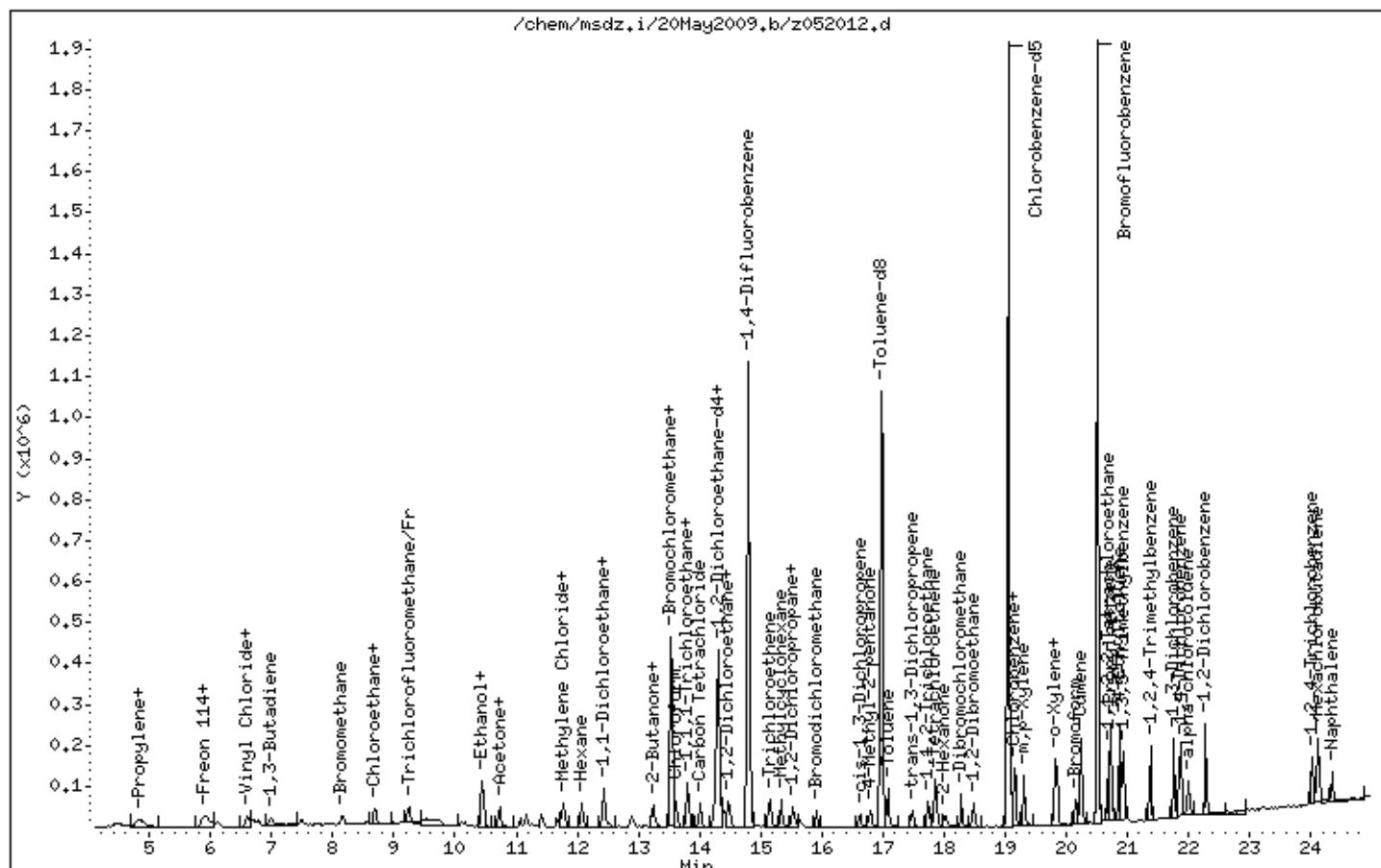
Instrument: msdz.i

Sample Info: 125ml #1754-234 2ppbv ICAL

Operator: tjs

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 07:56

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052013.d

Lab Smp Id: ICAL

Inj Date : 20-MAY-2009 17:00

Operator : tjs Inst ID: msdz.i

Smp Info : 500ml #1754-234 2ppbv ICAL

Misc Info : 2.0ppbv

Comment :

Method : /chem/msdz.i/20May2009.b/z0910520a.m

Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD

Cal Date : 20-MAY-2009 17:00 Cal File: z052013.d

Als bottle: 1 Calibration Sample, Level: 7

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 306967 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 234563 0.00- 30.00 76.41
 13.535 13.535 (1.000) 49 380436 0.00- 30.00 123.93

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1233249 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 176149 0.00- 30.00 14.28

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1497579 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 719923 0.00- 30.00 48.07

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 399452 10.0000 9.779 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 199161 0.00- 30.00 49.86

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1196231 10.0000 10.168 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 119610 0.00- 30.00 10.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	815600		38.83-	98.83	68.18
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\$ 77 Bromofluorobenzene

20.535	20.535	(1.078)	174	953540	10.0000	9.773	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1093727			84.56-	144.56	114.70
20.535	20.535	(1.078)	176	924319			66.40-	126.40	96.94

1 Propylene

4.449	4.449	(0.329)	41	81967	2.00000	1.907	80.00-	120.00	100.00
4.449	4.449	(0.329)	42	57706			0.00-	30.00	70.40
4.449	4.449	(0.329)	39	75951			0.00-	30.00	92.66

3 Dichlorodifluoromethane/Fr12

4.835	4.835	(0.357)	85	326841	2.00000	1.948	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	103525			2.29-	62.29	31.67

4 Freon 114

5.919	5.919	(0.437)	135	248411	2.00000	1.993	80.00-	120.00	100.00
5.919	5.919	(0.437)	85	311200			0.00-	30.00	125.28
5.944	5.919	(0.439)	137	79008			0.00-	30.00	31.81

5 Chloromethane

6.112	6.112	(0.452)	50	114244	2.00000	2.018	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	32595			0.00-	30.00	28.53

6 Vinyl Chloride

6.781	6.781	(0.501)	62	98853	2.00000	1.976	80.00-	120.00	100.00
6.781	6.781	(0.501)	64	34273			0.83-	60.83	34.67

7 1,3-Butadiene

6.971	6.971	(0.515)	54	72081	2.00000	1.871	80.00-	120.00	100.00
6.971	6.971	(0.515)	39	99525			0.00-	30.00	138.07

9 Bromomethane

8.148	8.148	(0.602)	94	86314	2.00000	1.805	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	78392			63.57-	123.57	90.82

10 Chloroethane

8.562	8.562	(0.633)	64	43252	2.00000	1.921	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	15127			0.00-	30.00	34.97
8.562	8.562	(0.633)	66	15069			0.00-	30.00	34.84

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	243107	2.00000	1.990	80.00-	120.00	100.00
9.226	9.246	(0.682)	103	160712			33.44-	93.44	66.11

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	37486	2.00000	1.568	80.00-	120.00	100.00
10.105	10.105	(0.747)	43	11493			0.00-	30.00	30.66

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	177907	2.00000	1.982	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	115346			33.10-	93.10	64.83
10.442	10.442	(0.771)	101	197017			0.00-	30.00	110.74

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	54683	2.00000	1.891	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	140381			0.00-	30.00	256.72
10.442	10.442	(0.771)	96	85777			0.00-	30.00	156.86

20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	49054	2.00000	1.843	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	307591			0.00-	30.00	627.05

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	35093	2.00000	2.017	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	121726			0.00-	30.00	346.87

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	131811	2.00000	1.800	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	40407			0.00-	30.00	30.66
11.061	11.061	(0.817)	59	5490			0.00-	30.00	4.17

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	252015	2.00000	2.029	80.00-	120.00	100.00
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25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	73240	2.00000	2.079	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	104344			0.00-	30.00	142.47
11.418	11.418	(0.844)	51	32890			0.00-	30.00	44.91

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	215169	2.00000	2.767	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	55969			0.00-	30.00	26.01
11.747	11.747	(0.868)	41	83081			0.00-	30.00	38.61

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	63891	2.00000	2.056	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	144347			0.00-	30.00	225.93
11.775	11.775	(0.870)	96	102147			0.00-	30.00	159.88

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	121910	2.00000	1.995	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	100576		0.00-	30.00	82.50
12.077	12.077	(0.892)	86	22241		0.00-	30.00	18.24

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	170387	2.00000	2.041	80.00-	120.00	100.00
12.434	12.434	(0.919)	65	52996		0.00-	30.00	31.10	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	13802	2.00000	2.055	80.00-	120.00	100.00
12.489	12.489	(0.923)	43	96155		0.00-	30.00	696.67	
12.489	12.489	(0.923)	42	9330		0.00-	30.00	67.60	

37 2-Butanone

CAS #: 78-93-3

13.246	13.246	(0.979)	72	53942	2.00000	2.393	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	433749		0.00-	30.00	804.10	
13.246	13.246	(0.979)	57	15185		0.00-	30.00	28.15	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	65401	2.00000	1.986	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	143076		0.00-	30.00	218.77	
13.225	13.225	(0.977)	96	96948		129.61-	189.61	148.24	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	113155	2.00000	1.911	80.00-	120.00	100.00
13.535	13.535	(1.000)	71	38306		0.00-	30.00	33.85	
13.535	13.535	(1.000)	72	39853		0.00-	30.00	35.22	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	215392	2.00000	1.973	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	140084		0.00-	30.00	65.04	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	214840	2.00000	1.991	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	139126		0.00-	30.00	64.76	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	133953	2.00000	2.138	80.00-	120.00	100.00
13.812	13.812	(1.020)	56	151289		0.00-	30.00	112.94	
13.812	13.812	(1.020)	41	106003		0.00-	30.00	79.13	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	266913	2.00000	2.096	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	294128		0.00-	30.00	110.20	

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	141773	2.00000	2.019	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	436438		0.00-	30.00	307.84
14.258	14.258	(1.053)	41	158215		0.00-	30.00	111.60

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	315580	2.00000	2.046	80.00-	120.00	100.00
14.285	14.285	(0.965)	77	71831		0.00-	30.00	22.76	

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	164000	2.00000	1.961	80.00-	120.00	100.00
14.395	14.395	(0.972)	64	50854		0.00-	30.00	31.01	

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	87193	2.00000	2.109	80.00-	120.00	100.00
14.477	14.477	(0.978)	100	34433		0.00-	30.00	39.49	
14.477	14.477	(0.978)	43	187390		0.00-	30.00	214.91	

53 Trichloroethene

CAS #: 79-01-6

15.164	15.136	(1.024)	130	170399	2.00000	1.970	80.00-	120.00	100.00
15.136	15.136	(1.022)	95	144224		0.00-	30.00	84.64	
15.136	15.136	(1.022)	97	93924		0.00-	30.00	55.12	

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	97967	2.00000	1.814	80.00-	120.00	100.00
15.521	15.521	(1.048)	62	71716		0.00-	30.00	73.20	
15.521	15.521	(1.048)	41	97664		58.92-	118.92	99.69	

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	74765	2.00000	1.992	80.00-	120.00	100.00
15.658	15.658	(1.057)	58	51174		0.00-	30.00	68.45	
15.658	15.658	(1.057)	57	18931		0.00-	30.00	25.32	

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	203691	2.00000	2.009	80.00-	120.00	100.00
15.905	15.905	(1.074)	85	133902		0.00-	30.00	65.74	

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.638	16.616	(1.124)	75	141172	2.00000	2.126	80.00-	120.00	100.00
16.638	16.616	(1.124)	77	41246		0.00-	30.00	29.22	
16.615	16.616	(1.122)	39	98859		40.93-	100.93	70.03	

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	239902	2.00000	2.207	80.00-	120.00	100.00
16.795	16.795	(1.134)	58	75511		0.00-	30.00	31.48	
16.795	16.795	(1.134)	85	36563		0.00-	30.00	15.24	

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 396209 2.00000 2.033 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 239046 0.00- 30.00 60.33

61 trans-1,3-Dichloropropene CAS #: 10061-02-6
17.489 17.467 (0.918) 75 150804 2.00000 1.855 80.00- 120.00 100.00
17.489 17.467 (0.918) 77 48799 0.00- 30.00 32.36
17.467 17.467 (0.917) 39 133043 35.92- 95.92 88.22

62 1,1,2-Trichloroethane CAS #: 79-00-5
17.741 17.741 (0.931) 97 151325 2.00000 1.992 80.00- 120.00 100.00
17.741 17.741 (0.931) 99 92415 0.00- 30.00 61.07
17.741 17.741 (0.931) 83 118541 49.05- 109.05 78.34

63 Tetrachloroethene CAS #: 127-18-4
17.857 17.857 (0.937) 166 246523 2.00000 1.966 80.00- 120.00 100.00
17.857 17.857 (0.937) 129 176607 0.00- 30.00 71.64
17.857 17.857 (0.937) 131 175086 36.65- 96.65 71.02

64 2-Hexanone CAS #: 591-78-6
18.003 18.003 (0.945) 58 120899 2.00000 2.044 80.00- 120.00 100.00
18.003 18.003 (0.945) 43 271042 0.00- 30.00 224.19
18.003 18.003 (0.945) 100 29049 0.00- 30.00 24.03

66 Dibromochloromethane CAS #: 124-48-1
18.294 18.294 (0.960) 129 265065 2.00000 2.198 80.00- 120.00 100.00
18.294 18.294 (0.960) 127 203694 0.00- 30.00 76.85

67 1,2-Dibromoethane CAS #: 106-93-4
18.498 18.498 (0.971) 107 256966 2.00000 1.990 80.00- 120.00 100.00
18.498 18.498 (0.971) 109 242834 0.00- 30.00 94.50

69 Chlorobenzene CAS #: 108-90-7
19.103 19.103 (1.003) 112 479486 2.00000 2.015 80.00- 120.00 100.00
19.103 19.103 (1.003) 114 154111 0.00- 30.00 32.14
19.079 19.079 (1.001) 77 245998 20.36- 80.36 51.30

70 Ethyl Benzene CAS #: 100-41-4
19.151 19.151 (1.005) 106 237621 2.00000 2.056 80.00- 120.00 100.00
19.151 19.151 (1.005) 91 706480 0.00- 30.00 297.31

71 m,p-Xylene CAS #: 108-38-3
19.320 19.320 (1.014) 106 292482 2.00000 2.047 80.00- 120.00 100.00
19.320 19.320 (1.014) 91 533812 0.00- 30.00 182.51

72 o-Xylene CAS #: 95-47-6
19.826 19.826 (1.040) 106 296170 2.00000 2.116 80.00- 120.00 100.00

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
72 o-Xylene (continued)								
19.826	19.826	(1.040)	91	559854		0.00-	30.00	189.03

73 Styrene								
19.850	19.850	(1.042)	104	380747	2.00000	2.012	80.00- 120.00	100.00
19.850	19.850	(1.042)	78	161260		0.00-	30.00	42.35

75 Bromoform								
20.148	20.148	(1.057)	173	256569	2.00000	2.242	80.00- 120.00	100.00
20.148	20.148	(1.057)	171	130054		0.00-	30.00	50.69

76 Cumene								
20.251	20.251	(1.063)	105	862370	2.00000	2.108	80.00- 120.00	100.00
20.251	20.251	(1.063)	120	241479		0.00-	30.00	28.00

79 1,1,2,2-Tetrachloroethane								
20.689	20.689	(1.086)	83	465527	2.00000	1.984	80.00- 120.00	100.00
20.689	20.689	(1.086)	85	299934		0.00-	30.00	64.43

80 Propylbenzene								
20.741	20.741	(1.088)	91	1046350	2.00000	2.050	80.00- 120.00	100.00
20.741	20.741	(1.088)	120	269201		0.00-	30.00	25.73

82 4-Ethyltoluene								
20.870	20.870	(1.095)	105	940874	2.00000	2.146	80.00- 120.00	100.00
20.870	20.870	(1.095)	120	286635		0.00-	30.00	30.46

83 1,3,5-Trimethylbenzene								
20.947	20.947	(1.099)	105	786825	2.00000	2.037	80.00- 120.00	100.00
20.947	20.947	(1.099)	120	398951		0.00-	30.00	50.70

85 1,2,4-Trimethylbenzene								
21.386	21.386	(1.122)	105	691437	2.00000	2.093	80.00- 120.00	100.00
21.386	21.386	(1.122)	120	341422		0.00-	30.00	49.38

88 1,3-Dichlorobenzene								
21.773	21.773	(1.143)	146	557688	2.00000	1.914	80.00- 120.00	100.00
21.773	21.773	(1.143)	148	350192		0.00-	30.00	62.79
21.773	21.773	(1.143)	111	205727		0.00-	30.00	36.89

89 1,4-Dichlorobenzene								
21.876	21.876	(1.148)	146	560130	2.00000	1.833	80.00- 120.00	100.00
21.876	21.876	(1.148)	148	354143		0.00-	30.00	63.23
21.876	21.876	(1.148)	111	194161		0.00-	30.00	34.66

90 alpha-chlorotoluene								
22.005	22.005	(1.155)	91	410797	2.00000	2.102	80.00- 120.00	100.00

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
90 alpha-chlorotoluene (continued)								
22.005	22.005	(1.155)	126	89729		0.00-	30.00	21.84

93 1,2-Dichlorobenzene CAS #: 95-50-1								
22.288	22.288	(1.170)	146	545018	2.00000	1.909	80.00- 120.00	100.00
22.288	22.288	(1.170)	148	338771		33.79-	93.79	62.16
22.288	22.288	(1.170)	111	205530		8.12-	68.12	37.71

97 1,2,4-Trichlorobenzene CAS #: 120-82-1								
24.042	24.042	(1.262)	180	228683	2.00000	1.823	80.00- 120.00	100.00
24.042	24.042	(1.262)	182	211433		0.00-	30.00	92.46

98 Hexachlorobutadiene CAS #: 87-68-3								
24.120	24.120	(1.266)	225	180378	2.00000	1.869	80.00- 120.00	100.00
24.120	24.120	(1.266)	223	111004		0.00-	30.00	61.54

99 Naphthalene CAS #: 91-20-3								
24.352	24.352	(1.278)	128	446145	2.00000	1.797	80.00- 120.00	100.00
24.352	24.352	(1.278)	127	51495		0.00-	30.00	11.54

179 Butane CAS #: 106-97-8								
6.694	6.694	(0.495)	58	19533	2.00000	1.924	80.00- 120.00	100.00
6.694	6.694	(0.495)	43	161337		0.00-	30.00	825.97

11 Isopentane CAS #: 78-78-4								
8.687	8.687	(0.642)	57	75095	2.00000	2.042	80.00- 120.00	100.00
8.687	8.687	(0.642)	43	124075		0.00-	30.00	165.22
8.687	8.687	(0.642)	42	111538		0.00-	30.00	148.53

167 Methylcyclohexane CAS #: 108-87-2								
15.328	15.328	(1.133)	83	191989	2.00000	2.087	80.00- 120.00	100.00
15.328	15.328	(1.133)	98	94756		0.00-	30.00	49.35
15.328	15.328	(1.133)	55	151800		0.00-	30.00	79.07

26 tert-butyl alcohol CAS #: 75-65-0								
11.665	11.665	(0.862)	59	165505	2.00000	2.072	80.00- 120.00	100.00
11.665	11.665	(0.862)	41	57246		0.00-	30.00	34.59
11.665	11.665	(0.862)	57	19402		0.00-	30.00	11.72

32 Isopropyl ether CAS #: 108-20-3								
12.434	12.434	(0.919)	45	297583	2.00000	1.953	80.00- 120.00	100.00
12.434	12.434	(0.919)	87	76155		0.00-	30.00	25.59
12.434	12.434	(0.919)	59	28549		0.00-	30.00	9.59

35 Ethyl-tert-butyl ether CAS #: 637-92-3								
12.900	12.900	(0.953)	59	302895	2.00000	2.485	80.00- 120.00	100.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.900	12.900	(0.953)	87	110742		0.00-	30.00	36.56
12.900	12.900	(0.953)	41	83502		0.00-	30.00	27.57

175 Ethyl Acetate

CAS #: 141-78-6

13.266	13.246	(0.980)	70	11676	2.00000	1.852	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	433749			0.00-	30.00	3714.88
13.225	13.225	(0.977)	61	143076			0.00-	30.00	1225.39

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	231053	2.00000	2.214	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	57461			0.00-	30.00	24.87
14.367	14.367	(0.970)	55	84933			0.00-	30.00	36.76

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052013.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: tjs
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 2.0 ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	306967	-6.45
52 1,4-Difluorobenze	1302885	781731	1824039	1233249	-5.34
68 Chlorobenzene-d5	1586849	952109	2221589	1497579	-5.63

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 20-MAY-2009 17:00

Client ID:

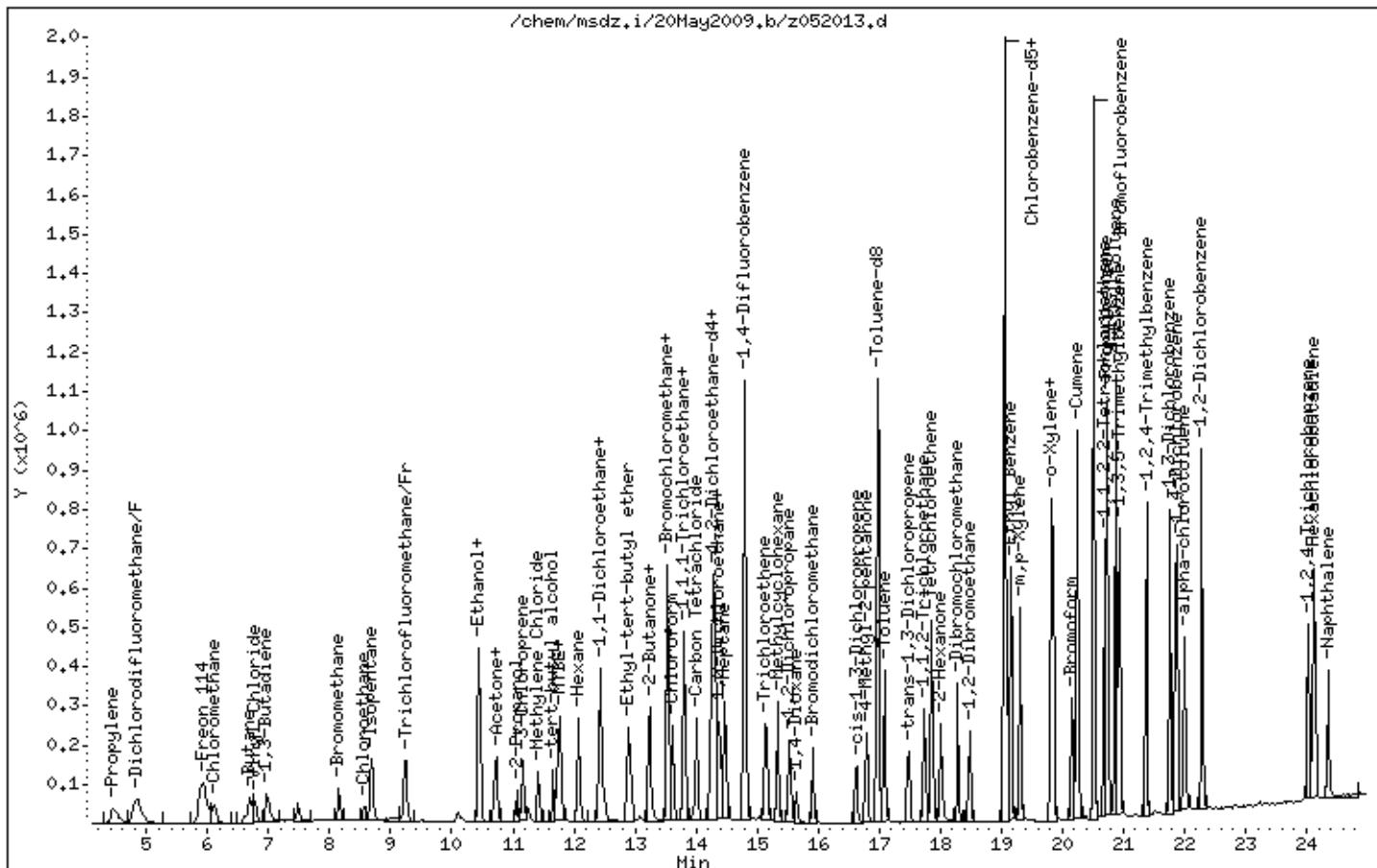
Instrument: msdz.i

Sample Info: 500ml #1754-234 2ppbv ICAL

Operator: tjs

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 07:57

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052014.d

Lab Smp Id: ICAL

Inj Date : 20-MAY-2009 17:58

Operator : dfm Inst ID: msdz.i

Smp Info : 50ml #1754-196 5ppbv ICAL

Misc Info : 5.0ppbv

Comment :

Method : /chem/msdz.i/20May2009.b/z0910520a.m

Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD

Cal Date : 20-MAY-2009 17:58 Cal File: z052014.d

Als bottle: 1 Calibration Sample, Level: 8

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub

Target Version: 3.50 Sample Matrix: AIR

Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 311990 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 244198 0.00- 30.00 78.27
 13.535 13.535 (1.000) 49 399116 0.00- 30.00 127.93

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1283107 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 174348 0.00- 30.00 13.59

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1514570 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 748769 0.00- 30.00 49.44

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 412908 10.0000 9.955 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 207413 0.00- 30.00 50.23

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1258478 10.0000 10.234 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 128270 0.00- 30.00 10.19

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	845239		38.83-	98.83	67.16
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\$ 77 Bromofluorobenzene

20.509	20.535	(1.076)	174	1014540	10.0000	10.234	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1142627			84.56-	144.56	112.63
20.509	20.535	(1.076)	176	975381			66.40-	126.40	96.14

1 Propylene

4.473	4.449	(0.330)	41	234968	5.00000	5.279	80.00-	120.00	100.00
4.473	4.449	(0.330)	42	160556			0.00-	30.00	68.33
4.449	4.449	(0.329)	39	207353			0.00-	30.00	88.25

3 Dichlorodifluoromethane/Fr12

4.859	4.835	(0.359)	85	885171	5.00000	5.158	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	275098			2.29-	62.29	31.08

4 Freon 114

5.920	5.919	(0.437)	135	651869	5.00000	5.120	80.00-	120.00	100.00
5.920	5.919	(0.437)	85	811925			0.00-	30.00	124.55
5.944	5.919	(0.439)	137	203442			0.00-	30.00	31.21

5 Chloromethane

6.112	6.112	(0.452)	50	299630	5.00000	5.165	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	91388			0.00-	30.00	30.50

6 Vinyl Chloride

6.781	6.781	(0.501)	62	283049	5.00000	5.444	80.00-	120.00	100.00
6.781	6.781	(0.501)	64	90516			0.83-	60.83	31.98

7 1,3-Butadiene

6.972	6.971	(0.515)	54	205951	5.00000	5.206	80.00-	120.00	100.00
6.972	6.971	(0.515)	39	264395			0.00-	30.00	128.38

9 Bromomethane

8.148	8.148	(0.602)	94	236728	5.00000	4.895	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	220046			63.57-	123.57	92.95

10 Chloroethane

8.562	8.562	(0.633)	64	116757	5.00000	5.082	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	39766			0.00-	30.00	34.06
8.562	8.562	(0.633)	66	40709			0.00-	30.00	34.87

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	726142	5.00000	5.687	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	466551			33.44-	93.44	64.25

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.081	10.105	(0.745)	45	136772	5.00000	5.456	80.00-	120.00	100.00
10.081	10.105	(0.745)	43	36663			0.00-	30.00	26.81

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	433769	5.00000	4.794	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	277500			33.10-	93.10	63.97
10.442	10.442	(0.771)	101	487942			0.00-	30.00	112.49

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	150352	5.00000	5.091	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	395420			0.00-	30.00	263.00
10.442	10.442	(0.771)	96	234161			0.00-	30.00	155.74

20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	127384	5.00000	4.779	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	602316			0.00-	30.00	472.83

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	100422	5.00000	5.493	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	335862			0.00-	30.00	334.45

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	386566	5.00000	5.144	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	101798			0.00-	30.00	26.33
11.061	11.061	(0.817)	59	12298			0.00-	30.00	3.18

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	684685	5.00000	5.334	80.00-	120.00	100.00
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25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	201704	5.00000	5.495	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	281214			0.00-	30.00	139.42
11.418	11.418	(0.844)	51	88591			0.00-	30.00	43.92

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	242879	5.00000	3.330	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	61875			0.00-	30.00	25.48
11.747	11.747	(0.868)	41	98247			0.00-	30.00	40.45

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	173184	5.00000	5.380	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	388677			0.00-	30.00	224.43
11.775	11.775	(0.870)	96	264527			0.00-	30.00	152.74

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	367246	5.00000	5.705	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	272304		0.00-	30.00	74.15
12.077	12.077	(0.892)	86	61029		0.00-	30.00	16.62

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	458853	5.00000	5.322	80.00-	120.00	100.00
12.434	12.434	(0.919)	65	143280		0.00-	30.00	31.23	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	30374	5.00000	4.575	80.00-	120.00	100.00
12.489	12.489	(0.923)	43	254046		0.00-	30.00	836.39	
12.489	12.489	(0.923)	42	22407		0.00-	30.00	73.77	

37 2-Butanone

CAS #: 78-93-3

13.246	13.246	(0.979)	72	146921	5.00000	6.070	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	1196018		0.00-	30.00	814.06	
13.246	13.246	(0.979)	57	40440		0.00-	30.00	27.52	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	168269	5.00000	5.023	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	485195		0.00-	30.00	288.34	
13.225	13.225	(0.977)	96	255659		129.61-	189.61	151.93	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	324270	5.00000	5.286	80.00-	120.00	100.00
13.535	13.535	(1.000)	71	110568		0.00-	30.00	34.10	
13.535	13.535	(1.000)	72	119474		0.00-	30.00	36.84	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	563388	5.00000	5.062	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	368968		0.00-	30.00	65.49	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	582831	5.00000	5.260	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	375733		0.00-	30.00	64.47	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	363351	5.00000	5.549	80.00-	120.00	100.00
13.812	13.812	(1.020)	56	412331		0.00-	30.00	113.48	
13.812	13.812	(1.020)	41	293827		0.00-	30.00	80.87	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	781652	5.00000	5.836	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	809563		0.00-	30.00	103.57	

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	395313	5.00000	5.423	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	1256639		0.00-	30.00	317.88
14.258	14.258	(1.053)	41	456849		0.00-	30.00	115.57

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	827276	5.00000	5.124	80.00-	120.00	100.00
14.285	14.285	(0.965)	77	188197		0.00-	30.00	22.75	

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	443349	5.00000	5.077	80.00-	120.00	100.00
14.395	14.395	(0.972)	64	140694		0.00-	30.00	31.73	

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	253199	5.00000	5.685	80.00-	120.00	100.00
14.477	14.477	(0.978)	100	97999		0.00-	30.00	38.70	
14.477	14.477	(0.978)	43	548565		0.00-	30.00	216.65	

53 Trichloroethene

CAS #: 79-01-6

15.136	15.136	(1.022)	130	455996	5.00000	5.056	80.00-	120.00	100.00
15.136	15.136	(1.022)	95	389263		0.00-	30.00	85.37	
15.136	15.136	(1.022)	97	249306		0.00-	30.00	54.67	

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	285790	5.00000	5.068	80.00-	120.00	100.00
15.521	15.521	(1.048)	62	201518		0.00-	30.00	70.51	
15.521	15.521	(1.048)	41	256986		58.92-	118.92	89.92	

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	205357	5.00000	5.204	80.00-	120.00	100.00
15.658	15.658	(1.057)	58	132825		0.00-	30.00	64.68	
15.658	15.658	(1.057)	57	46113		0.00-	30.00	22.46	

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	601640	5.00000	5.573	80.00-	120.00	100.00
15.905	15.905	(1.074)	85	384498		0.00-	30.00	63.91	

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.616	16.616	(1.122)	75	427309	5.00000	5.905	80.00-	120.00	100.00
16.616	16.616	(1.122)	77	134127		0.00-	30.00	31.39	
16.616	16.616	(1.122)	39	306625		40.93-	100.93	71.76	

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	683118	5.00000	5.800	80.00-	120.00	100.00
16.795	16.795	(1.134)	58	230187		0.00-	30.00	33.70	
16.795	16.795	(1.134)	85	108442		0.00-	30.00	15.87	

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 1081072 5.00000 5.262 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 644283 0.00- 30.00 59.60

61 trans-1,3-Dichloropropene CAS #: 10061-02-6
17.467 17.467 (0.917) 75 588635 5.00000 6.589 80.00- 120.00 100.00
17.467 17.467 (0.917) 77 145078 0.00- 30.00 24.65
17.467 17.467 (0.917) 39 305521 35.92- 95.92 51.90

62 1,1,2-Trichloroethane CAS #: 79-00-5
17.741 17.741 (0.931) 97 419165 5.00000 5.375 80.00- 120.00 100.00
17.741 17.741 (0.931) 99 263238 0.00- 30.00 62.80
17.741 17.741 (0.931) 83 333667 49.05- 109.05 79.60

63 Tetrachloroethene CAS #: 127-18-4
17.857 17.857 (0.937) 166 691896 5.00000 5.373 80.00- 120.00 100.00
17.857 17.857 (0.937) 129 483050 0.00- 30.00 69.82
17.857 17.857 (0.937) 131 467127 36.65- 96.65 67.51

64 2-Hexanone CAS #: 591-78-6
18.003 18.003 (0.945) 58 362504 5.00000 5.756 80.00- 120.00 100.00
18.003 18.003 (0.945) 43 757858 0.00- 30.00 209.06
18.003 18.003 (0.945) 100 90220 0.00- 30.00 24.89

66 Dibromochloromethane CAS #: 124-48-1
18.294 18.294 (0.960) 129 766373 5.00000 6.026 80.00- 120.00 100.00
18.294 18.294 (0.960) 127 604150 0.00- 30.00 78.83

67 1,2-Dibromoethane CAS #: 106-93-4
18.499 18.498 (0.971) 107 738582 5.00000 5.535 80.00- 120.00 100.00
18.499 18.498 (0.971) 109 688875 0.00- 30.00 93.27

69 Chlorobenzene CAS #: 108-90-7
19.103 19.103 (1.003) 112 1311204 5.00000 5.353 80.00- 120.00 100.00
19.103 19.103 (1.003) 114 417750 0.00- 30.00 31.86
19.079 19.079 (1.001) 77 647953 20.36- 80.36 49.42

70 Ethyl Benzene CAS #: 100-41-4
19.151 19.151 (1.005) 106 679791 5.00000 5.632 80.00- 120.00 100.00
19.151 19.151 (1.005) 91 1961998 0.00- 30.00 288.62

71 m,p-Xylene CAS #: 108-38-3
19.320 19.320 (1.014) 106 833171 5.00000 5.595 80.00- 120.00 100.00
19.296 19.320 (1.013) 91 1543663 0.00- 30.00 185.28

72 o-Xylene CAS #: 95-47-6
19.826 19.826 (1.040) 106 837597 5.00000 5.708 80.00- 120.00 100.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

72 o-Xylene (continued)

19.826	19.826	(1.040)	91	1604783		0.00-	30.00	191.59
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	1167356	5.00000	5.842	80.00-	120.00	100.00
19.850	19.850	(1.042)	78	505091		0.00-	30.00		43.27

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	782567	5.00000	6.386	80.00-	120.00	100.00
20.148	20.148	(1.057)	171	405808		0.00-	30.00		51.86

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	2414644	5.00000	5.647	80.00-	120.00	100.00
20.251	20.251	(1.063)	120	697298		0.00-	30.00		28.88

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	1276462	5.00000	5.313	80.00-	120.00	100.00
20.689	20.689	(1.086)	85	821979		0.00-	30.00		64.40

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	2975062	5.00000	5.592	80.00-	120.00	100.00
20.741	20.741	(1.088)	120	737441		0.00-	30.00		24.79

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	2696837	5.00000	5.830	80.00-	120.00	100.00
20.870	20.870	(1.095)	120	852603		0.00-	30.00		31.61

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	2234454	5.00000	5.561	80.00-	120.00	100.00
20.947	20.947	(1.099)	120	1159990		0.00-	30.00		51.91

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	2008769	5.00000	5.779	80.00-	120.00	100.00
21.386	21.386	(1.122)	120	983730		0.00-	30.00		48.97

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.773	21.773	(1.143)	146	1546473	5.00000	5.206	80.00-	120.00	100.00
21.773	21.773	(1.143)	148	999211		0.00-	30.00		64.61
21.773	21.773	(1.143)	111	548240		0.00-	30.00		35.45

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	1580696	5.00000	5.095	80.00-	120.00	100.00
21.876	21.876	(1.148)	148	995739		0.00-	30.00		62.99
21.850	21.850	(1.147)	111	537819		0.00-	30.00		34.02

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	1246710	5.00000	5.995	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	293360		0.00-	30.00	23.53
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	1519278	5.00000	5.216	80.00-	120.00	100.00
22.288	22.288	(1.170)	148	960268		33.79-	93.79		63.21
22.288	22.288	(1.170)	111	567440		8.12-	68.12		37.35

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	641465	5.00000	5.042	80.00-	120.00	100.00
24.042	24.042	(1.262)	182	606042		0.00-	30.00		94.48

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	517833	5.00000	5.226	80.00-	120.00	100.00
24.120	24.120	(1.266)	223	324181		0.00-	30.00		62.60

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	1259102	5.00000	5.012	80.00-	120.00	100.00
24.352	24.352	(1.278)	127	157247		0.00-	30.00		12.49

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	57433	5.00000	5.412	80.00-	120.00	100.00
6.694	6.694	(0.495)	43	469029		0.00-	30.00		816.65

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	195737	5.00000	5.176	80.00-	120.00	100.00
8.687	8.687	(0.642)	43	335464		0.00-	30.00		171.39
8.687	8.687	(0.642)	42	285970		0.00-	30.00		146.10

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	538297	5.00000	5.547	80.00-	120.00	100.00
15.328	15.328	(1.133)	98	279402		0.00-	30.00		51.90
15.328	15.328	(1.133)	55	442347		0.00-	30.00		82.18

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	320998	5.00000	4.172	80.00-	120.00	100.00
11.665	11.665	(0.862)	41	107603		0.00-	30.00		33.52
11.665	11.665	(0.862)	57	37792		0.00-	30.00		11.77

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	878790	5.00000	5.489	80.00-	120.00	100.00
12.434	12.434	(0.919)	87	204004		0.00-	30.00		23.21
12.434	12.434	(0.919)	59	82478		0.00-	30.00		9.39

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.901	12.900	(0.953)	59	398945	5.00000	3.535	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.901	12.900	(0.953)	87	148454		0.00-	30.00	37.21
12.901	12.900	(0.953)	41	114918		0.00-	30.00	28.81

175 Ethyl Acetate

CAS #: 141-78-6

13.246	13.246	(0.979)	70	45387	5.00000	6.416	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	1196018		0.00-	30.00	2635.16	
13.225	13.225	(0.977)	61	485195		0.00-	30.00	1069.02	

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	402200	5.00000	3.962	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	97504		0.00-	30.00	24.24	
14.367	14.367	(0.970)	55	134344		0.00-	30.00	33.40	

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052014.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 5.0ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	311990	-4.92
52 1,4-Difluorobenze	1302885	781731	1824039	1283107	-1.52
68 Chlorobenzene-d5	1586849	952109	2221589	1514570	-4.55

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 20-MAY-2009 17:58

Client ID:

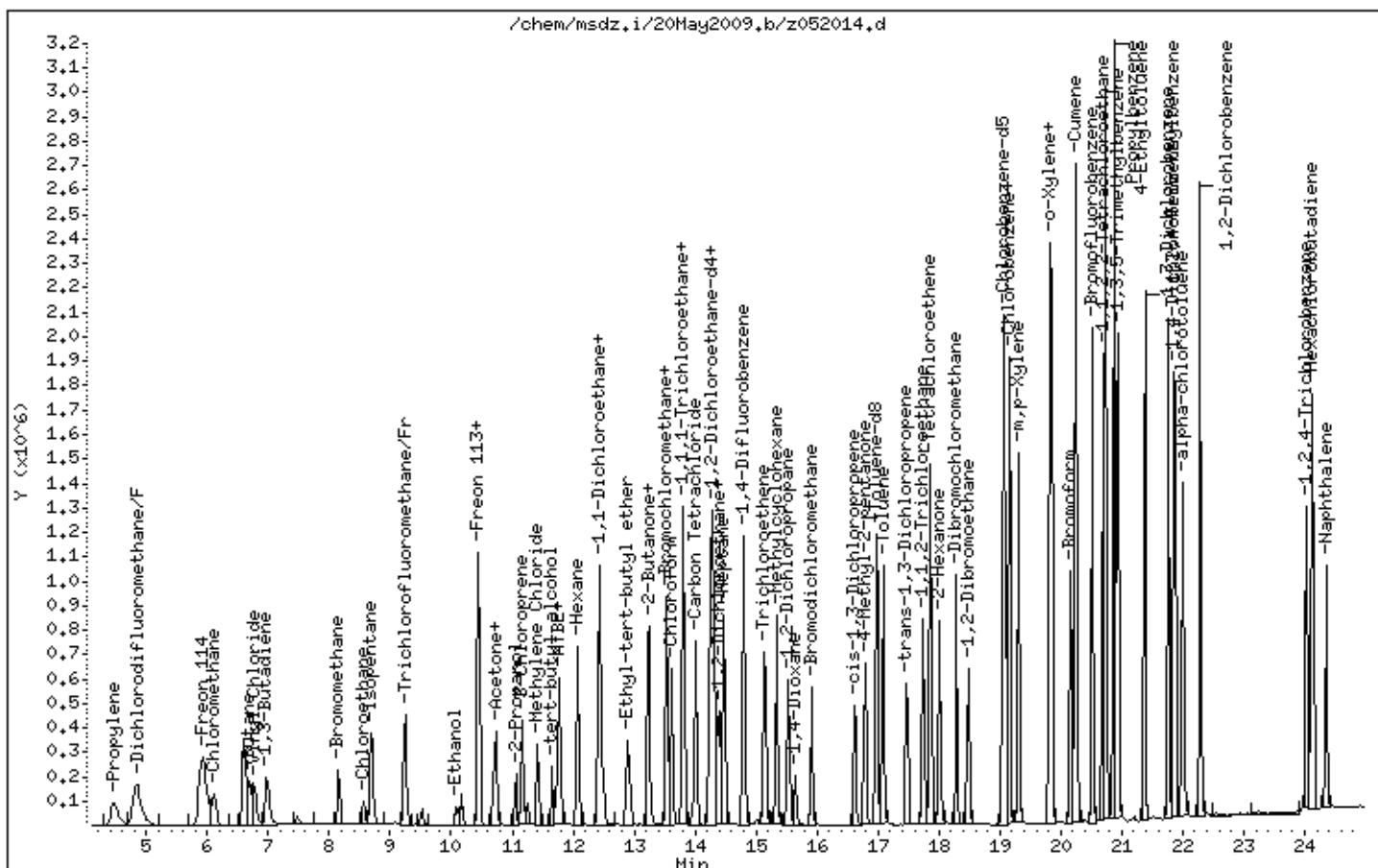
Instrument: msdz.i

Sample Info: 50ml #1754-196 5ppbv ICAL

Operator: dfm

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 07:58

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052015.d
 Lab Smp Id: 10ppbv ICAL Client Smp ID: ICAL
 Inj Date : 20-MAY-2009 18:34
 Operator : dfm Inst ID: msdz.i
 Smp Info : 100ml #1754-196
 Misc Info : 10ppbv
 Comment :
 Method : /chem/msdz.i/20May2009.b/z0910520a.m
 Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD
 Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d
 Als bottle: 1 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 328120 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 258172 0.00- 30.00 78.68
 13.535 13.535 (1.000) 49 410781 0.00- 30.00 125.19

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1302885 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 187243 0.00- 30.00 14.37

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1586849 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 768835 0.00- 30.00 48.45

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 422880 10.0000 10.000 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 227281 0.00- 30.00 53.75

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1267156 10.0000 10.000 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 126680 0.00- 30.00 10.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	872157		38.83-	98.83	68.83
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\$ 77 Bromofluorobenzene CAS #: 460-00-4

20.535	20.535	(1.078)	174	1042628	10.0000	10.000	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1194448			84.56-	144.56	114.56
20.535	20.535	(1.078)	176	1005144			66.40-	126.40	96.40

1 Propylene CAS #: 115-07-1

4.449	4.449	(0.329)	41	480192	10.0000	10.000	80.00-	120.00	100.00
4.449	4.449	(0.329)	42	305170			0.00-	30.00	63.55
4.449	4.449	(0.329)	39	417327			0.00-	30.00	86.91

3 Dichlorodifluoromethane/Fr12 CAS #: 75-71-8

4.835	4.835	(0.357)	85	1655817	10.0000	10.000	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	534718			2.29-	62.29	32.29

4 Freon 114 CAS #: 76-14-2

5.919	5.919	(0.437)	135	1270144	10.0000	10.000	80.00-	120.00	100.00
5.919	5.919	(0.437)	85	1578144			0.00-	30.00	124.25
5.919	5.919	(0.437)	137	402026			0.00-	30.00	31.65

5 Chloromethane CAS #: 74-87-3

6.112	6.112	(0.452)	50	568717	10.0000	10.000	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	175100			0.00-	30.00	30.79

6 Vinyl Chloride CAS #: 75-01-4

6.781	6.781	(0.501)	62	555578	10.0000	10.000	80.00-	120.00	100.00
6.781	6.781	(0.501)	64	171263			0.83-	60.83	30.83

7 1,3-Butadiene CAS #: 106-99-0

6.971	6.971	(0.515)	54	414028	10.0000	10.000	80.00-	120.00	100.00
6.971	6.971	(0.515)	39	535715			0.00-	30.00	129.39

9 Bromomethane CAS #: 74-83-9

8.148	8.148	(0.602)	94	469260	10.0000	10.000	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	439110			63.57-	123.57	93.57

10 Chloroethane CAS #: 75-00-3

8.562	8.562	(0.633)	64	240181	10.0000	10.000	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	79612			0.00-	30.00	33.15
8.562	8.562	(0.633)	66	76918			0.00-	30.00	32.03

13 Trichlorodifluoromethane/Fr11 CAS #: 75-69-4

9.246	9.246	(0.683)	101	1202365	10.0000	10.000	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	762807			33.44-	93.44	63.44

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	207790	10.0000	10.000	80.00-	120.00	100.00
10.105	10.105	(0.747)	43	50807			0.00-	30.00	24.45

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	792037	10.0000	10.000	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	499790			33.10-	93.10	63.10
10.442	10.442	(0.771)	101	881984			0.00-	30.00	111.36

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	297212	10.0000	10.000	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	792765			0.00-	30.00	266.73
10.442	10.442	(0.771)	96	467451			0.00-	30.00	157.28

20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	261750	10.0000	10.000	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	1010073			0.00-	30.00	385.89

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	206011	10.0000	10.000	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	741264			0.00-	30.00	359.82

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	841097	10.0000	10.000	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	207015			0.00-	30.00	24.61
11.061	11.061	(0.817)	59	27217			0.00-	30.00	3.24

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	1377194	10.0000	10.000	80.00-	120.00	100.00
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25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	391320	10.0000	10.000	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	569814			0.00-	30.00	145.61
11.418	11.418	(0.844)	51	169766			0.00-	30.00	43.38

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	1223093	10.0000	10.000	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	301582			0.00-	30.00	24.66
11.747	11.747	(0.868)	41	425621			0.00-	30.00	34.80

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	339590	10.0000	10.000	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	787684			0.00-	30.00	231.95
11.775	11.775	(0.870)	96	535407			0.00-	30.00	157.66

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	752659	10.0000	10.00	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	562393		0.00-	30.00	74.72
12.077	12.077	(0.892)	86	127508		0.00-	30.00	16.94

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	897001	10.0000	10.000	80.00-	120.00	100.00
12.434	12.434	(0.919)	65	282942		0.00-	30.00	31.54	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	93789	10.0000	10.000	80.00-	120.00	100.00
12.489	12.489	(0.923)	43	696422		0.00-	30.00	742.54	
12.489	12.489	(0.923)	42	64847		0.00-	30.00	69.14	

37 2-Butanone

CAS #: 78-93-3

13.246	13.246	(0.979)	72	292811	10.0000	10.000	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	2540977		0.00-	30.00	867.79	
13.246	13.246	(0.979)	57	103703		0.00-	30.00	35.42	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	327093	10.0000	10.000	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	979183		0.00-	30.00	299.36	
13.225	13.225	(0.977)	96	522059		129.61-	189.61	159.61	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	660881	10.0000	10.000	80.00-	120.00	100.00
13.535	13.535	(1.000)	71	229919		0.00-	30.00	34.79	
13.535	13.535	(1.000)	72	244343		0.00-	30.00	36.97	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	1100609	10.0000	10.000	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	726782		0.00-	30.00	66.03	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	1172039	10.0000	10.000	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	763058		0.00-	30.00	65.11	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	731838	10.0000	10.000	80.00-	120.00	100.00
13.812	13.812	(1.020)	56	822685		0.00-	30.00	112.41	
13.812	13.812	(1.020)	41	579409		0.00-	30.00	79.17	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	1564252	10.0000	10.000	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	1624335		0.00-	30.00	103.84	

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	783250	10.0000	10.000	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	2514265		0.00-	30.00	321.00
14.258	14.258	(1.053)	41	866229		0.00-	30.00	110.59

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	1641868	10.0000	10.000	80.00-	120.00	100.00
14.285	14.285	(0.965)	77	377726		0.00-	30.00		23.01

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	878287	10.0000	10.000	80.00-	120.00	100.00
14.395	14.395	(0.972)	64	262099		0.00-	30.00		29.84

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	502970	10.0000	10.000	80.00-	120.00	100.00
14.477	14.477	(0.978)	100	199557		0.00-	30.00		39.68
14.477	14.477	(0.978)	43	1102088		0.00-	30.00		219.12

53 Trichloroethene

CAS #: 79-01-6

15.136	15.136	(1.022)	130	894216	10.0000	10.000	80.00-	120.00	100.00
15.136	15.136	(1.022)	95	786793		0.00-	30.00		87.99
15.136	15.136	(1.022)	97	501188		0.00-	30.00		56.05

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	569581	10.0000	10.000	80.00-	120.00	100.00
15.521	15.521	(1.048)	62	402090		0.00-	30.00		70.59
15.521	15.521	(1.048)	41	506478		58.92-	118.92		88.92

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	425893	10.0000	10.000	80.00-	120.00	100.00
15.658	15.658	(1.057)	58	283873		0.00-	30.00		66.65
15.658	15.658	(1.057)	57	98268		0.00-	30.00		23.07

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	1189180	10.0000	10.000	80.00-	120.00	100.00
15.905	15.905	(1.074)	85	763718		0.00-	30.00		64.22

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.616	16.616	(1.122)	75	878662	10.0000	10.000	80.00-	120.00	100.00
16.616	16.616	(1.122)	77	281664		0.00-	30.00		32.06
16.616	16.616	(1.122)	39	623278		40.93-	100.93		70.93

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	1464957	10.0000	10.000	80.00-	120.00	100.00
16.795	16.795	(1.134)	58	493711		0.00-	30.00		33.70
16.795	16.795	(1.134)	85	226842		0.00-	30.00		15.48

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
60	Toluene				CAS #: 108-88-3			
17.086	17.086	(1.154)	91	2149462	10.0000	10.000	80.00- 120.00	100.00
17.086	17.086	(1.154)	92	1283740		0.00-	30.00	59.72
61	trans-1,3-Dichloropropene				CAS #: 10061-02-6			
17.467	17.467	(0.917)	75	977615	10.0000	10.000	80.00- 120.00	100.00
17.467	17.467	(0.917)	77	310301		0.00-	30.00	31.74
17.467	17.467	(0.917)	39	644485		35.92-	95.92	65.92
62	1,1,2-Trichloroethane				CAS #: 79-00-5			
17.741	17.741	(0.931)	97	833518	10.0000	10.000	80.00- 120.00	100.00
17.741	17.741	(0.931)	99	527829		0.00-	30.00	63.33
17.741	17.741	(0.931)	83	658914		49.05-	109.05	79.05
63	Tetrachloroethene				CAS #: 127-18-4			
17.857	17.857	(0.937)	166	1368864	10.0000	10.000	80.00- 120.00	100.00
17.857	17.857	(0.937)	129	933838		0.00-	30.00	68.22
17.857	17.857	(0.937)	131	912400		36.65-	96.65	66.65
64	2-Hexanone				CAS #: 591-78-6			
18.003	18.003	(0.945)	58	780407	10.0000	10.000	80.00- 120.00	100.00
18.003	18.003	(0.945)	43	1627017		0.00-	30.00	208.48
18.003	18.003	(0.945)	100	186903		0.00-	30.00	23.95
66	Dibromochloromethane				CAS #: 124-48-1			
18.294	18.294	(0.960)	129	1574150	10.0000	10.000	80.00- 120.00	100.00
18.294	18.294	(0.960)	127	1224900		0.00-	30.00	77.81
67	1,2-Dibromoethane				CAS #: 106-93-4			
18.498	18.498	(0.971)	107	1474139	10.0000	10.000	80.00- 120.00	100.00
18.498	18.498	(0.971)	109	1406168		0.00-	30.00	95.39
69	Chlorobenzene				CAS #: 108-90-7			
19.103	19.103	(1.003)	112	2542862	10.0000	10.000	80.00- 120.00	100.00
19.103	19.103	(1.003)	114	826890		0.00-	30.00	32.52
19.079	19.079	(1.001)	77	1280688		20.36-	80.36	50.36
70	Ethyl Benzene				CAS #: 100-41-4			
19.151	19.151	(1.005)	106	1357704	10.0000	10.000	80.00- 120.00	100.00
19.151	19.151	(1.005)	91	3973451		0.00-	30.00	292.66
71	m,p-Xylene				CAS #: 108-38-3			
19.320	19.320	(1.014)	106	1716729	10.0000	10.000	80.00- 120.00	100.00
19.320	19.320	(1.014)	91	3076647		0.00-	30.00	179.22
72	o-Xylene				CAS #: 95-47-6			
19.826	19.826	(1.040)	106	1693748	10.0000	10.000	80.00- 120.00	100.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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72 o-Xylene (continued)

19.826	19.826	(1.040)	91	3220156			0.00-	30.00	190.12
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	2489463	10.0000	10.000	80.00-	120.00	100.00
19.850	19.850	(1.042)	78	1038459			0.00-	30.00	41.71

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	1665725	10.0000	10.000	80.00-	120.00	100.00
20.148	20.148	(1.057)	171	845165			0.00-	30.00	50.74

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	4957741	10.0000	10.000	80.00-	120.00	100.00
20.251	20.251	(1.063)	120	1402146			0.00-	30.00	28.28

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	2586623	10.0000	10.000	80.00-	120.00	100.00
20.689	20.689	(1.086)	85	1632766			0.00-	30.00	63.12

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	6123820	10.0000	10.000	80.00-	120.00	100.00
20.741	20.741	(1.088)	120	1531011			0.00-	30.00	25.00

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	5513559	10.0000	10.000	80.00-	120.00	100.00
20.870	20.870	(1.095)	120	1723757			0.00-	30.00	31.26

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	4509160	10.0000	10.000	80.00-	120.00	100.00
20.947	20.947	(1.099)	120	2356958			0.00-	30.00	52.27

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	4172225	10.0000	10.000	80.00-	120.00	100.00
21.386	21.386	(1.122)	120	2065868			0.00-	30.00	49.51

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.773	21.773	(1.143)	146	3222256	10.0000	10.000	80.00-	120.00	100.00
21.773	21.773	(1.143)	148	2040125			0.00-	30.00	63.31
21.773	21.773	(1.143)	111	1144154			0.00-	30.00	35.51

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	3329151	10.0000	10.000	80.00-	120.00	100.00
21.876	21.876	(1.148)	148	2093852			0.00-	30.00	62.89
21.850	21.850	(1.147)	111	1129789			0.00-	30.00	33.94

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	2919399	10.0000	10.000	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	670166			0.00-	30.00	22.96
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	3117090	10.0000	10.000	80.00-	120.00	100.00
22.288	22.288	(1.170)	148	1988420			33.79-	93.79	63.79
22.288	22.288	(1.170)	111	1188107			8.12-	68.12	38.12

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	1503747	10.0000	10.000	80.00-	120.00	100.00
24.042	24.042	(1.262)	182	1426711			0.00-	30.00	94.88

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	1098522	10.0000	10.000	80.00-	120.00	100.00
24.120	24.120	(1.266)	223	695537			0.00-	30.00	63.32

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	3226648	10.0000	10.000	80.00-	120.00	100.00
24.352	24.352	(1.278)	127	383300			0.00-	30.00	11.88

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	108645	10.0000	10.000	80.00-	120.00	100.00
6.694	6.694	(0.495)	43	928678			0.00-	30.00	854.78

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	370393	10.0000	10.000	80.00-	120.00	100.00
8.687	8.687	(0.642)	43	633473			0.00-	30.00	171.03
8.687	8.687	(0.642)	42	548341			0.00-	30.00	148.04

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	1072166	10.0000	10.000	80.00-	120.00	100.00
15.328	15.328	(1.133)	98	553093			0.00-	30.00	51.59
15.328	15.328	(1.133)	55	881837			0.00-	30.00	82.25

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	987929	10.0000	10.000	80.00-	120.00	100.00
11.665	11.665	(0.862)	41	301557			0.00-	30.00	30.52
11.665	11.665	(0.862)	57	111978			0.00-	30.00	11.33

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	1841479	10.0000	10.000	80.00-	120.00	100.00
12.434	12.434	(0.919)	87	417383			0.00-	30.00	22.67
12.434	12.434	(0.919)	59	172519			0.00-	30.00	9.37

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.900	12.900	(0.953)	59	1663466	10.0000	10.000	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.900	12.900	(0.953)	87	628941		0.00-	30.00	37.81
12.900	12.900	(0.953)	41	440692		0.00-	30.00	26.49

175 Ethyl Acetate

CAS #: 141-78-6

13.246	13.246	(0.979)	70	77099	10.0000	10.000	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	2540977			0.00-	30.00	3295.73
13.225	13.225	(0.977)	61	979183			0.00-	30.00	1270.03

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	1401145	10.0000	10.000	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	354065			0.00-	30.00	25.27
14.367	14.367	(0.970)	55	447831			0.00-	30.00	31.96

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052015.d
Lab Smp Id: 10ppbv ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 10ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Client Smp ID: ICAL
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	328120	0.00
52 1,4-Difluorobenze	1302885	781731	1824039	1302885	0.00
68 Chlorobenzene-d5	1586849	952109	2221589	1586849	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 20-MAY-2009 18:34

Client ID: ICAL

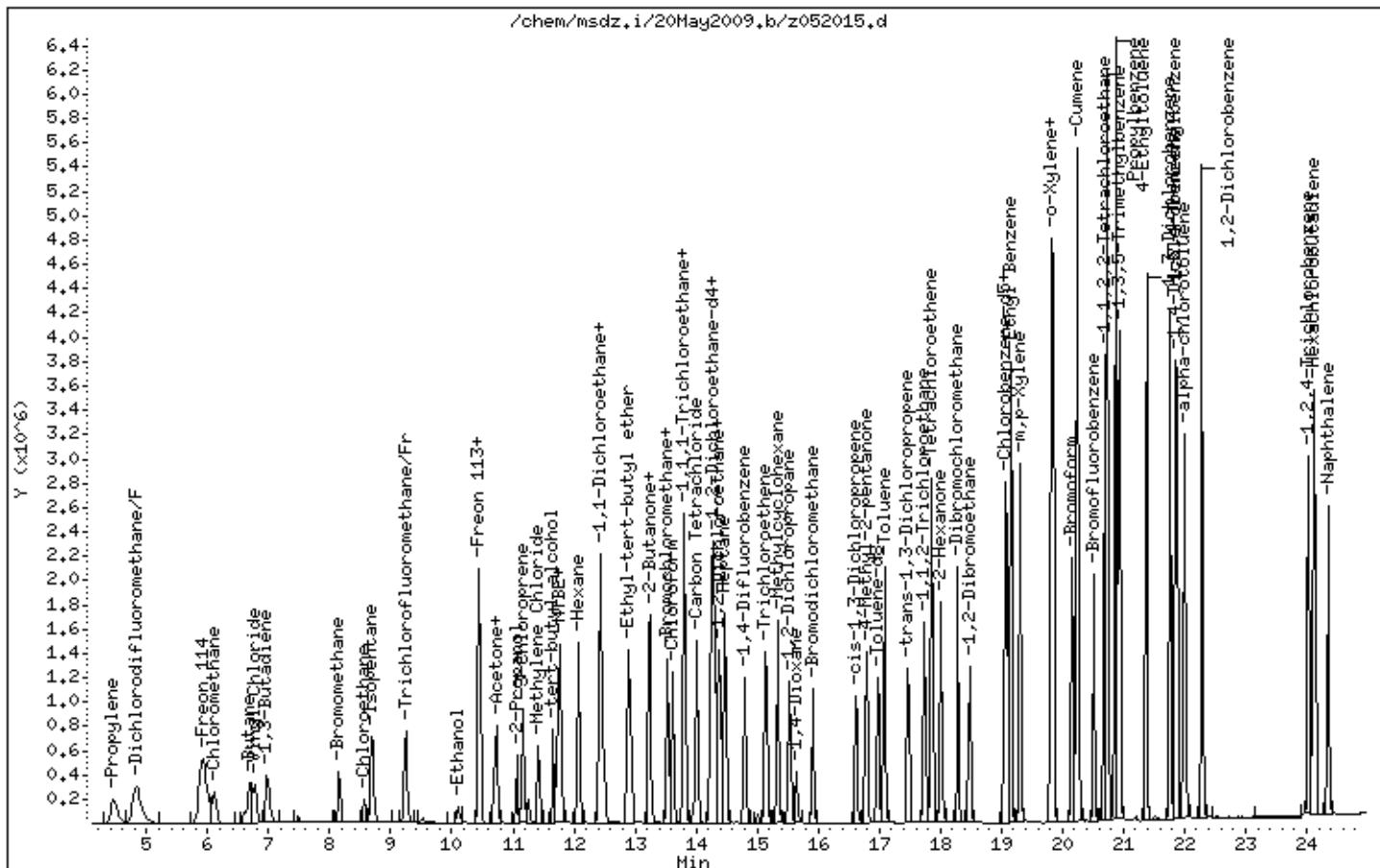
Instrument: msdz.i

Sample Info: 100ml #1754-196

Operator: dfm

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 07:59

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052016.d
 Lab Smp Id: 20ppbv ICAL Client Smp ID: ICAL
 Inj Date : 20-MAY-2009 19:42
 Operator : dfm Inst ID: msdz.i
 Smp Info : 200ml #1754-196
 Misc Info : 20ppbv
 Comment :
 Method : /chem/msdz.i/20May2009.b/z0910520a.m
 Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD
 Cal Date : 20-MAY-2009 19:42 Cal File: z052016.d
 Als bottle: 1 Calibration Sample, Level: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 329433 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 256097 0.00- 30.00 77.74
 13.535 13.535 (1.000) 49 446498 0.00- 30.00 135.54

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1355670 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 199345 0.00- 30.00 14.70

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1656405 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 801830 0.00- 30.00 48.41

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.312 14.313 (1.057) 65 465442 10.0000 10.533 80.00- 120.00 100.00
 14.312 14.313 (1.057) 67 252658 0.00- 30.00 54.28

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1341070 10.0000 10.274 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 135444 0.00- 30.00 10.10

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	908993		38.83-	98.83	67.78
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\$ 77 Bromofluorobenzene

20.509	20.535	(1.076)	174	1115445	10.0000	10.246	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1256552			84.56-	144.56	112.65
20.509	20.535	(1.076)	176	1067000			66.40-	126.40	95.66

1 Propylene

4.449	4.449	(0.329)	41	977203	20.0000	20.628	80.00-	120.00	100.00(A)
4.449	4.449	(0.329)	42	656474			0.00-	30.00	67.18
4.449	4.449	(0.329)	39	822060			0.00-	30.00	84.12

3 Dichlorodifluoromethane/Fr12

4.835	4.835	(0.357)	85	3382866	20.0000	18.846	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	1085290			2.29-	62.29	32.08

4 Freon 114

5.919	5.919	(0.437)	135	2565838	20.0000	19.213	80.00-	120.00	100.00
5.919	5.919	(0.437)	85	3184552			0.00-	30.00	124.11
5.919	5.919	(0.437)	137	817669			0.00-	30.00	31.87

5 Chloromethane

6.112	6.112	(0.452)	50	1270374	20.0000	20.611	80.00-	120.00	100.00(A)
6.112	6.112	(0.452)	52	390758			0.00-	30.00	30.76

6 Vinyl Chloride

6.780	6.781	(0.501)	62	1162960	20.0000	20.978	80.00-	120.00	100.00(A)
6.780	6.781	(0.501)	64	357783			0.83-	60.83	30.76

7 1,3-Butadiene

6.971	6.971	(0.515)	54	860769	20.0000	20.504	80.00-	120.00	100.00(A)
6.971	6.971	(0.515)	39	1101798			0.00-	30.00	128.00

9 Bromomethane

8.148	8.148	(0.602)	94	953621	20.0000	18.884	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	912648			63.57-	123.57	95.70

