GW - 40

MONITORING REPORTS

DATE: 1994

GIANT
INDUSTRIES, INC.

Crude Gathering Operations

5764 US Highway 64
Farmington, New Mexico
87401

505
632-8024
632-8006

October 27, 1994

Mr. William Olson
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

Dear Mr. Olson:

RE: FIREWATER POND SAMPLING

Enclosed is a report of the soil investigation performed in the former firewater pond area within the Giant Bloomfield Refinery. Please call me with any questions or comments.

Sincerely,

Timothy A. Kinney
Project Manager
Bloomfield Remediation Project

/dm

Enclosure — See on firewater pond soil analysis file

cc w/enc.: Stephanie Odell-BLM
Maura Hanning-NMED
Herbert Gorrod-EPA

cc w/o enc.: Carl Shook-Giant
Kim Bullerdick-Giant
Martin Nee-Burlington

BURLINGTON
ENVIRONMENTAL

October 27, 1994
Project 12641

Mr. Timothy Kinney
Manager, Crude Gathering Operations
Giant Industries Arizona, Inc.
5764 Highway 64
Farmington, New Mexico 87401

Dear Mr. Kinney:

Subject: Soil Sampling and Analysis at Giant Industries Arizona, Inc.' s Former Firewater Storage Pond, San Juan County, New Mexico.

During July and August 1994, Burlington Environmental Inc. (Burlington) initiated a soil sampling and analysis program for the former firewater storage pond (firewater pond) at Giant Industries Arizona, Inc's. (Giant's) former Giant Bloomfield Refinery. The site is located in San Juan County, New Mexico in the southwest corner of Section 22, Township 29 North, Range 12 West, as shown in Figure 1. The firewater pond was used to stockpile water for emergency purposes at the refinery. The project was designed and initiated to investigate the possible presence of low concentrations of volatile organic compounds reported by the Bureau of Land Management (BLM) from soil sampling conducted on March 21, 1990. In addition to soil sampling, one groundwater sample was collected from the existing groundwater Monitoring Well GBR-18 located downgradient of the firewater pond.

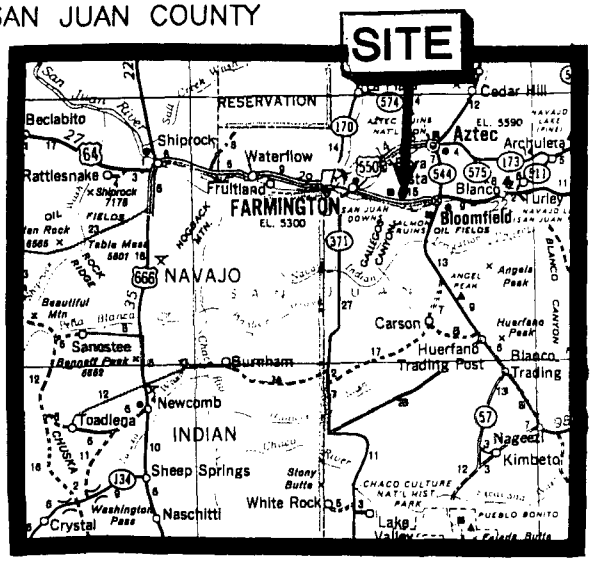
The investigation at the firewater pond included:

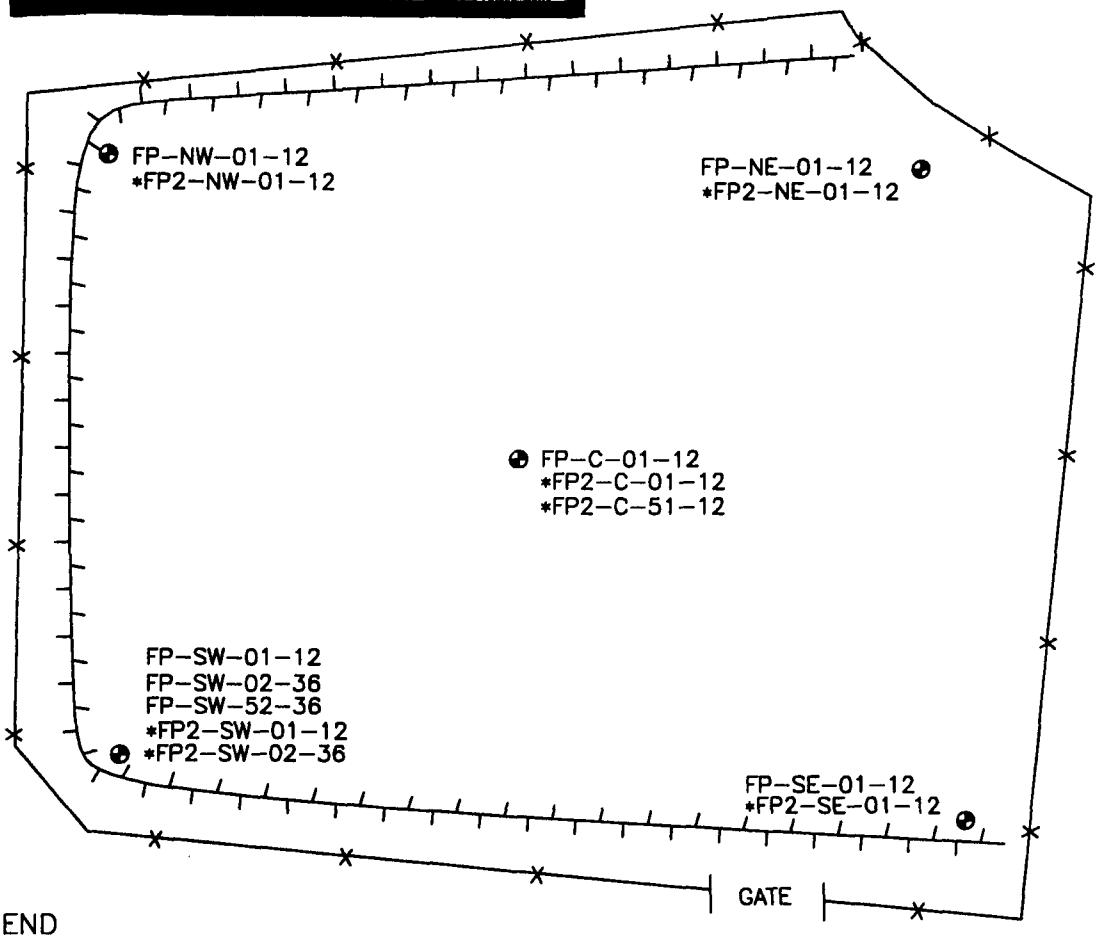
- hand augering and collection of soil samples;
- on-site field screening with a photoionization detector (PID); and
- soil and groundwater sample collection and submission for laboratory analysis.

METHODOLOGY

Two individual sampling events were performed at the former firewater pond during this investigation. The first sampling event took place on July 26, 1994, and included collecting six soil samples. Samples were collected at approximately 12 inches below ground surface (bgs) from each corner and from the center of the former pond, similar to locations sampled by the BLM. One additional sample was collected at approximately 36 inches bgs from the southwest corner where the BLM's sampling indicated highest concentrations of organic compounds in the soil. In addition, one duplicate sample was collected from the southwest corner at a depth of approximately 36 inches bgs. A rinsate sample was collected from the hand-auger bucket and sampling bowl. The investigation of the firewater pond began with the southwest corner and progressed counter clockwise to the northwest corner with the center location being sampled last.

SAN JUAN COUNTY





LEGEND

FENCE LINE

BERM

FP-SW-01-12 APPROXIMATE SAMPLING LOCATION AND NUMBER

N

* Resample locations. All resample locations were collected within 1'-2' of original sample location.

COL 12641A-001

BURLINGTON ENVIRONMENTAL
- A Phillips Environmental Company -

TITLE:
Giant Industries Arizona, Inc.
Former Fire Water Storage Pond
Giant Bloomfield Refinery

DWN: JEN	DES.:
CHKD:	APPD:
DATE: 10/12/94	REV.:

PROJECT NO.: 12641
GIANT FIRE WATER POND
SAN JUAN COUNTY, NM

Figure 1

Following receipt of the initial laboratory reports it was evident that the laboratory did not follow the required protocol for EPA Methods 8010/8020. Therefore, the analyses were canceled and a new round of sampling was initiated.

On August 29, 1994, each sample location was resampled using the same techniques as used during the July 26 sampling event. All resample locations were approximately 2 feet from the original sample point with the exception of the duplicate, which was collected from the 1-foot depth interval at the center location of the firewater pond.

The following methods were used at all of the hand augering locations at the firewater pond. Soil borings were completed using a 3-inch inside diameter stainless-steel hand-auger bucket with one 5-foot extension. The hand auger was advanced by rotating the bucket clockwise while applying downward pressure. Each hand-auger bucket was decontaminated between sampling events with an Alconox™ wash followed by a potable water rinse and a final distilled water rinse. Each soil boring was advanced to the sampling depth with one hand-auger bucket and sampled with another, previously decontaminated bucket. The soil sample was then transferred into a precleaned stainless-steel bowl and then immediately transferred to the laboratory sample container. The sample container was then sealed, labeled and preserved on ice for transport to the laboratory.

During the initial sampling event, once the soil had been placed in the sample container, additional soil from the sample point was collected in a 1-gallon sealable plastic bag for field screening for volatile compounds with an HNU PI 101 PID. After placing the material in the 1-gallon sealable bag, it was allowed to heat to a minimum of 80 degrees Fahrenheit before the concentration of volatile constituents was measured. Headspace field screening techniques were not used during the second sampling event as no volatile compounds we detected during the first sampling event.

Each soil sample collected during each sampling event was express shipped on ice under strict Chain-of-Custody procedures to Analytical Technologies, Inc. (ATI) in Albuquerque, New Mexico as requested by Giant. The samples collected from the first sampling event were analyzed for volatile aromatic and halogenated hydrocarbons by US Environmental Protection Agency (EPA) Methods 8010/8020 and for sulfate by U.S. EPA Method 375.2. The soil samples collected during the second sampling event were analyzed for volatile organic compounds by EPA Method 8240 which provides mass spectrometry confirmation of any analytes indicated by gas chromatography analyses. Level 4 Quality Assurance/Quality Control (QA/QC) documentation was requested of the laboratory.

The groundwater from Monitoring Well GBR-18 was purged until dry using a disposable bailer. The groundwater sample was collected using a precleaned disposable bailer after one bail-down due to poor recovery. The groundwater sample was stored on ice during transport to ATI's laboratory . ATI analyzed the groundwater sample for volatile organic compounds by EPA Methods 8010 and 8020. Strict chain-of-custody procedures and sample documentation were followed during transport to the laboratory.

RESULTS

The results from field headspace screening performed during the first sampling event showed no ionizable constituents detected in any of the samples screened.

The soil analysis from the initial sampling event was conducted using gas chromatography techniques (EPA Methods 8010/8020). Preliminary results from these samples showed no target analytes detected in any samples except for FP-C-01-12, which was collected at 12 inches bgs in the center of the fire water pond. The target analytes detected at this location are shown below.

Analytes	Sample Result (mg/kg)	Detection Limit (mg/kg)
Tetrachloroethene	0.027	0.025
Toluene	0.028	0.025
Trichlorofluoromethane	0.028	0.010
Total Xylenes	0.028	0.025

mg/kg - milligrams per kilogram

Because the preliminary results showed organic compounds very close to laboratory detection limits, and because the laboratory did not follow the required protocol for EPA Methods 8010 and 8020, resampling and subsequent analyses of soil samples were completed using more quantitative gas chromatography and mass spectrometry techniques (EPA Method 8240). The analytical results from the second round of sampling indicate that no target analytes were detected at the method detection limits.

No target compounds were detected in the groundwater sample collected from Monitoring Well GBR-18. Detection limits met data quality objectives for the initial groundwater sample. Laboratory reports for analysis of the sample from GBR-18 are attached. In the laboratory report and on the chain-of-custody documentation the reference to GBR-18 was incorrectly recorded as HBR-18.

The concentrations of sulfate detected in the soil samples from the first round of sampling are shown below. Samples for sulfate analysis were not collected during the second sampling event.

Sample ID	Sample Result (mg/kg)
FP-C-01-12	450
FP-NW-01-12	520
FP-SW-52-36	240
FP-SW-02-36	130
FP-NE-01-12	970
FP-SE-01-12	1400
FP-SW-01-12	810

mg/kg - milligrams per kilogram

Laboratory reports, including the Level 4 QA/QC, are enclosed herein.

CONCLUSIONS AND RECOMMENDATIONS

Giant has not been privileged to review the BLM laboratory reports or laboratory QA/QC data. Giant does not know which methods were used for laboratory analysis of their samples or the field techniques used to collect the samples.

The results from the first round of sampling for this project are questionable because the laboratory did not follow the required EPA protocol. Further, the presence of the organic compounds detected in those analyses were not confirmed using mass spectrometry during analysis in the second sampling event.

The lack of detectable organic compounds found in the soil and downgradient Monitoring Well GBR-18 samples indicates that the former firewater storage pond is not a source of organic compounds in the soil or groundwater.

Based upon the available data, Burlington does not recommend further action at the firewater storage pond.

If you have any questions or require additional information please do not hesitate to contact me at (505) 326-2262.

Respectfully Submitted,

BURLINGTON ENVIRONMENTAL INC.

Martin J. Nee, P.G.
Project Manager

MJN/STP/br/257wb

Analytical **Technologies,** Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **408420**

October 03, 1994

Burlington Environmental
4000 Monroe Road
Farmington, NM 87401

Project Name/Number: GIANT REFINERY 12641

Attention: S. Pope

On **08/30/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous and non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

All analyses were performed by Analytical Technologies Inc., 11 East Olive Road, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT REFINERY

DATE RECEIVED : 08/30/94
REPORT DATE : 10/03/94

ATI ID: 408420

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	FP2-SW-01-12	NON-AQ	08/29/94
02	FP2-SW-02-36	NON-AQ	08/29/94
03	FP2-SE-01-12	NON-AQ	08/29/94
04	FP2-NE-01-12	NON-AQ	08/29/94
05	FP2-NW-01-12	NON-AQ	08/29/94
06	FP2-C-01-12	NON-AQ	08/29/94
07	FP2-C-51-12	NON-AQ	08/29/94
08	FP2-R-01	AQUEOUS	08/29/94

---TOTALS---

MATRIX	#SAMPLES
NON-AQ	7
AQUEOUS	1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 001 Sample Date/Time: 29-AUG-94 1045
Client Sample Id: 408420-01 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: 94 Analysis Date: 01-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	92	81-117	
BROMOFLUOROBENZENE	%REC/SURR	98	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	94	70-121	
ANALYST	INITIALS	DWB		

Comments:

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 002 — Sample Date/Time: 29-AUG-94 1100
Client Sample Id: 408420-02 — Received Date: 31-AUG-94

Batch: BUS006 — Extraction Date: N/A
Blank: A — Dry Weight %: 89 — Analysis Date: 01-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	6	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	6	
1,1-DICHLOROETHENE	UG/KG	ND	6	
1,1-DICHLOROETHANE	UG/KG	ND	6	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	6	
CHLOROFORM	UG/KG	ND	6	
1,2-DICHLOROETHANE	UG/KG	ND	6	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	6	
CARBON TETRACHLORIDE	UG/KG	ND	6	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	6	
1,2-DICHLOROPROPANE	UG/KG	ND	6	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	6	
TRICHLOROETHENE	UG/KG	ND	6	
DIBROMOCHLOROMETHANE	UG/KG	ND	6	
1,1,2-TRICHLOROETHANE	UG/KG	ND	6	
BENZENE	UG/KG	ND	6	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	6	
BROMOFORM	UG/KG	ND	6	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	6	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	6	
TOLUENE	UG/KG	ND	6	
CHLOROBENZENE	UG/KG	ND	6	
ETHYL BENZENE	UG/KG	ND	6	
STYRENE	UG/KG	ND	6	
TOTAL XYLENES	UG/KG	ND	6	
TOLUENE-D8	%REC/SURR	94	81-117	
BROMOFLUOROBENZENE	%REC/SURR	96	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	93	70-121	
ANALYST	INITIALS	DWB		

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 003 Sample Date/Time: 29-AUG-94 1120
Client Sample Id: 408420-03 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: 97 Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	10	
BROMOMETHANE	UG/KG	ND	10	
VINYL CHLORIDE	UG/KG	ND	10	
CHLOROETHANE	UG/KG	ND	10	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	10	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	10	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	10	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	10	
2-HEXANONE	UG/KG	ND	10	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	94	81-117	
BROMOFLUOROBENZENE	%REC/SURR	99	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	93	70-121	
ANALYST	INITIALS	DWB		

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 004
Client Sample Id: 408420-04
Sample Date/Time: 29-AUG-94 1140
Received Date: 31-AUG-94

Batch: BUS006
Blank: A
Dry Weight %: 93
Extraction Date: N/A
Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	89	81-117	
BROMOFLUOROBENZENE	%REC/SURR	102	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	92	70-121	
ANALYST	INITIALS	DWB		

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 005 Sample Date/Time: 29-AUG-94 1200
Client Sample Id: 408420-05 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: 94 Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	91	81-117	
BROMOFLUOROBENZENE	%REC/SURR	98	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	93	70-121	
ANALYST	INITIALS	DWB		

Comments:

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 006 Sample Date/Time: 29-AUG-94 1225
Client Sample Id: 408420-06 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: 94 Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	93	81-117	
BROMOFLUOROBENZENE	%REC/SURR	101	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	95	70-121	
ANALYST	INITIALS	DWB		

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: SOIL
QC Level: N

Lab Id: 007 Sample Date/Time: 29-AUG-94 1230
Client Sample Id: 408420-07 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: 95 Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/KG	ND	11	
BROMOMETHANE	UG/KG	ND	11	
VINYL CHLORIDE	UG/KG	ND	11	
CHLOROETHANE	UG/KG	ND	11	
METHYLENE CHLORIDE	UG/KG	ND	5	
ACETONE	UG/KG	ND	11	
CARBON DISULFIDE	UG/KG	ND	5	
1,1-DICHLOROETHENE	UG/KG	ND	5	
1,1-DICHLOROETHANE	UG/KG	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/KG	ND	5	
CHLOROFORM	UG/KG	ND	5	
1,2-DICHLOROETHANE	UG/KG	ND	5	
2-BUTANONE (MEK)	UG/KG	ND	11	
1,1,1-TRICHLOROETHANE	UG/KG	ND	5	
CARBON TETRACHLORIDE	UG/KG	ND	5	
VINYL ACETATE	UG/KG	ND	11	
BROMODICHLOROMETHANE	UG/KG	ND	5	
1,2-DICHLOROPROPANE	UG/KG	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
TRICHLOROETHENE	UG/KG	ND	5	
DIBROMOCHLOROMETHANE	UG/KG	ND	5	
1,1,2-TRICHLOROETHANE	UG/KG	ND	5	
BENZENE	UG/KG	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/KG	ND	5	
BROMOFORM	UG/KG	ND	5	
4-METHYL-2-PENTANONE	UG/KG	ND	11	
2-HEXANONE	UG/KG	ND	11	
TETRACHLOROETHENE	UG/KG	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/KG	ND	5	
TOLUENE	UG/KG	ND	5	
CHLOROBENZENE	UG/KG	ND	5	
ETHYL BENZENE	UG/KG	ND	5	
STYRENE	UG/KG	ND	5	
TOTAL XYLENES	UG/KG	ND	5	
TOLUENE-D8	%REC/SURR	91	81-117	
BROMOFLUOROBENZENE	%REC/SURR	98	74-121	
1,2-DICHLOROETHANE-D4	%REC/SURR	93	70-121	
ANALYST	INITIALS	DWB		

Comments:

"FINAL REPORT FORMAT - SINGLE"

Accession: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988
Analysis Method: 8240 / SW-846, 3rd Edition, September 1986 and Rev. 1, July 1992
Extraction Method: N/A
Matrix: LIQUID
QC Level: N

Lab Id: 008 Sample Date/Time: 29-AUG-94 1245
Client Sample Id: 408420-08 Received Date: 31-AUG-94

Batch: BUS006 Extraction Date: N/A
Blank: A Dry Weight %: N/A Analysis Date: 02-SEP-94

Parameter:	Units:	Results:	Rpt Lmts:	Q:
CHLOROMETHANE	UG/L	ND	10	
BROMOMETHANE	UG/L	ND	10	
VINYL CHLORIDE	UG/L	ND	10	
CHLOROETHANE	UG/L	ND	10	
METHYLENE CHLORIDE	UG/L	ND	5	
ACETONE	UG/L	7	10	J
CARBON DISULFIDE	UG/L	ND	5	
1,1-DICHLOROETHENE	UG/L	ND	5	
1,1-DICHLOROETHANE	UG/L	ND	5	
TOTAL 1,2-DICHLOROETHENE	UG/L	ND	5	
CHLOROFORM	UG/L	ND	5	
1,2-DICHLOROETHANE	UG/L	ND	5	
2-BUTANONE (MEK)	UG/L	ND	10	
1,1,1-TRICHLOROETHANE	UG/L	ND	5	
CARBON TETRACHLORIDE	UG/L	ND	5	
VINYL ACETATE	UG/L	ND	10	
BROMODICHLOROMETHANE	UG/L	ND	5	
1,2-DICHLOROPROPANE	UG/L	ND	5	
CIS-1,3-DICHLOROPROPENE	UG/L	ND	5	
TRICHLOROETHENE	UG/L	ND	5	
DIBROMOCHLOROMETHANE	UG/L	ND	5	
1,1,2-TRICHLOROETHANE	UG/L	ND	5	
BENZENE	UG/L	ND	5	
TRANS-1,3-DICHLOROPROPENE	UG/L	ND	5	
BROMOFORM	UG/L	1	5	J
4-METHYL-2-PENTANONE	UG/L	ND	10	
2-HEXANONE	UG/L	ND	10	
TETRACHLOROETHENE	UG/L	ND	5	
1,1,2,2-TETRACHLOROETHANE	UG/L	ND	5	
TOLUENE	UG/L	ND	5	
CHLOROBENZENE	UG/L	ND	5	
ETHYL BENZENE	UG/L	ND	5	
STYRENE	UG/L	ND	5	
TOTAL XYLENES	UG/L	ND	5	
TOLUENE-D8	%REC/SURR	93	88-110	
BROMOFLUOROBENZENE	%REC/SURR	102	86-115	
1,2-DICHLOROETHANE-D4	%REC/SURR	94	76-114	
ANALYST	INITIALS	DWB		

Comments:

Analytical Technologies, Inc.

"Method Report Summary"

Accession Number: 409099
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 408420
Project Name: BE
Project Location: N/S
Test: VOLATILES (8240) CLP 1988

Client Sample Id:	Parameter:	Unit:	Result:
408420-08	ACETONE	UG/L	7
	BROMOFORM	UG/L	1

Common notation for Organic reporting

N/S = NOT SUBMITTED
N/A = NOT APPLICABLE
D = DILUTED OUT
UG/L = PARTS PER BILLION.
UG/KG = PARTS PER BILLION.
MG/KG = PARTS PER MILLION.
MG/L = PARTS PER MILLION.
MG/M3 = MILLIGRAMS PER CUBIC METER.
NG = NANOGRAMS.
UG = MICROGRAMS.
PPBV = PARTS PER BILLION/VOLUME.
< = LESS THAN DETECTION LIMIT.
* = VALUES OUTSIDE OF QUALITY CONTROL LIMITS
J = THE REPORTED VALUE IS EITHER LESS THAN THE REPORTING LIMIT BUT GREATER THAN ZERO, OR QUANTITATED AS A TIC; THEREFORE, IT IS ESTIMATED.
JJ = REPORTED VALUE IS ESTIMATED DUE TO MATRIX INTERFERENCE.
ND = NOT DETECTED ABOVE REPORT LIMIT.
RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.
RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION)

SOURCES FOR CONTROL LIMITS ARE INTERNAL LABORATORY QUALITY ASSURANCE PROGRAM AND REFERENCED METHOD.

ORGANIC SOILS ARE REPORTED ON A DRY WEIGHT BASIS.

DUE TO THE NATURE OF THE SAMPLE MATRIX, MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS CANNOT BE PERFORMED FOR AIR ANALYSIS.

LP = LEVERNE PETERSON	RW = RITA WINGO
DWB = DAVID BOWERS	LD = LARRY DILMORE
DB = DENNIS BESON	LL = LANCE LARSON
RB = RAFAEL BARRAZA	JA = JENNIFER ALEXANDER

BURLINGTON ENVIRONMENTAL
A Philip Environmental Company

Chain-of Custody Record

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

Accession # 408426

COC Serial No. C 1888

Project Name: Giant Refinery
Project Number: 12641 Phase . Task: 2000 . 77
Samplers: S. Pope
Laboratory Name: Analytical Technologies Inc
Laboratory Location:

	Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: 8240	Comments
01	FP2-SW-01-12	8/29/94	1045	Soil	1	1	
02	FP2-SW-02-36	8/29/94	1100	Soil	1	1	
03	FP2-SE-01-12	8/29/94	1120	Soil	1	1	
04	FP2-NE-01-12	8/29/94	1140	Soil	1	1	
05	FP2-NW-01-12	8/29/94	1200	Soil	1	1	
06	FP2-C-01-12	8/29/94	1225	Soil	1	1	
07	FP2-C-51-12	8/29/94	1230	Soil	1	1	
08	FP2-R-01	8/29/94	1245	Water	2	1	

Relinquished by:

Signature	Date	Time
Scott T. Pope	8/29/94	1500

Received By:

Signature	Date	Time
D. Watts	8/30	09:00

Samples Iced: ☒ Yes ☐ No

Carrier: Fed Ex

Airbill No. 138902566 5

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Shipping and Lab Notes:

Level 4 QA/QC
Bill Giant Refinery Direct

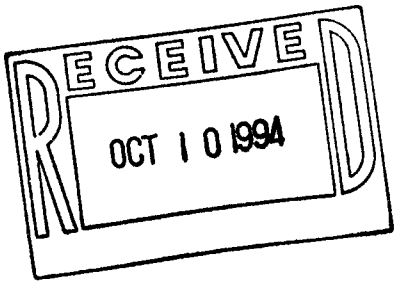
BE-179 4/94

Analytical Technologies, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **407412**

October 3, 1994



Burlington Environmental
4000 Monroe Road
Farmington, NM 87401

Project Name/Number: GIANT 12641

Attention: S. Pope

On **07/28/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous and non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA Method 8010/8020 analyses were cancelled for all soil samples.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT

DATE RECEIVED : 07/28/94
REPORT DATE : 10/03/94

ATI ID: 407412

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	FP-C-01-12	NON-AQ	07/26/94
02	FP-NW-01-12	NON-AQ	07/26/94
03	FP-SW-52-36	NON-AQ	07/26/94
04	FP-SW-02-36	NON-AQ	07/26/94
05	FP-NE-01-12	NON-AQ	07/26/94
06	FP-SE-01-12	NON-AQ	07/26/94
07	FP-SW-01-12	NON-AQ	07/26/94
08	FP-R-01	AQUEOUS	07/26/94
09	HBR-18	AQUEOUS	07/27/94

---TOTALS---

MATRIX	#SAMPLES
NON-AQ	7
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 407412

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT

DATE RECEIVED : 07/28/94
REPORT DATE : 10/03/94

PARAMETER	UNITS	01	02	03	04	05
SULFATE (EPA 375.2)	MG/KG	450	520	240	130	970

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 407412

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT

DATE RECEIVED : 07/28/94
REPORT DATE : 10/03/94

PARAMETER	UNITS	06	07
SULFATE (EPA 375.2)	MG/KG	1400	810

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT ATI I.D. : 407412

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SULFATE	MG/KG	40741201	450	470	4	860	400	102

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : BURLINGTON ENVIRONMENTAL ATI I.D.: 407412
PROJECT # : 12641
PROJECT NAME : GIANT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
08	FP-R-01	AQUEOUS	07/26/94	NA	07/29/94	1
09	HBR-18	AQUEOUS	07/27/94	NA	07/30/94	1

PARAMETER	UNITS	08	09
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		104	98
TRIFLUOROTOLUENE (%)		112	97

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010/8020	ATI I.D.	: 407412
BLANK I.D.	: 072994	MATRIX	: AQUEOUS
CLIENT	: BURLINGTON ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 12641	DATE ANALYZED	: 07/29/94
PROJECT NAME	: GIANT	DIL. FACTOR	: 1

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	0.5
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2
ETHYLBENZENE	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2
TETRACHLOROETHENE	UG/L	<0.2
TOLUENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATES:		
BROMOCHLOROMETHANE (%)		98
TRIFLUOROTOLUENE (%)		102

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)		
MSMSD #	: 40741209	ATI I.D.	: 407412
CLIENT	: BURLINGTON ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 12641	DATE ANALYZED	: 07/30/94
PROJECT NAME	: GIANT	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 40741209	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.5	10	9.9	99	11	110	11
CHLOROBENZENE	<0.5	10	10	100	10	100	0
1,1-DICHLOROETHENE	<0.2	10	9.7	97	10	100	3
TOLUENE	<0.5	10	10	100	11	110	10
TRICHLOROETHENE	<0.2	10	10	100	11	110	10

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

ASS # 407412

BURLINGTON ENVIRONMENTAL
A Philip Environmental Company

Chain-of Custody Record

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 1877

Project Name Giant
Project Number 18641 Phase . Task 0077 . 77
Samplers S. Pope
Laboratory Name Analytical Technologies, Inc
Location

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: 8020/8010	Sulfate		L450 ID									Comments
FP-C-01-12	7/26/94	1415	Soil	2	X	X		01									
FP-NW-01-12	7/26/94	1350	Soil	2	X	X		02									
FP-SW-02-36	7/26/94	1125	Soil	2	X	X		03									
FP-SW-02-36	7/26/94	1125	Soil	2	X	X		04									
FP-NE-01-12	7/26/94	1325	Soil	2	X	X		05									
FP-SE-01-12	7/26/94	1150	Soil	2	X	X		06									
FP-SW-01-12	7/26/94	1050	Soil	2	X	X		07									
FP-R-01	7/26/94	1430	Water	2	X			09									
HBR-18	7/27/94	0930	Water	2	X			09									

Relinquished by:

Signature	Date	Time
Steve T. Pope	7/27/94	1045

Received By:

Signature	Date	Time
[illegible]	7/28/94	09:00

Rec'd by FE

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: Fed Ex
Airbill No. 880927373

Shipping and Lab Notes:

Level 4 QA/QC
Bill Giant Direct for Analytical Costs.
(Giant Refinery, Farmington NM, Attn: Tim Kinney)

BE-179 4/94

Analytical Technologies, Inc.

CASE NARRATIVE

LABORATORY NAME: Analytical Technologies, Inc.
CLIENT NAME: Burlington Environmental
ATI I.D.#: 407412
PROJECT NAME: Giant/12641

CLIENT SAMPLE NUMBER	ATI NUMBER
FP-C-01-12	40741201
FP-NW-01-12	40741202
FP-SW-52-36	40741203
FP-SW-02-36	40741204
FP-NE-01-12	40741205
FP-SE-01-12	40741206
FP-SW-01-12	40741207

The samples were received at ATI, Phoenix on July 29, 1994 in good condition. The sample tags were correct.

CASE NARRATIVE - GENERAL CHEMISTRY

SULFATE: Soil sample analysis for sulfate was performed on a 20 g:200 mL leachate. The leaching process took place on 08/05/94.

Sulfate analysis by EPA method 375.2 took place on 08/05/94. Sample FP-C-01-12 was used as the QC sample. This QC and all other QC associated with this analysis met method and ATI acceptance criteria. There were no problems associated with the sulfate analysis of this sample set.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 407412

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT

DATE RECEIVED : 07/28/94
REPORT DATE : 08/22/94

PARAMETER	UNITS	01	02	03	04	05
SULFATE (EPA 375.2)	MG/KG	450	520	240	130	970

GENERAL CHEMISTRY RESULTS

ATI I.D. : 407412

CLIENT : BURLINGTON ENVIRONMENTAL
PROJECT # : 12641
PROJECT NAME : GIANT

DATE RECEIVED : 07/28/94
REPORT DATE : 08/22/94

PARAMETER	UNITS	06	07
SULFATE (EPA 375.2)	MG/KG	1400	810

LAB NAME: ANALYTICAL TECHNOLOGIES, INC.

ATI LAB ID 407412

INITIAL AND CONTINUING CALIBRATION VERIFICATION

INITIAL CALIBRATION SOURCE: Solutions Plus, Lot 930614

CONTINUING CALIBRATION SOURCE: ATI – Na_2SO_4

Concentration Units: mg/L

	INITIAL CALIBRATION			CONTINUING CALIBRATION				
ANALYTE	TRUE	FOUND	%	TRUE	FOUND	%	FOUND	%
Sulfate	25	24	96	25	23	92	24	96

LABORATORY CONTROL SAMPLE

LCS SOURCE:

	AQUEOUS (mg/L)					SOLID (mg/kg)				
ANALYTE	TRUE	FOUND	%	LIMITS		TRUE	FOUND	%	LIMITS	
Sulfate	25	24	96	22	28					
	25	23	92	22	28					

REAGENT BLANK

PREPARATION BLANK CONCENTRATION UNITS: mg/L

ANALYTE	PREPARATION BLANK
Sulfate	< 5

QUALITY CONTROL DATA
ANALYTICAL TECHNOLOGIES, INC.

Reviewer TW
Date: 8-8-94

PARAMETER: Sulfate METHOD: RFA 375.2 ACCESSION #'S

407412(1-7)	408584(1-3)		
408514-2	408581-1		
408547-2,3	408618-4		
408571-1			
408582-1			

NO. OF SAMPLES: 21
DATE: 8-5-94 TIME: 4:30PM ANALYST: CW

CALIBRATION CURVE

	VALUE mg/l	ABS/PK.HT	CONC.
BLANK	Nonpaint		2.28
1ST STANDARD	5.0		5.48
2ND STANDARD	10.0		9.70
3RD STANDARD	25.0		24.41
4TH STANDARD	40.0		40.51
5TH STANDARD	50.0		49.90

CORR.COEFF. 0.9995
SLOPE 1.6820
INTERCEPT -2.86

DUPLICATE AND SPIKE RESULTS

MATRIX/UNITS	SO4N mg/kg	SO4 mg/l	SO4 mg/l		
SAMPLE #	407412-1	408514-2	408616-1		
OBS.CONC.	450	290	2800		
DUPLICATE	470	290	2900		
% RPD	4	0	~~850~~ 4		
SPIKE RES.	860	470	7500		
SPIKE CONC.	400	200	5000		
% RECOVERY	102	90	94		
SAMPLES:	407412-1	408514-2	408616-1		
	-2	408547-2	-2		
	-3	-3	-3		
	-4	408571-1			
	-5	408582-1			
	-6	408584-1			
	-7	-2			
		-3			
		408581-1			
		408618-4			

QUALITY CONTROL CHECKS (ug/l) OR (mg/l)

Q.C. I.D.	OBSERVED CONC.	TRUE VALUE	95% CONF. LIMITS
Soln. plus 8951 Lot 930614	24.48, 23.21	25	22-28

COMMENTS:

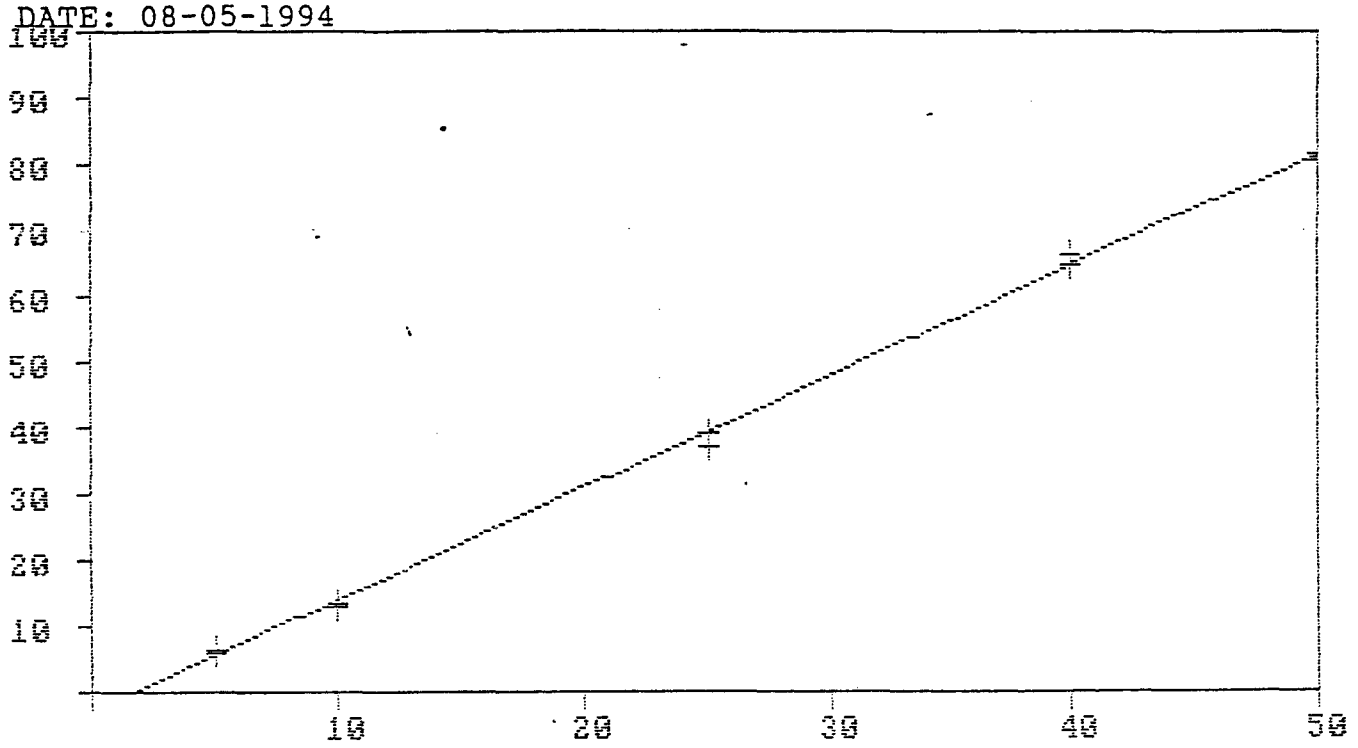
TOTAL RUN: 20 TOTAL REPORTED: 20 QC RUN: 2 QC ACCEPTABLE: 2

WAR: 2 NO. LATE: 0

004

Sulfate
8/5/94 4:30 PM
CW

CHANNEL NAME: SULFATE
RUN NAME: 080594S4
RUN DATE: 08-05-1994



DATA TYPE: CF
INTERCEPT = -2.86

CALIBRATION ORDER: 1
SLOPE = 1.68195

CORRELATION: .9994799

8/5/94 4:30pm cw

CHANNEL NAME:	SULFATE
RUN DATE:	08-05-1994
SAMPLE TABLE NAME:	080594S4
METHOD NAME:	SULFATE
NUMBER OF SAMPLES:	100
SAMPLE TIME:	80
TYPE OF ANALYSIS:	CF
Y PEAK HEIGHT/AREA:	HEIGHT

EAK SEARCH VARIABLES

THRESHOLD:	10
APEX:	10
ASCENDING SLOPE:	1.0
DESCENDING SLOPE:	1.0
PLATEAU POINTS:	3
INTEGRATION POINTS:	7

ALIBRATION INFORMATION

CALIBRATION TYPE:	LINEAR
UMBER OF STANDARDS:	10
INTERCEPT:	-2.86
LINEAR COEF:	1.6819
QUADRATIC COEF:	0.0000
CUBIC COEF:	0.0000
CORRELATION COEF:	0.999480

UP#	SAMPLE ID	DIL	WGT	HEIGHT	CONCENTRATION mg/l	EF		mg/l
	SYNC	1.00	1.000	3297	49.57			
	SCALE	1.00	1.000	3983	59.53	R		
	BLANK	1.00	1.000	69	2.70	R		2.28
	BLANK	1.00	1.000	11	1.86	R		
	S1	1.00	1.000	267	5.58			5.48
	S1	1.00	1.000	254	5.39			
	S2	1.00	1.000	560	9.83			9.70
	S2	1.00	1.000	541	9.56			
	S3	1.00	1.000	1523	23.81			24.41
.0	S3	1.00	1.000	1605	25.01			
.1	S4	1.00	1.000	2647	40.13			40.51
.2	S4	1.00	1.000	2699	40.89			
.3	S5	1.00	1.000	3303	49.66			49.90
.4	S5	1.00	1.000	3336	50.14			
.5	BLANK	1.00	1.000	23	2.04	R		1.87
.6	BLANK	1.00	1.000	0	1.70	R		
.7	QC	1.00	1.000	1545	24.13			24.48
.8	QC	1.00	1.000	1592	24.82			
.9	LEACH BLK	1.00	1.000	30	2.14	R		1.92
20	B	1.00	1.000	0	1.70	b		
21	407412-1	2.00	1.000	1397	43.97		451 mg/kg	45.10
22	407412-1	2.00	1.000	1475	46.24			
23	407412-1DUP	2.00	1.000	1479	46.35		466 mg/kg	46.66

	407412-1DUP	2.00	1.000	1500	46.96			
	407412-1SPK	4.00	1.000	1366	85.14		857 mg/kg	85.76
	407412-1SPK	4.00	1.000	1353	85.39			
	407412-2	2.00	1.000	1757	54.42		518 mg/kg	51.74
	407412-2	2.00	1.000	1572	49.05			
	407412-3	1.00	1.000	1556	24.29		243 mg/kg	24.24
	407412-3	1.00	1.000	1549	24.19			
	SYNC	1.00	1.000	2591	39.32			
	SCALE	1.00	1.000	3269	49.16			
	BLANK	1.00	1.000	43	2.33	R		
	BLANK	1.00	1.000	13	1.89	R		
	STD1	1.00	1.000	262	5.51			
	STD1	1.00	1.000	247	5.29			
	407412-4	1.00	1.000	767	12.84		131 mg/kg	13.17
	407412-4	1.00	1.000	812	13.49			
	407412-4DUP	1.00	1.000	775	12.95		134 mg/kg	13.47
	407412-4DUP	1.00	1.000	846	13.99			
	407412-5	2.50	1.000	2524	95.87		966 mg/kg	96.56
	407412-5	2.50	1.000	2562	97.25			
	407412-6	2.50	1.000	3432	128.83	over calibration	(1285 mg/kg	128.57)
	407412-6	2.50	1.000	3418	128.32	re-run		
	407412-7	2.50	1.000	2153	82.40		813 mg/kg	81.19
	407412-7	2.50	1.000	2086	79.97			
	407737-1	10.00	1.000	1840	284.17			284.90
	407737-1	10.00	1.000	1850	285.63			
	BLANK	1.00	1.000	15	1.92	R		1.81
	B	1.00	1.000	0	1.70	b		
	STD3	1.00	1.000	1478	23.16			23.49
	D3	1.00	1.000	1523	23.81	d		
	408514-2	10.00	1.000	1894	292.01			291.36
	408514-2	10.00	1.000	1885	290.71			
	408514-2DUP	10.00	1.000	1898	292.59			292.89
	408514-2DUP	10.00	1.000	1902	293.18			
	408514-2SPK	20.00	1.000	1525	476.88			472.09
	408514-2SPK	20.00	1.000	1492	467.30			
	408547-2	250.00	1.000	759	3180.62			3189.70
	408547-2	250.00	1.000	764	3198.77			
	408547-3	20.00	1.000	1120	359.28			364.21
	408547-3	20.00	1.000	1154	369.15			
	408571-1	1.00	1.000	1826	28.21			28.24
	408571-1	1.00	1.000	1830	28.27			
	408582-1	250.00	1.000	382	1812.22			1752.33
	408582-1	250.00	1.000	349	1692.44			
	408584-1	62.50	1.000	645	691.71			691.71
	408584-1	62.50	1.000	645	691.71			
	408584-2	250.00	1.000	719	3035.43			3044.51
	408584-2	250.00	1.000	724	3053.58			
	408584-3	125.00	1.000	1106	2220.07			2251.83
	408584-3	125.00	1.000	1141	2283.59			
	408581-1	125.00	1.000	983	1996.84			2040.40
	408581-1	125.00	1.000	1031	2083.95			
	408618-4	25.00	1.000	737	310.08			320.78
	408618-4	25.00	1.000	796	331.49			
	STD3	1.00	1.000	1535	23.99			23.90
	D3	1.00	1.000	1523	23.81	d		
	BLANK	1.00	1.000	12	1.88	R		1.79
	B	1.00	1.000	0	1.70	b		
	408616-1	250.00	1.000	655	2803.13			2833.98
	408616-1	250.00	1.000	672	2864.84			
	408616-1DUP	250.00	1.000	684	2908.39			2906.58

	408616-1DUP	250.00	1.000	683	2904.76		
	408616-1SPK	500.00	1.000	912	7[illegible].94		7464.68
	408616-1SPK	500.00	1.000	910	7457.42		
	408616-2	125.00	1.000	845	1746.39		1752.74
	408616-2	125.00	1.000	852	1759.09		
	408616-3	200.00	1.000	668	2280.25		2270.09
	408616-3	200.00	1.000	661	2259.93		
	407412-6	5.00	1.000	1773	137.22		137.37
	407412-6	5.00	1.000	1777	137.51		
	407737-1	10.00	1.000	1769	273.87		274.08
	407737-1	10.00	1.000	1772	274.30		
	QC	1.00	1.000	1488	23.31		23.21
	QC	1.00	1.000	1474	23.10		
	D3	1.00	1.000	1523	23.81	d	
		1.00	1.000	813	13.51		
	BLANK	1.00	1.000	27	2.09	R	1.90
0	B	1.00	1.000	0	1.70	b	

1373 mg/kg

\BLE NUMBER: 1 TABLE NAME: 080594S4

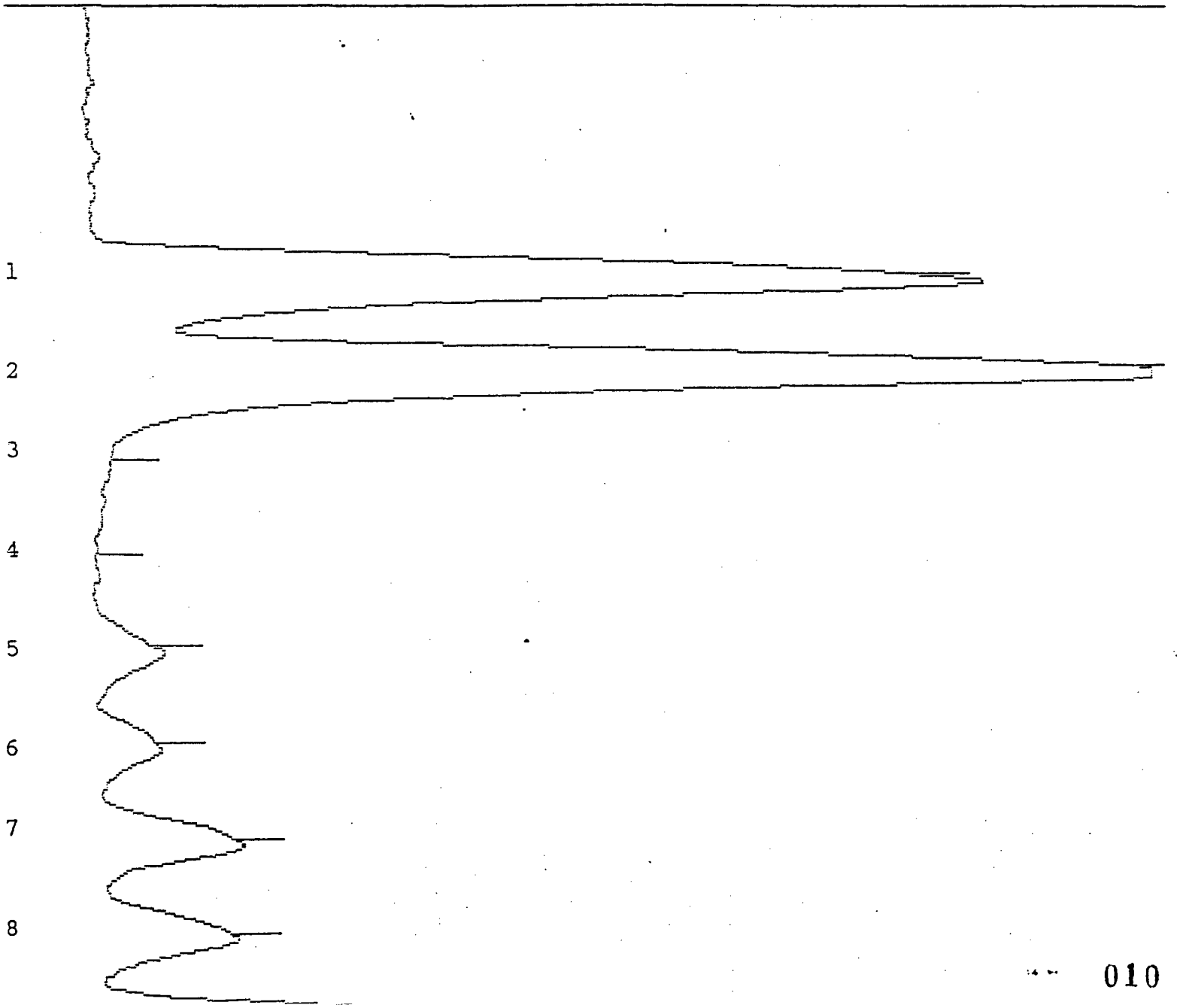
JP#	SAMPLE ID	DIL	WGT	CUP#	SAMPLE ID	DIL	WGT
l	SYNC	1	1	2	SCALE	1	1
3	BLANK	1	1	4	BLANK	1	1
5	S1	1	1	6	S1	1	1
7	S2	1	1	8	S2	1	1
9	S3	1	1	10	S3	1	1
11	S4	1	1	12	S4	1	1
13	S5	1	1	14	S5	1	1
15	BLANK	1	1	16	BLANK	1	1
17	QC	1	1	18	QC	1	1
19	LEACH BLK	1	1	20	B	1	1
21	407412-1	2	1	22	407412-1	2	1
23	407412-1DUP	2	1	24	407412-1DUP	2	1
25	407412-1SPK	4	1	26	407412-1SPK	4	1
27	407412-2	2	1	28	407412-2	2	1
29	407412-3	1	1	30	407412-3	1	1
31	SYNC	1	1	32	SCALE	1	1
33	BLANK	1	1	34	BLANK	1	1
35	STD1	1	1	36	STD1	1	1
37	407412-4	1	1	38	407412-4	1	1
39	407412-4DUP	1	1	40	407412-4DUP	1	1
41	407412-5	2.5	1	42	407412-5	2.5	1
43	407412-6	2.5	1	44	407412-6	2.5	1
45	407412-7	2.5	1	46	407412-7	2.5	1
47	407737-1	10	1	48	407737-1	10	1
49	BLANK	1	1	50	B	1	1
51	STD3	1	1	52	STD3	1	1
53	408514-2	10	1	54	408514-2	10	1
55	408514-2DUP	10	1	56	408514-2DUP	10	1
57	408514-2SPK	20	1	58	408514-2SPK	20	1
59	408547-2	250	1	60	408547-2	250	1
61	408547-3	20	1	62	408547-3	20	1
63	408571-1	1	1	64	408571-1	1	1
65	408582-1	250	1	66	408582-1	250	1
67	408584-1	62.5	1	68	408584-1	62.5	1
69	408584-2	250	1	70	408584-2	250	1
71	408584-3	125	1	72	408584-3	125	1
73	408581-1	125	1	74	408581-1	125	1
75	408618-4	25	1	76	408618-4	25	1
77	STD3	1	1	78	STD3	1	1
79	BLANK	1	1	80	B	1	1
81	408616-1	250	1	82	408616-1	250	1
83	408616-1DUP	250	1	84	408616-1DUP	250	1
85	408616-1SPK	500	1	86	408616-1SPK	500	1
87	408616-2	125	1	88	408616-2	125	1
89	408616-3	200	1	90	408616-3	200	1
91	407412-6	5	1	92	407412-6	5	1
93	407737-1	10	1	94	407737-1	10	1
95	QC	1	1	96	QC	1	1
97	STD3	1	1	98		1	1
99	BLANK	1	1	100	B	1	1

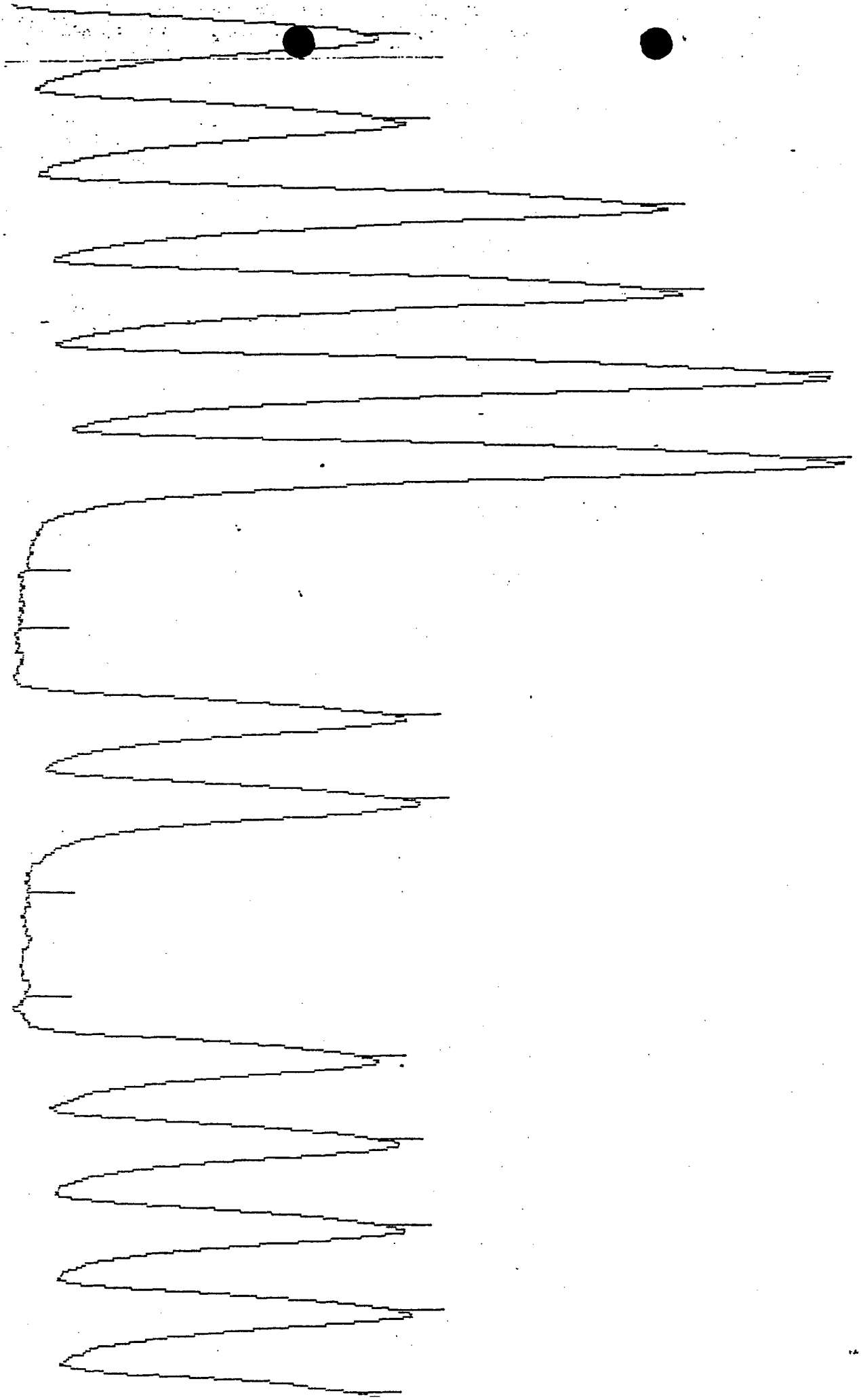
Sulfate

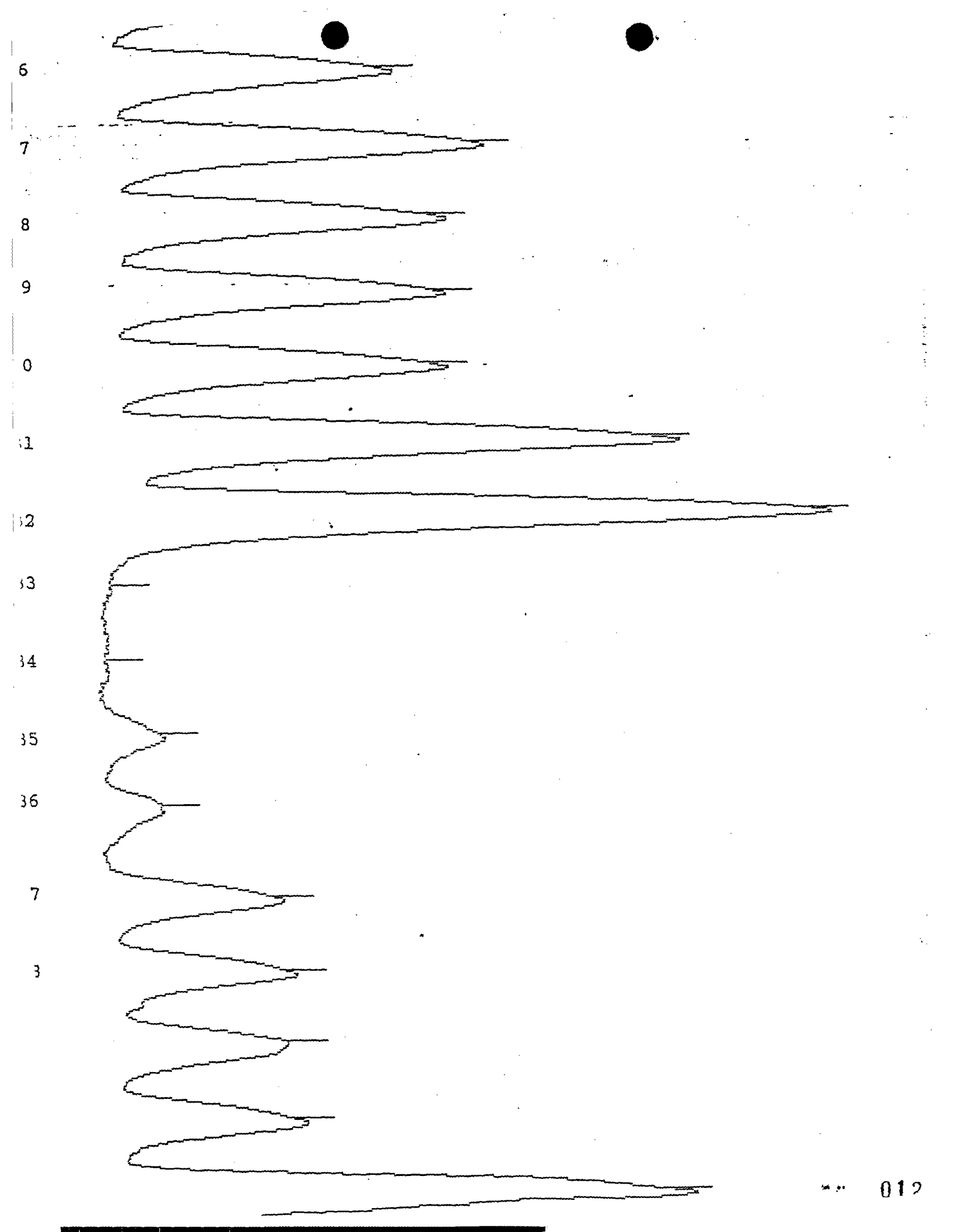
8-5-94 4:30pm

CW

UN DATE: 08-05-1994 CHART DATE: 08-08-1994
HART SPEED: 60
ATA FILE NAME: C:\DP4\DATA\080594S4.DAT



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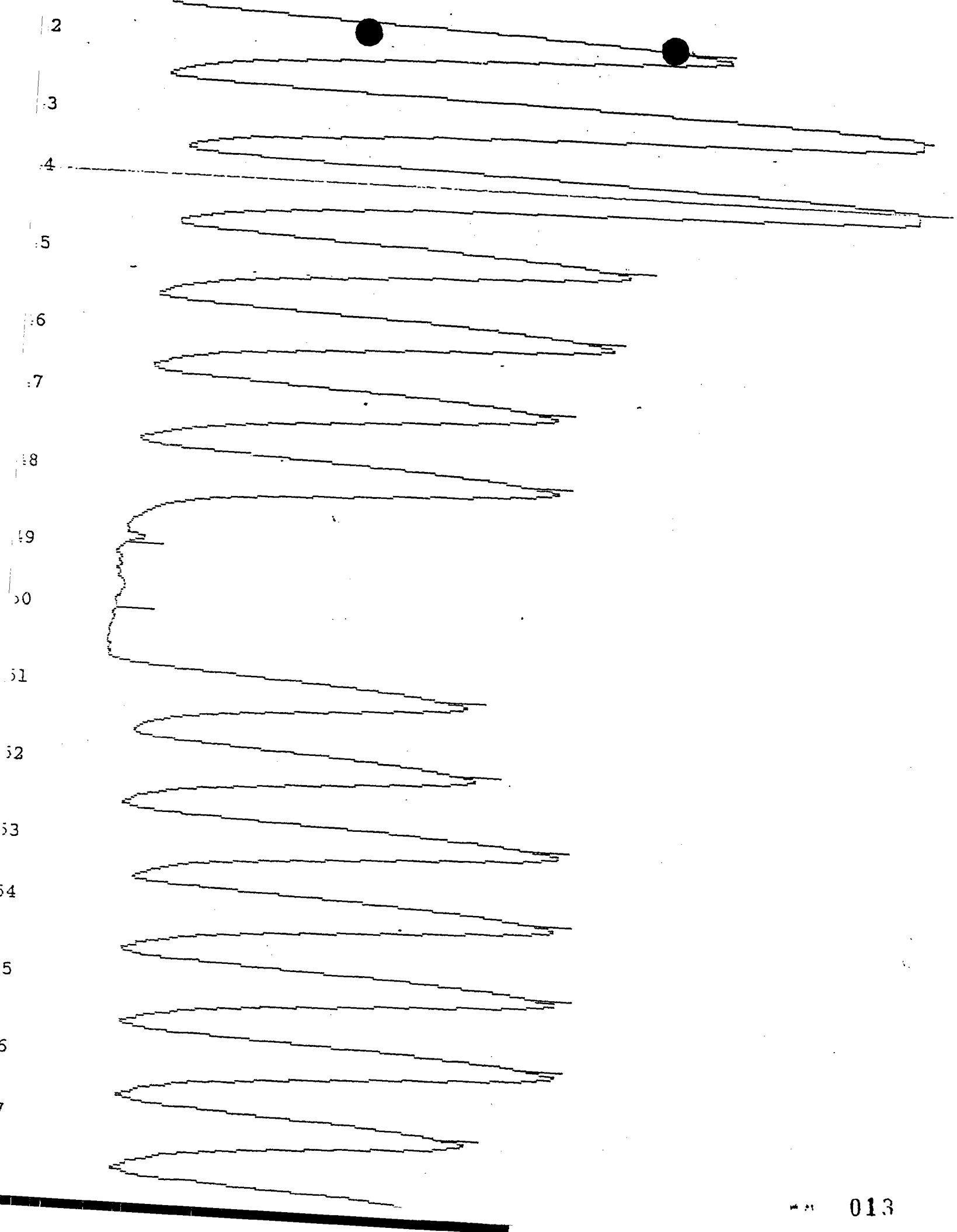

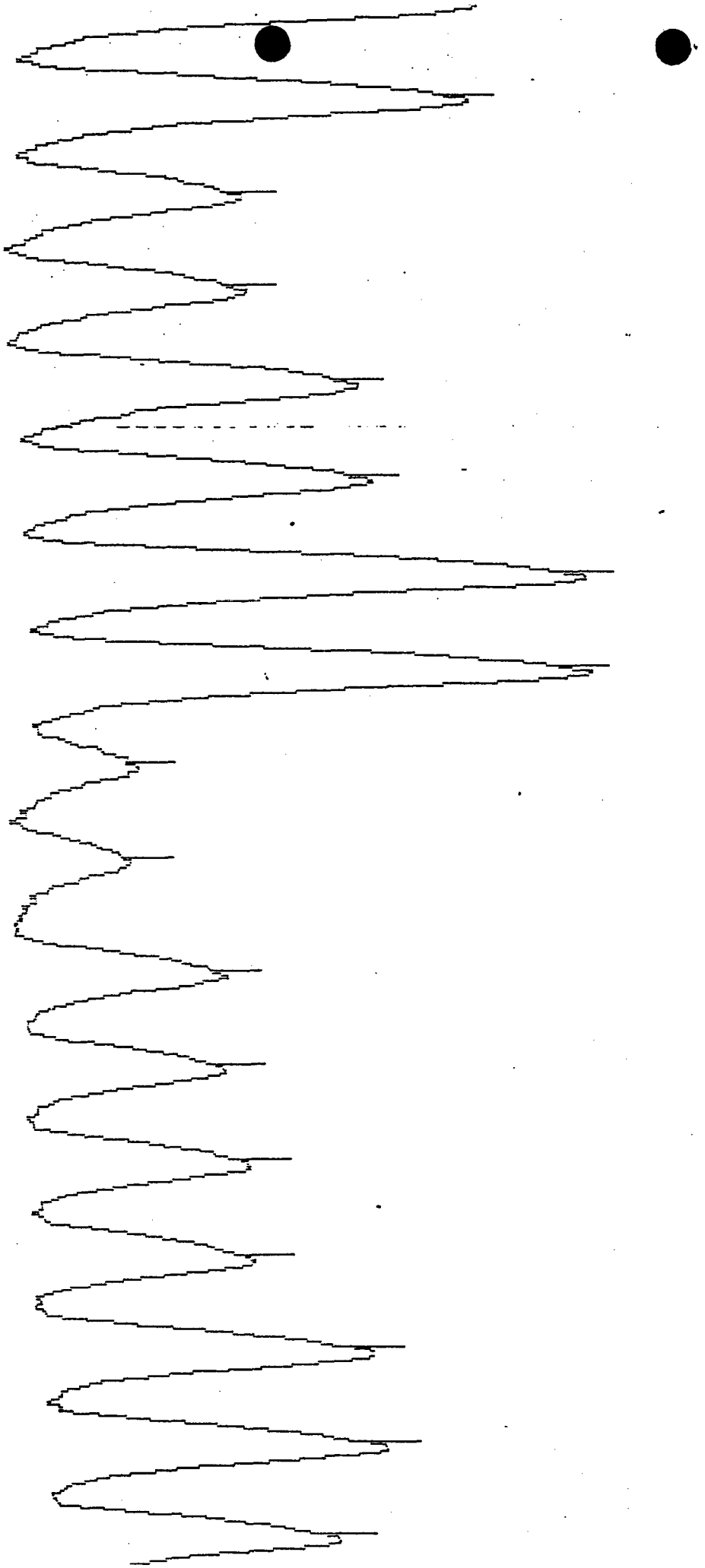
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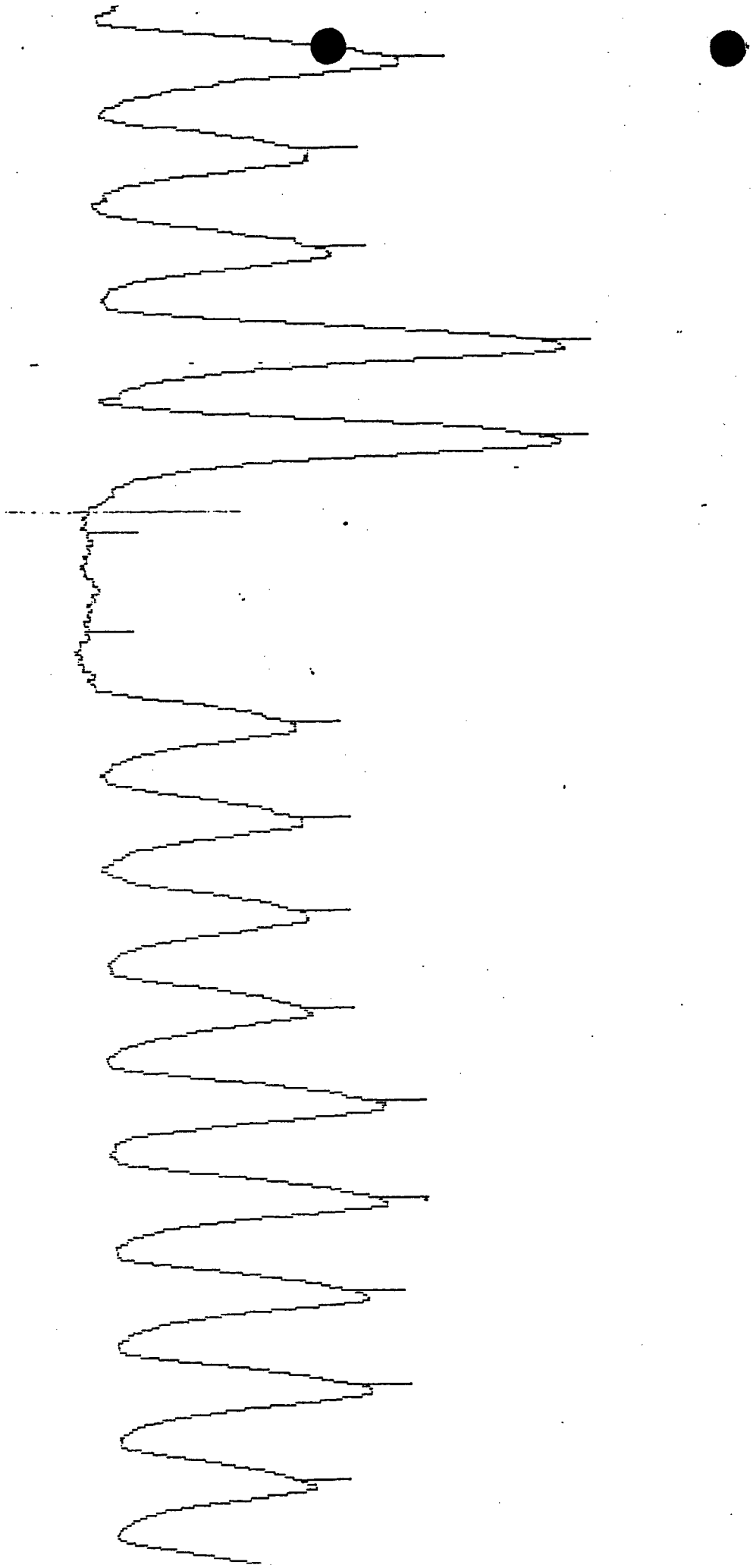
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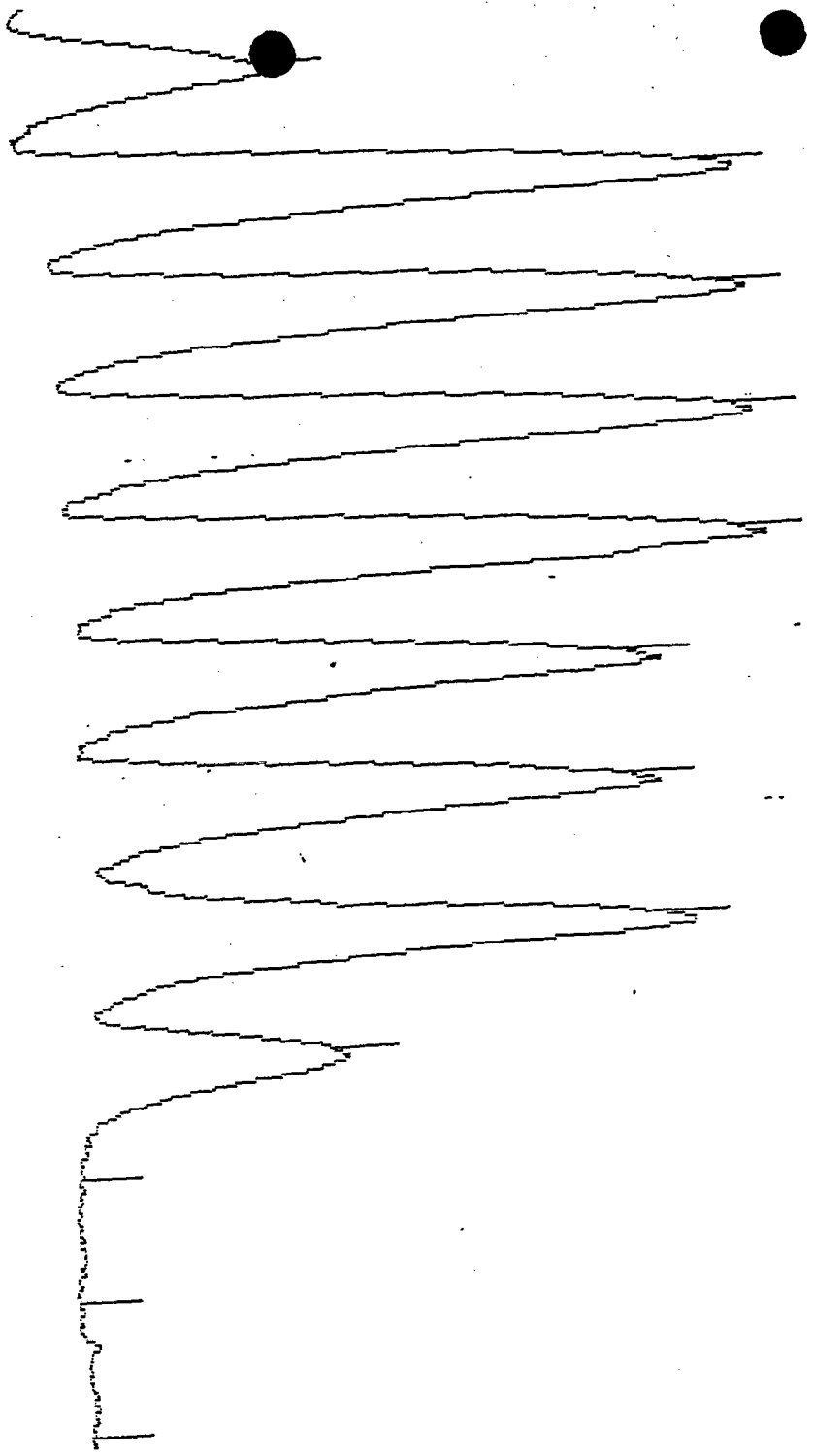


PARAMETER: Sulfate

METHOD REFERENCE: RFA 375.2

ANALYST: CW

DATE: 8-5-94 4:30PM

CUP #	SAMPLE #	CLIENT I.D.	DILUTION ml sple	DILUTION Final vol.	DILUTION Factor
1	Sync	-			-
2	Scale	-			
3	Blk	-			x2.5
4	std1				
5	std1	-			x2.5
6					
7	std2	-			x2.5
8					
9	std3	-			x
10					
11	std4	-			-
12					
13	std5	-			-
14					
15	Blank	-			x10
16					
17	Q.C.	-			x10
18					
19	Leach. Blk	-			x20
20	"				
21	407412-1	See leachate log			x2
22					
23	Dup -1				x20
24					
25	spk -1				-
26					
27	-2				x250
28					
29	-3				x62.5
30					

CUP #	SAMPLE #	CLIENT I.D.	DILUTION ml sple	DILUTION Final vol.	DILUTION Factor
31	407412-4	See Leachate log			-
32	"				
33	-5				x2.5
34	"				
35	-6				x2.5
36	"				
37	-7				x2.5
38	"				
39	407737-1	SL-1			x
40	"				
41	std3	-			-
42	"				
43	Blk	-			-
44	"				
45	408514-2	Farmer			x10
46	"				
47	Dup -2				x10
48	"				
49	spk -2				x20
50	"				
51	408547-2	W-314			x2
52	"				
53	-3	W-311			x20
54	408571-1				
55	"	EFF			-
56	408582-1				
57	"	Upper Wash Drain			x250
58	408584-1				
59		W-310			x62.5
60					

STANDARD CAL.: 2-70 DAMP: 10 SAMPLE/WASH TIME: 35/45 WRITTEN UP BY: CW

PARAMETER: Sulfate ANALYST: [illegible]

METHOD REFERENCE: REA 375.2 DATE: 8-5-94 4:30 PM

CUP #	SAMPLE #	CLIENT I.D.	DILUTION mL sple	DILUTION Final vol.	DILUTION Factor	COMMENTS
61	408584-2	W-310306			x250	
62	1					*I Put 407412-4 on tray twice by accident
63	408584-3	W-308305			x125	
64	1					
65	408581-1	~~Tailing~~ W-305 Slurry			x125	Tray did not advance to second ring (cup 31).
66	1					Cups 1-6 were resampled before I noticed
67	408618-4	RICE Tank			x25	and reset tray to cup 31.
68	1					
69	std 3	—			—	
70	1					
71	Blank	—			—	
72	1					
73	408616-1	W-309			x250	
74	1					
75	408616 -1 Dup	↓			x250	
76	1					
77	408616 -1 SPK				x500	
78	1					
79	408616 -2	W-308			x125	
80	1					
81	408616 -3	W-307			x200	
82						
83	407412-6	SCL Leachate Lag.			x5	
84	1					
85	407737-1	SR-1			x10	
86	1					
87	Q.C.	—			—	
88	1					
89	std	—			—	
90						

STANDARD CAL.: 2.70 DAMP: 4 SAMPLE/WASH TIME: 35/45 WRITTEN UP BY:

7/12/94 TLP

406110-1	40013495	20.02	200 ml
-1MD	↓	20.10	
-2	40013498	20.05	
-3	40013501	20.03	
-4	40013504	10.10	100 ml
Blank	nanopure	~~20~~	200 ml

7/27/94 TLP

Blank — 200 ml

407759-2	40014621	20.12 g
-3	40014623	20.00
-4	40014625	20.36
-5	40014627	20.18
-5MD	↓	20.15
-6	40014629	20.50
-7	40014631	20.07

8/5/94 CW

Blank — — 200 ml nanopure

407412-1	FP-C-01-12	20.01	
-1	↓	20.01	
-2	FP-NW-01-12	19.99	
-3	FP-SW-S2-36	19.99	
-4	FP-SW-02-36	20.08	
-5	FP-NE-01-12	~~20.01~~ 19.99	
-6	FP-SE-01-12	20.01	
-7 FP	SW-01-12	19.98	

CHECK LIST FOR REVIEW[redacted] DATA

ANALYSIS [redacted]
DATE 8-5-94

The following information is complete and correct on all pages of the write up:

__✓__ Analyst initials

__✓__ Parameter

__✓__ Method #

__✓__ Date and time of analysis

Chromatograms, chart recordings, computer printouts are all labeled with the following:

__✓__ Parameter

__✓__ Date and time of analysis

__✓__ Analyst initials

__✓__ Sample ID's

__✓__ Dilution factors

The following analysis information has been checked:

__✓__ The correlation coefficient is $\geq$ 0.9950.

__✓__ Absorbances/peak hts/mV readings are comparable to historical data.

__✓__ Client ID's (taken from the bottle at the time of analysis) are recorded on the raw dat sheets.

__✓__ Calculations are complete, correct and the final results are being reported in the correc units (i.e. mg/l or mg/kg).

__✓__ The correct number of significant figures are being used (no more than 3)

__✓__ The sample #'s on the raw data sheets, QC sheets and computer worksheets all match. (Chec client ID's at this time also.)

__✓__ All samples being reported are attached to the proper QC.

__✓__ There is sufficient quality control for the number of samples run (10%).

__✓__ All quality control data for samples being reported meets ATI criteria.

__✓__ Holding times were met.

__✓__ Data looks reasonable.

__NA__ Anything that looks out of control has an OOCE form stating the corrective action take and the results of that action.

__✓__ All data has been checked to make sure that the correct result is being recorded on th worksheets for data entry.

__✓__ QC and spike data has been entered on the control chart and evaluated for possible problems.

__✓__ The QC value matches the corresponding sample result.

I have checked all of the information listed above and I believe this write up is complete an correct.

8-8-94 Catherine Warren

AES # 401410

BURLINGTON ENVIRONMENTAL
A Philip Environmental Company

Chain-of Custody Record

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 1877

Project Name Giant
Project Number 18641 Phase . Task 0077.77
Samplers S. Pope
Laboratory Name Analytical Technologies, Inc
Location

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	8020/8010	Sulfate	418.1 TPH	Comments
FP-C-01-12	7/26/94	1415	Soil	2	X	X	01	
FP-NW-01-12	7/26/94	1350	Soil	2	X	X	02	
FP-SW-02-36	7/26/94	1125	Soil	2	X	X	03	
FP-SW-02-36	7/26/94	1125	Soil	2	X	X	04	
FP-NE-01-12	7/26/94	1325	Soil	2	X	X	05	
FP-SE-01-12	7/26/94	1150	Soil	2	X	X	06	
FP-SW-01-12	7/26/94	1050	Soil	2	X	X	07	
FP-R-01	7/26/94	1430	Water	2	X		08	
HBR-18	7/27/94	0930	Water	2	X		09	

Relinquished by:

Signature	Date	Time
Steve T. Pope	7/27/94	1045

Received By:

Signature	Date	Time
[signature]	7/28/94	09:00

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)
- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: Fed Ex
Airbill No. 880927373 3

Shipping and Lab Notes:

Level 4 QA/QC
Bill Giant Direct for Analytical Costs.
(Giant Refinery, Farmington NM, Attn: Tim Kinney)

021

AnalyticalTechnologies, Inc. Albuquerque, NM

Chain of Custody

DATE 7/28/94 PAGE 1 OF 1

NETWORK PROJECT MANAGER: LETITIA KRAKOWSKI

COMPANY: **Analytical Technologies, Inc.**

ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TOX	TOC	ORGANIC LEAD	SULFIDE	SURFACTANTS (MBAS)	SULFATE LEVEL 4	632/632 MOD	619/619 MOD	610/8310		8240 (TCLP 1311) ZHE		Diesel/Gasoline/BTXE/MTBE/ (MOD 8015/8020)	Volatile Organics GC/MS (624/8240)		NACE	ASBESTOS		BOD	TOTAL COLIFORM	FECAL COLIFORM	GROSS ALPHA/BETA	RADIUM 226/228		AIR - O2, CO2, METHANE	AIR/Diesel/Gasoline/BTXE/ (MOD 8015/8020)	NUMBER OF CONTAINERS
407412-01	7/26/94	1415	NONAQ	1						X																				1
-02		1350		2						X																				1
-03		1125		3						X																				1
-04		1125		4						X																				1
-05		1325		5						X																				1
-06		1150		6						X																				1
-07	↓	1050	↓	7						X																				1

PROJECT INFORMATION

PROJECT NUMBER: 407412
PROJECT NAME: BE
QC LEVEL: (IV)
QC REQUIRED: (MS) MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	7
CHAIN OF CUSTODY SEALS	Y
INTACT?	Y
RECEIVED GOOD COND./COLD	Y
LAB NUMBER	407412

DUE DATE: 8/18
RUSH SURCHARGE:
CLIENT DISCOUNT: 0 %

WO# LK912

SAMPLES SENT TO:

SAN DIEGO	
FT. COLLINS	
RENTON	
PENSACOLA	
PORTLAND	
PHOENIX	X
FIBERQUANT	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: [illegible] Date 7/28/94
Analytical Technologies, Inc.
Albuquerque

RECEIVED BY: (LAB) 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date
Company:

RECEIVED BY: (LAB) 2.
Signature: [signature] Time: 10:16
Printed Name: Date:
AL FORTNER 7-29-94
Company:
ATI

Analytical Technologies, Inc.

CASE NARRATIVE

CLIENT SAMPLE NUMBER	ATI-ALBUQUERQUE ID
FP-C-01-12	407412-01
FP-NW-01-12	407412-02
FP-SW-52-36	407412-03
FP-SW-02-36	407412-04
FP-NE-01-12	407412-05
FP-SE-01-12	407412-06
FP-SW-01-12	407412-07
FP-R-01	407412-08
HBR-18	407412-09

SULFATE: ATI-Phoenix performed sulfate analyses on samples 01-07 and are reported within. There were no problems associated with these sulfate analyses.

SW-846; 8010/8020: The soil samples were performed at a medium level. It was determined that these samples (01-07) did not meet the detection requirements as needed by this project. The samples were resampled and analyzed subsequent to this data package. However, the water samples (08-09) did meet the client's criteria and are reported within this report.

It should also be noted that the closing continuing standard for July 29, 1994 (file ID: 021R0101.D) failed to meet acceptance criteria for two compounds: trichlortrifluoromethane and trichloroethene. Per our SOP the opening standard for the next shift was examined and passed criteria. The data, therefore, meets criteria for reporting. All other QC criteria were met for this sample lot.

