

Long # 1
Vc- 11-500-1-200

TRIANGLE LABS

CASE NARRATIVE

**Analysis of Samples for the Presence of
Volatile Analytes by
High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry**

METHOD 8260

Date : October 27, 1997
Client ID : Radian International
TLI Project Number : 43334A

This report should only be reproduced in full. Any partial reproduction of this report requires permission from Triangle Laboratories, Inc.

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

1
DO A 048204
CONFIDENTIAL

Objective: Analysis of three condensates for Method 8260 volatile compounds.

Method:

Twenty-four VOST tube pairs and three condensate samples were received at Triangle Laboratories, Inc. on September 20, 1997 at 4°C in good condition. The samples were stored in a refrigerator at 4°C prior to analysis. This report pertains to the condensate samples only. The condensates were analyzed according to the guidelines of Methods 8260 and 5040. The internal standards and surrogate standards were added in the amount of 0.25 micrograms (ug) to 0.005 Liters (L) of the condensates immediately prior to analysis by GC/MS. The internal standards are pentafluorobenzene, 1,4-difluorobenzene, chlorobenzene- d_5 , and 1,4-dichlorobenzene- d_4 , and the surrogate standards reported are dibromofluoromethane, toluene- d_8 , and 4-bromofluorobenzene. The results reported relate only to the items tested.

The GC/MS analysis conditions are listed below:

Purge and trap:	Tekmar LSC-2000
Purge:	11 min.
Desorb Temperature:	250 C
Desorb Time:	3 min.

GC Conditions:

Column:	30 m x .53 mm x 0.3 μ J&W DB624
	0 C hold .5 min, 10 C/min to 45C, 6 C/min to 90C, hold 1.5 min,
	50 C/min to 200C.

MS Conditions:

Instrument:	VG-TRIO-1 Lab Base data systems
Scan:	35-350 amu at .6s/scan
Interface:	Jet Separator, 200 C

Report:

Enclosed with the case narrative are copies of the sample identification index, the project summary sheets, client paperwork, sample log-in sheets, and log book pages. A sample identification index summarizes the client sample name, TLI sample number, and analytical file name for each sample and blank. The project summary lists the amounts for detected analytes in gray. The estimated detection limits will be listed in parentheses when the target analytes are not detected.

The data are reported as quantitation reports, chromatograms, interim reports, and spectra of detected target analytes. The quantitation report header lists the TLI project number, analysis method, instrument sample file name, client sample name, client project number, TLI sample number, calibration file, date received, and analysis date. Sample volumes and dilution factors are also listed in the quantitation report header when appropriate. The response factors used for all calculations are from the calibration file listed in the header. All initial and continuing calibration data are located in the back of the data package. The

concentration is reported in ug/L for condensate samples. The retention time (RT) will be listed for all internal standards and analytes which are detected. If a target analyte is not detected, it will be flagged with a "U" and a detection limit will be listed. Estimated detection limits are calculated for all analytes which were not found in the samples by using an area of 2000. The estimated detection limits reported are the average detection limits achievable over time on an instrument type. The actual detection limit for a given compound on a given day may vary from the estimate reported. The quantitation limit for all analytes is half of the low point of the initial calibration adjusted for dilution or sample volume when appropriate. Below this point the calibration cannot be considered to be linear. Any amount reported at a level below the quantitation limit will be flagged with a "J" and should be considered estimated. If any compounds are found at a level above the upper calibration range, the analyte will be flagged with an "E" and the amounts reported should be considered estimated. If any target analytes found in the laboratory blanks are detected in the associated samples, they will be flagged with a "B" on each sample topsheet. All analytes are quantitated against the internal standard preceding them on the target analyte list. Surrogate standards are quantitated against the internal standard with the matching internal standard reference number. For example, toluene-d₈ has 2 in the IS Ref column and would be quantitated against the internal standard which has IS2 listed in the flag column. If an internal standard area is above or below the quality control limits as defined by the continuing calibration, it will be flagged with "High" or "Low" in the flag column.

Results:

All samples were analyzed within the fourteen day sampling to analysis holding time.

All internal standard areas and surrogate standard percent recoveries were within quality control limits for all samples and blanks.

The laboratory blank contained target analytes at levels below the quantitation limit. The target analytes in the laboratory blanks should not be considered as truly present in the native samples unless found at a level at least five times the amount found in the associated blank. In the event that the amount of a target analyte found in the samples is twenty times the amount found in the associated blank, the contribution from the blank can be considered negligible.

The batch Laboratory Control Sample (LCS) pair associated with this project is with Project 43410B. Their summary report has been included in this data package.

Sample Calculations:

$$\text{Response Factor (RF)} = \frac{(\text{area analyte}) \times (\text{amt IS})}{(\text{area IS}) \times (\text{amt analyte})}$$

$$\text{Conc (ug/L)} = \frac{(\text{area analyte in sample}) \times (\text{amt IS}) \times \text{DF}}{(\text{area IS}) \times (\text{ccal RF}) \times (\text{sampvol})}$$

Triangle Laboratories, Inc.
Case Narrative

October 27, 1997
43334A

Where:

amt IS = amount of internal standard = 0.25 ug
ical = initial calibration
ccal = continuing calibration
DF = dilution factor
sampvol = volume of condensate analyzed = 0.005 L

The data in this package has been judged to be valid according to the guidelines of Methods 8260 and 5040 except as noted above. Should you have any questions, please feel free to contact our Project Scientist, Mary McDonald, at (919) 544-5729, extension 269.

For Triangle Laboratories, Inc.,

Report Preparation:

Sarah A. Hubbard

Sarah A. Hubbard
Report Preparation Chemist

Quality Control:

Penny A. Brock 10/28/97

Penny A. Brock
Report Preparation Chemist

The total number of pages in this data package is 60.

DO A 048207
CONFIDENTIAL

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Certification pending. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing. (Including Waste Water, Sol/Haz Waste, Pulp/Paper, and Air Matrices) Parameters are AOX/TOX, Volatiles, Pesticides, PCB's, BNA's, and Dioxin/Furan. Method 1613 for Drinking Water.

State of Alabama, Department of Environmental Management. Expires December 31, 1997. Laboratory I.D. # 40950. Dioxin in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 1997. Certificate number OS-00397. Dioxin in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 1998. Certificate #AZ0423. Drinking Water for Dioxin, Dioxin in WW and S/H Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires February 18, 1998. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furan; AOX/TOX.

State of California, Department of Health Services. Expires August 31, 1999. Certificate #1922. Selected Metals in Waste Water; Volatiles. Semi-volatiles, and Dioxin/furan in WW and Sol/Haz Waste. Dioxin in drinking water.

State of Connecticut, Department of Health Services. Expires September 30, 1997. Registration # PH-0117. Dioxin in drinking water.

Delaware Health and Social Services. Expires December 31, 1997. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. Expires June 30, 1998. Dioxin in DW. Drinking Water ID HRS# 87424. Metals, Extractable Organics (GC/MS), Pesticides/PCB's (GC) and Volatiles (GC/MS) in Environmental Samples. Environmental water ID HRS# E87411.

Hawaii Department of Health. Expires March 1, 1998. Dioxin in drinking water. "Accepted" status for regulatory purposes.

Revised 9/18/97 RM

Printed 9/18/97

DO A 048208
CONFIDENTIAL

Idaho Department of Health and Welfare. Expires November 30, 1997. Dioxin in drinking water.

State of Kansas, Department of Health and Environment. Expires January 31, 1998. Environmental Analyses/Non potable Water and Solid and Hazardous Waste. Method 1613 for drinking water. ID #'s - Drinking water and/or pollution control - E-215. Solid or Hazardous Waste - E-1209.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 1997. ID#90060. Dioxin in drinking water.

Maryland Department of Health and Mental Hygiene. Expires September 30, 1997. Certification #235. Drinking water by Method 1613A.

State of Michigan, Department of Public Health. Expires March 31, 1998. Drinking water by Method 1613.

Mississippi State Department of Health. No expiration date.. Dioxin in drinking water.

Montana Department of Health and Environmental Services. Expires December 31, 1997. Dioxin in drinking water.

State of New Jersey, Department of Environmental Protection and Energy. Extended by state. Temporary certificate until December 31, 1997. ID #67851. BNAs and Volatiles. Dioxin in drinking water.

State of New Mexico, Environment Department. Certification pending. Dioxin in drinking water.

New York State Department of Health. Expires June 30, 1997. ID #11026. *Environmental Analyses of non-potable Water, Solid and Hazardous Waste. Method 1613 in DW.*

State of North Carolina, Department of Environment Health and Natural Resources Expires August 31, 1999. Certificate # 37751. Dioxin in drinking water.

State of North Carolina, Department of Environment, Health, and Natural Resources, Division of Environmental Management. Expires December 31, 1997. Certificate # 485. Metals, pesticides & PCBs, semi-volatiles and volatiles; TCLP.

North Dakota State Department of Health and Consolidated Laboratories. Expires December 31, 1997. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water.

Revised 9/18/97 RM

Printed 9/18/97

DO A 048209
CONFIDENTIAL

Oklahoma Department of Environmental Quality. Expires October 31, 1997. Laboratory #9612. Dioxin by 1613A, 8290 and 8280.

State of South Carolina, Department of Health and Environmental Control. Expires Jun 30, 1997. Certificate number #99040001 (drinking water). Expires August 31, 1999. Certificate number #99040002 (other parameters). Dioxin/Furans, BNA, Volatiles, and PCBs/pesticides under Clean Water Act, 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste.

State of Tennessee. Department of Environment and Conservation. Expires February 5, 1999. ID #02992. Method 1613 Drinking water only.

U.S. Department of Agriculture Soil Permit. Expires September 30, 2001. Permit No. S-3790. Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

U.S. Army Corps of Engineers. Expires November 30, 1997. Validated to perform methods 8280 & 8290 for Lockbourne Landfill Site Investigation, Defense Distribution Depot Projects, and assorted projects for the USACE North Pacific Division Laboratory.

U.S. EPA Region V. Expires November 14, 1999. Dioxin in drinking water.

U.S. EPA Region VIII, for the State of Wyoming. Expires November 13, 1997. Dioxin in drinking water.

State of Utah, Department of Health. Expires December 31, 1997. Certificate Number E-166. Certification for the following parameters: Semi-Volatiles and Volatiles under RCRA; Volatiles under Clean Water Act; Dioxin/furans by Method 8280; Drinking water for Dioxin by Method 1613; Metals including Mercury and Microwave Digestion.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 1998. ID # 00341. Dioxin in drinking water.

State of Washington, Department of Ecology. Expires September 1998. Lab Accreditation Number C067. Scope of Accreditation applies to water analyses for Polychlorinated Dibenzop-dioxins and Polychlorinated Dibenzofurans, BNA Extr (Semivolatile) Organics and Purgeable (Volatile) Organics.

State of Washington, Department of Health. Expires April 30, 1998. Dioxin in drinking water. Lab I.D. 129

State of West Virginia, Department of Health. Expires December 31, 1997. Certificate No. 9923(C). Dioxin in drinking water.

Revised 9/18/97 RM

Printed 9/18/97

DO A 048210
CONFIDENTIAL

State of Wisconsin, Department of Natural Resources. Expires August 31, 1998. Laboratory ID Number 999869530. Certification for the following categories of Organics: Purgeable, Base/Neutral, Acid, PCBs, and Dioxin. Expires November 14, 1999. Laboratory ID 999869530. Dioxin in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 1997. Registration number RT01195835. Controlled substance registration for schedules 1,2,3,3N,4,5.

N.C. Department of Human Resources. Expires October 31, 1997. Registration number NC-PT 0000 0031. North Carolina controlled substances registration. Application submitted for renewal.

Food & Drug Administration (FDA) Registration. Expires June 1998. ID #'s 001500 1053481. Annual registration of drug establishment. Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 1999. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina Radioactive Materials License. Expires April 30 1998. License No. 032-0954-1. License authorizes the licensee to receive, acquire, own, possess, transfer, import and use such radioactive materials as designated.

North Carolina General License for Radiation Protection. No. expiration date. License No. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.

Triangle Laboratories of RTP
Sample Identification Index for Project: 43334A

Unit Id:	TLI Id:	File Name:
DOW-VP-VST-11-CON	184-7-25	FW240
DOW-VP-VST-12-CON	184-7-26	FW241
DOW-VP-VST-13-CON	184-7-27	FW242
VBLK092497	VBLK092497	FW239

DO A 048212
CONFIDENTIAL

Triangle Laboratories of RTP
Project Summary for Project 43334A

Client ID: DOW-VP-VST DOW-VP-VST DOW-VP-VST VBLK092497
-11-CON -12-CON -13-CON

Filename : FW240 FW241 FW242 FW239
TLI Id : 184-7-25 184-7-26 184-7-27 VBLK092497
Matrix : WATER WATER WATER WATER
Units : ug/L ug/L ug/L ug/L

Dichlorodifluoromethane	(0.17)	(0.18)	(0.18)	(0.18)
Chloromethane	(0.26)	(0.28)	(0.27)	(0.27)
Vinyl Chloride	(0.28)	(0.30)	(0.29)	(0.29)
Bromomethane	(0.35)	(0.36)	(0.36)	(0.36)
Chloroethane	(0.37)	(0.39)	(0.38)	(0.38)
Trichlorofluoromethane	(0.11)	(0.12)	(0.11)	(0.11)
1,1-Dichloroethene	(0.31)	(0.32)	(0.32)	(0.32)
Methylene chloride	10.03	10.89	13.10	1.15
trans-1,2-Dichloroethene	(0.25)	(0.26)	(0.26)	(0.26)
1,1-Dichloroethane	(0.13)	(0.14)	(0.14)	(0.14)
2,2-Dichloropropane	(0.16)	(0.17)	(0.17)	(0.17)
cis-1,2-Dichloroethene	(0.25)	(0.26)	(0.26)	(0.26)
Chloroform	5.77	4.91	8.12	(0.12)
Bromochloromethane	(0.55)	(0.58)	(0.57)	(0.57)
1,1,1-Trichloroethane	(0.12)	(0.13)	(0.13)	(0.12)
Carbon tetrachloride	(0.13)	(0.13)	(0.14)	(0.13)
1,1-Dichloropropene	(0.12)	(0.12)	(0.12)	(0.12)
Benzene	(0.06)	(0.06)	(0.06)	(0.06)
1,2-Dichloroethane	(0.16)	(0.17)	(0.18)	(0.16)
Trichloroethene	(0.19)	(0.20)	(0.20)	(0.19)
1,2-Dichloropropane	(0.20)	(0.21)	(0.21)	(0.20)
Dibromomethane	(0.35)	(0.36)	(0.37)	(0.35)
Bromodichloromethane	(0.12)	(0.13)	(0.13)	(0.12)
cis-1,3-Dichloropropene	(0.16)	(0.17)	(0.17)	(0.16)
Toluene	(0.08)	0.19	0.23	1.31
trans-1,3-Dichloropropene	(0.20)	(0.21)	(0.22)	(0.20)
1,1,2-Trichloroethane	(0.28)	(0.30)	(0.30)	(0.28)
Tetrachloroethene	(0.20)	(0.21)	(0.21)	(0.22)
1,3-Dichloropropane	(0.16)	(0.17)	(0.17)	(0.17)
Dibromochloromethane	(0.24)	(0.25)	(0.24)	(0.25)
1,2-Dibromoethane	(0.28)	(0.29)	(0.29)	(0.30)
Chlorobenzene	(0.07)	(0.07)	(0.07)	(0.07)
1,1,1,2-Tetrachloroethane	(0.18)	(0.19)	(0.19)	(0.19)
Ethylbenzene	(0.13)	(0.14)	(0.14)	(0.14)
m-/p-Xylene	(0.10)	(0.11)	(0.10)	(0.11)

() - Estimated Detection Limit Page 1

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

DO A 048213
CONFIDENTIAL

Savar v3.5
Printed: 11:48:38 10/25/97

10

Triangle Laboratories of RTP
Project Summary for Project 43334A

Client ID:	DOW-VP-VST -11-CON	DOW-VP-VST -12-CON	DOW-VP-VST -13-CON	VBLK092497
Filename :	FW240	FW241	FW242	FW239
TLI Id :	184-7-25	184-7-26	184-7-27	VBLK092497
Matrix :	WATER	WATER	WATER	WATER
Units :	ug/L	ug/L	ug/L	ug/L

o-Xylene	(0.11)	(0.11)	(0.11)	(0.12)
Styrene	(0.07)	(0.08)	(0.07)	(0.08)
Bromoform	(0.45)	(0.46)	(0.45)	(0.47)
Cumene	(0.06)	(0.06)	(0.06)	(0.06)
1,1,2,2-Tetrachloroethane	(0.32)	(0.32)	(0.32)	(0.32)
Bromobenzene	(0.24)	(0.25)	(0.25)	(0.25)
1,2,3-Trichloropropane	(0.46)	(0.47)	(0.48)	(0.47)
n-Propylbenzene	(0.19)	(0.19)	(0.20)	(0.19)
2-Chlorotoluene	(0.23)	(0.23)	(0.24)	(0.24)
4-Chlorotoluene	(0.23)	(0.23)	(0.24)	(0.24)
1,3,5-Trimethylbenzene	(0.07)	(0.07)	(0.07)	(0.07)
tert-Butylbenzene	(0.06)	(0.06)	(0.06)	(0.06)
1,2,4-Trimethylbenzene	(0.06)	(0.06)	(0.07)	(0.06)
sec-Butylbenzene	(0.04)	(0.04)	(0.04)	(0.04)
Toluene	(0.05)	(0.05)	(0.06)	(0.06)
1,3-Dichlorobenzene	(0.11)	(0.11)	(0.11)	(0.11)
1,4-Dichlorobenzene	(0.11)	(0.11)	(0.11)	(0.11)
n-Butylbenzene	(0.06)	(0.06)	(0.06)	(0.06)
1,2-Dichlorobenzene	(0.14)	(0.14)	(0.14)	(0.14)
1,2-Dibromo-3-chloropropane	(2.05)	(2.08)	(2.10)	(2.09)
1,2,4-Trichlorobenzene	(0.18)	(0.18)	(0.18)	(0.18)
Hexachlorobutadiene	(0.23)	(0.24)	(0.24)	(0.24)
Naphthalene	(0.24)	(0.24)	(0.25)	(0.25)
1,2,3-Trichlorobenzene	(0.18)	(0.18)	(0.18)	(0.18)

() -Estimated Detection Limit Page 2

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

DO A 048214
CONFIDENTIAL

Savar v3.5
Printed: 11:48:38 10/25/97

11

Triangle Laboratories of RTP
LCS Summary of Results

LCS File : FW365	LCS DUP File: FW366
Date : 10/25/97	

Compound	LCS %REC	DUP %REC	RPD
Dichlorodifluoromethane	80	68	16
Chloromethane	77	69	11
Vinyl Chloride	71	73	3
Bromomethane	90	83	8
Chloroethane	81	73	10
Trichlorofluoromethane	98	86	13
1,1-Dichloroethene	89	91	2
Methylene chloride	86	76	12
trans-1,2-Dichloroethene	75	76	1
1,1-Dichloroethane	72	69	4
2,2-Dichloropropane	79	79	0
cis-1,2-Dichloroethene	90	90	0
Chloroform	86	78	10
Bromochloromethane	96	85	12
1,1,1-Trichloroethane	84	81	4
Carbon tetrachloride	84	82	2
1,1-Dichloropropene	89	96	8
Benzene	81	76	6
1,2-Dichloroethane	72	69	4
Trichloroethene	95	97	2
1,2-Dichloropropane	77	76	1
Dibromomethane	88	82	7
Bromodichloromethane	79	76	4
cis-1,3-Dichloropropene	76	80	5
Toluene	83	83	0
trans-1,3-Dichloropropene	73	76	4
1,1,2-Trichloroethane	87	84	4
Tetrachloroethene	102	103	1
1,3-Dichloropropane	89	90	1
Dibromochloromethane	100	100	0
1,2-Dibromoethane	103	105	2
Chlorobenzene	96	97	1
1,1,1,2-Tetrachloroethane	94	94	0
Ethylbenzene	79	88	11
m-/p-Xylene	81	86	6
o-Xylene	76	85	11
Styrene	68	75	10

DO A 048215
CONFIDENTIAL

Triangle Laboratories of RTP
LCS Summary of Results

LCS File : FW365	LCS DUP File: FW366
Date : 10/25/97	

Compound	LCS %REC	DUP %REC	RPD
Bromoform	101	100	1
Cumene	84	98	15
1,1,2,2-Tetrachloroethane	96	99	3
Bromobenzene	95	102	7
1,2,3-Trichloropropane	103	107	4
n-Propylbenzene	90	100	11
2-Chlorotoluene	112	119	6
4-Chlorotoluene	87	96	10
1,3,5-Trimethylbenzene	85	92	8
tert-Butylbenzene	86	96	11
1,2,4-Trimethylbenzene	77	92	18
sec-Butylbenzene	80	91	13
p-Cymene	85	95	11
1,3-Dichlorobenzene	102	103	1
1,4-Dichlorobenzene	103	107	4
n-Butylbenzene	78	88	12
1,2-Dichlorobenzene	96	103	7
1,2-Dibromo-3-chloropropane	80	86	7
1,2,4-Trichlorobenzene	81	93	14
Hexachlorobutadiene	109	121	10
Naphthalene	55	67	20
1,2,3-Trichlorobenzene	84	98	15
Acetone	588	529	11
Acrylonitrile	515	515	0
Benzyl chloride	742	829	11
Carbon disulfide	496	452	9
Iodomethane	587	622	6
Vinyl acetate	491	524	7

DO A 048216
CONFIDENTIAL

Hold all sample
until contacted
by Heidi Krahl

Condition 1 Run 1, 2, 3

Stream

J. Wayne
Signature

Remarks Hold all samples until contacted by Heidi Krall at that point only the tubes marked UOST/8260 will be analyzed

20f2

Chain of Custody Record

Hold all Samples until contacted by Heidi Krall

Dow, Plaquemine Trial Burn

Condition 1 Run 1,2,3

Vinyl II Plant—Boiler F410/420

Stack
Stream

[Signature]
Signature

Sample ID	Date	Analyses	Sample ID	Date	Analyses
DOW-VP-VST-13-TFBI	9/17/97	VOST/8260	DOW-VP-VST-12-TC04	9/17/97	Hold
DOW-VP-1-TCFBI			-T05		
DOW-VP-VST-12-T02			-TC05		
DOW-VP-TC02			-FB2T		
DOW-VP-T04			-FB2TC		↓
DOW-VP-TC04			-11-COW		
DOW-VP-T06			-12-COW		
DOW-VP-TC06			-13-COW		
DOW-VP-TF01					
DOW-VP-TCF01					
DOW-VP-VST-12-T01		Hold			
DOW-VP-TC01					
DOW-VP-T03					
DOW-VP-TC03					
DOW-VP-T04					

ANALYZE PER HEIDI KRALL'S INSTRUCTIONS — 512—419-6030 (Analytical task leader)

Received by:	Date/Time	Relinquished by:	Date/Time
Received by:	Date/Time	Relinquished by:	Date/Time
Received for laboratory by:	Date/Time	Opened by:	Date/Time

Temp °C +4 Condition good Comments: Twisted T04 DOW-VP-VST-12 T04 TCFBI

Remarks

COPY 94077

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY--		TLH Project Number 43334 Client: RAC01 - Radian International	Book 184
Custody Seal : Present/Intact Chain of Custody : Present Sample Tags : Absent Sample Tag Numbers: Not Listed on Chain of Custody SMO Forms : N/A	Sample Seals: Present Container...: Intact	Date Received 09/20/97 By <i>[Signature]</i>	Page 7
Ice Chest	ICE	Temp 4.0 C	Carrier and Number FedEx/1026533295

TLH Number... Client Sample ID.....	Matrix	To LAB	To STORAGE	To LAB	To STORAGE	To LAB	To STORAGE	To LAB	To STORAGE	DISPOSED
NR/H:CPM..... Client COC ID.....*	Location.....	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init
184-7-1A	DOW-VP-VST-11-T02 DOW-VP-VST-11-T02	TENAX R026								
184-7-1B	DOW-VP-VST-11-TC02 DOW-VP-VST-11-TC02	TNX/CHAR R026								
184-7-2A	DOW-VP-VST-11-T04 DOW-VP-VST-11-T04	TENAX R026								
184-7-2B	DOW-VP-VST-11-TC04 DOW-VP-VST-11-TC04	TNX/CHAR R026								
184-7-3A	DOW-VP-VST-11-T06 DOW-VP-VST-11-T06	TENAX R026								
184-7-3B	DOW-VP-VST-11-TC06 DOW-VP-VST-11-TC06	TNX/CHAR R026								
184-7-4A	DOW-VP-VST-11-TFB1 DOW-VP-VST-11-TFB1	TENAX R026								
184-7-4B	DOW-VP-VST-11-TCFB1 DOW-VP-VST-11-TCFB1	TNX/CHAR R026								
184-7-5A	DOW-VP-VST-11-T01 DOW-VP-VST-11-T01	TENAX R026								
184-7-5B	DOW-VP-VST-11-TC01 DOW-VP-VST-11-TC01	TNX/CHAR R026								
184-7-6A	DOW-VP-VST-11-T03 DOW-VP-VST-11-T03	TENAX R026								
184-7-6B	DOW-VP-VST-11-TC03 DOW-VP-VST-11-TC03	TNX/CHAR R026								
184-7-7A	DOW-VP-VST-11-T05 DOW-VP-VST-11-T05	TENAX R026								
184-7-7B	DOW-VP-VST-11-TC05 DOW-VP-VST-11-TC05	TNX/CHAR R026								

Receiving Remarks: DOW-VP-VST-12-T04,TC04 Appears on C.O.C. Twice.

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY--

Custody Seal : Present/Intact	Sample Seals: Present	TLI Project Number 43334	Book
Chain of Custody : Present	Container....: Intact	Client: RAC01 - Radian International	184
Sample Tags : Absent			
Sample Tag Numbers: Not Listed on Chain of Custody			
SMO Forms : N/A		Date Received 09/20/97 By <i>[Signature]</i>	Page
Ice Chest	ICE	Carrier and Number FedEx/1826533295	7

TLI Number..	Client Sample ID.....	Matrix	To LAB	To STORAGE	To LAB	To STORAGE	To LAB	To STORAGE	To LAB	To STORAGE	DISPOSED
mR/H:CPM.	Client COC ID.....	Location.....	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init	Date/Init
184-7-8A	DOW-VP-VST-11-FB2-T	TENAX									
	DOW-VP-VST-11-FB2-T	R026									
184-7-8B	DOW-VP-VST-11-FB2-TC	TNX/CHAR									
	DOW-VP-VST-11-FB2-TC	R026									
184-7-9A	DOW-VP-VST-13-T01	TENAX									
	DOW-VP-VST-13-T01	R026									
184-7-9B	DOW-VP-VST-13-TC01	TNX/CHAR									
	DOW-VP-VST-13-TC01	R026									
184-7-10A	DOW-VP-VST-13-T03	TENAX									
	DOW-VP-VST-13-T03	R026									
184-7-10B	DOW-VP-VST-13-TC03	TNX/CHAR									
	DOW-VP-VST-13-TC03	R026									
184-7-11A	DOW-VP-VST-13-T05	TENAX									
	DOW-VP-VST-13-T05	R026									
184-7-11B	DOW-VP-VST-13-TC05	TNX/CHAR									
	DOW-VP-VST-13-TC05	R026									
184-7-12A	DOW-VP-13-FB2-T	TENAX									
	DOW-VP-13-FB2-T	R026									
184-7-12B	DOW-VP-13-FB2-TC	TNX/CHAR									
	DOW-VP-13-FB2-TC	R026									
184-7-13A	DOW-VP-VST-13-T02	TENAX									
	DOW-VP-VST-13-T02	R026									
184-7-13B	DOW-VP-VST-13-TC02	TNX/CHAR									
	DOW-VP-VST-13-TC02	R026									
184-7-14A	DOW-VP-VST-13-T04	TENAX									
	DOW-VP-VST-13-T04	R026									
184-7-14B	DOW-VP-VST-13-TC04	TNX/CHAR									
	DOW-VP-VST-13-TC04	R026									

Receiving Remarks: DOW-VP-VST-12-T04,TC04 Appears on C.O.C. Twice.

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY--

Custody Seal : Present/Intact Sample Seals: Present
Chain of Custody : Present Container.... Intact
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

TLI Project Number 43334
Client: RAC01 - Radian International

Book
184

Date Received 09/20/97 By *[Signature]*

Page

Carrier and Number FedEx/1826533295

7

Ice Chest ICE Temp 4.0 C

TLI Number... mR/N:CPM.	Client Sample ID..... Client COC ID.....*	Matrix Location.....	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
184-7-15A	DOW-VP-VST-13-T06 DOW-VP-VST-13-T06	TENAX R026									
184-7-15B	DOW-VP-VST-13-TC06 DOW-VP-VST-13-TC06	TNX/CHAR R026									
184-7-16A	DOW-VP-VST-13-TFB1 DOW-VP-VST-13-TFB1	TENAX R026									
184-7-16B	DOW-VP-VST-13-TCFB1 DOW-VP-VST-13-TCFB1	TNX/CHAR R026									
184-7-17A	DOW-VP-VST-12-T02 DOW-VP-VST-12-T02	TENAX R026									
184-7-17B	DOW-VP-VST-12-TC02 DOW-VP-VST-12-TC02	TNX/CHAR R026									
184-7-18A	DOW-VP-VST-12-T04 DOW-VP-VST-12-T04	TENAX R026									
184-7-18B	DOW-VP-VST-12-TC04 DOW-VP-VST-12-TC04	TNX/CHAR R026									
184-7-19A	DOW-VP-VST-12-T06 DOW-VP-VST-12-T06	TENAX R026									
184-7-19B	DOW-VP-VST-12-TC06 DOW-VP-VST-12-TC06	TNX/CHAR R026									
184-7-20A	DOW-VP-VST-12-TFB1 DOW-VP-VST-12-TFB1	TENAX R026									
184-7-20B	DOW-VP-VST-12-TCFB1 DOW-VP-VST-12-TCFB1	TNX/CHAR R026									
184-7-21A	DOW-VP-VST-12-T01 DOW-VP-VST-12-T01	TENAX R026									
184-7-21B	DOW-VP-VST-12-TC01 DOW-VP-VST-12-TC01	TNX/CHAR R026									

Receiving Remarks: DOW-VP-VST-12-T04,TC04 Appears on C.O.C. Twice.