10 Chloroethane

8.562	8.562	(0.633)	64	497809	20.0000	20.433	80.00-	120.00	100.00(A)
8.562	8.562	(0.633)	49	166889			0.00-	30.00	33.52
8.562	8.562	(0.633)	66	158110			0.00-	30.00	31.76

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	2385417	20.0000	17.989	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	1522097			33.44-	93.44	63.81

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	450482	20.0000	17.542	80.00-	120.00	100.00
10.105	10.105	(0.747)	43	114184			0.00-	30.00	25.35

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	1518704	20.0000	16.377	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	972260			33.10-	93.10	64.02
10.442	10.442	(0.771)	101	1693264			0.00-	30.00	111.49

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	604756	20.0000	19.493	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	1619642			0.00-	30.00	267.82
10.442	10.442	(0.771)	96	933843			0.00-	30.00	154.42

20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	455942	20.0000	16.839	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	2067647			0.00-	30.00	453.49

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	439986	20.0000	22.172	80.00-	120.00	100.00(A)
11.171	11.171	(0.825)	41	1533751			0.00-	30.00	348.59

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	1807529	20.0000	22.164	80.00-	120.00	100.00(A)
11.061	11.061	(0.817)	43	427172			0.00-	30.00	23.63
11.061	11.061	(0.817)	59	57691			0.00-	30.00	3.19

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	2789269	20.0000	20.479	80.00-	120.00	100.00(A)
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25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	806246	20.0000	20.662	80.00-	120.00	100.00(A)
11.418	11.418	(0.844)	49	1163026			0.00-	30.00	144.25
11.418	11.418	(0.844)	51	340496			0.00-	30.00	42.23

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	2124123	20.0000	25.940	80.00-	120.00	100.00(A)
11.747	11.747	(0.868)	57	520553			0.00-	30.00	24.51
11.747	11.747	(0.868)	41	721280			0.00-	30.00	33.96

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	702172	20.0000	20.546	80.00-	120.00	100.00(A)
11.775	11.775	(0.870)	61	1618135			0.00-	30.00	230.45
11.775	11.775	(0.870)	96	1098179			0.00-	30.00	156.40

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	1546871	20.0000	22.247	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	1175871		0.00-	30.00	76.02
12.077	12.077	(0.892)	86	256068		0.00-	30.00	16.55

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	1843849	20.0000	20.211	80.00-	120.00	100.00(A)
12.434	12.434	(0.919)	65	557424		0.00-	30.00	30.23	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	180864	20.0000	24.386	80.00-	120.00	100.00(A)
12.489	12.489	(0.923)	43	1358588		0.00-	30.00	751.17	
12.489	12.489	(0.923)	42	127640		0.00-	30.00	70.57	

37 2-Butanone

CAS #: 78-93-3

13.245	13.246	(0.979)	72	616048	20.0000	23.306	80.00-	120.00	100.00(A)
13.245	13.246	(0.979)	43	5416238		0.00-	30.00	879.19	
13.225	13.246	(0.977)	57	215658		0.00-	30.00	35.01	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	683656	20.0000	19.436	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	1640864		0.00-	30.00	240.01	
13.225	13.225	(0.977)	96	1076816		129.61-	189.61	157.51	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	1406109	20.0000	21.342	80.00-	120.00	100.00(A)
13.535	13.535	(1.000)	71	461817		0.00-	30.00	32.84	
13.535	13.535	(1.000)	72	482298		0.00-	30.00	34.30	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	2250830	20.0000	19.289	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	1448329		0.00-	30.00	64.35	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	2412307	20.0000	20.528	80.00-	120.00	100.00(A)
13.812	13.812	(1.020)	99	1528416		0.00-	30.00	63.36	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	1475196	20.0000	21.102	80.00-	120.00	100.00(A)
13.812	13.812	(1.020)	56	1732789		0.00-	30.00	117.46	
13.812	13.812	(1.020)	41	1221093		0.00-	30.00	82.77	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	3203457	20.0000	22.230	80.00-	120.00	100.00(A)
13.997	13.997	(1.034)	117	3320880		0.00-	30.00	103.67	

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	1638100	20.0000	21.057	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	5238872		0.00-	30.00	319.81
14.258	14.258	(1.053)	41	1815476		0.00-	30.00	110.83

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	3309702	20.0000	19.500	80.00-	120.00	100.00
14.285	14.285	(0.965)	77	744873		0.00-	30.00		22.51

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	1758739	20.0000	19.212	80.00-	120.00	100.00
14.395	14.395	(0.972)	64	530546		0.00-	30.00		30.17

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	1044794	20.0000	21.802	80.00-	120.00	100.00(A)
14.477	14.477	(0.978)	100	401984		0.00-	30.00		38.47
14.477	14.477	(0.978)	43	2285012		0.00-	30.00		218.70

53 Trichloroethene

CAS #: 79-01-6

15.136	15.136	(1.022)	130	1830373	20.0000	19.317	80.00-	120.00	100.00
15.136	15.136	(1.022)	95	1593793		0.00-	30.00		87.07
15.136	15.136	(1.022)	97	1033397		0.00-	30.00		56.46

54 1,2-Dichloropropane

CAS #: 78-87-5

15.520	15.521	(1.048)	63	1172512	20.0000	19.731	80.00-	120.00	100.00
15.520	15.521	(1.048)	62	838775		0.00-	30.00		71.54
15.520	15.521	(1.048)	41	1016093		58.92-	118.92		86.66

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	876618	20.0000	20.848	80.00-	120.00	100.00(A)
15.658	15.658	(1.057)	58	581467		0.00-	30.00		66.33
15.658	15.658	(1.057)	57	197531		0.00-	30.00		22.53

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	2488212	20.0000	21.534	80.00-	120.00	100.00(A)
15.905	15.905	(1.074)	85	1596318		0.00-	30.00		64.16

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.615	16.616	(1.122)	75	1830928	20.0000	23.184	80.00-	120.00	100.00(A)
16.615	16.616	(1.122)	77	591494		0.00-	30.00		32.31
16.615	16.616	(1.122)	39	1331843		40.93-	100.93		72.74

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	3149124	20.0000	24.234	80.00-	120.00	100.00(A)
16.795	16.795	(1.134)	58	1037524		0.00-	30.00		32.95
16.795	16.795	(1.134)	85	472125		0.00-	30.00		14.99

AMOUNTS									
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====
60 Toluene									
7.086	17.086	(1.154)	91	4433071	20.0000	20.350	80.00-	120.00	100.00(A)
7.086	17.086	(1.154)	92	2623075			0.00-	30.00	59.17
61 trans-1,3-Dichloropropene									
7.467	17.467	(0.917)	75	2068308	20.0000	20.966	80.00-	120.00	100.00(A)
7.467	17.467	(0.917)	77	651478			0.00-	30.00	31.50
7.467	17.467	(0.917)	39	1365819			35.92-	95.92	66.04
62 1,1,2-Trichloroethane									
7.740	17.741	(0.931)	97	1679146	20.0000	19.733	80.00-	120.00	100.00
7.740	17.741	(0.931)	99	1071330			0.00-	30.00	63.80
7.740	17.741	(0.931)	83	1338398			49.05-	109.05	79.71
63 Tetrachloroethene									
7.857	17.857	(0.937)	166	2771191	20.0000	19.723	80.00-	120.00	100.00
7.857	17.857	(0.937)	129	1906662			0.00-	30.00	68.80
7.857	17.857	(0.937)	131	1872326			36.65-	96.65	67.56
64 2-Hexanone									
8.003	18.003	(0.945)	58	1651265	20.0000	23.058	80.00-	120.00	100.00(A)
8.003	18.003	(0.945)	43	3475781			0.00-	30.00	210.49
8.003	18.003	(0.945)	100	386534			0.00-	30.00	23.41
66 Dibromochloromethane									
8.294	18.294	(0.960)	129	3266830	20.0000	22.917	80.00-	120.00	100.00(A)
8.294	18.294	(0.960)	127	2528578			0.00-	30.00	77.40
67 1,2-Dibromoethane									
8.498	18.498	(0.971)	107	3045409	20.0000	20.740	80.00-	120.00	100.00(A)
8.498	18.498	(0.971)	109	2882844			0.00-	30.00	94.66
69 Chlorobenzene									
9.079	19.103	(1.001)	112	5279154	20.0000	19.755	80.00-	120.00	100.00
9.079	19.103	(1.001)	114	1685704			0.00-	30.00	31.93
9.079	19.079	(1.001)	77	2644245			20.36-	80.36	50.09
70 Ethyl Benzene									
9.151	19.151	(1.005)	106	2816359	20.0000	21.101	80.00-	120.00	100.00(A)
9.151	19.151	(1.005)	91	8232363			0.00-	30.00	292.31
71 m,p-Xylene									
9.296	19.320	(1.013)	106	3552820	20.0000	21.489	80.00-	120.00	100.00(A)
9.296	19.320	(1.013)	91	6407977			0.00-	30.00	180.36
72 o-Xylene									
9.826	19.826	(1.040)	106	3525821	20.0000	21.615	80.00-	120.00	100.00(A)

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====	=====

72 o-Xylene (continued)

19.826	19.826	(1.040)	91	6706089		0.00-	30.00	190.20
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	5250086	20.0000	23.243	80.00-	120.00	100.00(A)
19.850	19.850	(1.042)	78	2169280		0.00-	30.00	41.32	

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	3625369	20.0000	25.755	80.00-	120.00	100.00(A)
20.148	20.148	(1.057)	171	1851969		0.00-	30.00	51.08	

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	10265278	20.0000	21.600	80.00-	120.00	100.00(A)
20.251	20.251	(1.063)	120	2868729		0.00-	30.00	27.95	

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	5275372	20.0000	20.065	80.00-	120.00	100.00(A)
20.689	20.689	(1.086)	85	3390958		0.00-	30.00	64.28	

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	12682329	20.0000	21.475	80.00-	120.00	100.00(A)
20.741	20.741	(1.088)	120	3163998		0.00-	30.00	24.95	

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	11620295	20.0000	22.416	80.00-	120.00	100.00(A)
20.870	20.870	(1.095)	120	3607791		0.00-	30.00	31.05	

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	9354608	20.0000	21.061	80.00-	120.00	100.00(A)
20.947	20.947	(1.099)	120	4840218		0.00-	30.00	51.74	

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	8719823	20.0000	22.389	80.00-	120.00	100.00(A)
21.386	21.386	(1.122)	120	4346437		0.00-	30.00	49.85	

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.772	21.773	(1.143)	146	6825935	20.0000	20.860	80.00-	120.00	100.00(A)
21.772	21.773	(1.143)	148	4300173		0.00-	30.00	63.00	
21.772	21.773	(1.143)	111	2406999		0.00-	30.00	35.26	

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	6931595	20.0000	20.368	80.00-	120.00	100.00(A)
21.876	21.876	(1.148)	148	4375991		0.00-	30.00	63.13	
21.850	21.850	(1.147)	111	2362610		0.00-	30.00	34.08	

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	6391821	20.0000	26.328	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	1474260			0.00-	30.00	23.06
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	6698415	20.0000	20.876	80.00-	120.00	100.00(A)
22.288	22.288	(1.170)	148	4211971			33.79-	93.79	62.88
22.288	22.288	(1.170)	111	2450911			8.12-	68.12	36.59

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	3263841	20.0000	22.675	80.00-	120.00	100.00(A)
24.042	24.042	(1.262)	182	3060247			0.00-	30.00	93.76

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	2325539	20.0000	21.152	80.00-	120.00	100.00(A)
24.120	24.120	(1.266)	223	1478746			0.00-	30.00	63.59

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	7070151	20.0000	24.337	80.00-	120.00	100.00(A)
24.352	24.352	(1.278)	127	835343			0.00-	30.00	11.82

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	222004	20.0000	19.851	80.00-	120.00	100.00
6.694	6.694	(0.495)	43	1922264			0.00-	30.00	865.87

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	777547	20.0000	19.576	80.00-	120.00	100.00
8.687	8.687	(0.642)	43	1278157			0.00-	30.00	164.38
8.687	8.687	(0.642)	42	1128260			0.00-	30.00	145.11

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	2226314	20.0000	21.359	80.00-	120.00	100.00(A)
15.328	15.328	(1.133)	98	1123466			0.00-	30.00	50.46
15.328	15.328	(1.133)	55	1850277			0.00-	30.00	83.11

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	2092106	20.0000	24.352	80.00-	120.00	100.00
11.665	11.665	(0.862)	41	613482			0.00-	30.00	29.32
11.665	11.665	(0.862)	57	234866			0.00-	30.00	11.23

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	3856922	20.0000	22.191	80.00-	120.00	100.00
12.434	12.434	(0.919)	87	865258			0.00-	30.00	22.43
12.434	12.434	(0.919)	59	358065			0.00-	30.00	9.28

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.900	12.900	(0.953)	59	3552166	20.0000	27.146	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.900	12.900	(0.953)	87	1336264		0.00-	30.00	37.62
12.900	12.900	(0.953)	41	882431		0.00-	30.00	24.84

175 Ethyl Acetate

CAS #: 141-78-6

13.245	13.246	(0.979)	70	155097	20.0000	20.607	80.00-	120.00	100.00
13.245	13.246	(0.979)	43	4237585			0.00-	30.00	2732.22
13.225	13.225	(0.977)	61	1640864			0.00-	30.00	1057.96

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	2933384	20.0000	25.475	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	726982			0.00-	30.00	24.78
14.367	14.367	(0.970)	55	890298			0.00-	30.00	30.35

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Report Date: 21-May-2009 07:59

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
 Lab File ID: z052016.d
 Lab Smp Id: 20ppbv ICAL
 Analysis Type: VOA
 Quant Type: ISTD
 Operator: dfm
 Method File: /chem/msdz.i/20May2009.b/z0910520a.m
 Misc Info: 20ppbv

Calibration Date: 20-MAY-2009
 Calibration Time: 18:34
 Client Smp ID: ICAL
 Level: LOW
 Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	329433	0.40
52 1,4-Difluorobenze	1302885	781731	1824039	1355670	4.05
68 Chlorobenzene-d5	1586849	952109	2221589	1656405	4.38

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 20-MAY-2009 19:42

Client ID: ICAL

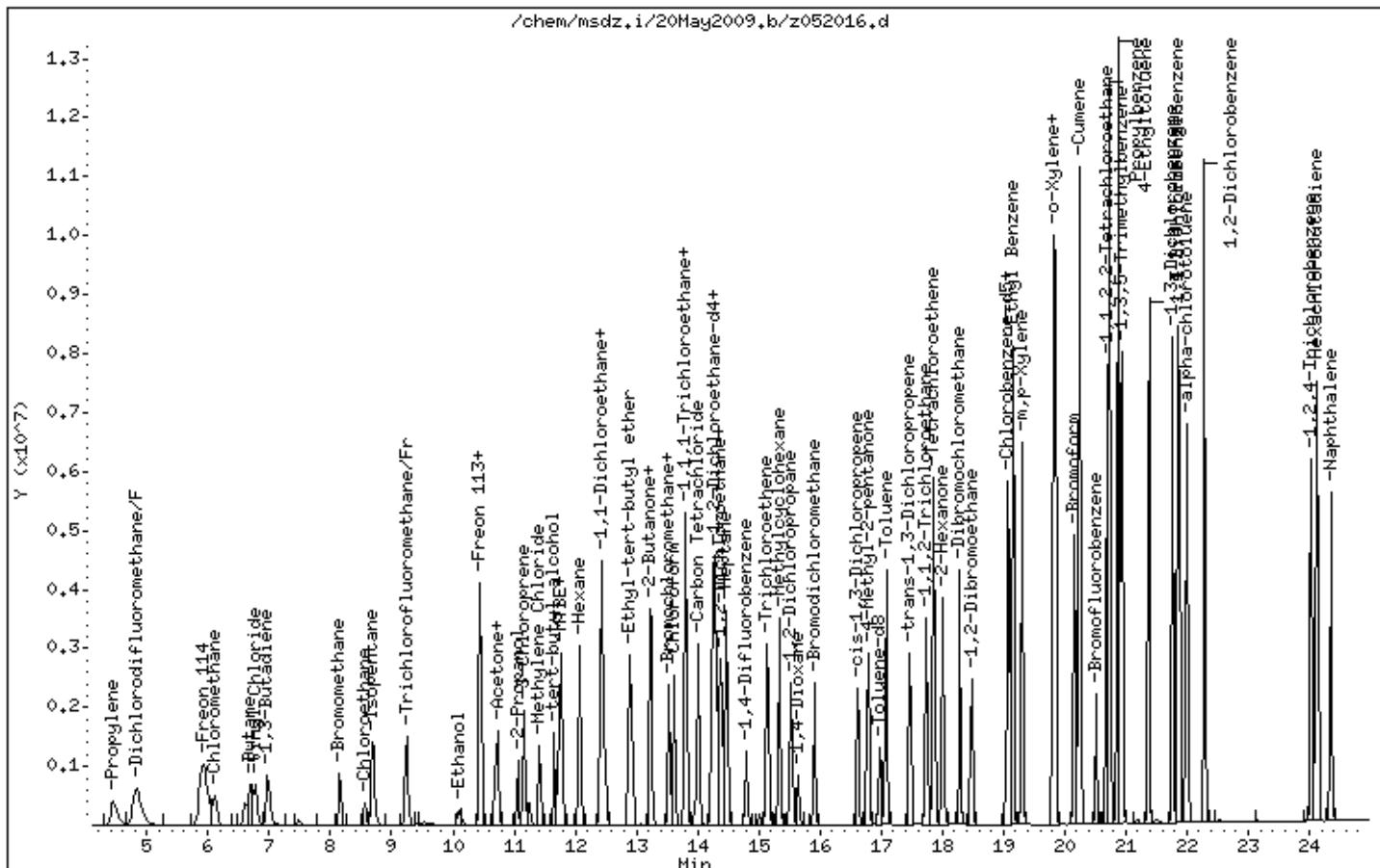
Instrument: msdz.i

Sample Info: 200ml #1754-196

Operator: dfm

Column phase: RTx-624

Column diameter: 0.32



Report Date: 21-May-2009 08:03

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/20May2009.b/z052017.d
 Lab Smp Id: 40ppbv ICAL Client Smp ID: ICAL
 Inj Date : 20-MAY-2009 21:14
 Operator : dfm Inst ID: msdz.i
 Smp Info : 400ml #1754-196
 Misc Info : 40ppbv
 Comment :
 Method : /chem/msdz.i/20May2009.b/z0910520a.m
 Meth Date : 20-May-2009 22:15 dmendoza Quant Type: ISTD
 Cal Date : 20-MAY-2009 21:14 Cal File: z052017.d
 Als bottle: 1 Calibration Sample, Level: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: HILOcrvENSR.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 331726 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 253952 0.00- 30.00 76.55
 13.535 13.535 (1.000) 49 481160 0.00- 30.00 145.05

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 1367344 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 201614 0.00- 30.00 14.74

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1671389 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 798300 0.00- 30.00 47.76

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 474793 10.0000 10.582 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 297327 0.00- 30.00 62.62

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 1353461 10.0000 10.245 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 135007 0.00- 30.00 9.97

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	923520		38.83-	98.83	68.23
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\$ 77 Bromofluorobenzene

20.509	20.535	(1.076)	174	1119252	10.0000	10.165	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	1251051			84.56-	144.56	111.78
20.509	20.535	(1.076)	176	1072997			66.40-	126.40	95.87

1 Propylene

4.449	4.449	(0.329)	41	2030030	40.0000	42.108	80.00-	120.00	100.00(A)
4.449	4.449	(0.329)	42	1301069			0.00-	30.00	64.09
4.449	4.449	(0.329)	39	1681201			0.00-	30.00	82.82

3 Dichlorodifluoromethane/Fr12

4.835	4.835	(0.357)	85	6677310	40.0000	37.299	80.00-	120.00	100.00(A)
4.835	4.835	(0.357)	87	2149230			2.29-	62.29	32.19

4 Freon 114

5.920	5.919	(0.437)	135	5080731	40.0000	38.045	80.00-	120.00	100.00(A)
5.920	5.919	(0.437)	85	6352225			0.00-	30.00	125.03
5.920	5.919	(0.437)	137	1620751			0.00-	30.00	31.90

5 Chloromethane

6.112	6.112	(0.452)	50	2328160	40.0000	37.848	80.00-	120.00	100.00(A)
6.112	6.112	(0.452)	52	777088			0.00-	30.00	33.38

6 Vinyl Chloride

6.763	6.781	(0.500)	62	2343553	40.0000	41.686	80.00-	120.00	100.00(A)
6.763	6.781	(0.500)	64	731431			0.83-	60.83	31.21

7 1,3-Butadiene

6.972	6.971	(0.515)	54	1753255	40.0000	41.258	80.00-	120.00	100.00(A)
6.972	6.971	(0.515)	39	2240742			0.00-	30.00	127.80

9 Bromomethane

8.148	8.148	(0.602)	94	1916729	40.0000	38.007	80.00-	120.00	100.00(A)
8.148	8.148	(0.602)	96	1823603			63.57-	123.57	95.14

10 Chloroethane

8.562	8.562	(0.633)	64	1026769	40.0000	41.578	80.00-	120.00	100.00(A)
8.562	8.562	(0.633)	49	345303			0.00-	30.00	33.63
8.562	8.562	(0.633)	66	323159			0.00-	30.00	31.47

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	4588300	40.0000	34.978	80.00-	120.00	100.00(A)
9.246	9.246	(0.683)	103	2959653			33.44-	93.44	64.50

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	940247	40.0000	36.921	80.00-	120.00	100.00(A)
10.105	10.105	(0.747)	43	224965			0.00-	30.00	23.93

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	2834791	40.0000	31.301	80.00-	120.00	100.00(A)
10.442	10.442	(0.771)	153	1810650			33.10-	93.10	63.87
10.442	10.442	(0.771)	101	3236765			0.00-	30.00	114.18

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	1170272	40.0000	37.804	80.00-	120.00	100.00(A)
10.442	10.442	(0.771)	61	3280264			0.00-	30.00	280.30
10.442	10.442	(0.771)	96	1817081			0.00-	30.00	155.27

20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	931113	40.0000	35.003	80.00-	120.00	100.00(A)
10.707	10.707	(0.791)	43	4291289			0.00-	30.00	460.88

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	871185	40.0000	42.954	80.00-	120.00	100.00(A)
11.171	11.171	(0.825)	41	3200236			0.00-	30.00	367.34

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	3950668	40.0000	46.537	80.00-	120.00	100.00(A)
11.061	11.061	(0.817)	43	859655			0.00-	30.00	21.76
11.061	11.061	(0.817)	59	126909			0.00-	30.00	3.21

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	5605446	40.0000	40.744	80.00-	120.00	100.00(A)
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25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	1596197	40.0000	40.534	80.00-	120.00	100.00(A)
11.418	11.418	(0.844)	49	2389976			0.00-	30.00	149.73
11.418	11.418	(0.844)	51	700644			0.00-	30.00	43.89

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	4286958	40.0000	49.856	80.00-	120.00	100.00(A)
11.747	11.747	(0.868)	57	1092373			0.00-	30.00	25.48
11.747	11.747	(0.868)	41	1447696			0.00-	30.00	33.77

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	1383512	40.0000	40.174	80.00-	120.00	100.00(A)
11.775	11.775	(0.870)	61	3244564			0.00-	30.00	234.52
11.775	11.775	(0.870)	96	2175716			0.00-	30.00	157.26

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	3236359	40.0000	45.219	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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30 Hexane (continued)

12.077	12.077	(0.892)	43	2454268		0.00-	30.00	75.83
12.077	12.077	(0.892)	86	530713		0.00-	30.00	16.40

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	3738982	40.0000	40.599	80.00-	120.00	100.00(A)
12.434	12.434	(0.919)	65	1152166		0.00-	30.00	30.81	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	432719	40.0000	53.910	80.00-	120.00	100.00(A)
12.489	12.489	(0.923)	43	3001716		0.00-	30.00	693.69	
12.489	12.489	(0.923)	42	847400		0.00-	30.00	195.83	

37 2-Butanone

CAS #: 78-93-3

13.225	13.246	(0.977)	72	967008	40.0000	36.813	80.00-	120.00	100.00(A)
13.246	13.246	(0.979)	43	11571972		0.00-	30.00	1196.68	
13.225	13.246	(0.977)	57	351678		0.00-	30.00	36.37	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	1366803	40.0000	38.784	80.00-	120.00	100.00(A)
13.225	13.225	(0.977)	61	3351028		0.00-	30.00	245.17	
13.225	13.225	(0.977)	96	2149067		129.61-	189.61	157.23	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	2898925	40.0000	43.033	80.00-	120.00	100.00(A)
13.535	13.535	(1.000)	71	925415		0.00-	30.00	31.92	
13.535	13.535	(1.000)	72	1001236		0.00-	30.00	34.54	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	4549459	40.0000	38.897	80.00-	120.00	100.00(A)
13.627	13.627	(1.007)	85	2927670		0.00-	30.00	64.35	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	4795499	40.0000	40.460	80.00-	120.00	100.00(A)
13.812	13.812	(1.020)	99	3052567		0.00-	30.00	63.65	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	2937165	40.0000	41.469	80.00-	120.00	100.00(A)
13.812	13.812	(1.020)	56	3614620		0.00-	30.00	123.06	
13.812	13.812	(1.020)	41	2544235		0.00-	30.00	86.62	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	6551512	40.0000	44.435	80.00-	120.00	100.00(A)
13.997	13.997	(1.034)	117	6776716		0.00-	30.00	103.44	

45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	3414111	40.0000	43.033	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====	=====

45 2,2,4-Trimethylpentane (continued)

14.258	14.258	(1.053)	57	10969813		0.00-	30.00	321.31
14.258	14.258	(1.053)	41	3760040		0.00-	30.00	110.13

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	6549985	40.0000	38.501	80.00-	120.00	100.00(A)
14.285	14.285	(0.965)	77	1489488		0.00-	30.00		22.74

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	3559236	40.0000	38.749	80.00-	120.00	100.00(A)
14.395	14.395	(0.972)	64	1097534		0.00-	30.00		30.84

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	2171197	40.0000	44.144	80.00-	120.00	100.00(A)
14.477	14.477	(0.978)	100	804598		0.00-	30.00		37.06
14.477	14.477	(0.978)	43	4804544		0.00-	30.00		221.29

53 Trichloroethene

CAS #: 79-01-6

15.136	15.136	(1.022)	130	3629470	40.0000	38.218	80.00-	120.00	100.00(A)
15.136	15.136	(1.022)	95	3165731		0.00-	30.00		87.22
15.136	15.136	(1.022)	97	2012482		0.00-	30.00		55.45

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	2403674	40.0000	40.089	80.00-	120.00	100.00(A)
15.521	15.521	(1.048)	62	1703589		0.00-	30.00		70.87
15.521	15.521	(1.048)	41	2066413		58.92-	118.92		85.97

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	1761039	40.0000	41.299	80.00-	120.00	100.00(A)
15.658	15.658	(1.057)	58	1202515		0.00-	30.00		68.28
15.658	15.658	(1.057)	57	407964		0.00-	30.00		23.17

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	5041751	40.0000	42.825	80.00-	120.00	100.00(A)
15.905	15.905	(1.074)	85	3203061		0.00-	30.00		63.53

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.616	16.616	(1.122)	75	3782834	40.0000	46.254	80.00-	120.00	100.00(A)
16.616	16.616	(1.122)	77	1202853		0.00-	30.00		31.80
16.616	16.616	(1.122)	39	2730235		40.93-	100.93		72.17

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	6630751	40.0000	48.748	80.00-	120.00	100.00(A)
16.795	16.795	(1.134)	58	2165274		0.00-	30.00		32.66
16.795	16.795	(1.134)	85	978329		0.00-	30.00		14.75

AMOUNTS									
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====
60 Toluene									
7.086	17.086	(1.154)	91	8912842	40.0000	40.482	80.00-	120.00	100.00(A)
7.086	17.086	(1.154)	92	5257079			0.00-	30.00	58.98
61 trans-1,3-Dichloropropene									
7.467	17.467	(0.917)	75	4237882	40.0000	42.186	80.00-	120.00	100.00(A)
7.467	17.467	(0.917)	77	1345221			0.00-	30.00	31.74
7.467	17.467	(0.917)	39	2806831			35.92-	95.92	66.23
62 1,1,2-Trichloroethane									
7.741	17.741	(0.931)	97	3357030	40.0000	39.208	80.00-	120.00	100.00(A)
7.741	17.741	(0.931)	99	2077404			0.00-	30.00	61.88
7.741	17.741	(0.931)	83	2646665			49.05-	109.05	78.84
63 Tetrachloroethene									
7.857	17.857	(0.937)	166	5341262	40.0000	37.950	80.00-	120.00	100.00(A)
7.857	17.857	(0.937)	129	3675144			0.00-	30.00	68.81
7.857	17.857	(0.937)	131	3586237			36.65-	96.65	67.14
64 2-Hexanone									
8.003	18.003	(0.945)	58	3379881	40.0000	45.489	80.00-	120.00	100.00(A)
8.003	18.003	(0.945)	43	7378290			0.00-	30.00	218.30
8.003	18.003	(0.945)	100	794294			0.00-	30.00	23.50
66 Dibromochloromethane									
8.294	18.294	(0.960)	129	6538770	40.0000	44.696	80.00-	120.00	100.00(A)
8.294	18.294	(0.960)	127	5069095			0.00-	30.00	77.52
67 1,2-Dibromoethane									
8.498	18.498	(0.971)	107	5958411	40.0000	40.188	80.00-	120.00	100.00(A)
8.498	18.498	(0.971)	109	5703280			0.00-	30.00	95.72
69 Chlorobenzene									
9.079	19.103	(1.001)	112	10467819	40.0000	38.984	80.00-	120.00	100.00(A)
9.079	19.103	(1.001)	114	3277264			0.00-	30.00	31.31
9.079	19.079	(1.001)	77	5186250			20.36-	80.36	49.54
70 Ethyl Benzene									
9.151	19.151	(1.005)	106	5465297	40.0000	40.497	80.00-	120.00	100.00(A)
9.151	19.151	(1.005)	91	16369270			0.00-	30.00	299.51
71 m,p-Xylene									
9.296	19.320	(1.013)	106	6974263	40.0000	41.538	80.00-	120.00	100.00(A)
9.296	19.320	(1.013)	91	12878757			0.00-	30.00	184.66
72 o-Xylene									
9.826	19.826	(1.040)	106	6825960	40.0000	41.255	80.00-	120.00	100.00(A)

AMOUNTS								
RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
72 o-Xylene (continued)								
19.826	19.826	(1.040)	91	13370061		0.00-	30.00	195.87

73 Styrene								
19.850	19.850	(1.042)	104	10309182	40.0000	44.402	80.00- 120.00	100.00(A)
19.850	19.850	(1.042)	78	4318540		0.00-	30.00	41.89

75 Bromoform								
20.148	20.148	(1.057)	173	7450948	40.0000	50.492	80.00- 120.00	100.00(A)
20.148	20.148	(1.057)	171	3840270		0.00-	30.00	51.54

76 Cumene								
20.251	20.251	(1.063)	105	17907923	40.0000	37.702	80.00- 120.00	100.00(A)
20.251	20.251	(1.063)	120	5595831		0.00-	30.00	31.25

79 1,1,2,2-Tetrachloroethane								
20.689	20.689	(1.086)	83	10393460	40.0000	39.279	80.00- 120.00	100.00(A)
20.689	20.689	(1.086)	85	6572250		0.00-	30.00	63.23

80 Propylbenzene								
20.741	20.741	(1.088)	91	18310963	40.0000	31.780	80.00- 120.00	100.00(A)
20.741	20.741	(1.088)	120	6214766		0.00-	30.00	33.94

82 4-Ethyltoluene								
20.870	20.870	(1.095)	105	17743981	40.0000	34.674	80.00- 120.00	100.00(A)
20.870	20.870	(1.095)	120	7137634		0.00-	30.00	40.23

83 1,3,5-Trimethylbenzene								
20.947	20.947	(1.099)	105	19511721	40.0000	42.992	80.00- 120.00	100.00(A)
20.947	20.947	(1.099)	120	10028762		0.00-	30.00	51.40

85 1,2,4-Trimethylbenzene								
21.386	21.386	(1.122)	105	18349412	40.0000	45.602	80.00- 120.00	100.00(A)
21.386	21.386	(1.122)	120	9033369		0.00-	30.00	49.23

88 1,3-Dichlorobenzene								
21.773	21.773	(1.143)	146	14476050	40.0000	43.323	80.00- 120.00	100.00(A)
21.773	21.773	(1.143)	148	9121712		0.00-	30.00	63.01
21.773	21.773	(1.143)	111	4948288		0.00-	30.00	34.18

89 1,4-Dichlorobenzene								
21.876	21.876	(1.148)	146	14855354	40.0000	42.824	80.00- 120.00	100.00(A)
21.876	21.876	(1.148)	148	9274114		0.00-	30.00	62.43
21.850	21.850	(1.147)	111	4881122		0.00-	30.00	32.86

90 alpha-chlorotoluene								
22.005	22.005	(1.155)	91	13921366	40.0000	53.606	80.00- 120.00	100.00(A)

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	3194456			0.00-	30.00	22.95
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	14196053	40.0000	43.324	80.00-	120.00	100.00(A)
22.288	22.288	(1.170)	148	8859148			33.79-	93.79	62.41
22.288	22.288	(1.170)	111	5106291			8.12-	68.12	35.97

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	6746462	40.0000	45.234	80.00-	120.00	100.00(A)
24.042	24.042	(1.262)	182	6380005			0.00-	30.00	94.57

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	4845236	40.0000	43.016	80.00-	120.00	100.00(A)
24.120	24.120	(1.266)	223	3063898			0.00-	30.00	63.24

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	14683450	40.0000	48.070	80.00-	120.00	100.00(A)
24.352	24.352	(1.278)	127	1720849			0.00-	30.00	11.72

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	458756	40.0000	40.612	80.00-	120.00	100.00(A)
6.694	6.694	(0.495)	43	3892646			0.00-	30.00	848.52

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	1544177	40.0000	38.833	80.00-	120.00	100.00(A)
8.687	8.687	(0.642)	43	2626048			0.00-	30.00	170.06
8.687	8.687	(0.642)	42	2274118			0.00-	30.00	147.27

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	4454509	40.0000	42.013	80.00-	120.00	100.00(A)
15.328	15.328	(1.133)	98	2224030			0.00-	30.00	49.93
15.328	15.328	(1.133)	55	3784612			0.00-	30.00	84.96

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	4099120	40.0000	45.969	80.00-	120.00	100.00(A)
11.665	11.665	(0.862)	41	1149561			0.00-	30.00	28.04
11.665	11.665	(0.862)	57	457098			0.00-	30.00	11.15

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	8172980	40.0000	45.431	80.00-	120.00	100.00(A)
12.434	12.434	(0.919)	87	1739880			0.00-	30.00	21.29
12.434	12.434	(0.919)	59	738433			0.00-	30.00	9.04

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.901	12.900	(0.953)	59	7630572	40.0000	53.890	80.00-	120.00	100.00(A)
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.901	12.900	(0.953)	87	3126084		0.00-	30.00	40.97
12.901	12.900	(0.953)	41	1851178		0.00-	30.00	24.26

175 Ethyl Acetate

CAS #: 141-78-6

13.246	13.246	(0.979)	70	316888	40.0000	41.498	80.00-	120.00	100.00(A)
13.246	13.246	(0.979)	43	9062148			0.00-	30.00	2859.73
13.225	13.225	(0.977)	61	3351028			0.00-	30.00	1057.48

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	6100614	40.0000	49.922	80.00-	120.00	100.00(A)
14.367	14.367	(0.970)	87	1515188			0.00-	30.00	24.84
14.367	14.367	(0.970)	55	1817981			0.00-	30.00	29.80

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z052017.d
Lab Smp Id: 40ppbv ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: dfm
Method File: /chem/msdz.i/20May2009.b/z0910520a.m
Misc Info: 40ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Client Smp ID: ICAL
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	331726	1.10
52 1,4-Difluorobenze	1302885	781731	1824039	1367344	4.95
68 Chlorobenzene-d5	1586849	952109	2221589	1671389	5.33

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 20-MAY-2009 21:14

Client ID: ICAL

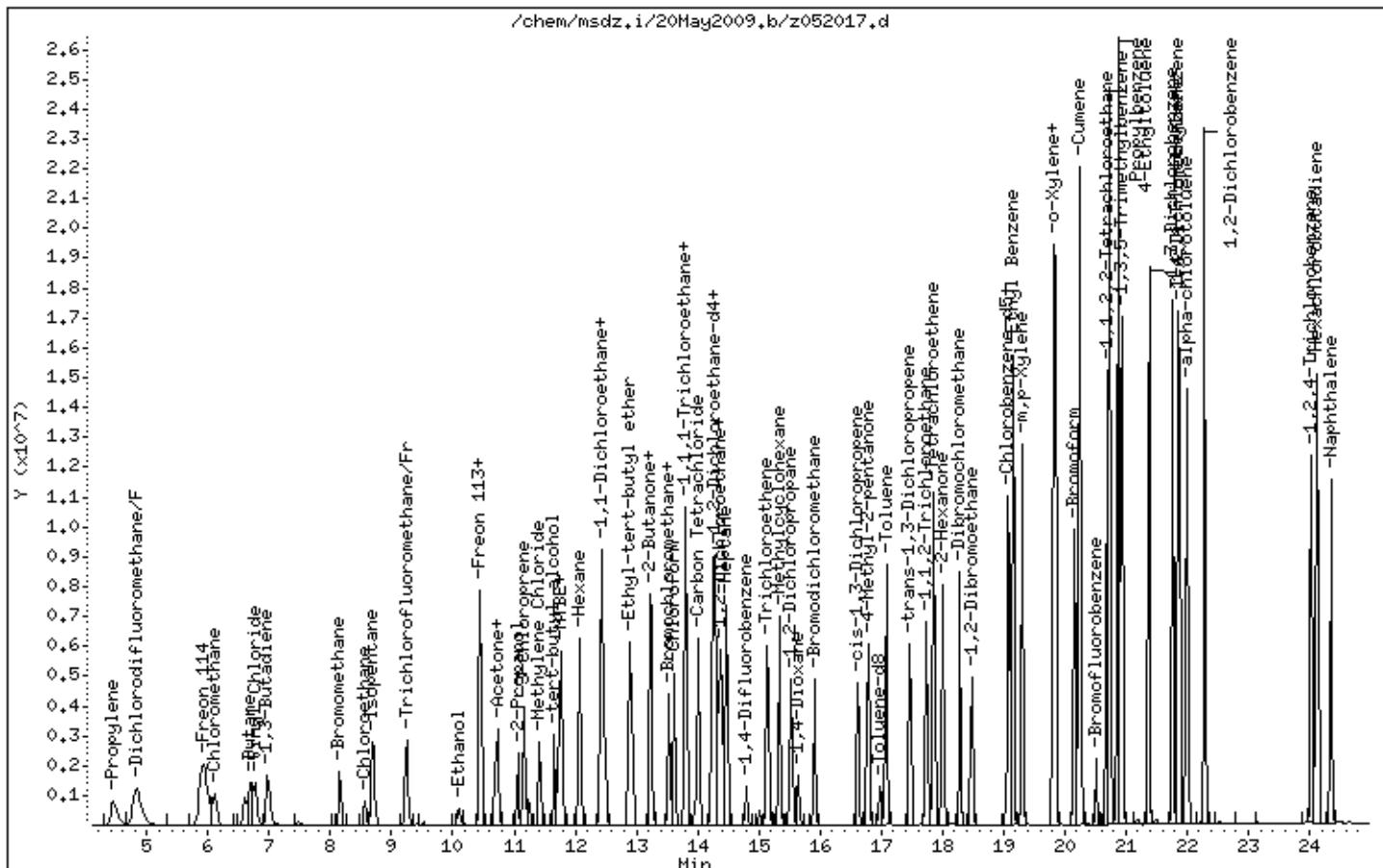
Instrument: msdz.i

Sample Info: 400ml #1754-196

Operator: dfm

Column phase: RTx-624

Column diameter: 0.32





Client Sample ID: CCV

Lab ID#: 0905582R1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060103	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/1/09 09:18 AM

Compound	%Recovery
Vinyl Chloride	94
Freon 113	86
1,1-Dichloroethene	97
1,1-Dichloroethane	98
cis-1,2-Dichloroethene	99
Chloroform	94
1,1,1-Trichloroethane	104
Trichloroethene	98
Bromodichloromethane	105
Toluene	96
Tetrachloroethylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	114	70-130

Report Date: 20-Jul-2009 16:02

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdz.i Injection Date: 01-JUN-2009 09:18
 Lab File ID: z060103.d Init. Cal. Date(s): 20-MAY-2009 21-MAY-2009
 Analysis Type: AIR Init. Cal. Times: 15:05 08:21
 Lab Sample ID: CCV-1 Quant Type: ISTD
 Method: /chem/msdz.i/01Jun2009.b/z0910520a.m

COMPOUND	RRF / AMOUNT	RF10	MIN	MAX	CURVE TYPE
\$ 47 1,2-Dichloroethane-d4	1.35140	1.41184 0.010	-4.47181	30.00000	Averaged
\$ 59 Toluene-d8	0.96761	0.97162 0.010	-0.41417	30.00000	Averaged
\$ 77 Bromofluorobenzene	0.66107	0.75647 0.010	-14.43099	30.00000	Averaged
1 Propylene	1.45331	1.39020 0.010	4.34224	30.00000	Averaged
3 Dichlorodifluoromethane/Fr1	5.56971	5.27325 0.010	5.32271	30.00000	Averaged
4 Freon 114	4.08030	3.94393 0.010	3.34227	30.00000	Averaged
5 Chloromethane	1.89388	1.77652 0.010	6.19662	30.00000	Averaged
6 Vinyl Chloride	1.75719	1.65531 0.010	5.79805	30.00000	Averaged
7 1,3-Butadiene	1.34361	1.32607 0.010	1.30535	30.00000	Averaged
9 Bromomethane	1.56375	1.49183 0.010	4.59897	30.00000	Averaged
10 Chloroethane	0.77174	0.75186 0.010	2.57606	30.00000	Averaged
13 Trichlorofluoromethane/Fr11	4.05627	3.92240 0.010	3.30020	30.00000	Averaged
14 Ethanol	0.76770	0.80484 0.010	-4.83748	30.00000	Averaged
15 1,1-Dichloroethene	0.92683	0.90339 0.010	2.52918	30.00000	Averaged
17 Freon 113	2.77657	2.39646 0.010	13.68984	30.00000	Averaged
19 Carbon Disulfide	4.22645	4.05563 0.010	4.04181	30.00000	Averaged
20 Acetone	0.80189	0.66026 0.010	17.66200	30.00000	Averaged
21 2-Propanol	2.55914	2.67877 0.010	-4.67455	30.00000	Averaged
22 3-Chloroprene	0.61140	0.61035 0.010	0.17194	30.00000	Averaged
25 Methylene Chloride	1.25361	1.16928 0.010	6.72659	30.00000	Averaged
27 MTBE	2.56423	2.17907 0.010	15.02041	30.00000	Averaged
28 trans-1,2-Dichloroethene	1.05660	1.02547 0.010	2.94656	30.00000	Averaged
30 Hexane	2.19092	2.27189 0.010	-3.69561	30.00000	Averaged
31 1,1-Dichloroethane	2.80347	2.74081 0.010	2.23506	30.00000	Averaged
33 Vinyl Acetate	0.24197	0.25885 0.010	-6.97677	30.00000	Averaged
36 cis-1,2-Dichloroethene	1.03335	1.02689 0.010	0.62471	30.00000	Averaged
37 2-Butanone	0.77055	0.86846 0.010	-12.70700	30.00000	Averaged
38 Tetrahydrofuran	2.03075	2.04604 0.010	-0.75303	30.00000	Averaged
40 Chloroform	3.61342	3.39011 0.010	6.18000	30.00000	Averaged
42 Cyclohexane	2.18561	2.18786 0.010	-0.10279	30.00000	Averaged
43 1,1,1-Trichloroethane	3.56625	3.71383 0.010	-4.13820	30.00000	Averaged
44 Carbon Tetrachloride	4.33516	5.09204 0.010	-17.45910	30.00000	Averaged
46 Benzene	1.26791	1.18040 0.010	6.90208	30.00000	Averaged
45 2,2,4-Trimethylpentane	2.41394	2.33431 0.010	3.29906	30.00000	Averaged
49 1,2-Dichloroethane	0.68641	0.67868 0.010	1.12637	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdz.i Injection Date: 01-JUN-2009 09:18
Lab File ID: z060103.d Init. Cal. Date(s): 20-MAY-2009 21-MAY-2009
Analysis Type: AIR Init. Cal. Times: 15:05 08:21
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msdz.i/01Jun2009.b/z0910520a.m

COMPOUND	RRF / AMOUNT	RF10	RRF %D / %DRIFT	%D / %DRIFT	CURVE TYPE
50 Heptane	0.36473	0.36793 0.010	-0.87852	30.00000	Averaged
53 Trichloroethene	0.68352	0.66665 0.010	2.46901	30.00000	Averaged
54 1,2-Dichloropropane	0.43882	0.40866 0.010	6.87403	30.00000	Averaged
55 1,4-Dioxane	0.30798	0.30760 0.010	0.12241	30.00000	Averaged
56 Bromodichloromethane	0.85819	0.89936 0.010	-4.79834	30.00000	Averaged
57 cis-1,3-Dichloropropene	0.60347	0.62863 0.010	-4.17029	30.00000	Averaged
58 4-Methyl-2-pentanone	1.00823	1.09257 0.010	-8.36557	30.00000	Averaged
60 Toluene	1.61541	1.54720 0.010	4.22285	30.00000	Averaged
61 trans-1,3-Dichloropropene	0.57730	0.56749 0.010	1.69993	30.00000	Averaged
62 1,1,2-Trichloroethane	0.52064	0.47513 0.010	8.74064	30.00000	Averaged
63 Tetrachloroethene	0.83593	0.83574 0.010	0.02284	30.00000	Averaged
64 2-Hexanone	0.44455	0.42097 0.010	5.30415	30.00000	Averaged
66 Dibromochloromethane	0.89516	0.98625 0.010	-10.17564	30.00000	Averaged
67 1,2-Dibromoethane	0.88614	0.87988 0.010	0.70635	30.00000	Averaged
69 Chlorobenzene	1.63931	1.54891 0.010	5.51461	30.00000	Averaged
70 Ethyl Benzene	0.82279	0.82260 0.010	0.02297	30.00000	Averaged
71 m,p-Xylene	1.00969	1.04284 0.010	-3.28314	30.00000	Averaged
72 o-Xylene	0.98124	1.05714 0.010	-7.73459	30.00000	Averaged
73 Styrene	1.38352	1.50238 0.010	-8.59156	30.00000	Averaged
75 Bromoform	0.89546	1.16391 0.010	-29.97973	30.00000	Averaged
76 Cumene	2.81828	3.13238 0.010	-11.14525	30.00000	Averaged
79 1,1,2,2-Tetrachloroethane	1.59839	1.58092 0.010	1.09325	30.00000	Averaged
80 Propylbenzene	3.46400	3.84328 0.010	-10.94938	30.00000	Averaged
82 4-Ethyltoluene	3.14139	3.57943 0.010	-13.94431	30.00000	Averaged
83 1,3,5-Trimethylbenzene	2.72987	2.99469 0.010	-9.70102	30.00000	Averaged
85 1,2,4-Trimethylbenzene	2.42460	2.78702 0.010	-14.94734	30.00000	Averaged
88 1,3-Dichlorobenzene	2.04292	2.28545 0.010	-11.87164	30.00000	Averaged
89 1,4-Dichlorobenzene	2.09829	2.34642 0.010	-11.82565	30.00000	Averaged
90 alpha-chlorotoluene	1.56731	2.00232 0.010	-27.75528	30.00000	Averaged
93 1,2-Dichlorobenzene	2.00617	2.26330 0.010	-12.81657	30.00000	Averaged
97 1,2,4-Trichlorobenzene	0.89235	1.18153 0.010	-32.40622	30.00000	Averaged <-
98 Hexachlorobutadiene	0.67392	0.88723 0.010	-31.65273	30.00000	Averaged <-
99 Naphthalene	1.82758	2.36187 0.010	-29.23456	30.00000	Averaged
179 Butane	0.34052	0.31848 0.010	6.47318	30.00000	Averaged
11 Isopentane	1.19872	1.20058 0.010	-0.15505	30.00000	Averaged

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdz.i Injection Date: 01-JUN-2009 09:18
Lab File ID: z060103.d Init. Cal. Date(s): 20-MAY-2009 21-MAY-2009
Analysis Type: AIR Init. Cal. Times: 15:05 08:21
Lab Sample ID: CCV-1 Quant Type: ISTD
Method: /chem/msdz.i/01Jun2009.b/z0910520a.m

COMPOUND	RRF / AMOUNT	RF10	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
167 Methylcyclohexane	3.19623	3.11985 0.010	2.38943	30.00000	Averaged	
26 tert-butyl alcohol	2.68808	2.65270 0.010	1.31631	30.00000	Averaged	
32 Isopropyl ether	5.42315	5.61687 0.010	-3.57202	30.00000	Averaged	
35 Ethyl-tert-butyl ether	4.26847	3.54293 0.010	16.99776	30.00000	Averaged	
175 Ethyl Acetate	0.23019	0.22355 0.010	2.88792	30.00000	Averaged	
48 tert-amyl methyl ether	0.89372	0.81900 0.010	8.36129	30.00000	Averaged	

Report Date: 20-Jul-2009 16:02

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060103.d
 Lab Smp Id: CCV-1 Client Smp ID: CCV-1
 Inj Date : 01-JUN-2009 09:18
 Operator : ej Inst ID: msdz.i
 Smp Info : 200mL #1754-196A
 Misc Info : 25ppbv-10ppbv
 Comment :
 Method : /chem/msdz.i/01Jun2009.b/z0910520a.m
 Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD
 Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AT09.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 227085 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 175267 48.68- 108.68 77.18
 13.535 13.535 (1.000) 49 302143 95.19- 155.19 133.05

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 914413 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 136977 0.00- 44.37 14.98

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1165555 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 536012 18.45- 78.45 45.99

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 320607 10.0000 10.447 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 157207 23.75- 83.75 49.03

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 888461 10.0000 10.041 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 89393 0.00- 40.00 10.06

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	603887		37.97-	97.97	67.97
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\$ 77 Bromofluorobenzene

20.509	20.509	(1.076)	174	881710	10.0000	11.443	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	930409			75.52-	135.52	105.52
20.535	20.535	(1.078)	176	838574			65.11-	125.11	95.11

1 Propylene

4.449	4.449	(0.329)	41	315694	10.0000	9.566	80.00-	120.00	100.00
4.449	4.449	(0.329)	42	209148			33.55-	93.55	66.25
4.449	4.449	(0.329)	39	280023			56.91-	116.91	88.70

3 Dichlorodifluoromethane/Fr12

4.835	4.835	(0.357)	85	1197477	10.0000	9.468	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	382569			1.95-	61.95	31.95

4 Freon 114

5.920	5.920	(0.437)	135	895607	10.0000	9.666	80.00-	120.00	100.00
5.920	5.920	(0.437)	85	1073162			94.25-	154.25	119.83
5.920	5.920	(0.437)	137	288765			1.65-	61.65	32.24

5 Chloromethane

6.112	6.112	(0.452)	50	403422	10.0000	9.380	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	117811			0.79-	60.79	29.20

6 Vinyl Chloride

6.781	6.781	(0.501)	62	375895	10.0000	9.420	80.00-	120.00	100.00
6.781	6.781	(0.501)	64	115738			0.79-	60.79	30.79

7 1,3-Butadiene

6.972	6.972	(0.515)	54	301131	10.0000	9.869	80.00-	120.00	100.00
6.972	6.972	(0.515)	39	386456			99.39-	159.39	128.33

9 Bromomethane

8.148	8.148	(0.602)	94	338773	10.0000	9.540	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	320822			64.70-	124.70	94.70

10 Chloroethane

8.562	8.562	(0.633)	64	170736	10.0000	9.742	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	59094			3.15-	63.15	34.61
8.562	8.562	(0.633)	66	54689			2.03-	62.03	32.03

13 Trichlorodifluoromethane/Fr11

9.246	9.246	(0.683)	101	890719	10.0000	9.670	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	577468			34.83-	94.83	64.83

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	182766	10.0000	10.484	80.00-	120.00	100.00
10.105	10.105	(0.747)	43	47471			0.00-	54.45	25.97

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	205146	10.0000	9.747	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	568535			236.73-	296.73	277.14
10.442	10.442	(0.771)	96	318202			127.28-	187.28	155.11

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	544200	10.0000	8.631	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	335620			31.67-	91.67	61.67
10.442	10.442	(0.771)	101	588720			81.36-	141.36	108.18

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	920972	10.0000	9.596	80.00-	120.00	100.00
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20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	149935	10.0000	8.234	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	753346			355.89-	415.89	502.45

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	608308	10.0000	10.467	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	145304			0.00-	54.61	23.89
11.061	11.061	(0.817)	59	19160			0.00-	33.24	3.15

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	138601	10.0000	9.983	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	510728			329.82-	389.82	368.49

25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	265526	10.0000	9.327	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	407896			115.61-	175.61	153.62
11.418	11.418	(0.844)	51	119589			13.38-	73.38	45.04

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	494834	10.0000	8.498	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	125697			0.00-	54.66	25.40
11.747	11.747	(0.868)	41	161576			4.80-	64.80	32.65

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	232869	10.0000	9.705	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	543776			201.95-	261.95	233.51
11.775	11.775	(0.870)	96	368901			127.66-	187.66	158.42

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	515912	10.0000	10.370	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	391450		44.72-	104.72	75.88
12.077	12.077	(0.892)	86	835559		0.00-	46.94	16.20

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	622397	10.0000	9.776	80.00-	120.00	100.00
12.434	12.434	(0.919)	65	191656		1.54-	61.54	30.79	

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	58781	10.0000	10.698	80.00-	120.00	100.00
12.489	12.489	(0.923)	43	516488		712.54-	772.54	878.66	
12.489	12.489	(0.923)	42	43943		39.14-	99.14	74.76	

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	233192	10.0000	9.938	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	724253		269.36-	329.36	310.58	
13.225	13.225	(0.977)	96	356193		122.75-	182.75	152.75	

37 2-Butanone

CAS #: 78-93-3

13.246	13.246	(0.979)	72	197215	10.0000	11.271	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	1805551		837.79-	897.79	915.52	
13.246	13.246	(0.979)	57	59269		5.42-	65.42	30.05	

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	464626	10.0000	10.075	80.00-	120.00	100.00
13.535	13.535	(1.000)	71	146975		4.79-	64.79	31.63	
13.535	13.535	(1.000)	72	156289		6.97-	66.97	33.64	

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	769844	10.0000	9.382	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	493197		36.03-	96.03	64.06	

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	496830	10.0000	10.010	80.00-	120.00	100.00
13.812	13.812	(1.020)	56	566083		82.41-	142.41	113.94	
13.812	13.812	(1.020)	41	413971		49.17-	109.17	83.32	

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	843354	10.0000	10.414	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	544193		35.11-	95.11	64.53	

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	1156327	10.0000	11.746	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	1178662		73.84-	133.84	101.93	

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	1079375	10.0000	9.310	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

46 Benzene (continued)

14.285	14.285	(0.965)	77	245684		0.00-	53.01	22.76
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45 2,2,4-Trimethylpentane

CAS #: 540-84-1

14.258	14.258	(1.053)	56	530086	10.0000	9.670	80.00-	120.00	100.00
14.258	14.258	(1.053)	57	1661366		291.00-	351.00		313.41
14.258	14.258	(1.053)	41	617084		80.59-	140.59		116.41

49 1,2-Dichloroethane

CAS #: 107-06-2

14.395	14.395	(0.972)	62	620595	10.0000	9.887	80.00-	120.00	100.00
14.395	14.395	(0.972)	64	196122		0.00-	59.84		31.60

50 Heptane

CAS #: 142-82-5

14.477	14.477	(0.978)	57	336442	10.0000	10.088	80.00-	120.00	100.00
14.477	14.477	(0.978)	100	128083		9.68-	69.68		38.07
14.477	14.477	(0.978)	43	739722		189.12-	249.12		219.87

53 Trichloroethene

CAS #: 79-01-6

15.136	15.136	(1.022)	130	609590	10.0000	9.753	80.00-	120.00	100.00
15.136	15.136	(1.022)	95	520055		57.99-	117.99		85.31
15.136	15.136	(1.022)	97	348775		26.05-	86.05		57.21

54 1,2-Dichloropropane

CAS #: 78-87-5

15.521	15.521	(1.048)	63	373684	10.0000	9.312	80.00-	120.00	100.00
15.521	15.521	(1.048)	62	264133		40.59-	100.59		70.68
15.521	15.521	(1.048)	41	357692		65.72-	125.72		95.72

55 1,4-Dioxane

CAS #: 123-91-1

15.658	15.658	(1.057)	88	281277	10.0000	9.988	80.00-	120.00	100.00
15.658	15.658	(1.057)	58	187611		36.65-	96.65		66.70
15.658	15.658	(1.057)	57	66273		0.00-	53.07		23.56

56 Bromodichloromethane

CAS #: 75-27-4

15.905	15.905	(1.074)	83	822391	10.0000	10.480	80.00-	120.00	100.00
15.905	15.905	(1.074)	85	532192		34.22-	94.22		64.71

57 cis-1,3-Dichloropropene

CAS #: 10061-01-5

16.616	16.616	(1.122)	75	574832	10.0000	10.417	80.00-	120.00	100.00
16.616	16.616	(1.122)	77	186785		2.06-	62.06		32.49
16.616	16.616	(1.122)	39	447176		47.79-	107.79		77.79

58 4-Methyl-2-pentanone

CAS #: 108-10-1

16.795	16.795	(1.134)	43	999064	10.0000	10.836	80.00-	120.00	100.00
16.795	16.795	(1.134)	58	324530		3.70-	63.70		32.48
16.795	16.795	(1.134)	85	161419		0.00-	45.48		16.16

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 1414777 10.0000 9.578 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 845327 29.72- 89.72 59.75

61 trans-1,3-Dichloropropene CAS #: 10061-02-6
17.467 17.467 (0.917) 75 661442 10.0000 9.830 80.00- 120.00 100.00
17.467 17.467 (0.917) 77 216753 1.74- 61.74 32.77
17.467 17.467 (0.917) 39 455994 38.94- 98.94 68.94

62 1,1,2-Trichloroethane CAS #: 79-00-5
17.741 17.741 (0.931) 97 553791 10.0000 9.126 80.00- 120.00 100.00
17.741 17.741 (0.931) 99 346497 33.33- 93.33 62.57
17.741 17.741 (0.931) 83 430631 47.76- 107.76 77.76

63 Tetrachloroethene CAS #: 127-18-4
17.857 17.857 (0.937) 166 974104 10.0000 9.998 80.00- 120.00 100.00
17.857 17.857 (0.937) 129 662637 38.22- 98.22 68.03
17.857 17.857 (0.937) 131 648946 36.62- 96.62 66.62

64 2-Hexanone CAS #: 591-78-6
18.003 18.003 (0.945) 58 490664 10.0000 9.470 80.00- 120.00 100.00
18.003 18.003 (0.945) 43 1088075 178.48- 238.48 221.76
18.003 18.003 (0.945) 100 130230 0.00- 53.95 26.54

66 Dibromochloromethane CAS #: 124-48-1
18.294 18.294 (0.960) 129 1149528 10.0000 11.018 80.00- 120.00 100.00
18.294 18.294 (0.960) 127 872735 47.81- 107.81 75.92

67 1,2-Dibromoethane CAS #: 106-93-4
18.498 18.498 (0.971) 107 1025550 10.0000 9.929 80.00- 120.00 100.00
18.498 18.498 (0.971) 109 977809 65.39- 125.39 95.34

69 Chlorobenzene CAS #: 108-90-7
19.103 19.103 (1.003) 112 1805339 10.0000 9.448 80.00- 120.00 100.00
19.103 19.103 (1.003) 114 576891 2.52- 62.52 31.95
19.079 19.079 (1.001) 77 865371 17.93- 77.93 47.93

70 Ethyl Benzene CAS #: 100-41-4
19.151 19.151 (1.005) 106 958784 10.0000 9.998 80.00- 120.00 100.00
19.151 19.151 (1.005) 91 2745208 262.66- 322.66 286.32

71 m,p-Xylene CAS #: 108-38-3
19.320 19.320 (1.014) 106 1215486 10.0000 10.328 80.00- 120.00 100.00
19.320 19.320 (1.014) 91 2187922 149.22- 209.22 180.00

72 o-Xylene CAS #: 95-47-6
19.826 19.826 (1.040) 106 1232149 10.0000 10.773 80.00- 120.00 100.00

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

72 o-Xylene (continued)

19.826	19.826	(1.040)	91	2298726			160.12-	220.12	186.56
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	1751108	10.0000	10.859	80.00-	120.00	100.00
19.850	19.850	(1.042)	78	724957			11.71-	71.71	41.40

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	1356605	10.0000	12.998	80.00-	120.00	100.00
20.148	20.148	(1.057)	171	695830			20.74-	80.74	51.29

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	3650960	10.0000	11.114	80.00-	120.00	100.00
20.251	20.251	(1.063)	120	1060710			0.00-	58.28	29.05

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	1842645	10.0000	9.891	80.00-	120.00	100.00
20.689	20.689	(1.086)	85	1183925			33.12-	93.12	64.25

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	4479556	10.0000	11.095	80.00-	120.00	100.00
20.741	20.741	(1.088)	120	1182482			0.00-	55.00	26.40

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	4172022	10.0000	11.394	80.00-	120.00	100.00
20.870	20.870	(1.095)	120	1349782			1.26-	61.26	32.35

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	3490476	10.0000	10.970	80.00-	120.00	100.00
20.947	20.947	(1.099)	120	1852779			22.27-	82.27	53.08

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	3248422	10.0000	11.495	80.00-	120.00	100.00
21.386	21.386	(1.122)	120	1673627			19.51-	79.51	51.52

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.773	21.773	(1.143)	146	2663821	10.0000	11.187	80.00-	120.00	100.00
21.773	21.773	(1.143)	148	1705846			33.31-	93.31	64.04
21.773	21.773	(1.143)	111	918447			5.51-	65.51	34.48

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	2734887	10.0000	11.182	80.00-	120.00	100.00
21.876	21.876	(1.148)	148	1729083			32.89-	92.89	63.22
21.850	21.850	(1.147)	111	906848			3.94-	63.94	33.16

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	2333810	10.0000	12.776	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	582373		0.00-	52.96	24.95
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	2637996	10.0000	11.282	80.00-	120.00	100.00
22.288	22.288	(1.170)	148	1675546			33.52-	93.52	63.52
22.288	22.288	(1.170)	111	957152			6.28-	66.28	36.28

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	1377135	10.0000	13.241	80.00-	120.00	100.00
24.042	24.042	(1.262)	182	1309223			64.88-	124.88	95.07

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	1034120	10.0000	13.165	80.00-	120.00	100.00
24.120	24.120	(1.266)	223	667021			33.32-	93.32	64.50

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	2752886	10.0000	12.923	80.00-	120.00	100.00
24.352	24.352	(1.278)	127	324552			0.00-	41.88	11.79

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	72322	10.0000	9.353	80.00-	120.00	100.00
6.694	6.694	(0.495)	43	656037			824.78-	884.78	907.11

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	272633	10.0000	10.016	80.00-	120.00	100.00
8.687	8.687	(0.642)	43	469443			141.03-	201.03	172.19
8.687	8.687	(0.642)	42	398585			118.04-	178.04	146.20

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	708472	10.0000	9.761	80.00-	120.00	100.00
15.328	15.328	(1.133)	98	359103			21.59-	81.59	50.69
15.328	15.328	(1.133)	55	586444			52.25-	112.25	82.78

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	602388	10.0000	9.868	80.00-	120.00	100.00
11.665	11.665	(0.862)	41	216316			0.52-	60.52	35.91
11.665	11.665	(0.862)	57	66756			0.00-	41.33	11.08

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	1275507	10.0000	10.357	80.00-	120.00	100.00
12.434	12.434	(0.919)	87	277458			0.00-	52.67	21.75
12.434	12.434	(0.919)	59	119415			0.00-	39.37	9.36

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.901	12.901	(0.953)	59	804546	10.0000	8.300	80.00-	120.00	100.00
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AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.901	12.901	(0.953)	87	305175		7.81-	67.81	37.93
12.901	12.901	(0.953)	41	225332		0.00-	56.49	28.01

175 Ethyl Acetate

CAS #: 141-78-6

13.246	13.246	(0.979)	70	50764	10.0000	9.711	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	1805551		3265.73-3325.73		3556.75	
13.225	13.225	(0.977)	61	724253		1240.03-1300.03		1426.71	

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	748900	10.0000	9.164	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	185372		0.00-	55.27	24.75	
14.367	14.367	(0.970)	55	239011		1.96-	61.96	31.91	

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060103.d
Lab Smp Id: CCV-1
Analysis Type: VOA
Quant Type: ISTD
Operator: ej
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 25ppbv-10ppbv

Calibration Date: 20-MAY-2009
Calibration Time: 18:34
Client Smp ID: CCV-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	328120	196872	459368	227085	-30.79
52 1,4-Difluorobenze	1302885	781731	1824039	914413	-29.82
68 Chlorobenzene-d5	1586849	952109	2221589	1165555	-26.55

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 01-JUN-2009 09:18

Client ID: CCV-1

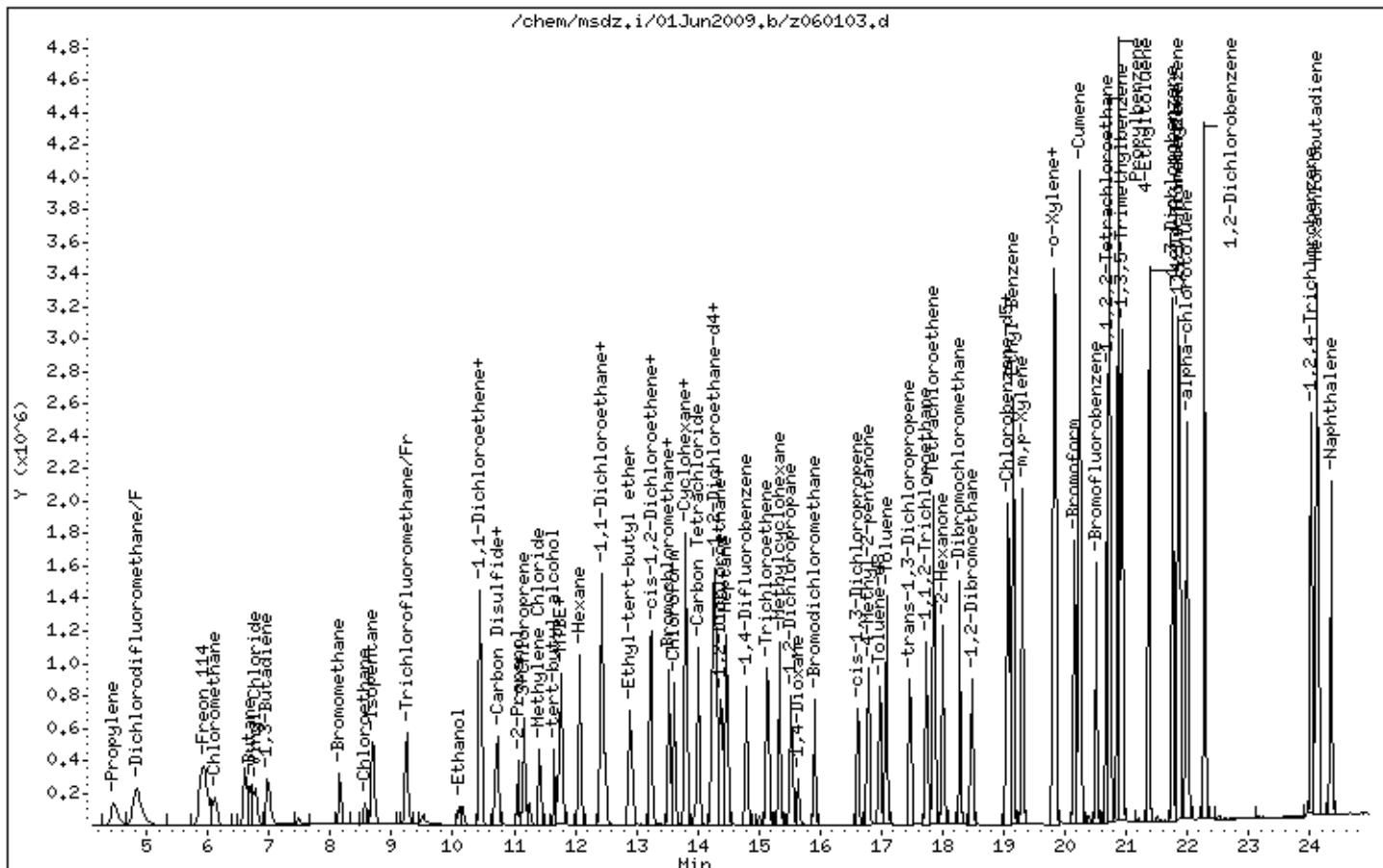
Instrument: msdz.i

Sample Info: 200mL #1754-196A

Operator: ej

Column phase: RTx-624

Column diameter: 0.32





Client Sample ID: LCS

Lab ID#: 0905582R1-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	z060104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/1/09 10:10 AM

Compound	%Recovery
Vinyl Chloride	92
Freon 113	93
1,1-Dichloroethene	105
1,1-Dichloroethane	99
cis-1,2-Dichloroethene	97
Chloroform	94
1,1,1-Trichloroethane	104
Trichloroethene	99
Bromodichloromethane	105
Toluene	101
Tetrachloroethylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	110	70-130

Air Toxics Ltd.