ATI certifies that this data is in compliance with the terms and conditions as set forth in SW-846; ATI Quality Assurance Plan; and other related documents, both technically and for completeness, for other that the exceptions noted above (if any). Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

10-01-94
Date

SAMPLE RESULTS

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : BURLINGTON ENVIRONMENTAL ATI I.D.: 407412
PROJECT # : 12641
PROJECT NAME : GIANT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
08	FP-R-01	AQUEOUS	07/26/94	NA	07/29/94	1
09	HBR-18	AQUEOUS	07/27/94	NA	07/30/94	1

PARAMETER	UNITS	08	09
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		104	98
TRIFLUOROTOLUENE (%)		112	97

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\014R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-08
Run Time Bar Code:
Acquired on : 29 Jul 94 11:55 PM
Report Created on: 30 Jul 94 01:45 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 14
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

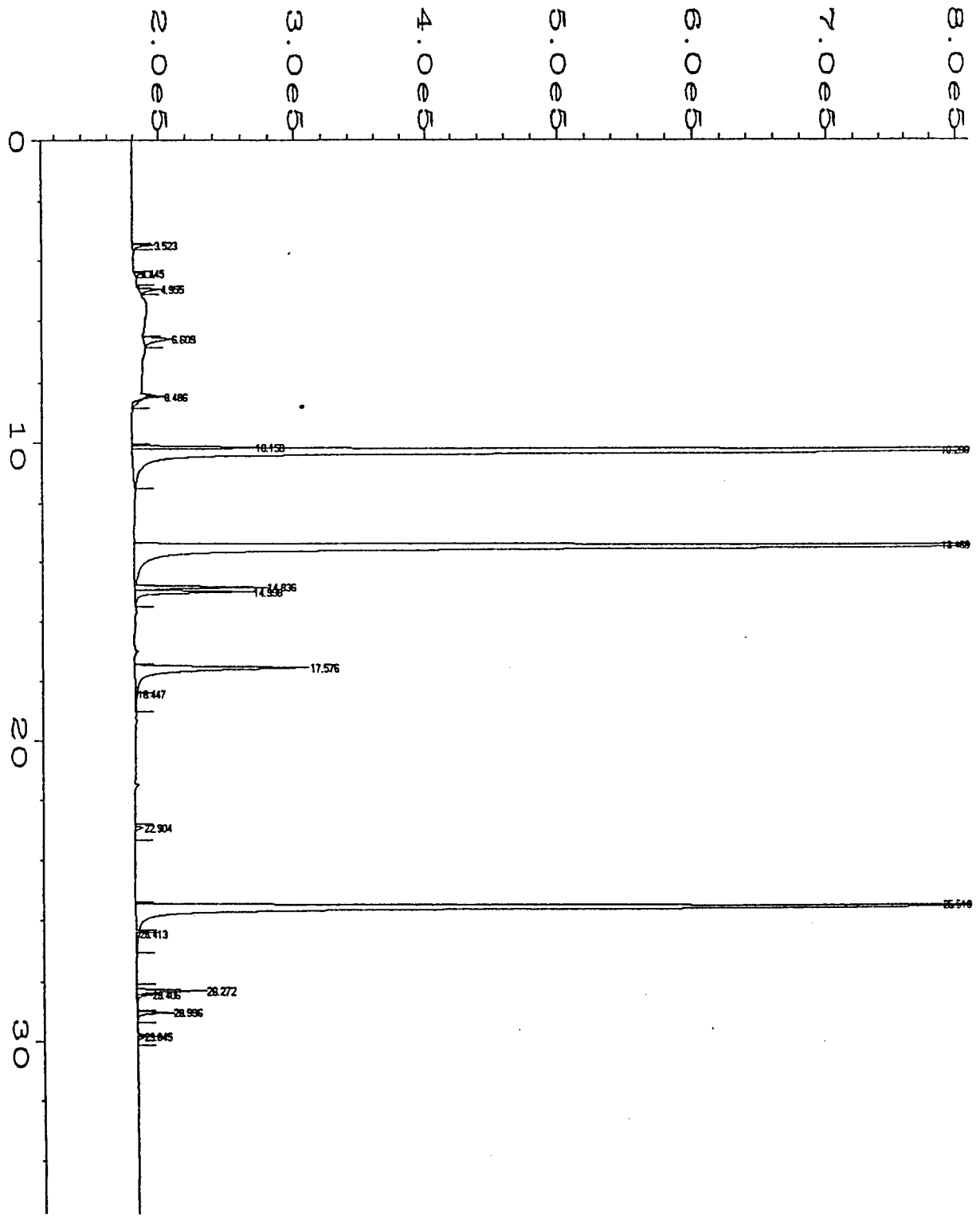
Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\014R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
4.955	17311	BB	0.070	1	-0.330	Chloromethane
5.635	* not found *			1		Vinylchloride
6.609	21936	BB	0.103	1	0.0911	Bromomethane
7.174	* not found *			1		Chloroethane
8.486	15357	BB	0.035	1	-0.399	TCFM
9.879	* not found *			1		1,1 DCEthene
10.150	92187	BV	0.050	1	-2.603	Methylene chloride
10.296	3525472	VV	0.087	1	267.445	unknown
11.668	* not found *			1		trans 1,2 DCEthene
12.165	* not found *			1		1,1 DCEthane
13.300	* not found *			1		cis 1,2 DCEthene
13.469	4376293	VV	0.071	1-R	103.656	BCM (surrogate)
13.719	* not found *			1		Chloroform
14.836	98873	VV	0.064	1	-0.841	1,2 DCEthane (EDC)
14.998	88857	VV	0.082	1	-1.179	1,1,1 TCEthane
15.786	* not found *			1		Carbon Tetrachloride
17.048	* not found *			1		1,2 DCPropane
17.137	* not found *			1		TCEthene (TCE)
17.227	* not found *			1		BDCM
18.447	2059	VV	0.196	1	-0.613	cis 1,3 DCPropene
19.418	* not found *			1		trans 1,3 DCPropene
19.698	* not found *			1		1,1,2 TCEthane
20.689	* not found *			1		DBCM
21.190	* not found *			1		1,2 DBrEthane (EDB)
21.566	* not found *			1		Tetrachloroethene (PCE)
22.904	7559	PV	0.073	1	-0.345	Chlorobenzene
24.026	* not found *			1		Bromoform
24.719	* not found *			1		1,1,2,2 TCEthane
25.513	2216098	BV	0.074	1-IR	100.000	BFB (I.S.)
28.272	53239	PV	0.053	1	-0.597	1,3 DCB
28.406	12353	VV	0.072	1	-0.624	1,4 DCB
28.996	28159	PV	0.056	1	-0.833	1,2 DCB
3.523	16742	PV	0.052		16742.49	* uncalibrated *
4.445	5480	BB	0.068		5480.254	* uncalibrated *
17.576	131046	PV	0.119		131045.8	* uncalibrated *
26.413	2466	VV	0.183		2466.070	* uncalibrated *
29.845	5572	VV	0.080		5571.761	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.469	-0.068

Not all calibrated peaks were found

==========



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\014R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 14
Sample Name	: 407412-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 11:55 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 00:33 AM	Analysis Method	: 0727ELCD.MTH
Last Recalib on	: 27 JUL 94 06:11 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\014F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-08
Run Time Bar Code:
Acquired on : 29 Jul 94 11:55 PM
Report Created on: 02 Aug 94 05:09 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 14
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\014F0101.D

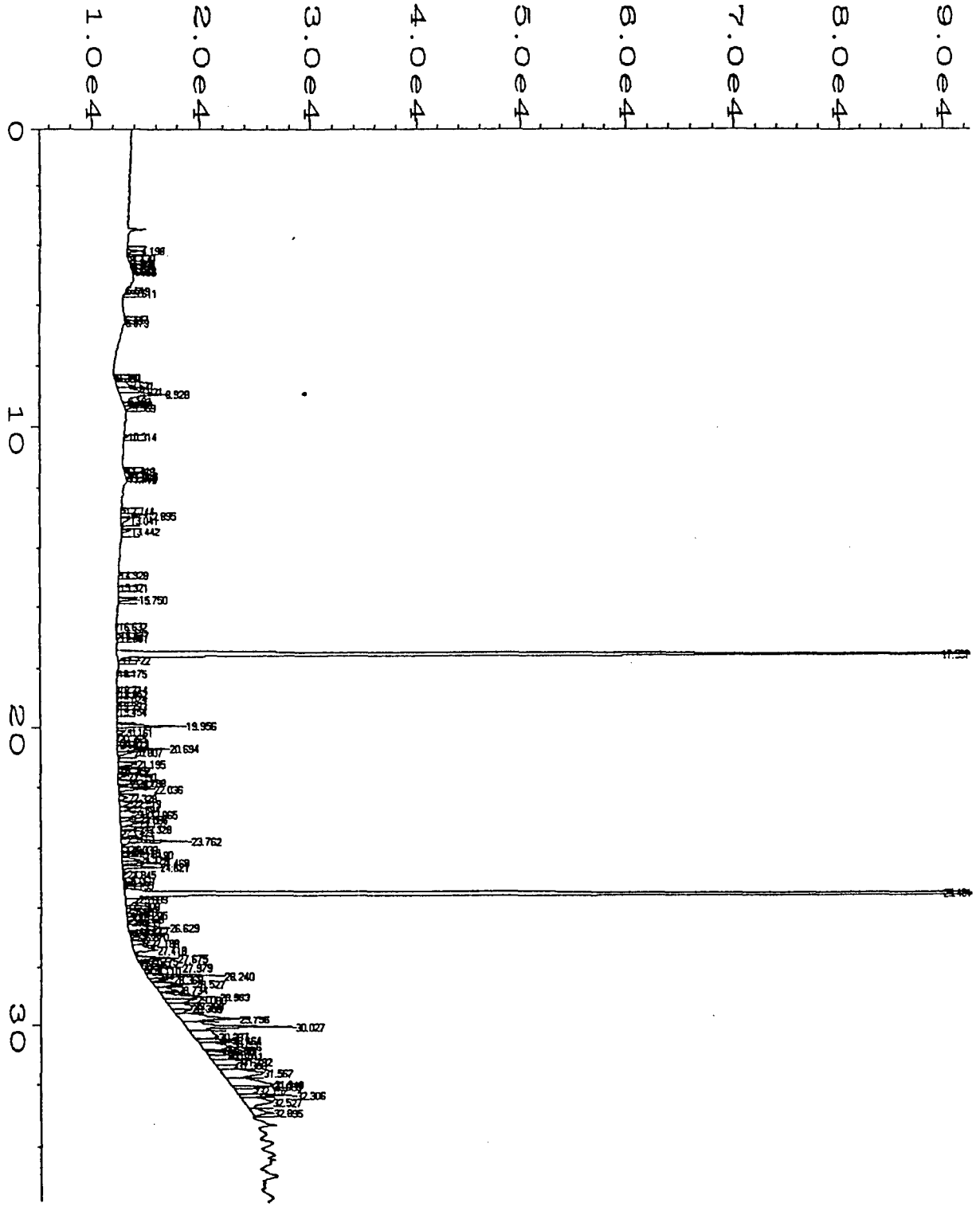
Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.611	875	PV	0.040	1	0.494	VinylChloride
9.778	* not found *			1		1,1DCEthene
11.590	* not found *			1		trans 1,2-DCEthene
11.920	* not found *			1		Methyl-tert-ButylEther
13.223	* not found *			1		cis 1,2-DCEthene
15.750	1936	BV	0.050	1	0.133	Benzene
17.057	* not found *			1		TCEthene (TCE)
17.537	272018	PV	0.059	1-R	111.826	Trifluorotoluene (Surr.)
18.449	* not found *			1		cis 1,3DCPropene
19.328	* not found *			1		trans-1,3-DCPropene
19.956	6479	VV	0.056	1	0.295	Toluene
21.461	* not found *			1		Tetrachloroethene (PCE)
22.865	2758	VV	0.085	1	0.164	Chlorobenzene
23.328	2125	VV	0.071	1	0.178	Ethylbenzene
23.762	6520	VV	0.075	1	0.338	M & P Xylene
24.621	3541	VV	0.057	1	0.204	O-Xylene
25.481	588976	VV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.240	7059	VV	0.049	1	0.181	1,3 DCB
28.369	2249	VV	0.056	1	0.0998	1,4 DCB
28.963	5156	VV	0.070	1	0.140	1,2 DCB
4.198	1351	BV	0.045		1350.600	* uncalibrated *
4.430	357	PV	0.088		356.829	* uncalibrated *
8.631	1316	VV	0.127		1316.434	* uncalibrated *
8.821	1936	VV	0.089		1936.475	* uncalibrated *
8.928	4323	VV	0.098		4323.489	* uncalibrated *
9.250	566	VV	0.086		565.608	* uncalibrated *
9.369	755	VV	0.061		754.849	* uncalibrated *
12.753	427	PV	0.075		426.869	* uncalibrated *
12.895	2526	VV	0.055		2526.087	* uncalibrated *
13.040	888	VV	0.074		887.694	* uncalibrated *
13.441	973	PV	0.049		973.269	* uncalibrated *
20.161	777	PV	0.070		776.908	* uncalibrated *
20.694	4870	VV	0.070		4870.291	* uncalibrated *
20.807	1560	VV	0.085		1559.563	* uncalibrated *
21.195	1738	PV	0.074		1738.274	* uncalibrated *
21.590	843	BV	0.054		843.089	* uncalibrated *
21.798	1812	PV	0.069		1812.220	* uncalibrated *
21.877	1078	VV	0.062		1078.038	* uncalibrated *
22.036	3373	VV	0.069		3372.796	* uncalibrated *
22.327	885	VV	0.074		885.134	* uncalibrated *
22.518	1284	VV	0.068		1284.399	* uncalibrated *

23.005	1880	VV	0.070	1879.682	* uncalibrated *
23.149	1739	VV	0.090	1739.444	* uncalibrated *
23.469	493	VV	0.081	493.242	* uncalibrated *
24.039	746	VV	0.071	745.638	* uncalibrated *
24.117	990	VV	0.050	990.387	* uncalibrated *
24.190	2158	VV	0.060	2158.413	* uncalibrated *
24.372	1682	PV	0.067	1681.501	* uncalibrated *
24.468	3568	VV	0.055	3568.413	* uncalibrated *
25.373	834	BV	0.054	834.083	* uncalibrated *
25.690	1274	VV	0.064	1274.103	* uncalibrated *
25.773	1027	VV	0.092	1026.619	* uncalibrated *
26.206	1144	VV	0.069	1143.569	* uncalibrated *
26.338	809	VV	0.066	808.745	* uncalibrated *
26.629	3961	PV	0.083	3961.249	* uncalibrated *
26.743	986	VV	0.052	986.448	* uncalibrated *
26.880	797	VV	0.058	796.657	* uncalibrated *
26.970	967	VV	0.063	967.336	* uncalibrated *
27.188	1789	PV	0.063	1788.944	* uncalibrated *
27.417	2265	VV	0.119	2265.193	* uncalibrated *
27.675	3861	PV	0.051	3861.072	* uncalibrated *
27.774	1028	VV	0.050	1027.618	* uncalibrated *
27.979	3785	PV	0.046	3784.572	* uncalibrated *
28.112	740	VV	0.049	739.850	* uncalibrated *
28.526	3815	VV	0.063	3814.592	* uncalibrated *
28.734	1893	VV	0.084	1893.053	* uncalibrated *
29.069	2878	VV	0.097	2878.327	* uncalibrated *
29.224	1628	VV	0.058	1628.123	* uncalibrated *
29.288	2206	VV	0.063	2205.004	* uncalibrated *
29.336	1849	VV	0.107	1848.782	* uncalibrated *
29.756	5273	VV	0.129	5273.480	* uncalibrated *
29.861	1534	VV	0.025	1533.547	* uncalibrated *
30.027	9845	VV	0.071	9844.956	* uncalibrated *
30.337	2210	VV	0.164	2209.865	* uncalibrated *
30.465	3134	VV	0.085	3134.109	* uncalibrated *
30.666	2709	VV	0.123	2709.497	* uncalibrated *
30.787	1796	VV	0.055	1795.908	* uncalibrated *
30.927	1725	VV	0.070	1725.329	* uncalibrated *
31.011	2158	VV	0.075	2158.233	* uncalibrated *
31.184	2565	VV	0.130	2564.570	* uncalibrated *
31.305	1845	VV	0.101	1845.182	* uncalibrated *
31.558	3807	VV	0.151	3806.722	* uncalibrated *
31.949	3944	VV	0.139	3944.240	* uncalibrated *
32.005	3658	VV	0.055	3657.949	* uncalibrated *
32.142	2100	VV	0.123	2099.823	* uncalibrated *
32.306	5242	VV	0.062	5242.292	* uncalibrated *
32.529	2580	VV	0.154	2579.816	* uncalibrated *
32.896	1878	VBA	0.117	1877.639	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.537	-0.086
17	25.536	25.481	-0.055

Calibration table contains at least one peak with amt = 0

Not all calibrated peaks were found



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\014F0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 14
Sample Name	: 407412-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 11:55 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 00:31 AM	Analysis Method	: 0727PID.MTH
Last Recalib on	: 27 JUL 94 05:09 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\015R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09
Run Time Bar Code:
Acquired on : 30 Jul 94 00:38 AM
Report Created on: 30 Jul 94 01:46 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\015R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.014	93206	BB	0.077	1	0.154	Chloromethane
5.635	* not found *			1		Vinylchloride
6.663	22069	BB	0.096	1	0.0864	Bromomethane
7.174	* not found *			1		Chloroethane
8.521	19603	BB	0.085	1	-0.369	TCFM
9.879	* not found *			1		1,1 DCEthene
10.284	* not found *			1		Methylene chloride
10.306	3337814	PV	0.086	1	248.627	unknown
11.668	* not found *			1		trans 1,2 DCEthene
12.165	* not found *			1		1,1 DCEthane
13.300	* not found *			1		cis 1,2 DCEthene
13.462	4221002	VV	0.069	1-R	98.169	BCM (surrogate)
13.719	* not found *			1		Chloroform
14.822	97464	VV	0.064	1	-0.855	1,2 DCEthane (EDC)
14.987	28782	VV	0.095	1	-1.417	1,1,1 TCEthane
15.653	9321	VV	0.034	1	-0.797	Carbon Tetrachloride
17.048	* not found *			1		1,2 DCPropane
17.137	* not found *			1		TCEthene (TCE)
17.227	* not found *			1		BDCM
18.531	* not found *			1		cis 1,3 DCPropene
19.418	* not found *			1		trans 1,3 DCPropene
19.698	* not found *			1		1,1,2 TCEthane
20.689	* not found *			1		DBCM
21.190	* not found *			1		1,2 DBrEthane (EDB)
21.566	* not found *			1		Tetrachloroethene (PCE)
22.867	7074	BV	0.070	1	-0.350	Chlorobenzene
24.026	* not found *			1		Bromoform
24.719	* not found *			1		1,1,2,2 TCEthane
25.460	2256940	BV	0.077	1-IR	100.000	BFB (I.S.)
28.340	* not found *			1		1,3 DCB
28.253	52794	PV	0.054	1	-0.462	1,4 DCB
28.987	27130	VV	0.055	1	-0.840	1,2 DCB
3.554	26772	BV	0.057		26772.49	* uncalibrated *
4.502	5517	BB	0.085		5517.020	* uncalibrated *
10.836	6648	VV	0.255		6648.463	* uncalibrated *
17.555	113813	PV	0.114		113813.4	* uncalibrated *
26.365	2638	VV	0.137		2638.189	* uncalibrated *
28.388	9031	VV	0.074		9031.407	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Differences

29	25.609	25.460	-0.149

Not all calibrated peaks were found

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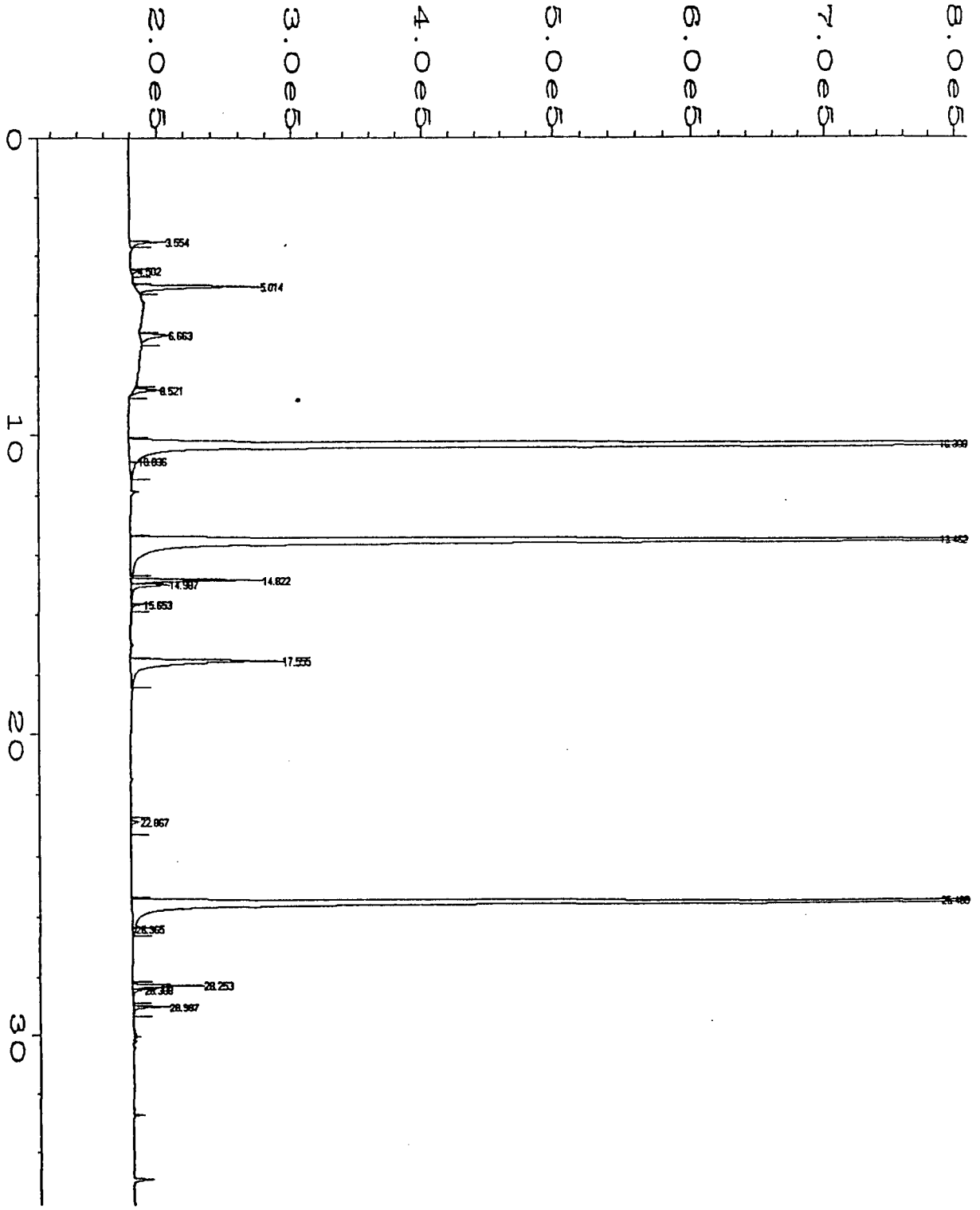


Data File Name	: C:\HPCHEM\3\DATA\29JUL94\015R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 15
Sample Name	: 407412-09	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 30 Jul 94 00:38 AM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 01:15 AM	Analysis Method	: 0727ELCD.MTH
Last Recalib on	: 27 JUL 94 06:11 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\015F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09
Run Time Bar Code:
Acquired on : 30 Jul 94 00:38 AM
Report Created on: 02 Aug 94 05:13 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

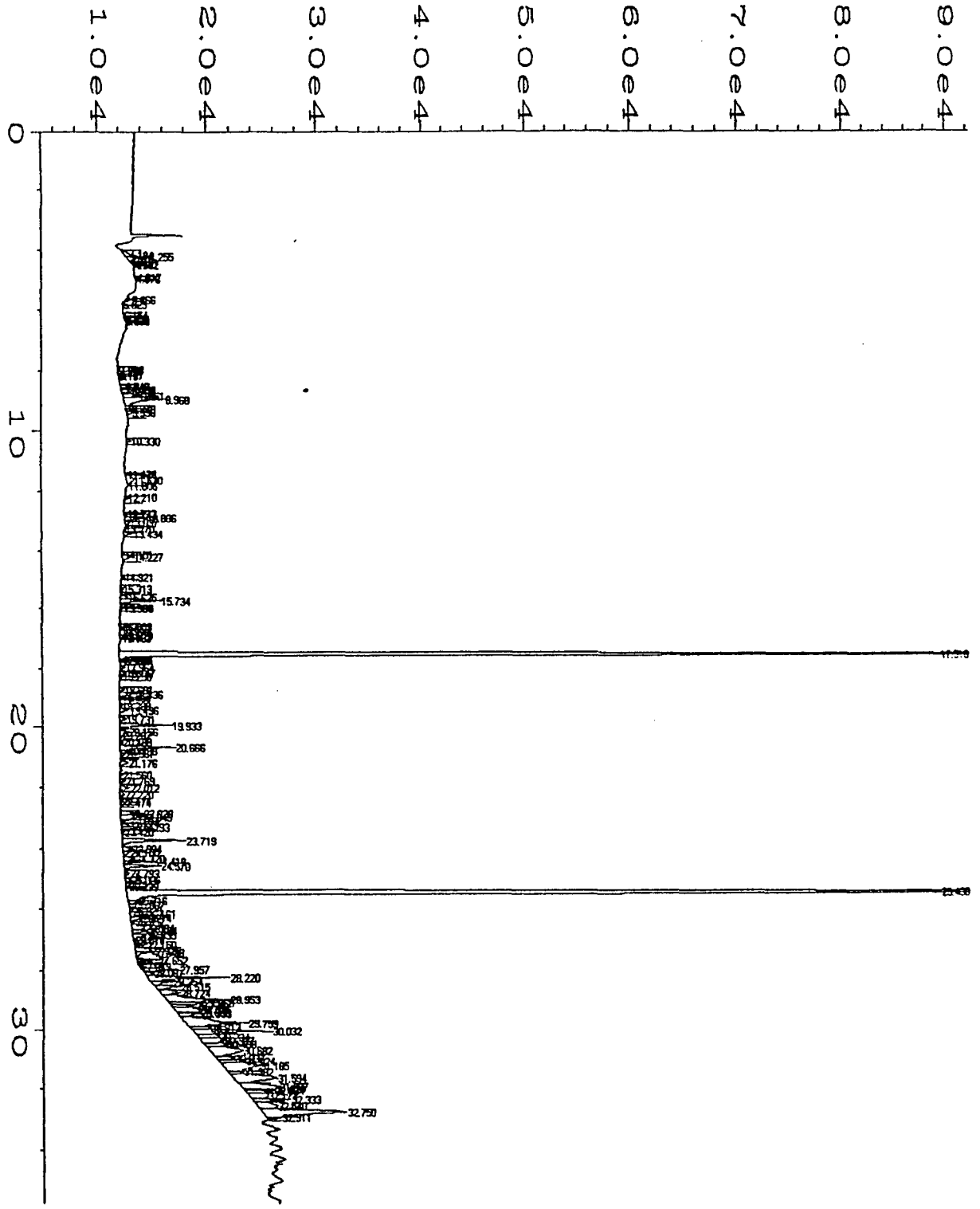
Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\015F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.594	* not found *			1		VinylChloride
9.778	* not found *			1		1,1DCEthene
11.590	* not found *			1		trans 1,2-DCEthene
11.920	* not found *			1		Methyl-tert-ButylEther
13.223	* not found *			1		cis 1,2-DCEthene
15.734	3815	VV	0.060	1	0.202	Benzene
16.911	435	BV	0.102	1	0.106	TCEthene (TCE)
17.516	244701	PV	0.060	1-R	96.968	Trifluorotoluene (Surr.)
18.449	* not found *			1		cis 1,3DCPropene
19.328	* not found *			1		trans-1,3-DCPropene
19.933	4884	VV	0.056	1	0.225	Toluene
21.461	* not found *			1		Tetrachloroethene (PCE)
22.829	2181	PV	0.060	1	0.140	Chlorobenzene
23.293	1747	VV	0.075	1	0.158	Ethylbenzene
23.719	5941	BV	0.070	1	0.301	M & P Xylene
24.570	3450	VV	0.057	1	0.195	O-Xylene
25.430	611013	BV	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.220	7439	VV	0.056	1	0.185	1,3 DCB
28.354	2033	VV	0.071	1	0.0898	1,4 DCB
28.953	5749	VV	0.091	1	0.156	1,2 DCB
4.194	404	BV	0.103		403.679	* uncalibrated *
4.255	2124	VV	0.059		2123.532	* uncalibrated *
5.666	715	VV	0.043		715.118	* uncalibrated *
8.584	523	BV	0.104		523.009	* uncalibrated *
8.649	1018	VV	0.078		1018.086	* uncalibrated *
8.852	1623	VV	0.091		1623.333	* uncalibrated *
8.967	3849	VV	0.102		3848.815	* uncalibrated *
9.279	560	VV	0.067		559.902	* uncalibrated *
9.396	529	VV	0.068		529.296	* uncalibrated *
10.331	467	BV	0.062		467.473	* uncalibrated *
11.630	874	BV	0.158		873.541	* uncalibrated *
11.730	563	VB	0.096		562.629	* uncalibrated *
12.747	399	BV	0.065		399.459	* uncalibrated *
12.887	2190	VV	0.064		2189.817	* uncalibrated *
13.036	621	VV	0.100		621.417	* uncalibrated *
13.434	902	PV	0.052		902.005	* uncalibrated *
14.226	1067	VV	0.077		1066.582	* uncalibrated *
15.622	672	BV	0.064		672.187	* uncalibrated *
16.629	368	PB	0.097		367.588	* uncalibrated *
18.148	602	PV	0.050		601.986	* uncalibrated *
18.690	512	BV	0.065		511.728	* uncalibrated *

19.436	1000	VV	0.064	1000.414	*	uncalibrated *
19.731	683	PV	0.072	682.822	*	uncalibrated *
20.156	941	VV	0.095	941.094	*	uncalibrated *
20.666	5175	VV	0.072	5174.815	*	uncalibrated *
20.783	801	VV	0.060	801.442	*	uncalibrated *
20.865	540	VB	0.077	540.381	*	uncalibrated *
21.170	770	BB	0.089	769.868	*	uncalibrated *
21.770	532	BV	0.057	531.575	*	uncalibrated *
22.011	926	PV	0.080	926.246	*	uncalibrated *
22.221	475	VV	0.079	475.084	*	uncalibrated *
22.949	2067	VV	0.084	2067.011	*	uncalibrated *
23.046	907	VV	0.055	906.553	*	uncalibrated *
23.993	931	VV	0.063	931.476	*	uncalibrated *
24.103	705	VV	0.091	704.506	*	uncalibrated *
24.320	1098	VV	0.063	1098.479	*	uncalibrated *
24.419	3081	VV	0.055	3081.476	*	uncalibrated *
24.793	495	PV	0.074	494.899	*	uncalibrated *
25.008	522	PV	0.068	521.928	*	uncalibrated *
25.717	751	VV	0.073	750.580	*	uncalibrated *
25.867	524	VV	0.079	524.180	*	uncalibrated *
26.160	1496	VV	0.073	1496.326	*	uncalibrated *
26.274	1073	VV	0.071	1073.266	*	uncalibrated *
26.580	1177	PV	0.094	1177.360	*	uncalibrated *
26.694	1397	VV	0.075	1397.421	*	uncalibrated *
26.835	1305	VV	0.086	1304.586	*	uncalibrated *
27.149	1189	PV	0.066	1188.624	*	uncalibrated *
27.322	1472	VV	0.073	1472.148	*	uncalibrated *
27.396	1754	VV	0.080	1754.480	*	uncalibrated *
27.652	2035	VV	0.057	2035.341	*	uncalibrated *
27.958	3538	PV	0.054	3538.312	*	uncalibrated *
28.088	887	VV	0.058	886.685	*	uncalibrated *
28.515	2347	VV	0.072	2347.237	*	uncalibrated *
28.723	1851	VV	0.082	1851.187	*	uncalibrated *
29.067	3149	VV	0.097	3148.790	*	uncalibrated *
29.288	2270	VV	0.093	2269.591	*	uncalibrated *
29.394	2151	VV	0.128	2150.759	*	uncalibrated *
29.759	5580	VV	0.119	5579.930	*	uncalibrated *
29.910	1738	VV	0.083	1738.129	*	uncalibrated *
30.032	7127	VV	0.069	7126.573	*	uncalibrated *
30.339	2040	VV	0.180	2040.264	*	uncalibrated *
30.474	1985	VV	0.092	1984.654	*	uncalibrated *
30.681	3014	VV	0.163	3014.254	*	uncalibrated *
30.933	1590	VV	0.075	1590.129	*	uncalibrated *
31.025	2423	VV	0.070	2422.886	*	uncalibrated *
31.187	3347	VV	0.160	3346.575	*	uncalibrated *
31.379	1480	VV	0.064	1479.887	*	uncalibrated *
31.593	4033	VV	0.147	4032.737	*	uncalibrated *
31.895	3494	VV	0.118	3494.474	*	uncalibrated *
31.968	3046	VV	0.048	3046.236	*	uncalibrated *
32.033	2844	VV	0.059	2844.466	*	uncalibrated *
32.213	1746	VV	0.127	1746.054	*	uncalibrated *
32.333	3624	VV	0.067	3624.068	*	uncalibrated *
32.540	1876	VV	0.116	1876.095	*	uncalibrated *
32.750	7936	VV	0.136	7936.164	*	uncalibrated *
32.911	1470	VBA	0.092	1469.788	*	uncalibrated *

Time Reference Peak Expected RT Actual RT Difference



Data File Name : C:\HPCHEM\3\DATA\29JUL94\015F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09
Run Time Bar Code:
Acquired on : 30 Jul 94 00:38 AM
Report Created on: 30 Jul 94 01:14 AM
Last Recalib on : 27 JUL 94 05:09 PM
Multiplier : 1

Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)		
MSMSD #	: 40741209	ATI I.D.	: 407412
CLIENT	: BURLINGTON ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 12641	DATE ANALYZED	: 07/30/94
PROJECT NAME	: GIANT	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 40741209	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
BENZENE	<0.5	10	9.9	99	11	110	11
CHLOROBENZENE	<0.5	10	10	100	10	100	0
1,1-DICHLOROETHENE	<0.2	10	9.7	97	10	100	3
TOLUENE	<0.5	10	10	100	11	110	10
TRICHLOROETHENE	<0.2	10	10	100	11	110	10

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Internal Standard Report

ata File Name : C:\HPCHEM\3\DATA\29JUL94\016R0101.D
perator : C. FROEHLICH & J.EPLEY
nstrument : GC#3 5890
ample Name : 407412-09MS
un Time Bar Code:
cquired on : 30 Jul 94 01:20 AM
eport Created on: 30 Jul 94 01:47 PM
ast Recalib on : 30 JUL 94 10:30 AM
ultiplier : 1

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

ig. 2 in C:\HPCHEM\3\DATA\29JUL94\016R0101.D

et Time	Height	Type	Width	Ref#	ug/L	Name
4.970	1431458	MM T	0.083	1	8.868	Chloromethane
5.532	1141197	BB	0.066	1	8.885	Vinylchloride
6.600	517637	MF T	0.112	1	8.783	Bromomethane
7.057	1048583	FM T	0.106	1	10.047	Chloroethane
8.479	1448083	MM T	0.091	1	10.822	TCFM
9.708	2439447	PV	0.068	1	9.667	1,1 DCEthene
10.123	2999973	VV	0.066	1	8.422	Methylene chloride
10.270	1472908	VV	0.097	1	111.526	unknown
11.498	3090568	VV	0.060	1	10.335	trans 1,2 DCEthene
11.991	2820170	VV	0.071	1	10.232	1,1 DCEthane
13.122	3128058	VV	0.062	1	10.344	cis 1,2 DCEthene
13.411	4166562	VV	0.064	1-R	98.503	BCM (surrogate)
13.540	4009229	VV	0.070	1	10.854	Chloroform
14.770	2627126	VV	0.062	1	10.078	1,2 DCEthane (EDC)
14.934	3002742	VV	0.079	1	10.224	1,1,1 TCEthane
15.621	3283485	VV	0.079	1	10.220	Carbon Tetrachloride
16.899	2492491	VV	0.061	1	10.259	1,2 DCPropane
16.991	3438659	VV	0.063	1	10.325	TCEthene (TCE)
17.084	2595626	VV	0.074	1	10.268	BDCM
18.403	2463613	VV	0.063	1	10.843	cis 1,3 DCPropene
19.300	1911441	VV	0.061	1	9.251	trans 1,3 DCPropene
19.581	2335084	VV	0.068	1	10.139	1,1,2 TCEthane
20.576	1525643	VV	0.076	1	9.882	DBCM
21.080	890466	VV	0.081	1	9.474	1,2 DBrEthane (EDB)
21.460	3579140	VV	0.068	1	10.689	Tetrachloroethene (PCE)
22.890	1585447	VV	0.066	1	10.474	Chlorobenzene
23.929	858348	VV	0.081	1	9.362	Bromoform
24.628	1550643	VV	0.069	1	10.016	1,1,2,2 TCEthane
25.521	2220273	VV	0.075	1-IR	100.000	BFB (I.S.)
28.273	2598105	PV	0.051	1	10.428	1,3 DCB
28.401	2651856	VV	0.053	1	10.213	1,4 DCB
28.994	2528623	VV	0.052	1	10.318	1,2 DCB
3.526	33591	PV	0.059		33590.85	* uncalibrated *
3.695	3939	VB	0.117		3939.386	* uncalibrated *
4.465	4457	BB	0.081		4456.740	* uncalibrated *
12.815	4187	VV	0.107		4187.161	* uncalibrated *
13.903	32099	VV	0.156		32099.48	* uncalibrated *
14.154	12317	VV	0.226		12316.54	* uncalibrated *
16.714	5905	VV	0.065		5904.515	* uncalibrated *
17.540	173880	VV	0.121		173879.7	* uncalibrated *
17.927	15645	VV	0.089		15645.21	* uncalibrated *
18.064	14198	VV	0.152		14197.81	* uncalibrated *

016

18.854	13355	VV	0.153	13355.13 *	uncalibrated *
20.253	9916	VV	0.147	9916.266 *	uncalibrated *
22.486	4746	VV	0.149	4745.823 *	uncalibrated *
22.752	3769	VV	0.082	3769.198 *	uncalibrated *
26.309	3758	VV	0.077	3758.365 *	uncalibrated *
26.418	3246	VV	0.129	3246.047 *	uncalibrated *
27.255	32600	BV	0.073	32600.38 *	uncalibrated *
29.927	3714	VV	0.171	3713.534 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.411	-0.126
29	25.609	25.521	-0.088

User Modified

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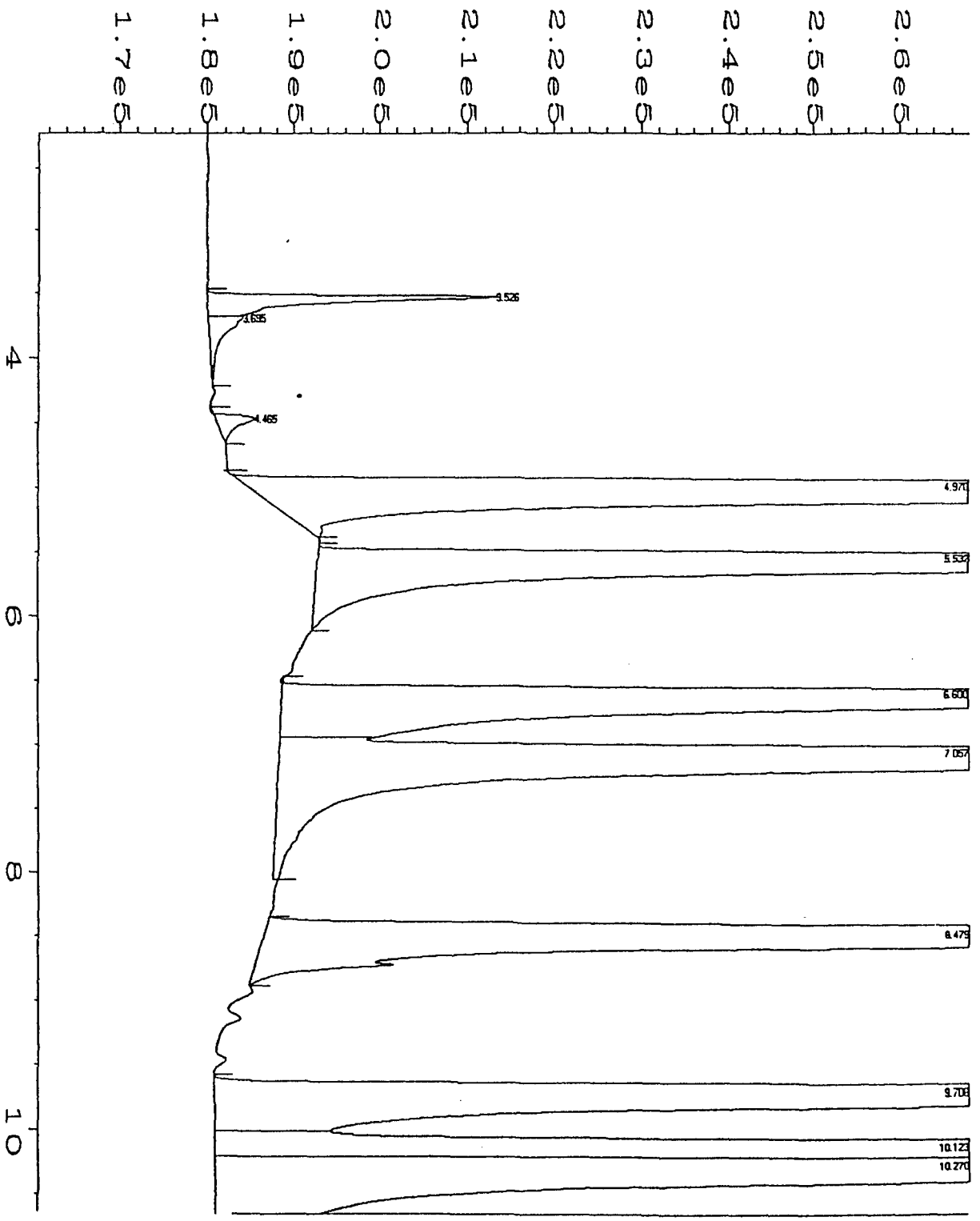
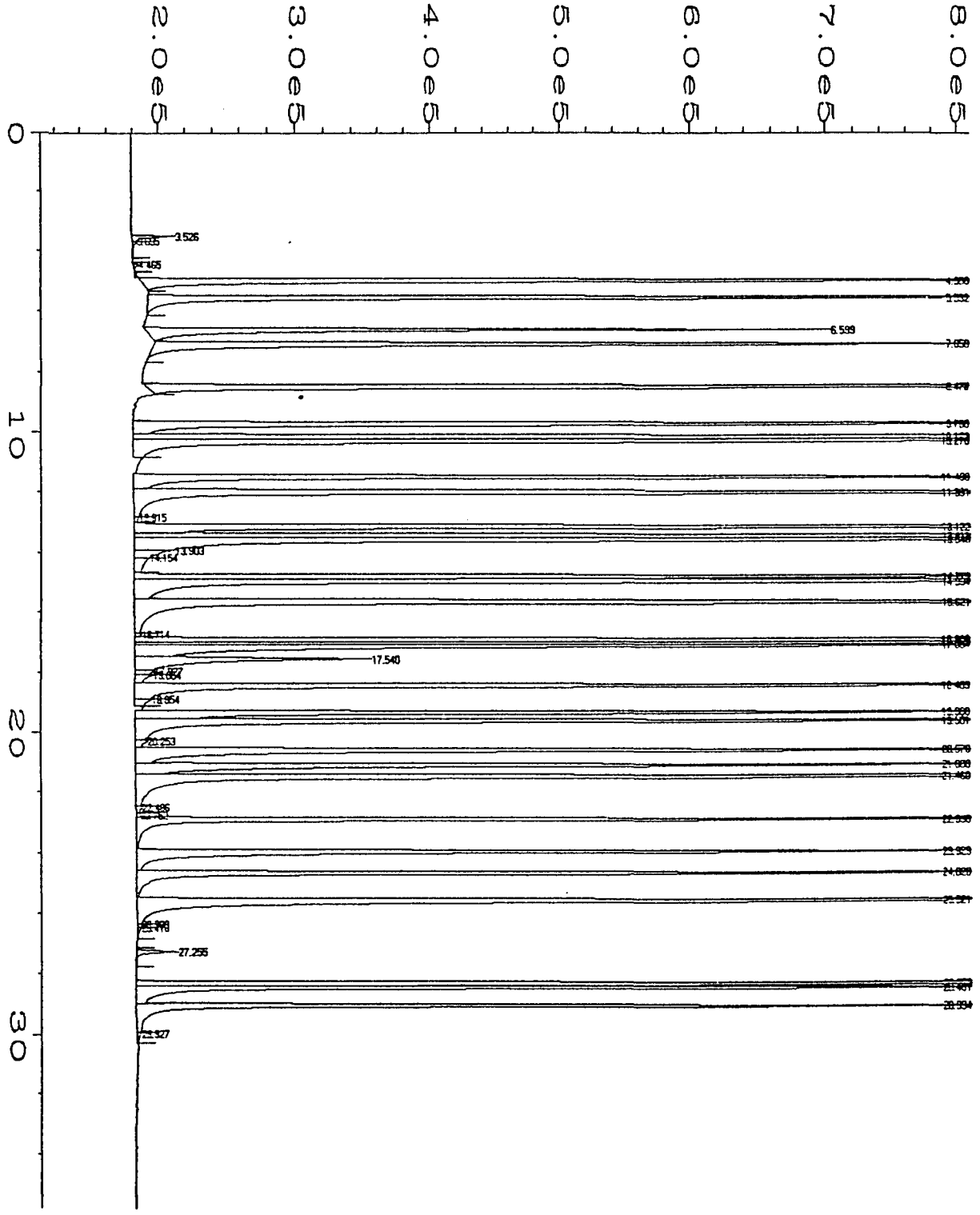


Data File Name : C:\HPCHEM\3\DATA\29JUL94\016R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MS
Run Time Bar Code:
Acquired on : 30 Jul 94 01:20 AM
Report Created on: 30 Jul 94 01:47 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MT
Sample Amount : 0
ISTD Amount : 100



Data File Name : C:\HPCHEM\3\DATA\29JUL94\016R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MS
Run Time Bar Code:
Acquired on : 30 Jul 94 01:20 AM
Report Created on: 30 Jul 94 01:58 AM
Last Recalib on : 27 JUL 94 06:11 PM
Multiplier : 1

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\016F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MS
Run Time Bar Code:
Acquired on : 30 Jul 94 01:20 AM
Report Created on: 02 Aug 94 05:17 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\016F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.507	22922	BV	0.054	1	9.234	VinylChloride
9.685	78280	MM T	0.064	1	8.936	1,1DCEthene
11.474	225799	BF	0.051	1	9.722	trans 1,2-DCEthene
11.793	55087	FF	0.078	1	9.519	Methyl-tert-ButylEther
13.098	121204	FF	0.054	1	9.753	cis 1,2-DCEthene
15.700	240927	BF	0.057	1	9.872	Benzene
16.968	137243	BF	0.055	1	9.598	TCEthene (TCE)
17.506	240149	FF	0.061	1-R	100.193	Trifluorotoluene (Surr.)
18.379	55301	BF	0.054	1	10.319	cis 1,3DCPropene
19.276	58509	FF	0.052	1	8.493	trans-1,3-DCPropene
19.944	248610	FF	0.055	1	10.058	Toluene
21.436	109605	FF	0.056	1	9.792	Tetrachloroethene (PCE)
22.864	261707	FF	0.053	1	10.021	Chlorobenzene
23.338	222220	FF	0.055	1	9.905	Ethylbenzene
23.776	445115	FF	0.067	1	20.880	M & P Xylene
24.628	228649	FF	0.055	1	10.500	O-Xylene
25.490	580342	BF	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.249	284146	FF	0.044	1	9.773	1,3 DCB
28.378	279738	FF	0.042	1	9.790	1,4 DCB
28.971	231053	FF	0.042	1	9.676	1,2 DCB
3.508	8742	MM T	0.038		8741.644	* uncalibrated *
4.217	1772	VV	0.056		1771.627	* uncalibrated *
4.879	968	PV	0.060		967.783	* uncalibrated *
6.571	4305	VV	0.061		4305.375	* uncalibrated *
8.927	41618	MM R	0.107		41618.43	* uncalibrated *
9.357	646	MM T	0.077		646.495	* uncalibrated *
10.098	2142	BF	0.060		2141.689	* uncalibrated *
12.173	514	FB	0.088		513.967	* uncalibrated *
12.837	1475	FF	0.062		1474.855	* uncalibrated *
13.386	894	FF	0.047		894.356	* uncalibrated *
14.183	1087	BF	0.069		1087.294	* uncalibrated *
18.018	527	FF	0.089		526.757	* uncalibrated *
18.833	974	FF	0.077		974.433	* uncalibrated *
20.161	647	FF	0.095		647.280	* uncalibrated *
20.540	1358	FF	0.063		1358.027	* uncalibrated *
20.687	4674	FF	0.075		4673.741	* uncalibrated *
20.799	1158	FF	0.064		1157.857	* uncalibrated *
21.045	2937	FF	0.054		2937.460	* uncalibrated *
21.195	1017	FF	0.071		1017.049	* uncalibrated *
24.041	1551	FF	0.073		1551.176	* uncalibrated *
24.374	1839	FF	0.059		1838.661	* uncalibrated *

25.784	785	FF	0.063	784.914 *	uncalibrated *
26.213	2083	BF	0.062	2082.686 *	uncalibrated *
26.356	611	FF	0.057	610.599 *	uncalibrated *
26.642	3868	BF	0.081	3867.786 *	uncalibrated *
26.761	970	FF	0.055	970.374 *	uncalibrated *
26.894	1913	FF	0.072	1912.762 *	uncalibrated *
27.196	1307	BF	0.064	1307.265 *	uncalibrated *
27.366	1919	FF	0.110	1919.351 *	uncalibrated *
27.688	7047	FF	0.050	7047.388 *	uncalibrated *
27.990	1695	FF	0.050	1694.583 *	uncalibrated *
28.159	1671	FF	0.051	1670.729 *	uncalibrated *
28.555	3174	FF	0.083	3174.353 *	uncalibrated *
28.662	2291	FF	0.073	2291.062 *	uncalibrated *
28.737	1744	FF	0.056	1744.137 *	uncalibrated *
29.143	3135	FF	0.081	3134.656 *	uncalibrated *
29.294	2597	FF	0.139	2596.702 *	uncalibrated *
29.768	5853	FF	0.122	5852.728 *	uncalibrated *
30.037	23013	FF	0.057	23012.65 *	uncalibrated *
30.344	2115	FF	0.152	2115.432 *	uncalibrated *
30.477	19986	FF	0.072	19985.59 *	uncalibrated *
30.680	2587	FF	0.109	2587.153 *	uncalibrated *
30.803	3060	FF	0.068	3060.007 *	uncalibrated *
31.157	2951	FF	0.226	2950.840 *	uncalibrated *
31.553	4056	FF	0.169	4056.123 *	uncalibrated *
31.966	3772	FF	0.152	3772.181 *	uncalibrated *
32.019	4152	FF	0.059	4152.301 *	uncalibrated *
32.152	1882	FF	0.121	1881.697 *	uncalibrated *
32.319	8701	FF	0.056	8700.799 *	uncalibrated *
32.543	2172	FF	0.138	2172.498 *	uncalibrated *
32.826	2170	FBA	0.148	2170.498 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.506	-0.117
17	25.536	25.490	-0.046

Calibration table contains at least one peak with amt = 0

User Modified

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Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\017R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MSD
Run Time Bar Code:
Acquired on : 30 Jul 94 02:03 AM
Report Created on: 30 Jul 94 01:50 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\017R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
4.977	1560522	BB	0.072	1	9.341	Chloromethane
5.545	1284087	MM T	0.078	1	9.662	Vinylchloride
6.621	563081	MF T	0.100	1	9.223	Bromomethane
7.083	1158307	FM T	0.096	1	10.698	Chloroethane
8.511	1660128	MM T	0.093	1	12.013	TCFM
9.748	2709515	PV	0.070	1	10.375	1,1 DCEthene
10.161	3233143	VV	0.066	1	8.863	Methylene chloride
10.309	1548954	VV	0.098	1	113.047	unknown
11.547	3368983	VV	0.063	1	10.892	trans 1,2 DCEthene
12.045	3106055	VV	0.071	1	10.905	1,1 DCEthane
13.181	3404933	VV	0.062	1	10.888	cis 1,2 DCEthene
13.470	4339566	VV	0.063	1-R	98.887	BCM (surrogate)
13.598	4314584	VV	0.070	1	11.318	Chloroform
14.824	2727731	VV	0.062	1	10.087	1,2 DCEthane (EDC)
14.985	3228597	VV	0.081	1	10.652	1,1,1 TCEthane
15.666	3573072	VV	0.077	1	10.760	Carbon Tetrachloride
16.931	2691715	VV	0.060	1	10.706	1,2 DCPropane
17.019	3823568	VV	0.062	1	11.137	TCEthene (TCE)
17.110	2841607	VV	0.071	1	10.867	BDCM
18.415	2633214	VV	0.064	1	11.189	cis 1,3 DCPropene
19.303	2106521	VV	0.061	1	9.868	trans 1,3 DCPropene
19.581	2467158	VV	0.069	1	10.341	1,1,2 TCEthane
20.570	1664409	VV	0.078	1	10.403	DBCM
21.073	968734	VV	0.081	1	9.939	1,2 DBrEthane (EDB)
21.449	3815535	VV	0.068	1	11.007	Tetrachloroethene (PCE)
22.871	1721404	VV	0.066	1	10.980	Chlorobenzene
23.907	921536	VV	0.082	1	9.683	Bromoform
24.603	1654072	VV	0.068	1	10.323	1,1,2,2 TCEthane
25.493	2303489	VV	0.076	1-IR	100.000	BFB (I.S.)
28.247	2620924	PV	0.050	1	10.117	1,3 DCB
28.376	2789852	VV	0.053	1	10.366	1,4 DCB
28.970	2596268	VV	0.051	1	10.201	1,2 DCB
3.516	35968	BB	0.078		35967.70	* uncalibrated *
4.470	4840	BB	0.080		4839.676	* uncalibrated *
9.153	5222	BV	0.065		5221.981	* uncalibrated *
10.849	10050	VV	0.213		10050.14	* uncalibrated *
16.651	8496	VV	0.086		8496.281	* uncalibrated *
17.560	190175	VV	0.120		190175.0	* uncalibrated *
17.943	17992	VV	0.092		17991.69	* uncalibrated *
18.076	16174	VV	0.155		16173.55	* uncalibrated *
18.859	15524	VV	0.139		15523.82	* uncalibrated *

20.248	11705	VV	0.152	11704.86 *	uncalibrated *
22.466	5761	VV	0.153	5761.117 *	uncalibrated *
22.734	5195	VV	0.084	5195.168 *	uncalibrated *
24.918	13063	VV	0.169	13062.68 *	uncalibrated *
26.289	5755	VV	0.087	5754.631 *	uncalibrated *
26.387	4973	VV	0.221	4972.703 *	uncalibrated *
27.224	35792	VV	0.080	35792.16 *	uncalibrated *
29.896	4599	VV	0.178	4599.017 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.470	-0.067
29	25.609	25.493	-0.116

User Modified

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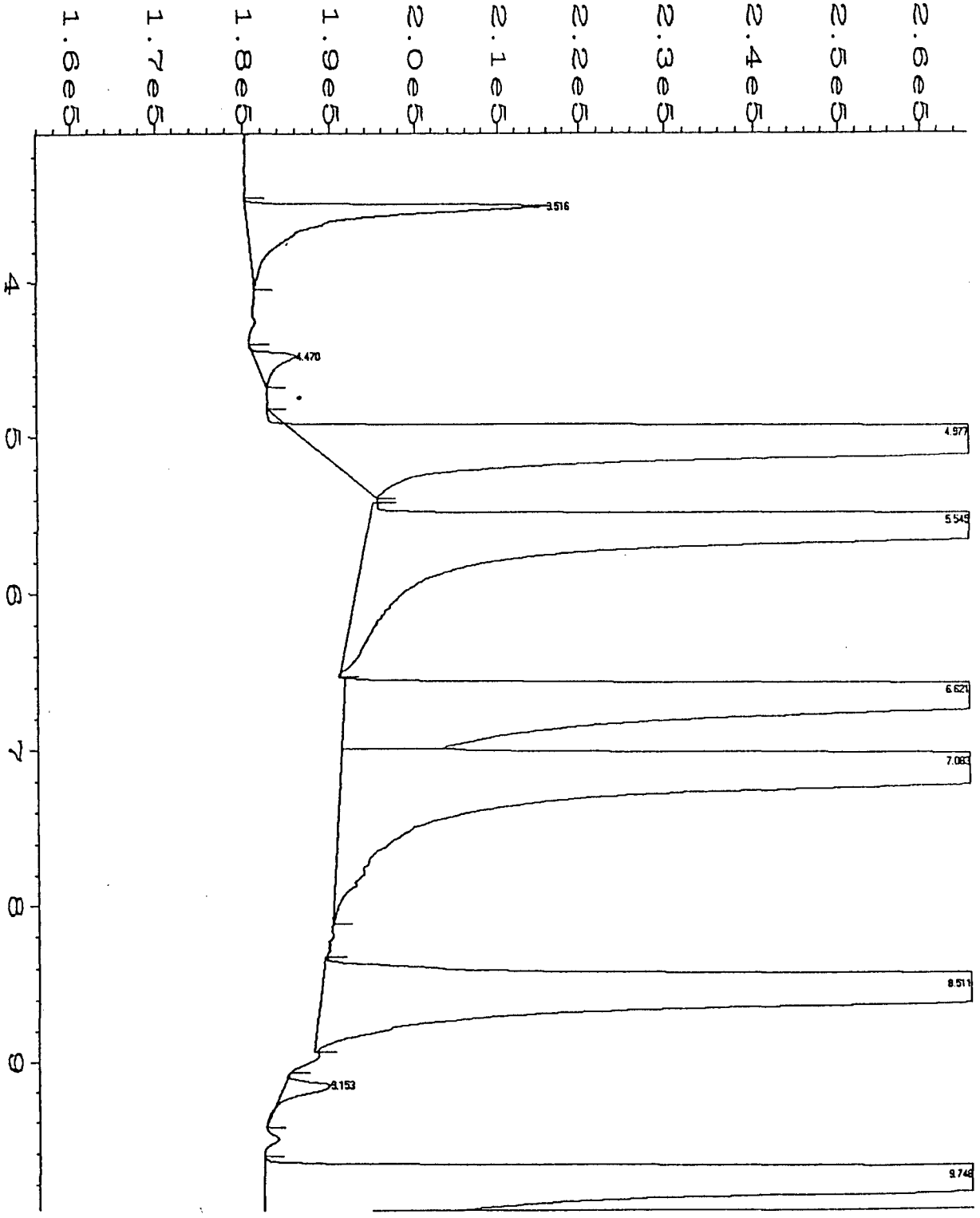
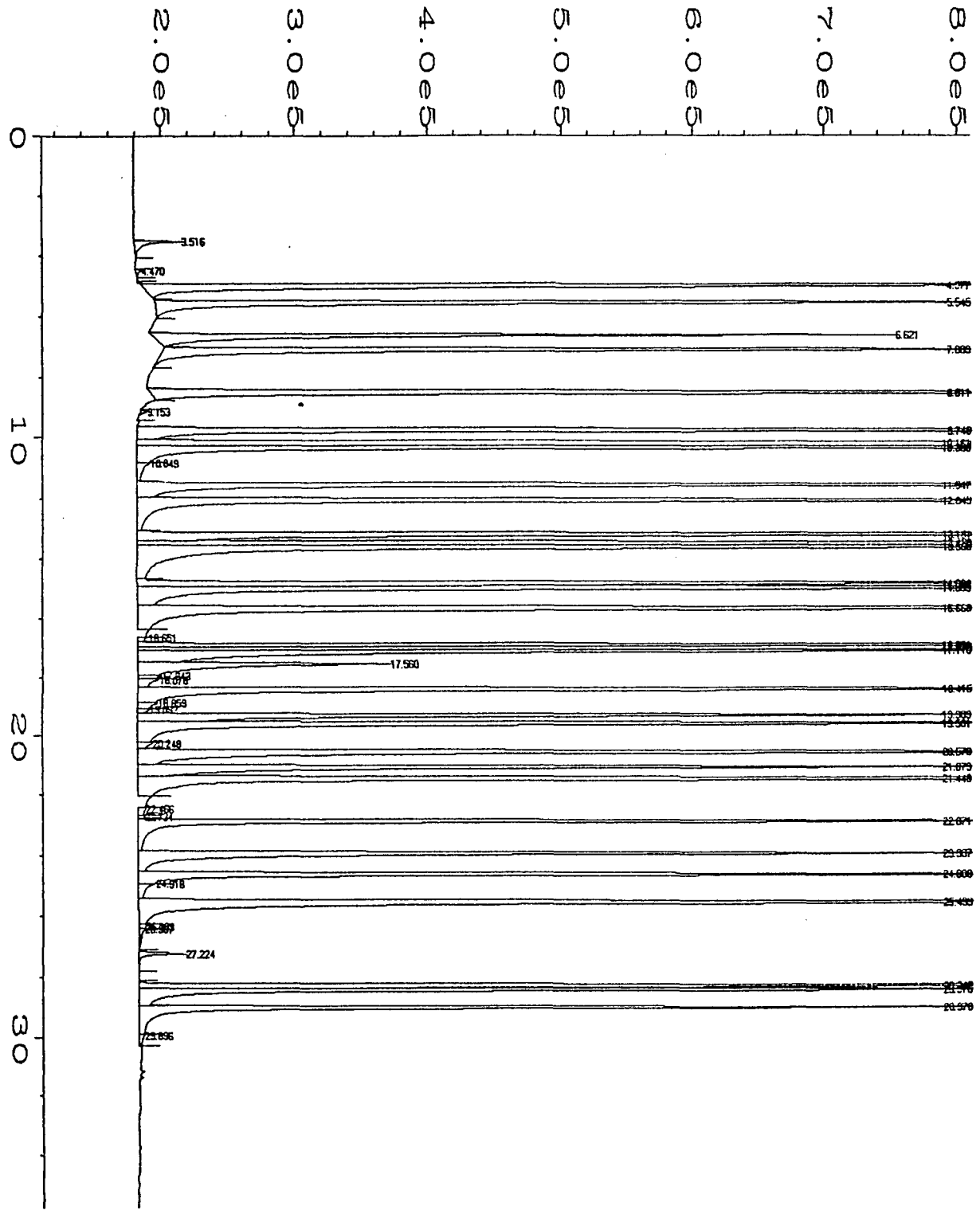


Data File Name : C:\HPCHEM\3\DATA\29JUL94\017R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MSD
Run Time Bar Code:
Acquired on : 30 Jul 94 02:03 AM
Report Created on: 30 Jul 94 01:50 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\017R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 17
Sample Name	: 407412-09MSD	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 30 Jul 94 02:03 AM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 02:41 AM	Analysis Method	: 0727ELCD.MTH
Last Recalib on	: 27 JUL 94 06:11 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\017F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MSD
Run Time Bar Code:
Acquired on : 30 Jul 94 02:03 AM
Report Created on: 02 Aug 94 05:20 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\017F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.520	25532	BV	0.053	1	10.030	VinylChloride
9.722	87869	BV	0.058	1	9.776	1,1DCEthene
11.523	248190	PV	0.052	1	10.428	trans 1,2-DCEthene
11.847	61079	VV	0.075	1	10.328	Methyl-tert-ButylEther
13.157	131260	PV	0.054	1	10.309	cis 1,2-DCEthene
15.743	296957	BV	0.056	1	10.678	Benzene
16.996	153622	BV	0.055	1	10.484	TCEthene (TCE)
17.527	250613	PV	0.060	1-R	102.108	Trifluorotoluene (Surr.)
18.390	60445	BV	0.053	1	11.012	cis 1,3DCPropene
19.278	63902	VV	0.052	1	9.056	trans-1,3-DCPropene
19.942	267885	PV	0.054	1	10.582	Toluene
21.425	118937	VV	0.056	1	10.368	Tetrachloroethene (PCE)
22.846	278477	PV	0.054	1	10.411	Chlorobenzene
23.317	239130	VV	0.055	1	10.405	Ethylbenzene
23.753	476164	VV	0.067	1	21.812	M & P Xylene
24.603	243339	VV	0.054	1	10.911	O-Xylene
25.463	594269	VV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.223	296428	VV	0.044	1	9.957	1,3 DCB
28.353	292409	VV	0.042	1	9.993	1,4 DCB
28.946	242006	VV	0.042	1	9.899	1,2 DCB
4.219	1840	BV	0.068		1839.740	* uncalibrated *
4.888	940	PV	0.057		939.998	* uncalibrated *
6.422	260	VV	0.124		259.607	* uncalibrated *
6.594	4855	VF	0.066		4855.385	* uncalibrated *
8.962	47685	MM T	0.097		47684.71	* uncalibrated *
10.134	2397	BV	0.048		2397.381	* uncalibrated *
10.330	493	VV	0.052		492.982	* uncalibrated *
12.231	435	VV	0.073		435.094	* uncalibrated *
12.894	1570	VV	0.054		1569.826	* uncalibrated *
13.444	887	BV	0.048		887.055	* uncalibrated *
14.239	1162	VV	0.081		1162.125	* uncalibrated *
18.035	555	BB	0.075		554.639	* uncalibrated *
18.837	1426	VV	0.073		1426.212	* uncalibrated *
20.189	689	VV	0.096		688.618	* uncalibrated *
20.533	1422	VV	0.071		1421.615	* uncalibrated *
20.680	7859	VV	0.072		7858.683	* uncalibrated *
20.788	913	VV	0.055		913.438	* uncalibrated *
21.038	3213	VV	0.055		3212.560	* uncalibrated *
21.178	1017	VV	0.070		1016.854	* uncalibrated *
24.023	809	VV	0.077		808.673	* uncalibrated *
24.352	1356	PV	0.058		1355.730	* uncalibrated *

25.753	1035	VV	0.097	1035.005	*	uncalibrated *
26.187	1309	VV	0.068	1308.727	*	uncalibrated *
26.321	654	VV	0.056	653.598	*	uncalibrated *
26.610	2784	PV	0.082	2784.419	*	uncalibrated *
26.728	880	VV	0.056	880.476	*	uncalibrated *
26.865	1309	PV	0.075	1309.069	*	uncalibrated *
27.166	930	VV	0.065	930.042	*	uncalibrated *
27.338	1389	VV	0.071	1388.975	*	uncalibrated *
27.413	1177	VV	0.093	1176.743	*	uncalibrated *
27.661	5661	VV	0.052	5660.973	*	uncalibrated *
27.964	1384	PV	0.048	1384.162	*	uncalibrated *
28.536	2665	VV	0.084	2665.256	*	uncalibrated *
28.714	2021	VV	0.106	2020.628	*	uncalibrated *
29.060	4055	VV	0.057	4054.549	*	uncalibrated *
29.117	3514	VV	0.074	3514.344	*	uncalibrated *
29.264	3097	VV	0.076	3097.312	*	uncalibrated *
29.383	2688	VV	0.114	2688.202	*	uncalibrated *
29.744	5372	VV	0.144	5372.056	*	uncalibrated *
29.910	1994	VV	0.060	1994.256	*	uncalibrated *
30.012	21754	VV	0.055	21754.45	*	uncalibrated *
30.334	2709	VV	0.208	2709.117	*	uncalibrated *
30.451	14501	VV	0.076	14501.22	*	uncalibrated *
30.660	3636	VV	0.127	3635.613	*	uncalibrated *
30.773	3675	VV	0.071	3675.303	*	uncalibrated *
31.144	3383	VV	0.274	3383.287	*	uncalibrated *
31.535	4303	VV	0.191	4303.421	*	uncalibrated *
31.907	3566	VV	0.145	3566.074	*	uncalibrated *
31.992	3506	VV	0.067	3505.509	*	uncalibrated *
32.123	2446	VV	0.123	2445.689	*	uncalibrated *
32.288	9992	VV	0.061	9991.612	*	uncalibrated *
32.520	2621	VV	0.158	2620.625	*	uncalibrated *
32.878	1609	VBA	0.161	1608.726	*	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.523	17.527	-0.096
17	25.536	25.463	-0.073

Calibration table contains at least one peak with amt = 0

User Modified

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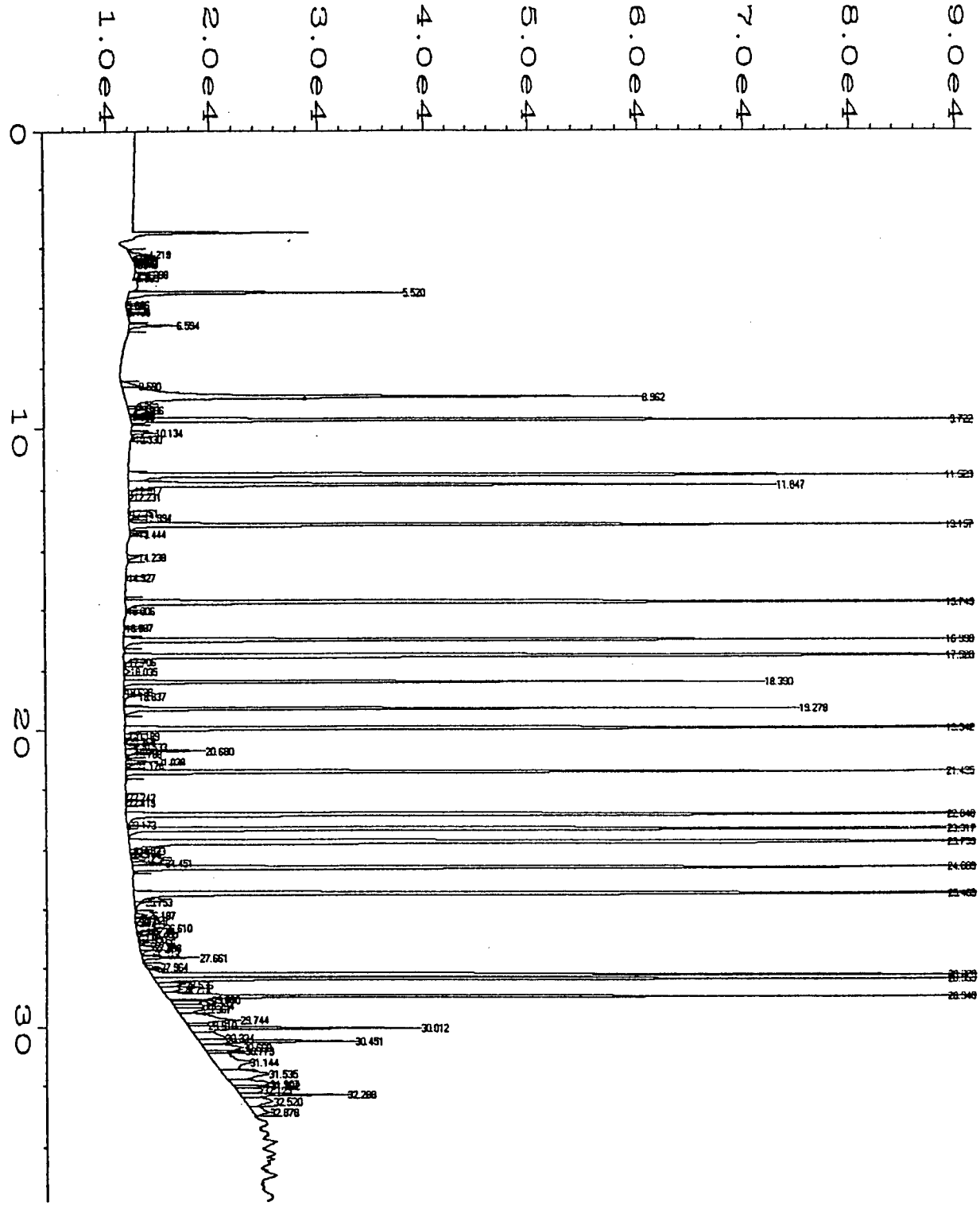

Data File Name : C:\HPCHEM\3\DATA\29JUL94\017F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 407412-09MSD
Run Time Bar Code:
Acquired on : 30 Jul 94 02:03 AM
Report Created on: 30 Jul 94 02:39 AM
Last Recalib on : 27 JUL 94 05:09 PM
Multiplier : 1

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

METHOD BLANKS

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010/8020	ATI I.D.	: 407412
BLANK I.D.	: 070994	MATRIX	: AQUEOUS
CLIENT	: BURLINGTON ENVIRONMENTAL	DATE EXTRACTED	: NA
PROJECT #	: 12641	DATE ANALYZED	: 07/29/94
PROJECT NAME	: GIANT	DIL. FACTOR	: 1

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	0.5
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2
ETHYLBENZENE	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2
TETRACHLOROETHENE	UG/L	<0.2
TOLUENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
SURROGATES:		
BROMOCHLOROMETHANE (%)		98
TRIFLUOROTOLUENE (%)		102

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\012R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : WRB 7/29/94
Run Time Bar Code:
Acquired on : 29 Jul 94 10:29 PM
Report Created on: 30 Jul 94 01:43 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\012R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.034	30488	BB	0.080	1	-0.259	Chloromethane
5.592	6580	BB	0.078	1	-0.257	Vinylchloride
6.682	50496	BB	0.113	1	0.526	Bromomethane BDL
7.174	* not found *			1		Chloroethane
8.551	32948	BB	0.077	1	-0.281	TCFM
9.786	11204	PV	0.063	1	-0.335	1,1 DCEthene
10.190	747476	VV	0.060	1	-0.328	Methylene chloride
10.336	3949409	VV	0.093	1	277.065	unknown
11.679	3838	VV	0.178	1	-0.624	trans 1,2 DCEthene
12.084	6303	VV	0.108	1	-0.671	1,1 DCEthane
13.222	9091	PV	0.066	1	-0.697	cis 1,2 DCEthene
13.496	4486732	VV	0.071	1-R	98.277	BCM (surrogate)
13.719	* not found *			1		Chloroform
14.860	124917	VV	0.064	1	-0.769	1,2 DCEthane (EDC)
15.021	65759	VV	0.088	1	-1.289	1,1,1 TCEthane
15.706	20771	VV	0.080	1	-0.763	Carbon Tetrachloride
16.970	16947	BV	0.057	1	-0.616	1,2 DCPropane
17.058	47775	VV	0.069	1	-0.839	TCEthene (TCE)
17.142	22212	VV	0.076	1	-0.486	BDCM
18.463	18437	VV	0.083	1	-0.543	cis 1,3 DCPropene
19.352	14814	BV	0.069	1	-0.598	trans 1,3 DCPropene
19.628	29705	VV	0.073	1	-0.724	1,1,2 TCEthane
20.625	6820	PV	0.094	1	-0.187	DBCM
21.136	6708	VV	0.094	1	-0.0216	1,2 DBrEthane (EDB)
21.492	34852	VV	0.068	1	-0.754	Tetrachloroethene (PCE)
22.917	18816	BV	0.067	1	-0.278	Chlorobenzene
23.969	5834	BV	0.084	1	0.197	Bromoform
24.647	31760	BV	0.068	1	-0.656	1,1,2,2 TCEthane
25.524	2396388	BV	0.073	1-IR	100.000	BFB (I.S.)
28.264	85185	VV	0.054	1	-0.486	1,3 DCB
28.395	41125	VV	0.075	1	-0.519	1,4 DCB
28.984	62026	VV	0.061	1	-0.703	1,2 DCB
3.586	8392	VV	0.057		8391.842	* uncalibrated *
4.518	6698	BB	0.078		6697.617	* uncalibrated *
11.586	15480	VV	0.071		15480.41	* uncalibrated *
14.066	18348	VV	0.142		18348.36	* uncalibrated *
17.592	140093	VV	0.116		140093.4	* uncalibrated *
26.431	2574	VV	0.198		2573.737	* uncalibrated *
31.715	22084	VV	0.030		22083.95	* uncalibrated *
32.646	4304	VV	0.073		4304.324	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.496	-0.041
29	25.609	25.524	-0.085

Not all calibrated peaks were found

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Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\012F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : WRB 7/29/94
Run Time Bar Code:
Acquired on : 29 Jul 94 10:29 PM
Report Created on: 01 Aug 94 08:12 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\012F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.594	* not found *			1		VinylChloride
9.754	498	BB	0.076	1	0.253	1,1DCEthene
11.552	1517	BV	0.097	1	0.159	trans 1,2-DCEthene
11.873	890	VB	0.092	1	-0.110	Methyl-tert-ButylEther
13.183	562	VV	0.061	1	0.135	cis 1,2-DCEthene
15.771	4158	VB	0.062	1	0.209	Benzene
17.024	1899	VB	0.077	1	0.197	TCEthene (TCE)
17.553	268118	BV	0.060	1-R	101.699	Trifluorotoluene (Surr.)
18.449	* not found *			1		cis 1,3DCPropene
19.309	743	PV	0.067	1	0.133	trans-1,3-DCPropene
19.971	6759	BV	0.056	1	0.286	Toluene
21.455	1164	VB	0.059	1	0.242	Tetrachloroethene (PCE)
22.878	4420	BV	0.057	1	0.214	Chlorobenzene
23.348	3370	VV	0.061	1	0.220	Ethylbenzene
23.779	8700	PV	0.074	1	0.407	M & P Xylene
24.633	4859	VV	0.059	1	0.247	O-Xylene
25.494	638337	BV	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.232	9498	VV	0.048	1	0.239	1,3 DCB
28.362	4346	VV	0.046	1	0.160	1,4 DCB
28.952	7467	VV	0.065	1	0.212	1,2 DCB
4.269	1030	PV	0.044		1030.476	* uncalibrated *
8.592	471	VV	0.127		470.898	* uncalibrated *
8.886	1688	VV	0.075		1688.366	* uncalibrated *
8.994	3473	VV	0.107		3472.783	* uncalibrated *
9.299	610	VV	0.087		609.671	* uncalibrated *
9.423	764	VB	0.080		763.717	* uncalibrated *
10.153	533	BV	0.063		532.955	* uncalibrated *
11.758	646	VV	0.070		646.143	* uncalibrated *
12.921	2671	VV	0.062		2670.670	* uncalibrated *
13.061	436	VV	0.068		435.633	* uncalibrated *
13.471	1001	BV	0.059		1000.778	* uncalibrated *
16.644	465	BV	0.089		464.553	* uncalibrated *
16.943	530	VV	0.065		530.467	* uncalibrated *
18.722	830	BV	0.066		830.482	* uncalibrated *
20.292	314	VV	0.085		314.260	* uncalibrated *
20.517	457	PV	0.075		456.723	* uncalibrated *
20.703	5591	VV	0.071		5590.969	* uncalibrated *
20.811	2080	VV	0.056		2080.234	* uncalibrated *
20.903	2462	VB	0.072		2461.976	* uncalibrated *
21.218	1087	BV	0.089		1086.548	* uncalibrated *
21.957	614	BV	0.063		613.661	* uncalibrated *
23.103	2069	VV	0.076		2068.951	* uncalibrated *

No conf. on ELCD

23.470	526	VV	0.071	526.253	*	uncalibrated *
24.044	1671	VV	0.069	1671.292	*	uncalibrated *
24.378	1462	BV	0.056	1461.947	*	uncalibrated *
24.481	3285	VV	0.055	3284.563	*	uncalibrated *
25.793	1080	VV	0.126	1079.643	*	uncalibrated *
26.211	2014	VV	0.068	2014.147	*	uncalibrated *
26.352	803	VV	0.068	802.772	*	uncalibrated *
26.450	463	VV	0.067	462.871	*	uncalibrated *
26.634	1641	VV	0.086	1640.911	*	uncalibrated *
26.749	1081	VV	0.058	1080.604	*	uncalibrated *
26.879	2489	PV	0.073	2488.586	*	uncalibrated *
27.189	1131	PV	0.067	1130.576	*	uncalibrated *
27.425	1869	VV	0.113	1869.081	*	uncalibrated *
27.674	3004	PV	0.050	3004.400	*	uncalibrated *
27.974	2611	PV	0.045	2610.953	*	uncalibrated *
28.105	742	VV	0.065	741.598	*	uncalibrated *
28.516	11323	VV	0.049	11323.27	*	uncalibrated *
28.720	1746	VV	0.091	1745.838	*	uncalibrated *
29.069	2909	VV	0.095	2908.933	*	uncalibrated *
29.197	2044	VV	0.052	2044.005	*	uncalibrated *
29.273	2165	VV	0.122	2164.507	*	uncalibrated *
29.744	7155	VV	0.096	7155.095	*	uncalibrated *
29.891	1418	VV	0.074	1417.635	*	uncalibrated *
30.015	8212	VV	0.059	8212.075	*	uncalibrated *
30.203	1695	VV	0.083	1695.049	*	uncalibrated *
30.326	2224	VV	0.104	2224.211	*	uncalibrated *
30.452	2540	VV	0.093	2539.769	*	uncalibrated *
30.663	2170	VV	0.103	2170.265	*	uncalibrated *
30.781	2453	VV	0.077	2452.798	*	uncalibrated *
31.007	1458	VV	0.193	1457.589	*	uncalibrated *
31.145	2136	VV	0.133	2135.765	*	uncalibrated *
31.349	1591	VV	0.117	1591.028	*	uncalibrated *
31.539	3235	VV	0.165	3235.228	*	uncalibrated *
31.864	2555	VV	0.122	2554.785	*	uncalibrated *
31.953	5608	VV	0.094	5607.872	*	uncalibrated *
32.176	1666	VV	0.123	1665.824	*	uncalibrated *
32.311	4133	VV	0.061	4132.778	*	uncalibrated *
32.542	2443	VV	0.146	2442.772	*	uncalibrated *
32.902	1507	VBA	0.131	1507.165	*	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.553	-0.070
17	25.536	25.494	-0.042

Calibration table contains at least one peak with amt = 0

Not all calibrated peaks were found

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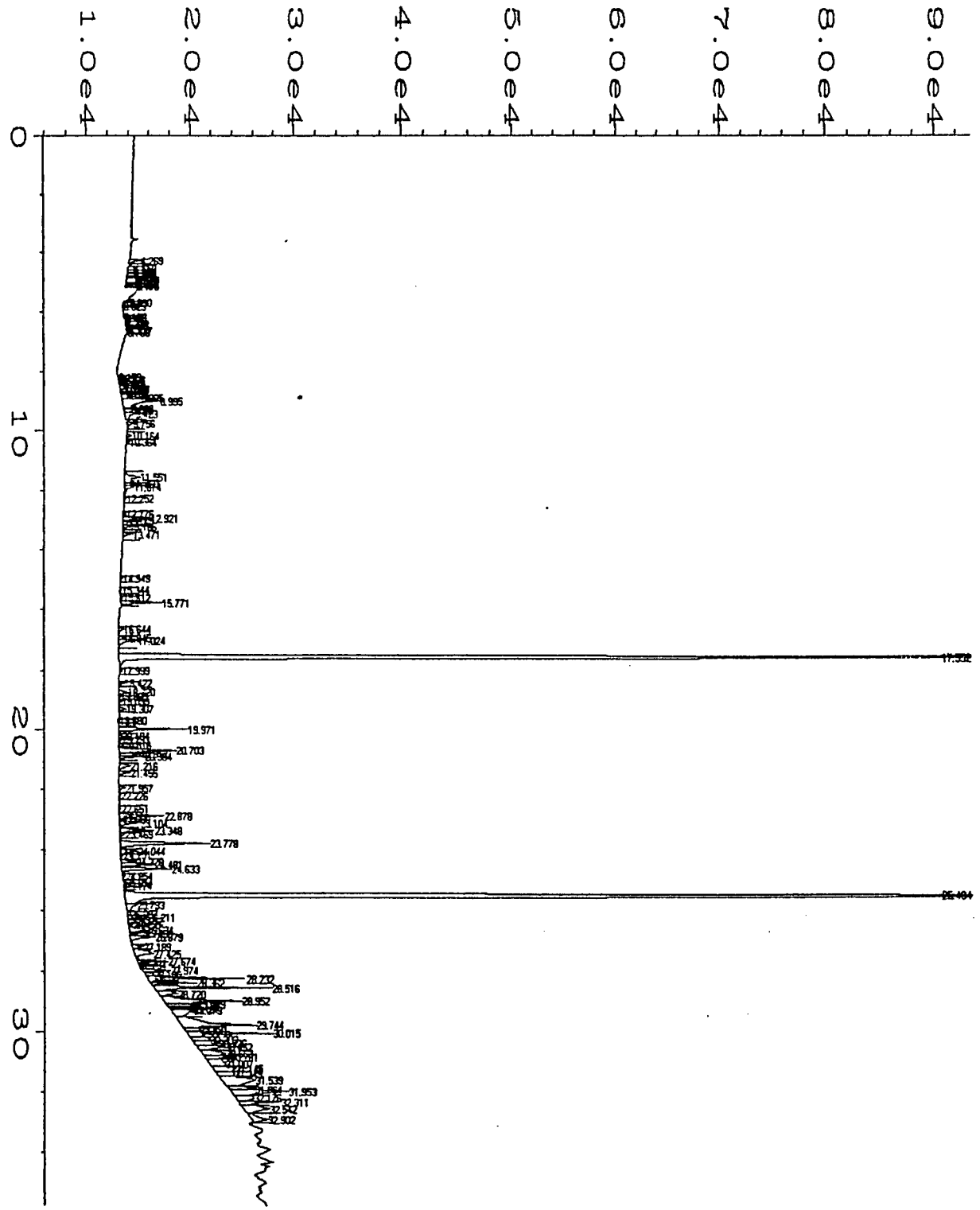
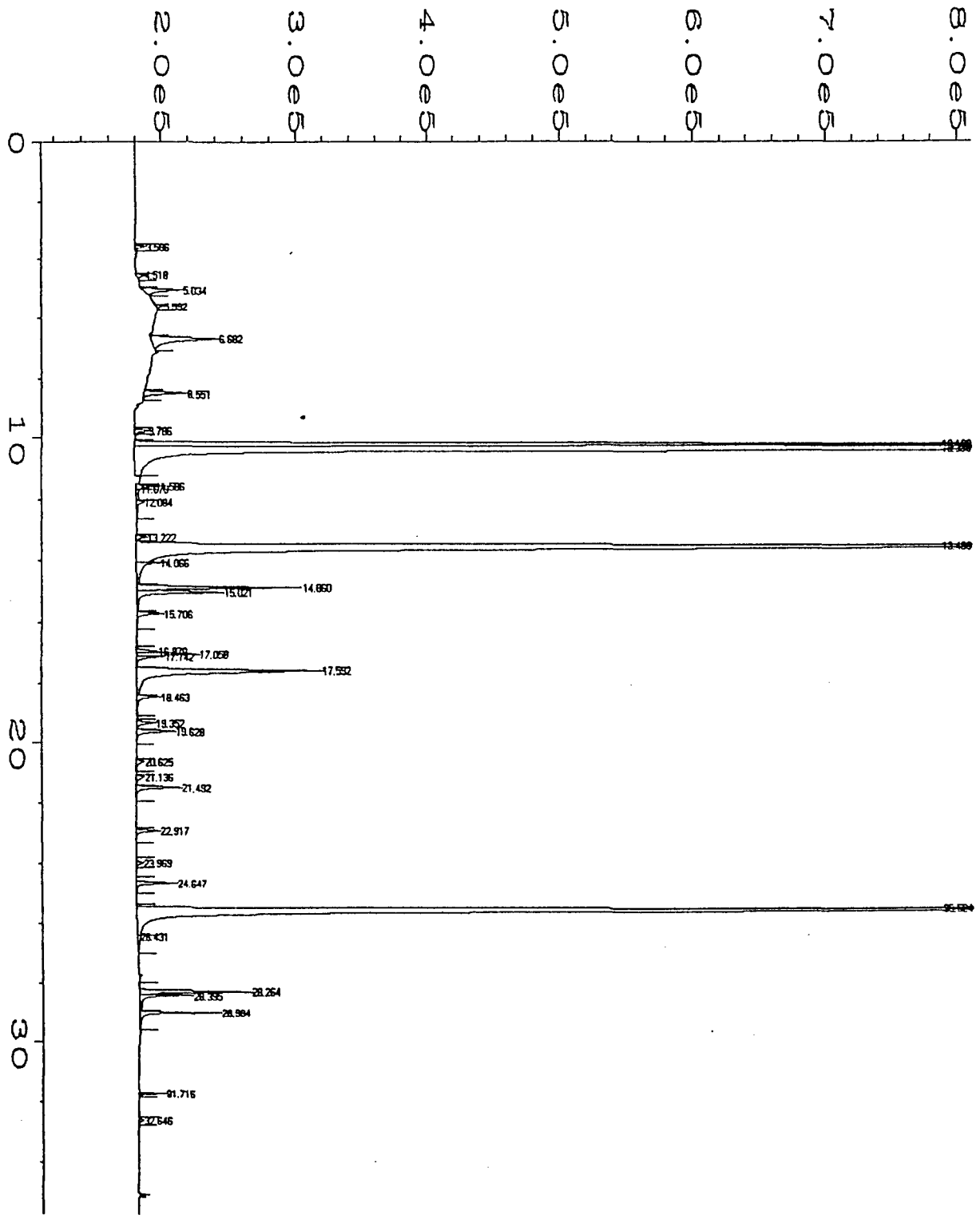