Archive Remarks:

DO A 048221
CONFIDENTIAL

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY				TLI Project Number 43334 Client: RAC01 - Radian International	Book 104
Custody Seal : Present/Intact Chain of Custody : Present Sample Tags : Absent Sample Tag Numbers: Not Listed on Chain of Custody SHO Forms : N/A	Sample Seals: Present Container...: Intact	Date Received 09/20/97	By 	Page 1	
Ice Chest ICE Temp 4.0 C	Carrier and Number FedEx/1826533295				

[illegible]

Archive # rko:

DO A 048722
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

20

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	6252663	8260	UON	V003	8260A	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSB-145-2 Exp 9/25/97 2.59ml	→	

Extract / Sample volume _____ μ L mL

Signature Carol S. Anderson Date 9/11/97

DO A 048223
CONFIDENTIAL

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/10/97	23:32	43069	VSB-145-1 Exp 9/24/97 10.6	LCS T/TC	FW079		ES 9/10/97	Exp 9/10/97	ES	
9/10/97	00:08	43069	VSB-145-1 Exp 9/24/97 2.59	LOSD T/TC	FW080		ES 9/10/97		ES	
9/11/97	06:24		VSB-145-2 Exp 9/25/97	BFB	FW081		CA 9/11/97		CA	
	06:49	VSB-143-1 Exp 9/23/97	VSB-143-3 Exp 9/23/97	USED050	FW082		CA 9/11/97		CA	8260
	07:23	VSB-143-1 Exp 9/23/97	VSB-143-2 Exp 9/23/97	USED020	FW083		CA 9/11/97		CA	
	07:52	VSB-143-1 Exp 9/23/97	VSB-144-1 Exp 9/23/97	USED010	FW084		CA 9/11/97		CA	
	08:29	VSB-143-1 Exp 9/23/97	VSB-143-4 Exp 9/23/97	USED0100	FW085		CA 9/11/97		CA	
	08:51	VSB-143-1 Exp 9/23/97	VSB-144-2 Exp 9/23/97	USED0200	FW086		CA 9/11/97		CA	
	09:22		VSB-144-1 Exp 9/24/97	UBIK	FW087		CA 9/11/97		ES	
	09:50		VSB-144-1 Exp 9/24/97 10.6	UBIK	FW088		ES 9/11/97		ES	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 31

Triangle Laboratories, Inc.
Run Log

21

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB 624	6252663	8260	UUA	UUA3	8260	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
US 148-2 US 149-2 US 150-2		

Extract / Sample volume _____ μ L mL

Signature [Signature] Date _____

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/23/92	15:48		1000 US 147-2 Exp 10/1/92	VFBIK	FW228				CA	
	16:20	43321B	183-93-10B	DOW-VP-VST-31-TFCBI TIC	FW229		CA 9/23/92		2L	
	16:51	43321B	183-93-20B	VP-FB2-T DOW-KA TIC	FW230		CA 9/23/92		2L	
	17:19	43321B	183-93-34B	VP-FB2-T DOW-VP-VST-33-TFCBI TIC	FW231		FBS 9/23/92		FBS	
9/23/92	16:51	43321B	183-93-10A	DOW-VP-VST-31-TFCBI	FW232		FBS 9/23/92		FBS	
9/23/92	18:09	43321B	183-93-20A	DOW-VP-FB2-T	FW233		FBS 9/23/92		FBS	
9/23/92	18:46	43321B	183-93-34A	DOW-VP-VST-33-TFCBI	FW234		FBS 9/23/92		FBS	SYSTEMS MALFUNCTION, COMPUTER CRASHED, FILE LOST.
9/24/92	07:56		2.00 US 145-2 Exp 9/1/92	BFB	FW235		CA 9/24/92		FBS	
9/24/92	08:07		10.00 US 149-4 Exp 10/1/92	VST D050	FW236		FBS 9/24/92		FBS	
9/24/92	10:52		10.00 US 149-4 Exp 10/1/92	VST D050	FW237		FBS 9/24/92		FBS	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 51

SVR1104AFORMS\RRUNLOG.DOC (1/23/97)

DO A 048224
CONFIDENTIAL

22

Signature _____ Date _____

Page 512

Radian International

Project Number: 43334A
Sample File: FW240

Method 8260 WATER
Sample ID: DOW-VP-VST-11-CON

Client Project: Dow Plaquemine
TLI ID: 184-7-25

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
Pentafluorobenzene		IS 1	5.28		
Dichlorodifluoromethane		U		0.17	5
Chloromethane		U		0.26	5
Vinyl Chloride		U		0.28	5
Bromomethane		U		0.35	5
Chloroethane		U		0.37	5
Trichlorofluoromethane		U		0.11	5
1,1-Dichloroethene		U		0.31	5
Methylene chloride	10.03	B	3.24		5
trans-1,2-Dichloroethene		U		0.25	5
Dichloroethane		U		0.13	5
2,2-Dichloropropane		U		0.16	5
cis-1,2-Dichloroethene		U		0.25	5
Chloroform	5.77		4.99		5
Bromochloromethane		U		0.55	5
1,1,1-Trichloroethane		U		0.12	5
1,4-Difluorobenzene		IS 2	6.05		
Carbon tetrachloride		U		0.13	5
1,1-Dichloropropene		U		0.12	5
Benzene		U		0.06	5
1,2-Dichloroethane		U		0.16	5
Trichloroethene		U		0.19	5
1,2-Dichloropropane		U		0.20	5
Dibromomethane		U		0.35	5
Bromodichloromethane		U		0.12	5
cis-1,3-Dichloropropene		U		0.16	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:41 10/25/1997

DO A 048226
CONFIDENTIAL

Radian International

Project Number: 43334A
Sample File: FW240

Method 8260 WATER
Sample ID: DOW-VP-VST-11-CON

Client Project: Dow Plaquemine
TLI ID: 184-7-25

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
Toluene		U		0.08	5
trans-1,3-Dichloropropene		U		0.20	5
1,1,2-Trichloroethane		U		0.28	5
Chlorobenzene-d ₅		IS 3	10.32		
Tetrachloroethene		U		0.20	5
1,3-Dichloropropane		U		0.16	5
Dibromochloromethane		U		0.24	5
1,2-Dibromoethane		U		0.28	5
Chlorobenzene		U		0.07	5
1,1,1,2-Tetrachloroethane		U		0.18	5
Ethylbenzene		U		0.13	5
m-/p-Xylene		U		0.10	10
o-Xylene		U		0.11	5
Styrene		U		0.07	5
Bromoform		U		0.45	5
1,4-Dichlorobenzene-d ₄		IS 4	15.68		
Cumene		U		0.06	5
1,1,2,2-Tetrachloroethane		U		0.32	5
Bromobenzene		U		0.24	5
1,2,3-Trichloropropane		U		0.46	5
n-Propylbenzene		U		0.19	5
2-Chlorotoluene		U		0.23	5
4-Chlorotoluene		U		0.23	5
1,3,5-Trimethylbenzene		U		0.07	5
tert-Butylbenzene		U		0.06	5
1,2,4-Trimethylbenzene		U		0.06	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 344-5729 • Fax: (919) 344-5491

DO A 048227
CONFIDENTIAL

Savar v3.5
Printed: 11:41 10/25/1997

Radian International

Project Number: 43334A
Sample File: FW240

Method 8260 WATER
Sample ID: DOW-VP-VST-11-CON

Client Project: Dow Plaquemine	Date Received: 09/20/97	Response File: FW237
TLI ID: 184-7-25	Date Analyzed: 09/24/97	
Sample Vol.: 0.005 L	Dilution Factor: 1.00	

Analyte	Conc. ug/l	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
sec-Butylbenzene		U		0.04	5
p-Cymene		U		0.05	5
1,3-Dichlorobenzene		U		0.11	5
1,4-Dichlorobenzene		U		0.11	5
n-Butylbenzene		U		0.06	5
1,2-Dichlorobenzene		U		0.14	5
1,2-Dibromo-3-chloropropane		U		2.05	5
1,2,4-Trichlorobenzene		U		0.18	5
Hexachlorobutadiene		U		0.23	5
Naphthalene		U		0.24	5
3-Trichlorobenzene		U		0.18	5

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.32	5.15	1	128
Toluene-d ₈	0.27	7.98	2	108
4-Bromofluorobenzene	0.20	12.62	2	80

DO A 048228
CONFIDENTIAL

Reviewed by SAH Date 10/25/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 11:41 10/25/1997

26 -

DO A 048229
CONFIDENTIAL

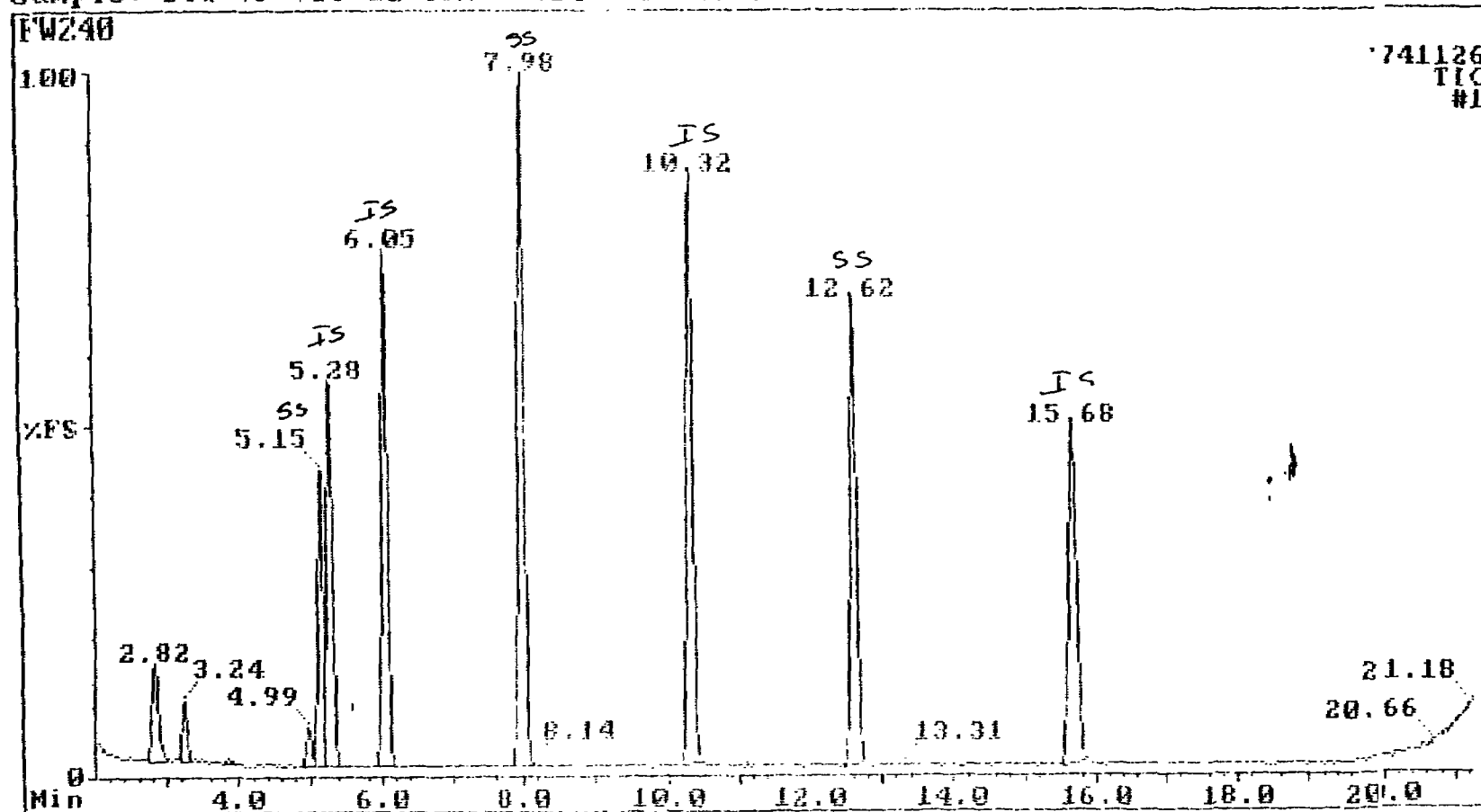
24-Sep-97 12:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-11-CON 184-7-25 ILI#43334A

Instrument F

Data Review: *gaf*
Date: 10/24/97

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	81	99	1	931904	bb	5.281	168 Pentafluorobenzene
2	100	96	97	0	1394064	bb	6.051	114 1,4-Difluorobenzene
3	100	97	98	-3	1321520	bv	10.321	117 Chlorobenzene-d5
4	100	78	99	-4	609560	bv	15.682	152 1,4-Dichlorobenzene-d4
5	100	94	99	-1	667776	bb	5.151	113 Dibromofluoromethane
6	100	94	99	-1	1823776	bv	7.981	98 Toluene-d8
7	100	89	93	-6	680856	bv	12.621	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.000	85 Dichlorodifluoromethane
9	17	14	14	-2	PPSAT 412 bb		1.828	50 Chloromethane
10	0	0	0	0	0		0.000	62 Vinyl Chloride
11	0	0	0	0	0		0.000	94 Bromomethane
12	0	0	0	0	0		0.000	64 Chloroethane
13	41	12	58	2	PPSAT 1112		2.823	101 Trichlorofluoromethane
14	0	0	0	0	0		0.000	96 1,1-Dichloroethane
15	100	72	97	1	74996	bb	3.240	84 Methylene chloride
16	0	0	0	0	0		0.000	96 trans-1,2-Dichloroethane
17	0	0	0	0	0		0.000	65 1,1-Dichloroethane
18	0	0	0	0	0		0.000	77 2,2-Dichloropropane
19	0	0	0	0	0		0.000	94 cis-1,2-Dichloroethane
20	100	58	90	-1	97926	bb	4.901	85 Chloroform
21	0	0	0	0	0		0.000	123 Bromochloromethane
22	0	0	0	0	0		0.000	97 1,1,1-Trichloroethane
23	0	0	0	0	0		0.000	117 Carbon tetrachloride
24	0	0	0	0	0		0.000	75 1,1-Dichloropropane
25	0	0	0	0	0		0.000	78 Benzene
26	0	0	0	0	0		0.000	60 1,3-Dichloropropane
27	0	0	0	0	0		0.000	130 Trichloroethane
28	0	0	0	0	0		0.000	65 1,2-Dichloropropane
29	0	0	0	0	0		0.000	93 Dibromomethane
30	0	0	0	0	0		0.000	65 Bromodichloromethane
31	0	0	0	0	0		0.000	75 cis-1,2-Dichloropropane
32	0	0	0	0	0		0.000	91 Toluene
33	0	0	0	0	0		0.000	75 trans-1,2-Dichloropropane
34	0	0	0	0	0		0.000	97 1,1,2-Trichloroethane
35	0	0	0	0	0		0.000	164 Tetrachloroethane
36	0	0	0	0	0		0.000	75 1,3-Dichloropropane
37	0	0	0	0	0		0.000	129 Dibromochloromethane
38	0	0	0	0	0		0.000	107 1,2-Dibromomethane
39	0	0	0	0	0		0.000	112 Chlorobenzene
40	0	0	0	0	0		0.000	131 1,1,1,2-Tetrachloroethane
41	0	0	0	0	0		0.000	106 Ethylbenzene
42	0	0	0	0	0		0.000	106 m-/p-Xylene
43	0	0	0	0	0		0.000	106 o-Xylene
44	0	0	0	0	0		0.000	104 Styrene
45	0	0	0	0	0		0.000	173 Bromoform
46	0	0	0	0	0		0.000	105 Cumene
47	0	0	0	0	0		0.000	85 1,1,2,2-Tetrachloroethane
48	15	10	52	-19	PPSAT 412 bb		12.621	156 Bromobenzene
49	0	0	0	0	0		0.000	75 1,2,3-Trichloropropane
50	0	0	0	0	0		0.000	120 n-Propylbenzene

DO A 048230
CONFIDENTIALData Review: East
Date: 10/24/97

27

No	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
51	0	0	0	0	0		0.000	126 2-Chlorotoluene
52	0	0	0	0	0		0.000	126 4-Chlorotoluene
53	0	0	0	0	0		0.000	105 1,3,5-Trimethylbenzene
54	0	0	0	0	0		0.000	119 tert-Butylbenzene
55	0	0	0	0	0		0.000	105 1,2,4-Trimethylbenzene
56	0	0	0	0	0		0.000	105 sec-Butylbenzene
57	0	0	0	0	0		0.000	119 p-Cymene
58	0	0	0	0	0		0.000	146 1,3-Dichlorobenzene
59	0	0	0	0	0		0.000	146 1,4-Dichlorobenzene
60	0	0	0	0	0		0.000	91 n-Butylbenzene
61	0	0	0	0	0		0.000	146 1,2-Dichlorobenzene
62	0	0	0	0	0		0.000	73 1,2-Dibromo-3-chloropropane
63	0	0	0	0	0		0.000	180 1,2,4-Trichlorobenzene
64	0	0	0	0	0		0.000	205 Hexachlorobutadiene
65	0	0	0	0	0		0.000	128 Naphthalene
66	0	0	0	0	0		0.000	180 1,2,3-Trichlorobenzene
67	100	87	95	-1	390.587	bw	7.870	43 Acetone
68	5	4	3	1	66.4	bw	4.250	53 Acrylonitrile
69	0	0	0	0	0		0.000	91 Benzyl chloride
70	14	15	28	120	508	bw	3.920	76 Carbon disulfide
71	0	0	0	0	0		0.000	100 Trichloroethene
72	46	37	39	-13	3905.67	bw	0.800	47 Vinyl acetate

DO A 048231
CONFIDENTIAL

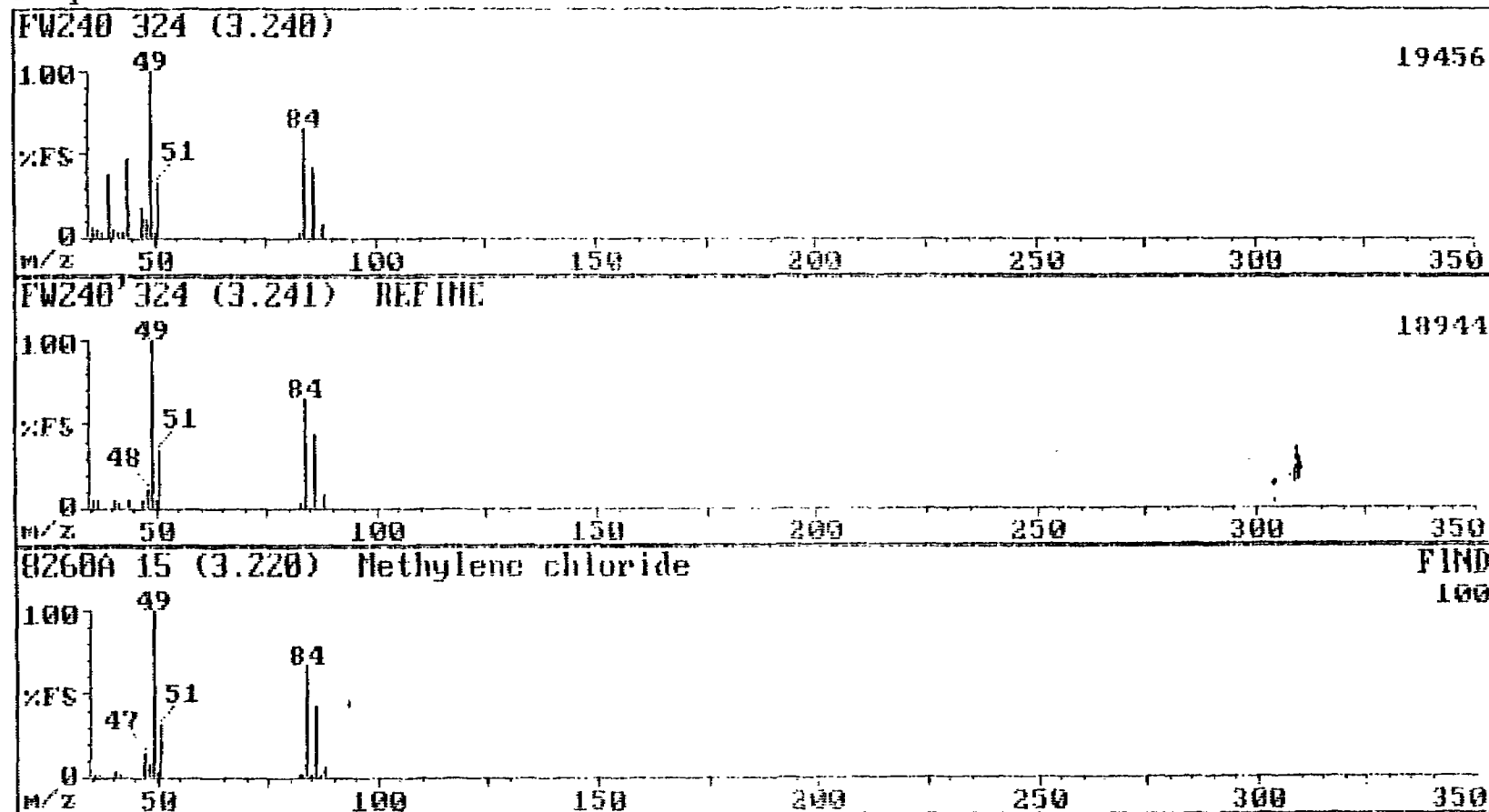
24-Sep-97 12:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-UST-11-CON 184-7-25 TLH43334A

Instrument F



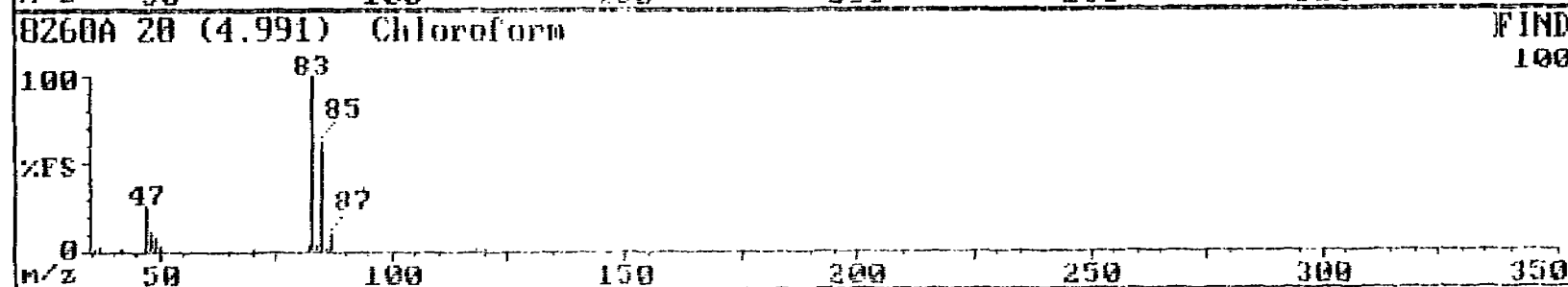
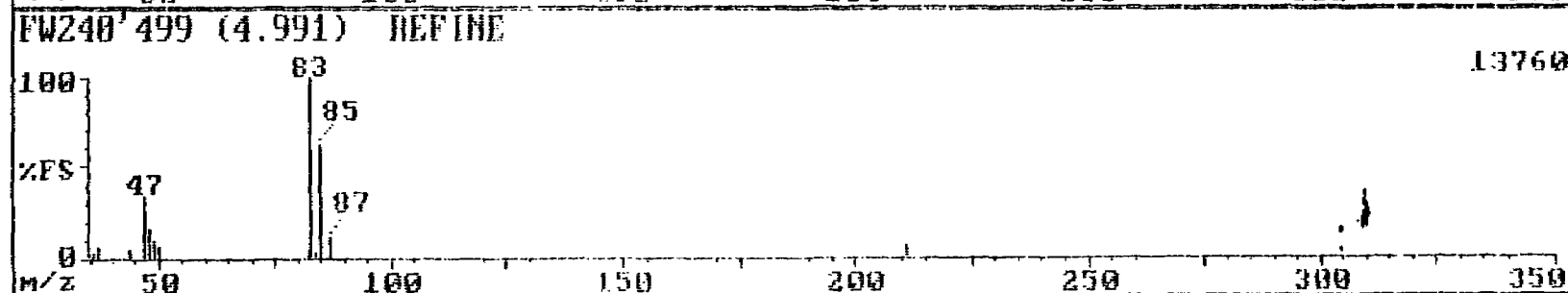
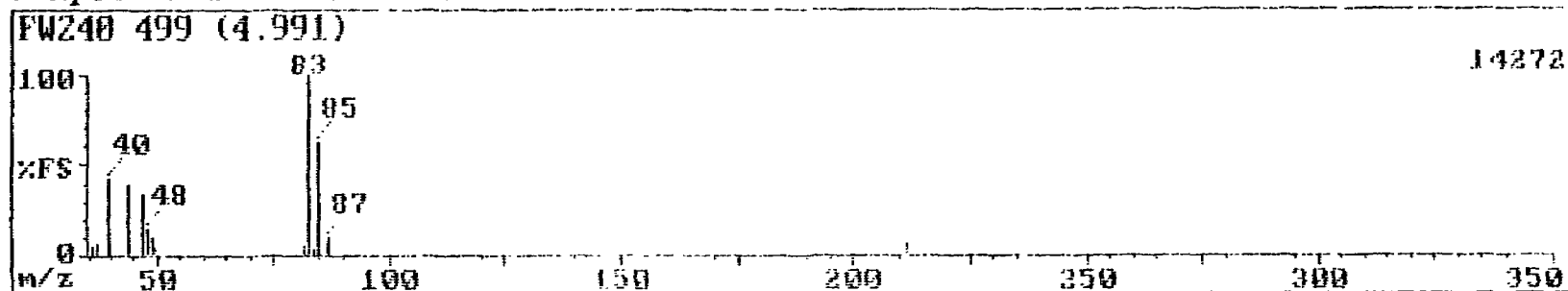
24-Sep-97 12:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-UST-11-COM 104-7-25 TLH43334A

Instrument F

DO A 048233
CONFIDENTIAL

Radian International

Project Number: 43334A
Sample File: FW241

Method 8260 WATER
Sample ID: DOW-VP-VST-12-CON

Client Project: Dow Plaquemine
TLI ID: 184-7-26

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
Pentafluorobenzene		IS 1	5.29		
Dichlorodifluoromethane		U		0.18	5
Chloromethane		U		0.28	5
Vinyl Chloride		U		0.30	5
Bromomethane		U		0.36	5
Chloroethane		U		0.39	5
Trichlorofluoromethane		U		0.12	5
1,1-Dichloroethene		U		0.32	5
Methylene chloride	10.89	B	3.24		5
trans-1,2-Dichloroethene		U		0.26	5
Dichloroethane		U		0.14	5
1,1,1-Trichloroethane		U		0.17	5
cis-1,2-Dichloroethene		U		0.26	5
Chloroform	4.91	J	5.00		5
Bromochloromethane		U		0.58	5
1,1,1-Trichloroethane		U		0.13	5
1,4-Difluorobenzene		IS 2	6.05		
Carbon tetrachloride		U		0.13	5
1,1-Dichloropropene		U		0.12	5
Benzene		U		0.06	5
1,2-Dichloroethane		U		0.17	5
Trichloroethene		U		0.20	5
1,2-Dichloropropane		U		0.21	5
Dibromomethane		U		0.36	5
Bromodichloromethane		U		0.13	5
cis-1,3-Dichloropropene		U		0.17	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 11:41 10/25/1997

DO A 048234
CONFIDENTIAL

Radian International

Project Number: 43334A
Sample File: FW241

Method 8260 WATER
Sample ID: DOW-VP-VST-12-CON

Client Project: Dow Plaquemine
FLI ID: 184-7-26

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
Toluene	0.19	BJ	8.07		5
trans-1,3-Dichloropropene		U		0.21	5
1,1,2-Trichloroethane		U		0.30	5
Chlorobenzene-d ₃		IS 3	10.31		
Tetrachloroethene		U		0.21	5
1,3-Dichloropropane		U		0.17	5
Dibromochloromethane		U		0.25	5
1,2-Dibromoethane		U		0.29	5
Chlorobenzene		U		0.07	5
1,1,1,2-Tetrachloroethane		U		0.19	5
Ethylbenzene		U		0.14	5
m-/p-Xylene		U		0.11	10
o-Xylene		U		0.11	5
Styrene		U		0.08	5
Bromoform		U		0.46	5
1,4-Dichlorobenzene-d ₄		IS 4	15.66		
Cumene		U		0.06	5
1,1,2,2-Tetrachloroethane		U		0.32	5
Bromobenzene		U		0.25	5
1,2,3-Trichloropropane		U		0.47	5
n-Propylbenzene		U		0.19	5
2-Chlorotoluene		U		0.23	5
4-Chlorotoluene		U		0.23	5
1,3,5-Trimethylbenzene		U		0.07	5
tert-Butylbenzene		U		0.06	5
1,2,4-Trimethylbenzene		U		0.06	5

DO A 048235
CONFIDENTIAL

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 11:41 10/25/1997

32

Radian International

Project Number: 43334A
Sample File: FW241

Method 8260 WATER
Sample ID: DOW-VP-VST-12-CON

Client Project: Dow Plaquemine
TLI ID: 184-7-26

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
sec-Butylbenzene		U		0.04	5
p-Cymene		U		0.05	5
1,3-Dichlorobenzene		U		0.11	5
1,4-Dichlorobenzene		U		0.11	5
n-Butylbenzene		U		0.06	5
1,2-Dichlorobenzene		U		0.14	5
1,2-Dibromo-3-chloropropane		U		2.08	5
1,2,4-Trichlorobenzene		U		0.18	5
Hexachlorobutadiene		U		0.24	5
Naphthalene		U		0.24	5
1,2,3-Trichlorobenzene		U		0.18	5

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.33	5.16	1	132
Toluene-d ₈	0.27	7.97	2	108
4-Bromofluorobenzene	0.20	12.61	2	80

Reviewed by Satt Date 10/25/97

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:41 10/25/1997

DO A 048236
CONFIDENTIAL

33

24-Sep-97 12:51

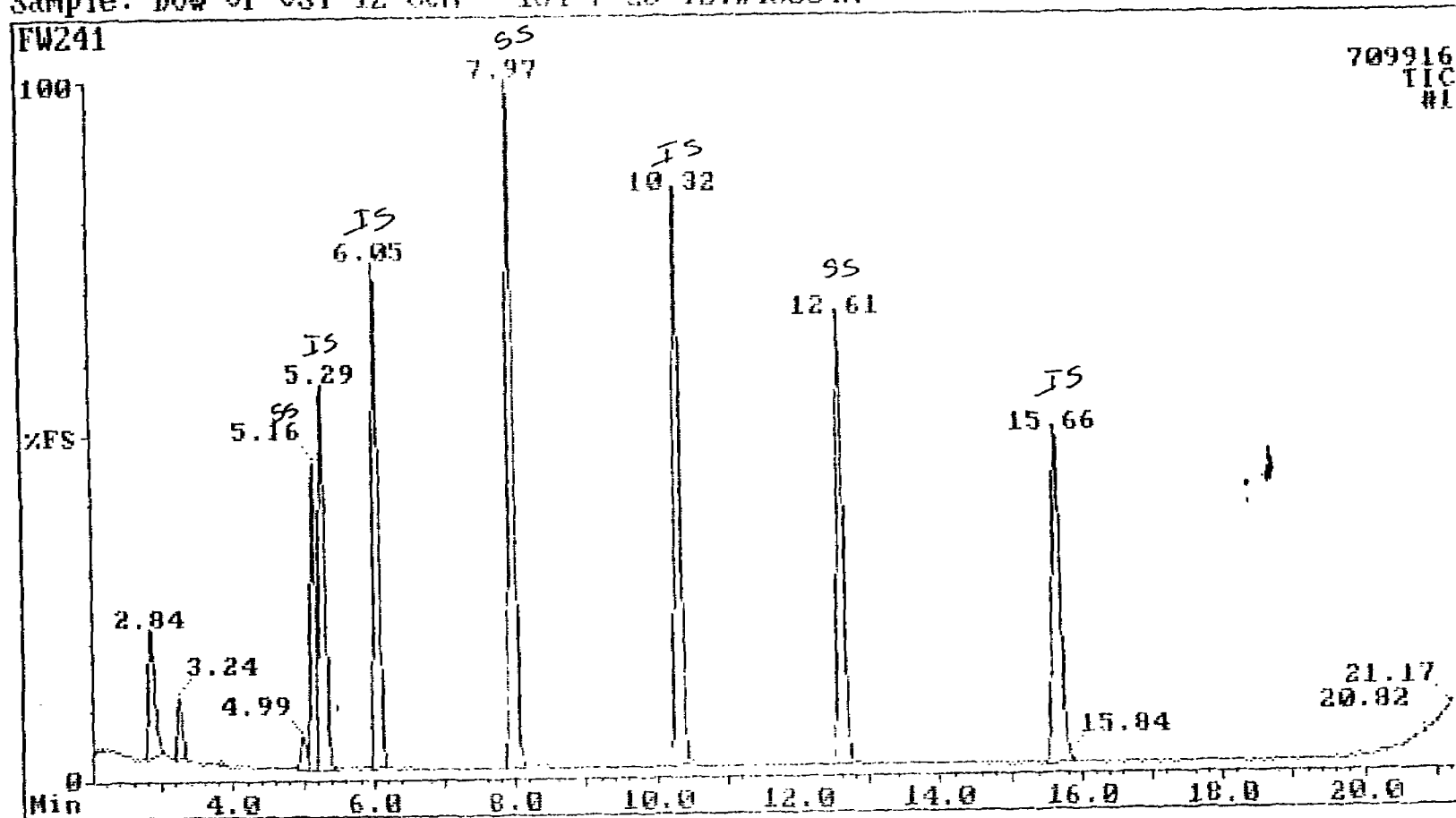
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-UST-12-COH

104-7-26 TL1143334A

Instrument F



Data Review: ~~9004~~
Date: 10/24/97

DO A 048237
CONFIDENTIAL

No.	INT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
	100	81	99	2	890384	bv	5.291	168	Pentafluorobenzene
2	100	96	98	-1	1332220	bv	6.051	114	1,4-Difluorobenzene
3	100	97	97	-4	1266860	bv	10.311	117	Chlorobenzene-d5
4	100	79	99	-4	601564	bv	15.662	152	1,4-Dichlorobenzene-d4
5	100	93	99	-1	647924	bv	5.161	113	Dibromofluoromethane
6	100	94	99	-2	1776060	bv	7.971	98	Toluene-d8
7	100	89	95	-7	657644	bv	12.611	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.000	85	Dichlorodifluoromethane
9	16	13	14	-3	FP 324 35		1.613	30	Chloromethane
10	0	0	0	0	0		0.000	62	Vinyl Chloride
11	0	0	0	0	0		0.000	94	Bromomethane
12	0	0	0	0	0		0.000	64	Chloroethane
13	39	10	56	2	FP 371 3		2.072	101	Trichlorofluoromethane
14	0	0	0	0	0		0.000	96	1,1-Dichloroethene
15	100	72	97	1	77784	bv	3.240	84	Methylene chloride
16	0	0	0	0	0		0.000	96	trans-1,2-Dichloroethene
17	0	0	0	0	0		0.000	60	1,1-Dichloroethane
18	0	0	0	0	0		0.000	77	2,2-Dichloropropane
19	0	0	0	0	0		0.000	96	cis-1,2-Dichloroethane
20	99	67	96	-1	79508	bv	5.001	35	Chloroform
21	0	0	0	0	0		0.000	128	Bromodichloromethane
22	0	0	0	0	0		0.000	27	1,1,1-Trichloroethane
23	0	0	0	0	0		0.000	117	Carbon tetrachloride
24	0	0	0	0	0		0.000	75	1,1-Dichloropropane
25	0	0	0	0	0		0.000	78	Bromoform
26	0	0	0	0	0		0.000	62	1,2-Dichloroethane
27	0	0	0	0	0		0.000	130	Trichloroethene
28	0	0	0	0	0		0.000	63	1,1-Dichloropropane
29	0	0	0	0	0		0.000	93	Dibromomethane
30	0	0	0	0	0		0.000	83	Bromodichloromethane
31	0	0	0	0	0		0.000	75	cis-1,3-Dichloropropane
32	0	0	0	0	4652		8.07	92	Toluene
33	0	0	0	0	0		0.000	75	trans-1,3-Dichloropropane
34	0	0	0	0	0		0.000	97	1,1,2-Trichloroethane
35	0	0	0	0	0		0.000	164	Tetrachloroethene
36	0	0	0	0	0		0.000	70	1,3-Dichloropropane
37	0	0	0	0	0		0.000	129	Dibromochloromethane
38	0	0	0	0	0		0.000	107	1,2-Dibromoethane
39	0	0	0	0	0		0.000	112	Chlorobenzene
40	0	0	0	0	0		0.000	131	1,1,1,2-Tetrachloroethane
41	0	0	0	0	0		0.000	106	Ethylbenzene
42	0	0	0	0	0		0.000	106	m-/p-Xylene
43	0	0	0	0	0		0.000	106	o-Xylene
44	0	0	0	0	0		0.000	104	Styrene
45	0	0	0	0	0		0.000	173	Bromoform
46	0	0	0	0	0		0.000	103	Cumene
47	0	0	0	0	0		0.000	83	1,1,2,2-Tetrachloroethane
48	0	0	0	0	0		0.000	156	Bromobenzene
49	0	0	0	0	0		0.000	73	1,2,3-Trichloropropane
50	0	0	0	0	0		0.000	120	n-Propylbenzene

DO A 048238
CONFIDENTIAL

Data Review: *sat*
Date: 10/24/97

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
51	0	0	0	0	0		0.000	126 2-Chlorotoluene
52	0	0	0	0	0		0.000	126 4-Chlorotoluene
53	0	0	0	0	0		0.000	105 1,3,5-Trimethylbenzene
54	0	0	0	0	0		0.000	119 tert-Butylbenzene
55	0	0	0	0	0		0.000	105 1,2,4-Trimethylbenzene
56	0	0	0	0	0		0.000	105 sec-Butylbenzene
57	0	0	0	0	0		0.000	119 p-Cymene
58	0	0	0	0	0		0.000	146 1,3-Dichlorobenzene
59	0	0	0	0	0		0.000	146 1,4-Dichlorobenzene
60	0	0	0	0	0		0.000	91 n-Butylbenzene
61	0	0	0	0	0		0.000	146 1,2-Dichlorobenzene
62	0	0	0	0	0		0.000	75 1,2-Dibromo-3-chloropropane
63	0	0	0	0	0		0.000	180 1,2,4-Trichlorobenzene
64	0	0	0	0	0		0.000	220 Hexachlorobutadiene
65	0	0	0	0	0		0.000	128 Naphthalene
66	0	0	0	0	0		0.000	180 1,2,3-Trichlorobenzene
67	100	85	98	1	315766	vv	2.840	47 Acetone
68	10	4	22	-68	480	bb	2.880	67 Acrylonitrile
69	0	0	0	0	0		0.000	91 Benzyl chloride
70	25	11	33	-99	600	bb	3.140	76 Carbon disulfide
71	0	0	0	0	0		0.000	147 Isodimethane
72	47	65	90	-100	315766	vv	2.340	47 Vinyl acetate

