MACKINNON ENVIRONMENTAL CONSULTING

SOIL BIOREMEDIATION REPORT AND RECOMMENDATIONS FOR DISPOSAL

Prepared for

A & B Auto Company
Oakland, California

Cinda Crabbe MacKinnon
Registered Geologist

June 30, 1992

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3 20

INTRODUCTION

This report is an update to the soil remediation plan submitted to Alameda County Health Agency (ACHA) June 9, 1992. My client, Mr. William Taylor of A&B Auto Co., would like to dispose of bioremediated soil at his nearby site on 8717 G Street in Oakland. This second property owned by Mr. Taylor, approximately two blocks from A & B Auto, is the preferred site for the soil because the bioremediated soils could be used as fill and would be contained in concrete. This report details the methods employed to bioremediate the soils, the latest analytical results, and discusses disposal.

BACKGROUND

A & B Auto Co. operates an auto towing yard at 8451 San Leandro in Oakland. Three underground fuel tanks and approximately 380 cubic yards of sandy soil-fill and concrete were removed by Bernabe & Brinker Inc. in 1991. Laboratory analyses of soil samples indicated contamination with up to 6,200 parts per million (ppm) diesel and 1,100 ppm of gasoline

Several options for soil remediation and disposal were investigated and bioremediation was selected as the most cost-effective and practical solution for reducing TPH contamination in the excavated soils. However, disposal can remain an expensive problem. We propose to dispose of remediated soils at the nearby site owned by Mr. Taylor.

BIOREMEDIATION OF SOIL

Bioremediation is a technology that enhances the breakdown of petroleum hydrocarbons (TPH) with naturally occurring soil micro-organisms. The technique has been used successfully, especially with the lighter chain hydrocarbons (gasoline and aromatics). Both light and heavier (diesel) components existed at the A & B site.

Bioremediation was carried out between February and May 1992. Concrete rubble was removed and stockpiled separately. To insure the presence of micro-organisms, a cultured compost was applied to the soil while it was being turned and mixed by a front-end loader. The culture were hydrated in water with a biodegradable surfactant and nutrients (nitrogen, phosphorus and potash) were also supplied. The soil was then divided into two piles less than 3 feet high and covered with Visqueen. For additional details see the Soil Plan submitted to your office June 9, 1992. Dimensions were measured and the total volume is calculated to be approximately 320 cubic yards.

The piles was kept moist and turned. The client assumed responsibility for turning the piles as a cost-saving measure but found it difficult to do frequently. After the initial tilling by MacKinnon Environmental Consulting (MEC) in February, the client turned the piles on three occasions between March and May.

MEC collected preliminary samples of the soil piles in the early stages, to monitor the bioremediation progress. Three samples were composited by the laboratory and no gasoline or BTEX (benzene, toluene, ethylbenzene and xylene) were detected; however analyses yielded 130 mg/kg in the diesel range. As levels for diesel were higher than deemed acceptable, additional samples were not analyzed at that time. The soil was then re-inoculated by adding additional cultured compost, along with CaCO3 to increase the pH. High pH levels (>7) have been shown to optimize remediation rates (Dibble and Bartha,"Bioremediation of Oil Sludge", 1979). Subsequent corrosivity analyses on 3 samples from the pile yielded a pH of 8.6.

SAMPLING

The soil was checked for odor and/or discoloration again in late March and early April and the two piles were re-sampled. Fourteen discrete samples were collected and again composited by the lab to reduce costs and yield an average contaminant profile. The diesel concentrations in the four resultant composite analyses were: 26, 71, 89, and 96 ppm.

As TPH levels now appeared to be below 100 ppm final sampling was planned. The pile was thoroughly turned one more time. On May 9th samples were collected from the middle or lower layer of the piles in an approximate grid pattern (see Figure 1). A total of 30 discrete samples were collected to exceed a minimum of 4 samples per 50 cubic yards. Every 3 to 4 samples were composited into one analytical sample by the laboratory, resulting in 10 composite samples.

The soil was sampled using brass rings and the ends were covered with foil and capped. The sealed containers were labeled and placed on ice. All samples were delivered under chain-of-custody procedures to the laboratory.

The soil samples were sent to McCampbell Laboratories in Martinez, California. Several samples were subsequently sent via Federal Express to Friedman and Bruya Laboratories in Seattle, Washington for specialized additional analyses. These laboratories are certified by the state of California for hazardous waste testing and analysis. Samples were analyzed following procedures developed and verified by the Environmental Protection Agency (EPA) or the California Department of Health Services (DHS).

DISCUSSION

Analytical results for total petroleum hydrocarbons (TPH) were somewhat inconclusive in May. Gasoline was unexpectedly reported in 3 composite samples at levels between 1.2 and 3.5ppm. It is possible that the "gasoline" reported was actually a volatile portion of diesel. McCampbell defines a carbon chain of C6 to C12 as gasoline; this overlaps with diesel (C10-C23).

Diesel levels were also of concern. We anticipated diesel levels to be well below 100ppm based on previous analyses, however this did not appear to be the case initially. The chemist at McCampbell noted that the diesel chromatogram actually suggested the hydrocarbon present was motor oil rather than diesel. MEC then sent some of the samples to bioremediation specialists in Seattle; their chemists, using thin layer chromatography verified that the dominant hydrocarbon appears to be used motor oil. MEC asked the lab to quantify their TPH findings and results indicated that diesel was below 50ppm for these three composite samples; the higher readings found by McCampbell were thus apparently due, to motor oil interference in the chromatogram.

The source for the used motor oil is somewhat perplexing as the tanks that were removed contained diesel and unleaded gasoline. Furthermore lab reports (Appendix A) prior to the May did not flag oil as being present in the diesel analyses. Our supposition is that oil may have leaked from the machinery A&B's contractor used the last time the pile was turned and mixed

At any rate it was decided the pile would have to be re-sampled and tested for motor oil as well as diesel, gasoline, and BTEX. Areas which had already tested "clean" i.e. non-detect (ND) or close to ND however were not re-analyzed. Samples were collected as done previously and described above.

RESULTS

The most recent samples were tested for total petroleum hydrocarbons (TPH) as motor oil, diesel, gasoline and aromatics (BTEX). Fourteen discrete samples had also previously been analyzed as four composites for lead.

Lead results are well below the Total Threshold Limit Concentration (TTLC) level of 1000mg/kg and suggest that leaded gasoline was not used in the former fuel tanks. Results are given in Table I below.

TABLE I

Sample #	Lead mg/kg
1,5,9,12	7.5
2,3,4,7	ND
6,10,11	3.6
41-43	5.1

The composite sample with the highest TPH results (310mg/kg) in May was also analyzed for Reactivity, Corrosivity and Ignitability (RCI). The purpose of this test was to support our assumption that the soil could be classified as non-hazardous and thus transported without additional precautions. The results were negative for reactivity and ignitability and the pH (Corrosivity) was 8.6. (The high pH level is probably due to the addition of CaCO3 to the soils to aid bioremediation).

Analytical results for petroleum hydrocarbons and volatiles are summarized in Table II below. Results for the May samples which were deemed to have "passed" are presented in Table IIA. An analysis would "pass" if ~~results~~ for gasoline and benzene were below detection limits (and/or) diesel results were less than (40ppm.) The entire soil pile was ~~re~~sampled in June and the results are presented in Table IIB. Certain analyses were not repeated on specific samples if the area had already passed. The piles were not turned in the interim and the June samples were collected as closely as possible to the May samples. To correlate areas of the soil pile sampled in May to areas sampled in June refer to the sample location maps (Figures 1 and 2).

where you get this #?

TABLE II

IIA

Sample #	M. Oil mg/kg	Diesel mg/kg	Gasoline mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbnz mg/kg	Xylenes mg/kg
410-12	NA	rs	ND	ND	ND	ND	0.019
13-15	rs	rs	ND	ND	ND	ND	ND
16-18	NA	rs	ND	ND	ND	ND	ND
25-27	NA	rs	ND	ND	ND	ND	0.007
531-33	46	29/ra	rs	rs	rs	rs	rs

Table II (continued)

IIB

Sample #	M. Oil mg/kg	Diesel mg/kg	Gasoline mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbnz mg/kg	Xylenes mg/kg
60-62	<30	30	NA	NA	NA	NA	NA
63-65	<30	5	NA	NA	NA	NA	NA
66-68	<30	20	NA	NA	NA	NA	NA
69,620+21	40	40	ND	ND	ND	ND	ND
622-624	40	<5	ND	ND	ND	ND	ND
625-627	40	5	NA	NA	NA	NA	NA
628-630	30	30	ND	ND	ND	ND	ND
631-633	NA	NA	ND	ND	ND	ND	ND
634-637	30	80	ND	ND	ND	ND	ND

a) Results are expressed in milligrams per kilogram (mg/kg). Mg/kg is roughly equivalent to parts per million (ppm).
b) ND = not detected NA = not analyzed
c) rs = resampled ra = same sample was reanalyzed

The laboratory reports for the results given above are attached along with chromatograms in Appendices A and B. Laboratory results for earlier tests on the soil pile, not included in the summary above, are also attached in Appendix A.

CONCLUSIONS

Bioremediation appears to have successfully reduced diesel and gasoline contamination. All areas of the soil pile now test below detection limits for gasoline, benzene, toluene and ethylbenzene. The presence of benzene would be of particular concern due to its toxicity and it is also considered a carcinogen. Two composite samples show a trace of xylene, however, the levels should be below any toxic potential from soil leaching. (No guideline limits are known to exist for xylene in soil, although the levels are well below maximum contaminant levels for drinking water standards).

The concentrations for diesel are down to 40ppm or less, except for one area (composite sample #634-637) which the lab reported at 80ppm. (This area is not ready for disposal). Most of the other samples range from <5 to 30ppm for diesel. Results for motor oil do not exceed 40ppm. We understand that the Regional Water Quality Control Board (RWQCB) generally desires TPH contamination to be less than 10 ppm but these levels are not easily achieved. Initial "hot spots" when the soil was excavated last year were as high as 1000ppm for gasoline and 6000ppm for diesel. Granted most of the soil was not this contaminated, but nonetheless remediation has been significant, especially for the heavier fractions.

Diesel and motor oil, the remaining TPH contaminants of concern, are less mobile, volatile and generally less hazardous then lighter fractions of TPH and thus more acceptable in the ranges reported above, than for example gasoline would be. The residual TPH (40ppm or less) should be low enough to protect ground water from contamination from the bioremediated soil. Furthermore the proposed disposal site has certain advantages (see "RECOMMENDATIONS") which provide greater groundwater protection than other disposal sites.

Lead results are well below TTLC levels and suggest that leaded gasoline was not used in the former fuel tanks. A previous owner of the property who used the fuel tanks, stated that the tanks never contained leaded gasoline. Test results confirm this statement and indicate that lead is not a problem in the soil.

RECOMMENDATIONS

We recommend the bioremediated soils be used as fill within concrete lined encasements. The one area of the smaller soil pile which tested high (80ppm) for diesel requires additional remediation; these soils should be removed from the material to be used as fill and stockpiled separately.

After separating the piles, it is estimated the bioremediated soil will total 280-300 cubic yards (ie this figure does not include the soils requiring additional treatment). The preferred disposal site for the bioremediated soil is the G Street property owned by Mr. Taylor in Oakland, approximately 2 blocks from A & B Auto. The reason for this is that abandoned furnace encasements exist on the property which need fill material.

The advantages to this disposal site are:
A. The bioremediated soils would be contained in concrete over 34 inches thick (pers comm. Mr Taylor, 6-6-92)
B. The soil will be "recycled" as fill which would otherwise have to be imported
C. The bioremediated soils will not occupy valuable space at a costly landfill.
D. Ground water monitoring wells are already present at the G Street site.

there wells not required re: UST removal
- not V. close or downgradient to furnace area

The structures and monitoring well locations of the G Street site are shown on Figure 3. We assume that Owens-Brockway, the previous owners, will continue monitoring the site as ACHA does not consider the site closed. Boring logs are in Appendix C.

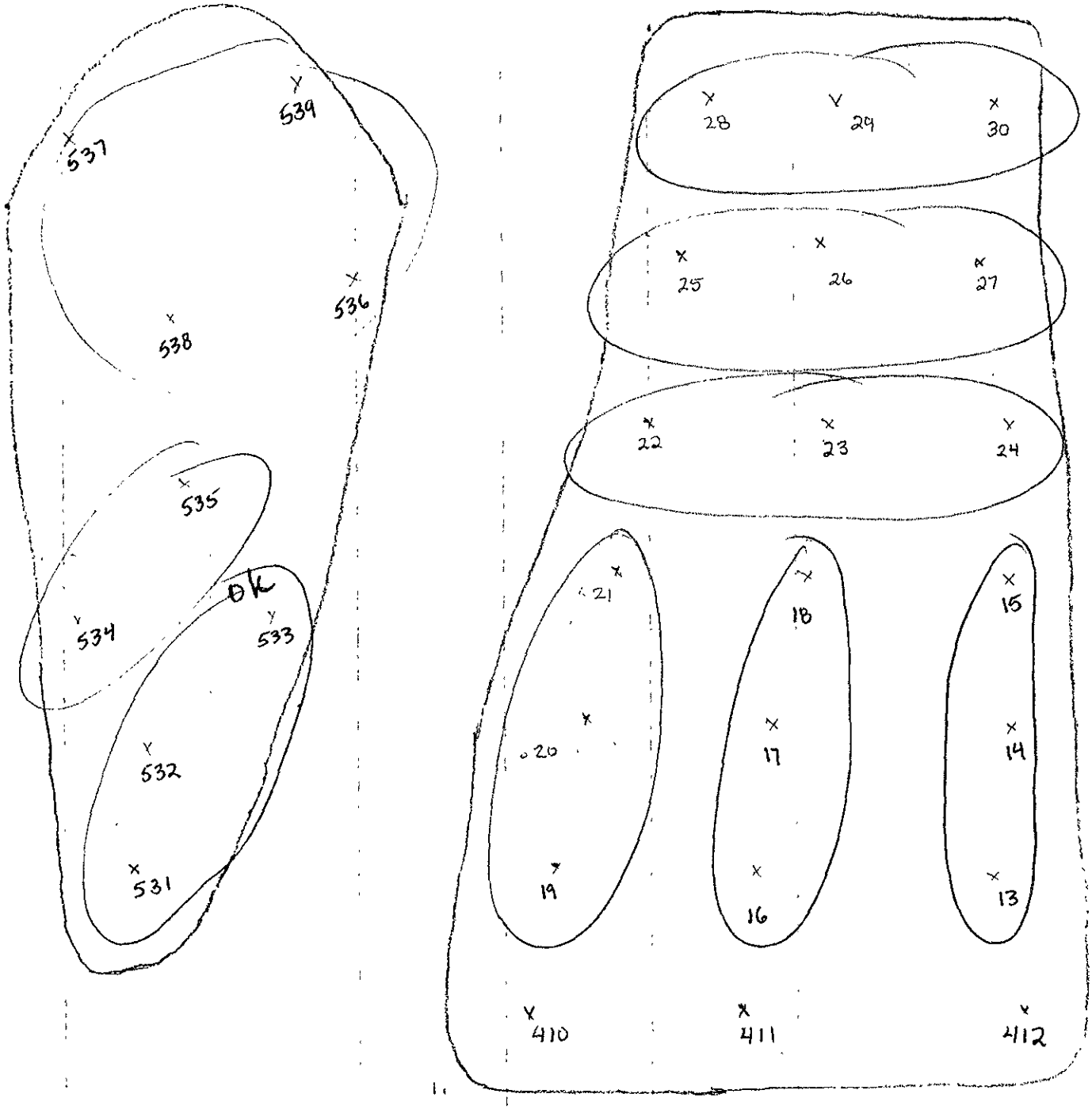
Mr. Taylor will be leasing the present site on San Leandro St. in the next few weeks and the large soil pile would impact the new tenant's operation. Thus he plans to move the soils as soon as

practical. If soils could be promptly approved for disposal the bioremediated soil could be used as fill in the furnace at the same time they are moved, and thus avoid mobilizing heavy equipment twice.

MEC should be present before the soil is loaded for transport to see that the area with remaining contamination is not mixed up with the "clean" soil. A&B Auto may find it necessary however to move this soil also and stockpile it in some convenient location at the new site.

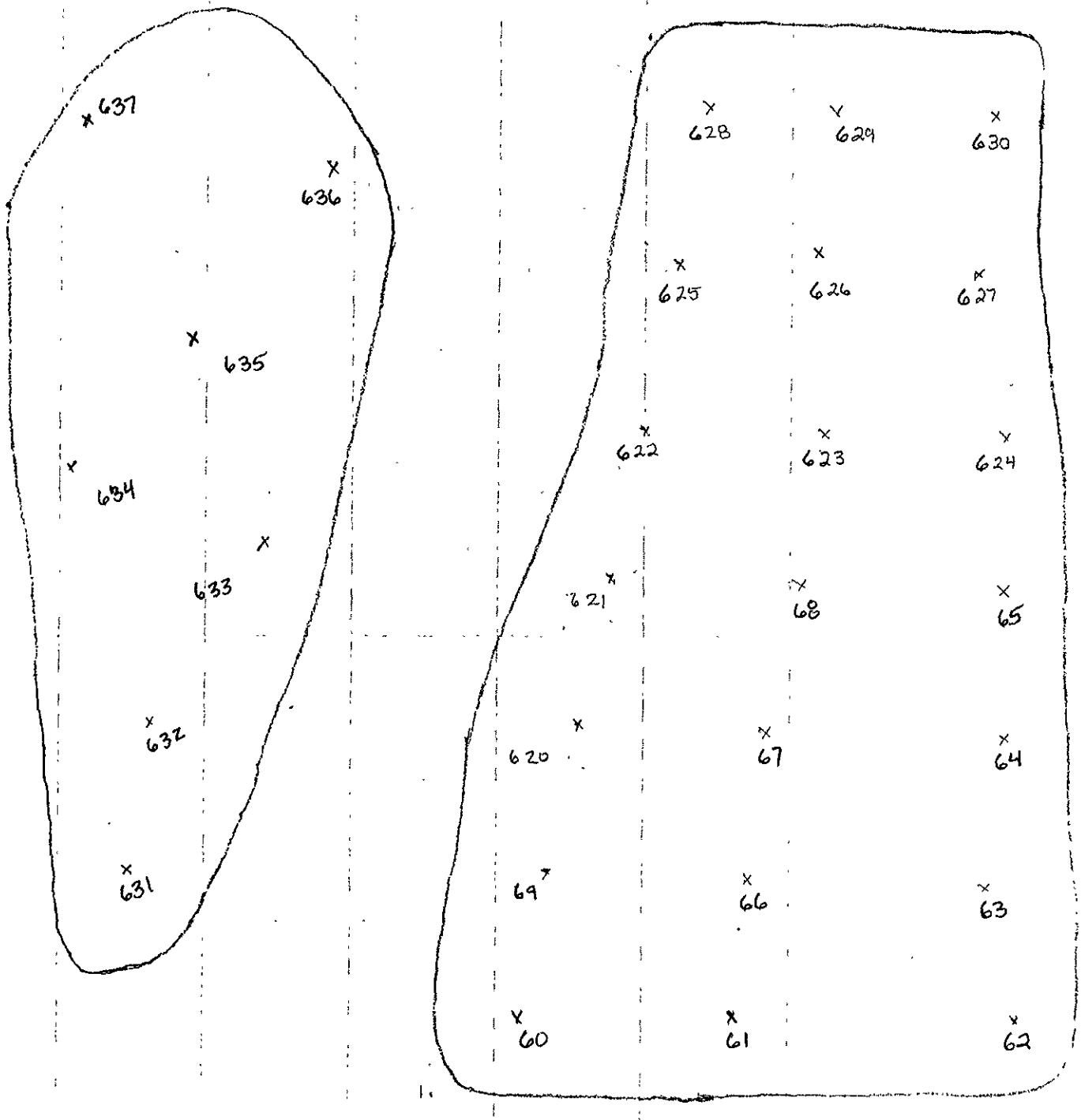
WARRANTY

MacKinnon Environmental Consulting warrants all services to be of high professional quality. No other warranty, either expressed or implied, as to quality or result to be achieved as a consequence of this work, is made. This report provides an assessment of the potential problems noted and represents a professional opinion. All reports and recommendations are based upon conditions and information made available to MacKinnon Environmental to date. Liability is not assumed in cases where the client or other parties involved have failed to disclose known environmental information. No responsibility is assumed for the control or correction of conditions or practices existing at the premises of the client. Nor are we responsible for work done by other parties. Data available from future studies may modify the conclusions and recommendations of this report.



SOIL SAMPLE LOCATION MAP, A + B AUTO
for 5-9-92

FIGURE 1



SOIL SAMPLE LOCATION MAP, A + B AUTO
for 6-20-92

FIGURE 2

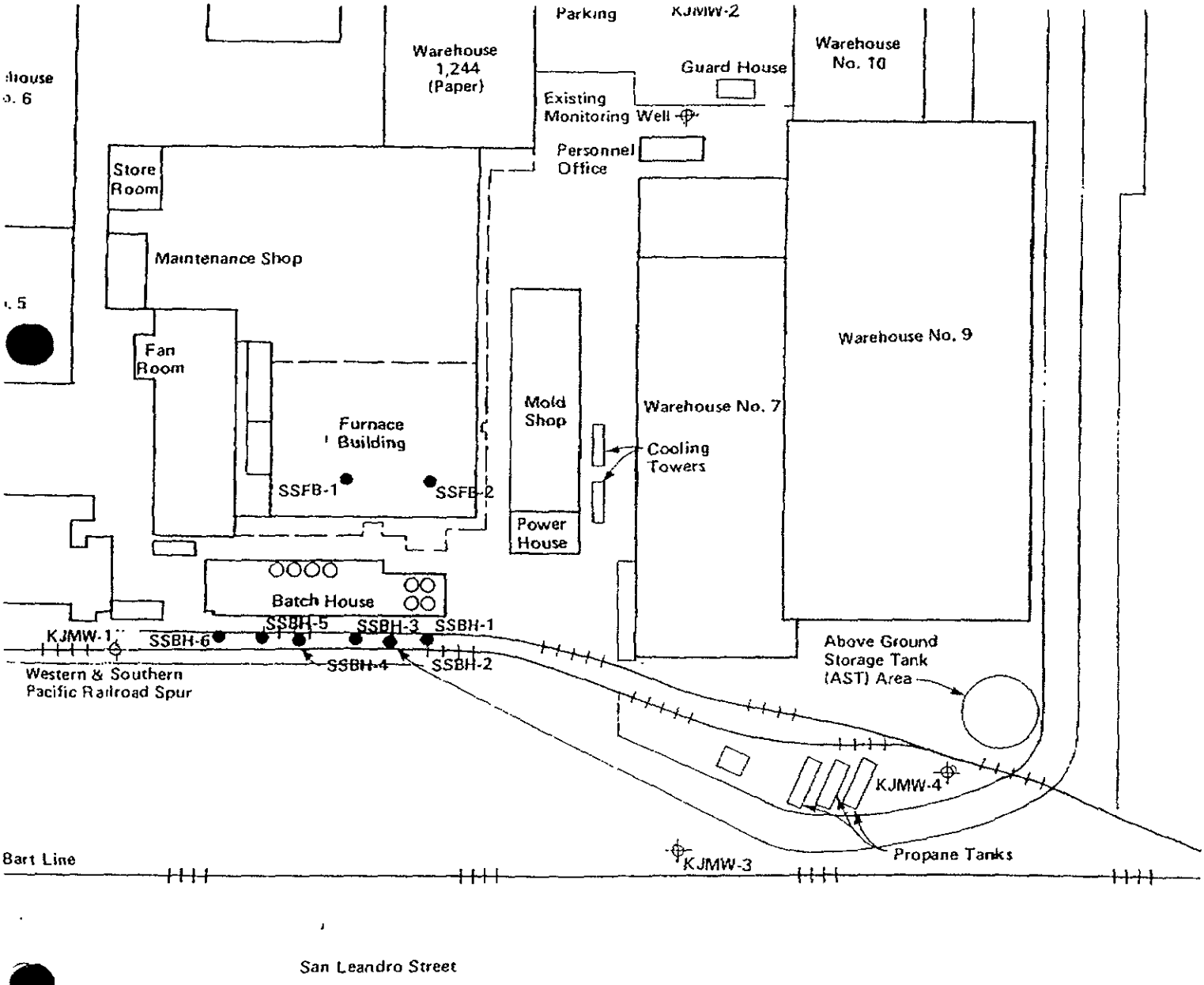


FIGURE 3
(from Kennedy/Jenks report-July 1991)

A P P E N D I X A

Laboratory Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 26, 1992
Date Submitted: June 22, 1992
Project: AB-692

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 5030 COUPLED TO 8020 and 8015
Results Reported as mg/kg (ppm)

Sample #	69 620-621	622-24	628-30
Analyte:			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Total Xylenes	<0.02	<0.02	<0.02
Gasoline	<2	<2	<2
Internal Standard (% Recovery)	113%	115%	113%

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 26, 1992
Date Submitted: June 22, 1992
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RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 5030 COUPLED TO 8020 and 8015
Results Reported as mg/kg (ppm)

Sample #	631-33	634-37
Analyte:		
Benzene	<0.01	<0.01
Toluene	<0.01	<0.01
Ethylbenzene	<0.01	<0.01
Total Xylenes	<0.02	<0.02
Gasoline	<2	<2
Internal Standard (% Recovery)	112%	113%

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 26, 1992
Date Submitted: June 22, 1992
Project: AB-692

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 5030 COUPLED TO 8020 and 8015
Results Reported as mg/kg (ppm)
Quality Assurance

Sample #	Method Blank	631-33 (Duplicate)
Analyte:		
Benzene	<0.01	<0.01
Toluene	<0.01	<0.01
Ethylbenzene	<0.01	<0.01
Total Xylenes	<0.02	<0.02
Gasoline	<2	<2
Internal Standard (% Recovery)	118%	109%

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Date Submitted: June 22, 1992
Project: AB-692

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 5030 COUPLED TO 8020 and 8015
Results Reported as mg/kg (ppm)
Quality Assurance

Sample #	631-33 Matrix Spike % Recovery	631-33 Matrix Spike Duplicate % Recovery	Spike Level
Analyte:			
Benzene	100%	81%	1
Toluene	86%	70%	1
Ethylbenzene	100%	83%	1
Total Xylenes	101%	85%	2
Gasoline	99%	101%	100
Internal Standard (% Recovery)	100%	97%	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 26, 1992
Date Submitted: June 22, 1992
Project: AB-692

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND GASOLINE USING EPA METHODS 5030 COUPLED TO 8020 and 8015
Results Reported as mg/kg (ppm)
Quality Assurance

Sample #	Spike Blank % Recovery	Spike Level
Analyte:		
Benzene	93%	1
Toluene	78%	1
Ethylbenzene	97%	1
Total Xylenes	101%	2
Gasoline	102%	100
Internal Standard (% Recovery)	99%	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 26, 1992
Date Submitted: June 22, 1992
Project: AB-692

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR NONHALOGENATED ORGANICS BY EPA METHOD 8015 (DIESEL AND MOTOR OIL) Results Reported as µg/g (ppm)

Sample #	Diesel (ppm)	Motor Oil (ppm)	Internal Standard (% Recovery)
60-62	30	<30	89%
63-65	5	<30	89%
69 620-621	40	40	91%
622-24	<5	40	91%
66-68	20	<30	91%
625-27	5	40	90%
628-30	30	30	94%
634-37	80	30	92%
Quality Assurance			
Method Blank	<5	<30	90%
622-24 (Duplicate)	<5	40	93%
622-24 (Matrix Spike) Percent Recovery	150%	73%	93%
622-24 (Matrix Spike Duplicate) Percent Recovery	150%	72%	95%
Spike Blank Percent Recovery	127%	63%	90%
Spike Level	250	250	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

June 12, 1992

Cinda MacKinnon, Project Leader
MacKinnon Environmental Consultants
3523 Rowe Place
Lafayette, CA 94549

Dear Ms MacKinnon:

Enclosed are the results of the analyses of the samples submitted on May 28, 1992 from Project AB-592.

In examination of the chromatograms generated in this analysis, no indication of the presence of gasoline or other products lighter than diesel fuel were seen.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this material, or if you just want to discuss any aspect of your projects, please do not hesitate to contact me.

Sincerely,

Andrew John Friedman
Chemist

AJF

Enclosures

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 12, 1992
Date Submitted: May 28, 1992
Project: AB-592

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL BY GC/FID (MODIFIED 8015) Results Reported as µg/g (ppm)

Sample #	Motor Oil (ppm)
L13-15	110
536-39	34
531-33	46

Quality Assurance

Method Blank	<10
536-39 (Duplicate)	32
536-39 (Matrix Spike) Percent Recovery	76%
536-39 (Matrix Spike Duplicate) Percent Recovery	77%
Spike Blank Percent Recovery	67%
Spike Level	500

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 12, 1992
Date Submitted: May 28, 1992
Project: AB-592

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL BY GC/FID (MODIFIED 8015) Results Reported as µg/g (ppm)

Sample #	Diesel (ppm)
L13-15	25
536-39	44
531-33	29
Quality Assurance	
Method Blank	<10
536-39 (Duplicate)	50
536-39 (Matrix Spike) Percent Recovery	114%
536-39 (Matrix Spike Duplicate) Percent Recovery	107%
Spike Blank Percent Recovery	95%
Spike Level	500

Lab No. _____

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING

LAFAYETTE, CA

510/284-7304

PROJECT MANAGER Cinda MacKinnon LABORATORY DESTINATION Friedman / Bruya

PROJECT NO. AB-592 SAMPLER'S NAME Cinda

Sample ID	Matrix (Soil) ~~Water~~	TPH Diesel Low/ High	TPH Gas+BTXE	Oil & Grease	8010 Halogen-ated	Metals (Zn, Cr, Cd, Pb)	Others	Date Collected	Containers	NOTES
58-60 L13-15		7						5-9-92	brass	analyze as 1 composite
		Please test to distinguish								
61-64 536-39		naturally occurring organics								analyze as 1 composite
		and/or ~ biodegradations products								
65-67 531-33		from fuel hydrocarbons								analyze as 1 composite
										Analyze for Motor Oil + Diesel per C. MacKinnon 6-5-92 HOK

Relinquished by NAI	Date/Time 5-27-92 2:20	Received by C MacKinnon	NOTES rec'd ok from Fed Ex. AOF 5-29
Organization Fed Ex		Organization MEC	
Relinquished by	Date/Time 5-28-92 10AM	Received by Cindy Gh Friedman	
Organization		Organization Friedman Bruya	

Lab.Analysis/Custody

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 1, 1992
Date Submitted: May 29, 1992
Project: AB-592

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR CONTAMINANT CHARACTERIZATION BY THIN LAYER CHROMATOGRAPHY

Sample #	TLC Characterization
Composite: L13, L14, L15	The thin layer chromatographic trace showed the presence of moderately polar and highly polar organic compounds, such as those found in used motor oil or low levels of asphalt. This characterization is based on the presence of a band of material at Rf 0.9 (hexane), visible with iodine staining only that is indicative of saturated hydrocarbons. In diesel fuels or heating oils a second band of material is usually seen at Rf 0.5 to 0.7 (hexane), visible under both short and long wave UV light, as well as with iodine staining and is indicative of high boiling aromatic hydrocarbons. This band was not found in this sample. Material was also seen at Rf 0.0 to 1.0 (methylene chloride), visible with iodine staining, as well as with both short and long wave UV light that is indicative of large (>6 ring) or heterocyclic polycyclic aromatic compounds often associated with asphalts or used motor oils.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 1, 1992
Date Submitted: May 29, 1992
Project: AB-592

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR CONTAMINANT CHARACTERIZATION BY THIN LAYER CHROMATOGRAPHY

Sample #	TLC Characterization
Composite: 536, 537, 538, 539	The thin layer chromatographic trace showed the presence of moderately polar and highly polar organic compounds, such as those found in used motor oil or low levels of asphalt. This characterization is based on the presence of a band of material at Rf 0.9 (hexane), visible with iodine staining only that is indicative of saturated hydrocarbons. In diesel fuels or heating oils a second band of material is usually seen at Rf 0.5 to 0.7 (hexane), visible under both short and long wave UV light, as well as with iodine staining and is indicative of high boiling aromatic hydrocarbons. This band was not found in this sample. Material was also seen at Rf 0.0 to 1.0 (methylene chloride), visible with iodine staining, as well as with both short and long wave UV light that is indicative of large (>6 ring) or heterocyclic polycyclic aromatic compounds often associated with asphalts or used motor oils.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 1, 1992
Date Submitted: May 29, 1992
Project: AB-592

RESULTS OF ANALYSES OF THE SOIL SAMPLES FOR CONTAMINANT CHARACTERIZATION BY THIN LAYER CHROMATOGRAPHY

Sample #	TLC Characterization
Composite: 531, 532, 533	The thin layer chromatographic trace showed the presence of moderately polar and highly polar organic compounds, such as those found in used motor oil or low levels of asphalt. This characterization is based on the presence of a band of material at Rf 0.9 (hexane), visible with iodine staining only that is indicative of saturated hydrocarbons. In diesel fuels or heating oils a second band of material is usually seen at Rf 0.5 to 0.7 (hexane), visible under both short and long wave UV light, as well as with iodine staining and is indicative of high boiling aromatic hydrocarbons. This band was not found in this sample. Material was also seen at Rf 0.0 to 1.0 (methylene chloride), visible with iodine staining, as well as with both short and long wave UV light that is indicative of large (>6 ring) or heterocyclic polycyclic aromatic compounds often associated with asphalts or used motor oils.

CHROMALAB, INC.

Environmental Laboratory (1094)

6 DAYS TURNAROUND

May 27, 1992 ChromaLab File No.: 0592192

McCAMPBELL ANALYTICAL

Attn: Ed Hamilton

RE: One composite soil sample for RCI analysis

Project Name: M/AB
Date Sampled: May 9, 1992 Date Submitted: May 20, 1992
Date Extracted: May 27, 1992 Date Analyzed: May 27, 1992

RESULTS:

Sample I.D.	Reactivity	Corrosivity	Ignitability
L19-21	No	pH 8.6	No
BLANK	No	pH 7.0	No
METHOD OF ANALYSIS	SEC.66705	SEC.66708	SEC.66702

ChromaLab, Inc.

Yiu Tam
Analytical Chemist

Eric Tam
Laboratory Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 3523 Rowe Lafayette, CA 94549	Client Project ID: AB-592	Date Sampled: 05/09/92
		Date Received: 05/11/92
	Client Contact: Cinda MacKinnon	Date Extracted: 05/15/92
	Client P.O:	Date Analyzed: 05/15-05/16/92

Medium Boiling Point (C10-C23) TPH* as Diesel

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(D)+
105111	410-412	S	70,e,g
105112	L13-L15	S	130,g,e
105113	L16-L18	S	120,g,e
105114	L19-L21	S	310,e,g
105115	L22-L24	S	120,e,g
105116	L25-L27	S	100,e
105117	L28-L30	S	120,e,g
105118	531-533	S	84,e
105119	534-535	S	150,e
105120	536-539	S	190,e
Detection Limit unless otherwise stated; ND means Not Detected		W	0.05 mg/L
		S	10 mg/kg

*water samples are reported in mg/L and soils in mg/kg

cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified diesel; b) diesel range compounds predominate; no recognizable pattern; c) diesel range compounds together with gasoline range compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel(aged diesel?); f) one to a few isolated peaks present; g) oil range compounds predominate.

EH Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 3523 Rowe Lafayette, CA 94549	Client Project ID: AB-592	Date Sampled: 05/09/92
		Date Received: 05/11/92
	Client Contact: Cinda MacKinnon	Date Extracted: 05/15/92
	Client P.O:	Date Analyzed: 05/15-05/16/92

Low Boiling Point (C6-C12) TPH* as Gasoline and BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(G)+	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
105111	410-412	S	ND,e,g	ND	ND	ND	0.019	98
105112	L13-L15	S	ND	ND	ND	ND	ND	103
105113	L16-L18	S	ND	ND	ND	ND	ND	99
105114	L19-L21	S	1.3,e,g	ND	ND	0.014	0.052	100
105116	L25-L27	S	ND,g	ND	ND	ND	0.007	101
105118	531-533	S	3.5,g	ND	ND	ND	0.009	101
105120	536-539	S	1.2,e,g	ND	ND	ND	0.011	101
Detection Limit unless otherwise stated; ND means Not Detected		W	0.05 mg/L	0.5ug/L	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water samples are reported in mg/L(TPH) and ug/L(BTEX) and soils are reported in mg/kg(TPH & BTEX)

#cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gasoline compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) gasoline range compounds predominate; no recognizable pattern; f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds predominate.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT

Date: 05/15-05/16/92 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.00	2.00	1.88	2.03	99	93	6.1
Benzene	0.00	0.2	0.192	0.2	100	96	4.1
Toluene	0.00	0.202	0.194	0.2	101	97	4.0
Ethyl Benzene	0.00	0.21	0.2	0.2	105	100	4.9
Xylenes	0.00	0.624	0.596	0.6	104	99	4.6
TPH (diesel)	0	156	158	150	104	105	0.9
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

Lab No. 16444

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING

WALNUT CREEK, CA

510/~~930-3272~~ 254-7304

PROJECT MANAGER Cinda MacKinnon

LABORATORY DESTINATION McCampbell

PROJECT NO. AG-592

SAMPLER'S NAME Cinda MacKinnon + Mary McDonald

Sample ID	Matrix (Soil/~~Water~~)	TPH Diesel Low/High	TPH Gas+BTXE	Oil & Grease	8010 Halogenated	Metals (Zn, Cr, ...)	Others	Date Collected	Containers	NOTES
410-412		✓	✓					5-9-92	brass	analyze 3 as 1 compos.-
L13-15			✓							
L16-18			✓							
L19-21			✓							
L22-24			– ND							
L25-27			✓							
L28-30			–							
531+532			✓							analyze
534+535			–							analyze 2 as 1 composed
536-539	✓	✓	✓							" 4 as 1 "

No. 105111
No. 105112
No. 105113
No. 105114
No. 105115
No. 105116
No. 105117
No. 105118

VOAS | O&G | METALS | OTHER

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT —
PRESERVATIVE —
APPROPRIATE CONTAINERS ✓

10 analyses → 7 total

Relinquished by C. MacKinnon	Date/Time 5:00pm 5-11-92	Received by S. Kendrick 5/11/92	NOTES
Organization MEC		Organization MEC	
Relinquished by S. Kendrick 5/11/92	Date/Time 5-11-92 1:45	Received by Ed [illegible]	
Organization MEC		Organization MAI	

No. 105119
No. 105120

Lab.Analysis/Custody

McCAMPBELL ANALYTICAL INC.	110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 2834 San Antonio Drive Walnut Creek, CA 94598	Client Project ID: AB-492	Date Sampled: 04/14/92
		Date Received: 04/15/92
	Client Contact: Cinda MacKinnon	Date Extracted: 04/15/92
	Client P.O:	Date Analyzed: 04/16-04/18/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modifed EPA method 3550 or 3510

Lab ID	Client ID	Matrix	TPH(D)+
120358	L41,42,43	S	71
120359	L44,45,46,47	S	96
120360	430,431,432,433	S	89
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c). diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel (aged diesel?); f) peaks elute in the diesel range but no pattern is present; g) one to a few isolated peaks predominate.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT

Date: 04/14-04/20/92 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.00	2.17	2.11	2.03	107	104	3.1
Benzene	0.00	0.214	0.212	0.2	107	106	0.9
Toluene	0.00	0.204	0.204	0.2	102	102	0.0
Ethyl Benzene	0.00	0.206	0.204	0.2	103	102	1.0
Xylenes	0.00	0.608	0.608	0.6	101	101	0.0
TPH (diesel)	0	148	151	150	99	101	1.9
TRPH (oil & grease)	0	945	830	1000	94	83	13.0

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

No. 120359
No. 120360
No. 120361

CHAIN OF CUSTODY AND ANALYSIS REQUEST

Lab No. 1644

MACKINNON ENVIRONMENTAL CONSULTING
WALNUT CREEK, CA
510/930-9272

PROJECT MANAGER Cinda MacKinnon
LABORATORY DESTINATION McCampbell
PROJECT NO. AB-492
SAMPLER'S NAME Cinda H + Jed Douglas

Sample ID	Matrix (Soil / ~~water~~)	TPH (~~Diesel~~ Low/High)	TPH Gas+BTXE	Oil & Grease	8010 Halogenated	Metals (~~Zn, Cr, Cd~~ Pb)	Others	Date Collected	Containers	NOTES
L41, 42+43		✓	see notes			only TTLC		4-14-92	brass	Analyze @ group of samples as one composite for diesel - if = < 50 ppm then analyze for (Gas + BTE)
L44, 45, 46+47		✓	see notes			(NO)				
430, 431, 432, 433		✓	see notes			(NO)				
435, 436, 437, 438		HOLD - do not analyze unless group #3 ≥ 25 ppm diesel - if so then analyze for diesel only								

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE
APPROPRIATE CONTAINERS ✓
VOAs/TO&G/METALS/OTHER

Relinquished by	Date/Time	Received by
Organization MEC	4-15-92/0935	Organization Skan
Relinquished by Skan	Date/Time 4-15-92	Received by
Organization CCK		Organization

NOTES Composite #1 (41-43) is the only TTLC-Pb analyses.

0935
4-15-92
10:10

Lab.Analysis/Custody

CHROMALAB, INC.

Analytical Laboratory (E694)

5 DAYS TURNAROUND

April 22, 1992 ChromaLab File No.: 0492149

MCCAMPBELL

Attn: Ed Hamilton

RE: One composite soil sample for Lead analysis

Project Name: M/AB-492
Date Submitted: Apr. 15, 1992
Date Extracted: Apr. 21, 1992 Date Analyzed: Apr. 22, 1992

RESULTS:

Sample I.D.	Lead (mg/Kg)
L41,L42, L43 Comp	5.1

BLANK	N.D.
SPIKE RECOVERY	100%
DUPLICATE SPIKE RECOVERY	104%
DETECTION LIMIT	2.5
METHOD OF ANALYSIS	3050/7420

ChromaLab, Inc.

Refaat A. Mankarious
Inorganics Supervisor

Eric Tam
Laboratory Director

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

CHROMALAB FILE # 432149
ORDER # 6112

CLIENT:

ADDRESS: McCAMPBELL ANALYTICAL
110 2nd AVE. SOUTH, #D7
PACHECO, CA 94553

PHONE:

PROJECT NAME/SITE: M/AB-492

SAMPLER:

DATE:

REPORT TO: S. Hamilton

BILLING TO: same

24 HR.		48 HR.		72 HR.
5 DAY		10 DAY		15 DAY

PO#/BILLING REFERENCE:

SAMPLE ID#/ STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE	ANALYSIS REQUESTED: Total Lead	REMARKS	SAMPLE NUMBER
L41,L42,L43	SOIL	3	B	4-14-92	X	12358	
	composite these cores into one sample.						

RELINQUISHED BY: DATE: TIME:

RECEIVED BY:

RELINQUISHED BY: DATE: TIME:

RECEIVED BY:

RELINQUISHED BY: DATE: TIME:

RECEIVED IN LAB BY:

TRAVEL TIME:

ON SITE TIME:

OTHER:

WERE SAMPLES:	YES	NO
PRESERVED ?		X
IN GOOD CONDITION?	X	

CHROMALAB, INC.

Analytical Laboratory (E694)

5 DAYS TURNAROUND

March 30, 1992 ChromaLab File No.: 0392226
0392232

MCCAMPBELL ANALYTICAL

Attn: Ed Hamilton

RE: Three composite soil sample for Lead analysis

Project Name: MK/ AB. 392
Date Sampled: Mar. 17, 1992 Date Submitted: Mar. 23, 1992
Date Extracted: Mar. 26, 1992 Date Analyzed: Mar. 30, 1992

RESULTS:

Sample I.D.	Lead (mg/Kg)
GC 2,3,4,7	N.D.
6,10,11	3.6
1,5,9,12	7.5

BLANK	N.D.
SPIKE RECOVERY	80%
DUPLICATE SPIKE RECOVERY	82%
DETECTION LIMIT	2.5
METHOD OF ANALYSIS	3050/7420

ChromaLab, Inc.

Refaat A. Mankarious
Inorganics Supervisor

Eric Tam
Laboratory Director

Lab No. [illegible]

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING

WALNUT CREEK, CA

415-930-9272

PROJECT MANAGER Cinda MacKinnon

LABORATORY DESTINATION

PROJECT NO. AB392

SAMPLER'S NAME Cinda

Sample ID	Matrix Soil/ ~~Water~~	TPH Diesel ~~Low/~~ High	TPH Gas+BTXE	Oil & Grease	8010 Halogen-ated	Metals ~~(Zn, Cr, Cd~~ Pb)	Others	Date Collected	Containers	NOTES
AB2,3,4+7		✓	✓	–	–	✓	–	3-17-92	brass	composite as one
If: <90mg/kg, G <10 mg/kg + benzene ND analyze the samples below*										
If above these parameters please call re the samples below*										
AB6,10+11		✓	✓	–	–	✓		↓	↓	* HOLD (composite as one)
AB 1,5,9+10 12		✓	✓	–	–	✓		↓	↓	* HOLD ↓
										No. 12190

Relinquished by C MacK[illegible] Organization MEC	Date/Time 3-18-92 11:15	Received by N. Andrigotti Organization CCX	NOTES Analyze 2,3,4+7 first (see instructions above). Bioremediation project
Relinquished by N. Andrigotti Organization CCX	Date/Time 3-18-92 11:30	Received by [illegible] Organization NAZ	

Lab.Analysis/Custody

CHROMALAB FILE #

ORDER # 5876

CLIENT:

ADDRESS: McCAMPBELL ANALYTICAL
110 2nd AVE. SOUTH, #D7
PACHECO, CA 94553

PHONE: 798-1620 FAX: 798-1622

PROJECT NAME/SITE: AK/AB. 792

SAMPLER: DATE:

REPORT TO: E. Hamlin

BILLING TO: E. Hamlin

8 HR. | 24 HR. | 48 HR. | 72 HR. | 5 DAY | 10 DAY | 15 DAY

P.O.#/BILLING REFERENCE:

SAMPLE ID#/ STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE	ANALYSIS REQUESTED: Total Lead (1A)	REMARKS	SAMPLE NUMBER
6, 10, 11	SOIL	3	B	3-17	X	3 place composite Above 3 cuts	
1, 5, 9, 12	"	4	"	3-17	X	3 place composite Above 4 cuts	

RELINQUISHED BY: DATE: TIME:

RELINQUISHED BY: DATE: TIME:

RELINQUISHED BY: Ed Hamlin DATE: 3-27-92 TIME: 1:45

Madeleine Marietta 3-23-92 2:45

RECEIVED BY:

RECEIVED BY: Madeleine Marietta

RECEIVED IN LAB BY:

TRAVEL TIME:

ON SITE TIME:

OTHER:

WERE SAMPLES:	YES	NO
PRESERVED ?		
IN GOOD CONDITION?		

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 2834 San Antonio Drive Walnut Creek, CA 94598	Client Project ID: AB-392	Date Sampled: 03/26/92
		Date Received: 03/27/92
	Client Contact: Cinda MacKinnon	Date Extracted: 03/28/92
	Client P.O:	Date Analyzed: 03/28/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modifed EPA method 3550 or 3510

Lab ID	Client ID	Matrix	TPH(D)+
12249	31,32,33	S	26,e
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c). diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel (aged diesel?); f) peaks elute in the diesel range but no pattern is present; g) one to a few isolated peaks predominate.

EH Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT

Date: 03/25-03/28/92 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.00	2.00	1.98	2.03	99	98	0.8
Benzene	0.00	0.22	0.23	0.2	110	115	4.4
Toluene	0.00	0.212	0.214	0.2	106	107	0.9
Ethyl Benzene	0.00	0.212	0.214	0.2	106	107	0.9
Xylenes	0.00	0.632	0.642	0.6	105	107	1.6
TPH (diesel)	0	147	141	150	98	94	3.7
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

Lab No. _____

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING

WALNUT CREEK, CA

510/930-9272

PROJECT MANAGER Cinda MacKinnon

LABORATORY DESTINATION McCampbell

PROJECT NO. AB-392

SAMPLER'S NAME CINDA

Sample ID	Matrix Soil/Water	TPH Diesel ~~Low~~ High	TPH Gas+BTXE	Oil & Grease	8010 Halogen-ated	Metals (Zn, Cr, Cd, Pb)	Others	Date Collected	Containers	NOTES
31, 32, 33		✓			No. 12249			3-26-92	brass	composite as one

VOAS | O&G | METALS | OTHER

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE
APPROPRIATE
CONTAINERS ✓

Relinquished by C MacKinnon	Date/Time 3-27-92/1040	Received by CCX722 T. Hayes	NOTES Bioremediation project
Relinquished by R. Hayes 3-27-92	Date/Time 3-27 10.53	Received by
Organization CCX722 1151		Organization NAI

Lab.Analysis/Custody

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 2834 San Antonio Drive Walnut Creek, CA 94598	Client Project ID: AB.392	Date Sampled: 03/17/92
		Date Received: 03/18/92
	Client Contact: Cinda MacKinnon	Date Extracted: 03/19/92
	Client P.O:	Date Analyzed: 03/19/92

Low Boiling Point TPH* (as Gasoline) and BTEX*

DOHS LUFT procedure; EPA method 5030, modified 8020 & 602

Lab ID	Client ID	Matrix	TPH(G)+	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
12190	AB2,3,4+7	S	ND,g	ND	ND	ND	ND	108
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L and soils in mg/kg

#cluttered chromatogram; sample peak co-elutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gas compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) one to a few isolated peaks predominate; f) gasoline range compounds together with higher boiling point (diesel range) compounds; g) aged gas or diesel range compounds present.

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

MacKinnon Environmental 2834 San Antonio Drive Walnut Creek, CA 94598	Client Project ID: AB.392	Date Sampled: 03/17/92
		Date Received: 03/18/92
	Client Contact: Cinda MacKinnon	Date Extracted: 03/19/92
	Client P.O:	Date Analyzed: 03/19/92

Medium Boiling Point TPH (as Diesel) *

DOHS LUFT procedure; modifed EPA method 3550 or 3510

Lab ID	Client ID	Matrix	TPH(D)+
12190	AB2,3,4+7	S	130,g
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L
		S	10 mg/kg

*water samples are reported in ug/L and soils in mg/kg

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately diesel compounds; b) diesel range compounds together with gasoline range compounds; c). diesel range compounds together with very low boiling point compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel; f) peaks elute in the diesel range but no pattern is present; g) modified diesel pattern (aged diesel?)

EH Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT

Date: 03/19-03/20/92 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.00	1.98	1.99	2.03	97	98	0.8
Benzene	0.00	0.226	0.224	0.2	113	112	0.9
Toluene	0.00	0.216	0.216	0.2	108	108	0.0
Ethyl Benzene	0.00	0.218	0.216	0.2	109	108	0.9
Xylenes	0.00	0.646	0.644	0.6	108	107	0.3
TPH (diesel)	0	143	149	150	96	99	3.7
TRPH (oil & grease)	0	855	835	1000	86	84	2.4

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

LAB NO. [illegible]

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING

WALNUT CREEK, CA

415-930-9272

PROJECT MANAGER Cinda MacKinnon LABORATORY DESTINATION

PROJECT NO. AB-392 SAMPLER'S NAME Cinda

Sample ID	Matrix Soil / ~~Water~~	TPH Diesel ~~Low~~ High	TPH Gas+BTXE	Oil & Grease	8010 Halogen-ated	Metals ~~(Zn, Cr, Cd,~~ Pb)	Others	Date Collected	Containers	NOTES
AB 2,3,4+7		✓	✓	–	–	✓	–	3-17-92	brass	Composite as one
	If:	<90 mg/kg,	@ <10 mg/kg + benzene ND		analyze the	samples	below*			
If above these parameters please call re the samples below.*										
AB 6, 10+11		✓	✓	–	–	✓		↓	↓	* HOLD (composite as one)
AB 1,5,9+~~10~~ 12 S/I		✓	✓	–	–	✓		↓	↓	* HOLD ↓
										No. 12190

Relinquished by C MacKinnon	Date/Time 3-18-92 11:15	Received by N. Audrieth	NOTES Analyze 2,3,4+7 first (see instructions above). Bioremediation project
Organization MEC		Organization CCX	
Relinquished by N. Audrieth	Date/Time 3-18-92 11:30	Received by [illegible]	
Organization CCX		Organization NAZ	

Lab.Analysis/Custody

A P P E N D I X B

CHROMATOGRAMS*

*NOTE: Laboratory sample numbers corresponding to sample numbers in this report are on the chain-of-custody form.

Lab No. _____

CHAIN OF CUSTODY AND ANALYSIS REQUEST

MACKINNON ENVIRONMENTAL CONSULTING
LAFAYETTE, CA
510/284-7304

[redacted]

~~Fax Fri 6-26-92~~ before 2:00pm

PROJECT MANAGER Cinda MacKinnon LABORATORY DESTINATION Friedman + Bryna

PROJECT NO. AB-692 SAMPLER'S NAME Cinda + Tom

FB1#

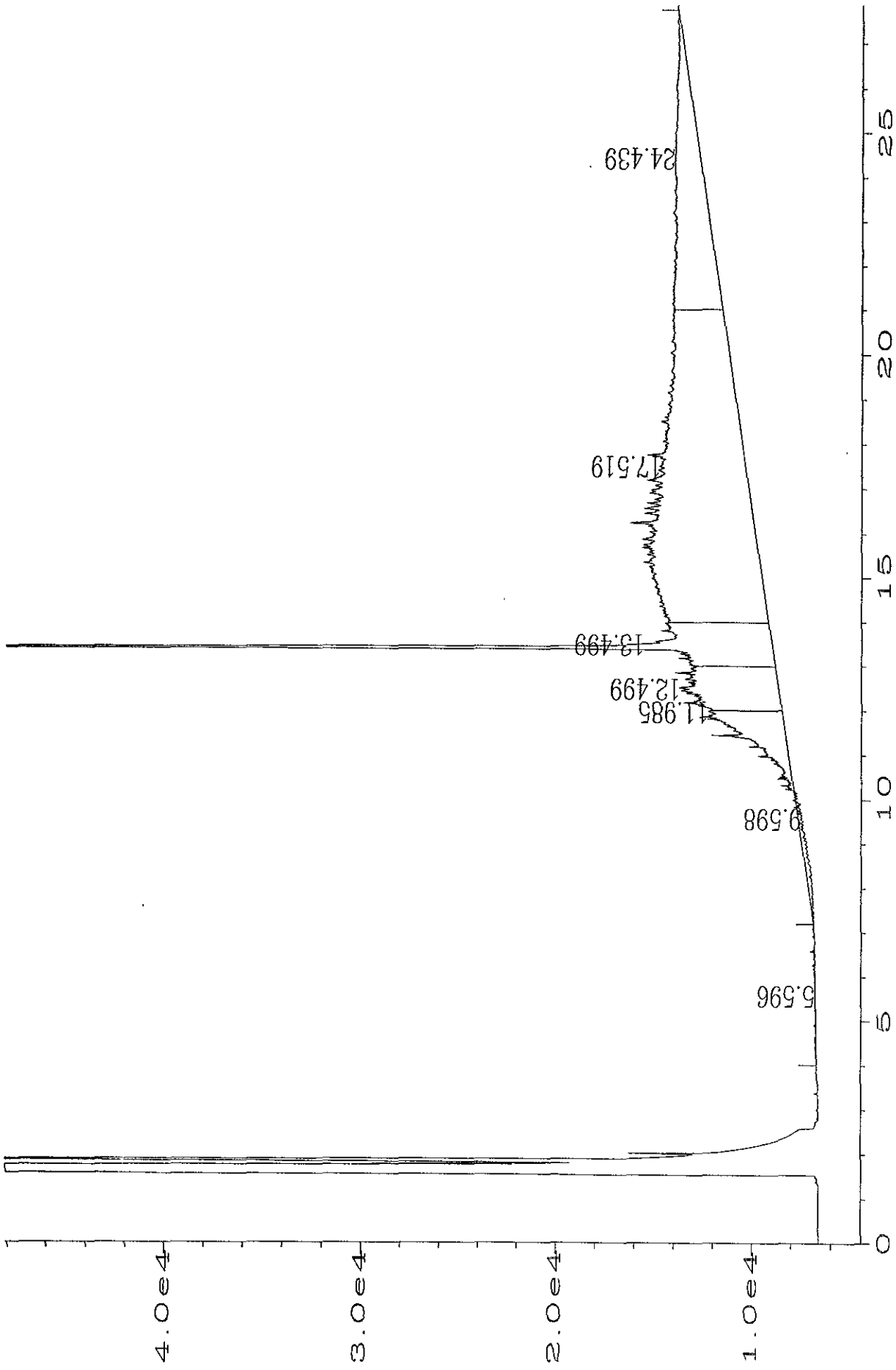
	Sample ID	Matrix (Soil) ~~Water~~	TPH Diesel Low/ High	TPH Gas+BTXE	~~motor~~ Oil & ~~Grease~~	~~8010 Halogenated~~	Metals (Zn, Cr, Cd, Pb)	Tot. TPH 8015 mod. (heavy)	Date Collected	Containers	NOTES
L	60-62		✓		✓	30201-03			6-20-92	brass	analyze as 1 composite
	63-65		✓		✓	30204-06					
	69 620-621		✓	✓	✓	30207-09					
	622-24		✓	✓	✓	30210-12					
	~~6625~~-68		✓	—	✓	30213-15					
	625-27		✓		✓	30216-18					
	628-30		✓	✓	✓	30219-21					
S	631-33		–	✓(only)	–	30222-24					
	634-37		✓	✓	✓	30225-28					
			3	5							

gave verbals to Cinda - she requested chromatograms of samples only.