Data File Name : C:\HPCHEM\3\DATA\29JUL94\012F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : WRB 7/29/94
Run Time Bar Code:
Acquired on : 29 Jul 94 10:29 PM
Report Created on: 29 Jul 94 11:05 PM
Last Recalib on : 27 JUL 94 05:09 PM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100



Data File Name : C:\HPCHEM\3\DATA\29JUL94\012R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : WRB 7/29/94
Run Time Bar Code:
Acquired on : 29 Jul 94 10:29 PM
Report Created on: 29 Jul 94 11:07 PM
Last Recalib on : 27 JUL 94 06:11 PM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

INITIAL CALIBRATIONS

INITIAL CALIBRATION

EPA METHOD 8020
JULY 29, 1994
GC 3 PID

COMPOUNDS	RESPONSE FACTORS (AMOUNT/HEIGHT)						Correlation of Determination*
VINYL CHLORIDE	3.16E-04	3.67E-04	3.62E-04	3.68E-04	3.49E-04	3.51E-04	0.999
1,1 DICHLOROETHENE	1.60E-04	8.70E-05	1.05E-04	1.06E-04	9.54E-05	1.00E-04	0.996
t 1,2 DICHLOROETHENE	3.54E-05	3.58E-05	3.93E-05	3.68E-05	3.68E-05	3.80E-05	0.999
METHYL-t-BUTYL ETHER	1.15E-04	1.27E-04	1.39E-04	1.54E-04	1.51E-04	1.56E-04	0.999
c 1,2 DICHLOROETHENE	6.32E-05	6.70E-05	7.40E-05	7.29E-05	6.90E-05	7.09E-05	0.999
BENZENE	2.95E-05	3.47E-05	3.74E-05	3.72E-05	3.51E-05	3.62E-05	0.999
TRICHLOROETHENE	5.09E-05	5.93E-05	6.40E-05	6.40E-05	5.95E-05	6.18E-05	0.998
TRIFLUOROTOLUENE surr	3.84E-04	3.50E-04	3.86E-04	3.72E-04	3.61E-04	3.56E-04	NA
c 1,3 DICHLOROPROPENE	1.35E-04	1.52E-04	1.68E-04	1.68E-04	1.62E-04	1.64E-04	0.999
t 1,3 DICHLOROPROPENE	1.94E-04	2.06E-04	1.90E-04	2.10E-04	1.92E-04	1.77E-04	0.997
TOLUENE	2.81E-05	3.21E-05	3.74E-05	3.66E-05	3.51E-05	3.56E-05	0.999
TETRACHLOROETHENE	6.83E-05	7.64E-05	8.39E-05	8.16E-05	7.71E-05	7.79E-05	0.998
CHLOROBENZENE	2.78E-05	3.12E-05	3.51E-05	3.47E-05	3.33E-05	3.36E-05	0.999
ETHYLBENZENE	3.40E-05	3.66E-04	4.09E-04	4.04E-05	3.87E-05	3.90E-05	0.999
M & P XYLENE	3.43E-05	3.72E-05	4.21E-05	4.23E-05	4.09E-05	4.13E-05	0.999
O XYLENE	3.33E-05	3.67E-05	4.19E-05	4.16E-05	4.00E-05	4.03E-05	0.999
BROMOFLUOROBENZENE I.S.	1.41E-04	1.49E-04	1.48E-04	1.49E-04	1.52E-04	1.53E-04	NA
1,3 DICHLOROBENZENE	2.24E-05	2.59E-05	3.09E-05	3.10E-05	3.01E-05	3.03E-05	0.999
1,4 DICHLOROBENZENE	2.58E-05	2.77E-05	3.18E-05	3.11E-05	3.07E-05	3.07E-05	0.999
1,2 DICHLOROBENZENE	2.68E-05	3.14E-05	3.71E-05	3.78E-05	3.70E-05	3.68E-05	0.999

*Square root of correlation determination is equal to the correlation coeficient
Square root of 0.990 is equal to 0.995 corrrelation coeficient

EPA METHOD 8010

JULY 29, 1994

GC 3 ELCD

STANDARD CONC.	1.0PPB	2.0PPB	5.0PPB	10.0PPB	15.0PPB	20.0PPB	
FILE I.D.	005F0101	006F0101	007F0101	008F0101	009F0101	010F0101	
COMPOUNDS	RESPONCE FACTORS (AMOUNT/HEIGHT)						Correlation of Determination*
CHLOROMETHANE	3.22E-06	4.53E-06	5.80E-06	5.39E-06	5.43E-06	5.74E-06	0.996
VINYLCHLORIDE	6.96E-06	6.42E-06	5.93E-06	6.91E-06	6.79E-06	7.20E-06	0.996
BROMOMETHANE	7.39E-06	1.29E-05	1.63E-05	1.55E-05	1.54E-05	1.50E-05	0.996
CHLOROETHANE	8.13E-06	7.99E-06	8.32E-06	8.44E-06	8.42E-06	8.55E-06	0.999
TCFM	5.29E-06	5.30E-06	6.37E-06	6.46E-06		7.17E-06	0.998
1,1 DICHLOROETHENE	4.85E-06	2.78E-06	3.16E-06	3.45E-06		3.77E-06	0.997
METHYLENE CHLORIDE	8.80E-07	1.32E-06	2.03E-09	2.53E-06		3.05E-06	0.999
t 1,2 DICHLOROETHENE	2.39E-06	2.35E-06	2.63E-06	2.85E-06	2.91E-06	3.15E-06	0.995
1,1 DICHLOROETHENE	2.48E-06	2.44E-06	2.88E-06	3.12E-06	3.15E-06	3.43E-06	0.994
c 1,2 DICHLOROETHENE	2.19E-06	2.28E-06	2.57E-06	2.82E-06	2.90E-06	2.12E-06	0.996
BROMOCHLOROMETHANE	2.03E-05	2.06E-05	2.01E-06	2.03E-06	2.07E-06	2.15E-06	NA
CHLOROFORM	1.22E-06	1.48E-06	2.00E-06	2.28E-06	2.40E-06	2.63E-06	0.994
1,2 DICHLOROETHANE	1.89E-06	2.35E-06	2.88E-06	3.27E-06	3.42E-06	3.71E-06	0.995
1,1,1 TRICHLOROETHANE	1.33E-06	2.12E-02	2.55E-06	2.94E-06	2.99E-06	3.35E-06	0.992
CARBON TETRACHLORIDE	1.96E-06	2.11E-06	2.40E-06	2.65E-06	2.72E-06	2.96E-06	0.994
1,2 DICHLOROPROPANE	2.61E-06	2.89E-06	3.24E-06	3.52E-06	3.62E-06	3.86E-06	0.997
TRICHLORETHENE	1.67E-06	2.03E-06	2.27E-06	2.55E-06	2.63E-06	2.88E-06	0.994
BROMODICHLOROMETHANE	2.60E-06	2.78E-06	3.19E-06	3.43E-06	3.46E-06	3.69E-06	0.997
c 1,3 DICHLOROPROPENE	2.77E-06	3.00E-06	3.46E-06	3.89E-06	3.85E-06		0.997
t 1,3 DICHLOROPROPENE	3.20E-06	3.39E-06	3.82E-06	4.17E-06	4.31E-06	4.55E-06	0.997
1,1,2 TRICHLOROETHANE	2.55E-06	2.85E-06	3.37E-06	3.74E-06	3.85E-06	4.10E-06	0.997
DIBROMOCHLOROMETHANE	5.21E-06	5.10E-06	5.53E-06	5.50E-06	5.72E-06	5.91E-06	0.998
1,2 DIBROMOETHANE	8.71E-06	8.69E-06	8.95E-06	9.37E-06	9.47E-06	9.50E-06	1.000
TETRACHLOROETHENE	1.79E-06	1.98E-06	2.31E-06	2.52E-06	2.64E-06	2.82E-06	0.996
CHLOROBENZENE	4.60E-06	4.88E-06	5.55E-06	5.63E-06	5.85E-06	6.05E-06	0.998
BROMOFORM	1.01E-05	9.57E-06	9.30E-06	9.87E-06	9.62E-06	9.56E-06	0.999
1,1,2,2, TETRACHLOROETHANE	3.84E-06	4.13E-06	5.16E-06	5.38E-06	5.89E-06	6.05E-06	0.998
BROMOFLUOROBENZENE	3.87E-05	3.91E-05	3.82E-05	3.89E-05	4.07E-05	3.98E-05	NA
1,3 DICHLOROBENZENE	2.29E-06	2.54E-06	3.14E-06	3.51E-06	3.59E-06	3.73E-06	0.998
1,4 DICHLOROBENZENE	2.47E-06	2.56E-06	3.11E-06	3.29E-06	3.43E-06	3.58E-06	0.998
1,2 DICHLOROBENZENE	2.44E-06	2.59E-06	3.09E-06	3.48E-06	3.64E-06	3.86E-06	0.997

*Square root of correlation determination is equal to the correlation coeficient

Square root of 0.990 is equal to 0.995 corrrelation coeficient

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\005F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 1.0PPB VOA STD
Run Time Bar Code:
Acquired on : 29 Jul 94 05:28 PM
Report Created on: 30 Jul 94 11:13 AM
Last Recalib on : 30 Jul 94 11:13 AM
Multiplier : 1

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

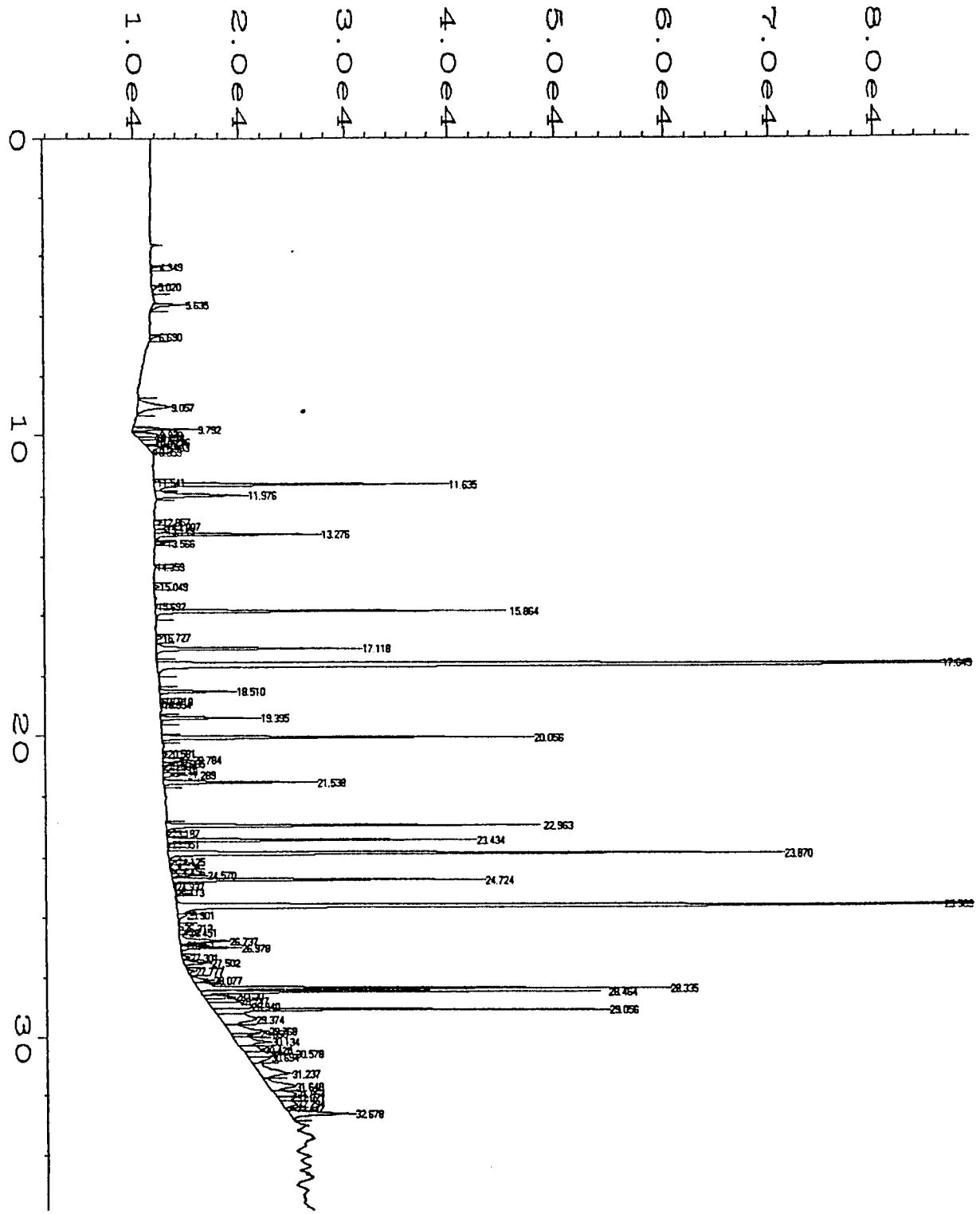
Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\005F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.635	3169	VV	0.063	1	1.105	VinylChloride
9.792	6243	BV	0.056	1	1.064	1,1DCEthene
11.635	28225	VV	0.058	1	1.004	trans 1,2-DCEthene
11.976	8733	VV	0.074	1	1.264	Methyl-tert-ButylEther
13.276	15812	VV	0.056	1	1.055	cis 1,2-DCEthene
15.864	33901	VV	0.058	1	1.078	Benzene
17.118	19642	PV	0.059	1	1.119	TCEthene (TCE)
17.645	286002	PV	0.060	1-R	99.188	Trifluorotoluene (Surr.)
18.510	7386	VV	0.056	1	1.137	cis 1,3DCPropene
19.395	9543	BV	0.053	1	1.191	trans-1,3-DCPropene
20.056	35526	BV	0.055	1	1.118	Toluene
21.538	14641	PV	0.057	1	1.073	Tetrachloroethene (PCE)
22.963	35956	PV	0.054	1	1.118	Chlorobenzene
23.434	29677	VV	0.056	1	1.054	Ethylbenzene
23.870	58325	PV	0.067	1	2.164	M & P Xylene
24.724	30014	VV	0.055	1	1.115	O-Xylene
25.589	710880	BV	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.335	44647	VV	0.047	1	1.181	1,3 DCB
28.464	38756	VV	0.043	1	1.168	1,4 DCB
29.056	37344	VV	0.049	1	1.380	1,2 DCB
4.349	891	BV	0.046		890.729	* uncalibrated *
5.020	569	BB	0.078		568.698	* uncalibrated *
6.690	940	VV	0.062		939.774	* uncalibrated *
9.057	3211	PV	0.143		3210.514	* uncalibrated *
9.978	2321	PV	0.083		2321.032	* uncalibrated *
10.059	1738	VV	0.066		1737.559	* uncalibrated *
10.134	1445	VV	0.014		1445.146	* uncalibrated *
10.206	1937	VV	0.081		1936.760	* uncalibrated *
10.282	1059	VV	0.049		1058.572	* uncalibrated *
10.403	1294	VV	0.079		1294.416	* uncalibrated *
10.553	140	VB	0.030		139.980	* uncalibrated *
11.541	345	PV	0.033		344.570	* uncalibrated *
12.857	770	PV	0.068		769.553	* uncalibrated *
13.007	1732	VV	0.061		1731.917	* uncalibrated *
13.149	1175	VV	0.069		1174.534	* uncalibrated *
13.566	1143	VV	0.043		1143.359	* uncalibrated *
14.359	171	PV	0.041		170.779	* uncalibrated *
15.049	518	BV	0.059		518.359	* uncalibrated *
15.692	248	VV	0.070		248.044	* uncalibrated *
16.727	669	VV	0.081		668.871	* uncalibrated *
18.810	468	PV	0.061		467.959	* uncalibrated *
19.954	259	VV	0.059		258.976	* uncalibrated *

20.581	512	BV	0.068	512.245	* uncalibrated *
20.784	2888	VV	0.069	2888.045	* uncalibrated *
20.885	1366	VV	0.061	1366.475	* uncalibrated *
20.984	514	VV	0.068	513.839	* uncalibrated *
21.149	649	VV	0.054	649.269	* uncalibrated *
21.289	2360	VV	0.078	2359.743	* uncalibrated *
23.187	471	VV	0.074	471.301	* uncalibrated *
23.551	420	VV	0.053	419.560	* uncalibrated *
24.125	734	VV	0.063	733.787	* uncalibrated *
24.234	276	VV	0.084	275.583	* uncalibrated *
24.456	618	PV	0.050	618.006	* uncalibrated *
24.570	3516	VV	0.052	3515.829	* uncalibrated *
24.937	263	VV	0.111	263.008	* uncalibrated *
25.113	124	VB	0.090	124.014	* uncalibrated *
25.901	898	VV	0.103	898.000	* uncalibrated *
26.312	500	VV	0.074	499.975	* uncalibrated *
26.451	987	VV	0.082	986.981	* uncalibrated *
26.737	4739	VV	0.096	4738.763	* uncalibrated *
26.861	597	VV	0.046	597.123	* uncalibrated *
26.978	5748	VV	0.064	5747.502	* uncalibrated *
27.301	768	PV	0.067	767.657	* uncalibrated *
27.502	2607	VV	0.070	2606.693	* uncalibrated *
27.777	798	PV	0.060	797.813	* uncalibrated *
28.077	1987	PV	0.068	1987.291	* uncalibrated *
28.620	2928	VV	0.065	2927.849	* uncalibrated *
28.747	3161	VV	0.095	3160.690	* uncalibrated *
28.940	3838	VV	0.135	3837.986	* uncalibrated *
29.374	3402	VV	0.218	3401.784	* uncalibrated *
29.768	3801	VV	0.130	3801.195	* uncalibrated *
29.858	2762	VV	0.069	2761.958	* uncalibrated *
30.134	3332	VV	0.130	3332.124	* uncalibrated *
30.428	2004	VV	0.163	2003.981	* uncalibrated *
30.578	4737	VV	0.090	4737.019	* uncalibrated *
30.694	2145	VV	0.108	2145.082	* uncalibrated *
31.237	3090	VV	0.185	3089.520	* uncalibrated *
31.648	2635	VV	0.159	2634.934	* uncalibrated *
31.954	2043	VV	0.125	2042.806	* uncalibrated *
32.071	1847	VV	0.097	1846.541	* uncalibrated *
32.294	1418	VV	0.126	1417.688	* uncalibrated *
32.447	998	VV	0.057	997.824	* uncalibrated *
32.678	6142	VV	0.085	6142.177	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.645	17.645	0.000
17	25.589	25.589	0.000

Calibration table contains at least one peak with amt = 0



Data File Name : C:\HPCHEM\3\DATA\29JUL94\005F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 1.0PPB VOA STD
Run Time Bar Code:
Acquired on : 29 Jul 94 05:28 PM
Report Created on: 30 Jul 94 11:13 AM
Last Recalib on : 30 Jul 94 11:13 AM
Multiplier : 1

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

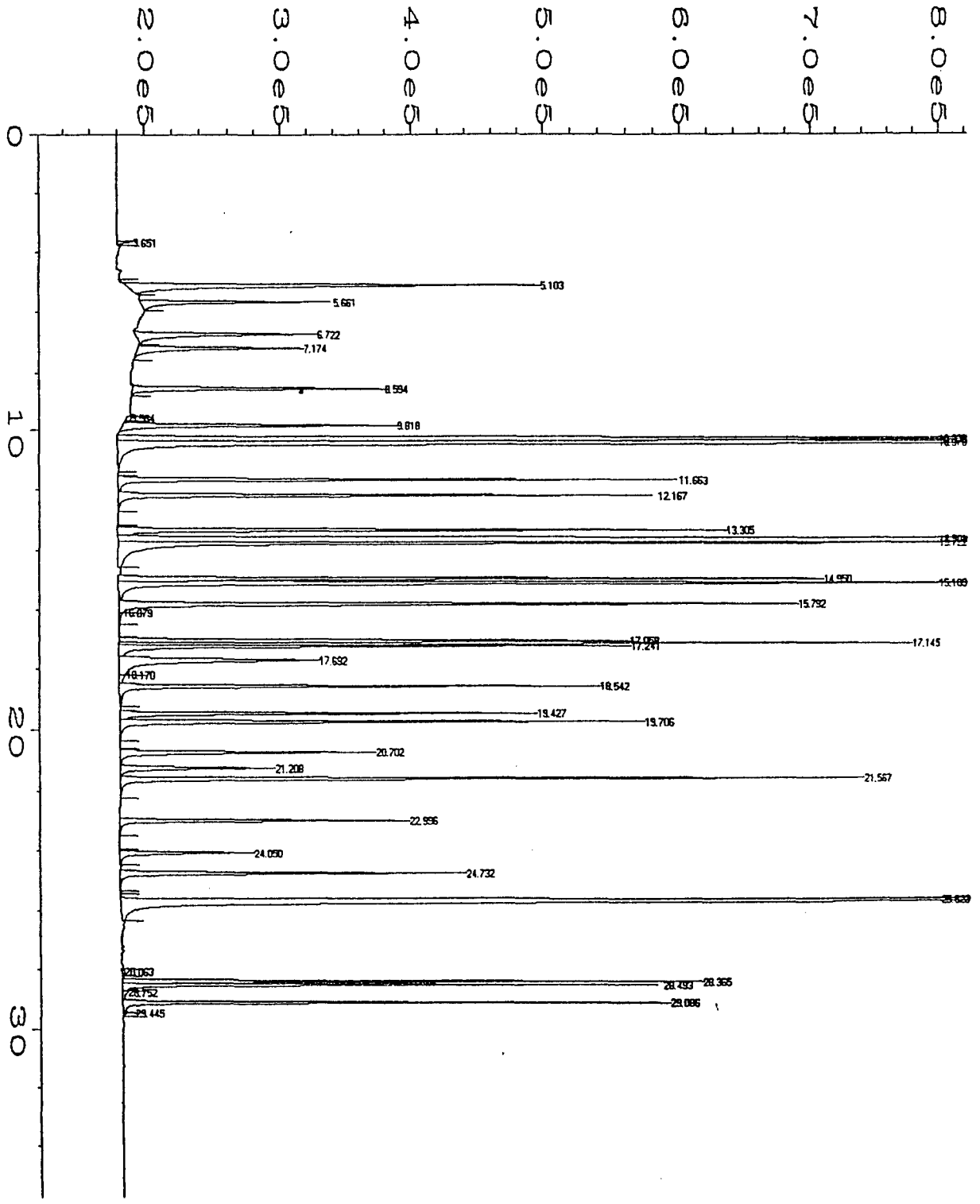
Data File Name : C:\HPCHEM\3\DATA\29JUL94\005R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 1.0PPB VOA STD
Run Time Bar Code:
Acquired on : 29 Jul 94 05:28 PM
Report Created on: 30 Jul 94 09:26 AM
Last Recalib on : 27 JUL 94 06:11 PM
Multiplier : 1

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\005R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.103	310992	BB	0.083	1	3.347	Chloromethane
5.661	143758	BB	0.063	1	1.207	Vinylchloride
6.722	135400	BB	0.080	1	2.857	Bromomethane
7.174	122936	BB	0.077	1	1.897	Chloroethane
8.594	189119	BB	0.073	1	0.643	TCFM
9.818	206050	VV	0.067	1	0.728	1,1 DCEthene
10.237	1136355	PV	0.058	1	2.466	Methylene chloride
10.378	1536852	VV	0.091	1	142.341	unknown
11.663	418892	BV	0.059	1	0.718	trans 1,2 DCEthene
12.167	403098	VV	0.063	1	0.768	1,1 DCEthane
13.305	456705	BV	0.058	1	0.826	cis 1,2 DCEthene
13.591	4922220	VV	0.061	1-R	100.174	BCM (surrogate)
13.722	819893	VV	0.074	1	0.895	Chloroform
14.950	529938	VV	0.057	1	1.390	1,2 DCEthane (EDC)
15.109	751476	VV	0.075	1	1.420	1,1,1 TCEthane
15.792	509647	VV	0.073	1	0.826	Carbon Tetrachloride
17.058	383159	PV	0.057	1	0.215	1,2 DCPropane
17.145	599567	VV	0.061	1	1.669	TCEthene (TCE)
17.241	383948	VV	0.074	1	0.754	BDCM
18.542	361113	VV	0.063	1	0.995	cis 1,3 DCPropene
19.427	313862	VV	0.059	1	1.051	trans 1,3 DCPropene
19.706	392447	VV	0.065	1	1.067	1,1,2 TCEthane
20.702	192016	BV	0.075	1	0.965	DBCM
21.208	114775	VV	0.074	1	1.137	1,2 DBrEthane (EDB)
21.567	559549	VV	0.065	1	0.763	Tetrachloroethene (PCE)
22.996	217352	VV	0.061	1	1.072	Chlorobenzene
24.050	98621	BV	0.077	1	1.226	Bromoform
24.732	260470	VV	0.063	1	1.305	1,1,2,2 TCEthane
25.623	2583679	BV	0.071	1-IR	100.000	BFB (I.S.)
28.365	435986	VV	0.050	1	1.111	1,3 DCB
28.493	404217	VV	0.051	1	0.911	1,4 DCB
29.086	409484	VV	0.050	1	1.201	1,2 DCB
3.651	11468	BV	0.044		11468.40	* uncalibrated *
9.564	2960	VV	0.114		2959.577	* uncalibrated *
16.079	3570	VV	0.160		3569.621	* uncalibrated *
17.692	148884	VV	0.117		148883.7	* uncalibrated *
18.170	5064	VV	0.190		5064.094	* uncalibrated *
28.063	2182	VV	0.126		2182.093	* uncalibrated *
28.752	4560	VV	0.138		4559.763	* uncalibrated *
29.445	9797	VV	0.030		9797.135	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.580	13.591	0.011
29	25.672	25.623	-0.049



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\005R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 5
Sample Name	: 1.0PPB VOA STD	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 05:28 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 09:26 AM	Analysis Method	: 0727ELCD.MT
Last Recalib on	: 27 JUL 94 06:11 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\006F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 2.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 06:11 PM
Report Created on: 30 Jul 94 11:16 AM
Last Recalib on : 30 Jul 94 11:16 AM
Multiplier : 1

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

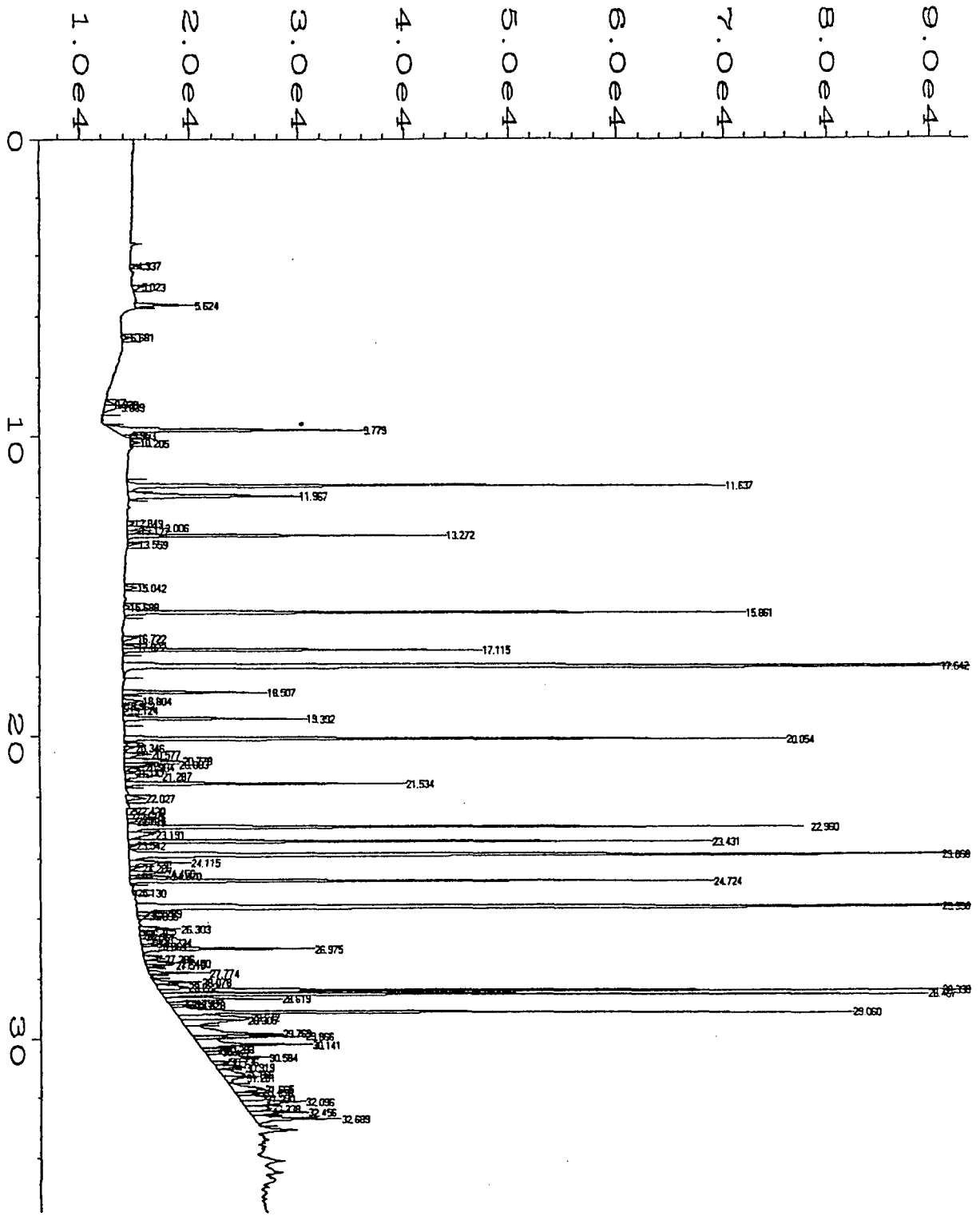
Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\006F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.624	5453	BV	0.052	1	1.898	VinylChloride
9.779	22986	VV	0.066	1	2.812	1,1DCEthene
11.637	55826	BV	0.053	1	2.119	trans 1,2-DCEthene
11.967	15699	VV	0.079	1	2.172	Methyl-tert-ButylEther
13.272	29869	VV	0.055	1	2.111	cis 1,2-DCEthene
15.861	58200	VV	0.057	1	2.007	Benzene
17.115	33727	VV	0.056	1	2.059	TCEthene (TCE)
17.642	258754	PV	0.060	1-R	90.299	Trifluorotoluene (Surr.)
18.507	13167	PV	0.054	1	2.106	cis 1,3DCPropene
19.392	16887	PV	0.053	1	2.106	trans-1,3-DCPropene
20.054	62220	BV	0.055	1	2.130	Toluene
21.534	26168	VV	0.056	1	2.050	Tetrachloroethene (PCE)
22.960	64132	VV	0.056	1	2.124	Chlorobenzene
23.431	54629	VV	0.056	1	2.085	Ethylbenzene
23.868	107592	VV	0.069	1	4.317	M & P Xylene
24.724	54537	VV	0.055	1	2.197	O-Xylene
25.590	673322	BV	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.338	77210	VV	0.044	1	2.263	1,3 DCB
28.467	72221	VV	0.043	1	2.279	1,4 DCB
29.060	63789	VV	0.046	1	2.479	1,2 DCB
4.337	703	PV	0.047		702.523	* uncalibrated *
5.023	892	BV	0.074		892.017	* uncalibrated *
6.681	888	PV	0.057		888.358	* uncalibrated *
8.938	902	PV	0.057		902.275	* uncalibrated *
9.039	1541	VV	0.129		1540.519	* uncalibrated *
9.953	791	VV	0.089		790.517	* uncalibrated *
10.205	940	BV	0.056		939.634	* uncalibrated *
12.849	710	BV	0.077		709.671	* uncalibrated *
13.006	3014	VV	0.065		3014.417	* uncalibrated *
13.127	1227	VV	0.073		1227.399	* uncalibrated *
13.559	1093	VV	0.054		1093.158	* uncalibrated *
15.042	1235	VV	0.065		1235.481	* uncalibrated *
15.688	547	PV	0.071		546.924	* uncalibrated *
16.722	1385	VV	0.078		1385.147	* uncalibrated *
17.022	1390	VV	0.054		1390.268	* uncalibrated *
18.804	1847	VV	0.065		1847.390	* uncalibrated *
18.963	299	VV	0.087		299.398	* uncalibrated *
19.124	592	VV	0.064		591.996	* uncalibrated *
20.346	1065	VV	0.073		1065.090	* uncalibrated *
20.577	2477	VV	0.073		2476.681	* uncalibrated *
20.778	5338	VV	0.073		5338.248	* uncalibrated *
20.883	4983	VV	0.062		4982.942	* uncalibrated *

20.984	1958	VV	0.065	1957.644 *	uncalibrated *
21.147	998	VV	0.057	998.401 *	uncalibrated *
21.287	3418	VV	0.077	3418.374 *	uncalibrated *
22.027	1801	VV	0.077	1801.083 *	uncalibrated *
22.420	898	VV	0.090	898.173 *	uncalibrated *
22.615	727	VV	0.069	726.991 *	uncalibrated *
22.716	934	VV	0.080	933.611 *	uncalibrated *
22.783	836	VV	0.049	836.193 *	uncalibrated *
23.191	2585	VV	0.106	2584.561 *	uncalibrated *
23.542	800	VV	0.082	800.270 *	uncalibrated *
24.115	5666	VV	0.065	5665.925 *	uncalibrated *
24.285	1210	VV	0.073	1210.215 *	uncalibrated *
24.456	3339	VV	0.061	3339.158 *	uncalibrated *
24.570	3889	VV	0.056	3889.293 *	uncalibrated *
25.130	402	VV	0.069	402.216 *	uncalibrated *
25.789	1431	VV	0.071	1431.334 *	uncalibrated *
25.895	1058	VV	0.078	1057.884 *	uncalibrated *
26.303	3875	VV	0.061	3875.103 *	uncalibrated *
26.462	770	PV	0.063	770.157 *	uncalibrated *
26.561	537	VV	0.085	537.170 *	uncalibrated *
26.734	2014	VV	0.094	2014.102 *	uncalibrated *
26.864	1483	VV	0.061	1483.352 *	uncalibrated *
26.975	15914	VV	0.064	15914.15 *	uncalibrated *
27.296	1923	PV	0.075	1922.709 *	uncalibrated *
27.450	3314	VV	0.058	3313.530 *	uncalibrated *
27.519	2750	VV	0.067	2750.390 *	uncalibrated *
27.774	5624	PV	0.048	5623.688 *	uncalibrated *
28.078	4364	PV	0.052	4364.416 *	uncalibrated *
28.232	2829	VV	0.073	2828.735 *	uncalibrated *
28.619	10684	VV	0.050	10684.20 *	uncalibrated *
28.756	1840	VV	0.075	1840.386 *	uncalibrated *
28.828	2300	VV	0.054	2299.883 *	uncalibrated *
29.242	6554	VV	0.088	6553.613 *	uncalibrated *
29.305	6125	VV	0.108	6125.401 *	uncalibrated *
29.769	8474	VV	0.092	8474.025 *	uncalibrated *
29.866	10423	VV	0.058	10422.84 *	uncalibrated *
30.141	10542	VV	0.077	10541.94 *	uncalibrated *
30.293	2047	VV	0.083	2047.161 *	uncalibrated *
30.427	1488	VV	0.086	1488.369 *	uncalibrated *
30.584	5586	VV	0.093	5585.941 *	uncalibrated *
30.736	1615	VV	0.085	1614.772 *	uncalibrated *
30.919	2667	VV	0.061	2666.798 *	uncalibrated *
31.156	2134	VV	0.129	2134.068 *	uncalibrated *
31.261	2085	VV	0.091	2084.742 *	uncalibrated *
31.665	2960	VV	0.121	2959.805 *	uncalibrated *
31.816	2592	VV	0.067	2592.281 *	uncalibrated *
31.990	2421	VV	0.109	2421.286 *	uncalibrated *
32.096	5924	VV	0.088	5924.453 *	uncalibrated *
32.338	2269	VV	0.118	2269.421 *	uncalibrated *
32.456	5469	VV	0.064	5469.385 *	uncalibrated *
32.689	8147	VV	0.076	8147.458 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.645	17.642	-0.003
17	25.590	25.590	0.000

Calibration table contains at least one peak with amt = 0



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\006F0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 6
Sample Name	: 2.0PPB VOA	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 06:11 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 11:16 AM	Analysis Method	: 0727PID.MTH
Last Recalib on	: 30 Jul 94 11:16 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

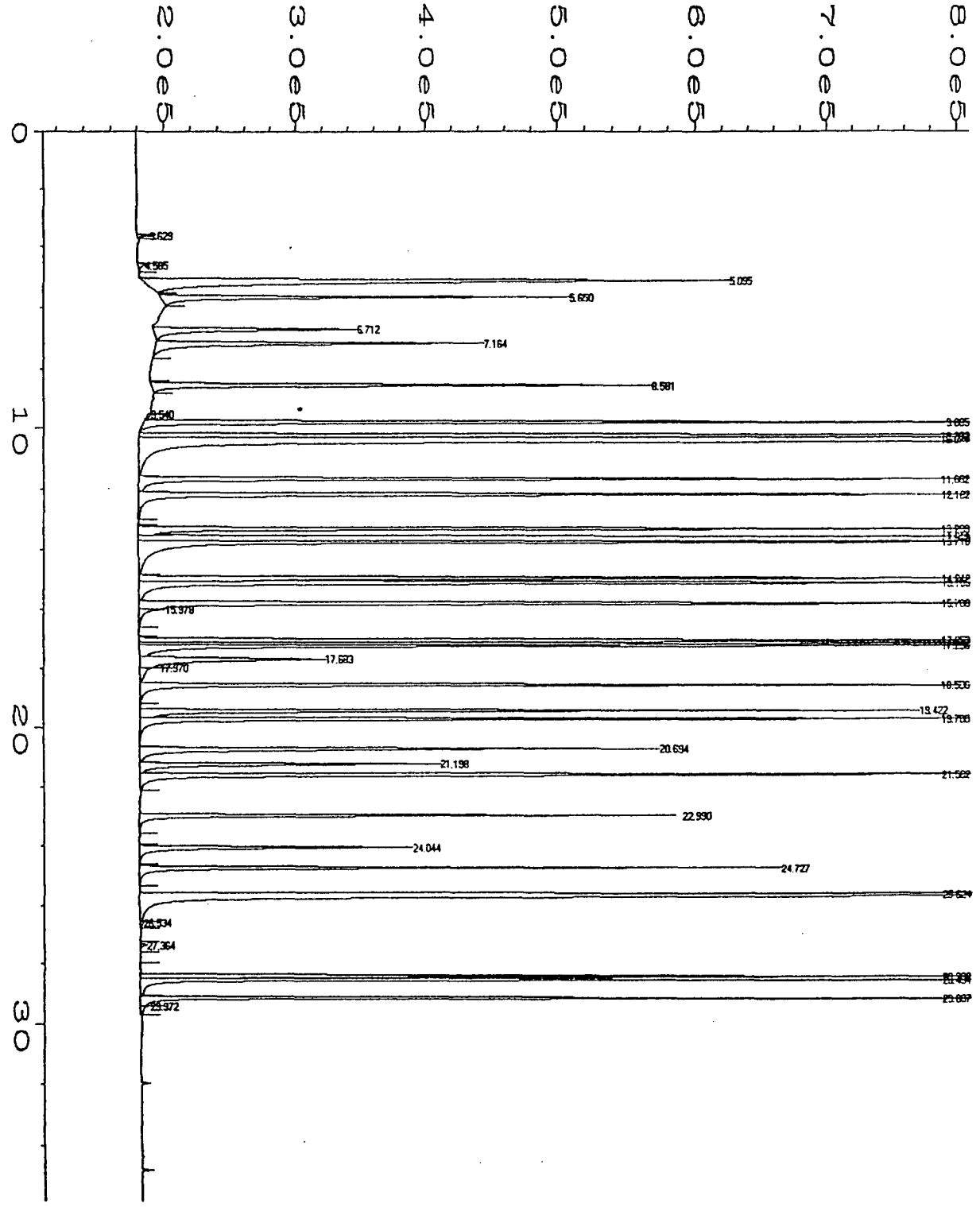
Data File Name : C:\HPCHEM\3\DATA\29JUL94\006R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 2.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 06:11 PM
Report Created on: 30 Jul 94 09:29 AM
Last Recalib on : 30 Jul 94 09:27 AM
Multiplier : 1

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\006R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.095	441477	BB	0.102	1	4.424	Chloromethane
5.650	311404	BB	0.065	1	2.394	Vinylchloride
6.712	155118	BB	0.083	1	3.071	Bromomethane
7.164	250433	BB	0.079	1	3.392	Chloroethane
8.581	377696	BB	0.071	1	2.181	TCFM
9.805	720729	PV	0.061	1	2.884	1,1 DCEthene
10.232	1510857	PV	0.061	1	3.475	Methylene chloride
10.371	4201352	VV	0.098	1	276.458	unknown
11.662	851269	VV	0.059	1	2.123	trans 1,2 DCEthene
12.162	818634	VV	0.069	1	2.203	1,1 DCEthane
13.299	877442	PV	0.061	1	2.142	cis 1,2 DCEthene
13.587	4861707	VV	0.065	1-R	99.885	BCM (surrogate)
13.716	1352660	VV	0.073	1	2.390	Chloroform
14.942	849578	VV	0.061	1	2.432	1,2 DCEthane (EDC)
15.105	943936	VV	0.076	1	1.919	1,1,1 TCEthane
15.788	947838	VV	0.070	1	2.117	Carbon Tetrachloride
17.053	690917	PV	0.059	1	1.212	1,2 DCPropane
17.142	983861	VV	0.062	1	2.885	TCEthene (TCE)
17.236	719098	VV	0.072	1	1.986	BDCM
18.536	667513	VV	0.063	1	2.111	cis 1,3 DCPropene
19.422	590293	BV	0.061	1	2.122	trans 1,3 DCPropene
19.700	702204	VV	0.067	1	2.139	1,1,2 TCEthane
20.694	392218	PV	0.075	1	1.999	DBCM
21.198	230155	VV	0.075	1	2.019	1,2 DBrEthane (EDB)
21.562	1008991	VV	0.064	1	1.994	Tetrachloroethene (PCE)
22.990	409469	VV	0.062	1	2.182	Chlorobenzene
24.044	208904	PV	0.078	1	2.101	Bromoform
24.727	483866	VV	0.066	1	2.396	1,1,2,2 TCEthane
25.624	2554858	PV	0.073	1-IR	100.000	BFB (I.S.)
28.366	786086	BV	0.049	1	2.411	1,3 DCB
28.494	782600	VV	0.052	1	2.307	1,4 DCB
29.087	771328	VV	0.050	1	2.627	1,2 DCB
3.629	9832	PV	0.044		9832.323	* uncalibrated *
4.585	5893	BB	0.080		5892.850	* uncalibrated *
9.540	2604	VV	0.114		2603.608	* uncalibrated *
15.978	20162	VV	0.115		20162.36	* uncalibrated *
17.683	140567	VV	0.112		140567.0	* uncalibrated *
17.970	15917	VV	0.106		15916.65	* uncalibrated *
26.534	2435	VV	0.116		2435.424	* uncalibrated *
27.364	5095	BV	0.071		5095.392	* uncalibrated *
29.372	7749	VV	0.098		7749.434	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.591	13.587	-0.004
29	25.623	25.624	0.001



Data File Name : C:\HPCHEM\3\DATA\29JUL94\006R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 2.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 06:11 PM
Report Created on: 30 Jul 94 09:30 AM
Last Recalib on : 30 Jul 94 09:27 AM
Multiplier : 1

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MT
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\007F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 5.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 06:54 PM
Report Created on: 30 Jul 94 11:18 AM
Last Recalib on : 30 Jul 94 11:18 AM
Multiplier : 1

Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\007F0101.D

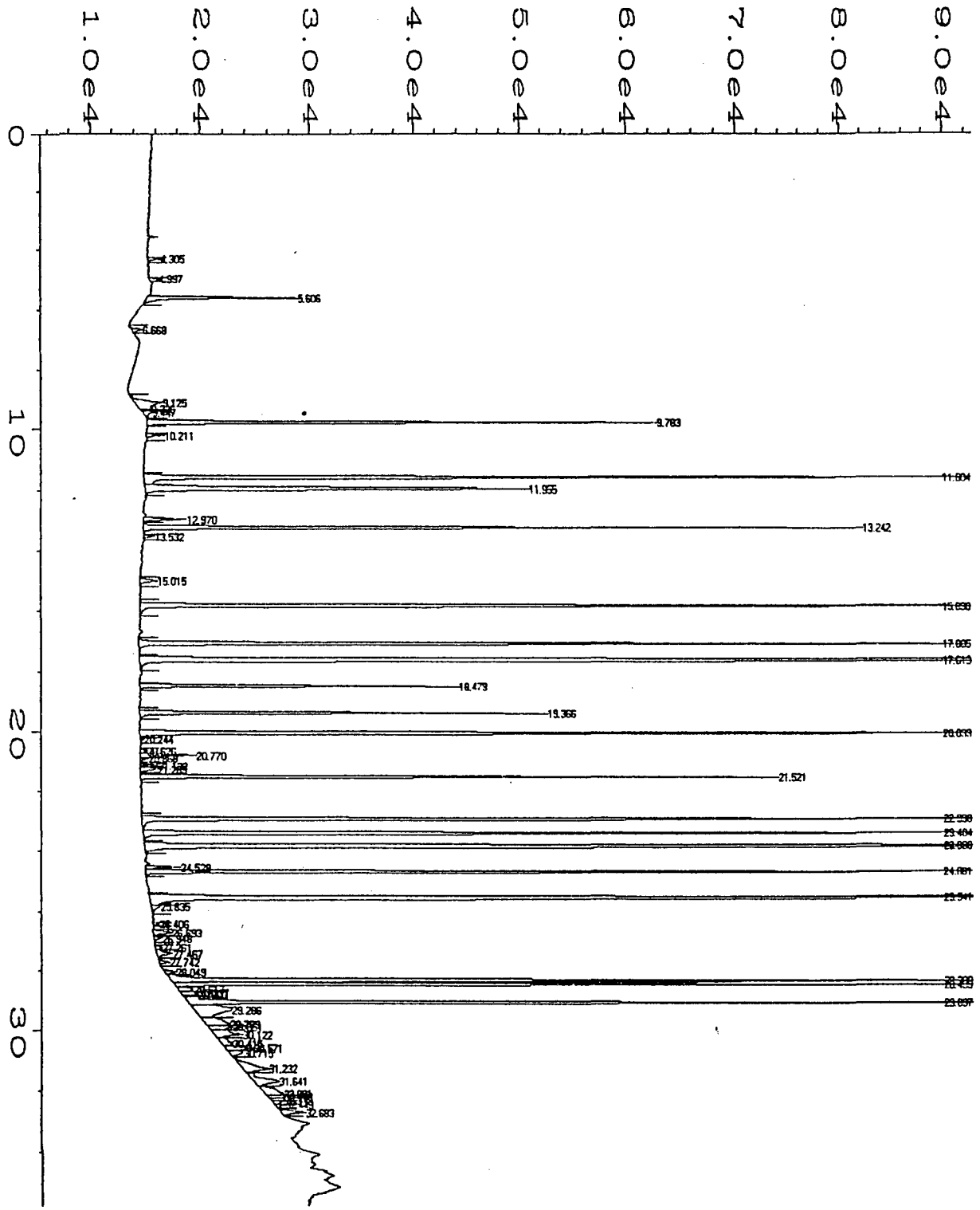
Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.606	13798	VV	0.057	1	4.875	VinylChloride
9.783	47659	BV	0.060	1	5.141	1,1DCEthene
11.604	127103	BV	0.052	1	4.893	trans 1,2-DCEthene
11.955	35992	VV	0.071	1	4.831	Methyl-tert-ButylEther
13.242	67545	VV	0.054	1	4.856	cis 1,2-DCEthene
15.830	133784	PV	0.058	1	4.677	Benzene
17.085	78182	PV	0.056	1	4.807	TCEthene (TCE)
17.613	268767	PV	0.061	1-R	97.187	Trifluorotoluene (Surr.)
18.479	29770	BV	0.055	1	4.813	cis 1,3DCPropene
19.366	38266	BV	0.054	1	4.697	trans-1,3-DCPropene
20.033	133552	PV	0.055	1	4.716	Toluene
21.521	59617	VV	0.057	1	4.720	Tetrachloroethene (PCE)
22.938	142559	BV	0.054	1	4.774	Chlorobenzene
23.404	122380	VV	0.055	1	4.745	Ethylbenzene
23.836	237298	PV	0.066	1	9.782	M & P Xylene
24.681	119454	VV	0.055	1	4.953	O-Xylene
25.541	674844	VV	0.055	1-IR	100.000	Bromofluorobenzene (I.S.)
28.309	161930	VV	0.045	1	4.998	1,3 DCB
28.439	157230	VV	0.043	1	5.056	1,4 DCB
29.037	134744	VV	0.044	1	5.454	1,2 DCB
4.305	1172	BV	0.048		1172.204	* uncalibrated *
4.997	875	BV	0.065		875.052	* uncalibrated *
6.668	1026	BV	0.039		1025.563	* uncalibrated *
9.125	2548	BV	0.128		2547.988	* uncalibrated *
9.336	984	VV	0.046		984.434	* uncalibrated *
9.447	910	VB	0.091		910.402	* uncalibrated *
10.211	1636	PV	0.057		1635.761	* uncalibrated *
12.970	4014	VV	0.063		4013.577	* uncalibrated *
13.532	1033	VV	0.054		1033.454	* uncalibrated *
15.015	1624	BV	0.077		1623.744	* uncalibrated *
20.244	372	VV	0.072		372.257	* uncalibrated *
20.626	659	BV	0.066		659.131	* uncalibrated *
20.770	5116	VV	0.073		5115.525	* uncalibrated *
20.868	848	VV	0.053		847.597	* uncalibrated *
21.132	1671	VV	0.054		1671.482	* uncalibrated *
21.269	1600	VV	0.080		1600.461	* uncalibrated *
24.528	3259	VV	0.051		3259.050	* uncalibrated *
25.835	866	VB	0.101		865.979	* uncalibrated *
26.406	626	PV	0.056		626.219	* uncalibrated *
26.693	1764	BV	0.088		1764.008	* uncalibrated *
26.948	766	VB	0.070		765.842	* uncalibrated *
27.261	664	BV	0.065		664.191	* uncalibrated *

27.467	1445	VV	0.090	1444.911 *	uncalibrated *
27.742	921	VV	0.075	921.096 *	uncalibrated *
28.049	999.8	PV	0.051	999.795 *	uncalibrated *
28.617	1396	VV	0.079	1396.315 *	uncalibrated *
28.737	1540	VV	0.090	1539.732 *	uncalibrated *
28.803	1296	VV	0.049	1296.493 *	uncalibrated *
29.286	3324	VV	0.218	3323.810 *	uncalibrated *
29.763	2095	VV	0.157	2094.609 *	uncalibrated *
29.851	2100	VV	0.095	2100.419 *	uncalibrated *
30.122	2482	VV	0.124	2481.869 *	uncalibrated *
30.415	948	VV	0.146	947.911 *	uncalibrated *
30.571	2481	VV	0.082	2480.788 *	uncalibrated *
30.715	1241	VV	0.106	1241.128 *	uncalibrated *
31.232	2355	PV	0.157	2355.379 *	uncalibrated *
31.641	2272	VV	0.153	2271.628 *	uncalibrated *
32.061	1713	VV	0.160	1712.539 *	uncalibrated *
32.150	1586	VV	0.061	1585.707 *	uncalibrated *
32.221	1549	VV	0.072	1549.191 *	uncalibrated *
32.313	1182	VV	0.070	1181.698 *	uncalibrated *
32.443	928	VV	0.054	927.817 *	uncalibrated *
32.683	2312	VV	0.080	2312.226 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.645	17.613	-0.032
17	25.541	25.541	0.000

Calibration table contains at least one peak with amt = 0

==========



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\007F0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 7
Sample Name	: 5.0PPB VOA	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 06:54 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 11:18 AM	Analysis Method	: 0727PID.MTH
Last Recalib on	: 30 Jul 94 11:18 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\007R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 5.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 06:54 PM
Report Created on: 30 Jul 94 09:34 AM
Last Recalib on : 30 Jul 94 09:34 AM
Multiplier : 1

Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\007R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.073	861435	BB	0.093	1	26.466	Chloromethane
5.630	842488	BB	0.064	1	5.652	Vinylchloride
6.680	306526	BB	0.075	1	5.630	Bromomethane
7.133	600664	BB	0.078	1	7.397	Chloroethane
8.569	784500	BB	0.078	1	5.738	TCFM
9.808	1580059	PV	0.067	1	5.697	1,1 DCEthene
10.234	2412107	VV	0.065	1	5.400	Methylene chloride
10.372	3113546	VV	0.092	1	200.145	unknown
11.628	1900000	VV	0.060	1	5.423	trans 1,2 DCEthene
12.129	1737576	VV	0.069	1	5.295	1,1 DCEthane
13.267	1947753	VV	0.061	1	5.432	cis 1,2 DCEthene
13.557	4971842	VV	0.064	1-R	99.788	BCM (surrogate)
13.689	2498304	VV	0.073	1	5.455	Chloroform
14.912	1737405	VV	0.063	1	5.425	1,2 DCEthane (EDC)
15.071	1961839	VV	0.077	1	5.236	1,1,1 TCEthane
15.753	2081444	VV	0.075	1	5.385	Carbon Tetrachloride
17.021	1541128	VV	0.062	1	4.086	1,2 DCPropane
17.109	2200447	VV	0.062	1	8.468	TCEthene (TCE)
17.205	1565255	VV	0.075	1	5.046	BDCM
18.505	1443990	VV	0.068	1	5.036	cis 1,3 DCPropene
19.393	1304894	VV	0.064	1	4.993	trans 1,3 DCPropene
19.671	1481708	VV	0.074	1	4.923	1,1,2 TCEthane
20.667	904399	VV	0.079	1	4.731	DBCM
21.173	558429	VV	0.081	1	4.639	1,2 DBrEthane (EDB)
21.546	2159986	VV	0.068	1	5.174	Tetrachloroethene (PCE)
22.965	901394	VV	0.063	1	5.060	Chlorobenzene
23.994	537784	VV	0.080	1	4.723	Bromoform
24.678	968112	VV	0.073	1	4.779	1,1,2,2 TCEthane
25.574	2615276	VV	0.077	1-IR	100.000	BFB (I.S.)
28.335	1594293	BV	0.052	1	5.383	1,3 DCB
28.464	1606220	VV	0.054	1	5.279	1,4 DCB
29.063	1620758	VV	0.051	1	5.846	1,2 DCB
3.606	8132	PV	0.044		8131.884	* uncalibrated *
12.699	4817	VV	0.324		4817.173	* uncalibrated *
14.474	7900	VV	0.112		7900.148	* uncalibrated *
14.691	5594	VV	0.102		5593.804	* uncalibrated *
17.652	170831	VV	0.134		170830.6	* uncalibrated *
22.564	3453	VV	0.141		3452.751	* uncalibrated *
22.823	4327	VV	0.086		4327.094	* uncalibrated *
23.254	7240	VV	0.116		7239.697	* uncalibrated *
23.473	4640	VV	0.143		4640.307	* uncalibrated *
24.218	22081	VV	0.088		22081.03	* uncalibrated *

24.485	8264	VV	0.047	8263.626 *	uncalibrated *
26.300	17053	VV	0.060	17053.38 *	uncalibrated *
26.483	3900	VV	0.112	3899.683 *	uncalibrated *
26.593	3767	VV	0.125	3767.365 *	uncalibrated *
27.319	15319	VV	0.087	15318.88 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.591	13.557	-0.034
29	25.574	25.574	0.000

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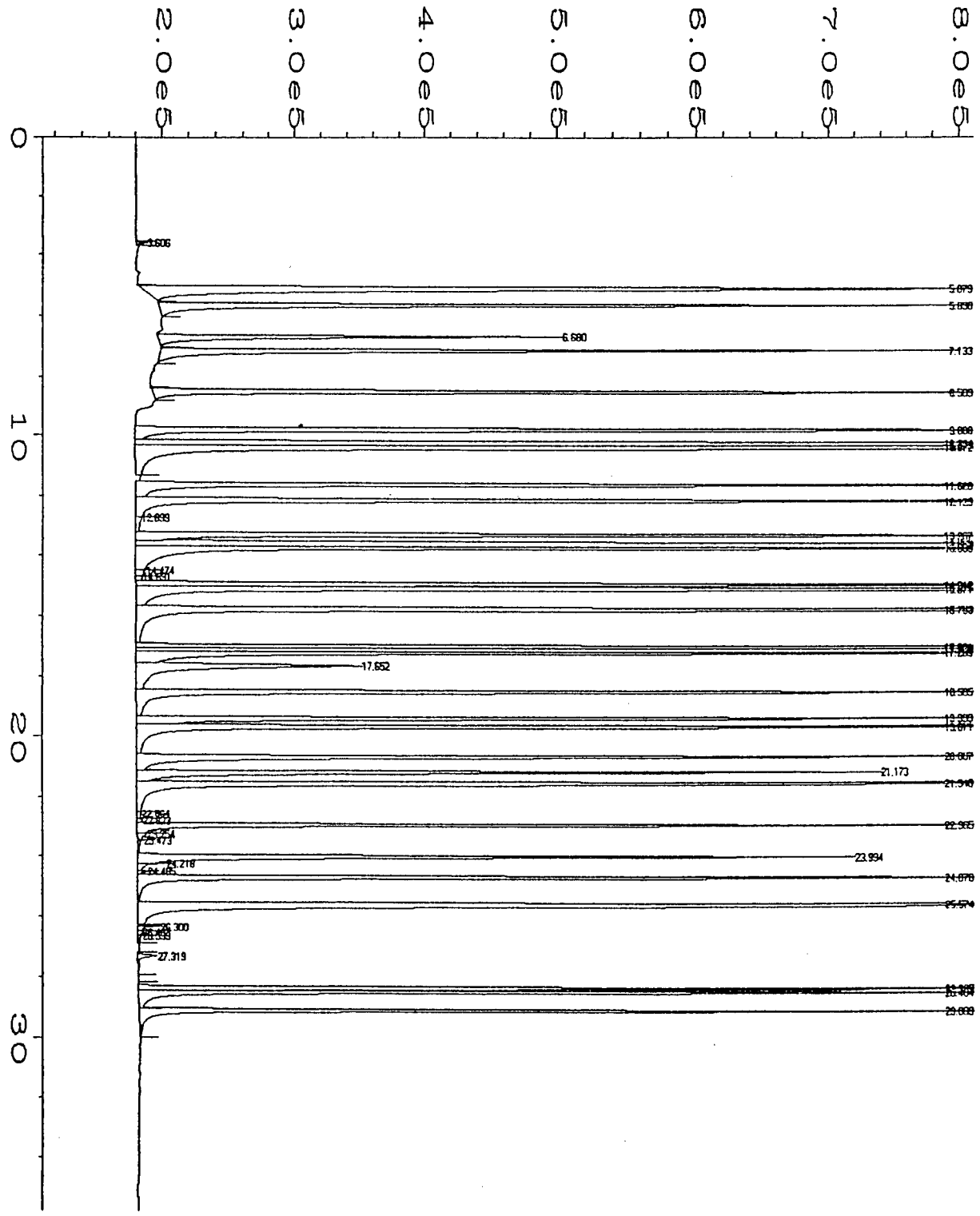

Data File Name	: C:\HPCHEM\3\DATA\29JUL94\007R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 7
Sample Name	: 5.0PPB VOA	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 06:54 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 09:34 AM	Analysis Method	: 0727ELCD.MTH
Last Recalib on	: 30 Jul 94 09:34 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\008F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 10.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 07:37 PM
Report Created on: 30 Jul 94 11:32 AM
Last Recalib on : 30 Jul 94 11:31 AM
Multiplier : 1

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\008F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.604	27168	BV	0.053	1	9.472	VinylChloride
9.799	94166	PV	0.061	1	9.299	1,1DCEthene
11.601	255588	BV	0.051	1	9.531	trans 1,2-DCEthene
11.923	65043	VV	0.075	1	9.738	Methyl-tert-ButylEther
13.222	137216	VV	0.053	1	9.562	cis 1,2-DCEthene
15.820	269132	PV	0.057	1	9.551	Benzene
17.088	156223	PV	0.056	1	9.461	TCEthene (TCE)
17.623	276817	BV	0.061	1-R	100.000	Trifluorotoluene (Surr.)
18.499	59522	PV	0.054	1	9.619	cis 1,3DCPropene
19.397	77053	PV	0.052	1	9.680	trans-1,3-DCPropene
20.069	273226	BV	0.055	1	9.573	Toluene
21.565	122500	PV	0.057	1	9.481	Tetrachloroethene (PCE)
22.995	288596	PV	0.054	1	9.571	Chlorobenzene
23.467	247380	VV	0.055	1	9.551	Ethylbenzene
23.906	472340	VV	0.067	1	19.188	M & P Xylene
24.759	240340	VV	0.055	1	9.561	O-Xylene
25.623	670246	BV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.358	322489	VV	0.044	1	9.714	1,3 DCB
28.485	321070	VV	0.041	1	1404.724	1,4 DCB
29.074	264515	VV	0.042	1	-336.597	1,2 DCB
4.307	1068	PV	0.044		1067.619	* uncalibrated *
4.977	692	PV	0.048		692.486	* uncalibrated *
6.206	236	BV	0.109		236.186	* uncalibrated *
6.668	4255	BV	0.060		4254.670	* uncalibrated *
8.926	1834	PV	0.098		1833.805	* uncalibrated *
9.051	2629	VV	0.113		2628.845	* uncalibrated *
9.458	552	VV	0.055		552.091	* uncalibrated *
10.220	2936	BV	0.061		2935.562	* uncalibrated *
10.422	450	VV	0.062		449.592	* uncalibrated *
12.806	496	PV	0.073		495.799	* uncalibrated *
12.957	2565	VV	0.064		2564.727	* uncalibrated *
13.089	658	VV	0.061		657.520	* uncalibrated *
13.508	1070	VV	0.048		1070.371	* uncalibrated *
14.995	484	BV	0.070		483.790	* uncalibrated *
16.708	731	BV	0.067		731.044	* uncalibrated *
18.801	579	VV	0.078		578.756	* uncalibrated *
18.953	394	VV	0.070		394.266	* uncalibrated *
20.269	548	VV	0.064		547.649	* uncalibrated *
20.669	1319	BV	0.073		1318.907	* uncalibrated *
20.805	4681	VV	0.076		4681.240	* uncalibrated *
20.909	3091	VV	0.059		3090.933	* uncalibrated *
21.007	924	VV	0.051		924.065	* uncalibrated *

21.176	3242	VV	0.053	3242.231 *	uncalibrated *
21.317	1494	VV	0.063	1494.377 *	uncalibrated *
22.066	624	BV	0.063	624.099 *	uncalibrated *
23.217	1367	VV	0.082	1366.533 *	uncalibrated *
24.158	2429	VV	0.080	2429.182 *	uncalibrated *
24.494	2627	PV	0.057	2626.780 *	uncalibrated *
24.605	3482	VV	0.053	3482.133 *	uncalibrated *
25.930	1155	VV	0.074	1154.978 *	uncalibrated *
26.340	2360	VV	0.064	2360.008 *	uncalibrated *
26.496	745	VV	0.051	744.534 *	uncalibrated *
26.766	1693	VV	0.075	1693.170 *	uncalibrated *
26.895	1031	VV	0.053	1031.210 *	uncalibrated *
27.025	2551	PV	0.068	2550.566 *	uncalibrated *
27.328	1324	PV	0.062	1324.356 *	uncalibrated *
27.482	1749	VV	0.063	1748.947 *	uncalibrated *
27.552	1228	VV	0.063	1227.600 *	uncalibrated *
27.798	5054	BV	0.047	5054.472 *	uncalibrated *
28.100	2470	PV	0.053	2469.947 *	uncalibrated *
28.636	6159	VV	0.064	6159.479 *	uncalibrated *
28.777	2080	VV	0.060	2080.305 *	uncalibrated *
28.845	2382	VV	0.063	2382.313 *	uncalibrated *
28.929	1997	VV	0.057	1996.798 *	uncalibrated *
29.252	2780	VV	0.075	2779.707 *	uncalibrated *
29.323	2671	VV	0.062	2671.297 *	uncalibrated *
29.393	2450	VV	0.077	2449.552 *	uncalibrated *
29.790	2441	VV	0.113	2440.981 *	uncalibrated *
29.876	4355	VV	0.065	4354.930 *	uncalibrated *
30.147	9759	VV	0.064	9759.140 *	uncalibrated *
30.428	1047	VV	0.164	1047.353 *	uncalibrated *
30.589	2377	VV	0.084	2377.131 *	uncalibrated *
30.680	1053	VV	0.053	1052.857 *	uncalibrated *
30.776	771	VV	0.064	770.989 *	uncalibrated *
30.922	1326	VV	0.056	1326.474 *	uncalibrated *
31.173	1448	VV	0.110	1447.843 *	uncalibrated *
31.262	1553	VV	0.063	1553.046 *	uncalibrated *
31.418	2115	VV	0.097	2114.815 *	uncalibrated *
31.655	4803	VV	0.142	4802.537 *	uncalibrated *
31.934	2311	VV	0.151	2311.403 *	uncalibrated *
32.095	2127	VV	0.053	2127.151 *	uncalibrated *
32.154	3247	VV	0.127	3246.763 *	uncalibrated *
32.444	4241	VV	0.058	4241.417 *	uncalibrated *
32.690	1665	VV	0.114	1664.691 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.623	0.000
17	25.623	25.623	0.000

Calibration table contains at least one peak with amt = 0

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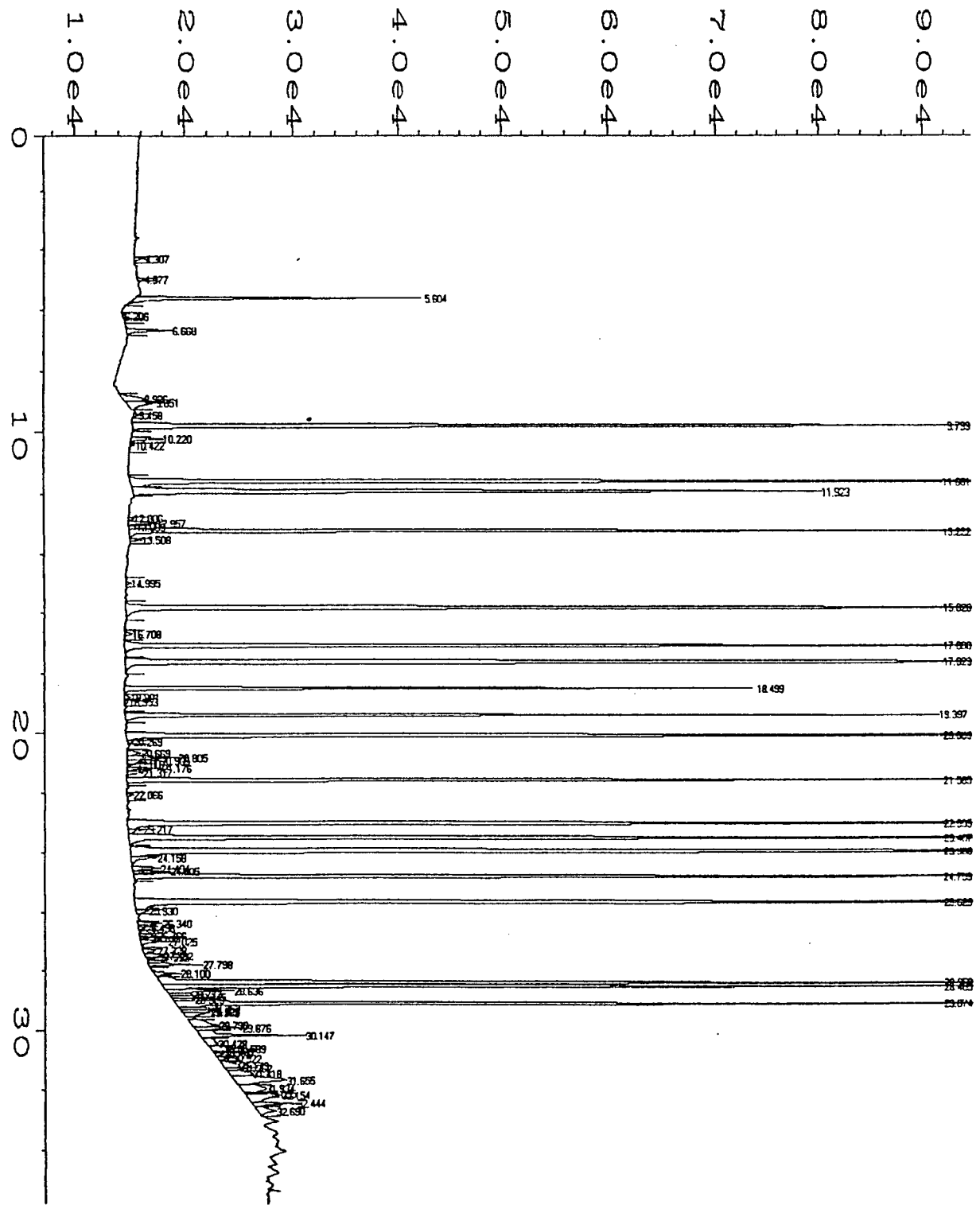

Data File Name : C:\HPCHEM\3\DATA\29JUL94\008F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 10.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 07:37 PM
Report Created on: 30 Jul 94 11:32 AM
Last Recalib on : 30 Jul 94 11:31 AM
Multiplier : 1

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\008R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 10.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 07:37 PM
Report Created on: 30 Jul 94 09:39 AM
Last Recalib on : 30 Jul 94 09:39 AM
Multiplier : 1

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\008R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.063	1853854	BB	0.072	1	59.527	Chloromethane
5.628	1446294	BB	0.066	1	9.701	Vinylchloride
6.694	646249	BB	0.077	1	9.540	Bromomethane
7.156	1184359	BB	0.075	1	11.998	Chloroethane
8.586	1548186	BB	0.077	1	11.626	TCFM
9.824	2896738	PV	0.071	1	10.910	1,1 DCEthene
10.245	3956882	VV	0.068	1	10.142	Methylene chloride
10.394	4037199	VV	0.099	1	263.868	unknown
11.625	3506152	VV	0.060	1	10.487	trans 1,2 DCEthene
12.118	3203758	VV	0.072	1	10.291	1,1 DCEthane
13.246	3543092	VV	0.062	1	10.391	cis 1,2 DCEthene
13.536	4936601	VV	0.063	1-R	100.741	BCM (surrogate)
13.664	4387344	VV	0.073	1	10.585	Chloroform
14.892	3061033	VV	0.064	1	10.273	1,2 DCEthane (EDC)
15.056	3402078	VV	0.082	1	10.067	1,1,1 TCEthane
15.743	3771105	VV	0.079	1	10.370	Carbon Tetrachloride
17.022	2839232	VV	0.060	1	7.969	1,2 DCPropane
17.112	3914110	VV	0.060	1	12.783	TCEthene (TCE)
17.205	2913667	VV	0.073	1	9.936	BDCM
18.525	2567964	VV	0.064	1	9.526	cis 1,3 DCPropene
19.421	2399137	VV	0.060	1	9.664	trans 1,3 DCPropene
19.706	2672757	VV	0.070	1	9.473	1,1,2 TCEthane
20.706	1816951	VV	0.076	1	9.767	DBCM
21.213	1067015	VV	0.079	1	8.958	1,2 DBrEthane (EDB)
21.589	3969553	VV	0.069	1	10.139	Tetrachloroethene (PCE)
23.021	1777393	VV	0.064	1	10.345	Chlorobenzene
24.068	1012970	VV	0.081	1	8.954	Bromoform
24.761	1859431	VV	0.066	1	9.760	1,1,2,2 TCEthane
25.653	2572173	VV	0.076	1-IR	100.000	BFB (I.S.)
28.381	2850256	VV	0.050	1	10.365	1,3 DCB
28.510	3041952	VV	0.052	1	10.689	1,4 DCB
29.098	2873016	VV	0.051	1	11.103	1,2 DCB
2.196	6250	VV	0.058		6249.734	* uncalibrated *
3.618	7638	PV	0.050		7638.143	* uncalibrated *
4.557	5749	BB	0.068		5749.217	* uncalibrated *
14.336	16675	VV	0.164		16675.42	* uncalibrated *
16.621	8337	VV	0.038		8337.409	* uncalibrated *
16.681	54350	VV	0.029		54349.92	* uncalibrated *
16.724	161753	VV	0.033		161753.4	* uncalibrated *
17.661	203602	VV	0.145		203601.5	* uncalibrated *
19.204	8112	VV	0.111		8112.234	* uncalibrated *
21.120	22135	VV	0.028		22135.17	* uncalibrated *

22.611	6208	VV	0.160	6207.719 *	uncalibrated *
22.883	10203	VV	0.081	10203.44 *	uncalibrated *
23.329	19493	VV	0.178	19493.03 *	uncalibrated *
23.920	5311	VV	0.068	5311.402 *	uncalibrated *
24.533	6387	VV	0.087	6387.473 *	uncalibrated *
25.331	4898	VV	0.128	4898.371 *	uncalibrated *
26.437	4393	VV	0.073	4392.837 *	uncalibrated *
26.562	4290	VV	0.154	4289.692 *	uncalibrated *
27.389	39065	VV	0.072	39065.44 *	uncalibrated *
29.771	3749	VV	0.122	3748.747 *	uncalibrated *
30.043	2248	VV	0.121	2247.670 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.591	13.536	-0.055
29	25.653	25.653	0.000

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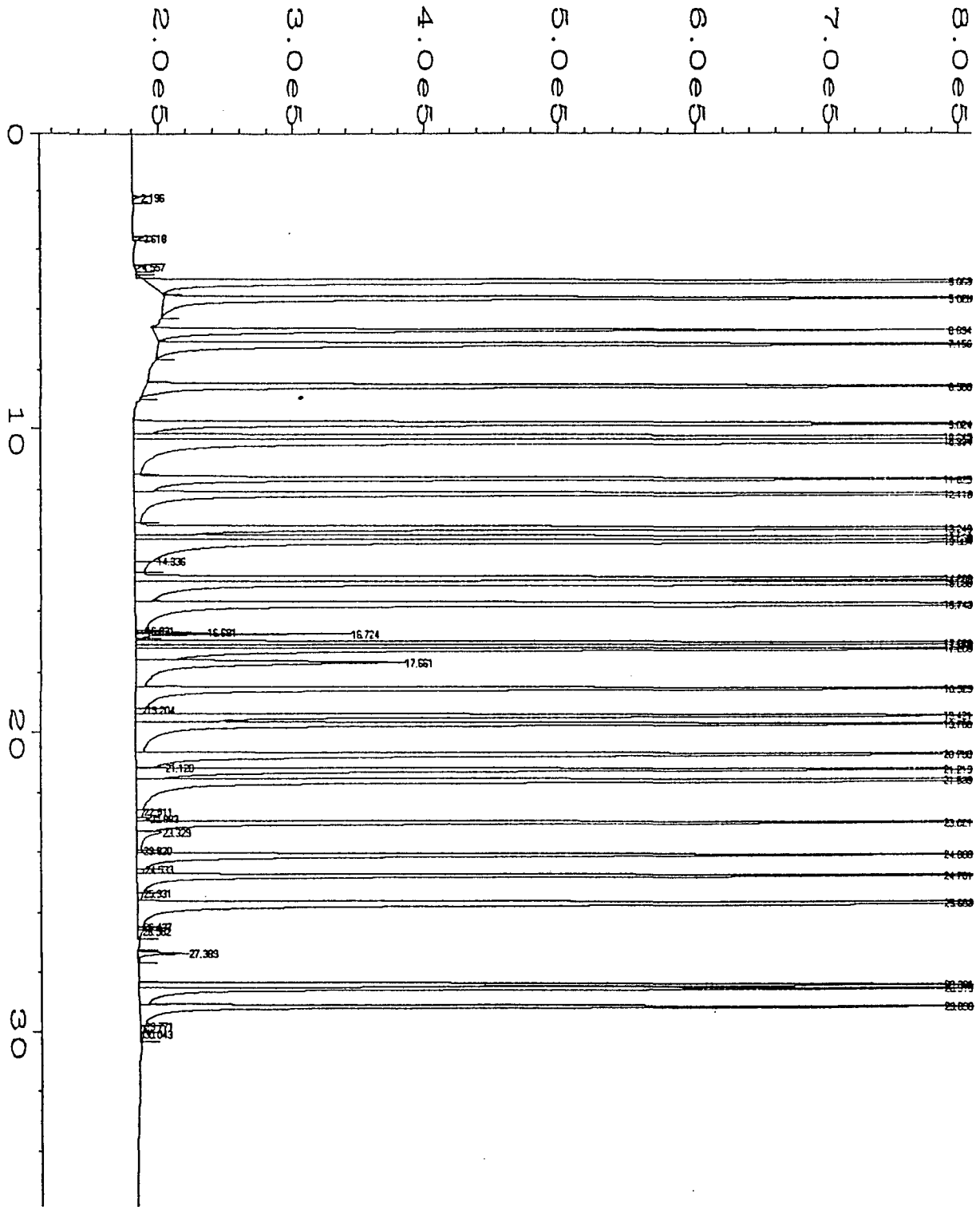

Data File Name : C:\HPCHEM\3\DATA\29JUL94\008R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 10.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 07:37 PM
Report Created on: 30 Jul 94 09:39 AM
Last Recalib on : 30 Jul 94 09:39 AM
Multiplier : 1

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\009F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 15.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 08:20 PM
Report Created on: 30 Jul 94 11:34 AM
Last Recalib on : 30 Jul 94 11:34 AM
Multiplier : 1

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\009F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.611	43007	VV	0.053	1	15.155	VinylChloride
9.855	157285	PV	0.059	1	15.654	1,1DCEthene
11.645	407958	PV	0.052	1	15.408	trans 1,2-DCEthene
11.966	99266	VV	0.071	1	15.253	Methyl-tert-ButylEther
13.277	217244	VV	0.054	1	15.338	cis 1,2-DCEthene
15.863	427665	PV	0.057	1	15.400	Benzene
17.114	252219	PV	0.056	1	15.483	TCEthene (TCE)
17.640	280935	VV	0.059	1-R	106.255	Trifluorotoluene (Surr.)
18.507	92432	PV	0.053	1	15.173	cis 1,3DCPropene
19.393	117636	PV	0.052	1	15.009	trans-1,3-DCPropene
20.059	427197	VV	0.055	1	15.199	Toluene
21.542	194508	VV	0.056	1	15.218	Tetrachloroethene (PCE)
22.963	450652	BV	0.054	1	15.163	Chlorobenzene
23.433	387442	VV	0.055	1	15.162	Ethylbenzene
23.868	734360	VV	0.066	1	30.317	M & P Xylene
24.718	375054	VV	0.055	1	15.146	O-Xylene
25.579	659070	PV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.316	497982	VV	0.043	1	15.218	1,3 DCB
28.444	488147	VV	0.042	1	39.801	1,4 DCB
29.033	405049	VV	0.041	1	42.535	1,2 DCB
4.310	927	PV	0.046		927.131	* uncalibrated *
4.985	651	PV	0.063		651.359	* uncalibrated *
6.684	6590	VV	0.055		6590.451	* uncalibrated *
8.646	998	BV	0.082		998.327	* uncalibrated *
8.730	1670	VV	0.088		1669.627	* uncalibrated *
8.841	1190	VV	0.034		1189.649	* uncalibrated *
8.980	1456	VV	0.100		1455.697	* uncalibrated *
9.113	1710	VV	0.132		1709.703	* uncalibrated *
10.261	4355	BV	0.054		4354.986	* uncalibrated *
13.013	6007	VV	0.062		6006.817	* uncalibrated *
13.566	1140	VV	0.053		1140.239	* uncalibrated *
15.053	405	VV	0.081		404.568	* uncalibrated *
16.735	882	PV	0.069		881.648	* uncalibrated *
18.096	297	VB	0.105		297.339	* uncalibrated *
20.656	2154	VV	0.067		2153.738	* uncalibrated *
20.790	4166	VV	0.077		4165.799	* uncalibrated *
20.899	1058	VV	0.063		1058.138	* uncalibrated *
20.988	911	VV	0.062		910.773	* uncalibrated *
21.156	5087	VV	0.054		5086.987	* uncalibrated *
21.289	900	VV	0.072		900.420	* uncalibrated *
21.777	483	VV	0.066		482.550	* uncalibrated *
23.183	1033	VV	0.079		1033.288	* uncalibrated *

24.127	1180	VV	0.097	1180.350 *	uncalibrated *
24.460	749	PV	0.048	748.671 *	uncalibrated *
24.566	3460	VV	0.051	3460.372 *	uncalibrated *
25.875	928	VV	0.090	928.068 *	uncalibrated *
26.299	765	BV	0.058	765.036 *	uncalibrated *
26.443	630	VV	0.052	629.611 *	uncalibrated *
26.718	1542	VV	0.071	1541.964 *	uncalibrated *
26.846	1016	VV	0.056	1015.728 *	uncalibrated *
26.981	990	PV	0.070	989.535 *	uncalibrated *
27.284	1123	BV	0.062	1123.225 *	uncalibrated *
27.494	1126	VV	0.103	1125.551 *	uncalibrated *
27.759	1773	PV	0.048	1773.417 *	uncalibrated *
28.059	1890	PV	0.051	1890.420 *	uncalibrated *
28.598	4199	VV	0.062	4198.910 *	uncalibrated *
28.733	1374	VV	0.067	1374.236 *	uncalibrated *
28.804	1302	VV	0.052	1301.987 *	uncalibrated *
29.147	2366	VV	0.042	2365.537 *	uncalibrated *
29.213	2262	VV	0.058	2262.369 *	uncalibrated *
29.284	2358	VV	0.054	2357.909 *	uncalibrated *
29.353	2262	VV	0.107	2262.080 *	uncalibrated *
29.674	1445	VV	0.090	1445.113 *	uncalibrated *
29.757	1892	VV	0.064	1892.446 *	uncalibrated *
29.833	2752	VV	0.070	2751.715 *	uncalibrated *
30.102	4064	VV	0.080	4064.458 *	uncalibrated *
30.403	1047	VV	0.142	1047.239 *	uncalibrated *
30.538	2032	VV	0.077	2032.077 *	uncalibrated *
30.719	746	VV	0.095	745.545 *	uncalibrated *
30.867	669	VV	0.047	668.947 *	uncalibrated *
31.087	987	VV	0.113	986.533 *	uncalibrated *
31.207	974	VV	0.073	974.168 *	uncalibrated *
31.600	2065	VV	0.160	2065.240 *	uncalibrated *
31.887	1776	VV	0.130	1775.510 *	uncalibrated *
32.077	2915	VV	0.169	2915.376 *	uncalibrated *
32.368	2008	VV	0.062	2008.374 *	uncalibrated *
32.602	2077	VV	0.143	2076.930 *	uncalibrated *
32.959	650	VBA	0.085	650.064 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.640	0.017
17	25.579	25.579	0.000