RECOVERY REPORT

Client Name: Client SDG: 01Jun2009
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS-1 Client Smp ID: LCS-1
Level: LOW Operator: tjs
Data Type: MS DATA SampleType: LCS
SpikeList File: SpectraENSR.spk Quant Type: ISTD
Sublist File: AT09.sub
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 50ppbv-10ppbv

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
3 Dichlorodifluorome	10.000	9.116	91.16	70-130
1 Propylene	10.000	10.200	102.00	60-140
4 Freon 114	10.000	9.269	92.69	70-130
5 Chloromethane	10.000	9.247	92.47	70-130
6 Vinyl Chloride	10.000	9.226	92.26	70-130
7 1,3-Butadiene	10.000	9.203	92.03	60-140
9 Bromomethane	10.000	9.298	92.98	70-130
10 Chloroethane	10.000	9.626	96.26	70-130
13 Trichlorofluoromet	10.000	9.388	93.88	70-130
14 Ethanol	11.000	8.722	79.29	60-140
17 Freon 113	10.000	9.302	93.02	70-130
15 1,1-Dichloroethene	10.000	10.541	105.41	70-130
20 Acetone	10.000	7.988	79.88	60-140
19 Carbon Disulfide	10.000	9.447	94.47	60-140
21 2-Propanol	10.000	10.829	108.29	60-140
22 3-Chloroprene	10.000	10.041	100.41	60-140
25 Methylene Chloride	10.000	10.067	100.67	70-130
27 MTBE	10.000	10.074	100.74	60-140
28 trans-1,2-Dichloro	10.000	9.375	93.75	60-140
30 Hexane	10.000	10.099	100.99	60-140
31 1,1-Dichloroethane	10.000	9.939	99.39	70-130
33 Vinyl Acetate	10.000	9.985	99.85	60-140
36 cis-1,2-Dichloroet	10.000	9.714	97.15	70-130
37 2-Butanone	10.000	10.994	109.94	60-140
38 Tetrahydrofuran	10.000	9.897	98.97	60-140
40 Chloroform	10.000	9.450	94.50	70-130
42 Cyclohexane	10.000	9.608	96.08	60-140
43 1,1,1-Trichloroeth	10.000	10.381	103.81	70-130
44 Carbon Tetrachlori	10.000	10.891	108.91	70-130
45 2,2,4-Trimethylpen	10.000	9.470	94.70	60-140
46 Benzene	10.000	9.272	92.72	70-130
50 Heptane	10.000	10.133	101.33	60-140
49 1,2-Dichloroethane	10.000	10.052	100.52	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
53 Trichloroethene	10.000	9.880	98.80	70-130
54 1,2-Dichloropropan	10.000	9.163	91.63	70-130
55 1,4-Dioxane	10.000	9.793	97.93	60-140
56 Bromodichlorometha	10.000	10.480	104.80	60-140
57 cis-1,3-Dichloropr	10.000	10.420	104.20	70-130
58 4-Methyl-2-pentano	10.000	11.003	110.03	60-140
60 Toluene	10.000	10.130	101.30	70-130
61 trans-1,3-Dichloro	10.000	10.012	100.12	70-130
62 1,1,2-Trichloroeth	10.000	9.140	91.40	70-130
64 2-Hexanone	10.000	9.904	99.04	60-140
63 Tetrachloroethene	10.000	10.118	101.18	70-130
66 Dibromochlorometha	10.000	10.842	108.42	60-140
67 1,2-Dibromoethane	10.000	9.767	97.67	70-130
69 Chlorobenzene	10.000	9.416	94.16	70-130
70 Ethyl Benzene	10.000	9.833	98.33	70-130
71 m,p-Xylene	10.000	10.295	102.95	70-130
72 o-Xylene	10.000	10.608	106.08	70-130
73 Styrene	10.000	11.930	119.30	70-130
75 Bromoform	10.000	12.273	122.73	60-140
76 Cumene	10.000	11.218	112.18	60-140
79 1,1,2,2-Tetrachlor	10.000	9.712	97.12	70-130
80 Propylbenzene	10.000	11.154	111.54	70-130
82 4-Ethyltoluene	10.000	11.231	112.31	60-140
83 1,3,5-Trimethylben	10.000	10.856	108.56	70-130
85 1,2,4-Trimethylben	10.000	11.186	111.86	70-130
88 1,3-Dichlorobenzen	10.000	10.847	108.47	70-130
89 1,4-Dichlorobenzen	10.000	10.552	105.52	70-130
90 alpha-chlorotoluen	10.000	15.614	156.14*	70-130
93 1,2-Dichlorobenzen	10.000	10.683	106.83	70-130
97 1,2,4-Trichloroben	10.000	13.121	131.21*	70-130
98 Hexachlorobutadien	10.000	12.357	123.57	70-130
99 Naphthalene	10.000	13.676	136.76	60-140
11 Isopentane	10.000	9.473	94.73	60-140
179 Butane	10.000	9.604	96.04	60-140
167 Methylcyclohexane	10.000	9.608	96.08	60-140
26 tert-butyl alcohol	10.000	10.073	100.73	60-140
32 Isopropyl ether	10.000	9.932	99.32	60-140
35 Ethyl-tert-butyl e	10.000	9.188	91.88	60-140
175 Ethyl Acetate	10.000	13.242	132.42	60-140
48 tert-amyl methyl e	10.000	9.822	98.22	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 47 1,2-Dichloroethane	10.000	10.068	100.68	70-130

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
\$ 59 Toluene-d8	10.000	9.942	99.42	70-130
\$ 77 Bromofluorobenzene	10.000	10.978	109.78	70-130

Report Date: 20-Jul-2009 16:02

Air Toxics Ltd.

AMBIENT AIR METHOD TO14/TO15

Data file : /chem/msdz.i/01Jun2009.b/z060104.d
 Lab Smp Id: LCS-1 Client Smp ID: LCS-1
 Inj Date : 01-JUN-2009 10:10
 Operator : tjs Inst ID: msdz.i
 Smp Info : 100mL #1754-202
 Misc Info : 50ppbv-10ppbv
 Comment :
 Method : /chem/msdz.i/01Jun2009.b/z0910520a.m
 Meth Date : 20-Jul-2009 16:02 nshafer Quant Type: ISTD
 Cal Date : 20-MAY-2009 18:34 Cal File: z052015.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AT09.sub
 Target Version: 3.50 Sample Matrix: AIR
 Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

* 39 Bromochloromethane CAS #: 74-97-5
 13.535 13.535 (1.000) 130 235728 10.0000 80.00- 120.00 100.00
 13.535 13.535 (1.000) 128 176835 48.68- 108.68 75.02
 13.535 13.535 (1.000) 49 297099 95.19- 155.19 126.03

* 52 1,4-Difluorobenzene CAS #: 540-36-3
 14.807 14.807 (1.000) 114 930628 10.0000 80.00- 120.00 100.00
 14.807 14.807 (1.000) 88 137983 0.00- 44.37 14.83

* 68 Chlorobenzene-d5 CAS #: 3114-55-4
 19.055 19.055 (1.000) 117 1171248 10.0000 80.00- 120.00 100.00
 19.055 19.055 (1.000) 82 551786 18.45- 78.45 47.11

\$ 47 1,2-Dichloroethane-d4 CAS #: 17060-07-0
 14.313 14.313 (1.057) 65 320737 10.0682 10.068 80.00- 120.00 100.00
 14.313 14.313 (1.057) 67 166409 23.75- 83.75 51.88

\$ 59 Toluene-d8 CAS #: 2037-26-5
 16.974 16.974 (1.146) 98 895272 9.94209 9.942 80.00- 120.00 100.00
 16.974 16.974 (1.146) 70 89534 0.00- 40.00 10.00

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====

\$ 59 Toluene-d8 (continued)

16.974	16.974	(1.146)	100	613322		37.97-	97.97	68.51
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\$ 77 Bromofluorobenzene CAS #: 460-00-4

20.509	20.509	(1.076)	174	850008	10.9780	10.978	80.00-	120.00	100.00
20.509	20.509	(1.076)	95	908941			75.52-	135.52	106.93
20.509	20.535	(1.076)	176	823739			65.11-	125.11	96.91

1 Propylene CAS #: 115-07-1

4.449	4.449	(0.329)	41	349449	10.2003	10.200	80.00-	120.00	100.00
4.449	4.449	(0.329)	42	228706			33.55-	93.55	65.45
4.449	4.449	(0.329)	39	300088			56.91-	116.91	85.87

3 Dichlorodifluoromethane/Fr12 CAS #: 75-71-8

4.835	4.835	(0.357)	85	1196935	9.11647	9.116	80.00-	120.00	100.00
4.835	4.835	(0.357)	87	390381			1.95-	61.95	32.62

4 Freon 114 CAS #: 76-14-2

5.920	5.920	(0.437)	135	891511	9.26879	9.269	80.00-	120.00	100.00
5.920	5.920	(0.437)	85	1085916			94.25-	154.25	121.81
5.920	5.920	(0.437)	137	283625			1.65-	61.65	31.81

5 Chloromethane CAS #: 74-87-3

6.112	6.112	(0.452)	50	412815	9.24680	9.247	80.00-	120.00	100.00
6.112	6.112	(0.452)	52	129596			0.79-	60.79	31.39

6 Vinyl Chloride CAS #: 75-01-4

6.781	6.781	(0.501)	62	382163	9.22612	9.226	80.00-	120.00	100.00
6.763	6.781	(0.500)	64	115726			0.79-	60.79	30.28

7 1,3-Butadiene CAS #: 106-99-0

6.972	6.972	(0.515)	54	291488	9.20314	9.203	80.00-	120.00	100.00
6.972	6.972	(0.515)	39	380854			99.39-	159.39	130.66

9 Bromomethane CAS #: 74-83-9

8.148	8.148	(0.602)	94	342744	9.29804	9.298	80.00-	120.00	100.00
8.148	8.148	(0.602)	96	325308			64.70-	124.70	94.91

10 Chloroethane CAS #: 75-00-3

8.562	8.562	(0.633)	64	175109	9.62557	9.626	80.00-	120.00	100.00
8.562	8.562	(0.633)	49	60284			3.15-	63.15	34.43
8.562	8.562	(0.633)	66	55471			2.03-	62.03	31.68

13 Trichlorodifluoromethane/Fr11 CAS #: 75-69-4

9.246	9.246	(0.683)	101	897658	9.38800	9.388	80.00-	120.00	100.00
9.246	9.246	(0.683)	103	582529			34.83-	94.83	64.89

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====

14 Ethanol CAS #: 64-17-5

10.105	10.105	(0.747)	45	157836	8.72177	8.722	80.00-	120.00	100.00
10.105	10.105	(0.747)	43	46849			0.00-	54.45	29.68

15 1,1-Dichloroethene CAS #: 75-35-4

10.442	10.442	(0.771)	98	230296	10.5408	10.541	80.00-	120.00	100.00
10.442	10.442	(0.771)	61	639305			236.73-	296.73	277.60
10.442	10.442	(0.771)	96	357365			127.28-	187.28	155.18

17 Freon 113 CAS #: 76-13-1

10.442	10.442	(0.771)	151	608841	9.30218	9.302	80.00-	120.00	100.00
10.442	10.442	(0.771)	153	380584			31.67-	91.67	62.51
10.442	10.442	(0.771)	101	660372			81.36-	141.36	108.46

19 Carbon Disulfide CAS #: 75-15-0

10.731	10.731	(0.793)	76	941176	9.44678	9.447	80.00-	120.00	100.00
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20 Acetone CAS #: 67-64-1

10.707	10.707	(0.791)	58	151001	7.98830	7.988	80.00-	120.00	100.00
10.707	10.707	(0.791)	43	735577			355.89-	415.89	487.13

21 2-Propanol CAS #: 67-63-0

11.061	11.061	(0.817)	45	653287	10.8293	10.829	80.00-	120.00	100.00
11.061	11.061	(0.817)	43	165642			0.00-	54.61	25.36
11.061	11.061	(0.817)	59	21057			0.00-	33.24	3.22

22 3-Chloroprene CAS #: 107-05-1

11.171	11.171	(0.825)	76	144713	10.0409	10.041	80.00-	120.00	100.00
11.171	11.171	(0.825)	41	508868			329.82-	389.82	351.64

25 Methylene Chloride CAS #: 75-09-2

11.418	11.418	(0.844)	84	297490	10.0670	10.067	80.00-	120.00	100.00
11.418	11.418	(0.844)	49	449702			115.61-	175.61	151.17
11.418	11.418	(0.844)	51	128226			13.38-	73.38	43.10

27 MTBE CAS #: 1634-04-4

11.747	11.747	(0.868)	73	608960	10.0744	10.074	80.00-	120.00	100.00
11.747	11.747	(0.868)	57	155395			0.00-	54.66	25.52
11.747	11.747	(0.868)	41	231369			4.80-	64.80	37.99

28 trans-1,2-Dichloroethene CAS #: 156-60-5

11.775	11.775	(0.870)	98	233499	9.37479	9.375	80.00-	120.00	100.00
11.775	11.775	(0.870)	61	568198			201.95-	261.95	243.34
11.775	11.775	(0.870)	96	376524			127.66-	187.66	161.25

30 Hexane CAS #: 110-54-3

12.077	12.077	(0.892)	57	521555	10.0986	10.099	80.00-	120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====

30 Hexane (continued)

12.077	12.077	(0.892)	43	391732	44.72-	104.72	75.11
12.077	12.077	(0.892)	86	88041	0.00-	46.94	16.88

31 1,1-Dichloroethane

CAS #: 75-34-3

12.434	12.434	(0.919)	63	656799	9.93860	9.939	80.00-	120.00	100.00
12.434	12.434	(0.919)	65	205646		1.54-	61.54		31.31

33 Vinyl Acetate

CAS #: 108-05-4

12.489	12.489	(0.923)	86	56956	9.98549	9.985	80.00-	120.00	100.00
12.489	12.489	(0.923)	43	524948		712.54-	772.54		921.67
12.489	12.489	(0.923)	42	46950		39.14-	99.14		82.43

36 cis-1,2-Dichloroethene

CAS #: 156-59-2

13.225	13.225	(0.977)	98	236636	9.71455	9.714	80.00-	120.00	100.00
13.225	13.225	(0.977)	61	722823		269.36-	329.36		305.46
13.225	13.225	(0.977)	96	370309		122.75-	182.75		156.49

37 2-Butanone

CAS #: 78-93-3

13.246	13.246	(0.979)	72	199697	10.9941	10.994	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	2167895		837.79-	897.79		1085.59
13.246	13.246	(0.979)	57	72484		5.42-	65.42		36.30

38 Tetrahydrofuran

CAS #: 109-99-9

13.535	13.535	(1.000)	42	473766	9.89682	9.897	80.00-	120.00	100.00
13.535	13.535	(1.000)	71	147403		4.79-	64.79		31.11
13.535	13.535	(1.000)	72	160538		6.97-	66.97		33.89

40 Chloroform

CAS #: 67-66-3

13.627	13.627	(1.007)	83	804942	9.45006	9.450	80.00-	120.00	100.00
13.627	13.627	(1.007)	85	517996		36.03-	96.03		64.35

42 Cyclohexane

CAS #: 110-82-7

13.812	13.812	(1.020)	84	495012	9.60796	9.608	80.00-	120.00	100.00
13.812	13.812	(1.020)	56	565383		82.41-	142.41		114.22
13.812	13.812	(1.020)	41	411227		49.17-	109.17		83.07

43 1,1,1-Trichloroethane

CAS #: 71-55-6

13.812	13.812	(1.020)	97	872728	10.3814	10.381	80.00-	120.00	100.00
13.812	13.812	(1.020)	99	556539		35.11-	95.11		63.77

44 Carbon Tetrachloride

CAS #: 56-23-5

13.997	13.997	(1.034)	119	1112932	10.8906	10.891	80.00-	120.00	100.00
13.997	13.997	(1.034)	117	1165246		73.84-	133.84		104.70

46 Benzene

CAS #: 71-43-2

14.285	14.285	(0.965)	78	1094001	9.27153	9.272	80.00-	120.00	100.00
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (PPBV)	(PPBV)	TARGET RANGE	RATIO
==	=====	====	=====	=====	=====	=====

46 Benzene (continued)

14.285	14.285 (0.965)	77	251682		0.00-	53.01	23.01
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45 2,2,4-Trimethylpentane CAS #: 540-84-1

14.258	14.258 (1.053)	56	538863	9.46978	9.470	80.00-	120.00	100.00
14.258	14.258 (1.053)	57	1694815			291.00-	351.00	314.52
14.258	14.258 (1.053)	41	611977			80.59-	140.59	113.57

49 1,2-Dichloroethane CAS #: 107-06-2

14.395	14.395 (0.972)	62	642117	10.0520	10.052	80.00-	120.00	100.00
14.395	14.395 (0.972)	64	196622			0.00-	59.84	30.62

50 Heptane CAS #: 142-82-5

14.477	14.477 (0.978)	57	343948	10.1332	10.133	80.00-	120.00	100.00
14.477	14.477 (0.978)	100	130685			9.68-	69.68	38.00
14.477	14.477 (0.978)	43	754033			189.12-	249.12	219.23

53 Trichloroethene CAS #: 79-01-6

15.136	15.136 (1.022)	130	628460	9.87981	9.880	80.00-	120.00	100.00
15.136	15.136 (1.022)	95	528675			57.99-	117.99	84.12
15.136	15.136 (1.022)	97	347950			26.05-	86.05	55.37

54 1,2-Dichloropropane CAS #: 78-87-5

15.521	15.521 (1.048)	63	374206	9.16312	9.163	80.00-	120.00	100.00
15.521	15.521 (1.048)	62	264898			40.59-	100.59	70.79
15.521	15.521 (1.048)	41	353228			65.72-	125.72	94.39

55 1,4-Dioxane CAS #: 123-91-1

15.658	15.658 (1.057)	88	280697	9.79350	9.793	80.00-	120.00	100.00
15.658	15.658 (1.057)	58	186946			36.65-	96.65	66.60
15.658	15.658 (1.057)	57	65383			0.00-	53.07	23.29

56 Bromodichloromethane CAS #: 75-27-4

15.905	15.905 (1.074)	83	837007	10.4802	10.480	80.00-	120.00	100.00
15.905	15.905 (1.074)	85	546182			34.22-	94.22	65.25

57 cis-1,3-Dichloropropene CAS #: 10061-01-5

16.616	16.616 (1.122)	75	585199	10.4201	10.420	80.00-	120.00	100.00
16.616	16.616 (1.122)	77	184208			2.06-	62.06	31.48
16.616	16.616 (1.122)	39	448515			47.79-	107.79	76.64

58 4-Methyl-2-pentanone CAS #: 108-10-1

16.795	16.795 (1.134)	43	1032413	11.0032	11.003	80.00-	120.00	100.00
16.795	16.795 (1.134)	58	328804			3.70-	63.70	31.85
16.795	16.795 (1.134)	85	157298			0.00-	45.48	15.24

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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60 Toluene CAS #: 108-88-3
17.086 17.086 (1.154) 91 1522925 10.1302 10.130 80.00- 120.00 100.00
17.086 17.086 (1.154) 92 907023 29.72- 89.72 59.56

61 trans-1,3-Dichloropropene CAS #: 10061-02-6
17.467 17.467 (0.917) 75 677008 10.0124 10.012 80.00- 120.00 100.00
17.467 17.467 (0.917) 77 217843 1.74- 61.74 32.18
17.467 17.467 (0.917) 39 461259 38.94- 98.94 68.13

62 1,1,2-Trichloroethane CAS #: 79-00-5
17.741 17.741 (0.931) 97 557329 9.13960 9.140 80.00- 120.00 100.00
17.741 17.741 (0.931) 99 354329 33.33- 93.33 63.58
17.741 17.741 (0.931) 83 428964 47.76- 107.76 76.97

63 Tetrachloroethene CAS #: 127-18-4
17.857 17.857 (0.937) 166 990627 10.1179 10.118 80.00- 120.00 100.00
17.857 17.857 (0.937) 129 670006 38.22- 98.22 67.63
17.857 17.857 (0.937) 131 650265 36.62- 96.62 65.64

64 2-Hexanone CAS #: 591-78-6
18.003 18.003 (0.945) 58 515676 9.90393 9.904 80.00- 120.00 100.00
18.003 18.003 (0.945) 43 1100113 178.48- 238.48 213.33
18.003 18.003 (0.945) 100 131095 0.00- 53.95 25.42

66 Dibromochloromethane CAS #: 124-48-1
18.294 18.294 (0.960) 129 1136752 10.8422 10.842 80.00- 120.00 100.00
18.294 18.294 (0.960) 127 865072 47.81- 107.81 76.10

67 1,2-Dibromoethane CAS #: 106-93-4
18.499 18.498 (0.971) 107 1013752 9.76743 9.767 80.00- 120.00 100.00
18.499 18.498 (0.971) 109 951839 65.39- 125.39 93.89

69 Chlorobenzene CAS #: 108-90-7
19.103 19.103 (1.003) 112 1807816 9.41551 9.416 80.00- 120.00 100.00
19.103 19.103 (1.003) 114 585634 2.52- 62.52 32.39
19.079 19.079 (1.001) 77 869411 17.93- 77.93 48.09

70 Ethyl Benzene CAS #: 100-41-4
19.151 19.151 (1.005) 106 947624 9.83330 9.833 80.00- 120.00 100.00
19.151 19.151 (1.005) 91 2696974 262.66- 322.66 284.60

71 m,p-Xylene CAS #: 108-38-3
19.320 19.320 (1.014) 106 1217532 10.2954 10.295 80.00- 120.00 100.00
19.296 19.320 (1.013) 91 2164684 149.22- 209.22 177.79

72 o-Xylene CAS #: 95-47-6
19.826 19.826 (1.040) 106 1219124 10.6078 10.608 80.00- 120.00 100.00

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
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72 o-Xylene (continued)

19.826	19.826	(1.040)	91	2307036			160.12-	220.12	189.24
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73 Styrene CAS #: 100-42-5

19.850	19.850	(1.042)	104	1933241	11.9303	11.930	80.00-	120.00	100.00
19.850	19.850	(1.042)	78	806031			11.71-	71.71	41.69

75 Bromoform CAS #: 75-25-2

20.148	20.148	(1.057)	173	1287188	12.2729	12.273	80.00-	120.00	100.00
20.148	20.148	(1.057)	171	654277			20.74-	80.74	50.83

76 Cumene CAS #: 98-82-8

20.251	20.251	(1.063)	105	3702926	11.2179	11.218	80.00-	120.00	100.00
20.251	20.251	(1.063)	120	1067710			0.00-	58.28	28.83

79 1,1,2,2-Tetrachloroethane CAS #: 79-34-5

20.689	20.689	(1.086)	83	1818284	9.71247	9.712	80.00-	120.00	100.00
20.689	20.689	(1.086)	85	1164462			33.12-	93.12	64.04

80 Propylbenzene CAS #: 103-65-1

20.741	20.741	(1.088)	91	4525479	11.1542	11.154	80.00-	120.00	100.00
20.741	20.741	(1.088)	120	1192648			0.00-	55.00	26.35

82 4-Ethyltoluene CAS #: 622-96-8

20.870	20.870	(1.095)	105	4132361	11.2313	11.231	80.00-	120.00	100.00
20.870	20.870	(1.095)	120	1325114			1.26-	61.26	32.07

83 1,3,5-Trimethylbenzene CAS #: 108-67-8

20.947	20.947	(1.099)	105	3470896	10.8555	10.856	80.00-	120.00	100.00
20.947	20.947	(1.099)	120	1852643			22.27-	82.27	53.38

85 1,2,4-Trimethylbenzene CAS #: 95-63-6

21.386	21.386	(1.122)	105	3176708	11.1863	11.186	80.00-	120.00	100.00
21.386	21.386	(1.122)	120	1632709			19.51-	79.51	51.40

88 1,3-Dichlorobenzene CAS #: 541-73-1

21.773	21.773	(1.143)	146	2595494	10.8472	10.847	80.00-	120.00	100.00
21.773	21.773	(1.143)	148	1644796			33.31-	93.31	63.37
21.773	21.773	(1.143)	111	890845			5.51-	65.51	34.32

89 1,4-Dichlorobenzene CAS #: 106-46-7

21.876	21.876	(1.148)	146	2593271	10.5520	10.552	80.00-	120.00	100.00
21.876	21.876	(1.148)	148	1629204			32.89-	92.89	62.82
21.850	21.850	(1.147)	111	867039			3.94-	63.94	33.43

90 alpha-chlorotoluene CAS #: 100-44-7

22.005	22.005	(1.155)	91	2866319	15.6143	15.614	80.00-	120.00	100.00(R)
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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
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90 alpha-chlorotoluene (continued)

22.005	22.005	(1.155)	126	702834	0.00-	52.96	24.52
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93 1,2-Dichlorobenzene

CAS #: 95-50-1

22.288	22.288	(1.170)	146	2510284	10.6833	10.683	80.00- 120.00	100.00
22.288	22.288	(1.170)	148	1577198		33.52-	93.52	62.83
22.288	22.288	(1.170)	111	902757		6.28-	66.28	35.96

97 1,2,4-Trichlorobenzene

CAS #: 120-82-1

24.042	24.042	(1.262)	180	1371357	13.1210	13.121	80.00- 120.00	100.00(R)
24.042	24.042	(1.262)	182	1297156		64.88-	124.88	94.59

98 Hexachlorobutadiene

CAS #: 87-68-3

24.120	24.120	(1.266)	225	975374	12.3570	12.357	80.00- 120.00	100.00
24.120	24.120	(1.266)	223	616518		33.32-	93.32	63.21

99 Naphthalene

CAS #: 91-20-3

24.352	24.352	(1.278)	128	2927456	13.6762	13.676	80.00- 120.00	100.00
24.352	24.352	(1.278)	127	349391		0.00-	41.88	11.93

179 Butane

CAS #: 106-97-8

6.694	6.694	(0.495)	58	77093	9.60413	9.604	80.00- 120.00	100.00
6.694	6.694	(0.495)	43	679545		824.78-	884.78	881.46

11 Isopentane

CAS #: 78-78-4

8.687	8.687	(0.642)	57	267688	9.47328	9.473	80.00- 120.00	100.00
8.687	8.687	(0.642)	43	451092		141.03-	201.03	168.51
8.687	8.687	(0.642)	42	390090		118.04-	178.04	145.73

167 Methylcyclohexane

CAS #: 108-87-2

15.328	15.328	(1.133)	83	723890	9.60780	9.608	80.00- 120.00	100.00
15.328	15.328	(1.133)	98	371486		21.59-	81.59	51.32
15.328	15.328	(1.133)	55	600772		52.25-	112.25	82.99

26 tert-butyl alcohol

CAS #: 75-65-0

11.665	11.665	(0.862)	59	638263	10.0727	10.073	80.00- 120.00	100.00
11.665	11.665	(0.862)	41	190067		0.52-	60.52	29.78
11.665	11.665	(0.862)	57	69617		0.00-	41.33	10.91

32 Isopropyl ether

CAS #: 108-20-3

12.434	12.434	(0.919)	45	1269759	9.93249	9.932	80.00- 120.00	100.00
12.434	12.434	(0.919)	87	280527		0.00-	52.67	22.09
12.434	12.434	(0.919)	59	116759		0.00-	39.37	9.20

35 Ethyl-tert-butyl ether

CAS #: 637-92-3

12.901	12.901	(0.953)	59	924447	9.18752	9.188	80.00- 120.00	100.00
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CONCENTRATIONS
ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET	RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====	=====	=====

35 Ethyl-tert-butyl ether (continued)

12.901	12.901	(0.953)	87	349971		7.81-	67.81	37.86
12.901	12.901	(0.953)	41	249999		0.00-	56.49	27.04

175 Ethyl Acetate

CAS #: 141-78-6

13.246	13.246	(0.979)	70	71856	13.2421	13.242	80.00-	120.00	100.00
13.246	13.246	(0.979)	43	2167895			3265.73-3325.73		3017.00
13.225	13.225	(0.977)	61	724177			1240.03-1300.03		1007.82

48 tert-amyl methyl ether

CAS #: 994-05-8

14.367	14.367	(0.970)	73	816959	9.82249	9.822	80.00-	120.00	100.00
14.367	14.367	(0.970)	87	208564			0.00-	55.27	25.53
14.367	14.367	(0.970)	55	263109			1.96-	61.96	32.21

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Air Toxics Ltd.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdz.i
Lab File ID: z060104.d
Lab Smp Id: LCS-1
Analysis Type: VOA
Quant Type: ISTD
Operator: tjs
Method File: /chem/msdz.i/01Jun2009.b/z0910520a.m
Misc Info: 50ppbv-10ppbv

Calibration Date: 01-JUN-2009
Calibration Time: 09:18
Client Smp ID: LCS-1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	227085	136251	317919	235728	3.81
52 1,4-Difluorobenze	914413	548648	1280178	930628	1.77
68 Chlorobenzene-d5	1165555	699333	1631777	1171248	0.49

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
39 Bromochloromethan	13.53	13.20	13.86	13.53	0.00
52 1,4-Difluorobenze	14.81	14.48	15.14	14.81	0.00
68 Chlorobenzene-d5	19.06	18.73	19.39	19.06	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Date : 01-JUN-2009 10:10

Client ID: LCS-1

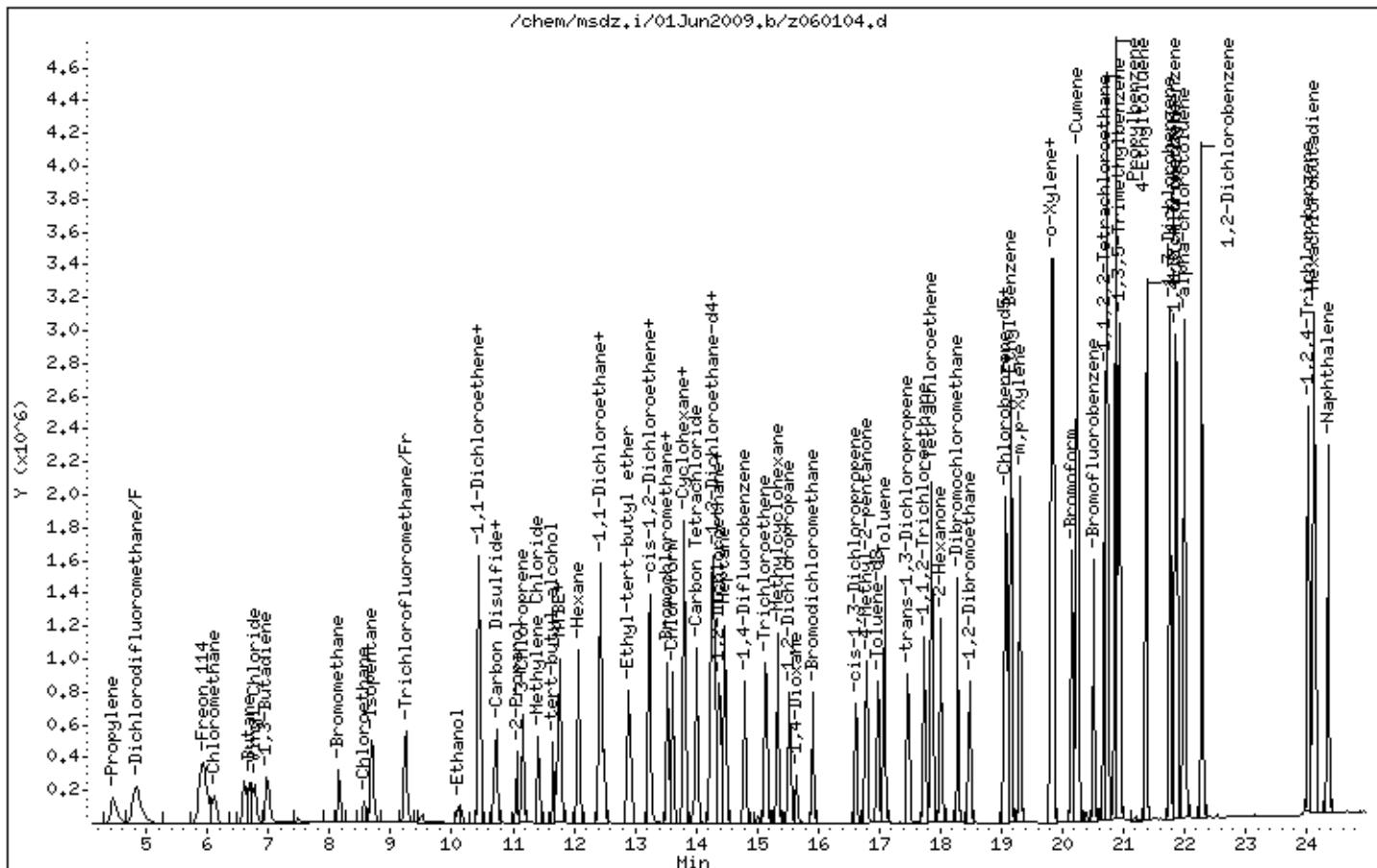
Instrument: msdz.i

Sample Info: 100mL #1754-202

Operator: tjs

Column phase: RTx-624

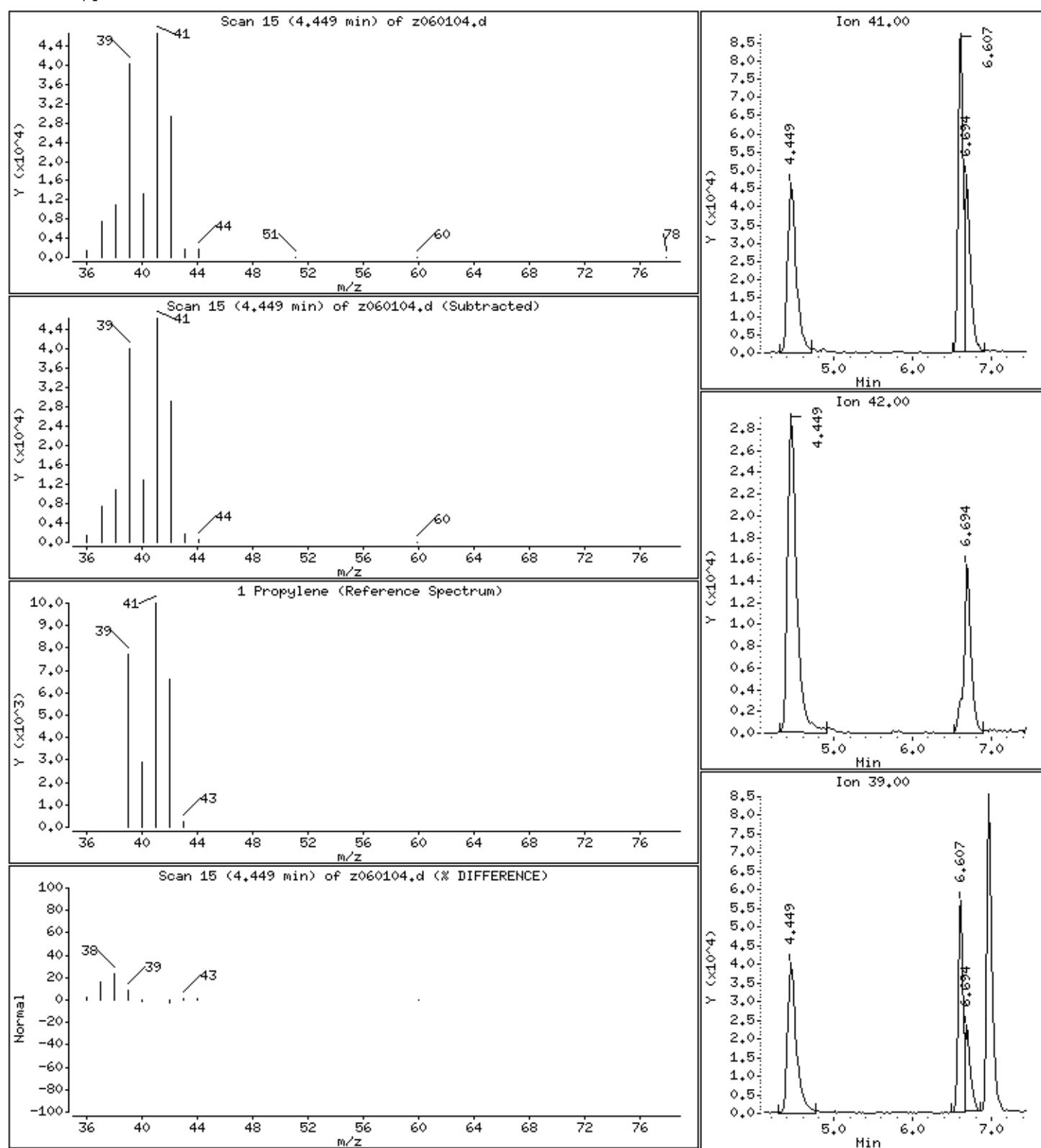
Column diameter: 0.32



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10,200 PPBV

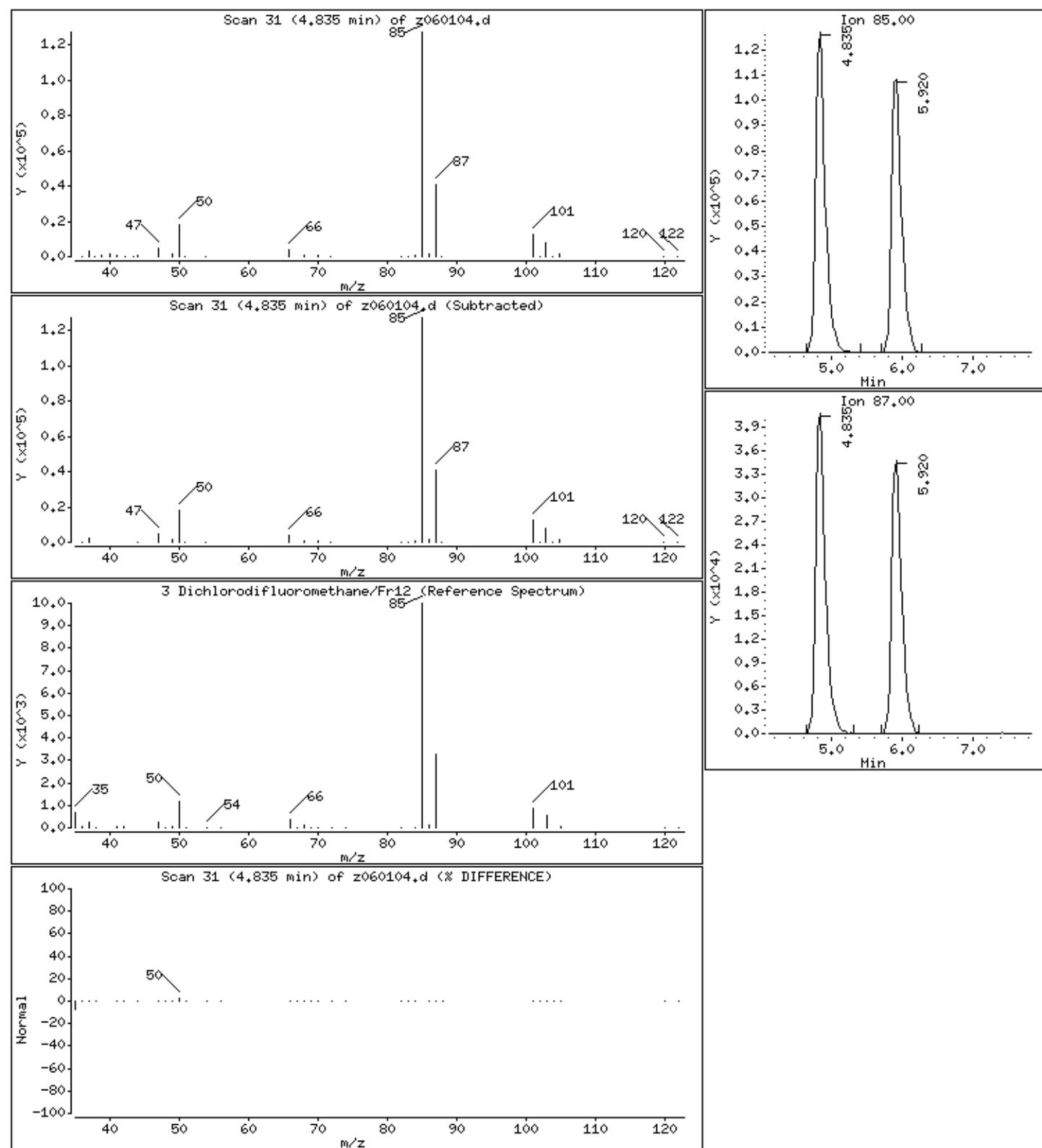
Page 2



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.116 PPBV

3 Dichlorodifluoromethane/Fr12

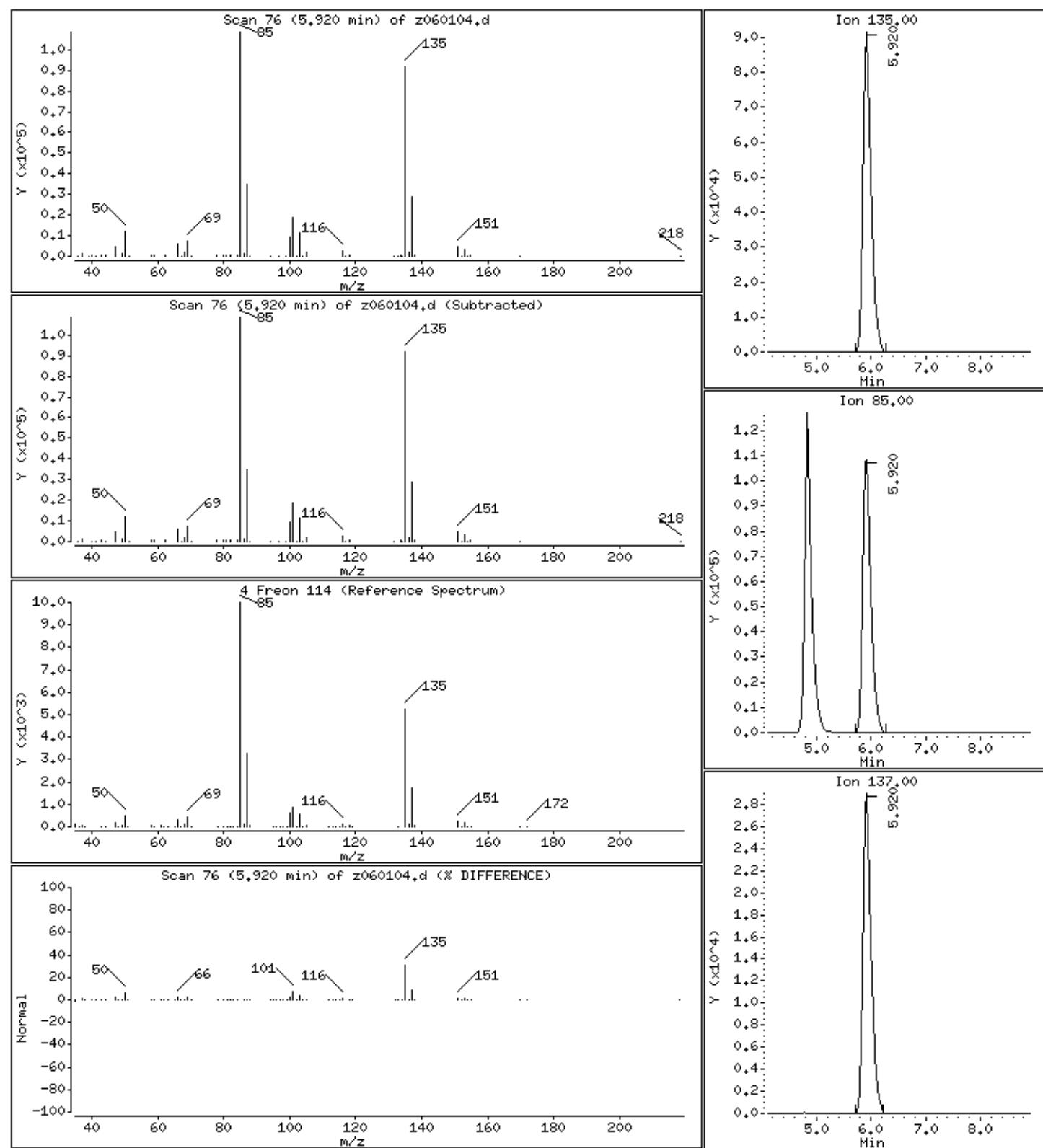


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.269 PPBV

Page 4

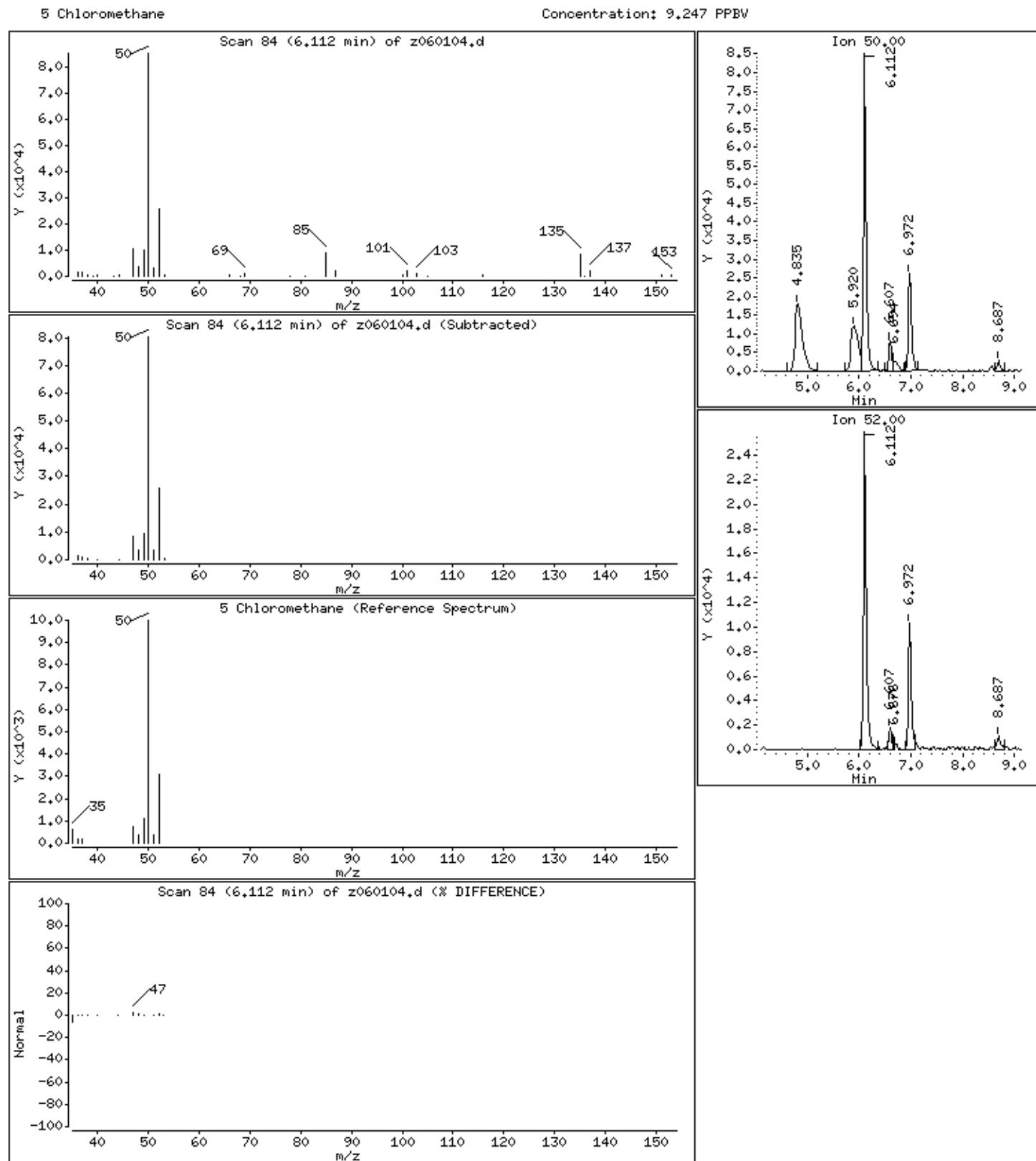
4 Freon 114



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

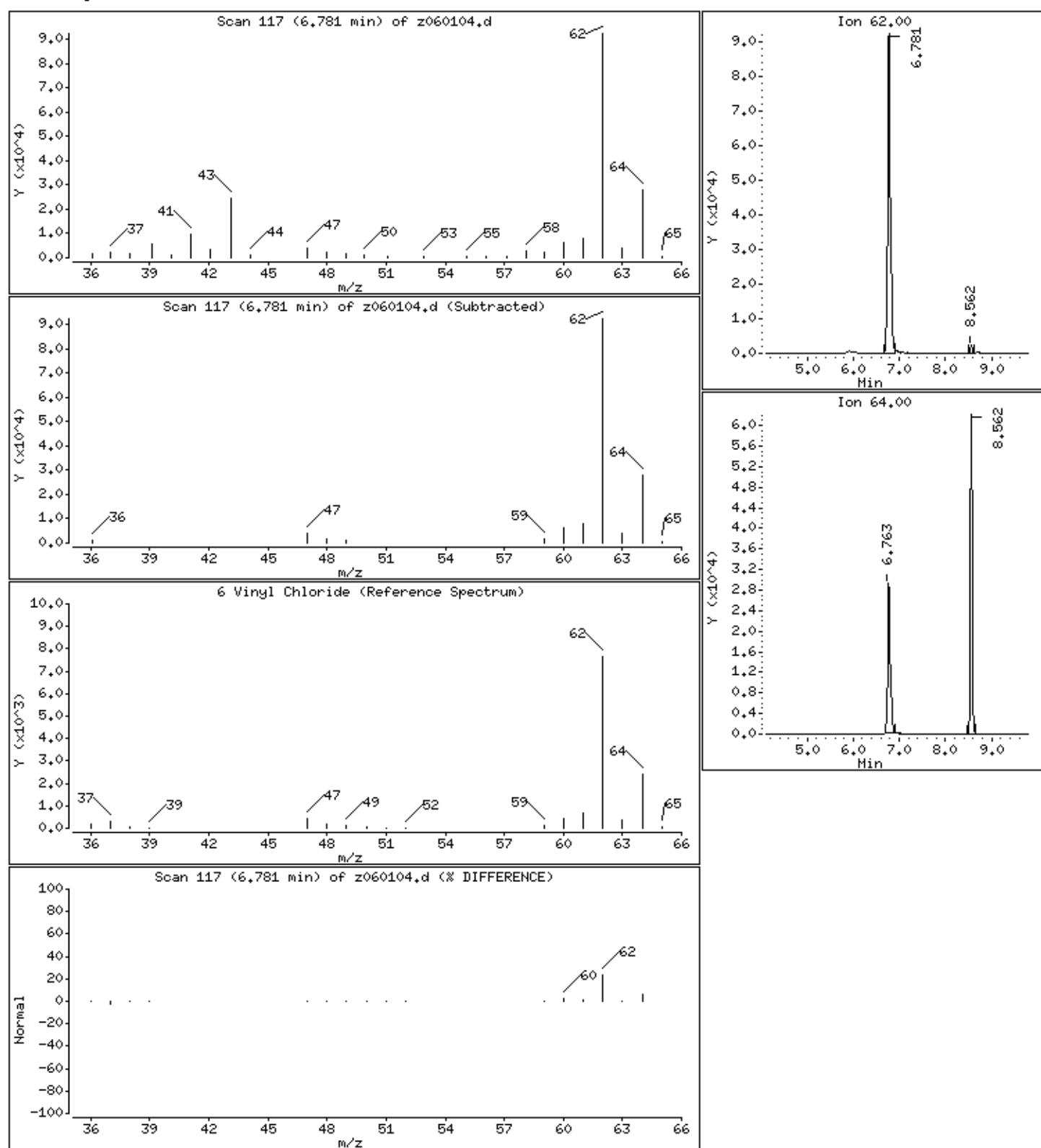
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 5



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.226 PPBV



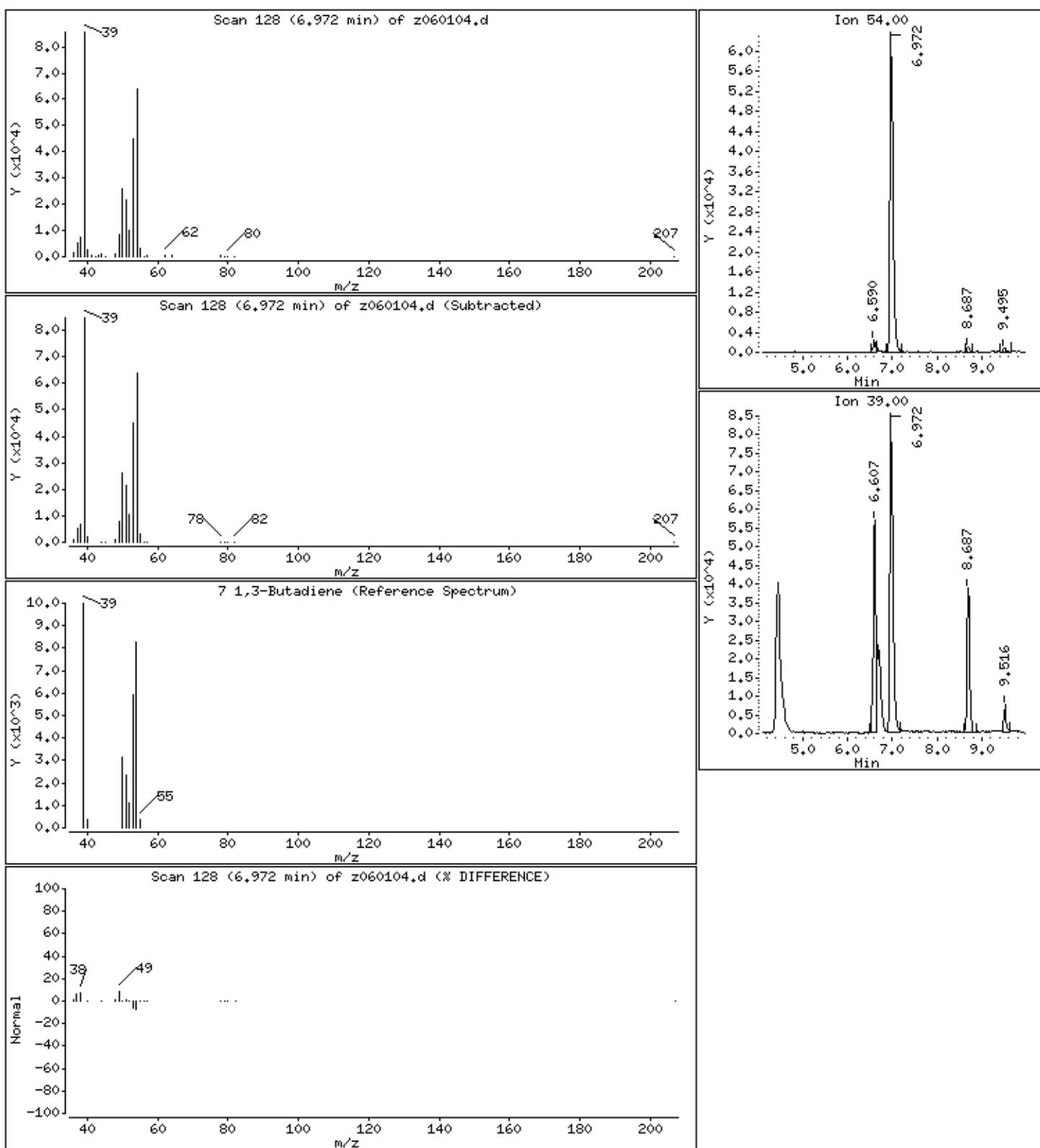
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 7

7 1,3-Butadiene

Concentration: 9.203 PPBV



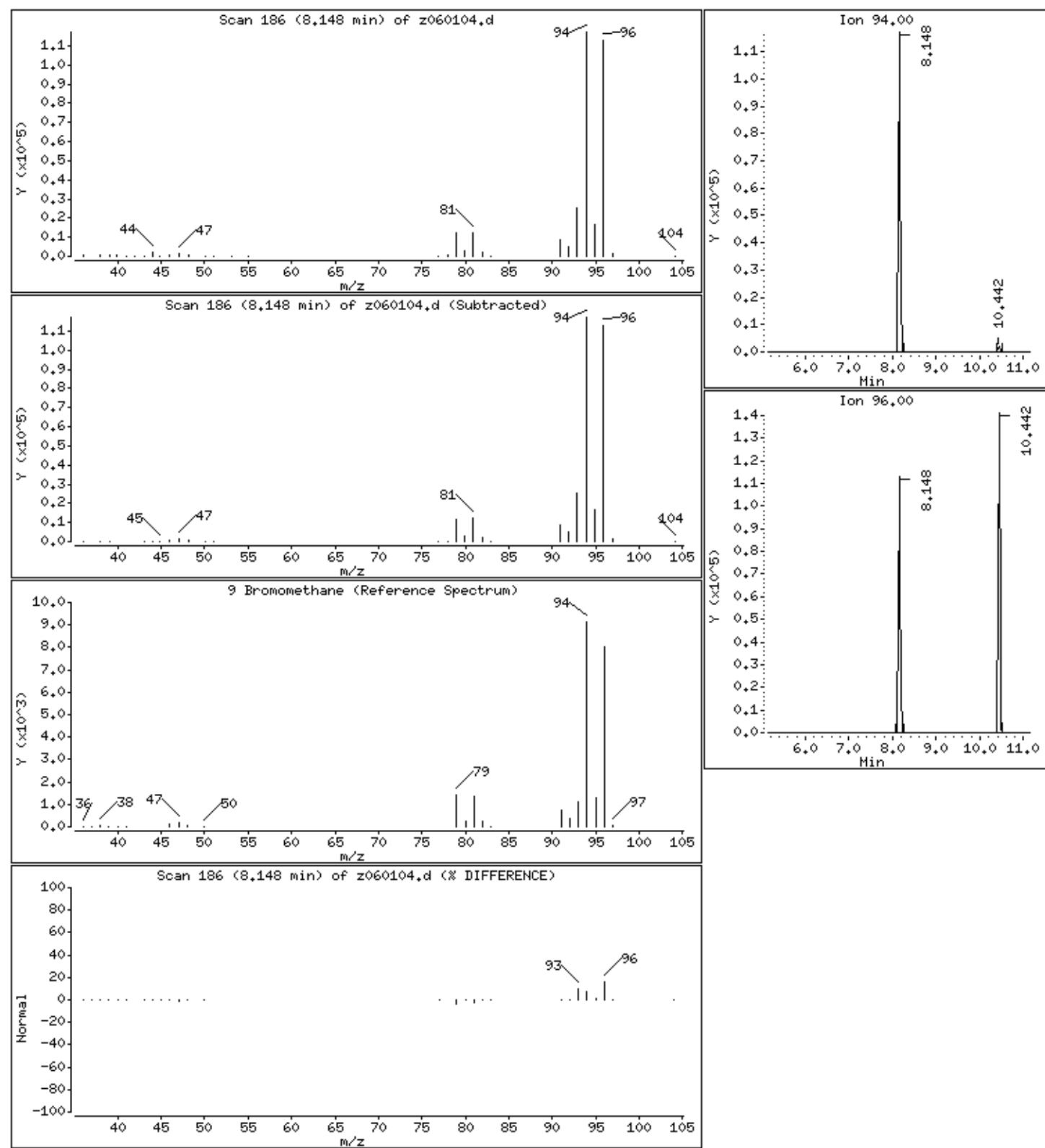
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column diameter: 0.32