Relinquished by C Mack Organization MEC	Date/Time 6-20-92/1553	Received by M. SANFORD, FF&B, 1 6-22-92 10:25 Organization ~~Fed Ex~~	NOTES Chromatograms required for this report.
Relinquished by Organization	Date/Time	Received by Organization	

Lab Analysis/Custody

C:\HPCHEM\4\DATA\06-23-92\026F1101.D



Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\026F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30201-03COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 07:05 AM
Report Created on: 26 Jun 92 05:42 PM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

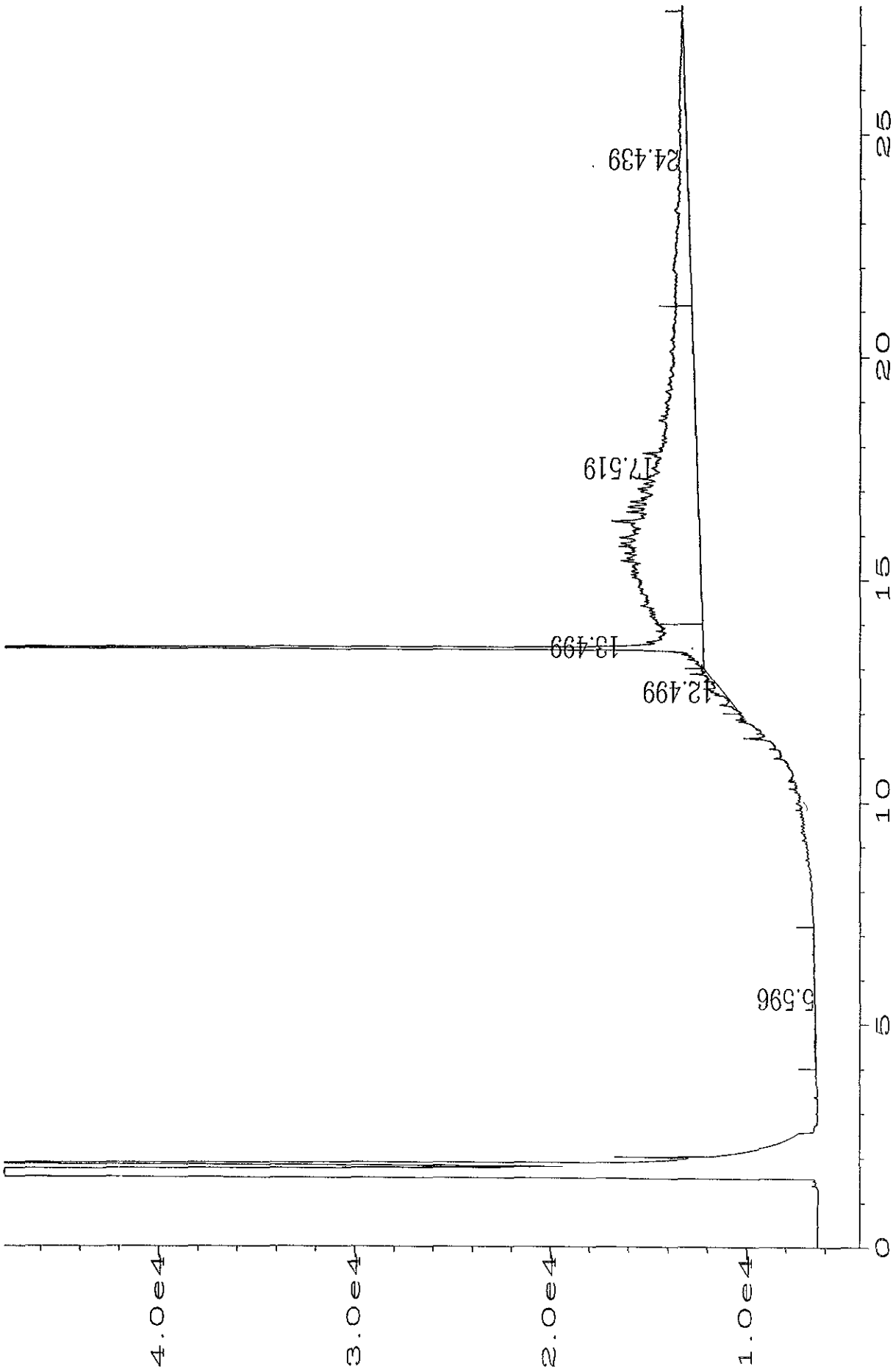
Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\026F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	3658	254	BB +	0.000	0.0974
2	9.598	138956	5032	BV +	0.000	3.7009
3	11.985	3098	3730	VVA	0.014	0.0825
4	12.499	258917	5183	VVA	0.833	6.8958
5	13.499	1076287	468966	VV +	0.000	28.6651
6	17.519	1773882	5777	VV +	0.000	47.2444
7	24.439	499892	1368	VB +	0.000	13.3138

Total area = 3754689

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\026F1101.D						
Operator	: SJD			Page Number	: 1		
Instrument	: ANALYZER1			Vial Number	: 26		
Sample Name	: 30201-03COMP			Injection Number	: 1		
Run Time Bar Code:				Sequence Line	: 11		
Acquired on	: 24 Jun 92 07:05 AM			Instrument Method:	TPHMO.MTH		
Report Created on:	26 Jun 92 05:42 PM			Analysis Method	: TPHMO.MTH		
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
332.0512605	>13.0		<15	238000			
		790282					
Gasoline	Ret Time	Area	Ret Time	m	b		
-33.7197	>2.5		<7.2	0.00035	-35		
		3658					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.34156	>4		<9	0.00018	-2		
		3658					
Diesel	Ret Time	Area	Ret Time	m	b		
121.65568	>7.2		<14	0.00018	-2		
		1477258					
Motor Oil	Ret Time	Area		m	b		
387.27932	>14			0.00018	-22		
		2273774					

C:\HPCHEM\4\DATA\06-23-92\027F1101.D



Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\027F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30204-06COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 07:42 AM
Report Created on: 26 Jun 92 05:44 PM

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\027F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	3141	109	BB +	0.000	0.1592
2	12.499	14540	1504	PB +	0.000	0.7371
3	13.499	867776	476610	BV +	0.000	43.9895
4	17.519	920285	4242	VVA	3.616	46.6513
5	24.439	166948	680	VB +	0.000	8.4630

Total area = 1972690

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\027F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 27	
Sample Name	: 30204-06COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 07:42 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:44 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
332.5037815	>13.0		<15	238000			
		791359					
Gasoline	Ret Time	Area	Ret Time	m	b		
-33.90065	>2.5		<7.2	0.00035	-35		
		3141					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.43462	>4		<9	0.00018	-2		
		3141					
Diesel	Ret Time	Area	Ret Time	m	b		
14.37226	>7.2		<14	0.00018	-2		
		882316					
Motor Oil	Ret Time	Area		m	b		
173.70194	>14			0.00018	-22		
		1087233					

C:\HPCHEM\4\DATA\06-23-92\028F1101.D

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\028F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30207-09COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 08:18 AM
Report Created on: 26 Jun 92 05:45 PM

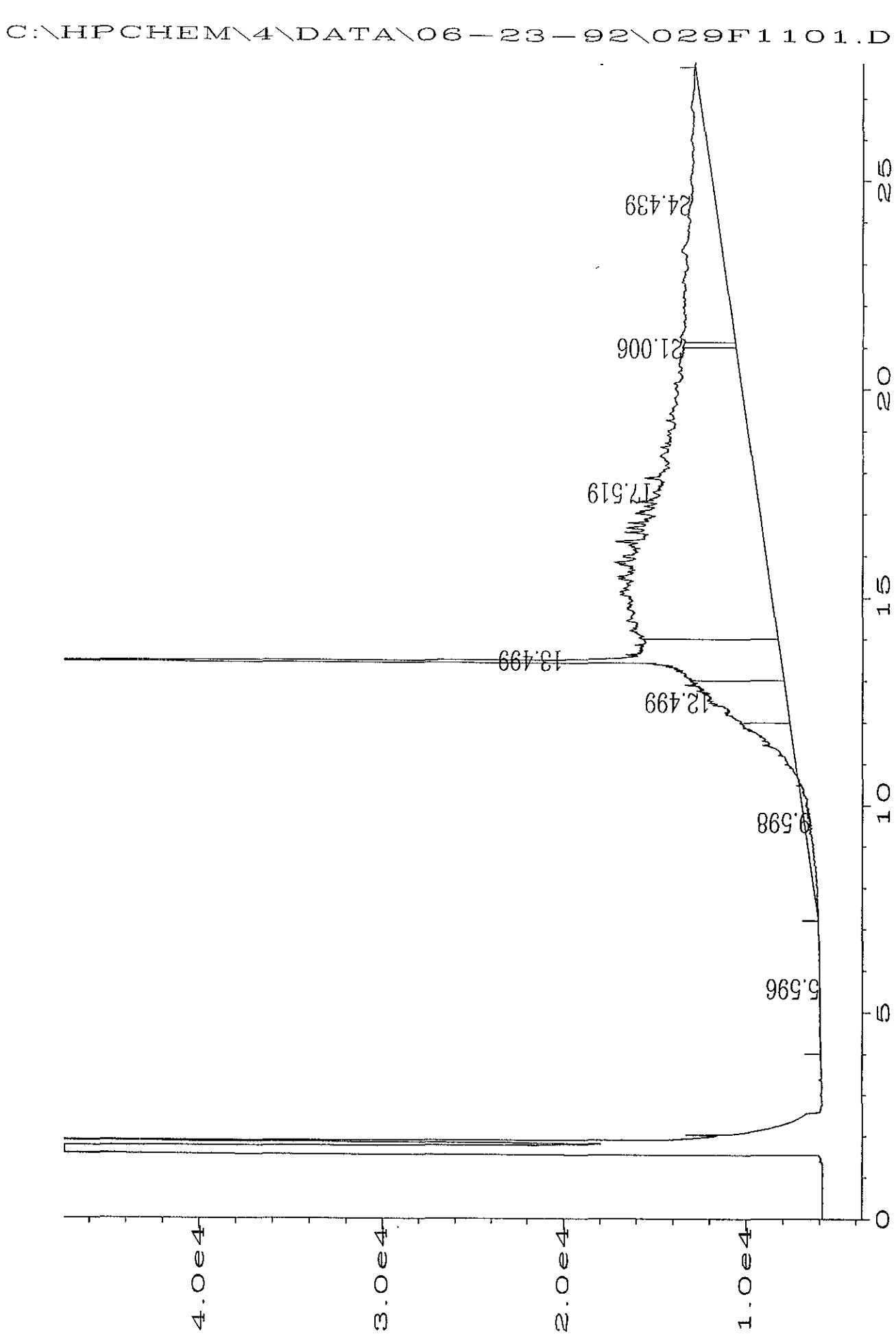
Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\028F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	2157	140	PV +	0.000	0.0482
2	9.598	156530	4700	PV +	0.000	3.4969
3	12.499	227376	4257	VV +	0.000	5.0796
4	13.499	1065621	490608	VV +	0.000	23.8058
5	17.519	2378653	8571	VV +	0.000	53.1387
6	21.041	24087	3191	VVA	0.126	0.5381
7	24.439	621885	2271	VB +	0.000	13.8928

Total area = 4476308

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\028F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 28	
Sample Name	: 30207-09COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 08:18 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:45 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area	FID		
338.8739496	>13.0		<15	238000			
		806520					
Gasoline	Ret Time	Area	Ret Time	m	b		
-34.24505	>2.5		<7.2	0.00035	-35		
		2157					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.61174	>4		<9	0.00018	-2		
		2157					
Diesel	Ret Time	Area	Ret Time	m	b		
113.74126	>7.2		<14	0.00018	-2		
		1449527					
Motor Oil	Ret Time	Area		m	b		
522.4325	>14			0.00018	-22		
		3024625					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13.499
12.499
9.598
5.596
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5
10
15
20
25
4.0e4
3.0e4
2.0e4
1.0e4

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\029F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30210-12COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 08:54 AM
Report Created on: 26 Jun 92 05:47 PM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\029F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	3323	99	PB +	0.000	0.0750
2	9.598	43636	3490	BV +	0.000	0.9847
3	12.499	236971	5510	VV +	0.000	5.3474
4	13.499	1191714	477961	VV +	0.000	26.8921
5	17.519	2371752	7689	VV +	0.000	53.5206
6	21.006	22202	2907	VVA	0.104	0.5010
7	24.439	561875	1913	VB +	0.000	12.6792

Total area = 4431471

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\029F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 29	
Sample Name	: 30210-12COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 08:54 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:47 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
340.1319328	>13.0		<15	238000			
		809514					
Gasoline	Ret Time	Area	Ret Time	m	b		
-33.83695	>2.5		<7.2	0.00035	-35		
		3323					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.40186	>4		<9	0.00018	-2		
		3323					
Diesel	Ret Time	Area	Ret Time	m	b		
117.30526	>7.2		<14	0.00018	-2		
		1472321					
Motor Oil	Ret Time	Area		m	b		
510.04922	>14			0.00018	-22		
		2955829					

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4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
5.596
9.598
11.986
12.499
13.499
17.519
21.006
24.439

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\030F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30213-15COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 09:31 AM
Report Created on: 26 Jun 92 05:48 PM

Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\030F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	3306	117	BB +	0.000	0.1063
2	9.598	49347	3085	BV +	0.000	1.5865
3	11.986	1489	1735	VVA	0.010	0.0479
4	12.499	133243	3312	VVA	0.670	4.2837
5	13.499	987321	483304	VV +	0.000	31.7416
6	17.519	1488995	4121	VV +	0.000	47.8700
7	21.006	17592	2292	VVA	0.128	0.5656
8	24.439	429202	1317	VB +	0.000	13.7985

Total area = 3110495

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\030F1101.D						
Operator	: SJD			Page Number	: 1		
Instrument	: ANALYZER1			Vial Number	: 30		
Sample Name	: 30213-15COMP			Injection Number	: 1		
Run Time Bar Code:				Sequence Line	: 11		
Acquired on	: 24 Jun 92 09:31 AM			Instrument Method:	TPHMO.MTH		
Report Created on:	26 Jun 92 05:48 PM			Analysis Method	: TPHMO.MTH		
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
339.789916	>13.0		<15	238000			
		808700					
Gasoline	Ret Time	Area	Ret Time	m	b		
-33.8429	>2.5		<7.2	0.00035	-35		
		3306					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.40492	>4		<9	0.00018	-2		
		3306					
Diesel	Ret Time	Area	Ret Time	m	b		
63.286	>7.2		<14	0.00018	-2		
		1171400					
Motor Oil	Ret Time	Area		m	b		
326.44202	>14			0.00018	-22		
		1935789					

C:\HPCHEM\4\DATA\06-23-92\031F1101.D
4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
5.596
12.499
13.499
17.519
20.998
24.439

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\031F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30216-18COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 10:08 AM
Report Created on: 26 Jun 92 05:50 PM

Page Number : 1
Vial Number : 31
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\031F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	2510	128	PB +	0.000	0.1260
2	12.499	9152	1299	PB +	0.000	0.4596
3	13.499	871145	478545	BV +	0.000	43.7439
4	17.519	929018	4240	VV +	0.000	46.6499
5	20.998	6400	995	VVA	0.077	0.3214
6	24.439	173244	705	VB +	0.000	8.6993

Total area = 1991469

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\031F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 31	
Sample Name	: 30216-18COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 10:08 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:50 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
337.8348739	>13.0		<15	238000			
		804047					
Gasoline	Ret Time	Area	Ret Time	m	b		
-34.1215	>2.5		<7.2	0.00035	-35		
		2510					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.5482	>4		<9	0.00018	-2		
		2510					
Diesel	Ret Time	Area	Ret Time	m	b		
11.725	>7.2		<14	0.00018	-2		
		880297					
Motor Oil	Ret Time	Area		m	b		
177.55916	>14			0.00018	-22		
		1108662					

C:\HPCHEM\4\DATA\06-23-92\032F1101.D
4.0e4
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2.0e4
1.0e4
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15
20
25
5.596
9.598
12.499
13.400
17.519

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\032F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30219-21COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 10:45 AM
Report Created on: 26 Jun 92 05:51 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\032F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	1440	151	PB +	0.000	0.0497
2	9.598	12717	4632	BV +	0.000	0.4385
3	12.499	277142	6199	VV +	0.000	9.5560
4	13.499	1185868	465713	VV +	0.000	40.8893
5	17.519	1423022	5946	VB +	0.000	49.0665

Total area = 2900190

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\032F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 32	
Sample Name	: 30219-21COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 10:45 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:51 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
350.5840336	>13.0		<15	238000			
		834390					
Gasoline	Ret Time	Area	Ret Time	m	b		
-34.496	>2.5		<7.2	0.00035	-35		
		1440					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.7408	>4		<9	0.00018	-2		
		1440					
Diesel	Ret Time	Area	Ret Time	m	b		
113.44066	>7.2		<14	0.00018	-2		
		1475727					
Motor Oil	Ret Time	Area		m	b		
234.14396	>14			0.00018	-22		
		1423022					

C:\HPCHEM\4\DATA\06-23-92\033F1101.D
4.0e4
3.0e4
2.0e4
1.0e4
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15
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25
5.596
11.986
12.499
13.490
17.519
24.439

Area Percent Report

Data File Name : C:\HPCHEM\4\DATA\06-23-92\033F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 30225-28COMP
Run Time Bar Code:
Acquired on : 24 Jun 92 11:23 AM
Report Created on: 26 Jun 92 05:53 PM

Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\4\DATA\06-23-92\033F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	2122	122	PB +	0.000	0.2219
2	11.986	1858	1464	VVA	0.015	0.1942
3	12.499	89825	2687	VB +	0.000	9.3903
4	13.499	808558	480281	BVA	0.028	84.5264
5	17.519	40620	1880	PV +	0.000	4.2464
6	24.439	13591	2975	PB +	0.000	1.4208

Total area = 956575

Last update on	1/7/92	BY LAB					
Data File Name	: C:\HPCHEM\4\DATA\06-23-92\033F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 33	
Sample Name	: 30225-28COMP				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 11:23 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 05:53 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
343.1415966	>13.0		<15	238000			
		816677					
Gasoline	Ret Time	Area	Ret Time	m	b		
-34.2573	>2.5		<7.2	0.00035	-35		
		2122					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-1.61804	>4		<9	0.00018	-2		
		2122					
Diesel	Ret Time	Area	Ret Time	m	b		
13.04152	>7.2		<14	0.00018	-2		
		900241					
Motor Oil	Ret Time	Area		m	b		
-12.24202	>14			0.00018	-22		
		54211					

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2.0e4
1.0e4
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10
15
20
25
9.598
12.499
13.499
17.519

Area Percent Report

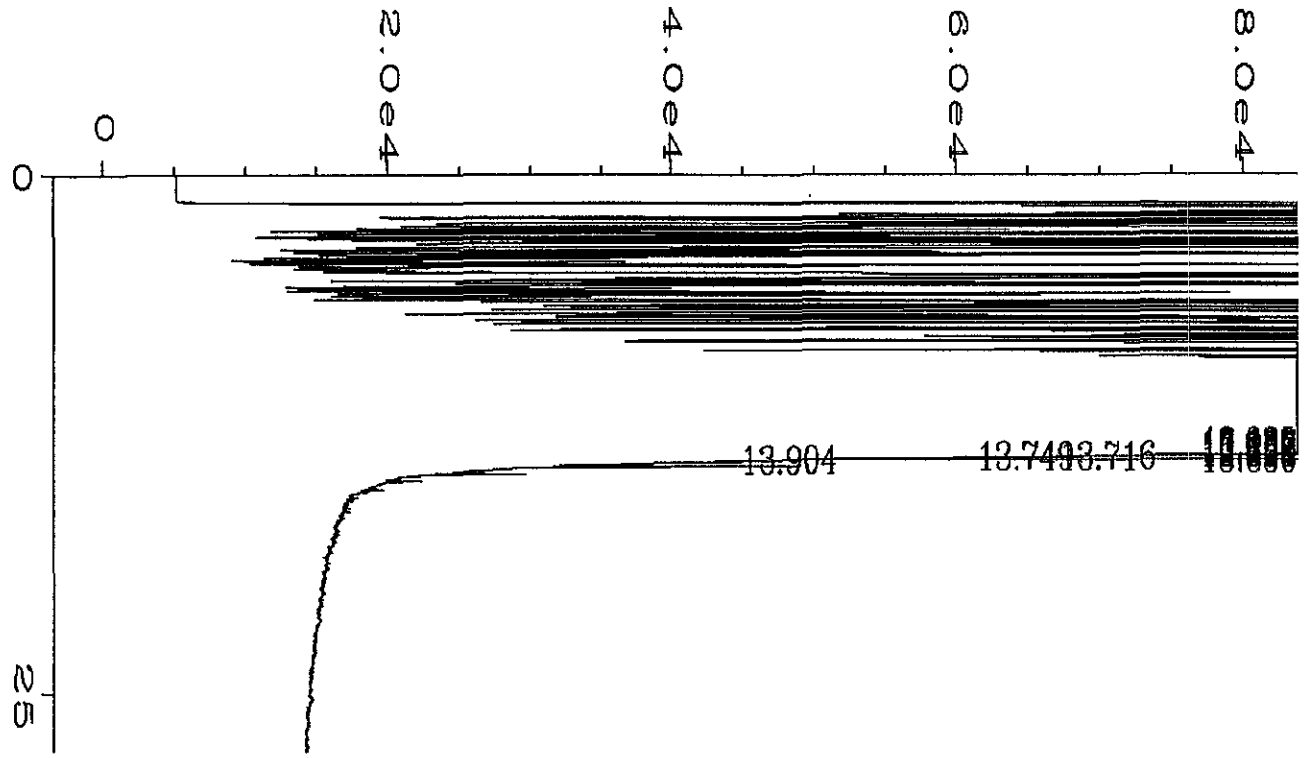
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\001F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 10,000 PPM g&d
Run Time Bar Code:
Acquired on : 23 Jun 92 11:35 PM
Report Created on: 26 Jun 92 12:15 PM

Page Number : 1
Vial Number : 1
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\001F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.230	983579	746882	BV	0.022	0.6244
2	2.257	618087	801528	VV	0.013	0.3924
3	2.299	456938	550026	PV	0.013	0.2901
4	2.382	226636	202368	PV	0.019	0.1439
5	2.408	641244	642130	VV	0.016	0.4071
6	2.430	125211	168977	VV	0.012	0.0795
7	3.246	6185122	1298156	PV +	0.000	3.9267
8	5.596	1.69927E+007	1404199	VV +	0.000	10.7880
9	9.598	7.10342E+007	1023063	VV +	0.000	45.0965
10	12.499	2.28011E+007	1001852	VV +	0.000	14.4755
11	13.499	9683590	674851	VVA	0.239	6.1477
12	17.519	2.77675E+007	92719	VB +	0.000	17.6283

Total area = 1.57516E+008



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\001R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 10,000 PPM g&d
Run Time Bar Code:
Acquired on : 23 Jun 92 11:35 PM
Report Created on: 26 Jun 92 12:16 PM

Page Number : 1
Vial Number : 1
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\001R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.085	14991	14791	BV	0.017	0.8563
2	13.133	16490	18501	VV	0.015	0.9419
3	13.167	21173	15428	PV	0.023	1.2094
4	13.223	272079	268894	PV	0.016	15.5414
5	13.269	40341	19827	PV	0.031	2.3043
6	13.333	75506	46521	VV	0.024	4.3130
7	13.369	18351	14756	VV	0.021	1.0482
8	13.456	1037215	571186	VV	0.027	59.2466
9	13.524	138183	130164	VV	0.017	7.8931
10	13.581	4758	5030	PV	0.015	0.2718
11	13.629	36734	11102	VV	0.055	2.0983
12	13.716	5602	5418	VV	0.017	0.3200
13	13.749	5237	3834	VV	0.023	0.2992
14	13.836	61441	49519	PV	0.019	3.5096
15	13.904	2574	1528	PV	0.023	0.1470

Total area = 1750675

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\001F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 1	
Sample Name	: 10,000 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 23 Jun 92 11:35 PM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:15 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
207.443	>13.0		<15	500000			
		1037215					
Gasoline	Ret Time	Area	Ret Time	m	b		
13606.52147	>2.5		<7.2	0.000586	22		
		23177822					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
4586.029	>4		<9	0.00027	-2		
		16992700					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
12988.42822	>7.2		<14	0.000127	4		
		1.02E+08					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
3520.104725	>13		<21	9.98E-05	-114		
		36413875					

C:\HPCHEM\1\DATA\06-23-92.C\002F1001.D
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12.139
13.400
17.519
24.439

Area Percent Report

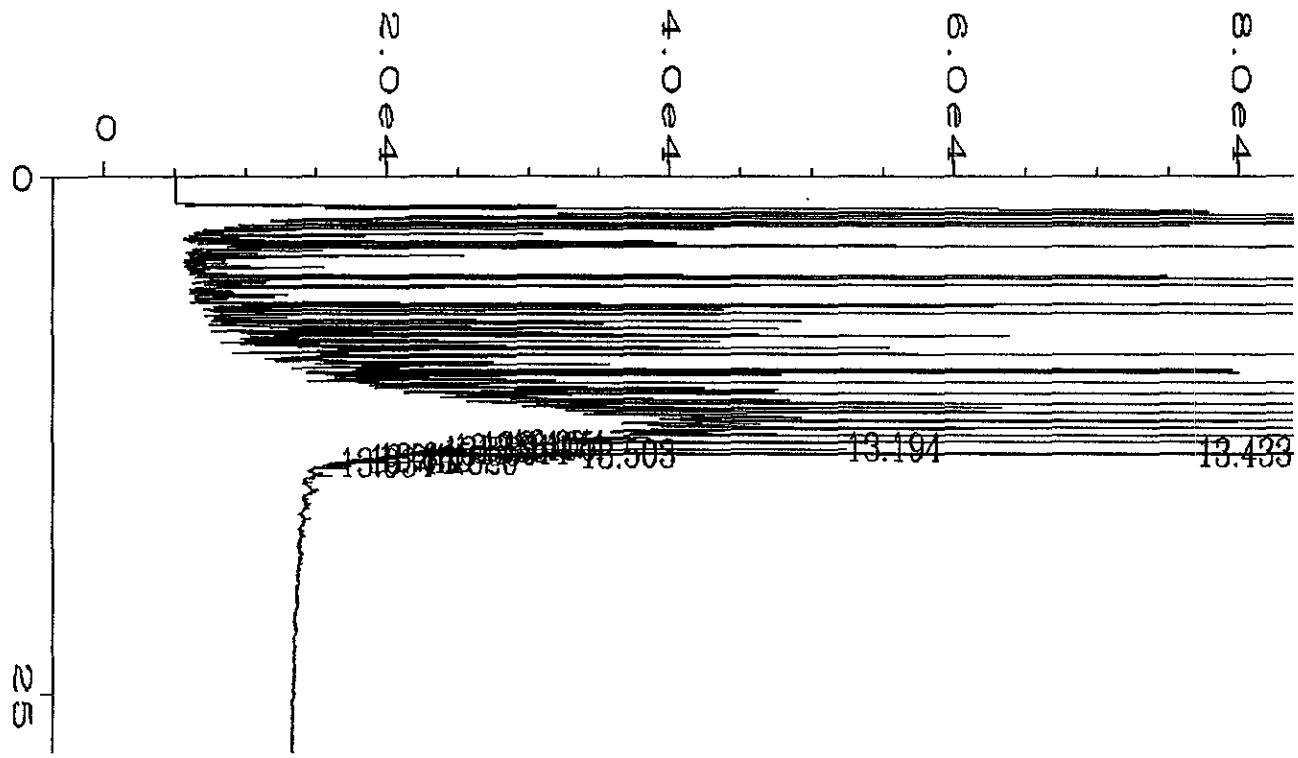
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\002F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1,000 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 00:14 AM
Report Created on: 26 Jun 92 12:16 PM

Page Number : 1
Vial Number : 2
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\002F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.230	112074	99395	BV	0.019	0.8569
2	2.257	67702	87743	VV	0.013	0.5176
3	2.300	49692	60971	VV	0.014	0.3799
4	2.386	23195	23383	PV	0.017	0.1773
5	2.408	66960	70288	VV	0.019	0.5120
6	2.433	13464	16062	VV	0.014	0.1029
7	3.246	531972	239053	PV +	0.000	4.0673
8	5.596	1278570	234183	PV +	0.000	9.7756
9	9.598	5545139	134913	VV +	0.000	42.3965
10	12.499	1920940	111844	VVA	0.286	14.6869
11	13.499	1660040	562854	VVA	0.049	12.6922
12	17.519	1420704	5848	VVA	4.049	10.8623
13	24.439	388791	1192	VB +	0.000	2.9726

Total area = 1.30792E+007



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\002R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1,000 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 00:14 AM
Report Created on: 26 Jun 92 12:17 PM

Page Number : 1
Vial Number : 2
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\002R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.074	1607	1722	VV	0.015	0.1592
2	13.105	2261	1923	VV	0.019	0.2239
3	13.144	2219	1542	VV	0.024	0.2198
4	13.194	27135	29437	PV	0.015	2.6876
5	13.238	3444	1806	PV	0.027	0.3411
6	13.311	8720	4263	VV	0.030	0.8637
7	13.339	3333	2141	VV	0.026	0.3301
8	13.433	931325	561653	VV	0.026	92.2443
9	13.503	15456	13741	VV	0.026	1.5308
10	13.645	1572	843	VV	0.029	0.1557
11	13.744	4044	1220	VV	0.047	0.4005
12	13.820	7598	5966	VV	0.019	0.7525
13	13.934	915	734	PV	0.020	0.0907

Total area = 1009628

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\002F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 2	
Sample Name	: 1,000 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 00:14 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:16 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
186.265	>13.0		<15	500000			
		931325					
Gasoline	Ret Time	Area	Ret Time	m	b		
1083.158666	>2.5		<7.2	0.000586	22		
		1810542					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
343.2139	>4		<9	0.00027	-2		
		1278570					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
1042.2804	>7.2		<14	0.000127	4		
		8194794					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
100.5120162	>13		<21	9.98E-05	-114		
		2149419					

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15.100
17.519
24.439

Area Percent Report

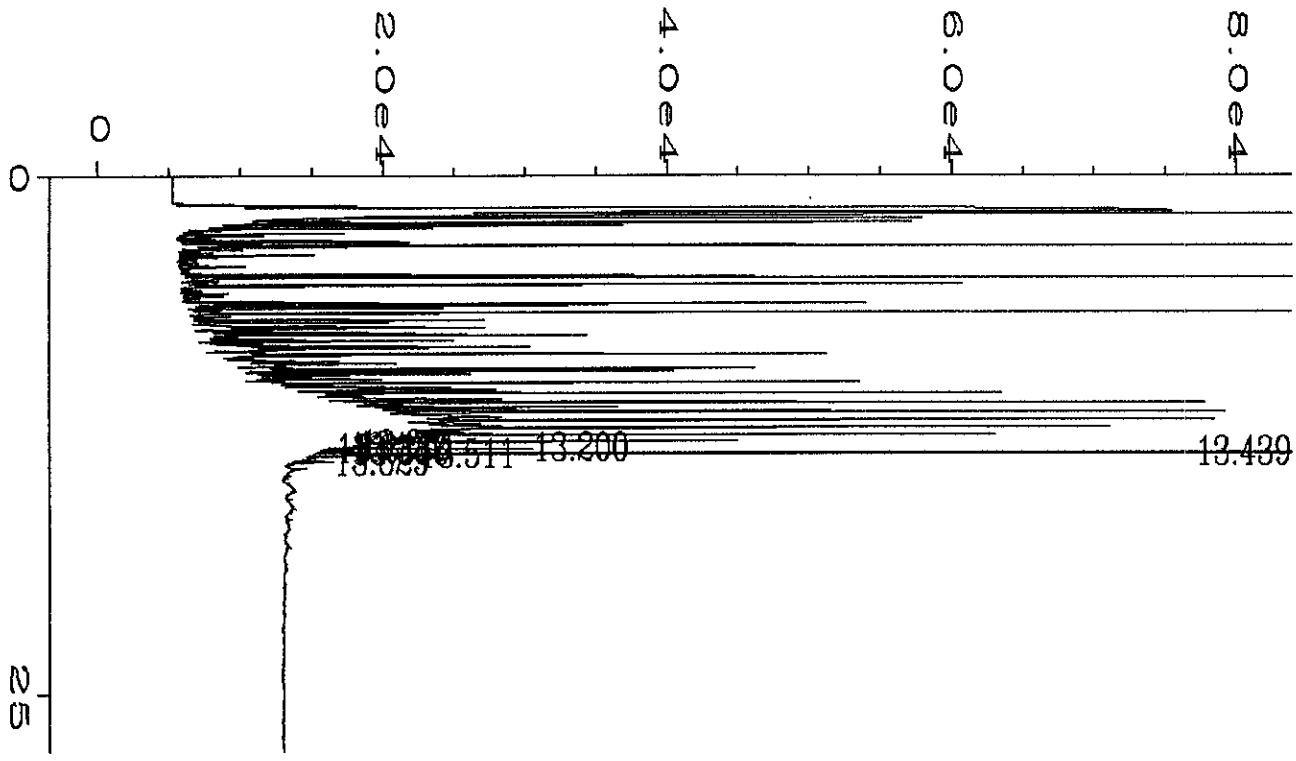
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\003F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 00:52 AM
Report Created on: 26 Jun 92 12:17 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\003F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.224	50367	45434	BV	0.018	0.6667
2	2.251	31587	40928	VV	0.013	0.4181
3	2.295	23230	28641	PV	0.014	0.3075
4	2.339	428	533	PV	0.013	0.0057
5	2.402	42130	32618	VV	0.019	0.5576
6	2.428	6367	7493	VV	0.014	0.0843
7	3.246	214095	116012	PV +	0.000	2.8339
8	5.596	575787	119088	PV +	0.000	7.6214
9	9.598	2679575	73161	VV +	0.000	35.4680
10	12.499	965204	57505	VV +	0.000	12.7759
11	13.499	1330899	554371	VVA	0.040	17.6164
12	17.519	1277090	4189	VV +	0.000	16.9041
13	24.439	358144	1596	VB +	0.000	4.7406

Total area = 7554903



Area Percent Report

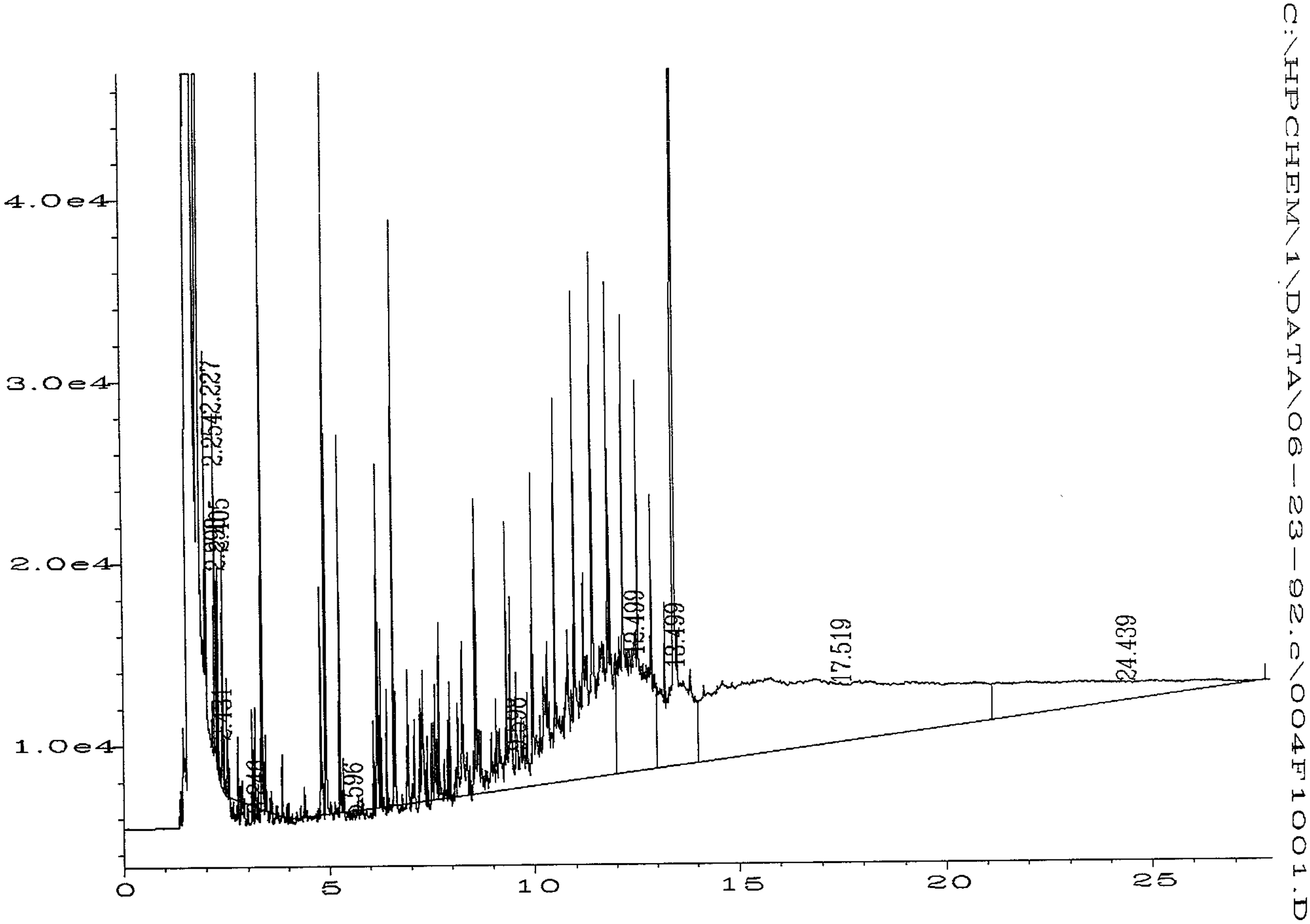
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\003R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 00:52 AM
Report Created on: 26 Jun 92 12:18 PM
Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\003R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.081	561	673	PV	0.014	0.0584
2	13.113	1006	867	PV	0.019	0.1048
3	13.152	1104	888	VV	0.021	0.1149
4	13.200	13770	14578	PV	0.015	1.4340
5	13.246	2048	925	PV	0.033	0.2132
6	13.317	4766	2266	VV	0.029	0.4963
7	13.346	4888	2484	VV	0.033	0.5091
8	13.439	915644	569821	VV	0.024	95.3560
9	13.511	11422	7843	VV	0.021	1.1895
10	13.829	5029	2964	VV	0.030	0.5237

Total area = 960238

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\003F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 3	
Sample Name	: 500 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 00:52 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:17 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
183.1288	>13.0		<15	500000			
		915644					
Gasoline	Ret Time	Area	Ret Time	m	b		
484.9498402	>2.5		<7.2	0.000586	22		
		789882					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
153.46249	>4		<9	0.00027	-2		
		575787					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
518.4063078	>7.2		<14	0.000127	4		
		4060034					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
54.896031	>13		<21	9.98E-05	-114		
		1692345					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Area Percent Report

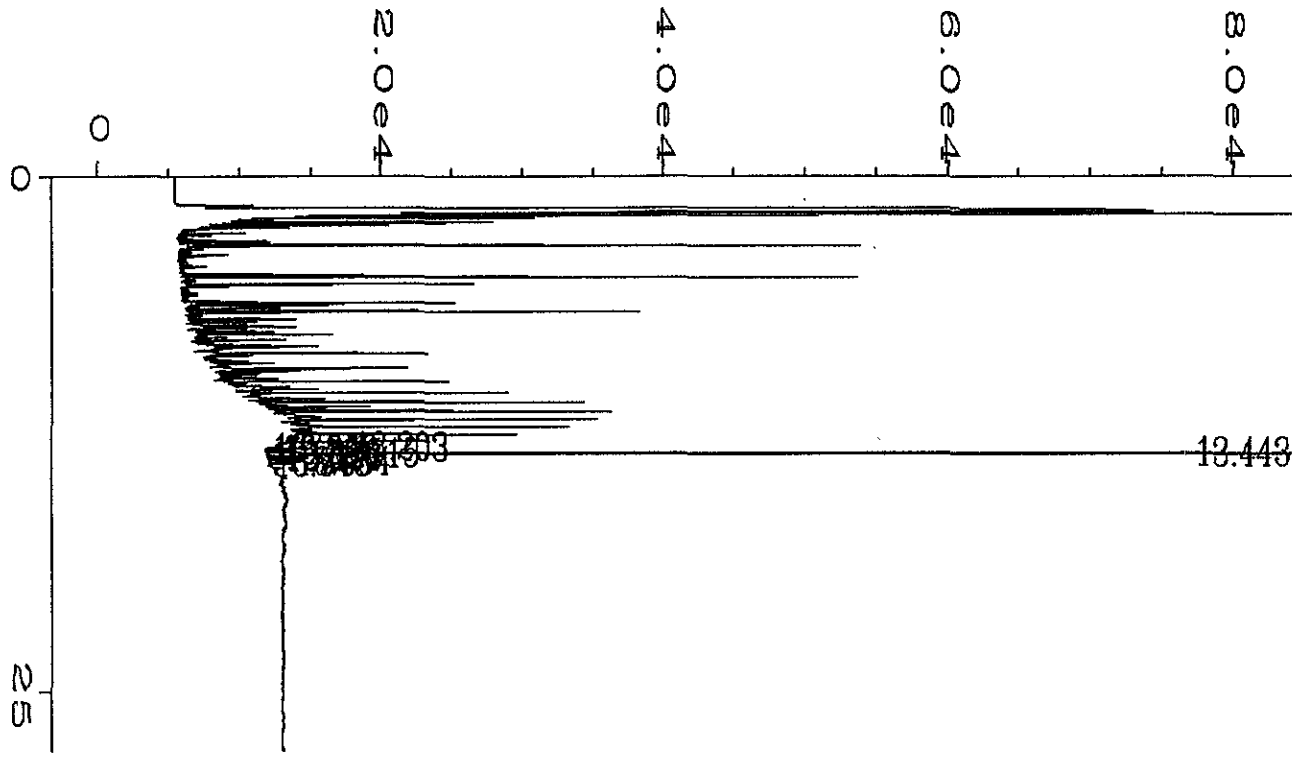
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\004F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 200 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 01:30 AM
Report Created on: 26 Jun 92 12:18 PM

Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\004F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.227	21059	18849	BV	0.018	0.4641
2	2.254	12788	16411	VV	0.013	0.2818
3	2.298	9281	11390	PV	0.023	0.2045
4	2.405	16681	13113	VV	0.019	0.3676
5	2.431	2516	2983	VV	0.014	0.0555
6	3.246	62418	46364	PV +	0.000	1.3757
7	5.596	213757	48055	PV +	0.000	4.7111
8	9.598	956351	29225	PV +	0.000	21.0775
9	12.499	386730	22234	VV +	0.000	8.5233
10	13.499	1147103	508901	VVA	0.038	25.2816
11	17.519	1322049	3451	VVA	6.384	29.1373
12	24.439	386570	1057	VB +	0.000	8.5198

Total area = 4537303



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\004R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 200 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 01:30 AM
Report Created on: 26 Jun 92 12:19 PM
Page Number : 1
Vial Number : 4
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\004R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.203	5822	6146	VV	0.016	0.6195
2	13.258	1146	505	PV	0.038	0.1220
3	13.318	2465	1090	VV	0.033	0.2623
4	13.358	2476	1110	VV	0.037	0.2634
5	13.443	903735	545425	VV	0.027	96.1637
6	13.515	6972	4073	VV	0.024	0.7419
7	13.579	4186	1186	VV	0.048	0.4454
8	13.630	1690	1131	VV	0.025	0.1799
9	13.658	5779	1264	VV	0.060	0.6149
10	13.834	5203	1860	VV	0.037	0.5537
11	13.948	313	312	PV	0.016	0.0333

Total area = 939787

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\004F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 4	
Sample Name	: 200 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 01:30 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:18 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
180.747	>13.0		<15	500000			
		903735					
Gasoline	Ret Time	Area	Ret Time	m	b		
183.8661675	>2.5		<7.2	0.000586	22		
		276175					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
55.71439	>4		<9	0.00027	-2		
		213757					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
205.0030883	>7.2		<14	0.000127	4		
		1586449					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
42.2286166	>13		<21	9.98E-05	-114		
		1565417					

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Area Percent Report

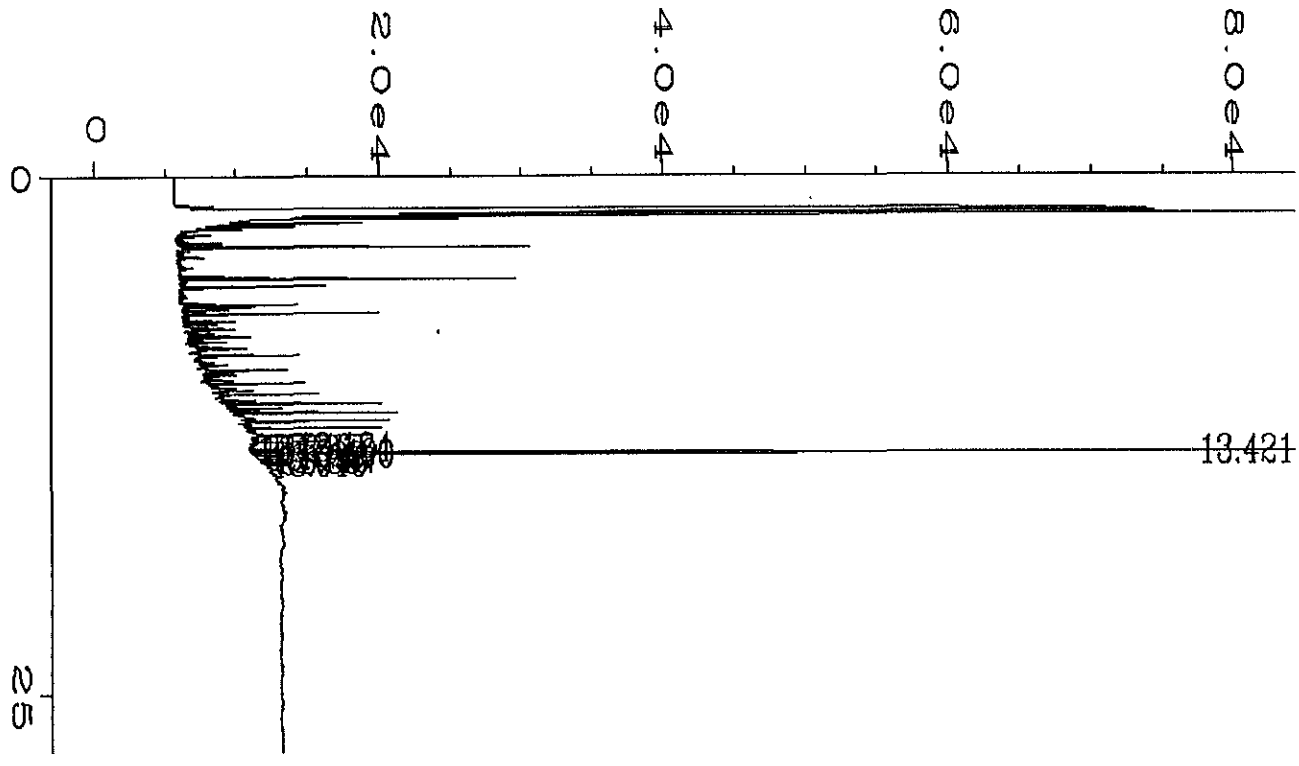
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\005F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 100 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:08 AM
Report Created on: 26 Jun 92 12:19 PM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\005F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.229	11092	9785	BV	0.019	0.3047
2	2.257	6533	8320	VV	0.013	0.1795
3	2.300	4388	5756	PV	0.023	0.1206
4	2.408	8325	6674	PV	0.018	0.2287
5	2.433	1240	1514	VV	0.014	0.0341
6	3.246	5662	24261	PV +	0.000	0.1555
7	5.596	106388	23257	PV +	0.000	2.9227
8	9.598	419616	14177	PV +	0.000	11.5276
9	12.499	203545	11071	VV +	0.000	5.5917
10	13.499	1078736	544421	VV +	0.000	29.6348
11	17.519	1384216	3588	VVA	6.430	38.0269
12	24.439	410359	1114	VB +	0.000	11.2733

Total area = 3640100



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\005R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 100 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:08 AM
Report Created on: 26 Jun 92 12:19 PM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\005R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.184	3074	3290	PV	0.015	0.3388
2	13.240	796	444	PV	0.026	0.0877
3	13.291	1074	695	VV	0.023	0.1184
4	13.421	881988	553914	VV	0.024	97.2107
5	13.490	10226	2953	VV	0.045	1.1271
6	13.629	1491	650	VV	0.038	0.1643
7	13.746	3434	831	VV	0.053	0.3784
8	13.807	4581	1319	VV	0.045	0.5049
9	13.919	631	433	VV	0.028	0.0695

Total area = 907294

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\005F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 5	
Sample Name	: 100 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 02:08 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:19 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
176.3976	>13.0		<15	500000			
		881988					
Gasoline	Ret Time	Area	Ret Time	m	b		
87.672505	>2.5		<7.2	0.000586	22		
		112050					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
26.72476	>4		<9	0.00027	-2		
		106388					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
107.8824703	>7.2		<14	0.000127	4		
		819909					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
43.7802072	>13		<21	9.98E-05	-114		
		1580964					

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24.439

Area Percent Report

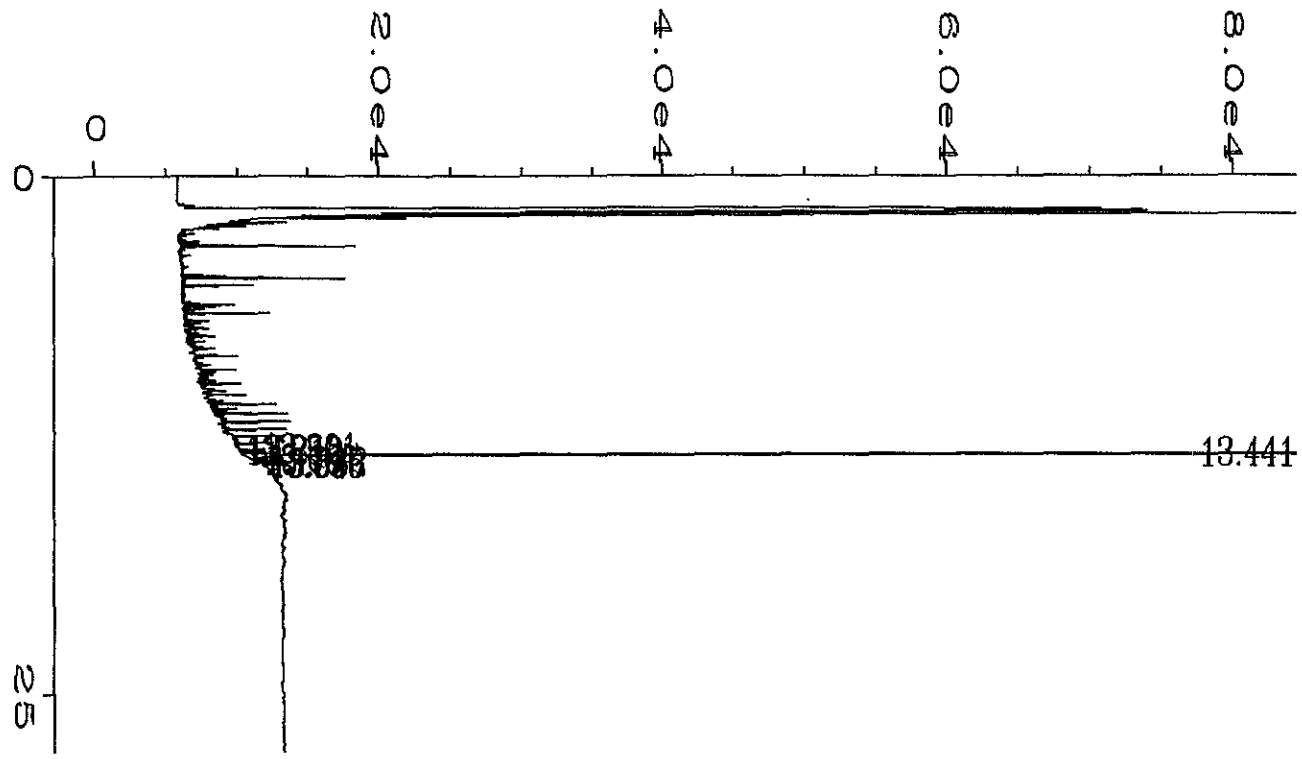
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\006F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 50 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:46 AM
Report Created on: 26 Jun 92 12:20 PM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\006F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.226	4963	4268	BV	0.019	0.1400
2	2.253	2896	3790	VV	0.013	0.0817
3	2.297	1954	2603	PV	0.022	0.0551
4	2.405	3755	2992	PV	0.019	0.1059
5	2.430	505	654	VV	0.013	0.0142
6	5.596	52090	11338	PV +	0.000	1.4692
7	9.598	246611	6761	PVA	0.608	6.9556
8	12.499	135736	5699	VV +	0.000	3.8284
9	13.499	1097127	530584	VV +	0.000	30.9442
10	17.519	1993521	5127	VB +	0.000	56.2268
11	24.439	6346	103	BB +	0.000	0.1790

Total area = 3545502



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\006R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 50 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:46 AM
Report Created on: 26 Jun 92 12:20 PM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\006R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.201	1693	1621	VV	0.016	0.1863
2	13.259	426	344	PV	0.021	0.0469
3	13.310	540	432	PV	0.027	0.0594
4	13.441	896156	538769	PV	0.026	98.6093
5	13.657	4643	684	VV	0.085	0.5109
6	13.767	1437	437	VV	0.042	0.1581
7	13.832	1892	812	VV	0.037	0.2082
8	13.899	1419	440	VV	0.046	0.1561
9	13.945	588	403	VV	0.029	0.0647

Total area = 908794

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\006F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 6	
Sample Name	: 50 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 02:46 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:20 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
179.2312	>13.0		<15	500000			
		896156					
Gasoline	Ret Time	Area	Ret Time	m	b		
52.529949	>2.5		<7.2	0.000586	22		
		52090					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
12.0643	>4		<9	0.00027	-2		
		52090					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
77.9063906	>7.2		<14	0.000127	4		
		583318					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
105.0103016	>13		<21	9.98E-05	-114		
		2194492					

C:\HPCHEM\1\DATA\06-23-02.C\007F1001.D
4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
5.596
12.499
13.499
17.519
24.439

Area Percent Report

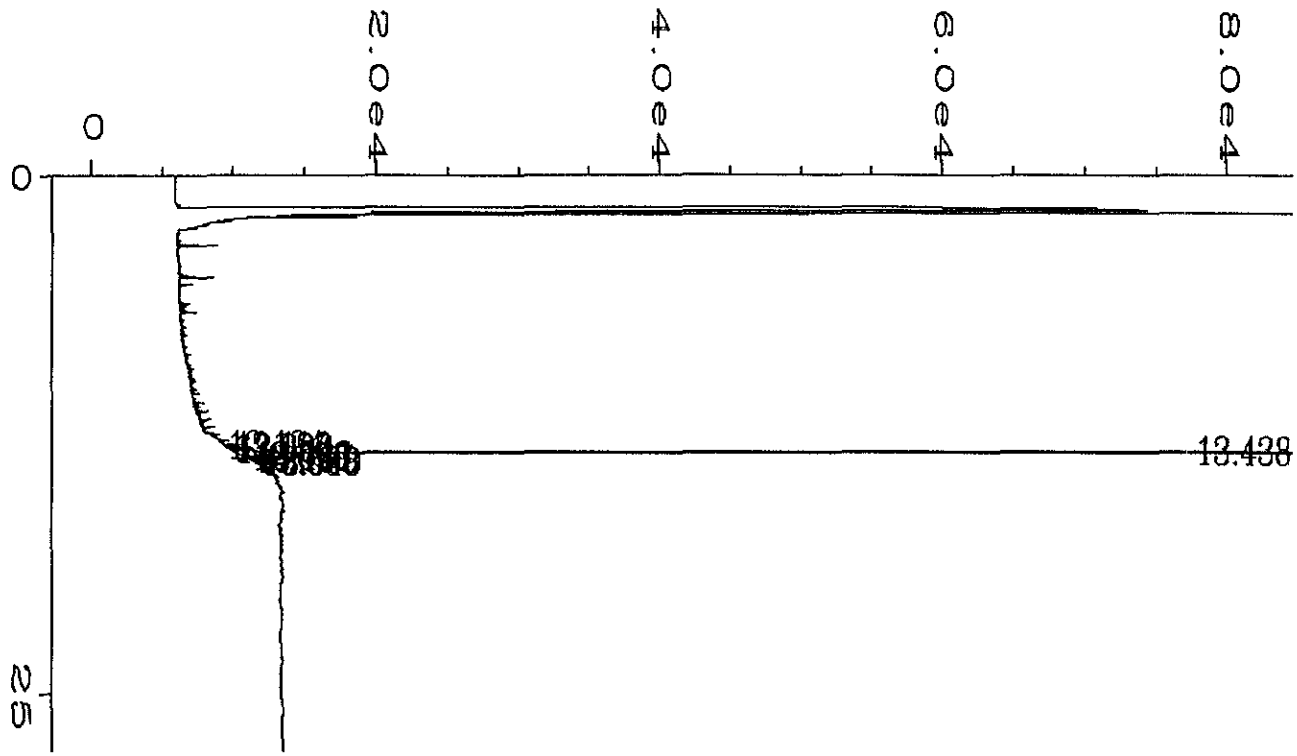
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\007F1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 10 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 03:23 AM
Report Created on: 26 Jun 92 12:21 PM

Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\007F1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.227	1067	868	BV	0.020	0.0353
2	2.256	477	683	VV	0.012	0.0158
3	2.300	141	464	PV	0.014	0.0047
4	2.408	370	520	VV	0.012	0.0123
5	5.596	14256	2355	BV +	0.000	0.4719
6	12.499	31911	1786	BV +	0.000	1.0563
7	13.499	1006493	507736	VV +	0.000	33.3162
8	17.519	1499314	3891	VV +	0.000	49.6292
9	24.439	467005	1217	VB +	0.000	15.4584

Total area = 3021035



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\007R1001.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 10 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 03:23 AM
Report Created on: 26 Jun 92 12:21 PM
Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\007R1001.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.124	377	156	PV	0.033	0.0430
2	13.198	654	475	VV	0.020	0.0745
3	13.256	358	335	PV	0.018	0.0409
4	13.306	481	424	PV	0.024	0.0548
5	13.438	863470	525029	PV	0.025	98.4771
6	13.593	2615	852	VV	0.051	0.2983
7	13.649	1430	649	VV	0.030	0.1631
8	13.690	686	383	VV	0.030	0.0782
9	13.767	1435	444	VV	0.054	0.1637
10	13.829	2637	633	VV	0.054	0.3008
11	13.898	1379	515	VV	0.036	0.1572
12	13.940	1301	557	VBA	0.032	0.1484

Total area = 876824

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\007F1001.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 7	
Sample Name	: 10 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 10	
Acquired on	: 24 Jun 92 03:23 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:21 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
172.694	>13.0		<15	500000			
		863470					
Gasoline	Ret Time	Area	Ret Time	m	b		
30.3554416	>2.5		<7.2	0.000586	22		
		14256					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
1.84912	>4		<9	0.00027	-2		
		14256					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
26.1641378	>7.2		<14	0.000127	4		
		174934					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
49.9052326	>13		<21	9.98E-05	-114		
		1642337					

C:\HPCHEM\1\DATA\06-23-92.C\021F1101.D
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3.0e4
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25
5.596
9.598
12.409
13.499
17.519
24.439

Area Percent Report

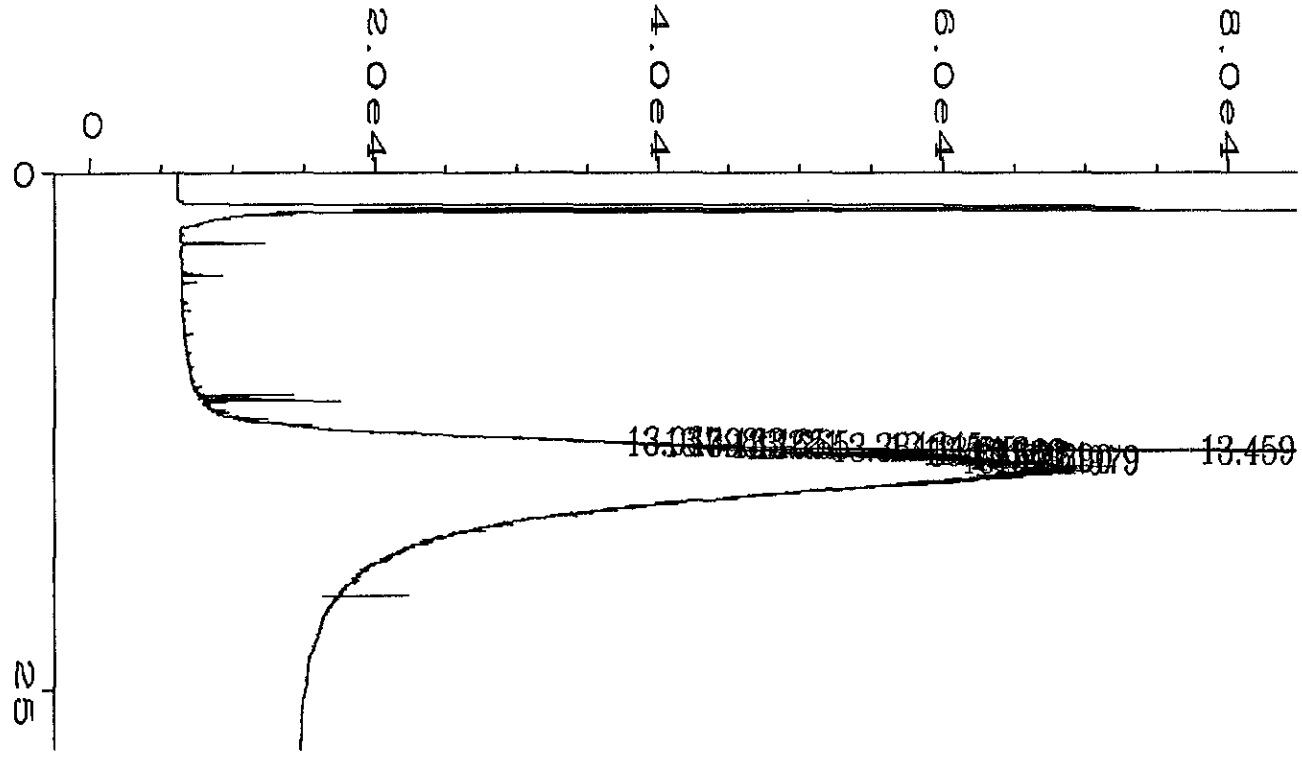
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\021F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1000 ppm MO
Run Time Bar Code:
Acquired on : 24 Jun 92 04:02 AM
Report Created on: 26 Jun 92 12:22 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\021F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	7586	2762	PV +	0.000	0.0523
2	9.598	7559	9914	PV +	0.000	0.0521
3	12.499	749085	26051	VV +	0.000	5.1601
4	13.499	3486776	551390	VV +	0.000	24.0190
5	17.519	9495054	60603	VVA	2.611	65.4076
6	24.439	770684	3303	VB +	0.000	5.3089

Total area = 1.45167E+007



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\021R1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1000 ppm MO
Run Time Bar Code:
Acquired on : 24 Jun 92 04:02 AM
Report Created on: 26 Jun 92 12:22 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\021R1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.037	1670	1032	BV	0.025	0.1471
2	13.098	4864	2421	PV	0.033	0.4285
3	13.133	4431	3449	VV	0.021	0.3903
4	13.165	9004	5687	VV	0.024	0.7931
5	13.221	6887	5144	VV	0.020	0.6066
6	13.265	9201	4700	VV	0.030	0.8105
7	13.345	34273	12113	VV	0.038	3.0190
8	13.384	9840	7081	VV	0.023	0.8667
9	13.459	913572	529265	VV	0.028	80.4721
10	13.542	17530	10352	VV	0.025	1.5441
11	13.575	12417	8711	VV	0.021	1.0937
12	13.601	14326	8315	VV	0.025	1.2619
13	13.660	23858	9661	VV	0.039	2.1016
14	13.682	18548	9256	VV	0.033	1.6338
15	13.744	16738	7400	VV	0.033	1.4743
16	13.775	14199	7268	VV	0.033	1.2507
17	13.861	10469	6044	PV	0.025	0.9221
18	13.890	9982	6608	VV	0.023	0.8793
19	13.921	1446	1598	VV	0.015	0.1274
20	13.979	2011	3181	PV	0.011	0.1772

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\021F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 21	
Sample Name	: 1000 ppm MO				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 04:02 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:22 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
182.7144	>13.0		<15	500000			
		913572					
Gasoline	Ret Time	Area	Ret Time	m	b		
26.4461546	>2.5		<7.2	0.000586	22		
		7586					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
0.04822	>4		<9	0.00027	-2		
		7586					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
425.8917416	>7.2		<14	0.000127	4		
		3329848					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
1090.412148	>13		<21	9.98E-05	-114		
		12068258					

C:\HPCHEM\1\DATA\06-23-92.C\022F1101.D
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5.596
12.499
13.109
17.519
24.439

Area Percent Report

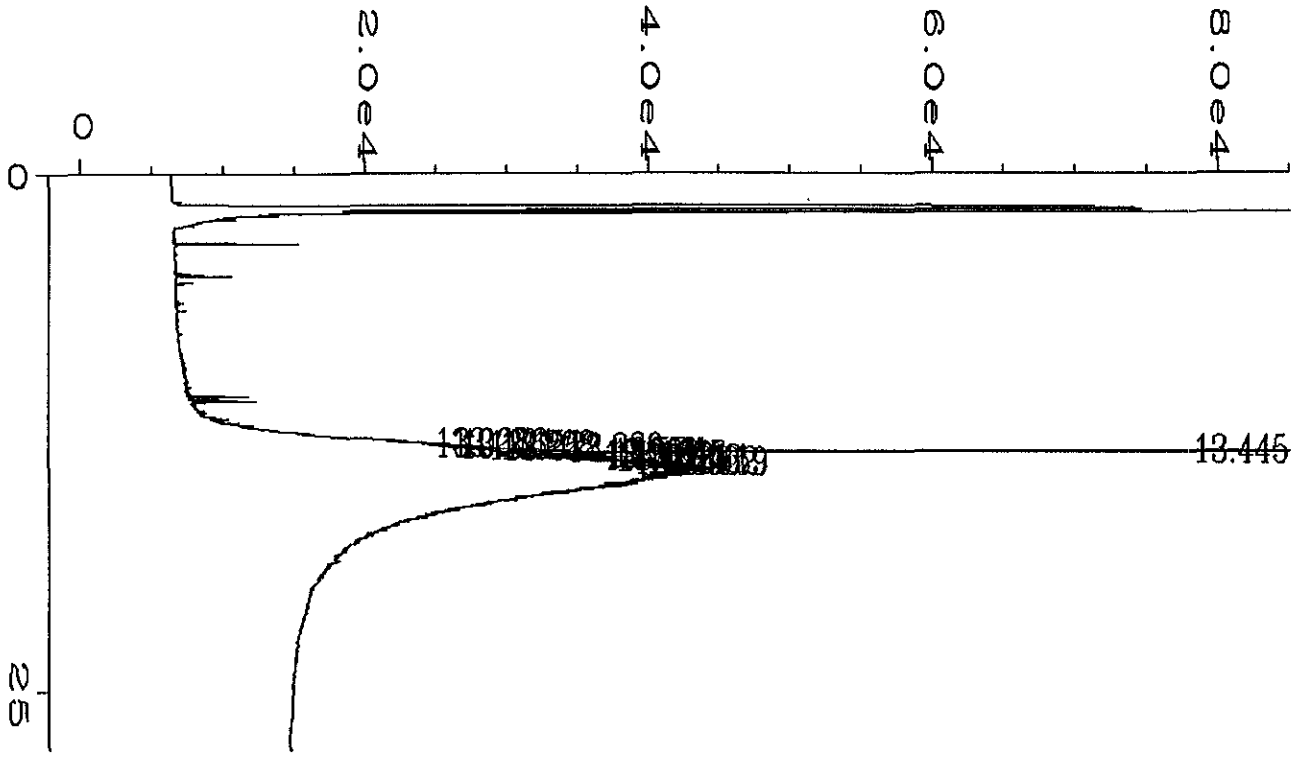
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\022F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 04:38 AM
Report Created on: 26 Jun 92 12:23 PM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\022F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.223	1625	1688	BV	0.022	0.0179
2	5.596	11659	3835	PB +	0.000	0.1287
3	12.499	396329	15241	VV +	0.000	4.3733
4	13.499	2358303	555515	VV +	0.000	26.0225
5	17.519	5659513	32815	VV +	0.000	62.4495
6	24.439	635120	2407	VB +	0.000	7.0082

Total area = 9062548



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\022R1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 04:38 AM
Report Created on: 26 Jun 92 12:23 PM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

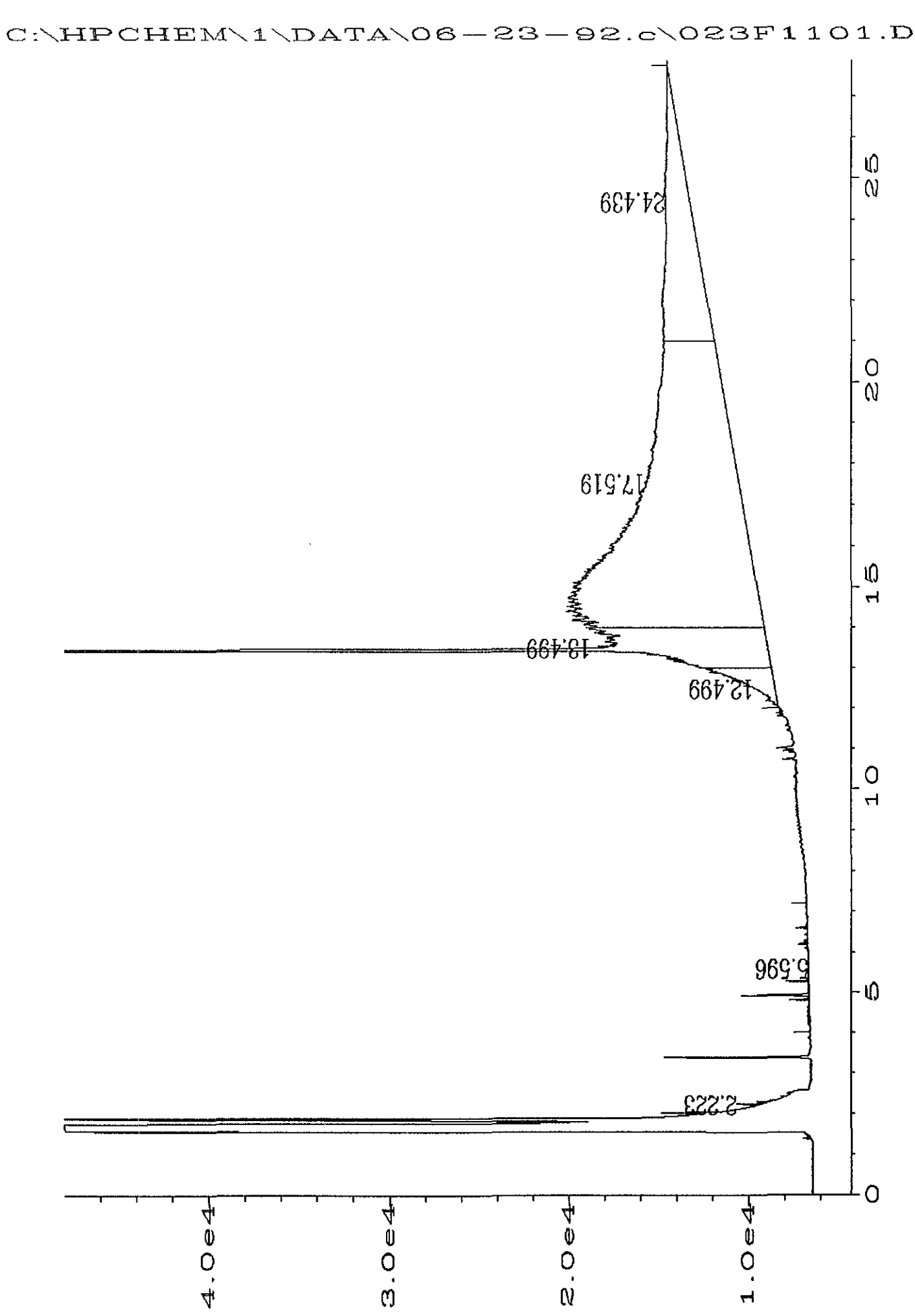
Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\022R1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.027	635	807	BV	0.013	0.0609
2	13.086	2689	1319	PV	0.034	0.2575
3	13.121	2330	1365	VV	0.024	0.2232
4	13.152	4927	2894	VV	0.026	0.4718
5	13.208	3527	2866	VV	0.018	0.3377
6	13.252	3893	2456	VV	0.026	0.3728
7	13.330	22682	5826	VV	0.051	2.1720
8	13.445	922426	556009	VV	0.025	88.3309
9	13.524	10668	5983	VV	0.026	1.0216
10	13.557	7103	5088	VV	0.023	0.6801
11	13.581	6259	4626	VV	0.020	0.5994
12	13.646	15870	5589	VV	0.040	1.5197
13	13.665	7785	5158	VV	0.025	0.7455
14	13.701	2727	2703	VV	0.017	0.2611
15	13.725	4709	3022	VV	0.024	0.4509
16	13.753	6784	2890	VV	0.033	0.6496
17	13.843	6754	3362	PV	0.033	0.6468
18	13.871	5989	3542	VV	0.026	0.5735
19	13.924	768	918	VV	0.014	0.0736
20	13.959	2992	2752	PV	0.021	0.2865

21	13.992	2768	949	VBA	0.049	0.2650

Total area = 1044284

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\022F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 22	
Sample Name	: 500 PPM MO				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 04:38 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:23 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
184.4852	>13.0		<15	500000			
		922426					
Gasoline	Ret Time	Area	Ret Time	m	b		
28.8333399	>2.5		<7.2	0.000586	22		
		11659					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
1.14793	>4		<9	0.00027	-2		
		11659					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
236.1405002	>7.2		<14	0.000127	4		
		1832206					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
594.119922	>13		<21	9.98E-05	-114		
		7095390					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12.499
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15
20
25
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3.0e4
2.0e4
1.0e4

Area Percent Report

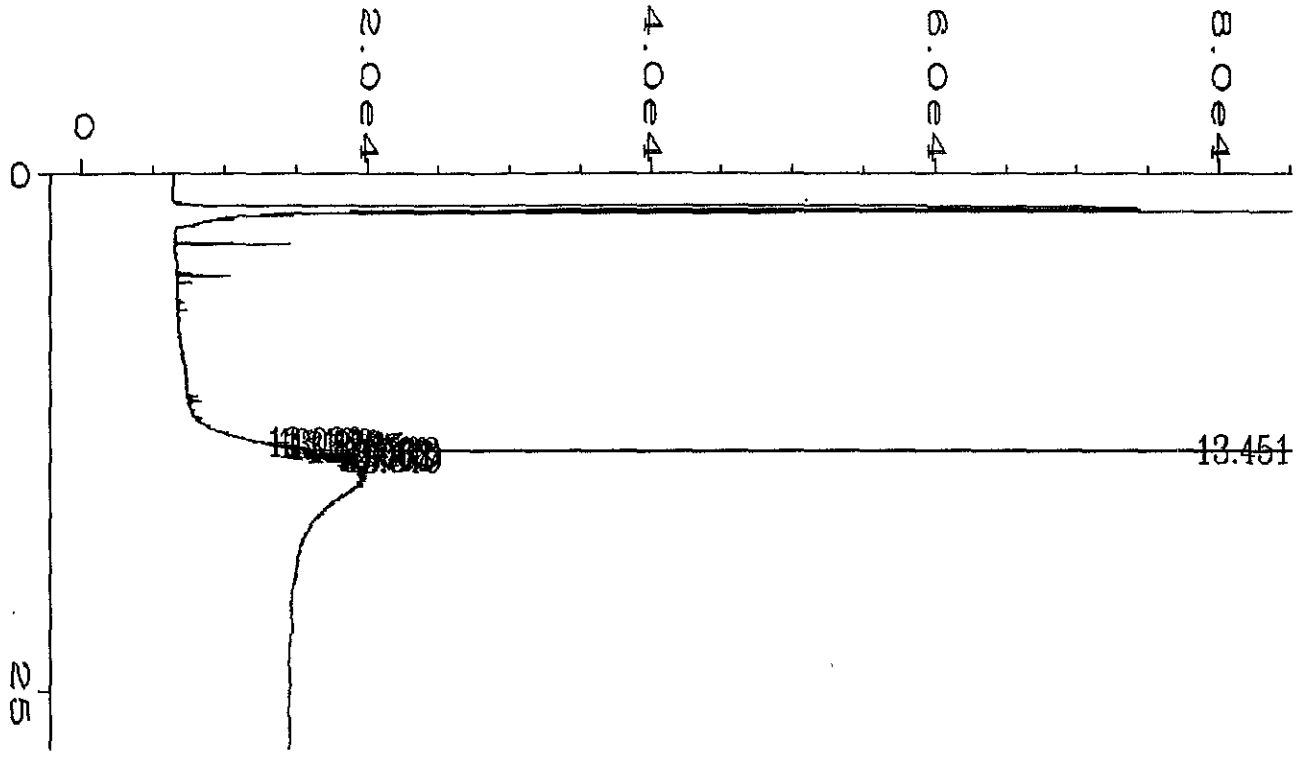
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\023F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 100 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 05:15 AM
Report Created on: 26 Jun 92 12:23 PM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\023F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.223	1228	1401	BV	0.020	0.0273
2	5.596	14024	3666	BB +	0.000	0.3117
3	12.499	86004	4058	PV +	0.000	1.9113
4	13.499	1325862	528134	VV +	0.000	29.4659
5	17.519	2514381	9529	VV +	0.000	55.8794
6	24.439	558154	1527	VB +	0.000	12.4044

Total area = 4499653



Area Percent Report

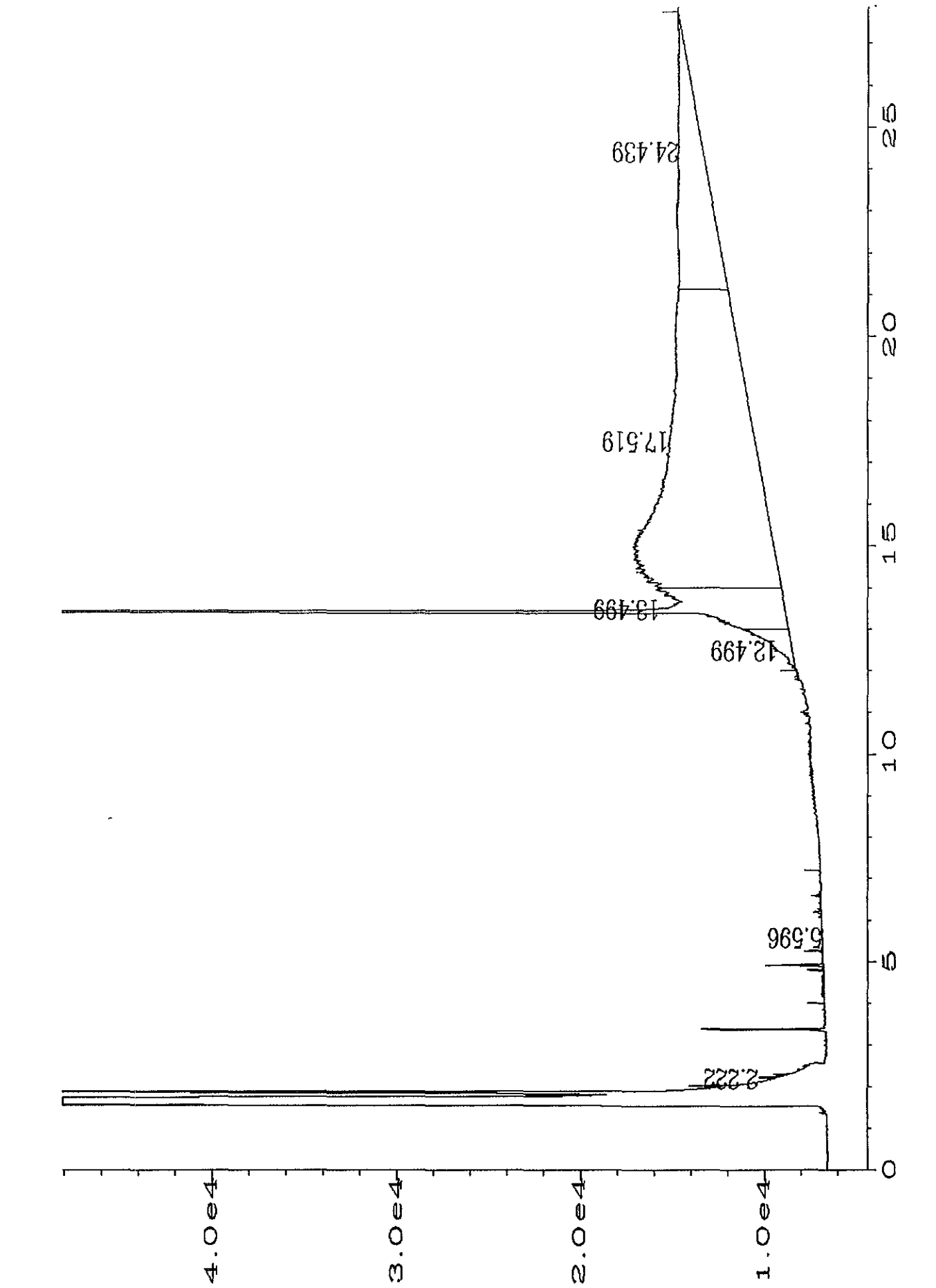
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\023R1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 100 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 05:15 AM
Report Created on: 26 Jun 92 12:24 PM
Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\023R1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.029	196	208	BV	0.016	0.0209
2	13.123	1316	383	PV	0.057	0.1407
3	13.156	1048	710	VV	0.023	0.1120
4	13.211	879	777	VV	0.017	0.0940
5	13.258	889	465	VV	0.028	0.0950
6	13.333	2344	1156	VV	0.033	0.2506
7	13.375	2809	1315	VV	0.036	0.3003
8	13.451	900586	540391	VV	0.026	96.2741
9	13.528	4880	2746	VV	0.026	0.5216
10	13.562	2638	1873	VV	0.023	0.2820
11	13.587	2462	1750	VV	0.020	0.2632
12	13.652	5352	1664	VV	0.054	0.5721
13	13.671	2711	1529	VV	0.030	0.2898
14	13.731	2388	1099	VV	0.029	0.2552
15	13.763	1953	927	VV	0.031	0.2088
16	13.847	1344	908	PV	0.025	0.1437
17	13.879	1645	848	VV	0.032	0.1759

Total area = 935439

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\023F1101.D						
Operator	: SJD			Page Number	: 1		
Instrument	: ANALYZER1			Vial Number	: 23		
Sample Name	: 100 PPM MO			Injection Number	: 1		
Run Time Bar Code:				Sequence Line	: 11		
Acquired on	: 24 Jun 92 05:15 AM			Instrument Method:	TPHMO.MTH		
Report Created on:	26 Jun 92 12:23 PM			Analysis Method	: TPHMO.MTH		
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
180.1172	>13.0		<15	500000			
		900586					
Gasoline	Ret Time	Area	Ret Time	m	b		
30.2194664	>2.5		<7.2	0.000586	22		
		14024					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
1.78648	>4		<9	0.00027	-2		
		14024					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
68.779176	>7.2		<14	0.000127	4		
		511280					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
179.3777686	>13		<21	9.98E-05	-114		
		2939657					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Area Percent Report

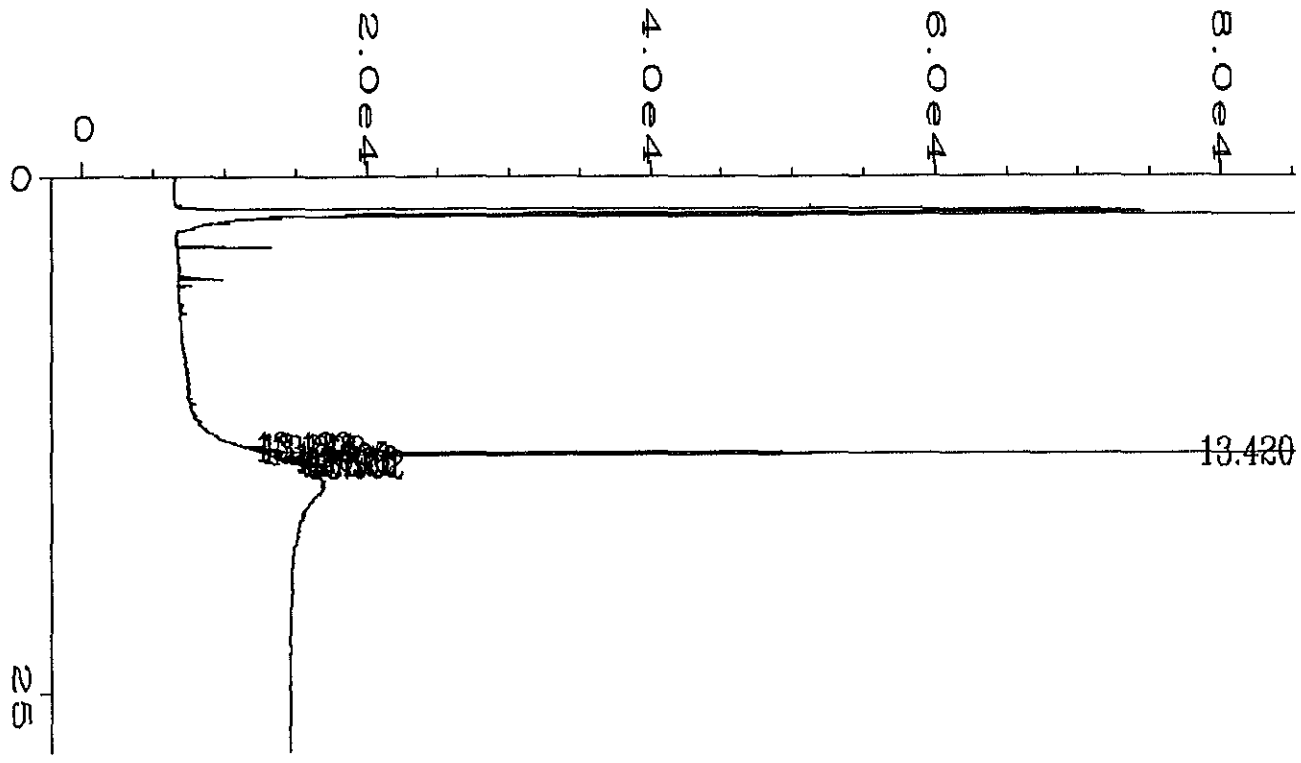
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\024F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 50 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 05:51 AM
Report Created on: 26 Jun 92 12:24 PM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\024F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.222	983	1139	BV	0.014	0.0255
2	5.596	13402	3075	BB +	0.000	0.3474
3	12.499	56234	2635	PV +	0.000	1.4576
4	13.499	1176723	534097	VV +	0.000	30.5002
5	17.519	2092405	6543	VVA	5.330	54.2343
6	24.439	518338	1403	VB +	0.000	13.4351

Total area = 3858084



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\024R1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 50 PPM MO
Run Time Bar Code:
Acquired on : 24 Jun 92 05:51 AM
Report Created on: 26 Jun 92 12:24 PM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\024R1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.132	1031	357	BV	0.041	0.1139
2	13.184	579	426	VV	0.021	0.0640
3	13.243	582	261	VV	0.036	0.0642
4	13.302	1096	531	VV	0.034	0.1211
5	13.420	892084	542072	VV	0.026	98.5465
6	13.605	2757	984	VV	0.039	0.3045
7	13.736	2517	481	VV	0.069	0.2780
8	13.810	1456	619	VV	0.032	0.1609
9	13.838	753	486	VV	0.026	0.0832
10	13.871	236	221	VV	0.018	0.0261
11	13.921	931	507	VV	0.027	0.1029
12	13.952	1220	447	VBA	0.045	0.1348

Total area = 905241

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\024F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 24	
Sample Name	: 50 PPM MO				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 05:51 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:24 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
178.4168	>13.0		<15	500000			
		892084					
Gasoline	Ret Time	Area	Ret Time	m	b		
29.8549122	>2.5		<7.2	0.000586	22		
		13402					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
1.61854	>4		<9	0.00027	-2		
		13402					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
47.1886091	>7.2		<14	0.000127	4		
		340873					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
123.2289912	>13		<21	9.98E-05	-114		
		2377044					

C:\HPCHEM\1\DATA\06-23-92.c\025F1101.D
4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
5.596
12.499
13.499
17.519
24.439

Area Percent Report

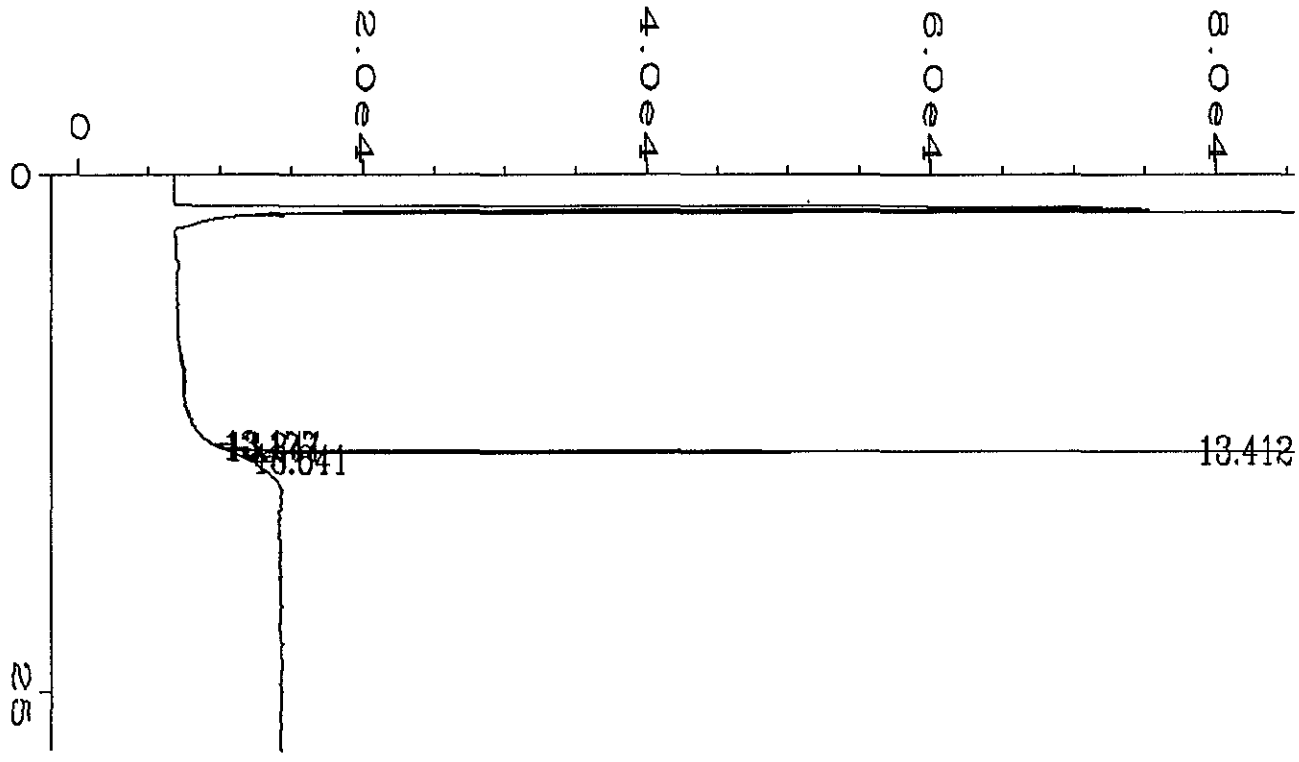
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\025F1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : BLANK
Run Time Bar Code:
Acquired on : 24 Jun 92 06:28 AM
Report Created on: 26 Jun 92 12:25 PM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\025F1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.596	6845	116	BB +	0.000	0.2163
2	12.499	21023	1128	PV +	0.000	0.6644
3	13.499	940392	471928	VV +	0.000	29.7190
4	17.519	1672605	4206	VVA	6.627	52.8590
5	24.439	523413	1472	VB +	0.000	16.5413

Total area = 3164278



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Area Percent Report

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Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\025R1101.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : BLANK
Run Time Bar Code:
Acquired on : 24 Jun 92 06:28 AM
Report Created on: 26 Jun 92 12:25 PM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\025R1101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.177	997	247	BV	0.055	0.1251
2	13.241	552	235	VV	0.039	0.0693
3	13.412	792936	491186	VV	0.026	99.5334
4	13.841	2168	92	VV	0.284	0.2722

Total area = 796653

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Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\025F1101.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 25	
Sample Name	: BLANK				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 11	
Acquired on	: 24 Jun 92 06:28 AM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:25 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
158.5872	>13.0		<15	500000			
		792936					
Gasoline	Ret Time	Area	Ret Time	m	b		
26.0118545	>2.5		<7.2	0.000586	22		
		6845					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
-0.15185	>4		<9	0.00027	-2		
		6845					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
25.3462893	>7.2		<14	0.000127	4		
		168479					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
67.6420878	>13		<21	9.98E-05	-114		
		1820061					

C:\HPCHEM\1\DATA\06-23-92.c\003F1201.D
4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
12.408
13.409
17.519

Area Percent Report

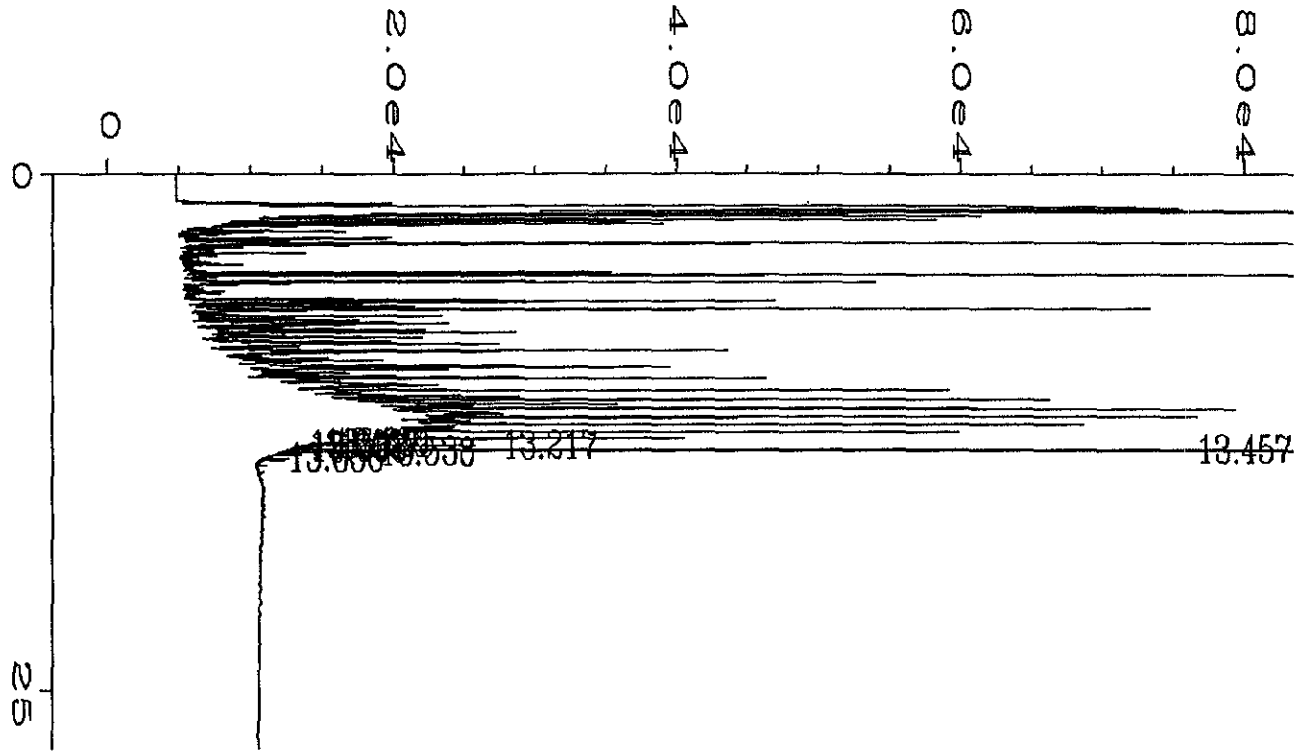
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\003F1201.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:35 PM
Report Created on: 26 Jun 92 12:26 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 12
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\003F1201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.241	27386	33700	BV	0.014	0.1344
2	2.284	23044	28466	PV	0.013	0.1131
3	2.328	409	519	PV	0.013	0.0020
4	2.391	41816	32837	VV	0.023	0.2052
5	2.416	6156	7387	VV	0.014	0.0302
6	2.488	12023	16268	PVA	0.013	0.0590
7	3.246	206637	109412	VV +	0.000	1.0140
8	5.596	1110986	109798	VV +	0.000	5.4516
9	9.598	5317734	79720	VV +	0.000	26.0939
10	12.499	1761303	73059	VVA	0.402	8.6427
11	13.499	2069545	506440	VVA	0.068	10.1552
12	17.519	9802160	23582	VB +	0.000	48.0988

Total area = 2.03792E+007



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\003R1201.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 500 PPM g&d
Run Time Bar Code:
Acquired on : 24 Jun 92 02:35 PM
Report Created on: 26 Jun 92 12:26 PM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 12
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\003R1201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.095	1116	869	PV	0.019	0.1264
2	13.129	1134	1007	VV	0.017	0.1284
3	13.167	1169	936	PV	0.021	0.1324
4	13.217	13851	14195	PV	0.016	1.5694
5	13.261	1405	778	PV	0.027	0.1592
6	13.338	3925	1322	VV	0.039	0.4447
7	13.457	844651	513482	PV	0.025	95.7036
8	13.538	12454	7081	VV	0.025	1.4111
9	13.858	2867	1802	PV	0.024	0.3248

Total area = 882570

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\003F1201.D						
Operator	: SJD				Page Number	: 1	
Instrument	: ANALYZER1				Vial Number	: 3	
Sample Name	: 500 PPM g&d				Injection Number	: 1	
Run Time Bar Code:					Sequence Line	: 12	
Acquired on	: 24 Jun 92 02:35 PM				Instrument Method:	TPHMO.MTH	
Report Created on:	26 Jun 92 12:26 PM				Analysis Method	: TPHMO.MTH	
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
168.9302	>13.0		<15	500000			
		844651					
Gasoline	Ret Time	Area	Ret Time	m	b		
794.2588403	>2.5		<7.2	0.000586	22		
		1317623					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
297.96622	>4		<9	0.00027	-2		
		1110986					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
1056.108058	>7.2		<14	0.000127	4		
		8303931					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
986.4999892	>13		<21	9.98E-05	-114		
		11027054					

C:\HPCHEM\1\DATA\06-23-92.c\021F1301.D
4.0e4
3.0e4
2.0e4
1.0e4
0
5
10
15
20
25
2.482
5.596
9.598
12.499
13.499
17.519
24.439

Area Percent Report

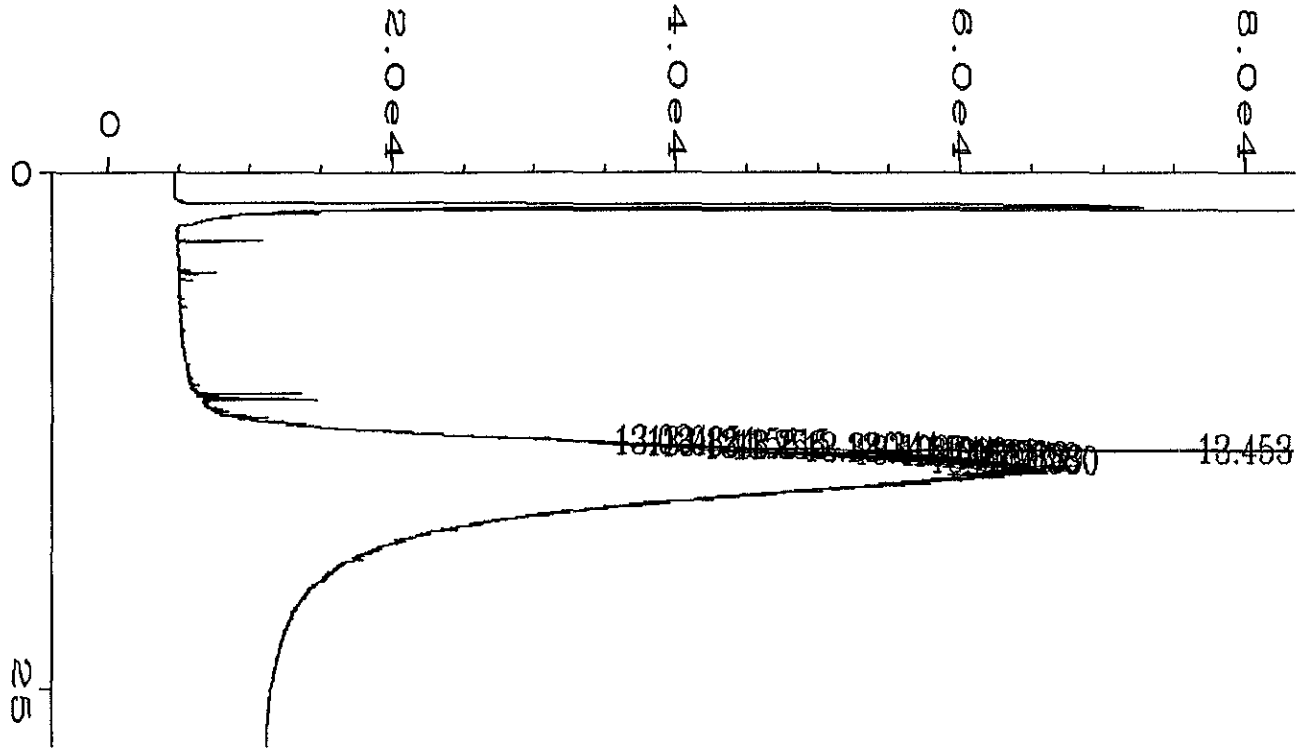
Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\021F1301.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1000 ppm MO
Run Time Bar Code:
Acquired on : 24 Jun 92 03:13 PM
Report Created on: 26 Jun 92 12:27 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 13
Instrument Method: TPHMO.MTH
Analysis Method : TPHMO.MTH

Sig. 1 in C:\HPCHEM\1\DATA\06-23-92.c\021F1301.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	2.482	106	212	PVA	0.010	0.0008
2	5.596	8920	2590	BV +	0.000	0.0633
3	9.598	85892	8709	PV +	0.000	0.6092
4	12.499	780799	26838	VV +	0.000	5.5381
5	13.499	3399120	541512	VV +	0.000	24.1093
6	17.519	9198370	58961	VVA	2.600	65.2422
7	24.439	625600	3007	VB +	0.000	4.4373

Total area = 1.40988E+007



Area Percent Report

Data File Name : C:\HPCHEM\1\DATA\06-23-92.c\021R1301.D
Operator : SJD
Instrument : ANALYZER1
Sample Name : 1000 ppm MO
Run Time Bar Code:
Acquired on : 24 Jun 92 03:13 PM
Report Created on: 26 Jun 92 12:27 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 13
Instrument Method: TPHMO.MTH
Analysis Method : ISTND.MTH

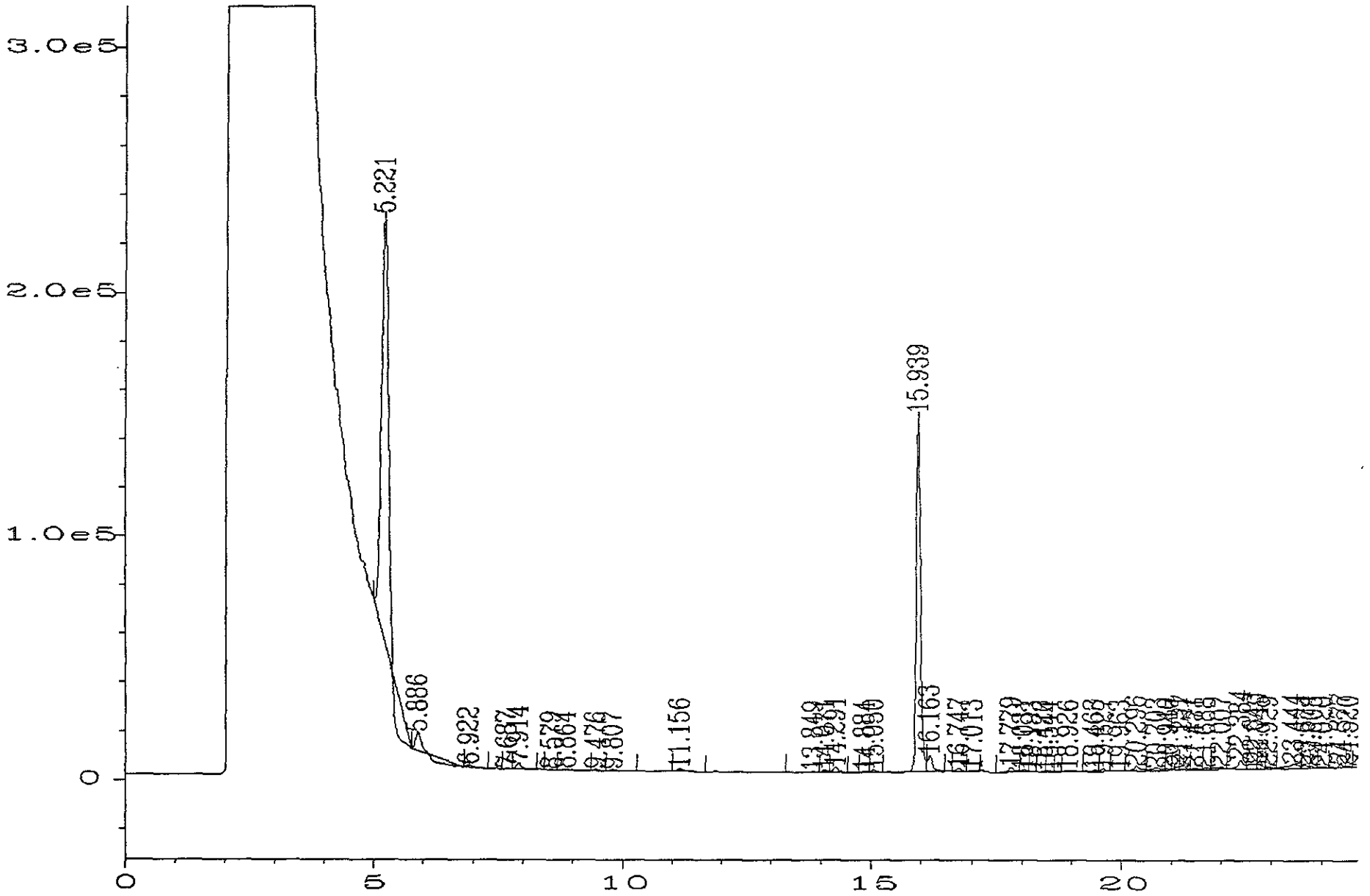
Sig. 2 in C:\HPCHEM\1\DATA\06-23-92.c\021R1301.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	13.024	1998	1547	BV	0.019	0.1820
2	13.085	4810	3018	PV	0.027	0.4381
3	13.124	5425	3019	VV	0.030	0.4941
4	13.156	10643	5303	VV	0.029	0.9693
5	13.215	7008	6089	VV	0.018	0.6382
6	13.256	8887	4616	VV	0.028	0.8093
7	13.341	33497	10590	VV	0.043	3.0506
8	13.380	6784	6768	VV	0.017	0.6179
9	13.453	857296	515967	VV	0.025	78.0750
10	13.509	7638	7072	VV	0.018	0.6956
11	13.541	17375	10148	VV	0.024	1.5824
12	13.574	11898	8572	VV	0.023	1.0836
13	13.603	13335	8746	VV	0.025	1.2144
14	13.663	24248	9409	VV	0.038	2.2083
15	13.684	17377	8619	VV	0.034	1.5825
16	13.753	14120	7694	VV	0.031	1.2859
17	13.778	21091	8418	VV	0.036	1.9208
18	13.858	14952	7407	VV	0.034	1.3617
19	13.889	11771	6792	VV	0.026	1.0720
20	13.950	692	1016	PV	0.011	0.0630

21	13.980	7197	3801	PBA	0.028	0.6554

Total area = 1098042

Last update on	6/22/92	BY bbs					
Data File Name	: C:\HPCHEM\1\DATA\06-23-92.c\021F1301.D						
Operator	: SJD			Page Number	: 1		
Instrument	: ANALYZER1			Vial Number	: 21		
Sample Name	: 1000 ppm MO			Injection Number	: 1		
Run Time Bar Code:				Sequence Line	: 13		
Acquired on	: 24 Jun 92 03:13 PM			Instrument Method:	TPHMO.MTH		
Report Created on:	26 Jun 92 12:27 PM			Analysis Method	: TPHMO.MTH		
IS % Recovery	Ret Time	Area	Ret Time	Avg. Area FID			
171.4592	>13.0		<15	500000			
		857296					
Gasoline	Ret Time	Area	Ret Time	m	b		
27.228012	>2.5		<7.2	0.000586	22		
		8920					
Mineral Spirits	Ret Time	Area	Ret Time	m	b		
0.4084	>4		<9	0.00027	-2		
		8920					
Diesel (only)	Ret Time	Area-IS	Ret Time	m	b		
435.8588505	>7.2		<14	0.000127	4		
		3408515					
Motor Oil	Ret Time	Area-IS	Ret Time	m	b		
1057.671361	>13		<21	9.98E-05	-114		
		11740194					



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\023F0201.D

Area Percent Report

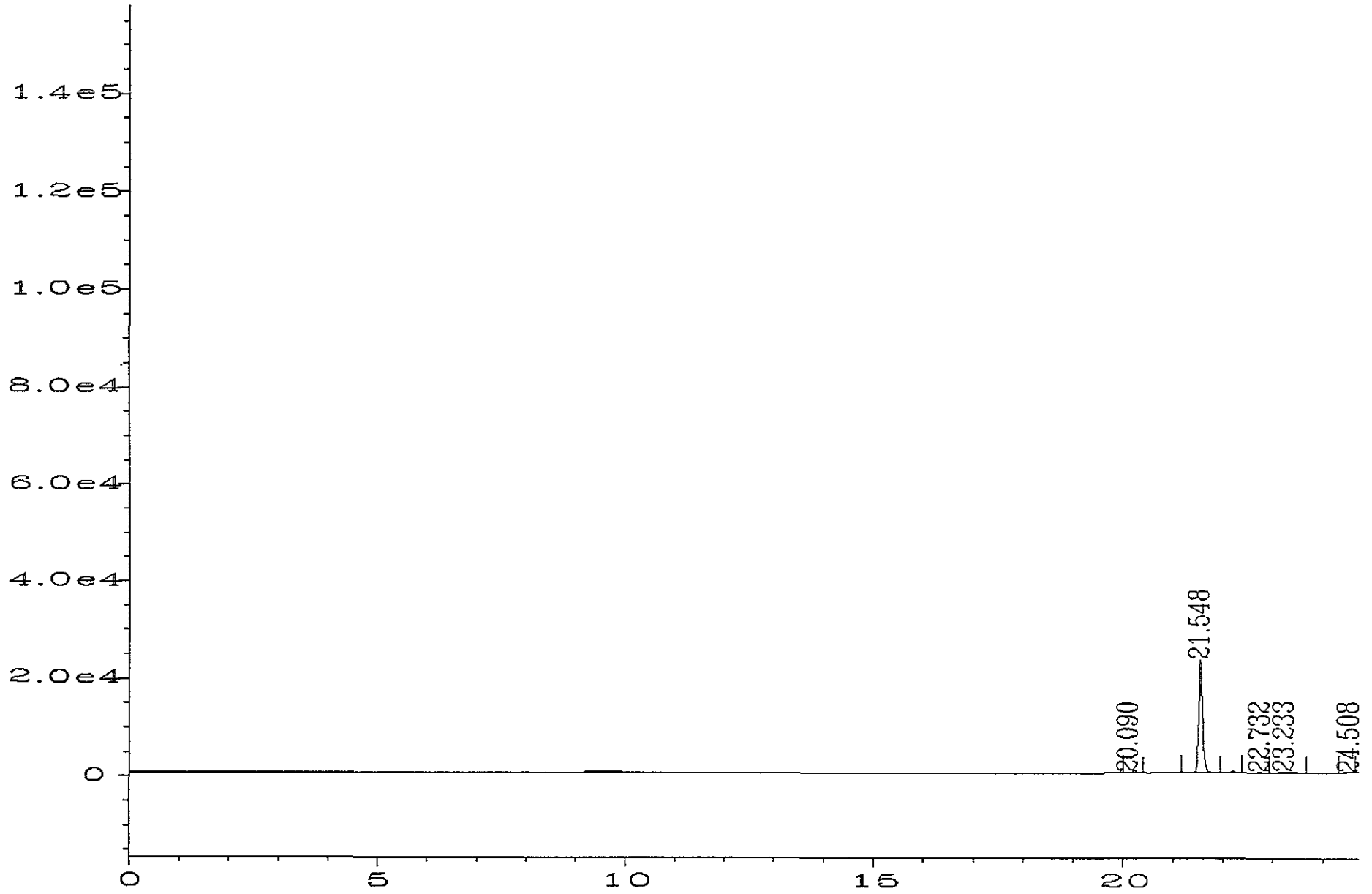
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\023F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30207-09comp mac
Run Time Bar Code:
Acquired on : 23 Jun 92 06:07 PM
Report Created on: 25 Jun 92 04:52 PM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\023F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.221	1446502	177274	BV	0.132	52.8836
2	5.886	3539	7745	PV	0.032	0.1294
3	6.922	5822	876	PV	0.107	0.2129
4	7.687	2236	275	PV	0.121	0.0818
5	7.914	20297	2580	VV	0.114	0.7421
6	8.579	1678	217	PV	0.114	0.0614
7	8.864	5213	582	PV	0.126	0.1906
8	9.476	3893	593	PV	0.102	0.1423
9	9.807	5351	568	PV	0.138	0.1956
10	11.156	9238	1031	PV	0.132	0.3378
11	13.849	1809	233	BV	0.111	0.0661
12	14.071	5022	826	PV	0.094	0.1836
13	14.291	13112	1998	VV	0.099	0.4794
14	14.884	2691	402	PV	0.099	0.0984
15	15.050	5747	907	VV	0.096	0.2101
16	15.939	873623	150109	PV	0.091	31.9393
17	16.163	48066	6409	VV	0.110	1.7573
18	16.747	8795	1148	VV	0.115	0.3216
19	17.013	2234	299	PV	0.110	0.0817
20	17.779	16070	1941	BV	0.121	0.5875
21	18.031	6124	881	VV	0.102	0.2239
22	18.193	1588	242	VV	0.096	0.0581
23	18.420	2924	380	VV	0.113	0.1069
24	18.544	2893	421	VV	0.101	0.1058
25	18.926	7259	591	VV	0.168	0.2654
26	19.463	5359	561	PV	0.132	0.1959
27	19.627	6343	978	VV	0.100	0.2319
28	19.963	2338	236	PV	0.141	0.0855
29	20.296	18500	1955	VV	0.131	0.6763
30	20.703	15493	1018	VV	0.200	0.5664
31	20.940	4394	683	VV	0.091	0.1606
32	21.131	8313	1305	VV	0.106	0.3039
33	21.227	14605	1688	VV	0.124	0.5339
34	21.471	8561	886	VV	0.141	0.3130
35	21.688	6470	767	VV	0.127	0.2365
36	22.007	12191	955	VV	0.172	0.4457
37	22.384	30871	3622	VV	0.118	1.1286
38	22.643	23272	2081	VV	0.152	0.8508
39	22.749	14658	2016	VV	0.113	0.5359
40	22.929	5994	720	VV	0.139	0.2191
41	23.444	28590	1730	VV	0.216	1.0452
42	23.674	9088	1092	VV	0.119	0.3322
43	23.808	3905	632	VV	0.103	0.1428
44	24.020	3104	350	VV	0.142	0.1135
45	24.377	9009	1203	PV	0.109	0.3294
46	24.520	2474	435	VV	0.089	0.0904

