VOLUME 3
RESULTS OF ENVIRONMENTAL INVESTIGATIONS
APPENDIX 5

Of The

COMM 100 ASSOCIATES FACILITY
100 COMMERCIAL STREET
PLAINVIEW, NASSAU COUNTY, NEW YORK
SITE NO. 1-30-075

For

ROBIN S. WEINSTEIN, ESQ.
KENSINGTON & RESSLER, P.C.
400 MADISON AVENUE
NEW YORK, NEW YORK 10017-1910

By

EIKON PLANNING AND DESIGN CORP.
P.O. BOX 469 - 221 HIGH STREET
HACKETTSTOWN, NEW JERSEY 07840

February 1, 1995

CHEMTECH
CONSULTING GROUP, INC.
110 Route 4 • Englewood, New Jersey 07631 Phone: (201) 567-6868 Fax: (201) 567-1333

DATA PACKAGE

FOR

VOLATILE

EIKON PLANNING & DESIGN CORP.
221 HIGH STREET
HACKETTSTOWN, NJ 07840

SITE NAME: 100 COMMERCIAL ST.

PROJECT No.: 88B

SAMPLING DATE: OCTOBER 17, 1994

LOW CONCENTRATION WATER FOR ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME CHEMTECH CONSULTING CORP. CITY/STATE ENGLEWOOD, N.J.

CASE NO. 4376 SDG NO. — SDG NOS. TO FOLLOW — — — SAS NO. —

CONTRACT NO. — SOW NO. —

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II, PARAGRAPH 5, and SECTION III, PARAGRAPH 16.)

	PAGE NOs FROM	TO	CHECK LAB	EPA
1. Inventory Sheet (Form DC-2) (Do not number)			✓	
2. SDG Case Narrative	01	01	✓	
3. Traffic Report	02	03	✓	
4. Volatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II LCV)	06	08	✓	
Lab Control Sample Recovery (From III LCV)	09	09	✓	
Method Blank Summary (Form IV LCV)	10	12	✓	
Tuning and Mass Calibration (Form V LCV)	13	17	✓	
b. Sample Data	18	37	✓	
TCL Results - (Form I LCV)			✓	
Tentatively Identified Compounds (Form I LCV-TIC)			✓	
Reconstructed total ion chromatograms (RIC) and Quantitation Reports for each sample			✓	
For each sample:				
Raw spectra and background-subtracted mass spectra of target compounds identified			✓	
Mass spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)				
Initial Calibration Summary (Form VI LCV)	39	42	✓	
RICs and Quan Reports for all Standards	43	91	✓	
Continuing Calibration (Form VII LCV)	92	97	✓	
RICs and Quan Reports for all Standards	98	107	✓	
Internal Standard Area and RT Summary (Form VIII LDV)	108	110	✓	
d. QC Data				
BFB	112	116	✓	
Blank Data	117	138	✓	
LCS Data	139	144	✓	
PES Data				
5. Semivolatiles Data				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II LCSV)	—	—	—	
Lab Control Sample Recovery (Form III LCSV)	—	—	—	
Method Blank Summary (Form IV LCSV)	—	—	—	
Tuning and Mass Calibration (Form V LCSV)	—	—	—	

LOW CONCENTRATION WATER FOR ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. 4376 SDG NO. ________ SDG NOS. TO FOLLOW — — SAS NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. Semivolatiles Data (cont.)				
b. Sample Data	—	—	—	
TCL Results (Form I LCSV)				
Tentatively Identified Compounds (Form I LCSV-TIC)				
Reconstructed total ion chromatograms (RIC) and Quantitation Reports for each sample				
For each sample: Raw spectra and background-subtracted mass spectra of TCL compounds				
Mass spectra of TICs with three best library matches GPC chromatograms (if GPC performed)				
c. Standards Data (All Instruments)				
Initial Calibration Summary (Form VI LCSV)	—	—	—	
RICs and Quan Reports for all Standards	—	—	—	
Continuing Calibration (Form VII LCSV)	—	—	—	
RICs and Quan Reports for all Standards	—	—	—	
Internal Standard Area and RT Summary (Form VIII LCSV)	—	—	—	
d. QC Data				
DFTPP	—	—	—	
Blank Data	—	—	—	
LCS Data	—	—	—	
PES Data	—	—	—	
6. Pesticides				
a. QC Summary	—	—	—	
Surrogate Percent Recovery Summary (Form II LCP)	—	—	—	
Lab Control Sample Recovery (Form III LCP)	—	—	—	
Method Blank Summary (Form IV LCP)	—	—	—	
b. Sample Data	—	—	—	
TCL Results - Organic Analysis Data Sheet (Form I LCP)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout and calibration plots				
Manual work sheets				
For pesticides/Aroclors confirmed by GC/MS, copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				

LOW CONCENTRATION WATER FOR ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. 4376 SDG NO. — SDG NOS. TO FOLLOW — — SAS NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6.. Pesticides (cont.)				
c. Standards Data				
Initial Calibration Data (Form VI LCP)	—	—	—	
Calibration Verification (Form VII LCP)	—	—	—	
Pesticides Analytical Sequence (Form VIII, LCP)	—	—	—	
PesticideFlorisil Cartridge Check (Form IX, LCP)	—	—	—	
Pesticide Identification (Form X LCP)	—	—	—	
Standard chromatograms and data system printout for all Standards	—	—	—	
For pesticides/Aroclors confirmed by GC/MS, copies of spectra for standards used	—	—	—	
d. QC Data				
Blank Data	—	—	—	
LCS Data	—	—	—	
PES Data	—	—	—	
7. Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	146	148	✓	
Internal sample and sample extract transfer chain-of-custody records	—	—	—	
Screening records	—	—	—	
All instrument output, including strip charts from screening activities (describe or list)	—	—	—	
______	—	—	—	
______	—	—	—	
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)	—	—	—	
Chain-of-Custody Records	—	—	—	
Sample Tags	—	—	—	
Sample Log-In Sheet (Lab & DC1)	—	—	—	
SDG Cover Sheet	—	—	—	
Miscellaneous Shipping/Receiving Records (describe or list)				
______	—	—	—	
______	—	—	—	
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
______	—	—	—	
______	—	—	—	

CHEMTECH
CONSULTING GROUP, INC.

LABORATORY REPORT

CASE NARRATIVE

Client Name:	**Eikon Planning & Design Corp.**
Laboratory Case No.:	**4376**
Project Name:	**100 Commercial St.**
Project NO.:	**88B**

One soil sample, One field blank and One Trip Blank were received intact on Oct. 18, 1994. These samples were analyzed for Volatile analysis according to the NYSCLP and were analyzed within the holding times.

Sample SB5-4,2-4' was selected for Matrix Spike and Matrix Spike Duplicate analysis. The results have been reported on Form III-B.

The surrogate recovery of each sample is found on Form II-A. Internal Standard Areaing counts for each Sample is found on Form VIII-A. Initial Calibration results are found on Form VI-A. Both Continuing Calibrations and Instrument Tuning Information are located on Form V-A. all Blank Summaries are located on Form IV-A.

If you have any questions, please feel free to call Mr. Divyajit Mehta.

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110 Route 4 ● Englewood, New Jersey 07631 Phone: (201) 567-6868 Fax: (201) 567-1333

Chain of Custody

Record

CHEMTECH
CONSULTING GROUP, INC.
Environmental Services
Since 1967

110 Route 4 ● Englewood, New Jersey 07631
(201) 567-6868 ● (212) 255-2100
Fax: (201) 567-1333

CHAIN OF CUSTODY RECORD

1. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)

2. Preservative (Enter in Column B). See other side: 1. HCl 2. HNO_3 3. $NaHSO_4$ 4. H_2SO_4 5. NaOH 6. Other (Specify) 7. Ice only N. Not preserved

3. PROJ. NO.: 888
PROJECT NAME: COMM 100
SAMPLING CO.:
Sampler (Name): A.W. EISENBERGER
Sampler Signature:
4. Date Shipped:
Carrier:
Airbill Number:
E ANALYSIS: 1. VOCMS/NYSCLP
ANALYTICAL REMARKS

Sample Numbers	A Matrix Enter from Box 1	B Preservative Used from Box 2	C No. of Containers	D Station Location or Sample Description	1	2	3	4	5	6	7	8	9	F Date and Time of Sample Collection		G Sample Condition On Receipt	H CHEMTECH Tracking Number
1. SB5-4, 2-4'	SOIL	ICE	1	SB5-4, 2-4'	X									10/17/1994	10:20 A		
2. FD BLK 10-17-94	WATER	ICE/HCL	2	FIELD BLANK	X									10/17/1994	14:15 P		
3.														/ /19	: A P		
4.														/ /19	: A P		
5.														/ /19	: A P		
6.														/ /19	: A P		
7.														/ /19	: A P		
8.														/ /19	: A P		
9.														/ /19	: A P		
10.														/ /19	: A P		
11.														/ /19	: A P		
12.														/ /19	: A P		
13.														/ /19	: A P		
14.														/ /19	: A P		
15.														/ /19	: A P		

000003

Relinquished by: (Signature)	Date / Time		Received by: (Signature)	Shipment complete?	Page	REMARKS
	10-18-94	14:45	B. Morovati	Y N	___ of ___	ASP CLP
Relinquished by: (Signature)	**Date / Time**		**Received for Laboratory by: (Signature)**	**Date / Time**		
B. Morovati	10/18/94	14:45	B. Morovati	10/18/94	14:45	

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

№ 104113

4.

Volatiles Data

000004

(a)

Volatiles Data

QC Summary

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMM Group: ______

	SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER #	TOT OUT
01	VBLK01	104	100	104		
02	TRIP BLANK	91	88	88		
03	FLD BLK 10-17-9	104	102	101		
04						
05						
06						
07						
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	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Lab Code: 4376   Case No.: ______   SAS No.: 100 COMM   SDG No.: ______

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER #	TOT OUT
01	VBLK01	95	93	92		
02	SB5-4,2-4'	111	97	101		
03	SB5-4,2-4'MS	113	106	108		
04	SB5-4,2-4'MSD	98	93	94		
05						
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	QC LIMITS
SMC1 (TOL) = Toluene-d8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: SAS No.: 100 COMM SDG No.:

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER #	TOT OUT
01	VBLK02	95	93	95		
02	BLK SPK	100	95	98		
03						
04						
05						
06						
07						
08						
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		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: ____ SAS No.: 100 COMMERCIAL ST SDG No.: ____

Matrix Spike - EPA Sample No.: SB5-4,2-4' Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	55	0	74	135	(59-172)
Trichloroethene	55	0	58	105	(62-137)
Benzene	55	0	70	127	(66-142)
Toluene	55	0	67	122	(59-139)
Chlorobenzene	55	0	54	98	(60-133)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	55	69	125	7	22	(59-172)
Trichloroethene	55	54	98	7	24	(62-137)
Benzene	55	68	124	3	21	(66-142)
Toluene	55	63	115	6	21	(59-139)
Chlorobenzene	55	50	91	8	21	(60-133)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: ____

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

Lab Name: CHEMTECH Contract: EIKON P

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL S Group: ______

Lab File ID: V5960.D Lab Sample ID: VBLK01

Date Analyzed: 10/19/94 Time Analyzed: 1549

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) __

Instrument ID: VOA-1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	TRIP BLANK	O33275	V5963.D	1853
02	FLD BLK 10-17-9	O33274	V5964.D	1943
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: CHEMTECH Contract: BIKON P

Lab Code: 4376 Case No.: ____ SAS No.: 100 COMMERCIAL SSDG No.: ____

Lab File ID: V5968.D Lab Sample ID: VBLK01

Date Analyzed: 10/21/94 Time Analyzed: 1111

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA-1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB5-4,2-4'	O33273	V5969.D	1159
02	SB5-4,2-4'MS	O33273MS	V5977.D	1909
03	SB5-4,2-4'MSD	O33273MSD	V5978.D	1956
04				
05				
06				
07				
08				
09				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK02

Lab Name: CHEMTECH Contract: EIKON P

Project No.: 4376 Site: ________ Location: 100 COMMERCIAL S Group: ________

Lab File ID: V6020.D Lab Sample ID: VBLK02

Date Analyzed: 10/26/94 Time Analyzed: 1046

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA-1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLK SPK	BLK SPK	V6021.D	1139
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : CHEMTECH　　Contract: EIKON PLANNING

Lab Code: 4376　　Case No.: ______　　SAS No.: 100 COMMERCIAL S SDG No.: ______

Lab File ID: V5708.D　　BFB Injection Date: 9/12/94

Instrument ID: VOA-1　　BFB Injection Time: 1114

GC Column: DB-624　　ID: 0.53 (mm)　　Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.8
75	30.0 - 66.0% of mass 95	43.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.0
175	4.0 - 9.0% of mass 174	5.6 (7.4)1
176	93.0 - 101.0% of mass 174	72.8 (97.1)1
177	5.0 - 9.0% of mass 176	4.6 (6.3)2

1-Value is % mass 174　　2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	V5709.D	9/12/94	1146
02	VSTD010	VSTD010	V5710.D	9/12/94	1233
03	VSTD200	VSTD200	V5711.D	9/12/94	1334
04	VSTD100	VSTD100	V5712.D	9/12/94	1421
05	VSTD020	VSTD020	V5713.D	9/12/94	1509
06					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL S Group: ______

Lab File ID: V5954.D BFB Injection Date: 10/19/94

Instrument ID: VOA-1 BFB Injection Time: 1008

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) ______

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.3
75	30.0 - 66.0% of mass 95	42.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.2
175	4.0 - 9.0% of mass 174	5.2 (7.2)1
176	93.0 - 101.0% of mass 174	70.3 (96.0)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	V5955.D	10/19/94	1127
02	VSTD010	VSTD010	V5956.D	10/19/94	1216
03	VSTD200	VSTD200	V5957.D	10/19/94	1306
04	VSTD100	VSTD100	V5958.D	10/19/94	1356
05	VSTD020	VSTD020	V5959.D	10/19/94	1446
06	VBLK01	VBLK01	V5960.D	10/19/94	1549
07	TRIP BLANK	O33275	V5963.D	10/19/94	1853
08	FLD BLK 10-17-9	O33274	V5964.D	10/19/94	1943
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: SAS No.: 100 COMMERCIAL S SDG No.:

Lab File ID: V5965.D BFB Injection Date: 10/21/94

Instrument ID: VOA-1 BFB Injection Time: 0901

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.4
75	30.0 - 66.0% of mass 95	41.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	81.4
175	4.0 - 9.0% of mass 174	6.3 (7.7)1
176	93.0 - 101.0% of mass 174	80.3 (98.7)1
177	5.0 - 9.0% of mass 176	5.5 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD0501	V5967.D	10/21/94	1014
02	VBLK01	VBLK01	V5968.D	10/21/94	1111
03	SB5-4,2-4'	O33273	V5969.D	10/21/94	1159
04	SB5-4,2-4'MS	O33273MS	V5977.D	10/21/94	1909
05	SB5-4,2-4'MSD	O3O33273MSD	V5978.D	10/21/94	1956
06					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : CHEMTECH   Contract: EIKON PLANNING

Project No.: 4376   Site: ______   Location: 100 COMMERCIAL S   Group: ______

Lab File ID: V5991.D   BFB Injection Date: 10/25/94

Instrument ID: VOA-1   BFB Injection Time: 0838

GC Column: DB-624   ID: 0.53 (mm)   Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.5
75	30.0 - 66.0% of mass 95	43.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	77.3
175	4.0 - 9.0% of mass 174	5.7 (7.4)1
176	93.0 - 101.0% of mass 174	76.9 (99.5)1
177	5.0 - 9.0% of mass 176	5.0 (6.4)2

1-Value is % mass 174   2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	V5992.D	10/25/94	0911
02	VSTD010	VSTD010	V5993.D	10/25/94	0958
03	VSTD020	VSTD020	V5994.D	10/25/94	1045
04	VSTD100	VSTD100	V5995.D	10/25/94	1134
05	VSTD200	VSTD200	V5996.D	10/25/94	1226
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL S Group: ______

Lab File ID: V6018.D BFB Injection Date: 10/26/94

Instrument ID: VOA-1 BFB Injection Time: 0930

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.8
75	30.0 - 66.0% of mass 95	42.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	71.4
175	4.0 - 9.0% of mass 174	5.2 (7.2)1
176	93.0 - 101.0% of mass 174	69.7 (97.6)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD0502	V6019.D	10/26/94	0959
02	VBLK02	VBLK02	V6020.D	10/26/94	1046
03	BLK SPK	BLK SPK	V6021.D	10/26/94	1139
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

(b)

Volatiles Data

Sample Data

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB5-4,2-4'

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Lab Code: 4376   Case No.: ____   SAS No.: 100 COMMERCIAL   SDG No.: ____

Matrix: (soil/water) SOIL   Lab Sample ID: O33273

Sample wt/vol: 5.0 (g/mL) G   Lab File ID: V5969.D

Level: (low/med) LOW   Date Received: 10/17/94

% Moisture: not dec. 9   Date Analyzed: 10/21/94

GC Column: DB-624   ID: 0.53 (mm)   Dilution Factor: 1.0

Soil Extract Volume: ____ (uL)   Soil Aliquot Volume: ____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	13	
75-35-4	1,1-Dichloroethene	11	U
75-34-4	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylenes (total)	11	U

000019

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SB5-4,2-4'

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Project No. 4376   Site: ____   Location: 100 COMMERCIAL   Group: ____

Matrix: (soil/water) SOIL   Lab Sample ID: O33273

Sample wt/vol: 5.0 (g/mL) G   Lab File ID: V5969.D

Level: (low/med) LOW   Date Received: 10/17/94

% Moisture: not dec. 9   Date Analyzed: 10/21/94

GC Column: DB-624   ID: 0.53 (mm)   Dilution Factor: 1.0

Soil Extract Volume: ____ (uL)   Soil Aliquot Volume: ____ (uL)

Number TICs found: 3   Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	36.57	27	J
2.	Unknown	36.96	20	J
3.	Unknown	39.31	20	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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16.				
17.				
18.				
19.				
20.				
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22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5969.D
Acq Time : 21 Oct 94 11:59 am
Sample : 33273-4376
Misc :
Quant Time: Nov 1 15:38 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 15:33:38 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.23	128	220601	50.00 ug/L	0.00
16) 1,4-Difluorobenzene	12.43	114	845305	50.00 ug/L	0.02
29) Chlorobenzene-d5	22.80	117	632061	50.00 ug/L	0.00
System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.42	65	417224	50.69 ug/L	
31) Toluene-d8	17.82	98	847248	55.38 ug/L	
40) Bromofluorobenzene	26.96	95	555338	48.43 ug/L	
Target Compounds					Qvalue
7) Acetone	3.87	43	10867	11.51 ug/L	97
8) Carbon Disulfide	4.01	76	90131	11.78 ug/L	92

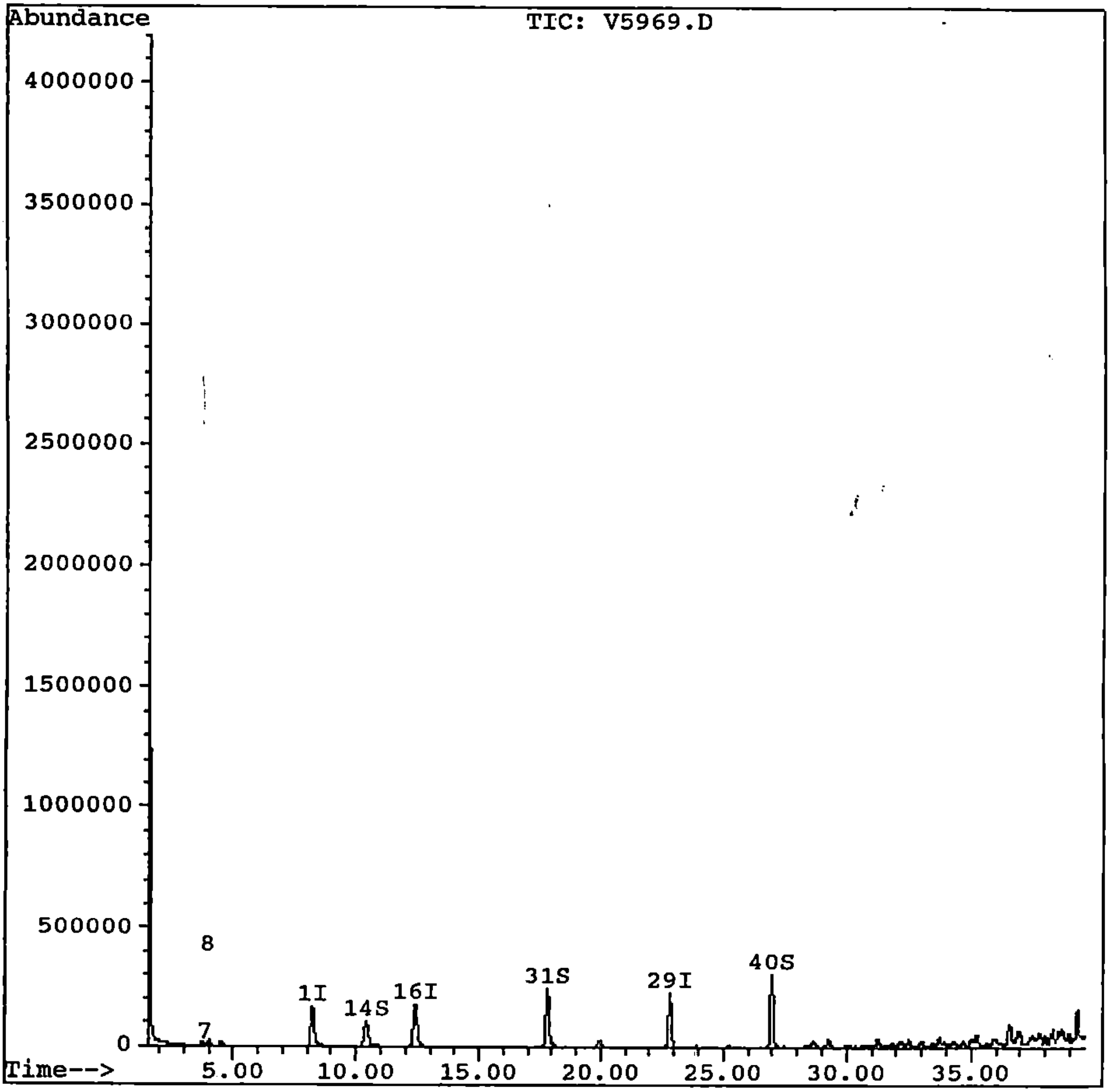
000021

Quantitation Report

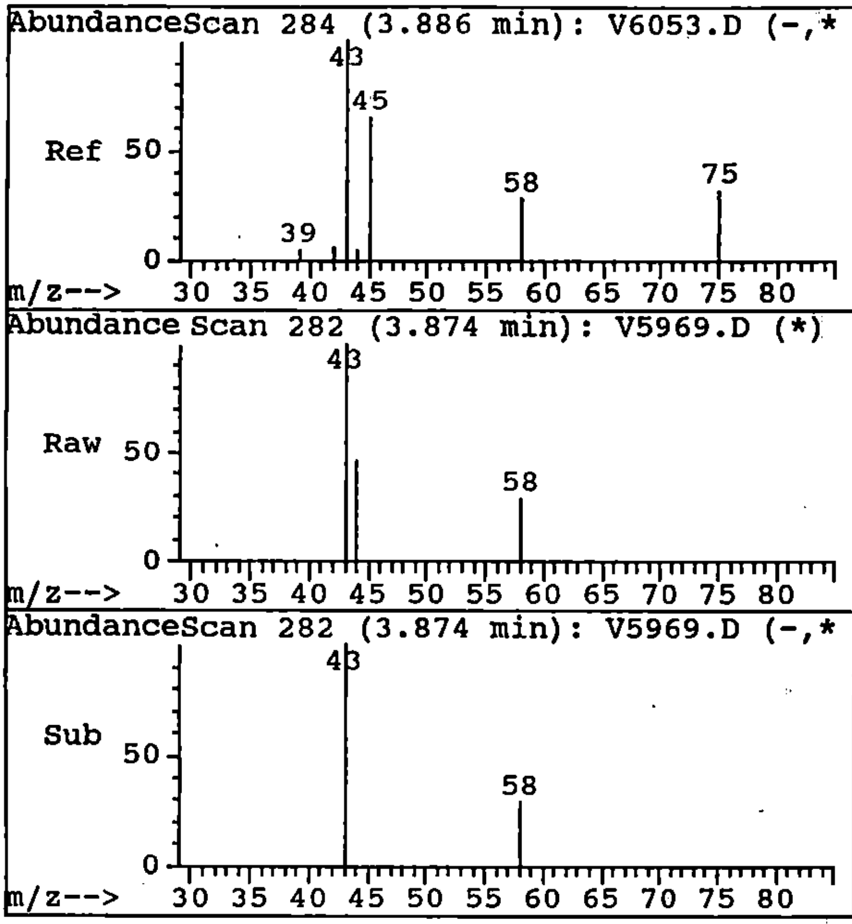
Data File : C:\HPCHEM\1\DATA\V5969.D
Acq Time : 21 Oct 94 11:59 am
Sample : 33273-4376
Misc :
Quant Time: Nov 1 15:38 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 15:33:38 1994
Response via : Single Level Calibration



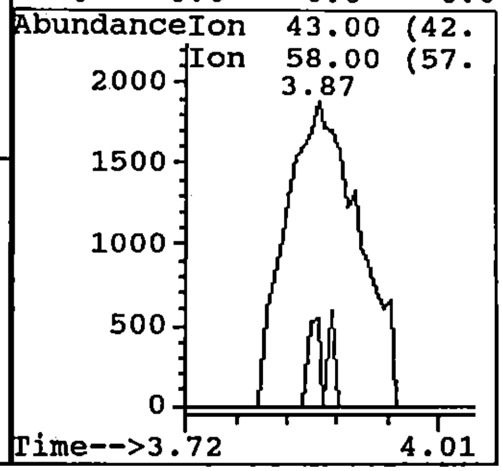
000022

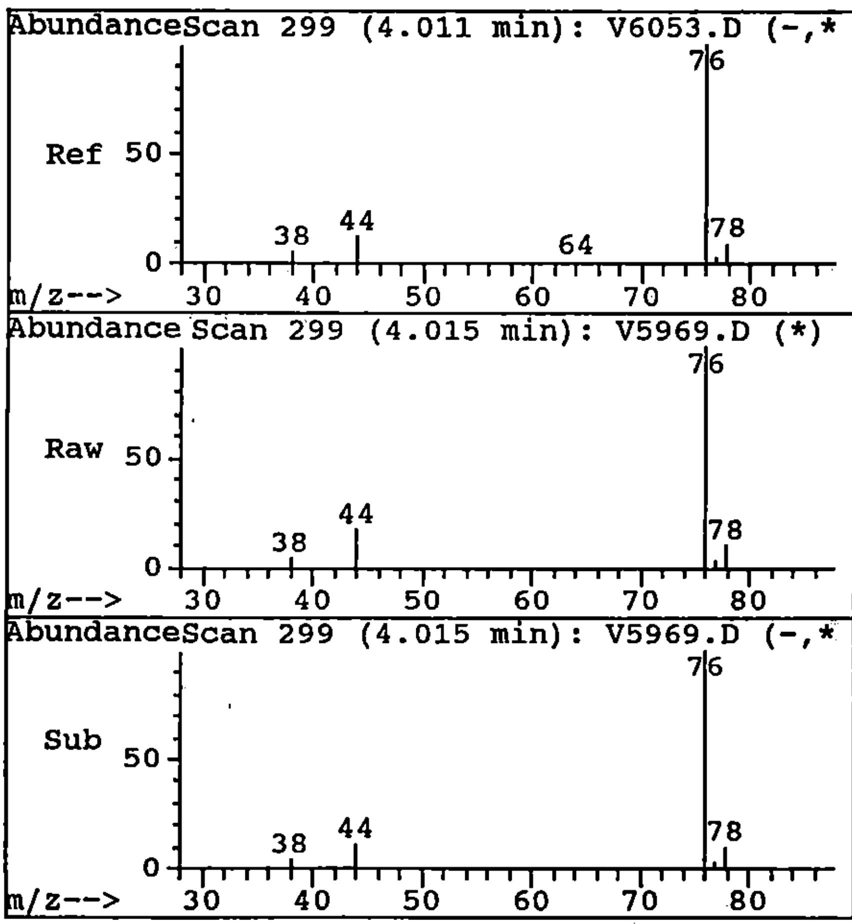


#7
Acetone
Concen: 11.51 ug/L
RT: 3.87 min Scan# 282
Delta R.T. -0.00 min
Lab File: V5969.D
Acq: 21 Oct 94 11:59 am

Tgt Ion:43 Resp: 10867

Ion	Ratio	Lower	Upper
43	100		
58	28.6	7.0	47.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

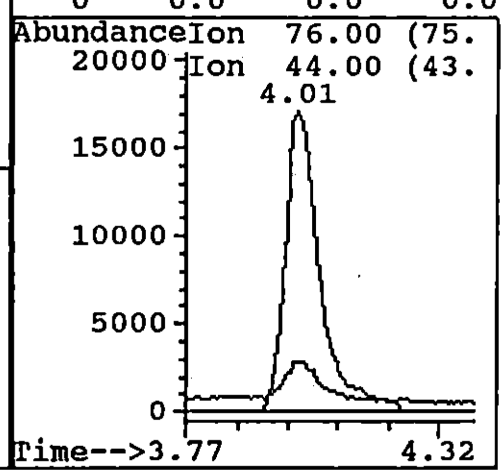




#8
Carbon Disulfide
Concen: 11.78 ug/L
RT: 4.01 min Scan# 299
Delta R.T. -0.00 min
Lab File: V5969.D
Acq: 21 Oct 94 11:59 am

Tgt Ion:76 Resp: 90131

Ion	Ratio	Lower	Upper
76	100		
44	16.7	7.4	19.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0



000023

Library Search Compound Report

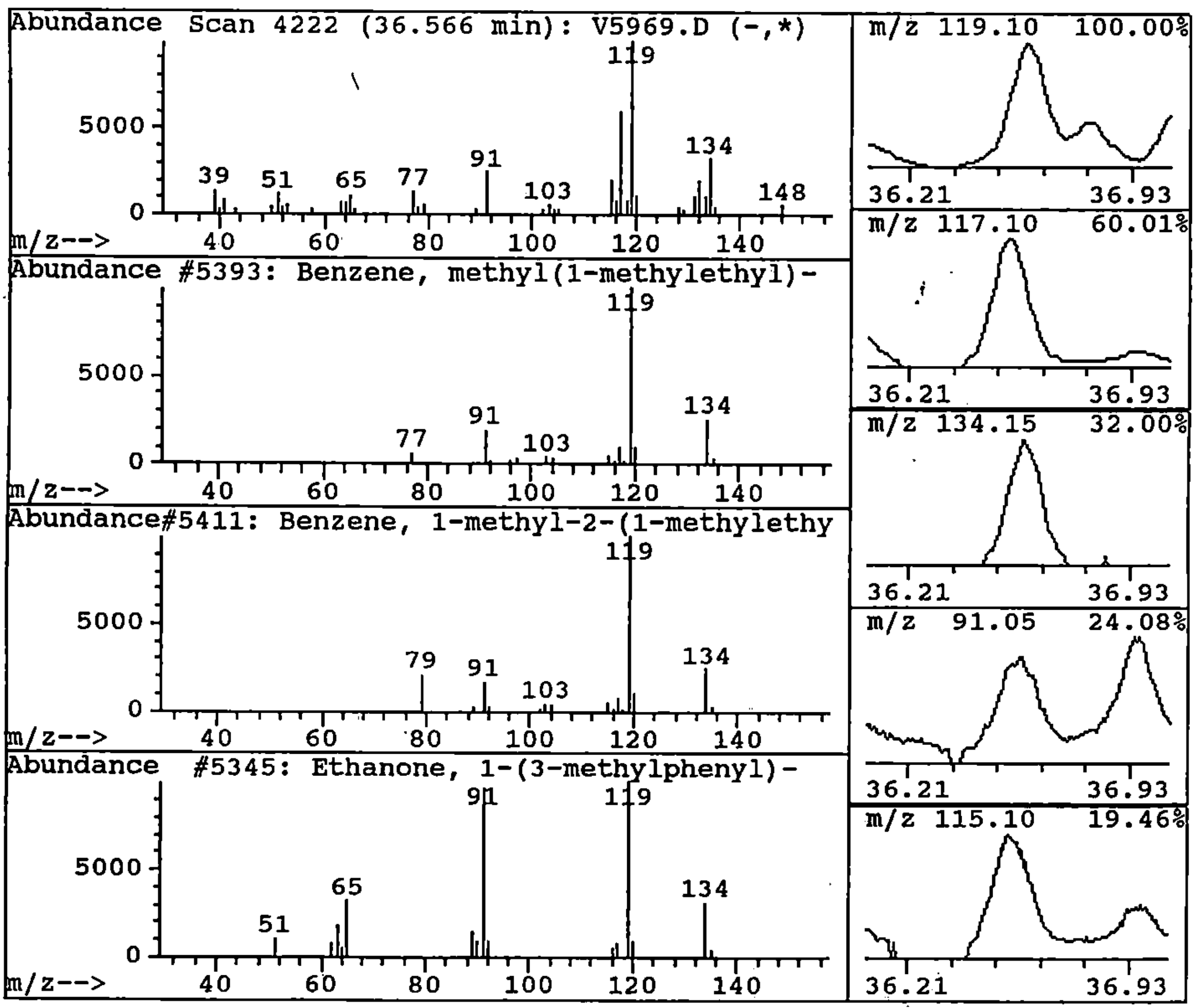
Data File : C:\HPCHEM\1\DATA\V5969.D
Acq Time : 21 Oct 94 11:59 am
Sample : 33273-4376
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
36.57	24.52 ug/L	904751	Chlorobenzene-d5	22.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, methyl(1-methylethyl)-	5393	025155-15-1	49
2	Benzene, 1-methyl-2-(1-methylethyl)	5411	000527-84-4	46
3	Ethanone, 1-(3-methylphenyl)-	5345	000585-74-0	46
4	Benzene, 1-methyl-3-(1-methylethyl)	5409	000535-77-3	46
5	Benzene, 1,4-diethyl-	5397	000105-05-5	46



Library Search Compound Report

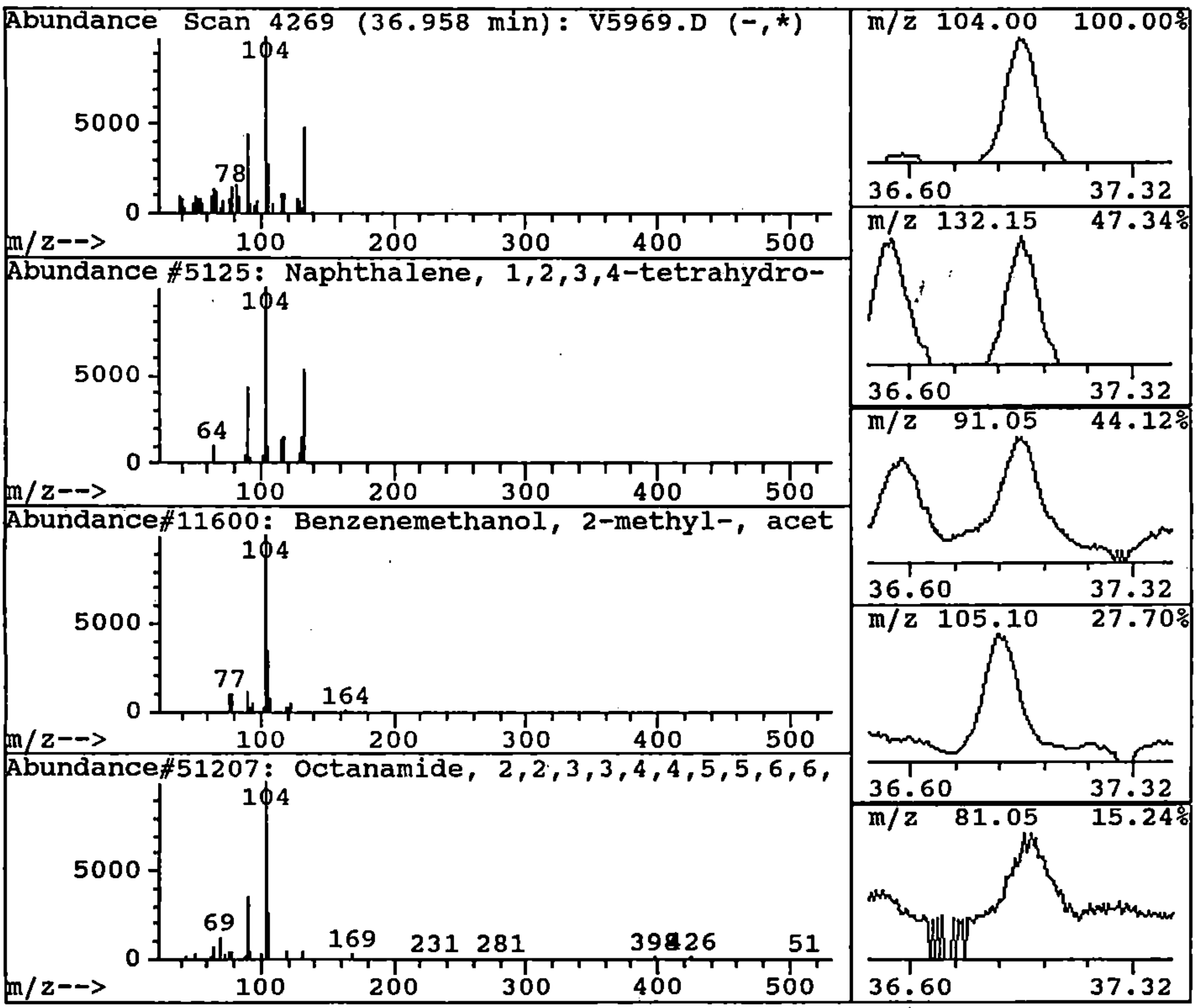
Data File : C:\HPCHEM\1\DATA\V5969.D
Acq Time : 21 Oct 94 11:59 am
Sample : 33273-4376
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
36.96	18.68 ug/L	689037	Chlorobenzene-d5	22.80

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	5125	000119-64-2	90
2	Benzenemethanol, 2-methyl-, acetate	11600	017373-93-2	25
3	Octanamide, 2,2,3,3,4,4,5,5,6,6,7,7	51207	055521-09-0	23
4	Benzeneacetic acid, 2-phenylethyl e	27169	000102-20-5	23
5	Benzenemethanol, 2-methyl-	3497	000089-95-2	23



Library Search Compound Report

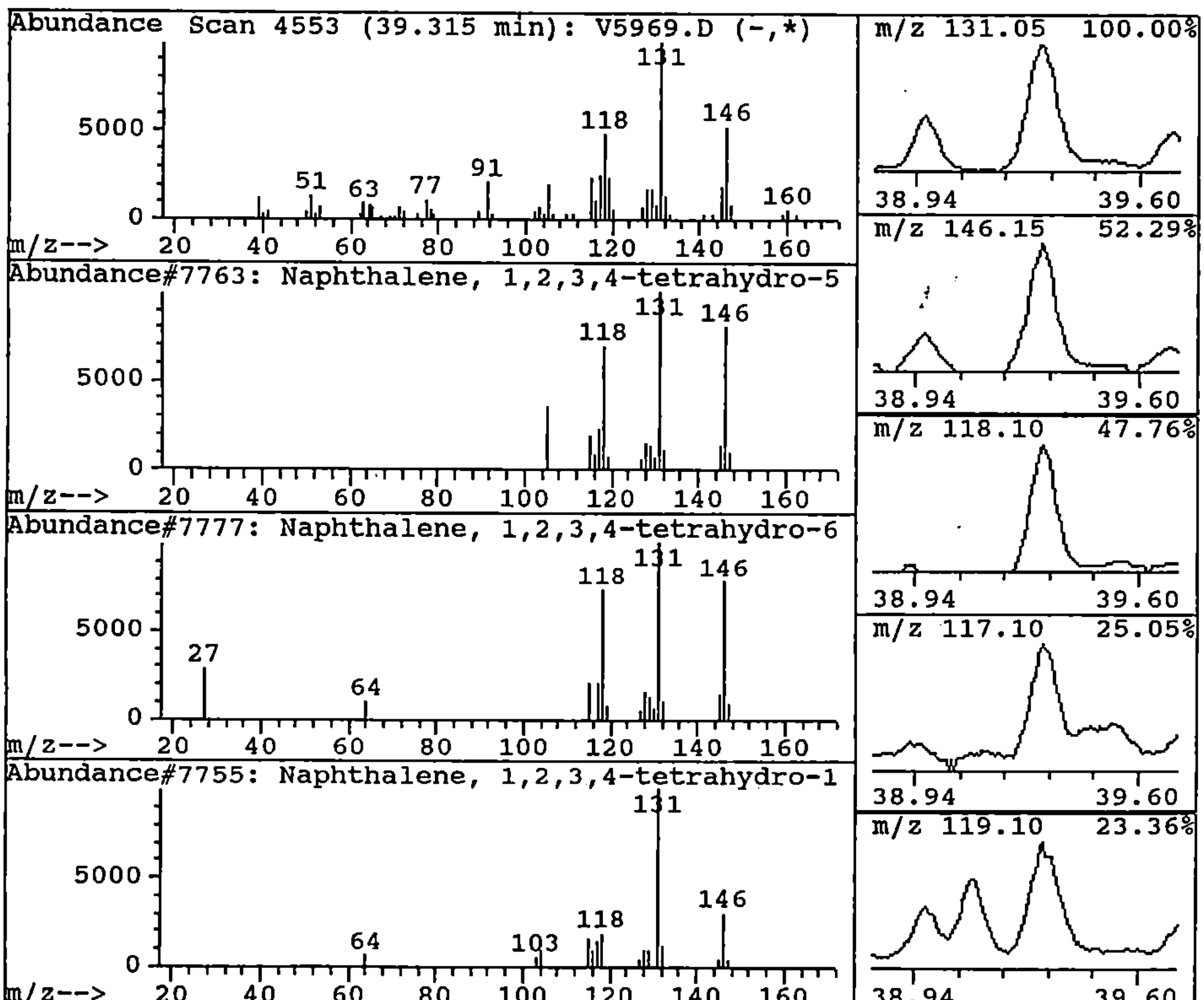
Data File : C:\HPCHEM\1\DATA\V5969.D
Acq Time : 21 Oct 94 11:59 am
Sample : 33273-4376
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
39.31	18.63 ug/L	687478	Chlorobenzene-d5	22.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-5-m	7763	002809-64-5	76
2	Naphthalene, 1,2,3,4-tetrahydro-6-m	7777	001680-51-9	70
3	Naphthalene, 1,2,3,4-tetrahydro-1-m	7755	001559-81-5	62
4	Benzene, (2-methyl-1-butenyl)-	7784	056253-64-6	60
5	Benzene, (3-methyl-2-butenyl)-	7772	004489-84-3	64



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FLD BLK 10-17-9

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: ____ SAS No.: 100 COMMERCIAL SDG No.: ____

Matrix: (soil/water) WATER Lab Sample ID: O33274

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V5964.D

Level: (low/med) ____ Date Received: 10/17/94

% Moisture: not dec. 100 Date Analyzed: 10/19/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound	ug/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	14	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U

006027

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

FLD BLK 10-17-9

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Project No. 4376   Site: ______   Location: 100 COMMERCIAL   Group: ______

Matrix: (soil/water) WATER   Lab Sample ID: O33274

Sample wt/vol: 5.0 (g/mL) ML   Lab File ID: V5964.D

Level: (low/med) ______   Date Received: 10/17/94

% Moisture: not dec. 100   Date Analyzed: 10/19/94

GC Column: DB-624   ID: 0.53 (mm)   Dilution Factor: 1.0

Soil Extract Volume: ______ (uL)   Soil Aliquot Volume: ______ (uL)

Number TICs found: 0   Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
3.				
4.				
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6.				
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26.				
27.				
28.				
29.				
30.				

