MALCOLM PIRNIE

INDEPENDENT ENVIRONMENTAL ENGINEERS, SCIENTISTS AND CONSULTANTS

Malcolm Pirnie, Inc.
50 Fountain Plaza, Suite 600
Buffalo, NY 14202
T: 716.667.0900
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December 24, 2008

Gene Melnyk
Environmental Engineer II
New York State Department of Environmental Conservation
270 Michigan Street
Buffalo, New York 14203-2999

Re: Air Sampling Results – two events.
275 Franklin Street Site, Buffalo, New York
Work Assignment # D004439-3

Dear Mr. Melnyk:

Malcolm Pirnie is please to provide the enclosed documentation and analytical results of two air-sampling events performed in relation to the 275 Franklin Street Immediate Investigation Work Assignment (IIWA) Site in Buffalo, New York. One data set pertains to air sampling performed on May 29, 2008 at the Insty-Prints commercial property located at 265 Franklin Street. The second data set pertains to air sampling performed on October 28 and 29, 2008 at the apartment building located at 267 Franklin Street.

This data submittal provides a brief summary of work performed and pertinent documentation of each of these sampling events. Analytical data provided is considered final by the laboratory and independent, third-party, data validation is pending. At completion of the project, a final report will be submitted which will contain a more detailed discussion of sampling procedures and validated results.

Air samples were collected in accordance with the procedures described in the, April 2008 NYSDEC-approved, Field Activities Plan. All air samples were collected using a 6-liter Summa canister sampling train, which consists of a Summa canister, flow controller, particulate filter, pressure gage, and fittings. All canisters were evacuated and certified as analyte-free by the analytical laboratory (Columbia Analytical Services Inc.) prior to use at the Site. Flow regulators supplied by the analytical laboratory were used to allow for continuous sampling over the two-hour period (May event) and 24-hour period (October event). Each flow regulator was equipped with a filter to prevent particulate matter from entering the canister.

Columbia Analytical Services, Inc. analyzed indoor air and ambient air samples for VOCs using modified EPA Method TO-15 with a gas chromatograph/mass spectrometer (GC/MS) in full-scan mode.

On May 29, 2008, four air samples were collected at the Insty-Prints shop at 265 Franklin Street. Samples were designated as follows:

- 275 Franklin FA: placed in a central location on the first floor of the print shop.
- 275 Franklin OA: placed outside in the street in front of 265 Franklin St.
- 275 Franklin CS: placed on the crawlspace floor near the access hatch.
- 275 Franklin DUP: placed on the crawlspace floor near the access hatch.

Low concentrations of VOCs were detected in each sample, none at levels above NYSDOH guidance values.

Attachment A contains the following items pertinent to the May 29, 2008 sampling event at 265 Franklin Street (Insty-Prints):

- Air - Chain of Custody Record (1 page)
- Analytical Data Summary table and Laboratory Form 1s (5 pages).
- Indoor Air Questionnaire and Building Inventory (11 pages)
- Photo log (8 pages).
- Full analytical data package (177 pages).

On October 28 and 29, 2008, five air samples were collected at the apartment building at 267 Franklin Street. Samples were designated as follows:

- 267 Franklin SS: A sub-slab air sample from beneath the concrete floor of the boiler room
- 267 Franklin BA1: A basement air sample from the boiler room
- 267 Franklin BA2: A basement air sample from the bedroom of occupied apartment B2
- 267 Franklin BA3: A basement air sample from the kitchen of vacant apartment B1
- 267 Franklin OA: An ambient air sample from outside the west side of the building.

VOCs were detected in each sample, some at levels above NYSDOH guidance values.

Attachment B contains the following items pertinent to the October 28 and 29, 2008 sampling event at 267 Franklin Street (Apartment Building):

- Columbia Analytical - Air - Chain of Custody Record (1 page)
- Laboratory Form 1 data results (5 pages).
- Indoor Air Questionnaire and Building Inventory (8 pages)
- Photo Log (3 pages).
- Full Analytical Data Package (131 pages)

If you have any questions or require additional information, please call me at 716/667-6654.

Very truly yours,

MALCOLM PIRNIE, INC.

Jim Richert

James J. Richert
Sr. Project Hydrogeologist

Attachments: File 0266377

ATTACHMENT A

265 Franklin St.
Vapor Intrusion Investigation Data and Results

Air - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services, Inc.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No.

Company Name & Address (Reporting Information)
Malcolm Pirnie Inc.
50 Fountain Plaza
Suite 600 Buffalo NY 14202

Project Name: 275 Franklin st.

Project Number: 0266 377

Project Manager: John Hilton

P.O. # / Billing Information

Phone: 716-667-0900

Fax:

Email Address for Result Reporting

Sampler (Print & Sign): Dwight Symonds / D. Symonds

CAS Contact

Analysis Method and/or Analytes

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Sample Type (Air/Tube/ Solid)	Canister ID (Bar Code # - AC, SC, etc.)	Flow Controller (Bar Code - FC #)	Sample Volume	TO-15				**Comments** e.g. Actual Preservative or specific instructions
275 Franklin OA		5/29	1030	Air	003493	FC00293	6L	✓				
275 Franklin FA		↓	1035	↓	002659	FC00341	↓	✓				
275 Franklin CS		↓	1040	↓	003754	FC00207	↓	✓				
275 Franklin Dup		↓	—	↓	02235	FC00037	↓	✓				

Report Tier Levels - please select

Tier I - (Results/Default if not specified) _____
Tier II - (Results + QC) _____
Tier III - (Data Validation Package) 10% Surcharge _____
Tier V - (client specified) _____

EDD required Yes / No
Type: _____ EDD Units: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
D. Symonds	5/29	1400			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank

Temperature °C

Table 1
Summary of Indoor Air Analytical Results
275 Franklin Street Site
Buffalo, New York

Compound	NYSDOH Air Guidance Values ug/m^3	SAMPLE LOCATION			
		275 Franklin OA [(1)]-20080529 µg/m^3	275 Franklin FA[(2)]-20080529 µg/m^3	275 Franklin CS[(3)]-20080529 µg/m^3	275 Franklin 20080529-FD[(4)] µg/m^3
Vinyl Chloride					
1,1-Dichloroethane					
Methylene Chloride	60		28		
trans-1,2-Dichloroethene					
cis-1,2-Dichloroethene					
1,1,1-Trichloroethane					
Benzene			2.6		
Trichloroethene	5		1.1	0.26	0.25
Toluene		1.1	29	0.97	1
Tetrachloroethene	100		93	20	19
Ethyl Benzene			16		
m,p-Xylene			47	1.1	1.4
o-Xylene			110	1.6	1.8

Notes:

1) OA = Outdoor Ambient Air
2) FF = First Floor Indoor Air
3) CS = Crawl Space Indoor Air
4) Crawl Space Field Duplicate

Samples collected May 29, 2008

Blank - Not detected above method reporting limit.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin OA**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01303

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.77	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.77	ND	0.19	
75-09-2	Methylene Chloride	ND	0.77	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.77	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.77	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.77	ND	0.14	
71-43-2	Benzene	ND	0.77	ND	0.24	
79-01-6	Trichloroethene	ND	0.15	ND	0.029	
108-88-3	Toluene	**1.1**	0.77	**0.30**	0.20	
127-18-4	Tetrachloroethene	ND	0.77	ND	0.11	
100-41-4	Ethylbenzene	ND	0.77	ND	0.18	
179601-23-1	m,p-Xylenes	ND	0.77	ND	0.18	
95-47-6	o-Xylene	ND	0.77	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin FA**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00902

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.9	ND	0.75	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.48	
75-09-2	Methylene Chloride	**28**	1.9	**8.0**	0.55	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.48	
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.48	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.35	
71-43-2	Benzene	**2.6**	1.9	**0.82**	0.60	
79-01-6	Trichloroethene	**1.1**	0.38	**0.21**	0.071	
108-88-3	Toluene	**29**	1.9	**7.7**	0.51	
127-18-4	Tetrachloroethene	**93**	1.9	**14**	0.28	
100-41-4	Ethylbenzene	**16**	1.9	**3.7**	0.44	
179601-23-1	m,p-Xylenes	**47**	1.9	**11**	0.44	
95-47-6	o-Xylene	**110**	1.9	**24**	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin CS**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01418

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.6 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.76	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.76	ND	0.19	
75-09-2	Methylene Chloride	ND	0.76	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.76	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.76	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.76	ND	0.14	
71-43-2	Benzene	ND	0.76	ND	0.24	
79-01-6	Trichloroethene	**0.26**	0.15	**0.048**	0.028	
108-88-3	Toluene	**0.97**	0.76	**0.26**	0.20	
127-18-4	Tetrachloroethene	**20**	0.76	**2.9**	0.11	
100-41-4	Ethylbenzene	ND	0.76	ND	0.17	
179601-23-1	m,p-Xylenes	**1.1**	0.76	**0.24**	0.17	
95-47-6	o-Xylene	**1.6**	0.76	**0.37**	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin Dup**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00686

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.75	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.75	ND	0.19	
75-09-2	Methylene Chloride	ND	0.75	ND	0.21	
156-60-5	trans-1,2-Dichloroethene	ND	0.75	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.75	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.75	ND	0.14	
71-43-2	Benzene	ND	0.75	ND	0.23	
79-01-6	Trichloroethene	**0.25**	0.15	**0.047**	0.028	
108-88-3	Toluene	**1.0**	0.75	**0.27**	0.20	
127-18-4	Tetrachloroethene	**19**	0.75	**2.8**	0.11	
100-41-4	Ethylbenzene	ND	0.75	ND	0.17	
179601-23-1	m,p-Xylenes	**1.4**	0.75	**0.32**	0.17	
95-47-6	o-Xylene	**1.8**	0.75	**0.42**	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By:_____ Date:_____

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dwight Symonds Date/Time Prepared 5/29/08 11am

Preparer's Affiliation Malcolm Pirnie Phone No. 585-727-3710

Purpose of Investigation Air Sampling

1. OCCUPANT:

Interviewed: Y / N

Last Name: Metz First Name: Dave

Address: 265 Franklin st

County: _____

Home Phone: _____ Office Phone: 716-853-6483

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School (Commercial/Multi-use)
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: office Bldg

If multiple units, how many? 3 first floor - print shop second floor - storage/office Third floor - Appt.

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 3 Building age Early 1900's

Is the building insulated? (Y) / N How air tight? Tight / Average / Not Tight

partially - Back area insulated / New Doors approx 50% bldg insulated

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

1st & Second floor - Some Connection
2nd & third floor - Some Connection

Airflow near source

Outdoor air infiltration

front door / Back Door

Infiltration into air ducts

Taped & sealed / fairly new - photo taken

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

Backhaves is Block

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	Back Room block	Brick stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with Thick Brick 5 course	
h. The basement is:	wet	damp	dry	moldy
i. ~~The basement~~ is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

18"-20" Thick

Basement/Lowest level depth below grade: 4 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

N/A

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

1st & Part 2nd floor roof top unit

Type of heating system(s) used in this building: (circle all that apply – note primary)

2nd & 3rd - Gas furnace

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas (2 new Hot water tanks)

Boiler/furnace located in: Basement Outdoors roof unit Main Floor Other _____

2nd floor furnace

Air conditioning: (Central Air) – Both heating units – Window units Open Windows None

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Taped Joints - Tight Joints photos taken

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	
1st Floor	Print shop / offices / bathrooms / Breakroom
2nd Floor	storage / office
3rd Floor	Appt
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? N/A

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? (Y) N When & Type? Daily (Blanket wash)

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented? N/A

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? Vented to 3' space in Ceiling

o. Is there a clothes dryer? 2nd floor (Y) N If yes, is it vented outside? (Y) N

p. Has there been a pesticide application? Y (N) When & Type? _____

Are there odors in the building? (Y) N
If yes, please describe: Ink / Toners / Cleaners

Do any of the building occupants use solvents at work? (Y) N - Blanket wash
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Blanket wash

If yes, are their clothes washed at work? Y (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) — No
Yes, use dry-cleaning infrequently (monthly or less) — Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

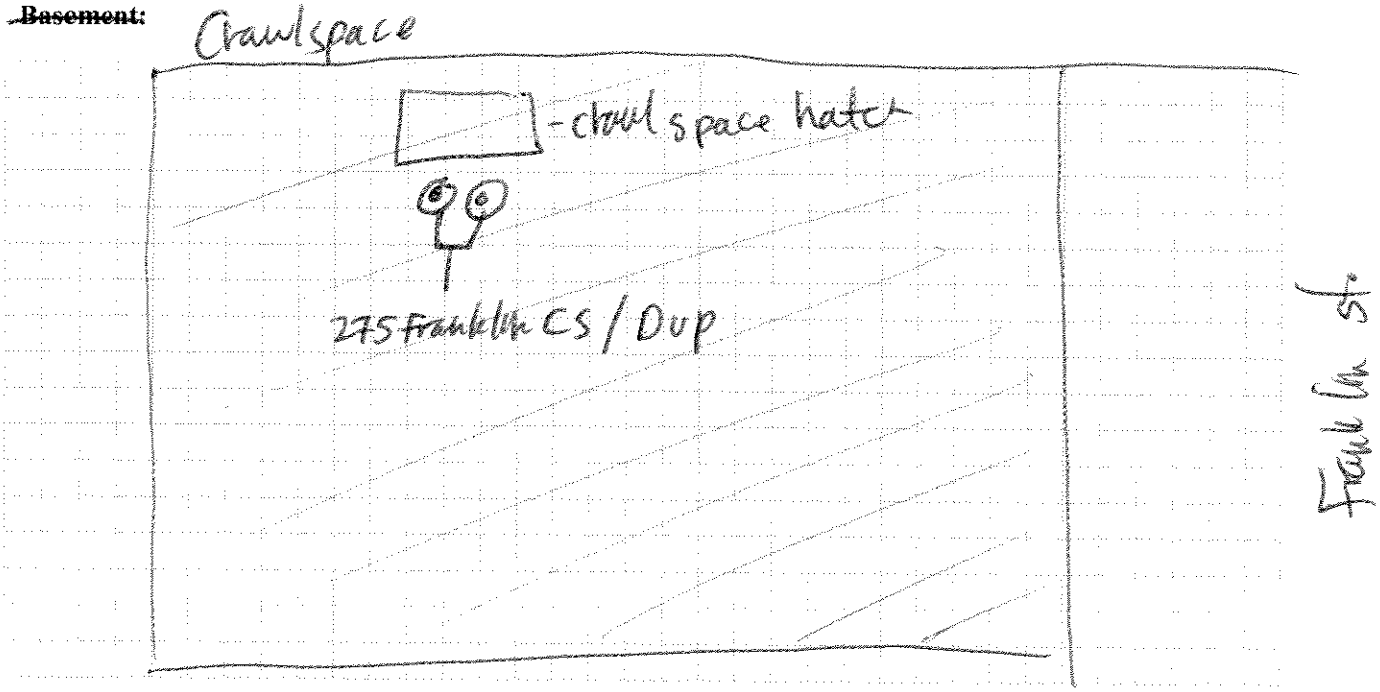
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

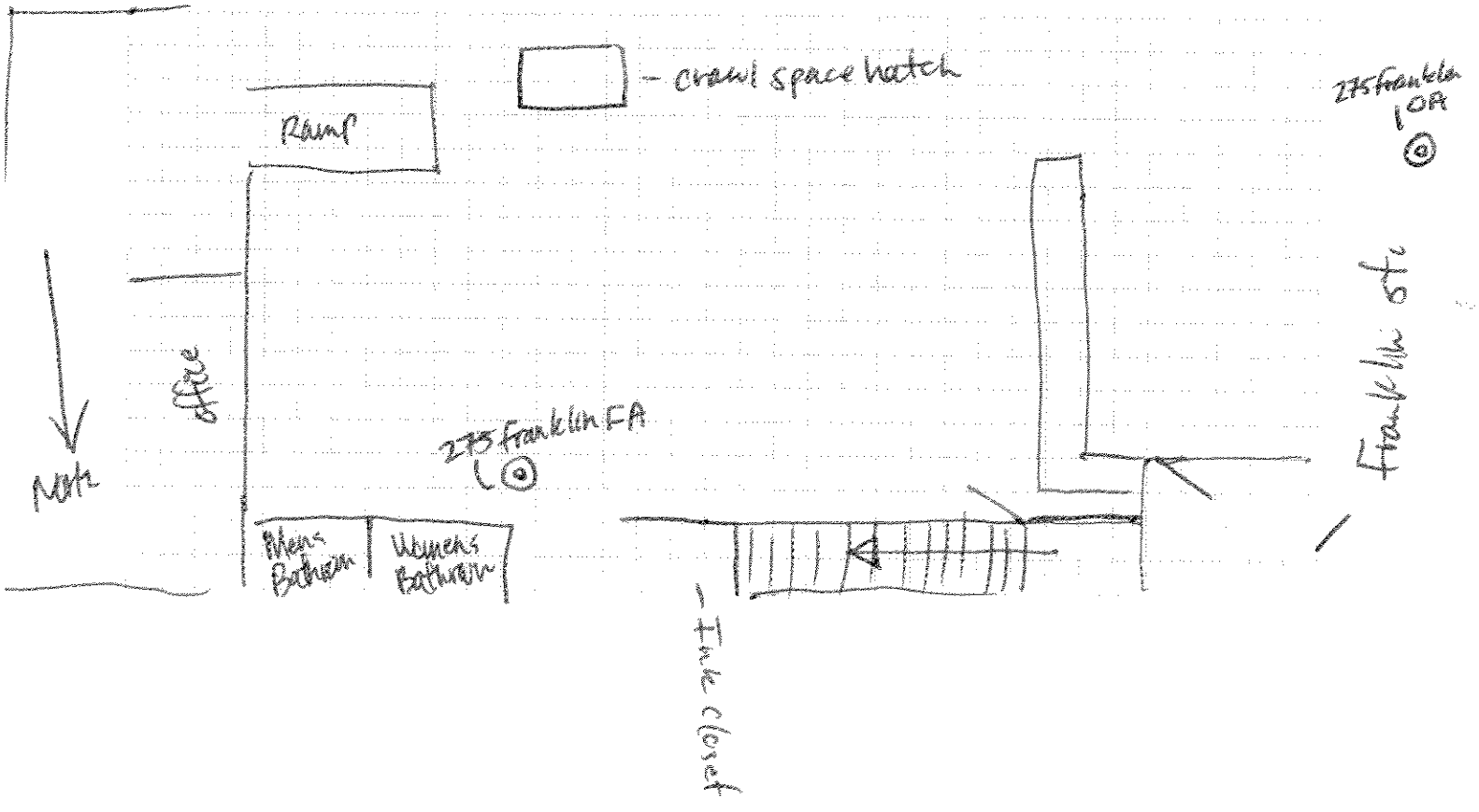
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



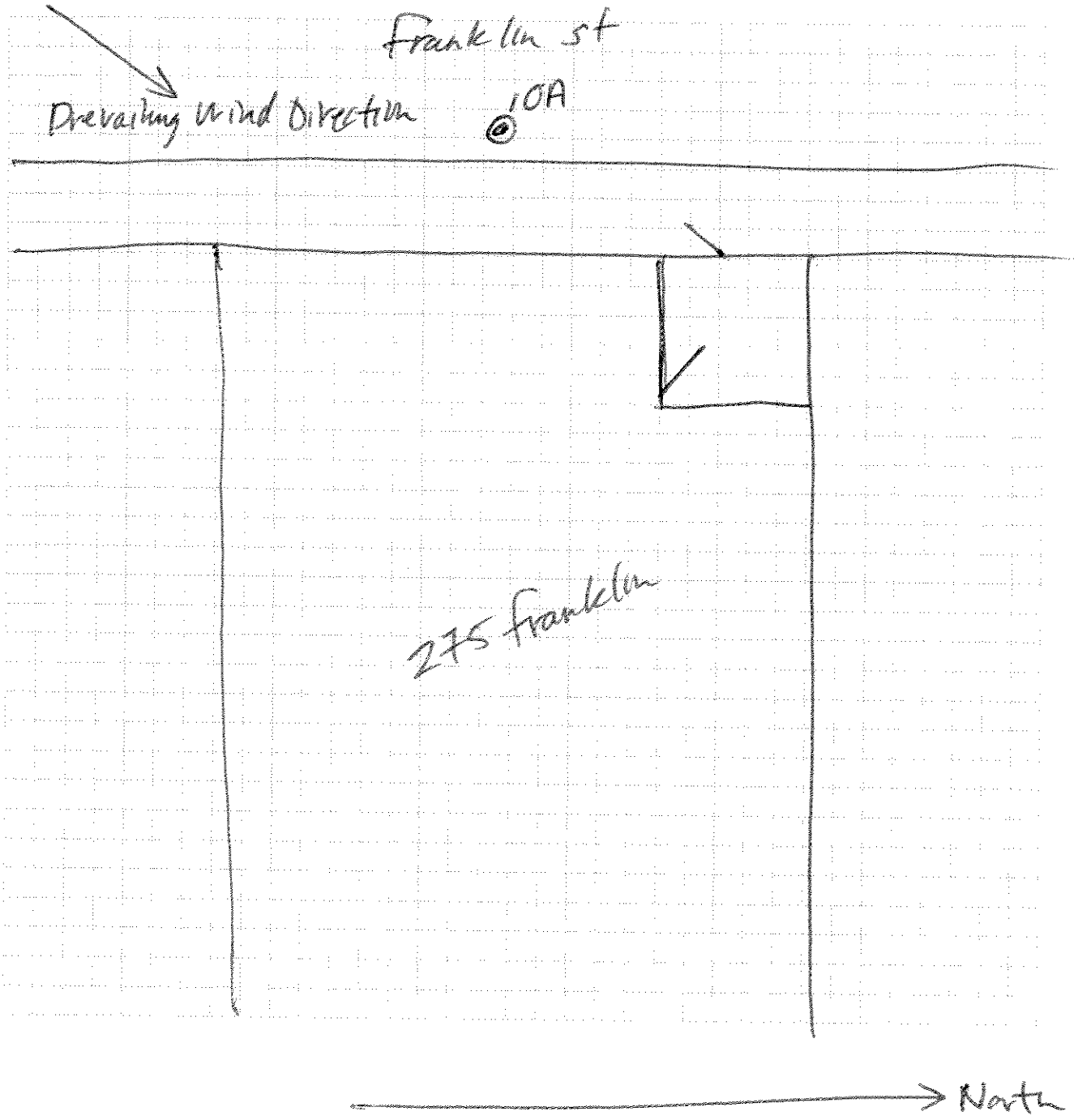
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
closet on first floor	Kohle Madden Ink	25 5lbs cans	all capped none leaky Used	mod. Rosin Ester Resins	3560 ppm	Yes
				Veg. oils, Hydrotreated		
				middle distillate, organic		
				pigments, Alkyd Resins		
	Braden Sutphin	20		- None listed		
	Ink	5lbs cans				
	Braden Sutphin	45 5lbs		- None listed		
	Ink	cans				
	Unmarked Ink cans	10 5lbs	↓	- None listed	↓	
		cans				
Back Room	Blanket wash	5gal	good	Petroleum Naphtha	855 ppm	
	GE. Richards Graphic supply		Used	Sorbitan Mono-Oleate		
	WM one step water miscible		(open top)			
	wash					
	Super Master/	2gal	good	- Water, Potassium Hydroxide		
	set print plus		Used	Aminoethylethanolamine		
				Potassium Sulfate		↓

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Back Room	- Color lock silver plate stabilizer	2gal	Used	- Water, Potassium Phosphate Sodium phosphate	4600 ppb	Yes
	- Chem Wicker Glass Cleaner	18oz	Used	- 2-Butoxyethanol water, Isobutane, Isopropanol		
	- Day International Slip Agent 6	1qt	Used	- Deionized water, Polysiloxane		
Print shop	- UPdate Silk spray	16oz	Used	- None listed	3600 ppb	
	- WD40	2 12oz	Used	- None listed		
	- 3M cleaner Conditioner	1qt	Used	- water, stoddard solvent Ammonium Phosphate Amorphous Silica Phosphoric Acid formaldehyde		
	Mobil - Spindle oil 1	1qt 1gal	Used	- none listed		
	- Nilgon Whe Aragan Eo 150	1gal	Used	- none listed		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	Day International					
	The Super Rubber rejuvenator	1gal	used	Dimethyl Glutarate	4000ppb	Yes
				Petroleum Naphtha	↓	
				Dimethyl Adipate		
				Dimethyl Succinate		
	Plastic cups half full of Ink	~100	used	- None	3300ppb	Yes
	- 3 & One	3oz	used	- none	↓	↓
	- Martin Vale / Roller cleaner	13oz	used	- Petroleum Distillate		
				Hexylene Glycol		
				1-methoxy-2 propanol		
				Isopropanol		
	- Clear Co silicone	16oz	used	Propane, Butane,		
				heptane,		
	- 3M High strength Adhesive	16.6oz	used	- None listed	↓	
	- Raid	16oz	Used	- None listed		
	- White lithium	12oz	Used	- None listed		
	- Armor all	1/2gal	Used	- None listed		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Printshop	Sprinks Jak	17oz	used	-NJTSR# 80100143-5001P		
	Kwik n' Easy Roller & Blanket DeGlazer			HMIS - HO F-O R0	3500 ppm	Y
	- Gold Miracle starter cleaner & conditioner	1pint	used	-None listed		
	- LA-CO Zoom/spout oiler	4oz		-None listed		
	- Unigraph Inter. plate cleaner desensitizer & protector	1qt		-Gum Arabic -Naphtha petroleum -Light Aromatic solvent pine oil.		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
004	05/29/2008

Direction Photo Taken:

Southwest

Description:

Location of outdoor air sample (275 Franklin OA)

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
006	05/29/2008

Direction Photo Taken:

East

Description:

Location of indoor air sample (275 Franklin FA)

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
005	05/29/2008

Direction Photo Taken:

East

Description:

Location of indoor air sample (275 Franklin FA)

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
001	05/29/2008

Direction Photo Taken:

Southeast

Description:

Hatch door to crawl space.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

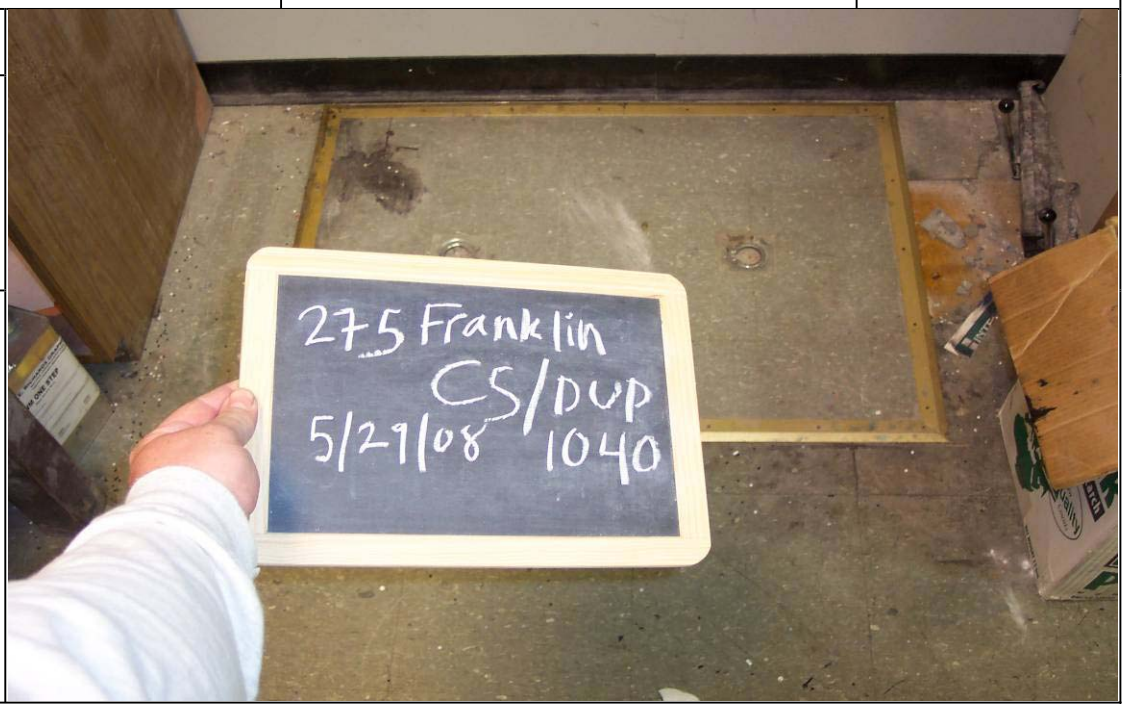
Photo No.	Date:
007	05/29/2008

Direction Photo Taken:

South

Description:

Closed crawl space from which two air samples were collected (CS and Dup)



MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
008	05/29/2008

Direction Photo Taken:

South

Description:

Air sample (CS and Dup) canisters in crawl space.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
009	05/29/2008

Direction Photo Taken:

North

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
010	05/29/2008

Direction Photo Taken:

Northwest

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
014	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing product.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
015	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
016	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
017	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
018	05/29/2008

Direction Photo Taken:

Southwest.

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
019	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing products.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Insty-Prints (265 Franklin Street)	0266-377

Photo No.	Date:
020	05/29/2008

Direction Photo Taken:

NA

Description:

Potential VOC-containing products.

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

June 20, 2008

Mark Flusche
Malcolm Pirnie, Incorporated
43 British American Blvd.
Latham, NY 12110

RE: 275 Franklin St. / 0266 377

Dear Mark:

Enclosed are the results of the samples submitted to our laboratory on May 30, 2008. For your reference, these analyses have been assigned our service request number P0801622.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 177 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Kate Aguilera

Kate Aguilera
Project Manager

NARRATIVE

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Client:	Malcolm Pirnie, Incorporated	CAS Project No:	P0801622
Project:	275 Franklin St. / 0266 377	New York Lab ID:	11221

CASE NARRATIVE

The samples were received intact under chain of custody on May 30, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Malcolm Pirnie, Incorporated

Project: 275 Franklin St. 0266 377

Folder: P0801622

Detailed Sample Information

CAS Sample ID	Client Sample ID	Container Type	Pi1 (Hg)	Pi1 (psig)	Pf1	Pi2 (Hg)	Pi2 (psig)	Pf2	Cont ID	Order #	FC ID	Order #
P0801622-001.01	275 Franklin OA	6.0 L-Summa Canister Ambient	-6.0	-2.9	3.5				AC01303	**8904**	FC00293	**8904**
P0801622-002.01	275 Franklin FA	6.0 L-Summa Canister Ambient	-5.8	-2.8	3.5				AC00902	**8904**	FC00341	**8904**
P0801622-003.01	275 Franklin CS	6.0 L-Summa Canister Ambient	-5.2	-2.6	3.6				AC01418	**8904**	FC00207	**8904**
P0801622-004.01	275 Franklin Dup	6.0 L-Summa Canister Ambient	-5.1	-2.5	3.5				AC00686	**8904**	FC00037	**8904**

Miscellaneous Items - received

AVG00799
AVG00306
AVG00810
AVG00768

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Malcolm Pirnie, Incorporated Work order: P0801622

Project: 275 Franklin St. / 0266 377

Sample(s) received on: 5/30/08 Date opened: 5/30/08 by: LKUKITA

Note: This form is used for all samples received by CAS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by CAS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
	Cooler Temperature _____ °C Blank Temperature _____ °C			
9	Was a **trip blank** received?	☐	☒	☐
	Trip blank supplied by CAS: Serial # _____ -TB _____			
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were VOA vials checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0801622-001.01	6.0 L Ambient Can					
P0801622-002.01	6.0 L Ambient Can					
P0801622-003.01	6.0 L Ambient Can					
P0801622-004.01	6.0 L Ambient Can					

Explain any discrepancies: (include lab sample ID numbers): _____

*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12);
Diss. Sulfide, NaOH (pH>12); T. Sulfide, NaOH/ZnAc (pH>12) RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

NYSDEC DATA PACKAGE SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
275 Franklin OA	P0801622-001	EPA TO-15					
275 Franklin FA	P0801622-002	EPA TO-15					
275 Franklin CS	P0801622-003	EPA TO-15					
275 Franklin Dup	P0801622-004	EPA TO-15					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
P0801622-001	Air	5/29/08	5/30/08	NA	6/4/08
P0801622-002	Air	5/29/08	5/30/08	NA	6/4/08
P0801622-003	Air	5/29/08	5/30/08	NA	6/4/08
P0801622-004	Air	5/29/08	5/30/08	NA	6/4/08

CHAIN OF CUSTODY FORMS

Columbia Analytical Services, Inc.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0801622

Company Name & Address (Reporting Information)
Malcolm Pirnie Inc.
50 fountain plaza
suite 600 Buffalo NY 14202

Project Name: 275 Franklin st.

Project Number: 0266 377

Project Manager: John Hilton

P.O. # / Billing Information

Phone: 716-667-0900

Fax:

Email Address for Result Reporting

Sampler (Print & Sign): Dwight Symonds / D-Symonds

CAS Contact

Analysis Method and/or Analytes: TO-15

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Sample Type (Air/Tube/ Solid)	Canister ID (Bar Code # - AC, SC, etc.)	Flow Controller (Bar Code - FC #)	Sample Volume	Comments e.g. Actual Preservative or specific instructions
275 Franklin OA	1	5/29	1030	Air	003493	FC00293	6L	-6.0"
275 Franklin FA	2	"	1035	"	002659	FC00341	"	-5.8"
275 Franklin CS	3	"	1040	"	003754	FC00207	"	-5.2"
275 Franklin DUP	4	"	—	"	02235	FC00037	"	-5.1"

Report Tier Levels - please select
Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) ____
EDD required Yes / No
Type: ____
EDD Units: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature) D-Symonds	Date: 5/29	Time: 1400	Received by: (Signature) FEDEX	Date:	Time:		
Relinquished by: (Signature) FEDEX	Date:	Time:	Received by: (Signature) Anne Kinsella	Date: 5/30/08	Time: 0937	Cooler / Blank	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Temperature ____ °C	

GC/MS VOLATILES DATA

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

SURROGATE SPIKE RECOVERY RESULTS

Client: **Malcolm Pirnie, Incorporated**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister(s)
Test Notes:

Date(s) Collected: 5/29/08
Date(s) Received: 5/30/08
Date(s) Analyzed: 6/3 - 6/4/08

Client Sample ID	CAS Sample ID	1,2-Dichloroethane-d4		Toluene-d8		Bromofluorobenzene		Data Qualifier
		% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	% Recovered	Acceptance Limits	
Method Blank	P080603-MB	**96**	70-130	**99**	70-130	**83**	70-130	
Lab Control Sample	P080603-LCS	**96**	70-130	**98**	70-130	**82**	70-130	
275 Franklin OA	P0801622-001	**98**	70-130	**98**	70-130	**81**	70-130	
275 Franklin FA	P0801622-002	**98**	70-130	**98**	70-130	**82**	70-130	
275 Franklin CS	P0801622-003	**98**	70-130	**98**	70-130	**82**	70-130	
275 Franklin Dup	P0801622-004	**98**	70-130	**98**	70-130	**83**	70-130	

Verified By: RC Date: 6/13/08

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **Lab Control Sample**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P080603-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/03/08
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	24.8	**24.1**	**97**	61-127	
75-35-4	1,1-Dichloroethene	27.8	**28.8**	**104**	77-116	
75-09-2	Methylene Chloride	27.8	**27.2**	**98**	71-113	
156-60-5	trans-1,2-Dichloroethene	26.5	**27.2**	**103**	74-118	
156-59-2	cis-1,2-Dichloroethene	27.0	**27.7**	**103**	74-117	
71-55-6	1,1,1-Trichloroethane	26.8	**27.7**	**103**	78-114	
71-43-2	Benzene	27.0	**25.0**	**93**	73-111	
79-01-6	Trichloroethene	27.3	**28.7**	**105**	80-116	
108-88-3	Toluene	26.5	**26.9**	**102**	76-116	
127-18-4	Tetrachloroethene	26.0	**27.6**	**106**	77-118	
100-41-4	Ethylbenzene	26.3	**27.3**	**104**	79-116	
179601-23-1	m,p-Xylenes	62.5	**64.4**	**103**	80-117	
95-47-6	o-Xylene	29.8	**30.7**	**103**	80-116	

Verified By: RL Date: 6/13/08

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated** CAS Project ID: P0801622
Client Project ID: **275 Franklin St. / 0266 377**

Method Blank Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 06030805.D
Analyst: Wida Ang Date Analyzed: 6/03/08
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 09:23
Test Notes:

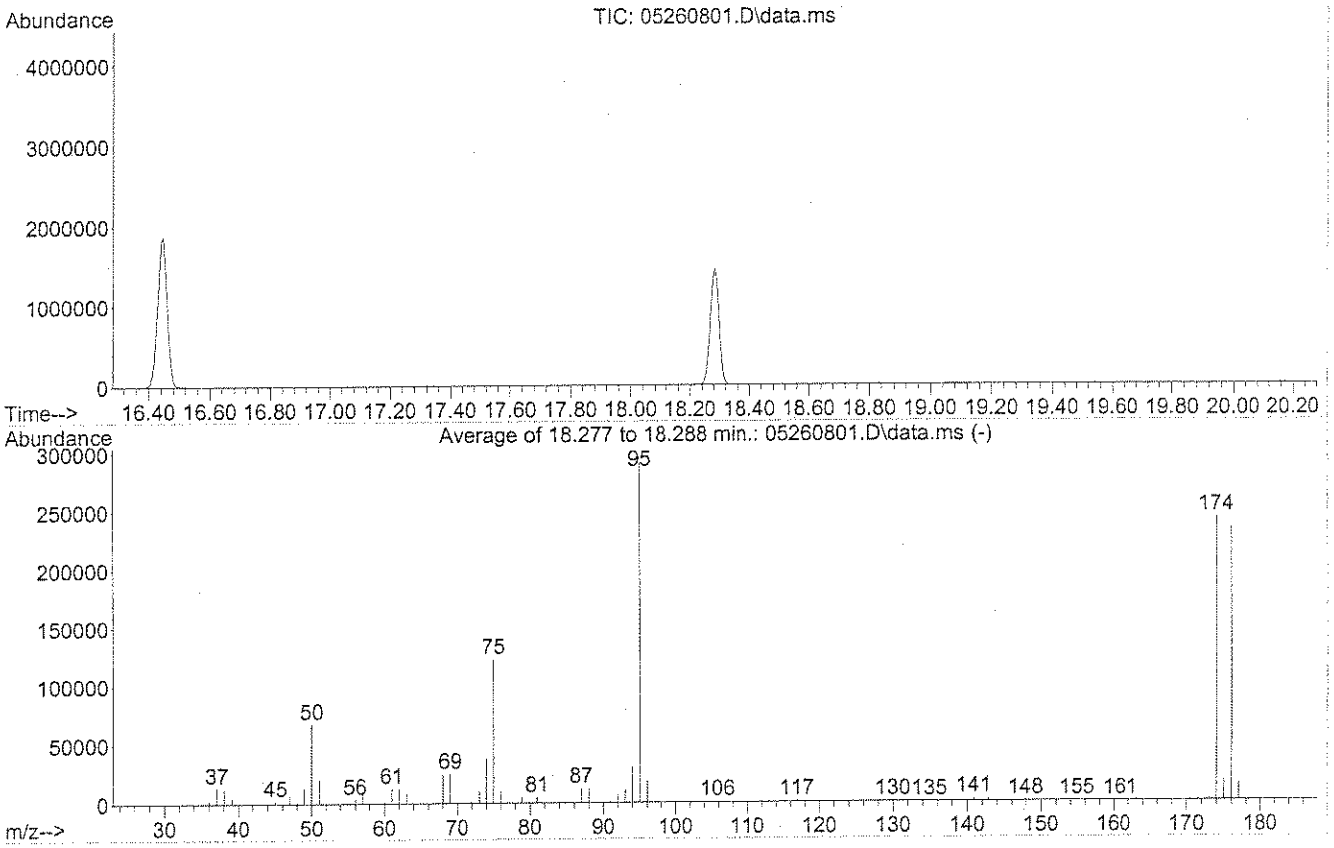
Client Sample ID	CAS Sample ID	Lab File ID	Time Analyzed
Lab Control Sample	P080603-LCS	06030817.D	19:27
275 Franklin OA	P0801622-001	06030827.D	01:21
275 Franklin CS	P0801622-003	06030828.D	01:59
275 Franklin Dup	P0801622-004	06030829.D	02:36
275 Franklin FA	P0801622-002	06030831.D	04:16

BFB

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260801.D
Acq On : 26 May 2008 3:58 pm
Operator : WA
Sample : 25ng BFB Tune
Misc : S20-05120801
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:50:43 2008



AutoFind: Scans 2479, 2480, 2481; Background Corrected with Scan 2469

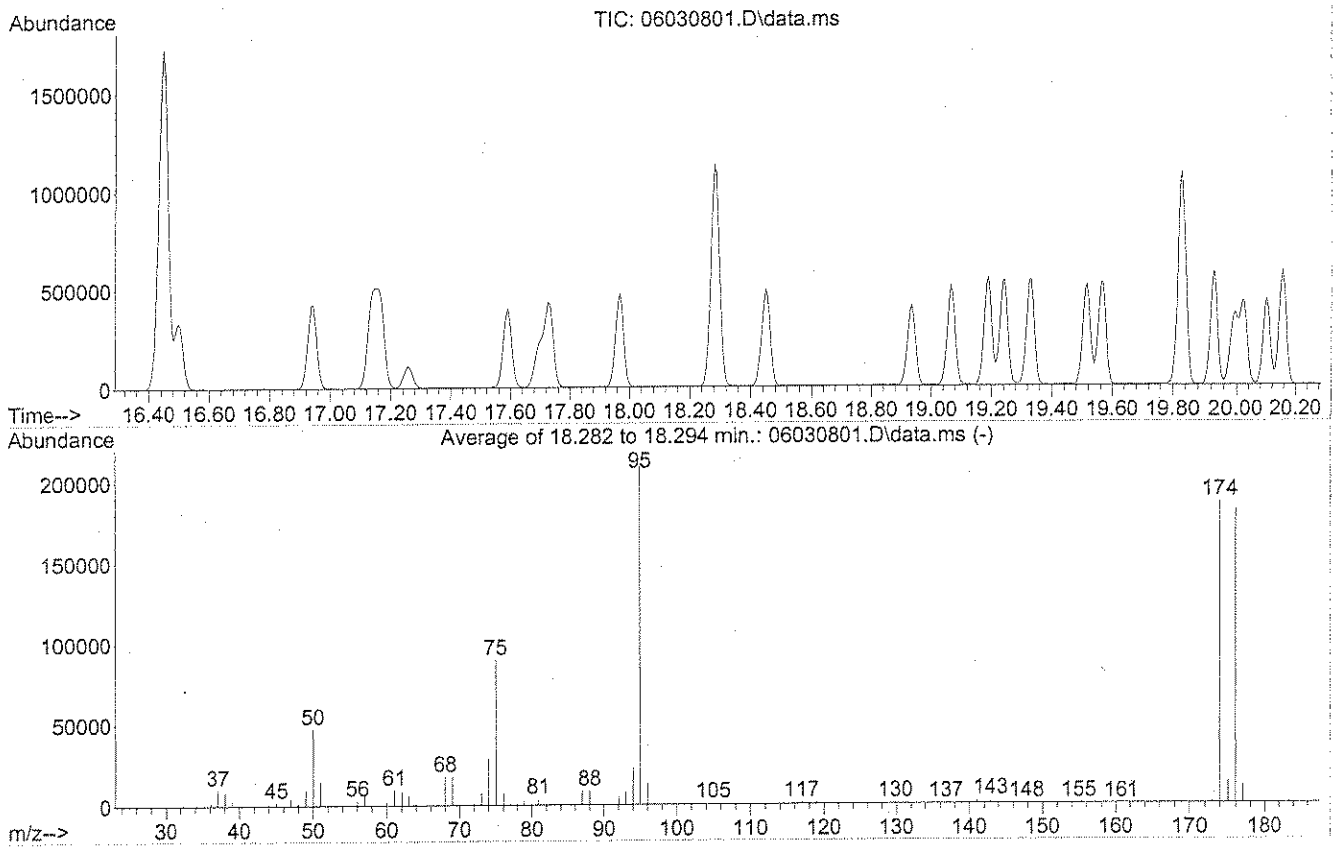
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.5	68147	PASS
75	95	30	66	42.6	123432	PASS
95	95	100	100	100.0	289984	PASS
96	95	5	9	6.5	18763	PASS
173	174	0.00	2	0.8	2059	PASS
174	95	50	120	83.9	243179	PASS
175	174	4	9	7.4	18091	PASS
176	174	93	101	96.6	234901	PASS
177	176	5	9	6.2	14675	PASS

16

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:50:43 2008



AutoFind: Scans 2480, 2481, 2482; Background Corrected with Scan 2470

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.6	47448	PASS
75	95	30	66	42.9	90083	PASS
95	95	100	100	100.0	209792	PASS
96	95	5	9	6.4	13388	PASS
173	174	0.00	2	0.8	1582	PASS
174	95	50	120	89.0	186667	PASS
175	174	4	9	7.3	13620	PASS
176	174	93	101	97.4	181739	PASS
177	176	5	9	6.3	11359	PASS

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated** CAS Project ID: P0801622
Client Project ID: **275 Franklin St. / 0266 377**

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 06030801.D
Analyst: Wida Ang Date Analyzed: 6/3/08
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 05:51
Test Notes:

		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	24 Hour Standard	363875	9.20	1500112	11.35	574573	16.45
	Upper Limit	509425	9.53	2100157	11.68	804402	16.78
	Lower Limit	218325	8.87	900067	11.02	344744	16.12
	Client Sample ID						
01	Method Blank	352886	9.19	1448658	11.34	560317	16.44
02	Lab Control Sample	352094	9.23	1451764	11.37	563110	16.45
03	275 Franklin OA	325243	9.19	1349535	11.34	526941	16.45
04	275 Franklin CS	328702	9.19	1355237	11.34	528175	16.45
05	275 Franklin Dup	329793	9.19	1379796	11.34	534295	16.45
06	275 Franklin FA	334486	9.19	1385669	11.34	537051	16.45
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Verified By: Rc Date: 6/13/08

COLUMBIA ANALYTICAL SERVICES

MDLs for TO-15 (LOW LEVEL - SCAN)

	09/17/07	10/02/07	08/30/07					FINAL	
	MS9	MS13	MS16	MAX			MW	MDL_R	MDL_R
COMPOUND	MDL_R	MDL_R	MDL_R	MDL_R	µg/m³	ppbV		µg/m³	ppbV
Propene	0.050	0.025	0.025	0.0500	0.050	0.02906	42.08	**0.050**	**0.029**
Dichlorodifluoromethane	0.050	0.025	0.027	0.0500	0.050	0.01012	120.90	**0.050**	**0.010**
Chloromethane	0.050	0.025	0.025	0.0500	0.050	0.02422	50.49	**0.050**	**0.024**
Freon 114	0.050	0.027	0.025	0.0500	0.050	0.00716	170.90	**0.050**	**0.0072**
Vinyl Chloride	0.050	0.025	0.029	0.0500	0.050	0.01957	62.50	**0.050**	**0.020**
1,3-Butadiene	0.050	0.025	0.026	0.0500	0.050	0.02261	54.09	**0.050**	**0.023**
Bromomethane	0.050	0.031	0.030	0.0500	0.050	0.01288	94.94	**0.050**	**0.013**
Chloroethane	0.050	0.033	0.032	0.0500	0.050	0.01896	64.52	**0.050**	**0.019**
Ethanol	0.050	0.050	0.050	0.0500	0.050	0.02655	46.07	**0.050**	**0.027**
Acetonitrile	0.050	0.025	0.025	0.0500	0.050	0.02979	41.05	**0.050**	**0.030**
Acrolein	0.063	0.025	0.044	0.0630	0.063	0.02749	56.06	**0.063**	**0.027**
Acetone	0.073	0.049	0.062	0.0730	0.073	0.03074	58.08	**0.073**	**0.031**
Trichlorofluoromethane	0.050	0.025	0.025	0.0500	0.050	0.00890	137.40	**0.050**	**0.0089**
Isopropanol	0.057	0.050	0.025	0.0570	0.057	0.02320	60.10	**0.057**	**0.023**
Acrylonitrile	0.070	0.025	0.025	0.0700	0.070	0.03227	53.06	**0.070**	**0.032**
1,1-Dichloroethene	0.050	0.046	0.045	0.0500	0.050	0.01262	96.94	**0.050**	**0.013**
tert-Butanol	0.074	0.050	0.050	0.0740	0.074	0.02442	74.12	**0.074**	**0.024**
Methylene Chloride	0.050	0.025	0.037	0.0500	0.050	0.01440	84.94	**0.050**	**0.014**
Allyl Chloride	0.050	0.025	0.041	0.0500	0.050	0.01598	76.53	**0.050**	**0.016**
Trichlorotrifluoroethane	0.056	0.025	0.028	0.0560	0.056	0.00731	187.38	**0.056**	**0.0073**
Carbon Disulfide	0.050	0.025	0.120	0.1200	0.120	0.03855	76.14	**0.12**	**0.039**
trans-1,2-Dichloroethene	0.050	0.025	0.025	0.0500	0.050	0.01262	96.94	**0.050**	**0.013**
1,1-Dichloroethane	0.050	0.025	0.025	0.0500	0.050	0.01236	98.96	**0.050**	**0.012**
Methyl tert-Butyl Ether	0.050	0.025	0.031	0.0500	0.050	0.01387	88.15	**0.050**	**0.014**
Vinyl Acetate	0.140	0.160	0.077	0.1600	0.160	0.04546	86.09	**0.16**	**0.045**
2-Butanone	0.050	0.041	0.026	0.0500	0.050	0.01696	72.11	**0.050**	**0.017**
cis-1,2-Dichloroethene	0.050	0.025	0.026	0.0500	0.050	0.01262	96.94	**0.050**	**0.013**
Diisopropyl Ether	0.059	0.025	0.032	0.0590	0.059	0.01412	102.18	**0.059**	**0.014**
Ethyl Acetate	0.050	0.046	0.061	0.0610	0.061	0.01693	88.11	**0.061**	**0.017**
n-Hexane	0.050	0.025	0.025	0.0500	0.050	0.01419	86.17	**0.050**	**0.014**
Chloroform	0.059	0.028	0.028	0.0590	0.059	0.01209	119.40	**0.059**	**0.012**
Tetrahydrofuran	0.053	0.051	0.029	0.0530	0.053	0.01798	72.11	**0.053**	**0.018**
Ethyl tert-Butyl Ether	0.051	0.025	0.027	0.0510	0.051	0.01221	102.18	**0.051**	**0.012**
1,2-Dichloroethane	0.050	0.025	0.030	0.0500	0.050	0.01236	98.96	**0.050**	**0.012**
1,1,1-Trichloroethane	0.050	0.025	0.025	0.0500	0.050	0.00917	133.40	**0.050**	**0.0092**
Isopropyl Acetate	0.066	0.029	0.041	0.0660	0.066	0.01581	102.13	**0.066**	**0.016**
1-Butanol	0.095	0.025	*NA*	0.0950	0.095	0.03135	74.12	**0.095**	**0.031**
Benzene	0.050	0.025	0.026	0.0500	0.050	0.01566	78.11	**0.050**	**0.016**
Carbon Tetrachloride	0.050	0.025	0.025	0.0500	0.050	0.00795	153.80	**0.050**	**0.0080**
Cyclohexane	0.050	0.025	0.025	0.0500	0.050	0.01453	84.16	**0.050**	**0.015**
tert-Amyl Methyl Ether	0.050	0.025	0.025	0.0500	0.050	0.01197	102.18	**0.050**	**0.012**
1,2-Dichloropropane	0.050	0.025	0.025	0.0500	0.050	0.01082	113.00	**0.050**	**0.011**
Bromodichloromethane	0.050	0.025	0.025	0.0500	0.050	0.00747	163.80	**0.050**	**0.0075**
Trichloroethene	0.050	0.032	0.025	0.0500	0.050	0.00931	131.40	**0.050**	**0.0093**
1,4-Dioxane	0.061	0.040	0.036	0.0610	0.061	0.01693	88.11	**0.061**	**0.017**
Isooctane	0.050	0.025	0.025	0.0500	0.050	0.01071	114.23	**0.050**	**0.011**
Methyl Methacrylate	0.075	0.050	0.025	0.0750	0.075	0.01832	100.12	**0.075**	**0.018**
n-Heptane	0.064	0.030	0.030	0.0640	0.064	0.01562	100.20	**0.064**	**0.016**
cis-1,3-Dichloropropene	0.052	0.030	0.025	0.0520	0.052	0.01146	111.00	**0.052**	**0.011**
4-Methyl-2-pentanone	0.056	0.026	0.034	0.0560	0.056	0.01367	100.20	**0.056**	**0.014**
trans-1,3-Dichloropropene	0.063	0.035	0.025	0.0630	0.063	0.01388	111.00	**0.063**	**0.014**
1,1,2-Trichloroethane	0.050	0.032	0.030	0.0500	0.050	0.00917	133.40	**0.050**	**0.0092**
Toluene	0.050	0.027	0.025	0.0500	0.050	0.01327	92.14	**0.050**	**0.013**
2-Hexanone	0.076	0.025	0.030	0.0760	0.076	0.01856	100.16	**0.076**	**0.019**
Dibromochloromethane	0.068	0.025	0.030	0.0680	0.068	0.00799	208.30	**0.068**	**0.0080**
1,2-Dibromoethane	0.054	0.031	0.025	0.0540	0.054	0.00703	187.90	**0.054**	**0.0070**
Butyl Acetate	0.065	0.025	0.025	0.0650	0.065	0.01369	116.16	**0.065**	**0.014**

COLUMBIA ANALYTICAL SERVICES

MDLs for TO-15 (LOW LEVEL - SCAN)

	09/17/07	10/02/07	08/30/07					FINAL	
	MS9	MS13	MS16	MAX			MW	MDL_R	MDL_R
COMPOUND	MDL_R	MDL_R	MDL_R	MDL_R	µg/m³	ppbV		µg/m³	ppbV
n-Octane	0.050	0.029	0.035	0.0500	0.050	0.01071	114.23	**0.050**	**0.011**
Tetrachloroethene	0.050	0.031	0.029	0.0500	0.050	0.00738	165.80	**0.050**	**0.0074**
Chlorobenzene	0.051	0.025	0.025	0.0510	0.051	0.01108	112.60	**0.051**	**0.011**
Ethylbenzene	0.062	0.025	0.025	0.0620	0.062	0.01428	106.20	**0.062**	**0.014**
m- & p-Xylene	0.130	0.050	0.050	0.1300	0.130	0.02994	106.20	**0.13**	**0.030**
Bromoform	0.076	0.029	0.033	0.0760	0.076	0.00735	252.80	**0.076**	**0.0074**
Styrene	0.076	0.025	0.025	0.0760	0.076	0.01786	104.10	**0.076**	**0.018**
o-Xylene	0.063	0.025	0.036	0.0630	0.063	0.01451	106.20	**0.063**	**0.015**
n-Nonane	0.050	0.025	0.025	0.0500	0.050	0.00954	128.26	**0.050**	**0.0095**
1,1,2,2-Tetrachloroethane	0.064	0.025	0.025	0.0640	0.064	0.00932	167.90	**0.064**	**0.0093**
Cumene	0.056	0.025	0.025	0.0560	0.056	0.01140	120.20	**0.056**	**0.011**
alpha-Pinene	0.077	0.025	0.025	0.0770	0.077	0.01382	136.24	**0.077**	**0.014**
n-Propylbenzene	0.052	0.025	0.025	0.0520	0.052	0.01058	120.19	**0.052**	**0.011**
3-Ethyltoluene	0.057	0.025	0.025	0.0570	0.057	0.01160	120.20	**0.057**	**0.012**
4-Ethyltoluene	0.057	0.027	0.026	0.0570	0.057	0.01160	120.20	**0.057**	**0.012**
1,3,5-Trimethylbenzene	0.060	0.025	0.025	0.0600	0.060	0.01221	120.20	**0.060**	**0.012**
alpha-Methylstyrene	0.073	0.025	0.027	0.0730	0.073	0.01511	118.19	**0.073**	**0.015**
2-Ethyltoluene	0.053	0.025	0.027	0.0530	0.053	0.01079	120.20	**0.053**	**0.011**
1,2,4-Trimethylbenzene	0.069	0.025	0.025	0.0690	0.069	0.01404	120.20	**0.069**	**0.014**
n-Decane	0.064	0.025	0.025	0.0640	0.064	0.01100	142.28	**0.064**	**0.011**
Benzyl Chloride	0.086	0.025	0.025	0.0860	0.086	0.01662	126.59	**0.086**	**0.017**
1,3-Dichlorobenzene	0.062	0.025	0.025	0.0620	0.062	0.01032	147.00	**0.062**	**0.010**
1,4-Dichlorobenzene	0.056	0.025	0.025	0.0560	0.056	0.00932	147.00	**0.056**	**0.0093**
sec-Butylbenzene	0.058	0.025	0.025	0.0580	0.058	0.01057	134.22	**0.058**	**0.011**
p-Isopropyltoluene	0.065	0.025	0.029	0.0650	0.065	0.01185	134.22	**0.065**	**0.012**
1,2,3-Trimethylbenzene	0.064	0.025	0.025	0.0640	0.064	0.01302	120.19	**0.064**	**0.013**
1,2-Dichlorobenzene	0.066	0.025	0.032	0.0660	0.066	0.01098	147.00	**0.066**	**0.011**
d-Limonene	0.080	0.025	0.025	0.0800	0.080	0.01436	136.24	**0.080**	**0.014**
1,2-Dibromo-3-Chloropropane	0.076	0.025	0.027	0.0760	0.076	0.00787	236.33	**0.076**	**0.0079**
n-Undecane	0.090	0.025	0.025	0.0900	0.090	0.01408	156.31	**0.090**	**0.014**
1,2,4-Trichlorobenzene	0.076	0.025	0.049	0.0760	0.076	0.01024	181.50	**0.076**	**0.010**
Naphthalene	0.074	0.025	0.032	0.0740	0.074	0.01412	128.17	**0.074**	**0.014**
n-Dodecane	0.088	0.025	0.025	0.0880	0.088	0.01264	170.34	**0.088**	**0.013**
Hexachloro-1,3-butadiene	0.090	0.036	0.032	0.0900	0.090	0.00844	260.80	**0.090**	**0.0084**

Sample Data

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin OA**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-001

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01303

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.9 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.77	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.77	ND	0.19	
75-09-2	Methylene Chloride	ND	0.77	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.77	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.77	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.77	ND	0.14	
71-43-2	Benzene	ND	0.77	ND	0.24	
79-01-6	Trichloroethene	ND	0.15	ND	0.029	
108-88-3	**Toluene**	**1.1**	0.77	**0.30**	0.20	
127-18-4	Tetrachloroethene	ND	0.77	ND	0.11	
100-41-4	Ethylbenzene	ND	0.77	ND	0.18	
179601-23-1	m,p-Xylenes	ND	0.77	ND	0.18	
95-47-6	o-Xylene	ND	0.77	ND	0.18	

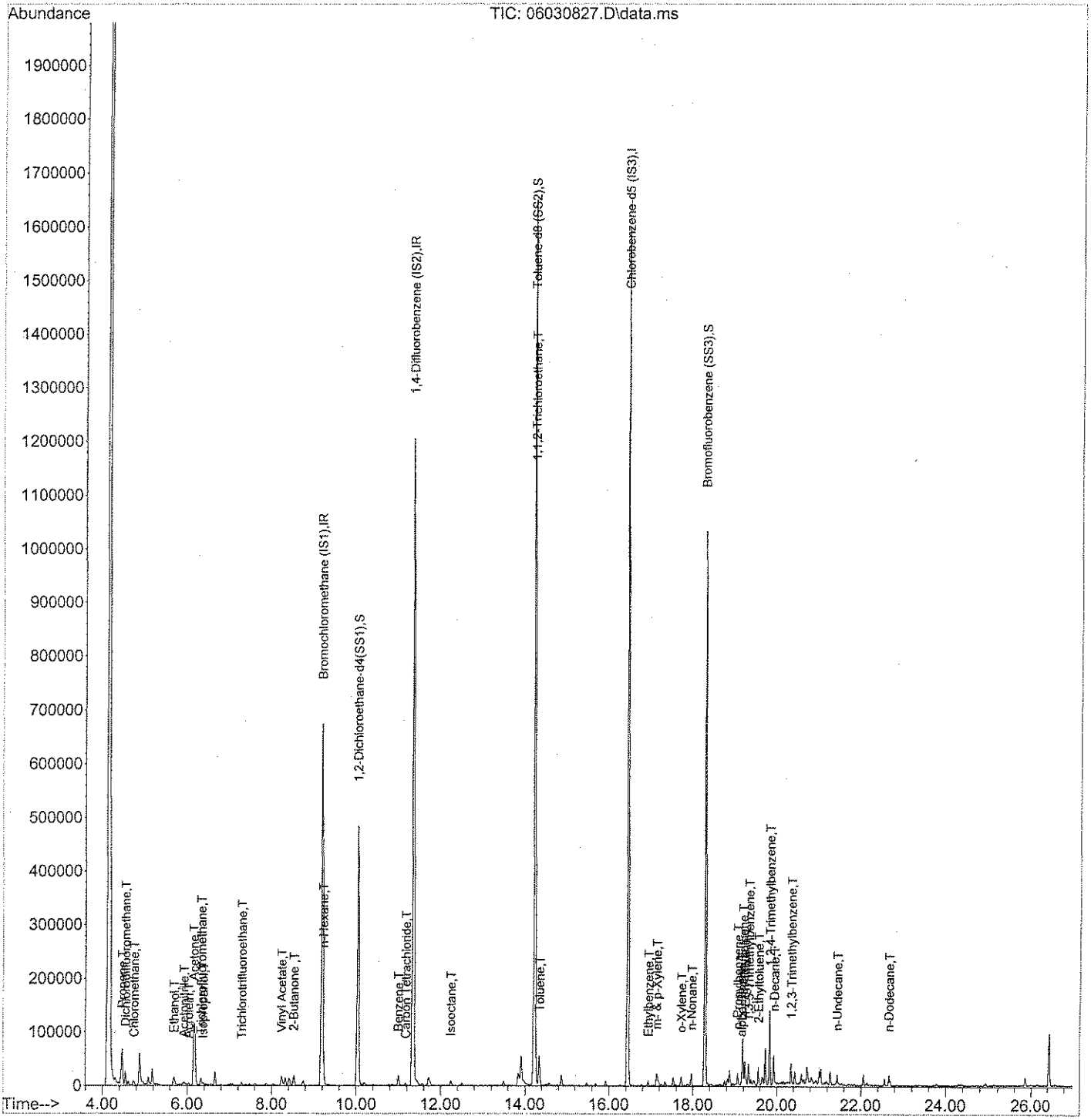
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/13/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030827.D
Acq On : 4 Jun 2008 1:21
Operator : WA
Sample : P0801622-001 (1000ml)
Misc : Malcolm 275 Franklin OA (-2.9, 3.5)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 04 04:09:26 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030827.D
Acq On : 4 Jun 2008 1:21
Operator : WA
Sample : P0801622-001 (1000ml)
Misc : Malcolm 275 Franklin OA (-2.9, 3.5)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 04 04:09:26 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	325243	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	11.34	114	1349535	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	526941	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.05	65	457953	24.624	ng		-0.05
Spiked Amount 25.000			Recovery =	98.48%			
57) Toluene-d8 (SS2)	14.22	98	1331813	24.515	ng		-0.02
Spiked Amount 25.000			Recovery =	98.08%			
73) Bromofluorobenzene (SS3)	18.28	174	367915	20.370	ng		-0.01
Spiked Amount 25.000			Recovery =	81.48%			
Target Compounds							Qvalue
2) Propene	4.46	42	9849	0.391	ng	#	51
3) Dichlorodifluoromethane	4.55	85	24535	0.806	ng		98
4) Chloromethane	4.75	50	9997	0.261	ng		98
5) Freon 114	4.87	135	537	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D. ✓			
7) 1,3-Butadiene	5.08	54	102	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	5.70	45	24312	1.423	ng		100
11) Acetonitrile	5.92	41	6123	0.124	ng		72
12) Acrolein	6.04	56	4170	0.339	ng		94
13) Acetone	6.16	58	72925	4.291	ng	#	72
14) Trichlorofluoromethane	6.33	101	12070	0.423	ng		97
15) Isopropanol	6.37	45	8479	0.166	ng		63
16) Acrylonitrile	6.65	53	94	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) tert-Butanol	6.98	59	1519	N.D.			
19) Methylene Chloride	7.03	84	1290	N.D. ✓			
20) Allyl Chloride	7.15	41	102	N.D.			
21) Trichlorotrifluoroethane	7.30	151	2700	0.195	ng		84
22) Carbon Disulfide	7.40	76	3335	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D. ✓			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	8.24	86	2007	0.721	ng	#	75
27) 2-Butanone	8.52	72	4968	0.559	ng	#	1
28) cis-1,2-Dichloroethene	9.19	61	328	N.D. ✓			
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	9.19	61	328	N.D.			
31) n-Hexane	9.22	57	7034	0.190	ng	#	65

6/10/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030827.D
Acq On : 4 Jun 2008 1:21
Operator : WA
Sample : P0801622-001 (1000ml)
Misc : Malcolm 275 Franklin OA (-2.9, 3.5)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 04 04:09:26 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	9.33	83	531	N.D.		
34) Tetrahydrofuran	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	10.47	97	198	N.D. ✓		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	10.80	56	1275	N.D.		
41) Benzene	11.00	78	19237	~~0.338 ng~~		96
42) Carbon Tetrachloride	11.17	117	4004	0.172 ng		95
43) Cyclohexane	11.34	84	1412	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	12.20	130	360	N.D. ✓		
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) Isooctane	12.24	57	10981	0.121 ng		96
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	12.51	71	739	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	13.19	58	521	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	14.24	97	111510	8.058 ng	#	7
58) Toluene	14.35	91	44782	0.727 ng		98
59) 2-Hexanone	14.59	43	5413	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	15.31	43	1567	N.D.		
63) n-Octane	15.48	57	994	N.D.		
64) Tetrachloroethene	15.69	166	1576	N.D. ✓		
65) Chlorobenzene	0.00	112	0	N.D.		
66) Ethylbenzene	16.94	91	8932	~~0.128 ng~~		93
67) m- & p-Xylene	17.14	91	22187	~~0.478 ng~~		95
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	17.58	104	1789	N.D.		
70) o-Xylene	17.73	91	11612	~~0.234 ng~~		100
71) n-Nonane	17.97	43	12011	0.245 ng		88
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
74) Cumene	18.45	105	3060	N.D.		
75) alpha-Pinene	19.15	93	5371	0.158 ng	#	43
76) n-Propylbenzene	19.06	91	18716	0.223 ng		86
77) 3-Ethyltoluene	19.19	105	58382	0.736 ng		92
78) 4-Ethyltoluene	19.24	105	29740	0.416 ng		97
79) 1,3,5-Trimethylbenzene	19.33	105	21989	0.347 ng		90

6/10/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030827.D
Acq On : 4 Jun 2008 1:21
Operator : WA
Sample : P0801622-001 (1000ml)
Misc : Malcolm 275 Franklin OA (-2.9, 3.5)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 04 04:09:26 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	19.72	118	434	N.D.		
81) 2-Ethyltoluene	19.56	105	24577	0.320 ng		94
82) 1,2,4-Trimethylbenzene	19.83	105	83240	1.296 ng		98
83) n-Decane	19.93	57	24311	0.535 ng		88
84) Benzyl Chloride	20.11	91	1269	N.D.		
85) 1,3-Dichlorobenzene	20.10	146	716	N.D.		
86) 1,4-Dichlorobenzene	20.10	146	716	N.D.		
87) sec-Butylbenzene	20.15	105	2173	N.D.		
88) p-Isopropyltoluene	20.34	119	3016	N.D.		
89) 1,2,3-Trimethylbenzene	20.34	105	15675	0.254 ng		95
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	20.51	68	352	N.D.		
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.		
93) n-Undecane	21.44	57	7855	0.165 ng		78
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.		
95) Naphthalene	22.69	128	8594	N.D.		
96) n-Dodecane	22.66	57	7431	0.160 ng	#	72
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		

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

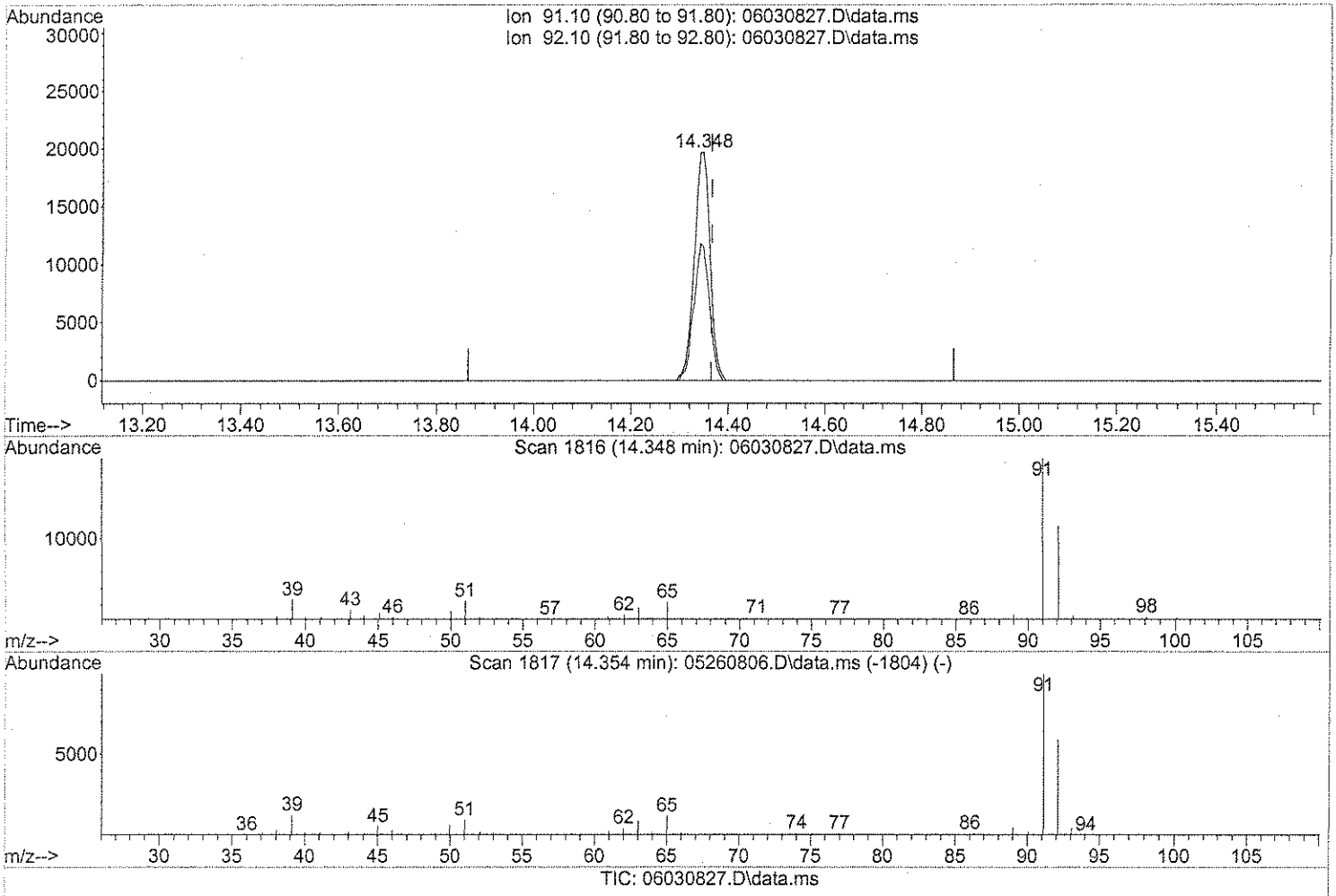
26

DT 6/10/08

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030827.D
Acq On : 4 Jun 2008 1:21
Operator : WA
Sample : P0801622-001 (1000ml)
Misc : Malcolm 275 Franklin OA (-2.9, 3.5)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 04 04:09:26 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030827.D\data.ms

(58) Toluene (T)

14.348min (-0.018) 0.73ng

response 44782

Ion	Exp%	Act%
91.10	100	100
92.10	57.80	59.32
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin FA**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-002

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00902

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.8 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	1.9	ND	0.75	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.48	
75-09-2	**Methylene Chloride**	**28**	1.9	**8.0**	0.55	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.48	
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.48	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.35	
71-43-2	**Benzene**	**2.6**	1.9	**0.82**	0.60	
79-01-6	**Trichloroethene**	**1.1**	0.38	**0.21**	0.071	
108-88-3	**Toluene**	**29**	1.9	**7.7**	0.51	
127-18-4	**Tetrachloroethene**	**93**	1.9	**14**	0.28	
100-41-4	**Ethylbenzene**	**16**	1.9	**3.7**	0.44	
179601-23-1	**m,p-Xylenes**	**47**	1.9	**11**	0.44	
95-47-6	**o-Xylene**	**110**	1.9	**24**	0.44	

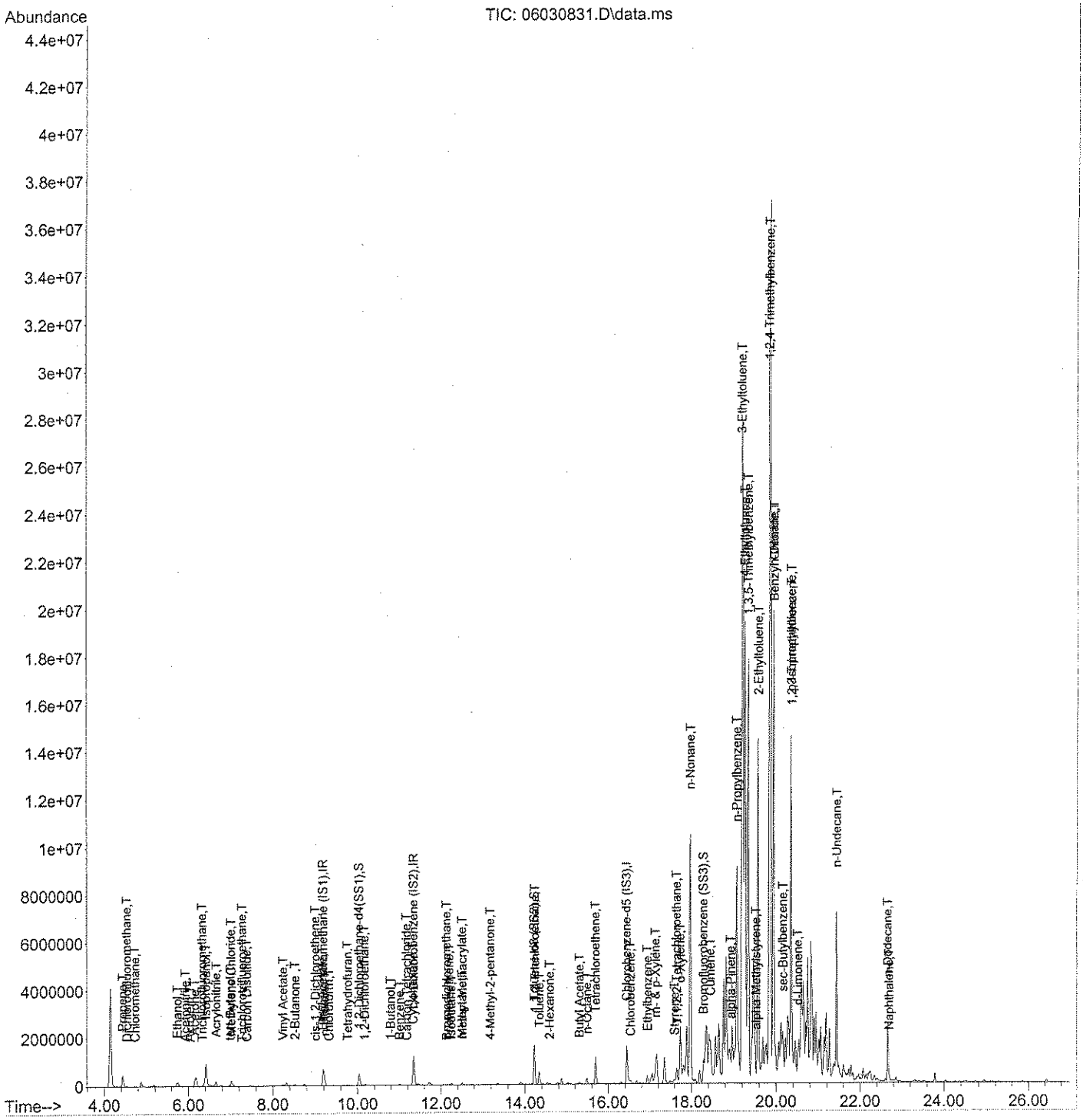
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: Re Date: 6/13/08

Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16 am
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16 am
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	334486	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	11.34	114	1385669	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	537051	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.04	65	468764	24.509	ng		-0.05
Spiked Amount 25.000			Recovery =	98.04%			
57) Toluene-d8 (SS2)	14.22	98	1357289	24.514	ng		-0.02
Spiked Amount 25.000			Recovery =	98.04%			
73) Bromofluorobenzene (SS3)	18.29	174	375214	20.383	ng		0.00
Spiked Amount 25.000			Recovery =	81.52%			
Target Compounds							Qvalue
2) Propene	4.43	42	225559	8.711	ng		98
3) Dichlorodifluoromethane	4.54	85	21060	0.672	ng		99
4) Chloromethane	4.74	50	9049	0.230	ng		95
5) Freon 114	4.84	135	95	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	5.13	54	445	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	5.74	45	365625	20.812	ng		95
11) Acetonitrile	5.93	41	7467	0.147	ng	#	69
12) Acrolein	6.04	56	8572	0.677	ng		100
13) Acetone	6.15	58	197238	11.285	ng	#	84
14) Trichlorofluoromethane	6.32	101	14447	0.493	ng		96
15) Isopropanol	6.41	45	2081742	39.542	ng		93
16) Acrylonitrile	6.66	53	2047	0.064	ng	#	6
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) tert-Butanol	7.00	59	8548	0.174	ng	#	1
19) Methylene Chloride	7.02	84	97594	7.240	ng	#	39
20) Allyl Chloride	7.15	41	191	N.D.			
21) Trichlorotrifluoroethane	7.28	151	2035	0.143	ng		98
22) Carbon Disulfide	7.39	76	6986	0.129	ng		82
23) trans-1,2-Dichloroethene	8.06	61	1135	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	8.24	86	2687	0.939	ng	#	1
27) 2-Butanone	8.52	72	20568	2.251	ng	#	12
28) cis-1,2-Dichloroethene	9.01	61	7390	~~0.298 ng~~			93
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	9.17	61	1145	0.180	ng	#	30
31) n-Hexane	9.23	57	64406	1.690	ng		91

JDH 6/5/08

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Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16 am
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.32	83	1824	0.092	ng		84
34) Tetrahydrofuran	9.77	72	7050	0.821	ng	#	48
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.			
36) 1,2-Dichloroethane	10.17	62	1135	0.050	ng	#	42
38) 1,1,1-Trichloroethane	10.48	97	674	N.D. ✓			
39) Isopropyl Acetate	0.00	61	0	N.D.			
40) 1-Butanol	10.79	56	34193	1.499	ng	#	69
41) Benzene	11.01	78	40020	0.685	ng		100
42) Carbon Tetrachloride	11.18	117	3208	0.134	ng		95
43) Cyclohexane	11.33	84	12864	0.563	ng	#	1
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.			
45) 1,2-Dichloropropane	0.00	63	0	N.D.			
46) Bromodichloromethane	12.14	83	1469	0.086	ng	#	19
47) Trichloroethene	12.20	130	5455	0.300	ng		99
48) 1,4-Dioxane	0.00	88	0	N.D.			
49) Isooctane	12.24	57	54921	0.588	ng		91
50) Methyl Methacrylate	12.51	100	4795	0.765	ng	#	1
51) n-Heptane	12.50	71	14379	1.031	ng	#	53
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.			
53) 4-Methyl-2-pentanone	13.18	58	6856	0.338	ng		82
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.			
55) 1,1,2-Trichloroethane	14.24	97	115231	8.109	ng	#	7
58) Toluene	14.35	91	473809	7.544	ng		99
59) 2-Hexanone	14.59	43	24094	0.406	ng	#	50
60) Dibromochloromethane	0.00	129	0	N.D.			
61) 1,2-Dibromoethane	0.00	107	0	N.D.			
62) Butyl Acetate	15.31	43	84513	1.417	ng		85
63) n-Octane	15.49	57	65003	3.423	ng		95
64) Tetrachloroethene	15.69	166	449328	24.188	ng		100
65) Chlorobenzene	16.53	112	17755	0.397	ng	#	43
66) Ethylbenzene	16.94	91	301034	4.217	ng		92
67) m- & p-Xylene	17.14	91	576618	12.191	ng		92
68) Bromoform	0.00	173	0	N.D.			
69) Styrene	17.60	104	54235	1.187	ng		94
70) o-Xylene	17.74	91	1395827	27.573	ng		93
71) n-Nonane	17.98	43	5829691	116.690	ng		93
72) 1,1,2,2-Tetrachloroethane	17.65	83	41317	1.971	ng	#	34
74) Cumene	18.45	105	1229862	16.687	ng		95
75) alpha-Pinene	18.94	93	23862	0.690	ng		65
76) n-Propylbenzene	19.08	91	8749643	102.163	ng		93
77) 3-Ethyltoluene	19.21	105	24587553	304.113	ng		90
78) 4-Ethyltoluene	19.27	105	12712901	174.279	ng		96
79) 1,3,5-Trimethylbenzene	19.35	105	11060208	171.011	ng		95

6/15/08

Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16 am
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

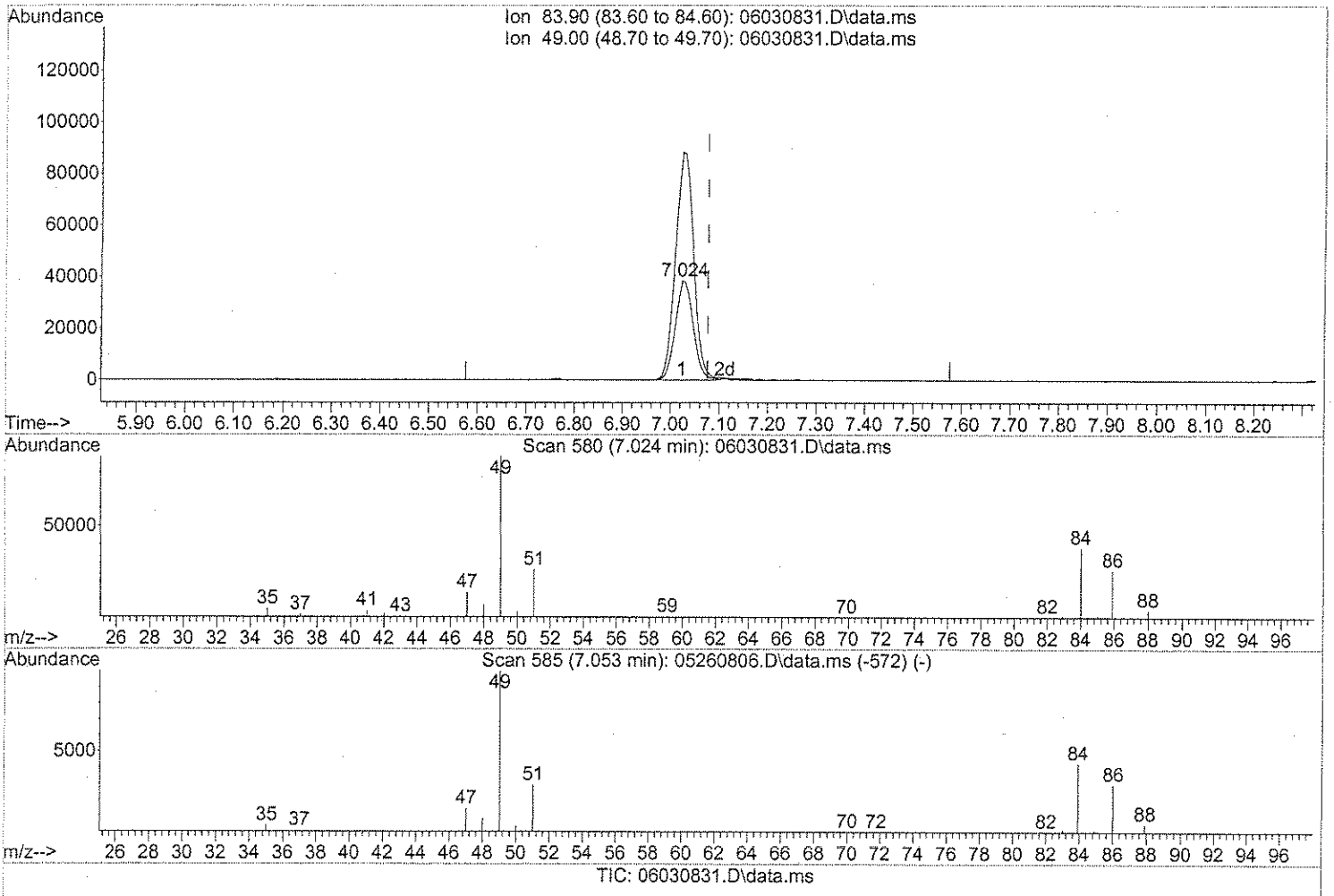
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.53	118	10091	0.277	ng	#	13
81) 2-Ethyltoluene	19.59	105	11375095	145.103	ng		95
82) 1,2,4-Trimethylbenzene	19.85	105	27290030	416.778	ng		88
83) n-Decane	19.95	57	9485865	204.636	ng		80
84) Benzyl Chloride	19.95	91	15807	0.312	ng	#	57
85) 1,3-Dichlorobenzene	20.04	146	98	N.D.			
86) 1,4-Dichlorobenzene	20.11	146	1474	N.D.			
87) sec-Butylbenzene	20.17	105	878970	10.347	ng		95
88) p-Isopropyltoluene	20.36	119	931662	12.554	ng	#	48
89) 1,2,3-Trimethylbenzene	20.36	105	6394067	101.704	ng		96
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.			
91) d-Limonene	20.52	68	88326	4.377	ng		93
92) 1,2-Dibromo-3-Chloropr...	21.06	157	511	N.D.			
93) n-Undecane	21.44	57	2960698	60.902	ng		78
94) 1,2,4-Trichlorobenzene	22.86	184	107	N.D.			
95) Naphthalene	22.69	128	132741	1.395	ng		90
96) n-Dodecane	22.66	57	961809	20.305	ng		76
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(19) Methylene Chloride (T)

7.024min (-0.053) 7.24ng

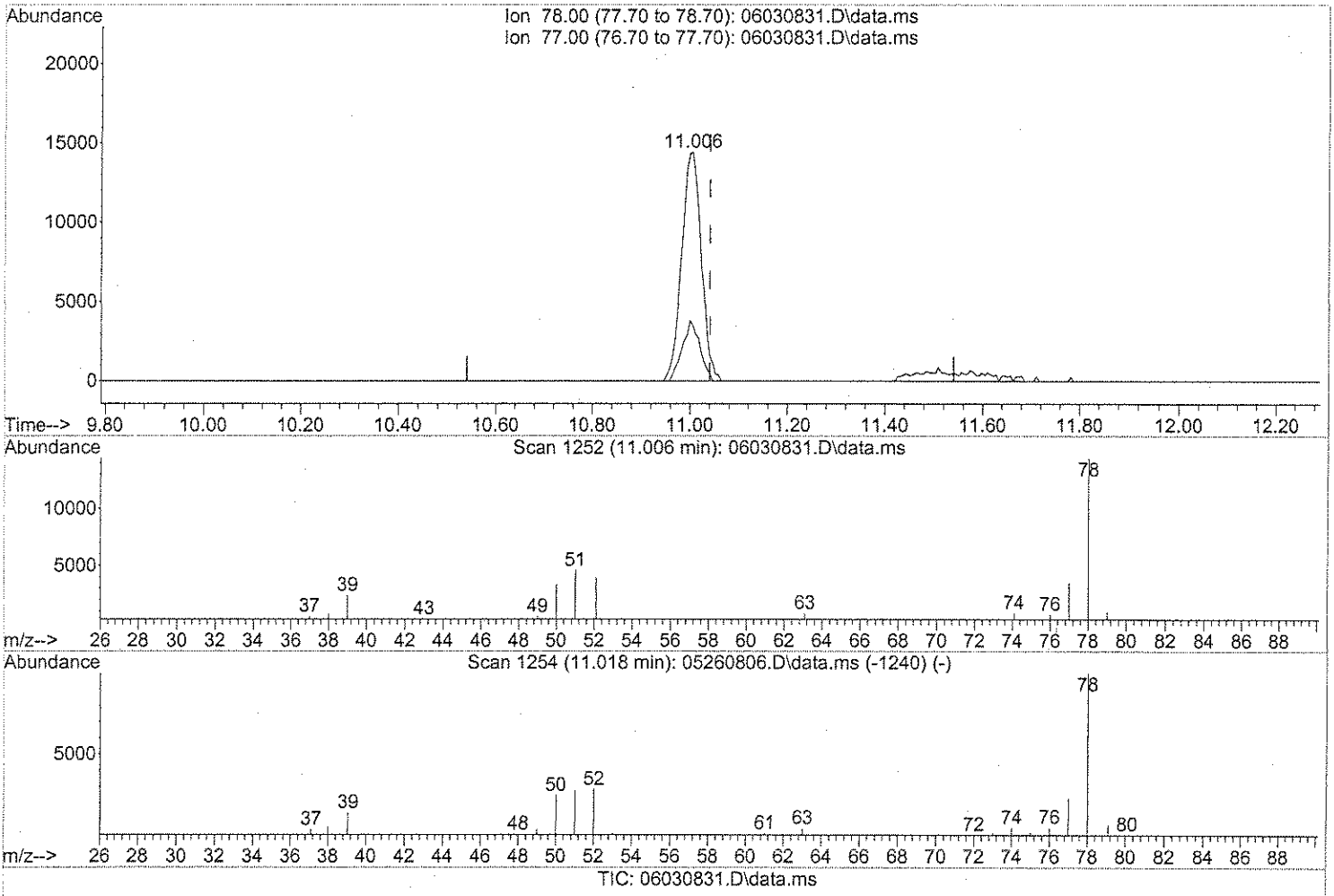
response 97594

Ion	Exp%	Act%
83.90	100	100
49.00	155.50	234.78#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(41) Benzene (T)

11.006min (-0.036) 0.68ng

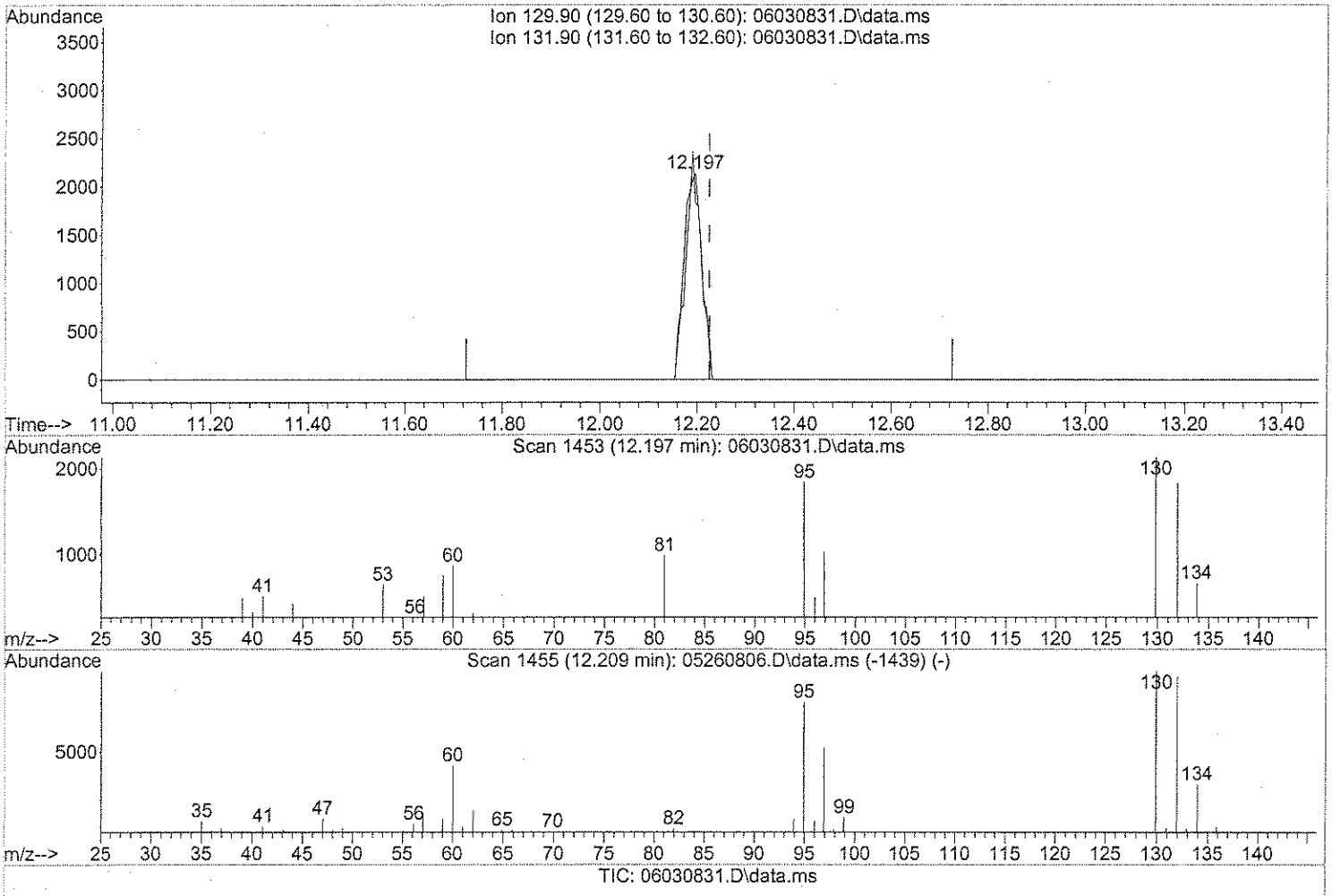
response 40020

Ion	Exp%	Act%
78.00	100	100
77.00	23.50	23.50
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(47) Trichloroethene (T)

12.197min (-0.030) 0.30ng

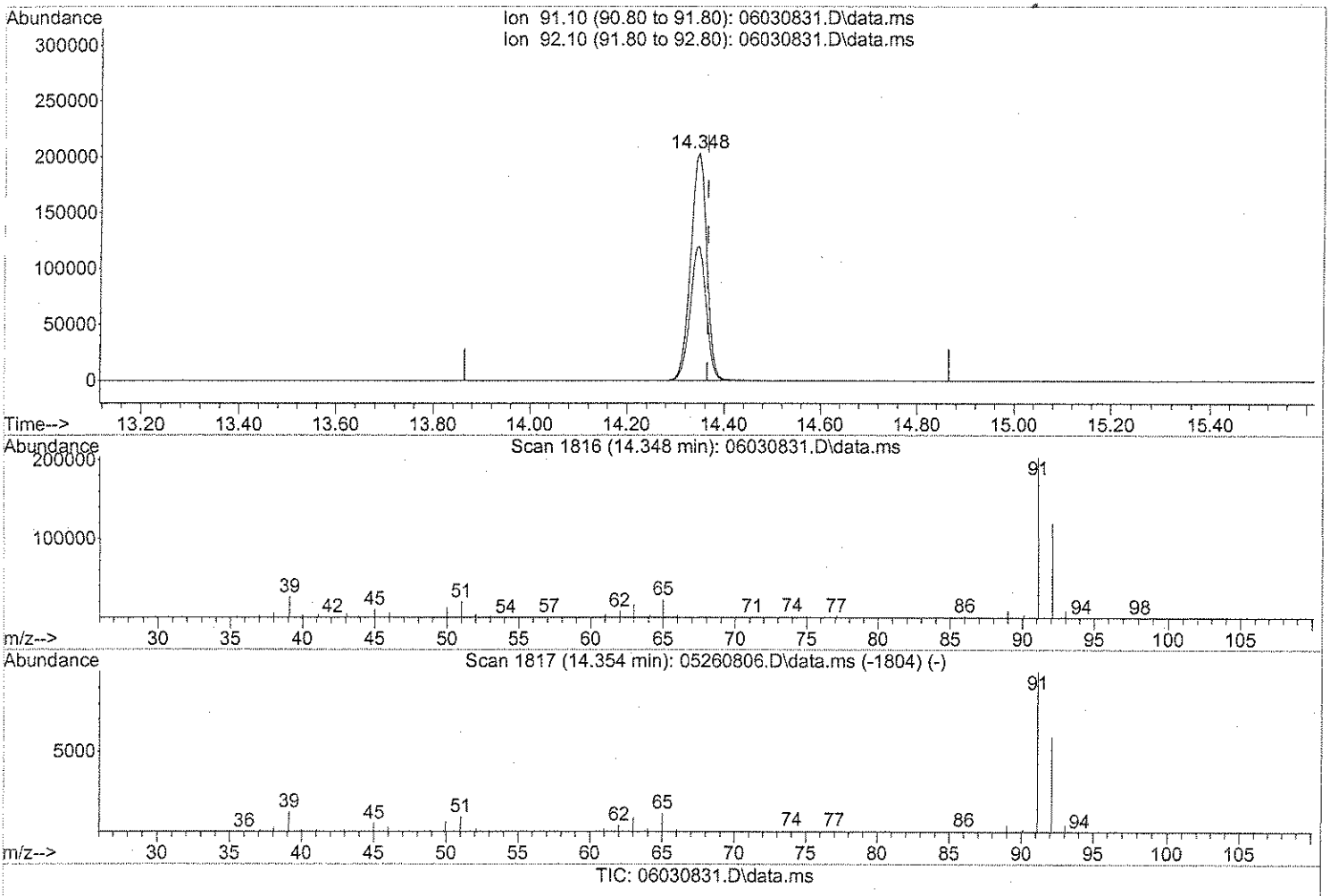
response 5455

Ion	Exp%	Act%
129.90	100	100
131.90	95.10	94.32
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(58) Toluene (T)

14.348min (-0.018) 7.54ng

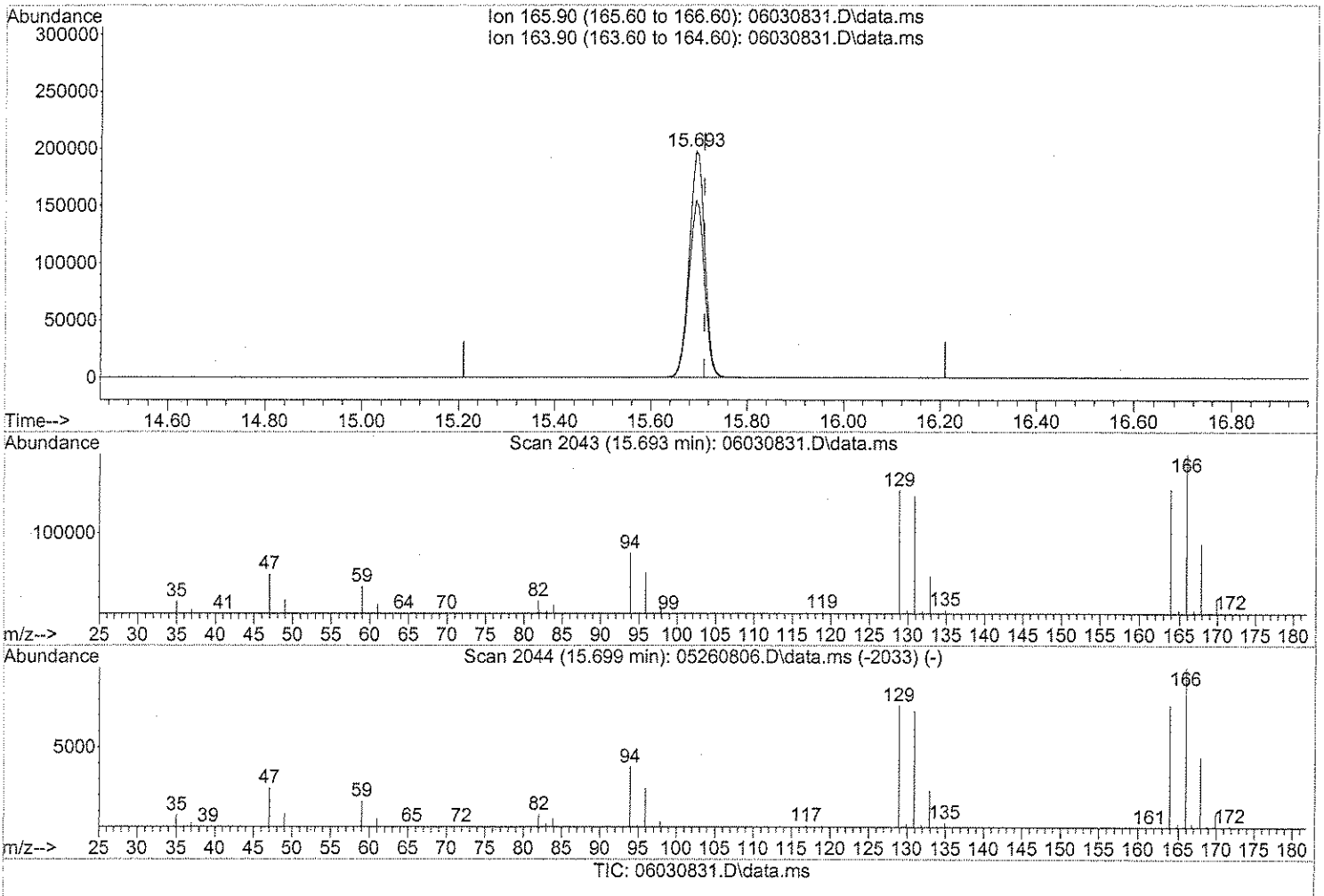
response 473809

Ion	Exp%	Act%
91.10	100	100
92.10	57.80	58.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(64) Tetrachloroethene (T)

15.693min (-0.018) 24.19ng

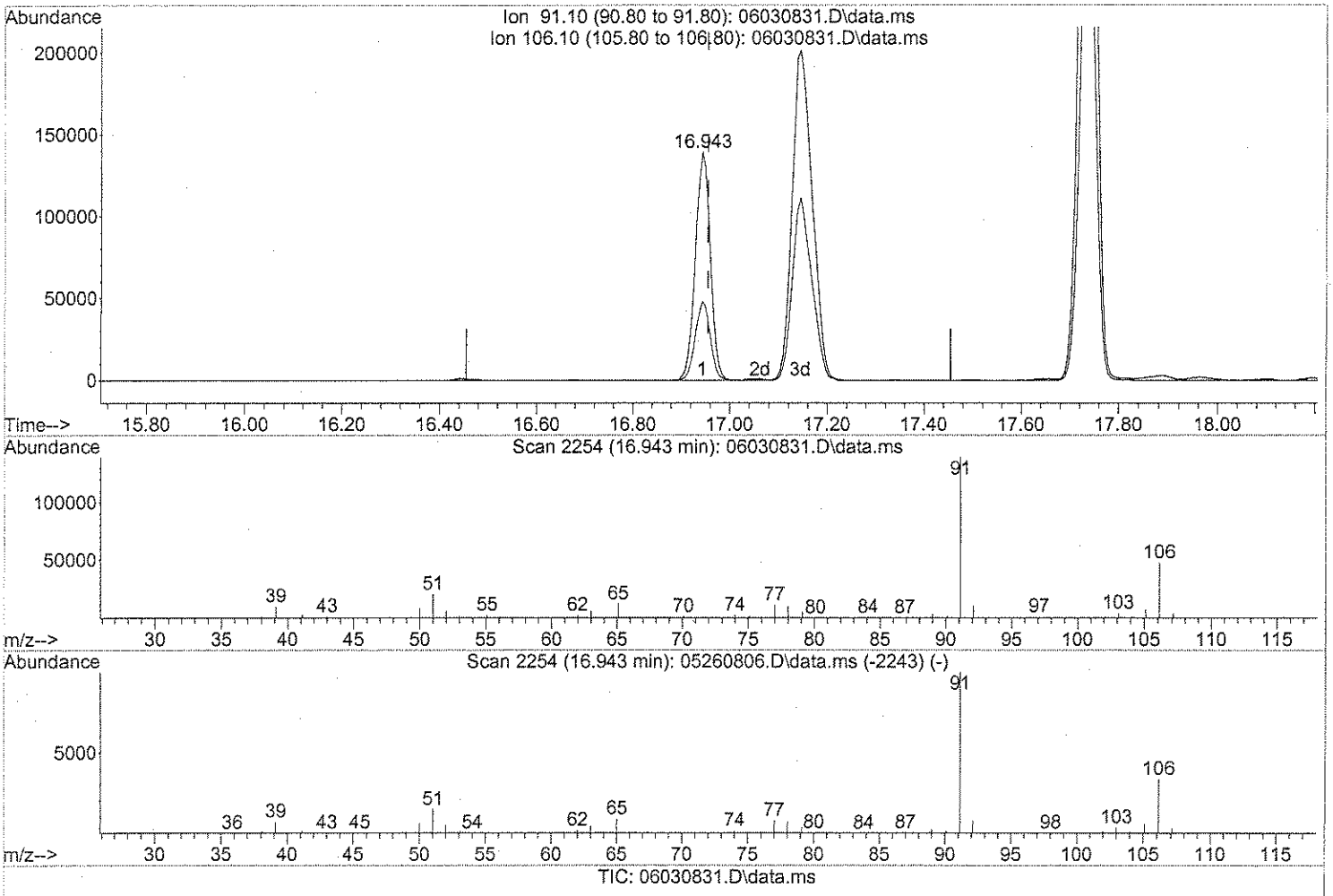
response 449328

Ion	Exp%	Act%
165.90	100	100
163.90	77.50	77.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030831.D\data.ms

(66) Ethylbenzene (T)

16.943min (-0.012) 4.22ng

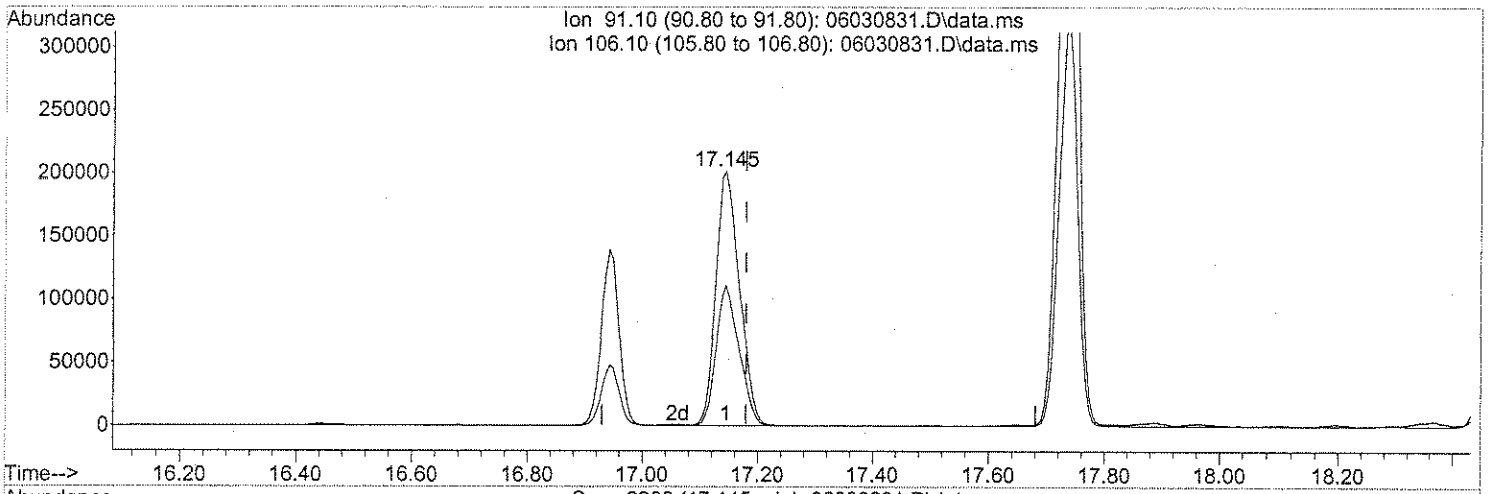
response 301034

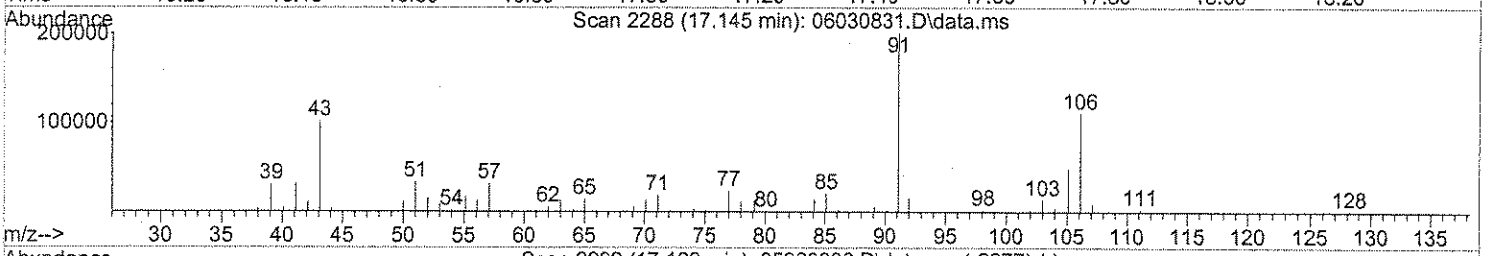
Ion	Exp%	Act%
91.10	100	100
106.10	29.90	34.34
0.00	0.00	0.00
0.00	0.00	0.00

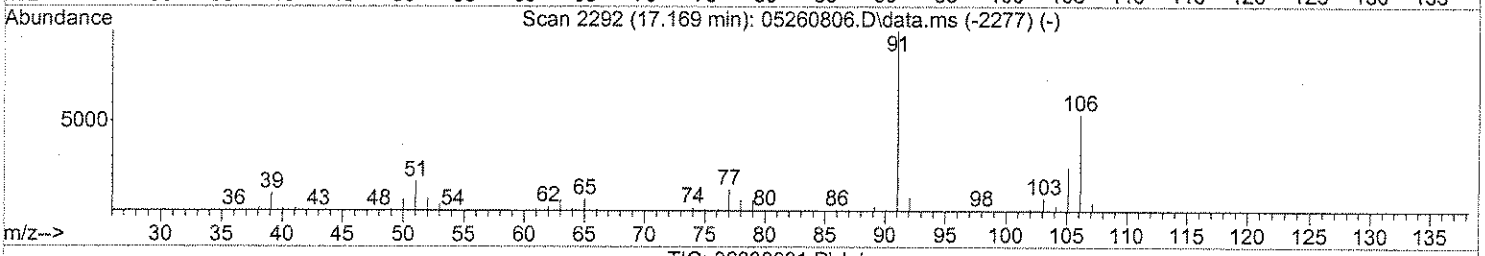
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration







TIC: 06030831.D\data.ms

(67) m- & p-Xylene (T)

17.145min (-0.036) 12.19ng

response 576618

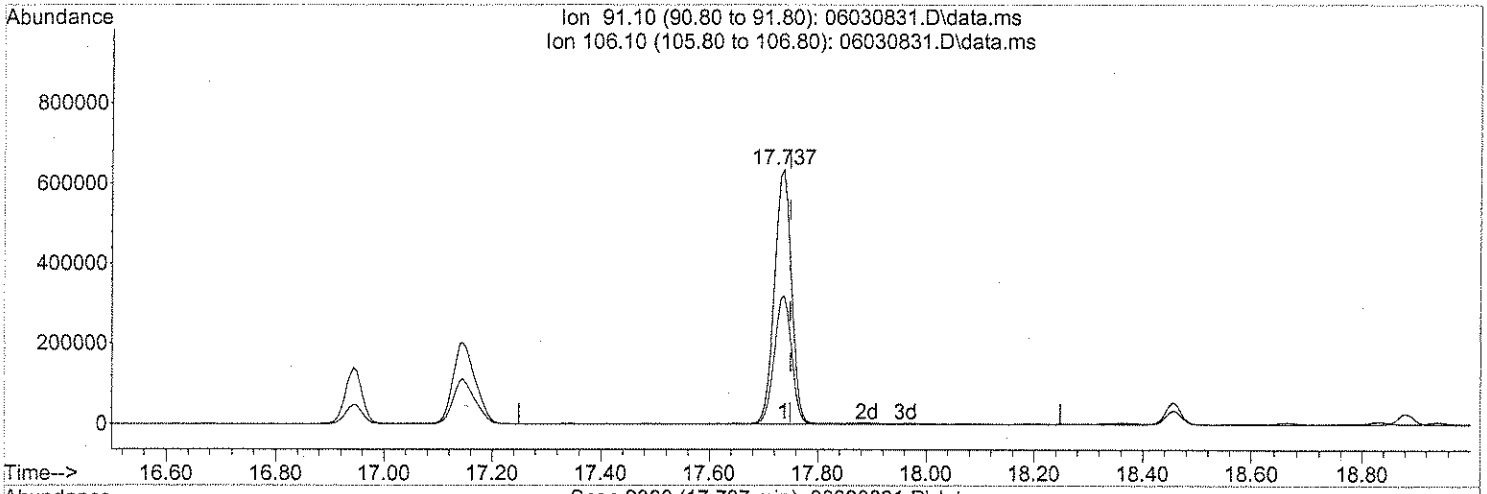
Ion	Exp%	Act%
91.10	100	100
106.10	48.00	53.39
0.00	0.00	0.00
0.00	0.00	0.00

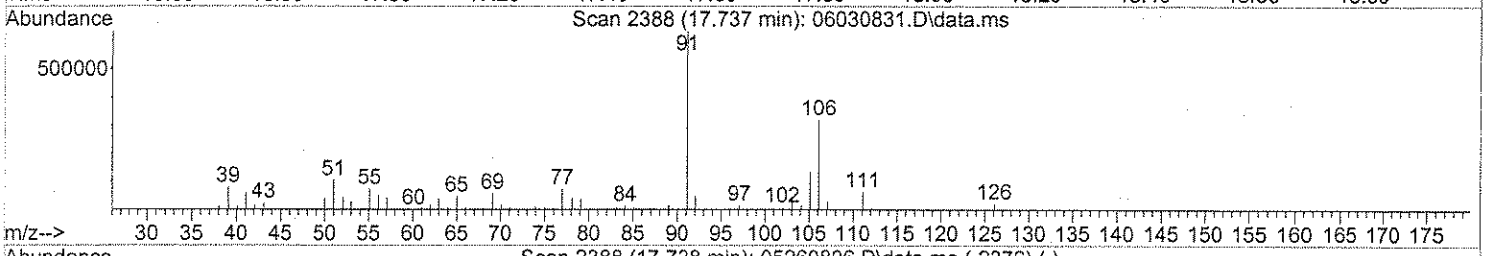
39

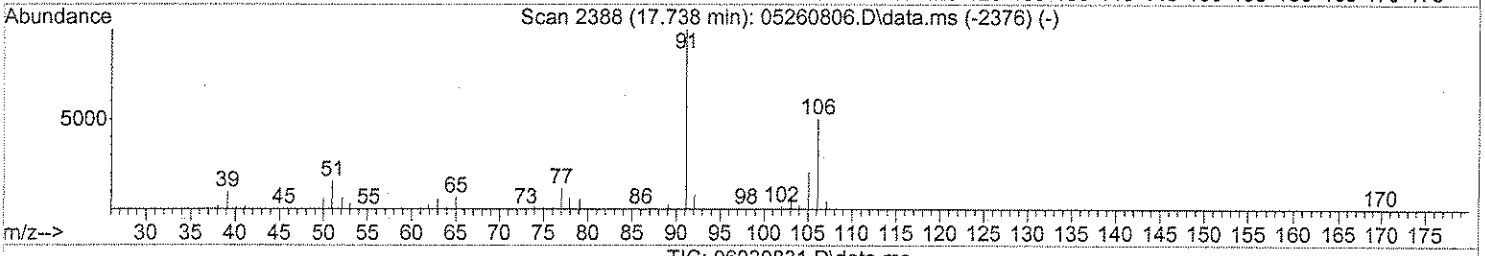
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030831.D
Acq On : 4 Jun 2008 4:16
Operator : WA
Sample : P0801622-002 (400ml)
Misc : Malcolm 275 Franklin FA (-2.8, 3.5)
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 04 06:13:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration







TIC: 06030831.D\data.ms

(70) o-Xylene (T)

17.737min (-0.012) 27.57ng

response 1395827

Ion	Exp%	Act%
91.10	100	100
106.10	45.90	50.52
0.00	0.00	0.00
0.00	0.00	0.00

40

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin CS**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-003

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC01418

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.6 Final Pressure (psig): 3.6

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.76	ND	0.30	
75-35-4	1,1-Dichloroethene	ND	0.76	ND	0.19	
75-09-2	Methylene Chloride	ND	0.76	ND	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	0.76	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.76	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.76	ND	0.14	
71-43-2	Benzene	ND	0.76	ND	0.24	
79-01-6	**Trichloroethene**	**0.26**	0.15	**0.048**	0.028	
108-88-3	**Toluene**	**0.97**	0.76	**0.26**	0.20	
127-18-4	**Tetrachloroethene**	**20**	0.76	**2.9**	0.11	
100-41-4	Ethylbenzene	ND	0.76	ND	0.17	
179601-23-1	**m,p-Xylenes**	**1.1**	0.76	**0.24**	0.17	
95-47-6	**o-Xylene**	**1.6**	0.76	**0.37**	0.17	

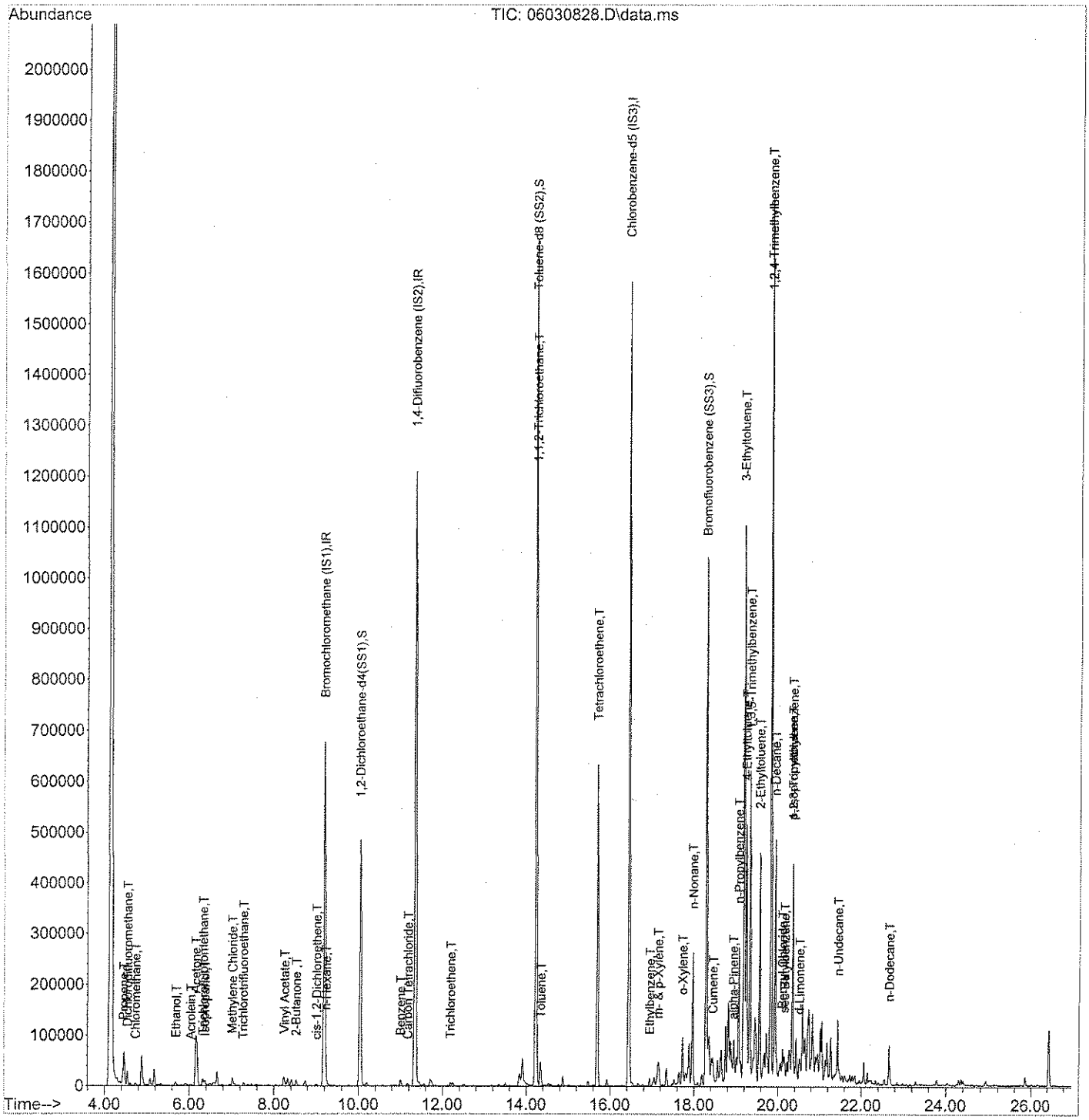
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/13/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



42

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	328702	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	11.34	114	1355237	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	528175	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.05	65	460664	24.510	ng		-0.05
Spiked Amount 25.000			Recovery =	98.04%			
57) Toluene-d8 (SS2)	14.23	98	1336760	24.549	ng		-0.02
Spiked Amount 25.000			Recovery =	98.20%			
73) Bromofluorobenzene (SS3)	18.29	174	370651	20.473	ng		0.00
Spiked Amount 25.000			Recovery =	81.88%			
Target Compounds							Qvalue
2) Propene	4.45	42	12363	0.486	ng	#	55
3) Dichlorodifluoromethane	4.55	85	25771	0.837	ng		99
4) Chloromethane	4.74	50	4833	0.125	ng		98
5) Freon 114	4.86	135	631	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D.			
7) 1,3-Butadiene	0.00	54	0	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	5.70	45	11085	0.642	ng		94
11) Acetonitrile	5.92	41	4577	N.D.			
12) Acrolein	6.05	56	3582	0.288	ng		98
13) Acetone	6.16	58	56469	3.288	ng	#	82
14) Trichlorofluoromethane	6.33	101	12396	0.430	ng		96
15) Isopropanol	6.37	45	20280	0.392	ng		73
16) Acrylonitrile	6.59	53	90	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D.			
18) tert-Butanol	6.98	59	1774	N.D.			
19) Methylene Chloride	7.02	84	6297	~~0.475 ng~~		#	41
20) Allyl Chloride	7.14	41	347	N.D.			
21) Trichlorotrifluoroethane	7.28	151	2909	0.208	ng	#	77
22) Carbon Disulfide	7.40	76	3226	N.D.			
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.			
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.			
26) Vinyl Acetate	8.25	86	1919	0.682	ng		99
27) 2-Butanone	8.53	72	2721	0.303	ng	#	1
28) cis-1,2-Dichloroethene	9.01	61	2967	~~0.122 ng~~			89
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	9.18	61	404	N.D.			
31) n-Hexane	9.23	57	6012	0.161	ng		78

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
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Operator : WA
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Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	9.31	83	810	N.D.		
34) Tetrahydrofuran	0.00	72	0	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	0.00	62	0	N.D.		
38) 1,1,1-Trichloroethane	10.48	97	114	N.D. ✓		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	10.78	56	1297	N.D.		
41) Benzene	11.01	78	12235	0~~.214 ng~~		99
42) Carbon Tetrachloride	11.17	117	4466	0.191 ng		98
43) Cyclohexane	11.34	84	2091	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	12.19	130	3028	0.170 ng		91
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) Isooctane	12.24	57	8055	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	12.50	71	637	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	13.19	58	404	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	14.24	97	111875	8.050 ng	#	7
58) Toluene	14.35	91	39811	0.645 ng		100
59) 2-Hexanone	14.58	43	3442	N.D.		
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	15.31	43	2241	N.D.		
63) n-Octane	15.47	57	1841	N.D.		
64) Tetrachloroethene	15.69	166	239531	13.111 ng		100
65) Chlorobenzene	16.54	112	382	N.D.		
66) Ethylbenzene	16.94	91	13454	~~0.192 ng~~		91
67) m- & p-Xylene	17.14	91	32755	0.704 ng		92
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	17.60	104	2582	N.D.		
70) o-Xylene	17.73	91	52371	1.052 ng		90
71) n-Nonane	17.97	43	130255	2.651 ng		94
72) 1,1,2,2-Tetrachloroethane	17.71	83	92	N.D.		
74) Cumene	18.45	105	37405	0.516 ng		97
75) alpha-Pinene	18.93	93	3916	0.115 ng	#	43
76) n-Propylbenzene	19.06	91	230366	2.735 ng		91
77) 3-Ethyltoluene	19.19	105	774773	9.744 ng		95
78) 4-Ethyltoluene	19.24	105	318423	4.439 ng		93
79) 1,3,5-Trimethylbenzene	19.33	105	341949	5.376 ng		92

JAT 6/10/08

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Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	445	N.D.			
81) 2-Ethyltoluene	19.56	105	335409	4.350	ng		93
82) 1,2,4-Trimethylbenzene	19.83	105	1002308	15.565	ng		97
83) n-Decane	19.93	57	188825	4.142	ng		84
84) Benzyl Chloride	20.10	91	14116	0.284	ng	#	57
85) 1,3-Dichlorobenzene	20.11	146	710	N.D.			
86) 1,4-Dichlorobenzene	20.11	146	710	N.D.			
87) sec-Butylbenzene	20.16	105	20741	0.248	ng		93
88) p-Isopropyltoluene	20.34	119	27588	0.378	ng	#	45
89) 1,2,3-Trimethylbenzene	20.34	105	187682	3.035	ng		98
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.			
91) d-Limonene	20.52	68	5829	0.294	ng		99
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.			
93) n-Undecane	21.43	57	49509	1.036	ng		86
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.			
95) Naphthalene	22.70	128	8198	N.D.			
96) n-Dodecane	22.66	57	30413	0.653	ng	#	76
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.			