DO A 048239
CONFIDENTIAL

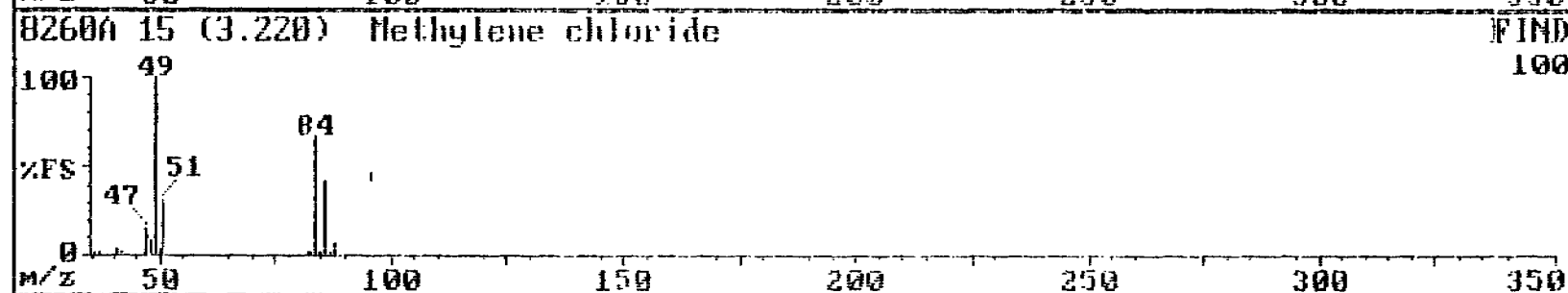
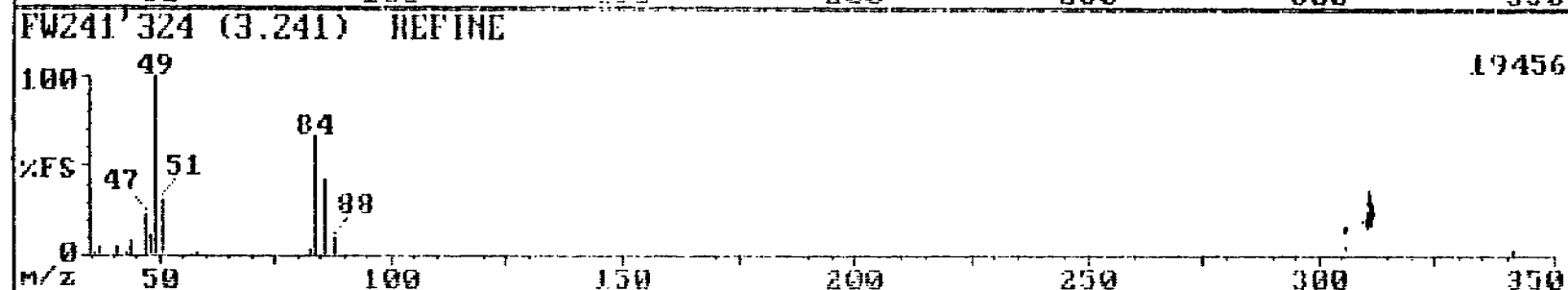
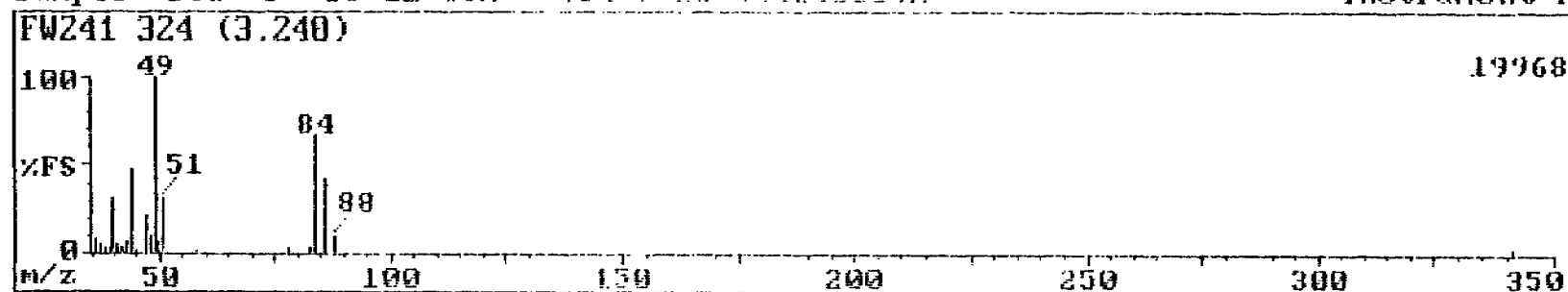
24-Sep-97 12:51

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-UST-12-CON 184-7-26 TLH433340

Instrument F



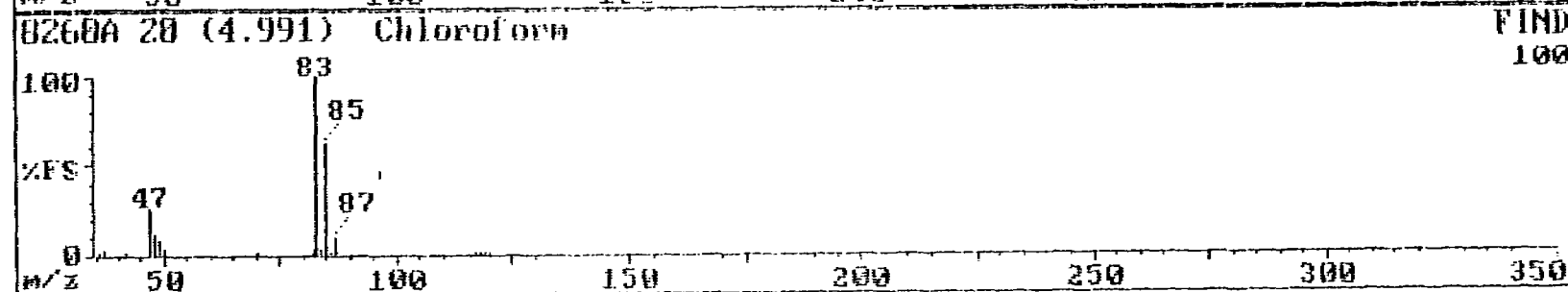
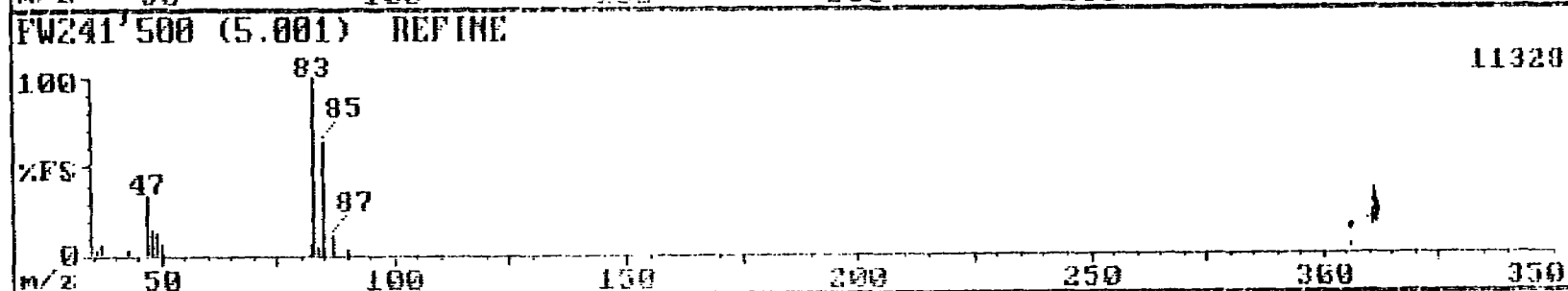
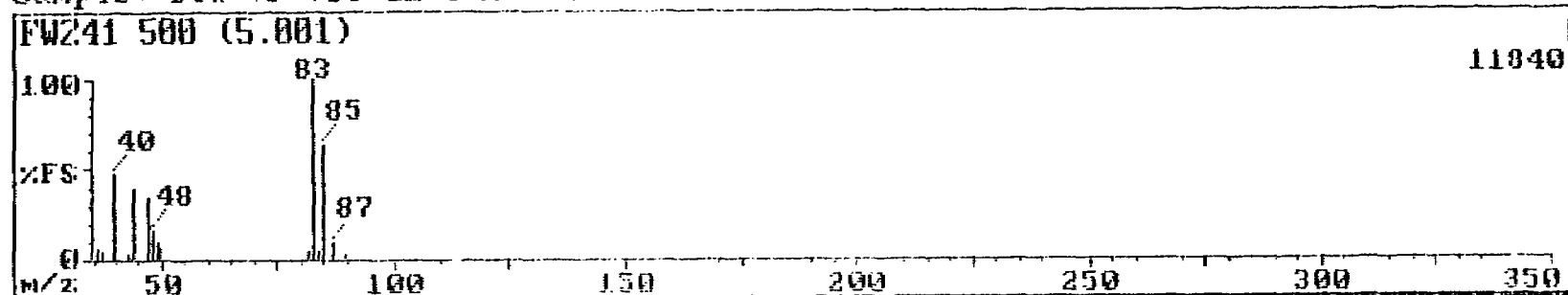
24-Sep-97 12:51

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-VST-12-CON 184-7-26 TLH43334A

Instrument F

DO A 048241
CONFIDENTIAL

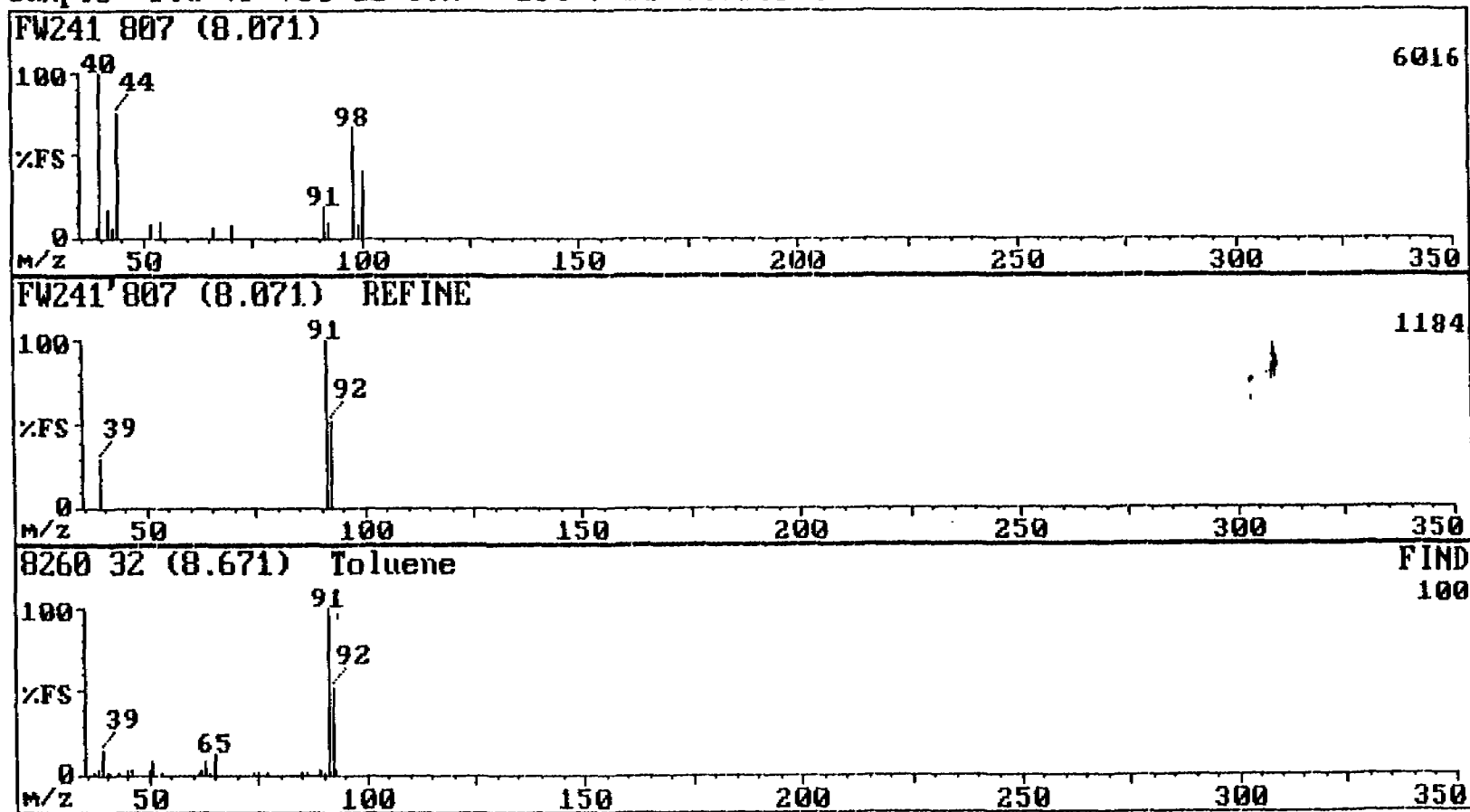
24-Sep-97 12:51

Triangle Laboratories, Inc.

(919) 544-5729

Sample: DOW-VP-VST-12-CON 104-7-26 TLIN43334A

Instrument F



Radian International

Project Number: 43334A
Sample File: FW242

Method 8260 WATER
Sample ID: DOW-VP-VST-13-CON

Client Project: Dow Plaquemine
TLI ID: 184-7-27

Date Received: 09/20/97

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
Pentafluorobenzene		IS 1	5.29		
Dichlorodifluoromethane		U		0.18	5
Chloromethane		U		0.27	5
Vinyl Chloride		U		0.29	5
Bromomethane		U		0.36	5
Chloroethane		U		0.38	5
Trichlorofluoromethane		U		0.11	5
1,1-Dichloroethene		U		0.32	5
Methylene chloride	13.10	B	3.24		5
trans-1,2-Dichloroethene		U		0.26	5
1,1-Dichloroethane		U		0.14	5
2,2-Dichloropropane		U		0.17	5
cis-1,2-Dichloroethene		U		0.26	5
Chloroform	8.12		5.00		5
Bromochloromethane		U		0.57	5
1,1,1-Trichloroethane		U		0.13	5
1,4-Difluorobenzene		IS 2	6.05		
Carbon tetrachloride		U		0.14	5
1,1-Dichloropropene		U		0.12	5
Benzene		U		0.06	5
1,2-Dichloroethane		U		0.18	5
Trichloroethene		U		0.20	5
1,2-Dichloropropane		U		0.21	5
Dibromomethane		U		0.37	5
Bromodichloromethane		U		0.13	5
cis-1,3-Dichloropropene		U		0.17	5

DO A 048243
CONFIDENTIAL

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 11:41 10/25/1997

Radian International

Project Number: 43334A

Sample File: FW242

Method 8260 WATER

Sample ID: DOW-VP-VST-13-CON

Client Project: Dow Plaquemine

Date Received: 09/20/97

Response File: FW237

TLI ID: 184-7-27

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
Toluene	0.23	BJ	8.06		5
trans-1,3-Dichloropropene		U		0.22	5
1,1,2-Trichloroethane		U		0.30	5
Chlorobenzene-d ₅		IS 3	10.31		
Tetrachloroethene		U		0.21	5
1,3-Dichloropropane		U		0.17	5
Dibromochloromethane		U		0.24	5
1,2-Dibromoethane		U		0.29	5
Chlorobenzene		U		0.07	5
1,1,1,2-Tetrachloroethane		U		0.19	5
benzene		U		0.14	5
m-, p-Xylene		U		0.10	10
o-Xylene		U		0.11	5
Styrene		U		0.07	5
Bromoform		U		0.45	5
1,4-Dichlorobenzene-d ₄		IS 4	15.65		
Cumene		U		0.06	5
1,1,2,2-Tetrachloroethane		U		0.32	5
Bromobenzene		U		0.25	5
1,2,3-Trichloropropane		U		0.48	5
n-Propylbenzene		U		0.20	5
2-Chlorotoluene		U		0.24	5
4-Chlorotoluene		U		0.24	5
1,3,5-Trimethylbenzene		U		0.07	5
tert-Butylbenzene		U		0.06	5
1,2,4-Trimethylbenzene		U		0.07	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:41 10/1/1997

DO A 048244
CONFIDENTIAL

Radian International

Project Number: 43334A
Sample File: FW242

Method 8260 WATER
Sample ID: DOW-VP-VST-13-CON

Client Project: Dow Plaquemine	Date Received: 09/20/97	Response File: FW237
TLI ID: 184-7-27	Date Analyzed: 09/24/97	

Sample Vol.: 0.005 L	Dilution Factor: 1.00
----------------------	-----------------------

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
sec-Butylbenzene		U		0.04	5
p-Cymene		U		0.06	5
1,3-Dichlorobenzene		U		0.11	5
1,4-Dichlorobenzene		U		0.11	5
n-Butylbenzene		U		0.06	5
1,2-Dichlorobenzene		U		0.14	5
1,2-Dibromo-3-chloropropane		U		2.10	5
1,2,4-Trichlorobenzene		U		0.18	5
Hexachlorobutadiene		U		0.24	5
Naphthalene		U		0.25	5
1,2,3-Trichlorobenzene		U		0.18	5

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.33	5.16	1	132
Toluene-d ₈	0.27	7.97	2	108
4-Bromofluorobenzene	0.19	12.61	2	76

Reviewed by sat Date 10/25/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

DO A 048245
CONFIDENTIAL

Savar v3.5
Printed: 11:41 10/25/1997

24-Sep-97 13:23

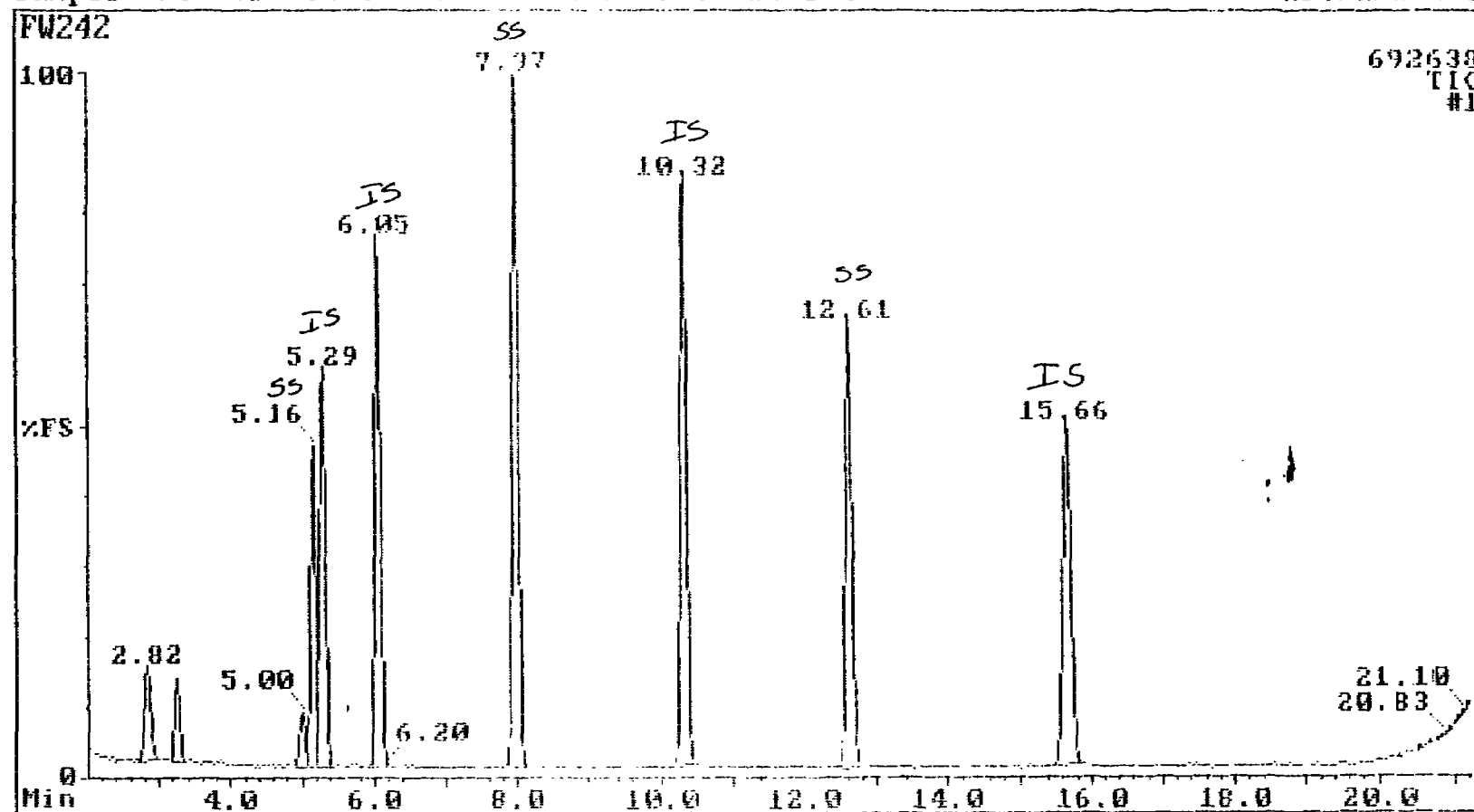
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-UP-VST-13-COH

184-7-27 TLH43334n

Instrument F



Data Review: *galt*
Date: 10/24/97

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	81	99	2	896868	bb	5.291	168 Pentafluorobenzene
2	100	96	97	-1	1300104	bv	6.051	114 1,4-Difluorobenzene
3	100	96	97	-4	1293316	bv	10.311	117 Chlorobenzene-d5
4	100	78	98	-3	593932	bv	15.652	132 1,4-Dichlorobenzene-d4
5	100	94	99	-1	661800	bv	5.161	113 Dibromofluoromethane
6	100	95	99	-2	1737336	bv	7.971	98 Toluene-d8
7	100	90	93	-7	623552	bv	12.611	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.000	85 Dichlorodifluoromethane
9	18	18	18	-9	FP ext 723	bb	0.050	50 Chloromethane
10	0	0	0	0	0		0.000	62 Vinyl Chloride
11	0	0	0	0	0		0.000	94 Bromomethane
12	0	0	0	0	0		0.000	64 Chloroethane
13	40	11	57	2	FP ext 742	bb	0.070	101 Trichlorofluoromethane
14	0	0	0	0	0		0.000	96 1,1-Dichloroethane
15	100	76	98	1	94224	bb	3.340	84 Methylene chloride
16	0	0	0	0	0		0.000	96 trans-1,2-Dichloroethane
17	0	0	0	0	0		0.000	43 1,1-Dichloroethane
18	0	0	0	0	0		0.000	77 1,1-Dichloroethane
19	0	0	0	0	0		0.000	91 1,1-Dichloroethane
20	100	74	96	-1	132512	bb	5.001	83 Chloroform
21	0	0	0	0	0		0.000	122 Bromochloromethane
22	0	0	0	0	0		0.000	97 1,1,1-Trichloroethane
23	0	0	0	0	0		0.000	117 Carbon tetrachloride
24	0	0	0	0	0		0.000	75 1,1-Dichloropropane
25	0	0	0	0	0		0.000	78 Benzene
26	0	0	0	0	0		0.000	62 1,2-Dichloroethane
27	0	0	0	0	0		0.000	130 Trichloroethane
28	0	0	0	0	0		0.000	65 1,2-Dichloropropane
29	0	0	0	0	0		0.000	93 Dibromomethane
30	0	0	0	0	0		0.000	83 Bromodichloromethane
31	0	0	0	0	0		0.000	75 1,1,2-Trichloropropane
32	0	0	0	0	0		0.000	92 Toluene
33	0	0	0	0	0		0.000	73 trans-1,2-Dichloropropane
34	0	0	0	0	0		0.000	97 1,1,2-Trichloroethane
35	0	0	0	0	0		0.000	164 Tetrachloroethane
36	0	0	0	0	0		0.000	76 1,3-Dichloropropane
37	0	0	0	0	0		0.000	119 Dibromochloromethane
38	0	0	0	0	0		0.000	107 1,2-Dibromomethane
39	0	0	0	0	0		0.000	112 Chlorobenzene
40	0	0	0	0	0		0.000	131 1,1,1,2-Tetrachloroethane
41	0	0	0	0	0		0.000	106 Ethylbenzene
42	0	0	0	0	0		0.000	106 m-/p-Xylene
43	0	0	0	0	0		0.000	106 o-Xylene
44	0	0	0	0	0		0.000	104 Styrene
45	0	0	0	0	0		0.000	173 Bromoform
46	0	0	0	0	0		0.000	105 Cumene
47	0	0	0	0	0		0.000	63 1,1,2,2-Tetrachloroethane
48	0	0	0	0	0		0.000	156 Bromobenzene
49	0	0	0	0	0		0.000	75 1,2,3-Trichloropropane
50	0	0	0	0	0		0.000	120 n-Propylbenzene

DO A 048247
CONFIDENTIALData Review: *gatt*
Date: 10/24/97

44

No.	MAT	FOR	REV	Delta	Area	P.Flag	RT	QM Name
	0	0	0	0	0		0.000	126 2-Chlorotoluene
52	0	0	0	0	0		0.000	126 4-Chlorotoluene
53	0	0	0	0	0		0.000	105 1,3,5-Trimethylbenzene
54	0	0	0	0	0		0.000	119 tert-Butylbenzene
55	0	0	0	0	0		0.000	105 1,2,4-Trimethylbenzene
56	0	0	0	0	0		0.000	105 sec-Butylbenzene
57	0	0	0	0	0		0.000	119 p-Cymene
58	0	0	0	0	0		0.000	146 1,3-Dichlorobenzene
59	0	0	0	0	0		0.000	146 1,4-Dichlorobenzene
60	0	0	0	0	0		0.000	91 n-Butylbenzene
61	0	0	0	0	0		0.000	146 1,2-Dichlorobenzene
62	0	0	0	0	0		0.000	75 1,3-Dibromo-3-chloropropan
63	0	0	0	0	0		0.000	180 1,2,4-Trichlorobenzene
64	0	0	0	0	0		0.000	225 Hexachlorobutadiene
65	0	0	0	0	0		0.000	128 Naphthalene
66	0	0	0	0	0		0.000	180 1,2,3-Trichlorobenzene
67	100	85	94	-1	520940	OK	2.820	43 Acetone
68	0	0	0	0	0		0.000	55 Acrylonitrile
69	0	0	0	0	0		0.000	91 Benzyl chloride
70	0	0	0	0	0		0.000	76 Carbon disulfide
71	0	0	0	0	0		0.000	142 Iodomethane
72	96	84	89	-131	520940	OK	2.820	43 Vinyl acetate

DO A 048248
CONFIDENTIAL

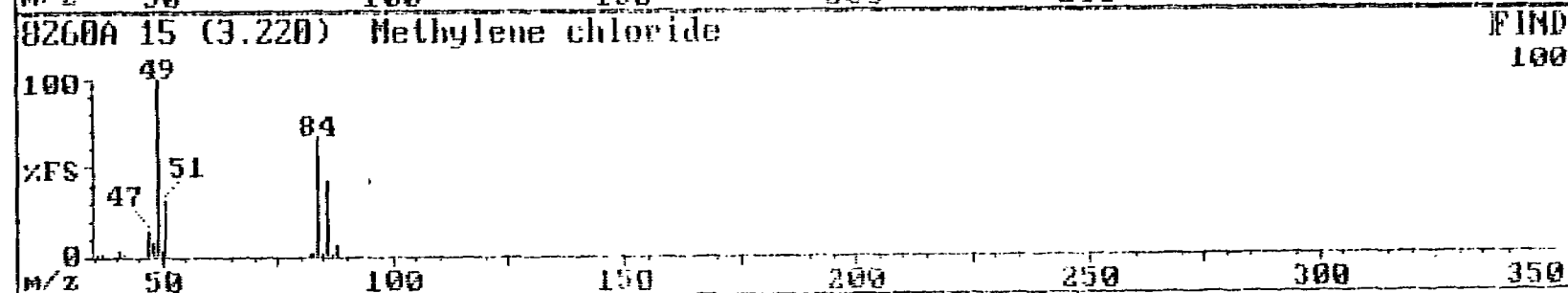
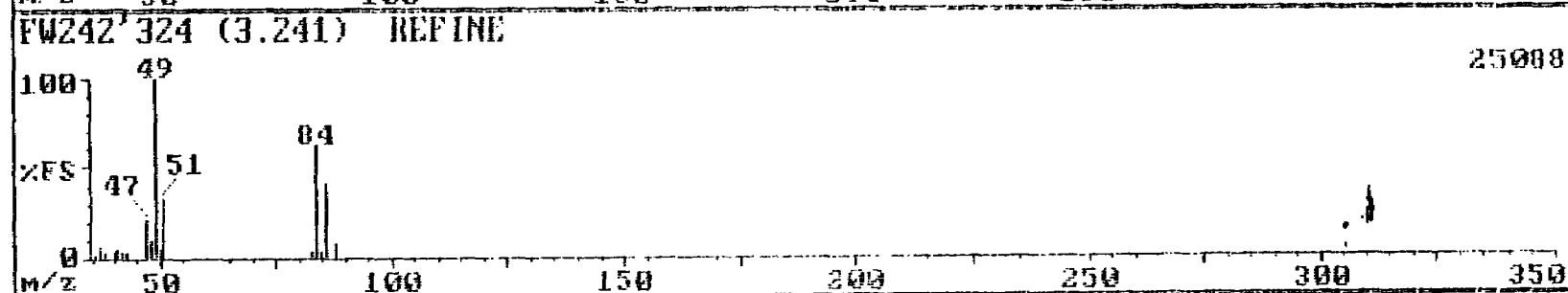
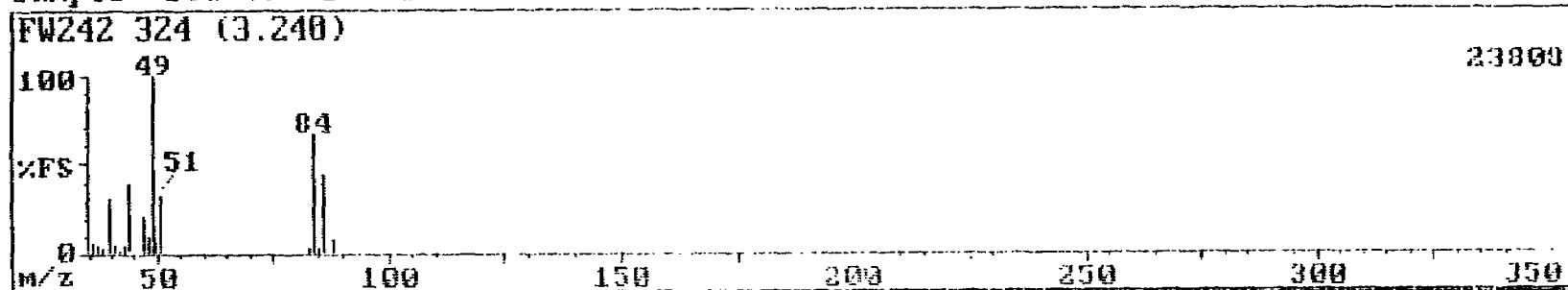
24-Sep-97 13:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-13-CON 184-7-27 TL#433346

Instrument F

DO A 048249
CONFIDENTIAL

24-Sep-97 13:23

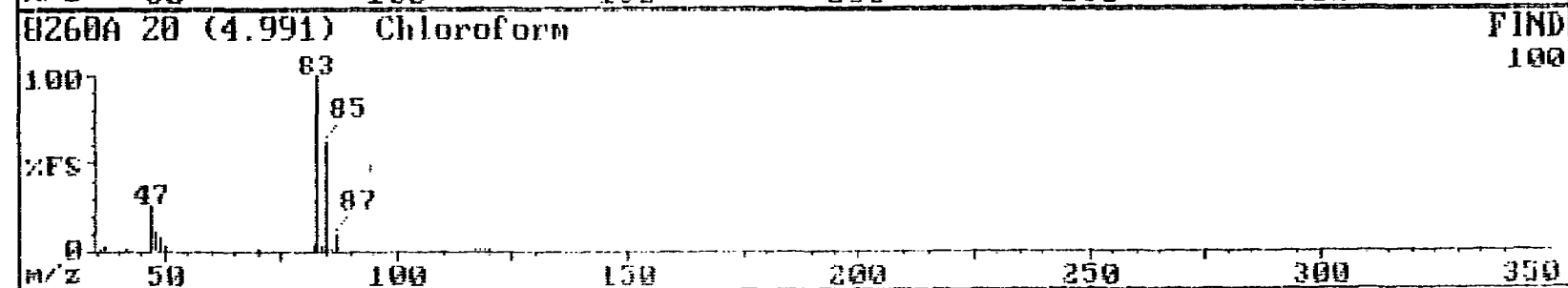
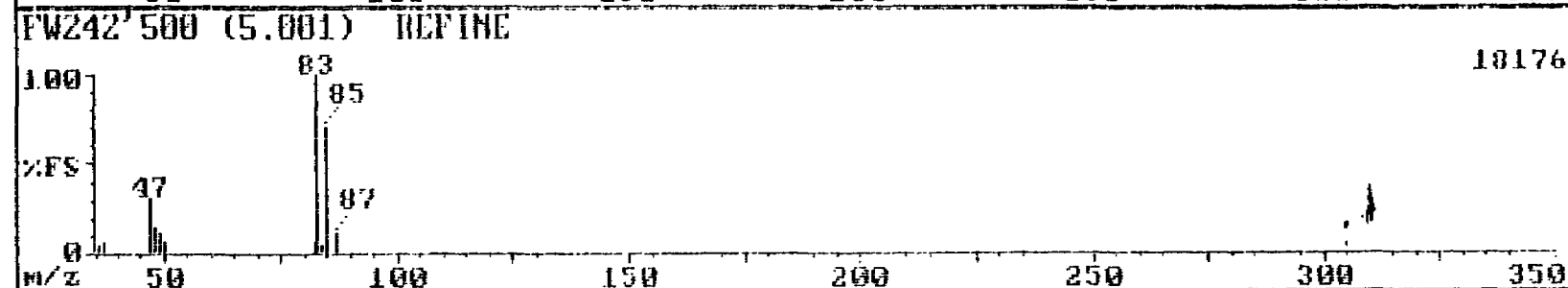
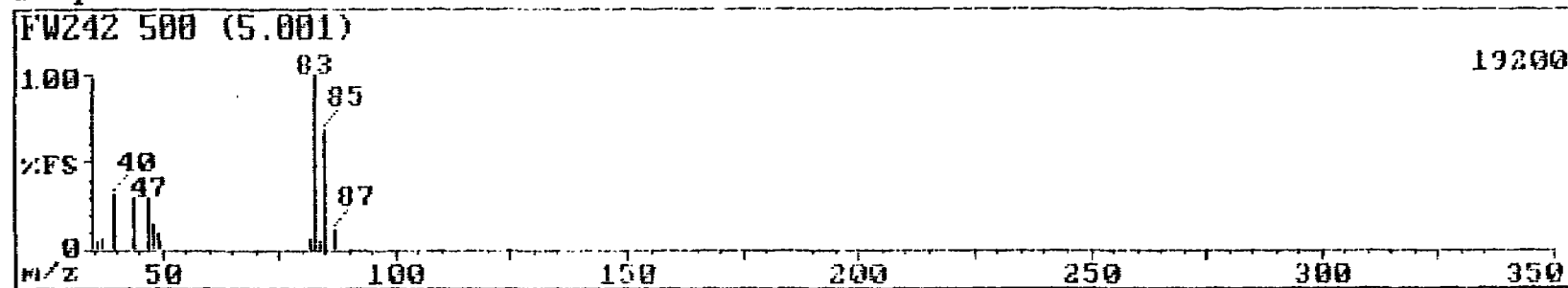
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-UST-13-COM