000028

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5964.D
Acq Time : 19 Oct 94 7:43 pm
Sample : 33274-4376
Misc :
Quant Time: Nov 1 15:09 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNHO.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 12:46:48 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.06	128	222762	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.19	114	852351	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.65	117	733933	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.17	65	419667	50.74	ug/L	
31) Toluene-d8	17.63	98	864143	52.22	ug/L	
40) Bromofluorobenzene	26.80	95	661457	50.89	ug/L	
Target Compounds						Qvalue
7) Acetone	3.79	43	16690	14.05	ug/L	94
9) Methylene Chloride	4.45	84	74345	14.47	ug/L	94

000028

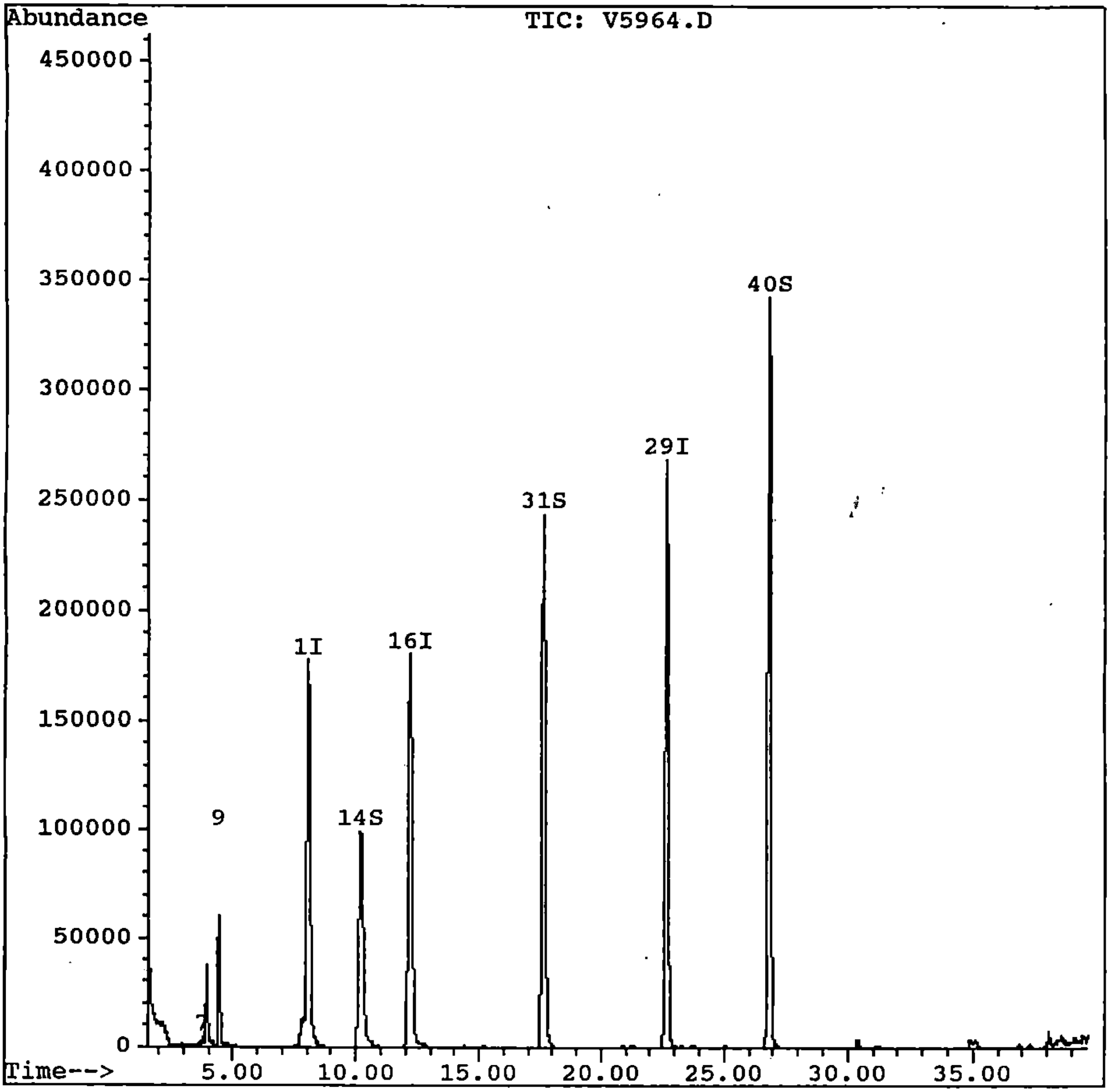
(#) = qualifier out of range (m) = manual integration

Quantitation Report

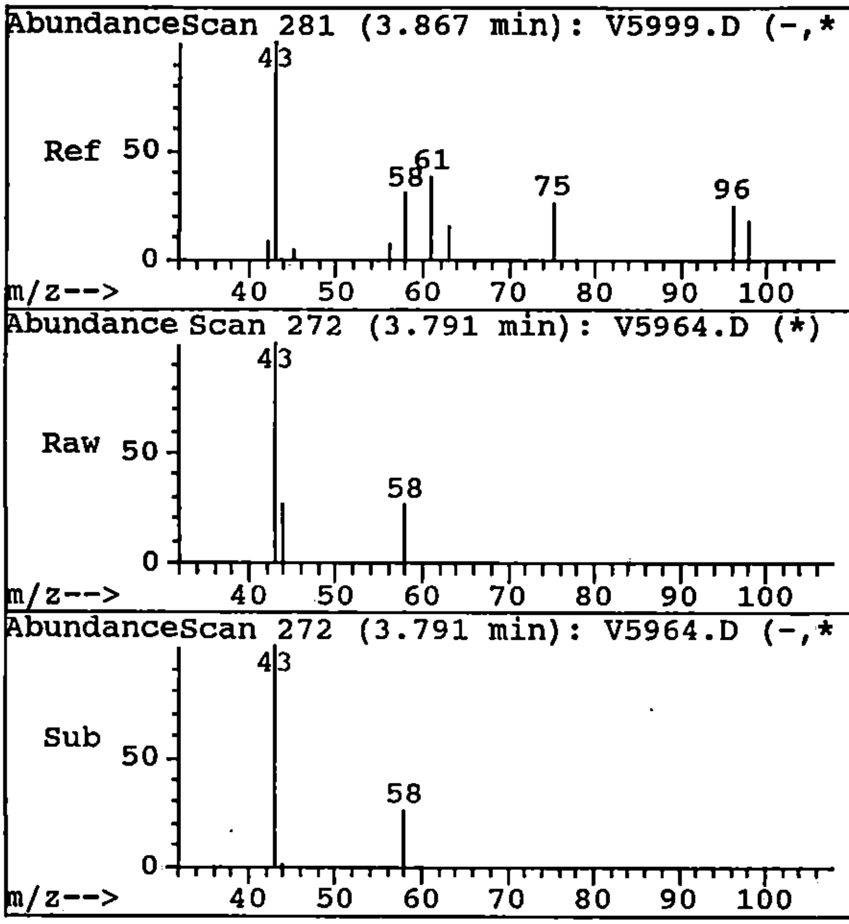
Data File : C:\HPCHEM\1\DATA\V5964.D
Acq Time : 19 Oct 94 7:43 pm
Sample : 33274-4376
Misc :
Quant Time: Nov 1 15:09 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNHO.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 12:46:48 1994
Response via : Single Level Calibration



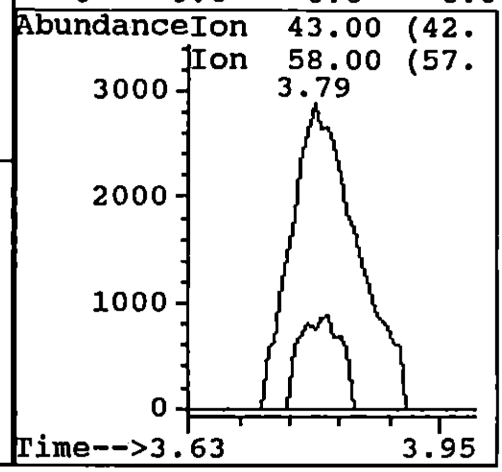
000030

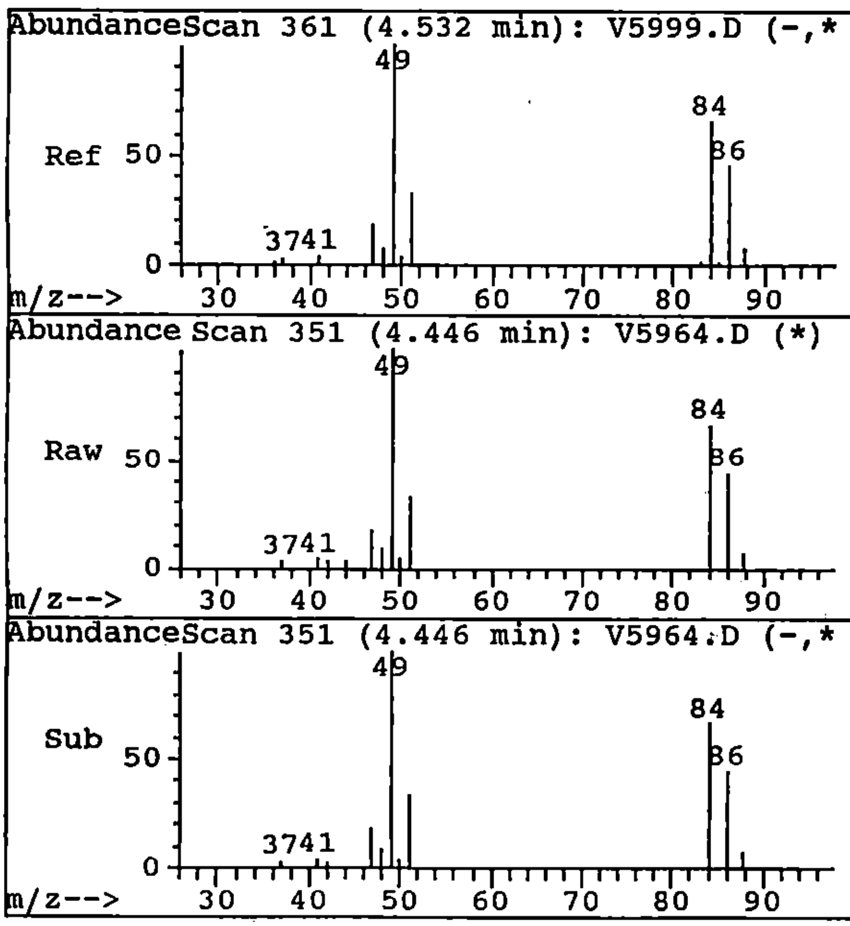


#7
Acetone
Concen: 14.05 ug/L
RT: 3.79 min Scan# 272
Delta R.T. -0.00 min
Lab File: V5964.D
Acq: 19 Oct 94 7:43 pm

Tgt Ion:43 Resp: 16690

Ion	Ratio	Lower	Upper
43	100		
58	26.4	9.4	49.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

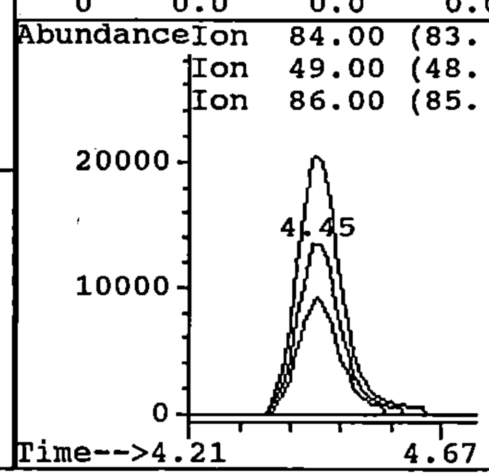




#9
Methylene Chloride
Concen: 14.47 ug/L
RT: 4.45 min Scan# 351
Delta R.T. 0.01 min
Lab File: V5964.D
Acq: 19 Oct 94 7:43 pm

Tgt Ion:84 Resp: 74345

Ion	Ratio	Lower	Upper
84	100		
49	151.5	93.5	193.5
86	67.1	33.7	93.7
0	0.0	0.0	0.0



000031

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\V5964.D
Acq Time : 19 Oct 94 7:43 pm
Sample : 33274-4376
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Library : nbs54k.l

No Library Search Compounds Detected

000032

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: Location: 100 COMMERCIAL Group:

Matrix: (soil/water) WATER Lab Sample ID: O33275

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V5963.D

Level: (low/med) Date Received: 10/17/94

% Moisture: not dec. 100 Date Analyzed: 10/19/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U

000033

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

TRIP BLANK

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Project No. 4376   Site: ____   Location: 100 COMMERCIAL   Group: ____

Matrix: (soil/water) WATER   Lab Sample ID: O33275

Sample wt/vol: 5.0 (g/mL) ML   Lab File ID: V5963.D

Level: (low/med) ____   Date Received: 10/17/94

% Moisture: not dec. 100   Date Analyzed: 10/19/94

GC Column: DB-624   ID: 0.53 (mm)   Dilution Factor: 1.0

Soil Extract Volume: ____ (uL)   Soil Aliquot Volume: ____ (uL)

Number TICs found: 0   Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
3.				
4.				
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25.				
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30.				

000034

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5963.D
Acq Time : 19 Oct 94 6:53 pm
Sample : 33275-4376
Misc :
Quant Time: Oct 21 12:26 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Last Update : Fri Oct 21 12:26:15 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.06	128	247593	50.00 ug/L	0.00
16) 1,4-Difluorobenzene	12.20	114	961662	50.00 ug/L	0.00
29) Chlorobenzene-d5	22.65	117	820148	50.00 ug/L	0.00
System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.20	65	406352	44.21 ug/L	
31) Toluene-d8	17.63	98	841606	45.51 ug/L	
40) Bromofluorobenzene	26.81	95	636763	43.84 ug/L	
Target Compounds					Qvalue

000035

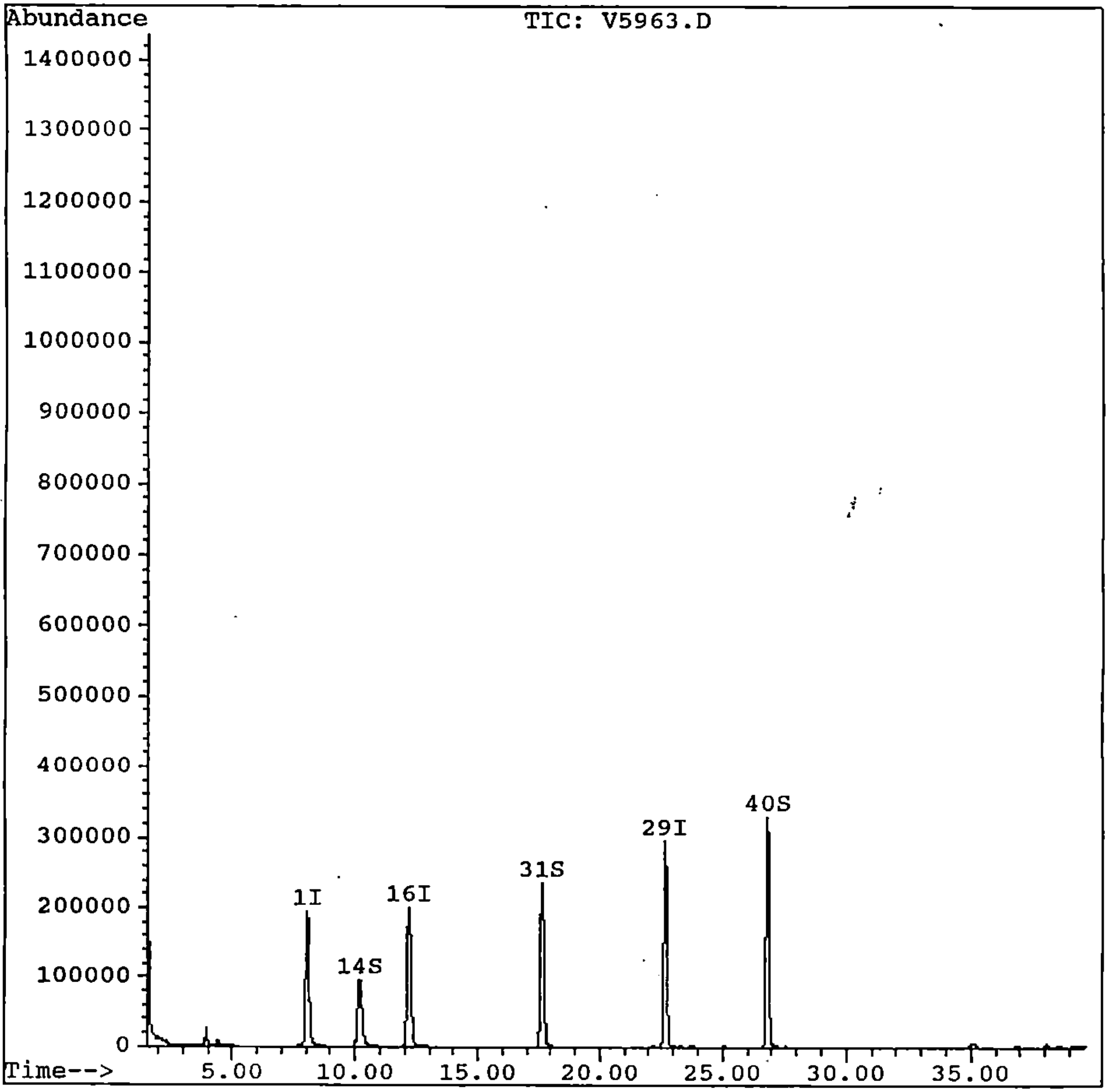
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5963.D
Acq Time : 19 Oct 94 6:53 pm
Sample : 33275-4376
Misc :
Quant Time: Oct 21 12:26 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Last Update : Fri Oct 21 12:26:15 1994
Response via : Single Level Calibration



006036

Library Search Compound Report

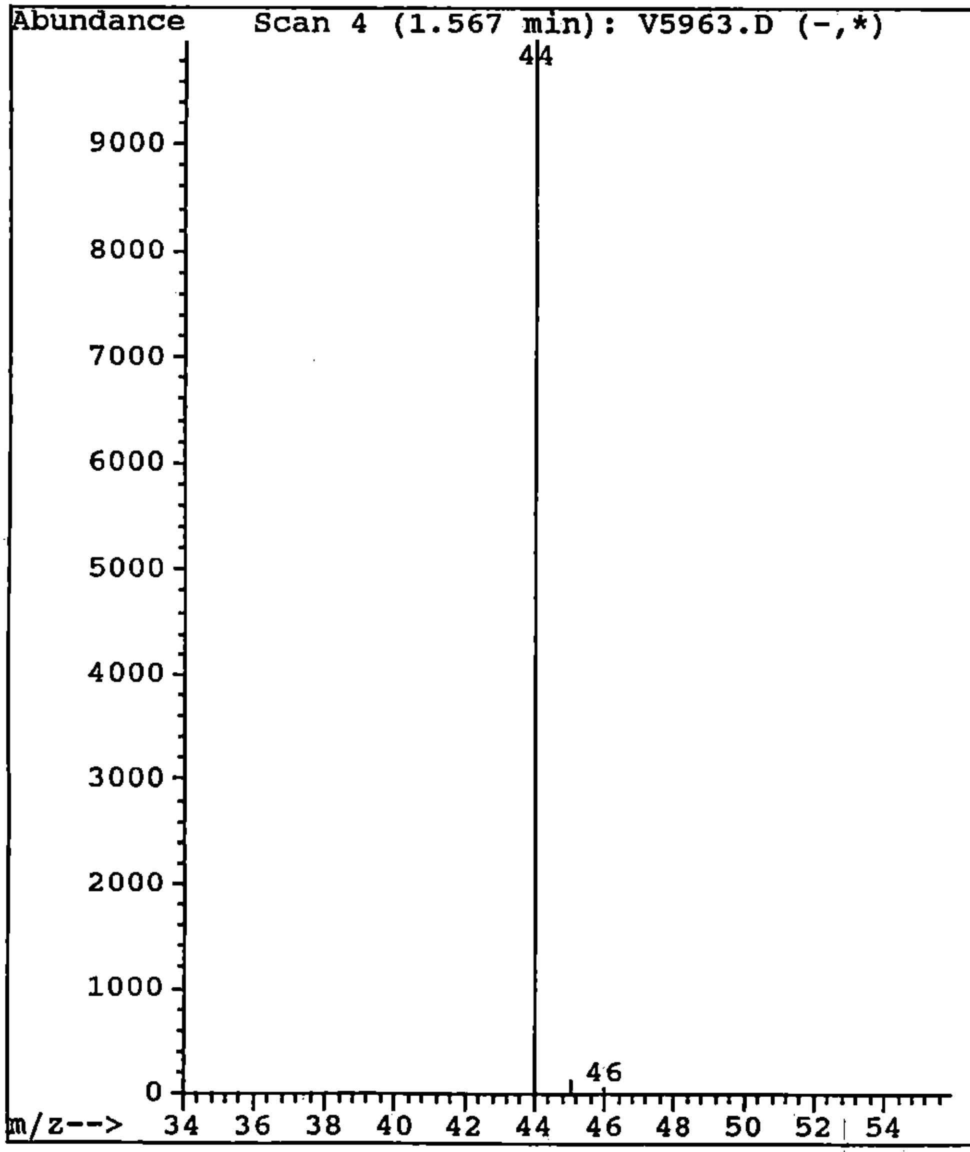
Data File : C:\HPCHEM\1\DATA\V5963.D
Acq Time : 19 Oct 94 6:53 pm
Sample : 33275-4376
Misc :

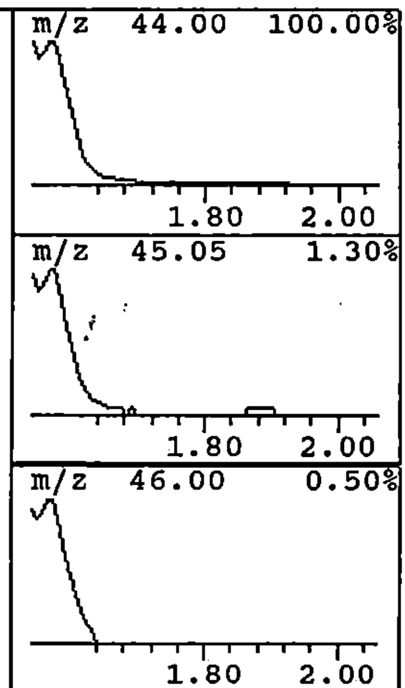
Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
1.57	83.37 ug/L	3052150	Bromochloromethane	8.06

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	~~Unknown~~ CO_2 10/21	0	000000-00-0	0





000037

(c)

Volatiles Data

Standards Data
(All Instruments)

000038

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Lab Code: 4376   Case No.: ____   SAS No.: CIAL ST   SDG No.: ____

Instrument ID: VOA-1   Calibration Date(s): 9/12/94   9/12/94

Heated Purge: (Y/N) Y   Calibration Times: 1146   1509

GC Column: DB-624   ID: 0.53 (mm)

Lab File ID: RRF10 = V5710.D   RRF20 = V5713.D
RRF50 = V5709.D   RRF100 = V5712.D   RRF200 = V5711.D

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Chloromethane		0.883	0.810	0.927	0.825	0.849	0.859	5.5	
Bromomethane	*	0.593	0.595	0.511	0.483	0.435	0.523	13.4	*
Vinyl Chloride	*	1.001	0.961	1.070	0.990	0.508	0.906	25.0	*
Chloroethane		0.344	0.334	0.313	0.292	0.153	0.287	27.0	
Methylene Chloride		1.974	1.601	1.525	1.357	1.277	1.547	17.5	
Acetone		0.559	0.468	0.461	0.386	0.352	0.445	18.1	
Carbon Disulfide		2.555	2.577	2.747	2.602	2.455	2.587	4.1	
1,1-Dichloroethene	*	1.728	1.740	1.814	1.668	1.495	1.689	7.1	*
1,1-Dichloroethane	*	2.735	2.730	2.759	2.610	2.496	2.666	4.2	*
1,2-Dichloroethene (total)		3.518	3.522	3.580	3.402	3.330	3.470	3.1	
Chloroform	*	3.088	2.983	2.945	2.742	2.736	2.899	5.3	*
1,2-Dichloroethane	*	0.928	1.861	1.845	1.767	1.757	1.631	24.3	*
2-Butanone		0.264	0.234	0.240	0.219	0.203	0.232	9.8	
1,1,1-Trichloroethane	*	0.545	0.553	0.506	0.491	0.464	0.512	7.3	*
Carbon Tetrachloride	*	0.574	0.596	0.568	0.555	0.521	0.563	4.9	*
Bromodichloromethane	*	0.756	0.754	0.666	0.638	0.572	0.677	11.6	*
1,2-Dichloropropane		0.524	0.522	0.445	0.431	0.398	0.464	12.2	
cis-1,3-Dichloropropene	*	0.587	0.577	0.512	0.496	0.459	0.526	10.4	*
Trichloroethene	*	0.513	0.516	0.438	0.435	0.415	0.463	10.2	*
Dibromochloromethane	*	0.864	0.874	0.734	0.713	0.664	0.770	12.2	*
1,1,2-Trichloroethane	*	0.534	0.526	0.443	0.419	0.381	0.461	14.6	*
Benzene	*	0.909	0.875	0.790	0.785	0.737	0.819	8.6	*
trans-1,3-Dichloropropene	*	0.415	0.417	0.361	0.353	0.330	0.375	10.4	*
Bromoform	*	0.753	0.755	0.648	0.622	0.593	0.674	11.2	*
4-Methyl-2-Pentanone		0.823	0.776	0.674	0.613	0.568	0.691	15.6	
2-Hexanone		0.556	0.527	0.489	0.445	0.414	0.486	11.9	
Tetrachloroethene	*	0.736	0.775	0.618	0.608	0.560	0.659	13.9	*
1,1,2,2-Tetrachloroethane	*	1.337	1.297	1.137	1.029	0.896	1.139	16.1	*
Toluene	*	1.345	1.339	1.060	1.069	0.996	1.162	14.4	*
Chlorobenzene	*	1.293	1.303	1.063	1.036	0.985	1.136	13.3	*
Ethylbenzene	*	1.549	1.560	1.283	1.276	1.224	1.378	11.8	*
Styrene	*	0.971	0.956	0.862	0.833	0.827	0.890	7.7	*
Xylenes (total)	*	1.746	1.720	1.495	1.445	1.427	1.566	9.8	*
Toluene-d8		1.310	1.392	1.095	1.097	1.030	1.185	13.2	
Bromofluorobenzene	*	1.030	0.979	0.840	0.791	0.788	0.886	12.7	*
1,2-Dichloroethane-d4		1.544	1.595	1.496	1.566	1.575	1.555	2.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: RCIAL ST Group: ______

Instrument ID: VOA-1 Calibration Date(s): 10/19/94 10/19/94

Heated Purge: (Y/N) ___ Calibration Times: 1127 1446

GC Column: DB-624 ID: 0.53 (mm)

Lab File ID: RRF10 = V5956.D RRF20 = V5959.D
RRF50 = V5955.D RRF100 = V5958.D RRF200 = V5957.D

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	RRF (average)	% RSD	
Chloromethane		0.744	0.576	0.744	0.620	0.651	0.667	11.3	
Bromomethane	*	0.516	0.451	0.431	0.386	0.377	0.432	13.0	*
Vinyl Chloride	*	0.692	0.568	0.675	0.619	0.656	0.642	7.7	*
Chloroethane		0.311	0.213	0.246	0.211	0.208	0.238	18.4	
Methylene Chloride		1.620	1.288	1.153	1.067	1.028	1.231	19.4	
Acetone		0.403	0.322	0.267	0.263	0.228	0.297	23.0	
Carbon Disulfide		2.498	1.823	2.074	1.852	1.884	2.026	13.9	
1,1-Dichloroethene	*	1.519	1.372	1.348	1.342	1.316	1.379	5.8	*
1,1-Dichloroethane	*	2.449	2.274	2.198	2.219	2.179	2.264	4.8	*
1,2-Dichloroethene (total)		1.535	1.430	1.390	1.393	1.391	1.428	4.4	
Chloroform	*	2.784	2.638	2.447	2.548	2.526	2.589	5.0	*
1,2-Dichloroethane	*	1.783	1.682	1.559	1.628	1.617	1.654	5.1	*
2-Butanone		0.155	0.161	0.122	0.147	0.130	0.143	11.6	
1,1,1-Trichloroethane	*	0.494	0.452	0.446	0.423	0.409	0.445	7.3	*
Carbon Tetrachloride	*	0.478	0.456	0.459	0.443	0.428	0.453	4.1	*
Bromodichloromethane	*	0.716	0.655	0.639	0.616	0.589	0.643	7.4	*
1,2-Dichloropropane		0.438	0.406	0.376	0.361	0.349	0.386	9.3	
cis-1,3-Dichloropropene	*	0.533	0.514	0.463	0.472	0.449	0.486	7.3	*
Trichloroethene	*	0.403	0.374	0.349	0.332	0.319	0.355	9.5	*
Dibromochloromethane	*	0.704	0.658	0.601	0.597	0.568	0.626	8.7	*
1,1,2-Trichloroethane	*	0.426	0.397	0.342	0.344	0.322	0.366	11.9	*
Benzene	*	0.795	0.735	0.678	0.676	0.642	0.705	8.5	*
trans-1,3-Dichloropropene	*	0.387	0.376	0.328	0.343	0.330	0.353	7.7	*
Bromoform	*	0.547	0.520	0.445	0.466	0.435	0.483	10.1	*
4-Methyl-2-Pentanone		0.570	0.553	0.383	0.438	0.380	0.465	19.7	
2-Hexanone		0.357	0.359	0.252	0.295	0.260	0.305	16.9	
Tetrachloroethene	*	0.551	0.530	0.449	0.438	0.405	0.475	13.2	*
1,1,2,2-Tetrachloroethane	*	1.028	0.974	0.721	0.788	0.716	0.845	17.3	*
Toluene	*	1.120	1.073	0.868	0.908	0.850	0.964	12.9	*
Chlorobenzene	*	0.974	0.928	0.783	0.783	0.744	0.842	12.1	*
Ethylbenzene	*	1.323	1.258	1.059	1.105	1.045	1.158	10.8	*
Styrene	*	0.839	0.768	0.713	0.723	0.696	0.748	7.7	*
Xylenes (total)	*	1.515	1.397	1.254	1.281	1.211	1.332	9.2	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: RCIAL ST Group: ______

Instrument ID: VOA-1 Calibration Date(s): 10/19/94 10/19/94

Heated Purge: (Y/N) ___ Calibration Times: 1127 1446

GC Column: DB-624 ID: 0.53 (mm)

Lab File ID: RRF10 = V5956.D RRF20 = V5959.D
RRF50 = V5955.D RRF100 = V5958.D RRF200 = V5957.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Toluene-d8	1.498	1.586	1.127	1.178	1.095	1.297	17.6
Bromofluorobenzene *	1.176	1.163	0.886	0.903	0.845	0.995	16.2 *
1,2-Dichloroethane-d4	2.213	2.404	1.856	1.987	1.914	2.075	11.0

000041

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: RCIAL ST Group: ______

Instrument ID: VOA-1 Calibration Date(s): 10/25/94 10/25/94

Heated Purge: (Y/N) Y Calibration Times: 0911 1226

GC Column: DB-624 ID: 0.53 (mm)

Lab File ID:	RRF10 = V5993.D	RRF20 = V5994.D
RRF50 = V5992.D	RRF100 = V5995.D	RRF200 = V5996.D

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Chloromethane		1.486	1.152	1.537	1.082	1.367	1.325	15.2	
Bromomethane	*	1.004	0.797	0.789	0.608	0.684	0.776	19.2	*
Vinyl Chloride	*	1.256	1.069	1.269	1.033	1.116	1.149	9.4	*
Chloroethane		0.653	0.528	0.376	0.314	0.380	0.450	30.6	
Methylene Chloride		2.465	1.625	1.342	1.169	0.967	1.514	38.6	
Acetone		0.518	0.330	0.453	0.275	0.369	0.389	25.0	
Carbon Disulfide		2.061	1.819	2.025	1.826	1.489	1.844	12.3	
1,1-Dichloroethene	*	1.687	1.514	1.588	1.500	1.195	1.497	12.3	*
1,1-Dichloroethane	*	2.682	2.404	2.424	2.355	1.983	2.370	10.6	*
1,2-Dichloroethene (total)		3.656	3.370	3.395	3.296	2.690	3.281	10.8	
Chloroform	*	3.024	2.624	2.746	2.603	2.259	2.651	10.4	*
1,2-Dichloroethane	*	1.836	1.671	1.665	1.635	1.451	1.652	8.3	*
2-Butanone		0.157	0.159	0.200	0.143	0.169	0.166	13.0	
1,1,1-Trichloroethane	*	0.547	0.463	0.473	0.418	0.365	0.453	15.0	*
Carbon Tetrachloride	*	0.521	0.448	0.489	0.420	0.369	0.449	13.2	*
Bromodichloromethane	*	0.737	0.620	0.619	0.561	0.512	0.610	13.8	*
1,2-Dichloropropane		0.455	0.381	0.364	0.339	0.303	0.368	15.3	
cis-1,3-Dichloropropene	*	0.573	0.476	0.484	0.436	0.402	0.474	13.5	*
Trichloroethene	*	0.443	0.359	0.383	0.324	0.312	0.364	14.3	*
Dibromochloromethane	*	0.703	0.571	0.612	0.524	0.471	0.576	15.3	*
1,1,2-Trichloroethane	*	0.451	0.358	0.356	0.312	0.288	0.353	17.7	*
Benzene	*	0.897	0.724	0.723	0.675	0.589	0.722	15.6	*
trans-1,3-Dichloropropene	*	0.398	0.330	0.345	0.311	0.293	0.335	11.9	*
Bromoform	*	0.586	0.462	0.511	0.413	0.383	0.471	17.1	*
4-Methyl-2-Pentanone		0.739	0.484	0.502	0.401	0.465	0.518	24.9	
2-Hexanone		0.454	0.317	0.348	0.276	0.339	0.347	19.1	
Tetrachloroethene	*	0.521	0.487	0.513	0.406	0.358	0.457	15.7	*
1,1,2,2-Tetrachloroethane	*	0.764	0.751	0.804	0.691	0.572	0.717	12.6	*
Toluene	*	1.300	0.987	0.987	0.851	0.789	0.983	20.1	*
Chlorobenzene	*	1.027	0.819	0.813	0.718	0.637	0.803	18.2	*
Ethylbenzene	*	1.474	1.173	1.179	1.034	0.950	1.162	17.2	*
Styrene	*	0.837	0.698	0.716	0.642	0.566	0.692	14.4	*
Xylenes (total)	*	1.695	1.364	1.379	1.208	1.070	1.343	17.9	*
Toluene-d8		1.452	1.171	1.070	1.023	0.974	1.138	16.7	
Bromofluorobenzene	*	1.152	0.926	0.818	0.783	0.723	0.880	19.2	*
1,2-Dichloroethane-d4		1.003	1.813	1.627	1.816	1.700	1.592	21.3	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Response Factor Report VOA

```
Method        : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title         : VOA  Standards for 5 point calibration
Last Update   : Tue Nov 01 14:09:08 1994
Response via  : Initial Calibration
```

Calibration Files

50	=V5709.D	10	=V5710.D	200	=V5711.D
100	=V5712.D	20	=V5713.D		

		Compound	50	10	200	100	20	Avg	%RSD
1)	I	Bromochloromethane	ISTD						
2)	P	Chloromethane	0.926	0.883	0.849	0.825	0.810	0.859	5.48#
3)	c	Vinyl Chloride	1.070	1.001	0.507	0.990	0.961	0.906	24.98
4)		Bromomethane	0.511	0.593	0.435	0.483	0.595	0.523	13.41
5)		Chloroethane	0.313	0.344	0.153	0.292	0.334	0.287	26.98
6)	C	1,1-Dichloroethene	1.813	1.728	1.495	1.668	1.740	1.689	7.11
7)		Acetone	0.461	0.559	0.352	0.386	0.468	0.445	18.08
8)		Carbon Disulfide	2.747	2.555	2.454	2.602	2.577	2.587	4.07
9)		Methylene Chloride	1.525	1.974	1.277	1.357	1.601	1.547	17.55
10)		trans-1,2-Dichloroethene	2.015	1.966	1.853	1.890	1.934	1.931	3.28
11)	P	1,1-Dichloroethane	2.759	2.735	2.496	2.609	2.730	2.666	4.18#
12)	I	cis-1,2-Dichloroethene	1.565	1.552	1.477	1.512	1.588	1.539	2.88
13)	C	Chloroform	2.945	3.087	2.736	2.742	2.983	2.899	5.35
14)	S	1,2-Dichloroethane-d4	1.496	1.544	1.575	1.566	1.595	1.555	2.42
15)		1,2-Dichloroethane	1.845	0.928	1.757	1.767	1.861	1.631	24.28
16)	I	1,4-Difluorobenzene	ISTD						
17)		2-Butanone	0.240	0.264	0.203	0.219	0.234	0.232	9.83
18)		1,1,1-Trichloroethane	0.506	0.545	0.464	0.491	0.553	0.512	7.29
19)		Carbon Tetrachloride	0.568	0.574	0.521	0.555	0.595	0.563	4.91
20)	M	Benzene	0.790	0.908	0.737	0.785	0.875	0.819	8.59
21)	M	Trichloroethene	0.438	0.513	0.415	0.435	0.516	0.463	10.24
22)	C	1,2-Dichloropropane	0.445	0.524	0.398	0.431	0.522	0.464	12.17
23)		Bromodichloromethane	0.666	0.756	0.572	0.638	0.754	0.677	11.65
24)		cis-1,3-Dichloropropene	0.512	0.587	0.459	0.496	0.577	0.526	10.35
25)		trans-1,3-Dichloropropene	0.361	0.415	0.329	0.353	0.417	0.375	10.41
26)		1,1,2-Trichloroethane	0.443	0.534	0.381	0.419	0.526	0.461	14.61
27)		Dibromochloromethane	0.734	0.864	0.664	0.713	0.874	0.770	12.23
28)	P	Bromoform	0.648	0.753	0.593	0.622	0.755	0.674	11.20#
29)	I	Chlorobenzene-d5	ISTD						
30)		4-Methyl-2-Pentanone	0.674	0.823	0.568	0.613	0.776	0.691	15.57
31)	S	Toluene-d8	1.095	1.310	1.030	1.097	1.392	1.185	13.23
32)	C	Toluene	1.060	1.345	0.996	1.069	1.339	1.162	14.39
33)		Tetrachloroethene	0.618	0.736	0.560	0.608	0.775	0.659	13.88
34)		2-Hexanone	0.489	0.556	0.413	0.445	0.527	0.486	11.94
35)	P	Chlorobenzene	1.063	1.293	0.985	1.036	1.303	1.136	13.26#
36)	C	Ethylbenzene	1.283	1.549	1.224	1.276	1.560	1.378	11.79
37)		m+ p-Xylenes	0.503	0.586	0.476	0.485	0.568	0.523	9.53
38)		o-xylene	0.992	1.160	0.951	0.960	1.152	1.043	9.99
39)		Styrene	0.861	0.971	0.827	0.833	0.956	0.890	7.73
40)	S	Bromofluorobenzene	0.840	1.030	0.788	0.791	0.979	0.886	12.66
41)	P	1,1,2,2-Tetrachloroethane	1.137	1.337	0.896	1.029	1.297	1.139	16.14#