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
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Operator : WA
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Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

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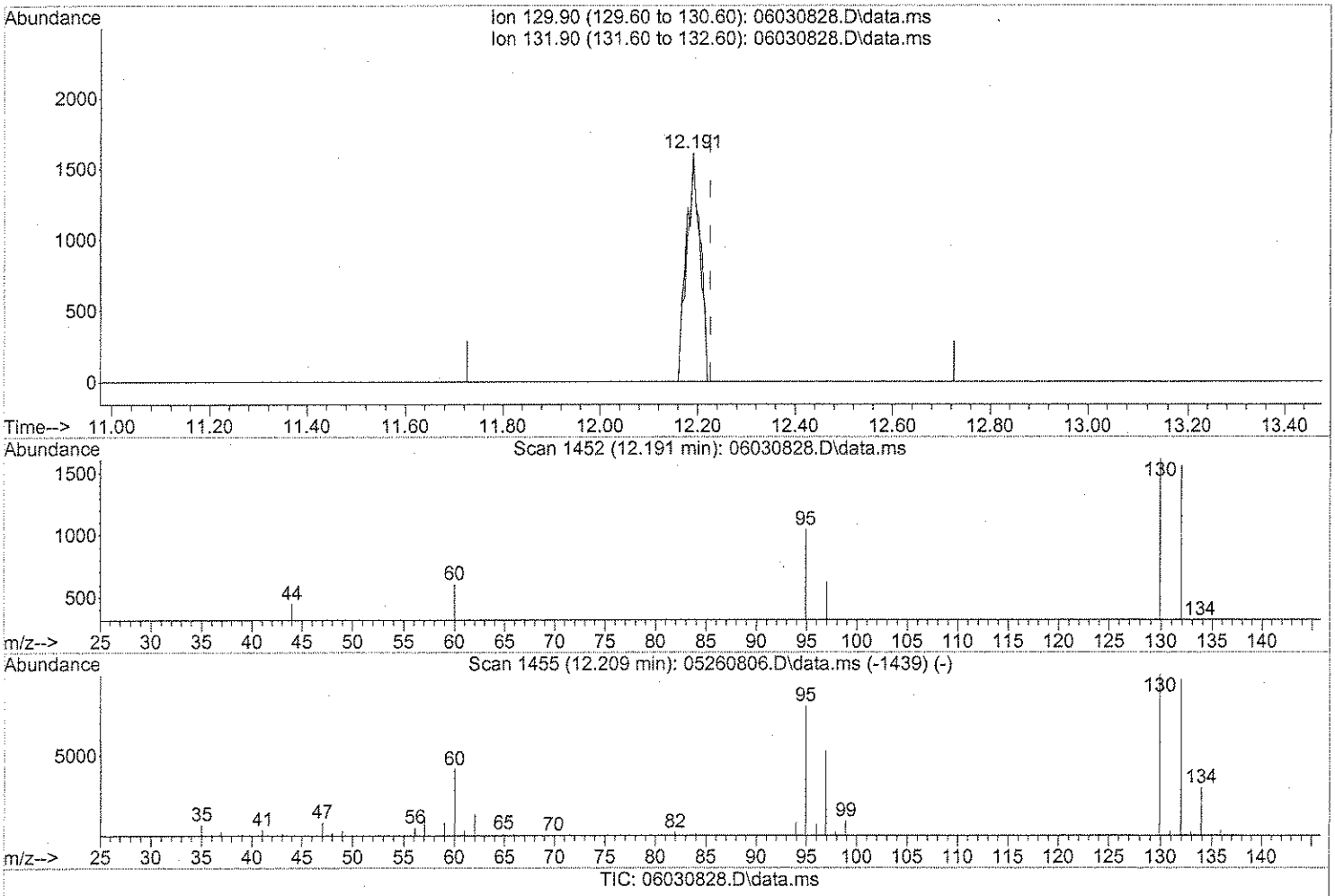
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030828.D\data.ms

(47) Trichloroethene (T)

12.191min (-0.036) 0.17ng

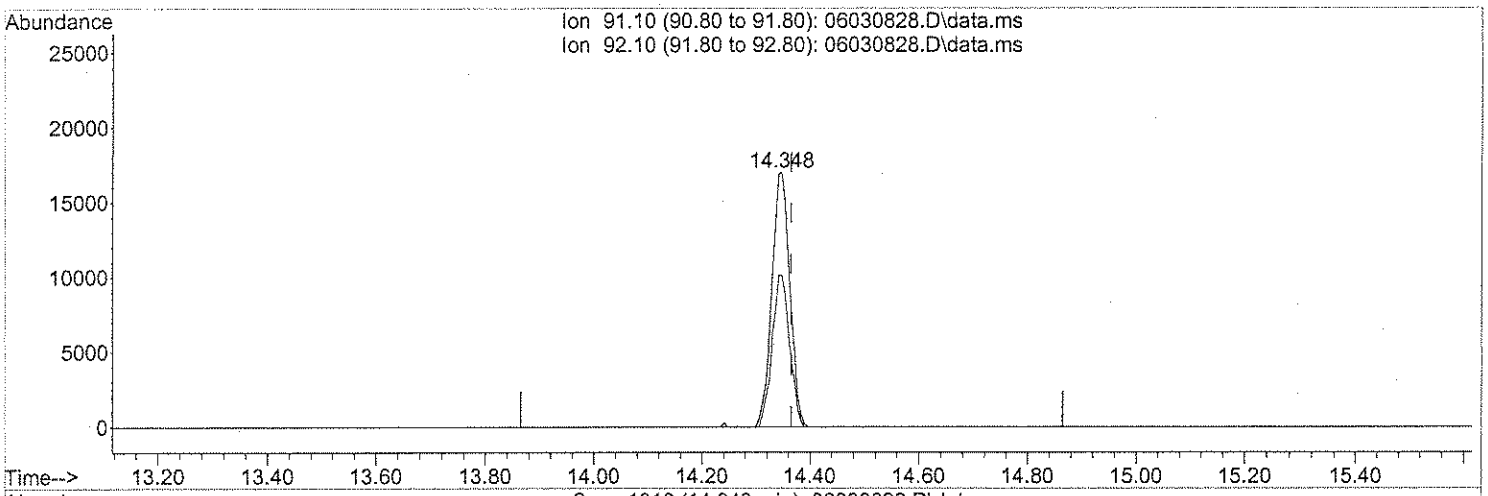
response 3028

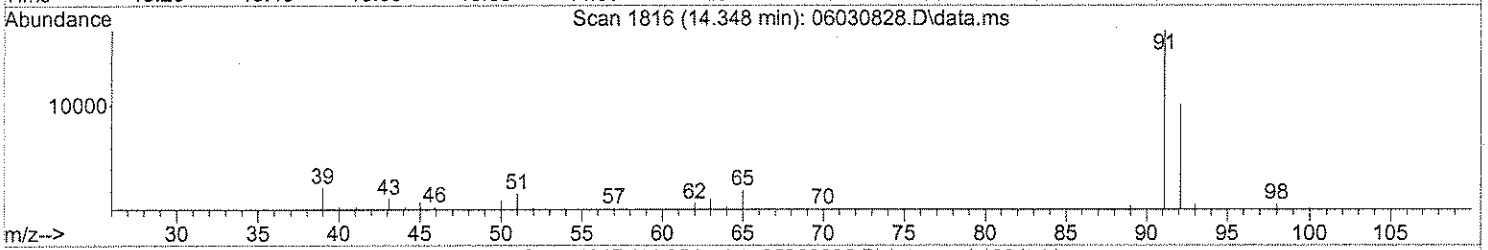
Ion	Exp%	Act%
129.90	100	100
131.90	95.10	103.90
0.00	0.00	0.00
0.00	0.00	0.00

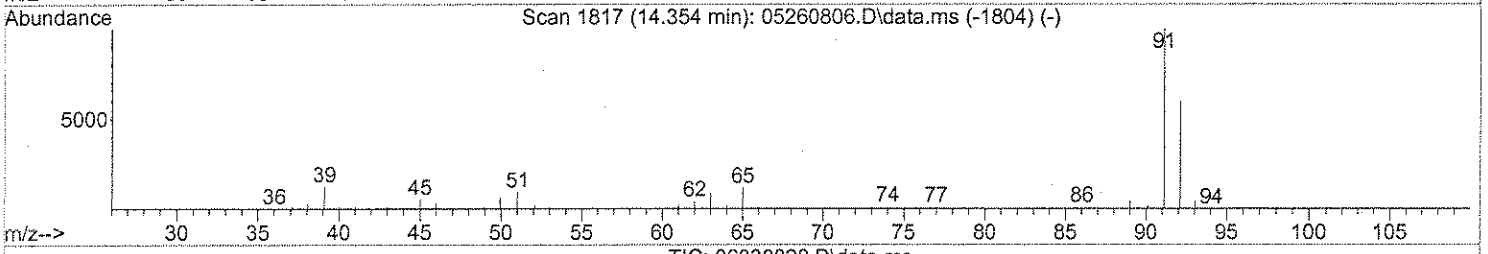
Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration







TIC: 06030828.D\data.ms

(58) Toluene (T)

14.348min (-0.018) 0.64ng

response 39811

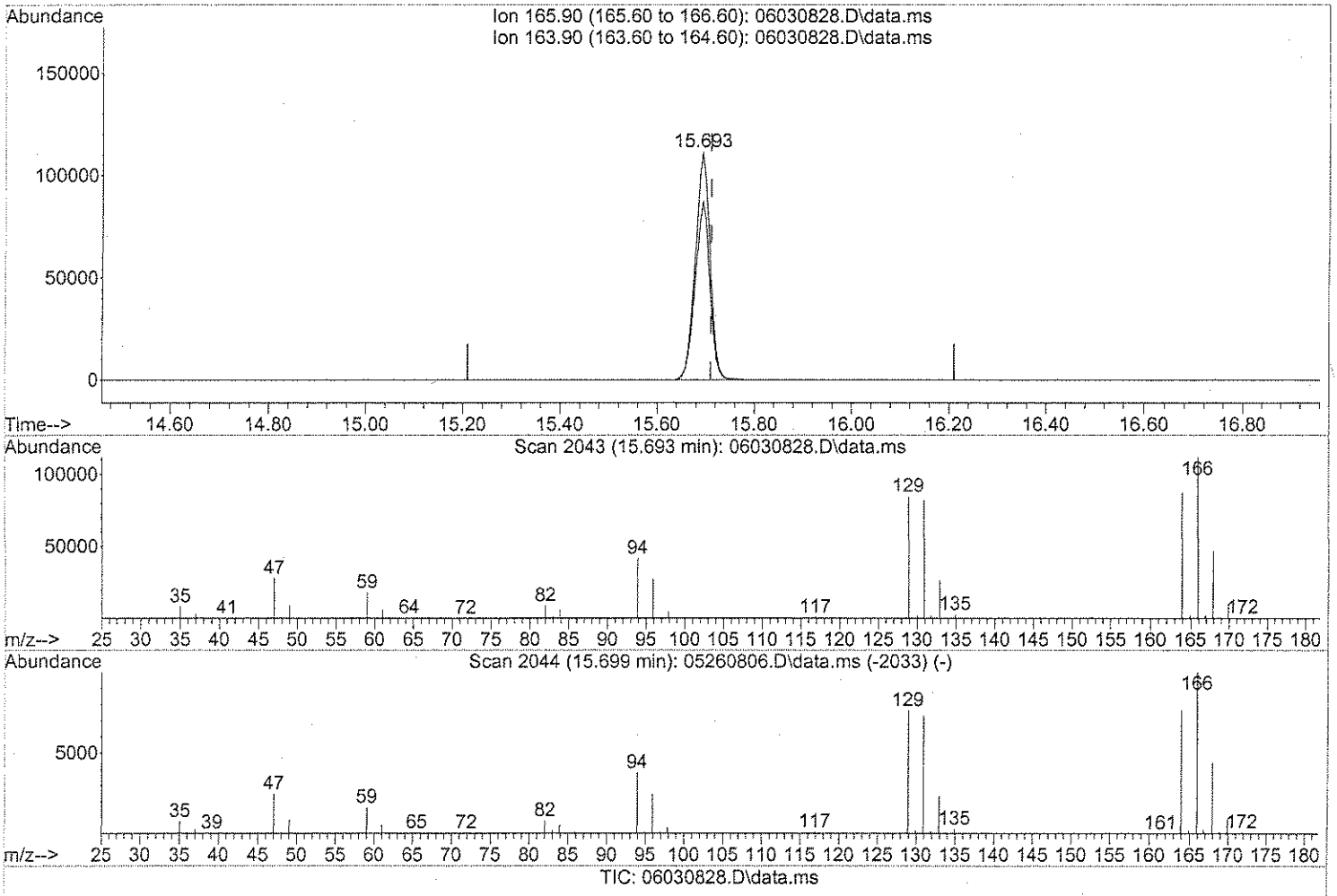
Ion	Exp%	Act%
91.10	100	100
92.10	57.80	57.75
0.00	0.00	0.00
0.00	0.00	0.00

47

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030828.D\data.ms

(64) Tetrachloroethene (T)

15.693min (-0.018) 13.11ng

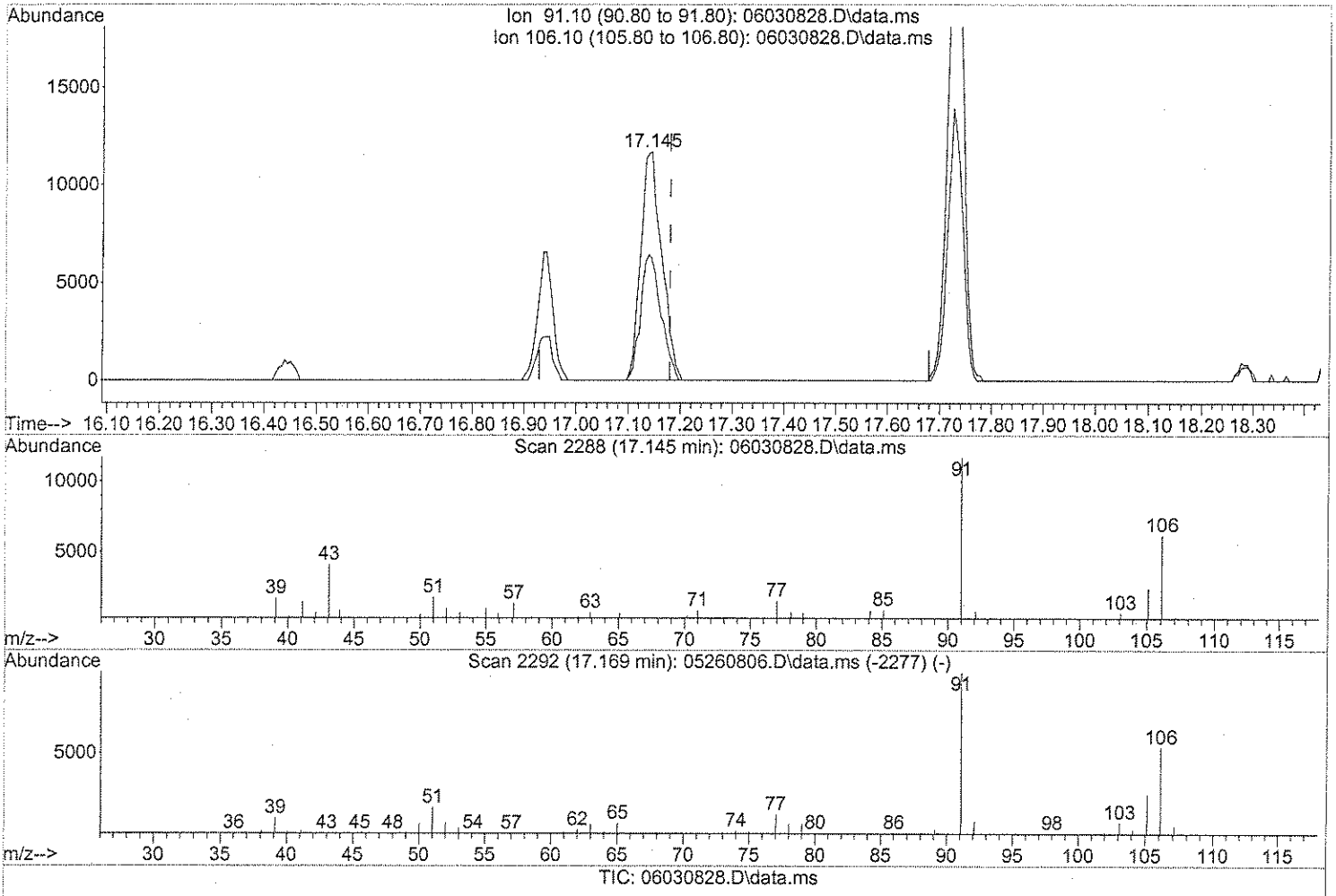
response 239531

Ion	Exp%	Act%
165.90	100	100
163.90	77.50	77.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(67) m- & p-Xylene (T)

17.145min (-0.036) 0.70ng

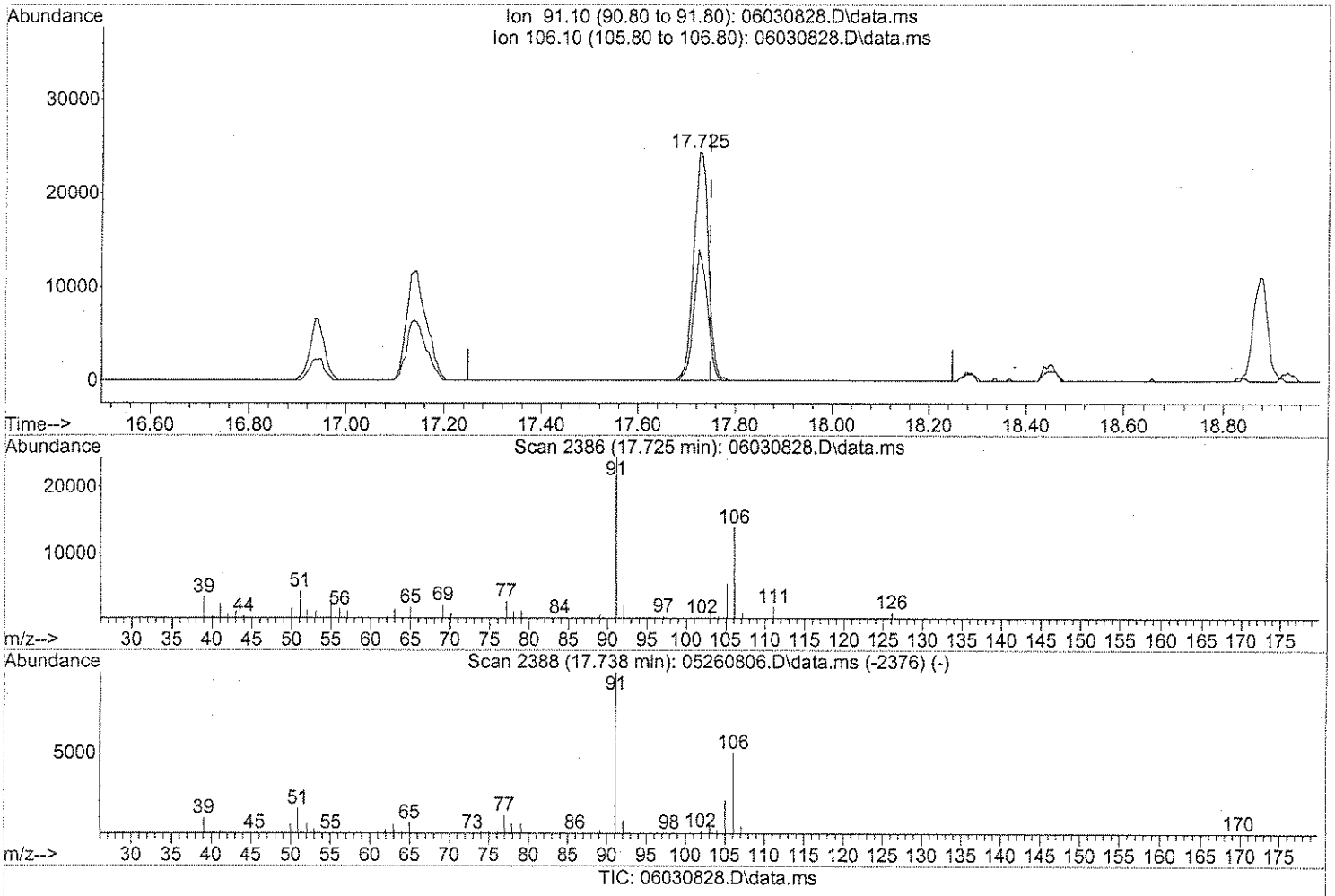
response 32755

Ion	Exp%	Act%
91.10	100	100
106.10	48.00	53.26
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030828.D
Acq On : 4 Jun 2008 1:59
Operator : WA
Sample : P0801622-003 (1000ml)
Misc : Malcolm 275 Franklin CS (-2.6, 3.6)
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 04 04:09:34 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030828.D\data.ms

(70) o-Xylene (T)

17.725min (-0.024) 1.05ng

response 52371

Ion	Exp%	Act%
91.10	100	100
106.10	45.90	52.79
0.00	0.00	0.00
0.00	0.00	0.00

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **275 Franklin Dup**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P0801622-004

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:
Container ID: AC00686

Date Collected: 5/29/08
Date Received: 5/30/08
Date Analyzed: 6/4/08
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -2.5 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.75	ND	0.29	
75-35-4	1,1-Dichloroethene	ND	0.75	ND	0.19	
75-09-2	Methylene Chloride	ND	0.75	ND	0.21	
156-60-5	trans-1,2-Dichloroethene	ND	0.75	ND	0.19	
156-59-2	cis-1,2-Dichloroethene	ND	0.75	ND	0.19	
71-55-6	1,1,1-Trichloroethane	ND	0.75	ND	0.14	
71-43-2	Benzene	ND	0.75	ND	0.23	
79-01-6	**Trichloroethene**	**0.25**	0.15	**0.047**	0.028	
108-88-3	**Toluene**	**1.0**	0.75	**0.27**	0.20	
127-18-4	**Tetrachloroethene**	**19**	0.75	**2.8**	0.11	
100-41-4	Ethylbenzene	ND	0.75	ND	0.17	
179601-23-1	**m,p-Xylenes**	**1.4**	0.75	**0.32**	0.17	
95-47-6	**o-Xylene**	**1.8**	0.75	**0.42**	0.17	

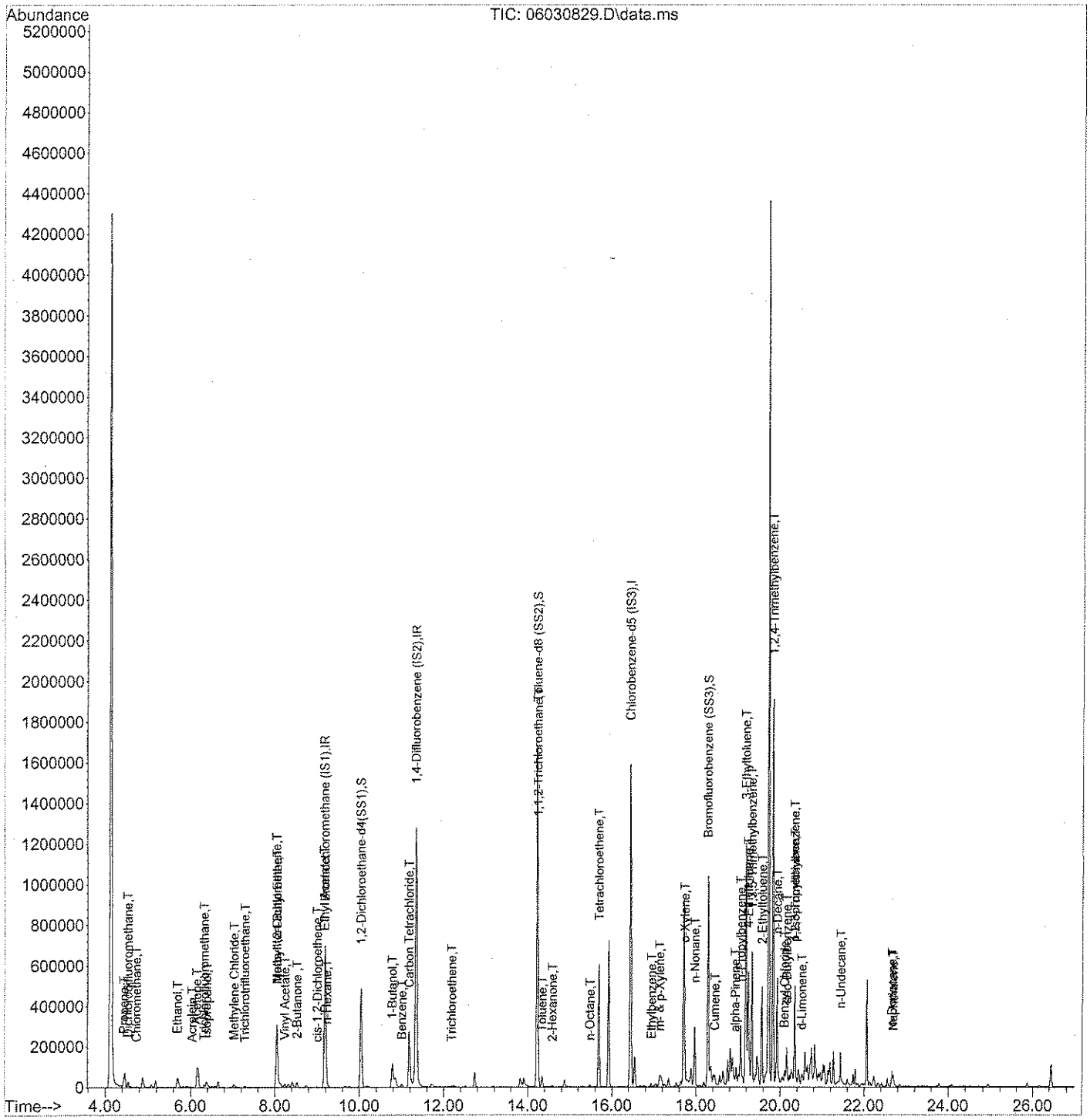
ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RG Date: 6/6/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
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ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	329793	25.000	ng		-0.06
37) 1,4-Difluorobenzene (IS2)	11.34	114	1379796	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	534295	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.04	65	463136	24.560	ng		-0.05
Spiked Amount 25.000			Recovery =	98.24%			✓
57) Toluene-d8 (SS2)	14.23	98	1354116	24.583	ng		-0.02
Spiked Amount 25.000			Recovery =	98.32%			✓
73) Bromofluorobenzene (SS3)	18.29	174	378179	20.650	ng		0.00
Spiked Amount 25.000			Recovery =	82.60%			✓
Target Compounds							Qvalue
2) Propene	4.44	42	16633	0.652	ng	#	1
3) Dichlorodifluoromethane	4.53	85	25853	0.837	ng		99
4) Chloromethane	4.74	50	5574	0.144	ng		87
5) Freon 114	4.85	135	647	N.D.			
6) Vinyl Chloride	0.00	62	0	N.D. ✓			
7) 1,3-Butadiene	5.14	54	103	N.D.			
8) Bromomethane	0.00	94	0	N.D.			
9) Chloroethane	0.00	64	0	N.D.			
10) Ethanol	5.70	45	96147	5.551	ng		98
11) Acetonitrile	5.92	41	4932	N.D.			
12) Acrolein	6.04	56	2977	0.238	ng		98
13) Acetone	6.15	58	60357	3.503	ng	#	74
14) Trichlorofluoromethane	6.32	101	13238	0.458	ng		99
15) Isopropanol	6.38	45	57288	1.104	ng		91
16) Acrylonitrile	6.60	53	120	N.D.			
17) 1,1-Dichloroethene	0.00	96	0	N.D. ✓			
18) tert-Butanol	6.97	59	3186	N.D.			
19) Methylene Chloride	7.03	84	5951	~~0.448 ng~~		#	34
20) Allyl Chloride	7.07	41	1038	N.D.			
21) Trichlorotrifluoroethane	7.29	151	2817	0.201	ng	#	83
22) Carbon Disulfide	7.39	76	4032	N.D.			
23) trans-1,2-Dichloroethene	8.05	61	16196	~~0.610 ng~~ UR		#	19
24) 1,1-Dichloroethane	0.00	63	0	N.D.			
25) Methyl tert-Butyl Ether	8.05	73	4334	0.105	ng	#	44
26) Vinyl Acetate	8.24	86	745	0.264	ng	#	1
27) 2-Butanone	8.53	72	5777	0.641	ng	#	1
28) cis-1,2-Dichloroethene	9.01	61	3060	~~0.125 ng~~			96
29) Diisopropyl Ether	0.00	87	0	N.D.			
30) Ethyl Acetate	9.17	61	4903	0.780	ng		79
31) n-Hexane	9.23	57	6462	0.172	ng		81

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
32) Chloroform	9.32	83	442	N.D.		
34) Tetrahydrofuran	9.77	72	231	N.D.		
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.		
36) 1,2-Dichloroethane	10.16	62	101	N.D.		
38) 1,1,1-Trichloroethane	10.47	97	100	N.D. ✓		
39) Isopropyl Acetate	0.00	61	0	N.D.		
40) 1-Butanol	10.78	56	149871	6.599 ng	#	64
41) Benzene	11.01	78	14242	~~0.245 ng~~		95
42) Carbon Tetrachloride	11.18	117	4324	0.181 ng		99
43) Cyclohexane	11.33	84	1746	N.D.		
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.		
45) 1,2-Dichloropropane	0.00	63	0	N.D.		
46) Bromodichloromethane	0.00	83	0	N.D.		
47) Trichloroethene	12.19	130	3094	0.171 ng		95
48) 1,4-Dioxane	0.00	88	0	N.D.		
49) Isooctane	12.24	57	8733	N.D.		
50) Methyl Methacrylate	0.00	100	0	N.D.		
51) n-Heptane	12.49	71	857	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	13.17	58	1589	N.D.		
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
55) 1,1,2-Trichloroethane	14.24	97	113666	8.033 ng	#	7
58) Toluene	14.34	91	43193	0.691 ng		100
59) 2-Hexanone	14.58	43	6310	0.107 ng		78
60) Dibromochloromethane	0.00	129	0	N.D.		
61) 1,2-Dibromoethane	0.00	107	0	N.D.		
62) Butyl Acetate	15.31	43	5574	N.D.		
63) n-Octane	15.48	57	2143	0.113 ng	#	66
64) Tetrachloroethene	15.69	166	233202	12.618 ng		99
65) Chlorobenzene	16.53	112	212	N.D.		
66) Ethylbenzene	16.94	91	15801	~~0.222 ng~~		98
67) m- & p-Xylene	17.14	91	43839	0.932 ng		92
68) Bromoform	0.00	173	0	N.D.		
69) Styrene	17.59	104	3163	N.D.		
70) o-Xylene	17.73	91	61871	1.228 ng		94
71) n-Nonane	17.97	43	146395	2.945 ng		94
72) 1,1,2,2-Tetrachloroethane	17.72	83	964	N.D.		
74) Cumene	18.45	105	40498	0.552 ng		92
75) alpha-Pinene	18.93	93	4507	0.131 ng	#	43
76) n-Propylbenzene	19.06	91	250629	2.942 ng		89
77) 3-Ethyltoluene	19.19	105	834395	10.374 ng		94
78) 4-Ethyltoluene	19.24	105	352768	4.861 ng		93
79) 1,3,5-Trimethylbenzene	19.33	105	360729	5.606 ng		91

6/10/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	506	N.D.		
81) 2-Ethyltoluene	19.57	105	357460	4.583 ng		93
82) 1,2,4-Trimethylbenzene	19.83	105	1096611	16.834 ng		97
83) n-Decane	19.93	57	206981	4.488 ng		81
84) Benzyl Chloride	20.10	91	15752	0.313 ng		62
85) 1,3-Dichlorobenzene	20.11	146	1513	N.D.		
86) 1,4-Dichlorobenzene	20.11	146	1513	N.D.		
87) sec-Butylbenzene	20.16	105	23996	0.284 ng		97
88) p-Isopropyltoluene	20.34	119	33427	0.453 ng	#	49
89) 1,2,3-Trimethylbenzene	20.34	105	213364	3.411 ng		99
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) d-Limonene	20.52	68	6915	0.344 ng		93
92) 1,2-Dibromo-3-Chloropr...	21.43	157	97	N.D.		
93) n-Undecane	21.43	57	64411	1.332 ng		84
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.		
95) Naphthalene	22.69	128	41830	0.442 ng		96
96) n-Dodecane	22.66	57	28725	0.610 ng	#	75
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.		

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

Data Path : J:\MS16\DATA\2008_06\03\
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Operator : WA
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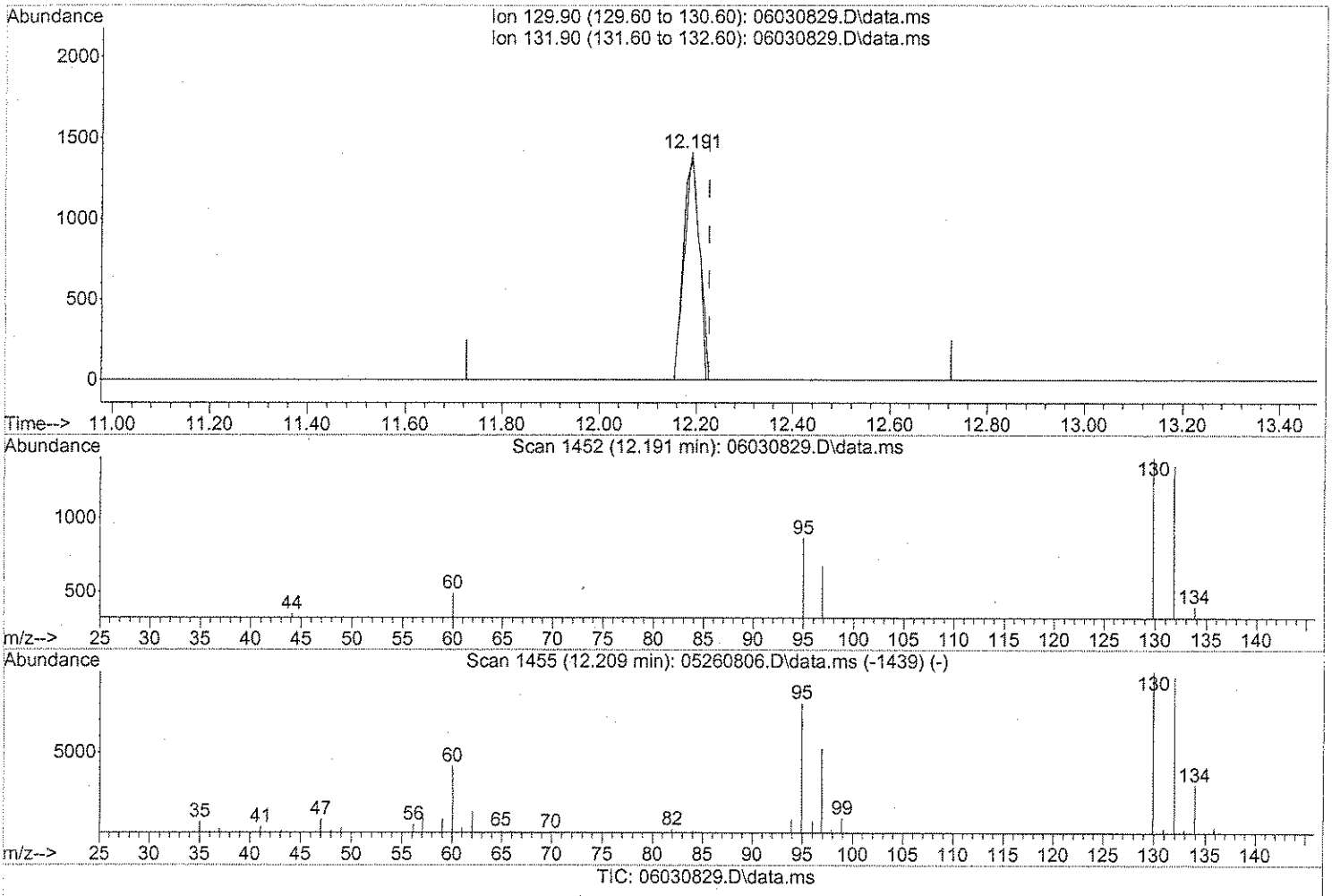
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030829.D\data.ms

(47) Trichloroethene (T)

12.191min (-0.036) 0.17ng

response 3094

Ion	Exp%	Act%
129.90	100	100
131.90	95.10	99.77
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
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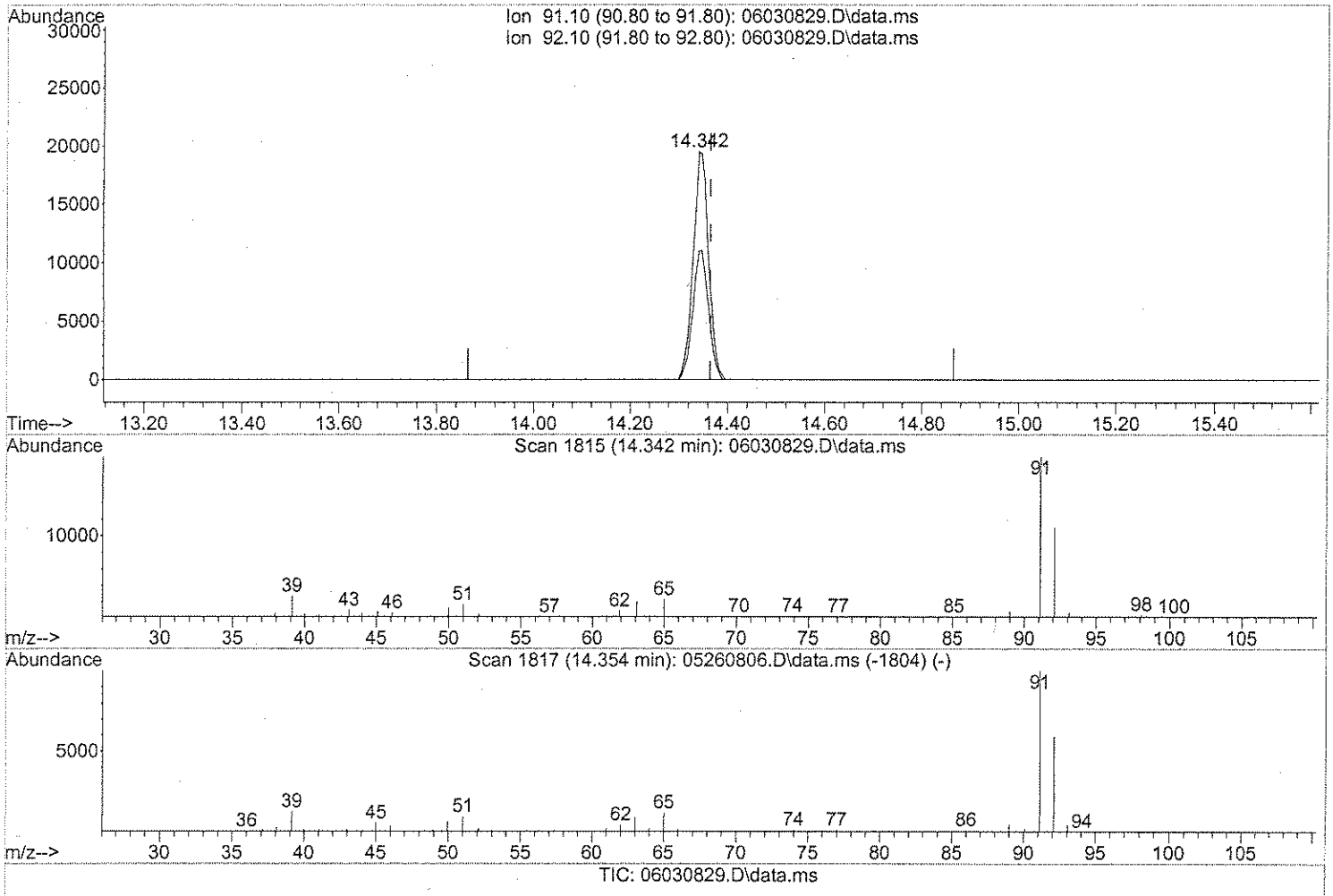

TIC: 06030829.D\data.ms

(58) Toluene (T)

14.342min (-0.024) 0.69ng

response 43193

Ion	Exp%	Act%
91.10	100	100
92.10	57.80	57.48
0.00	0.00	0.00
0.00	0.00	0.00

57

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

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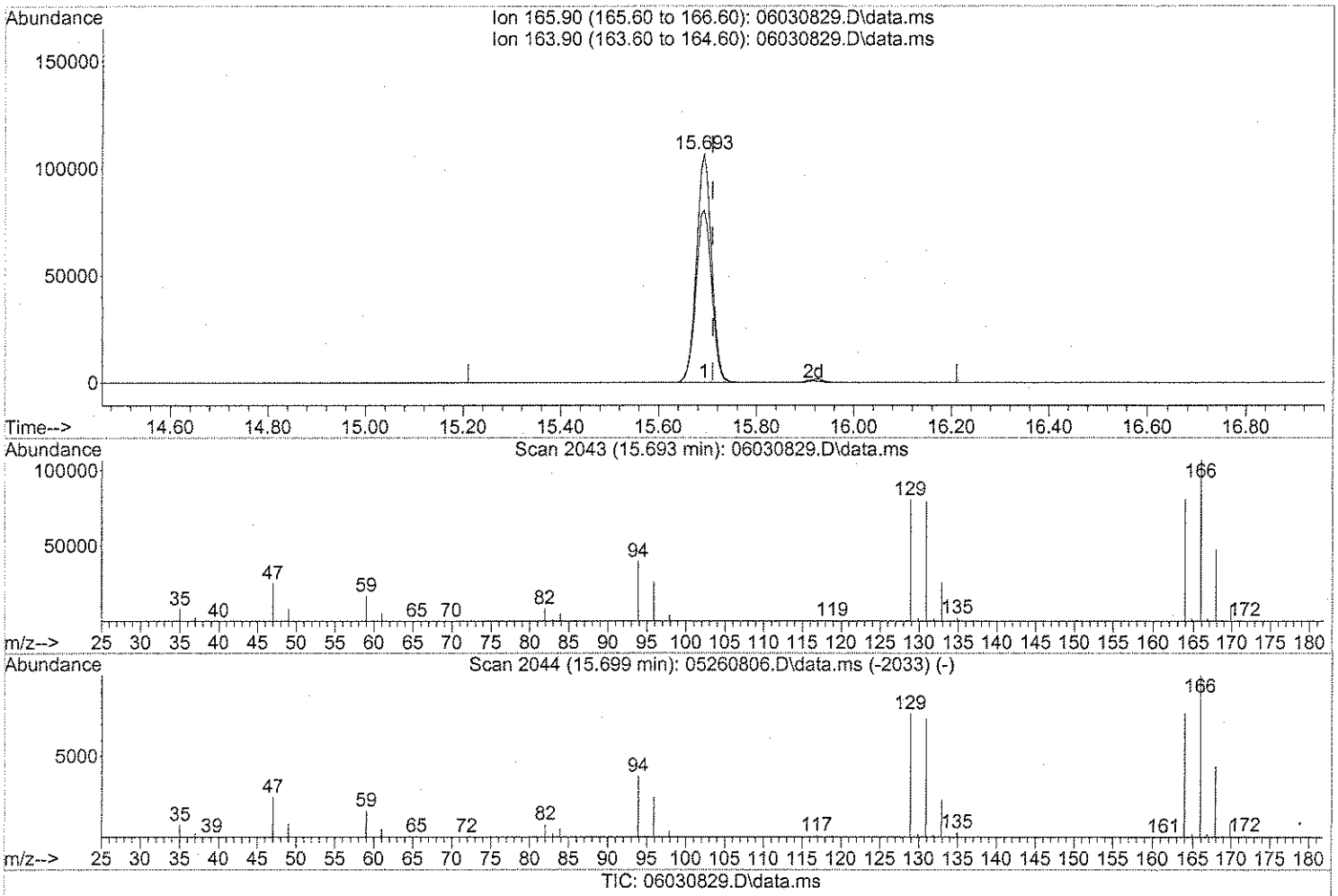
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030829.D\data.ms

(64) Tetrachloroethene (T)

15.693min (-0.018) 12.62ng

response 233202

Ion	Exp%	Act%
165.90	100	100
163.90	77.50	77.98
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
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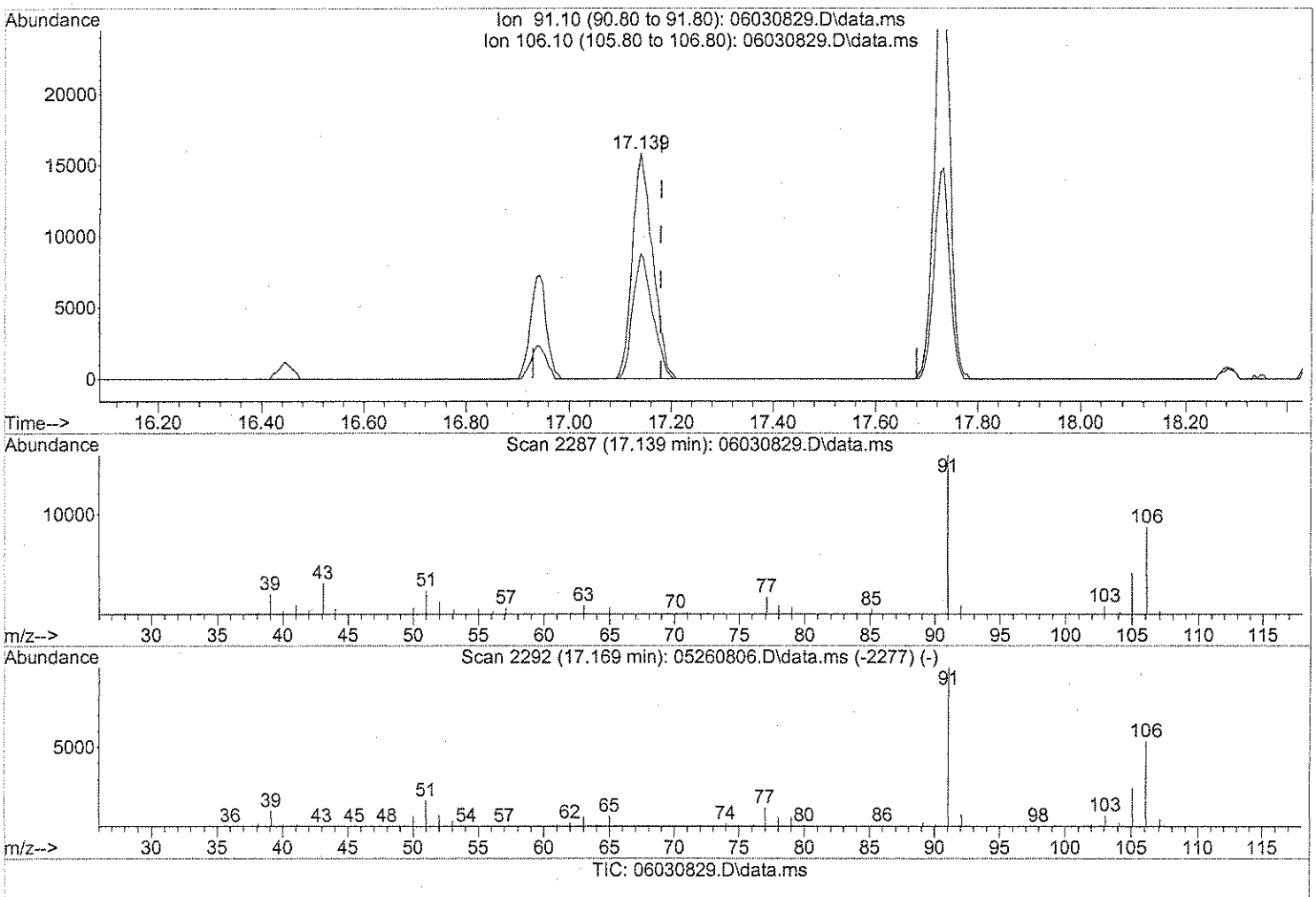


TIC: 06030829.D\data.ms

(67) m- & p-Xylene (T)

17.139min (-0.042) 0.93ng

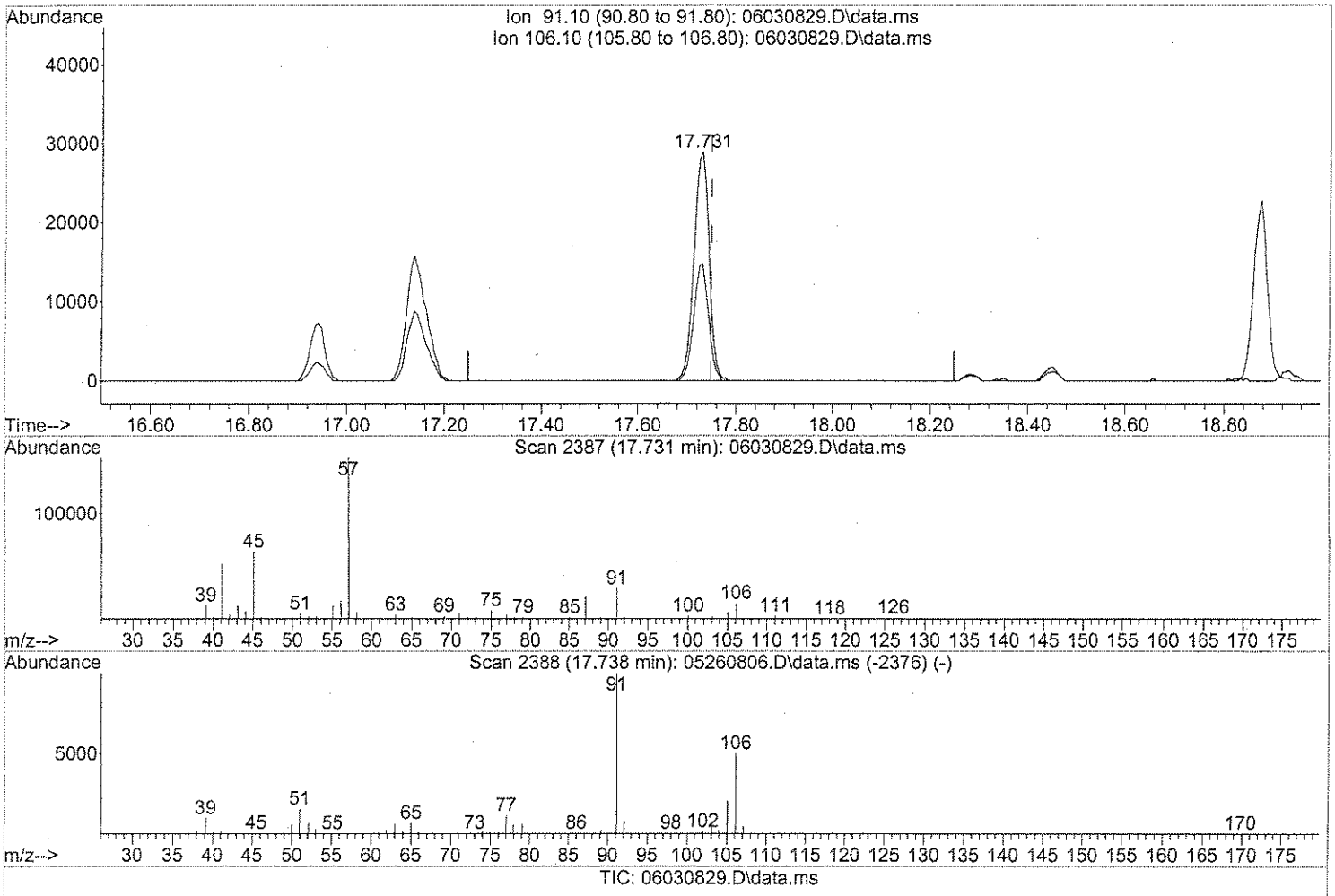
response 43839

Ion	Exp%	Act%
91.10	100	100
106.10	48.00	53.65
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030829.D
Acq On : 4 Jun 2008 2:36
Operator : WA
Sample : P0801622-004 (1000ml)
Misc : Malcolm 275 Franklin Dup (-2.5, 3.5)
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 04 04:09:40 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030829.D\data.ms

(70) o-Xylene (T)

17.731min (-0.018) 1.23ng

response 61871

Ion	Exp%	Act%
91.10	100	100
106.10	45.90	49.95
0.00	0.00	0.00
0.00	0.00	0.00

Standards Data

Method Path : J:\MS16\METHODS\
Method File : R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:40:29 2008
Response Via : Initial Calibration

Calibration Files
0.1 =05260802.D 0.5 =05260803.D 1.0 =05260804.D 5.0 =05260805.D 25 =05260806.D 50 =05260807.D
100 =05260808.D

		Compound	0.1	0.5	1.0	5.0	25	50	100	Avg	%RSD
1)	IR	Bromochloromethane...	----------	----------	----------	ISTD	----------	----------	----------		
2)	T	Propene	2.444	2.097	1.940	1.928	1.663	1.773	1.701	1.935	13.99
3)	T	Dichlorodifluo...	2.901	2.773	2.458	2.316	1.960	2.006	1.970	2.341	16.63
4)	T	Chloromethane	4.012	3.745	3.438	2.716	2.621	2.315	1.740	2.941	27.86
5)	T	Freon 114	1.445	1.581	1.407	1.316	1.143	1.144	1.122	1.308	13.68
6)	T	Vinyl Chloride	2.224	2.268	1.999	1.846	1.583	1.613	1.578	1.873	15.94
7)	T	1,3-Butadiene	1.944	1.968	1.749	1.614	1.529	1.588	1.559	1.707	10.75
8)	T	Bromomethane	1.225	1.182	1.083	0.849	0.840	0.831	0.750	0.965	19.92
9)	T	Chloroethane	1.200	1.100	1.063	0.944	0.813	0.832	0.823	0.968	16.01
10)	T	Ethanol	1.010	1.626	1.513	1.402	1.199	1.212	1.229	1.313	16.10
11)	T	Acetonitrile		4.677	4.201	3.811	3.336	3.350	3.336	3.785	14.77
12)	T	Acrolein		1.160	0.992	0.885	0.858	0.884	0.901	0.947	12.07
13)	T	Acetone			1.837	1.479	1.065	1.070	1.080	1.306	26.44
14)	T	Trichlorofluor...	2.526	2.543	2.318	2.144	1.909	1.952	1.949	2.191	12.49
15)	T	Isopropanol		5.466	4.971	3.559	3.522	3.086	3.005	3.935	26.20
16)	T	Acrylonitrile	2.464	2.648	2.469	2.396	2.183	2.227	2.233	2.374	7.11
17)	T	1,1-Dichloroet...	1.099	1.203	1.093	1.009	0.910	0.917	0.926	1.023	11.04
18)	T	tert-Butanol	4.544	4.581	4.131	3.794	3.354	3.352	1.924	3.669	25.06
19)	T	Methylene Chlo...		1.283	1.125	1.008	0.877	0.873	0.878	1.008	16.72
20)	T	Allyl Chloride	2.410	2.579	2.365	2.406	2.122	2.176	2.199	2.322	7.02
21)	T	Trichlorotrifl...	1.182	1.274	1.161	1.058	0.927	0.930	0.921	1.065	13.54
22)	T	Carbon Disulfide		4.991	4.319	3.940	3.651	3.695	3.719	4.053	12.89
23)	T	trans-1,2-Dich...	2.334	2.294	2.105	1.981	1.783	1.793	1.808	2.014	11.72
24)	T	1,1-Dichloroet...	2.310	2.391	2.329	2.147	1.911	1.935	1.948	2.139	9.72
25)	T	Methyl tert-Bu...	3.576	3.611	3.308	3.092	2.728	2.769	2.774	3.123	12.27
26)	T	Vinyl Acetate		0.252	0.249	0.225	0.192	0.193	0.172	0.214	15.57
27)	T	2-Butanone	0.778	0.799	0.738	0.699	0.603	0.611	0.553	0.683	13.93
28)	T	cis-1,2-Dichlo...	1.986	2.207	1.969	1.848	1.634	1.656	1.666	1.852	11.63
29)	T	Diisopropyl Ether	0.997	1.028	0.963	0.914	0.806	0.802	0.786	0.900	11.24
30)	T	Ethyl Acetate		0.552	0.508	0.496	0.434	0.441	0.428	0.477	10.44
31)	T	n-Hexane	3.461	3.260	3.018	2.769	2.477	2.492	2.461	2.848	14.30

5/29/08

Method Path : J:\MS16\METHODS\
Method File : R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

32)	T	Chloroform	1.667	1.699	1.588	1.456	1.294	1.304	1.319	1.475	11.94
33)	S	1,2-Dichloroet...	1.417	1.427	1.431	1.413	1.408	1.446	1.465	1.430	1.41
34)	T	Tetrahydrofuran	0.636	0.752	0.727	0.673	0.596	0.564	0.545	0.642	12.36
35)	T	Ethyl tert-But...	1.442	1.505	1.386	1.310	1.188	1.196	1.191	1.317	9.94
36)	T	1,2-Dichloroet...	1.868	1.953	1.838	1.682	1.496	1.505	1.498	1.691	11.62
37)	IR	1,4-Difluorobenzen...	----------	ISTD	----------						
38)	T	1,1,1-Trichlor...	0.506	0.493	0.465	0.413	0.370	0.369	0.364	0.426	14.51
39)	T	Isopropyl Acetate	0.207	0.249	0.229	0.213	0.197	0.193	0.191	0.211	10.09
40)	T	1-Butanol	0.492	0.459	0.423	0.408	0.369	0.367	0.362	0.411	12.24
41)	T	Benzene	1.572	1.222	1.099	0.961	0.853	0.837	0.834	1.054	25.77
42)	T	Carbon Tetrach...	0.481	0.494	0.462	0.428	0.389	0.386	0.386	0.432	10.86
43)	T	Cyclohexane	0.590	0.475	0.444	0.382	0.338	0.330	0.326	0.412	23.71
44)	T	tert-Amyl Meth...	0.790	0.779	0.752	0.698	0.637	0.630	0.627	0.702	10.26
45)	T	1,2-Dichloropr...	0.363	0.352	0.339	0.312	0.274	0.271	0.268	0.311	13.13
46)	T	Bromodichlorom...	0.345	0.350	0.338	0.308	0.281	0.275	0.271	0.310	11.13
47)	T	Trichloroethene	0.385	0.373	0.356	0.325	0.292	0.285	0.281	0.328	13.26
48)	T	1,4-Dioxane	0.211	0.228	0.212	0.203	0.180	0.175	0.170	0.197	11.21
49)	T	Isooctane	1.893	1.963	1.815	1.643	1.520	1.483	1.479	1.685	12.11
50)	T	Methyl Methacr...		0.119	0.121	0.117	0.109	0.107	0.105	0.113	5.82
51)	T	n-Heptane	0.265	0.301	0.272	0.260	0.227	0.221	0.216	0.252	12.54
52)	T	cis-1,3-Dichlo...	0.417	0.444	0.417	0.397	0.363	0.357	0.351	0.392	9.16
53)	T	4-Methyl-2-pen...	0.408	0.415	0.383	0.370	0.335	0.330	0.324	0.366	10.24
54)	T	trans-1,3-Dich...	0.400	0.402	0.371	0.360	0.335	0.330	0.333	0.362	8.51
55)	T	1,1,2-Trichlor...	0.289	0.296	0.273	0.255	0.231	0.227	0.225	0.256	11.68
56)	I	Chlorobenzene-d5 (...	----------	ISTD	----------						
57)	S	Toluene-d8 (SS2)	2.647	2.610	2.596	2.564	2.537	2.557	2.531	2.577	1.64
58)	T	Toluene	3.867	3.439	3.121	2.811	2.452	2.424	2.352	2.924	19.79
59)	T	2-Hexanone	3.643	3.252	2.862	2.682	2.367	2.323	2.198	2.761	19.28
60)	T	Dibromochlorom...	1.065	0.974	0.869	0.842	0.766	0.771	0.753	0.863	13.68
61)	T	1,2-Dibromoethane	0.966	0.927	0.868	0.780	0.703	0.699	0.676	0.803	14.71
62)	T	Butyl Acetate	3.185	3.110	2.978	2.782	2.526	2.486	2.366	2.776	11.71
63)	T	n-Octane	0.969	1.069	0.956	0.888	0.787	0.775	0.744	0.884	13.68
64)	T	Tetrachloroethene	1.109	1.019	0.904	0.848	0.738	0.728	0.708	0.865	17.95
65)	T	Chlorobenzene	2.545	2.511	2.242	2.033	1.782	1.765	1.705	2.083	17.08
66)	T	Ethylbenzene	4.040	3.875	3.573	3.229	2.895	2.860	2.790	3.323	15.40
67)	T	m- & p-Xylene	2.730	2.589	2.359	2.125	1.890	1.882	1.838	2.202	16.49
68)	T	Bromoform	0.525	0.556	0.522	0.502	0.470	0.470	0.461	0.501	7.07
69)	T	Styrene	2.473	2.355	2.254	2.112	1.927	1.910	1.857	2.127	11.33
70)	T	o-Xylene	2.994	2.720	2.495	2.298	2.028	2.009	1.951	2.357	16.92

5/29/08

Method Path : J:\MS16\METHODS\
Method File : R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)

71)	T	n-Nonane	2.773	2.752	2.539	2.311	2.045	2.001	1.857	2.326	16.02
72)	T	1,1,2,2-Tetrac...	1.256	1.091	1.046	0.955	0.851	0.834	0.798	0.976	16.95
73)	S	Bromofluoroben...	0.838	0.834	0.839	0.860	0.871	0.879	0.876	0.857	2.28
74)	T	Cumene	4.104	3.951	3.678	3.336	3.016	3.000	2.930	3.431	14.10
75)	T	alpha-Pinene	1.698	1.847	1.738	1.646	1.472	1.458	1.410	1.610	10.28
76)	T	n-Propylbenzene	4.743	4.567	4.278	3.896	3.518	3.505	3.401	3.987	13.73
77)	T	3-Ethyltoluene	4.606	4.309	4.000	3.583	3.282	3.318	3.248	3.764	14.52
78)	T	4-Ethyltoluene	3.973	4.046	3.654	3.359	2.969	2.925	2.844	3.396	14.88
79)	T	1,3,5-Trimethy...	3.739	3.496	3.160	2.911	2.612	2.600	2.556	3.011	15.65
80)	T	alpha-Methylst...	1.762	1.883	1.785	1.693	1.601	1.588	1.539	1.693	7.33
81)	T	2-Ethyltoluene	4.139	4.277	3.896	3.588	3.255	3.230	3.160	3.649	12.60
82)	T	1,2,4-Trimethy...	3.785	3.556	3.273	2.934	2.627	2.616	2.545	3.048	16.31
83)	T	n-Decane	2.399	2.502	2.322	2.145	1.954	1.936	1.847	2.158	11.83
84)	T	Benzyl Chloride	2.706	2.532	2.395	2.308	2.192	2.197	2.156	2.355	8.65
85)	T	1,3-Dichlorobe...	2.431	2.236	2.072	1.850	1.668	1.658	1.603	1.931	16.65
86)	T	1,4-Dichlorobe...	2.325	2.177	2.007	1.795	1.630	1.618	1.573	1.875	15.92
87)	T	sec-Butylbenzene	4.523	4.638	4.226	3.881	3.516	3.487	3.409	3.954	12.97
88)	T	p-Isopropyltol...	3.843	4.080	3.699	3.394	3.101	3.082	2.983	3.455	12.34
89)	T	1,2,3-Trimethy...	3.413	3.395	3.104	2.842	2.614	2.597	2.523	2.927	12.96
90)	T	1,2-Dichlorobe...	2.181	2.133	1.892	1.712	1.546	1.510	1.436	1.773	17.05
91)	T	d-Limonene	0.939	1.091	0.989	0.957	0.880	0.874	0.844	0.939	8.99
92)	T	1,2-Dibromo-3-...	0.594	0.614	0.580	0.557	0.554	0.552	0.538	0.570	4.74
93)	T	n-Undecane	2.495	2.547	2.411	2.241	2.106	2.065	1.976	2.263	9.94
94)	T	1,2,4-Trichlor...	0.377	0.361	0.332	0.303	0.298	0.293	0.281	0.321	11.41
95)	T	Naphthalene	5.936	4.616	4.225	3.845	4.165	4.147	4.065	4.428	15.89
96)	T	n-Dodecane	2.335	2.463	2.276	2.162	2.126	2.090	1.984	2.205	7.37
97)	T	Hexachloro-1,3...	0.603	0.622	0.577	0.523	0.478	0.470	0.457	0.533	12.70

(#) = Out of Range

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-052108[illegible]
20ng/L Std. ID: S20-05210808
200ng/L Std. ID: S20-05210802

Dilution Factors:		5	50	250	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source) 4	20	20	20	200	200	200
	Source Std.	Primary Working Standards			Injection (L):	0.025	0.025	0.050	0.25	0.125	0.25	0.50
Compounds	mg/m³	200ng/L	20ng/L	4ng/L	ICAL Points:	0.1ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Propene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
Dichlorodifluoromethane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
Chloromethane	1.02	204	20.4	4.08		0.102	0.510	1.02	5.10	25.5	51.0	102
Freon-114	1.07	214	21.4	4.28		0.107	0.535	1.07	5.35	26.8	53.5	107
Vinyl Chloride	1.03	206	20.6	4.12		0.103	0.515	1.03	5.15	25.8	51.5	103
1,3-Butadiene	1.09	218	21.8	4.36		0.109	0.545	1.09	5.45	27.3	54.5	109
Bromomethane	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
Chloroethane	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
Ethanol	0.91	182	18.2	3.64		0.091	0.455	0.910	4.55	22.8	45.5	91.0
Acetonitrile	0.980	196	19.6	3.92		0.098	0.490	0.980	4.90	24.5	49.0	98.0
Acrolein	0.960	192	19.2	3.84		0.096	0.480	0.960	4.80	24.0	48.0	96.0
Acetone	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
Trichlorofluoromethane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
Isopropanol	1.03	206	20.6	4.12		0.103	0.515	1.03	5.15	25.8	51.5	103
Acrylonitrile	1.010	202	20.2	4.04		0.101	0.505	1.01	5.05	25.3	50.5	101
1,1-Dichloroethene	1.13	226	22.6	4.52		0.113	0.565	1.13	5.65	28.3	56.5	113
tert-Butanol	1.020	204	20.4	4.08		0.102	0.510	1.02	5.10	25.5	51.0	102
Methylene Chloride	1.12	224	22.4	4.48		0.112	0.560	1.12	5.60	28.0	56.0	112
Allyl Chloride	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
Trichlorotrifluoroethane	1.14	228	22.8	4.56		0.114	0.570	1.14	5.70	28.5	57.0	114
Carbon Disulfide	1.00	200	20.0	4.00		0.100	0.500	1.00	5.00	25.0	50.0	100
trans-1,2-Dichloroethene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
1,1-Dichloroethane	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
Methyl tert-Butyl Ether	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
Vinyl Acetate	0.98	196	19.6	3.92		0.098	0.490	0.980	4.90	24.5	49.0	98.0
2-Butanone	1.12	224	22.4	4.48		0.112	0.560	1.12	5.60	28.0	56.0	112
cis-1,2-Dichloroethene	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
Diisopropyl Ether	1.03	206	20.6	4.12		0.103	0.515	1.03	5.15	25.8	51.5	103
Ethyl Acetate	1.27	254	25.4	5.08		0.127	0.635	1.27	6.35	31.8	63.5	127
n-Hexane	1.12	224	22.4	4.48		0.112	0.560	1.12	5.60	28.0	56.0	112
Chloroform	1.29	258	25.8	5.16		0.129	0.645	1.29	6.45	32.3	64.5	129
Tetrahydrofuran	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
Ethyl tert-Butyl Ether	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
1,2-Dichloroethane	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
1,1,1-Trichloroethane	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
Isopropyl Acetate	1.010	202	20.2	4.04		0.101	0.505	1.01	5.05	25.3	50.5	101
1-Butanol	0.910	182	18.2	3.64		0.091	0.455	0.910	4.55	22.8	45.5	91.0
Benzene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
Carbon Tetrachloride	1.07	214	21.4	4.28		0.107	0.535	1.07	5.35	26.8	53.5	107
Cyclohexane	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
tert-Amyl Methyl Ether	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
1,2-Dichloropropane	1.09	218	21.8	4.36		0.109	0.545	1.09	5.45	27.3	54.5	109
Bromodichloromethane	1.15	230	23.0	4.60		0.115	0.575	1.15	5.75	28.8	57.5	115
Trichloroethene	1.14	228	22.8	4.56		0.114	0.570	1.14	5.70	28.5	57.0	114
1,4-Dioxane	1.15	230	23.0	4.60		0.115	0.575	1.15	5.75	28.8	57.5	115
Isooctane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
Methyl Methacrylate	1.06	212	21.2	4.24		0.106	0.530	1.06	5.30	26.5	53.0	106
n-Heptane	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
cis-1,3-Dichloropropene	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
4-Methyl-2-pentanone	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
trans-1,3-Dichloropropene	1.16	232	23.2	4.64		0.116	0.580	1.16	5.80	29.0	58.0	116
1,1,2-Trichloroethane	1.09	218	21.8	4.36		0.109	0.545	1.09	5.45	27.3	54.5	109
Toluene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
2-Hexanone	1.02	204	20.4	4.08		0.102	0.510	1.02	5.10	25.5	51.0	102
Dibromochloromethane	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
1,2-Dibromoethane	1.09	218	21.8	4.36		0.109	0.545	1.09	5.45	27.3	54.5	109
n-Butyl Acetate	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
n-Octane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
Tetrachloroethene	1.09	218	21.8	4.36		0.109	0.545	1.09	5.45	27.3	54.5	109
Chlorobenzene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
Ethylbenzene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
m-&p-Xylene	2.58	516	51.6	10.32		0.258	1.29	2.58	12.9	64.5	129	258

5/29/08

Primary Source Standards Concentrations
(Working & Initial Calibration)

4ng/L Std. ID: S20-05210811
20ng/L Std. ID: S20-05210808
200ng/L Std. ID: S20-05210802

Dilution Factors:		5	50	250	Working STD Conc.(ng/L):	ICAL Concentrations (Primary Source)						
	Source Std.	Primary Working Standards			Injection (L):	0.025	0.025	0.05	0.25	0.125	0.25	0.50
Compounds	mg/m³	200ng/L	20ng/L	4ng/L	ICAL Points:	0.1ng	0.5ng	1ng	5ng	25ng	50ng	100ng
Bromoform	1.31	262	26.2	5.24		0.131	0.655	1.31	6.55	32.8	65.5	131
Styrene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
o-Xylene	1.22	244	24.4	4.88		0.122	0.610	1.22	6.10	30.5	61.0	122
n-Nonane	1.03	206	20.6	4.12		0.103	0.515	1.03	5.15	25.8	51.5	103
1,1,2,2-Tetrachloroethane	1.23	246	24.6	4.92		0.123	0.615	1.23	6.15	30.8	61.5	123
Cumene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
alpha-Pinene	1.06	212	21.2	4.24		0.106	0.530	1.06	5.30	26.5	53.0	106
n-Propylbenzene	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
3-Ethyltoluene	1.02	204	20.4	4.08		0.102	0.510	1.02	5.10	25.5	51.0	102
4-Ethyltoluene	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111
1,3,5-Trimethylbenzene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
alpha-Methylstyrene	1.02	204	20.4	4.08		0.102	0.510	1.02	5.10	25.5	51.0	102
2-Ethyltoluene	0.990	198	19.8	3.96		0.099	0.495	0.990	4.95	24.8	49.5	99.0
1,2,4-Trimethylbenzene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
n-Decane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
Benzyl Chloride	1.07	214	21.4	4.28		0.107	0.535	1.07	5.35	26.8	53.5	107
1,3-Dichlorobenzene	1.06	212	21.2	4.24		0.106	0.530	1.06	5.30	26.5	53.0	106
1,4-Dichlorobenzene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
sec-Butylbenzene	1.07	214	21.4	4.28		0.107	0.535	1.07	5.35	26.8	53.5	107
p-Isopropyltoluene	1.180	236	23.6	4.72		0.118	0.590	1.18	5.90	29.5	59.0	118
1,2,3-Trimethylbenzene	1.10	220	22.0	4.40		0.110	0.550	1.10	5.50	27.5	55.0	110
1,2-Dichlorobenzene	1.08	216	21.6	4.32		0.108	0.540	1.08	5.40	27.0	54.0	108
d-Limonene	1.06	212	21.2	4.24		0.106	0.530	1.06	5.30	26.5	53.0	106
1,2-Dibromo-3-chloropropane	1.04	208	20.8	4.16		0.104	0.520	1.04	5.20	26.0	52.0	104
n-Undecane	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
1,2,4-Trichlorobenzene	1.12	224	22.4	4.48		0.112	0.560	1.12	5.60	28.0	56.0	112
Naphthalene	1.05	210	21.0	4.20		0.105	0.525	1.05	5.25	26.3	52.5	105
n-Dodecane	1.06	212	21.2	4.24		0.106	0.530	1.06	5.30	26.5	53.0	106
Hexachloro-1,3-butadiene	1.11	222	22.2	4.44		0.111	0.555	1.11	5.55	27.8	55.5	111

*Enter information in the Solid Shaded Areas ONLY.

5/27/08

Method Path : J:\MS16\METHODS\
Method File : R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:50:43 2008
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
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2	0.5	1	25	J:\MS16\DATA\2008_05\26\05260803.D
3	1.0	1	25	J:\MS16\DATA\2008_05\26\05260804.D
4	5.0	5	25	J:\MS16\DATA\2008_05\26\05260805.D
5	25	27	25	J:\MS16\DATA\2008_05\26\05260806.D
6	50	54	25	J:\MS16\DATA\2008_05\26\05260807.D
7	100	108	25	J:\MS16\DATA\2008_05\26\05260808.D

#	ID	Update Time	Quant Time	Acquisition Time
1	0.1	May 27 08:39 2008	May 27 08:13 2008	26 May 2008 4:36 pm
2	0.5	May 27 08:39 2008	May 27 08:17 2008	26 May 2008 5:14 pm
3	1.0	May 27 08:39 2008	May 27 08:21 2008	26 May 2008 5:51 pm
4	5.0	May 27 08:39 2008	May 27 08:23 2008	26 May 2008 6:36 pm
5	25	May 27 08:40 2008	May 27 08:25 2008	26 May 2008 7:14 pm
6	50	May 27 08:40 2008	May 27 08:35 2008	26 May 2008 7:52 pm
7	100	May 27 08:40 2008	May 27 08:38 2008	26 May 2008 8:30 pm

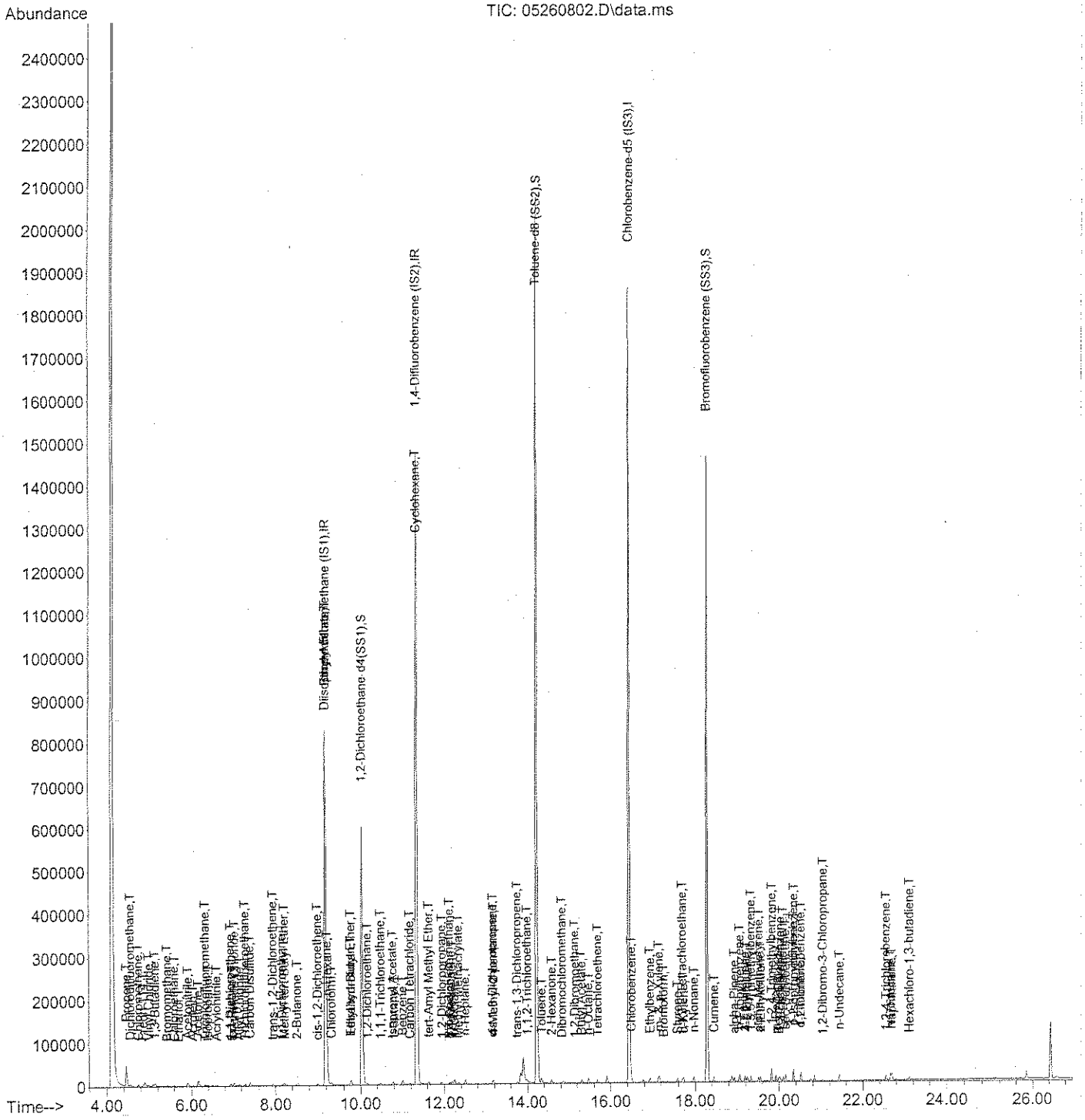
\16052608.M Thu May 29 11:50:14 2008

SB 5/29/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:13:11 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:13:11 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	400141	25.000	ng		-0.07
37) 1,4-Difluorobenzene (IS2)	11.34	114	1673816	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	627739	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.04	65	566923	20.091	ng		-0.05
Spiked Amount 25.000			Recovery =	80.36%			
57) Toluene-d8 (SS2)	14.22	98	1661708	26.885	ng		-0.02
Spiked Amount 25.000			Recovery =	107.52%			
73) Bromofluorobenzene (SS3)	18.28	174	526226	32.713	ng		-0.01
Spiked Amount 25.000			Recovery =	130.84%			
Target Compounds							Qvalue
2) Propene	4.46	42	4224	0.106	ng		96
3) Dichlorodifluoromethane	4.56	85	4829	0.102	ng		95
4) Chloromethane	4.75	50	6550	0.112	ng		91
5) Freon 114	4.86	135	2475	0.108	ng		100
6) Vinyl Chloride	5.00	62	3667	0.091	ng		94
7) 1,3-Butadiene	5.14	54	3391	0.090	ng		92
8) Bromomethane	5.43	94	2058	0.124	ng		94
9) Chloroethane	5.60	64	2016	0.109	ng		82
10) Ethanol	5.71	45	1471	0.053	ng	#	50
11) Acetonitrile	5.92	41	13158	0.184	ng		76
12) Acrolein	6.05	56	2744	0.140	ng		99
13) Acetone	6.16	58	8349	0.316	ng	#	64
14) Trichlorofluoromethane	6.33	101	4204	0.107	ng		92
15) Isopropanol	6.40	45	9894m	0.115	ng		
16) Acrylonitrile	6.61	53	3984	0.085	ng		92
17) 1,1-Dichloroethene	6.94	96	1987	0.104	ng	#	80
18) tert-Butanol	6.98	59	7419m	0.095	ng		
19) Methylene Chloride	7.04	84	3045	0.146	ng	#	52
20) Allyl Chloride	7.15	41	4050	0.093	ng		71
21) Trichlorotrifluoroethane	7.28	151	2157	0.131	ng		88
22) Carbon Disulfide	7.40	76	12879	0.163	ng		97
23) trans-1,2-Dichloroethene	7.94	61	4109	0.100	ng		92
24) 1,1-Dichloroethane	8.16	63	4104	0.088	ng		91
25) Methyl tert-Butyl Ether	8.21	73	6354	0.101	ng		87
26) Vinyl Acetate	8.23	86	205	N.D.			
27) 2-Butanone	8.52	72	1394	0.102	ng	#	1
28) cis-1,2-Dichloroethene	9.00	61	3528	0.093	ng		98
29) Diisopropyl Ether	9.18	87	1644	0.095	ng	#	13
30) Ethyl Acetate	9.19	61	737	0.073	ng	#	34
31) n-Hexane	9.23	57	6205	0.109	ng		80

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:13:11 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.32	83	3442	0.115	ng		99
34) Tetrahydrofuran	9.77	72	1130	0.083	ng	#	5
35) Ethyl tert-Butyl Ether	9.77	87	2423	0.099	ng	#	80
36) 1,2-Dichloroethane	10.16	62	3289	0.092	ng		69
38) 1,1,1-Trichloroethane	10.48	97	3727	0.116	ng		93
39) Isopropyl Acetate	10.77	61	1401	0.082	ng	#	40
40) 1-Butanol	10.80	56	2998	0.095	ng	#	1
41) Benzene	11.01	78	11577	0.141	ng		97
42) Carbon Tetrachloride	11.18	117	3444	0.142	ng		92
43) Cyclohexane	11.33	84	4388	0.135	ng	#	1
44) tert-Amyl Methyl Ether	11.63	73	5499	0.095	ng		76
45) 1,2-Dichloropropane	11.94	63	2646	0.104	ng		96
46) Bromodichloromethane	12.13	83	2654	0.109	ng		97
47) Trichloroethene	12.18	130	2936	0.130	ng		92
48) 1,4-Dioxane	12.16	88	1628	0.106	ng	#	68
49) Isooctane	12.24	57	13181	0.097	ng		99
50) Methyl Methacrylate	12.34	100	515	0.064	ng	#	89
51) n-Heptane	12.51	71	1969	0.094	ng	#	39
52) cis-1,3-Dichloropropene	13.16	75	2905	0.089	ng		93
53) 4-Methyl-2-pentanone	13.18	58	2871	0.096	ng	#	60
54) trans-1,3-Dichloropropene	13.76	75	3109	0.108	ng		89
55) 1,1,2-Trichloroethane	13.99	97	2106	0.106	ng		93
58) Toluene	14.34	91	10682	0.141	ng		98
59) 2-Hexanone	14.59	43	9331	0.117	ng		91
60) Dibromochloromethane	14.83	129	2967	0.150	ng		84
61) 1,2-Dibromoethane	15.15	107	2643	0.135	ng		99
62) Butyl Acetate	15.31	43	8397	0.103	ng		93
63) n-Octane	15.47	57	2530	0.104	ng	#	66
64) Tetrachloroethene	15.69	166	3035	0.162	ng		90
65) Chlorobenzene	16.50	112	7030	0.140	ng		98
66) Ethylbenzene	16.94	91	10957	0.127	ng		95
67) m- & p-Xylene	17.15	91	17683	0.312	ng		92
68) Bromoform	17.26	173	1727	0.162	ng		77
69) Styrene	17.59	104	6707	0.128	ng		95
70) o-Xylene	17.73	91	9171	0.152	ng		95
71) n-Nonane	17.97	43	7173	0.108	ng		93
72) 1,1,2,2-Tetrachloroethane	17.70	83	3879	0.146	ng		96
74) Cumene	18.45	105	11130	0.132	ng		94
75) alpha-Pinene	18.93	93	4520	0.110	ng		98
76) n-Propylbenzene	19.06	91	12504	0.118	ng		74
77) 3-Ethyltoluene	19.19	105	11797	0.129	ng		97
78) 4-Ethyltoluene	19.24	105	11073	0.133	ng		90
79) 1,3,5-Trimethylbenzene	19.33	105	10140	0.139	ng		93

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:13:11 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

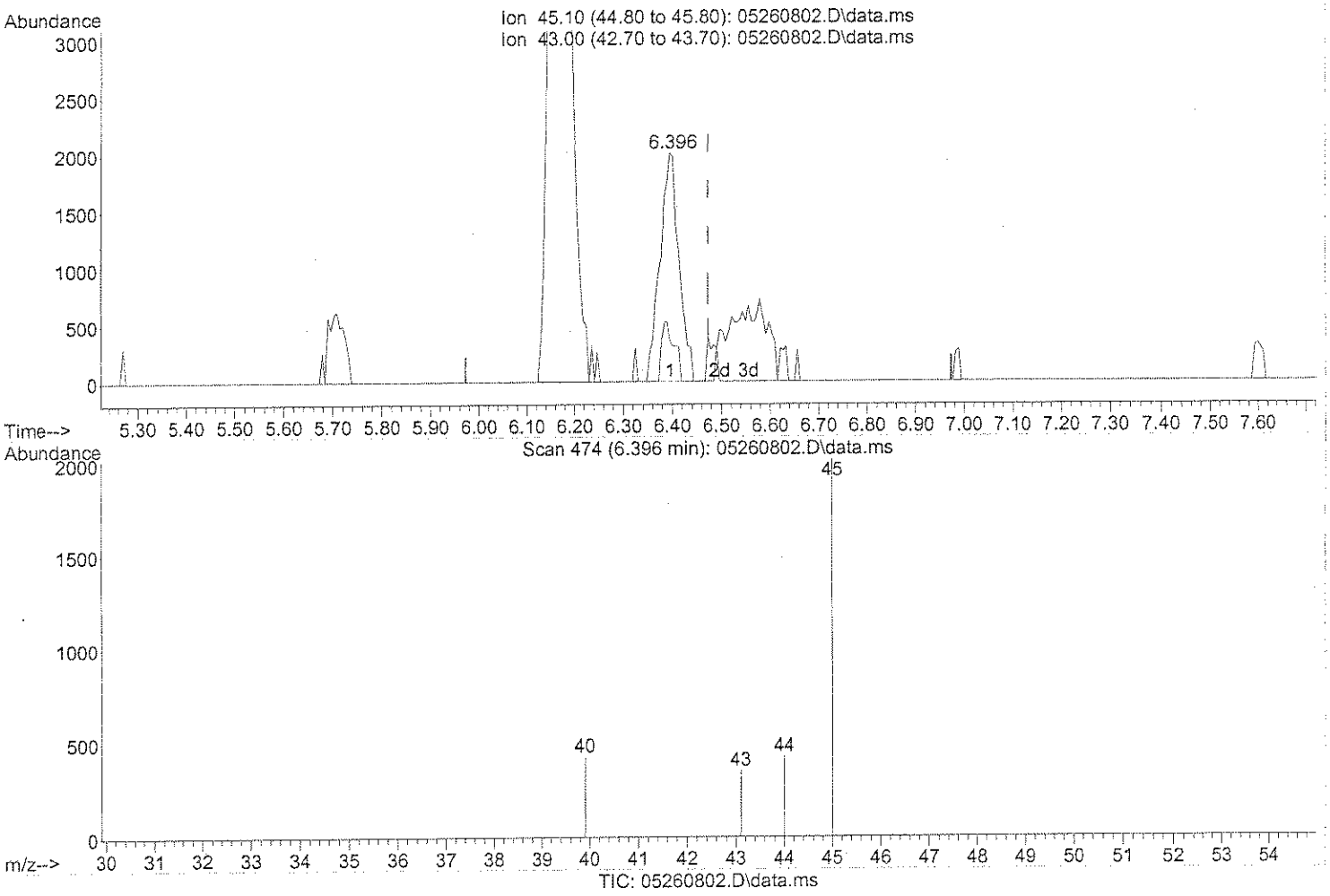
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	4513	0.114	ng		98
81) 2-Ethyltoluene	19.56	105	10288	0.114	ng		92
82) 1,2,4-Trimethylbenzene	19.83	105	10455	0.138	ng		92
83) n-Decane	19.93	57	6264	0.104	ng		80
84) Benzyl Chloride	19.99	91	7269	0.115	ng		92
85) 1,3-Dichlorobenzene	20.02	146	6470	0.147	ng		97
86) 1,4-Dichlorobenzene	20.10	146	6421	0.153	ng		95
87) sec-Butylbenzene	20.16	105	12151	0.123	ng		95
88) p-Isopropyltoluene	20.34	119	11386	0.136	ng		96
89) 1,2,3-Trimethylbenzene	20.34	105	9426	0.128	ng		91
90) 1,2-Dichlorobenzene	20.52	146	5914	0.145	ng		92
91) d-Limonene	20.51	68	2499	0.092	ng		82
92) 1,2-Dibromo-3-Chloropr...	21.04	157	1552	0.121	ng	#	83
93) n-Undecane	21.44	57	6578	0.104	ng		76
94) 1,2,4-Trichlorobenzene	22.55	184	1060	0.150	ng	#	65
95) Naphthalene	22.69	128	15651	0.146	ng		96
96) n-Dodecane	22.66	57	6214	0.101	ng		78
97) Hexachloro-1,3-butadiene	23.11	225	1680	0.159	ng		89

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

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:12:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.396min (-0.077) 0.06ng

response 5444

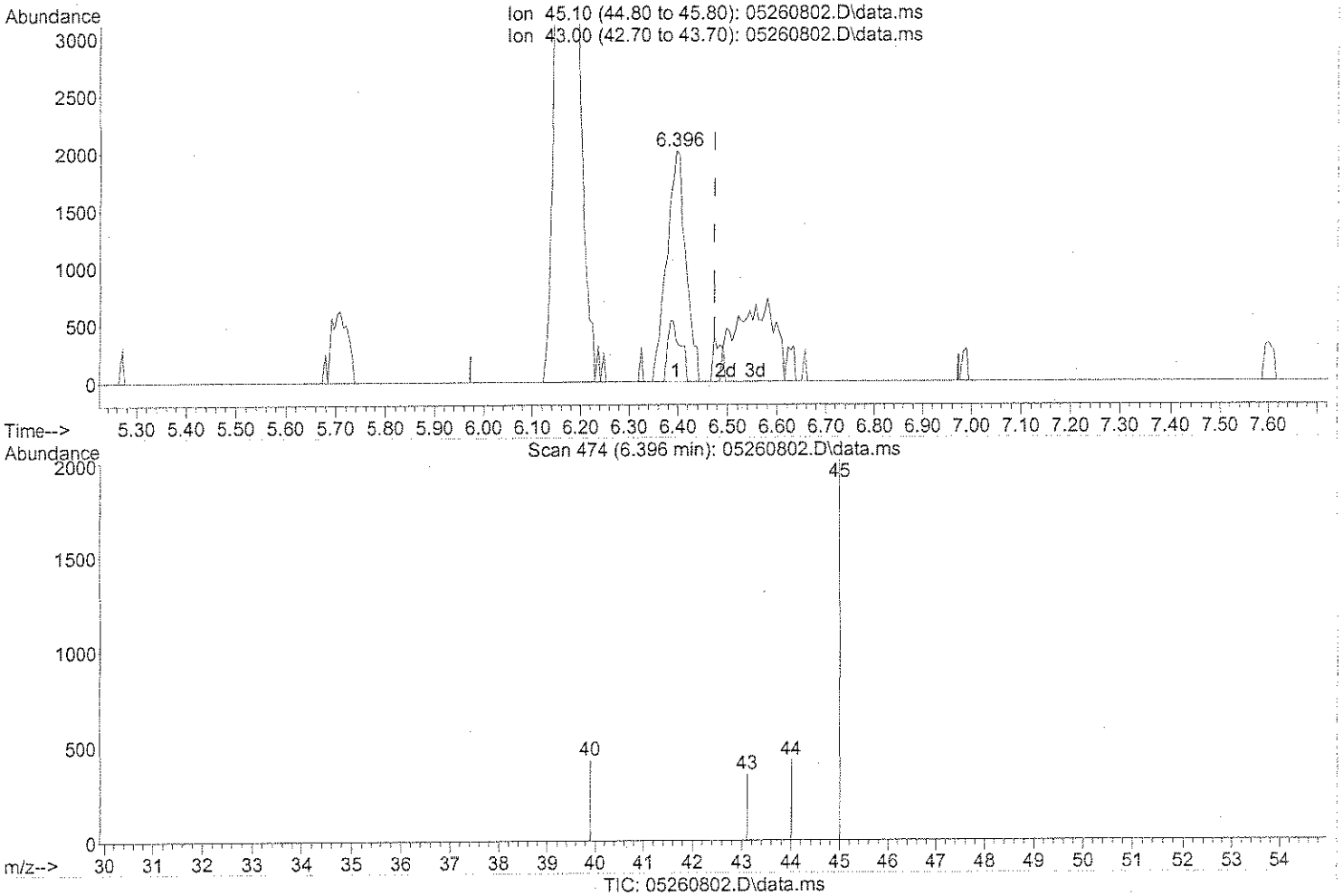
Ion	Exp%	Act%
45.10	100	100
43.00	19.40	17.60
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:12:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.396min (-0.077) 0.12ng m

response 9894

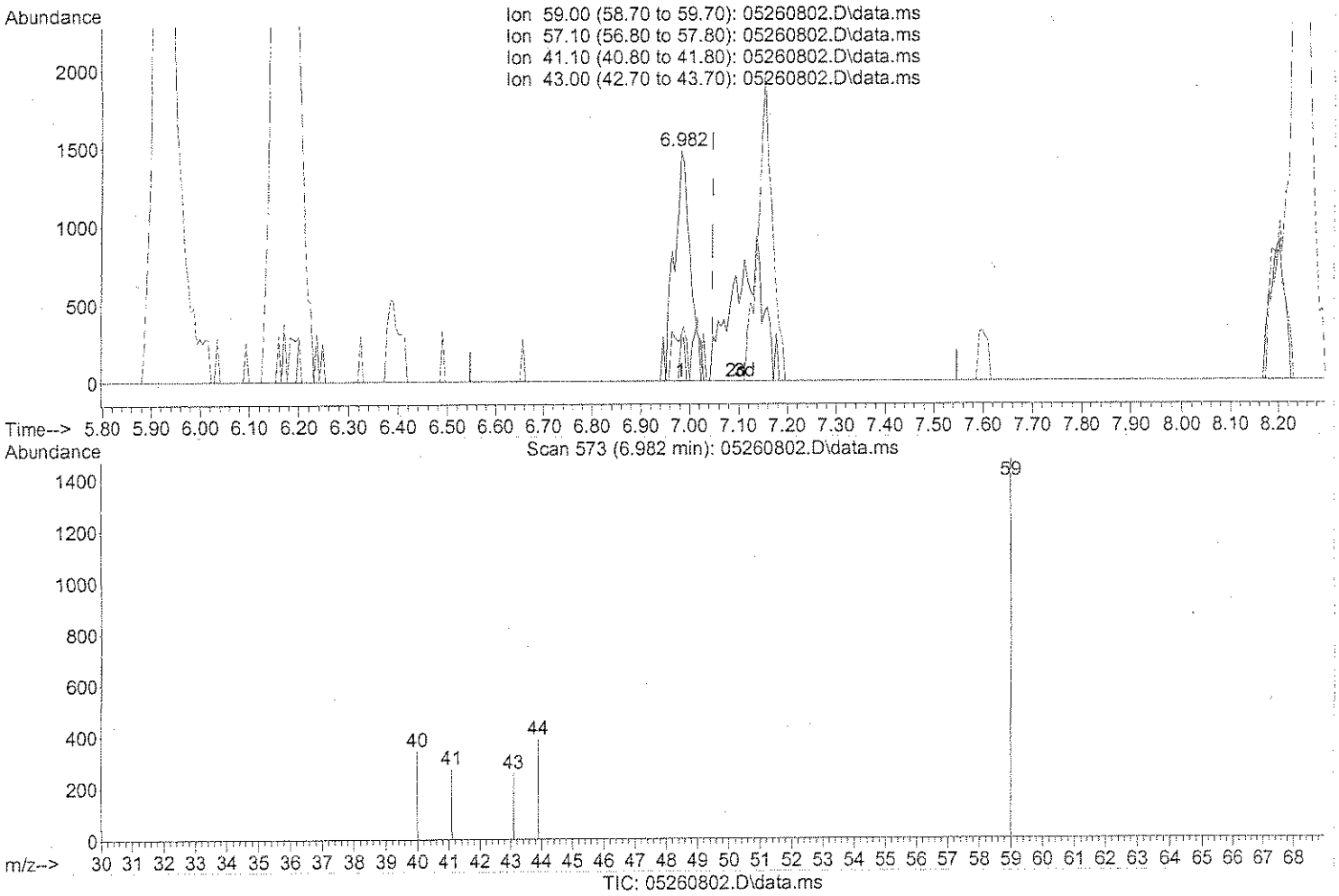
Ion	Exp%	Act%
45.10	100	100
43.00	19.40	9.68
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks
DM 5/29/08
EM 5/30/08

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:12:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

6.982min (-0.065) 0.04ng

response 3488

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	0.00
41.10	21.90	17.95
43.00	17.20	5.48

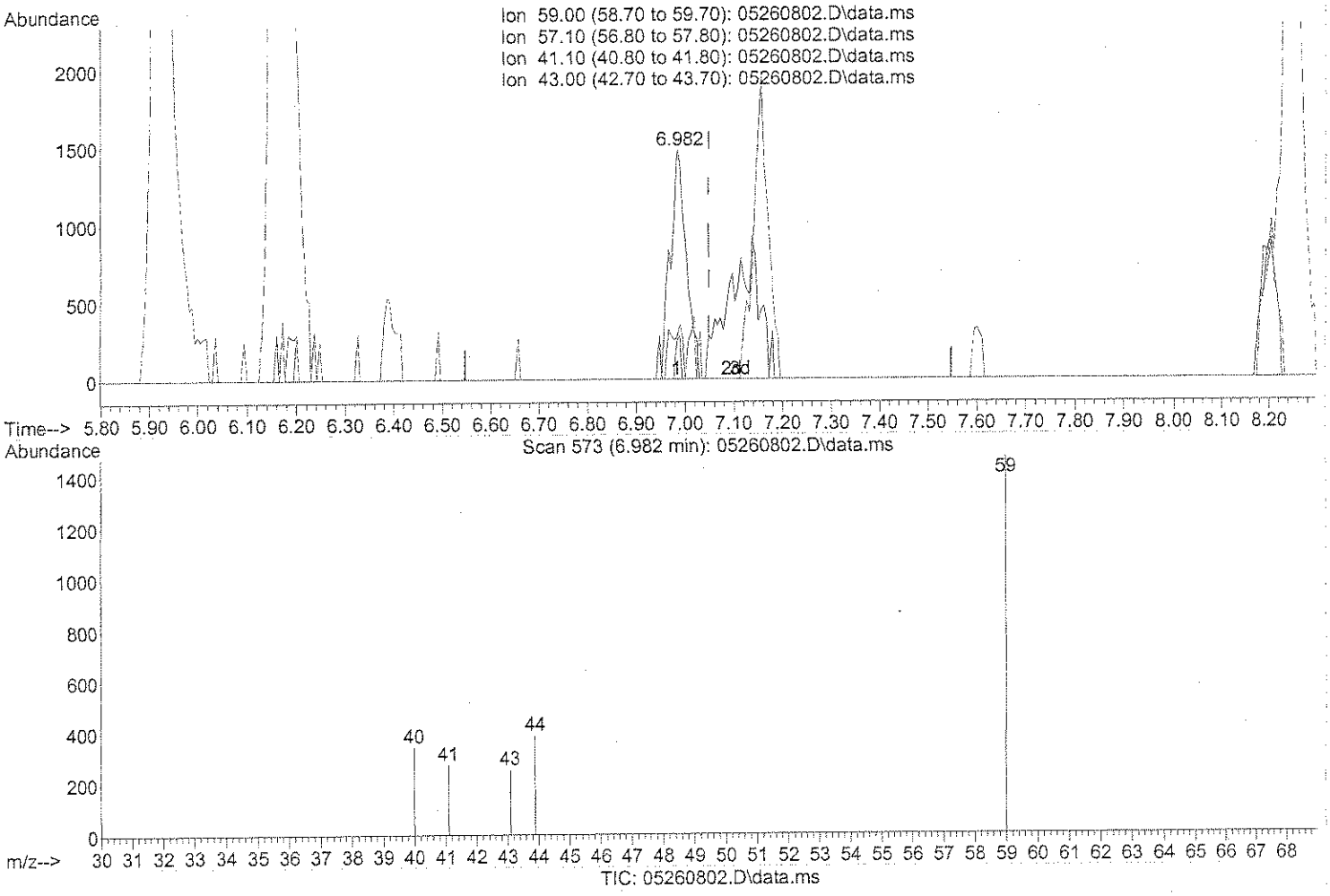
split peaks

74

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260802.D
Acq On : 26 May 2008 4:36 pm
Operator : WA
Sample : 0.1ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210811
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 27 08:12:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

6.982min (-0.065) 0.10ng m

response 7419

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	0.00
41.10	21.90	8.44
43.00	17.20	2.57

int. whole peaks

JDM 5/29/08

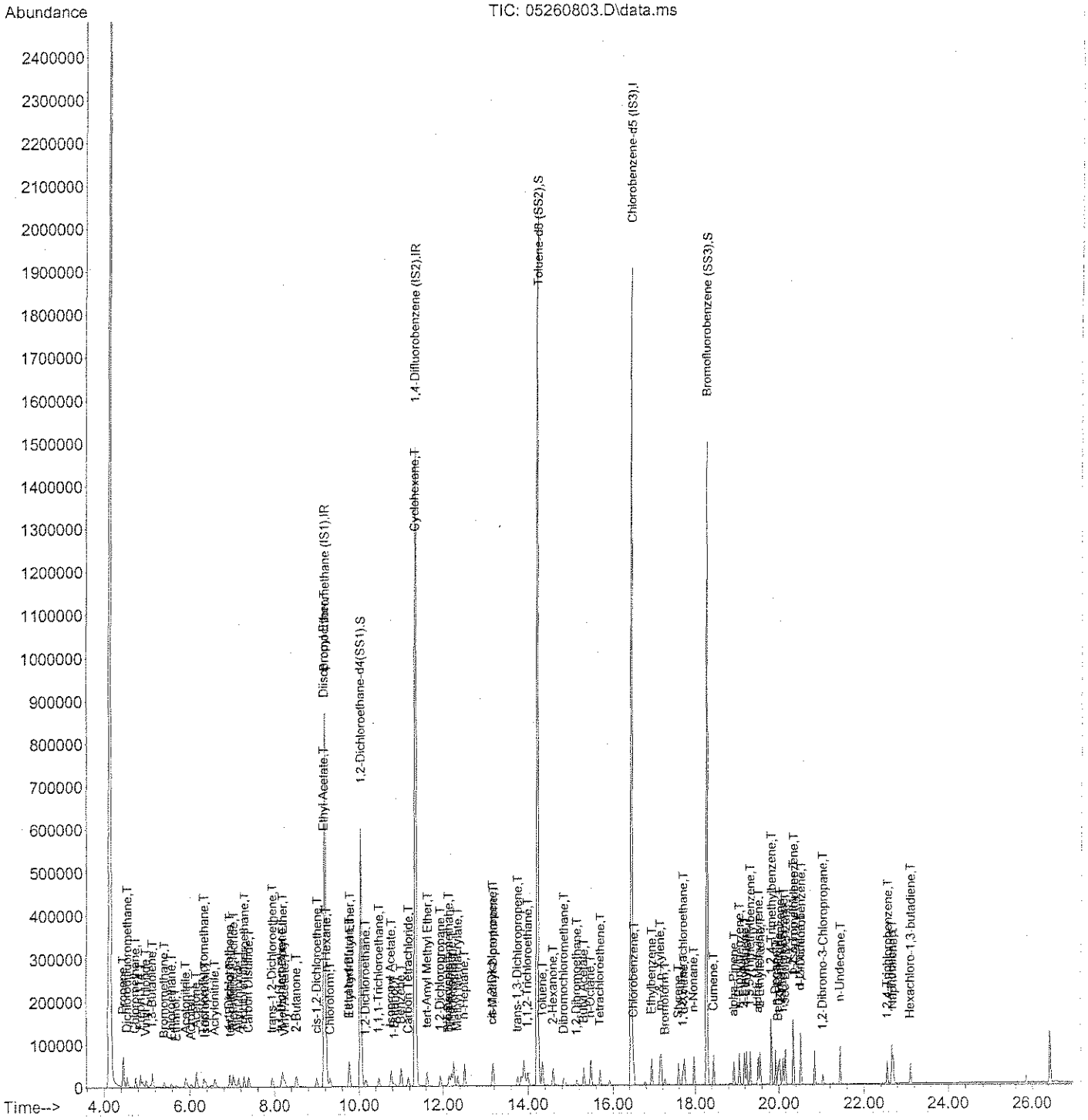
Sam 5/30/08

75

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:17:54 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:17:54 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	401927	25.000	ng		-0.06
37) 1,4-Difluorobenzene (IS2)	11.34	114	1681603	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	646123	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.04	65	573396	20.231	ng		-0.05
Spiked Amount 25.000			Recovery =	80.92%			
57) Toluene-d8 (SS2)	14.23	98	1686339	26.507	ng		-0.02
Spiked Amount 25.000			Recovery =	106.04%			
73) Bromofluorobenzene (SS3)	18.28	174	538778	32.540	ng		-0.01
Spiked Amount 25.000			Recovery =	130.16%			
Target Compounds							Qvalue
2) Propene	4.45	42	18207	0.453	ng		96
3) Dichlorodifluoromethane	4.55	85	23186	0.488	ng		98
4) Chloromethane	4.74	50	30704	0.523	ng		98
5) Freon 114	4.85	135	13598	0.593	ng		98
6) Vinyl Chloride	4.98	62	18778	0.463	ng		95
7) 1,3-Butadiene	5.13	54	17240	0.455	ng	#	86
8) Bromomethane	5.42	94	9975	0.597	ng		100
9) Chloroethane	5.58	64	9285	0.501	ng		89
10) Ethanol	5.68	45	11895m	0.430	ng		
11) Acetonitrile	5.92	41	36843	0.513	ng		93
12) Acrolein	6.04	56	8955	0.455	ng		97
13) Acetone	6.16	58	20065	0.756	ng	#	67
14) Trichlorofluoromethane	6.33	101	21258	0.541	ng		97
15) Isopropanol	6.37	45	45256m	0.526	ng		
16) Acrylonitrile	6.60	53	21501	0.455	ng		99
17) 1,1-Dichloroethene	6.93	96	10929	0.568	ng		97
18) tert-Butanol	6.96	59	37559m	0.480	ng		
19) Methylene Chloride	7.02	84	11554	0.551	ng	#	43
20) Allyl Chloride	7.15	41	21772	0.495	ng		74
21) Trichlorotrifluoroethane	7.28	151	11677	0.707	ng		86
22) Carbon Disulfide	7.39	76	40121	0.507	ng		99
23) trans-1,2-Dichloroethene	7.94	61	20284	0.493	ng		95
24) 1,1-Dichloroethane	8.16	63	21332	0.455	ng		94
25) Methyl tert-Butyl Ether	8.19	73	32217	0.511	ng		81
26) Vinyl Acetate	8.25	86	1989	0.369	ng	#	1
27) 2-Butanone	8.52	72	7197	0.526	ng	#	7
28) cis-1,2-Dichloroethene	9.01	61	19695	0.519	ng		92
29) Diisopropyl Ether	9.18	87	8514	0.489	ng	#	22
30) Ethyl Acetate	9.17	61	5631	0.556	ng		84
31) n-Hexane	9.23	57	29350	0.513	ng		91

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:17:54 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.32	83	17613	0.588	ng		95
34) Tetrahydrofuran	9.77	72	6712	0.489	ng	#	47
35) Ethyl tert-Butyl Ether	9.78	87	12699	0.514	ng	#	76
36) 1,2-Dichloroethane	10.16	62	17268	0.482	ng		97
38) 1,1,1-Trichloroethane	10.47	97	18245	0.564	ng		92
39) Isopropyl Acetate	10.77	61	8471	0.493	ng	#	70
40) 1-Butanol	10.85	56	14060	0.441	ng	#	1
41) Benzene	11.01	78	45203	0.548	ng		99
42) Carbon Tetrachloride	11.18	117	17774	0.728	ng		98
43) Cyclohexane	11.33	84	17716	0.543	ng	#	1
44) tert-Amyl Methyl Ether	11.63	73	27234	0.469	ng		74
45) 1,2-Dichloropropane	11.93	63	12919	0.505	ng		90
46) Bromodichloromethane	12.13	83	13522	0.552	ng		96
47) Trichloroethene	12.19	130	14284	0.629	ng		94
48) 1,4-Dioxane	12.14	88	8805	0.569	ng	#	60
49) Isooctane	12.24	57	68671	0.502	ng		93
50) Methyl Methacrylate	12.34	100	4242	0.521	ng	#	77
51) n-Heptane	12.50	71	11249	0.536	ng	#	52
52) cis-1,3-Dichloropropene	13.16	75	15530	0.472	ng		97
53) 4-Methyl-2-pentanone	13.18	58	14645	0.488	ng		86
54) trans-1,3-Dichloropropene	13.76	75	15667	0.539	ng		99
55) 1,1,2-Trichloroethane	13.99	97	10839	0.542	ng		96
58) Toluene	14.35	91	48882	0.627	ng		96
59) 2-Hexanone	14.58	43	42868	0.520	ng		95
60) Dibromochloromethane	14.84	129	13973	0.687	ng		97
61) 1,2-Dibromoethane	15.14	107	13056	0.649	ng		97
62) Butyl Acetate	15.31	43	42203	0.502	ng		93
63) n-Octane	15.47	57	14371	0.576	ng		92
64) Tetrachloroethene	15.69	166	14352	0.745	ng		99
65) Chlorobenzene	16.50	112	35691	0.692	ng		99
66) Ethylbenzene	16.94	91	54082	0.608	ng		95
67) m- & p-Xylene	17.14	91	86302	1.481	ng		92
68) Bromoform	17.26	173	9414	0.856	ng		97
69) Styrene	17.59	104	32872	0.609	ng		95
70) o-Xylene	17.73	91	42884	0.690	ng		91
71) n-Nonane	17.96	43	36634	0.534	ng		92
72) 1,1,2,2-Tetrachloroethane	17.70	83	17335	0.633	ng		91
74) Cumene	18.45	105	55143	0.635	ng		93
75) alpha-Pinene	18.93	93	25301	0.597	ng		95
76) n-Propylbenzene	19.06	91	61972	0.569	ng		89
77) 3-Ethyltoluene	19.19	105	56794	0.604	ng		95
78) 4-Ethyltoluene	19.24	105	58033	0.678	ng		92
79) 1,3,5-Trimethylbenzene	19.33	105	48794	0.648	ng		91

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:17:54 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

