TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of

Volatile Analytes by

High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry

METHOD 8260 Rev. 1 (7/92)

Date : September 30, 1997

Client ID : Radian International

TLI Project Number : 43396

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

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

Method:

Four VOST tube pairs were received at Triangle Laboratories, Inc. on September 26, 1997 at 11°C in good condition. The samples were stored in a refrigerator at 4°C prior to analysis. The "FB" sample tubes will be processed and reported under Project 43397. The remaining VOST samples 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 the VOST tubes 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 0.3u 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. 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 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-d_8 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:

The VOST tubes were analyzed separately per client request. All samples were analyzed within the fourteen day sampling to analysis holding time. The analyst noted moisture in the Tenax tubes.

All internal standard areas and surrogate percent recoveries met QC criteria.

Data was included for an LCS/LCS DUP pair. The results were reasonable and consistent with historical data.

There were no target analytes detected in the laboratory blank. The target analytes were manually searched f when not detected in the samples by the instrument.

Sample Calculations:

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

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

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, ext. 269.

For Triangle Laboratories, Inc.,

Report Preparation:

Tracy Wardell

Tracy Wardell
Report Preparation Chemist

Quality Control:

Sarah A Hubbard

Sarah A. Hubbard
Report Preparation Chemist

The total number of pages in this data package is 44.

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

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

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 Dibenzo-p-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

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: 43396

Client Id:	TLI Id:	File Name:
DOW-VP-VST-41-T02 T	184-69-1A	HT537
DOW-VP-VST-41-TC02 TC	184-69-1B	HT534
DOW-VP-VST-41-T04 T	184-69-2A	HT538
DOW-VP-VST-41-TC04 TC	184-69-2B	HT535
DOW-VP-VST-41-T06 T	184-69-3A	HT539
DOW-VP-VST-41-TC06 TC	184-69-3B	HT536
VOSTBLK 092797 T/TC	VOSTBLK 092797	HT532

Triangle Laboratories of RTP

Project Summary for Project 43396

Client ID:	DOW-VP-VST -41-T02 T	DOW-VP-VST -41-TC02 T C	DOW-VP-VST -41-T04 T	DOW-VP-VST -41-TC04 T C	DOW-VP-VST -41-T06 T
Filename :	HT537	HT534	HT538	HT535	HT539
TLI Id :	184-69-1A	184-69-1B	184-69-2A	184-69-2B	184-69-3A
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)

( )-Estimated Detection Limit

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

Client ID:	DOW-VP-VST -41-TC06 T C	VOSTBLK 09 2797 T/TC
Filename :	HT536	HT532
TLI Id :	184-69-3B	VOSTBLK 0927
Matrix :	VOST	VOST
Units :	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)

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

COPY 9/26/97

Chain of Custody Record

Dow, Plaquemine Trial Burn

Condition 4 Run 1, 2, 3

Vinyl II ~~Plant~~ Boiler F410/420

Vinyl II Stack
Stream

Signature

Sample ID	Date	Analyses	Sample ID	Date	Analyses
DOW-VP-VST-41-T02	9/24/97	VOST	DOW-VP-VST-43-T03	9/24/97	VOST
DOW-VP- TC02			TC03		
DOW-VP- T04			T04		
DOW-VP- TC04			TC04		
DOW-VP- T06			T06		
DOW-VP- TC06			TC06		
DOW-VP- TFBI			TFBI		
DOW-VP- TCFBI			TCFBI		
DOW-VP-VST-42-T02					
DOW-VP- TC02					
DOW-VP- T04					
DOW-VP- TC04					
DOW-VP- T06					
DOW-VP- TC06					
DOW-VP- TFBI					

3 day Turnaround

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
	9/26/97 0915		
Temp °C / Condition	Comments:		

Remarks Vinyl II Test Condition 4

3 day Turn-around on "41" samples only

TRIANGLE LABORATORIES, INC. -- LOG 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 43396
Client: RAC01 - Radian International

Book 184

Date Received 09/26/97 By

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Ice Chest ICE/ICE PACKS Temp 11.0 C

Carrier and Number FedEx/1026533310

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
184-69-1A	DOW-VP-VST-41-T02	TENAX									
	DOW-VP-VST-41-T02	R026									
184-69-1B	DOW-VP-VST-41-TC02	TNX/CHAR									
	DOW-VP-VST-41-TC02	R026									
184-69-2A	DOW-VP-VST-41-T04	TENAX									
	DOW-VP-VST-41-T04	R026									
184-69-2B	DOW-VP-VST-41-TC04	TNX/CHAR									
	DOW-VP-VST-41-TC04	R026									
184-69-3A	DOW-VP-VST-41-T06	TENAX									
	DOW-VP-VST-41-T06	R026									
184-69-3B	DOW-VP-VST-41-TC06	TNX/CHAR									
	DOW-VP-VST-41-TC06	R026									
184-69-4A	DOW-VP-VST-41-TFB1	TENAX									
	DOW-VP-VST-41-TFB1	R026									
184-69-4B	DOW-VP-VST-41-TCFB1	TNX/CHAR									
	DOW-VP-VST-41-TCFB1	R026									

Receiving Remarks: FAST TAT VOST; OTHER VOST'S ARE IN PROJ. 43397.

Archive Remarks:

Form Revised 05/27/1997 -- Page 1 OF 1

DO A 048712
CONFIDENTIAL

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8240	VOA	1A 9/24/97 3A 9/24/97 8260	8260	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VS8-145-2 Exp. 9-25-97 a) 25ug/ml		

Extract / Sample volume 5 Circle unit: µL (mL)

Angela S. Brown 9/24/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/24/97	0812		2.0ul VS8-145-2 Exp. 9-25-97	BFB	HT423		ASB 9/24/97	9/24/97	ASB	File glitched last 9/24/97
	08:53		↓	BFB	HT424		ASB 9/24/97		ASB	SCAN #479
	09:11		10.0ul VS8-143-3 Exp. 9-21-97	VOSTD0.25 T/IC	HT425		ASB 9/24/97		ASB	
	09:58		↓	VOSTD0.25 T/IC	HT426		ASB 9/24/97		ASB	ICALPT.
	10:41		10 ul VS8-143-2 Exp. 9-21-97	VOSTD0.10 T/IC	HT427		ASB 9/24/97		ASB	
	11:18		↓	VOSTD0.10 T/IC	HT428		ASB 9/24/97		ASB	ICALPT.
	11:47		10ul VS8-143-4 Exp. 9-21-97	VOSTD0.50 T/IC	HT429		ASB 9/24/97		ASB	ICALPT.
	12:21		10 ul VS8-144-3 Exp. 9-23-97	VOSTD0.75 T/IC	HT430		ASB 9/24/97		ASB	ICALPT.
	12:51		10 ul VS8-144-2 Exp. 9-23-97	VOSTD1.00 T/IC	HT431		ASB 9/24/97		ASB	ICALPT.
↓	13:38		10 ul VS8-147-2 Exp. 10/6/97	VOSTBLK T/IC	HT432		ASB 9/24/97	✓	ASB	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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SRVR1\DOA\FORMS\LRRUNLOG.DOC (1/23/97)

DO A 048713
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Triangle Laboratories, Inc.
Run Log

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

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSS-147-2 exp. 10/14/97 @ 25ug/ml →	VSS-151-4 exp 10/14/97 @ 25 ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/26/97	1658	433216	183-93-18A	DOW-VP-VSF-32-T04 T	HT526		JdL 9/26/97		JdL	
	1757	433216	183-93-28A	DOW-VP-VSF-33-T04 T	HT526		JdL 9/26/97		JdL	
	1821	433216	183-93-30A	DOW-VP-VSF-33-T06 T	HT527		JdL 9/26/97		JdL	
9/27/97	1026		10ul VSS-151-4 exp. 10/14/97	BFB	HT528		JdL 9/27/97		JdL	
	1051		10ul 147-4 VSS-149-2 exp. 10/14/97	VOSTD0.25 TIC	HT529		JdL 9/27/97		JdL	
	1137		10ul VSS-151-3 exp 10/14/97	VOSTD1K TIC	HT530		JdL 9/27/97		JdL	
	1223		↓	↓	HT531		JdL 9/27/97		JdL	
	1259		↓	↓	HT532		JdL 9/27/97		JdL	
	1334	428977D	179-65-5B	DOW-VP-VSF-21-T05 TIC	HT533		JdL 9/27/97		JdL	
	1416	43396	184-69-1B	DOW-VP-VSF-41-T02 TIC	HT534		JdL 9/27/97		JdL	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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S:\VRHOA\FORMS\LRRUNLOG.DOC (1/23/97)

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Triangl Laboratories, Inc.
Run Log