(#) = Out of Range

000043

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5709.D
Acq Time : 12 Sep 94 11:46 am
Sample : 50PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:02 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:09:08 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.14	128	243442	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.29	114	897466	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.71	117	711256	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.28	65	364292	50.00	ug/L	
31) Toluene-d8	17.71	98	778977	50.00	ug/L	
40) Bromofluorobenzene	26.87	95	597301	50.00	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.96	50	225546	50.00	ug/L	100
3) Vinyl Chloride	2.07	62	260487	50.00	ug/L	100
4) Bromomethane	2.46	94	124296	50.00	ug/L	100
5) Chloroethane	2.59	64	76111	50.00	ug/L	100
6) 1,1-Dichloroethene	3.66	61	441480	50.00	ug/L	100
7) Acetone	3.87	43	112293	50.00	ug/L	100
8) Carbon Disulfide	3.96	76	668686	50.00	ug/L	100
9) Methylene Chloride	4.47	84	371291	50.00	ug/L	100
10) trans-1,2-Dichloroethene	4.99	61	490462	50.00	ug/L	100
11) 1,1-Dichloroethane	5.89	63	671617	50.00	ug/L	100
12) cis-1,2-Dichloroethene	7.42	96	381055	50.00	ug/L	100
13) Chloroform	8.51	83	716986	50.00	ug/L	100
15) 1,2-Dichloroethane	10.59	62	449116	50.00	ug/L	100
17) 2-Butanone	7.63	43	215614	50.00	ug/L	100
18) 1,1,1-Trichloroethane	9.01	97	453952	50.00	ug/L	100
19) Carbon Tetrachloride	9.62	117	509794	50.00	ug/L	100
20) Benzene	10.45	78	709322	50.00	ug/L	100
21) Trichloroethene	13.16	130	392668	50.00	ug/L	100
22) 1,2-Dichloropropane	13.94	63	399179	50.00	ug/L	100
23) Bromodichloromethane	15.12	83	598094	50.00	ug/L	100
24) cis-1,3-Dichloropropene	16.82	75	459617	50.00	ug/L	100
25) trans-1,3-Dichloropropene	18.93	75	323577	50.00	ug/L	100
26) 1,1,2-Trichloroethane	19.48	97	397295	50.00	ug/L	100
27) Dibromochloromethane	20.76	129	658945	50.00	ug/L	100
28) Bromoform	25.64	173	581702	50.00	ug/L	100
30) 4-Methyl-2-Pentanone	17.58	43	479246	50.00	ug/L	100
32) Toluene	17.93	91	753648	50.00	ug/L	100
33) Tetrachloroethene	19.85	166	439600	50.00	ug/L	100
34) 2-Hexanone	20.64	43	347725	50.00	ug/L	100
35) Chlorobenzene	22.81	112	756176	50.00	ug/L	100
36) Ethylbenzene	23.35	91	912555	50.00	ug/L	100
37) m+ p-Xylenes	23.79	106	358047	50.00	ug/L	100
38) o-xylene	25.11	91	705768	50.00	ug/L	100
39) Styrene	25.18	104	612722	50.00	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5709.D
Acq Time : 12 Sep 94 11:46 am
Sample : 50PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:02 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:09:08 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.60	83	808893	50.00 ug/L	100

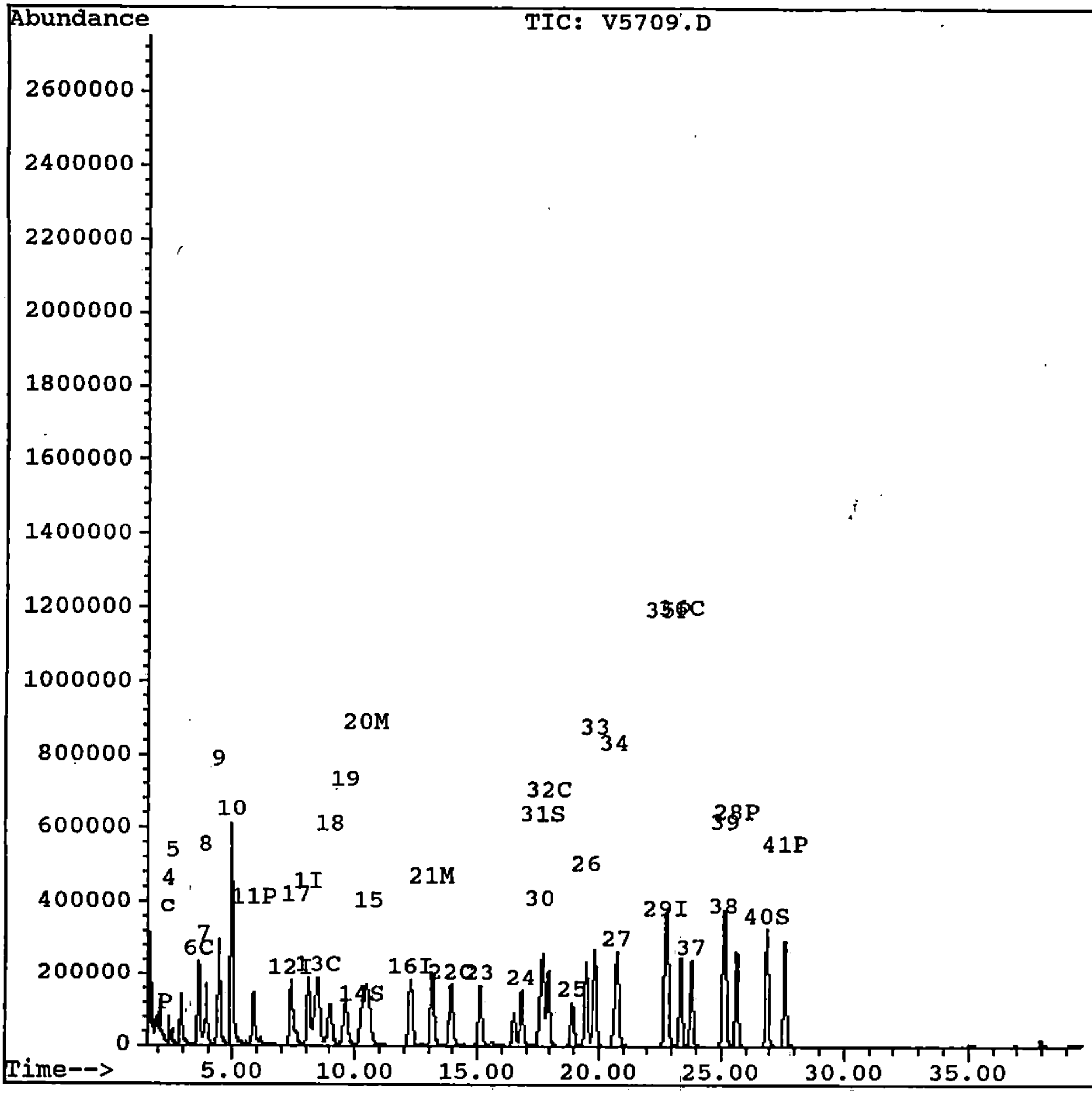
000045

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5709.D
Acq Time : 12 Sep 94 11:46 am
Sample : 50PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:02 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:09:08 1994
Response via : Single Level Calibration



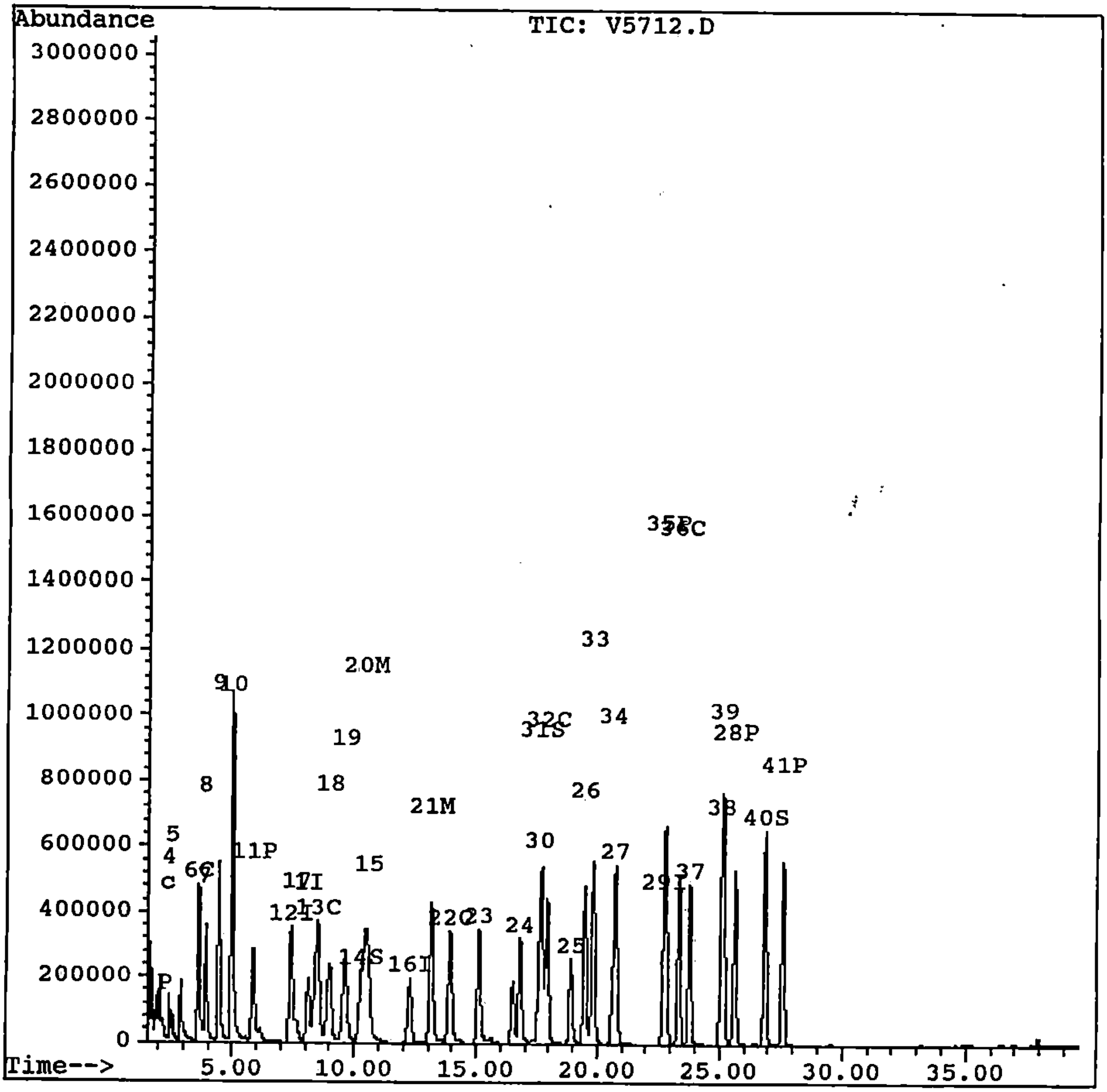
000046

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5712.D
Acq Time : 12 Sep 94 2:21 pm
Sample : 100PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:06 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration



000055

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5710.D
Acq Time : 12 Sep 94 12:33 pm
Sample : 10PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:04 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.12	128	242415	50.00	ug/L	-0.01
16) 1,4-Difluorobenzene	12.27	114	860849	50.00	ug/L	-0.02
29) Chlorobenzene-d5	22.69	117	687040	50.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.26	65	74873	10.32	ug/L	
31) Toluene-d8	17.68	98	180041	11.96	ug/L	
40) Bromofluorobenzene	26.86	95	141574	12.27	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.97	50	42832	9.54	ug/L	99
3) Vinyl Chloride	2.07	62	48522	9.35	ug/L	97
4) Bromomethane	2.46	94	28770	11.62	ug/L	96
5) Chloroethane	2.59	64	16690	11.01	ug/L	97
6) 1,1-Dichloroethene	3.67	61	83759	9.53	ug/L	99
7) Acetone	3.82	43	27082	12.11	ug/L	94
8) Carbon Disulfide	3.96	76	123894	9.30	ug/L	90
9) Methylene Chloride	4.47	84	95721	12.94	ug/L	99
10) trans-1,2-Dichloroethene	4.99	61	95295	9.76	ug/L	96
11) 1,1-Dichloroethane	5.89	63	132606	9.91	ug/L	100
12) cis-1,2-Dichloroethene	7.42	96	75229	9.91	ug/L	97
13) Chloroform	8.51	83	149689	10.48	ug/L	100
15) 1,2-Dichloroethane	10.57	62	44975	5.03	ug/L	92
17) 2-Butanone	7.60	43	45408	10.98	ug/L	98
18) 1,1,1-Trichloroethane	9.02	97	93749	10.77	ug/L	99
19) Carbon Tetrachloride	9.59	117	98869	10.11	ug/L	96
20) Benzene	10.44	78	156413	11.49	ug/L	98
21) Trichloroethene	13.17	130	88356	11.73	ug/L	92
22) 1,2-Dichloropropane	13.93	63	90177	11.78	ug/L	98
23) Bromodichloromethane	15.11	83	130142	11.34	ug/L	97
24) cis-1,3-Dichloropropene	16.81	75	101064	11.46	ug/L	99
25) trans-1,3-Dichloropropene	18.90	75	71452	11.51	ug/L	98
26) 1,1,2-Trichloroethane	19.48	97	91997	12.07	ug/L	99
27) Dibromochloromethane	20.74	129	148818	11.77	ug/L	99
28) Bromoform	25.63	173	129699	11.62	ug/L	98
30) 4-Methyl-2-Pentanone	17.57	43	113123	12.22	ug/L	100
32) Toluene	17.92	91	184860	12.70	ug/L	98
33) Tetrachloroethene	19.82	166	101080	11.90	ug/L	98
34) 2-Hexanone	20.63	43	76358	11.37	ug/L	94
35) Chlorobenzene	22.79	112	177600	12.16	ug/L	97
36) Ethylbenzene	23.33	91	212803	12.07	ug/L	100
37) m+ p-Xylenes	23.77	106	80455	11.63	ug/L	98
38) o-xylene	25.09	91	159366	11.69	ug/L	100
39) Styrene	25.16	104	133458	11.27	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5710.D
Acq Time : 12 Sep 94 12:33 pm
Sample : 10PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:04 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.60	83	183663	11.75 ug/L	100

000049

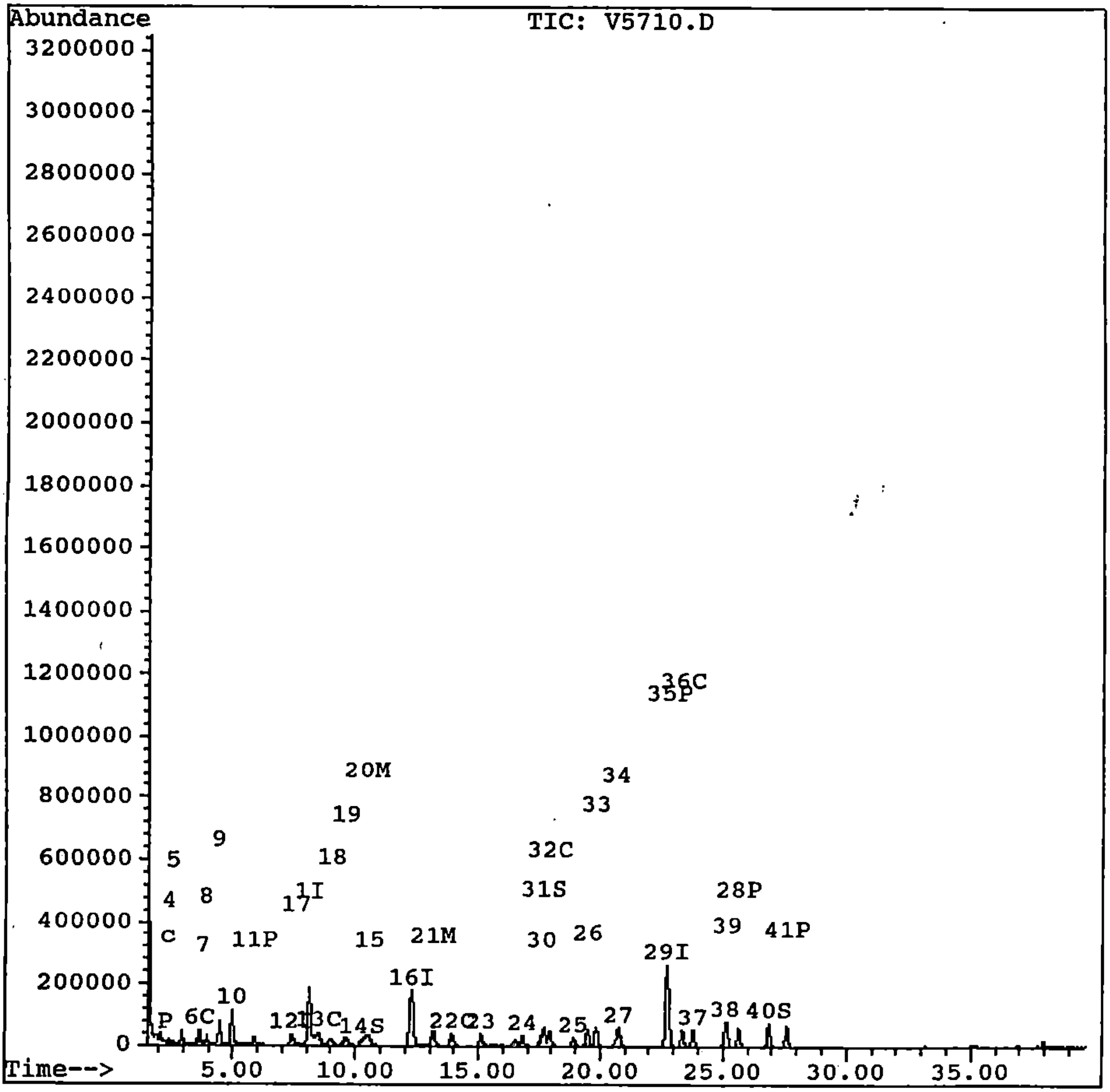
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5710.D
Acq Time : 12 Sep 94 12:33 pm
Sample : 10PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:04 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration



000043

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5711.D
Acq Time : 12 Sep 94 1:34 pm
Sample : 200PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:05 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.16	128	261792	50.00	ug/L	0.02
16) 1,4-Difluorobenzene	12.30	114	1027562	50.00	ug/L	0.01
29) Chlorobenzene-d5	22.71	117	800954	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.32	65	1649253	210.50	ug/L	
31) Toluene-d8	17.71	98	3299594	188.07	ug/L	
40) Bromofluorobenzene	26.86	95	2524486	187.66	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.97	50	889164	183.30	ug/L	99
3) Vinyl Chloride	2.06	62	531401	94.85	ug/L	97
4) Bromomethane	2.45	94	455034	170.21	ug/L	99
5) Chloroethane	2.58	64	160626	98.12	ug/L	100
6) 1,1-Dichloroethene	3.65	61	1565306	164.85	ug/L	99
7) Acetone	4.02	43	368243	152.47	ug/L	95
8) Carbon Disulfide	3.94	76	2570232	178.71	ug/L	99
9) Methylene Chloride	4.50	84	1337553	167.50	ug/L	98
10) trans-1,2-Dichloroethene	5.00	61	1939970	183.91	ug/L	98
11) 1,1-Dichloroethane	5.91	63	2613790	180.95	ug/L	99
12) cis-1,2-Dichloroethene	7.45	96	1546517	188.70	ug/L	98
13) Chloroform	8.56	83	2864542	185.76	ug/L	99
15) 1,2-Dichloroethane	10.63	62	1839375	190.42	ug/L	99
17) 2-Butanone	7.74	43	835919	169.30	ug/L	99
18) 1,1,1-Trichloroethane	9.02	97	1905830	183.34	ug/L	100
19) Carbon Tetrachloride	9.62	117	2141033	183.40	ug/L	97
20) Benzene	10.47	78	3029208	186.49	ug/L	98
21) Trichloroethene	13.16	130	1705405	189.66	ug/L	98
22) 1,2-Dichloropropane	13.95	63	1636347	179.01	ug/L	99
23) Bromodichloromethane	15.14	83	2350611	171.63	ug/L	99
24) cis-1,3-Dichloropropene	16.83	75	1887153	179.30	ug/L	100
25) trans-1,3-Dichloropropene	18.93	75	1354313	182.78	ug/L	98
26) 1,1,2-Trichloroethane	19.49	97	1566014	172.13	ug/L	97
27) Dibromochloromethane	20.76	129	2729900	180.92	ug/L	100
28) Bromoform	25.63	173	2436919	182.94	ug/L	99
30) 4-Methyl-2-Pentanone	17.61	43	1818771	168.50	ug/L	99
32) Toluene	17.93	91	3189676	187.92	ug/L	100
33) Tetrachloroethene	19.83	166	1793459	181.14	ug/L	98
34) 2-Hexanone	20.63	43	1324771	169.16	ug/L	100
35) Chlorobenzene	22.79	112	3154250	185.21	ug/L	99
36) Ethylbenzene	23.34	91	3921542	190.80	ug/L	100
37) m+ p-Xylenes	23.78	106	1524108	189.00	ug/L	99
38) o-xylene	25.09	91	3045629	191.60	ug/L	99
39) Styrene	25.18	104	2649996	192.03	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5711.D
Acq Time : 12 Sep 94 1:34 pm
Sample : 200PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:05 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.60	83	2870980	157.59	ug/L	99

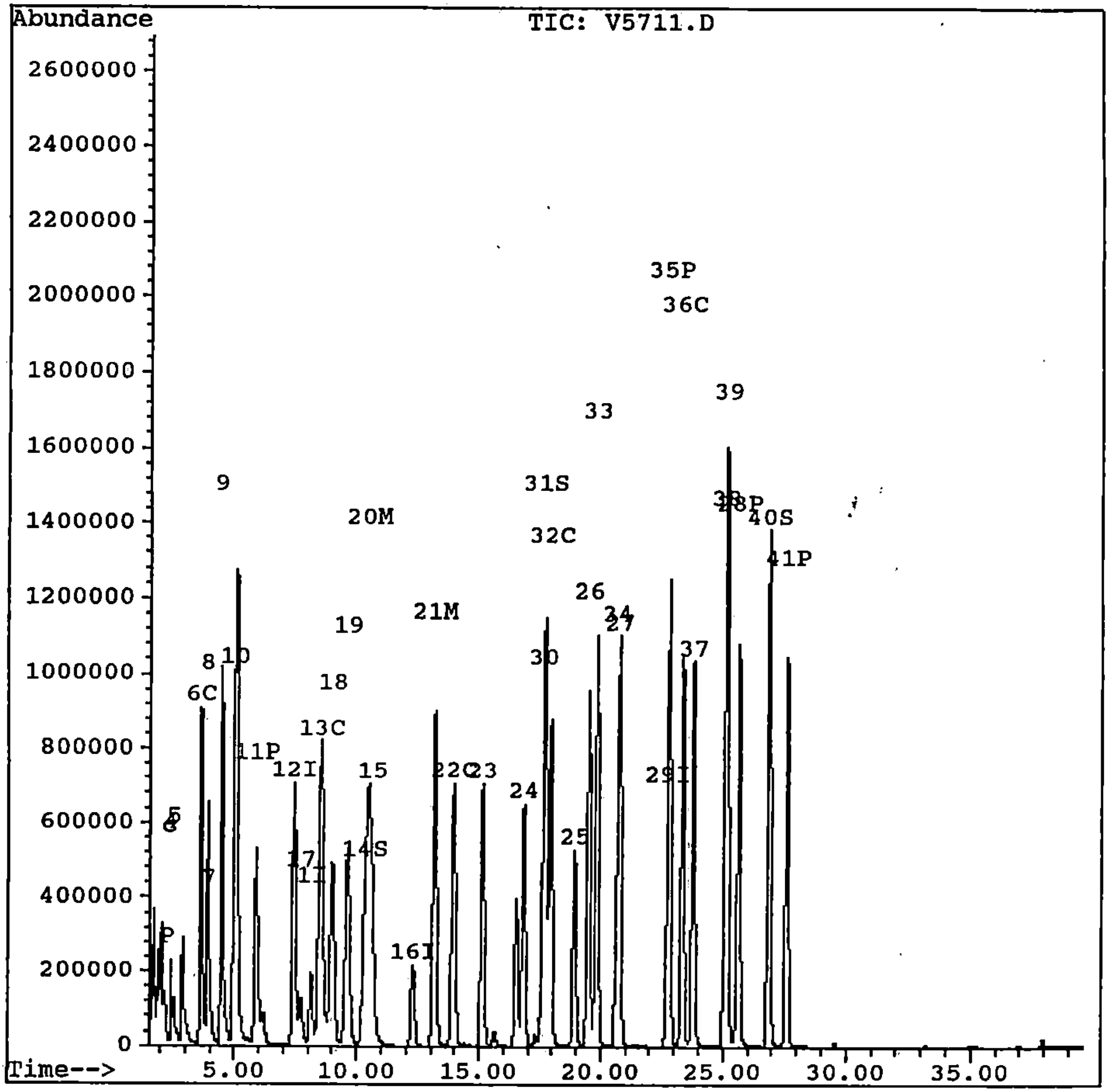
000051

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5711.D
Acq Time : 12 Sep 94 1:34 pm
Sample : 200PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:05 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration



000052

Quantitation Report

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Data File : C:\HPCHEM\1\DATA\V5712.D
Acq Time  : 12 Sep 94   2:21 pm              Operator: VP/DW
Sample    : 100PPB VOA INI STD               Inst    : VOA
Misc      :                                  Multiplr: 1.00
Quant Time: Nov  1 14:06 1994