Calibration table contains at least one peak with amt = 0

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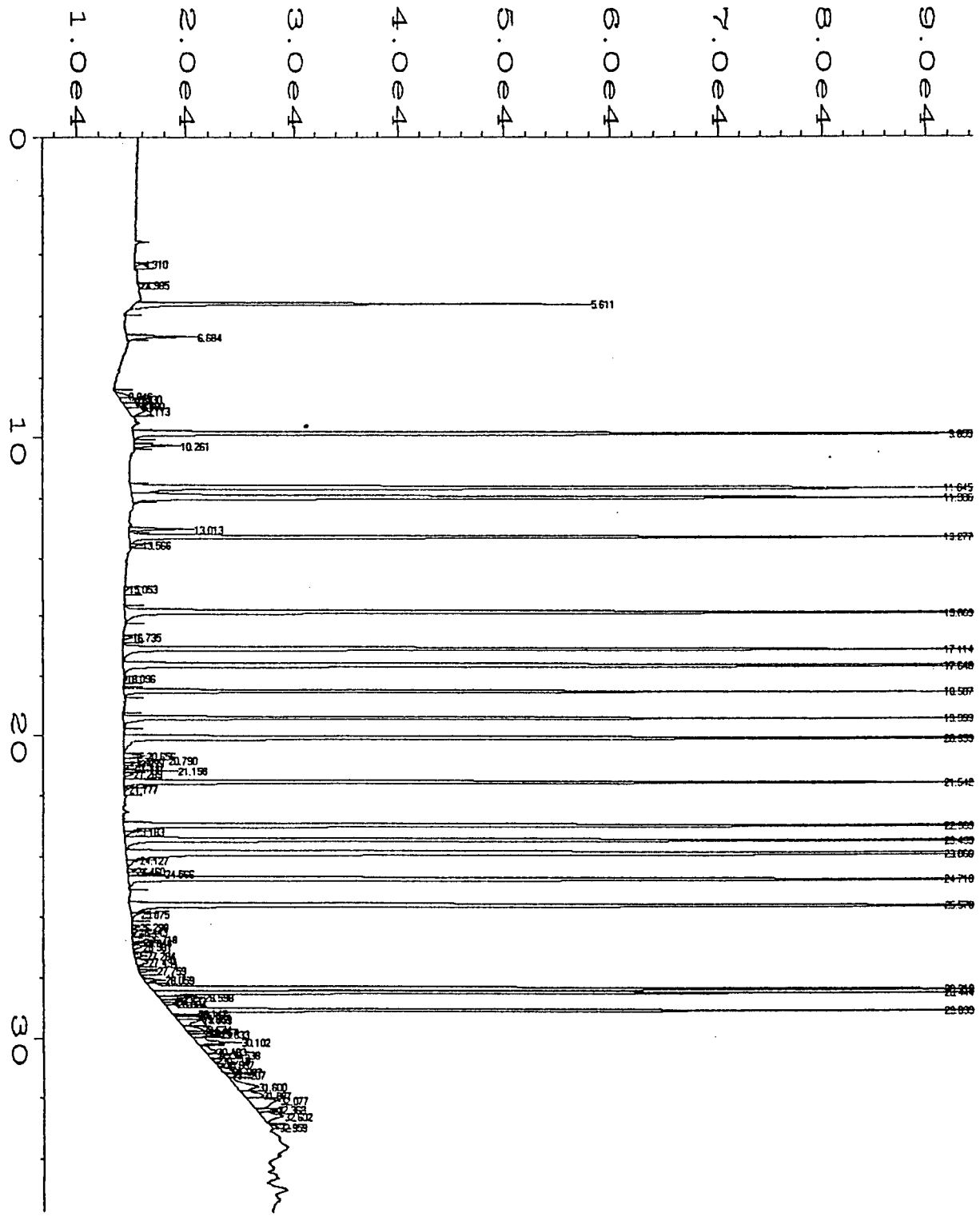

Data File Name : C:\HPCHEM\3\DATA\29JUL94\009F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 15.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 08:20 PM
Report Created on: 30 Jul 94 11:34 AM
Last Recalib on : 30 Jul 94 11:34 AM
Multiplier : 1

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\009R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 15.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 08:20 PM
Report Created on: 30 Jul 94 10:31 AM
Last Recalib on : 30 Jul 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\009R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.070	2763324	MM T	0.096	1	15.795	Chloromethane
5.635	2208887	MM T	0.076	1	15.770	Vinylchloride
6.711	972760	MF T	0.100	1	15.125	Bromomethane
7.174	1780509	FM T	0.095	1	15.428	Chloroethane
8.614	2441385	BB	0.083	1	16.742	TCFM
9.879	4524900	PV	0.067	1	16.451	1,1 DCEthene
10.284	5653951	VV	0.068	1	16.302	Methylene chloride
10.430	4537098	VV	0.100	1	310.635	unknown
11.668	5155684	VV	0.062	1	15.891	trans 1,2 DCEthene
12.165	4767860	VV	0.072	1	15.982	1,1 DCEthane
13.300	5168117	VV	0.063	1	15.788	cis 1,2 DCEthene
13.591	4824972	VV	0.064	1-R	103.142	BCM (surrogate)
13.719	6253180	VV	0.072	1	15.901	Chloroform
14.942	4382532	VV	0.063	1	15.804	1,2 DCEthane (EDC)
15.105	5020092	VV	0.077	1	16.175	1,1,1 TCEthane
15.786	5513129	VV	0.077	1	15.916	Carbon Tetrachloride
17.048	4140870	VV	0.062	1	15.733	1,2 DCPropane
17.137	5707685	VV	0.062	1	15.954	TCEthene (TCE)
17.227	4335769	VV	0.072	1	15.782	BDCM
18.531	3894001	VV	0.067	1	15.743	cis 1,3 DCPropene
19.418	3478165	VV	0.060	1	15.633	trans 1,3 DCPropene
19.698	3893942	VV	0.071	1	15.696	1,1,2 TCEthane
20.689	2623951	VV	0.076	1	15.489	DBCM
21.190	1583133	VV	0.079	1	15.282	1,2 DBrEthane (EDB)
21.566	5677349	VV	0.069	1	15.678	Tetrachloroethene (PCE)
22.987	2562536	VV	0.064	1	15.481	Chlorobenzene
24.026	1558598	VV	0.081	1	15.285	Bromoform
24.719	2546531	VV	0.067	1	15.273	1,1,2,2 TCEthane
25.609	2455471	VV	0.077	1-IR	100.000	BFB (I.S.)
28.340	4176765	VV	0.050	1	15.512	1,3 DCB
28.468	4367674	VV	0.053	1	15.522	1,4 DCB
29.057	4116380	VV	0.050	1	15.612	1,2 DCB
3.603	11315	PV	0.046		11315.38	* uncalibrated *
4.560	5244	BB	0.057		5243.788	* uncalibrated *
15.415	43371	VV	0.172		43371.49	* uncalibrated *
17.676	229935	VV	0.133		229934.6	* uncalibrated *
18.061	22077	VV	0.197		22076.60	* uncalibrated *
22.584	10106	VV	0.149		10106.43	* uncalibrated *
22.851	18174	VV	0.081		18174.13	* uncalibrated *
23.295	35616	VV	0.175		35615.70	* uncalibrated *
25.385	6868	VV	0.083		6868.212	* uncalibrated *
26.522	4545	VV	0.145		4544.901	* uncalibrated *

27.341	58665	VV	0.071	58664.75 *	uncalibrated *
29.996	5784	VV	0.132	5784.045 *	uncalibrated *
30.179	3418	VV	0.162	3418.254 *	uncalibrated *
30.427	2339	VV	0.107	2338.863 *	uncalibrated *
32.687	8562	VBA	0.197	8561.750 *	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.591	0.054
29	25.609	25.609	0.000

User Modified

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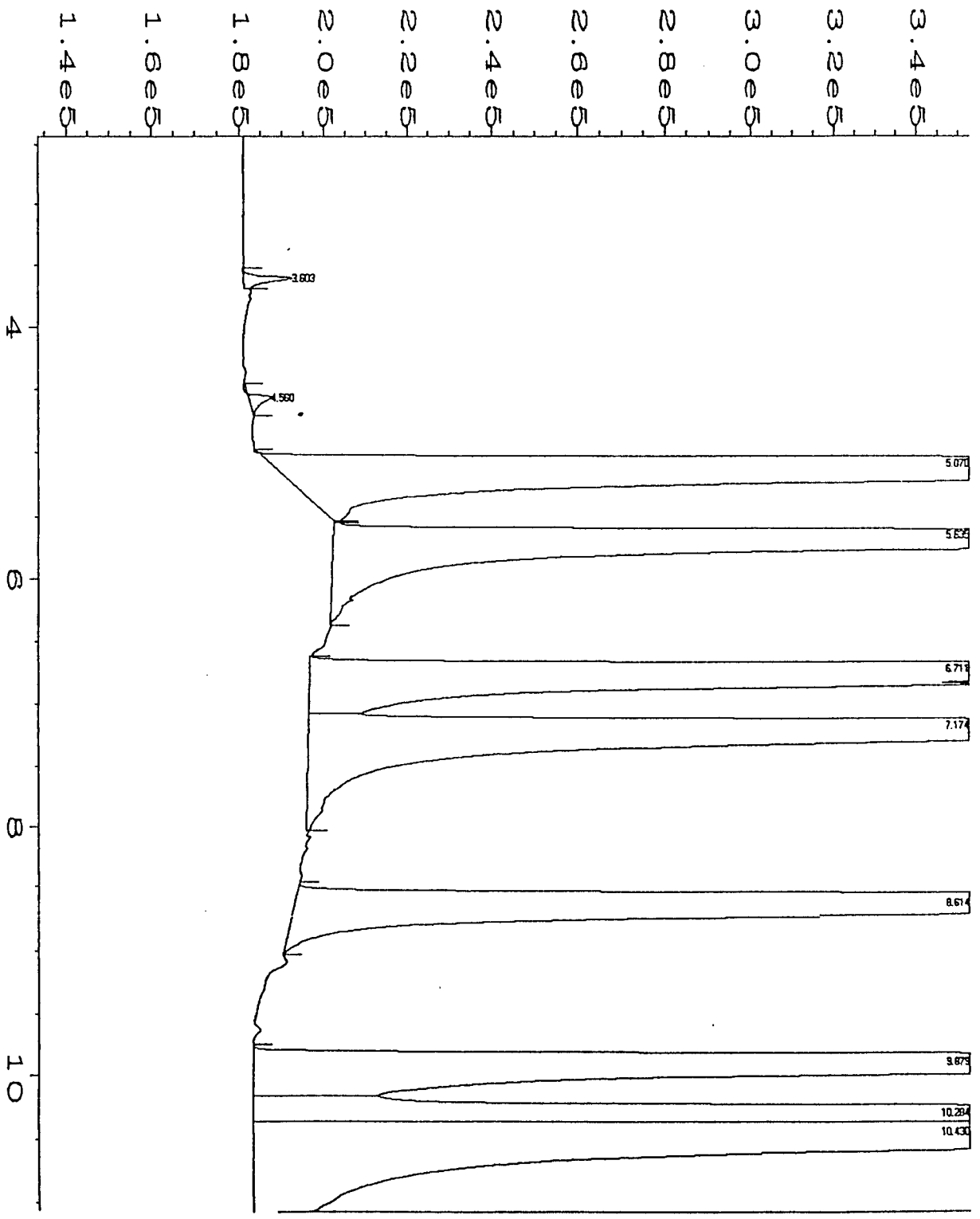
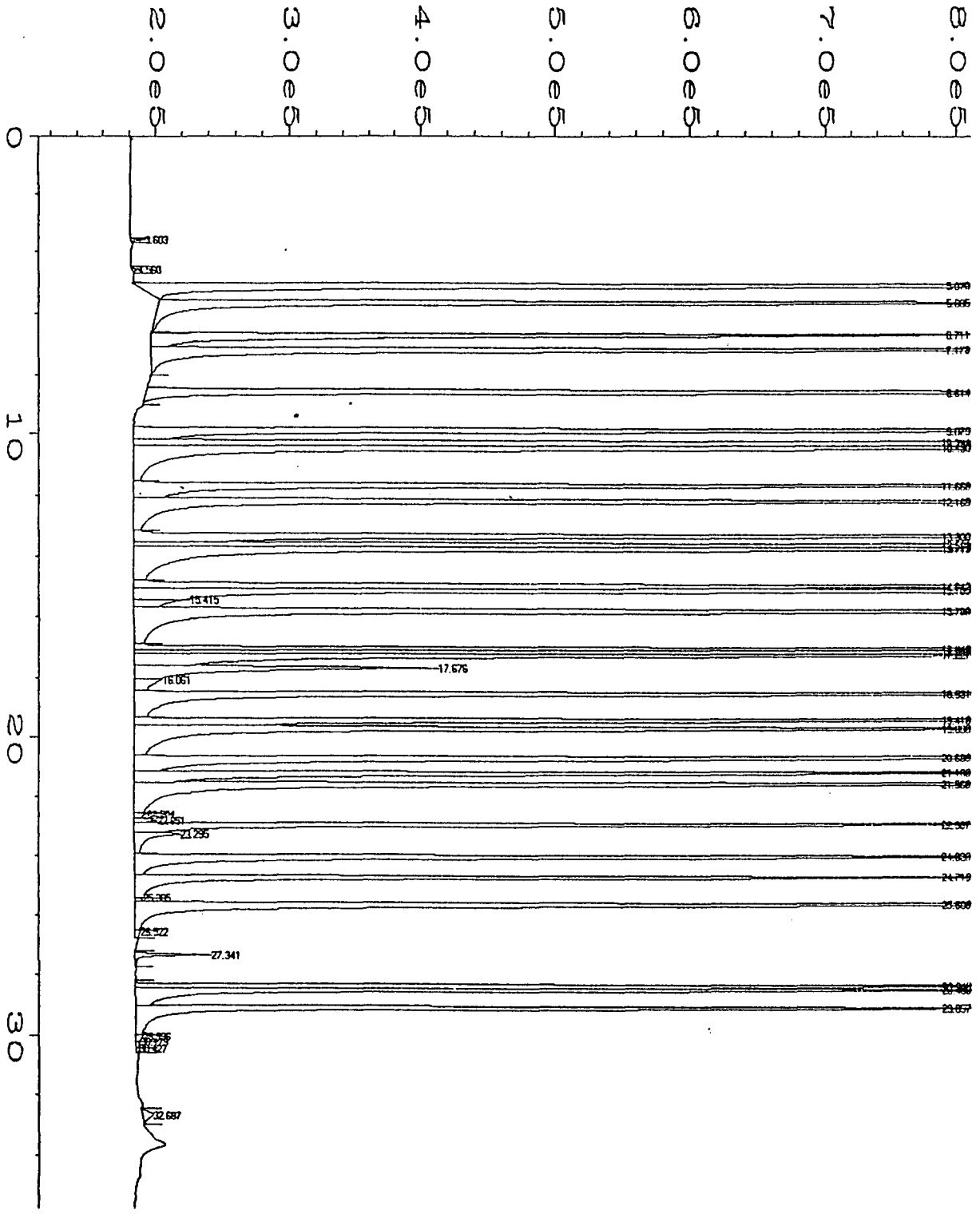


Data File Name	: C:\HPCHEM\3\DATA\29JUL94\009R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 9
Sample Name	: 15.0PPB VOA	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 08:20 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 10:31 AM	Analysis Method	: 0729ELCD.MTH
Last Recalib on	: 30 Jul 94 10:30 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100



Data File Name : C:\HPCHEM\3\DATA\29JUL94\009R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 15.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 08:20 PM
Report Created on: 30 Jul 94 09:50 AM
Last Recalib on : 30 Jul 94 09:49 AM
Multiplier : 1

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\010F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 20.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 09:03 PM
Report Created on: 30 Jul 94 11:37 AM
Last Recalib on : 30 Jul 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\010F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.594	57059	VV	0.053	1	20.174	VinylChloride
9.778	199194	VV	0.059	1	19.886	1,1DCEthene
11.590	526453	PV	0.052	1	19.970	trans 1,2-DCEthene
11.920	128049	VV	0.076	1	19.867	Methyl-tert-ButylEther
13.223	282229	VV	0.054	1	20.014	cis 1,2-DCEthene
15.806	551766	VV	0.056	1	19.970	Benzene
17.057	323498	VV	0.055	1	19.953	TCEthene (TCE)
17.586	264269	BV	0.060	1-R	95.432	Trifluorotoluene (Surr.)
18.449	121734	PV	0.053	1	20.091	cis 1,3DCPropene
19.328	157357	BV	0.051	1	20.183	trans-1,3-DCPropene
19.986	562491	BV	0.054	1	20.118	Toluene
21.461	256763	PV	0.055	1	20.158	Tetrachloroethene (PCE)
22.889	595513	PV	0.054	1	20.135	Chlorobenzene
23.363	512496	VV	0.055	1	20.145	Ethylbenzene
23.804	968798	VV	0.067	1	40.219	M & P Xylene
24.664	496325	VV	0.056	1	20.147	O-Xylene
25.536	655214	BV	0.054	1-IR	100.000	Bromofluorobenzene (I.S.)
28.307	659044	VV	0.044	1	20.139	1,3 DCB
28.437	650784	VV	0.042	1	20.150	1,4 DCB
29.030	543246	VV	0.042	1	20.232	1,2 DCB
4.299	999.8	BV	0.047		999.844	* uncalibrated *
4.973	752	PV	0.048		752.281	* uncalibrated *
6.657	8970	BV	0.062		8970.298	* uncalibrated *
8.921	1693	VV	0.053		1692.894	* uncalibrated *
9.042	4291	VV	0.106		4291.118	* uncalibrated *
9.237	704	VV	0.048		703.874	* uncalibrated *
9.334	724	VV	0.070		724.140	* uncalibrated *
9.437	671	VV	0.055		671.038	* uncalibrated *
10.199	5353	VV	0.060		5353.224	* uncalibrated *
12.087	816	VV	0.051		816.013	* uncalibrated *
12.814	493	BV	0.061		492.736	* uncalibrated *
12.957	2930	VV	0.059		2930.282	* uncalibrated *
13.086	1397	VV	0.061		1396.814	* uncalibrated *
13.511	1062	VV	0.056		1062.214	* uncalibrated *
14.997	562	VV	0.069		562.023	* uncalibrated *
16.676	1620	PV	0.069		1620.357	* uncalibrated *
18.752	1152	VV	0.067		1152.164	* uncalibrated *
18.884	526	VV	0.077		525.972	* uncalibrated *
19.064	493	VV	0.060		492.816	* uncalibrated *
20.183	930	VV	0.061		929.819	* uncalibrated *
20.292	707	VV	0.091		706.857	* uncalibrated *
20.576	2996	VV	0.074		2996.279	* uncalibrated *

20.707	6045	VV	0.077	6045.272	* uncalibrated *
20.816	3849	VV	0.059	3849.159	* uncalibrated *
20.911	3148	VV	0.067	3148.409	* uncalibrated *
21.075	6980	VV	0.054	6979.623	* uncalibrated *
21.223	1122	VV	0.075	1122.398	* uncalibrated *
21.965	688	BV	0.074	688.465	* uncalibrated *
23.114	2644	VV	0.091	2644.319	* uncalibrated *
24.063	2802	VV	0.076	2801.656	* uncalibrated *
24.401	2533	PV	0.056	2532.893	* uncalibrated *
24.510	3397	VV	0.054	3397.100	* uncalibrated *
25.844	965	VV	0.083	965.109	* uncalibrated *
25.944	444	VV	0.071	444.184	* uncalibrated *
26.264	2526	VV	0.069	2526.110	* uncalibrated *
26.408	738	VV	0.057	738.497	* uncalibrated *
26.512	905	VV	0.061	905.351	* uncalibrated *
26.694	1703	VV	0.075	1703.106	* uncalibrated *
26.817	1974	VV	0.059	1973.573	* uncalibrated *
26.945	3403	VV	0.071	3402.910	* uncalibrated *
27.260	2007	PV	0.064	2006.719	* uncalibrated *
27.421	2065	VV	0.053	2064.907	* uncalibrated *
27.497	2812	VV	0.065	2811.967	* uncalibrated *
27.745	5091	PV	0.048	5090.698	* uncalibrated *
28.048	3981	PV	0.050	3981.359	* uncalibrated *
28.181	1482	VV	0.058	1481.703	* uncalibrated *
28.591	22799	VV	0.050	22798.72	* uncalibrated *
28.731	2799	VV	0.066	2799.466	* uncalibrated *
28.802	3127	VV	0.059	3126.840	* uncalibrated *
29.149	5671	VV	0.051	5671.457	* uncalibrated *
29.210	4921	VV	0.047	4921.390	* uncalibrated *
29.280	4913	VV	0.057	4913.120	* uncalibrated *
29.351	3979	VV	0.074	3978.682	* uncalibrated *
29.511	3984	VV	0.080	3984.006	* uncalibrated *
29.623	4321	VV	0.091	4321.062	* uncalibrated *
29.669	4339	VV	0.054	4338.708	* uncalibrated *
29.751	4581	VV	0.056	4580.889	* uncalibrated *
29.835	11169	VV	0.066	11168.91	* uncalibrated *
29.960	3640	VV	0.075	3640.452	* uncalibrated *
30.108	12828	VV	0.072	12828.28	* uncalibrated *
30.288	3970	VV	0.091	3970.157	* uncalibrated *
30.409	4576	VV	0.098	4576.252	* uncalibrated *
30.526	4705	VV	0.120	4705.020	* uncalibrated *
30.750	2917	VV	0.091	2916.705	* uncalibrated *
30.878	3682	VV	0.080	3682.309	* uncalibrated *
31.006	1985	VV	0.058	1984.514	* uncalibrated *
31.108	2040	VV	0.097	2040.216	* uncalibrated *
31.230	2599	VV	0.107	2599.104	* uncalibrated *
31.391	2004	VV	0.049	2003.916	* uncalibrated *
31.459	2095	VV	0.065	2094.848	* uncalibrated *
31.626	4144	VV	0.151	4144.468	* uncalibrated *
31.790	2648	VV	0.043	2648.267	* uncalibrated *
31.939	2697	VV	0.113	2697.161	* uncalibrated *
32.051	4975	VV	0.057	4974.949	* uncalibrated *
32.103	3490	VV	0.056	3490.112	* uncalibrated *
32.224	1617	VV	0.097	1617.229	* uncalibrated *
32.407	4435	VV	0.057	4434.876	* uncalibrated *
32.649	1911	VV	0.116	1910.584	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference

8		17.623	17.586	-0.037
17		25.536	25.536	0.000

Calibration table contains at least one peak with amt = 0

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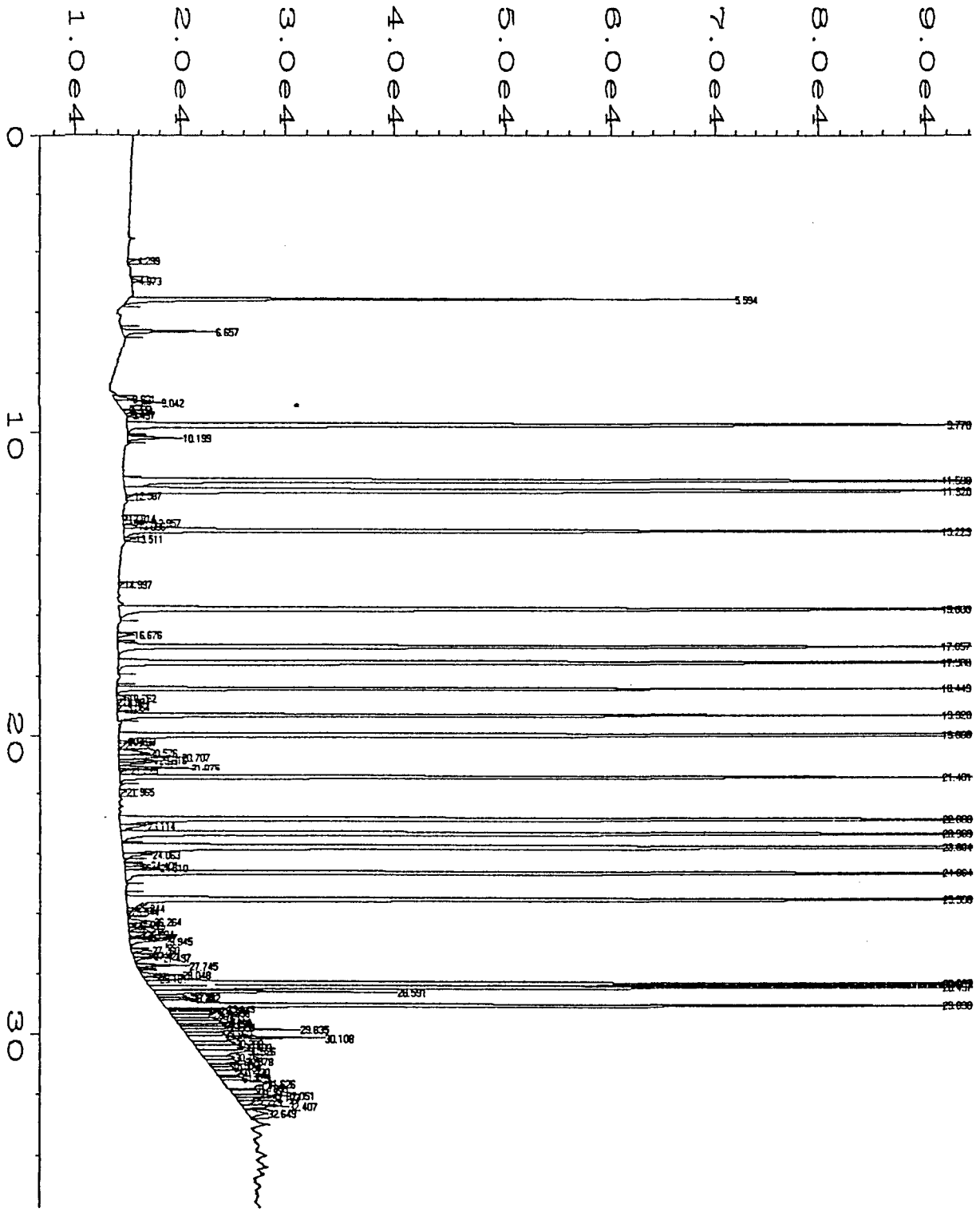

Data File Name : C:\HPCHEM\3\DATA\29JUL94\010F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 20.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 09:03 PM
Report Created on: 30 Jul 94 11:37 AM
Last Recalib on : 30 Jul 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\010R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : 20.0PPB VOA
Run Time Bar Code:
Acquired on : 29 Jul 94 09:03 PM
Report Created on: 30 Jul 94 10:06 AM
Last Recalib on : 30 Jul 94 10:06 AM
Multiplier : 1

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\010R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.053	3485826	MM T	0.088	1	18.167	Chloromethane
5.617	2776960	MM T	0.091	1	18.088	Vinylchloride
6.683	1329761	MF T	0.102	1	18.364	Bromomethane
7.144	2339802	FM T	0.096	1	18.202	Chloroethane
8.568	2791390	MM T	0.093	1	18.016	TCFM
9.801	5305561	PV	0.072	1	18.000	1,1 DCEthene
10.222	6550541	VV	0.070	1	17.842	Methylene chloride
10.372	4186323	VV	0.102	1	279.953	unknown
11.613	6344704	VV	0.062	1	17.996	trans 1,2 DCEthene
12.111	5826053	VV	0.073	1	18.014	1,1 DCEthane
13.246	6416978	VV	0.064	1	17.999	cis 1,2 DCEthene
13.537	4642336	VV	0.062	1-R	96.931	BCM (surrogate)
13.666	7590838	VV	0.073	1	17.917	Chloroform
14.887	5390042	VV	0.062	1	17.948	1,2 DCEthane (EDC)
15.049	5974235	VV	0.081	1	17.960	1,1,1 TCEthane
15.729	6747350	VV	0.079	1	17.972	Carbon Tetrachloride
16.991	5179160	VV	0.061	1	18.023	1,2 DCPropane
17.079	6943788	VV	0.062	1	17.954	TCEthene (TCE)
17.171	5426756	VV	0.072	1	18.074	BDCM
18.473	4910777	VV	0.065	1	18.125	cis 1,3 DCPropene
19.352	4392746	VV	0.060	1	18.029	trans 1,3 DCPropene
19.629	4883046	VV	0.069	1	18.029	1,1,2 TCEthane
20.610	3385189	VV	0.076	1	18.079	DBCM
21.107	2105483	VV	0.078	1	18.191	1,2 DBrEthane (EDB)
21.484	7101820	VV	0.069	1	17.981	Tetrachloroethene (PCE)
22.913	3303459	VV	0.063	1	18.079	Chlorobenzene
23.960	2092642	VV	0.080	1	18.276	Bromoform
24.665	3304437	VV	0.069	1	17.982	1,1,2,2 TCEthane
25.566	2513931	VV	0.078	1-IR	100.000	BFB (I.S.)
28.331	5357174	PV	0.052	1	18.098	1,3 DCB
28.460	5580575	VV	0.052	1	18.047	1,4 DCB
29.053	5179699	VV	0.052	1	17.990	1,2 DCB
3.610	7119	BV	0.050		7118.750	* uncalibrated *
4.546	6450	BB	0.065		6450.019	* uncalibrated *
9.285	5192	BV	0.066		5192.424	* uncalibrated *
14.787	40357	VV	0.037		40356.69	* uncalibrated *
16.402	19994	VV	0.065		19993.51	* uncalibrated *
16.489	21694	VV	0.157		21694.48	* uncalibrated *
17.619	237735	VV	0.143		237735.5	* uncalibrated *
18.122	19200	VV	0.152		19199.52	* uncalibrated *
22.501	13898	VV	0.151		13897.99	* uncalibrated *
22.774	26028	VV	0.079		26028.34	* uncalibrated *

23.221	54655	VV	0.166	54654.81	*	uncalibrated *
26.491	5515	VV	0.158	5515.017	*	uncalibrated *
26.816	3896	VV	0.186	3896.267	*	uncalibrated *
27.317	91695	VV	0.072	91695.48	*	uncalibrated *
28.717	43722	VV	0.121	43721.98	*	uncalibrated *
30.000	7017	VV	0.155	7017.112	*	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.537	0.000
29	25.566	25.566	0.000

User Modified

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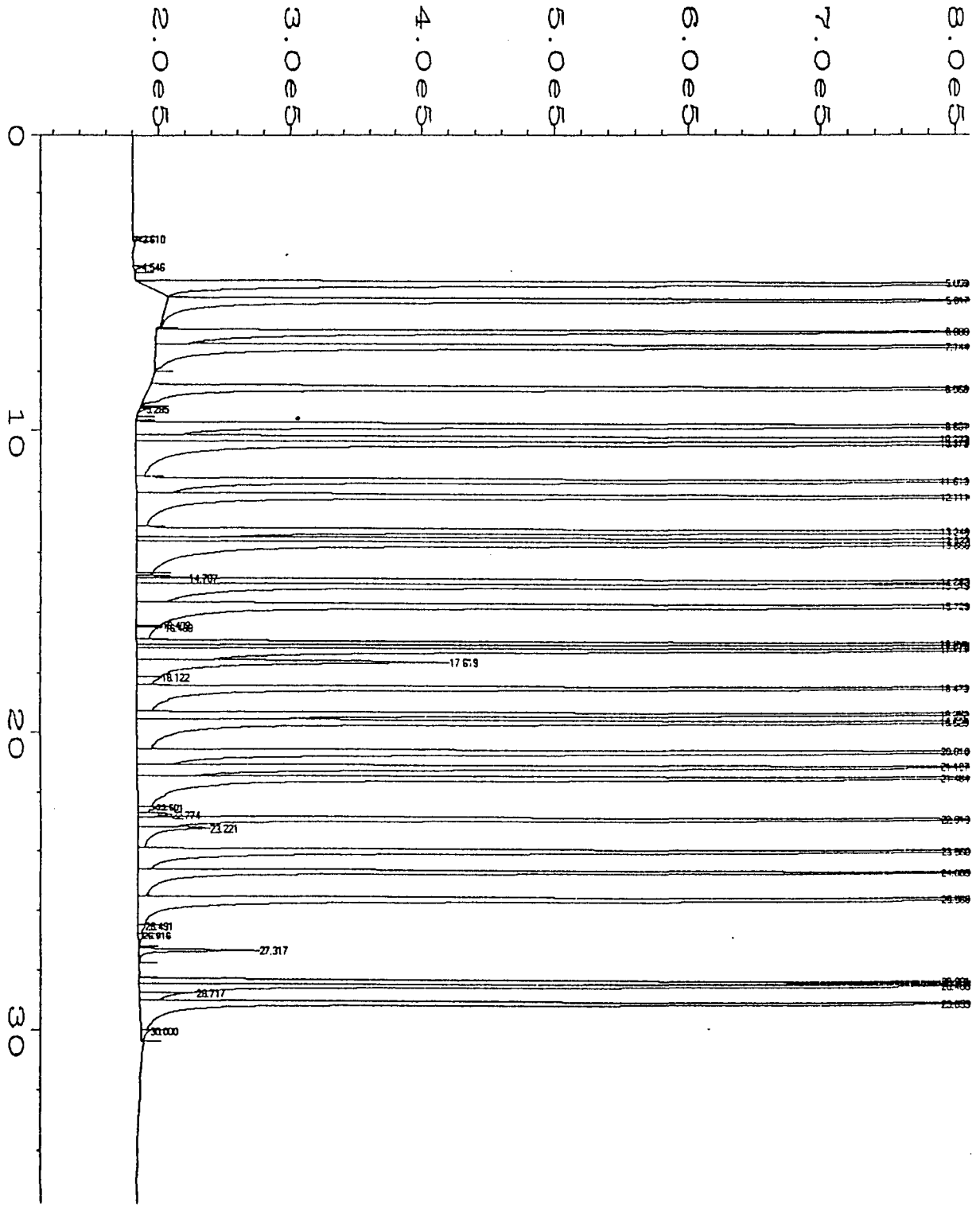


Data File Name	: C:\HPCHEM\3\DATA\29JUL94\010R0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 10
Sample Name	: 20.0PPB VOA	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Jul 94 09:03 PM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 10:06 AM	Analysis Method	: 0729ELCD.MTH
Last Recalib on	: 30 Jul 94 10:06 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

LABORATORY CONTROL SAMPLE / CONTINUING CALIBRATIONS

EPA - 8010
Continuing Calibration

ATI ID: 011R0101.D
DATE OF ANALYSIS : JULY 29, 1994
TIME OF ANALYSIS: 09:46

COMPOUNDS	Result	True Value	% Recovery	Acceptance Range
CHLOROMETHANE	9.799	10	98	6.0-14.1
VINYLCHLORIDE	9.843	10	98	6.9-13.2
BROMOMETHANE	10.382	10	104	5.9-14.2
CHLOROETHANE	10.717	10	107	7.7-12.3
TCFM	11.504	10	115	6.7-13.4
1,1 DICHLOROETHENE	10.246	10	102	6.3-13.7
METHYLENE CHLORIDE	10.747	10	107	7.8-12.3
t 1,2 DICHLOROETHENE	10.355	10	104	6.4-13.6
1,1 DICHLOROETHENE	10.408	10	104	6.3-13.7
c 1,2 DICHLOROETHENE	10.476	10	105	8.5-11.5*
CHLOROFORM	10.744	10	107	7.5-12.5
1,2 DICHLOROETHANE	10.559	10	106	7.2-12.9
1,1,1 TRICHLOROETHANE	10.422	10	104	7.1-12.9
CARBON TETRACHLORIDE	10.501	10	105	6.9-13.2
1,2 DICHLOROPROPANE	10.731	10	107	7.4-12.6
TRICHLORETHENE	10.856	10	109	7.7-12.3
BROMODICHLOROMETHANE	10.699	10	107	7.6-12.4
c 1,3 DICHLOROPROPENE	11.263	10	113	6.4-13.6
t 1,3 DICHLOROPROPENE	10.141	10	101	6.4-13.6
1,1,2 TRICHLOROETHANE	10.686	10	107	7.9-12.2
DIBROMOCHLOROMETHANE	10.417	10	104	6.6-13.5
1,2 DIBROMOETHANE	10.542	10	105	8.5-11.5*
TETRACHLOROETHENE	10.63	10	106	7.0-13.0
CHLOROBENZENE	10.518	10	105	7.2-12.8
BROMOFORM	10.115	10	101	7.4-12.7
1,1,2,2, TETRACHLOROETHANE	10.625	10	106	4.9-15.1
1,3 DICHLOROBENZENE	10.102	10	101	5.0-15.1
1,4 DICHLOROBENZENE	10.237	10	102	7.0-13.1
1,2 DICHLOROBENZENE	10.199	10	102	7.0-13.0

* DEFAULT CRITERIA, NO CRITERIA ESTABLISHED BY EPA IN SW-846 METHOD 8010

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\011F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 29 Jul 94 09:46 PM
Report Created on: 30 Jul 94 11:51 AM
Last Recalib on : 30 Jul 94 11:37 AM
Multiplier : 1

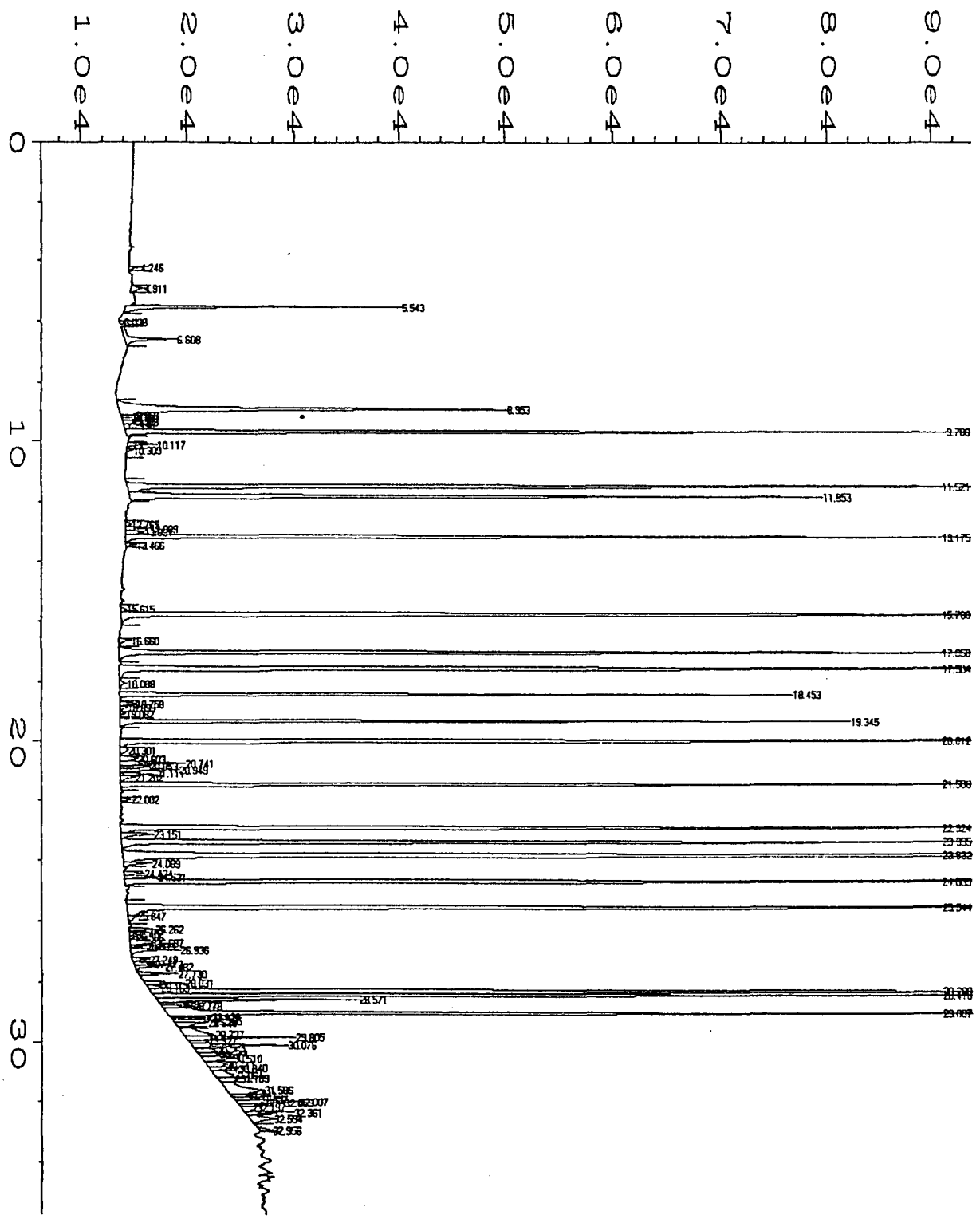
Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\011F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.543	26310	VV	0.054	1	9.937	VinylChloride
9.700	87287	VV	0.060	1	9.344	1,1DCEthene
11.521	243831	BV	0.052	1	9.854	trans 1,2-DCEthene
11.853	65111	VV	0.077	1	10.589	Methyl-tert-ButylEther
13.175	130714	VV	0.054	1	9.872	cis 1,2-DCEthene
15.788	264195	VV	0.057	1	10.161	Benzene
17.050	155439	VV	0.056	1	10.199	TCEthene (TCE)
17.584	260131	VV	0.061	1-R	101.879	Trifluorotoluene (Surr.)
18.453	63247	VV	0.054	1	11.076	cis 1,3DCPropene
19.345	68965	PV	0.052	1	9.394	trans-1,3-DCPropene
20.012	270265	BV	0.055	1	10.263	Toluene
21.500	119861	VV	0.056	1	10.048	Tetrachloroethene (PCE)
22.924	281926	PV	0.054	1	10.133	Chlorobenzene
23.395	239520	VV	0.056	1	10.021	Ethylbenzene
23.832	477987	VV	0.067	1	21.048	M & P Xylene
24.683	242854	VV	0.055	1	10.469	O-Xylene
25.544	618227	BV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.289	304861	VV	0.044	1	9.843	1,3 DCB
28.418	299682	VV	0.043	1	9.845	1,4 DCB
29.007	250316	VV	0.043	1	9.842	1,2 DCB
4.246	1110	BV	0.044		1110.224	* uncalibrated *
4.911	1278	BV	0.074		1278.310	* uncalibrated *
6.038	399	PV	0.091		399.485	* uncalibrated *
6.608	5026	VV	0.084		5025.778	* uncalibrated *
8.953	36683	BV	0.086		36682.89	* uncalibrated *
9.150	1406	VV	0.060		1405.788	* uncalibrated *
9.251	1440	VV	0.074		1439.878	* uncalibrated *
9.368	1235	VV	0.077		1234.597	* uncalibrated *
9.448	819	VV	0.111		819.290	* uncalibrated *
10.117	2827	BV	0.062		2826.918	* uncalibrated *
10.309	665	VV	0.062		665.260	* uncalibrated *
12.765	612	BV	0.060		612.134	* uncalibrated *
12.909	2352	VV	0.064		2352.251	* uncalibrated *
13.031	1818	VV	0.066		1817.655	* uncalibrated *
13.466	1035	VV	0.058		1035.287	* uncalibrated *
15.615	586	PV	0.073		586.468	* uncalibrated *
16.660	1210	PV	0.076		1209.790	* uncalibrated *
18.088	676	VV	0.086		675.594	* uncalibrated *
18.758	1618	VV	0.068		1618.350	* uncalibrated *
18.899	811	VV	0.075		811.393	* uncalibrated *
19.082	624	VV	0.062		623.616	* uncalibrated *
20.301	773	VV	0.140		772.840	* uncalibrated *

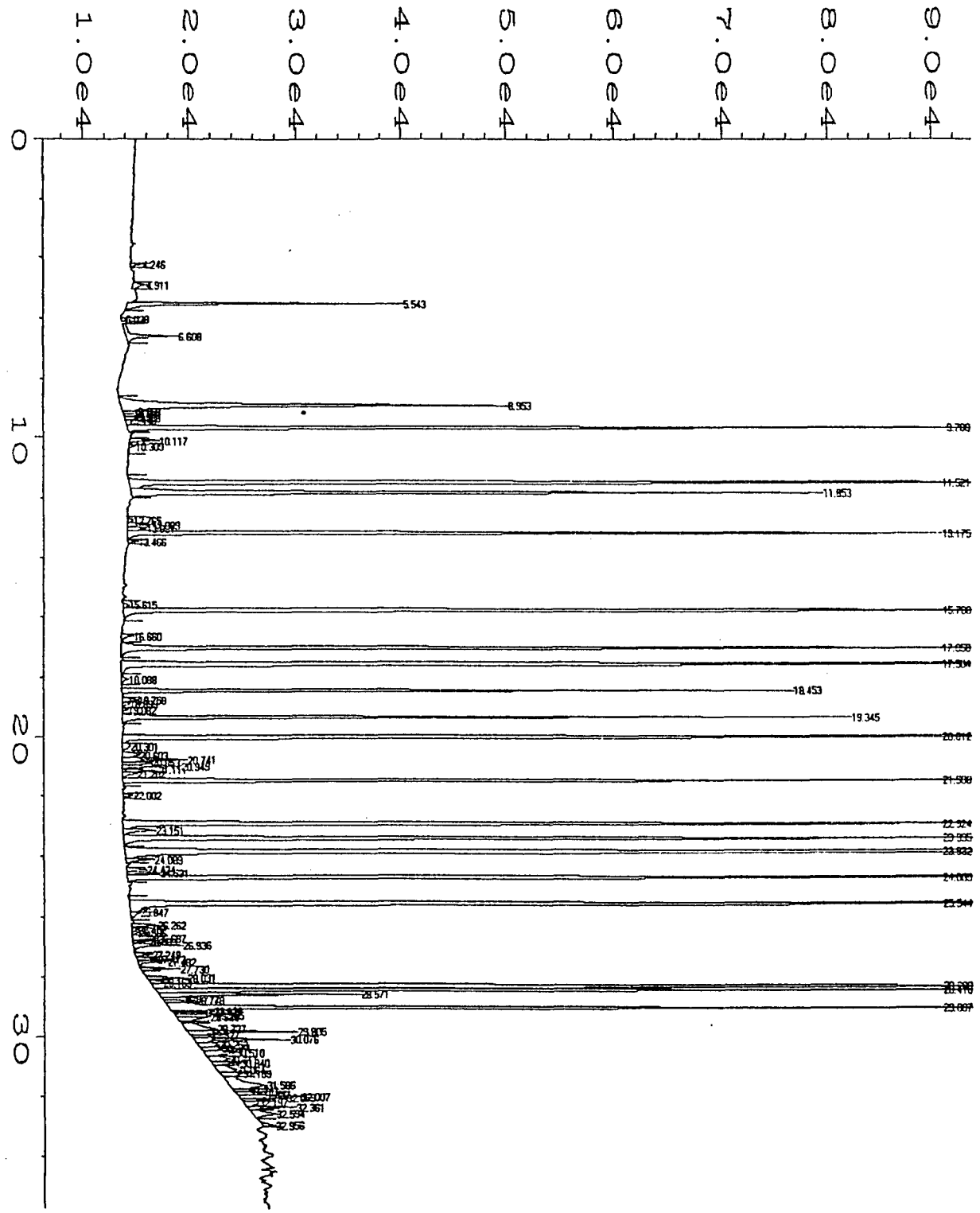
20.603	1728	VV	0.084	1727.999	*	uncalibrated *
20.741	6227	VV	0.076	6227.333	*	uncalibrated *
20.853	2822	VV	0.056	2822.485	*	uncalibrated *
20.949	5697	VV	0.069	5697.104	*	uncalibrated *
21.111	3442	VV	0.054	3442.028	*	uncalibrated *
21.262	1449	VV	0.086	1448.502	*	uncalibrated *
22.002	1035	BV	0.069	1035.244	*	uncalibrated *
23.151	3171	VV	0.083	3170.525	*	uncalibrated *
24.089	2801	VV	0.071	2800.674	*	uncalibrated *
24.424	1975	PV	0.058	1975.471	*	uncalibrated *
24.531	3240	VV	0.053	3239.990	*	uncalibrated *
25.847	958	VV	0.111	957.797	*	uncalibrated *
26.262	2602	VV	0.064	2602.132	*	uncalibrated *
26.407	685	VV	0.065	684.794	*	uncalibrated *
26.506	640	VV	0.064	640.243	*	uncalibrated *
26.687	2489	VV	0.087	2488.756	*	uncalibrated *
26.809	1504	VV	0.059	1504.037	*	uncalibrated *
26.936	4704	PV	0.069	4703.985	*	uncalibrated *
27.249	1695	PV	0.065	1694.785	*	uncalibrated *
27.413	1976	VV	0.064	1975.875	*	uncalibrated *
27.482	2882	VV	0.072	2882.280	*	uncalibrated *
27.730	3794	PV	0.049	3793.866	*	uncalibrated *
28.031	3944	PV	0.046	3944.437	*	uncalibrated *
28.163	1284	VV	0.055	1284.317	*	uncalibrated *
28.571	19249	VV	0.049	19249.24	*	uncalibrated *
28.712	2709	VV	0.067	2708.845	*	uncalibrated *
28.778	3015	VV	0.057	3015.102	*	uncalibrated *
29.129	3983	VV	0.050	3983.090	*	uncalibrated *
29.193	3615	VV	0.049	3614.645	*	uncalibrated *
29.255	3810	VV	0.056	3809.777	*	uncalibrated *
29.326	3239	VV	0.083	3238.769	*	uncalibrated *
29.727	2998	VV	0.112	2997.521	*	uncalibrated *
29.805	10351	VV	0.058	10350.64	*	uncalibrated *
29.927	1863	VV	0.079	1863.051	*	uncalibrated *
30.076	9069	VV	0.058	9069.348	*	uncalibrated *
30.253	1943	VV	0.102	1943.041	*	uncalibrated *
30.374	1857	VV	0.088	1857.142	*	uncalibrated *
30.510	2970	VV	0.097	2969.682	*	uncalibrated *
30.711	1840	VV	0.110	1840.380	*	uncalibrated *
30.840	2731	VV	0.075	2731.035	*	uncalibrated *
31.064	1796	VV	0.126	1796.337	*	uncalibrated *
31.189	2099	VV	0.108	2099.293	*	uncalibrated *
31.586	3491	VV	0.170	3491.302	*	uncalibrated *
31.741	1665	VV	0.055	1665.467	*	uncalibrated *
31.897	2294	VV	0.105	2294.386	*	uncalibrated *
32.007	5906	VV	0.060	5905.525	*	uncalibrated *
32.059	4299	VV	0.060	4299.164	*	uncalibrated *
32.197	1409	VV	0.111	1408.990	*	uncalibrated *
32.361	4538	VV	0.057	4537.622	*	uncalibrated *
32.594	2225	VV	0.122	2224.573	*	uncalibrated *
32.956	1179	PBA	0.075	1178.785	*	uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
8	17.623	17.584	-0.039
17	25.536	25.544	0.008



Data File Name : C:\HPCHEM\3\DATA\29JUL94\011F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 29 Jul 94 09:46 PM
Report Created on: 30 Jul 94 11:51 AM
Last Recalib on : 30 Jul 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100



Data File Name : C:\HPCHEM\3\DATA\29JUL94\011F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 29 Jul 94 09:46 PM
Report Created on: 30 Jul 94 11:51 AM
Last Recalib on : 30 Jul 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727PID.MTH
Sample Amount : 0
ISTD Amount : 100

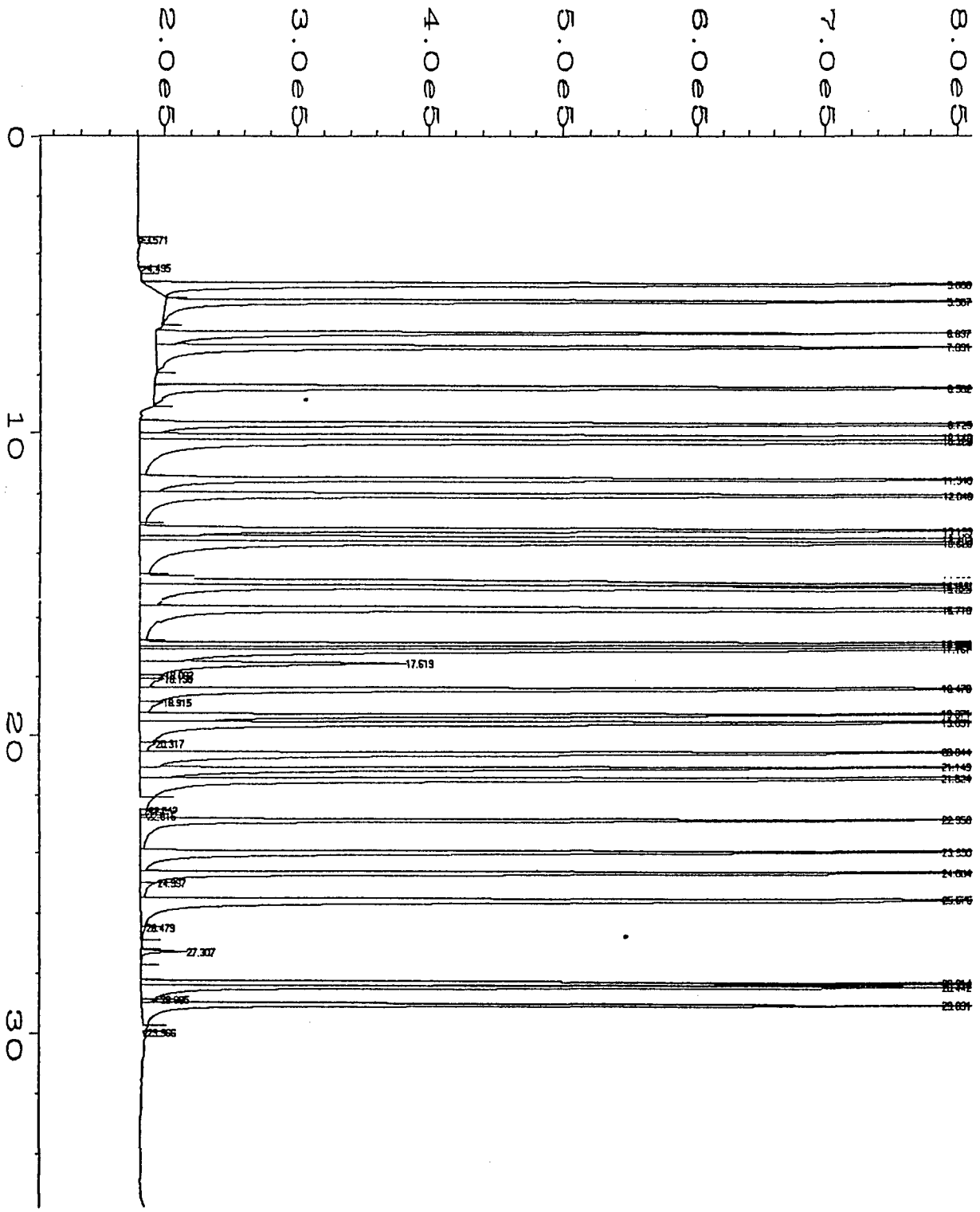
Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\011R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 29 Jul 94 09:46 PM
Report Created on: 30 Jul 94 10:57 AM
Last Recalib on : 30 Jul 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\011R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
5.000	1690238	MM T	0.088	1	9.799	Chloromethane
5.567	1352762	MM T	0.075	1	9.843	Vinylchloride
6.637	653581	MF T	0.100	1	10.382	Bromomethane
7.091	1200731	FM T	0.094	1	10.717	Chloroethane
8.502	1570498	MM T	0.090	1	11.504	TCFM
9.725	2662145	PV	0.067	1	10.246	1,1 DCEthene
10.288	3758571	VV	0.096	1	10.747	Methylene chloride
10.378	* not found *			1		unknown
11.546	3323600	VV	0.062	1	10.355	trans 1,2 DCEthene
12.049	3076312	VV	0.073	1	10.408	1,1 DCEthane
13.199	3398212	VV	0.063	1	10.476	cis 1,2 DCEthene
13.492	4560889	VV	0.064	1-R	100.442	BCM (surrogate)
13.623	4265757	VV	0.072	1	10.744	Chloroform
14.860	2939879	VV	0.063	1	10.559	1,2 DCEthane (EDC)
15.023	3277760	VV	0.079	1	10.422	1,1,1 TCEthane
15.710	3614514	VV	0.078	1	10.501	Carbon Tetrachloride
16.985	2791293	VV	0.061	1	10.731	1,2 DCPropane
17.074	3864840	VV	0.061	1	10.856	TCEthene (TCE)
17.167	2897030	VV	0.072	1	10.699	BDCM
18.479	2807903	VV	0.064	1	11.263	cis 1,3 DCPropene
19.371	2236180	VV	0.061	1	10.141	trans 1,3 DCPropene
19.651	2631513	VV	0.069	1	10.686	1,1,2 TCEthane
20.644	1724424	VV	0.076	1	10.417	DBCM
21.149	1062667	VV	0.078	1	10.542	1,2 DBrEthane (EDB)
21.524	3822625	VV	0.068	1	10.630	Tetrachloroethene (PCE)
22.950	1708748	VV	0.066	1	10.518	Chlorobenzene
23.990	996623	VV	0.079	1	10.115	Bromoform
24.684	1757854	VV	0.068	1	10.625	1,1,2,2 TCEthane
25.575	2383487	VV	0.076	1-IR	100.000	BFB (I.S.)
28.314	2708328	BV	0.051	1	10.102	1,3 DCB
28.442	2852932	VV	0.053	1	10.237	1,4 DCB
29.031	2686001	VV	0.050	1	10.199	1,2 DCB
3.571	5166	PV	0.056		5166.426	* uncalibrated *
4.495	6296	BB	0.065		6295.733	* uncalibrated *
10.140	3743190	VV	0.065		3743190.	* uncalibrated *
17.619	200044	VV	0.126		200044.0	* uncalibrated *
18.002	18450	VV	0.079		18450.46	* uncalibrated *
18.130	18098	VV	0.157		18097.67	* uncalibrated *
18.915	17279	VV	0.186		17279.30	* uncalibrated *
20.317	11685	VV	0.155		11684.82	* uncalibrated *
22.543	6243	VV	0.154		6243.288	* uncalibrated *
22.815	5498	VV	0.086		5497.881	* uncalibrated *



Data File Name : C:\HPCHEM\3\DATA\29JUL94\011R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 29 Jul 94 09:46 PM
Report Created on: 30 Jul 94 10:58 AM
Last Recalib on : 30 Jul 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

EPA - 8020

Continuing Calibration

ATI ID: 021F0101.D
DATE OF ANALYSIS : JULY 30, 1994
TIME OF ANALYSIS: 04:54

COMPOUNDS	Result	True Value	% Recovery	Acceptance Range
VINYL CHLORIDE	10.322	10	103	6.9-13.2**
1,1 DICHLOROETHENE	9.713	10	97	6.3-13.7**
t 1,2 DICHLOROETHENE	10.28	10	102	6.4-13.6**
METHYL-t-BUTYL ETHER	9.393	10	94	8.5-11.5*
c 1,2 DICHLOROETHENE	10.218	10	102	6.4-13.6**
BENZENE	10.537	10	105	7.7-12.3
TRICHLOROETHENE	10.319	10	103	7.7-12.3**
c 1,3 DICHLOROPROPENE	10.898	10	109	6.4-13.6**
t 1,3 DICHLOROPROPENE	8.619	10	86	6.4-13.6**
TOLUENE	10.465	10	105	7.75-12.25
TETRACHLOROETHENE	10.377	10	107	7.0-13.0**
CHLOROBENZENE	10.408	10	104	8.05-11.95
ETHYLBENZENE	10.398	10	104	6.3-13.7
M & P XYLENE	21.865	20	109	17-23*
O XYLENE	10.829	10	108	8.5-11.5*
1,3 DICHLOROBENZENE	10.104	10	101	7.25-12.8
1,4 DICHLOROBENZENE	10.165	10	102	6.95-13.7
1,2 DICHLOROBENZENE	10.103	10	101	6.8-13.2

* DEFAULT CRITERIA, NO CRITERIA ESTABLISHED BY EPA IN SW-846 METHOD 8020
** REFER TO SW-846 METHOD 8010

EPA - 8010

Continuing Calibration

ATI ID: 011R0101.D
DATE OF ANALYSIS : JULY 29, 1994
TIME OF ANALYSIS: 09:46

COMPOUNDS	Result	True Value	% Recovery	Acceptance Range	
CHLOROMETHANE	9.81	10	98	6.0-14.1	
VINYLCHLORIDE	9.719	10	97	6.9-13.2	
BROMOMETHANE	9.973	10	100	5.9-14.2	
CHLOROETHANE	10.958	10	110	7.7-12.3	
TCFM	17.883	10	179	6.7-13.4	A
1,1 DICHLOROETHENE	10.362	10	104	6.3-13.7	
METHYLENE CHLORIDE	10.984	10	110	7.8-12.3	
t 1,2 DICHLOROETHENE	11.014	10	110	6.4-13.6	
1,1 DICHLOROETHENE	11.04	10	110	6.3-13.7	
c 1,2 DICHLOROETHENE	11.192	10	112	8.5-11.5*	
CHLOROFORM	11.597	10	116	7.5-12.5	
1,2 DICHLOROETHANE	10.483	10	105	7.2-12.9	
1,1,1 TRICHLOROETHANE	11.216	10	112	7.1-12.9	
CARBON TETRACHLORIDE	11.295	10	113	6.9-13.2	
1,2 DICHLOROPROPANE	7.912	10	79	7.4-12.6	
TRICHLORETHENE	15.703	10	157	7.7-12.3	A
BROMODICHLOROMETHANE	10.675	10	107	7.6-12.4	
c 1,3 DICHLOROPROPENE	11.726	10	117	6.4-13.6	
t 1,3 DICHLOROPROPENE	9.854	10	99	6.4-13.6	
1,1,2 TRICHLOROETHANE	10.652	10	107	7.9-12.2	
DIBROMOCHLOROMETHANE	10.296	10	103	6.6-13.5	
1,2 DIBROMOETHANE	9.807	10	98	8.5-11.5*	
TETRACHLOROETHENE	11.398	10	114	7.0-13.0	
CHLOROBENZENE	11.307	10	113	7.2-12.8	
BROMOFORM	9.214	10	92	7.4-12.7	
1,1,2,2, TETRACHLOROETHANE	9.907	10	99	4.9-15.1	
1,3 DICHLOROBENZENE	10.684	10	107	5.0-15.1	
1,4 DICHLOROBENZENE	10.843	10	108	7.0-13.1	
1,2 DICHLOROBENZENE	10.732	10	107	7.0-13.0	

* DEFAULT CRITERIA, NO CRITERIA ESTABLISHED BY EPA IN SW-846 METHOD 8010

A: OUTSIDE ACCEPTANCE CRITERIA

EPA - 8010

Continuing Calibration

ATI ID: 011R0101.D
DATE OF ANALYSIS : JULY 29, 1994
TIME OF ANALYSIS: 09:46

COMPOUNDS	Result	True Value	% Recovery	Acceptance Range	
CHLOROMETHANE	9.81	10	98	6.0-14.1	
VINYLCHLORIDE	9.719	10	97	6.9-13.2	
BROMOMETHANE	9.973	10	100	5.9-14.2	
CHLOROETHANE	10.958	10	110	7.7-12.3	
TCFM	17.883	10	179	6.7-13.4	A
1,1 DICHLOROETHENE	10.362	10	104	6.3-13.7	
METHYLENE CHLORIDE	10.984	10	110	7.8-12.3	
t 1,2 DICHLOROETHENE	11.014	10	110	6.4-13.6	
1,1 DICHLOROETHENE	11.04	10	110	6.3-13.7	
c 1,2 DICHLOROETHENE	11.192	10	112	8.5-11.5*	
CHLOROFORM	11.597	10	116	7.5-12.5	
1,2 DICHLOROETHANE	10.483	10	105	7.2-12.9	
1,1,1 TRICHLOROETHANE	11.216	10	112	7.1-12.9	
CARBON TETRACHLORIDE	11.295	10	113	6.9-13.2	
1,2 DICHLOROPROPANE	7.912	10	79	7.4-12.6	
TRICHLORETHENE	15.703	10	157	7.7-12.3	A
BROMODICHLOROMETHANE	10.675	10	107	7.6-12.4	
c 1,3 DICHLOROPROPENE	11.726	10	117	6.4-13.6	
t 1,3 DICHLOROPROPENE	9.854	10	99	6.4-13.6	
1,1,2 TRICHLOROETHANE	10.652	10	107	7.9-12.2	
DIBROMOCHLOROMETHANE	10.296	10	103	6.6-13.5	
1,2 DIBROMOETHANE	9.807	10	98	8.5-11.5*	
TETRACHLOROETHENE	11.398	10	114	7.0-13.0	
CHLOROBENZENE	11.307	10	113	7.2-12.8	
BROMOFORM	9.214	10	92	7.4-12.7	
1,1,2,2, TETRACHLOROETHANE	9.907	10	99	4.9-15.1	
1,3 DICHLOROBENZENE	10.684	10	107	5.0-15.1	
1,4 DICHLOROBENZENE	10.843	10	108	7.0-13.1	
1,2 DICHLOROBENZENE	10.732	10	107	7.0-13.0	

* DEFAULT CRITERIA, NO CRITERIA ESTABLISHED BY EPA IN SW-846 METHOD 8010

A: OUTSIDE ACCEPTANCE CRITERIA

Internal Standard Report

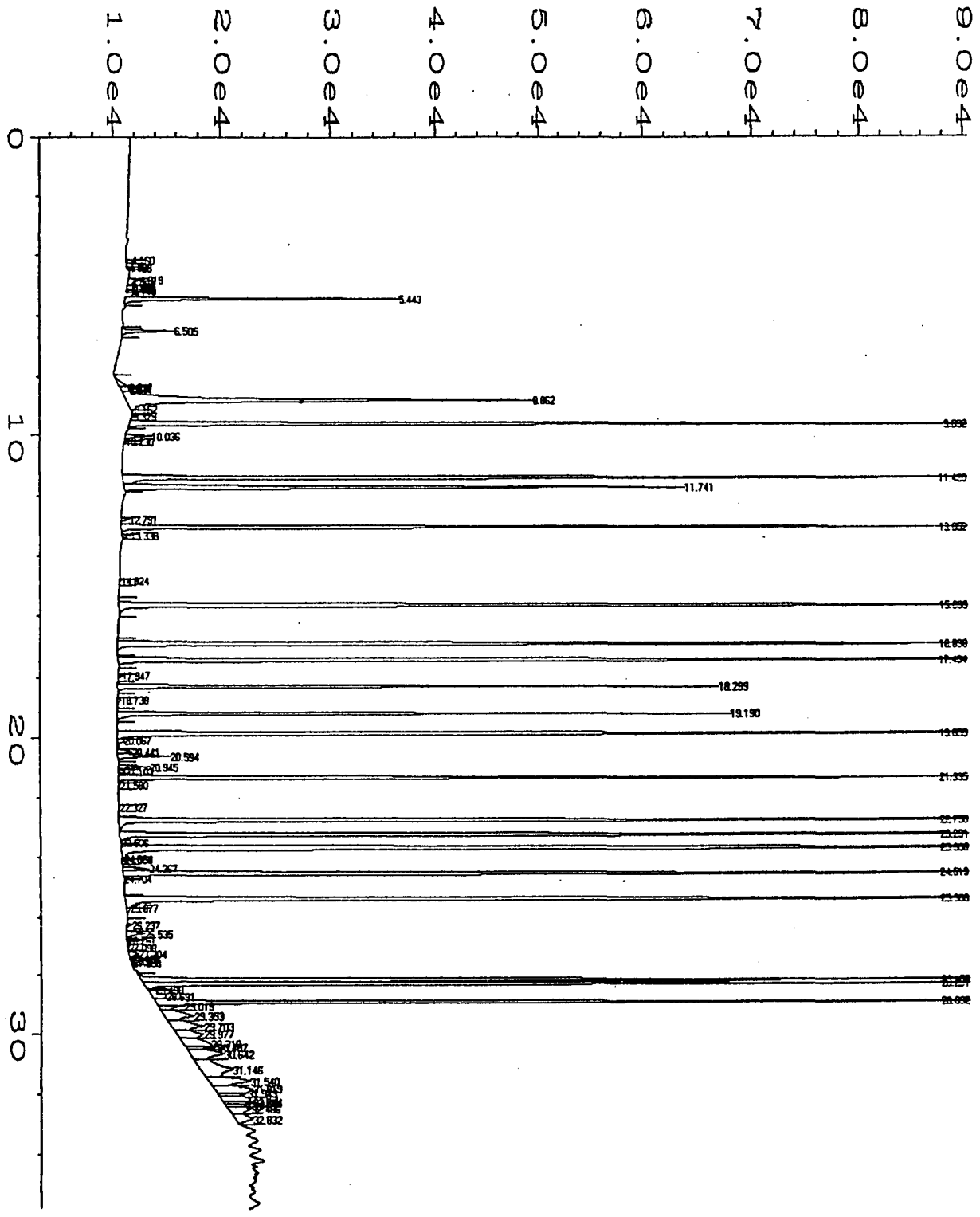
Data File Name : C:\HPCHEM\3\DATA\29JUL94\021F0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 30 Jul 94 04:54 AM
Report Created on: 02 Aug 94 05:36 PM
Last Recalib on : 30 JUL 94 11:37 AM
Multiplier : 1

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729PID.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 1 in C:\HPCHEM\3\DATA\29JUL94\021F0101.D

Ret Time	Height	Type	Width	Ref#	ug/l	Name
5.443	24984	BV	0.051	1	10.322	VinylChloride
9.632	82966	VV	0.059	1	9.713	1,1DCEthene
11.420	232502	PV	0.052	1	10.280	trans 1,2-DCEthene
11.740	52934	VV	0.074	1	9.393	Methyl-tert-ButylEther
13.052	123549	PV	0.053	1	10.218	cis 1,2-DCEthene
15.639	250355	PV	0.057	1	10.537	Benzene
16.893	143690	BV	0.055	1	10.319	TCEthene (TCE)
17.434	238297	PB	0.060	1-R	102.151	Trifluorotoluene (Surr.)
18.299	56854	PV	0.053	1	10.898	cis 1,3DCPropene
19.190	57794	BV	0.052	1	8.619	trans-1,3-DCPropene
19.353	251796	PV	0.055	1	10.465	Toluene
21.335	113145	VV	0.056	1	10.377	Tetrachloroethene (PCE)
22.758	264609	BV	0.054	1	10.408	Chlorobenzene
23.231	227133	VV	0.055	1	10.398	Ethylbenzene
23.668	453693	PV	0.056	1	21.865	M & P Xylene
24.519	229538	VV	0.055	1	10.829	O-Xylene
25.380	564832	BV	0.053	1-IR	100.000	Bromofluorobenzene (I.S.)
28.159	285857	VV	0.044	1	10.104	1,3 DCB
28.291	282703	VV	0.043	1	10.165	1,4 DCB
28.892	234704	VV	0.041	1	10.103	1,2 DCB
4.819	954	PV	0.052		954.331	* uncalibrated *
6.505	5023	VV	0.060		5023.031	* uncalibrated *
8.342	1271	PV	0.128		1271.264	* uncalibrated *
8.862	38996	VV	0.098		38996.35	* uncalibrated *
9.379	1054	VV	0.104		1054.110	* uncalibrated *
10.036	2533	BV	0.049		2533.423	* uncalibrated *
12.791	843	BV	0.066		842.950	* uncalibrated *
13.338	843	PV	0.050		843.041	* uncalibrated *
17.947	428	BV	0.074		428.185	* uncalibrated *
18.738	336	BB	0.078		335.615	* uncalibrated *
20.067	558	VB	0.103		557.983	* uncalibrated *
20.441	1328	BV	0.069		1327.782	* uncalibrated *
20.594	5027	VV	0.073		5026.801	* uncalibrated *
20.945	3019	VV	0.054		3019.114	* uncalibrated *
21.103	693	VV	0.064		692.572	* uncalibrated *
24.367	2596	BV	0.051		2595.719	* uncalibrated *
26.237	535	BB	0.071		534.900	* uncalibrated *
26.535	1797	BV	0.085		1796.645	* uncalibrated *
27.304	1020	PV	0.077		1020.322	* uncalibrated *
28.498	720	VV	0.066		720.464	* uncalibrated *
28.691	1461	VV	0.132		1461.087	* uncalibrated *
[illegible]	[illegible]	VV	0.086		2515.532	* uncalibrated *

ok



Data File Name	: C:\HPCHEM\3\DATA\29JUL94\021F0101.D		
Operator	: C. FROEHLICH & J.EPLEY	Page Number	: 1
Instrument	: GC#3 5890	Vial Number	: 21
Sample Name	: GC3-34-01 VOALCS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 30 Jul 94 04:54 AM	Instrument Method	: 0727PID.MTH
Report Created on	: 30 Jul 94 05:30 AM	Analysis Method	: 0727PID.MTH
Last Recalib on	: 27 JUL 94 05:09 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 100

Internal Standard Report

Data File Name : C:\HPCHEM\3\DATA\29JUL94\021R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 30 Jul 94 04:54 AM
Report Created on: 02 Aug 94 06:20 PM
Last Recalib on : 30 JUL 94 10:30 AM
Multiplier : 1

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0729ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

Sig. 2 in C:\HPCHEM\3\DATA\29JUL94\021R0101.D

Ret Time	Height	Type	Width	Ref#	ug/L	Name
4.905	1519099	BB	0.065	1	9.810	Chloromethane
5.468	1201064	BB	0.065	1	9.719	Vinylchloride
6.532	565138	BB	0.075	1	9.973	Bromomethane
6.989	1106757	BB	0.075	1	10.958	Chloroethane
8.414	2278916	BB	0.076	1	17.883	TCFM ↑
9.655	2516899	PV	0.069	1	10.362	1,1 DCEthene
10.061	3504567	VV	0.066	1	10.984	Methylene chloride
10.213	992554	VV	0.098	1	77.658	unknown
11.444	3163979	VV	0.061	1	11.014	trans 1,2 DCEthene
11.941	2919208	VV	0.073	1	11.040	1,1 DCEthane
13.076	3246003	VV	0.064	1	11.192	cis 1,2 DCEthene
13.364	4028453	VV	0.062	1-R	98.411	BCM (surrogate)
13.493	4083777	VV	0.072	1	11.597	Chloroform ↑
14.717	2610227	VV	0.062	1	10.483	1,2 DCEthane (EDC)
14.879	3126586	VV	0.081	1	11.216	1,1,1 TCEthane
15.561	3471742	VV	0.079	1	11.295	Carbon Tetrachloride
16.831	2578472	VV	0.061	1	7.912	TCEthene (TCE) ↓
16.921	3616925	VV	0.062	1	15.703	1,2 DCPropane ↑
17.011	2595953	VV	0.074	1	10.675	BDCM
18.323	2560809	VV	0.065	1	11.726	cis 1,3 DCPropene ↑
19.214	1950497	VV	0.061	1	9.854	trans 1,3 DCPropene
19.492	2351683	VV	0.069	1	10.652	1,1,2 TCEthane
20.479	1534125	VV	0.078	1	10.296	DBCM
20.979	890966	VV	0.081	1	9.807	1,2 DBrEthane (EDB)
21.357	3660581	VV	0.069	1	11.398	Tetrachloroethene (PCE)
22.782	1648368	VV	0.066	1	11.307	Chlorobenzene
23.819	818714	VV	0.082	1	9.214	Bromoform
24.519	1474499	VV	0.068	1	9.907	1,1,2,2 TCEthane
25.410	2148681	VV	0.078	1-IR	100.000	BFB (I.S.)
28.183	2557276	PV	0.052	1	10.684	1,3 DCB
28.314	2703336	VV	0.054	1	10.843	1,4 DCB
28.915	2521293	VV	0.051	1	10.732	1,2 DCB
16.477	17111	VV	0.121		17110.91	* uncalibrated *
17.466	165726	VV	0.124		165726.1	* uncalibrated *
17.842	16813	VV	0.093		16812.59	* uncalibrated *
17.989	14459	VV	0.158		14459.08	* uncalibrated *
18.779	14058	VV	0.191		14058.09	* uncalibrated *
20.158	11383	VV	0.155		11382.97	* uncalibrated *
22.376	6102	VV	0.160		6101.841	* uncalibrated *
22.644	5396	VV	0.088		5395.619	* uncalibrated *
24.835	12072	VV	0.179		12072.44	* uncalibrated *
26.208	5452	VV	0.265		5452.389	* uncalibrated *

24.997	12493	VV	0.226	12492.85	* uncalibrated *
26.479	3900	VV	0.193	3900.068	* uncalibrated *
27.307	34373	VV	0.072	34373.04	* uncalibrated *
28.885	14286	VV	0.051	14286.17	* uncalibrated *
29.966	2909	VV	0.095	2909.221	* uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.537	13.492	-0.045
29	25.609	25.575	-0.034

Not all calibrated peaks were found

User Modified

==========

27.138	35064	VV	0.081	35063.68 * uncalibrated *
29.841	2981	VV	0.118	2981.183 * uncalibrated *

Time Reference Peak	Expected RT	Actual RT	Difference
12	13.364	13.364	0.000
29	25.410	25.410	0.000

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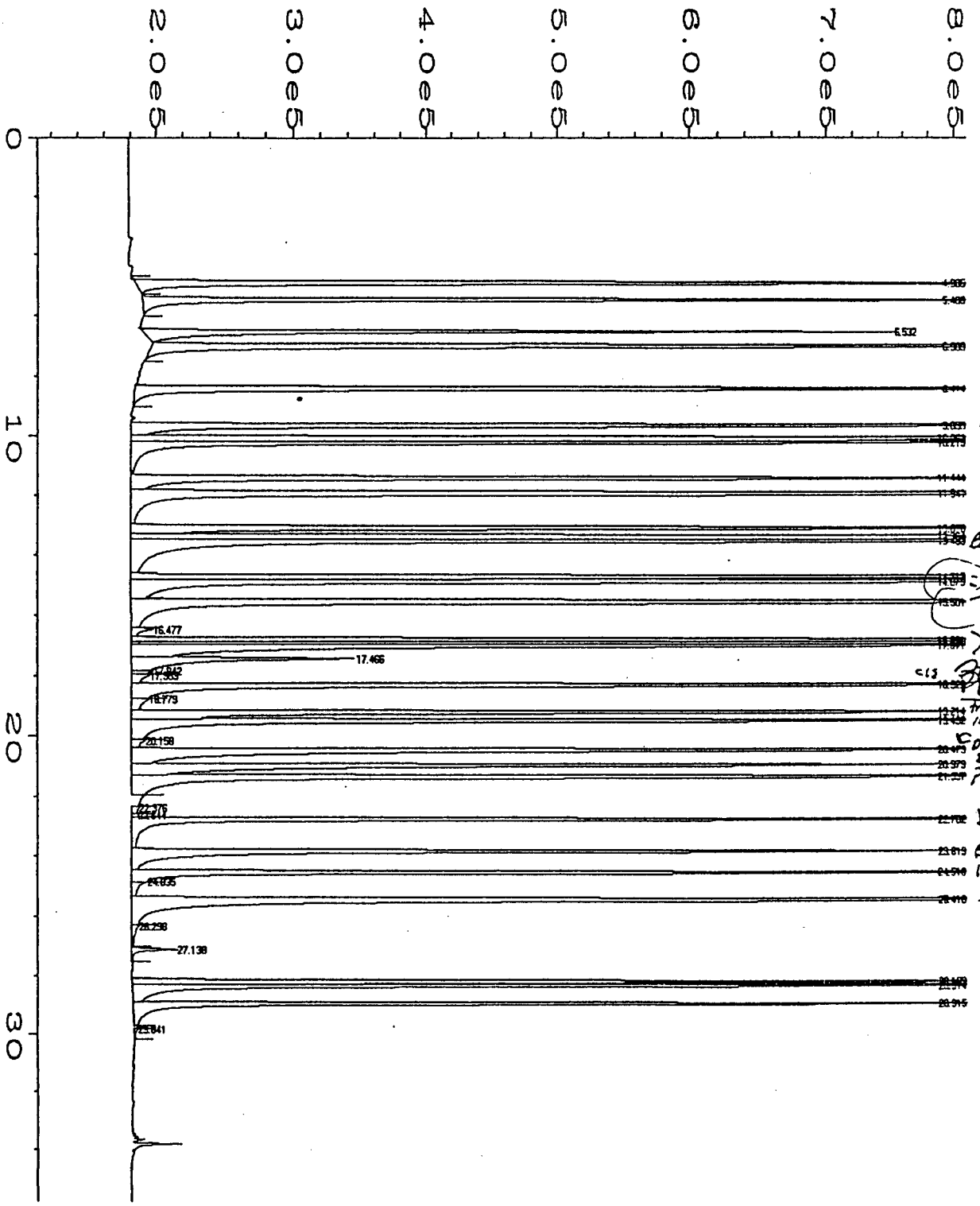


Data File Name : C:\HPCHEM\3\DATA\29JUL94\021R0101.D
Operator : C. FROEHLICH & J.EPLEY
Instrument : GC#3 5890
Sample Name : GC3-34-01 VOALCS
Run Time Bar Code:
Acquired on : 30 Jul 94 04:54 AM
Report Created on: 30 Jul 94 05:32 AM
Last Recalib on : 27 JUL 94 06:11 PM
Multiplier : 1

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 1
Instrument Method: 0727PID.MTH
Analysis Method : 0727ELCD.MTH
Sample Amount : 0
ISTD Amount : 100

INJECTION LOGS

GC INJECTION LOG

INSTRUMENT: GC3

DATE	ANALYST	SPARG #	TEST	SAMPLE ID #	D.F.	CLIENT ID	COMPUTER ID	INJ VOL	SURR %	REINJECTS DIL	REINJECTS C/O	REINJECTS SUR	REINJECTS QC	HNU	COMMENTS
7/29/94	SE/CFF	1	VOA	GC3-34-01	—		001 F/R0101	5ml							
		2		↓	—		002								
		3		↓	—		004								
		1		1.0 PPB VOA STD	—		005								
		2		2.0	—		006								
		3		5.0	—		007								
		4		10.0	—		008								
		5		15.0	—		009								
		6		20.0 ↓	—		010								
		7		10.0 PPB LCS	—		011								
		8		WRB 7/29/94	—		012								
		9		407414-01	—		013							0	pH=1
		10		412-08 ~~415~~	—	FP-R-01	014							~	=7 LVL
		11		-09	—	GBR-18	015							~	=2
		12		-09 MS	—		016								
		13		↓ -09 MSD	—		017								
		14		415-01	—		018								$HgCl_2$
↓	↓	15	↓	↓ -02	—		019 ↓	↓							↓

COMMENTS:

125

REVIEWED:

GC INJECTION LOG

INSTRUMENT: GC3

DATE	ANALYST	SPARG #	TEST	SAMPLE ID #	D.F.	CLIENT ID	COMPUTER ID	INJ VOL	SURR %	REINJECTS DIL	REINJECTS C/O	REINJECTS SUR	REINJECTS QC	HNU	COMMENTS
7/29	JB/CFF	16	VOA	407415-03	-		020 F/R010	5µl							Hg Clc
↓	↓	17	↓	GC3-34-01	-		021 ↓	↓							

7/29/94

COMMENTS:

REVIEWED:

CHAINS OF CUSTODY

AES # 407412

BURLINGTON ENVIRONMENTAL
A Philip Environmental Company

Chain-of Custody Record

4000 Monroe Road
Farmington, NM 87401
(505) 326-2262 Phone
(505) 326-2388 FAX

COC Serial No. C 1877

Project Name: Giant
Project Number: 18641 Phase . Task: 0077.77
Samplers: S. Pope
Laboratory Name: Analytical Technologies, Inc
Laboratory Location:

Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	8020/8010	Sulfate		LPSO ID										Comments
FP-C-01-12	7/26/94	1415	Soil	2	X	X		01										
FP-NW-01-12	7/26/94	1350	Soil	2	X	X		02										
FP-SW-02-36	7/26/94	1125	Soil	2	X	X		03										
FP-SW-02-36	7/26/94	1125	Soil	2	X	X		04										
FP-NE-01-12	7/26/94	1325	Soil	2	X	X		05										
FP-SE-01-12	7/26/94	1150	Soil	2	X	X		06										
FP-SW-01-12	7/26/94	1050	Soil	2	X	X		07										
FP-R-01	7/26/94	1430	Water	2	X			08										
HBR-18	7/27/94	0930	Water	2	X			09										

Relinquished by:

Signature	Date	Time
Steve T. Pope	7/27/94	1045

Received By:

Signature	Date	Time
[signature]	7/28/94	09:00

Samples Iced: ☒ Yes ☐ No

Preservatives (ONLY for Water Samples)
- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Carrier: Fed Ex
Airbill No. 880927373 3

Shipping and Lab Notes:

Level 4 QA/QC
Bill Giant Direct for Analytical Costs.
(Giant Refinery, Farmington NM, Attn: Tim Kinney)

BE-179 4/94

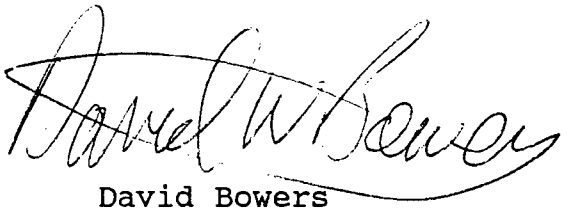
VOLATILES CASE NARRATIVE

LABORATORY NAME: ANALYTICAL TECHNOLOGIES, INC.
CASE NUMBER: ATI
SDG#: 9099
PROJECT NAME: BE

RECEIVED AUG 31, 1994
ATI BATCH 94-BS-006

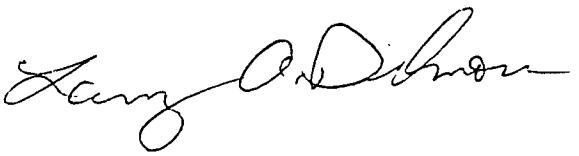
CLIENT ID#	PREVIOUS ATI #	ATI #
FP2-SW-01-12	408420-01	409099-1
FP2-SW-02-36	408420-02	409099-2
FP2-SE-01-12	408420-03	409099-3
FP2-NE-01-12	408420-04	409099-4
FP2-NW-01-12	408420-05	409099-5
FP2-C-01-12	408420-06	409099-6
FP2-C-51-12	408420-07	409099-7
FP2-R-01	408420-08	409099-8

The samples were received in good condition. No problems were noted in the analysis of the samples.