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

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSS-147-2 exp 10/2/97 @ 25 ug/ml	VSS-151-4 exp 10/10/97 @ 25 ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	BackUp*	Proc	Comments***
9/27/97	1447	43396	184-69-3B	DOW-VP-VST-41-TC04 T/C	HT535		JL 9/27/97		JL	
	1521	43396	184-69-3B	DOW-VP-VST-41-TC06 T/C	HT536		JL 9/27/97		JL	
	1556	43396	184-69-1A	DOW-VP-VST-41-TC02 T/C	HT537		JL 9/27/97		JL	moisture from tube JL 9/27/97
	1632	43396	184-69-2A	DOW-VP-VST-41-T04 T	HT538		JL 9/27/97		JL	
	1713	43396	184-69-3A	DOW-VP-VST-41-T06 T	HT539		JL 9/27/97		JL	
	1746	42857D	179-65-5A	DOW-VP-VST-21-T05 T	HT540		JL 9/27/97		JL	
	1818	5.0ml VSS-152.1 exp 10/10/97	10ml VSS-147-2 exp 10/2/97	LCS	HT541		JL 9/27/97		JL	
	1851	5.0ml VSS-152-1 exp 10/10/97	10ml VSS-147-2 exp 10/2/97	LCS DUP	HT542		JL 9/27/97		JL	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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SRVR1\QA\FORMS\LRRUNLOG.DOC (1/23/97)

DO A 048715
CONFIDENTIAL

Triangle Laboratories of RTP

Sample Identification Index for Project: 43397&A

Client Id:	TLI Id:	File Name:
DOW-VP-VST-41-TFB1 T	184-69-4A	HT618
DOW-VP-VST-41-TCFB1 T/C	184-69-4B	HT615
DOW-VP-VST-42-TC02 T/C	184-70-1B	HT620
DOW-VP-VST-42-T03 T	184-70-14A	HT656
DOW-VP-VST-42-TC03 T/C	184-70-14B	HT652
DOW-VP-VST-42-T04 T	184-70-2A	HT627
DOW-VP-VST-42-TC04 T/C	184-70-2B	HT621
DOW-VP-VST-42-T05 T	184-70-15A	HT657
DOW-VP-VST-42-TC05 T/C	184-70-15B	HT653
DOW-VP-VST-42-T06 T	184-70-3A	HT628
DOW-VP-VST-42-TC06 T/C	184-70-3B	HT622
DOW-VP-VST-42-TFB1 T	184-70-4A	HT616
DOW-VP-VST-42-TCFB1 T/C	184-70-4B	HT613
DOW-VP-VST-43-T01 T	184-70-17A	HT658
DOW-VP-VST-43-TC01 T/C	184-70-17B	HT654
DOW-VP-VST-43-T03 T	184-70-5A	HT629
DOW-VP-VST-43-TC03 T/C	184-70-5B	HT623
DOW-VP-VST-43-T04 T	184-70-6A	HT630
DOW-VP-VST-43-TC04 T/C	184-70-6B	HT624
DOW-VP-VST-43-T05 T	184-70-18A	HT659
DOW-VP-VST-43-TC05 T/C	184-70-18B	HT655
DOW-VP-VST-43-T06 T	184-70-7A	HT631
DOW-VP-VST-43-TC06 T/C	184-70-7B	HT625
DOW-VP-VST-43-TFB1 T	184-70-8A	HT617
DOW-VP-VST-43-TCFB1 T/C	184-70-8B	HT614
VOSTBLK100297 T/TC	VOSTBLK100297	HT612
VOSTBLK100497 T/TC	VOSTBLK100497	HT651

see text page 3 for Failure info.

scott 10/31/97

Triangle Laboratories of RTP

Project Summary for Project 43397&A

Client ID:	DOW-VP-VST -41-TFB1 T	DOW-VP-VST -41-TCFB1 T/C	DOW-VP-VST -42-TC02 T /C	DOW-VP-VST -42-T03 T	DOW-VP-VST -42-TC03 T /C
Filename :	HT618	HT615	HT620	HT656	HT652
TLI Id :	184-69-4A	184-69-4B	184-70-1B	184-70-14A	184-70-14B
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)

Front Half of this VP-42-T02 was broken so no data.

( )-Estimated Detection Limit Page 1

Triangle Laboratories of RTP

Project Summary for Project 43397&A

Client ID:	DOW-VP-VST -42-T04 T	DOW-VP-VST -42-TC04 T /C	DOW-VP-VST -42-T05 T	DOW-VP-VST -42-TC05 T /C	DOW-VP-VST -42-T06 T
Filename :	HT627	HT621	HT657	HT653	HT628
TLI Id :	184-70-2A	184-70-2B	184-70-15A	184-70-15B	184-70-3A
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

This sample had IS + SS failures Don't use

( )-Estimated Detection Limit Page 2

Triangle Laboratories of RTP

Project Summary for Project 43397&A

Client ID:	DOW-VP-VST -42-TC06 T /C	DOW-VP-VST -42-TFB1 T	DOW-VP-VST -42-TCFB1 T/C	DOW-VP-VST -43-T01 T	DOW-VP-VST -43-TC01 T /C
Filename :	HT622	HT616	HT613	HT658	HT654
TLI Id :	184-70-3B	184-70-4A	184-70-4B	184-70-17A	184-70-17B
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)

(0.001) IG and 10/31/97

( )-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

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Printed: 11:08:49 10/31/97

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Triangle Laboratories of RTP

Project Summary for Project 43397&A

Client ID:	DOW-VP-VST -43-T03 T	DOW-VP-VST -43-TC03 T /C	DOW-VP-VST -43-T04 T	DOW-VP-VST -43-TC04 T /C	DOW-VP-VST -43-T05 T
Filename :	HT629	HT623	HT630	HT624	HT659
TLI Id :	184-70-5A	184-70-5B	184-70-6A	184-70-6B	184-70-18A
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	(0.015)	(0.001)	(0.010)	(0.001)	(0.001)
Chlorobenzene	(0.002)	(0.001)	(0.005)	(0.001)	(0.001)

Had IS+SS failures Don't use

Zero

For VP-43- There was no T02/TC02 collected. Per Jim McGee.

( )-Estimated Detection Limit Page 4

Triangle Laboratories of RTP

Project Summary for Project 43397&A

Client ID:	DOW-VP-VST -43-TC05 T /C	DOW-VP-VST -43-T06 T	DOW-VP-VST -43-TC06 T /C	DOW-VP-VST -43-TFB1 T	DOW-VP-VST -43-TCFB1 T/C
Filename :	HT655	HT631	HT625	HT617	HT614
TLI Id :	184-70-18B	184-70-7A	184-70-7B	184-70-8A	184-70-8B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

IS+SS failures Don't use

( )-Estimated Detection Limit Page 5

Client ID:	VOSTBLK100 297 T/TC	VOSTBLK100 497 T/TC
Filename :	HT612	HT651
TLI Id :	VOSTBLK100297	VOSTBLK100497
Matrix :	VOST	VOST
Units :	ug	ug
1,1,2-Trichloroethane	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)

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

Triangle Laboratories f RTP
LCS Summary of Results

LCS File : HT606	LCS DUP File: HT607
Date : 10/28/97	

Compound	LCS %REC	DUP %REC	RPD
1,1,2-Trichloroethane	89	84	6
Chlorobenzene	101	102	1

Chain of Custody Record

Dow, Plaquemine Trial Burn

Condition 4 Run 1, 2, 3

Vinyl II Plant— Boiler F410/420

Vinyl II Stack
Stream

Signature

Sample ID	Date	Analyses	Sample ID	Date	Analyses
DOW-VP- VST-41-TO2	9/24/97	VOST	Dow-VP-VST-43-TO2	9/24/97	VOST
DOW-VP- TCO2			TCO2		
DOW-VP- TO4			TO4		
DOW-VP- TCO4			TCO4		
DOW-VP- TO6			TO6		
DOW-VP- TCO6			TCO6		
DOW-VP- TF81			TF81		
DOW-VP- TCF81			TCF81		
DOW-VP- VST-42-TO2					
DOW-VP- TCO2					
DOW-VP- TO4					
DOW-VP- TCO4					
DOW-VP- TO6					
DOW-VP- TCO6					
DOW-VP- TF81					

Duplicate Triplicate

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
	9/26/97 0915		

Temp °C	Condition	Comments:

Remarks: Vinyl II Test Condition 4

3 day turn-around on '41' samples only

Chain of Custody Record

Dow, Plaquemine Trial Burn

Condition 4 Run 1, 2, 3 Held

Vinyl II Plant— Boiler F410/420

Vinyl II Stack
Stream

Signature

Sample ID	Date	Analyses	Sample ID	Date	Analyses
DOW-VP-VST-41-TO1	9/24/97	VOST	Dow-VP-VST-42-TCFBZ	9/24/97	VOST
DOW-VP- TCO1	↓	HOLD	Dow-VP-VST-43-TO1	↓	HOLD
DOW-VP- TO3	↓	↓	TCO1	↓	↓
DOW-VP- TCO3	↓	↓	TO5	↓	↓
DOW-VP- TO5	↓	↓	TCO5	↓	↓
DOW-VP- TCO5	↓	↓	TFBZ	↓	↓
DOW-VP- TFBZ	↓	↓	TCFBZ	↓	↓
DOW-VP- TCFBZ	↓	↓			
DOW-VP-VST-42-TO1	↓	↓			
DOW-VP- TCO1	↓	↓			
DOW-VP- TO3	↓	↓			
DOW-VP- TCO3	↓	↓			
DOW-VP- TO5	↓	↓			
DOW-VP- TCO5	↓	↓			
DOW-VP- TFBZ	↓	↓			

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 9/26/97 0915	Opened by:	Date/Time
Temp °C ✓ Condition	Comments:		

Remarks Hold these samples pending review of initial results

COPY 11/24/97

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

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

TLI Project Number 43397
Client: RAC01 - Radian International

Book 184

Date Received 09/26/97 By

Page 70

Ice Chest ICE/ICE PACKS Temp 11.0 C

Carrier and Number FedEx/1826533310

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
184-70-1A	DOW-VP-VST-42-T02 DOW-VP-VST-42-T02	TENAX R026									
184-70-1B	DOW-VP-VST-42-TC02 DOW-VP-VST-42-TC02	TNX/CHAR R026									
184-70-2A	DOW-VP-VST-42-T04 DOW-VP-VST-42-T04	TENAX R026									
184-70-2B	DOW-VP-VST-42-TC04 DOW-VP-VST-42-TC04	TNX/CHAR R026									
184-70-3A	DOW-VP-VST-42-T06 DOW-VP-VST-42-T06	TENAX R026									
184-70-3B	DOW-VP-VST-42-TC06 DOW-VP-VST-42-TC06	TNX/CHAR R026									
184-70-4A	DOW-VP-VST-42-TFB1 DOW-VP-VST-42-TFB1	TENAX R026									
184-70-4B	DOW-VP-VST-42-TCFB1 DOW-VP-VST-42-TCFB1	TNX/CHAR R026									
184-70-5A	DOW-VP-VST-43-T03 DOW-VP-VST-43-T03	TENAX R026									
184-70-5B	DOW-VP-VST-43-TC03 DOW-VP-VST-43-TC03	TNX/CHAR R026									
184-70-6A	DOW-VP-VST-43-T04 DOW-VP-VST-43-T04	TENAX R026									
184-70-6B	DOW-VP-VST-43-TC04 DOW-VP-VST-43-TC04	TNX/CHAR R026									
184-70-7A	DOW-VP-VST-43-T06 DOW-VP-VST-43-T06	TENAX R026									
184-70-7B	DOW-VP-VST-43-TC06 DOW-VP-VST-43-TC06	TNX/CHAR R026									

Receiving Remarks:

Archive Remarks:

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DO A 048726
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TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

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

TLI Project Number 43397
Client: RAC01 - Radian International

Book 184

Date Received 09/26/97 By

Page 70

Ice Chest ICE/ICE PACKS Temp 11.0 C

Carrier and Number FedEx/1826533310

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
184-70-8A	DOW-VP-VST-43-TFB1 DOW-VP-VST-43-TFB1	TENAX R026									
184-70-8B	DOW-VP-VST-43-TCFB1 DOW-VP-VST-43-TCFB1	TNX/CHAR R026									
184-70-9A	DOW-VP-VST-41-T01 DOW-VP-VST-41-T01	TENAX R026									
184-70-9B	DOW-VP-VST-41-TC01 DOW-VP-VST-41-TC01	TNX/CHAR R026									
184-70-10A	DOW-VP-VST-41-T03 DOW-VP-VST-41-T03	TENAX R026									
184-70-10B	DOW-VP-VST-41-TC03 DOW-VP-VST-41-TC03	TNX/CHAR R026									
184-70-11A	DOW-VP-VST-41-T05 DOW-VP-VST-41-T05	TENAX R026									
184-70-11B	DOW-VP-VST-41-TC05 DOW-VP-VST-41-TC05	TNX/CHAR R026									
184-70-12A	DOW-VP-VST-41-TFB2 DOW-VP-VST-41-TFB2	TENAX R026									
184-70-12B	DOW-VP-VST-41-TCFB2 DOW-VP-VST-41-TCFB2	TNX/CHAR R026									
184-70-13A	DOW-VP-VST-42-T01 DOW-VP-VST-42-T01	TENAX R026									
184-70-13B	DOW-VP-VST-42-TC01 DOW-VP-VST-42-TC01	TNX/CHAR R026									
184-70-14A	DOW-VP-VST-42-T03 DOW-VP-VST-42-T03	TENAX R026									
184-70-14B	DOW-VP-VST-42-TC03 DOW-VP-VST-42-TC03	TNX/CHAR R026									

Receiving Remarks:

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- LOG 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 43397
Client: RAC01 - Radian International

Book 184

Date Received 09/26/97 By

Page 70

Ice Chest ICE/ICE PACKS Temp 11.0 C

Carrier and Number FedEx/1826533310

TLI Number.. ....Client Sample ID..... .....Matrix mM/H:CHM. .....Client COC ID.....* 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
184-70-15A DOW-VP-VST-42-T05 TENAX DOW-VP-VST-42-T05 R026									
184-70-15B DOW-VP-VST-42-TC05 TNX/CHAR DOW-VP-VST-42-TC05 R026									
184-70-16A DOW-VP-VST-42-TFB2 TENAX DOW-VP-VST-42-TFB2 R026									
184-70-16B DOW-VP-VST-42-TCFB2 TNX/CHAR DOW-VP-VST-42-TCFB2 R026									
184-70-17A DOW-VP-VST-43-T01 TENAX DOW-VP-VST-43-T01 R026									
184-70-17B DOW-VP-VST-43-TC01 TNX/CHAR DOW-VP-VST-43-TC01 R026									
184-70-18A DOW-VP-VST-43-T05 TENAX DOW-VP-VST-43-T05 R026									
184-70-18B DOW-VP-VST-43-TC05 TNX/CHAR DOW-VP-VST-43-TC05 R026									
184-70-19A DOW-VP-VST-43-TFB1 TENAX DOW-VP-VST-43-TFB1 R026									
184-70-19B DOW-VP-VST-43-TCFB1 TNX/CHAR DOW-VP-VST-43-TCFB1 R026									

Receiving Remarks:

Archive Remarks:

21.

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

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

TLI Project Number 43396
Client: RAC01 - Radian International

Book 184

Date Received 09/26/97 By

Page 69

Ice Chest ICE/ICE PACKS Temp 11.0 C

Carrier and Number FedEx/1826533310

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location	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
184-69-1A	DOW-VP-VST-41-T02		TENAX	CA 9/26/97	9/29/97	9/27/97						
	DOW-VP-VST-41-T02	R026										
184-69-1B	DOW-VP-VST-41-TC02		TNX/CHAR									
	DOW-VP-VST-41-TC02	R026										
184-69-2A	DOW-VP-VST-41-T04		TENAX									
	DOW-VP-VST-41-T04	R026										
184-69-2B	DOW-VP-VST-41-TC04		TNX/CHAR									
	DOW-VP-VST-41-TC04	R026										
184-69-3A	DOW-VP-VST-41-T06		TENAX									
	DOW-VP-VST-41-T06	R026										
184-69-3B	DOW-VP-VST-41-TC06		TNX/CHAR									
	DOW-VP-VST-41-TC06	R026										
184-69-4A	DOW-VP-VST-41-TFB1		TENAX					CA 10/2/97				
	DOW-VP-VST-41-TFB1	R026										
184-69-4B	DOW-VP-VST-41-TCFB1		TNX/CHAR									
	DOW-VP-VST-41-TCFB1	R026										

Receiving Remarks: FAST TAT VOST. OTHER VOST'S ARE IN PROJ. 43397.