Method        : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title         : VOA  Standards for 5 point calibration
Last Update   : Tue Nov 01 14:03:27 1994
Response via  : Single Level Calibration
```

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.11	128	257098	50.00	ug/L	-0.02
16) 1,4-Difluorobenzene	12.27	114	965825	50.00	ug/L	-0.02
29) Chlorobenzene-d5	22.70	117	753530	50.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.27	65	805314	104.66	ug/L	
31) Toluene-d8	17.70	98	1653675	100.19	ug/L	
40) Bromofluorobenzene	26.85	95	1191674	94.16	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.96	50	424089	89.02	ug/L	98
3) Vinyl Chloride	2.07	62	509142	92.54	ug/L	97
4) Bromomethane	2.46	94	248373	94.60	ug/L	98
5) Chloroethane	2.58	64	149906	93.25	ug/L	98
6) 1,1-Dichloroethene	3.65	61	857680	91.98	ug/L	99
7) Acetone	3.90	43	198437	83.66	ug/L	98
8) Carbon Disulfide	3.94	76	1338043	94.74	ug/L	99
9) Methylene Chloride	4.47	84	697939	89.00	ug/L	98
10) trans-1,2-Dichloroethene	4.99	61	971882	93.82	ug/L	97
11) 1,1-Dichloroethane	5.88	63	1341771	94.59	ug/L	100
12) cis-1,2-Dichloroethene	7.42	96	777406	96.59	ug/L	98
13) Chloroform	8.50	83	1409948	93.10	ug/L	98
15) 1,2-Dichloroethane	10.59	62	908420	95.76	ug/L	99
17) 2-Butanone	7.63	43	422081	90.95	ug/L	99
18) 1,1,1-Trichloroethane	8.99	97	948598	97.09	ug/L	98
19) Carbon Tetrachloride	9.62	117	1071516	97.65	ug/L	100
20) Benzene	10.44	78	1517008	99.37	ug/L	99
21) Trichloroethene	13.14	130	841071	99.52	ug/L	100
22) 1,2-Dichloropropane	13.93	63	832981	96.95	ug/L	98
23) Bromodichloromethane	15.12	83	1231788	95.69	ug/L	97
24) cis-1,3-Dichloropropene	16.81	75	957868	96.83	ug/L	99
25) trans-1,3-Dichloropropene	18.91	75	681639	97.87	ug/L	98
26) 1,1,2-Trichloroethane	19.47	97	809512	94.67	ug/L	97
27) Dibromochloromethane	20.75	129	1376873	97.08	ug/L	98
28) Bromoform	25.62	173	1202065	96.01	ug/L	98
30) 4-Methyl-2-Pentanone	17.58	43	923859	90.98	ug/L	99
32) Toluene	17.92	91	1610841	100.87	ug/L	100
33) Tetrachloroethene	19.82	166	916606	98.41	ug/L	98
34) 2-Hexanone	20.60	43	670305	90.98	ug/L	99
35) Chlorobenzene	22.79	112	1560568	97.40	ug/L	99
36) Ethylbenzene	23.33	91	1922546	99.43	ug/L	99
37) m+ p-Xylenes	23.78	106	731088	96.37	ug/L	99
38) o-xylene	25.08	91	1446949	96.76	ug/L	98
39) Styrene	25.17	104	1255838	96.73	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5712.D
Acq Time : 12 Sep 94 2:21 pm
Sample : 100PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:06 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.58	83	1550507	90.46 ug/L	99

000054

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5713.D
Acq Time : 12 Sep 94 3:09 pm
Sample : 20PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:07 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.11	128	243484	50.00	ug/L	-0.03
16) 1,4-Difluorobenzene	12.28	114	871719	50.00	ug/L	-0.01
29) Chlorobenzene-d5	22.71	117	685902	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.25	65	155343	21.32	ug/L	
31) Toluene-d8	17.69	98	381848	25.42	ug/L	
40) Bromofluorobenzene	26.86	95	268547	23.31	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.95	50	78847	17.48	ug/L	100
3) Vinyl Chloride	2.07	62	93635	17.97	ug/L	96
4) Bromomethane	2.46	94	57924	23.30	ug/L	97
5) Chloroethane	2.59	64	32512	21.35	ug/L	91
6) 1,1-Dichloroethene	3.66	61	169432	19.19	ug/L	98
7) Acetone	3.83	43	45578	20.29	ug/L	94
8) Carbon Disulfide	3.96	76	251011	18.77	ug/L	95
9) Methylene Chloride	4.46	84	155905	20.99	ug/L	98
10) trans-1,2-Dichloroethene	4.99	61	188324	19.20	ug/L	98
11) 1,1-Dichloroethane	5.87	63	265917	19.79	ug/L	98
12) cis-1,2-Dichloroethene	7.40	96	154672	20.29	ug/L	98
13) Chloroform	8.49	83	290546	20.26	ug/L	99
15) 1,2-Dichloroethane	10.57	62	181236	20.17	ug/L	99
17) 2-Butanone	7.59	43	81689	19.50	ug/L	98
18) 1,1,1-Trichloroethane	8.99	97	192871	21.87	ug/L	99
19) Carbon Tetrachloride	9.61	117	207635	20.97	ug/L	99
20) Benzene	10.43	78	305097	22.14	ug/L	99
21) Trichloroethene	13.14	130	179784	23.57	ug/L	98
22) 1,2-Dichloropropane	13.91	63	182127	23.49	ug/L	99
23) Bromodichloromethane	15.10	83	262994	22.64	ug/L	99
24) cis-1,3-Dichloropropene	16.81	75	201082	22.52	ug/L	100
25) trans-1,3-Dichloropropene	18.90	75	145253	23.11	ug/L	99
26) 1,1,2-Trichloroethane	19.47	97	183476	23.77	ug/L	100
27) Dibromochloromethane	20.74	129	304760	23.81	ug/L	99
28) Bromoform	25.63	173	263361	23.31	ug/L	98
30) 4-Methyl-2-Pentanone	17.57	43	212807	23.02	ug/L	98
32) Toluene	17.93	91	367411	25.28	ug/L	99
33) Tetrachloroethene	19.83	166	212713	25.09	ug/L	98
34) 2-Hexanone	20.62	43	144478	21.54	ug/L	100
35) Chlorobenzene	22.79	112	357541	24.52	ug/L	99
36) Ethylbenzene	23.34	91	428079	24.32	ug/L	99
37) m+ p-Xylenes	23.78	106	155762	22.56	ug/L	99
38) o-xylene	25.09	91	315971	23.21	ug/L	100
39) Styrene	25.17	104	262243	22.19	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5713.D
Acq Time : 12 Sep 94 3:09 pm
Sample : 20PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:07 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.60	83	355910	22.81 ug/L	100

000057

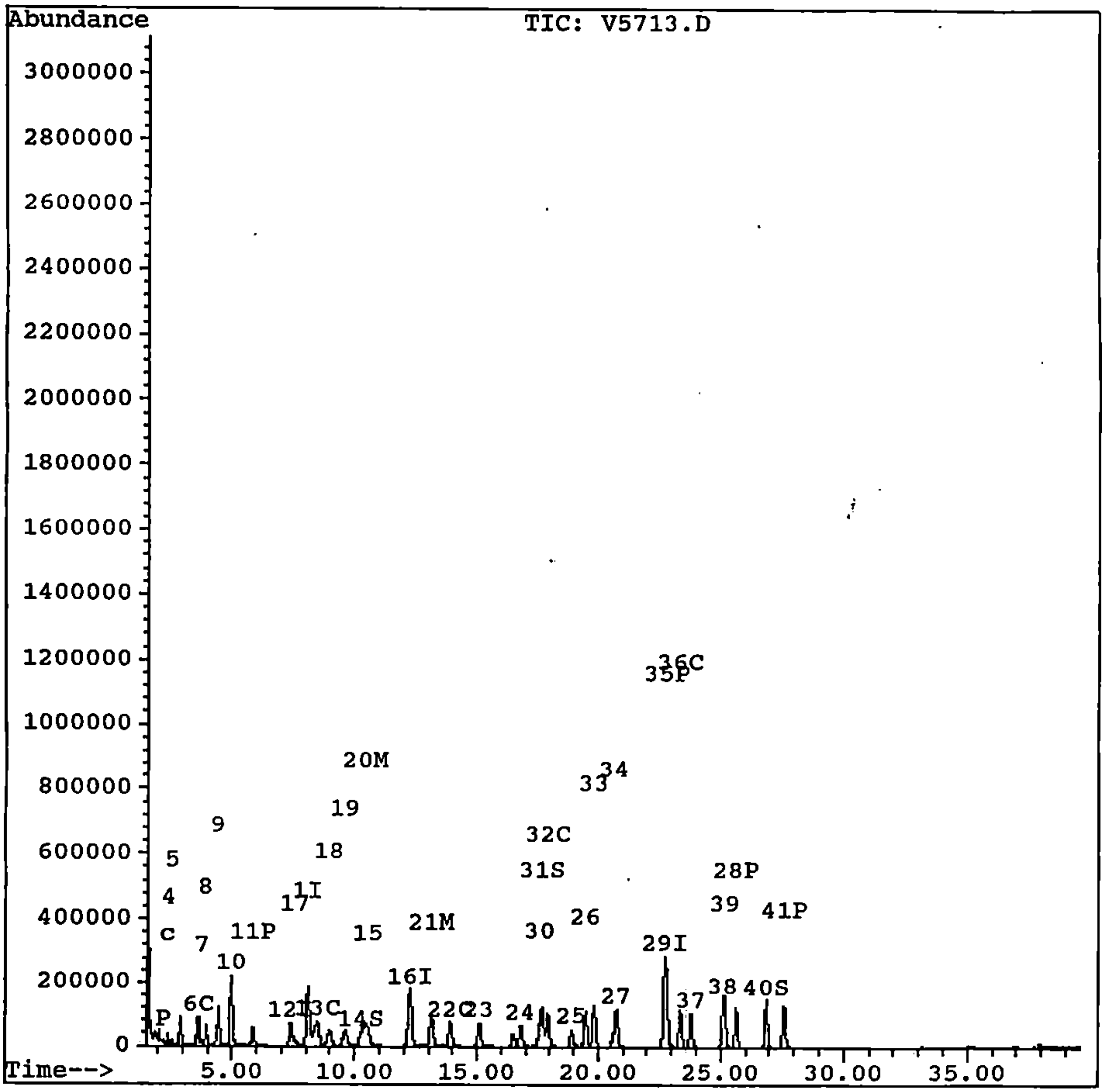
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5713.D
Acq Time : 12 Sep 94 3:09 pm
Sample : 20PPB VOA INI STD
Misc :
Quant Time: Nov 1 14:07 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:03:27 1994
Response via : Single Level Calibration



000058

Response Factor Report VOA

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Initial Calibration

Calibration Files
10 =V5956.D 20 =V5959.D 50 =V5955.D
100 =V5958.D 200 =V5957.D

		Compound	10	20	50	100	200	Avg	%RSD
1)	I	Bromochloromethane	------------	ISTD	------------				
2)	P	Chloromethane	0.744	0.576	0.744	0.620	0.651	0.667	11.27#
3)	c	Vinyl Chloride	0.692	0.568	0.675	0.619	0.656	0.642	7.69
4)		Bromomethane	0.516	0.451	0.431	0.386	0.377	0.432	12.99
5)		Chloroethane	0.311	0.213	0.246	0.211	0.208	0.238	18.31
6)	C	1,1-Dichloroethene	1.519	1.372	1.348	1.342	1.316	1.379	5.84
7)		Acetone	0.403	0.322	0.267	0.263	0.228	0.297	23.00
8)		Carbon Disulfide	2.498	1.823	2.074	1.852	1.884	2.026	13.88
9)		Methylene Chloride	1.620	1.288	1.153	1.067	1.028	1.231	19.43
10)		trans-1,2-Dichloroethene	1.811	1.614	1.627	1.578	1.625	1.651	5.55
11)	P	1,1-Dichloroethane	2.449	2.274	2.198	2.219	2.179	2.264	4.83#
12)	I	cis-1,2-Dichloroethene	1.535	1.430	1.390	1.393	1.391	1.428	4.37
13)	C	Chloroform	2.784	2.638	2.447	2.548	2.526	2.589	4.98
14)	S	1,2-Dichloroethane-d4	2.213	2.404	1.856	1.987	1.914	2.075	11.01
15)		1,2-Dichloroethane	1.783	1.682	1.559	1.628	1.617	1.654	5.10
16)	I	1,4-Difluorobenzene	------------	ISTD	------------				
17)		2-Butanone	0.155	0.161	0.122	0.147	0.130	0.143	11.59
18)		1,1,1-Trichloroethane	0.494	0.452	0.446	0.423	0.409	0.445	7.38
19)		Carbon Tetrachloride	0.478	0.456	0.459	0.443	0.428	0.453	4.09
20)	M	Benzene	0.795	0.735	0.678	0.676	0.642	0.705	8.52
21)	M	Trichloroethene	0.403	0.374	0.349	0.332	0.319	0.356	9.45
22)	C	1,2-Dichloropropane	0.438	0.406	0.376	0.361	0.349	0.386	9.33
23)		Bromodichloromethane	0.716	0.655	0.639	0.616	0.589	0.643	7.44
24)		cis-1,3-Dichloropropene	0.533	0.514	0.463	0.472	0.449	0.486	7.34
25)		trans-1,3-Dichloropropene	0.387	0.376	0.328	0.343	0.330	0.353	7.73
26)		1,1,2-Trichloroethane	0.426	0.397	0.342	0.344	0.322	0.366	11.80
27)		Dibromochloromethane	0.704	0.658	0.601	0.597	0.568	0.626	8.72
28)	P	Bromoform	0.547	0.520	0.445	0.466	0.435	0.483	10.06#
29)	I	Chlorobenzene-d5	------------	ISTD	------------				
30)		4-Methyl-2-Pentanone	0.570	0.553	0.383	0.438	0.380	0.465	19.64
31)	S	Toluene-d8	1.498	1.586	1.127	1.178	1.095	1.297	17.57
32)	C	Toluene	1.120	1.073	0.868	0.908	0.850	0.964	12.84
33)		Tetrachloroethene	0.551	0.530	0.449	0.438	0.405	0.475	13.19
34)		2-Hexanone	0.357	0.359	0.252	0.295	0.260	0.305	16.80
35)	P	Chlorobenzene	0.974	0.928	0.783	0.783	0.744	0.842	12.08#
36)	C	Ethylbenzene	1.323	1.258	1.059	1.105	1.045	1.158	10.83
37)		m+ p-Xylenes	0.484	0.450	0.408	0.408	0.388	0.427	9.09
38)		o-xylene	1.031	0.947	0.846	0.873	0.826	0.905	9.33
39)		Styrene	0.839	0.768	0.713	0.723	0.696	0.748	7.71
40)	S	Bromofluorobenzene	1.176	1.163	0.886	0.903	0.845	0.995	16.20
41)	P	1,1,2,2-Tetrachloroethane	1.028	0.974	0.721	0.788	0.716	0.845	17.28#

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V5955.D
Acq Time : 19 Oct 94 11:27 am
Sample : 50PPB VOA INI CURVE
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	Bromochloromethane	1.000	1.000	0.0	100	0.00
2	P	Chloromethane	0.667	0.744	-11.6	100	0.00
3	c	Vinyl Chloride	0.642	0.675	-5.2	100	0.00
4		Bromomethane	0.432	0.431	0.3	100	0.00
5		Chloroethane	0.238	0.246	-3.4	100	0.00
6	C	1,1-Dichloroethene	1.379	1.348	2.3	100	0.00
7		Acetone	0.297	0.267	10.1	100	0.00
8		Carbon Disulfide	2.026	2.074	-2.4	100	0.00
9		Methylene Chloride	1.231	1.153	6.3	100	0.00
10		trans-1,2-Dichloroethene	1.651	1.627	1.4	100	0.00
11	P	1,1-Dichloroethane	2.264	2.198	2.9	100	0.00
12	I	cis-1,2-Dichloroethene	1.428	1.390	2.7	100	0.00
13	C	Chloroform	2.589	2.447	5.5	100	0.00
14	S	1,2-Dichloroethane-d4	2.075	1.856	10.5	100	0.00
15		1,2-Dichloroethane	1.654	1.559	5.7	100	0.00
16	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
17		2-Butanone	0.143	0.122	14.7	100	0.00
18		1,1,1-Trichloroethane	0.445	0.446	-0.2	100	0.00
19		Carbon Tetrachloride	0.453	0.459	-1.4	100	0.00
20	M	Benzene	0.705	0.678	3.9	100	0.00
21	M	Trichloroethene	0.356	0.349	1.8	100	0.00
22	C	1,2-Dichloropropane	0.386	0.376	2.6	100	0.00
23		Bromodichloromethane	0.643	0.639	0.7	100	0.00
24		cis-1,3-Dichloropropene	0.486	0.463	4.8	100	0.00
25		trans-1,3-Dichloropropene	0.353	0.328	7.1	100	0.00
26		1,1,2-Trichloroethane	0.366	0.342	6.6	100	0.00
27		Dibromochloromethane	0.626	0.601	3.9	100	0.00
28	P	Bromoform	0.483	0.445	7.9	100	0.00
29	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
30		4-Methyl-2-Pentanone	0.465	0.383	17.7	100	0.00
31	S	Toluene-d8	1.297	1.127	13.1	100	0.00
32	C	Toluene	0.964	0.868	9.9	100	0.00
33		Tetrachloroethene	0.475	0.449	5.3	100	0.00
34		2-Hexanone	0.305	0.252	17.2	100	0.00
35	P	Chlorobenzene	0.842	0.783	7.1	100	0.00
36	C	Ethylbenzene	1.158	1.059	8.5	100	0.00
37		m+ p-Xylenes	0.427	0.408	4.5	100	0.00
38		o-xylene	0.905	0.846	6.4	100	0.00
39		Styrene	0.748	0.713	4.7	100	0.00
40	S	Bromofluorobenzene	0.995	0.886	11.0	100	0.00

(#) = Out of Range

000060

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V5955.D
Acq Time : 19 Oct 94 11:27 am
Sample : 50PPB VOA INI CURVE
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41	P	1,1,2,2-Tetrachloroethane	0.845	0.721	14.7	100	0.00

000061

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5955.D
Acq Time : 19 Oct 94 11:27 am
Sample : 50PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:18 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.06	128	244275	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.20	114	891476	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.65	117	750572	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.19	65	453441	44.48	ug/L	
31) Toluene-d8	17.64	98	846188	43.46	ug/L	
40) Bromofluorobenzene	26.81	95	664674	44.52	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.98	50	181827	55.45	ug/L	100
3) Vinyl Chloride	2.06	62	164988	52.29	ug/L	100
4) Bromomethane	2.44	94	105248	49.56	ug/L	100
5) Chloroethane	2.57	64	60068	51.40	ug/L	100
6) 1,1-Dichloroethene	3.63	61	329254	48.60	ug/L	100
7) Acetone	3.79	43	65153	44.73	ug/L	100
8) Carbon Disulfide	3.93	76	506603	20.00	ug/L m	100
9) Methylene Chloride	4.44	84	281683	46.59	ug/L	100
10) trans-1,2-Dichloroethene	4.95	61	397503	49.01	ug/L	100
11) 1,1-Dichloroethane	5.84	63	536820	48.28	ug/L	100
12) cis-1,2-Dichloroethene	7.36	96	339476	48.40	ug/L	100
13) Chloroform	8.43	83	597662	47.01	ug/L	100
15) 1,2-Dichloroethane	10.50	62	380902	46.90	ug/L	100
17) 2-Butanone	7.54	43	108702	42.65	ug/L	100
18) 1,1,1-Trichloroethane	8.93	97	397241	50.12	ug/L	100
19) Carbon Tetrachloride	9.55	117	409203	50.70	ug/L	100
20) Benzene	10.36	78	604261	48.06	ug/L	100
21) Trichloroethene	13.08	130	311478	49.12	ug/L	100
22) 1,2-Dichloropropane	13.86	63	335216	48.69	ug/L	100
23) Bromodichloromethane	15.06	83	569729	49.66	ug/L	100
24) cis-1,3-Dichloropropene	16.75	75	412690	47.61	ug/L	100
25) trans-1,3-Dichloropropene	18.86	75	291979	46.45	ug/L	100
26) 1,1,2-Trichloroethane	19.42	97	304718	46.69	ug/L	100
27) Dibromochloromethane	20.70	129	536025	48.05	ug/L	100
28) Bromoform	25.58	173	396403	46.08	ug/L	100
30) 4-Methyl-2-Pentanone	17.51	43	287114	41.16	ug/L	100
32) Toluene	17.85	91	651817	45.05	ug/L	100
33) Tetrachloroethene	19.77	166	337289	47.34	ug/L	100
34) 2-Hexanone	20.57	43	189361	41.41	ug/L	100
35) Chlorobenzene	22.75	112	587421	46.46	ug/L	100
36) Ethylbenzene	23.29	91	794934	45.73	ug/L	100
37) m+ p-Xylenes	23.73	106	306324	47.74	ug/L	100
38) o-xylene	25.04	91	635306	46.78	ug/L	100
39) Styrene	25.11	104	535115	47.67	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5955.D
Acq Time : 19 Oct 94 11:27 am
Sample : 50PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:18 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.55	83	541131	42.64	ug/L	100

000063

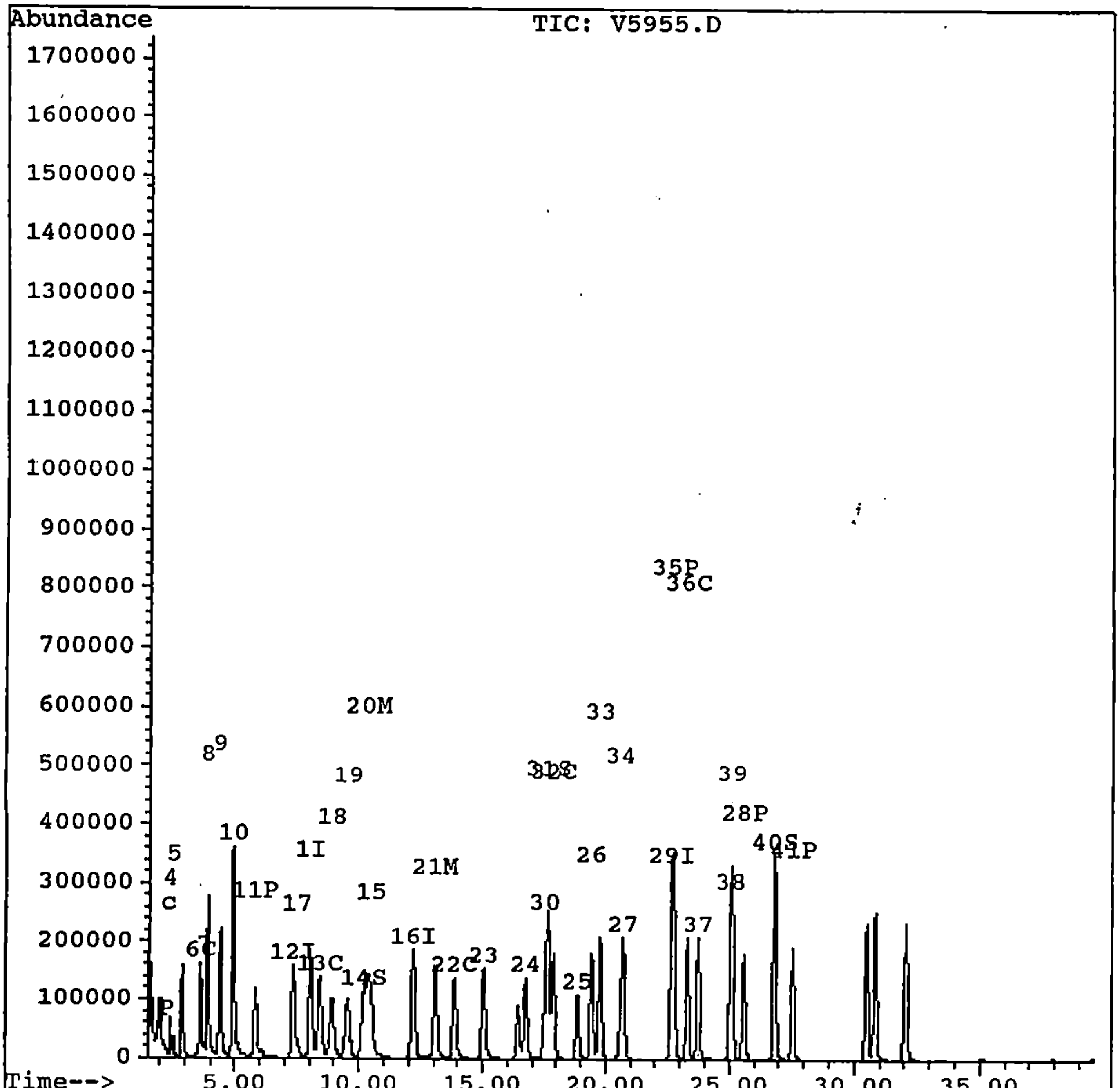
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5955.D
Acq Time : 19 Oct 94 11:27 am
Sample : 50PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:18 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5956.D
Acq Time : 19 Oct 94 12:16 pm
Sample : 10PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:22 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.07	128	216522	50.00	ug/L	0.01
16) 1,4-Difluorobenzene	12.23	114	801285	50.00	ug/L	0.03
29) Chlorobenzene-d5	22.66	117	678022	50.00	ug/L	0.01
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.21	65	95844	11.92	ug/L	
31) Toluene-d8	17.64	98	203140	13.29	ug/L	
40) Bromofluorobenzene	26.82	95	159456	13.28	ug/L	
Target Compounds						Qvalue
2) Chloromethane	2.01	50	32201	9.99	ug/L	94
3) Vinyl Chloride	2.06	62	29947	10.24	ug/L	100
4) Bromomethane	2.46	94	22364	11.99	ug/L	97
5) Chloroethane	2.59	64	13456	12.64	ug/L	96
6) 1,1-Dichloroethene	3.65	61	65775	11.27	ug/L	99
7) Acetone	3.81	43	17452	15.11	ug/L	97
8) Carbon Disulfide	3.94	76	108154	12.04	ug/L m	99
9) Methylene Chloride	4.46	84	70168	14.05	ug/L	95
10) trans-1,2-Dichloroethene	4.99	61	78420	11.13	ug/L	94
11) 1,1-Dichloroethane	5.86	63	106031	11.14	ug/L	97
12) cis-1,2-Dichloroethene	7.38	96	66473	11.05	ug/L	92
13) Chloroform	8.46	83	120575	11.38	ug/L	98
15) 1,2-Dichloroethane	10.52	62	77209	11.43	ug/L	94
18) 1,1,1-Trichloroethane	8.96	97	79223	11.09	ug/L	96
19) Carbon Tetrachloride	9.58	117	76555	10.41	ug/L	99
20) Benzene	10.40	78	127333	11.72	ug/L	98
21) Trichloroethene	13.09	130	64589	11.54	ug/L	96
22) 1,2-Dichloropropane	13.86	63	70263	11.66	ug/L	95
23) Bromodichloromethane	15.06	83	114821	11.21	ug/L	99
24) cis-1,3-Dichloropropene	16.76	75	85454	11.52	ug/L	100
25) trans-1,3-Dichloropropene	18.88	75	61944	11.80	ug/L	99
26) 1,1,2-Trichloroethane	19.43	97	68193	12.45	ug/L	99
27) Dibromochloromethane	20.71	129	112784	11.70	ug/L	100
28) Bromoform	25.58	173	87626	12.30	ug/L	96
30) 4-Methyl-2-Pentanone	17.53	43	77227	14.89	ug/L	98
32) Toluene	17.87	91	151822	12.89	ug/L	97
33) Tetrachloroethene	19.79	166	74651	12.25	ug/L	99
34) 2-Hexanone	20.59	43	48369	14.14	ug/L	94
35) Chlorobenzene	22.76	112	132065	12.44	ug/L	98
36) Ethylbenzene	23.29	91	179469	12.50	ug/L	99
37) m+ p-Xylenes	23.74	106	65600	11.85	ug/L	97
38) o-xylene	25.05	91	139857	12.18	ug/L	98
39) Styrene	25.13	104	113796	11.77	ug/L	98
41) 1,1,2,2-Tetrachloroethane	27.56	83	139377	14.26	ug/L	100

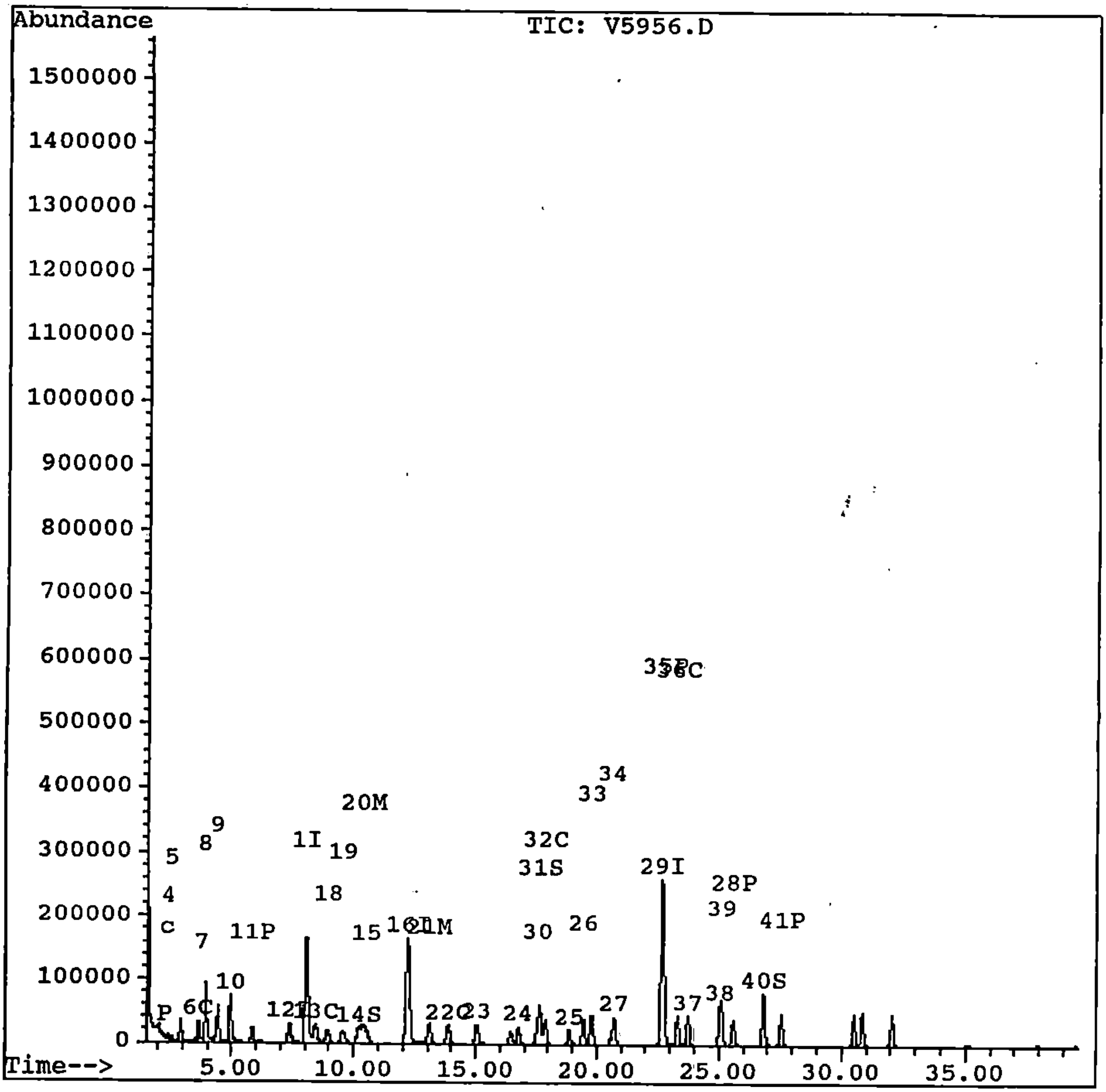
(#) = qualifier out of range (m) = manual integration 000065

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5956.D
Acq Time : 19 Oct 94 12:16 pm
Sample : 10PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:22 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration



000066

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5957.D
Acq Time : 19 Oct 94 1:06 pm
Sample : 200PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:23 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	8.08	128	231134	50.00	ug/L		0.02
16) 1,4-Difluorobenzene	12.22	114	945849	50.00	ug/L		0.02
29) Chlorobenzene-d5	22.66	117	796417	50.00	ug/L		0.01
System Monitoring Compounds							%Recovery
14) 1,2-Dichloroethane-d4	10.22	65	1769587	206.22	ug/L		
31) Toluene-d8	17.65	98	3488818	194.28	ug/L		
40) Bromofluorobenzene	26.82	95	2692902	190.91	ug/L		
Target Compounds							Qvalue
2) Chloromethane	2.00	50	602123	174.99	ug/L		99
3) Vinyl Chloride	2.07	62	606876	194.37	ug/L		99
4) Bromomethane	2.46	94	348340	174.89	ug/L		99
5) Chloroethane	2.58	64	192020	168.92	ug/L		98
6) 1,1-Dichloroethene	3.64	61	1216624	195.26	ug/L		98
7) Acetone	3.93	43	211160	171.26	ug/L		98
8) Carbon Disulfide	3.94	76	1741487	181.65	ug/L	m	100
9) Methylene Chloride	4.47	84	950112	178.24	ug/L		93
10) trans-1,2-Dichloroethene	4.98	61	1502433	199.73	ug/L		95
11) 1,1-Dichloroethane	5.87	63	2014965	198.35	ug/L		98
12) cis-1,2-Dichloroethene	7.38	96	1285882	200.16	ug/L		93