Total area = 2735259



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\023R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\023R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30207-09comp mac
Run Time Bar Code:
Acquired on : 23 Jun 92 06:07 PM
Report Created on: 25 Jun 92 04:53 PM

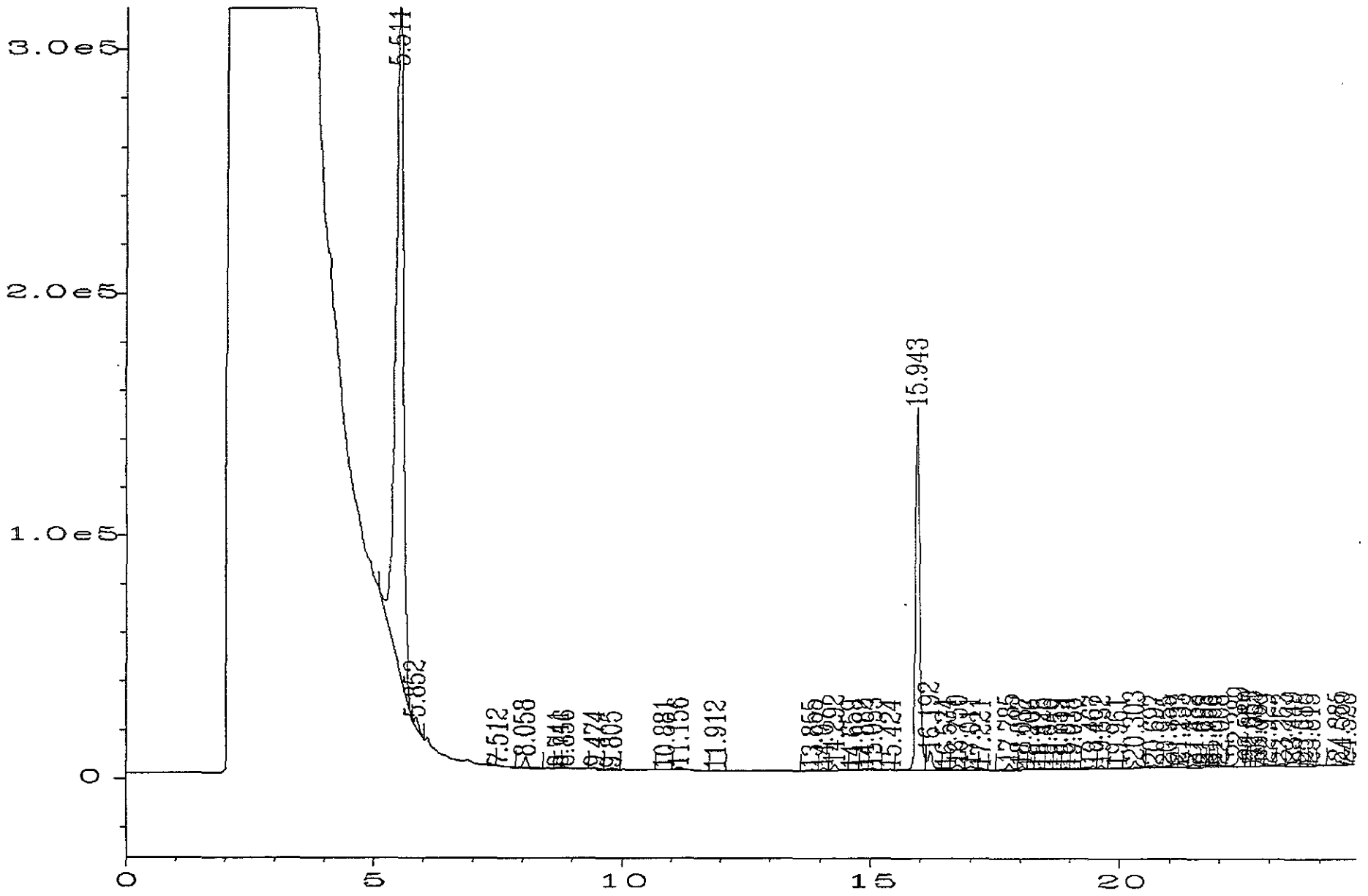
Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\023R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.090	1161	161	VB	0.106	0.8351
2	21.548	130294	23225	PV	0.087	93.7052
3	22.732	1725	148	PV	0.161	1.2403
4	23.233	5122	271	PV	0.267	3.6837
5	24.508	745	79	BBA	0.146	0.5357

Total area = 139046

Wash.	0.222226	1190363	-0.00967	139047
Benzene				
ppb	FID	Ret Time	PID	Ret Time
	-0.23901	7.687	10	
	1.061384	7.914	10	
	-0.4		10	
	-0.4		10	
	-0.4		10	
	-0.4		10	
Toluene				
ppb	FID	Ret Time	PID	Ret Time
	-0.5		-0.0658	
	-0.5		-0.0658	
	-0.5		-0.0658	
	-0.5		-0.0658	
	-0.5		-0.0658	
	-0.5		-0.0658	
Ethylbenzene				
ppb	FID	Ret Time	PID	Ret Time
	-0.08459	13.849	0.223	
	0.120404	14.071	0.223	
	-0.2		0.223	
	-0.2		0.223	
	-0.2		0.223	
	-0.2		0.223	
m,p-Xylenes				
ppb	FID	Ret Time	PID	Ret Time
	-0.38223	13.849	0.2773	
	-0.17307	14.071	0.2773	
	0.353591	14.291	0.2773	
	-0.5		0.2773	
	-0.5		0.2773	
	-0.5		0.2773	
o-Xylene				
ppb	FID	Ret Time	PID	Ret Time
	0.32119	14.884	0.2663	
	0.371034	15.05	0.2663	
	0.2773		0.2663	
	0.2773		0.2663	
	0.2773		0.2663	
	0.2773		0.2663	



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\024F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\024F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30210-12comp
Run Time Bar Code:
Acquired on : 23 Jun 92 06:53 PM
Report Created on: 25 Jun 92 04:54 PM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\024F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.511	3136670	286368	BV	0.163	68.0160
2	5.852	24503	4148	PV	0.095	0.5313
3	7.512	2047	243	PV	0.119	0.0444
4	8.058	26526	4565	PV	0.088	0.5752
5	8.741	2545	417	VV	0.092	0.0552
6	8.856	5341	611	VV	0.123	0.1158
7	9.474	4926	710	VV	0.106	0.1068
8	9.805	3886	524	PV	0.118	0.0843
9	10.881	1602	212	BV	0.116	0.0347
10	11.156	9098	1002	PB	0.140	0.1973
11	11.912	1283	187	BV	0.102	0.0278
12	13.855	4092	522	PV	0.120	0.0887
13	14.077	6272	983	VV	0.098	0.1360
14	14.292	16227	2361	VV	0.104	0.3519
15	14.659	1387	191	VV	0.108	0.0301
16	14.882	4315	642	VV	0.101	0.0936
17	15.053	6714	1014	VV	0.099	0.1456
18	15.424	3364	330	VV	0.148	0.0730
19	15.943	889520	150767	VV	0.092	19.2885
20	16.192	58175	7778	VV	0.108	1.2615
21	16.534	7447	843	VV	0.125	0.1615
22	16.750	21729	2052	VV	0.153	0.4712
23	17.011	14699	1386	VV	0.152	0.3187
24	17.221	4670	683	VV	0.103	0.1013
25	17.785	20339	2534	PV	0.116	0.4410
26	18.037	9629	1496	VV	0.098	0.2088
27	18.206	3100	440	VV	0.101	0.0672
28	18.425	6691	724	VV	0.127	0.1451
29	18.546	4111	546	VV	0.114	0.0892
30	18.759	2565	294	VV	0.119	0.0556
31	18.914	4358	670	VV	0.096	0.0945
32	19.038	2355	317	VV	0.110	0.0511
33	19.467	13039	1248	PV	0.141	0.2827
34	19.632	10356	1609	VV	0.100	0.2246
35	19.961	4450	380	VV	0.154	0.0965
36	20.303	30191	3136	VV	0.132	0.6547
37	20.697	17733	1181	VV	0.200	0.3845
38	20.955	5985	871	VV	0.097	0.1298
39	21.137	9625	1418	VV	0.097	0.2087
40	21.233	14597	1693	VV	0.122	0.3165
41	21.482	13413	1279	VV	0.152	0.2908
42	21.692	6569	1133	VV	0.097	0.1424
43	21.763	3759	1011	VV	0.062	0.0815
44	21.866	9141	1062	VV	0.111	0.1982
45	22.008	6489	928	VV	0.102	0.1407
46	22.389	37102	4372	VV	0.118	0.8045
47	22.589	12555	2275	VV	0.092	0.2722
48	22.655	13365	2338	VV	0.080	0.2898

49	22.751	16953	2159	VV	0.117	0.3676
50	22.929	9895	986	VV	0.132	0.2146
51	23.263	9254	1032	VV	0.127	0.2007
52	23.449	23493	1763	VV	0.181	0.5094
53	23.685	10151	1175	VV	0.122	0.2201
54	23.815	6663	931	VV	0.105	0.1445
55	24.385	12373	1637	PV	0.110	0.2683
56	24.528	4326	518	VBA	0.122	0.0938

Total area = 4611665

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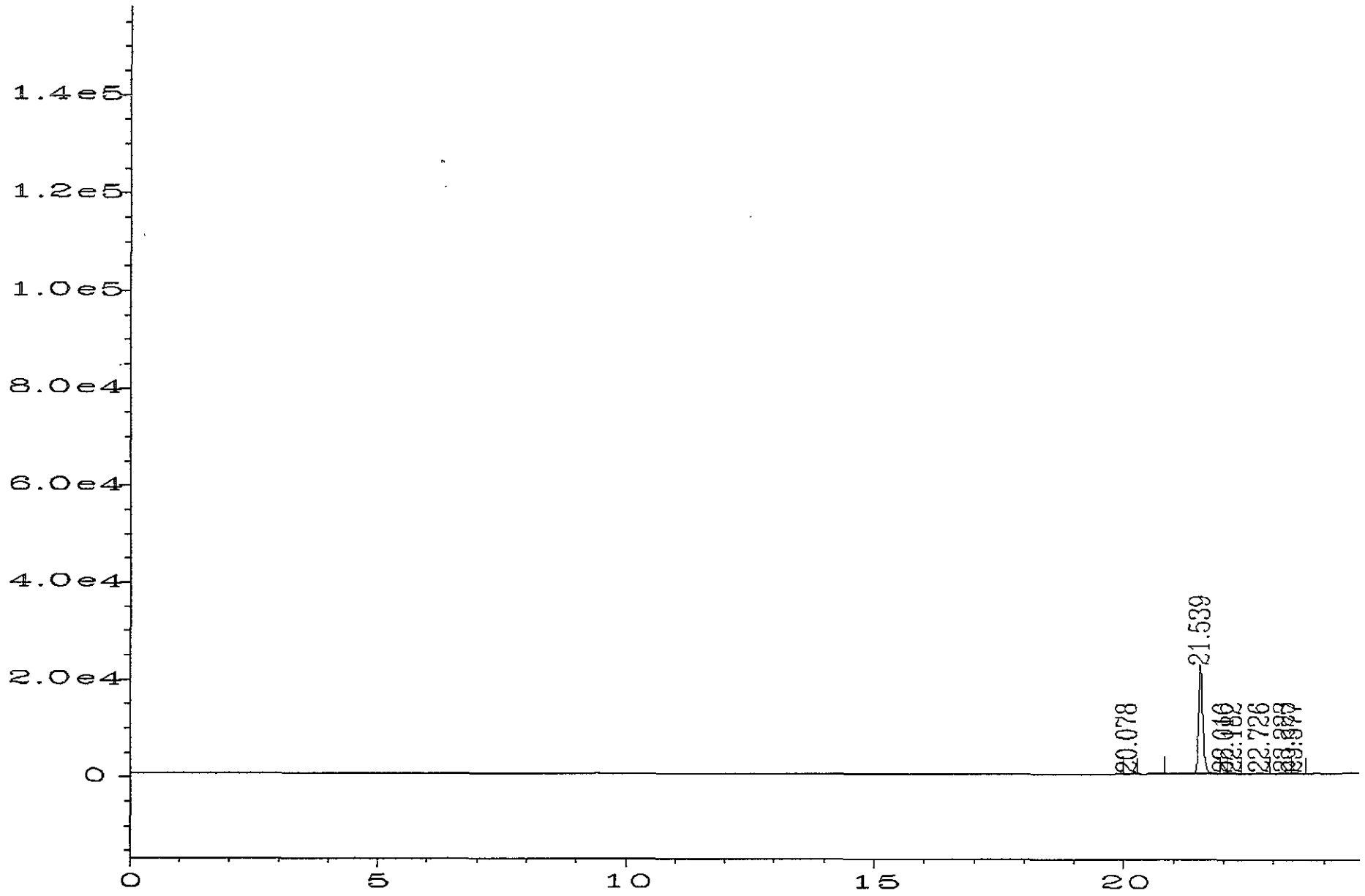


Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\024R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\024R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30210-12comp
Run Time Bar Code:
Acquired on : 23 Jun 92 06:53 PM
Report Created on: 25 Jun 92 04:55 PM

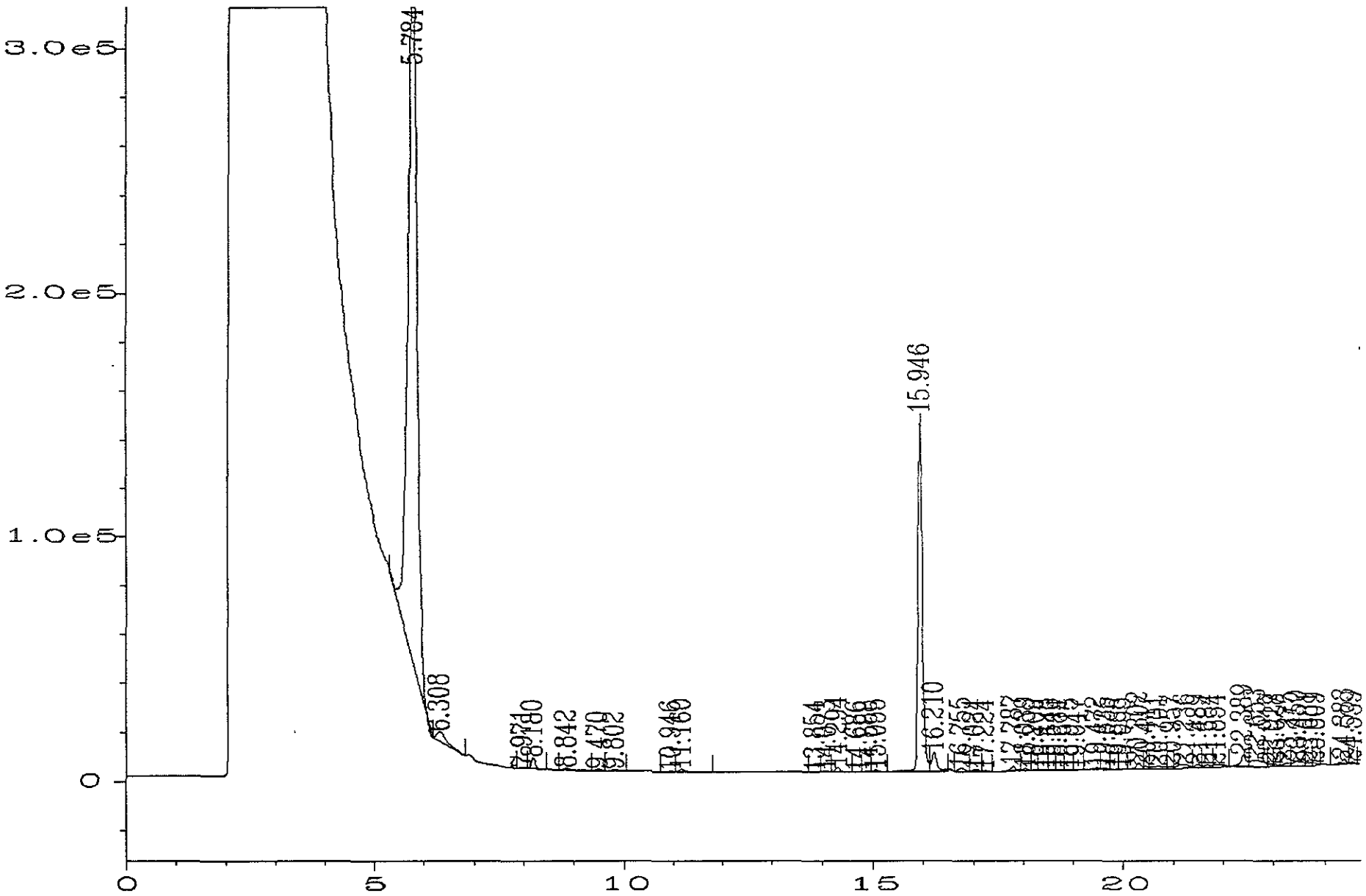
Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\024R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.078	1061	171	VB	0.096	0.7502
2	21.539	130988	22687	VV	0.089	92.5832
3	22.010	806	114	VV	0.103	0.5696
4	22.182	1356	175	VB	0.112	0.9582
5	22.726	1977	202	BV	0.134	1.3971
6	23.223	3617	272	PV	0.184	2.5564
7	23.377	1677	198	VV	0.141	1.1854

Total area = 141482

Sample Name : 30210-12comp			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\024F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.76919	1212431	-11.0789	141482	
Wash.	0.250242	1337581	-0.00916	141482	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.25262	7.512	10		
	1.509872	8.058	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.40116	10.881	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.06107	13.855	0.223		
	0.200154	14.077	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.23361	13.855	0.2773		
	-0.09169	14.077	0.2773		
	0.556378	14.292	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.299922	14.659	0.2663		
	0.347678	14.882	0.2663		
	0.386805	15.053	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\025F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\025F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30219-21comp
Run Time Bar Code:
Acquired on : 23 Jun 92 07:37 PM
Report Created on: 25 Jun 92 04:57 PM

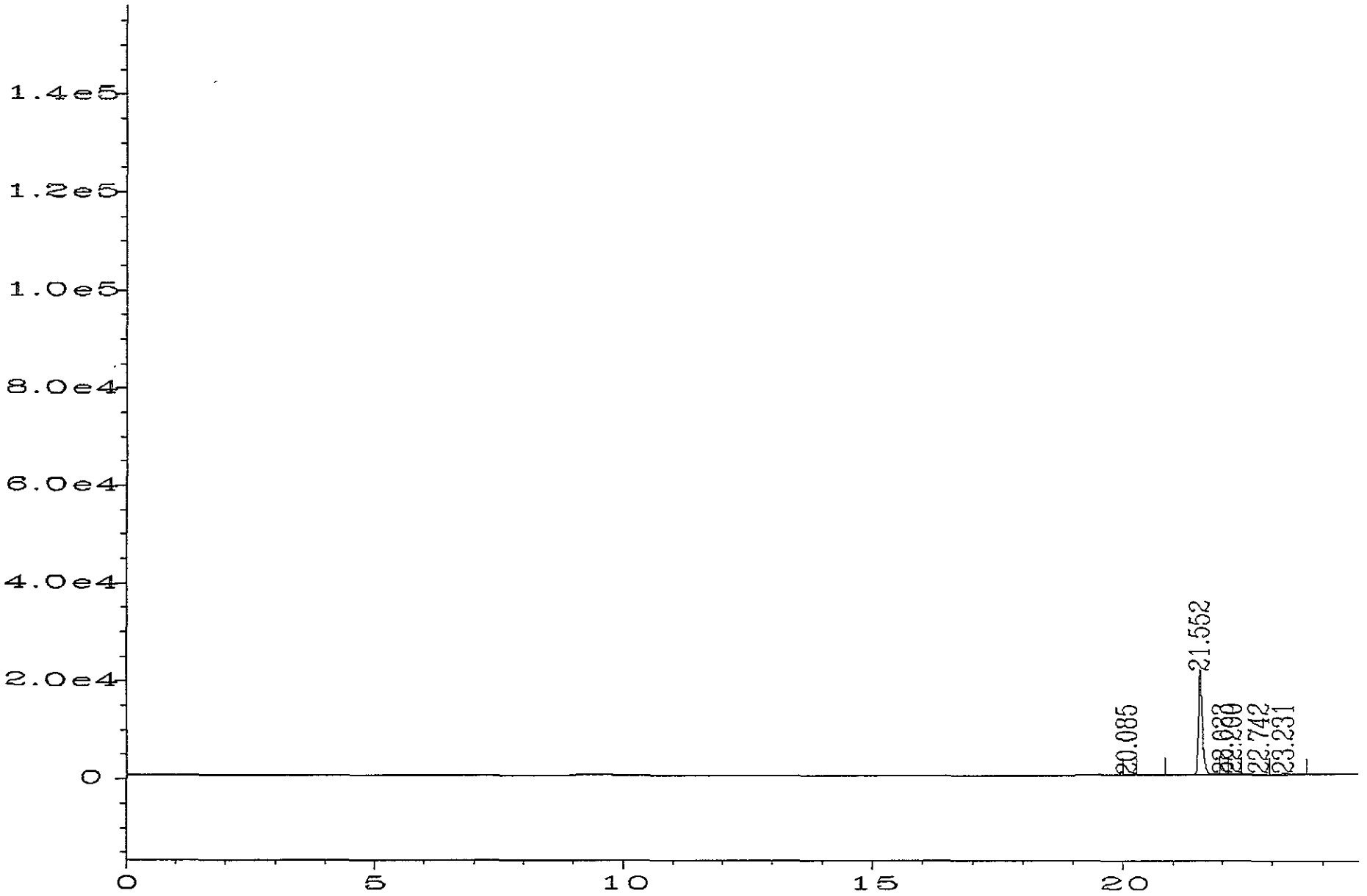
Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\025F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.784	3781421	302079	BV	0.189	72.6711
2	6.308	47287	3867	PV	0.170	0.9088
3	7.971	3289	386	PV	0.125	0.0632
4	8.180	25479	4831	VV	0.082	0.4897
5	8.842	8549	872	PV	0.143	0.1643
6	9.470	4029	648	PV	0.097	0.0774
7	9.802	4033	547	PV	0.115	0.0775
8	10.946	1137	173	BV	0.098	0.0219
9	11.160	8215	940	VB	0.139	0.1579
10	13.854	1194	183	BV	0.106	0.0230
11	14.073	3848	651	PV	0.093	0.0740
12	14.294	12899	1963	VV	0.099	0.2479
13	14.686	1008	160	VV	0.095	0.0194
14	14.888	2746	395	VV	0.107	0.0528
15	15.055	5958	816	VV	0.107	0.1145
16	15.946	876612	146948	VV	0.093	16.8467
17	16.210	57165	7686	VV	0.109	1.0986
18	16.755	13231	1406	VV	0.136	0.2543
19	17.024	7947	765	VV	0.147	0.1527
20	17.224	2968	453	VV	0.102	0.0570
21	17.787	14444	1902	PV	0.111	0.2776
22	18.039	6910	1087	VV	0.095	0.1328
23	18.209	1816	266	VV	0.100	0.0349
24	18.428	4649	514	VV	0.129	0.0893
25	18.546	2816	417	VV	0.100	0.0541
26	18.684	1417	163	VV	0.125	0.0272
27	18.915	2633	421	VV	0.093	0.0506
28	19.047	1393	186	VV	0.104	0.0268
29	19.472	7319	720	PV	0.139	0.1407
30	19.635	5888	888	VV	0.100	0.1132
31	19.868	3251	429	VV	0.115	0.0625
32	19.953	3424	429	VV	0.133	0.0658
33	20.302	19477	2583	VV	0.107	0.3743
34	20.447	6294	1038	VV	0.087	0.1210
35	20.701	16080	1004	VV	0.214	0.3090
36	20.957	5310	822	VV	0.095	0.1020
37	21.236	22001	1424	VV	0.203	0.4228
38	21.489	10217	1149	VV	0.136	0.1963
39	21.684	10680	1052	VV	0.136	0.2052
40	21.854	14976	992	VV	0.188	0.2878
41	22.389	39336	4755	VV	0.115	0.7560
42	22.653	47208	2721	VV	0.216	0.9072
43	22.917	6946	1138	VV	0.088	0.1335
44	23.028	5448	824	VV	0.110	0.1047
45	23.275	11967	1261	VV	0.131	0.2300
46	23.450	24848	1820	VV	0.179	0.4775
47	23.681	10258	1191	VV	0.120	0.1971
48	23.809	7484	1006	VV	0.109	0.1438

49	24.383	14821	1844	PV	0.115	0.2848
50	24.539	5148	579	VBA	0.126	0.0989

Total area = 5203476



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\025R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\025R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30219-21comp
Run Time Bar Code:
Acquired on : 23 Jun 92 07:37 PM
Report Created on: 25 Jun 92 04:57 PM

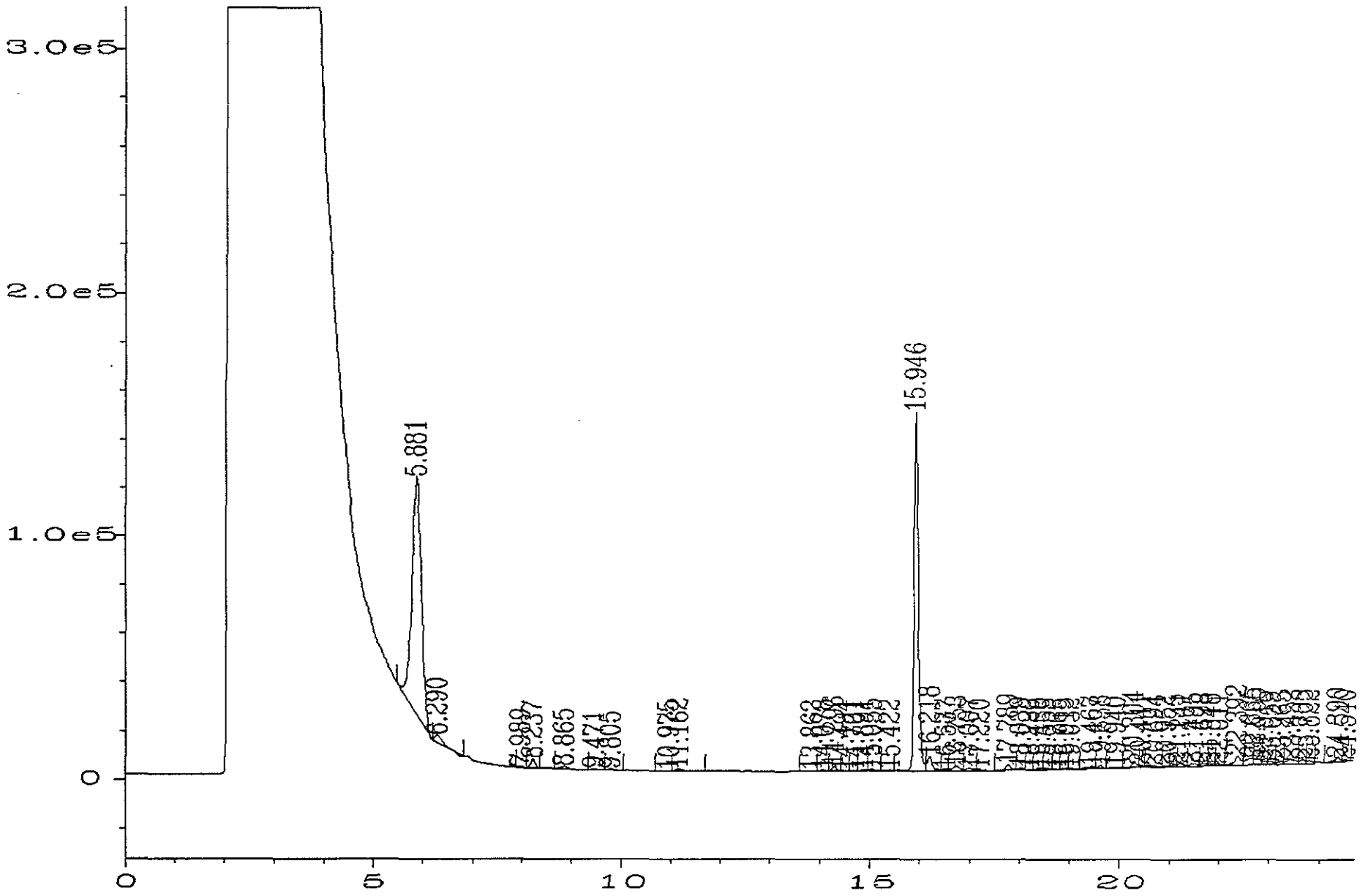
Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\025R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.085	889	139	VB	0.096	0.6354
2	21.552	127617	21724	VV	0.090	91.2158
3	22.023	1226	140	VV	0.123	0.8760
4	22.200	1939	207	VV	0.133	1.3856
5	22.742	2748	188	VV	0.191	1.9643
6	23.231	5488	281	PV	0.251	3.9229

Total area = 139906

Sample Name : 30219-21comp			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\025F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.82813	1120915	-11.0792	139907	
Wash.	0.23755	1270887	-0.00949	139907	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.16319	7.971	10		
	1.434488	8.18	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.42985	10.946	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.12382	13.854	0.223		
	0.045502	14.073	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.42227	13.854	0.2773		
	-0.2495	14.073	0.2773		
	0.339725	14.294	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.29374	14.686	0.2663		
	0.322087	14.888	0.2663		
	0.374475	15.055	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\026F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\026F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30225-28comp
Run Time Bar Code:
Acquired on : 23 Jun 92 08:22 PM
Report Created on: 25 Jun 92 04:59 PM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\026F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.881	1262997	98249	BV	0.194	47.3273
2	6.290	25882	3142	PV	0.122	0.9699
3	7.989	2474	365	PV	0.108	0.0927
4	8.237	21760	3911	VV	0.086	0.8154
5	8.865	11341	1097	VV	0.146	0.4250
6	9.471	3664	597	PV	0.097	0.1373
7	9.805	3541	487	PV	0.114	0.1327
8	10.975	1225	165	BV	0.108	0.0459
9	11.162	7979	898	VB	0.140	0.2990
10	13.862	2180	302	PV	0.110	0.0817
11	14.078	4500	732	PV	0.095	0.1686
12	14.296	11740	1895	VV	0.095	0.4399
13	14.494	731	116	VV	0.090	0.0274
14	14.701	673	122	VV	0.087	0.0252
15	14.891	3317	485	VV	0.104	0.1243
16	15.055	4563	716	VV	0.096	0.1710
17	15.422	1809	228	PV	0.112	0.0678
18	15.946	874200	148075	VV	0.092	32.7582
19	16.218	44026	6032	VV	0.107	1.6497
20	16.537	5772	664	VV	0.126	0.2163
21	16.753	19257	1885	VV	0.148	0.7216
22	17.007	10350	976	VV	0.150	0.3878
23	17.220	3900	509	VV	0.111	0.1461
24	17.789	17271	2311	PV	0.111	0.6472
25	18.039	5613	880	VV	0.098	0.2103
26	18.220	2233	345	VV	0.089	0.0837
27	18.430	6681	703	VV	0.132	0.2503
28	18.555	4379	565	VV	0.117	0.1641
29	18.765	1779	263	VV	0.096	0.0667
30	18.915	3339	528	VV	0.097	0.1251
31	19.032	2041	286	VV	0.100	0.0765
32	19.467	10533	950	PV	0.148	0.3947
33	19.638	7772	1249	VV	0.095	0.2912
34	19.940	5193	402	VV	0.176	0.1946
35	20.304	19006	2665	VV	0.101	0.7122
36	20.441	5288	958	VV	0.092	0.1981
37	20.694	12518	880	VV	0.186	0.4691
38	20.952	5258	730	VV	0.105	0.1970
39	21.135	6708	1024	VV	0.096	0.2514
40	21.241	11164	1291	VV	0.133	0.4183
41	21.495	12779	1240	VV	0.150	0.4789
42	21.698	9080	1071	VV	0.119	0.3403
43	21.848	7030	864	VV	0.111	0.2634
44	22.011	5989	823	VV	0.111	0.2244
45	22.392	34426	3880	VV	0.122	1.2900
46	22.665	27174	2563	VV	0.144	1.0183
47	22.765	20616	2483	VV	0.128	0.7725
48	22.915	7203	1261	VV	0.083	0.2699

49	23.055	8169	1062	VV	0.105	0.3061
50	23.265	11007	1197	VV	0.126	0.4125
51	23.452	26996	1984	VV	0.179	1.0116
52	23.703	12969	1586	VV	0.115	0.4860
53	23.822	10127	1314	VV	0.109	0.3795
54	24.390	15002	1636	PV	0.128	0.5622
55	24.540	5420	616	VBA	0.125	0.2031

Total area = 2668646

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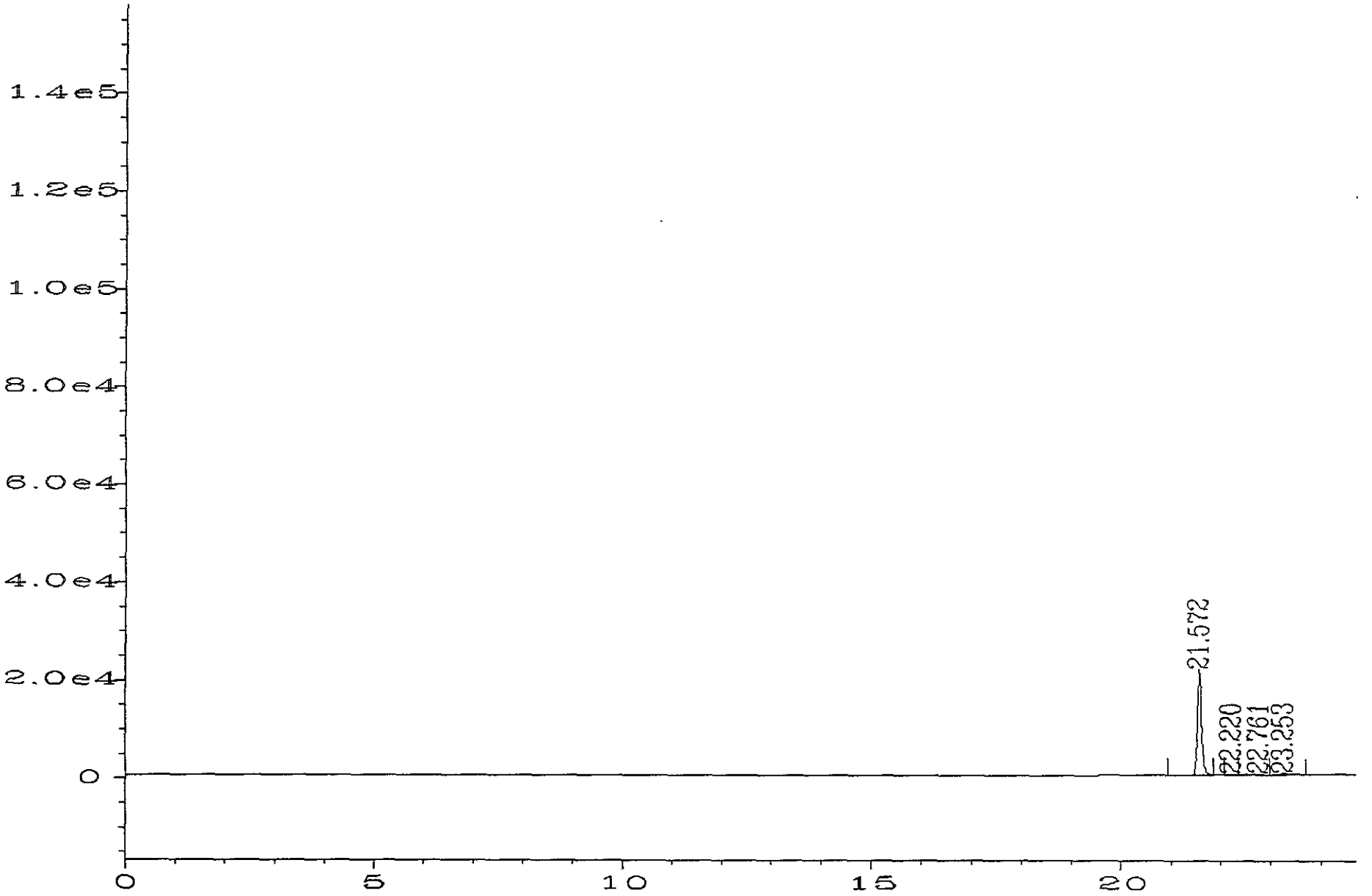


Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\026R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\026R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30225-28comp
Run Time Bar Code:
Acquired on : 23 Jun 92 08:22 PM
Report Created on: 25 Jun 92 05:00 PM

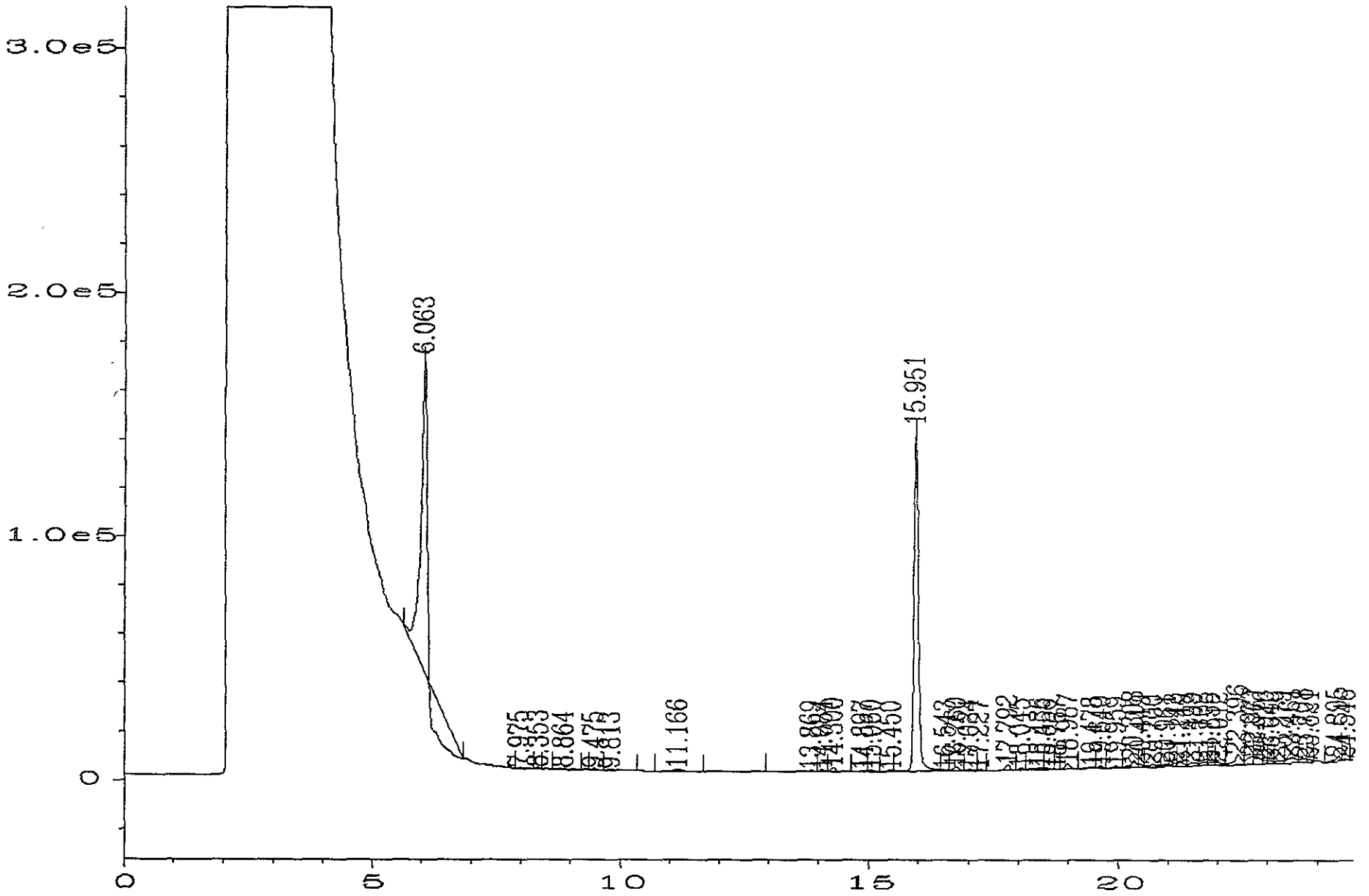
Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\026R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	21.572	123216	21558	BV	0.088	92.9997
2	22.220	1936	199	VV	0.134	1.4614
3	22.761	2427	157	VV	0.209	1.8320
4	23.253	4911	256	PV	0.270	3.7069

Total area = 132491

Sample Name : 30225-28comp			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\026F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.82449	1126573	-11.0803	132490	
Wash.	0.235692	1261122	-0.01106	132490	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.22187	7.989	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.42442	10.975	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.06092	13.862	0.223		
	0.0871	14.078	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.35808	13.862	0.2773		
	-0.20705	14.078	0.2773		
	0.264274	14.296	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.289223	14.494	0.2663		
	0.288277	14.701	0.2663		
	0.3314	14.891	0.2663		
	0.351723	15.055	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.C\027F0201.D

Area Percent Report

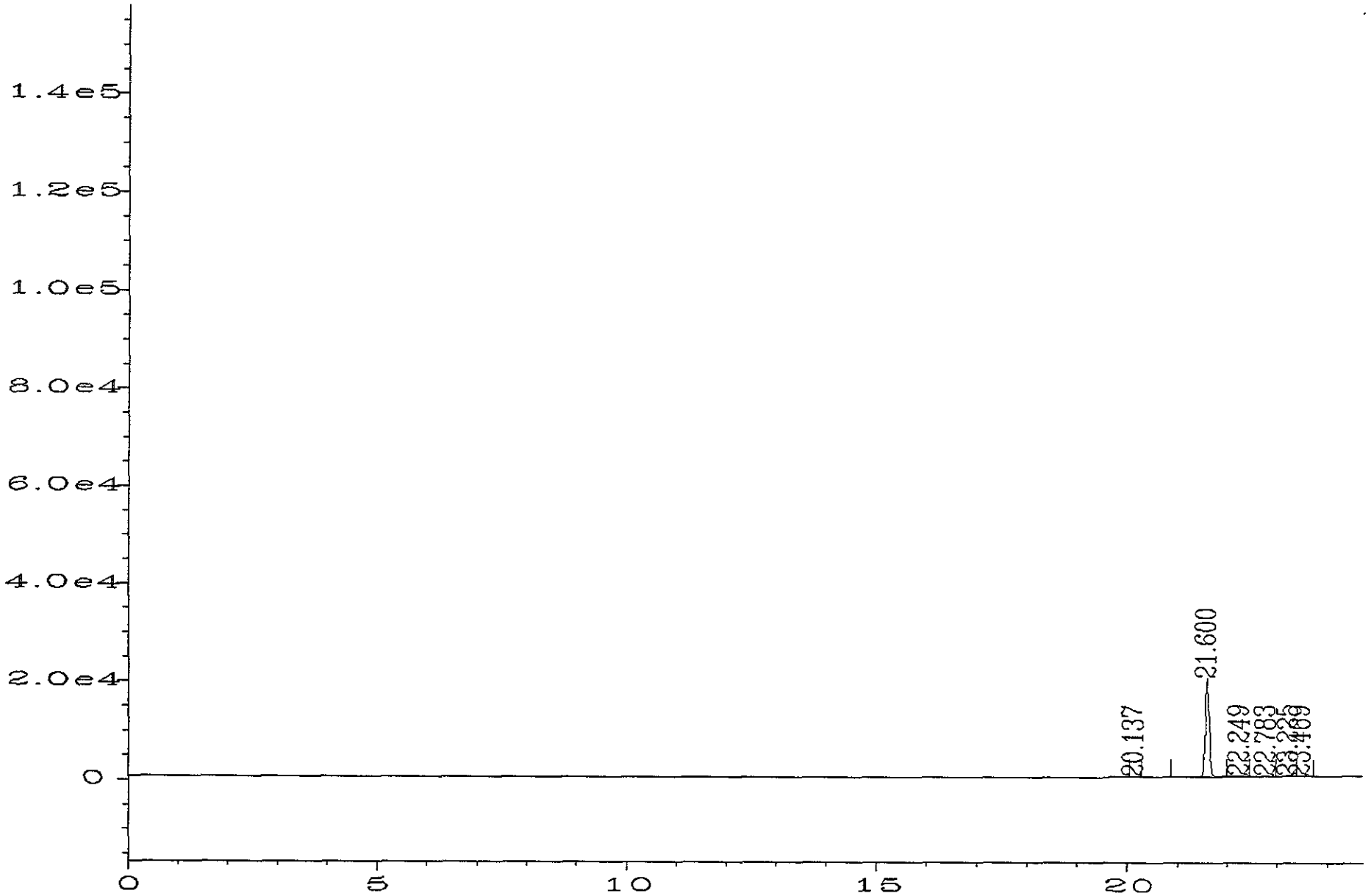
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\027F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24comp
Run Time Bar Code:
Acquired on : 23 Jun 92 09:07 PM
Report Created on: 25 Jun 92 05:02 PM

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\027F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	6.063	730042	135329	BV	0.083	35.1253
2	7.975	1837	211	PV	0.124	0.0884
3	8.353	2649	623	PV	0.067	0.1274
4	8.864	8209	648	VV	0.173	0.3950
5	9.475	4978	684	VV	0.112	0.2395
6	9.813	5234	588	VV	0.132	0.2518
7	11.166	8621	919	BB	0.142	0.4148
8	13.869	2464	286	PV	0.128	0.1186
9	14.084	4167	696	PV	0.094	0.2005
10	14.300	10968	1751	VB	0.096	0.5277
11	14.897	3507	481	BV	0.109	0.1687
12	15.060	4362	710	VV	0.094	0.2099
13	15.450	1107	133	PV	0.127	0.0533
14	15.951	870651	146030	VV	0.092	41.8906
15	16.543	4021	487	VV	0.116	0.1935
16	16.760	14235	1499	VV	0.138	0.6849
17	17.024	7234	704	VV	0.143	0.3480
18	17.227	2726	411	VV	0.101	0.1311
19	17.792	16148	2256	PV	0.108	0.7770
20	18.045	4479	805	VV	0.087	0.2155
21	18.436	7933	708	VV	0.156	0.3817
22	18.556	4477	551	VV	0.136	0.2154
23	18.767	913	170	VV	0.079	0.0439
24	18.987	15229	2154	VV	0.104	0.7327
25	19.478	7598	775	PV	0.132	0.3656
26	19.640	6453	1090	VV	0.093	0.3105
27	19.959	7423	562	PV	0.175	0.3571
28	20.308	22233	2796	VV	0.112	1.0697
29	20.449	6242	1077	VV	0.081	0.3003
30	20.700	15392	1041	VV	0.192	0.7406
31	20.961	7058	922	VV	0.109	0.3396
32	21.142	7827	1141	VV	0.097	0.3766
33	21.249	13651	1486	VV	0.125	0.6568
34	21.499	17416	1528	VV	0.165	0.8379
35	21.703	12245	1437	VV	0.118	0.5892
36	21.855	8684	1107	VV	0.106	0.4178
37	22.012	10207	1116	VV	0.135	0.4911
38	22.396	41565	4375	VV	0.129	1.9998
39	22.677	28384	2935	VV	0.161	1.3657
40	22.761	26311	2924	VV	0.136	1.2659
41	22.926	8667	1504	VV	0.096	0.4170
42	23.046	9097	1275	VV	0.106	0.4377
43	23.279	14065	1332	VV	0.144	0.6767
44	23.461	29910	2316	VV	0.171	1.4391
45	23.708	14577	1740	VV	0.118	0.7014
46	23.821	8919	1371	VV	0.089	0.4292
47	24.395	14881	1621	PV	0.127	0.7160
48	24.546	3397	584	VV	0.084	0.1635

Total area = 2078394



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\027R0201.D

Sample Name : 30222-24comp			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\027F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.85067	1085914	-11.0814	124818	
Wash.	0.234325	1253943	-0.01268	124818	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.26774	7.975	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.0428	13.869	0.223		
	0.065855	14.084	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.33959	13.869	0.2773		
	-0.22873	14.084	0.2773		
	0.214017	14.3	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.334499	14.897	0.2663		
	0.348444	15.06	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\027R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24comp
Run Time Bar Code:
Acquired on : 23 Jun 92 09:07 PM
Report Created on: 25 Jun 92 05:02 PM

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\027R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.137	875	134	VB	0.097	0.7009
2	21.600	114080	20101	VV	0.088	91.3966
3	22.249	3043	204	VV	0.196	2.4380
4	22.783	2426	155	VV	0.204	1.9437
5	23.225	2835	226	VV	0.168	2.2715
6	23.469	1559	147	VV	0.156	1.2494

Total area = 124819

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\016F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\016F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 10 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 12:59 PM
Report Created on: 26 Jun 92 12:17 PM

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\016F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.097	129115	18067	BV	0.119	0.1624
2	5.541	139575	16765	PV	0.130	0.1756
3	5.738	29853	4487	VV	0.104	0.0376
4	6.015	213138	25858	PV	0.124	0.2681
5	6.219	99462	10384	VV	0.150	0.1251
6	6.501	46193	5500	VV	0.121	0.0581
7	6.686	57052	8483	VV	0.103	0.0718
8	7.012	470448	43805	VV	0.152	0.5918
9	7.698	170585	20634	PV	0.122	0.2146
10	8.010	2757307	350784	VV	0.115	3.4685
11	8.252	509089	65663	VV	0.113	0.6404
12	8.652	1175917	104021	VV	0.173	1.4792
13	8.906	288847	45055	VV	0.095	0.3634
14	9.061	373879	40197	VV	0.140	0.4703
15	9.240	74308	12422	VV	0.100	0.0935
16	9.387	116118	10388	VV	0.176	0.1461
17	9.838	681387	69977	PV	0.147	0.8571
18	10.137	128334	16438	VV	0.115	0.1614
19	10.291	107160	12096	VV	0.132	0.1348
20	10.547	536284	66974	VV	0.123	0.6746
21	10.771	1234685	91104	VV	0.188	1.5532
22	11.167	1.0658E+007	1728702	VV	0.095	13.4072
23	11.445	973939	63584	VV	0.199	1.2252
24	11.922	570445	53241	VV	0.154	0.7176
25	12.108	47898	9296	VV	0.076	0.0603
26	12.225	72945	10602	VV	0.102	0.0918
27	12.405	223656	28070	VV	0.120	0.2813
28	12.587	79515	9169	VV	0.132	0.1000
29	13.041	222898	18934	VV	0.162	0.2804
30	13.188	58940	12284	VV	0.080	0.0741
31	13.283	123951	14133	VV	0.126	0.1559
32	13.517	136305	10867	VV	0.165	0.1715
33	13.697	49379	8768	VV	0.080	0.0621
34	13.868	481882	66839	VV	0.109	0.6062
35	14.078	3074953	505629	VV	0.095	3.8681
36	14.304	1.18944E+007	1859596	VV	0.098	14.9624
37	14.880	449930	47623	VV	0.130	0.5660
38	15.055	4400886	700917	VV	0.096	5.5361
39	15.423	196337	20204	VV	0.146	0.2470
40	15.606	145739	14148	VV	0.138	0.1833
41	15.936	1219638	161677	VV	0.111	1.5342
42	16.301	17672	3210	VV	0.092	0.0222
43	16.538	70745	13118	VV	0.085	0.0890
44	16.809	1646475	190737	VV	0.127	2.0712
45	17.031	5215253	635087	VV	0.131	6.5605
46	17.222	1991561	303899	VV	0.099	2.5053
47	17.643	1590857	197468	VV	0.118	2.0012
48	18.034	5658738	959563	VV	0.092	7.1184

49	18.411	202405	23963	VV	0.118	0.2546
50	18.501	140772	21173	VV	0.096	0.1771
51	18.697	206095	26271	VV	0.110	0.2593
52	18.902	1328157	200770	VV	0.098	1.6707
53	19.461	2284738	231256	VV	0.135	2.8741
54	19.609	1991384	339779	VV	0.091	2.5050
55	19.814	79891	15293	VV	0.080	0.1005
56	19.944	329210	57214	VV	0.088	0.4141
57	20.167	1306129	157014	VV	0.134	1.6430
58	20.347	1393830	213438	VV	0.096	1.7534
59	20.568	725097	93528	VV	0.111	0.9121
60	20.918	364730	53499	VV	0.101	0.4588
61	21.112	591547	118568	VV	0.076	0.7441
62	21.214	820296	154300	VV	0.080	1.0319
63	21.492	785008	65506	VV	0.171	0.9875
64	21.750	983121	148497	VV	0.095	1.2367
65	21.886	335260	68289	VV	0.072	0.4217
66	22.010	1130095	176725	VV	0.097	1.4216
67	22.118	223922	49893	VV	0.075	0.2817
68	22.264	261216	47798	VV	0.081	0.3286
69	22.361	194515	34852	VV	0.080	0.2447
70	22.583	386849	57104	VV	0.096	0.4866
71	22.741	906501	104295	VV	0.136	1.1403
72	22.900	787392	105116	VV	0.106	0.9905
73	23.165	125474	16950	VV	0.107	0.1578
74	23.417	157737	22576	VV	0.102	0.1984
75	23.504	82985	17628	VV	0.078	0.1044
76	23.652	176065	30716	VV	0.084	0.2215
77	23.722	149659	27428	VV	0.091	0.1883
78	23.891	72936	10004	VV	0.110	0.0917
79	24.050	168673	25036	VV	0.100	0.2122
80	24.465	191468	17564	VV	0.152	0.2409