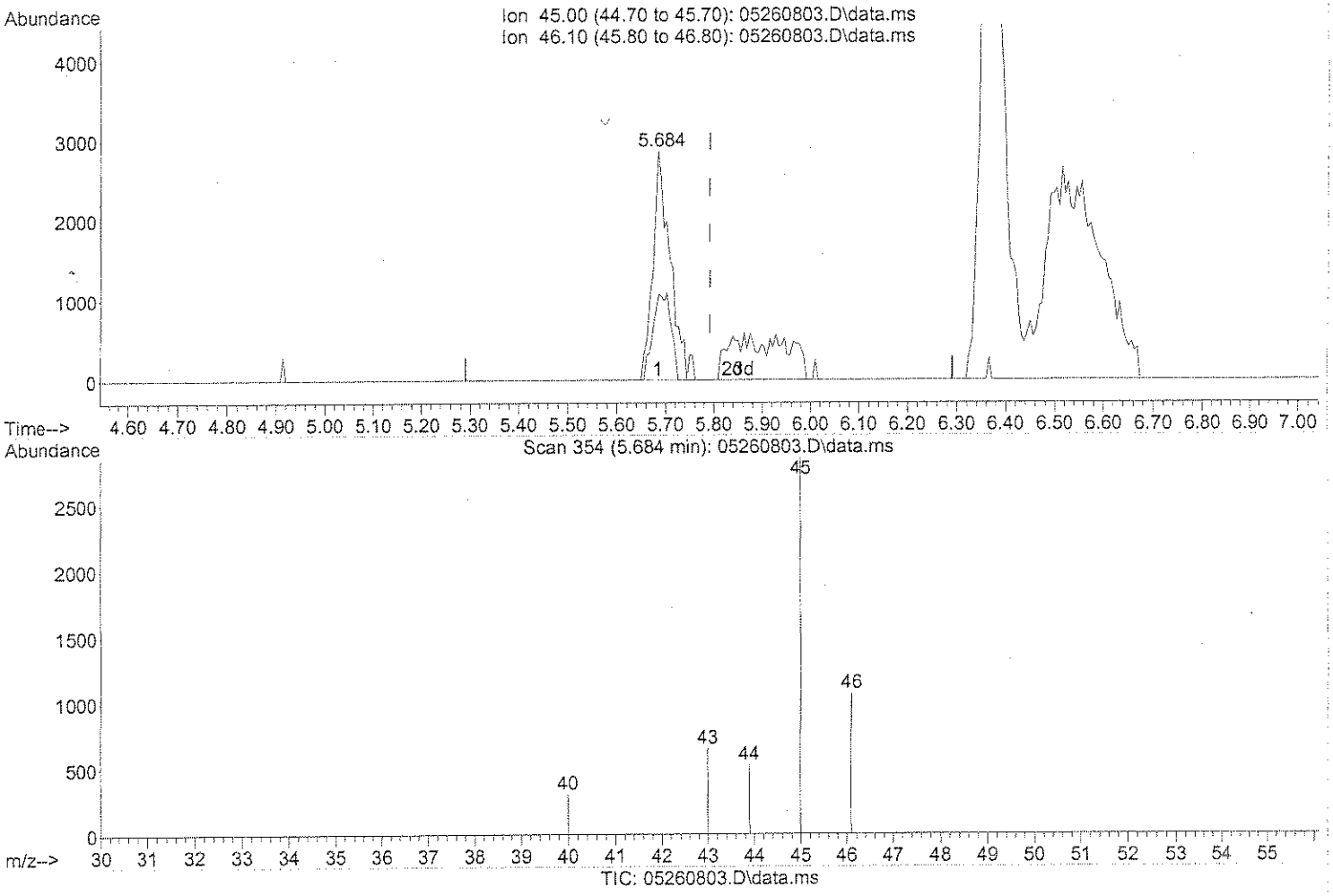
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.51	118	24814	0.607	ng		99
81) 2-Ethyltoluene	19.56	105	54713	0.587	ng		91
82) 1,2,4-Trimethylbenzene	19.83	105	50550	0.649	ng		90
83) n-Decane	19.93	57	33626	0.545	ng		79
84) Benzyl Chloride	19.99	91	35007	0.539	ng		89
85) 1,3-Dichlorobenzene	20.02	146	30633	0.678	ng		100
86) 1,4-Dichlorobenzene	20.10	146	30946	0.717	ng		98
87) sec-Butylbenzene	20.15	105	64132	0.632	ng		95
88) p-Isopropyltoluene	20.34	119	62212	0.722	ng		94
89) 1,2,3-Trimethylbenzene	20.34	105	48252	0.636	ng		88
90) 1,2-Dichlorobenzene	20.52	146	29763	0.710	ng		100
91) d-Limonene	20.51	68	14951	0.532	ng		92
92) 1,2-Dibromo-3-Chloropr...	21.03	157	8248	0.625	ng		89
93) n-Undecane	21.43	57	34558	0.532	ng		79
94) 1,2,4-Trichlorobenzene	22.55	184	5220	0.716	ng	#	88
95) Naphthalene	22.69	128	62628	0.568	ng		98
96) n-Dodecane	22.66	57	33735	0.533	ng		77
97) Hexachloro-1,3-butadiene	23.11	225	8918	0.818	ng		93

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

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.684min (-0.107) 0.25ng

response 7042

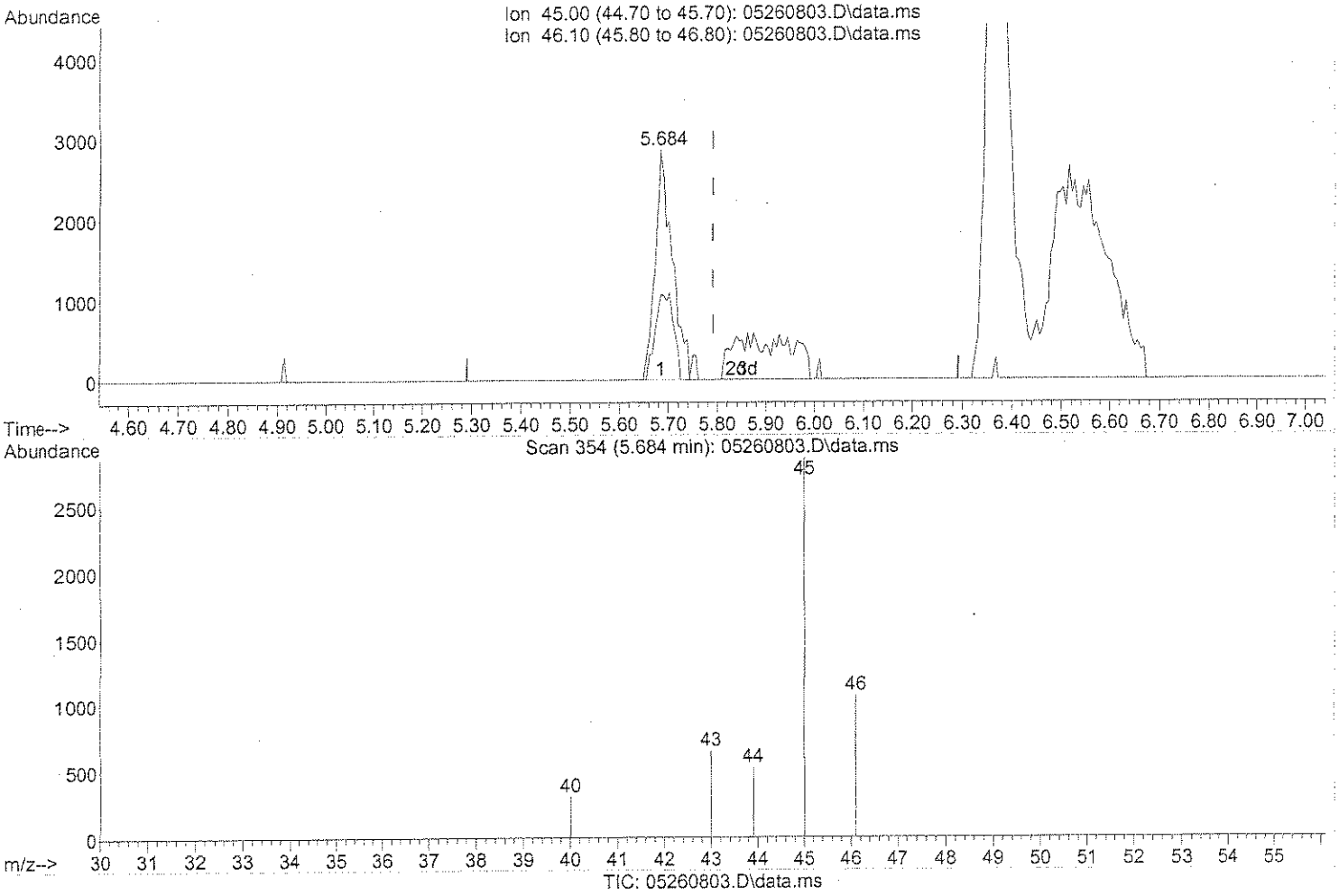
split peaks

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	40.64
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.684min (-0.107) 0.43ng m

response 11895

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	24.06
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks

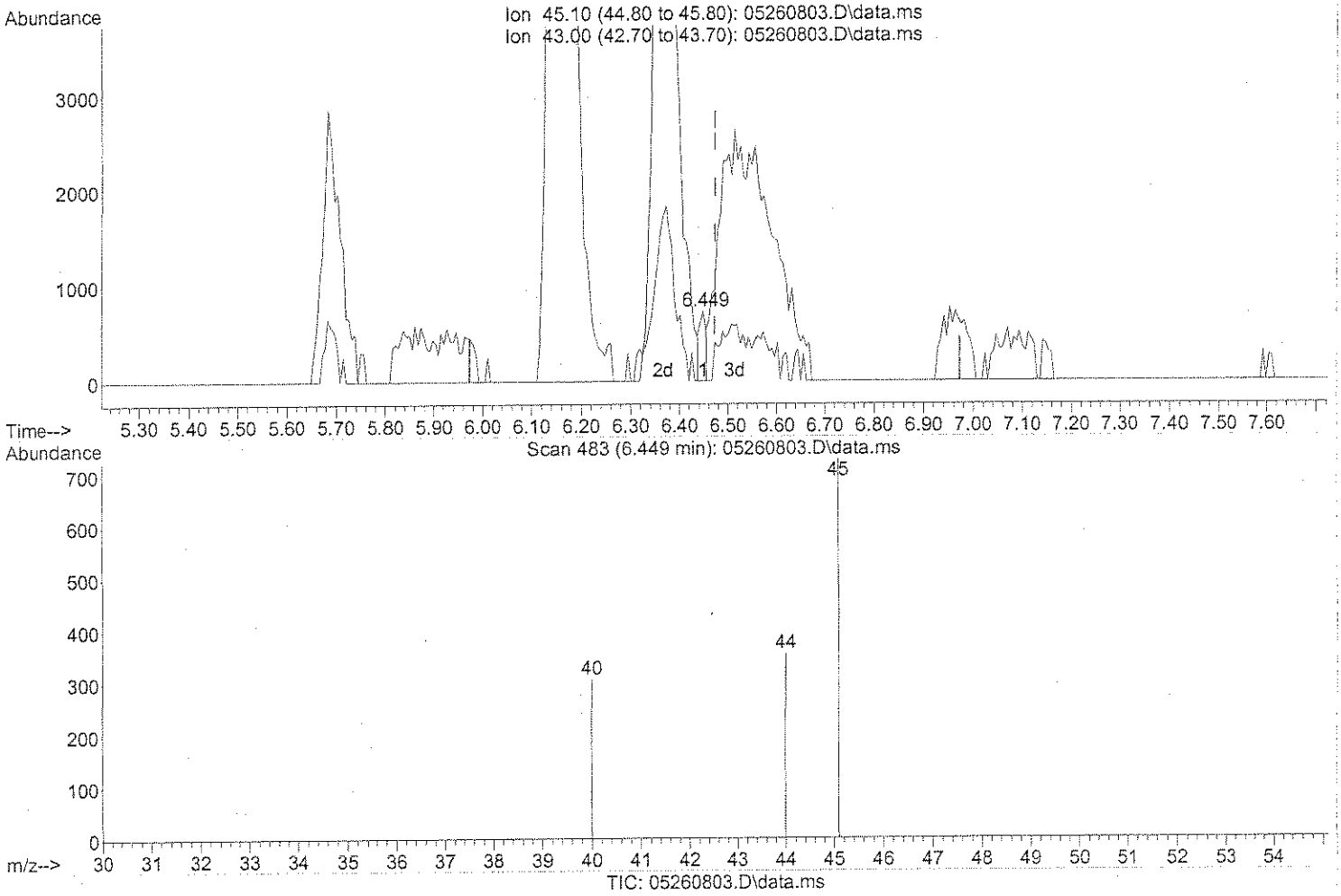
EA 5/29/08

EM 5/30/08

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.449min (-0.024) 0.01ng

response 664

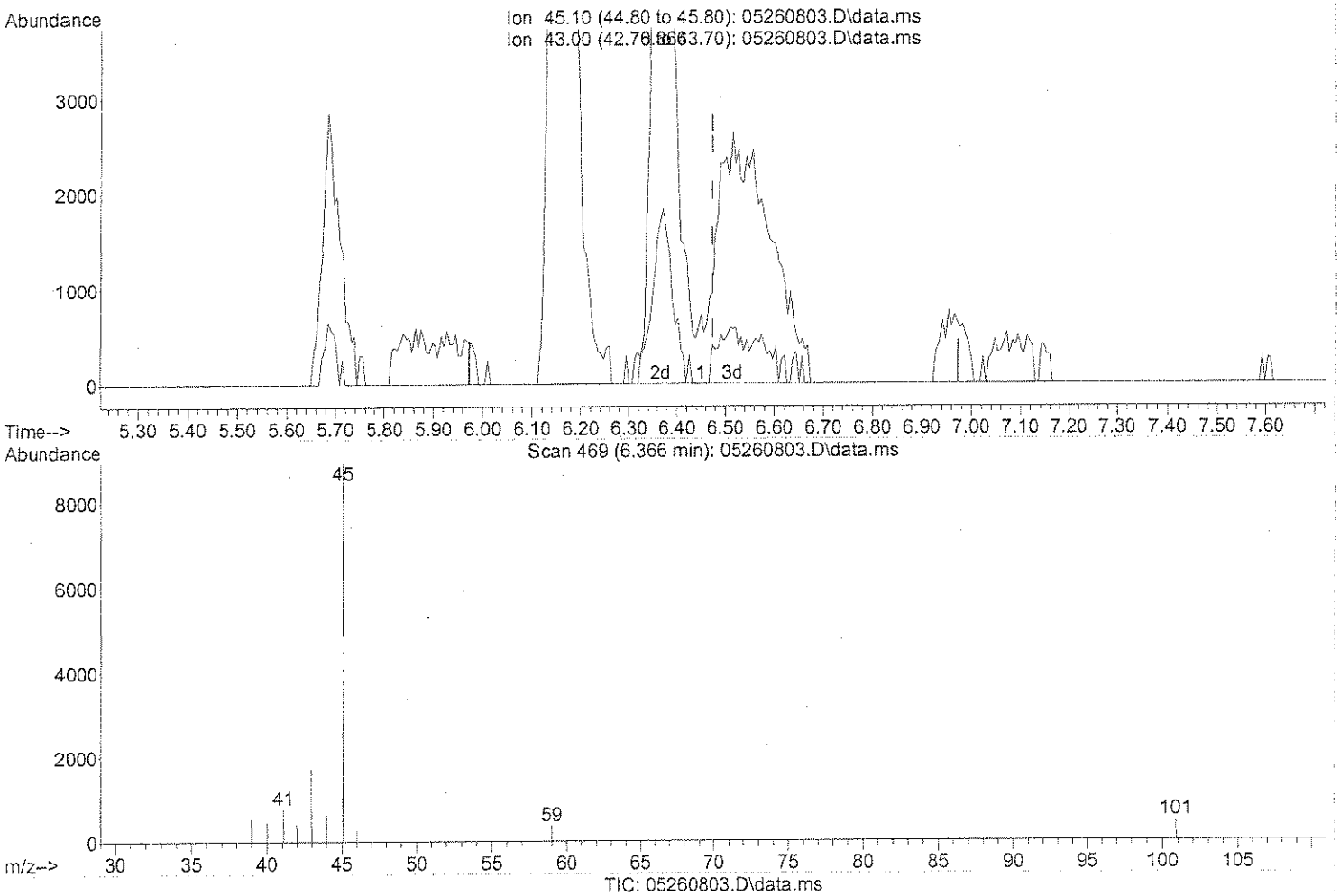
Ion	Exp%	Act%
45.10	100	100
43.00	19.40	0.00
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.366min (-0.107) 0.53ng m

response 45256

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	0.00
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks

[illegible] 5/29/08

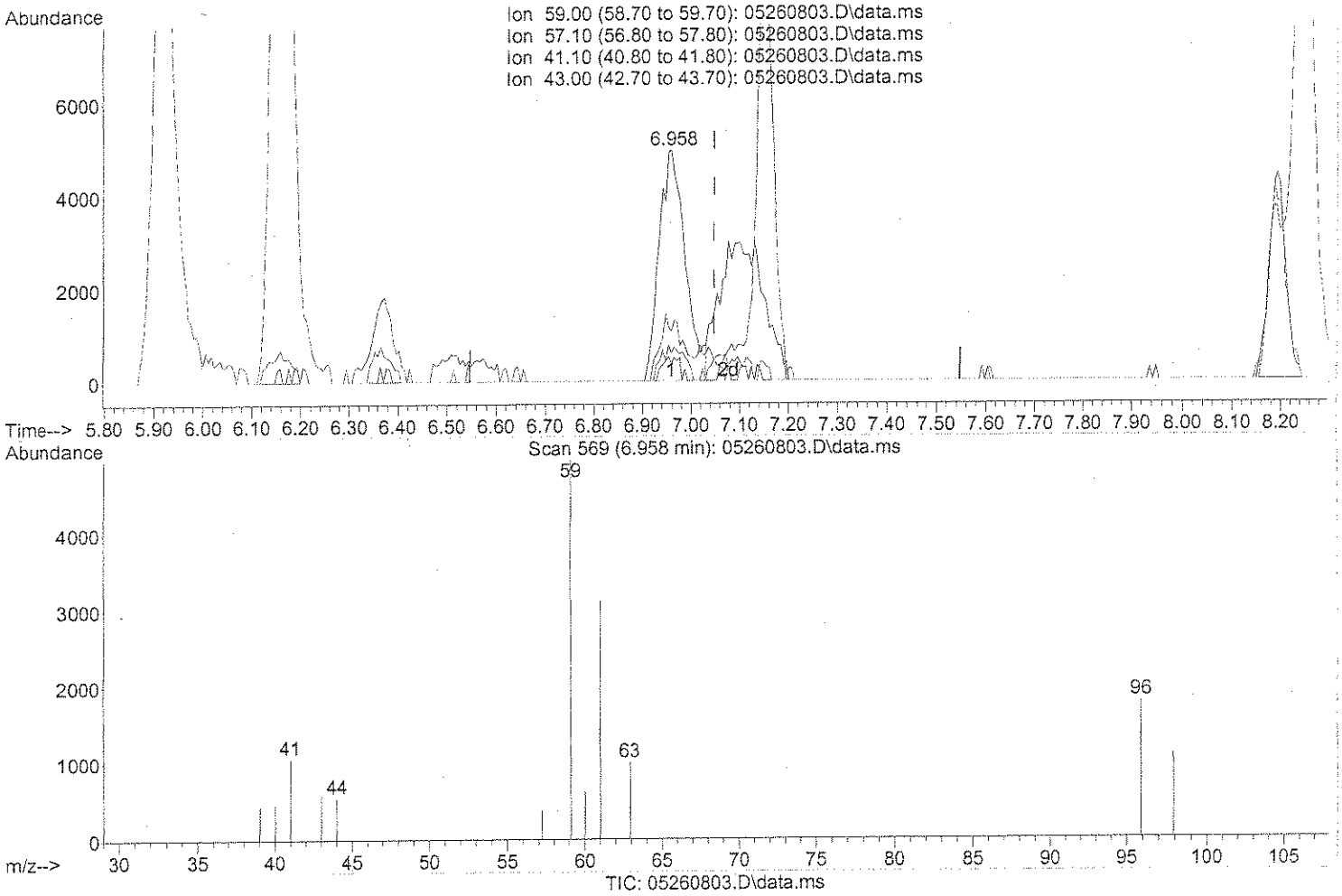
[illegible] 5/30/08

83

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

6.958min (-0.089) 0.24ng

response 18590

split peaks

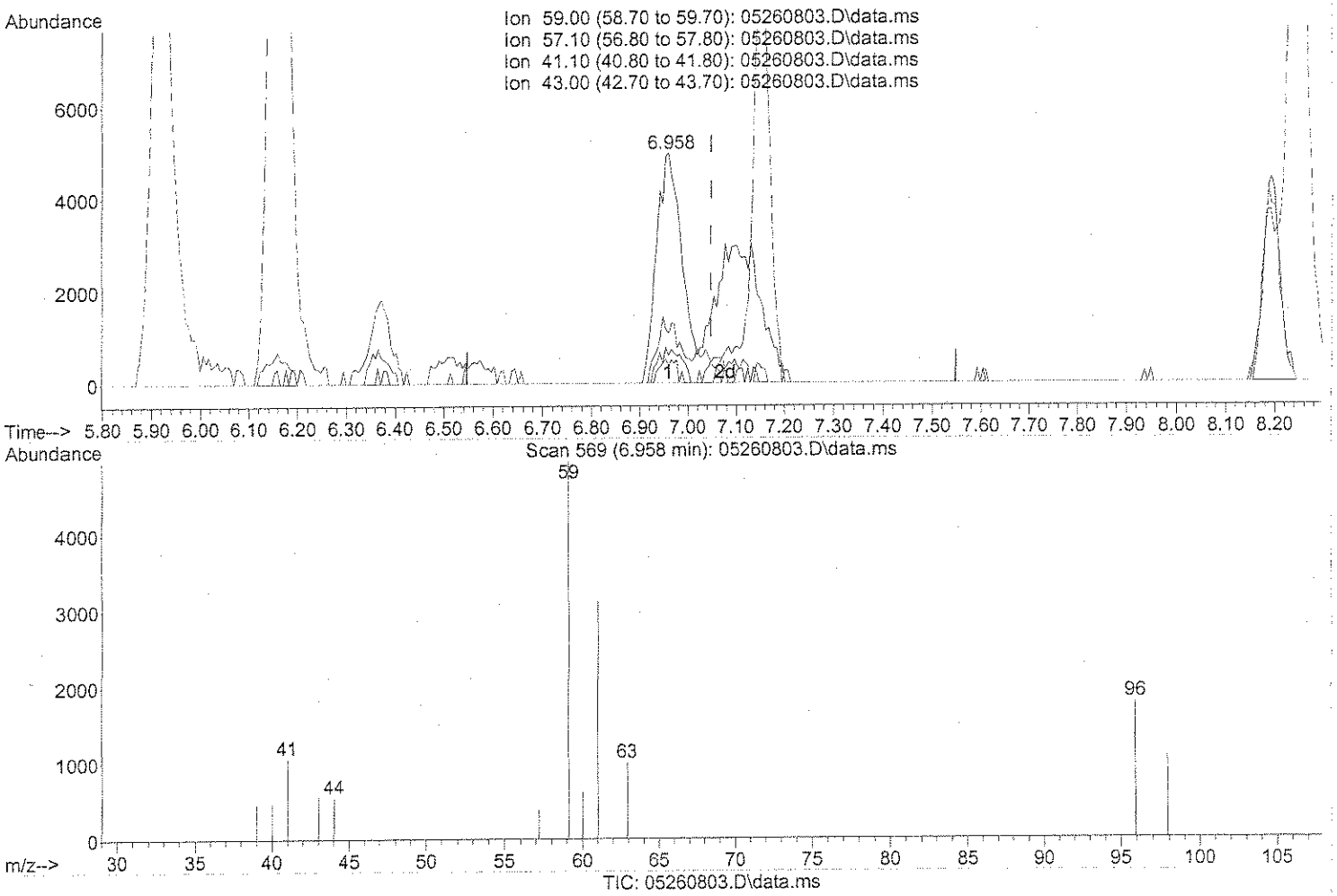
Ion	Exp%	Act%
59.00	100	100
57.10	10.00	6.88
41.10	21.90	24.65
43.00	17.20	13.47

84

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260803.D
Acq On : 26 May 2008 5:14 pm
Operator : WA
Sample : 0.5ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:16:14 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

6.958min (-0.089) 0.48ng m

response 37559

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	3.41
41.10	21.90	12.20
43.00	17.20	6.67

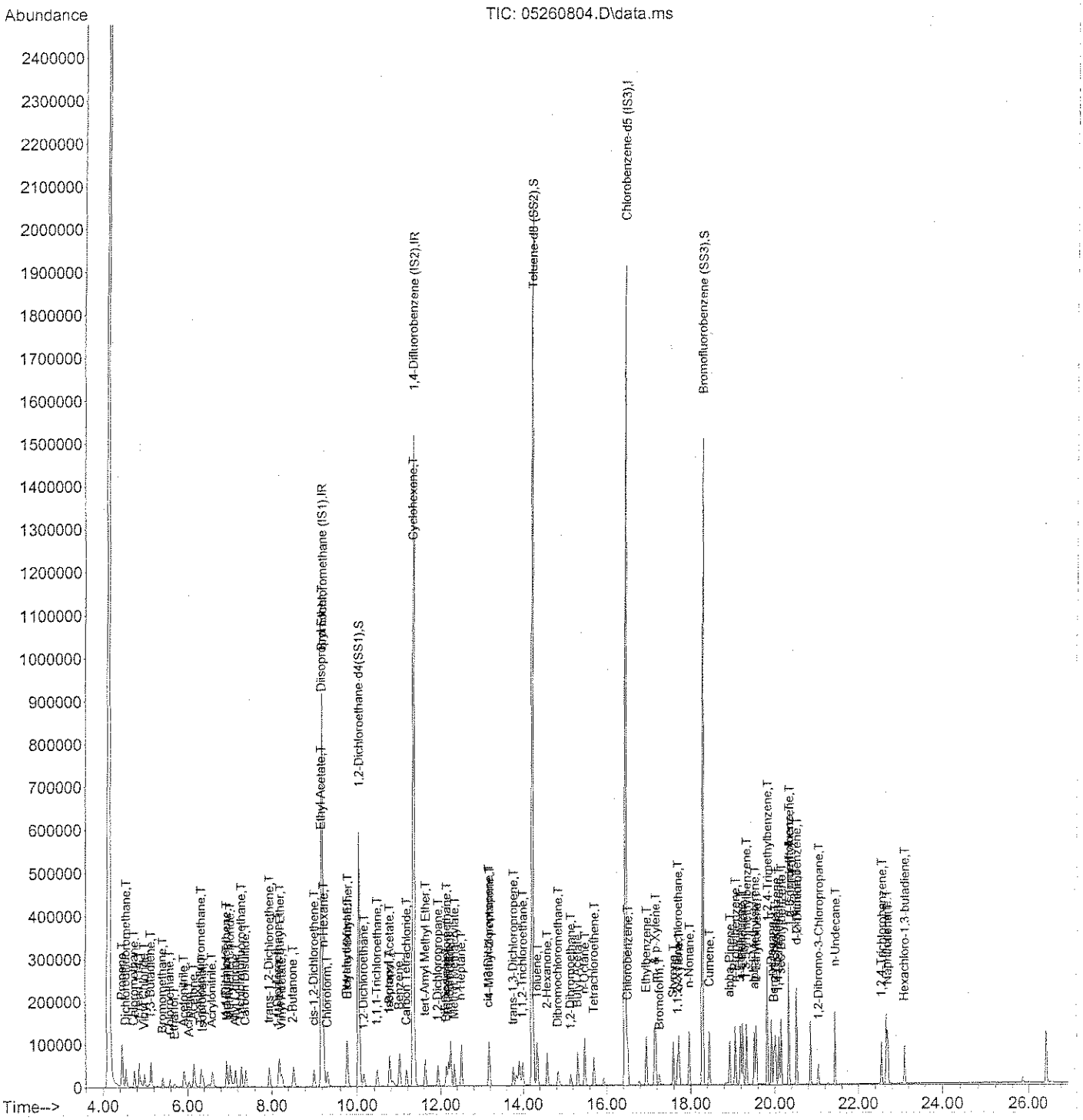
int. whole peaks
MA 5/29/08
EM 5/30/08

85

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	400525	25.000	ng		-0.06
37) 1,4-Difluorobenzene (IS2)	11.34	114	1674056	25.000	ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.45	82	647047	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.04	65	573073	20.290	ng		-0.05
Spiked Amount 25.000			Recovery = 81.16%				
57) Toluene-d8 (SS2)	14.22	98	1679917	26.368	ng		-0.02
Spiked Amount 25.000			Recovery = 105.48%				
73) Bromofluorobenzene (SS3)	18.28	174	543013	32.749	ng		-0.01
Spiked Amount 25.000			Recovery = 131.00%				
Target Compounds							Qvalue
2) Propene	4.45	42	33570	0.838	ng		93
3) Dichlorodifluoromethane	4.54	85	40962	0.865	ng		98
4) Chloromethane	4.74	50	56185	0.960	ng		98
5) Freon 114	4.85	135	24123	1.056	ng		94
6) Vinyl Chloride	4.98	62	32982	0.816	ng		93
7) 1,3-Butadiene	5.12	54	30538	0.809	ng		89
8) Bromomethane	5.41	94	18215	1.093	ng		99
9) Chloroethane	5.58	64	17881	0.968	ng		94
10) Ethanol	5.69	45	22061m	0.801	ng		
11) Acetonitrile	5.92	41	65956	0.922	ng		96
12) Acrolein	6.04	56	15251	0.778	ng		99
13) Acetone	6.16	58	32672	1.235	ng	#	70
14) Trichlorofluoromethane	6.32	101	38614	0.986	ng		100
15) Isopropanol	6.37	45	82028m	0.956	ng		
16) Acrylonitrile	6.60	53	39953	0.849	ng		98
17) 1,1-Dichloroethene	6.93	96	19791	1.032	ng		95
18) tert-Butanol	6.95	59	67512m	0.865	ng		
19) Methylene Chloride	7.02	84	20193	0.966	ng	#	43
20) Allyl Chloride	7.15	41	39791	0.908	ng		78
21) Trichlorotrifluoroethane	7.28	151	21202	1.288	ng	#	83
22) Carbon Disulfide	7.39	76	69199	0.877	ng		100
23) trans-1,2-Dichloroethene	7.94	61	37088	0.905	ng		94
24) 1,1-Dichloroethane	8.16	63	41421	0.886	ng		92
25) Methyl tert-Butyl Ether	8.20	73	58827	0.936	ng		79
26) Vinyl Acetate	8.25	86	3910	0.728	ng	#	19
27) 2-Butanone	8.52	72	13238	0.971	ng	#	6
28) cis-1,2-Dichloroethene	9.01	61	35017	0.926	ng		97
29) Diisopropyl Ether	9.18	87	15888	0.916	ng	#	25
30) Ethyl Acetate	9.17	61	10329	1.024	ng		86
31) n-Hexane	9.23	57	54152	0.950	ng		93

87

5/29/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.32	83	32822	1.099	ng		96
34) Tetrahydrofuran	9.77	72	12922	0.946	ng	#	44
35) Ethyl tert-Butyl Ether	9.78	87	23314	0.947	ng	#	73
36) 1,2-Dichloroethane	10.16	62	32391	0.907	ng		93
38) 1,1,1-Trichloroethane	10.47	97	34222	1.063	ng		96
39) Isopropyl Acetate	10.77	61	15493	0.905	ng	#	66
40) 1-Butanol	10.77	56	25783m	0.813	ng		
41) Benzene	11.01	78	80961	0.987	ng		99
42) Carbon Tetrachloride	11.17	117	33137	1.364	ng		97
43) Cyclohexane	11.33	84	32994	1.015	ng	#	1
44) tert-Amyl Methyl Ether	11.63	73	52381	0.906	ng		77
45) 1,2-Dichloropropane	11.93	63	24757	0.972	ng		98
46) Bromodichloromethane	12.14	83	26064	1.069	ng		93
47) Trichloroethene	12.19	130	27200	1.204	ng		100
48) 1,4-Dioxane	12.14	88	16333	1.059	ng	#	69
49) Isooctane	12.24	57	126387	0.927	ng		93
50) Methyl Methacrylate	12.34	100	8581	1.059	ng	#	73
51) n-Heptane	12.51	71	20216	0.968	ng	#	49
52) cis-1,3-Dichloropropene	13.16	75	29028	0.887	ng		100
53) 4-Methyl-2-pentanone	13.18	58	26898	0.901	ng		85
54) trans-1,3-Dichloropropene	13.77	75	28839	0.998	ng		95
55) 1,1,2-Trichloroethane	13.99	97	19925	1.000	ng		93
58) Toluene	14.35	91	88851	1.138	ng		100
59) 2-Hexanone	14.58	43	75563	0.915	ng		98
60) Dibromochloromethane	14.84	129	24973	1.226	ng		96
61) 1,2-Dibromoethane	15.14	107	24497	1.216	ng		100
62) Butyl Acetate	15.31	43	80934	0.961	ng		93
63) n-Octane	15.47	57	25736	1.030	ng		96
64) Tetrachloroethene	15.69	166	25493	1.321	ng		95
65) Chlorobenzene	16.50	112	63839	1.236	ng		99
66) Ethylbenzene	16.94	91	99869	1.122	ng		93
67) m- & p-Xylene	17.16	91	157509	2.700	ng		93
68) Bromoform	17.26	173	17692	1.606	ng		98
69) Styrene	17.59	104	63008	1.165	ng		95
70) o-Xylene	17.73	91	78792	1.267	ng		93
71) n-Nonane	17.97	43	67696	0.985	ng		91
72) 1,1,2,2-Tetrachloroethane	17.70	83	33312	1.215	ng		94
74) Cumene	18.45	105	102814	1.183	ng		96
75) alpha-Pinene	18.93	93	47668	1.123	ng		93
76) n-Propylbenzene	19.06	91	116259	1.067	ng		91
77) 3-Ethyltoluene	19.19	105	105590	1.122	ng		95
78) 4-Ethyltoluene	19.24	105	104962	1.225	ng		93
79) 1,3,5-Trimethylbenzene	19.33	105	88320	1.170	ng		88

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

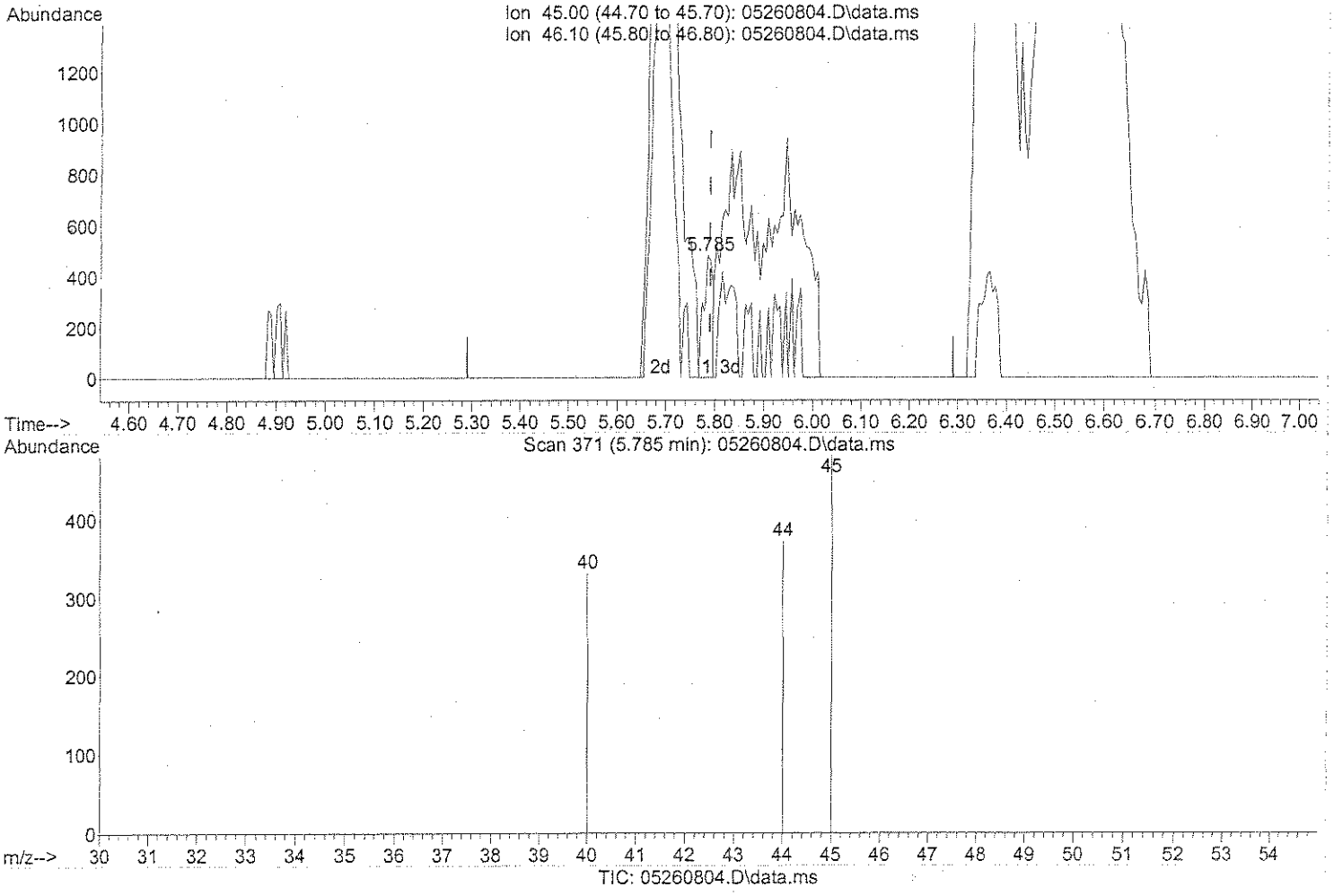
Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) alpha-Methylstyrene	19.52	118	47129	1.151	ng	98
81) 2-Ethyltoluene	19.56	105	99840	1.069	ng	92
82) 1,2,4-Trimethylbenzene	19.83	105	93176	1.195	ng	91
83) n-Decane	19.92	57	62502	1.011	ng	80
84) Benzyl Chloride	19.99	91	66336	1.021	ng	90
85) 1,3-Dichlorobenzene	20.02	146	56857	1.256	ng	97
86) 1,4-Dichlorobenzene	20.10	146	57131	1.322	ng	99
87) sec-Butylbenzene	20.16	105	117023	1.152	ng	95
88) p-Isopropyltoluene	20.34	119	112983	1.310	ng	94
89) 1,2,3-Trimethylbenzene	20.34	105	88366	1.164	ng	86
90) 1,2-Dichlorobenzene	20.52	146	52899	1.260	ng	99
91) d-Limonene	20.51	68	27139	0.965	ng	85
92) 1,2-Dibromo-3-Chloropr...	21.04	157	15605	1.180	ng	86
93) n-Undecane	21.44	57	65532	1.008	ng	79
94) 1,2,4-Trichlorobenzene	22.55	184	9621	1.318	ng	89
95) Naphthalene	22.69	128	114826	1.041	ng	100
96) n-Dodecane	22.66	57	62441	0.984	ng	77
97) Hexachloro-1,3-butadiene	23.11	225	16567	1.518	ng	100

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:19:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.785min (-0.006) 0.02ng

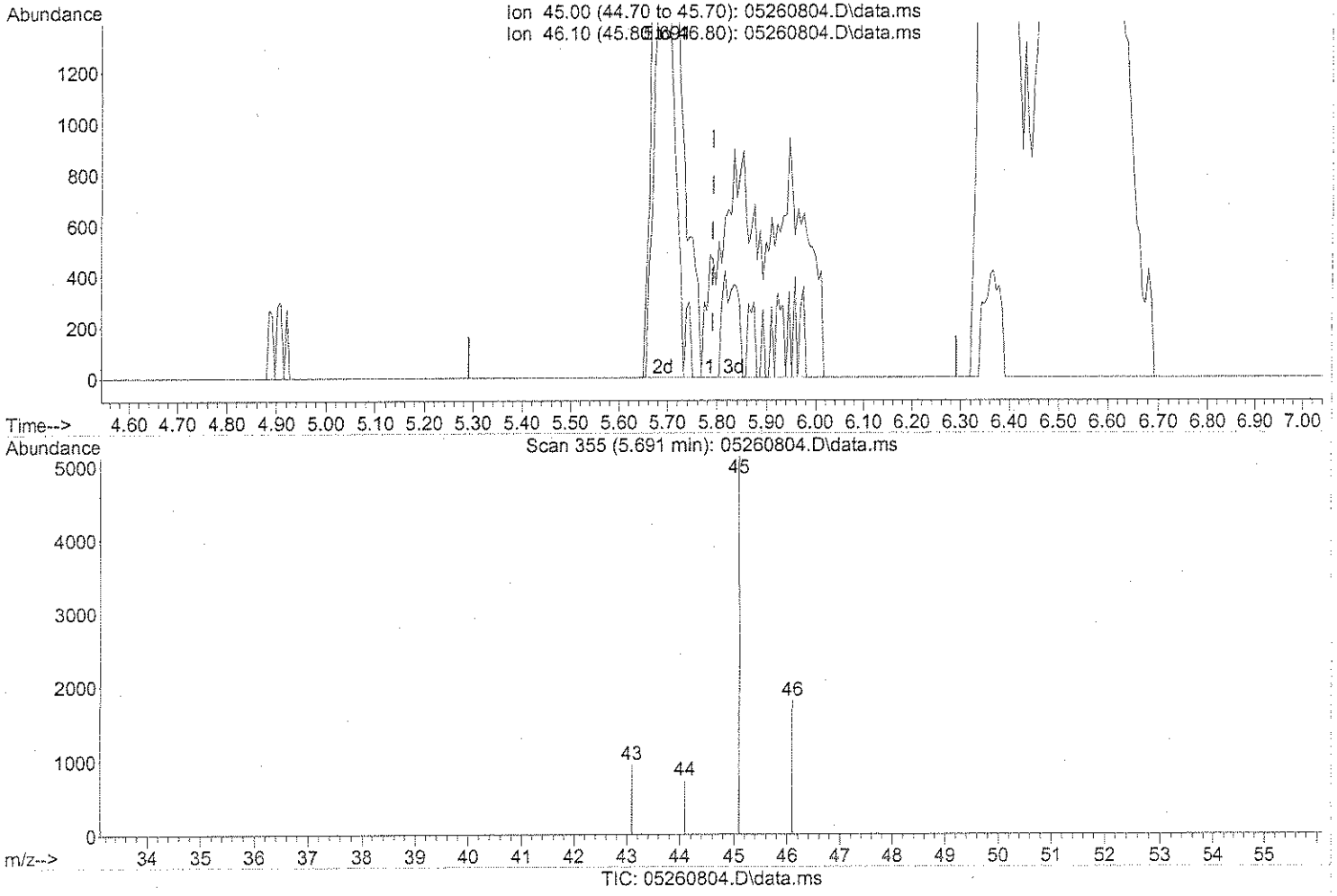
response 661

split peaks

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:19:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.691min (-0.101) 0.80ng m

response 22061

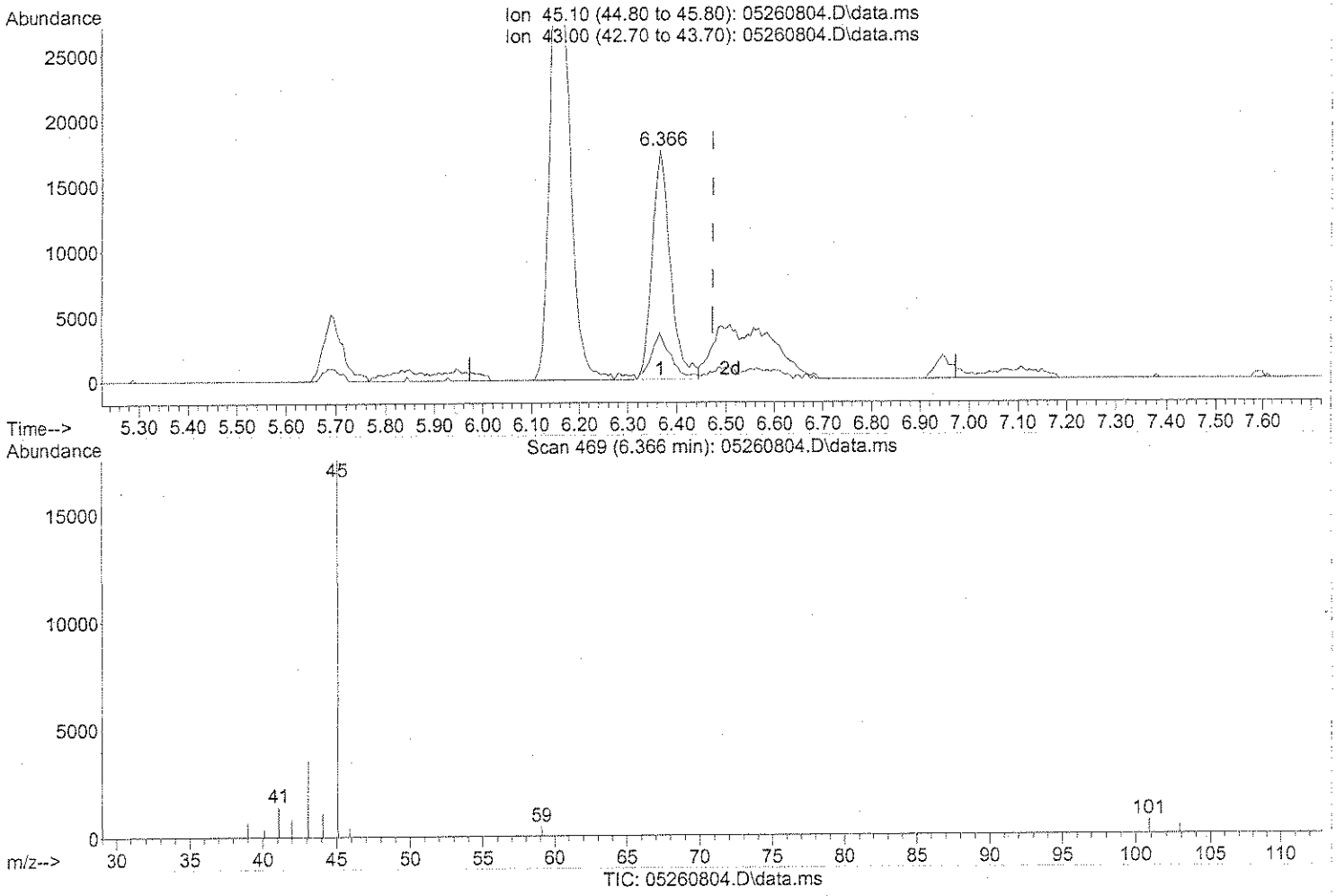
Ion	Exp%	Act%
45.00	100	100
46.10	37.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks
DH 5/29/08
EM 5/30/08

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:19:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.366min (-0.107) 0.54ng

response 45987

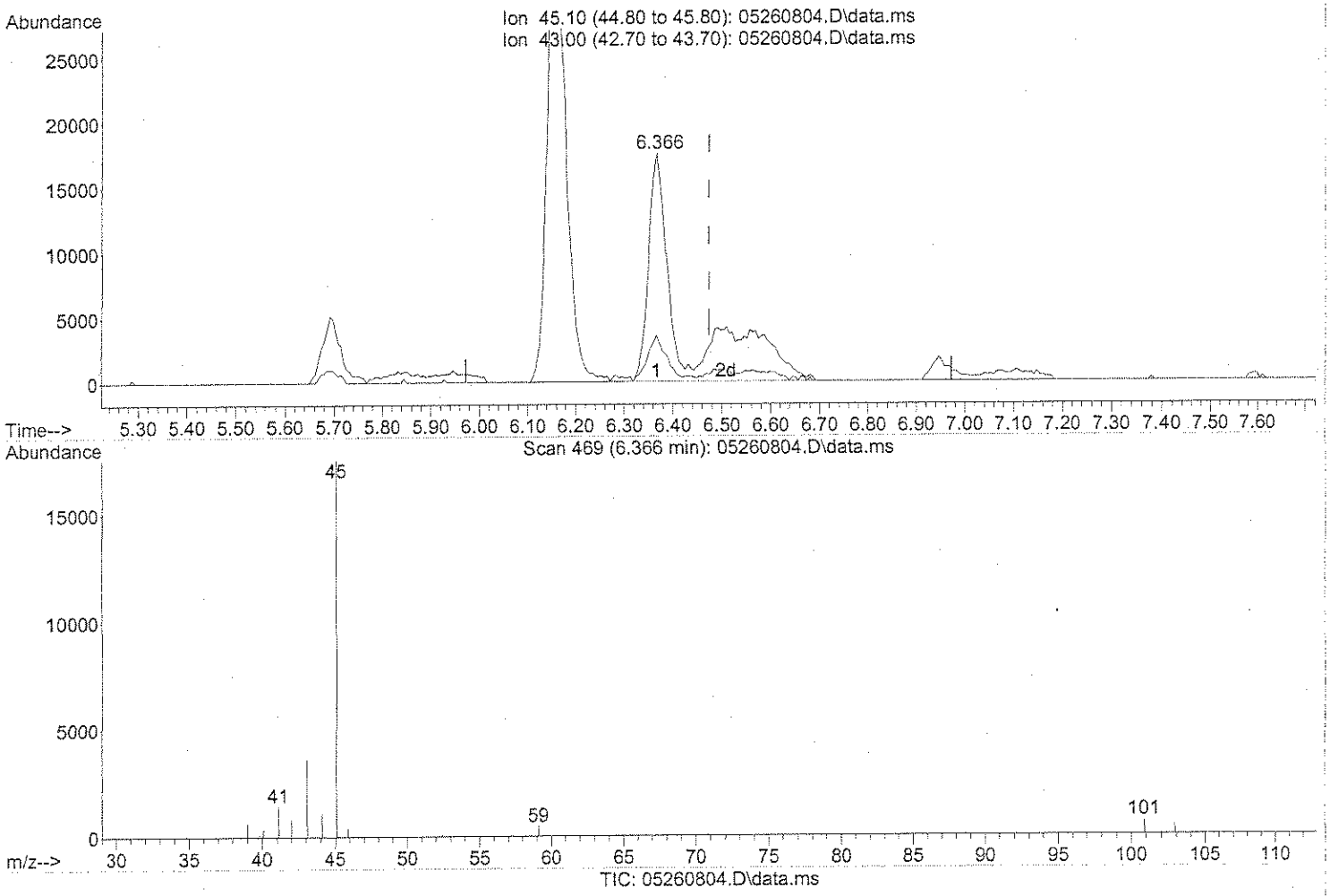
Ion	Exp%	Act%
45.10	100	100
43.00	19.40	22.11
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.366min (-0.107) 0.96ng m

response 82028

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	12.39
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks (reprint)

[illegible] 5/30/08

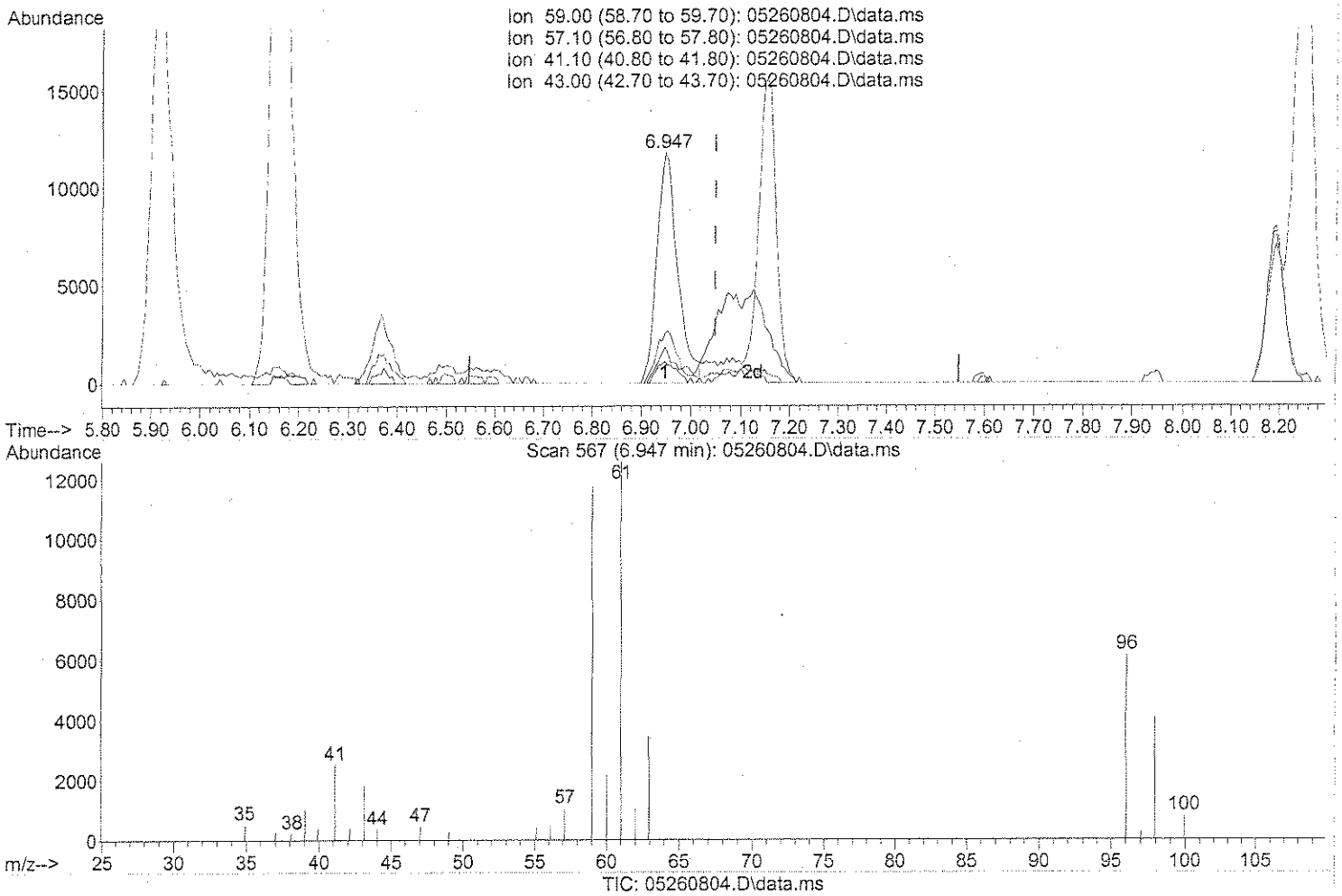
[illegible] 5/30/08

93

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:19:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

6.947min (-0.101) 0.44ng

response 34580

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	8.89
41.10	21.90	23.90
43.00	17.20	15.49

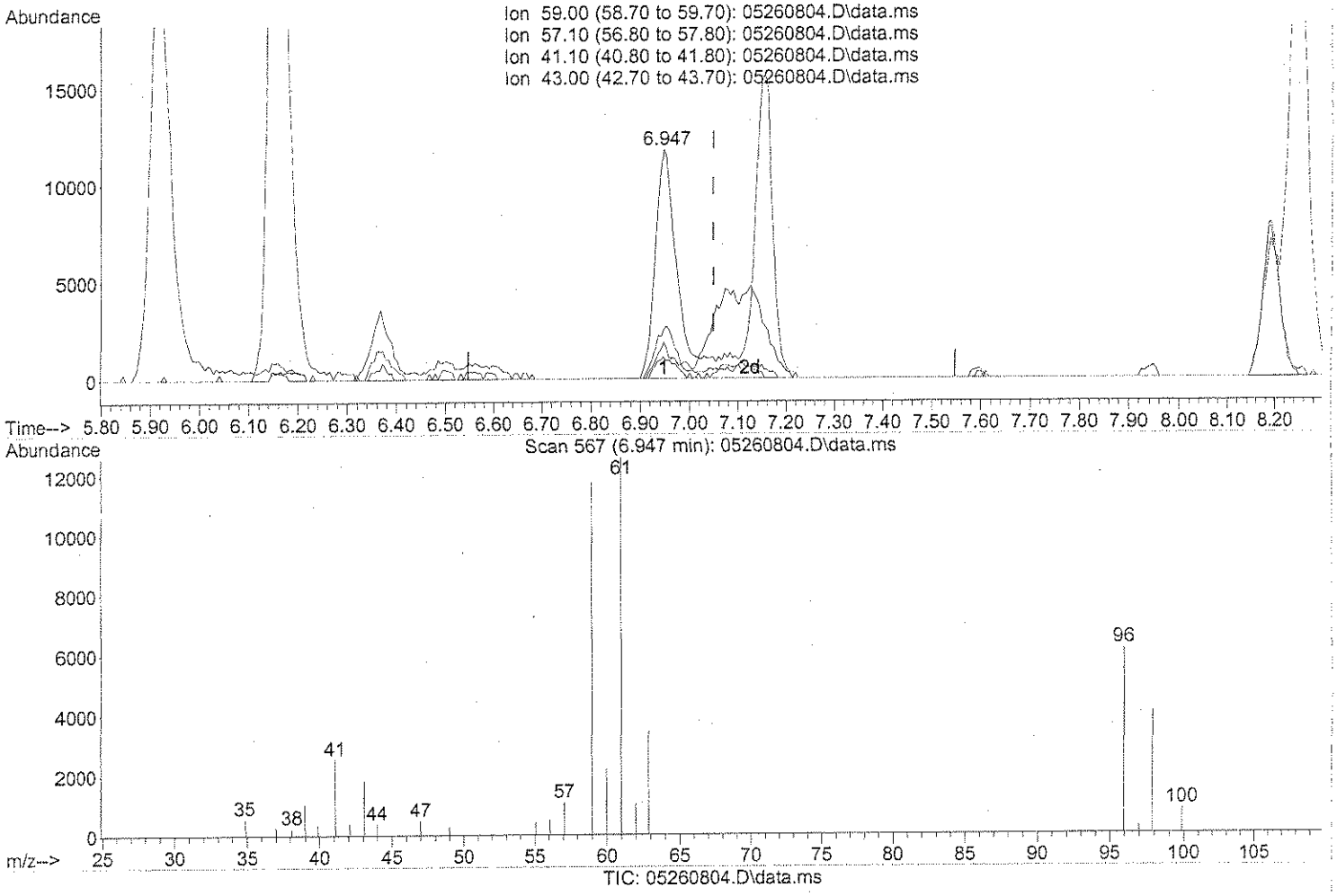
split int. whole peaks

5/29/08

5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



TIC: 05260804.D\data.ms

(18) tert-Butanol (T)

6.947min (-0.101) 0.87ng m

response 67512

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	4.55
41.10	21.90	12.24
43.00	17.20	7.93

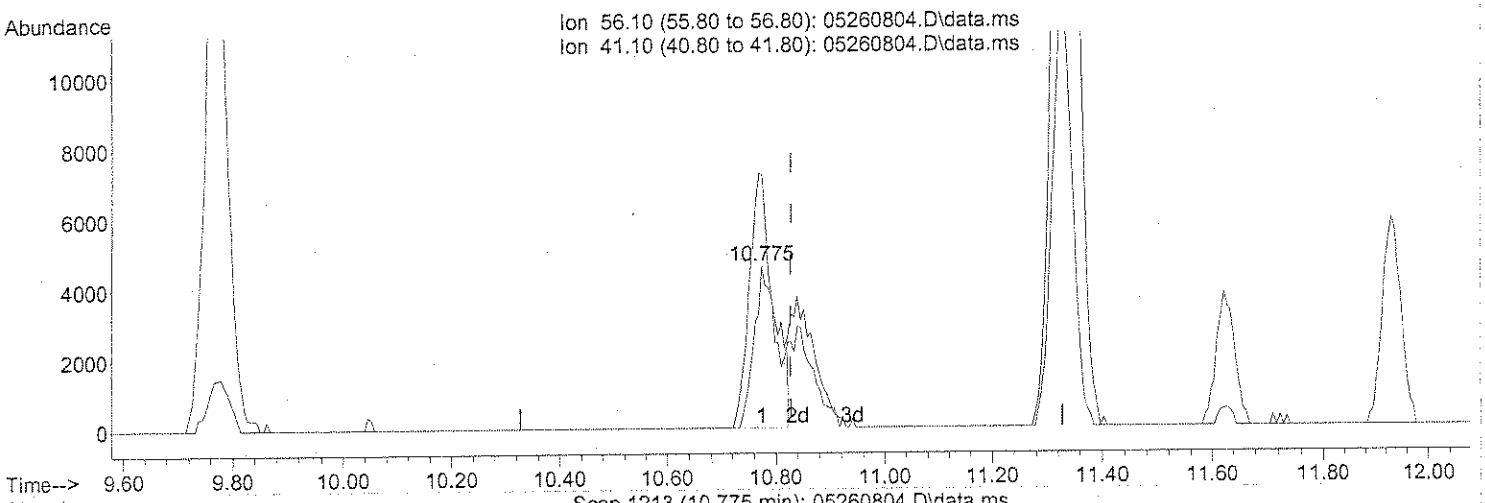
int. whole peaks

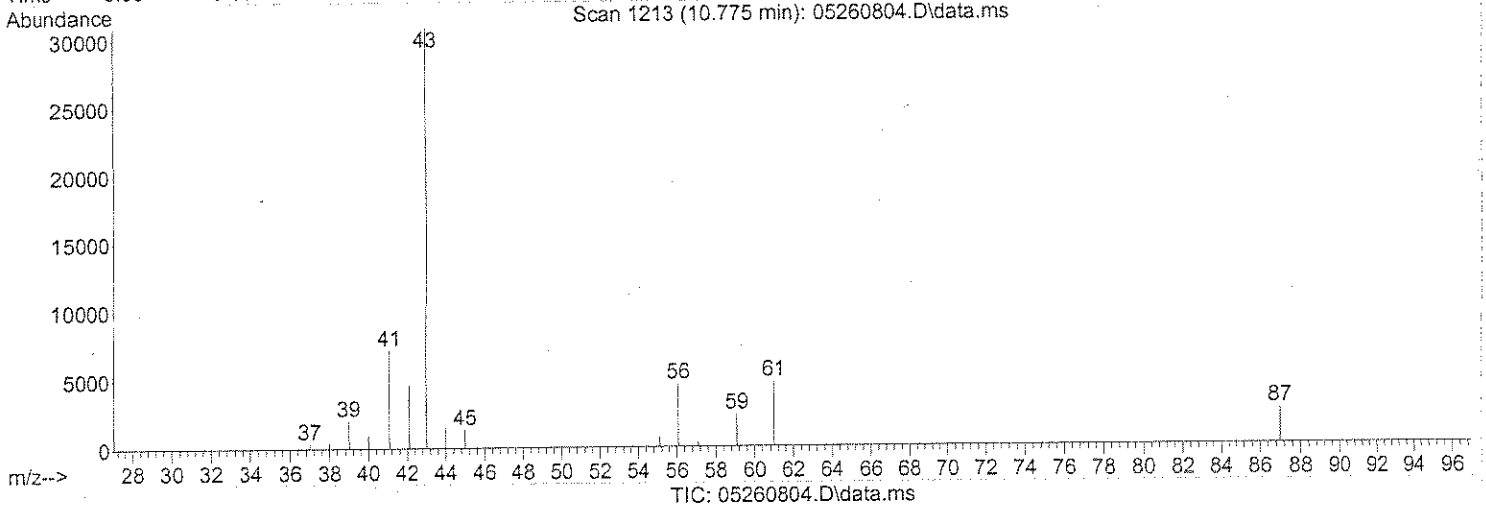
KM 5/29/08

Sum 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:19:52 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration





TIC: 05260804.D\data.ms

(40) 1-Butanol (T)

10.775min (-0.053) 0.46ng

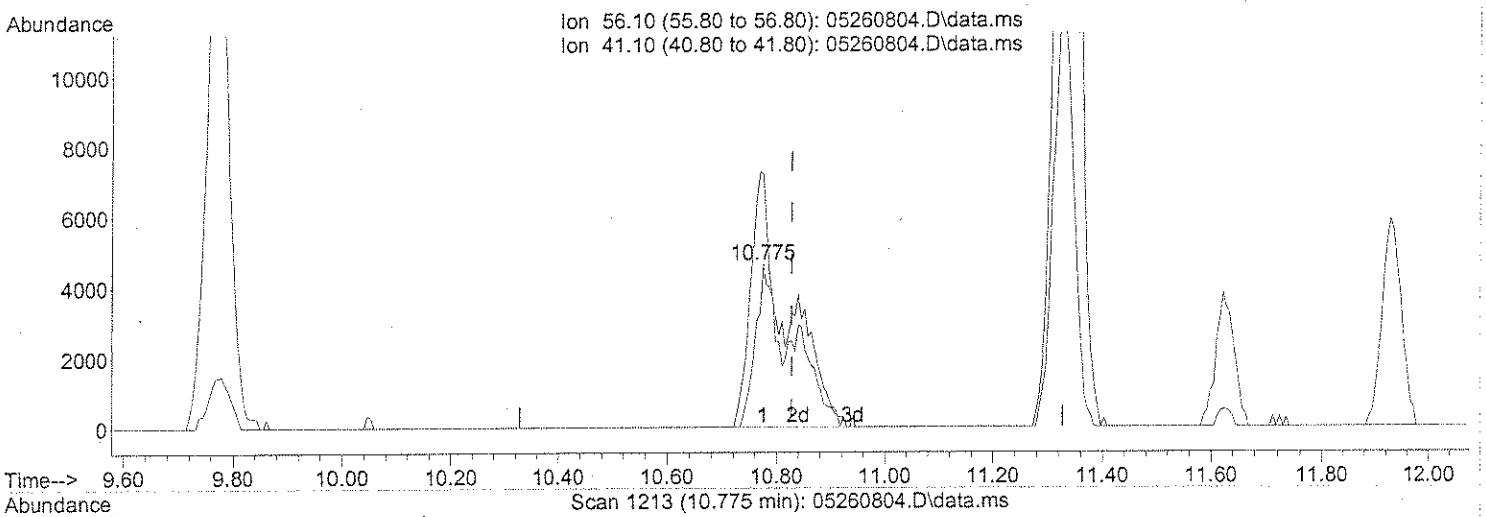
response 14478

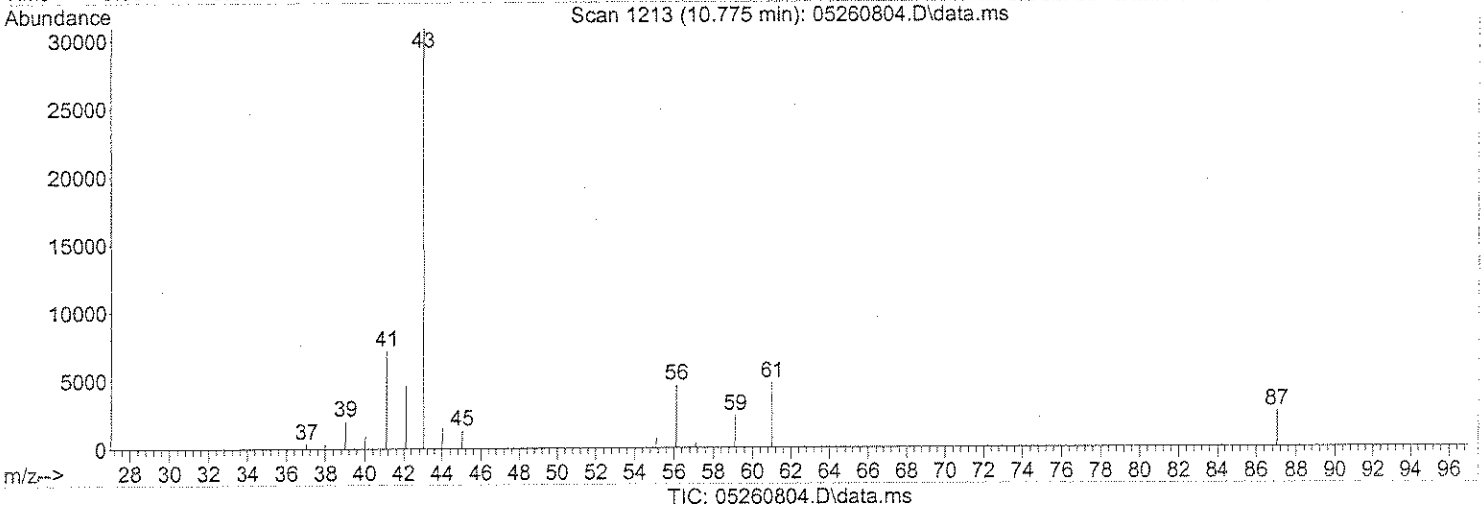
Ion	Exp%	Act%
56.10	100	100
41.10	111.90	141.64#
0.00	0.00	0.00
0.00	0.00	0.00

~~int. whole~~ split peaks

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260804.D
Acq On : 26 May 2008 5:51 pm
Operator : WA
Sample : 1.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:21:24 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration





(40) 1-Butanol (T)

10.775min (-0.053) 0.81ng m

response 25783

Ion	Exp%	Act%
56.10	100	100
41.10	111.90	79.53#
0.00	0.00	0.00
0.00	0.00	0.00

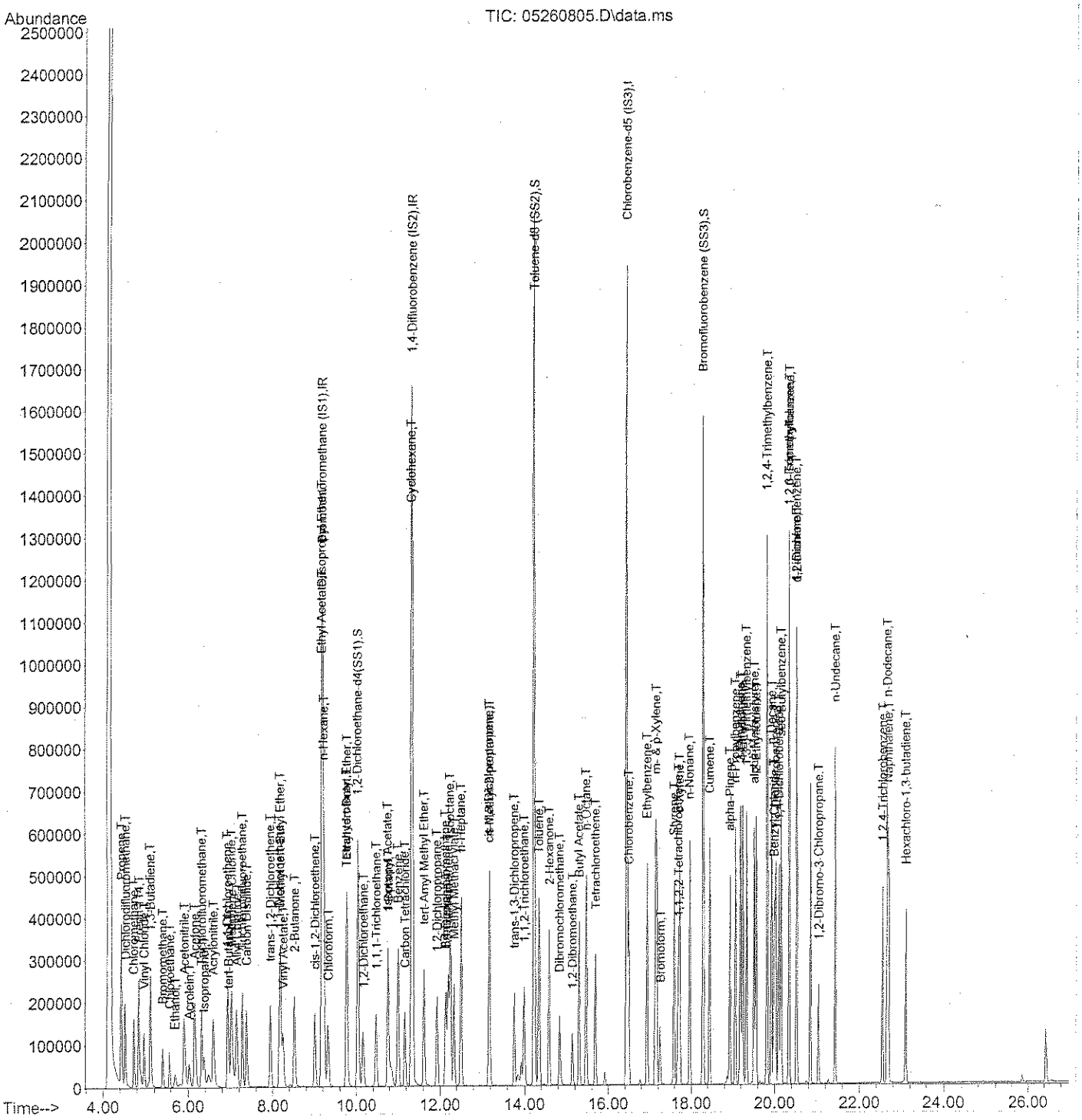
int. whole peaks

JDH 5/29/08

Em 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:23:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:23:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.20	130	398220	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	11.35	114	1672349	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	16.45	82	656314	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.05	65	562574	20.033	ng		-0.05
Spiked Amount 25.000			Recovery =	80.12%			
57) Toluene-d8 (SS2)	14.23	98	1682540	26.037	ng		-0.02
Spiked Amount 25.000			Recovery =	104.16%			
73) Bromofluorobenzene (SS3)	18.28	174	564532	33.566	ng		-0.01
Spiked Amount 25.000			Recovery =	134.28%			
Target Compounds							Qvalue
2) Propene	4.43	42	165872	4.166	ng		91
3) Dichlorodifluoromethane	4.53	85	191797	4.074	ng		99
4) Chloromethane	4.72	50	220643	3.790	ng		99
5) Freon 114	4.85	135	112151	4.940	ng		96
6) Vinyl Chloride	4.97	62	151399	3.767	ng		96
7) 1,3-Butadiene	5.12	54	140094	3.733	ng		87
8) Bromomethane	5.41	94	70976	4.286	ng		97
9) Chloroethane	5.58	64	78983	4.299	ng		95
10) Ethanol	5.70	45	101632m	3.712	ng		
11) Acetonitrile	5.92	41	297425	4.184	ng		99
12) Acrolein	6.03	56	67672	3.471	ng		99
13) Acetone	6.16	58	130773	4.970	ng	#	76
14) Trichlorofluoromethane	6.32	101	177575	4.560	ng		100
15) Isopropanol	6.38	45	291949m	3.422	ng		
16) Acrylonitrile	6.60	53	192737	4.119	ng		97
17) 1,1-Dichloroethene	6.93	96	90816	4.764	ng		94
18) tert-Butanol	6.96	59	308175m	3.972	ng		
19) Methylene Chloride	7.03	84	89954	4.328	ng	#	42
20) Allyl Chloride	7.15	41	201201	4.619	ng		79
21) Trichlorotrifluoroethane	7.28	151	96040	5.869	ng		87
22) Carbon Disulfide	7.38	76	313785	4.000	ng		100
23) trans-1,2-Dichloroethene	7.95	61	173593	4.259	ng		94
24) 1,1-Dichloroethane	8.17	63	189842	4.085	ng		94
25) Methyl tert-Butyl Ether	8.18	73	273332	4.375	ng		80
26) Vinyl Acetate	8.25	86	17592	3.296	ng	#	22
27) 2-Butanone	8.52	72	62378	4.602	ng	#	18
28) cis-1,2-Dichloroethene	9.01	61	163376	4.348	ng		94
29) Diisopropyl Ether	9.18	87	74992	4.347	ng	#	31
30) Ethyl Acetate	9.17	61	50216	5.008	ng		84
31) n-Hexane	9.23	57	247007	4.359	ng		93

99

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:23:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.33	83	149573	5.037	ng		96
34) Tetrahydrofuran	9.76	72	59479	4.378	ng	#	47
35) Ethyl tert-Butyl Ether	9.78	87	109581	4.478	ng	#	75
36) 1,2-Dichloroethane	10.18	62	147356	4.148	ng		96
38) 1,1,1-Trichloroethane	10.48	97	152020	4.727	ng		93
39) Isopropyl Acetate	10.76	61	71890	4.206	ng	#	64
40) 1-Butanol	10.77	56	124276	3.923	ng		99
41) Benzene	11.01	78	353647	4.314	ng		100
42) Carbon Tetrachloride	11.18	117	153229	6.311	ng		98
43) Cyclohexane	11.33	84	141740	4.365	ng	#	27
44) tert-Amyl Methyl Ether	11.63	73	242879	4.207	ng		76
45) 1,2-Dichloropropane	11.94	63	113744	4.472	ng		98
46) Bromodichloromethane	12.13	83	118652	4.870	ng		93
47) Trichloroethene	12.19	130	123906	5.488	ng		100
48) 1,4-Dioxane	12.14	88	77930	5.060	ng	#	71
49) Isooctane	12.24	57	571496	4.197	ng		93
50) Methyl Methacrylate	12.34	100	41411	5.115	ng	#	73
51) n-Heptane	12.50	71	96386	4.621	ng	#	53
52) cis-1,3-Dichloropropene	13.17	75	138213	4.227	ng		98
53) 4-Methyl-2-pentanone	13.18	58	130008	4.357	ng		86
54) trans-1,3-Dichloropropene	13.76	75	139516	4.831	ng		97
55) 1,1,2-Trichloroethane	13.99	97	92901	4.669	ng		92
58) Toluene	14.34	91	405922	5.127	ng		98
59) 2-Hexanone	14.58	43	359088	4.289	ng		100
60) Dibromochloromethane	14.83	129	122676	5.937	ng		100
61) 1,2-Dibromoethane	15.14	107	111644	5.465	ng		97
62) Butyl Acetate	15.31	43	383471	4.489	ng		93
63) n-Octane	15.47	57	121279	4.786	ng		95
64) Tetrachloroethene	15.69	166	121317	6.200	ng		100
65) Chlorobenzene	16.50	112	293518	5.602	ng		100
66) Ethylbenzene	16.94	91	457743	5.068	ng		92
67) m- & p-Xylene	17.16	91	719735	12.163	ng		91
68) Bromoform	17.26	173	86250	7.718	ng		99
69) Styrene	17.59	104	299387	5.459	ng		94
70) o-Xylene	17.73	91	368054	5.833	ng		93
71) n-Nonane	17.96	43	312495	4.484	ng		93
72) 1,1,2,2-Tetrachloroethane	17.70	83	154117	5.544	ng		93
74) Cumene	18.45	105	472913	5.365	ng		94
75) alpha-Pinene	18.93	93	229060	5.318	ng		93
76) n-Propylbenzene	19.06	91	536928	4.857	ng		92
77) 3-Ethyltoluene	19.19	105	479773	5.025	ng		94
78) 4-Ethyltoluene	19.24	105	489427	5.629	ng		92
79) 1,3,5-Trimethylbenzene	19.33	105	412688	5.391	ng		91

JDH 5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

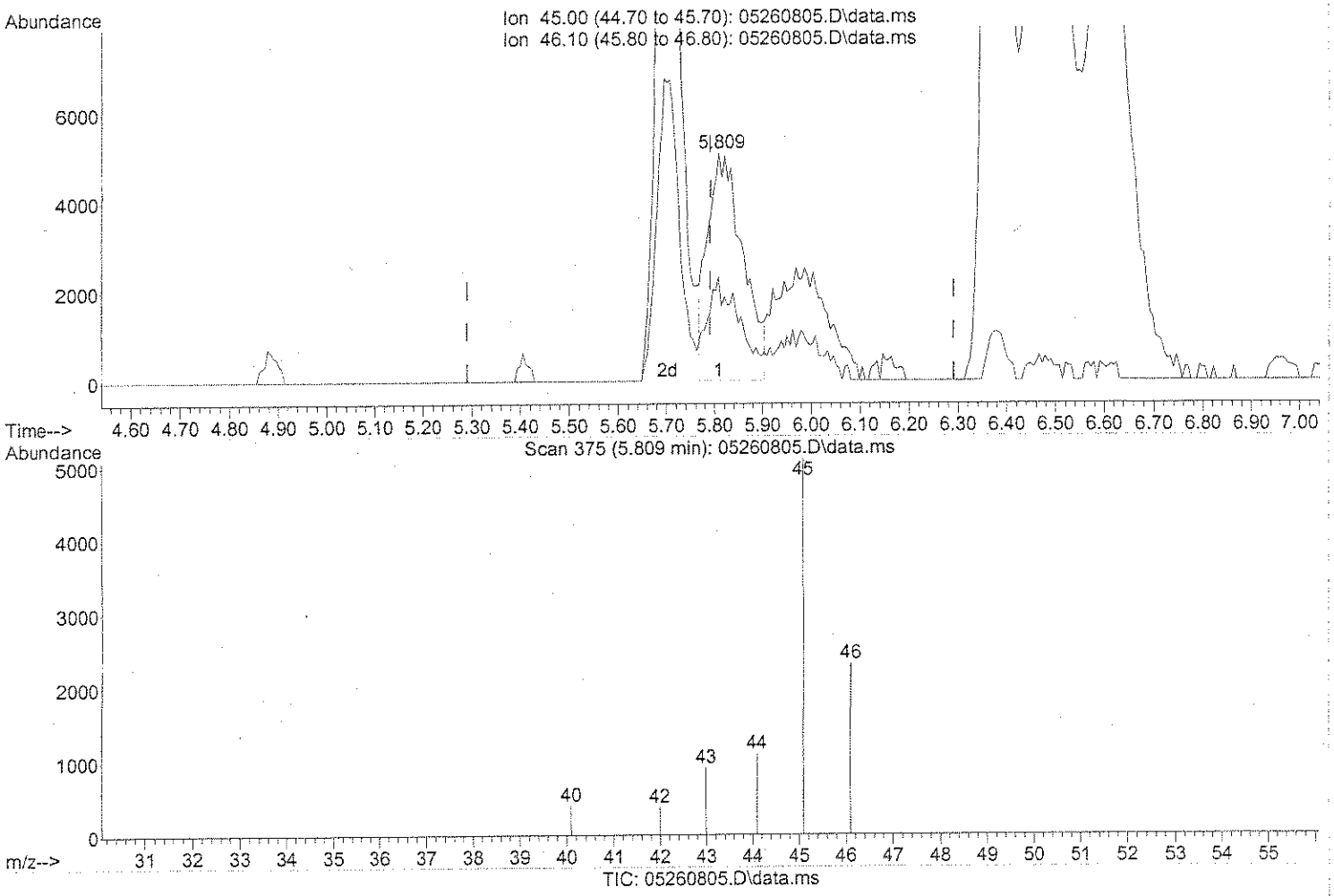
Quant Time: May 27 08:23:29 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.51	118	226617	5.457	ng		97
81) 2-Ethyltoluene	19.56	105	466308	4.923	ng		93
82) 1,2,4-Trimethylbenzene	19.83	105	423645	5.356	ng		91
83) n-Decane	19.93	57	292870	4.672	ng		81
84) Benzyl Chloride	19.99	91	324101	4.917	ng		89
85) 1,3-Dichlorobenzene	20.02	146	257435	5.608	ng		99
86) 1,4-Dichlorobenzene	20.10	146	259129	5.910	ng		99
87) sec-Butylbenzene	20.15	105	545118	5.290	ng		95
88) p-Isopropyltoluene	20.34	119	525742	6.008	ng		93
89) 1,2,3-Trimethylbenzene	20.34	105	410362	5.328	ng		87
90) 1,2-Dichlorobenzene	20.52	146	242720	5.701	ng		100
91) d-Limonene	20.52	68	133117	4.665	ng		87
92) 1,2-Dibromo-3-Chloropr...	21.04	157	76037	5.668	ng		83
93) n-Undecane	21.43	57	308882	4.685	ng		80
94) 1,2,4-Trichlorobenzene	22.55	184	44542	6.015	ng	#	89
95) Naphthalene	22.69	128	529936	4.735	ng		99
96) n-Dodecane	22.66	57	300809	4.676	ng		78
97) Hexachloro-1,3-butadiene	23.11	225	76210	6.883	ng		98

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.809min (+0.018) 0.95ng

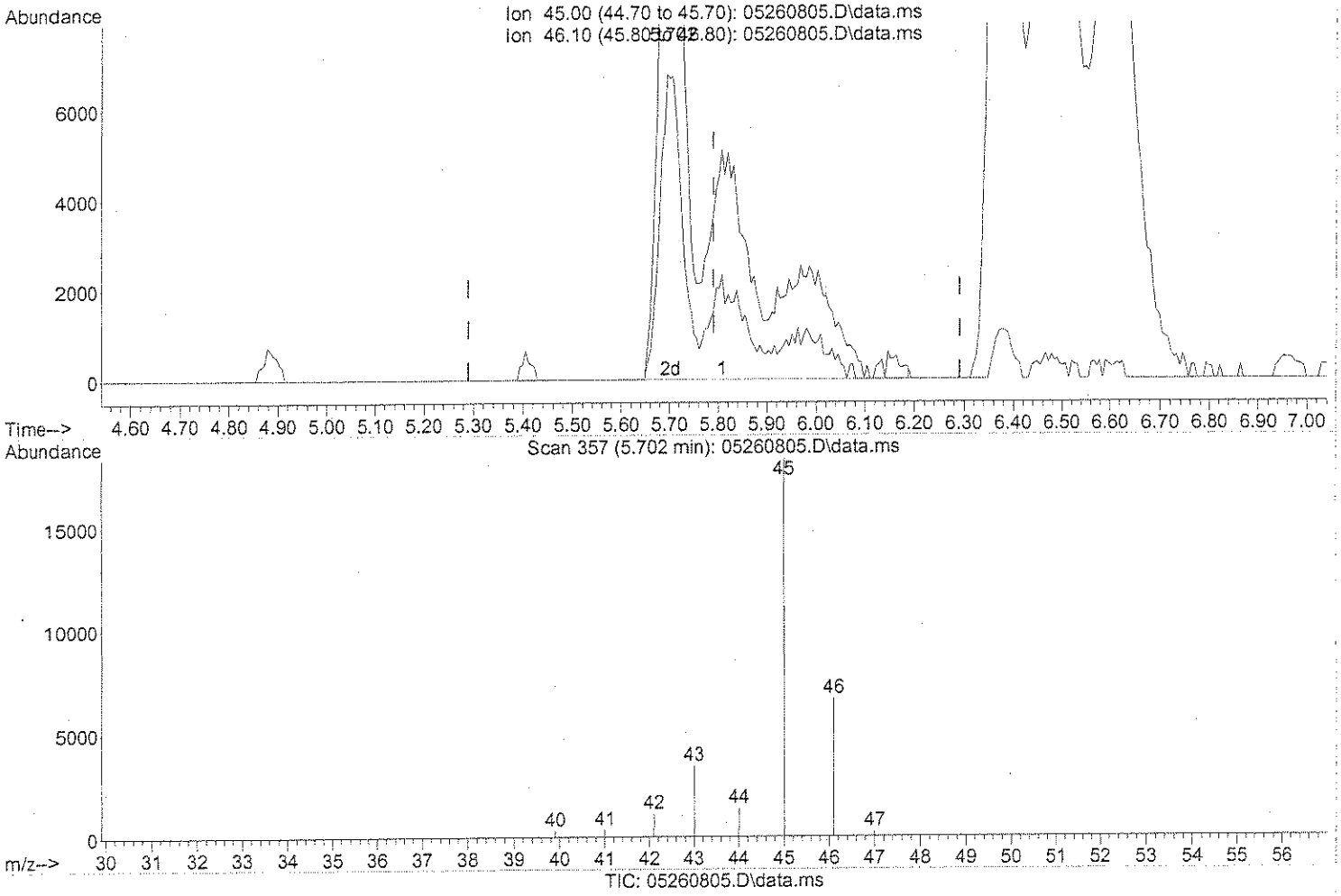
response 25973

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	46.34
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.702min (-0.089) 3.71ng m

response 101632

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	11.84#
0.00	0.00	0.00
0.00	0.00	0.00

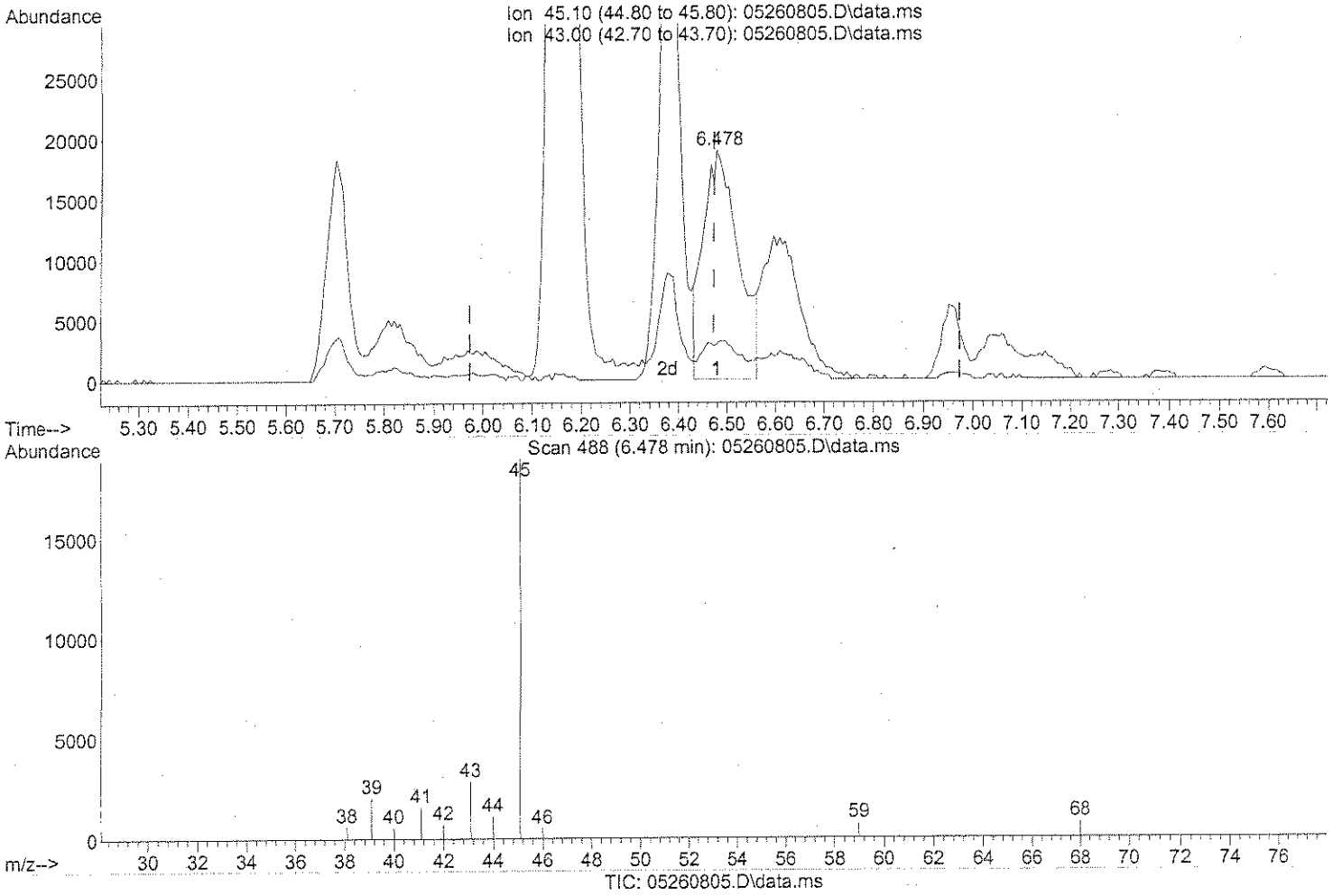
int. whole peaks

DA 5/29/08

Tom 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.478min (+0.005) 1.13ng

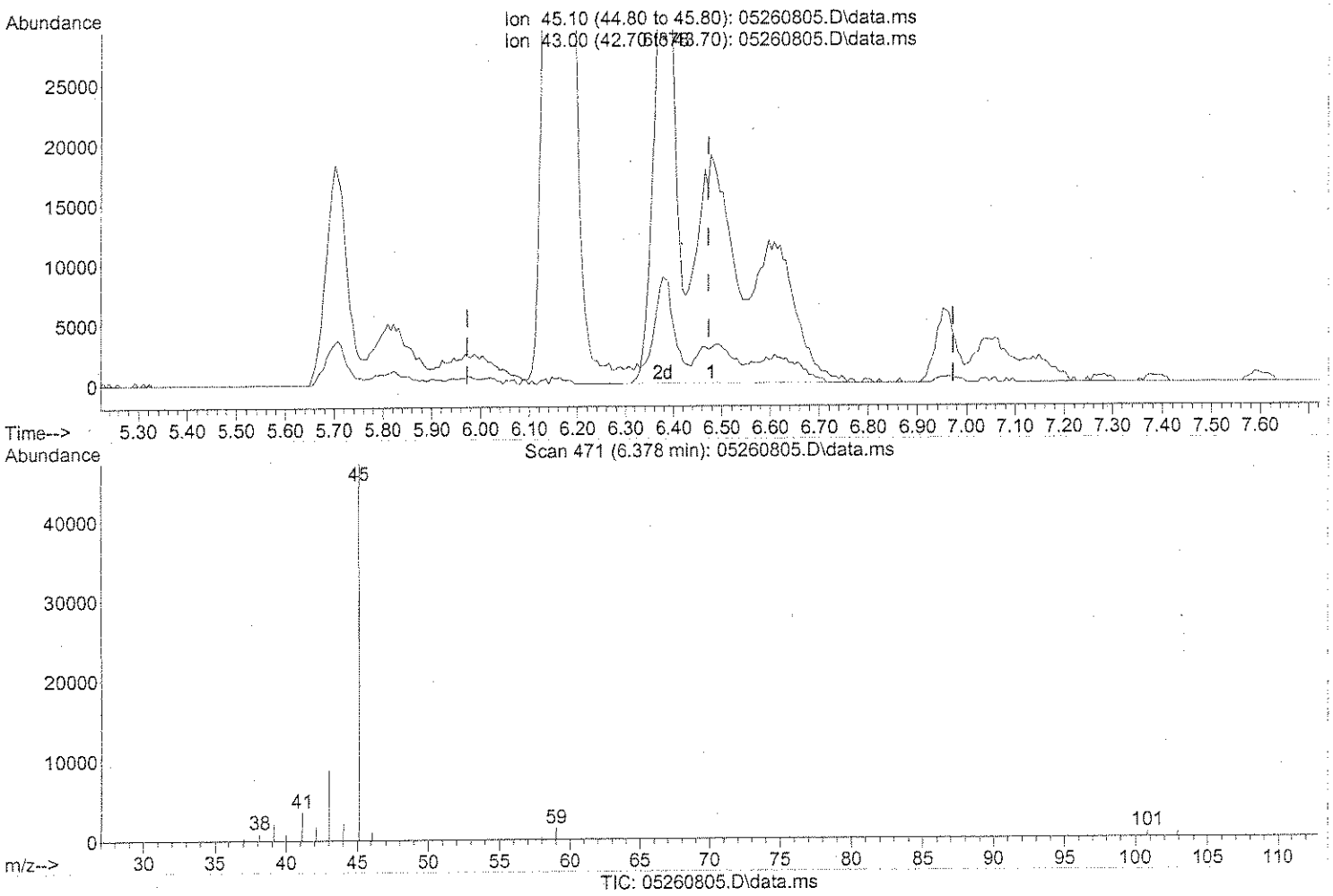
response 95977

split peaks

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	31.79
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.378min (-0.095) 3.42ng m

response 291949

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	10.45
0.00	0.00	0.00
0.00	0.00	0.00

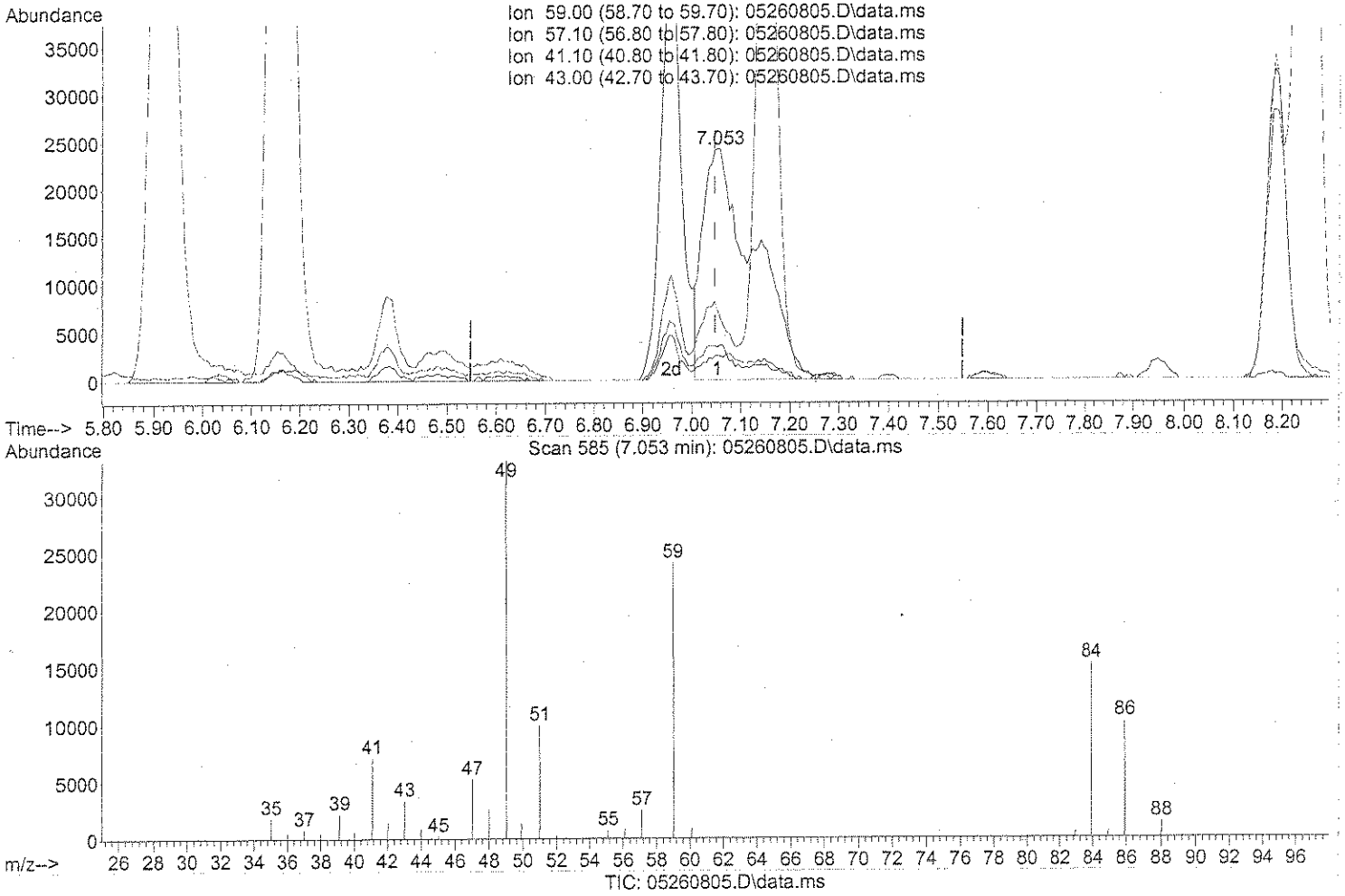
int. whole peaks

JM 5/29/08

EM 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



TIC: 05260805.D\data.ms

(18) tert-Butanol (T)

7.053min (+0.006) 2.25ng

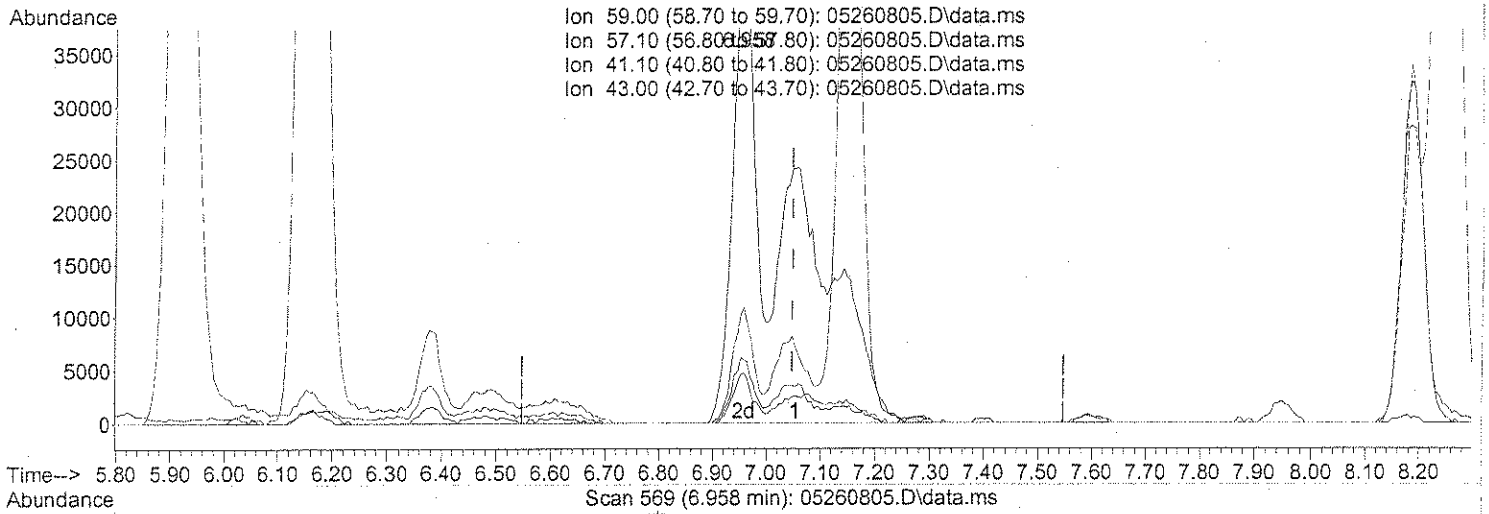
response 174925

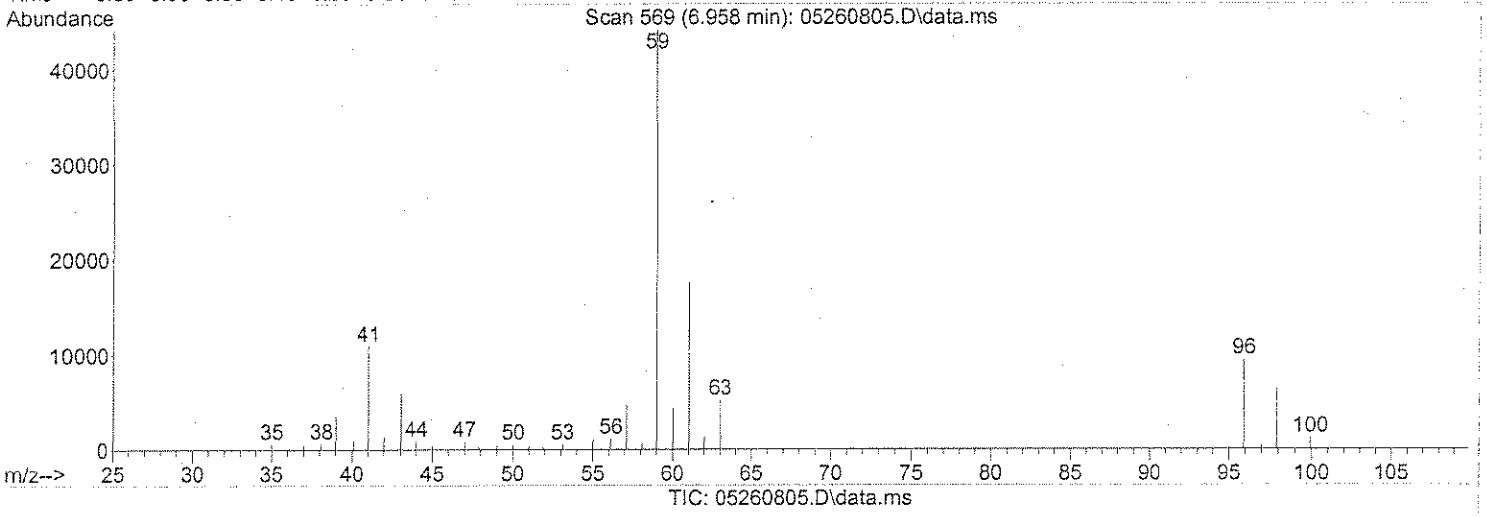
split peaks

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	0.00
41.10	21.90	18.92
43.00	17.20	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260805.D
Acq On : 26 May 2008 6:36 pm
Operator : WA
Sample : 5.0ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:22:31 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration





TIC: 05260805.D\data.ms

(18) tert-Butanol (T)

6.958min (-0.089) 3.97ng m

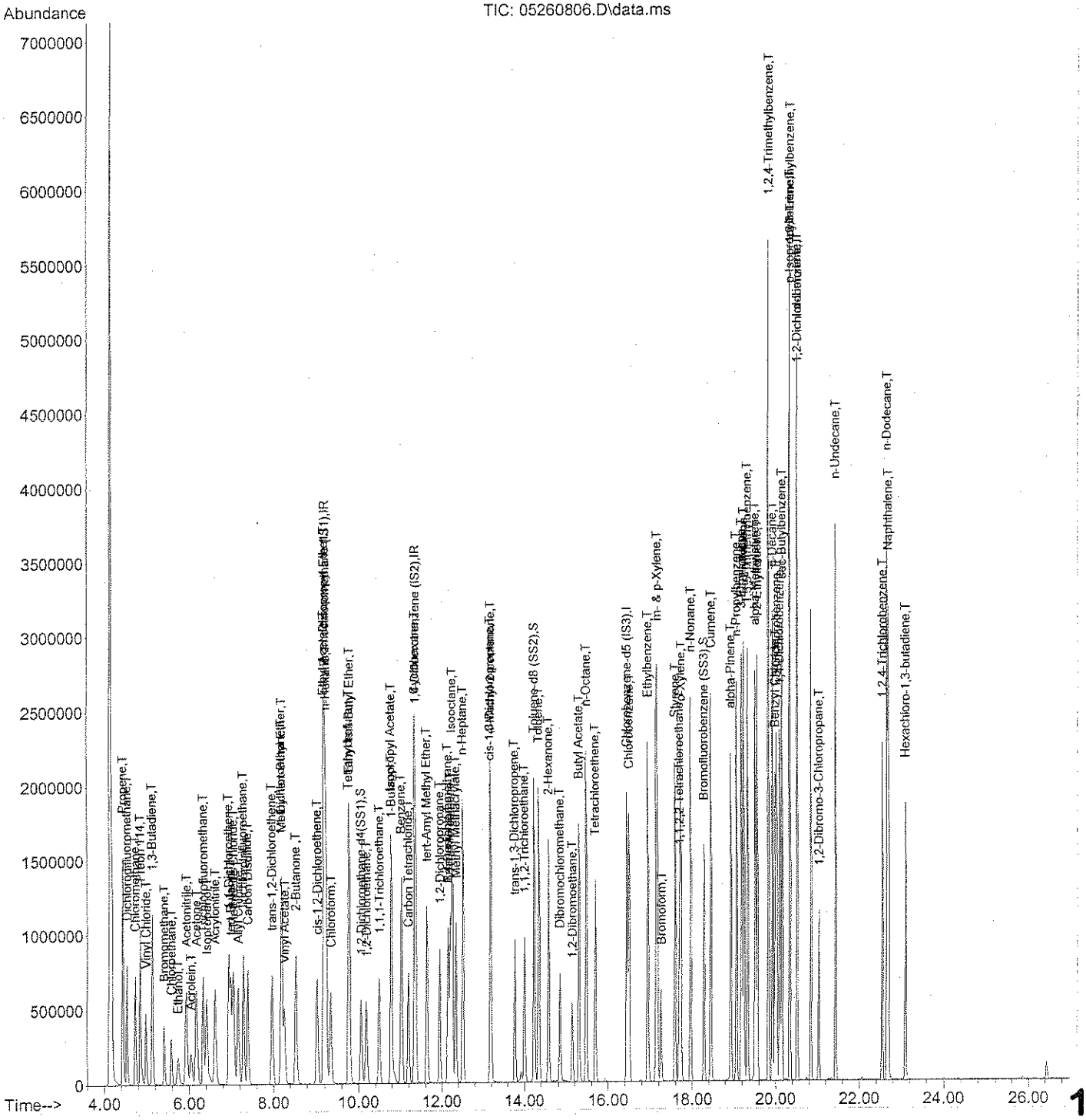
response 308175

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	0.00
41.10	21.90	10.74
43.00	17.20	0.00

int. whole peaks
JH 5/29/08
Em 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:25:44 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:25:44 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.22	130	395887	25.000	ng		-0.03
37) 1,4-Difluorobenzene (IS2)	11.36	114	1634987	25.000	ng		-0.02
56) Chlorobenzene-d5 (IS3)	16.45	82	654511	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.06	65	557560	19.972	ng		-0.03
Spiked Amount 25.000			Recovery =	79.88%			
57) Toluene-d8 (SS2)	14.24	98	1660168	25.761	ng		-0.01
Spiked Amount 25.000			Recovery =	103.04%			
73) Bromofluorobenzene (SS3)	18.29	174	570371	34.007	ng		0.00
Spiked Amount 25.000			Recovery =	136.04%			
Target Compounds							Qvalue
2) Propene	4.43	42	711066	17.962	ng		93
3) Dichlorodifluoromethane	4.54	85	807036	17.242	ng		98
4) Chloromethane	4.73	50	1058342	18.289	ng		99
5) Freon 114	4.85	135	484950	21.486	ng		97
6) Vinyl Chloride	4.98	62	646924	16.191	ng		95
7) 1,3-Butadiene	5.13	54	660983	17.719	ng	#	85
8) Bromomethane	5.41	94	349784	21.245	ng		98
9) Chloroethane	5.58	64	338526	18.535	ng		96
10) Ethanol	5.74	45	432975m	15.907	ng		
11) Acetonitrile	5.94	41	1294135	18.311	ng		98
12) Acrolein	6.05	56	326130	16.827	ng		97
13) Acetone	6.18	58	468682	17.918	ng	#	79
14) Trichlorofluoromethane	6.34	101	785881	20.301	ng		100
15) Isopropanol	6.42	45	1438967m	16.967	ng		
16) Acrylonitrile	6.62	53	874549	18.799	ng		98
17) 1,1-Dichloroethene	6.95	96	407867	21.523	ng		93
18) tert-Butanol	6.99	59	1354362	17.560	ng		96
19) Methylene Chloride	7.05	84	388813	18.816	ng	#	41
20) Allyl Chloride	7.17	41	883777	20.409	ng		82
21) Trichlorotrifluoroethane	7.29	151	418494	25.724	ng		86
22) Carbon Disulfide	7.40	76	1445312	18.531	ng		100
23) trans-1,2-Dichloroethene	7.97	61	776634	19.165	ng		93
24) 1,1-Dichloroethane	8.19	63	841365	18.209	ng		94
25) Methyl tert-Butyl Ether	8.20	73	1200934	19.334	ng		80
26) Vinyl Acetate	8.27	86	74381	14.017	ng	#	24
27) 2-Butanone	8.54	72	267468	19.847	ng	#	16
28) cis-1,2-Dichloroethene	9.04	61	719537	19.260	ng		95
29) Diisopropyl Ether	9.20	87	329457	19.209	ng	#	32
30) Ethyl Acetate	9.19	61	218755	21.946	ng		86
31) n-Hexane	9.24	57	1098299	19.497	ng		92

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:25:44 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.35	83	661772	22.417	ng		96
34) Tetrahydrofuran	9.77	72	262536	19.437	ng	#	46
35) Ethyl tert-Butyl Ether	9.79	87	494673	20.333	ng	#	77
36) 1,2-Dichloroethane	10.19	62	651423	18.447	ng		96
38) 1,1,1-Trichloroethane	10.50	97	664987	21.151	ng		93
39) Isopropyl Acetate	10.78	61	325499	19.477	ng	#	65
40) 1-Butanol	10.79	56	550712	17.781	ng		98
41) Benzene	11.02	78	1534046	19.139	ng		99
42) Carbon Tetrachloride	11.19	117	681759	28.723	ng		98
43) Cyclohexane	11.34	84	614898	19.368	ng	#	47
44) tert-Amyl Methyl Ether	11.63	73	1082550	19.179	ng		77
45) 1,2-Dichloropropane	11.95	63	489565	19.688	ng		96
46) Bromodichloromethane	12.15	83	529636	22.237	ng		93
47) Trichloroethene	12.21	130	544708	24.678	ng		99
48) 1,4-Dioxane	12.15	88	338329	22.469	ng	#	68
49) Isooctane	12.26	57	2583896	19.408	ng		92
50) Methyl Methacrylate	12.35	100	189120	23.895	ng	#	71
51) n-Heptane	12.52	71	411960	20.201	ng	#	51
52) cis-1,3-Dichloropropene	13.17	75	616710	19.293	ng		100
53) 4-Methyl-2-pentanone	13.19	58	576479	19.762	ng		85
54) trans-1,3-Dichloropropene	13.77	75	636098	22.529	ng		98
55) 1,1,2-Trichloroethane	14.00	97	412127	21.187	ng		91
58) Toluene	14.35	91	1765007	22.354	ng		98
59) 2-Hexanone	14.59	43	1580295	18.928	ng		99
60) Dibromochloromethane	14.85	129	557375	27.047	ng		100
61) 1,2-Dibromoethane	15.15	107	502191	24.648	ng		98
62) Butyl Acetate	15.31	43	1738953	20.414	ng		93
63) n-Octane	15.48	57	535703	21.199	ng		95
64) Tetrachloroethene	15.70	166	527210	27.016	ng		99
65) Chlorobenzene	16.50	112	1282950	24.553	ng		100
66) Ethylbenzene	16.94	91	2046467	22.722	ng		93
67) m- & p-Xylene	17.17	91	3191845	54.090	ng		92
68) Bromoform	17.26	173	403720	36.227	ng		100
69) Styrene	17.60	104	1361799	24.900	ng		94
70) o-Xylene	17.74	91	1619401	25.734	ng		93
71) n-Nonane	17.97	43	1381099	19.871	ng		94
72) 1,1,2,2-Tetrachloroethane	17.70	83	685924	24.741	ng		94
74) Cumene	18.45	105	2131977	24.251	ng		94
75) alpha-Pinene	18.93	93	1020963	23.769	ng		93
76) n-Propylbenzene	19.07	91	2422315	21.972	ng		92
77) 3-Ethyltoluene	19.19	105	2190869	23.010	ng		94
78) 4-Ethyltoluene	19.24	105	2160976	24.924	ng		94
79) 1,3,5-Trimethylbenzene	19.33	105	1846602	24.191	ng		91

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

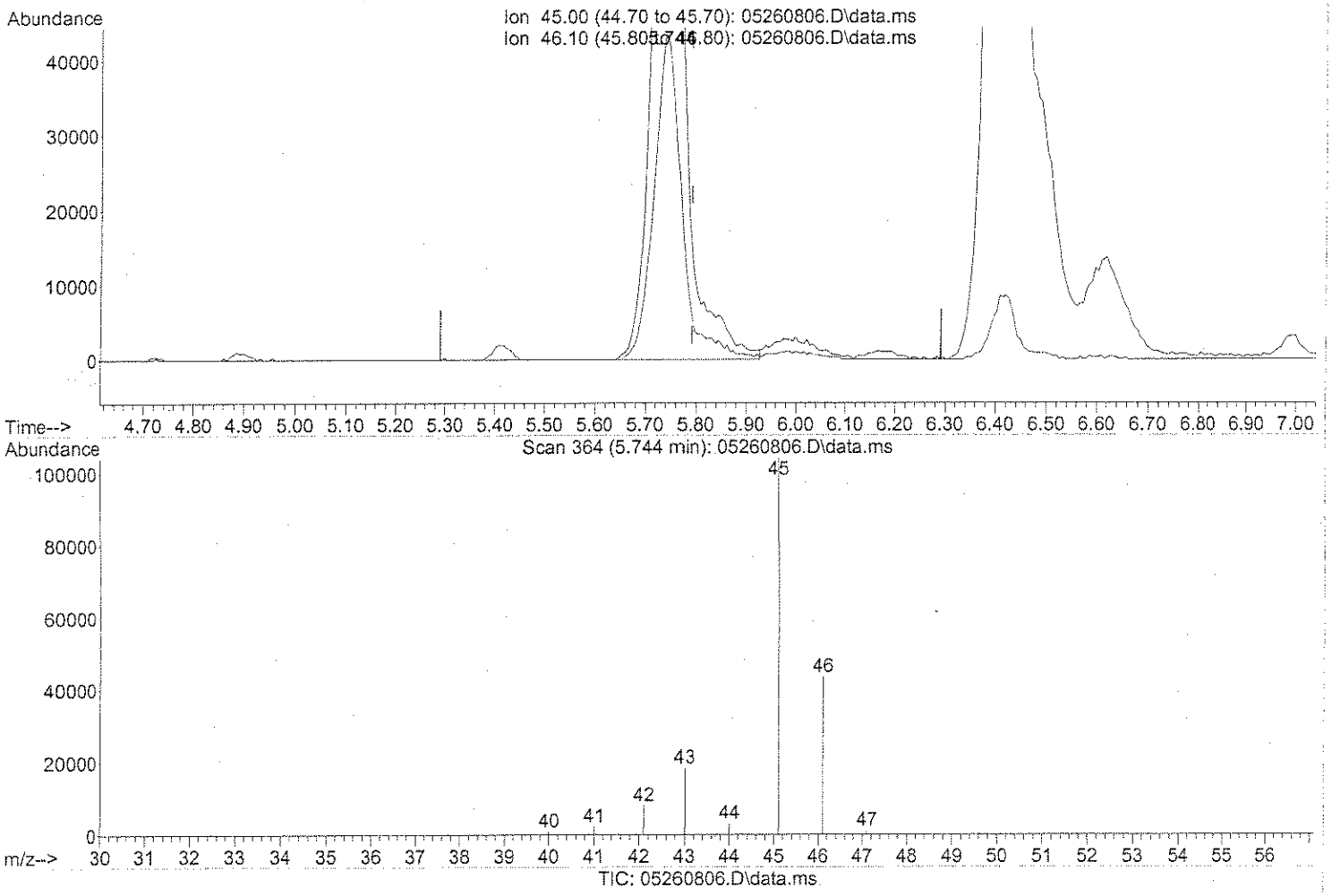
Quant Time: May 27 08:25:44 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	1068773	25.806	ng		98
81) 2-Ethyltoluene	19.57	105	2113100	22.369	ng		93
82) 1,2,4-Trimethylbenzene	19.84	105	1891296	23.978	ng		91
83) n-Decane	19.93	57	1329961	21.273	ng		80
84) Benzyl Chloride	20.00	91	1537896	23.396	ng		89
85) 1,3-Dichlorobenzene	20.02	146	1157260	25.281	ng		99
86) 1,4-Dichlorobenzene	20.10	146	1173179	26.832	ng		99
87) sec-Butylbenzene	20.16	105	2467034	24.008	ng		95
88) p-Isopropyltoluene	20.34	119	2394860	27.443	ng		93
89) 1,2,3-Trimethylbenzene	20.35	105	1881635	24.498	ng		88
90) 1,2-Dichlorobenzene	20.52	146	1092803	25.741	ng		100
91) d-Limonene	20.52	68	610872	21.467	ng		88
92) 1,2-Dibromo-3-Chloropr...	21.04	157	377273	28.200	ng		82
93) n-Undecane	21.44	57	1450299	22.059	ng		78
94) 1,2,4-Trichlorobenzene	22.55	184	218655	29.607	ng	#	86
95) Naphthalene	22.69	128	2867866	25.695	ng		99
96) n-Dodecane	22.66	57	1475297	22.995	ng		77
97) Hexachloro-1,3-butadiene	23.11	225	348136	31.529	ng		100

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:24:58 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.744min (-0.047) 15.24ng

response 414761

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	40.23
0.00	0.00	0.00
0.00	0.00	0.00