13) Chloroform	8.48	83	2335390	206.49	ug/L		98
15) 1,2-Dichloroethane	10.53	62	1494582	207.34	ug/L		99
17) 2-Butanone	7.62	43	490876	212.81	ug/L		98
18) 1,1,1-Trichloroethane	8.94	97	1545804	183.38	ug/L		98
19) Carbon Tetrachloride	9.56	117	1619418	186.50	ug/L		99
20) Benzene	10.39	78	2429658	189.49	ug/L		100
21) Trichloroethene	13.08	130	1207258	182.65	ug/L		97
22) 1,2-Dichloropropane	13.87	63	1321439	185.77	ug/L		99
23) Bromodichloromethane	15.06	83	2229906	184.45	ug/L		100
24) cis-1,3-Dichloropropene	16.77	75	1698833	193.99	ug/L		100
25) trans-1,3-Dichloropropene	18.86	75	1247301	201.32	ug/L		99
26) 1,1,2-Trichloroethane	19.44	97	1219467	188.59	ug/L		99
27) Dibromochloromethane	20.71	129	2148061	188.85	ug/L		98
28) Bromoform	25.59	173	1647360	195.84	ug/L		98
30) 4-Methyl-2-Pentanone	17.54	43	1211274	198.80	ug/L		96
32) Toluene	17.87	91	2708494	195.81	ug/L		99
33) Tetrachloroethene	19.79	166	1290117	180.24	ug/L		99
34) 2-Hexanone	20.58	43	828554	206.18	ug/L		99
35) Chlorobenzene	22.75	112	2370874	190.19	ug/L		99
36) Ethylbenzene	23.30	91	3327554	197.25	ug/L		100
37) m+ p-Xylenes	23.74	106	1234627	189.92	ug/L		97
38) o-xylene	25.05	91	2630386	195.10	ug/L		99
39) Styrene	25.14	104	2217107	195.24	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5957.D
Acq Time : 19 Oct 94 1:06 pm
Sample : 200PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:23 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,1,2,2-Tetrachloroethane	27.56	83	2281236	198.65 ug/L	98

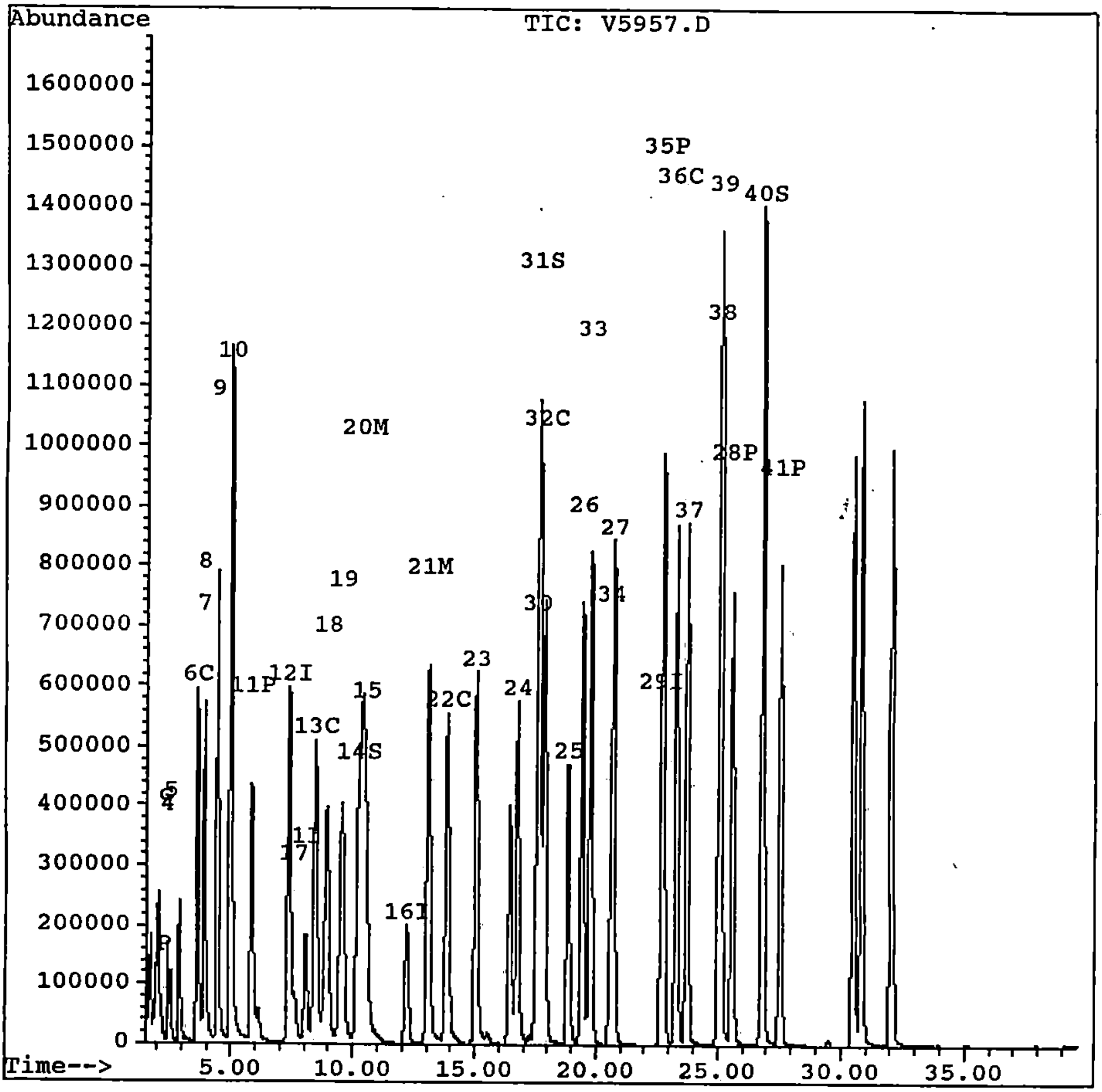
000068

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5957.D
Acq Time : 19 Oct 94 1:06 pm
Sample : 200PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:23 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration



000064

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5958.D
Acq Time : 19 Oct 94 1:56 pm
Sample : 100PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:25 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.08	128	228980	50.00	ug/L	0.02
16) 1,4-Difluorobenzene	12.22	114	913057	50.00	ug/L	0.02
29) Chlorobenzene-d5	22.66	117	766855	50.00	ug/L	0.02
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.22	65	910056	107.05	ug/L	
31) Toluene-d8	17.64	98	1806297	104.47	ug/L	
40) Bromofluorobenzene	26.82	95	1384980	101.97	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.99	50	283727	83.23	ug/L	97
3) Vinyl Chloride	2.07	62	283358	91.61	ug/L	99
4) Bromomethane	2.46	94	176962	89.68	ug/L	98
5) Chloroethane	2.58	64	96739	85.90	ug/L	99
6) 1,1-Dichloroethene	3.64	61	614622	99.57	ug/L	98
7) Acetone	3.88	43	120520	98.67	ug/L	100
8) Carbon Disulfide	3.94	76	848096	89.30	ug/L m	99
9) Methylene Chloride	4.47	84	488787	92.56	ug/L	96
10) trans-1,2-Dichloroethene	4.98	61	722615	96.97	ug/L	96
11) 1,1-Dichloroethane	5.86	63	1016248	100.98	ug/L	99
12) cis-1,2-Dichloroethene	7.38	96	637886	100.23	ug/L	93
13) Chloroform	8.46	83	1167028	104.15	ug/L	97
15) 1,2-Dichloroethane	10.52	62	745635	104.42	ug/L	98
17) 2-Butanone	7.59	43	268825	120.73	ug/L	98
18) 1,1,1-Trichloroethane	8.95	97	771847	94.85	ug/L	97
19) Carbon Tetrachloride	9.56	117	809512	96.58	ug/L	97
20) Benzene	10.37	78	1234834	99.76	ug/L	99
21) Trichloroethene	13.08	130	606822	95.11	ug/L	96
22) 1,2-Dichloropropane	13.87	63	659909	96.10	ug/L	98
23) Bromodichloromethane	15.06	83	1124814	96.38	ug/L	99
24) cis-1,3-Dichloropropene	16.75	75	862085	101.98	ug/L	100
25) trans-1,3-Dichloropropene	18.87	75	625613	104.60	ug/L	99
26) 1,1,2-Trichloroethane	19.43	97	628036	100.62	ug/L	98
27) Dibromochloromethane	20.71	129	1090795	99.34	ug/L	99
28) Bromoform	25.59	173	851590	104.88	ug/L	98
30) 4-Methyl-2-Pentanone	17.53	43	672414	114.61	ug/L	95
32) Toluene	17.87	91	1392615	104.56	ug/L	99
33) Tetrachloroethene	19.78	166	671848	97.48	ug/L	99
34) 2-Hexanone	20.57	43	452381	116.91	ug/L	100
35) Chlorobenzene	22.75	112	1200448	100.01	ug/L	99
36) Ethylbenzene	23.30	91	1694612	104.32	ug/L	100
37) m+ p-Xylenes	23.74	106	625230	99.89	ug/L	98
38) o-xylene	25.05	91	1338707	103.12	ug/L	99
39) Styrene	25.14	104	1108659	101.39	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5958.D
Acq Time : 19 Oct 94 1:56 pm
Sample : 100PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:25 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.56	83	1208663	109.31	ug/L	100

000071

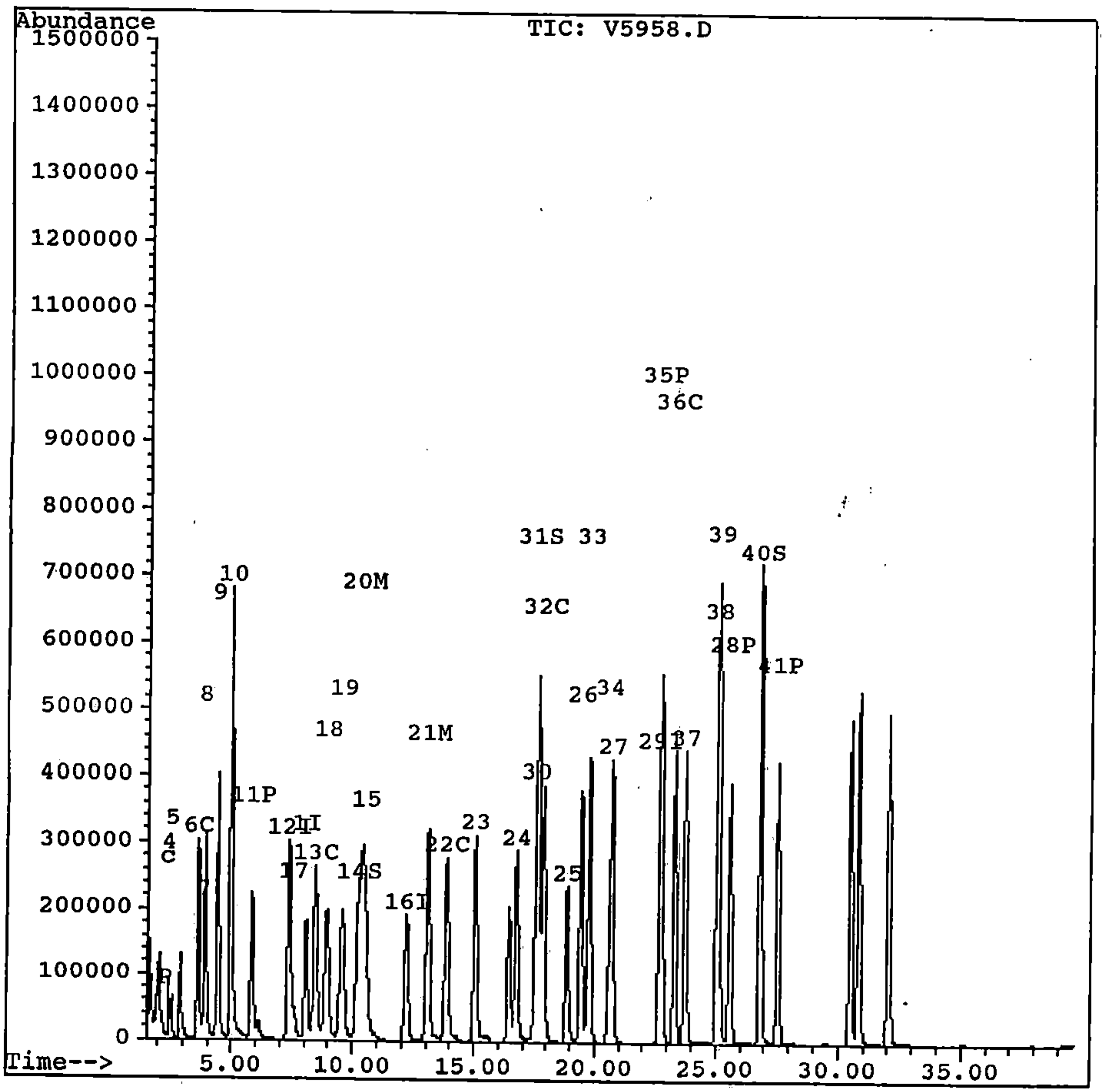
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5958.D
Acq Time : 19 Oct 94 1:56 pm
Sample : 100PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:25 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration



0000072

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5959.D
Acq Time : 19 Oct 94 2:46 pm
Sample : 20PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:26 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.07	128	218114	50.00	ug/L	0.01
16) 1,4-Difluorobenzene	12.22	114	823522	50.00	ug/L	0.02
29) Chlorobenzene-d5	22.65	117	691274	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.19	65	209710	25.90	ug/L	
31) Toluene-d8	17.63	98	438605	28.14	ug/L	
40) Bromofluorobenzene	26.82	95	321628	26.27	ug/L	
Target Compounds						Qvalue
2) Chloromethane	2.01	50	50271	15.48	ug/L	95
3) Vinyl Chloride	2.06	62	49583	16.83	ug/L	99
4) Bromomethane	2.45	94	39348	20.94	ug/L	98
5) Chloroethane	2.58	64	18626	17.36	ug/L	94
6) 1,1-Dichloroethene	3.65	61	119677	20.35	ug/L	99
7) Acetone	3.81	43	28093	24.15	ug/L	92
8) Carbon Disulfide	3.93	76	159091	17.59	ug/L m	100
9) Methylene Chloride	4.45	84	112339	22.33	ug/L	95
10) trans-1,2-Dichloroethene	4.97	61	140771	19.83	ug/L	97
11) 1,1-Dichloroethane	5.85	63	198411	20.70	ug/L	97
12) cis-1,2-Dichloroethene	7.38	96	124799	20.59	ug/L	93
13) Chloroform	8.45	83	230130	21.56	ug/L	97
15) 1,2-Dichloroethane	10.51	62	146743	21.57	ug/L	100
17) 2-Butanone	7.57	43	52930	26.36	ug/L	100
18) 1,1,1-Trichloroethane	8.95	97	148784	20.27	ug/L	99
19) Carbon Tetrachloride	9.55	117	150183	19.86	ug/L	98
20) Benzene	10.38	78	242168	21.69	ug/L	97
21) Trichloroethene	13.09	130	123327	21.43	ug/L	99
22) 1,2-Dichloropropane	13.86	63	133627	21.58	ug/L	99
23) Bromodichloromethane	15.04	83	215907	20.51	ug/L	99
24) cis-1,3-Dichloropropene	16.75	75	169224	22.19	ug/L	99
25) trans-1,3-Dichloropropene	18.87	75	123992	22.99	ug/L	98
26) 1,1,2-Trichloroethane	19.43	97	130665	23.21	ug/L	96
27) Dibromochloromethane	20.70	129	216846	21.90	ug/L	94
28) Bromoform	25.59	173	171178	23.37	ug/L	97
30) 4-Methyl-2-Pentanone	17.52	43	152873	28.91	ug/L	97
32) Toluene	17.87	91	296575	24.70	ug/L	100
33) Tetrachloroethene	19.78	166	146603	23.60	ug/L	96
34) 2-Hexanone	20.58	43	99259	28.46	ug/L	97
35) Chlorobenzene	22.75	112	256636	23.72	ug/L	98
36) Ethylbenzene	23.29	91	347972	23.76	ug/L	99
37) m+ p-Xylenes	23.74	106	124479	22.06	ug/L	98
38) o-xylene	25.05	91	261797	22.37	ug/L	100
39) Styrene	25.12	104	212374	21.55	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5959.D
Acq Time : 19 Oct 94 2:46 pm
Sample : 20PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:26 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,1,2,2-Tetrachloroethane	27.56	83	269412	27.03 ug/L	99

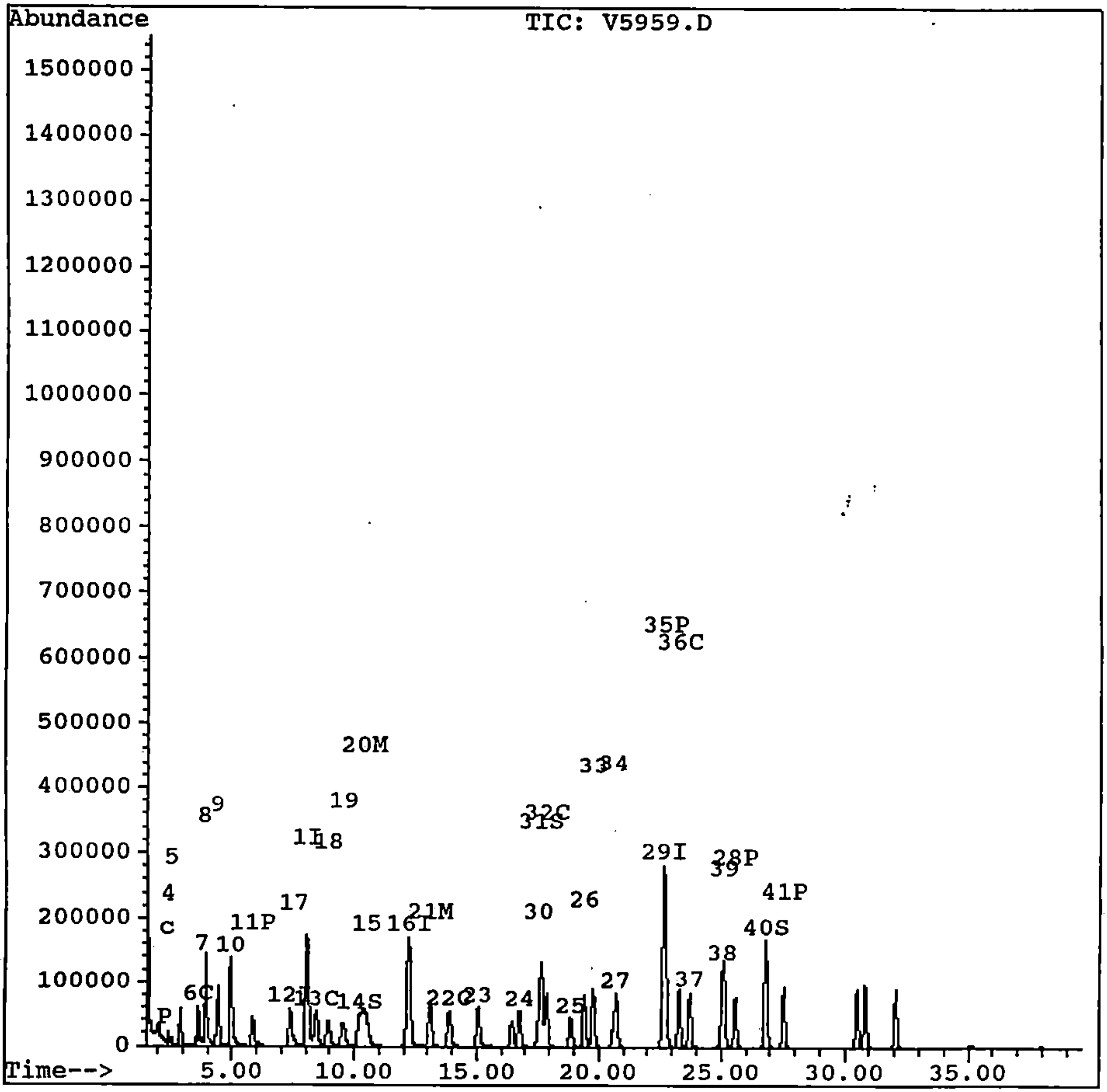
000074

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5959.D
Acq Time : 19 Oct 94 2:46 pm
Sample : 20PPB VOA INI CURVE
Misc :
Quant Time: Oct 27 14:26 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICC.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 14:28:23 1994
Response via : Single Level Calibration



000075

Response Factor Report VOA

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Initial Calibration

Calibration Files

10	=V5993.D	20	=V5994.D	50	=V5992.D
100	=V5995.D	200	=V5996.D		

		Compound	10	20	50	100	200	Avg	%RSD
1)	I	Bromochloromethane	--------	--------	----ISTD	--------	--------	--------	--------
2)	P	Chloromethane	1.486	1.152	1.537	1.082	1.367	1.325	15.16#
3)	c	Vinyl Chloride	1.256	1.069	1.269	1.033	1.116	1.149	9.42
4)		Bromomethane	1.004	0.797	0.789	0.608	0.684	0.776	19.24
5)		Chloroethane	0.653	0.528	0.376	0.314	0.380	0.450	30.62
6)	C	1,1-Dichloroethene	1.687	1.514	1.588	1.500	1.195	1.497	12.31
7)		Acetone	0.518	0.330	0.453	0.275	0.369	0.389	24.99
8)		Carbon Disulfide	2.061	1.819	2.025	1.826	1.489	1.844	12.33
9)		Methylene Chloride	2.465	1.625	1.342	1.169	0.967	1.514	38.59
10)		trans-1,2-Dichloroethene	2.017	1.859	1.852	1.813	1.429	1.794	12.17
11)	P	1,1-Dichloroethane	2.682	2.404	2.424	2.355	1.983	2.370	10.58#
12)	I	cis-1,2-Dichloroethene	1.639	1.511	1.543	1.483	1.261	1.487	9.38
13)	C	Chloroform	3.024	2.624	2.746	2.603	2.259	2.651	10.41
14)	S	1,2-Dichloroethane-d4	1.003	1.813	1.627	1.815	1.700	1.592	21.26
15)		1,2-Dichloroethane	1.836	1.671	1.665	1.635	1.451	1.652	8.28
16)	I	1,4-Difluorobenzene	--------	--------	----ISTD	--------	--------	--------	--------
17)		2-Butanone	0.157	0.159	0.200	0.143	0.169	0.166	13.00
18)		1,1,1-Trichloroethane	0.547	0.462	0.473	0.418	0.365	0.453	14.97
19)		Carbon Tetrachloride	0.521	0.448	0.489	0.420	0.369	0.449	13.17
20)	M	Benzene	0.897	0.724	0.723	0.675	0.589	0.722	15.57
21)	M	Trichloroethene	0.443	0.359	0.383	0.324	0.312	0.364	14.28
22)	C	1,2-Dichloropropane	0.455	0.381	0.364	0.339	0.303	0.368	15.31
23)		Bromodichloromethane	0.737	0.620	0.619	0.561	0.512	0.610	13.77
24)		cis-1,3-Dichloropropene	0.573	0.476	0.484	0.436	0.402	0.474	13.53
25)		trans-1,3-Dichloropropene	0.397	0.330	0.345	0.311	0.293	0.335	11.90
26)		1,1,2-Trichloroethane	0.451	0.358	0.356	0.312	0.288	0.353	17.71
27)		Dibromochloromethane	0.703	0.570	0.612	0.524	0.471	0.576	15.33
28)	P	Bromoform	0.586	0.462	0.511	0.413	0.383	0.471	17.11#
29)	I	Chlorobenzene-d5	--------	--------	----ISTD	--------	--------	--------	--------
30)		4-Methyl-2-Pentanone	0.739	0.484	0.502	0.401	0.465	0.518	24.92
31)	S	Toluene-d8	1.452	1.171	1.070	1.023	0.974	1.138	16.70
32)	C	Toluene	1.300	0.987	0.987	0.851	0.789	0.983	20.07
33)		Tetrachloroethene	0.521	0.487	0.513	0.406	0.358	0.457	15.71
34)		2-Hexanone	0.454	0.317	0.348	0.276	0.339	0.347	19.05
35)	P	Chlorobenzene	1.027	0.819	0.813	0.718	0.637	0.803	18.19#
36)	C	Ethylbenzene	1.474	1.173	1.179	1.034	0.949	1.162	17.17
37)		m+ p-Xylenes	0.556	0.448	0.444	0.377	0.338	0.432	19.19
38)		o-xylene	1.139	0.916	0.935	0.831	0.732	0.911	16.56
39)		Styrene	0.837	0.698	0.716	0.642	0.566	0.692	14.44
40)	S	Bromofluorobenzene	1.152	0.926	0.818	0.783	0.723	0.880	19.18
41)	P	1,1,2,2-Tetrachloroethane	0.764	0.751	0.804	0.691	0.572	0.717	12.60#

(#) = Out of Range

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5992.D
Acq Time : 25 Oct 94 9:11 am
Sample : 50PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:47 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.23	128	229237	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.40	114	916026	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.80	117	763615	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.41	65	372912	51.10	ug/L	
31) Toluene-d8	17.80	98	816727	47.00	ug/L	
40) Bromofluorobenzene	26.95	95	624801	46.47	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.97	50	352294	62.15	ug/L	100
3) Vinyl Chloride	2.09	62	290904	55.24	ug/L	100
4) Bromomethane	2.49	94	180831	49.38	ug/L	100
5) Chloroethane	2.61	64	86151	44.47	ug/L	100
6) 1,1-Dichloroethene	3.71	61	364115	53.06	ug/L	100
7) Acetone	3.87	43	103891	58.29	ug/L	100
8) Carbon Disulfide	4.01	76	464170	54.90	ug/L	100
9) Methylene Chloride	4.53	84	307633	44.33	ug/L	100
10) trans-1,2-Dichloroethene	5.05	61	424565	51.62	ug/L	100
11) 1,1-Dichloroethane	5.96	63	555593	51.14	ug/L	100
12) cis-1,2-Dichloroethene	7.51	96	353756	51.87	ug/L	100
13) Chloroform	8.63	83	629509	51.79	ug/L	100
15) 1,2-Dichloroethane	10.73	62	381658	50.40	ug/L	100
17) 2-Butanone	7.70	43	183607	60.52	ug/L	100
18) 1,1,1-Trichloroethane	9.13	97	432890	53.65	ug/L	100
19) Carbon Tetrachloride	9.76	117	447482	54.37	ug/L	100
20) Benzene	10.59	78	662149	50.07	ug/L	100
21) Trichloroethene	13.28	130	350420	52.52	ug/L	100
22) 1,2-Dichloropropane	14.06	63	333306	49.37	ug/L	100
23) Bromodichloromethane	15.24	83	566911	50.74	ug/L	100
24) cis-1,3-Dichloropropene	16.92	75	443634	51.06	ug/L	100
25) trans-1,3-Dichloropropene	19.02	75	316088	51.45	ug/L	100
26) 1,1,2-Trichloroethane	19.58	97	326433	50.48	ug/L	100
27) Dibromochloromethane	20.85	129	560838	53.14	ug/L	100
28) Bromoform	25.72	173	467904	55.11	ug/L	100
30) 4-Methyl-2-Pentanone	17.69	43	383283	48.45	ug/L	100
32) Toluene	18.03	91	753518	50.21	ug/L	100
33) Tetrachloroethene	19.94	166	391368	56.09	ug/L	100
34) 2-Hexanone	20.71	43	266015	50.23	ug/L	100
35) Chlorobenzene	22.89	112	620686	50.63	ug/L	100
36) Ethylbenzene	23.44	91	900290	50.73	ug/L	100
37) m+ p-Xylenes	23.87	106	338917	51.31	ug/L	100
38) o-xylene	25.19	91	714279	51.36	ug/L	100
39) Styrene	25.27	104	546438	51.72	ug/L	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5992.D
Acq Time : 25 Oct 94 9:11 am
Sample : 50PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:47 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.68	83	613944	56.11	ug/L	100

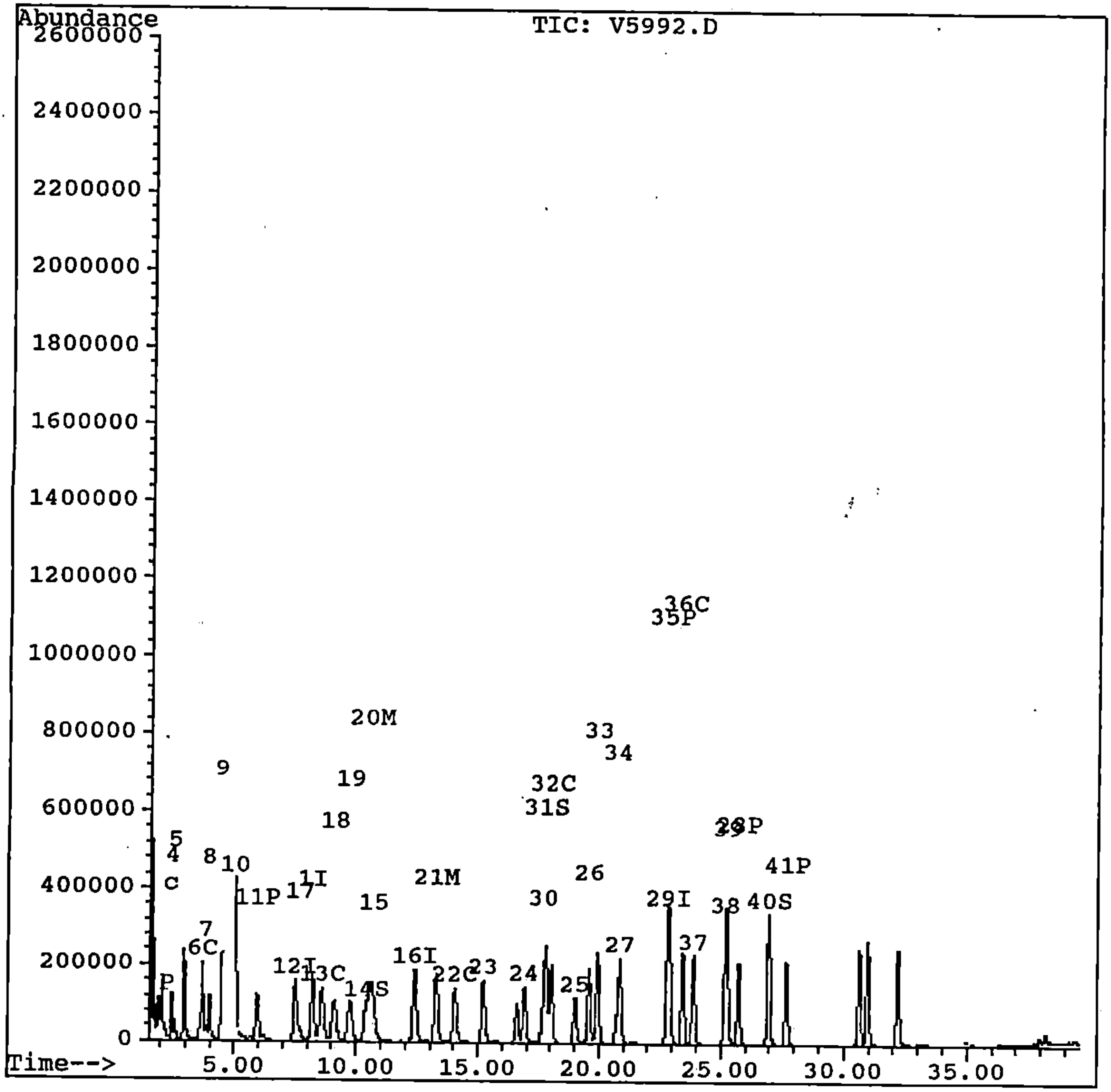
3008078

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5992.D
Acq Time : 25 Oct 94 9:11 am
Sample : 50PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:47 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Multiple Level Calibration



000079

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5993.D
Acq Time : 25 Oct 94 9:58 am
Sample : 10PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 15:00 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.23	128	204293	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.42	114	782779	50.00	ug/L	0.02
29) Chlorobenzene-d5	22.81	117	650838	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.41	65	40992	6.17	ug/L	
31) Toluene-d8	17.80	98	188945	13.57	ug/L	
40) Bromofluorobenzene	26.95	95	149919	14.08	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.97	50	60720	9.67	ug/L	96
3) Vinyl Chloride	2.10	62	51335	9.90	ug/L	96
4) Bromomethane	2.49	94	41019	12.73	ug/L	99
5) Chloroethane	2.63	64	26674	17.37	ug/L	97
6) 1,1-Dichloroethene	3.72	61	68925	10.62	ug/L	99
7) Acetone	3.86	43	21166	11.43	ug/L	98
8) Carbon Disulfide	4.02	76	84226	10.18	ug/L	89
9) Methylene Chloride	4.53	84	100720	18.37	ug/L	98
10) trans-1,2-Dichloroethene	5.05	61	82403	10.89	ug/L	99
11) 1,1-Dichloroethane	5.97	63	109598	11.07	ug/L	98
12) cis-1,2-Dichloroethene	7.52	96	66982	10.62	ug/L	96
13) Chloroform	8.61	83	123556	11.01	ug/L	97
15) 1,2-Dichloroethane	10.71	62	75016	11.03	ug/L	95
17) 2-Butanone	7.68	43	24539	7.82	ug/L	92
18) 1,1,1-Trichloroethane	9.11	97	85671	11.58	ug/L m	99
19) Carbon Tetrachloride	9.77	117	81557	10.66	ug/L m	98
20) Benzene	10.60	78	140473	12.41	ug/L	100
21) Trichloroethene	13.30	130	69302	11.57	ug/L	98
22) 1,2-Dichloropropane	14.06	63	71194	12.50	ug/L	97
23) Bromodichloromethane	15.23	83	115359	11.91	ug/L	96
24) cis-1,3-Dichloropropene	16.92	75	89650	11.82	ug/L	98
25) trans-1,3-Dichloropropene	19.04	75	62226	11.52	ug/L	99
26) 1,1,2-Trichloroethane	19.60	97	70652	12.66	ug/L	99
27) Dibromochloromethane	20.85	129	110047	11.48	ug/L	99
28) Bromoform	25.72	173	91766	11.48	ug/L	99
30) 4-Methyl-2-Pentanone	17.69	43	96133	14.71	ug/L	94
32) Toluene	18.04	91	169196	13.17	ug/L	99
33) Tetrachloroethene	19.94	166	67857	10.17	ug/L m	100
34) 2-Hexanone	20.73	43	59062	13.02	ug/L	99
35) Chlorobenzene	22.90	112	133663	12.63	ug/L	99
36) Ethylbenzene	23.44	91	191878	12.50	ug/L	99
37) m+ p-Xylenes	23.89	106	72320	12.52	ug/L	96
38) o-xylene	25.18	91	148221	12.17	ug/L	100
39) Styrene	25.26	104	108960	11.70	ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5993.D
Acq Time : 25 Oct 94 9:58 am
Sample : 10PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 15:00 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	1,1,2,2-Tetrachloroethane	27.69	83	99497	9.51 ug/L	m	97

000081

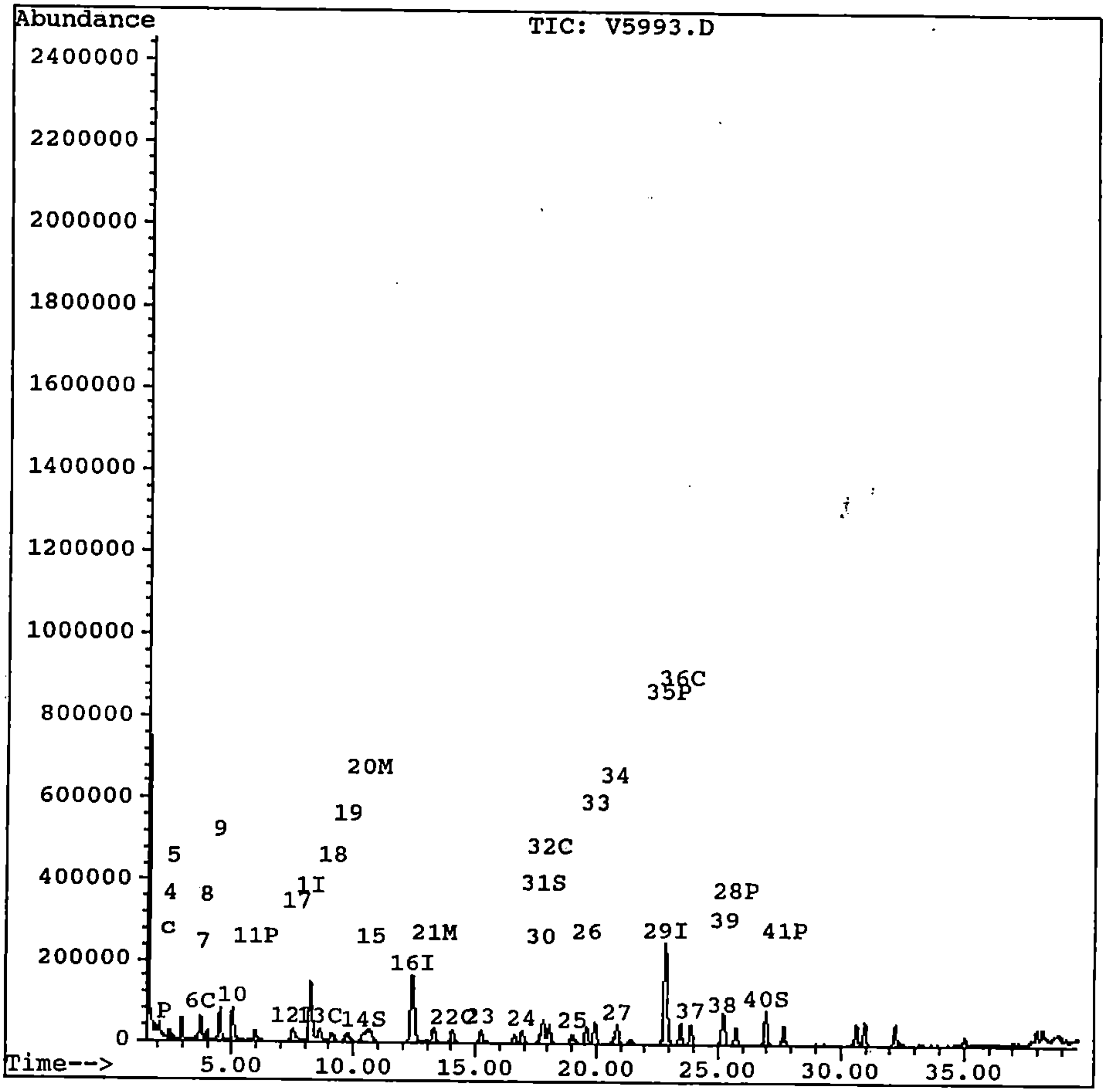
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5993.D
Acq Time : 25 Oct 94 9:58 am
Sample : 10PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 15:00 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration



0000082

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5994.D
Acq Time : 25 Oct 94 10:45 am
Sample : 20PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.23	128	206692	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.42	114	828719	50.00	ug/L	0.02
29) Chlorobenzene-d5	22.80	117	695853	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.43	65	149895	22.29	ug/L	
31) Toluene-d8	17.81	98	325990	21.90	ug/L	
40) Bromofluorobenzene	26.96	95	257787	22.64	ug/L	
Target Compounds						Qvalue
2) Chloromethane	1.97	50	95273	15.00	ug/L	99
3) Vinyl Chloride	2.10	62	88370	16.85	ug/L	97
4) Bromomethane	2.50	94	65880	20.20	ug/L	98
5) Chloroethane	2.63	64	43623	28.08	ug/L	96
6) 1,1-Dichloroethene	3.72	61	125149	19.06	ug/L	99
7) Acetone	3.87	43	27262	14.55	ug/L	95
8) Carbon Disulfide	4.02	76	150424	17.97	ug/L	95
9) Methylene Chloride	4.53	84	134329	24.21	ug/L	99
10) trans-1,2-Dichloroethene	5.06	61	153727	20.08	ug/L	97
11) 1,1-Dichloroethane	5.97	63	198747	19.84	ug/L	96