Column phase: RTx-624

Concentration: 9.298 PPBV

9 Bromomethane



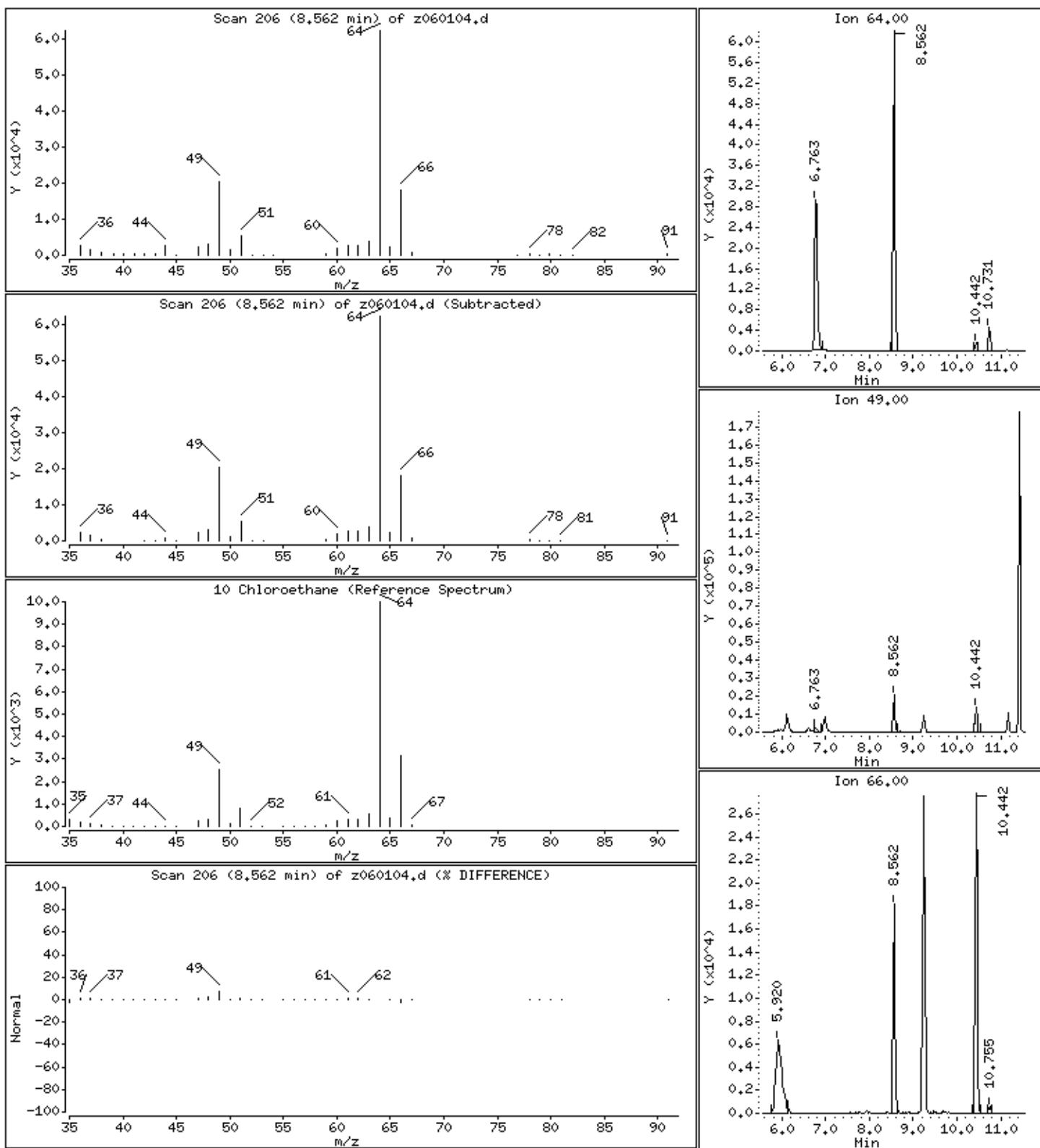
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i

Column phase: RTx-624
Operator: tjs
Column diameter: 0.32

10 Chloroethane

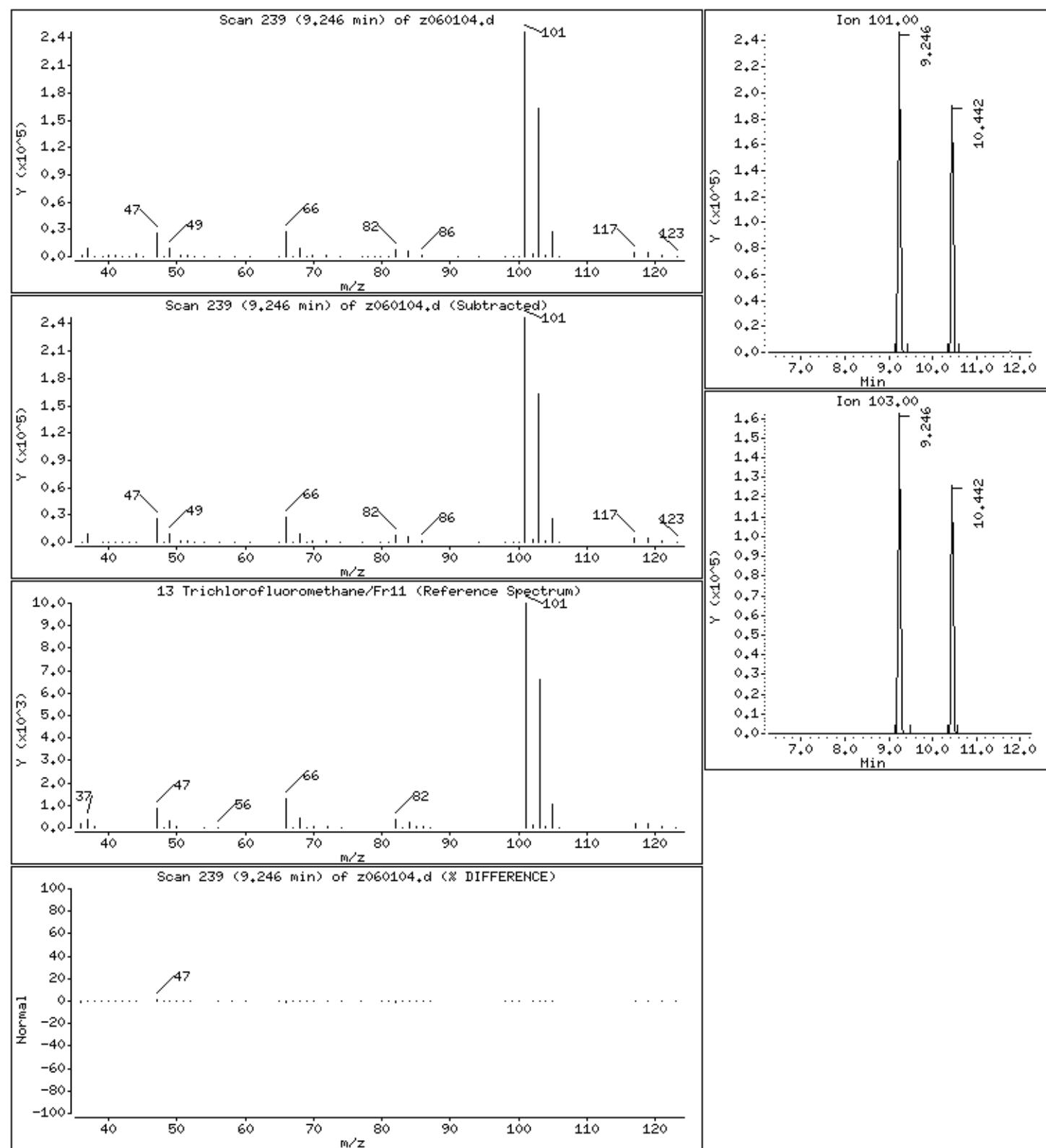
Concentration: 9.626 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.388 PPBV

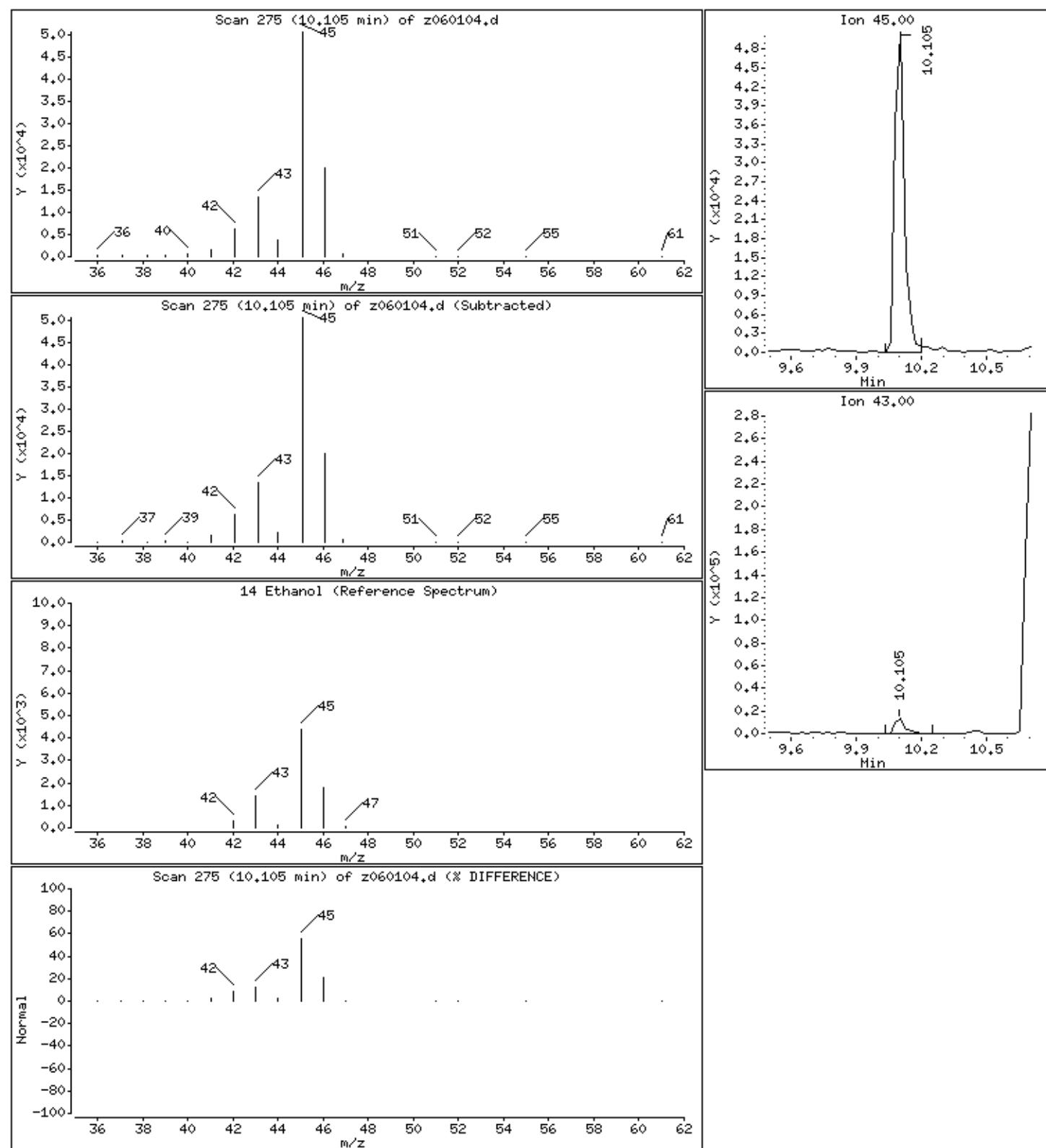
13 Trichlorofluoromethane/Fr11



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 8.722 PPBV

14 Ethanol

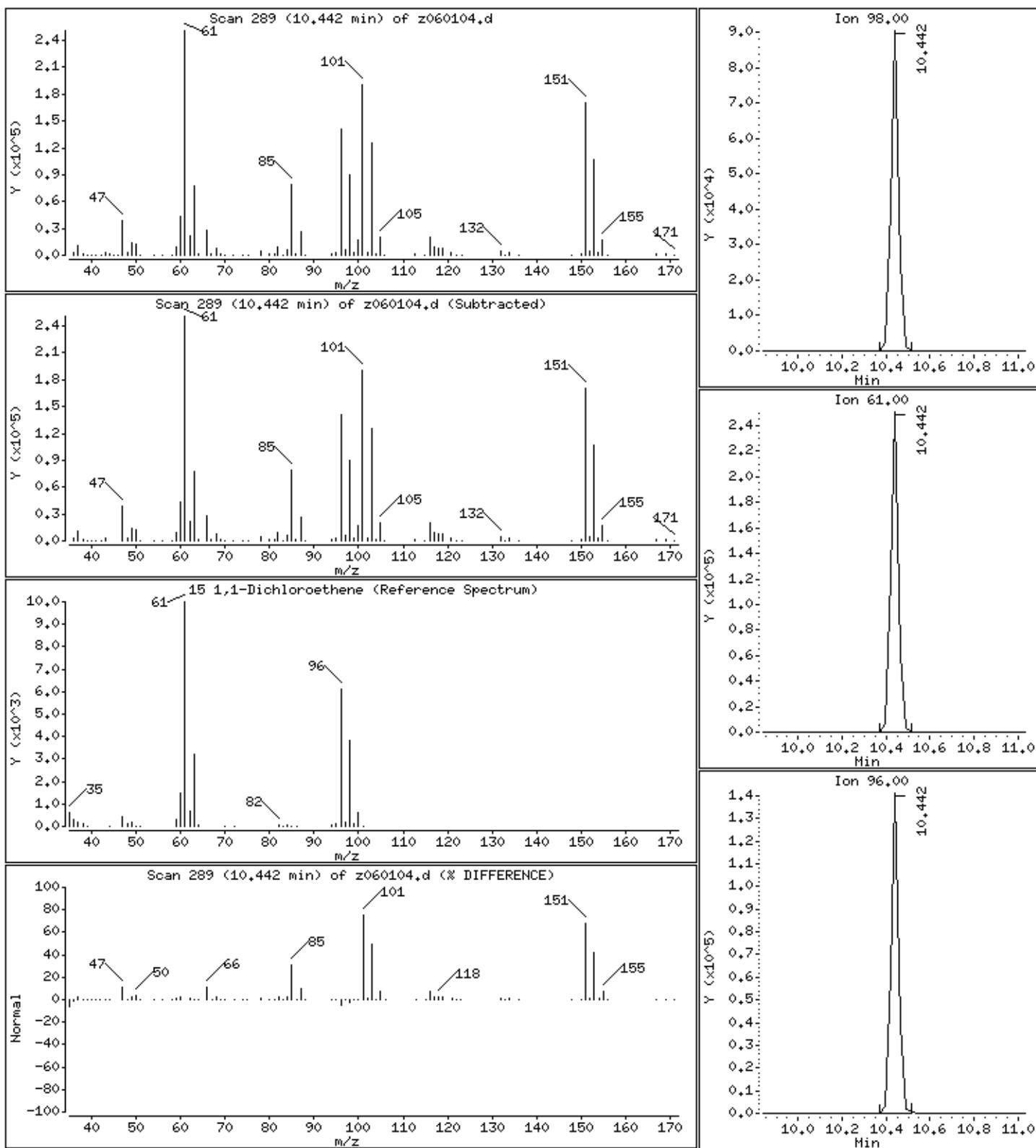


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.541 PPBV
Column diameter: 0.32

15 1,1-Dichloroethene

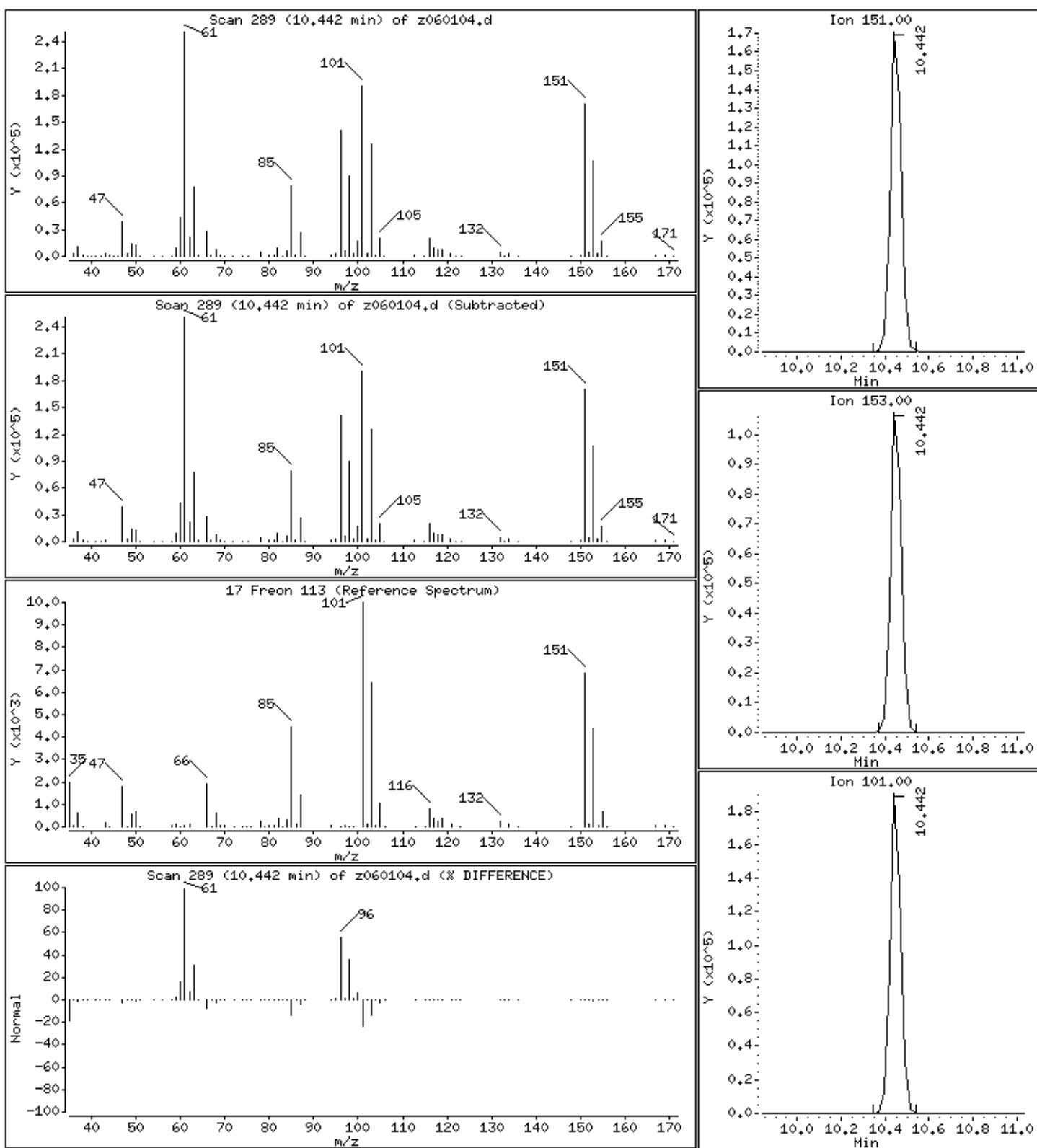
Concentration: 10.541 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.302 PPBV
Column diameter: 0.32

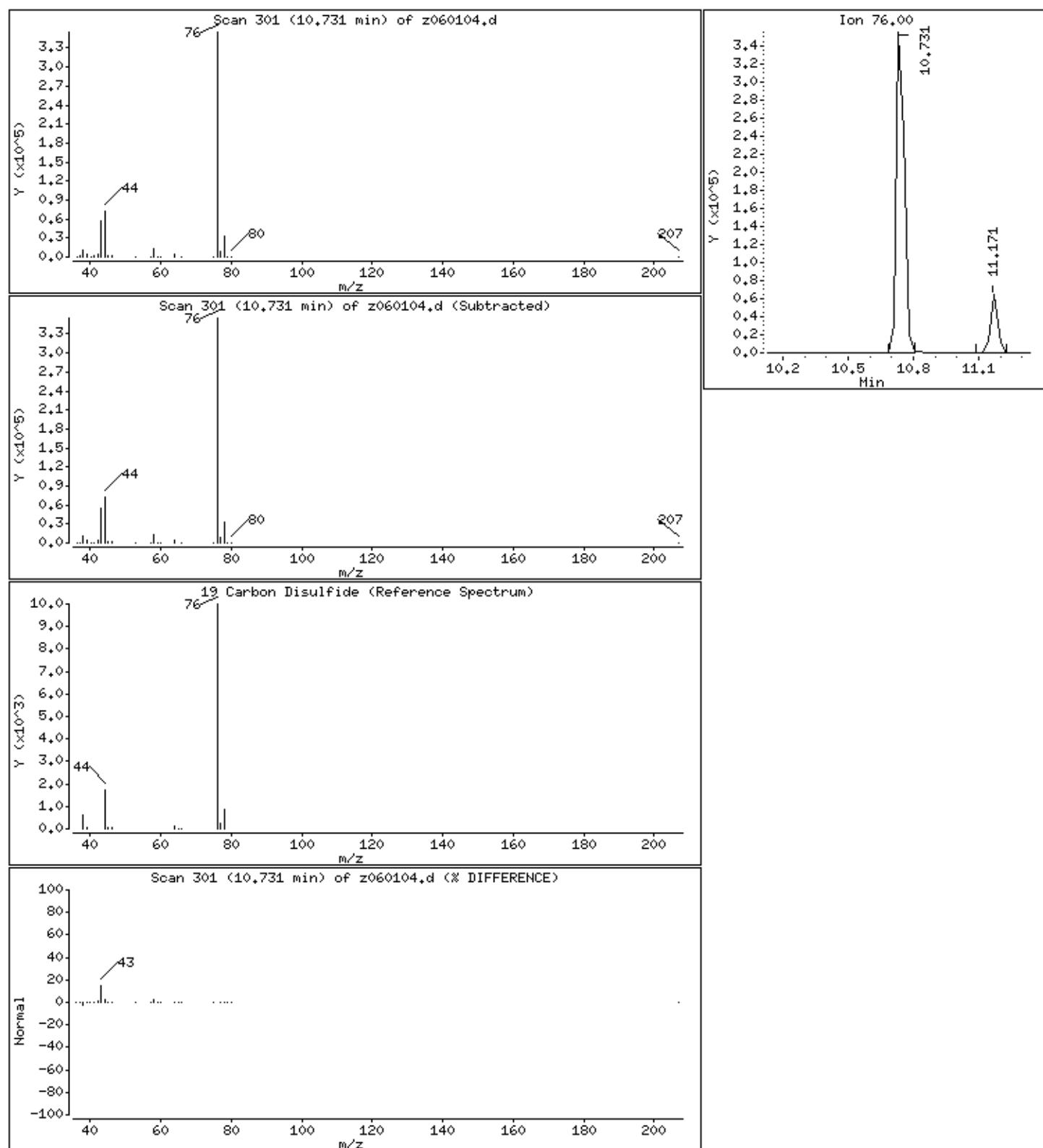
17 Freon 113



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.447 PPBV

19 Carbon Disulfide

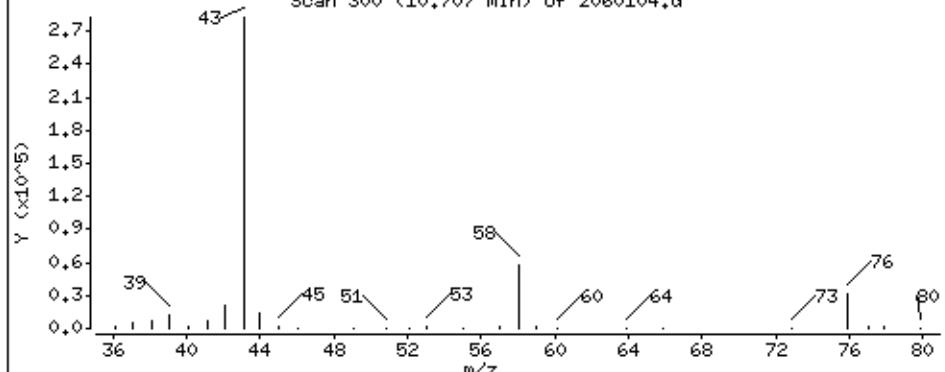


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

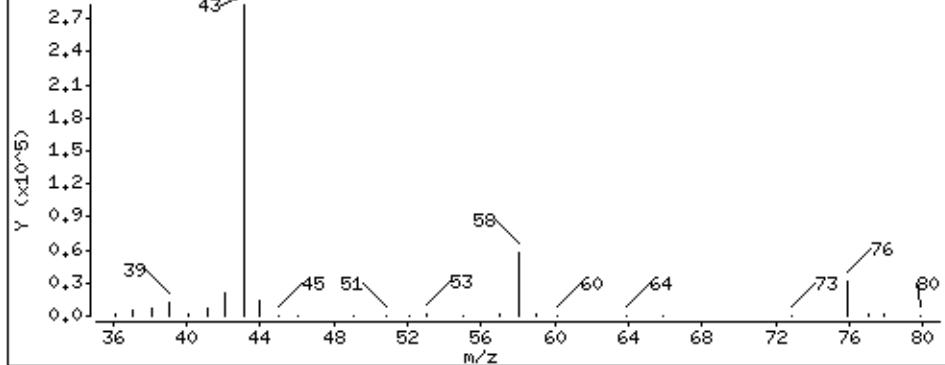
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 7.988 PPBV

20 Acetone

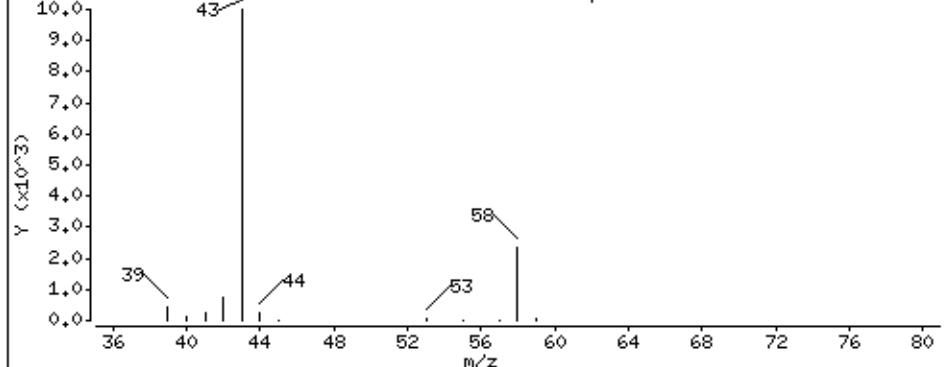
Scan 300 (10.707 min) of z060104.d



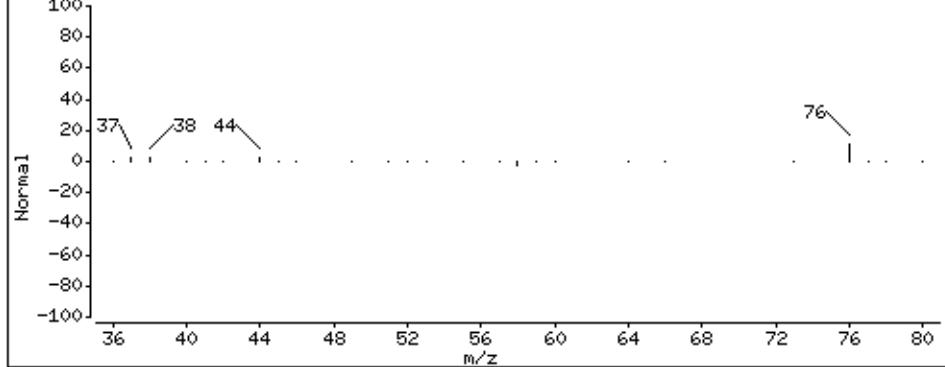
Scan 300 (10.707 min) of z060104.d (Subtracted)



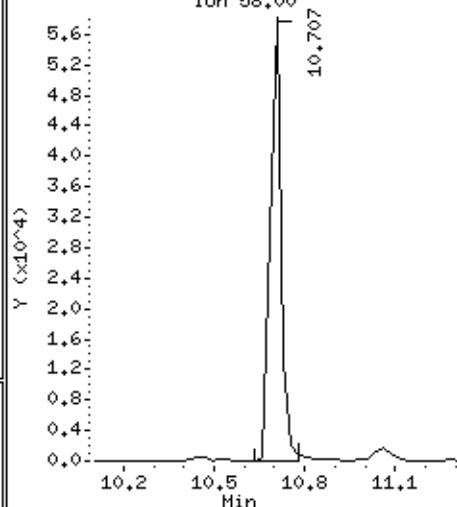
20 Acetone (Reference Spectrum)



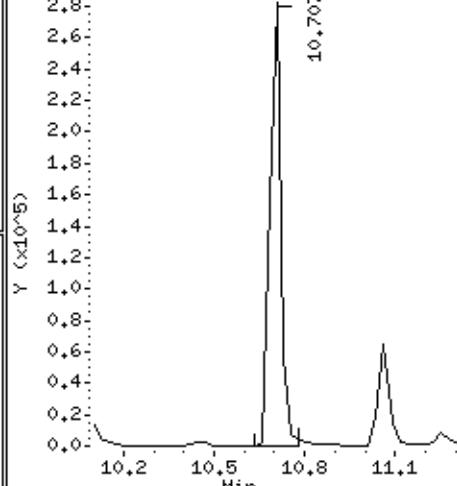
Scan 300 (10.707 min) of z060104.d (% DIFFERENCE)



Ion 58.00



Ion 43.00

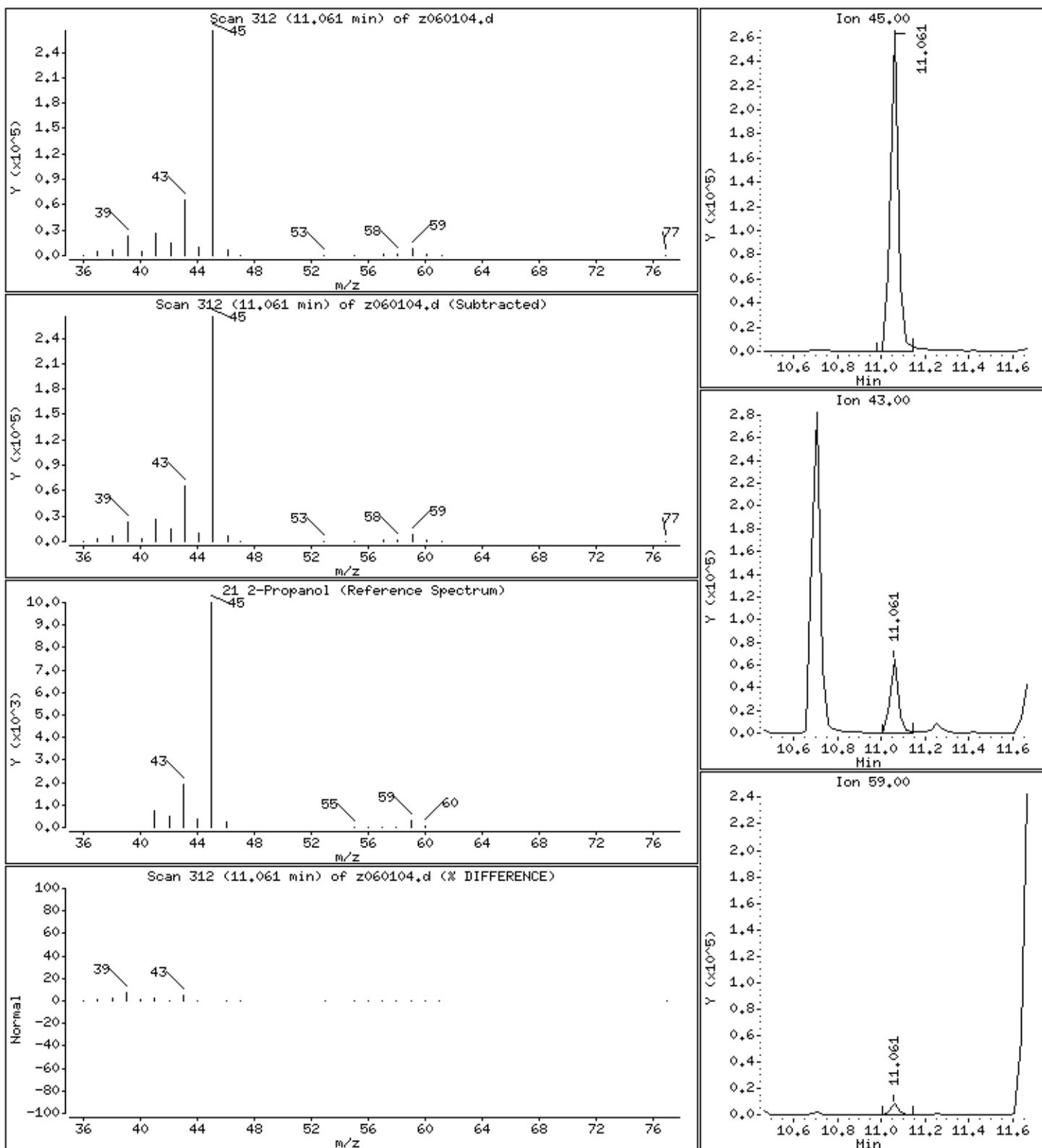


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.829 PPBV
Column diameter: 0.32

21 2-Propanol

Concentration: 10.829 PPBV

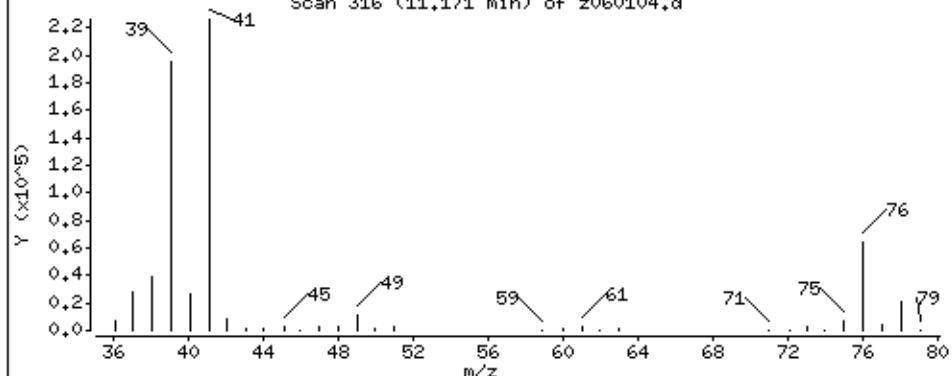


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

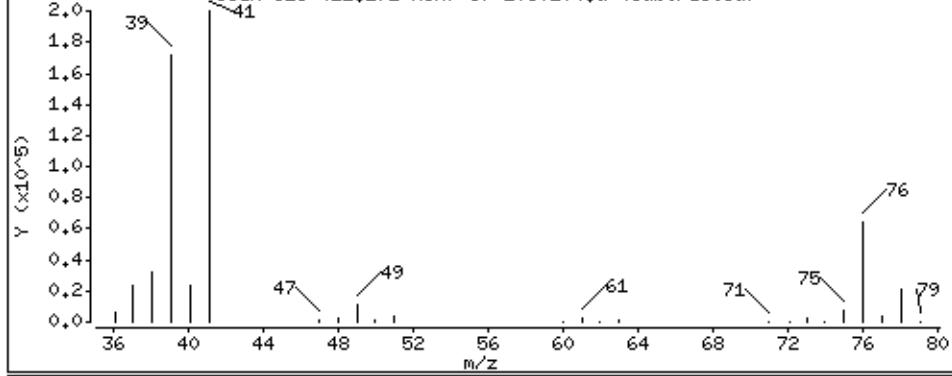
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.041 PPBV

22 3-Chloroprene

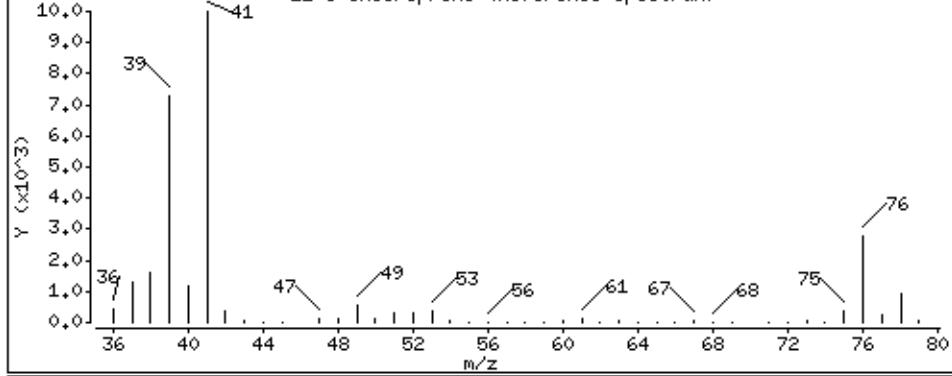
Scan 316 (11.171 min) of z060104.d



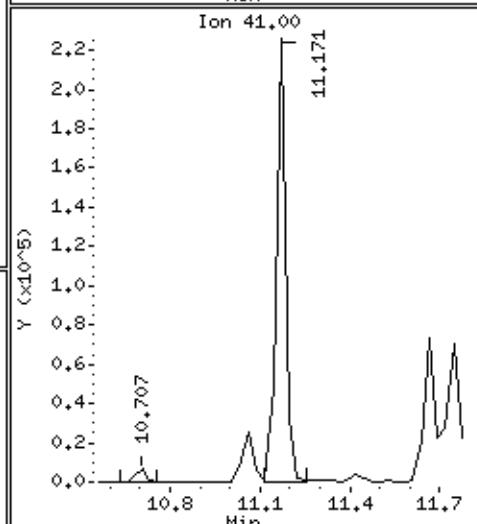
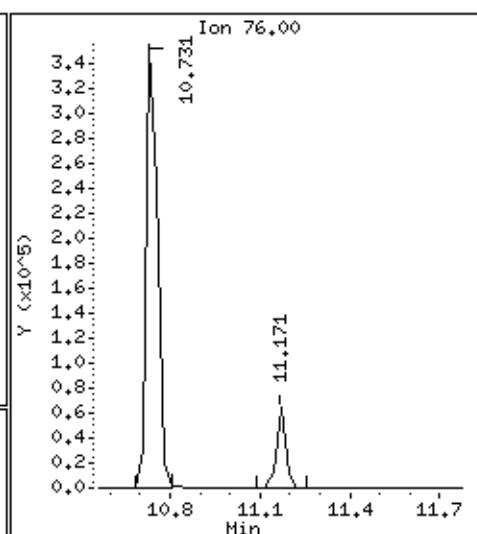
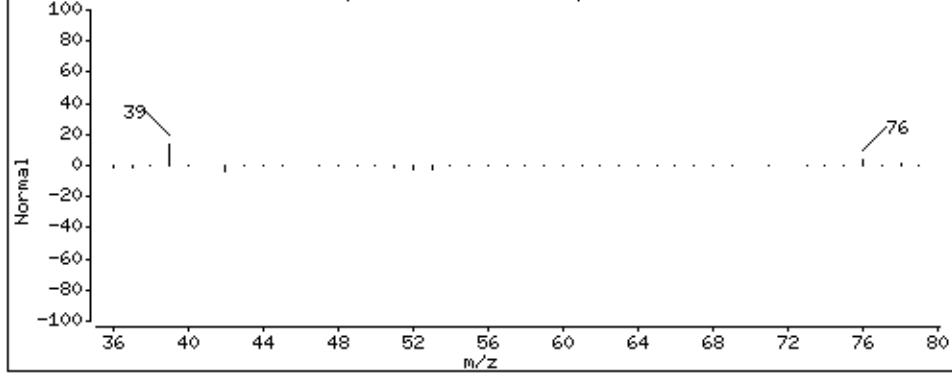
Scan 316 (11.171 min) of z060104.d (Subtracted)



22 3-Chloroprene (Reference Spectrum)



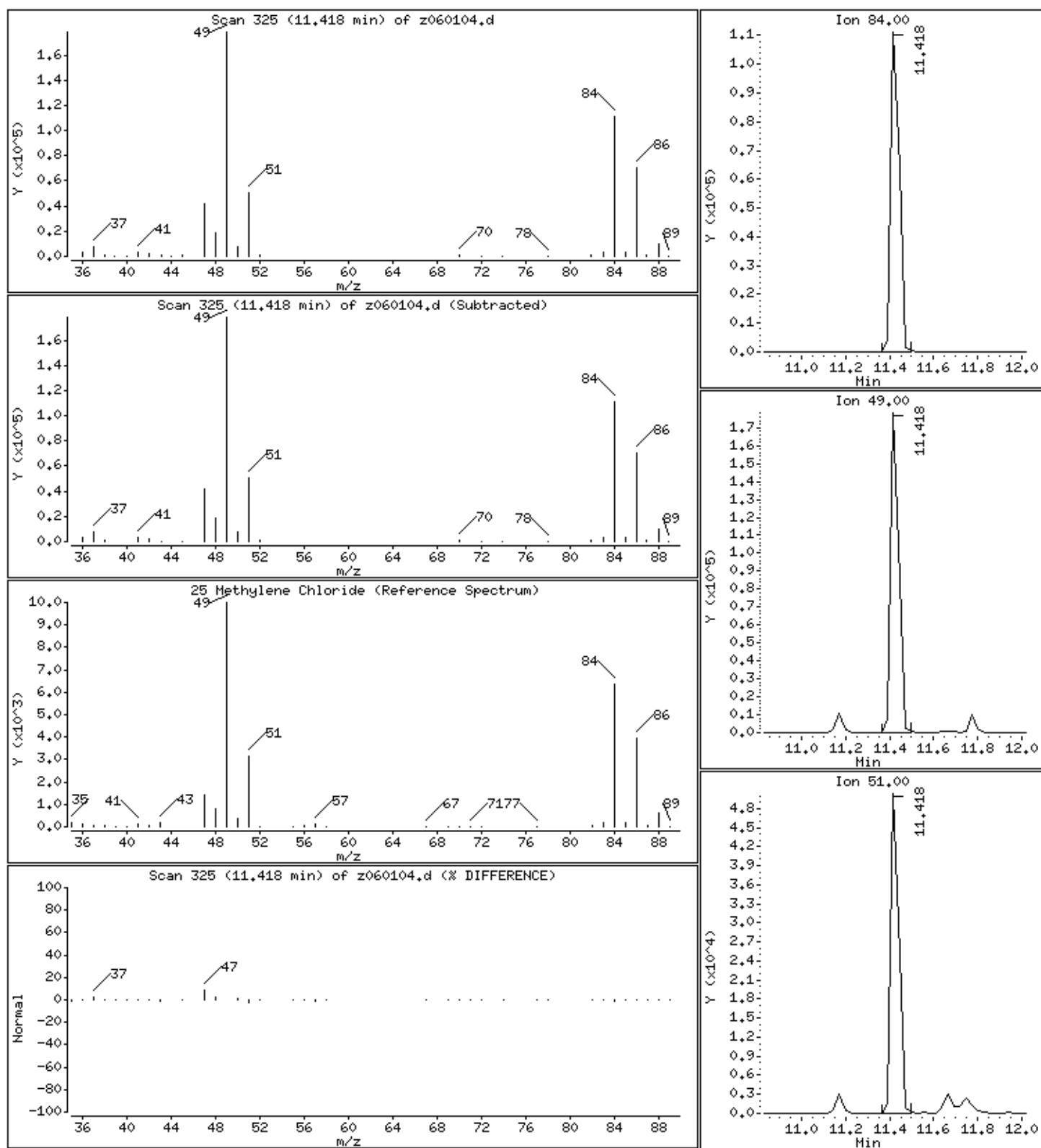
Scan 316 (11.171 min) of z060104.d (% DIFFERENCE)



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.067 PPBV

25 Methylene Chloride



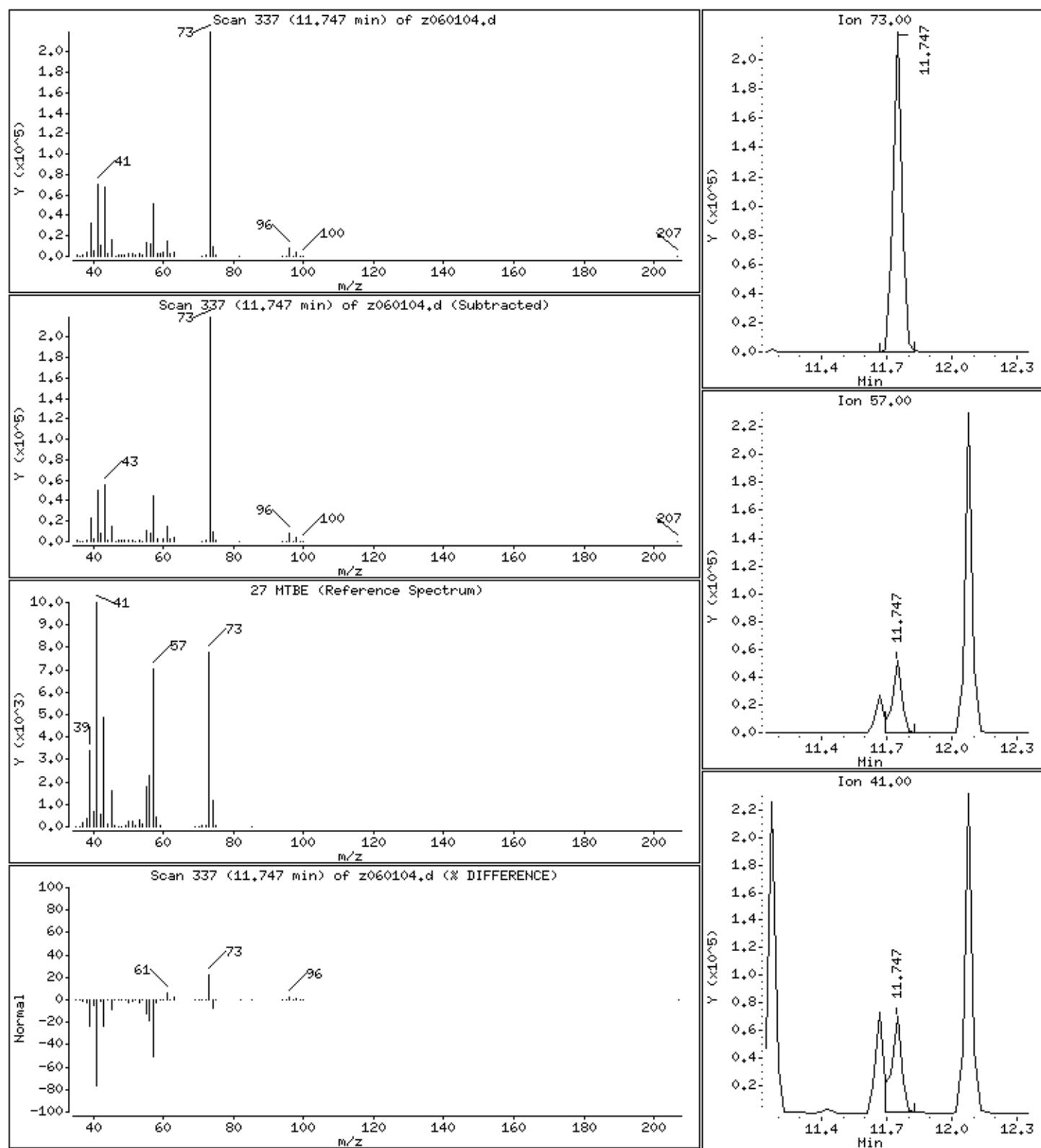
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 19

27 MTBE

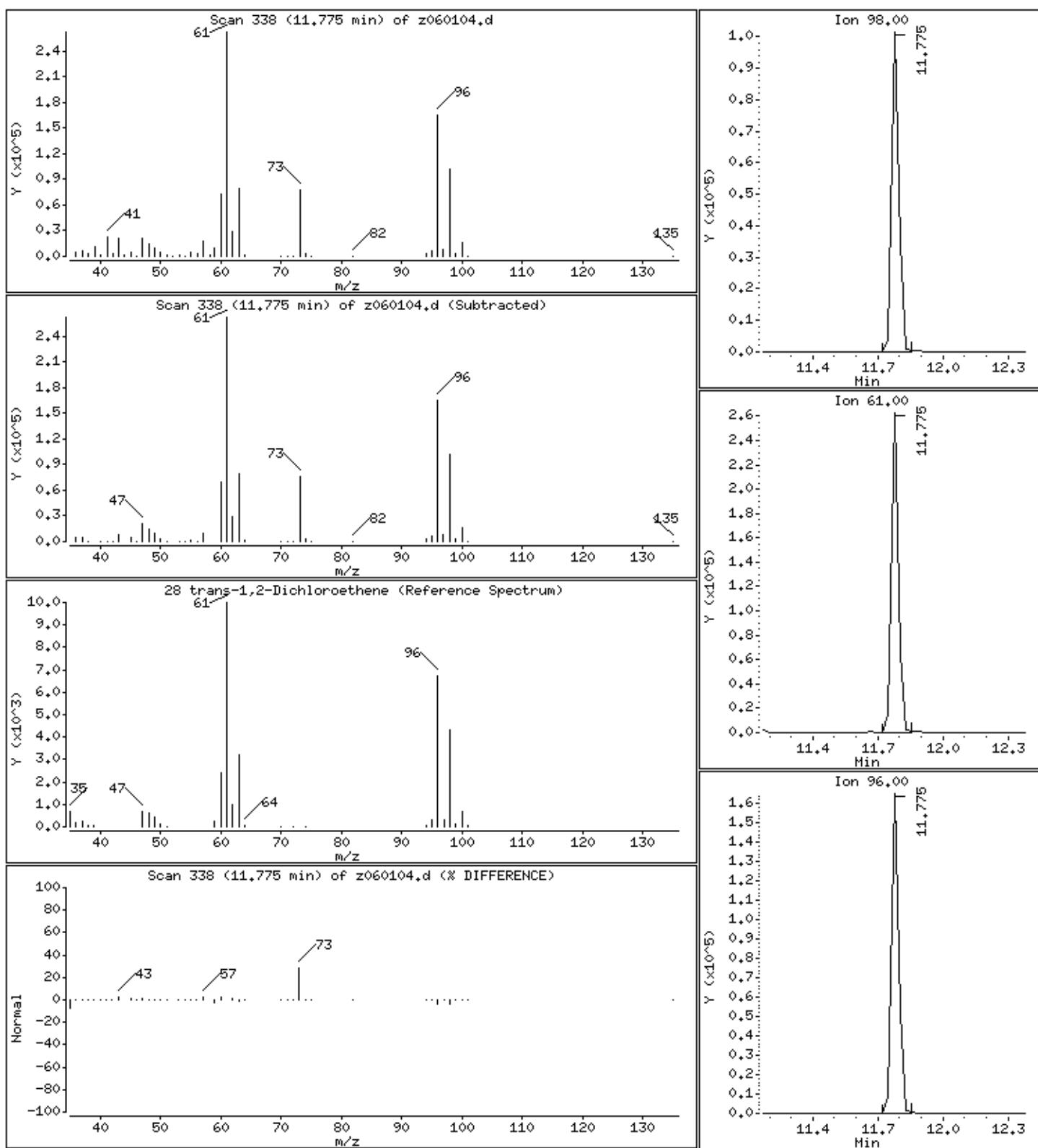
Concentration: 10.074 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.375 PPBV

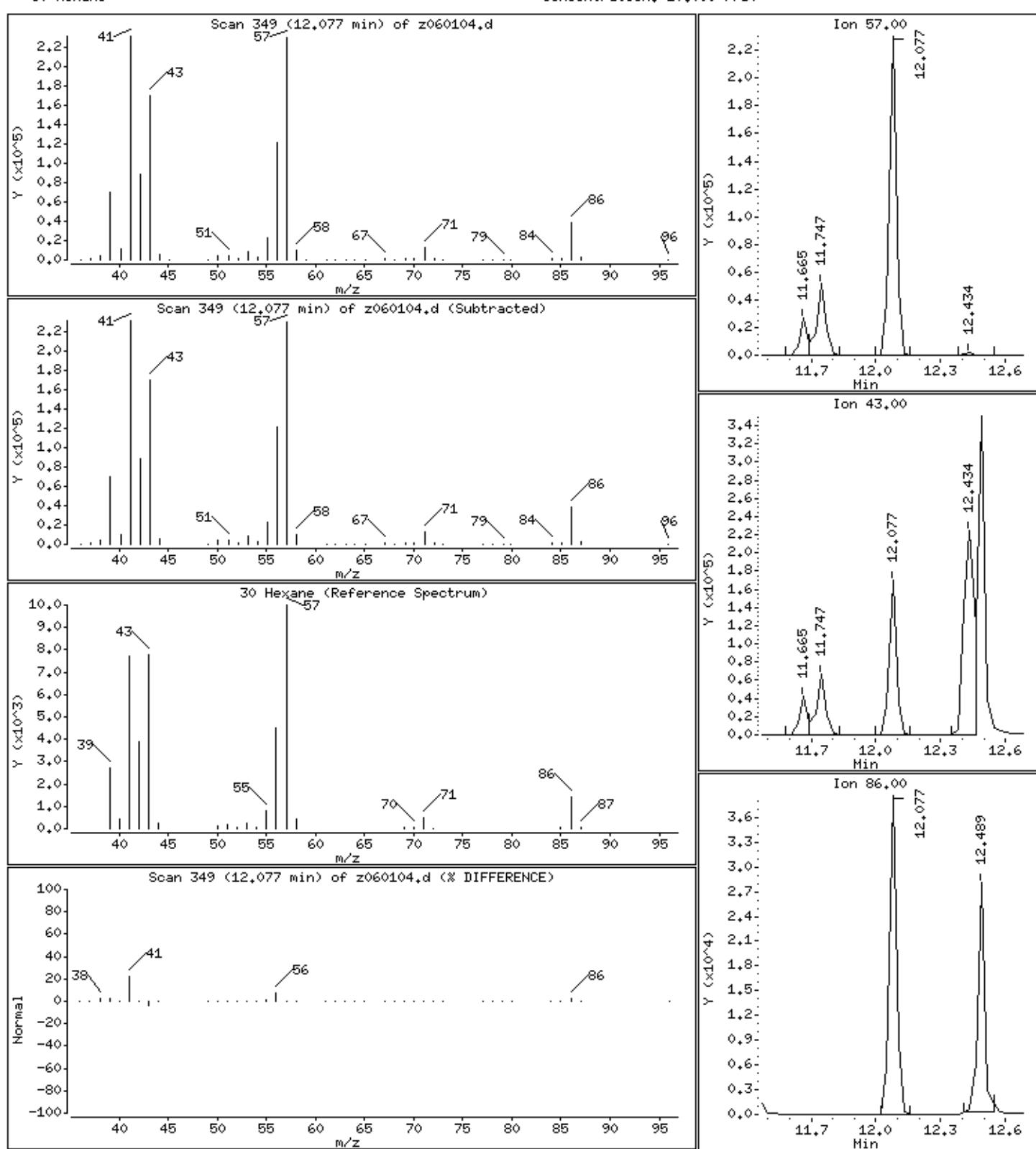
28 trans-1,2-Dichloroethene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.099 PPBV

Page 21

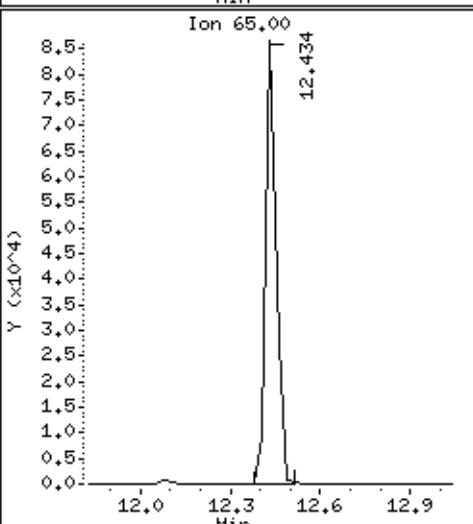
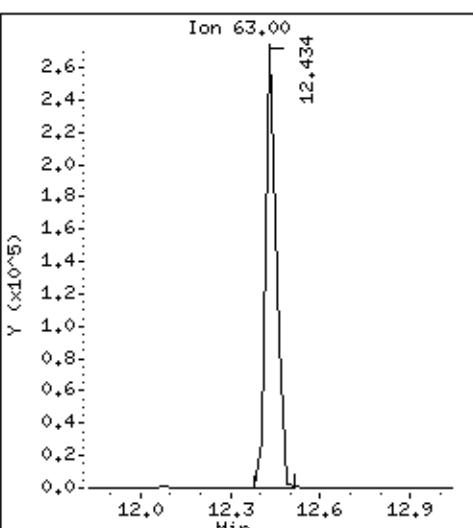
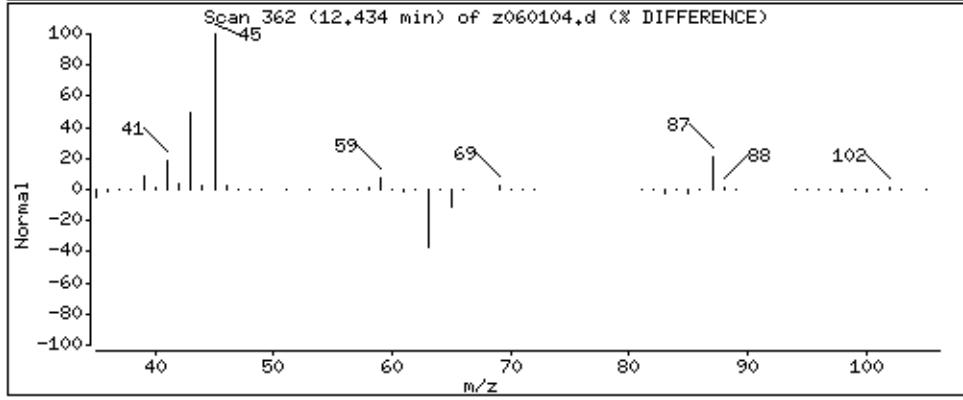
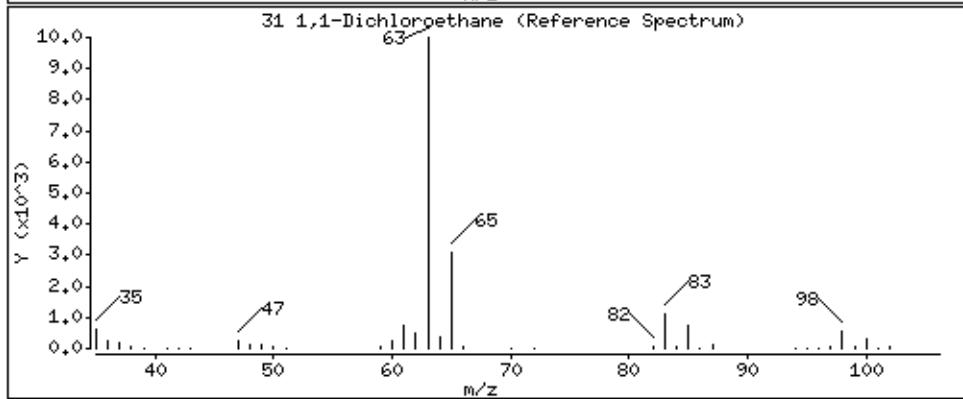
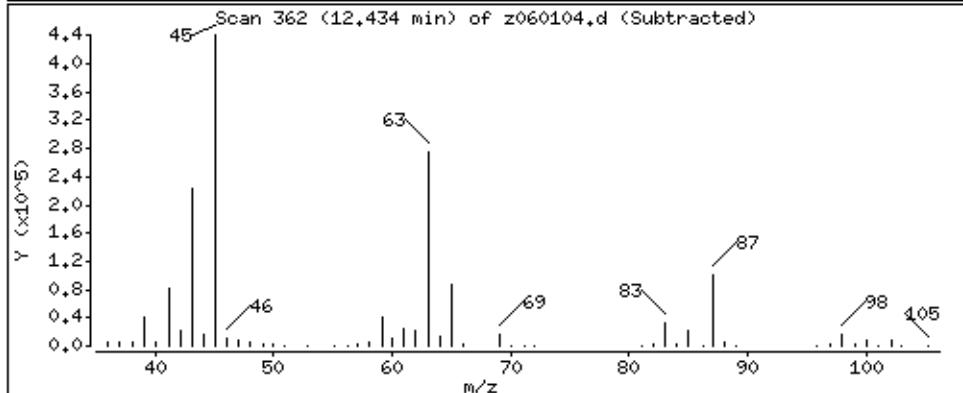
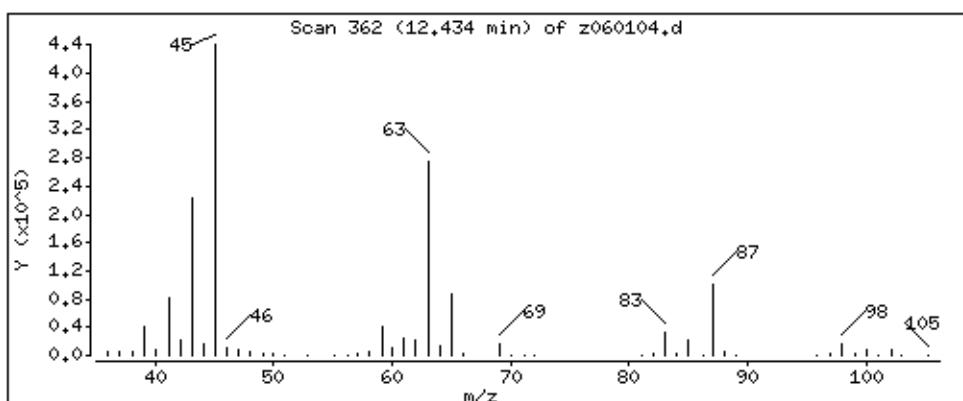


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.939 PPBV
Column diameter: 0.32

31 1,1-Dichloroethane

Scan 362 (12.434 min) of z060104.d



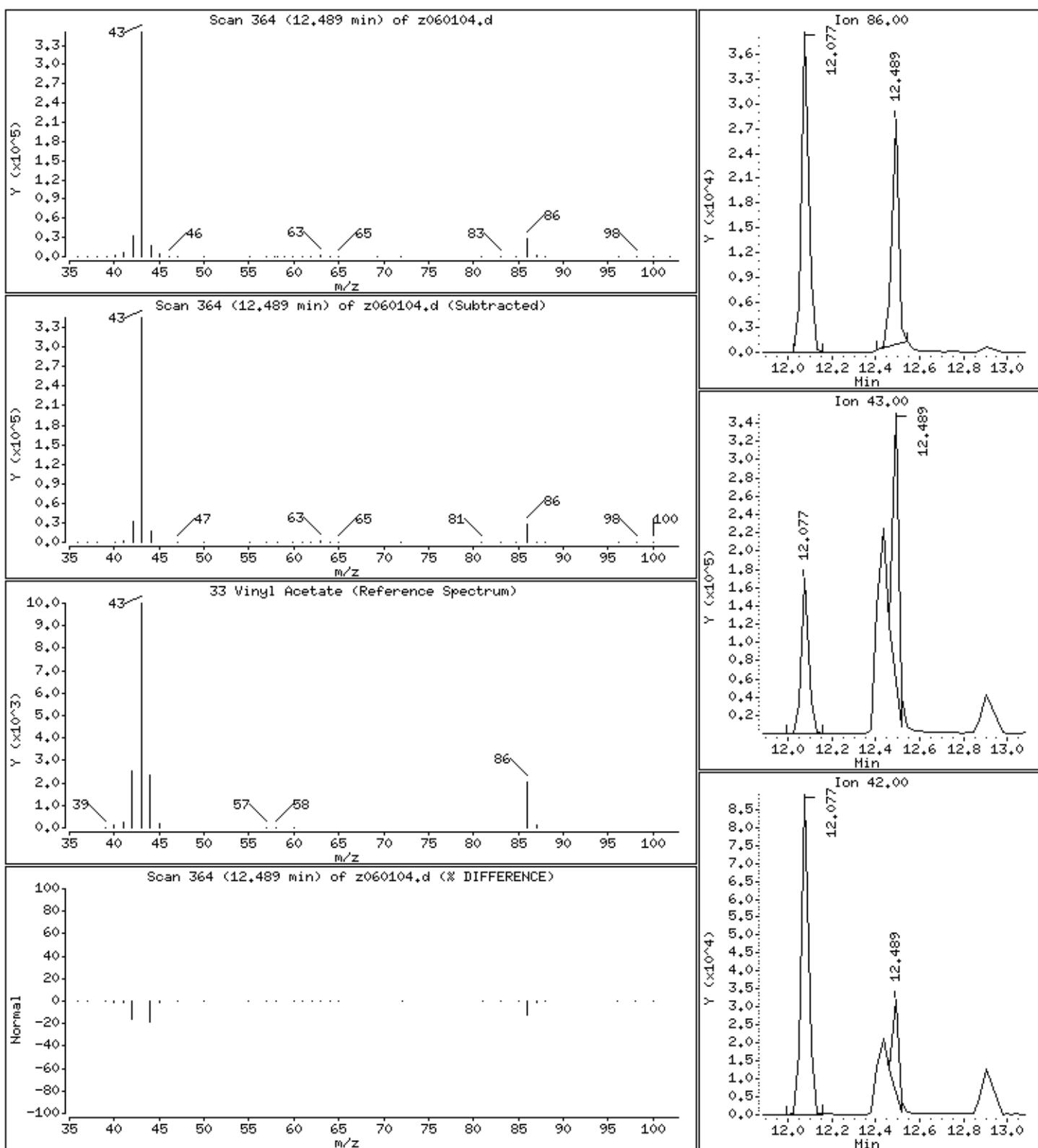
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 23