David Bowers
GC/MS TECHNICIAN
09-19-94

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or her designee, as verified by the following signature.



Larry Dilmore
GC/MS SUPERVISOR
09-19-94

4090099

BURLINGTON ENVIRONMENTAL
A Philip Environmental Company

Chain-of Custody Record

4000 Monroe Road
Farmington, NM 87401

(505) 326-2262 Phone
(505) 326-2388 FAX

~~Accession # 409420~~

COC Serial No. C 1888

Project Name Giant Refinery
Project Number 12641 Phase . Task 2000 . 77
Samplers S. Pope
Laboratory Name Analytical Technologies Inc
Location

	Sample Number (and depth)	Date	Time	Matrix	Total Number of Bottles	Type of Analysis and Bottle: 8240	Comments
01	FP2-SW-01-12	8/29/94	1045	Soil	1	1	
02	FP2-SW-02-36	8/29/94	1100	Soil	1	1	
03	FP2-SE-01-12	8/29/94	1120	Soil	1	1	
04	FP2-NE-01-12	8/29/94	1140	Soil	1	1	
05	FP2-NW-01-12	8/29/94	1200	Soil	1	1	
06	FP2-C-01-12	8/29/94	1225	Soil	1	1	
07	FP2-C-51-12	8/29/94	1230	Soil	1	1	
08	FP2-R-01	8/29/94	1245	Water	2	1	

Relinquished by:

Signature	Date	Time
Scott T. Pope	8/29/94	1500

Received By:

Signature	Date	Time
[illegible]	8/30	09:00
David R. Burr II	8/31/94	0920

Samples Iced: ☒ Yes ☐ No

Carrier: Fed Ex

Airbill No. 138902566 5

Preservatives (ONLY for Water Samples)

- ☐ Cyanide ..... Sodium hyroxide (NaOH)
- ☒ Volatile Organic Analysis ..... Hydrochloric acid (HCl)
- ☐ Metals ..... Nitric acid (HNO_3)
- ☐ TPH (418.1) ..... Sulfuric acid (H_2SO_4)
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

Shipping and Lab Notes:

Level 4 QA/QC
Bill Giant Refinery Direct

101

US EPA CONTRACT LAB PROGRAM

LAB NAME ANALYTICAL TECHNOLOGIES, INC.	LOG-IN DATE 31-AUG-94
RECEIVED BY (PRINT) DAVID R. BARR II	DATE/TIME 8/31/94 / 0920
LOGBOOK NO. 94-2	PAGE NO. 7
CASE NUMBER	SAMPLE DELIVERY GROUP NO.
SAS #	

Circle The Correct Response: *(if an * item is circled, contact SMO and attach record of resolution)*

1.	Custody Seals:	(present) / intact	absent* / broken	2.	Custody seal numbers: N/S		
3.	Chain of Custody records	(present)	absent*	4.	Traffic report or packing list	(present)	absent*
5.	Airbill	(airbill) (present)	sticker absent*	6.	Airbill No. 458876237I		
7.	Sample Tags / Sample Tags #s	(present) / (listed on COC)	absent* / not listed on COC	8.	Sample condition	(intact)	broken* leaking
9.	Does information on custody records, traffic reports and sample tags agree?	(yes)	no*	10.	Date received at lab: 31-AUG-94 / Time received at lab: 0920		

EPA SAMPLE NUMBER	SAMPLE TAG NUMBER	ASSIGNED LAB NUMBER	REMARKS, COMMENTS
408420-1	FP2-SW-01-12	409099-1	INTACT
408420-2	FP2-SW-02-36	409099-2	INTACT
408420-3	FP2-SE-01-12	409099-3	INTACT
408420-4	FP2-NE-01-12	409099-4	INTACT
408420-5	FP2-NW-01-12	409099-5	INTACT
408420-6	FP2-C-01-12	409099-6	INTACT
408420-7	FP2-C-51-12	409099-7	INTACT
408420-8	FP2-R-01	409099-8	INTACT

SAMPLES TRANSFERRED TO:

LAB AREA	BY	DATE/TIME	RECEIVED BY	DATE/TIME
GC MS	David R. Barr II	8/31/94 / 1340	Donald Long	8/31/94 1340

002

Analytical Technologies, Inc.

PROJECT SAMPLE INSPECTION FORM

Accession #: 4090099 Date received: 31-AUG-94

1.	Was there a Chain of Custody?	(YES)	NO	7.	Are samples correctly preserved for analysis required?	(YES)	NO N/A
2.	Was Chain of Custody properly relinquished?	(YES)	NO	8.	Is there sufficient volume for analysis requested?	(YES)	NO
3.	Were samples received cold? (At 4° or on ice)	(YES)	NO N/A	9.	Were samples received within holding time?	(YES)	NO
4.	Were all containers properly labeled and identified?	(YES)	NO	10.	Was there headspace greater than ¼" in diameter in volatile bottles?	YES	(NO) N/A
5.	Were samples received in proper containers for analysis requested?	(YES)	NO	11.	If sent, were matrix spike bottles returned?	YES	NO (N/A)
6.	Were all sample containers received intact?	(YES)	NO				

Tracking Number: 458 876 2371 Shipped By: ABX

Cooler Number: NS

Out of Control Events and Inspection Comments:

Inspected By: ARB Date: 8-31-94 Logged By: ORB Date: 8-31-94

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842001

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90991

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

40842001

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90991

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842002

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90992

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 11 Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	total 1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	XYLENE (total)	6	U

LE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842002

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90992

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 11 Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842003

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90993

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

E

EPA SAMPLE NO.

40842003

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90993

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842004

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90994

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 7 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842004

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90994

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 7 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

EPA

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842005

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90995

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842005

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90995

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

EPA

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842006

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-6

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90996

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842006

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-6

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90996

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

40842007

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-7

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90997

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 5 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842007

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-7

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90997

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 5 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842008

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) WATER Lab Sample ID: 409099-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 90998

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	7	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	1	J
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842008

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) WATER Lab Sample ID: 409099-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 90998

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	40842008	93	104	94	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	40842001	92	98	93	0	0
02	40842002	94	96	93	0	0
03	40842003	94	99	93	0	0
04	40842004	89	102	92	0	0
05	40842005	91	98	93	0	0
06	40842006	93	101	95	0	0
07	40842007	91	98	93	0	0
08	40842003MS	94	98	92	0	0
09	40842003MSD	101	90	96	0	0
10	VBLKBA	94	101	97	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix Spike - EPA Sample No.: 40842003 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	51.5	0	44.3	86	59-172
Trichloroethene	51.5	0	48.9	95	62-137
Benzene	51.5	0	50.6	98	66-142
Toluene	51.5	0	48.9	95	59-139
Chlorobenzene	51.5	0	51.3	100	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	51.5	44.4	86	0	22	59-172
Trichloroethene	51.5	50.1	97	-2	24	62-137
Benzene	51.5	52.5	102	-4	21	66-142
Toluene	51.5	51.9	101	-6	21	59-139
Chlorobenzene	51.5	51.6	100	0	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: EPA SAMPLE # 40842003,(409099-3),5.0 GRAMS
12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA

VOLATILE METHOD BLANK SUMMARY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID: BS006ABK Lab Sample ID: BS006ABK

Date Analyzed: 09/01/94 Time Analyzed: 2032

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: BUBBA

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	40842001	409099-1	90991	2250
02	40842002	409099-2	90992	2336
03	40842003	409099-3	90993	0022
04	40842004	409099-4	90994	0108
05	40842005	409099-5	90995	0154
06	40842006	409099-6	90996	0241
07	40842007	409099-7	90997	0327
08	40842008	409099-8	90998	0413
09	40842003MS	409099-3MS	BS006MS	0459
10	40842003MSD	409099-3MSD	BS006MSD	0545

COMMENTS: VBLKBA SOIL
12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLKBA

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: BS006ABK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006ABK

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKBA

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: BS006ABK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006ABK

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID (Standard): CPB901 Date Analyzed: 09/01/94

Instrument ID: BUBBA Time Analyzed: 1938

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	56400	8.70	185000	10.65	154000	18.19
	UPPER LIMIT	112800	9.20	370000	11.15	308000	18.69
	LOWER LIMIT	28200	8.20	92500	10.15	77000	17.69
	EPA SAMPLE NO.						
01	40842001	42600	8.64	139000	10.59	124000	18.12
02	40842002	41600	8.64	134000	10.59	119000	18.12
03	40842003	42400	8.64	137000	10.59	119000	18.14
04	40842004	43300	8.62	139000	10.59	125000	18.12
05	40842005	42200	8.62	134000	10.59	121000	18.12
06	40842006	42000	8.62	135000	10.59	119000	18.12
07	40842007	41700	8.62	133000	10.57	123000	18.12
08	40842008	42400	8.62	135000	10.57	121000	18.12
09	40842003MS	42800	8.64	134000	10.59	118000	18.12
10	40842003MSD	41600	8.62	128000	10.57	104000	18.09
11	VBLKBA	48100	8.64	151000	10.59	134000	18.14

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

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

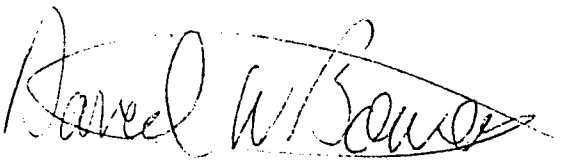
VOLATILES CASE NARRATIVE

LABORATORY NAME: ANALYTICAL TECHNOLOGIES, INC.
CASE NUMBER: ATI
SDG#: 9099
PROJECT NAME: BE

RECEIVED AUG 31, 1994
ATI BATCH 94-BS-006

CLIENT ID#	PREVIOUS ATI #	ATI #
FP2-SW-01-12	408420-01	409099-1
FP2-SW-02-36	408420-02	409099-2
FP2-SE-01-12	408420-03	409099-3
FP2-NE-01-12	408420-04	409099-4
FP2-NW-01-12	408420-05	409099-5
FP2-C-01-12	408420-06	409099-6
FP2-C-51-12	408420-07	409099-7
FP2-R-01	408420-08	409099-8

The samples were received in good condition. No problems were noted in the analysis of the samples.



David Bowers
GC/MS TECHNICIAN
09-19-94

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Larry Dilmore
GC/MS SUPERVISOR
09-19-94

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	40842008	93	104	94	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	40842001	92	98	93	0	0
02	40842002	94	96	93	0	0
03	40842003	94	99	93	0	0
04	40842004	89	102	92	0	0
05	40842005	91	98	93	0	0
06	40842006	93	101	95	0	0
07	40842007	91	98	93	0	0
08	40842003MS	94	98	92	0	0
09	40842003MSD	101	90	96	0	0
10	VBLKBA	94	101	97	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix Spike - EPA Sample No.: 40842003 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	51.5	0	44.3	86	59-172
Trichloroethene	51.5	0	48.9	95	62-137
Benzene	51.5	0	50.6	98	66-142
Toluene	51.5	0	48.9	95	59-139
Chlorobenzene	51.5	0	51.3	100	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	51.5	44.4	86	0	22	59-172
Trichloroethene	51.5	50.1	97	-2	24	62-137
Benzene	51.5	52.5	102	-4	21	66-142
Toluene	51.5	51.9	101	-6	21	59-139
Chlorobenzene	51.5	51.6	100	0	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: EPA SAMPLE # 40842003,(409099-3),5.0 GRAMS
12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID: BS006ABK Lab Sample ID: BS006ABK

Date Analyzed: 09/01/94 Time Analyzed: 2032

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: BUBBA

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	40842001	409099-1	90991	2250
02	40842002	409099-2	90992	2336
03	40842003	409099-3	90993	0022
04	40842004	409099-4	90994	0108
05	40842005	409099-5	90995	0154
06	40842006	409099-6	90996	0241
07	40842007	409099-7	90997	0327
08	40842008	409099-8	90998	0413
09	40842003MS	409099-3MS	BS006MS	0459
10	40842003MSD	409099-3MSD	BS006MSD	0545

COMMENTS: VBLKBA SOIL
12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID: BFB901A BFB Injection Date: 09/01/94

Instrument ID: BUBBA BFB Injection Time: 1224

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.5
75	30.0 - 60.0% of mass 95	54.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	9.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	79.5
175	5.0 - 9.0% of mass 174	5.5 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	79.3 (99.8)1
177	5.0 - 9.0% of mass 176	6.4 (8.1)2

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

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD200	200BS901	200BS901	09/01/94	1450
02	VSTD150	150BS901	150BS901	09/01/94	1551
03	VSTD100	100BS901	100BS901	09/01/94	1639
04	VSTD020	20BS901	20BS901	09/01/94	1725
05	VSTD050	CAB901	CAB901	09/01/94	1812

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID: BFB901P BFB Injection Date: 09/01/94

Instrument ID: BUBBA BFB Injection Time: 1929

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.2
75	30.0 - 60.0% of mass 95	48.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	81.2
175	5.0 - 9.0% of mass 174	5.6 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.1 (98.7)1
177	5.0 - 9.0% of mass 176	5.4 (6.7)2

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

THIS TUNE 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	CPB901	CPB901	09/01/94	1938
02	VBLKBA	BS006ABK	BS006ABK	09/01/94	2032
03	40842001	409099-1	90991	09/01/94	2250
04	40842002	409099-2	90992	09/01/94	2336
05	40842003	409099-3	90993	09/02/94	0022
06	40842004	409099-4	90994	09/02/94	0108
07	40842005	409099-5	90995	09/02/94	0154
08	40842006	409099-6	90996	09/02/94	0241
09	40842007	409099-7	90997	09/02/94	0327
10	40842008	409099-8	90998	09/02/94	0413
11	40842003MS	409099-3MS	BS006MS	09/02/94	0459
12	40842003MSD	409099-3MSD	BS006MSD	09/02/94	0545

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID (Standard): CPB901 Date Analyzed: 09/01/94

Instrument ID: BUBBA Time Analyzed: 1938

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	56400	8.70	185000	10.65	154000	18.19
	UPPER LIMIT	112800	9.20	370000	11.15	308000	18.69
	LOWER LIMIT	28200	8.20	92500	10.15	77000	17.69
	EPA SAMPLE NO.						
01	40842001	42600	8.64	139000	10.59	124000	18.12
02	40842002	41600	8.64	134000	10.59	119000	18.12
03	40842003	42400	8.64	137000	10.59	119000	18.14
04	40842004	43300	8.62	139000	10.59	125000	18.12
05	40842005	42200	8.62	134000	10.59	121000	18.12
06	40842006	42000	8.62	135000	10.59	119000	18.12
07	40842007	41700	8.62	133000	10.57	123000	18.12
08	40842008	42400	8.62	135000	10.57	121000	18.12
09	40842003MS	42800	8.64	134000	10.59	118000	18.12
10	40842003MSD	41600	8.62	128000	10.57	104000	18.09
11	VBLKBA	48100	8.64	151000	10.59	134000	18.14

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

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842001

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90991

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

40842001

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90991

Level: (low/med) LOW Date Received: 08/31/94

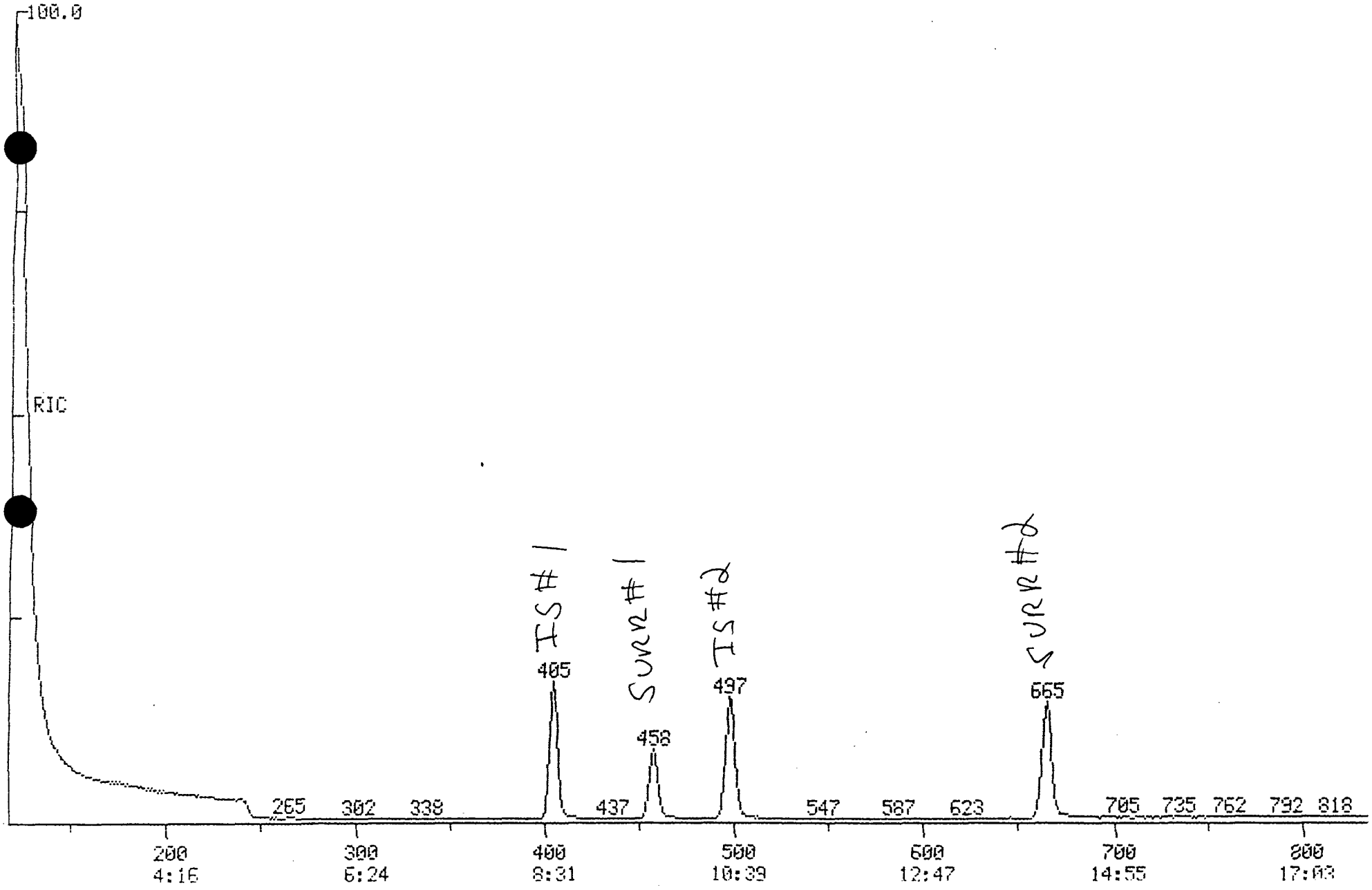
% Moisture: not dec. 6 Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

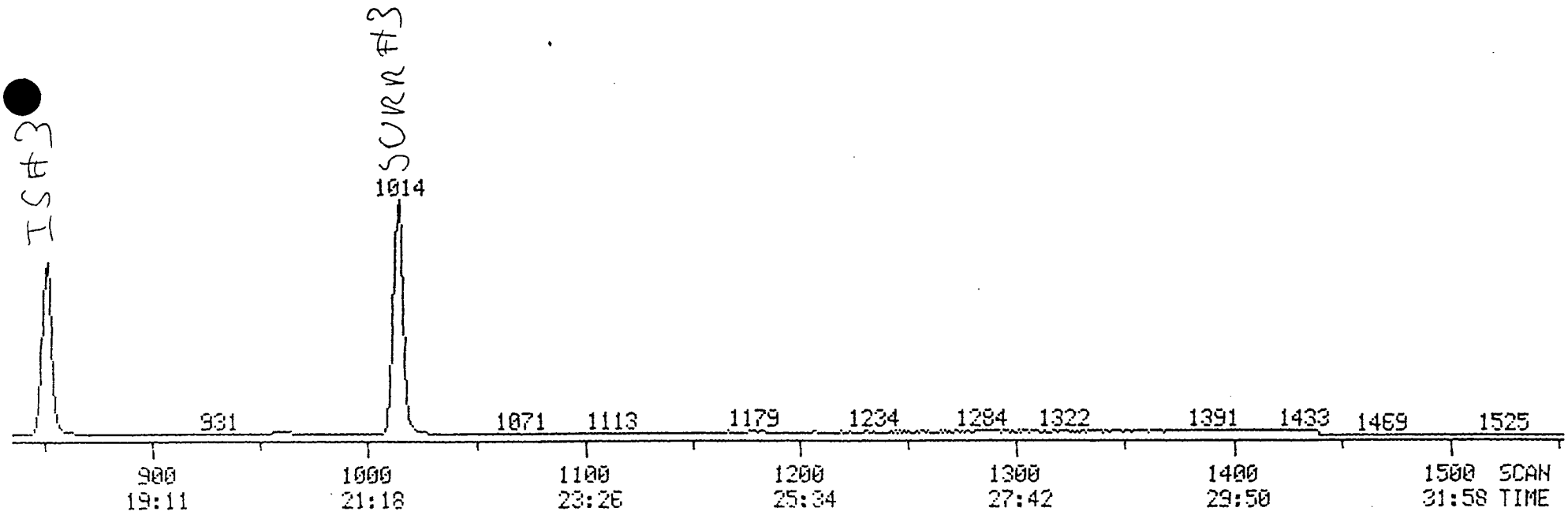
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: 90991 #1 SCANS 117 TO 835
09/01/94 22:50:00 CALI: 90991 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842001,(403039-1),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 90991 #1 SCANS 835 TO 1553
09/01/94 22:50:00 CALI: 90991 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842001,(409099-1),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 399872.



Quantitation Report File 90991

Data: 90991.TI
09/01/94 22:50:00
Sample: EPA SAMPLE # 40842001,(409099-1),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	405	8:38	1	1.000	A BB	42566.	50.000 PPB	14.64
2	114	497	10:35	2	1.000	A BB	139389.	50.000 PPB	14.64
3	117	850	18:07	3	1.000	A BB	124026.	50.000 PPB	14.64
4	65	458	9:46	1	1.131	A BB	64639.	46.699 PPB	13.68
5	98	665	14:10	3	0.782	A BB	115096.	46.137 PPB	13.51
6	95	1014	21:36	3	1.193	A BB	109770.	49.179 PPB	14.40
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	265	5:39	1	0.654	A BB	759.	0.798 PPB	0.23
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	173	977	20:49	2	1.966	A BB	126.	0.061 PPB	0.02
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	92	674	14:22	3	0.793	A BB	805.	0.556 PPB	0.16
38	112	856	18:14	3	1.007	A BB	370.	0.163 PPB	0.05
39	NOT FOUND								
40	NOT FOUND								
41	106	875	18:39	3	1.029	A BB	639.	0.599 PPB	0.18
42	NOT FOUND								
43	146	1167	24:52	3	1.373	A BB	368.	0.139 PPB	0.04
44	146	1234	26:18	3	1.452	A BB	367.	0.149 PPB	0.04
45	146	1183	25:12	3	1.392	A BB	529.	0.204 PPB	0.06
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.70	50.00	1.519	1.626	0.93
5	14:09	1.00	0.781	1.00	46.14	50.00	0.928	1.006	0.92
6	21:35	1.00	1.192	1.00	49.18	50.00	0.885	0.900	0.98
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	0.99	0.658	0.99	0.80	50.00	0.018	1.118	0.02
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49	1.00	1.962	1.00	0.06	50.00	0.001	0.745	0.00
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22	1.00	0.793	1.00	0.56	50.00	0.006	0.584	0.01
38	18:13	1.00	1.006	1.00	0.16	50.00	0.003	0.916	0.00
39	18:25		1.016						
40	19:57		1.101						
41	18:37	1.00	1.028	1.00	0.60	100.00	0.003	0.430	0.01
42	19:50		1.095						
43	24:51	1.00	1.372	1.00	0.14	50.00	0.003	1.066	0.00
44	26:16	1.00	1.451	1.00	0.15	50.00	0.003	0.994	0.00
45	25:11	1.00	1.391	1.00	0.20	50.00	0.004	1.044	0.00
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report Fi 90991

Data: 90991.TI
09/01/94 22:50:00
Sample: EPA SAMPLE # 40842001,(409099-1),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	498	10:37	2	1.002	A BB	24646.	46.837 PPB	13.72
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	46.84	50.00	0.177	0.189	0.94
57	4:40		0.539						

PROCEDURE: TCA ●IAGNOSTIC REPORT ● 9/01/94 23:26:16
DATA FILE: 90991
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

< ---- STANDARDS ----- >< --- PLUS UNKNOWNS --- >< - LIST NAMES - >								
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	63	VXIS/VXSURR
3	3	1	32	11	3	1	32	VXIS/VXTARG1
3	3	1	32	11	3	1	32	VXIS/VXTARG2
3	3	1	32	11	3	1	32	VXIS/VXTARG3
3	3	1	32	11	3	1	32	VXIS/VXTARG4
3	3	1	32	10	4	1	23	VXIS/VXTARG5
3	3	1	32	5	3	1	32	VXIS/VXTARG6
3	3	1	32	4	3	1	32	VXIS/VXTARG7
3	3	1	32	7	3	1	32	VXIS/VXTARG8
3	3	1	32	4	3	1	32	VXIS/VXTARG9
3	3	1	32	4	3	1	32	VXIS/VXTARG10
3	3	1	32	6	3	1	32	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 7 FOUND

< COMPOUND >< ---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >													
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	993	.	128	405	.	1
2	VX	2	498	497	497	.	1	994	.	114	497	.	1
3	VX	3	850	851	851	.	1	967	.	117	850	-1	1
4	VX	4	458	458	458	.	1	944	.	65	458	.	1
5	VX	5	664	664	665	1	1	999	.	98	665	.	1
6	VX	6	1013	1014	1014	.	1	997	.	95	1014	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	265	.	.	.	.	.	84	265	.	1
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	267	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	323	.	.	.	.	.	63	.	.	.
17	VX	17	291	289	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	324	.	.	.	.	.	43	.	.	.
24	VX	24	575	575	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	637	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	776	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	979	.	.	.	.	.	173	977	.	1
33	VX	33	615	615	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	
35	VX	35	752	752	.	.	.	.	.	164	.	.	
36	VX	36	1003	1005	.	.	.	.	.	83	.	.	
37	VX	37	474	474									

39	VX	39	864	865		.	.	.	.		106	.	.	.
40	VX	40	936	937		.	.	.	.		104	.	.	.
41	VX	41	874	875	875	.	1	993	.		106	875	.	1
42	VX	42	931	932		.	.	.	.		106	.	.	.
43	VX	43	1167	1169		.	.	.	.		146	1167	.	1
44	VX	44	1233	1236		.	.	.	.		146	1234	.	1
45	VX	45	1182	1184		.	.	.	.		146	1183	.	1
46	VX	46	611	611		.	.	.	.		63	.	.	.
47	VX	47	580	580		.	.	.	.		93	.	.	.
48	VX	48	126	123		.	.	.	.		85	.	.	.
49	VX	49	988	990		.	.	.	.		88	.	.	.
50	VX	50	-1034	1036		.	.	.	.		75	.	.	.
51	VX	51	697	697		.	.	.	.		69	.	.	.
52	VX	52	698	698		.	.	.	.		69	.	.	.
53	VX	53	254	252		.	.	.	.		142	.	.	.
54	VX	54	1023	1025		.	.	.	.		75	.	.	.
55	VX	55	386	385		.	.	.	.		41	.	.	.
56	VX	56	-499	498		.	.	.	.		88	498	.	1
57	VX	57	219	217		.	.	.	.		56	.	.	.

D:90991.
9/08/94 14:14:06
LIST OF TIC, PURITY, FIT

COMPOUND

PURITY FIT

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842002

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90992

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 11 Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	total 1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	XYLENE (total)	6	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

40842002

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90992

Level: (low/med) LOW Date Received: 08/31/94

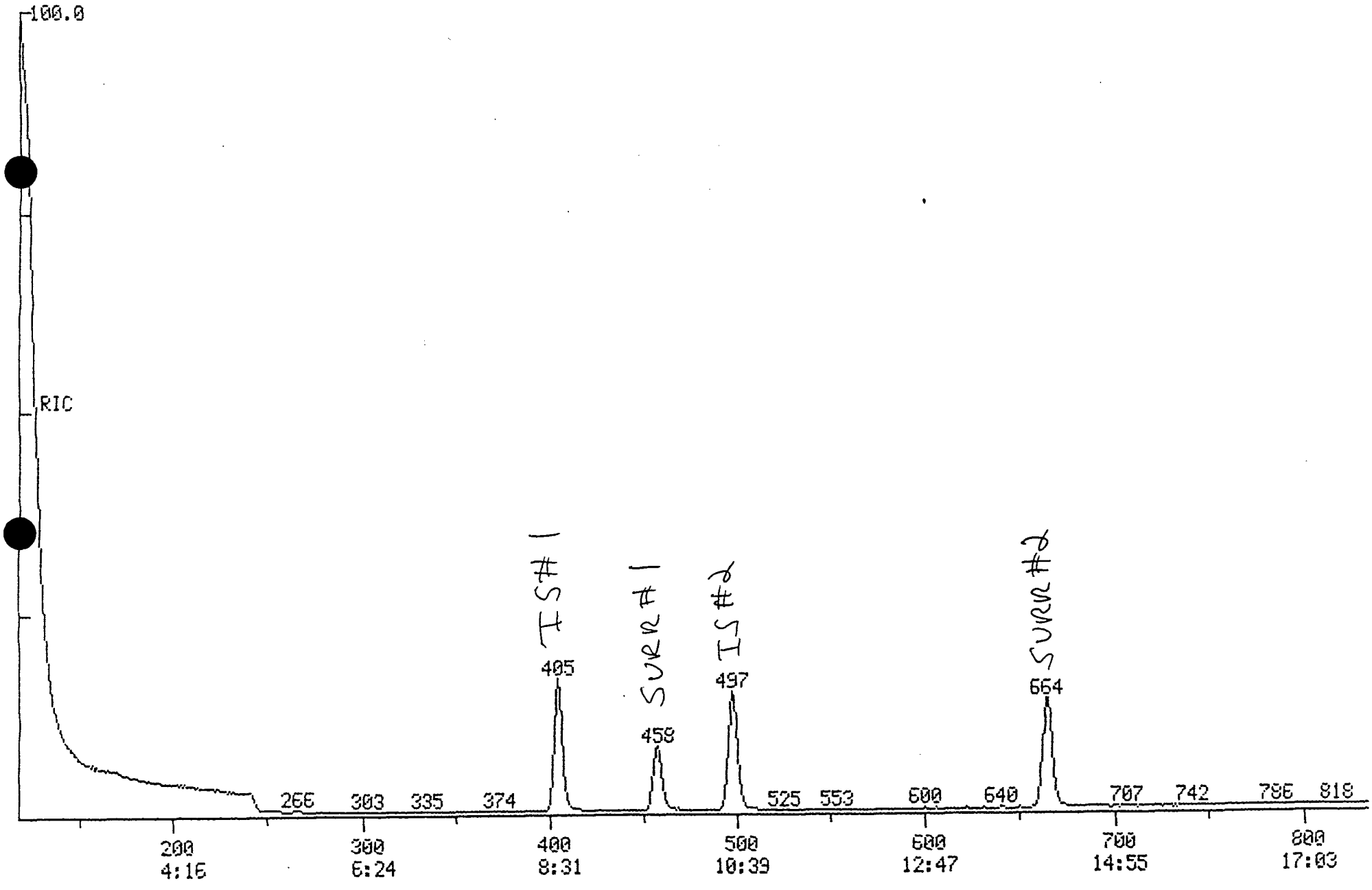
% Moisture: not dec. 11 Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

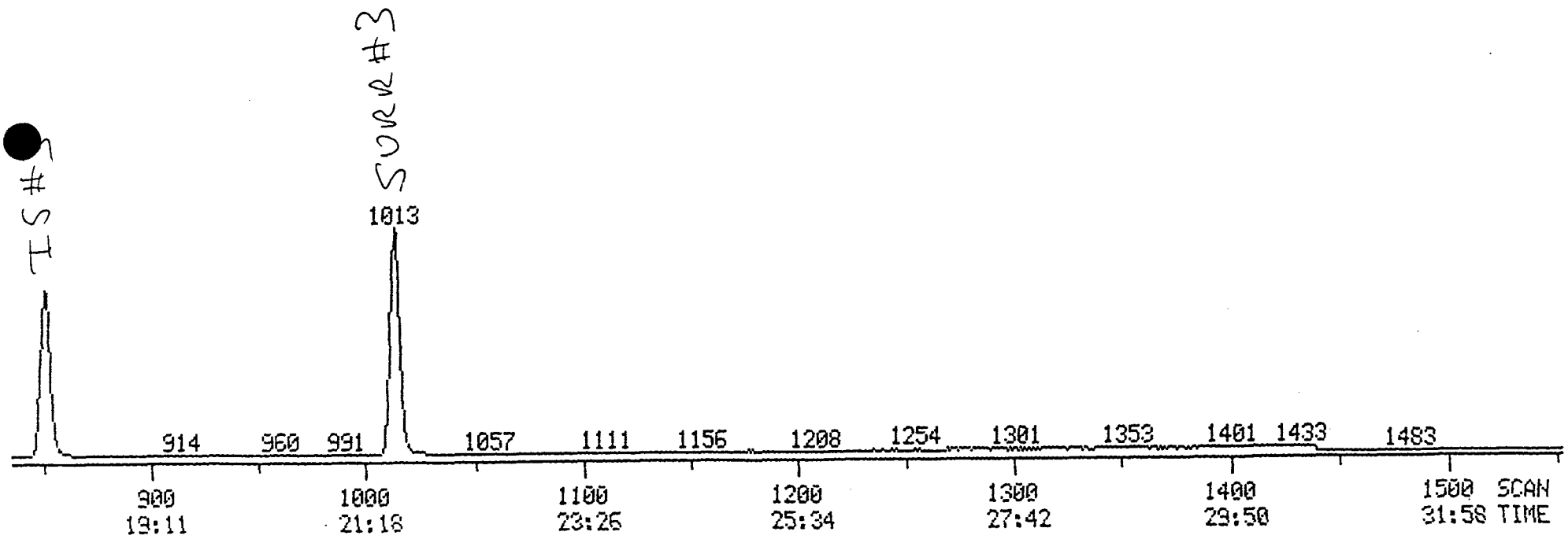
RIC DATA: 90992 #1 SCANS 117 TO 835
09/01/94 23:36:00 CALI: 90992 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842002,(403099-2),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 30992 #1 SCANS 835 TO 1553
09/01/94 23:36:00 CALI: 30992 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842002,(409099-2),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0

396800.



Quantitation Report File: 90992

Data: 90992.TI
09/01/94 23:36:00
Sample: EPA SAMPLE # 40842002,(409099-2),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	405	8:38	1	1.000	A BB	41616.	50.000 PPB	14.67
2	114	497	10:35	2	1.000	A BB	134143.	50.000 PPB	14.67
3	117	850	18:07	3	1.000	A BB	119367.	50.000 PPB	14.67
4	65	458	9:46	1	1.131	A BB	63158.	46.671 PPB	13.70
5	98	664	14:09	3	0.781	A BB	113174.	47.137 PPB	13.83
6	95	1013	21:35	3	1.192	A BB	103455.	48.160 PPB	14.13
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	266	5:40	1	0.657	A BB	920.	0.989 PPB	0.29
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.67	50.00	1.518	1.626	0.93
5	14:09	1.00	0.781	1.00	47.14	50.00	0.948	1.006	0.94
6	21:35	1.00	1.192	1.00	48.16	50.00	0.867	0.900	0.96
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	1.00	0.658	1.00	0.99	50.00	0.022	1.118	0.02
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22		0.793						
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: 90992

Data: 90992.TI
09/01/94 23:36:00
Sample: EPA SAMPLE # 40842002,(409099-2),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	24228.	47.843 PPB	14.04
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.84	50.00	0.181	0.189	0.96
57	4:40		0.539						

PROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 0:12:18
DATA FILE: 90992
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	16	6	6	1	45	VXIS/VXSURR
3	3	1	16	11	3	1	16	VXIS/VXTARG1
3	3	1	16	11	3	1	16	VXIS/VXTARG2
3	3	1	16	11	3	1	16	VXIS/VXTARG3
3	3	1	16	11	3	1	16	VXIS/VXTARG4
3	3	1	16	10	3	1	16	VXIS/VXTARG5
3	3	1	16	5	3	1	16	VXIS/VXTARG6
3	3	1	16	4	3	1	16	VXIS/VXTARG7
3	3	1	16	7	3	1	16	VXIS/VXTARG8
3	3	1	16	4	3	1	16	VXIS/VXTARG9
3	3	1	16	4	3	1	16	VXIS/VXTARG10
3	3	1	16	6	3	1	16	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

COMPOUND			SEARCH				SAT	CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	990	.	128	405	.	1
2	VX	2	498	497	497	.	1	993	.	114	497	.	1
3	VX	3	850	850	850	.	1	973	.	117	850	.	1
4	VX	4	458	457	458	1	1	941	.	65	458	.	1
5	VX	5	664	664	664	.	1	1000	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	994	.	95	1013	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	.	.	.	.	.	84	266	.	1
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	324	.	.	.	.	.	63	.	.	.
17	VX	17	291	290	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	325	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	977	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1003	.	.	.	.	.	83	.	.	.

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1234	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	124	.	.	.	.	.	85	.	.	.	
49	VX	49	988	988	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1034	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	253	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1023	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

D:90992.
9/08/94 14:14:56
LIST OF TIC, PURITY, FIT

COMPOUND PURITY FIT

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842003

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90993

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

40842003

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90993

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

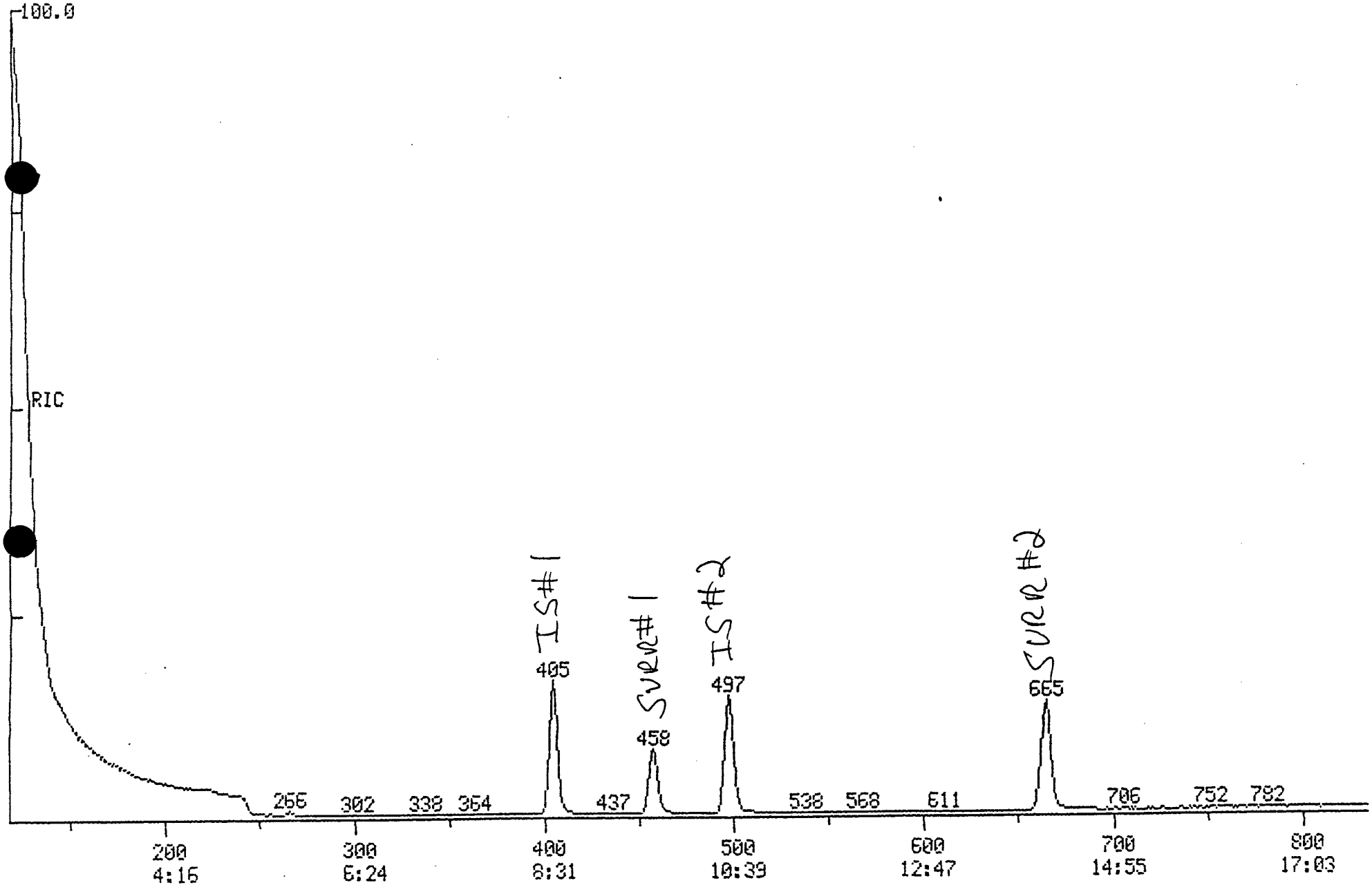
Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

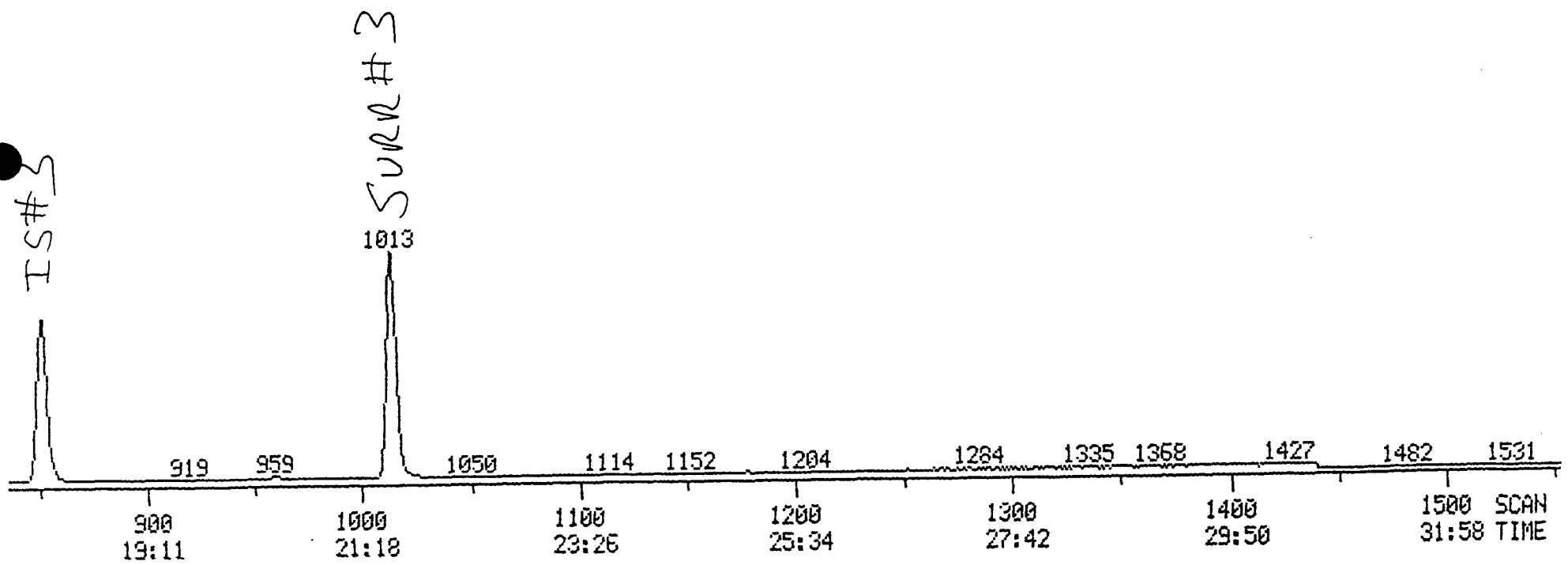
RIC DATA: 90993 #1 SCANS 117 TO 835
09/02/94 0:22:00 CALI: 90993 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842003,(403039-3),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC
03/02/94 0:22:00
DATA: 90993 #1
CALI: 90993 #3
SCANS 835 TO 1553
OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842003,(409039-3),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

404480.

100.0



Quantitation Report File: 90993

Data: 90993.TI
09/02/94 0:22:00
Sample: EPA SAMPLE # 40842003,(409099-3),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	405	8:38	1	1.000	A BB	42403.	50.000	PPB	14.46
2	114	497	10:35	2	1.000	A BB	136799.	50.000	PPB	14.46
3	117	851	18:08	3	1.000	A BB	119469.	50.000	PPB	14.46
4	65	458	9:46	1	1.131	A BB	64189.	46.552	PPB	13.46
5	98	665	14:10	3	0.781	A BB	112879.	46.974	PPB	13.59
6	95	1013	21:35	3	1.190	A BB	106279.	49.432	PPB	14.30
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	84	266	5:40	1	0.657	A BB	1107.	1.168	PPB NSF	0.34
12	NOT FOUND									
13	43	224	4:46	1	0.553	A*BB	738.	4.516	PPB NSF	1.31
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	NOT FOUND									
35	NOT FOUND									
36	NOT FOUND									
37	92	673	14:20	3	0.791	A*BB	241.	0.173	PPB	0.05
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									
50	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.55	50.00	1.514	1.626	0.93
5	14:09	1.00	0.781	1.00	46.97	50.00	0.945	1.006	0.94
6	21:35	1.00	1.192	1.00	49.43	50.00	0.890	0.900	0.99
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	1.00	0.658	1.00	1.17	50.00	0.026	1.118	0.02
12	4:04		0.470						
13	4:48	1.00	0.554	1.00	4.52	50.00	0.017	0.193	0.09
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22	1.00	0.793	1.00	0.17	50.00	0.002	0.584	0.00
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: 90993

Data: 90993.TI
09/02/94 0:22:00
Sample: EPA SAMPLE # 40842003,(409099-3),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	24272.	46.999 PPB	13.59
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.00	50.00	0.177	0.189	0.94
57	4:40		0.539						

PROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 0:58:36
DATA FILE: 90993
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	83	VXIS/VXSURR
3	3	1	32	11	4	1	47	VXIS/VXTARG1
3	3	1	32	11	3	1	32	VXIS/VXTARG2
3	3	1	32	11	3	1	32	VXIS/VXTARG3
3	3	1	32	11	3	1	32	VXIS/VXTARG4
3	3	1	32	10	3	1	32	VXIS/VXTARG5
3	3	1	32	5	3	1	32	VXIS/VXTARG6
3	3	1	32	4	3	1	32	VXIS/VXTARG7
3	3	1	32	7	3	1	32	VXIS/VXTARG8
3	3	1	32	4	3	1	32	VXIS/VXTARG9
3	3	1	32	4	3	1	32	VXIS/VXTARG10
3	3	1	32	6	3	1	32	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	987	.	128	405	.	1
2	VX	2	498	497	497	.	1	997	.	114	497	.	1
3	VX	3	850	851	851	.	1	972	.	117	851	.	1
4	VX	4	458	458	458	.	1	939	.	65	458	.	1
5	VX	5	664	664	665	1	1	999	.	98	665	.	1
6	VX	6	1013	1014	1013	-1	1	996	.	95	1013	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	266	.	1	908	.	84	266	.	1
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	224	.	2
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	323	.	.	.	.	.	63	.	.	.
17	VX	17	291	289	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	324	.	.	.	.	.	43	.	.	.
24	VX	24	575	575	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	637	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	776	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	979	.	.	.	.	.	173	.	.	.
33	VX	33	615	615	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
			1003	1005	.	.	.	.	.	83	.	.	.

39	VX	39	864	865	.	.	.	.	.	106	.	.	.	
40	VX	40	936	937	.	.	.	.	.	104	.	.	.	
41	VX	41	874	875	.	.	.	.	.	106	.	.	.	
42	VX	42	931	932	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1169	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1236	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1185	.	.	.	.	.	146	.	.	.	
46	VX	46	611	611	.	.	.	.	.	63	.	.	.	
47	VX	47	580	580	.	.	.	.	.	93	.	.	.	
48	VX	48	126	123	.	.	.	.	.	85	.	.	.	
49	VX	49	988	990	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1036	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	252	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1025	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

D: 90993.
9/08/94 14:15:45
LIST OF TIC, PURITY, FIT

COMPOUND PURITY FIT

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

40842004

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90994

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 7 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

VOLATILE ORGANI ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842004

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90994

Level: (low/med) LOW Date Received: 08/31/94

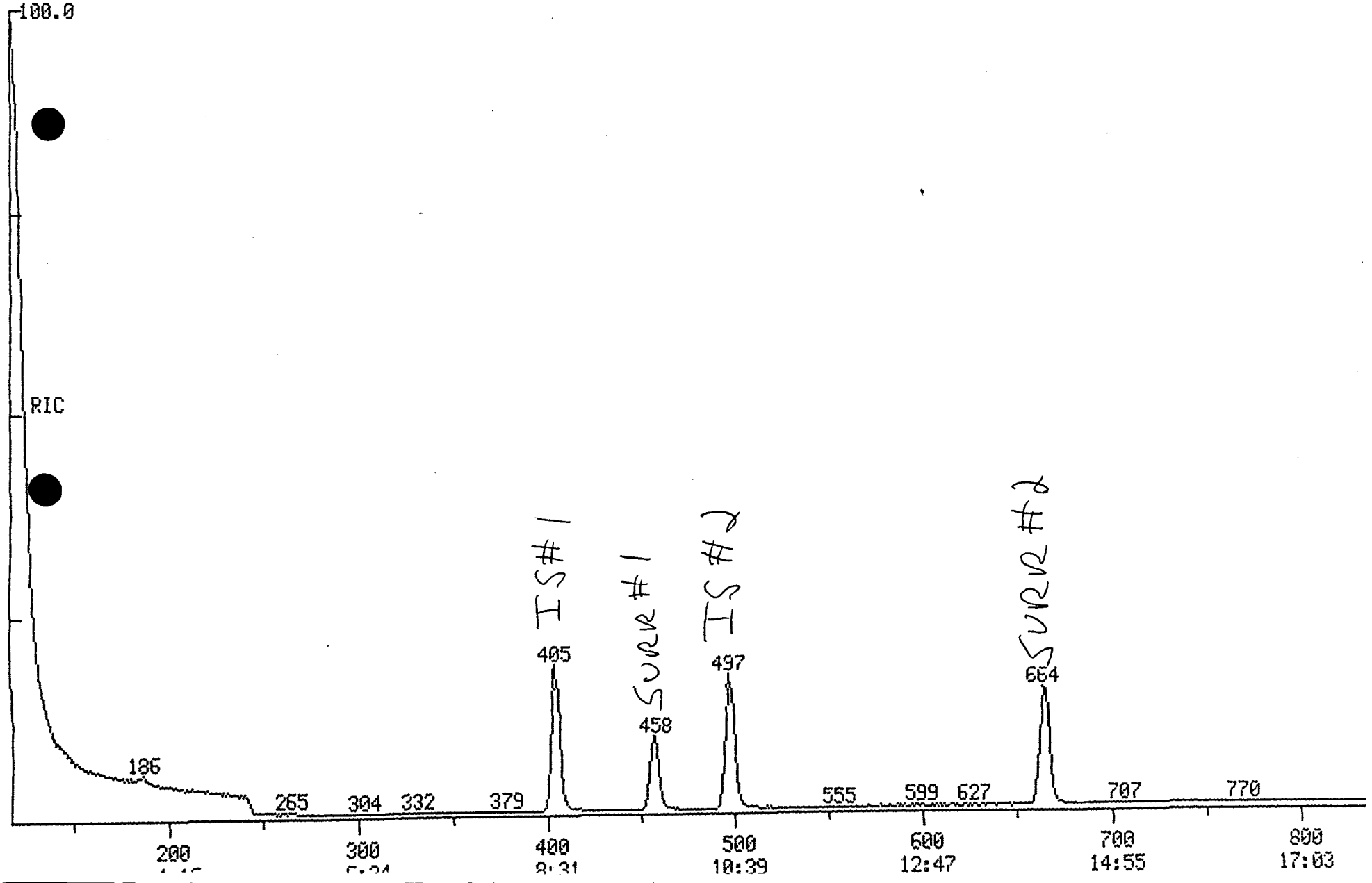
% Moisture: not dec. 7 Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

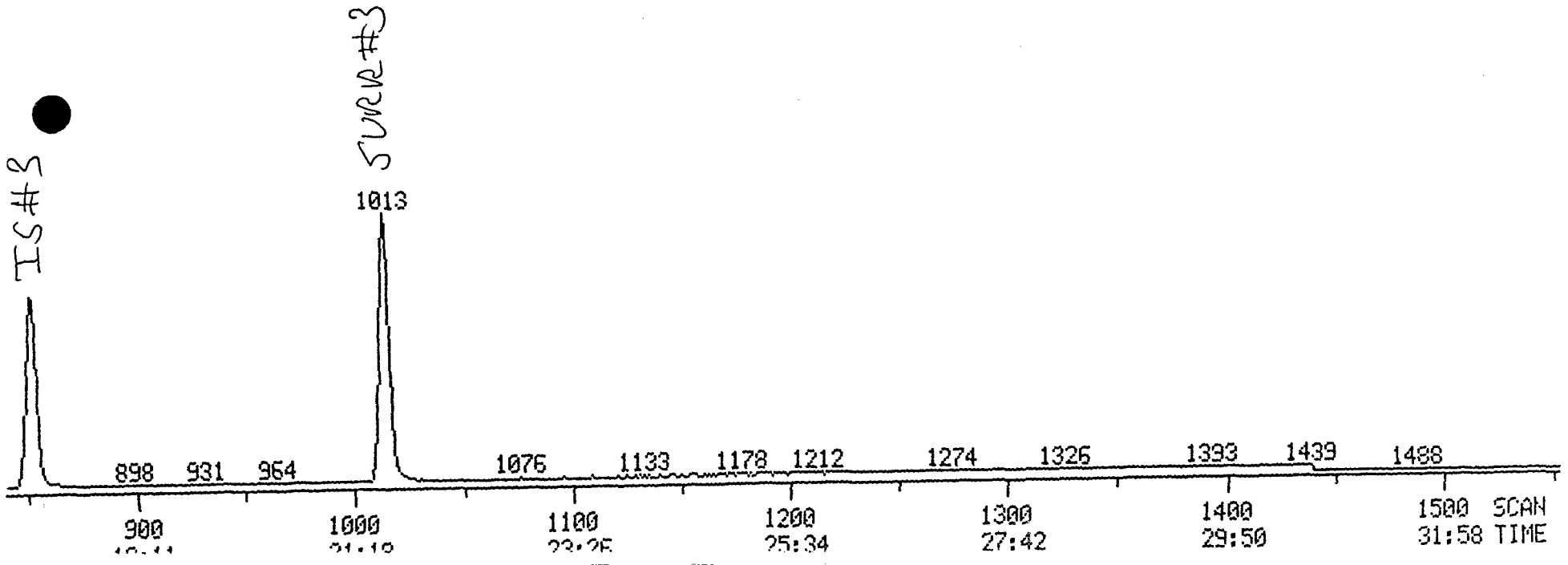
RIC DATA: 90994 #1 SCANS 117 TO 835
09/02/94 1:08:00 CALI: 90994 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842004,(409099-4),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 30934 #1 SCANS 835 TO 1553
09/02/94 1:08:00 CALI: 30934 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842004,(409039-4),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

369864.

100.0



)ata: 90994.TI
)9/02/94 1:08:00
Sample: EPA SAMPLE # 40842004,(409099-4),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	43284.	50.000 PPB	14.74
2	114	497	10:35	2	1.000	A BB	138854.	50.000 PPB	14.74
3	117	850	18:07	3	1.000	A BB	124708.	50.000 PPB	14.74
4	65	458	9:46	1	1.134	A BB	65000.	46.181 PPB	13.61
5	98	664	14:09	3	0.781	A BB	111349.	44.391 PPB	13.08
6	95	1013	21:35	3	1.192	A BB	114141.	50.859 PPB	14.99
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
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33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.18	50.00	1.502	1.626	0.92
5	14:09	1.00	0.781	1.00	44.39	50.00	0.893	1.006	0.89
6	21:35	1.00	1.192	1.00	50.86	50.00	0.915	0.900	1.02
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41		0.658						
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22		0.793						
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report (TIC Data)

ata: 90994.TI
9/02/94 1:08:00
ample: EPA SAMPLE # 40842004,(409099-4),5.0 GRAMS
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	25116.	47.914 PPB NSF	14.12
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.91	50.00	0.181	0.189	0.96
57	4:40		0.539						

PROCEDURE: TOA DIAGNOSTIC REPORT

DATA FILE: 90994
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	16	6	6	1	45	VXIS/VXSURR
3	3	1	16	11	3	1	16	VXIS/VXTARG1
3	3	1	16	11	3	1	16	VXIS/VXTARG2
3	3	1	16	11	3	1	16	VXIS/VXTARG3
3	3	1	16	11	3	1	16	VXIS/VXTARG4
3	3	1	16	10	3	1	16	VXIS/VXTARG5
3	3	1	16	5	3	1	16	VXIS/VXTARG6
3	3	1	16	4	3	1	16	VXIS/VXTARG7
3	3	1	16	7	3	1	16	VXIS/VXTARG8
3	3	1	16	4	3	1	16	VXIS/VXTARG9
3	3	1	16	4	3	1	16	VXIS/VXTARG10
3	3	1	16	6	3	1	16	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

COMPOUND			SEARCH				SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	991	.	128	404	-1	1
2	VX	2	498	497	497	.	1	999	.	114	497	.	1
3	VX	3	850	850	850	.	1	971	.	117	850	.	1
4	VX	4	458	457	458	1	1	945	.	65	458	.	1
5	VX	5	664	664	664	.	1	997	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	993	.	95	1013	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	.	.	.	.	.	84	.	.	.
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	324	.	.	.	.	.	63	.	.	.
17	VX	17	291	290	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	325	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	977	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1003	.	.	.	.	.	83	.	.	.
37	VX	37	674	674	.	.	.	.	.	92	.	.	.
38	VX	38	855	855	.	.	.	.	.	112	.	.	.

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1234	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	124	.	.	.	.	.	85	.	.	.	
49	VX	49	988	988	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1034	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	253	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1023	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

9/08/94 14:16:34
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842005

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90995

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842005

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90995

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

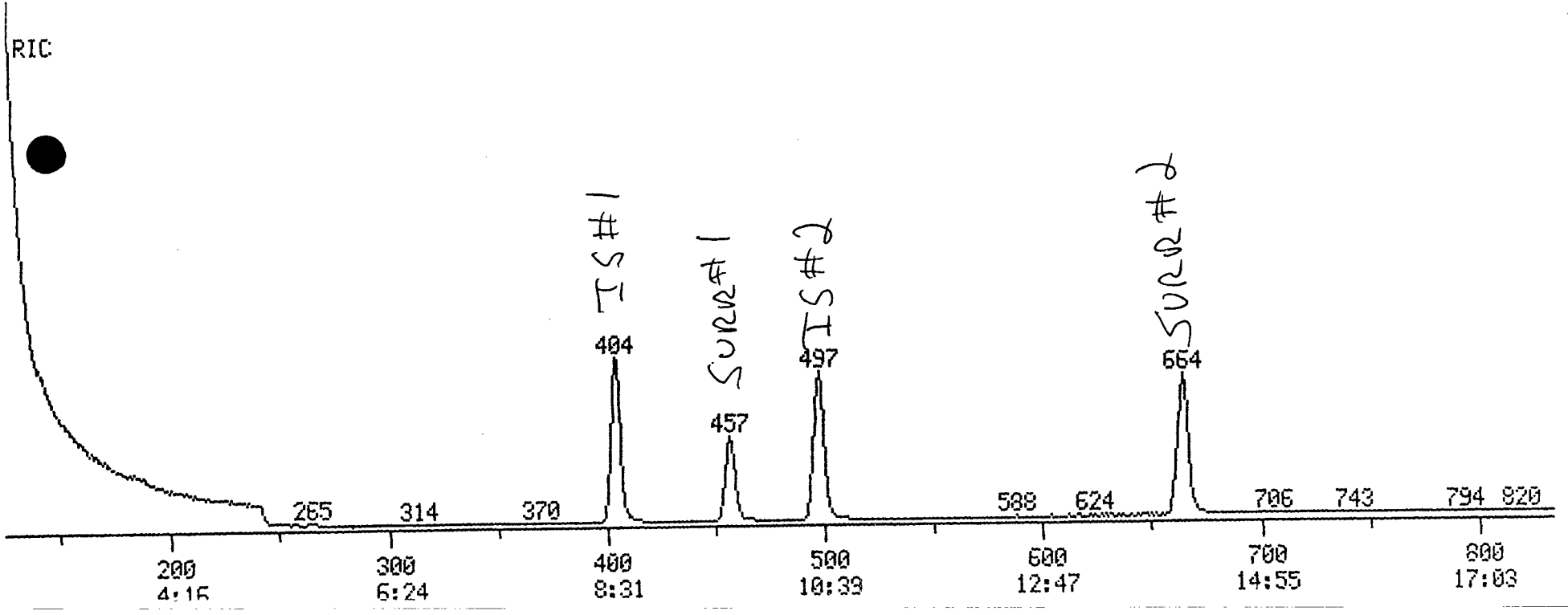
Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: 90995 #1 SCANS 117 TO 835
09/02/94 1:54:00 CALI: 90995 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842005,(409099-5),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

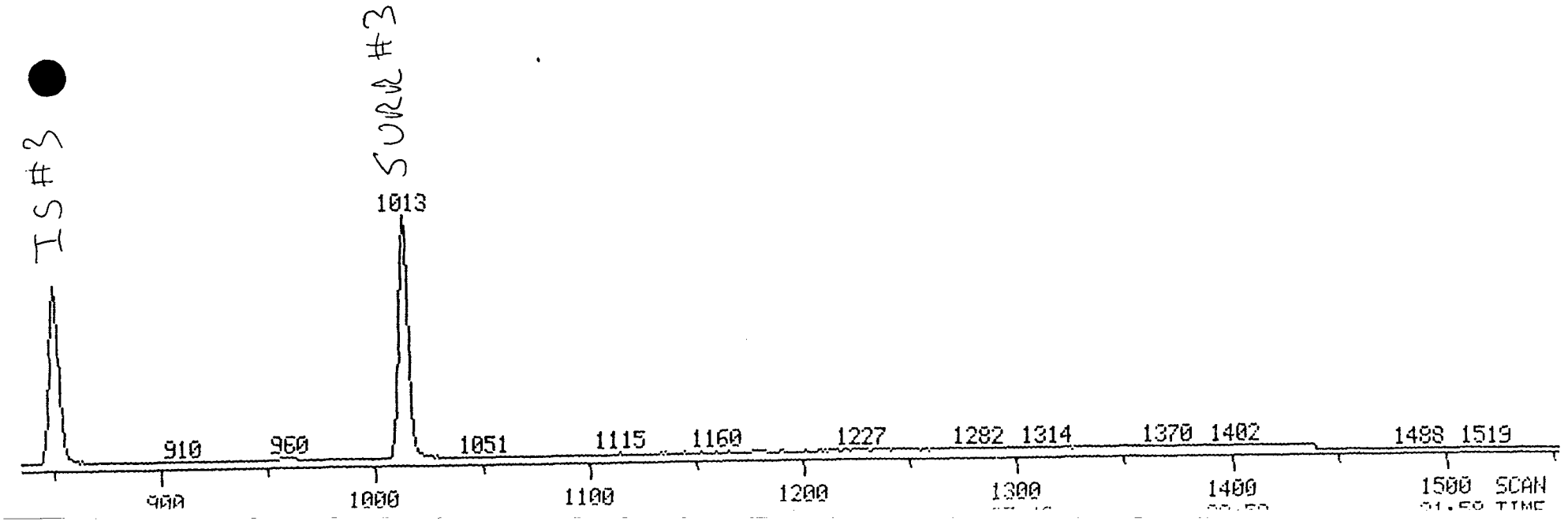
100.0



RIC DATA: 90395 #1 SCANS 835 TO 1553
09/02/94 1:54:00 CALI: 90395 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842005,(409099-5),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

379904.

100.0



Quantitation Report File: 90995

Data: 90995.TI
7/02/94 1:54:00
Sample: EPA SAMPLE # 40842005,(409099-5),5.0 GRAMS
Cmnds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	42155.	50.000 PPB	14.67
2	114	497	10:35	2	1.000	A BB	133785.	50.000 PPB	14.67
3	117	850	18:07	3	1.000	A BB	121443.	50.000 PPB	14.67
4	65	457	9:44	1	1.131	A BB	63730.	46.491 PPB	13.65
5	98	664	14:09	3	0.781	A BB	110669.	45.306 PPB	13.30
6	95	1013	21:35	3	1.192	A BB	106911.	48.918 PPB	14.36
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	266	5:40	1	0.658	A BB	413.	0.438 PPB	0.13
12	NOT FOUND								
13	43	223	4:45	1	0.552	A BB	295.	1.816 PPB NSF	0.53
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	92	672	14:19	3	0.791	A BB	300.	0.212 PPB	0.06
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

o	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R.Fac	Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.49	50.00	1.512	1.626	0.93
5	14:09	1.00	0.781	1.00	45.31	50.00	0.911	1.006	0.91
6	21:35	1.00	1.192	1.00	48.92	50.00	0.880	0.900	0.98
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
0	3:45		0.433						
1	5:41	1.00	0.658	1.00	0.44	50.00	0.010	1.118	0.01
2	4:04		0.470						
3	4:48	0.99	0.554	1.00	1.82	50.00	0.007	0.193	0.04
4	5:44		0.663						
5	4:57		0.571						
6	6:56		0.800						
7	6:12		0.717						
8	8:20		0.963						
9	9:58		1.153						
0	7:47		0.899						
1	9:08		0.861						
2	9:39		0.910						
3	6:57		0.655						
4	12:15		1.155						
5	11:43		1.104						
6	13:34		1.279						
7	11:19		1.066						
8	16:31		1.556						
9	15:13		1.434						
0	10:01		0.944						
1	14:50		1.398						
2	20:49		1.962						
3	13:05		0.722						
4	15:19		0.846						
5	16:00		0.884						
6	21:22		1.180						
7	14:22	1.00	0.793	1.00	0.21	50.00	0.002	0.584	0.00
8	18:13		1.006						
9	18:25		1.016						
0	19:57		1.101						
1	18:37		1.028						
2	19:50		1.095						
3	24:51		1.372						
4	26:16		1.451						
5	25:11		1.391						
6	13:01		1.227						
7	12:22		1.165						
8	2:42		0.313						
9	21:03		1.984						
0	22:05		2.080						

uantitation Report File: 90995

ata: 90995.TI
9/02/94 1:54:00
ample: EPA SAMPLE # 40842005,(409099-5),5.0 GRAMS
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	24040.	47.600 PPB NSF	13.97
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.60	50.00	0.180	0.189	0.95
57	4:40		0.539						

ROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 2:30:36
)ATA FILE: 90995
:EFERENCE: VX11
IAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

---- STANDARDS ----- >< --- PLUS UNKNOWNS --- >< - LIST NAMES - >								
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	45	6	6	1	50	VXIS/VXSURR
3	3	1	45	11	3	1	45	VXIS/VXTARG1
3	3	1	45	11	3	1	45	VXIS/VXTARG2
3	3	1	45	11	3	1	45	VXIS/VXTARG3
3	3	1	45	11	3	1	45	VXIS/VXTARG4
3	3	1	45	10	3	1	45	VXIS/VXTARG5
3	3	1	45	5	3	1	45	VXIS/VXTARG6
3	3	1	45	4	3	1	45	VXIS/VXTARG7
3	3	1	45	7	3	1	45	VXIS/VXTARG8
3	3	1	45	4	3	1	45	VXIS/VXTARG9
3	3	1	45	4	3	1	45	VXIS/VXTARG10
3	3	1	45	6	3	1	45	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

< COMPOUND >< ---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >													
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	404	404	.	1	988	.	128	404	.	1
2	VX	2	498	497	497	.	1	996	.	114	497	.	1
3	VX	3	850	850	850	.	1	971	.	117	850	.	1
4	VX	4	458	457	457	.	1	941	.	65	457	.	1
5	VX	5	664	663	664	1	1	1000	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	993	.	95	1013	.	1
7	VX	7	141	138	.	.	.	.	.	50	.	.	.
8	VX	8	172	169	.	.	.	.	.	94	.	.	.
9	VX	9	147	144	.	.	.	.	.	62	.	.	.
10	VX	10	177	174	.	.	.	.	.	64	.	.	.
11	VX	11	267	265	.	.	.	.	.	84	266	.	1
12	VX	12	191	188	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	223	.	1
14	VX	14	269	267	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	323	.	.	.	.	.	63	.	.	.
17	VX	17	291	289	.	.	.	.	.	96	.	.	.
18	VX	18	391	389	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	363	.	.	.	.	.	43	.	.	.
21	VX	21	429	427	.	.	.	.	.	97	.	.	.
22	VX	22	453	451	.	.	.	.	.	117	.	.	.
23	VX	23	326	324	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	695	.	.	.	.	.	75	.	.	.
32	VX	32	977	978	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1004	.	.	.	.	.	83	.	.	.
37	VX	37	674	673	.	.	.	.	.	92	672	.	.
38	VX	38	855	855	.	.	.	.	.	112	.	.	.

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1235	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	123	.	.	.	.	.	85	.	.	.	
49	VX	49	988	989	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1035	.	.	.	.	.	75	.	.	.	
51	VX	51	697	696	.	.	.	.	.	69	.	.	.	
52	VX	52	698	697	.	.	.	.	.	69	.	.	.	
53	VX	53	254	252	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1024	.	.	.	.	.	75	.	.	.	
55	VX	55	386	384	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

:90995.
9/08/94 14:17:23
IST OF TIC, PURITY, FIT

PURITY FIT

OMPOUND

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842006

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-6

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90996

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842006

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-6

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90996

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 6 Date Analyzed: 09/02/94

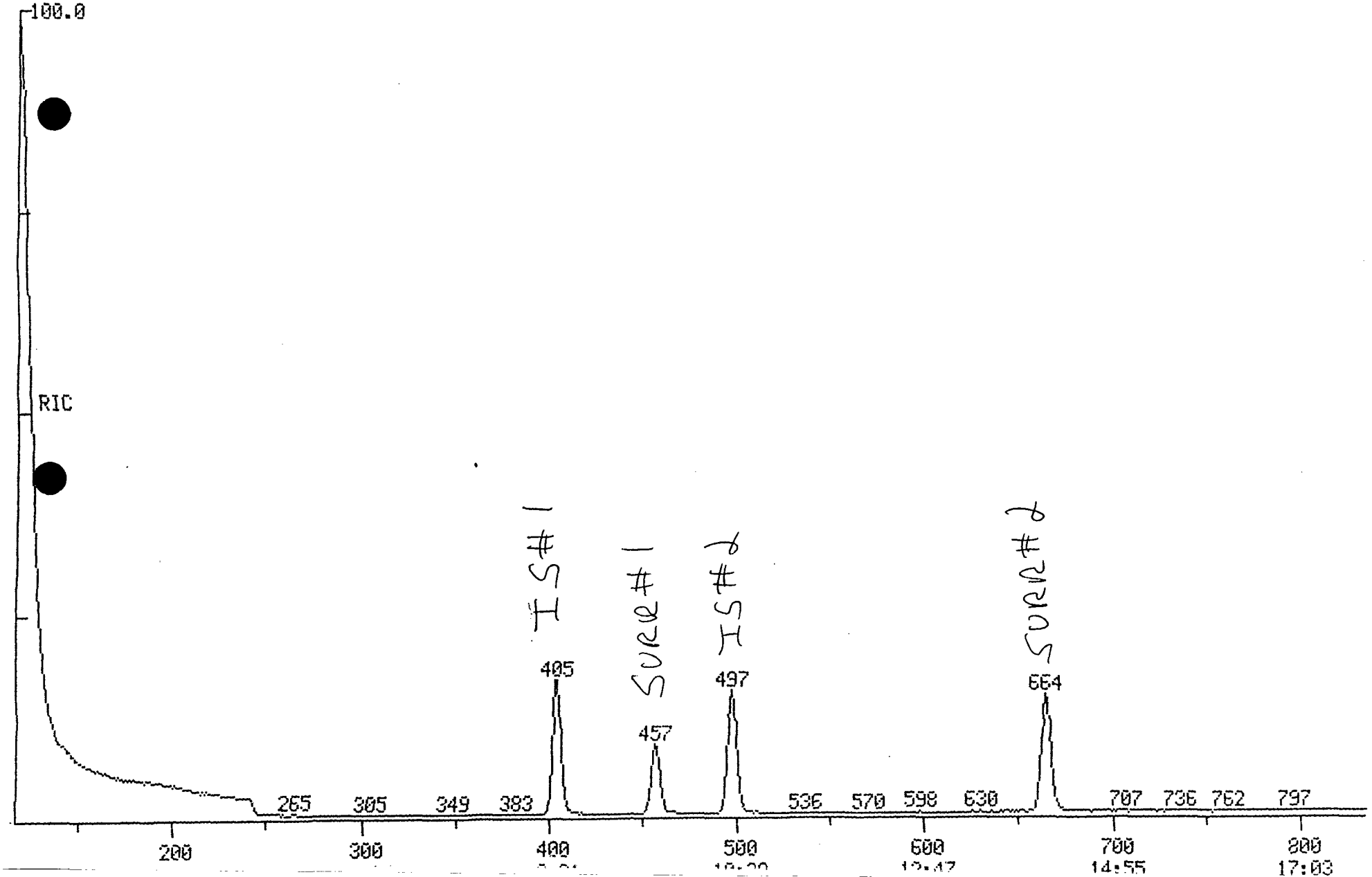
Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

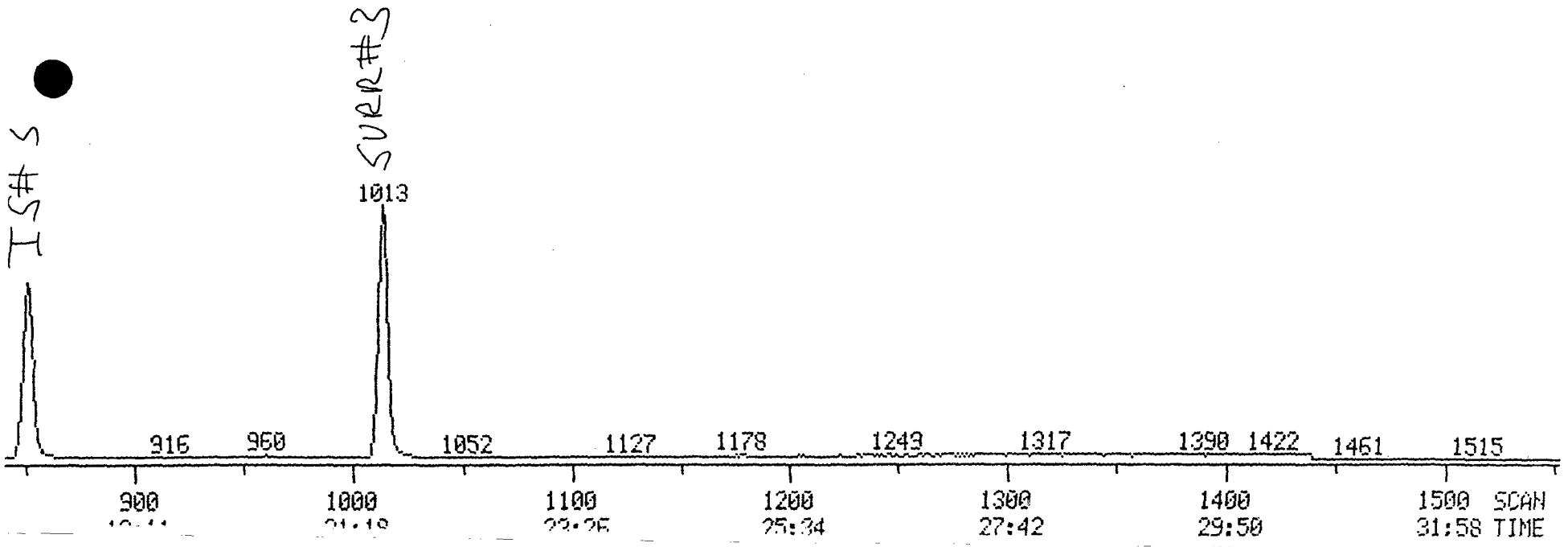
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: 90996 #1 SCANS 117 TO 835
09/02/94 2:41:00 CALI: 90996 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842006,(409099-6),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 90996 #1 SCANS 835 TO 1553
09/02/94 2:41:00 CALI: 90996 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842006,(403099-6),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 382976.



antitation Report File: [redacted]996

ata: 90996.TI
?/02/94 2:41:00
mple: EPA SAMPLE # 40842006,(409099-6),5.0 GRAMS
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
bmitted by: Analyst: DB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

lo	Name									
8	C016	DICHLORODIFLUOROMETHANE								
9	C191	CIS 1,4-DICHLORO-2-BUTENE								
0	C221	TRANS 1,4-DICHLORO-2-BUTENE								

lo	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	42007.	50.000 PPB	14.60
2	114	497	10:35	2	1.000	A BB	135127.	50.000 PPB	14.60
3	117	850	18:07	3	1.000	A BB	119214.	50.000 PPB	14.60
4	65	457	9:44	1	1.131	A BB	64756.	47.406 PPB	13.84
5	98	664	14:09	3	0.781	A BB	111278.	46.408 PPB	13.55
6	95	1013	21:35	3	1.192	A BB	108753.	50.691 PPB	14.80
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	265	5:39	1	0.656	A BB	281.	0.299 PPB	0.09
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	97	426	9:05	2	0.857	A BB	227.	0.112 PPB	0.03
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

lo	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R. Fac	Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	47.41	50.00	1.542	1.626	0.95
5	14:09	1.00	0.781	1.00	46.41	50.00	0.933	1.006	0.93
6	21:35	1.00	1.192	1.00	50.69	50.00	0.912	0.900	1.01
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	0.99	0.658	1.00	0.30	50.00	0.007	1.118	0.01
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08	0.99	0.861	1.00	0.11	50.00	0.002	0.752	0.00
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22		0.793						
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: 90996

Data: 90996.TI
9/02/94 2:41:00
Sample: EPA SAMPLE # 40842006,(409099-6),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	24308.	47.651 PPB NSF	13.91
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.65	50.00	0.180	0.189	0.95
57	4:40		0.539						

OCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 3:16:39
TA FILE: 90996
FERENCE: VX11
ME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

ROC	STANDARDS USED	POSS	RMS	PLUS UNKNOWNS PROC	USED	POSS	RMS	LIST NAMES STANDARD/UNKNOWN
3	3	1	16	6	6	1	29	VXIS/VXSURR
3	3	1	16	11	3	1	16	VXIS/VXTARG1
3	3	1	16	11	3	1	16	VXIS/VXTARG2
3	3	1	16	11	3	1	16	VXIS/VXTARG3
3	3	1	16	11	3	1	16	VXIS/VXTARG4
3	3	1	16	10	3	1	16	VXIS/VXTARG5
3	3	1	16	5	3	1	16	VXIS/VXTARG6
3	3	1	16	4	3	1	16	VXIS/VXTARG7
3	3	1	16	7	3	1	16	VXIS/VXTARG8
3	3	1	16	4	3	1	16	VXIS/VXTARG9
3	3	1	16	4	3	1	16	VXIS/VXTARG10
3	3	1	16	6	3	1	16	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

NO	COMPOUND LIB	ENTRY	SEARCH REF	PRED	SEL	DELTA	PEAKS	SAT FIT	PEAKS	CHRO M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	994	.	128	404	-1	1
2	VX	2	498	497	497	.	1	994	.	114	497	.	1
3	VX	3	850	850	850	.	1	953	.	117	850	.	1
4	VX	4	458	457	457	.	1	939	.	65	457	.	1
5	VX	5	664	664	664	.	1	1000	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	996	.	95	1013	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	.	.	.	.	.	84	265	.	1
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	324	.	.	.	.	.	63	.	.	.
17	VX	17	291	290	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	426	.	1
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	325	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	977	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1003	.	.	.	.	.	83	.	.	.
37	VX	37	674	674	.	.	.	.	.	92	.	.	.
38	VX	38	855	855						112			

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1234	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	124	.	.	.	.	.	85	.	.	.	
49	VX	49	988	988	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1034	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	253	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1023	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

90996.
/08/94 14:18:12
ST OF TIC, PURITY, FIT

)MPOUND PURITY FIT

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842007

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-7

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 90997

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 5 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

40842007

ab Name: A.T.I. Contract: NA

ab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

atrix: (soil/water) SOIL Lab Sample ID: 409099-7

ample wt/vol: 5.0 (g/mL) G Lab File ID: 90997

evel: (low/med) LOW Date Received: 08/31/94

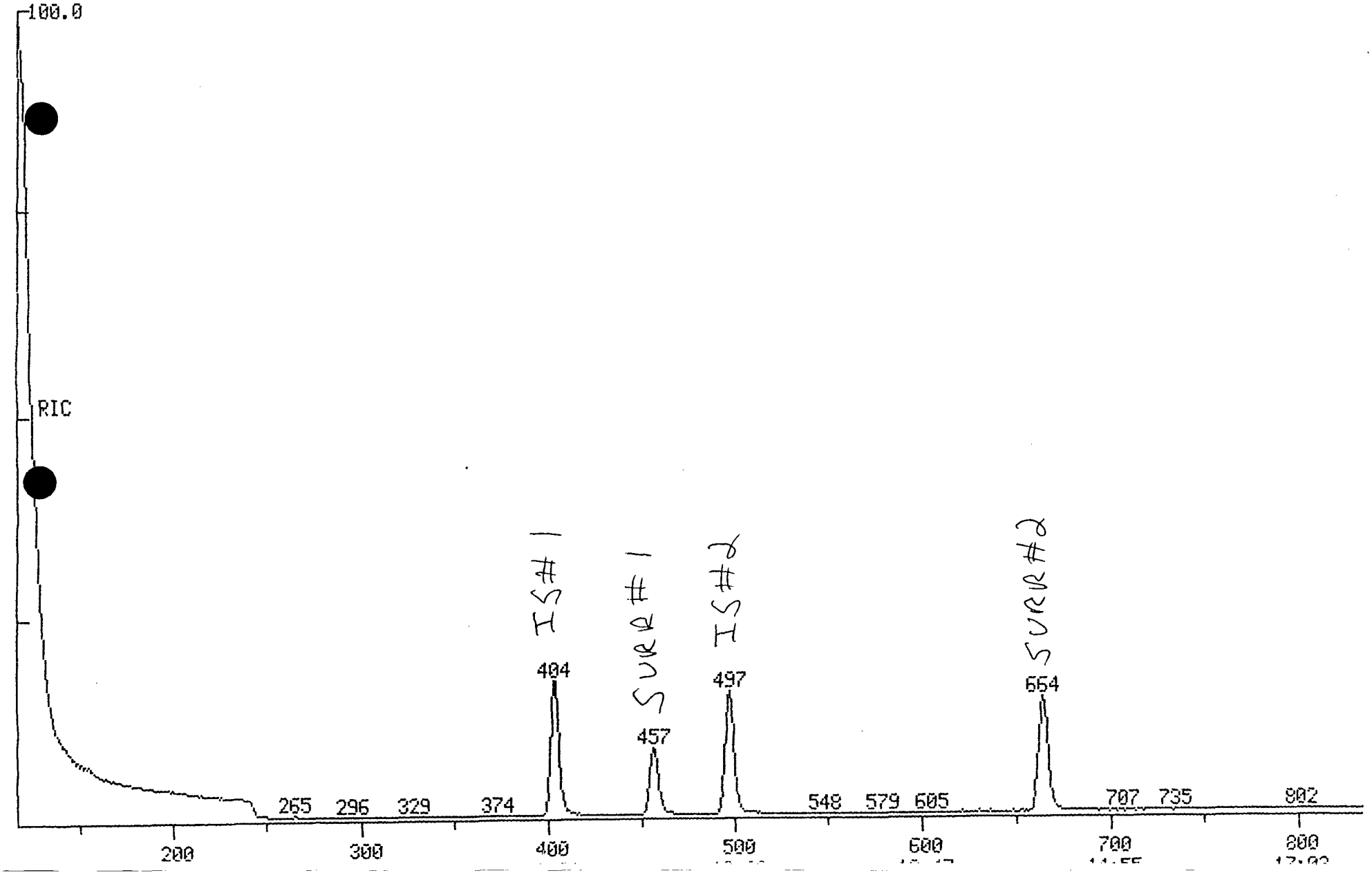
Moisture: not dec. 5 Date Analyzed: 09/02/94

olumn (pack/cap) CAP Dilution Factor: 1.0

umber TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

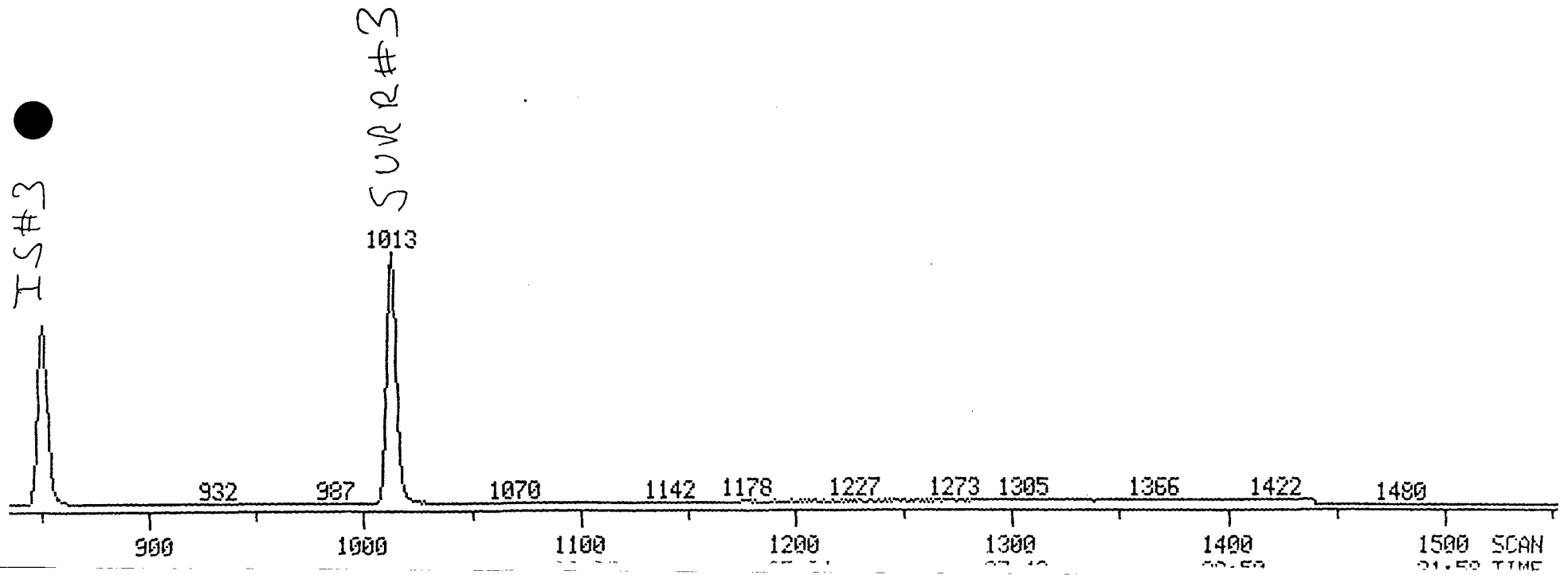
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: 90997 #1 SCANS 117 TO 835
09/02/94 3:27:00 CALI: 90997 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842007,(409099-7),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1.1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 90997 #1 SCANS 835 TO 1553
09/02/94 3:27:00 CALI: 90997 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842007,(409099-7),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 382976.