12) cis-1,2-Dichloroethene	7.52	96	124885	19.58	ug/L	98
13) Chloroform	8.62	83	216929	19.11	ug/L	98
15) 1,2-Dichloroethane	10.72	62	138189	20.08	ug/L	97
17) 2-Butanone	7.70	43	52656	15.85	ug/L	98
18) 1,1,1-Trichloroethane	9.15	97	153301	19.57	ug/L	98
19) Carbon Tetrachloride	9.77	117	148453	18.34	ug/L	96
20) Benzene	10.59	78	240056	20.04	ug/L	97
21) Trichloroethene	13.28	130	119060	18.78	ug/L	97
22) 1,2-Dichloropropane	14.05	63	126399	20.96	ug/L	99
23) Bromodichloromethane	15.24	83	205646	20.05	ug/L	99
24) cis-1,3-Dichloropropene	16.93	75	157910	19.67	ug/L	99
25) trans-1,3-Dichloropropene	19.02	75	109451	19.14	ug/L	100
26) 1,1,2-Trichloroethane	19.60	97	118528	20.07	ug/L	99
27) Dibromochloromethane	20.86	129	189105	18.64	ug/L	99
28) Bromoform	25.73	173	153223	18.10	ug/L	97
30) 4-Methyl-2-Pentanone	17.69	43	134606	19.27	ug/L	98
32) Toluene	18.04	91	274767	20.01	ug/L	99
33) Tetrachloroethene	19.94	166	135609	19.01	ug/L	99
34) 2-Hexanone	20.72	43	88266	18.21	ug/L	96
35) Chlorobenzene	22.90	112	228019	20.16	ug/L	100
36) Ethylbenzene	23.44	91	326566	19.90	ug/L	97
37) m+ p-Xylenes	23.88	106	124680	20.19	ug/L	97
38) o-xylene	25.19	91	255052	19.59	ug/L	95
39) Styrene	25.27	104	194227	19.50	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5994.D
Acq Time : 25 Oct 94 10:45 am
Sample : 20PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.69	83	209129	18.69 ug/L	99

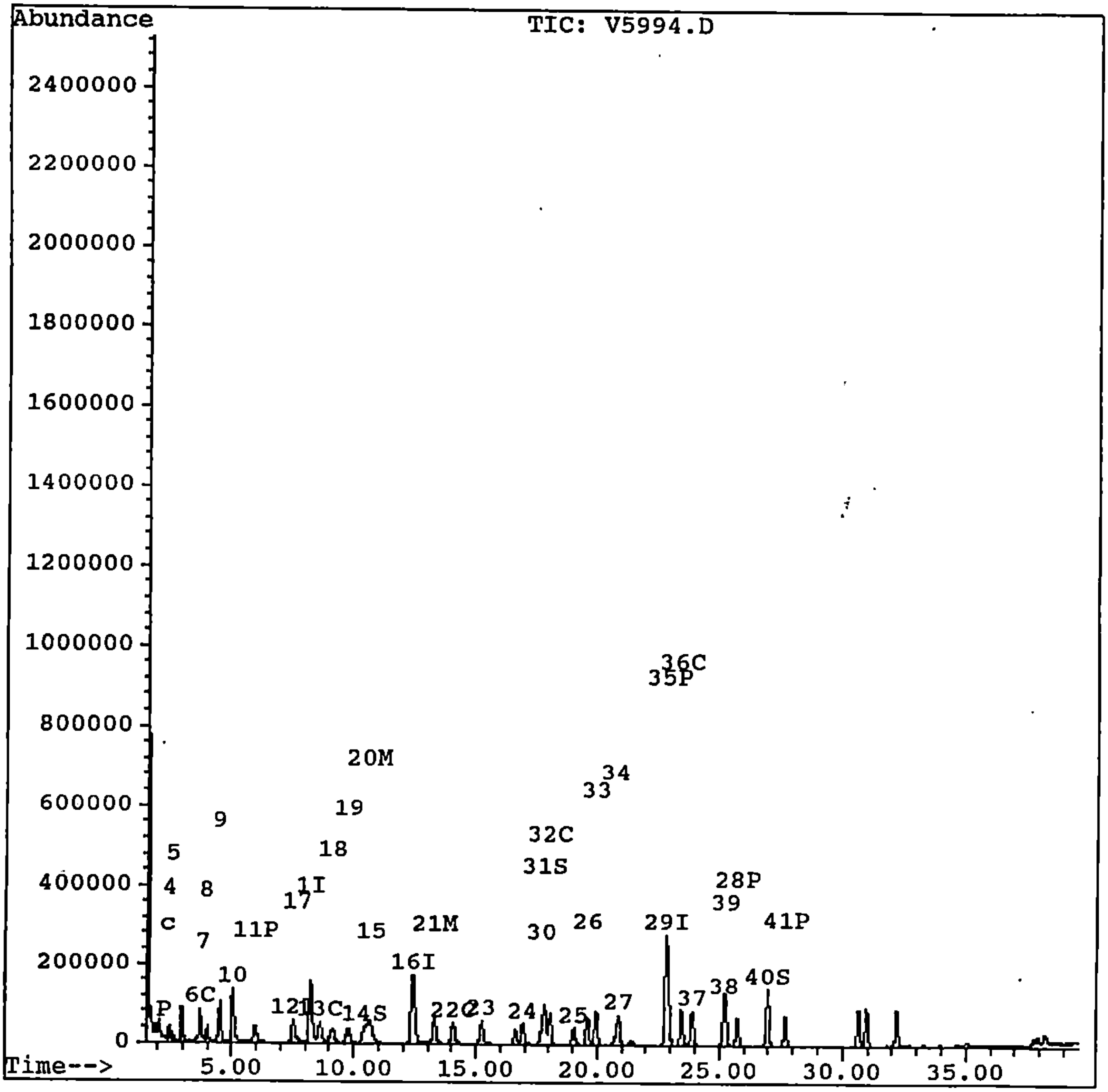
000084

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5994.D
Acq Time : 25 Oct 94 10:45 am
Sample : 20PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration



000085

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5995.D
Acq Time : 25 Oct 94 11:34 am
Sample : 100PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.23	128	214604	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.40	114	922310	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.80	117	800380	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.41	65	779211	111.60	ug/L	
31) Toluene-d8	17.79	98	1637099	95.62	ug/L	
40) Bromofluorobenzene	26.97	95	1252688	95.64	ug/L	
Target Compounds						Qvalue
2) Chloromethane	2.01	50	464427	70.41	ug/L	98
3) Vinyl Chloride	2.10	62	443486	81.42	ug/L	98
4) Bromomethane	2.50	94	260885	77.05	ug/L	98
5) Chloroethane	2.63	64	134948	83.66	ug/L	99
6) 1,1-Dichloroethene	3.72	61	643835	94.44	ug/L	98
7) Acetone	3.93	43	117854	60.59	ug/L	98
8) Carbon Disulfide	4.02	76	783590	90.16	ug/L	100
9) Methylene Chloride	4.54	84	501822	87.12	ug/L	99
10) trans-1,2-Dichloroethene	5.07	61	778084	97.88	ug/L	97
11) 1,1-Dichloroethane	5.97	63	1010912	97.18	ug/L	100
12) cis-1,2-Dichloroethene	7.51	96	636593	96.11	ug/L	96
13) Chloroform	8.63	83	1117223	94.79	ug/L	99
15) 1,2-Dichloroethane	10.72	62	701809	98.21	ug/L	98
17) 2-Butanone	7.71	43	263961	71.39	ug/L	97
18) 1,1,1-Trichloroethane	9.11	97	770969	88.44	ug/L	99
19) Carbon Tetrachloride	9.73	117	774353	85.93	ug/L	97
20) Benzene	10.58	78	1245550	93.41	ug/L	98
21) Trichloroethene	13.26	130	598316	84.79	ug/L	97
22) 1,2-Dichloropropane	14.03	63	625372	93.17	ug/L	99
23) Bromodichloromethane	15.23	83	1034905	90.65	ug/L	100
24) cis-1,3-Dichloropropene	16.91	75	803630	89.96	ug/L	99
25) trans-1,3-Dichloropropene	19.01	75	573297	90.07	ug/L	97
26) 1,1,2-Trichloroethane	19.58	97	575134	87.49	ug/L	98
27) Dibromochloromethane	20.86	129	966868	85.61	ug/L	99
28) Bromoform	25.73	173	761291	80.80	ug/L	98
30) 4-Methyl-2-Pentanone	17.69	43	641375	79.83	ug/L	98
32) Toluene	18.03	91	1361517	86.19	ug/L	100
33) Tetrachloroethene	19.93	166	649742	79.20	ug/L	99
34) 2-Hexanone	20.71	43	441062	79.09	ug/L	98
35) Chlorobenzene	22.89	112	1149338	88.33	ug/L	99
36) Ethylbenzene	23.44	91	1655523	87.72	ug/L	99
37) m+ p-Xylenes	23.88	106	604170	85.04	ug/L	95
38) o-xylene	25.20	91	1330656	88.87	ug/L	99
39) Styrene	25.28	104	1028371	89.78	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5995.D
Acq Time : 25 Oct 94 11:34 am
Sample : 100PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,1,2,2-Tetrachloroethane	27.70	83	1105336	85.88 ug/L	97

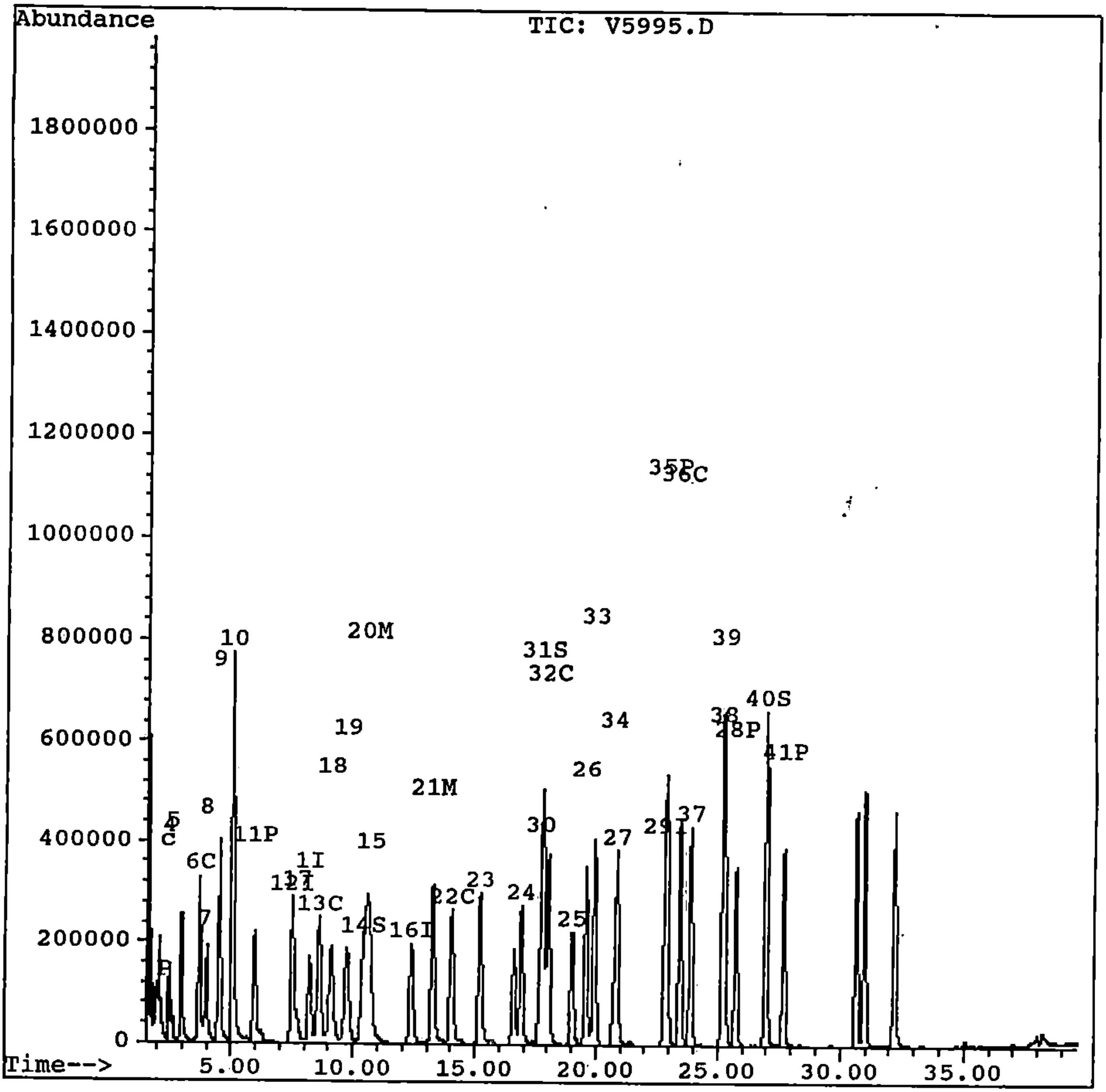
000087

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5995.D
Acq Time : 25 Oct 94 11:34 am
Sample : 100PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:50 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration



0000088

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5996.D
Acq Time : 25 Oct 94 12:26 pm
Sample : 200PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:57 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.24	128	218564	50.00	ug/L	0.01
16) 1,4-Difluorobenzene	12.40	114	948262	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.82	117	778745	50.00	ug/L	0.02
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.43	65	1486075	208.98	ug/L	
31) Toluene-d8	17.80	98	3032577	182.05	ug/L	
40) Bromofluorobenzene	26.99	95	2251639	176.69	ug/L	
Target Compounds						Qvalue
2) Chloromethane	2.01	50	1195290	177.93	ug/L m	99
3) Vinyl Chloride	2.09	62	975713	175.89	ug/L m	99
4) Bromomethane	2.48	94	598371	173.53	ug/L m	99
5) Chloroethane	2.61	64	332009	202.10	ug/L m	100
6) 1,1-Dichloroethene	3.70	61	1044790	150.48	ug/L	97
7) Acetone	4.04	43	322484	162.78	ug/L m	0
8) Carbon Disulfide	3.99	76	1302109	147.11	ug/L	99
9) Methylene Chloride	4.55	84	845448	144.12	ug/L	96
10) trans-1,2-Dichloroethene	5.07	61	1249539	154.34	ug/L	96
11) 1,1-Dichloroethane	5.97	63	1733609	163.63	ug/L	99
12) cis-1,2-Dichloroethene	7.53	96	1102629	163.46	ug/L	94
13) Chloroform	8.64	83	1974987	164.53	ug/L	99
15) 1,2-Dichloroethane	10.73	62	1268930	174.36	ug/L	98
17) 2-Butanone	7.80	43	640617	168.52	ug/L	99
18) 1,1,1-Trichloroethane	9.11	97	1383016	154.31	ug/L	97
19) Carbon Tetrachloride	9.72	117	1399405	151.05	ug/L	99
20) Benzene	10.58	78	2235426	163.06	ug/L	99
21) Trichloroethene	13.26	130	1183694	163.15	ug/L	95
22) 1,2-Dichloropropane	14.04	63	1150993	166.79	ug/L	98
23) Bromodichloromethane	15.23	83	1943262	165.56	ug/L	98
24) cis-1,3-Dichloropropene	16.92	75	1525586	166.10	ug/L	99
25) trans-1,3-Dichloropropene	19.03	75	1111774	169.89	ug/L	98
26) 1,1,2-Trichloroethane	19.59	97	1092093	161.59	ug/L	98
27) Dibromochloromethane	20.86	129	1785702	153.79	ug/L	99
28) Bromoform	25.75	173	1454159	150.11	ug/L	99
30) 4-Methyl-2-Pentanone	17.71	43	1448546	185.29	ug/L	98
32) Toluene	18.03	91	2457662	159.91	ug/L	100
33) Tetrachloroethene	19.94	166	1114035	139.56	ug/L	99
34) 2-Hexanone	20.74	43	1055802	194.59	ug/L	99
35) Chlorobenzene	22.91	112	1984128	156.73	ug/L	100
36) Ethylbenzene	23.45	91	2957644	161.07	ug/L	99
37) m+ p-Xylenes	23.89	106	1051540	152.12	ug/L	94
38) o-xylene	25.22	91	2278945	156.43	ug/L	99
39) Styrene	25.29	104	1763962	158.27	ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5996.D
Acq Time : 25 Oct 94 12:26 pm
Sample : 200PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:57 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.71	83	1782825	142.37	ug/L	100

0000090

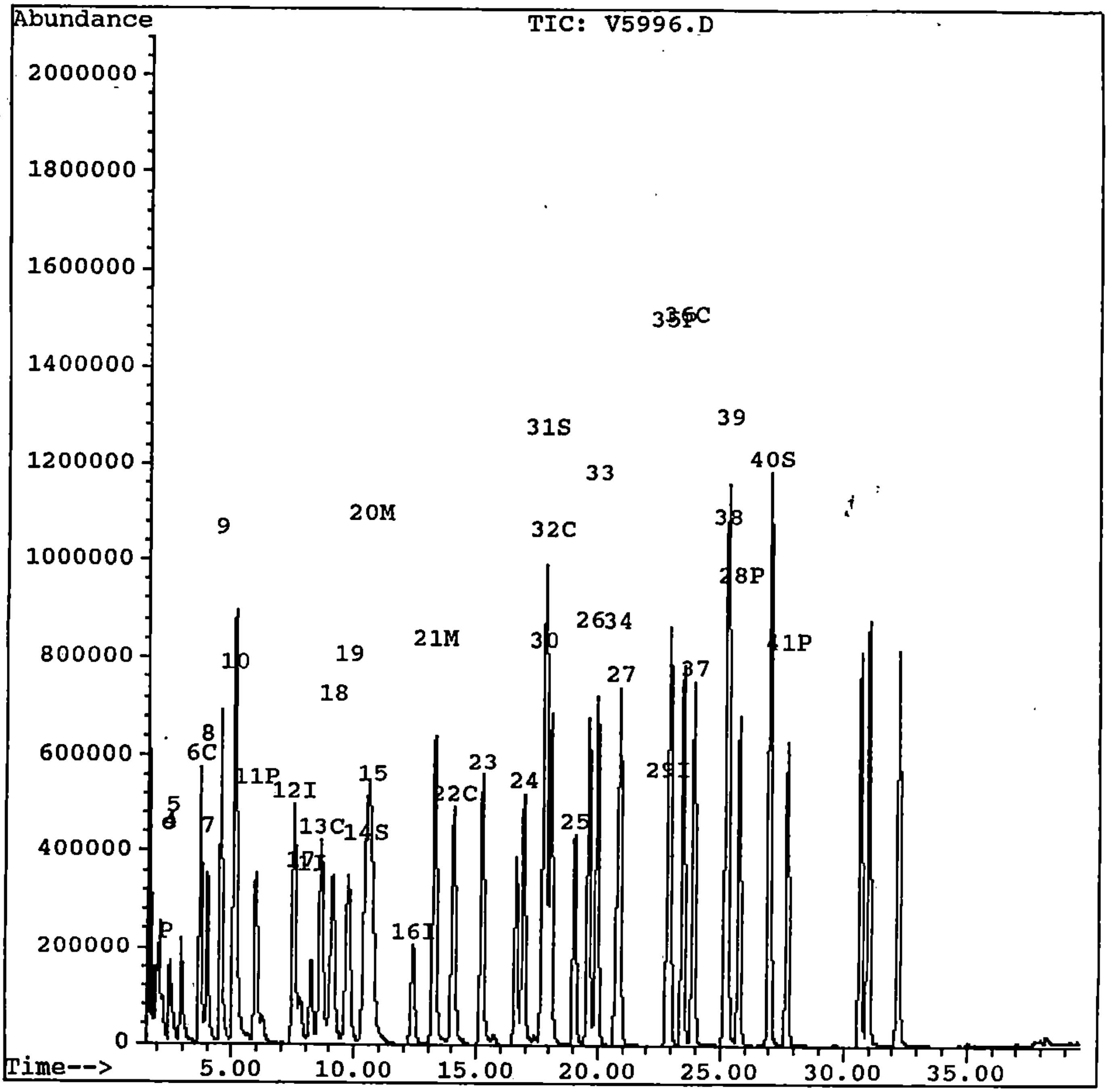
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5996.D
Acq Time : 25 Oct 94 12:26 pm
Sample : 200PPB VOA INI (H) STD
Misc :
Quant Time: Oct 27 14:57 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Mon Oct 31 12:20:59 1994
Response via : Single Level Calibration



000091

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: SAS No.: 100 COMMERCIAL SDG No.:

Instrument ID: VOA-1 Calibration Date: 9/12/94 Time: 1146

Lab File ID: V5709.D Init. Calib. Date(s): 9/12/94 9/12/94

Heated Purge: (Y/N) Y Init. Calib. Times: 1146 1509

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.859	0.926		-7.8	100.0
Bromomethane	0.523	0.511	0.100	2.3	25.0
Vinyl Chloride	0.906	1.070	0.100	-18.1	25.0
Chloroethane	0.287	0.313		-9.1	100.0
Methylene Chloride	1.547	1.525		1.4	100.0
Acetone	0.445	0.461		-3.6	100.0
Carbon Disulfide	2.587	2.747		-6.2	100.0
1,1-Dichloroethene	1.689	1.813	0.100	-7.3	25.0
1,1-Dichloroethane	2.666	2.759	0.200	-3.5	25.0
1,2-Dichloroethene (total)	3.470	3.580		-3.1	100.0
Chloroform	2.899	2.945	0.200	-1.6	25.0
1,2-Dichloroethane	1.631	1.845	0.100	-13.1	25.0
2-Butanone	0.232	0.240		-3.4	100.0
1,1,1-Trichloroethane	0.512	0.506	0.100	1.2	25.0
Carbon Tetrachloride	0.563	0.568	0.100	-0.9	25.0
Bromodichloromethane	0.677	0.666	0.200	1.6	25.0
1,2-Dichloropropane	0.464	0.445		4.1	100.0
cis-1,3-Dichloropropene	0.526	0.512	0.200	2.7	25.0
Trichloroethene	0.463	0.438	0.300	5.4	25.0
Dibromochloromethane	0.770	0.734	0.100	4.7	25.0
1,1,2-Trichloroethane	0.461	0.443	0.100	3.9	25.0
Benzene	0.819	0.790	0.500	3.5	25.0
trans-1,3-Dichloropropene	0.375	0.361	0.100	3.7	25.0
Bromoform	0.674	0.648	0.100	3.9	25.0
4-Methyl-2-Pentanone	0.691	0.674		2.5	100.0
2-Hexanone	0.486	0.489		-0.6	100.0
Tetrachloroethene	0.659	0.618	0.200	6.2	25.0
1,1,2,2-Tetrachloroethane	1.139	1.137	0.500	0.2	25.0
Toluene	1.162	1.060	0.400	8.8	25.0
Chlorobenzene	1.136	1.063	0.500	6.4	25.0
Ethylbenzene	1.378	1.283	0.100	6.9	25.0
Styrene	0.890	0.861	0.300	3.3	25.0
Xylenes (total)	1.566	1.495	0.300	4.6	25.0
Toluene-d8	1.185	1.095	0.010	7.6	100.0
Bromofluorobenzene	0.886	0.840	0.200	5.2	25.0
1,2-Dichloroethane-d4	1.555	1.496	0.010	3.8	100.0

000092

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Instrument ID: VOA-1 Calibration Date: 10/19/94 Time: 1127

Lab File ID: V5955.D Init. Calib. Date(s): 10/19/94 10/19/94

Heated Purge: (Y/N) ______ Init. Calib. Times: 1127 1446

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.667	0.744		-11.5	100.0
Bromomethane	0.432	0.431	0.100	0.2	25.0
Vinyl Chloride	0.642	0.675	0.100	-5.1	25.0
Chloroethane	0.238	0.246		-3.4	100.0
Methylene Chloride	1.231	1.153		6.3	100.0
Acetone	0.297	0.267		10.1	100.0
Carbon Disulfide	2.026	2.074		-2.4	100.0
1,1-Dichloroethene	1.379	1.348	0.100	2.2	25.0
1,1-Dichloroethane	2.264	2.198	0.200	2.9	25.0
1,2-Dichloroethene (total)	1.428	1.390		2.7	100.0
Chloroform	2.589	2.447	0.200	5.5	25.0
1,2-Dichloroethane	1.654	1.559	0.100	5.7	25.0
2-Butanone	0.143	0.122		14.7	100.0
1,1,1-Trichloroethane	0.445	0.446	0.100	-0.2	25.0
Carbon Tetrachloride	0.453	0.459	0.100	-1.3	25.0
Bromodichloromethane	0.643	0.639	0.200	0.6	25.0
1,2-Dichloropropane	0.386	0.376		2.6	100.0
cis-1,3-Dichloropropene	0.486	0.463	0.200	4.7	25.0
Trichloroethene	0.356	0.349	0.300	2.0	25.0
Dibromochloromethane	0.626	0.601	0.100	4.0	25.0
1,1,2-Trichloroethane	0.366	0.342	0.100	6.6	25.0
Benzene	0.705	0.678	0.500	3.8	25.0
trans-1,3-Dichloropropene	0.353	0.328	0.100	7.1	25.0
Bromoform	0.483	0.445	0.100	7.9	25.0
4-Methyl-2-Pentanone	0.465	0.383		17.6	100.0
2-Hexanone	0.305	0.252		17.4	100.0
Tetrachloroethene	0.475	0.449	0.200	5.5	25.0
1,1,2,2-Tetrachloroethane	0.845	0.721	0.500	14.7	25.0
Toluene	0.964	0.868	0.400	10.0	25.0
Chlorobenzene	0.842	0.783	0.500	7.0	25.0
Ethylbenzene	1.158	1.059	0.100	8.5	25.0
Styrene	0.748	0.713	0.300	4.7	25.0
Xylenes (total)	1.332	1.254	0.300	6.0	25.0

000093

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Project No.: 4376   Site: ______   Location: 100 COMMERCIAL   Group: ______

Instrument ID: VOA-1   Calibration Date: 10/19/94   Time: 1127

Lab File ID: V5955.D   Init. Calib. Date(s): 10/19/94   10/19/94

Heated Purge: (Y/N) ______   Init. Calib. Times: 1127   1446

GC Column: DB-624   ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Toluene-d8	1.297	1.127	0.010	13.1	100.0
Bromofluorobenzene	0.995	0.886	0.200	11.0	25.0
1,2-Dichloroethane-d4	2.075	1.856	0.010	10.6	100.0

000094

All other compounds must meet a minimum RRF of 0.010

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Lab Code: 4376   Case No.: ______   SAS No.: 100 COMMERCIA   SDG No.: ______

Instrument ID: VOA-1   Calibration Date: 10/21/94   Time: 1014

Lab File ID: V5967.D   Init. Calib. Date(s): 9/12/94   9/12/94

Heated Purge: (Y/N) Y   Init. Calib. Times: 1146   1509

GC Column: DB-624   ID: 0.53 (mm)

COMPOUND	RRF (mean)	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.866	0.670		22.6	100.0
Bromomethane	0.527	0.478	0.100	9.3	25.0
Vinyl Chloride	0.914	0.854	0.100	6.6	25.0
Chloroethane	0.289	0.254		12.1	100.0
Methylene Chloride	1.558	1.053		32.4	100.0
Acetone	0.449	0.214		52.3	100.0
Carbon Disulfide	2.609	1.734		33.5	100.0
1,1-Dichloroethene	1.702	1.387	0.100	18.5	25.0
1,1-Dichloroethane	2.688	2.079	0.200	22.7	25.0
1,2-Dichloroethene (total)	3.470	2.944		16.4	100.0
Chloroform	2.921	2.440	0.200	16.5	25.0
1,2-Dichloroethane	1.645	1.507	0.100	8.4	25.0
2-Butanone	0.232	0.109		53.0	100.0
1,1,1-Trichloroethane	0.512	0.427	0.100	16.6	25.0
Carbon Tetrachloride	0.563	0.435	0.100	22.7	25.0
Bromodichloromethane	0.677	0.593	0.200	12.4	25.0
1,2-Dichloropropane	0.464	0.362		22.0	100.0
cis-1,3-Dichloropropene	0.526	0.451	0.200	14.3	25.0
Trichloroethene	0.463	0.380	0.300	17.9	25.0
Dibromochloromethane	0.770	0.580	0.100	24.7	25.0
1,1,2-Trichloroethane	0.461	0.359	0.100	22.1	25.0
Benzene	0.819	0.657	0.500	19.8	25.0
trans-1,3-Dichloropropene	0.375	0.320	0.100	14.7	25.0
Bromoform	0.663	0.460	0.100	30.6	25.0
4-Methyl-2-Pentanone	0.691	0.359		48.0	100.0
2-Hexanone	0.486	0.229		52.9	100.0
Tetrachloroethene	0.660	0.520	0.200	21.2	25.0
1,1,2,2-Tetrachloroethane	1.139	0.761	0.500	33.2	25.0
Toluene	1.162	0.923	0.400	20.6	25.0
Chlorobenzene	1.136	0.928	0.500	18.3	25.0
Ethylbenzene	1.379	1.116	0.100	19.1	25.0
Styrene	0.890	0.709	0.300	20.3	25.0
Xylenes (total)	1.566	1.318	0.300	16.4	25.0
Toluene-d8	1.185	1.210	0.010	-2.1	100.0
Bromofluorobenzene	0.886	0.907	0.200	-2.4	25.0
1,2-Dichloroethane-d4	1.567	1.865	0.010	-19.0	100.0

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: Location: 100 COMMERCIAL Group:

Instrument ID: VOA-1 Calibration Date: 10/25/94 Time: 0911

Lab File ID: V5992.D Init. Calib. Date(s): 10/25/94 10/25/94

Heated Purge: (Y/N) Y Init. Calib. Times: 0911 1226

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.325	1.537		-16.0	100.0
Bromomethane	0.776	0.789	0.100	-1.7	25.0
Vinyl Chloride	1.149	1.269	0.100	-10.4	25.0
Chloroethane	0.450	0.376		16.4	100.0
Methylene Chloride	1.514	1.342		11.4	100.0
Acetone	0.389	0.453		-16.5	100.0
Carbon Disulfide	1.844	2.025		-9.8	100.0
1,1-Dichloroethene	1.497	1.588	0.100	-6.1	25.0
1,1-Dichloroethane	2.370	2.424	0.200	-2.3	25.0
1,2-Dichloroethene (total)	3.281	3.395		-3.4	100.0
Chloroform	2.651	2.746	0.200	-3.6	25.0
1,2-Dichloroethane	1.652	1.665	0.100	-0.8	25.0
2-Butanone	0.166	0.200		-20.5	100.0
1,1,1-Trichloroethane	0.453	0.473	0.100	-4.4	25.0
Carbon Tetrachloride	0.449	0.489	0.100	-8.9	25.0
Bromodichloromethane	0.610	0.619	0.200	-1.5	25.0
1,2-Dichloropropane	0.368	0.364		1.1	100.0
cis-1,3-Dichloropropene	0.474	0.484	0.200	-2.1	25.0
Trichloroethene	0.364	0.383	0.300	-5.2	25.0
Dibromochloromethane	0.576	0.612	0.100	-6.3	25.0
1,1,2-Trichloroethane	0.353	0.356	0.100	-0.8	25.0
Benzene	0.722	0.723	0.500	-0.1	25.0
trans-1,3-Dichloropropene	0.335	0.345	0.100	-3.0	25.0
Bromoform	0.471	0.511	0.100	-8.5	25.0
4-Methyl-2-Pentanone	0.518	0.502		3.1	100.0
2-Hexanone	0.347	0.348		-0.3	100.0
Tetrachloroethene	0.457	0.513	0.200	-12.3	25.0
1,1,2,2-Tetrachloroethane	0.717	0.804	0.500	-12.1	25.0
Toluene	0.983	0.987	0.400	-0.4	25.0
Chlorobenzene	0.803	0.813	0.500	-1.2	25.0
Ethylbenzene	1.162	1.179	0.100	-1.5	25.0
Styrene	0.692	0.716	0.300	-3.5	25.0
Xylenes (total)	1.343	1.379	0.300	-2.7	-2.6
Toluene-d8	1.138	1.070	0.010	6.0	100.0
Bromofluorobenzene	0.880	0.818	0.200	7.0	25.0
1,2-Dichloroethane-d4	1.592	1.627	0.010	-2.2	100.0

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Instrument ID: VOA-1 Calibration Date: 10/26/94 Time: 0959

Lab File ID: V6019.D Init. Calib. Date(s): 10/21/94 10/25/94

Heated Purge: (Y/N) Y Init. Calib. Times: 1014 1134

GC Column: DB-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.325	1.282		3.2	100.0
Bromomethane	0.776	0.743	0.100	4.3	25.0
Vinyl Chloride	1.149	1.022	0.100	11.1	25.0
Chloroethane	0.450	0.448		0.4	100.0
Methylene Chloride	1.514	1.309		13.5	100.0
Acetone	0.389	0.265		31.9	100.0
Carbon Disulfide	1.844	2.058		-11.6	100.0
1,1-Dichloroethene	1.497	1.517	0.100	-1.3	25.0
1,1-Dichloroethane	2.370	2.498	0.200	-5.4	25.0
1,2-Dichloroethene (total)	3.281	3.326		-1.4	100.0
Chloroform	2.651	2.732	0.200	-3.1	25.0
1,2-Dichloroethane	1.652	1.701	0.100	-3.0	25.0
2-Butanone	0.166	0.137		17.5	100.0
1,1,1-Trichloroethane	0.453	0.455	0.100	-0.4	25.0
Carbon Tetrachloride	0.449	0.463	0.100	-3.1	25.0
Bromodichloromethane	0.610	0.628	0.200	-3.0	25.0
1,2-Dichloropropane	0.368	0.386		-4.9	100.0
cis-1,3-Dichloropropene	0.474	0.487	0.200	-2.7	25.0
Trichloroethene	0.364	0.370	0.300	-1.6	25.0
Dibromochloromethane	0.576	0.611	0.100	-6.1	25.0
1,1,2-Trichloroethane	0.353	0.354	0.100	-0.3	25.0
Benzene	0.722	0.715	0.500	1.0	25.0
trans-1,3-Dichloropropene	0.335	0.344	0.100	-2.7	25.0
Bromoform	0.471	0.480	0.100	-1.9	25.0
4-Methyl-2-Pentanone	0.518	0.374		27.8	100.0
2-Hexanone	0.347	0.248		28.5	100.0
Tetrachloroethene	0.457	0.481	0.200	-5.3	25.0
1,1,2,2-Tetrachloroethane	0.717	0.694	0.500	3.2	25.0
Toluene	0.983	0.922	0.400	6.2	25.0
Chlorobenzene	0.803	0.824	0.500	-2.6	25.0
Ethylbenzene	1.162	1.140	0.100	1.9	25.0
Styrene	0.692	0.728	0.300	-5.2	25.0
Xylenes (total)	1.343	1.359	0.300	-1.2	25.0