33 Vinyl Acetate

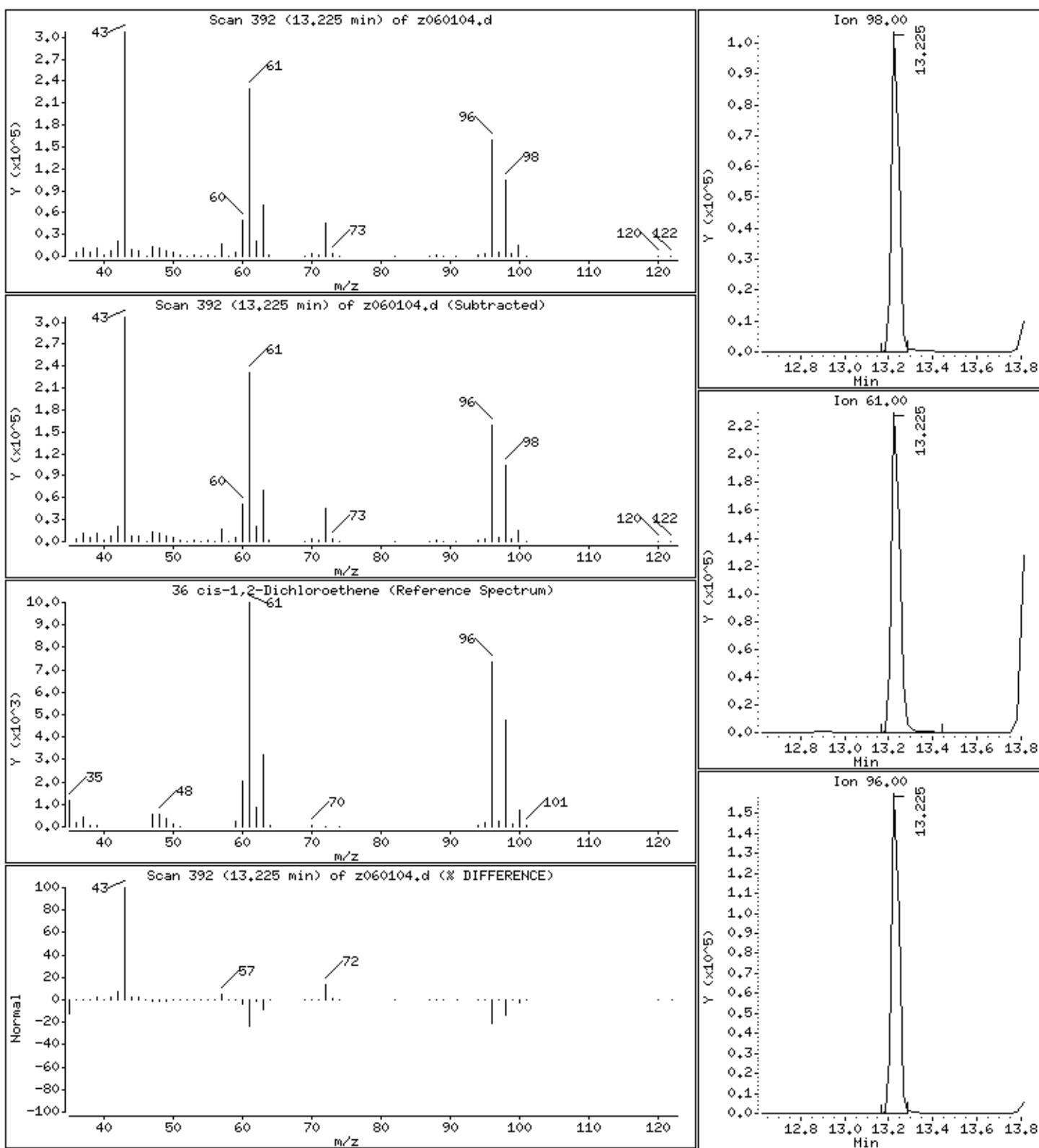
Concentration: 9.985 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.714 PPBV

36 cis-1,2-Dichloroethene



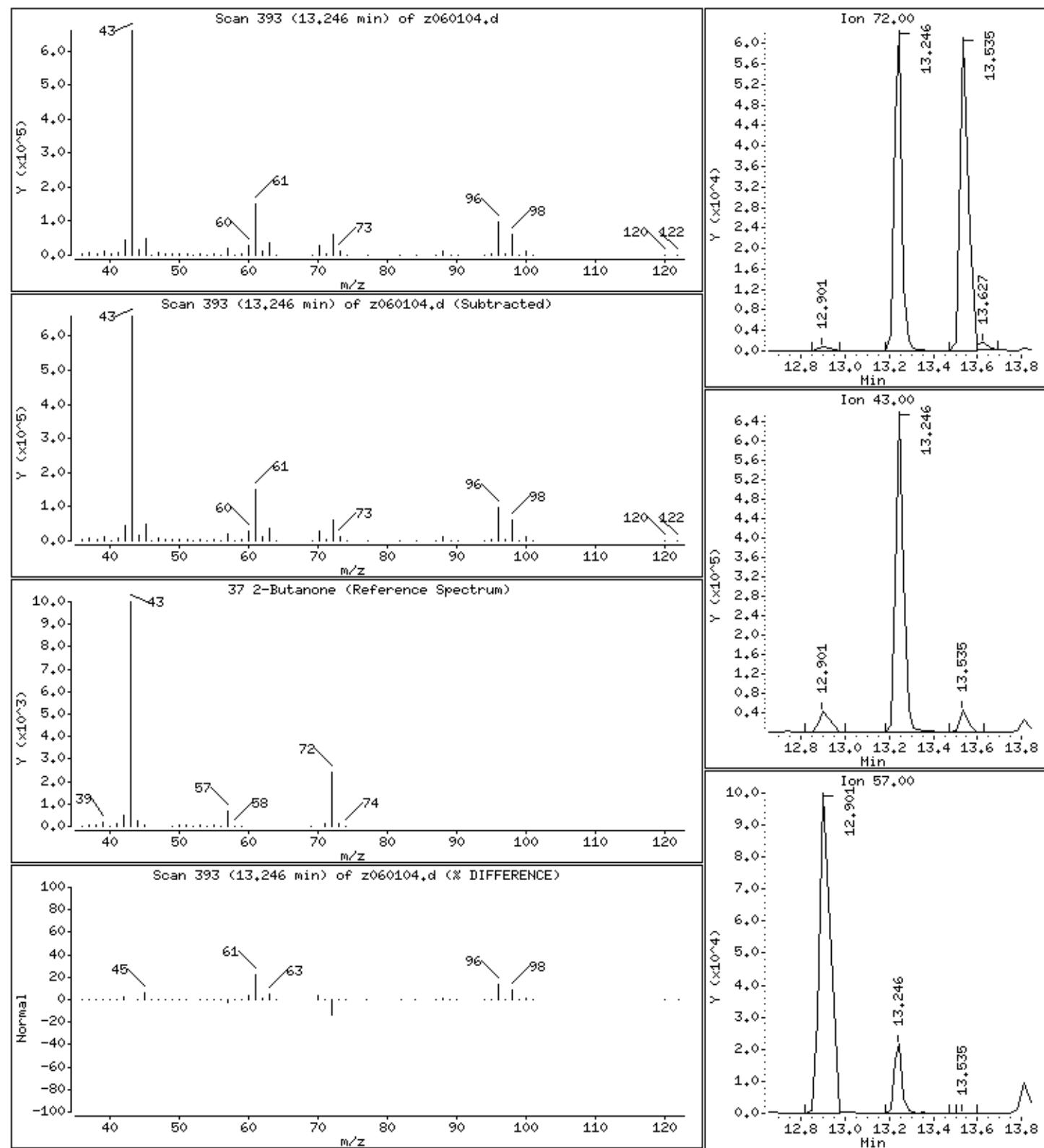
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i

Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Concentration: 10.994 PPBV

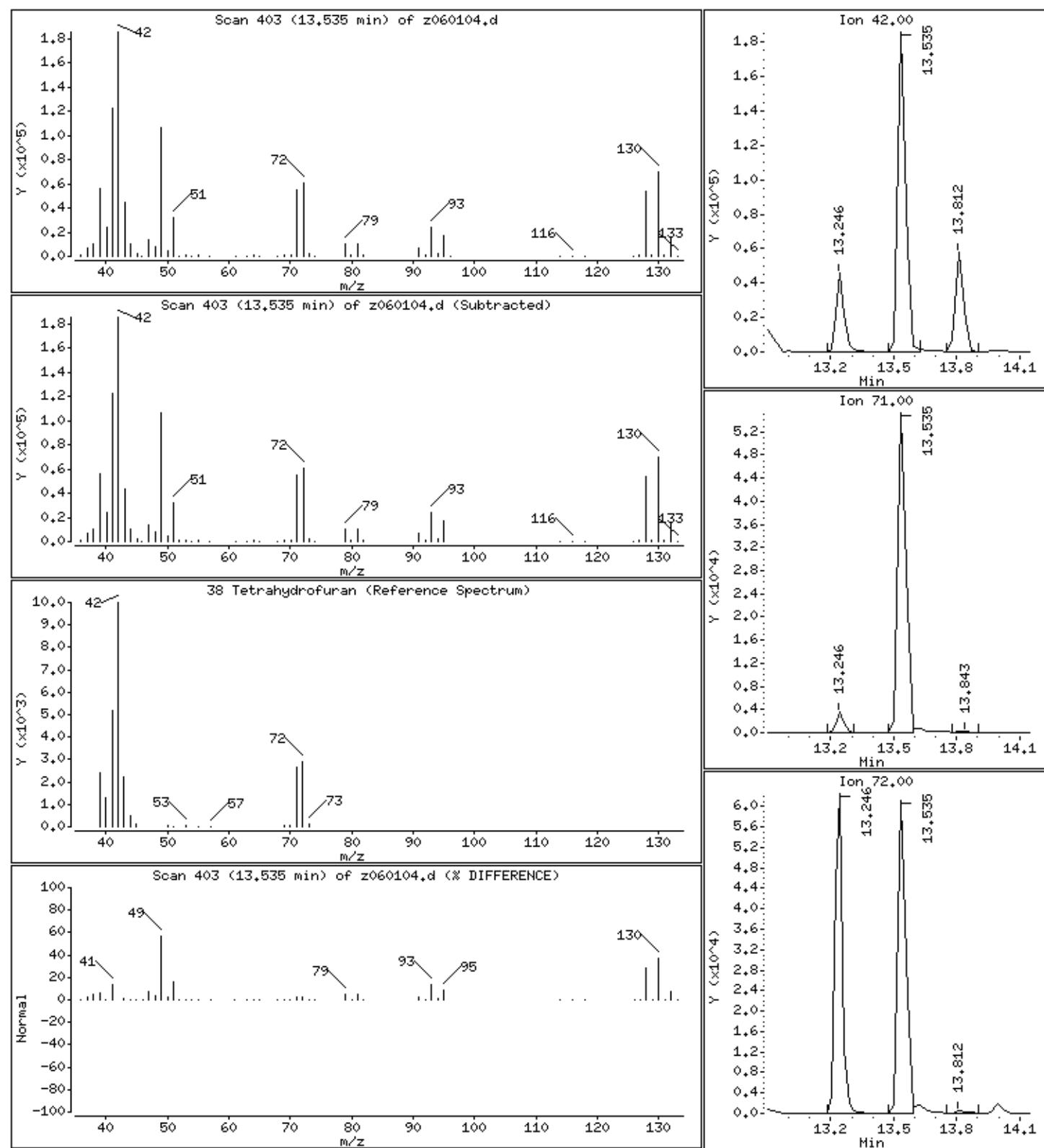
37 2-Butanone



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

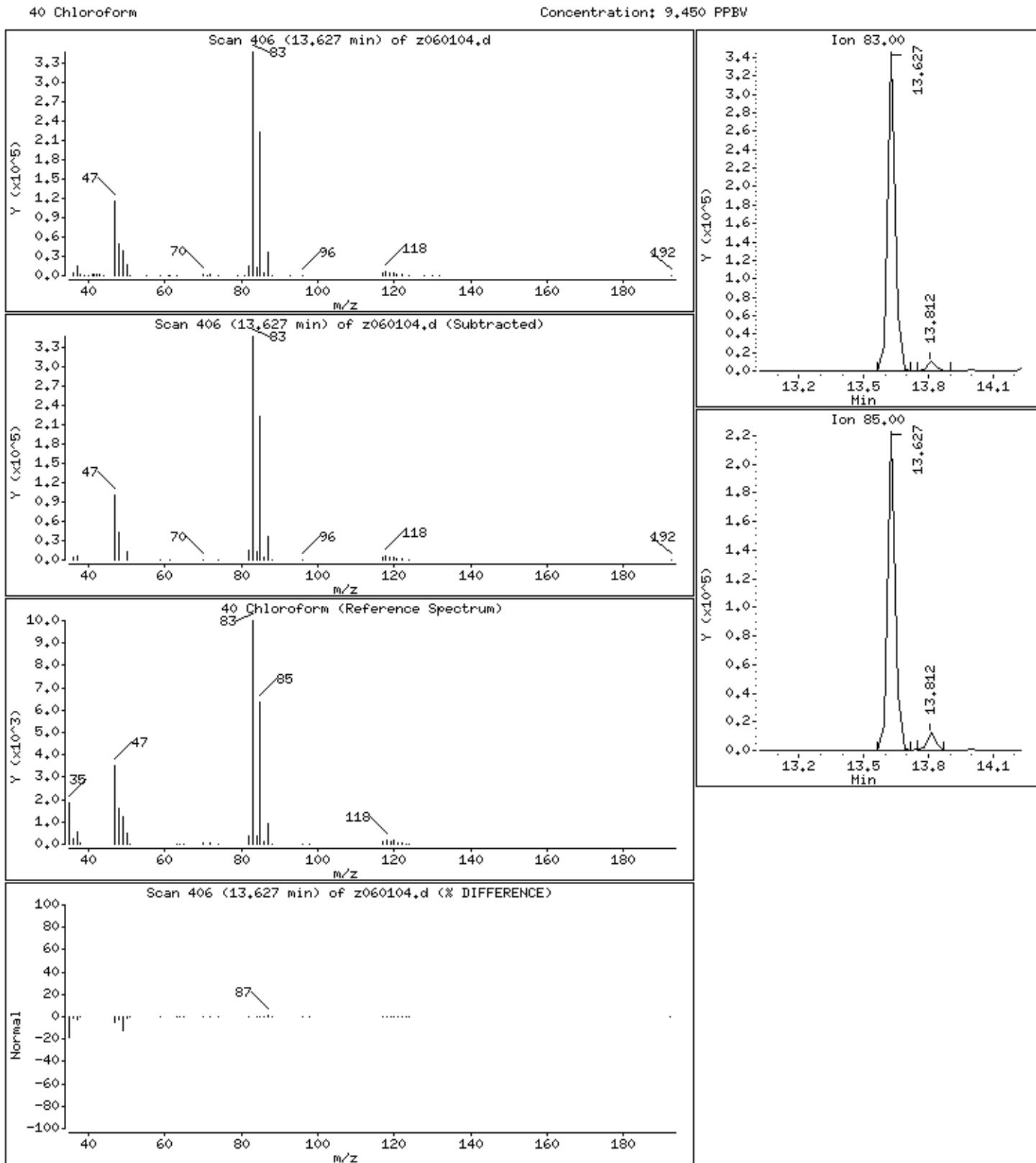
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.897 PPBV

38 Tetrahydrofuran



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

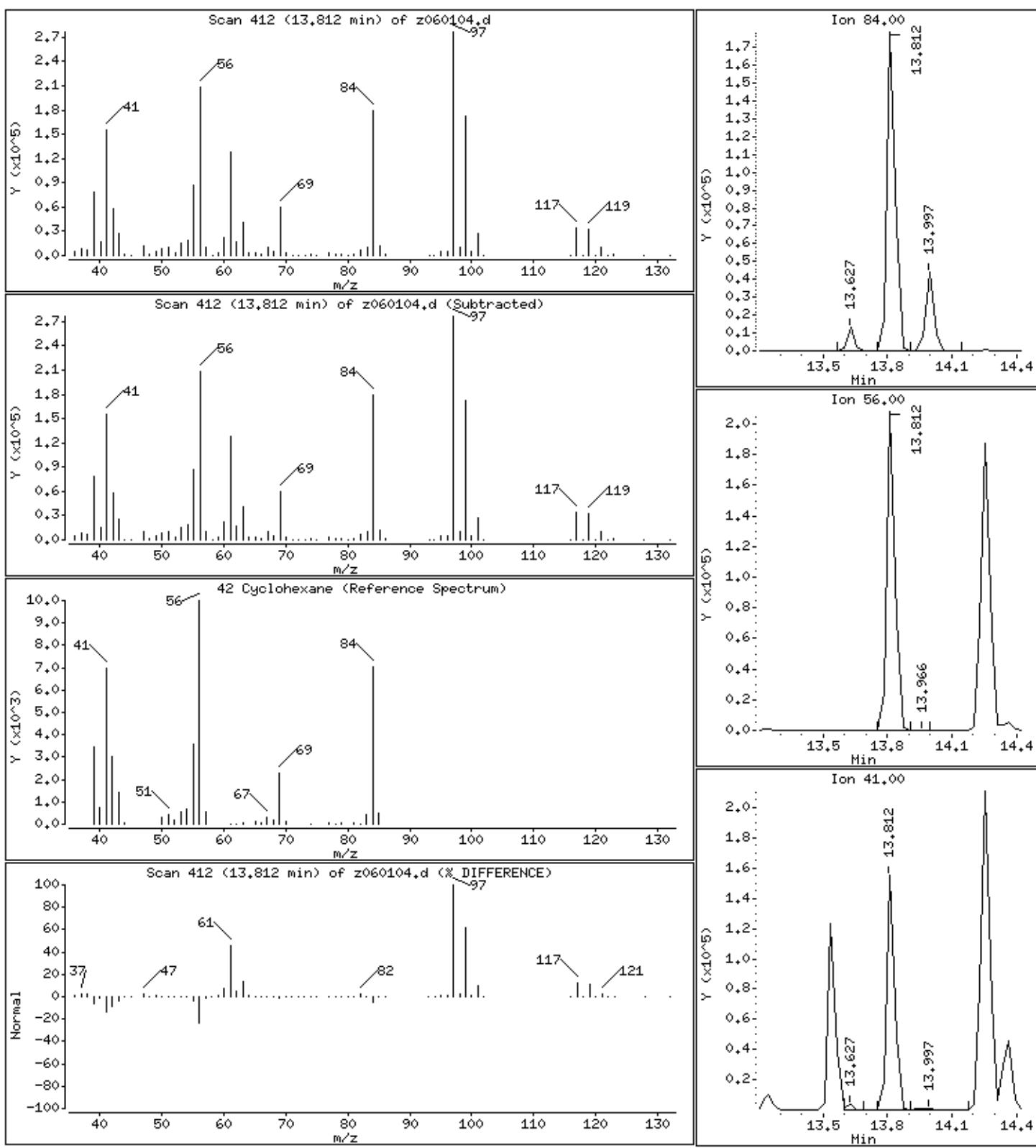
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.450 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.608 PPBV
Column diameter: 0.32

42 Cyclohexane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i

Page 29

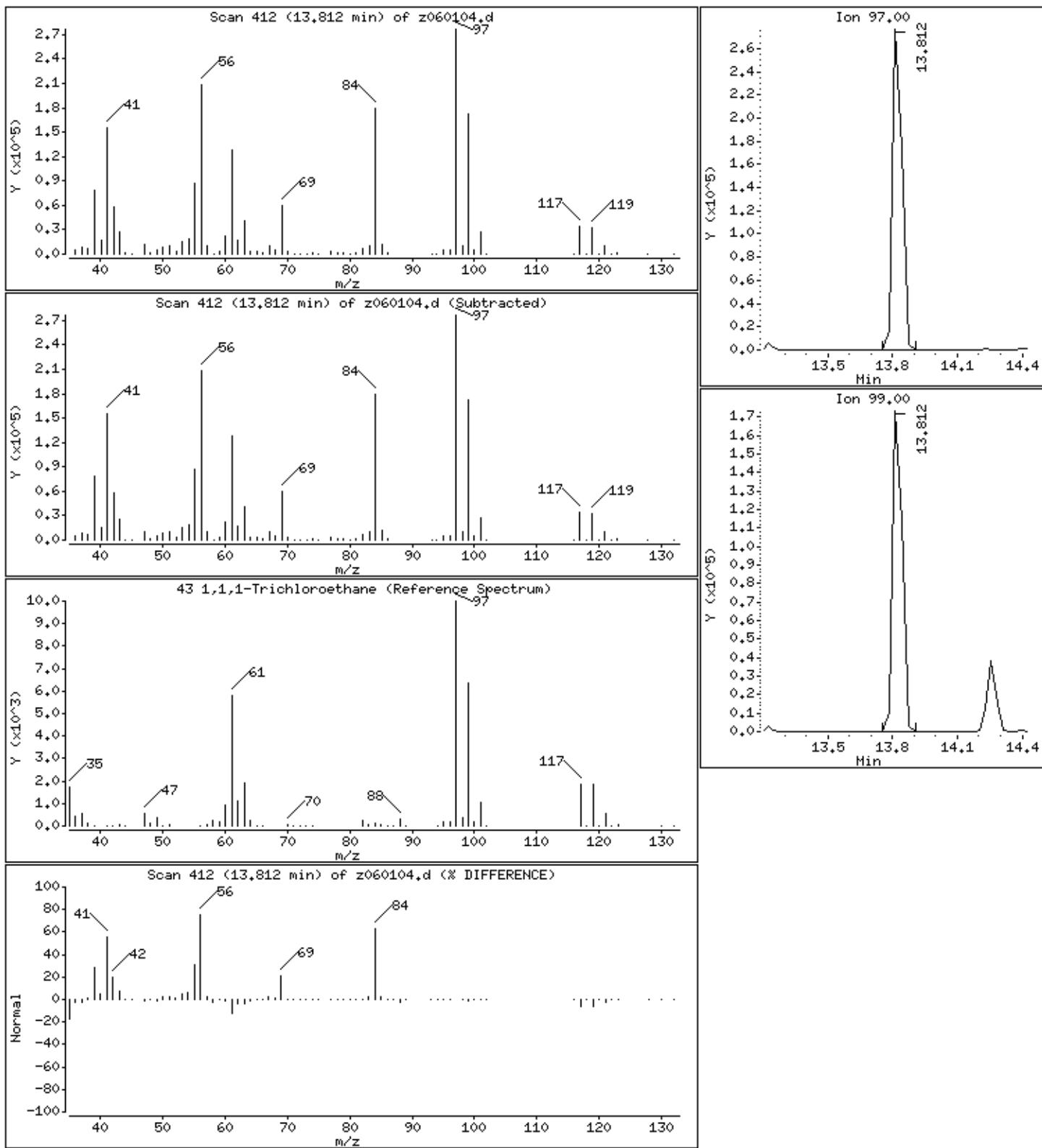
Operator: tjs

Column phase: RTx-624

Column diameter: 0.32

43 1,1,1-Trichloroethane

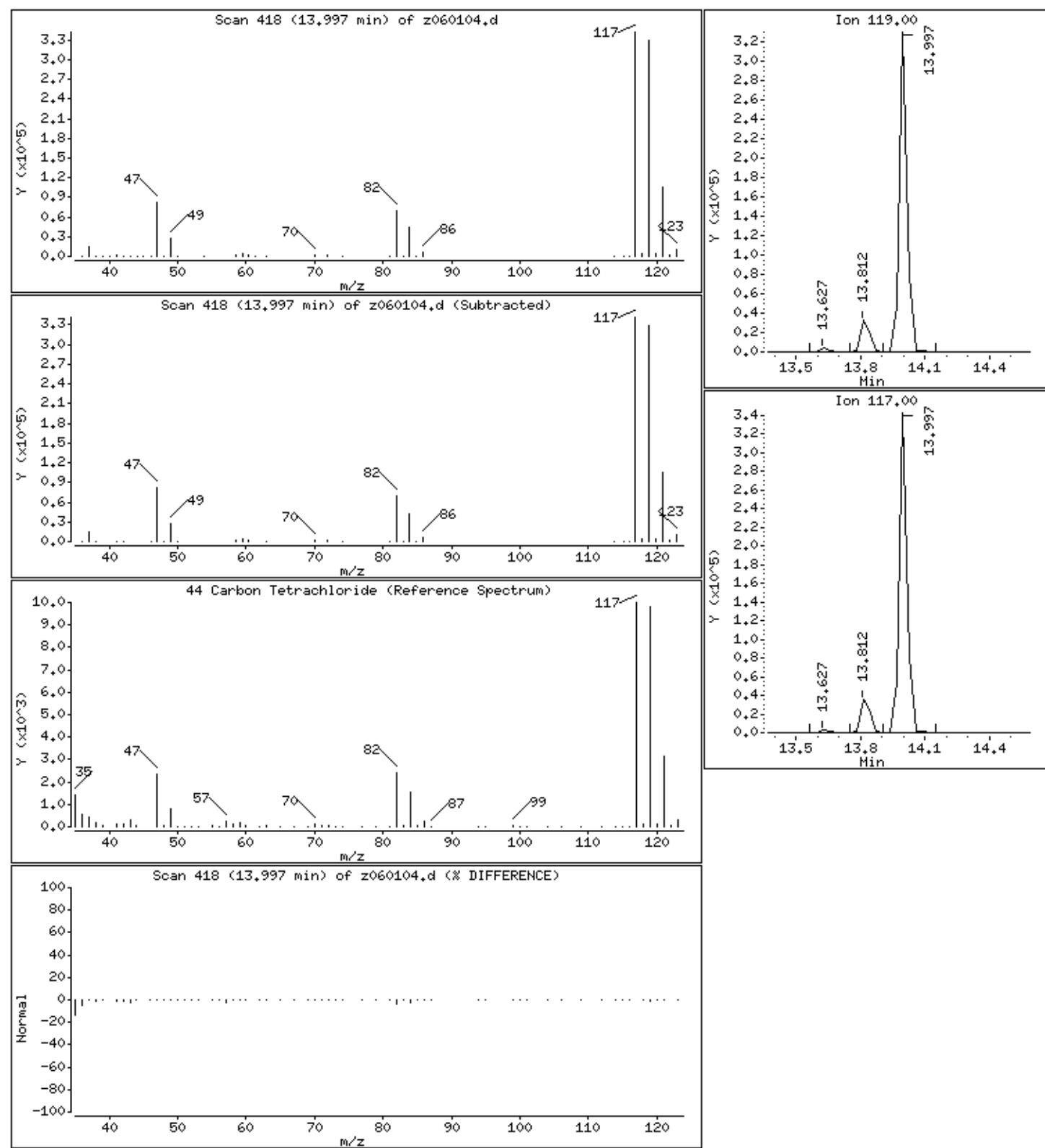
Concentration: 10.381 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.891 PPBV

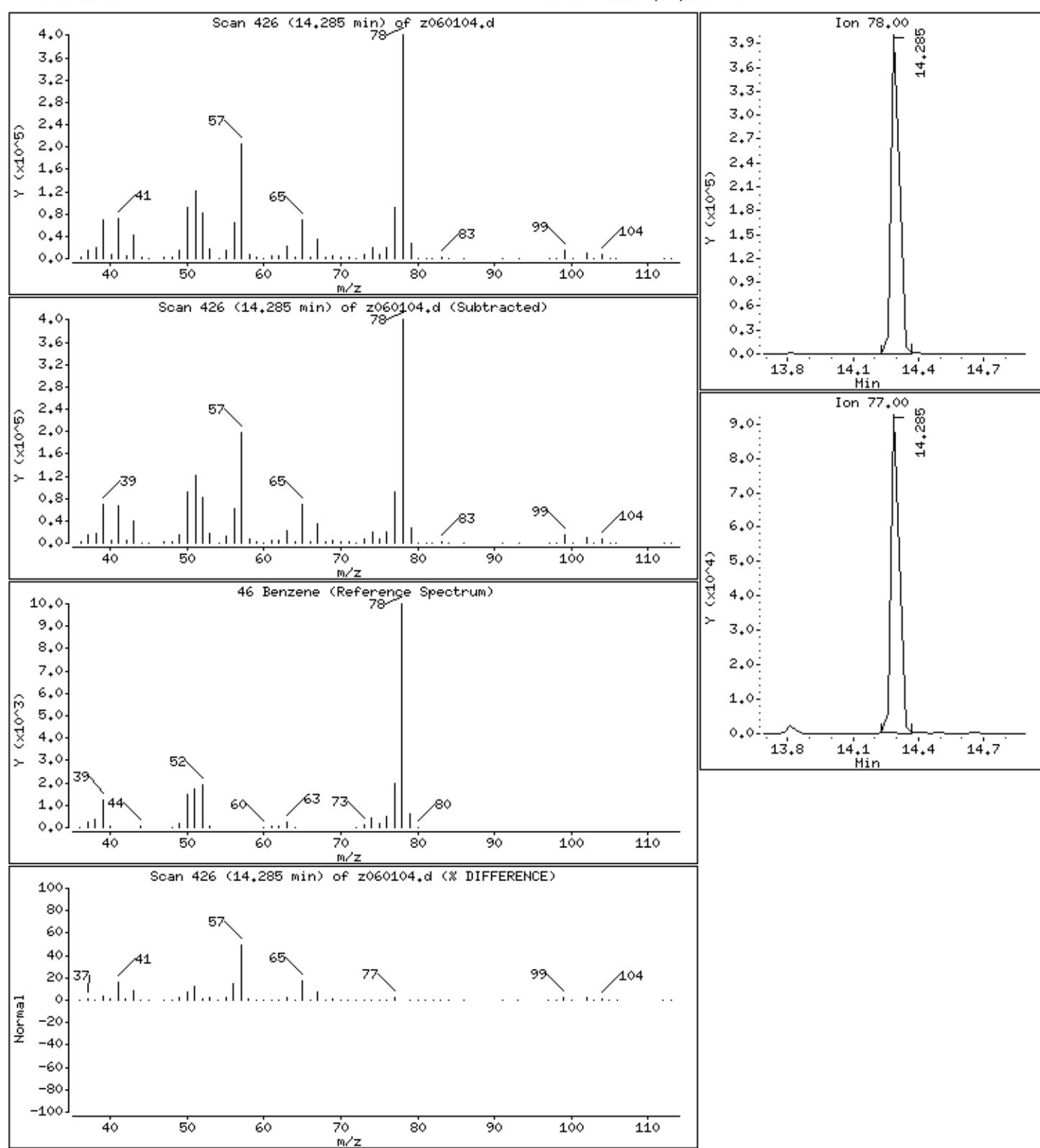
44 Carbon Tetrachloride



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.272 PPBV

Page 31



Date : 01-JUN-2009 10:10

Client ID: LCS-1

Instrument: msdz.i

Sample Info: 100mL #1754-202

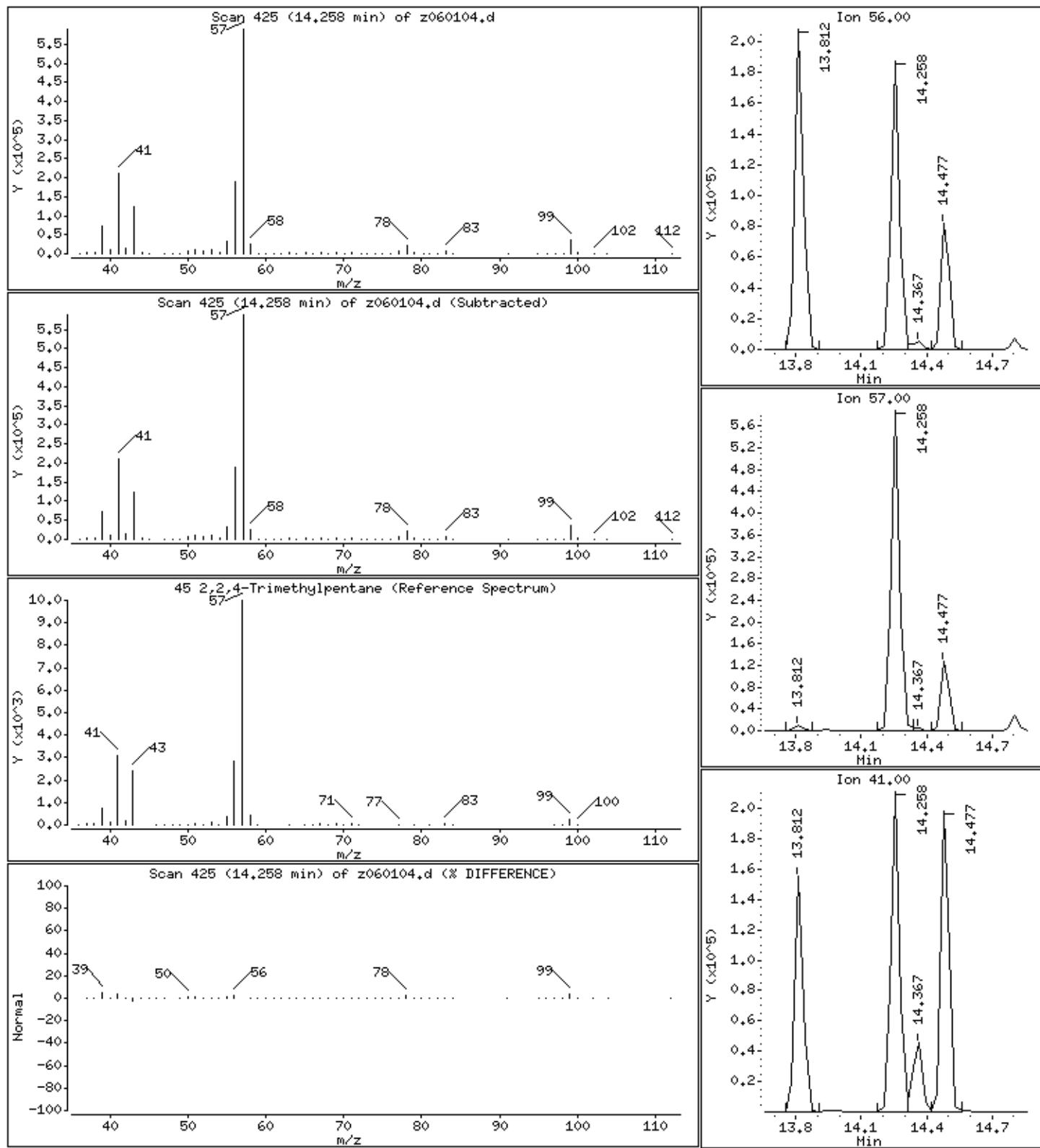
Operator: tjs

Column phase: RTx-624

Column diameter: 0.32

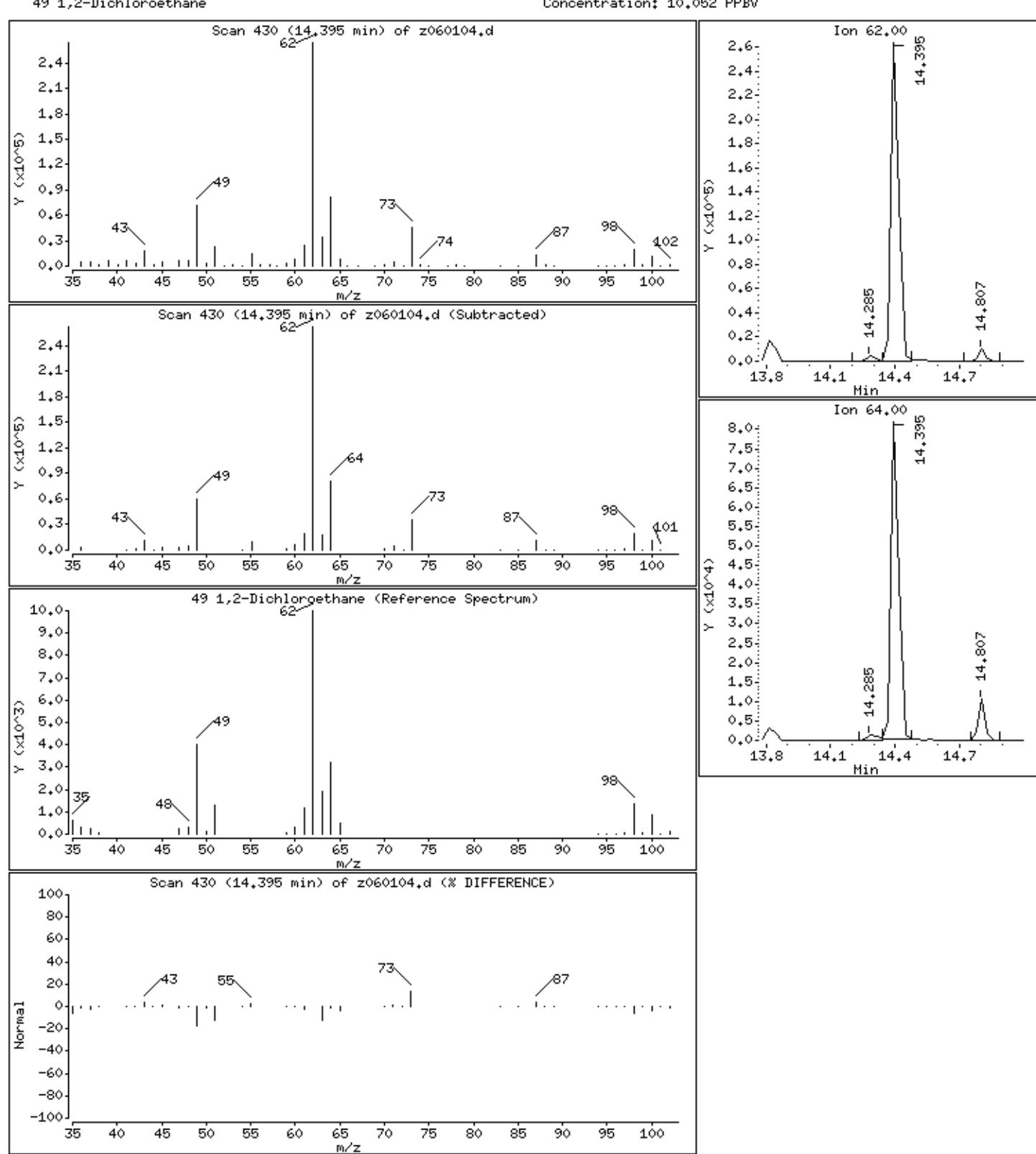
45 2,2,4-Trimethylpentane

Concentration: 9.470 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.052 PPBV

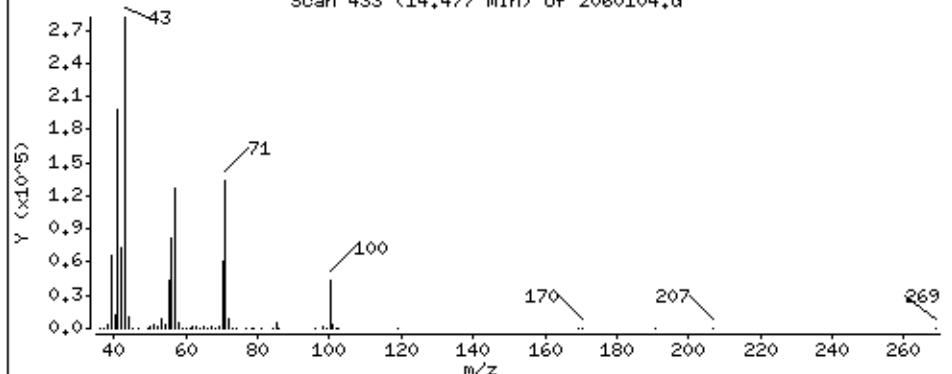


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

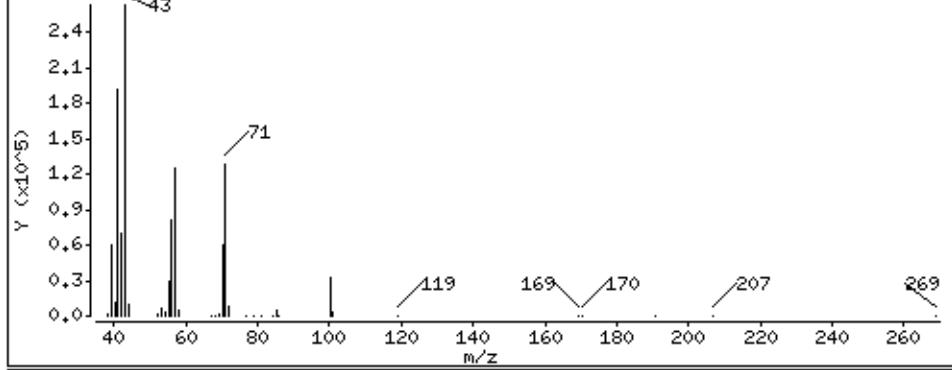
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.133 PPBV

50 Heptane

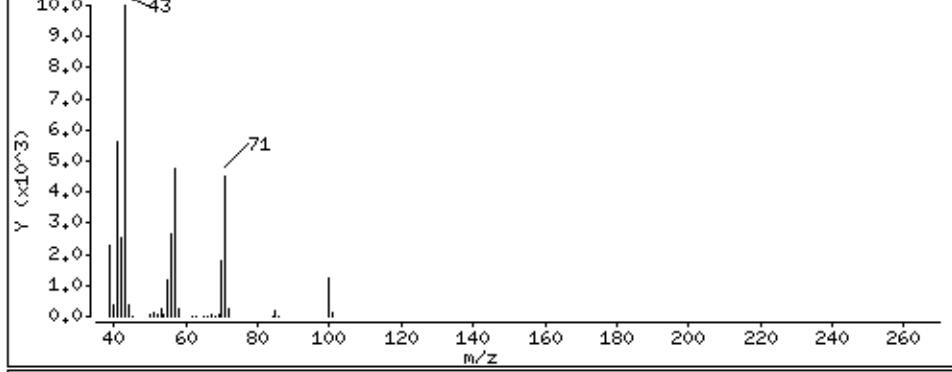
Scan 433 (14.477 min) of z060104.d



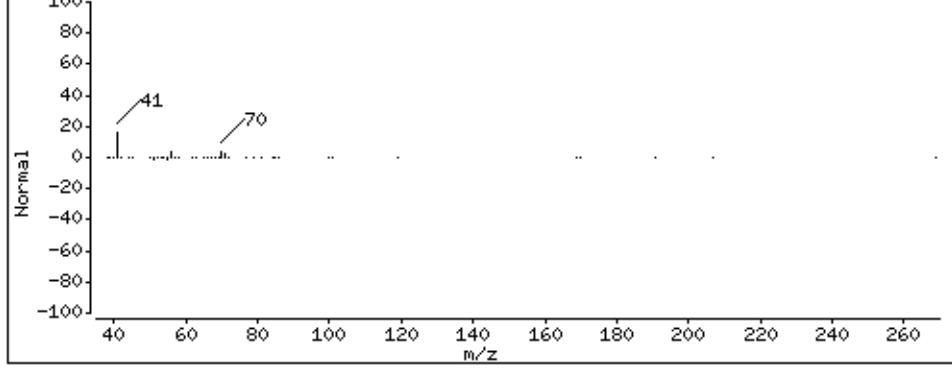
Scan 433 (14.477 min) of z060104.d (Subtracted)



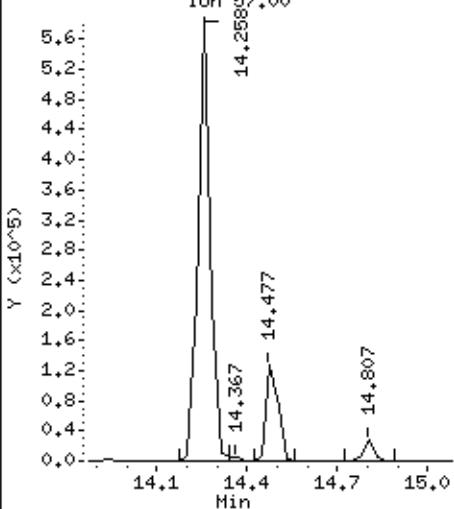
50 Heptane (Reference Spectrum)



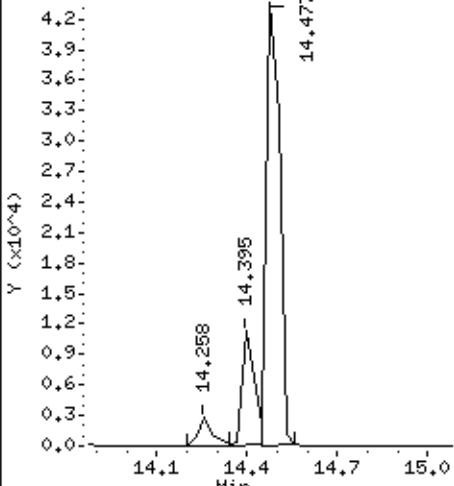
Scan 433 (14.477 min) of z060104.d (% DIFFERENCE)



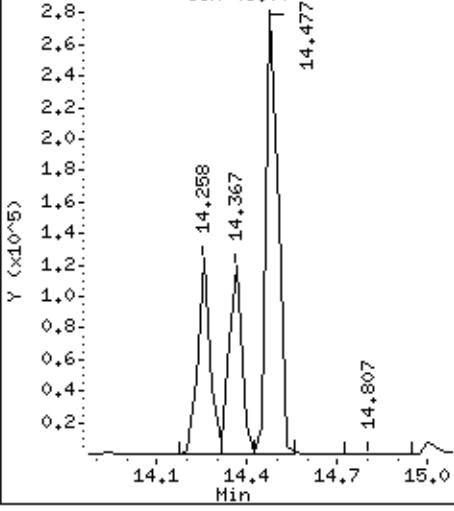
Ion 57.00



Ion 100.00



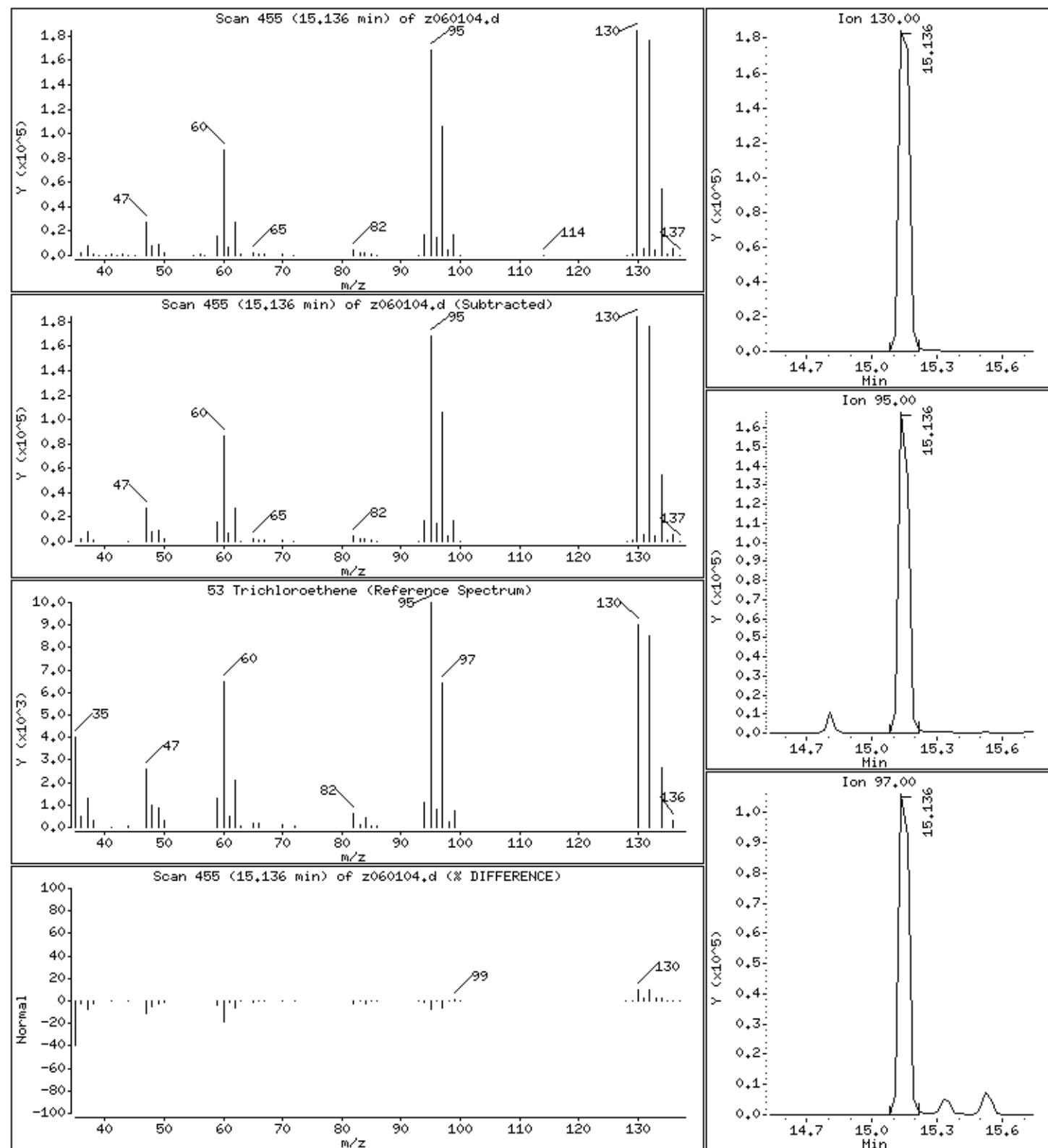
Ion 43.00



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

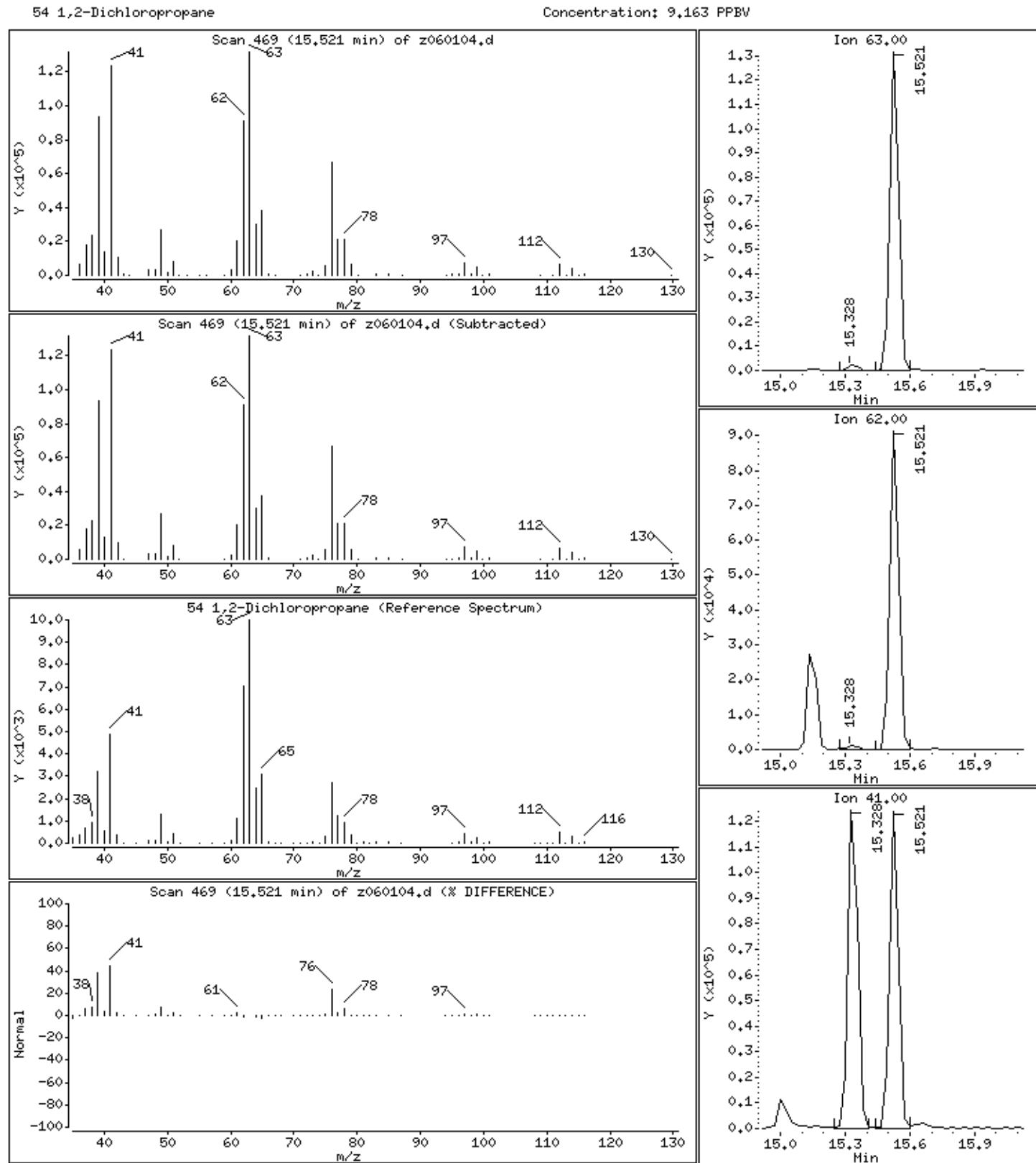
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.880 PPBV

53 Trichloroethene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.163 PPBV

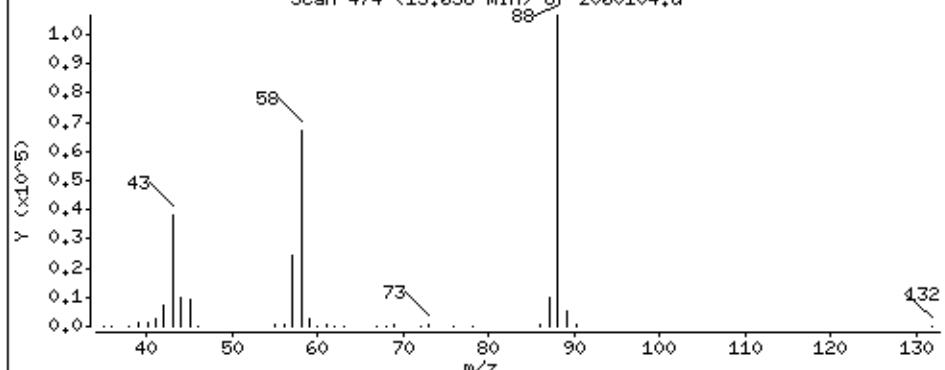


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

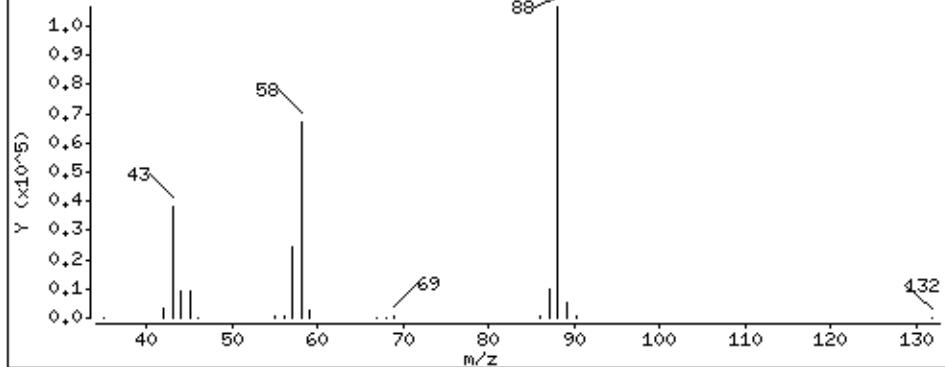
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.793 PPBV

55 1,4-Dioxane

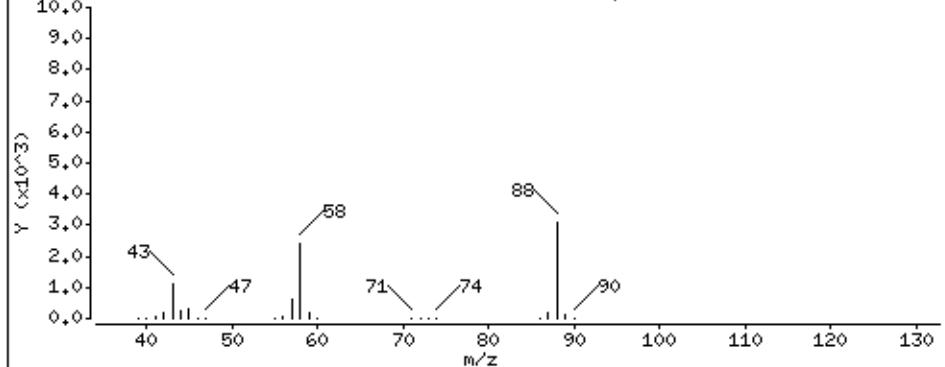
Scan 474 (15.658 min) of z060104.d



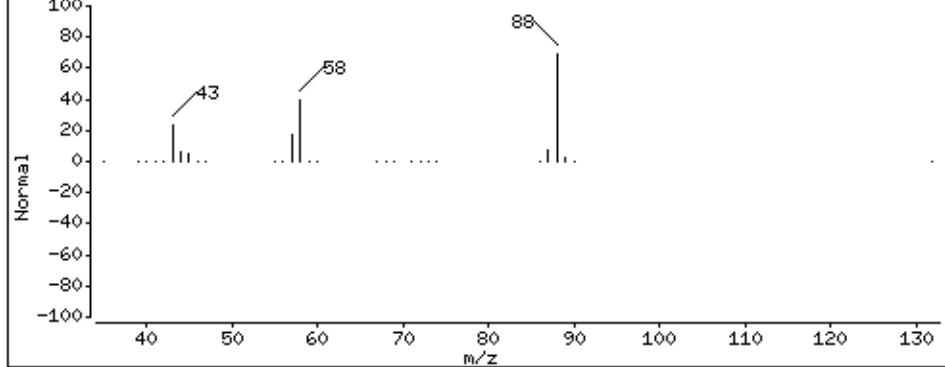
Scan 474 (15.658 min) of z060104.d (Subtracted)



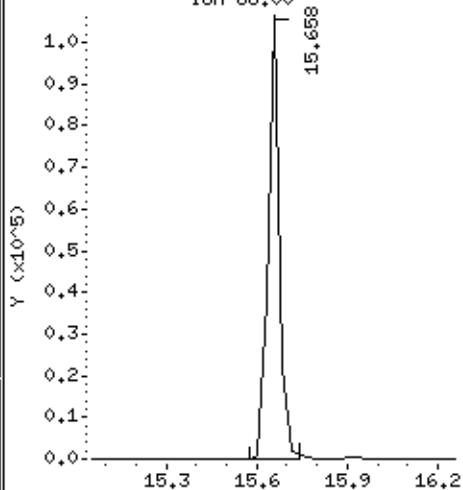
55 1,4-Dioxane (Reference Spectrum)



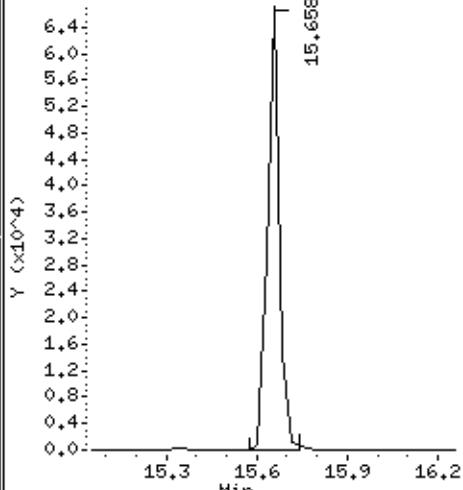
Scan 474 (15.658 min) of z060104.d (% DIFFERENCE)



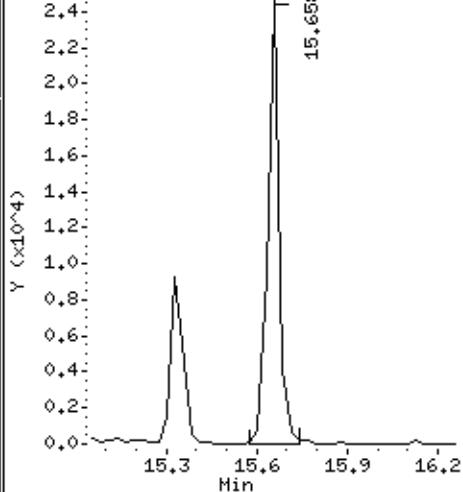
Ion 88.00



Ion 58.00



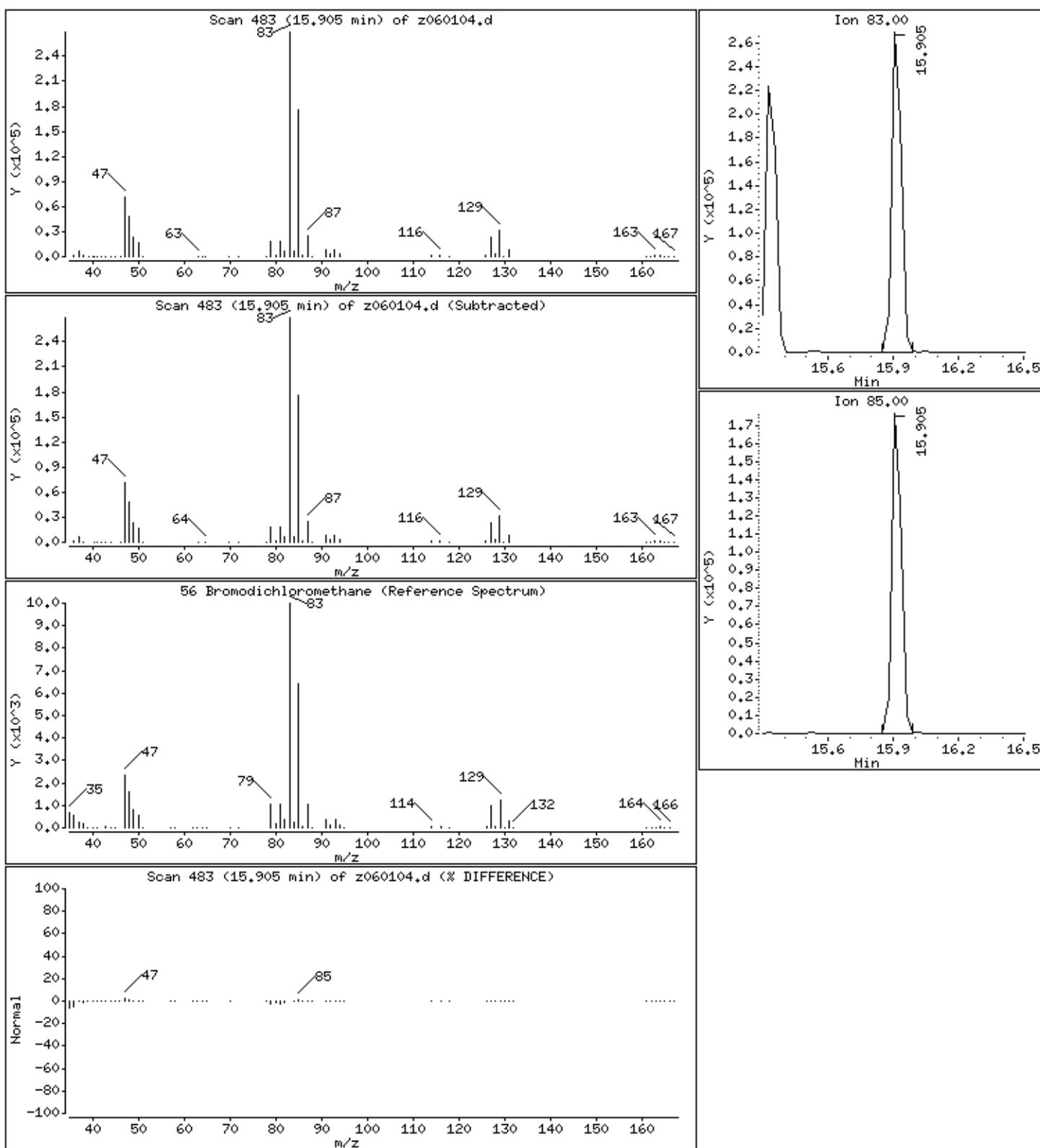
Ion 57.00



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.480 PPBV

56 Bromodichloromethane



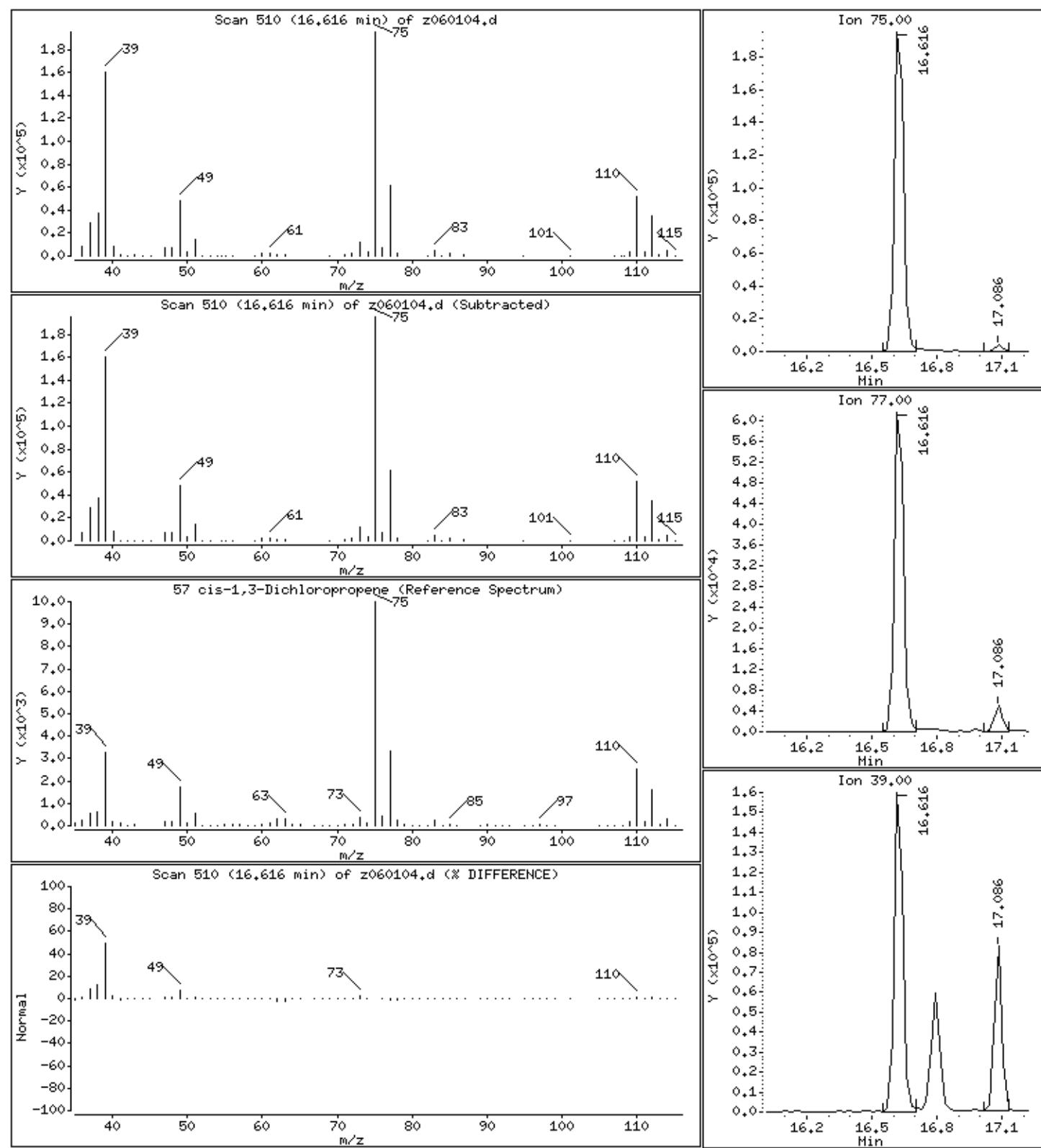
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column diameter: 0.32
Column phase: RTx-624