184-7-27 TL#43334A

Instrument F



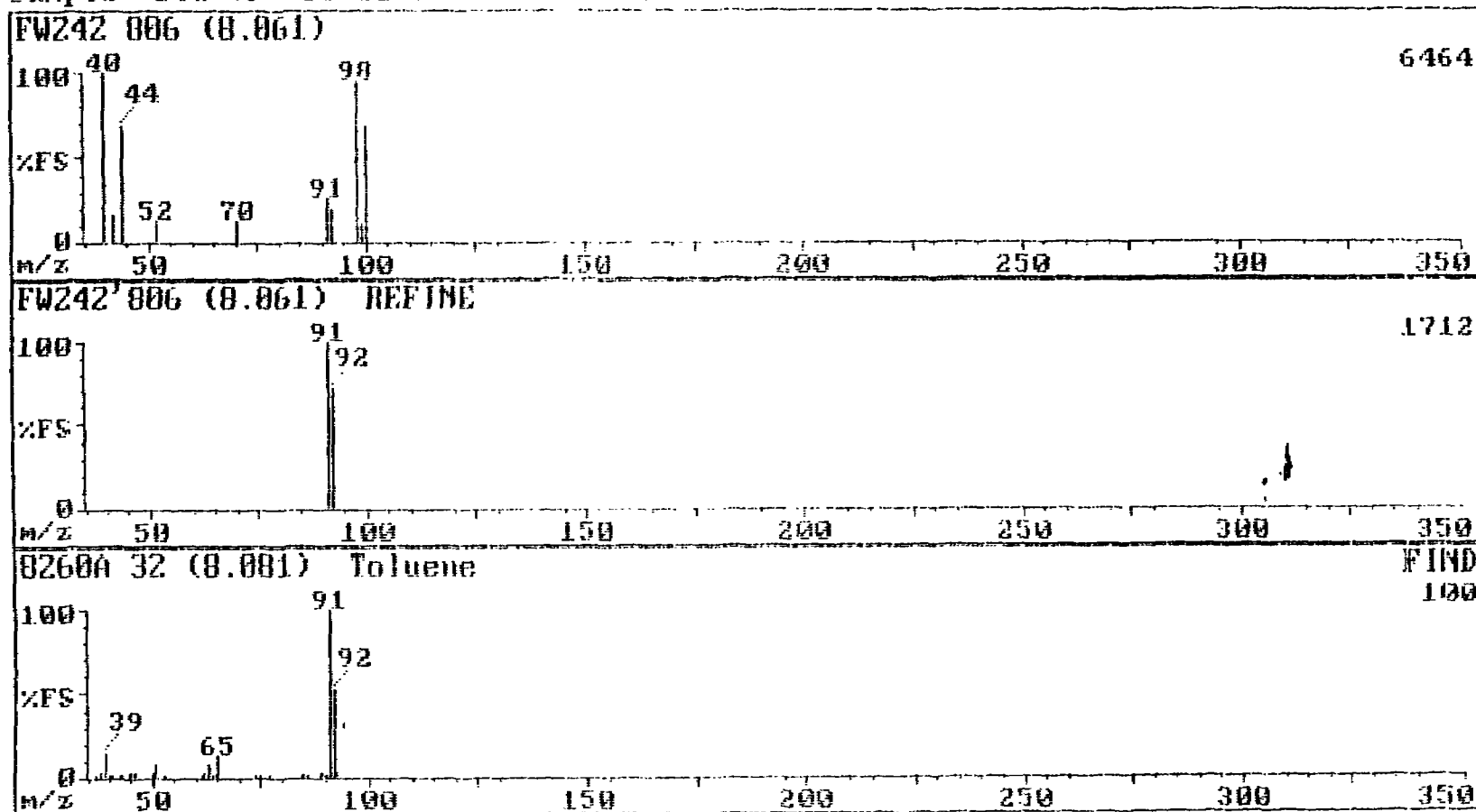
24-Sep-97 13:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-13-CON 104-7-27 TLH433340

Instrument F



Radian International

Project Number: 43334A
Sample File: FW239

Method 8260 WATER
Sample ID: VBLK092497

Client Project: Dow Plaquemine
TLI ID: VBLK092497

Date Received: / /

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
Pentafluorobenzene		IS 1	5.29		
Dichlorodifluoromethane		U		0.18	5
Chloromethane		U		0.27	5
Vinyl Chloride		U		0.29	5
Bromomethane		U		0.36	5
Chloroethane		U		0.38	5
Trichlorofluoromethane		U		0.11	5
1,1-Dichloroethene		U		0.32	5
Methylene chloride	1.15	J	3.24		5
trans-1,2-Dichloroethene		U		0.26	5
Dichloroethane		U		0.14	5
trans-1,2-Dichloropropane		U		0.17	5
cis-1,2-Dichloroethene		U		0.26	5
Chloroform		U		0.12	5
Bromochloromethane		U		0.57	5
1,1,1-Trichloroethane		U		0.12	5
1,4-Difluorobenzene		IS 2	6.05		
Carbon tetrachloride		U		0.13	5
1,1-Dichloropropene		U		0.12	5
Benzene		U		0.06	5
1,2-Dichloroethane		U		0.16	5
Trichloroethene		U		0.19	5
1,2-Dichloropropane		U		0.20	5
Dibromomethane		U		0.35	5
Bromodichloromethane		U		0.12	5
cis-1,3-Dichloropropene		U		0.16	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:40 10/25/1997

DO A 046252
CONFIDENTIAL

Radian International

Project Number: 43334A

Sample File: FW239

Method 8260 WATER

Sample ID: VBLK092497

Client Project: Dow Plaquemine

Date Received: / /

Response File: FW237

TLI ID: VBLK092497

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ug/L	Quan. Limit ug/L
Toluene	1.31	J	8.06		5
trans-1,3-Dichloropropene		U		0.20	5
1,1,2-Trichloroethane		U		0.28	5
Chlorobenzene-d ₅		IS 3	10.31		
Tetrachloroethene		U		0.22	5
1,3-Dichloropropane		U		0.17	5
Dibromochloromethane		U		0.25	5
1,2-Dibromoethane		U		0.30	5
Chlorobenzene		U		0.07	5
1,1,1,2-Tetrachloroethane		U		0.19	5
Ethylbenzene		U		0.14	5
m-/p-Xylene		U		0.11	10
o-Xylene		U		0.12	5
Styrene		U		0.08	5
Bromoform		U		0.47	5
1,4-Dichlorobenzene-d ₄		IS 4	15.69		
Cumene		U		0.06	5
1,1,1,2,2-Tetrachloroethane		U		0.32	5
Bromobenzene		U		0.25	5
1,2,3-Trichloropropane		U		0.47	5
n-Propylbenzene		U		0.19	5
2-Chlorotoluene		U		0.24	5
4-Chlorotoluene		U		0.24	5
1,3,5-Trimethylbenzene		U		0.07	5
tert-Butylbenzene		U		0.06	5
1,2,4-Trimethylbenzene		U		0.06	5

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:40 10/25/1997

DO A 048253
CONFIDENTIAL

50

Radian International

Project Number: 43334A
 Sample File: FW239

Method 8260 WATER
 Sample ID: VBLK092497

Client Project: Dow Plaquemine
 FLI ID: VBLK092497

Date Received: / /

Response File: FW237

Date Analyzed: 09/24/97

Sample Vol.: 0.005 L

Dilution Factor: 1.00

Analyte	Conc. ug/L	FLAG	RT	Det. Limit ng/L	Quan. Limit ug/L
sec-Butylbenzene		U		0.04	5
p-Cymene		U		0.06	5
1,3-Dichlorobenzene		U		0.11	5
1,4-Dichlorobenzene		U		0.11	5
n-Butylbenzene		U		0.06	5
1,2-Dichlorobenzene		U		0.14	5
1,2-Dibromo-3-chloropropane		U		2.09	5
1,2,4-Trichlorobenzene		U		0.18	5
Hexachlorobutadiene		U		0.24	5
Naphthalene		U		0.25	5
m-Trichlorobenzene		U		0.18	5

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.33	5.16	1	132
Toluene-d ₈	0.26	7.97	2	104
4-Bromofluorobenzene	0.18	12.62	2	72

Reviewed by SAH Date 10/29/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
 801 Capitola Drive • Durham, North Carolina 27713
 Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 11:40 10/25/1997

DO A 048254
 CONFIDENTIAL

51

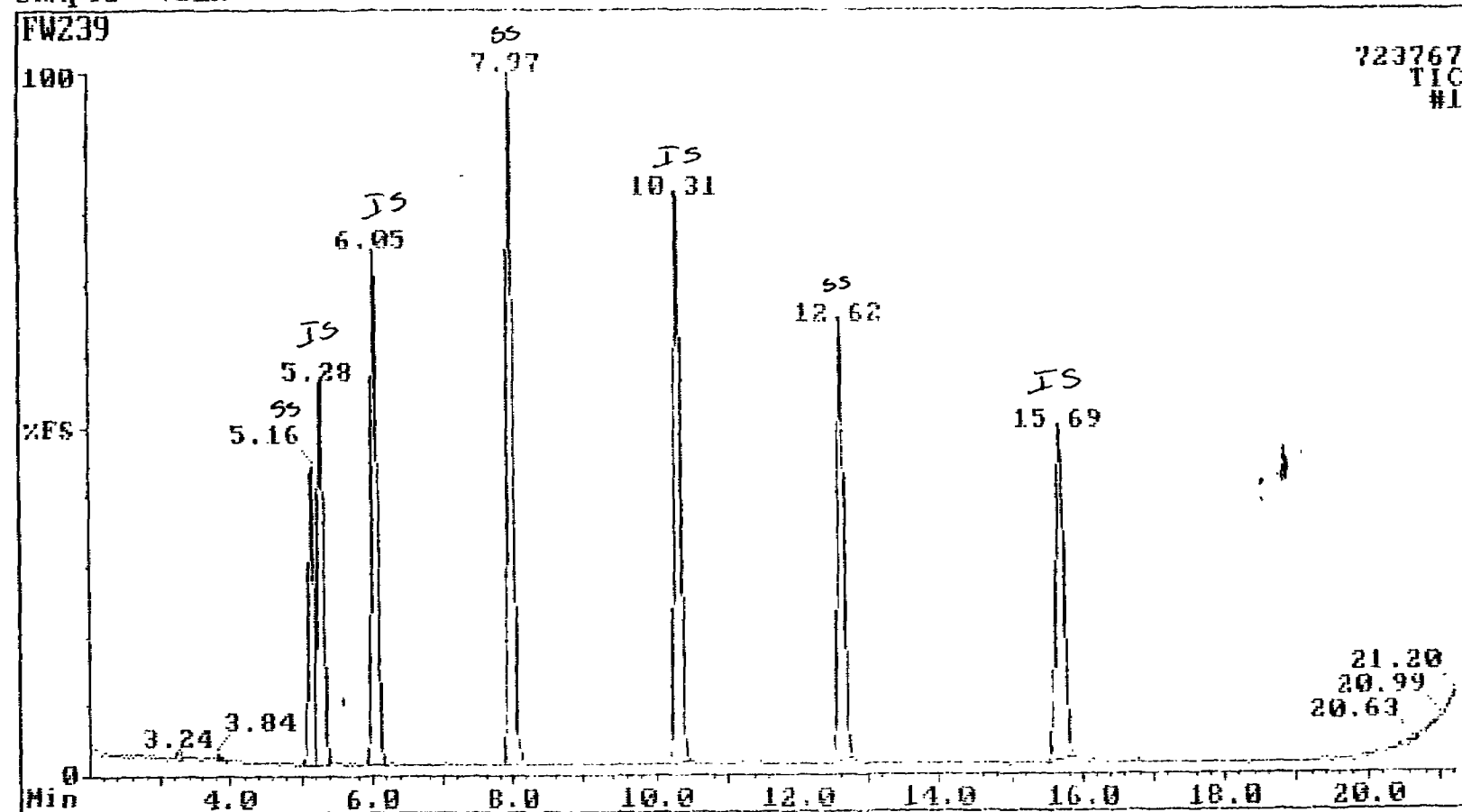
24-Sep-97 11:51

Sample: VBLK

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Instrument F



date: 10/24/97
review: [signature]

52

DO A 048255
CONFIDENTIAL

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	81	99	2	900400	bb	5.291	168	Pentafluorobenzene
2	100	96	97	-1	1397184	bb	6.051	114	1,4-Difluorobenzene
3	100	95	97	-4	1253312	bv	10.311	117	Chlorobenzene-d5
4	100	77	98	-1	598324	A	15.692	132	1,4-Dichlorobenzene-d4
5	100	94	99	-1	652292	bv	5.161	113	Dibromofluoromethane
6	100	95	99	-2	1781220	bv	7.971	98	Toluene-d8
7	100	88	93	-6	639396	bv	12.621	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.000	83	Dichlorodifluoromethane
9	0	0	0	0	0		0.000	50	Chloromethane
10	0	0	0	0	0		0.000	62	Vinyl Chloride
11	0	0	0	0	0		0.000	94	Bromomethane
12	0	0	0	0	0		0.000	64	Chloroethane
13	43	15	58	2	155	bb	2.070	101	Trichlorofluoromethane
14	0	0	0	0	0		0.000	96	1,1-Dichloroethane
15	67	26	84	1	8315	bb	7.240	84	Methylchloride
16	0	0	0	0	0		0.000	96	trans-1,2-Dichloroethane
17	0	0	0	0	0		0.000	65	1,1-Dichloroethane
18	0	0	0	0	0		0.000	77	2,2-Dichloropropane
19	0	0	0	0	0		0.000	96	cis-1,2-Dichloroethane
20	0	0	0	0	0		0.000	83	Chloroform
21	0	0	0	0	0		0.000	133	Bromochloromethane
22	0	0	0	0	0		0.000	97	1,1,1-Trichloroethane
23	0	0	0	0	0		0.000	117	Chlorobenzene-d5
24	0	0	0	0	0		0.000	75	1,1-Dichloropropane
25	0	0	0	0	0		0.000	71	Benzene
26	0	0	0	0	0		0.000	62	1,2-Dichloroethane
27	0	0	0	0	0		0.000	130	Trichloroethane
28	0	0	0	0	0		0.000	63	1,2-Dichloropropane
29	0	0	0	0	0		0.000	97	Dibromomethane
30	0	0	0	0	0		0.000	83	Bromodichloromethane
31	0	0	0	0	0		0.000	75	cis-1,3-Dichloropropane
32	70	30	68	-3	33240	bb	8.061	72	Toluene
33	0	0	0	0	0		0.000	75	trans-1,3-Dichloropropane
34	0	0	0	0	0		0.000	97	1,1,2-Trichloroethane
35	0	0	0	0	0		0.000	104	Tetrachloroethane
36	0	0	0	0	0		0.000	76	1,3-Dichloropropane
37	0	0	0	0	0		0.000	129	Dibromochloromethane
38	0	0	0	0	0		0.000	107	1,2-Dibromoethane
39	0	0	0	0	0		0.000	112	Chlorobenzene
40	0	0	0	0	0		0.000	131	1,1,1,2-Tetrachloroethane
41	0	0	0	0	0		0.000	106	Ethylbenzene
42	0	0	0	0	0		0.000	106	m-/p-Xylene
43	0	0	0	0	0		0.000	106	o-Xylene
44	0	0	0	0	0		0.000	104	Styrene
45	0	0	0	0	0		0.000	173	Bromoform
46	0	0	0	0	0		0.000	105	Cumene
47	0	0	0	0	0		0.000	83	1,1,2,2-Tetrachloroethane
48	14	10	32	-20	52	bb	12.811	156	Bromobenzene
49	0	0	0	0	0		0.000	75	1,2,3-Trichloropropane
50	0	0	0	0	0		0.000	120	n-Propylbenzene

DO A 048256
CONFIDENTIALData Review: *mt*
Date: 10/24/97

53

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
51	0	0	0	0	0		0.000	126 2-Chlorotoluene
52	0	0	0	0	0		0.000	126 4-Chlorotoluene
53	0	0	0	0	0		0.000	105 1,3,5-Trimethylbenzene
54	0	0	0	0	0		0.000	119 tert-Butylbenzene
55	0	0	0	0	0		0.000	105 1,2,4-Trimethylbenzene
56	0	0	0	0	0		0.000	105 sec-Butylbenzene
57	0	0	0	0	0		0.000	119 p-Cymene
58	0	0	0	0	0		0.000	146 1,3-Dichlorobenzene
59	31	10	41	-1	PP200	bb	13.772	146 1,4-Dichlorobenzene
60	0	0	0	0	0		0.000	91 n-Butylbenzene
61	0	0	0	0	0		0.000	146 1,2-Dichlorobenzene
62	0	0	0	0	0		0.000	75 1,2-Dibromo-3-chloropropan
63	0	0	0	0	0		0.000	180 1,2,4-Trichlorobenzene
64	0	0	0	0	0		0.000	205 Hexachlorobutadiene
65	0	0	0	0	0		0.000	108 Naphthalene
66	0	0	0	0	0		0.000	180 1,2,3-Trichlorobenzene
67	15	12	27	101	11380	A	7.840	47 Acetone
68	11	11	19	-105	624	bb	2.510	55 Acrylonitrile
69	0	0	0	0	0		0.000	21 Benzyl chloride
70	19	15	30	-81	414	bb	1.020	73 Carbon disulfide
71	0	0	0	0	0		0.000	142 Iodine monochloride
72	07	07	31	-29	11580	A	3.840	45 Methyl acetate

DO A 048257
CONFIDENTIAL

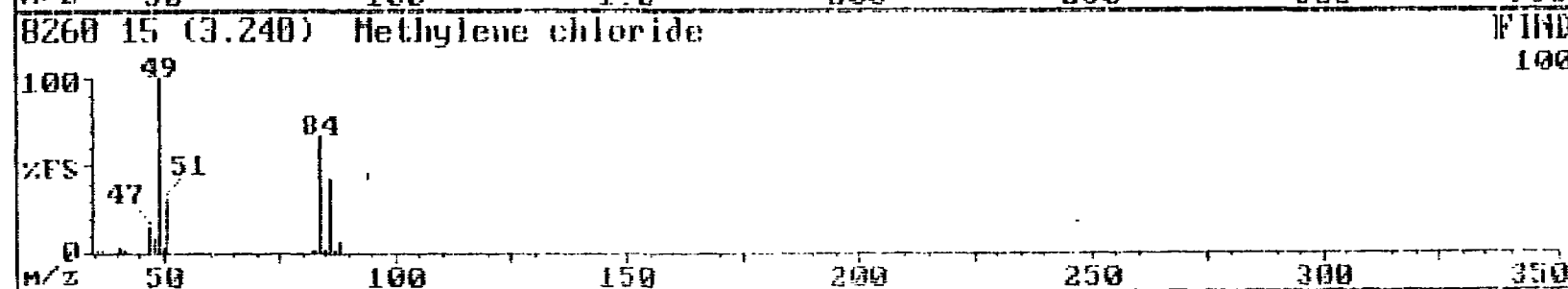
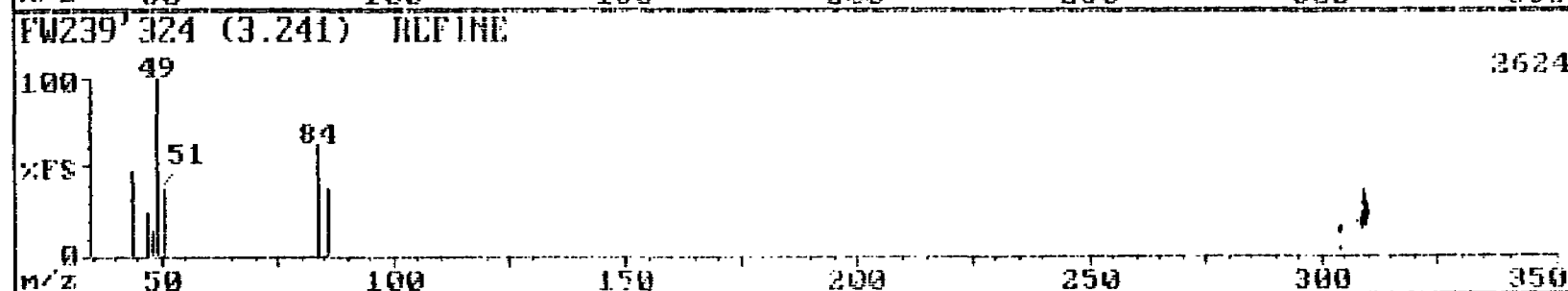
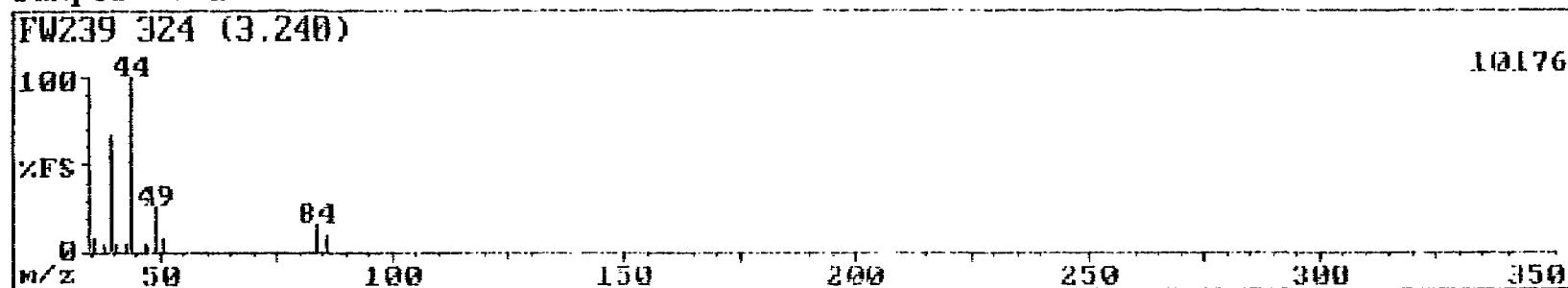
24-Sep-97 11:51

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: VBLK

Instrument F

DO A 048258
CONFIDENTIAL

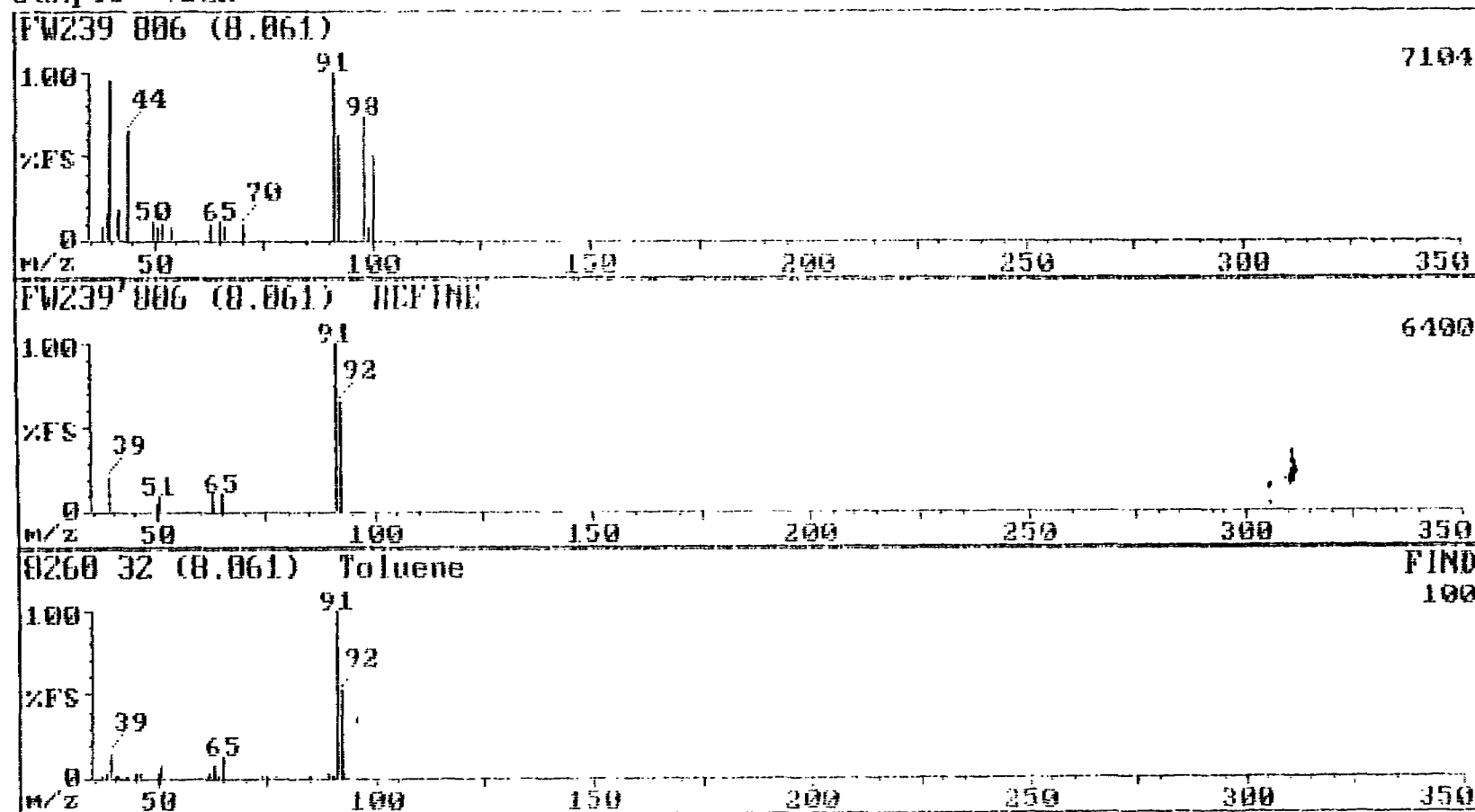
24-Sep-97 11:51

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: VBLK

Instrument F



Triangle Laboratories f RTP, Inc.
Continuing Calibration Curve

ICAL File: FW237 Date of Analysis :09/24/97 Analyte List: 8260
ICAL File: ICALF911

Analyte	Flag	RF50	RFMEAN	%D
Pentafluorobenzene	I			
Dichlorodifluoromethane		0.615	0.478	-28.7
Chloromethane	P	0.408	0.331	-23.3
Vinyl Chloride	C	0.380	0.338	-12.4
Bromomethane		0.311	0.235	-32.3
Chloroethane		0.291	0.226	-28.8
Trichlorofluoromethane		0.973	1.016	4.2
1,1-Dichloroethene	C	0.350	0.315	-11.1
Methylene chloride		0.401	0.339	-18.3
trans-1,2-Dichloroethene		0.429	0.394	-8.9
1,1-Dichloroethane	P	0.822	0.692	-18.8
2,2-Dichloropropane		0.673	0.515	-30.7
cis-1,2-Dichloroethene		0.428	0.400	-7.0
Chloroform	C	0.910	0.753	-20.8
Bromochloromethane		0.194	0.197	1.5
1,1,1-Trichloroethane		0.891	0.798	-11.7
Difluorobenzene	I			
bon tetrachloride		0.563	0.731	23.0
1,1-Dichloropropene		0.621	0.578	-7.4
Benzene		1.218	1.040	-17.1
1,2-Dichloroethane		0.435	0.382	-13.9
Trichloroethene		0.384	0.386	0.5
1,2-Dichloropropane	C	0.361	0.340	-6.2
Dibromomethane		0.207	0.198	-4.5
Bromodichloromethane		0.589	0.562	-4.8
cis-1,3-Dichloropropene		0.454	0.497	8.7
Toluene	C	0.906	0.807	-12.3
trans-1,3-Dichloropropene		0.350	0.404	13.4
1,1,2-Trichloroethane		0.254	0.254	0.0
Chlorobenzene-d5	I			
Tetrachloroethene		0.371	0.372	0.3
1,3-Dichloropropane		0.466	0.433	-7.6
Dibromochloromethane		0.317	0.389	18.5
1,2-Dibromoethane		0.268	0.298	10.1
Chlorobenzene	P	1.064	0.999	-6.5
1,1,1,2-Tetrachloroethane		0.412	0.439	6.2
Ethylbenzene	C	0.567	0.555	-2.2
m-/p-Xylene		0.751	0.693	-8.4

* - Fails QC Criteria for %D; << - Rf less than minimum QC RF; >> - RF greater than maximum QC RF

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

DO A 048260
CONFIDENTIAL

57

Triangle Laboratories f RTP, Inc.
Continuing Calibration Curve

CCAL File: FW237
ICAL File: ICALF911

Date of Analysis :09/24/97

Analyte List: 8260

Analyte	Flag	RF50	RFMEAN	%D
o-Xylene		0.688	0.653	-5.4
Styrene		1.047	1.015	-3.2
Bromoform	P	0.170	0.231	26.4
1,4-Dichlorobenzene-d4	I			
Cumene		2.692	2.748	2.0
1,1,2,2-Tetrachloroethane	P	0.520	0.520	0.0
Bromobenzene		0.674	0.750	10.1
1,2,3-Trichloropropane		0.353	0.357	1.1
n-Propylbenzene		0.863	0.865	0.2
2-Chlorotoluene		0.710	0.726	2.2
4-Chlorotoluene		0.710	0.721	1.5
1,3,5-Trimethylbenzene		2.447	2.411	-1.5
tert-Butylbenzene		2.637	2.689	1.9
1,2,4-Trimethylbenzene		2.573	2.472	-4.1
sec-Butylbenzene		3.762	3.745	-0.5
p-Cymene		3.026	3.141	3.7
1,3-Dichlorobenzene		1.490	1.511	1.4
1,4-Dichlorobenzene		1.528	1.575	3.0
n-Butylbenzene		2.954	2.826	-4.5
1,2-Dichlorobenzene		1.188	1.323	10.2
1,2-Dibromo-3-chloropropane		0.080	0.087	8.0
1,2,4-Trichlorobenzene		0.913	1.035	11.8
Hexachlorobutadiene		0.707	0.790	10.5
Naphthalene		0.679	1.025	33.8
1,2,3-Trichlorobenzene		0.701	0.869	19.3

Surrogate	Flag	RF50	RFMEAN	%D
Dibromofluoromethane	S	0.556	0.477	-16.6
Toluene-d8	S	1.222	1.127	-8.4
4-Bromofluorobenzene	S	0.620	0.541	-14.6

Approved by: SAT Date 10/27/97

* - Fails QC Criteria for %D; <<- Rf less than minimum QC RF; >>- RF greater than maximum QC RF

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

DO A 048261
CONFIDENTIAL

58

Triangle Laboratories of RTP, Inc.
Initial Calibration Curve

ICAL File: ICALF911	Date of Analysis :09/11/97	Analyte List: 8260
RF10 FW084	RF20 FW083	RF50 FW082
RF100 FW085	RF200 FW086	

Analyte	Flag	RF10	RF20	RF50	RF100	RF200	MEAN	%RSD
Pentafluorobenzene	I							
Dichlorodifluoromethane		0.486	0.526	0.481	0.458	0.436	0.478	7.0
Chloromethane	P	0.328	0.367	0.346	0.310	0.304	0.331	7.9
Vinyl Chloride	C	0.333	0.373	0.344	0.327	0.317	0.338	6.4
Bromomethane		0.239	0.257	0.225	0.226	0.227	0.235	5.8
Chloroethane		0.230	0.249	0.231	0.214	0.207	0.226	7.2
Trichlorofluoromethane		1.043	1.067	1.019	0.999	0.954	1.016	4.3
1,1-Dichloroethene	C	0.334	0.340	0.298	0.305	0.297	0.315	6.6
Methylene chloride		0.355	0.369	0.339	0.320	0.312	0.339	7.1
trans-1,2-Dichloroethene		0.415	0.414	0.380	0.375	0.383	0.394	5.0
1,1-Dichloroethane	P	0.695	0.748	0.706	0.659	0.651	0.692	5.6
2,2-Dichloropropane		0.475	0.549	0.518	0.495	0.536	0.515	5.9
cis-1,2-Dichloroethene		0.415	0.419	0.388	0.390	0.386	0.400	3.9
Chloroform	C	0.775	0.790	0.764	0.735	0.703	0.753	4.6
Bromochloromethane		0.214	0.207	0.189	0.188	0.187	0.197	6.3
1,1,1-Trichloroethane		0.811	0.841	0.801	0.766	0.770	0.798	3.9
Difluorobenzene	I							
bon tetrachloride		0.965	0.787	0.674	0.625	0.604	0.731	20.3
1,1-Dichloropropene		0.766	0.623	0.536	0.498	0.466	0.578	20.8
Benzene		1.053	1.050	1.064	1.046	0.985	1.040	3.0
1,2-Dichloroethane		0.390	0.395	0.391	0.371	0.362	0.382	3.7
Trichloroethene		0.384	0.391	0.384	0.385	0.384	0.386	0.8
1,2-Dichloropropane	C	0.344	0.346	0.343	0.332	0.336	0.340	1.7
Dibromomethane		0.207	0.200	0.202	0.191	0.190	0.198	3.7
Bromodichloromethane		0.554	0.579	0.581	0.548	0.548	0.562	3.0
cis-1,3-Dichloropropene		0.482	0.501	0.504	0.497	0.500	0.497	1.7
Toluene	C	0.830	0.801	0.818	0.802	0.784	0.807	2.2
trans-1,3-Dichloropropene		0.384	0.404	0.418	0.407	0.406	0.404	3.1
1,1,2-Trichloroethane		0.253	0.262	0.261	0.252	0.240	0.254	3.4
Chlorobenzene-d5	I							
Tetrachloroethene		0.377	0.376	0.359	0.377	0.371	0.372	2.1
1,3-Dichloropropane		0.446	0.450	0.432	0.425	0.411	0.433	3.7
Dibromochloromethane		0.389	0.401	0.382	0.388	0.388	0.389	1.8
1,2-Dibromoethane		0.304	0.305	0.290	0.297	0.295	0.298	2.1
Chlorobenzene	P	1.012	1.031	0.990	1.006	0.953	0.999	2.9
1,1,1,2-Tetrachloroethane		0.435	0.458	0.435	0.441	0.426	0.439	2.7
Ethylbenzene	C	0.532	0.561	0.554	0.572	0.555	0.555	2.6
m-/p-Xylene		0.672	0.697	0.693	0.711	0.692	0.693	2.0

* - Fails QC Criteria for %RSD; << - Rf less than minimum QC RF; >> - RF greater than maximum QC RF

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 344-5729 • Fax: (919) 344-5491

Savar v3.5

DO A 048262
CONFIDENTIAL

59

Triangle Laboratories of RTP, Inc.
Initial Calibration Curve

ICAL File: ICALF911	Date of Analysis :09/11/97	Analyte List: 8260
RF10 FW084	RF20 FW083	RF50 FW082
RF100 FW085	RF200 FW086	

Analyte	Flag	RF10	RF20	RF50	RF100	RF200	MEAN	%RSD
o-Xylene		0.623	0.651	0.662	0.683	0.646	0.653	3.4
Styrene		0.871	0.976	1.056	1.094	1.077	1.015	9.1
Bromoform	P	0.220	0.228	0.235	0.243	0.228	0.231	3.7
1,4-Dichlorobenzene-d4	I							
Cumene		2.675	2.776	2.685	2.828	2.775	2.748	2.4
1,1,2,2-Tetrachloroethane	P	0.558	0.520	0.512	0.520	0.490	0.520	4.7
Bromobenzene		0.761	0.749	0.723	0.753	0.762	0.750	2.1
1,2,3-Trichloropropane		0.390	0.370	0.350	0.346	0.330	0.357	6.5
n-Propylbenzene		0.828	0.870	0.839	0.902	0.888	0.865	3.7
2-Chlorotoluene		0.712	0.727	0.721	0.727	0.746	0.726	1.7
4-Chlorotoluene		0.697	0.720	0.708	0.738	0.742	0.721	2.7
1,3,5-Trimethylbenzene		2.305	2.386	2.396	2.443	2.526	2.411	3.4
tert-Butylbenzene		2.464	2.860	2.539	2.690	2.893	2.689	7.1
1,2,4-Trimethylbenzene		2.378	2.490	2.470	2.498	2.524	2.472	2.3
sec-Butylbenzene		3.704	3.799	3.632	3.796	3.793	3.745	2.0
p-Cymene		2.977	3.123	3.075	3.249	3.282	3.141	4.0
1,3-Dichlorobenzene		1.556	1.525	1.468	1.503	1.505	1.511	2.2
1,4-Dichlorobenzene		1.663	1.626	1.528	1.541	1.514	1.575	4.2
n-Butylbenzene		2.728	2.860	2.779	2.931	2.831	2.826	2.7
1,2-Dichlorobenzene		1.392	1.338	1.303	1.286	1.296	1.323	3.3
1,2-Dibromo-3-chloropropane		0.092	0.082	0.090	0.087	0.083	0.087	5.2
1,2,4-Trichlorobenzene		1.085	1.035	1.031	1.000	1.024	1.035	3.0
Hexachlorobutadiene		0.796	0.756	0.764	0.801	0.834	0.790	3.9
Naphthalene		0.789	0.898	1.028	1.157	1.252	1.025	18.3
1,2,3-Trichlorobenzene		1.008	0.896	0.848	0.787	0.806	0.869	10.1

Surrogate	Flag	RF10	RF20	RF50	RF100	RF200	Mean	%RSD
Dibromofluoromethane	S	0.487	0.500	0.476	0.463	0.460	0.477	3.5
Toluene-d8	S	1.089	1.133	1.149	1.139	1.123	1.127	2.1
4-Bromofluorobenzene	S	0.524	0.528	0.582	0.552	0.518	0.541	4.9

Approved by: SAH Date 10/25/97

* - Fails QC Criteria for %RSD; << - Rf less than minimum QC RF; >> - RF greater than maximum QC RF

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

60

DO A 048263
CONFIDENTIAL

TRIANGLE LABS

CASE NARRATIVE

**Analysis of Samples for the Presence of
Volatile Analytes by
High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry**

METHOD 8260

Date : October 27, 1997
Client ID : Radian International
TLI Project Number : 43386

This report should only be reproduced in full. Any partial reproduction of this report requires permission from Triangle Laboratories, Inc.