Total area = 7.94948E+007

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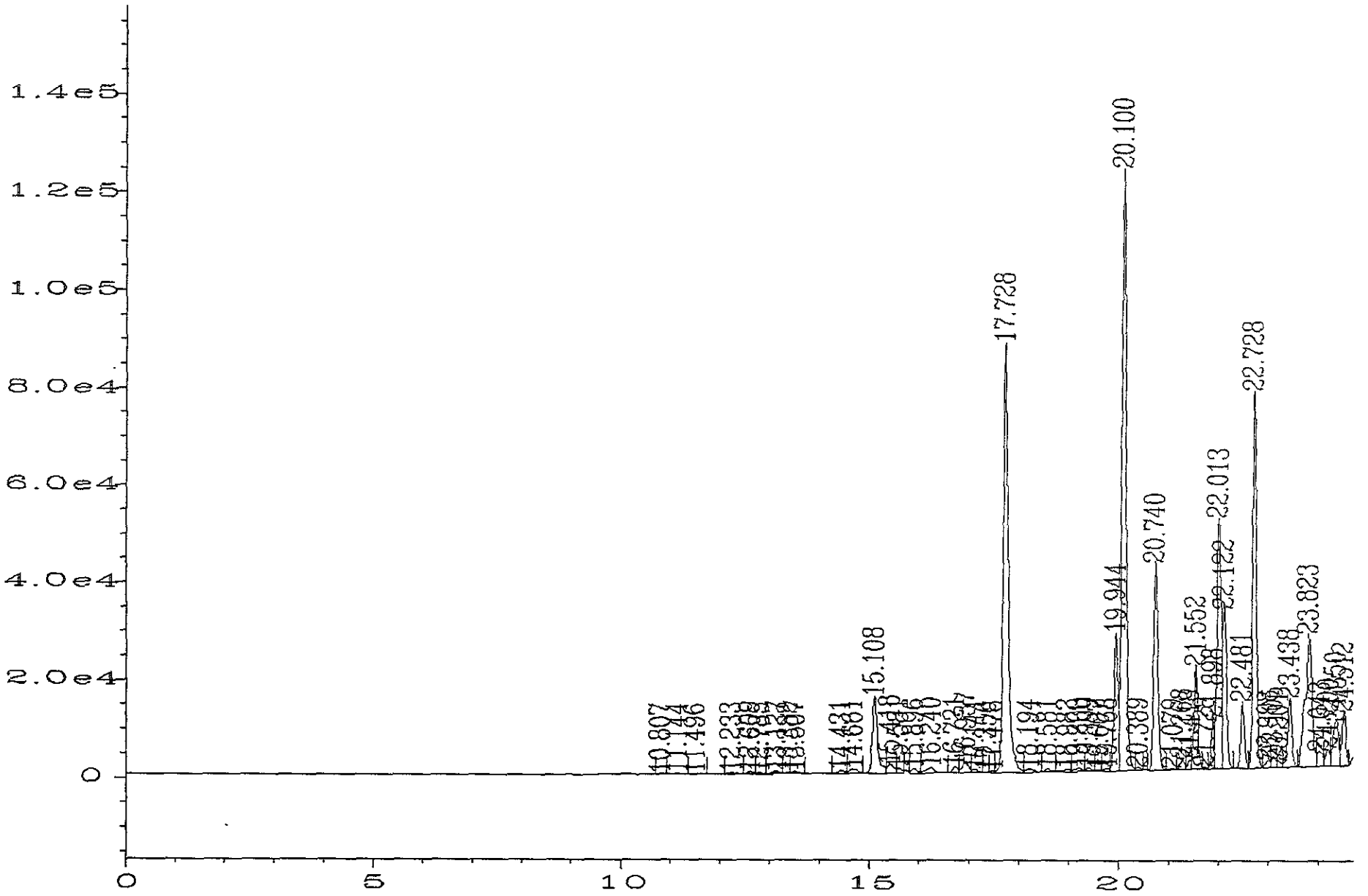

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\016R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\016R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 10 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 12:59 PM
Report Created on: 26 Jun 92 12:18 PM

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\016R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	10.807	864	136	PV	0.103	0.0234
2	11.144	1904	178	PV	0.148	0.0517
3	11.496	895	86	PB	0.150	0.0243
4	12.233	2622	269	VV	0.154	0.0712
5	12.609	3504	452	PV	0.119	0.0951
6	12.785	2107	284	VV	0.112	0.0572
7	13.127	5492	520	VV	0.157	0.1490
8	13.382	1767	217	VV	0.135	0.0479
9	13.507	4492	495	VV	0.128	0.1219
10	14.431	6316	675	VV	0.137	0.1714
11	14.661	9689	793	VV	0.163	0.2629
12	15.108	116062	15823	VV	0.112	3.1498
13	15.418	16436	1716	VV	0.139	0.4461
14	15.581	6745	909	VV	0.124	0.1831
15	15.896	7820	922	VV	0.124	0.2122
16	16.240	13611	1102	VV	0.171	0.3694
17	16.721	9196	1328	PV	0.108	0.2496
18	16.937	19109	2109	VV	0.145	0.5186
19	17.111	5166	689	VV	0.109	0.1402
20	17.356	1226	236	VV	0.077	0.0333
21	17.478	2179	379	VV	0.084	0.0591
22	17.728	605574	89244	VV	0.103	16.4347
23	18.194	8646	746	VV	0.159	0.2347
24	18.581	4798	699	PV	0.104	0.1302
25	18.982	5515	599	VV	0.129	0.1497
26	19.200	7328	782	VV	0.129	0.1989
27	19.399	4740	692	VV	0.102	0.1286
28	19.607	2229	307	VV	0.121	0.0605
29	19.768	4432	619	VV	0.105	0.1203
30	19.944	154271	28495	VV	0.084	4.1868
31	20.100	736602	125828	VV	0.091	19.9907
32	20.389	4304	595	VV	0.108	0.1168
33	20.740	242991	43555	VV	0.086	6.5945
34	21.079	2160	281	VV	0.110	0.0586
35	21.268	13875	2382	VV	0.090	0.3766
36	21.418	8724	2005	VV	0.066	0.2367
37	21.552	118412	21790	VV	0.084	3.2136
38	21.728	1676	405	VV	0.067	0.0455
39	21.898	42702	10790	PV	0.061	1.1589
40	22.013	316262	51704	VV	0.092	8.5830
41	22.122	169168	33900	VV	0.076	4.5911
42	22.481	70533	13653	VV	0.081	1.9142
43	22.728	385379	79034	VV	0.076	10.4588
44	22.998	10108	1524	VV	0.106	0.2743
45	23.105	12861	2160	VV	0.087	0.3490
46	23.201	6877	1219	VV	0.094	0.1866
47	23.438	84294	14126	VV	0.092	2.2877
48	23.823	246895	27427	VV	0.125	6.7005

49	24.043	24284	3012	VV	0.122	0.6591
50	24.200	20065	3642	VV	0.082	0.5446
51	24.350	72615	9262	VV	0.125	1.9707
52	24.512	59207	11355	VV	0.081	1.6068

Total area = 3684733

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Sample Name : 10 ppm gas			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\016F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	29.68776	53164226	-10.5514	3681961	
Wash.	7.694157	40454322	0.729747	3645077	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	11.88212	7.698	10.07616	11.144	
	198.1261	8.01	10.0358	11.496	
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	32.58872	10.547	0.043088	14.431	
	75.68006	10.771	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	8.496259	13.517	0.482426	16.24	
	2.95038	13.697	0.398276	16.721	
	30.54407	13.868	0.587218	16.937	
	195.982	14.078	0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	2.714573	13.697	0.427287	16.721	
	30.87052	13.868	0.588968	16.937	
	199.6794	14.078	0.361557	17.111	
	773.8254	14.304	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	7.615658	14.88	0.378661	17.111	
	72.05575	15.055	0.292966	17.356	
	0.2773		0.313693	17.478	
	0.2773		13.43753	17.728	
	0.2773		0.2663		
	0.2773		0.2663		

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\017F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\017F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 5 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 01:42 PM
Report Created on: 26 Jun 92 12:20 PM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\017F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.094	52680	6806	BV	0.126	0.1410
2	5.303	1822	588	PV	0.050	0.0049
3	5.540	48750	5967	PV	0.129	0.1305
4	5.741	10973	1682	VV	0.104	0.0294
5	6.015	114543	13875	PV	0.125	0.3065
6	6.210	23925	3223	VV	0.119	0.0640
7	6.504	7848	1280	VV	0.095	0.0210
8	6.687	15331	2459	VV	0.097	0.0410
9	7.013	176023	17504	VV	0.145	0.4710
10	7.697	69331	8073	PV	0.126	0.1855
11	8.013	1030176	131077	VV	0.115	2.7568
12	8.255	203830	25476	VV	0.118	0.5455
13	8.653	474969	39613	VV	0.181	1.2710
14	8.909	113371	17677	VV	0.096	0.3034
15	9.071	191231	16457	VV	0.171	0.5117
16	9.389	56054	4588	VV	0.160	0.1500
17	9.844	259602	25528	VV	0.152	0.6947
18	10.146	57203	6917	VV	0.120	0.1531
19	10.286	51946	5848	VV	0.137	0.1390
20	10.554	203538	25343	VV	0.123	0.5447
21	10.777	482763	34553	VV	0.194	1.2919
22	11.169	4915585	802806	VV	0.095	13.1544
23	11.444	445323	33079	VV	0.188	1.1917
24	11.926	219483	20934	VV	0.147	0.5873
25	12.116	20082	3689	VV	0.078	0.0537
26	12.226	23133	3632	VV	0.095	0.0619
27	12.411	81013	10649	VV	0.115	0.2168
28	12.604	18818	2531	VV	0.115	0.0504
29	13.047	66158	6510	PV	0.142	0.1770
30	13.288	66222	5231	VV	0.172	0.1772
31	13.520	49677	4032	VV	0.164	0.1329
32	13.694	15663	2974	VV	0.076	0.0419
33	13.869	174041	24424	VV	0.109	0.4657
34	14.079	1432085	237843	VV	0.094	3.8323
35	14.302	5756027	892904	VV	0.099	15.4035
36	14.883	191238	18670	VV	0.138	0.5118
37	15.057	2127814	339019	VV	0.096	5.6942
38	15.429	77159	7711	VV	0.152	0.2065
39	15.602	55092	5336	VV	0.144	0.1474
40	15.944	977030	147145	VV	0.101	2.6146
41	16.541	24979	4502	PV	0.092	0.0668
42	16.816	693948	85917	VV	0.121	1.8570
43	17.035	2522329	310265	VV	0.131	6.7499
44	17.225	939015	145347	VV	0.098	2.5129
45	17.648	736404	96671	VV	0.114	1.9707
46	18.034	2747741	464531	VV	0.092	7.3531
47	18.415	83043	10482	VV	0.112	0.2222
48	18.504	61537	9517	VV	0.093	0.1647

49	18.699	88923	12035	VV	0.107	0.2380
50	18.905	623431	97840	VV	0.096	1.6683
51	19.463	1079205	109876	VV	0.135	2.8880
52	19.612	955788	163544	VV	0.090	2.5577
53	19.815	35407	6964	VV	0.077	0.0948
54	19.948	150354	26811	VV	0.087	0.4024
55	20.171	625740	75424	VV	0.133	1.6745
56	20.350	677131	104782	VV	0.095	1.8120
57	20.572	271335	47076	VV	0.086	0.7261
58	20.680	97988	16440	VV	0.099	0.2622
59	20.921	183355	26532	VV	0.102	0.4907
60	21.115	299561	60655	VV	0.075	0.8016
61	21.217	423409	79588	VV	0.080	1.1331
62	21.493	375677	32093	VV	0.174	1.0053
63	21.753	498192	75770	VV	0.095	1.3332
64	21.889	161185	32733	VV	0.072	0.4313
65	22.012	683083	90893	VV	0.109	1.8280
66	22.268	124312	23666	VV	0.078	0.3327
67	22.367	127009	21625	VV	0.085	0.3399
68	22.589	196970	30050	VV	0.095	0.5271
69	22.745	472338	54016	VV	0.137	1.2640
70	22.903	430246	59201	VV	0.103	1.1514
71	23.170	59429	8166	VV	0.106	0.1590
72	23.421	86932	12557	VV	0.101	0.2326
73	23.509	44715	9486	VV	0.079	0.1197
74	23.654	101041	16977	VV	0.088	0.2704
75	23.729	81687	14539	VV	0.094	0.2186
76	23.892	28842	4423	VV	0.109	0.0772
77	24.055	94522	14788	VV	0.095	0.2529
78	24.465	124050	10769	VV	0.159	0.3320

tal area = 3.73684E+007

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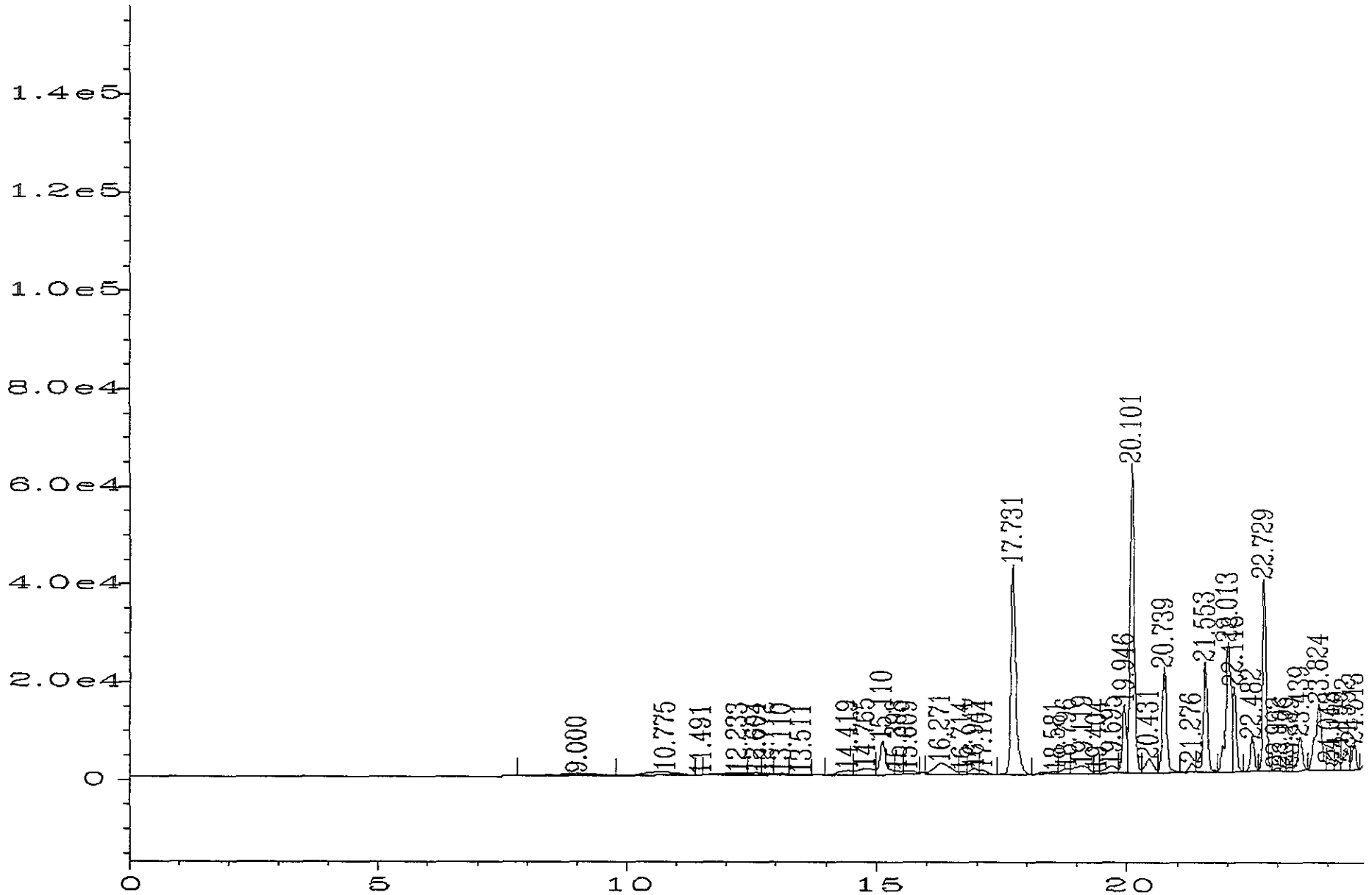


Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\017R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\017R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 5 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 01:42 PM
Report Created on: 26 Jun 92 12:21 PM

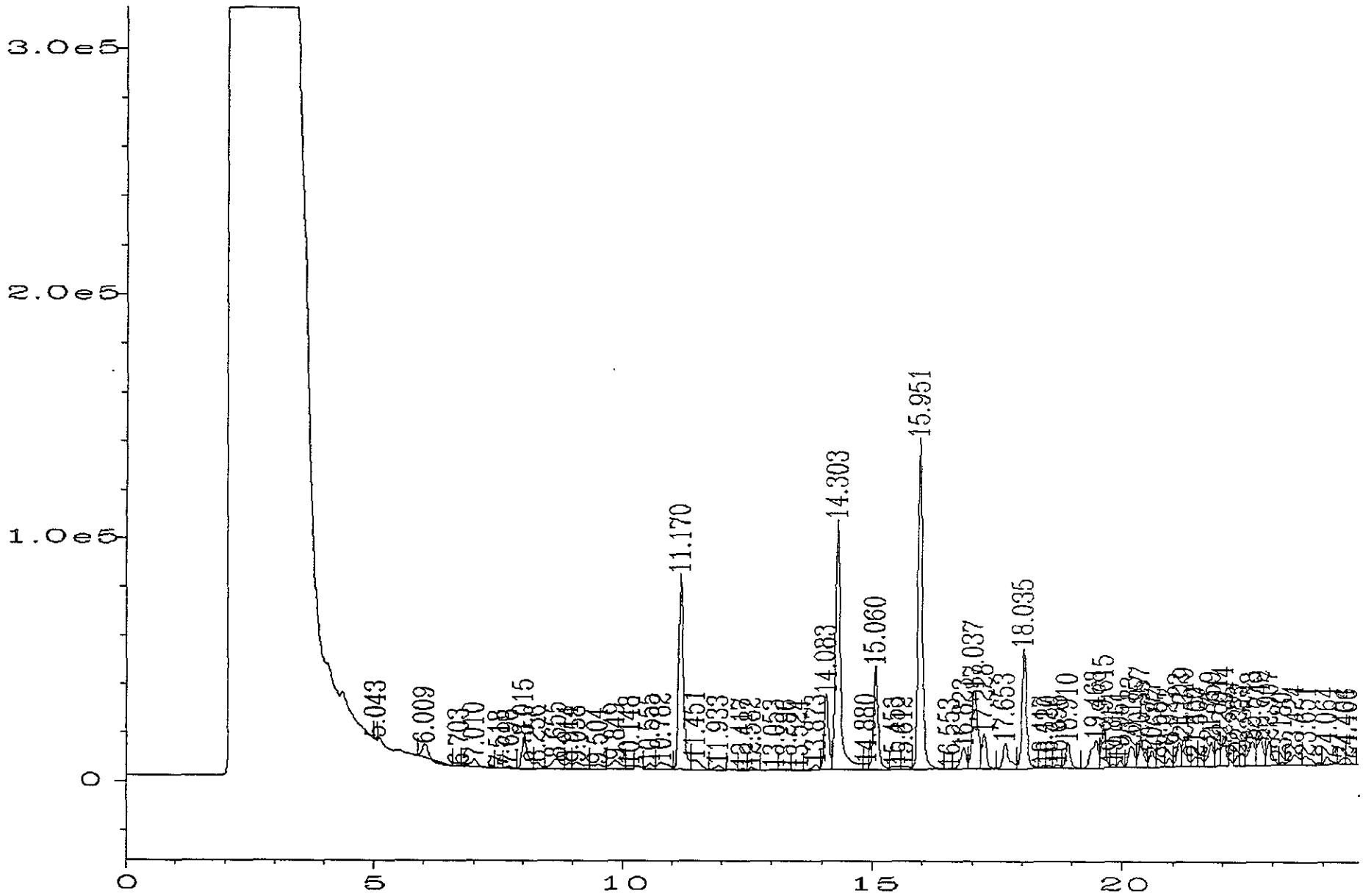
Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\017R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	9.000	26116	457	BV	0.690	1.1780
2	10.775	33704	733	VV	0.549	1.5203
3	11.491	986	125	VV	0.108	0.0445
4	12.233	17616	523	VV	0.420	0.7946
5	12.604	7774	551	VV	0.193	0.3507
6	12.772	5255	449	VV	0.159	0.2370
7	13.110	4316	319	VV	0.186	0.1947
8	13.511	3634	252	VV	0.189	0.1639
9	14.419	15647	836	VV	0.242	0.7058
10	14.765	28591	1346	VV	0.278	1.2897
11	15.110	61016	6973	VV	0.129	2.7523
12	15.398	7426	896	VV	0.117	0.3350
13	15.609	11752	751	VV	0.199	0.5301
14	16.271	54977	2380	VV	0.315	2.4799
15	16.714	5663	703	VV	0.117	0.2555
16	16.947	13216	1234	VV	0.158	0.5961
17	17.104	8631	886	VV	0.138	0.3893
18	17.731	298180	43029	PV	0.105	13.4502
19	18.581	9375	448	PV	0.260	0.4229
20	18.796	12593	1092	VV	0.162	0.5680
21	19.119	33254	1586	VV	0.264	1.5000
22	19.404	3688	568	VV	0.092	0.1664
23	19.695	22997	1457	VV	0.240	1.0373
24	19.946	78863	14212	VV	0.086	3.5573
25	20.101	371139	64230	VV	0.090	16.7412
26	20.431	31932	2881	VV	0.166	1.4404
27	20.739	127649	21971	VV	0.091	5.7579
28	21.276	14541	1916	VV	0.114	0.6559
29	21.553	132396	22972	VV	0.090	5.9721
30	22.013	187734	26450	VV	0.104	8.4682
31	22.118	84678	17561	VV	0.080	3.8196
32	22.482	36097	7051	PV	0.081	1.6283
33	22.729	198913	39893	VV	0.079	8.9725
34	22.992	4338	631	VV	0.108	0.1957
35	23.106	5174	934	VV	0.082	0.2334
36	23.229	5267	730	VV	0.120	0.2376
37	23.439	44037	7006	VV	0.096	1.9864
38	23.824	122159	13577	VV	0.126	5.5103
39	24.043	11895	1497	VV	0.132	0.5365
40	24.199	9731	1759	VV	0.092	0.4390
41	24.352	34637	4428	VV	0.125	1.5624
42	24.513	29334	5565	VV	0.083	1.3232

Total area = 2216920

Sample Name : 5 ppm gas			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\017F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	11.86708	25492358	-10.7786	2157101	
Wash.	3.786257	19918847	0.398255	2073282	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	4.591832	7.697	10.03944	11.491	
	73.77267	8.013	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	12.05829	10.554	0.203954	14.419	
	29.28648	10.777	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	2.969393	13.52	1.270862	16.271	
	0.799299	13.694	0.330937	16.714	
	10.90382	13.869	0.474897	16.947	
	91.16702	14.079	0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	0.519661	13.694	0.369664	16.714	
	10.83007	13.869	0.492853	16.947	
	92.72873	14.079	0.418072	17.104	
	374.2174	14.302	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	3.396392	14.883	0.454024	17.104	
	34.98195	15.057	6.751715	17.731	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\018F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\018F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 1 ppm gas
Run Time Bar Code: 0.5
Acquired on : 23 Jun 92 02:26 PM
Report Created on: 26 Jun 92 12:23 PM

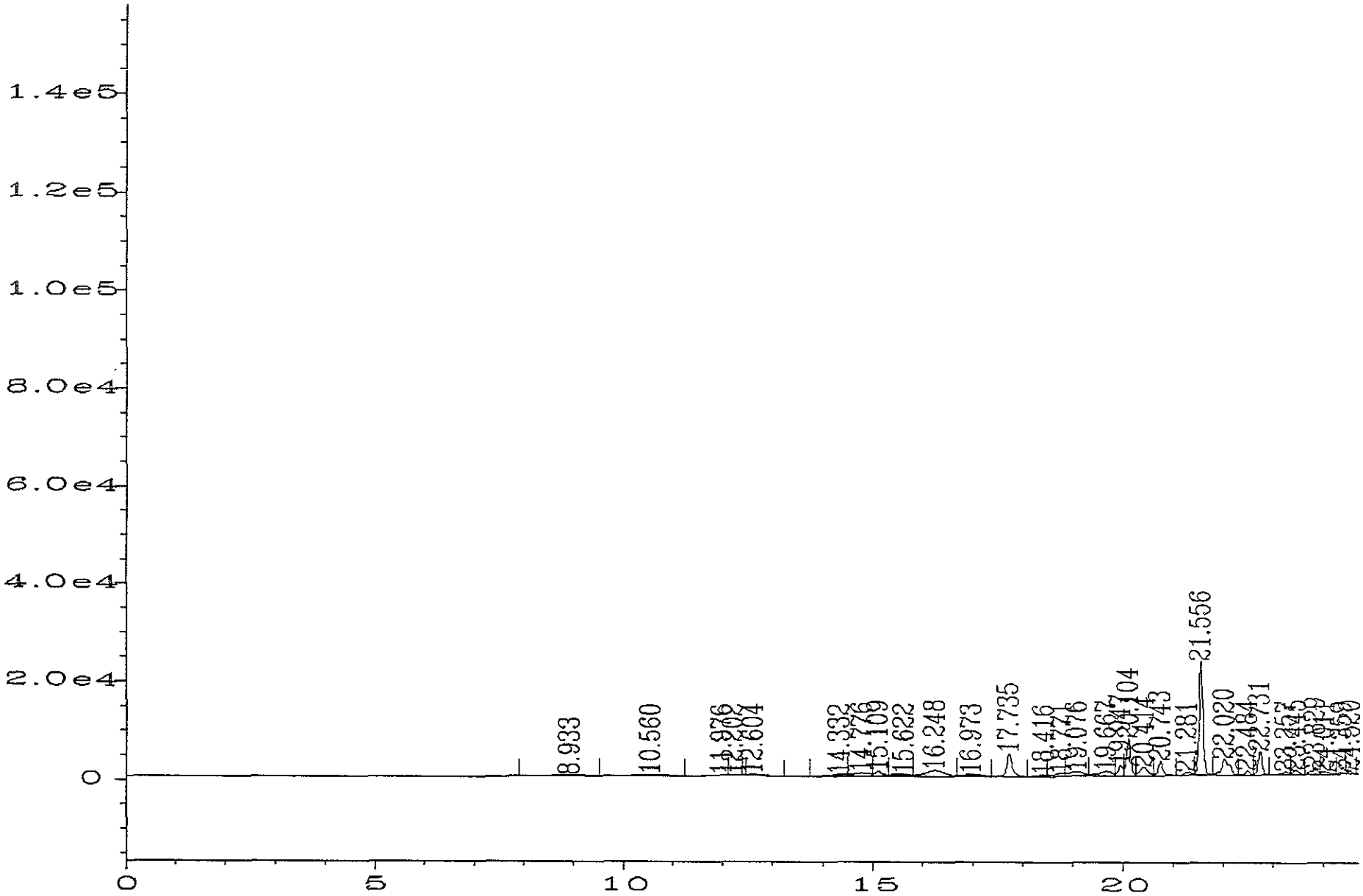
Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\018F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.043	2410	725	BV	0.055	0.0448
2	6.009	34167	5767	PV	0.098	0.6354
3	6.703	2994	495	PV	0.101	0.0557
4	7.010	35054	3109	VV	0.158	0.6519
5	7.518	1439	227	PV	0.098	0.0268
6	7.698	6928	834	VV	0.127	0.1288
7	8.015	104445	13485	VV	0.113	1.9425
8	8.256	21098	2459	VV	0.125	0.3924
9	8.655	51948	3878	VV	0.197	0.9661
10	8.914	17350	2474	VV	0.102	0.3227
11	9.058	39946	2654	VV	0.203	0.7429
12	9.504	30917	1892	VV	0.222	0.5750
13	9.849	47541	3411	VV	0.196	0.8842
14	10.148	12368	1354	VV	0.124	0.2300
15	10.555	20595	2303	VV	0.133	0.3830
16	10.782	42528	2868	VV	0.204	0.7909
17	11.170	509448	80961	VV	0.098	9.4747
18	11.451	47398	3737	VV	0.189	0.8815
19	11.933	17877	1839	VV	0.138	0.3325
20	12.417	5507	812	VV	0.105	0.1024
21	12.582	6634	956	VV	0.106	0.1234
22	13.053	4156	488	PV	0.124	0.0773
23	13.296	4929	401	VV	0.167	0.0917
24	13.524	4684	405	VV	0.160	0.0871
25	13.873	19830	2314	VV	0.128	0.3688
26	14.083	188442	30987	VV	0.094	3.5046
27	14.303	717627	103451	VV	0.104	13.3464
28	14.880	15685	2437	VV	0.093	0.2917
29	15.060	276310	43241	VV	0.098	5.1388
30	15.453	14212	1169	VV	0.158	0.2643
31	15.612	11800	1018	VV	0.149	0.2195
32	15.951	829377	137812	VV	0.092	15.4247
33	16.553	2088	323	VV	0.102	0.0388
34	16.823	67115	8615	VV	0.116	1.2482
35	17.037	261508	32187	VV	0.128	4.8635
36	17.228	93721	14346	VV	0.098	1.7430
37	17.653	91349	10469	VV	0.126	1.6989
38	18.035	306604	49751	VV	0.095	5.7022
39	18.417	6050	917	VV	0.094	0.1125
40	18.520	6981	1011	VV	0.101	0.1298
41	18.696	10303	1435	VV	0.104	0.1916
42	18.910	67399	10631	VV	0.095	1.2535
43	19.468	109857	11327	PV	0.132	2.0431
44	19.615	106499	17727	VV	0.093	1.9807
45	19.817	7256	1206	VV	0.087	0.1349
46	19.951	16858	2926	VV	0.088	0.3135
47	20.183	69457	8470	VV	0.132	1.2917
48	20.357	84817	12611	VV	0.098	1.5774

49	20.577	43535	6624	VV	0.096	0.8097
50	20.687	28394	3492	VV	0.121	0.5281
51	20.927	25767	3551	VV	0.104	0.4792
52	21.122	55162	9724	VV	0.084	1.0259
53	21.219	74556	12102	VV	0.090	1.3866
54	21.450	22170	3715	VV	0.099	0.4123
55	21.507	25706	3595	VV	0.119	0.4781
56	21.759	68390	10136	VV	0.096	1.2719
57	21.891	44966	7644	VV	0.084	0.8363
58	22.014	80422	12431	VV	0.095	1.4957
59	22.283	20221	4225	VV	0.072	0.3761
60	22.372	33620	5126	VV	0.093	0.6253
61	22.578	86856	9751	VV	0.125	1.6153
62	22.742	89555	10088	VV	0.128	1.6655
63	22.907	71075	10025	VV	0.101	1.3218
64	23.180	7604	1155	VV	0.099	0.1414
65	23.424	50157	4069	VV	0.170	0.9328
66	23.651	42795	3617	VV	0.159	0.7959
67	24.064	24499	3041	VV	0.115	0.4556
68	24.404	18898	2473	VV	0.115	0.3515
69	24.466	9090	2356	VBA	0.064	0.1691

Total area = 5376946



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\018RO201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\018R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 1 ppm gas
Run Time Bar Code: 0.5
Acquired on : 23 Jun 92 02:26 PM
Report Created on: 26 Jun 92 12:23 PM

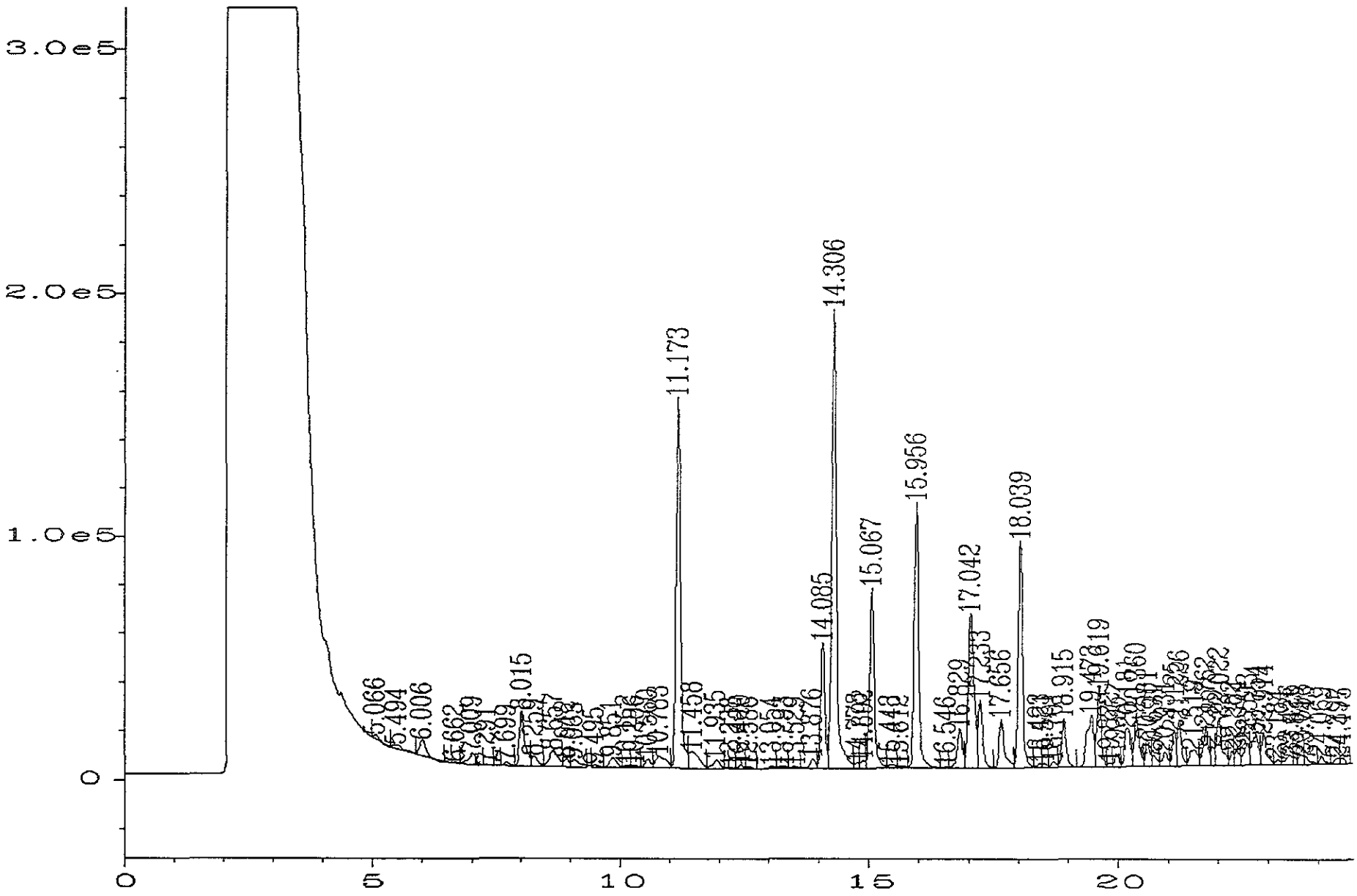
Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\018R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	8.933	11788	210	BV	0.693	2.1775
2	10.560	13407	268	VV	0.626	2.4766
3	11.976	2208	83	PV	0.328	0.4079
4	12.202	541	53	VB	0.171	0.0999
5	12.604	3074	277	BV	0.159	0.5678
6	14.332	7845	319	VV	0.328	1.4491
7	14.776	15086	652	VV	0.328	2.7867
8	15.109	10134	977	VV	0.147	1.8719
9	15.622	8751	357	VV	0.320	1.6165
10	16.248	33650	1257	VV	0.398	6.2158
11	16.973	8593	374	VV	0.320	1.5873
12	17.735	35934	4731	PV	0.114	6.6377
13	18.416	3316	254	PV	0.218	0.6126
14	18.771	9546	623	VV	0.218	1.7634
15	19.076	18016	832	VV	0.328	3.3279
16	19.667	17123	889	VV	0.274	3.1629
17	19.947	13424	2194	VV	0.093	2.4797
18	20.104	45925	7638	VV	0.093	8.4834
19	20.414	19695	1689	VV	0.177	3.6380
20	20.743	20809	3012	VV	0.103	3.8439
21	21.281	7352	674	VV	0.161	1.3580
22	21.556	128567	23385	VV	0.087	23.7491
23	22.020	35791	3319	VV	0.148	6.6113
24	22.484	5264	869	VV	0.092	0.9724
25	22.731	27198	4844	VV	0.087	5.0241
26	23.257	6810	560	VV	0.179	1.2580
27	23.445	8351	1002	VV	0.120	1.5425
28	23.829	11554	1397	PV	0.117	2.1342
29	24.011	5968	520	VV	0.174	1.1024
30	24.359	2011	306	PV	0.109	0.3715
31	24.520	3627	636	VBA	0.089	0.6701

Total area = 541356

Sample Name : 1 ppm gas			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\018F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-2.15309	3721914	-11.0231	516163	
Wash.	0.62569	3310512	0.063795	487409	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.29639	7.518	10		
	0.098816	7.698	10		
	7.12004	8.015	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	0.770712	10.555	0.069448	14.332	
	2.123978	10.782	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.098839	13.524	0.864369	16.248	
	1.065154	13.873	0.386783	16.973	
	11.8226	14.083	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	0.790933	13.873	0.417452	16.973	
	11.76757	14.083	0.2773		
	46.21752	14.303	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.533122	14.88	1.047865	17.735	
	4.783916	15.06	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\019F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\019F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : ~~0.5~~ pm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 03:10 PM
Report Created on: 26 Jun 92 12:25 PM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\019F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.066	6177	1407	BV	0.078	0.0758
2	5.494	22607	1535	PV	0.204	0.2774
3	6.006	54920	6699	VV	0.125	0.6738
4	6.662	2896	490	PV	0.095	0.0355
5	7.009	46060	4675	VV	0.143	0.5651
6	7.291	1537	207	PV	0.112	0.0189
7	7.699	11122	1474	VV	0.114	0.1364
8	8.015	177660	22708	PV	0.115	2.1796
9	8.259	35519	4173	VV	0.123	0.4358
10	8.657	82834	6558	VV	0.186	1.0163
11	8.912	22436	3390	VV	0.097	0.2753
12	9.063	34997	2883	VV	0.176	0.4294
13	9.495	8419	965	VV	0.128	0.1033
14	9.851	39003	3982	PV	0.150	0.4785
15	10.152	6615	891	VV	0.108	0.0812
16	10.286	8768	953	VV	0.138	0.1076
17	10.560	27679	3523	VV	0.120	0.3396
18	10.783	71125	4916	VV	0.200	0.8726
19	11.173	954755	153288	VV	0.096	11.7134
20	11.458	90128	6707	VV	0.187	1.1057
21	11.935	34998	3432	VV	0.147	0.4294
22	12.238	3791	589	VV	0.096	0.0465
23	12.420	11369	1611	VV	0.109	0.1395
24	12.586	6770	941	VV	0.110	0.0831
25	13.054	8884	963	PV	0.131	0.1090
26	13.293	10146	824	VV	0.168	0.1245
27	13.529	8475	685	VV	0.170	0.1040
28	13.876	30514	3909	VV	0.117	0.3744
29	14.085	310900	52182	VV	0.092	3.8143
30	14.306	1231879	189497	VV	0.098	15.1133
31	14.778	13283	2160	VV	0.087	0.1630
32	14.892	20953	3169	VV	0.096	0.2571
33	15.067	475092	74344	VV	0.098	5.8287
34	15.443	14362	1317	VV	0.150	0.1762
35	15.612	10459	977	VV	0.144	0.1283
36	15.956	678805	110379	VV	0.095	8.3279
37	16.546	3250	542	PV	0.094	0.0399
38	16.829	117548	15854	VV	0.113	1.4421
39	17.042	509738	63106	VV	0.129	6.2537
40	17.233	180314	27930	VV	0.097	2.2122
41	17.656	148726	19837	VV	0.111	1.8246
42	18.039	562855	93574	VV	0.094	6.9054
43	18.423	10596	1621	VV	0.095	0.1300
44	18.521	11086	1665	VV	0.098	0.1360
45	18.701	16437	2398	VV	0.103	0.2017
46	18.915	121040	19795	VV	0.093	1.4850
47	19.473	202357	21194	PV	0.130	2.4826
48	19.619	192217	32642	VV	0.091	2.3582

49	19.822	8796	1592	VV	0.083	0.1079
50	19.957	29482	5262	VV	0.087	0.3617
51	20.181	128380	15674	VV	0.131	1.5750
52	20.360	141879	21989	VV	0.095	1.7406
53	20.581	68091	10803	VV	0.093	0.8354
54	20.691	27851	4297	VV	0.108	0.3417
55	20.931	41944	5832	VV	0.105	0.5146
56	21.125	77523	14729	VV	0.079	0.9511
57	21.226	102210	18656	VV	0.082	1.2540
58	21.519	74751	6275	VV	0.166	0.9171
59	21.762	107618	16608	VV	0.093	1.3203
60	21.897	39170	7745	VV	0.074	0.4806
61	22.022	146292	19689	VV	0.109	1.7948
62	22.282	30416	5935	VV	0.076	0.3732
63	22.374	38102	5974	VV	0.091	0.4675
64	22.593	69682	8788	VV	0.111	0.8549
65	22.754	109422	12268	VV	0.125	1.3425
66	22.914	93483	12641	VV	0.106	1.1469
67	23.184	13115	1979	VV	0.097	0.1609
68	23.426	37019	4004	VV	0.130	0.4542
69	23.523	13156	2878	VV	0.076	0.1614
70	23.658	28657	4183	VV	0.099	0.3516
71	23.743	22589	3170	VV	0.119	0.2771
72	24.069	21926	3197	VV	0.101	0.2690
73	24.397	16931	2419	VV	0.105	0.2077
74	24.475	10355	2344	VBA	0.074	0.1270

Total area = 8150939

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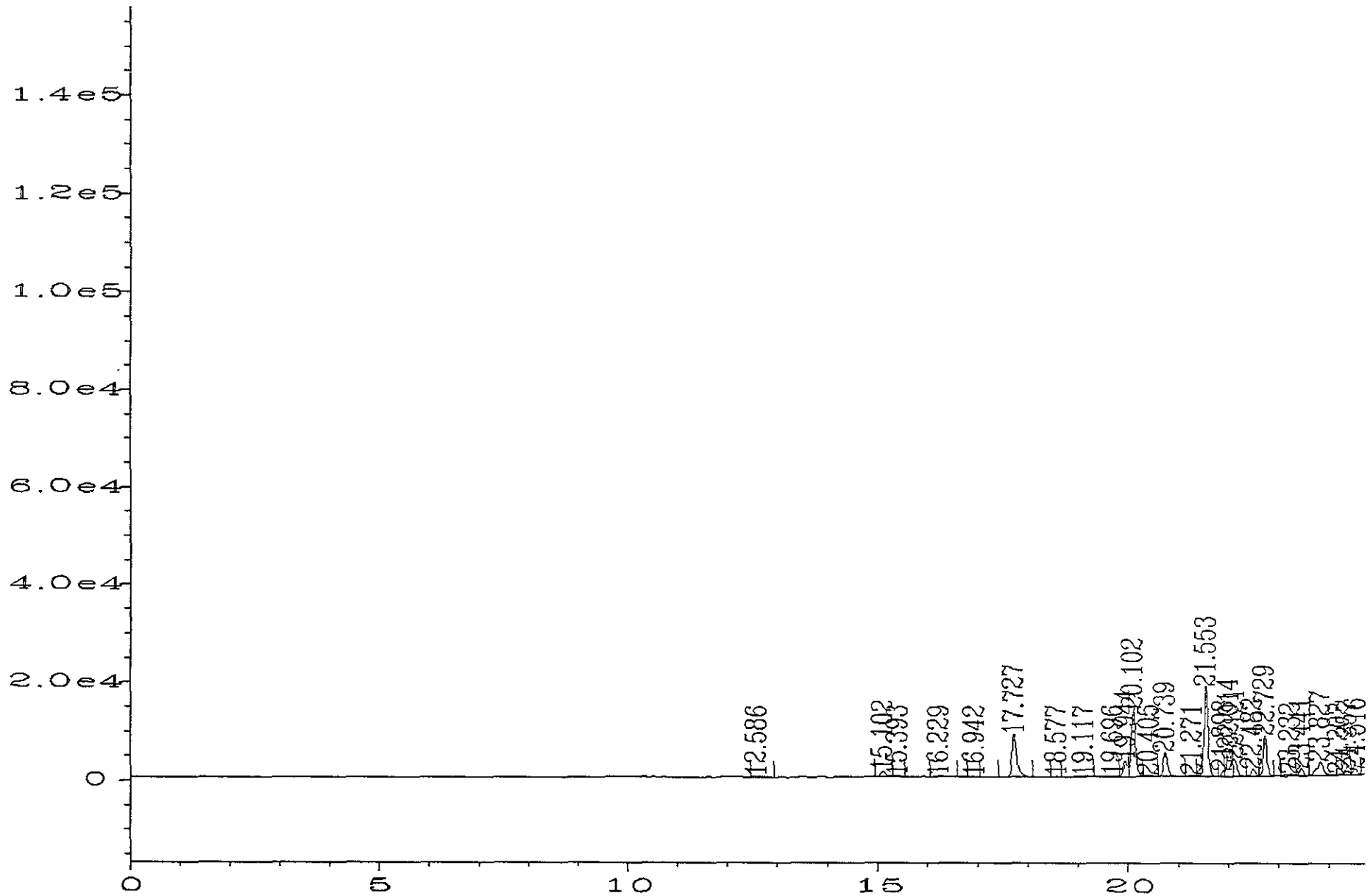


Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\019R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\019R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : ~~0.5~~ pm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 03:10 PM
Report Created on: 26 Jun 92 12:26 PM

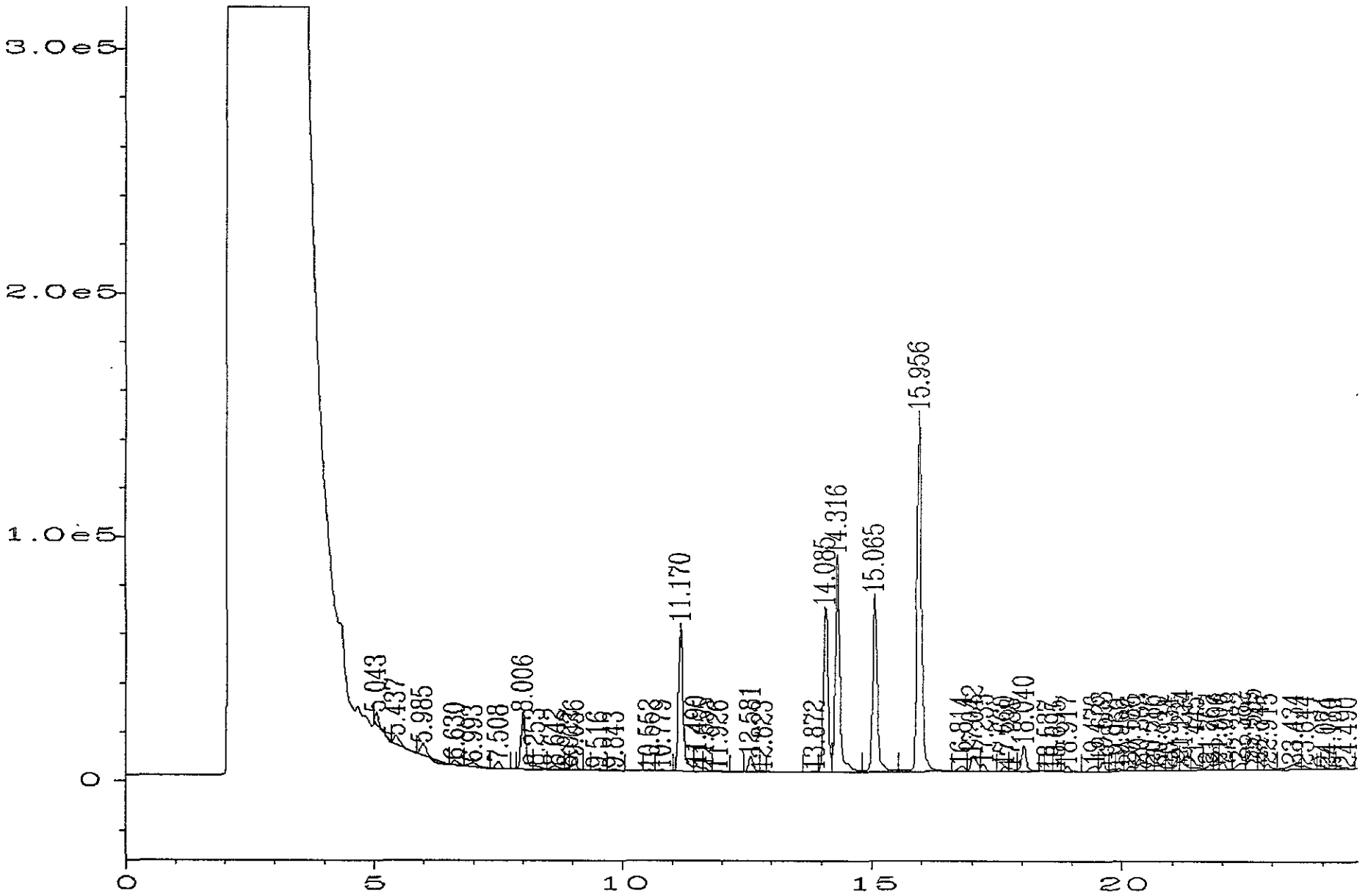
Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\019R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	12.586	1824	190	BB	0.145	0.3739
2	15.102	7907	1111	PV	0.108	1.6209
3	15.393	999	113	VB	0.127	0.2047
4	16.229	3471	204	VV	0.223	0.7115
5	16.942	862	110	PV	0.110	0.1767
6	17.727	61340	8678	BV	0.107	12.5737
7	18.577	755	128	BV	0.089	0.1547
8	19.117	4226	164	VV	0.344	0.8663
9	19.696	4828	219	VV	0.290	0.9897
10	19.944	18562	3320	VV	0.086	3.8048
11	20.102	82839	14000	VV	0.091	16.9807
12	20.405	4103	354	VV	0.171	0.8409
13	20.739	30909	5078	VV	0.093	6.3357
14	21.271	2274	318	VV	0.106	0.4662
15	21.553	101044	18711	VV	0.084	20.7122
16	21.898	4808	1180	VV	0.062	0.9856
17	22.014	34667	5630	VV	0.093	7.1062
18	22.121	17936	3470	VV	0.077	3.6766
19	22.482	7902	1501	VV	0.081	1.6198
20	22.729	41956	8238	VV	0.080	8.6004
21	23.232	5204	405	VV	0.177	1.0667
22	23.441	10081	1560	VV	0.097	2.0664
23	23.827	26264	2840	PV	0.128	5.3836
24	24.202	883	203	VV	0.070	0.1811
25	24.357	5712	797	VV	0.117	1.1708
26	24.516	6490	1223	VV	0.083	1.3303

Total area = 487846

Sample Name : 0.5 pm gas			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\019F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-0.90295	5663128	-11.0273	487846	
Wash.	0.88667	4681921	0.063502	486022	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.400784	7.699	10		
	12.39152	8.015	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	1.207794	10.56	-0.0658		
	3.888413	10.783	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.340705	13.529	0.289157	16.229	
	1.746793	13.876	0.23943	16.942	
	19.63542	14.085	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	1.486461	13.876	0.291359	16.942	
	19.73959	14.085	0.2773		
	79.69532	14.306	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.493946	14.778	1.600445	17.727	
	0.619043	14.892	0.2663		
	8.026051	15.067	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\020F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\020F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 0.1 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 03:54 PM
Report Created on: 26 Jun 92 12:28 PM

Page Number : 1
Vial Number : 20
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\020F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.043	18898	4419	BV	0.071	0.4884
2	5.437	25289	3473	PV	0.115	0.6535
3	5.985	22618	4914	PV	0.084	0.5845
4	6.630	16310	2026	PV	0.122	0.4215
5	6.993	19125	1763	VV	0.158	0.4942
6	7.508	19006	2642	PV	0.112	0.4912
7	8.006	150802	23469	PV	0.098	3.8971
8	8.253	14998	1340	VV	0.147	0.3876
9	8.642	20148	1513	VV	0.202	0.5207
10	8.922	4696	922	VV	0.076	0.1214
11	9.036	31658	5389	VV	0.089	0.8181
12	9.516	6424	743	VV	0.127	0.1660
13	9.843	6497	714	VV	0.137	0.1679
14	10.552	3280	396	VV	0.128	0.0848
15	10.779	5606	436	VV	0.180	0.1449
16	11.170	384828	60721	PV	0.097	9.9448
17	11.490	20014	2125	VV	0.142	0.5172
18	11.655	8878	1354	VV	0.098	0.2294
19	11.926	3688	395	VV	0.131	0.0953
20	12.581	38821	6396	PV	0.095	1.0032
21	12.823	416	89	VV	0.068	0.0107
22	13.872	3650	467	VV	0.118	0.0943
23	14.085	402934	68191	VV	0.092	10.4127
24	14.316	578084	89626	VV	0.098	14.9390
25	15.065	469506	72929	VV	0.099	12.1331
26	15.956	923586	148849	VV	0.095	23.8675
27	16.814	20606	2126	VV	0.152	0.5325
28	17.042	54797	6567	VV	0.133	1.4161
29	17.233	20098	3038	VV	0.099	0.5194
30	17.660	15740	2264	VV	0.105	0.4068
31	17.788	9924	1206	VV	0.114	0.2565
32	18.040	71724	10457	VV	0.102	1.8535
33	18.537	4218	575	VV	0.109	0.1090
34	18.695	4248	542	VV	0.113	0.1098
35	18.917	16857	2341	VV	0.106	0.4356
36	19.476	23380	2451	PV	0.131	0.6042
37	19.623	25498	3895	VV	0.099	0.6589
38	19.828	4569	633	VV	0.108	0.1181
39	19.956	6234	887	VV	0.104	0.1611
40	20.186	16066	1861	VV	0.136	0.4152
41	20.363	25104	3014	VV	0.117	0.6487
42	20.586	15737	2220	VV	0.105	0.4067
43	20.710	22728	1951	VV	0.165	0.5874
44	20.934	8593	1285	VV	0.096	0.2221
45	21.135	21380	3337	VV	0.093	0.5525
46	21.224	33267	4203	VV	0.111	0.8597
47	21.445	13523	1155	VV	0.152	0.3495
48	21.767	18642	2432	VV	0.106	0.4817

49	21.906	14181	2337	VV	0.089	0.3665
50	22.018	22979	2968	VV	0.111	0.5938
51	22.382	29404	2862	VV	0.139	0.7599
52	22.585	51430	4367	VV	0.163	1.3291
53	22.747	18269	2962	VV	0.103	0.4721
54	22.915	17721	2367	VV	0.106	0.4579
55	23.434	33563	1992	VV	0.221	0.8673
56	23.644	13350	1442	VV	0.132	0.3450
57	24.074	3688	656	VV	0.085	0.0953
58	24.180	3297	469	VV	0.104	0.0852
59	24.490	9064	580	VBA	0.215	0.2342

Total area = 3869638

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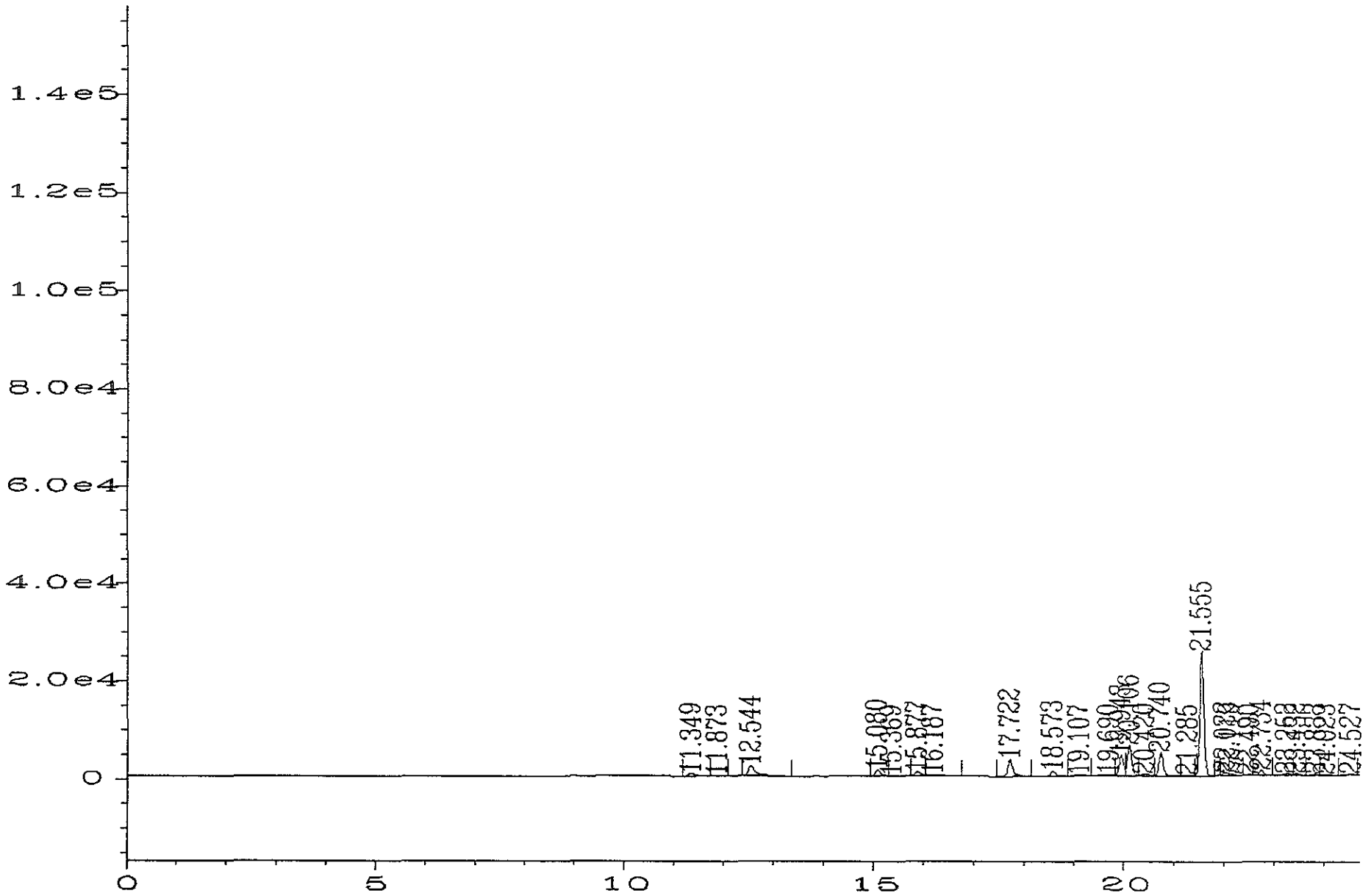


Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\020RO201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\020R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 0.1 ppm gas
Run Time Bar Code:
Acquired on : 23 Jun 92 03:54 PM
Report Created on: 26 Jun 92 12:29 PM

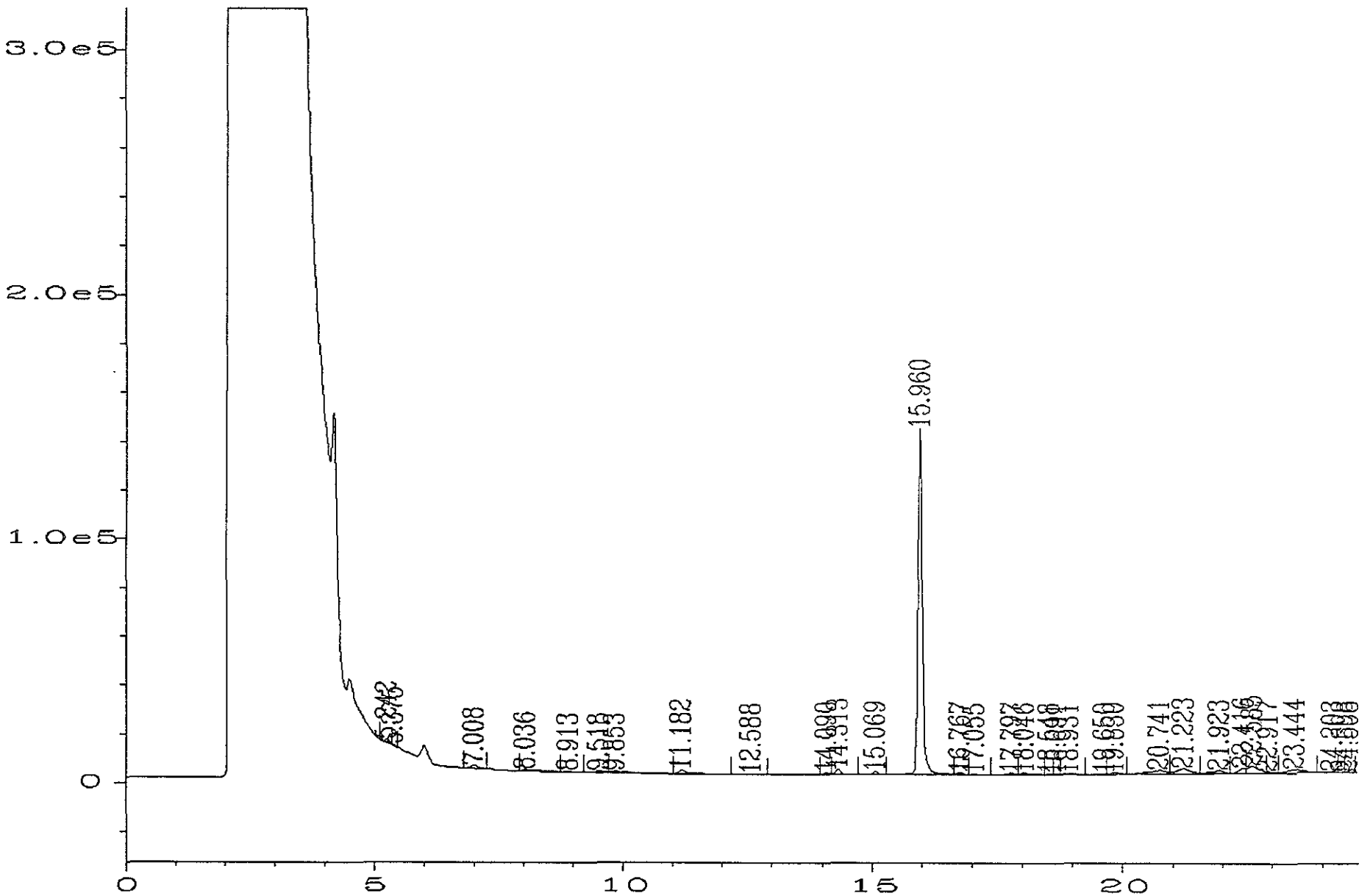
Page Number : 1
Vial Number : 20
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\020R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.349	6608	557	BV	0.169	1.7764
2	11.873	1427	117	VB	0.181	0.3836
3	12.544	21632	2045	BB	0.151	5.8157
4	15.080	10097	1316	VV	0.115	2.7146
5	15.369	1494	127	VB	0.195	0.4015
6	15.877	5810	763	BV	0.116	1.5620
7	16.187	6171	286	VV	0.288	1.6590
8	17.722	25755	3509	BV	0.110	6.9240
9	18.573	9938	1101	PV	0.130	2.6718
10	19.107	4525	207	VV	0.274	1.2166
11	19.690	4813	251	VV	0.250	1.2941
12	19.943	25297	4338	VV	0.090	6.8009
13	20.106	38674	6348	VV	0.093	10.3974
14	20.420	4864	401	VV	0.169	1.3078
15	20.740	30958	4851	VV	0.097	8.3230
16	21.285	2604	221	VV	0.166	0.7001
17	21.555	139212	25767	VV	0.084	37.4263
18	22.022	5053	715	VV	0.105	1.3585
19	22.119	3678	507	VV	0.121	0.9889
20	22.490	1612	232	VV	0.104	0.4333
21	22.734	7388	1119	VV	0.097	1.9862
22	23.252	5142	361	VV	0.187	1.3823
23	23.432	2837	332	VV	0.121	0.7626
24	23.833	2362	293	PV	0.113	0.6350
25	24.023	2033	164	VV	0.159	0.5467
26	24.527	1979	200	PBA	0.138	0.5319

Total area = 371963

Sample Name : 0.1 ppm gas			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\020F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-2.69279	2883868	-11.0456	365355	
Wash.	0.385229	2046922	0.03319	342296	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.968432	7.508	10.26432	11.349	
	10.45774	8.006	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.29762	10.552	-0.0658		
	-0.15411	10.779	-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.03287	13.872	0.223		
	25.50719	14.085	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.26239	13.872	0.2773		
	25.731	14.085	0.2773		
	37.13327	14.316	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	7.934943	15.065	0.826471	17.722	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\021F0201.D

Area Percent Report

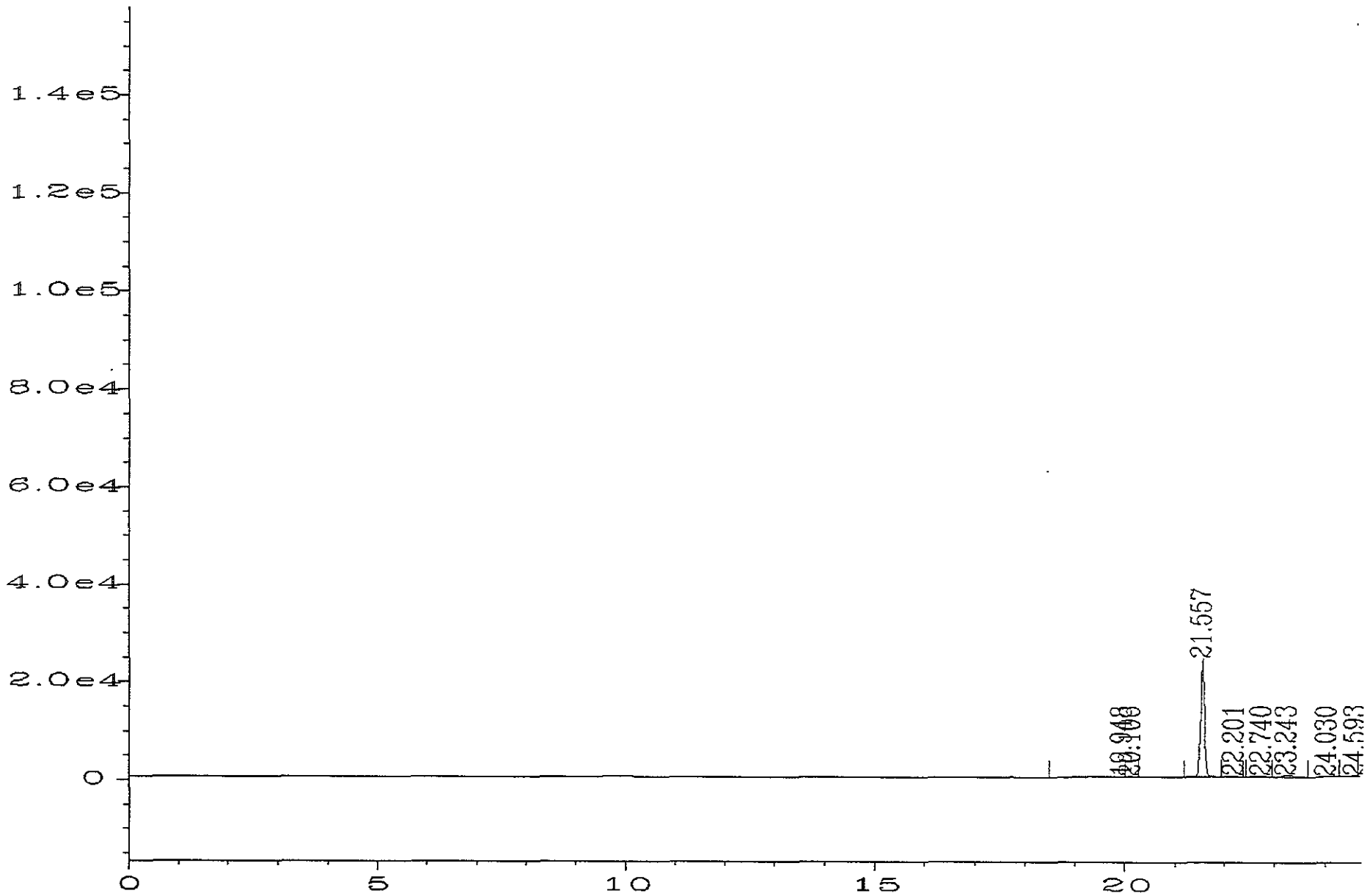
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\021F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : blank
Run Time Bar Code:
Acquired on : 23 Jun 92 04:38 PM
Report Created on: 26 Jun 92 12:30 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\021F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.242	6583	1414	BV	0.069	0.5172
2	5.375	1811	496	VV	0.061	0.1423
3	7.008	16883	1475	PV	0.162	1.3265
4	8.036	17560	740	PV	0.303	1.3797
5	8.913	4618	493	VV	0.130	0.3628
6	9.518	7772	707	PV	0.157	0.6106
7	9.853	13694	657	VV	0.276	1.0759
8	11.182	17493	1531	PV	0.160	1.3744
9	12.588	1454	161	PB	0.130	0.1142
10	14.090	5928	1015	PV	0.092	0.4657
11	14.313	13746	2102	VB	0.100	1.0800
12	15.069	8124	1156	BV	0.105	0.6383
13	15.960	875680	142207	PV	0.095	68.8009
14	16.767	9054	1040	VV	0.127	0.7114
15	17.055	4720	320	VV	0.198	0.3708
16	17.797	9095	788	PV	0.158	0.7146
17	18.046	12989	800	VV	0.213	1.0205
18	18.548	2787	381	VV	0.106	0.2189
19	18.691	2014	292	VV	0.098	0.1583
20	18.931	4643	282	VV	0.209	0.3648
21	19.650	3693	383	PV	0.161	0.2901
22	19.830	8617	451	VV	0.246	0.6771
23	20.741	41022	1465	VV	0.344	3.2230
24	21.223	41228	2166	VV	0.260	3.2392
25	21.923	22538	1301	VV	0.226	1.7707
26	22.416	21200	2081	VV	0.150	1.6657
27	22.585	47162	3148	VV	0.211	3.7054
28	22.917	6317	607	VV	0.136	0.4963
29	23.444	36558	1521	VV	0.306	2.8723
30	24.203	3948	343	PV	0.150	0.3102
31	24.398	1573	219	VV	0.102	0.1236
32	24.508	2270	211	VBA	0.144	0.1783

Total area = 1272773



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\021RO201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\021R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : blank
Run Time Bar Code:
Acquired on : 23 Jun 92 04:38 PM
Report Created on: 26 Jun 92 12:31 PM

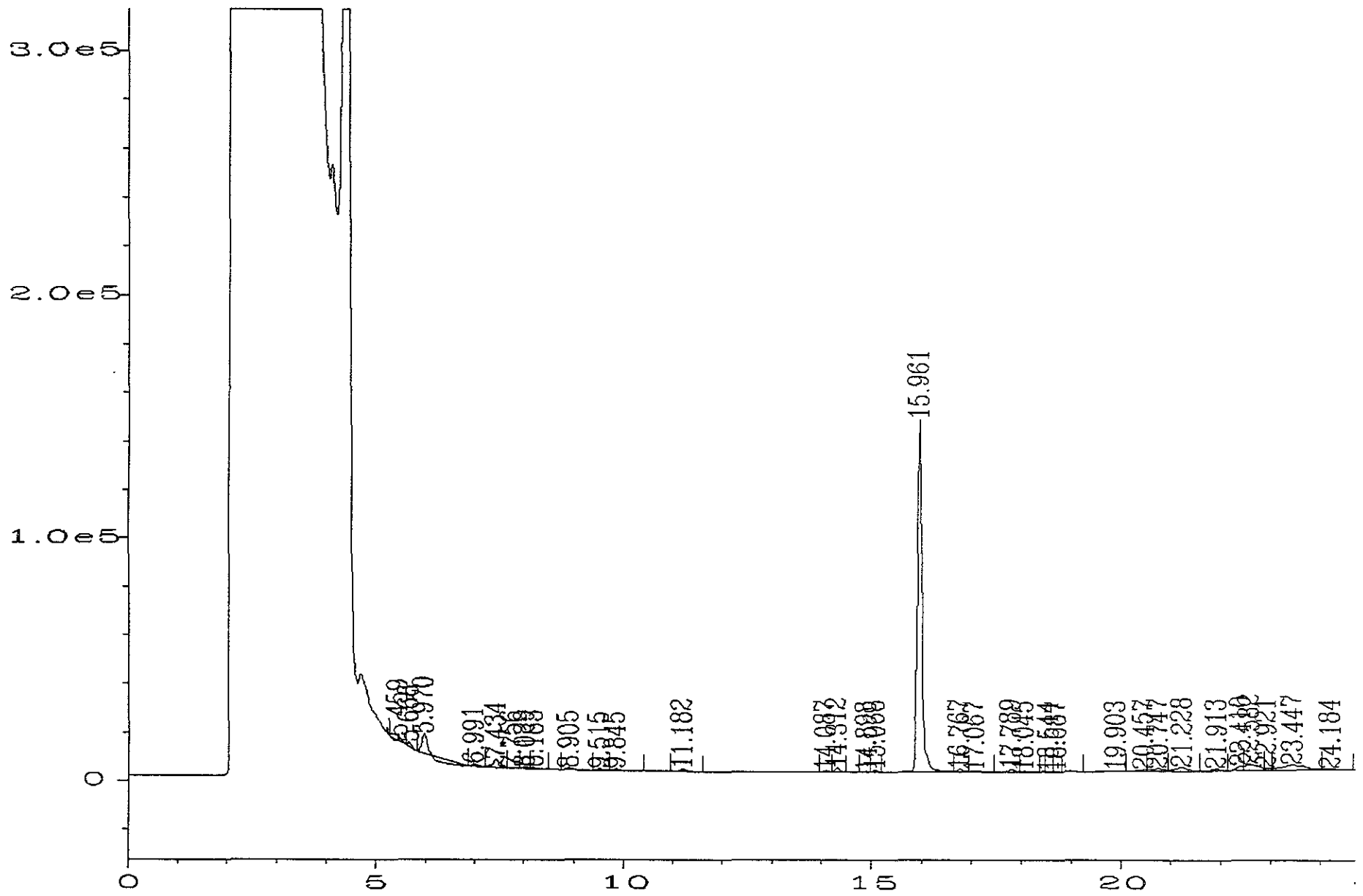
Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\021R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	19.948	3204	117	BV	0.344	2.1511
2	20.106	1274	187	VV	0.101	0.8556
3	21.557	132677	24442	BV	0.085	89.0689
4	22.201	1613	165	VB	0.133	1.0831
5	22.740	2171	164	BV	0.179	1.4572
6	23.243	6149	312	PV	0.274	4.1278
7	24.030	1319	105	PV	0.164	0.8854
8	24.593	553	47	PBA	0.161	0.3710

Total area = 148960

Sample Name : blank			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\021F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.87715	1044794	-11.0778	148960	
Wash.	0.215961	1157441	-0.00758	148960	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.86432	8.036	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.178206	14.09	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.11409	14.09	0.2773		
	0.394865	14.313	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.409802	15.069	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\022F0201.D

Area Percent Report

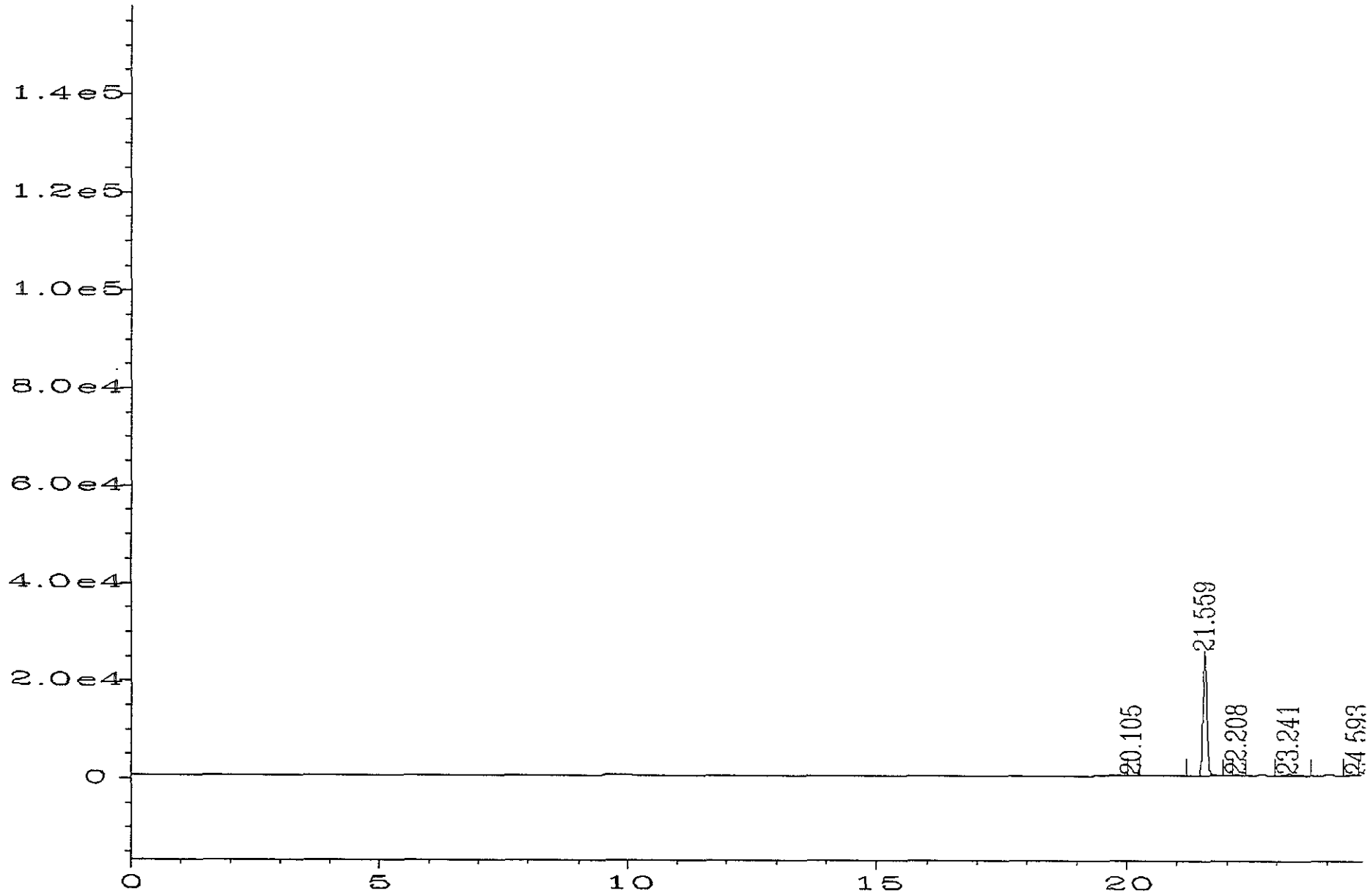
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\022F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : method blank
Run Time Bar Code:
Acquired on : 23 Jun 92 05:23 PM
Report Created on: 26 Jun 92 12:33 PM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\022F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.459	7895	2032	BV	0.064	0.5985
2	5.668	8172	1762	VV	0.077	0.6195
3	5.970	12546	8170	PV	0.046	0.9511
4	6.991	9102	1063	PV	0.129	0.6900
5	7.434	27737	3533	VV	0.114	2.1028
6	7.756	2357	193	PV	0.176	0.1787
7	8.029	5759	646	VV	0.130	0.4366
8	8.183	5601	572	VV	0.138	0.4246
9	8.905	4896	640	VV	0.114	0.3711
10	9.515	5241	592	PV	0.130	0.3973
11	9.845	5084	579	VV	0.132	0.3855
12	11.182	9269	1026	BV	0.131	0.7027
13	14.087	3977	681	PV	0.091	0.3015
14	14.312	10859	1784	VV	0.095	0.8233
15	14.898	1686	251	BV	0.098	0.1278
16	15.068	5577	883	VV	0.097	0.4228
17	15.961	913605	145885	VV	0.096	69.2620
18	16.767	9946	1111	VV	0.130	0.7540
19	17.067	4475	283	VV	0.218	0.3392
20	17.789	11215	1148	PV	0.136	0.8502
21	18.045	7784	554	VV	0.184	0.5901
22	18.544	1842	256	VV	0.103	0.1397
23	18.687	1796	245	VV	0.102	0.1362
24	19.903	9256	313	PV	0.369	0.7017
25	20.457	10248	756	VV	0.176	0.7770
26	20.747	21392	1081	VV	0.257	1.6218
27	21.228	30321	1587	VV	0.255	2.2987
28	21.913	13849	866	VV	0.214	1.0499
29	22.410	16395	1726	VV	0.158	1.2429
30	22.582	43691	2584	VV	0.218	3.3123
31	22.921	8323	930	VV	0.125	0.6310
32	23.447	77207	2160	VV	0.446	5.8532
33	24.184	11955	497	VBA	0.306	0.9063

Total area = 1319057



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\022R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\022R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : method blank
Run Time Bar Code:
Acquired on : 23 Jun 92 05:23 PM
Report Created on: 26 Jun 92 12:33 PM

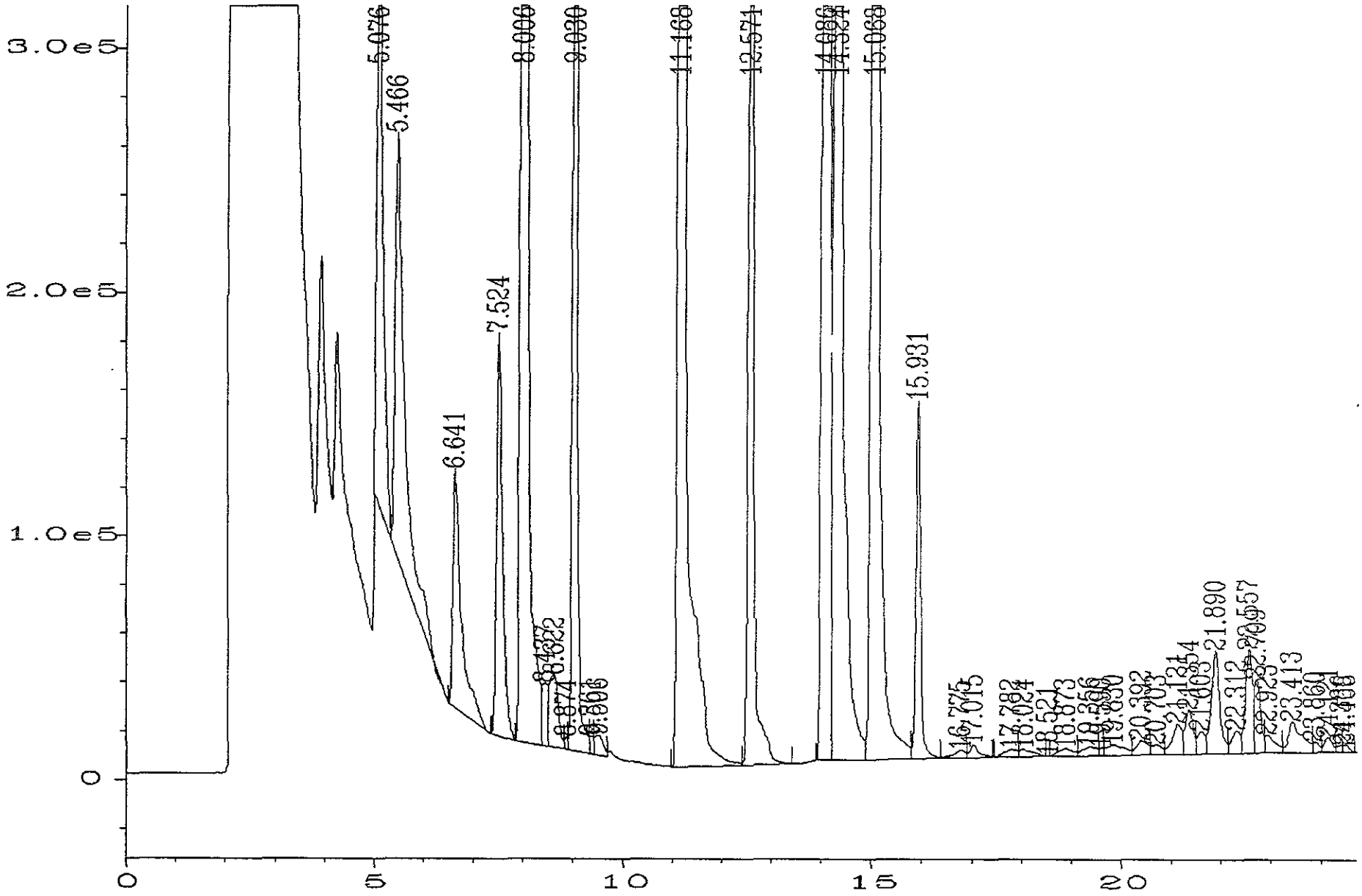
Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\022R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.105	1048	158	VB	0.099	0.7100
2	21.559	139513	25565	BV	0.085	94.5383
3	22.208	839	153	BB	0.085	0.5683
4	23.241	5681	295	PV	0.260	3.8499
5	24.593	492	19	BBA	0.428	0.3336

Total area = 147573

Sample Name : method blank			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\022F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.87768	1043979	-11.078	147573	
Wash.	0.221571	1186922	-0.00788	147573	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	1.597064	7.434	10		
	-0.2303	7.756	10		
	0.014648	8.029	10		
	0.003272	8.183	10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	0.053733	14.087	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.2411	14.087	0.2773		
	0.206921	14.312	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.304799	14.898	0.2663		
	0.368261	15.068	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\015F0201.D

Area Percent Report

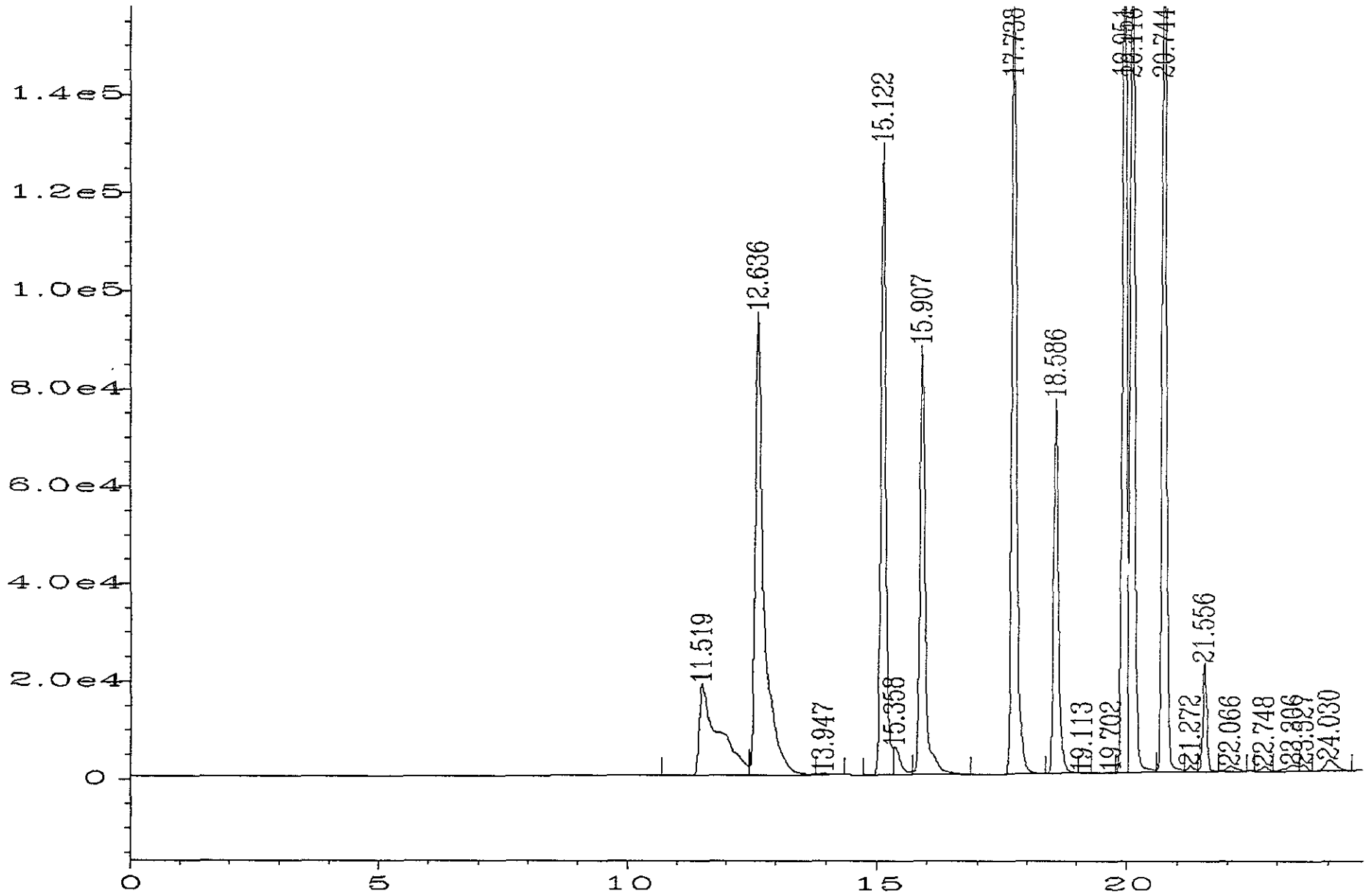
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\015F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 1,000 ppb vol cc
Run Time Bar Code:
Acquired on : 23 Jun 92 12:16 PM
Report Created on: 26 Jun 92 12:37 PM

Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\015F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.076	2336681	302962	BV	0.113	1.9487
2	5.466	2323041	174563	VV	0.186	1.9373
3	6.641	1168415	98472	PV	0.165	0.9744
4	7.524	1439615	166721	PV	0.130	1.2006
5	8.006	1.54905E+007	2568077	PV	0.092	12.9182
6	8.437	196958	25852	VV	0.109	0.1643
7	8.622	379486	29783	VV	0.177	0.3165
8	8.874	23225	5301	VV	0.073	0.0194
9	9.030	3864087	706034	VV	0.085	3.2224
10	9.361	41576	7232	VV	0.096	0.0347
11	9.506	91813	8022	VV	0.174	0.0766
12	11.168	2.06648E+007	3285804	PV	0.096	17.2333
13	12.571	3477896	532060	VV	0.100	2.9004
14	14.086	2.12123E+007	3548867	BV	0.093	17.6899
15	14.324	2.248E+007	3830074	VV	0.090	18.7471
16	15.068	2.09037E+007	3463777	VV	0.092	17.4325
17	15.931	921345	147449	VV	0.096	0.7683
18	16.775	52324	3017	VV	0.246	0.0436
19	17.015	67023	5240	VV	0.178	0.0559
20	17.782	57723	3002	VV	0.242	0.0481
21	18.024	55279	3129	VV	0.230	0.0461
22	18.521	1157	306	VV	0.063	0.0010
23	18.873	64765	3120	VV	0.259	0.0540
24	19.356	75924	3668	VV	0.259	0.0633
25	19.590	19393	3277	VV	0.088	0.0162
26	19.830	108716	4404	VV	0.306	0.0907
27	20.392	95728	5785	VV	0.215	0.0798
28	20.703	55895	3959	VV	0.177	0.0466
29	21.121	174113	12545	VV	0.182	0.1452
30	21.354	201648	18252	VV	0.166	0.1682
31	21.603	97063	9328	VV	0.147	0.0809
32	21.890	496067	42194	VV	0.176	0.4137
33	22.312	110159	9505	VV	0.154	0.0919
34	22.557	424519	42331	VV	0.149	0.3540
35	22.709	253516	30032	VV	0.128	0.2114
36	22.923	102160	7344	VV	0.183	0.0852
37	23.413	235866	12620	VV	0.248	0.1967
38	23.860	35172	4188	VV	0.129	0.0293
39	24.121	65489	5913	VV	0.168	0.0546
40	24.386	22051	2744	VV	0.106	0.0184
41	24.468	24875	2897	VBA	0.122	0.0207

Total area = 1.19912E+008



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\015RO201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\015R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 1,000 ppb vol cc
Run Time Bar Code:
Acquired on : 23 Jun 92 12:16 PM
Report Created on: 26 Jun 92 12:37 PM

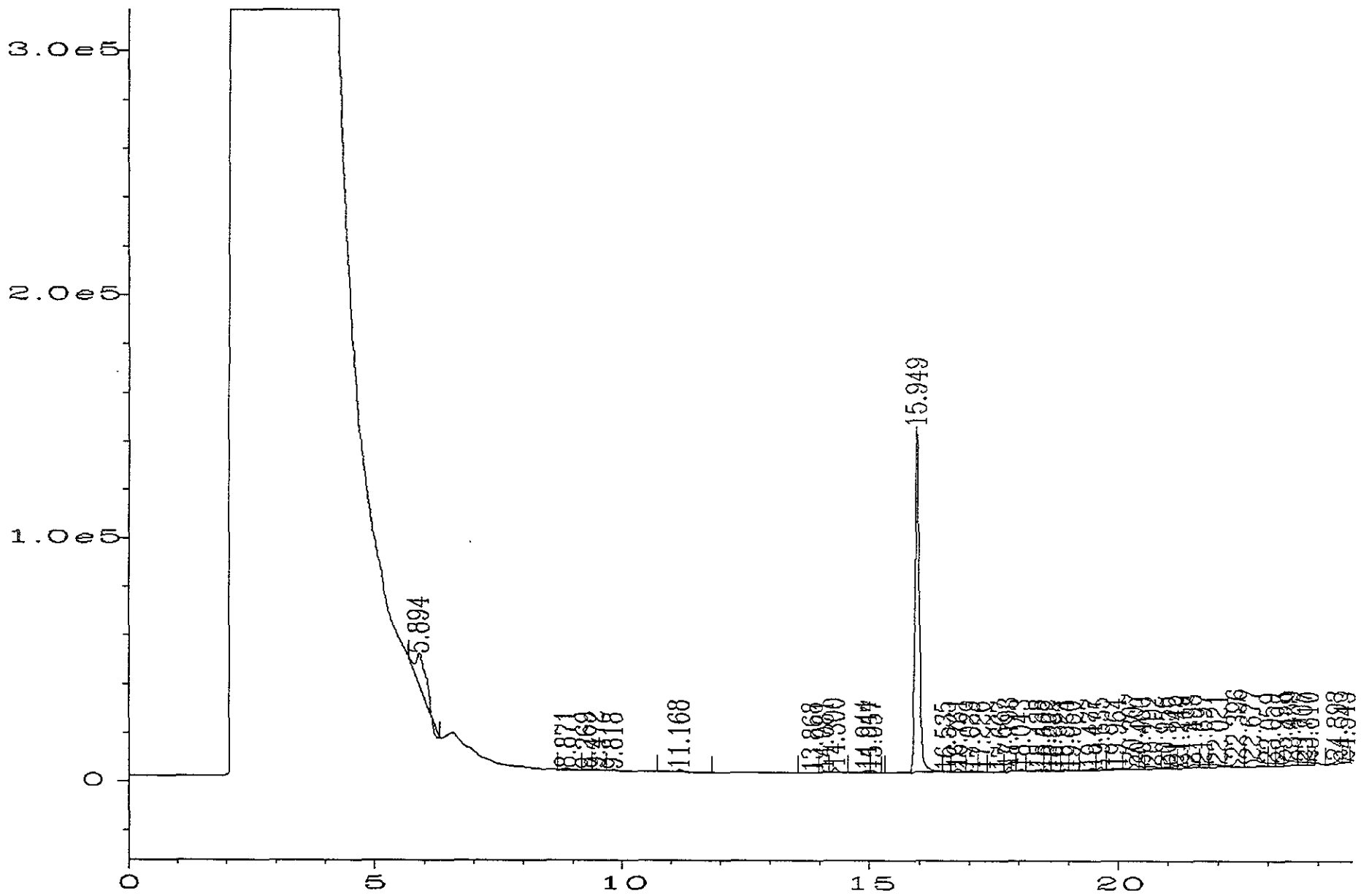
Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\015R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.519	506470	18792	BV	0.349	5.7126
2	12.636	1159983	95361	VV	0.171	13.0838
3	13.947	3302	318	VB	0.148	0.0372
4	15.122	884039	129886	BV	0.105	9.9713
5	15.358	54912	5638	VV	0.162	0.6194
6	15.907	657236	88353	VV	0.114	7.4131
7	17.738	1118707	168730	PV	0.102	12.6182
8	18.586	508570	77110	PV	0.102	5.7363
9	19.113	1054	106	VB	0.129	0.0119
10	19.702	2034	166	BV	0.167	0.0229
11	19.951	1167370	209086	VV	0.088	13.1671
12	20.116	1390199	242355	VV	0.089	15.6804
13	20.744	1173334	208881	VV	0.088	13.2344
14	21.272	12568	1375	VV	0.127	0.1418
15	21.556	127147	22541	VV	0.088	1.4341
16	22.066	17344	1087	VV	0.224	0.1956
17	22.748	10714	1028	VV	0.150	0.1208
18	23.306	21556	1325	VV	0.238	0.2431
19	23.527	13633	1370	VV	0.148	0.1538
20	24.030	35645	2274	VV	0.231	0.4021

Total area = 8865818

Sample Name	: 1,000 ppb vol cc		Injection Number : 1		
Data File Name	: C:\HPCHEM\6\DATA\06-22-92.c\015F0201.D				
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	40.54605	70024929	-9.77899	8865817	
Wash.	4.672148	24574083	1.478649	7196062	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	103.2523	7.524	30.2588	11.519	
	1114.916	8.006	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.00887	13.947	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	1353.145	14.086	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	1380.421	14.086	0.2773		
	1462.948	14.324	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	341.2166	15.068	24.59818	17.738	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\028F0201.D

Area Percent Report

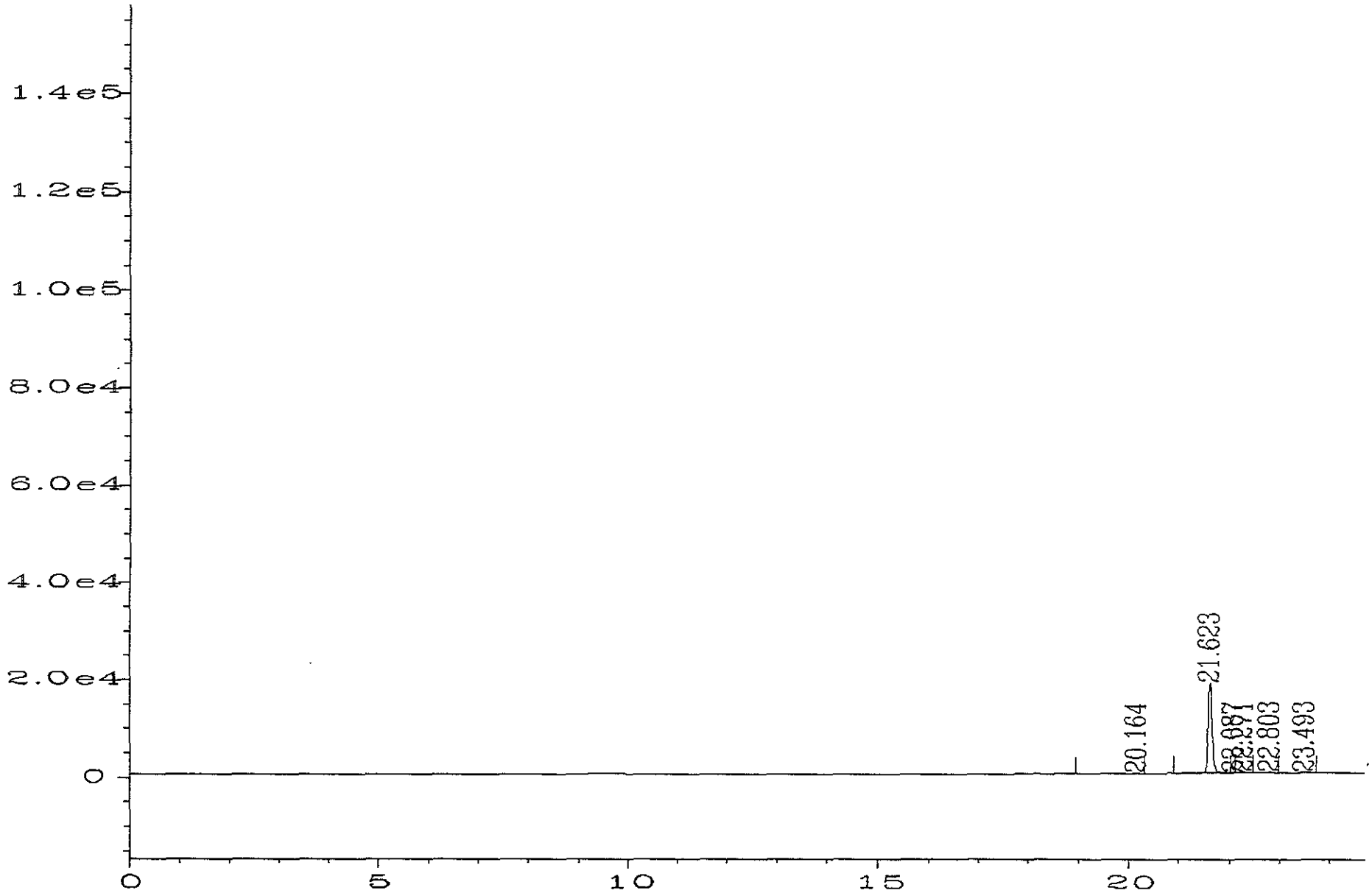
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\028F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24comp dup
Run Time Bar Code:
Acquired on : 23 Jun 92 09:51 PM
Report Created on: 26 Jun 92 12:40 PM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\028F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.894	185917	12791	BV	0.195	12.7075
2	8.871	7744	627	PV	0.165	0.5293
3	9.269	3771	368	VV	0.160	0.2577
4	9.472	5910	751	VV	0.116	0.4040
5	9.818	3561	540	VV	0.107	0.2434
6	11.168	8645	894	PV	0.144	0.5909
7	13.868	1127	174	BV	0.101	0.0770
8	14.081	4206	711	PV	0.093	0.2875
9	14.300	11346	1851	VV	0.094	0.7755
10	14.944	5541	724	VV	0.126	0.3787
11	15.057	4502	749	VB	0.091	0.3077
12	15.949	849219	143067	BV	0.092	58.0445
13	16.535	3826	434	VV	0.120	0.2615
14	16.761	12687	1341	VV	0.137	0.8671
15	17.029	7368	699	VV	0.151	0.5036
16	17.226	2884	444	VV	0.100	0.1971
17	17.667	1853	361	PV	0.086	0.1267
18	17.793	11350	1782	VV	0.097	0.7757
19	18.043	5226	918	VV	0.090	0.3572
20	18.438	6047	595	VV	0.143	0.4133
21	18.562	4220	556	VV	0.115	0.2885
22	18.682	2002	243	VV	0.137	0.1368
23	18.924	3133	470	VV	0.101	0.2141
24	19.050	1355	211	VV	0.092	0.0926
25	19.477	7575	699	VV	0.144	0.5178
26	19.635	6263	999	VV	0.097	0.4281
27	19.964	7819	644	PV	0.166	0.5345
28	20.307	19410	2199	VV	0.123	1.3267
29	20.460	4896	908	VV	0.075	0.3346
30	20.702	16459	982	VV	0.217	1.1250
31	20.955	6694	818	VV	0.116	0.4576
32	21.142	6935	1017	VV	0.095	0.4740
33	21.249	11944	1283	VV	0.127	0.8164
34	21.498	15646	1299	VV	0.173	1.0694
35	21.697	12102	1246	VV	0.128	0.8272
36	22.021	17278	1182	VV	0.191	1.1810
37	22.396	34118	3335	VV	0.137	2.3320
38	22.677	57709	2730	VV	0.264	3.9444
39	23.059	11555	1365	VV	0.124	0.7898
40	23.298	10610	1122	VV	0.130	0.7252
41	23.459	25221	1812	VV	0.187	1.7239
42	23.707	13915	1458	VV	0.131	0.9511
43	23.810	8884	1276	VV	0.116	0.6073
44	24.393	10589	1250	PV	0.118	0.7237
45	24.543	3986	361	VBA	0.146	0.2725

Total area = 1463048



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\028R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\028R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24comp dup
Run Time Bar Code:
Acquired on : 23 Jun 92 09:51 PM
Report Created on: 26 Jun 92 12:41 PM

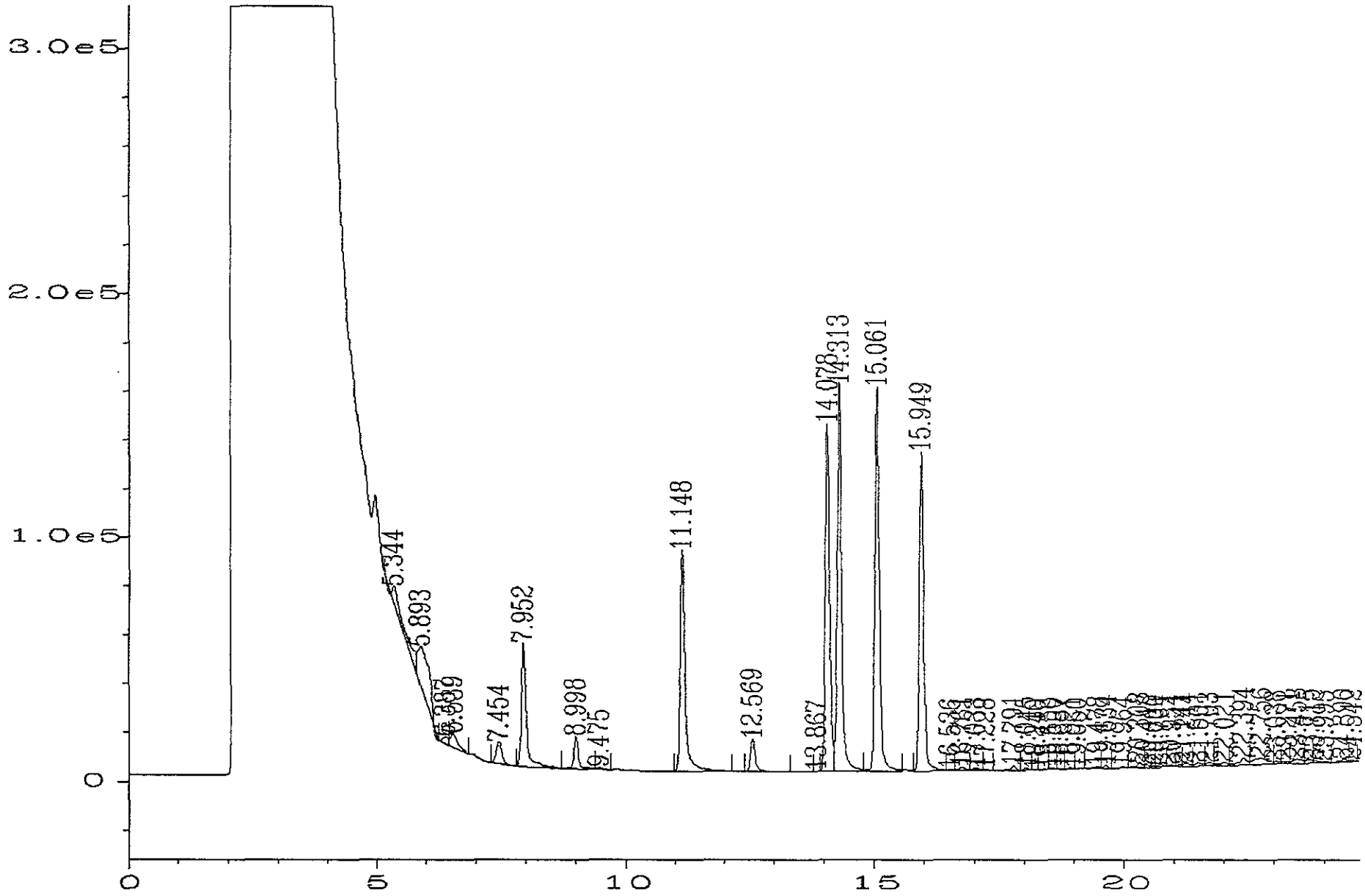
Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\028R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	20.164	1508	138	BB	0.152	1.3164
2	21.623	106334	18643	PV	0.089	92.8392
3	22.087	504	93	VV	0.089	0.4401
4	22.271	2349	204	VV	0.154	2.0508
5	22.803	2019	124	VV	0.212	1.7626
6	23.493	1822	108	VV	0.214	1.5910

Total area = 114536

Sample Name : 30222-24comp dup			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\028F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-3.87925	1041533	-11.0829	114536	
Wash.	0.222813	1193447	-0.01484	114536	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.1281	13.868	0.223		
	0.068343	14.081	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.42663	13.868	0.2773		
	-0.22619	14.081	0.2773		
	0.238625	14.3	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.367674	14.944	0.2663		
	0.350728	15.057	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\029F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\029F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24 ms vol
Run Time Bar Code:
Acquired on : 23 Jun 92 10:34 PM
Report Created on: 26 Jun 92 12:42 PM

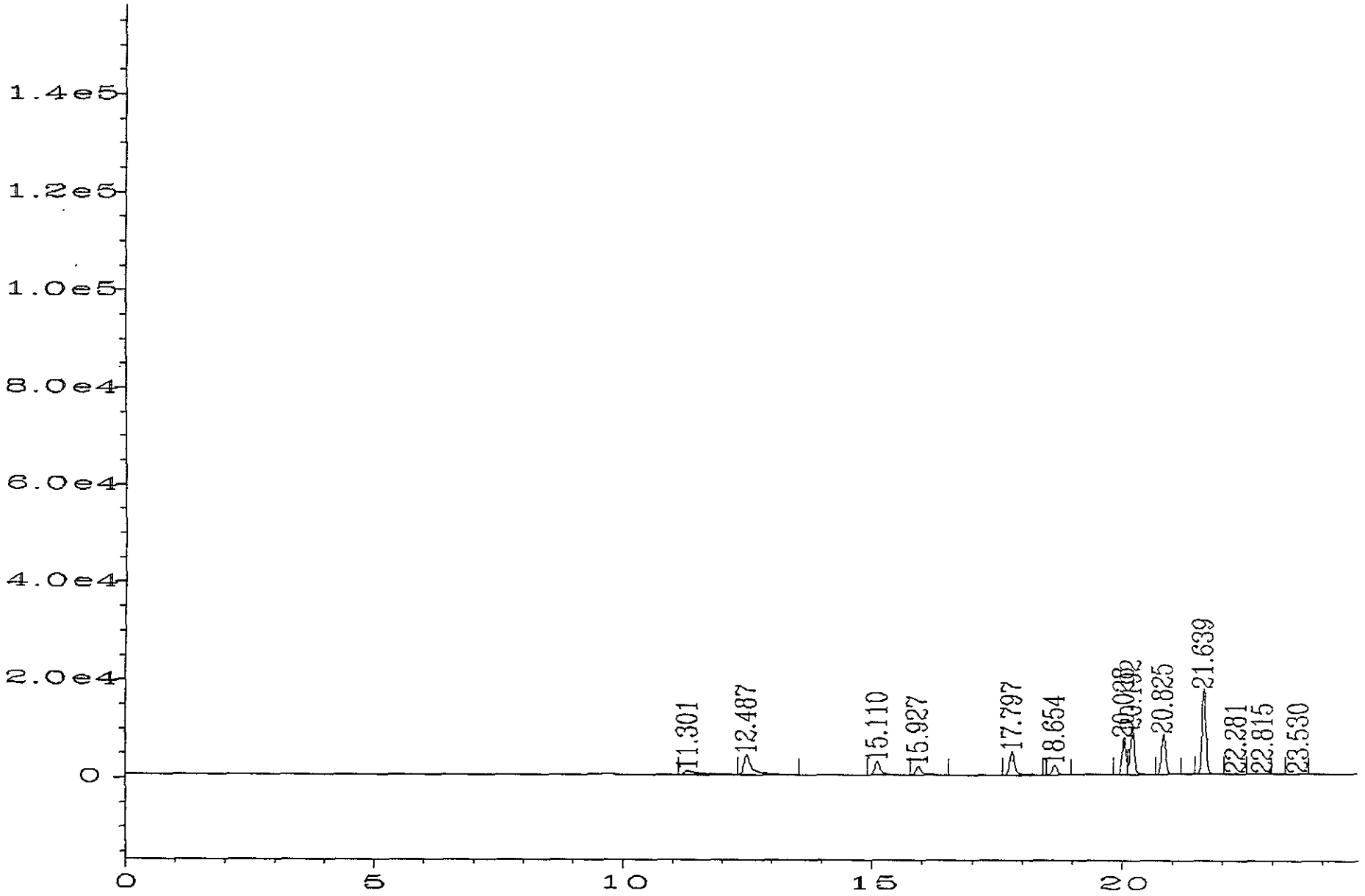
Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\029F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.344	129876	7007	BV	0.248	2.2970
2	5.893	271659	16138	VV	0.220	4.8045
3	6.387	23424	2895	PV	0.121	0.4143
4	6.539	56064	5512	VV	0.145	0.9915
5	7.454	70276	8859	PV	0.122	1.2429
6	7.952	353709	50845	PV	0.105	6.2557
7	8.998	87797	13375	PV	0.098	1.5528
8	9.475	5385	716	VV	0.112	0.0952
9	11.148	620257	90827	PV	0.103	10.9698
10	12.569	90513	13137	PV	0.105	1.6008
11	13.867	872	167	BV	0.087	0.0154
12	14.078	849959	143070	VV	0.092	15.0323
13	14.313	980499	162170	VV	0.092	17.3410
14	15.061	979997	159749	VV	0.095	17.3322
15	15.949	779473	131572	VV	0.091	13.7857
16	16.536	3446	394	VV	0.122	0.0610
17	16.761	12611	1298	VV	0.140	0.2230
18	17.033	9804	1005	VV	0.141	0.1734
19	17.228	3510	550	VV	0.097	0.0621
20	17.791	12236	1726	PV	0.106	0.2164
21	18.045	6362	1176	VV	0.086	0.1125
22	18.240	510	99	PV	0.086	0.0090
23	18.433	3783	471	VV	0.114	0.0669
24	18.550	3342	456	VV	0.110	0.0591
25	18.687	1143	162	VV	0.095	0.0202
26	18.921	3396	541	VV	0.094	0.0601
27	19.050	1287	192	VV	0.092	0.0228
28	19.478	7882	793	PV	0.137	0.1394
29	19.634	7217	1214	VV	0.092	0.1276
30	19.964	6479	573	PV	0.154	0.1146
31	20.308	19174	1980	VV	0.132	0.3391
32	20.443	6112	1073	VV	0.095	0.1081
33	20.600	4429	796	VV	0.078	0.0783
34	20.704	7936	791	VV	0.139	0.1404
35	20.954	6178	764	VV	0.117	0.1093
36	21.141	6212	984	VV	0.105	0.1099
37	21.244	10782	1218	VV	0.120	0.1907
38	21.501	14406	1221	VV	0.162	0.2548
39	21.703	12028	1266	VV	0.132	0.2127
40	22.021	16007	1177	VV	0.183	0.2831
41	22.394	31402	2945	VV	0.144	0.5554
42	22.756	53689	2544	VV	0.276	0.9495
43	23.038	9440	1192	VV	0.118	0.1670
44	23.271	9845	1002	VV	0.164	0.1741
45	23.458	22996	1723	VV	0.177	0.4067
46	23.715	12770	1392	VV	0.131	0.2259
47	23.812	7099	1103	VV	0.107	0.1256
48	23.995	5687	643	VV	0.131	0.1006