Archive Remarks:

Form Revised 05/27/1997 -- Page 1 OF 1

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DO A 048729
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Triangle Laboratories, Inc.
Run Log

23

DO A 048730
CONFIDENTIAL

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8240	VOA	~~3A3324~~ 8260 (ASB 9/21/97)	8260	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VS8-145-2 Exp. 9-25-97 w/o Bughul		

Extract / Sample volume 5 µL (mL) (Circle unit)

Angela S. Brown 9/21/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/21/97	08:12		2.0 ul VS8-145-2 Exp. 9-25-97	BFB	HT423		ASB 9/21/97	ASB 9/21/97	ASB	File glitched lost ASB 9/21/97
↓	08:53		↓	BFB	HT424		ASB 9/21/97	↓	ASB	SCAN #479
	09:14		10.0 ul VS8-143-3 Exp. 9-23-97	VOSTD0.25 T/TC	HT425		ASB 9/21/97		ASB	
	09:58		↓	VOSTD0.25 T/TC	HT426		ASB 9/21/97		ASB	ICAL Pt.
	10:41		10 ul VS8-143-2 Exp. 9-23-97	VOSTD0.10 T/TC	HT427		ASB 9/21/97		ASB	
	11:18		↓	VOSTD0.10 T/TC	HT428		ASB 9/21/97		ASB	ICAL Pt.
	11:47		10 ul VS8-143-4 Exp. 9-23-97	VOSTD0.50 T/TC	HT429		ASB 9/21/97		ASB	ICAL Pt.
	12:21		10 ul VS8-144-3 Exp. 9-23-97	VOSTD0.75 T/TC	HT430		ASB 9/21/97		ASB	ICAL Pt.
	12:51		10 ul VS8-144-2 Exp. 9-23-97	VOSTD1.00 T/TC	HT431		ASB 9/21/97		ASB	ICAL Pt.
↓	13:38		10 ul VS8-147-2 Exp. 10/1/97	VOSTBLK T/TC	HT432		ASB 9/21/97	↓	ASB	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

SRVR1\QA\FORMS\LRRUNLOG.DOC (1/23/97)

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274036	8260	VOA	VOA3	3D'TC	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSB-152-2 exp. 10/7/97 @ 25 ug/kg		

Extract / Sample volume _____ Circle unit µL mL

Tracy C. Hartwell 10/1/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/1/97	1639	43386	184-59-18A	DOW-VP-VST-23-T02	HT603		TH 10/1/97		TH	moisture in tube TH 10/1/97
	1711	43386	184-59-21A	DOW-VP-VST-23-TOV	HT604		TH 10/1/97		TH	
	1747	43386	184-59-23A	DOW-VP-VST-23-T06	HT605		TH 10/1/97		TH	
	1816	5.0 µ VSB-152-1 exp. 10/1/97	10.0 µ VSB-152-2 exp. 10/3/97	LCS TITC	HT606		TH 10/1/97		TH	
	18:50	↓	↓	LCS DUP TITC	HT607		TH 10/1/97		TH	
10/2/97	07:49		2.5 µ VSB-151-4 exp 10/10/97	BFB	HT608		CA 10/2/97		CA	
	01:59		10 µ VSB-149-4 exp 10/9/97	VOA DO25 TITC	HT609		CA 10/2/97		CA	
	08:39		10 µ VSB 152-2 exp 10/3/97	VOA BLK 1 TITC	HT610		CA 10/2/97		CA	
	08:57			VOA BLK TITC	HT611		CA 10/2/97		CA	
	10:10			↓	HT612		CA 10/2/97		CA	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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S:\VR1\QA\FORMS\LRRUNLOG.DOC (1/23/97)

DO A 048731
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Triangle Laboratories, Inc.
Run Log

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DO A 048732
CONFIDENTIAL

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VCD	VODS	3DTC	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
V38-167-3 8260 Exp 10/13/97 (25 gm)	→	

Extract / Sample volume ______ µL mL (Circle unit)

Carl S. Anderson 10/2/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/2/97	10:43	43397	184-70-4B	TIC Dow-VP-VSI-42-TCFB1	HT613		CA 10/2/97		CA	
↓	11:12	43397	184-70-8B	TIC Dow-VP-VSI-43-TCFB1	HT614		CA 10/2/97		CA	
	11:43	43397	184-69-4B	TIC Dow-VP-VSI-41-TCFB1	HT615		CA 10/2/97		CA	43396 was the original number. Type was cracked. Reprocessed &RW
	12:13	43397	184-70-4A	T Dow-VP-VSI-42-TFB1	HT616		CA 10/2/97		CA	
	12:44	43397	184-70-8A	T Dow-VP-VSI-43-TFB1	HT617		CA 10/2/97		CA	
	13:14	43397	184-69-4A	T Dow-VP-VSI-41-TFB1	HT618		CA 10/2/97		CA	
	13:44	43334C	184-7-22D	TIC Dow-VP-VSI-12-TC03	HT619		CA 10/2/97		CA	
	14:13	43397	184-70-1B	TIC Dow-VP-VSI-42-TC02	HT620		CA 10/2/97		CA	
	14:47	43397	184-70-2B (DB crossed out; CA 10/2/97)	TIC Dow-VP-VSI-42-TC04	HT621		CA 10/2/97		CA	
↓	15:13	43397	184-70-3B	TIC Dow-VP-VSI-42-TC06	HT622		CA 10/2/97		CA	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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SRVR1\QA\FORMS\LRRUNLOG.DOC (1/23/97)

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Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	V6D3	3DJC	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
U78-152-3 8260 @25μg/ml 07p 10/2/97		

Extract / Sample volume ________ μL mL (Circle unit)

Carl S. Goodwin 10/2/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/2/97	15:38	43397	184-70-5B	DOW-VP-VST-43-TC03 (TIC)	HT623		CA 10/2/97		CA	
↓	16:04	43397	184-70-6B	DOW-VP-VST-43-TC04 (TIC)	HT624		CA 10/2/97		Jcl	
	16:30	43397	184-70-7B	DOW-VP-VST-43-TC06 (T/C)	HT625		Jcl 10/2/97		Jcl	
	1657	43334	184-7-22A	DOW-VP-VST-12-T03 (T)	HT626		Jcl 10/2/97		Jcl	
	1725	43397	184-70-2A	DOW-VP-VST-42-T04 (T)	HT627		Jcl 10/2/97		Jcl	
	1808	43397	184-70-3A	DOW-VP-VST-42-T06 (T)	HT628		Jcl 10/2/97		Jcl	Moisture purge flow reduced stop/start Jcl 10/2/97 IS/SS
	1841	43397	184-70-5A	DOW-VP-VST-43-T03 (T)	HT629		Jcl 10/2/97		Jcl	Purge flow stopped moisture in trap Jcl 10/2/97 IS/SS failure
	1913	43397	184-70-6A	DOW-VP-VST-43-T04 (T)	HT630		Jcl 10/2/97		Jcl	low purge flow started OK IS/SS LOW
↓	1940	43397	184-70-7A	DOW-VP-VST-43-T06 (T)	HT631		Jcl 10/2/97		Jcl	flow okay but was reduced half way thru purge Jcl 10/2/97
					08CA	10/3	97			

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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DO A 048733
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Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	V60A	V003	3570	8260A

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSB-151-4 exp 10/10/97 @ 25ug/mL	8260 VSB-152-2 exp 10/13/97 @25ug/mL	

Extract / Sample volume _____ Circle unit µL mL

Carl S. Cardenas 10/3/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/3/97	0522		2.0ml VSB-151-4 exp 10/10/97	DFB	HT632		CA 10/3/97		CA	
	0955		10 VSB 149-4 exp 10/1/97	V05DD0.25 TIC	HT633		CA 10/3/97		CA	Bit conditioning burned out
	1247		↓	↓	HT634		CA 10/3/97		CA	
	1322		100 VSB-152-2 exp 10/13/97	V05BLK TIC	HT635		CA 10/3/97		CA	
	1710		↓	V05TBLK TIC	HT636		Jcl 10/3/97		Jcl	
	1758		↓	↓	HT637		Jcl 10/4/97		Jcl	
	1833		↓	↓	HT638		Jcl 10/3/97		Jcl	
	1932	1.0ml VSB-154-1 exp 10/12/97	10ml VSB-152-3 exp 10/13/97	V05TDD.10 TIC	HT639		Jcl 10/3/97		Jcl	
	2002	↓	↓	↓	HT640		Jcl 10/3/97		Jcl	Ical pt 10/4/97
	2030	5.0ml VSB-154-1 exp 10/12/97	10ml VSB-152-4 exp 10/13/97	V05TDD.50 TIC	HT641		Jcl 10/3/97		Jcl	Ical pt Jcl 10/4/97

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DO A 048734
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Triangle Laboratories, Inc.
Run Log