uantitation Report File: 90997

ata: 90997.TI
9/02/94 3:27:00
ample: EPA SAMPLE # 40842007,(409099-7),5.0 GRAMS
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	41684.	50.000 PPB	14.79
2	114	496	10:34	2	1.000	A BB	132602.	50.000 PPB	14.79
3	117	850	18:07	3	1.000	A BB	122833.	50.000 PPB	14.79
4	65	458	9:46	1	1.134	A BB	62980.	46.464 PPB	13.74
5	98	664	14:09	3	0.781	A BB	112340.	45.470 PPB	13.45
6	95	1013	21:35	3	1.192	A BB	108446.	49.059 PPB	14.51
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	265	5:39	1	0.656	A BB	214.	0.230 PPB	0.07
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
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36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	Fac(L)	Ratio
	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
	9:47	1.00	1.131	1.00	46.46	50.00	1.511	1.626	0.93
	14:09	1.00	0.781	1.00	45.47	50.00	0.915	1.006	0.91
	21:35	1.00	1.192	1.00	49.06	50.00	0.883	0.900	0.98
	3:00		0.347						
	3:40		0.424						
	3:08		0.362						
	3:45		0.433						
	5:41	0.99	0.658	1.00	0.23	50.00	0.005	1.118	0.00
	4:04		0.470						
	4:48		0.554						
	5:44		0.663						
	4:57		0.571						
	6:56		0.800						
	6:12		0.717						
	8:20		0.963						
	9:58		1.153						
	7:47		0.899						
	9:08		0.861						
	9:39		0.910						
	6:57		0.655						
	12:15		1.155						
	11:43		1.104						
	13:34		1.279						
	11:19		1.066						
	16:31		1.556						
	15:13		1.434						
	10:01		0.944						
	14:50		1.398						
	20:49		1.962						
	13:05		0.722						
	15:19		0.846						
	16:00		0.884						
	21:22		1.180						
	14:22		0.793						
	18:13		1.006						
	18:25		1.016						
	19:57		1.101						
1	18:37		1.028						
2	19:50		1.095						
3	24:51		1.372						
4	26:16		1.451						
5	25:11		1.391						
6	13:01		1.227						
7	12:22		1.165						
8	2:42		0.313						
9	21:03		1.984						
0	22:05		2.080						

)antitation Report File: 90997

)ta: 90997.TI
)/02/94 3:27:00
)mple: EPA SAMPLE # 40842007,(409099-7),5.0 GRAMS
)nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
)rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
)bmitted by: Analyst: DB Acct. No.: BUBBA

10UNT=AREA * REF AMNT/(REF AREA * RESP FACT)
)sp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.002	A BB	23504.	46.953 PPB NSF	13.89
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	46.95	50.00	0.177	0.189	0.94
57	4:40		0.539						

OCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 4:02:42
TA FILE: 90997
FERENCE: VX11
ME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
ROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	45	6	6	1	50	VXIS/VXSURR
3	3	1	45	11	3	1	45	VXIS/VXTARG1
3	3	1	45	11	3	1	45	VXIS/VXTARG2
3	3	1	45	11	3	1	45	VXIS/VXTARG3
3	3	1	45	11	3	1	45	VXIS/VXTARG4
3	3	1	45	10	3	1	45	VXIS/VXTARG5
3	3	1	45	5	3	1	45	VXIS/VXTARG6
3	3	1	45	4	3	1	45	VXIS/VXTARG7
3	3	1	45	7	3	1	45	VXIS/VXTARG8
3	3	1	45	4	3	1	45	VXIS/VXTARG9
3	3	1	45	4	3	1	45	VXIS/VXTARG10
3	3	1	45	6	3	1	45	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

COMPOUND			SEARCH					SAT		CHRO			
ID	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	404	404	.	1	987	.	128	404	.	1
2	VX	2	498	497	497	.	1	999	.	114	496	-1	1
3	VX	3	850	850	850	.	1	954	.	117	850	.	1
4	VX	4	458	457	457	.	1	940	.	65	458	1	1
5	VX	5	664	663	664	1	1	999	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	994	.	95	1013	.	1
7	VX	7	141	138	.	.	.	.	.	50	.	.	.
8	VX	8	172	169	.	.	.	.	.	94	.	.	.
9	VX	9	147	144	.	.	.	.	.	62	.	.	.
10	VX	10	177	174	.	.	.	.	.	64	.	.	.
11	VX	11	267	265	.	.	.	.	.	84	265	.	1
12	VX	12	191	188	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	267	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	.	.	.	.	.	96	.	.	.
16	VX	16	325	323	.	.	.	.	.	63	.	.	.
17	VX	17	291	289	.	.	.	.	.	96	.	.	.
18	VX	18	391	389	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	.	.	.
20	VX	20	365	363	.	.	.	.	.	43	.	.	.
21	VX	21	429	427	.	.	.	.	.	97	.	.	.
22	VX	22	453	451	.	.	.	.	.	117	.	.	.
23	VX	23	326	324	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	.	.	.	.	.	130	.	.	.
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	.	.	.	.	.	78	.	.	.
31	VX	31	696	695	.	.	.	.	.	75	.	.	.
32	VX	32	977	978	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1004	.	.	.	.	.	83	.	.	.
37	VX	37	674	673	.	.	.	.	.	92	.	.	.
38	VX	38	855	855						112			

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1235	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	123	.	.	.	.	.	85	.	.	.	
49	VX	49	988	989	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1035	.	.	.	.	.	75	.	.	.	
51	VX	51	697	696	.	.	.	.	.	69	.	.	.	
52	VX	52	698	697	.	.	.	.	.	69	.	.	.	
53	VX	53	254	252	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1024	.	.	.	.	.	75	.	.	.	
55	VX	55	386	384	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

90997.
/08/94 14:19:00
ST OF TIC, PURITY, FIT

MPOUND PURITY FIT

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842008

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) WATER Lab Sample ID: 409099-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 90998

Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	7	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	1	J
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

40842008

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) WATER Lab Sample ID: 409099-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 90998

Level: (low/med) LOW Date Received: 08/31/94

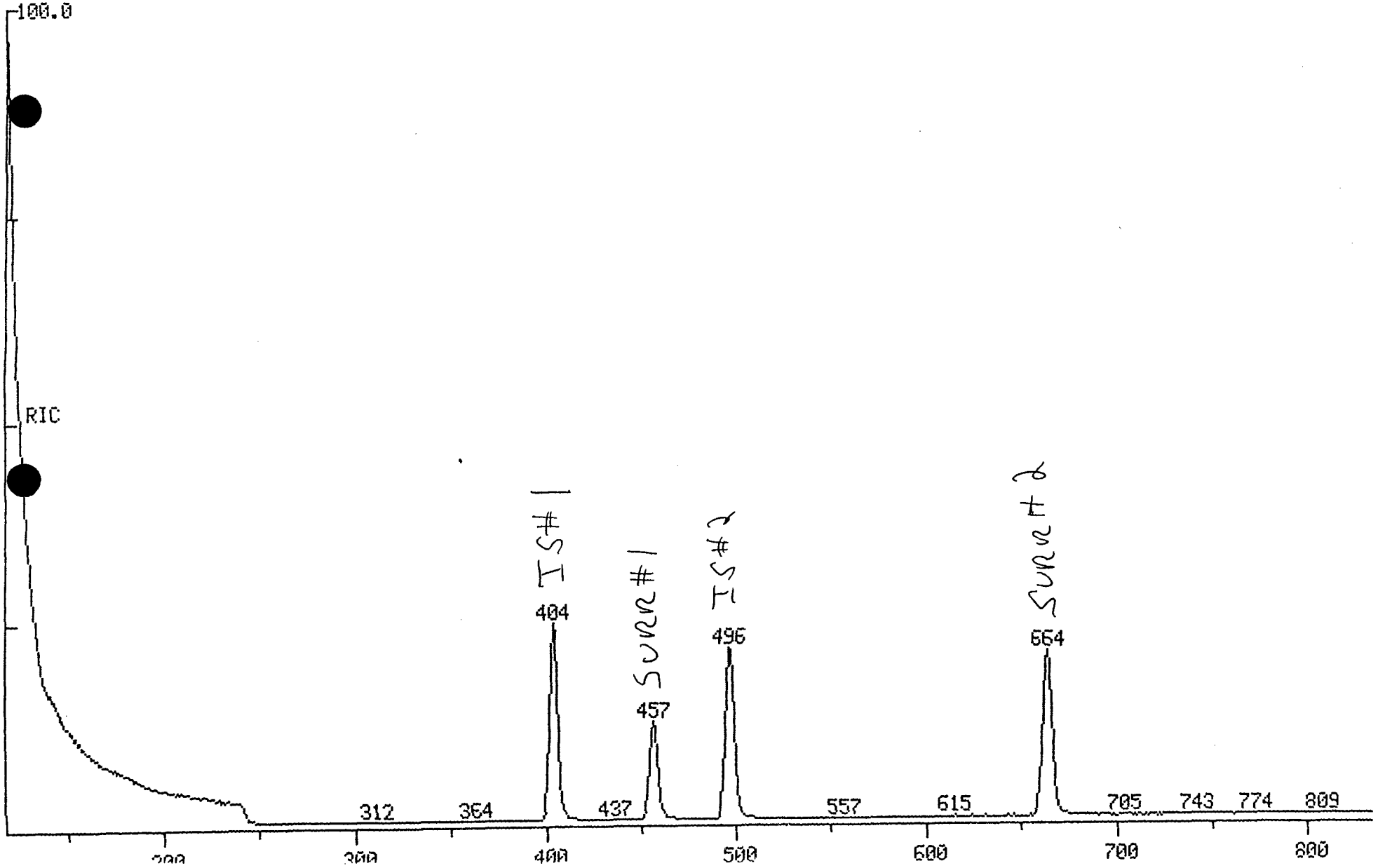
% Moisture: not dec. Date Analyzed: 09/02/94

Column (pack/cap) CAP Dilution Factor: 1.0

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

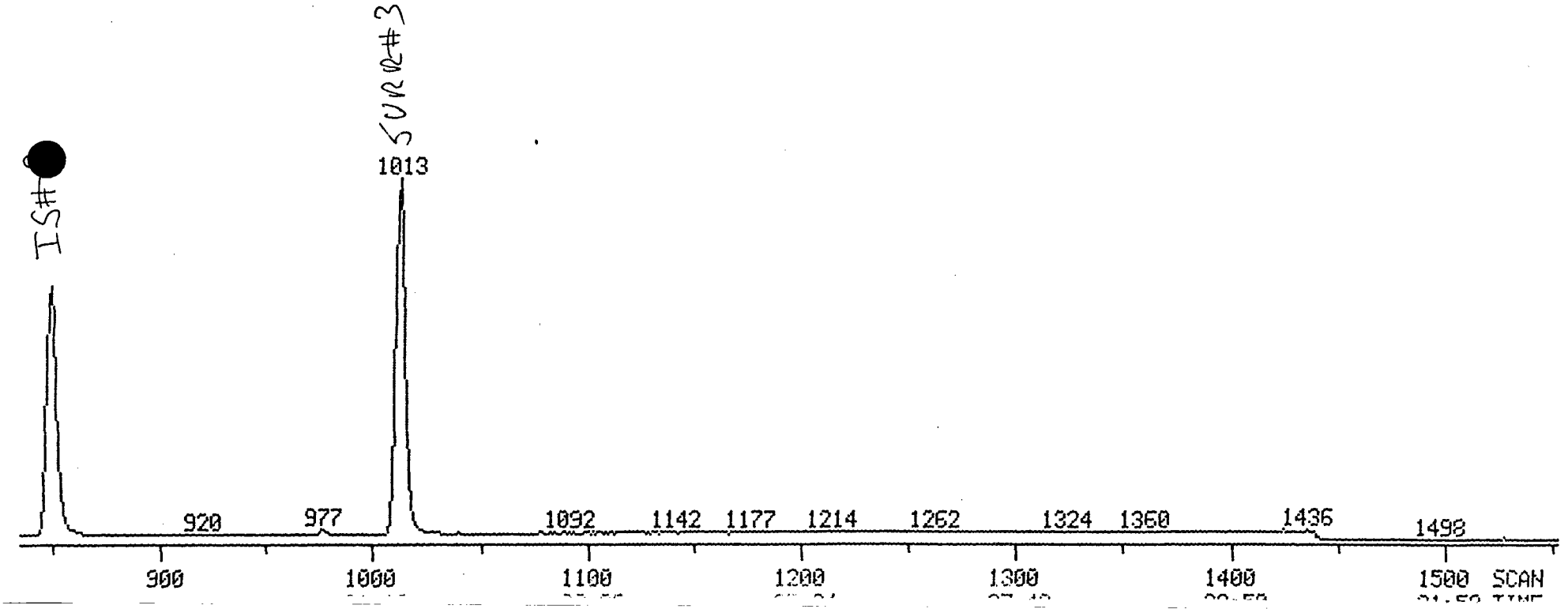
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: 90998 #1 SCANS 117 TO 835
09/02/94 4:13:00 CALI: 90998 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 90998 #1 SCANS 835 TO 1553
09/02/94 4:13:00 CALI: 90998 #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 272384.



antitation Report File: 90998

ta: 90998.TI
/02/94 4:13:00
mple: EPA SAMPLE # 40842008,(409099-8),ST
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
bmitted by: Analyst: DB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
sp. fac. from Library Entry

lo	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

o	Name
8	C016 DICHLORODIFLUOROMETHANE
9	C191 CIS 1,4-DICHLORO-2-BUTENE
0	C221 TRANS 1,4-DICHLORO-2-BUTENE

o	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	42436.	50.000 PPB	14.22
2	114	496	10:34	2	1.000	A BB	134824.	50.000 PPB	14.22
3	117	850	18:07	3	1.000	A BB	121249.	50.000 PPB	14.22
4	65	457	9:44	1	1.131	A BB	65138.	47.204 PPB	13.43
5	98	664	14:09	3	0.781	A BB	113457.	46.522 PPB	13.23
6	95	1013	21:35	3	1.192	A BB	113427.	51.983 PPB	14.78
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
0	NOT FOUND								
1	84	265	5:39	1	0.656	A BB	97.	0.102 PPB	0.03
2	NOT FOUND								
3	43	222	4:44	1	0.550	A BB	1185.	7.246 PPB	2.06
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
0	NOT FOUND								
1	NOT FOUND								
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	129	774	16:30	2	1.560	A BB	263.	0.116 PPB	0.03
9	NOT FOUND								
0	NOT FOUND								
1	NOT FOUND								
2	173	976	20:48	2	1.968	A BB	2077.	1.034 PPB	0.29
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
0	NOT FOUND								
1	NOT FOUND								
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
0	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R. Fac	Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	47.20	50.00	1.535	1.626	0.94
5	14:09	1.00	0.781	1.00	46.52	50.00	0.936	1.006	0.93
6	21:35	1.00	1.192	1.00	51.98	50.00	0.935	0.900	1.04
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	0.99	0.658	1.00	0.10	50.00	0.002	1.118	0.00
12	4:04		0.470						
13	4:48	0.99	0.554	0.99	7.25	50.00	0.028	0.193	0.14
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31	1.00	1.556	1.00	0.12	50.00	0.002	0.838	0.00
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49	1.00	1.962	1.00	1.03	50.00	0.015	0.745	0.02
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22		0.793						
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

uantitation Report File: 90998

ata: 90998.TI
9/02/94 4:13:00
ample: EPA SAMPLE # 40842008,(409099-8),ST
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	496	10:34	2	1.000	A BB	24157.	47.462 PPB	NSF 13.50
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.46	50.00	0.179	0.189	0.95
57	4:40		0.539						

ROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 4:48:39
ATA FILE: 90998
EFERENCE: VX11
AME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

---- STANDARDS -----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	63	VXIS/VXSURR
3	3	1	32	11	3	1	32	VXIS/VXTARG1
3	3	1	32	11	3	1	32	VXIS/VXTARG2
3	3	1	32	11	4	1	39	VXIS/VXTARG3
3	3	1	32	11	4	1	33	VXIS/VXTARG4
3	3	1	32	10	3	1	32	VXIS/VXTARG5
3	3	1	32	5	3	1	32	VXIS/VXTARG6
3	3	1	32	4	3	1	32	VXIS/VXTARG7
3	3	1	32	7	3	1	32	VXIS/VXTARG8
3	3	1	32	4	3	1	32	VXIS/VXTARG9
3	3	1	32	4	3	1	32	VXIS/VXTARG10
3	3	1	32	6	3	1	32	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 8 FOUND

COMPOUND ><			---------- SEARCH ----------					>< SAT ><			------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	404	404	.	1	989	.	128	404	.	1
2	VX	2	498	496	496	.	1	994	.	114	496	.	1
3	VX	3	850	850	850	.	1	971	.	117	850	.	1
4	VX	4	458	457	457	.	1	942	.	65	457	.	1
5	VX	5	664	663	664	1	1	1000	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	994	.	95	1013	.	1
7	VX	7	141	138	.	.	.	.	.	50	.	.	.
8	VX	8	172	169	.	.	.	.	.	94	.	.	.
9	VX	9	147	144	.	.	.	.	.	62	.	.	.
10	VX	10	177	174	.	.	.	.	.	64	.	.	.
11	VX	11	267	264	.	.	.	.	.	84	265	.	1
12	VX	12	191	188	.	.	.	.	.	101	.	.	.
13	VX	13	225	222	.	.	.	.	.	43	222	.	1
14	VX	14	269	266	.	.	.	.	.	76	.	.	.
15	VX	15	232	229	.	.	.	.	.	96	.	.	.
16	VX	16	325	322	.	.	.	.	.	63	.	.	.
17	VX	17	291	288	.	.	.	.	.	96	.	.	.
18	VX	18	391	389	.	.	.	.	.	83	.	.	.
19	VX	19	468	466	.	.	.	.	.	62	.	.	.
20	VX	20	365	363	.	.	.	.	.	43	.	.	.
21	VX	21	429	427	.	.	.	.	.	97	.	.	.
22	VX	22	453	451	.	.	.	.	.	117	.	.	.
23	VX	23	326	323	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	548	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	530	.	.	.	.	.	130	.	.	.
28	VX	28	775	774	774	.	1	874	.	129	774	.	1
29	VX	29	714	713	.	.	.	.	.	97	.	.	.
30	VX	30	469	467	.	.	.	.	.	78	.	.	.
31	VX	31	696	695	.	.	.	.	.	75	.	.	.
32	VX	32	977	977	977	.	1	881	.	173	976	-1	1
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	718	.	.	.	.	.	43	.	.	.
35	VX	35	752	751	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1003	.	.	.	.	.	83	.	.	.
37	VX	37	674	673	.	.	.	.	.	92	.	.	.
38	VX	38	855	855						112			

9	VX	39	864	864	.	.	.	.	.	106	.	.	.	
0	VX	40	936	936	.	.	.	.	.	04	.	.	.	
1	VX	41	874	874	.	.	.	.	.	106	.	.	.	
2	VX	42	931	931	.	.	.	.	.	106	.	.	.	
3	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
4	VX	44	1233	1235	.	.	.	.	.	146	.	.	.	
5	VX	45	1182	1184	.	.	.	.	.	146	.	.	.	
6	VX	46	611	610	.	.	.	.	.	63	.	.	.	
7	VX	47	580	579	.	.	.	.	.	93	.	.	.	
8	VX	48	126	122	.	.	.	.	.	85	.	.	.	
9	VX	49	988	989	.	.	.	.	.	88	.	.	.	
0	VX	50	-1034	1035	.	.	.	.	.	75	.	.	.	
1	VX	51	697	696	.	.	.	.	.	69	.	.	.	
2	VX	52	698	697	.	.	.	.	.	69	.	.	.	
3	VX	53	254	251	.	.	.	.	.	142	.	.	.	
4	VX	54	1023	1024	.	.	.	.	.	75	.	.	.	
5	VX	55	386	384	.	.	.	.	.	41	.	.	.	
6	VX	56	-499	497	.	.	.	.	.	88	496	.	1	
7	VX	57	219	216	.	.	.	.	.	56	.	.	.	

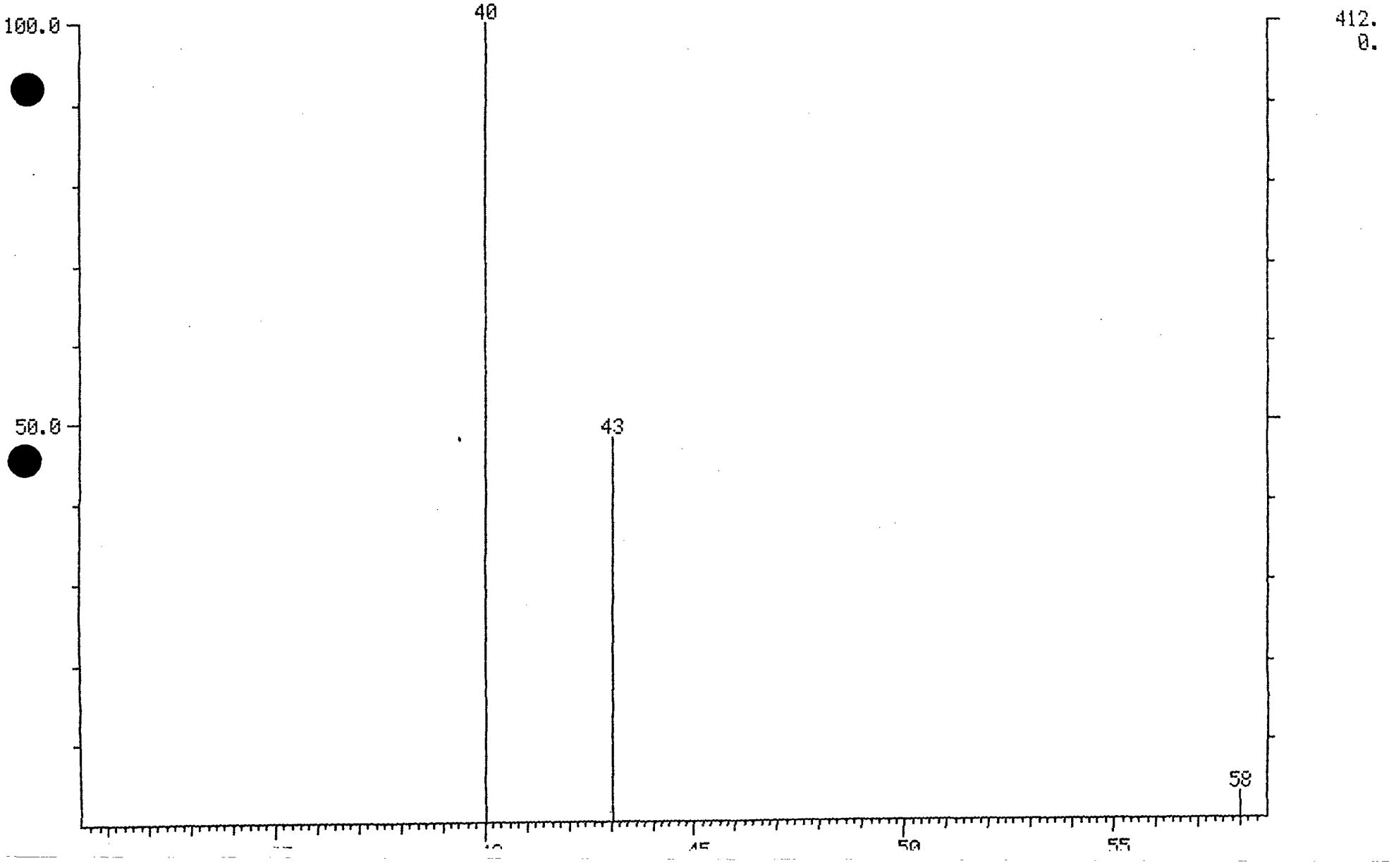
:90998.
9/08/94 14:19:49
IST OF TIC, PURITY, FIT

OMPOUND PURITY FIT

MASS SPECTRUM
09/02/94 4:13:00 + 4:44
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 40 DEG. C
ENHANCED (S 15B 2N 0T)NAME: C035 ACETONE

DATA: 90998 #222
CALI: 90998 #3

BASE M/Z: 40
RIC: 623.

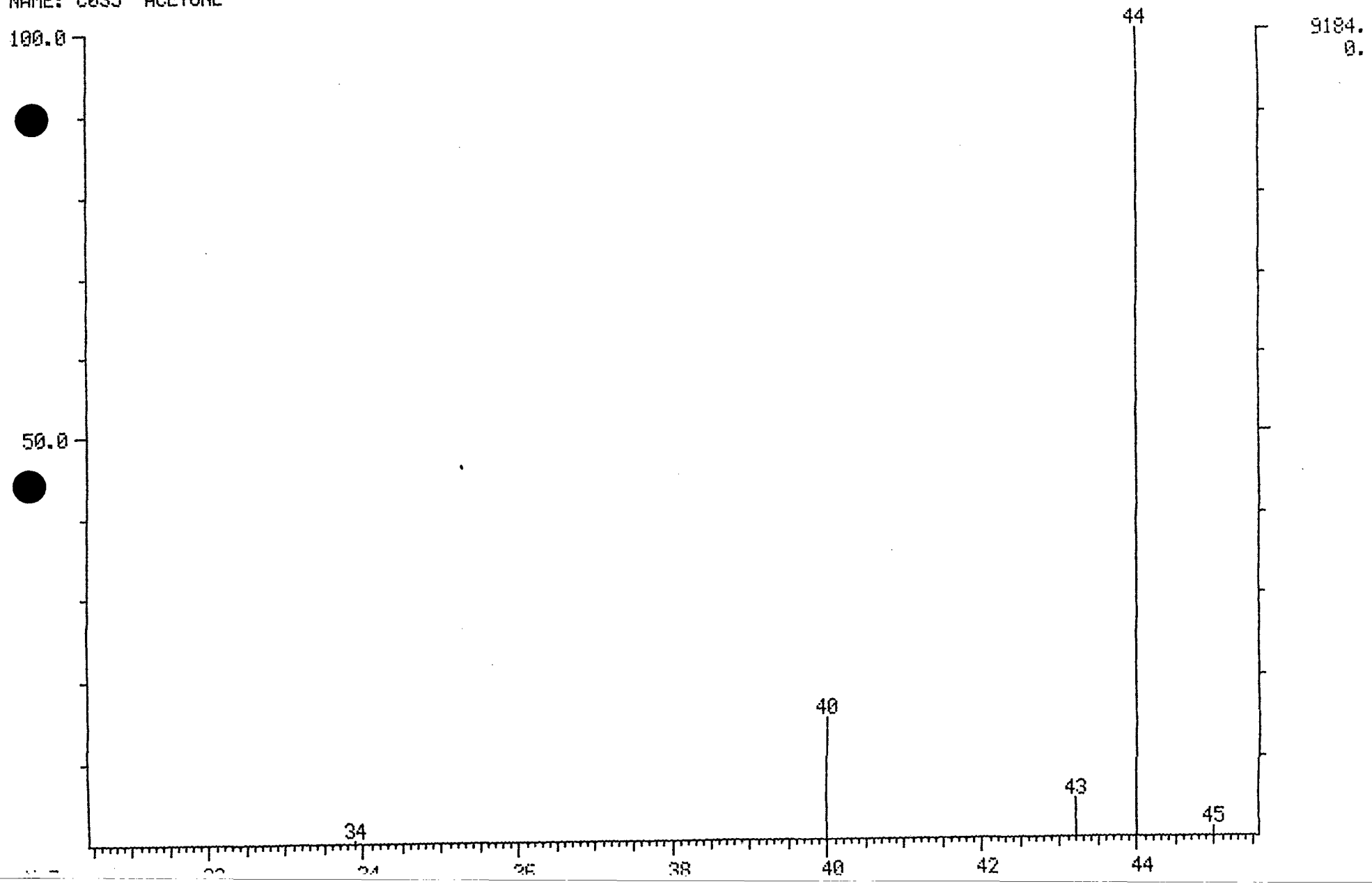


MASS SPECTRUM
09/02/94 4:13:00 + 4:44
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 48 DEG. C

DATA: 90998 #222
CALI: 90998 #3

BASE M/Z: 44
RIC: 11120.

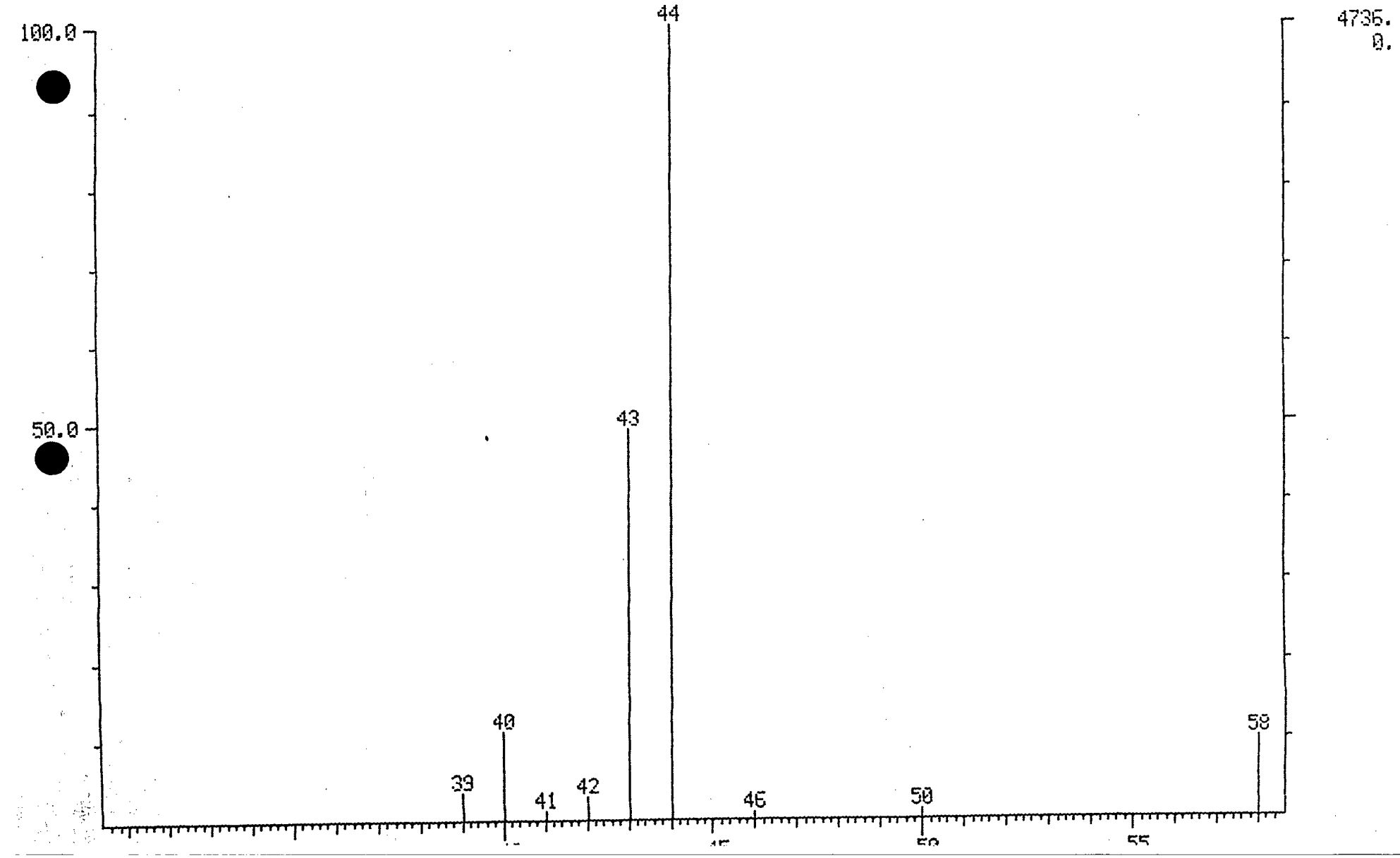
NAME: C035 ACETONE



MASS SPECTRUM
09/01/94 19:38:00 + 4:49
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 48 DEG. C
ENHANCED (S 15B 2N 0T)NAME: C035 ACETONE

DATA: CPB901 #226
CALI: CPB901 #3

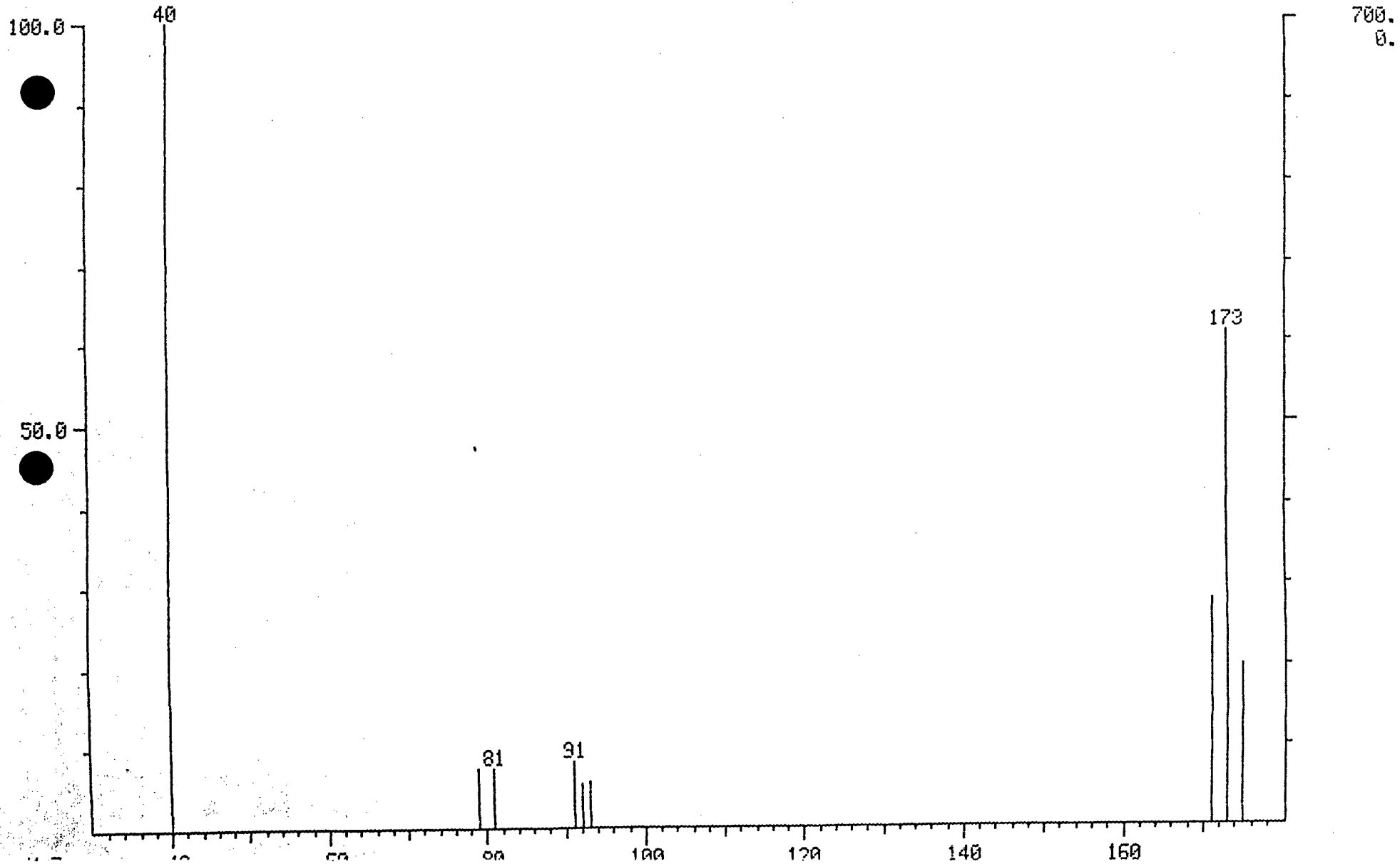
BASE M/Z: 44
RIC: 8528.



MASS SPECTRUM
09/02/94 4:13:00 + 20:48
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 129 DEG. C
ENHANCED (S 15B 2N 0T)NAME: C180 BROMOFORM

DATA: 90998 #976
CALI: 90998 #3

BASE M/Z: 40
RIC: 1702.

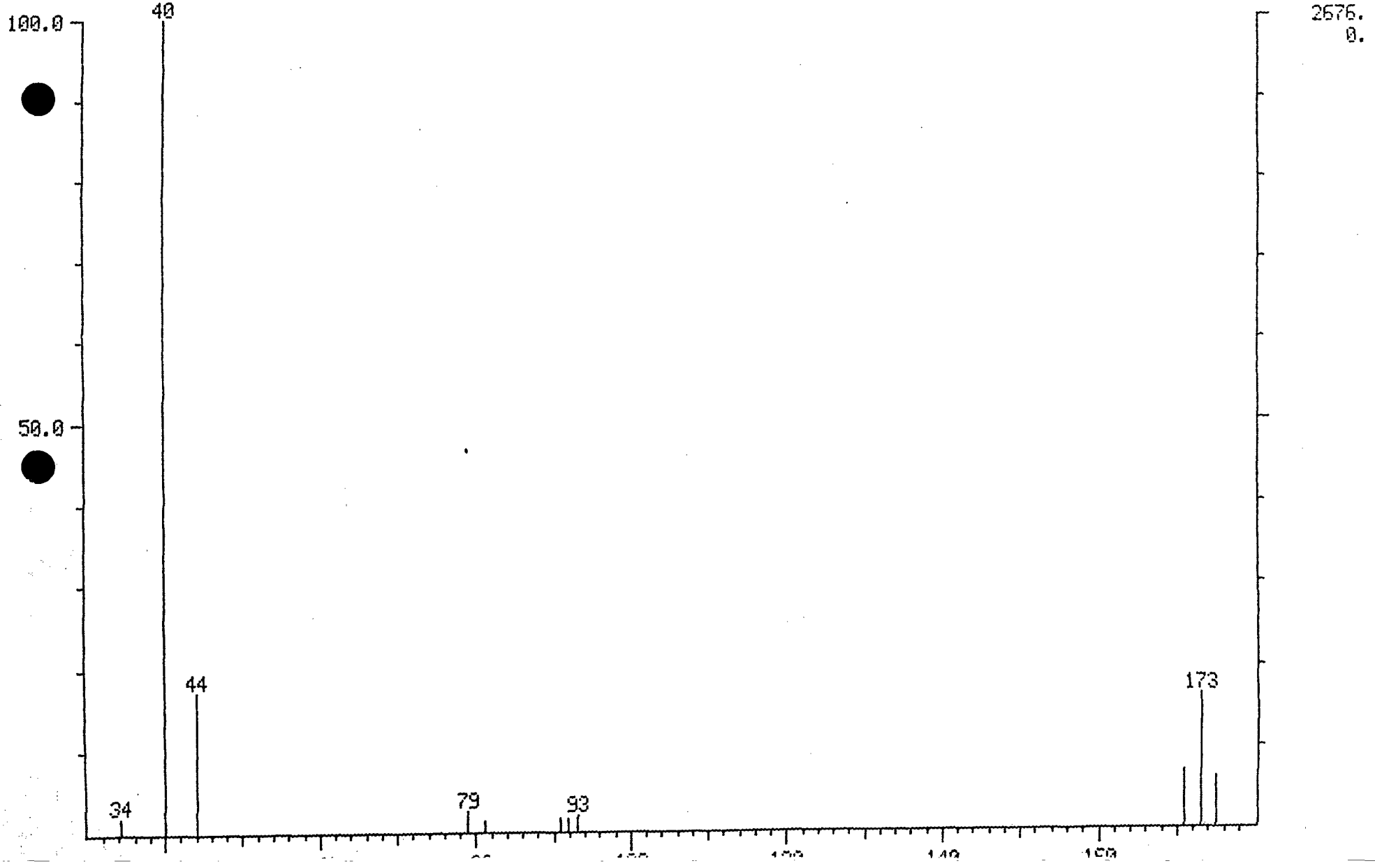


MASS SPECTRUM
09/02/94 4:13:00 + 20:48
SAMPLE: EPA SAMPLE # 40842008,(409099-8),ST
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 129 DEG. C

DATA: 90998 #976
CALI: 90998 #3

BASE M/Z: 40
RIC: 4232.

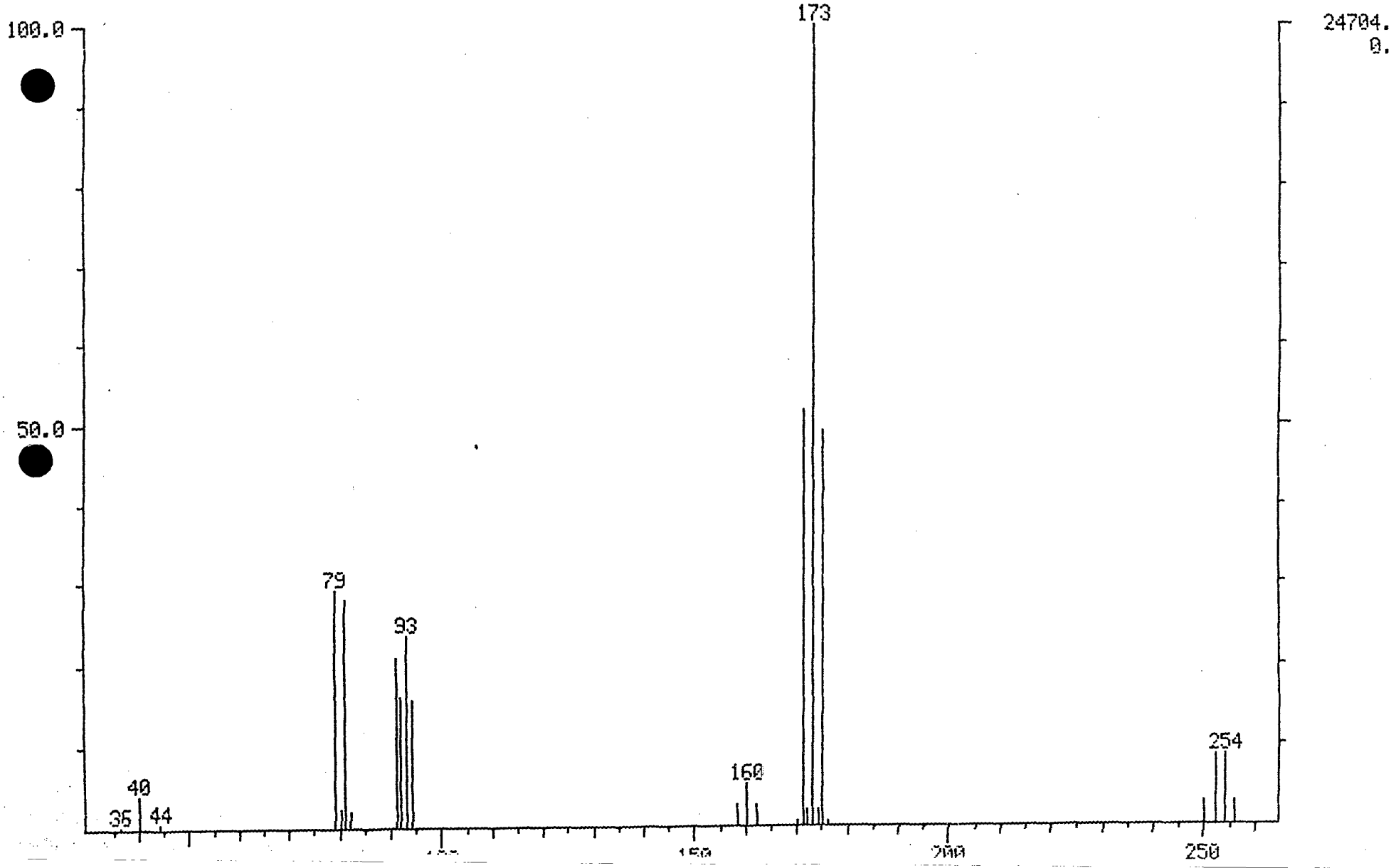
NAME: C180 BROMOFORM



MASS SPECTRUM
09/01/94 13:38:00 + 20:52
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 129 DEG. C
ENHANCED (S 15B 2N 0T)NAME: C180 BROMOFORM

DATA: CPB301 #979
CALI: CPB301 #3

BASE M/Z: 173
RIC: 94464.



6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Instrument ID: BUBBA Calibration Date(s): 09/01/94 09/01/94

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

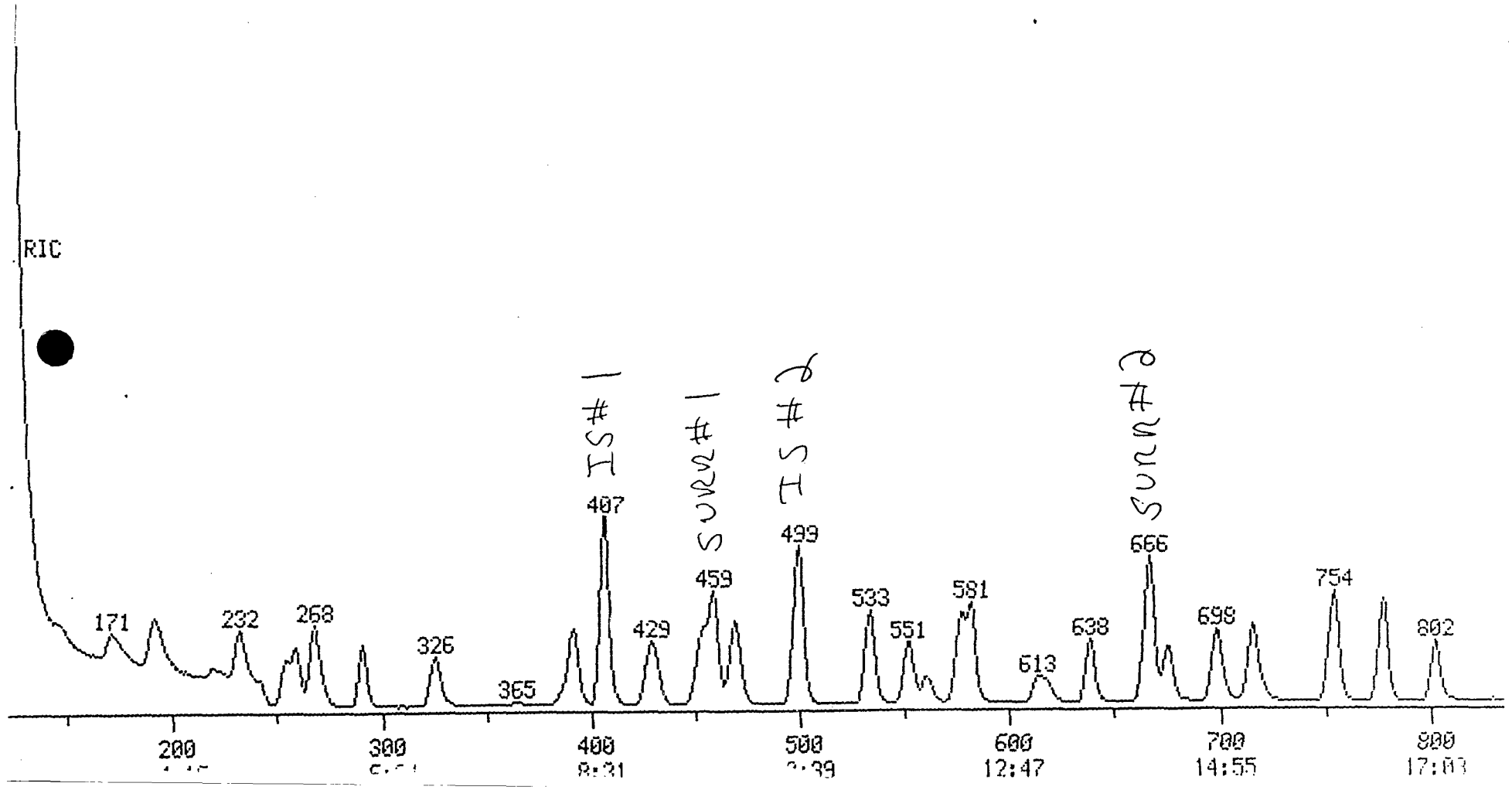
LAB FILE ID: RRF20 = 20BS901 RRF50 = CAB901
RRF100= 100BS901 RRF150= 150BS901 RRF200= 200BS901

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	0.695	0.680	0.634	0.674	0.653	0.667	3.6	#
Bromomethane		1.234	1.240	1.144	1.254	1.191	1.213	3.7	
Vinyl Chloride	*	0.867	0.891	0.814	0.902	0.861	0.867	3.9	*
Chloroethane		0.510	0.534	0.493	0.562	0.509	0.522	5.2	
Methylene Chloride		1.104	1.012	0.917	0.975	0.897	0.981	8.4	
Acetone		0.230	0.287	0.252	0.240	0.191	0.240	14.5	
Carbon Disulfide		2.736	2.593	2.407	2.621	2.383	2.548	5.9	
1,1-Dichloroethene	*	1.005	0.976	0.923	1.003	0.922	0.966	4.3	*
1,1-Dichloroethane	#	2.185	2.067	1.951	2.061	1.906	2.034	5.4	#
total 1,2-Dichloroethene		1.073	1.038	0.971	1.040	0.955	1.015	4.9	
Chloroform	*	2.931	2.737	2.568	2.663	2.391	2.658	7.5	*
1,2-Dichloroethane		1.879	1.768	1.698	1.711	1.491	1.709	8.3	
2-Butanone		0.355	0.355	0.376	0.333	0.269	0.338	12.2	
1,1,1-Trichloroethane		0.910	0.737	0.705	0.739	0.646	0.747	13.2	
Carbon Tetrachloride		0.999	0.875	0.825	0.837	0.730	0.853	11.4	
Vinyl Acetate		0.479	0.435	0.445	0.445	0.367	0.434	9.5	
Bromodichloromethane		1.058	0.900	0.866	0.871	0.734	0.886	13.0	
1,2-Dichloropropane	*	0.433	0.369	0.351	0.351	0.304	0.362	12.9	*
cis-1,3-Dichloropropene		0.602	0.549	0.549	0.556	0.486	0.548	7.5	
Trichloroethene		0.593	0.547	0.498	0.497	0.423	0.512	12.4	
Dibromochloromethane		1.082	0.941	0.894	0.871	0.704	0.898	15.2	
1,1,2-Trichloroethane		0.455	0.403	0.378	0.366	0.297	0.380	15.1	
Benzene		0.811	0.711	0.657	0.666	0.584	0.686	12.2	
trans-1,3-Dichloropropene		0.443	0.415	0.419	0.426	0.362	0.413	7.4	
Bromoform	#	0.935	0.884	0.833	0.756	0.616	0.805	15.5	#
4-Methyl-2-Pentanone		0.716	0.630	0.612	0.600	0.436	0.599	17.0	
2-Hexanone		0.287	0.262	0.260	0.216	0.180	0.241	17.7	
Tetrachloroethene		0.692	0.610	0.545	0.583	0.445	0.575	15.7	
1,1,2,2-Tetrachloroethane	#	0.909	0.766	0.715	0.651	0.512	0.711	20.6	#
Toluene	*	0.657	0.598	0.544	0.586	0.464	0.570	12.6	*
Chlorobenzene	#	0.929	0.913	0.857	0.853	0.706	0.852	10.3	#
Ethylbenzene	*	0.317	0.335	0.322	0.314	0.255	0.309	10.0	*
Styrene		0.505	0.731	0.698	0.566	0.579	0.616	15.4	
o-Xylene		0.371	0.477	0.449	0.392	0.373	0.412	11.6	
m,p-xylene		0.374	0.437	0.392	0.360	0.329	0.378	10.6	
Toluene-d8		1.069	0.999	0.989	1.084	0.960	1.020	5.3	
Bromofluorobenzene		0.703	0.920	0.894	0.764	0.925	0.841	12.0	
1,2-Dichloroethane-d4		1.609	1.600	1.613	1.449	1.447	1.544	5.7	

RIC DATA: 20BS901 #1 SCANS 117 TO 835
09/01/94 17:25:00 CALI: 20BS901 #3 OUT OF 117 TO 1553
SAMPLE: VSTD020 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0

RIC



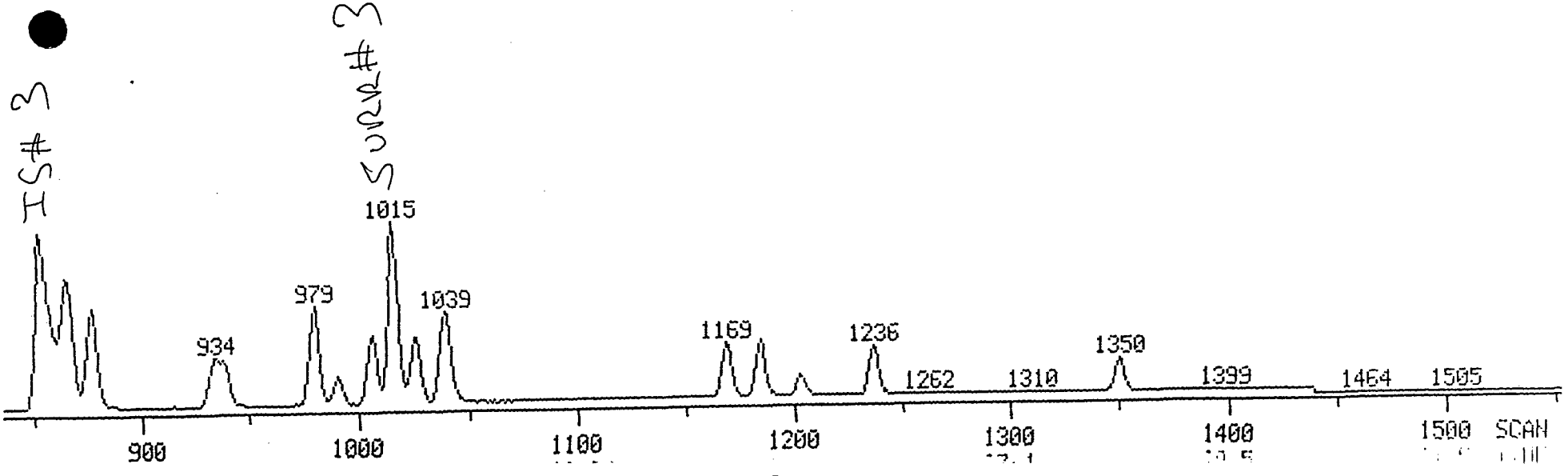
RIC
09/01/94 17:25:00
SAMPLE: VSTD020 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 20BS901 #1
CALI: 20BS901 #3

SCANS 835 TO 1553
OUT OF 117 TO 1553

331680.

100.0



antitation Report File: 20BS901

ta: 20BS901.TI
/01/94 17:25:00
mple: VSTD020 SOIL
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
bmitted by: Analyst: DB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
sp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name	
48	C016	DICHLORODIFLUOROMETHANE
49	C191	CIS 1,4-DICHLORO-2-BUTENE
50	C221	TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	406	8:39	1	1.000	A BV	52515.	50.000 PPB	3.52
2	114	498	10:37	2	1.000	A BB	158821.	50.000 PPB	3.52
3	117	852	18:09	3	1.000	A BV	118466.	50.000 PPB	3.52
4	65	459	9:47	1	1.131	A BB	84522.	50.000 PPB	3.52
5	98	666	14:11	3	0.782	A BB	126645.	50.000 PPB	3.52
6	95	1015	21:38	3	1.191	A VB	83274.	50.000 PPB	3.52
7	50	140	2:59	1	0.345	A VB	14590.	20.000 PPB	1.41
8	94	171	3:39	1	0.421	A BB	25922.	20.000 PPB	1.41
9	62	146	3:07	1	0.360	A BB	18215.	20.000 PPB	1.41
10	64	177	3:46	1	0.436	A BB	10723.	20.000 PPB	1.41
11	84	267	5:41	1	0.658	A BB	23201.	20.000 PPB	1.41
12	101	192	4:05	1	0.473	A BB	70369.	20.000 PPB	1.41
13	43	224	4:46	1	0.552	A BB	4827.	20.000 PPB	1.41
14	76	269	5:44	1	0.663	A VB	57465.	20.000 PPB	1.41
15	96	232	4:57	1	0.571	A BB	21116.	20.000 PPB	1.41
16	63	325	6:56	1	0.800	A BB	45906.	20.000 PPB	1.41
17	96	291	6:12	1	0.717	A BB	22537.	20.000 PPB	1.41
18	83	392	8:21	1	0.966	A BB	61562.	20.000 PPB	1.41
19	62	468	9:58	1	1.153	A BB	39469.	20.000 PPB	1.41
20	43	365	7:47	1	0.899	A BB	7452.	20.000 PPB	1.41
21	97	429	9:08	2	0.861	A BB	57782.	20.000 PPB	1.41
22	117	454	9:40	2	0.912	A BB	63443.	20.000 PPB	1.41
23	43	326	6:57	2	0.655	A BB	30429.	20.000 PPB	1.41
24	83	576	12:16	2	1.157	A BB	67192.	20.000 PPB	1.41
25	63	551	11:44	2	1.106	A BB	27511.	20.000 PPB	1.41
26	75	638	13:36	2	1.281	A BB	38216.	20.000 PPB	1.41
27	130	533	11:21	2	1.070	A BB	37677.	20.000 PPB	1.41
28	129	777	16:33	2	1.560	A BV	68731.	20.000 PPB	1.41
29	97	715	15:14	2	1.436	A BB	28899.	20.000 PPB	1.41
30	78	470	10:01	2	0.944	A BB	51516.	20.000 PPB	1.41
31	75	698	14:52	2	1.402	A BB	28167.	20.000 PPB	1.41
32	173	979	20:52	2	1.966	A BB	59396.	20.000 PPB	1.41
33	43	617	13:09	3	0.724	A BB	33915.	20.000 PPB	1.41
34	43	721	15:22	3	0.846	A BB	13577.	20.000 PPB	1.41
35	164	754	16:04	3	0.885	A BB	32790.	20.000 PPB	1.41
36	83	1005	21:25	3	1.180	A BB	43097.	20.000 PPB	1.41
37	92	675	14:23	3	0.792	A BB	31118.	20.000 PPB	1.41
38	112	857	18:16	3	1.006	A BB	44017.	20.000 PPB	1.41
39	106	866	18:27	3	1.016	A BV	15029.	20.000 PPB	1.41
40	104	938	19:59	3	1.101	A BB	23940.	20.000 PPB	1.41
41	106	876	18:40	3	1.028	A VB	35433.	40.000 PPB	2.82
42	106	933	19:53	3	1.095	A BB	17589.	20.000 PPB	1.41
43	146	1169	24:55	3	1.372	A BB	31577.	20.000 PPB	1.41
44	146	1236	26:20	3	1.451	A BB	29577.	20.000 PPB	1.41
45	146	1185	25:15	3	1.391	A BB	30238.	20.000 PPB	1.41
46	63	612	13:02	2	1.229	A BB	12047.	20.000 PPB	1.41
47	93	581	12:23	2	1.167	A BB	43230.	20.000 PPB	1.41
48	85	125	2:40	1	0.308	A BB	37421.	20.000 PPB	1.41
49	88	990	21:06	2	1.988	A BB	7146.	20.000 PPB	1.41
50	75	1038	22:07	2	2.084	A BB	9873.	20.000 PPB	1.41

lo	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R.Fac	Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.609	1.609	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	1.069	1.069	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.703	0.703	1.00
7	3:00	0.99	0.347	0.99	20.00	20.00	0.695	0.695	1.00
8	3:40	0.99	0.424	0.99	20.00	20.00	1.234	1.234	1.00
9	3:08	0.99	0.362	0.99	20.00	20.00	0.867	0.867	1.00
10	3:45	1.01	0.433	1.01	20.00	20.00	0.510	0.510	1.00
11	5:41	1.00	0.658	1.00	20.00	20.00	1.104	1.104	1.00
12	4:04	1.01	0.470	1.01	20.00	20.00	3.350	3.350	1.00
13	4:48	1.00	0.554	1.00	20.00	20.00	0.230	0.230	1.00
14	5:44	1.00	0.663	1.00	20.00	20.00	2.736	2.736	1.00
15	4:57	1.00	0.571	1.00	20.00	20.00	1.005	1.005	1.00
16	6:56	1.00	0.800	1.00	20.00	20.00	2.185	2.185	1.00
17	6:12	1.00	0.717	1.00	20.00	20.00	1.073	1.073	1.00
18	8:20	1.00	0.963	1.00	20.00	20.00	2.931	2.931	1.00
19	9:58	1.00	1.153	1.00	20.00	20.00	1.879	1.879	1.00
20	7:47	1.00	0.899	1.00	20.00	20.00	0.355	0.355	1.00
21	9:08	1.00	0.861	1.00	20.00	20.00	0.910	0.910	1.00
22	9:39	1.00	0.910	1.00	20.00	20.00	0.999	0.999	1.00
23	6:57	1.00	0.655	1.00	20.00	20.00	0.479	0.479	1.00
24	12:15	1.00	1.155	1.00	20.00	20.00	1.058	1.058	1.00
25	11:43	1.00	1.104	1.00	20.00	20.00	0.433	0.433	1.00
26	13:34	1.00	1.279	1.00	20.00	20.00	0.602	0.602	1.00
27	11:19	1.00	1.066	1.00	20.00	20.00	0.593	0.593	1.00
28	16:31	1.00	1.556	1.00	20.00	20.00	1.082	1.082	1.00
29	15:13	1.00	1.434	1.00	20.00	20.00	0.455	0.455	1.00
30	10:01	1.00	0.944	1.00	20.00	20.00	0.811	0.811	1.00
31	14:50	1.00	1.398	1.00	20.00	20.00	0.443	0.443	1.00
32	20:49	1.00	1.962	1.00	20.00	20.00	0.935	0.935	1.00
33	13:05	1.00	0.722	1.00	20.00	20.00	0.716	0.716	1.00
34	15:19	1.00	0.846	1.00	20.00	20.00	0.287	0.287	1.00
35	16:00	1.00	0.884	1.00	20.00	20.00	0.692	0.692	1.00
36	21:22	1.00	1.180	1.00	20.00	20.00	0.909	0.909	1.00
37	14:22	1.00	0.793	1.00	20.00	20.00	0.657	0.657	1.00
38	18:13	1.00	1.006	1.00	20.00	20.00	0.929	0.929	1.00
39	18:25	1.00	1.016	1.00	20.00	20.00	0.317	0.317	1.00
40	19:57	1.00	1.101	1.00	20.00	20.00	0.505	0.505	1.00
41	18:37	1.00	1.028	1.00	40.00	40.00	0.374	0.374	1.00
42	19:50	1.00	1.095	1.00	20.00	20.00	0.371	0.371	1.00
43	24:51	1.00	1.372	1.00	20.00	20.00	0.666	0.666	1.00
44	26:16	1.00	1.451	1.00	20.00	20.00	0.624	0.624	1.00
45	25:11	1.00	1.391	1.00	20.00	20.00	0.638	0.638	1.00
46	13:01	1.00	1.227	1.00	20.00	20.00	0.190	0.190	1.00
47	12:22	1.00	1.165	1.00	20.00	20.00	0.680	0.680	1.00
48	2:42	0.98	0.313	0.98	20.00	20.00	1.781	1.781	1.00
49	21:03	1.00	1.984	1.00	20.00	20.00	0.112	0.112	1.00
50	22:05	1.00	2.080	1.00	20.00	20.00	0.155	0.155	1.00

uantitation Report File: 20BS901

ata: 20BS901.TI
9/01/94 17:25:00
ample: VSTD020 SOIL
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	700	14:55	2	1.406	A BB	21625.	20.000 PPB	1.41
52	69	700	14:55	3	0.822	A BB	21625.	20.000 PPB	1.41
53	142	254	5:25	1	0.626	A BB	73601.	20.000 PPB	1.41
54	75	1026	21:52	3	1.204	A VB	31394.	20.000 PPB	1.41
55	41	386	8:14	1	0.951	A BB	10809.	20.000 PPB	1.41
56	88	499	10:38	2	1.002	A BB	28794.	20.000 PPB	1.41
57	56	219	4:40	1	0.539	A BB	9720.	100.000 PPB	7.04

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	20.00	20.00	0.340	0.340	1.00
52	14:52	1.00	0.821	1.00	20.00	20.00	0.456	0.456	1.00
53	5:25	1.00	0.626	1.00	20.00	20.00	3.504	3.504	1.00
54	21:48	1.00	1.204	1.00	20.00	20.00	0.663	0.663	1.00
55	8:14	1.00	0.951	1.00	20.00	20.00	0.515	0.515	1.00
56	10:37	1.00	1.000	1.00	20.00	20.00	0.453	0.453	1.00
57	4:40	1.00	0.539	1.00	100.00	100.00	0.093	0.093	1.00

ATA FILE: 20BS901
EFERENCE: VX11
AME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

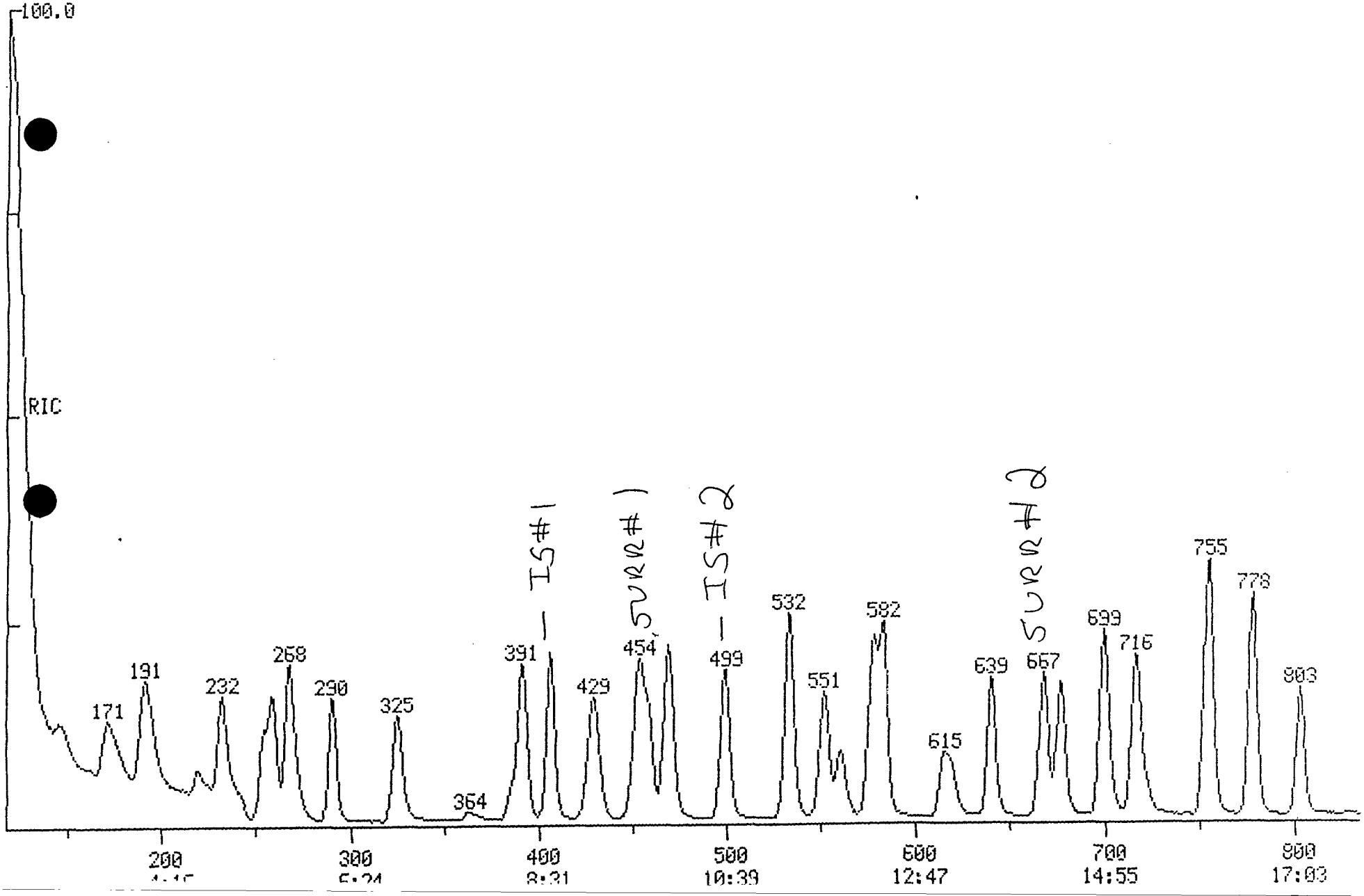
---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	16	6	6	1	29	VXIS/VXSURR
3	3	1	16	11	11	1	45	VXIS/VXTARG1
3	3	1	16	11	11	1	38	VXIS/VXTARG2
3	3	1	16	11	11	1	29	VXIS/VXTARG3
3	3	1	16	11	11	1	39	VXIS/VXTARG4
3	3	1	16	10	10	4	41	VXIS/VXTARG5
3	3	1	16	5	5	1	25	VXIS/VXTARG6
3	3	1	16	4	4	1	14	VXIS/VXTARG7
3	3	1	16	7	5	1	28	VXIS/VXTARG8
3	3	1	16	4	4	1	27	VXIS/VXTARG9
3	3	1	16	4	4	1	27	VXIS/VXTARG10
3	3	1	16	6	5	2	39	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 54 FOUND

COMPOUND ><			---------- SEARCH ---------- >< SAT ><					------ CHRO ------- >				
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	407	407	.	1	993	.	128	406	-1	1
2	VX	2	498	499	499	.	1	996	.	114	498	-1	1
3	VX	3	850	852	852	.	1	965	.	117	852	.	1
4	VX	4	458	459	459	.	1	947	.	65	459	.	1
5	VX	5	664	666	666	.	1	996	.	98	666	.	1
6	VX	6	1013	1015	1015	.	1	990	.	95	1015	.	1
7	VX	7	141	140	140	.	1	996	.	50	140	.	1
8	VX	8	172	171	171	.	1	977	.	94	171	.	1
9	VX	9	147	146	146	.	1	992	.	62	146	.	1
10	VX	10	177	176	177	1	1	969	.	64	177	.	1
11	VX	11	267	267	267	.	1	999	.	84	267	.	1
12	VX	12	191	191	191	.	1	998	.	101	192	1	1
13	VX	13	225	225	224	-1	1	989	.	43	224	.	1
14	VX	14	269	269	269	.	1	991	.	76	269	.	1
15	VX	15	232	232	232	.	1	991	.	96	232	.	1
16	VX	16	325	325	325	.	1	986	.	63	325	.	1
17	VX	17	291	291	291	.	1	987	.	96	291	.	1
18	VX	18	391	392	392	.	1	987	.	83	392	.	1
19	VX	19	468	469	469	.	1	970	.	62	468	-1	1
20	VX	20	365	365	365	.	1	946	.	43	365	.	1
21	VX	21	429	430	429	-1	1	976	.	97	429	.	1
22	VX	22	453	454	454	.	1	961	.	117	454	.	1
23	VX	23	326	327	327	.	1	981	.	43	326	-1	1
24	VX	24	575	576	576	.	1	993	.	83	576	.	1
25	VX	25	550	551	551	.	1	993	.	63	551	.	1
26	VX	26	637	638	638	.	1	996	.	75	638	.	1
27	VX	27	532	533	533	.	1	985	.	130	533	.	1
28	VX	28	775	777	777	.	1	1000	.	129	777	.	1
29	VX	29	714	715	715	.	1	945	.	97	715	.	1
30	VX	30	469	470	470	.	1	992	.	78	470	.	1
31	VX	31	696	698	698	.	1	988	.	75	698	.	1
32	VX	32	977	979	979	.	1	997	.	173	979	.	1
33	VX	33	615	616	617	1	1	983	.	43	617	.	1
34	VX	34	719	721	720	-1	1	971	.	43	721	1	1
35	VX	35	752	754	754	.	1	959	.	164	754	.	1
36	VX	36	1003	1005	1005	.	1	999	.	83	1005	.	1
37	VX	37	674	676	675	-1	1	993	.	92	675	.	1
38	VX	38	855	857	857	.	1	990	.	112	857	.	1

39	VX	39	884	886	886	.	2	997	.	105	886	.	1
40	VX	40	936	938	938	.	1	986	.	104	938	.	1
41	VX	41	874	876	[redacted]	.	1	997	.	106	876	.	1
42	VX	42	931	933	934	1	1	987	.	106	933	-1	1
43	VX	43	1167	1170	1169	-1	2	995	.	146	1169	.	1
44	VX	44	1233	1236	1236	.	1	992	.	146	1236	.	1
45	VX	45	1182	1185	1185	.	1	993	.	146	1185	.	1
46	VX	46	611	612	612	.	1	994	.	63	612	.	1
47	VX	47	580	581	581	.	1	995	.	93	581	.	1
48	VX	48	126	126	126	.	1	996	.	85	125	-1	1
49	VX	49	988	990	990	.	1	979	.	88	990	.	1
50	VX	50	-1034	1036	.	.	.	.	.	75	1038	.	1
51	VX	51	697	699	.	.	.	.	.	69	700	.	1
52	VX	52	698	700	700	.	1	994	.	69	700	.	1
53	VX	53	254	254	254	.	1	998	.	142	254	.	1
54	VX	54	1023	1026	1026	.	1	996	.	75	1026	.	1
55	VX	55	386	387	386	-1	1	995	.	41	386	.	1
56	VX	56	-499	500	.	.	.	.	.	88	499	.	1
57	VX	57	219	219	219	.	2	1000	.	56	219	.	1

RIC DATA: CAB901 #1 SCANS 117 TO 835
09/01/94 18:12:00 CALI: CAB901 #3 OUT OF 117 TO 1501
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1.1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20. 3



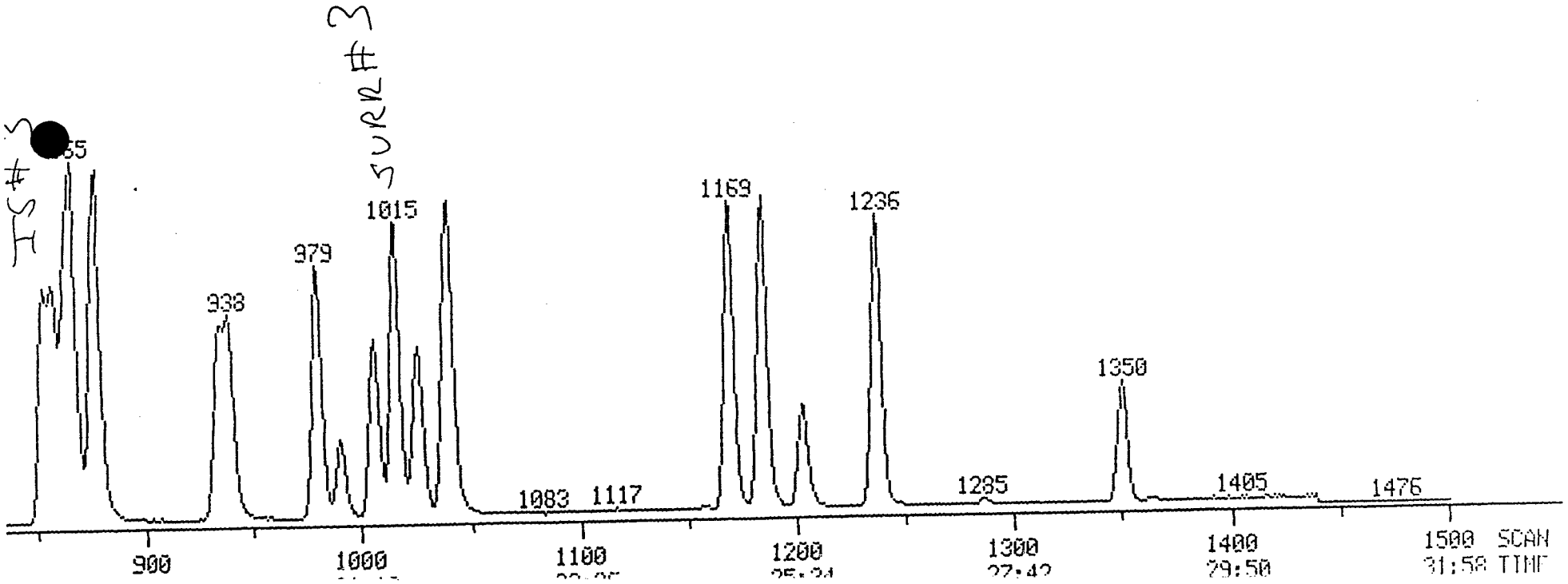
RIC
09/01/94 18:12:00
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CAB901 #1
CALI: CAB901 #3

SCANS 835 TO 1501
OUT OF 117 TO 1501

387584.