49	24.390	10317	1146	PV	0.124	0.1825
50	24.542	4934	522	VBA	0.133	0.0873

Total area = 5654209



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\029R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\029R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24 ms vol
Run Time Bar Code:
Acquired on : 23 Jun 92 10:34 PM
Report Created on: 26 Jun 92 12:43 PM

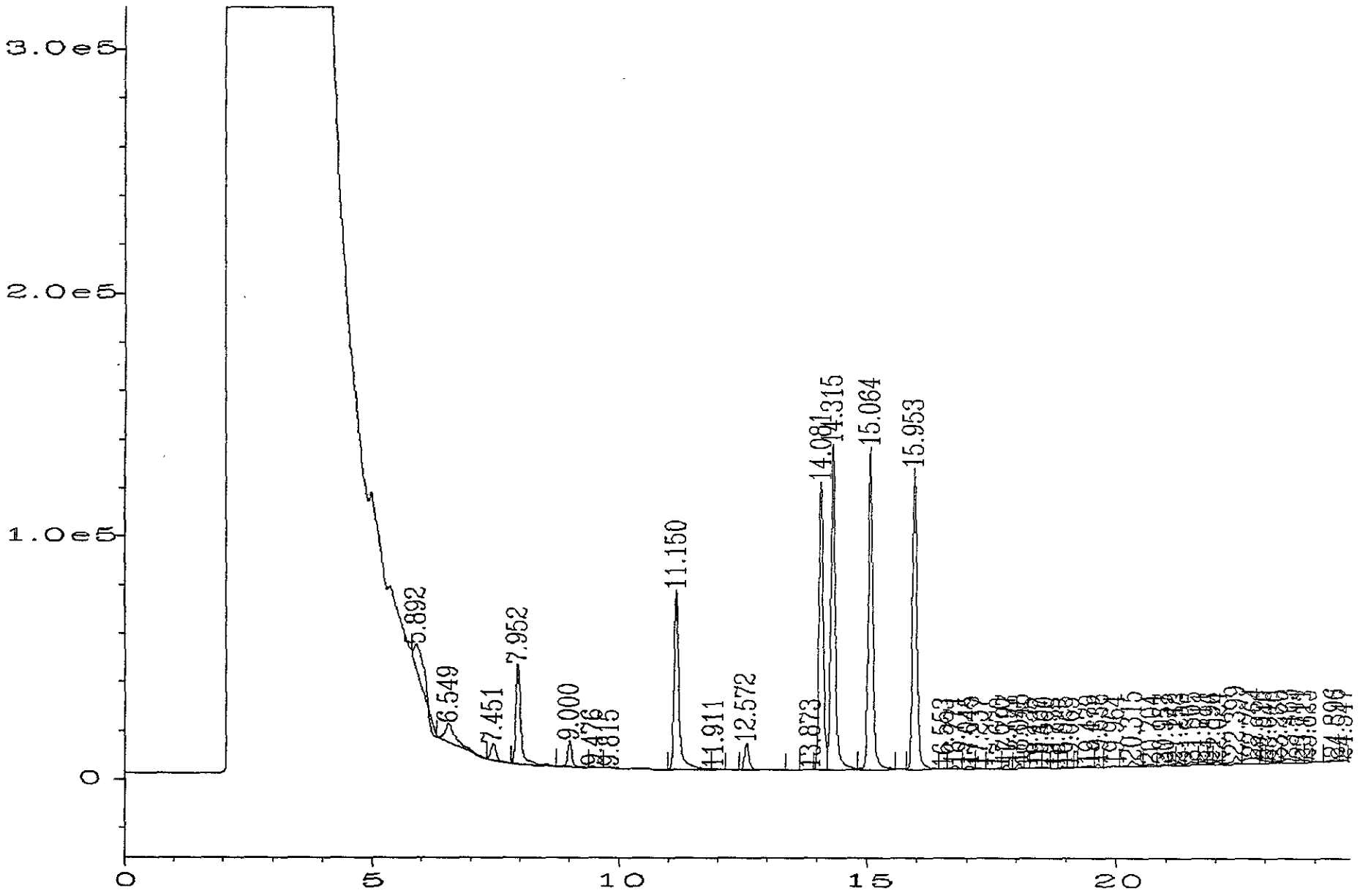
Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\029R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.301	19172	829	BV	0.301	4.7718
2	12.487	48137	4052	VB	0.169	11.9813
3	15.110	23038	2701	BV	0.126	5.7342
4	15.927	14966	1770	VB	0.125	3.7249
5	17.797	35015	4811	BB	0.110	8.7151
6	18.654	13784	2045	BB	0.103	3.4308
7	20.028	43058	7635	BV	0.088	10.7171
8	20.192	56698	9416	VV	0.093	14.1121
9	20.825	47266	8303	PB	0.089	11.7645
10	21.639	96775	17481	VV	0.086	24.0871
11	22.281	1865	163	VV	0.151	0.4642
12	22.815	788	99	PB	0.111	0.1960
13	23.530	1209	99	PV	0.172	0.3008

Total area = 401771

Sample Name : 30222-24 ms vol			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\029F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-2.08661	3825144	-11.043	382599	
Wash.	0.390214	2073114	0.031538	334462	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	4.659872	7.454	10.76688	11.301	
	25.06705	7.952	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.14437	13.867	0.223		
	54.02738	14.078	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.44323	13.867	0.2773		
	54.83233	14.078	0.2773		
	63.33048	14.313	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	16.26105	15.061	1.027876	17.797	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\030F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\030F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24 msd vol
Run Time Bar Code:
Acquired on : 23 Jun 92 11:18 PM
Report Created on: 26 Jun 92 12:45 PM

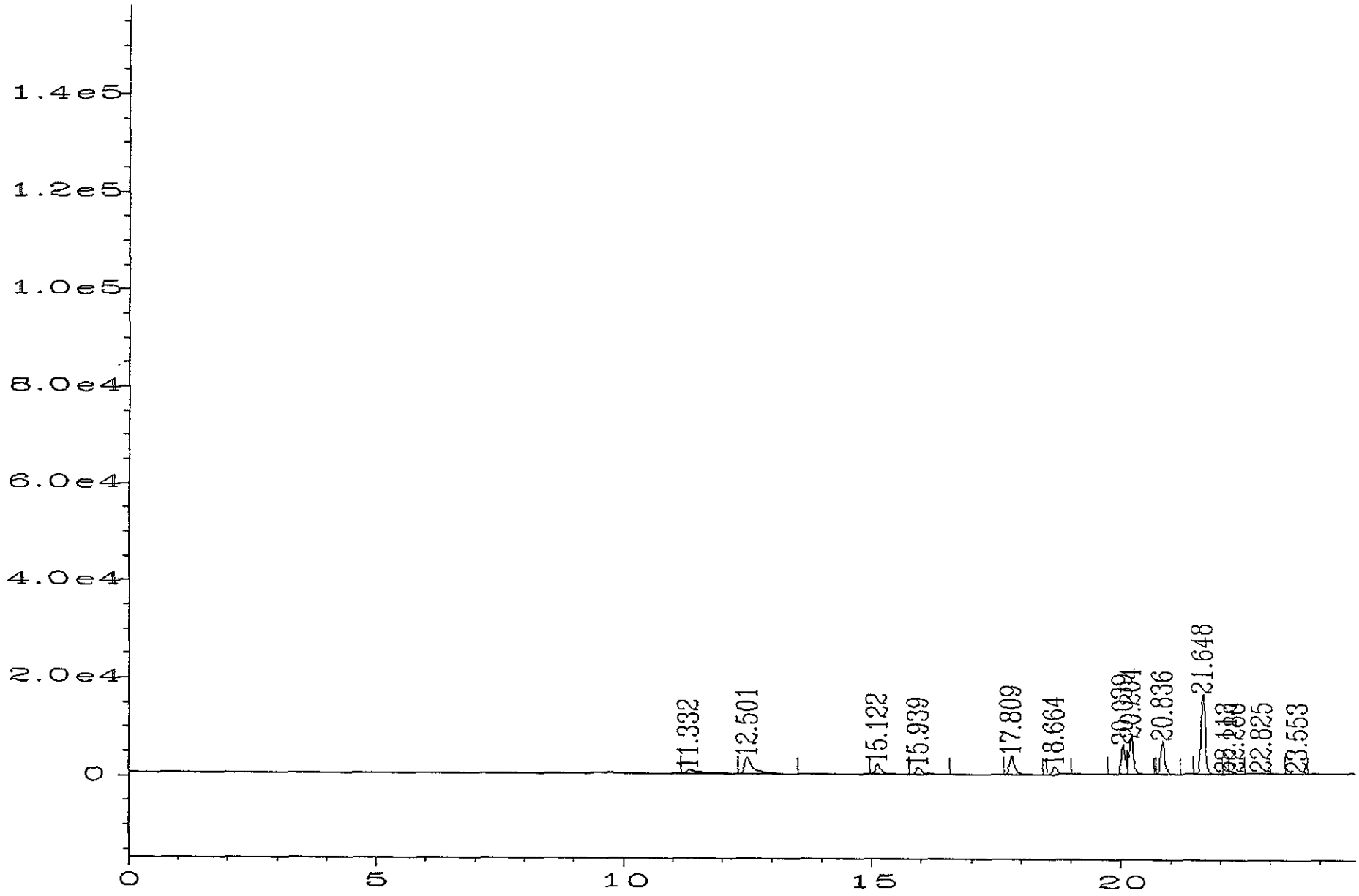
Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\030F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.892	134576	10698	VV	0.176	2.8544
2	6.549	112564	7956	PV	0.197	2.3875
3	7.451	48458	6660	PV	0.114	1.0278
4	7.952	285106	41503	PV	0.103	6.0472
5	9.000	62982	10748	PV	0.090	1.3359
6	9.476	2814	488	VV	0.092	0.0597
7	9.815	763	393	PV	0.051	0.0162
8	11.150	506718	74243	PV	0.103	10.7476
9	11.911	2730	298	VV	0.152	0.0579
10	12.572	74826	10887	PV	0.104	1.5871
11	13.873	1592	249	BV	0.096	0.0338
12	14.081	705587	119022	VV	0.092	14.9657
13	14.315	830036	135808	VV	0.093	17.6053
14	15.064	824374	133961	VV	0.095	17.4852
15	15.953	756262	126449	VV	0.093	16.0405
16	16.553	3252	385	VV	0.123	0.0690
17	16.771	13994	1342	VV	0.153	0.2968
18	17.045	13542	1402	VV	0.139	0.2872
19	17.237	4135	667	VV	0.094	0.0877
20	17.670	2288	467	PV	0.074	0.0485
21	17.797	11168	1820	VV	0.094	0.2369
22	18.048	10604	1964	PV	0.086	0.2249
23	18.235	628	141	VV	0.074	0.0133
24	18.437	4558	548	VV	0.122	0.0967
25	18.560	3386	451	VV	0.110	0.0718
26	18.775	1281	145	VV	0.116	0.0272
27	18.923	4077	653	VV	0.093	0.0865
28	19.065	1127	188	VV	0.100	0.0239
29	19.479	10187	968	PV	0.143	0.2161
30	19.638	8342	1417	VV	0.092	0.1769
31	19.964	5365	472	PV	0.149	0.1138
32	20.315	26624	2363	VV	0.151	0.5647
33	20.704	10749	789	VV	0.179	0.2280
34	20.957	6415	726	VV	0.123	0.1361
35	21.142	6277	973	VV	0.108	0.1331
36	21.253	10310	1200	VV	0.128	0.2187
37	21.505	15228	1286	VV	0.170	0.3230
38	21.711	13267	1286	VV	0.138	0.2814
39	21.896	5483	917	VV	0.086	0.1163
40	22.024	9440	1120	VV	0.124	0.2002
41	22.399	33431	3339	VV	0.135	0.7091
42	22.764	44093	2448	VV	0.238	0.9352
43	22.926	8548	1446	VV	0.086	0.1813
44	23.048	9389	1173	VV	0.117	0.1991
45	23.260	9806	1012	VV	0.129	0.2080
46	23.463	22661	1638	VV	0.184	0.4806
47	23.711	10859	1308	VV	0.121	0.2303
48	23.823	8597	1138	VV	0.106	0.1823

49	24.396	11140	1251	PV	0.124	0.2363
50	24.547	5060	513	VBA	0.139	0.1073

Total area = 4714700



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\030R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\030R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 30222-24 msd vol
Run Time Bar Code:
Acquired on : 23 Jun 92 11:18 PM
Report Created on: 26 Jun 92 12:45 PM

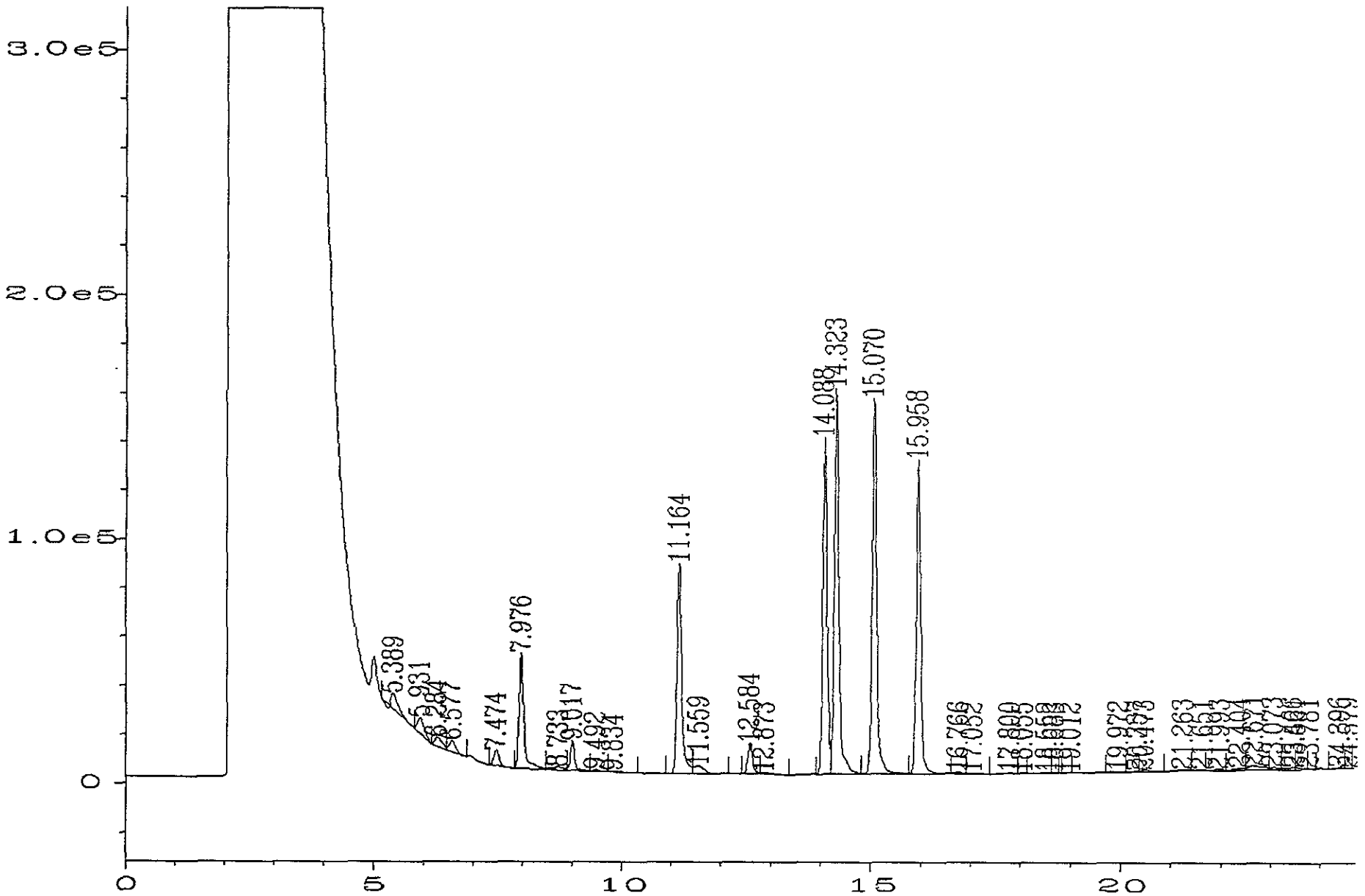
Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\030R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.332	15827	731	BV	0.284	4.6424
2	12.501	38566	3291	VB	0.165	11.3123
3	15.122	17854	2089	BV	0.127	5.2371
4	15.939	11949	1379	VB	0.130	3.5048
5	17.809	27573	3795	BB	0.110	8.0877
6	18.664	10932	1604	BB	0.104	3.2067
7	20.039	34242	6011	BV	0.089	10.0438
8	20.204	45915	7541	VB	0.093	13.4678
9	20.836	38671	6750	BV	0.089	11.3431
10	21.648	92676	16480	VV	0.088	27.1839
11	22.112	863	143	VV	0.099	0.2532
12	22.288	2486	202	VV	0.167	0.7293
13	22.825	2355	187	VV	0.169	0.6907
14	23.553	1013	88	PV	0.170	0.2972

Total area = 340924

Sample Name : 30222-24 msd vol			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\030F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-2.39021	3353716	-11.0516	325095	
Wash.	0.359228	1910291	0.021429	286529	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	3.088976	7.451	10.63308	11.332	
	20.12763	7.952	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.09843	13.873	0.223		
	44.81645	14.081	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	-0.39636	13.873	0.2773		
	45.43371	14.081	0.2773		
	53.53534	14.315	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	13.72284	15.064	0.866013	17.809	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\031F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\031F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : spike blank vol
Run Time Bar Code:
Acquired on : 24 Jun 92 00:02 AM
Report Created on: 26 Jun 92 12:47 PM

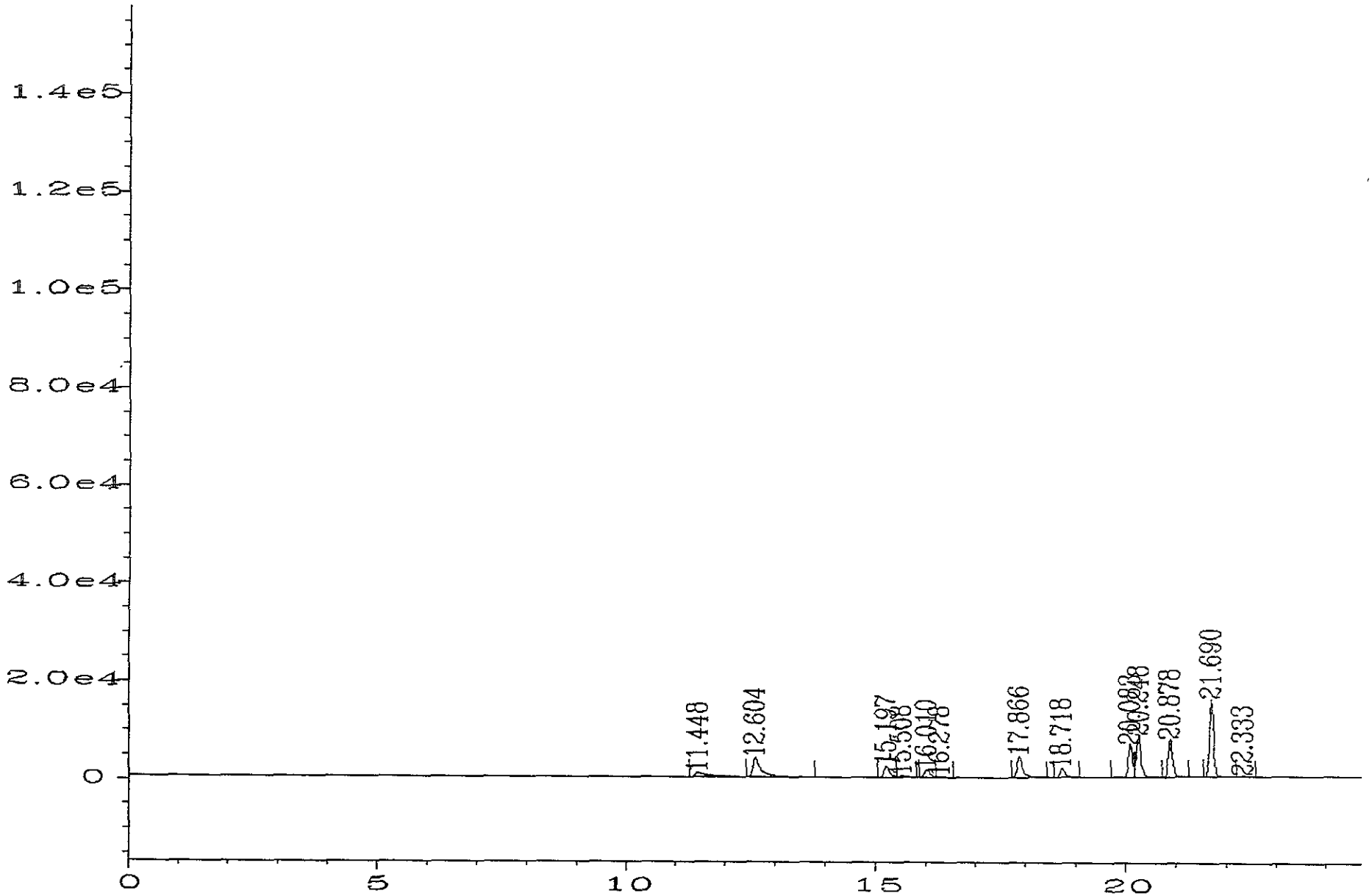
Page Number : 1
Vial Number : 31
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\031F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.389	50581	6302	BV	0.126	0.9906
2	5.931	59538	6597	VV	0.134	1.1660
3	6.284	40194	3642	PV	0.166	0.7871
4	6.577	38089	4577	VV	0.122	0.7459
5	7.474	46817	6526	PV	0.113	0.9168
6	7.976	326818	47474	PV	0.103	6.4003
7	8.733	25003	1280	VV	0.263	0.4896
8	9.017	72269	12330	VV	0.089	1.4153
9	9.492	5749	660	VV	0.124	0.1126
10	9.834	214	343	VB	0.038	0.0042
11	11.164	565559	86673	BV	0.099	11.0757
12	11.559	48001	3197	VV	0.206	0.9400
13	12.584	83891	12691	PV	0.101	1.6429
14	12.873	7428	674	VB	0.171	0.1455
15	14.088	823751	139690	PV	0.092	16.1321
16	14.323	988553	159359	VV	0.094	19.3595
17	15.070	968001	155040	VV	0.096	18.9570
18	15.958	768433	129249	VV	0.091	15.0487
19	16.766	7132	888	VV	0.118	0.1397
20	17.052	3887	298	VV	0.181	0.0761
21	17.800	4873	632	PV	0.112	0.0954
22	18.055	824	137	VV	0.089	0.0161
23	18.552	3623	267	PV	0.179	0.0710
24	18.683	1121	172	VV	0.109	0.0219
25	19.012	491	46	VV	0.178	0.0096
26	19.972	5477	364	PV	0.203	0.1073
27	20.337	4322	402	VV	0.143	0.0846
28	20.473	15694	708	VV	0.308	0.3073
29	21.263	15768	651	VV	0.307	0.3088
30	21.651	9751	598	VV	0.245	0.1910
31	21.993	13812	687	VV	0.271	0.2705
32	22.404	16688	1092	VV	0.200	0.3268
33	22.671	37436	1829	VV	0.269	0.7331
34	23.073	12330	988	VV	0.169	0.2415
35	23.466	12801	921	VV	0.185	0.2507
36	23.521	10916	879	VV	0.207	0.2138
37	23.781	4869	612	VV	0.104	0.0954
38	24.396	3810	409	PV	0.129	0.0746
39	24.579	1780	106	VBA	0.220	0.0349

Total area = 5106291

Sample Name : spike blank vol			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\031F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-2.13418	3751270	-11.0444	373239	
Wash.	0.359816	1913380	0.026377	309989	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	2.970824	7.474	10.73008	11.448	
	23.1309	7.976	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	52.35531	14.088	0.263884	16.278	
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	53.12619	14.088	0.2773		
	63.8548	14.323	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	16.0654	15.07	0.980962	17.866	
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\031R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\031R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : spike blank vol
Run Time Bar Code:
Acquired on : 24 Jun 92 00:02 AM
Report Created on: 26 Jun 92 12:48 PM

Page Number : 1
Vial Number : 31
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\031R0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.448	18252	856	BV	0.284	4.8901
2	12.604	44998	3844	VB	0.166	12.0561
3	15.197	18303	2347	BV	0.117	4.9037
4	15.508	3465	284	VB	0.175	0.9283
5	16.010	11926	1510	BV	0.119	3.1952
6	16.278	2145	210	VB	0.145	0.5747
7	17.866	32858	4320	BB	0.114	8.8035
8	18.718	13339	1834	BB	0.110	3.5737
9	20.083	39785	6871	BV	0.090	10.6594
10	20.248	53625	8649	VV	0.094	14.3675
11	20.878	44348	7668	VB	0.090	11.8821
12	21.690	88998	15971	BV	0.087	23.8449
13	22.333	1197	149	VV	0.113	0.3207

Total area = 373238

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\032F0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\032F0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 100 ppb vol cc
Run Time Bar Code:
Acquired on : 24 Jun 92 00:45 AM
Report Created on: 26 Jun 92 12:55 PM

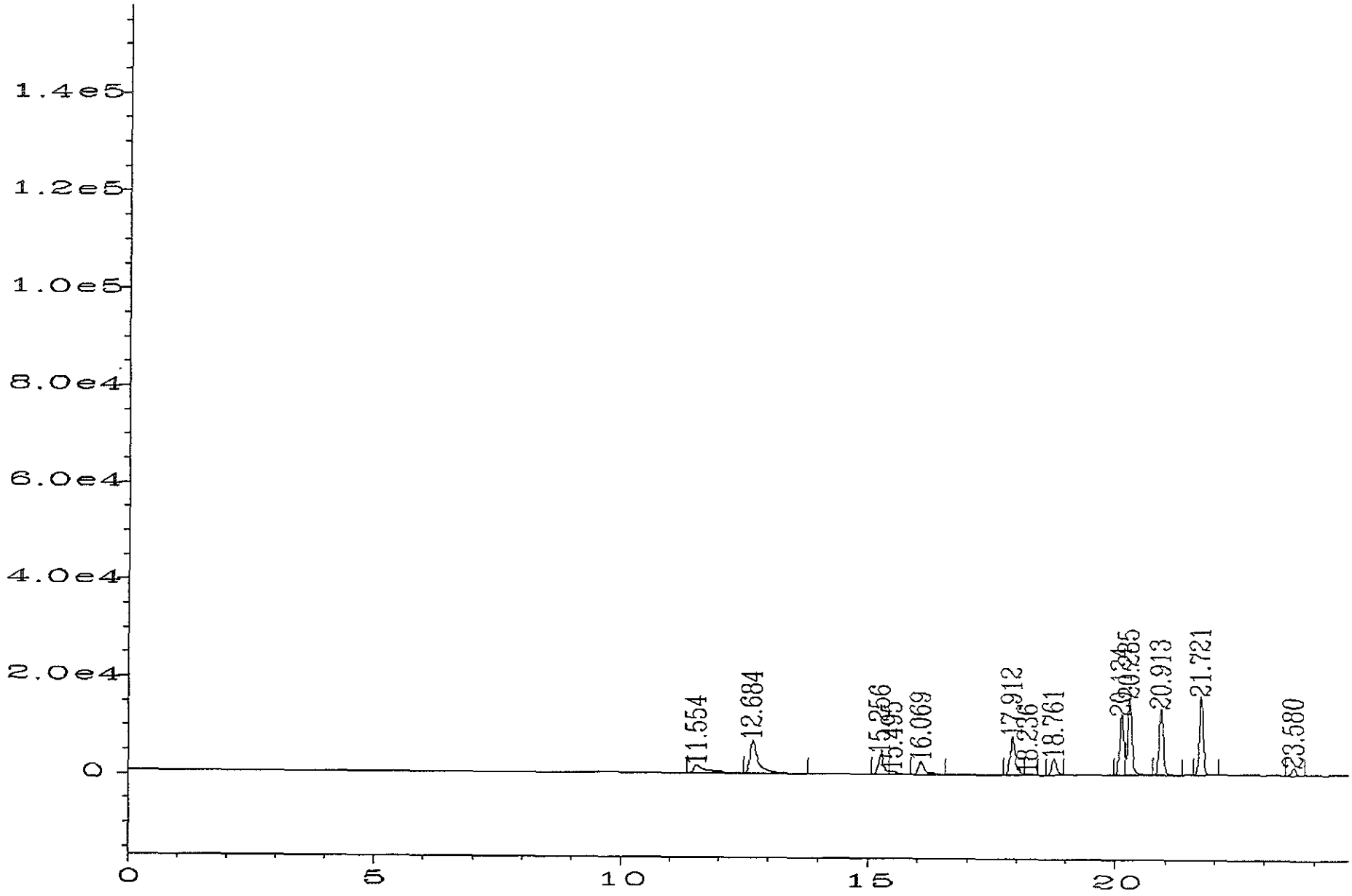
Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 1 in C:\HPCHEM\6\DATA\06-22-92.c\032F0201.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	5.415	63892	11375	BV	0.097	0.7362
2	5.949	39090	5325	PV	0.115	0.4504
3	6.324	43038	3827	PV	0.174	0.4959
4	6.590	96580	8519	VV	0.161	1.1128
5	7.486	86153	11553	PV	0.117	0.9927
6	7.985	604753	88678	PV	0.102	6.9683
7	8.560	50324	3486	VV	0.196	0.5799
8	9.024	135444	22600	VV	0.091	1.5606
9	9.492	10498	1282	VV	0.116	0.1210
10	9.602	8512	1385	VV	0.091	0.0981
11	10.372	1880	349	PB	0.084	0.0217
12	11.167	1057162	166402	BV	0.098	12.1811
13	11.457	90918	6802	VV	0.184	1.0476
14	12.042	12759	2103	VV	0.092	0.1470
15	12.585	161630	24740	VV	0.100	1.8624
16	12.800	14648	1530	VV	0.135	0.1688
17	13.230	2867	492	VB	0.091	0.0330
18	14.091	1571194	265993	PV	0.092	18.1040
19	14.325	1823374	299798	VV	0.093	21.0098
20	14.721	27379	3698	VV	0.106	0.3155
21	15.072	1752110	288312	VV	0.093	20.1886
22	15.403	36008	3382	VV	0.146	0.4149
23	15.959	772955	128784	VV	0.093	8.9064
24	16.771	7832	905	VV	0.127	0.0902
25	17.053	6199	502	VB	0.173	0.0714
26	17.800	4904	682	BV	0.107	0.0565
27	18.054	1090	202	PB	0.086	0.0126
28	18.693	78752	14926	BV	0.082	0.9074
29	18.940	940	143	VV	0.091	0.0108
30	19.073	830	102	VV	0.113	0.0096
31	19.485	771	77	PV	0.134	0.0089
32	19.651	559	106	PV	0.083	0.0064
33	19.979	3166	263	PV	0.167	0.0365
34	20.313	3014	297	VV	0.137	0.0347
35	20.459	2299	332	VV	0.100	0.0265
36	20.591	2223	318	VV	0.101	0.0256
37	20.699	3782	314	VV	0.179	0.0436
38	21.132	4574	267	VV	0.285	0.0527
39	21.484	8939	403	VV	0.273	0.1030
40	21.688	2486	367	VV	0.113	0.0286
41	21.770	1769	326	VV	0.074	0.0204
42	22.022	7424	489	VV	0.194	0.0855
43	22.402	9487	733	VV	0.170	0.1093
44	22.698	29405	1372	VV	0.264	0.3388
45	23.071	7421	617	VV	0.159	0.0855
46	23.534	20886	693	VV	0.368	0.2407
47	24.043	2220	216	VV	0.151	0.0256
48	24.386	3007	352	PV	0.120	0.0346

49	24.575	1554	97	VBA	0.199	0.0179

Total area = 8678697



Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\032R0201.D

Area Percent Report

Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\032R0201.D
Operator : jeb
Instrument : ANALYZER6
Sample Name : 100 ppb vol cc
Run Time Bar Code:
Acquired on : 24 Jun 92 00:45 AM
Report Created on: 26 Jun 92 12:56 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 2
Instrument Method: BTEXG-C.MTH
Analysis Method : BTEXG-C.MTH

Sig. 2 in C:\HPCHEM\6\DATA\06-22-92.c\032R0201.D

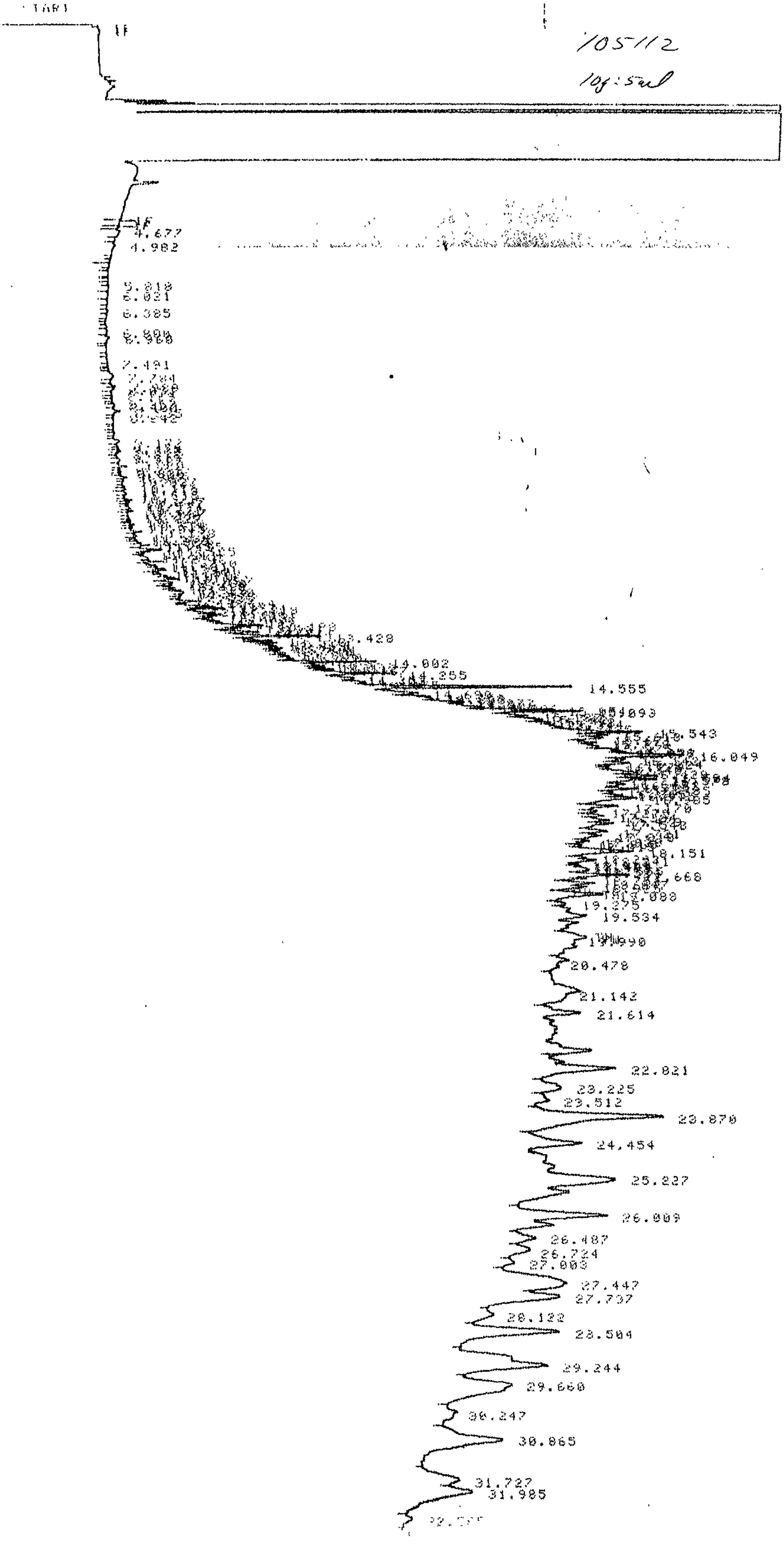
Pk#	Ret Time	Area	Height	Type	Width	Area %
1	11.554	30723	1601	BV	0.254	5.1606
2	12.684	76575	6822	VB	0.160	12.8627
3	15.256	30842	4096	BV	0.116	5.1806
4	15.495	5986	566	VV	0.150	1.0055
5	16.069	24200	2668	PV	0.133	4.0650
6	17.912	56891	7879	BV	0.109	9.5562
7	18.236	1420	205	VB	0.105	0.2385
8	18.761	22767	3368	BV	0.103	3.8243
9	20.124	71842	12570	BV	0.089	12.0676
10	20.285	96610	16104	VV	0.092	16.2280
11	20.913	80027	13742	VV	0.091	13.4425
12	21.721	88618	16111	BV	0.086	14.8856
13	23.580	8827	1569	BB	0.088	1.4828

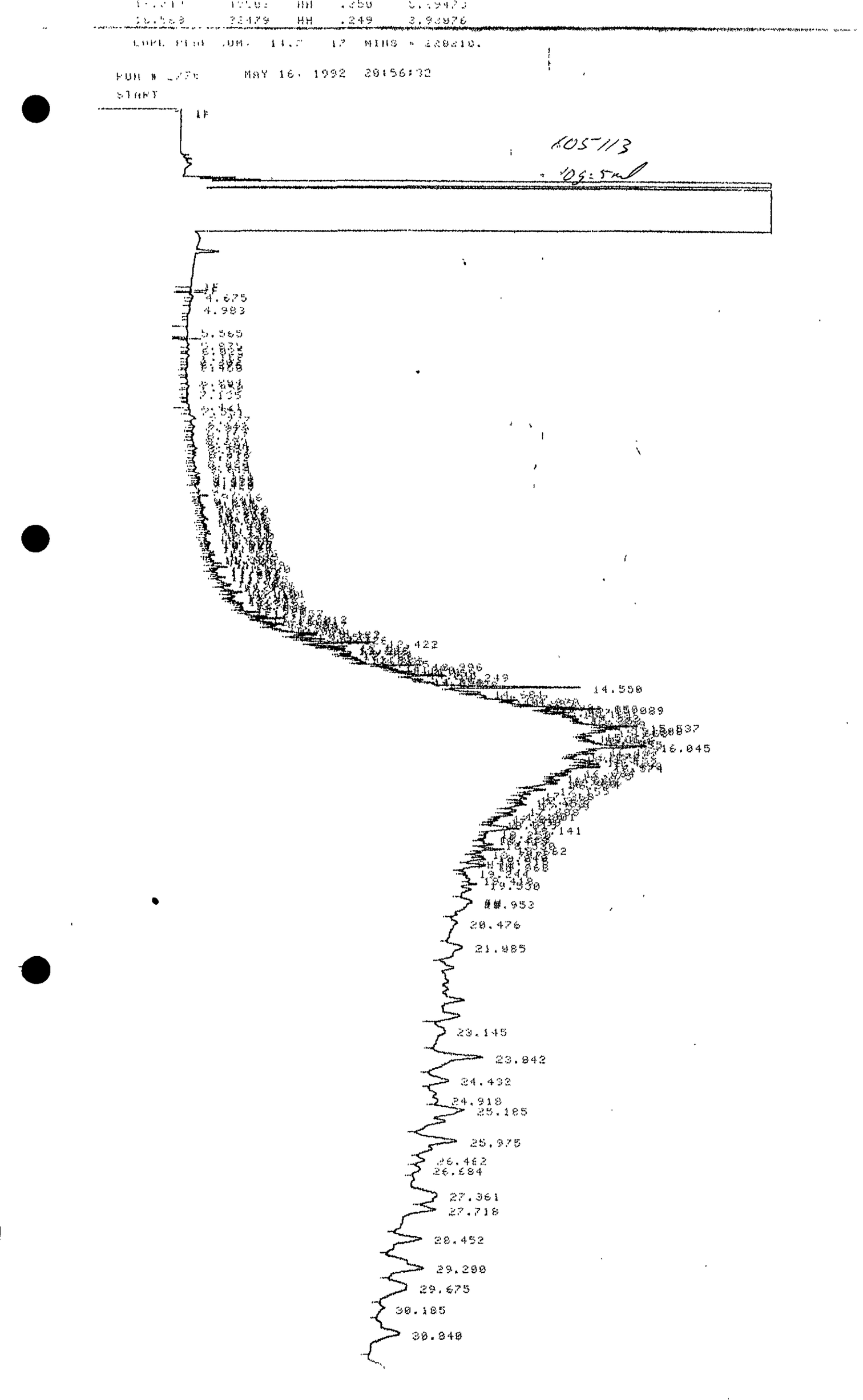
Total area = 595328

Sample Name : 100 ppb vol cc			Injection Number : 1		
Data File Name : C:\HPCHEM\6\DATA\06-22-92.c\032F0201.D					
IS	FID		PID		
% Rec					
Gasoline					
ppm	FID		PID		
Oregon	-0.43116	6395716	-11.0113	595328	
Wash.	0.522798	2769825	0.063926	488030	
Benzene					
ppb	FID	Ret Time	PID	Ret Time	
	5.803016	7.486	11.22892	11.554	
	43.14222	7.985	10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
	-0.4		10		
Toluene					
ppb	FID	Ret Time	PID	Ret Time	
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
	-0.5		-0.0658		
Ethylbenzene					
ppb	FID	Ret Time	PID	Ret Time	
	100.0422	14.091	0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
	-0.2		0.223		
m,p-Xylenes					
ppb	FID	Ret Time	PID	Ret Time	
	101.7847	14.091	0.2773		
	118.2016	14.325	0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
	-0.5		0.2773		
o-Xylene					
ppb	FID	Ret Time	PID	Ret Time	
	0.723851	14.721	1.503679	17.912	
	28.85421	15.072	0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		
	0.2773		0.2663		

RUN # 2279   MAY 16, 1992 20:15:53

START

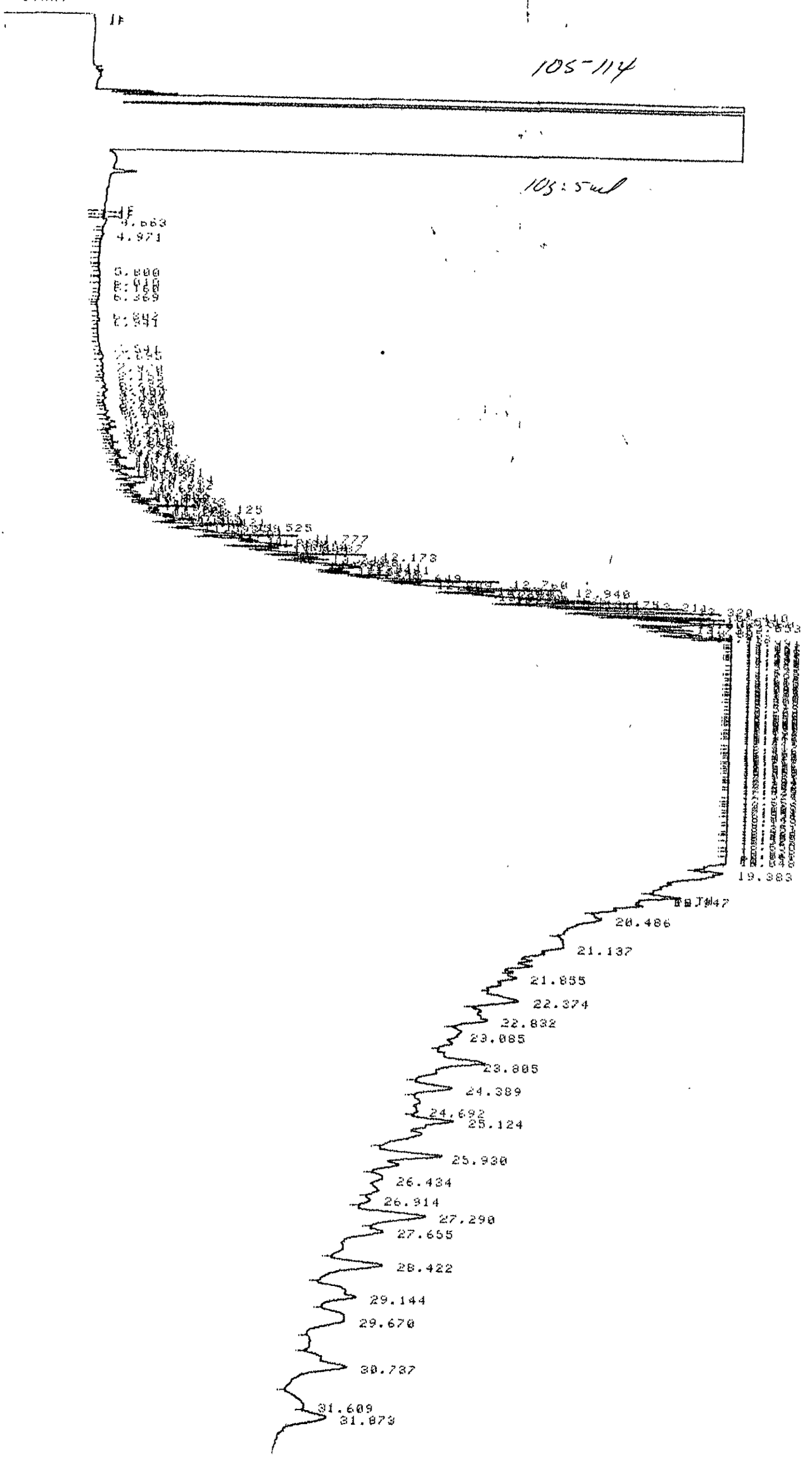



MAY 16, 1992 20:56:32
START
4.675
4.983
5.565
14.550
16.045
20.476
21.085
23.145
23.842
24.432
24.918
25.185
25.975
26.462
26.684
27.361
27.718
28.452
29.200
29.675
30.185
30.840

RUN # 2773 Mar 16, 1992 18:33:30

105-114

105:5wd



KEROSINE RANGE, 4.37 - 13.71 MINS (C7-C16) PEAKSUM = 15723.

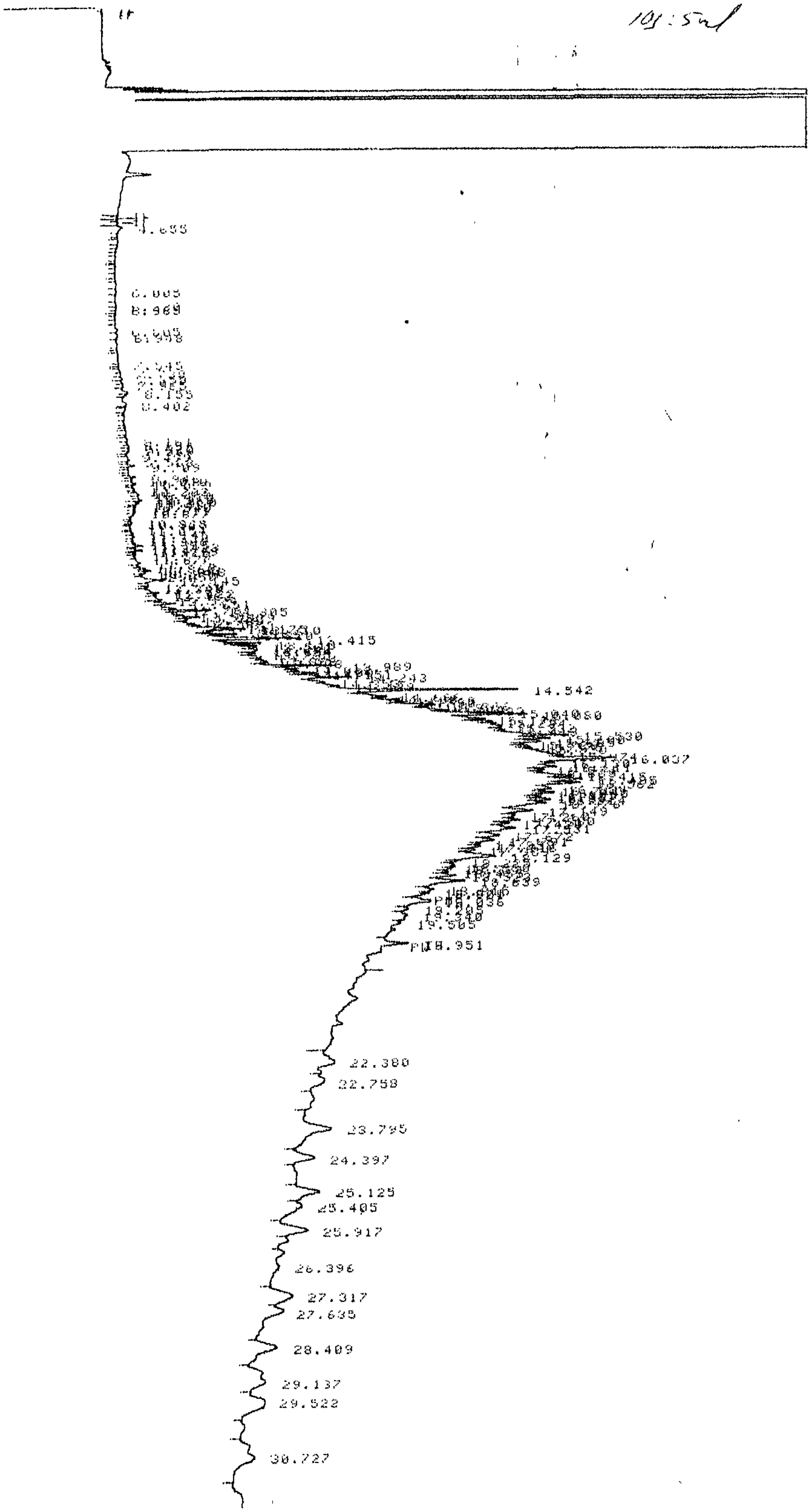
DIESEL PEAK SUM, 11.7 - 17 MINS = 36762.

RUN # 2741   MAY 15, 1992 16:59:52

START

105-115

10:5ul

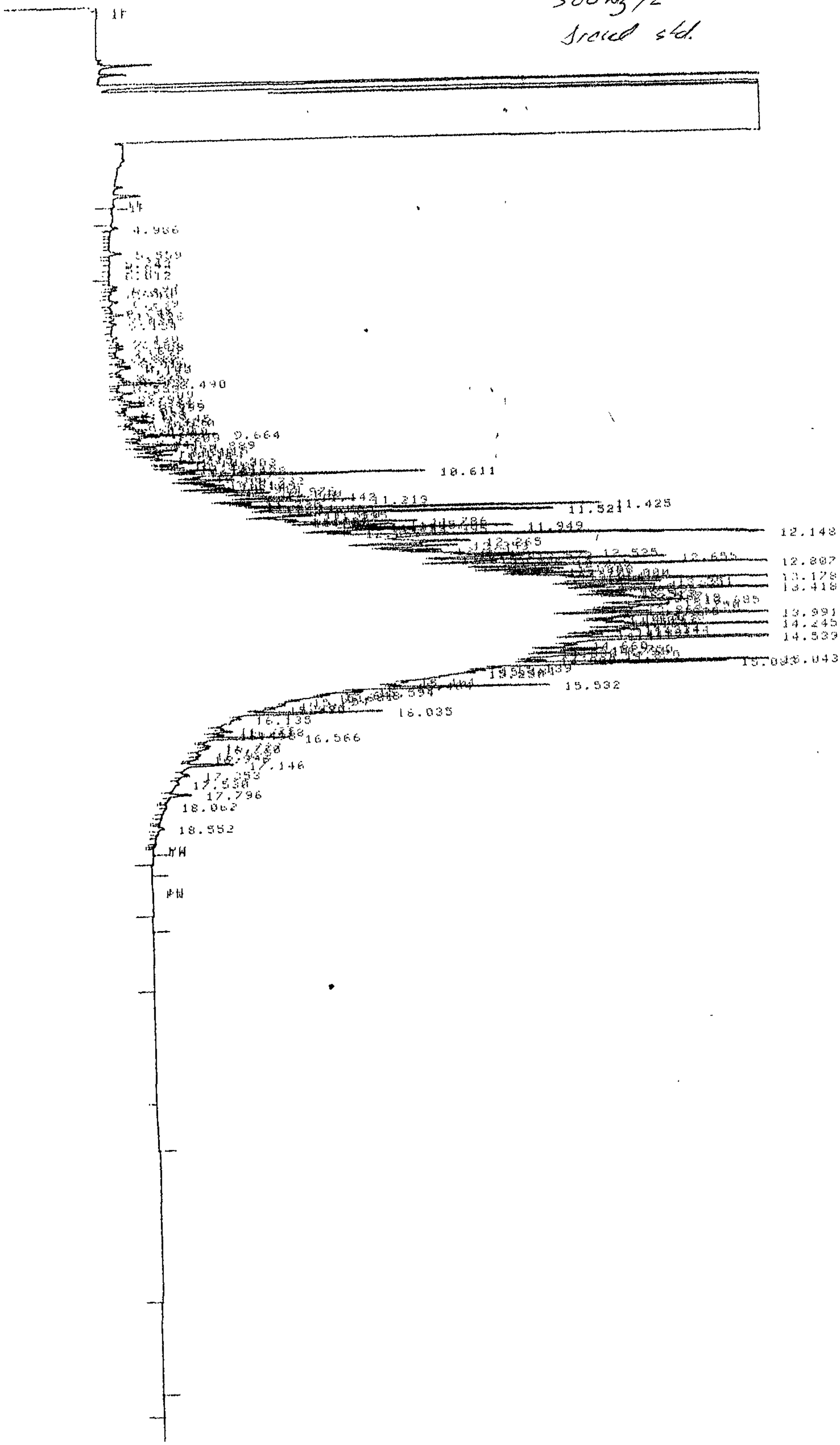


SLOPE PKSD SUMS 14.2 - 1? MINS = 48515.

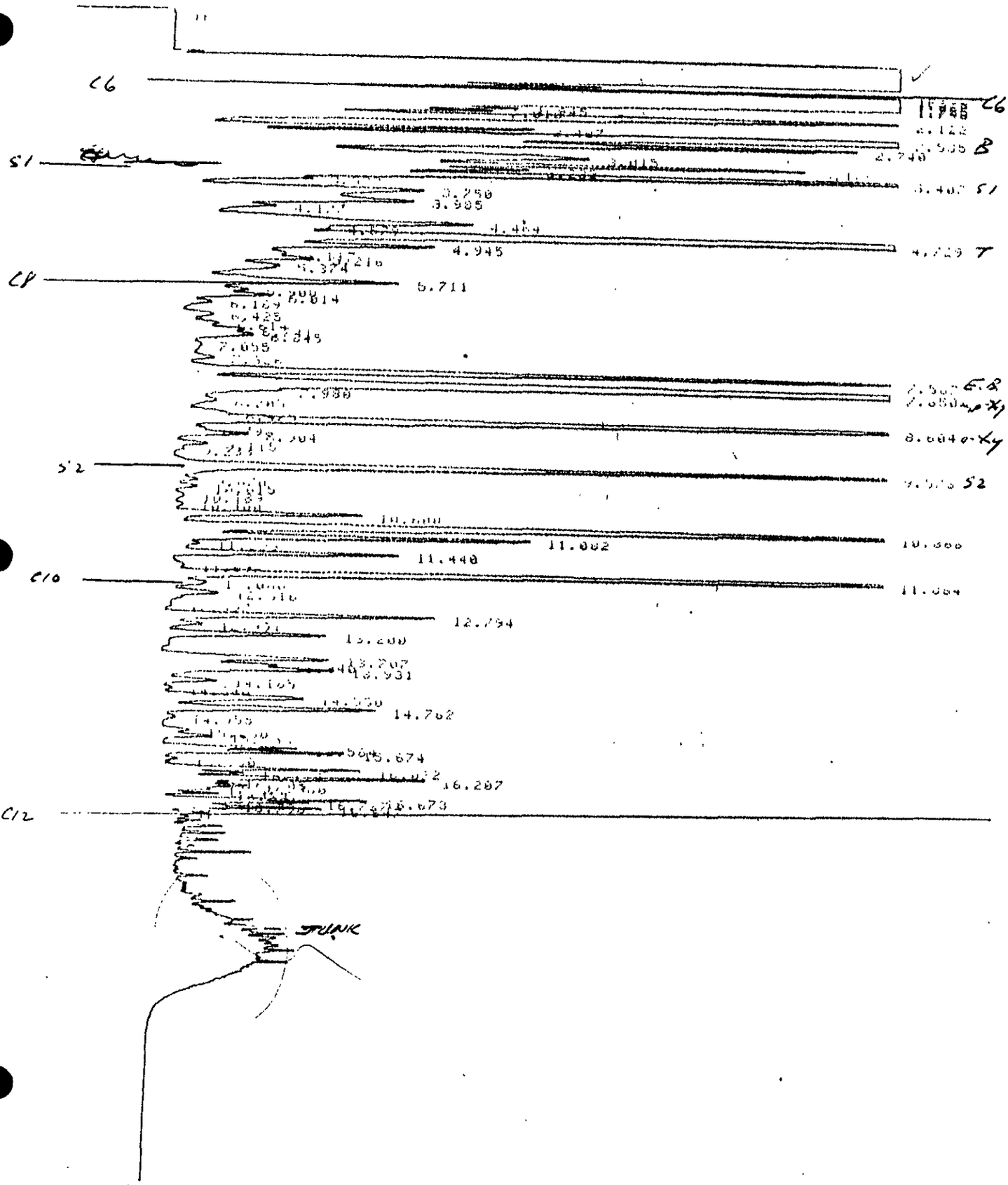
RUN # 2.36   MAY 15, 1992   11:20:48

START

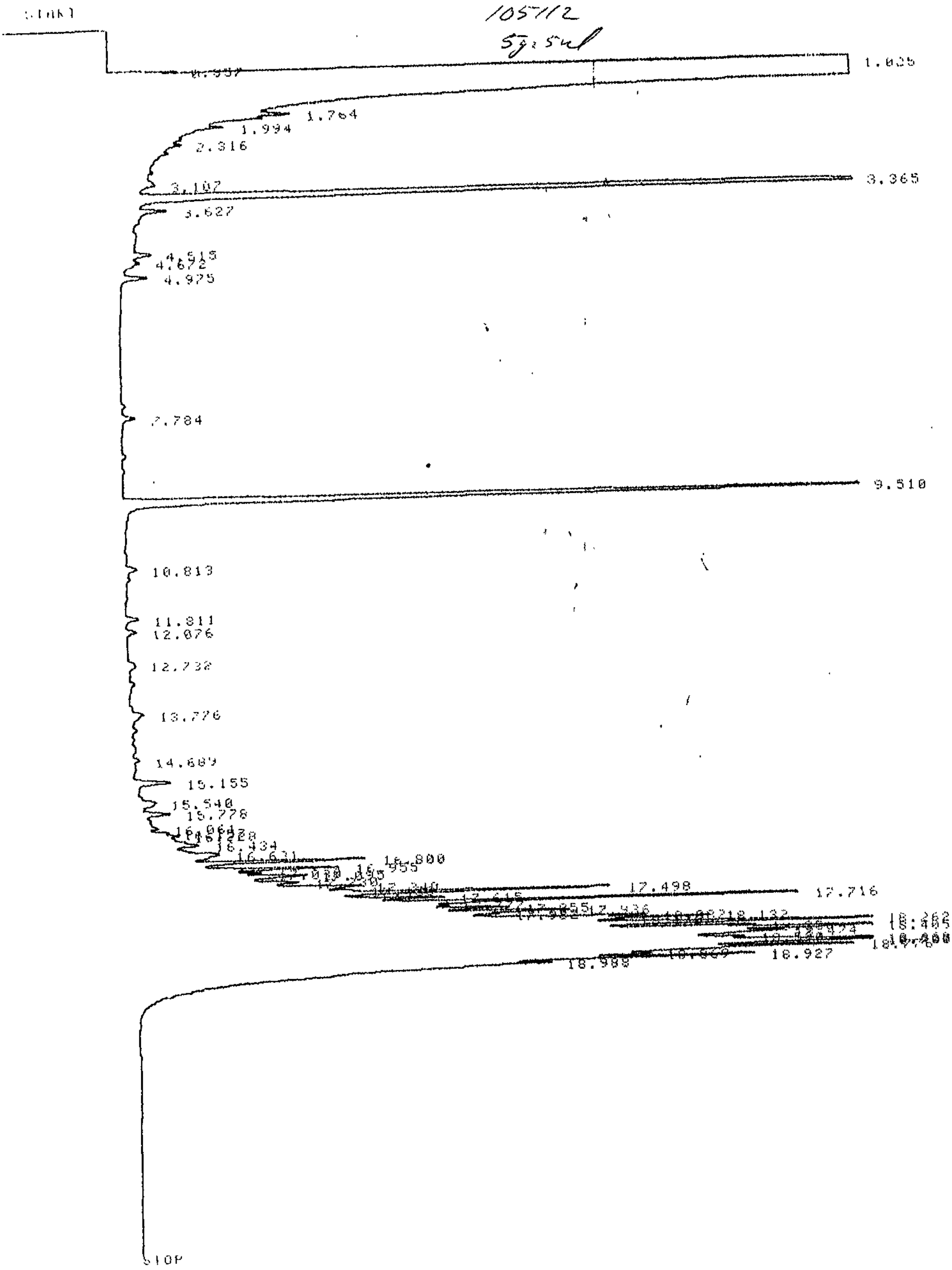
300 mg/L
[illegible] std.