Page 39

57 cis-1,3-Dichloropropene

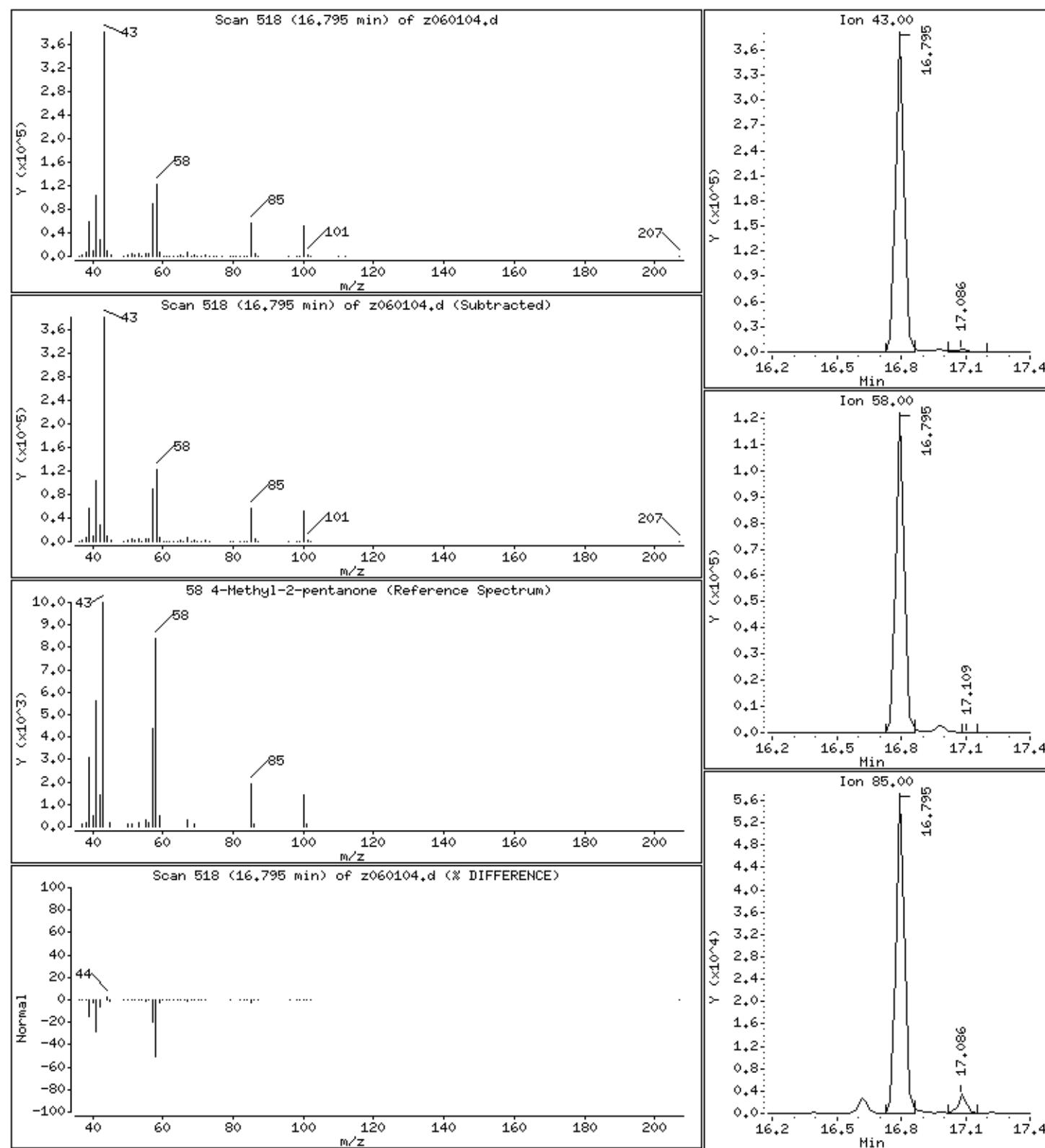
Concentration: 10,420 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 11.003 PPBV

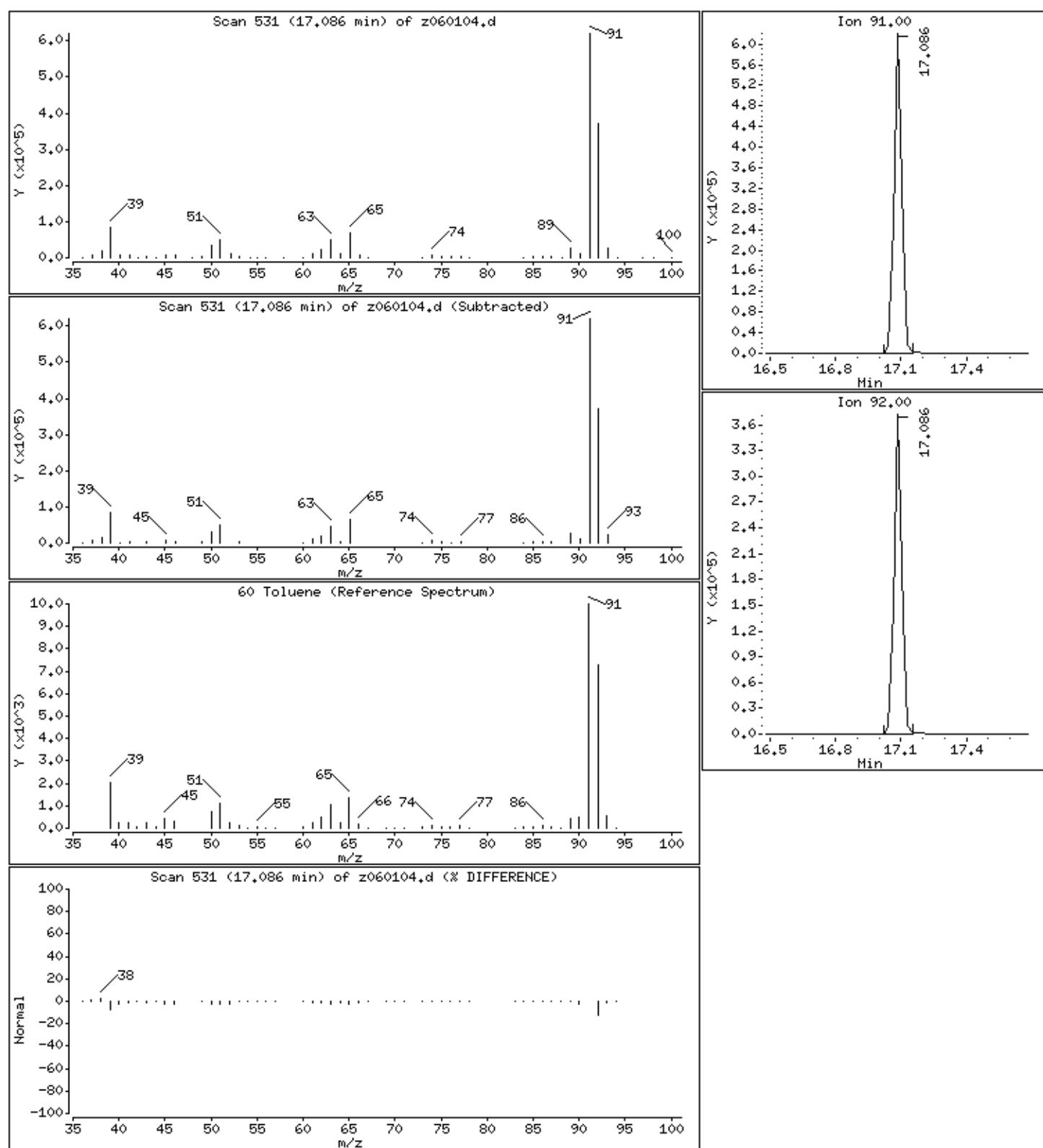
58 4-Methyl-2-pentanone



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.130 PPBV

Page 41



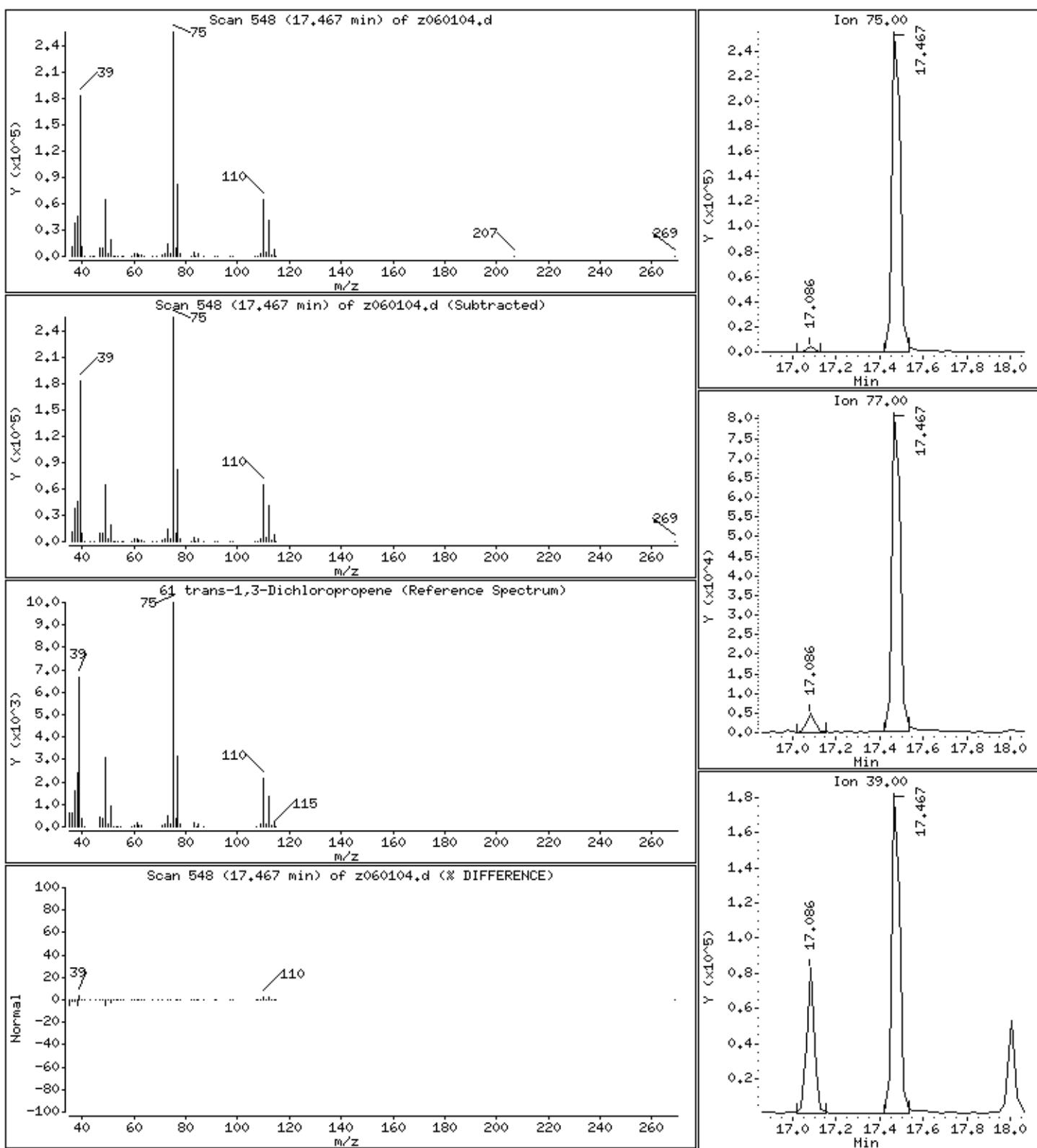
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 42

61 trans-1,3-Dichloropropene

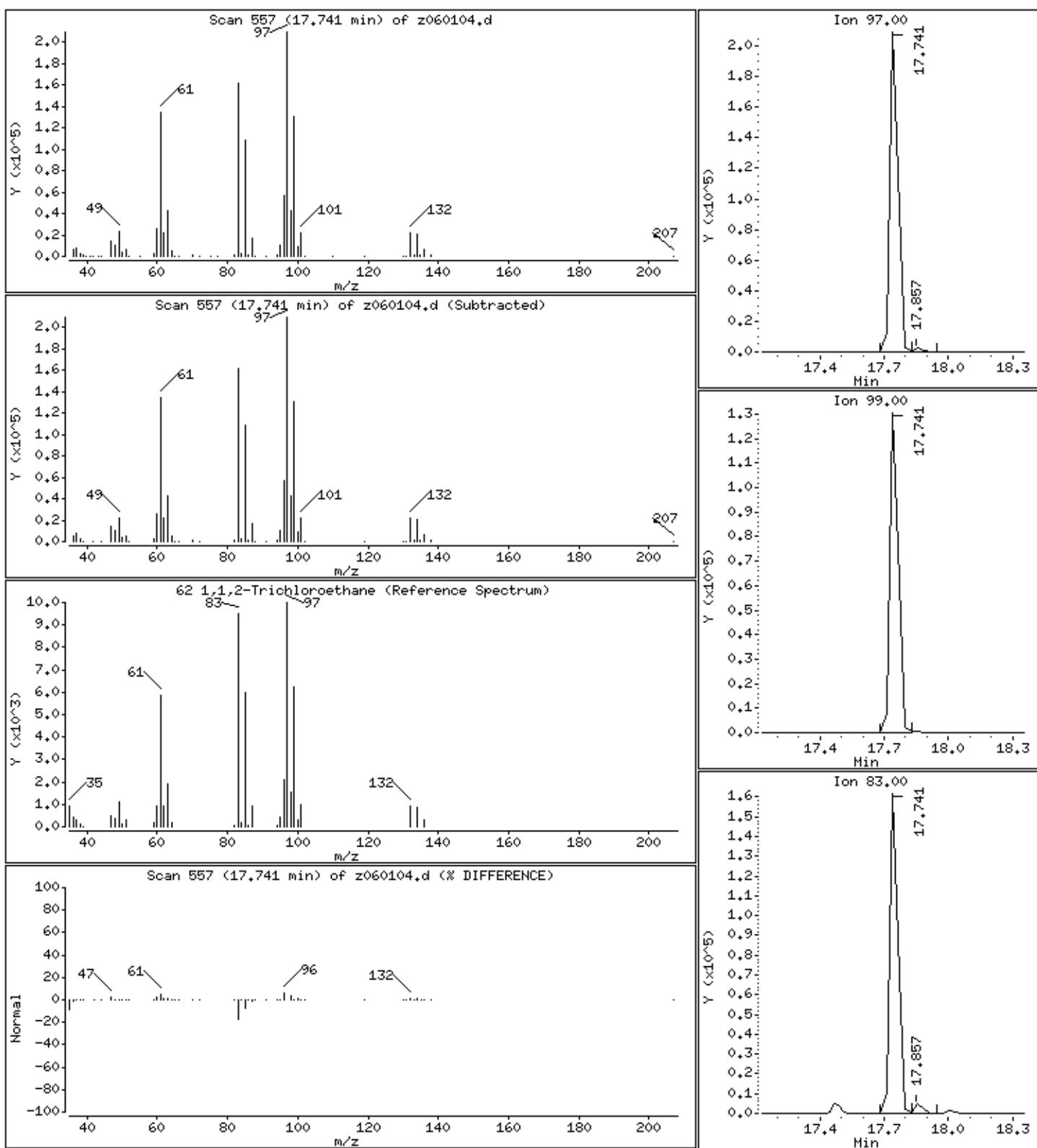
Concentration: 10.012 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.140 PPBV

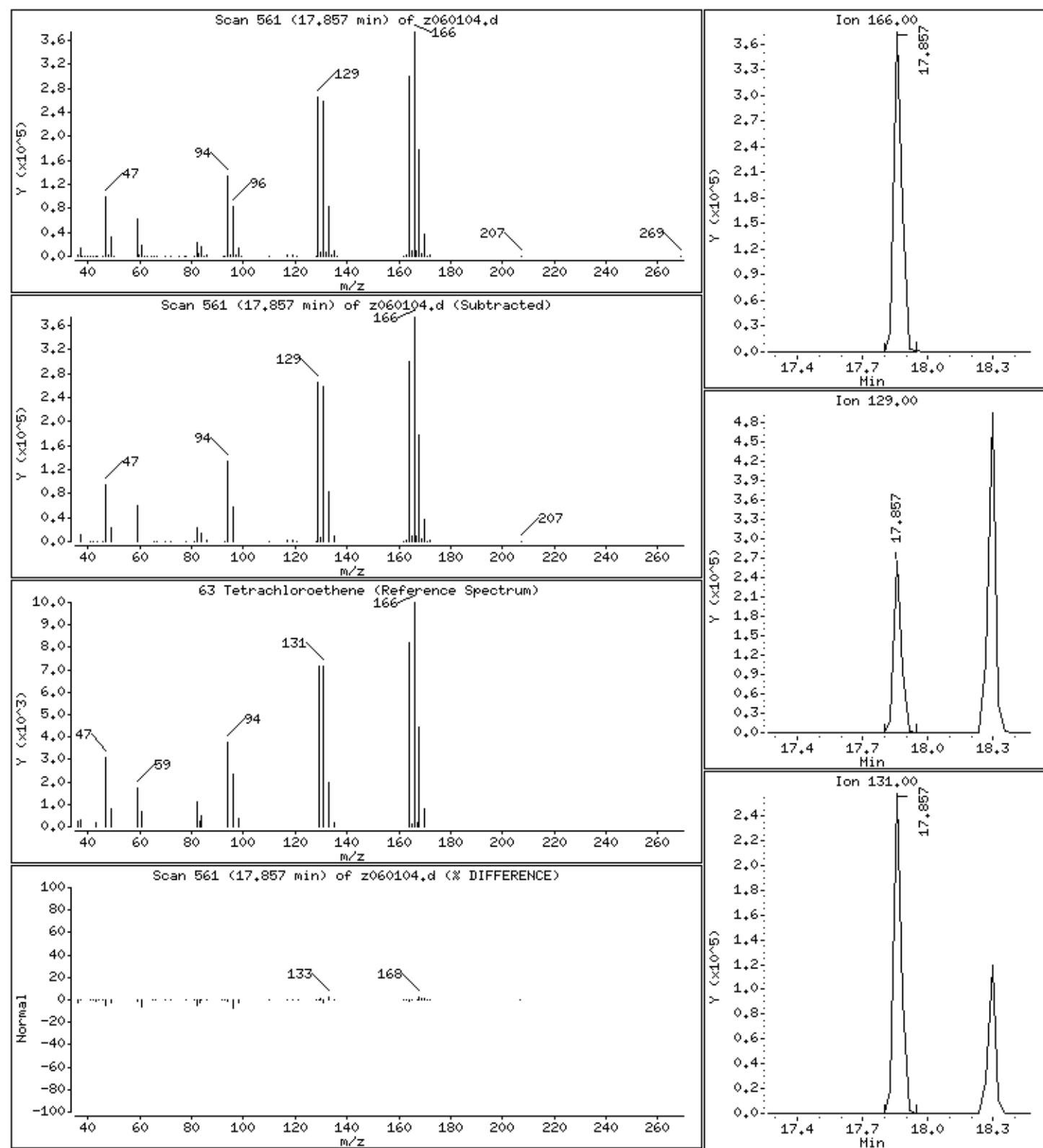
62 1,1,2-Trichloroethane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.118 PPBV

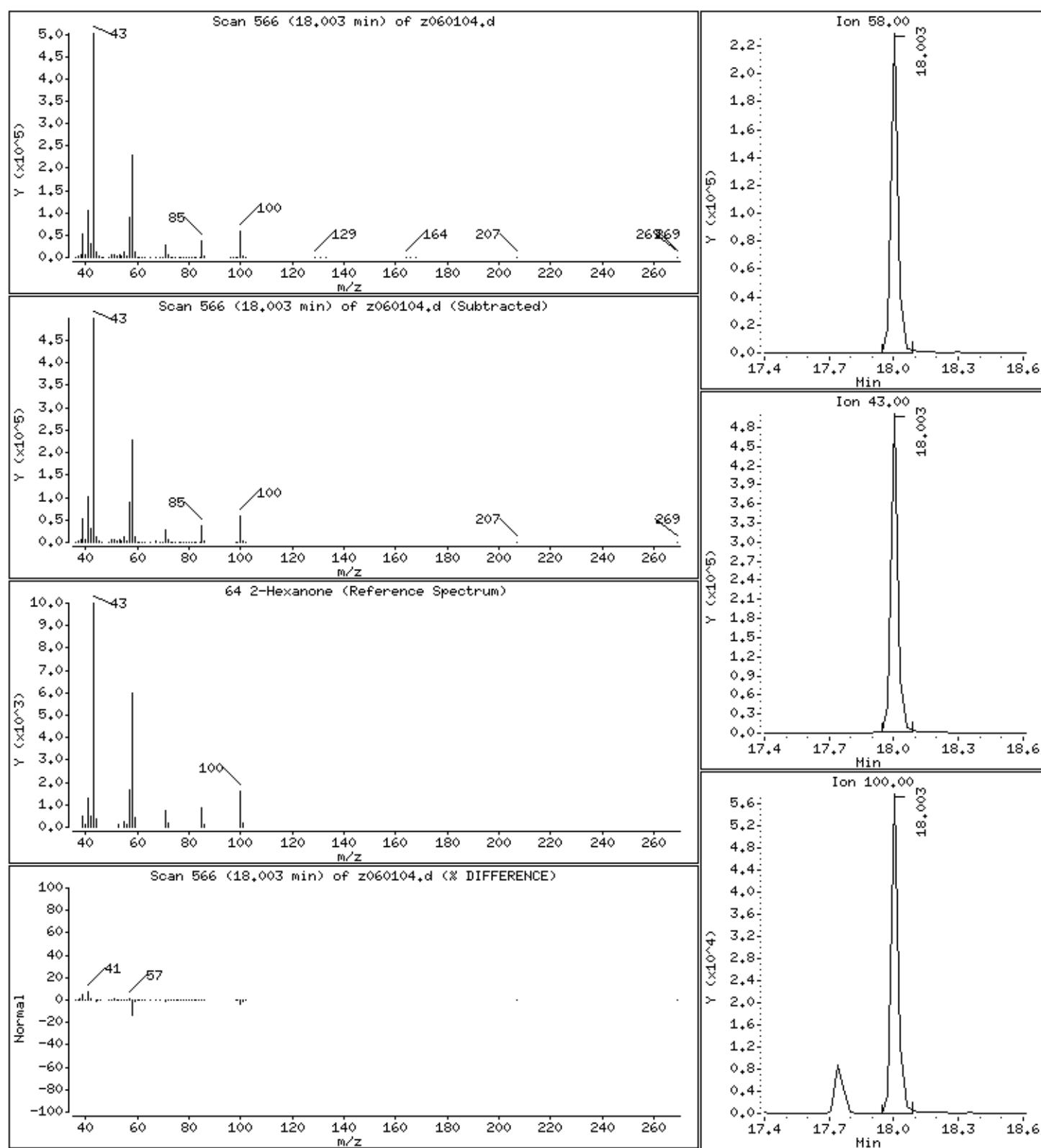
63 Tetrachloroethene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.904 PPBV

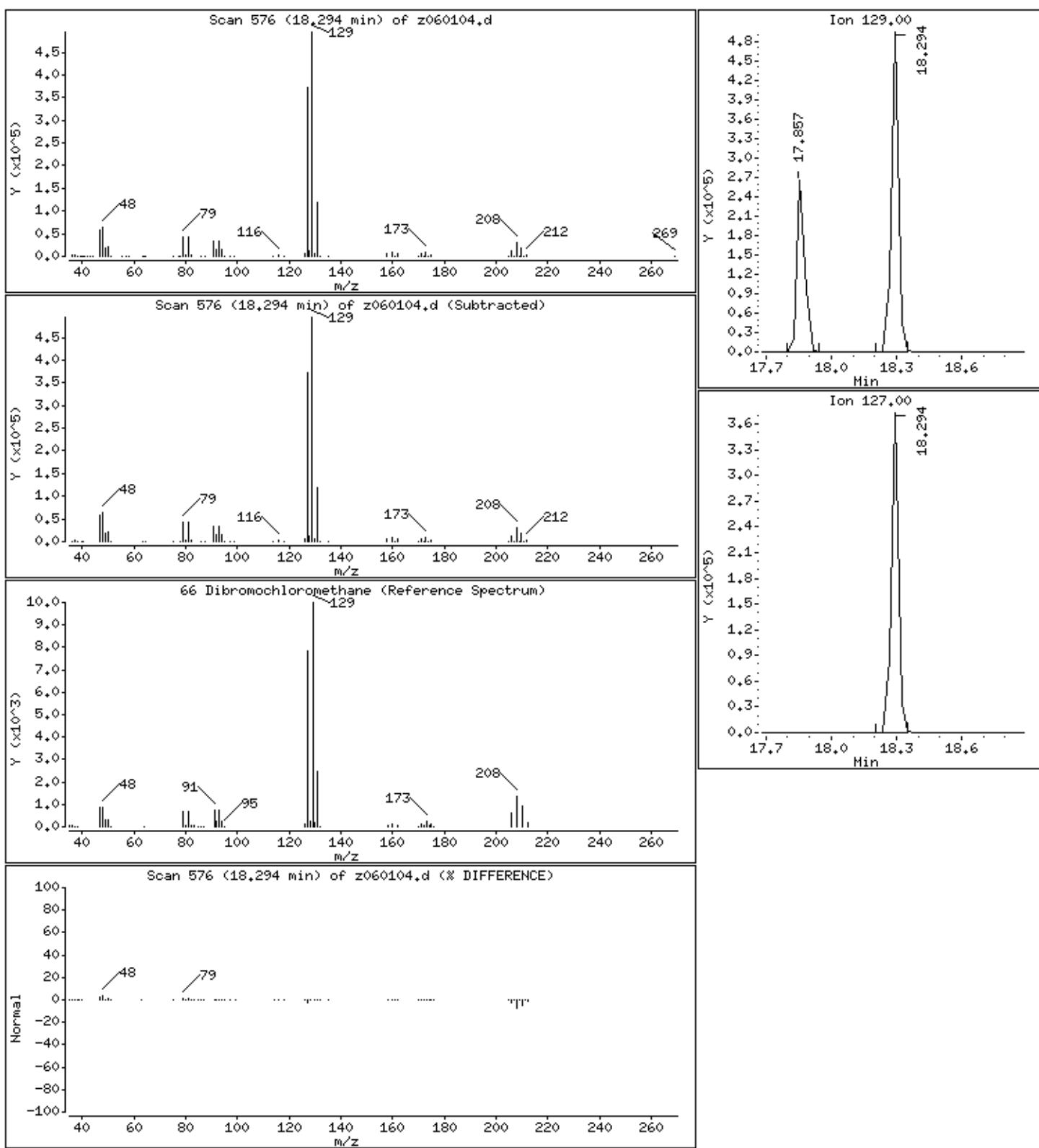
Page 45



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

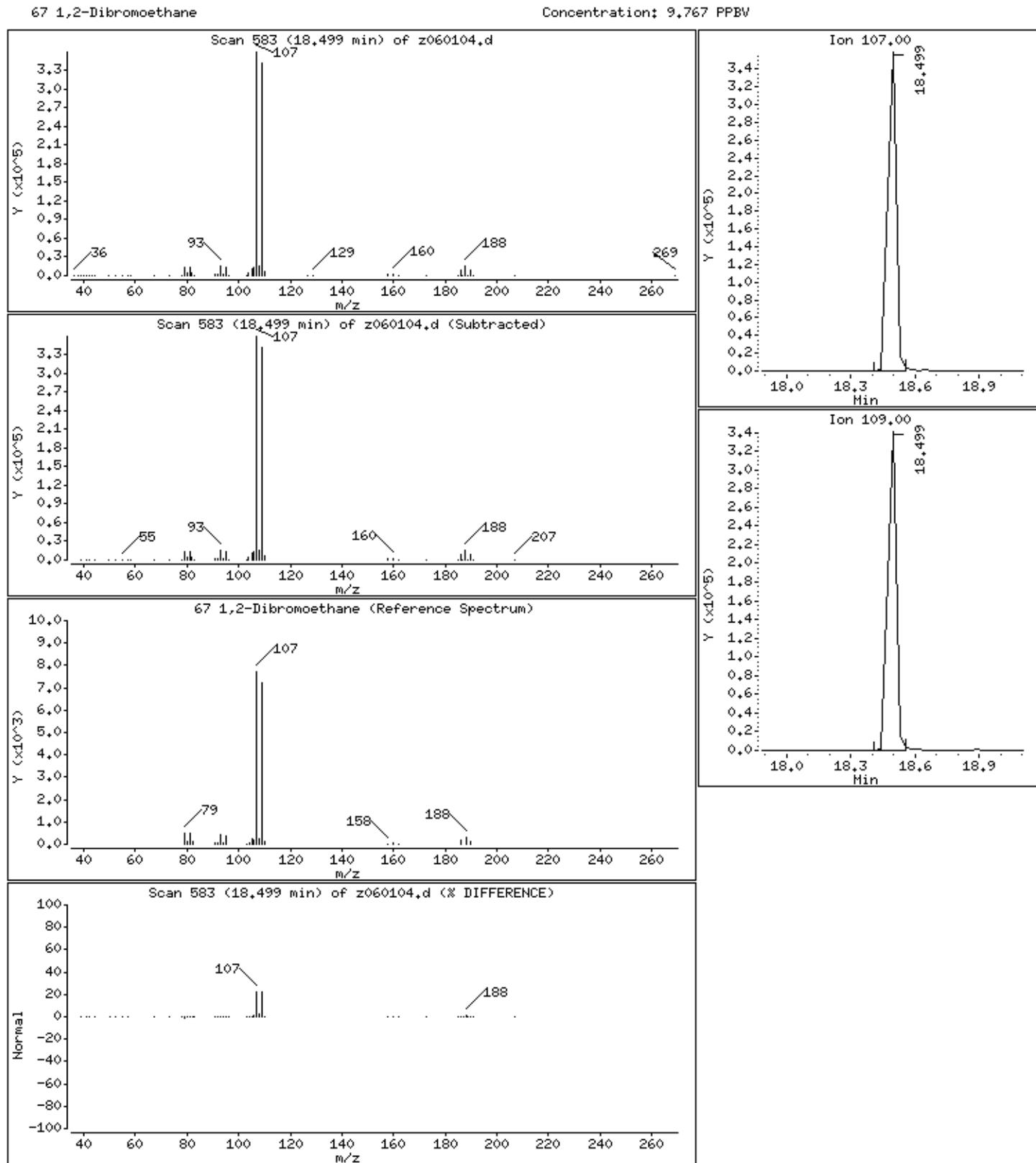
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.842 PPBV

66 Dibromochloromethane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

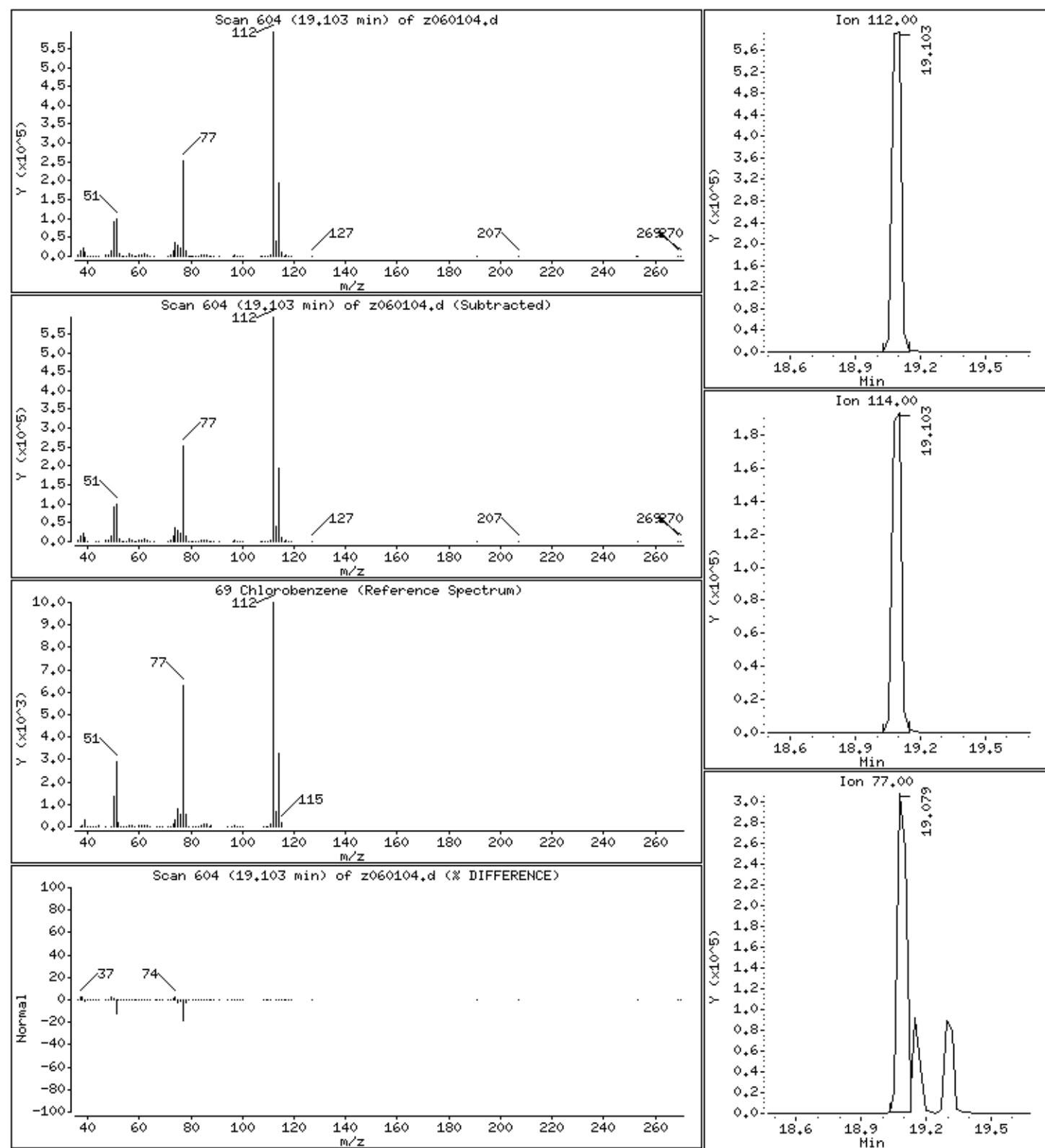
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.767 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.416 PPBV

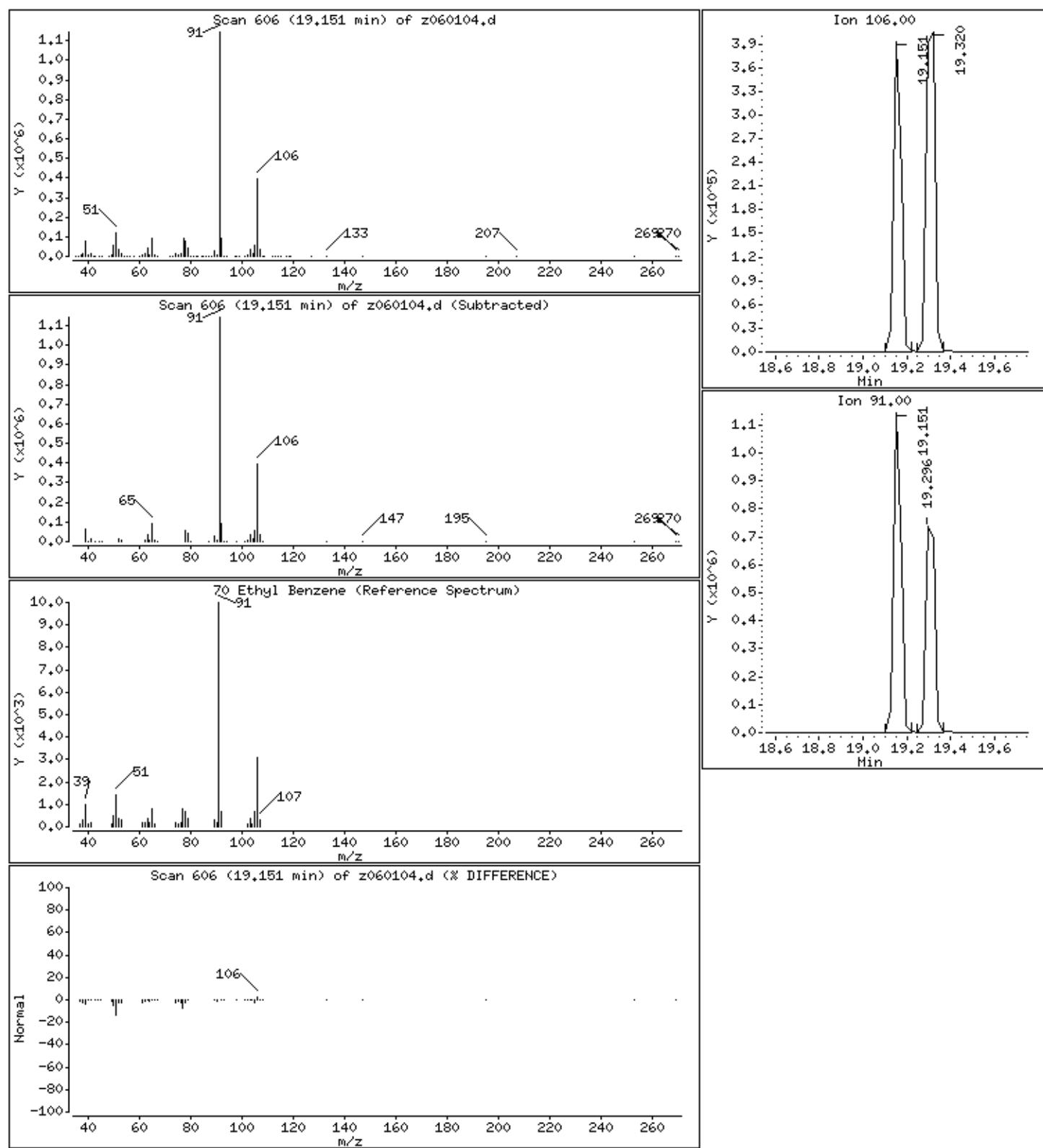
69 Chlorobenzene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column diameter: 0.32
Column phase: RTx-624
Concentration: 9.833 PPBV

70 Ethyl Benzene



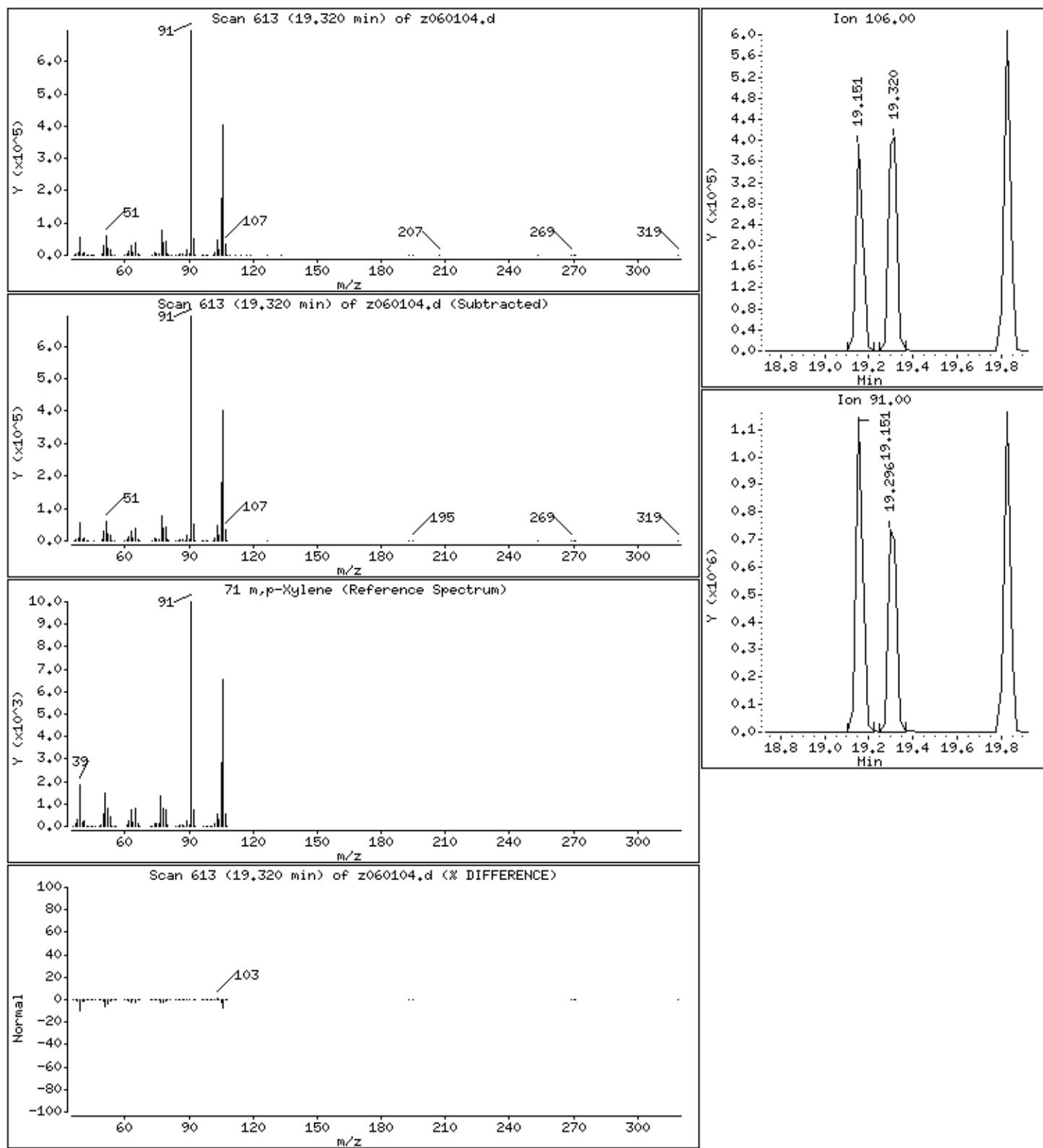
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i

Column phase: RTx-624
Operator: tjs
Column diameter: 0.32

71 m,p-Xylene

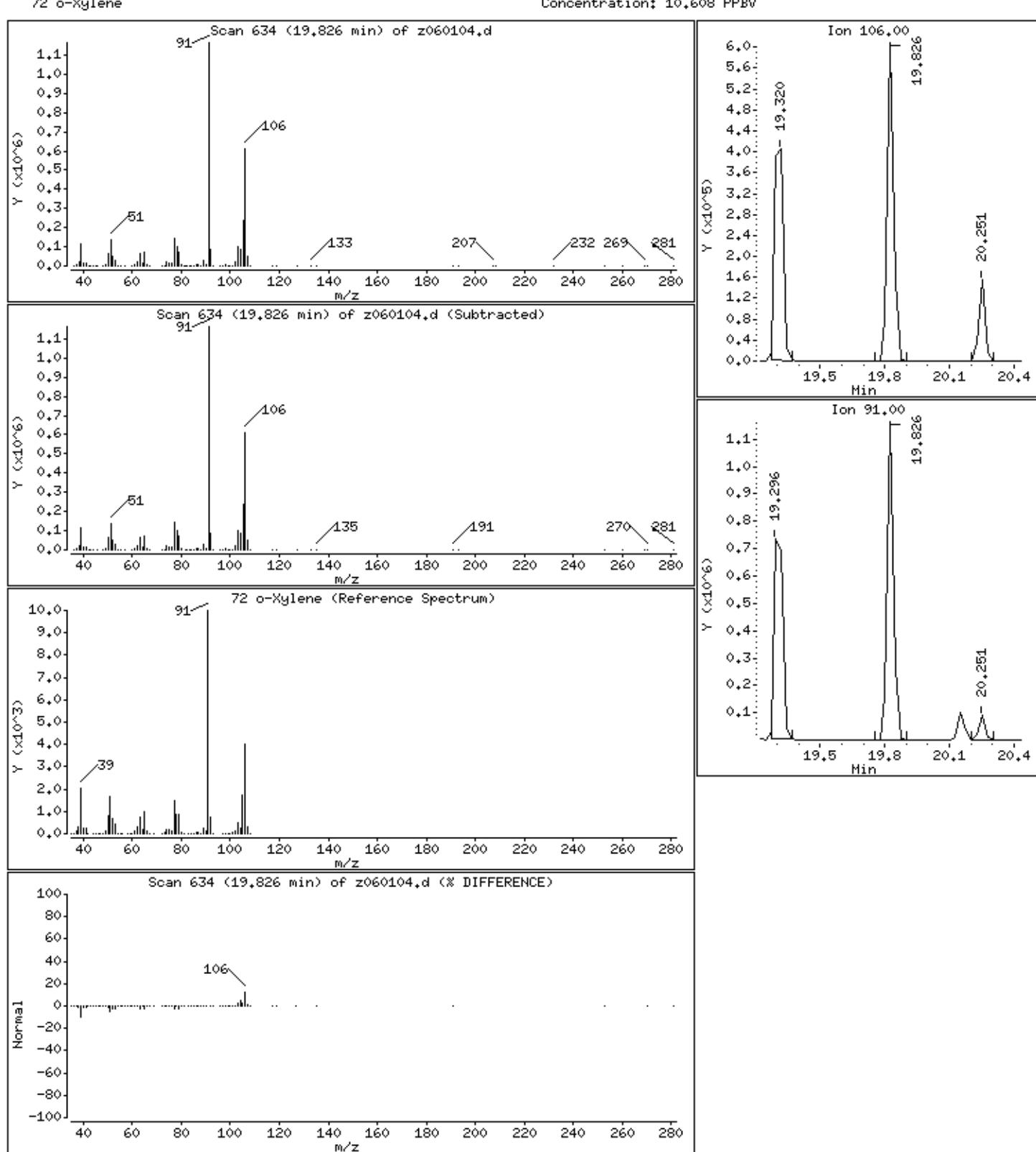
Concentration: 10.295 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10,608 PPBV

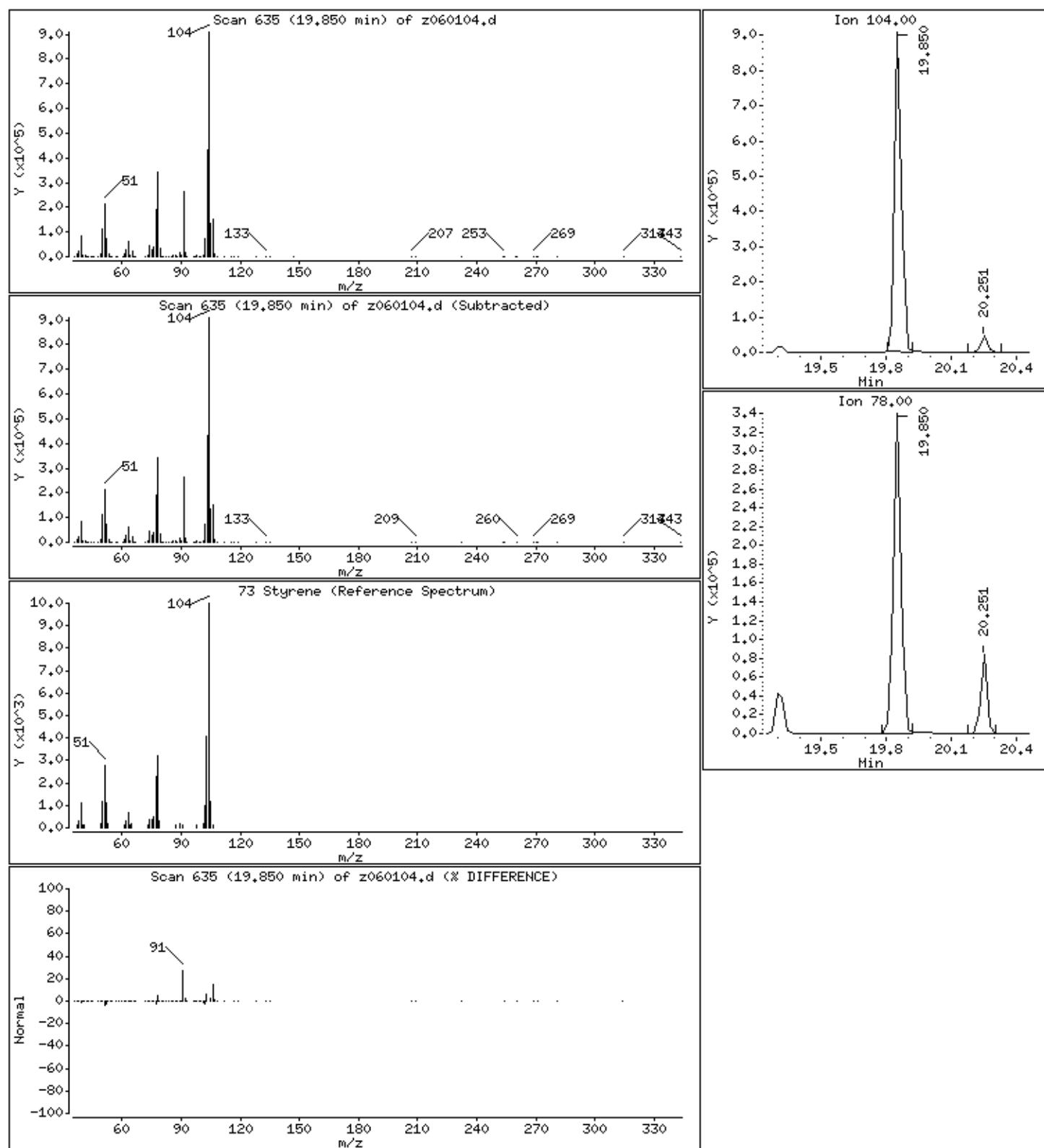
Page 51



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 11.930 PPBV

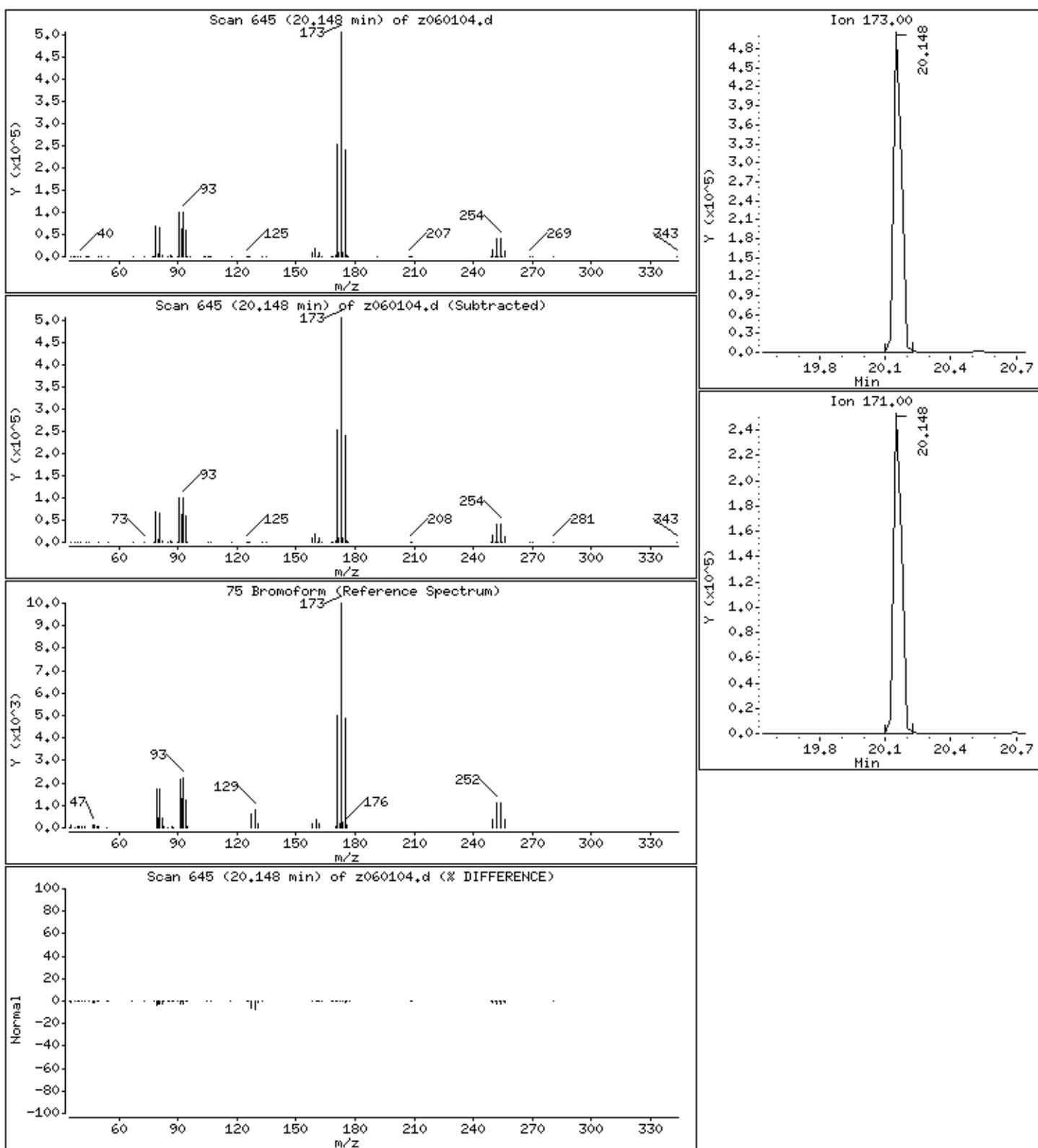
73 Styrene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 12.273 PPBV

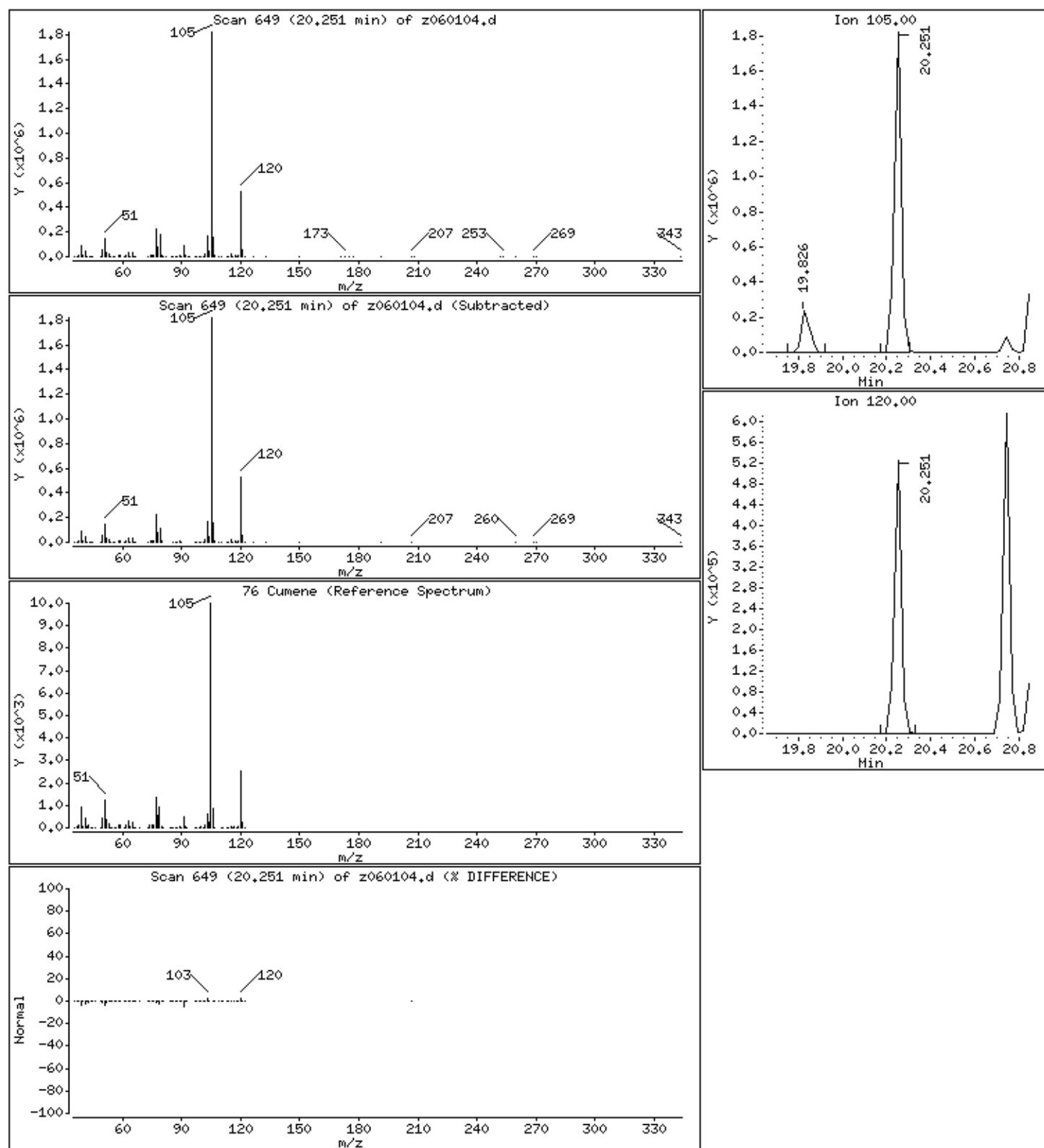
75 Bromoform



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 11.218 PPBV

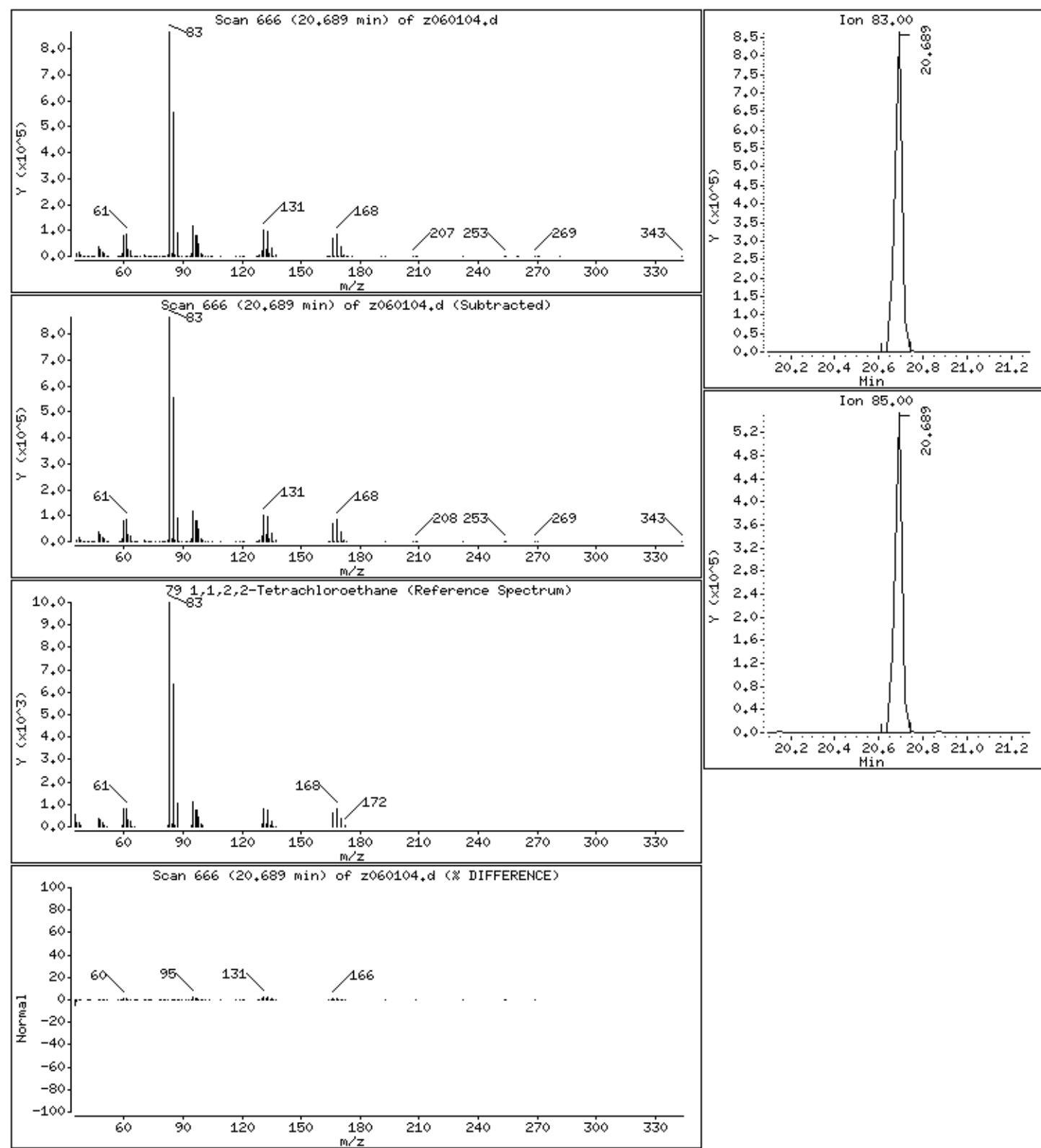
76 Cumene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.712 PPBV