100.0



uantitation Report File: CAB901

ata: CAB901.TI
9/01/94 18:12:00
ample: VSTD050 SOIL
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	406	8:39	1	1.000	A BB	51029.	50.000 PPB	1.61
2	114	499	10:38	2	1.000	A BB	168375.	50.000 PPB	1.61
3	117	853	18:11	3	1.000	A BV	141281.	50.000 PPB	1.61
4	65	459	9:47	1	1.131	A BB	81624.	50.000 PPB	1.61
5	98	667	14:13	3	0.782	A BB	141147.	50.000 PPB	1.61
6	95	1015	21:38	3	1.190	A VB	130040.	50.000 PPB	1.61
7	50	140	2:59	1	0.345	A VB	34690.	50.000 PPB	1.61
8	94	171	3:39	1	0.421	A BB	63288.	50.000 PPB	1.61
9	62	147	3:08	1	0.362	A BB	45470.	50.000 PPB	1.61
10	64	176	3:45	1	0.433	A BB	27225.	50.000 PPB	1.61
11	84	267	5:41	1	0.658	A BB	51655.	50.000 PPB	1.61
12	101	191	4:04	1	0.470	A BB	170951.	50.000 PPB	1.61
13	43	224	4:46	1	0.552	A BB	14631.	50.000 PPB	1.61
14	76	269	5:44	1	0.663	A VB	132317.	50.000 PPB	1.61
15	96	232	4:57	1	0.571	A BB	49800.	50.000 PPB	1.61
16	63	325	6:56	1	0.800	A BB	105487.	50.000 PPB	1.61
17	96	290	6:11	1	0.714	A BB	52969.	50.000 PPB	1.61
18	83	391	8:20	1	0.963	A BB	139684.	50.000 PPB	1.61
19	62	468	9:58	1	1.153	A BB	90229.	50.000 PPB	1.61
20	43	364	7:45	1	0.897	A BB	18103.	50.000 PPB	1.61
21	97	428	9:07	2	0.858	A BB	124124.	50.000 PPB	1.61
22	117	454	9:40	2	0.910	A BB	147321.	50.000 PPB	1.61
23	43	326	6:57	2	0.653	A BB	73274.	50.000 PPB	1.61
24	83	577	12:18	2	1.156	A BB	151521.	50.000 PPB	1.61
25	63	551	11:44	2	1.104	A BB	62047.	50.000 PPB	1.61
26	75	639	13:37	2	1.281	A BB	92361.	50.000 PPB	1.61
27	130	532	11:20	2	1.066	A BB	92073.	50.000 PPB	1.61
28	129	778	16:35	2	1.559	A BB	158460.	50.000 PPB	1.61
29	97	717	15:17	2	1.437	A BB	67833.	50.000 PPB	1.61
30	78	470	10:01	2	0.942	A BB	119667.	50.000 PPB	1.61
31	75	699	14:54	2	1.401	A BV	69833.	50.000 PPB	1.61
32	173	979	20:52	2	1.962	A BB	148815.	50.000 PPB	1.61
33	43	618	13:10	3	0.725	A BB	88949.	50.000 PPB	1.61
34	43	721	15:22	3	0.845	A BB	36953.	50.000 PPB	1.61
35	164	755	16:05	3	0.885	A BB	86225.	50.000 PPB	1.61
36	83	1006	21:26	3	1.179	A BB	108278.	50.000 PPB	1.61
37	92	676	14:24	3	0.792	A BB	84545.	50.000 PPB	1.61
38	112	857	18:16	3	1.005	A BB	128992.	50.000 PPB	1.61
39	106	867	18:28	3	1.016	A BV	47291.	50.000 PPB	1.61
40	104	939	20:01	3	1.101	A BB	103226.	50.000 PPB	1.61
41	106	876	18:40	3	1.027	A VB	123535.	100.000 PPB	3.23
42	106	933	19:53	3	1.094	A BB	67436.	50.000 PPB	1.61
43	146	1169	24:55	3	1.370	A BB	162306.	50.000 PPB	1.61
44	146	1236	26:20	3	1.449	A BB	155581.	50.000 PPB	1.61
45	146	1185	25:15	3	1.389	A BB	159116.	50.000 PPB	1.61
46	63	614	13:05	2	1.230	A BB	31760.	50.000 PPB	1.61
47	93	582	12:24	2	1.166	A BB	93386.	50.000 PPB	1.61
48	85	126	2:41	1	0.310	A BB	84900.	50.000 PPB	1.61
49	88	990	21:06	2	1.984	A BB	20051.	50.000 PPB	1.61
50	75	1038	22:07	2	2.080	A BB	27336.	50.000 PPB	1.61

No	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.600	1.600	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	0.999	0.999	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.920	0.920	1.00
7	3:00	0.99	0.347	0.99	50.00	50.00	0.680	0.680	1.00
8	3:40	0.99	0.424	0.99	50.00	50.00	1.240	1.240	1.00
9	3:08	1.00	0.362	1.00	50.00	50.00	0.891	0.891	1.00
10	3:45	1.00	0.433	1.00	50.00	50.00	0.534	0.534	1.00
11	5:41	1.00	0.658	1.00	50.00	50.00	1.012	1.012	1.00
12	4:04	1.00	0.470	1.00	50.00	50.00	3.350	3.350	1.00
13	4:48	1.00	0.554	1.00	50.00	50.00	0.287	0.287	1.00
14	5:44	1.00	0.663	1.00	50.00	50.00	2.593	2.593	1.00
15	4:57	1.00	0.571	1.00	50.00	50.00	0.976	0.976	1.00
16	6:56	1.00	0.800	1.00	50.00	50.00	2.067	2.067	1.00
17	6:12	1.00	0.717	1.00	50.00	50.00	1.038	1.038	1.00
18	8:20	1.00	0.963	1.00	50.00	50.00	2.737	2.737	1.00
19	9:58	1.00	1.153	1.00	50.00	50.00	1.768	1.768	1.00
20	7:47	1.00	0.899	1.00	50.00	50.00	0.355	0.355	1.00
21	9:08	1.00	0.861	1.00	50.00	50.00	0.737	0.737	1.00
22	9:39	1.00	0.910	1.00	50.00	50.00	0.875	0.875	1.00
23	6:57	1.00	0.655	1.00	50.00	50.00	0.435	0.435	1.00
24	12:15	1.00	1.155	1.00	50.00	50.00	0.900	0.900	1.00
25	11:43	1.00	1.104	1.00	50.00	50.00	0.369	0.369	1.00
26	13:34	1.00	1.279	1.00	50.00	50.00	0.549	0.549	1.00
27	11:19	1.00	1.066	1.00	50.00	50.00	0.547	0.547	1.00
28	16:31	1.00	1.556	1.00	50.00	50.00	0.941	0.941	1.00
29	15:13	1.00	1.434	1.00	50.00	50.00	0.403	0.403	1.00
30	10:01	1.00	0.944	1.00	50.00	50.00	0.711	0.711	1.00
31	14:50	1.00	1.398	1.00	50.00	50.00	0.415	0.415	1.00
32	20:49	1.00	1.962	1.00	50.00	50.00	0.884	0.884	1.00
33	13:05	1.01	0.722	1.00	50.00	50.00	0.630	0.630	1.00
34	15:19	1.00	0.846	1.00	50.00	50.00	0.262	0.262	1.00
35	16:00	1.01	0.884	1.00	50.00	50.00	0.610	0.610	1.00
36	21:22	1.00	1.180	1.00	50.00	50.00	0.766	0.766	1.00
37	14:22	1.00	0.793	1.00	50.00	50.00	0.598	0.598	1.00
38	18:13	1.00	1.006	1.00	50.00	50.00	0.913	0.913	1.00
39	18:25	1.00	1.016	1.00	50.00	50.00	0.335	0.335	1.00
40	19:57	1.00	1.101	1.00	50.00	50.00	0.731	0.731	1.00
41	18:37	1.00	1.028	1.00	100.00	100.00	0.437	0.437	1.00
42	19:50	1.00	1.095	1.00	50.00	50.00	0.477	0.477	1.00
43	24:51	1.00	1.372	1.00	50.00	50.00	1.149	1.149	1.00
44	26:16	1.00	1.451	1.00	50.00	50.00	1.101	1.101	1.00
45	25:11	1.00	1.391	1.00	50.00	50.00	1.126	1.126	1.00
46	13:01	1.00	1.227	1.00	50.00	50.00	0.189	0.189	1.00
47	12:22	1.00	1.165	1.00	50.00	50.00	0.555	0.555	1.00
48	2:42	0.99	0.313	0.99	50.00	50.00	1.664	1.664	1.00
49	21:03	1.00	1.984	1.00	50.00	50.00	0.119	0.119	1.00
50	22:05	1.00	2.080	1.00	50.00	50.00	0.162	0.162	1.00

Quantitation Report File: CAB901

Data: CAB901.TI
09/01/94 18:12:00
Sample: VSTD050 SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	701	14:56	2	1.405	A BB	62515.	50.000 PPB	1.61
52	69	701	14:56	3	0.822	A BB	62515.	50.000 PPB	1.61
53	142	254	5:25	1	0.626	A BB	167156.	50.000 PPB	1.61
54	75	1026	21:52	3	1.203	A VB	76546.	50.000 PPB	1.61
55	41	386	8:14	1	0.951	A BB	26768.	50.000 PPB	1.61
56	88	498	10:37	2	0.998	A BB	31171.	50.000 PPB	1.61
57	56	219	4:40	1	0.539	A BB	24498.	250.000 PPB	8.06

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	50.00	50.00	0.371	0.371	1.00
52	14:52	1.00	0.821	1.00	50.00	50.00	0.442	0.442	1.00
53	5:25	1.00	0.626	1.00	50.00	50.00	3.276	3.276	1.00
54	21:48	1.00	1.204	1.00	50.00	50.00	0.542	0.542	1.00
55	8:14	1.00	0.951	1.00	50.00	50.00	0.525	0.525	1.00
56	10:37	1.00	1.000	1.00	50.00	50.00	0.185	0.185	1.00
57	4:40	1.00	0.539	1.00	250.00	250.00	0.096	0.096	1.00

PROCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 18:46:48
DATA FILE: CAB901
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

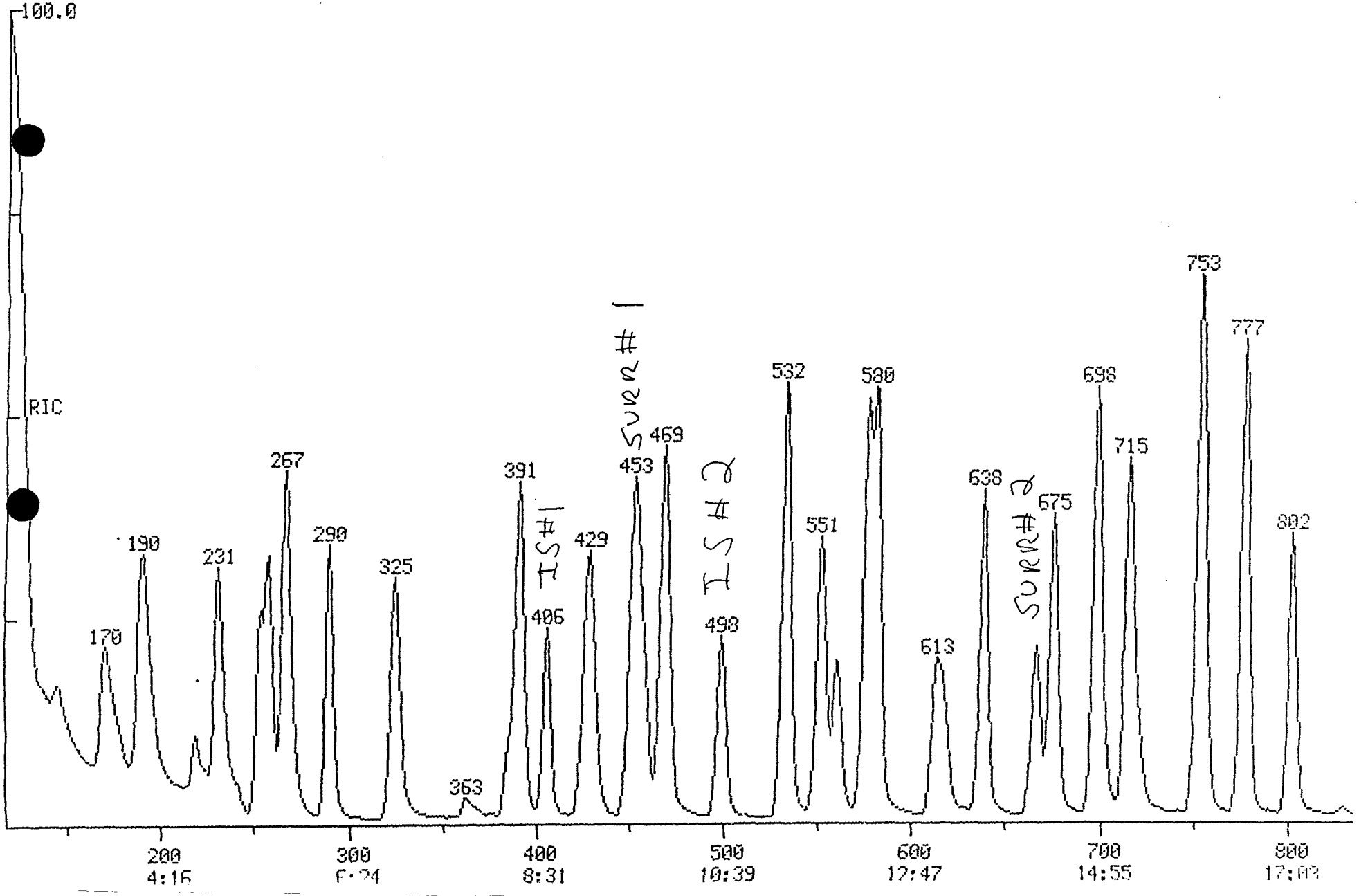
---- STANDARDS -----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	29	6	6	1	95	VXIS/VXSURR
3	3	1	29	11	11	1	48	VXIS/VXTARG1
3	3	1	29	11	11	1	55	VXIS/VXTARG2
3	3	1	29	11	11	1	49	VXIS/VXTARG3
3	3	1	29	11	11	1	78	VXIS/VXTARG4
3	3	1	29	10	10	4	66	VXIS/VXTARG5
3	3	1	29	5	5	1	78	VXIS/VXTARG6
3	3	1	29	4	4	1	32	VXIS/VXTARG7
3	3	1	29	7	6	1	89	VXIS/VXTARG8
3	3	1	29	4	4	1	43	VXIS/VXTARG9
3	3	1	29	4	4	1	51	VXIS/VXTARG10
3	3	1	29	6	5	1	47	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 55 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><					------ CHRO ------- >				
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	406	406	.	1	989	.	128	406	.	1
2	VX	2	498	499	499	.	1	999	.	114	499	.	1
3	VX	3	850	853	853	.	1	973	.	117	853	.	1
4	VX	4	458	459	459	.	1	950	.	65	459	.	1
5	VX	5	664	666	667	1	1	998	.	98	667	.	1
6	VX	6	1013	1016	1015	-1	1	993	.	95	1015	.	1
7	VX	7	141	140	139	-1	1	997	.	50	140	1	1
8	VX	8	172	171	171	.	1	980	.	94	171	.	1
9	VX	9	147	146	146	.	1	993	.	62	147	1	1
10	VX	10	177	176	176	.	1	993	.	64	176	.	1
11	VX	11	267	267	267	.	1	997	.	84	267	.	1
12	VX	12	191	190	191	1	1	994	.	101	191	.	1
13	VX	13	225	224	224	.	1	992	.	43	224	.	1
14	VX	14	269	269	269	.	1	995	.	76	269	.	1
15	VX	15	232	231	232	1	1	992	.	96	232	.	1
16	VX	16	325	325	325	.	1	987	.	63	325	.	1
17	VX	17	291	290	290	.	1	985	.	96	290	.	1
18	VX	18	391	391	391	.	1	987	.	83	391	.	1
19	VX	19	468	469	468	-1	1	973	.	62	468	.	1
20	VX	20	365	365	364	-1	1	994	.	43	364	.	1
21	VX	21	429	429	429	.	1	979	.	97	428	-1	1
22	VX	22	453	453	454	1	1	962	.	117	454	.	1
23	VX	23	326	326	326	.	1	992	.	43	326	.	1
24	VX	24	575	576	577	1	1	990	.	83	577	.	1
25	VX	25	550	551	551	.	1	994	.	63	551	.	1
26	VX	26	637	639	639	.	1	993	.	75	639	.	1
27	VX	27	532	533	532	-1	1	981	.	130	532	.	1
28	VX	28	775	778	778	.	1	999	.	129	778	.	1
29	VX	29	714	716	716	.	1	948	.	97	717	1	1
30	VX	30	469	470	470	.	1	996	.	78	470	.	1
31	VX	31	696	698	699	1	1	991	.	75	699	.	1
32	VX	32	977	980	979	-1	1	991	.	173	979	.	1
33	VX	33	615	617	618	1	1	986	.	43	618	.	1
34	VX	34	719	721	721	.	1	975	.	43	721	.	1
35	VX	35	752	754	755	1	1	954	.	164	755	.	1
36	VX	36	1003	1006	1006	.	1	1000	.	83	1006	.	1
37	VX	37	674	676	676	.	1	995	.	92	676	.	1

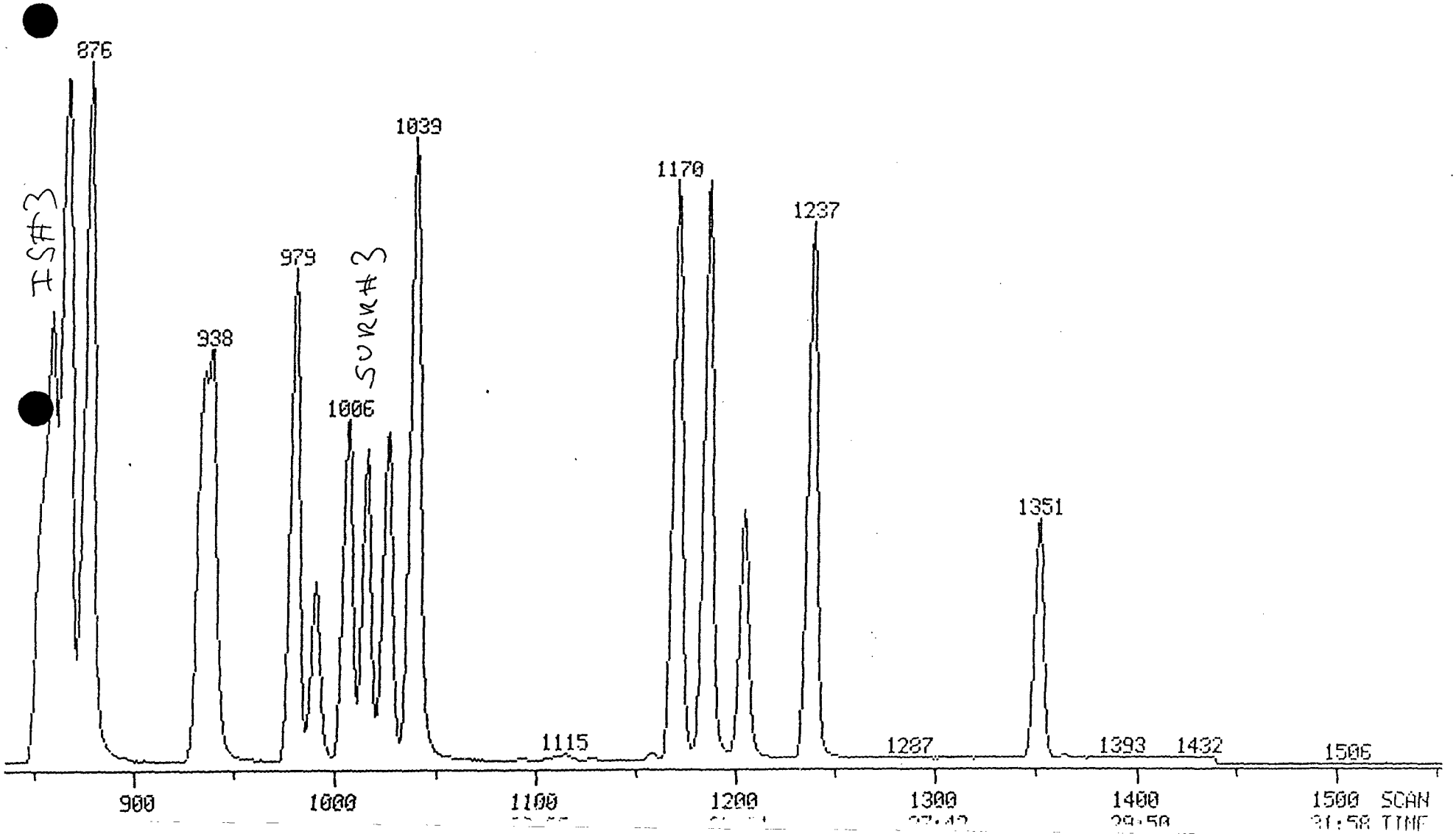
7	VX	39	864	866	866	.	2	995	.	106	867	1	1
0	VX	40	936	938	9[illegible]	1	1	991	.	[illegible]04	939	.	1
1	VX	41	874	876	876	.	1	998	.	106	876	.	1
2	VX	42	931	933	934	1	1	986	.	106	933	-1	1
3	VX	43	1167	1170	1169	-1	2	992	.	146	1169	.	1
4	VX	44	1233	1236	1236	.	1	990	.	146	1236	.	1
5	VX	45	1182	1185	1185	.	1	991	.	146	1185	.	1
6	VX	46	611	613	614	1	1	995	.	63	614	.	1
7	VX	47	580	582	582	.	1	998	.	93	582	.	1
8	VX	48	126	125	125	.	1	999	.	85	126	1	1
9	VX	49	988	991	990	-1	1	990	.	88	990	.	1
0	VX	50	-1034	1037	.	.	.	.	.	75	1038	.	1
1	VX	51	697	699	700	1	1	888	.	69	701	1	1
2	VX	52	698	700	700	.	1	989	.	69	701	1	1
3	VX	53	254	254	254	.	1	997	.	142	254	.	1
4	VX	54	1023	1026	1026	.	1	999	.	75	1026	.	1
5	VX	55	386	386	386	.	1	992	.	41	386	.	1
6	VX	56	-499	500	.	.	.	.	.	88	498	.	1
7	VX	57	219	218	219	1	1	999	.	56	219	.	1

RIC DATA: 100BS901 #1 SCANS 117 TO 835
09/01/94 16:39:00 CALI: 100BS901 #3 OUT OF 117 TO 1553
SAMPLE: VSTD100 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: 100BS901 #1 SCANS 835 TO 1553
09/01/94 16:39:00 CALI: 100BS901 #3 OUT OF 117 TO 1553
SAMPLE: VSTD100 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1.1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 371200.



uantitation Report File: 100BS901

ata: 100BS901.TI
9/01/94 16:39:00
ample: VSTD100 SOIL
onds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
ormula: METH 8240 & CLP Instrument: FINN Weight: 0.000
ubmitted by: Analyst: DB Acct. No.: BUBBA

MOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

o	Name	
3	C016	DICHLORODIFLUOROMETHANE
9	C191	CIS 1,4-DICHLORO-2-BUTENE
0	C221	TRANS 1,4-DICHLORO-2-BUTENE

o	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	406	8:39	1	1.000	A BB	54419.	50.000 PPB	0.85
2	114	498	10:37	2	1.000	A BB	181346.	50.000 PPB	0.85
3	117	852	18:09	3	1.000	A BV	158011.	50.000 PPB	0.85
4	65	459	9:47	1	1.131	A BB	87756.	50.000 PPB	0.85
5	98	666	14:11	3	0.782	A BB	156245.	50.000 PPB	0.85
6	95	1015	21:38	3	1.191	A VB	141268.	50.000 PPB	0.85
7	50	138	2:56	1	0.340	A VB	68970.	100.000 PPB	1.69
8	94	170	3:37	1	0.419	A BB	124516.	100.000 PPB	1.69
9	62	144	3:04	1	0.355	A BB	88611.	100.000 PPB	1.69
10	64	175	3:44	1	0.431	A BB	53671.	100.000 PPB	1.69
11	84	266	5:40	1	0.655	A BB	99849.	100.000 PPB	1.69
12	101	190	4:03	1	0.468	A BB	333327.	100.000 PPB	1.69
13	43	224	4:46	1	0.552	A BB	27445.	100.000 PPB	1.69
14	76	268	5:43	1	0.660	A VB	261926.	100.000 PPB	1.69
15	96	231	4:55	1	0.569	A BB	100463.	100.000 PPB	1.69
16	63	324	6:54	1	0.798	A BB	212303.	100.000 PPB	1.69
17	96	290	6:11	1	0.714	A BB	105682.	100.000 PPB	1.69
18	83	391	8:20	1	0.963	A BB	279475.	100.000 PPB	1.69
19	62	468	9:58	1	1.153	A BB	184762.	100.000 PPB	1.69
20	43	363	7:44	1	0.894	A BB	40977.	100.000 PPB	1.69
21	97	429	9:08	2	0.861	A BB	255787.	100.000 PPB	1.69
22	117	453	9:39	2	0.910	A BB	299129.	100.000 PPB	1.69
23	43	326	6:57	2	0.655	A BB	161277.	100.000 PPB	1.69
24	83	576	12:16	2	1.157	A BB	314141.	100.000 PPB	1.69
25	63	551	11:44	2	1.106	A BB	127259.	100.000 PPB	1.69
26	75	638	13:36	2	1.281	A BB	198951.	100.000 PPB	1.69
27	130	532	11:20	2	1.068	A BB	180523.	100.000 PPB	1.69
28	129	777	16:33	2	1.560	A BB	324341.	100.000 PPB	1.69
29	97	715	15:14	2	1.436	A BB	137101.	100.000 PPB	1.69
30	78	470	10:01	2	0.944	A BB	238112.	100.000 PPB	1.69
31	75	697	14:51	2	1.400	A BB	152124.	100.000 PPB	1.69
32	173	979	20:52	2	1.966	A BB	302099.	100.000 PPB	1.69
33	43	617	13:09	3	0.724	A BB	193325.	100.000 PPB	1.69
34	43	720	15:21	3	0.845	A BB	82099.	100.000 PPB	1.69
35	164	753	16:03	3	0.884	A BB	172288.	100.000 PPB	1.69
36	83	1005	21:25	3	1.180	A BB	225893.	100.000 PPB	1.69
37	92	675	14:23	3	0.792	A BB	171867.	100.000 PPB	1.69
38	112	857	18:16	3	1.006	A BB	270791.	100.000 PPB	1.69
39	106	866	18:27	3	1.016	A BV	101675.	100.000 PPB	1.69
40	104	938	19:59	3	1.101	A BB	220483.	100.000 PPB	1.69
41	106	876	18:40	3	1.028	A VB	248074.	200.000 PPB	3.39
42	106	933	19:53	3	1.095	A BB	141785.	100.000 PPB	1.69
43	146	1170	24:56	3	1.373	A BB	322034.	100.000 PPB	1.69
44	146	1237	26:22	3	1.452	A BB	300464.	100.000 PPB	1.69
45	146	1186	25:16	3	1.392	A BB	311925.	100.000 PPB	1.69
46	63	612	13:02	2	1.229	A BB	68474.	100.000 PPB	1.69
47	93	581	12:23	2	1.167	A BB	185999.	100.000 PPB	1.69
48	85	125	2:40	1	0.308	A BB	171200.	100.000 PPB	1.69
49	88	990	21:06	2	1.988	A BB	51669.	100.000 PPB	1.69
50	75	1038	22:07	2	2.084	A BB	68098.	100.000 PPB	1.69

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.613	1.613	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	0.989	0.989	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.894	0.894	1.00
7	3:00	0.98	0.347	0.98	100.00	100.00	0.634	0.634	1.00
8	3:40	0.99	0.424	0.99	100.00	100.00	1.144	1.144	1.00
9	3:08	0.98	0.362	0.98	100.00	100.00	0.814	0.814	1.00
10	3:45	0.99	0.433	0.99	100.00	100.00	0.493	0.493	1.00
11	5:41	1.00	0.658	1.00	100.00	100.00	0.917	0.917	1.00
12	4:04	0.99	0.470	0.99	100.00	100.00	3.063	3.063	1.00
13	4:48	1.00	0.554	1.00	100.00	100.00	0.252	0.252	1.00
14	5:44	1.00	0.663	1.00	100.00	100.00	2.407	2.407	1.00
15	4:57	1.00	0.571	1.00	100.00	100.00	0.923	0.923	1.00
16	6:56	1.00	0.800	1.00	100.00	100.00	1.951	1.951	1.00
17	6:12	1.00	0.717	1.00	100.00	100.00	0.971	0.971	1.00
18	8:20	1.00	0.963	1.00	100.00	100.00	2.568	2.568	1.00
19	9:58	1.00	1.153	1.00	100.00	100.00	1.698	1.698	1.00
20	7:47	0.99	0.899	0.99	100.00	100.00	0.376	0.376	1.00
21	9:08	1.00	0.861	1.00	100.00	100.00	0.705	0.705	1.00
22	9:39	1.00	0.910	1.00	100.00	100.00	0.825	0.825	1.00
23	6:57	1.00	0.655	1.00	100.00	100.00	0.445	0.445	1.00
24	12:15	1.00	1.155	1.00	100.00	100.00	0.866	0.866	1.00
25	11:43	1.00	1.104	1.00	100.00	100.00	0.351	0.351	1.00
26	13:34	1.00	1.279	1.00	100.00	100.00	0.549	0.549	1.00
27	11:19	1.00	1.066	1.00	100.00	100.00	0.498	0.498	1.00
28	16:31	1.00	1.556	1.00	100.00	100.00	0.894	0.894	1.00
29	15:13	1.00	1.434	1.00	100.00	100.00	0.378	0.378	1.00
30	10:01	1.00	0.944	1.00	100.00	100.00	0.657	0.657	1.00
31	14:50	1.00	1.398	1.00	100.00	100.00	0.419	0.419	1.00
32	20:49	1.00	1.962	1.00	100.00	100.00	0.833	0.833	1.00
33	13:05	1.00	0.722	1.00	100.00	100.00	0.612	0.612	1.00
34	15:19	1.00	0.846	1.00	100.00	100.00	0.260	0.260	1.00
35	16:00	1.00	0.884	1.00	100.00	100.00	0.545	0.545	1.00
36	21:22	1.00	1.180	1.00	100.00	100.00	0.715	0.715	1.00
37	14:22	1.00	0.793	1.00	100.00	100.00	0.544	0.544	1.00
38	18:13	1.00	1.006	1.00	100.00	100.00	0.857	0.857	1.00
39	18:25	1.00	1.016	1.00	100.00	100.00	0.322	0.322	1.00
40	19:57	1.00	1.101	1.00	100.00	100.00	0.698	0.698	1.00
41	18:37	1.00	1.028	1.00	200.00	200.00	0.392	0.392	1.00
42	19:50	1.00	1.095	1.00	100.00	100.00	0.449	0.449	1.00
43	24:51	1.00	1.372	1.00	100.00	100.00	1.019	1.019	1.00
44	26:16	1.00	1.451	1.00	100.00	100.00	0.951	0.951	1.00
45	25:11	1.00	1.391	1.00	100.00	100.00	0.987	0.987	1.00
46	13:01	1.00	1.227	1.00	100.00	100.00	0.189	0.189	1.00
47	12:22	1.00	1.165	1.00	100.00	100.00	0.513	0.513	1.00
48	2:42	0.98	0.313	0.98	100.00	100.00	1.573	1.573	1.00
49	21:03	1.00	1.984	1.00	100.00	100.00	0.142	0.142	1.00
50	22:05	1.00	2.080	1.00	100.00	100.00	0.188	0.188	1.00

antitation Report File: 100BS901

ta: 100BS901.TI
/01/94 16:39:00
mple: VSTD100 SOIL
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
bmitted by: Analyst: DB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
esp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	699	14:54	2	1.404	A BB	136747.	100.000 PPB	1.69
52	69	699	14:54	3	0.820	A BB	136747.	100.000 PPB	1.69
53	142	253	5:23	1	0.623	A BB	338270.	100.000 PPB	1.69
54	75	1026	21:52	3	1.204	A VB	159678.	100.000 PPB	1.69
55	41	386	8:14	1	0.951	A BB	54220.	100.000 PPB	1.69
56	88	498	10:37	2	1.000	A BB	34299.	100.000 PPB	1.69
57	56	218	4:39	1	0.537	A BB	50927.	500.000 PPB	8.47

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	100.00	100.00	0.377	0.377	1.00
52	14:52	1.00	0.821	1.00	100.00	100.00	0.433	0.433	1.00
53	5:25	1.00	0.626	1.00	100.00	100.00	3.108	3.108	1.00
54	21:48	1.00	1.204	1.00	100.00	100.00	0.505	0.505	1.00
55	8:14	1.00	0.951	1.00	100.00	100.00	0.498	0.498	1.00
56	10:37	1.00	1.000	1.00	100.00	100.00	0.095	0.095	1.00
57	4:40	1.00	0.539	1.00	500.00	500.00	0.094	0.094	1.00

ROCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 17:14:20
ATA FILE: 100BS901
EFERENCE: VX11
AME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

---- STANDARDS ----- >< --- PLUS UNKNOWNS --- >< - LIST NAMES - >								
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	63	VXIS/VXSURR
3	3	1	32	11	11	1	49	VXIS/VXTARG1
3	3	1	32	11	11	1	53	VXIS/VXTARG2
3	3	1	32	11	11	1	41	VXIS/VXTARG3
3	3	1	32	11	11	1	53	VXIS/VXTARG4
3	3	1	32	10	10	2	37	VXIS/VXTARG5
3	3	1	32	5	5	1	26	VXIS/VXTARG6
3	3	1	32	4	4	1	31	VXIS/VXTARG7
3	3	1	32	7	6	1	50	VXIS/VXTARG8
3	3	1	32	4	4	1	23	VXIS/VXTARG9
3	3	1	32	4	4	1	24	VXIS/VXTARG10
3	3	1	32	6	5	2	42	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 55 FOUND

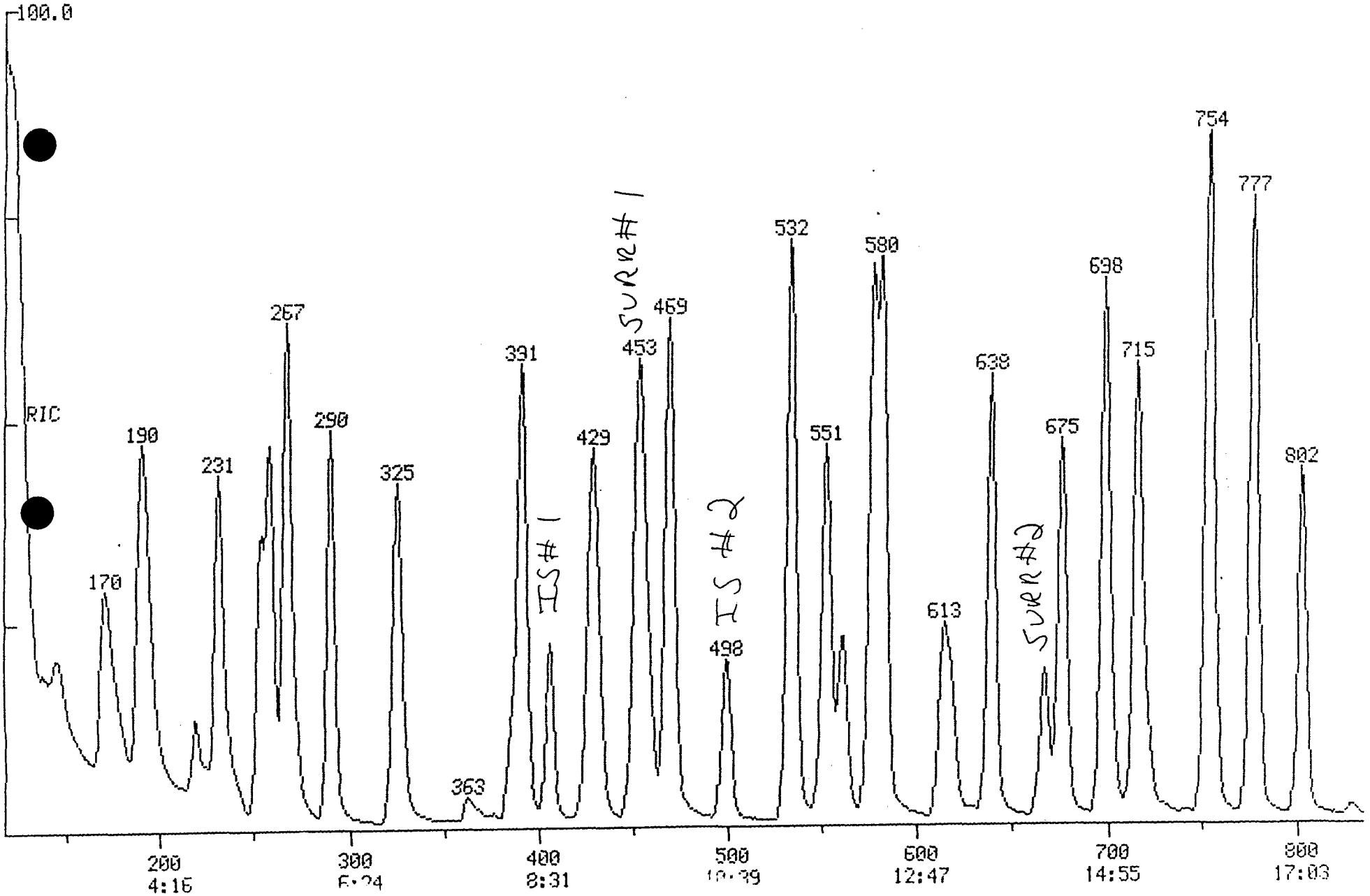
< COMPOUND >< ---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >														
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS	
1	VX	1	406	406	406	.	1	992	.	128	406	.	1	
2	VX	2	498	498	498	.	1	997	.	114	498	.	1	
3	VX	3	850	852	852	.	1	955	.	117	852	.	1	
4	VX	4	458	459	459	.	1	948	.	65	459	.	1	
5	VX	5	664	665	666	1	1	996	.	98	666	.	1	
6	VX	6	1013	1015	1015	.	1	991	.	95	1015	.	1	
7	VX	7	141	139	138	-1	1	998	.	50	138	.	1	
8	VX	8	172	170	170	.	1	982	.	94	170	.	1	
9	VX	9	147	145	145	.	1	997	.	62	144	-1	1	
10	VX	10	177	175	175	.	1	991	.	64	175	.	1	
11	VX	11	267	266	266	.	1	1000	.	84	266	.	1	
12	VX	12	191	189	190	1	1	999	.	101	190	.	1	
13	VX	13	225	224	224	.	1	992	.	43	224	.	1	
14	VX	14	269	268	268	.	1	996	.	76	268	.	1	
15	VX	15	232	231	231	.	1	987	.	96	231	.	1	
16	VX	16	325	324	324	.	1	986	.	63	324	.	1	
17	VX	17	291	290	290	.	1	988	.	96	290	.	1	
18	VX	18	391	391	391	.	1	987	.	83	391	.	1	
19	VX	19	468	468	468	.	1	973	.	62	468	.	1	
20	VX	20	365	364	363	-1	1	996	.	43	363	.	1	
21	VX	21	429	429	429	.	1	979	.	97	429	.	1	
22	VX	22	453	453	453	.	1	958	.	117	453	.	1	
23	VX	23	326	326	326	.	1	994	.	43	326	.	1	
24	VX	24	575	576	576	.	1	989	.	83	576	.	1	
25	VX	25	550	551	551	.	1	993	.	63	551	.	1	
26	VX	26	637	638	638	.	1	998	.	75	638	.	1	
27	VX	27	532	533	532	-1	1	983	.	130	532	.	1	
28	VX	28	775	777	777	.	1	997	.	129	777	.	1	
29	VX	29	714	715	715	.	1	948	.	97	715	.	1	
30	VX	30	469	469	470	1	1	997	.	78	470	.	1	
31	VX	31	696	697	698	1	1	989	.	75	697	-1	1	
32	VX	32	977	979	979	.	1	995	.	173	979	.	1	
33	VX	33	615	616	617	1	1	990	.	43	617	.	1	
34	VX	34	719	720	720	.	1	986	.	43	720	.	1	
35	VX	35	752	753	753	.	1	960	.	164	753	.	1	
36	VX	36	1003	1005	1005	.	1	994	.	83	1005	.	1	
37	VX	37	674	675	675	.	1	998	.	92	675	.	1	

9	VX	39	864	866	866	.	2	994	.	106	866	.	1
0	VX	40	936	938	9	.	1	987	.	04	938	.	1
1	VX	41	874	876	876	.	1	998	.	106	876	.	1
2	VX	42	931	933	934	1	1	980	.	106	933	-1	1
3	VX	43	1167	1171	1170	-1	1	993	.	146	1170	.	1
4	VX	44	1233	1237	1237	.	1	990	.	146	1237	.	1
5	VX	45	1182	1186	1186	.	1	993	.	146	1186	.	1
6	VX	46	611	612	612	.	1	997	.	63	612	.	1
7	VX	47	580	581	581	.	1	996	.	93	581	.	1
8	VX	48	126	125	125	.	1	997	.	85	125	.	1
9	VX	49	988	990	990	.	1	990	.	88	990	.	1
0	VX	50	-1034	1037	.	.	.	.	.	75	1038	.	1
1	VX	51	697	698	699	1	1	891	.	69	699	.	1
2	VX	52	698	699	699	.	1	994	.	69	699	.	1
3	VX	53	254	253	253	.	1	995	.	142	253	.	1
4	VX	54	1023	1026	1026	.	1	996	.	75	1026	.	1
5	VX	55	386	386	385	-1	2	994	.	41	386	1	1
6	VX	56	-499	499	.	.	.	.	.	88	498	.	1
7	VX	57	219	218	218	.	1	1000	.	56	218	.	1

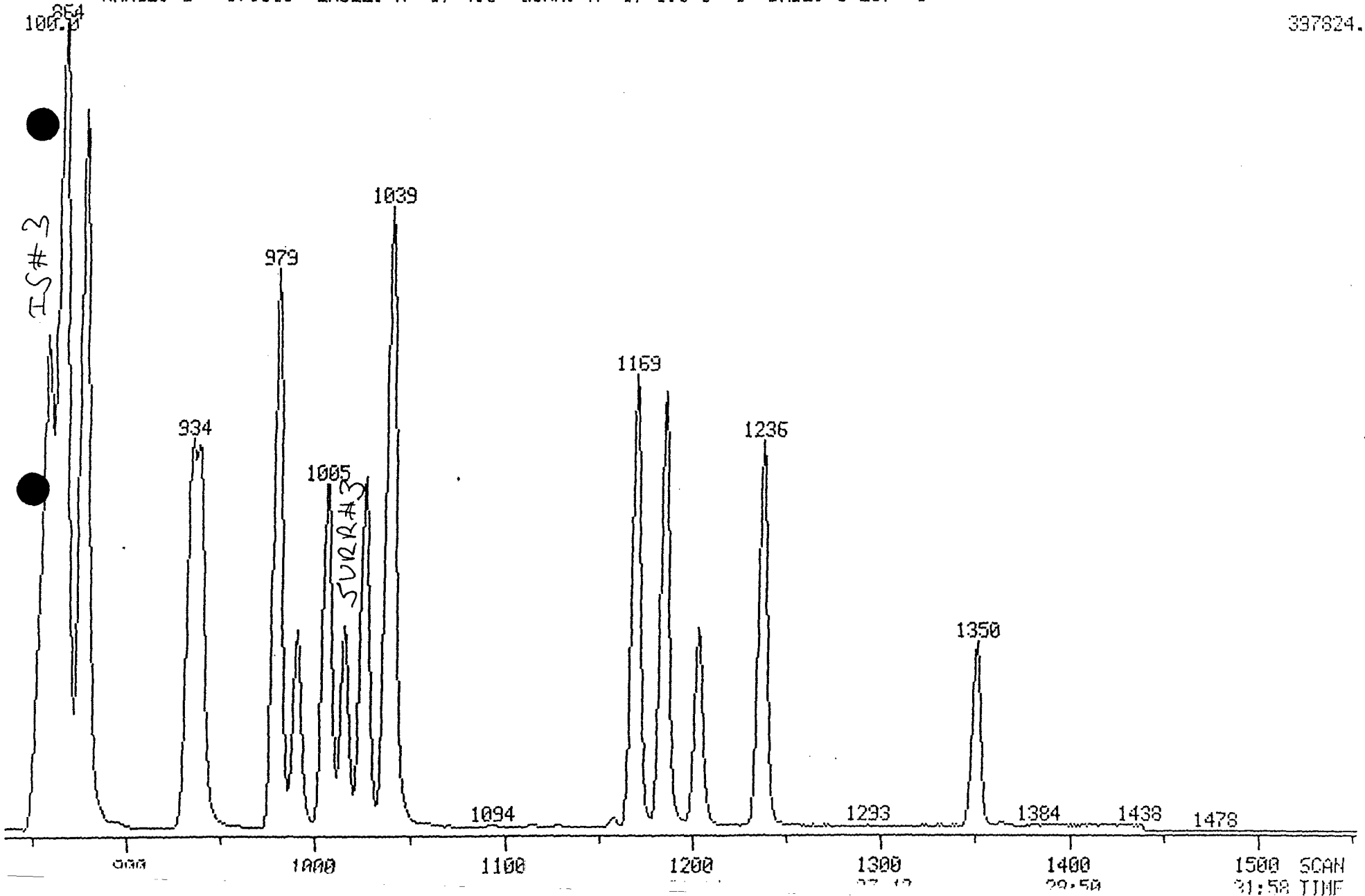
RIC
09/01/94 15:51:00
SAMPLE: VSTD150 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 150BS901 #1
CALI: 150BS901 #3

SCANS 117 TO 835
OUT OF 117 TO 1553



RIC DATA: 150BS901 #1 SCANS 835 TO 1553
09/01/94 15:51:00 CALI: 150BS901 #3 OUT OF 117 TO 1553
SAMPLE: VSTD150 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 150BS901

Data: 150BS901.TI
09/01/94 15:51:00
Sample: VSTD150 SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

o	Name	
8	C016	DICHLORODIFLUOROMETHANE
9	C191	CIS 1,4-DICHLORO-2-BUTENE
0	C221	TRANS 1,4-DICHLORO-2-BUTENE

o	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	406	8:39	1	1.000	A BB	51893.	50.000 PPB	0.57
2	114	498	10:37	2	1.000	A BB	172894.	50.000 PPB	0.57
3	117	852	18:09	3	1.000	A BV	134087.	50.000 PPB	0.57
4	65	459	9:47	1	1.131	A BV	75211.	50.000 PPB	0.57
5	98	666	14:11	3	0.782	A BB	145303.	50.000 PPB	0.57
6	95	1015	21:38	3	1.191	A VB	102475.	50.000 PPB	0.57
7	50	139	2:58	1	0.342	A VB	104914.	150.000 PPB	1.72
8	94	170	3:37	1	0.419	A BB	195151.	150.000 PPB	1.72
9	62	145	3:05	1	0.357	A BB	140386.	150.000 PPB	1.72
0	64	176	3:45	1	0.433	A BB	87464.	150.000 PPB	1.72
1	84	266	5:40	1	0.655	A BB	151735.	150.000 PPB	1.72
2	101	190	4:03	1	0.468	A BB	539569.	150.000 PPB	1.72
3	43	225	4:48	1	0.554	A BB	37317.	150.000 PPB	1.72
4	76	268	5:43	1	0.660	A VB	408071.	150.000 PPB	1.72
5	96	231	4:55	1	0.569	A BB	156101.	150.000 PPB	1.72
6	63	324	6:54	1	0.798	A BB	320914.	150.000 PPB	1.72
7	96	290	6:11	1	0.714	A BB	161947.	150.000 PPB	1.72
8	83	391	8:20	1	0.963	A BB	414600.	150.000 PPB	1.72
9	62	468	9:58	1	1.153	A BB	266365.	150.000 PPB	1.72
0	43	363	7:44	1	0.894	A BB	51858.	150.000 PPB	1.72
1	97	429	9:08	2	0.861	A BB	383380.	150.000 PPB	1.72
2	117	453	9:39	2	0.910	A BB	434179.	150.000 PPB	1.72
3	43	326	6:57	2	0.655	A BB	230867.	150.000 PPB	1.72
4	83	576	12:16	2	1.157	A BB	451932.	150.000 PPB	1.72
5	63	551	11:44	2	1.106	A BB	182255.	150.000 PPB	1.72
6	75	638	13:36	2	1.281	A BB	288508.	150.000 PPB	1.72
7	130	532	11:20	2	1.068	A BB	257835.	150.000 PPB	1.72
8	129	777	16:33	2	1.560	A BB	451966.	150.000 PPB	1.72
9	97	715	15:14	2	1.436	A BB	189709.	150.000 PPB	1.72
0	78	470	10:01	2	0.944	A BB	345603.	150.000 PPB	1.72
1	75	697	14:51	2	1.400	A BB	221203.	150.000 PPB	1.72
2	173	979	20:52	2	1.966	A BB	391954.	150.000 PPB	1.72
3	43	616	13:08	3	0.723	A BB	241270.	150.000 PPB	1.72
4	43	720	15:21	3	0.845	A BB	86831.	150.000 PPB	1.72
5	164	753	16:03	3	0.884	A BB	234549.	150.000 PPB	1.72
6	83	1005	21:25	3	1.180	A BB	261849.	150.000 PPB	1.72
7	92	675	14:23	3	0.792	A BB	235568.	150.000 PPB	1.72
8	112	857	18:16	3	1.006	A BB	343218.	150.000 PPB	1.72
9	106	866	18:27	3	1.016	A BV	126116.	150.000 PPB	1.72
0	104	938	19:59	3	1.101	A BB	227485.	150.000 PPB	1.72
1	106	876	18:40	3	1.028	A VB	289912.	300.000 PPB	3.45
2	106	933	19:53	3	1.095	A BB	157741.	150.000 PPB	1.72
3	146	1169	24:55	3	1.372	A BB	284283.	150.000 PPB	1.72
4	146	1236	26:20	3	1.451	A BB	243762.	150.000 PPB	1.72
5	146	1184	25:14	3	1.390	A BB	264672.	150.000 PPB	1.72
6	63	612	13:02	2	1.229	A BB	93730.	150.000 PPB	1.72
7	93	581	12:23	2	1.167	A BB	264442.	150.000 PPB	1.72
8	85	125	2:40	1	0.308	A BB	267266.	150.000 PPB	1.72
9	88	990	21:06	2	1.988	A BB	64214.	150.000 PPB	1.72
0	75	1038	22:07	2	2.084	A VB	83259.	150.000 PPB	1.72

No	Ret(L)	Ratio	RRT(L)	Rati	Amnt	Amnt(L)	R. Fac	. Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.449	1.449	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	1.084	1.084	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.764	0.764	1.00
7	3:00	0.99	0.347	0.99	150.00	150.00	0.674	0.674	1.00
8	3:40	0.99	0.424	0.99	150.00	150.00	1.254	1.254	1.00
9	3:08	0.99	0.362	0.99	150.00	150.00	0.902	0.902	1.00
10	3:45	1.00	0.433	1.00	150.00	150.00	0.562	0.562	1.00
11	5:41	1.00	0.658	1.00	150.00	150.00	0.975	0.975	1.00
12	4:04	0.99	0.470	0.99	150.00	150.00	3.466	3.466	1.00
13	4:48	1.00	0.554	1.00	150.00	150.00	0.240	0.240	1.00
14	5:44	1.00	0.663	1.00	150.00	150.00	2.621	2.621	1.00
15	4:57	1.00	0.571	1.00	150.00	150.00	1.003	1.003	1.00
16	6:56	1.00	0.800	1.00	150.00	150.00	2.061	2.061	1.00
17	6:12	1.00	0.717	1.00	150.00	150.00	1.040	1.040	1.00
18	8:20	1.00	0.963	1.00	150.00	150.00	2.663	2.663	1.00
19	9:58	1.00	1.153	1.00	150.00	150.00	1.711	1.711	1.00
20	7:47	0.99	0.899	0.99	150.00	150.00	0.333	0.333	1.00
21	9:08	1.00	0.861	1.00	150.00	150.00	0.739	0.739	1.00
22	9:39	1.00	0.910	1.00	150.00	150.00	0.837	0.837	1.00
23	6:57	1.00	0.655	1.00	150.00	150.00	0.445	0.445	1.00
24	12:15	1.00	1.155	1.00	150.00	150.00	0.871	0.871	1.00
25	11:43	1.00	1.104	1.00	150.00	150.00	0.351	0.351	1.00
26	13:34	1.00	1.279	1.00	150.00	150.00	0.556	0.556	1.00
27	11:19	1.00	1.066	1.00	150.00	150.00	0.497	0.497	1.00
28	16:31	1.00	1.556	1.00	150.00	150.00	0.871	0.871	1.00
29	15:13	1.00	1.434	1.00	150.00	150.00	0.366	0.366	1.00
30	10:01	1.00	0.944	1.00	150.00	150.00	0.666	0.666	1.00
31	14:50	1.00	1.398	1.00	150.00	150.00	0.426	0.426	1.00
32	20:49	1.00	1.962	1.00	150.00	150.00	0.756	0.756	1.00
33	13:05	1.00	0.722	1.00	150.00	150.00	0.600	0.600	1.00
34	15:19	1.00	0.846	1.00	150.00	150.00	0.216	0.216	1.00
35	16:00	1.00	0.884	1.00	150.00	150.00	0.583	0.583	1.00
36	21:22	1.00	1.180	1.00	150.00	150.00	0.651	0.651	1.00
37	14:22	1.00	0.793	1.00	150.00	150.00	0.586	0.586	1.00
38	18:13	1.00	1.006	1.00	150.00	150.00	0.853	0.853	1.00
39	18:25	1.00	1.016	1.00	150.00	150.00	0.314	0.314	1.00
40	19:57	1.00	1.101	1.00	150.00	150.00	0.566	0.566	1.00
41	18:37	1.00	1.028	1.00	300.00	300.00	0.360	0.360	1.00
42	19:50	1.00	1.095	1.00	150.00	150.00	0.392	0.392	1.00
43	24:51	1.00	1.372	1.00	150.00	150.00	0.707	0.707	1.00
44	26:16	1.00	1.451	1.00	150.00	150.00	0.606	0.606	1.00
45	25:11	1.00	1.391	1.00	150.00	150.00	0.658	0.658	1.00
46	13:01	1.00	1.227	1.00	150.00	150.00	0.181	0.181	1.00
47	12:22	1.00	1.165	1.00	150.00	150.00	0.510	0.510	1.00
48	2:42	0.98	0.313	0.98	150.00	150.00	1.717	1.717	1.00
49	21:03	1.00	1.984	1.00	150.00	150.00	0.124	0.124	1.00
50	22:05	1.00	2.080	1.00	150.00	150.00	0.161	0.161	1.00

Quantitation Report File: 150BS901

Data: 150BS901.TI
7/01/94 15:51:00
Sample: VSTD150 SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	699	14:54	2	1.404	A BB	163546.	150.000 PPB	1.72
52	69	699	14:54	3	0.820	A BB	163546.	150.000 PPB	1.72
53	142	253	5:23	1	0.623	A BB	504268.	150.000 PPB	1.72
54	75	1026	21:52	3	1.204	A VV	206228.	150.000 PPB	1.72
55	41	386	8:14	1	0.951	A BB	75183.	150.000 PPB	1.72
56	88	498	10:37	2	1.000	A BB	32865.	150.000 PPB	1.72
57	56	218	4:39	1	0.537	A BB	70401.	750.000 PPB	8.62

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	150.00	150.00	0.315	0.315	1.00
52	14:52	1.00	0.821	1.00	150.00	150.00	0.407	0.407	1.00
53	5:25	1.00	0.626	1.00	150.00	150.00	3.239	3.239	1.00
54	21:48	1.00	1.204	1.00	150.00	150.00	0.513	0.513	1.00
55	8:14	1.00	0.951	1.00	150.00	150.00	0.483	0.483	1.00
56	10:37	1.00	1.000	1.00	150.00	150.00	0.063	0.063	1.00
57	4:40	1.00	0.539	1.00	750.00	750.00	0.090	0.090	1.00

:OCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 16:27:32
:TA FILE: 150BS901
:FERENCE: VX11
:ME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
ROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	63	VXIS/VXSURR
3	3	1	32	11	11	1	52	VXIS/VXTARG1
3	3	1	32	11	11	1	53	VXIS/VXTARG2
3	3	1	32	11	11	1	41	VXIS/VXTARG3
3	3	1	32	11	11	1	42	VXIS/VXTARG4
3	3	1	32	10	10	4	51	VXIS/VXTARG5
3	3	1	32	5	5	1	26	VXIS/VXTARG6
3	3	1	32	4	4	1	31	VXIS/VXTARG7
3	3	1	32	7	6	1	50	VXIS/VXTARG8
3	3	1	32	4	4	1	23	VXIS/VXTARG9
3	3	1	32	4	4	1	24	VXIS/VXTARG10
3	3	1	32	6	5	2	23	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 55 FOUND

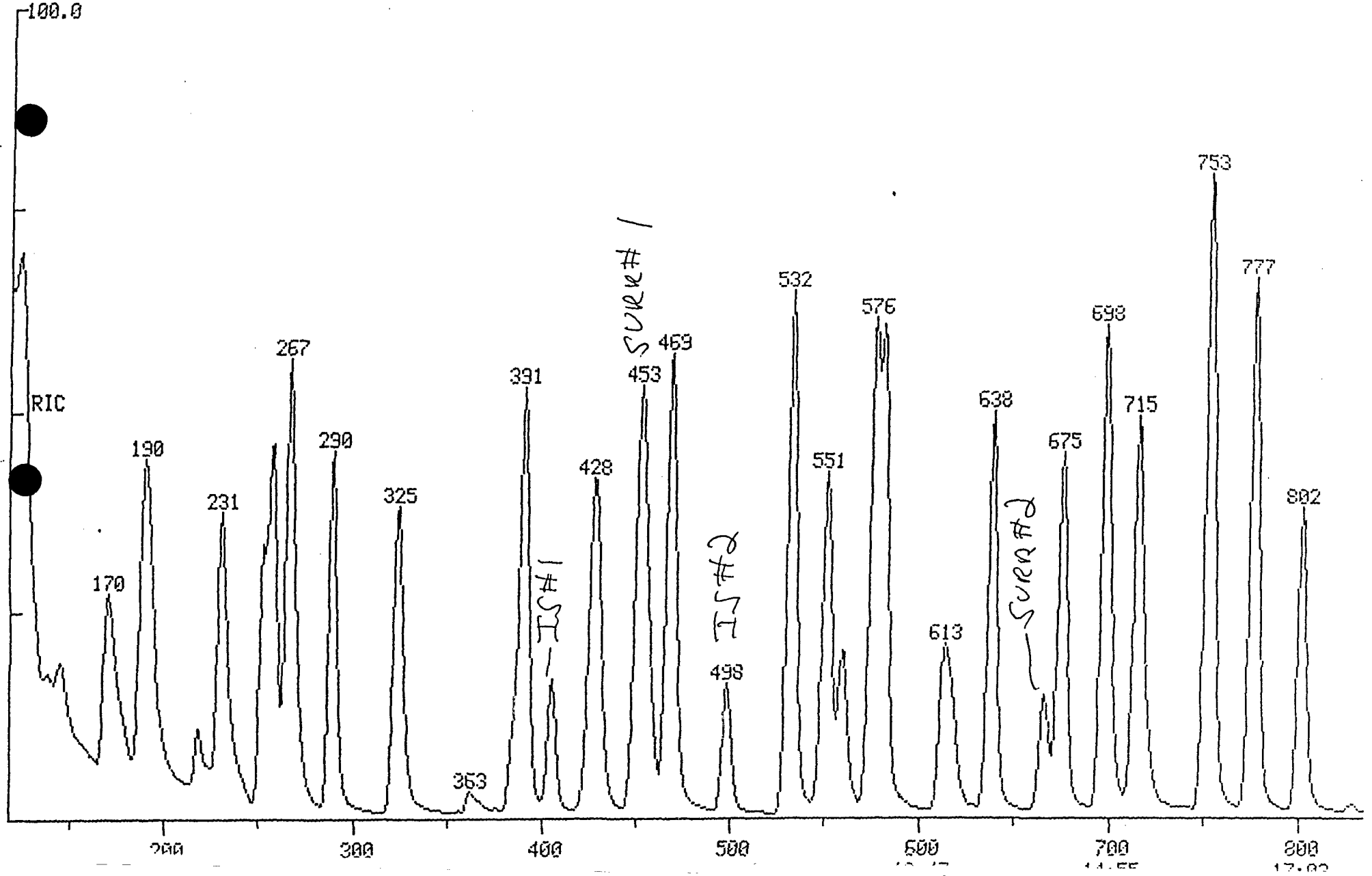
COMPOUND ><			---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >											
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS	
1	VX	1	406	406	406	.	1	993	.	128	406	.	1	
2	VX	2	498	498	498	.	1	996	.	114	498	.	1	
3	VX	3	850	852	852	.	1	971	.	117	852	.	1	
4	VX	4	458	459	459	.	1	958	.	65	459	.	1	
5	VX	5	664	665	666	1	1	998	.	98	666	.	1	
6	VX	6	1013	1015	1015	.	1	994	.	95	1015	.	1	
7	VX	7	141	139	139	.	1	996	.	50	139	.	1	
8	VX	8	172	171	170	-1	1	978	.	94	170	.	1	
9	VX	9	147	145	145	.	1	996	.	62	145	.	1	
10	VX	10	177	176	176	.	1	992	.	64	176	.	1	
11	VX	11	267	266	266	.	1	998	.	84	266	.	1	
12	VX	12	191	190	190	.	1	998	.	101	190	.	1	
13	VX	13	225	224	225	1	1	993	.	43	225	.	1	
14	VX	14	269	268	268	.	1	996	.	76	268	.	1	
15	VX	15	232	231	231	.	1	990	.	96	231	.	1	
16	VX	16	325	324	324	.	1	988	.	63	324	.	1	
17	VX	17	291	290	290	.	1	986	.	96	290	.	1	
18	VX	18	391	391	391	.	1	982	.	83	391	.	1	
19	VX	19	468	468	468	.	1	974	.	62	468	.	1	
20	VX	20	365	364	363	-1	1	999	.	43	363	.	1	
21	VX	21	429	429	429	.	1	978	.	97	429	.	1	
22	VX	22	453	453	453	.	1	959	.	117	453	.	1	
23	VX	23	326	326	326	.	1	993	.	43	326	.	1	
24	VX	24	575	576	576	.	1	991	.	83	576	.	1	
25	VX	25	550	551	551	.	1	989	.	63	551	.	1	
26	VX	26	637	638	638	.	1	999	.	75	638	.	1	
27	VX	27	532	533	532	-1	1	984	.	130	532	.	1	
28	VX	28	775	777	777	.	1	997	.	129	777	.	1	
29	VX	29	714	715	715	.	1	944	.	97	715	.	1	
30	VX	30	469	469	470	1	1	998	.	78	470	.	1	
31	VX	31	696	697	698	1	1	987	.	75	697	-1	1	
32	VX	32	977	979	979	.	1	998	.	173	979	.	1	
33	VX	33	615	616	616	.	1	985	.	43	616	.	1	
34	VX	34	719	720	720	.	1	969	.	43	720	.	1	
35	VX	35	752	753	754	1	1	959	.	164	753	-1	1	
36	VX	36	1003	1005	1005	.	1	1000	.	83	1005	.	1	
37	VX	37	674	675	675		1	997		92	675		1	

				.	2	993	.	106	866	.	1
40	936	938	938	.	1	986	.	104	938	.	1
41	874	876	876	.	1	997	.	106	876	.	1
42	931	933	934	1	1	982	.	106	933	-1	1
43	1167	1170	1169	-1	2	992	.	146	1169	.	1
44	1233	1236	1236	.	1	995	.	146	1236	.	1
45	1182	1185	1185	.	1	992	.	146	1184	-1	1
46	611	612	612	.	1	995	.	63	612	.	1
47	580	581	581	.	1	996	.	93	581	.	1
48	126	125	125	.	1	1000	.	85	125	.	1
49	988	990	990	.	1	991	.	88	990	.	1
50	-1034	1037	.	.	.	.	.	75	1038	.	1
51	697	698	699	1	1	875	.	69	699	.	1
52	698	699	699	.	1	991	.	69	699	.	1
53	254	253	253	.	1	995	.	142	253	.	1
54	1023	1026	1026	.	1	1000	.	75	1026	.	1
55	386	386	386	.	2	997	.	41	386	.	1
56	-499	499	.	.	.	.	.	88	498	.	1
57	219	218	218	.	1	999	.	56	218	.	1

RIC
09/01/94 14:50:00
SAMPLE: VSTD200 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 200BS901 #1
CALI: 200BS901 #3

SCANS 117 TO 835
OUT OF 117 TO 1553

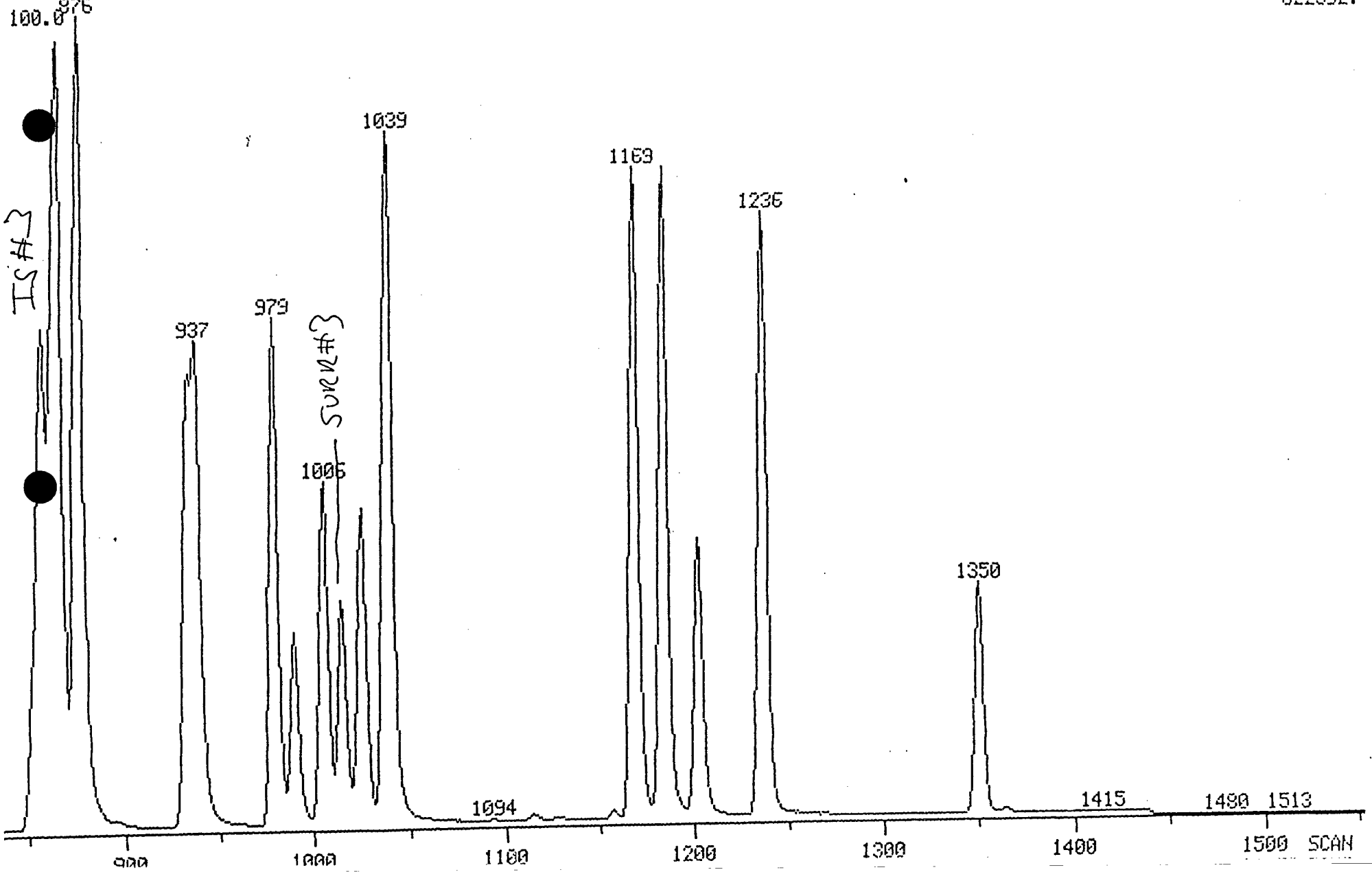


RIC
09/01/94 14:50:00
SAMPLE: VSTD200 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 200BS901 #1
CALI: 200BS901 #3

SCANS 935 TO 1553
OUT OF 117 TO 1553

622592.



)antitation Report File: 200BS901

)ta: 200BS901.TI
?/01/94 14:50:00
)mple: VSTD200 SOIL
)nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
)rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
)bmitted by: Analyst: DWB Acct. No.: BUBBA

10UNT=AREA * REF AMNT/(REF AREA * RESP FACT)
)sp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	405	8:38	1	1.000	A BB	63446.	50.000 PPB	0.43
2	114	498	10:37	2	1.000	A BB	218504.	50.000 PPB	0.43
3	117	852	18:09	3	1.000	A BV	191194.	50.000 PPB	0.43
4	65	459	9:47	1	1.133	A BV	91786.	50.000 PPB	0.43
5	98	666	14:11	3	0.782	A BB	183630.	50.000 PPB	0.43
6	95	1015	21:38	3	1.191	A VB	176918.	50.000 PPB	0.43
7	50	139	2:58	1	0.343	A VB	165780.	200.000 PPB	1.74
8	94	170	3:37	1	0.420	A BB	302278.	200.000 PPB	1.74
9	62	145	3:05	1	0.358	A BB	218382.	200.000 PPB	1.74
10	64	175	3:44	1	0.432	A BB	129276.	200.000 PPB	1.74
11	84	266	5:40	1	0.657	A BB	227664.	200.000 PPB	1.74
12	101	190	4:03	1	0.469	A BB	823854.	200.000 PPB	1.74
13	43	224	4:46	1	0.553	A BB	48365.	200.000 PPB	1.74
14	76	268	5:43	1	0.662	A VB	604797.	200.000 PPB	1.74
15	96	231	4:55	1	0.570	A BB	233906.	200.000 PPB	1.74
16	63	324	6:54	1	0.800	A BB	483755.	200.000 PPB	1.74
17	96	290	6:11	1	0.716	A BB	242405.	200.000 PPB	1.74
18	83	391	8:20	1	0.965	A BB	606751.	200.000 PPB	1.74
19	62	468	9:58	1	1.156	A BB	378394.	200.000 PPB	1.74
20	43	363	7:44	1	0.896	A BB	68154.	200.000 PPB	1.74
21	97	429	9:08	2	0.861	A BB	564436.	200.000 PPB	1.74
22	117	453	9:39	2	0.910	A BB	638124.	200.000 PPB	1.74
23	43	325	6:56	2	0.653	A BB	321087.	200.000 PPB	1.74
24	83	575	12:15	2	1.155	A BB	641502.	200.000 PPB	1.74
25	63	551	11:44	2	1.106	A BB	265795.	200.000 PPB	1.74
26	75	638	13:36	2	1.281	A BB	424960.	200.000 PPB	1.74
27	130	532	11:20	2	1.068	A BB	369656.	200.000 PPB	1.74
28	129	777	16:33	2	1.560	A BB	615708.	200.000 PPB	1.74
29	97	715	15:14	2	1.436	A BB	259853.	200.000 PPB	1.74
30	78	469	10:00	2	0.942	A BB	510605.	200.000 PPB	1.74
31	75	697	14:51	2	1.400	A BB	315998.	200.000 PPB	1.74
32	173	979	20:52	2	1.966	A BB	538648.	200.000 PPB	1.74
33	43	616	13:08	3	0.723	A BB	333562.	200.000 PPB	1.74
34	43	720	15:21	3	0.845	A BB	137626.	200.000 PPB	1.74
35	164	753	16:03	3	0.884	A BB	340233.	200.000 PPB	1.74
36	83	1006	21:26	3	1.181	A BB	391606.	200.000 PPB	1.74
37	92	675	14:23	3	0.792	A BB	354768.	200.000 PPB	1.74
38	112	857	18:16	3	1.006	A BB	540178.	200.000 PPB	1.74
39	106	866	18:27	3	1.016	A BV	194932.	200.000 PPB	1.74
40	104	938	19:59	3	1.101	A BB	443176.	200.000 PPB	1.74
41	106	876	18:40	3	1.028	A VB	503342.	400.000 PPB	3.48
42	106	933	19:53	3	1.095	A BB	285093.	200.000 PPB	1.74
43	146	1169	24:55	3	1.372	A BB	622356.	200.000 PPB	1.74
44	146	1236	26:20	3	1.451	A BB	588682.	200.000 PPB	1.74
45	146	1184	25:14	3	1.390	A BB	609166.	200.000 PPB	1.74
46	63	612	13:02	2	1.229	A BB	131131.	200.000 PPB	1.74
47	93	581	12:23	2	1.167	A BB	353720.	200.000 PPB	1.74
48	85	125	2:40	1	0.309	A BB	457871.	200.000 PPB	1.74
49	88	990	21:06	2	1.988	A BB	99763.	200.000 PPB	1.74
50	75	1037	22:06	2	2.082	A BB	129916.	200.000 PPB	1.74

No	Ret(L)	Ratio	RRT(L)	Rat	Amnt	Amnt(L)	R. Fa	R. Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.447	1.447	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	0.960	0.960	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.925	0.925	1.00
7	3:00	0.99	0.347	0.99	200.00	200.00	0.653	0.653	1.00
8	3:40	0.99	0.424	0.99	200.00	200.00	1.191	1.191	1.00
9	3:08	0.99	0.362	0.99	200.00	200.00	0.861	0.861	1.00
10	3:45	0.99	0.433	1.00	200.00	200.00	0.509	0.509	1.00
11	5:41	1.00	0.658	1.00	200.00	200.00	0.897	0.897	1.00
12	4:04	0.99	0.470	1.00	200.00	200.00	3.246	3.246	1.00
13	4:48	1.00	0.554	1.00	200.00	200.00	0.191	0.191	1.00
14	5:44	1.00	0.663	1.00	200.00	200.00	2.383	2.383	1.00
15	4:57	1.00	0.571	1.00	200.00	200.00	0.922	0.922	1.00
16	6:56	1.00	0.800	1.00	200.00	200.00	1.906	1.906	1.00
17	6:12	1.00	0.717	1.00	200.00	200.00	0.955	0.955	1.00
18	8:20	1.00	0.963	1.00	200.00	200.00	2.391	2.391	1.00
19	9:58	1.00	1.153	1.00	200.00	200.00	1.491	1.491	1.00
20	7:47	0.99	0.899	1.00	200.00	200.00	0.269	0.269	1.00
21	9:08	1.00	0.861	1.00	200.00	200.00	0.646	0.646	1.00
22	9:39	1.00	0.910	1.00	200.00	200.00	0.730	0.730	1.00
23	6:57	1.00	0.655	1.00	200.00	200.00	0.367	0.367	1.00
24	12:15	1.00	1.155	1.00	200.00	200.00	0.734	0.734	1.00
25	11:43	1.00	1.104	1.00	200.00	200.00	0.304	0.304	1.00
26	13:34	1.00	1.279	1.00	200.00	200.00	0.486	0.486	1.00
27	11:19	1.00	1.066	1.00	200.00	200.00	0.423	0.423	1.00
28	16:31	1.00	1.556	1.00	200.00	200.00	0.704	0.704	1.00
29	15:13	1.00	1.434	1.00	200.00	200.00	0.297	0.297	1.00
30	10:01	1.00	0.944	1.00	200.00	200.00	0.584	0.584	1.00
31	14:50	1.00	1.398	1.00	200.00	200.00	0.362	0.362	1.00
32	20:49	1.00	1.962	1.00	200.00	200.00	0.616	0.616	1.00
33	13:05	1.00	0.722	1.00	200.00	200.00	0.436	0.436	1.00
34	15:19	1.00	0.846	1.00	200.00	200.00	0.180	0.180	1.00
35	16:00	1.00	0.884	1.00	200.00	200.00	0.445	0.445	1.00
36	21:22	1.00	1.180	1.00	200.00	200.00	0.512	0.512	1.00
37	14:22	1.00	0.793	1.00	200.00	200.00	0.464	0.464	1.00
38	18:13	1.00	1.006	1.00	200.00	200.00	0.706	0.706	1.00
39	18:25	1.00	1.016	1.00	200.00	200.00	0.255	0.255	1.00
40	19:57	1.00	1.101	1.00	200.00	200.00	0.579	0.579	1.00
41	18:37	1.00	1.028	1.00	400.00	400.00	0.329	0.329	1.00
42	19:50	1.00	1.095	1.00	200.00	200.00	0.373	0.373	1.00
43	24:51	1.00	1.372	1.00	200.00	200.00	0.814	0.814	1.00
44	26:16	1.00	1.451	1.00	200.00	200.00	0.770	0.770	1.00
45	25:11	1.00	1.391	1.00	200.00	200.00	0.797	0.797	1.00
46	13:01	1.00	1.227	1.00	200.00	200.00	0.150	0.150	1.00
47	12:22	1.00	1.165	1.00	200.00	200.00	0.405	0.405	1.00
48	2:42	0.98	0.313	0.99	200.00	200.00	1.804	1.804	1.00
49	21:03	1.00	1.984	1.00	200.00	200.00	0.114	0.114	1.00
50	22:05	1.00	2.080	1.00	200.00	200.00	0.149	0.149	1.00

antitation Report File: 200BS901

ta: 200BS901.TI
/01/94 14:50:00
mple: VSTD200 SOIL
nds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
rmula: METH 8240 & CLP Instrument: FINN Weight: 0.000
bmitted by: Analyst: DWB Acct. No.: BUBBA

OUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
sp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	699	14:54	2	1.404	A BB	252262.	200.000 PPB	1.74
52	69	699	14:54	3	0.820	A BB	252262.	200.000 PPB	1.74
53	142	253	5:23	1	0.625	A BB	767575.	200.000 PPB	1.74
54	75	1026	21:52	3	1.204	A VV	283248.	200.000 PPB	1.74
55	41	385	8:12	1	0.951	A BB	98197.	200.000 PPB	1.74
56	88	498	10:37	2	1.000	A BV	41464.	200.000 PPB	1.74
57	56	218	4:39	1	0.538	A BB	89381.	1000.000 PPB	8.70

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	200.00	200.00	0.289	0.289	1.00
52	14:52	1.00	0.821	1.00	200.00	200.00	0.330	0.330	1.00
53	5:25	1.00	0.626	1.00	200.00	200.00	3.025	3.025	1.00
54	21:48	1.00	1.204	1.00	200.00	200.00	0.370	0.370	1.00
55	8:14	1.00	0.951	1.00	200.00	200.00	0.387	0.387	1.00
56	10:37	1.00	1.000	1.00	200.00	200.00	0.047	0.047	1.00
57	4:40	1.00	0.539	1.00	1000.00	1000.00	0.070	0.070	1.00

ROCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 15:40:17
ATA FILE: 200BS901
EFERENCE: VX11
AME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

---- STANDARDS ----- >< --- PLUS UNKNOWNS --- >< - LIST NAMES - >								
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	58	VXIS/VXSURR
3	3	1	32	11	11	1	33	VXIS/VXTARG1
3	3	1	32	11	11	1	57	VXIS/VXTARG2
3	3	1	32	11	11	1	36	VXIS/VXTARG3
3	3	1	32	11	11	1	30	VXIS/VXTARG4
3	3	1	32	10	10	4	51	VXIS/VXTARG5
3	3	1	32	5	5	1	26	VXIS/VXTARG6
3	3	1	32	4	4	1	31	VXIS/VXTARG7
3	3	1	32	7	6	1	50	VXIS/VXTARG8
3	3	1	32	4	4	1	23	VXIS/VXTARG9
3	3	1	32	4	4	1	24	VXIS/VXTARG10
3	3	1	32	6	5	1	42	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 55 FOUND

COMPOUND >< ---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >													
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	406	406	.	1	994	.	128	405	-1	1
2	VX	2	498	498	498	.	1	998	.	114	498	.	1
3	VX	3	850	852	852	.	1	970	.	117	852	.	1
4	VX	4	458	458	458	.	1	932	.	65	459	1	1
5	VX	5	664	665	666	1	1	998	.	98	666	.	1
6	VX	6	1013	1015	1015	.	1	993	.	95	1015	.	1
7	VX	7	141	139	139	.	1	998	.	50	139	.	1
8	VX	8	172	170	170	.	1	982	.	94	170	.	1
9	VX	9	147	145	145	.	1	996	.	62	145	.	1
10	VX	10	177	175	175	.	1	991	.	64	175	.	1
11	VX	11	267	266	266	.	1	997	.	84	266	.	1
12	VX	12	191	189	190	1	1	1000	.	101	190	.	1
13	VX	13	225	224	224	.	1	994	.	43	224	.	1
14	VX	14	269	268	268	.	1	996	.	76	268	.	1
15	VX	15	232	231	231	.	1	990	.	96	231	.	1
16	VX	16	325	324	324	.	1	983	.	63	324	.	1
17	VX	17	291	290	290	.	1	984	.	96	290	.	1
18	VX	18	391	390	391	1	1	984	.	83	391	.	1
19	VX	19	468	468	468	.	1	969	.	62	468	.	1
20	VX	20	365	364	363	-1	1	997	.	43	363	.	1
21	VX	21	429	429	428	-1	1	974	.	97	429	1	1
22	VX	22	453	453	453	.	1	956	.	117	453	.	1
23	VX	23	326	326	326	.	1	990	.	43	325	-1	1
24	VX	24	575	576	576	.	1	992	.	83	575	-1	1
25	VX	25	550	551	551	.	1	998	.	63	551	.	1
26	VX	26	637	638	638	.	1	996	.	75	638	.	1
27	VX	27	532	533	532	-1	1	988	.	130	532	.	1
28	VX	28	775	777	777	.	1	998	.	129	777	.	1
29	VX	29	714	715	715	.	1	950	.	97	715	.	1
30	VX	30	469	469	469	.	1	992	.	78	469	.	1
31	VX	31	696	697	697	.	1	992	.	75	697	.	1
32	VX	32	977	979	979	.	1	999	.	173	979	.	1
33	VX	33	615	616	616	.	1	990	.	43	616	.	1
34	VX	34	719	720	720	.	1	977	.	43	720	.	1
35	VX	35	752	753	753	.	1	956	.	164	753	.	1
36	VX	36	1003	1006	1006	.	1	996	.	83	1006	.	1
37	VX	37	674	675	675	.	1	996	.	92	675	.	1

39	VX	39	864	866	866	.	2	995	.	106	866	.	1
40	VX	40	936	938	[redacted]	.	1	985	.	104	938	.	1
41	VX	41	874	876	[redacted]	.	1	996	.	106	876	.	1
42	VX	42	931	933	934	1	1	983	.	106	933	-1	1
43	VX	43	1167	1170	1169	-1	2	994	.	146	1169	.	1
44	VX	44	1233	1236	1236	.	1	992	.	146	1236	.	1
45	VX	45	1182	1185	1185	.	1	994	.	146	1184	-1	1
46	VX	46	611	612	612	.	1	992	.	63	612	.	1
47	VX	47	580	581	581	.	1	996	.	93	581	.	1
48	VX	48	126	125	125	.	1	993	.	85	125	.	1
49	VX	49	988	990	990	.	1	993	.	88	990	.	1
50	VX	50	-1034	1037	.	.	.	.	.	75	1037	.	1
51	VX	51	697	698	699	1	1	887	.	69	699	.	1
52	VX	52	698	699	699	.	1	990	.	69	699	.	1
53	VX	53	254	253	253	.	1	994	.	142	253	.	1
54	VX	54	1023	1026	1026	.	1	997	.	75	1026	.	1
55	VX	55	386	386	385	-1	1	997	.	41	385	.	1
56	VX	56	-499	499	.	.	.	.	.	88	498	.	1
57	VX	57	219	218	218	.	1	1000	.	56	218	.	1

7A

VOLATI● CONTINUING CALIBRATION C●CK

ab Name: A.T.I. Contract: NA

ab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

nstrument ID: BUBBA Calibration date: 09/01/94 Time: 1938

ab File ID: CPB901 Init. Calib. Date(s): 09/01/94 09/01/94

atrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

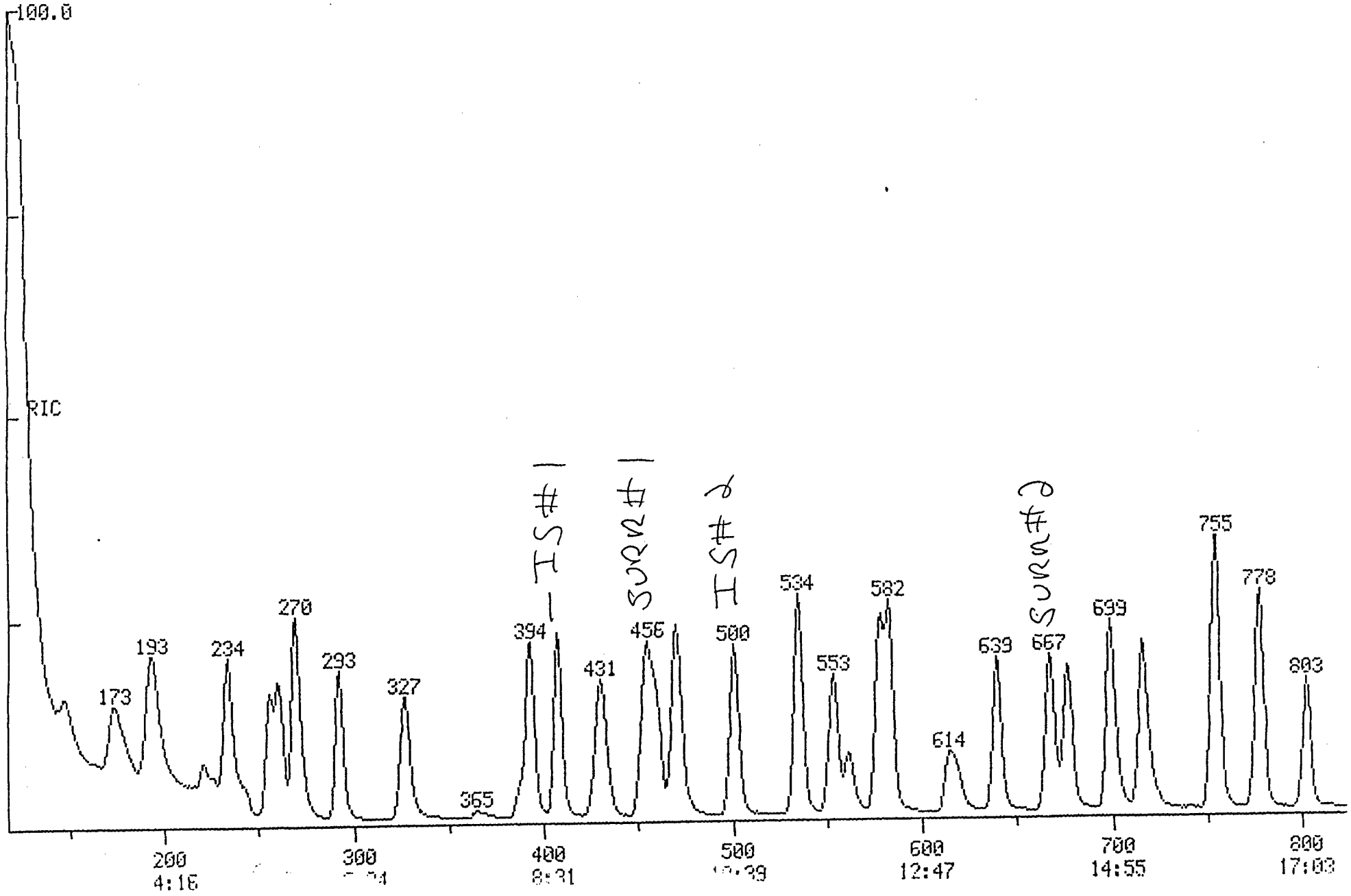
in RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.667	0.765	-14.7	#
Bromomethane		1.213	1.349	-11.2	
Vinyl Chloride	*	0.867	1.004	-15.8	*
Chloroethane		0.522	0.580	-11.1	
Methylene Chloride		0.981	1.118	-14.0	
Acetone		0.240	0.193	19.6	
Carbon Disulfide		2.548	2.782	-9.2	
1,1-Dichloroethene	*	0.966	1.059	-9.6	*
1,1-Dichloroethane	#	2.034	2.198	-8.1	#
total 1,2-Dichloroethene		1.015	1.122	-10.5	
Chloroform	*	2.658	2.785	-4.8	*
1,2-Dichloroethane		1.709	1.768	-3.5	
2-Butanone		0.338	0.281	16.9	
1,1,1-Trichloroethane		0.747	0.752	-0.7	
Carbon Tetrachloride		0.853	0.856	-0.4	
Vinyl Acetate		0.434	0.430	0.9	
Bromodichloromethane		0.886	0.864	2.5	
1,2-Dichloropropane	*	0.362	0.375	-3.6	*
cis-1,3-Dichloropropene		0.548	0.547	0.2	
Trichloroethene		0.512	0.516	-0.8	
Dibromochloromethane		0.898	0.838	6.7	
1,1,2-Trichloroethane		0.380	0.378	0.5	
Benzene		0.686	0.731	-6.6	
trans-1,3-Dichloropropene		0.413	0.406	1.7	
Bromoform	#	0.805	0.745	7.5	#
4-Methyl-2-Pentanone		0.599	0.524	12.5	
2-Hexanone		0.241	0.204	15.4	
Tetrachloroethene		0.575	0.603	-4.9	
1,1,2,2-Tetrachloroethane	#	0.711	0.689	3.1	#
Toluene	*	0.570	0.584	-2.5	*
Chlorobenzene	#	0.852	0.916	-7.5	#
Ethylbenzene	*	0.309	0.334	-8.1	*
Styrene		0.616	0.713	-15.8	
o-Xylene		0.412	0.472	-14.6	
m,p-xylene		0.378	0.430	-13.8	
Toluene-d8		1.020	1.006	1.4	
Bromofluorobenzene		0.841	0.900	-7.0	
1,2-Dichloroethane-d4		1.544	1.626	-5.3	

RIC
09/01/94 19:38:00
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

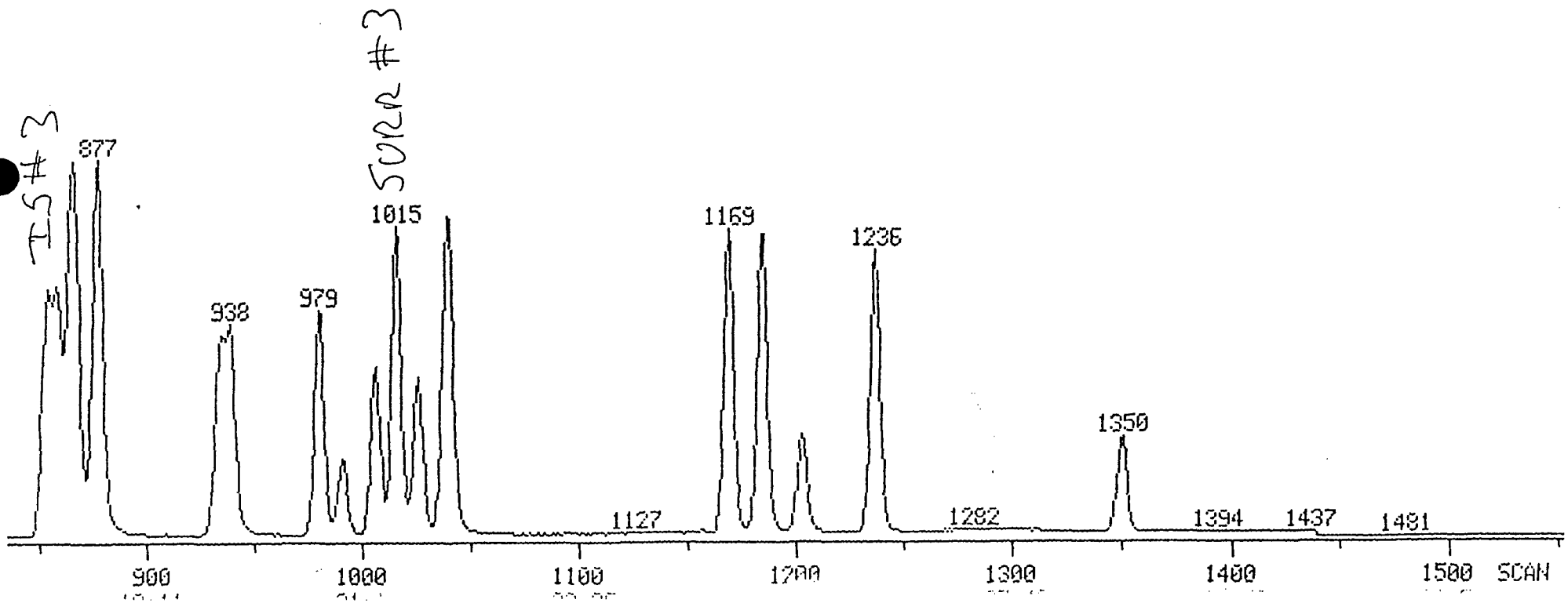
DATA: CPB901 #1
CALI: CPB901 #3

SCANS 117 TO 835
OUT OF 117 TO 1553



RIC DATA: CPB301 #1 SCANS 835 TO 1553
09/01/94 19:38:00 CALI: CPB301 #3 OUT OF 117 TO 1553
SAMPLE: VSTD050 SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 393360.