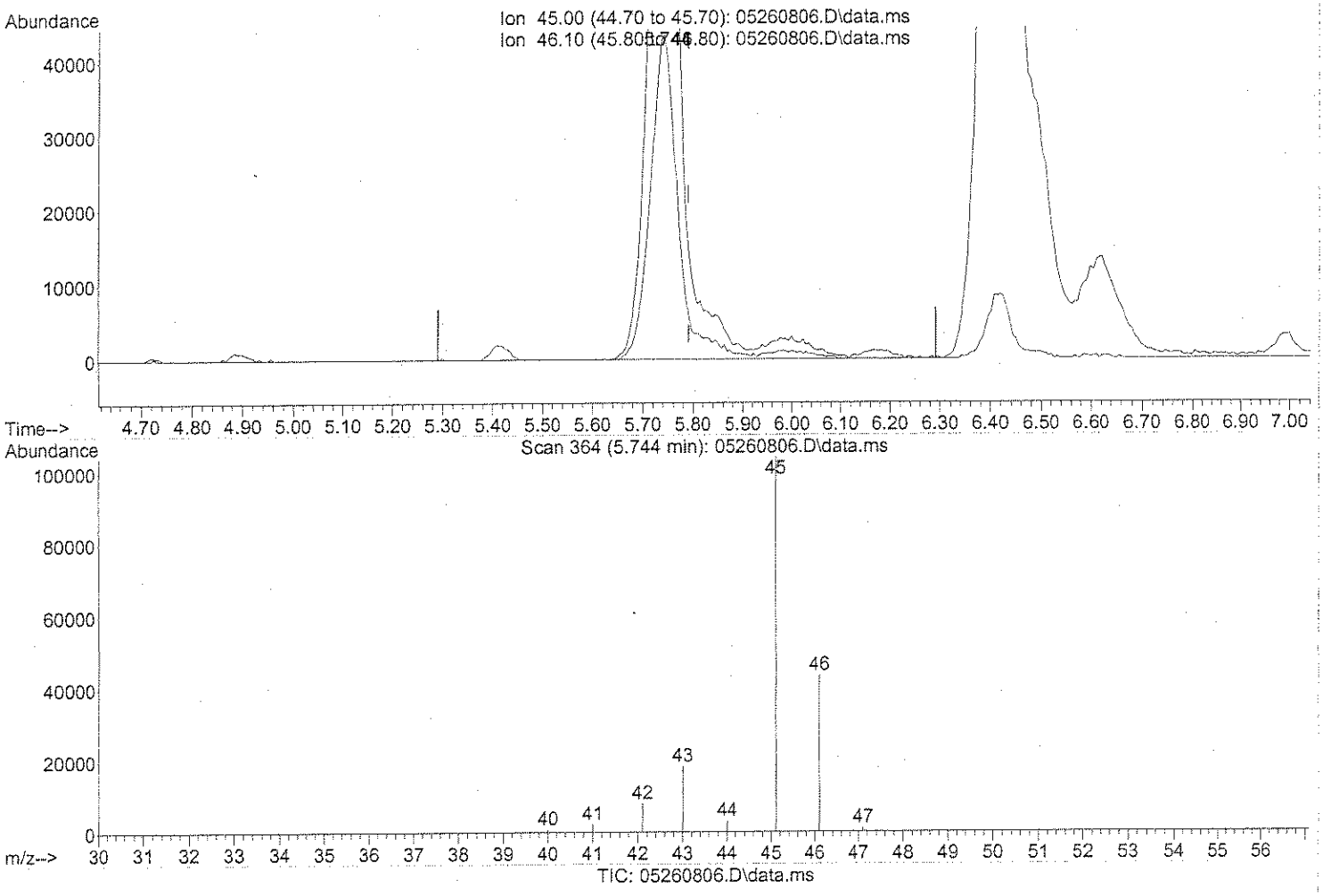
split peaks

112

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:24:58 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.744min (-0.047) 15.91ng m

response 432975

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	38.54
0.00	0.00	0.00
0.00	0.00	0.00

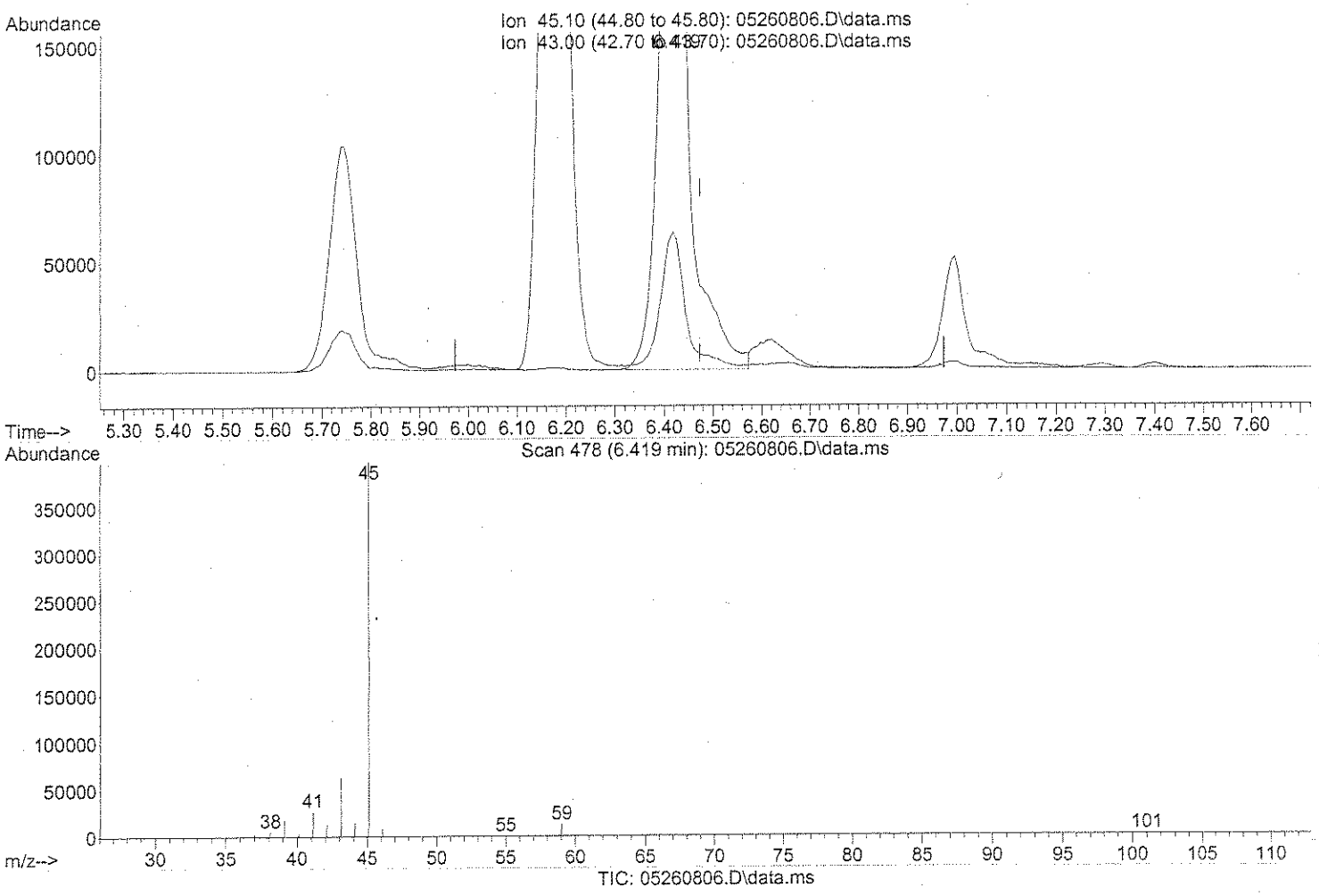
int. whole peaks

JM 5/29/08

Sam 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:24:58 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.419min (-0.054) 16.17ng

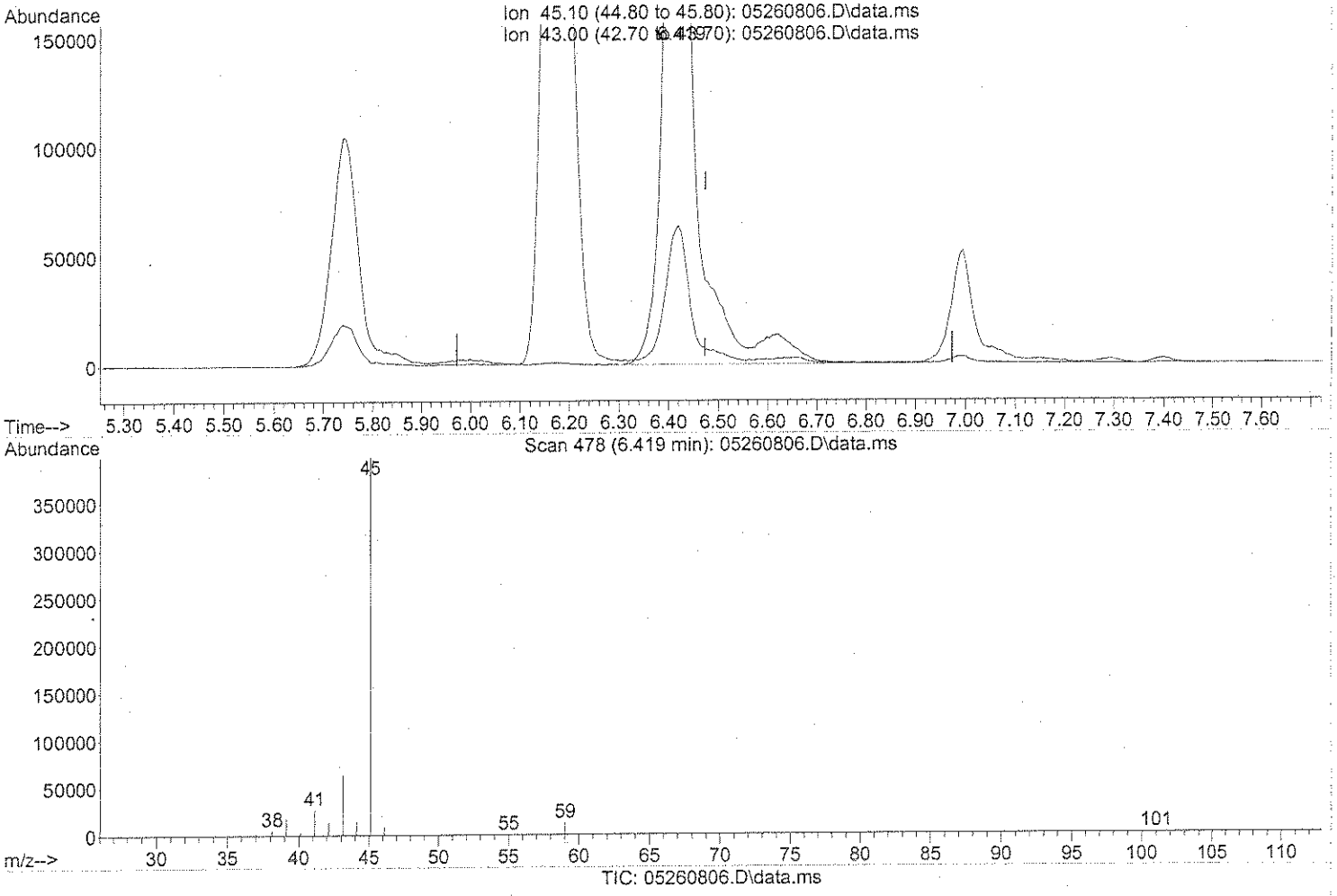
response 1371401

split peaks

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	17.77
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260806.D
Acq On : 26 May 2008 7:14 pm
Operator : WA
Sample : 25ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:24:58 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.419min (-0.054) 16.97ng m

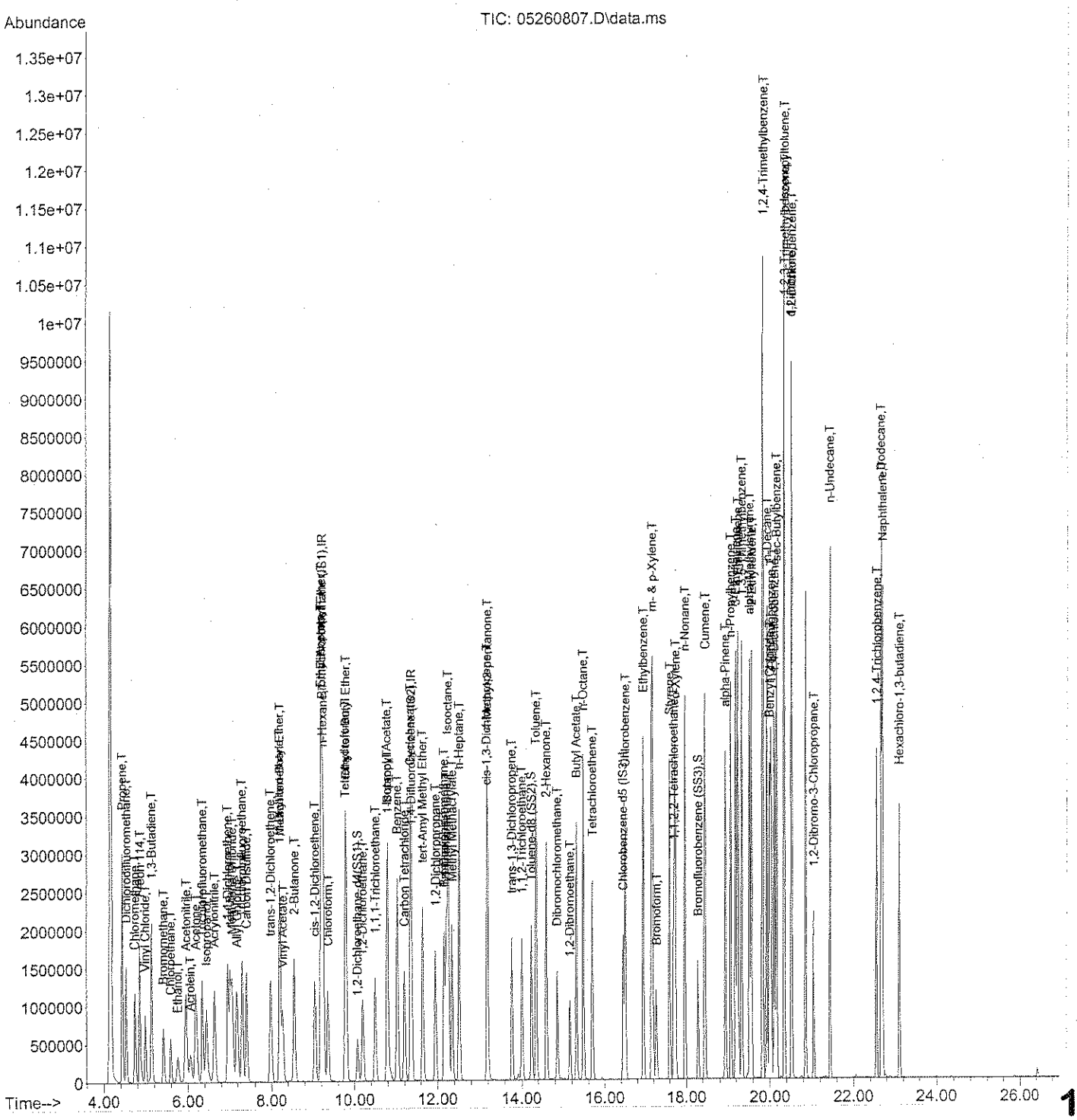
response 1438967

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	16.93
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks
JDH 5/29/08
Em 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:35:27 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:35:27 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.23	130	388471	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	11.37	114	1647237	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	16.46	82	658280	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.08	65	561887	20.511	ng		-0.02
Spiked Amount 25.000			Recovery =	82.04%			
57) Toluene-d8 (SS2)	14.24	98	1683278	25.970	ng		0.00
Spiked Amount 25.000			Recovery =	103.88%			
73) Bromofluorobenzene (SS3)	18.29	174	578716	34.307	ng		0.00
Spiked Amount 25.000			Recovery =	137.24%			
Target Compounds							Qvalue
2) Propene	4.44	42	1488105	38.309	ng		92
3) Dichlorodifluoromethane	4.54	85	1621133	35.296	ng		98
4) Chloromethane	4.74	50	1834813	32.312	ng		99
5) Freon 114	4.86	135	950822	42.931	ng		98
6) Vinyl Chloride	4.99	62	1290533	32.916	ng		94
7) 1,3-Butadiene	5.14	54	1344963	36.742	ng	#	85
8) Bromomethane	5.42	94	677693	41.946	ng		99
9) Chloroethane	5.60	64	678681	37.868	ng		96
10) Ethanol	5.77	45	856770m	32.078	ng		
11) Acetonitrile	5.96	41	2550629	36.779	ng		98
12) Acrolein	6.06	56	659705	34.688	ng		97
13) Acetone	6.19	58	922838	35.954	ng	#	78
14) Trichlorofluoromethane	6.34	101	1577028	41.516	ng		100
15) Isopropanol	6.44	45	2469895m	29.680	ng		
16) Acrylonitrile	6.64	53	1747249	38.275	ng		97
17) 1,1-Dichloroethene	6.96	96	805359	43.310	ng		91
18) tert-Butanol	7.02	59	2656177	35.096	ng		96
19) Methylene Chloride	7.07	84	759421	37.452	ng	#	40
20) Allyl Chloride	7.18	41	1775021	41.772	ng		83
21) Trichlorotrifluoroethane	7.30	151	823320	51.574	ng		87
22) Carbon Disulfide	7.41	76	2870640	37.507	ng		100
23) trans-1,2-Dichloroethene	7.98	61	1532608	38.542	ng		93
24) 1,1-Dichloroethane	8.20	63	1668607	36.802	ng		94
25) Methyl tert-Butyl Ether	8.21	73	2388378	39.186	ng		79
26) Vinyl Acetate	8.29	86	147140	28.259	ng	#	49
27) 2-Butanone	8.56	72	531364	40.182	ng	#	20
28) cis-1,2-Dichloroethene	9.05	61	1427846	38.950	ng		94
29) Diisopropyl Ether	9.21	87	641768	38.132	ng	#	32
30) Ethyl Acetate	9.20	61	435021	44.476	ng		83
31) n-Hexane	9.25	57	2168320	39.226	ng		92

5/29/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:35:27 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.37	83	1307274	45.129	ng		95
34) Tetrahydrofuran	9.79	72	486473	36.704	ng	#	44
35) Ethyl tert-Butyl Ether	9.80	87	975544	40.865	ng	#	76
36) 1,2-Dichloroethane	10.20	62	1286163	37.117	ng		96
38) 1,1,1-Trichloroethane	10.51	97	1337307	42.219	ng		94
39) Isopropyl Acetate	10.79	61	643632	38.228	ng	#	66
40) 1-Butanol	10.80	56	1099028	35.220	ng		97
41) Benzene	11.03	78	3034770	37.581	ng		99
42) Carbon Tetrachloride	11.20	117	1362256	56.966	ng		99
43) Cyclohexane	11.35	84	1207794	37.760	ng	#	48
44) tert-Amyl Methyl Ether	11.65	73	2159046	37.967	ng		77
45) 1,2-Dichloropropane	11.96	63	971819	38.792	ng		96
46) Bromodichloromethane	12.16	83	1042770	43.456	ng		93
47) Trichloroethene	12.21	130	1070999	48.162	ng		99
48) 1,4-Dioxane	12.16	88	661926	43.633	ng	#	67
49) Isooctane	12.26	57	5082567	37.893	ng		92
50) Methyl Methacrylate	12.36	100	374571	46.974	ng	#	71
51) n-Heptane	12.53	71	808502	39.351	ng	#	50
52) cis-1,3-Dichloropropene	13.18	75	1222015	37.944	ng		100
53) 4-Methyl-2-pentanone	13.20	58	1141926	38.854	ng		85
54) trans-1,3-Dichloropropene	13.78	75	1262997	44.399	ng		98
55) 1,1,2-Trichloroethane	14.01	97	813929	41.533	ng		90
58) Toluene	14.36	91	3509775	44.196	ng		98
59) 2-Hexanone	14.60	43	3119465	37.149	ng		99
60) Dibromochloromethane	14.85	129	1126081	54.331	ng		100
61) 1,2-Dibromoethane	15.16	107	1002547	48.924	ng		99
62) Butyl Acetate	15.32	43	3436932	40.116	ng		92
63) n-Octane	15.49	57	1061248	41.756	ng		95
64) Tetrachloroethene	15.70	166	1045308	53.259	ng		99
65) Chlorobenzene	16.51	112	2555630	48.629	ng		100
66) Ethylbenzene	16.95	91	4066809	44.896	ng		93
67) m- & p-Xylene	17.17	91	6393111	107.719	ng		92
68) Bromoform	17.27	173	811442	72.397	ng		100
69) Styrene	17.60	104	2716028	49.377	ng		94
70) o-Xylene	17.74	91	3227592	50.996	ng		93
71) n-Nonane	17.97	43	2712805	38.808	ng		95
72) 1,1,2,2-Tetrachloroethane	17.71	83	1351121	48.456	ng		93
74) Cumene	18.46	105	4265057	48.237	ng		95
75) alpha-Pinene	18.94	93	2034056	47.083	ng		93
76) n-Propylbenzene	19.07	91	4844624	43.693	ng		92
77) 3-Ethyltoluene	19.20	105	4455656	46.528	ng		95
78) 4-Ethyltoluene	19.25	105	4274342	49.017	ng		94
79) 1,3,5-Trimethylbenzene	19.34	105	3697471	48.161	ng		92

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

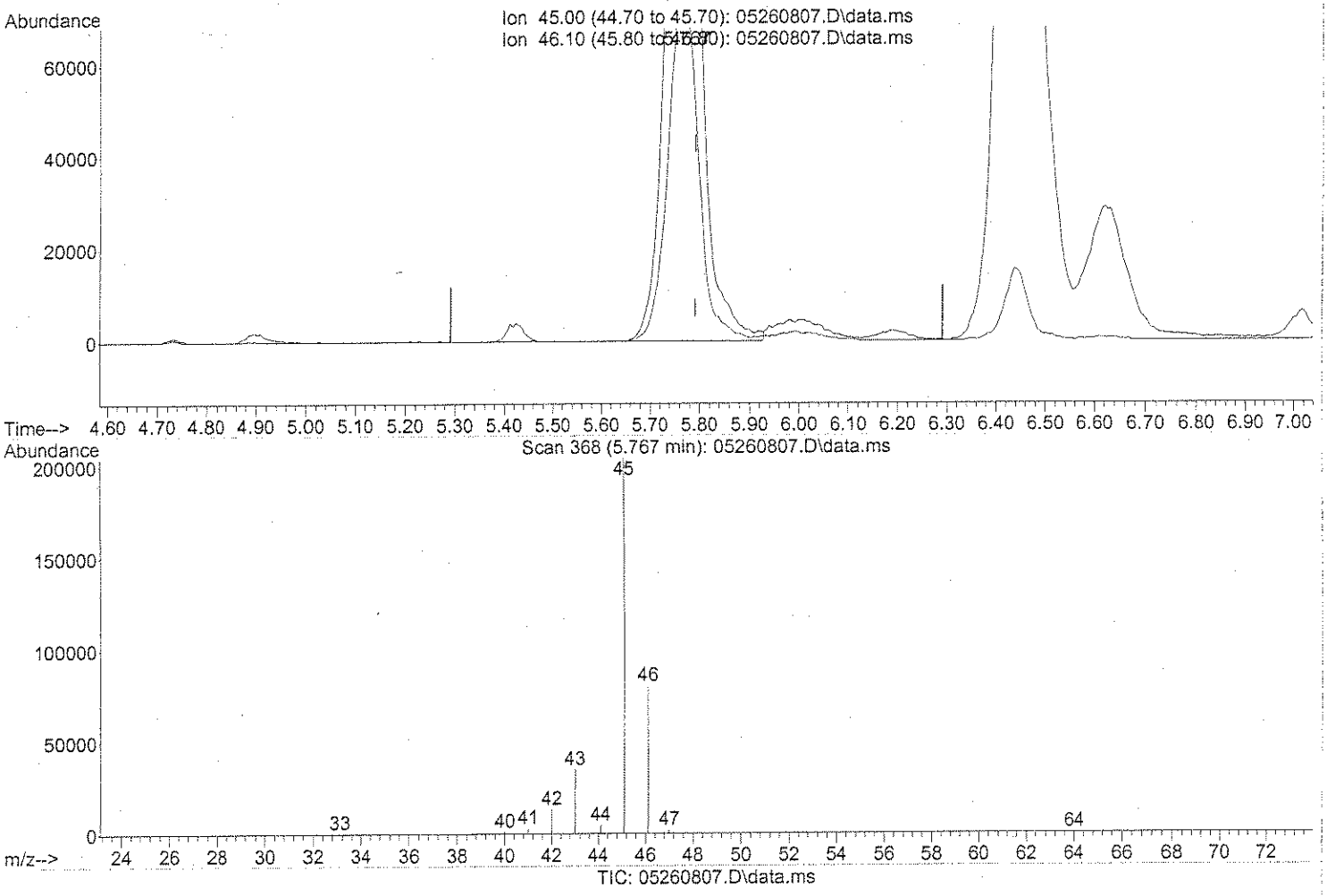
Quant Time: May 27 08:35:27 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	2132739	51.200	ng		98
81) 2-Ethyltoluene	19.57	105	4209587	44.306	ng		93
82) 1,2,4-Trimethylbenzene	19.84	105	3789214	47.764	ng		92
83) n-Decane	19.94	57	2651253	42.165	ng		79
84) Benzyl Chloride	20.00	91	3095199	46.818	ng		89
85) 1,3-Dichlorobenzene	20.03	146	2313825	50.258	ng		100
86) 1,4-Dichlorobenzene	20.11	146	2343469	53.292	ng		99
87) sec-Butylbenzene	20.16	105	4912874	47.536	ng		95
88) p-Isopropyltoluene	20.34	119	4788149	54.553	ng		93
89) 1,2,3-Trimethylbenzene	20.36	105	3760317	48.677	ng		89
90) 1,2-Dichlorobenzene	20.52	146	2147282	50.289	ng		100
91) d-Limonene	20.52	68	1220306	42.637	ng		88
92) 1,2-Dibromo-3-Chloropr...	21.04	157	756263	56.204	ng		81
93) n-Undecane	21.43	57	2854154	43.162	ng		78
94) 1,2,4-Trichlorobenzene	22.55	184	432056	58.168	ng	#	86
95) Naphthalene	22.70	128	5732941	51.070	ng		99
96) n-Dodecane	22.66	57	2916336	45.196	ng		77
97) Hexachloro-1,3-butadiene	23.11	225	686916	61.855	ng		99

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:34:23 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.767min (-0.024) 30.86ng

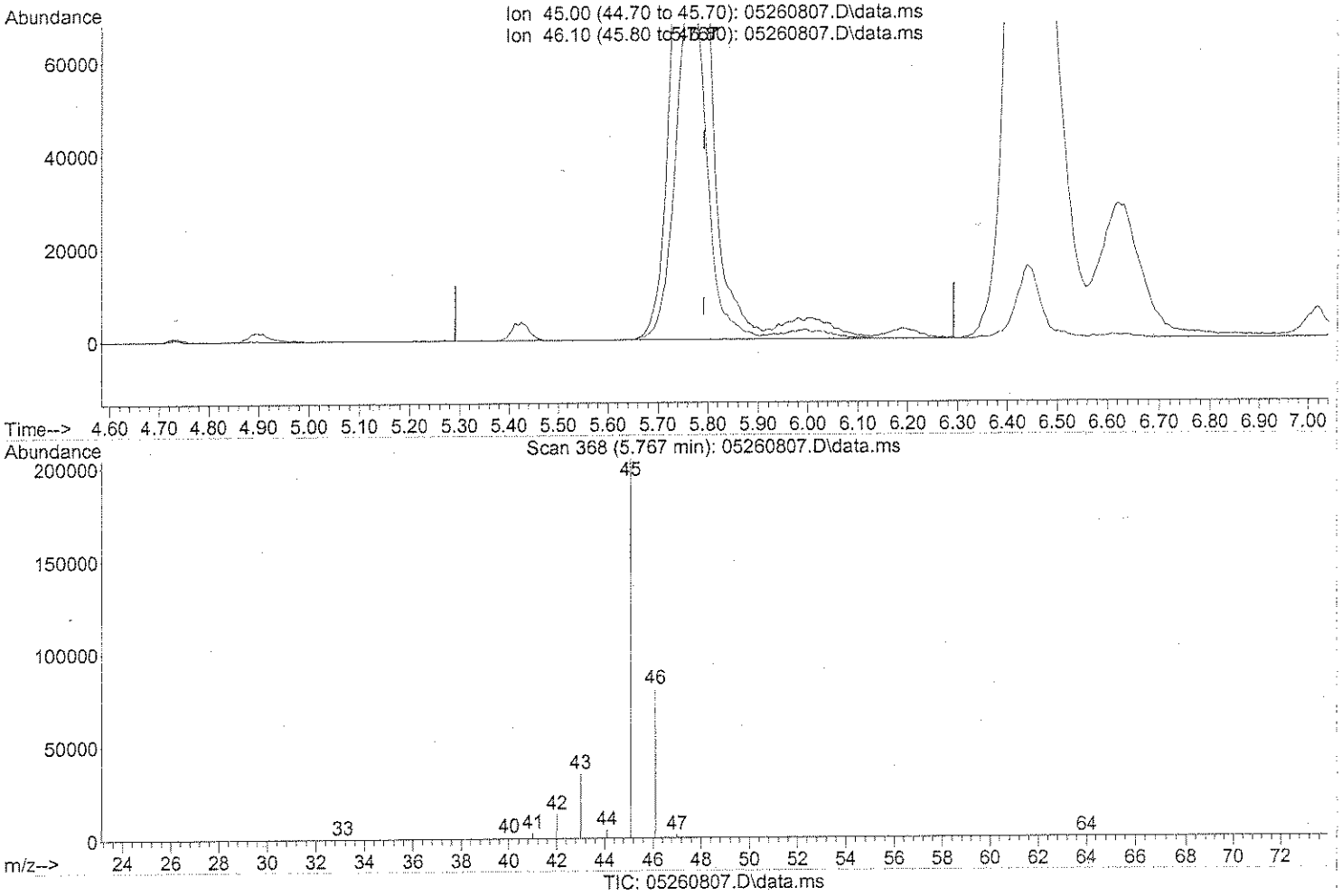
response 824365

split peaks

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	39.69
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:34:23 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.767min (-0.024) 32.08ng m

response 856770

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	38.18
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks

5/29/08

5/30/08

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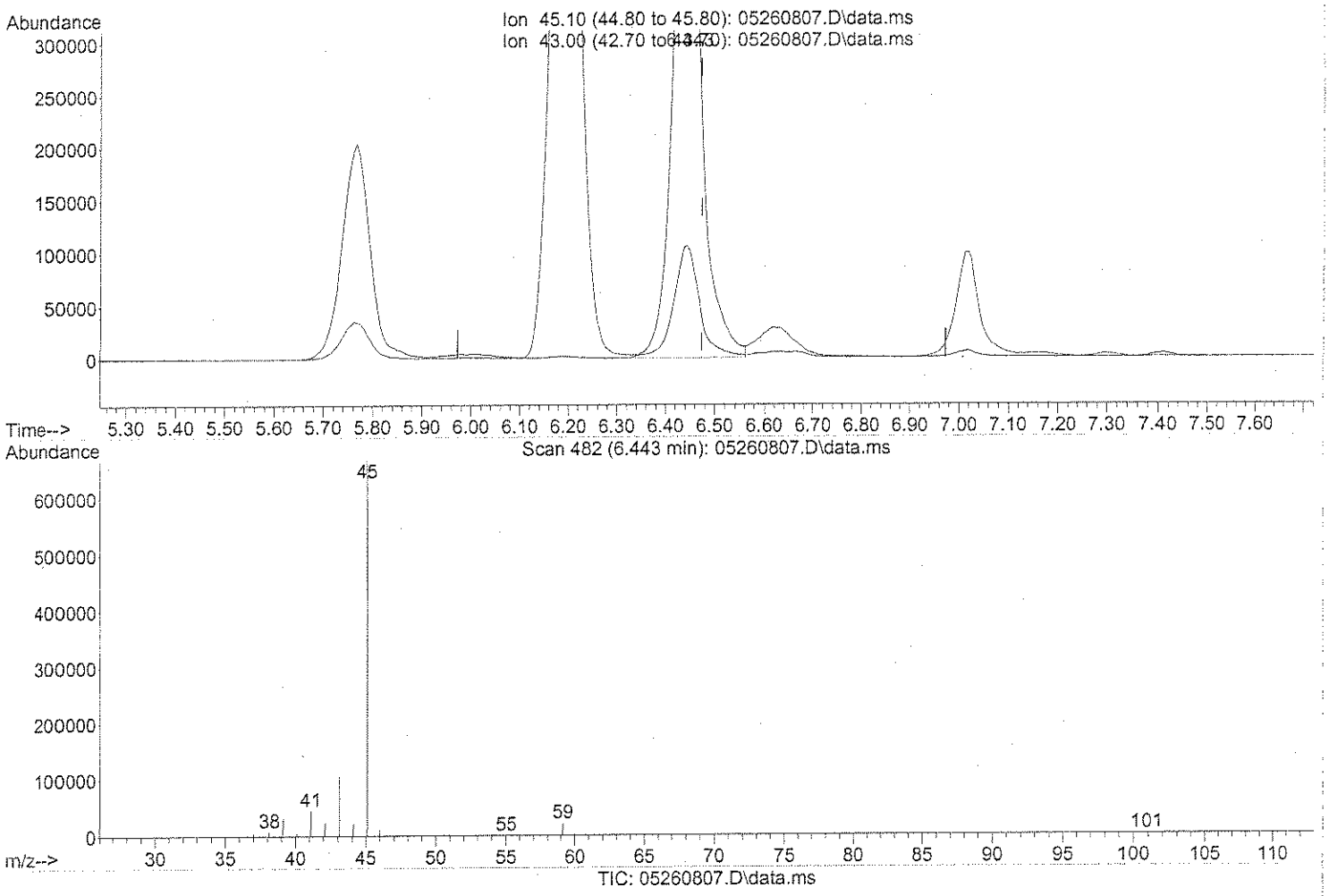
Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:34:23 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



TIC: 05260807.D\data.ms

(15) Isopropanol (T)

6.443min (-0.030) 27.79ng

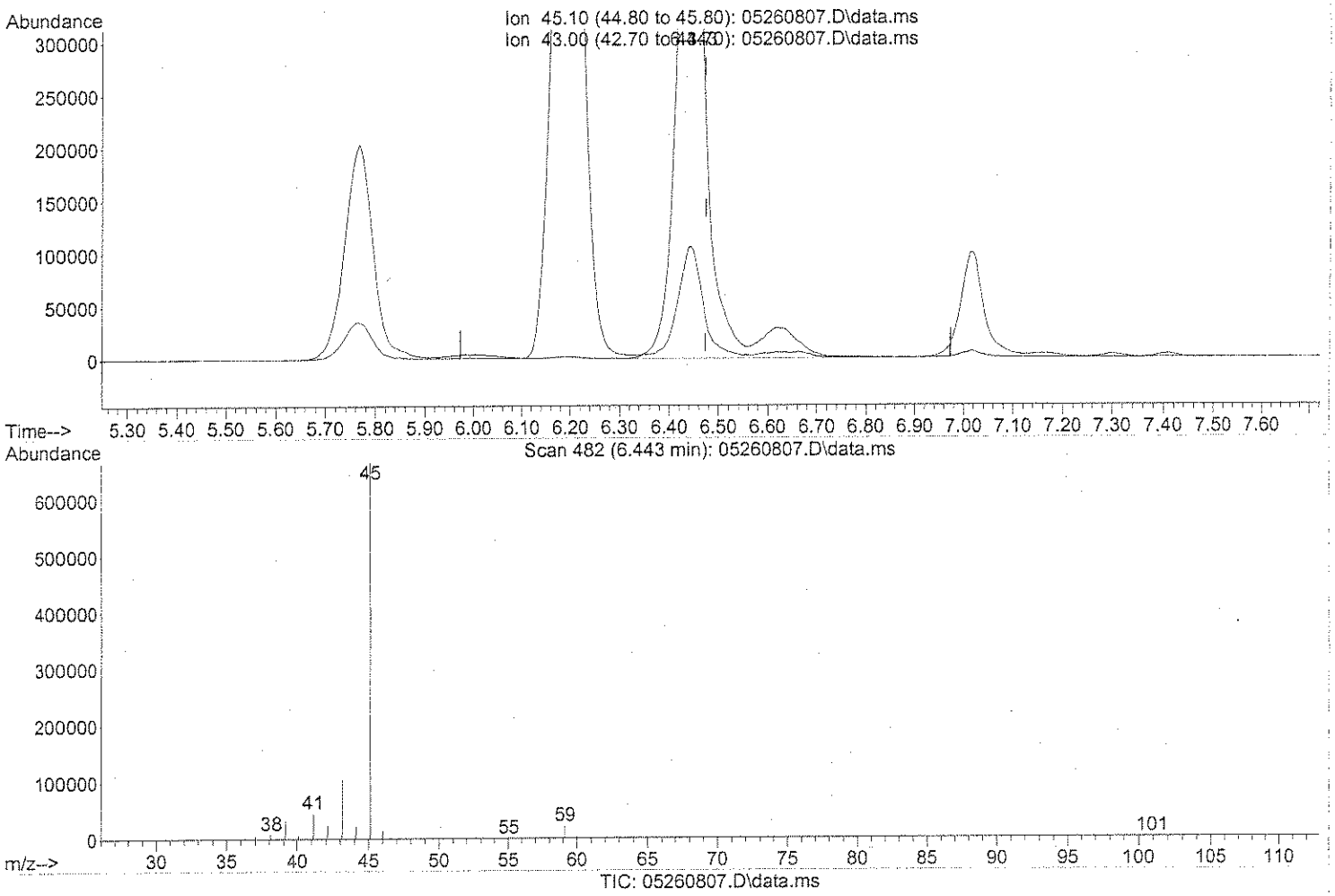
response 2312863

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	16.50
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260807.D
Acq On : 26 May 2008 7:52 pm
Operator : WA
Sample : 50ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:34:23 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.443min (-0.030) 29.68ng m

response 2469895

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	15.45
0.00	0.00	0.00
0.00	0.00	0.00

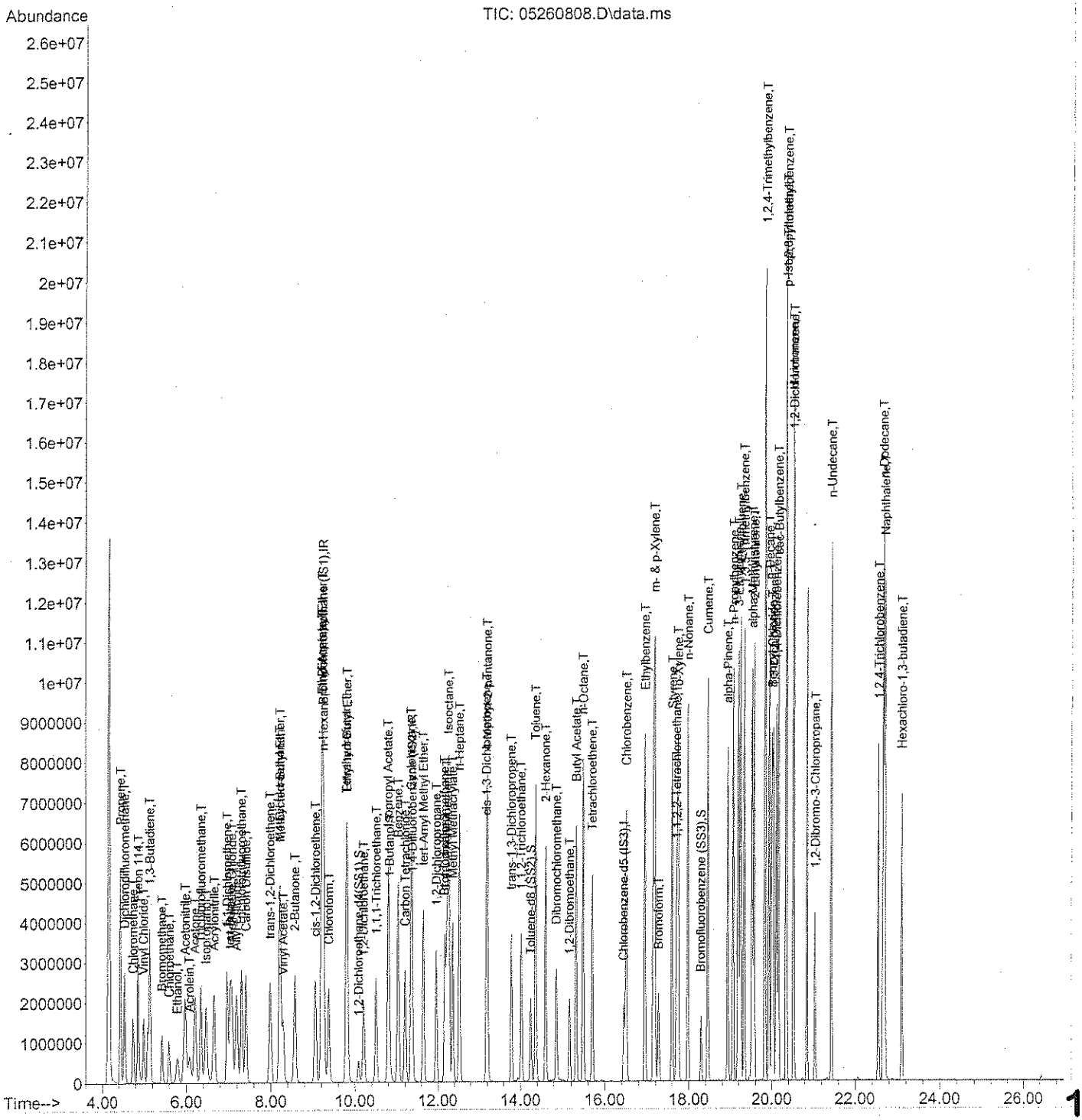
Int. whole peaks

DA 5/29/08

Tam 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:38:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:38:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.25	130	386095	25.000	ng		0.00
37) 1,4-Difluorobenzene (IS2)	11.38	114	1653539	25.000	ng		0.00
56) Chlorobenzene-d5 (IS3)	16.46	82	678453	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.09	65	565549	20.772	ng		0.00
Spiked Amount 25.000			Recovery =	83.08%			
57) Toluene-d8 (SS2)	14.25	98	1717295	25.707	ng		0.00
Spiked Amount 25.000			Recovery =	102.84%			
73) Bromofluorobenzene (SS3)	18.29	174	594590	34.200	ng		0.00
Spiked Amount 25.000			Recovery =	136.80%			
Target Compounds							Qvalue
2) Propene	4.44	42	2836829	73.478	ng		93
3) Dichlorodifluoromethane	4.54	85	3164778	69.330	ng		98
4) Chloromethane	4.74	50	2740968	48.567	ng		100
5) Freon 114	4.86	135	1854170	84.233	ng		97
6) Vinyl Chloride	4.99	62	2510365	64.422	ng		95
7) 1,3-Butadiene	5.14	54	2625216	72.158	ng		94
8) Bromomethane	5.43	94	1215673	75.708	ng		98
9) Chloroethane	5.60	64	1335144	74.956	ng		96
10) Ethanol	5.79	45	1727283	65.068	ng		97
11) Acetonitrile	5.97	41	5048612	73.246	ng		98
12) Acrolein	6.08	56	1335596	70.659	ng		97
13) Acetone	6.21	58	1851795	72.591	ng	#	77
14) Trichlorofluoromethane	6.35	101	3129612	82.895	ng		100
15) Isopropanol	6.47	45	4780400m	57.797	ng		
16) Acrylonitrile	6.66	53	3482951	76.767	ng		97
17) 1,1-Dichloroethene	6.96	96	1616756	87.479	ng		92
18) tert-Butanol	7.04	59	3031545	40.302	ng		95
19) Methylene Chloride	7.08	84	1519492	75.397	ng	#	41
20) Allyl Chloride	7.19	41	3565453	84.424	ng		83
21) Trichlorotrifluoroethane	7.31	151	1622190	102.243	ng		86
22) Carbon Disulfide	7.41	76	5744041	75.513	ng		100
23) trans-1,2-Dichloroethene	7.99	61	3071136	77.709	ng		92
24) 1,1-Dichloroethane	8.21	63	3338718	74.091	ng		94
25) Methyl tert-Butyl Ether	8.22	73	4755909	78.510	ng		80
26) Vinyl Acetate	8.29	86	259984	50.238	ng	#	1
27) 2-Butanone	8.57	72	956253	72.757	ng	#	22
28) cis-1,2-Dichloroethene	9.06	61	2855733	78.380	ng		94
29) Diisopropyl Ether	9.22	87	1250910	74.783	ng	#	36
30) Ethyl Acetate	9.22	61	839698	86.377	ng		83
31) n-Hexane	9.26	57	4256079	77.469	ng		92

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:38:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.38	83	2628154	91.286	ng		95
34) Tetrahydrofuran	9.80	72	934904	70.972	ng	#	49
35) Ethyl tert-Butyl Ether	9.81	87	1930911	81.383	ng	#	75
36) 1,2-Dichloroethane	10.21	62	2544747	73.889	ng		96
38) 1,1,1-Trichloroethane	10.51	97	2645547	83.201	ng		94
39) Isopropyl Acetate	10.80	61	1275935	75.494	ng	#	69
40) 1-Butanol	10.83	56	2176266	69.476	ng		95
41) Benzene	11.04	78	6068695	74.864	ng		99
42) Carbon Tetrachloride	11.21	117	2729440	113.703	ng		99
43) Cyclohexane	11.36	84	2390624	74.454	ng	#	48
44) tert-Amyl Methyl Ether	11.65	73	4315624	75.601	ng		79
45) 1,2-Dichloropropane	11.97	63	1931077	76.789	ng		96
46) Bromodichloromethane	12.17	83	2062510	85.625	ng		93
47) Trichloroethene	12.23	130	2117063	94.839	ng		99
48) 1,4-Dioxane	12.17	88	1294622	85.014	ng	#	67
49) Isooctane	12.27	57	10174043	75.563	ng		90
50) Methyl Methacrylate	12.37	100	739610	92.399	ng	#	72
51) n-Heptane	12.53	71	1583461	76.776	ng	#	49
52) cis-1,3-Dichloropropene	13.19	75	2417177	74.769	ng		100
53) 4-Methyl-2-pentanone	13.21	58	2251466	76.314	ng		85
54) trans-1,3-Dichloropropene	13.79	75	2552526	89.388	ng		98
55) 1,1,2-Trichloroethane	14.02	97	1622420	82.473	ng		90
58) Toluene	14.37	91	7020369	85.775	ng		98
59) 2-Hexanone	14.61	43	6083087	70.288	ng		99
60) Dibromochloromethane	14.86	129	2268151	106.179	ng		99
61) 1,2-Dibromoethane	15.17	107	1999750	94.686	ng		99
62) Butyl Acetate	15.33	43	6742260	76.356	ng		92
63) n-Octane	15.49	57	2098429	80.111	ng		95
64) Tetrachloroethene	15.71	166	2093850	103.511	ng		99
65) Chlorobenzene	16.52	112	5089602	93.966	ng		100
66) Ethylbenzene	16.96	91	8177162	87.588	ng		94
67) m- & p-Xylene	17.18	91	12867420	210.360	ng		94
68) Bromoform	17.28	173	1639282	141.908	ng		100
69) Styrene	17.61	104	5444049	96.029	ng		94
70) o-Xylene	17.75	91	6459028	99.019	ng		94
71) n-Nonane	17.98	43	5192086	72.067	ng		94
72) 1,1,2,2-Tetrachloroethane	17.71	83	2665244	92.743	ng		92
74) Cumene	18.46	105	8588112	94.242	ng		96
75) alpha-Pinene	18.94	93	4054737	91.066	ng		93
76) n-Propylbenzene	19.08	91	9691442	84.807	ng		93
77) 3-Ethyltoluene	19.20	105	8989744	91.084	ng		96
78) 4-Ethyltoluene	19.25	105	8567996	95.333	ng		95
79) 1,3,5-Trimethylbenzene	19.34	105	7490986	94.671	ng		94

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

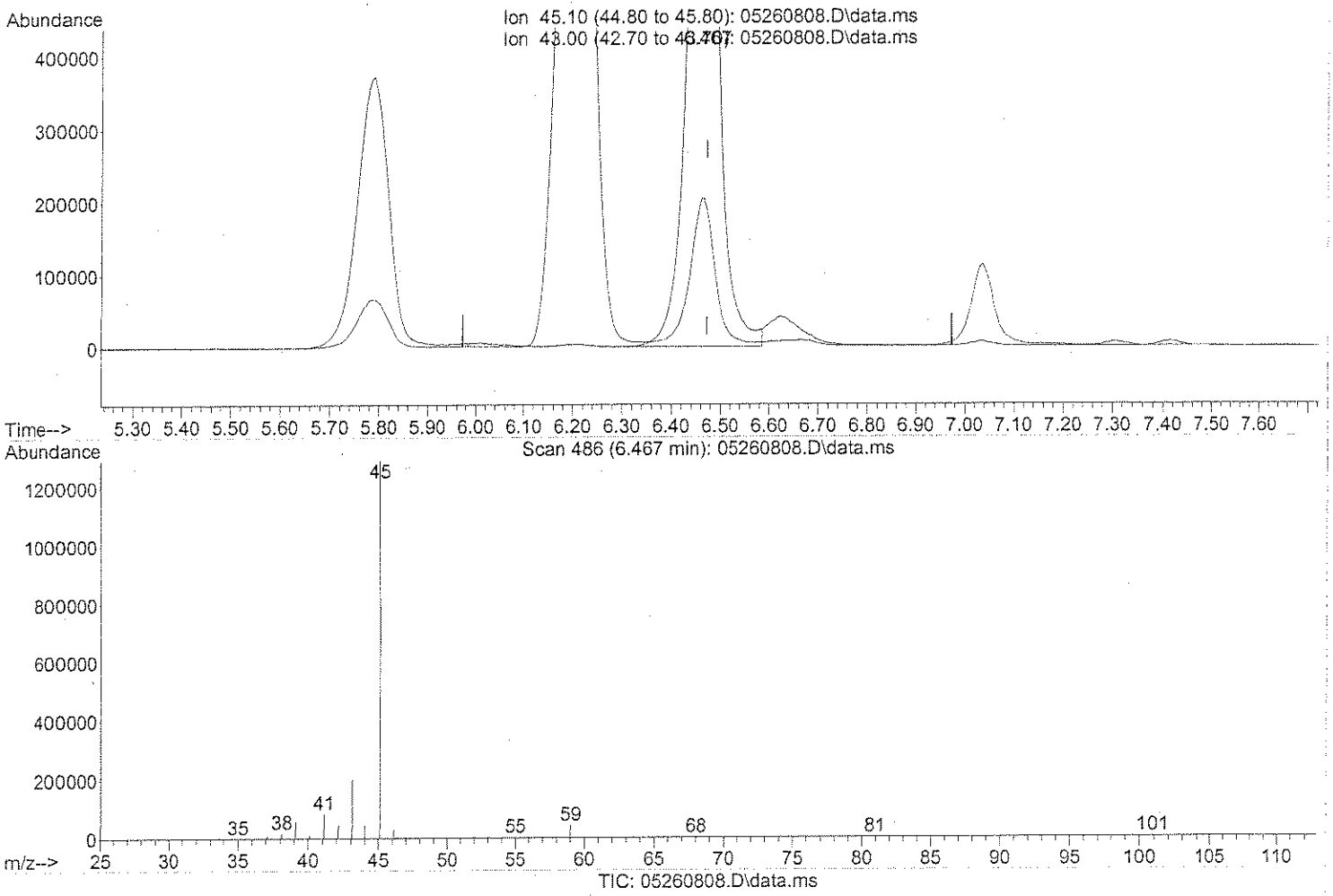
Quant Time: May 27 08:38:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.53	118	4259512	99.217	ng		99
81) 2-Ethyltoluene	19.58	105	8490812	86.710	ng		94
82) 1,2,4-Trimethylbenzene	19.85	105	7596628	92.911	ng		94
83) n-Decane	19.94	57	5211640	80.420	ng		79
84) Benzyl Chloride	20.01	91	6261225	91.891	ng		90
85) 1,3-Dichlorobenzene	20.04	146	4611892	97.195	ng		100
86) 1,4-Dichlorobenzene	20.11	146	4696419	103.623	ng		99
87) sec-Butylbenzene	20.17	105	9897976	92.924	ng		96
88) p-Isopropyltoluene	20.36	119	9553769	105.614	ng		94
89) 1,2,3-Trimethylbenzene	20.36	105	7531861	94.600	ng		90
90) 1,2-Dichlorobenzene	20.53	146	4208026	95.621	ng		100
91) d-Limonene	20.52	68	2427100	82.281	ng		89
92) 1,2-Dibromo-3-Chloropr...	21.05	157	1517346	109.413	ng		80
93) n-Undecane	21.44	57	5629788	82.606	ng		78
94) 1,2,4-Trichlorobenzene	22.56	184	854314	111.596	ng	#	84
95) Naphthalene	22.70	128	11582774	100.114	ng		99
96) n-Dodecane	22.67	57	5705966	85.800	ng		77
97) Hexachloro-1,3-butadiene	23.11	225	1376955	120.304	ng		100

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:37:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.467min (-0.006) 55.18ng

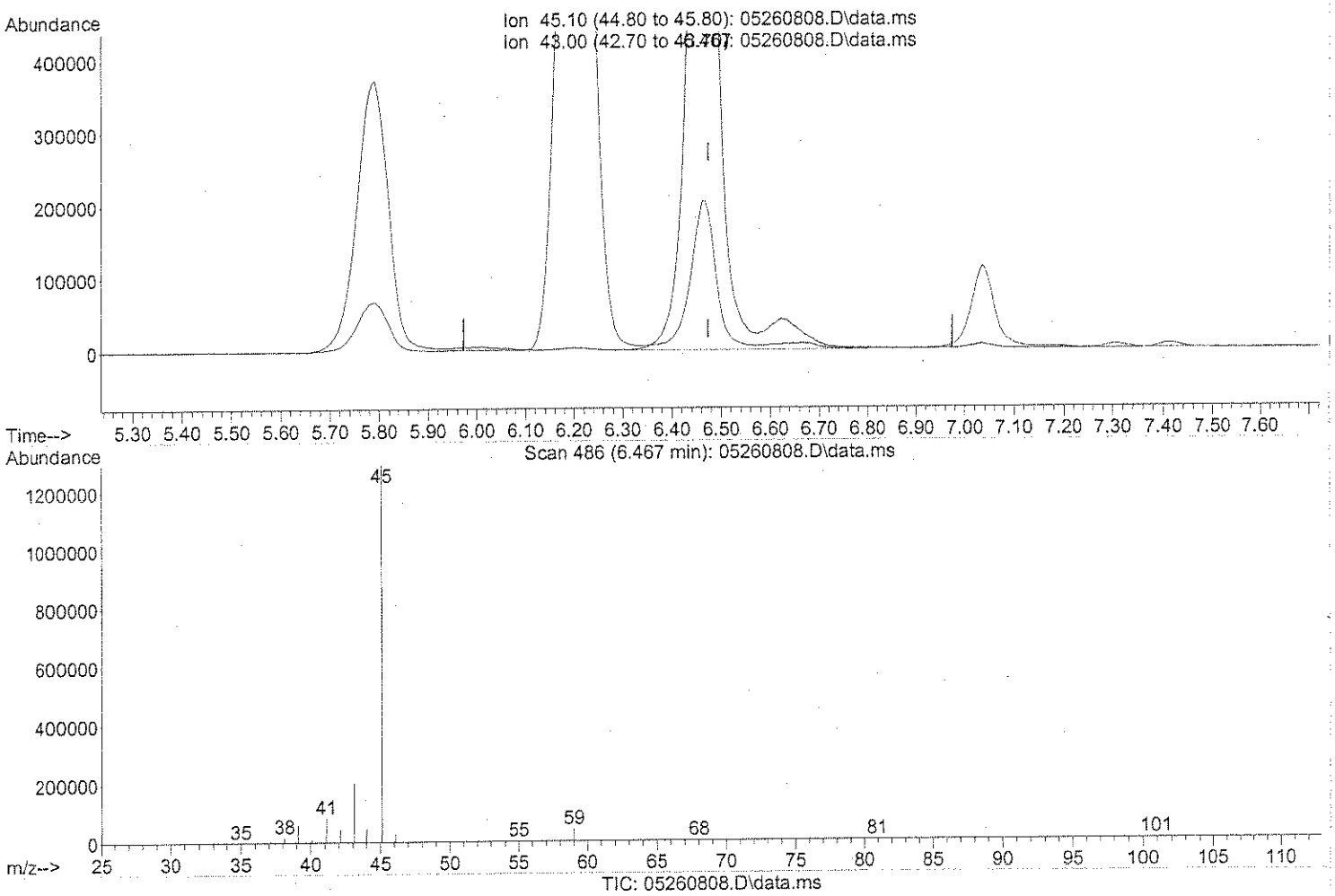
response 4564134

split peaks

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	16.36
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260808.D
Acq On : 26 May 2008 8:30 pm
Operator : WA
Sample : 100ng TO-15 ICAL STD
Misc : S20-05120801/S20-05210802
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 27 08:37:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Mon May 12 20:47:38 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.467min (-0.006) 57.80ng m

response 4780400

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	15.62
0.00	0.00	0.00
0.00	0.00	0.00

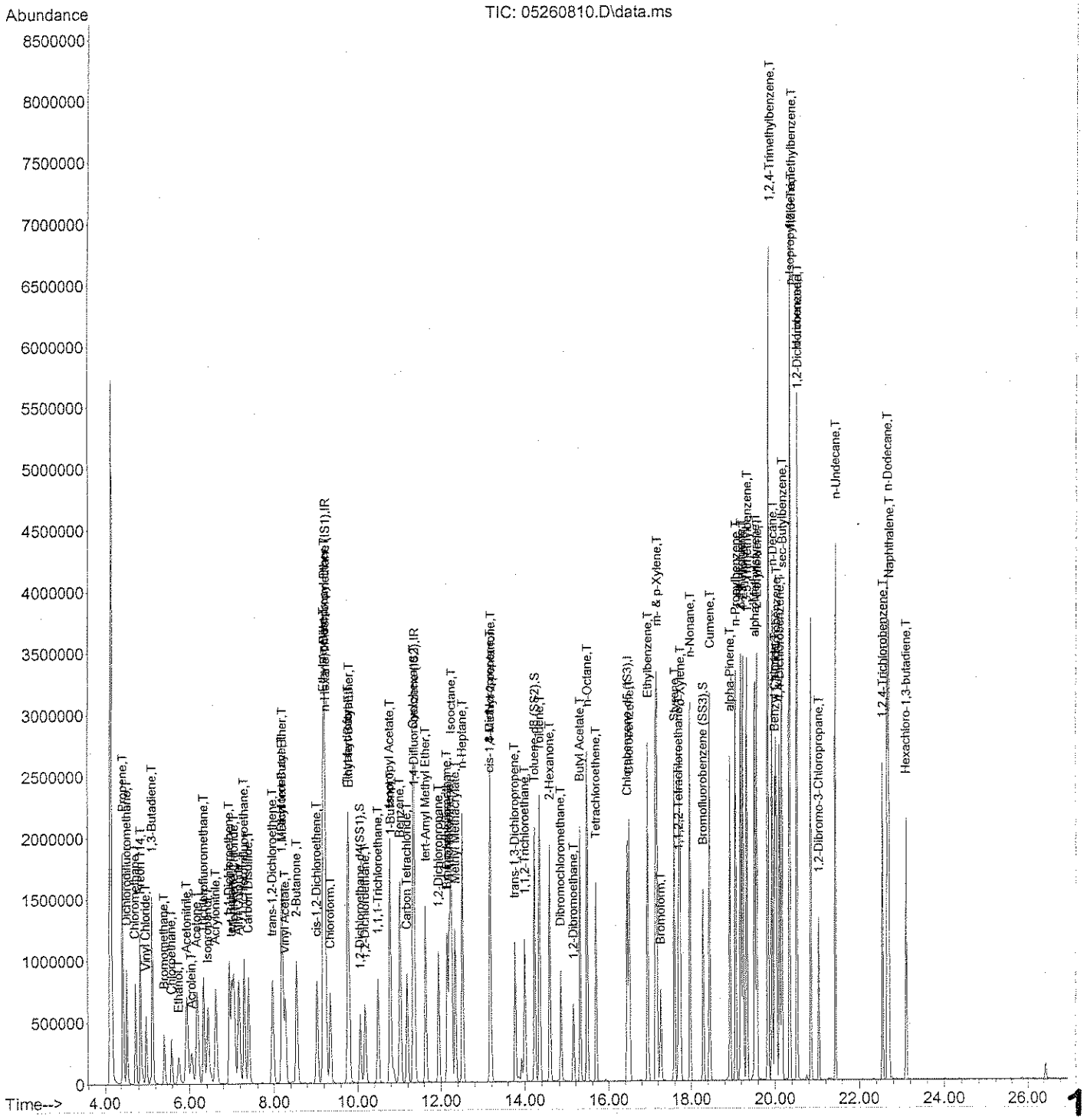
int. whole peaks

DM 5/29/08

Tom 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:42:04 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:42:04 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.23	130	407859	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	11.37	114	1689589	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	16.45	82	667061	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.07	65	569355	24.413	ng		-0.02
Spiked Amount 25.000			Recovery =	97.64%			
57) Toluene-d8 (SS2)	14.24	98	1713292	24.913	ng		-0.01
Spiked Amount 25.000			Recovery =	99.64%			
73) Bromofluorobenzene (SS3)	18.29	174	581376	25.427	ng		0.00
Spiked Amount 25.000			Recovery =	101.72%			
Target Compounds							Qvalue
2) Propene	4.43	42	871029	27.588	ng		92
3) Dichlorodifluoromethane	4.53	85	956715	25.053	ng		98
4) Chloromethane	4.73	50	1227596	25.585	ng		100
5) Freon 114	4.85	135	586768	27.492	ng		97
6) Vinyl Chloride	4.98	62	766426	25.082	ng		95
7) 1,3-Butadiene	5.13	54	924731	33.202	ng	#	85
8) Bromomethane	5.42	94	365175	23.185	ng		98
9) Chloroethane	5.59	64	408506	25.871	ng		95
10) Ethanol	5.76	45	574235m	26.806	ng		
11) Acetonitrile	5.95	41	1528567	24.755	ng		98
12) Acrolein	6.05	56	435174	28.174	ng		97
13) Acetone	6.18	58	597804	28.051	ng	#	74
14) Trichlorofluoromethane	6.34	101	986041	27.583	ng		100
15) Isopropanol	6.43	45	1696236m	26.423	ng		
16) Acrylonitrile	6.63	53	1098277	28.353	ng		97
17) 1,1-Dichloroethene	6.95	96	508940	30.507	ng		96
18) tert-Butanol	7.01	59	1687948m	28.203	ng		
19) Methylene Chloride	7.06	84	479985	29.201	ng	#	49
20) Allyl Chloride	7.17	41	1164762	30.741	ng		83
21) Trichlorotrifluoroethane	7.30	151	509817	29.349	ng		86
22) Carbon Disulfide	7.40	76	1682270	25.445	ng		100
23) trans-1,2-Dichloroethene	7.97	61	944480	28.745	ng		94
24) 1,1-Dichloroethane	8.19	63	1027210	29.440	ng		94
25) Methyl tert-Butyl Ether	8.20	73	1483694	29.124	ng		81
26) Vinyl Acetate	8.27	86	111507	31.947	ng	#	1
27) 2-Butanone	8.55	72	327282	29.373	ng	#	28
28) cis-1,2-Dichloroethene	9.04	61	876026	28.989	ng		95
29) Diisopropyl Ether	9.20	87	423126	28.830	ng	#	54
30) Ethyl Acetate	9.19	61	248591	31.977	ng		86
31) n-Hexane	9.24	57	1311592	28.226	ng		92

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 29 11:42:04 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.36	83	803558	33.387	ng		96
34) Tetrahydrofuran	9.78	72	313496	29.935	ng	#	52
35) Ethyl tert-Butyl Ether	9.80	87	617165	28.731	ng	#	79
36) 1,2-Dichloroethane	10.19	62	771745	27.968	ng		96
38) 1,1,1-Trichloroethane	10.50	97	813898	28.294	ng		94
39) Isopropyl Acetate	10.78	61	410147	28.711	ng	#	71
40) 1-Butanol	10.80	56	710564	25.551	ng		94
41) Benzene	11.02	78	1886912	26.487	ng		99
42) Carbon Tetrachloride	11.19	117	830520	28.424	ng		98
43) Cyclohexane	11.34	84	745661	26.772	ng	#	49
44) tert-Amyl Methyl Ether	11.64	73	1370343	28.890	ng		79
45) 1,2-Dichloropropane	11.95	63	597803	28.418	ng		96
46) Bromodichloromethane	12.15	83	641317	30.627	ng		93
47) Trichloroethene	12.21	130	652583	29.430	ng		99
48) 1,4-Dioxane	12.16	88	409402	30.764	ng	#	70
49) Isooctane	12.26	57	3206684	28.156	ng		91
50) Methyl Methacrylate	12.35	100	233408	30.538	ng	#	69
51) n-Heptane	12.52	71	495434	29.136	ng	#	52
52) cis-1,3-Dichloropropene	13.17	75	746984	28.174	ng		99
53) 4-Methyl-2-pentanone	13.19	58	694096	28.024	ng		85
54) trans-1,3-Dichloropropene	13.77	75	764174	31.268	ng		99
55) 1,1,2-Trichloroethane	14.00	97	499675	28.839	ng		90
58) Toluene	14.35	91	2149242	27.551	ng		98
59) 2-Hexanone	14.59	43	1852856	25.150	ng		99
60) Dibromochloromethane	14.85	129	685950	29.798	ng		100
61) 1,2-Dibromoethane	15.15	107	603979	28.201	ng		98
62) Butyl Acetate	15.31	43	2068043	27.918	ng		91
63) n-Octane	15.48	57	660220	27.989	ng		95
64) Tetrachloroethene	15.70	166	644791	27.945	ng		99
65) Chlorobenzene	16.50	112	1549150	27.869	ng		100
66) Ethylbenzene	16.94	91	2462734	27.774	ng		93
67) m- & p-Xylene	17.16	91	3862781	65.751	ng		92
68) Bromoform	17.26	173	499298	37.358	ng		100
69) Styrene	17.60	104	1650770	29.087	ng		94
70) o-Xylene	17.74	91	1950703	31.023	ng		93
71) n-Nonane	17.97	43	1649502	26.582	ng		95
72) 1,1,2,2-Tetrachloroethane	17.70	83	819359	31.468	ng		93
74) Cumene	18.45	105	2654480	28.998	ng		95
75) alpha-Pinene	18.93	93	1240581	28.884	ng		92
76) n-Propylbenzene	19.07	91	2982474	28.037	ng		92
77) 3-Ethyltoluene	19.19	105	2684594	26.733	ng		95
78) 4-Ethyltoluene	19.24	105	2583452	28.514	ng		94
79) 1,3,5-Trimethylbenzene	19.33	105	2218816	27.621	ng		92

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

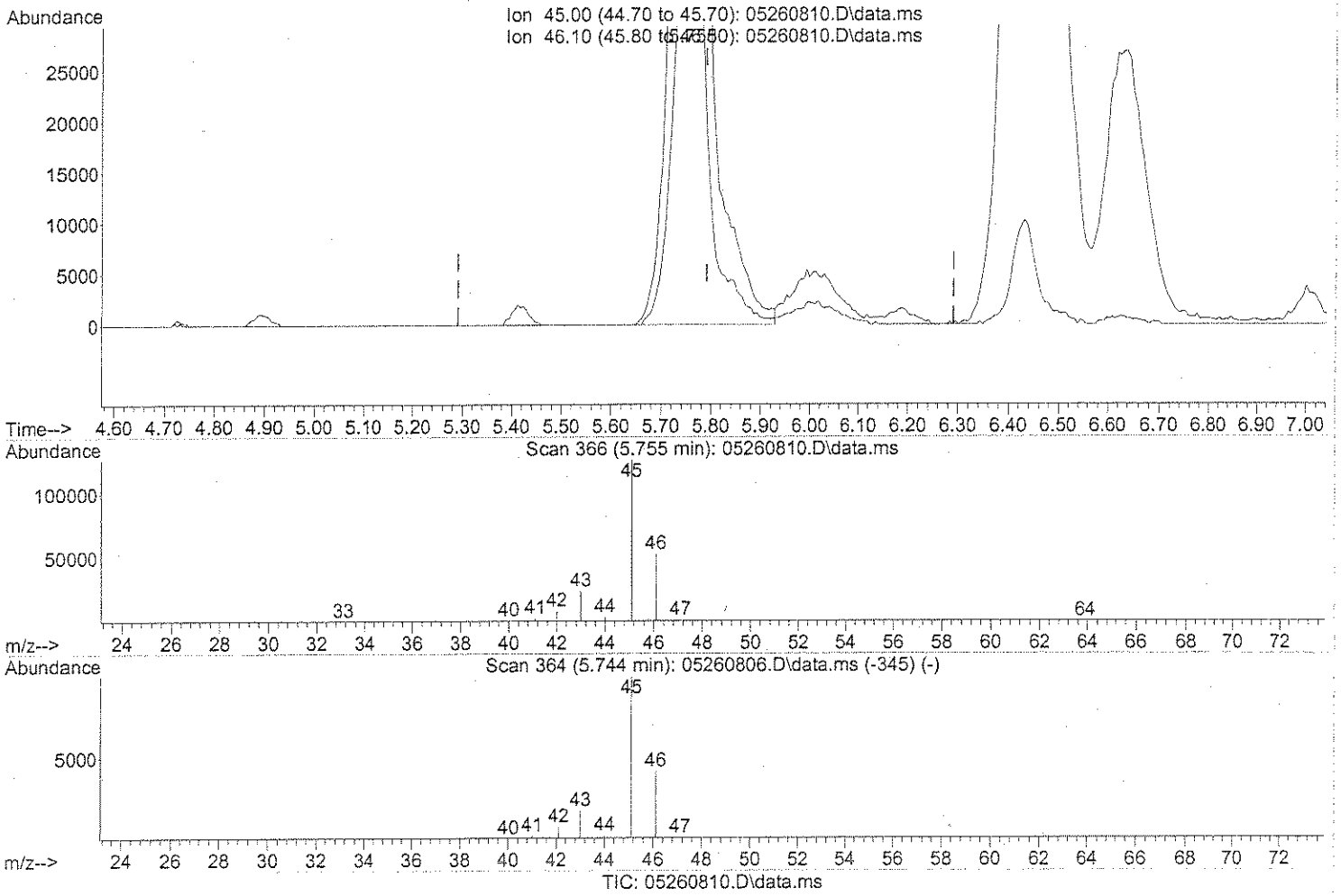
Quant Time: May 29 11:42:04 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	1279743	28.331	ng		98
81) 2-Ethyltoluene	19.57	105	2596793	26.669	ng		93
82) 1,2,4-Trimethylbenzene	19.83	105	2237271	27.509	ng		91
83) n-Decane	19.93	57	1621913	28.170	ng		80
84) Benzyl Chloride	19.99	91	1864065	29.664	ng		89
85) 1,3-Dichlorobenzene	20.02	146	1391479	27.002	ng		99
86) 1,4-Dichlorobenzene	20.11	146	1408092	28.147	ng		99
87) sec-Butylbenzene	20.16	105	3012787	28.555	ng		95
88) p-Isopropyltoluene	20.34	119	2905255	31.517	ng		93
89) 1,2,3-Trimethylbenzene	20.35	105	2345312	30.034	ng		89
90) 1,2-Dichlorobenzene	20.52	146	1285779	27.181	ng		100
91) d-Limonene	20.52	68	718757	28.679	ng		87
92) 1,2-Dibromo-3-Chloropr...	21.04	157	447167	29.409	ng		80
93) n-Undecane	21.43	57	1733271	28.705	ng		79
94) 1,2,4-Trichlorobenzene	22.55	184	254025	29.687	ng	#	86
95) Naphthalene	22.70	128	3414229	28.894	ng		99
96) n-Dodecane	22.66	57	1713461	29.123	ng		78
97) Hexachloro-1,3-butadiene	23.11	225	404761	28.471	ng		99

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

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.755min (-0.036) 25.17ng

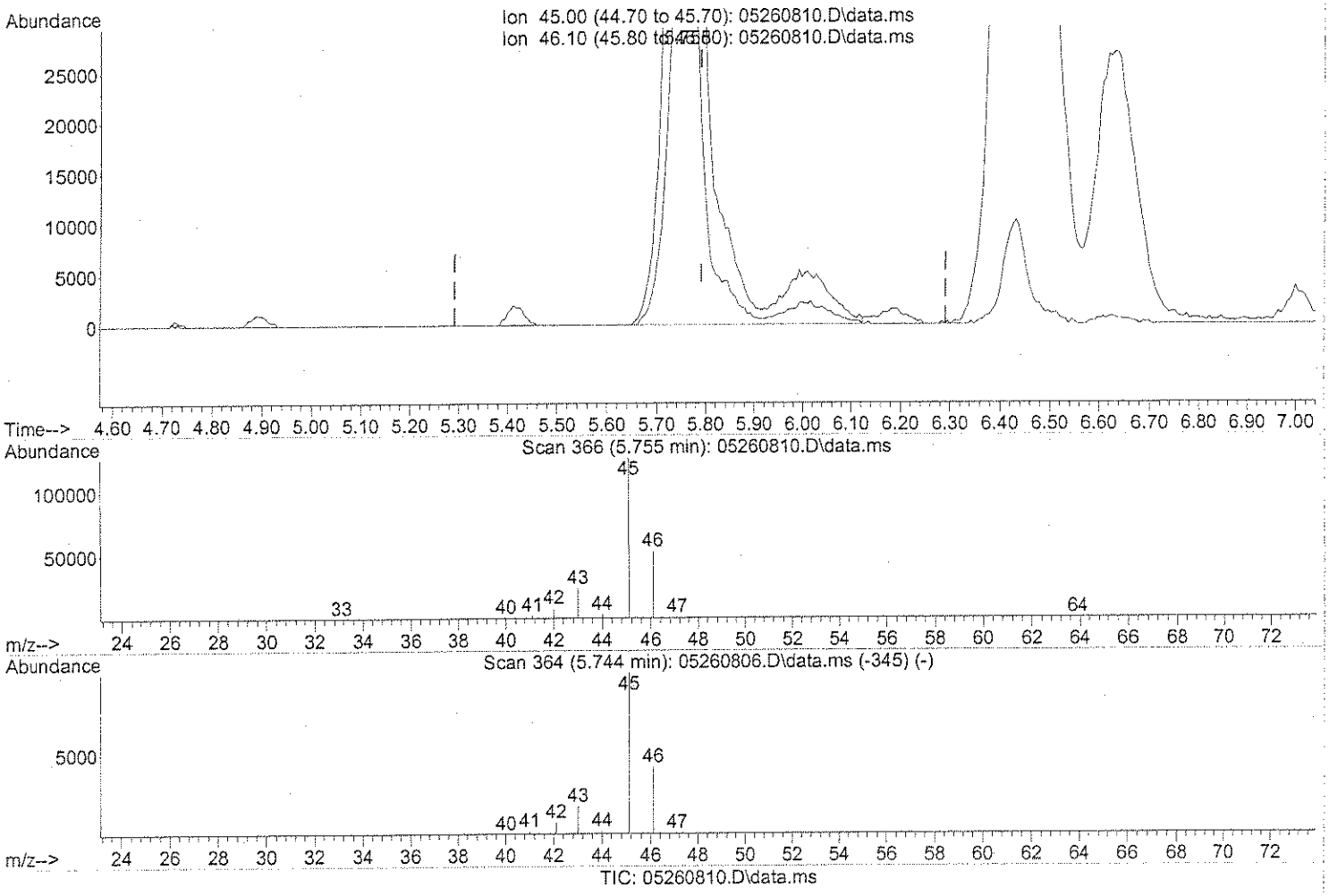
response 539235

split peaks

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	40.19
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.755min (-0.036) 26.81ng m

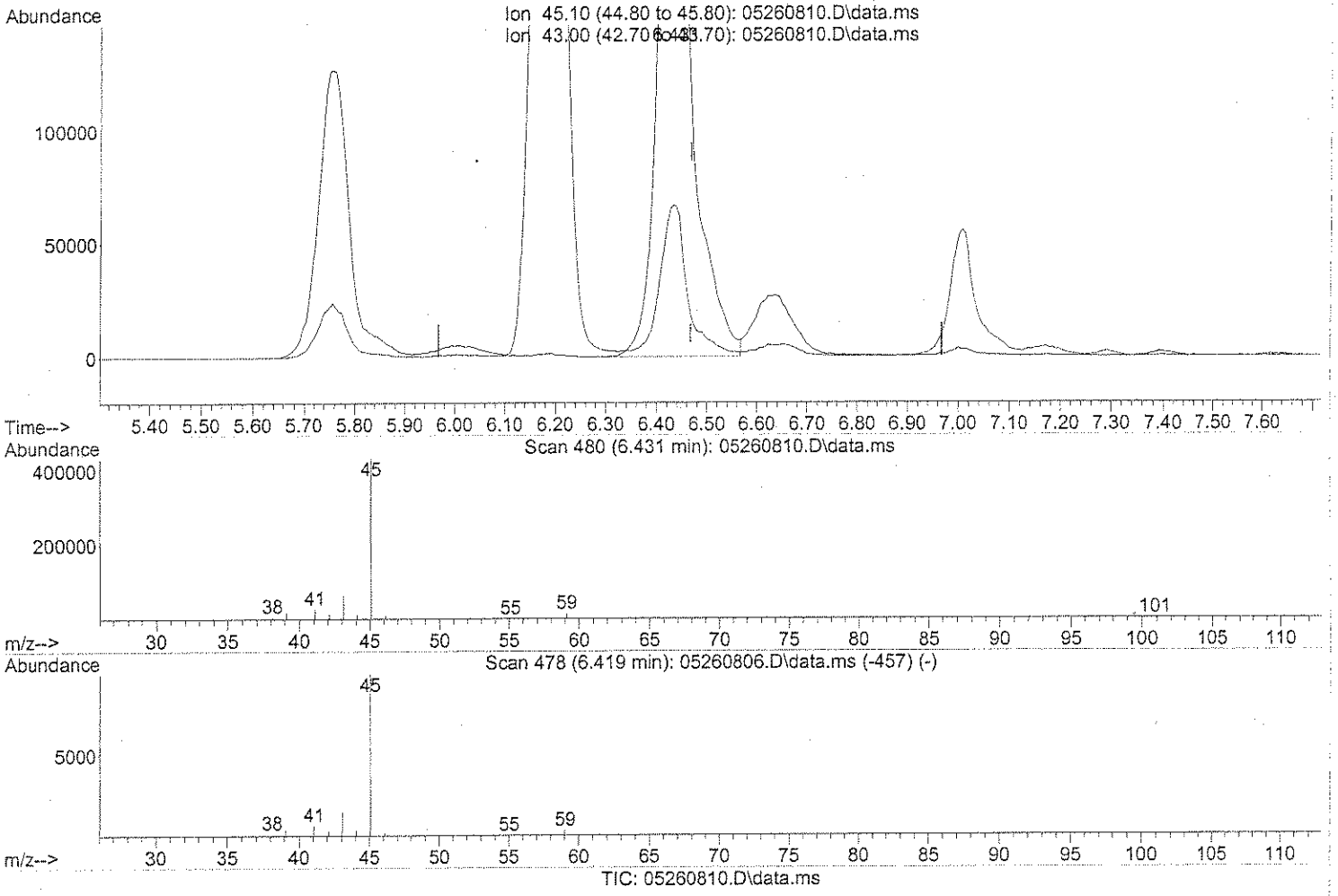
response 574235

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	37.74
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks
DT 5/29/08
Tem 5/30/08

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.431min (-0.036) 24.12ng

response 1548303

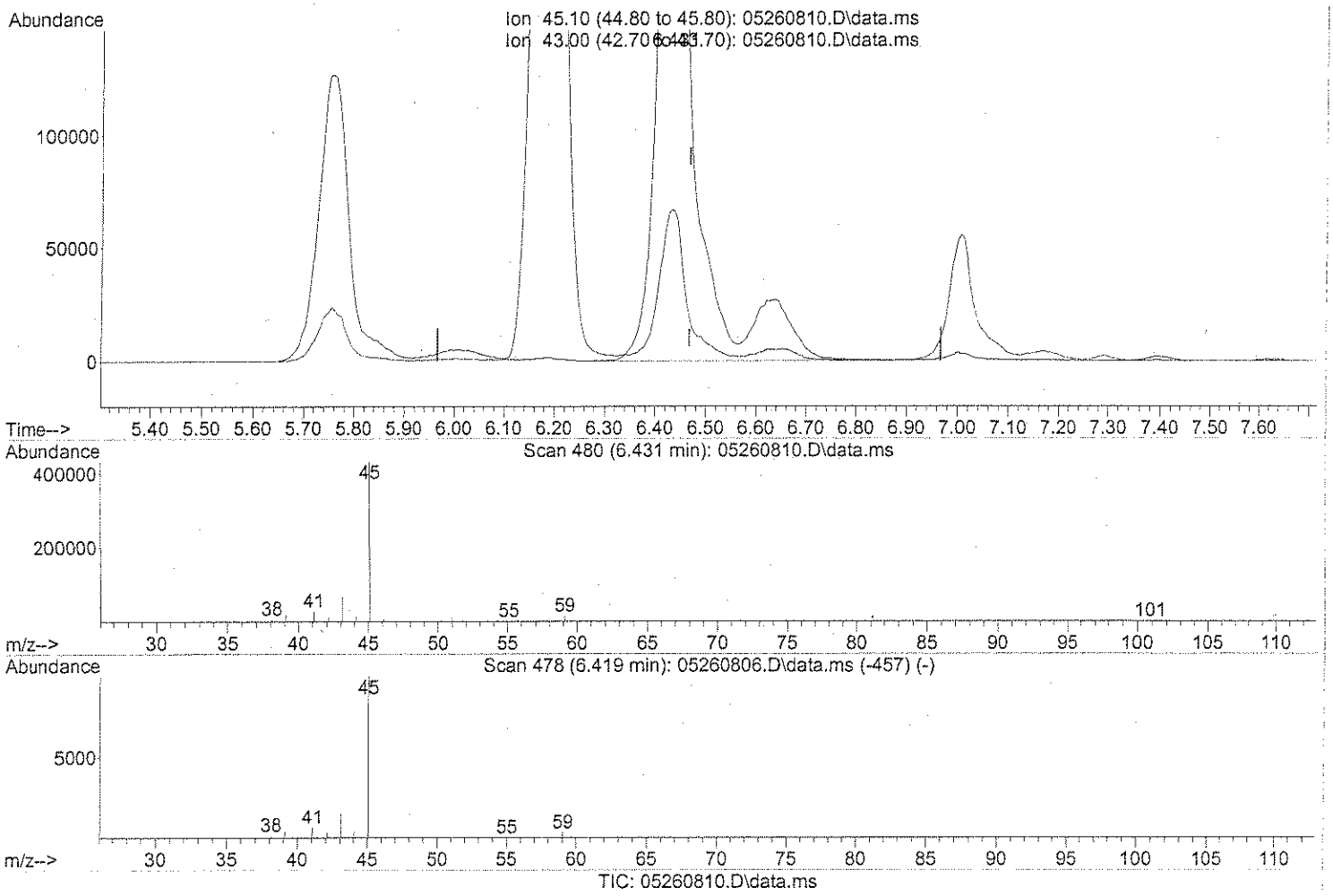
Ion	Exp%	Act%
45.10	100	100
43.00	19.40	16.72
0.00	0.00	0.00
0.00	0.00	0.00

split peaks

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.431min (-0.036) 26.42ng m

response 1696236

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	15.27
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peaks

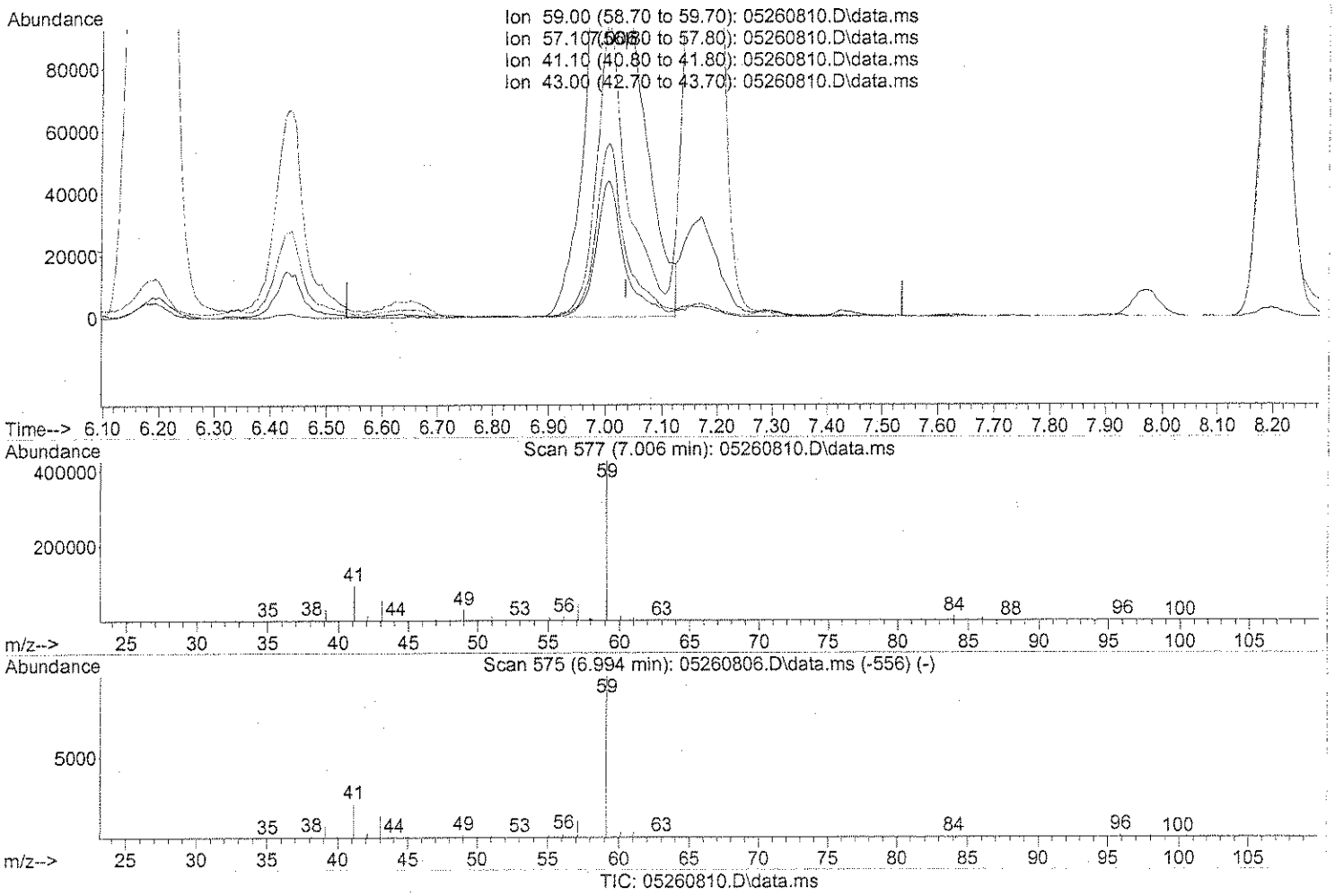
5/29/08

5/30/08

137

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

7.006min (-0.030) 25.79ng

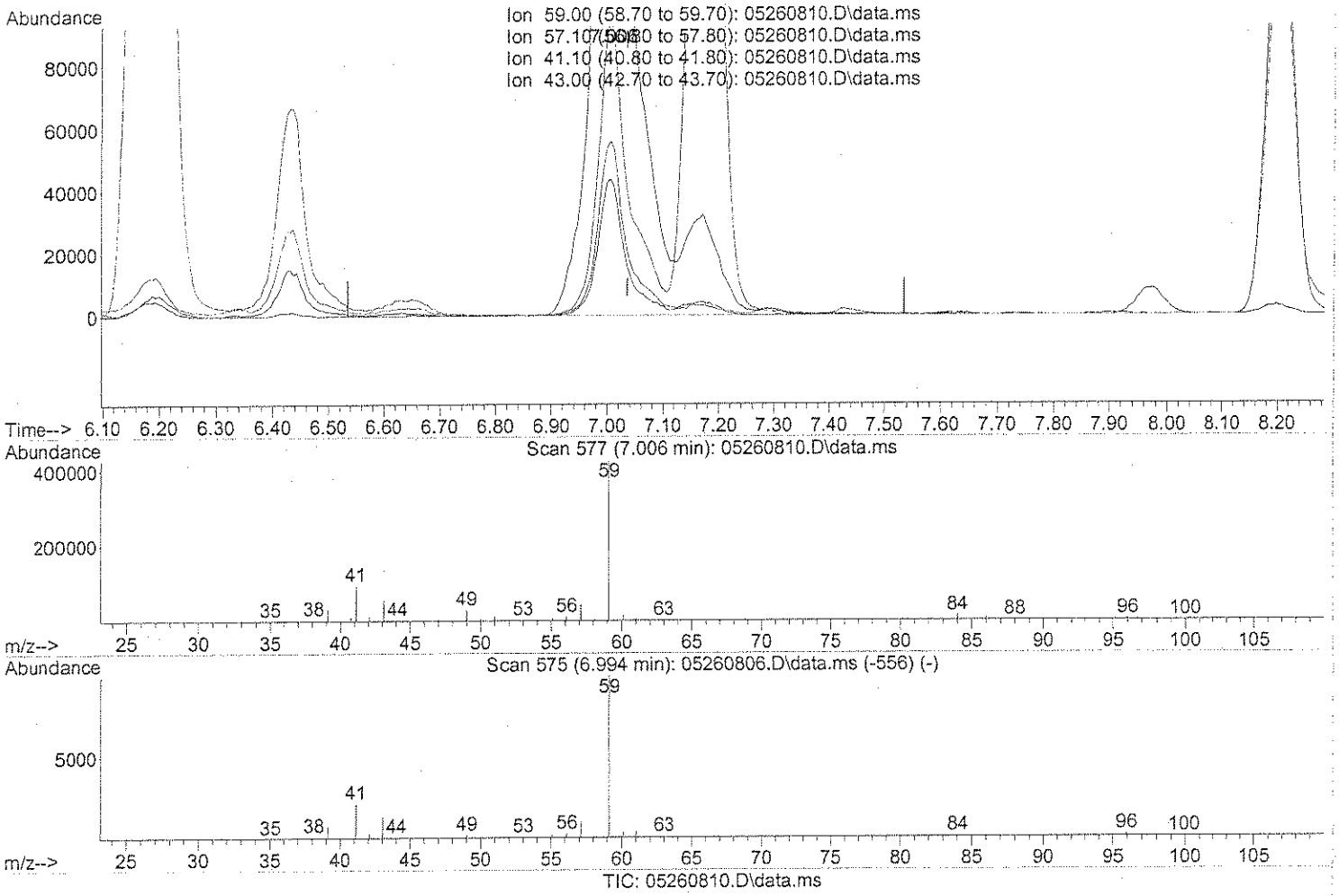
response 1543739

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	9.86
41.10	21.90	23.49
43.00	17.20	13.19

split peaks

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260810.D
Acq On : 27 May 2008 9:24 am
Operator : WA
Sample : 25ng TO-15 ICV STD
Misc : S20-05120801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 27 10:00:48 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

7.006min (-0.030) 28.20ng m

response 1687948

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	9.02
41.10	21.90	21.48
43.00	17.20	12.06

int. whole peaks
DM 5/29/08
Em 5/30/08

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: **05260810.D**
Data File Path: **J:\MS16\DATA\2008_05\26**
Operator: **WA**
Date Acquired: **5/27/08 9:24**
Acq. Method File: **TO15.M**
Sample Name: **25ng TO-15 ICV STD**
Misc Info: **S20-05120801/S20-05220809**
Instrument Name: **GCMS-16**

#	Name Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
2)	Propene	4.43	27.59	26.3	104.9	70	130	*
3)	Dichlorodifluoromethane	4.53	25.05	25.5	98.2	70	130	*
4)	Chloromethane	4.73	25.59	24.5	104.4	70	130	*
5)	Freon 114	4.85	27.49	26.0	105.7	70	130	*
6)	Vinyl Chloride	4.98	25.08	24.8	101.1	70	130	*
7)	1,3-Butadiene	5.13	33.20	30.0	110.7	70	130	*
8)	Bromomethane	5.42	23.18	25.0	92.7	70	130	*
9)	Chloroethane	5.59	25.87	25.0	103.5	70	130	*
10)	Ethanol	5.76	26.81	23.8	112.6	70	130	*
11)	Acetonitrile	5.95	24.75	25.3	97.8	70	130	*
12)	Acrolein	6.05	28.17	24.8	113.6	70	130	*
13)	Acetone	6.18	28.05	26.8	104.7	70	130	*
14)	Trichlorofluoromethane	6.34	27.58	26.3	104.9	70	130	*
15)	Isopropanol	6.43	26.42	25.8	102.4	70	130	*
16)	Acrylonitrile	6.63	28.35	25.5	111.2	70	130	*
17)	1,1-Dichloroethene	6.95	30.51	27.8	109.7	70	130	*
18)	tert-Butanol	7.01	28.20	25.8	109.3	70	130	*
19)	Methylene Chloride	7.06	29.20	27.8	105.0	70	130	*
20)	Allyl Chloride	7.17	30.74	26.8	114.7	70	130	*
21)	Trichlorotrifluoroethane	7.30	29.35	27.8	105.6	70	130	*
22)	Carbon Disulfide	7.40	25.44	25.0	101.8	70	130	*
23)	trans-1,2-Dichloroethene	7.97	28.74	26.5	108.5	70	130	*
24)	1,1-Dichloroethane	8.19	29.44	26.8	109.9	70	130	*
25)	Methyl tert-Butyl Ether	8.20	29.12	26.8	108.7	70	130	*
26)	Vinyl Acetate	8.27	31.95	25.3	126.3	70	130	*
27)	2-Butanone	8.55	29.37	27.0	108.8	70	130	*
28)	cis-1,2-Dichloroethene	9.04	28.99	27.0	107.4	70	130	*
29)	Diisopropyl Ether	9.20	28.83	26.3	109.6	70	130	*
30)	Ethyl Acetate	9.19	31.98	29.3	109.1	70	130	*
31)	n-Hexane	9.24	28.23	27.0	104.5	70	130	*
32)	Chloroform	9.36	33.39	29.8	112.0	70	130	*
34)	Tetrahydrofuran	9.78	29.93	26.8	111.7	70	130	*
35)	Ethyl tert-Butyl Ether	9.80	28.73	26.0	110.5	70	130	*
36)	1,2-Dichloroethane	10.19	27.97	26.3	106.3	70	130	*
38)	1,1,1-Trichloroethane	10.50	28.29	26.8	105.6	70	130	*
39)	Isopropyl Acetate	10.78	28.71	25.5	112.6	70	130	*

5/29/08

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: **05260810.D**
Data File Path: **J:\MS16\DATA\2008_05\26**
Operator: **WA**
Date Acquired: **5/27/08 9:24**
Acq. Method File: **TO15.M**
Sample Name: **25ng TO-15 ICV STD**
Misc Info: **S20-05120801/S20-05220809**
Instrument Name: **GCMS-16**

#	Name Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
40)	1-Butanol	10.80	25.55	24.8	103.0	70	130	*
41)	**Benzene**	**11.02**	**26.49**	**27.0**	**98.1**	**70**	**130**	*
42)	**Carbon Tetrachloride**	**11.19**	**28.42**	**26.0**	**109.3**	**70**	**130**	*
43)	Cyclohexane	11.34	26.77	26.8	99.9	70	130	*
44)	**tert-Amyl Methyl Ether**	**11.64**	**28.89**	**26.0**	**111.1**	**70**	**130**	*
45)	**1,2-Dichloropropane**	**11.95**	**28.42**	**26.5**	**107.2**	**70**	**130**	*
46)	**Bromodichloromethane**	**12.15**	**30.63**	**27.8**	**110.2**	**70**	**130**	*
47)	**Trichloroethene**	**12.21**	**29.43**	**27.3**	**107.8**	**70**	**130**	*
48)	**1,4-Dioxane**	**12.16**	**30.76**	**27.5**	**111.9**	**70**	**130**	*
49)	Isooctane	12.26	28.16	26.3	107.1	70	130	*
50)	Methyl Methacrylate	12.35	30.54	25.8	118.4	70	130	*
51)	n-Heptane	12.52	29.14	26.8	108.7	70	130	*
52)	**cis-1,3-Dichloropropene**	**13.17**	**28.17**	**25.0**	**112.7**	**70**	**130**	*
53)	**4-Methyl-2-pentanone**	**13.19**	**28.02**	**27.5**	**101.9**	**70**	**130**	*
54)	**trans-1,3-Dichloropropene**	**13.77**	**31.27**	**28.0**	**111.7**	**70**	**130**	*
55)	**1,1,2-Trichloroethane**	**14.00**	**28.84**	**26.3**	**109.7**	**70**	**130**	*
58)	**Toluene**	**14.35**	**27.55**	**26.5**	**104.0**	**70**	**130**	*
59)	**2-Hexanone**	**14.59**	**25.15**	**26.3**	**95.6**	**70**	**130**	*
60)	**Dibromochloromethane**	**14.85**	**29.80**	**27.0**	**110.4**	**70**	**130**	*
61)	**1,2-Dibromoethane**	**15.15**	**28.20**	**26.3**	**107.2**	**70**	**130**	*
62)	**Butyl Acetate**	**15.31**	**27.92**	**26.3**	**106.2**	**70**	**130**	*
63)	n-Octane	15.48	27.99	26.0	107.7	70	130	*
64)	**Tetrachloroethene**	**15.70**	**27.94**	**26.0**	**107.5**	**70**	**130**	*
65)	**Chlorobenzene**	**16.50**	**27.87**	**26.5**	**105.2**	**70**	**130**	*
66)	**Ethylbenzene**	**16.94**	**27.77**	**26.3**	**105.6**	**70**	**130**	*
67)	**m- & p-Xylene**	**17.16**	**65.75**	**62.5**	**105.2**	**70**	**130**	*
68)	**Bromoform**	**17.26**	**37.36**	**31.3**	**119.4**	**70**	**130**	*
69)	**Styrene**	**17.60**	**29.09**	**26.3**	**110.6**	**70**	**130**	*
70)	**o-Xylene**	**17.74**	**31.02**	**29.8**	**104.1**	**70**	**130**	*
71)	**n-Nonane**	**17.97**	**26.58**	**26.0**	**102.2**	**70**	**130**	*
72)	**1,1,2,2-Tetrachloroethane**	**17.70**	**31.47**	**29.8**	**105.6**	**70**	**130**	*
74)	**Cumene**	**18.45**	**29.00**	**27.0**	**107.4**	**70**	**130**	*
75)	**alpha-Pinene**	**18.93**	**28.88**	**26.3**	**109.8**	**70**	**130**	*
76)	n-Propylbenzene	19.07	28.04	26.3	106.6	70	130	*
77)	3-Ethyltoluene	19.19	26.73	25.5	104.8	70	130	*

5/29/08

INITIAL CALIBRATION VERIFICATION CHECK SHEET

Data File Name: **05260810.D**
Data File Path: **J:\MS16\DATA\2008_05\26**
Operator: **WA**
Date Acquired: **5/27/08 9:24**
Acq. Method File: **TO15.M**
Sample Name: **25ng TO-15 ICV STD**
Misc Info: **S20-05120801/S20-05220809**
Instrument Name: **GCMS-16**

#	Name Compound	Ret. Time	Amt. (ng)	Spike Amt.(ng)	% Rec.	Lower Limit	Upper Limit	* OR Fail
78)	**4-Ethyltoluene**	**19.24**	**28.51**	**26.5**	**107.6**	**70**	**130**	*
79)	**1,3,5-Trimethylbenzene**	**19.33**	**27.62**	**26.0**	**106.2**	**70**	**130**	*
80)	alpha-Methylstyrene	19.52	28.33	25.5	111.1	70	130	*
81)	2-Ethyltoluene	19.57	26.67	24.8	107.5	70	130	*
82)	**1,2,4-Trimethylbenzene**	**19.83**	**27.51**	**26.0**	**105.8**	**70**	**130**	*
83)	n-Decane	19.93	28.17	26.3	107.1	70	130	*
84)	**Benzyl Chloride**	**19.99**	**29.66**	**25.8**	**115.0**	**70**	**130**	*
85)	**1,3-Dichlorobenzene**	**20.02**	**27.00**	**25.5**	**105.9**	**70**	**130**	*
86)	**1,4-Dichlorobenzene**	**20.11**	**28.15**	**26.3**	**107.0**	**70**	**130**	*
87)	sec-Butylbenzene	20.16	28.55	26.8	106.5	70	130	*
88)	p-Isopropyltoluene	20.34	31.52	28.8	109.4	70	130	*
89)	1,2,3-Trimethylbenzene	20.35	30.03	28.5	105.4	70	130	*
90)	**1,2-Dichlorobenzene**	**20.52**	**27.18**	**25.8**	**105.4**	**70**	**130**	*
91)	**d-Limonene**	**20.52**	**28.68**	**26.0**	**110.3**	**70**	**130**	*
92)	**1,2-Dibromo-3-Chloropropane**	**21.04**	**29.41**	**25.8**	**114.0**	**70**	**130**	*
93)	n-Undecane	21.43	28.70	26.5	108.3	70	130	*
94)	**1,2,4-Trichlorobenzene**	**22.55**	**29.69**	**26.0**	**114.2**	**70**	**130**	*
95)	**Naphthalene**	**22.70**	**28.89**	**26.3**	**109.9**	**70**	**130**	*
96)	n-Dodecane	22.66	29.12	26.5	109.9	70	130	*
97)	**Hexachloro-1,3-butadiene**	**23.11**	**28.47**	**26.3**	**108.3**	**70**	**130**	*

Bold = 67 Compound List

5/29/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	Bromochloromethane (IS1)	1.000	1.000	0.0	91	-0.05
2	T	Propene	1.935	1.532	20.8	73	0.00
3	T	Dichlorodifluoromethane	2.341	2.007	14.3	79	0.00
4	T	Chloromethane	2.941	2.628	10.6	88	-0.01
5	T	Freon 114	1.308	1.144	12.5	79	-0.01
6	T	Vinyl Chloride	1.873	1.599	14.6	79	-0.02
7	T	1,3-Butadiene	1.707	1.569	8.1	89	-0.02
8	T	Bromomethane	0.965	0.860	10.9	93	-0.02
9	T	Chloroethane	0.968	0.822	15.1	80	-0.02
10	T	Ethanol	1.313	1.207	8.1	79	-0.09
11	T	Acetonitrile	3.785	3.233	14.6	78	-0.06
12	T	Acrolein	0.947	0.843	11.0	87	-0.04
13	T	Acetone	1.306	1.103	15.5	68	-0.05
14	T	Trichlorofluoromethane	2.191	1.945	11.2	83	-0.02
15	T	Isopropanol	3.935	4.035	-2.5	104	-0.09
16	T	Acrylonitrile	2.374	2.146	9.6	82	-0.06
17	T	1,1-Dichloroethene	1.023	0.941	8.0	85	-0.03
18	T	tert-Butanol	3.669	3.342	8.9	80	-0.08
19	T	Methylene Chloride	1.008	0.893	11.4	81	-0.04
20	T	Allyl Chloride	2.322	2.129	8.3	81	-0.04
21	T	Trichlorotrifluoroethane	1.065	0.953	10.5	82	-0.02
22	T	Carbon Disulfide	4.053	3.691	8.9	86	-0.02
23	T	trans-1,2-Dichloroethene	2.014	1.761	12.6	81	-0.04
24	T	1,1-Dichloroethane	2.139	1.923	10.1	82	-0.05
25	T	Methyl tert-Butyl Ether	3.123	2.742	12.2	81	-0.03
26	T	Vinyl Acetate	0.214	0.195	8.9	79	-0.04
27	T	2-Butanone	0.683	0.595	12.9	78	-0.04
28	T	cis-1,2-Dichloroethene	1.852	1.645	11.2	81	-0.05
29	T	Diisopropyl Ether	0.900	0.827	8.1	83	-0.04
30	T	Ethyl Acetate	0.477	0.438	8.2	81	-0.04
31	T	n-Hexane	2.848	2.471	13.2	82	-0.03
32	T	Chloroform	1.475	1.343	8.9	84	-0.05
33	S	1,2-Dichloroethane-d4(SS1)	1.430	1.382	3.4	89	-0.05
34	T	Tetrahydrofuran	0.642	0.589	8.3	80	-0.04
35	T	Ethyl tert-Butyl Ether	1.317	1.195	9.3	83	-0.03
36	T	1,2-Dichloroethane	1.691	1.505	11.0	82	-0.04
37	IR	1,4-Difluorobenzene (IS2)	1.000	1.000	0.0	90	-0.03
38	T	1,1,1-Trichloroethane	0.426	0.383	10.1	83	-0.04

6/5/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39	T	Isopropyl Acetate	0.211	0.194	8.1	82	-0.04
40	T	1-Butanol	0.411	0.358	12.9	79	-0.04
41	T	Benzene	1.054	0.858	18.6	80	-0.03
42	T	Carbon Tetrachloride	0.432	0.391	9.5	82	-0.02
43	T	Cyclohexane	0.412	0.349	15.3	82	-0.02
44	T	tert-Amyl Methyl Ether	0.702	0.631	10.1	81	-0.03
45	T	1,2-Dichloropropane	0.311	0.278	10.6	80	-0.03
46	T	Bromodichloromethane	0.310	0.287	7.4	83	-0.03
47	T	Trichloroethene	0.328	0.302	7.9	83	-0.03
48	T	1,4-Dioxane	0.197	0.184	6.6	81	-0.03
49	T	Isooctane	1.685	1.516	10.0	83	-0.02
50	T	Methyl Methacrylate	0.113	0.108	4.4	83	-0.03
51	T	n-Heptane	0.252	0.229	9.1	79	-0.02
52	T	cis-1,3-Dichloropropene	0.392	0.363	7.4	82	-0.02
53	T	4-Methyl-2-pentanone	0.366	0.334	8.7	81	-0.03
54	T	trans-1,3-Dichloropropene	0.362	0.328	9.4	82	-0.02
55	T	1,1,2-Trichloroethane	0.256	0.235	8.2	83	-0.02
56	I	Chlorobenzene-d5 (IS3)	1.000	1.000	0.0	88	-0.01
57	S	Toluene-d8 (SS2)	2.577	2.554	0.9	87	-0.02
58	T	Toluene	2.924	2.628	10.1	82	-0.02
59	T	2-Hexanone	2.761	2.386	13.6	78	-0.02
60	T	Dibromochloromethane	0.863	0.797	7.6	83	-0.02
61	T	1,2-Dibromoethane	0.803	0.743	7.5	83	-0.02
62	T	Butyl Acetate	2.776	2.512	9.5	79	-0.02
63	T	n-Octane	0.884	0.813	8.0	80	-0.02
64	T	Tetrachloroethene	0.865	0.799	7.6	82	-0.02
65	T	Chlorobenzene	2.083	1.906	8.5	82	-0.02
66	T	Ethylbenzene	3.323	3.068	7.7	83	-0.01
67	T	m- & p-Xylene	2.202	2.005	8.9	83	-0.02
68	T	Bromoform	0.501	0.490	2.2	86	-0.02
69	T	Styrene	2.127	2.011	5.5	83	-0.02
70	T	o-Xylene	2.357	2.147	8.9	82	-0.02
71	T	n-Nonane	2.326	2.098	9.8	79	-0.01
72	T	1,1,2,2-Tetrachloroethane	0.976	0.893	8.5	82	-0.02
73	S	Bromofluorobenzene (SS3)	0.857	0.711	17.0	72	0.00
74	T	Cumene	3.431	3.208	6.5	84	-0.01
75	T	alpha-Pinene	1.610	1.558	3.2	83	0.00
76	T	n-Propylbenzene	3.987	3.721	6.7	84	-0.01

Evaluate Continuing Calibration Report

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

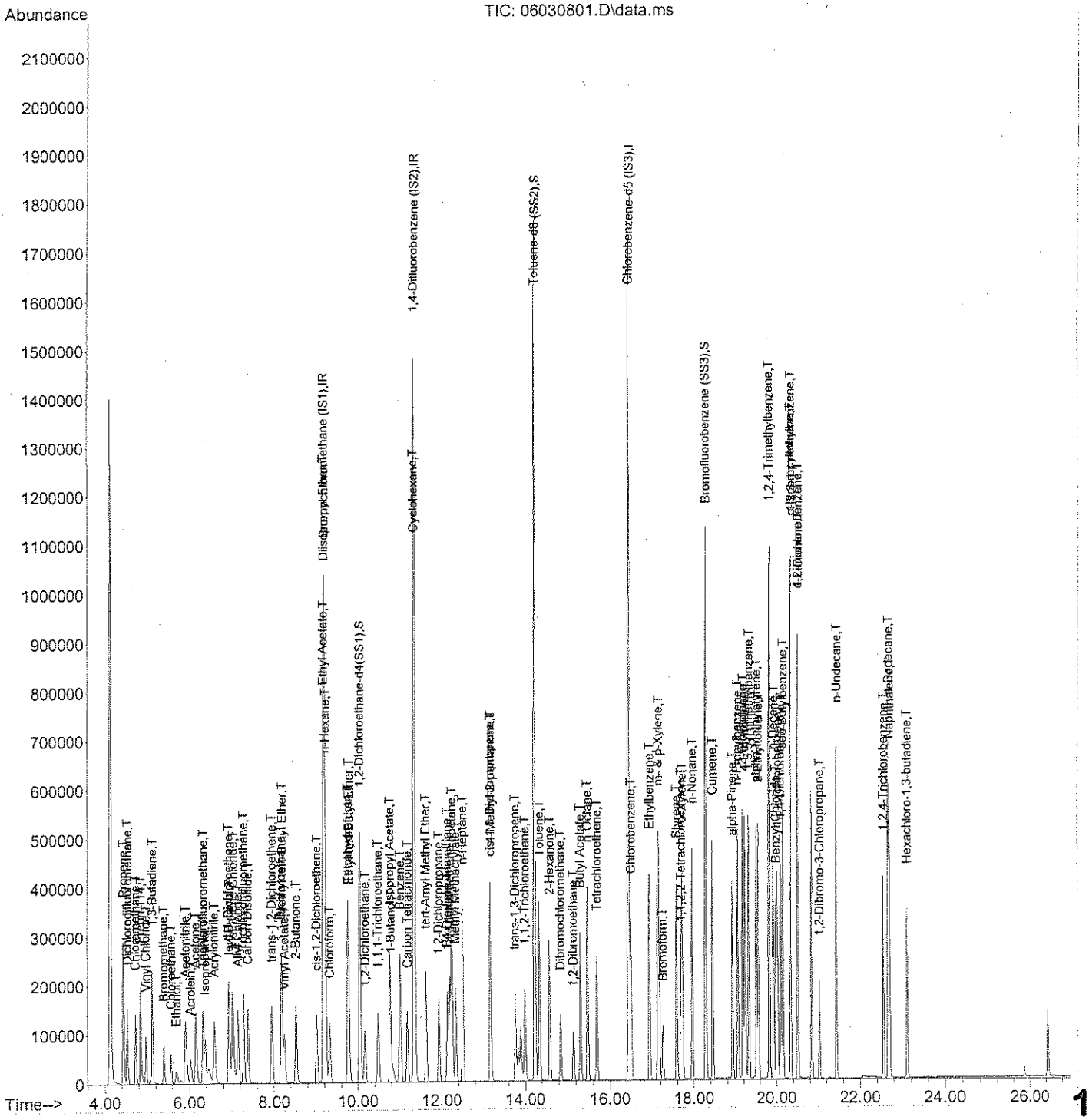
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	T	3-Ethyltoluene	3.764	3.433	8.8	84	-0.01
78	T	4-Ethyltoluene	3.396	3.191	6.0	83	-0.01
79	T	1,3,5-Trimethylbenzene	3.011	2.751	8.6	83	-0.01
80	T	alpha-Methylstyrene	1.693	1.656	2.2	86	-0.02
81	T	2-Ethyltoluene	3.649	3.437	5.8	84	-0.01
82	T	1,2,4-Trimethylbenzene	3.048	2.781	8.8	83	-0.02
83	T	n-Decane	2.158	2.036	5.7	83	-0.01
84	T	Benzyl Chloride	2.355	2.232	5.2	85	-0.02
85	T	1,3-Dichlorobenzene	1.931	1.792	7.2	85	-0.02
86	T	1,4-Dichlorobenzene	1.875	1.740	7.2	85	-0.01
87	T	sec-Butylbenzene	3.954	3.706	6.3	84	-0.01
88	T	p-Isopropyltoluene	3.455	3.277	5.2	85	-0.02
89	T	1,2,3-Trimethylbenzene	2.927	2.758	5.8	85	-0.02
90	T	1,2-Dichlorobenzene	1.773	1.679	5.3	86	-0.02
91	T	d-Limonene	0.939	0.905	3.6	83	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.570	0.565	0.9	89	-0.01
93	T	n-Undecane	2.263	2.137	5.6	83	0.00
94	T	1,2,4-Trichlorobenzene	0.321	0.320	0.3	93	0.00
95	T	Naphthalene	4.428	4.385	1.0	100	-0.01
96	T	n-Dodecane	2.205	2.143	2.8	87	0.00
97	T	Hexachloro-1,3-butadiene	0.533	0.513	3.8	86	0.00

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

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.20	130	363875	25.000	ng		-0.05
37) 1,4-Difluorobenzene (IS2)	11.35	114	1500112	25.000	ng		-0.03
56) Chlorobenzene-d5 (IS3)	16.45	82	574573	25.000	ng		-0.01
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.05	65	502978	24.174	ng		-0.05
Spiked Amount 25.000			Recovery =	96.68%			
57) Toluene-d8 (SS2)	14.23	98	1467722	24.778	ng		-0.02
Spiked Amount 25.000			Recovery =	99.12%			
73) Bromofluorobenzene (SS3)	18.29	174	408786	20.756	ng		0.00
Spiked Amount 25.000			Recovery =	83.04%			
Target Compounds							Qvalue
2) Propene	4.44	42	120386	4.274	ng		93
3) Dichlorodifluoromethane	4.54	85	151912	4.459	ng		98
4) Chloromethane	4.73	50	195090	4.557	ng		99
5) Freon 114	4.85	135	89102	4.679	ng		99
6) Vinyl Chloride	4.97	62	119841	4.396	ng		94
7) 1,3-Butadiene	5.12	54	124485	5.010	ng	#	86
8) Bromomethane	5.41	94	65706	4.676	ng		100
9) Chloroethane	5.58	64	62828	4.460	ng		95
10) Ethanol	5.70	45	79905m	4.181	ng		
11) Acetonitrile	5.92	41	230602	4.186	ng		99
12) Acrolein	6.03	56	58887	4.273	ng		98
13) Acetone	6.15	58	89079	4.685	ng	#	76
14) Trichlorofluoromethane	6.33	101	147199	4.615	ng		99
15) Isopropanol	6.38	45	302483m	5.281	ng		
16) Acrylonitrile	6.60	53	157759	4.565	ng		96
17) 1,1-Dichloroethene	6.93	96	77370	5.198	ng		96
18) tert-Butanol	6.95	59	248076m	4.646	ng		
19) Methylene Chloride	7.04	84	72769	4.962	ng	#	47
20) Allyl Chloride	7.15	41	162706	4.813	ng		82
21) Trichlorotrifluoroethane	7.28	151	79094	5.104	ng		84
22) Carbon Disulfide	7.39	76	268641	4.554	ng		100
23) trans-1,2-Dichloroethene	7.95	61	141000	4.810	ng		94
24) 1,1-Dichloroethane	8.17	63	155379	4.991	ng		94
25) Methyl tert-Butyl Ether	8.19	73	221466	4.873	ng		79
26) Vinyl Acetate	8.25	86	13899	4.463	ng	#	34
27) 2-Butanone	8.53	72	48468	4.876	ng	#	18
28) cis-1,2-Dichloroethene	9.01	61	132875	4.929	ng		94
29) Diisopropyl Ether	9.19	87	61988	4.734	ng	#	42
30) Ethyl Acetate	9.17	61	40502	5.840	ng		86
31) n-Hexane	9.23	57	201415	4.858	ng		92

DOH 6/5/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.33	83	126116	5.873	ng		96
34) Tetrahydrofuran	9.76	72	47563	5.091	ng	#	51
35) Ethyl tert-Butyl Ether	9.79	87	91284	4.763	ng	#	78
36) 1,2-Dichloroethane	10.18	62	120489	4.894	ng		97
38) 1,1,1-Trichloroethane	10.48	97	126363	4.948	ng		95
39) Isopropyl Acetate	10.77	61	58714	4.629	ng	#	71
40) 1-Butanol	10.79	56	97789	3.961	ng		98
41) Benzene	11.01	78	283052	4.475	ng		99
42) Carbon Tetrachloride	11.18	117	125646	4.843	ng		98
43) Cyclohexane	11.33	84	116159	4.697	ng	#	29
44) tert-Amyl Methyl Ether	11.62	73	196843	4.674	ng		77
45) 1,2-Dichloropropane	11.94	63	90839	4.864	ng		95
46) Bromodichloromethane	12.14	83	99036	5.327	ng		95
47) Trichloroethene	12.20	130	103425	5.253	ng		99
48) 1,4-Dioxane	12.14	88	63475	5.372	ng	#	72
49) Isooctane	12.25	57	472920	4.677	ng		92
50) Methyl Methacrylate	12.34	100	34263	5.049	ng	#	71
51) n-Heptane	12.51	71	76388	5.060	ng	#	52
52) cis-1,3-Dichloropropene	13.17	75	113130	4.806	ng		99
53) 4-Methyl-2-pentanone	13.18	58	105230	4.785	ng		86
54) trans-1,3-Dichloropropene	13.76	75	114243	5.265	ng		98
55) 1,1,2-Trichloroethane	13.99	97	76960	5.003	ng		91
58) Toluene	14.35	91	332151	4.943	ng		99
59) 2-Hexanone	14.58	43	279635	4.407	ng		99
60) Dibromochloromethane	14.84	129	101666	5.127	ng		99
61) 1,2-Dibromoethane	15.14	107	93088	5.046	ng		100
62) Butyl Acetate	15.31	43	303085	4.750	ng		93
63) n-Octane	15.47	57	97208	4.784	ng		96
64) Tetrachloroethene	15.69	166	100059	5.035	ng		99
65) Chlorobenzene	16.50	112	240925	5.032	ng		99
66) Ethylbenzene	16.94	91	380779	4.986	ng		93
67) m- & p-Xylene	17.16	91	594423	11.747	ng		91
68) Bromoform	17.26	173	73779	6.409	ng		98
69) Styrene	17.59	104	249624	5.106	ng		94
70) o-Xylene	17.73	91	300965	5.557	ng		92
71) n-Nonane	17.97	43	248360	4.647	ng		96
72) 1,1,2,2-Tetrachloroethane	17.70	83	126217	5.628	ng		93
74) Cumene	18.45	105	398162	5.050	ng		94
75) alpha-Pinene	18.93	93	189775	5.130	ng		94
76) n-Propylbenzene	19.06	91	449017	4.900	ng		90
77) 3-Ethyltoluene	19.19	105	402413	4.652	ng		93
78) 4-Ethyltoluene	19.24	105	407072	5.216	ng		93
79) 1,3,5-Trimethylbenzene	19.33	105	341388	4.934	ng		90