Toluene-d8	1.138	1.037	0.010	8.9	100.0
Bromofluorobenzene	0.880	0.833	0.200	5.3	25.0
1,2-Dichloroethane-d4	1.592	1.638	0.010	-2.9	100.0

000097

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V5967.D
Acq Time : 21 Oct 94 10:14 am
Sample : 50 CCC
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:09:08 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	Bromochloromethane	1.000	1.000	0.0	115	0.10
2	P	Chloromethane	0.859	0.670	22.0	83	0.04
3	c	Vinyl Chloride	0.906	0.854	5.7	92	0.03
4		Bromomethane	0.523	0.478	8.6	108	0.04
5		Chloroethane	0.287	0.254	11.7	93	0.04
6	C	1,1-Dichloroethene	1.689	1.387	17.9	88	0.05
7		Acetone	0.445	0.214	51.9#	53	0.00
8		Carbon Disulfide	2.587	1.734	33.0#	73	0.06
9		Methylene Chloride	1.547	1.053	31.9#	79	0.06
10		trans-1,2-Dichloroethene	1.931	1.561	19.2	89	0.08
11	P	1,1-Dichloroethane	2.666	2.079	22.0	87	0.07
12	I	cis-1,2-Dichloroethene	1.539	1.383	10.1	102	0.09
13	C	Chloroform	2.899	2.440	15.8	95	0.11
14	S	1,2-Dichloroethane-d4	1.555	1.865	-19.9	143	0.11
15		1,2-Dichloroethane	1.631	1.507	7.6	94	0.13
16	I	1,4-Difluorobenzene	1.000	1.000	0.0	121	0.12
17		2-Butanone	0.232	0.109	53.0#	55	0.07
18		1,1,1-Trichloroethane	0.512	0.427	16.6	102	0.12
19		Carbon Tetrachloride	0.563	0.435	22.7	93	0.14
20	M	Benzene	0.819	0.657	19.8	101	0.12
21	M	Trichloroethene	0.463	0.380	18.0	105	0.12
22	C	1,2-Dichloropropane	0.464	0.362	22.0	99	0.09
23		Bromodichloromethane	0.677	0.593	12.5	108	0.11
24		cis-1,3-Dichloropropene	0.526	0.451	14.3	107	0.10
25		trans-1,3-Dichloropropene	0.375	0.320	14.7	107	0.10
26		1,1,2-Trichloroethane	0.461	0.359	22.2	98	0.11
27		Dibromochloromethane	0.770	0.580	24.6	96	0.09
28	P	Bromoform	0.674	0.460	31.8#	86	0.10
29	I	Chlorobenzene-d5	1.000	1.000	0.0	127	0.09
30		4-Methyl-2-Pentanone	0.691	0.359	48.1#	68	0.11
31	S	Toluene-d8	1.185	1.210	-2.1	140	0.10
32	C	Toluene	1.162	0.923	20.5	111	0.11
33		Tetrachloroethene	0.659	0.520	21.1	107	0.09
34		2-Hexanone	0.486	0.229	52.8#	60	0.09
35	P	Chlorobenzene	1.136	0.928	18.3	111	0.10
36	C	Ethylbenzene	1.378	1.116	19.0	110	0.10
37		m+ p-Xylenes	0.523	0.429	18.0	108	0.11
38		o-xylene	1.043	0.889	14.8	114	0.09
39		Styrene	0.890	0.709	20.3	104	0.10
40	S	Bromofluorobenzene	0.886	0.907	-2.4	137	0.10

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V5967.D
Acq Time : 21 Oct 94 10:14 am
Sample : 50 CCC
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 14:09:08 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41	P	1,1,2,2-Tetrachloroethane	1.139	0.761	33.2#	85	0.11

000093

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5967.D
Acq Time : 21 Oct 94 10:14 am
Sample : 50 CCC
Misc :
Quant Time: Nov 1 12:22 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Sep 20 15:53:06 1994
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	8.23	128	279711	50.00	ug/L		0.10
16) 1,4-Difluorobenzene	12.41	114	1087392	50.00	ug/L		0.12
29) Chlorobenzene-d5	22.81	117	902184	50.00	ug/L		0.09
System Monitoring Compounds							%Recovery
14) 1,2-Dichloroethane-d4	10.39	65	521783	59.54	ug/L		
31) Toluene-d8	17.81	98	1091795	51.06	ug/L		
40) Bromofluorobenzene	26.97	95	818449	51.21	ug/L		
Target Compounds							Qvalue
2) Chloromethane	2.00	50	187278	38.68	ug/L	m	97
3) Vinyl Chloride	2.10	62	238881	46.72	ug/L	m	97
4) Bromomethane	2.50	94	133730	45.35	ug/L		95
5) Chloroethane	2.63	64	70950	43.82	ug/L		98
6) 1,1-Dichloroethene	3.71	61	387894	40.73	ug/L	m	99
7) Acetone	3.88	43	59853	23.85	ug/L		93
8) Carbon Disulfide	4.02	76	485152	33.24	ug/L		100
9) Methylene Chloride	4.53	84	294626	33.80	ug/L		100
10) trans-1,2-Dichloroethene	5.07	61	436567	40.10	ug/L		98
11) 1,1-Dichloroethane	5.96	63	581502	38.68	ug/L		97
12) cis-1,2-Dichloroethene	7.51	96	386953	44.61	ug/L		99
13) Chloroform	8.62	83	682393	41.77	ug/L		98
15) 1,2-Dichloroethane	10.72	62	421641	45.82	ug/L		99
17) 2-Butanone	7.70	43	118462	23.48	ug/L		99
18) 1,1,1-Trichloroethane	9.13	97	464191	41.72	ug/L		99
19) Carbon Tetrachloride	9.76	117	472879	38.64	ug/L		99
20) Benzene	10.58	78	714657	40.11	ug/L		99
21) Trichloroethene	13.28	130	412952	40.98	ug/L	m	98
22) 1,2-Dichloropropane	14.04	63	393477	38.99	ug/L	m	99
23) Bromodichloromethane	15.23	83	644395	43.74	ug/L		97
24) cis-1,3-Dichloropropene	16.92	75	490397	42.86	ug/L		100
25) trans-1,3-Dichloropropene	19.03	75	347769	42.65	ug/L		98
26) 1,1,2-Trichloroethane	19.59	97	389962	38.92	ug/L	m	98
27) Dibromochloromethane	20.86	129	631228	37.70	ug/L	m	98
28) Bromoform	25.74	173	499783	34.68	ug/L	m	98
30) 4-Methyl-2-Pentanone	17.69	43	323658	25.96	ug/L		100
32) Toluene	18.04	91	833133	39.74	ug/L		100
33) Tetrachloroethene	19.94	166	469366	39.44	ug/L	m	99
34) 2-Hexanone	20.72	43	206937	23.60	ug/L		99
35) Chlorobenzene	22.91	112	837056	40.84	ug/L	m	98
36) Ethylbenzene	23.45	91	1007042	40.48	ug/L		99
37) m+ p-Xylenes	23.90	106	387419	41.01	ug/L		97
38) o-xylene	25.20	91	801609	42.59	ug/L		98
39) Styrene	25.28	104	639881	39.85	ug/L		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5967.D
Acq Time : 21 Oct 94 10:14 am
Sample : 50 CCC
Misc :
Quant Time: Nov 1 12:22 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Sep 20 15:53:06 1994
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,1,2,2-Tetrachloroethane	27.71	83	686947	33.41 ug/L m	98

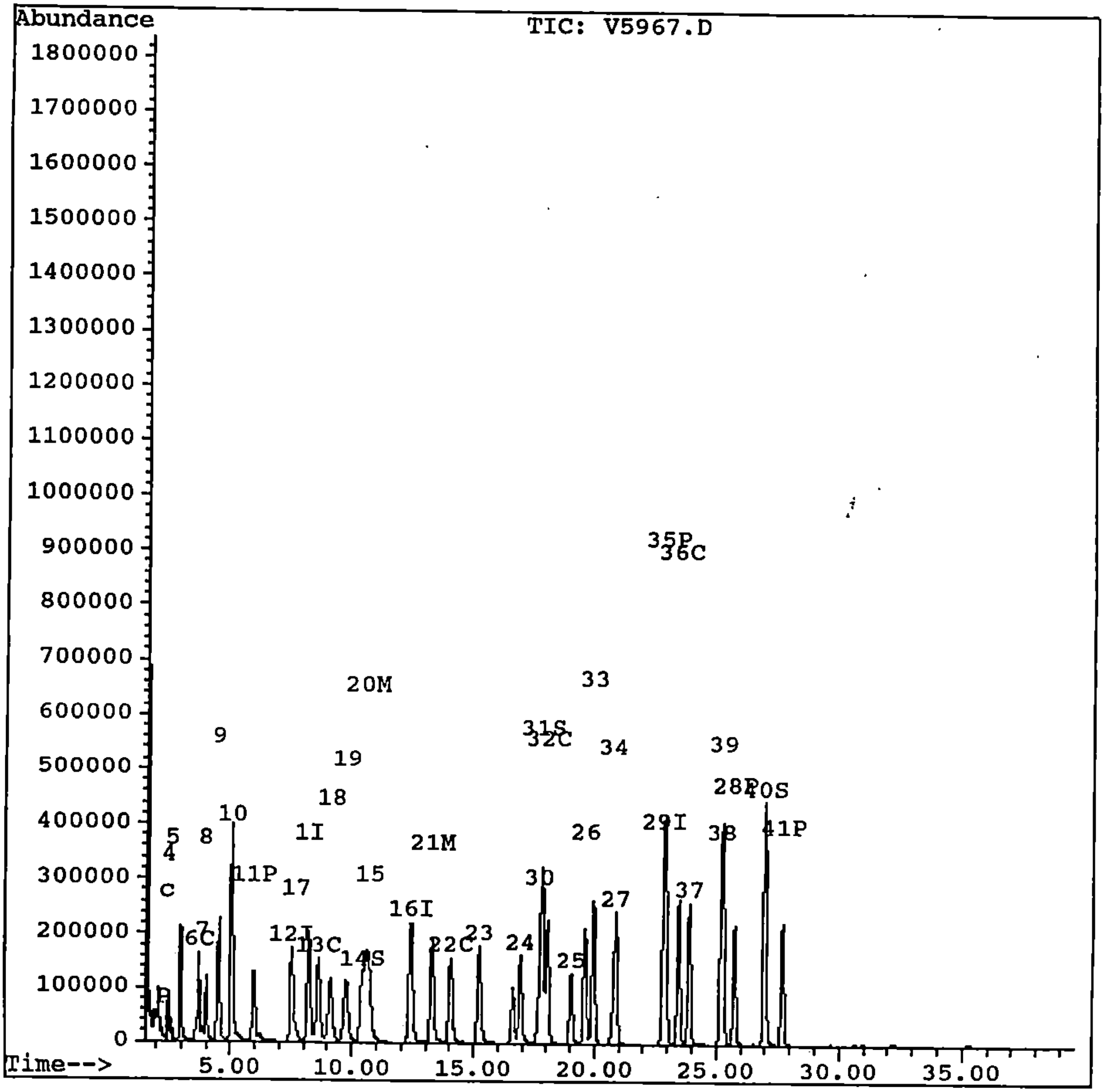
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5967.D
Acq Time : 21 Oct 94 10:14 am
Sample : 50 CCC
Misc :
Quant Time: Nov 1 12:22 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH3.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Sep 20 15:53:06 1994
Response via : Multiple Level Calibration



000102

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V6019.D
Acq Time : 26 Oct 94 9:59 am
Sample : 50PPB VOA CCC
Misc :

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	Bromochloromethane	1.000	1.000	0.0	111	0.04
2	P	Chloromethane	1.325	1.282	3.3	92	0.02
3	C	Vinyl Chloride	1.149	1.022	11.0	89	0.02
4		Bromomethane	0.776	0.743	4.4	104	0.00
5		Chloroethane	0.450	0.448	0.5	132	0.02
6	C	1,1-Dichloroethene	1.497	1.517	-1.3	106	0.02
7		Acetone	0.389	0.265	32.0#	65	0.03
8		Carbon Disulfide	1.844	2.058	-11.6	113	0.03
9		Methylene Chloride	1.514	1.309	13.5	108	0.02
10		trans-1,2-Dichloroethene	1.794	1.852	-3.3	111	0.03
11	P	1,1-Dichloroethane	2.370	2.498	-5.4	114	0.03
12	I	cis-1,2-Dichloroethene	1.487	1.474	0.9	106	0.04
13	C	Chloroform	2.651	2.732	-3.0	110	0.03
14	S	1,2-Dichloroethane-d4	1.592	1.638	-2.9	112	0.04
15		1,2-Dichloroethane	1.652	1.701	-3.0	113	0.03
16	I	1,4-Difluorobenzene	1.000	1.000	0.0	113	0.04
17		2-Butanone	0.166	0.137	17.3	77	0.02
18		1,1,1-Trichloroethane	0.453	0.455	-0.4	108	0.04
19		Carbon Tetrachloride	0.449	0.463	-3.1	107	0.04
20	M	Benzene	0.722	0.715	0.9	112	0.05
21	M	Trichloroethene	0.364	0.370	-1.7	109	0.04
22	C	1,2-Dichloropropane	0.368	0.386	-4.7	119	0.04
23		Bromodichloromethane	0.610	0.628	-3.0	114	0.03
24		cis-1,3-Dichloropropene	0.474	0.487	-2.7	113	0.04
25		trans-1,3-Dichloropropene	0.335	0.344	-2.5	112	0.04
26		1,1,2-Trichloroethane	0.353	0.354	-0.2	112	0.04
27		Dibromochloromethane	0.576	0.611	-6.0	112	0.03
28	P	Bromoform	0.471	0.480	-1.9	106	0.03
29	I	Chlorobenzene-d5	1.000	1.000	0.0	117	0.02
30		4-Methyl-2-Pentanone	0.518	0.374	27.7#	87	0.03
31	S	Toluene-d8	1.138	1.037	8.9	113	0.04
32	C	Toluene	0.983	0.922	6.2	109	0.04
33		Tetrachloroethene	0.457	0.481	-5.4	110	0.02
34		2-Hexanone	0.347	0.248	28.6#	83	0.03
35	P	Chlorobenzene	0.803	0.824	-2.6	118	0.02
36	C	Ethylbenzene	1.162	1.140	1.9	113	0.03
37		m+ p-Xylenes	0.432	0.451	-4.2	119	0.03
38		o-xylene	0.911	0.908	0.2	113	0.02
39		Styrene	0.692	0.728	-5.2	119	0.02
40	S	Bromofluorobenzene	0.880	0.833	5.4	119	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\V6019.D
Acq Time : 26 Oct 94 9:59 am
Sample : 50PPB VOA CCC
Misc :

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41	P	1,1,2,2-Tetrachloroethane	0.717	0.694	3.2	101	0.02

008104

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6019.D
Acq Time : 26 Oct 94 9:59 am
Sample : 50PPB VOA CCC
Misc :
Quant Time: Nov 1 11:21 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	8.27	128	254231	50.00	ug/L		0.04
16) 1,4-Difluorobenzene	12.44	114	1032485	50.00	ug/L		0.04
29) Chlorobenzene-d5	22.83	117	891356	50.00	ug/L		0.02
System Monitoring Compounds							%Recovery
14) 1,2-Dichloroethane-d4	10.45	65	416506	51.46	ug/L		
31) Toluene-d8	17.84	98	924324	45.57	ug/L		
40) Bromofluorobenzene	26.98	95	742646	47.32	ug/L		
Target Compounds							Qvalue
2) Chloromethane	1.99	50	325855	48.37	ug/L	m	98
3) Vinyl Chloride	2.11	62	259916	44.50	ug/L	m	100
4) Bromomethane	2.50	94	188788	47.82	ug/L	m	98
5) Chloroethane	2.63	64	113894	49.77	ug/L	m	99
6) 1,1-Dichloroethene	3.73	61	385592	50.66	ug/L		99
7) Acetone	3.89	43	67265	34.02	ug/L		95
8) Carbon Disulfide	4.03	76	523154	55.79	ug/L		99
9) Methylene Chloride	4.55	84	332713	43.23	ug/L		100
10) trans-1,2-Dichloroethene	5.08	61	470934	51.63	ug/L		97
11) 1,1-Dichloroethane	5.99	63	635189	52.72	ug/L		97
12) cis-1,2-Dichloroethene	7.55	96	374700	49.54	ug/L		98
13) Chloroform	8.65	83	694523	51.52	ug/L		100
15) 1,2-Dichloroethane	10.75	62	432443	51.49	ug/L		99
17) 2-Butanone	7.73	43	141381	41.34	ug/L	m	98
18) 1,1,1-Trichloroethane	9.17	97	469544	50.20	ug/L		99
19) Carbon Tetrachloride	9.79	117	478378	51.57	ug/L		97
20) Benzene	10.64	78	738421	49.54	ug/L		98
21) Trichloroethene	13.32	130	382499	50.87	ug/L		98
22) 1,2-Dichloropropane	14.09	63	398168	52.33	ug/L		100
23) Bromodichloromethane	15.26	83	648724	51.51	ug/L		98
24) cis-1,3-Dichloropropene	16.96	75	502617	51.33	ug/L		100
25) trans-1,3-Dichloropropene	19.05	75	354808	51.24	ug/L		100
26) 1,1,2-Trichloroethane	19.62	97	365356	50.12	ug/L		100
27) Dibromochloromethane	20.89	129	630514	53.00	ug/L		98
28) Bromoform	25.74	173	495779	50.97	ug/L		99
30) 4-Methyl-2-Pentanone	17.71	43	333640	36.13	ug/L		99
32) Toluene	18.06	91	821677	46.90	ug/L		99
33) Tetrachloroethene	19.96	166	429174	52.69	ug/L		98
34) 2-Hexanone	20.74	43	220823	35.72	ug/L		97
35) Chlorobenzene	22.92	112	734216	51.30	ug/L		99
36) Ethylbenzene	23.47	91	1016188	49.06	ug/L		98
37) m+ p-Xylenes	23.90	106	401672	52.10	ug/L		99
38) o-xylene	25.21	91	809786	49.88	ug/L		97
39) Styrene	25.29	104	648640	52.59	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6019.D
Acq Time : 26 Oct 94 9:59 am
Sample : 50PPB VOA CCC
Misc :
Quant Time: Nov 1 11:21 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	1,1,2,2-Tetrachloroethane	27.70	83	618178	48.40 ug/L	99

000106

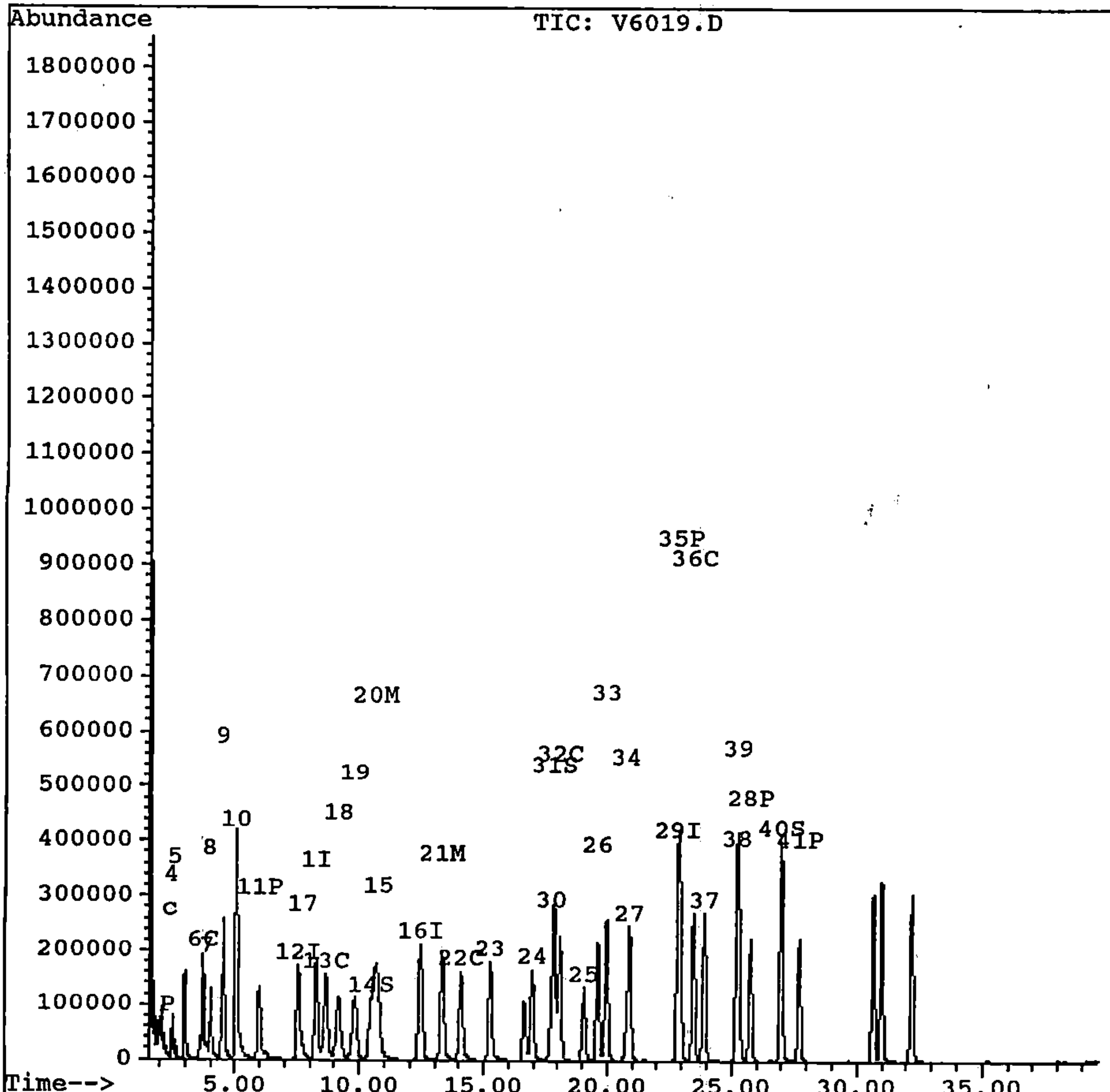
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6019.D
Acq Time : 26 Oct 94 9:59 am
Sample : 50PPB VOA CCC
Misc :
Quant Time: Nov 1 11:21 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration
Last Update : Thu Oct 27 15:01:58 1994
Response via : Multiple Level Calibration



0000107

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: Location: 100 COMMERCIAL ST Group:

Lab File ID (Standard): V5955.D Date Analyzed: 10/19/94

Instrument ID: VOA-1 Time Analyzed: 1127

GC Column: DB-624 ID: 0.53 (mm) Heated Purge (Y/N)

		IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	244275	8.06	891476	12.20	750572	22.65
	UPPER LIMIT	488550	8.56	1782952	12.70	1501144	23.15
	LOWER LIMIT	122138	7.56	445738	11.70	375286	22.15
	SAMPLE NO.						
01	VBLK01	230825	8.22	909143	12.40	763377	22.81
02	TRIP BLANK	247593	8.06	961662	12.20	820148	22.65
03	FLD BLK 10-17-9	222762	8.06	852351	12.19	733933	22.65
04							
05							
06							
07							
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16							
17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: SAS No.: 100 COMMERCIAL ST SDG No.:

Lab File ID (Standard): V5967.D Date Analyzed: 10/21/94

Instrument ID: VOA-1 Time Analyzed: 1014

GC Column: DB-624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	279711	8.23	1087392	12.41	902184	22.81
	UPPER LIMIT	559422	8.73	2174784	12.91	1804368	23.31
	LOWER LIMIT	139856	7.73	543696	11.91	451092	22.31
	EPA SAMPLE NO.						
01	VBLK01	256313	8.23	1028234	12.41	843583	22.81
02	SB5-4,2-4'	220601	8.23	845305	12.43	632061	22.80
03	SB5-4,2-4'MS	172188	8.24	663315	12.41	522027	22.80
04	SB5-4,2-4'MSD	220271	8.24	855610	12.41	682355	22.81
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL ST Group: ______

Lab File ID (Standard): V6019.D Date Analyzed: 10/26/94

Instrument ID: VOA-1 Time Analyzed: 0959

GC Column: DB-624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	254231	8.27	1032485	12.44	891356	22.83
	UPPER LIMIT	508462	8.77	2064970	12.94	1782712	23.33
	LOWER LIMIT	127116	7.77	516243	11.94	445678	22.33
	SAMPLE NO.						
01	VBLK02	265994	8.25	1030803	12.43	908992	22.81
02	BLK SPK	222108	8.25	964386	12.43	842619	22.81
03							
04							
05							
06							
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17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

(d)

Volatiles Data

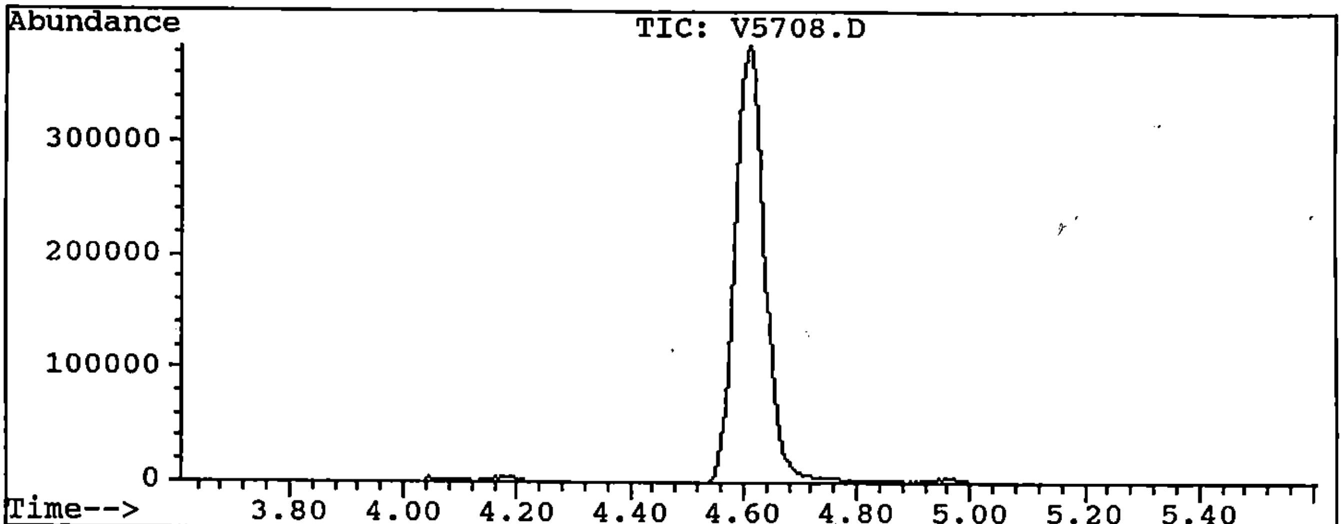
QC Data

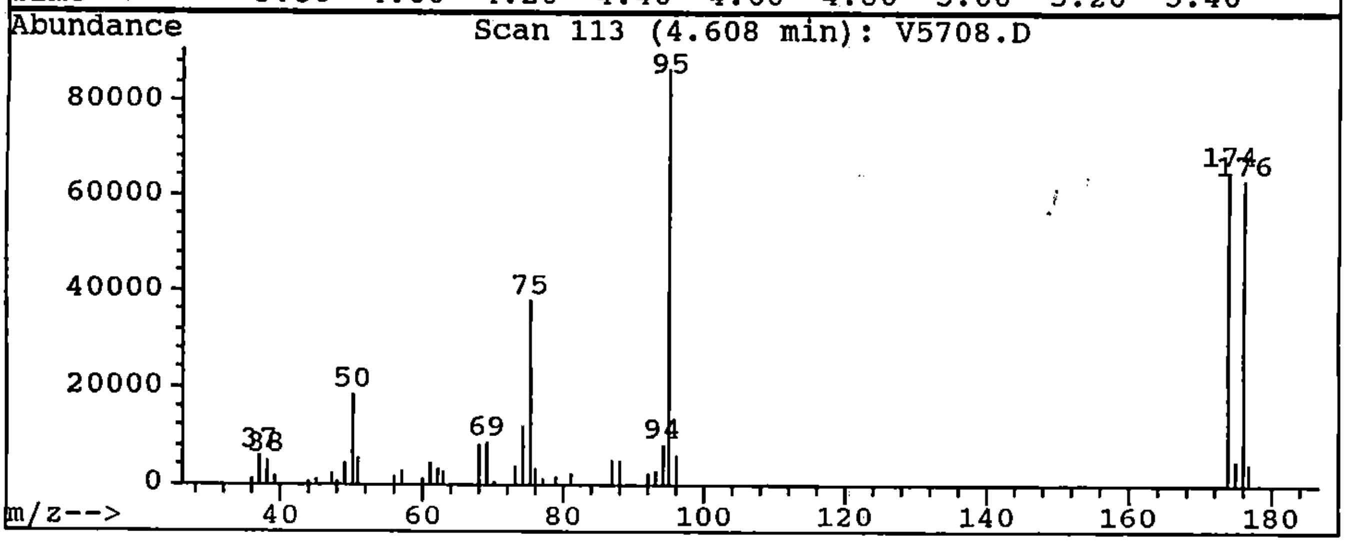
BFB

Data File : C:\HPCHEM\1\DATA\V5708.D
Acq Time : 12 Sep 94 11:14 am
Sample : 50NG BFB VOA TUNE CHECK
Misc :

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH0.M
Title : VOA Standards for 5 point calibration





Peak Apex is scan: 113

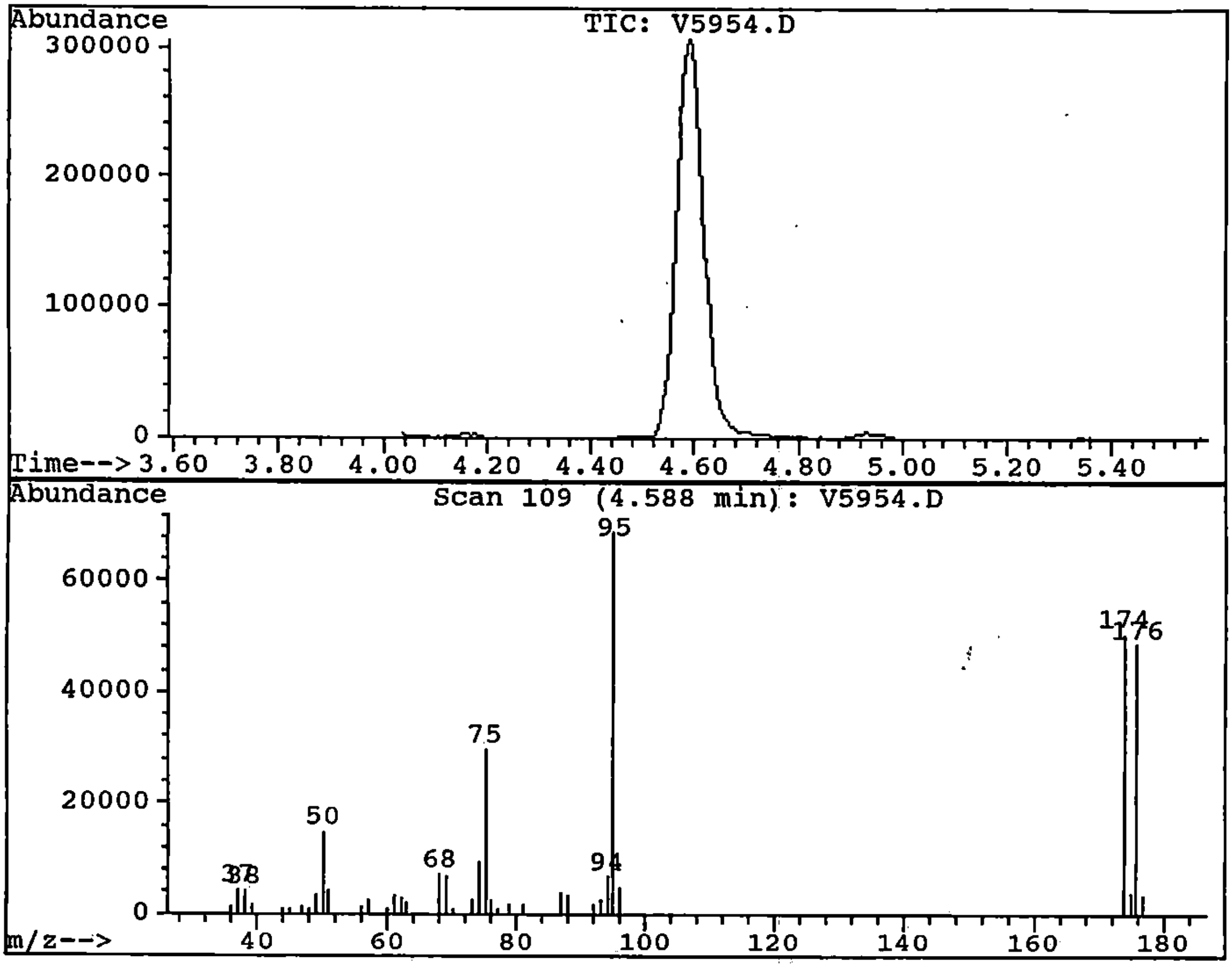
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	18040	PASS
75	95	30	60	43.4	37640	PASS
95	95	100	100	100.0	86648	PASS
96	95	5	9	6.5	5614	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	75.0	64992	PASS
175	174	5	9	7.4	4815	PASS
176	174	95	101	97.1	63080	PASS
177	176	5	9	6.3	3945	PASS

BFB

Data File : C:\HPCHEM\1\DATA\V5954.D
Acq Time : 19 Oct 94 10:08 am
Sample : 50NG BFB VOA TUNE
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration



Peak Apex is scan: 109

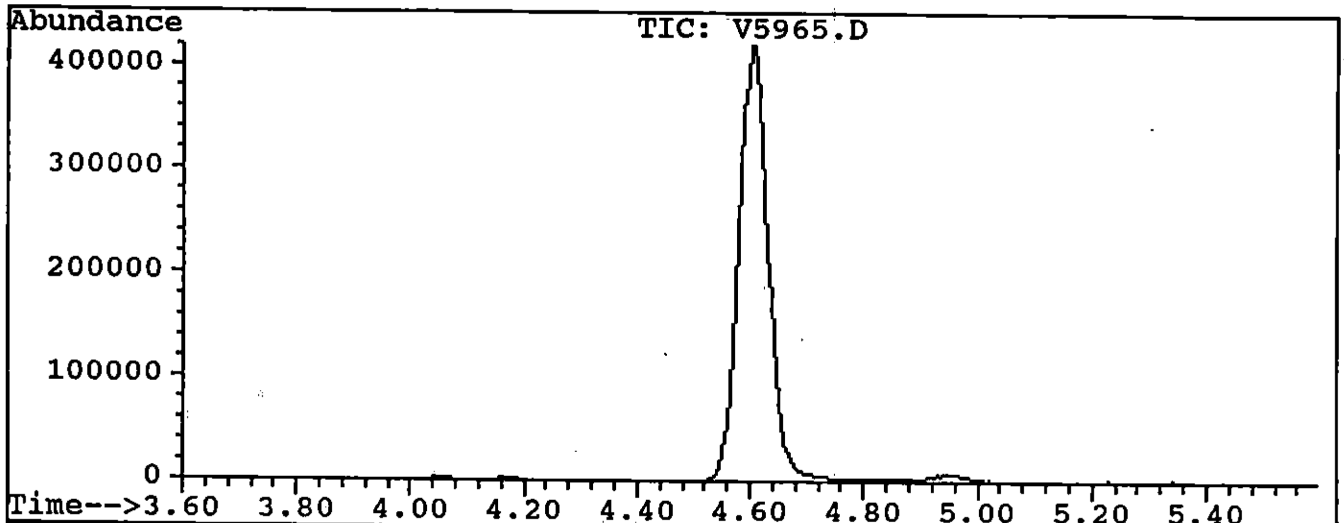
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.3	14694	PASS
75	95	30	60	42.9	29624	PASS
95	95	100	100	100.0	68984	PASS
96	95	5	9	6.5	4514	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	73.2	50480	PASS
175	174	5	9	7.2	3614	PASS
176	174	95	101	96.0	48472	PASS
177	176	5	9	6.6	3199	PASS

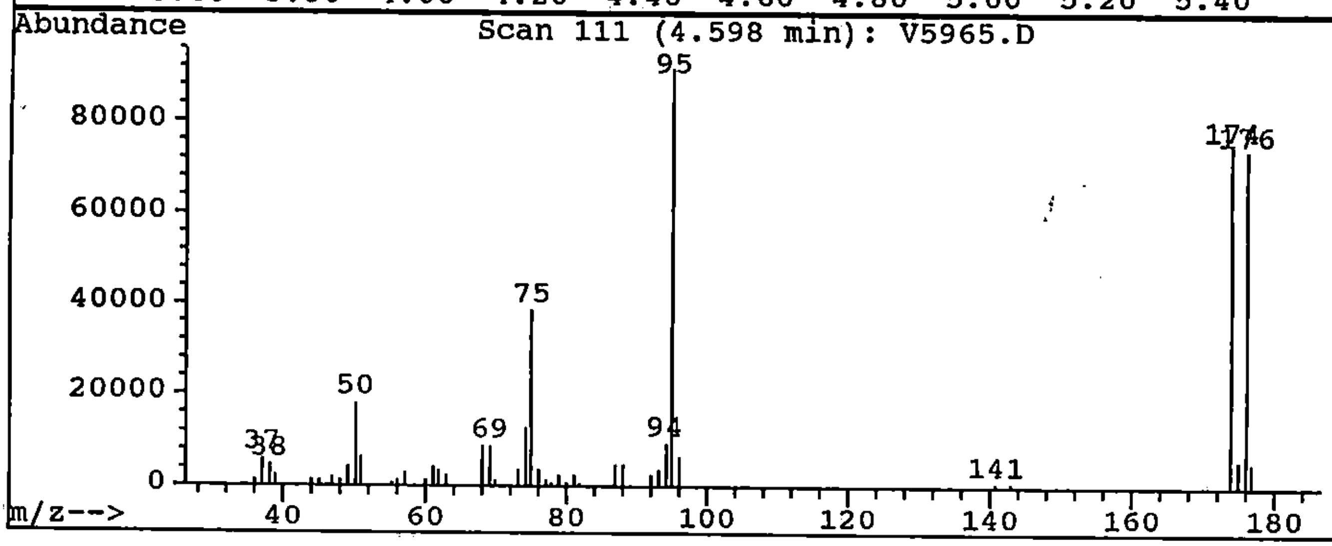
BFB

Data File : C:\HPCHEM\1\DATA\V5965.D
Acq Time : 21 Oct 94 9:01 am
Sample : 50NG BFB VOA TUNE
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration





Peak Apex is scan: 111

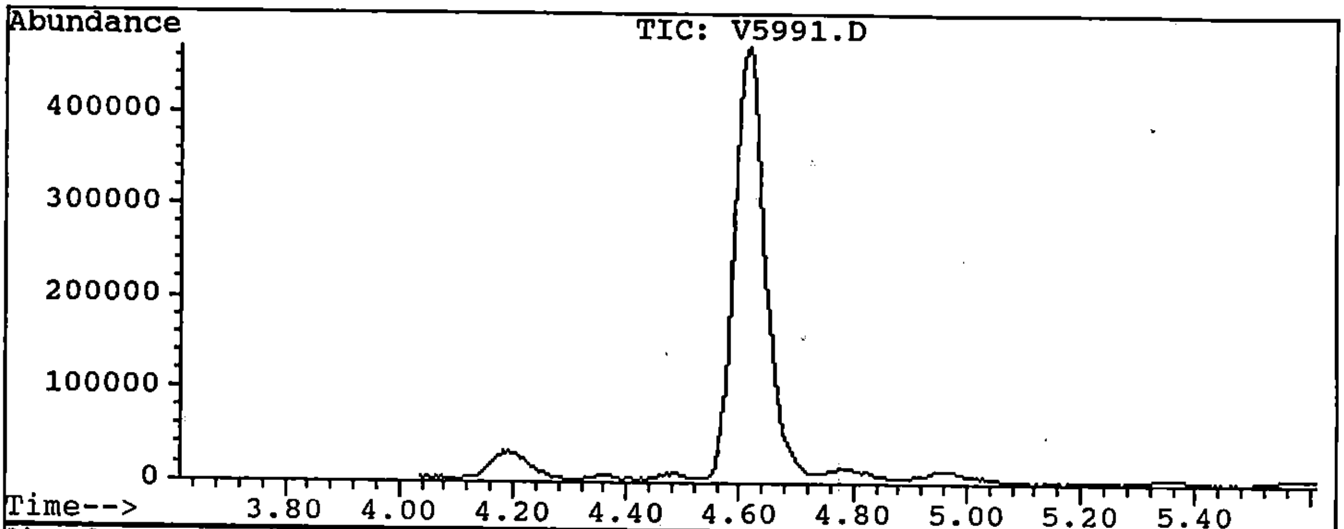
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	17744	PASS
75	95	30	60	41.9	38368	PASS
95	95	100	100	100.0	91480	PASS
96	95	5	9	6.8	6223	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	81.4	74432	PASS
175	174	5	9	7.7	5757	PASS
176	174	95	101	98.7	73432	PASS
177	176	5	9	6.9	5050	PASS

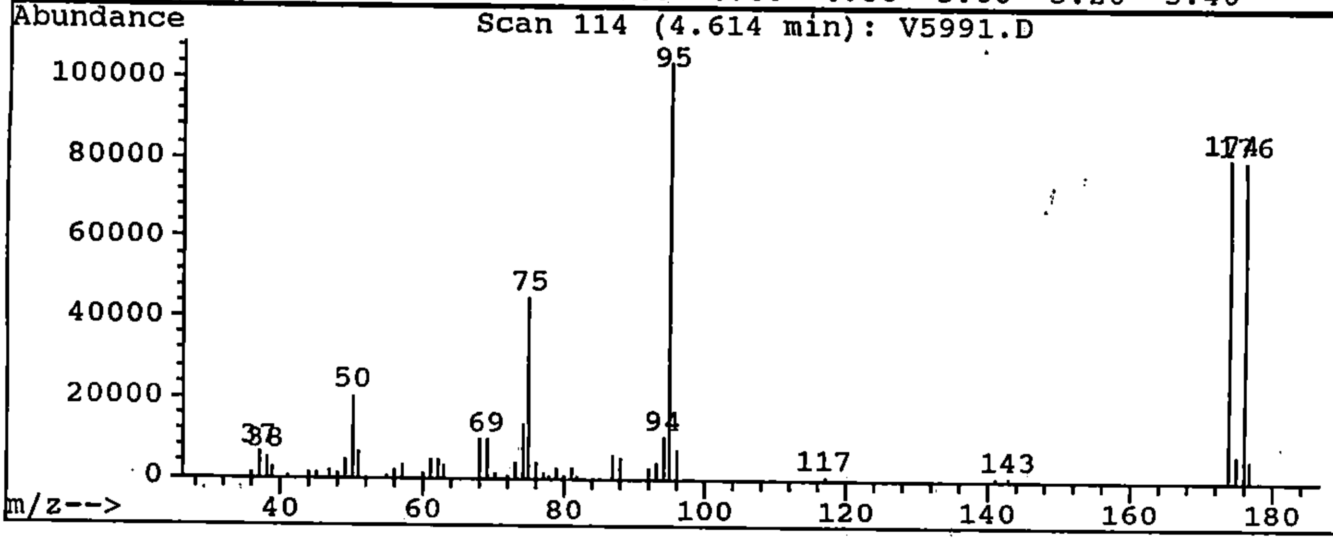
BFB

Data File : C:\HPCHEM\1\DATA\V5991.D
Acq Time : 25 Oct 94 8:38 am
Sample : 50NG BFB VOA TUNE
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPICCH.M
Title : VOA Standards for 5 point calibration





Peak Apex is scan: 114

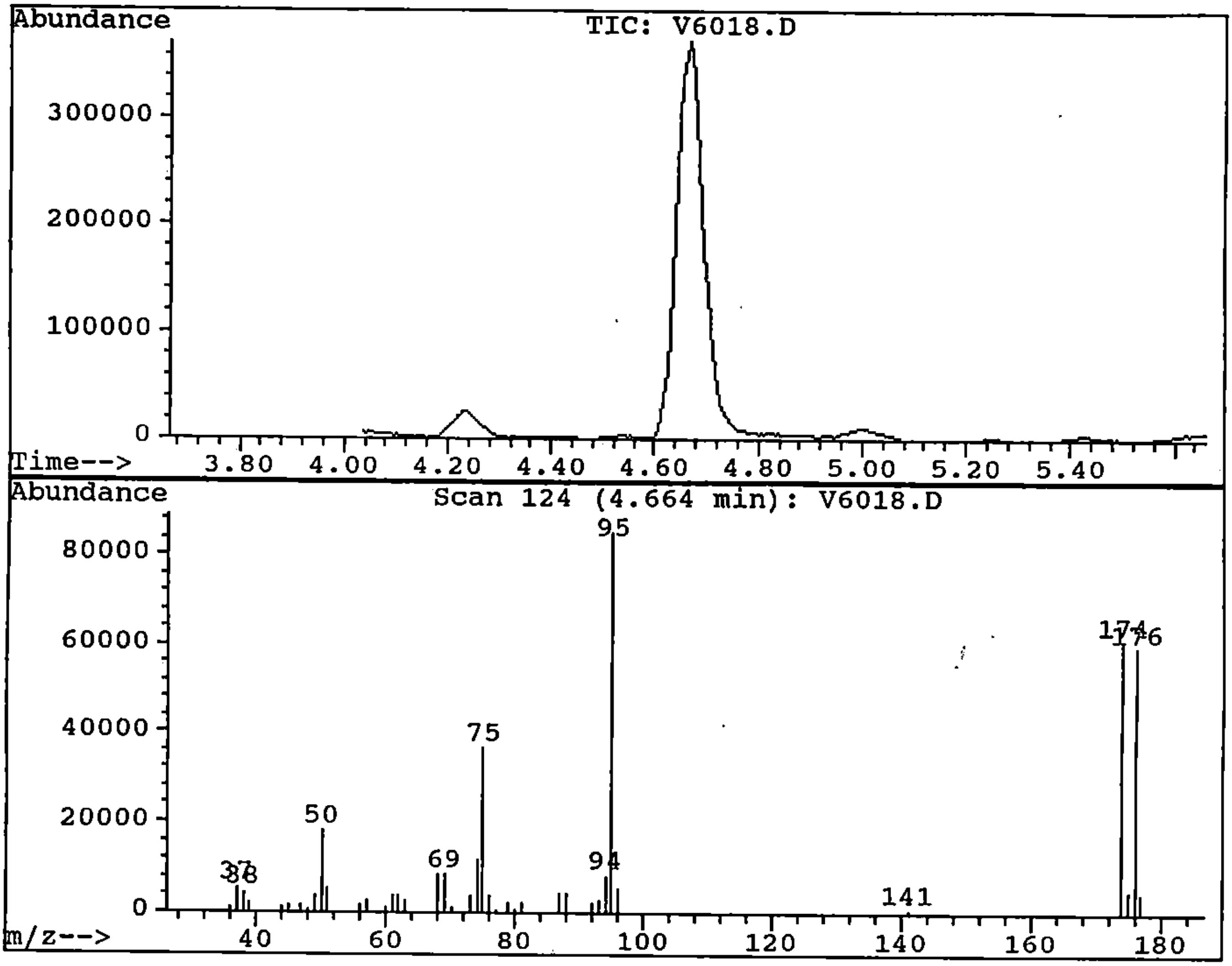
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	20280	PASS
75	95	30	60	43.1	44920	PASS
95	95	100	100	100.0	104192	PASS
96	95	5	9	6.6	6837	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	77.3	80528	PASS
175	174	5	9	7.4	5968	PASS
176	174	95	101	99.5	80088	PASS
177	176	5	9	6.4	5163	PASS

BFB

Data File : C:\HPCHEM\1\DATA\V6018.D
Acq Time : 26 Oct 94 9:30 am
Sample : 50ng BFB VOA TUNE
Misc :

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration



Peak Apex is scan: 124

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	17696	PASS
75	95	30	60	42.7	36336	PASS
95	95	100	100	100.0	85016	PASS
96	95	5	9	6.3	5383	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	71.4	60720	PASS
175	174	5	9	7.2	4401	PASS
176	174	95	101	97.6	59256	PASS
177	176	5	9	6.6	3889	PASS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: CHEMTECH   Contract: EIKON PLANNING

Lab Code: 4376   Case No.: ______   SAS No.: 100 COMMERCIAL   SDG No.: ______

Matrix: (soil/water) WATER   Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) ML   Lab File ID: V5960.D

Level: (low/med) ______   Date Received: ______

% Moisture: not dec. 100   Date Analyzed: 10/19/94

GC Column: DB-624   ID: 0.53 (mm)   Dilution Factor: 1.0

Soil Extract Volume: ______ (uL)   Soil Aliquot Volume: ______ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound	ug/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8.7	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U

000117

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
VBLK01

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No. 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Matrix: (soil/water) WATER Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: V5960.D

Level: (low/med) ______ Date Received: ______

% Moisture: not dec. 100 Date Analyzed: 10/19/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Number TICs found: 0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
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29.				
30.				

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5960.D