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

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSB-151-4 exp. 10/10/97 @ 25ug/ml → 8260	VSB-152-2 exp. 10/13/97 @ 25ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Tracy C. Stowell 10/3/97
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/3/97	21:00	1.5ml VSB-154-1 exp. 10/17/97	10ml VSB-153-1 exp. 10/9/97	VOSTD0.75 TIC	HT642		TCL 10/3/97		TCL	FCal Pt TCL 10/4/97
10/4/97	07:07		10ml VSB-157-4 exp. 10/10/97	BFB	HT643		TCL 10/4/97		TCL	
	07:33	2.5ml VSB-154-1 exp. 10/17/97	10ml VSB-152-4 exp. 10/17/97	VOSTD0.25 TIC	HT644		TCL 10/4/97		TCL	FCal Pt TCL 10/4/97
	08:21	↓	↓	↓	HT645		TCL 10/4/97		TCL	
	08:58	10ml VSB-154-1 exp. 10/17/97	10ml VSB-153-3 exp. 10/13/97	VOSTD10.0 TIC	HT646		TCL 10/4/97		TCL	FCal Pt TCL 10/4/97
	09:36		10ml VSB-152-2 exp. 10/17/97	VOSTBLK TIC	HT647		TCL 10/4/97		TCL	
	10:15		↓	↓	HT648		TCL 10/4/97		TCL	Added 1ml H2O to Tune TCL 10/4/97
	10:53		↓	↓	HT649		TCL 10/4/97		TCL	
	11:23		↓	↓	HT650		TCL 10/4/97		TCL	Rnd Tube TCL 10/4/97
↓	11:54		↓	↓	HT651		TCL 10/4/97			

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA5	8260A	

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DO A 048736
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Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSS-TST-7 gfp 10/10/97 @ 25µg/mL → 8260	VSS-1322 gfp. 10/13/97 @ 25µg/mL	

Extract / Sample volume _____ Circle unit µL mL

Signature: Tony C. Appell Date: 10/14/97

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
10/4/97	12:26	43397A	184-70-14A	DOW-VP-VST-42-TCO.3 TIC	HT652		JcL 10/4/97		JcL	Some moisture from tube JcL 10/4/97
	12:58	43397A	184-70-15B	DOW-VP-VST-42-TC05 TIC	HT653		JcL 10/4/97		JcL	
	13:24	43397A	184-70-17B	DOW-VP-VST-43-TC01 T/C	HT654		JcL 10/4/97		JcL	
	14:10	43397A	184-70-18B	DOW-VP-VST-43-TC05 T/C	HT655		DBS 10/4/97		DBS	
	14:39	43397A	184-70-14A	DOW-VP-VST-42-T03 T	HT656		DBS 10/4/97		DBS	IS failed
	15:09	43397A	184-70-15A	DOW-VP-VST-42-T05 T	HT657		DBS 10/4/97		DBS	
	15:39	43397A	184-70-17A	DOW-VP-VST-43-T01 T	HT658		DBS 10/4/97		DBS	
	16:10	43397A	184-70-18A	DOW-VP-VST-43-T05 T	HT659		DBS 10/4/97		DBS	
										DBS 10/5/97

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Radian International

Project Number: 43396 | **Method 8260 VOST**

Sample File: HT537 | **Sample ID: DOW-VP-VST-41-T02**

Client Project: Dow Plaquemine | **Date Received: 09/26/97** | **Response File: ICALH921**

TLI ID: 184-69-1A | **Date Analyzed : 09/27/97**

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 (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.258	5.01	1	103
Toluene-d_8	0.254	7.80	2	102

Reviewed by TW Date 9/30/97

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

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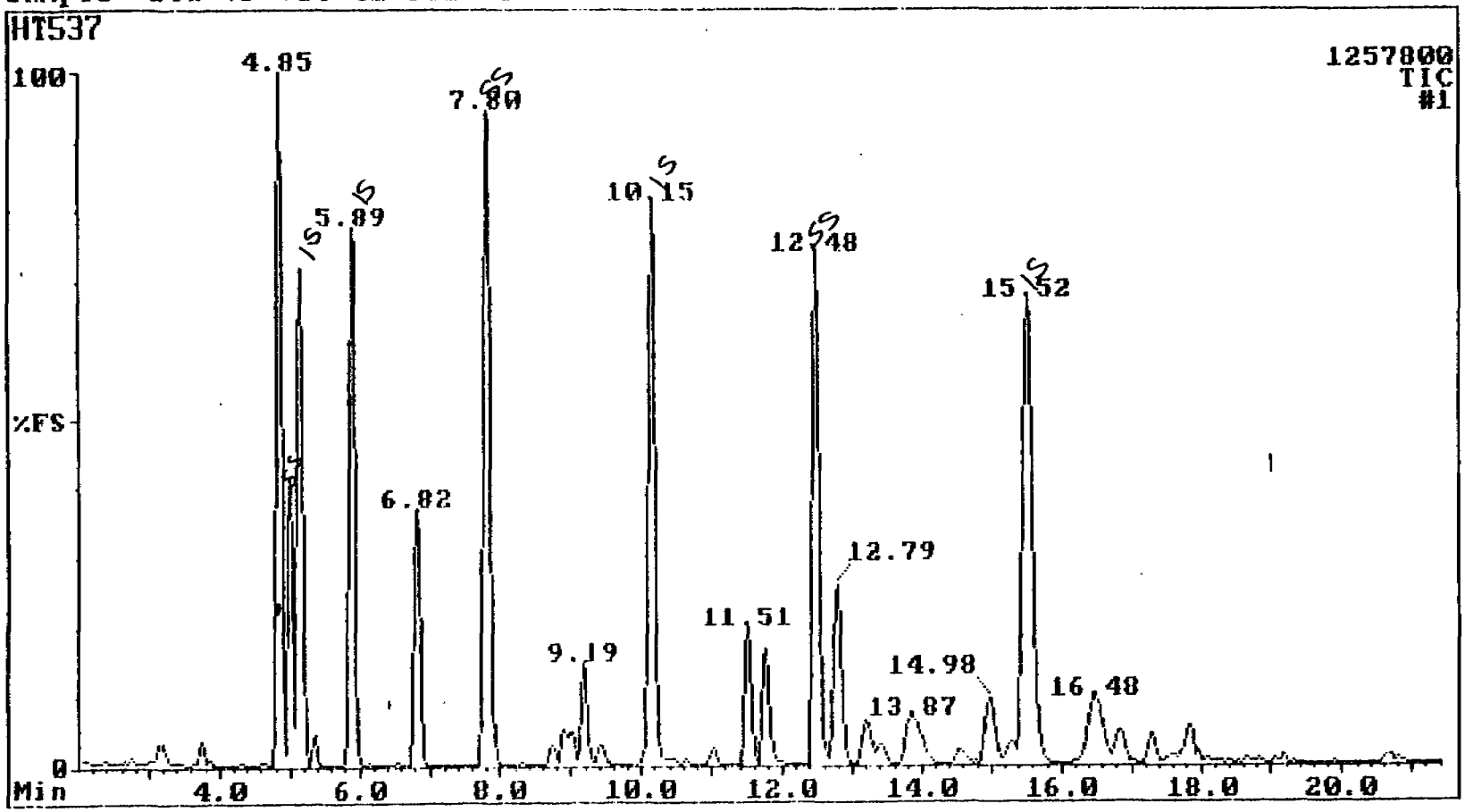
Printed: 11:52 09/30/1997

2-1

09-27-97 15:56 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sample: DOW-VP-VST-41-T02 T 184-69-10 TLI#43396 Instrument H



Data Review: TLD
Date: 9-30-97

QUAN DB : HT537 LAB-BASE QUAN 09-27-97 16:34

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	81	99	2	2060408	bb	5.14	168	Pentafluorobenzene
2	100	94	96	0	2399700	bv	5.89	114	1,4-Difluorobenzene
3	100	95	97	1	2186564	bv	10.15	117	Chlorobenzene-d5
4	100	62	99	2	1227060	bv	15.52	152	1,4-Dichlorobenzene-d4
5	100	96	99	0	1018100	bb	5.01	113	Dibromofluoromethane
6	100	93	99	0	3192408	bv	7.80	98	Toluene-d8
7	100	89	93	0	1463696	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

Data Review: TW
Date: 9-30-97

Radian International

Project Number: 43396
Sample File: HT534

Method 8260 VOST
Sample ID: DOW-VP-VST-41-TC02 TC

Client Project: Dow Plaquemine **Date Received: 09/26/97** **Response File: ICALH921**
TLI ID: 184-69-1B **Date Analyzed: 09/27/97**

Analyte	Amount ng	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	10.14		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.49		

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.266	5.01	1	106
Toluene-d_8	0.255	7.79	2	102