79 1,1,2,2-Tetrachloroethane



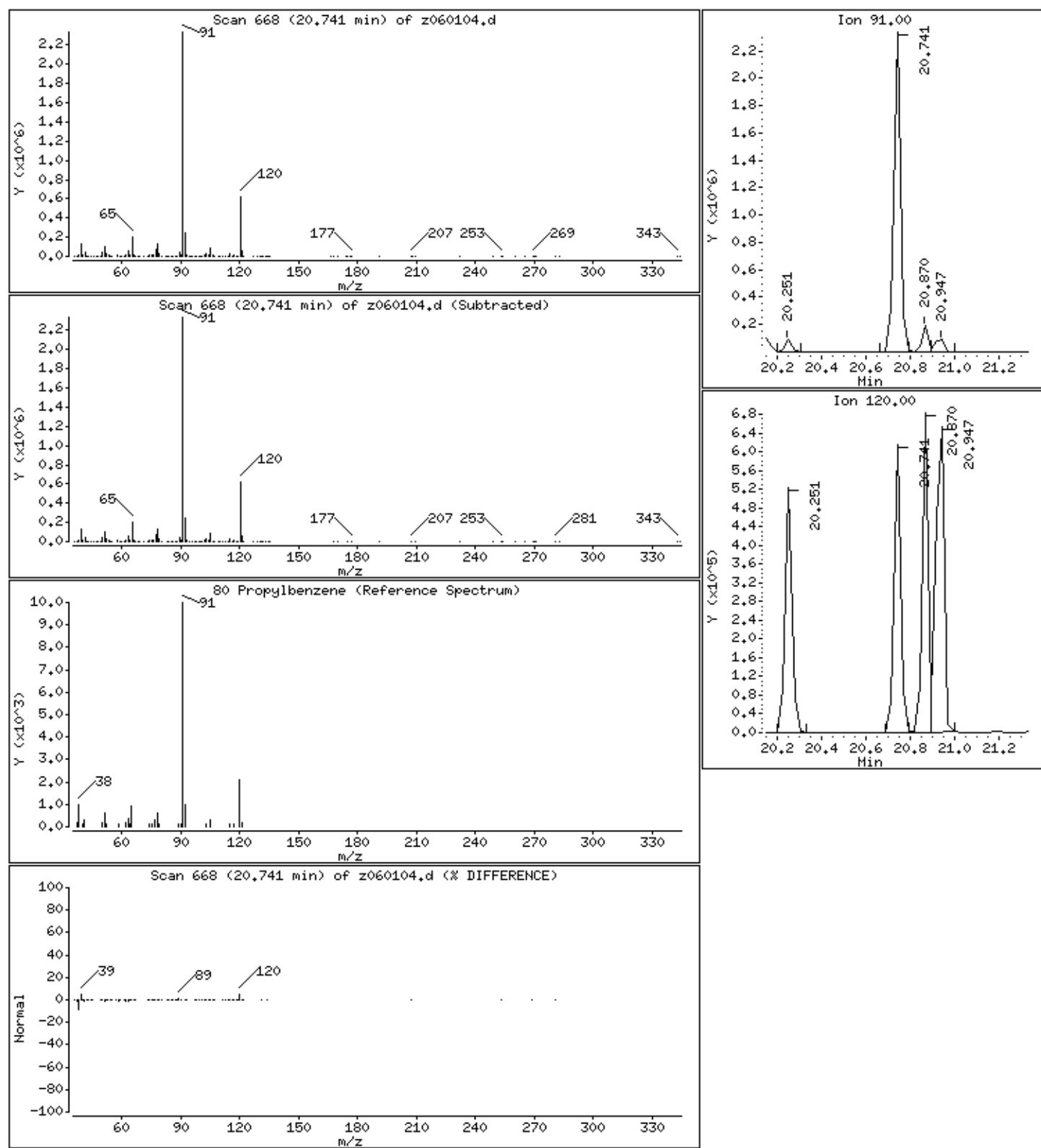
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 56

80 Propylbenzene

Concentration: 11.154 PPBV



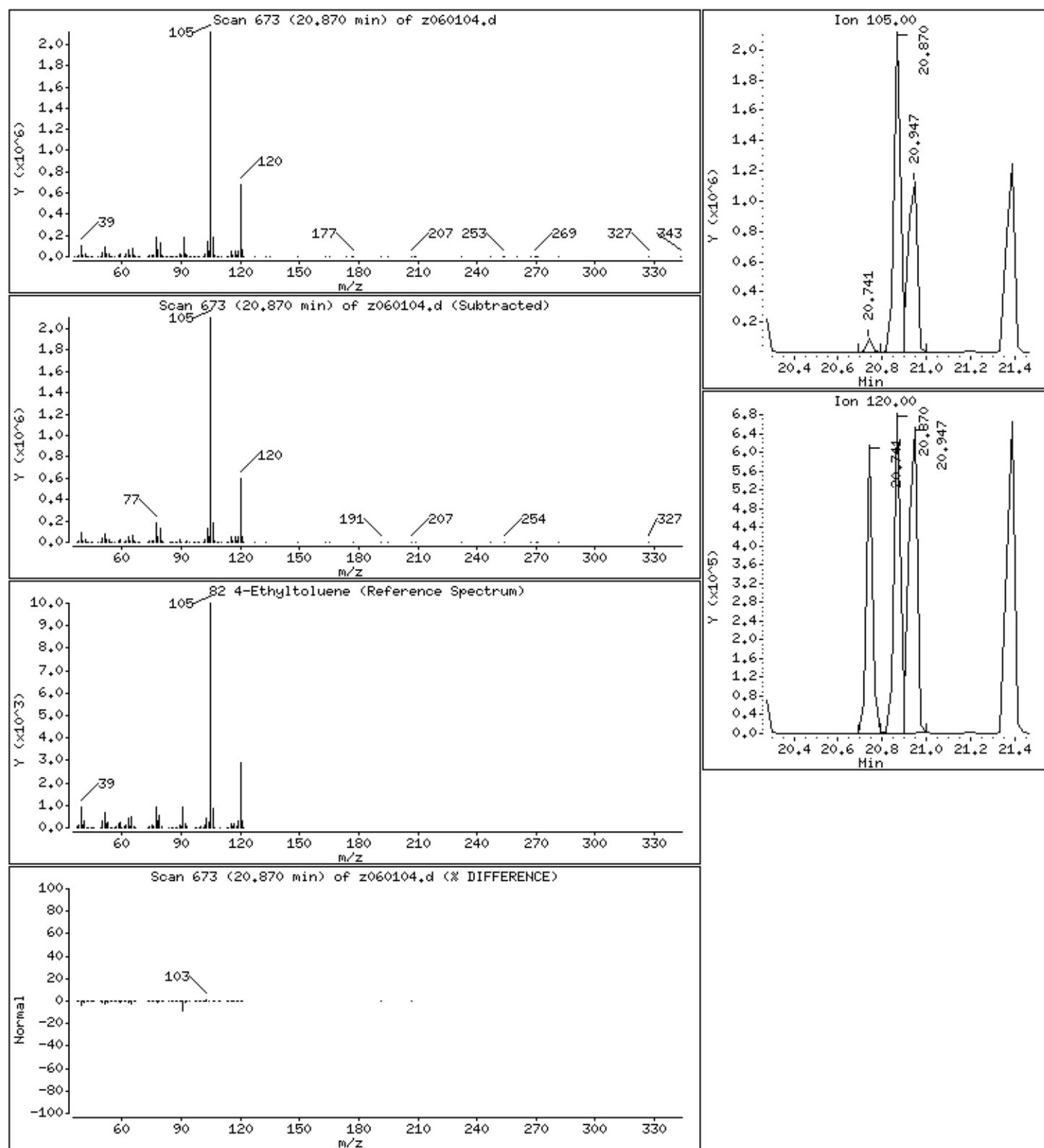
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 57

82 4-Ethyltoluene

Concentration: 11.231 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

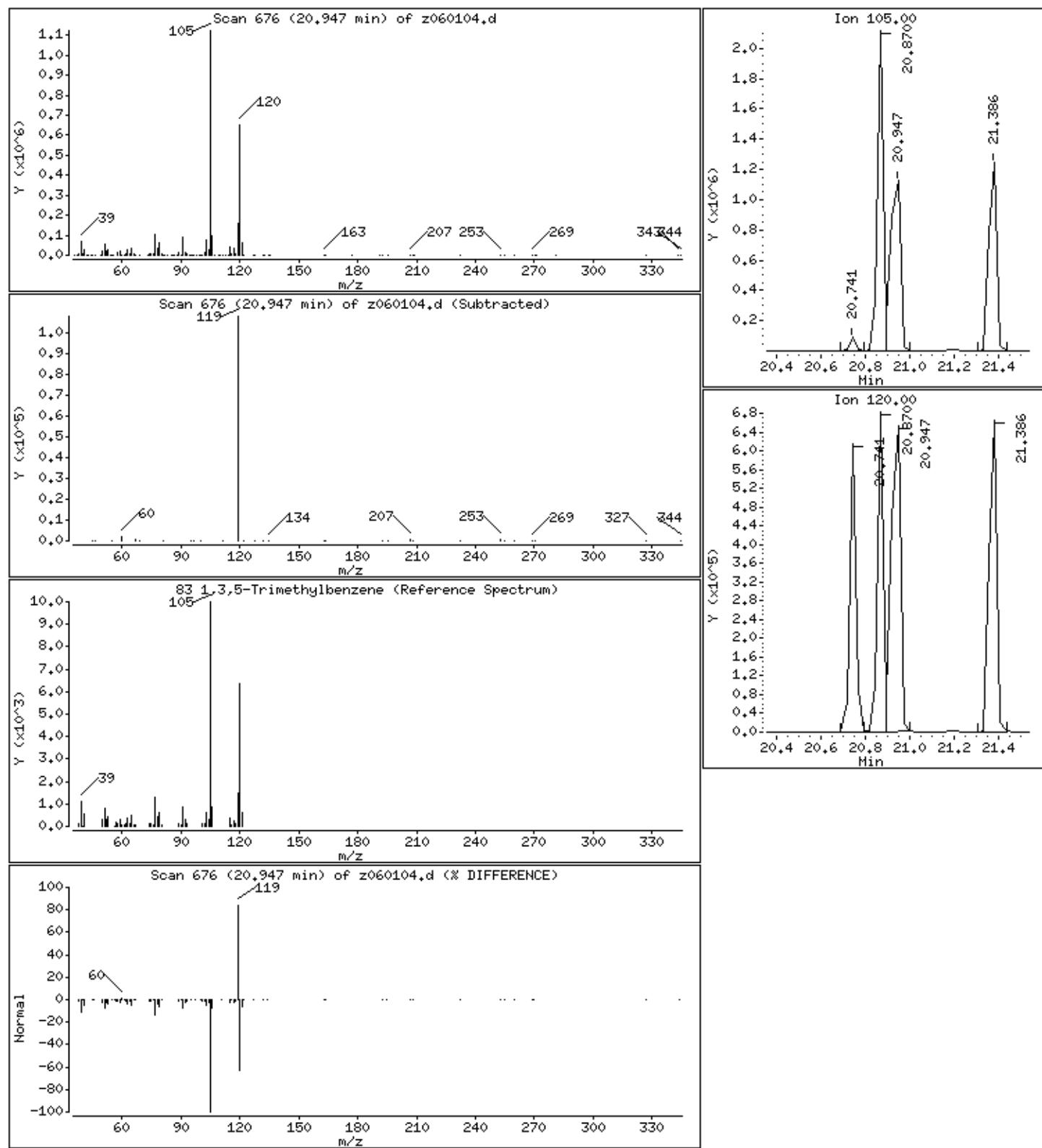
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624

Page 58

Column diameter: 0.32

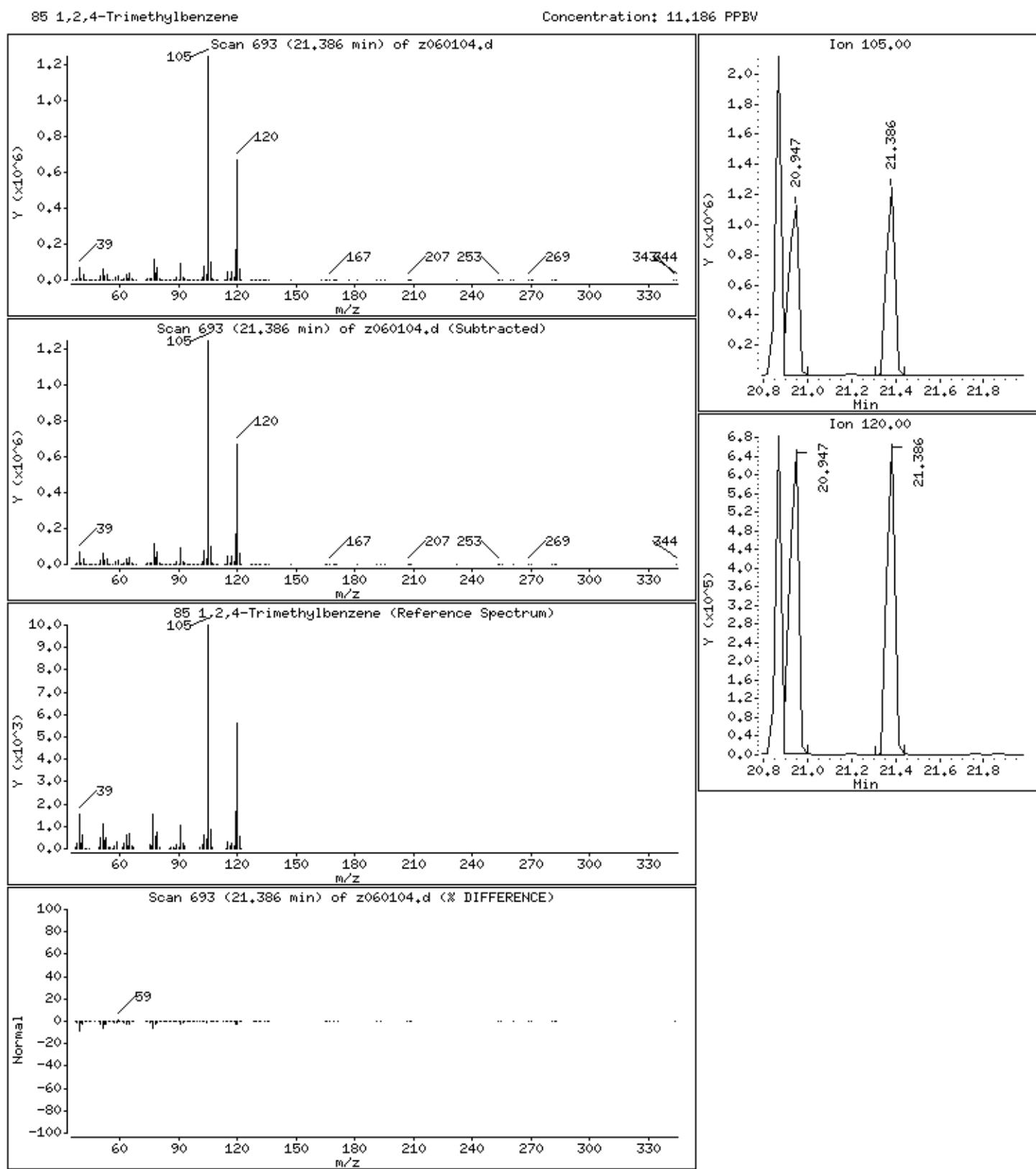
83 1,3,5-Trimethylbenzene

Concentration: 10.856 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

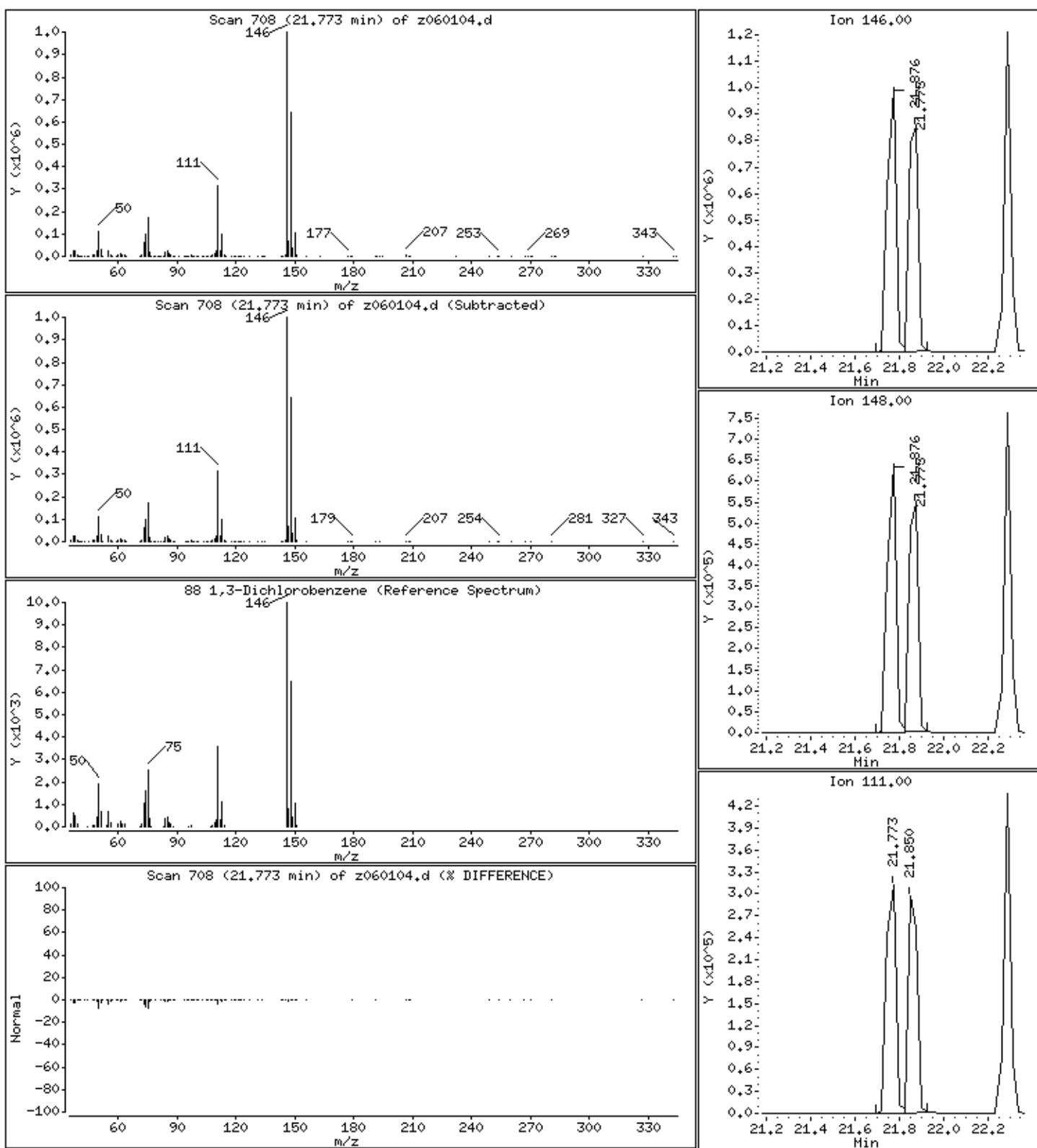
Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 11.186 PPBV



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 10.847 PPBV

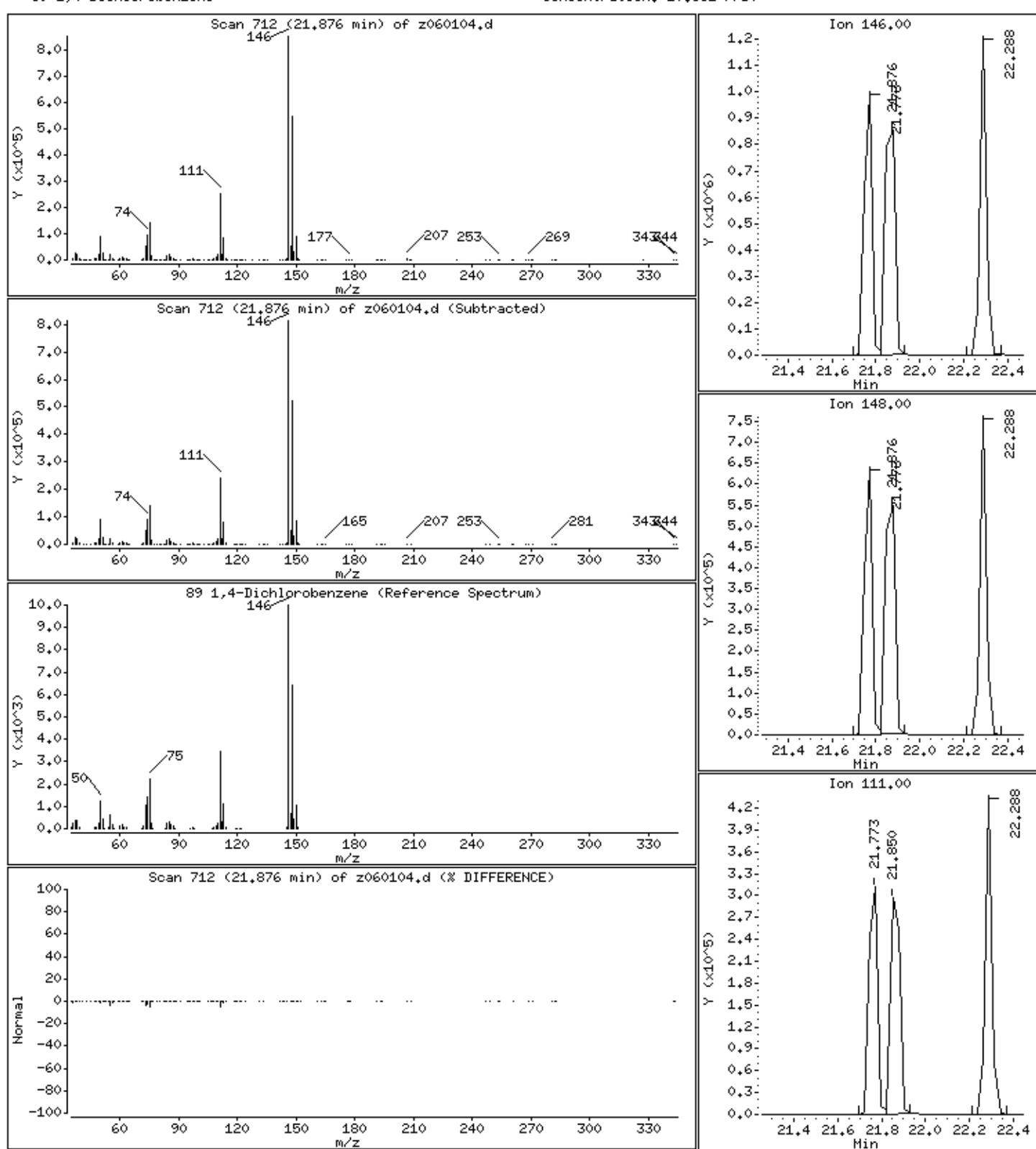
88 1,3-Dichlorobenzene



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.552 PPBV

Page 61



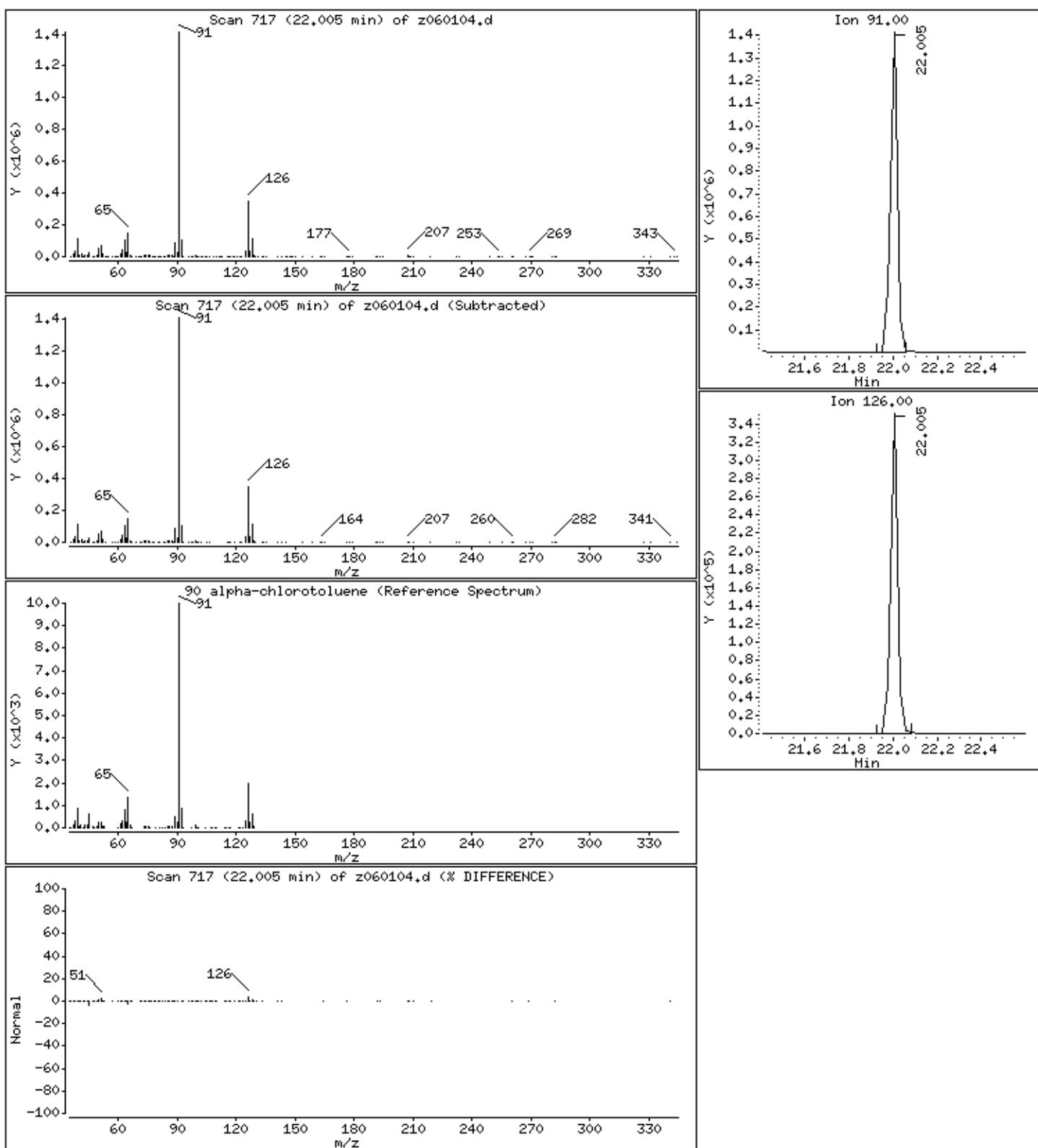
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 62

90 alpha-chlorotoluene

Concentration: 15.614 PPBV



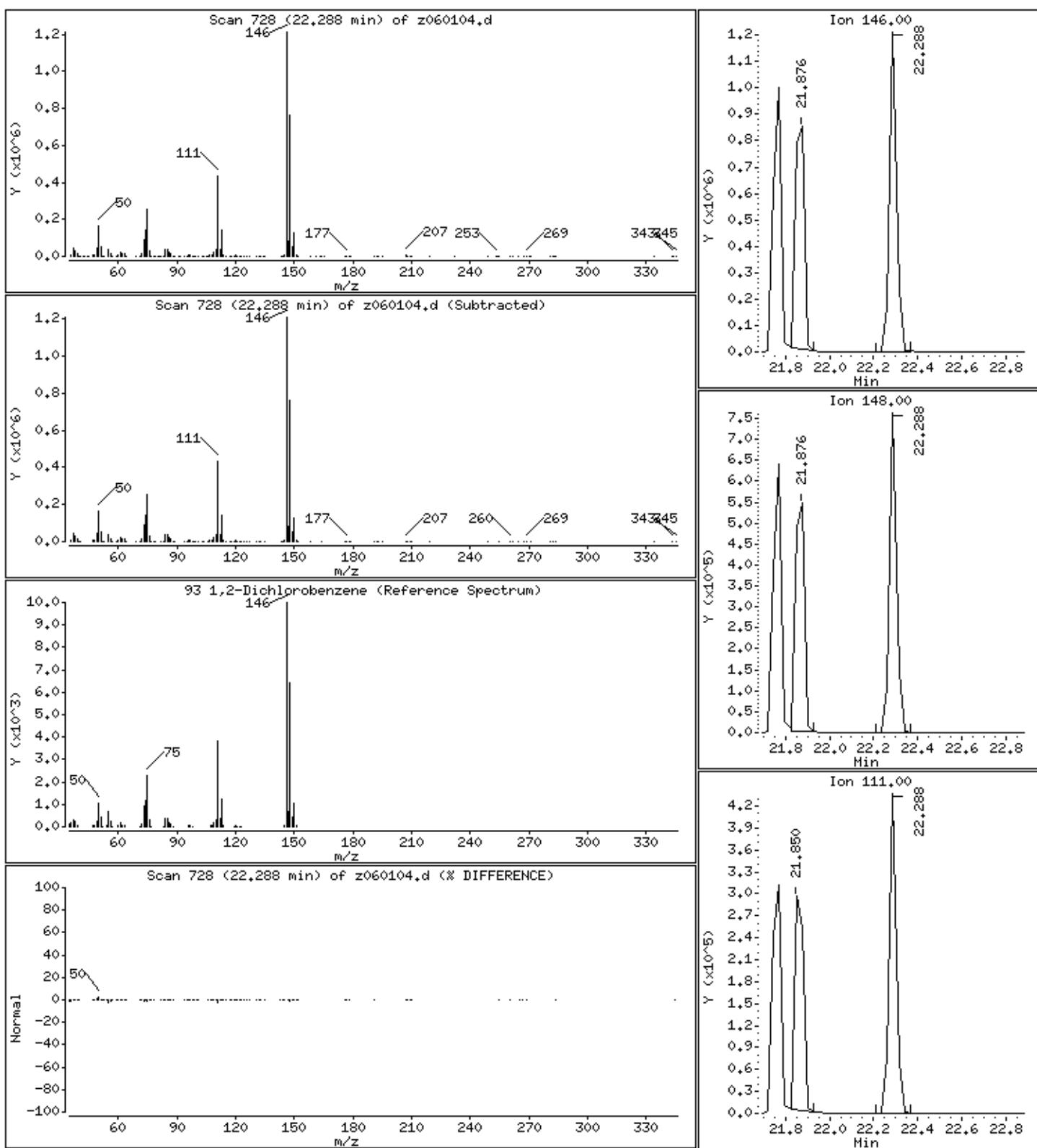
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 63

93 1,2-Dichlorobenzene

Concentration: 10.683 PPBV

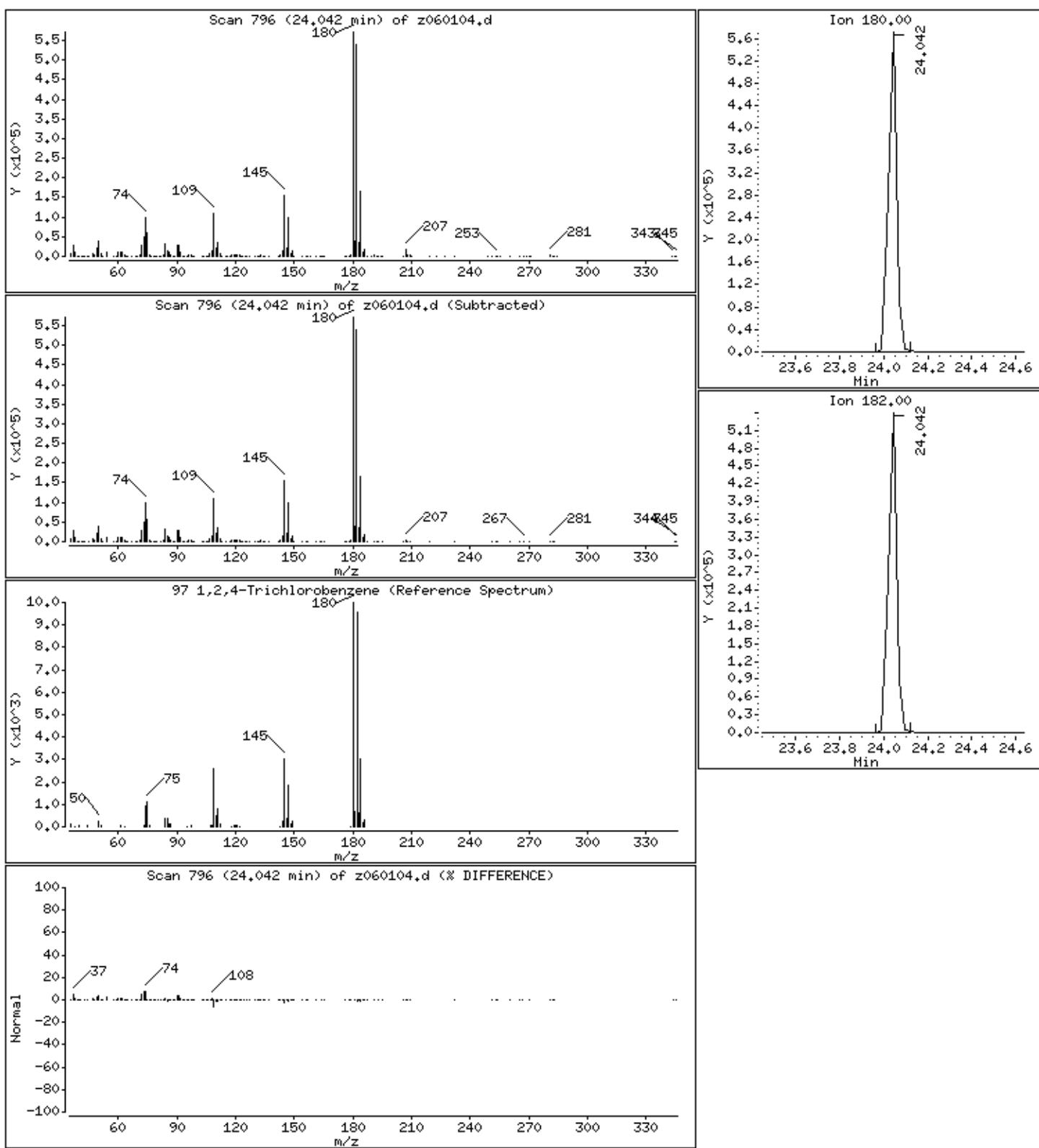


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 13.121 PPBV

97 1,2,4-Trichlorobenzene

Concentration: 13.121 PPBV



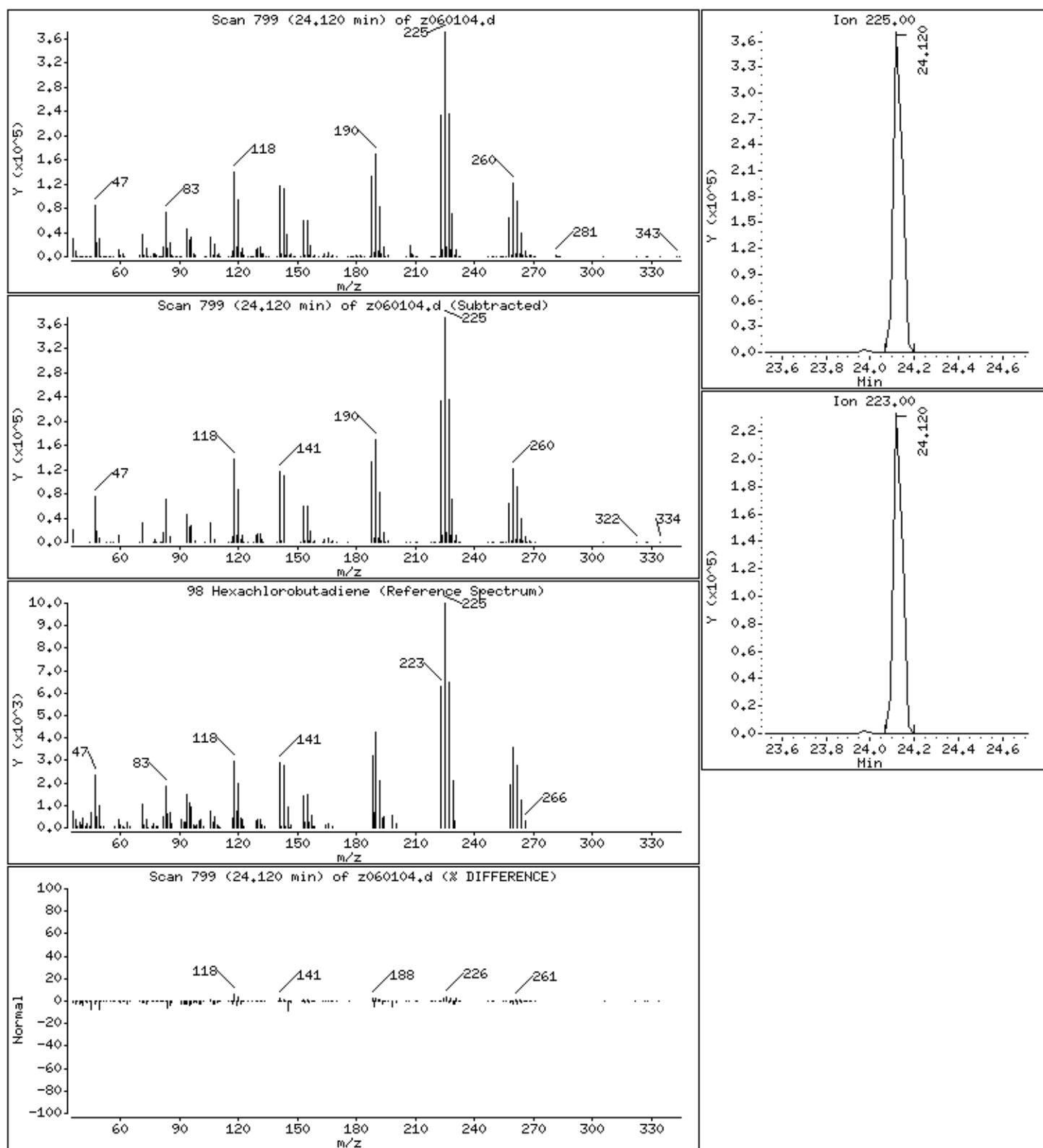
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 65

98 Hexachlorobutadiene

Concentration: 12.357 PPBV



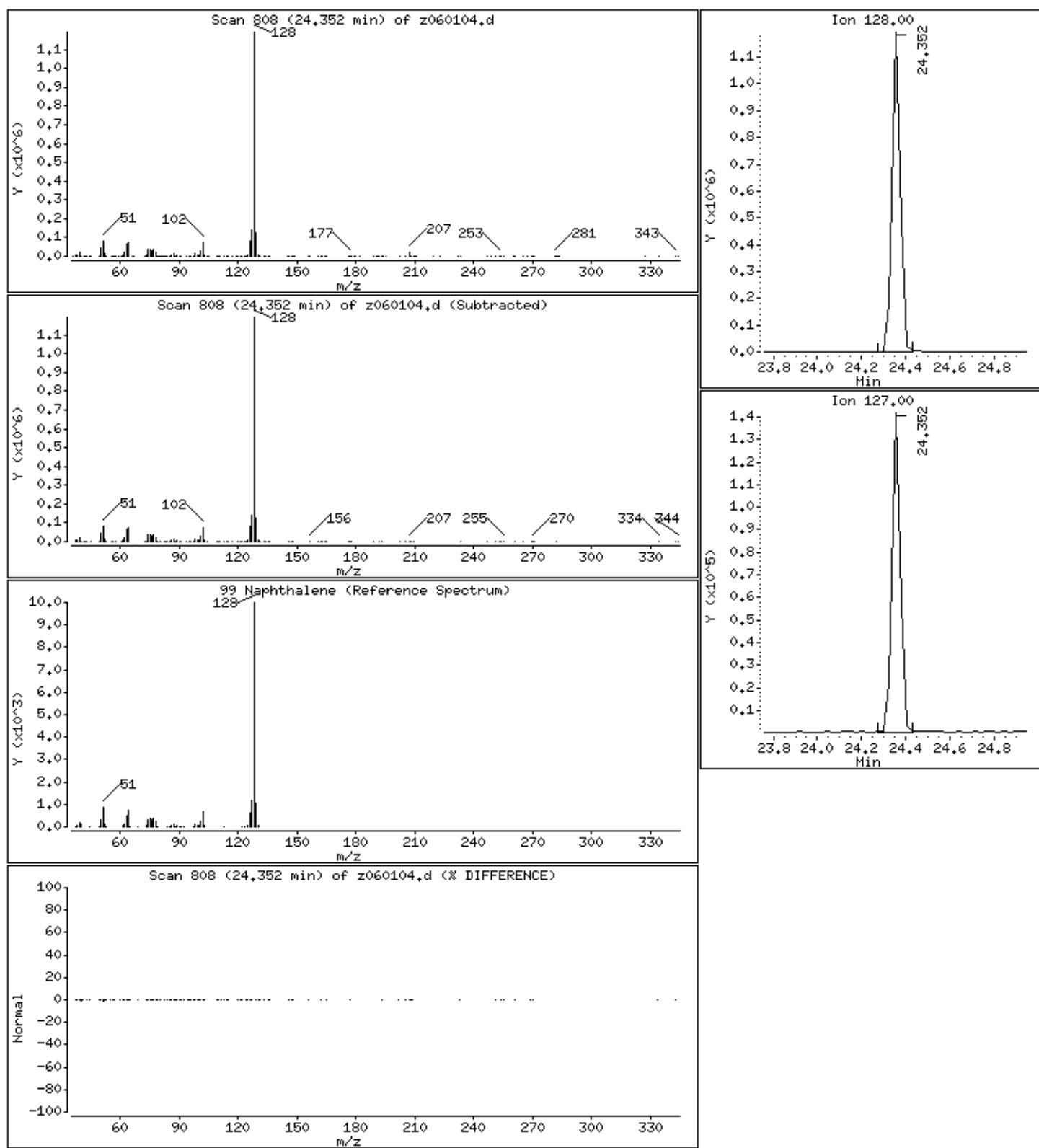
Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32

Page 66

99 Naphthalene

Concentration: 13,676 PPBV

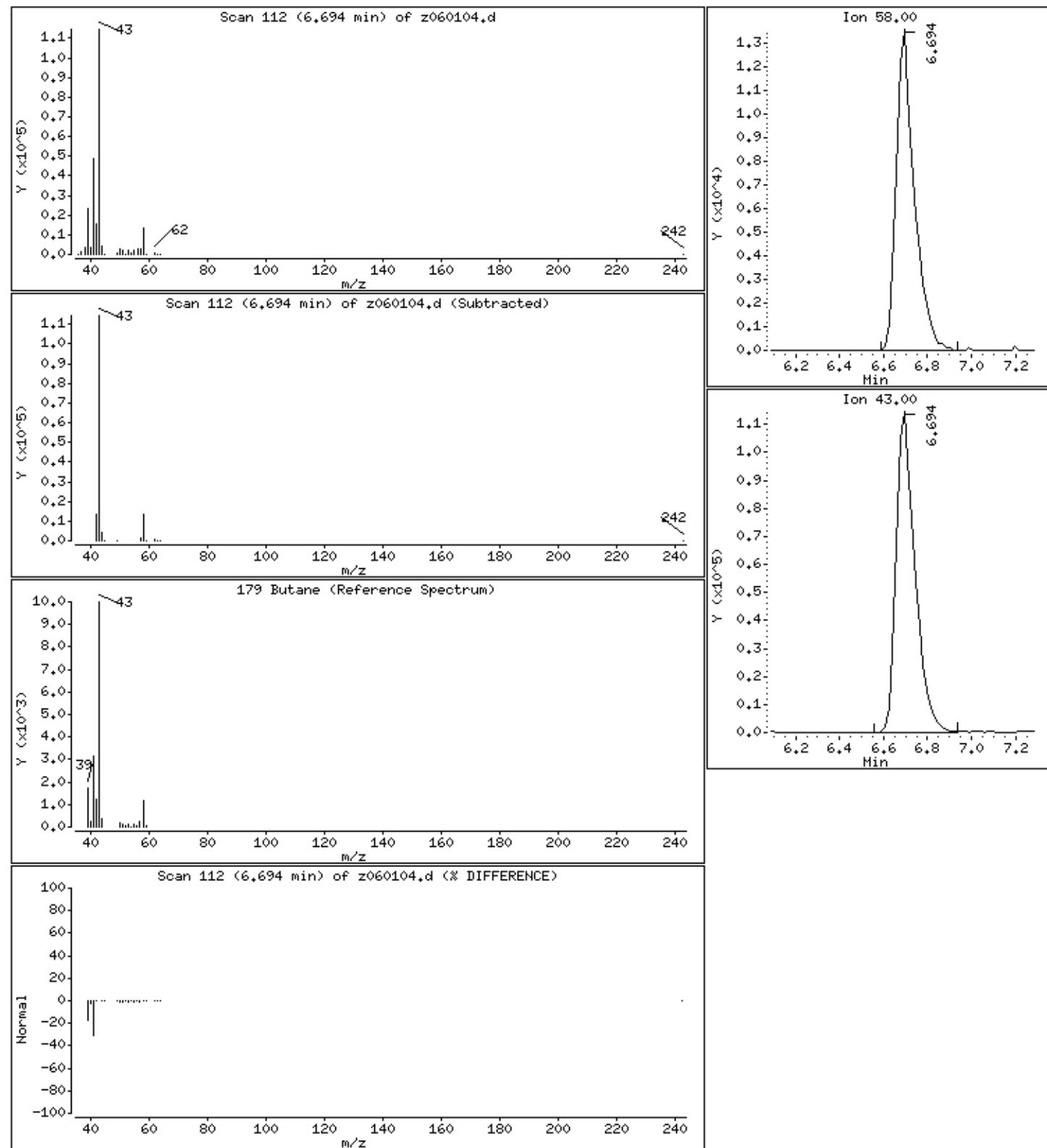


Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 9.604 PPBV

Page 67

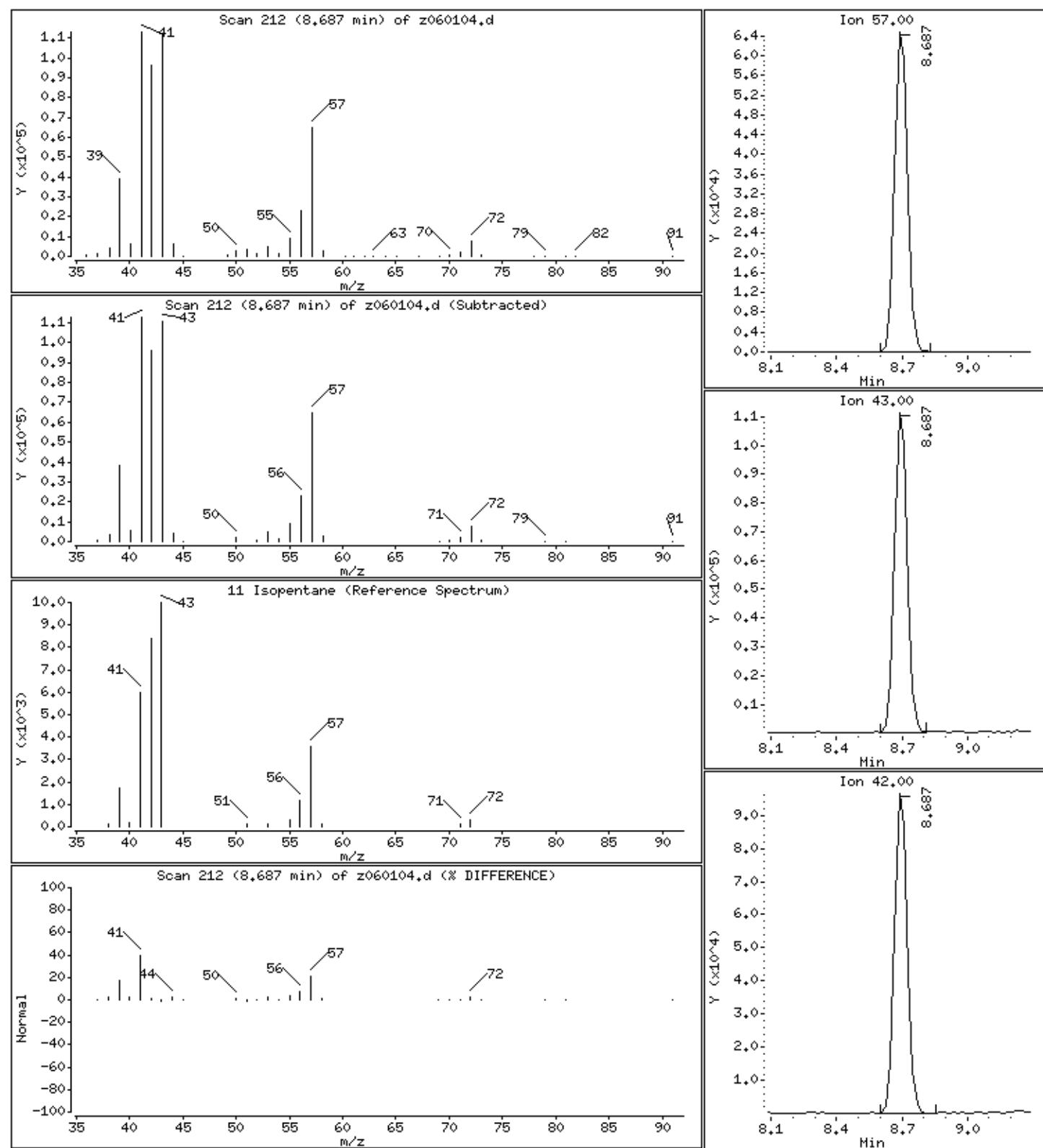
179 Butane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.473 PPBV

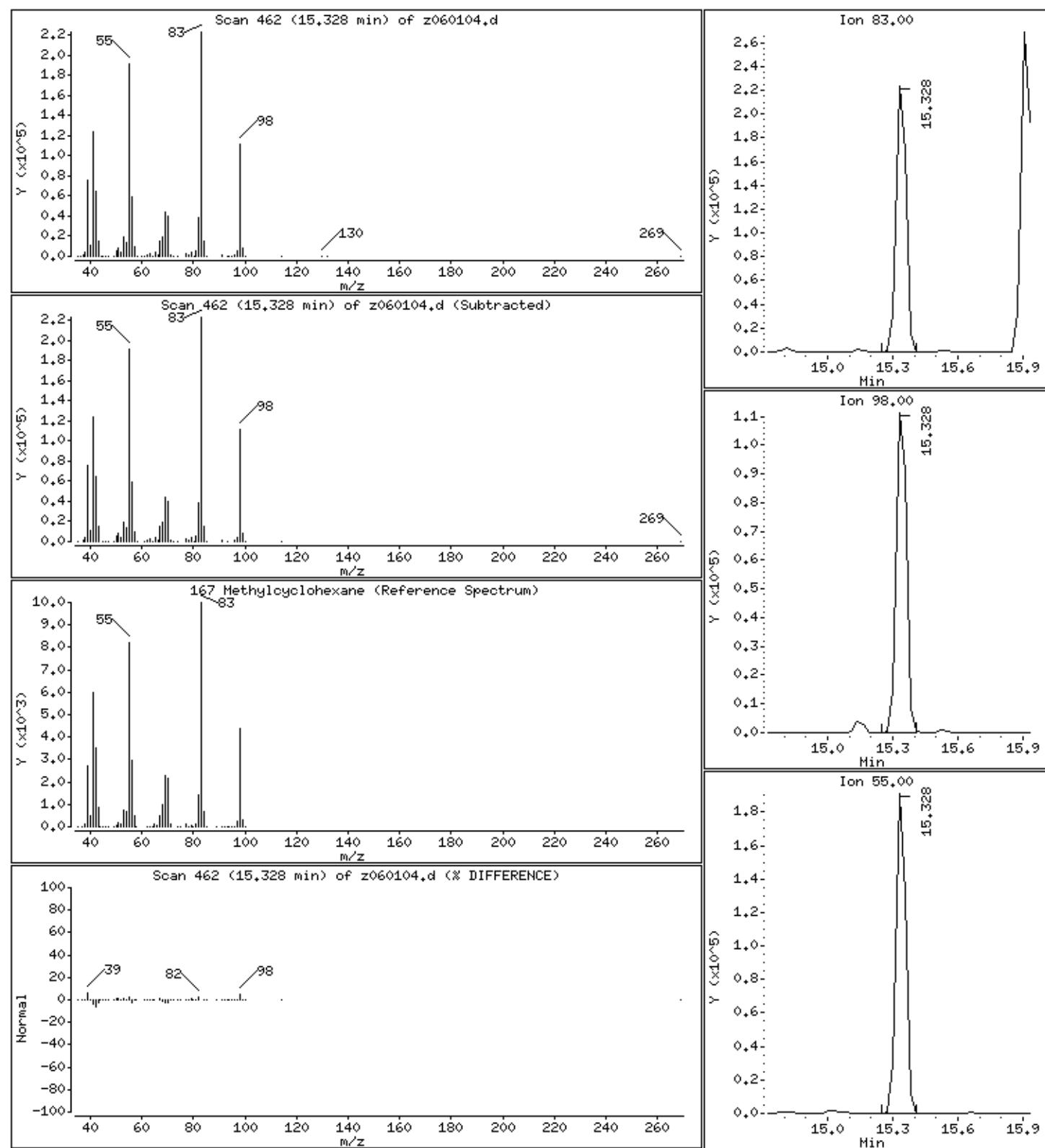
11 Isopentane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.608 PPBV

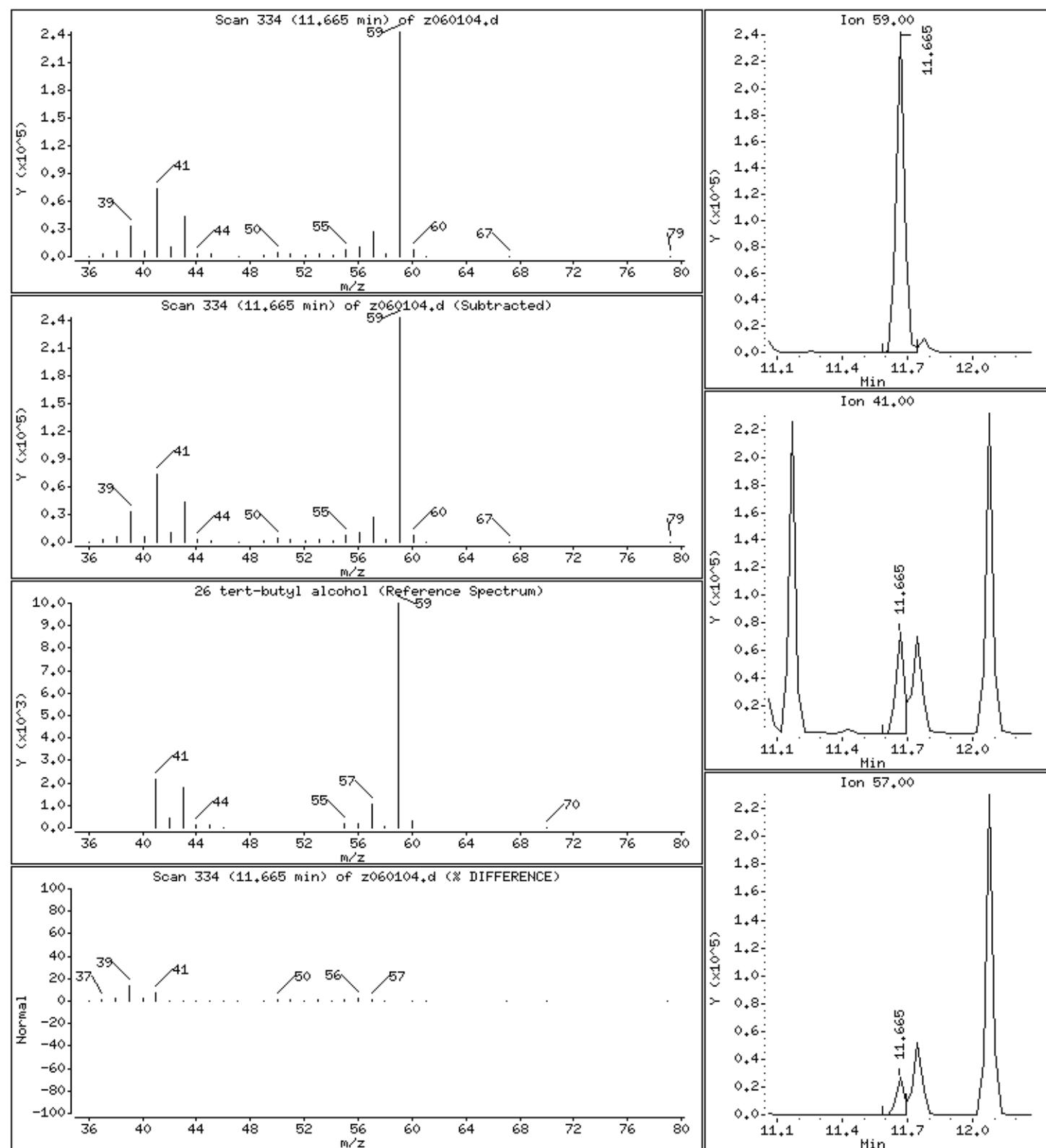
167 Methylcyclohexane



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Concentration: 10.073 PPBV
Column diameter: 0.32

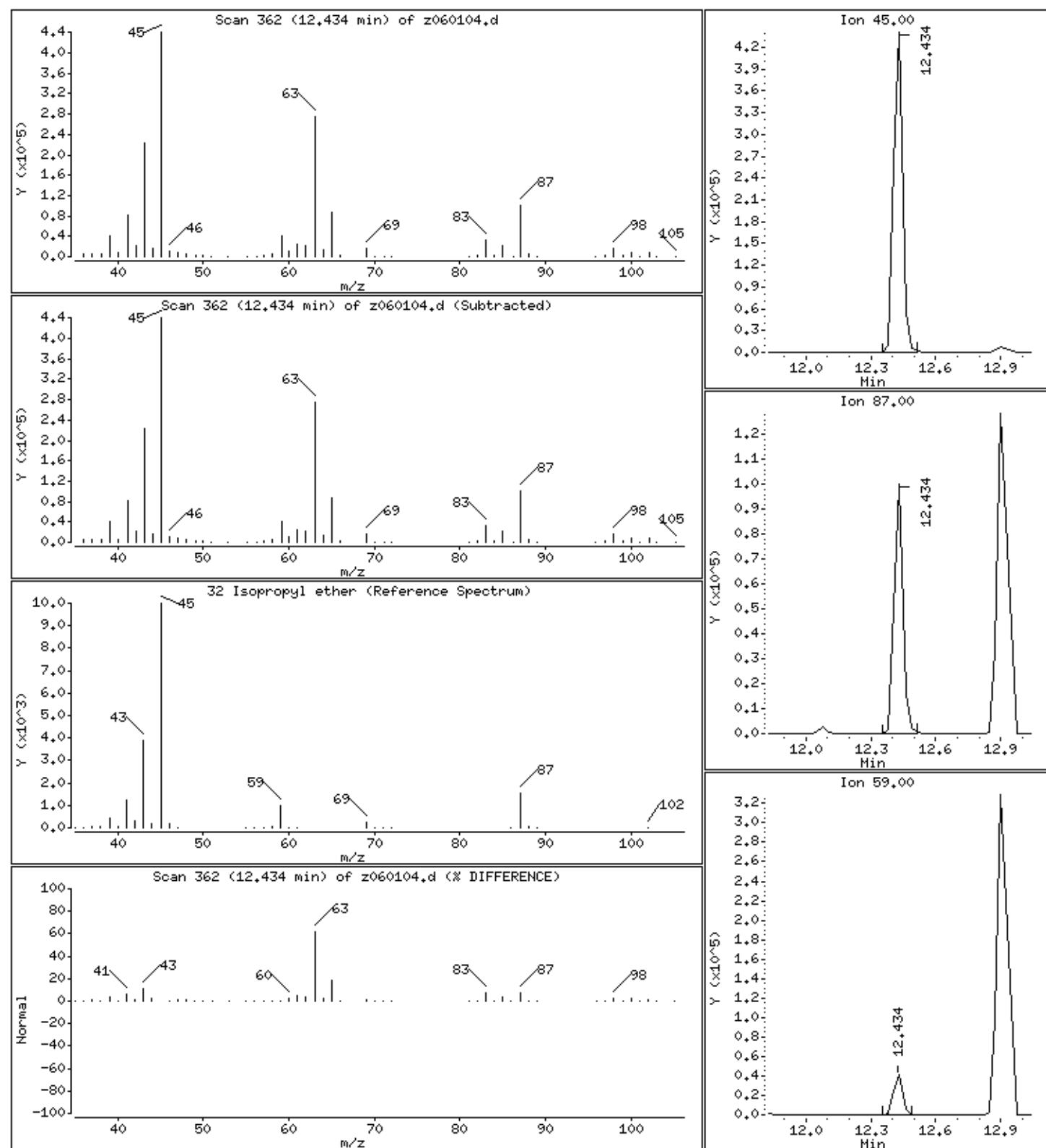
26 tert-butyl alcohol



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.932 PPBV

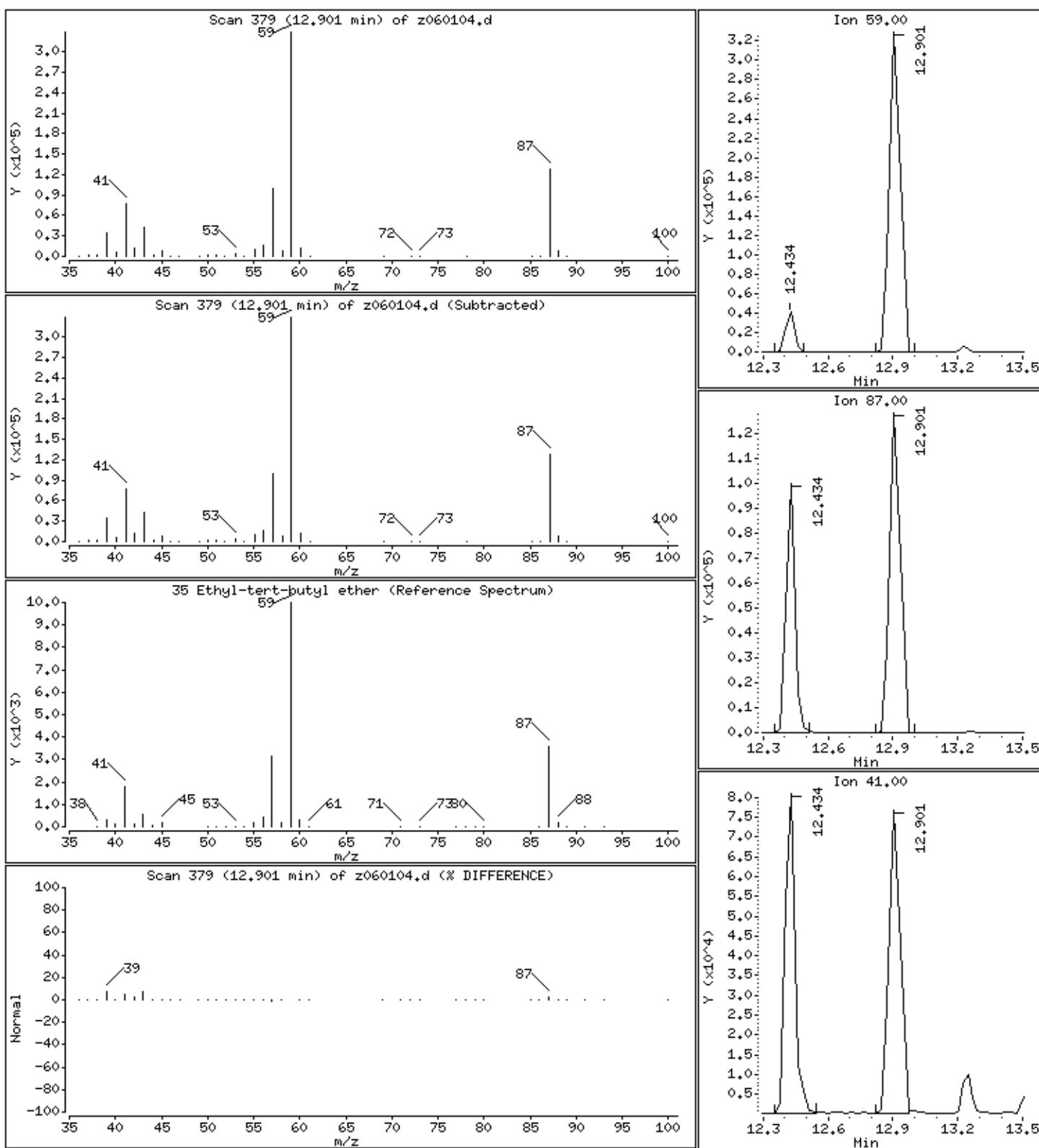
32 Isopropyl ether



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.188 PPBV

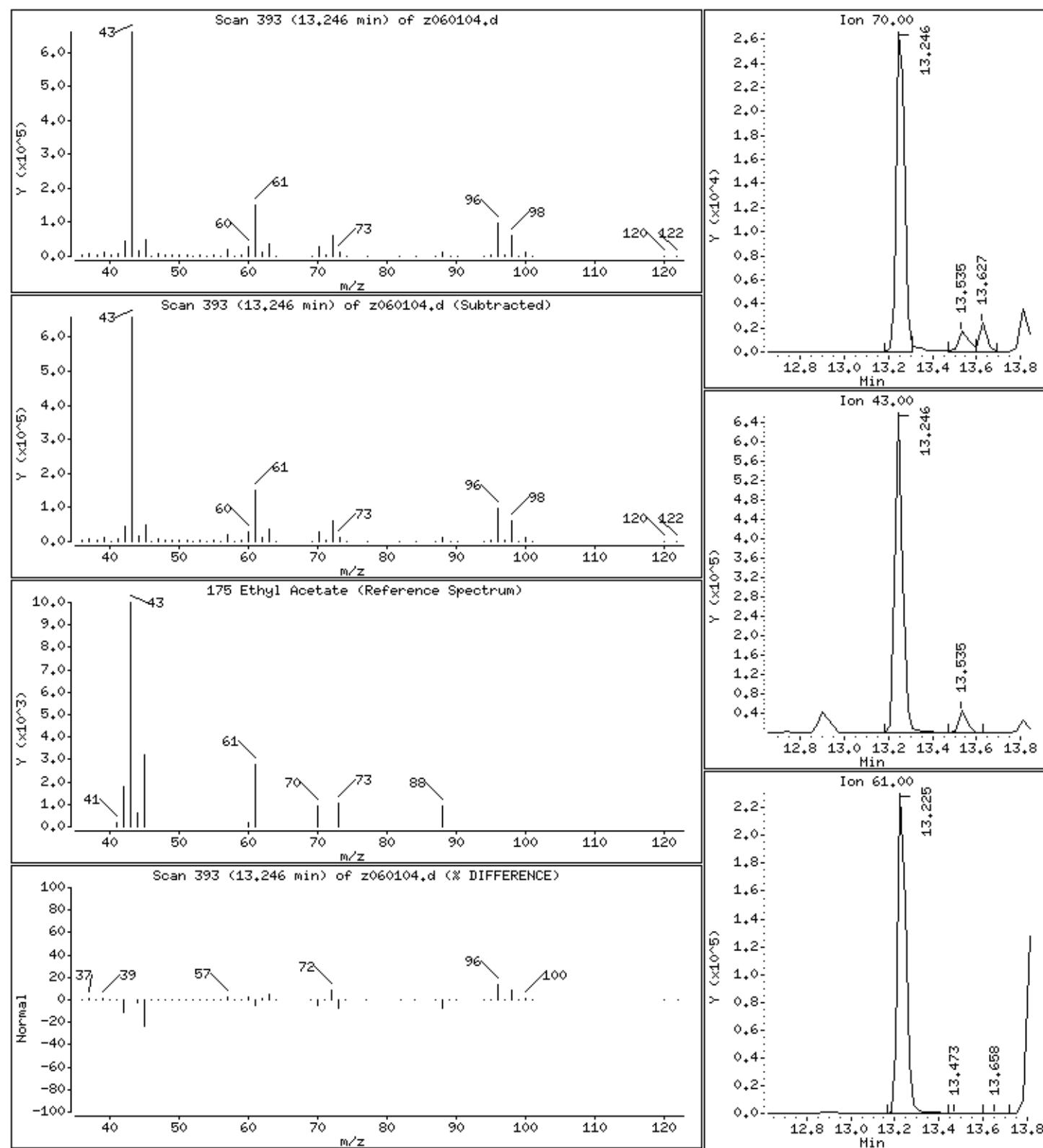
35 Ethyl-tert-butyl ether



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 13.242 PPBV

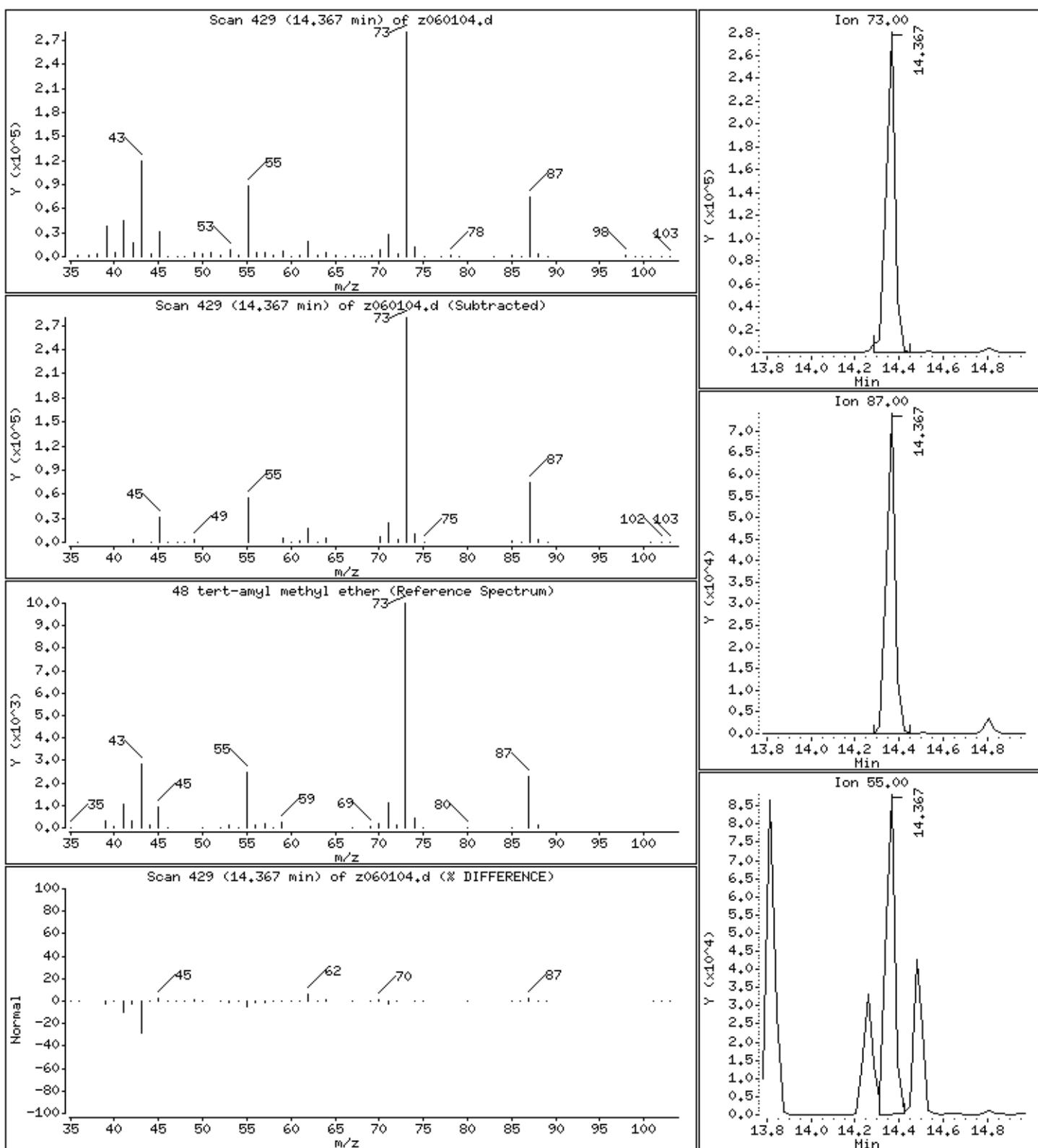
175 Ethyl Acetate



Data File: /chem/msdz.i/01Jun2009.b/z060104.d
Date : 01-JUN-2009 10:10
Client ID: LCS-1
Sample Info: 100mL #1754-202

Instrument: msdz.i
Operator: tjs
Column phase: RTx-624
Column diameter: 0.32
Concentration: 9.822 PPBV

48 tert-amyl methyl ether



m/z ION ABUNDANCE CRITERIA % REL. ABUNDANCE

50	15.0 - 40.0% of mass 95	21.59
75	30.0 - 60.0% of mass 95	39.65
95	Base peak, 100.00% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.50
173	Less than 2.0% of mass 95	(0.62) ¹
174	50.0 - 100% of mass 174	93.00
175	5.0 - 9.0% of mass 174	(2.04) ¹
176	Greater than 95.0% but less than 101.0% of mass 174	(96.71) ¹
177	5.0 - 9.0% of mass 176	(6.47) ²

¹ - value in parenthesis is % mass 174

² - value in parenthesis is % mass 176

Verify 176/174 m/z Ratio: $\frac{92.323}{174.101} \times 100 = 90.71\%$

NOAH Cart #: _____ File #: _____

Calculation Check:

$$\text{ppbv of compound} = \frac{\text{Area}_{\text{sample}}}{\text{Area}_{\text{std}}} \times \frac{\text{Conc.}_{\text{std}}}{\text{RRF}} = \frac{(888461)}{(91413)} \times \frac{(10.0)}{(0.16261)} = 10.0414$$

Reported Result 10.041

Method: 209050A

Use	Sample/Control	Capillary	Pressure	Amt Injested	DE	Loaded by inj.	Date analyzed	Time analyzed	Received by inj.	Comments
✓	Bromo	BFG tube (new)	W/60	5 min	2nd	1.00	06/05/01	09:05	09	
✓	or	CCV # 151-051	50 psi	10 min	100%	1.00			0531	05
✓	O3	CCV # 154-168	25 psi	200ml	1				0418	05
✓	or	CCV # 151-202	50 psi	100ml	1				1010	05
✓	o.s	System blank	dry	-					1054	05
✓	o6	Lab blank	15 psi	10 ml					1111	05
✓	o7		✓	10 ml					1228	05
✓	o8	09050601X - 0546	15 psi	10 ml	✓	1.91			1316	05

Signature _____

Date

@ Air Toxics Ltd.