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

DO A 048264
CONFIDENTIAL

Triangle Laboratories, Inc.
Case Narrative

October 28, 1997
43386

Objective: Analysis of twelve VOST tube pairs for the volatile compounds 1,1,2-trichloroethane and chlorobenzene using Method 8260.

Method:

Twenty-four VOST tube pairs were received at Triangle Laboratories, Inc. on September 25, 1997 at 7°C in good condition. The samples were stored in a refrigerator at 4°C prior to analysis. This report pertains to the analysis of twelve of the VOST tube pairs only. The VOST tube pairs were analyzed separately according to the guidelines of Methods 8260 and 5040. The internal standards and surrogate standards were added in the amount of 0.25 micrograms (ug) immediately prior to analysis by GC/MS. The internal standards are pentafluorobenzene, 1,4-difluorobenzene, chlorobenzene-d₅, and 1,4-dichlorobenzene-d₄, and the surrogate standards reported are dibromofluoromethane, toluene-d₈, and 4-bromofluorobenzene. The results reported relate only to the items tested.

The GC/MS analysis conditions are listed below:

Purge and trap:	Tekmar LSC-2000
Purge:	11 min.
Desorb Temperature:	250 C
Desorb Time:	3 min.

GC Conditions:

Column:	30 m x .53 mm x 0.3 μ J&W DB624
	0 C hold .5 min, 10 C/min to 45C, 6 C/min to 90C, hold 1.5 min, 50 C/min to 200C.

MS Conditions:

Instrument:	VG-TRIO-1 Lab Base data system
Scan:	35-350 amu at .6s/scan
Interface:	Jet Separator, 200 C

Report:

Enclosed with the case narrative are copies of the sample identification index, the project summary sheets, client paperwork, sample log-in sheets, and log book pages. A sample identification index summarizes the client sample name, TLI sample number, and analytical file name for each sample and blank. The project summary lists the amounts for detected analytes in gray. The estimated detection limits will be listed in parentheses when the target analytes are not detected.

The data are reported as quantitation reports, chromatograms, interim reports, and spectra of detected target analytes. The quantitation report header lists the TLI project number, analysis method, instrument sample file name, client sample name, client project number, TLI sample number, calibration file, date received, and analysis date. The response factors used for all

calculations are from the calibration file listed in the header. All initial and continuing calibration data are located in the back of the data package. The amount is reported in total ug for the VOST tubes. The retention time (RT) will be listed for all internal standards and analytes which are detected. If a target analyte is not detected, it will be flagged with a "U" and a detection limit will be listed. Estimated detection limits are calculated for all analytes which were not found in the samples by using an area of 2000. The estimated detection limits reported are the average detection limits achievable over time on an instrument type. The actual detection limit for a given compound on a given day may vary from the estimate reported. The quantitation limit for all analytes is half of the low point of the initial calibration. Below this point the calibration cannot be considered to be linear. Any amount reported at a level below the quantitation limit will be flagged with a "J" and should be considered estimated. If any compounds are found at a level above the upper calibration range, the analyte will be flagged with an "E" and the amounts reported should be considered estimated. If any target analytes found in the laboratory blanks are detected in the associated samples, they will be flagged with a "B" on each sample topsheet. All analytes are quantitated against the internal standard preceding them on the target analyte list. Surrogate standards are quantitated against the internal standard with the matching internal standard reference number. For example, toluene-d₈ has 2 in the IS Ref column and would be quantitated against the internal standard which has IS2 listed in the flag column. If an internal standard area is above or below the quality control limits as defined by the continuing calibration, it will be flagged with "High" or "Low" in the flag column.

Results:

All of the VOST tube pairs were analyzed within the fourteen day sampling to analysis holding time. The VOST tubes were analyzed separately per client request.

Moisture was observed during the purge of a number of samples.

All internal standard areas and surrogate standard percent recoveries were within quality control limits for all samples and blanks.

The laboratory blanks contained no target analytes.

The absence of the target compounds was confirmed manually for all samples.

The associated Laboratory Control Sample (LCS) pair had reasonable results which were consistent with historical data.

Sample Calculations:

$$\text{Response Factor (RF)} = \frac{(\text{area analyte}) \times (\text{amt IS})}{(\text{area IS}) \times (\text{amt analyte})}$$

$$\text{Amount (ug)} = \frac{(\text{area analyte in sample}) \times (\text{amt IS})}{(\text{area IS}) \times (\text{avg ical RF})}$$

Triangle Laboratories, Inc.
Case Narrative

October 28, 1997
43386

Where:

amt IS = amount of internal standard = 0.25 ug
ical = initial calibration

The data in this package has been judged to be valid according to the guidelines of Methods 8260 and 5040 except as noted above. Should you have any questions, please feel free to contact our Project Scientist, Mary McDonald, at (919) 544-5729, extension 269.

For Triangle Laboratories, Inc.,

Report Preparation:

Sarah A. Hubbard

Sarah A. Hubbard
Report Preparation Chemist

Quality Control:

Penny A. Brock

Penny A. Brock
Report Preparation Chemist

The total number of pages in this data package is 120.

DO A 048267
CONFIDENTIAL

TRIANGLE LABORATORIES, INC.

LIST OF CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

American Association for Laboratory Accreditation. Certification pending. Certificate Number 0226-01. Accreditation for technical competence in Environmental Testing.(Including Waste Water, Sol/Haz Waste, Pulp/Paper, and Air Matrices) Parameters are AOX/TOX, Volatiles, Pesticides, PCB's, BNA's, and Dioxin/Furan. Method 1613 for Drinking Water.

State of Alabama, Department of Environmental Management. Expires December 31, 1997. Laboratory I.D. # 40950. Dioxin in drinking water.

State of Alaska, Department of Environmental Conservation. Expires December 21, 1997. Certificate number OS-00397. Dioxin in drinking water.

State of Arizona, Department of Health Services. Expires May 26, 1998. Certificate #AZ0423. Drinking Water for Dioxin, Dioxin in WW and S/H Waste.

State of Arkansas, Department of Pollution Control and Ecology. Expires February 18, 1998. Pulp/paper, soil, water, and Hazardous Waste for Dioxin/Furan; AOX/TOX.

State of California, Department of Health Services. Expires August 31, 1999. Certificate #1922. Selected Metals in Waste Water; Volatiles. Semi-volatiles, and Dioxin/furan in WW and Sol/Haz Waste. Dioxin in drinking water.

State of Connecticut, Department of Health Services. Expires September 30, 1997. Registration # PH-0117. Dioxin in drinking water.

Delaware Health and Social Services. Expires December 31, 1997. Certificate #NC 140. Dioxin in drinking water.

Florida Department of Health and Rehabilitative Services. Expires June 30, 1998. Dioxin in DW. Drinking Water ID HRS# 87424. Metals, Extractable Organics (GC/MS), Pesticides/PCB's (GC) and Volatiles (GC/MS) in Environmental Samples. Environmental water ID HRS# E87411.

Hawaii Department of Health. Expires March 1, 1998. Dioxin in drinking water. "Accepted" status for regulatory purposes .

Revised 9/18/97 RM

Printed 9/18/97

DO A 048268
CONFIDENTIAL

Idaho Department of Health and Welfare. Expires November 30, 1997. Dioxin in drinking water.

State of Kansas, Department of Health and Environment. Expires January 31, 1998. Environmental Analyses/Non potable Water and Solid and Hazardous Waste. Method 1613 for drinking water. ID #'s - Drinking water and/or pollution control - E-215. Solid or Hazardous Waste - E-1209.

Commonwealth of Kentucky, Department for Environmental Protection. Expires December 31, 1997. ID#90060. Dioxin in drinking water.

Maryland Department of Health and Mental Hygiene. Expires September 30, 1997. Certification #235. Drinking water by Method 1613A.

State of Michigan, Department of Public Health. Expires March 31, 1998. Drinking water by Method 1613.

Mississippi State Department of Health. No expiration date.. Dioxin in drinking water.

Montana Department of Health and Environmental Services. Expires December 31, 1997. Dioxin in drinking water.

State of New Jersey, Department of Environmental Protection and Energy. Extended by state. Temporary certificate until December 31, 1997. ID #67851. BNAs and Volatiles. Dioxin in drinking water.

State of New Mexico, Environment Department. Certification pending. Dioxin in drinking water.

New York State Department of Health. Expires June 30, 1997. ID #11026. Environmental Analyses of non-potable Water, Solid and Hazardous Waste. Method 1613 in DW.

State of North Carolina, Department of Environment Health and Natural Resources Expires August 31, 1999. Certificate # 37751. Dioxin in drinking water.

State of North Carolina, Department of Environment, Health, and Natural Resources, Division of Environmental Management. Expires December 31, 1997. Certificate # 485. Metals, pesticides & PCBs, semi-volatiles and volatiles; TCLP.

North Dakota State Department of Health and Consolidated Laboratories. Expires December 31, 1997. Certificate # R-076. Effective October 4, 1993. Dioxin in drinking water.

Oklahoma Department of Environmental Quality. Expires October 31, 1997. Laboratory #9612. Dioxin by 1613A, 8290 and 8280.

State of South Carolina, Department of Health and Environmental Control. Expires June 30, 1997. Certificate number #99040001 (drinking water). Expires August 31, 1999. Certificate number #99040002 (other parameters). Dioxin/Furans, BNA, Volatiles, and PCBs/pesticides under Clean Water Act, 2,3,7,8-TCDD for Drinking Water, and Organic extractables for Solid and Hazardous Waste.

State of Tennessee. Department of Environment and Conservation. Expires February 5, 1999. ID #02992. Method 1613 Drinking water only.

U.S. Department of Agriculture Soil Permit. Expires September 30, 2001. Permit No. S-3790. Under the authority of the Federal Plant Pest Act, permission is granted to receive foreign soil samples for use in laboratory analysis.

U.S. Army Corps of Engineers. Expires November 30, 1997. Validated to perform methods 8280 & 8290 for Lockbourne Landfill Site Investigation, Defense Distribution Depot Projects, and assorted projects for the USACE North Pacific Division Laboratory.

U.S. EPA Region V. Expires November 14, 1999. Dioxin in drinking water.

U.S. EPA Region VIII, for the State of Wyoming. Expires November 13, 1997. Dioxin in drinking water.

State of Utah, Department of Health. Expires December 31, 1997. Certificate Number E-166. Certification for the following parameters: Semi-Volatiles and Volatiles under RCRA; Volatiles under Clean Water Act; Dioxin/furans by Method 8280; Drinking water for Dioxin by Method 1613; Metals including Mercury and Microwave Digestion.

Commonwealth of Virginia, Department of General Services, Division of Consolidated Laboratory Services. Expires June 30, 1998. ID # 00341. Dioxin in drinking water.

State of Washington, Department of Ecology. Expires September 1998. Lab Accreditation Number C067. Scope of Accreditation applies to water analyses for Polychlorinated Dibenzop-dioxins and Polychlorinated Dibenzofurans, BNA Extr (Semivolatile) Organics and Purgeable (Volatile) Organics.

State of Washington, Department of Health. Expires April 30, 1998. Dioxin in drinking water. Lab I.D. 129

State of West Virginia, Department of Health. Expires December 31, 1997. Certificate No. 9923(C). Dioxin in drinking water.

State of Wisconsin, Department of Natural Resources. Expires August 31, 1998. Laboratory ID Number 999869530. Certification for the following categories of Organics: Purgeable, Base/Neutral, Acid, PCBs, and Dioxin. Expires November 14, 1999. Laboratory ID 999869530. Dioxin in drinking water.

PHARMACEUTICAL

Drug Enforcement Agency (DEA). Expires November 30, 1997. Registration number RT01195835. Controlled substance registration for schedules 1,2,3,N,4,5.

N.C. Department of Human Resources. Expires October 31, 1997. Registration number NC-PT 0000 0031. North Carolina controlled substances registration. Application submitted for renewal.

Food & Drug Administration (FDA) Registration. Expires June 1998. ID #'s 001500 1053481. Annual registration of drug establishment. Annual registration of drug establishment.

OTHER

Clinical Laboratory Improvement Amendments (CLIA) Registration. Expires May 30, 1999. ID # 34D0705123. Department of Health & Human Services, Health Care Financing Administration.

U.S. EPA Large Quantity Hazardous Waste Generator. No expiration date. EPA ID #NCD982156879. Permit indicates that the laboratory is a large generator of hazardous waste.

North Carolina Radioactive Materials License. Expires April 30 1998. License No. 032-0954-1. License authorizes the licensee to receive, acquire, own, possess, transfer, import and use such radioactive materials as designated.

North Carolina General License for Radiation Protection. No. expiration date. License No. 032-875-OG. The general license applies only to radioactive material contained in devices which have been manufactured and labeled in accordance with specific requirements.

Triangle Laboratories of RTP
Sample Identification Index for Project: 43386

Client Id:	TLI Id:	File Name:
DOW-VP-VST-21-T02 T	184-59-2A	HT597
DOW-VP-VST-21-TC02 T/C	184-59-2B	HT583
DOW-VP-VST-21-T04 T	184-59-5A	HT598
DOW-VP-VST-21-TC04 T/C	184-59-5B	HT584
DOW-VP-VST-21-T06 T	184-59-7A	HT599
DOW-VP-VST-21-TC06 T/C	184-59-7B	HT585
DOW-VP-VST-21-TFB2 T	184-59-8A	HT574
DOW-VP-VST-21-TCFB2 T/C	184-59-8B	HT571
DOW-VP-VST-22-T02 T	184-59-10A	HT600
DOW-VP-VST-22-TC02 T/C	184-59-10B	HT591
DOW-VP-VST-22-T04 T	184-59-12A	HT601
DOW-VP-VST-22-TC04 T/C	184-59-12B	HT592
DOW-VP-VST-22-T06 T	184-59-15A	HT602
DOW-VP-VST-22-TC06 T/C	184-59-15B	HT593
DOW-VP-VST-22-TFB2 T	184-59-16A	HT575
DOW-VP-VST-22-TCFB2 T/C	184-59-16B	HT572
DOW-VP-VST-23-T02 T	184-59-18A	HT603
DOW-VP-VST-23-TC02 T/C	184-59-18B	HT594
DOW-VP-VST-23-T04 T	184-59-21A	HT604
DOW-VP-VST-23-TC04 T/C	184-59-21B	HT595
DOW-VP-VST-23-T06 T	184-59-23A	HT605
DOW-VP-VST-23-TC06 T/C	184-59-23B	HT596
DOW-VP-VST-23-TFB2 T	184-59-24A	HT576
DOW-VP-VST-23-TCFB2 T/C	184-59-24B	HT573
VOSTBLK093097 T/TC	VOSTBLK093097	HT570
VOSTBLK100197 T/TC	VOSTBLK100197	HT590

9aH
10/28/97

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID:	DOW-VP-VST -21-T02 T	DOW-VP-VST -21-TC02 T /C	DOW-VP-VST -21-T04 T	DOW-VP-VST -21-TC04 T /C	DOW-VP-VST -21-T06 T
Filename :	HT597	HT583	HT598	HT584	HT599
TLI Id :	184-59-2A	184-59-2B	184-59-5A	184-59-5B	184-59-7A
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID:	DOW-VP-VST -21-TC06 T /C	DOW-VP-VST -21-TFB2 T	DOW-VP-VST -21-TCFB2 T/C	DOW-VP-VST -22-T02 T	DOW-VP-VST -22-TC02 T /C
Filename :	HT585	HT574	HT571	HT600	HT591
TLI Id :	184-59-7B	184-59-8A	184-59-8B	184-59-10A	184-59-10B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug

1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

DO A 048274
CONFIDENTIAL

() -Estimated Detection Limit Page 2

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID:	DOW-VP-VST -22-T04 T	DOW-VP-VST -22-TC04 T /C	DOW-VP-VST -22-T06 T /C	DOW-VP-VST -22-TC06 T	DOW-VP-VST -22-TFB2 T
Filename :	HT601	HT592	HT602	HT593	HT575
TLI Id :	184-59-12A	184-59-12B	184-59-15A	184-59-15B	184-59-16A
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	0.005	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

DO A 048275
CONFIDENTIAL

() Estimated Detection Limit Page 3

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:47:37 10/28/97

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID:	DOW-VP-VST -22-TCFB2 T/C	DOW-VP-VST -23-T02 T	DOW-VP-VST -23-TC02 T /C	DOW-VP-VST -23-T04 T	DOW-VP-VST -23-TC04 T /C
Filename :	HT572	HT603	HT594	HT604	HT595
TLI Id :	184-59-16B	184-59-18A	184-59-18B	184-59-21A	1844-59-21B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

DO A 048276
CONFIDENTIAL

()-Estimated Detection Limit Page 4

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID:	DOW-VP-VST -23-T06 T	DOW-VP-VST -23-TC06 T /C	DOW-VP-VST -23-TFB2 T	DOW-VP-VST -23-TCFB2 T/C	VOSTBLK093 097 T/TC
Filename :	HT605	HT596	HT576	HT573	HT570
TLI Id :	184-59-23A	184-59-23B	184-59-24A	184-59-24B	VOSTBLK093097
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug

1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

DO A 048277
CONFIDENTIAL

() - Estimated Detection Limit Page 5

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax (919) 544-5491

Savar v3.5
Printed: 17:47:37 10/28/97

Triangle Laboratories of RTP
Project Summary for Project 43386

Client ID: VOSTBLK100
197 T/TC

Filename : HT590
TLI Id : VOSTBLK100197
Matrix : VOST *SAH*
Units : ug *10/26/97*

1,1,2-Trichloroethane	(0.001)
Chlorobenzene	(0.001)

DO A 048278
CONFIDENTIAL

()-Estimated Detection Limit Page 6



Chain of Custody Record

Page 1 of 5

PROJECT Dow Plaquemine			NO. OF CONTAINERS	ANALYSES										REMARKS	SAM ID NO. (for lab use only)
LABORATORY: Triangle Labs															
PREPARED BY (Signature) John Barr			1	2	3	4	5	6	7	8	9	10	11	12	
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME													
DOW-VP-VST-21-T01	VOST TUBE	7-18-77													
-T01															
-T02				X	X										
-T02				X	X										
-T03						X									
-T03						X									
-TFB1						X									
-TFB1						X									
-T04				X	X										
-T04				X	X										
REMARKS: for all samples hold time expires 10/1/77 - analyze those soon.													RELINQUISHED BY: S.G.oss	DATE: 9/24/77	TIME:
RECEIVED BY:		DATE:	TIME:	RELINQUISHED BY:		DATE:	TIME:	RECEIVED BY:		DATE:	TIME:	RELINQUISHED BY:		DATE:	TIME:

LAB USE ONLY															
RECEIVED FOR LABORATORY BY:		DATE	TIME	AIRBILL NO.	OPENED BY:		DATE	TIME	TEMP °C	SEAL #	CONDITION				
[Signature]		7/17	100												
REMARKS:															

4-88-30337

DO A 048279
CONFIDENTIAL

Chain of Custody Record

 Page 2 of 5

17

PROJECT			NO. OF CONTAINERS	ANALYSES										REMARKS	SAM ID NO. (for lab use only)
LABORATORY:															
PREPARED BY (Signature)															
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME													
DWW-VP-VST-21 - T05	VOST TUBE	7-18-17	1			X									
-T05			1			X									
-T06			1	Y	Y										
-T06			1	Y	Y										
-T02			1	Y	Y										
-T02			1	X	X										
DWW-VP-VST-22 - T01			1			X									
-T01			1			Y									
-T02			1	X	Y										
-T02			1	X	X										
REMARKS													RELINQUISHED BY:	DATE	TIME
													S Glass	7/24/17	
RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION
<i>Robert M. Smith</i>	7/18/17	0900							
REMARKS:									

4-88-30337

 DO A 048280
 CONFIDENTIAL



Chain of Custody Record

Page 3 of 5

PROJECT			NO. OF CONTAINERS	ANALYSES										REMARKS	SAM ID NO. (for lab use only)
LABORATORY:															
DOW Plaquemine															
Triangle Labs															
PREPARED BY (Signature)															
John Glass															
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME		Chlorobenzene	1,1,2-Trichloroethane	HOLD									
DOWP-VST-22-103	BVOST TUBE	7-18-97	1			X									
-103			1			X									
-104			1	X	X										
-104			1	X	X										
-105			1			X									
-105			1			X									
-104			1			X									
-105			1			X									
-106			1	X	X										
-106			1	X	X										
REMARKS													RELINQUISHED BY:	DATE	TIME
													J. Glass	7/18/97	
RECEIVED BY:		DATE	TIME	RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME	RELINQUISHED BY:		DATE	TIME

LAB USE ONLY									
RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION
John Glass	7/18/97	0900							
REMARKS:									

DO A 048281
CONFIDENTIAL

4-88-30337

13

Chain of Custody Record

 Page 4 of 5

PROJECT DOW Plaquemine			NO. OF CONTAINERS	ANALYSES										REMARKS	SAM ID NO. (for lab use only)
LABORATORY: Triangle Labs															
PREPARED BY (Signature) <i>[Signature]</i>															
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME													
DOW-VP-VST-22-TF02	VOST TUBE	7-19-97	1	X	X										
DOW-VP-VST-22-TCF02			1	X	X	X									
DOW-VP-VST-23-T01			1			X									
	TC01		1			X									
	-T02		1	X	X										
	-TC02		1	X	X										
	-T03		1			X									
	-TC03		1			X									
	-TFB1		1			X									
	-TCFB1		1			X									

REMARKS										RELINQUISHED BY: S. G. Lass		DATE 7/29/97	TIME
RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	TIME	

LAB USE ONLY

RECEIVED FOR LABORATORY BY: <i>[Signature]</i>	DATE 7/23/97	TIME 0800	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION
REMARKS:									

 DO A 048282
 CONFIDENTIAL

4-88-30337

Chain of Custody Record

 Page 2 of 50

PROJECT Dow Plaquemine			NO. OF CONTAINERS	ANALYSES										REMARKS	SAM ID NO. (for lab use only)
LABORATORY: Triangle Lakes				Chloroform	1,1,2-Trichloroethane	HOLD									
PREPARED BY (Signature) John Blue															
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME													
DOW-VP-VST-23-T04	VOST TUBE	3/19/97	1	✓	✓										
-TC04			1	X	X										
-T05			1			X									
-TC05			1			X									
-T06			1	X	X										
-TC06			1	X	X										
-TF02			1	X	X										
-TCF02			1	X	X										

REMARKS										RELINQUISHED BY: S. Glass		DATE 3/24/97	TIME
RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME		

LAB USE ONLY

RECEIVED FOR LABORATORY BY: [Signature]	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION
REMARKS:									

4-88-30337

 DO A 048283
 CONFIDENTIAL

COPY 7/14/12 7/10-1/12

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent			Sample Seals: Absent			TLI Project Number 43386				Book	
Chain of Custody : Present			Container.... Intact			Client: RAC01 - Radian International				184	
Sample Tags : Absent						Date Received		09/25/97	By <i>Mark McTyghe</i>		Page
Sample Tag Numbers: Not Listed on Chain of Custody						Carrier and Number		FedEx/1826533306		59	
Styro Cooler/Box			ICE			Temp 7.0 C					

TLI Number... mR/Hr/CPH.	Client Sample ID..... Client COC ID.....*	Matrix Location.....	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
184-59-1A	DOW-VP-VST-21-T01 DOW-VP-VST-21-T01	TENAX R026									
184-59-1B	DOW-VP-VST-21-TC01 DOW-VP-VST-21-TC01	TNX/CHAR R026									
184-59-2A	DOW-VP-VST-21-T02 DOW-VP-VST-21-T02	TENAX R026									
184-59-2B	DOW-VP-VST-21-TC02 DOW-VP-VST-21-TC02	TNX/CHAR R026									
184-59-3A	DOW-VP-VST-21-T03 DOW-VP-VST-21-T03	TENAX R026									
184-59-3B	DOW-VP-VST-21-TC03 DOW-VP-VST-21-TC03	TNX/CHAR R026									
184-59-4A	DOW-VP-VST-21-TFB1 DOW-VP-VST-21-TFB1	TENAX R026									
184-59-4B	DOW-VP-VST-21-TCFB1 DOW-VP-VST-21-TCFB1	TNX/CHAR R026									
184-59-5A	DOW-VP-VST-21-T04 DOW-VP-VST-21-T04	TENAX R026									
184-59-5B	DOW-VP-VST-21-TC04 DOW-VP-VST-21-TC04	TNX/CHAR R026									
184-59-6A	DOW-VP-VST-21-T05 DOW-VP-VST-21-T05	TENAX R026									
184-59-6B	DOW-VP-VST-21-TC05 DOW-VP-VST-21-TC05	TNX/CHAR R026									
184-59-7A	DOW-VP-VST-21-T06 DOW-VP-VST-21-T06	TENAX R026									
184-59-7B	DOW-VP-VST-21-TC06 DOW-VP-VST-21-TC06	TNX/CHAR R026									

Receiving Remarks:

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- IN RECORD/CHAIN OF CUSTODY												
Custody Seal : Absent Chain of Custody : Present Sample Tags : Absent Sample Tag Numbers: Not Listed on Chain of Custody SMO Forms : N/A				Sample Seals: Absent Container...: Intact				TLI Project Number 43386 Client: RAC01 - Radian International				Book 184
Styro Cooler/Box ICE Temp 7.0 C				Date Received 09/25/97 By <i>Kevin M. Lynch</i>				Carrier and Number FedEx/1826533306				Page 59
TLI Number... MR/H:CPM.	Client Sample ID.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init	
	Client COC ID.....*	Location.....										
184-59-8A	DOW-VP-VST-21-TFB2 DOW-VP-VST-21-TFB2	TENAX R026										
184-59-8B	DOW-VP-VST-21-TCFB2 DOW-VP-VST-21-TCFB2	TNX/CHAR R026										
184-59-9A	DOW-VP-VST-22-T01 DOW-VP-VST-22-T01	TENAX R026										
184-59-9B	DOW-VP-VST-22-TC01 DOW-VP-VST-22-TC02	TNX/CHAR R026										
184-59-10A	DOW-VP-VST-22-T02 DOW-VP-VST-22-T02	TENAX R026										
184-59-10B	DOW-VP-VST-22-TC02 DOW-VP-VST-22-TC02	TNX/CHAR R026										
184-59-11A	DOW-VP-VST-22-T03 DOW-VP-VST-22-T03	TENAX R026										
184-59-11B	DOW-VP-VST-22-TC03 DOW-VP-VST-22-TC03	TNX/CHAR R026										
184-59-12A	DOW-VP-VST-22-T04 DOW-VP-VST-22-T04	TENAX R026										
184-59-12B	DOW-VP-VST-22-TC04 DOW-VP-VST-22-TC04	TNX/CHAR R026										
184-59-13A	DOW-VP-VST-22-T05 DOW-VP-VST-22-T05	TENAX R026										
184-59-13B	DOW-VP-VST-22-TC05 DOW-VP-VST-22-TC05	TNX/CHAR R026										
184-59-14A	DOW-VP-VST-22-TFB1 DOW-VP-VST-22-TFB1	TENAX R026										
184-59-14B	DOW-VP-VST-22-TCFB1 DOW-VP-VST-22-TCFB1	TNX/CHAR R026										
Receiving Remarks:												
Archive Remarks:												

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent		Sample Seals: Absent		TLI Project Number 43386				Book	
Chain of Custody : Present		Container...: Intact		Client: RAC01 - Radian International				184	
Sample Tags : Absent									
Sample Tag Numbers: Not Listed on Chain of Custody									
SMO Forms : N/A				Date Received 09/25/97				By <i>Kenn M. Dyck</i>	
Styro Cooler/Box		ICB		Temp 7.0 C				Carrier and Number FedEx/1826533306	
								59	

TLI Number... MR/H:CPM.	Client Sample ID..... Client COC ID.....*	Matrix Location.....	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
184-59-15A	DOW-VP-VST-22-T06 DOW-VP-VST-22-T06	TENAX R026									
184-59-15B	DOW-VP-VST-22-TC06 DOW-VP-VST-22-TC06	TNX/CHAR R026									
184-59-16A	DOW-VP-VST-22-TFB2 DOW-VP-VST-22-TFB2	TENAX R026									
184-59-16B	DOW-VP-VST-22-TCFB2 DOW-VP-VST-22-TCFB2	TNX/CHAR R026									
184-59-17A	DOW-VP-VST-23-T01 DOW-VP-VST-23-T01	TENAX R026									
184-59-17B	DOW-VP-VST-23-TC01 DOW-VP-VST-23-TC01	TNX/CHAR R026									
184-59-18A	DOW-VP-VST-23-T02 DOW-VP-VST-23-T02	TENAX R026									
184-59-18B	DOW-VP-VST-23-TC02 DOW-VP-VST-23-TC02	TNX/CHAR R026									
184-59-19A	DOW-VP-VST-23-T03 DOW-VP-VST-23-T03	TENAX R026									
184-59-19B	DOW-VP-VST-23-TC03 DOW-VP-VST-23-TC03	TNX/CHAR R026									
184-59-20A	DOW-VP-VST-23-TFB1 DOW-VP-VST-23-TFB1	TENAX R026									
184-59-20B	DOW-VP-VST-23-TCFB1 DOW-VP-VST-23-TCFB1	TNX/CHAR R026									
184-59-21A	DOW-VP-VST-23-T04 DOW-VP-VST-23-T04	TENAX R026									
184-59-21B	DOW-VP-VST-23-TC04 DOW-VP-VST-23-TC04	TNX/CHAR R026									

Receiving Remarks:

Archive Remarks:

Custody Seal	: Absent	Sample Seals:	Absent
Chain of Custody	: Present	Container...	Intact
Sample Tags	: Absent		
Sample Tag Numbers	: Not Listed on Chain of Custody		
SMO Forms	: N/A		

Book.
184

E

FedEx/1026533306

59

Temp 7.0 C

152

Archive Remarks:

Form Revised 05/27/1997 -- Page 4 OF 4

DO A 048287
CONFIDENTIAL.