6/5/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

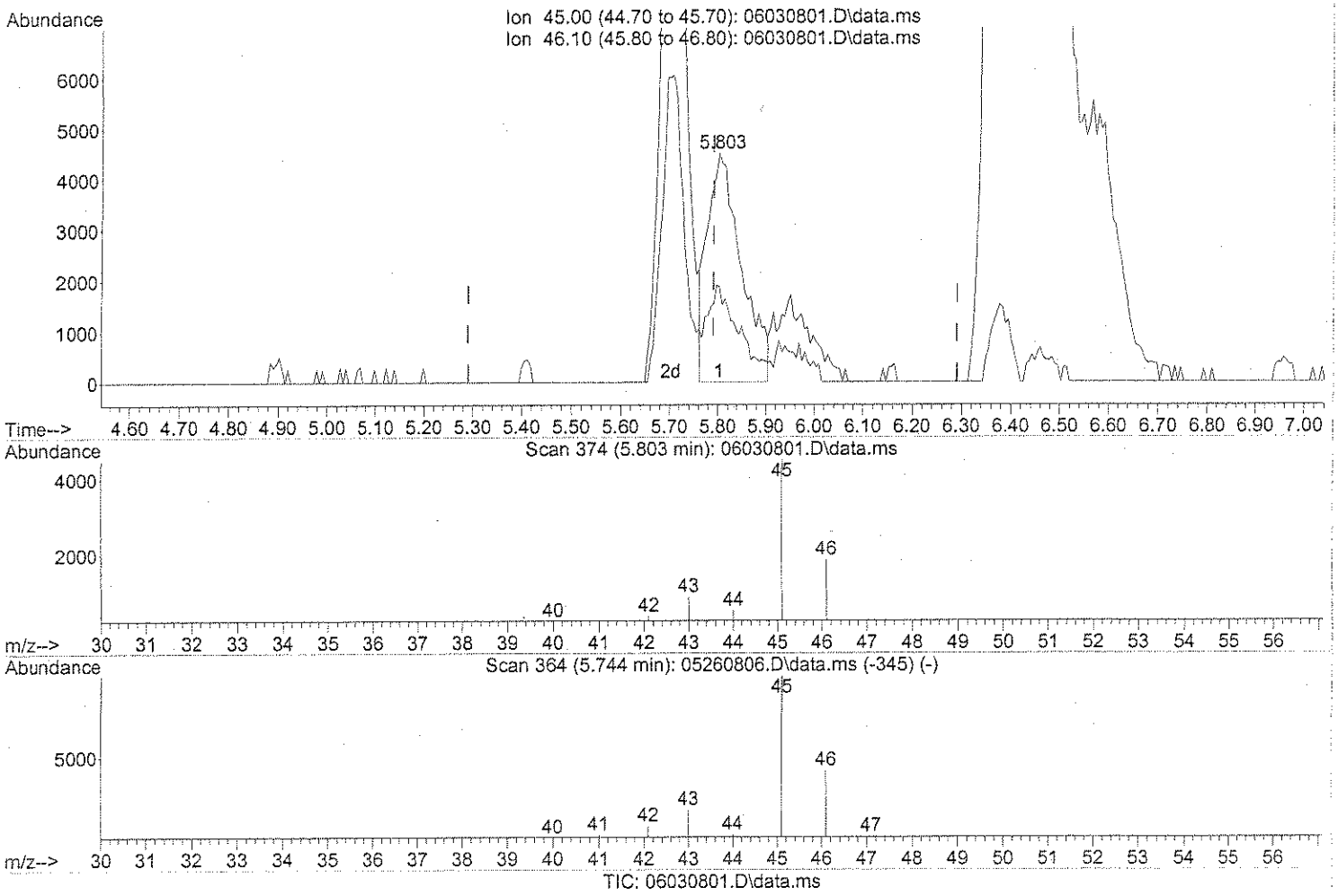
Quant Time: Jun 05 16:35:21 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	194159	4.990	ng		95
81) 2-Ethyltoluene	19.57	105	390967	4.662	ng		91
82) 1,2,4-Trimethylbenzene	19.83	105	351498	5.018	ng		90
83) n-Decane	19.93	57	243316	4.906	ng		80
84) Benzyl Chloride	19.99	91	274414	5.070	ng		88
85) 1,3-Dichlorobenzene	20.02	146	218324	4.919	ng		99
86) 1,4-Dichlorobenzene	20.10	146	219893	5.103	ng		98
87) sec-Butylbenzene	20.16	105	455684	5.014	ng		95
88) p-Isopropyltoluene	20.34	119	444355	5.597	ng		93
89) 1,2,3-Trimethylbenzene	20.34	105	348566	5.182	ng		87
90) 1,2-Dichlorobenzene	20.52	146	208356	5.114	ng		99
91) d-Limonene	20.52	68	110254	5.107	ng		85
92) 1,2-Dibromo-3-Chloropr...	21.04	157	67497	5.154	ng		81
93) n-Undecane	21.43	57	257880	4.958	ng		80
94) 1,2,4-Trichlorobenzene	22.55	184	41223	5.593	ng	#	86
95) Naphthalene	22.69	128	529051	5.198	ng		98
96) n-Dodecane	22.66	57	261068	5.152	ng		78
97) Hexachloro-1,3-butadiene	23.11	225	65484	5.348	ng		99

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

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030801.D\data.ms

(10) Ethanol (T)

5.803min (+0.012) 1.16ng

response 22181

split peak

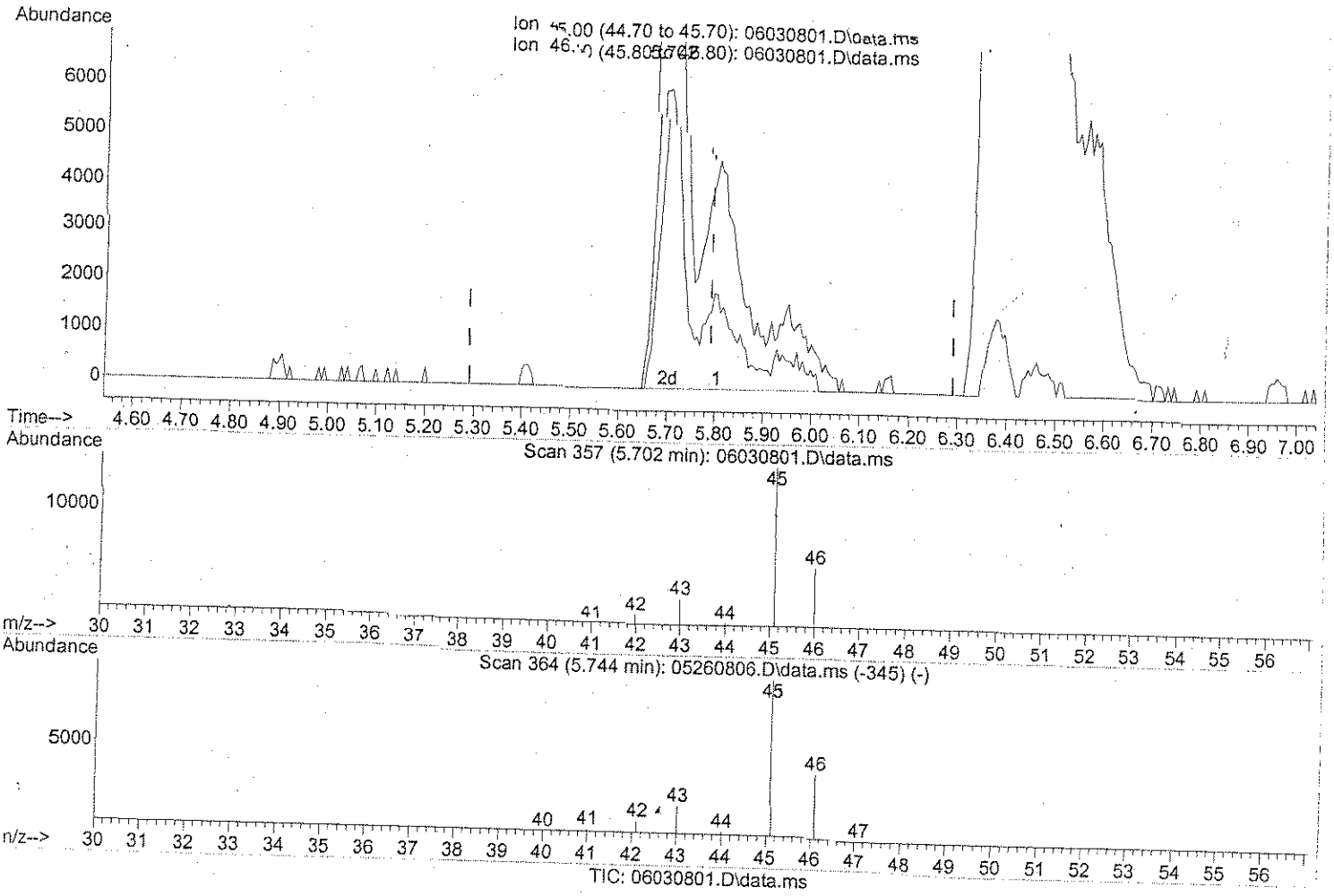
Ion	Exp%	Act%
45.00	100	100
46.10	37.00	39.75
0.00	0.00	0.00
0.00	0.00	0.00

150

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(10) Ethanol (T)

5.702min (-0.089) 4.18ng m

response 79905

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	11.03#
0.00	0.00	0.00
0.00	0.00	0.00

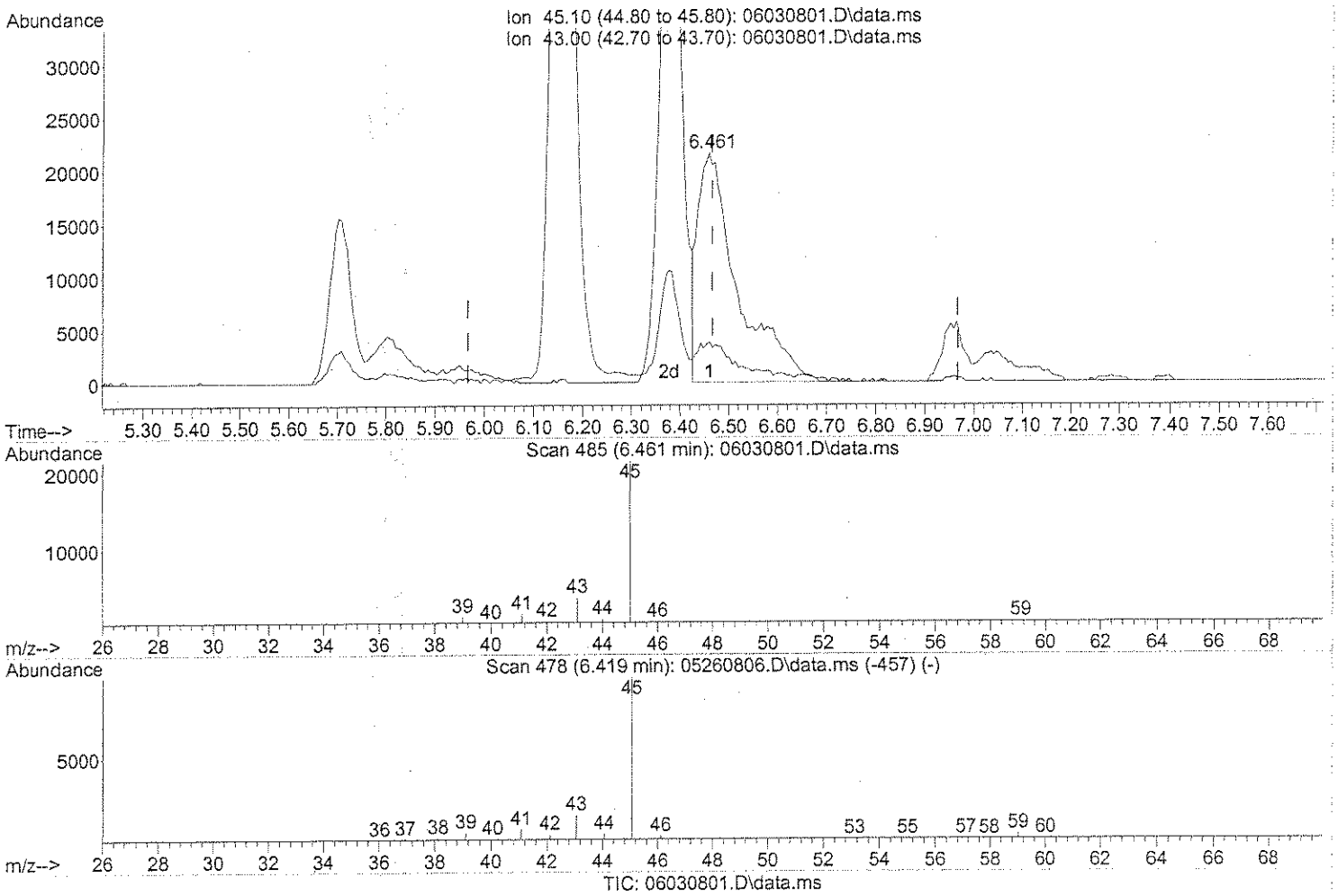
int. whole peak

JM 6/5/08

Em 6/10/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.461min (-0.006) 2.15ng

response 123320

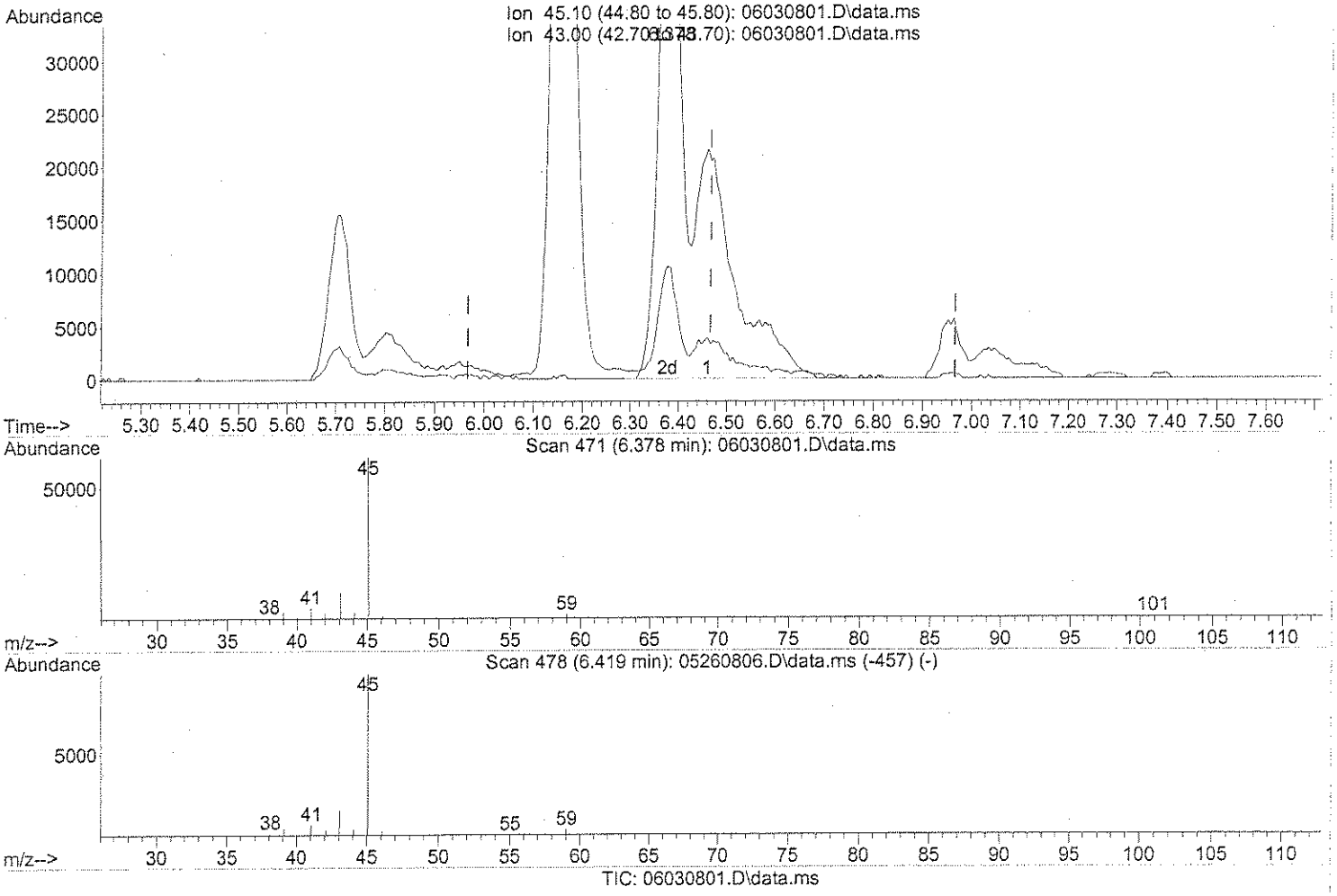
split peak

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	18.51
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(15) Isopropanol (T)

6.378min (-0.089) 5.28ng m

response 302483

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	7.55
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peak

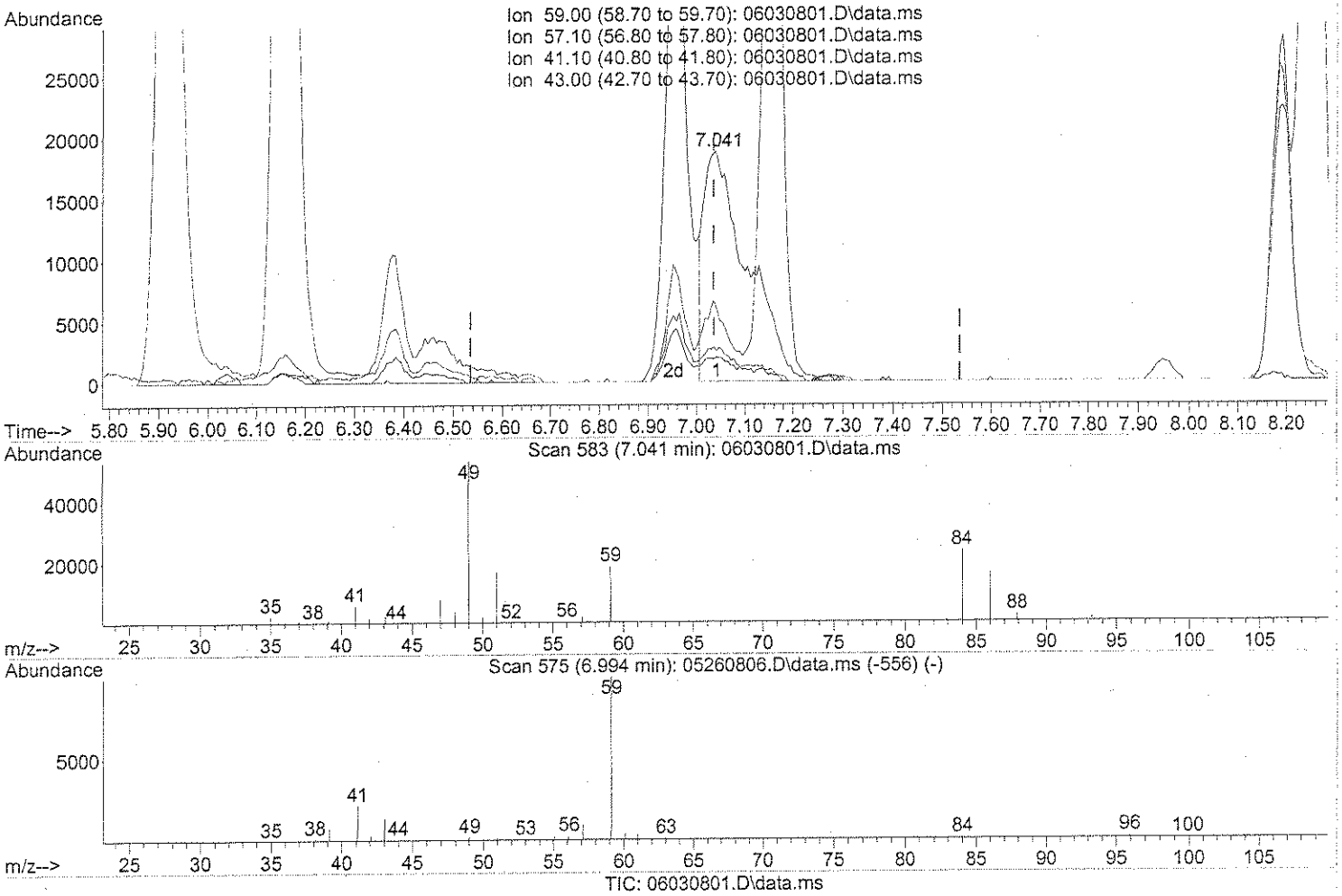
KDA 6/5/08

Em 6/10/08

153

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



(18) tert-Butanol (T)

7.041min (+0.006) 2.19ng

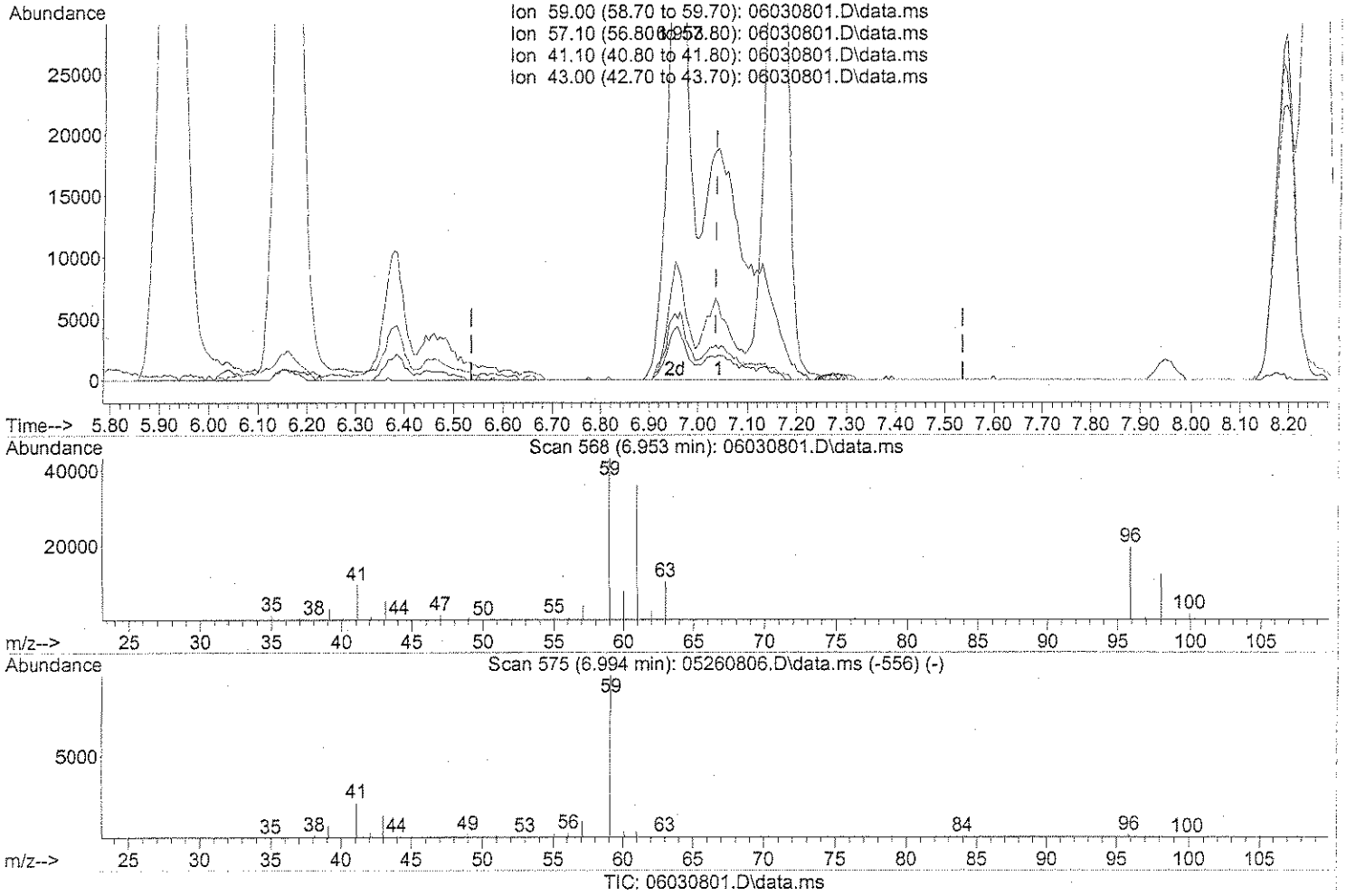
response 116824

split peak

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	8.34
41.10	21.90	20.62
43.00	17.20	14.64

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 03 11:57:01 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



TIC: 06030801.D\data.ms

(18) tert-Butanol (T)

6.953min (-0.083) 4.65ng m

response 248076

Ion	Exp%	Act%
59.00	100	100
57.10	10.00	3.93
41.10	21.90	9.71
43.00	17.20	6.89

int. whole peak

DT 6/5/08

Em 6/10/08

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated** CAS Project ID: P0801622
Client Project ID: **275 Franklin St. / 0266 377**

Internal Standard Area and RT Summary

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Lab File ID: 06030801.D
Analyst: Wida Ang Date Analyzed: 6/3/08
Sampling Media: 6.0 L Summa Canister(s) Time Analyzed: 05:51
Test Notes:

		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	24 Hour Standard	363875	9.20	1500112	11.35	574573	16.45
	Upper Limit	509425	9.53	2100157	11.68	804402	16.78
	Lower Limit	218325	8.87	900067	11.02	344744	16.12
	Client Sample ID						
01	Method Blank	352886	9.19	1448658	11.34	560317	16.44
02	Lab Control Sample	352094	9.23	1451764	11.37	563110	16.45
03	275 Franklin OA	325243	9.19	1349535	11.34	526941	16.45
04	275 Franklin CS	328702	9.19	1355237	11.34	528175	16.45
05	275 Franklin Dup	329793	9.19	1379796	11.34	534295	16.45
06	275 Franklin FA	334486	9.19	1385669	11.34	537051	16.45
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area
AREA LOWER LIMIT = 60% of internal standard area
RT UPPER LIMIT = 0.33 minutes of internal standard RT
RT LOWER LIMIT = 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

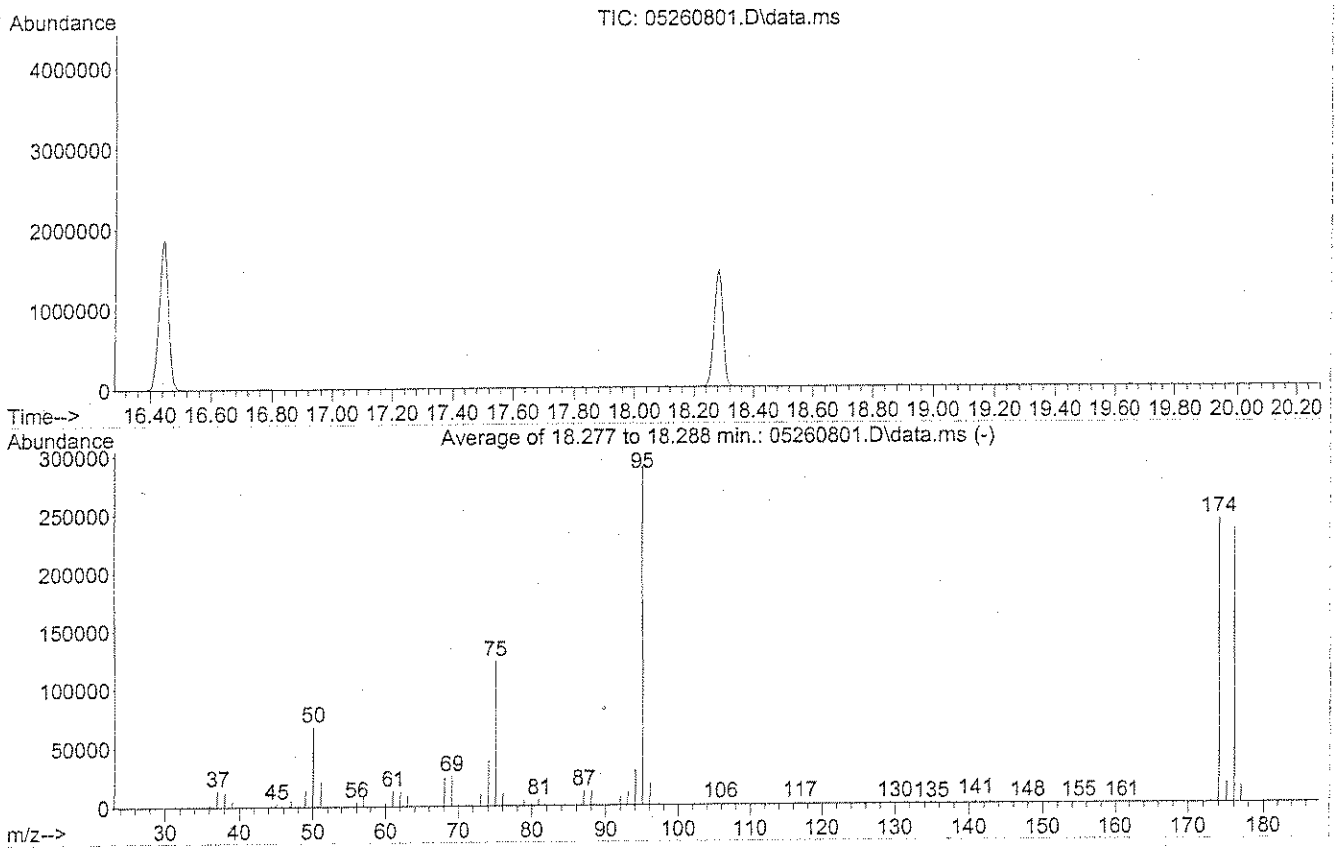
Verified By: Rc Date: 6/13/08

Raw QC Data

Data Path : J:\MS16\DATA\2008_05\26\
Data File : 05260801.D
Acq On : 26 May 2008 3:58 pm
Operator : WA
Sample : 25ng BFB Tune
Misc : S20-05120801
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:50:43 2008



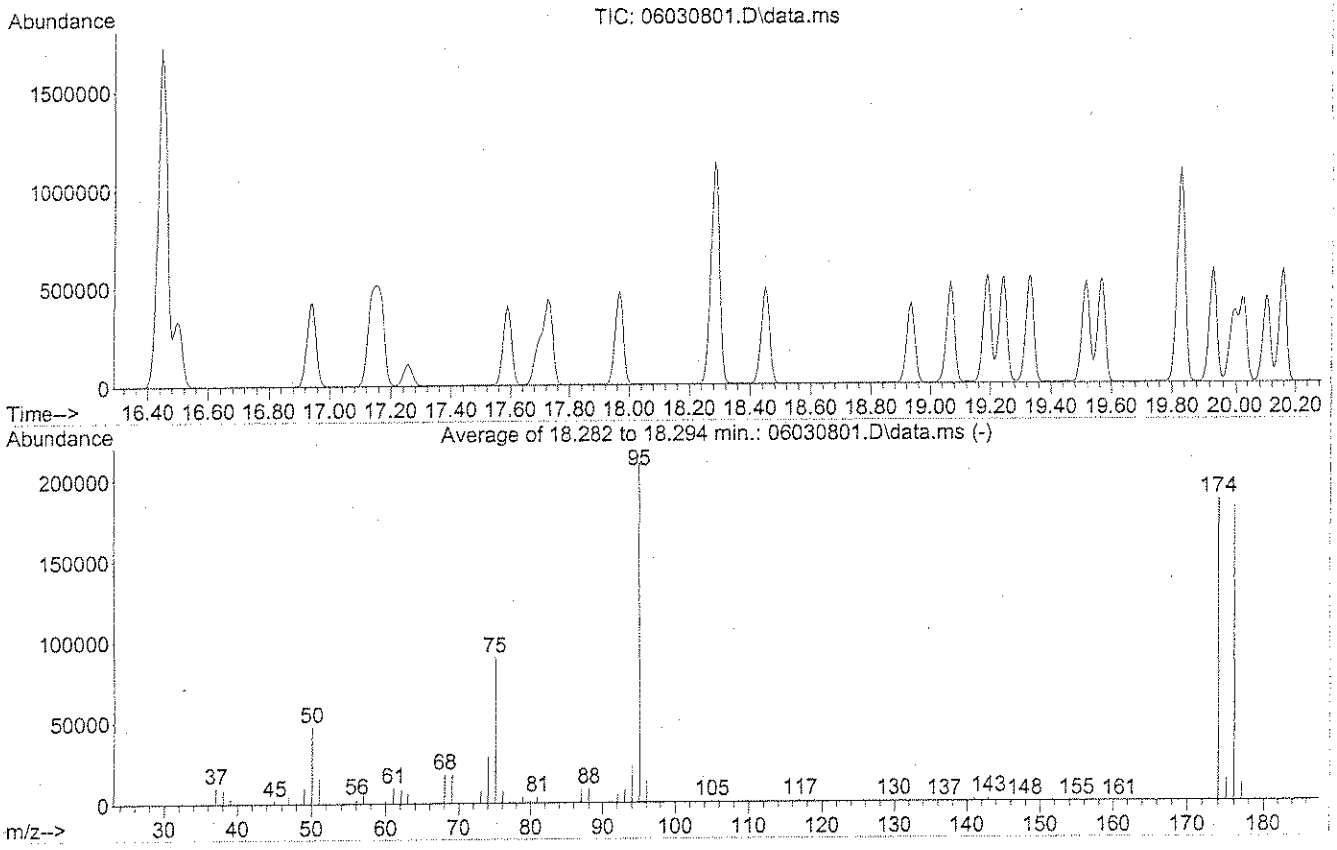
AutoFind: Scans 2479, 2480, 2481; Background Corrected with Scan 2469

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.5	68147	PASS
75	95	30	66	42.6	123432	PASS
95	95	100	100	100.0	289984	PASS
96	95	5	9	6.5	18763	PASS
173	174	0.00	2	0.8	2059	PASS
174	95	50	120	83.9	243179	PASS
175	174	4	9	7.4	18091	PASS
176	174	93	101	96.6	234901	PASS
177	176	5	9	6.2	14675	PASS

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030801.D
Acq On : 3 Jun 2008 5:51 am
Operator : WA
Sample : 5ng TO-15 CCV
Misc : S20-05300801/S20-05210808
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : J:\MS16\METHODS\R16052608.M
Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
Last Update : Tue May 27 08:50:43 2008



AutoFind: Scans 2480, 2481, 2482; Background Corrected with Scan 2470

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.6	47448	PASS
75	95	30	66	42.9	90083	PASS
95	95	100	100	100.0	209792	PASS
96	95	5	9	6.4	13388	PASS
173	174	0.00	2	0.8	1582	PASS
174	95	50	120	89.0	186667	PASS
175	174	4	9	7.3	13620	PASS
176	174	93	101	97.4	181739	PASS
177	176	5	9	6.3	11359	PASS

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **Malcolm Pirnie, Incorporated**
Client Sample ID: **Method Blank**
Client Project ID: **275 Franklin St. / 0266 377**

CAS Project ID: P0801622
CAS Sample ID: P080603-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16
Analyst: Wida Ang
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 6/3/08
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

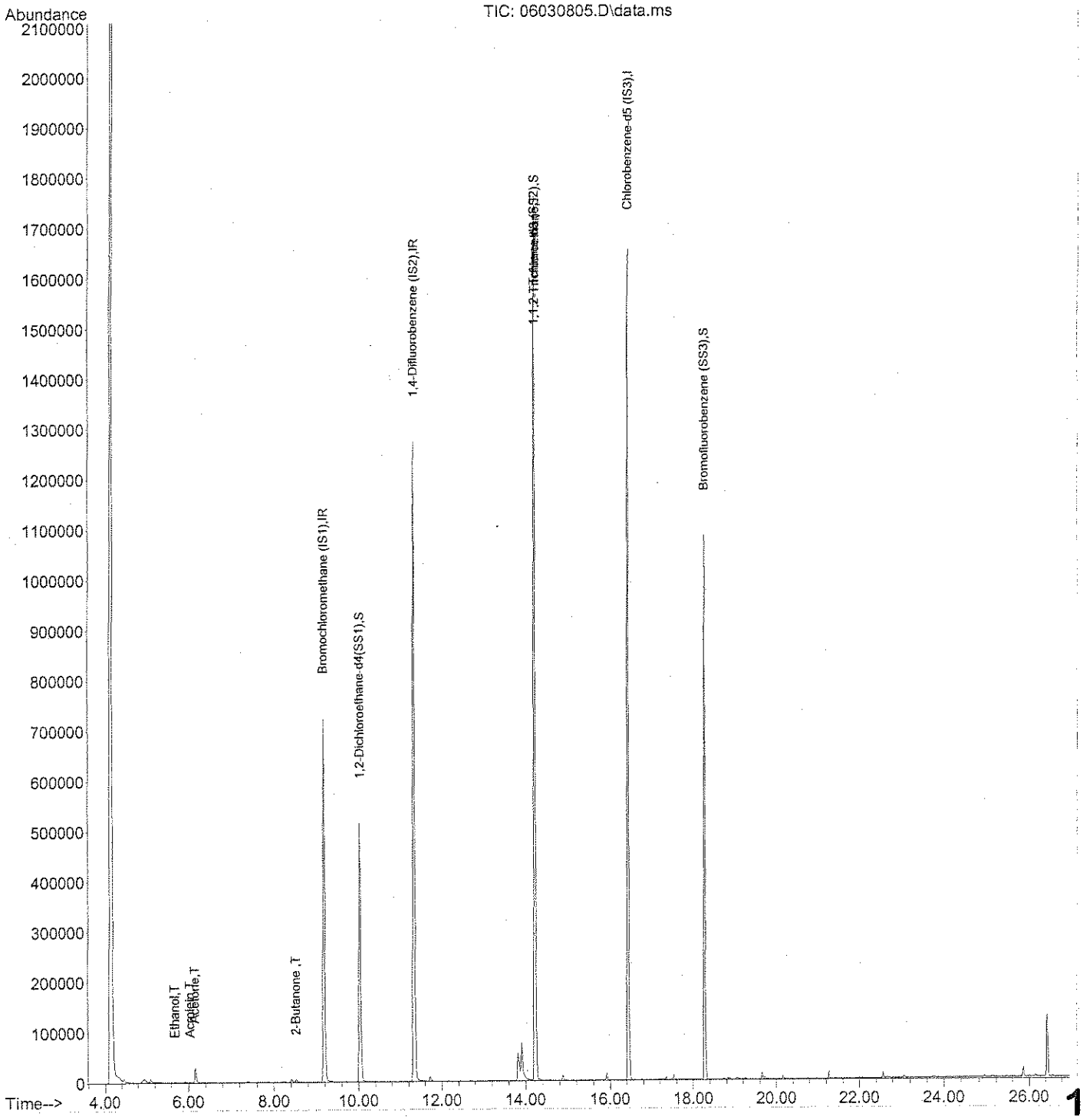
CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
108-88-3	Toluene	ND	0.50	ND	0.13	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: RC Date: 6/13/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030805.D
Acq On : 3 Jun 2008 9:23 am
Operator : WA
Sample : CAS CAN QC B# 1186 (1000ml)
Misc : SC00897 as Method Blank
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 10:07:12 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030805.D
Acq On : 3 Jun 2008 9:23 am
Operator : WA
Sample : CAS CAN QC B# 1186 (1000ml)
Misc : SC00897 as Method Blank
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 10:07:12 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane (IS1)	9.19	130	352886	25.000 ng		-0.06
37) 1,4-Difluorobenzene (IS2)	11.34	114	1448658	25.000 ng		-0.04
56) Chlorobenzene-d5 (IS3)	16.44	82	560317	25.000 ng		-0.02
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4(...	10.04	65	486560	24.113 ng		-0.05
Spiked Amount 25.000			Recovery =	96.44%		
57) Toluene-d8 (SS2)	14.22	98	1422826	24.631 ng		-0.02
Spiked Amount 25.000			Recovery =	98.52%		
73) Bromofluorobenzene (SS3)	18.28	174	397124	20.677 ng		-0.01
Spiked Amount 25.000			Recovery =	82.72%		
Target Compounds						Qvalue
2) Propene	4.47	42	1920	N.D.		
3) Dichlorodifluoromethane	0.00	85	0	N.D.		
4) Chloromethane	0.00	50	0	N.D.		
5) Freon 114	0.00	135	0	N.D.		
6) Vinyl Chloride	0.00	62	0	N.D.		
7) 1,3-Butadiene	0.00	54	0	N.D.		
8) Bromomethane	0.00	94	0	N.D.		
9) Chloroethane	0.00	64	0	N.D.		
10) Ethanol	5.69	45	2440	0.132 ng	ㅋ	72
11) Acetonitrile	5.93	41	3764	N.D.		
12) Acrolein	6.05	56	1900	0.142 ng	ㅋ	98
13) Acetone	6.16	58	20692	1.122 ng	ㅋ#	50
14) Trichlorofluoromethane	0.00	101	0	N.D.		
15) Isopropanol	6.41	45	89	N.D.		
16) Acrylonitrile	0.00	53	0	N.D.		
17) 1,1-Dichloroethene	0.00	96	0	N.D.		
18) tert-Butanol	0.00	59	0	N.D.		
19) Methylene Chloride	7.04	84	314	N.D.		
20) Allyl Chloride	0.00	41	0	N.D.		
21) Trichlorotrifluoroethane	0.00	151	0	N.D.		
22) Carbon Disulfide	7.40	76	3948	N.D.		
23) trans-1,2-Dichloroethene	0.00	61	0	N.D.		
24) 1,1-Dichloroethane	0.00	63	0	N.D.		
25) Methyl tert-Butyl Ether	0.00	73	0	N.D.		
26) Vinyl Acetate	0.00	86	0	N.D.		
27) 2-Butanone	8.53	72	1724	0.179 ng	ㅋ#	1
28) cis-1,2-Dichloroethene	0.00	61	0	N.D.		
29) Diisopropyl Ether	0.00	87	0	N.D.		
30) Ethyl Acetate	0.00	61	0	N.D.		
31) n-Hexane	0.00	57	0	N.D.		

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RDT 6/5/08

Quantitation Report (Not Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030805.D
Acq On : 3 Jun 2008 9:23 am
Operator : WA
Sample : CAS CAN QC B# 1186 (1000ml)
Misc : SC00897 as Method Blank
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 10:07:12 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
32) Chloroform	0.00	83	0	N.D.	
34) Tetrahydrofuran	0.00	72	0	N.D.	
35) Ethyl tert-Butyl Ether	0.00	87	0	N.D.	
36) 1,2-Dichloroethane	0.00	62	0	N.D.	
38) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
39) Isopropyl Acetate	0.00	61	0	N.D.	
40) 1-Butanol	0.00	56	0	N.D.	
41) Benzene	11.01	78	1452	N.D.	
42) Carbon Tetrachloride	0.00	117	0	N.D.	
43) Cyclohexane	11.34	84	633	N.D.	
44) tert-Amyl Methyl Ether	0.00	73	0	N.D.	
45) 1,2-Dichloropropane	0.00	63	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) Trichloroethene	12.19	130	91	N.D.	
48) 1,4-Dioxane	0.00	88	0	N.D.	
49) Isooctane	12.24	57	537	N.D.	
50) Methyl Methacrylate	0.00	100	0	N.D.	
51) n-Heptane	0.00	71	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	13.18	58	90	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	14.24	97	120241	~~8.094 ng~~ UR #	7
58) Toluene	14.34	91	1294	N.D.	
59) 2-Hexanone	14.58	43	1871	N.D.	
60) Dibromochloromethane	0.00	129	0	N.D.	
61) 1,2-Dibromoethane	0.00	107	0	N.D.	
62) Butyl Acetate	0.00	43	0	N.D.	
63) n-Octane	0.00	57	0	N.D.	
64) Tetrachloroethene	0.00	166	0	N.D.	
65) Chlorobenzene	0.00	112	0	N.D.	
66) Ethylbenzene	16.94	91	91	N.D.	
67) m- & p-Xylene	17.14	91	99	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Styrene	0.00	104	0	N.D.	
70) o-Xylene	0.00	91	0	N.D.	
71) n-Nonane	17.96	43	1064	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
74) Cumene	18.28	105	130	N.D.	
75) alpha-Pinene	0.00	93	0	N.D.	
76) n-Propylbenzene	19.06	91	100	N.D.	
77) 3-Ethyltoluene	19.18	105	89	N.D.	
78) 4-Ethyltoluene	19.24	105	106	N.D.	
79) 1,3,5-Trimethylbenzene	19.24	105	106	N.D.	

PM 6/5/08

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030805.D
Acq On : 3 Jun 2008 9:23 am
Operator : WA
Sample : CAS CAN QC B# 1186 (1000ml)
Misc : SC00897 as Method Blank
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 03 10:07:12 2008
Quant Method : J:\MS16\METHODS\R16052608.M
Quant Title : EPA TO-15 per SOP VOA-TO15 (CASS TO-15/GC-MS)
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) alpha-Methylstyrene	0.00	118	0	N.D.	
81) 2-Ethyltoluene	19.57	105	90	N.D.	
82) 1,2,4-Trimethylbenzene	19.83	105	377	N.D.	
83) n-Decane	20.15	57	4411	N.D.	
84) Benzyl Chloride	0.00	91	0	N.D.	
85) 1,3-Dichlorobenzene	20.10	146	144	N.D.	
86) 1,4-Dichlorobenzene	20.10	146	144	N.D.	
87) sec-Butylbenzene	20.16	105	97	N.D.	
88) p-Isopropyltoluene	20.34	119	206	N.D.	
89) 1,2,3-Trimethylbenzene	20.16	105	97	N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
91) d-Limonene	0.00	68	0	N.D.	
92) 1,2-Dibromo-3-Chloropr...	0.00	157	0	N.D.	
93) n-Undecane	21.43	57	799	N.D.	
94) 1,2,4-Trichlorobenzene	0.00	184	0	N.D.	
95) Naphthalene	22.69	128	1508	N.D.	
96) n-Dodecane	22.66	57	1503	N.D.	
97) Hexachloro-1,3-butadiene	0.00	225	0	N.D.	

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

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COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

lient:	**Malcolm Pirnie, Incorporated**		
lient Sample ID:	**Lab Control Sample**	CAS Project ID:	P0801622
lient Project ID:	**275 Franklin St. / 0266 377**	CAS Sample ID:	P080603-LCS
est Code:	EPA TO-15	Date Collected:	NA
ıstrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	NA
nalyst:	Wida Ang	Date Analyzed:	6/03/08
ampling Media:	6.0 L Summa Canister	Volume(s) Analyzed:	NA Liter(s)
est Notes:			

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	24.8	**24.1**	**97**	61-127	
75-35-4	1,1-Dichloroethene	27.8	**28.8**	**104**	77-116	
75-09-2	Methylene Chloride	27.8	**27.2**	**98**	71-113	
156-60-5	trans-1,2-Dichloroethene	26.5	**27.2**	**103**	74-118	
156-59-2	cis-1,2-Dichloroethene	27.0	**27.7**	**103**	74-117	
71-55-6	1,1,1-Trichloroethane	26.8	**27.7**	**103**	78-114	
71-43-2	Benzene	27.0	**25.0**	**93**	73-111	
79-01-6	Trichloroethene	27.3	**28.7**	**105**	80-116	
108-88-3	Toluene	26.5	**26.9**	**102**	76-116	
127-18-4	Tetrachloroethene	26.0	**27.6**	**106**	77-118	
100-41-4	Ethylbenzene	26.3	**27.3**	**104**	79-116	
179601-23-1	m,p-Xylenes	62.5	**64.4**	**103**	80-117	
95-47-6	o-Xylene	29.8	**30.7**	**103**	80-116	

Verified By: RL Date: 6/13/08

Quantitation Report (QT Reviewed)

Data Path : J:\MS16\DATA\2008_06\03\
Data File : 06030817.D
Acq On : 3 Jun 2008 7:27 pm
Operator : WA
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Misc : S20-05300801/S20-05220809
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 05 16:40:13 2008
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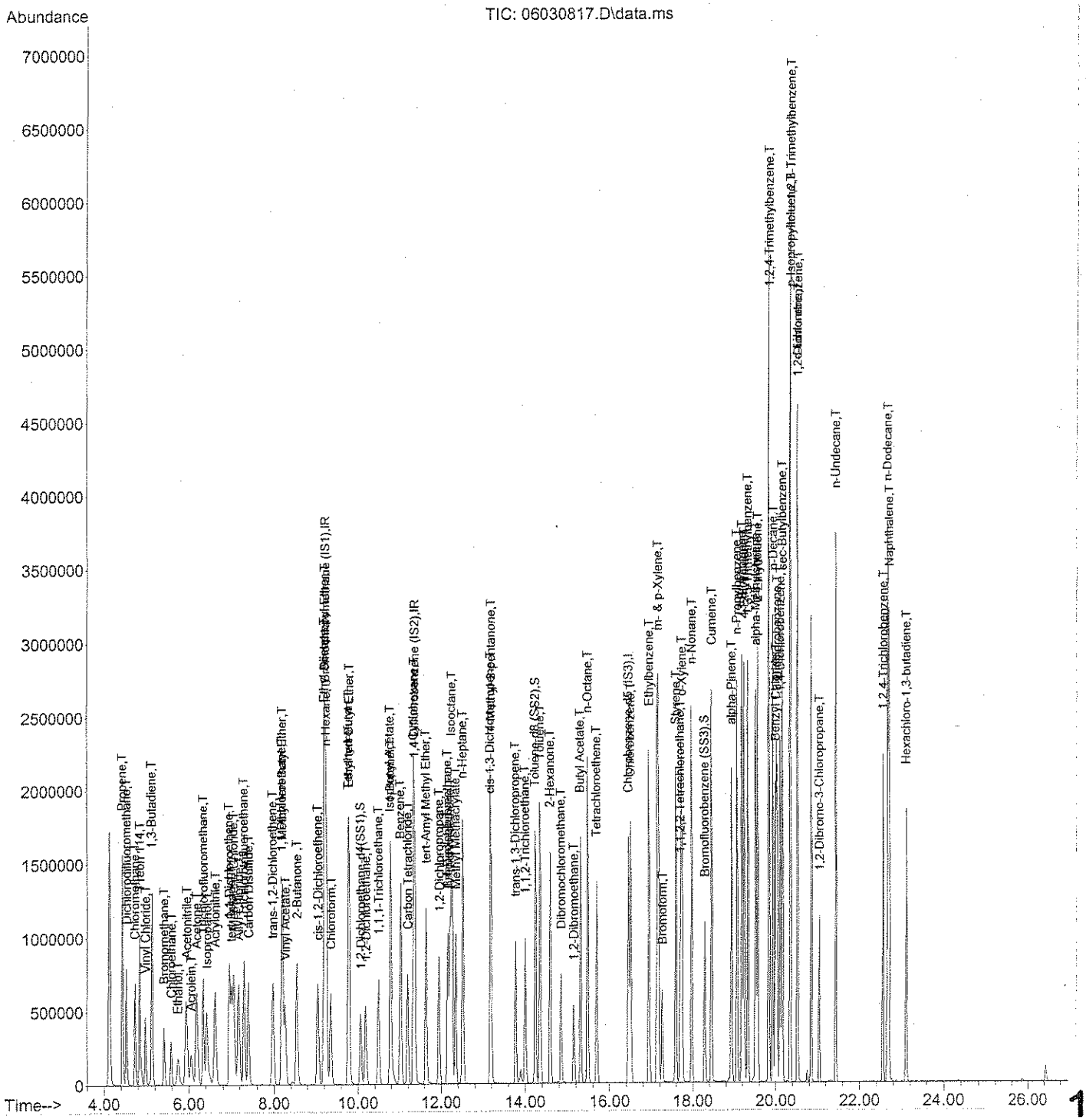
QLast Update : Tue May 27 08:50:43 2008
Response via : Initial Calibration



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Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS1)	9.23	130	352094	25.000	ng		-0.02
37) 1,4-Difluorobenzene (IS2)	11.37	114	1451764	25.000	ng		-0.01
56) Chlorobenzene-d5 (IS3)	16.45	82	563110	25.000	ng		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4(...	10.07	65	485364	24.108	ng		-0.02
Spiked Amount 25.000			Recovery =	96.44%			
57) Toluene-d8 (SS2)	14.24	98	1424611	24.539	ng		-0.01
Spiked Amount 25.000			Recovery =	98.16%			
73) Bromofluorobenzene (SS3)	18.29	174	394112	20.418	ng		0.00
Spiked Amount 25.000			Recovery =	81.68%			
Target Compounds							Qvalue
2) Propene	4.43	42	737196	27.048	ng		93
3) Dichlorodifluoromethane	4.53	85	796297	24.155	ng		97
4) Chloromethane	4.73	50	1015647	24.520	ng		100
5) Freon 114	4.85	135	486003	26.377	ng		96
6) Vinyl Chloride	4.98	62	635312	24.084	ng		95
7) 1,3-Butadiene	5.13	54	794025	33.024	ng	#	84
8) Bromomethane	5.42	94	349934	25.736	ng		97
9) Chloroethane	5.59	64	329256	24.154	ng		96
10) Ethanol	5.75	45	473664m	25.613	ng		
11) Acetonitrile	5.95	41	1235374	23.175	ng		98
12) Acrolein	6.05	56	349675	26.224	ng		96
13) Acetone	6.18	58	494298	26.868	ng	#	74
14) Trichlorofluoromethane	6.34	101	817448	26.488	ng		99
15) Isopropanol	6.43	45	1335374m	24.096	ng		
16) Acrylonitrile	6.63	53	918002	27.453	ng		96
17) 1,1-Dichloroethene	6.95	96	414336	28.770	ng		94
18) tert-Butanol	7.00	59	1372421	26.562	ng		96
19) Methylene Chloride	7.05	84	386531	27.240	ng	#	43
20) Allyl Chloride	7.17	41	959711	29.341	ng		83
21) Trichlorotrifluoroethane	7.30	151	427002	28.475	ng		84
22) Carbon Disulfide	7.40	76	1356477	23.767	ng		100
23) trans-1,2-Dichloroethene	7.97	61	772925	27.249	ng		94
24) 1,1-Dichloroethane	8.19	63	842980	27.986	ng		94
25) Methyl tert-Butyl Ether	8.20	73	1208169	27.472	ng		80
26) Vinyl Acetate	8.27	86	85022	28.217	ng	#	1
27) 2-Butanone	8.55	72	270669	28.140	ng	#	23
28) cis-1,2-Dichloroethene	9.04	61	723327	27.727	ng		94
29) Diisopropyl Ether	9.20	87	344403	27.183	ng	#	50
30) Ethyl Acetate	9.19	61	205095	30.560	ng		85
31) n-Hexane	9.25	57	1077028	26.849	ng		92

Quantitation Report (QT Reviewed)

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Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) Chloroform	9.36	83	673915	32.435	ng		96
34) Tetrahydrofuran	9.78	72	254528	28.153	ng	#	48
35) Ethyl tert-Butyl Ether	9.80	87	503524	27.153	ng	#	77
36) 1,2-Dichloroethane	10.19	62	648582	27.227	ng		97
38) 1,1,1-Trichloroethane	10.50	97	684935	27.712	ng		94
39) Isopropyl Acetate	10.78	61	336344	27.402	ng	#	71
40) 1-Butanol	10.79	56	561610	23.503	ng		98
41) Benzene	11.02	78	1531043	25.012	ng		99
42) Carbon Tetrachloride	11.20	117	699286	27.853	ng		99
43) Cyclohexane	11.34	84	611858	25.567	ng	#	48
44) tert-Amyl Methyl Ether	11.64	73	1113169	27.313	ng		77
45) 1,2-Dichloropropane	11.95	63	491043	27.167	ng		96
46) Bromodichloromethane	12.16	83	538458	29.927	ng		93
47) Trichloroethene	12.21	130	547302	28.726	ng		99
48) 1,4-Dioxane	12.16	88	333640	29.178	ng	#	67
49) Isooctane	12.26	57	2637265	26.950	ng		92
50) Methyl Methacrylate	12.36	100	188674	28.729	ng	#	71
51) n-Heptane	12.52	71	403925	27.646	ng	#	50
52) cis-1,3-Dichloropropene	13.17	75	614110	26.957	ng		100
53) 4-Methyl-2-pentanone	13.19	58	568472	26.712	ng		85
54) trans-1,3-Dichloropropene	13.77	75	635889	30.281	ng		98
55) 1,1,2-Trichloroethane	14.00	97	414943	27.872	ng		89
58) Toluene	14.36	91	1768946	26.862	ng		98
59) 2-Hexanone	14.59	43	1534917	24.681	ng		100
60) Dibromochloromethane	14.85	129	574736	29.575	ng		100
61) 1,2-Dibromoethane	15.15	107	507633	28.078	ng		99
62) Butyl Acetate	15.31	43	1692116	27.060	ng		92
63) n-Octane	15.49	57	547592	27.500	ng		96
64) Tetrachloroethene	15.70	166	538190	27.631	ng		99
65) Chlorobenzene	16.50	112	1295035	27.598	ng		100
66) Ethylbenzene	16.95	91	2044876	27.318	ng		93
67) m- & p-Xylene	17.16	91	3194355	64.411	ng		92
68) Bromoform	17.26	173	421773	37.383	ng		100
69) Styrene	17.60	104	1360437	28.397	ng		94
70) o-Xylene	17.74	91	1630808	30.724	ng		93
71) n-Nonane	17.97	43	1386812	26.475	ng		96
72) 1,1,2,2-Tetrachloroethane	17.70	83	684268	31.131	ng		93
74) Cumene	18.45	105	2207413	28.565	ng		94
75) alpha-Pinene	18.94	93	1024264	28.250	ng		93
76) n-Propylbenzene	19.07	91	2496414	27.800	ng		92
77) 3-Ethyltoluene	19.19	105	2251379	26.558	ng		95
78) 4-Ethyltoluene	19.25	105	2173366	28.416	ng		94
79) 1,3,5-Trimethylbenzene	19.33	105	1864343	27.492	ng		92

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Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) alpha-Methylstyrene	19.52	118	1039315	27.256	ng		98
81) 2-Ethyltoluene	19.57	105	2187075	26.608	ng		92
82) 1,2,4-Trimethylbenzene	19.83	105	1893889	27.585	ng		91
83) n-Decane	19.94	57	1362680	28.036	ng		80
84) Benzyl Chloride	19.99	91	1547367	29.170	ng		89
85) 1,3-Dichlorobenzene	20.03	146	1188938	27.331	ng		99
86) 1,4-Dichlorobenzene	20.11	146	1196186	28.325	ng		99
87) sec-Butylbenzene	20.16	105	2527396	28.376	ng		95
88) p-Isopropyltoluene	20.34	119	2456527	31.569	ng		93
89) 1,2,3-Trimethylbenzene	20.35	105	1979893	30.035	ng		88
90) 1,2-Dichlorobenzene	20.52	146	1094036	27.397	ng		100
91) d-Limonene	20.52	68	569018	26.895	ng		86
92) 1,2-Dibromo-3-Chloropr...	21.04	157	384796	29.979	ng		80
93) n-Undecane	21.43	57	1462339	28.689	ng		79
94) 1,2,4-Trichlorobenzene	22.55	184	223393	30.927	ng	#	87
95) Naphthalene	22.70	128	2935357	29.428	ng		99
96) n-Dodecane	22.66	57	1453077	29.257	ng		77
97) Hexachloro-1,3-butadiene	23.11	225	354863	29.569	ng		99

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

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Quant Method : J:\MS16\METHODS\R16052608.M
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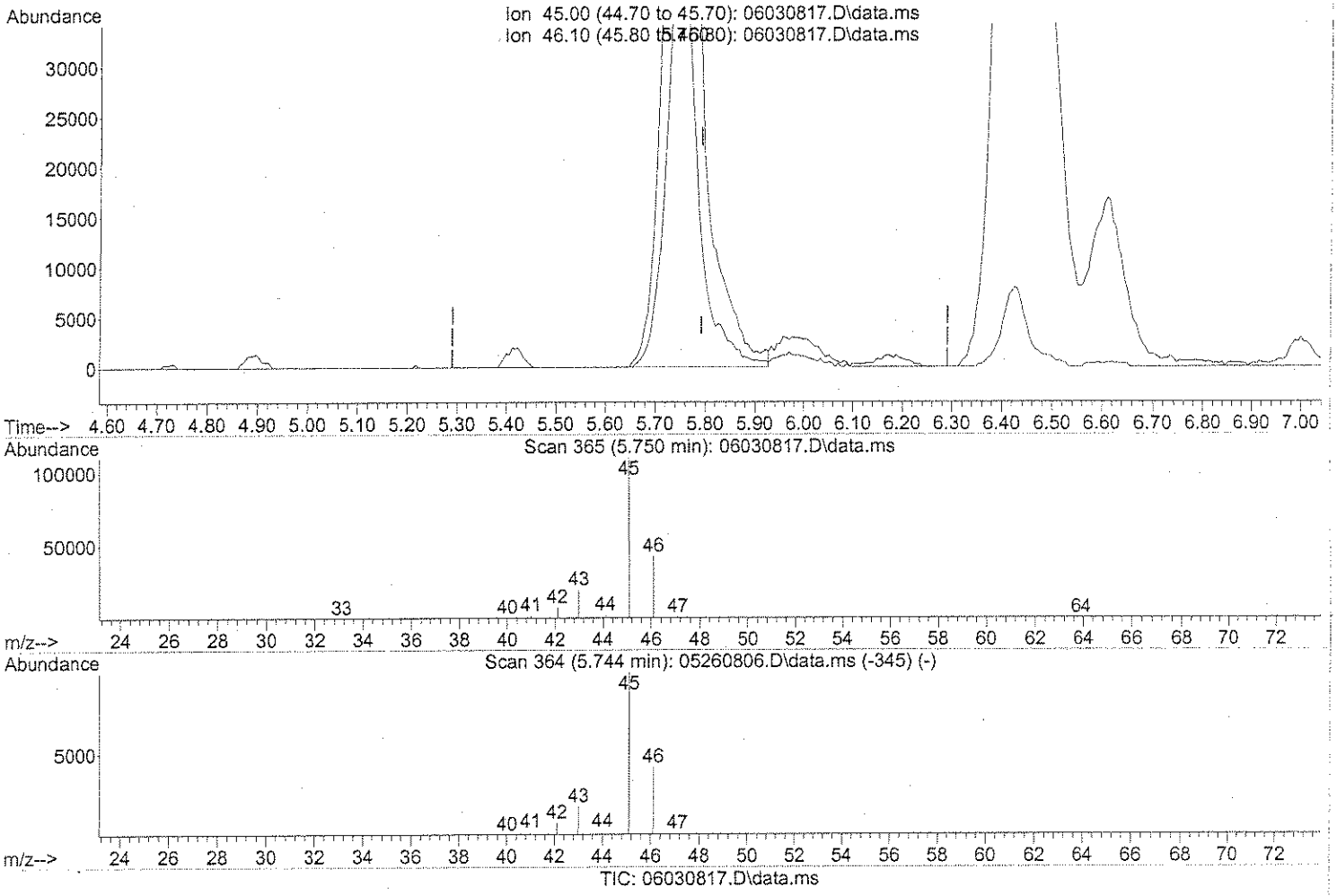

(10) Ethanol (T)

5.750min (-0.041) 24.62ng

response 455374

split peak

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	39.99
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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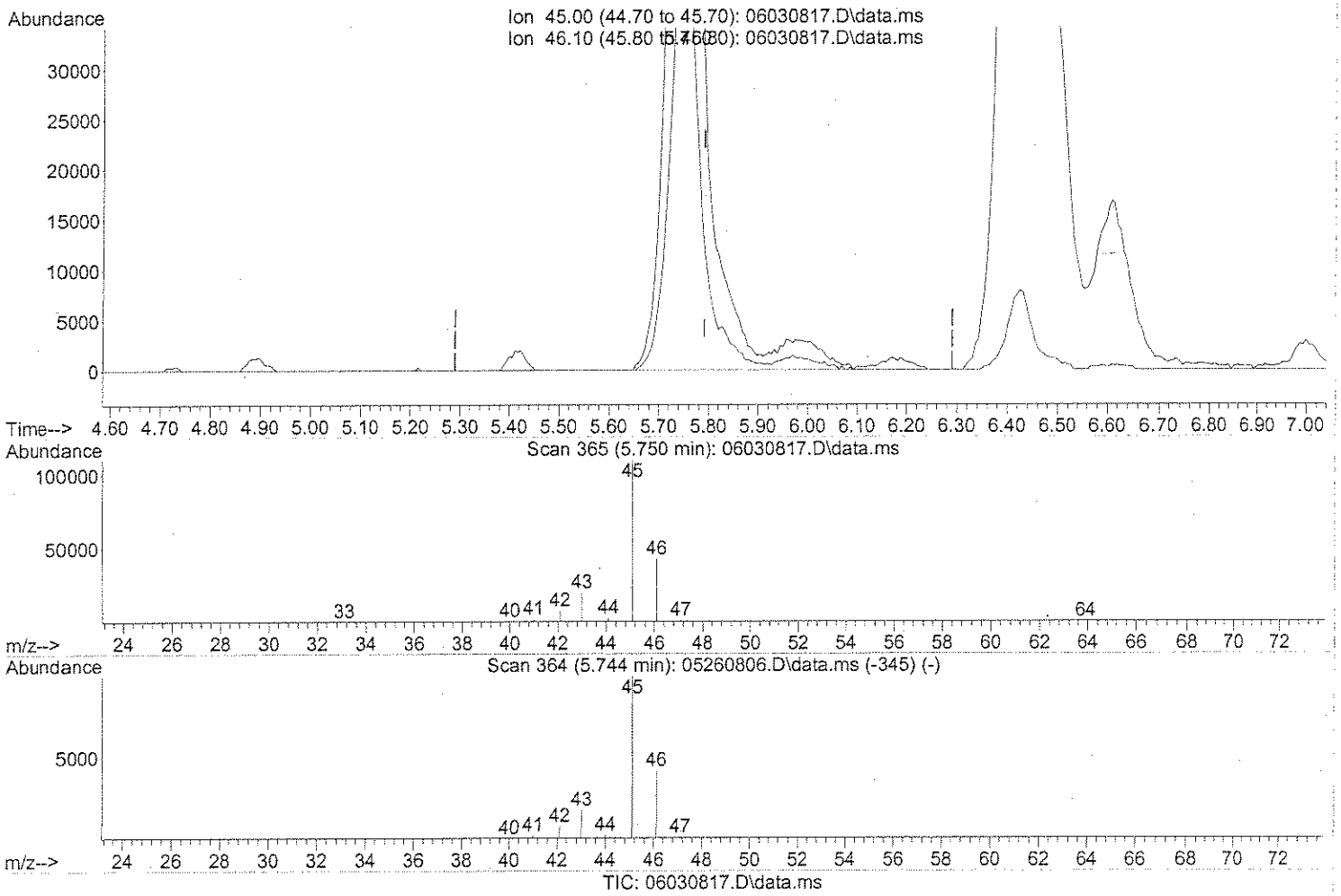

(10) Ethanol (T)

5.750min (-0.041) 25.61ng m

response 473664

Ion	Exp%	Act%
45.00	100	100
46.10	37.00	38.44
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peak
JM 6/5/08
Em 6/10/08

171

Data Path : J:\MS16\DATA\2008_06\03\
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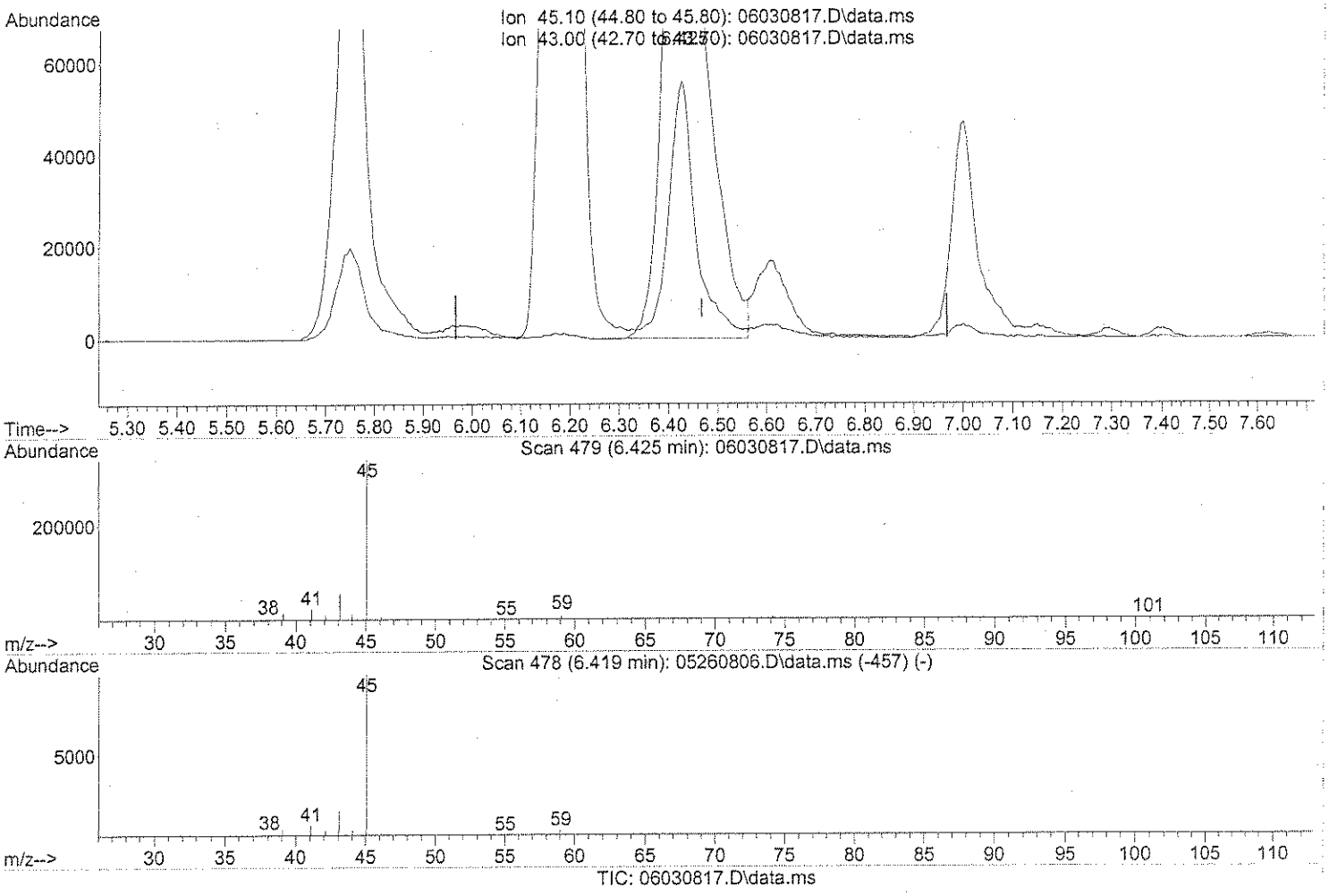

(15) Isopropanol (T)

6.425min (-0.042) 22.67ng

response 1256498

split peak

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	17.02
0.00	0.00	0.00
0.00	0.00	0.00

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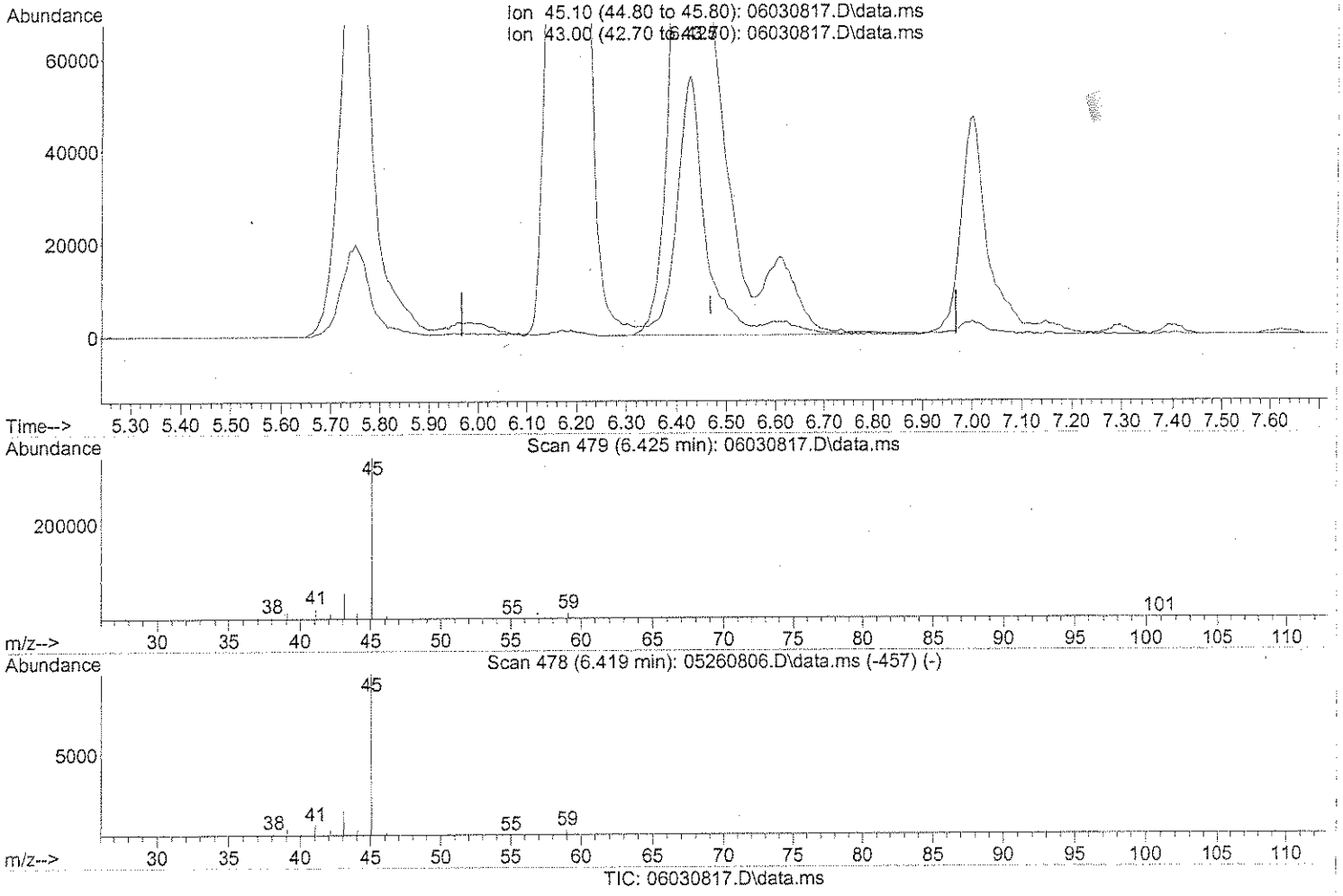


(15) Isopropanol (T)

6.425min (-0.042) 24.10ng m

response 1335374

Ion	Exp%	Act%
45.10	100	100
43.00	19.40	16.02
0.00	0.00	0.00
0.00	0.00	0.00

int. whole peak
RM 6/5/08
Em 6/10/08

Copy of Calculations

Instructions for Data Validation-Method TO-15(SCAN)

1. Determination of Pressure Dilution Factor

Upon receipt at the laboratory the pressure or vacuum of the sample canisters is measured using a digital pressure gauge. The canisters are then pressurized with humidified zero air to approximately +3.5 psig (pounds per square inch gauge).

Pressure Dilution factor is calculated as:

$$\text{PDF} = \frac{P_f + 14.7}{P_i + 14.7}$$

P_f final pressure in psig
P_i initial pressure in psig

2. Validating Initial and Continuing Calibration Results

GC/MS target compound analysis is performed using internal standard quantitation. Three internal standard compounds (Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5) are added to each aliquot of sample, blank, standard and duplicate at an amount of 25 nanograms(ng). Internal standard responses are used to calculate RRFs (relative response factors) as follows:

$$\text{RRF} = \frac{A_x C_{is}}{A_{is} C_x}$$

A_x area response of the analyte quantitation ion
A_{is} area response of the corresponding internal standard quantitation ion
C_{is} internal standard concentration, ng
C_x analyte concentration, ng

The percent relative standard deviation (%RSD) for the five or six initial calibration points should be less than 30% (with a maximum of two analytes $\leq$40%) for the calibration to be considered valid and linear.

$$\%\text{RSD} = \frac{SD}{\overline{RRF}}(100)$$

SD standard deviation
$\overline{RRF}$ average or mean RRF (ICAL)

The initial calibration is verified once per twenty-four hour analytical sequence with the analysis of a continuing calibration standard at one of the initial calibration levels (actual analyte concentrations of the CCV are the same as the corresponding concentrations in the initial calibration). The relative response factor of each target analyte from the daily continuing calibration standard is compared to the average relative response factor from the initial multipoint calibration. The percent difference (%D) of the initial and continuing calibration relative response factors is calculated as follows:

$$\%D = \left(\frac{\overline{RRF} - RRF\ cont}{\overline{RRF}} \right)(100)$$

$\overline{RRF}$	average relative response factor from the initial calibration
$RRF\ cont$	relative response factor from the daily continuing calibration standard

Note: the percent difference (%D) should be less than 30% for an acceptable continuing calibration standard.

3. Validating GC/MS Target Analyte Quantitation Results

Target analytes are measured in nanograms using internal standard quantitation as follows:

$$ng_x = \frac{A_x ng_{is}}{A_{is}\,\overline{RRF}}$$

ng_x	nanogram concentration of analyte x
A_x	area response of the analyte's quantitation ion
A_{is}	area response of the corresponding internal standard's quantitation ion
ng_{is}	internal standard amount, in nanograms
$\overline{RRF}$	average or mean RRFs (ICAL)

4. Calculation of µg/m^3 (microgram per cubic meter) Results

Target compound results reported on the "Results of Analysis" form in units of µg/m^3 are calculated as follows:

$$\mu g/m^3 = \frac{(ng)(PDF)}{L}$$

ng	nanograms of analyte (measured on the GC/MS quantitation report)
PDF	pressure dilution factor (see equation 1)
L	sample aliquot in Liters

5. Conversion to ppb (parts per billion) Volume

$$C_{ppbv} = C_x\left(\frac{24.46}{FW}\right)$$

FW	formula weight of the target analytes (i.e. formula weight of Dichloromethane is 84.94; 1,2-Dichloropropane is 113)
24.46	molar volume of ideal gas at 25°C and 1 atmosphere
C_x	final analyte concentration calculated in equation 4 ($\mu g/m^3$)

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dwight Symonds Date/Time Prepared 5/29/08 11am

Preparer's Affiliation Malcolm Pirnie Phone No. 585-727-3710

Purpose of Investigation Air Sampling

1. OCCUPANT:

Interviewed: Y / N

Last Name: Metz First Name: Dave

Address: 265 Franklin st

County: _____

Home Phone: _____ Office Phone: 716-853-6483

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School (Commercial/Multi-use)
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: Office Bldg

If multiple units, how many? 3 first flow - print shop second flow - storage/office Third flow - Appt.

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 3 Building age Early 1900's

Is the building insulated? (Y) / N How air tight? Tight / Average / Not Tight

partially - Back area insulated / New Doors approx 50% bldg insulated

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

1st & second floor - same connection
2nd & third floor - same connection

Airflow near source

Outdoor air infiltration

front door / Back Door

Infiltration into air ducts

Taped & sealed / fairly new - photo taken

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick (Backhouse is Block)
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block (Back Room)	stone (Brick)	other _____
g. Foundation walls:	unsealed	sealed	sealed with Thick Brick 5 course 18"-20" Thick	
h. The basement is:	wet	damp	dry	moldy
i. ~~The basement~~ is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 4 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

N/A

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary) (1st & Part 2nd floor roof top unit; 2nd & 3rd - Gas furnace)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas (2 new Hot water tanks)

Boiler/furnace located in: Basement | Outdoors (roof unit) | Main Floor | Other _____

2nd floor furnace

Air conditioning: (Central Air) – Both heating units – Window units Open Windows None

4

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Taped Joints - Tight Joints photos taken

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	
1st Floor	Print shop / offices / bathrooms / Breakroom
2nd Floor	storage / office
3rd Floor	Appt
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify

d. Has the building ever had a fire? Y / (N) When?

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? N/A

g. Is there smoking in the building? Y / (N) How frequently?

h. Have cleaning products been used recently? (Y) / N When & Type? Daily (Blankets wash)

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented? N/A

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? vented to 3' space in Ceiling

o. Is there a clothes dryer? 2nd floor (Y) N If yes, is it vented outside? (Y) N

p. Has there been a pesticide application? Y (N) When & Type? _____

Are there odors in the building?
If yes, please describe: Ink/Toners/Cleaners (Y) N

Do any of the building occupants use solvents at work? (Y) N - Blanket wash
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Blanket wash

If yes, are their clothes washed at work? Y (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

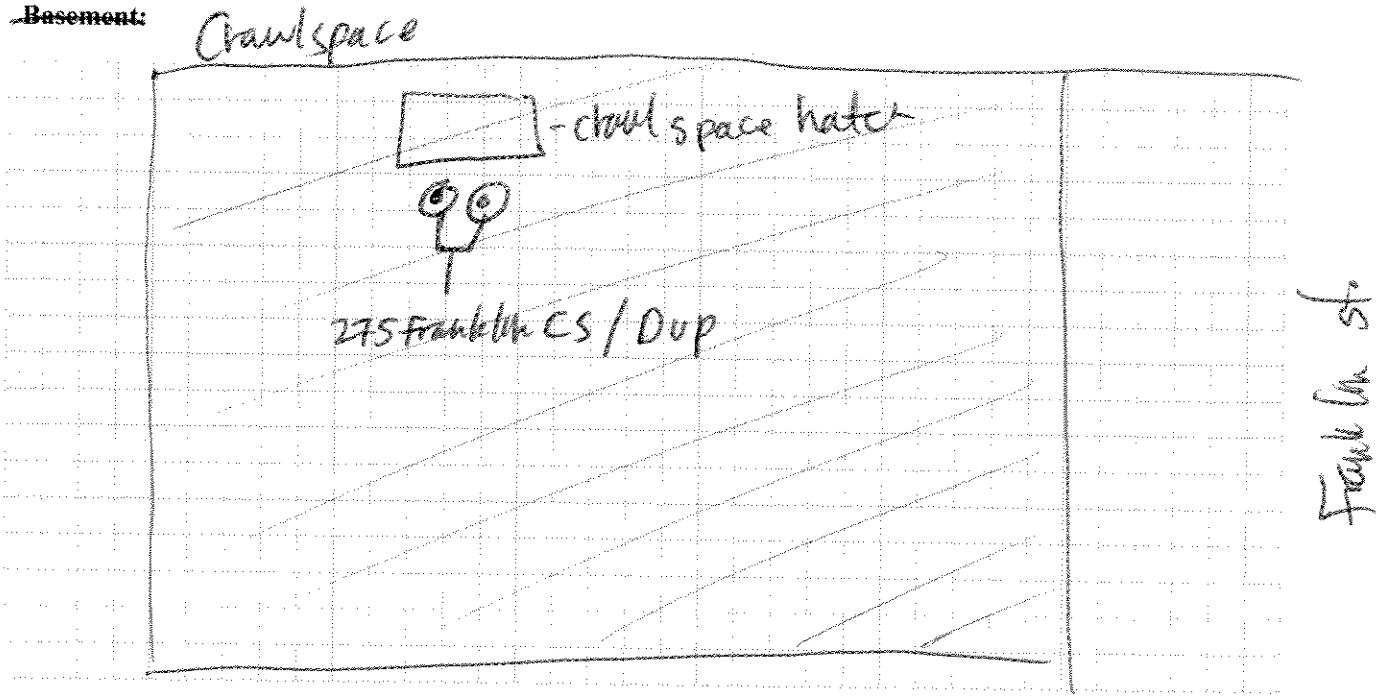
~~c.~~ **Responsibility for costs associated with reimbursement explained?** Y / N

~~d.~~ **Relocation package provided and explained to residents?** Y / N

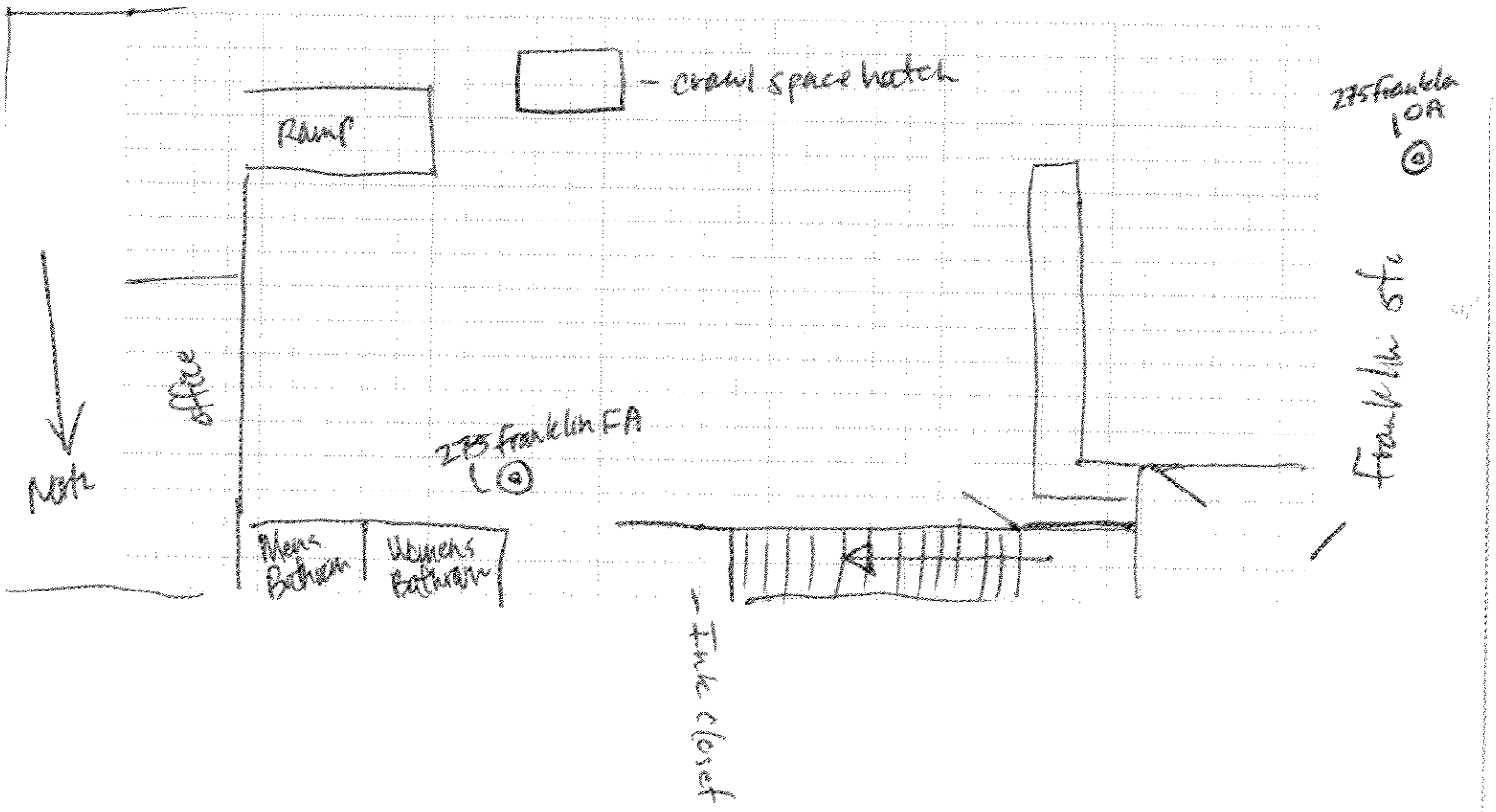
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

~~**Basement:**~~



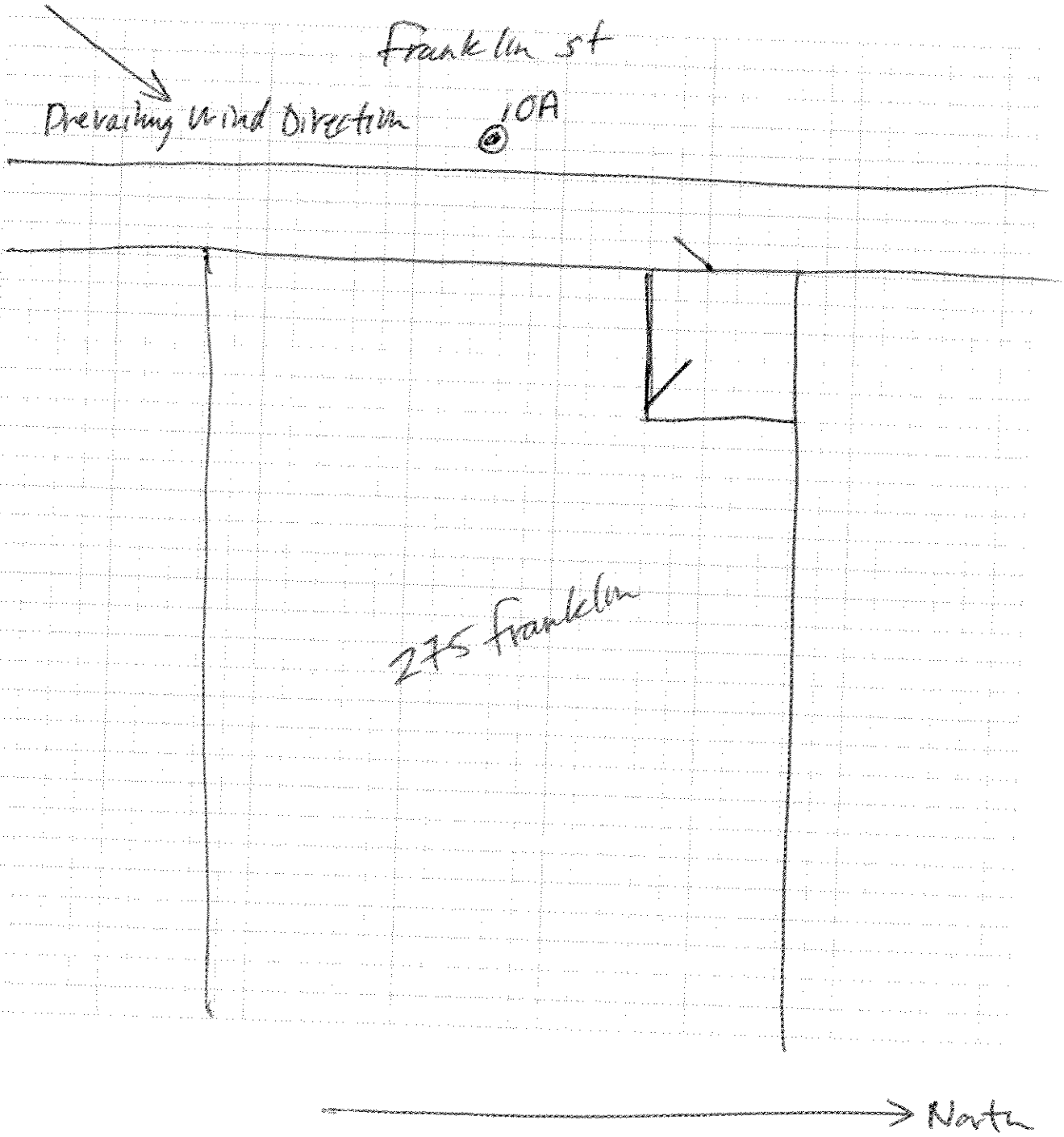
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
closet on first floor	Kohl & Madden Ink	25 5lbs cans	All capped none leaking Used	Mod. Rosin Ester Resins	3560 ppb	Yes
				Veg. oils, Hydrotreated middle distillate, organic pigments, Alkyd Resins		
	Braden Sutphin Ink	20 5lbs cans		- None listed		
	Braden Sutphin Ink	45 lbs cans		- None listed		
	Unmarked Ink cans	10 5lbs cans	↓	- None listed	↓	
Back Room	Blanket wash	5gal	good Used	Petroleum Naphtha	85 ppm	
	GE. Richards Graphic supply wpm one step water miscible wash		open top	Sorbitan Mono-Oleate		
	Super Master/ set print plus	2gal	good Used	- water, Potassium Hydroxide Aminoethylethanolamine Potassium Sulfate		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPB Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Back Room	- Color Lok silver plate stabilizer	2gal	Used	- water, Potassium Phosphate Sodium phosphate	4600 ppm	Yes
	- Chem Tronics Glass cleaner	18oz	Used	- 2-Butoxyethanol water, Isobutane, Isopropanol	↓	↓
	- Day International Slip Agent 6	1qt	Used	- Deionized water, Polysiloxane	↓	↓
Printshop	- UPdate Silk spray	16oz	Used	- None Listed	3600 ppm	↓
	- WD40	2 12oz	Used	- None listed	↓	↓
	- 3M cleaner Conditioner	1qt	Used	- water, stoddard solvent Ammonium Phosphate Amorphous Silica Phosphoric Acid formaldehyde	↓	↓
	Mobil - Spindle oil 1gal	1gal	Used	- none listed	↓	↓
	- Nicam Whe Aragam ED 152	1gal	Used	- none listed	↓	↓

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	Day Intermediate Fine					
	Super Rubber rejuvenater	1gal	used	Dimethyl Glutarate	4000ppb	Yes
				Petroleum Naphtha	↓	
				Dimethyl Adipate		
				Dimethyl Succinate		
	Plastic cups half full of Ink	~100	used	- None	3300ppb	Yes
	- 3 & One	3oz	used	- none	↓	↓
	- Martin Vale / Roller cleaner	13oz	used	- Petroleum Distillate		
				Hexylene Glycol		
				1-methoxy-2 propanol		
				Isopropanol		
	- Clear Co silicone	16oz	used	Propane, Butane,		
				Heptane,		
	- 3M High strength Adhesive	16.6oz	used	- None listed	↓	
	- Raid	16oz	Used	- None listed		
	- White lithium	12oz	Used	- None listed		
	- Armor all	1/2gal	Used	- None listed	↓	

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPb Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Printshop	Sprinks Ink	17oz	Used	- NJTSR# 80100143-5001P		
	Kwik n' Easy Roller & Blanket Deglazer			HMIS - HO F-0 RO	3800 ppm	Yes
	- Gold Miracle starter cleaner & conditioner	1pint	Used	- None listed		
	- LA-CO Zoom / spout oiler	4oz		- None listed		
	- Unigraph Inter. plate cleaner desensitizer & protector	1qt		- Gum Arabic - Naphtha Petroleum - Light Aromatic solvent pineoil.		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT B

267 Franklin St.
Vapor Intrusion Investigation Data and Results

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

Columbia Analytical Services, Inc.
An Employee - Owned Company
1 Mustard Street, Suite 250
Rochester, New York 14609-6925
Phone (585) 288-5380
Fax (585) 288-8475

Requested Turnaround Time in Business Days From Receipt, please circle
1 Day 2 Day 3 Day 4 Day 5 Day (10 Day-Standard)

CAS Project No.

CAS Contact:

Company Name & Address (Reporting Information)
Malcolm Pirnie

Project Name: Franklin
Project Number: 0266377

Project Manager: Jim Richert

P.O. # / Billing Information

Phone: 716-667-6654 Fax: 716/667-0279

Email Address for Result Reporting: JRichert@pirnie.com

Sampler (Print & Sign): Dugut Symonds / D. Symonds

Analysis Method and/or Analytes

10-15

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Sample Final Vacuum					Comments / Specific Instructions
267 Franklin SS		10/29	1120	K659	3364163	-8.8		X				SUB-SLAB
267 Franklin BA1		10/29	1130	K067	143062	-7.9		X				Basement Air
267 Franklin BA2		10/29	1144	2802	142250	-7.0		X				"
267 Franklin BA3		10/29	1140	2613	142254	-7.2		X				"
267 Franklin OA		10/29	1150	KL75	146810	-7.9		X				Outdoor Air

Jim Richert 10/29/08

Report Tier Levels - please select
Tier I - (Results/Default if not specified) _____ Tier III (CLP Forms Only) _____
Tier II (Results + QC) _____ Tier IV (Data Validation) _____

EDD required Yes / No
Type: _____ EDD Units: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jim Richert	10/29/08	1110			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN SS

Date Sampled : 10/29/08 11:20 **Order #:** 1150195 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 5.00
CAN DILUTION : 1.81 Pi= -8.7 Pf= 8.4

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	2.3 J	0.11	0.72 J
1,1-DICHLOROETHENE	0.44	3.9 U	0.11	1.00 U
TRANS-1,2-DICHLOROETHENE	0.44	3.9 U	0.11	1.00 U
CIS-1,2-DICHLOROETHENE	0.44	0.81 J	0.11	0.20 J
ETHYLBENZENE	0.95	2.1 J	0.22	0.49 J
METHYLENE CHLORIDE	0.38	3.5 U	0.11	1.00 U
TETRACHLOROETHENE	0.15	340	0.022	50
TOLUENE	0.41	42	0.11	11
1,1,1-TRICHLOROETHANE	0.60	5.4 U	0.11	1.00 U
TRICHLOROETHENE	0.12	17	0.022	3.1
VINYL CHLORIDE	0.28	2.5 U	0.11	1.00 U
O-XYLENE	0.95	1.7 J	0.22	0.40 J
M+P-XYLENE	1.9	6.2 J	0.44	1.4 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA1

Date Sampled : 10/29/08 11:30 **Order #:** 1150196 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 20.00
CAN DILUTION : 1.72 Pi= -8.1 Pf= 7.5

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	1.1 J	0.11	0.35 J
1,1-DICHLOROETHENE	0.44	15 U	0.11	3.8 U
TRANS-1,2-DICHLOROETHENE	0.44	15 U	0.11	3.8 U
CIS-1,2-DICHLOROETHENE	0.44	20	0.11	5.1
ETHYLBENZENE	0.95	33 U	0.22	7.6 U
METHYLENE CHLORIDE	0.38	1.5 JB	0.11	0.44 JB
TETRACHLOROETHENE	0.15	1200	0.022	170
TOLUENE	0.41	4.1 J	0.11	1.1 J
1,1,1-TRICHLOROETHANE	0.60	21 U	0.11	3.8 U
TRICHLOROETHENE	0.12	13	0.022	2.5
VINYL CHLORIDE	0.28	9.7 U	0.11	3.8 U
O-XYLENE	0.95	33 U	0.22	7.6 U
M+P-XYLENE	1.9	1.8 J	0.44	0.41 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA2

Date Sampled : 10/29/08 11:44 **Order #:** 1150197 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 10.00
CAN DILUTION : 1.60 Pi= -6.5 Pf= 7.6

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.76 J	0.11	0.24 J
1,1-DICHLOROETHENE	0.44	7.0 U	0.11	1.8 U
TRANS-1,2-DICHLOROETHENE	0.44	7.0 U	0.11	1.8 U
CIS-1,2-DICHLOROETHENE	0.44	12	0.11	3.0
ETHYLBENZENE	0.95	15 U	0.22	3.5 U
METHYLENE CHLORIDE	0.38	6.1 U	0.11	1.8 U
TETRACHLOROETHENE	0.15	670	0.022	99
TOLUENE	0.41	1.8 J	0.11	0.49 J
1,1,1-TRICHLOROETHANE	0.60	9.6 U	0.11	1.8 U
TRICHLOROETHENE	0.12	7.0	0.022	1.3
VINYL CHLORIDE	0.28	4.5 U	0.11	1.8 U
O-XYLENE	0.95	15 U	0.22	3.5 U
M+P-XYLENE	1.9	0.87 J	0.44	0.20 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA3

Date Sampled : 10/29/08 11:40 **Order #:** 1150198 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 10.00
CAN DILUTION : 1.68 Pi= -7.7 Pf= 7.4

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.55 J	0.11	0.17 J
1,1-DICHLOROETHENE	0.44	7.3 U	0.11	1.8 U
TRANS-1,2-DICHLOROETHENE	0.44	7.3 U	0.11	1.8 U
CIS-1,2-DICHLOROETHENE	0.44	18	0.11	4.4
ETHYLBENZENE	0.95	16 U	0.22	3.7 U
METHYLENE CHLORIDE	0.38	0.59 JB	0.11	0.17 JB
TETRACHLOROETHENE	0.15	900	0.022	130
TOLUENE	0.41	1.6 J	0.11	0.43 J
1,1,1-TRICHLOROETHANE	0.60	10 U	0.11	1.8 U
TRICHLOROETHENE	0.12	11	0.022	2.0
VINYL CHLORIDE	0.28	4.7 U	0.11	1.8 U
O-XYLENE	0.95	16 U	0.22	3.7 U
M+P-XYLENE	1.9	32 U	0.44	7.4 U

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	96	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN OA

Date Sampled : 10/29/08 11:50 **Order #:** 1150201 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 1.00
CAN DILUTION : 1.60 Pi= -6.5 Pf= 7.5

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.46 J	0.11	0.15 J
1,1-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
TRANS-1,2-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
CIS-1,2-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
ETHYLBENZENE	0.95	0.26 J	0.22	0.059 J
METHYLENE CHLORIDE	0.38	0.22 JB	0.11	0.062 JB
TETRACHLOROETHENE	0.15	0.12 J	0.022	0.017 J
TOLUENE	0.41	1.1	0.11	0.29
1,1,1-TRICHLOROETHANE	0.60	0.96 U	0.11	0.18 U
TRICHLOROETHENE	0.12	0.21	0.022	0.039
VINYL CHLORIDE	0.28	0.45 U	0.11	0.18 U
O-XYLENE	0.95	0.65 J	0.22	0.15 J
M+P-XYLENE	1.9	0.98 J	0.44	0.23 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	101	%

OSR – 3

267 Franklin St.

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Dwight Symonds Date/Time Prepared 10/28/05 11:00

Preparer's Affiliation Malcolm Pirnie Inc Phone No. 585-727-3710

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y / N

Last Name: Masucci First Name: Antonio

Address: 267 Franklin St. Buffalo NY

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 13 Age of Occupants avg ~ 35 ↑ (25, 30, 35, 65)

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 4 Building age 7

Is the building insulated? Y / N ? How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

some Connection w/ Hallways & Doorways

Airflow near source

Outdoor air infiltration

some / old Bldg.

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other slab over dirt
d. Basement floor:	uncovered	covered	covered with	partially covered carpet.
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with	paint.
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 6' (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

subslab is irregularly poured - unevenness in floor - some cracking

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

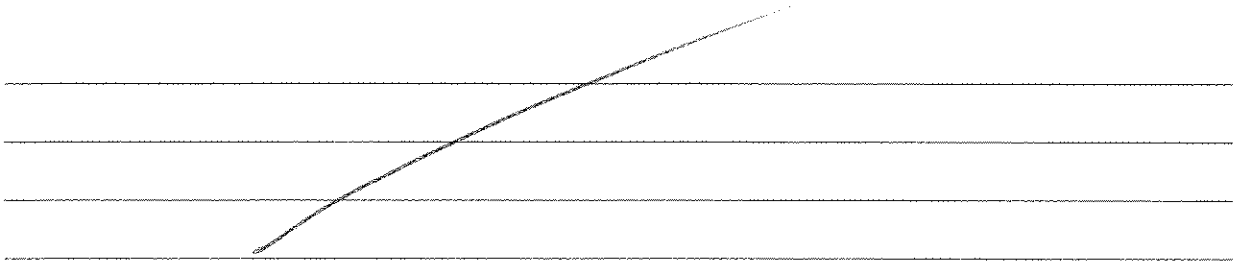
Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in: Basement Outdoors Main Floor Other_____

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.



7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	utility Room / Boiler Room / two appts.
1st Floor	4 appts
2nd Floor	4 appts
3rd Floor	4 appts
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA
Please specify _____

d. Has the building ever had a fire? Y N When? _____

e. Is a kerosene or unvented gas space heater present? Y N Where? _____

f. Is there a workshop or hobby/craft area? Y N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? ? possible

h. Have cleaning products been used recently? Y N When & Type? _____

i. Have cosmetic products been used recently? Y / ~~N~~ When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? _____

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) N

p. Has there been a pesticide application? (Y) / N When & Type? once a month.

Are there odors in the building? Y / N
If yes, please describe: moist/mouldy

Do any of the building occupants use solvents at work? (Y) / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Household cleaners/paint thinners

If yes, are their clothes washed at work? Y / ~~N~~

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) ~~No~~
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: ~~Public Water~~ Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: ~~Public Sewer~~ Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

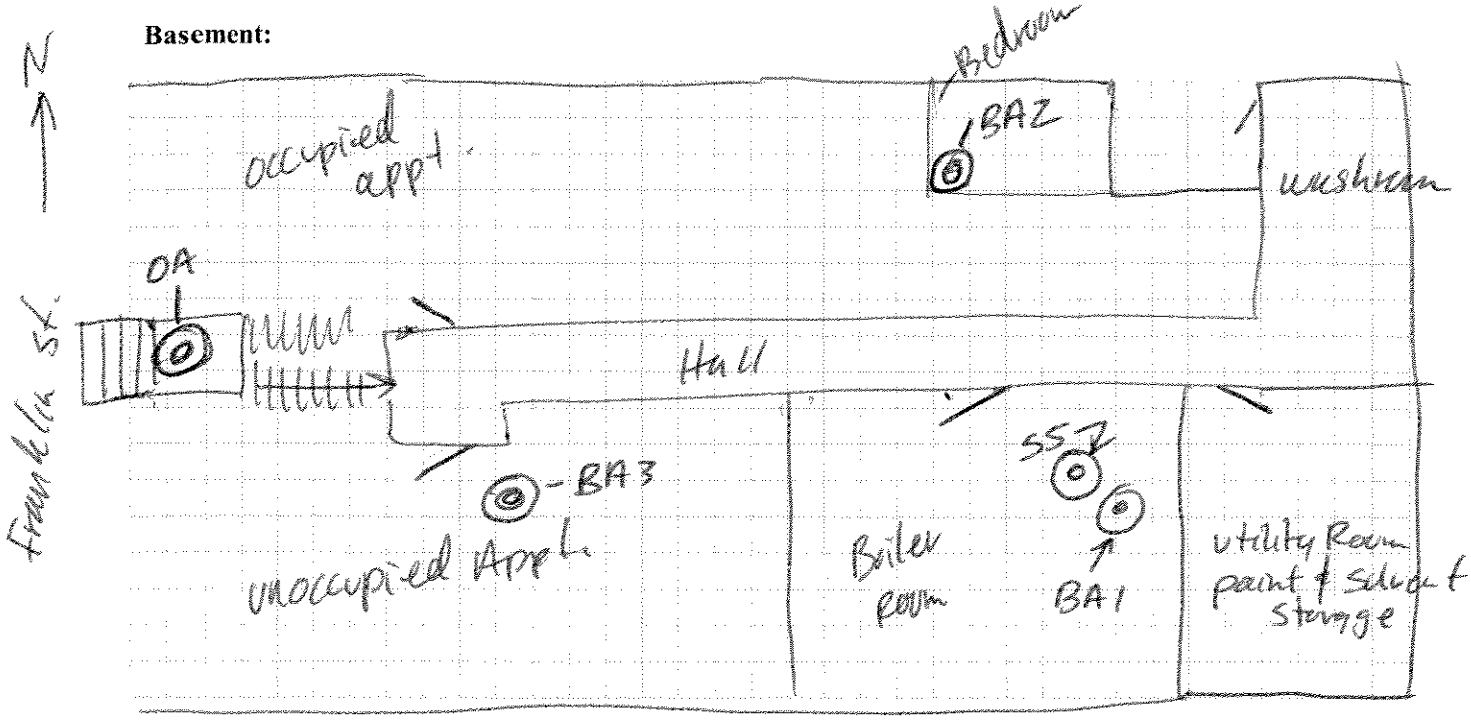
c. Responsibility for costs associated with reimbursement explained? Y / ~~N~~

d. Relocation package provided and explained to residents? Y ~~N~~

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

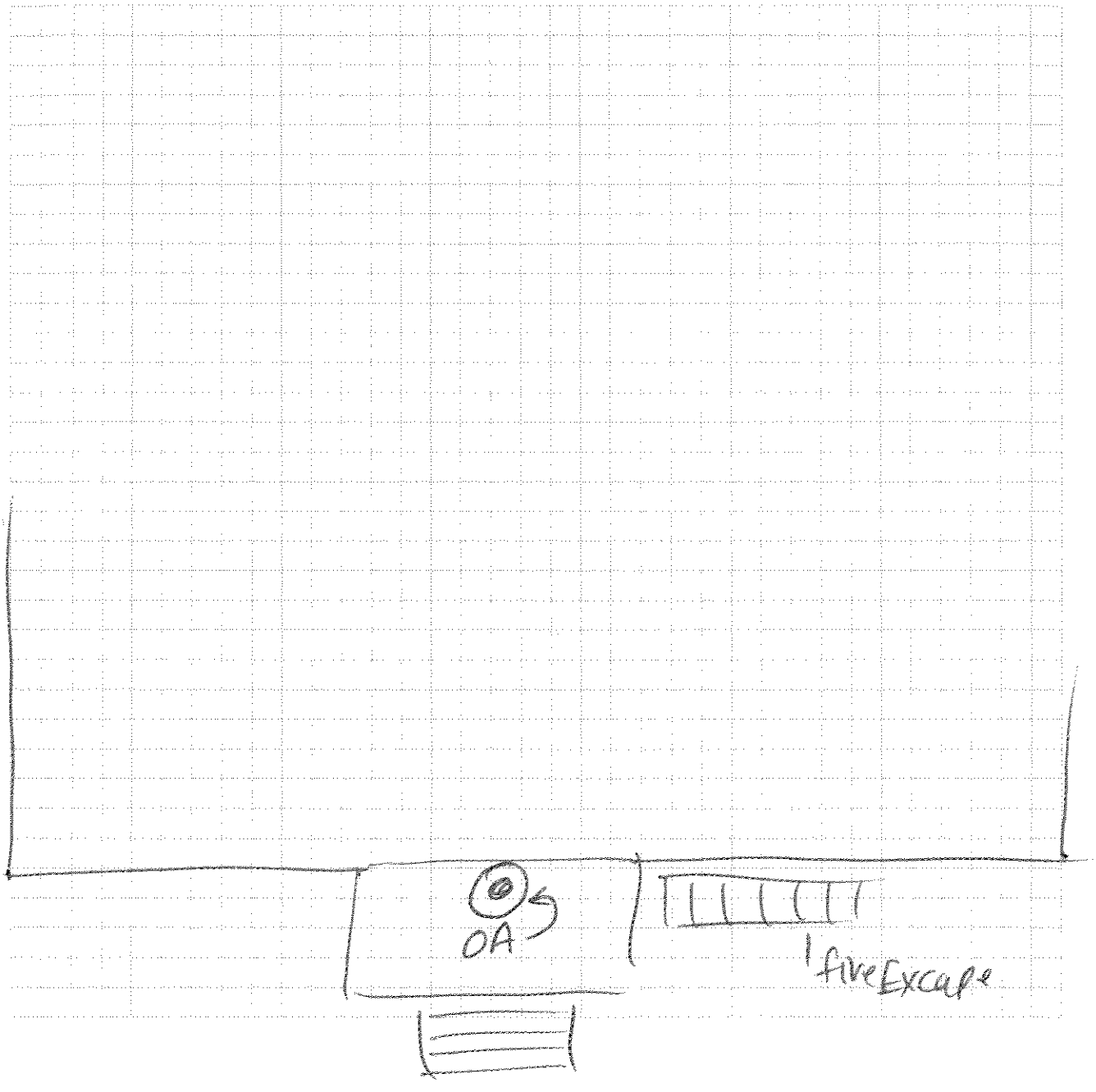


First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



4
E5920

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PID Rae

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
MAINT. CLOSET	LATEX & OIL BASED PAINT	1G	LESS THAN FU	PAINT / OVER OPEN CONTAINER	3 PPM	864
"	OPEN CANS PAINT THINNER	LIG	USED	SOAKING PAINT BRUSHES	310 PPM	863
LC	STAIN, PAINTS 20 MISC. CONTAINERS	8 OZ TO 1GAL	USED	VARIOUS	5.7 PPM	861
"	18 CALK, ADHESIVE & GREASE TUBES	CALK TUBES	NEW & USED	VARIOUS	1.7 PPM	860
4	13 CONT. SOAPS	13 - 75 OZ	USED	SOAPS	1.7 PPM	859
4	WD40, OVEN CLEANER & 24 ASSORTMENTS	LIG	USED	OIL, PAINT, PESTICIDES, VARIOUS	1.1 PPM	858

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

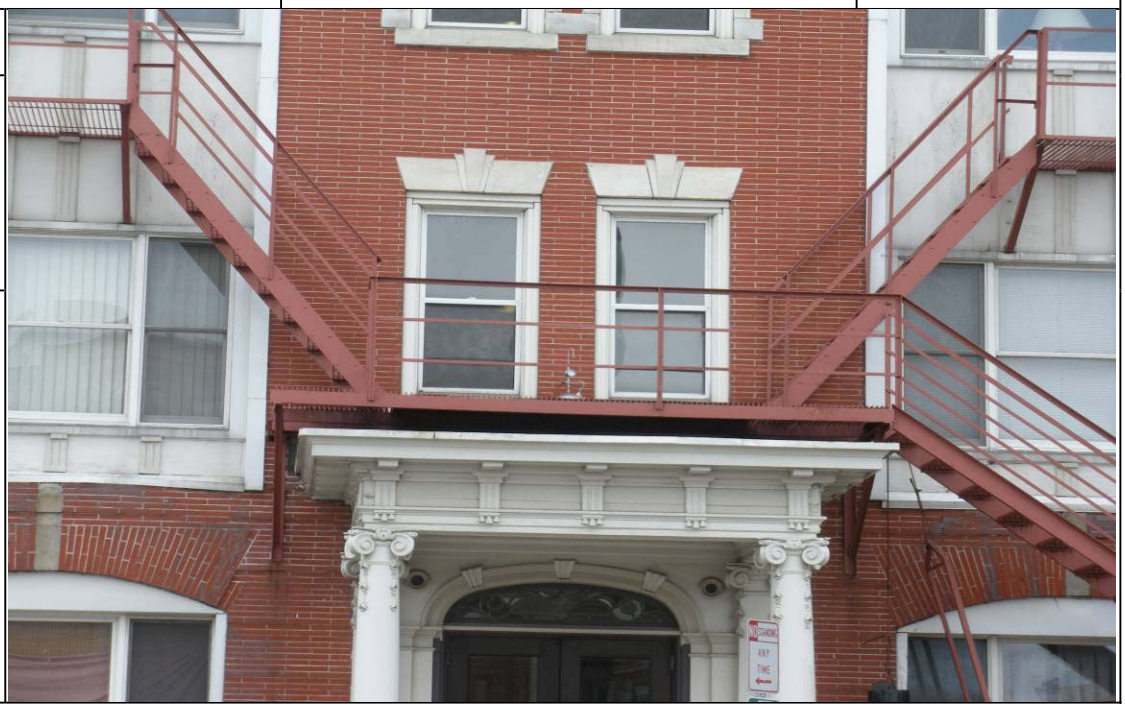
Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to East

Description:

Sample canister on front fire escape for background outdoor air sample
(267 Franklin –OA)



MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to east

Description:

Sub-slab sample (SS) and Basement air sample (BA1) located in boiler room of 267 Franklin Street apartment building.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to East inside.

Description:

Location of basement air sample BA-3 in the kitchen of apartment B-1.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to South

Description:

Location of basement air sample BA-2 in main bedroom of apartment B-2.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to the South

Description:

Maintenance shop in the Southeast of basement level of 267 Franklin St. Note the many sources of VOCs present.

MALCOLM PIRNIE

PHOTOGRAPHIC LOG

Project:	Location:	Project No.
275 Franklin Street Site, Buffalo, New York	Apartment Bld. (267 Franklin Street)	0266-377

Photo No.	Date:
	10/28-29/08

Direction Photo Taken:

View to the East.

Description:

Some of the many consumer sources of VOCs located in the maintenance shop of 267 Franklin Street.

1 Mustard Street, Suite 250 Rochester, NY 14609-6925 (585) 288-5380 (585) 288-8475 fax

Columbia Analytical Services INC.
An Employee - Owned Company

December 3, 2008

Mr. Jim Richert
Malcolm Pirnie Inc.
50 Fountain Plaza
Suite 600
Buffalo, NY 14202

Re: Franklin Project #0266-377
Submission #R2846926

Dear Mr. Richert:

Enclosed is an analytical data report for the above referenced facility. A total of five samples were received by our laboratory on October 30, 2008.

Any problems encountered with this project are addressed in a case narrative section which is presented later in this report.

This report consists of two (2) packages: the sample data package and the sample data summary package. A copy of the summary package has been sent to your attention, and the data package has been sent to Chris Taylor's attention. All data presented in this package has been reviewed prior to report submission. If you should have any questions or concerns, please contact me at (585) 288-5380.

Sincerely,
COLUMBIA ANALYTICAL SERVICES

Janice M. Jaeger
Project Chemist

enc.

This report contains a total of 131 pages.

Columbia Analytical Services inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client	: Malcolm Pirnie, Inc.
Project Reference	: FRANKLIN PROJECT #0266-377
Lab Submission #	: R2846926
Contact Person	: Janice Jaeger
Phone Number	: (585) 288-5380
Reported	: 12/01/08

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

SDG NARRATIVE

CASE NARRATIVE

COMPANY: Malcolm Pirnie
Franklin Project #0266-377
SUBMISSION #: R2846926

Malcolm Pirnie samples were collected on 10/29/08 and received at CAS on 10/30/08 in good condition.

VOLATILE ORGANICS

Five air samples were analyzed for a site specific list of Volatiles by method TO-15.

All Tuning criteria were met.

All the initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within acceptance limits.

All Reference spike recoveries were within limits.

The Laboratory Blanks associated with these analyses were free of contamination except the 11/15/08 blank contained a low level hit for Methylene chloride. All affected data has been flagged with a "B".

All samples were analyzed within recommended holding times.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG#: 267 FRANKLIN SS
SUBMISSION R2846926
CLIENT: Malcolm Pirnie, Inc.
CLIENT REP: Janice Jaeger
PROJECT: FRANKLIN PROJECT #0266-377

BATCH COMPLETE: __yes_____
DISKETTE REQUESTED: Y___ N__X__
DATE: 11/3/08
CUSTODY SEAL: PRESENT/ABSENT: P
CHAIN OF CUSTODY: PRESENT/ABSENT: P

DATE REVISED:
DATE DUE: 11/20/08
PROTOCOL: to-15
SHIPPING No.:

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS AMPLE CONDITION
1150195	267 FRANKLIN SS	AIR	TO-15	10/29/2008	10/30/2008			
1150196	267 FRANKLIN BA1	AIR	TO-15	10/29/2008	10/30/2008			
1150197	267 FRANKLIN BA2	AIR	TO-15	10/29/2008	10/30/2008			
1150198	267 FRANKLIN BA3	AIR	TO-15	10/29/2008	10/30/2008			
1150201	267 FRANKLIN OA	AIR	TO-15	10/29/2008	10/30/2008			

Columbia Analytical Services™

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the MDL. This flag is also used for DoD instead of "P" as indicated below.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 40% (25% for CLP) difference for detected concentrations between the two GC columns. The concentration is reported on the Form I and flagged with a "P" ("J" for DoD).

Q - for DoD only – indicates a pesticide/Aroclor target is not confirmed. This flag is used when there is ≥ 100% difference for the detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

ACCREDITED IN ACCORDANCE WITH nelac

CAS/Rochester Lab ID # for State Certifications[1]

NELAP Accredited
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
Nevada ID # NY-00032
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania ID# 68-786
Rhode Island ID # 158
West Virginia ID # 292

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com.

CHAINS OF CUSTODY

INTERNAL CHAINS

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

Columbia Analytical Services INC
An Employee - Owned Company
1 Mustard Street, Suite 250
Rochester, New York 14609-6925
Phone (585) 288-5380
Fax (585) 288-8475

Requested Turnaround Time in Business Days From Receipt, please circle
1 Day 2 Day 3 Day 4 Day 5 Day (10 Day-Standard)

CAS Project No.