Acq Time : 19 Oct 94 3:49 pm
Sample : PRO BLK
Misc :
Quant Time: Oct 28 14:29 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Last Update : Fri Oct 28 14:29:13 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.22	128	230825	50.00	ug/L	0.16
16) 1,4-Difluorobenzene	12.40	114	909143	50.00	ug/L	0.20
29) Chlorobenzene-d5	22.81	117	763377	50.00	ug/L	0.17
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.40	65	446100	52.06	ug/L	
31) Toluene-d8	17.81	98	899031	52.23	ug/L	
40) Bromofluorobenzene	26.96	95	674768	49.91	ug/L	
Target Compounds						Qvalue
9) Methylene Chloride	4.52	84	46529	8.74	ug/L	96

000119

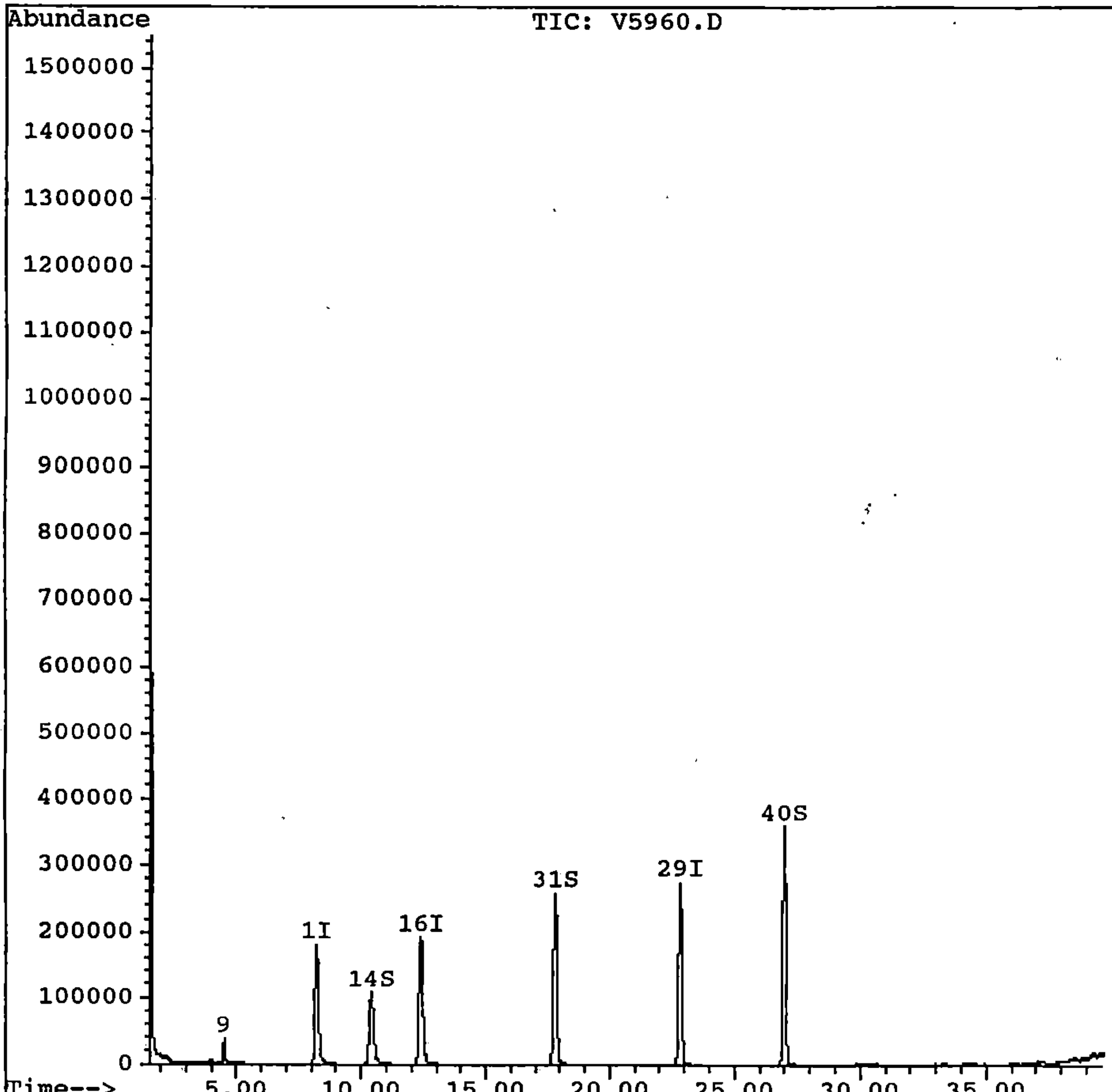
(#) = qualifier out of range (m) = manual integration

Quantitation Report

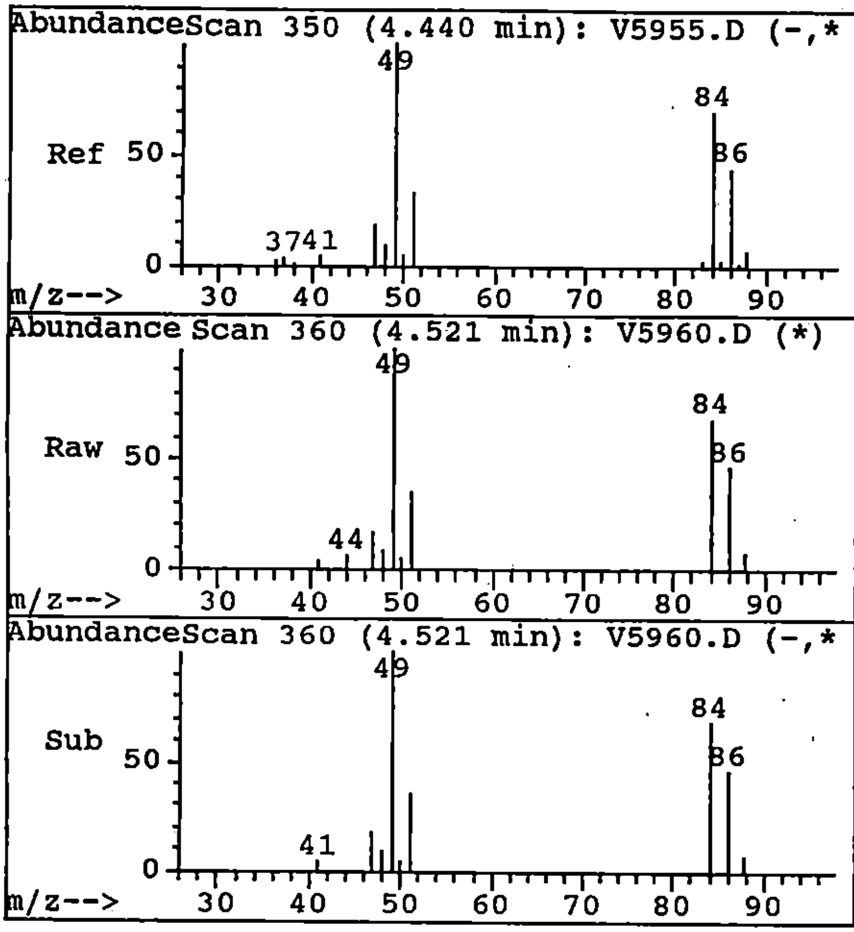
Data File : C:\HPCHEM\1\DATA\V5960.D
Acq Time : 19 Oct 94 3:49 pm
Sample : PRO BLK
Misc :
Quant Time: Oct 28 14:29 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Last Update : Fri Oct 28 14:29:13 1994
Response via : Single Level Calibration



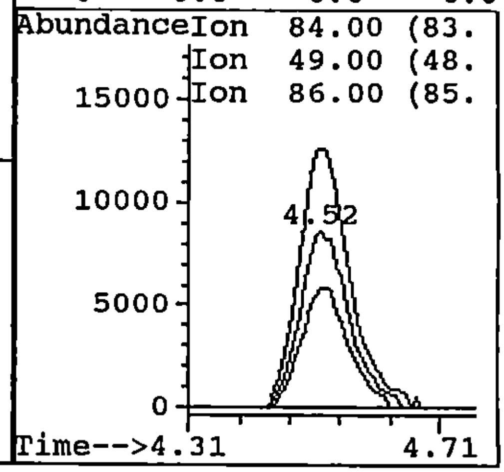
000120



#9
Methylene Chloride
Concen: 8.74 ug/L
RT: 4.52 min Scan# 360
Delta R.T. 0.08 min
Lab File: V5960.D
Acq: 19 Oct 94 3:49 pm

Tgt Ion:84 Resp: 46529

Ion	Ratio	Lower	Upper
84	100		
49	147.4	93.5	193.5
86	67.5	33.7	93.7
0	0.0	0.0	0.0



000121

Library Search Compound Report

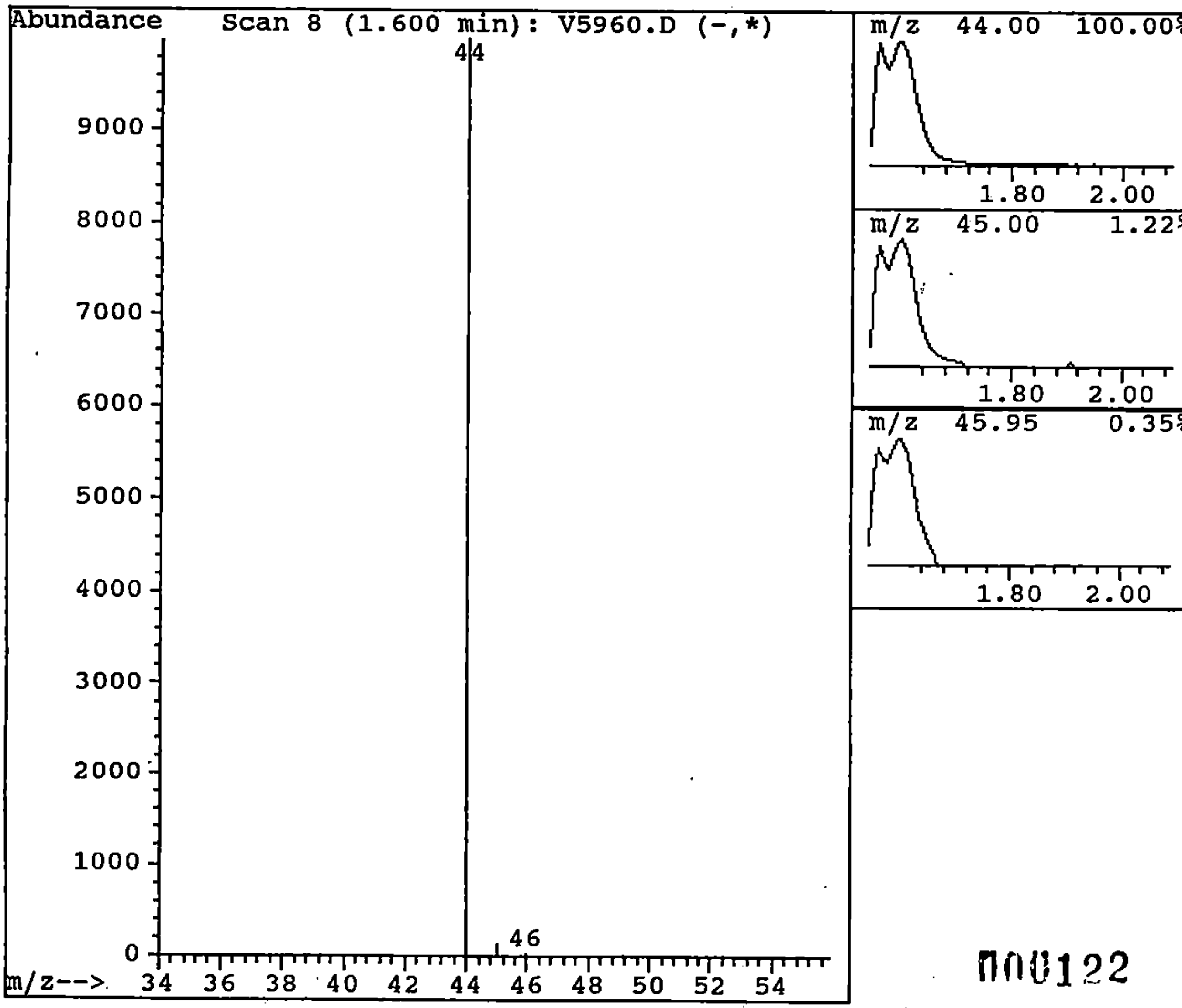
Data File : C:\HPCHEM\1\DATA\V5960.D
Acq Time : 19 Oct 94 3:49 pm
Sample : PRO BLK
Misc :

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUN.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
1.60	114.25 ug/L	3983466	Bromochloromethane	8.22

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1	~~Unknown~~ CO_2 10/28	0	000000-00-0	0



000122

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: ____ SAS No.: 100 COMMERCIAL SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5968.D

Level: (low/med) LOW Date Received: ____

% Moisture: not dec. ____ Date Analyzed: 10/21/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5.1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U

000123

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

VBLK01

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No. 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Matrix: (soil/water) SOIL Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5968.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. 0 Date Analyzed: 10/21/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
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Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5968.D
Acq Time : 21 Oct 94 11:11 am
Sample : ~~EXT~~ BLK ~~ 10/31/94
Misc :
Quant Time: Nov 1 15:36 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 15:33:38 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.23	128	256313	50.00 ug/L	0.00
16) 1,4-Difluorobenzene	12.41	114	1028234	50.00 ug/L	0.00
29) Chlorobenzene-d5	22.81	117	843583	50.00 ug/L	0.00
System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.40	65	439587	45.97 ug/L	
31) Toluene-d8	17.82	98	973823	47.70 ug/L	
40) Bromofluorobenzene	26.97	95	713424	46.61 ug/L	
Target Compounds					Qvalue
9) Methylene Chloride	4.52	84	27626	5.12 ug/L	95

000125

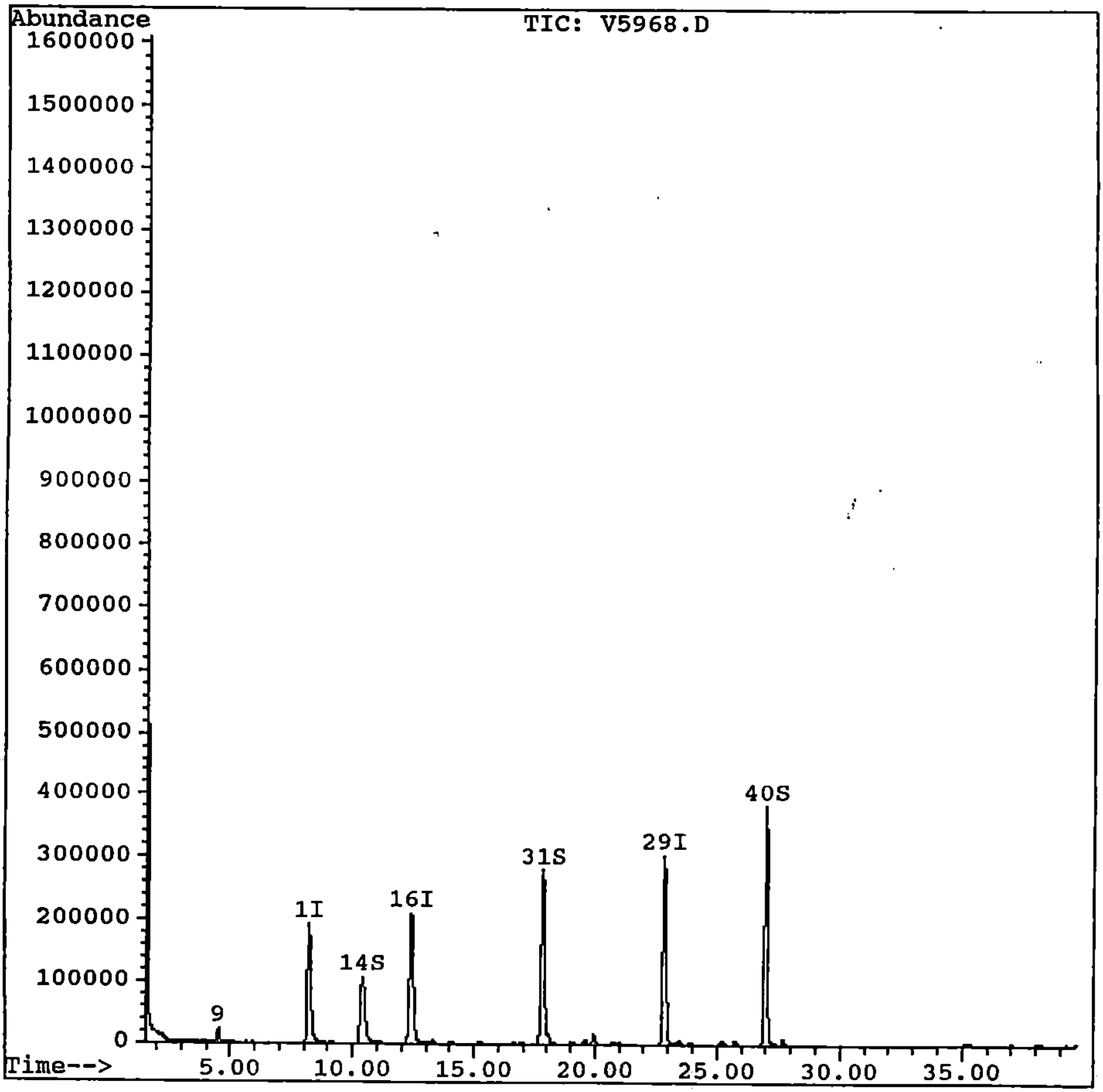
(#) = qualifier out of range (m) = manual integration

Quantitation Report

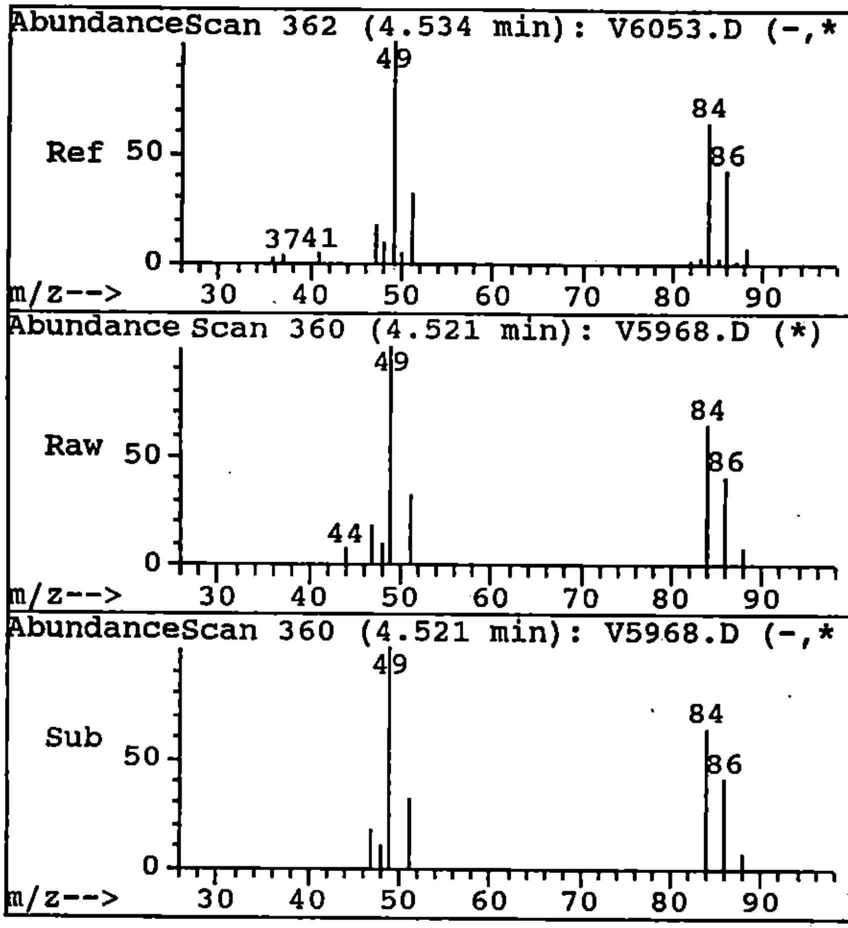
Data File : C:\HPCHEM\1\DATA\V5968.D
Acq Time : 21 Oct 94 11:11 am
Sample : ~~EXT~~ BLK
Misc :
Quant Time: Nov 1 15:36 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 15:33:38 1994
Response via : Single Level Calibration



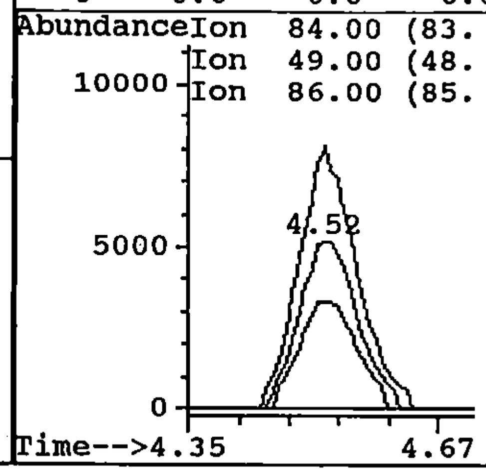
000126



#9
Methylene Chloride
Concen: 5.12 ug/L
RT: 4.52 min Scan# 360
Delta R.T. -0.01 min
Lab File: V5968.D
Acq: 21 Oct 94 11:11 am

Tgt Ion:84 Resp: 27626

Ion	Ratio	Lower	Upper
84	100		
49	155.9	97.8	197.8
86	64.7	35.4	95.4
0	0.0	0.0	0.0



000127

Library Search Compound Report

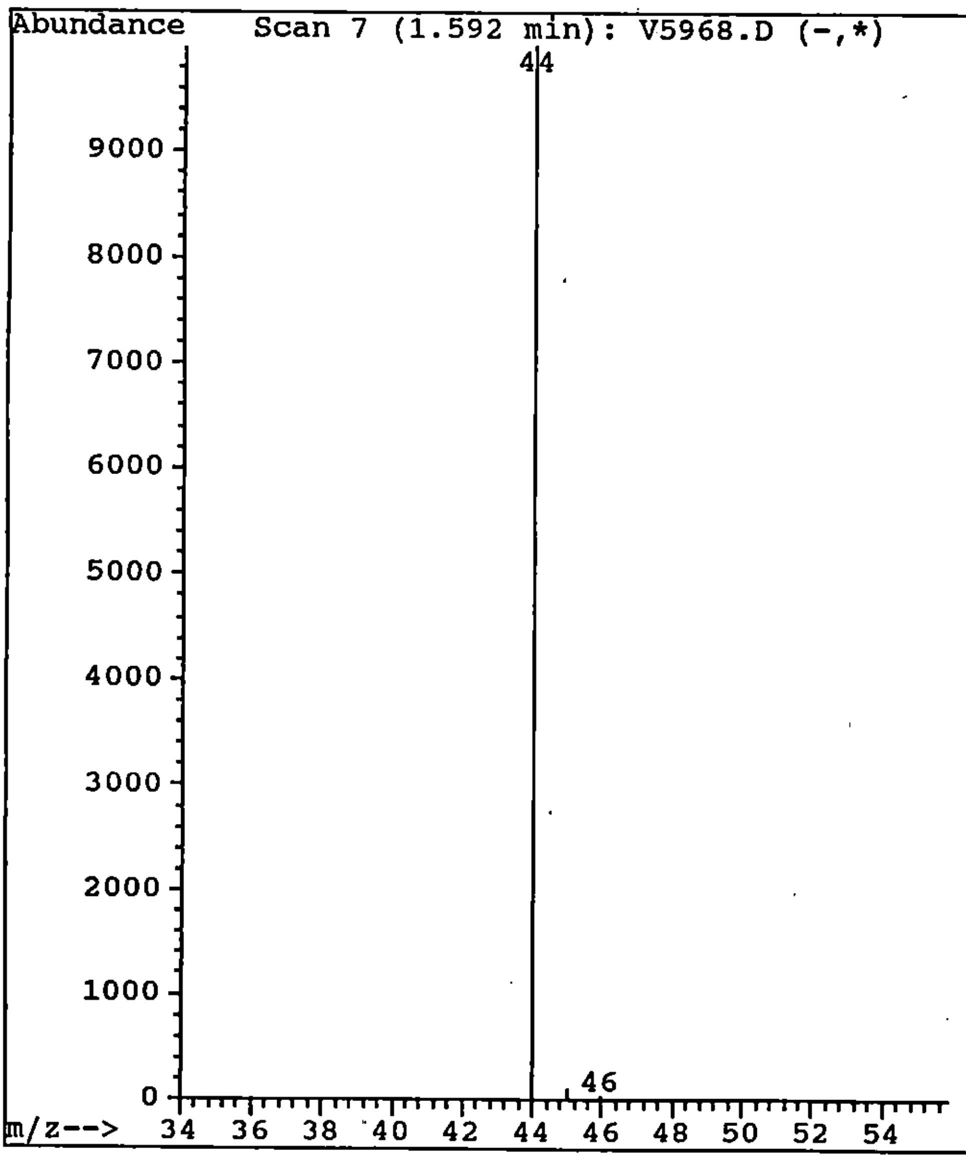
Data File : C:\HPCHEM\1\DATA\V5968.D
Acq Time : 21 Oct 94 11:11 am
Sample : EXT BLK
Misc :

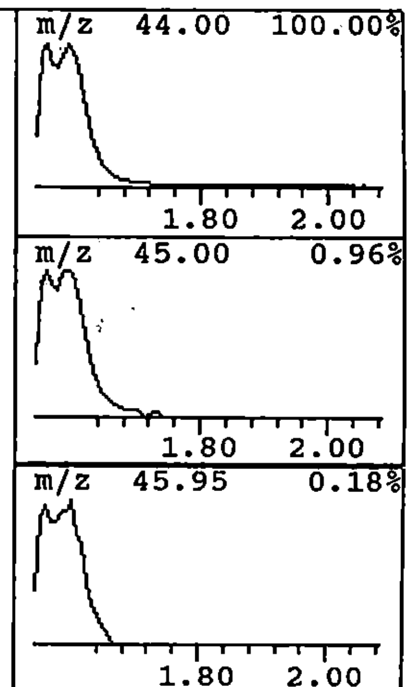
Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Library : C:\DATABASE\NBS54K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
1.59	103.49 ug/L	3830419	Bromochloromethane	8.23

Hit# of 0	Tentative ID	Ref#	CAS#	Qual
1 ~~Unknown~~ Co~		0	000000-00-0	0





000128

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLK02

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Matrix: (soil/water) SOIL Lab Sample ID: VBLK02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6020.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. 0 Date Analyzed: 10/26/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound	ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-4	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylenes (total)	10	U

000128

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

VBLK02

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No. 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Matrix: (soil/water) SOIL Lab Sample ID: VBLK02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6020.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. 0 Date Analyzed: 10/26/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6020.D
Acq Time : 26 Oct 94 10:46 am
Sample : BLK
Misc :
Quant Time: Nov 1 11:24 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 11:24:02 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.25	128	265994	50.00 ug/L	-0.02
16) 1,4-Difluorobenzene	12.43	114	1030803	50.00 ug/L	-0.01
29) Chlorobenzene-d5	22.81	117	908992	50.00 ug/L	-0.02
System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.43	65	415463	47.67 ug/L	
31) Toluene-d8	17.82	98	898515	47.66 ug/L	
40) Bromofluorobenzene	26.96	95	706464	46.64 ug/L	
Target Compounds					Qvalue
7) Acetone	3.86	43	18768	13.33 ug/L	93
9) Methylene Chloride	4.54	84	77201	11.09 ug/L	98

000131

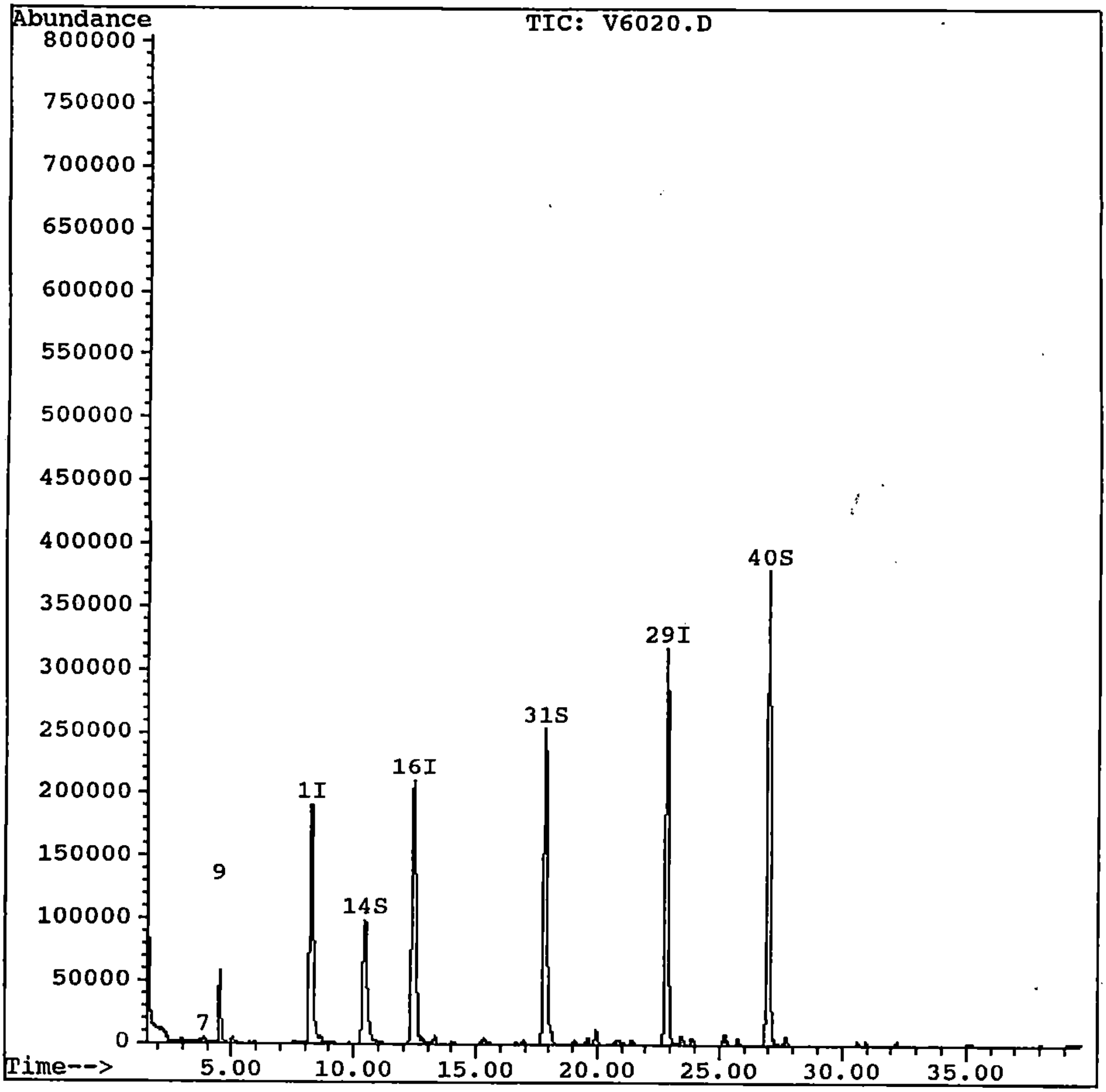
(#) = qualifier out of range (m) = manual integration

Quantitation Report

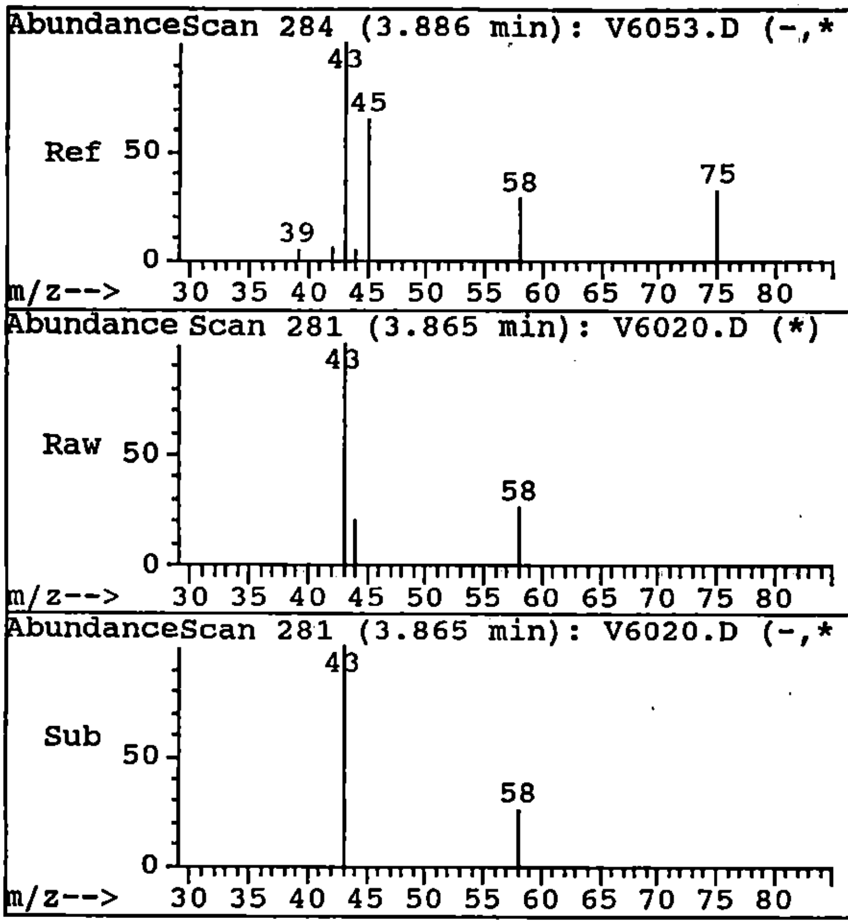
Data File : C:\HPCHEM\1\DATA\V6020.D
Acq Time : 26 Oct 94 10:46 am
Sample : BLK
Misc :
Quant Time: Nov 1 11:24 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 11:24:02 1994
Response via : Single Level Calibration



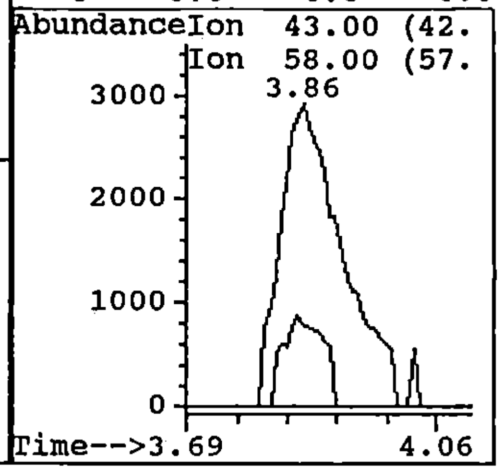
000132

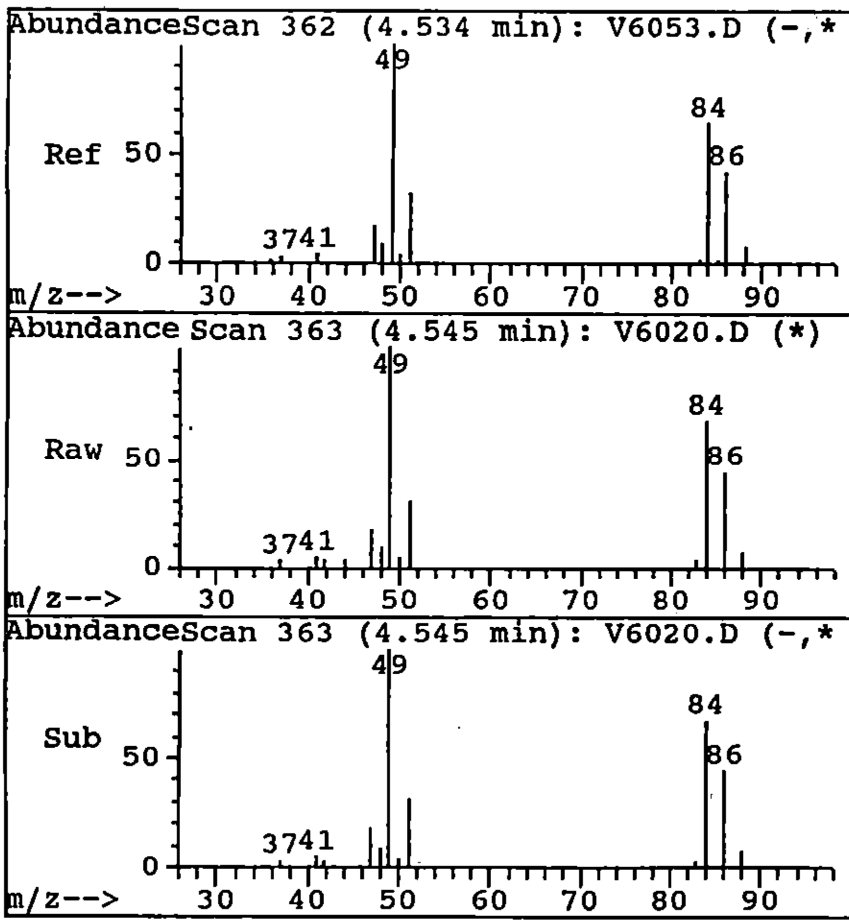


#7
Acetone
Concen: 13.33 ug/L
RT: 3.86 min Scan# 281
Delta R.T. -0.03 min
Lab File: V6020.D
Acq: 26 Oct 94 10:46 am

Tgt Ion:43 Resp: 18768

Ion	Ratio	Lower	Upper
43	100		
58	26.0	9.7	49.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

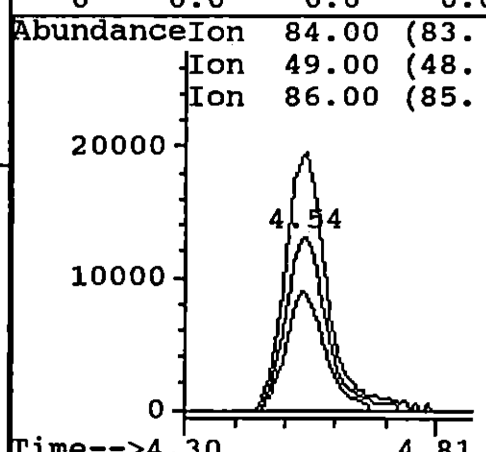




#9
Methylene Chloride
Concen: 11.09 ug/L
RT: 4.54 min Scan# 363
Delta R.T. -0.00 min
Lab File: V6020.D
Acq: 26 Oct 94 10:46 am

Tgt Ion:84 Resp: 77201

Ion	Ratio	Lower	Upper
84	100		
49	149.0	101.5	201.5
86	65.8	37.1	97.1
0	0.0	0.0	0.0



000133

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\V6020.D
Acq Time : 26 Oct 94 10:46 am
Sample : BLK
Misc :

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Library : nbs54k.l

No Library Search Compounds Detected

000134

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLK SPK

Lab Name: CHEMTECH Contract: EIKON PLANNING

Project No.: 4376 Site: ______ Location: 100 COMMERCIAL Group: ______

Matrix: (soil/water) SOIL Lab Sample ID: BLK SPK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6021.D

Level: (low/med) LOW Date Received: ______

% Moisture: not dec. 0 Date Analyzed: 10/26/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound	ug/Kg	Q
74-87-3	Chloromethane	34	
74-83-9	Bromomethane	38	
75-01-4	Vinyl Chloride	38	
75-00-3	Chloroethane	31	
75-09-2	Methylene Chloride	52	
67-64-1	Acetone	54	
75-15-0	Carbon Disulfide	50	
75-35-4	1,1-Dichloroethene	42	
75-34-4	1,1-Dichloroethane	45	
540-59-0	1,2-Dichloroethene (total)	97	
67-66-3	Chloroform	48	
107-06-2	1,2-Dichloroethane	45	
78-93-3	2-Butanone	47	
71-55-6	1,1,1-Trichloroethane	47	
56-23-5	Carbon Tetrachloride	45	
75-27-4	Bromodichloromethane	49	
78-87-5	1,2-Dichloropropane	44	
10061-01-5	cis-1,3-Dichloropropene	48	
79-01-6	Trichloroethene	48	
124-48-1	Dibromochloromethane	46	
79-00-5	1,1,2-Trichloroethane	45	
71-43-2	Benzene	47	
10061-02-6	trans-1,3-Dichloropropene	47	
75-25-2	Bromoform	46	
108-10-1	4-Methyl-2-Pentanone	50	
591-78-6	2-Hexanone	50	
127-18-4	Tetrachloroethene	48	
79-34-5	1,1,2,2-Tetrachloroethane	44	
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	45	
100-41-4	Ethylbenzene	48	
100-42-5	Styrene	48	
1330-20-7	Xylenes (total)	94	

000135

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6021.D
Acq Time : 26 Oct 94 11:39 am
Sample : BLK SPK
Misc :
Quant Time: Nov 1 11:26 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 11:24:02 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.25	128	222108	50.00 ug/L	-0.02
16) 1,4-Difluorobenzene	12.43	114	964386	50.00 ug/L	-0.01
29) Chlorobenzene-d5	22.81	117	842619	50.00 ug/L	-0.02

System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.43	65	357980	49.19 ug/L	
31) Toluene-d8	17.82	98	873603	49.99 ug/L	
40) Bromofluorobenzene	26.96	95	665722	47.41 ug/L	

Target Compounds					Qvalue
2) Chloromethane	1.96	50	196200	34.46 ug/L	98
3) Vinyl Chloride	2.09	62	173137	38.12 ug/L	98
4) Bromomethane	2.49	94	125999	38.20 ug/L	99
5) Chloroethane	2.61	64	62148	31.23 ug/L	99
6) 1,1-Dichloroethene	3.71	61	285900	42.43 ug/L	99
7) Acetone	3.87	43	64016	54.47 ug/L	99
8) Carbon Disulfide	4.02	76	454605	49.73 ug/L	99
9) Methylene Chloride	4.53	84	300153	51.63 ug/L	99
10) trans-1,2-Dichloroethene	5.06	61	375710	45.66 ug/L	98
11) 1,1-Dichloroethane	5.96	63	497425	44.82 ug/L	97
12) cis-1,2-Dichloroethene	7.53	96	335623	51.26 ug/L	99
13) Chloroform	8.63	83	582955	48.04 ug/L	98
15) 1,2-Dichloroethane	10.73	62	343355	45.44 ug/L	99
17) 2-Butanone	7.71	43	123409	46.73 ug/L	98
18) 1,1,1-Trichloroethane	9.14	97	411075	46.86 ug/L	99
19) Carbon Tetrachloride	9.77	117	403984	45.21 ug/L	99
20) Benzene	10.60	78	644807	46.74 ug/L	98
21) Trichloroethene	13.29	130	343153	48.02 ug/L	98
22) 1,2-Dichloropropane	14.06	63	326410	43.88 ug/L	99
23) Bromodichloromethane	15.25	83	590862	48.76 ug/L	97
24) cis-1,3-Dichloropropene	16.94	75	448653	47.78 ug/L	99
25) trans-1,3-Dichloropropene	19.02	75	313833	47.35 ug/L	99
26) 1,1,2-Trichloroethane	19.59	97	307784	45.10 ug/L	99
27) Dibromochloromethane	20.86	129	541547	45.98 ug/L	100
28) Bromoform	25.72	173	430340	46.47 ug/L	98
30) 4-Methyl-2-Pentanone	17.70	43	317496	50.33 ug/L	100
32) Toluene	18.04	91	756938	48.72 ug/L	98
33) Tetrachloroethene	19.93	166	386792	47.67 ug/L	98
34) 2-Hexanone	20.71	43	210382	50.39 ug/L	100
35) Chlorobenzene	22.90	112	624044	44.96 ug/L	98
36) Ethylbenzene	23.44	91	920467	47.91 ug/L	97
37) m+ p-Xylenes	23.87	106	352865	46.47 ug/L	96
38) o-xylene	25.19	91	726377	47.44 ug/L	98
39) Styrene	25.26	104	590628	48.16 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6021.D
Acq Time : 26 Oct 94 11:39 am
Sample : BLK SPK
Misc :
Quant Time: Nov 1 11:26 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 11:24:02 1994
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,1,2,2-Tetrachloroethane	27.68	83	519890	44.48 ug/L	99

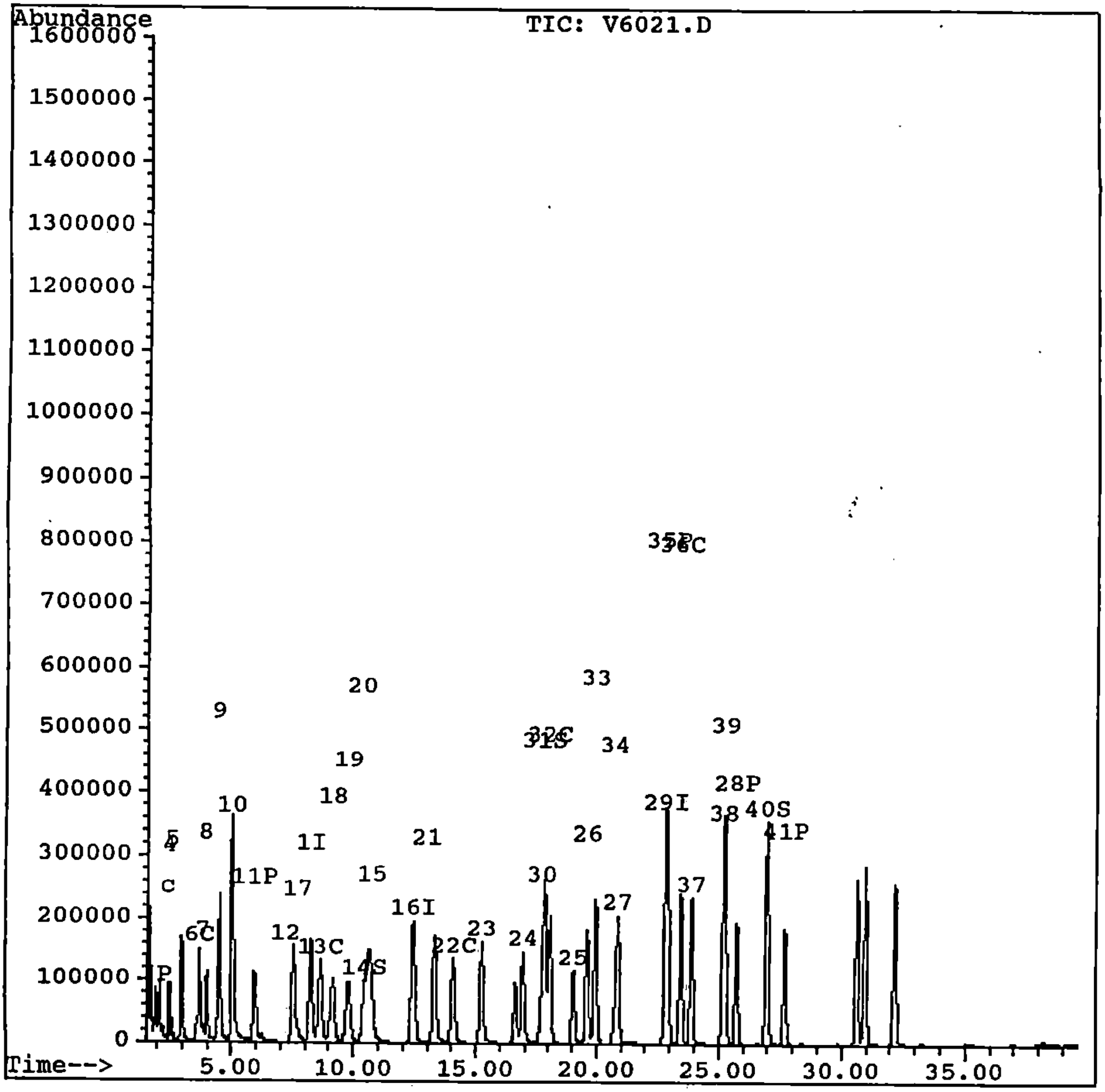
000137

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V6021.D
Acq Time : 26 Oct 94 11:39 am
Sample : BLK SPK
Misc :
Quant Time: Nov 1 11:26 1994

Operator:
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 11:24:02 1994
Response via : Single Level Calibration



000138

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB5-4,2-4'MS

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: ______ SAS No.: 100 COMMERCIAL SDG No.: ______

Matrix: (soil/water) SOIL Lab Sample ID: O33273MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5977.D

Level: (low/med) LOW Date Received: 10/17/94

% Moisture: not dec. 9 Date Analyzed: 10/21/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound	ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5.8	JB
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	J
75-35-4	1,1-Dichloroethene	74	
75-34-4	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	58	
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	70	
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	7.4	J
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	67	
108-90-7	Chlorobenzene	54	
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylenes (total)	11	U

000139

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5977.D
Acq Time : 21 Oct 94 7:09 pm
Sample : 33273MS
Misc :
Quant Time: Nov 1 12:27 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 12:26:31 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	8.24	128	172188	50.00	ug/L	0.00
16) 1,4-Difluorobenzene	12.41	114	663315	50.00	ug/L	0.00
29) Chlorobenzene-d5	22.80	117	522027	50.00	ug/L	0.00
System Monitoring Compounds						%Recovery
14) 1,2-Dichloroethane-d4	10.42	65	346923	54.00	ug/L	
31) Toluene-d8	17.81	98	714012	56.51	ug/L	
40) Bromofluorobenzene	26.96	95	502748	53.08	ug/L	
Target Compounds						Qvalue
6) 1,1-Dichloroethene	3.71	61	322636	67.56	ug/L	98
8) Carbon Disulfide	4.02	76	57997	9.71	ug/L	91
9) Methylene Chloride	4.53	84	19231	5.30	ug/L	96
20) Benzene	10.59	78	560515	64.29	ug/L	100
21) Trichloroethene	13.28	130	266372	52.87	ug/L	98
32) Toluene	18.04	91	591372	61.34	ug/L	99
33) Tetrachloroethene	19.93	166	36883	6.79	ug/L	96
35) Chlorobenzene	22.90	112	473805	48.91	ug/L	99

000140

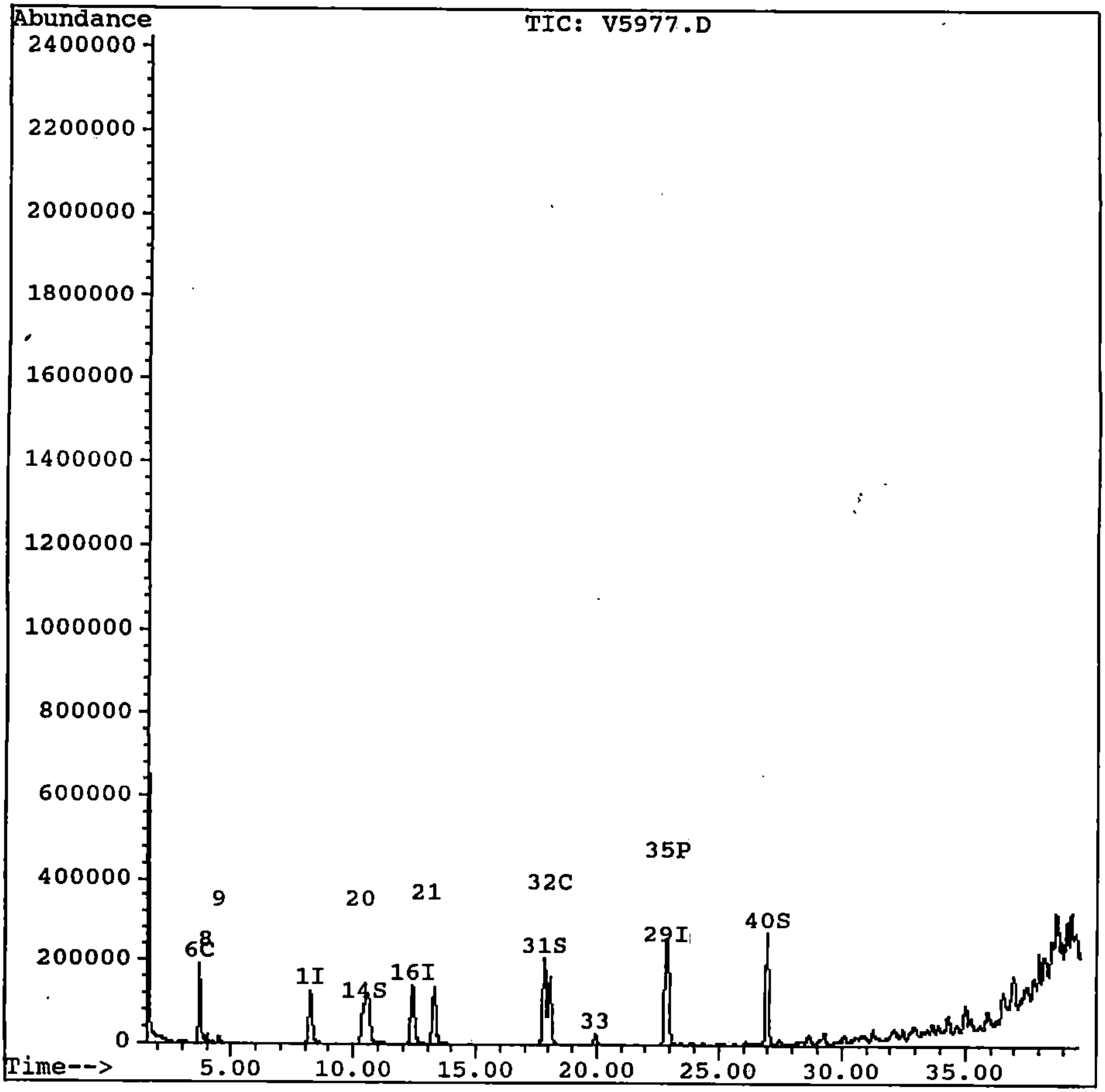
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5977.D
Acq Time : 21 Oct 94 7:09 pm
Sample : 33273MS
Misc :
Quant Time: Nov 1 12:27 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 12:26:31 1994
Response via : Single Level Calibration



1141

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB5-4,2-4'MSD

Lab Name: CHEMTECH Contract: EIKON PLANNING

Lab Code: 4376 Case No.: ______ SAS No.: 100 COMMERCIAL SDG No.: ______

Matrix: (soil/water) SOIL Lab Sample ID: O33273MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5978.D

Level: (low/med) LOW Date Received: 10/17/94

% Moisture: not dec. 9 Date Analyzed: 10/21/94

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	14	B
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	69	
75-34-4	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	54	
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	68	
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	63	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylenes (total)	11	U

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5978.D
Acq Time : 21 Oct 94 7:56 pm
Sample : 33273MSD
Misc :
Quant Time: Nov 1 12:27 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
Last Update : Tue Nov 01 12:26:31 1994
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	8.24	128	220271	50.00 ug/L	0.00
16) 1,4-Difluorobenzene	12.41	114	855610	50.00 ug/L	0.00
29) Chlorobenzene-d5	22.81	117	682355	50.00 ug/L	0.00
System Monitoring Compounds					%Recovery
14) 1,2-Dichloroethane-d4	10.41	65	387261	47.12 ug/L	
31) Toluene-d8	17.81	98	805461	48.77 ug/L	
40) Bromofluorobenzene	26.96	95	574665	46.42 ug/L	
Target Compounds					Qvalue
6) 1,1-Dichloroethene	3.72	61	383389	62.76 ug/L	99
9) Methylene Chloride	4.54	84	60203	12.97 ug/L	98
20) Benzene	10.60	78	694416	61.75 ug/L	100
21) Trichloroethene	13.28	130	321249	49.43 ug/L	99
32) Toluene	18.04	91	721462	57.25 ug/L	99
35) Chlorobenzene	22.89	112	583638	46.09 ug/L	98

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Quantitation Report

Data File : C:\HPCHEM\1\DATA\V5978.D
Acq Time : 21 Oct 94 7:56 pm
Sample : 33273MSD
Misc :
Quant Time: Nov 1 12:27 1994

Operator: VP/DW
Inst : VOA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CLPRUNH.M
Title : VOA Standards for 5 point calibration
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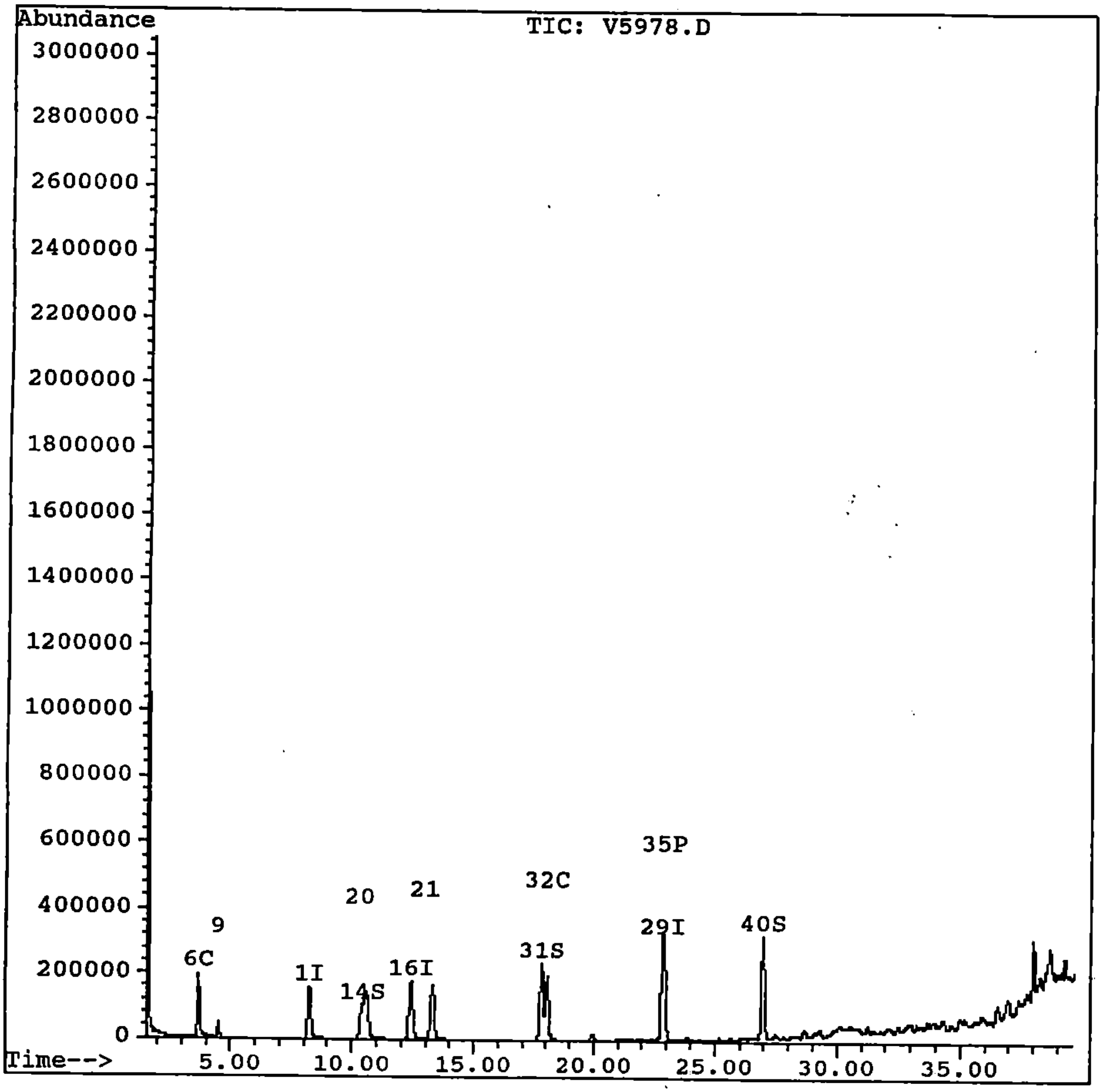
Response via : Single Level Calibration



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7.

Micellaneous Data

EMTECH
CONSULTING GROUP, INC.

VOA / DOS RUN LOGPAGE

DATE	SAMPLE ID	DATA FILE	EXT. DATE	ANALYST	COMMENT
	-30923MS	V5701	0010C	✓	OK
	-30924-MSD	V5702			OK
	-30921	V5703			OK
9/10/94	BFB	V5704		✓	OK
	50 CCC	V5705			Not good
	BFB	V5706			OK
	50 CCC (H)	5707			Purgable C is Problem
9/12/94	BFB	V5708	✓	✓	OK
	50 PPB (H)	V5709			DO UPDATE CHPICCH3
	10 PPB (H)	V5710			
	200 PPB (H)	V5711			
	100 PPB (H)	V5712			
	20 PPB (H)	V5713			
	PRO BLK	V5714	BEM		OK
A159-31755	(5.0g) ~~A158-31723~~ 9/12/94	V5715			* ~~H2S high~~. OK
-31756	~~-31724~~	V5716			* OK
-31757	~~-31725 MS~~	V5717			* OK
-31758 MS	~~-31726 MSD~~	~~9/12 V5718~~ V5718			OK
-31759 MSD	~~-31727~~	V5719			OK
9/13/94	BFB ~~-31728~~ 9/12/94	V5720		✓	OK
	50 CCC	V5721			OK
	PRO BLK	V5722	BEM		* OK
5.0g	A159-31758 MS	V5723			* OK
	-31759 MSD	V5724	BEM		* OK
	A-158-31723 5.0g	V5725			* OK
	-31724 1.0g	V5726			Need 2 D

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