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB 424	3274056	8240	VIA	ASB 9/21/97 3A 424 8260	8260	

20

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VS8-143-2 Exp. 9-25-97 at 25 ug/ml		

Extract / Sample volume 5 µL mL
 Signature Angela S. Brown Date 9/21/97

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/21/97	08:12		2.0ul VS8-143-2 Exp. 9-25-97	BFB	HT423		ASB 9/21/97	9/21/97	ASB	File glitched test
	08:53		↓	BFB	HT424		ASB 9/21/97		ASB	scan #479
	09:14		10.0ul VS8-143-3 Exp. 9-25-97	VOSTD0.25 T/C	HT425		ASB 9/21/97		ASB	
	09:58		↓	VOSTD0.25 T/C	HT426		ASB 9/21/97		ASB	ICAL PT.
	10:41		10.0ul VS8-143-2 Exp. 9-25-97	VOSTD0.10 T/C	HT427		ASB 9/21/97		ASB	
	11:18		↓	VOSTD0.10 T/C	HT428		ASB 9/21/97		ASB	ICAL PT.
	11:41		10ul VS8-143-4 Exp. 9-25-97	VOSTD0.50 T/C	HT429		ASB 9/21/97		ASB	ICAL PT.
	12:21		10ul VS8-144-3 Exp. 9-23-97	VOSTD0.75 T/C	HT430		ASB 9/21/97		ASB	ICAL PT.
	12:51		10ul VS8-144-2 Exp. 9-23-97	VOSTD1.00 T/C	HT431		ASB 9/21/97		ASB	ICAL PT.
✓	13:38		10ul VS8-147-2 Exp. 10/1/97	VOSTBLK T/C	HT432		ASB 9/21/97	✓	ASB	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 61

SRV1100AV(JRUNLOG.DOC (1/22/97)

DO A 048288
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
D0624	3274656	8260	V0A	V0A3	3DTC	

27

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
4260 V58-152-2 254/10/13/97		

Extract / Sample volume _____ Circle unit
µL mL

Tony C. Spence 9/29/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/24/97	1846	433348	184-7-1A	DOW-VP-4T-11-T02	H1563		JL 9/29/97		JL	
	1928	433348	184-7-2A	DOW-VP-4T-11-T04	H1564		JL 9/29/97		JL	
	1956	433348	184-7-3A	DOW-VP-4T-11-T06	H1565		JL 9/29/97		JL	
9/24/97	07:28		258-151-4 12/10/1997	BFD	H1566		CA 9/30/97		CA	
	07:52		258-149-4 12/10/1997	V05-400-25 7 TIC	H1567		CA 9/30/97		CA	
	08:31		258-152-2 12/10/1997	V05-400-25 7 TIC	H1568		CA 9/30/97		CA	
	09:58				H1569		CA 9/30/97		CA	
	09:22				H1570		CA 9/30/97		CA	
	09:52	433386	184-59-8B	DOW-VP-4T-21-T0802	H1571		CA 9/30/97		CA	
	10:23	433386	184-59-16B	DOW-VP-4T-22-T0802	H1572		CA 9/30/97		CA	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 76

SVT7110A\FORMS\RUN LOG.DOC (1/23/97)

DO A 048289
CONFIDENTIAL

82

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
9260 V-20-152-2 0.00/0.12/97	0.25 µL	

Carl S. Anderson 9/30/97

* Volatile Data Only
88VH110A\FORMS\LRRUN\LOG.DOC (1/23/87)

***** Dated Signature/Initials Required**

Page 12

DO A 048290
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	3DR	

62

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
8260 VSR-152-2 exp 10/15/97	254/4	

Extract / Sample volume μ L mL
 Signature Loney C. Spruill Date 9/30/97

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/16/97	1607	43386	184-59-2B	Dow-VP-VSR-21-TLC	HT583		JLH 9/16/97		JLH	moisture from tube.
	1640	43386	184-59-5B	Dow-VP-VSR-21-TLC	HT584		JLH 9/16/97		JLH	
	1716	43386	184-59-7B	Dow-VP-VSR-21-TLC	HT585		JLH 9/16/97		JLH	
10/1/97	07:21		254 151-4 exp 10/1/97	BFB	HT586		CA 10/1/97		CA	
	0801		254 149-4 exp 10/1/97	VOSEBIR 711C	HT587		CA 10/1/97		CA	
	0838		254 152-2 exp 10/1/97	VOSEBIR 711C	HT588		CA 10/1/97		CA	
	0909			VOSEBIR 711C	HT589		CA 10/1/97		CA	
	0921			VOSEBIR 711C	HT590		CA 10/1/97		CA	
	0954	43386	184-59-10B	Dow-VP-VSR-22-TLC	HT591		CA 10/1/97		CA	moisture from tube.
	10123	43386	184-59-12B	Dow-VP-VSR-22-TLC	HT592		CA 10/1/97		CA	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 78

SRVRI\DOA\FORMS\LRUNLOG.DOC (1/23/97)

DO A 048291
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	V00	V003	31rc	

30

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
078-152-2		
cap 101367 825 mg/L		

Extract / Sample volume _____ μ L mL

Signature Carol S. Anderson Date 10/1/97

Date**	Time**	Project	Sample#	Client ID	Filename	pl*	Operator/Date	Backup*	Proc	Comments***
10/1/97	10:53	43386	184-59-15A	Dow-VF-VST-22-7000	HT593		CA 10/1/97		CA	
	11:26	43386	184-59-18B	Dow-VF-VST-23-7002	HT594		CA 10/1/97		CA	
	11:54	43386	184-59-21B	Dow-VF-VST-23-7004	HT595		CA 10/1/97		CA	
	12:25	43386	184-59-23B	Dow-VF-VST-23-7006	HT596		CA 10/1/97		CA	
	12:57	43386	184-59-2A	Dow-VF-VST-21-7002	HT597		CA 10/1/97		CA	moisture powder wet
	13:27	43386	184-59-5A	Dow-VF-VST-21-7004	HT598		CA 10/1/97		CA	
	13:58	43386	184-59-7A	Dow-VF-VST-21-7006	HT599		CA 10/1/97		CA	
	14:34	43386	184-59-10A	Dow-VF-VST-22-7002	HT600		CA 10/1/97		CA	
	15:03	43386	184-59-12A	Dow-VF-VST-22-7004	HT601		CA 10/1/97		CA	
	16:03	43386	184-59-15A	Dow-VF-VST-22-7006	HT602		CA 10/1/97		22	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 71

SRV1100A\FORMS\LRN\LOG.DOC (1/3/97)

DO A 048292
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274036	8260	VOR	V003	3DTC	

31

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
V58-152-2 Exp. 10/13/97 @ 25 ug/L		

Extract / Sample volume μ L mL

Signature Tammy C. Spruill Date 10/1/97

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/1/97	16:39	43386	184-59-18A	DOW-VP-VST-23-T02	HT603		SL 10/1/97	10/1/97	SL	10/1/97
	17:11	43386	184-59-21A	DOW-VP-VST-23-T04	HT604		SL 10/1/97		SL	
	17:47	43386	184-59-23A	DOW-VP-VST-23-T06	HT605		SL 10/1/97		SL	
	18:16	V58-152-2 Exp. 10/1/97	V58-152-2 Exp. 10/13/97	LCS TITC	HT606		SL 10/1/97		SL	
	18:50			LCS Dup TITC	HT607		SL 10/1/97		SL	
10/2/97	07:49		2.5 V58-151-4 Exp 10/10/97	BFB	HT608		CA 10/2/97		CA	
	07:59		100 V58-149-4 Exp 10/9/97	V0510025 TITC	HT609		CA 10/2/97		CA	
	08:39		100 V58-152-2 Exp 10/13/97	V051018 TITC	HT610		CA 10/2/97		CA	
	08:57			V051018 TITC	HT611		CA 10/2/97		CA	
	10:10				HT612		CA 10/2/97		CA	

* Volatile Data Only

** Transcribed Data

*** Dated Signature/Initials Required

Page 80

SRV1110A\FORMS\ERRUNLOG.DOC (11/23/97)

DO A 048293
CONFIDENTIAL

Radian International

Project Number: 43386
Sample File: HT597

Method 8260 VOST
Sample ID: DOW-VP-VST-21-T02 T

Client Project: Dow Plaquemine Date Received: 09/25/97 Response File: ICA1H921
FLI ID: 184-59-2A Date Analyzed: 10/01/97

Analyte	Amount ng	FLAG	RT	Det. Limit ug	Quan. Limit ng
Pentafluorobenzene		IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.90		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.17		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.57		

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.265	5.02	1	106
fluorene-d ₁₀	0.255	7.82	2	102
Bromofluorobenzene	0.295	12.50	2	118

Reviewed by SAK Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

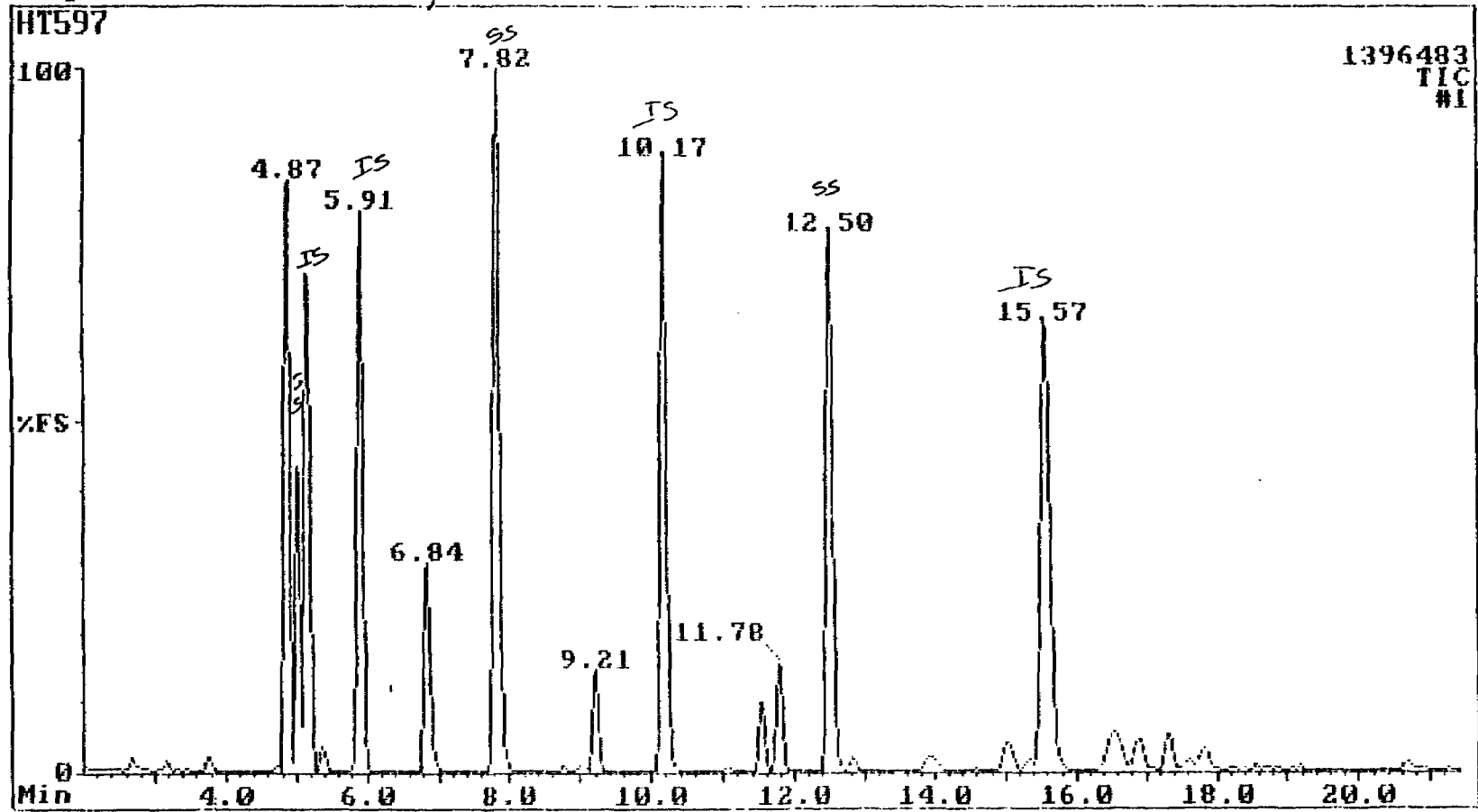
Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-3729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048294
CONFIDENTIAL

10-01-97 12:57 Triangle Laboratories of RTP, Inc. (919) 544-5729
 Sample: DOW-VP-VST-21-T/02 T 104-59-2A TL1#43386 Instrument II



Data Review *sat*
 Date: 10/28/97

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	3	2382128	bb	5.15	168 Pentafluorobenzene
2	100	94	96	0	2792396	bv	5.90	114 1,4-Difluorobenzene
3	100	95	97	1	2560000	bv	10.17	117 Chlorobenzene-d5
4	100	67	97	4	1477628	bv	15.57	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1205468	bv	5.02	113 Dibromofluoromethane
6	100	93	98	1	3716068	bv	7.82	98 Toluene-d8
7	100	88	93	0	1712184	bv	12.50	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

Data Review: *sat*
Date: 10/28/97

DO A 048296
CONFIDENTIAL

Radian International

Project Number: 43386

Sample File: HT583

Method 8260 VOST

Sample ID: DOW-VP-VST-21-TC02 T/C

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICA1H921

ILI ID: 184-59-2B

Date Analyzed: 09/30/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.11		
1,4-Difluorobenzene		IS 2	5.86		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₅		IS 3	10.10		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.43		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.249	4.98	1	100
Toluene-d ₈	0.256	7.77	2	102
4-Bromofluorobenzene	0.303	12.42	2	121

Reviewed by Satt Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048297
CONFIDENTIAL

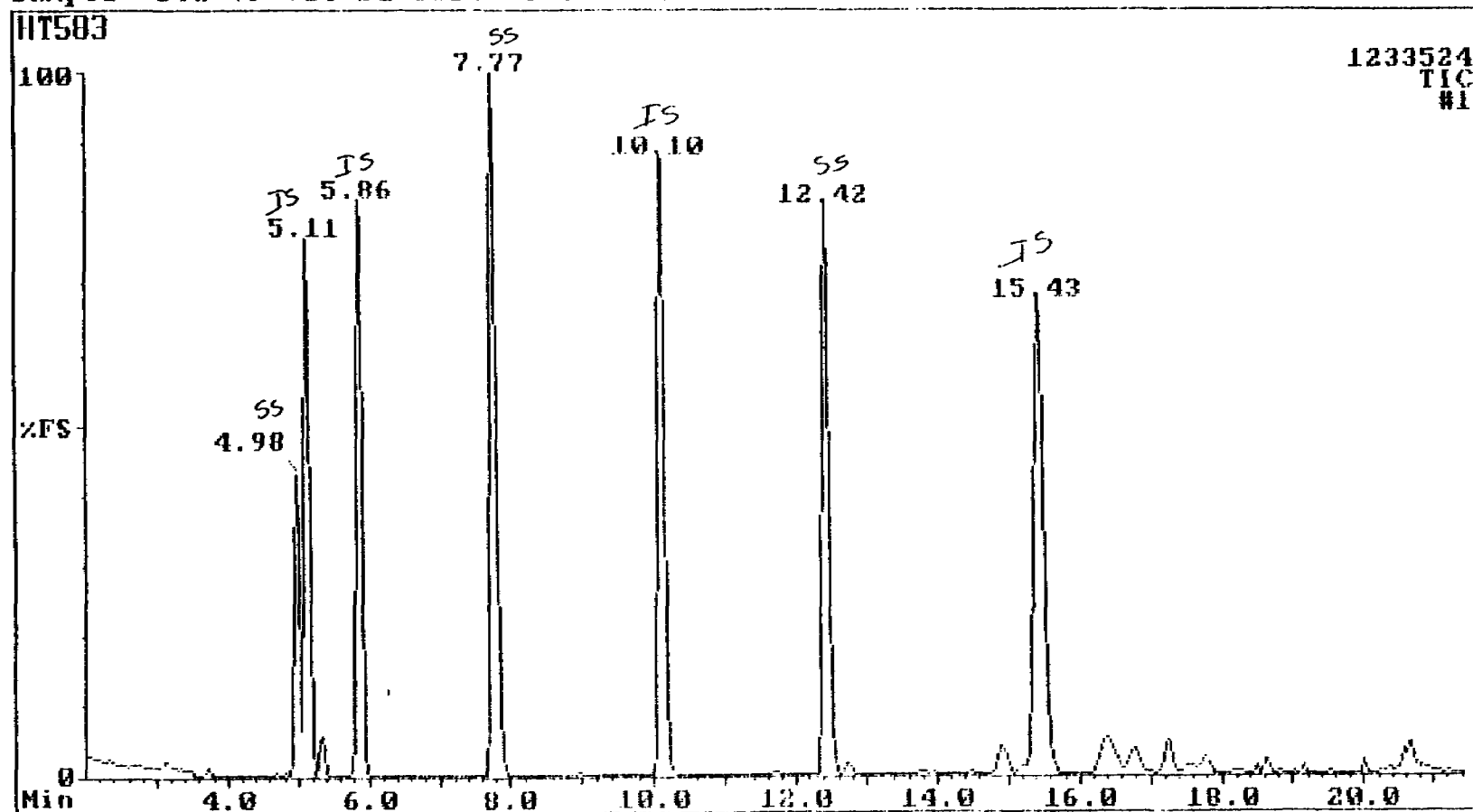
09-30-97 16:07

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-21-TC02 T/C 104-59-2B TLH43386

Instrument II



Data Review: *sa*
Date: 10/28/97

DO A 048298
CONFIDENTIAL

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	83	99	-1	2293884	bv	5.11	168 Pentafluorobenzene
2	100	95	97	0	2618992	bv	5.86	114 1,4-Difluorobenzene
3	100	95	96	1	2431388	bv	10.10	117 Chlorobenzene-d5
4	100	69	97	1	1435204	bv	15.43	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1090840	bv	4.98	113 Dibromofluoromethane
6	100	93	99	1	3500916	bv	7.77	98 Toluene-d8
7	100	89	93	0	1645532	bv	12.42	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048299
CONFIDENTIAL

Data Review: *sat*
Date: 10/28/97

Radian International

Project Number: 43386

Sample File: HT598

Method 8260 VOST

Sample ID: DOW-VP-VST-21-T04 T

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICAH921

TLI ID: 184-59-5A

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene	-	IS 1	5.13		
1,4-Difluorobenzene		IS 2	5.88		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.15		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.55		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.264	4.99	1	106
Tri-fluorobenzene-d ₃	0.254	7.80	2	102
Monofluorobenzene	0.295	12.49	2	118

Reviewed by SAH Date 10/26/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

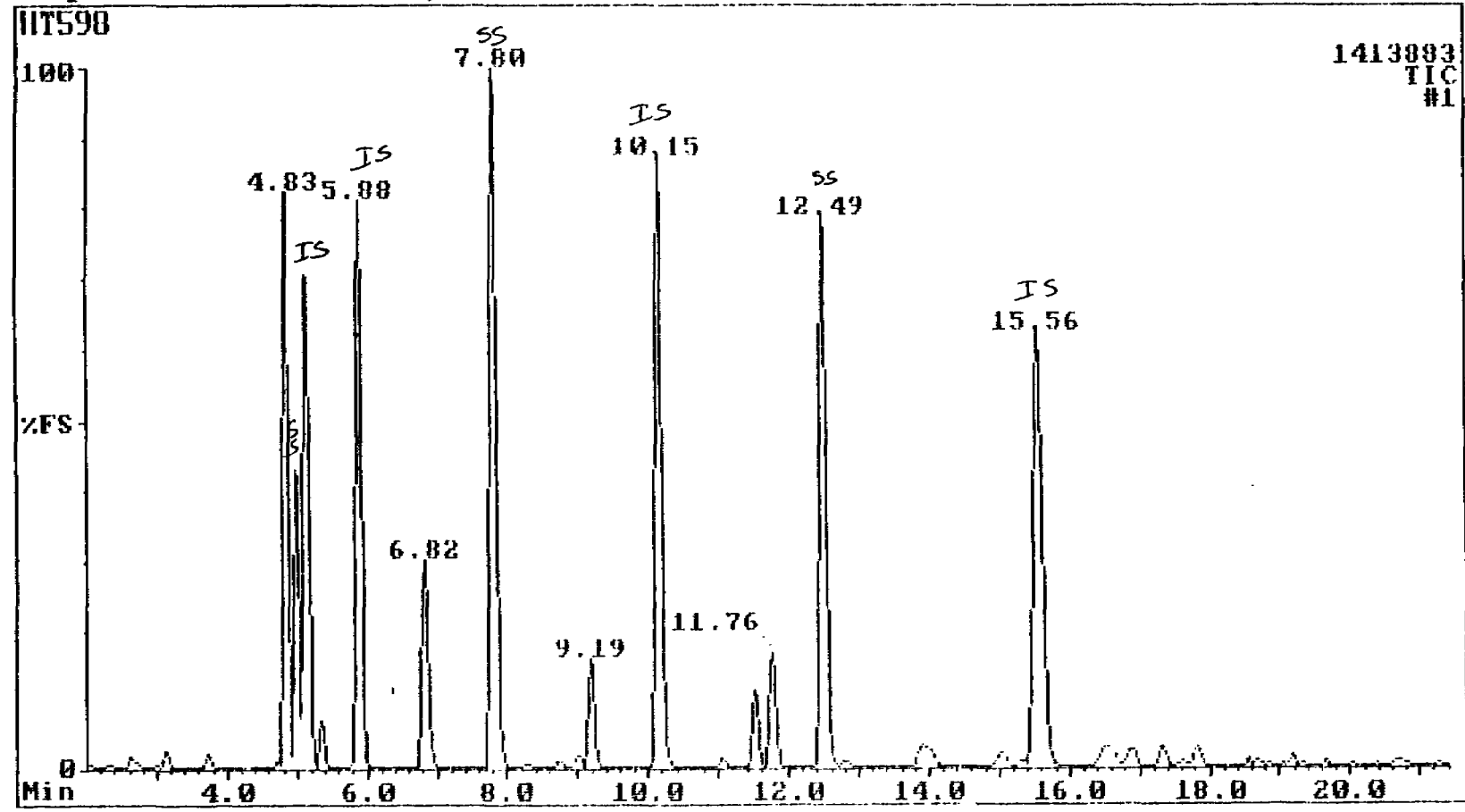
Printed: 17:05 10/28/1997

DO A 048300
CONFIDENTIAL

45

IS 10/26/97
10-01-97 13:27 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sample: DOW-VP-VST-21-TX04 T 104-59-50 TL#43386 Instrument H

Data Review: ~~304~~
Date: 10/26/97



J : HT598

LAB-BASE QUAN

10-01-97

13:59

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	1	2432040	bv	5.13	168 Pentafluorobenzene
	100	94	96	0	2875012	bv	5.88	114 1,4-Difluorobenzene
	100	96	97	2	2639044	bv	10.15	117 Chlorobenzene-d5
4	100	72	97	5	1574228	bv	15.55	152 1,4-Dichlorobenzene-d4
5	100	97	99	-1	1229776	bv	4.99	113 Dibromofluoromethane
6	100	93	98	2	3814200	bv	7.80	98 Toluene-d8
7	100	88	93	3	1761700	bv	12.49	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

Data Review: *SAH*
Date: *10/26/97*

47

Radian International

Project Number: 43386

Method 8260 VOST

Sample File: HT584

Sample ID: DOW-VP-VST-21-TC04 T/C

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICALH921

TLI ID: 184-59-5B

Date Analyzed: 09/30/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.11		
1,4-Difluorobenzene		IS 2	5.86		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₅		IS 3	10.10		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.41		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.248	4.98	1	99
Toluene-d ₈	0.252	7.76	2	101
4-Bromofluorobenzene	0.288	12.42	2	115

Reviewed by SAH Date 10/28/97

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048303
CONFIDENTIAL

43

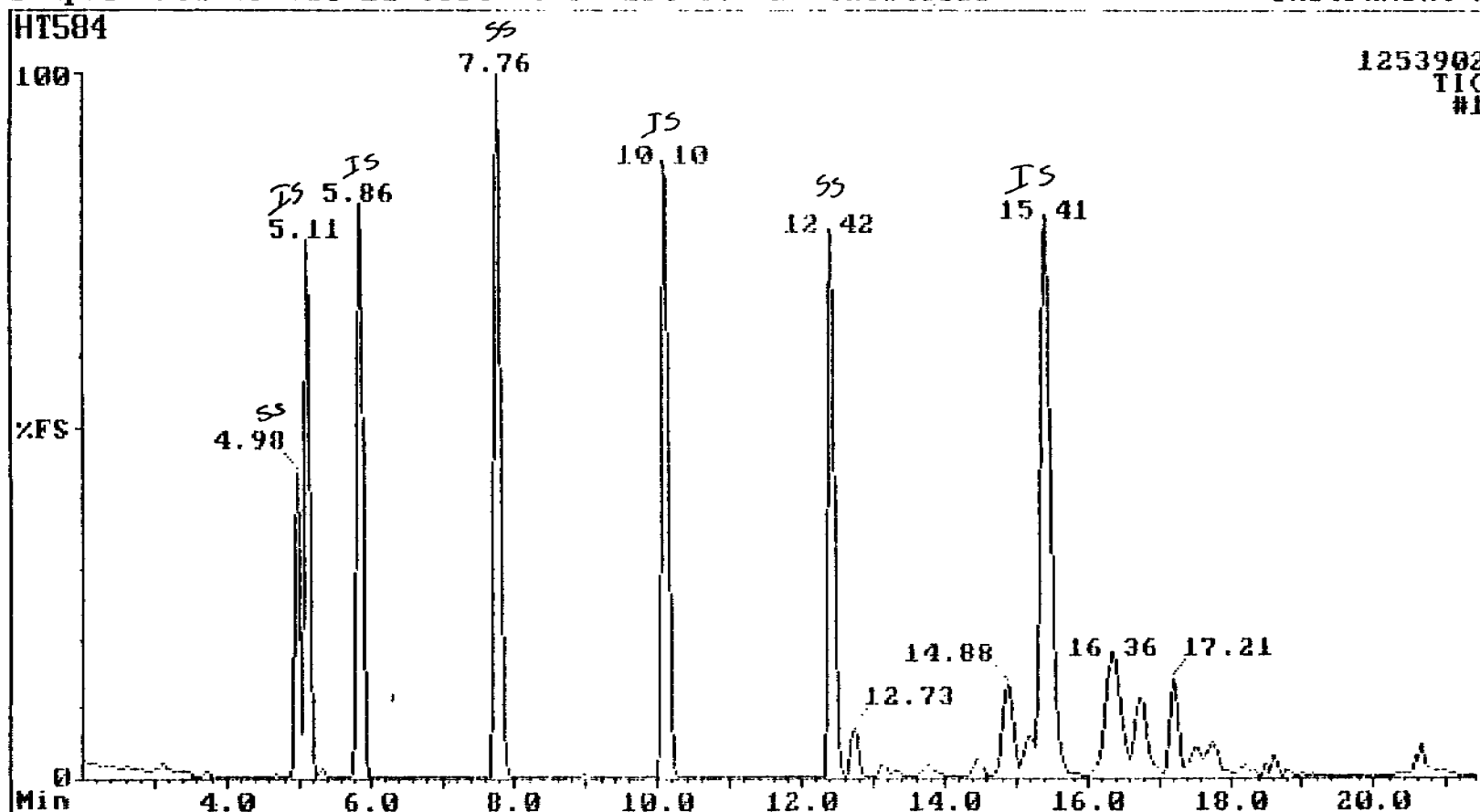
09-30-97 16:40

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-21-TC04 T/C 104-59-5B TL#43306

Instrument H



Data Review ~~sent~~
Date: 10/28/97 49

DO A 048304
CONFIDENTIAL

JB : HT584

LAB-BASE QUAN

10-01-97

07:53

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	84	99	-1	2354376	bv	5.11	168 Pentafluorobenzene
2	100	95	97	0	2686108	bv	5.86	114 1,4-Difluorobenzene
3	100	95	96	1	2453760	bv	10.10	117 Chlorobenzene-d5
4	98	58	99	-1	1379536	bv	15.41	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1116304	bv	4.98	113 Dibromofluoromethane
6	100	93	99	0	3544780	bv	7.76	98 Toluene-d8
7	100	89	93	0	1605796	bv	12.42	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048305
CONFIDENTIALData Review *SAH*
Date: 10/28/97

50

Radian International

Project Number: 43386
Sample File: HT599

Method 8260 VOST
Sample ID: DOW-VP-VST-21-T06 T

Client Project: Dow Plaquemine	Date Received: 09/25/97	Response File: ICA1H921
TLI ID: 184-59-7A	Date Analyzed: 10/01/97	

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene	-	IS 1	5.13		
1,4-Difluorobenzene		IS 2	5.88		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.16		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.57		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.261	5.00	1	104
Chlorobenzene-d ₃	0.252	7.81	2	101
Monofluorobenzene	0.302	12.50	2	121

DO A 048306
CONFIDENTIAL

Reviewed by SAH Date 10/23/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:05 10/28/1997

10-01-97 13:58

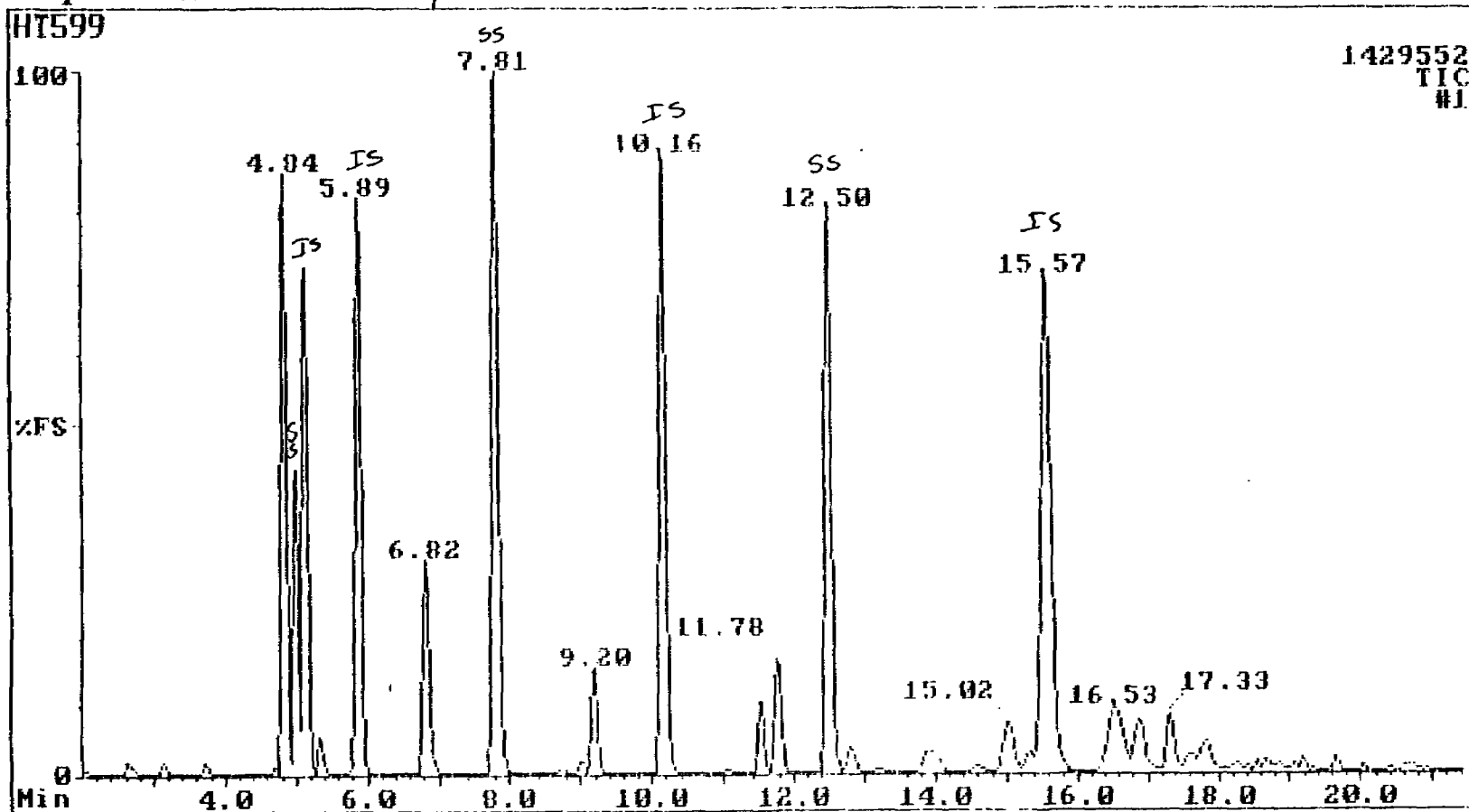
*18%
12/20/97*

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-21-T006 T 104-59-7A TL#43386

Instrument H

Data Review: *sat*
Date: 10/28/97DO A 048307
CONFIDENTIAL

DB : HT599

LAB-BASE QUAN

10-01-97

14:35

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	81	99	1	2494860	bb	5.13	168 Pentafluorobenzene
	100	94	96	0	2941884	bv	5.88	114 1,4-Difluorobenzene
	100	94	96	3	2691492	bv	10.16	117 Chlorobenzene-d5
4	99	64	97	5	1608592	bv	15.57	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1246736	bb	5.00	113 Dibromofluoromethane
6	100	93	99	3	3882316	bv	7.81	98 Toluene-d8
7	100	88	93	4	1841780	bv	12.50	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048308
CONFIDENTIAL

Data Review: *sat*
Date: 10/28/97

Radian International

Project Number: 43386
Sample File: HT585

Method 8260 VOST
Sample ID: DOW-VP-VST-21-TC06 T/C

Client Project: Dow Plaquemine Date Received: 09/25/97 Response File: ICA1H921
ILI ID: 184-59-7B Date Analyzed: 09/30/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.12		
1,4-Difluorobenzene		IS 2	5.86		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.10		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₂		IS 4	15.41		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.263	4.99	1	105
Toluene-d ₈	0.252	7.77	2	101
4-Bromofluorobenzene	0.289	12.42	2	116

Reviewed by SAH Date 10/25/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:05 10/28/1997

DO A 048309
CONFIDENTIAL

54

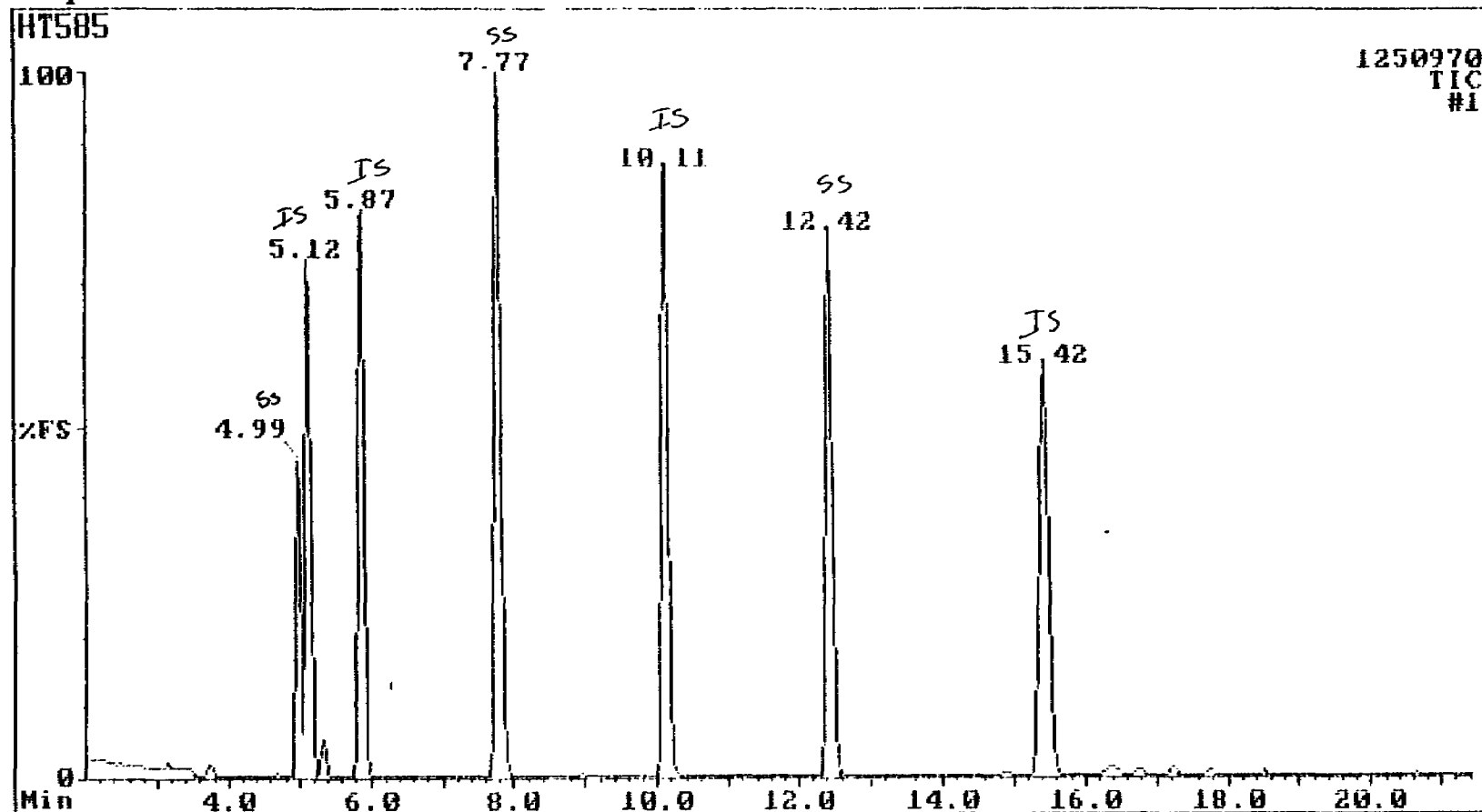
09-30-97 17:16

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-Z1-TC06 T/C 184-59-7B TL#43386