Reviewed by TW Date 9/30/97

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

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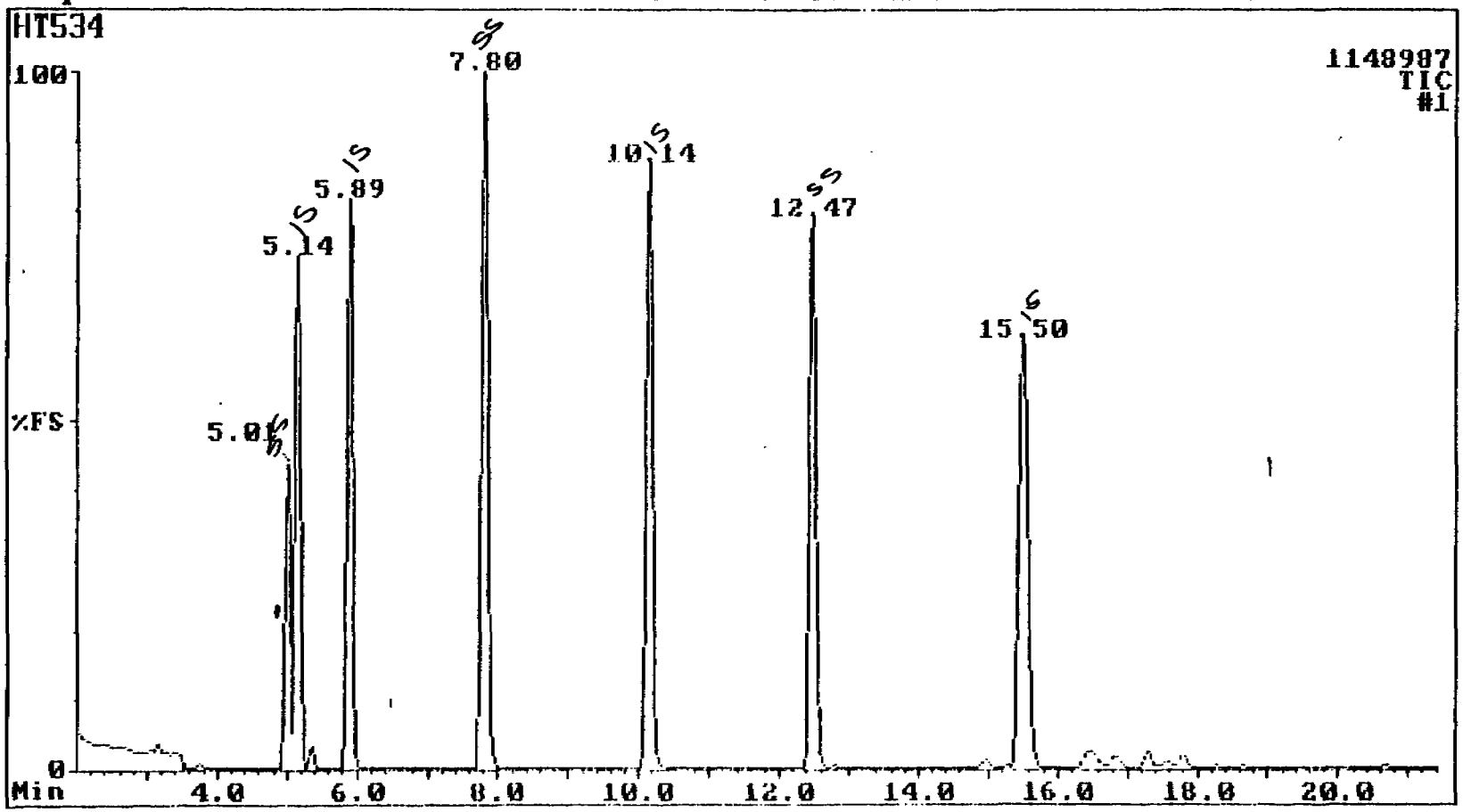
Printed: 11:52 09/30/1997

09-27-97 14:16 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sample: DOW-VP-VST-41-TC02 T/C 184-69-1B TLI#43396 Instrument H



Data Review: TJD
Date: 9-30-97

QUAN DB : HT534 LAB-BASE QUAN 09-27-97 14:5

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	2	1955744	bb	5.14	168	Pentafluorobenzene
2	100	94	96	0	2303812	bb	5.89	114	1,4-Difluorobenzene
3	100	95	97	0	2106340	bv	10.14	117	Chlorobenzene-d5
4	100	74	99	0	1225264	bv	15.49	152	1,4-Dichlorobenzene-d4
5	100	97	99	0	993228	bv	5.01	113	Dibromofluoromethane
6	100	93	99	-1	3075132	bv	7.79	98	Toluene-d8
7	100	88	93	-1	1404064	bv	12.47	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: TW
Date: 9-30-97

Radian International

Project Number: 43396
Sample File: HT538

Method 8260 VOST
Sample ID: DOW-VP-VST-41-T04 T

Client Project: Dow Plaquemine
TLI ID: 184-69-2A

Date Received: 09/26/97
Date Analyzed: 09/27/97

Response File: ICALH921

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ng
Pentafluorobenzene		IS 1	5.13		
1,4-Difluorobenzene		IS 2	5.88		
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	15.53		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.245	5.00	1	98
Toluene-d_8	0.253	7.80	2	101

Reviewed by TW Date 9/30/97

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

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Printed: 11:52 09/30/1997

29A TMN 9-30-97

DO A 048743
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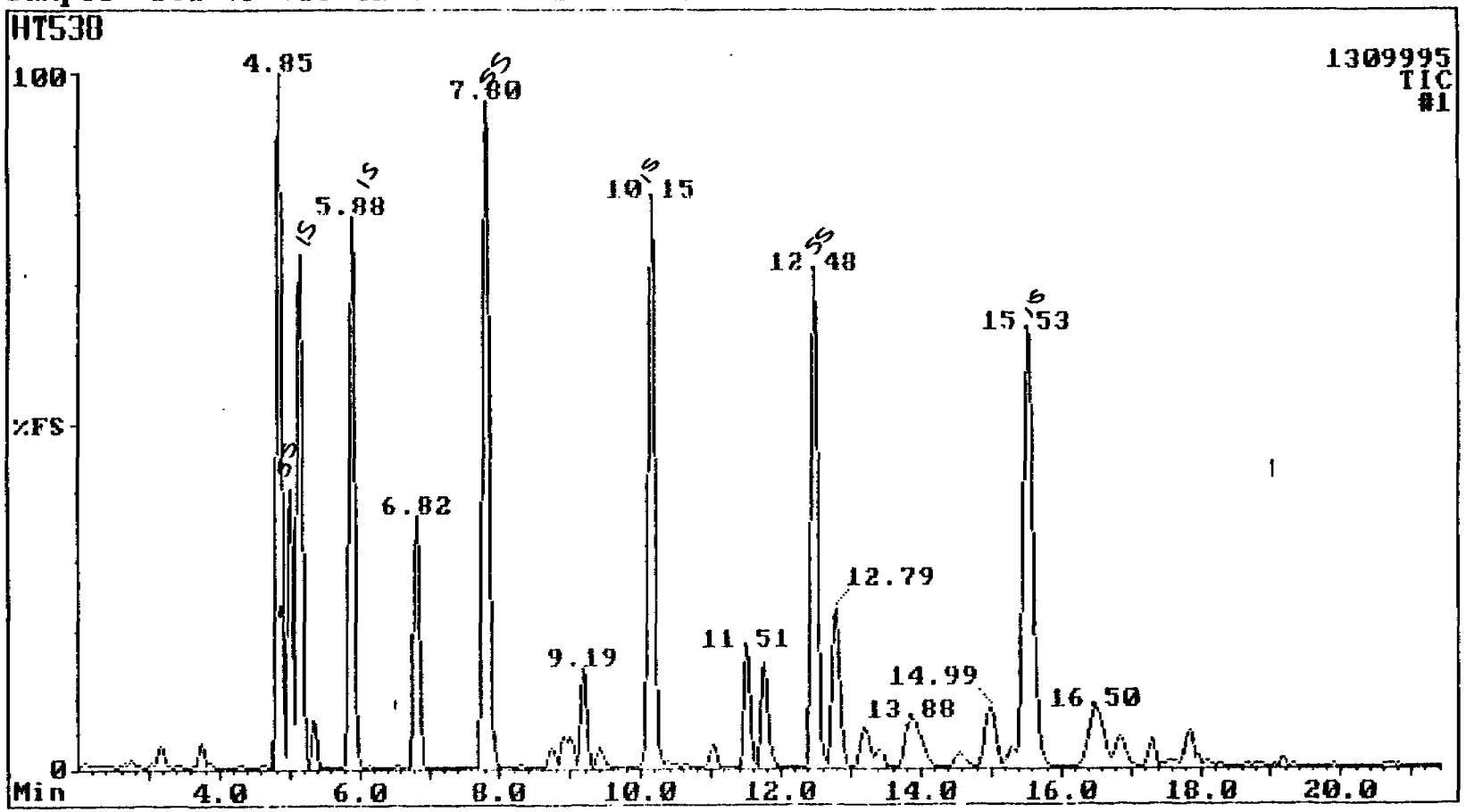
09-27-97 16:32 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sample: DOW-VP-VST-41-T04 T 184-69-2A TLI#43396 Instrument H