Company Name & Address (Reporting Information): Malcolm Pirnie

Project Name: Franklin

Project Number: 0266377

CAS Contact:

Project Manager: Jim Richert

P.O. # / Billing Information

Phone: 716-667-6654 Fax: 716/667-0279

Email Address for Result Reporting: JRichert@pirnie.com

Sampler (Print & Sign): Dwight Symonds / D. Symonds

Analysis Method and/or Analytes

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Sample Final Vacuum		TO-15				Comments Specific Instructions
267 Franklin SS		11/29	1120	K659	3364163	-8.8		X				SUB-SLAB
267 Franklin BA1		11/29	1139	K767	143067	-7.9		X				Basement Air
267 Franklin BA2		11/29	1144	2802	142250	-7.0		X				"
267 Franklin BA3		11/29	1140	2613	142254	-7.2		X				"
267 Franklin OA		11/29	1150	K675	146810	-7.9		X				Outdoor Air

Jim Richert 10/29/08

Report Tier Levels - please select
Tier I - (Results/Default if not specified) _____ Tier III (CLP Forms Only) _____
Tier II (Results + QC) _____ Tier IV (Data Validation) _____

EDD required Yes / No
Type: _____ EDD Units: _____

Project Requirements (MRLs, QAPP)

	Date	Time		Date	Time
Reliquished by: (Signature) Jim Richert	10/29/8	1110	Received by: (Signature)	10/30/08	1035
Reliquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Reliquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler Receipt And Preservation Check Form

Project/Client _____ Submission Number R2846926

Cooler received on 10/30/08 by: M COURIER: CAS UPS ~~FEDEX~~ VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	~~NO~~		
2.	Were custody papers properly filled out (ink, signed, etc.)?	~~YES~~	NO		
3.	Did all bottles arrive in good condition (unbroken)?	~~YES~~	NO		
4.	Did any VOA vials have significant* air bubbles?	YES	NO	~~N/A~~	
5.	Were **Ice** or **Ice packs** present?	YES	~~NO~~		
6.	Where did the bottles originate?	~~CAS/ROC,~~ CLIENT			
7.	Temperature of cooler(s) upon receipt:	17°	15°	13°	16° 14°
	Is the temperature within 0° - 6° C?:	Yes	Yes	Yes	Yes Yes
	If No, Explain Below	~~No~~	No	No	No No

Date/Time Temperatures Taken: 10/30/08 1645

Thermometer ID: 161 / IR GUN#2 / ~~IR GUN#3~~ Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition, Client Approval to Run Samples: _____

PC Secondary Review: _____

Cooler Breakdown: Date: 11/3/08 by: AMH

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	YES	NO
2.	Did all bottle labels and tags agree with custody papers?	YES	NO
3.	Were correct containers used for the tests indicated?	YES	NO
4.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated N/A

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received	Exp
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid	
	$Na_2S_2O_3$	-	-		
	Zn Aceta	-	-		
	HCl	*	*		

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: _____

Other Comments:

PC Secondary Review: AMH 11/5/08

*significant air bubbles are greater than 5-6 mm

Chain of Custody

Submission: **R2846926** ***Client:*** Malcolm Pirnie, Inc.

Lab ID: 1150195 ***Matrix*** AIR

Received into CAS-Rochester Custody: 10/30/08

Container: 11501951

Date of Custody	User	Dept	Storage Location	Purpose	Empty
11/03/08 13:35	ahentsch	Sample Management	Ambient 2	Storage	☐
11/03/08 15:09	twalton	GC/MS Volatiles	Analyst	Analysis	☐

Lab ID: 1150196 ***Matrix*** AIR

Received into CAS-Rochester Custody: 10/30/08

Container: 11501961

Date of Custody	User	Dept	Storage Location	Purpose	Empty
11/03/08 13:35	ahentsch	Sample Management	Ambient 2	Storage	☐
11/03/08 15:09	twalton	GC/MS Volatiles	Analyst	Analysis	☐

Lab ID: 1150197 ***Matrix*** AIR

Received into CAS-Rochester Custody: 10/30/08

Container: 11501971

Date of Custody	User	Dept	Storage Location	Purpose	Empty
11/03/08 13:35	ahentsch	Sample Management	Ambient 2	Storage	☐
11/03/08 15:09	twalton	GC/MS Volatiles	Analyst	Analysis	☐

Lab ID: 1150198 ***Matrix*** AIR

Received into CAS-Rochester Custody: 10/30/08

Container: 11501981

Date of Custody	User	Dept	Storage Location	Purpose	Empty
11/03/08 13:35	ahentsch	Sample Management	Ambient 2	Storage	☐
11/03/08 15:09	twalton	GC/MS Volatiles	Analyst	Analysis	☐

Chain of Custody

Submission: **R2846926** ***Client:*** Malcolm Pirnie, Inc.

Lab ID: 1150201 ***Matrix*** AIR

Received into CAS-Rochester Custody: 10/30/08

Container: 11502011

Date of Custody	User	Dept	Storage Location	Purpose	Empty
11/03/08 13:35	ahentsch	Sample Management	Ambient 2	Storage	☐
11/03/08 15:09	twalton	GC/MS Volatiles	Analyst	Analysis	☐

VOLATILE ORGANICS

QC SUMMARY

A6082.D
11/14/08 23:12

LCS 1.0

LCS RECOVERY FOR SECOND SOURCE STANDARD

Compounds Flagged outside of 70-130% recovery

DF 100.00 | inj volume 250 | nominal volume 1000

SS Stock 0-515-53A conc.====>	Stock ppm	ppb	MW	cas#	Target ppbv	LCS ppbv	Recovery %	
Internal standard						2.5		
propylene	1.04	10.40	42.08	115-07-1	2.60	2.45	94.2	
dichlorodifluoromethane	1.01	10.10	120.91	75-71-8	2.53	2.47	97.8	
freon-114	1.01	10.10	170.92	76-14-2	2.53	2.47	97.8	
chloromethane	1.01	10.10	50.49	74-87-3	2.53	2.47	97.8	
vinyl chloride	1.01	10.10	62.5	75-01-4	2.53	2.5	99.0	
1,3-butadiene	1.09	10.90	54.09	106-99-0	2.73	2.69	98.7	
bromomethane	1.02	10.20	94.9	74-83-9	2.55	2.46	96.5	
chloroethane	1.01	10.10	64.5	75-00-3	2.53	2.47	97.8	
trichlorofluoromethane	0.99	9.90	137.37	75-69-4	2.48	2.46	99.4	
ethanol	1.03	10.30	46.07	64-17-5	2.58	1.59	61.7 #	NT
freon-113	1.06	10.60	187.38	76-13-1	2.65	2.66	100.4	
1,1-dichloroethene	1.08	10.80	96.94	75-35-4	2.70	2.76	102.2	
acetone	1.03	10.30	58.08	67-64-1	2.58	2.49	96.7	
isopropanol	1.10	11.00	60.1	67-63-0	2.75	1.49	54.2 #	NT
carbon disulfide	1.04	10.40	76.14	75-15-0	2.60	2.44	93.8	
methylene chloride	1.07	10.70	84.93	75-09-2	2.68	2.7	100.9	
trans-1,2-dichloroethene	1.03	10.30	96.94	156-60-5	2.58	2.62	101.7	
methyl tert butyl ether	1.05	10.50	88.15	1634-04-4	2.63	2.76	105.1	
hexane	1.05	10.50	86.18	110-54-3	2.63	2.76	105.1	
1,1-dichloroethane	1.06	10.60	98.96	107-06-2	2.65	2.73	103.0	
vinyl acetate	1.07	10.70	86.09	108-05-4	2.68	2.96	110.7	
2-butanone	1.08	10.80	72.11	78-93-3	2.70	2.67	98.9	
cis-1,2-dichloroethene	1.08	10.80	96.94	156-59-2	2.70	2.75	101.9	
ethyl acetate	1.00	10.00	88.11	141-78-6	2.50	2.45	98.0	
chloroform	1.00	10.00	119.38	67-66-3	2.50	2.68	107.2	
tetrahydrofuran	1.06	10.60	72.11	109-99-9	2.65	2.77	104.5	
Internal standard					0.00	2.5	#DIV/0!	###
1,1,1-trichloroethane	1.05	10.50	133.4	71-55-6	2.63	2.58	98.3	
cyclohexane	1.06	10.60	84.16	110-82-7	2.65	2.64	99.6	
carbon tetrachloride	1.05	10.50	153.82	56-23-5	2.63	2.63	100.2	
1,2-dichloroethane	1.07	10.70	98.96	107-06-2	2.68	2.62	97.9	
benzene	1.07	10.70	78.11	71-43-2	2.68	2.65	99.1	
heptane	1.06	10.60	100.2	142-82-5	2.65	2.67	100.8	
trichloroethylene	1.05	10.50	131.39	79-01-6	2.63	2.47	94.1	
1,2-dichloropropane	1.06	10.60	112.99	78-87-5	2.65	2.7	101.9	
1,4-dioxane	1.05	10.50	88.11	123-91-1	2.63	1.77	67.4 #	NT
bromodichloromethane	1.05	10.50	163.83	75-27-4	2.63	2.57	97.9	
cis-1,3-dichloro-1-propene	1.04	10.40	110.97	10061-01-5	2.60	2.59	99.6	
4-methyl-2-pentanone	1.08	10.80	100.16	108-10-1	2.70	2.57	95.2	
toluene	1.08	10.80	92.14	108-88-3	2.70	2.78	103.0	
trans-1,3-dichloro-1-propene	1.10	11.00	110.97	10061-02-6	2.75	2.88	104.7	
1,1,2-trichloroethane	1.04	10.40	133.4	79-00-5	2.60	2.56	98.5	
tetrachloroethene	1.05	10.50	165.83	127-18-4	2.63	2.47	94.1	
2-hexanone	1.09	10.90	100.16	591-78-6	2.73	2.48	91.0	
dibromochloromethane	1.04	10.40	208.28	124-48-1	2.60	2.58	99.2	
1,2-dibromoethane	1.05	10.50	187.86	106-93-4	2.63	2.52	96.0	
Internal standard					0.00	2.5	#DIV/0!	###
chlorobenzene	1.07	10.70	112.56	108-90-7	2.68	2.6	97.2	
ethylbenzene	1.07	10.70	106.17	100-41-4	2.68	2.68	100.2	
M+P xylene	2.10	21.00	106.17	1330-20-7	5.25	5.31	101.1	
O xylene	1.05	10.50	106.17	95-47-6	2.63	2.62	99.8	
styrene	1.06	10.60	104.15	100-42-5	2.65	2.59	97.7	
bromoform	1.05	10.50	252.73	75-25-2	2.63	2.48	94.5	
Surrogate standard					0.00	2.55	#DIV/0!	###
1,1,2,2-tetrachloroethane	1.05	10.50	167.85	79-34-5	2.63	2.25	85.7	
4-ethyltoluene	1.09	10.90	120.19	622-96-8	2.73	2.51	92.1	
1,3,5-trimethylbenzene	1.06	10.60	120.19	108-67-8	2.65	2.59	97.7	
1,2,4-trimethylbenzene	1.04	10.40	120.19	95-63-6	2.60	2.57	98.8	
1,3-dichlorobenzene	1.06	10.60	147	541-73-1	2.65	2.42	91.3	
1,4-dichlorobenzene	1.05	10.50	147	106-46-7	2.63	2.48	94.5	
benzyl chloride	1.06	10.60	126.59	100-44-7	2.65	2.33	87.9	
1,2-dichlorobenzene	1.02	10.20	147	95-50-1	2.55	2.31	90.6	
1,2,4-trichlorobenzene	1.00	10.00	181.45	120-82-1	2.50	2.45	98.0	
hexachlorobutadiene	1.02	10.20	260.76	87-68-3	2.55	2.33	91.4	

NT 11-15-08

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK1

Lab Name: CAS/ROCH Contract: MAL

Lab Code: 10145 Case No.: R8-46926 SAS No.: SDG No.: R2846926

Lab File ID: A6084.D Lab Sample ID: CLNBLK 1.0

Date Analyzed: 11/15/2008 Time Analyzed: 0:53

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MS#9

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS1	LCS 1.0	A6082.D	23:12
02	FRANKLIN OA	1150201 1.0	A6088.D	4:16
03	FRANKLIN SS	1150195 5.0	A6089.D	5:01
04	FRANKLIN BA1	1150196 20.0	A6090.D	5:47
05	FRANKLIN BA2	1150197 10.0	A6091.D	6:32
06	FRANKLIN BA3	1150198 10.0	A6092.D	7:17

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: MAL

Lab Code: 10145 Case No.: R8-46926 SAS No.: _____ SDG No.: R2846926

Lab File ID: A6069.D BFB Injection Date: 11/14/2008

Instrument ID: MS#9 BFB Injection Time: 12:40

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120.0% of mass 95	75.7
175	4.0 - 9.0% of mass 174	5.4 (7.2)1
176	93.0 - 101.0% of mass 174	73.6 (97.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

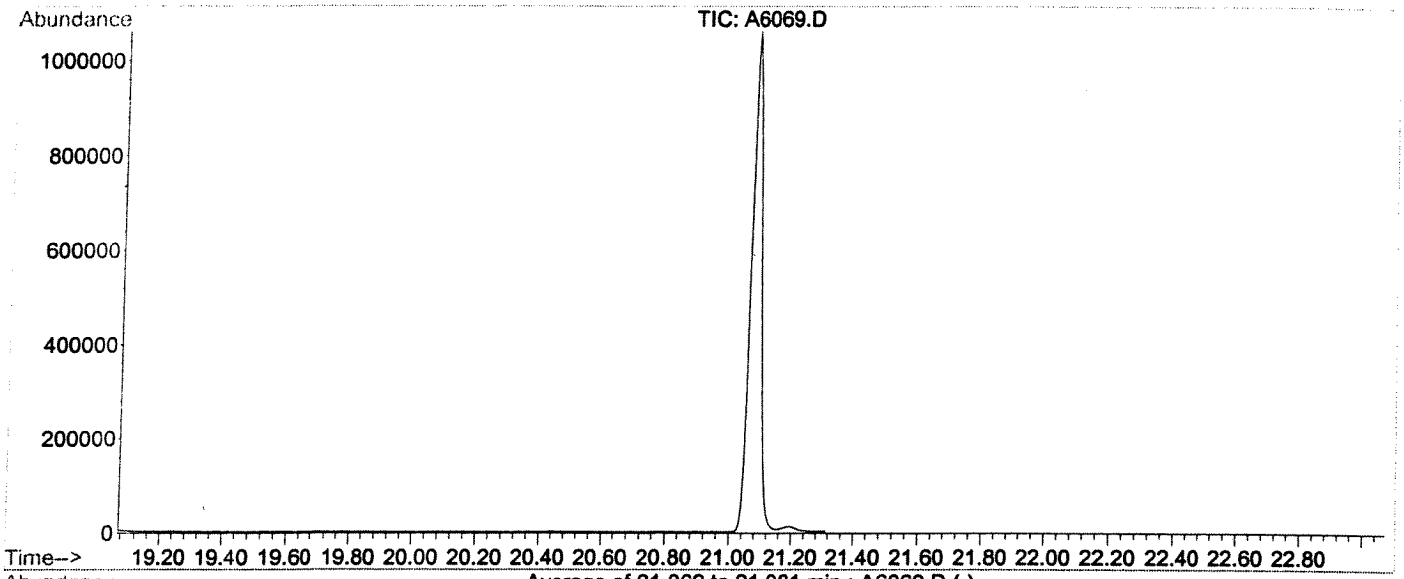
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

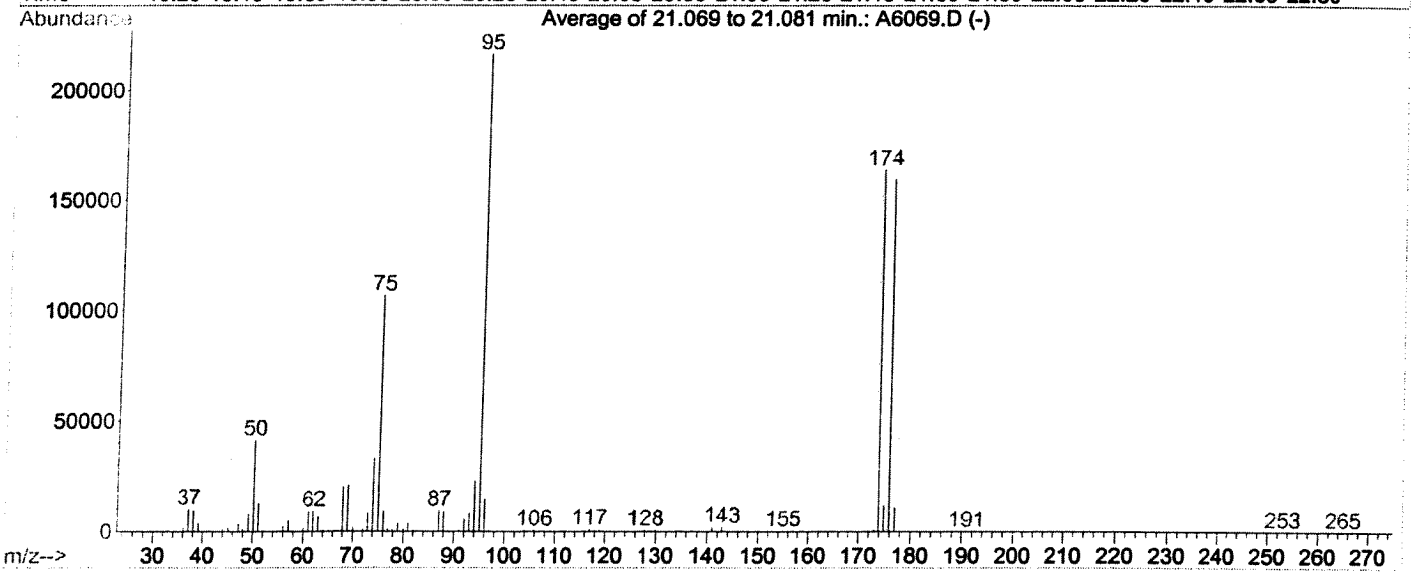
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK-CAL	METBLK 1.0	A6071.D	11/14/2008	14:45
02	0.02 PPB	0.02 PPB	A6072.D	11/14/2008	15:31
03	0.095 PPB	0.095 PPB	A6073.D	11/14/2008	16:16
04	0.20 PPB	0.20 PPB	A6074.D	11/14/2008	17:01
05	0.50 PPB	0.50 PPB	A6075.D	11/14/2008	17:46
06	1.0 PPB	1.0 PPB	A6076.D	11/14/2008	18:31
07	2.5 PPB	2.5 PPB	A6077.D	11/14/2008	19:16
08	5.0 PPB	5.0 PPB	A6078.D	11/14/2008	20:02
09	7.5 PPB	7.5 PPB	A6079.D	11/14/2008	20:50
10	10.0 PPB	10.0 PPB	A6080.D	11/14/2008	21:41
11	ICV	ICV	A6081.D	11/14/2008	22:26

BFB

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6069.D Vial: 1
Acq On : 14 Nov 2008 12:40 Operator: T.WALTON
Sample : TUNE Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15

TW 11-14-08





AutoFind: Scans 2649, 2650, 2651; Background Corrected with Scan 2637

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	41519	PASS
75	95	30	66	49.3	106797	PASS
95	95	100	100	100.0	216683	PASS
96	95	5	9	6.8	14675	PASS
173	174	0.00	2	0.5	852	PASS
174	95	50	120	75.7	163989	PASS
175	174	4	9	7.2	11771	PASS
176	174	93	101	97.3	159531	PASS
177	176	5	9	6.7	10693	PASS

A6069.D 111408A.M Fri Nov 14 13:02:09 2008 OFFLINE

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: MAL

Lab Code: 10145 Case No.: R8-46926 SAS No.: _____ SDG No.: R2846926

Lab File ID: A6069.D BFB Injection Date: 11/14/2008

Instrument ID: MS#9 BFB Injection Time: 12:40

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120.0% of mass 95	75.7
175	4.0 - 9.0% of mass 174	5.4 (7.2)1
176	93.0 - 101.0% of mass 174	73.6 (97.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

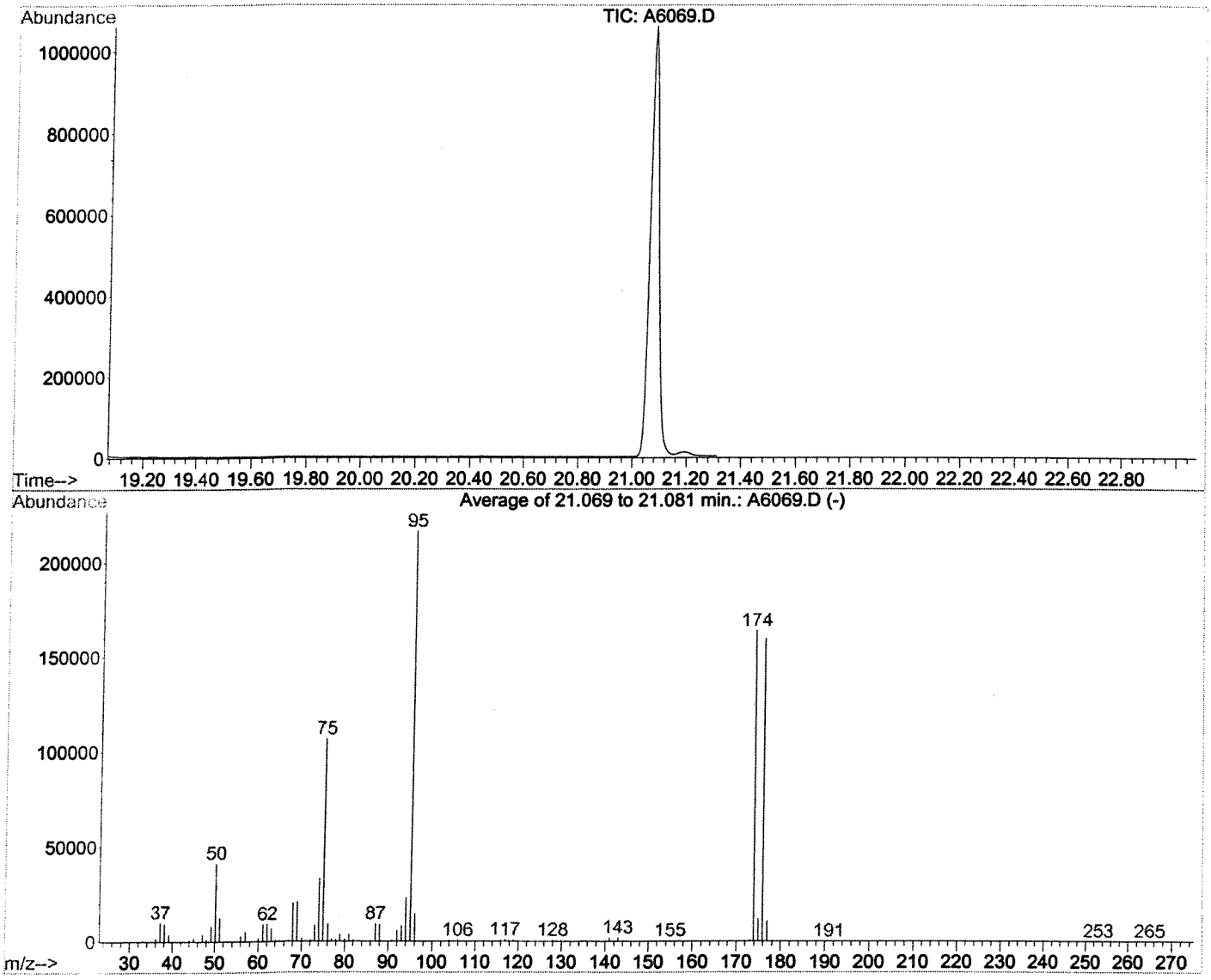
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV1	5.0 PPB	A6078.D	11/14/2008	20:02
02	LCS1	LCS 1.0	A6082.D	11/14/2008	23:12
03	VBLK1	CLNBLK 1.0	A6084.D	11/15/2008	0:53
04	FRANKLIN OA	1150201 1.0	A6088.D	11/15/2008	4:16
05	FRANKLIN SS	1150195 5.0	A6089.D	11/15/2008	5:01
06	FRANKLIN BA1	1150196 20.0	A6090.D	11/15/2008	5:47
07	FRANKLIN BA2	1150197 10.0	A6091.D	11/15/2008	6:32
08	FRANKLIN BA3	1150198 10.0	A6092.D	11/15/2008	7:17

BFB

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6069.D Vial: 1
Acq On : 14 Nov 2008 12:40 Operator: T.WALTON
Sample : TUNE Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15

TW 11-14-08



AutoFind: Scans 2649, 2650, 2651; Background Corrected with Scan 2637

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	41519	PASS
75	95	30	66	49.3	106797	PASS
95	95	100	100	100.0	216683	PASS
96	95	5	9	6.8	14675	PASS
173	174	0.00	2	0.5	852	PASS
174	95	50	120	75.7	163989	PASS
175	174	4	9	7.2	11771	PASS
176	174	93	101	97.3	159531	PASS
177	176	5	9	6.7	10693	PASS

A6069.D 111408A.M Fri Nov 14 13:02:09 2008 OFFLINE

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: MAL

Lab Code: 10145 Case No.: R8-46926 SAS No.: _____ SDG No.: R2846926

Lab File ID (Standard): A6078.D Date Analyzed: 11/14/2008

Instrument ID: MS#9 Time Analyzed: 20:02

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	200909	12.24	773231	13.90	641830	18.98
	UPPER LIMIT	281273	12.74	1082523	14.40	898562	19.48
	LOWER LIMIT	120545	11.74	463939	13.40	385098	18.48
	EPA SAMPLE NO.						
01	LCS1	205030	12.24	833045	13.90	701447	18.98
02	VBLK1	201122	12.24	816510	13.91	680797	18.98
03	FRANKLIN OA	198834	12.24	803646	13.91	677017	18.98
04	FRANKLIN SS	193881	12.24	789255	13.91	671242	18.98
05	FRANKLIN BA1	196469	12.24	784818	13.91	656253	18.98
06	FRANKLIN BA2	187036	12.26	732426	13.92	613671	18.98
07	FRANKLIN BA3	185640	12.24	723997	13.90	607203	18.98

IS1 = bromochloromethane

IS2 = 1,4-difluorobenzene

IS3 = chlorobenzene-d5

AREA UPPER LIMIT = +40% of internal standard area

AREA LOWER LIMIT = - 40% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

METHOD DETECTION LIMIT (MDL) STUDY

Columbia Analytical Services
Rochester, NY

Method: EPA TO-15
Matrix: Air
Instrument: GC/MS #9

Column: DB-624, 60m x 0.25mm x 1.4um
Instrument Analyst: Tom Walton

Raw Data

Analyte	Date	Spike (ppbv)	1	2	3	4	5	6	7	8	9	Avg (ppbv)	Mean %Rec	%RSD	σ	MDL (ppbv)	MRL (ppbv)	Eval	NYS #
bromochloromethane	4/25/2008	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000			2.5000	100.00	0.00	0.0000	0.0000		re-check	NA
propylene	4/25/2008	0.0208	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000		re-check	NT/NC
dichlorodifluoromethane	4/25/2008	0.0202	0.0278	0.0287	0.0308	0.0276	0.0283	0.0282	0.0282			0.0285	141.16	3.75	0.0011	0.0034	0.220	ok	
freon-114	4/25/2008	0.0202	0.0221	0.0220	0.0239	0.0206	0.0217	0.0216	0.0216			0.0219	108.56	4.54	0.0010	0.0032	0.220	ok	
chloromethane	4/25/2008	0.0202	0.0246	0.0239	0.0281	0.0245	0.0260	0.0249	0.0235			0.0251	124.12	6.19	0.0016	0.0049	0.220	ok	
vinyl chloride	4/25/2008	0.0202	0.0202	0.0197	0.0237	0.0183	0.0213	0.0205	0.0203			0.0206	101.84	8.05	0.0017	0.0052	0.110	ok	
1,3-butadiene	4/25/2008	0.0218	0.0217	0.0196	0.0206	0.0191	0.0194	0.0199	0.0208			0.0202	92.46	4.55	0.0009	0.0029	0.220	ok	
bromomethane	4/25/2008	0.0204	0.0233	0.0245	0.0258	0.0246	0.0250	0.0263	0.0248			0.0249	122.06	3.88	0.0010	0.0031	0.110	ok	
chloroethane	4/25/2008	0.0202	0.0225	0.0212	0.0262	0.0220	0.0231	0.0228	0.0203			0.0226	111.81	8.26	0.0019	0.0059	0.220	ok	
trichlorofluoromethane	4/25/2008	0.0198	0.0231	0.0218	0.0249	0.0226	0.0228	0.0229	0.0214			0.0228	115.08	4.91	0.0011	0.0035	0.110	ok	
ethanol	4/25/2008	0.0206	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000		re-check	NT/NC
freon-113	4/25/2008	0.0212	0.0222	0.0216	0.0246	0.0212	0.0229	0.0225	0.0225			0.0225	106.13	4.86	0.0011	0.0035	0.022	ok	
1,1-dichloroethene	4/25/2008	0.0216	0.0193	0.0205	0.0208	0.0187	0.0193	0.0186	0.0200			0.0196	90.74	4.37	0.0009	0.0027	0.110	ok	
acetone	4/25/2008	0.0206	0.1534	0.1974	0.1801	0.1781	0.1937	0.1534	0.1593			0.1736	842.86	10.65	0.0185	0.0586	0.550	ok	
isopropanol	4/25/2008	0.0220	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000		re-check	NT/NC
carbon disulfide	4/25/2008	0.0208	0.0208	0.0203	0.0238	0.0208	0.0213	0.0219	0.0209			0.0214	102.88	5.46	0.0012	0.0037	0.110	ok	
methylene chloride	4/25/2008	0.0214	0.0279	0.0264	0.0274	0.0274	0.0291	0.0280	0.0274			0.0277	129.24	2.97	0.0008	0.0026	0.110	ok	
trans-1,2-dichloroethene	4/25/2008	0.0206	0.0166	0.0156	0.0171	0.0159	0.0153	0.0161	0.0159			0.0161	78.02	3.78	0.0006	0.0019	0.110	re-check	**
methyl tert butyl ether	4/25/2008	0.0210	0.0122	0.0111	0.0120	0.0103	0.0110	0.0113	0.0112			0.0113	53.81	5.64	0.0006	0.0020	0.220	re-check	**
hexane	4/25/2008	0.0210	0.0131	0.0127	0.0136	0.0118	0.0130	0.0132	0.0126			0.0129	61.22	4.44	0.0006	0.0018	0.220	re-check	**
1,1-diclethane	4/25/2008	0.0212	0.0221	0.0197	0.0243	0.0201	0.0218	0.0207	0.0200			0.0212	100.20	7.67	0.0016	0.0052	0.110	ok	
vinyl acetate	4/25/2008	0.0214	0.2937	0.2917	0.2934	0.2911	0.2935	0.2927	0.2930			0.2927	1367.89	0.34	0.0010	0.0031	0.550	ok	L
2-butanone	4/25/2008	0.0216	0.1770	0.1766	0.1794	0.1814	0.1863	0.1812	0.1791			0.1801	833.99	1.82	0.0033	0.0104	0.220	ok	L
cis-1,2-dichloroethene	4/25/2008	0.0216	0.0144	0.0129	0.0151	0.0142	0.0158	0.0144	0.0154			0.0146	67.59	6.53	0.0010	0.0030	0.110	ok	
ethyl acetate	4/25/2008	0.0200	0.0216	0.0202	0.0240	0.0215	0.0231	0.0222	0.0216			0.0220	110.14	5.58	0.0012	0.0039	0.220	ok	
chloroform	4/25/2008	0.0200	0.0208	0.0197	0.0231	0.0203	0.0210	0.0202	0.0198			0.0207	103.50	5.61	0.0012	0.0037	0.110	ok	
tetrahydrofuran	4/25/2008	0.0212	0.0083	0.0044	0.0042	0.0044	0.0051	0.0043	0.0044			0.0050	23.65	29.48	0.0015	0.0047	0.220	ok	
1,4-difluorobenzene	4/25/2008	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000			2.5000	100.00	0.00	0.0000	0.0000		re-check	NA
1,1,1-trichloroethane	4/25/2008	0.0210	0.0241	0.0214	0.0248	0.0217	0.0234	0.0232	0.0230			0.0231	109.93	5.26	0.0012	0.0038	0.110	ok	
cyclohexane	4/25/2008	0.0212	0.0134	0.0130	0.0139	0.0119	0.0124	0.0126	0.0112			0.0126	59.57	7.21	0.0009	0.0029	0.220	ok	
carbon tetrachloride	4/25/2008	0.0210	0.0210	0.0216	0.0245	0.0206	0.0203	0.0215	0.0200			0.0214	101.70	7.05	0.0015	0.0048	0.022	ok	
1,2-dichloroethane	4/25/2008	0.0214	0.0218	0.0201	0.0247	0.0208	0.0209	0.0200	0.0204			0.0212	99.27	7.72	0.0016	0.0052	0.110	ok	
benzene	4/25/2008	0.0214	0.0201	0.0193	0.0210	0.0180	0.0195	0.0181	0.0189			0.0193	90.05	5.55	0.0011	0.0034	0.110	ok	
heptane	4/25/2008	0.0212	0.0090	0.0089	0.0097	0.0076	0.0099	0.0091	0.0088			0.0090	42.45	8.27	0.0007	0.0024	0.220	ok	
trichloroethene	4/25/2008	0.0210	0.0196	0.0182	0.0200	0.0171	0.0181	0.0170	0.0176			0.0182	86.80	6.42	0.0012	0.0037	0.022	ok	
1,2-diclpropane	4/25/2008	0.0212	0.0214	0.0192	0.0220	0.0191	0.0210	0.0188	0.0190			0.0201	94.68	6.69	0.0013	0.0043	0.110	ok	
1,4-dioxane	4/25/2008	0.0210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000		re-check	NT/NC
bromodichloromethane	4/25/2008	0.0210	0.0221	0.0221	0.0233	0.0208	0.0207	0.0210	0.0212			0.0216	102.86	4.38	0.0009	0.0030	0.022	ok	

QA Approval_____

METHOD DETECTION LIMIT (MDL) STUDY

Columbia Analytical Services
Rochester, NY

Method: EPA TO-15
Matrix: Air
Instrument: GC/MS #9

Column: DB-624, 60m x 0.25mm x 1.4um
Instrument Analyst: Tom Walton

Raw Data

Analyte	Date	Spike (ppbv)	1	2	3	4	5	6	7	8	9	Avg (ppbv)	Mean %Rec	%RSD	G	MDL (ppbv)	MRL (ppbv)	Eval	NYS #
cis-1,3-dichloropropene	4/25/2008	0.0208	0.0130	0.0122	0.0136	0.0121	0.0121	0.0123	0.0113			0.0124	59.48	5.93	0.0007	0.0023	0.220	ok	
4-methyl-2-pentanone	4/25/2008	0.0216	0.0202	0.0200	0.0219	0.0199	0.0186	0.0201	0.0206			0.0202	93.45	4.85	0.0010	0.0031	0.220	ok	L
toluene	4/25/2008	0.0216	0.0146	0.0128	0.0143	0.0126	0.0132	0.0140	0.0129			0.0135	62.43	5.94	0.0008	0.0025	0.110	ok	
trans-1,3-dichloropropene	4/25/2008	0.0202	0.1011	0.0997	0.1005	0.0997	0.0992	0.1000	0.0989			0.0999	494.41	0.75	0.0007	0.0024	0.110	ok	L
1,1,2-trichloroethane	4/25/2008	0.0208	0.0174	0.0169	0.0201	0.0156	0.0185	0.0178	0.0175			0.0177	85.03	7.86	0.0014	0.0044	0.110	ok	
tetrachloroethene	4/25/2008	0.0210	0.0183	0.0157	0.0189	0.0171	0.0171	0.0160	0.0166			0.0171	81.43	6.79	0.0012	0.0037	0.022	ok	
2-hexanone	4/25/2008	0.0218	0.0654	0.0635	0.0655	0.0622	0.0610	0.0640	0.0642			0.0637	292.14	2.57	0.0016	0.0052	0.110	ok	L
dibromochloromethane	4/25/2008	0.0208	0.0180	0.0167	0.0205	0.0171	0.0189	0.0176	0.0161			0.0178	85.78	8.30	0.0015	0.0047	0.022	ok	
1,2-dibromoethane	4/25/2008	0.0210	0.0162	0.0148	0.0182	0.0137	0.0144	0.0149	0.0146			0.0153	72.65	9.82	0.0015	0.0048	0.022	ok	
chlorobenzene-d5	4/25/2008	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000			2.5000	100.00	0.00	0.0000	0.0000		re-check	NA
chlorobenzene	4/25/2008	0.0214	0.0220	0.0203	0.0231	0.0197	0.0200	0.0210	0.0202			0.0209	97.66	5.91	0.0012	0.0039	0.110	ok	
ethylbenzene	4/25/2008	0.0214	0.0151	0.0128	0.0144	0.0120	0.0128	0.0131	0.0125			0.0132	61.88	8.33	0.0011	0.0035	0.220	ok	
M+P xylene	4/25/2008	0.0420	0.0262	0.0226	0.0251	0.0214	0.0235	0.0232	0.0225			0.0235	55.95	6.98	0.0016	0.0052	0.440	ok	
O xylene	4/25/2008	0.0210	0.0123	0.0101	0.0122	0.0100	0.0111	0.0113	0.0114			0.0112	53.33	8.09	0.0009	0.0029	0.220	ok	
styrene	4/25/2008	0.0212	0.0091	0.0087	0.0090	0.0085	0.0074	0.0082	0.0076			0.0084	39.42	7.90	0.0007	0.0021	0.220	re-check	**
bromoform	4/25/2008	0.0210	0.0180	0.0147	0.0182	0.0157	0.0165	0.0164	0.0157			0.0165	78.37	7.71	0.0013	0.0040	0.110	ok	
surr 1, bromofluorobenzene	4/25/2008	2.5000	2.1247	2.0933	2.1159	2.0894	2.0874	2.1000	2.0707			2.0973	83.89	0.87	0.0182	0.0577		re-check	NA
1,1,2,2-tetrachloroethane	4/25/2008	0.0210	0.0256	0.0210	0.0232	0.0191	0.0216	0.0222	0.0212			0.0220	104.69	9.22	0.0020	0.0064	0.022	ok	
4-ethyltoluene	4/25/2008	0.0218	0.0120	0.0091	0.0110	0.0087	0.0093	0.0099	0.0094			0.0099	45.48	11.87	0.0012	0.0037	0.220	ok	
1,3,5-trimethylbenzene	4/25/2008	0.0212	0.0115	0.0093	0.0107	0.0088	0.0098	0.0092	0.0096			0.0098	46.43	9.58	0.0009	0.0030	0.220	ok	
1,2,4-trimethylbenzene	4/25/2008	0.0208	0.0112	0.0091	0.0103	0.0088	0.0085	0.0095	0.0093			0.0095	45.81	9.78	0.0009	0.0030	0.220	ok	
1,3-dclbenz	4/25/2008	0.0212	0.0147	0.0123	0.0142	0.0114	0.0113	0.0123	0.0108			0.0124	58.63	11.99	0.0015	0.0047	0.220	ok	
1,4-dclbenz	4/25/2008	0.0210	0.0144	0.0114	0.0129	0.0101	0.0108	0.0117	0.0109			0.0117	55.92	12.45	0.0015	0.0046	0.220	ok	
benzyl chloride	4/25/2008	0.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000	0.550	re-check	NT/NC
1,2-dclbenz	4/25/2008	0.0204	0.0144	0.0126	0.0129	0.0114	0.0092	0.0122	0.0115			0.0120	58.96	13.33	0.0016	0.0051	0.220	ok	
1,2,4-trichlorobenzene	4/25/2008	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000	0.220	re-check	NT/NC
hexachlorobutadiene	4/25/2008	0.0204	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.00	#DIV/0!	0.0000	0.0000	0.220	re-check	NT/NC
Data Files			A4793	A4795	A4797	A4799	A4801	A4803	A4805										

NA - Not applicable for internal or surrogate standards
NT/NC -compound is not a target compound and is not calibrated for this MDL study.
L - Compound is calibrated with a linear fit.
** The calculated MDL is below the instrument reporting limit of 0.01 ppb, the MDL study will not be repeated at a lower level.

VOLATILE ORGANICS

SAMPLE DATA

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN SS

Date Sampled : 10/29/08 11:20 **Order #:** 1150195 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 5.00
CAN DILUTION : 1.81 Pi= -8.7 Pf= 8.4

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	2.3 J	0.11	0.72 J
1,1-DICHLOROETHENE	0.44	3.9 U	0.11	1.00 U
TRANS-1,2-DICHLOROETHENE	0.44	3.9 U	0.11	1.00 U
CIS-1,2-DICHLOROETHENE	0.44	0.81 J	0.11	0.20 J
ETHYLBENZENE	0.95	2.1 J	0.22	0.49 J
METHYLENE CHLORIDE	0.38	3.5 U	0.11	1.00 U
TETRACHLOROETHENE	0.15	340	0.022	50
TOLUENE	0.41	42	0.11	11
1,1,1-TRICHLOROETHANE	0.60	5.4 U	0.11	1.00 U
TRICHLOROETHENE	0.12	17	0.022	3.1
VINYL CHLORIDE	0.28	2.5 U	0.11	1.00 U
O-XYLENE	0.95	1.7 J	0.22	0.40 J
M+P-XYLENE	1.9	6.2 J	0.44	1.4 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	101	%

Quantitation Report (~~Not~~ Reviewed)

TW 11-17-08.

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6089.D
Acq On : 15 Nov 2008 5:01
Sample : 1150195 5.0
Misc : PI=-8.7 PF=8.4 MAR R46926 IMP ASPB
Vial: 12
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008
Quant Results File: 111408A.RES

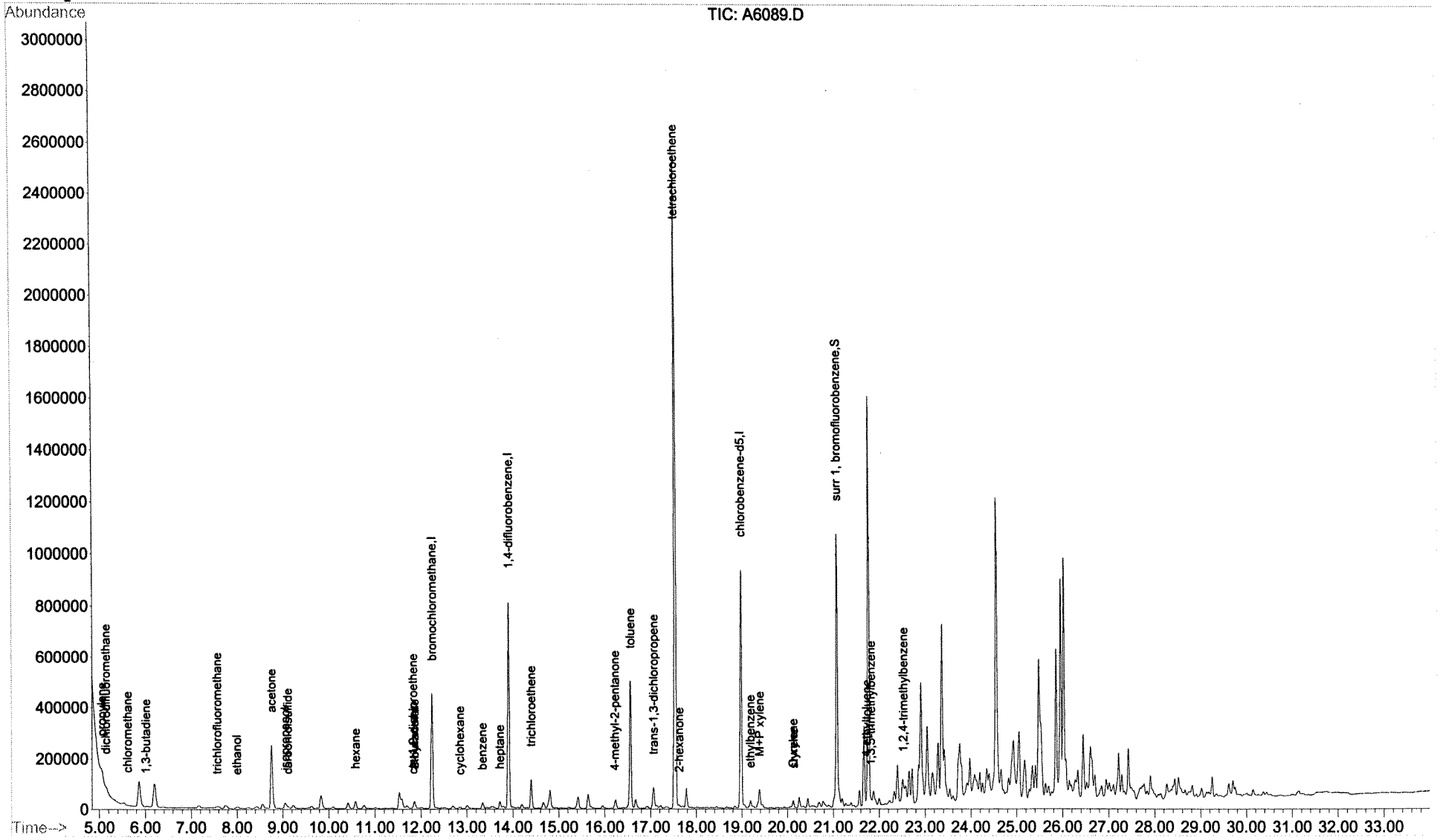
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

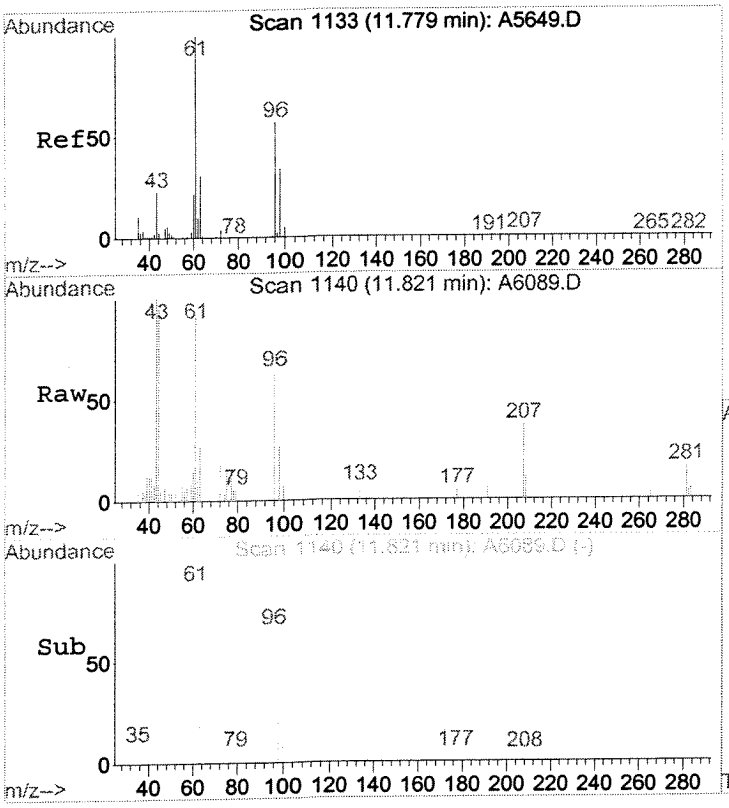
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)	
1) bromochloromethane	12.24	130	193881	2.5000	ppbv		0.00	
28) 1,4-difluorobenzene	13.91	114	789255	2.5000	ppbv		0.00	
48) chlorobenzene-d5	18.98	117	671242	2.5000	ppbv		0.00	
System Monitoring Compounds								
55) surr 1, bromofluorobenzene	21.08	174	385393	2.53	ppbv		0.00	
Spiked Amount 2.500	Range 70 - 130		Recovery = 101.07%					
Target Compounds							Qvalue	
2) propylene	5.06	41	31498	0.2759	ppbv		93	NT
3) dichlorodifluoromethane	5.15	85	20291	0.0737	ppbv		99	NT
5) chloromethane	5.62	50	1945	0.0180	ppbv	#	42	NT
7) 1,3-butadiene	6.01	54	2819	0.0301	ppbv		88	NT
10) trichlorofluoromethane	7.56	101	10631	0.0392	ppbv		100	NT
11) ethanol	7.99	45	18906	0.6751	ppbv		100	NT
14) acetone	8.75	43	501500	2.6841	ppbv		95	NT
15) isopropanol	9.05	45	49450	0.4359	ppbv		96	NT
16) carbon disulfide	9.11	76	7567	0.0259	ppbv		88	NT
20) hexane	10.58	57	17168	0.0963	ppbv		99	NT
23) 2-butanone	11.86	43	53290	0.2131	ppbv		97	NT
24) cis-1,2-dichloroethene	11.82	96	2197	0.0225	ppbv		85	J
~~25) ethyl acetate~~	~~11.86~~	~~43~~	~~53421~~	~~0.1742~~	~~ppbv~~		~~76~~	
30) cyclohexane	12.85	56	3800	0.0191	ppbv	#	79	NT
33) benzene	13.35	78	26905	0.0797	ppbv		95	J
34) heptane	13.71	71	7109	0.0579	ppbv		91	NT
35) trichloroethene	14.40	130	47741	0.3402	ppbv		98	
40) 4-methyl-2-pentanone	16.21	43	11352	0.0355	ppbv		90	NT (per VM)
41) toluene	16.56	91	457836	1.2299	ppbv		100	J
~~42) trans-1,3-dichloropropene~~	~~17.07~~	~~75~~	~~1878~~	~~0.0109~~	~~ppbv~~	~~#~~	~~61~~	
44) tetrachloroethene	17.54	166	993819	5.5689	ppbv		99	
45) 2-hexanone	17.62	43	6556	0.0212	ppbv		86	NT
50) ethylbenzene	19.18	91	27133	0.0538	ppbv		100	J
51) M+P xylene	19.39	91	62922	0.1573	ppbv		99	J
52) O xylene	20.12	91	18633	0.0444	ppbv		100	J
53) styrene	20.13	104	7456	0.0235	ppbv		95	NT
57) 4-ethyltoluene	21.72	105	11288	0.0194	ppbv		100	NT
58) 1,3,5-trimethylbenzene	21.82	105	7442	0.0156	ppbv		94	NT
59) 1,2,4-trimethylbenzene	22.54	105	24578	0.0526	ppbv		100	NT

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6089.D Vial: 12
Acq On : 15 Nov 2008 5:01 Operator: T.WALTON
Sample : 1150195 5.0 Inst : GC/MS Ins
Misc : PI=-8.7 PF=8.4 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration

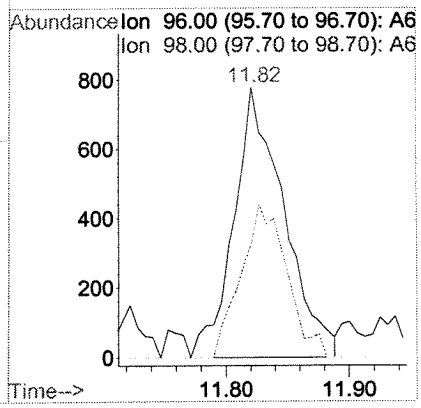


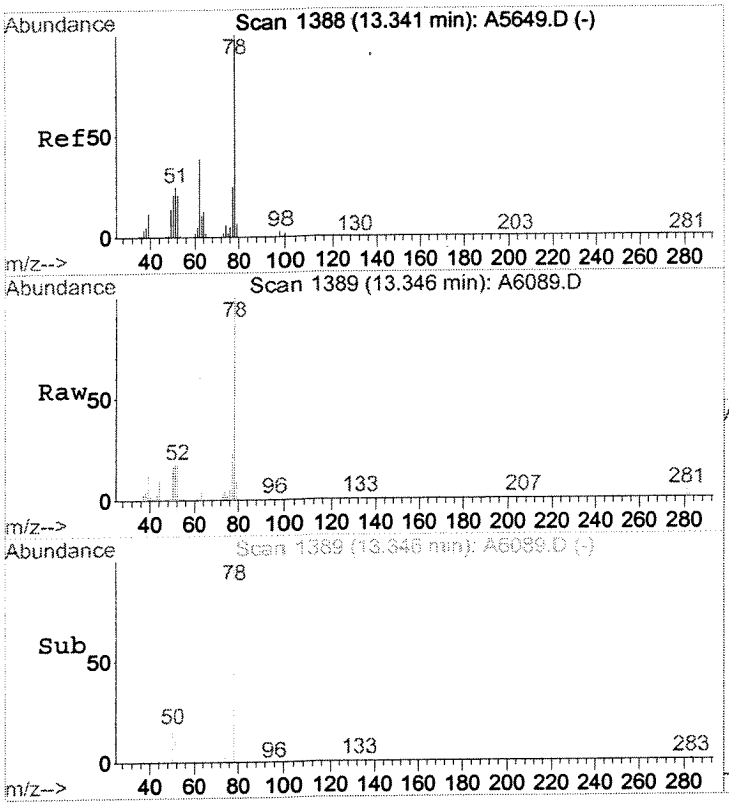


#24
cis-1,2-dichloroethene
Concen: 0.0225 ppbv
RT: 11.82 min Scan# 1140
Delta R.T. -0.01 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 96 Resp: 2197

Ion	Ratio	Lower	Upper
96	100		
98	51.8	43.8	83.8

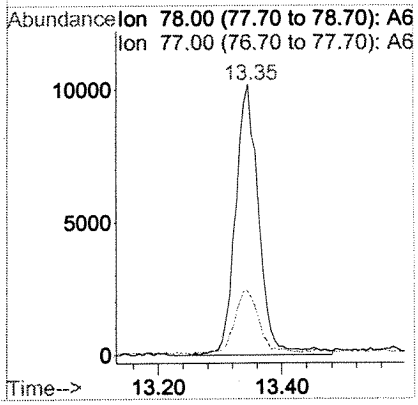


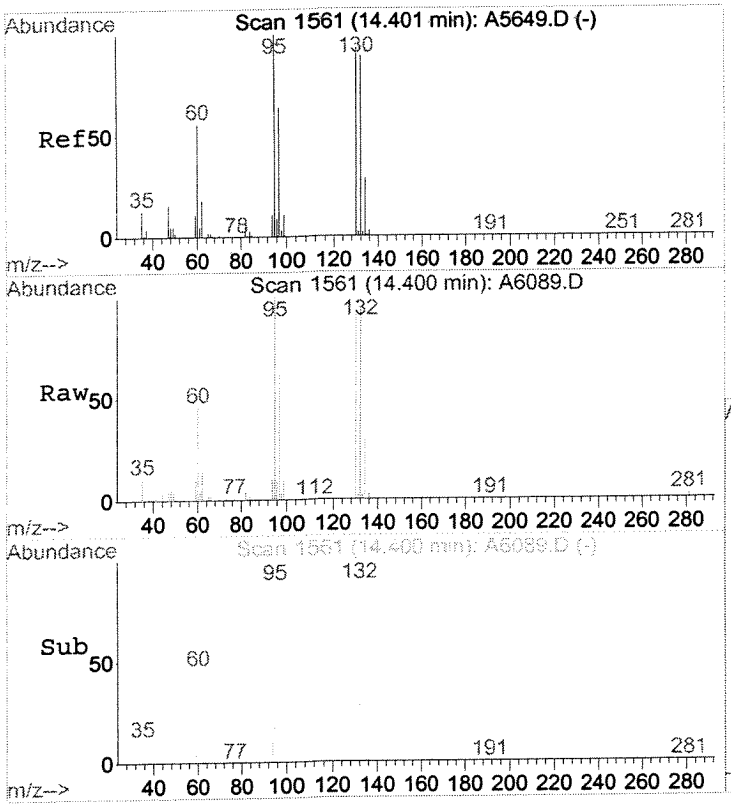


#33
benzene
Concen: 0.0797 ppbv
RT: 13.35 min Scan# 1389
Delta R.T. 0.01 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 78 Resp: 26905

Ion	Ratio	Lower	Upper
78	100		
77	26.8	4.4	44.4

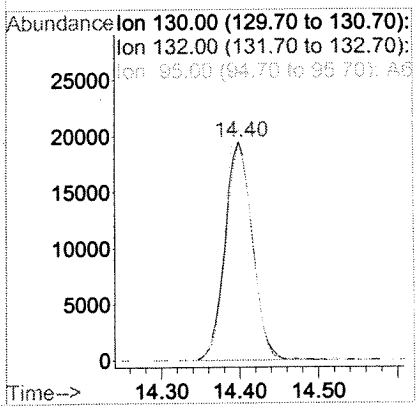


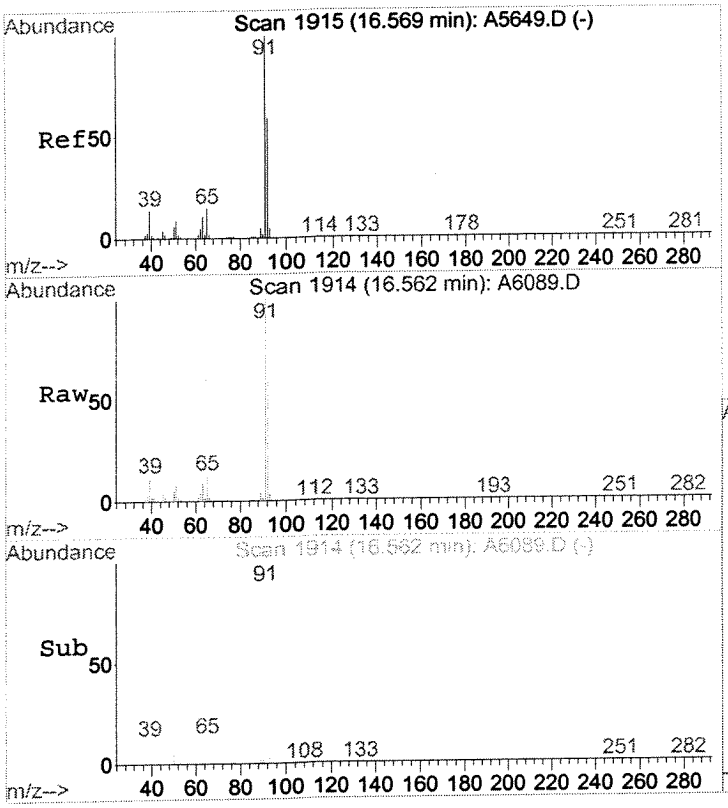


#35
trichloroethene
Concen: 0.3402 ppbv
RT: 14.40 min Scan# 1561
Delta R.T. 0.00 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion:130 Resp: 47741

Ion	Ratio	Lower	Upper
130	100		
132	95.8	75.8	115.8
95	105.1	88.5	128.5

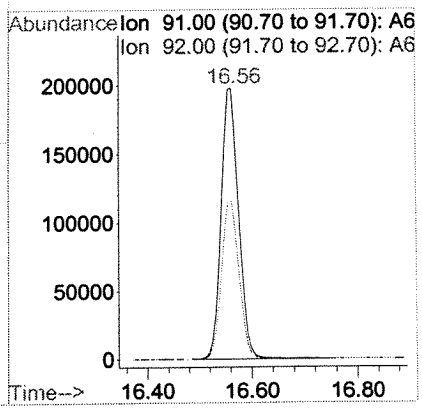


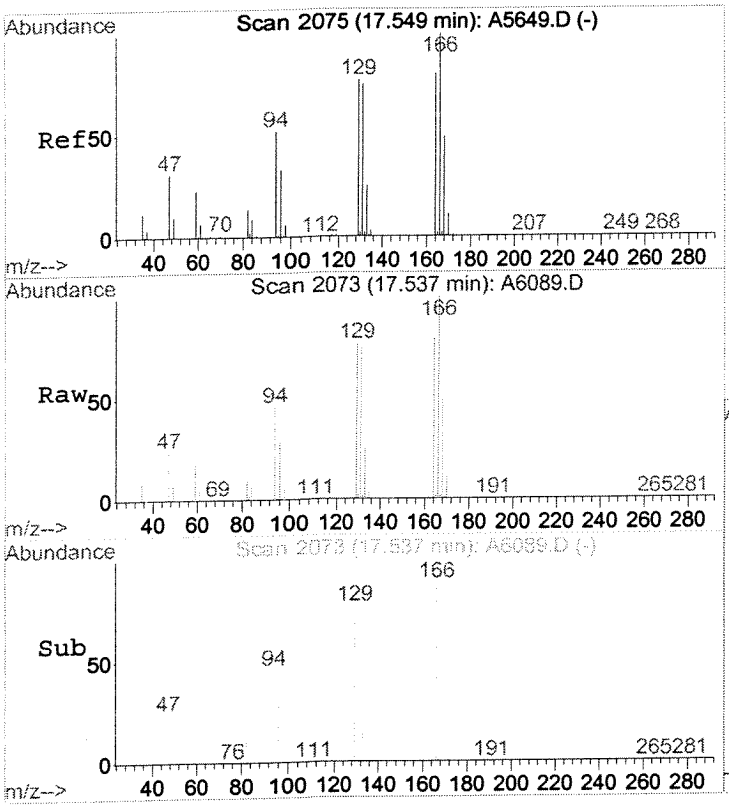


#41
toluene
Concen: 1.2299 ppbv
RT: 16.56 min Scan# 1914
Delta R.T. 0.00 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 91 Resp: 457836

Ion	Ratio	Lower	Upper
91	100		
92	58.8	39.0	79.0

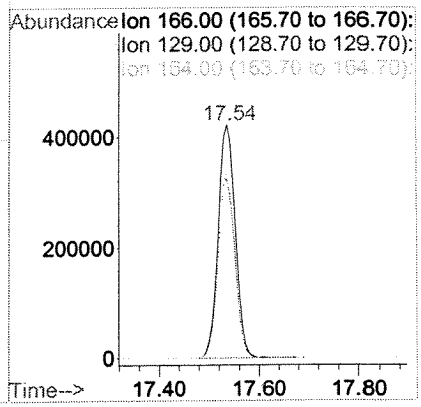


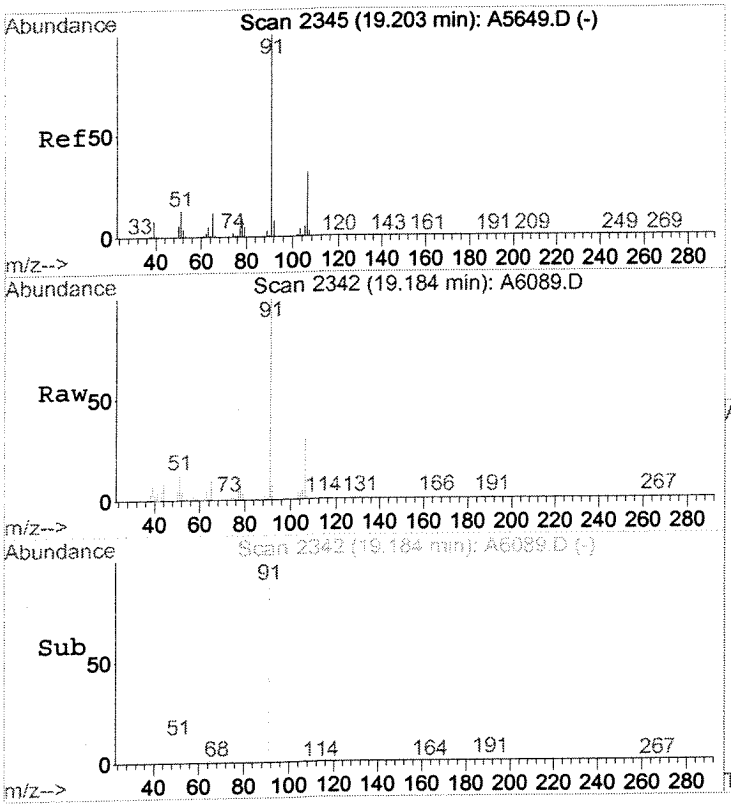


#44
tetrachloroethene
Concen: 5.5689 ppbv
RT: 17.54 min Scan# 2073
Delta R.T. 0.00 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion:166 Resp: 993819

Ion	Ratio	Lower	Upper
166	100		
129	77.1	59.0	99.0
164	79.1	59.2	99.2

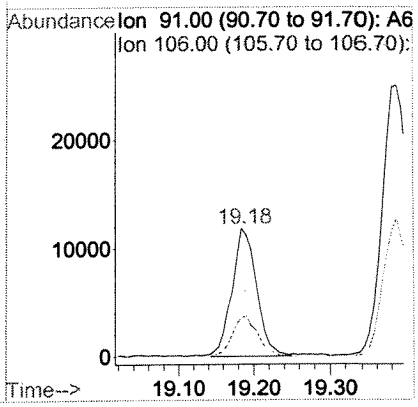


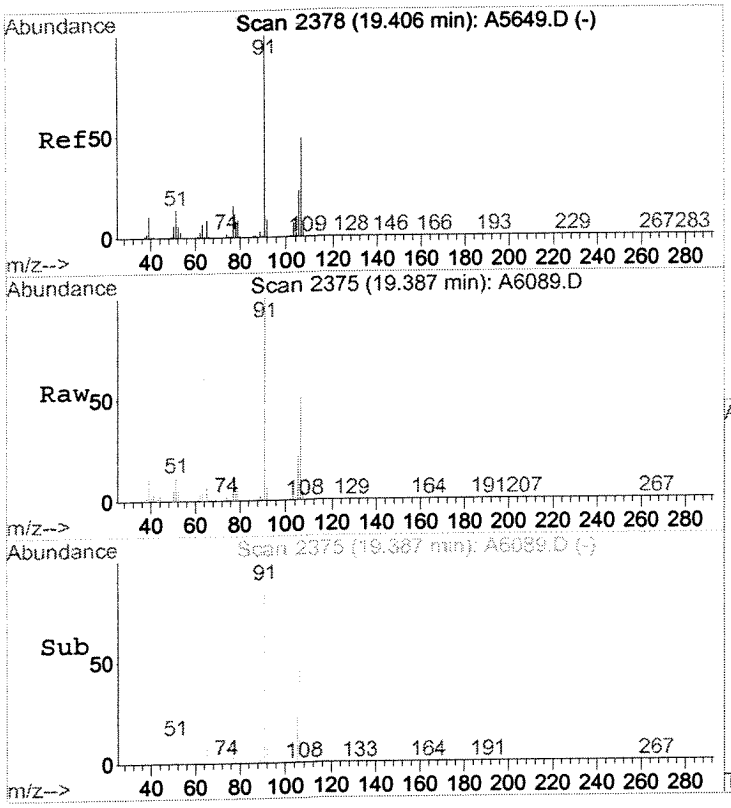


#50
ethylbenzene
Concen: 0.0538 ppbv
RT: 19.18 min Scan# 2342
Delta R.T. -0.01 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 91 Resp: 27133

Ion	Ratio	Lower	Upper
91	100		
106	30.9	11.1	51.1

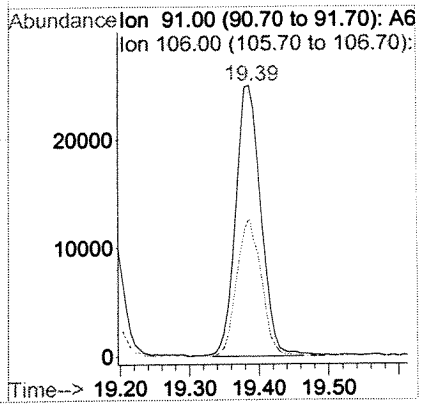


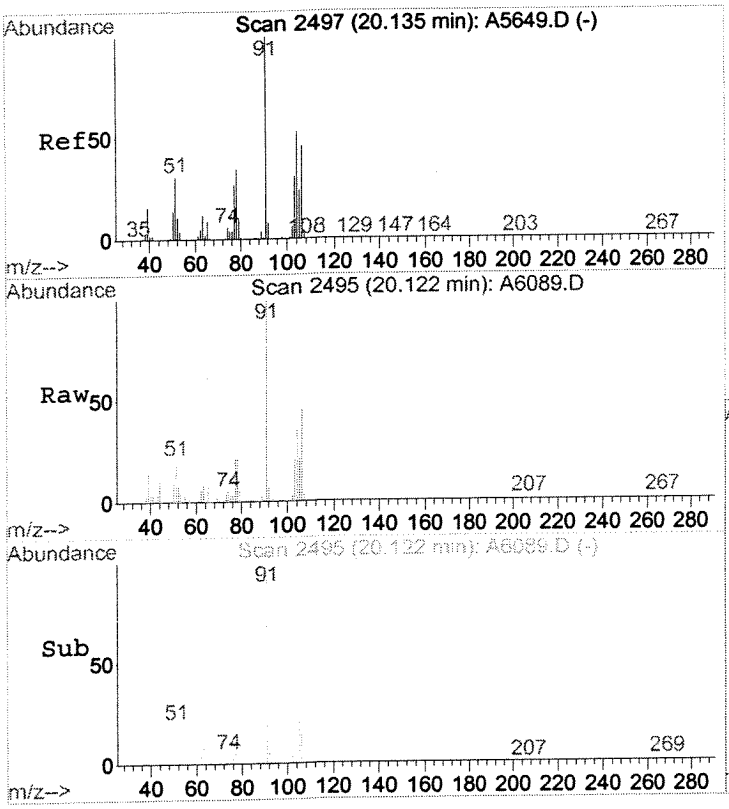


#51
M+P xylene
Concen: 0.1573 ppbv
RT: 19.39 min Scan# 2375
Delta R.T. -0.01 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 91 Resp: 62922

Ion	Ratio	Lower	Upper
91	100		
106	48.9	28.1	68.1

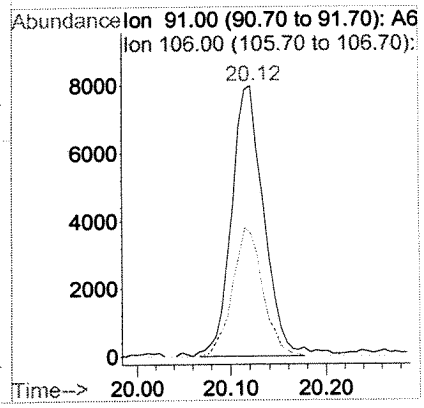




#52
O xylene
Concen: 0.0444 ppbv
RT: 20.12 min Scan# 2495
Delta R.T. 0.00 min
Lab File: A6089.D
Acq: 15 Nov 2008 5:01

Tgt Ion: 91 Resp: 18633

Ion	Ratio	Lower	Upper
91	100		
106	44.4	24.3	64.3



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA1

Date Sampled : 10/29/08 11:30 **Order #:** 1150196 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 20.00
CAN DILUTION : 1.72 Pi= -8.1 Pf= 7.5

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	1.1 J	0.11	0.35 J
1,1-DICHLOROETHENE	0.44	15 U	0.11	3.8 U
TRANS-1,2-DICHLOROETHENE	0.44	15 U	0.11	3.8 U
CIS-1,2-DICHLOROETHENE	0.44	20	0.11	5.1
ETHYLBENZENE	0.95	33 U	0.22	7.6 U
METHYLENE CHLORIDE	0.38	1.5 JB	0.11	0.44 JB
TETRACHLOROETHENE	0.15	1200	0.022	170
TOLUENE	0.41	4.1 J	0.11	1.1 J
1,1,1-TRICHLOROETHANE	0.60	21 U	0.11	3.8 U
TRICHLOROETHENE	0.12	13	0.022	2.5
VINYL CHLORIDE	0.28	9.7 U	0.11	3.8 U
O-XYLENE	0.95	33 U	0.22	7.6 U
M+P-XYLENE	1.9	1.8 J	0.44	0.41 J

SURROGATE RECOVERIES	QC LIMITS	
BROMOFLUOROBENZENE	(70 - 130 %)	99 %

Quantitation Report (Not Reviewed)

11-17-08

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6090.D Vial: 13
Acq On : 15 Nov 2008 5:47 Operator: T.WALTON
Sample : 1150196 20.0 Inst : GC/MS Ins
Misc : PI=-8.1 PF=7.5 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

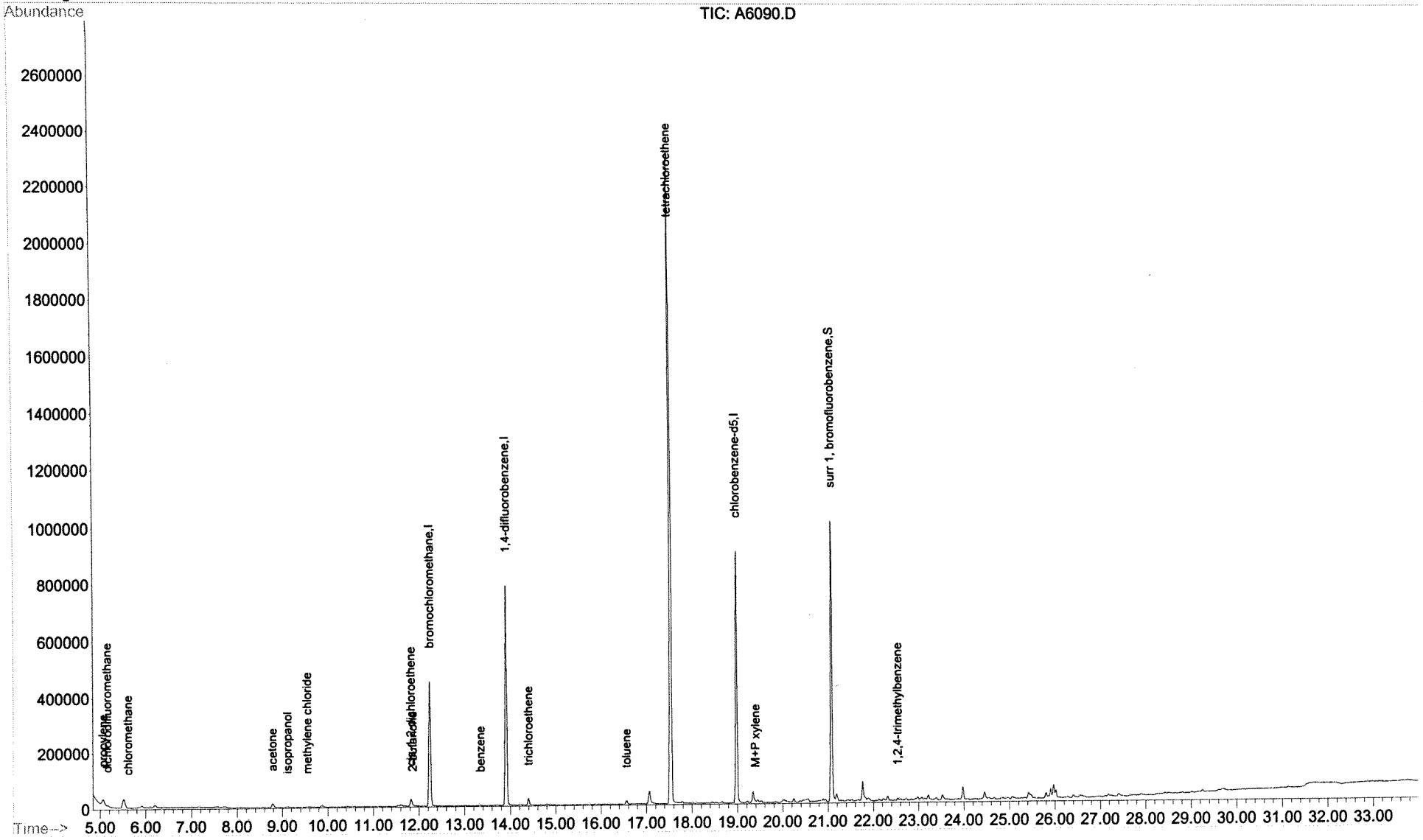
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	196469	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	784818	2.5000	ppbv	0.00
48) chlorobenzene-d5	18.98	117	656253	2.5000	ppbv	0.00
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	368150	2.47	ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 98.76%			
Target Compounds						Qvalue
~~2) propylene~~	~~5.06~~	~~41~~	~~11324~~	~~0.0979~~	~~ppbv~~	~~#~~ ~~64~~
3) dichlorodifluoromethane	5.16	85	5733	0.0206	ppbv	99
5) chloromethane	5.62	50	2845	0.0260	ppbv	81 NT
14) acetone	8.78	43	29719	0.1570	ppbv	94
15) isopropanol	9.11	45	6664	0.0580	ppbv	97
17) methylene chloride	9.55	84	1109	0.0129	ppbv	93 JB
23) 2-butanone	11.87	43	6093	0.0240	ppbv	95 NT
24) cis-1,2-dichloroethene	11.83	96	14769	0.1494	ppbv	99
33) benzene	13.35	78	3467	0.0103	ppbv	73 J
35) trichloroethene	14.40	130	10010	0.0717	ppbv	97
41) toluene	16.56	91	11625	0.0314	ppbv	93 J
44) tetrachloroethene	17.54	166	893631	5.0358	ppbv	99
51) M+P xylene	19.39	91	4655	0.0119	ppbv	94 J
59) 1,2,4-trimethylbenzene	22.54	105	6122	0.0134	ppbv	96 NT

(#) = qualifier out of range (m) = manual integration
A6090.D 111408A.M Sat Nov 15 11:41:27 2008 OFFLINE

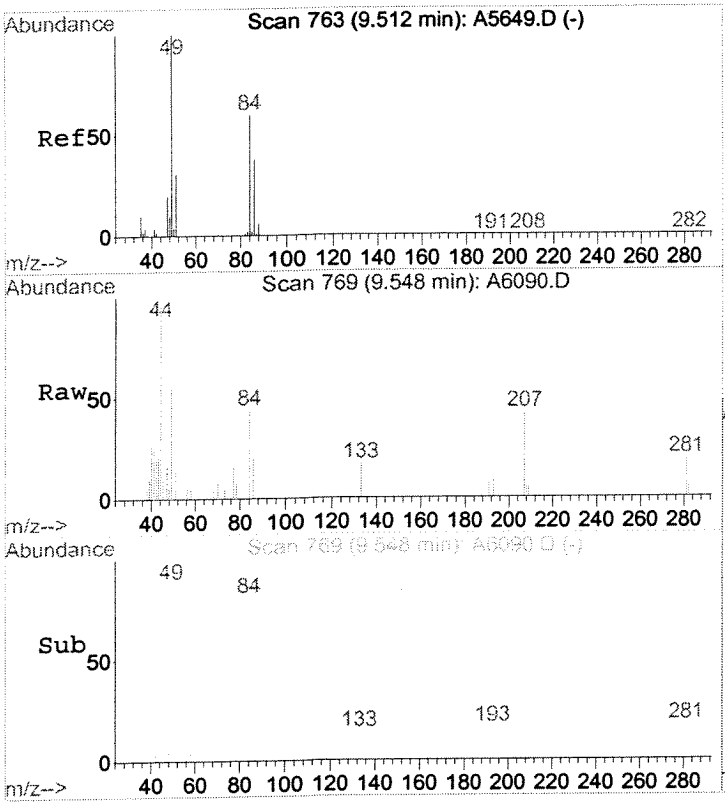
00035

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6090.D Vial: 13
Acq On : 15 Nov 2008 5:47 Operator: T.WALTON
Sample : 1150196 20.0 Inst : GC/MS Ins
Misc : PI=-8.1 PF=7.5 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration



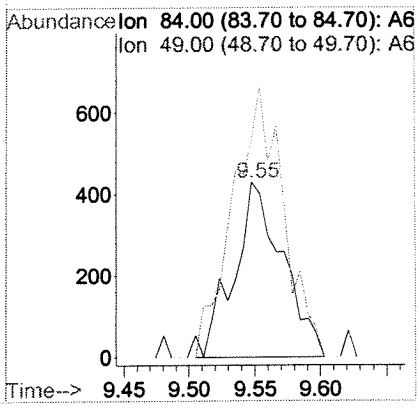
A6090.D 111408A.M Sat Nov 15 11:41:27 2008 OFFLINE



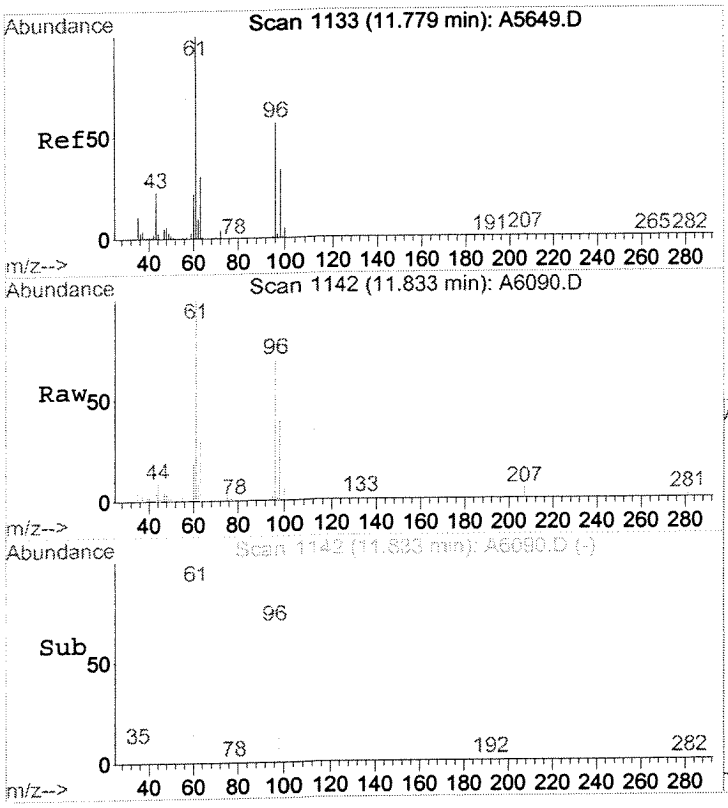
#17
methylene chloride
Concen: 0.0129 ppbv
RT: 9.55 min Scan# 769
Delta R.T. -0.01 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion: 84 Resp: 1109

Ion	Ratio	Lower	Upper
84	100		
49	159.2	148.4	188.4



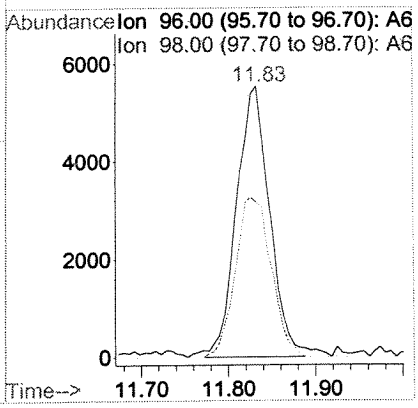
00037

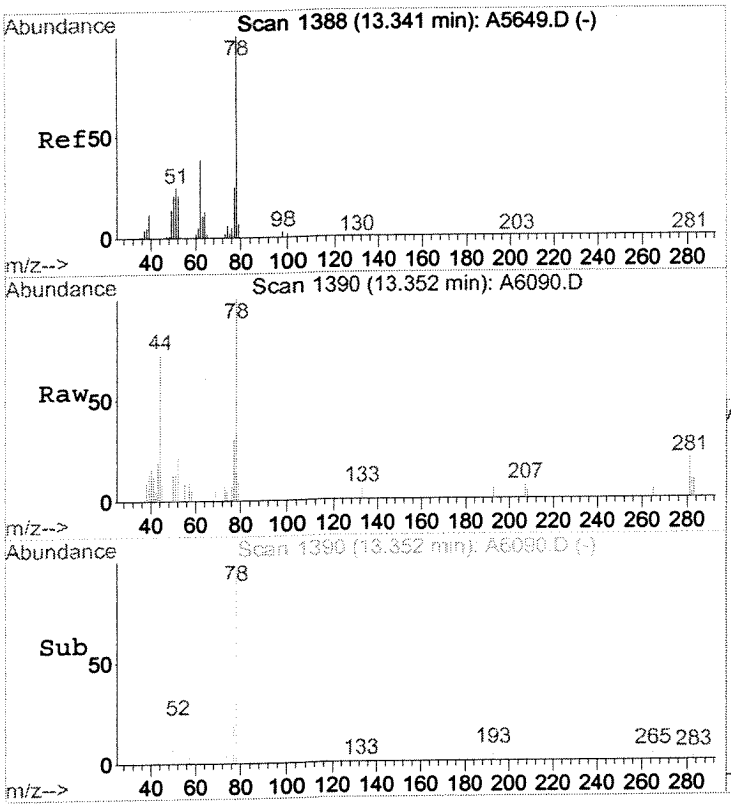


#24
cis-1,2-dichloroethene
Concen: 0.1494 ppbv
RT: 11.83 min Scan# 1142
Delta R.T. 0.01 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion: 96 Resp: 14769

Ion	Ratio	Lower	Upper
96	100		
98	62.8	43.8	83.8

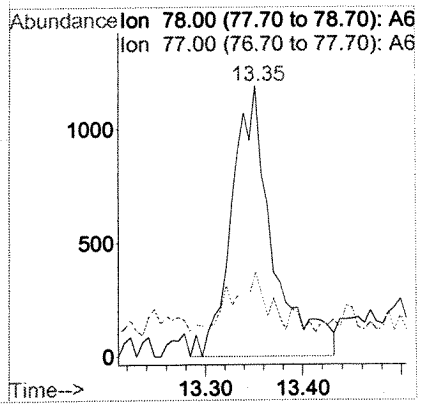


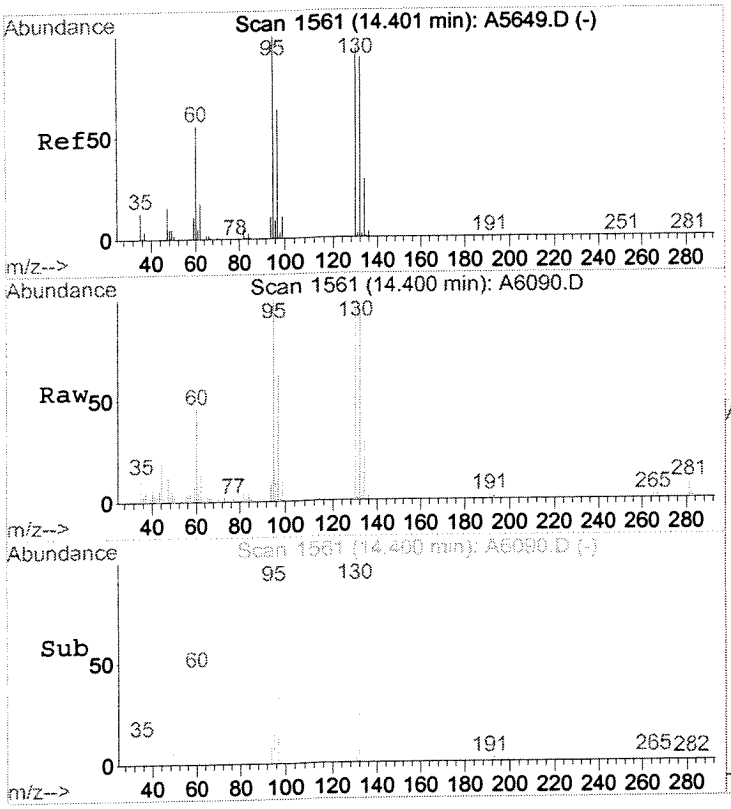


#33
benzene
Concen: 0.0103 ppbv
RT: 13.35 min Scan# 1390
Delta R.T. 0.01 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion: 78 Resp: 3467

Ion	Ratio	Lower	Upper
78	100		
77	11.2	4.4	44.4

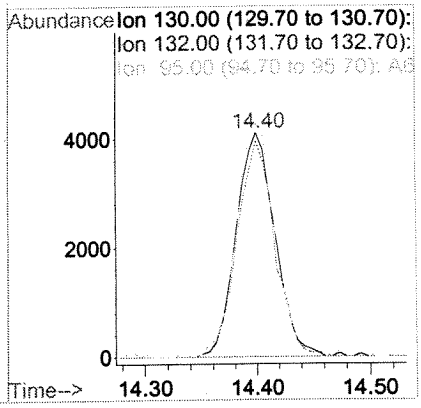


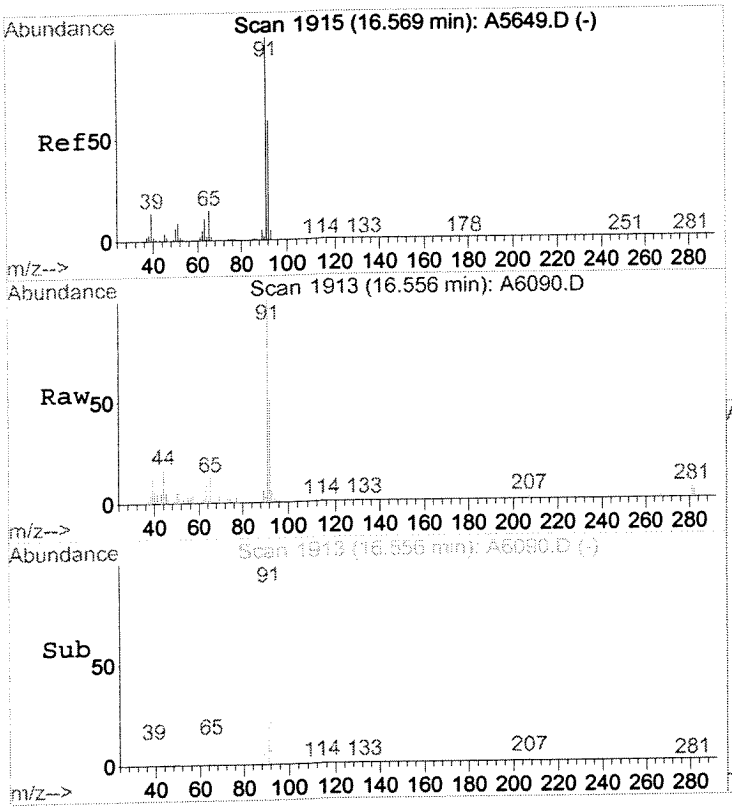


#35
trichloroethene
Concen: 0.0717 ppbv
RT: 14.40 min Scan# 1561
Delta R.T. 0.00 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion:130 Resp: 10010

Ion	Ratio	Lower	Upper
130	100		
132	93.6	75.8	115.8
95	104.9	88.5	128.5

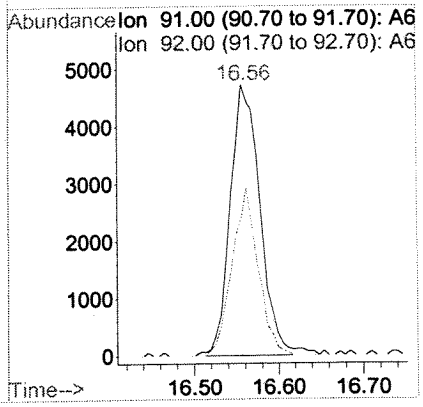


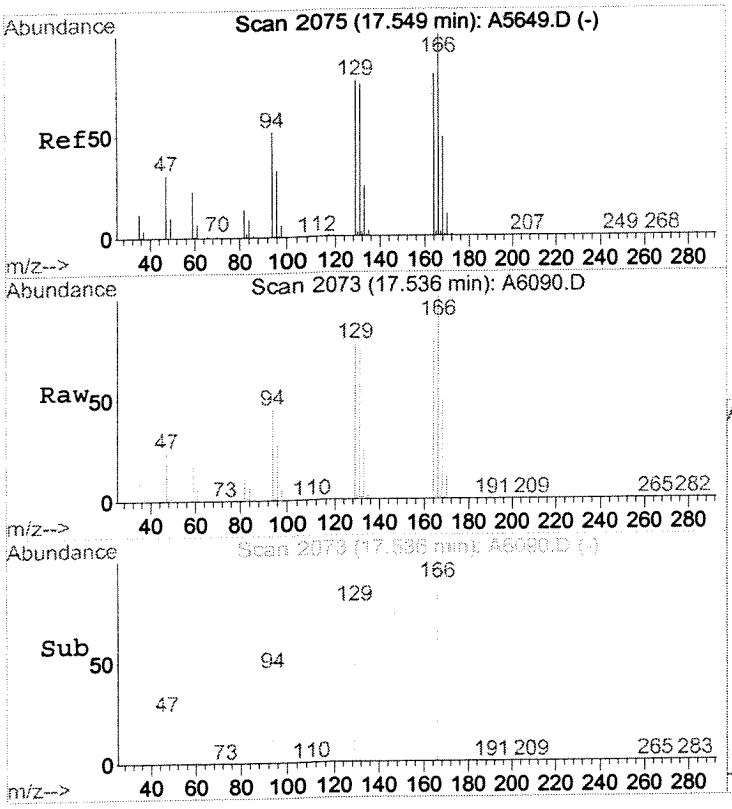


#41
toluene
Concen: 0.0314 ppbv
RT: 16.56 min Scan# 1913
Delta R.T. -0.01 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion: 91 Resp: 11625

Ion	Ratio	Lower	Upper
91	100		
92	53.8	39.0	79.0

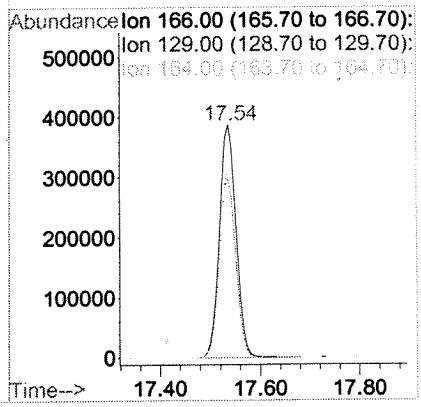




#44
tetrachloroethene
Concen: 5.0358 ppbv
RT: 17.54 min Scan# 2073
Delta R.T. 0.00 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion:166 Resp: 893631

Ion	Ratio	Lower	Upper
166	100		
129	77.1	59.0	99.0
164	79.1	59.2	99.2



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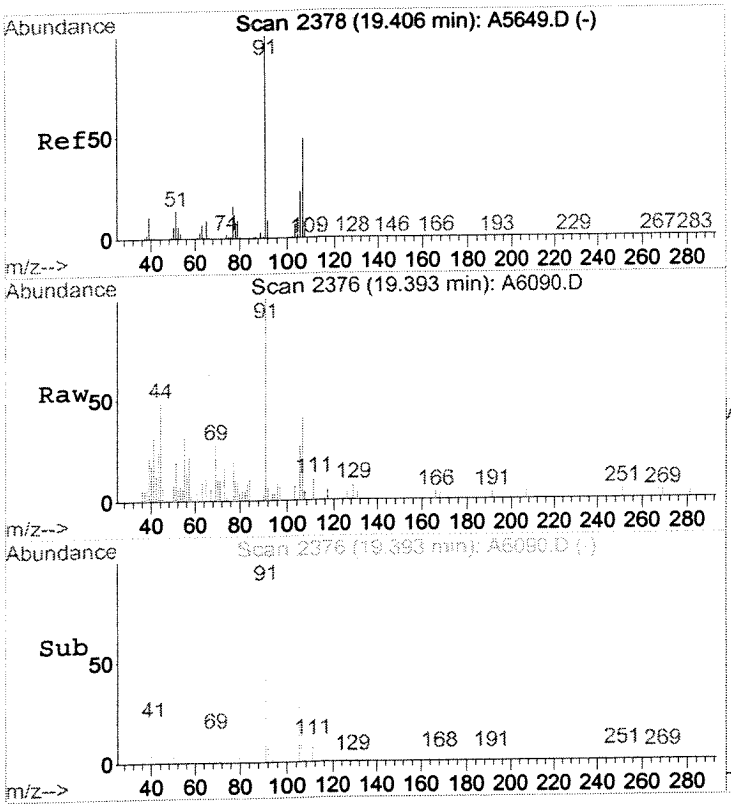
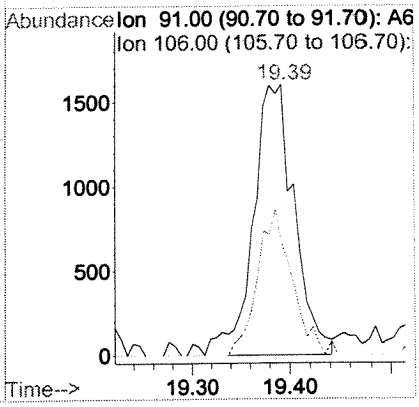


#51
M+P xylene
Concen: 0.0119 ppbv
RT: 19.39 min Scan# 2376
Delta R.T. 0.00 min
Lab File: A6090.D
Acq: 15 Nov 2008 5:47

Tgt Ion: 91 Resp: 4655

Ion	Ratio	Lower	Upper
91	100		
106	44.3	28.1	68.1



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA2

Date Sampled : 10/29/08 11:44 **Order #:** 1150197 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 10.00
CAN DILUTION : 1.60 Pi= -6.5 Pf= 7.6

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.76 J	0.11	0.24 J
1,1-DICHLOROETHENE	0.44	7.0 U	0.11	1.8 U
TRANS-1,2-DICHLOROETHENE	0.44	7.0 U	0.11	1.8 U
CIS-1,2-DICHLOROETHENE	0.44	12	0.11	3.0
ETHYLBENZENE	0.95	15 U	0.22	3.5 U
METHYLENE CHLORIDE	0.38	6.1 U	0.11	1.8 U
TETRACHLOROETHENE	0.15	670	0.022	99
TOLUENE	0.41	1.8 J	0.11	0.49 J
1,1,1-TRICHLOROETHANE	0.60	9.6 U	0.11	1.8 U
TRICHLOROETHENE	0.12	7.0	0.022	1.3
VINYL CHLORIDE	0.28	4.5 U	0.11	1.8 U
O-XYLENE	0.95	15 U	0.22	3.5 U
M+P-XYLENE	1.9	0.87 J	0.44	0.20 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	97	%

Quantitation Report (~~Not~~ Reviewed)

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6091.D
Acq On : 15 Nov 2008 6:32
Sample : 1150197 10.0
Misc : PI=-6.5 PF=7.6 MAR R46926 IMP ASPB
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008

Vial: 14
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

TW 11-17-08

Quant Results File: 111408A.RES

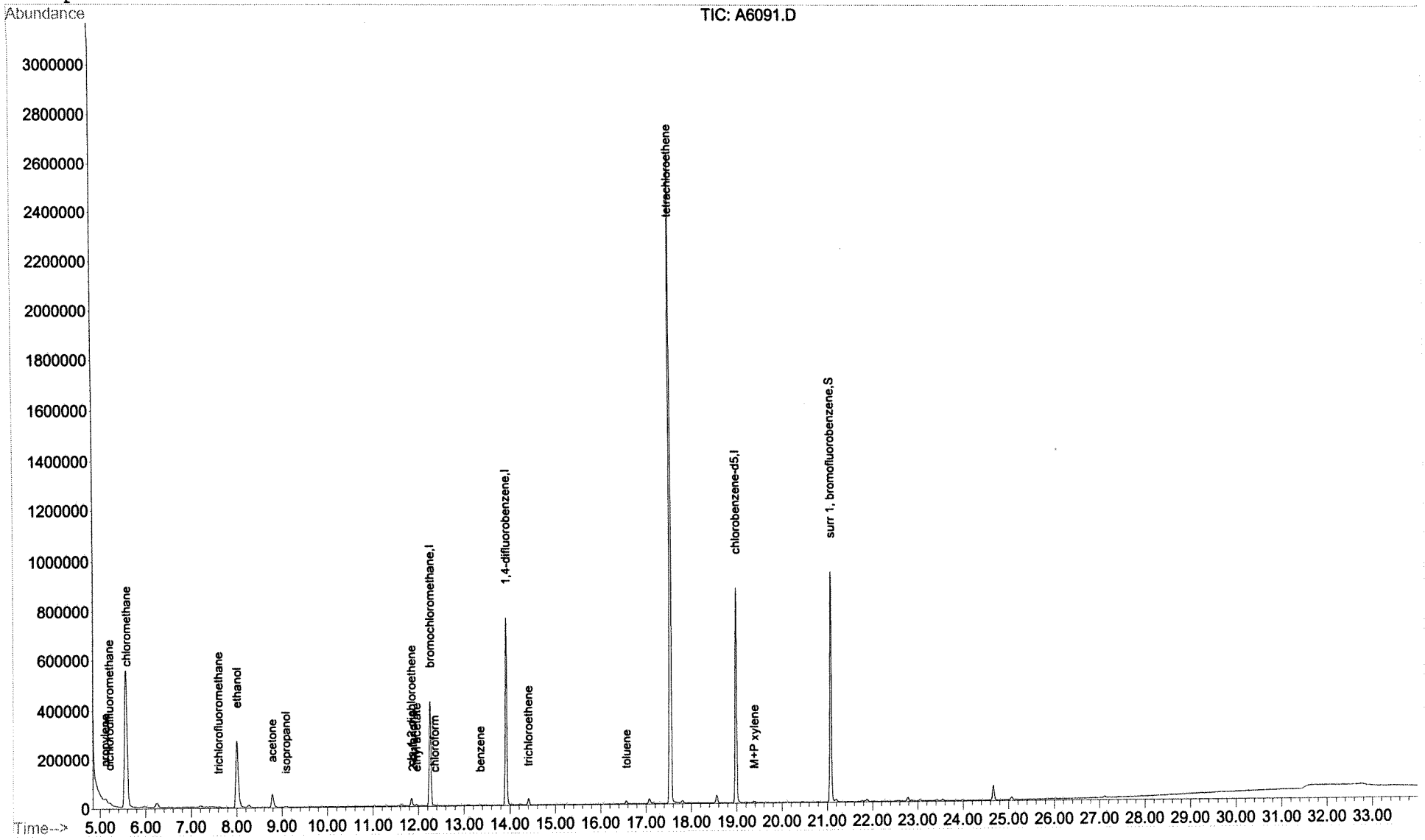
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

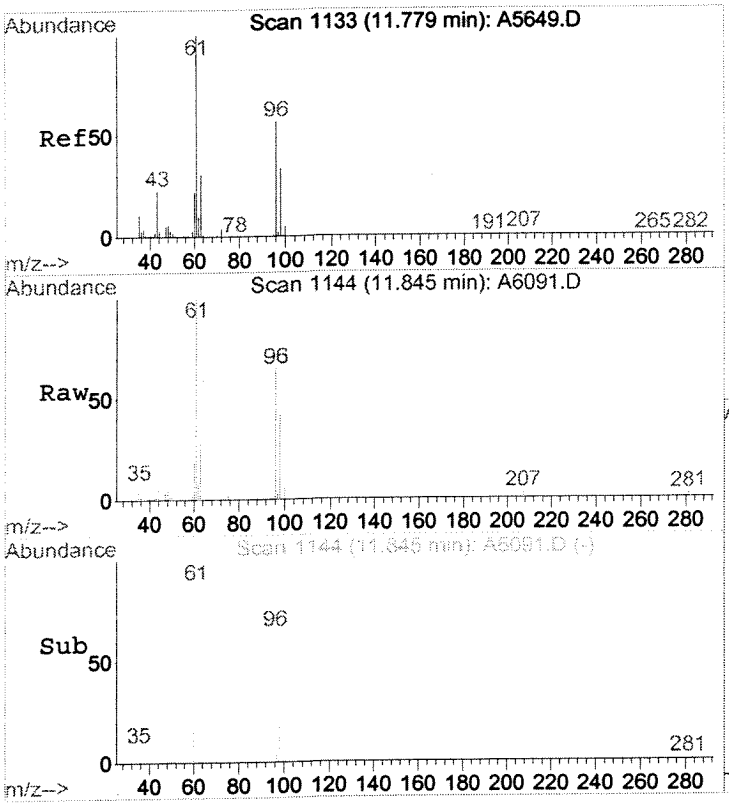
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	12.26	130	187036	2.5000 ppbv	0.02
28) 1,4-difluorobenzene	13.92	114	732426	2.5000 ppbv	0.01
48) chlorobenzene-d5	18.98	117	613671	2.5000 ppbv	0.00
System Monitoring Compounds					
55) surr 1, bromofluorobenzene	21.08	174	337583	2.42 ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 96.84%		
Target Compounds					Qvalue
~~2) propylene~~	~~5.12~~	~~41~~	~~8780~~	~~0.0797 ppbv #~~	~~63~~
3) dichlorodifluoromethane	5.21	85	10300	0.0388 ppbv	98 NT
5) chloromethane	5.59	50	1751	~~0.0168 ppbv~~	~~71~~ NT-mis I d
10) trichlorofluoromethane	7.59	101	5198	0.0199 ppbv	96
11) ethanol	8.00	45	616596	22.8237 ppbv	99 NT
14) acetone	8.78	43	114520	0.6353 ppbv	94
15) isopropanol	9.09	45	8345	0.0762 ppbv	78 #
23) 2-butanone	11.88	43	4176	0.0173 ppbv	87
24) cis-1,2-dichloroethene	11.85	96	17341	0.1842 ppbv	97
25) ethyl acetate	11.96	43	11130	0.0376 ppbv	99 NT
26) chloroform	12.35	83	2463	0.0126 ppbv	99 NT
33) benzene	13.35	78	4640	0.0148 ppbv	94 J
35) trichloroethene	14.41	130	10639	0.0817 ppbv	99
41) toluene	16.56	91	10572	0.0306 ppbv	97 J
44) tetrachloroethene	17.54	166	1027635	6.2052 ppbv	99
51) M+P xylene	19.39	91	4568	0.0125 ppbv	97 J

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6091.D Vial: 14
Acq On : 15 Nov 2008 6:32 Operator: T.WALTON
Sample : 1150197 10.0 Inst : GC/MS Ins
Misc : PI=-6.5 PF=7.6 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration

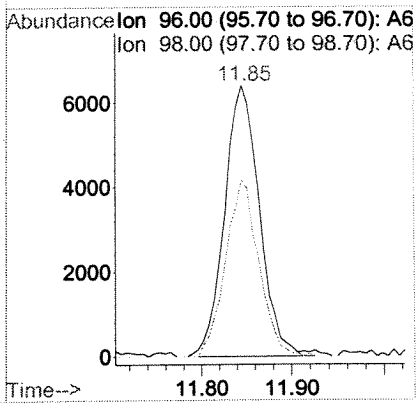


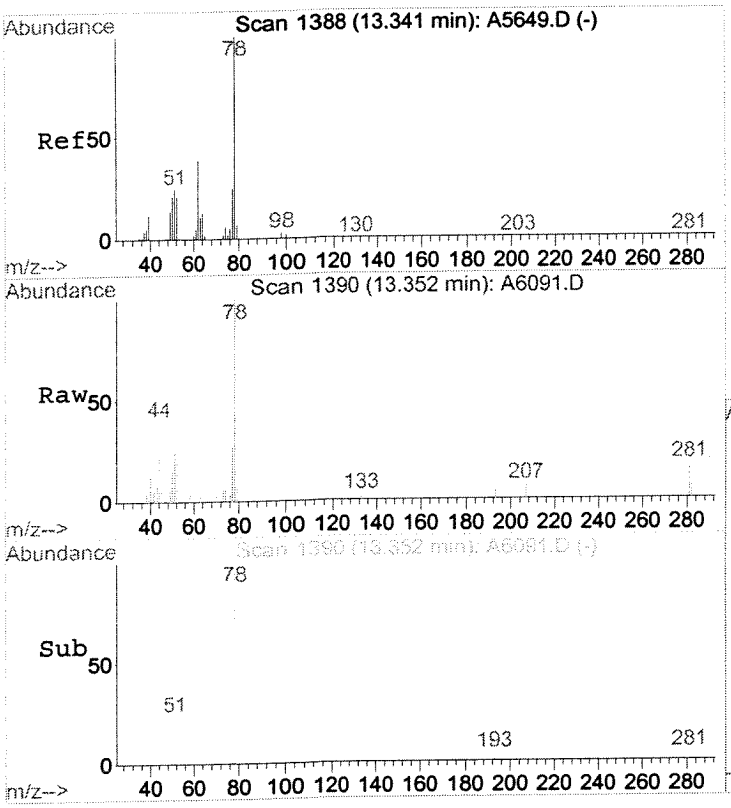


#24
cis-1,2-dichloroethene
Concen: 0.1842 ppbv
RT: 11.85 min Scan# 1144
Delta R.T. 0.02 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion: 96 Resp: 17341

Ion	Ratio	Lower	Upper
96	100		
98	61.5	43.8	83.8

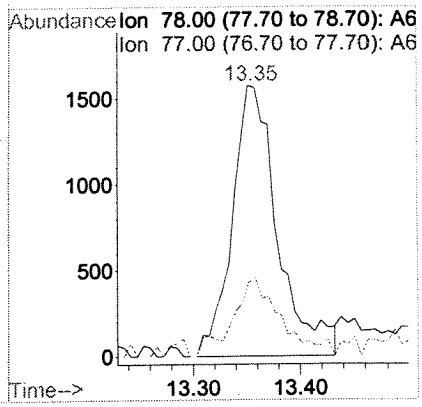




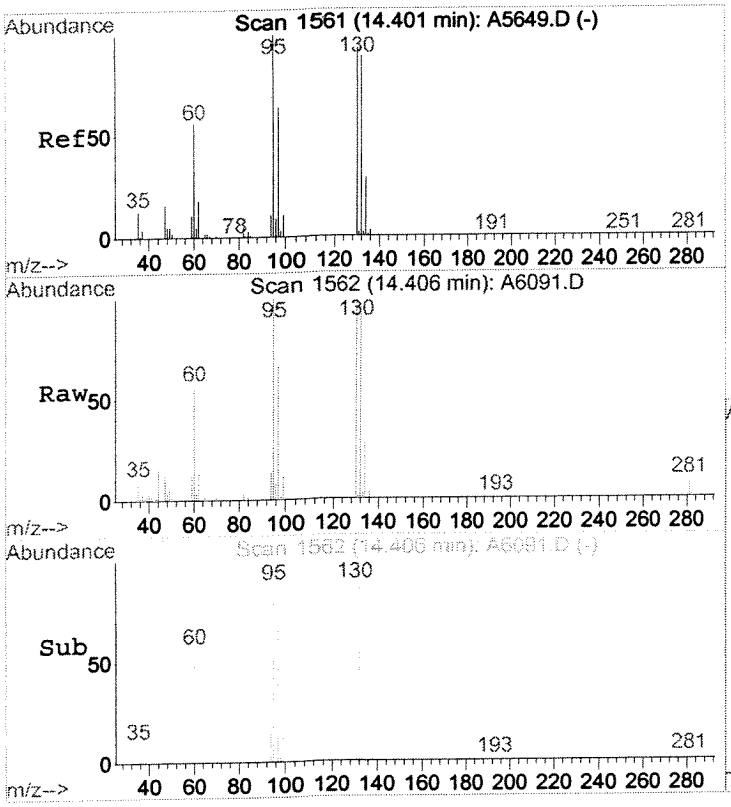
#33
benzene
Concen: 0.0148 ppbv
RT: 13.35 min Scan# 1390
Delta R.T. 0.01 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion: 78 Resp: 4640

Ion	Ratio	Lower	Upper
78	100		
77	27.2	4.4	44.4



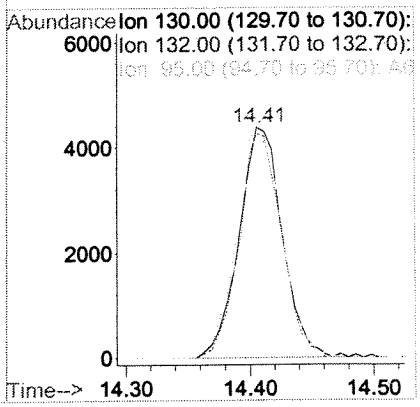
00048



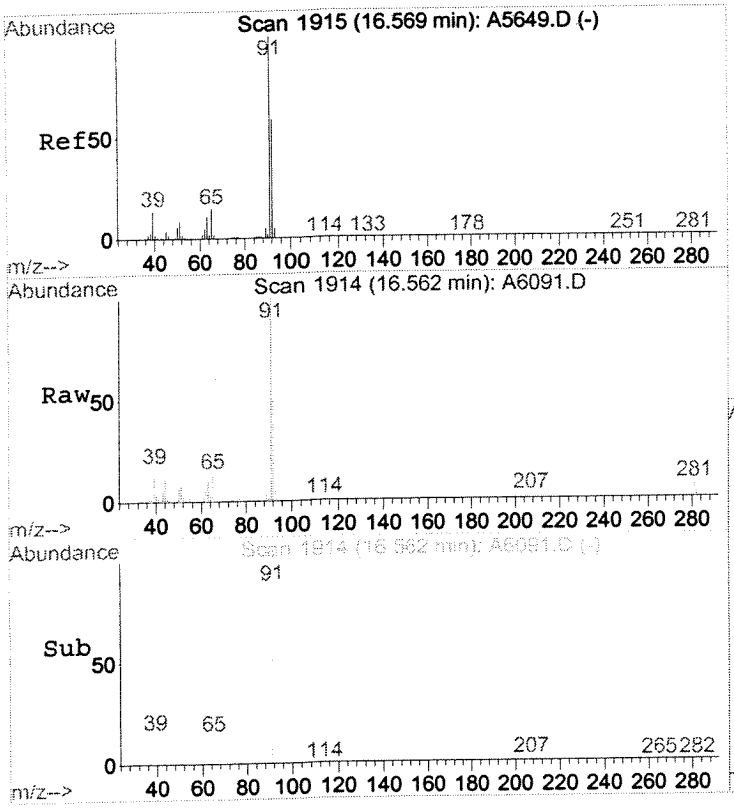
#35
trichloroethene
Concen: 0.0817 ppbv
RT: 14.41 min Scan# 1562
Delta R.T. 0.01 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion:130 Resp: 10639

Ion	Ratio	Lower	Upper
130	100		
132	95.5	75.8	115.8
95	106.0	88.5	128.5



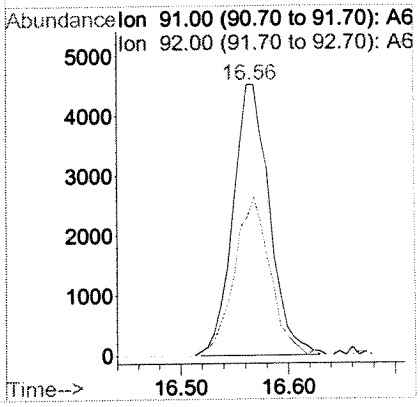
00049



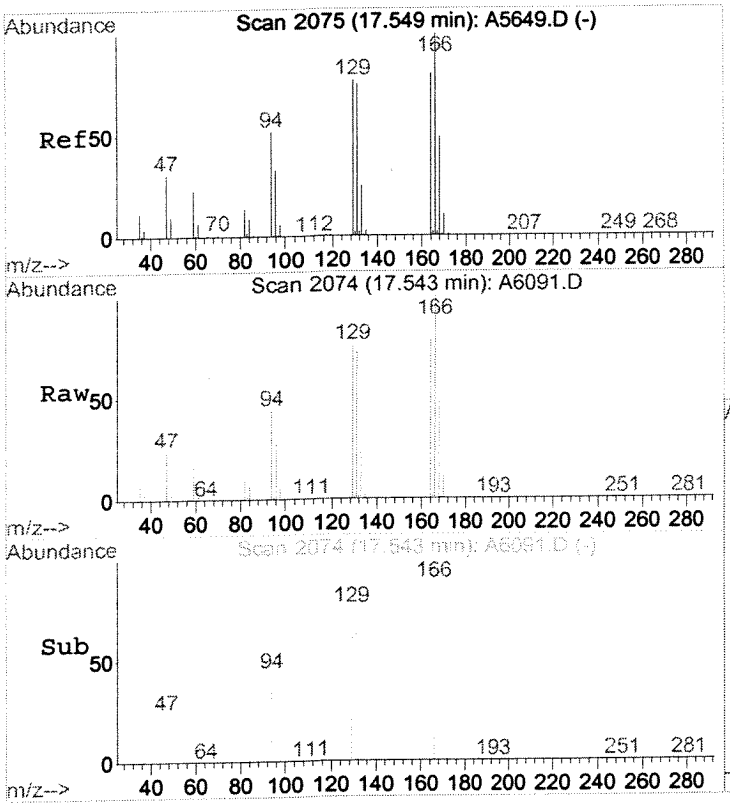
#41
toluene
Concen: 0.0306 ppbv
RT: 16.56 min Scan# 1914
Delta R.T. 0.00 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion: 91 Resp: 10572

Ion	Ratio	Lower	Upper
91	100		
92	56.9	39.0	79.0



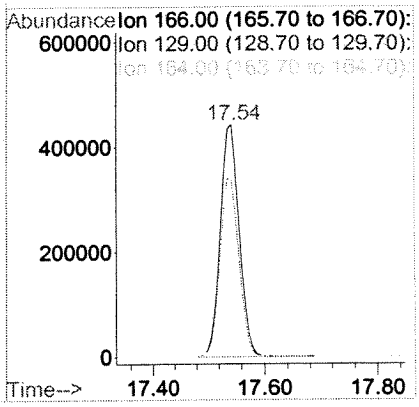
00050

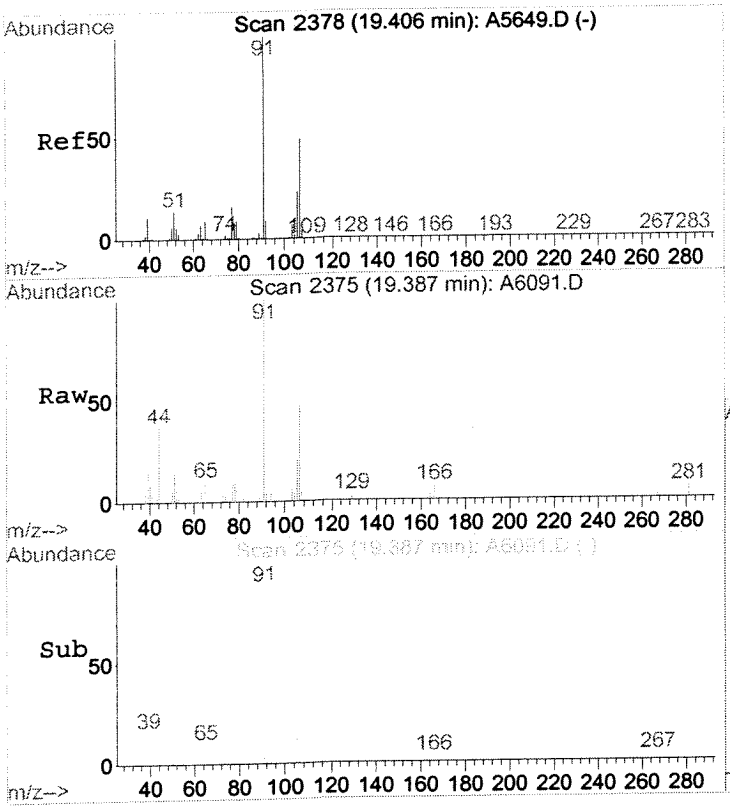


#44
tetrachloroethene
Concen: 6.2052 ppbv
RT: 17.54 min Scan# 2074
Delta R.T. 0.01 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion:166 Resp: 1027635

Ion	Ratio	Lower	Upper
166	100		
129	77.6	59.0	99.0
164	79.2	59.2	99.2

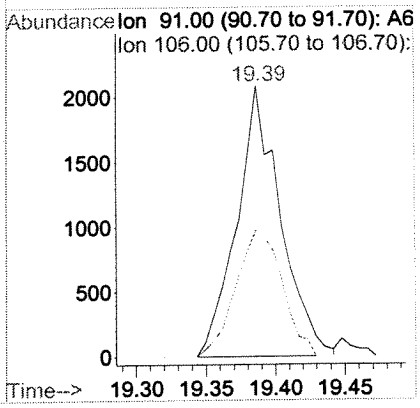




#51
M+P xylene
Concen: 0.0125 ppbv
RT: 19.39 min Scan# 2375
Delta R.T. -0.01 min
Lab File: A6091.D
Acq: 15 Nov 2008 6:32

Tgt Ion: 91 Resp: 4568

Ion	Ratio	Lower	Upper
91	100		
106	50.0	28.1	68.1



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN BA3

Date Sampled : 10/29/08 11:40 **Order #:** 1150198 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 10.00
CAN DILUTION : 1.68 Pi= -7.7 Pf= 7.4

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.55 J	0.11	0.17 J
1,1-DICHLOROETHENE	0.44	7.3 U	0.11	1.8 U
TRANS-1,2-DICHLOROETHENE	0.44	7.3 U	0.11	1.8 U
CIS-1,2-DICHLOROETHENE	0.44	18	0.11	4.4
ETHYLBENZENE	0.95	16 U	0.22	3.7 U
METHYLENE CHLORIDE	0.38	0.59 JB	0.11	0.17 JB
TETRACHLOROETHENE	0.15	900	0.022	130
TOLUENE	0.41	1.6 J	0.11	0.43 J
1,1,1-TRICHLOROETHANE	0.60	10 U	0.11	1.8 U
TRICHLOROETHENE	0.12	11	0.022	2.0
VINYL CHLORIDE	0.28	4.7 U	0.11	1.8 U
O-XYLENE	0.95	16 U	0.22	3.7 U
M+P-XYLENE	1.9	32 U	0.44	7.4 U

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	96	%

Quantitation Report (~~Not~~ Reviewed)

TW 11-17-08.