Quantitation Report File: CPB901

Data: CPB901.TI
09/01/94 19:38:00
Sample: VSTD050 SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	408	8:42	1	1.000	A BB	56374.	50.000 PPB	1.61
2	114	500	10:39	2	1.000	A BB	185105.	50.000 PPB	1.61
3	117	853	18:11	3	1.000	A BV	154267.	50.000 PPB	1.61
4	65	461	9:49	1	1.130	A BB	91659.	50.000 PPB	1.61
5	98	667	14:13	3	0.782	A BB	155145.	50.000 PPB	1.61
6	95	1015	21:38	3	1.190	A VB	138812.	50.000 PPB	1.61
7	50	141	3:00	1	0.346	A VB	43112.	50.000 PPB	1.61
8	94	172	3:40	1	0.422	A BB	76048.	50.000 PPB	1.61
9	62	147	3:08	1	0.360	A BB	56602.	50.000 PPB	1.61
10	64	179	3:49	1	0.439	A BB	32673.	50.000 PPB	1.61
11	84	269	5:44	1	0.659	A BB	63002.	50.000 PPB	1.61
12	101	193	4:07	1	0.473	A BB	196816.	50.000 PPB	1.61
13	43	226	4:49	1	0.554	A BB	10862.	50.000 PPB	1.61
14	76	271	5:46	1	0.664	A VB	156826.	50.000 PPB	1.61
15	96	234	4:59	1	0.574	A BB	59675.	50.000 PPB	1.61
16	63	327	6:58	1	0.801	A BB	123914.	50.000 PPB	1.61
17	96	292	6:13	1	0.716	A BB	63233.	50.000 PPB	1.61
18	83	393	8:22	1	0.963	A BB	156992.	50.000 PPB	1.61
19	62	470	10:01	1	1.152	A BB	99691.	50.000 PPB	1.61
20	43	365	7:47	1	0.895	A BB	15820.	50.000 PPB	1.61
21	97	431	9:11	2	0.862	A BB	139114.	50.000 PPB	1.61
22	117	456	9:43	2	0.912	A BB	158453.	50.000 PPB	1.61
23	43	329	7:01	2	0.658	A BB	79646.	50.000 PPB	1.61
24	83	577	12:18	2	1.154	A BB	159957.	50.000 PPB	1.61
25	63	553	11:47	2	1.106	A BB	69340.	50.000 PPB	1.61
26	75	639	13:37	2	1.278	A BB	101263.	50.000 PPB	1.61
27	130	534	11:23	2	1.068	A BB	95532.	50.000 PPB	1.61
28	129	778	16:35	2	1.556	A BB	155062.	50.000 PPB	1.61
29	97	716	15:15	2	1.432	A BB	69961.	50.000 PPB	1.61
30	78	472	10:03	2	0.944	A BB	135258.	50.000 PPB	1.61
31	75	699	14:54	2	1.398	A BB	75230.	50.000 PPB	1.61
32	173	979	20:52	2	1.958	A BB	137879.	50.000 PPB	1.61
33	43	618	13:10	3	0.725	A BB	80893.	50.000 PPB	1.61
34	43	722	15:23	3	0.846	A BB	31533.	50.000 PPB	1.61
35	164	754	16:04	3	0.884	A BB	92967.	50.000 PPB	1.61
36	83	1006	21:26	3	1.179	A BB	106289.	50.000 PPB	1.61
37	92	676	14:24	3	0.792	A BB	90048.	50.000 PPB	1.61
38	112	857	18:16	3	1.005	A BB	141373.	50.000 PPB	1.61
39	106	866	18:27	3	1.015	A BV	51547.	50.000 PPB	1.61
40	104	938	19:59	3	1.100	A BB	110023.	50.000 PPB	1.61
41	106	877	18:41	3	1.028	A VB	132728.	100.000 PPB	3.23
42	106	934	19:54	3	1.095	A BB	72882.	50.000 PPB	1.61
43	146	1169	24:55	3	1.370	A BB	164459.	50.000 PPB	1.61
44	146	1236	26:20	3	1.449	A BB	153362.	50.000 PPB	1.61
45	146	1184	25:14	3	1.388	A BB	161011.	50.000 PPB	1.61
46	63	614	13:05	2	1.228	A BB	30916.	50.000 PPB	1.61
47	93	583	12:25	2	1.166	A BB	98019.	50.000 PPB	1.61
48	85	126	2:41	1	0.309	A BB	113475.	50.000 PPB	1.61
49	88	990	21:06	2	1.980	A BB	21519.	50.000 PPB	1.61
50	75	1038	22:07	2	2.076	A BB	29787.	50.000 PPB	1.61

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	50.00	50.00	1.626	1.626	1.00
5	14:09	1.00	0.781	1.00	50.00	50.00	1.006	1.006	1.00
6	21:35	1.00	1.192	1.00	50.00	50.00	0.900	0.900	1.00
7	3:00	1.00	0.347	1.00	50.00	50.00	0.765	0.765	1.00
8	3:40	1.00	0.424	1.00	50.00	50.00	1.349	1.349	1.00
9	3:08	1.00	0.362	1.00	50.00	50.00	1.004	1.004	1.00
10	3:45	1.02	0.433	1.01	50.00	50.00	0.580	0.580	1.00
11	5:41	1.01	0.658	1.00	50.00	50.00	1.118	1.118	1.00
12	4:04	1.01	0.470	1.01	50.00	50.00	3.491	3.491	1.00
13	4:48	1.00	0.554	1.00	50.00	50.00	0.193	0.193	1.00
14	5:44	1.01	0.663	1.00	50.00	50.00	2.782	2.782	1.00
15	4:57	1.01	0.571	1.00	50.00	50.00	1.059	1.059	1.00
16	6:56	1.01	0.800	1.00	50.00	50.00	2.198	2.198	1.00
17	6:12	1.00	0.717	1.00	50.00	50.00	1.122	1.122	1.00
18	8:20	1.01	0.963	1.00	50.00	50.00	2.785	2.785	1.00
19	9:58	1.00	1.153	1.00	50.00	50.00	1.768	1.768	1.00
20	7:47	1.00	0.899	1.00	50.00	50.00	0.281	0.281	1.00
21	9:08	1.00	0.861	1.00	50.00	50.00	0.752	0.752	1.00
22	9:39	1.01	0.910	1.00	50.00	50.00	0.856	0.856	1.00
23	6:57	1.01	0.655	1.01	50.00	50.00	0.430	0.430	1.00
24	12:15	1.00	1.155	1.00	50.00	50.00	0.864	0.864	1.00
25	11:43	1.01	1.104	1.00	50.00	50.00	0.375	0.375	1.00
26	13:34	1.00	1.279	1.00	50.00	50.00	0.547	0.547	1.00
27	11:19	1.01	1.066	1.00	50.00	50.00	0.516	0.516	1.00
28	16:31	1.00	1.556	1.00	50.00	50.00	0.838	0.838	1.00
29	15:13	1.00	1.434	1.00	50.00	50.00	0.378	0.378	1.00
30	10:01	1.00	0.944	1.00	50.00	50.00	0.731	0.731	1.00
31	14:50	1.00	1.398	1.00	50.00	50.00	0.406	0.406	1.00
32	20:49	1.00	1.962	1.00	50.00	50.00	0.745	0.745	1.00
33	13:05	1.01	0.722	1.00	50.00	50.00	0.524	0.524	1.00
34	15:19	1.00	0.846	1.00	50.00	50.00	0.204	0.204	1.00
35	16:00	1.00	0.884	1.00	50.00	50.00	0.603	0.603	1.00
36	21:22	1.00	1.180	1.00	50.00	50.00	0.689	0.689	1.00
37	14:22	1.00	0.793	1.00	50.00	50.00	0.584	0.584	1.00
38	18:13	1.00	1.006	1.00	50.00	50.00	0.916	0.916	1.00
39	18:25	1.00	1.016	1.00	50.00	50.00	0.334	0.334	1.00
40	19:57	1.00	1.101	1.00	50.00	50.00	0.713	0.713	1.00
41	18:37	1.00	1.028	1.00	100.00	100.00	0.430	0.430	1.00
42	19:50	1.00	1.095	1.00	50.00	50.00	0.472	0.472	1.00
43	24:51	1.00	1.372	1.00	50.00	50.00	1.066	1.066	1.00
44	26:16	1.00	1.451	1.00	50.00	50.00	0.994	0.994	1.00
45	25:11	1.00	1.391	1.00	50.00	50.00	1.044	1.044	1.00
46	13:01	1.00	1.227	1.00	50.00	50.00	0.167	0.167	1.00
47	12:22	1.01	1.165	1.00	50.00	50.00	0.530	0.530	1.00
48	2:42	0.99	0.313	0.99	50.00	50.00	2.013	2.013	1.00
49	21:03	1.00	1.984	1.00	50.00	50.00	0.116	0.116	1.00
50	22:05	1.00	2.080	1.00	50.00	50.00	0.161	0.161	1.00

Quantitation Report File: CPB901

Data: CPB901.TI
09/01/94 19:38:00
Sample: VSTD050 SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	69	700	14:55	2	1.400	A BB	61043.	50.000 PPB	1.61
52	69	700	14:55	3	0.821	A BB	61043.	50.000 PPB	1.61
53	142	256	5:27	1	0.627	A BB	202433.	50.000 PPB	1.61
54	75	1026	21:52	3	1.203	A VB	74230.	50.000 PPB	1.61
55	41	388	8:16	1	0.951	A BB	23624.	50.000 PPB	1.61
56	88	500	10:39	2	1.000	A BB	34940.	50.000 PPB	1.61
57	56	221	4:43	1	0.542	A BB	26513.	250.000 PPB	8.06

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52	1.00	1.402	1.00	50.00	50.00	0.330	0.330	1.00
52	14:52	1.00	0.821	1.00	50.00	50.00	0.396	0.396	1.00
53	5:25	1.01	0.626	1.00	50.00	50.00	3.591	3.591	1.00
54	21:48	1.00	1.204	1.00	50.00	50.00	0.481	0.481	1.00
55	8:14	1.01	0.951	1.00	50.00	50.00	0.419	0.419	1.00
56	10:37	1.00	1.000	1.00	50.00	50.00	0.189	0.189	1.00
57	4:40	1.01	0.539	1.00	250.00	250.00	0.094	0.094	1.00

PROCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 20:21:29
DATA FILE: CPB901
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	16	6	6	1	61	VXIS/VXSURR
3	3	1	16	11	11	2	79	VXIS/VXTARG1
3	3	1	16	11	11	1	80	VXIS/VXTARG2
3	3	1	16	11	11	1	55	VXIS/VXTARG3
3	3	1	16	11	11	1	51	VXIS/VXTARG4
3	3	1	16	10	10	4	53	VXIS/VXTARG5
3	3	1	16	5	5	1	40	VXIS/VXTARG6
3	3	1	16	4	4	1	49	VXIS/VXTARG7
3	3	1	16	7	6	1	55	VXIS/VXTARG8
3	3	1	16	4	4	1	24	VXIS/VXTARG9
3	3	1	16	4	4	1	19	VXIS/VXTARG10
3	3	1	16	6	5	1	22	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 55 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	408	408	.	1	992	.	128	408	.	1
2	VX	2	498	500	500	.	1	996	.	114	500	.	1
3	VX	3	850	853	853	.	1	973	.	117	853	.	1
4	VX	4	458	460	461	1	1	948	.	65	461	.	1
5	VX	5	664	667	667	.	1	998	.	98	667	.	1
6	VX	6	1013	1016	1015	-1	1	993	.	95	1015	.	1
7	VX	7	141	142	141	-1	2	995	.	50	141	.	1
8	VX	8	172	173	172	-1	1	979	.	94	172	.	1
9	VX	9	147	148	147	-1	1	995	.	62	147	.	1
10	VX	10	177	178	179	1	1	988	.	64	179	.	1
11	VX	11	267	268	269	1	1	997	.	84	269	.	1
12	VX	12	191	192	193	1	1	996	.	101	193	.	1
13	VX	13	225	226	226	.	1	989	.	43	226	.	1
14	VX	14	269	270	271	1	1	994	.	76	271	.	1
15	VX	15	232	234	234	.	1	991	.	96	234	.	1
16	VX	16	325	327	327	.	1	985	.	63	327	.	1
17	VX	17	291	293	293	.	1	987	.	96	292	-1	1
18	VX	18	391	393	394	1	1	985	.	83	393	-1	1
19	VX	19	468	470	470	.	1	974	.	62	470	.	1
20	VX	20	365	367	365	-2	1	994	.	43	365	.	1
21	VX	21	429	431	431	.	1	976	.	97	431	.	1
22	VX	22	453	455	456	1	1	964	.	117	456	.	1
23	VX	23	326	328	329	1	1	996	.	43	329	.	1
24	VX	24	575	577	577	.	1	993	.	83	577	.	1
25	VX	25	550	552	553	1	1	997	.	63	553	.	1
26	VX	26	637	639	639	.	1	996	.	75	639	.	1
27	VX	27	532	534	534	.	1	986	.	130	534	.	1
28	VX	28	775	778	778	.	1	998	.	129	778	.	1
29	VX	29	714	717	716	-1	1	946	.	97	716	.	1
30	VX	30	469	471	472	1	1	994	.	78	472	.	1
31	VX	31	696	699	699	.	1	990	.	75	699	.	1
32	VX	32	977	980	979	-1	1	1000	.	173	979	.	1
33	VX	33	615	617	618	1	1	987	.	43	618	.	1
34	VX	34	719	722	721	-1	1	970	.	43	722	1	1
35	VX	35	752	755	755	.	1	956	.	164	754	-1	1
36	VX	36	1003	1006	1006		1	1000			1004		1

39	VX	39	864	866	866	.	2	995	.	106	866	.	1
40	VX	40	936	938	938	.	1	987	.	104	938	.	1
41	VX	41	874	876	877	1	1	998	.	106	877	.	1
42	VX	42	931	933	934	1	1	990	.	106	934	.	1
43	VX	43	1167	1170	1169	-1	2	992	.	146	1169	.	1
44	VX	44	1233	1236	1236	.	1	992	.	146	1236	.	1
45	VX	45	1182	1185	1184	-1	1	989	.	146	1184	.	1
46	VX	46	611	613	614	1	1	996	.	63	614	.	1
47	VX	47	580	582	582	.	1	998	.	93	583	1	1
48	VX	48	126	126	126	.	1	998	.	85	126	.	1
49	VX	49	988	991	990	-1	1	989	.	88	990	.	1
50	VX	50	-1034	1037	.	.	.	.	.	75	1038	.	1
51	VX	51	697	699	700	1	1	882	.	69	700	.	1
52	VX	52	698	700	700	.	1	990	.	69	700	.	1
53	VX	53	254	256	256	.	1	996	.	142	256	.	1
54	VX	54	1023	1026	1026	.	1	999	.	75	1026	.	1
55	VX	55	386	388	388	.	1	993	.	41	388	.	1
56	VX	56	-499	501	.	.	.	.	.	88	500	.	1
57	VX	57	219	221	221	.	1	1000	.	56	221	.	1

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Lab File ID (Standard): CPB901 Date Analyzed: 09/01/94

Instrument ID: BUBBA Time Analyzed: 1938

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	56400	8.70	185000	10.65	154000	18.19
	UPPER LIMIT	112800	9.20	370000	11.15	308000	18.69
	LOWER LIMIT	28200	8.20	92500	10.15	77000	17.69
	EPA SAMPLE NO.						
01	40842001	42600	8.64	139000	10.59	124000	18.12
02	40842002	41600	8.64	134000	10.59	119000	18.12
03	40842003	42400	8.64	137000	10.59	119000	18.14
04	40842004	43300	8.62	139000	10.59	125000	18.12
05	40842005	42200	8.62	134000	10.59	121000	18.12
06	40842006	42000	8.62	135000	10.59	119000	18.12
07	40842007	41700	8.62	133000	10.57	123000	18.12
08	40842008	42400	8.62	135000	10.57	121000	18.12
09	40842003MS	42800	8.64	134000	10.59	118000	18.12
10	40842003MSD	41600	8.62	128000	10.57	104000	18.09
11	VBLKBA	48100	8.64	151000	10.59	134000	18.14

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

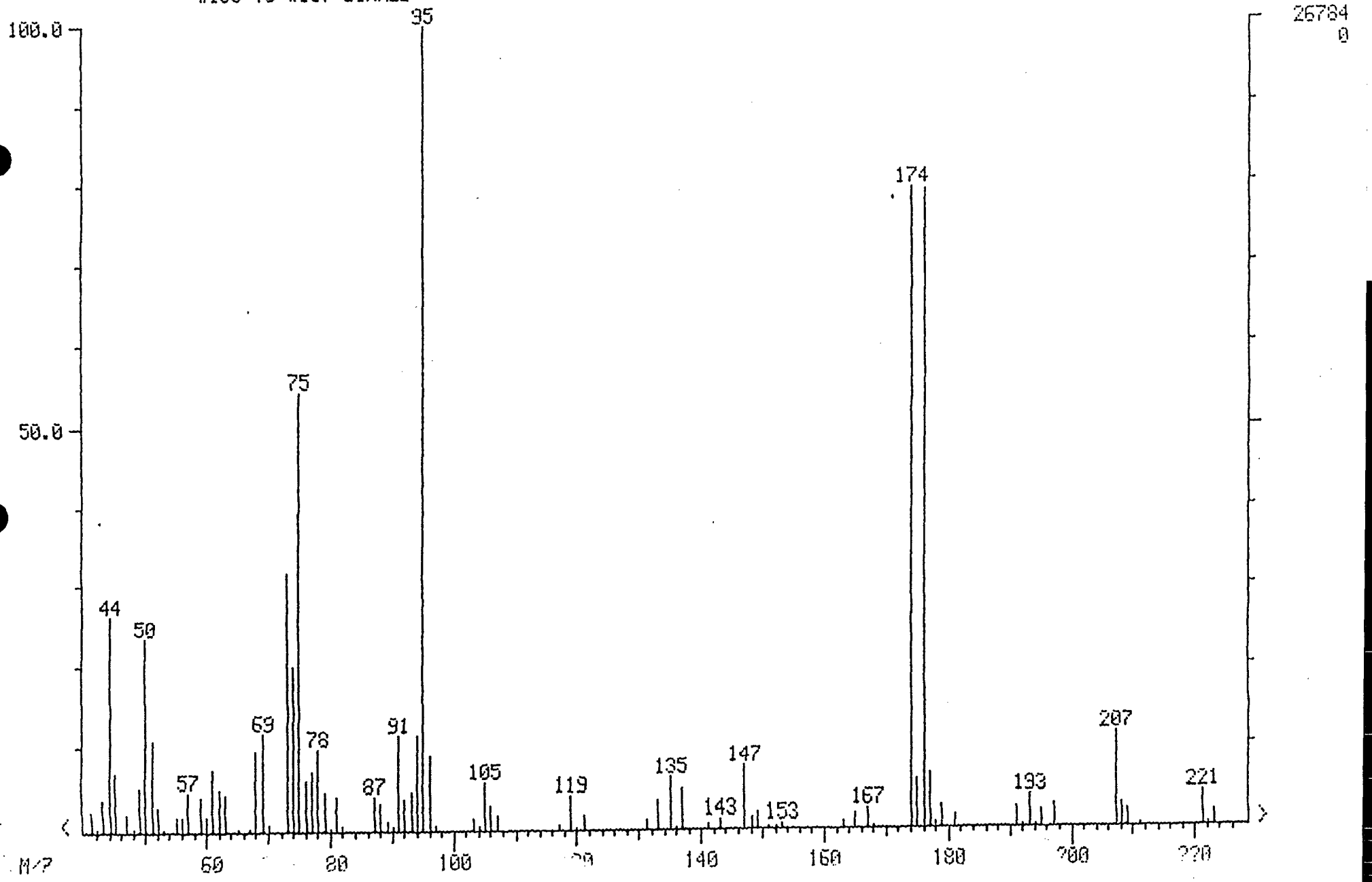
UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

MASS SPECTRUM
09/01/94 12:24:00 + 3:19
SAMPLE: 50NG BFB INCOS 50B TUNE CHECK
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 240 DEG. C
#155 TO #157 SUMMED

DATA: BFB301A #156
CALI: CALTAB #3

BASE M/Z: 95
RIC: 193168.



Mass List Data: BFB901A # 156 Base m/z: 95
09/01/94 12:24:00 + 3:19 Cali: CALTAB # 3 RIC: 199168.
Sample: 50NG BFB INCOS 50B TUNE CHECK
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
#155 to #157 summed

34	0.00	0.	Minima	Min Inten:	0.
255			Maxima	#2000	
Mass	% RA	Inten.	Mass	% RA	Inten.
34?	2.80	750.	96	8.98	2404.
36?	1.95	522.	97	0.44	117.
37?	7.18	1924.	103	1.42	381.
38?	6.85	1834.	104	0.52	138.
39?	6.06	1624.	105	5.62	1504.
40?	31.18	8352.	106	2.69	720.
41?	2.31	620.	107	1.71	458.
42?	0.20	53.	115	0.13	35.
43?	3.67	983.	117	0.53	141.
44?	26.37	7064.	119	3.79	1015.
45?	6.50	1742.	120	0.33	89.
47?	1.95	523.	121	1.58	422.
48?	0.27	73.	131	1.06	284.
49?	4.97	1332.	133	3.27	877.
50?	23.54	6304.	135	5.97	1600.
51?	10.87	2912.	136	0.24	64.
52?	2.67	715.	137	4.81	1288.
53?	0.29	78.	141	0.55	148.
55?	1.57	421.	143	1.18	316.
56?	1.78	477.	147	7.55	2022.
57?	4.30	1152.	148	1.49	398.
59?	3.78	1013.	149	2.07	554.
60?	1.68	451.	151	0.25	66.
61?	7.08	1896.	152	0.41	111.
62?	4.63	1240.	153	0.47	125.
63?	4.15	1112.	163	0.74	197.
65?	0.34	90.	165	1.77	473.
67?	0.38	102.	167	2.20	588.
68?	9.33	2500.	168	0.19	52.
69	11.65	3120.	174	79.45	21280.
70	0.83	221.	175	5.52	1478.
73	31.66	8480.	176	79.33	21248.
74	19.92	5336.	177	6.44	1724.
75	54.54	14608.	178	0.48	129.
76	5.74	1538.	179	2.51	673.
77	7.03	1882.	181	1.40	375.
78	9.69	2596.	191	2.11	566.
79	4.49	1202.	192	0.39	104.
80	0.28	75.	193	3.70	992.
81	3.99	1068.	194	0.20	53.
82	0.48	128.	195	2.01	538.
87	3.75	1005.	197	2.36	631.
88	3.12	835.	207	11.32	3032.
89	1.11	298.	208	2.37	636.
90	0.48	128.	209	1.90	509.
91	11.29	3024.	211	0.31	83.
92	3.47	929.	219	0.12	32.
93	4.53	1212.	221	3.99	1068.
94	11.22	3004.	222	0.28	74.
95	100.00	26784.	223	1.56	417.

Mass	% RA	Inten.
239	1.94	519.
241	0.42	112.
251	0.12	33.
253	4.87	1304.
254	0.97	259.
255	1.16	311.

Tuning Report
09/01/94 12:24:00 + 3:19
Instrument: FINN
#155 to #157 summed
Case Number:

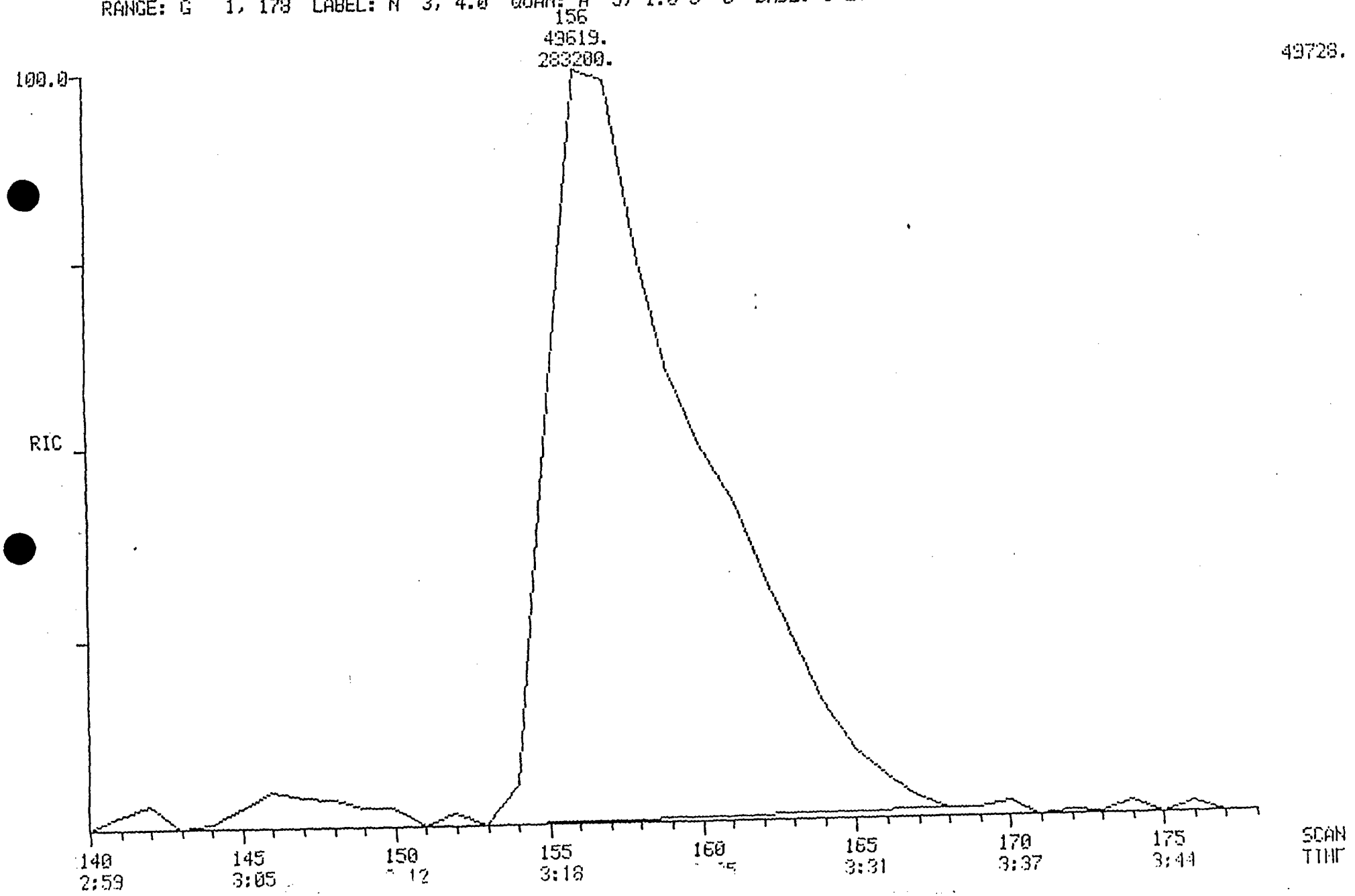
Data: BFB901A # 156
Cali: CALTAB # 3
Analyst: DWB
Laboratory:

Base m/z: 95
RIC: 199168.
Acct. No.: BUBBA
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	6304.	23.5	15.0	40.0	95	23.5	PASS
75	14608.	54.5	30.0	60.0	95	54.5	PASS
95	26784.	100.0	100.0	---	---	100.0	PASS
96	2404.	9.0	5.0	9.0	95	9.0	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	21280.	79.5	50.0	---	95	79.5	PASS
175	1478.	5.5	5.0	9.0	174	6.9	PASS
176	21248.	79.3	95.0	101.0	174	99.8	PASS
177	1724.	6.4	5.0	9.0	176	8.1	PASS

RIC
09/01/94 12:24:00
SAMPLE: 50NG BFB INCOS 50B TUNE CHECK
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1, 178 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

DATA: BFB301A #155 SCANS 140 TO 178
CALI: CALTAB #3



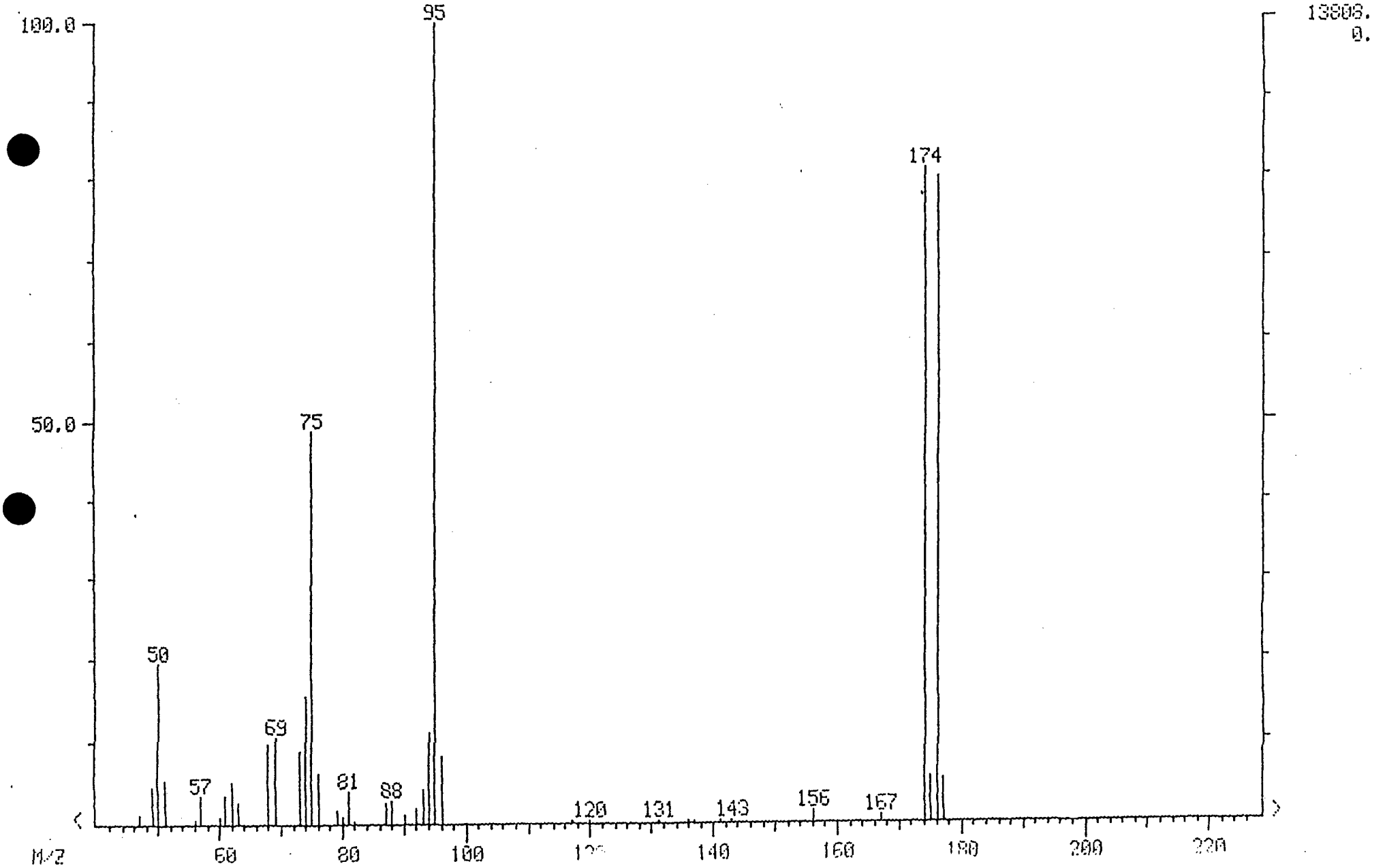
```
Scan AW:Off  Linear display  01 SEP 94 12:30:41
EM Limit: 2000  Smoothing:   1  CG:Off                    Single
Positive mode. Emission reguln. Voltages ENABLED. Low electron energy.
EM (1500v): OFF  Emission: 750ua  Range: 10^-7  Zero:  128  Filament: OFF

 1 Resolution Hi(+)          133
 2 Resolution Lo(+)          131
 3 Quad Offset (+)           0.0
 4 Quad Program (+)          0.0
 5 Lens Offset (+)          -50.0
 6 Lens Program (+)          0.0
 7 Ext Offset (+)            0.0
 8 Ext Program (+)           0.0
 9 Collector (+)            30.0
 0 Ion Offset (+)            5.5
 1 Ion Program (+)           4.5
 2 Rod Polarity (+)          REV
```

MASS SPECTRUM
09/01/94 19:29:00 + 2:27
SAMPLE: 50NG BFB INCOS 50B TUNE CHECK
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
TEMP: 240 DEG. C
#114 TO #116 SUMMED - #105

DATA: BFB301P #115
CALI: CALTAB #3

BASE M/Z: 95
RIC: 65792.



~Mass List Data: BFB901P # 115 Base m/z: 95
09/01/94 19:29:00 + 2:27 Cali: CALTAB # 3 RIC: 65792.
Sample: 50NG BFB INCOS 50B TUNE CHECK
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
#114 to #116 summed - #105

36 0.00 0. Minima Min Inten: 0.
255 Maxima # 0

Mass		% RA	Inten.
36?	S	1.12	154.
37?		7.72	1066.
38?	S	6.81	940.
39?	S	0.57	79.
47?		1.06	147.
49?		4.37	603.
50?	S	19.24	2656.
51?	S	5.32	734.
56?		0.43	60.
57?		3.19	440.
60?		0.93	128.
61?	S	3.33	460.
62?		4.87	672.
63?	S	2.38	328.
68?		9.73	1344.
69	S	10.44	1442.
73	S	8.79	1214.
74	S	15.35	2120.
75	S	48.78	6736.
76		5.96	823.
79	S	1.69	234.
80		0.85	118.
81		3.90	539.
82		0.28	39.
87		2.48	342.
88		2.68	370.
90		0.97	134.
92	S	1.84	254.
93		4.25	587.
94		11.01	1520.
95		100.00	13808.
96	S	8.30	1146.
117		0.24	33.
120		0.25	34.
131		0.23	32.
136		0.25	35.
137	S	0.33	45.
141		0.28	39.
143		0.40	55.
156		1.26	174.
167	S	0.92	127.
174		81.23	11216.
175		5.64	779.
176		80.19	11072.
177	S	5.34	737.
255	S	0.41	57.

BROMOFLUOROBENZENE

Tuning Report
09/01/94 19:29:00 + 2:27
Instrument: FINN
#114 to #116 summed - #105
Case Number:

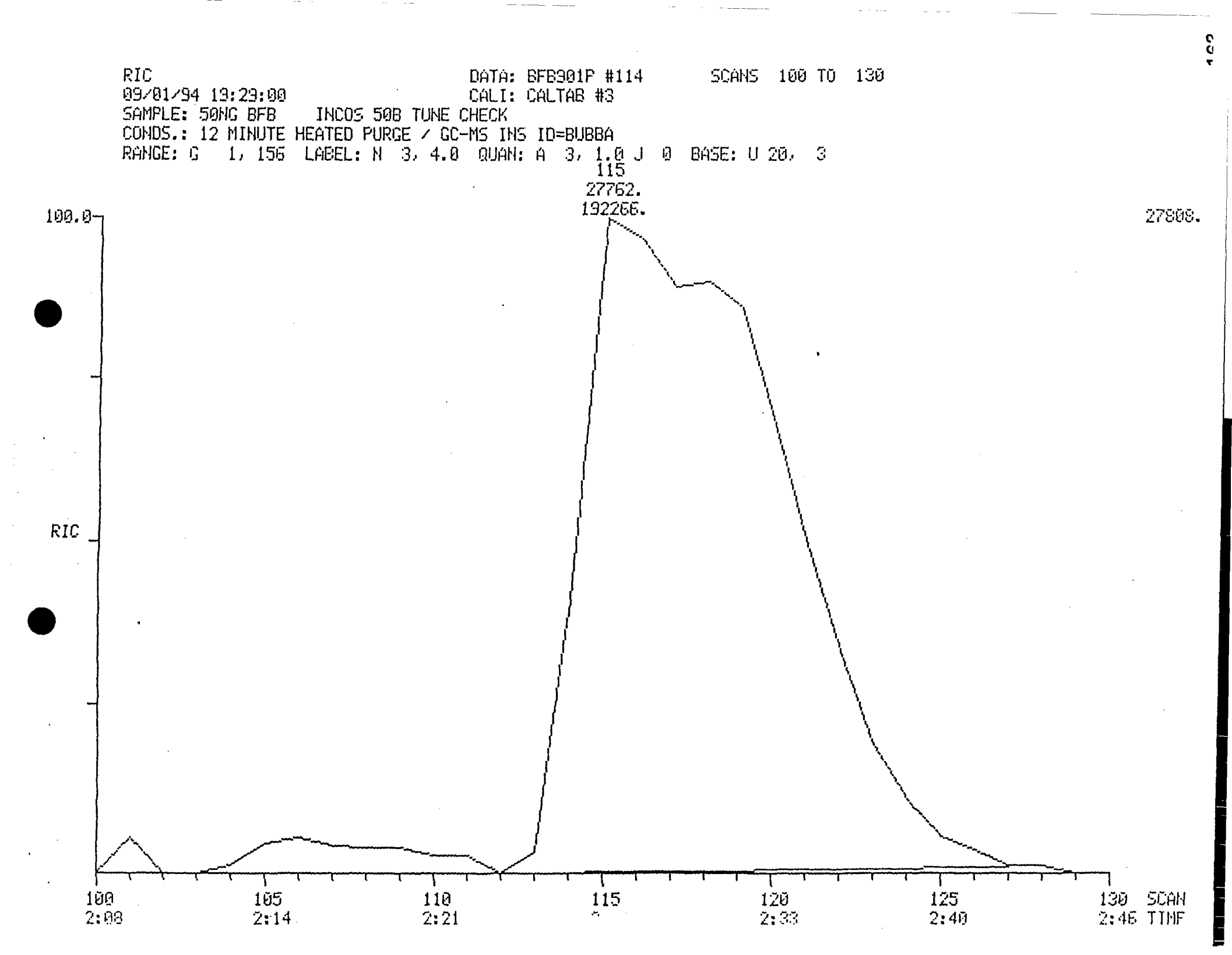
Data: BFB901P # 115
Cali: CALTAB # 3
Analyst: DB

Base m/z: 95
RIC: 65792.
Acct. No.: BUBBA

Laboratory:

Contract:

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	2656.	19.2	15.0	40.0	95	19.2	PASS
75	6736.	48.8	30.0	60.0	95	48.8	PASS
95	13808.	100.0	100.0	---	---	100.0	PASS
96	1146.	8.3	5.0	9.0	95	8.3	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	11216.	81.2	50.0	---	95	81.2	PASS
175	779.	5.6	5.0	9.0	174	6.9	PASS
176	11072.	80.2	95.0	101.0	174	98.7	PASS
177	737.	5.3	5.0	9.0	176	6.7	PASS


RIC
09/01/94 13:29:00
SAMPLE: 50NG BFB INCOS 50B TUNE CHECK
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1, 156 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3
DATA: BFB301P #114
CALI: CALTAB #3
SCANS 100 TO 130
115
27762.
192266.
100.0
27808.
RIC
100
2:08
105
2:14
110
2:21
115
120
2:33
125
2:40
130
2:46
SCAN
TIME

Scan AW:Off Linear displa 01 SEP 94 19:35:05
EM Limit: 2000 Smoothing: 1 CG:Off Single
Positive mode. Emission reguln. Voltages ENABLED. Low electron energy.
EM (1500v): OFF Emission: 750ua Range: 10^-7 Zero: 128 Filament: OFF

1	Resolution Hi(+)	133
2	Resolution Lo(+)	131
3	Quad Offset (+)	0.0
4	Quad Program (+)	0.0
5	Lens Offset (+)	-50.0
6	Lens Program (+)	0.0
7	Ext Offset (+)	0.0
8	Ext Program (+)	0.0
9	Collector (+)	30.0
.0	Ion Offset (+)	5.5
.1	Ion Program (+)	4.5
.2	Rod Polarity (+)	REV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKBA

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: BS006ABK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006ABK

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/01/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKBA

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: BS006ABK

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006ABK

Level: (low/med) LOW Date Received:

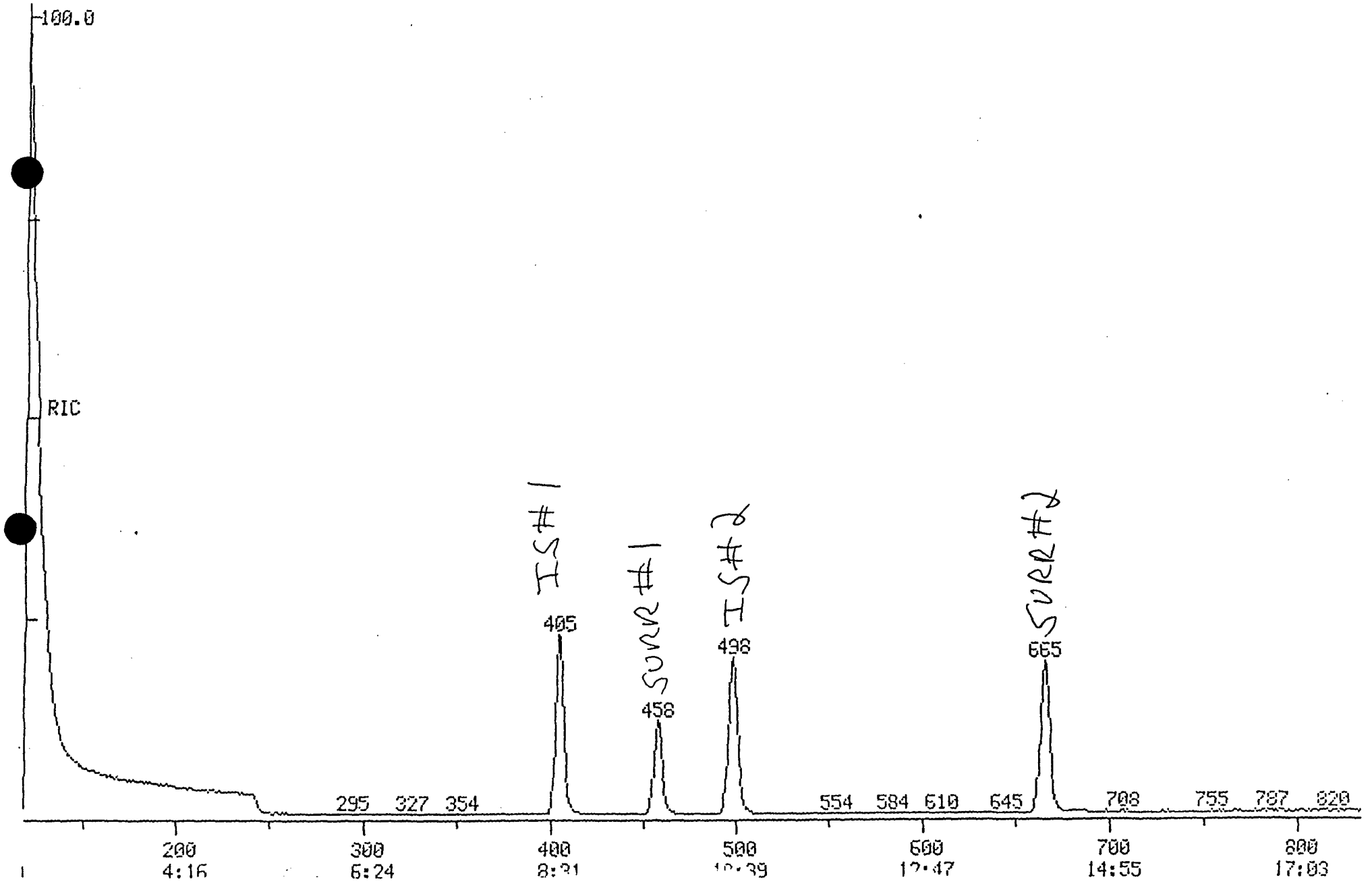
% Moisture: not dec. Date Analyzed: 09/01/94

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

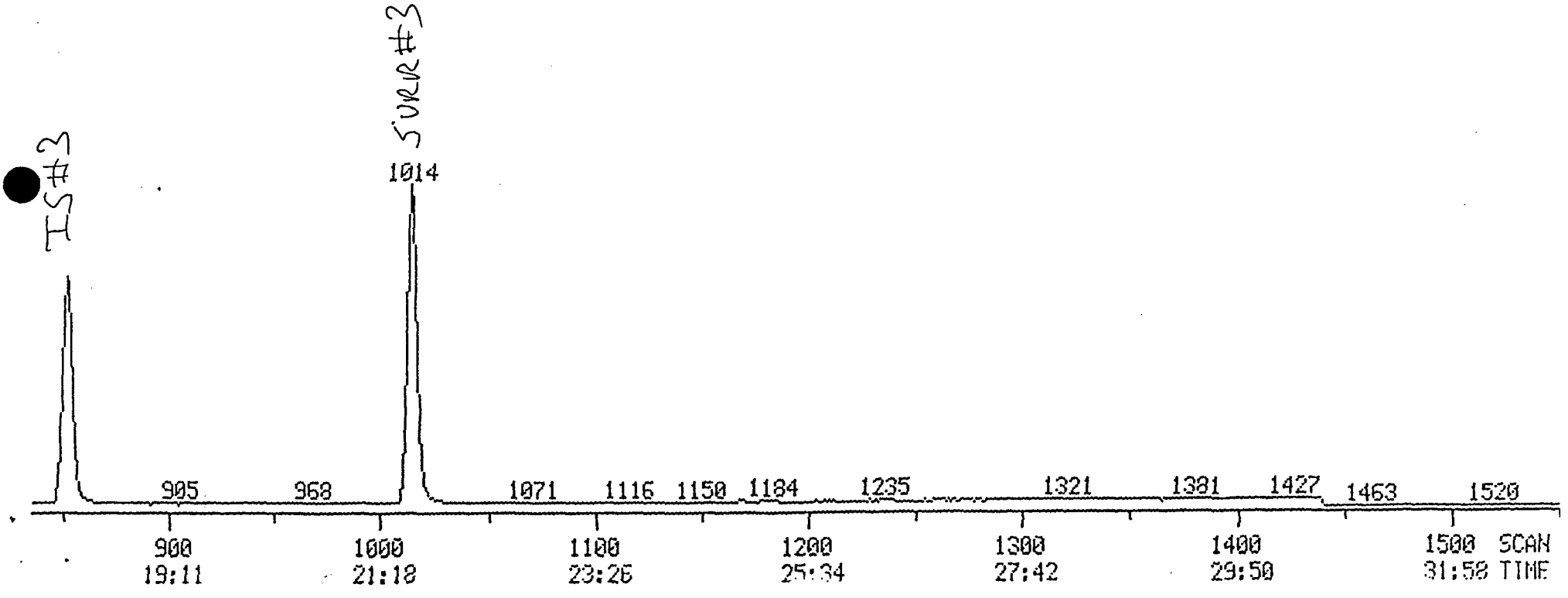
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC DATA: BS006ABK #1 SCANS 117 TO 835
09/01/94 20:32:00 CALI: BS006ABK #3 OUT OF 117 TO 1553
SAMPLE: VBLKBA SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1.1553 LABEL: N 0. 4.0 QUAN: A 0. 1.0 J 0 BASE: U 20. 3



RIC DATA: BS006ABK #1 SCANS 835 TO 1553
09/01/94 20:32:00 CALI: BS006ABK #3 OUT OF 117 TO 1553
SAMPLE: VBLKBA SOIL
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 326144.



Quantitation Report Fi[redacted] BS006ABK

Data: BS006ABK.TI
09/01/94 20:32:00
Sample: VBLKBA SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	405	8:38	1	1.000	A BB	48078.	50.000 PPB	14.44
2	114	497	10:35	2	1.000	A BB	150897.	50.000 PPB	14.44
3	117	851	18:08	3	1.000	A BB	133675.	50.000 PPB	14.44
4	65	458	9:46	1	1.131	A BB	75918.	48.559 PPB	14.03
5	98	665	14:10	3	0.781	A BB	126744.	47.139 PPB	13.62
6	95	1014	21:36	3	1.192	A BB	121917.	50.679 PPB	14.64
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	146	1169	24:55	3	1.374	A BB	1017.	0.357 PPB	0.10
44	146	1236	26:20	3	1.452	A BB	1427.	0.537 PPB	0.16
45	146	1184	25:14	3	1.391	A BB	1244.	0.446 PPB	0.13
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	48.56	50.00	1.579	1.626	0.97
5	14:09	1.00	0.781	1.00	47.14	50.00	0.948	1.006	0.94
6	21:35	1.00	1.192	1.00	50.68	50.00	0.912	0.900	1.01
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41		0.658						
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57		0.571						
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58		1.153						
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19		1.066						
28	16:31		1.556						
29	15:13		1.434						
30	10:01		0.944						
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22		0.793						
38	18:13		1.006						
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51	1.00	1.372	1.00	0.36	50.00	0.008	1.066	0.01
44	26:16	1.00	1.451	1.00	0.54	50.00	0.011	0.994	0.01
45	25:11	1.00	1.391	1.00	0.45	50.00	0.009	1.044	0.01
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: BS006ABK

Data: BS006ABK.TI
09/01/94 20:32:00
Sample: VBLKBA SOIL
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	498	10:37	2	1.002	A BB	27624.	48.493 PPB	14.01
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	48.49	50.00	0.183	0.189	0.97
57	4:40		0.539						

PROCEDURE: TCA DIAGNOSTIC REPORT 9/01/94 21:07:43
DATA FILE: BS006ABK
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	45	6	6	1	50	VXIS/VXSURR
3	3	1	45	11	3	1	45	VXIS/VXTARG1
3	3	1	45	11	3	1	45	VXIS/VXTARG2
3	3	1	45	11	3	1	45	VXIS/VXTARG3
3	3	1	45	11	3	1	45	VXIS/VXTARG4
3	3	1	45	10	3	1	45	VXIS/VXTARG5
3	3	1	45	5	3	1	45	VXIS/VXTARG6
3	3	1	45	4	3	1	45	VXIS/VXTARG7
3	3	1	45	7	3	1	45	VXIS/VXTARG8
3	3	1	45	4	3	1	45	VXIS/VXTARG9
3	3	1	45	4	3	1	45	VXIS/VXTARG10
3	3	1	45	6	3	1	45	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 6 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	991	.	128	405	.	1
2	VX	2	498	498	498	.	1	997	.	114	497	-1	1
3	VX	3	850	851	851	.	1	970	.	117	851	.	1
4	VX	4	458	458	458	.	1	937	.	65	458	.	1
5	VX	5	664	664	665	1	1	996	.	98	665	.	1
6	VX	6	1013	1014	1014	.	1	988	.	95	1014	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	.	.	.	.	.	84	.	.	.
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	224	.	.	.	.	.	43	.	.	.
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	231	.	.	.	.	.	96	.	.	.
16	VX	16	325	324	.	.	.	.	.	63	.	.	.
17	VX	17	291	290	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	468	.	.	.	.	.	62	.	.	.
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	325	.	.	.	.	.	43	.	.	.
24	VX	24	575	575	.	.	.	.	.	83	.	.	.
25	VX	25	550	550	.	.	.	.	.	63	.	.	.
26	VX	26	637	637	.	.	.	.	.	75	.	.	.
27	VX	27	532	532	.	.	.	.	.	130	.	.	.
28	VX	28	775	776	.	.	.	.	.	129	.	.	.
29	VX	29	714	715	.	.	.	.	.	97	.	.	.
30	VX	30	469	469	.	.	.	.	.	78	.	.	.
31	VX	31	696	696	.	.	.	.	.	75	.	.	.
32	VX	32	977	979	.	.	.	.	.	173	.	.	.
33	VX	33	615	615	.	.	.	.	.	43	.	.	.
34	VX	34	719	720	.	.	.	.	.	43	.	.	.
35	VX	35	752	753	.	.	.	.	.	164	.	.	.

39	VX	39	864	865	.	.	.	.	.	106	.	.	.	
40	VX	40	936	937	.	.	.	.	.	104	.	.	.	
41	VX	41	874	875	.	.	.	.	.	106	.	.	.	
42	VX	42	931	932	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1169	.	.	.	.	.	146	1169	.	1	
44	VX	44	1233	1236	.	.	.	.	.	146	1236	.	1	
45	VX	45	1182	1184	.	.	.	.	.	146	1184	.	1	
46	VX	46	611	611	.	.	.	.	.	63	.	.	.	
47	VX	47	580	580	.	.	.	.	.	93	.	.	.	
48	VX	48	126	124	.	.	.	.	.	85	.	.	.	
49	VX	49	988	990	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1036	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	253	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1025	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	499	.	.	.	.	.	88	498	.	1	
57	VX	57	219	218	.	.	.	.	.	56	.	.	.	

D:BS006ABK.
9/08/94 14:13:32
LIST OF TIC, PURITY, FIT

COMPOUND PURITY FIT

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842003MS

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006MS

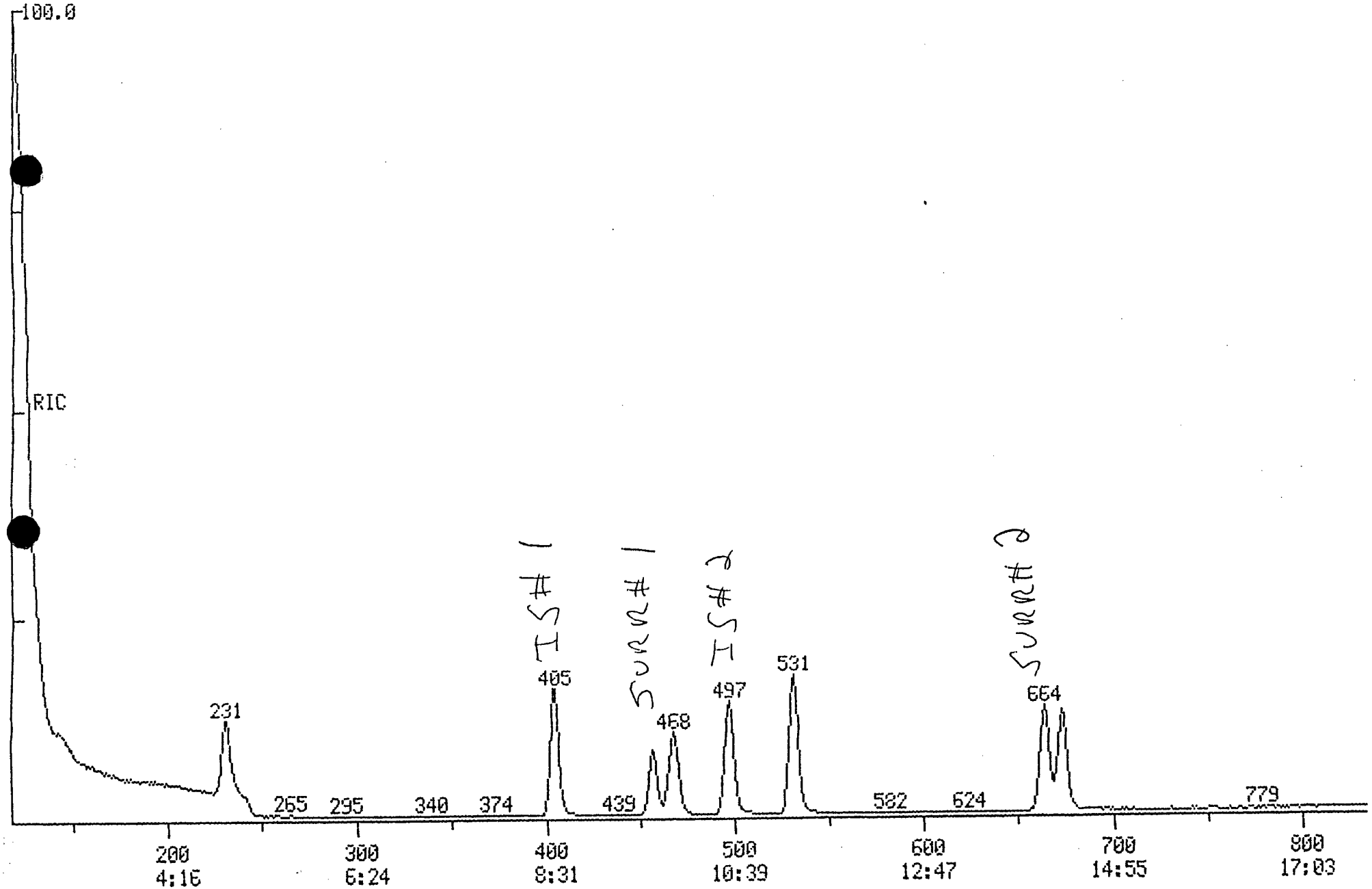
Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

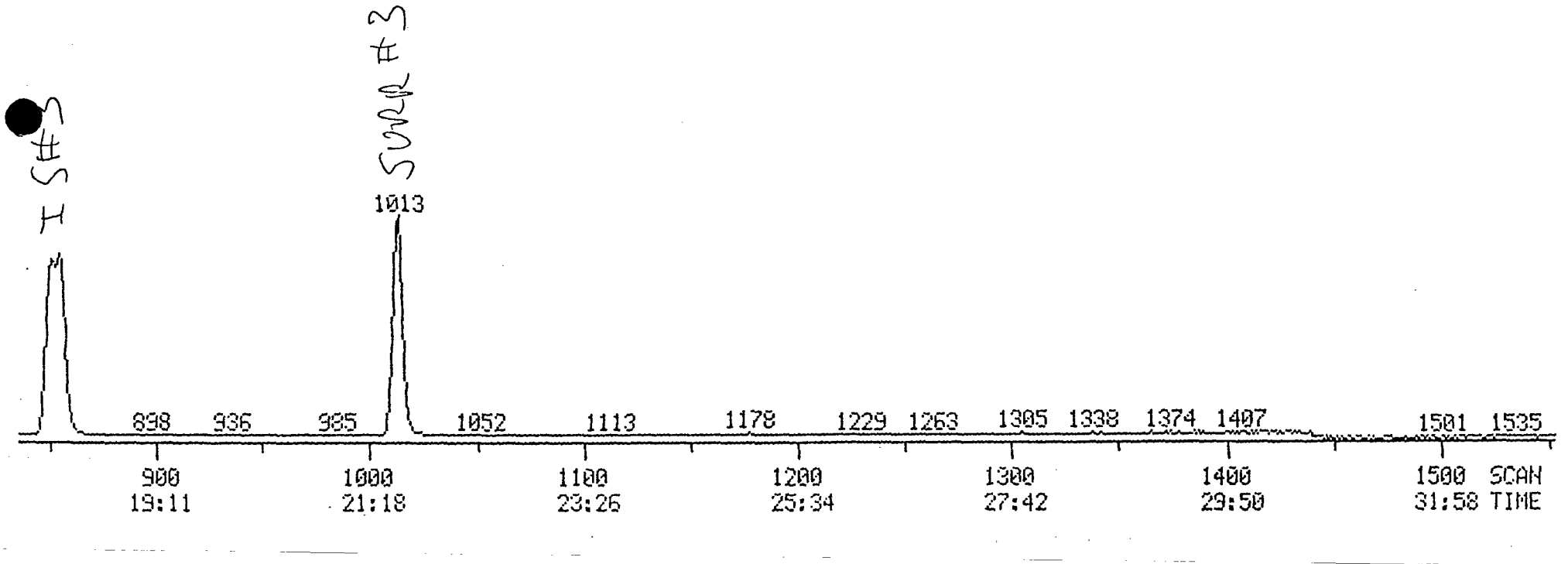
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

RIC DATA: BS006MS #1 SCANS 117 TO 835
09/02/94 4:59:00 CALI: BS006MS #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 4084200 3MS,(409099-3MS),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: BS006MS #1 SCANS 835 TO 1553
09/02/94 4:59:00 CALI: BS006MS #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842003MS,(409099-3MS),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 407552.



Quantitation Report File: BS006MS

Data: BS006MS.TI
09/02/94 4:59:00
Sample: EPA SAMPLE # 40842003MS,(409099-3MS),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	405	8:38	1	1.000	A BB	42764.	50.000 PPB	8.66
2	114	497	10:35	2	1.000	A BB	133559.	50.000 PPB	8.66
3	117	850	18:07	3	1.000	A BB	118366.	50.000 PPB	8.66
4	65	458	9:46	1	1.131	A BB	64135.	46.121 PPB	7.99
5	98	664	14:09	3	0.781	A BB	112287.	47.163 PPB	8.17
6	95	1013	21:35	3	1.192	A BB	104513.	49.063 PPB	8.50
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	266	5:40	1	0.657	A BB	393.	0.411 PPB	0.07
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	96	231	4:55	1	0.570	A BB	38931.	43.001 PPB	7.45
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	62	469	10:00	1	1.158	A BB	467.	0.309 PPB	0.05
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	530	11:18	2	1.066	A BB	65413.	47.449 PPB	8.22
28	NOT FOUND								
29	NOT FOUND								
30	78	468	9:58	2	0.942	A BB	95892.	49.129 PPB	8.51
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	92	673	14:20	3	0.792	A BB	65488.	47.392 PPB	8.21
38	112	855	18:13	3	1.006	A BB	107992.	49.779 PPB	8.62
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	46.12	50.00	1.500	1.626	0.92
5	14:09	1.00	0.781	1.00	47.16	50.00	0.949	1.006	0.94
6	21:35	1.00	1.192	1.00	49.06	50.00	0.883	0.900	0.98
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	1.00	0.658	1.00	0.41	50.00	0.009	1.118	0.01
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57	1.00	0.571	1.00	43.00	50.00	0.910	1.059	0.86
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58	1.00	1.153	1.00	0.31	50.00	0.011	1.768	0.01
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19	1.00	1.066	1.00	47.45	50.00	0.490	0.516	0.95
28	16:31		1.556						
29	15:13		1.434						
30	10:01	1.00	0.944	1.00	49.13	50.00	0.718	0.731	0.98
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22	1.00	0.793	1.00	47.39	50.00	0.553	0.584	0.95
38	18:13	1.00	1.006	1.00	49.78	50.00	0.912	0.916	1.00
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: BS006MS

Data: BS006MS.TI
09/02/94 4:59:00
Sample: EPA SAMPLE # 40842003MS,(409099-3MS),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	497	10:35	2	1.000	A BB	24001.	47.602 PPB	8.24
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.60	50.00	0.180	0.189	0.95
57	4:40		0.539						

PROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 5:34:41
DATA FILE: BS006MS
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	16	6	6	1	29	VXIS/VXSURR
3	3	1	16	11	3	1	16	VXIS/VXTARG1
3	3	1	16	11	4	1	26	VXIS/VXTARG2
3	3	1	16	11	5	1	14	VXIS/VXTARG3
3	3	1	16	11	5	1	30	VXIS/VXTARG4
3	3	1	16	10	3	1	16	VXIS/VXTARG5
3	3	1	16	5	3	1	16	VXIS/VXTARG6
3	3	1	16	4	3	1	16	VXIS/VXTARG7
3	3	1	16	7	3	1	16	VXIS/VXTARG8
3	3	1	16	4	3	1	16	VXIS/VXTARG9
3	3	1	16	4	3	1	16	VXIS/VXTARG10
3	3	1	16	6	3	1	16	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 11 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	405	405	.	1	990	.	128	405	.	1
2	VX	2	498	497	497	.	1	994	.	114	497	.	1
3	VX	3	850	850	850	.	1	976	.	117	850	.	1
4	VX	4	458	457	457	.	1	939	.	65	458	1	1
5	VX	5	664	664	664	.	1	997	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	997	.	95	1013	.	1
7	VX	7	141	139	.	.	.	.	.	50	.	.	.
8	VX	8	172	170	.	.	.	.	.	94	.	.	.
9	VX	9	147	145	.	.	.	.	.	62	.	.	.
10	VX	10	177	175	.	.	.	.	.	64	.	.	.
11	VX	11	267	266	.	.	.	.	.	84	266	.	1
12	VX	12	191	189	.	.	.	.	.	101	.	.	.
13	VX	13	225	223	.	.	.	.	.	43	.	.	.
14	VX	14	269	268	.	.	.	.	.	76	.	.	.
15	VX	15	232	231	231	.	1	990	.	96	231	.	1
16	VX	16	325	324	.	.	.	.	.	63	.	.	.
17	VX	17	291	290	.	.	.	.	.	96	.	.	.
18	VX	18	391	390	.	.	.	.	.	83	.	.	.
19	VX	19	468	467	.	.	.	.	.	62	469	.	1
20	VX	20	365	364	.	.	.	.	.	43	.	.	.
21	VX	21	429	428	.	.	.	.	.	97	.	.	.
22	VX	22	453	452	.	.	.	.	.	117	.	.	.
23	VX	23	326	325	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	531	.	1	987	.	130	530	-1	1
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	714	.	.	.	.	.	97	.	.	.
30	VX	30	469	468	468	.	1	993	.	78	468	.	1
31	VX	31	696	695	.	.	.	.	.	75	.	.	.
32	VX	32	977	977	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	719	.	.	.	.	.	43	.	.	.
35	VX	35	752	752	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1003	.	.	.	.	.	83	.	.	.

39	VX	39	864	864	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	.	.	.	.	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1234	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	124	.	.	.	.	.	85	.	.	.	
49	VX	49	988	988	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1034	.	.	.	.	.	75	.	.	.	
51	VX	51	697	697	.	.	.	.	.	69	.	.	.	
52	VX	52	698	698	.	.	.	.	.	69	.	.	.	
53	VX	53	254	253	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1023	.	.	.	.	.	75	.	.	.	
55	VX	55	386	385	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	498	.	.	.	.	.	88	497	.	1	
57	VX	57	219	217	.	.	.	.	.	56	.	.	.	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40842003MSD

Lab Name: A.T.I. Contract: NA

Lab Code: NA Case No.: ATI SAS No.: NA SDG No.: 9099

Matrix: (soil/water) SOIL Lab Sample ID: 409099-3MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: BS006MSD

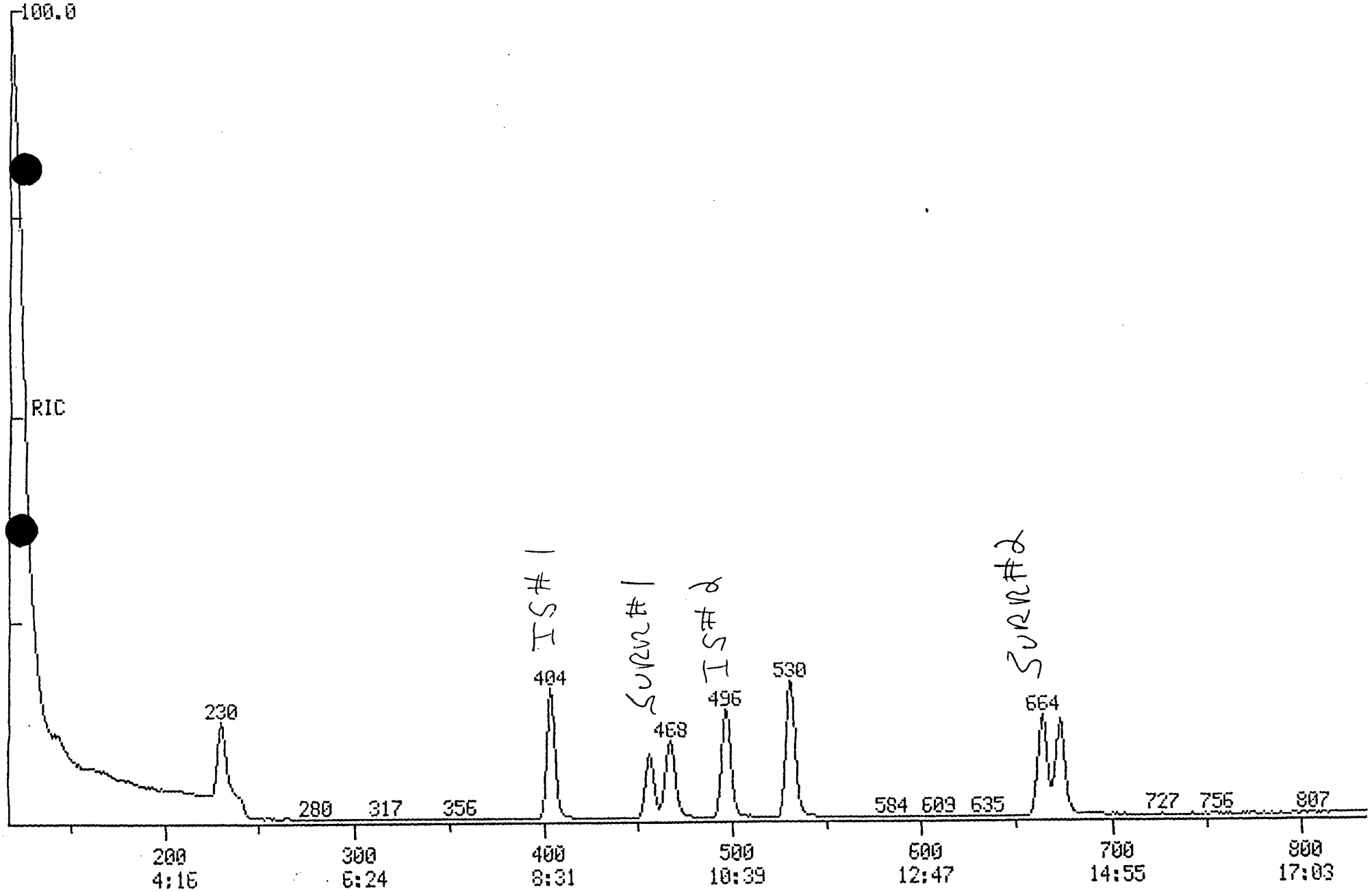
Level: (low/med) LOW Date Received: 08/31/94

% Moisture: not dec. 3 Date Analyzed: 09/02/94

Column: (pack/cap) CAP Dilution Factor: 1.0

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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane	5	U
540-59-0	total 1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	XYLENE (total)	5	U

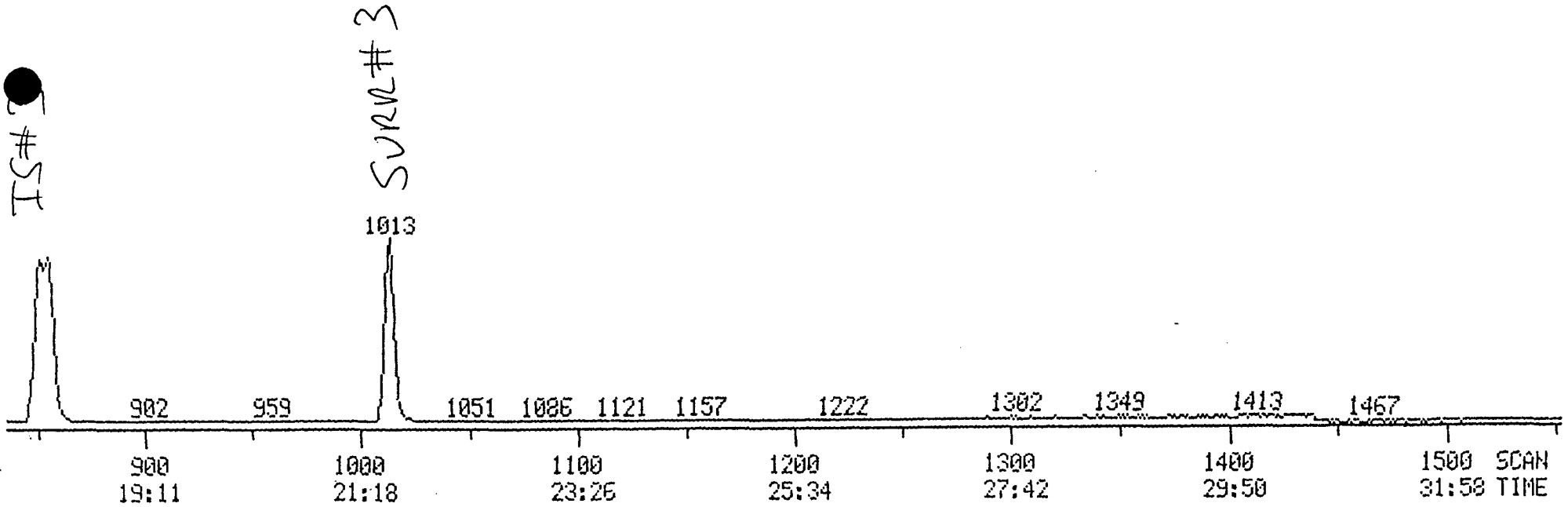
RIC DATA: BS006MSD #1 SCANS 117 TO 835
09/02/94 5:45:00 CALI: BS006MSD #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842003MSD,(409099-3MSD),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



RIC DATA: BS006MSD #1 SCANS 835 TO 1553
09/02/94 5:45:00 CALI: BS006MSD #3 OUT OF 117 TO 1553
SAMPLE: EPA SAMPLE # 40842003MSD,(409099-3MSD),5.0 GRAMS
CONDS.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
RANGE: G 1,1553 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0

403968.



Quantitation Report File: BS006MSD

Data: BS006MSD.TI
09/02/94 5:45:00
Sample: EPA SAMPLE # 40842003MSD,(409099-3MSD),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	D4-1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE	*SURROGATE*
5	CS05	D8-TOLUENE	*SURROGATE*
6	CS10	BROMOFLUOROBENZENE	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C041	TRICHLOROFLUOROMETHANE	
13	C035	ACETONE	
14	C040	CARBON DISULFIDE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C055	TRANS 1,2-DICHLOROETHENE	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C070	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C145	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C170	TRANS-1,3-DICHLOROPROPENE	
32	C180	BROMOFORM	
33	C190	4-METHYL-2-PENTANONE	
34	C195	2-HEXANONE	
35	C220	TETRACHLOROETHENE	
36	C225	1,1,2,2-TETRACHLOROETHANE	
37	C230	TOLUENE	
38	C235	CHLOROBENZENE	
39	C240	ETHYL BENZENE	
40	C245	STYRENE	
41	C251	M,P-XYLENE	
42	C250	O-XYLENE	
43	C252	1,3-DICHLOROBENZENE	
44	C253	1,2-DICHLOROBENZENE	
45	C254	1,4-DICHLOROBENZENE	
46	C171	2-CHLOROETHYL VINYL ETHER	
47	C066	DIBROMOMETHANE	

No	Name
48	C016 DICHLORODIFLUOROMETHANE
49	C191 CIS 1,4-DICHLORO-2-BUTENE
50	C221 TRANS 1,4-DICHLORO-2-BUTENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	404	8:37	1	1.000	A BB	41615.	50.000 PPB	8.56
2	114	496	10:34	2	1.000	A BB	128246.	50.000 PPB	8.56
3	117	849	18:05	3	1.000	A BB	103536.	50.000 PPB	8.56
4	65	457	9:44	1	1.131	A BB	64739.	47.840 PPB	8.19
5	98	664	14:09	3	0.782	A BB	104719.	50.285 PPB	8.61
6	95	1013	21:35	3	1.193	A BB	83544.	44.837 PPB	7.67
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	265	5:39	1	0.656	A BB	345.	0.371 PPB	0.06
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	96	230	4:54	1	0.569	A BB	37946.	43.070 PPB	7.37
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	62	468	9:58	1	1.158	A BB	540.	0.367 PPB	0.06
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	130	530	11:18	2	1.069	A BB	64276.	48.556 PPB	8.31
28	NOT FOUND								
29	NOT FOUND								
30	78	468	9:58	2	0.944	A BB	95383.	50.893 PPB	8.71
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	92	673	14:20	3	0.793	A BB	60751.	50.261 PPB	8.60
38	112	855	18:13	3	1.007	A BB	95102.	50.116 PPB	8.58
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	8:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	10:37	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	9:47	1.00	1.131	1.00	47.84	50.00	1.556	1.626	0.96
5	14:09	1.00	0.781	1.00	50.29	50.00	1.011	1.006	1.01
6	21:35	1.00	1.192	1.00	44.84	50.00	0.807	0.900	0.90
7	3:00		0.347						
8	3:40		0.424						
9	3:08		0.362						
10	3:45		0.433						
11	5:41	0.99	0.658	1.00	0.37	50.00	0.008	1.118	0.01
12	4:04		0.470						
13	4:48		0.554						
14	5:44		0.663						
15	4:57	0.99	0.571	1.00	43.07	50.00	0.912	1.059	0.86
16	6:56		0.800						
17	6:12		0.717						
18	8:20		0.963						
19	9:58	1.00	1.153	1.00	0.37	50.00	0.013	1.768	0.01
20	7:47		0.899						
21	9:08		0.861						
22	9:39		0.910						
23	6:57		0.655						
24	12:15		1.155						
25	11:43		1.104						
26	13:34		1.279						
27	11:19	1.00	1.066	1.00	48.56	50.00	0.501	0.516	0.97
28	16:31		1.556						
29	15:13		1.434						
30	10:01	1.00	0.944	1.00	50.89	50.00	0.744	0.731	1.02
31	14:50		1.398						
32	20:49		1.962						
33	13:05		0.722						
34	15:19		0.846						
35	16:00		0.884						
36	21:22		1.180						
37	14:22	1.00	0.793	1.00	50.26	50.00	0.587	0.584	1.01
38	18:13	1.00	1.006	1.00	50.12	50.00	0.919	0.916	1.00
39	18:25		1.016						
40	19:57		1.101						
41	18:37		1.028						
42	19:50		1.095						
43	24:51		1.372						
44	26:16		1.451						
45	25:11		1.391						
46	13:01		1.227						
47	12:22		1.165						
48	2:42		0.313						
49	21:03		1.984						
50	22:05		2.080						

Quantitation Report File: BS006MSD

Data: BS006MSD.TI
09/02/94 5:45:00
Sample: EPA SAMPLE # 40842003MSD,(409099-3MSD),5.0 GRAMS
Conds.: 12 MINUTE HEATED PURGE / GC-MS INS ID=BUBBA
Formula: METH 8240 & CLP Instrument: FINN Weight: 0.000
Submitted by: Analyst: DB Acct. No.: BUBBA

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C181 METHYL METHACRYLATE
52	C224 ETHYL METHACRYLATE
53	C026 IODOMETHANE
54	C192 1,2,3-TRICHLOROPROPANE
55	C067 METHACRYLONITRILE
56	C114 1,4-DIOXANE
57	C036 ACROLEIN (2-PROPENAL)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	88	496	10:34	2	1.000	A BB	23100.	47.713 PPB NSF	8.17
57	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	14:52		1.402						
52	14:52		0.821						
53	5:25		0.626						
54	21:48		1.204						
55	8:14		0.951						
56	10:37	1.00	1.000	1.00	47.71	50.00	0.180	0.189	0.95
57	4:40		0.539						

PROCEDURE: TCA DIAGNOSTIC REPORT 9/02/94 6:20:44
DATA FILE: BS006MSD
REFERENCE: VX11
NAME LIST: VXDRIVER INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: VXIS

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	3	1	32	6	6	1	63	VXIS/VXSURR
3	3	1	32	11	3	1	32	VXIS/VXTARG1
3	3	1	32	11	4	1	52	VXIS/VXTARG2
3	3	1	32	11	5	1	57	VXIS/VXTARG3
3	3	1	32	11	5	1	19	VXIS/VXTARG4
3	3	1	32	10	4	1	57	VXIS/VXTARG5
3	3	1	32	5	3	1	32	VXIS/VXTARG6
3	3	1	32	4	3	1	32	VXIS/VXTARG7
3	3	1	32	7	3	1	32	VXIS/VXTARG8
3	3	1	32	4	3	1	32	VXIS/VXTARG9
3	3	1	32	4	3	1	32	VXIS/VXTARG10
3	3	1	32	6	3	1	32	VXIS/VXTARG11

57 COMPOUNDS PROCESSED, 12 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	VX	1	406	404	404	.	1	989	.	128	404	.	1
2	VX	2	498	496	496	.	1	998	.	114	496	.	1
3	VX	3	850	850	850	.	1	963	.	117	849	-1	1
4	VX	4	458	457	457	.	1	936	.	65	457	.	1
5	VX	5	664	663	664	1	1	1000	.	98	664	.	1
6	VX	6	1013	1013	1013	.	1	994	.	95	1013	.	1
7	VX	7	141	138	.	.	.	.	.	50	.	.	.
8	VX	8	172	169	.	.	.	.	.	94	.	.	.
9	VX	9	147	144	.	.	.	.	.	62	.	.	.
10	VX	10	177	174	.	.	.	.	.	64	.	.	.
11	VX	11	267	264	.	.	.	.	.	84	265	.	1
12	VX	12	191	188	.	.	.	.	.	101	.	.	.
13	VX	13	225	222	.	.	.	.	.	43	.	.	.
14	VX	14	269	266	.	.	.	.	.	76	.	.	.
15	VX	15	232	230	230	.	1	995	.	96	230	.	1
16	VX	16	325	323	.	.	.	.	.	63	.	.	.
17	VX	17	291	289	.	.	.	.	.	96	.	.	.
18	VX	18	391	389	.	.	.	.	.	83	.	.	.
19	VX	19	468	466	.	.	.	.	.	62	468	.	1
20	VX	20	365	363	.	.	.	.	.	43	.	.	.
21	VX	21	429	427	.	.	.	.	.	97	.	.	.
22	VX	22	453	451	.	.	.	.	.	117	.	.	.
23	VX	23	326	324	.	.	.	.	.	43	.	.	.
24	VX	24	575	574	.	.	.	.	.	83	.	.	.
25	VX	25	550	549	.	.	.	.	.	63	.	.	.
26	VX	26	637	636	.	.	.	.	.	75	.	.	.
27	VX	27	532	531	530	-1	1	984	.	130	530	.	1
28	VX	28	775	775	.	.	.	.	.	129	.	.	.
29	VX	29	714	713	.	.	.	.	.	97	.	.	.
30	VX	30	469	467	468	1	1	993	.	78	468	.	1
31	VX	31	696	695	.	.	.	.	.	75	.	.	.
32	VX	32	977	978	.	.	.	.	.	173	.	.	.
33	VX	33	615	614	.	.	.	.	.	43	.	.	.
34	VX	34	719	718	.	.	.	.	.	43	.	.	.
35	VX	35	752	751	.	.	.	.	.	164	.	.	.
36	VX	36	1003	1004	.	.	.	.	.	83	.	.	.

39	VX	39	864	863	.	.	.	.	.	106	.	.	.	
40	VX	40	936	936	.	.	.	.	.	104	.	.	.	
41	VX	41	874	874	873	-1	1	931	.	106	.	.	.	
42	VX	42	931	931	.	.	.	.	.	106	.	.	.	
43	VX	43	1167	1168	.	.	.	.	.	146	.	.	.	
44	VX	44	1233	1234	.	.	.	.	.	146	.	.	.	
45	VX	45	1182	1183	.	.	.	.	.	146	.	.	.	
46	VX	46	611	610	.	.	.	.	.	63	.	.	.	
47	VX	47	580	579	.	.	.	.	.	93	.	.	.	
48	VX	48	126	122	.	.	.	.	.	85	.	.	.	
49	VX	49	988	989	.	.	.	.	.	88	.	.	.	
50	VX	50	-1034	1035	.	.	.	.	.	75	.	.	.	
51	VX	51	697	696	.	.	.	.	.	69	.	.	.	
52	VX	52	698	697	.	.	.	.	.	69	.	.	.	
53	VX	53	254	251	.	.	.	.	.	142	.	.	.	
54	VX	54	1023	1024	.	.	.	.	.	75	.	.	.	
55	VX	55	386	384	.	.	.	.	.	41	.	.	.	
56	VX	56	-499	497	.	.	.	.	.	88	496	.	1	
57	VX	57	219	216	.	.	.	.	.	56	.	.	.	