DO A 048744
CONFIDENTIAL

Data Review: TLW
Date: 9-30-97

QUAN DB : HT538 LAB-BASE QUAN 09-27-97 17:16

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	80	99	1	2259648	bb	5.13	168	Pentafluorobenzene
2	100	94	96	0	2591768	bv	5.88	114	1,4-Difluorobenzene
3	100	95	97	2	2309392	bv	10.15	117	Chlorobenzene-d5
4	98	61	97	3	1226488	bv	15.53	152	1,4-Dichlorobenzene-d4
5	100	98	99	0	1058428	bb	5.00	113	Dibromofluoromethane
6	100	93	99	2	3424612	bv	7.80	98	Toluene-d8
7	100	89	93	2	1513548	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

Data Review: TW
Date: 9-30-97

Radian International

Project Number: 43396 | **Method 8260 VOST**

Sample File: HT535 | **Sample ID: DOW-VP-VST-41-TC04 TC**

Client Project: Dow Plaquemine | **Date Received: 09/26/97** | **Response File: ICALH921**

TLI ID: 184-69-2B | **Date Analyzed : 09/27/97**

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_5		IS 3	10.14		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.49		

Surrogate Summary	Amount (ug)	RT	IS Ref.	%REC
Dibromofluoromethane	0.257	5.01	1	103
Toluene-d_8	0.255	7.79	2	102

Reviewed by NJ Date 9/30/97

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

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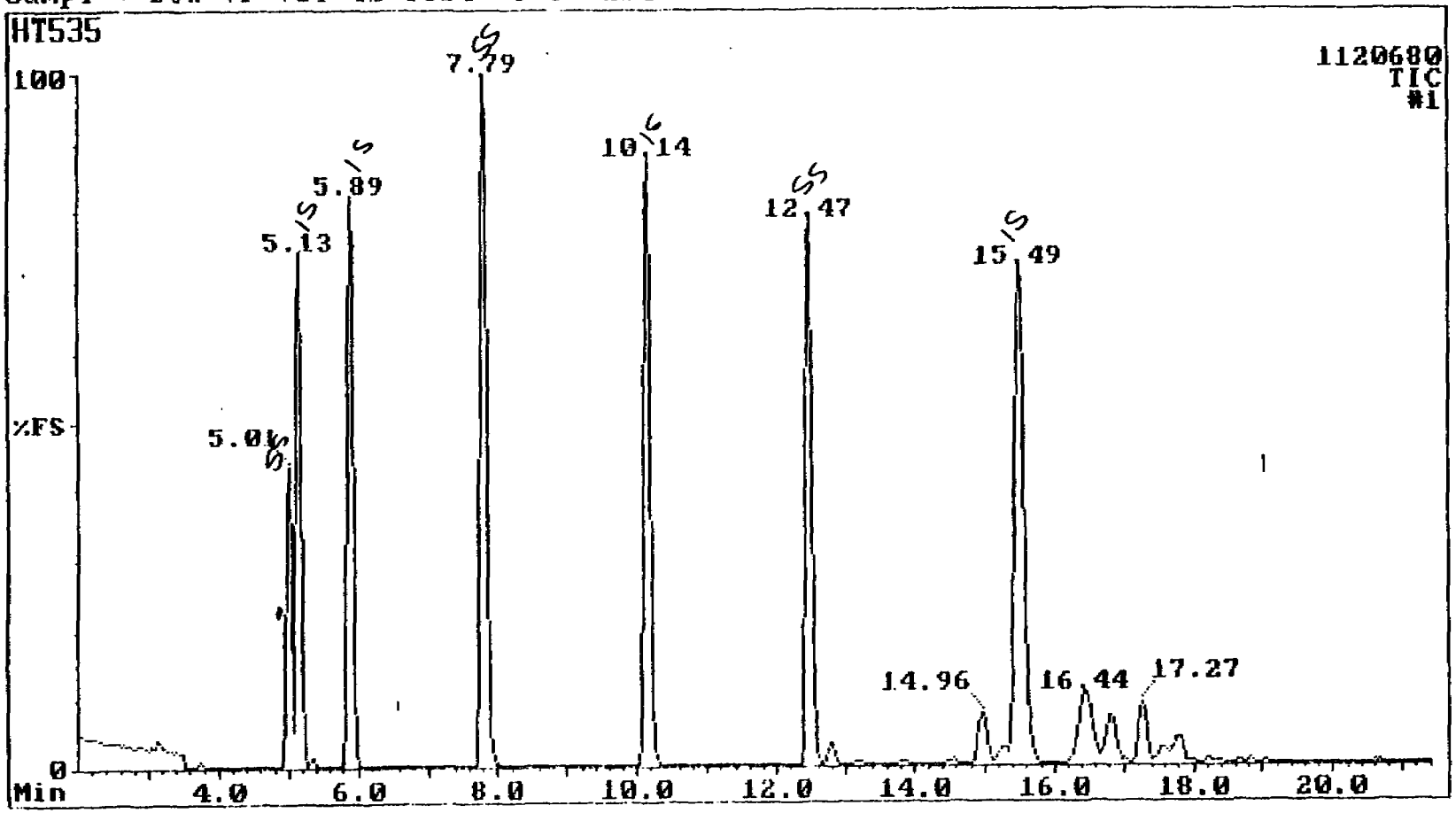
DO A 048747
CONFIDENTIAL

09-27-97 14:47 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sampl : DOW-VP-VST-41-TC04 T/C 104-69-2B TLI#43396 Instrument H



Data Review: TWD
Date: 9-30-97

QUAN DB : HT535 LAB-BASE QUAN 09-27-97 15:22

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	1	1983580	bb	5.13	168	Pentafluorobenzene
2	100	94	96	0	2260820	bb	5.88	114	1,4-Difluorobenzene
	100	95	97	1	2051300	bv	10.14	117	Chlorobenzene-d5
4	99	61	97	0	1200016	bv	15.49	152	1,4-Dichlorobenzene-d4
5	100	98	99	1	972964	bb	5.01	113	Dibromofluoromethane
6	100	93	98	1	3012400	bv	7.79	98	Toluene-d8
7	100	89	93	1	1376664	bv	12.47	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: TW
Date: 9-30-97

3

Radian International

Project Number: 43396 | **Method 8260 VOST**
Sample File: HT539 | **Sample ID: DOW-VP-VST-41-T06 T**

Client Project: Dow Plaquemine | **Date Received: 09/26/97** | **Response File: ICALH921**
TLI ID: 184-69-3A | **Date Analyzed : 09/27/97**

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_5		IS 3	10.14		
Chlorobenzene		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.50		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.255	5.00	1	102
Toluene-d_8	0.257	7.79	2	103