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6092.D Vial: 15
Acq On : 15 Nov 2008 7:17 Operator: T.WALTON
Sample : 1150198 10.0 Inst : GC/MS Ins
Misc : PI=-7.7 PF=7.4 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	12.24	130	185640	2.5000 ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	723997	2.5000 ppbv	0.00
48) chlorobenzene-d5	18.98	117	607203	2.5000 ppbv	0.00
System Monitoring Compounds					
55) surr 1, bromofluorobenzene	21.08	174	331696	2.40 ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 96.16%		
Target Compounds					Qvalue
~~2) propylene~~	~~5.05~~	~~41~~	~~6730~~	~~0.0616 ppbv #~~	~~66~~
3) dichlorodifluoromethane	5.15	85	9911	0.0376 ppbv	98
5) chloromethane	5.62	50	2244	0.0217 ppbv	88
10) trichlorofluoromethane	7.56	101	4480	0.0173 ppbv	90
11) ethanol	7.98	45	23407	0.8729 ppbv	98
14) acetone	8.76	43	26441	0.1478 ppbv	93
15) isopropanol	9.08	45	4252	0.0391 ppbv	99
17) methylene chloride	9.55	84	827	0.0102 ppbv	91 JB
23) 2-butanone	11.88	43	4667	0.0195 ppbv	96 NT
24) cis-1,2-dichloroethene	11.83	96	24548	0.2628 ppbv	99
33) benzene	13.34	78	3190	0.0103 ppbv	97 J
35) trichloroethene	14.40	130	15273	0.1186 ppbv	96
41) toluene	16.56	91	8686	0.0254 ppbv	98 J
44) tetrachloroethene	17.54	166	1295389	7.9131 ppbv	99

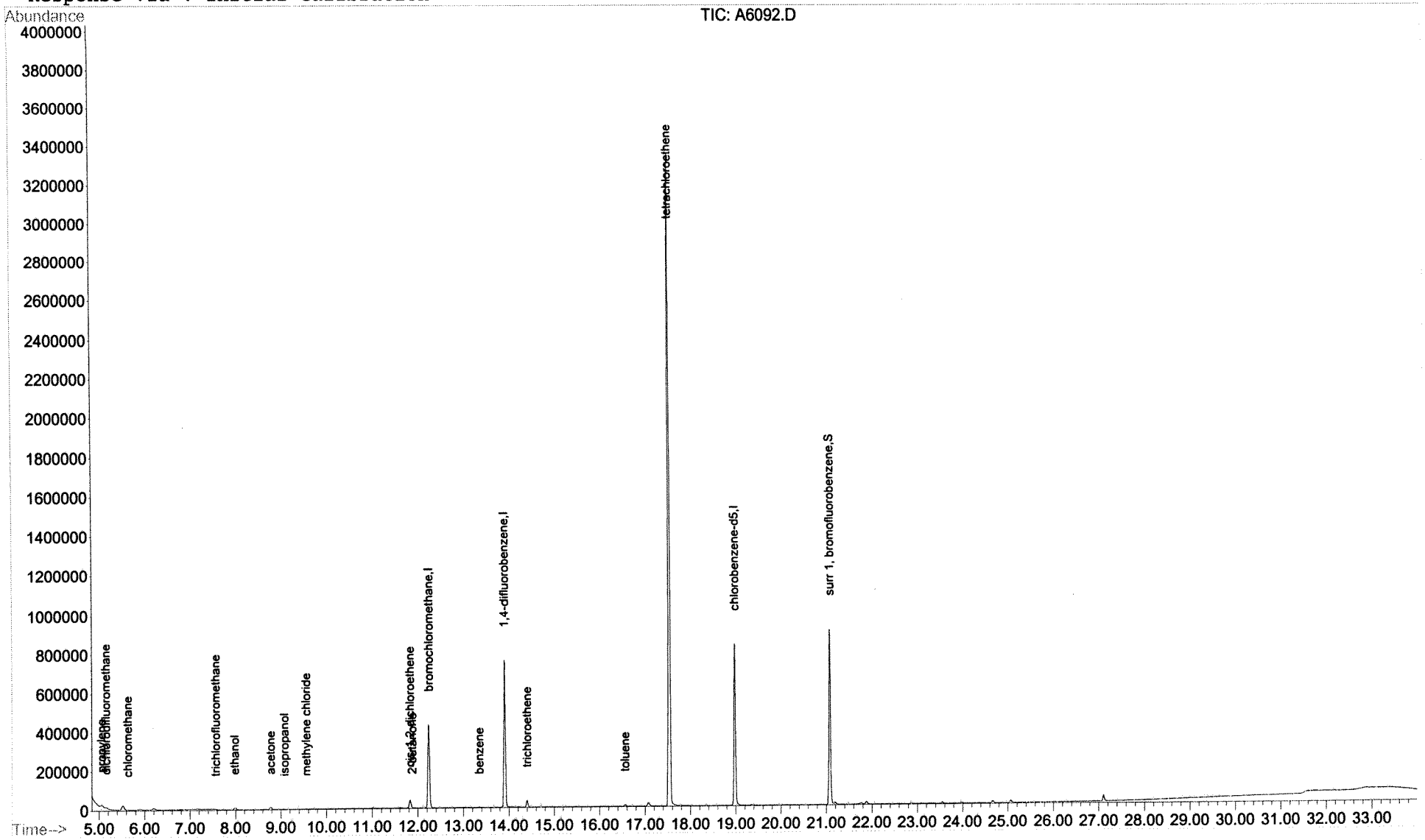
NT

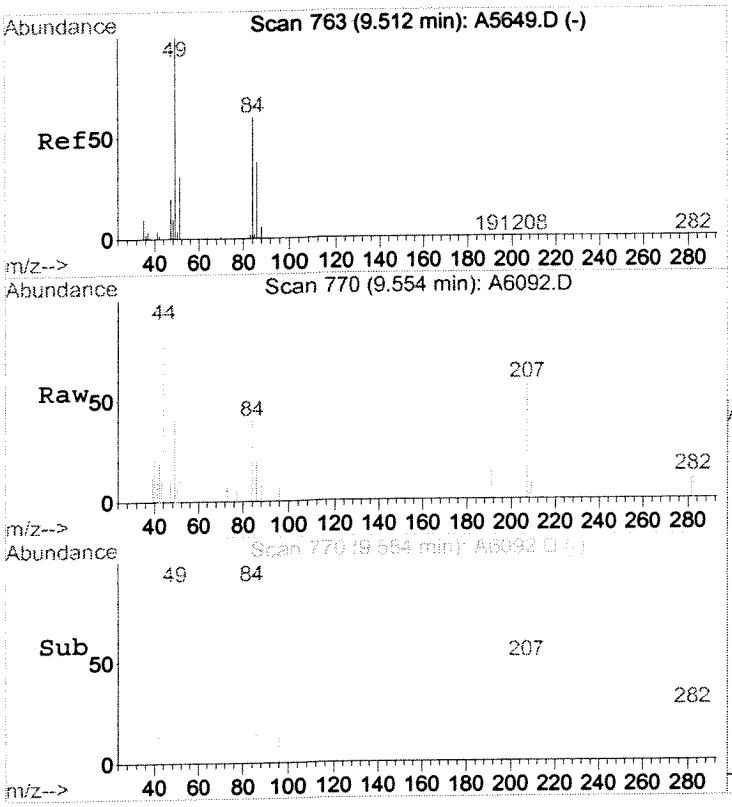
(#) = qualifier out of range (m) = manual integration
A6092.D 111408A.M Sat Nov 15 11:41:34 2008 OFFLINE

00052

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6092.D Vial: 15
Acq On : 15 Nov 2008 7:17 Operator: T.WALTON
Sample : 1150198 10.0 Inst : GC/MS Ins
Misc : PI=-7.7 PF=7.4 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration

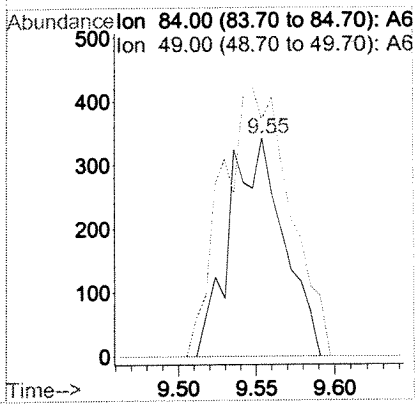




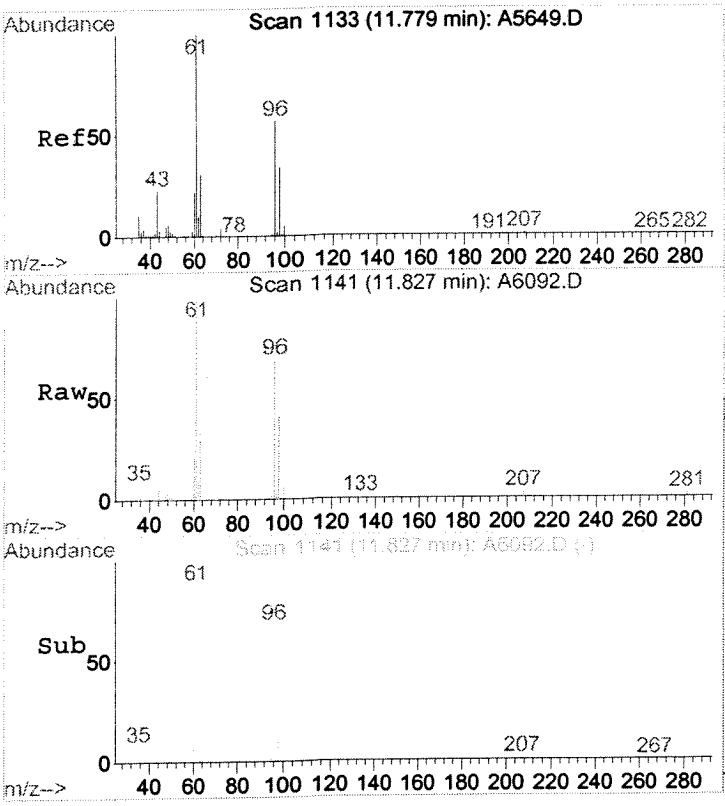
#17
methylene chloride
Concen: 0.0102 ppbv
RT: 9.55 min Scan# 770
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion: 84 Resp: 827

Ion	Ratio	Lower	Upper
84	100		
49	155.9	148.4	188.4



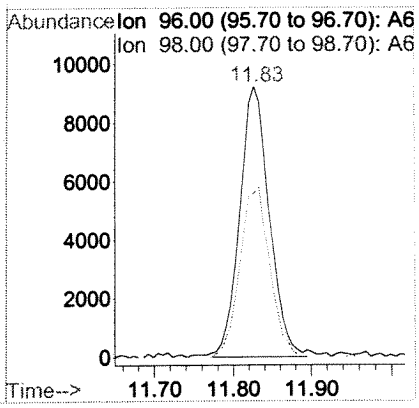
00054

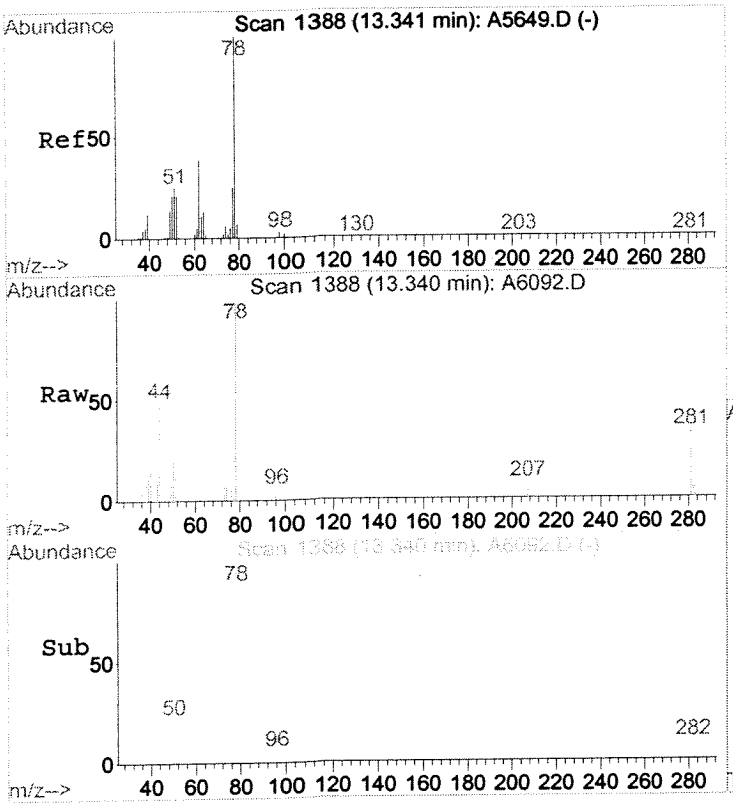


#24
cis-1,2-dichloroethene
Concen: 0.2628 ppbv
RT: 11.83 min Scan# 1141
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion: 96 Resp: 24548

Ion	Ratio	Lower	Upper
96	100		
98	62.6	43.8	83.8

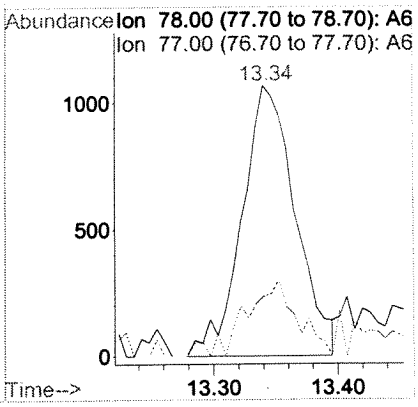


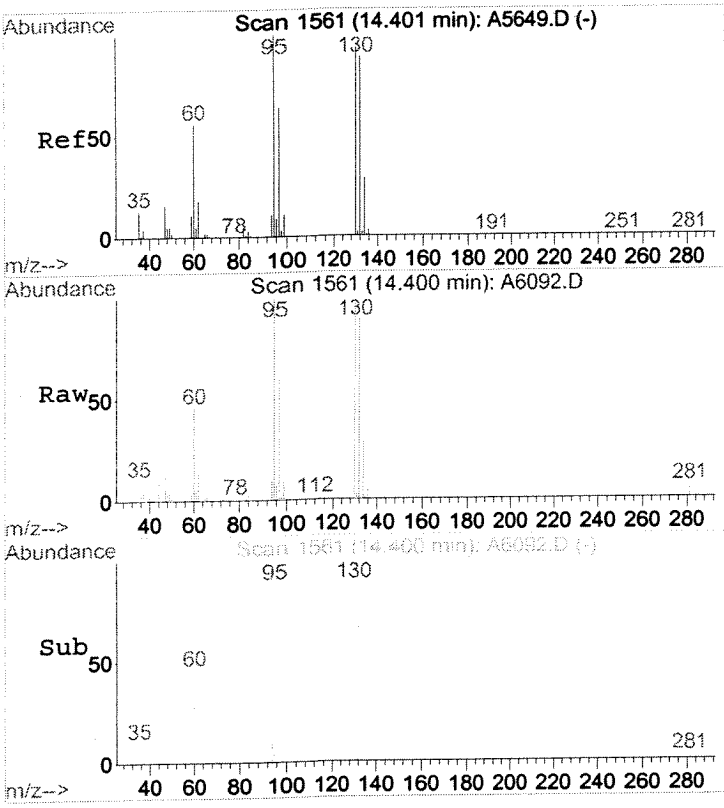


#33
benzene
Concen: 0.0103 ppbv
RT: 13.34 min Scan# 1388
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion: 78 Resp: 3190

Ion	Ratio	Lower	Upper
78	100		
77	26.0	4.4	44.4

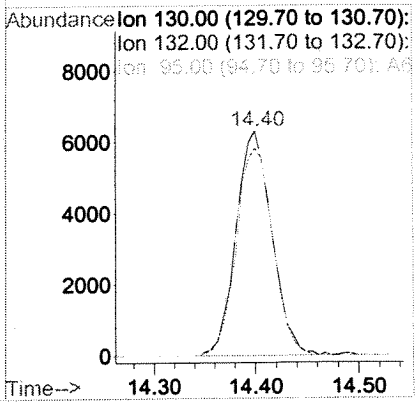




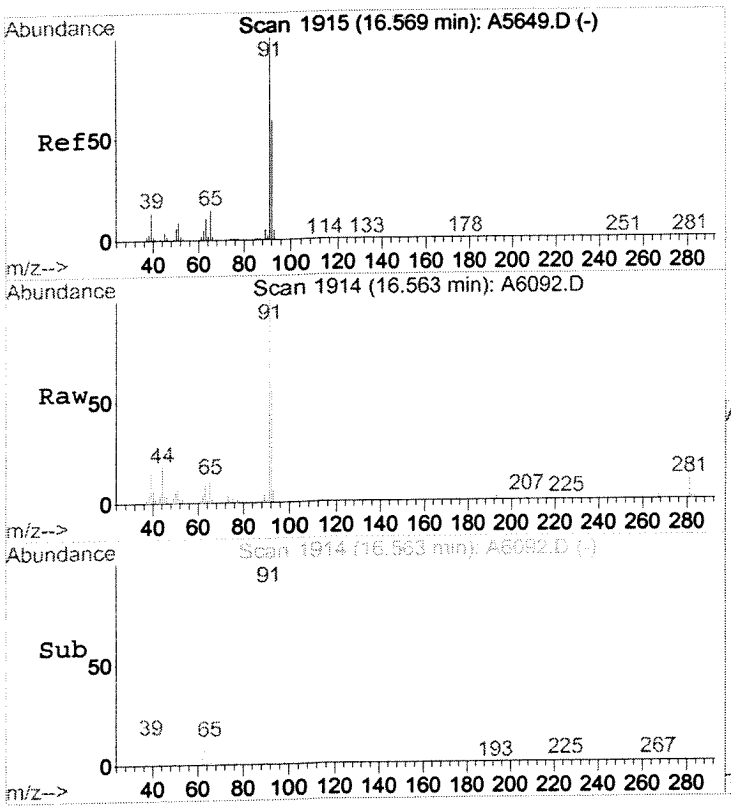
#35
trichloroethene
Concen: 0.1186 ppbv
RT: 14.40 min Scan# 1561
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion:130 Resp: 15273

Ion	Ratio	Lower	Upper
130	100		
132	94.0	75.8	115.8
95	103.0	88.5	128.5



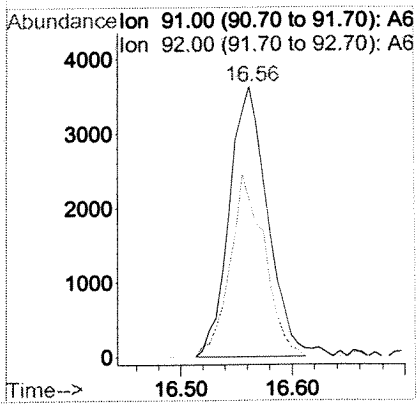
00057

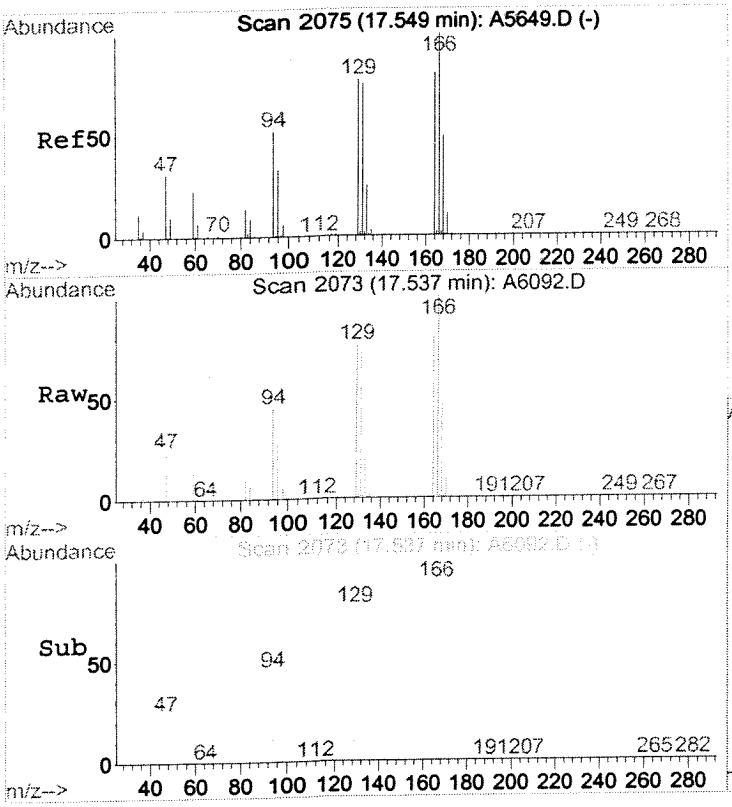


#41
toluene
Concen: 0.0254 ppbv
RT: 16.56 min Scan# 1914
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion: 91 Resp: 8686

Ion	Ratio	Lower	Upper
91	100		
92	60.6	39.0	79.0

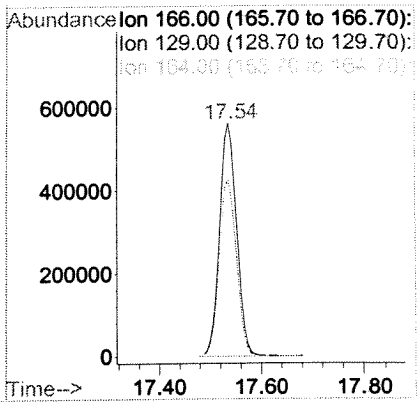




#44
tetrachloroethene
Concen: 7.9131 ppbv
RT: 17.54 min Scan# 2073
Delta R.T. 0.00 min
Lab File: A6092.D
Acq: 15 Nov 2008 7:17

Tgt Ion:166 Resp: 1295389

Ion	Ratio	Lower	Upper
166	100		
129	76.9	59.0	99.0
164	79.4	59.2	99.2



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Malcolm Pirnie, Inc.
Project Reference: FRANKLIN PROJECT #0266-377
Client Sample ID : 267 FRANKLIN OA

Date Sampled : 10/29/08 11:50 **Order #:** 1150201 **Sample Matrix:** AIR
Date Received: 10/30/08 **Submission #:** R2846926 **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 1.00
CAN DILUTION : 1.60 Pi= -6.5 Pf= 7.5

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.46 J	0.11	0.15 J
1,1-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
TRANS-1,2-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
CIS-1,2-DICHLOROETHENE	0.44	0.70 U	0.11	0.18 U
ETHYLBENZENE	0.95	0.26 J	0.22	0.059 J
METHYLENE CHLORIDE	0.38	0.22 JB	0.11	0.062 JB
TETRACHLOROETHENE	0.15	0.12 J	0.022	0.017 J
TOLUENE	0.41	1.1	0.11	0.29
1,1,1-TRICHLOROETHANE	0.60	0.96 U	0.11	0.18 U
TRICHLOROETHENE	0.12	0.21	0.022	0.039
VINYL CHLORIDE	0.28	0.45 U	0.11	0.18 U
O-XYLENE	0.95	0.65 J	0.22	0.15 J
M+P-XYLENE	1.9	0.98 J	0.44	0.23 J

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	101	%

Quantitation Report (~~Not~~ Reviewed)

TW 11-17-08

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6088.D Vial: 11
Acq On : 15 Nov 2008 4:16 Operator: T.WALTON
Sample : 1150201 1.0 Inst : GC/MS Ins
Misc : PI=-6.5 PF=7.5 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	12.24	130	198834	2.5000 ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	803646	2.5000 ppbv	0.00
48) chlorobenzene-d5	18.98	117	677017	2.5000 ppbv	0.00
System Monitoring Compounds					
55) surr 1, bromofluorobenzene	21.07	174	387225	2.52 ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 100.69%		
Target Compounds					Qvalue
2) propylene	5.07	41	26736	0.2283 ppbv	83
3) dichlorodifluoromethane	5.15	85	99213	0.3515 ppbv	100
4) freon-114	5.51	85	4014	0.0133 ppbv	85
5) chloromethane	5.62	50	34056	0.3079 ppbv	98
~~7) 1,3-butadiene~~	~~6.02~~	~~54~~	~~1581~~	~~0.0164 ppbv #~~	~~51~~
10) trichlorofluoromethane	7.55	101	41324	0.1487 ppbv	98
12) freon-113	8.64	101	10580	0.0537 ppbv	94
14) acetone	8.77	43	369398	1.9278 ppbv	95
17) methylene chloride	9.55	84	3399	0.0390 ppbv	88
20) hexane	10.58	57	7389	0.0404 ppbv	99
23) 2-butanone	11.86	43	95817	~~0.3735 ppbv~~	96
25) ethyl acetate	11.86	43	97757	~~0.3109 ppbv~~	76
26) chloroform	12.34	83	2423	0.0117 ppbv	97
27) tetrahydrofuran	12.41	72	558	0.0109 ppbv #	55
30) cyclohexane	12.85	56	3702	0.0183 ppbv #	42
31) carbon tetrachloride	13.01	117	11311	0.0518 ppbv	100
33) benzene	13.35	78	31152	0.0907 ppbv	97
34) heptane	13.72	71	2001	0.0160 ppbv	98
35) trichloroethene	14.39	130	3452	0.0242 ppbv	95
40) 4-methyl-2-pentanone	16.20	43	6043	0.0186 ppbv	99
41) toluene	16.56	91	68384	0.1804 ppbv	99
44) tetrachloroethene	17.53	166	1980	0.0109 ppbv	90
45) 2-hexanone	17.61	43	11416	0.0363 ppbv	98
50) ethylbenzene	19.19	91	18885	0.0371 ppbv	95
51) M+P xylene	19.38	91	56792	0.1408 ppbv	99
52) O xylene	20.12	91	39794	0.0939 ppbv	98
59) 1,2,4-trimethylbenzene	22.54	105	8310	~~0.0176 ppbv~~	90

NT

JB

NT

NT - POOR INT

NT - mis I D/poor fit

NT

J

NT

J

NT

J

J

J

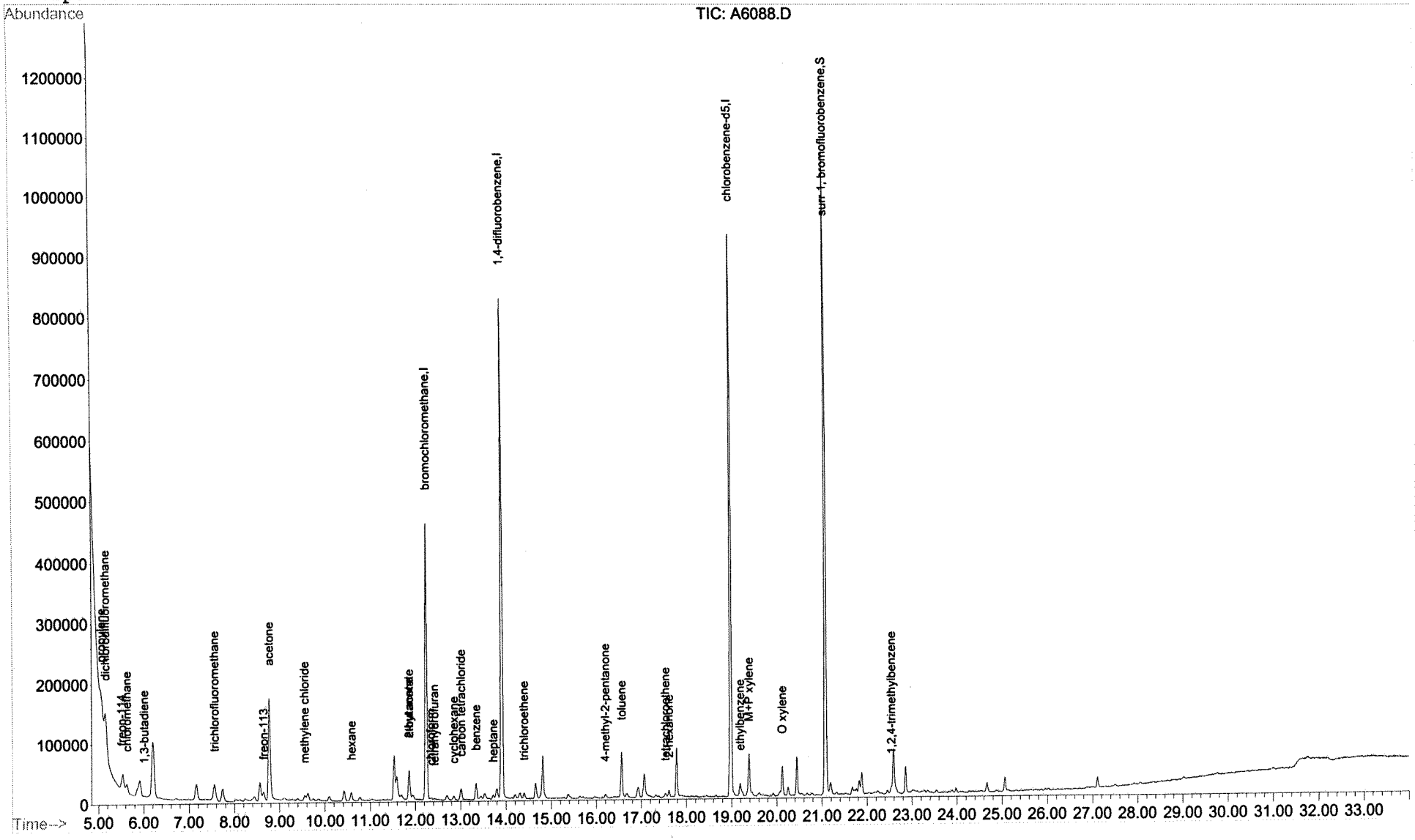
NT

(#) = qualifier out of range (m) = manual integration
A6088.D 111408A.M Sat Nov 15 11:41:19 2008 OFFLINE

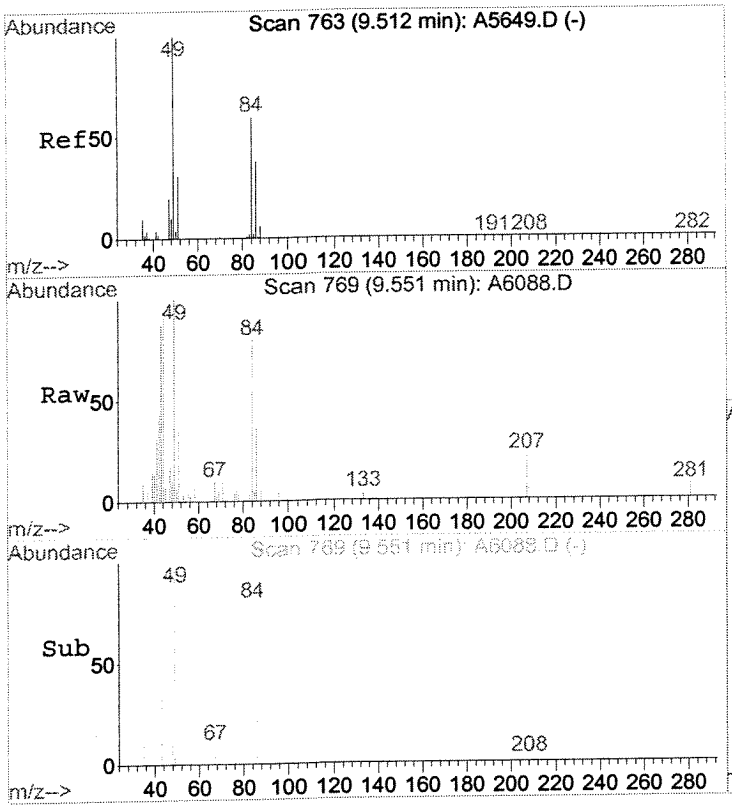
00061

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6088.D Vial: 11
Acq On : 15 Nov 2008 4:16 Operator: T.WALTON
Sample : 1150201 1.0 Inst : GC/MS Ins
Misc : PI=-6.5 PF=7.5 MAR R46926 IMP ASPB Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration



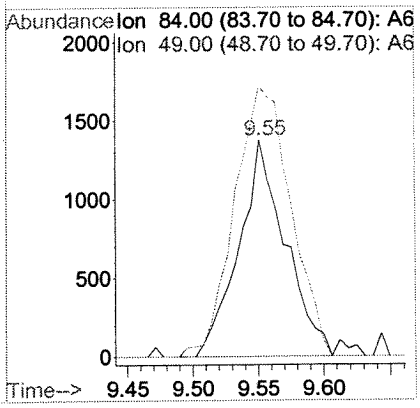
A6088.D 111408A.M Sat Nov 15 11:41:20 2008 OFFLINE



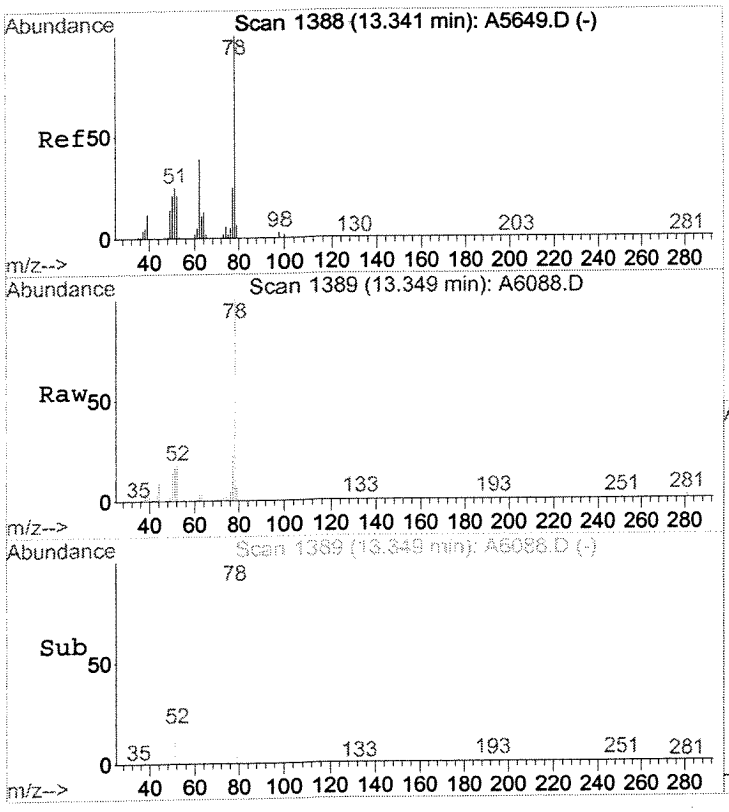
#17
methylene chloride
Concen: 0.0390 ppbv
RT: 9.55 min Scan# 769
Delta R.T. -0.00 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 84 Resp: 3399

Ion	Ratio	Lower	Upper
84	100		
49	152.4	148.4	188.4



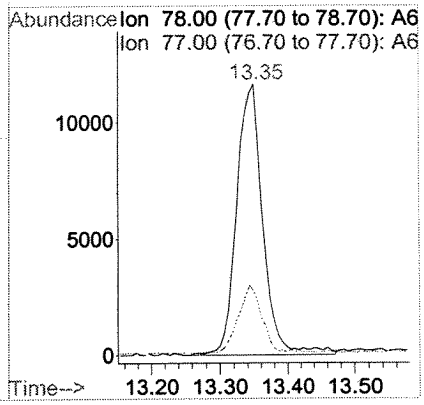
00063

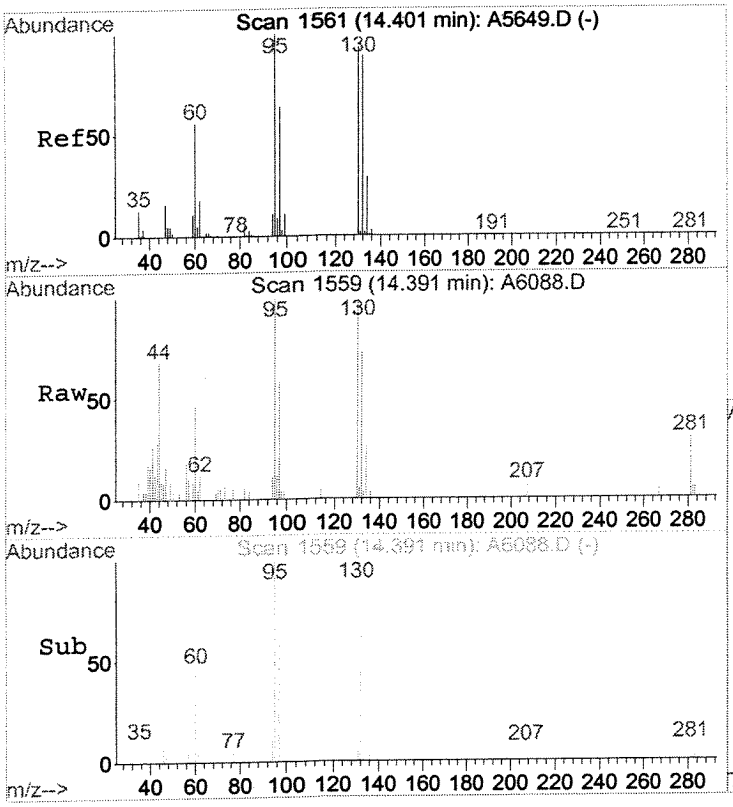


#33
benzene
Concen: 0.0907 ppbv
RT: 13.35 min Scan# 1389
Delta R.T. 0.01 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 78 Resp: 31152

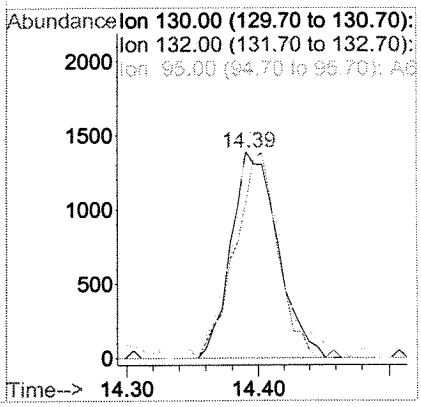
Ion	Ratio	Lower	Upper
78	100		
77	23.1	4.4	44.4



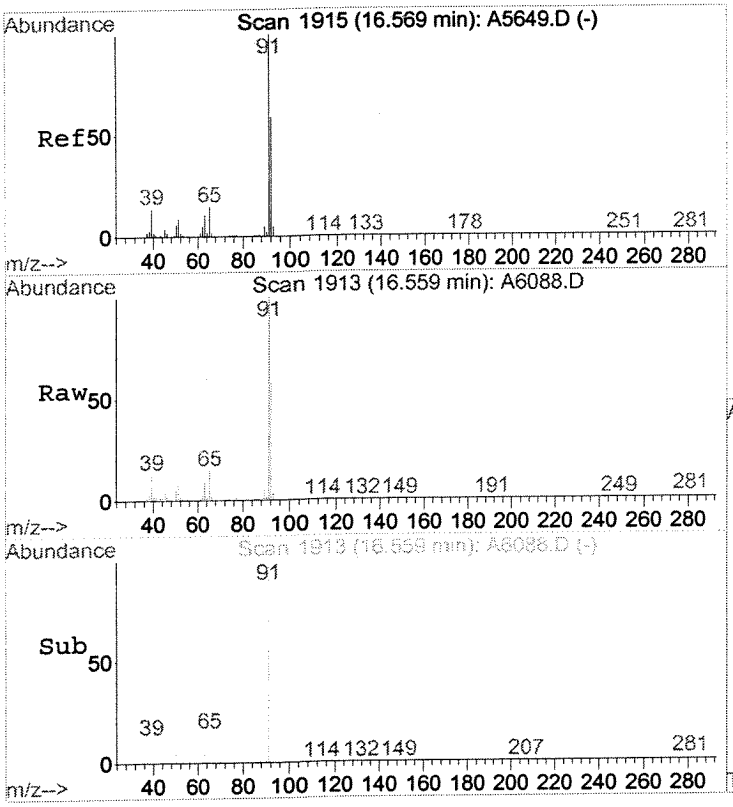


#35
trichloroethene
Concen: 0.0242 ppbv
RT: 14.39 min Scan# 1559
Delta R.T. -0.01 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion:130	Resp:	3452	
Ion	Ratio	Lower	Upper
130	100		
132	90.8	75.8	115.8
95	113.6	88.5	128.5



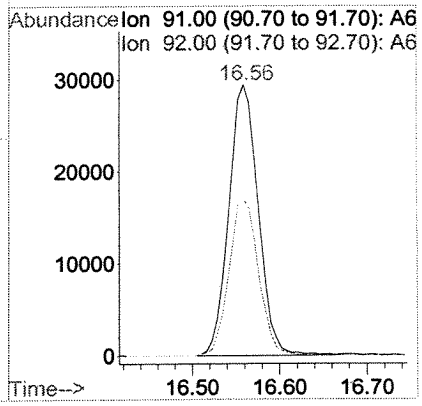
00065

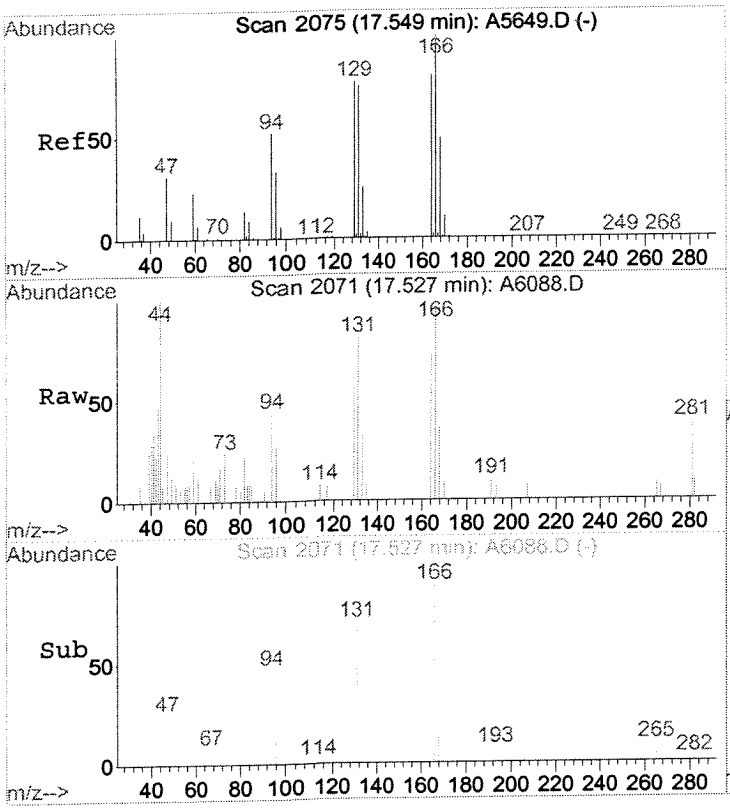


#41
toluene
Concen: 0.1804 ppbv
RT: 16.56 min Scan# 1913
Delta R.T. -0.00 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 91 Resp: 68384

Ion	Ratio	Lower	Upper
91	100		
92	57.9	39.0	79.0

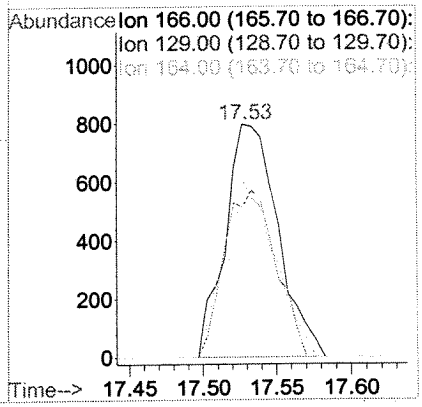


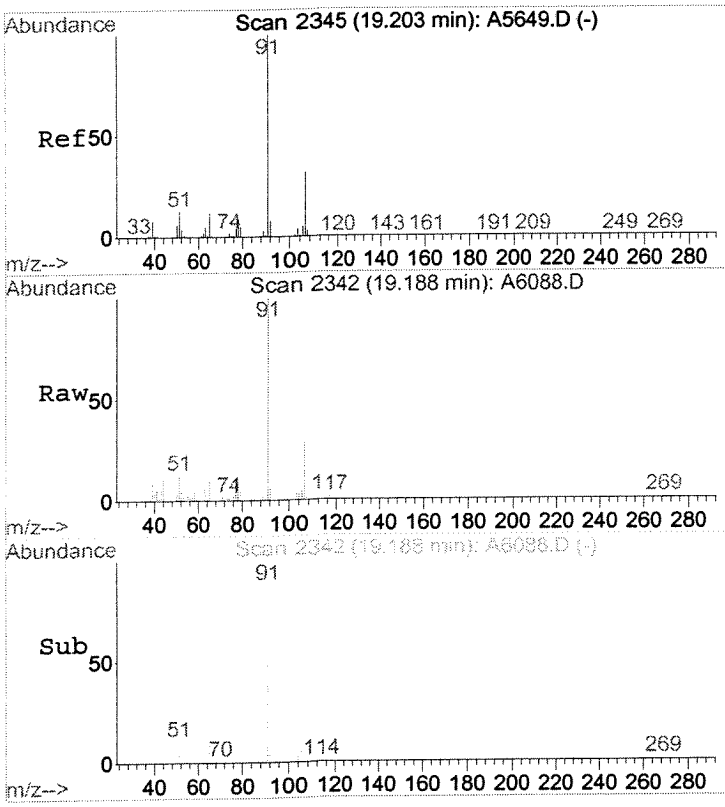


#44
tetrachloroethene
Concen: 0.0109 ppbv
RT: 17.53 min Scan# 2071
Delta R.T. -0.01 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion:166 Resp: 1980

Ion	Ratio	Lower	Upper
166	100		
129	70.8	59.0	99.0
164	70.6	59.2	99.2

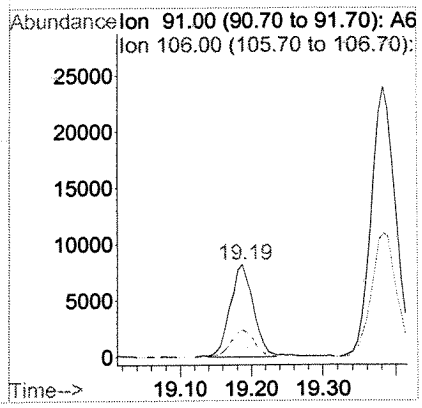


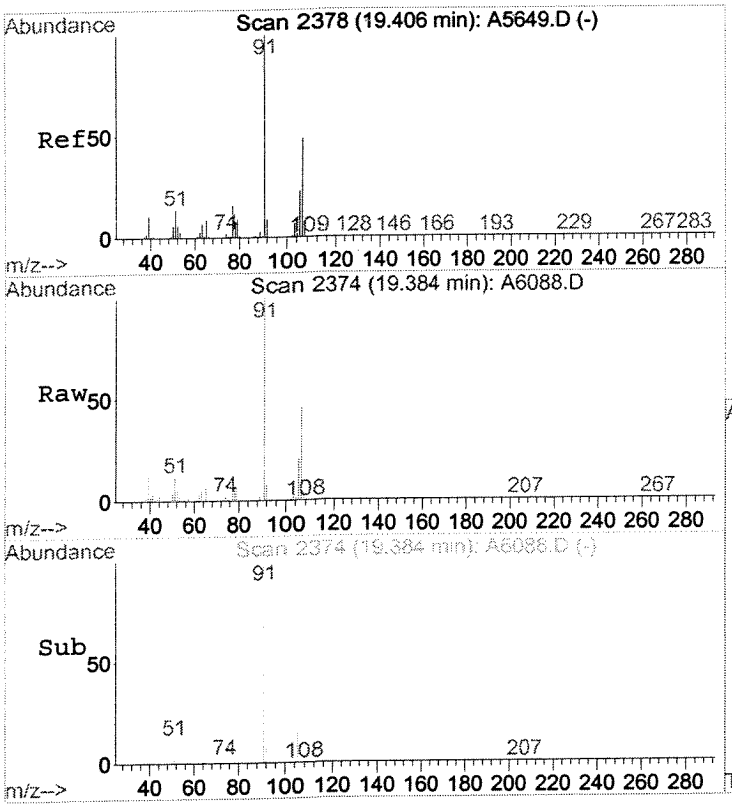


#50
ethylbenzene
Concen: 0.0371 ppbv
RT: 19.19 min Scan# 2342
Delta R.T. -0.00 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 91 Resp: 18885

Ion	Ratio	Lower	Upper
91	100		
106	28.4	11.1	51.1

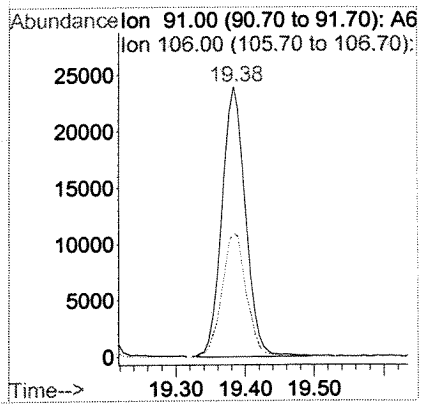


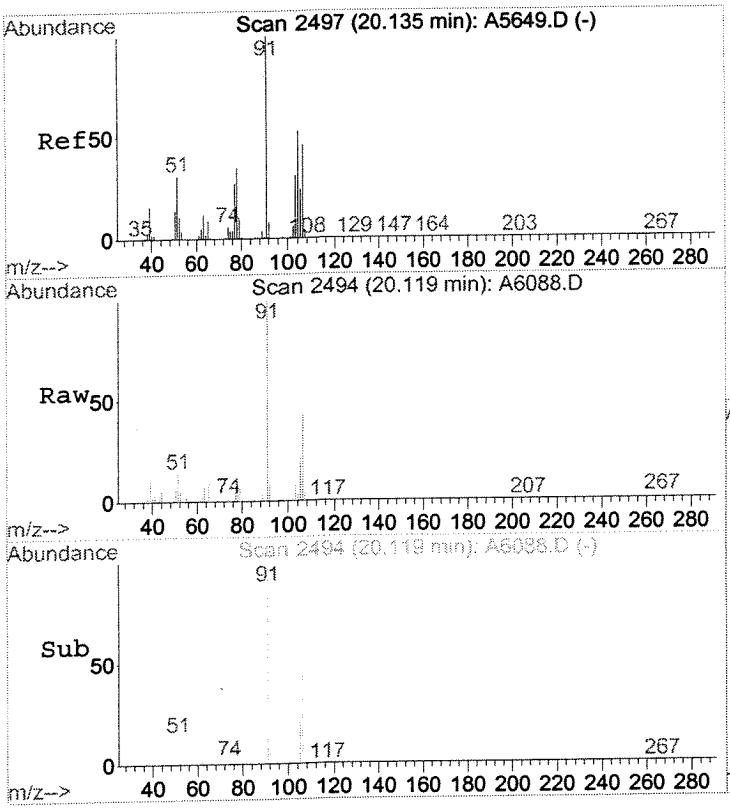


#51
M+P xylene
Concen: 0.1408 ppbv
RT: 19.38 min Scan# 2374
Delta R.T. -0.01 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 91 Resp: 56792

Ion	Ratio	Lower	Upper
91	100		
106	47.3	28.1	68.1

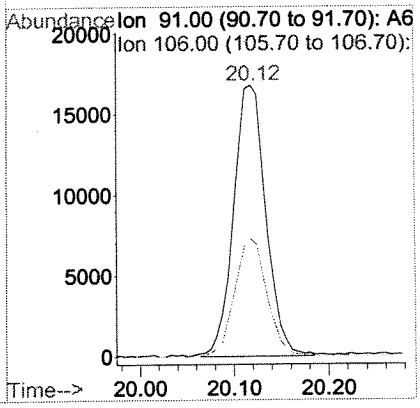




#52
O xylene
Concen: 0.0939 ppbv
RT: 20.12 min Scan# 2494
Delta R.T. -0.00 min
Lab File: A6088.D
Acq: 15 Nov 2008 4:16

Tgt Ion: 91 Resp: 39794

Ion	Ratio	Lower	Upper
91	100		
106	43.3	24.3	64.3



00070

VOLATILE ORGANICS

STANDARDS DATA

CALRPT.TXT
Response Factor Report GC/MS Ins

TW 11-15-08.

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration

Calibration Files

0.02	=A6072.D	0.1	=A6073.D	0.2	=A6074.D
0.5	=A6075.D	1.0	=A6076.D	2.5	=A6077.D
5.0	=A6078.D	7.5	=A6079.D	10.0	=A6080.D
	=		=		=

	Compound	0.02	0.1	0.2	0.5	1.0	2.5	Avg	%RSD
	Compound	5.0	7.5	10.0					
1) I	bromochloromethane	ISTD							
2)	propylene			1.735	1.559	1.405	1.402	1.472	8.94
		1.437	1.412	1.356					
3)	dichlorodifluoromet		3.606	3.685	3.595	3.544	3.521	3.549	2.46
		3.560	3.495	3.389					
4)	freon-114	3.738	3.713	3.921	3.820	3.826	3.782	3.787	2.16
		3.859	3.775	3.647					
5)	chloromethane		1.361	1.462	1.395	1.385	1.394	1.391	2.88
		1.413	1.391	1.323					
6)	vinyl chloride	1.460	1.462	1.531	1.509	1.482	1.511	1.491	3.70
		1.556	1.535	1.372					
7)	1,3-butadiene	1.313	1.149	1.178	1.190	1.200	1.227	1.209	5.60
		1.274	1.258	1.091					
8)	bromomethane		1.191	1.160	1.115	1.146	1.142	1.145	2.32
		1.157	1.142	1.106					
9)	chloroethane	0.809	0.707	0.735	0.721	0.697	0.736	0.733	4.47
		0.744	0.739	0.710					
10)	trichlorofluorometh	3.531	3.325	3.640	3.425	3.578	3.541	3.494	3.17
		3.580	3.494	3.335					
11)	ethanol				0.321	0.513	0.478	0.361	29.98
		0.274	0.326	0.254					
12)	freon-113	2.682	2.376	2.569	2.462	2.289	2.466	2.476	4.53
		2.521	2.491	2.427					
13)	1,1-dichloroethene	2.249	1.908	2.112	2.056	2.131	2.193	2.135	4.97
		2.230	2.214	2.123					
14)	acetone				2.828	2.115	2.386	2.409	9.67
		2.428	2.368	2.330					
15)	isopropanol				1.136	2.185	1.960	1.463	33.60
		1.010	1.367	1.120					
16)	carbon disulfide	4.178	3.612	3.772	3.655	3.791	3.773	3.774	4.55
		3.828	3.757	3.604					

NT 1st Eruption 240%.

17)	methylene chloride			1.131	1.108	1.085	1.022	1.091	1.095	3.08
		1.115	1.119	1.091						
18)	trans-1,2-dichloroe	2.196	1.947	2.074	2.048	1.945	2.106		2.075	4.18
		2.160	2.132	2.069						
19)	methyl tert butyl e	4.081	3.609	3.472	3.619	3.092	3.744		3.700	8.01
		3.948	3.899	3.831						
20)	hexane			2.149	2.217	2.089	2.364		2.298	6.34
		2.461	2.436	2.368						
21)	1,1-diclethane	2.694	2.510	2.538	2.546	2.294	2.551		2.535	4.21
		2.604	2.569	2.512						
22)	vinyl acetate	4.369	3.731	3.611	4.015	3.233	4.212		4.040	10.56
		4.460	4.400	4.325						
23)	2-butanone			3.404	3.178	3.299	2.799	3.268	3.225	5.90
		3.356	3.326	3.170						
24)	cis-1,2-dichloroeth			1.210	1.254	1.243	1.129	1.272	1.258	5.28
		1.330	1.324	1.303						
25)	ethyl acetate			3.996	3.901	4.093	3.480	4.084	3.954	5.39
		4.167	4.013	3.895						
26)	chloroform			2.640	2.642	2.625	2.377	2.639	2.612	3.76
		2.696	2.666	2.611						
27)	tetrahydrofuran	0.678	0.584	0.553	0.619	0.542	0.681		0.646	11.32
		0.728	0.721	0.710						
28) I	1,4-difluorobenzene	----------ISTD----------								
29)	1,1,1-trichloroetha	0.724	0.646	0.710	0.680	0.631	0.711		0.693	5.11
		0.726	0.723	0.682						
30)	cyclohexane			0.598	0.598	0.577	0.660		0.630	6.31
		0.673	0.672	0.632						
31)	carbon tetrachlorid	0.720	0.598	0.668	0.647	0.617	0.709		0.679	7.28
		0.728	0.732	0.693						
32)	1,2-dichloroethane	0.516	0.458	0.498	0.474	0.413	0.479		0.476	6.22
		0.492	0.489	0.461						
33)	benzene			1.072	1.099	1.065	0.933	1.096	1.069	5.67
		1.126	1.112	1.049						
34)	heptane			0.357	0.362	0.343	0.404		0.389	8.77
		0.426	0.426	0.403						
35)	trichloroethene	0.533	0.405	0.436	0.419	0.399	0.442		0.444	9.01
		0.460	0.464	0.442						
36)	1,2-diclpropane			0.399	0.416	0.413	0.347	0.424	0.413	7.38
		0.443	0.441	0.421						
37)	1,4-dioxane			0.105	0.145	0.108	0.176	0.173	0.132	23.70
		0.111	0.138	0.096						
38)	bromodichloromethan	0.822	0.643	0.693	0.689	0.638	0.736		0.718	8.31

			0.762	0.761	0.722					
39)		cis-1,3-dichloropro	0.674	0.512	0.552	0.553	0.484	0.604	0.586	10.92
			0.640	0.641	0.609					
40)		4-methyl-2-pentanon		0.937	0.986	0.992	0.949	1.078	1.013	6.14
			1.095	1.080	0.989					
41)		toluene		1.083	1.149	1.188	0.986	1.241	1.179	8.88
			1.299	1.281	1.206					
42)		trans-1,3-dichlorop		0.482	0.497	0.527	0.453	0.578	0.543	11.40
			0.612	0.613	0.585					
43)		1,1,2-trichloroetha		0.405	0.409	0.403	0.337	0.412	0.406	7.42
			0.433	0.433	0.415					
44)		tetrachloroethene	0.723	0.497	0.537	0.525	0.484	0.560	0.565	12.58
			0.591	0.598	0.573					
45)		2-hexanone		0.879	0.931	0.938	0.943	1.072	0.978	7.49
			1.072	1.044	0.948					
46)		dibromochloromethan	0.782	0.542	0.576	0.592	0.548	0.669	0.648	13.27
			0.715	0.722	0.688					
47)		1,2-dibromoethane	0.803	0.535	0.567	0.572	0.480	0.597	0.601	14.78
			0.626	0.628	0.602					
48)	I	chlorobenzene-d5	----------ISTD----------							
49)		chlorobenzene		1.060	1.121	1.117	0.928	1.148	1.108	7.66
			1.204	1.176	1.111					
50)		ethylbenzene			1.804	1.881	1.533	1.994	1.879	9.51
			2.076	1.997	1.868					
51)		M+P xylene			1.461	1.530	1.248	1.599	1.490	8.89
			1.637	1.547	1.405					
52)		O xylene			1.443	1.535	1.270	1.662	1.564	10.60
			1.752	1.696	1.592					
53)		styrene			1.055	1.127	0.943	1.257	1.180	12.19
			1.336	1.306	1.237					
54)		bromoform	0.869	0.556	0.604	0.644	0.589	0.787	0.736	18.38
			0.869	0.872	0.835					
55)	S	surr 1, bromofluoro	0.568	0.568	0.551	0.557	0.567	0.560	0.568	2.12
			0.569	0.582	0.590					
56)		1,1,2,2-tetrachloro	1.809	1.098	1.133	1.142	0.945	1.164	1.202	20.02
			1.216	1.189	1.117					
57)		4-ethyltoluene	2.649	1.791	1.931	2.077	1.778	2.316	2.162	13.73
			2.421	2.336	2.156					
58)		1,3,5-trimethylbenz	2.146	1.490	1.565	1.721	1.473	1.902	1.777	13.17
			1.981	1.927	1.792					
59)		1,2,4-trimethylbenz	2.079	1.423	1.517	1.654	1.439	1.873	1.740	13.93
			1.973	1.924	1.779					

60)	1,3-dclbenz	1.513	0.960	1.008	1.039	0.886	1.168	1.137	16.65
		1.245	1.239	1.174					
61)	1,4-dclbenz	1.438	0.933	0.993	1.022	0.877	1.164	1.122	16.03
		1.251	1.244	1.180					
62)	benzyl chloride				1.325	1.183	1.631	1.543	15.23
		1.760	1.739	1.620					
63)	1,2-dclbenz	1.479	0.898	0.950	0.990	0.831	1.096	1.079	17.91
		1.179	1.170	1.115					
64)	1,2,4-trichlorobenz	0.995	0.659	0.670	0.723	0.551	0.720	0.754	17.02
		0.808	0.828	0.827					
65)	hexachlorobutadiene	1.288	0.818	0.855	0.847	0.651	0.800	0.852	20.49
		0.819	0.820	0.767					

(#) = Out of Range ### Number of calibration levels exceeded format ###

111408A.M Sat Nov 15 11:37:21 2008 OFFLINE

HP CHEMSTATION CUSTOM REPORT CALIBRATION SUMMARY

Method File : 111408A | Calibration Title : TO-15 | Last Calibration Update : Sat Nov 15 11:31:59 2008

Calibration Table Concentrations (Level 1-20)

file		A6072.D	A6073.D	A6074.D	A6075.D	A6076.D	A6077.D	A6078.D	A6079.D	A6080.D	
Level		1	2	3	4	5	6	7	8	9	#
ID	Compound	0.02	0.1	0.2	0.5	1.0	2.5	5.0	7.5	10.0	
1)	bromochloromethane	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	-1
2)	propylene	0.0206	0.0979	0.2060	0.5150	1.0300	2.5750	5.1500	7.7250	10.3000	-1
3)	dichlorodifluoromethane	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
4)	freon-114	0.0200	0.0950	0.2000	0.5000	1.0000	2.5000	5.0000	7.5000	10.0000	-1
5)	chloromethane	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
6)	vinyl chloride	0.0200	0.0950	0.2000	0.5000	1.0000	2.5000	5.0000	7.5000	10.0000	-1
7)	1,3-butadiene	0.0216	0.1026	0.2160	0.5400	1.0800	2.7000	5.4000	8.1000	10.8000	-1
8)	bromomethane	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
9)	chloroethane	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
10)	trichlorofluoromethane	0.0198	0.0941	0.1980	0.4950	0.9900	2.4750	4.9500	7.4250	9.9000	-1
11)	ethanol	0.0194	0.0922	0.1940	0.4850	0.9700	2.4250	4.8500	7.2750	9.7000	-1
12)	freon-113	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
13)	1,1-dichloroethene	0.0218	0.1036	0.2180	0.5450	1.0900	2.7250	5.4500	8.1750	10.9000	-1
14)	acetone	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
15)	isopropanol	0.0222	0.1055	0.2220	0.5550	1.1100	2.7750	5.5500	8.3250	11.1000	-1
16)	carbon disulfide	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
17)	methylene chloride	0.0218	0.1036	0.2180	0.5450	1.0900	2.7250	5.4500	8.1750	10.9000	-1
18)	trans-1,2-dichloroethene	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
19)	methyl tert butyl ether	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
20)	hexane	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
21)	1,1-diclethane	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
22)	vinyl acetate	0.0198	0.0941	0.1980	0.4950	0.9900	2.4750	4.9500	7.4250	9.9000	-1
23)	2-butanone	0.0216	0.1026	0.2160	0.5400	1.0800	2.7000	5.4000	8.1000	10.8000	-1
24)	cis-1,2-dichloroethene	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
25)	ethyl acetate	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
26)	chloroform	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
27)	tetrahydrofuran	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
28)	1,4-difluorobenzene	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	-1
29)	1,1,1-trichloroethane	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
30)	cyclohexane	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
31)	carbon tetrachloride	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
32)	1,2-dichloroethane	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
33)	benzene	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
34)	heptane	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1

111408CAL.xls TW 11-17-08

35)	trichloroethene	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
36)	1,2-diclpropane	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
37)	1,4-dioxane	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
38)	bromodichloromethane	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
39)	cis-1,3-dichloropropene	0.0204	0.0969	0.2040	0.5100	1.0200	2.5500	5.1000	7.6500	10.2000	-1
40)	4-methyl-2-pentanone	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
41)	toluene	0.0216	0.1026	0.2160	0.5400	1.0800	2.7000	5.4000	8.1000	10.8000	-1
42)	trans-1,3-dichloropropene	0.0222	0.1055	0.2220	0.5550	1.1100	2.7750	5.5500	8.3250	11.1000	-1
43)	1,1,2-trichloroethane	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
44)	tetrachloroethene	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
45)	2-hexanone	0.0214	0.1017	0.2140	0.5350	1.0700	2.6750	5.3500	8.0250	10.7000	-1
46)	dibromochloromethane	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
47)	1,2-dibromoethane	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
48)	chlorobenzene-d5	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	-1
49)	chlorobenzene	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
50)	ethylbenzene	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
51)	M+P xylene	0.0416	0.1976	0.4160	1.0400	2.0800	5.2000	10.4000	15.6000	20.8000	-1
52)	O xylene	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
53)	styrene	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
54)	bromoform	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
55)	surr 1, bromofluorobenzene	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	-1
56)	1,1,2,2-tetrachloroethane	0.0210	0.0998	0.2100	0.5250	1.0500	2.6250	5.2500	7.8750	10.5000	-1
57)	4-ethyltoluene	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
58)	1,3,5-trimethylbenzene	0.0212	0.1007	0.2120	0.5300	1.0600	2.6500	5.3000	7.9500	10.6000	-1
59)	1,2,4-trimethylbenzene	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
60)	1,3-dclbenz	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
61)	1,4-dclbenz	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
62)	benzyl chloride	0.0208	0.0988	0.2080	0.5200	1.0400	2.6000	5.2000	7.8000	10.4000	-1
63)	1,2-dclbenz	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
64)	1,2,4-trichlorobenzene	0.0202	0.0960	0.2020	0.5050	1.0100	2.5250	5.0500	7.5750	10.1000	-1
65)	hexachlorobutadiene	0.0204	0.0969	0.2040	0.5100	1.0200	2.5500	5.1000	7.6500	10.2000	-1

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6072.D Vial: 2
Acq On : 14 Nov 2008 15:31 Operator: T.WALTON
Sample : 0.02 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:54 2008 Quant Results File: 111408A.RES

TW 11-15-08

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	12.24	130	213205	2.5000 ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	862919	2.5000 ppbv	0.00
48) chlorobenzene-d5	18.98	117	732479	2.5000 ppbv	-0.03
System Monitoring Compounds					
55) surr 1, bromofluorobenzene	21.08	174	416308	2.50 ppbv	-0.02
Spiked Amount 2.500	Range 70 - 130		Recovery = 100.10%		
Target Compounds					Qvalue
2) propylene	5.06	41	7200	0.0467 ppbv #	66
3) dichlorodifluoromethane	5.16	85	7232	0.0234 ppbv	100
4) freon-114	5.49	85	6375	0.0197 ppbv	96
5) chloromethane	5.62	50	2885(m)	0.0237 ppbv	(m) TW 11-15-08.
6) vinyl chloride	5.92	62	2491	0.0196 ppbv	95
7) 1,3-butadiene	6.03	54	2419	0.0235 ppbv	97
8) bromomethane	6.74	94	2822	0.0274 ppbv	88
9) chloroethane	6.99	64	1393	0.0223 ppbv #	59
10) trichlorofluoromethane	7.56	101	5962	0.0200 ppbv	93
11) ethanol	0.00	45	0	N.D. d	
12) freon-113	8.64	101	4894	0.0232 ppbv	98
13) 1,1-dichloroethene	8.65	61	4182	0.0230 ppbv #	62
14) acetone	8.77	43	18748	0.0613 ppbv	92
15) isopropanol	0.00	45	0	N.D. d	
16) carbon disulfide	9.11	76	7411	0.0230 ppbv	87
17) methylene chloride	9.55	84	2761	0.0285 ppbv	91
18) trans-1,2-dichloroethene	10.09	61	3933	0.0222 ppbv	86
19) methyl tert butyl ether	10.16	73	7379	0.0233 ppbv	98
20) hexane	10.58	57	3979	0.0207 ppbv	96
21) 1,1-diclethane	10.83	63	4871	0.0225 ppbv	90
22) vinyl acetate	10.88	43	7377	0.0213 ppbv	98
23) 2-butanone	11.88	43	8915	0.0307 ppbv	97
24) cis-1,2-dichloroethene	11.83	96	3190	0.0280 ppbv	81
25) ethyl acetate	11.95	43	9459	0.0269 ppbv	100
26) chloroform	12.34	83	5219	0.0232 ppbv	98
27) tetrahydrofuran	12.44	72	1237	0.0225 ppbv	96
29) 1,1,1-trichloroethane	12.72	97	5248	0.0219 ppbv	96
30) cyclohexane	12.85	56	4912	0.0229 ppbv	97
31) carbon tetrachloride	13.01	117	5221	0.0223 ppbv	98
32) 1,2-dichloroethane	13.33	62	3815	0.0232 ppbv	98
33) benzene	13.34	78	11579	0.0295 ppbv	97
34) heptane	13.72	71	2915	0.0221 ppbv	99
35) trichloroethene	14.40	130	3828	0.0250 ppbv	96
36) 1,2-diclpropane	14.77	63	3814	0.0260 ppbv	91
37) 1,4-dioxane	0.00	88	0	N.D. d	
38) bromodichloromethane	15.20	83	5900	0.0238 ppbv	97
39) cis-1,3-dichloropropene	15.95	75	4749	0.0235 ppbv	94
40) 4-methyl-2-pentanone	16.21	43	10187	0.0279 ppbv	96
41) toluene	16.56	91	10954	0.0262 ppbv	99
42) trans-1,3-dichloropropene	16.87	75	5080	0.0264 ppbv	95
43) 1,1,2-trichloroethane	17.21	97	4014	0.0275 ppbv	93
44) tetrachloroethene	17.54	166	5240	0.0269 ppbv	94

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6072.D Vial: 2
Acq On : 14 Nov 2008 15:31 Operator: T.WALTON
Sample : 0.02 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:54 2008 Quant Results File: 111408A.RES

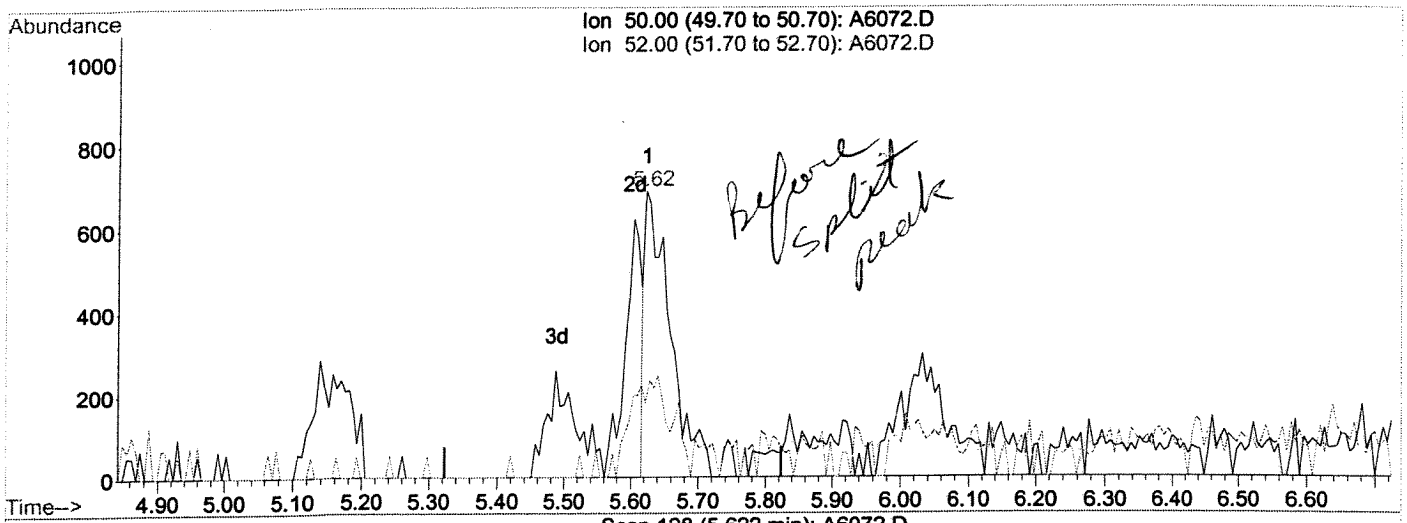
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

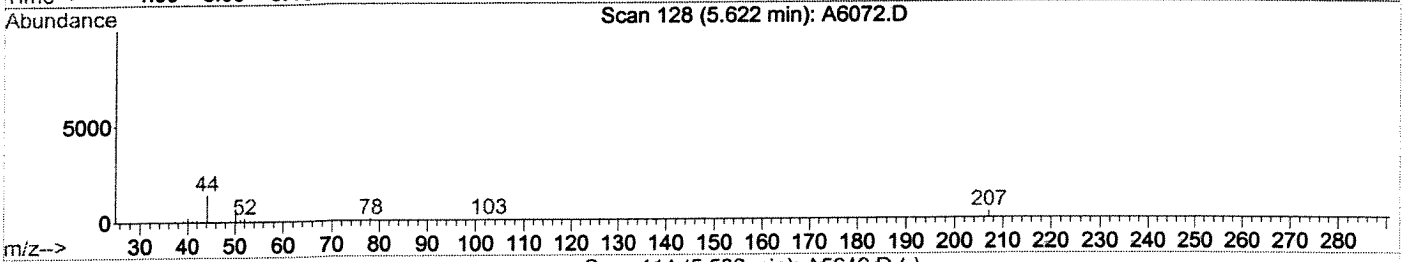
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	2-hexanone	17.63	43	9229	0.0265	ppbv	96
46)	dibromochloromethane	17.93	129	5665	0.0253	ppbv	99
47)	1,2-dibromoethane	18.18	107	5820	0.0281	ppbv	98
49)	chlorobenzene	19.04	112	9643	0.0284	ppbv	95
50)	ethylbenzene	19.19	91	15045	0.0268	ppbv	98
51)	M+P xylene	19.39	91	23217	0.0522	ppbv	97
52)	O xylene	20.12	91	11760	0.0255	ppbv	97
53)	styrene	20.13	104	8264	0.0241	ppbv	98
54)	bromoform	20.50	173	5298	0.0246	ppbv	99
56)	1,1,2,2-tetrachloroethane	21.27	83	11132	0.0316	ppbv	99
57)	4-ethyltoluene	21.72	105	15679	0.0248	ppbv	98
58)	1,3,5-trimethylbenzene	21.83	105	13329	0.0256	ppbv	99
59)	1,2,4-trimethylbenzene	22.54	105	12667	0.0249	ppbv	99
60)	1,3-dclbenz	23.12	146	9222	0.0277	ppbv	97
61)	1,4-dclbenz	23.28	146	8763	0.0266	ppbv	98
62)	benzyl chloride	23.50	91	9889	0.0229	ppbv	98
63)	1,2-dclbenz	23.99	146	8751	0.0277	ppbv	98
64)	1,2,4-trichlorobenzene	27.01	180	5891	0.0267	ppbv	98
65)	hexachlorobutadiene	27.31	225	7698	0.0309	ppbv	93

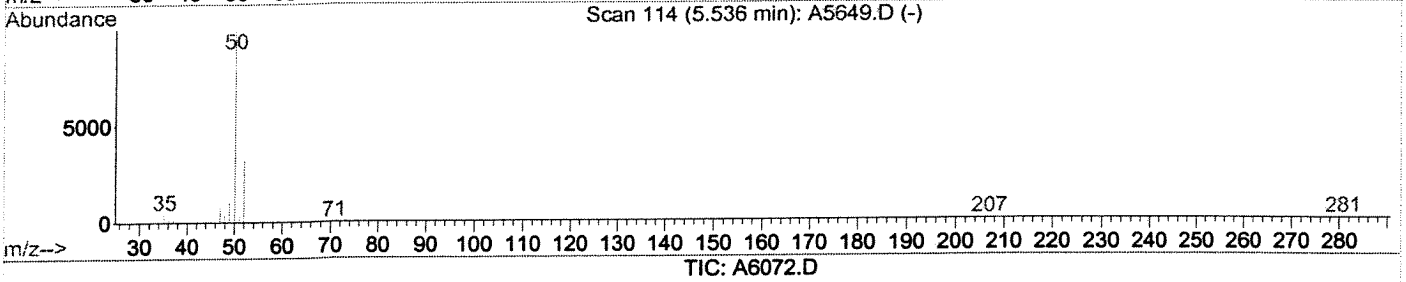
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6072.D Vial: 2
Acq On : 14 Nov 2008 15:31 Operator: T.WALTON
Sample : 0.02 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration







TIC: A6072.D

(5) chloromethane

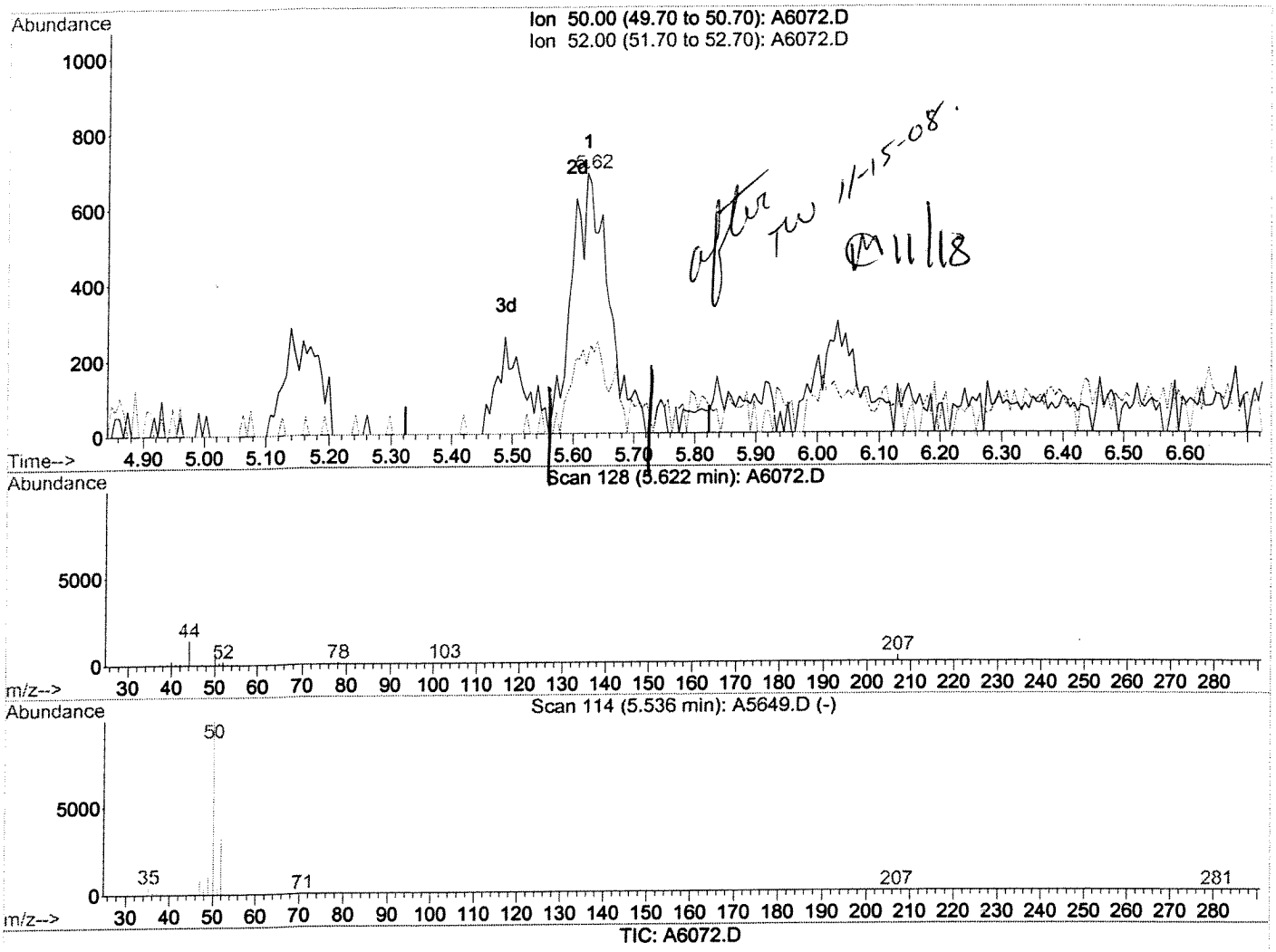
5.62min 0.0150ppbv

response 1819

Ion	Exp%	Act%
50.00	100	100
52.00	32.30	23.86
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6072.D Vial: 2
Acq On : 14 Nov 2008 15:31 Operator: T.WALTON
Sample : 0.02 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:53 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



TIC: A6072.D

(5) chloromethane

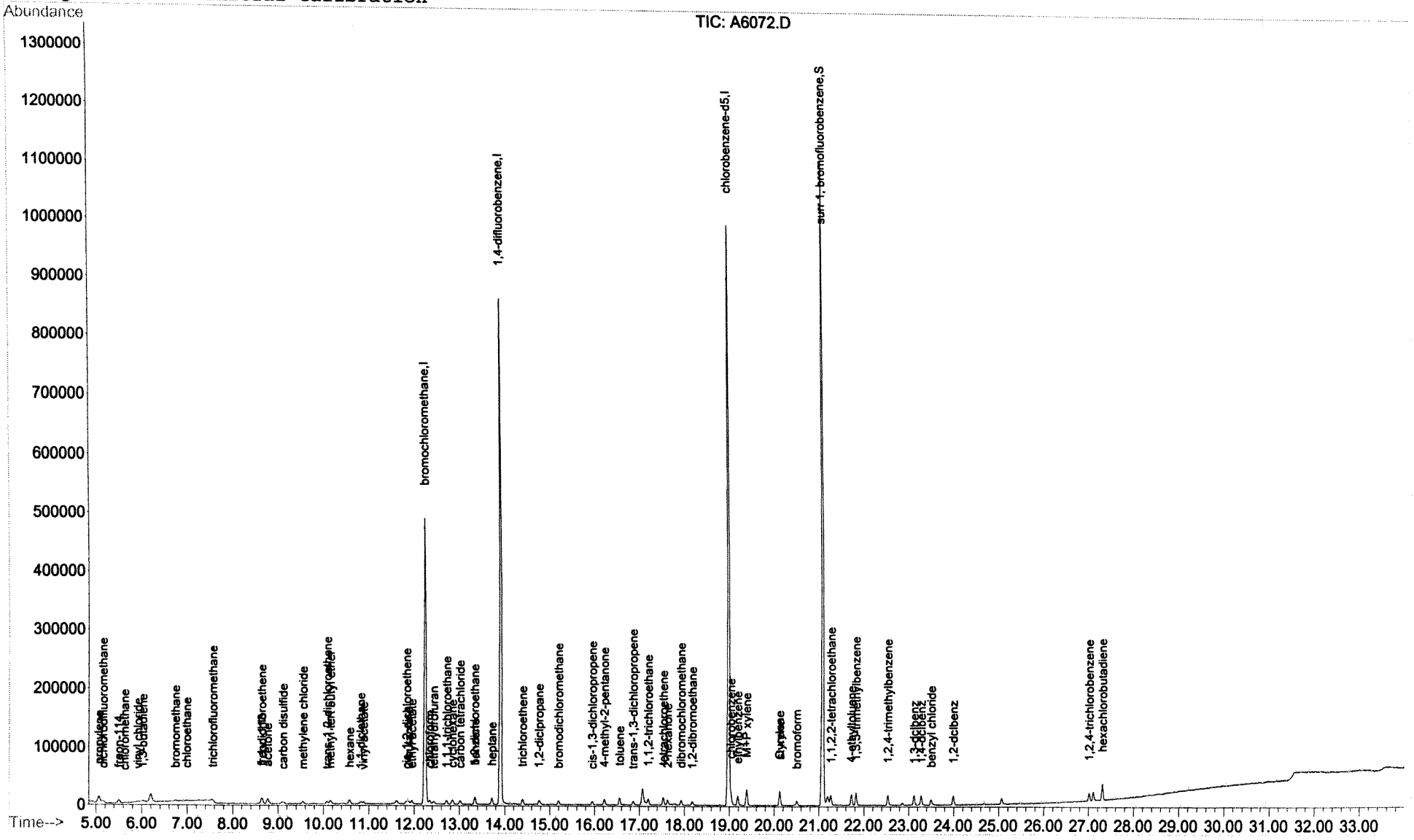
5.62min 0.0237ppbv m

response 2885

Ion	Exp%	Act%
50.00	100	100
52.00	32.30	15.04
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6072.D Vial: 2
Acq On : 14 Nov 2008 15:31 Operator: T.WALTON
Sample : 0.02 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:54 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Initial Calibration



23655

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6073.D Vial: 3
Acq On : 14 Nov 2008 16:16 Operator: T.WALTON
Sample : 0.095 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

TW 11-15-08

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	208026	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	838041	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	710736	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	403679	2.50	ppbv	-0.02
Spiked Amount 2.500	Range 70 - 130		Recovery = 100.04%			
Target Compounds						Qvalue
2) propylene	5.06	41	14859	0.0987	ppbv	87
3) dichlorodifluoromethane	5.16	85	28803	0.0957	ppbv	99
4) freon-114	5.49	85	29354	0.0931	ppbv	99
5) chloromethane	5.62	50	10872	0.0916	ppbv	92
6) vinyl chloride	5.91	62	11560	0.0933	ppbv	100
7) 1,3-butadiene	6.03	54	9806	0.0975	ppbv	99
8) bromomethane	6.74	94	9515	0.0949	ppbv	91
9) chloroethane	6.98	64	5644	0.0926	ppbv	79
10) trichlorofluoromethane	7.56	101	26036	0.0896	ppbv	97
11) ethanol	7.97	45	3533	0.0982	ppbv #	37
12) freon-113	8.64	101	20110	0.0977	ppbv	96
13) 1,1-dichloroethene	8.65	61	16451	0.0927	ppbv	81
14) acetone	8.77	43	33916	0.1137	ppbv	95
15) isopropanol	9.07	45	13220	0.1040	ppbv	97
16) carbon disulfide	9.11	76	29695	0.0946	ppbv	94
17) methylene chloride	9.55	84	9752	0.1030	ppbv	87
18) trans-1,2-dichloroethene	10.08	61	16168	0.0937	ppbv	88
19) methyl tert butyl ether	10.15	73	30243	0.0980	ppbv	98
20) hexane	10.58	57	17644	0.0939	ppbv	100
21) 1,1-diclethane	10.82	63	21035	0.0998	ppbv	100
22) vinyl acetate	10.88	43	29216	0.0866	ppbv	99
23) 2-butanone	11.86	43	29064	0.1027	ppbv	98
24) cis-1,2-dichloroethene	11.83	96	10241	0.0920	ppbv	95
25) ethyl acetate	11.94	43	33187	0.0967	ppbv	98
26) chloroform	12.35	83	21927	0.0997	ppbv	100
27) tetrahydrofuran	12.42	72	4938	0.0919	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	21605	0.0930	ppbv	97
30) cyclohexane	12.85	56	17731	0.0851	ppbv	95
31) carbon tetrachloride	13.02	117	20015	0.0879	ppbv	100
32) 1,2-dichloroethane	13.34	62	15626	0.0980	ppbv	97
33) benzene	13.34	78	36532	0.0957	ppbv	98
34) heptane	13.72	71	10837	0.0847	ppbv	99
35) trichloroethene	14.40	130	13409	0.0900	ppbv	95
36) 1,2-diclpropane	14.77	63	13477	0.0945	ppbv	94
37) 1,4-dioxane	15.06	88	3493	0.1007	ppbv	98
38) bromodichloromethane	15.20	83	21290	0.0883	ppbv	99
39) cis-1,3-dichloropropene	15.94	75	16638	0.0847	ppbv	97
40) 4-methyl-2-pentanone	16.21	43	31935	0.0901	ppbv	99
41) toluene	16.56	91	37261	0.0918	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	17059	0.0912	ppbv	98
43) 1,1,2-trichloroethane	17.20	97	13412	0.0946	ppbv	89
44) tetrachloroethene	17.54	166	16624	0.0878	ppbv	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6073.D Vial: 3
Acq On : 14 Nov 2008 16:16 Operator: T.WALTON
Sample : 0.095 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.62	43	29974	0.0885	ppbv	99
46) dibromochloromethane	17.93	129	18142	0.0835	ppbv	97
47) 1,2-dibromoethane	18.18	107	17895	0.0889	ppbv	100
49) chlorobenzene	19.03	112	30349	0.0923	ppbv	98
50) ethylbenzene	19.19	91	48333	0.0887	ppbv	98
51) M+P xylene	19.39	91	74242	0.1721	ppbv	100
52) O xylene	20.12	91	37304	0.0832	ppbv	100
53) styrene	20.13	104	26511	0.0797	ppbv	97
54) bromoform	20.51	173	15612	0.0746	ppbv	98
56) 1,1,2,2-tetrachloroethane	21.26	83	31154	0.0912	ppbv	99
57) 4-ethyltoluene	21.72	105	48890	0.0796	ppbv	97
58) 1,3,5-trimethylbenzene	21.83	105	42657	0.0843	ppbv	98
59) 1,2,4-trimethylbenzene	22.54	105	39979	0.0808	ppbv	99
60) 1,3-dclbenz	23.12	146	26956	0.0835	ppbv	98
61) 1,4-dclbenz	23.28	146	26215	0.0821	ppbv	98
62) benzyl chloride	23.50	91	31375	0.0750	ppbv	99
63) 1,2-dclbenz	23.99	146	24504	0.0799	ppbv	98
64) 1,2,4-trichlorobenzene	27.01	180	17989	0.0839	ppbv	97
65) hexachlorobutadiene	27.31	225	22524	0.0931	ppbv	98

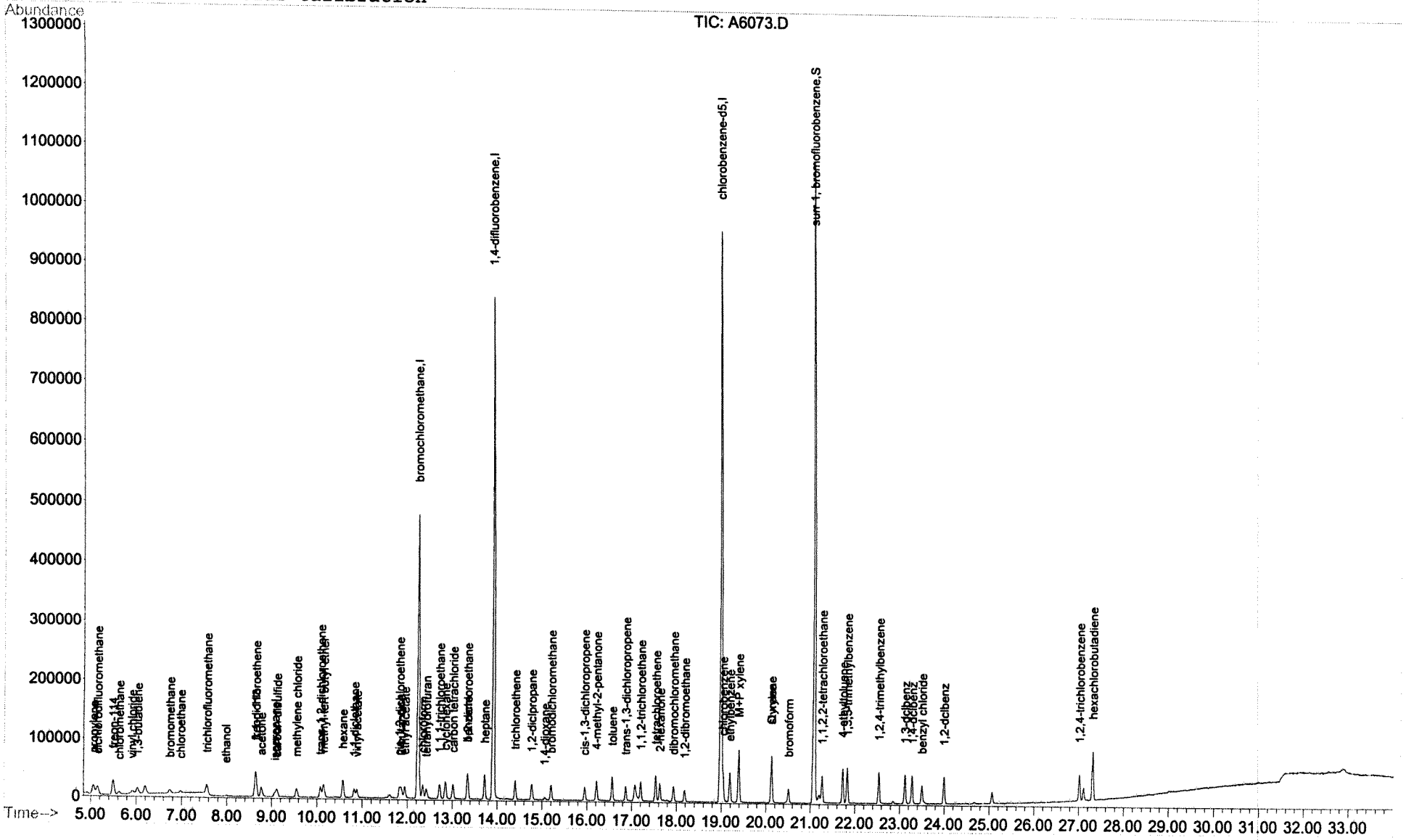
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6073.D
Acq On : 14 Nov 2008 16:16
Sample : 0.095 PPB
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008

Vial: 3
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration



Quantitation Report (QA Reviewed)

TW 11-15-08

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6074.D Vial: 3
Acq On : 14 Nov 2008 17:01 Operator: T.WALTON
Sample : 0.20 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	205921	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	780689	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	646753	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.07	174	356293	2.43	ppbv	-0.03
Spiked Amount 2.500	Range 70 - 130		Recovery = 97.03%			
Target Compounds						Qvalue
2) propylene	5.05	41	29435	0.1975	ppbv	95
3) dichlorodifluoromethane	5.15	85	61317	0.2058	ppbv	100
4) freon-114	5.49	85	64598	0.2070	ppbv	97
5) chloromethane	5.62	50	24333	0.2072	ppbv	98
6) vinyl chloride	5.92	62	25213	0.2055	ppbv	100
7) 1,3-butadiene	6.03	54	20966	0.2107	ppbv	99
8) bromomethane	6.74	94	19295	0.1943	ppbv	95
9) chloroethane	6.98	64	12233	0.2028	ppbv	95
10) trichlorofluoromethane	7.56	101	59370	0.2065	ppbv	100
11) ethanol	7.98	45	7490	0.2103	ppbv	99
12) freon-113	8.64	101	45278	0.2222	ppbv	100
13) 1,1-dichloroethene	8.64	61	37928	0.2159	ppbv	91
14) acetone	8.76	43	53055	0.1797	ppbv	94
15) isopropanol	9.05	45	29423	0.2338	ppbv	97
16) carbon disulfide	9.12	76	64619	0.2079	ppbv	98
17) methylene chloride	9.55	84	19887	0.2122	ppbv	92
18) trans-1,2-dichloroethene	10.08	61	35867	0.2101	ppbv	92
19) methyl tert butyl ether	10.14	73	60628	0.1985	ppbv	98
20) hexane	10.57	57	37882	0.2036	ppbv	100
21) 1,1-diclethane	10.82	63	44319	0.2124	ppbv	100
22) vinyl acetate	10.88	43	58894	0.1763	ppbv	99
23) 2-butanone	11.86	43	56547	0.2019	ppbv	97
24) cis-1,2-dichloroethene	11.84	96	22109	0.2007	ppbv	96
25) ethyl acetate	11.94	43	67479	0.1987	ppbv	98
26) chloroform	12.34	83	45691	0.2100	ppbv	100
27) tetrahydrofuran	12.41	72	9749	0.1833	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	46577	0.2152	ppbv	96
30) cyclohexane	12.85	56	39972	0.2059	ppbv	96
31) carbon tetrachloride	13.01	117	43818	0.2066	ppbv	100
32) 1,2-dichloroethane	13.34	62	33250	0.2239	ppbv	98
33) benzene	13.34	78	73424	0.2065	ppbv	98
34) heptane	13.72	71	23852	0.2001	ppbv	99
35) trichloroethene	14.40	130	28339	0.2042	ppbv	95
36) 1,2-diclpropane	14.77	63	27562	0.2074	ppbv	97
37) 1,4-dioxane	15.05	88	9403	0.2910	ppbv	93
38) bromodichloromethane	15.20	83	44988	0.2003	ppbv	98
39) cis-1,3-dichloropropene	15.95	75	35186	0.1922	ppbv	99
40) 4-methyl-2-pentanone	16.21	43	65866	0.1996	ppbv	100
41) toluene	16.56	91	77485	0.2049	ppbv	97
42) trans-1,3-dichloropropene	16.87	75	34459	0.1978	ppbv	98
43) 1,1,2-trichloroethane	17.20	97	26556	0.2010	ppbv	93
44) tetrachloroethene	17.53	166	35206	0.1995	ppbv	99

(#) = qualifier out of range (m) = manual integration

00086

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6074.D Vial: 3
Acq On : 14 Nov 2008 17:01 Operator: T.WALTON
Sample : 0.20 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.62	43	62218	0.1971	ppbv	99
46) dibromochloromethane	17.93	129	37783	0.1866	ppbv	100
47) 1,2-dibromoethane	18.18	107	37197	0.1983	ppbv	100
49) chlorobenzene	19.03	112	61467	0.2054	ppbv	98
50) ethylbenzene	19.19	91	98947	0.1996	ppbv	99
51) M+P xylene	19.39	91	157215	0.4004	ppbv	99
52) O xylene	20.12	91	78392	0.1922	ppbv	100
53) styrene	20.13	104	57320	0.1894	ppbv	96
54) bromoform	20.51	173	32481	0.1707	ppbv	99
56) 1,1,2,2-tetrachloroethane	21.26	83	61555	0.1980	ppbv	100
57) 4-ethyltoluene	21.72	105	100892	0.1806	ppbv	100
58) 1,3,5-trimethylbenzene	21.83	105	85829	0.1865	ppbv	97
59) 1,2,4-trimethylbenzene	22.54	105	81651	0.1814	ppbv	99
60) 1,3-dclbenz	23.12	146	54214	0.1845	ppbv	97
61) 1,4-dclbenz	23.28	146	53412	0.1838	ppbv	98
62) benzyl chloride	23.50	91	64875	0.1703	ppbv	99
63) 1,2-dclbenz	23.99	146	49626	0.1779	ppbv	98
64) 1,2,4-trichlorobenzene	27.02	180	35017	0.1795	ppbv	100
65) hexachlorobutadiene	27.31	225	45116	0.2049	ppbv	96

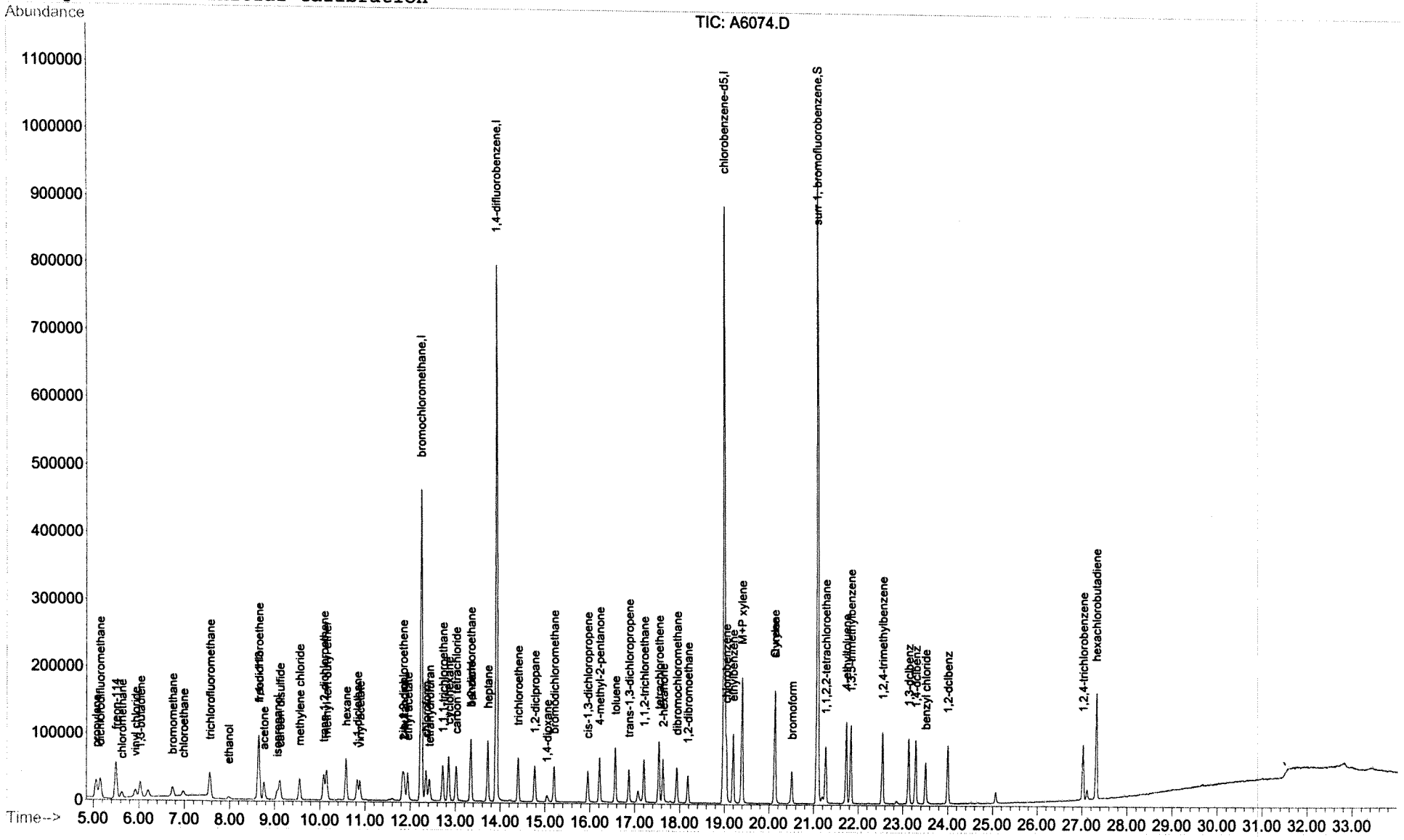
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6074.D
Acq On : 14 Nov 2008 17:01
Sample : 0.20 PPB
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008

Vial: 3
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration



A6074.D 111408A.M Sat Nov 15 08:47:24 2008 OFFLINE

TW 11-15-08

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6075.D Vial: 3
Acq On : 14 Nov 2008 17:46 Operator: T.WALTON
Sample : 0.50 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:05 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	207599	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	819303	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	685400	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.07	174	381536	2.45	ppbv	-0.03
Spiked Amount 2.500	Range 70 - 130		Recovery = 98.04%			
Target Compounds						Qvalue
2) propylene	5.05	41	66658	0.4436	ppbv	100
3) dichlorodifluoromethane	5.15	85	150750	0.5018	ppbv	100
4) freon-114	5.49	85	158616	0.5041	ppbv	99
5) chloromethane	5.62	50	58489	0.4941	ppbv	100
6) vinyl chloride	5.92	62	62641	0.5064	ppbv	98
7) 1,3-butadiene	6.03	54	53358	0.5318	ppbv	97
8) bromomethane	6.74	94	46763	0.4671	ppbv	100
9) chloroethane	6.98	64	30253	0.4974	ppbv	98
10) trichlorofluoromethane	7.56	101	140770	0.4857	ppbv	99
11) ethanol	7.98	45	12939	0.3604	ppbv	98
12) freon-113	8.64	101	109356	0.5322	ppbv	100
13) 1,1-dichloroethene	8.65	61	93050	0.5253	ppbv	91
14) acetone	8.75	43	123309	0.4143	ppbv	96
15) isopropanol	9.05	45	52334	0.4125	ppbv	100
16) carbon disulfide	9.11	76	157815	0.5037	ppbv	99
17) methylene chloride	9.55	84	49096	0.5197	ppbv	88
18) trans-1,2-dichloroethene	10.08	61	89268	0.5186	ppbv	93
19) methyl tert butyl ether	10.13	73	159266	0.5172	ppbv	100
20) hexane	10.58	57	98508	0.5251	ppbv	99
21) 1,1-diclethane	10.82	63	112038	0.5326	ppbv	100
22) vinyl acetate	10.88	43	165019	0.4901	ppbv	99
23) 2-butanone	11.85	43	147949	0.5240	ppbv	98
24) cis-1,2-dichloroethene	11.83	96	55224	0.4972	ppbv	98
25) ethyl acetate	11.93	43	178420	0.5211	ppbv	100
26) chloroform	12.34	83	114438	0.5217	ppbv	100
27) tetrahydrofuran	12.41	72	27487	0.5125	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	117054	0.5154	ppbv	96
30) cyclohexane	12.85	56	104763	0.5141	ppbv	97
31) carbon tetrachloride	13.02	117	111238	0.4998	ppbv	100
32) 1,2-dichloroethane	13.34	62	83121	0.5333	ppbv	98
33) benzene	13.35	78	186768	0.5005	ppbv	98
34) heptane	13.72	71	63542	0.5080	ppbv	99
35) trichloroethene	14.40	130	71408	0.4903	ppbv	96
36) 1,2-diclpropane	14.77	63	71732	0.5144	ppbv	96
37) 1,4-dioxane	15.03	88	18474m	0.5447	ppbv	(m) TW 11-15-08
38) bromodichloromethane	15.20	83	117405	0.4982	ppbv	98
39) cis-1,3-dichloropropene	15.94	75	92377	0.4808	ppbv	99
40) 4-methyl-2-pentanone	16.20	43	173850	0.5020	ppbv	98
41) toluene	16.56	91	210279	0.5298	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	95791	0.5240	ppbv	99
43) 1,1,2-trichloroethane	17.20	97	68642	0.4950	ppbv	93
44) tetrachloroethene	17.53	166	90277	0.4875	ppbv	98

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6075.D Vial: 3
Acq On : 14 Nov 2008 17:46 Operator: T.WALTON
Sample : 0.50 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:05 2008 Quant Results File: 111408A.RES

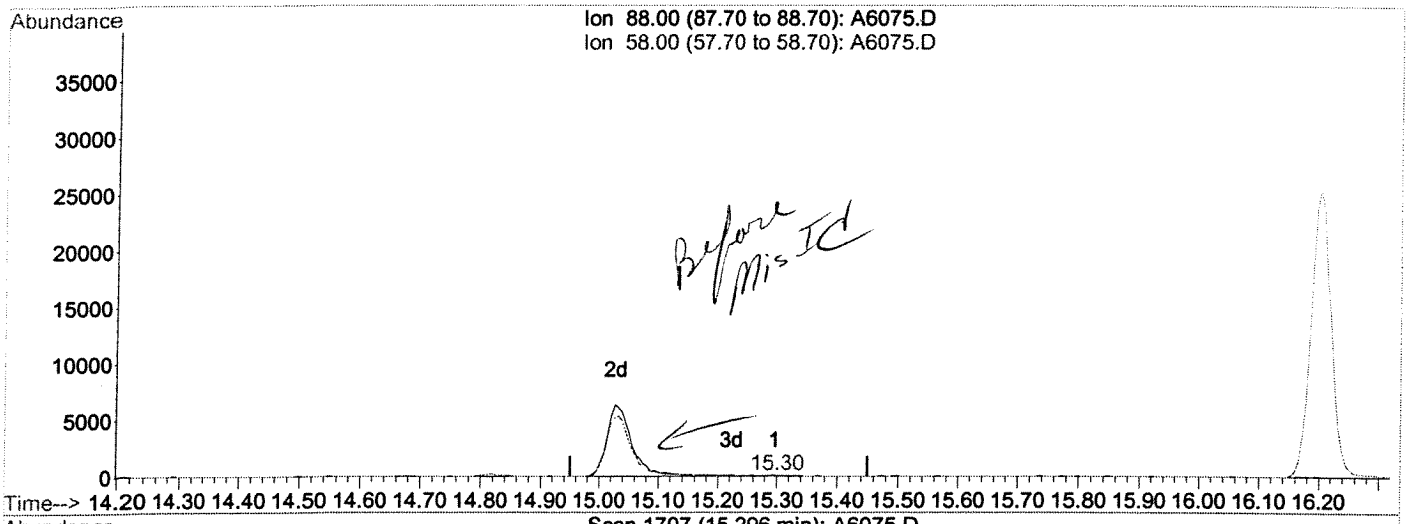
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

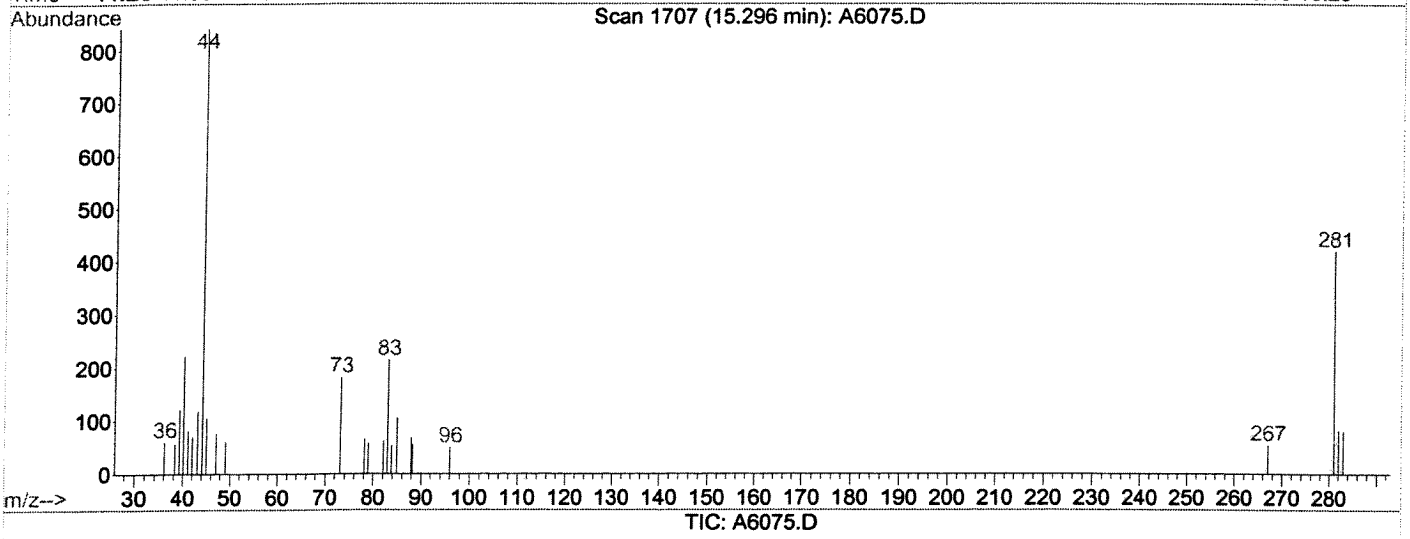
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	2-hexanone	17.62	43	164492	0.4966	ppbv	97
46)	dibromochloromethane	17.93	129	101926	0.4797	ppbv	100
47)	1,2-dibromoethane	18.17	107	98445	0.5000	ppbv	98
49)	chlorobenzene	19.03	112	162325	0.5118	ppbv	99
50)	ethylbenzene	19.19	91	273381	0.5203	ppbv	100
51)	M+P xylene	19.39	91	436292	1.0486	ppbv	100
52)	O xylene	20.12	91	220942	0.5112	ppbv	98
53)	styrene	20.13	104	162217	0.5057	ppbv	95
54)	bromoform	20.51	173	91816	0.4552	ppbv	98
56)	1,1,2,2-tetrachloroethane	21.26	83	164378	0.4989	ppbv	98
57)	4-ethyltoluene	21.72	105	287529	0.4856	ppbv	100
58)	1,3,5-trimethylbenzene	21.83	105	250071	0.5127	ppbv	98
59)	1,2,4-trimethylbenzene	22.54	105	235778	0.4943	ppbv	99
60)	1,3-dclbenz	23.12	146	148125	0.4757	ppbv	97
61)	1,4-dclbenz	23.28	146	145646	0.4730	ppbv	99
62)	benzyl chloride	23.50	91	188907	0.4680	ppbv	100
63)	1,2-dclbenz	23.99	146	137067	0.4635	ppbv	98
64)	1,2,4-trichlorobenzene	27.01	180	100156	0.4845	ppbv	99
65)	hexachlorobutadiene	27.31	225	118382	0.5072	ppbv	97

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6075.D Vial: 3
Acq On : 14 Nov 2008 17:46 Operator: T.WALTON
Sample : 0.50 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration





TIC: A6075.D

(37) 1,4-dioxane

15.30min 0.0056ppbv

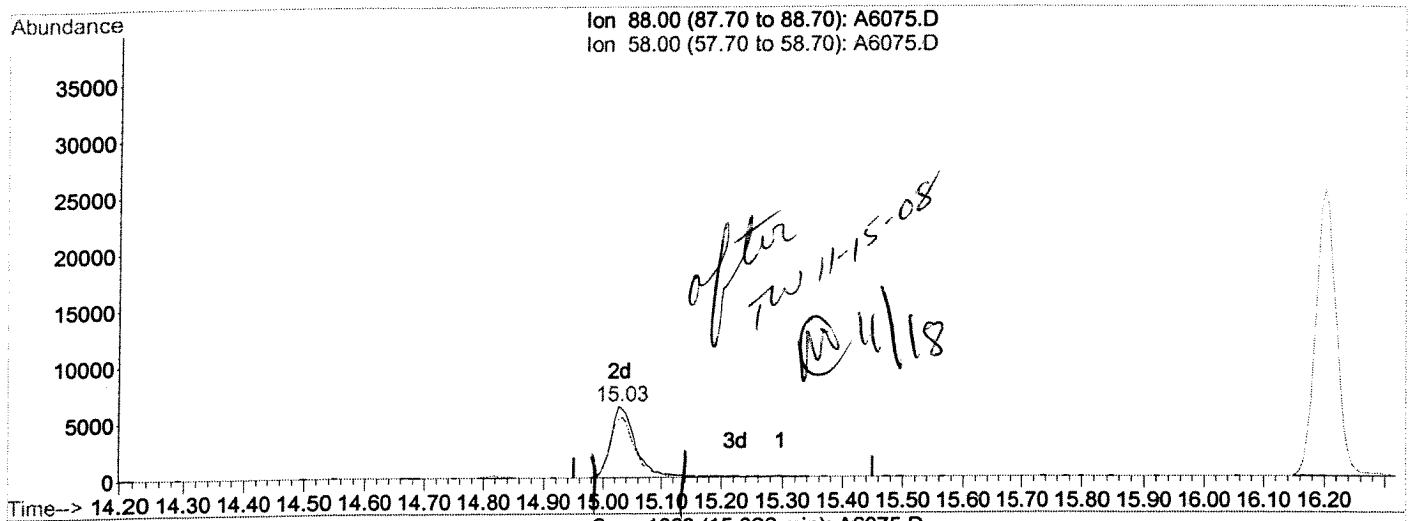
response 190

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	94.74
0.00	0.00	0.00
0.00	0.00	0.00

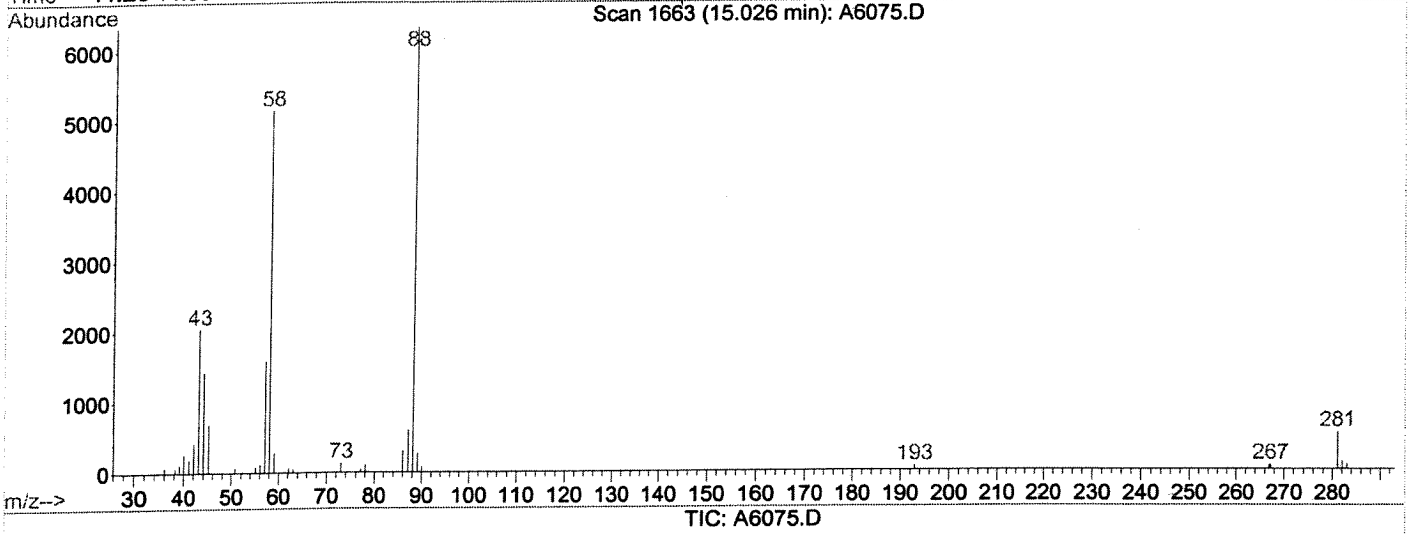
A6075.D 111408A.M Sat Nov 15 09:05:29 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6075.D Vial: 3
Acq On : 14 Nov 2008 17:46 Operator: T.WALTON
Sample : 0.50 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:05 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



after TW 11-15-08 @ 11/18



TIC: A6075.D

(37) 1,4-dioxane

15.03min 0.5447ppbv m

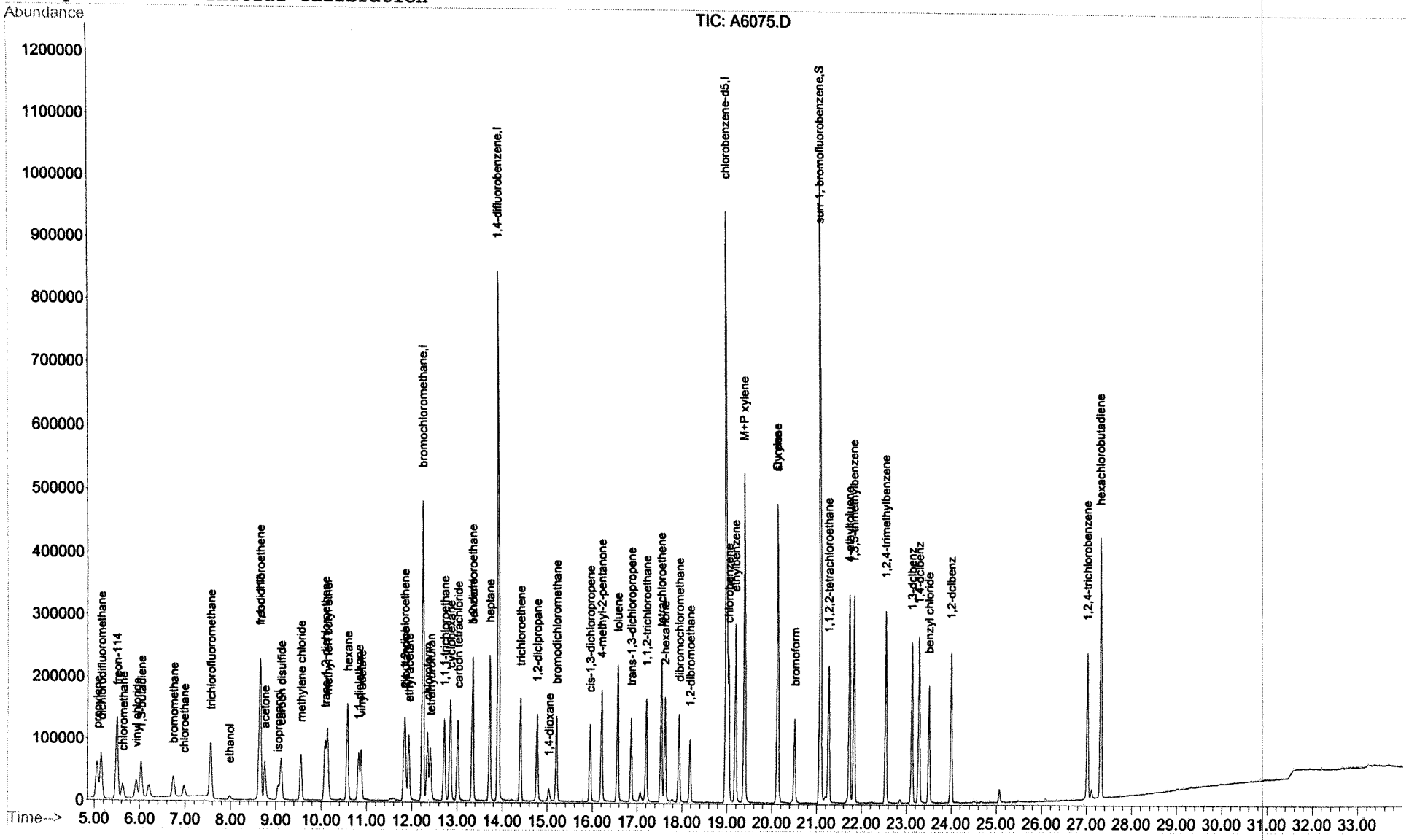
response 18474

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	0.97#
0.00	0.00	0.00
0.00	0.00	0.00

A6075.D 111408A.M Sat Nov 15 09:05:42 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6075.D Vial: 3
Acq On : 14 Nov 2008 17:46 Operator: T.WALTON
Sample : 0.50 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:05 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Initial Calibration



Data File : J:\ACQUDATA\AIR1\DATA\111408\A6076.D Vial: 4
Acq On : 14 Nov 2008 18:31 Operator: T.WALTON
Sample : 1.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

TW 11-15-08.