MSD-Z

Logbook #: 1794

9	✓	2060109	0905607A	-06AB	34360	8.0 (15)	Scalp	1.83	80	6-1-09	105	105	"C Etoyl"
10	✓	10	✓	-07AB	1165	↓					1452	1452	
11	✓	11	↓	-17AB	4395	4.46(15)		1.50	↓	1542	1542	KR	
12	✓	2060112	0905607A	-06AB	34369	8.0 (15)	500mL	1.03	ML	6-1-09	1637	1637	KR
13	✓	13	09053382	-01A	33785	4.82-4.91	200mL	1.00	KR	1709	1709	KR	trip blank
14	✓	14	-02A	10075	4.54(15)	500mL	1.55	KR	1752	1752	KR		
15	✓	15	-03A	34425	35.44(15)	500mL	1.52	KR	1829	1829	KR		
16	✓	16	-04A	41609	20.44(15)	500mL	1.44	KR	1910	1910	KR		
17	✓	17	-05A	76109	35.44(15)	500mL	1.52	KR	1954	1954	KR		
18	✓	18	-05A	↓	↓	↓	↓	KR	2138	2138	KR		
19	X	19	Manifold #3	1055	-	500mL	1.00	KR	2231	2231	KR		
20	X	20	manifold #2	1053	-	1	1	80	6-3-09				Active @ 050 not analyzed
21		1											
22		1											
23													
24													
25													
26													
27													
28													
29													
30													
31													

Comments:

6-2-09

Signature

Date

Air Toxics Ltd.

Data file : /chem/msdz.i/20May2009.b/z052005.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 20-MAY-2009 11:42
Operator : ej Inst ID: msdz.i
Smp Info : 2.0uL #1476-660 BFB tune check;BFB
Misc Info : 50ng
Comment :
Method : /chem/msdz.i/20May2009.b/bfb60.m
Meth Date : 20-May-2009 09:36 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
5.844	5.937	-0.093	95	985770		100.00-	100.00	100.00	
5.844	5.937	-0.093	50	220264		15.00-	40.00	22.34	
5.844	5.937	-0.093	75	399364		30.00-	60.00	40.51	
5.844	5.937	-0.093	96	65248		5.00-	9.00	6.62	
5.844	5.937	-0.093	173	5884		0.00-	1.99	0.66	
5.844	5.937	-0.093	174	888298		50.01-	100.00	90.11	
5.844	5.937	-0.093	175	63541		5.00-	9.00	7.15	
5.844	5.937	-0.093	176	857760		95.01-	100.99	96.56	
5.844	5.937	-0.093	177	54454		5.00-	9.00	6.35	

Data File: /chem/msdz.i/20May2009.b/z052005.d

Page 1

Date : 20-MAY-2009 11:42

Client ID: BFB

Instrument: msdz.i

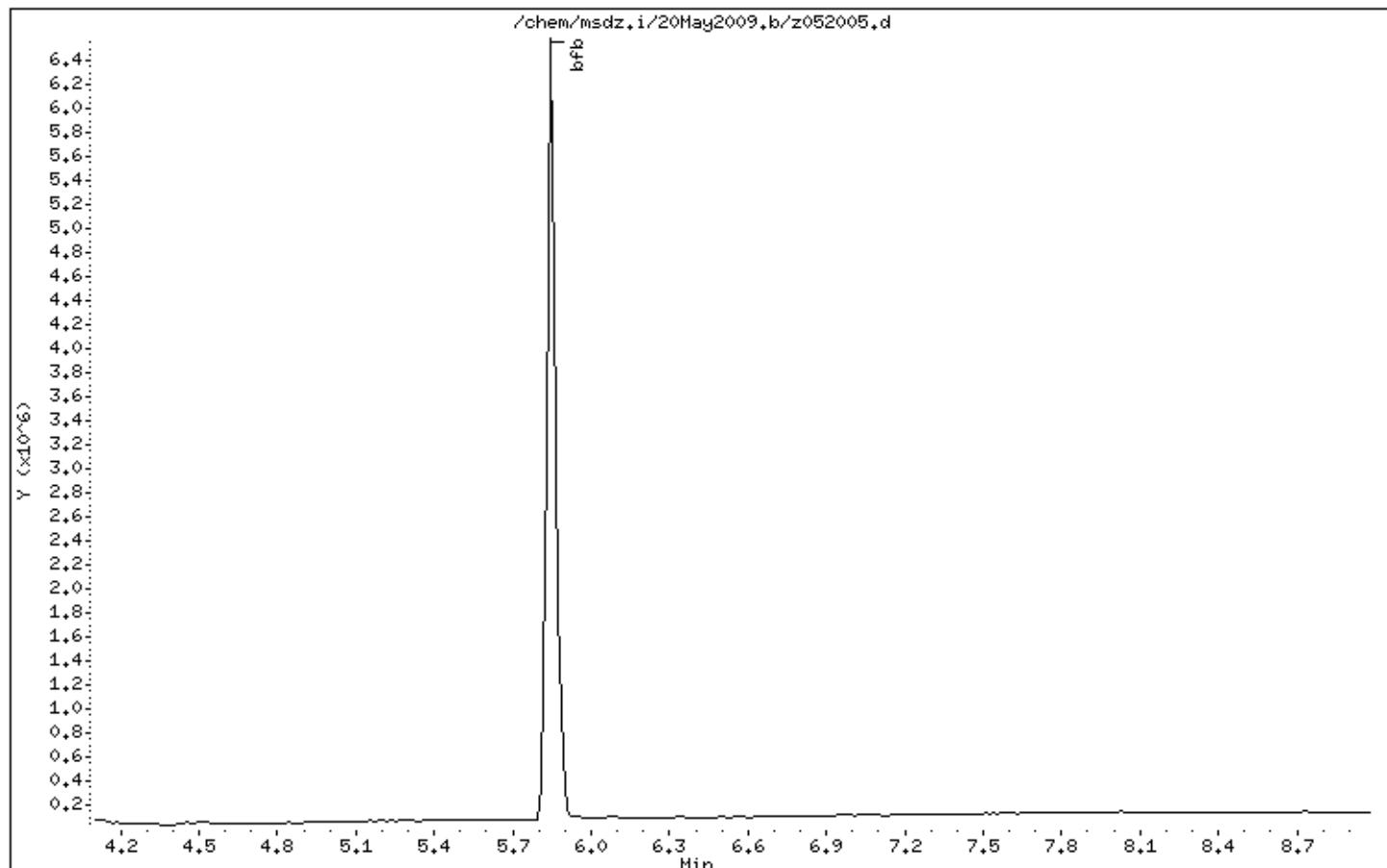
Sample Info: 2.0uL #1476-660 BFB tune check;BFB

Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00



Date : 20-MAY-2009 11:42

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

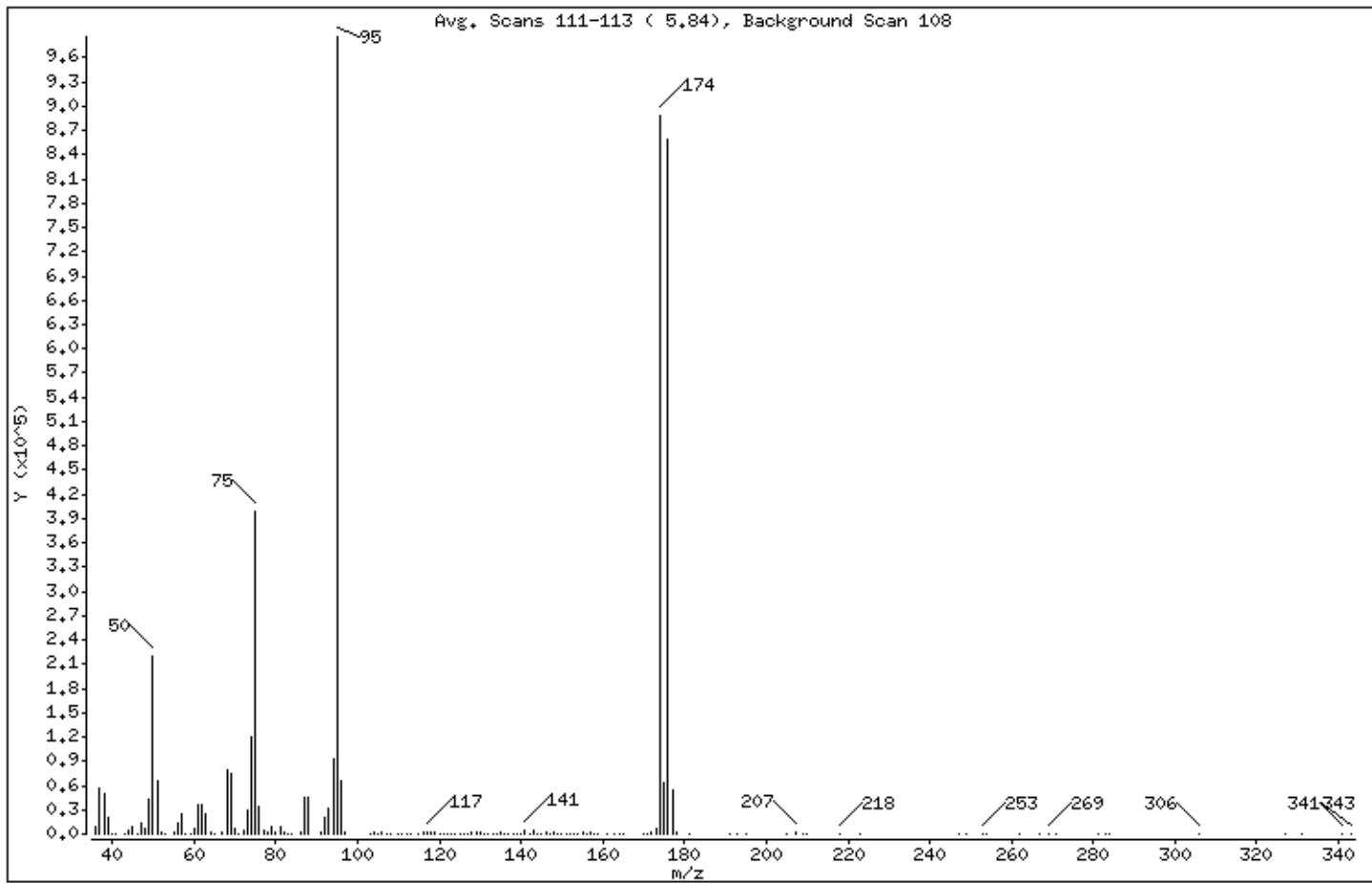
Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
		ABUNDANCE	ABUNDANCE
95 Base Peak, 100% relative abundance		100.00	
50 15.00 - 40.00% of mass 95		22.34	
75 30.00 - 60.00% of mass 95		40.51	
96 5.00 - 9.00% of mass 95		6.62	
173 Less than 1.99% of mass 174		0.60 (< 0.66)	
174 50.01 - 100.00% of mass 95		90.11	
175 5.00 - 9.00% of mass 174		6.45 (< 7.15)	
176 95.01 - 100.99% of mass 174		87.01 (< 96.56)	
177 5.00 - 9.00% of mass 176		5.52 (< 6.35)	

Date : 20-MAY-2009 11:42

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

Data File: z052005.d

Spectrum: Avg. Scans 111-113 (5.84), Background Scan 108

Location of Maximum: 95.00

Number of points: 150

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	10010	77.00	5321	125.00	434	165.00	70
37.00	55776	78.00	3045	126.00	609	170.00	287
38.00	50336	79.00	9459	127.00	551	171.00	352
39.00	19664	80.00	3168	128.00	2304	172.00	1142
40.00	599	81.00	9735	129.00	1134	173.00	5884
41.00	121	82.00	2142	130.00	2680	174.00	888256
43.00	596	83.00	326	131.00	1008	175.00	63536
44.00	5057	84.00	88	132.00	157	176.00	857728
45.00	9554	86.00	1233	133.00	366	177.00	54448
46.00	686	87.00	45728	134.00	131	178.00	1521
47.00	13868	88.00	44520	135.00	1185	181.00	87
48.00	6387	91.00	1642	136.00	237	191.00	118
49.00	43360	92.00	20984	137.00	1045	193.00	331
50.00	220224	93.00	31184	138.00	85	195.00	5
51.00	66272	94.00	92744	139.00	279	205.00	22
52.00	2991	95.00	985728	140.00	376	207.00	1813
53.00	193	96.00	65248	141.00	4784	209.00	376
55.00	2279	97.00	2037	142.00	793	210.00	202
56.00	12781	103.00	267	143.00	4761	218.00	109
57.00	23856	104.00	2410	144.00	283	223.00	107
58.00	1083	105.00	669	145.00	636	247.00	125
59.00	220	106.00	2426	146.00	1260	249.00	49
60.00	7691	107.00	706	147.00	739	253.00	180
61.00	36752	108.00	283	148.00	1863	254.00	98
62.00	35840	110.00	176	149.00	663	262.00	89
63.00	25840	111.00	637	150.00	864	267.00	82
64.00	2143	112.00	259	151.00	131	269.00	503
65.00	530	113.00	400	152.00	265	271.00	122
67.00	1875	115.00	740	153.00	765	281.00	119
68.00	78616	116.00	1939	154.00	830	283.00	155
69.00	75768	117.00	3063	155.00	2244	284.00	225
70.00	5771	118.00	2143	156.00	620	306.00	93
71.00	295	119.00	2845	157.00	1353	327.00	80
72.00	3721	120.00	251	158.00	230	331.00	99
73.00	30432	121.00	85	159.00	1081	341.00	189

Data File: /chem/msdz.i/20May2009.b/z052005.d

Page 4

Date : 20-MAY-2009 11:42

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

Data File: z052005.d

Spectrum: Avg. Scans 111-113 (5.84), Background Scan 108

Location of Maximum: 95.00

Number of points: 150

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	119040	122.00	86	161.00	713	343.00	32
75.00	399360	123.00	440	163.00	344		
76.00	34688	124.00	401	164.00	350		

Air Toxics Ltd.

Data file : /var/chem/msdz.i/01Jun2009.b/z060101.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 01-JUN-2009 08:05
Operator : ej Inst ID: msdz.i
Smp Info : 2.0uL #1476-660 BFB tune check;BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdz.i/01Jun2009.b/bfb60.m
Meth Date : 01-Jun-2009 08:11 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
5.859	5.937	-0.078	95	804224		100.00-	100.00	100.00	
5.859	5.937	-0.078	50	173629		15.00-	40.00	21.59	
5.859	5.937	-0.078	75	318839		30.00-	60.00	39.65	
5.859	5.937	-0.078	96	52307		5.00-	9.00	6.50	
5.859	5.937	-0.078	173	4661		0.00-	1.99	0.62	
5.859	5.937	-0.078	174	747946		50.01-	100.00	93.00	
5.859	5.937	-0.078	175	52679		5.00-	9.00	7.04	
5.859	5.937	-0.078	176	723328		95.01-	100.99	96.71	
5.859	5.937	-0.078	177	46827		5.00-	9.00	6.47	

Data File: /var/chem/msdz.i/01Jun2009.b/z060101.d

Page 1

Date : 01-JUN-2009 08:05

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

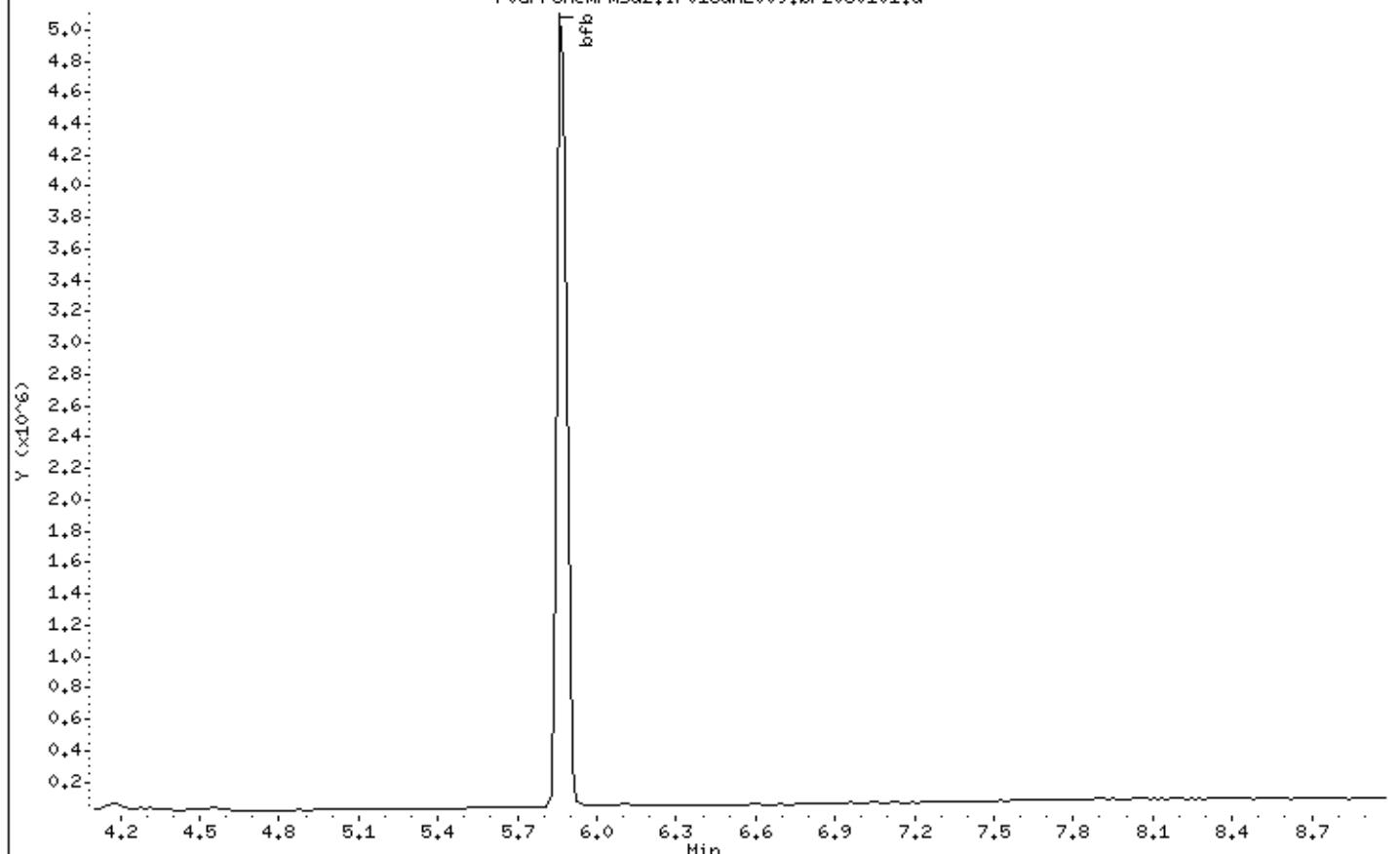
Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

/var/chem/msdz.i/01Jun2009.b/z060101.d



Date : 01-JUN-2009 08:05

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

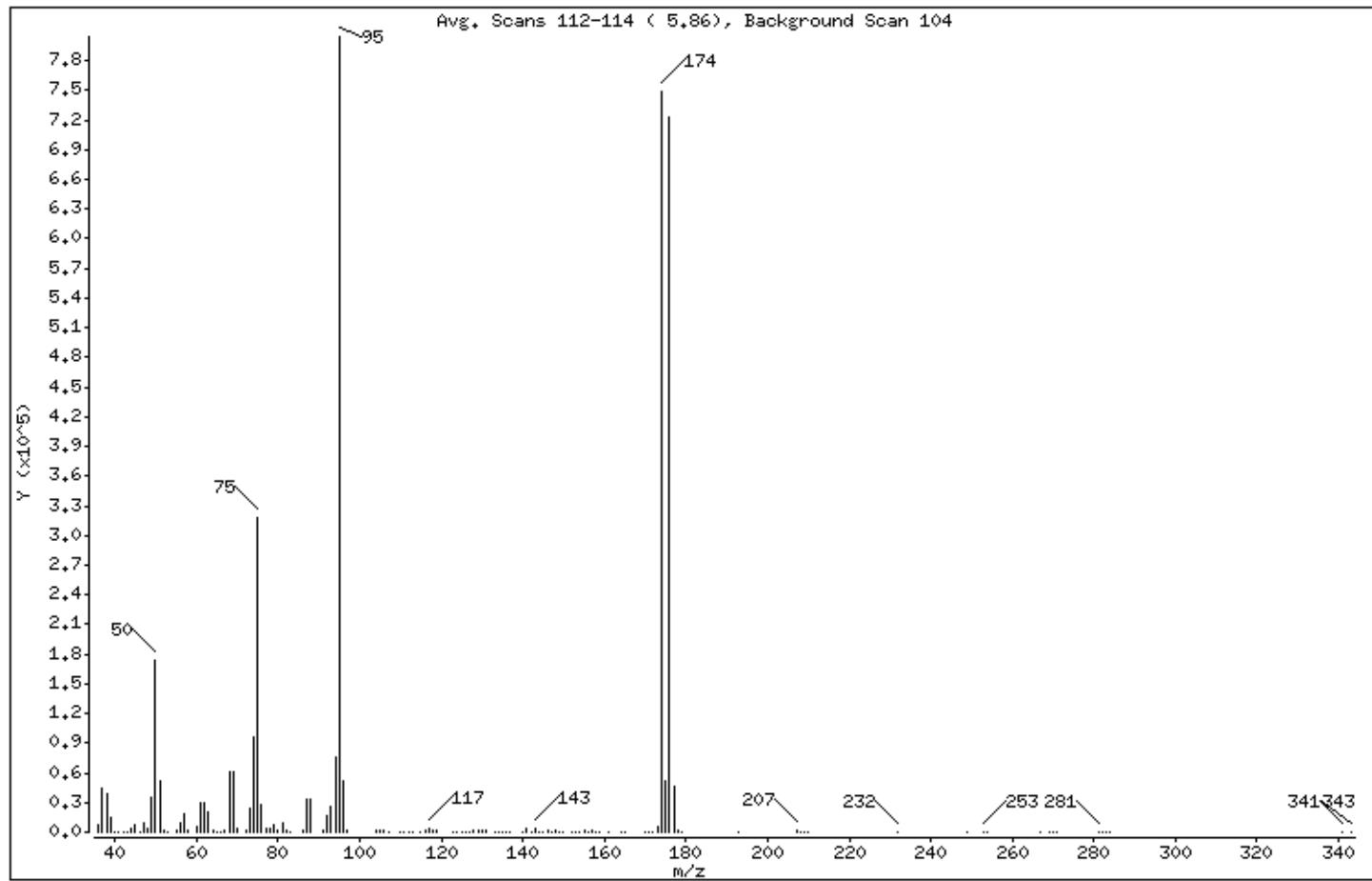
Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
		ABUNDANCE	ABUNDANCE
95 Base Peak, 100% relative abundance		100.00	
50 15.00 - 40.00% of mass 95		21.59	
75 30.00 - 60.00% of mass 95		39.65	
96 5.00 - 9.00% of mass 95		6.50	
173 Less than 1.99% of mass 174		0.58 (< 0.62)	
174 50.01 - 100.00% of mass 95		93.00	
175 5.00 - 9.00% of mass 174		6.55 (< 7.04)	
176 95.01 - 100.99% of mass 174		89.94 (< 96.71)	
177 5.00 - 9.00% of mass 176		5.82 (< 6.47)	

Date : 01-JUN-2009 08:05

Client ID: BFB

Instrument: msdz.i

Sample Info: 2.0uL #1476-660 BFB tune check;BFB

Volume Injected (uL): 1.0

Operator: ej

Column phase:

Column diameter: 2.00

Data File: z060101.d

Spectrum: Avg. Scans 112-114 (5.86), Background Scan 104

Location of Maximum: 95.00

Number of points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7525	73.00	24480	123.00	84	164.00	116
37.00	44632	74.00	95344	124.00	345	165.00	119
38.00	38376	75.00	318784	125.00	347	170.00	105
39.00	15362	76.00	27000	126.00	274	171.00	108
40.00	571	77.00	3875	127.00	128	172.00	641
41.00	19	78.00	2821	128.00	1962	173.00	4661
42.00	314	79.00	8143	129.00	1002	174.00	747904
43.00	374	80.00	2683	130.00	2170	175.00	52672
44.00	3953	81.00	8673	131.00	1052	176.00	723328
45.00	7681	82.00	1651	133.00	353	177.00	46824
46.00	348	83.00	215	134.00	266	178.00	1188
47.00	9175	86.00	963	135.00	876	179.00	19
48.00	4577	87.00	34136	136.00	123	193.00	197
49.00	35928	88.00	32936	137.00	730	207.00	1964
50.00	173568	91.00	1521	140.00	423	208.00	180
51.00	52528	92.00	16432	141.00	3908	209.00	59
52.00	2083	93.00	25224	142.00	379	210.00	193
53.00	175	94.00	76128	143.00	4176	232.00	172
55.00	1661	95.00	804224	144.00	254	249.00	200
56.00	9852	96.00	52304	145.00	378	253.00	437
57.00	18840	97.00	1925	146.00	991	254.00	108
58.00	953	104.00	1990	147.00	472	267.00	128
60.00	6190	105.00	956	148.00	1416	269.00	458
61.00	29488	106.00	1725	149.00	584	270.00	219
62.00	28784	107.00	616	150.00	499	271.00	243
63.00	20280	110.00	92	152.00	300	281.00	626
64.00	1958	111.00	316	153.00	778	282.00	174
65.00	463	112.00	203	154.00	400	283.00	85
66.00	106	113.00	125	155.00	1807	284.00	172
67.00	1496	115.00	872	156.00	249	341.00	91
68.00	61304	116.00	1729	157.00	1278	343.00	485
69.00	60720	117.00	2910	158.00	244		
70.00	4367	118.00	1882	159.00	625		
72.00	2638	119.00	2388	161.00	713		

Shipping/ Receiving Documents

**180 Blue Ravine Road, Suite B
Folsom, CA 95630**

**Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific**

COMPANY: The Johnson Company
ATTENTION: Mr. Chris Turner
FAX #: 802.229.5876
FROM: Sample Receiving
Workorder #: 0905582R1
of pages (Including Cover): 1

7/21/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found discrepancies.
In order to expedite analysis and reporting, please review the attached information for accuracy.
Corrections can be faxed to **Bryanna Langley at 916-985-1020**.

ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

The following discrepancy has been observed:

The Chain of Custody (COC) was not completed properly. Please note for future reference that the COC must be signed and dated in order to properly relinquish or receive samples.

Your prompt response is appreciated.

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national and international laws, regulations and ordinances of every kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of sample. D.O.T. Hotline (800) 467-4922

Project Manager Glen Kite

Collected by: (Print and Sign) T. Osborne

Company The Johnson Co.

Email _____

Address 120 State St. Suite 600

City Montpelier

State VT

Zip 05630

Phone (802) 229-4600

Fax (802) 229-5876

Project Info:

P.O. # _____

Project # J-D145-5

Project Name Fluor Daniel NY

Turn Around Time: Lab Use Only
Pressurized by: _____

Date: _____

Pressurization Gas: _____

N₂ He _____

Lab I.D. Field Sample I.D. (Location)

Date of Collection Time of Collection

Analyses Requested Canister Pressure/Vacuum

Initial Final Receipt Final

OFA-Trip Blank	33785	5/13-09	-	TD-15	29.5	5.0		
OFA-SV-LFP-1	12025	5-20-09	8:01		-30"	-6"		
OFA-SV-LFP-3	34424	5/20/09	8:01		-31"	-6"		
OFA-SV-LFP-4	4169	5/20/09	8:23		-34"	-6"		
OFA-SV-LFP-5	96109	5/20/09	8:42	TO-15	-31"	-6"		

Relinquished by: (signature) Date/Time

Eric J. Jr. 5/26/09

Notes: Shipped FedEx overnight

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Regulator 913 used. / Canister 2091 used.
Regulator/canister SC416 Don't Analyze Clogged VP.

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Temp (°C): Condition: Custody Seals intact? Work Order#:

Lab Use Only

Shipper Name: Air Bell Temp (°C): Condition: Custody Seals intact? Work Order#:

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020
Page 1 of 1

SAMPLE RECEIPT SUMMARY

WORKORDER 0905582R1

Client	Phone	Date Promised: 07/14/09
Mr. Chris Turner The Johnson Company 100 State Street Suite 600 Montpelier, VT 05602	603.232.2974	Date Completed: 7/20/09
	Fax	Date Received: 5/26/09
	802.229.5876	PO#:
		Project#: 1-0145-5 Avery Dennison NY
		Total \$: \$ 0.00
Sales Rep: TB		Logged By: MG

<u>Fraction</u>	<u>Sample #</u>	<u>Analysis</u>	<u>Collected</u>	<u>Receipt Vac./Pres.</u>	<u>Amount\$</u>
01A	Trip Blank	Modified TO-15	5/13/2009	4.8 psi	\$0.00
02A	SV-LFP-1	Modified TO-15	5/20/2009	4.0 "Hg	\$0.00
03A	SV-LFP-3	Modified TO-15	5/20/2009	3.5 "Hg	\$0.00
04A	SV-LFP-4	Modified TO-15	5/20/2009	2.0 "Hg	\$0.00
05A	SV-LFP-5	Modified TO-15	5/20/2009	3.5 "Hg	\$0.00
05AA	SV-LFP-5 Lab Duplicate	Modified TO-15	5/20/2009	3.5 "Hg	\$0.00
06A	Lab Blank	Modified TO-15	NA	NA	\$0.00
07A	CCV	Modified TO-15	NA	NA	\$0.00
08A	LCS	Modified TO-15	NA	NA	\$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Avery Dennison NY/12936

BILL TO: Accounts Payable
The Johnson Company
100 State Street
Montpelier, VT 05602

Analysis Code: pptv

TERMS: NET 60

Reporting Method: Modified TO-15-LL (Sh)-The Johnson Company (1-0145-5)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Sample Discrepancy Report

Identification

Initiated By: MG Project ID:12936 PM: BL Date: 5/26/2009 Discrepancy Type: 1. 2. 3.

Workorder(s) affected:0905582 Sample(s) affected: ALL

1. Sample Receipt Discrepancies

Narration Not Required:

- 1.1. Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.
- 1.2. No brass cap on canister.
- 1.3. Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

- 1.4. Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

- 1.5. COC was not filled out in ink.
- 1.6. COC improperly relinquished / received.
- 1.7. Sample tags / can numbers do not match the COC.
- 1.8. Sample date error / missing on COC but noted on sample tag (check one).
- 1.9. Custody Seal on the outside of the container was broken / improperly placed (check one).
- 1.10. ID-none on the sample Tag/Blank
- 1.11. Other (describe below).

Describe the Discrepancy: 1.6: No signature and date was provided when the COC was relinquished.

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

- 2.1. COC was not received with samples.
- 2.2. Analysis method(s) is not specified / incorrectly specified (check one) on the COC.
- 2.3. Incorrect sampling media / container for analysis requested.
- 2.4. Number of samples on the COC does not match the number of samples that were received.
- 2.5. Samples were received expired.
- 2.6. Sampling date (time for sulfur) is not documented for some / any samples (check one).
- 2.7. Sample received with amount of H₂O in the Tedlar Bag.
- 2.8. Sample cannot be analyzed. Container was received broken / leaking / flat / defective.
- 2.9. Tedlar bag / canister received emitting a strong odor; Sample can / cannot (check one) be analyzed.
- 2.10. Tedlar Bag for Sulfur analysis has metal fitting.
- 2.11. Environmental Supply Company valves
- 2.12. Sorbent samples -sampling volume was not provided
- 2.13. Flow controller used – canister samples received at ambient or under pressure.
- 2.14. Canister was at ambient pressure at time of pressurization and (check all that apply):
 - Canister failed leak check on two manifolds,
 - Canister valve was open,
 - Brass nut was loose/not present.
 - Sample can be analyzed
 - Cannot be analyzed
- 2.15. Canister sample received with a vacuum difference >5.0" Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.
- 2.16. Canister sample received at >15" Hg (not identified as a Trip/Field Blank).
- 2.17. Canister Trip Blank received at low vacuum (< 25" Hg).
- 2.18. Sorbent Sample received outside method required temperature of 2°C to 6°C; ice / blue ice (check one) was present. A temp. Blank was / was not present (check one).
- 2.19. Other (describe below)

Initials: _____

Date: _____

Notify Receiving:

Notify PM:

Describe the Discrepancy:

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

- 3.1. Tedlar Bag found to be leaking at the time of analysis; sample can / cannot (check one) be analyzed.
- 3.2. Tedlar Bag found to be flat/low volume; sample cannot be analyzed.
- 3.3. Sulfur samples received with insufficient time to analyze prior to expiration.
- 3.4. Canister found to be leaking at the time of analysis.
- 3.5. VOST tube saturated; bag dilution necessary.
- 3.6. Sample loss due to instrument malfunction / broken glassware.
- 3.7. Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.
- 3.8. Reporting Limit was raised.
- 3.9. Post weight > Pre weight in field/lab Blank for PM10/TSP samples.
- 3.10. Other (describe below).

Initials: _____

Date: _____

Notify Receiving:

Notify PM:

Team Lead Initials: _____

Date: _____

Describe the Discrepancy: _____

How Does this Affect Client:

Project Manager Use Only

Project Manager Notification

Section 2 Complete

Section 3

Complete

Action:

- It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials: _____ Date: _____

- Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials: _____ Person notified: _____ Date: _____

- Waiting for Client Reply

Comments: _____

Notify Lab Name: _____

Date: _____ Notify Receiving:

- Additional notifications attached.

Additional Comments:

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

Modified TO-15-LL (Sh)-The Johnson Company (1-0145-5)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.10	
76-13-1	Freon 113	0.10	
75-35-4	1,1-Dichloroethene	0.10	
75-34-3	1,1-Dichloroethane	0.10	
156-59-2	cis-1,2-Dichloroethene	0.10	
67-66-3	Chloroform	0.10	
71-55-6	1,1,1-Trichloroethane	0.10	
79-01-6	Trichloroethene	0.10	
75-27-4	Bromodichloromethane	0.10	
108-88-3	Toluene	0.10	
127-18-4	Tetrachloroethene	0.10	
17060-07-0	1,2-Dichloroethane-d4		
2037-26-5	Toluene-d8		
460-00-4	4-Bromofluorobenzene		



www.airtoxics.com
1-800-985-5955

Media Certification Report

File/Canister #: f051247 ;6I #33785 /w24hrs+6"cans#40333:1

Date: 5/13/2009 00:57:41

Peak #	Quantification	CAS	Type	Concentration	Units
	1,1,1,2-Tetrafluoroethane	0-00-0	Not Found		ppbv
	Freon 134a	0-00-0	Not Found		ppbv
	Freon 123a	0-00-0	Not Found		ppbv
	1,1-Difluoroethane	0-00-0	Not Found		ppbv
	Freon 114	0-00-0	Not Found		ppbv
	Chloromethane	0-00-0	Not Found		ppbv
	Vinyl Chloride	0-00-0	Not Found		ppbv
	Methyl Acetate	0-00-0	Not Found		ppbv
	Vinyl bromide	0-00-0	Not Found		ppbv
	Acrolein	0-00-0	Not Found		ppbv
	Freon 113	0-00-0	Not Found		ppbv
	Dibromomethane	0-00-0	Not Found		ppbv
	2-Propanol	0-00-0	Not Found		ppbv
	3-Chloropropene	0-00-0	Not Found		ppbv
	Acetonitrile	0-00-0	Not Found		ppbv
	trans-1,2-Dichloroethene	0-00-0	Not Found		ppbv
	Methyl tert-butyl ether	0-00-0	Not Found		ppbv
	Acrylonitrile	107-13-1	Not Found		ppbv
	1,1-Dichloroethane	0-00-0	Not Found		ppbv
	Isopropyl ether	0-00-0	Not Found		ppbv
	Vinyl Acetate	0-00-0	Not Found		ppbv
	Chloroprene	126-99-8	Not Found		ppbv
	Nonane	589-43-5	Not Found		ppbv
	Ethyl-tert-butyl ether	0-00-0	Not Found		ppbv
	cis-1,2-Dichloroethene	0-00-0	Not Found		ppbv
	2-Butanone (Methyl Ethyl Ketone)	0-00-0	Not Found		ppbv
	Ethyl Acetate	0-00-0	Not Found		ppbv
	Tetrahydrofuran	0-00-0	Not Found		ppbv
	1,1,1-Trichloroethane	0-00-0	Not Found		ppbv
	Carbon Tetrachloride	0-00-0	Not Found		ppbv
	1,1-Dichloropropene	0-00-0	Not Found		ppbv
	2,2,4-Trimethylpentane	0-00-0	Not Found		ppbv
	1,2-Dichloroethane	0-00-0	Not Found		ppbv
	tert-Amyl Methyl ether	0-00-0	Not Found		ppbv
	Butyl Acetate	2610-95-9	Not Found		ppbv
	1,2-Dichloropropane	0-00-0	Not Found		ppbv
	1,4-Dioxane	0-00-0	Not Found		ppbv
	Bromodichloromethane	0-00-0	Not Found		ppbv
	cis-1,3-Dichloropropene	0-00-0	Not Found		ppbv
	4-Methyl-2-pentanone	0-00-0	Not Found		ppbv
	trans-1,3-Dichloropropene	0-00-0	Not Found		ppbv
	1,1,2-Trichloroethane	0-00-0	Not Found		ppbv
	Tetrachloroethene	0-00-0	Not Found		ppbv



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1-800-985-5955

Media Certification Report

File/Canister #: f051247 ;6I #33785 /w24hrs+6"cans#40333:1

Date: 5/13/2009 00:57:41

Peak #	Quantification	CAS	Type	Concentration	Units
	2-Hexanone	0-00-0	Not Found		ppbv
	Dibromochloromethane	0-00-0	Not Found		ppbv
	1,2,3-Trichlorobenzene	0-00-0	Not Found		ppbv
	1,2-Dibromoethane (EDB)	0-00-0	Not Found		ppbv
	1,1,1,2-Tetrachloroethane	0-00-0	Not Found		ppbv
	o-Xylene	0-00-0	Not Found		ppbv
	Styrene	0-00-0	Not Found		ppbv
	Cumene	0-00-0	Not Found		ppbv
	1,1,2,2-Tetrachloroethane	0-00-0	Not Found		ppbv
	Propylbenzene	0-00-0	Not Found		ppbv
	1,2,3-Trichloropropane	0-00-0	Not Found		ppbv
	4-Ethyltoluene	0-00-0	Not Found		ppbv
	2-Chlorotoluene	108-41-8	Not Found		ppbv
	1,3,5-Trimethylbenzene	0-00-0	Not Found		ppbv
	3-Chlorotoluene	106-43-4	Not Found		ppbv
	tert-Butylbenzene	0-00-0	Not Found		ppbv
	1,2,4-Trimethylbenzene	0-00-0	Not Found		ppbv
	Pentachloroethane	0-00-0	Not Found		ppbv
	sec-Butylbenzene	0-00-0	Not Found		ppbv
	p-Cymene	0-00-0	Not Found		ppbv
	1,3-Dichlorobenzene	0-00-0	Not Found		ppbv
	1,4-Dichlorobenzene	0-00-0	Not Found		ppbv
	1,2,3-Trimethylbenzene	95-63-6	Not Found		ppbv
	alpha-Chlorotoluene	0-00-0	Not Found		ppbv
	Indan	0-00-0	Not Found		ppbv
	Butylbenzene	0-00-0	Not Found		ppbv
	1,2-Dichlorobenzene	0-00-0	Not Found		ppbv
	Indene	0-00-0	Not Found		ppbv
	Hexachloroethane	67-72-1	Not Found		ppbv
	1,2-Dibromo-3-chloropropane	0-00-0	Not Found		ppbv
	1,2,4-Trichlorobenzene	0-00-0	Not Found		ppbv
	Hexachlorobutadiene	0-00-0	Not Found		ppbv
	Naphthalene	0-00-0	Not Found		ppbv
19	1,3-Butadiene	822-35-5	Quantified	0.01	ppbv
23	Isobutane	624-64-6	Quantified	0.00	ppbv
51	Chloroethane	18100-65-7	Quantified	0.00	ppbv
56	Isopentane	0-00-0	Quantified	0.00	ppbv
67	Freon 11	382-31-0	Quantified	0.00	ppbv
86	Ethanol	64-17-5	Quantified	0.01	ppbv
93	Carbon Disulfide	75-15-0	Quantified	0.01	ppbv
94	Acetone	67-64-1	Quantified	0.01	ppbv
107	2,3-Dimethylpentane	29700-20-7	Quantified	0.00	ppbv
110	Methylene Chloride	75-09-2	Quantified	0.01	ppbv



www.airtoxics.com
1-800-985-5955

Media Certification Report

File/Canister #: f051247 ;6I #33785 /w24hrs+6"cans#40333:1

Date: 5/13/2009 00:57:41

Peak #	Quantification	CAS	Type	Concentration	Units
125	Hexane	4312-76-9	Quantified	0.00	ppbv
125	tert-Butyl alcohol	4312-76-9	Quantified	0.00	ppbv
156	Bromochloromethane-IS	74-97-5	Quantified	2.50	ppbv
160	Chloroform	17364-31-7	Quantified	0.00	ppbv
168	Benzene	71-43-2	Quantified	0.01	ppbv
169	1,2-Dichloroethane-d4	930-29-0	Quantified	2.18	ppbv
173	Heptane	0-00-0	Quantified	0.00	ppbv
175	Thiophene	110-02-1	Quantified	0.00	ppbv
182	1,4-Difluorobenzene-IS	540-36-3	Quantified	2.50	ppbv
189	Methylcyclohexane	32222-25-6	Quantified	0.00	ppbv
218	Toluene-D8	2037-26-5	Quantified	2.48	ppbv
220	Toluene	108-88-3	Quantified	0.01	ppbv
247	Chlorobenzene-d5-IS	3114-55-4	Quantified	2.50	ppbv
249	Ethyl Benzene	103148-59-0	Quantified	0.00	ppbv
255	m,p-Xylene	0-00-0	Quantified	0.00	ppbv
264	Bromoform	0-00-0	Quantified	0.00	ppbv
271	Bromofluorobenzene	1073-06-9	Quantified	2.53	ppbv



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1-800-985-5955

Media Certification Report

Canister Number: 6L#12025 w/ 83ml#FC00462
Can#: 65799-12025
Date : 05/06/09 12:36
Data File: i050606sim.d

Name	CAS	Conc.	Units
Toluene	108-88-3	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
Chloroform	67-66-3	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	104.00	% Recovery
Toluene-d8	2037-26-5	99.00	% Recovery
4-Bromofluorobenzene	460-00-4	96.00	% Recovery



www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 6L#34424 w/ 83ml#FC00436
Can#: 65799-34424
Date : 05/06/09 14:20
Data File: i050609sim.d

Name	CAS	Conc.	Units
Toluene	108-88-3	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
Chloroform	67-66-3	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	106.00	% Recovery
Toluene-d8	2037-26-5	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	95.00	% Recovery



www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 6L#4169 w/ 83ml#FC00393
Can#: 65799-4169
Date : 05/06/09 16:03
Data File: i050612sim.d

Name	CAS	Conc.	Units
Toluene	108-88-3	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
Chloroform	67-66-3	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	105.00	% Recovery
Toluene-d8	2037-26-5	98.00	% Recovery
4-Bromofluorobenzene	460-00-4	95.00	% Recovery



www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 6L#96109 w/ 83ml#FC00409
Can#: 65799-96109
Date : 05/06/09 13:11
Data File: i050607sim.d

Name	CAS	Conc.	Units
Toluene	108-88-3	ND	ppbv
Tetrachloroethene	127-18-4	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	ND	ppbv
Chloroform	67-66-3	ND	ppbv
1,1,1-Trichloroethane	71-55-6	ND	ppbv
Vinyl Chloride	75-01-4	ND	ppbv
Bromodichloromethane	75-27-4	ND	ppbv
1,1-Dichloroethane	75-34-3	ND	ppbv
1,1-Dichloroethene	75-35-4	ND	ppbv
Freon 113	76-13-1	ND	ppbv
Trichloroethene	79-01-6	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0	104.00	% Recovery
Toluene-d8	2037-26-5	100.00	% Recovery
4-Bromofluorobenzene	460-00-4	96.00	% Recovery

Reason for re-issue: Include column info in the narrative
& to update target quant sheets w/ ion ratios

R	T	M	Q	Re-Issue Request Form Present
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Client or QA or Lab contact present with reason for re-issue
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Review all affected data
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Report header has correct R1, R2 etc
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Lab Narrative clearly explains the re-issue (Date, Reason and whether client requested)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date for Re-Issue in Report Header matches date in Lab Narrative
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Check Project Profile for correct reporting instructions (multiple clients, # hardcopies etc.)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Corrective Action issued - # _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The re-issued work order has been approved by QA Manager or a Technical Director <u>ML07/2019</u> (Initials/date)

R T M Q
(Reporting Review/Date) (Technical Review/Date) (Management Review/Date) (QA Review/Date)
HR 7/20/09 NK 7/20/09

REISSUED-DATA REVIEW CHECKLIST

Work Order #:

Reason for re-issue: _____

R	T	M	Q	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Re-issue Request Form Present
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Client or QA or Lab contact present with reason for re-issue
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Review all affected data
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Report header has correct R1, R2 etc
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Lab Narrative clearly explains the re-issue (Date, Reason and whether client requested)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date for Re-Issue in Report Header matches date in Lab Narrative
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Check Project Profile for correct reporting instructions (multiple clients, # hardcopies etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Corrective Action issued - # _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The re-issued work order has been approved by QA Manager or a Technical Director _____ (Initials/date)

R (Reporting Review/Date) **T** (Technical Review/Date) **M** (Management Review/Date) **Q** (QA Review/Date)

Additional Comments:

Not Applicable



The Johnson
Company ENVIRONMENTAL SCIENCE AND ENGINEERING SOLUTIONS

Date: June 22, 2009

MEMORANDUM

ph (802) 229-4600
fax (802) 229-5876
100 State Street, Suite 600
Montpelier, VT 05602
www.johnsonco.com

From: Thomas Osborne, Project Scientist

To: *Thomas Osborne* Project File # 1-0145-5

Subject: Affidavit for Relinquished Chain of Custody's for Soil Vapor Samples at the Avery Dennison Site, New Windsor, NY

Attachment: Air Toxics Laboratory Receipt of Chain of Custody

Soil vapor samples were collected using 6 liter summa canisters on May 20, 2009 from the Avery Dennison Site in New Windsor, NY. The sample containers remained in the sampler's custody until shipping via Federal Express on May 21, 2009. There were a total of three (3) boxes shipped from the office of The Johnson Company, via express saver on May 21, 2009, and received intact and signed in at Air Toxics Laboratory at 9:20 AM on May 26, 2009. The chain of custody (COC) form was placed inside one of the three shipped boxes before closing and sealing the boxes. The date, time and signature were not included on the COC by the sampler before closing and sealing the boxes. The boxes (3 total), were closed and sealed via clear shipping tape attached on all sides. Two chain of custody seal tapes were placed on each box and additional clear packing tape was placed over the custody seals to keep intact for shipping. Once the error was noted Air Toxics Laboratory was contacted on June 15, 2009, to determine the condition of the shipping boxes. Bryanna Langley, project manager with Air Toxics indicated that all boxes were received in good condition with all custody seal tapes on all three shipped boxes intact.

State of Vermont)
)
)ss.
County of Washington)

On this 22nd day of June, 2010, personally appeared before me Thomas Osborne who stated that he proved to me through satisfactory evidence of identification, to be the person who signed on the preceding or attached document in my presence.

Sonja P. Schuyler
Sonja Schuyler, Notary Public for Vermont
My Commission Expires:
2-10-2011.

ATTACHMENT 1
Air Toxics Laboratory Receipt of Chain of Custody



Air Toxics LTD

CHAIN-OFF-CUSTODY RECORD

Sample Transportation Notice

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

APPENDIX C

DATA USABILITY SUMMARY REPORT

APPENDIX C

DATA USABILITY SUMMARY REPORT

Soil Vapor Quality Assessment Little Falls Ponds Property New Windsor, New York May 2009

**Prepared for:
Avery Dennison Corporation
7 Bishop Street
Framingham, Massachusetts 01702**

**Prepared by:
The Johnson Company, Inc.
100 State Street, Suite 600
Montpelier, Vermont 05602**

**Project No.: 1-0145-5
June 2009**

TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 PERSONNEL QUALIFICATIONS.....	1
3.0 DATA QUALITY EVALUATION	1
4.0 DESCRIPTION OF SAMPLES AND ANALYTICAL PARAMETERS.....	2
5.0 SUMMARY OF DATA DEFICIENCIES, ANALYTICAL PROTOCOL DEVIATIONS, AND QUALITY CONTROL PROBLEMS	3
6.0 CONCLUSIONS	3
7.0 REFERENCES.....	4

LIST OF ATTACHMENTS

Attachment 1 Resume for Christopher M. Turner

1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) provides an evaluation of analytical data from laboratory analysis of four soil vapor samples collected from the Little Falls Ponds property in New Windsor, New York on May 20, 2009, in accordance with Draft DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2002). The primary purpose of this DUSR is to determine whether or not these data meet project specific criteria for data quality and data use.

2.0 PERSONNEL QUALIFICATIONS

This DUSR has been prepared by Christopher M. Turner of The Johnson Company, Montpelier, Vermont. Mr. Turner holds a Bachelor of Science degree in Environmental Geology from Allegheny College in Meadville, Pennsylvania, and a Master of Science degree in Earth Sciences/Hydrogeology from the University of Waterloo in Waterloo, Ontario, Canada. Mr. Turner has over 7 years professional experience in the collection and evaluation of environmental sampling data. A resume documenting Mr. Turner's experience in environmental sampling and data review is provided as Attachment 1.

3.0 DATA QUALITY EVALUATION

This section of the DUSR addresses the six data package evaluation questions listed in Appendix 2B: Guidance for the Development of Data Usability Summary Reports of the New York State Department of Environmental Conservation (NYSDEC) Draft DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2002). All analyses were performed by Air Toxics Limited of Folsom, California (ATL). The data package being evaluated (Work Order # 0905582) is included as Appendix B to the Soil Vapor Quality Assessment report.

- 1. Is the data package complete as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables?*

YES - The ATL data package is complete with respect to data content requirements specified for NYSDEC Analytical Service Protocol (ASP; NYSDEC, 2005) Category B deliverables. The ATL data package is not formatted to include specific United

States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) reporting forms referenced in the NYSDEC ASP; the CLP forms referenced in the ASP are not applicable to laboratory analysis of air samples.

2. *Have all holding times been met?*

YES – All samples were analyzed within the 30 day holding time limit specified in EPA Method TO-15.

3. *Do all the QC data: blanks instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls, and sample data fall within the protocol required limits and specifications?*

YES – The data package was independently verified prior to submittal using USEPA National Functional Guidelines as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

4. *Have all of the data been generated using established and agreed upon analytical protocols?*

YES – The Laboratory Narrative states that there were no analytical discrepancies from Method protocols.

5. *Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?*

YES – Evaluation of selected raw data confirms the summarized results and quality control data provided in the laboratory report are correct.

6. *Have the correct data qualifiers been used?*

YES – The correct data qualifiers were used.

4.0 DESCRIPTION OF SAMPLES AND ANALYTICAL PARAMETERS

The evaluated data package includes four soil vapor samples collected in 6-liter stainless steel Summa™ canisters. The canisters were individually certified-clean and evacuated by ATL prior to sample collection. Each sample was collected through dedicated stainless steel flow controllers to ensure that sample collection rates did not exceed the maximum rate of 0.2 liters per minute recommended in the New York State Department of Health (NYSDOH) Guidance for

Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006). The vacuum in each canister was measured by ATL after evacuation, by the sampler before and after sampling, and again by ATL upon receipt of the samples to confirm that sample integrity was not compromised by leakage of the canisters during transport. A trip blank sample prepared by ATL accompanied the sample canisters during transport and was analyzed for the same parameters using the same methodology as the samples.

Samples were analyzed by ATL using a modified EPA Method TO-15 with GG/MS full scan. Sample preparation procedures and modifications to EPA Method TO-15 are documented in the Laboratory Narrative (Appendix B to the Soil Vapor Quality Assessment Report). Concentrations of 11 VOCs were quantified for each sample: vinyl chloride, Freon 113, 1,1-Dichloroethene, 1,1-Dichloroethane, cis-1,2-dichloroethene, chloroform, 1,1,1-trichloroethane, bromodichloromethane, toluene, and tetrachloroethene.

5.0 SUMMARY OF DATA DEFICIENCIES, ANALYTICAL PROTOCOL DEVIATIONS, AND QUALITY CONTROL PROBLEMS

No data deficiencies, analytical protocol deviations, or quality control problems were identified in the evaluated data package. One deviation to Chain-of-Custody protocol occurred: the sampler did not sign and date the Chain-of-Custody form prior to sealing the form within a sample container, which was sealed closed with a chain-of-custody seal that remained intact until the sample containers were relinquished. An affidavit signed by the sampler verifies the use of proper Chain-of-Custody procedures; this affidavit is included with the Chain-of-Custody form in Appendix B of the Soil Vapor Quality Assessment Report.

6.0 CONCLUSIONS

The data evaluated in this Report is representative of soil vapor conditions at the sampling locations and meet criteria for data quality and data use. Resampling or reanalysis of the existing samples is not recommended.

7.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC, 2002). Draft DER-10 Technical Guidance for Site Investigation and Remediation. Division of Environmental Remediation, December 2002, 136 pp.

New York State Department of Environmental Conservation (NYSDEC, 2005). Analytical Service Protocol. July 2005.

New York State Department of Health (NYSDOH, 2006). Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. NYSDOH Center for Environmental Health, Bureau of Environmental Exposure Investigation. October 2006. 92 pp.

K:\1-0145-5\Documents\SVQA Little Falls Ponds\Report\Appendix C - DUSR 062209.doc

Attachment 1

Resume for Christopher M. Turner



CHRISTOPHER M. TURNER, M.Sc.
Engineer/Scientist VIII

Mr. Turner has more than seven years experience as a consulting hydrogeologist working on a variety of environmental characterization and remediation projects. He specializes in solute fate and transport in fractured rock environments, with particular emphasis on chlorinated solvent DNAPLs and depth-discrete environmental sampling technologies. Mr. Turner has worked on a diverse array of projects involving highly complex geologic environments and contaminant source areas. In addition to his work managing and performing site characterization projects, Mr. Turner has been responsible for developing project-specific laboratory data reporting requirements, developing Quality Assurance Project Plans, and evaluating the defensibility of laboratory analytical data for environmental liability litigation.

Selected Experience Summary

- **Site Characterization** – Designed and implemented multi-phase characterization programs at numerous sites with complex geological environments and multiple contaminant sources. Innovative site characterization techniques employed by Mr. Turner have included the design and installation of multilevel monitoring devices, depth-discrete hydraulic testing, chemical analysis of rock core, and the development of methods to extract rock core porewater for VOC and radionuclide analysis. Site experience includes fractured crystalline and porous sedimentary rock, and unconsolidated materials impacted with solvent, manufactured gas plant and pesticide DNAPLs, various LNAPLs, metals, and radionuclides. Past experience includes all aspects of site characterization from investigation design through rock and soil coring, sampling, hydraulic testing, data validation and interpretation, quality analysis/quality control, remedial design, and remedial implementation.
- **Data Quality Assurance** – Served as the data quality control manager and personnel coordinator for a multi-million dollar steam injection pilot test in central California. Responsibilities included identifying and managing modifications to a complex data acquisition system and ensuring that analytical samples were collected and analyzed according to a detailed work plan developed by an academic panel of experts. For another project, Mr. Turner worked with a Germany-based laboratory to develop an analytical data reporting package to achieve comprehensive data validation capability despite limited European laboratory software reporting flexibility. Mr. Turner has performed data validation for multiple projects involving air, soil, and water samples, with multiple analyte classifications and analytical methods.
- **Risk Communication** – Refined site conceptual model and generated a series of presentation materials for a major aerospace client to communicate site-related risk to surrounding residential property owners. For another high profile aerospace/defense site, developed presentation materials for a contentious public meeting that communicated the complex nature of radionuclide transport in fractured sandstone and potential for off-site risk to human health.

Education

- B.S., Environmental Geology, Allegheny College, 1998
- M.Sc., Earth Sciences / Contaminant Hydrogeology, University of Waterloo, 2002

Note: Long version available upon request.