Reviewed by TW Date 9/30/97

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

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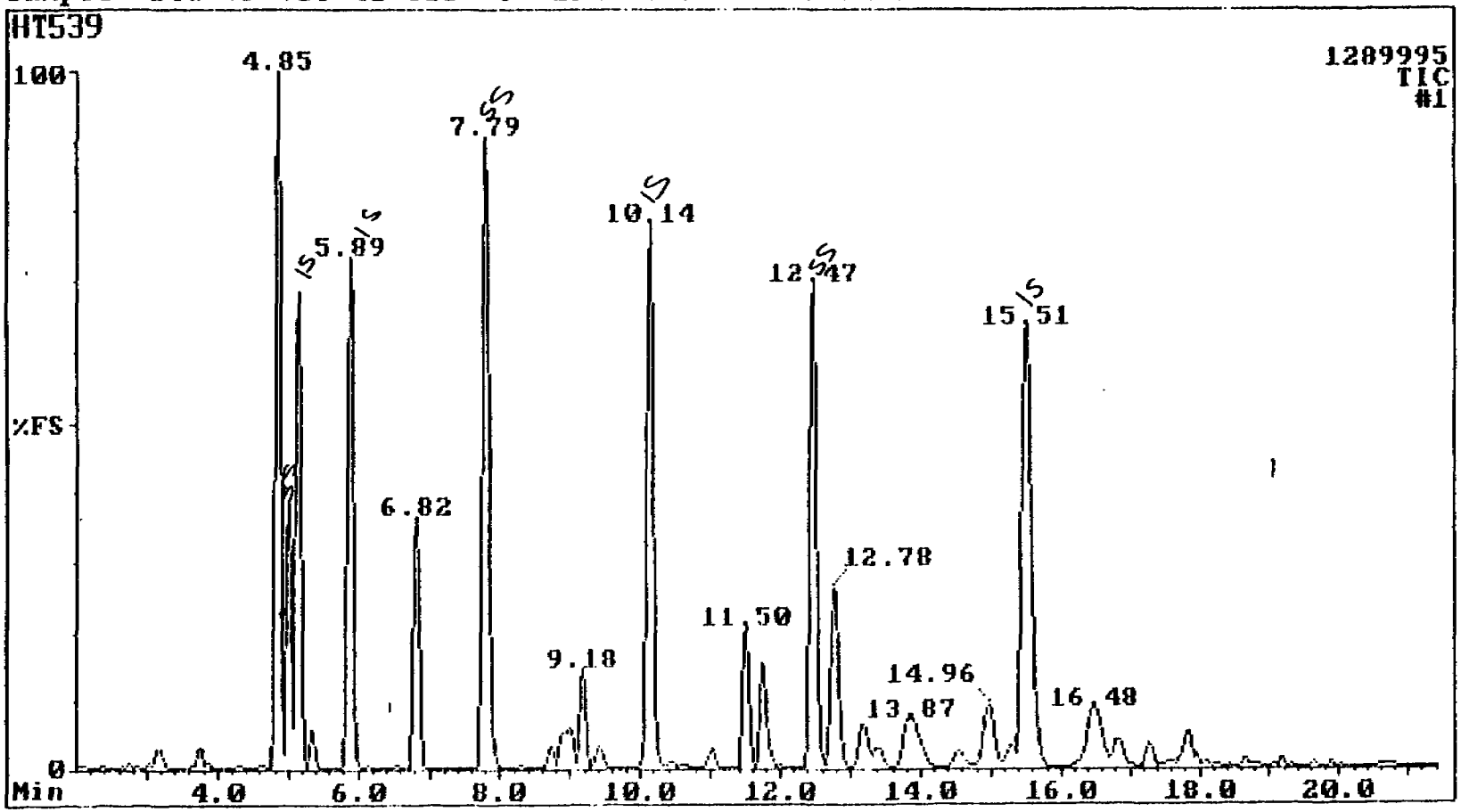
Savar v3.5
Printed: 11:52 09/30/1997

09-27-97 17:13 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sample: DOW-VP-VST-41-T06 T 104-69-3A TLI#43396 Instrument H



Data Review: TLJ
Date: 9-30-97

QUAN DB : HT539 LAB-BASE QUAN 09-27-97 17:47

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	80	99	1	2051192	bb	5.13	168	Pentafluorobenzene
2	100	94	96	0	2377828	bv	5.88	114	1,4-Difluorobenzene
3	100	95	97	1	2183808	bv	10.14	117	Chlorobenzene-d5
4	98	61	97	1	1204036	bv	15.50	152	1,4-Dichlorobenzene-d4
5	100	97	99	0	1000476	bv	5.00	113	Dibromofluoromethane
6	100	93	99	1	3200244	bv	7.79	98	Toluene-d8
7	100	89	94	1	1450780	bv	12.47	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: TW
Date: 9-30-97

Radian International

Project Number: 43396
ample File: HT536

Method 8260 VOST
Sample ID: DOW-VP-VST-41-TC06 TC

Client Project: Dow Plaquemine
TLI ID: 184-69-3B

Date Received: 09/26/97
Date Analyzed : 09/27/97

Response File: ICALH921

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.13		
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	15.51		

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.261	5.01	1	104
Toluene-d_8	0.255	7.80	2	102

Reviewed by TW Date 9/30/97

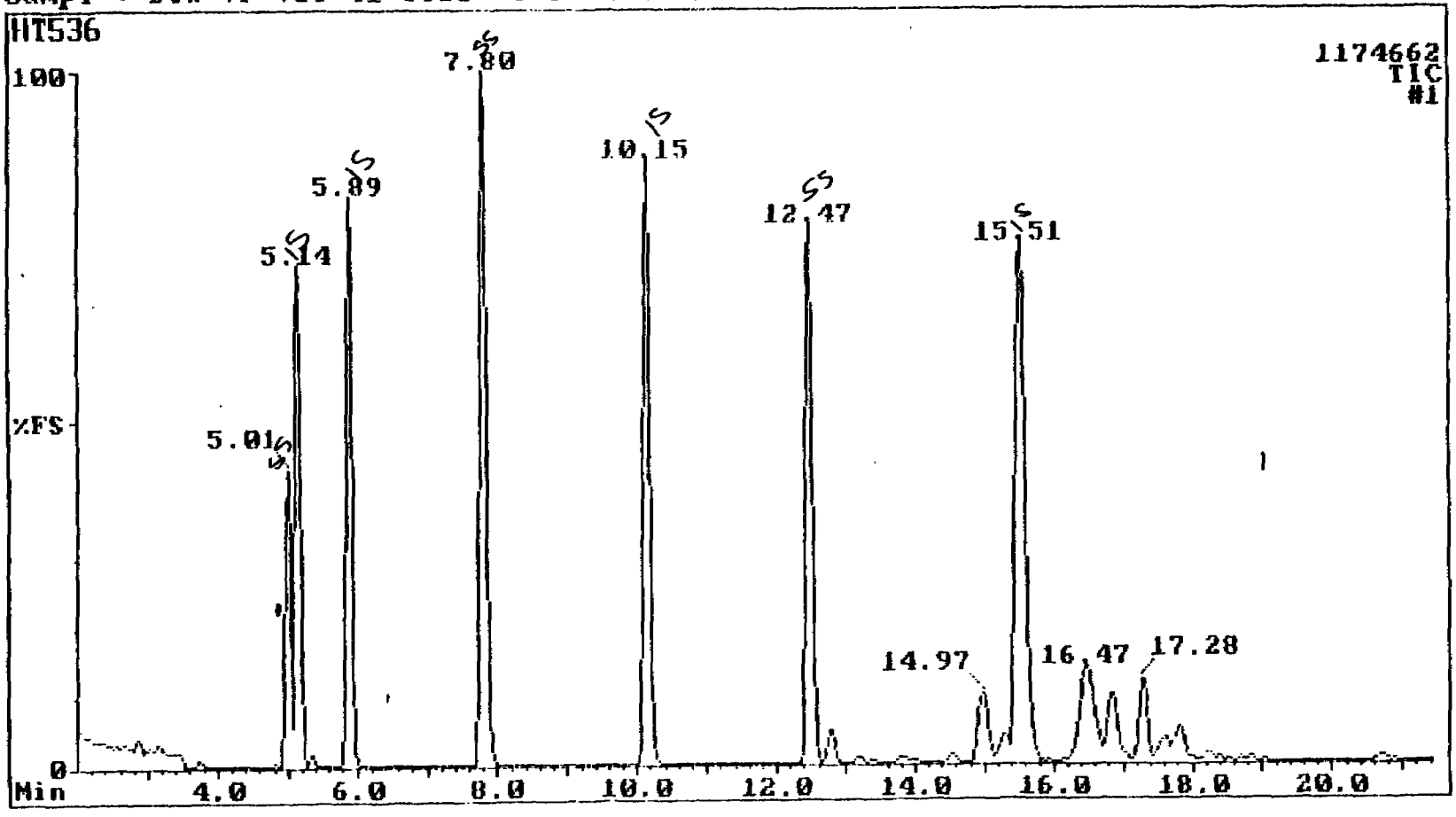
NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

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: 11:52 09/30/1997

09-27-97 15:21 Triangle Laboratories of RTP, Inc. (919) 544-5729
Sampl : DOW-VP-VST-41-TC06 T/C 184-69-3B TLI#43396 Instrument H



Data Review: TLJ
Date: 9-30-97

QUAN DB : HT536 LAB-BASE QUAN 09-27-97 15:57

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	83	99	1	2024004	bb	5.13	168	Pentafluorobenzene
2	100	94	96	1	2349120	bv	5.89	114	1,4-Difluorobenzene
3	100	95	97	1	2118512	bv	10.15	117	Chlorobenzene-d5
4	98	60	98	1	1228132	bv	15.51	152	1,4-Dichlorobenzene-d4
5	100	98	99	1	1009084	bb	5.01	113	Dibromofluoromethane
6	100	93	98	0	3131484	bv	7.80	98	Toluene-d8
7	100	88	93	-1	1433208	bv	12.47	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: TW
Date: 9-30-97