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	204544	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	787639	2.5000	ppbv	0.00
48) chlorobenzene-d5	18.98	117	664084	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	376680	2.50	ppbv	-0.02
Spiked Amount 2.500	Range 70 - 130		Recovery = 99.90%			
Target Compounds						Qvalue
2) propylene	5.05	41	118394	0.7996	ppbv	99
3) dichlorodifluoromethane	5.15	85	292870	0.9894	ppbv	99
4) freon-114	5.49	85	313051	1.0097	ppbv	98
5) chloromethane	5.62	50	114446	0.9812	ppbv	99
6) vinyl chloride	5.92	62	121242	0.9948	ppbv	100
7) 1,3-butadiene	6.03	54	106079	1.0730	ppbv	98
8) bromomethane	6.74	94	94717	0.9603	ppbv	100
9) chloroethane	6.98	64	57564	0.9606	ppbv	98
10) trichlorofluoromethane	7.56	101	289847	1.0149	ppbv	100
11) ethanol	7.97	45	40706	1.1507	ppbv	98
12) freon-113	8.64	101	200412	0.9900	ppbv	99
13) 1,1-dichloroethene	8.65	61	190050	1.0890	ppbv	93
14) acetone	8.75	43	181654	0.6195	ppbv	94
15) isopropanol	9.03	45	198446	1.5877	ppbv	96
16) carbon disulfide	9.12	76	322596	1.0450	ppbv	100
17) methylene chloride	9.55	84	91116	0.9789	ppbv	89
18) trans-1,2-dichloroethene	10.08	61	167089	0.9852	ppbv	92
19) methyl tert butyl ether	10.12	73	268172	0.8839	ppbv	99
20) hexane	10.58	57	182850	0.9892	ppbv	100
21) 1,1-diclethane	10.82	63	198921	0.9597	ppbv	99
22) vinyl acetate	10.88	43	261886	0.7894	ppbv	98
23) 2-butanone	11.85	43	247316	0.8890	ppbv	98
24) cis-1,2-dichloroethene	11.83	96	98841	0.9033	ppbv	99
25) ethyl acetate	11.93	43	298933	0.8862	ppbv	100
26) chloroform	12.34	83	204230	0.9449	ppbv	100
27) tetrahydrofuran	12.40	72	47482	0.8986	ppbv	98
29) 1,1,1-trichloroethane	12.72	97	208577	0.9552	ppbv	96
30) cyclohexane	12.84	56	194356	0.9921	ppbv	98
31) carbon tetrachloride	13.02	117	204126	0.9540	ppbv	100
32) 1,2-dichloroethane	13.33	62	139256	0.9293	ppbv	99
33) benzene	13.34	78	314443	0.8765	ppbv	98
34) heptane	13.72	71	115779	0.9628	ppbv	98
35) trichloroethene	14.40	130	130787	0.9340	ppbv	97
36) 1,2-diclpropane	14.77	63	115741	0.8634	ppbv	96
37) 1,4-dioxane	15.02	88	57692	1.7695	ppbv	90
38) bromodichloromethane	15.20	83	208995	0.9225	ppbv	99
39) cis-1,3-dichloropropene	15.95	75	155525	0.8420	ppbv	99
40) 4-methyl-2-pentanone	16.20	43	319925	0.9609	ppbv	98
41) toluene	16.56	91	335479	0.8792	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	158373	0.9011	ppbv	98
43) 1,1,2-trichloroethane	17.20	97	110556	0.8293	ppbv	93
44) tetrachloroethene	17.54	166	160002	0.8987	ppbv	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6076.D Vial: 4
Acq On : 14 Nov 2008 18:31 Operator: T.WALTON
Sample : 1.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.62	43	317903	0.9983	ppbv	96
46) dibromochloromethane	17.93	129	181269	0.8874	ppbv	99
47) 1,2-dibromoethane	18.18	107	158800	0.8389	ppbv	99
49) chlorobenzene	19.03	112	261262	0.8501	ppbv	99
50) ethylbenzene	19.18	91	431518	0.8476	ppbv	100
51) M+P xylene	19.39	91	689344	1.7100	ppbv	100
52) O xylene	20.12	91	354254	0.8460	ppbv	98
53) styrene	20.13	104	262878	0.8458	ppbv	94
54) bromoform	20.51	173	162722	0.8327	ppbv	99
56) 1,1,2,2-tetrachloroethane	21.26	83	263554	0.8256	ppbv	99
57) 4-ethyltoluene	21.73	105	476982	0.8314	ppbv	100
58) 1,3,5-trimethylbenzene	21.82	105	414895	0.8779	ppbv	98
59) 1,2,4-trimethylbenzene	22.54	105	397401	0.8599	ppbv	99
60) 1,3-dclbenz	23.12	146	244775	0.8113	ppbv	98
61) 1,4-dclbenz	23.28	146	242262	0.8120	ppbv	98
62) benzyl chloride	23.50	91	326879	0.8357	ppbv	98
63) 1,2-dclbenz	23.99	146	223065	0.7786	ppbv	98
64) 1,2,4-trichlorobenzene	27.01	180	147704	0.7375	ppbv	99
65) hexachlorobutadiene	27.31	225	176356	0.7799	ppbv	96

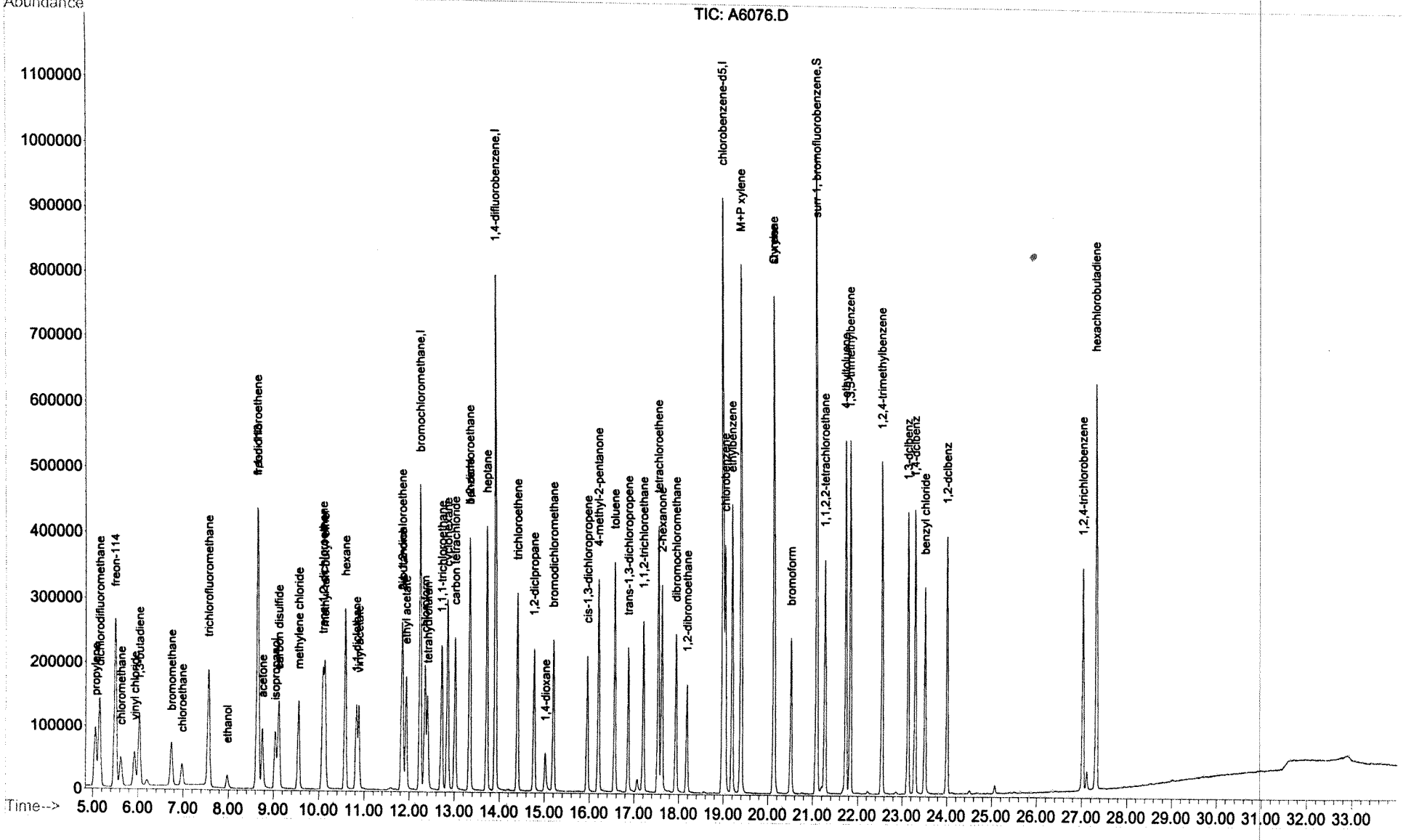
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6076.D
Acq On : 14 Nov 2008 18:31
Sample : 1.0 PPB
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008

Vial: 4
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration



A6076.D 111408A.M Sat Nov 15 08:47:32 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6077.D Vial: 4
Acq On : 14 Nov 2008 19:16 Operator: T.WALTON
Sample : 2.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

TW 11-15-08

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	206387	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	786696	2.5000	ppbv	0.00
48) chlorobenzene-d5	18.98	117	655993	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	367473	2.47	ppbv	-0.03
Spiked Amount 2.500	Range 70 - 130		Recovery = 98.66%			
Target Compounds						Qvalue
2) propylene	5.06	41	298118	1.9954	ppbv	97
3) dichlorodifluoromethane	5.15	85	733965	2.4575	ppbv	100
4) freon-114	5.50	85	780587	2.4952	ppbv	97
5) chloromethane	5.63	50	290671	2.4697	ppbv	100
6) vinyl chloride	5.92	62	311758	2.5352	ppbv	100
7) 1,3-butadiene	6.02	54	273404	2.7408	ppbv	98
8) bromomethane	6.74	94	238111	2.3925	ppbv	98
9) chloroethane	6.98	64	153443	2.5378	ppbv	99
10) trichlorofluoromethane	7.56	101	723556	2.5110	ppbv	99
11) ethanol	7.97	45	95731	2.6821	ppbv	100
12) freon-113	8.64	101	544573	2.6661	ppbv	100
13) 1,1-dichloroethene	8.65	61	493427	2.8022	ppbv	92
14) acetone	8.74	43	517148	1.7478	ppbv	95
15) isopropanol	9.02	45	449081	3.5609	ppbv	94
16) carbon disulfide	9.12	76	809800	2.5999	ppbv	100
17) methylene chloride	9.55	84	245530	2.6142	ppbv	88
18) trans-1,2-dichloroethene	10.08	61	456319	2.6665	ppbv	92
19) methyl tert butyl ether	10.12	73	819091	2.6757	ppbv	100
20) hexane	10.58	57	522139	2.7994	ppbv	99
21) 1,1-diclethane	10.83	63	558041	2.6684	ppbv	100
22) vinyl acetate	10.88	43	860680	2.5710	ppbv	98
23) 2-butanone	11.84	43	728530	2.5954	ppbv	98
24) cis-1,2-dichloroethene	11.83	96	280890	2.5440	ppbv	99
25) ethyl acetate	11.92	43	884979	2.6001	ppbv	99
26) chloroform	12.35	83	571961	2.6226	ppbv	99
27) tetrahydrofuran	12.39	72	150330	2.8196	ppbv	98
29) 1,1,1-trichloroethane	12.71	97	587607	2.6943	ppbv	96
30) cyclohexane	12.85	56	555257	2.8378	ppbv	98
31) carbon tetrachloride	13.01	117	586068	2.7422	ppbv	99
32) 1,2-dichloroethane	13.33	62	403062	2.6931	ppbv	99
33) benzene	13.34	78	922373	2.5742	ppbv	98
34) heptane	13.72	71	339700	2.8282	ppbv	97
35) trichloroethene	14.40	130	361882	2.5876	ppbv	97
36) 1,2-diclpropane	14.77	63	353680	2.6415	ppbv	96
37) 1,4-dioxane	15.00	88	141458	4.3440	ppbv	94
38) bromodichloromethane	15.20	83	602353	2.6620	ppbv	100
39) cis-1,3-dichloropropene	15.95	75	484957	2.6288	ppbv	99
40) 4-methyl-2-pentanone	16.19	43	907426	2.7288	ppbv	96
41) toluene	16.56	91	1054523	2.7670	ppbv	100
42) trans-1,3-dichloropropene	16.86	75	505084	2.8773	ppbv	98
43) 1,1,2-trichloroethane	17.20	97	337110	2.5319	ppbv	93
44) tetrachloroethene	17.53	166	462489	2.6008	ppbv	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6077.D Vial: 4
Acq On : 14 Nov 2008 19:16 Operator: T.WALTON
Sample : 2.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

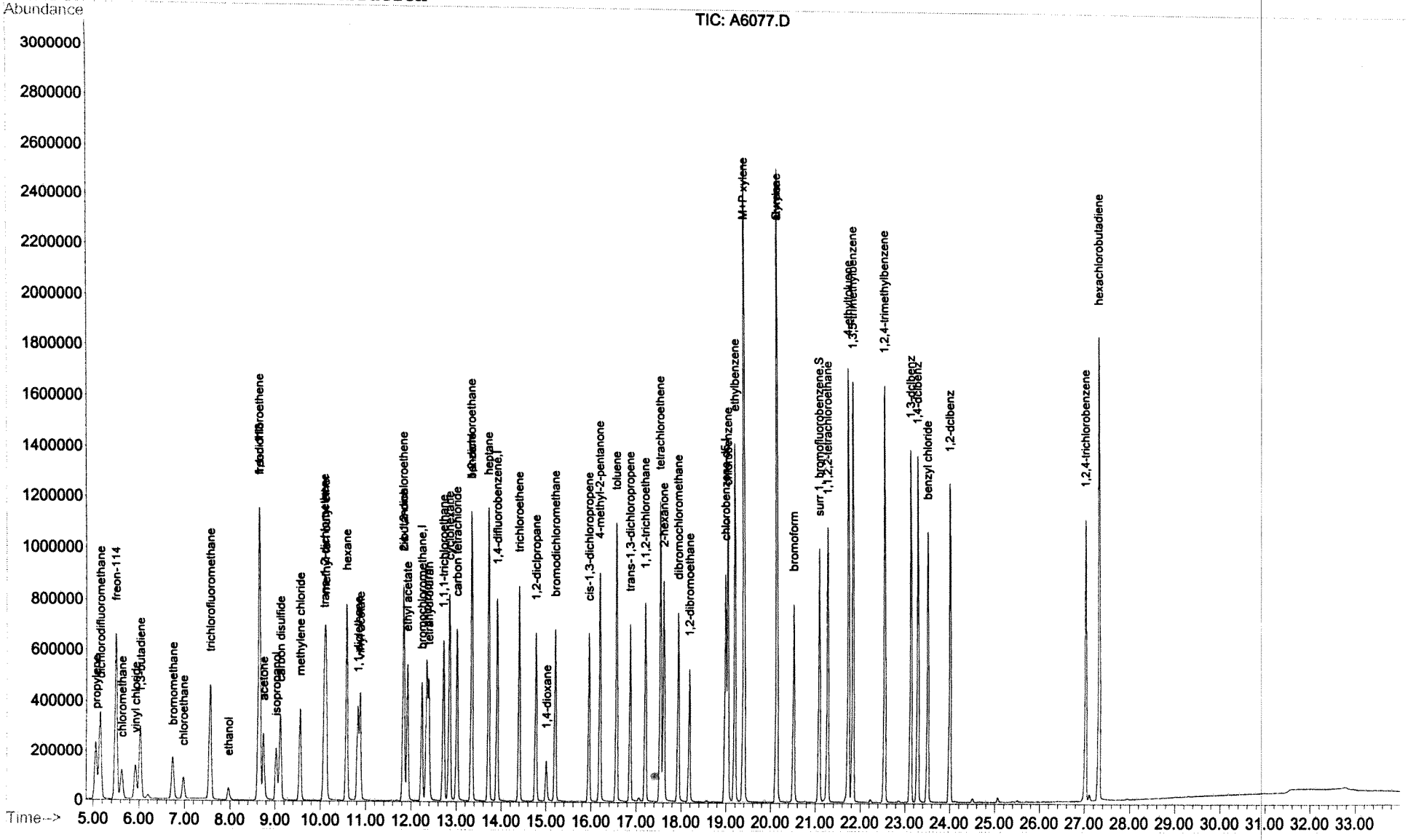
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.61	43	901958	2.8358	ppbv	95
46) dibromochloromethane	17.93	129	552777	2.7094	ppbv	100
47) 1,2-dibromoethane	18.18	107	493387	2.6097	ppbv	100
49) chlorobenzene	19.04	112	798351	2.6298	ppbv	100
50) ethylbenzene	19.19	91	1386713	2.7576	ppbv	99
51) M+P xylene	19.38	91	2182325	5.4804	ppbv	99
52) O xylene	20.12	91	1144770	2.7677	ppbv	97
53) styrene	20.13	104	866127	2.8211	ppbv	94
54) bromoform	20.51	173	537128	2.7824	ppbv	99
56) 1,1,2,2-tetrachloroethane	21.26	83	801749	2.5427	ppbv	100
57) 4-ethyltoluene	21.73	105	1534570	2.7078	ppbv	99
58) 1,3,5-trimethylbenzene	21.83	105	1322346	2.8326	ppbv	97
59) 1,2,4-trimethylbenzene	22.54	105	1277721	2.7989	ppbv	97
60) 1,3-dclbenz	23.12	146	797098	2.6744	ppbv	97
61) 1,4-dclbenz	23.27	146	793948	2.6940	ppbv	98
62) benzyl chloride	23.50	91	1112805	2.8802	ppbv	97
63) 1,2-dclbenz	23.99	146	726003	2.5653	ppbv	98
64) 1,2,4-trichlorobenzene	27.01	180	477087	2.4115	ppbv	99
65) hexachlorobutadiene	27.31	225	535297	2.3963	ppbv	97

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6077.D Vial: 4
Acq On : 14 Nov 2008 19:16 Operator: T.WALTON
Sample : 2.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration



A6077.D 111408A.M Sat Nov 15 08:47:37 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: 111408A.RES

TW 11-15-08

updated RT from this standard.

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	200909	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	773231	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	641830	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	365403	2.51	ppbv	-0.02
Spiked Amount 2.500	Range 70 - 130		Recovery = 100.27%			
Target Compounds						Qvalue
2) propylene	5.06	41	594738	4.0894	ppbv	97
3) dichlorodifluoromethane	5.16	85	1444892	4.9698	ppbv	99
4) freon-114	5.49	85	1550755	5.0922	ppbv	97
5) chloromethane	5.63	50	573624	5.0068	ppbv	100
6) vinyl chloride	5.92	62	625259	5.2232	ppbv	100
7) 1,3-butadiene	6.03	54	552662	5.6914	ppbv	96
8) bromomethane	6.74	94	469373	4.8448	ppbv	100
9) chloroethane	6.97	64	302105	5.1328	ppbv	99
10) trichlorofluoromethane	7.56	101	1424162	5.0771	ppbv	100
11) ethanol	7.96	45	106924	3.0773	ppbv	99
12) freon-113	8.64	101	1083790	5.4506	ppbv	99
13) 1,1-dichloroethene	8.64	61	976881	5.6990	ppbv	90
14) acetone	8.73	43	1024405	3.5565	ppbv	94
15) isopropanol	9.01	45	450647	3.6707	ppbv	94
16) carbon disulfide	9.11	76	1599797	5.2762	ppbv	100
17) methylene chloride	9.55	84	488194	5.3396	ppbv	88
18) trans-1,2-dichloroethene	10.08	61	911230	5.4700	ppbv	91
19) methyl tert butyl ether	10.11	73	1681571	5.6429	ppbv	100
20) hexane	10.58	57	1058129	5.8277	ppbv	98
21) 1,1-diclethane	10.82	63	1109296	5.4489	ppbv	100
22) vinyl acetate	10.87	43	1774315	5.4448	ppbv	98
23) 2-butanone	11.83	43	1456598	5.3306	ppbv	97
24) cis-1,2-dichloroethene	11.83	96	571634	5.3184	ppbv	99
25) ethyl acetate	11.92	43	1758070	5.3062	ppbv	98
26) chloroform	12.34	83	1137536	5.3582	ppbv	99
27) tetrahydrofuran	12.38	72	313111	6.0328	ppbv	97
29) 1,1,1-trichloroethane	12.72	97	1179093	5.5006	ppbv	97
30) cyclohexane	12.85	56	1114350	5.7944	ppbv	96
31) carbon tetrachloride	13.02	117	1182620	5.6298	ppbv	100
32) 1,2-dichloroethane	13.33	62	813431	5.5297	ppbv	99
33) benzene	13.34	78	1863727	5.2919	ppbv	99
34) heptane	13.72	71	704793	5.9699	ppbv	96
35) trichloroethene	14.40	130	740148	5.3844	ppbv	97
36) 1,2-diclpropane	14.77	63	726175	5.5180	ppbv	96
37) 1,4-dioxane	15.00	88	177852m	5.5567	ppbv	(m) TW 11-15-08
38) bromodichloromethane	15.20	83	1226024	5.5125	ppbv	100
39) cis-1,3-dichloropropene	15.95	75	1009657	5.5682	ppbv	99
40) 4-methyl-2-pentanone	16.19	43	1811408	5.5420	ppbv	96
41) toluene	16.56	91	2169827	5.7926	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	1050232	6.0869	ppbv	97
43) 1,1,2-trichloroethane	17.20	97	697185	5.3274	ppbv	92
44) tetrachloroethene	17.54	166	959438	5.4893	ppbv	98

(#) = qualifier out of range (m) = manual integration

00100

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

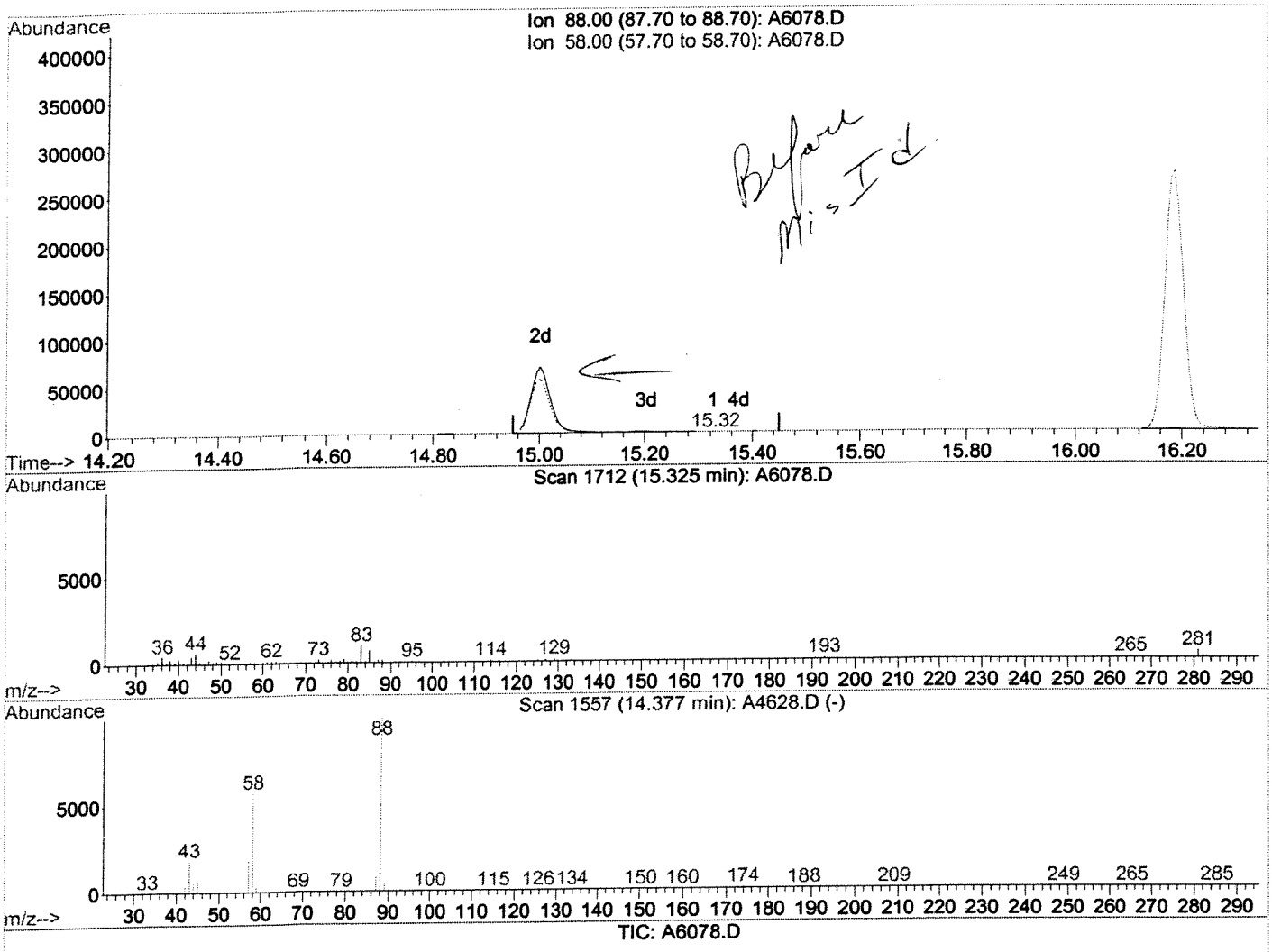
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	2-hexanone	17.60	43	1773396	5.6728	ppbv	93
46)	dibromochloromethane	17.93	129	1160396	5.7866	ppbv	99
47)	1,2-dibromoethane	18.18	107	1016757	5.4717	ppbv	100
49)	chlorobenzene	19.03	112	1638309	5.5158	ppbv	100
50)	ethylbenzene	19.19	91	2824789	5.7412	ppbv	98
51)	M+P xylene	19.39	91	4371717	11.2207	ppbv	96
52)	O xylene	20.12	91	2360889	5.8338	ppbv	96
53)	styrene	20.13	104	1800369	5.9935	ppbv	94
54)	bromoform	20.51	173	1160376	6.1436	ppbv	99
56)	1,1,2,2-tetrachloroethane	21.26	83	1638833	5.3121	ppbv	100
57)	4-ethyltoluene	21.73	105	3138812	5.6608	ppbv	97
58)	1,3,5-trimethylbenzene	21.83	105	2695598	5.9017	ppbv	96
59)	1,2,4-trimethylbenzene	22.54	105	2634401	5.8982	ppbv	96
60)	1,3-dclbenz	23.12	146	1662189	5.7000	ppbv	98
61)	1,4-dclbenz	23.28	146	1669900	5.7913	ppbv	98
62)	benzyl chloride	23.50	91	2349543	6.2154	ppbv	96
63)	1,2-dclbenz	23.99	146	1528887	5.5214	ppbv	98
64)	1,2,4-trichlorobenzene	27.01	180	1047908	5.4137	ppbv	99
65)	hexachlorobutadiene	27.31	225	1072484	4.9071	ppbv	96

(#) = qualifier out of range (m) = manual integration

00101

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



(37) 1,4-dioxane

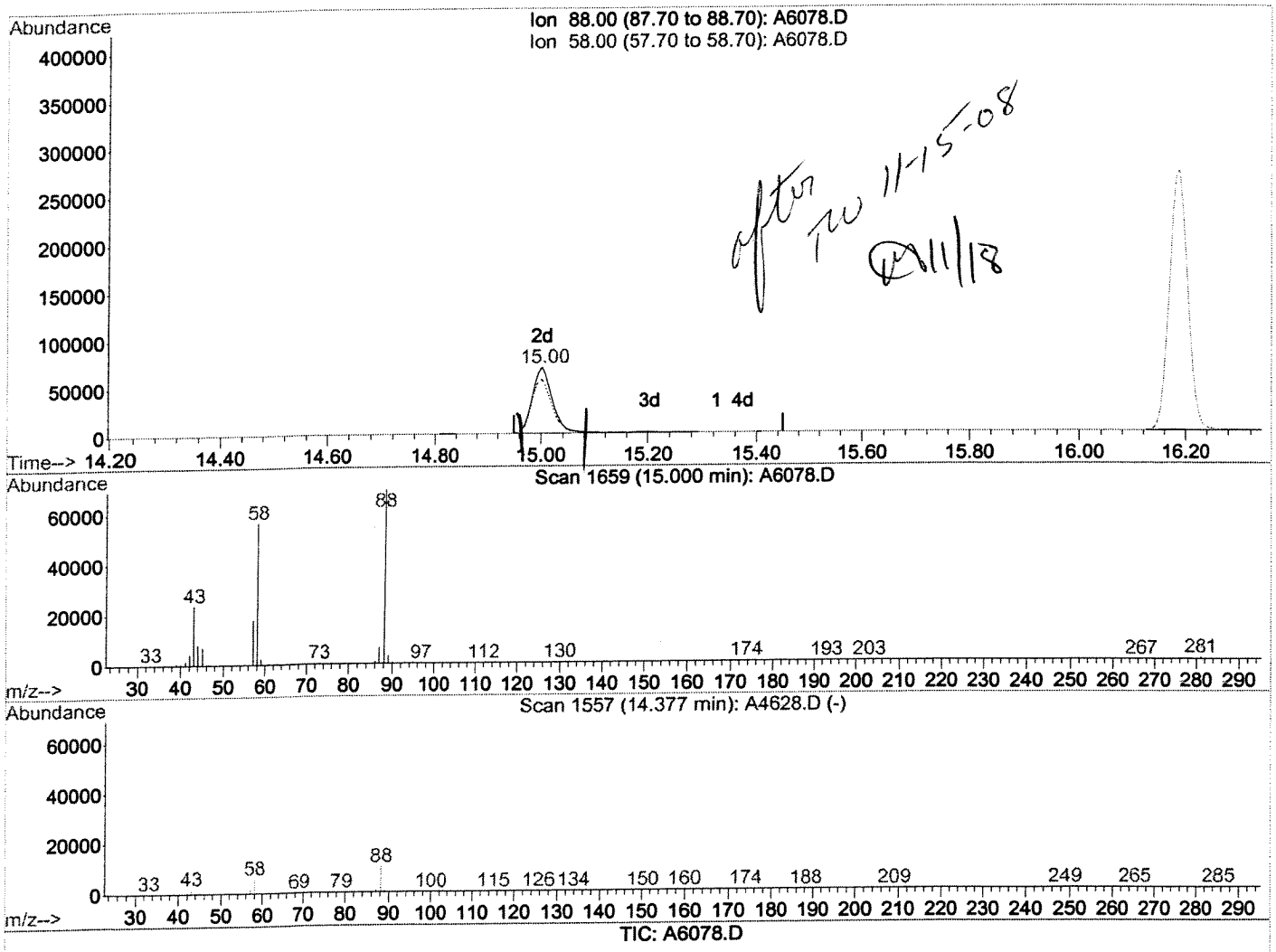
15.32min 0.0043ppbv

response 139

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	84.89
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



after TW 11-15-08 @ 11/18

(37) 1,4-dioxane

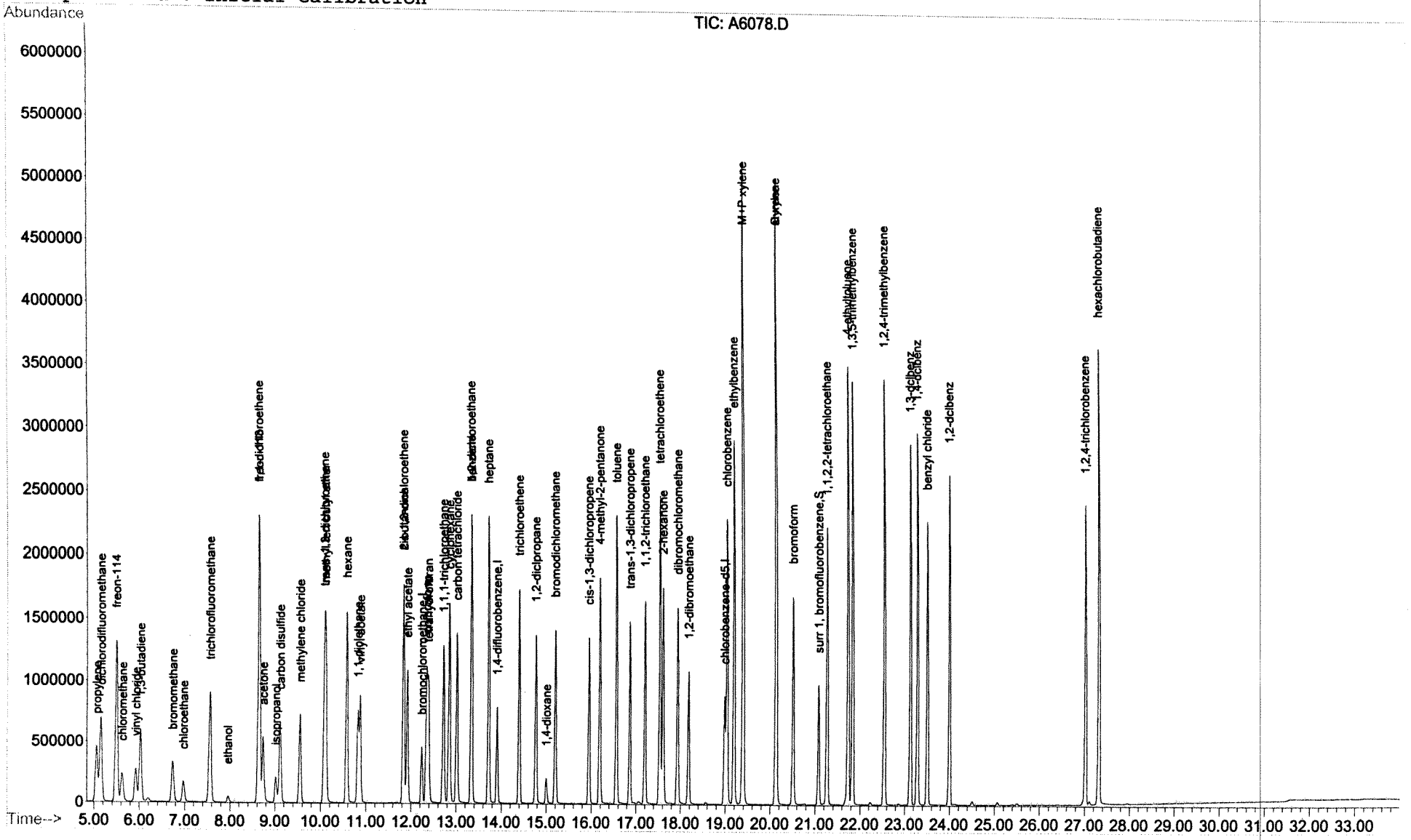
15.00min 5.5567ppbv m

response 177852

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	0.07#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Initial Calibration



TW 11-15-00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6079.D Vial: 4
Acq On : 14 Nov 2008 20:50 Operator: T.WALTON
Sample : 7.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:10 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	203631	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	777474	2.5000	ppbv	0.00
48) chlorobenzene-d5	18.98	117	657464	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.07	174	382580	2.56	ppbv	-0.03
Spiked Amount 2.500	Range 70 - 130		Recovery = 102.49%			
Target Compounds						Qvalue
2) propylene	5.05	41	888654	6.0286	ppbv	97
3) dichlorodifluoromethane	5.15	85	2156474	7.3182	ppbv	99
4) freon-114	5.50	85	2306292	7.4720	ppbv	96
5) chloromethane	5.62	50	858270	7.3911	ppbv	99
6) vinyl chloride	5.92	62	937718	7.7286	ppbv	100
7) 1,3-butadiene	6.03	54	829673	8.4299	ppbv	97
8) bromomethane	6.74	94	704399	7.1735	ppbv	100
9) chloroethane	6.98	64	456054	7.6448	ppbv	100
10) trichlorofluoromethane	7.56	101	2113406	7.4335	ppbv	99
11) ethanol	7.96	45	193140	5.4844	ppbv	99
12) freon-113	8.64	101	1627935	8.0777	ppbv	98
13) 1,1-dichloroethene	8.64	61	1474279	8.4858	ppbv	89
14) acetone	8.74	43	1519164	5.2037	ppbv	93
15) isopropanol	9.01	45	926888	7.4490	ppbv	92
16) carbon disulfide	9.12	76	2387015	7.7672	ppbv	100
17) methylene chloride	9.55	84	745181	8.0415	ppbv	86
18) trans-1,2-dichloroethene	10.08	61	1367803	8.1010	ppbv	90
19) methyl tert butyl ether	10.11	73	2525075	8.3602	ppbv	99
20) hexane	10.57	57	1592430	8.6532	ppbv	98
21) 1,1-diclethane	10.83	63	1663844	8.0636	ppbv	99
22) vinyl acetate	10.87	43	2661051	8.0567	ppbv	97
23) 2-butanone	11.84	43	2194058	7.9221	ppbv	97
24) cis-1,2-dichloroethene	11.82	96	865407	7.9440	ppbv	100
25) ethyl acetate	11.92	43	2574156	7.6654	ppbv	96
26) chloroform	12.34	83	1709793	7.9460	ppbv	99
27) tetrahydrofuran	12.38	72	471588	8.9647	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	1770818	8.2159	ppbv	97
30) cyclohexane	12.85	56	1677928	8.6773	ppbv	96
31) carbon tetrachloride	13.01	117	1791754	8.4830	ppbv	100
32) 1,2-dichloroethane	13.33	62	1219837	8.2472	ppbv	100
33) benzene	13.34	78	2775457	7.8377	ppbv	100
34) heptane	13.72	71	1063708	8.9609	ppbv	96
35) trichloroethene	14.40	130	1124932	8.1390	ppbv	97
36) 1,2-diclpropane	14.77	63	1091440	8.2483	ppbv	97
37) 1,4-dioxane	15.00	88	335138m	10.4138	ppbv	
38) bromodichloromethane	15.20	83	1845861	8.2542	ppbv	99
39) cis-1,3-dichloropropene	15.95	75	1524060	8.3593	ppbv	98
40) 4-methyl-2-pentanone	16.19	43	2694350	8.1984	ppbv	94
41) toluene	16.56	91	3226001	8.5652	ppbv	98
42) trans-1,3-dichloropropene	16.86	75	1587640	9.1514	ppbv	97
43) 1,1,2-trichloroethane	17.20	97	1051241	7.9890	ppbv	92
44) tetrachloroethene	17.53	166	1465095	8.3366	ppbv	99

(m) TW 11-15-08

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6079.D Vial: 4
Acq On : 14 Nov 2008 20:50 Operator: T.WALTON
Sample : 7.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:10 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

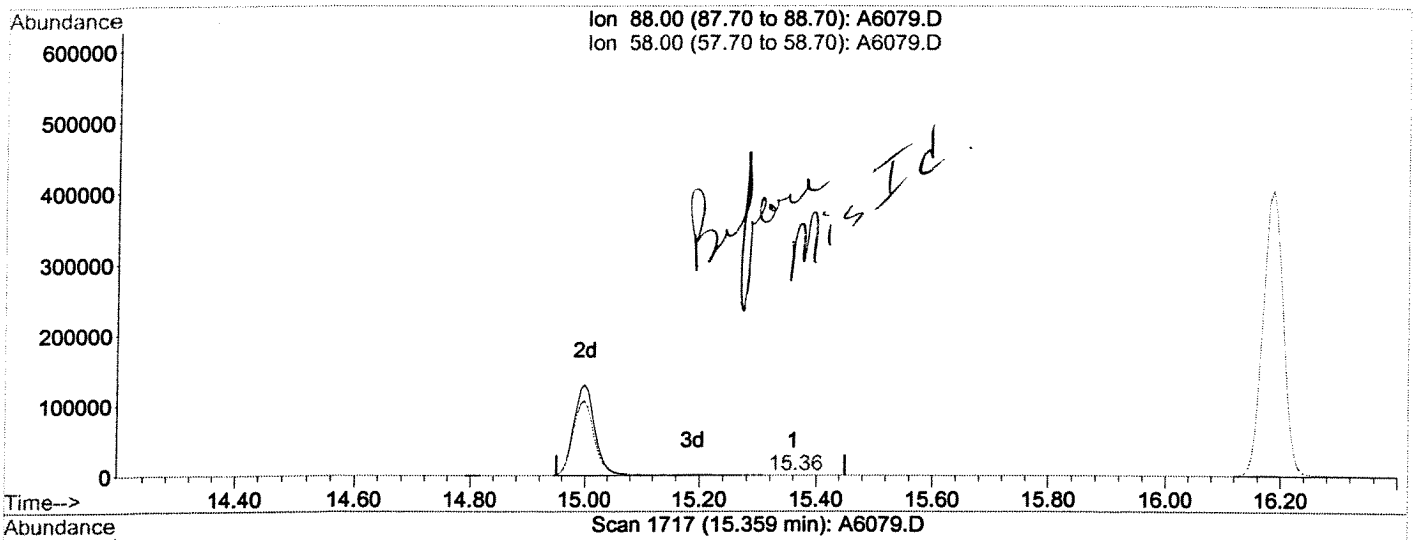
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	2-hexanone	17.61	43	2605557	8.2892	ppbv	92
46)	dibromochloromethane	17.93	129	1768046	8.7688	ppbv	99
47)	1,2-dibromoethane	18.18	107	1538372	8.2335	ppbv	99
49)	chlorobenzene	19.03	112	2459216	8.0827	ppbv	99
50)	ethylbenzene	19.19	91	4174631	8.2829	ppbv	96
51)	M+P xylene	19.39	91	6345008	15.8982	ppbv	94
52)	O xylene	20.13	91	3513211	8.4748	ppbv	95
53)	styrene	20.13	104	2704595	8.7895	ppbv	95
54)	bromoform	20.51	173	1788004	9.2414	ppbv	99
56)	1,1,2,2-tetrachloroethane	21.26	83	2462549	7.7922	ppbv	99
57)	4-ethyltoluene	21.72	105	4654069	8.1939	ppbv	95
58)	1,3,5-trimethylbenzene	21.83	105	4029644	8.6127	ppbv	94
59)	1,2,4-trimethylbenzene	22.54	105	3946207	8.6251	ppbv	95
60)	1,3-dclbenz	23.12	146	2540841	8.5059	ppbv	99
61)	1,4-dclbenz	23.28	146	2551530	8.6384	ppbv	98
62)	benzyl chloride	23.50	91	3568040	9.2143	ppbv	94
63)	1,2-dclbenz	23.99	146	2331398	8.2194	ppbv	98
64)	1,2,4-trichlorobenzene	27.02	180	1649891	8.3210	ppbv	99
65)	hexachlorobutadiene	27.31	225	1649859	7.3693	ppbv	95

(#) = qualifier out of range (m) = manual integration

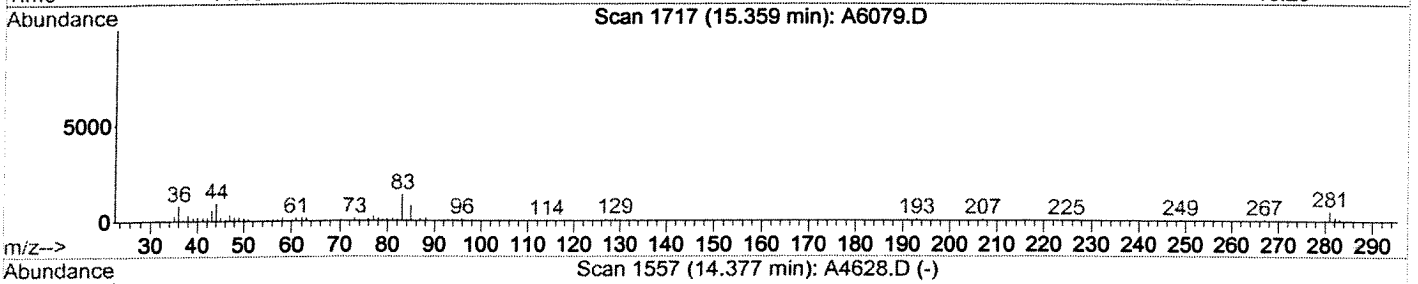
Quantitation Report (Quan)

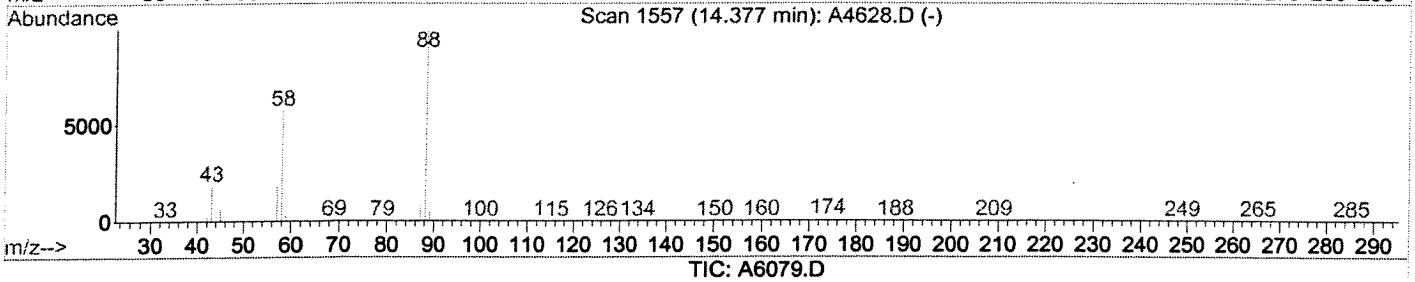
Data File : J:\ACQUDATA\AIR1\DATA\111408\A6079.D Vial: 4
Acq On : 14 Nov 2008 20:50 Operator: T.WALTON
Sample : 7.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



Before MisId.





TIC: A6079.D

(37) 1,4-dioxane

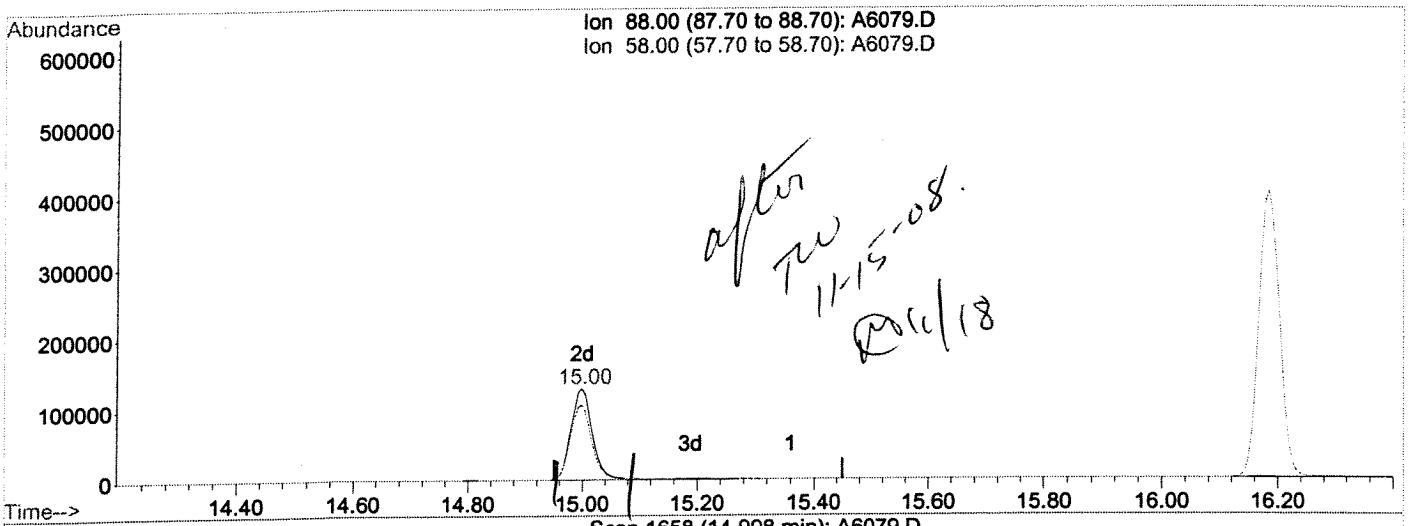
15.36min 0.0044ppbv

response 141

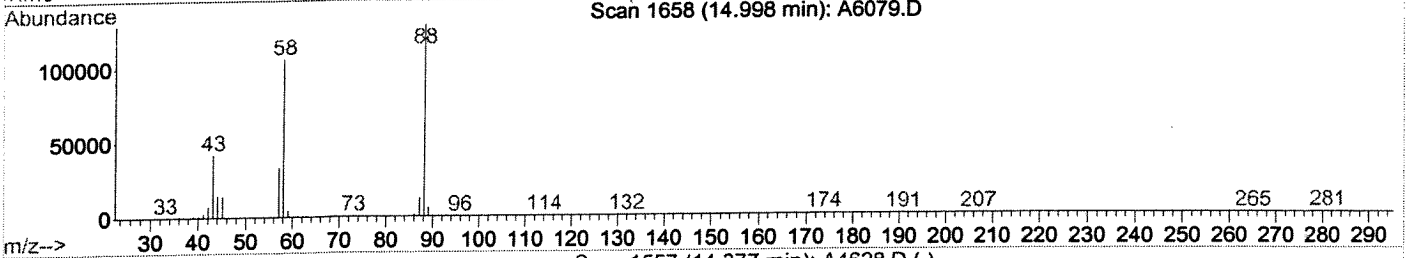
Ion	Exp%	Act%
88.00	100	100
58.00	91.80	85.82
0.00	0.00	0.00
0.00	0.00	0.00

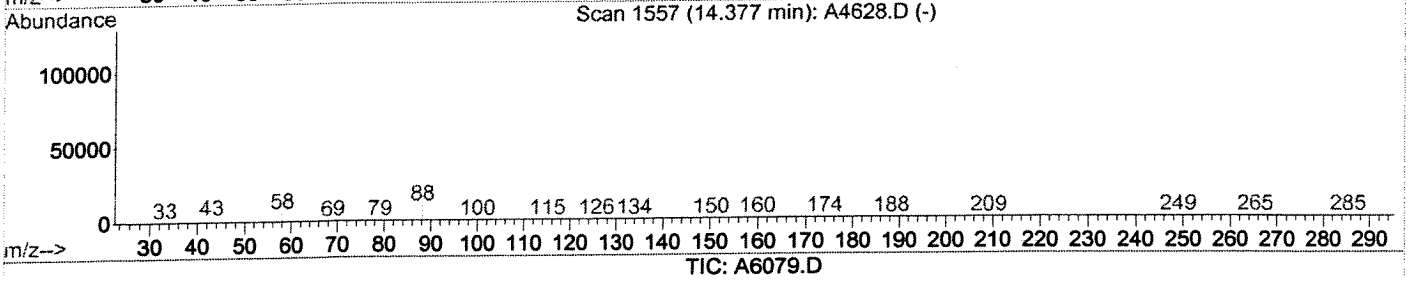
Data File : J:\ACQUDATA\AIR1\DATA\111408\A6079.D Vial: 4
Acq On : 14 Nov 2008 20:50 Operator: T.WALTON
Sample : 7.5 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:10 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



after TW 11-15-08.





(37) 1,4-dioxane

15.00min 10.4138ppbv m

response 335138

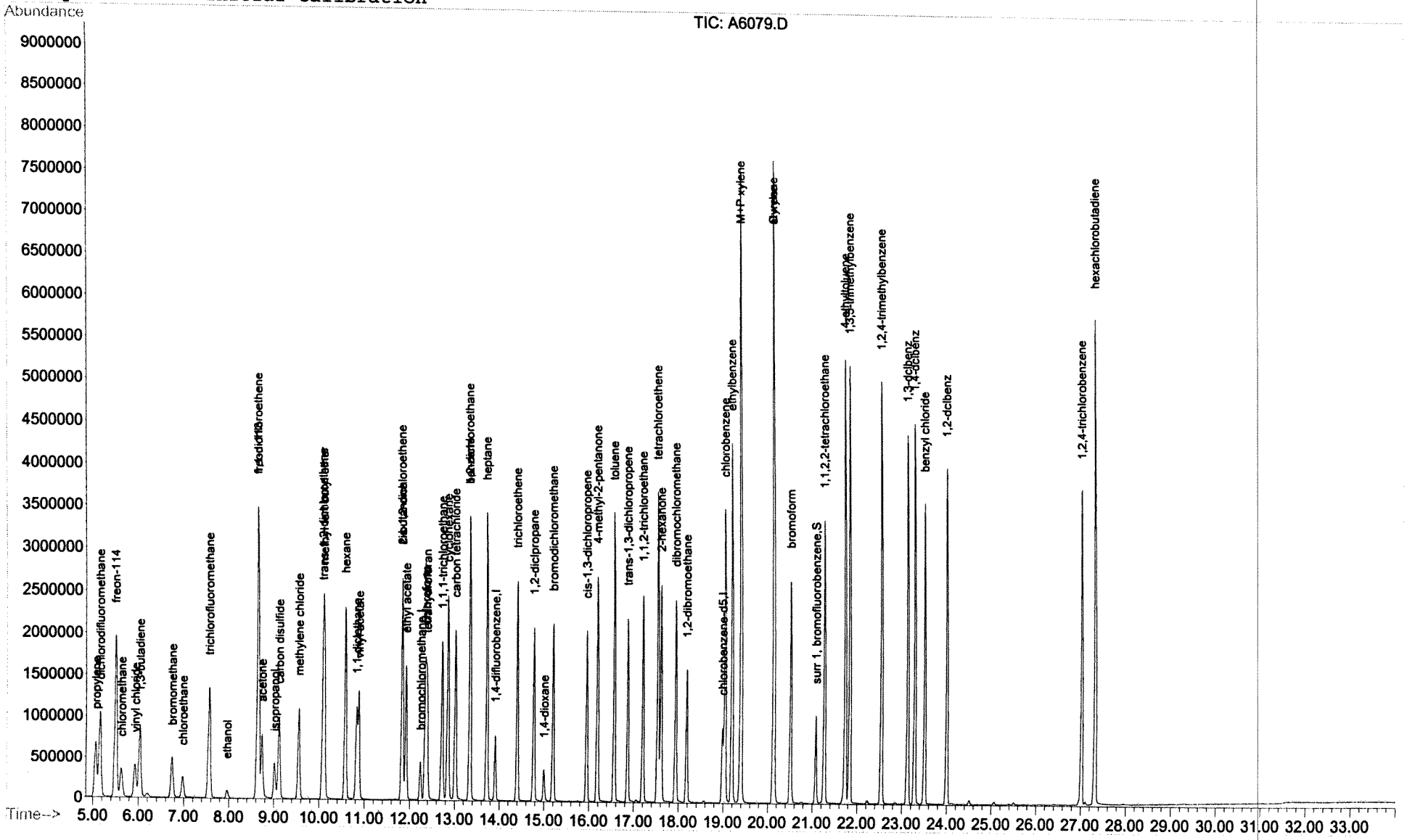
Ion	Exp%	Act%
88.00	100	100
58.00	91.80	0.04#
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6079.D
Acq On : 14 Nov 2008 20:50
Sample : 7.5 PPB
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:10 2008

Vial: 4
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Initial Calibration



A6079.D 111408A.M Sat Nov 15 09:10:28 2008 OFFLINE

TW 11-15-08

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6080.D Vial: 4
Acq On : 14 Nov 2008 21:41 Operator: T.WALTON
Sample : 10.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	209517	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	828689	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	702296	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.07	174	414387	2.60	ppbv	-0.03
Spiked Amount 2.500	Range 70 - 130		Recovery = 103.92%			
Target Compounds						Qvalue
2) propylene	5.06	41	1170866	7.7200	ppbv	97
3) dichlorodifluoromethane	5.16	85	2868277	9.4603	ppbv	99
4) freon-114	5.50	85	3056376	9.6239	ppbv	96
5) chloromethane	5.62	50	1119550	9.3704	ppbv	99
6) vinyl chloride	5.91	62	1150024	9.2122	ppbv	99
7) 1,3-butadiene	6.02	54	987347	9.7501	ppbv	92
8) bromomethane	6.73	94	935901	9.2633	ppbv	99
9) chloroethane	6.97	64	600865	9.7893	ppbv	99
10) trichlorofluoromethane	7.55	101	2767220	9.4598	ppbv	99
11) ethanol	8.03	45	206458	5.6978	ppbv	99
12) freon-113	8.64	101	2176384	10.4957	ppbv	98
13) 1,1-dichloroethene	8.64	61	1939274	10.8487	ppbv	88
14) acetone	8.75	43	2050171	6.8253	ppbv	93
15) isopropanol	9.06	45	1041423	8.1344	ppbv	92
16) carbon disulfide	9.11	76	3141178	9.9341	ppbv	99
17) methylene chloride	9.55	84	996598	10.4524	ppbv	87
18) trans-1,2-dichloroethene	10.08	61	1820858	10.4814	ppbv	89
19) methyl tert butyl ether	10.11	73	3402972	10.9503	ppbv	99
20) hexane	10.57	57	2123575	11.2152	ppbv	98
21) 1,1-diclethane	10.83	63	2231424	10.5105	ppbv	99
22) vinyl acetate	10.87	43	3588511	10.5595	ppbv	97
23) 2-butanone	11.84	43	2869593	10.0702	ppbv	96
24) cis-1,2-dichloroethene	11.82	96	1168814	10.4277	ppbv	100
25) ethyl acetate	11.92	43	3427141	9.9187	ppbv	96
26) chloroform	12.34	83	2297201	10.3760	ppbv	99
27) tetrahydrofuran	12.39	72	637081	11.7705	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	2375207	10.3390	ppbv	97
30) cyclohexane	12.85	56	2243279	10.8839	ppbv	95
31) carbon tetrachloride	13.01	117	2412020	10.7139	ppbv	100
32) 1,2-dichloroethane	13.33	62	1635747	10.3756	ppbv	100
33) benzene	13.34	78	3719855	9.8554	ppbv	100
34) heptane	13.72	71	1430097	11.3029	ppbv	95
35) trichloroethene	14.40	130	1522586	10.3352	ppbv	97
36) 1,2-diclpropane	14.77	63	1478843	10.4853	ppbv	97
37) 1,4-dioxane	15.02	88	332000	9.6787	ppbv	91
38) bromodichloromethane	15.20	83	2489869	10.4459	ppbv	99
39) cis-1,3-dichloropropene	15.95	75	2059619	10.5986	ppbv	97
40) 4-methyl-2-pentanone	16.19	43	3507186	10.0122	ppbv	93
41) toluene	16.56	91	4317744	10.7553	ppbv	97
42) trans-1,3-dichloropropene	16.87	75	2152636	11.6413	ppbv	96
43) 1,1,2-trichloroethane	17.20	97	1431449	10.2061	ppbv	92
44) tetrachloroethene	17.54	166	1995743	10.6543	ppbv	99

(#) = qualifier out of range (m) = manual integration

00110

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6080.D Vial: 4
Acq On : 14 Nov 2008 21:41 Operator: T.WALTON
Sample : 10.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

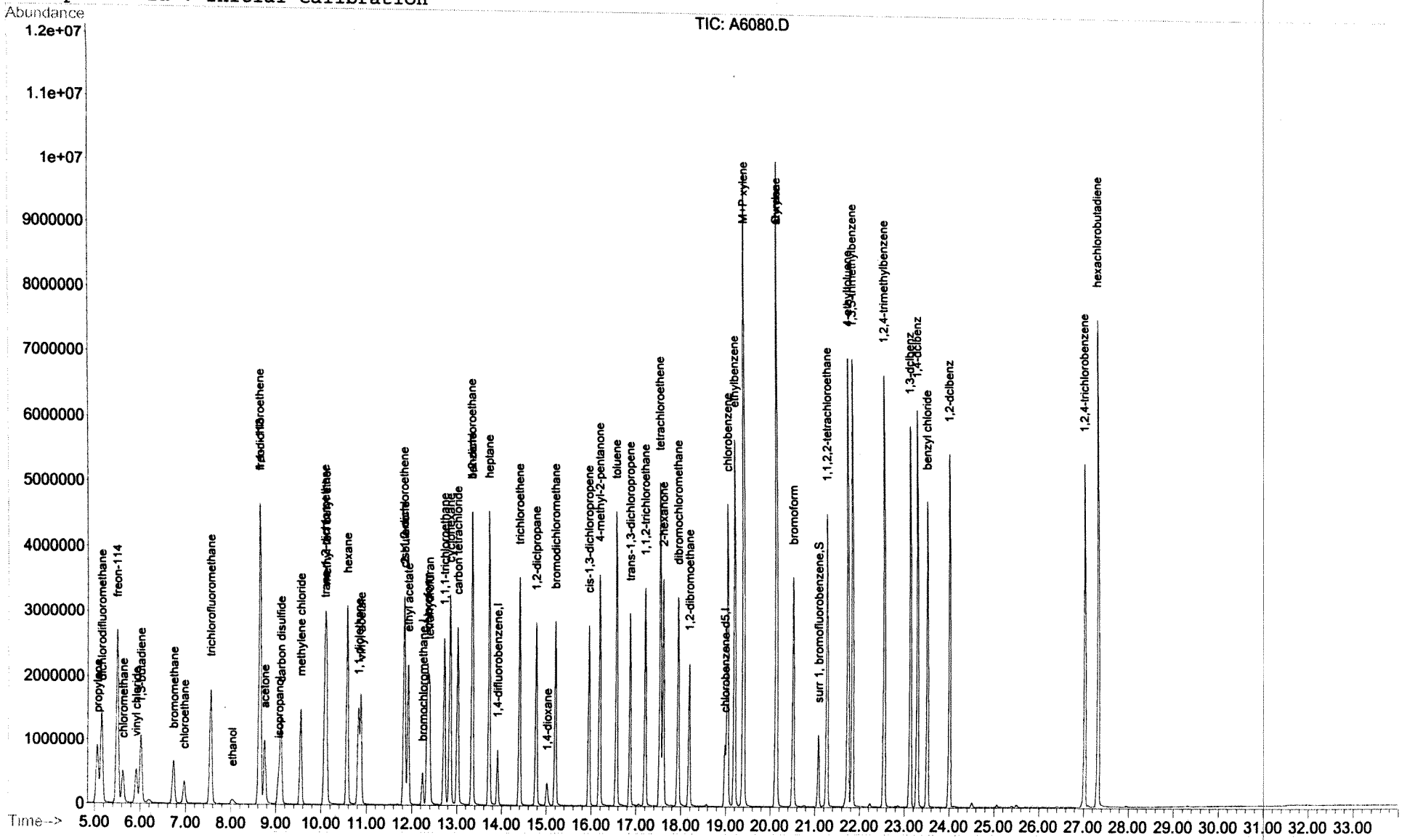
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	2-hexanone	17.61	43	3361268	10.0325	ppbv	90
46)	dibromochloromethane	17.93	129	2395252	11.1452	ppbv	99
47)	1,2-dibromoethane	18.18	107	2093871	10.5140	ppbv	100
49)	chlorobenzene	19.03	112	3309563	10.1832	ppbv	98
50)	ethylbenzene	19.19	91	5560956	10.3292	ppbv	94
51)	M+P xylene	19.40	91	8208900	19.2554	ppbv	91
52)	O xylene	20.12	91	4695473	10.6037	ppbv	94
53)	styrene	20.13	104	3649391	11.1029	ppbv	96
54)	bromoform	20.51	173	2439230	11.8026	ppbv	99
56)	1,1,2,2-tetrachloroethane	21.26	83	3296215	9.7644	ppbv	98
57)	4-ethyltoluene	21.73	105	6117714	10.0832	ppbv	93
58)	1,3,5-trimethylbenzene	21.83	105	5335405	10.6756	ppbv	92
59)	1,2,4-trimethylbenzene	22.54	105	5198743	10.6373	ppbv	92
60)	1,3-dclbenz	23.13	146	3430814	10.7521	ppbv	99
61)	1,4-dclbenz	23.28	146	3446871	10.9247	ppbv	98
62)	benzyl chloride	23.50	91	4734123	11.4452	ppbv	92
63)	1,2-dclbenz	24.00	146	3162511	10.4378	ppbv	98
64)	1,2,4-trichlorobenzene	27.02	180	2347086	11.0815	ppbv	100
65)	hexachlorobutadiene	27.31	225	2198567	9.1933	ppbv	95

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6080.D Vial: 4
Acq On : 14 Nov 2008 21:41 Operator: T.WALTON
Sample : 10.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration



Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P

Midpoint CCV. JW 11-15-08

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	100	0.00
2		propylene	1.472	1.437	2.4	100	0.00
3		dichlorodifluoromethane	3.549	3.560	-0.3	100	0.00
4		freon-114	3.787	3.859	-1.9	100	0.00
5		chloromethane	1.391	1.413	-1.6	100	0.00
6		vinyl chloride	1.491	1.556	-4.4	100	0.00
7		1,3-butadiene	1.209	1.274	-5.4	100	0.00
8		bromomethane	1.145	1.157	-1.0	100	0.00
9		chloroethane	0.733	0.744	-1.5	100	0.00
10		trichlorofluoromethane	3.494	3.580	-2.5	100	0.00
11		ethanol	0.361	0.274	24.1	100	0.00
12		freon-113	2.476	2.521	-1.8	100	0.00
13		1,1-dichloroethene	2.135	2.230	-4.4	100	0.00
14		acetone	2.409	2.428	-0.8	100	0.00
15		isopropanol	1.463	1.010	31.0#	100	0.00
16		carbon disulfide	3.774	3.828	-1.4	100	0.00
17		methylene chloride	1.095	1.115	-1.8	100	0.00
18		trans-1,2-dichloroethene	2.075	2.160	-4.1	100	0.00
19		methyl tert butyl ether	3.700	3.948	-6.7	100	0.00
20		hexane	2.298	2.461	-7.1	100	0.00
21		1,1-diclethane	2.535	2.604	-2.7	100	0.00
22		vinyl acetate	4.040	4.460	-10.4	100	0.00
23		2-butanone	3.225	3.356	-4.1	100	0.00
24		cis-1,2-dichloroethene	1.258	1.330	-5.7	100	0.00
25		ethyl acetate	3.954	4.167	-5.4	100	0.00
26		chloroform	2.612	2.696	-3.2	100	0.00
27		tetrahydrofuran	0.646	0.728	-12.7	100	0.00
28	I	1,4-difluorobenzene	1.000	1.000	0.0	100	0.00
29		1,1,1-trichloroethane	0.693	0.726	-4.8	100	0.00
30		cyclohexane	0.630	0.673	-6.8	100	0.00
31		carbon tetrachloride	0.679	0.728	-7.2	100	0.00
32		1,2-dichloroethane	0.476	0.492	-3.4	100	0.00
33		benzene	1.069	1.126	-5.3	100	0.00
34		heptane	0.389	0.426	-9.5	100	0.00
35		trichloroethene	0.444	0.460	-3.6	100	0.00
36		1,2-diclpropane	0.413	0.443	-7.3	100	0.00
37		1,4-dioxane	0.132	0.111	15.9	100	0.00
38		bromodichloromethane	0.718	0.762	-6.1	100	0.00
39		cis-1,3-dichloropropene	0.586	0.640	-9.2	100	0.00
40		4-methyl-2-pentanone	1.013	1.095	-8.1	100	0.00
41		toluene	1.179	1.299	-10.2	100	0.00
42		trans-1,3-dichloropropene	0.543	0.612	-12.7	100	0.00
43		1,1,2-trichloroethane	0.406	0.433	-6.7	100	0.00
44		tetrachloroethene	0.565	0.591	-4.6	100	0.00
45		2-hexanone	0.978	1.072	-9.6	100	0.00
46		dibromochloromethane	0.648	0.715	-10.3	100	0.00
47		1,2-dibromoethane	0.601	0.626	-4.2	100	0.00
48	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00

(#) = Out of Range

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49		chlorobenzene	1.108	1.204	-8.7	100	0.00
50		ethylbenzene	1.879	2.076	-10.5	100	0.00
51		M+P xylene	1.490	1.637	-9.9	100	0.00
52		O xylene	1.564	1.752	-12.0	100	0.00
53		styrene	1.180	1.336	-13.2	100	0.00
54		bromoform	0.736	0.869	-18.1	100	0.00
55	S	surr 1, bromofluorobenzene	0.568	0.569	-0.2	100	0.00
56		1,1,2,2-tetrachloroethane	1.202	1.216	-1.2	100	0.00
57		4-ethyltoluene	2.162	2.421	-12.0	100	0.00
58		1,3,5-trimethylbenzene	1.777	1.981	-11.5	100	0.00
59		1,2,4-trimethylbenzene	1.740	1.973	-13.4	100	0.00
60		1,3-dclbenz	1.137	1.245	-9.5	100	0.00
61		1,4-dclbenz	1.122	1.251	-11.5	100	0.00
62		benzyl chloride	1.543	1.760	-14.1	100	0.00
63		1,2-dclbenz	1.079	1.179	-9.3	100	0.00
64		1,2,4-trichlorobenzene	0.754	0.808	-7.2	100	0.00
65		hexachlorobutadiene	0.852	0.819	3.9	100	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

TW 11-15-08
updated RT from this standard.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	200909	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	773231	2.5000	ppbv	-0.01
48) chlorobenzene-d5	18.98	117	641830	2.5000	ppbv	-0.02
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	365403	2.51	ppbv	-0.02
Spiked Amount 2.500	Range 70 - 130		Recovery = 100.27%			
Target Compounds						Qvalue
2) propylene	5.06	41	594738	4.0894	ppbv	97
3) dichlorodifluoromethane	5.16	85	1444892	4.9698	ppbv	99
4) freon-114	5.49	85	1550755	5.0922	ppbv	97
5) chloromethane	5.63	50	573624	5.0068	ppbv	100
6) vinyl chloride	5.92	62	625259	5.2232	ppbv	100
7) 1,3-butadiene	6.03	54	552662	5.6914	ppbv	96
8) bromomethane	6.74	94	469373	4.8448	ppbv	100
9) chloroethane	6.97	64	302105	5.1328	ppbv	99
10) trichlorofluoromethane	7.56	101	1424162	5.0771	ppbv	100
11) ethanol	7.96	45	106924	3.0773	ppbv	99
12) freon-113	8.64	101	1083790	5.4506	ppbv	99
13) 1,1-dichloroethene	8.64	61	976881	5.6990	ppbv	90
14) acetone	8.73	43	1024405	3.5565	ppbv	94
15) isopropanol	9.01	45	450647	3.6707	ppbv	94
16) carbon disulfide	9.11	76	1599797	5.2762	ppbv	100
17) methylene chloride	9.55	84	488194	5.3396	ppbv	88
18) trans-1,2-dichloroethene	10.08	61	911230	5.4700	ppbv	91
19) methyl tert butyl ether	10.11	73	1681571	5.6429	ppbv	100
20) hexane	10.58	57	1058129	5.8277	ppbv	98
21) 1,1-diclethane	10.82	63	1109296	5.4489	ppbv	100
22) vinyl acetate	10.87	43	1774315	5.4448	ppbv	98
23) 2-butanone	11.83	43	1456598	5.3306	ppbv	97
24) cis-1,2-dichloroethene	11.83	96	571634	5.3184	ppbv	99
25) ethyl acetate	11.92	43	1758070	5.3062	ppbv	98
26) chloroform	12.34	83	1137536	5.3582	ppbv	99
27) tetrahydrofuran	12.38	72	313111	6.0328	ppbv	97
29) 1,1,1-trichloroethane	12.72	97	1179093	5.5006	ppbv	97
30) cyclohexane	12.85	56	1114350	5.7944	ppbv	96
31) carbon tetrachloride	13.02	117	1182620	5.6298	ppbv	100
32) 1,2-dichloroethane	13.33	62	813431	5.5297	ppbv	99
33) benzene	13.34	78	1863727	5.2919	ppbv	99
34) heptane	13.72	71	704793	5.9699	ppbv	96
35) trichloroethene	14.40	130	740148	5.3844	ppbv	97
36) 1,2-diclpropane	14.77	63	726175	5.5180	ppbv	96
37) 1,4-dioxane	15.00	88	177852m	5.5567	ppbv	(m) TW 11-15-08
38) bromodichloromethane	15.20	83	1226024	5.5125	ppbv	100
39) cis-1,3-dichloropropene	15.95	75	1009657	5.5682	ppbv	99
40) 4-methyl-2-pentanone	16.19	43	1811408	5.5420	ppbv	96
41) toluene	16.56	91	2169827	5.7926	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	1050232	6.0869	ppbv	97
43) 1,1,2-trichloroethane	17.20	97	697185	5.3274	ppbv	92
44) tetrachloroethene	17.54	166	959438	5.4893	ppbv	98

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: 111408A.RES

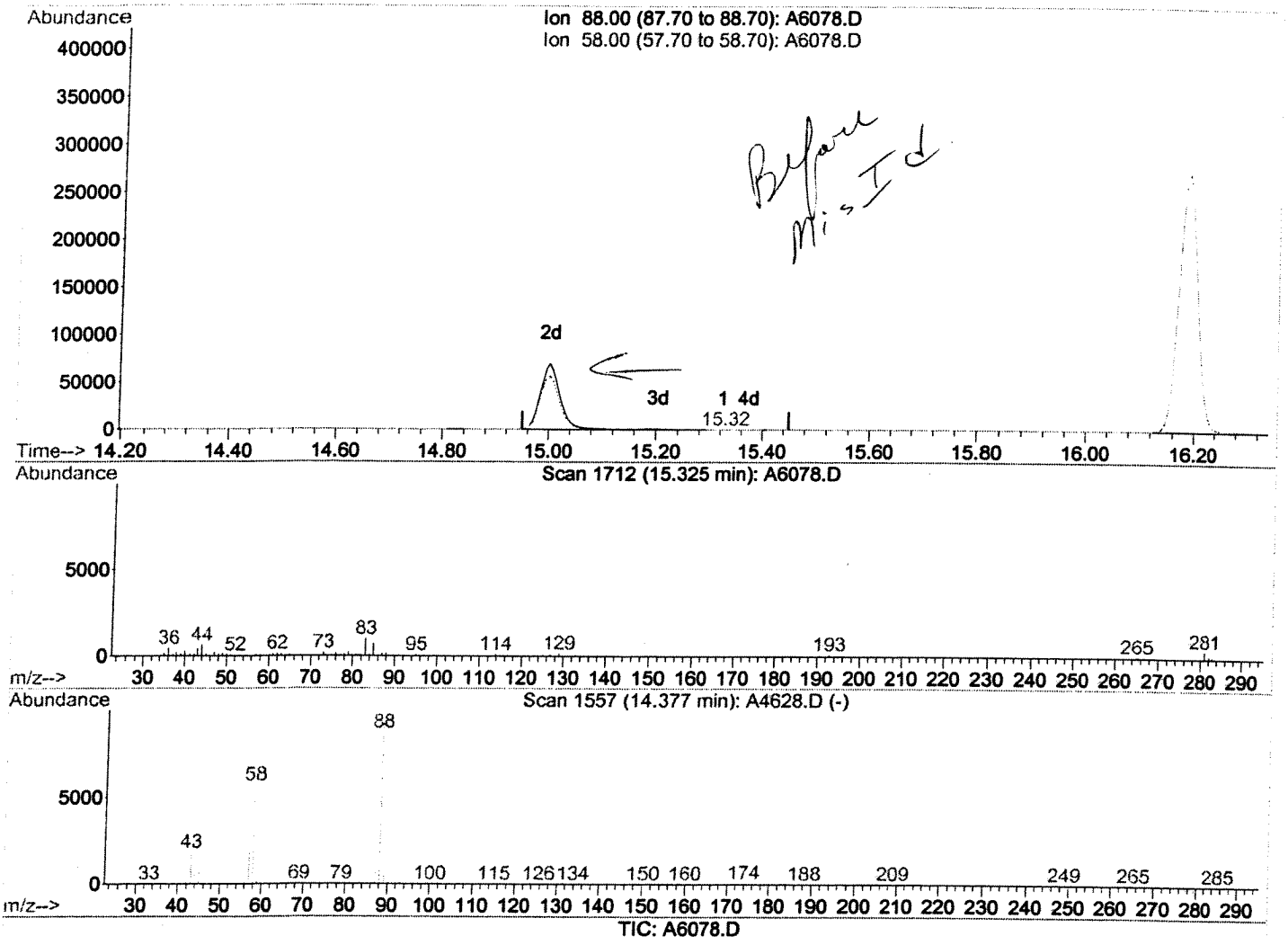
Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:27:05 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.60	43	1773396	5.6728	ppbv	93
46) dibromochloromethane	17.93	129	1160396	5.7866	ppbv	99
47) 1,2-dibromoethane	18.18	107	1016757	5.4717	ppbv	100
49) chlorobenzene	19.03	112	1638309	5.5158	ppbv	100
50) ethylbenzene	19.19	91	2824789	5.7412	ppbv	98
51) M+P xylene	19.39	91	4371717	11.2207	ppbv	96
52) O xylene	20.12	91	2360889	5.8338	ppbv	96
53) styrene	20.13	104	1800369	5.9935	ppbv	94
54) bromoform	20.51	173	1160376	6.1436	ppbv	99
56) 1,1,2,2-tetrachloroethane	21.26	83	1638833	5.3121	ppbv	100
57) 4-ethyltoluene	21.73	105	3138812	5.6608	ppbv	97
58) 1,3,5-trimethylbenzene	21.83	105	2695598	5.9017	ppbv	96
59) 1,2,4-trimethylbenzene	22.54	105	2634401	5.8982	ppbv	96
60) 1,3-dclbenz	23.12	146	1662189	5.7000	ppbv	98
61) 1,4-dclbenz	23.28	146	1669900	5.7913	ppbv	98
62) benzyl chloride	23.50	91	2349543	6.2154	ppbv	96
63) 1,2-dclbenz	23.99	146	1528887	5.5214	ppbv	98
64) 1,2,4-trichlorobenzene	27.01	180	1047908	5.4137	ppbv	99
65) hexachlorobutadiene	27.31	225	1072484	4.9071	ppbv	96

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 8:47 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



(37) 1,4-dioxane

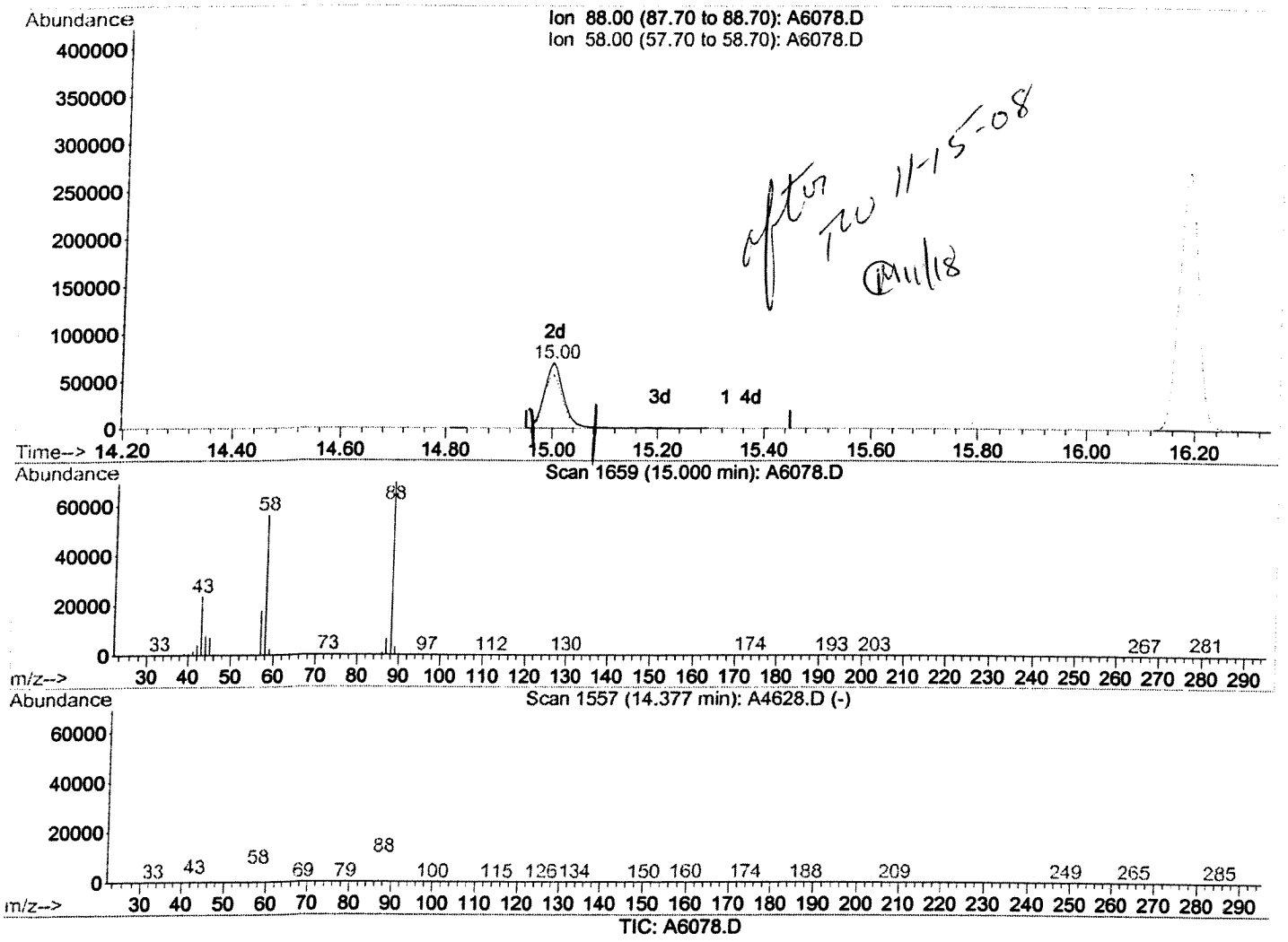
15.32min 0.0043ppbv

response 139

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	84.89
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D Vial: 4
Acq On : 14 Nov 2008 20:02 Operator: T.WALTON
Sample : 5.0 PPB Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008 Quant Results File: temp.res

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Multiple Level Calibration



(37) 1,4-dioxane

15.00min 5.5567ppbv m

response 177852

Ion	Exp%	Act%
88.00	100	100
58.00	91.80	0.07#
0.00	0.00	0.00
0.00	0.00	0.00

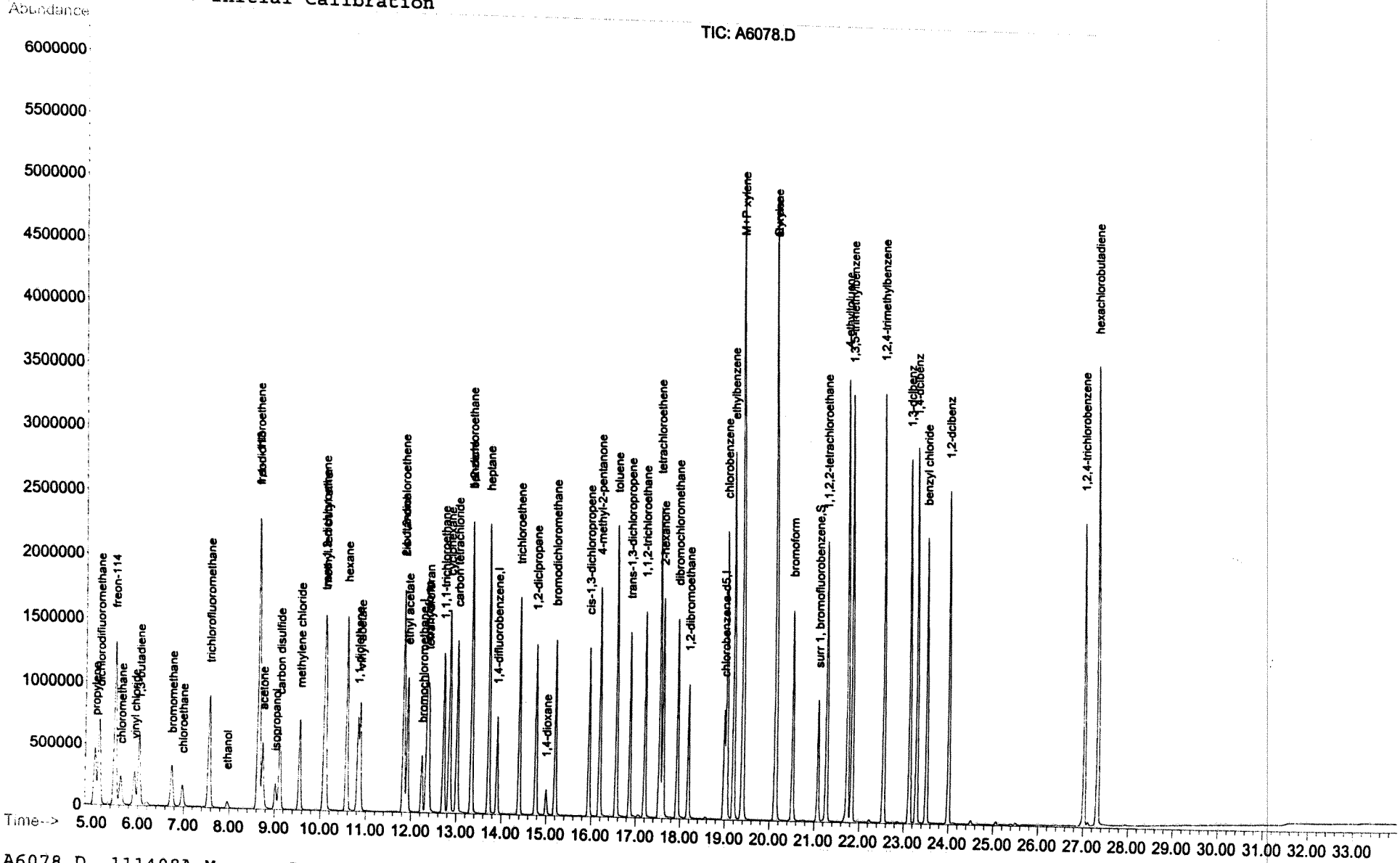
A6078.D 111408A.M Sat Nov 15 09:08:59 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6078.D
Acq On : 14 Nov 2008 20:02
Sample : 5.0 PPB
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:08 2008

Vial: 4
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 08:48:57 2008
Response via : Initial Calibration



A6078.D 111408A.M Sat Nov 15 09:09:21 2008 OFFLINE

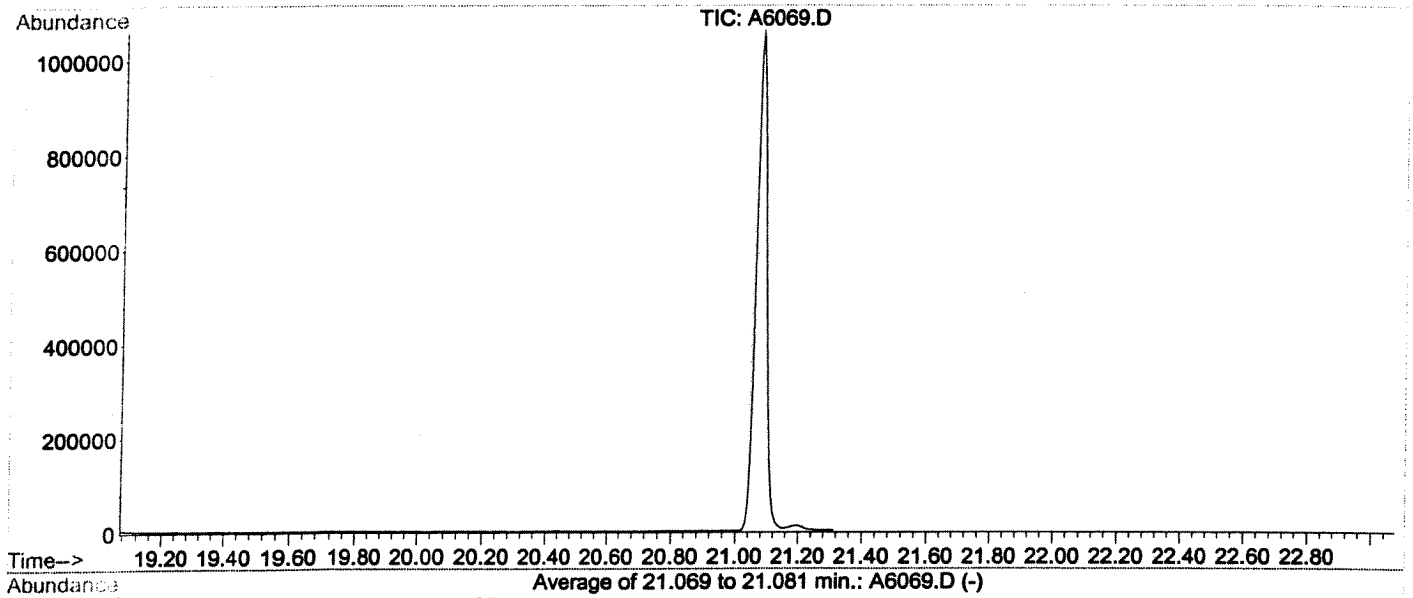
VOLATILE ORGANICS

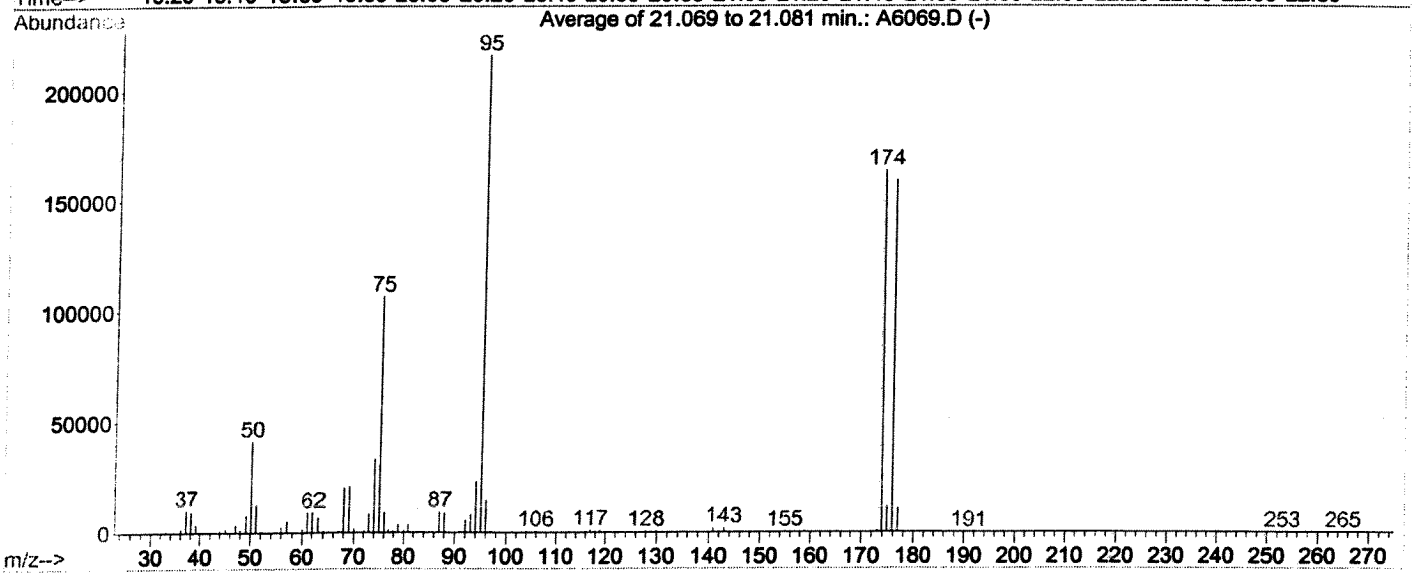
RAW QC DATA

BFB

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6069.D Vial: 1
Acq On : 14 Nov 2008 12:40 Operator: T.WALTON
Sample : TUNE Inst : GC/MS Ins
Misc : PI=0 PF=0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15

TW 11-14-08.





AutoFind: Scans 2649, 2650, 2651; Background Corrected with Scan 2637

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.2	41519	PASS
75	95	30	66	49.3	106797	PASS
95	95	100	100	100.0	216683	PASS
96	95	5	9	6.8	14675	PASS
173	174	0.00	2	0.5	852	PASS
174	95	50	120	75.7	163989	PASS
175	174	4	9	7.2	11771	PASS
176	174	93	101	97.3	159531	PASS
177	176	5	9	6.7	10693	PASS

A6069.D 111408A.M Fri Nov 14 13:02:09 2008 OFFLINE

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 1155254 **Sample Matrix:** AIR
Date Received: **Submission #:** **Analytical Run** 170221

DATE ANALYZED : 11/15/08
ANALYTICAL DILUTION: 1.00
CAN DILUTION : 1.00 Pi= 0 Pf= 0

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	0.35 U	0.11	0.11 U
1,1-DICHLOROETHENE	0.44	0.44 U	0.11	0.11 U
TRANS-1,2-DICHLOROETHENE	0.44	0.44 U	0.11	0.11 U
CIS-1,2-DICHLOROETHENE	0.44	0.44 U	0.11	0.11 U
ETHYLBENZENE	0.95	0.95 U	0.22	0.22 U
METHYLENE CHLORIDE	0.38	0.042 J	0.11	0.012 J
TETRACHLOROETHENE	0.15	0.15 U	0.022	0.022 U
TOLUENE	0.41	0.41 U	0.11	0.11 U
1,1,1-TRICHLOROETHANE	0.60	0.60 U	0.11	0.11 U
TRICHLOROETHENE	0.12	0.12 U	0.022	0.022 U
VINYL CHLORIDE	0.28	0.28 U	0.11	0.11 U
O-XYLENE	0.95	0.95 U	0.22	0.22 U
M+P-XYLENE	1.9	1.9 U	0.44	0.44 U

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	100	%

Quantitation Report (Not Reviewed)

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6084.D Vial: 7
Acq On : 15 Nov 2008 00:53 Operator: T.WALTON
Sample : CLNBLK 1.0 method Blank. 1155254 Inst : GC/MS Ins
Misc : PI=0 PF=0 CAN 1SC00662 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

TW 11-15-08.

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) bromochloromethane	12.24	130	201122	2.5000 ppbv	0.00
28) 1,4-difluorobenzene	13.91	114	816510	2.5000 ppbv	0.00
48) chlorobenzene-d5	18.98	117	680797	2.5000 ppbv	0.00
System Monitoring Compounds					
55) surr 1, bromofluorobenzene	21.08	174	385102	2.49 ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 99.58%		
Target Compounds					Qvalue
~~2) propylene~~	~~5.07~~	~~41~~	~~14659~~	~~0.1238 ppbv #~~	~~60~~
3) dichlorodifluoromethane	5.16	85	5352	0.0187 ppbv	98 NT
14) acetone	8.77	43	31420	0.1621 ppbv	96 NT
17) methylene chloride	9.56	84	1054	0.0120 ppbv #	80 J
23) 2-butanone	11.87	43	7129	0.0275 ppbv	92 NT
~~25) ethyl acetate~~	~~11.87~~	~~43~~	~~7074~~	~~0.0222 ppbv #~~	~~75~~
64) 1,2,4-trichlorobenzene	27.01	180	2053	0.0100 ppbv	89 NT

LT

ASPB TW 11-18.

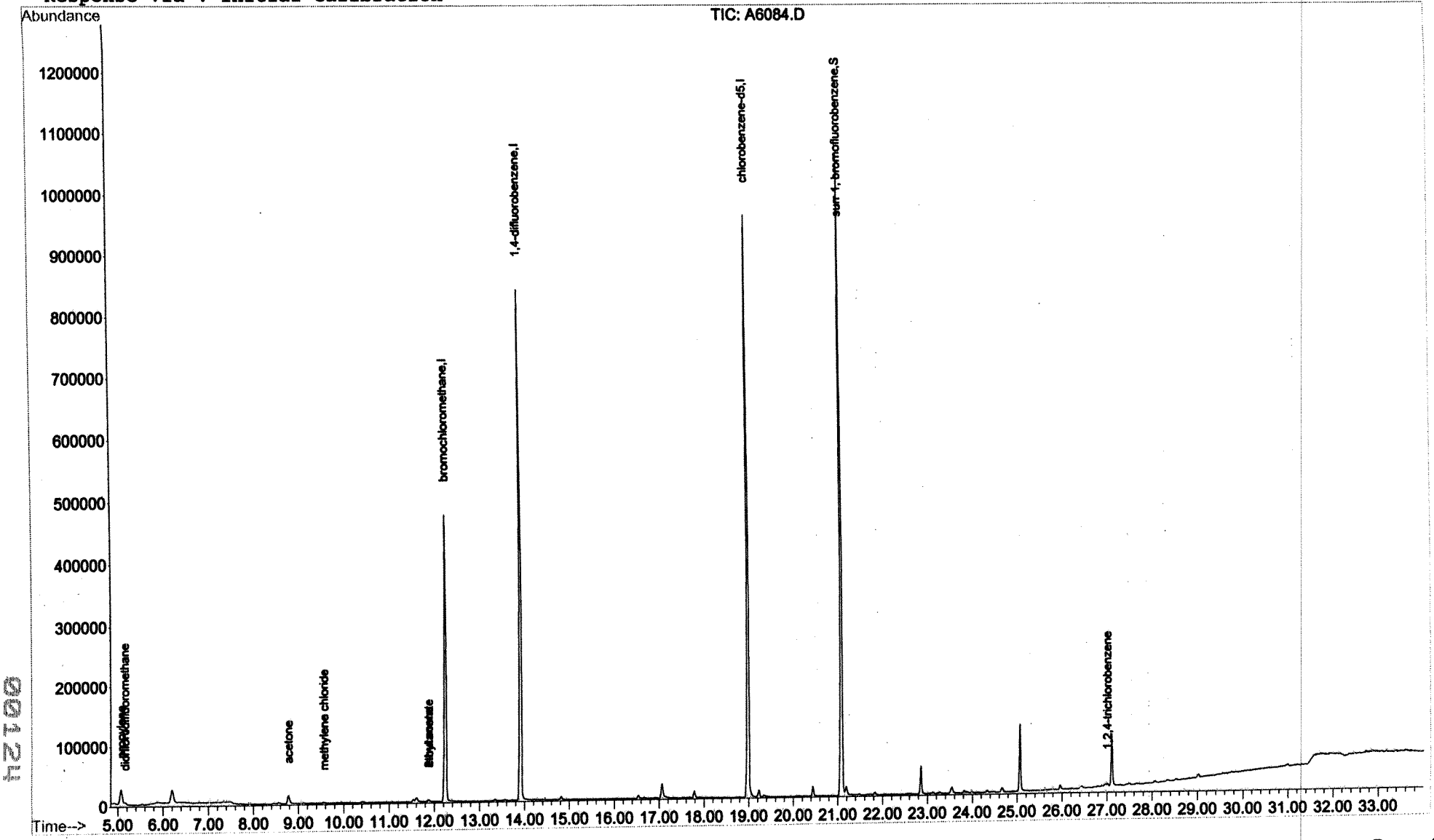
ASPB JB methylene chloride to 10X = 0.12 ppb. TW 11-18-08

Passes IAC cleaning QC. Not for LS Passes as MB.

(#) = qualifier out of range (m) = manual integration
A6084.D 111408A.M Sat Nov 15 11:41:04 2008 OFFLINE

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6084.D Vial: 7
Acq On : 15 Nov 2008 00:53 Operator: T.WALTON
Sample : CLNBLK 1.0 Inst : GC/MS Ins
Misc : PI=0 PF=0 CAN 1SC00662 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:41 2008 Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD TO-15
Reported: 12/01/08

Project Reference:
Client Sample ID : LABORATORY CONTROL SAMPLE

Date Sampled : **Order #:** 1155255 **Sample Matrix:** AIR
Date Received: **Submission #:** **Analytical Run** 170221

DATE ANALYZED : 11/14/08
ANALYTICAL DILUTION: 1.00
CAN DILUTION : 1.00 Pi= 0 Pf= 0

ANALYTE	MRL UG/M3	RESULT UG/M3	MRL PPBv	RESULT PPBv
BENZENE	0.35	8.5	0.11	2.7
1,1-DICHLOROETHENE	0.44	11	0.11	2.8
TRANS-1,2-DICHLOROETHENE	0.44	10	0.11	2.6
CIS-1,2-DICHLOROETHENE	0.44	11	0.11	2.8
ETHYLBENZENE	0.95	12	0.22	2.7
METHYLENE CHLORIDE	0.38	9.4	0.11	2.7
TETRACHLOROETHENE	0.15	17	0.022	2.5
TOLUENE	0.41	10	0.11	2.8
1,1,1-TRICHLOROETHANE	0.60	14	0.11	2.6
TRICHLOROETHENE	0.12	13	0.022	2.5
VINYL CHLORIDE	0.28	6.4	0.11	2.5
O-XYLENE	0.95	11	0.22	2.6
M+P-XYLENE	1.9	23	0.44	5.3

SURROGATE RECOVERIES	QC LIMITS		
BROMOFLUOROBENZENE	(70 - 130 %)	102	%

Quantitation Report (Not Reviewed)

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6082.D
Acq On : 14 Nov 2008 23:12
Sample : LCS 1.0
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:40 2008

Vial: 5
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

1155255

TW 11-15-08

Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) bromochloromethane	12.24	130	205030	2.5000	ppbv	0.00
28) 1,4-difluorobenzene	13.90	114	833045	2.5000	ppbv	0.00
48) chlorobenzene-d5	18.98	117	701447	2.5000	ppbv	0.00
System Monitoring Compounds						
55) surr 1, bromofluorobenzene	21.08	174	405712	2.55	ppbv	0.00
Spiked Amount 2.500	Range 70 - 130		Recovery = 101.82%			
Target Compounds						Qvalue
2) propylene	5.05	41	295506	2.4472	ppbv	98
3) dichlorodifluoromethane	5.15	85	718473	2.4682	ppbv	100
4) freon-114	5.49	85	765963	2.4663	ppbv	97
5) chloromethane	5.62	50	281347	2.4670	ppbv	100
6) vinyl chloride	5.92	62	306192	2.5043	ppbv	100
7) 1,3-butadiene	6.03	54	266939	2.6927	ppbv	98
8) bromomethane	6.73	94	230941	2.4598	ppbv	99
9) chloroethane	6.98	64	148468	2.4694	ppbv	99
10) trichlorofluoromethane	7.56	101	706116	2.4639	ppbv	100
11) ethanol	7.96	45	47189	1.5934	ppbv	98
12) freon-113	8.64	101	539985	2.6595	ppbv	100
13) 1,1-dichloroethene	8.64	61	482687	2.7563	ppbv	93
14) acetone	8.74	43	492404	2.4921	ppbv	94
15) isopropanol	9.03	45	178651	1.4890	ppbv	97
16) carbon disulfide	9.11	76	756464	2.4438	ppbv	100
17) methylene chloride	9.55	84	242330	2.6980	ppbv	89
18) trans-1,2-dichloroethene	10.08	61	445198	2.6159	ppbv	92
19) methyl tert butyl ether	10.12	73	835896	2.7550	ppbv	100
20) hexane	10.57	57	520315	2.7610	ppbv	100
21) 1,1-diclethane	10.82	63	567240	2.7280	ppbv	100
22) vinyl acetate	10.87	43	979889	2.9577	ppbv	98
23) 2-butanone	11.84	43	705489	2.6672	ppbv	98
24) cis-1,2-dichloroethene	11.83	96	283440	2.7469	ppbv	99
25) ethyl acetate	11.92	43	794435	2.4502	ppbv	98
26) chloroform	12.34	83	574984	2.6842	ppbv	99
27) tetrahydrofuran	12.39	72	146836	2.7704	ppbv	99
29) 1,1,1-trichloroethane	12.72	97	594593	2.5762	ppbv	97
30) cyclohexane	12.84	56	554620	2.6419	ppbv	97
31) carbon tetrachloride	13.02	117	594859	2.6284	ppbv	100
32) 1,2-dichloroethane	13.33	62	415071	2.6194	ppbv	99
33) benzene	13.34	78	944718	2.6524	ppbv	98
34) heptane	13.72	71	345731	2.6685	ppbv	98
35) trichloroethene	14.39	130	365678	2.4689	ppbv	97
36) 1,2-diclpropane	14.77	63	371250	2.6972	ppbv	96
37) 1,4-dioxane	15.01	88	77558	1.7689	ppbv	90
38) bromodichloromethane	15.20	83	615093	2.5694	ppbv	100
39) cis-1,3-dichloropropene	15.94	75	504974	2.5881	ppbv	99
40) 4-methyl-2-pentanone	16.19	43	868925	2.5742	ppbv	97
41) toluene	16.56	91	1092949	2.7816	ppbv	99
42) trans-1,3-dichloropropene	16.86	75	521777	2.8814	ppbv	98
43) 1,1,2-trichloroethane	17.20	97	346740	2.5629	ppbv	92
44) tetrachloroethene	17.54	166	465911	2.4735	ppbv	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6082.D
Acq On : 14 Nov 2008 23:12
Sample : LCS 1.0
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:40 2008

Vial: 5
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Quant Method : J:\ACQUDATA\A...\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration
DataAcq Meth : 111408A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) 2-hexanone	17.61	43	808581	2.4804	ppbv	95
46) dibromochloromethane	17.93	129	556640	2.5769	ppbv	100
47) 1,2-dibromoethane	18.17	107	504691	2.5194	ppbv	100
49) chlorobenzene	19.03	112	809956	2.6049	ppbv	100
50) ethylbenzene	19.18	91	1413111	2.6804	ppbv	99
51) M+P xylene	19.39	91	2218373	5.3079	ppbv	98
52) O xylene	20.12	91	1150260	2.6208	ppbv	97
53) styrene	20.13	104	857243	2.5889	ppbv	94
54) bromoform	20.51	173	513005	2.4839	ppbv	99
56) 1,1,2,2-tetrachloroethane	21.26	83	758184	2.2490	ppbv	100
57) 4-ethyltoluene	21.72	105	1523174	2.5113	ppbv	99
58) 1,3,5-trimethylbenzene	21.83	105	1291336	2.5893	ppbv	97
59) 1,2,4-trimethylbenzene	22.54	105	1255479	2.5714	ppbv	98
60) 1,3-dclbenz	23.12	146	772611	2.4221	ppbv	98
61) 1,4-dclbenz	23.28	146	779374	2.4750	ppbv	98
62) benzyl chloride	23.50	91	1008609	2.3294	ppbv	98
63) 1,2-dclbenz	23.99	146	698731	2.3088	ppbv	98
64) 1,2,4-trichlorobenzene	27.01	180	517316	2.4466	ppbv	99
65) hexachlorobutadiene	27.31	225	557787	2.3344	ppbv	97

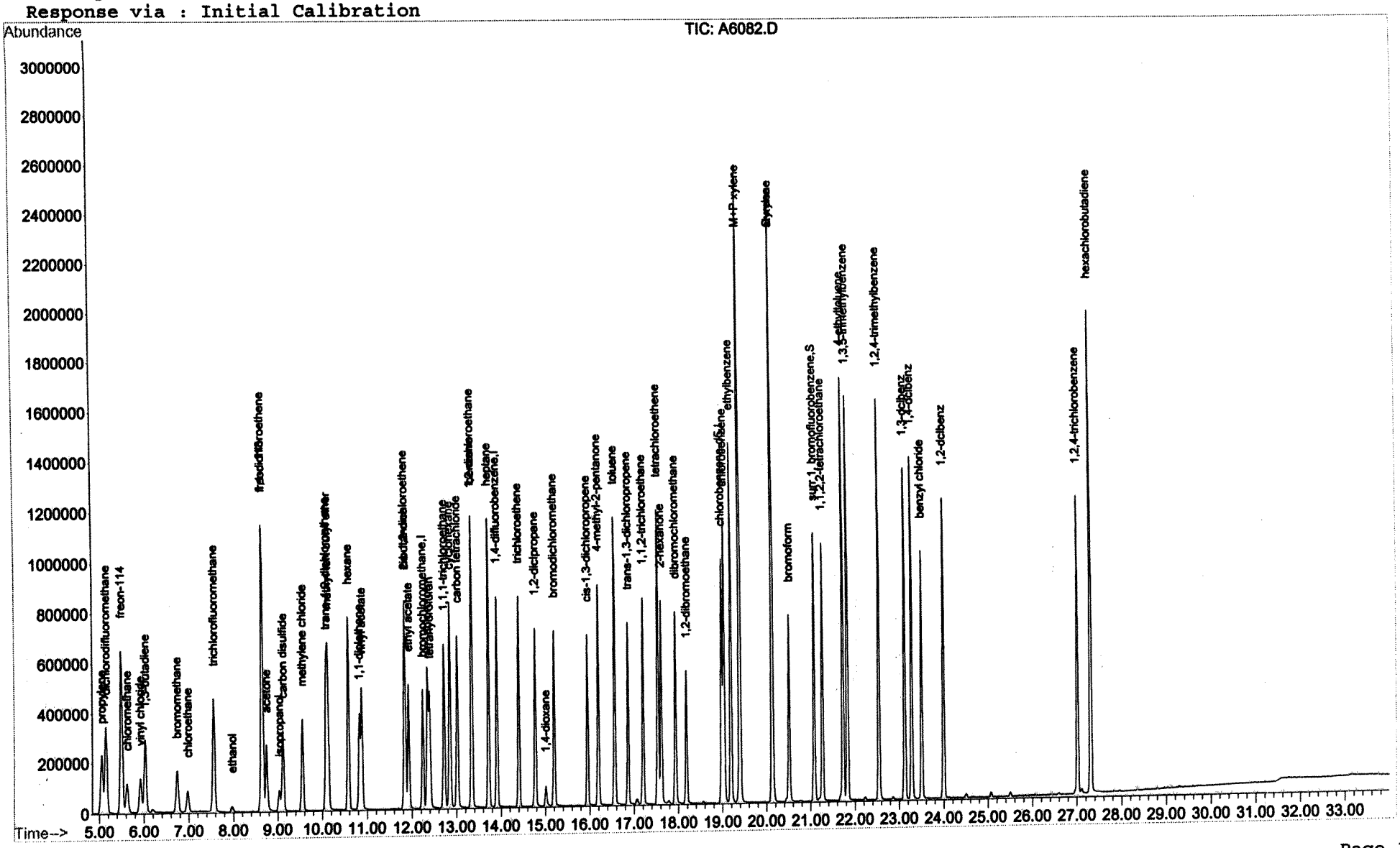
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\AIR1\DATA\111408\A6082.D
Acq On : 14 Nov 2008 23:12
Sample : LCS 1.0
Misc : PI=0 PF=0
MS Integration Params: RTEINT.P
Quant Time: Nov 15 11:40 2008

Vial: 5
Operator: T.WALTON
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 111408A.RES

Method : J:\ACQUDATA\AIR1\METHODS\111408A.M (RTE Integrator)
Title : TO-15
Last Update : Sat Nov 15 11:31:59 2008
Response via : Initial Calibration



0-553
TO-15 170221 11/14/08 Tom Walton

leak check 16 -> 21.6 in 1240 sec
Pressures He = 23.0 IS = 28.9 ATM = 14.5
Volume IS = 250 Nominal Sample = 100Cml
Methods Tune = BFB GC/MS = 111408A Entech = TO15

AS	Vol	Sample		Pa/Pf	File or Comments
1	0	Tune IS = 0-515-72E			A6069 Y 12:40
1	1000	Blank 1.0	we can direct		A6070 Y
1	1000	Met Blank 1.0	we can direct		A6071 Y
2	100	0.02 ppb	0-515-73A Exp ~~7/13~~ 12/13 TO-14-08		A6072 Y
3	95	0.095 ppb	0-515-73B Exp ~~7/13~~ 12/13		A6073 Y
3	200	0.20 ppb			A6074 Y
3	500	0.50 ppb			A6075 Y
4	100	1.0 ppb	0-515-73C Exp ~~7/13~~ 12/13 TO-14-08		A6076 Y
4	250	2.5 ppb			A6077 Y
4	500	5.0 ppb			A6078 Y
4	750	7.5 ppb			A6079 Y
4	1000	10.0 ppb			A6080 Y
5	500	ICV	0-515-72D Exp 12/10		A6081 Y *
5	250	LCS			A6082 Y
C	1000	Blk carry over check		o/o	A6083 Y
7	1000	CLN Blk 1.0	can ISC00662	o/o	A6084 Y Report as MB
8	1000	CLN Blk 1.0	can SLC00054	o/o	A6085 Y
9	1000	CLN Blk 1.0	can SLC00044	o/o	A6086 Y
10	1000	1146273 1.0	[redacted] R46655 TO15.IAQ	-3.6/7.5	A6087 Y
11	1000	1150201 1.0	MAR R46926 TO15.IMP ASPIB	-6.5/7.5	A6088 Y
12	200	1150195 5.0		-8.7/8.4	A6089 Y
13	50	1150196 20.0		-8.1/7.5	A6090 Y
14	100	1150197 10.0		-6.5/7.6	A6091 Y
15	100	1150198 10.0		-7.7/7.4	A6092 Y
16	100	1146939 10.0	[redacted] TO15.IAQ R46698	-3.4/28.4	A6093 Y E
16	100	1146939 10.0 Dup		-3.4/28.4	A6094 Y E
~~1~~	~~1~~	~~Blk~~, TW 11-15	Purge+Bake prior to ↓		~~A6095~~
1	SyR	1146939 44.0	(25/1100)	-3.4/28.4	A6095 Y DL

* Valid calibration saved, updated RT from 5ppb. NT-Isopropanol fails ICV. Rerun fresh ICV prior to any samples requiring Isopropanol as target.

1155255
1155254

tuned tune
- to get
50%.

used as CCV

11-10-08 BP = 29.32 lab T = 23°C
TW Dilution air = 0-515-68F @ 30 psig + 3 L/min.
0-515-72A. diluted 2.4 ml of 0-515-66D Exp 9/4/09
0.2 ppb 1° into canister 8134 + Press to +29.3 "Hg.
= 2.4/12.000 Expires 12-10-08.
0-515-72B diluted 12 ml of 0-515-66D Exp 9/4/09
10 ppb 1° into canister 8132 + Press to +29.3 "Hg
= 12/12.000 Expires 12-10-08.
0-515-72C diluted 120 ml of 0-515-66D
10 ppb 1° into canister 8133 + Press to +29.3
= 120/12.000 Expires 12-10-08.
0-515-72D diluted 120 ml of 0-515-53A exp 2/25/09.
10 ppb 2° into canister 2337 + Press to +29.3
= 120/12.000 Expires 12-10-08.
filled Blanks can ISC00739 + ISC00662 TW.
11/12/08 BP = 29.60 lab T = 23°C
Dilution Air = 0-515-68F @ 30 psig + 3 L/min
0-515-72E diluted 1.2 ml of 0-515-53C Exp 3/1/09
10 ppb IS into canister K1590 + Pressured to 29.6 "Hg
= 1.2/30,000 dilution Exp 12/12/08.
0-515-72F Prepared same ↑ into can K1591 exp 12/12/08
10 ppb IS filled Blanks can ISC00739 + ISC00662
11-12-08 TW

TW 11-13-08

Continued on Page

Read and Understood By

Tom Wilson — Signed
11/13/08. — Date
Signed
Date

11-13-08 BP = 29.20 lab T = 23°C
Dilution Air = 0-515-68F @ 30psig + 3 L/min.

0-515-73A 0.2 ppb 1° diluted 2.4 ml of 0-515-66D exp 9/4/09. into canister 8134 + Press to +29.2" Hg. = 2.4/12.000 expires 12-13-08.

0-515-73B 1.0 ppb 1° diluted 12 ml of 0-515-66D into canister 8132 + Press to +29.2" Hg = 12/12.000 expires 12-13-08.

0-515-73C 10 ppb 1° diluted 120 ml of 0-515-66D into canister 8133 + Press to +29.2" Hg. = 120/12.000 expires 12-13-08.

0-515-73D 10 ppb 1° diluted 120 ml of 0-515-66D into canister 2338 + Press to +29.2" Hg = 120/12,000 Expires 12-13-08.

TW 11-17-08

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Signed Date Signed Date