Instrument II



Data Review: sat
Date: 10/28/97 55

DO A 048310
CONFIDENTIAL

JB : HT585

LAB-BASE QUAN

09-30-97

21:37

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	84	99	0	2276516	bb	5.12	168 Pentafluorobenzene
2	100	95	97	-1	2671368	bv	5.86	114 1,4-Difluorobenzene
3	100	95	97	1	2448692	bv	10.10	117 Chlorobenzene-d5
4	100	78	99	-1	1376064	bv	15.41	152 1,4-Dichlorobenzene-d4
5	100	98	100	0	1146032	bv	4.99	113 Dibromofluoromethane
6	100	93	99	1	3517752	bv	7.77	98 Toluene-d8
7	100	89	93	0	1600476	bv	12.42	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048311
CONFIDENTIALData Review: *zatt*
Date: 10/28/97 56

Radian International

Project Number: 43386

Sample File: HT600

Method 8260 VOST

Sample ID: DOW-VP-VST-22-T02 T

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICAH921

TLI ID: 184-59-10A

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene	-	IS 1	5.14		
1,4-Difluorobenzene		IS 2	5.90		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₅		IS 3	10.17		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.58		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.254	5.01	1	102
Fluorene-d ₉	0.249	7.82	2	100
Fluorobenzene	0.283	12.50	2	113

DO A 048312
CONFIDENTIAL

Reviewed by SAH Date 10/28/97

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

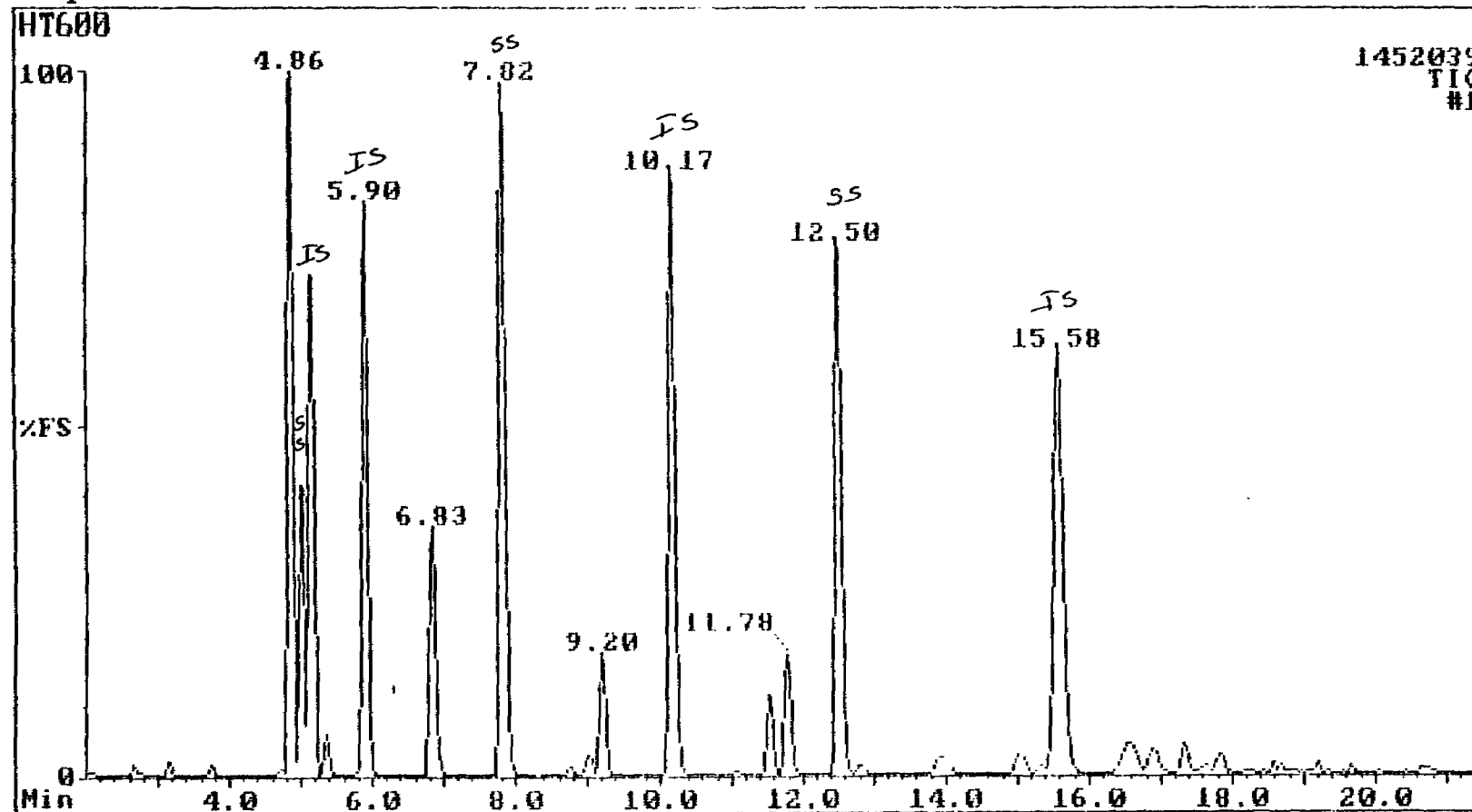
10-01-97 14:34

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-T02 T 104-59-100 TL1#43306

Instrument H



Data Review *sat*
Date: 10/25/97
64

DO A 048313
CONFIDENTIAL

JB : HT600

LAB-BASE QUAN

10-01-97

15:04

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	80	99	2	2492124	bb	5.14	168	Pentafluorobenzene
	100	94	96	1	2981000	bv	5.90	114	1,4-Difluorobenzene
	100	94	96	1	2653248	bv	10.17	117	Chlorobenzene-d5
4	100	69	97	5	1510592	bv	15.58	152	1,4-Dichlorobenzene-d4
5	100	97	99	0	1208708	bv	5.01	113	Dibromofluoromethane
6	100	93	98	1	3882096	bv	7.82	98	Toluene-d8
7	100	88	93	0	1752996	bv	12.50	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048314
CONFIDENTIAL

Data Review: *sat*
Date: 10/28/97

Radian International

Project Number: 43386
Sample File: HT591

Method 8260 VOST
Sample ID: DOW-VP-VST-22-TC02 T/C

Client Project: Dow Plaquemine	Date Received: 09/25/97	Response File: ICA1H921
TLI ID: 184-59-10B	Date Analyzed: 10/01/97	

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.91		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.17		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.57		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.273	5.03	1	109
Toluene-d ₈	0.255	7.82	2	102
4-Bromofluorobenzene	0.286	12.50	2	114

Reviewed by SAH Date 10/28/97

DO A 048315
CONFIDENTIAL

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:05 10/28/1997

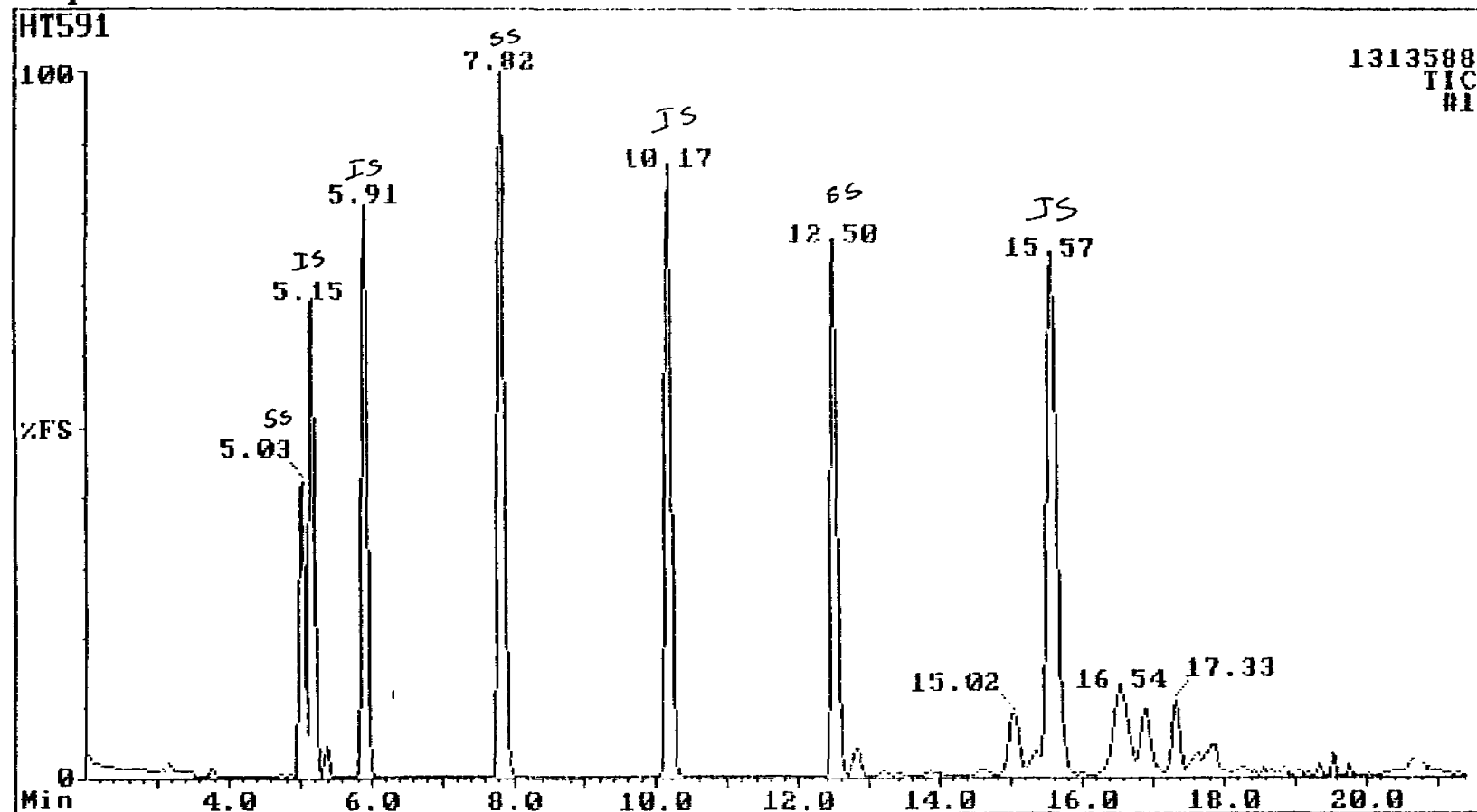
10-01-97 09:54

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-TC02 T/C 104-59-10B TLH43386

Instrument H



Data Review ~~sat~~
Date: 10/28/97 67

DO A 048316
CONFIDENTIAL

JB : HT591

LAB-BASE QUAN

10-01-97

10:23

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	83	99	3	2156008	bb	5.15	168 Pentafluorobenzene
2	100	94	96	1	2620712	bv	5.91	114 1,4-Difluorobenzene
3	100	95	97	-1	2339344	bv	10.17	117 Chlorobenzene-d5
4	98	61	98	4	1397520	bb	15.57	152 1,4-Dichlorobenzene-d4
5	100	98	99	1	1124784	bb	5.03	113 Dibromofluoromethane
6	100	92	98	0	3493416	bv	7.82	98 Toluene-d8
7	100	88	93	-2	1556572	bv	12.50	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048317
CONFIDENTIALData Review *sa#*
Date: 10/28/97

63

Radian International

Project Number: 43386
Sample File: HT601

Method 8260 VOST
Sample ID: DOW-VP-VST-22-T04 T

Client Project: Dow Plaquemine
TLI ID: 184-59-12A

Date Received: 09/25/97

Response File: ICA1H921

Date Analyzed: 10/01/97

Analyte	Amount ng	FLAG	RT	Det. Limit ng	Quan. Limit ng
Pentafluorobenzene		IS 1	5.14		
1,4-Difluorobenzene		IS 2	5.89		
1,1,2-Trichloroethane	0.005	J	8.61		0.05
Chlorobenzene-d ₅		IS 3	10.17		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.55		

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.255	5.01	1	102
Chlorobenzene-d ₅	0.256	7.81	2	102
Monofluorobenzene	0.292	12.50	2	117

Reviewed by SAH Date 10/28/97

DO A 048318
CONFIDENTIAL

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:05 10/28/1997
63

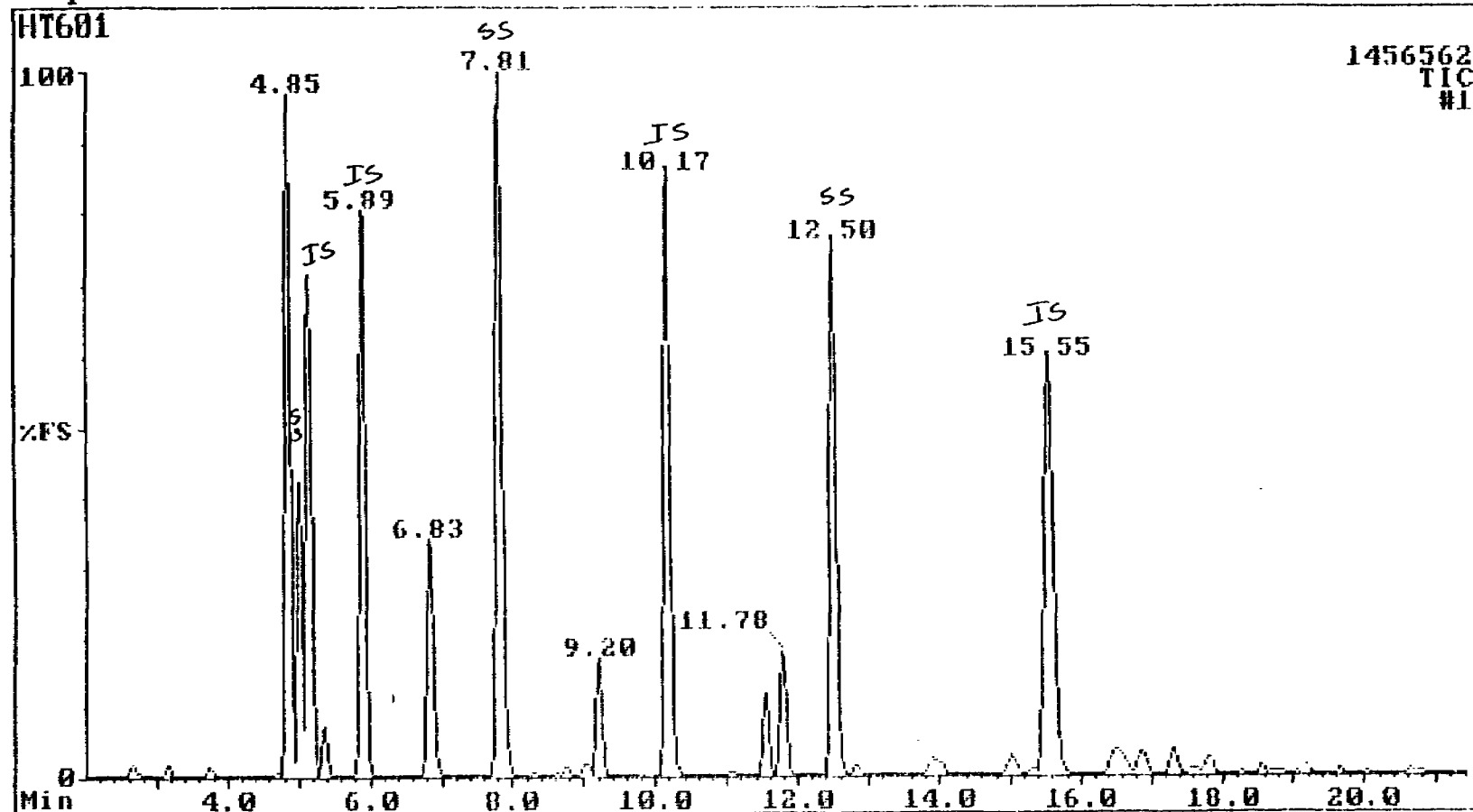
10-01-97 15:03

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-T04 T 184-59-120 TLH43306

Instrument II



Data Review *scott*
Date: 10/28/97 70

DO A 048319
CONFIDENTIAL

J : HT601

LAB-BASE QUAN

10-01-97

16:04

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	80	99	2	2542308	bb	5.14	168	Pentafluorobenzene
	100	94	96	0	2957368	bb	5.89	114	1,4-Difluorobenzene
	100	95	97	3	2666624	bv	10.17	117	Chlorobenzene-d5
4	100	71	97	2	1515816	bv	15.55	152	1,4-Dichlorobenzene-d4
5	100	98	99	0	1241864	bb	5.01	113	Dibromofluoromethane
6	100	93	99	1	3950896	bv	7.81	98	Toluene-d8
7	100	88	95	2	1793704	bv	12.50	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	87	67	79	2	14220	bb	3.61	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048320
CONFIDENTIALData Review *sat*
Date: 10/26/97 71

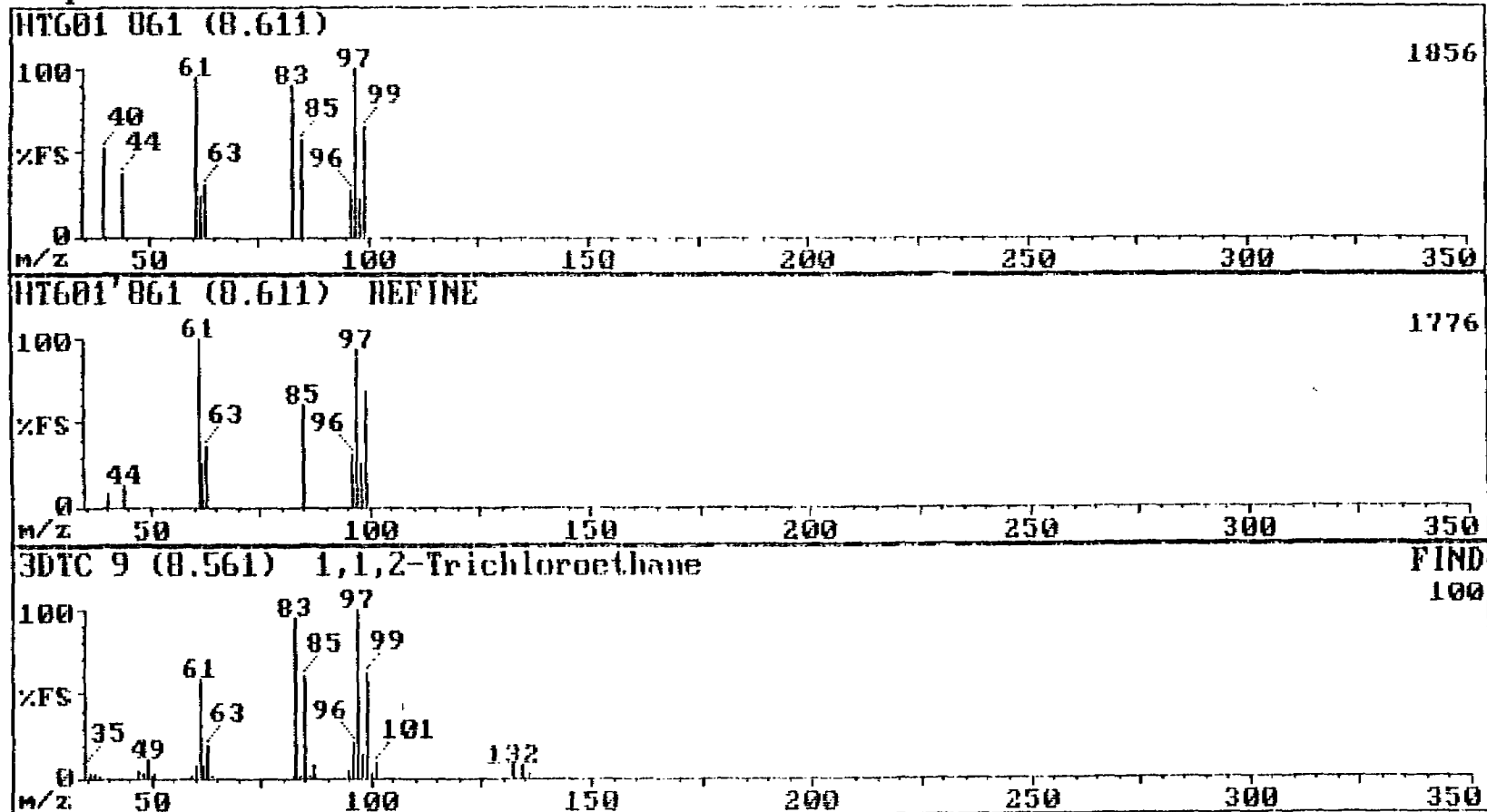
10-01-97 15:03

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-T04 T 104-59-120 TLH43306

Instrument II

DO A 048321
CONFIDENTIAL

Radian International

Project Number: 43386

Sample File: HT592

Method 8260 VOST

Sample ID: DOW-VP-VST-22-TC04 T/C

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICA1H921

TLI ID: 184-59-12B

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.14		
1,4-Difluorobenzene		IS 2	5.89		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.15		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.53		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.275	5.01	1	110
Benzene-d ₆	0.256	7.80	2	102
Bromofluorobenzene	0.294	12.48	2	118

Reviewed by SAH Date 10/28/97

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

801 Capitola Drive • Durham, North Carolina 27713

Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048322
CONFIDENTIAL

73

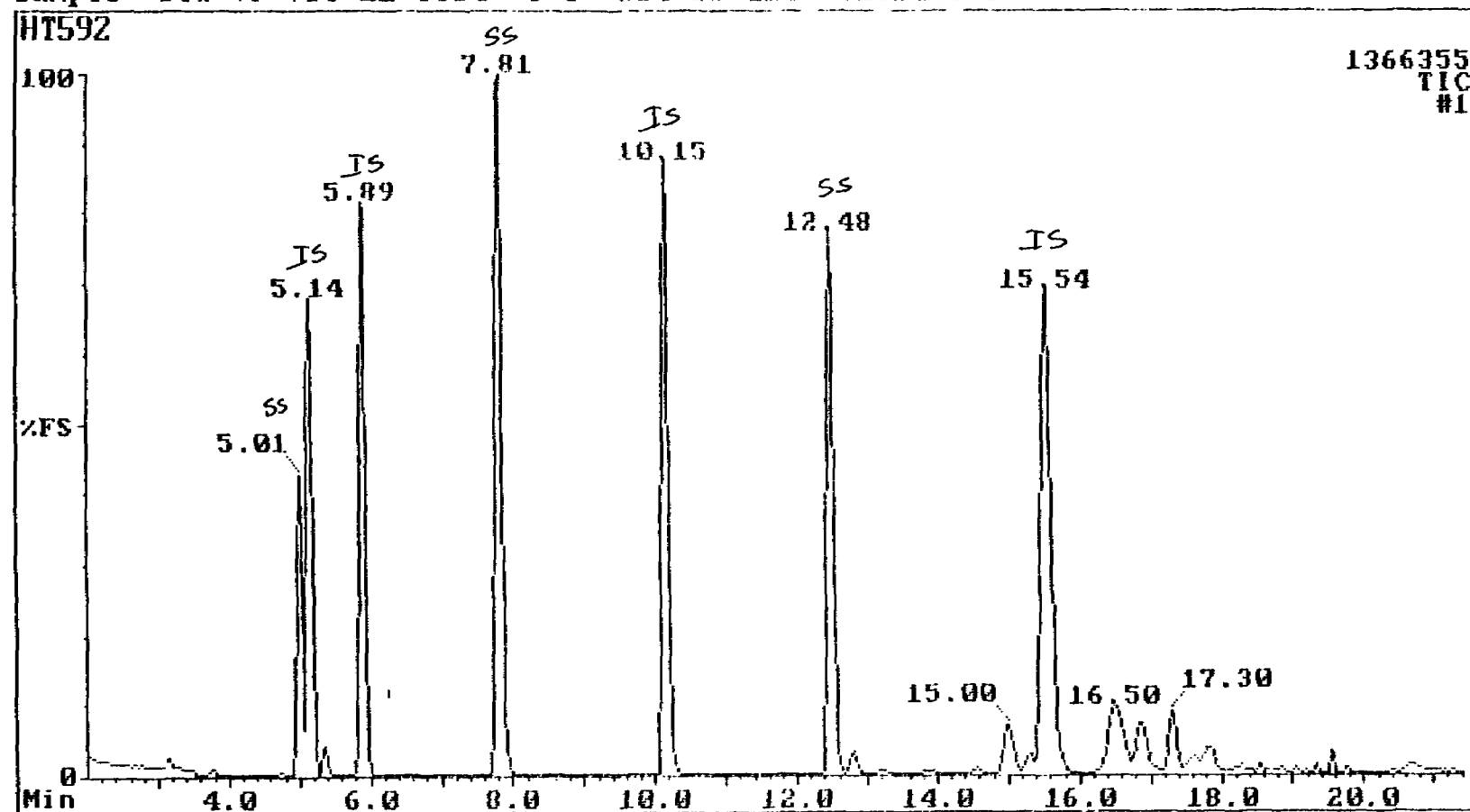
10-01-97 10:23

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-TC04 T/C 104-59-12B TLH43386

Instrument H



Data Review: sat
Date: 10/26/97

74

DO A 048323
CONFIDENTIAL

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	82	99	2	2265824	bb	5.14	168	Pentafluorobenzene
2	100	94	96	0	2737240	bv	5.89	114	1,4-Difluorobenzene
3	100	94	96	1	2489600	bv	10.15	117	Chlorobenzene-d5
4	99	63	97	3	1448960	bv	15.53	152	1,4-Dichlorobenzene-d4
5	100	98	99	0	1191280	bb	5.01	113	Dibromofluoromethane
6	100	93	98	0	3659692	bv	7.80	98	Toluene-d8
7	100	88	93	0	1671116	bv	12.48	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048324
CONFIDENTIAL

Data Review *sat*
Date: *10/28/97*

Radian International

Project Number: 43386

Method 8260 VOST

Sample File: HT602

Sample ID: DOW-VP-VST-22-T06 T

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICAH921

ILI ID: 184-59-15A

Date Analyzed: 10/01/97

Analyte	Amount ng	FLAG	RT	Det. Limit ug	Quan. Limit ng
Pentafluorobenzene		IS 1	5.16		
1,4-Difluorobenzene		IS 2	5.91		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.18		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.57		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.265	5.03	1	106
Toluene-d ₈	0.253	7.82	2	101
4-Bromofluorobenzene	0.292	12.51	2	117

Reviewed by set Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.

Savar v3.5

801 Capitola Drive • Durham, North Carolina 27713

Printed: 17:05 10/28/1997

Phone: (919) 544-5729 • Fax: (919) 544-5491

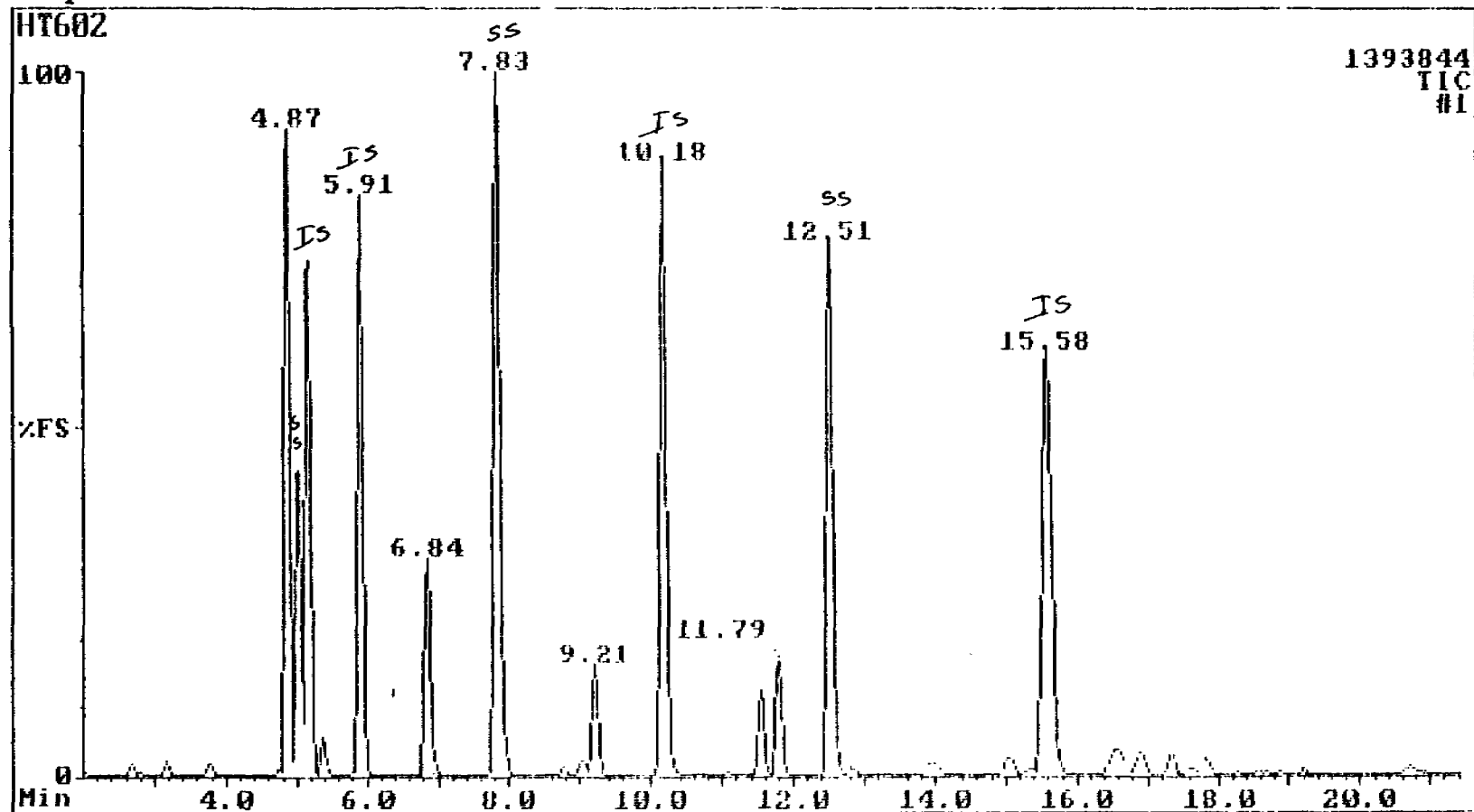
DO A 048325
CONFIDENTIAL

76

Sample: DOW-VP-VST-22-T06

184-59-15A TL1443386

Instrument II



DO A 048326
CONFIDENTIAL

Data Review *sat*
Date: *10/28/97*

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	4	2444008	bb	5.16	168 Pentafluorobenzene
2	100	94	96	-1	2885748	bv	5.91	114 1,4-Difluorobenzene
3	100	95	97	0	2611568	bb	10.18	117 Chlorobenzene-d5
4	100	71	97	2	1497560	bb	15.57	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1239600	bv	5.03	113 Dibromofluoromethane
6	100	93	98	0	3813312	bv	7.82	98 Toluene-d8
7	100	88	93	-1	1748584	bv	12.51	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	70	46	68	1	FP 5540	bb	8.53	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048327
CONFIDENTIAL

Data Review: *path*
Date: 10/28/97

Radian International

Project Number: 43386
Sample File: HT593

Method 8260 VOST
Sample ID: DOW-VP-VST-22-TC06 T/C

Client Project: Dow Plaquemine	Date Received: 09/25/97	Response File: ICALH921
TLI ID: 184-59-15B	Date Analyzed: 10/01/97	

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.91		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.18		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.60		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.267	5.02	1	107
Chlorobenzene-d ₃	0.255	7.83	2	102
Pentafluorobenzene	0.279	12.52	2	112

Reviewed by SAH Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048328
CONFIDENTIAL

73

10-01-97 10:53

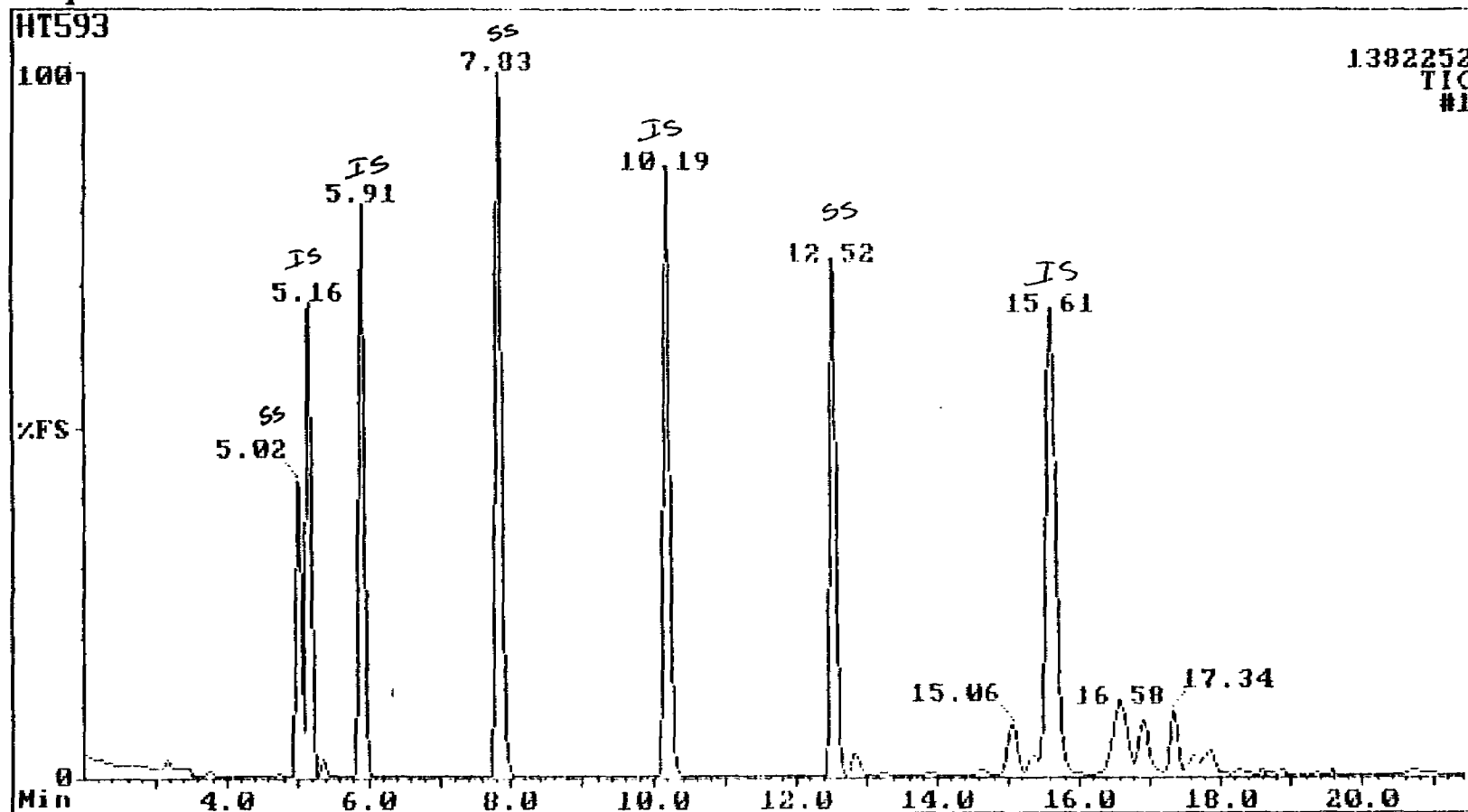
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-22-TC06 T/C 184-59-15B TL#43386

Instrument H

Data Review *soff*
Date: 10/28/97



DO A 048329
CONFIDENTIAL

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	3	2323800	bb	5.15	168	Pentafluorobenzene
	100	94	96	1	2762972	bv	5.91	114	1,4-Difluorobenzene
	100	95	97	0	2488540	bv	10.18	117	Chlorobenzene-d5
4	97	62	97	5	1385832	bv	15.60	152	1,4-Dichlorobenzene-d4
5	100	97	99	0	1188336	bb	5.02	113	Dibromofluoromethane
6	100	92	98	1	3676704	bv	7.83	98	Toluene-d8
7	100	88	93	0	1597836	bv	12.52	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048330
CONFIDENTIAL

Data Review: *sat*
Date: *10/23/97*

Radian International

Project Number: 43386

Sample File: HT603

Method 8260 VOST

Sample ID: DOW-VP-VST-23-T02

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICALH921

ILI ID: 184-59-18A

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene	-	IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.89		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.16		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.54		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.259	5.01	1	104
Toluene-d ₈	0.251	7.81	2	100
4-Bromofluorobenzene	0.287	12.49	2	115

Reviewed by edh Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048331
CONFIDENTIAL

88

10-01-97 16:39

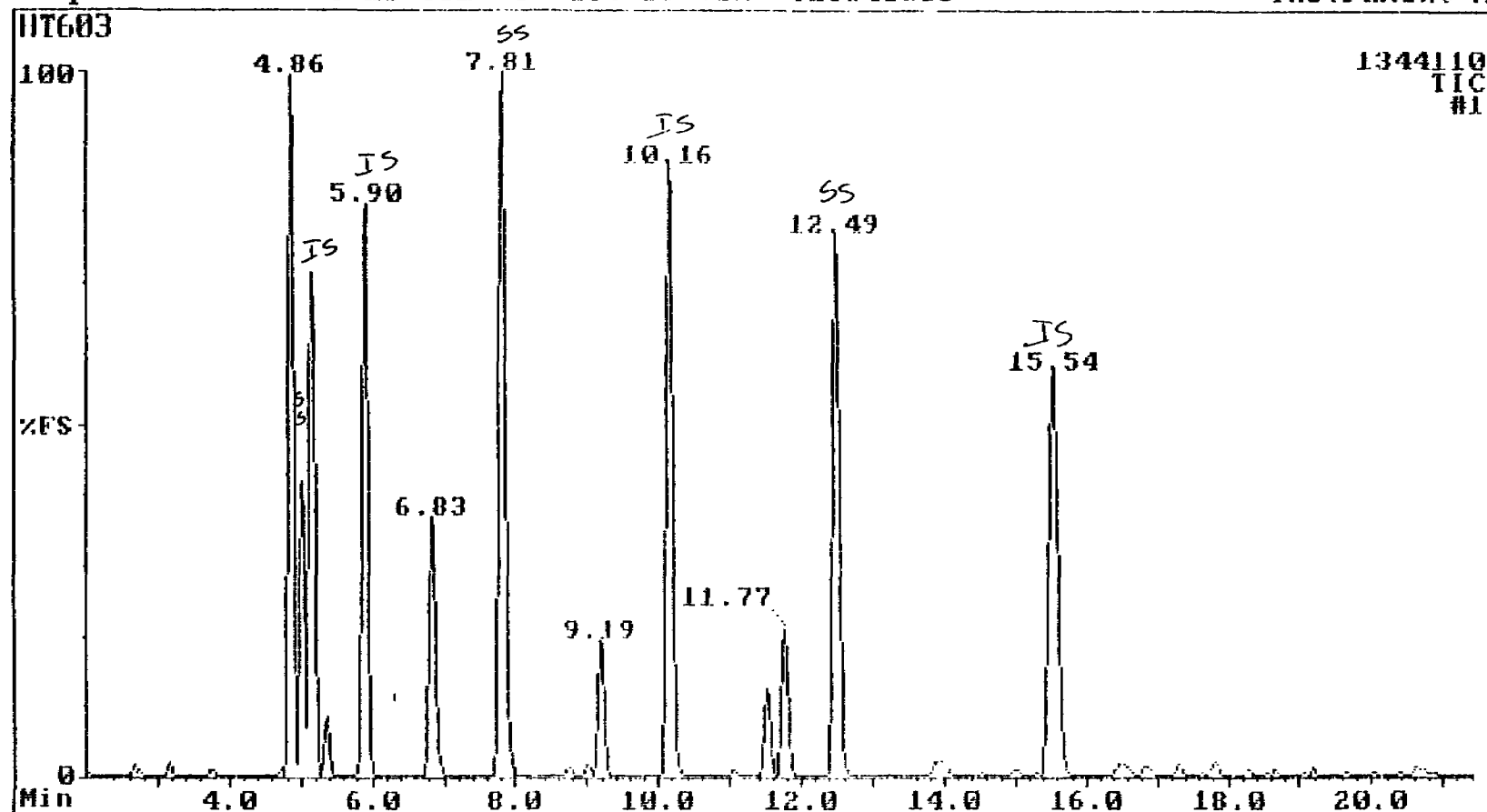
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-T02 T 104-59-100 TL#43386

Instrument H

Data Review: *Scd*
Date: 10/28/97



DO A 048332
CONFIDENTIAL

DB : HT603

LAB-BASE QUAN

10-01-97

17:12

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	3	2306948	bb	5.15	168 Pentafluorobenzene
2	100	94	96	-1	2782128	bv	5.89	114 1,4-Difluorobenzene
3	100	95	97	2	2509920	bv	10.16	117 Chlorobenzene-d5
4	100	76	99	2	1422056	bv	15.54	152 1,4-Dichlorobenzene-d4
5	100	98	99	-1	1142132	bb	5.01	113 Dibromofluoromethane
6	100	93	98	1	3657932	bv	7.81	98 Toluene-d8
7	100	88	93	1	1655224	bb	12.49	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

Data Review: *BAH*
Date: *10/26/97*

DO A 048333
CONFIDENTIAL

Radian International

Project Number: 43386
Sample File: HT594

Method 8260 VOST
Sample ID: DOW-VP-VST-23-TC02.T/C

Client Project: Dow Plaquemine
FLI ID: 184-59-18B

Date Received: 09/25/97

Response File: ICAH921

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.90		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.18		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.60		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.276	5.02	1	110
ene-d ₈	0.254	7.83	2	102
Bromofluorobenzene	0.287	12.52	2	115

Reviewed by SAT Date 10/28/97

NA- Not Applicable; Det. Limit Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048334
CONFIDENTIAL

91

10-01-97 11:26

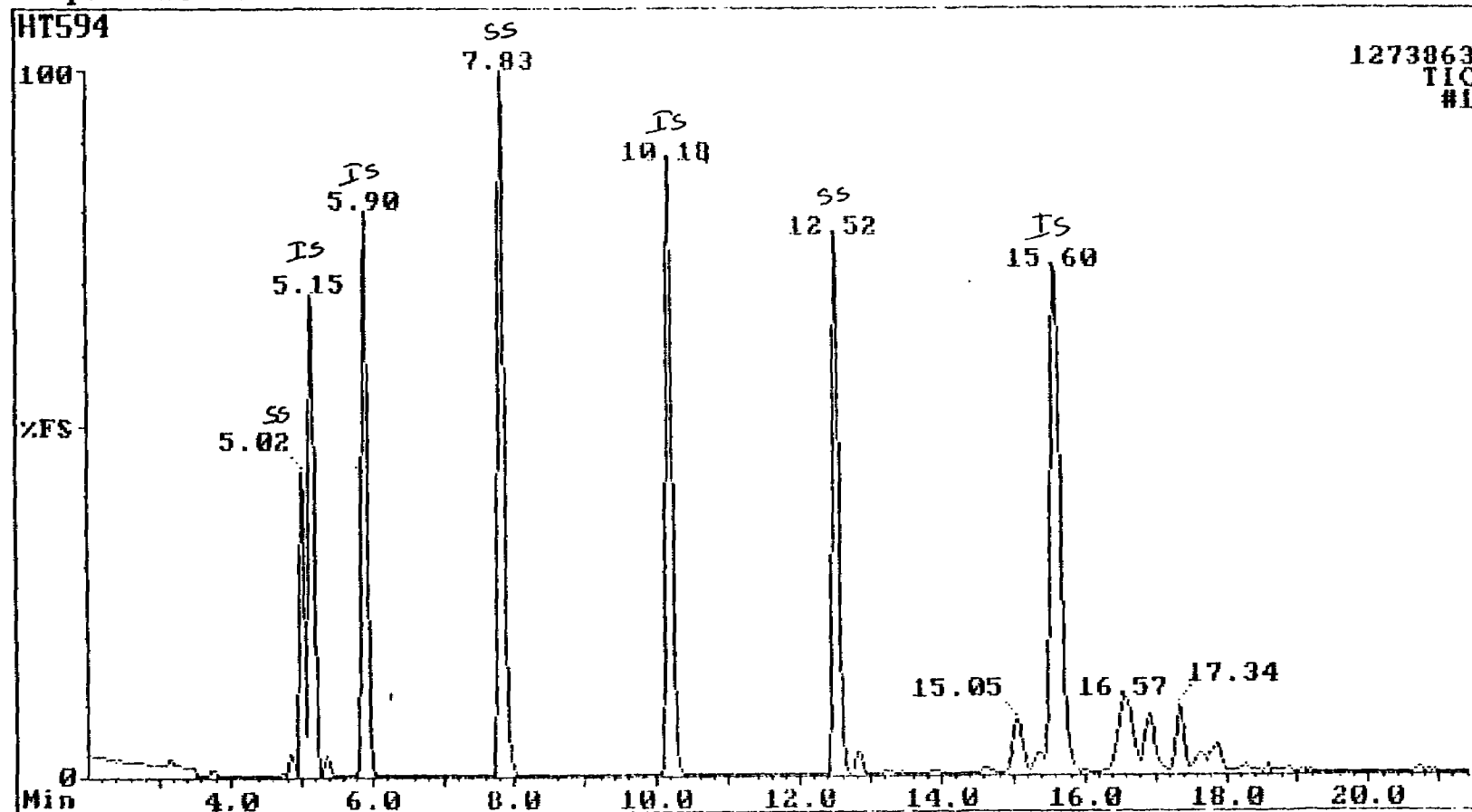
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-TC02 T/C 104-59-180 TL#43386

Instrument H

Data Review: ~~544~~
Date: 10/28/97 92



DO A 048335
CONFIDENTIAL

JB : HT594

LAB-BASE QUAN

10-01-97

11:55

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	3	2143880	bb	5.15	168	Pentafluorobenzene
	100	94	96	0	2600148	bv	5.90	114	1,4-Difluorobenzene
	100	95	97	2	2375800	bv	10.18	117	Chlorobenzene-d5
4	97	62	97	5	1410424	bv	15.60	152	1,4-Dichlorobenzene-d4
5	100	98	99	0	1131100	bb	5.02	113	Dibromofluoromethane
6	100	93	98	2	3449180	bv	7.83	98	Toluene-d8
7	100	88	93	2	1549676	bv	12.52	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048336
CONFIDENTIALData Review: *eat*
Date: *12/97*

Radian International

Project Number: 43386

Sample File: HT604

Method 8260 VOST

Sample ID: DOW-VP-VST-23-T04 T

Client Project: Dow Plaquemine

Date Received: 09/25/97

Response File: ICAIH921

TLI ID: 184-59-21A

Date Analyzed: 10/01/97

Analyte	Amount ng	FLAG	RT	Det. Limit ug	Quan. Limit ng
Pentafluorobenzene		IS 1	5.14		
1,4-Difluorobenzene		IS 2	5.89		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.15		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.51		

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.249	5.01	1	100
Toluene-d ₈	0.251	7.80	2	100
4-Bromofluorobenzene	0.275	12.48	2	110

Reviewed by SAH Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5

Printed: 17:05 10/28/1997

DO A 048337
CONFIDENTIAL

94

10-01-97 17:11

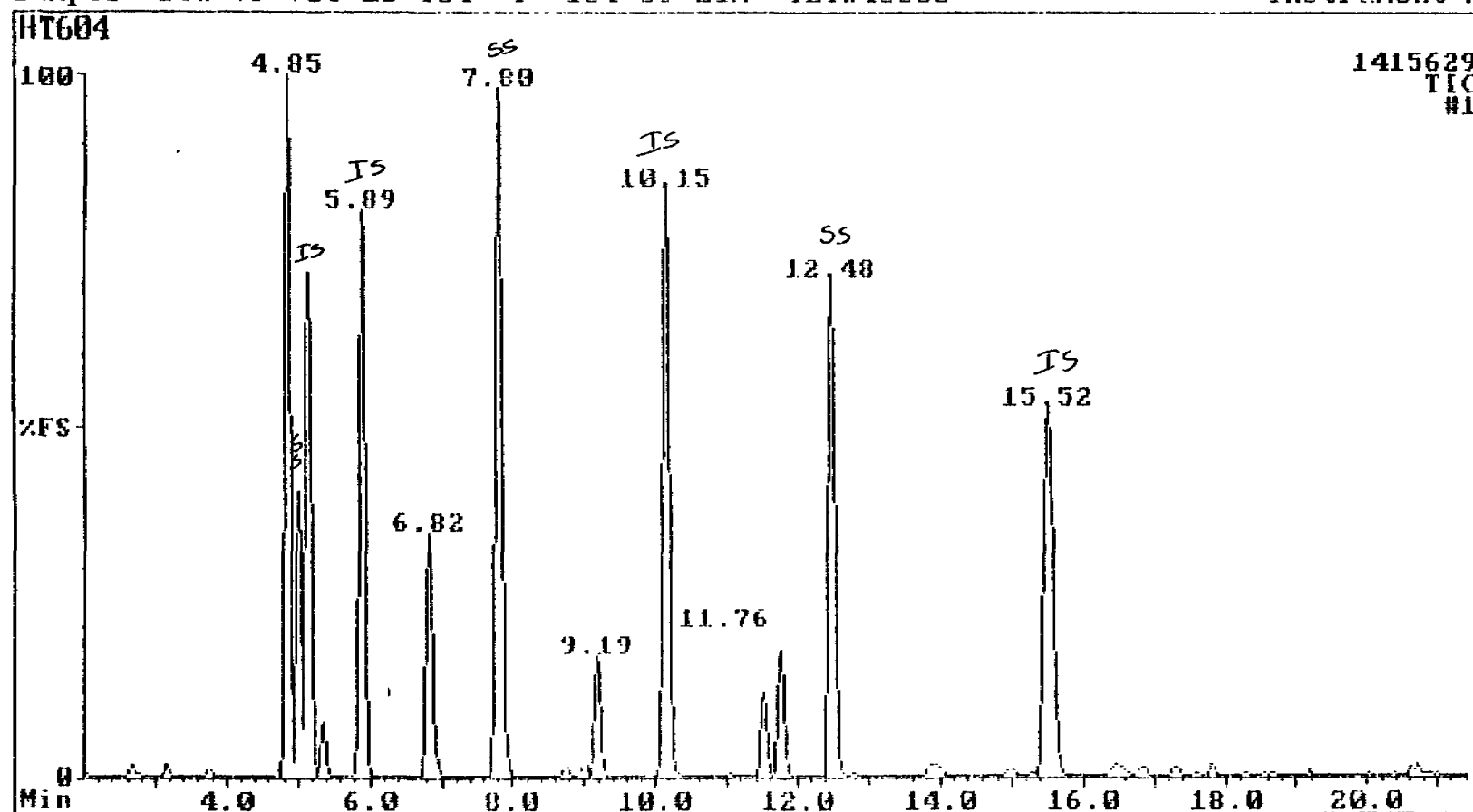
Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-T04 T 104-59-210 TL#43386

Instrument H

Data Review: *sat*
Date: 12/21/95



DO A 048338
CONFIDENTIAL

DB : HT604

LAB-BASE QUAN

10-01-97

17:51

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	2	2401040	bb	5.14	168 Pentafluorobenzene
2	100	94	96	0	2843296	bv	5.89	114 1,4-Difluorobenzene
3	100	95	97	1	2531760	bb	10.15	117 Chlorobenzene-d5
4	100	76	99	1	1344156	bv	15.51	152 1,4-Dichlorobenzene-d4
5	100	98	99	0	1142512	bv	5.01	113 Dibromofluoromethane
6	100	93	98	0	3730436	bv	7.80	98 Toluene-d8
7	100	88	93	0	1622008	bv	12.48	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	42	22	46	2	FP 3441504	bb	5.51	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048339
CONFIDENTIALData Review: *scd*
Date: 10/28/97 96

Radian International

Project Number: 43386
Sample File: HT595

Method 8260 VOST
Sample ID: DOW-VP-VST-23-TC04 T/C

Client Project: Dow Plaquemine	Date Received: 09/25/97	Response File: ICALH921
TLI ID: 1844-59-21B	Date Analyzed: 10/01/97	

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.16		
1,4-Difluorobenzene		IS 2	5.91		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₃		IS 3	10.18		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.59		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.270	5.03	1	108
ene-d ₄	0.250	7.83	2	100
Bromofluorobenzene	0.282	12.52	2	113

DO A 04834
CONFIDENTIAL

Reviewed by Date 10/26/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 344-5729 • Fax: (919) 344-5491

Savar v3.5
Printed: 17:05 10/28/1997

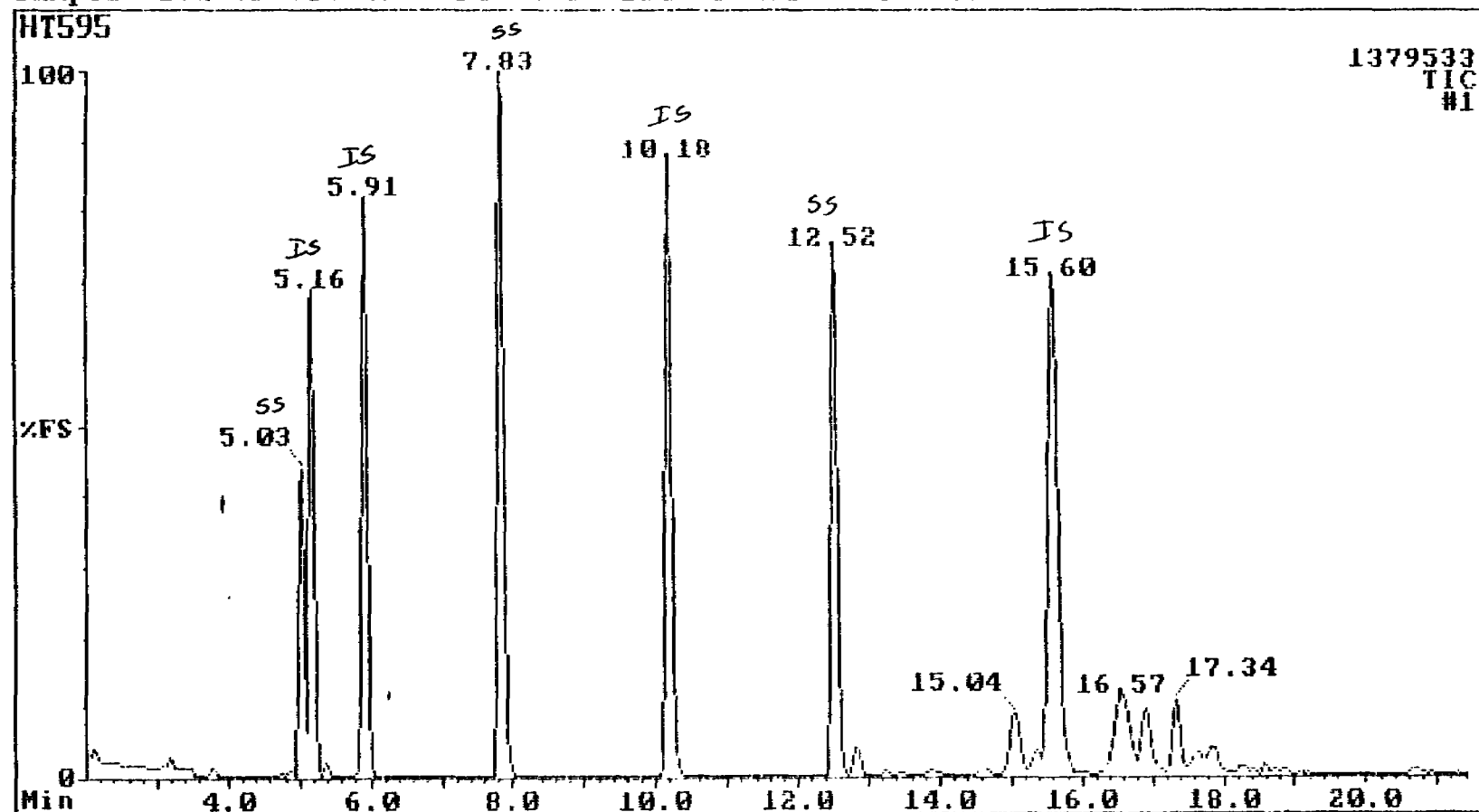
10-01-97 11:54

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-TC04 I/C 104-59-21B TLH43386

Instrument H



Data Review: *Scott*
Date: 10/28/97 98

DO A 048341
CONFIDENTIAL

DB : HT595

LAB-BASE QUAN

10-01-97

12:26

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	83	99	4	2355232	bb	5.16	168 Pentafluorobenzene
	100	94	96	-1	2838464	bv	5.91	114 1,4-Difluorobenzene
3	100	95	97	0	2545864	bv	10.18	117 Chlorobenzene-d5
4	97	61	97	4	1466676	bv	15.59	152 1,4-Dichlorobenzene-d4
5	100	97	99	0	1215668	bb	5.03	113 Dibromofluoromethane
6	100	93	98	1	3712884	bv	7.83	98 Toluene-d8
7	100	88	93	0	1659400	bv	12.52	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048342
CONFIDENTIALData Review: *gall*
Date: 10/26/97

Radian International

Project Number: 43386

Sample File: HT605

Method 8260 VOST

Sample ID: DOW-VP-VST-23-T06 T

Client Project: Dow Plaquemine

TLI ID: 184-59-23A

Date Received: 09/25/97

Response File: ICALH921

Date Analyzed: 10/01/97

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.14		
1,4-Difluorobenzene		IS 2	5.89		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₅		IS 3	10.15		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₄		IS 4	15.52		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.260	5.01	1	104
Toluene-d ₈	0.253	7.80	2	101
4-Bromofluorobenzene	0.279	12.48	2	112

Reviewed by Satt Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

DO A 048343
CONFIDENTIAL

Savar v3.5
Printed: 17:05 10/28/1997

100

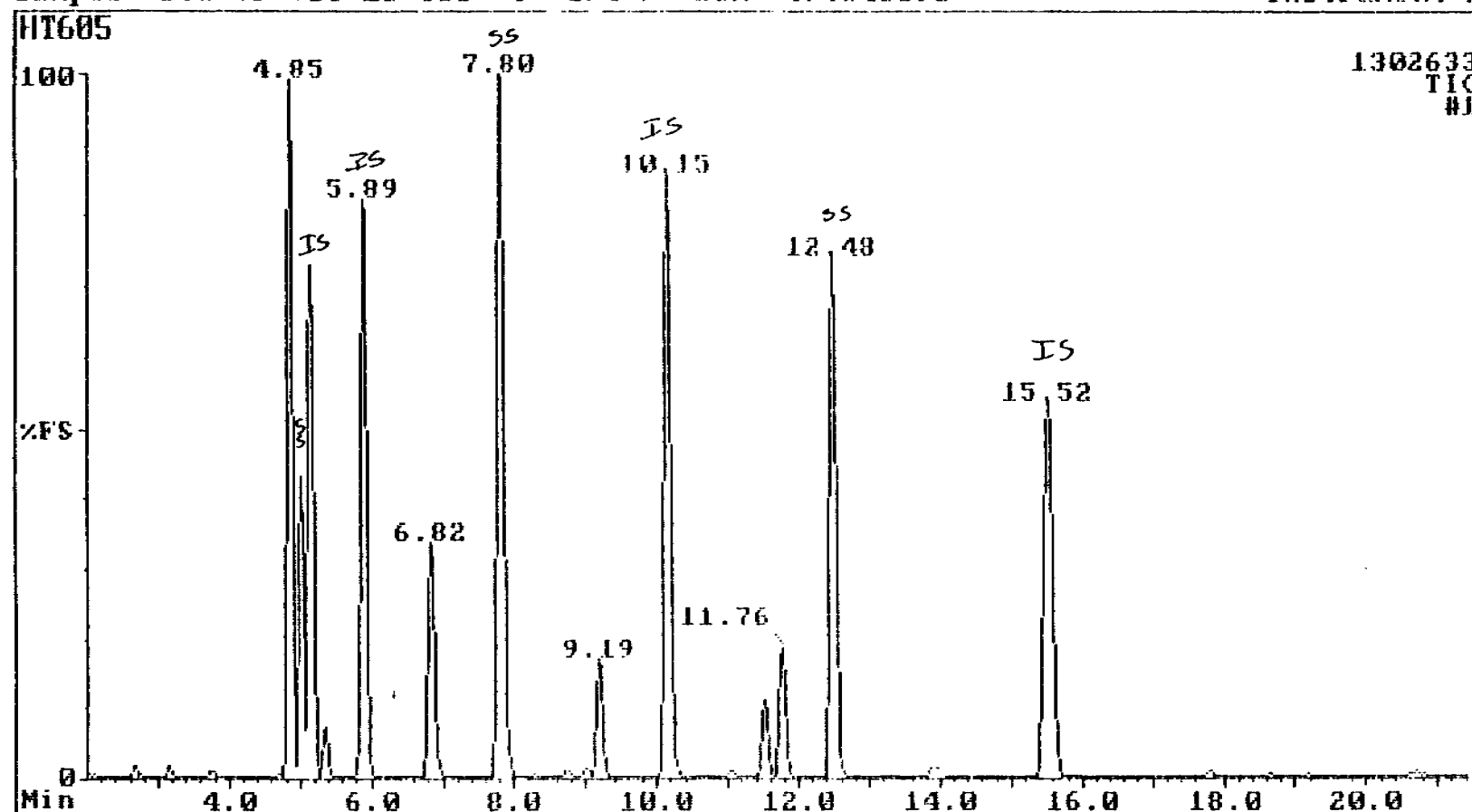
10-01-97 17:47

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-T06 T 104-59-230 TL1043306

Instrument II



Data Review *self*
Date: 10/28/97

101

DO A 048344
CONFIDENTIAL

DB : HT605

LAB-BASE QUAN

10-01-97

18:18

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM Name
1	100	80	99	2	2273620	bb	5.14	168 Pentafluorobenzene
2	100	94	96	0	2726828	bv	5.89	114 1,4-Difluorobenzene
3	100	95	97	1	2469328	bv	10.15	117 Chlorobenzene-d5
4	100	79	99	2	1317492	bb	15.52	152 1,4-Dichlorobenzene-d4
5	100	97	99	0	1129968	bb	3.01	113 Dibromofluoromethane
6	100	93	99	0	3607016	bv	7.80	98 Toluene-d8
7	100	88	93	0	1577256	bv	12.48	95 4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63 1,2-Dichloropropane
9	0	0	0	0	0		0.00	97 1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112 Chlorobenzene

DO A 048345
CONFIDENTIALData Review 544
Date: 10/26/97

102

Radian International

Project Number: 43386
Sample File: HT596

Method 8260 VOST
Sample ID: DOW-VP-VST-23-TC06 T/C

Client Project: Dow Plaquemine	Date Received: 09/25/97	Response File: ICAH921
ILI ID: 184-59-23B	Date Analyzed: 10/01/97	

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.15		
1,4-Difluorobenzene		IS 2	5.90		
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₅		IS 3	10.17		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d ₂		IS 4	15.57		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.268	5.02	1	107
Chlorobenzene-d ₅	0.252	7.82	2	101
Monofluorobenzene	0.295	12.50	2	118

Reviewed by East Date 10/28/97

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories of RTP, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.5
Printed: 17:05 10/28/1997

DO A 048346
CONFIDENTIAL

103

Data Review: *scst*
Date: 10/25/97

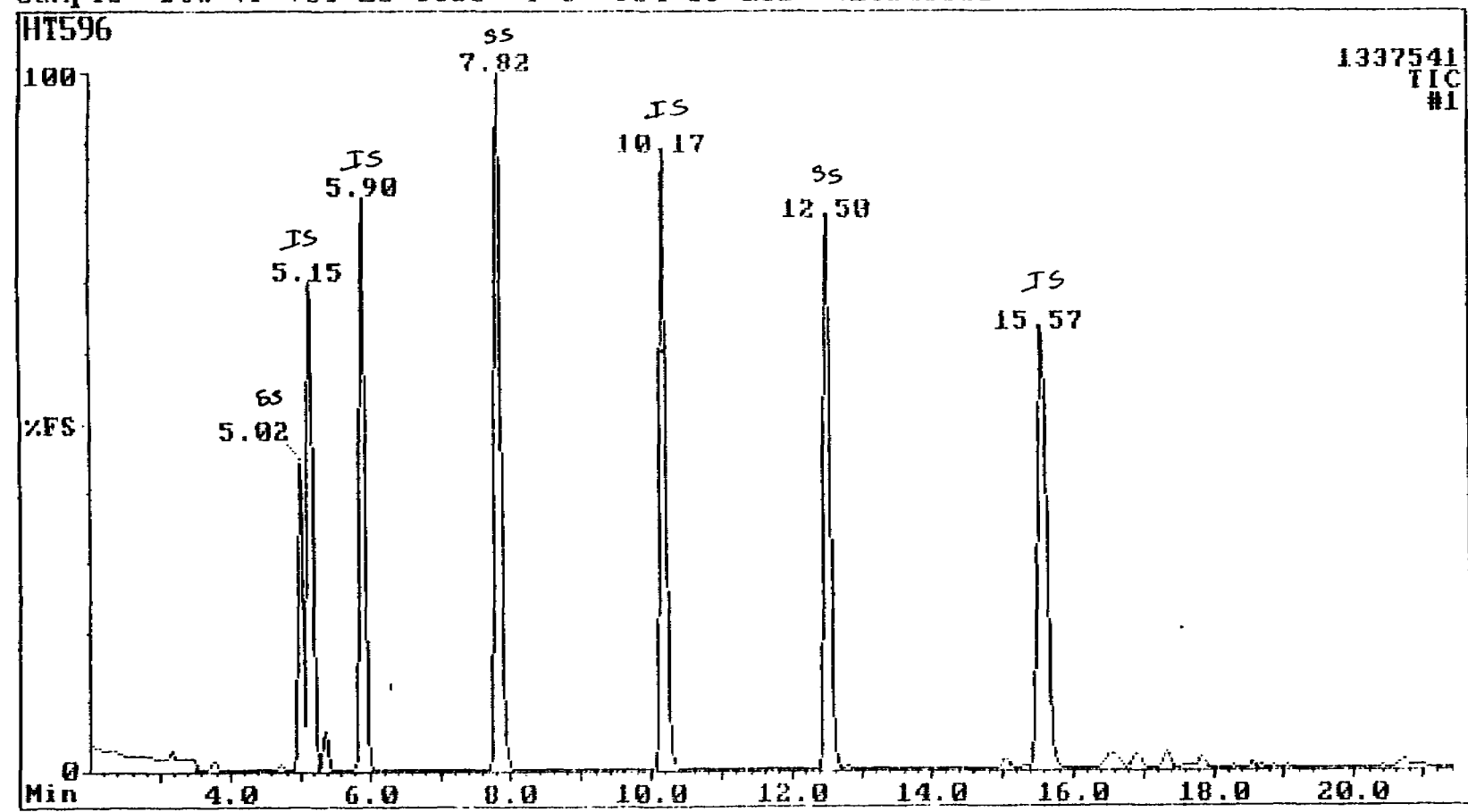
10-01-97 12:25

Triangle Laboratories of RTP, Inc.

(919) 544-5729

Sample: DOW-VP-VST-23-TC06 T/C 184-59-23B TLH43386

Instrument H



DO A 048347
CONFIDENTIAL

JB : HT596

LAB-BASE QUAN

10-01-97

12:59

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	3	2332108	bv	3.15	168	Pentafluorobenzene
	100	94	96	0	2715508	bv	5.90	114	1,4-Difluorobenzene
	100	95	97	1	2479924	bv	10.17	117	Chlorobenzene-d5
4	100	75	99	4	1509960	bv	15.57	152	1,4-Dichlorobenzene-d4
5	100	98	99	0	1195712	bb	5.02	113	Dibromofluoromethane
6	100	93	98	1	3576528	bv	7.82	98	Toluene-d8
7	100	88	93	0	1664732	bb	12.50	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	63	1,2-Dichloropropane
9	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
10	0	0	0	0	0		0.00	112	Chlorobenzene

DO A 048348
CONFIDENTIALData Review: *sat*
Date: 10/28/97 105