5000 ppm GAS STD



105712
5g:5ml



Closing signal file M:SIGNAL .BNC

RUN# 2680 MAY 16, 1992 03:09:47

METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC

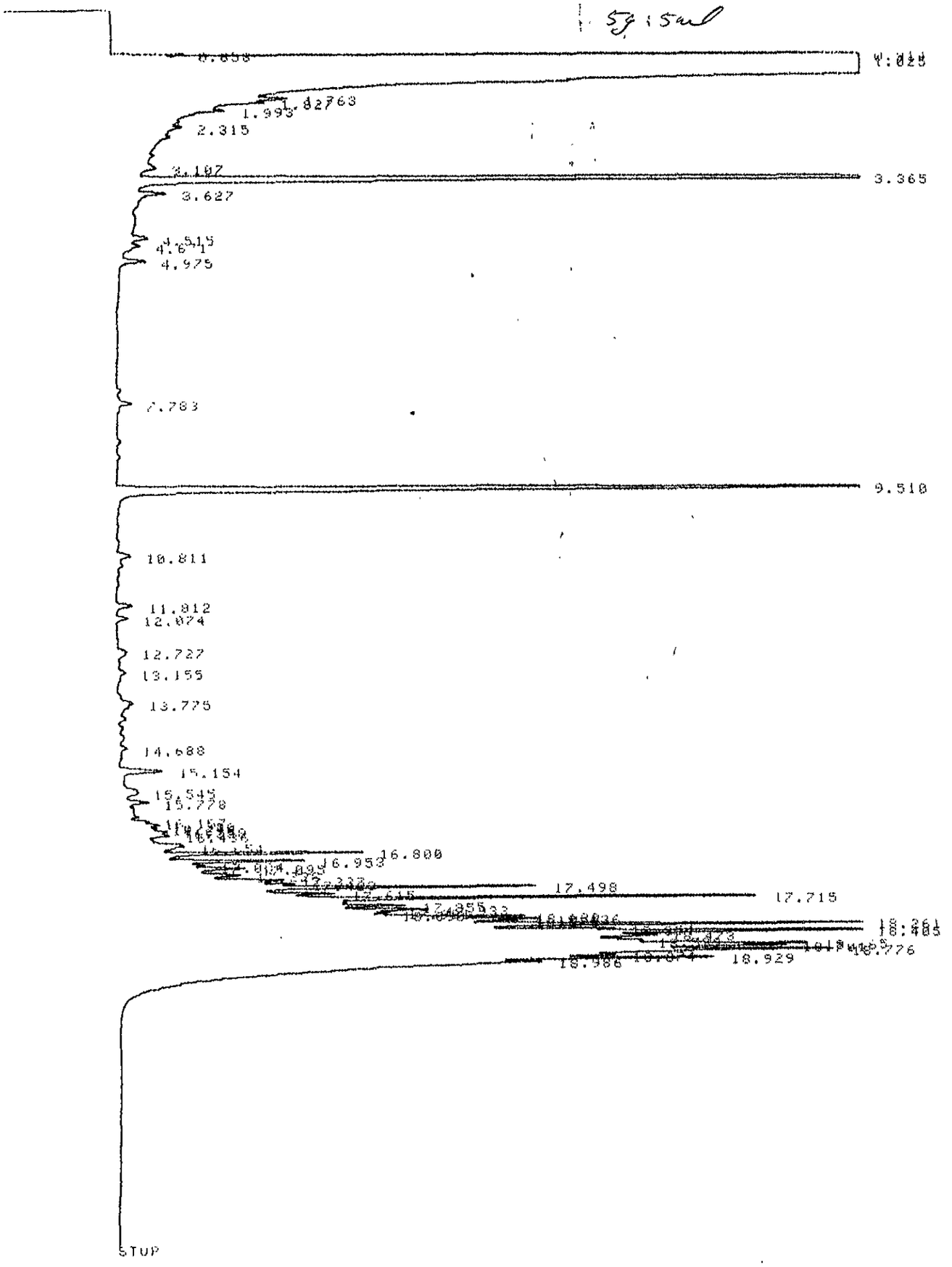
ESTD-AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	AMOUNT	NAME
.857	PP	5455	.023	3987		1.418	
1.025	PB	84529280	.063	22366928		21977.608	
1.764	BV	13231	.060	3687		3.440	
3.107	VP	8102	.118	1140		2.107	
3.365	PB	437663	.069	106205	2	103.726	a,a,a-tTFT%
3.627	BV	11811	.080	2451		3.071	
4.515	VV	13120	.111	1972		3.411	
4.672	VP	8435	.114	1235	3	2.303	TOLUENE
4.975	PB	10028	.078	2152		2.607	
[illegible]	BV	6509	.089	1216	5	1.790	m,p-XYLENE
[illegible]				[illegible]		[illegible]	4BFB%

RUN # 2681 MAY 16, 1992 03:42:39

105-113

5g : 5ml



Closing signal file M:SIGNAL .BNC

RUN# 2681 MAY 16, 1992 03:42:39

METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC

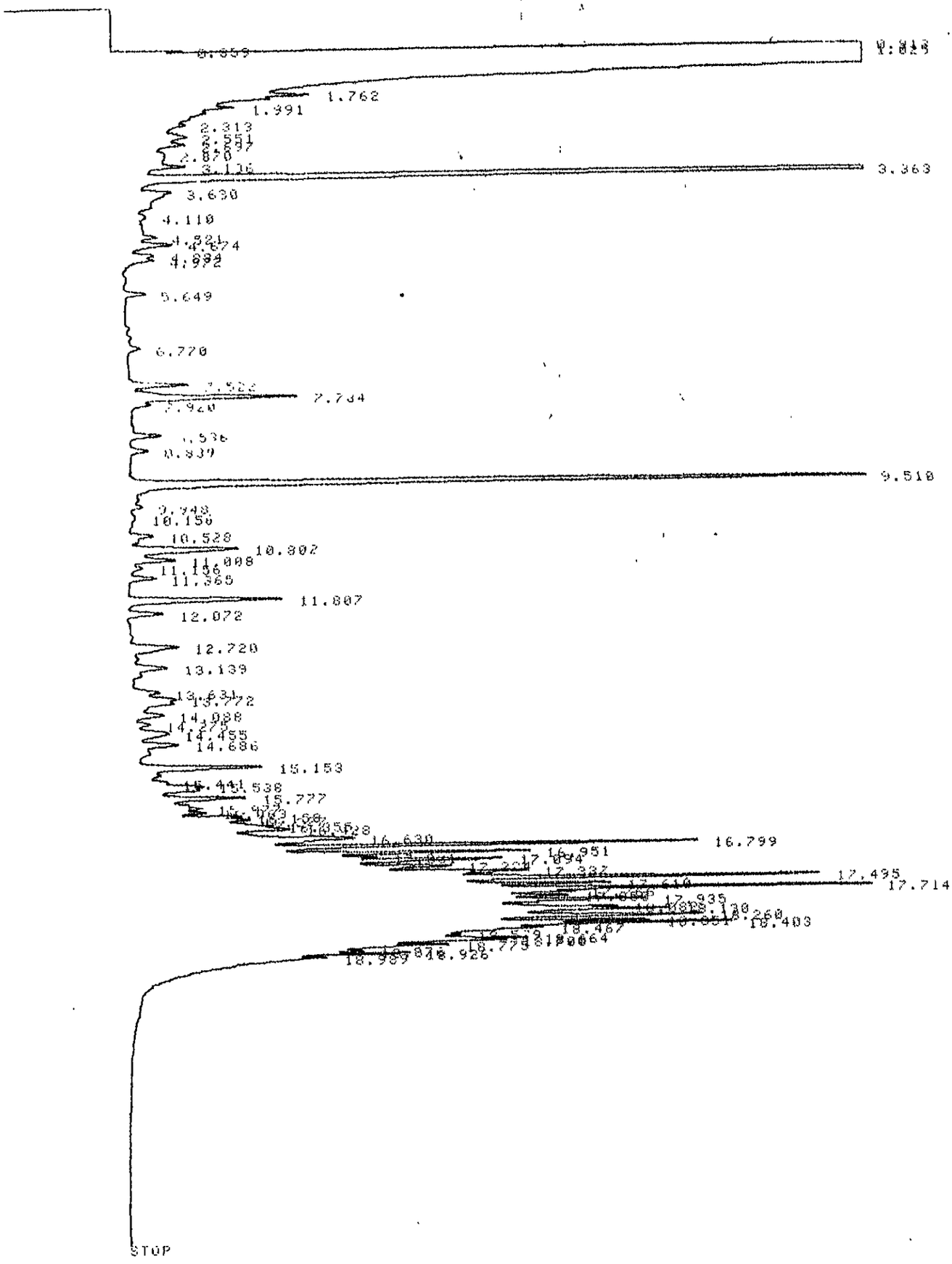
ESTD-AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	AMOUNT	NAME
.858	PP	5678	.023	4169		1.476	
.914	PV	3811088	.033	1897303		990.883	
1.025	VB	79578368	.061	21804352		20690.376	
1.763	BV	11841	.058	3421		3.079	
1.827	VP	6654	.044	2542		1.730	
3.107	VP	7762	.115	1128		2.018	
3.365	PB	434998	.068	106618	2	103.095	a,a,a-tTFT*
3.627	BV	12019	.082	2430		3.125	

TOTAL AREA=2119602
MUL FACTOR=1.0000E+00

105114
59:50

RUN # 2682 MAY 16, 1992 04:15:28
START



Closing signal file M:SIGNAL .BNC

RUN# 2682 MAY 16, 1992 04:15:28

METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC

ESTD-AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	AMOUNT	NAME
.913	PV	3826586	.035	1821659		994.913	
1.025	VB	82759168	.059	23405552		21517.392	
[illegible]	BV	15533	.056	4612		4.038	

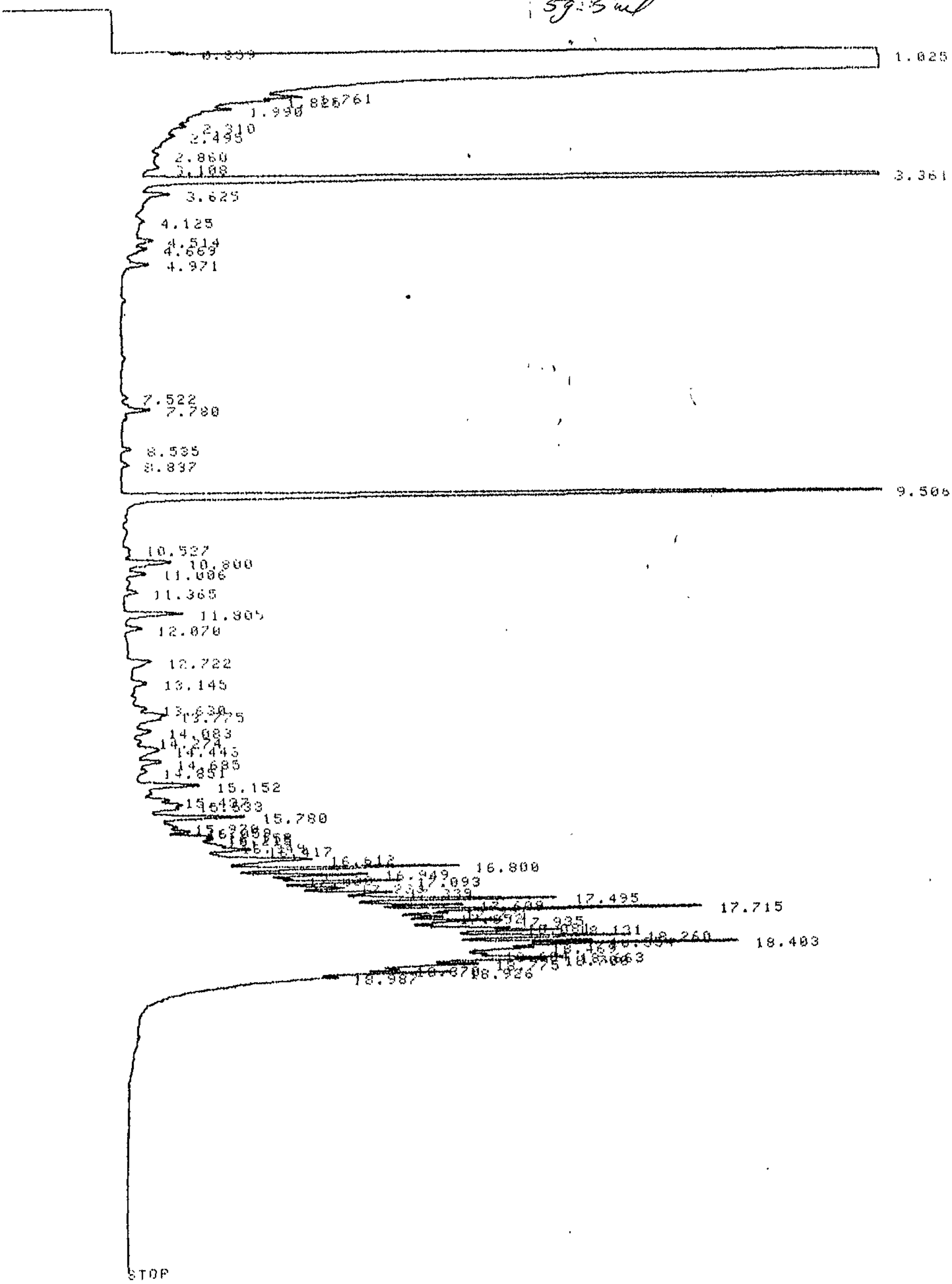
TOTAL AREA=2675846
MUL FACTOR=1.0000E+00

105-116

* RUN # 2683   MAY 16, 1992 04:49:10

59.5ml

START



STOP

Closing signal file M:SIGNAL .BNC

RUN# 2683   MAY 16, 1992 04:49:10

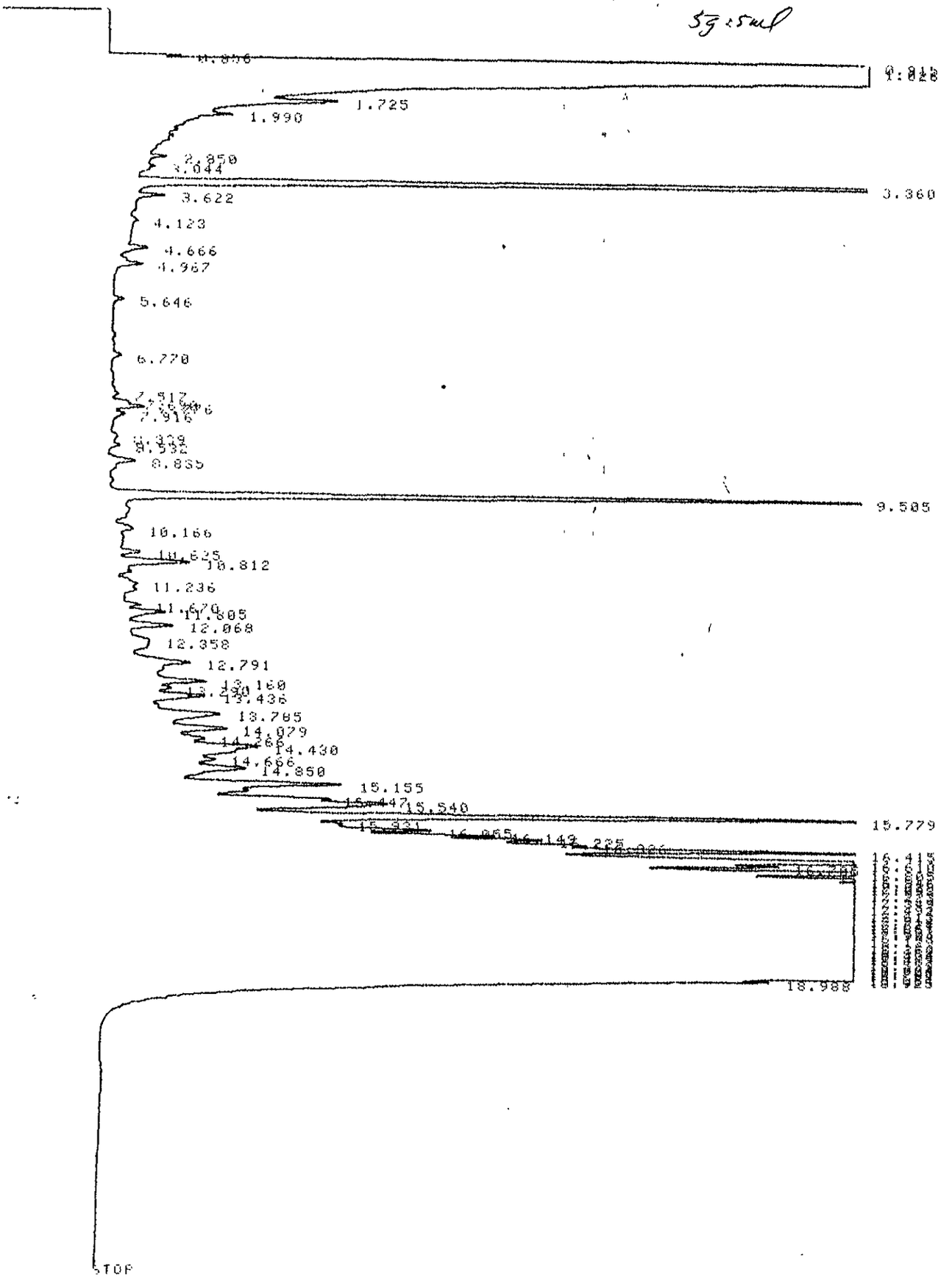
METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC
ESTD-AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CAL#	AMOUNT	NAME
.859	PP	5582	.023	3965		1.451	
1.025	PB	88485568	.063	23593872		23006.248	
[illegible]	[illegible]	[illegible]	.058	3928		3.621	

RUN # 2604 MAY 16, 1992 05:22:19

105118
5g:5ml



Closing signal file M:SIGNAL .BNC

RUN# 2604 MAY 16, 1992 05:22:19

METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC

ESTD:AREA

RT	TYPE	AREA	WIDTH	HEIGHT	CHL#	AMOUNT	NAME
.915	PV	304248	.028	1820384		792.285	
1.026	VB	91227008	.061	24976992		23719.016	
1.725	BP	31493	.084	6286		8.188	
1.990	PP	6947	.048	2395		1.806	
2.850	PV	7149	.074	1607		1.859	
3.044	VP	6228	.112	928		1.619	
[illegible]	[illegible]	[illegible]	[illegible]	105649		102.279	[illegible]

8.532	VB	8943	.085	1757	B	.505	O-XYLENE
9.505	PB	1302599	.078	279895	?R	35.587	4BPB%

TOTAL AREA=2285570

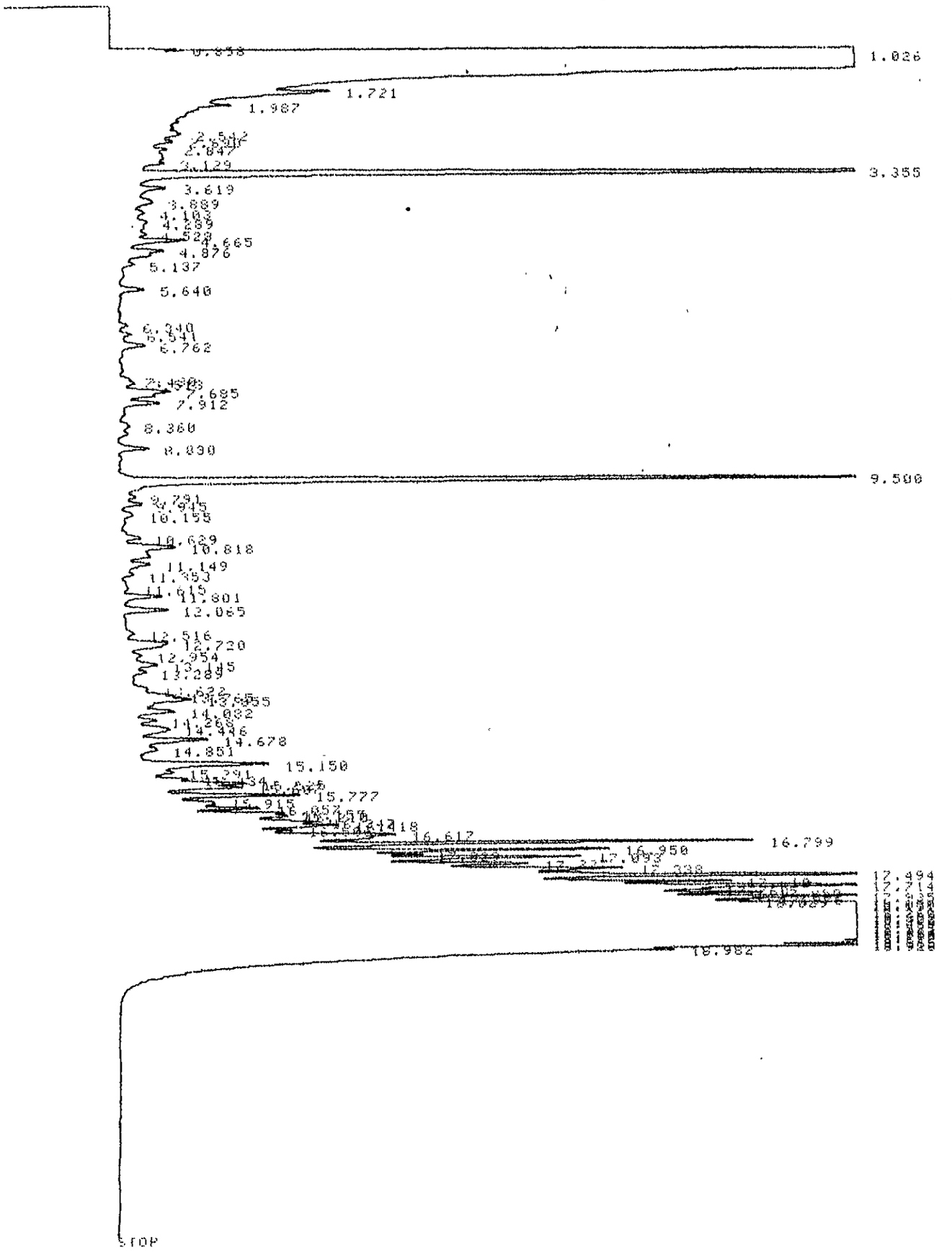
MUL FACTOR=1.0000E+00

105120

59.5wl

RUN # 2685 MAY 16, 1992 05:59:42

START



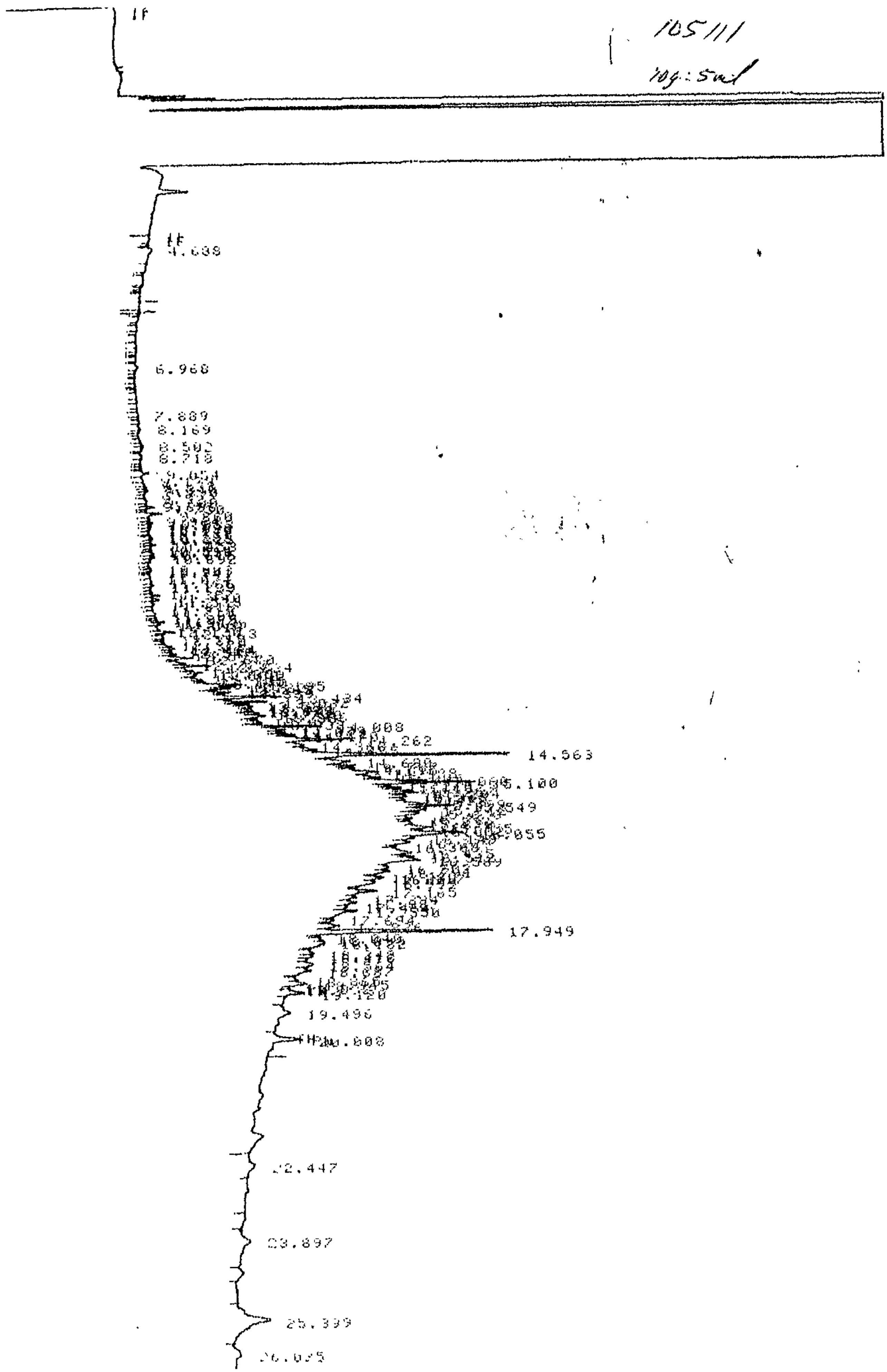
STOP

Closing signal file M:SIGNAL .BNC

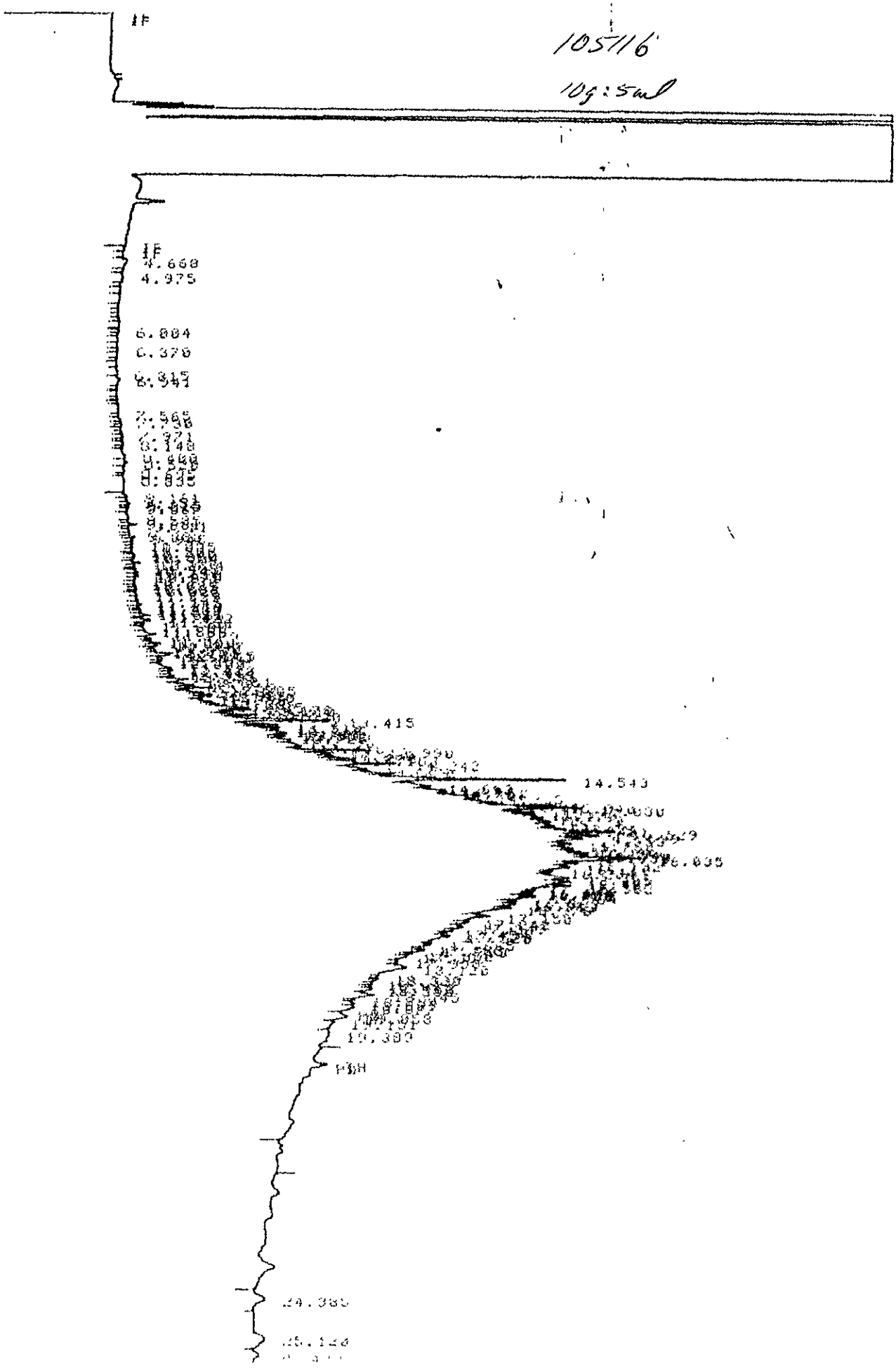
RUN# 2685 MAY 16, 1992 05:59:42

METHOD NAME: M:BTEXFID1.MET

SIGNAL FILE: M:SIGNAL.BNC


105111
10g:5ml
6.968
7.889
8.169
8.502
8.718
14.563
17.949
19.496
22.447
23.897
25.399

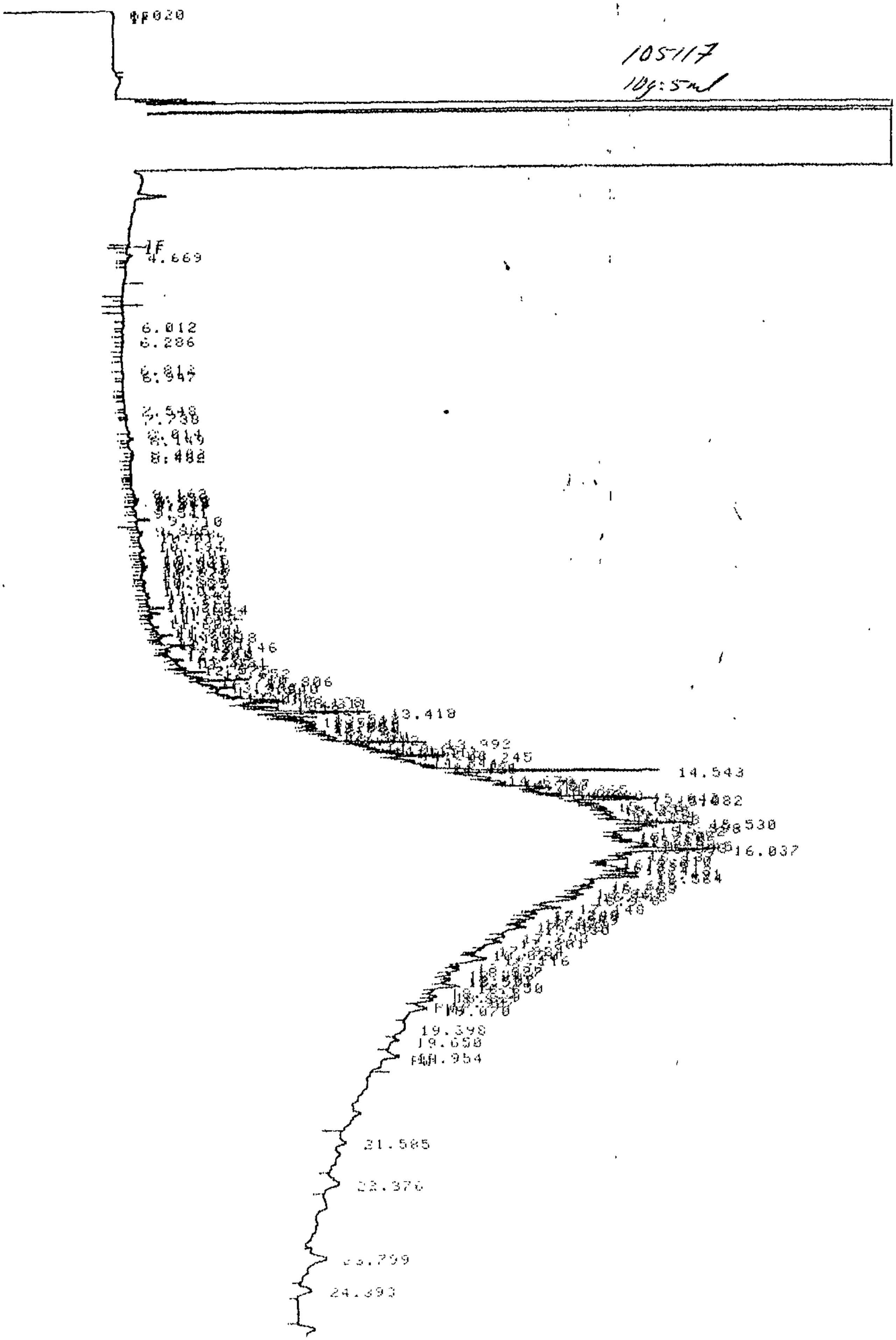
MUH # 2770 MAY 16, 1992 16:07:28
START



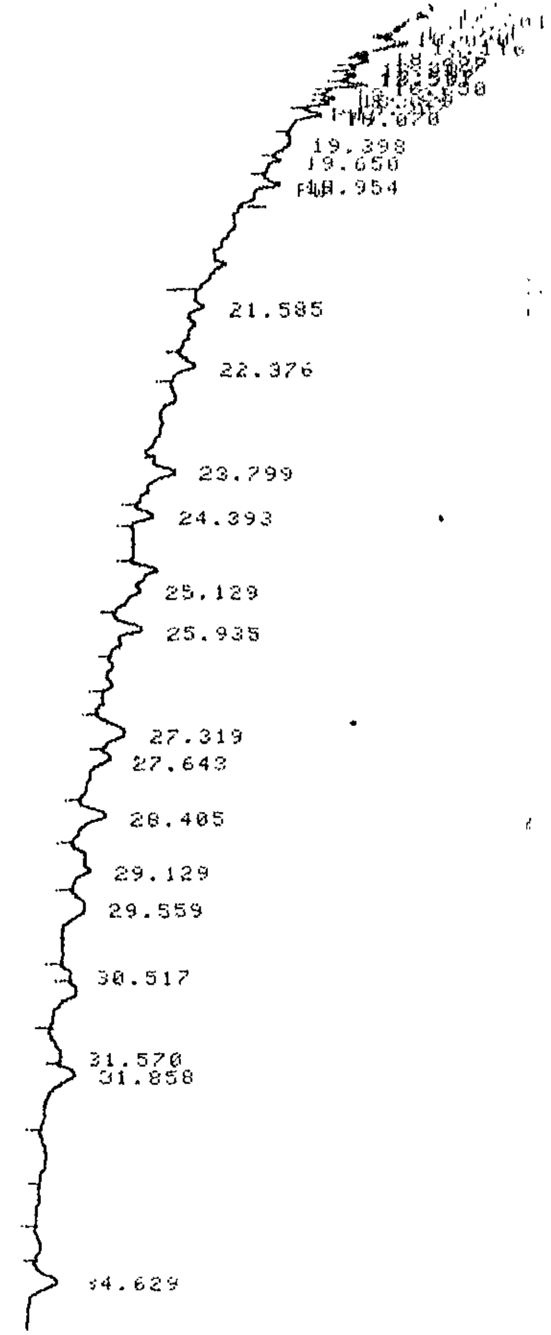
SLOPE PEAK SUM: 14. - 17 MINS = 71691.

RUN # 2764 MAY 16, 1992 10:52:27

START



105117 (cont.)



STOP

Closing signal file M:SIGNAL .BNC

RUN# 2264 MAY 16, 1992 10:52:27

SAMPLE# 26

SIGNAL FILE: M:SIGNAL.BNC

AREA%

RT	AREA	TYPE	WIDTH	AREA%
[illegible]	155	1 PH	.053	.00340
4.669	434	PP	.068	.00931
6.012	146	VP	.053	.00321
6.266	111	PP	.047	.00244
6.812	142	PH	.082	.00312
6.947	146	HP	.054	.00321
7.540	485	VH	.115	.01065
7.736	551	HH	.081	.01210
8.014	1856	HH	.187	.04077
8.149	1275	HH	.090	.02801
[illegible]	1408	HH	.107	.03093

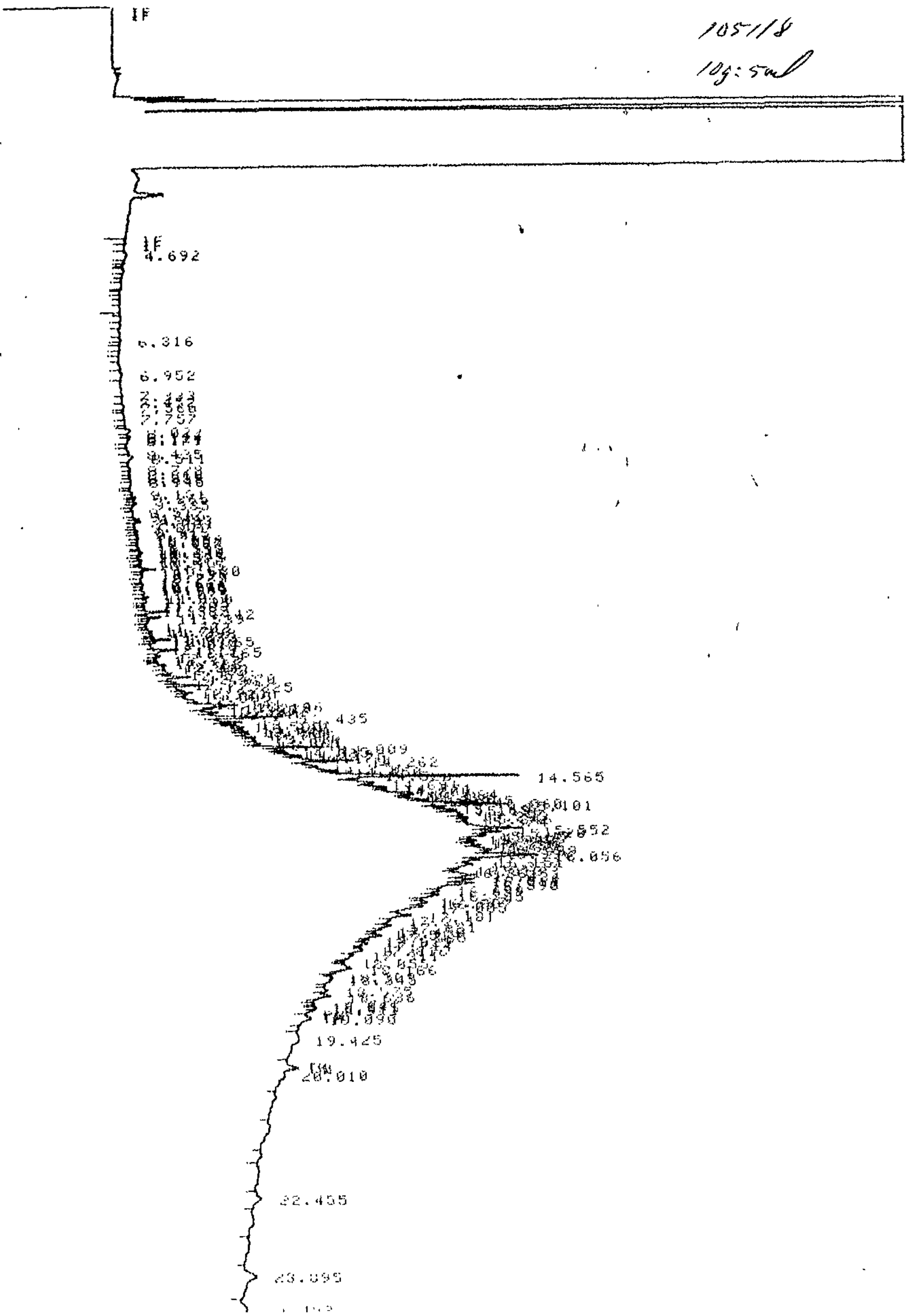
SLOPE PEAK SUM, 14.7 - 17 MINS = 37395.

RUN # 2758 MAY 16, 1992 06:03:28

START

105118

10g:5ml



% of TOTAL GAS

OIL & DIESEL RANGE: 10.1 - MINS (C9-C17) PEAKSUM= 13160.

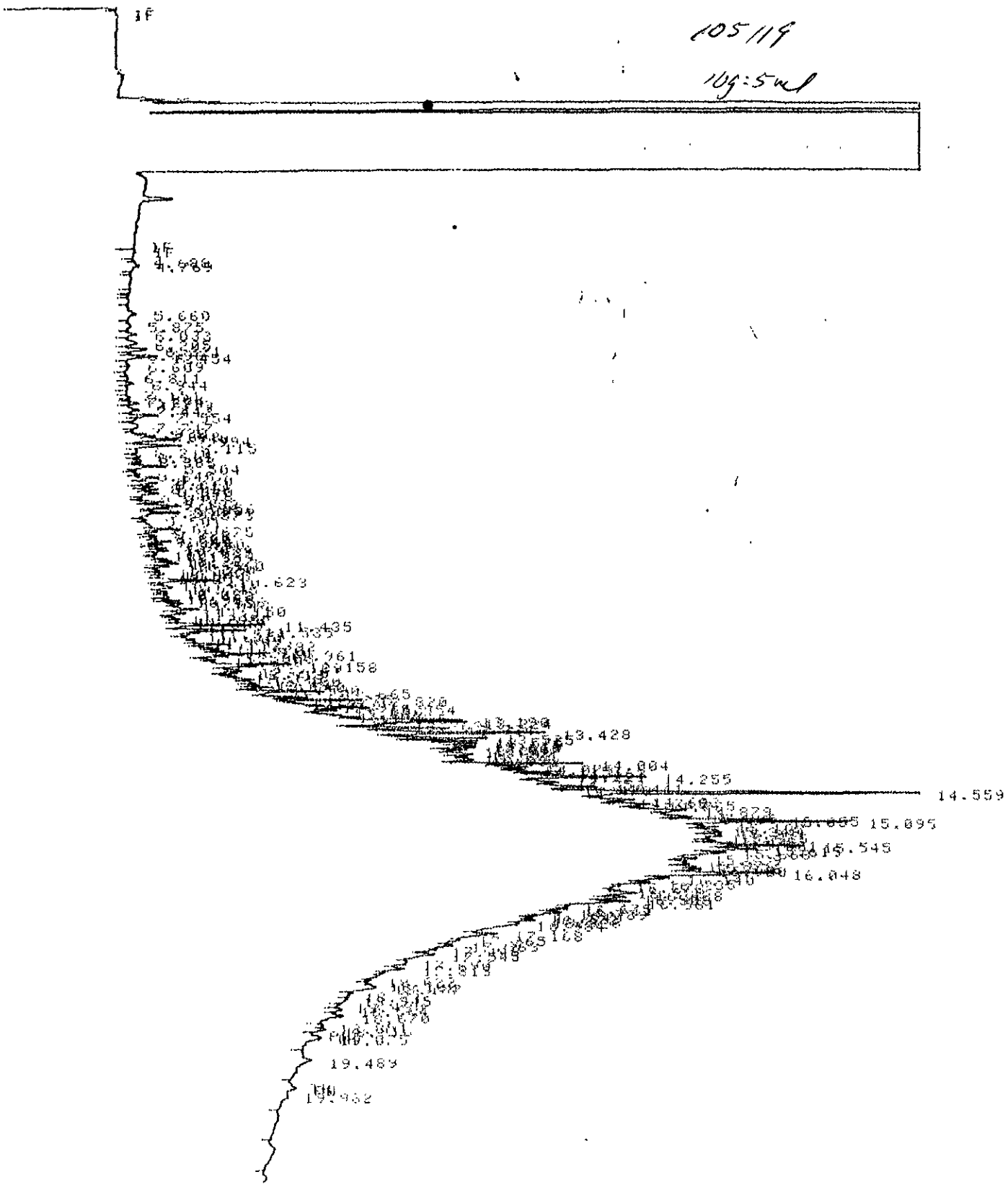
STODDARD SOLVENT RANGE: 5.38 - 10.28 MINS (C8-C12) PEAKSUM= 3957.

KEROSINE RANGE: 4.87 - 13.71 MINS (C7-C18) PEAKSUM = 3957.

SLOPE PEAK SUM: 14.7 - 17 MINS = 19870.

RUN # 2761 MAY 16, 1992 08:21:10

START



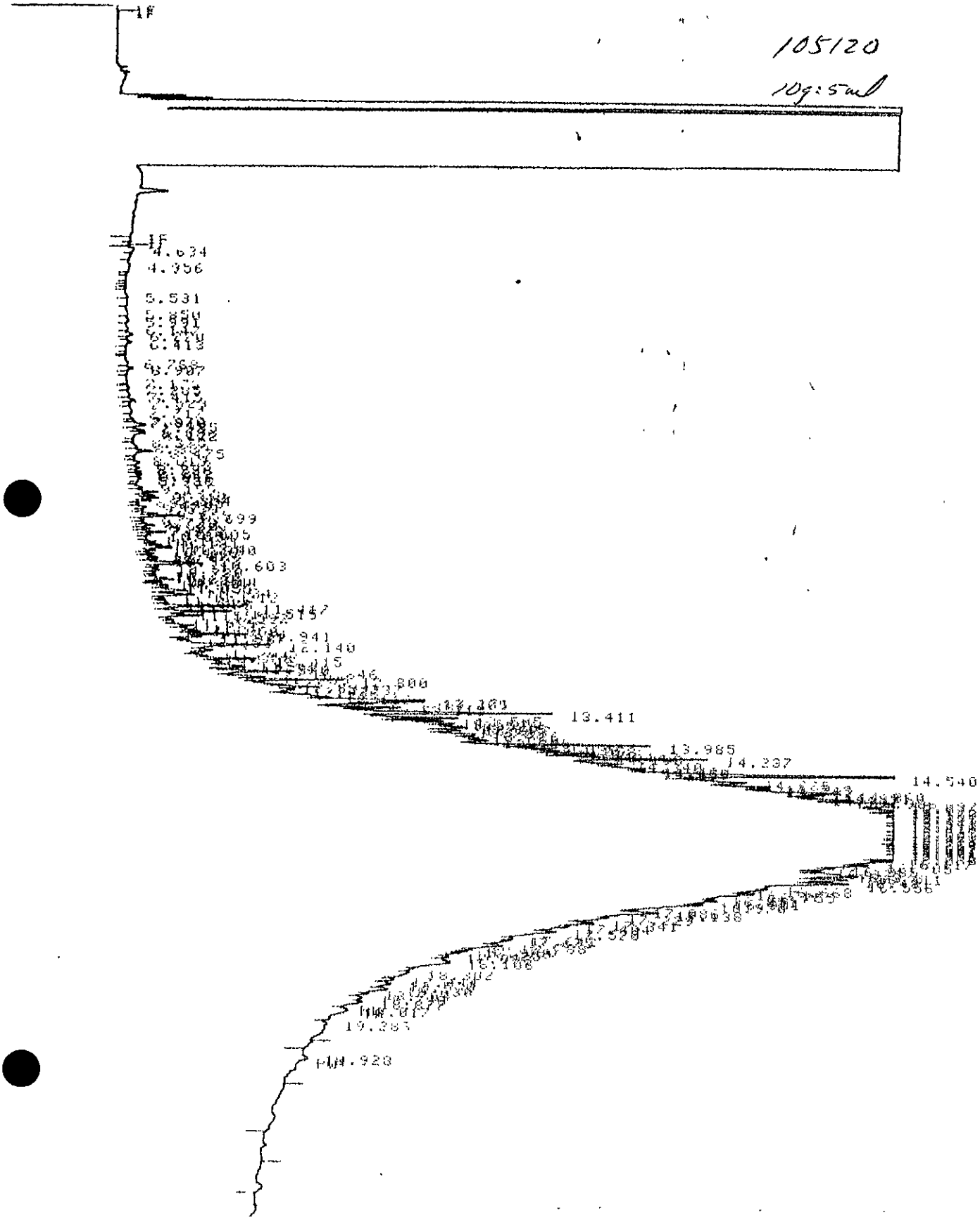
STODDARD SOLVENT RANGE: 5.38 - 10.20 MINS (C8-C12) PEAKSUM = 194.

KEROSINE RANGE: 4.87 - 13.71 MINS (C7-C18) PEAKSUM = 3046.

SLOPE PEAK SUM: 14.7 - 17 MINS = 70680.

RUN # 2767 MAY 16, 1992 13:37:33

START



A P P E N D I X C

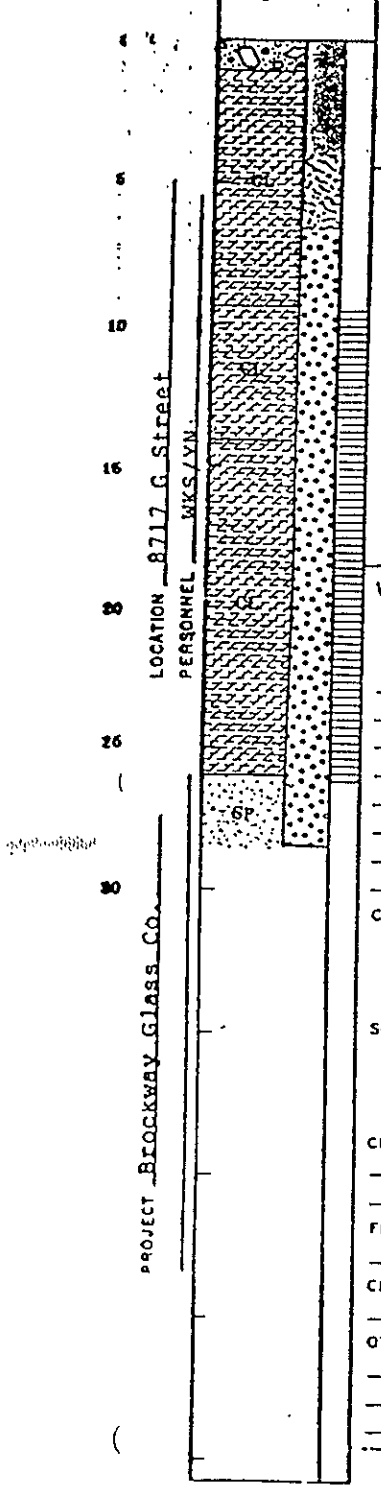
BORING LOGS

WELL MW1

WELL CONSTRUCTION SUMMARY

LOCATION or COORDS: Brockway glass
8717 G Street
Oakland, CA 94621

ELEVATION: GROUND LEVEL _____
TOP OF CASING _____



PROJECT Brockway Glass Co.
LOCATION 8717 G Street
PERSONNEL WKS/YN

DRILLING SUMMARY:

TOTAL DEPTH 28 ft
BOREHOLE DIAMETER 6-inch
DRILLER Exceltech, Fremont
RIG Mobile D-25
BIT(S) Hollow-stem, Cont. flight
DRILLING FLUID Traffic-Rated box
SURFACE CASING _____

WELL DESIGN:

BASIS: GEOLOGIC LOG X GEOPHYSICAL LOG __

CASING STRING(S): C=CASING S=SCREEN

0	9	C			
9	26	S			

CASING: C1 2" PVC Sch 40
C2 _____
C3 _____
C4 _____

SCREEN: S1 2" PVC Sch 40,
S2 20 slots
S3 _____
S4 _____

CENTRALIZERS None

FILTER MATERIAL Monterey Sand #2 7'-28'

CEMENT Neat cement 0-4'

OTHER Bentonite 4'-7'

CONSTRUCTION TIME LOG:

TASK	START DATE	START TIME	FINISH DATE	FINISH TIME
DRILLING: 0-28	5/26	9:15	5/26	13:30
GEOPHYS LOGGING:				
CASING: 0-26	5/26	13:35	5/26	13:40
FILTER PLACEMENT	5/26	13:46	5/26	14:54
CEMENTING:	5/26	15:00	5/26	15:30
DEVELOPMENT:	5/26	15:35	5/26	17:30
OTHER.				

WELL DEVELOPMENT

1.7" Hand Pump

COMMENTS:

Water levels (to ground surface):
During drilling: 11 ft
5/26 15:00 9.2 ft
5/27 11:15 9.9 ft

Water samling on 5/27 for TPH and BTX

BASELINE ENVIRONMENTAL CONSULTING
315 Washington Street
Oakland, CA 94607
(415) 763-7037

Boring No. MW-1
Date 5/26/87
Datum

DRILLING LOG

Location Brockway Glass Co., Oakland
Driller Exceltech, Fremont
Method Hollow-stem, cont. flight

Bore Size 6-inch
Casing Size 2-inch
Logger WKS

DEPTH	GRAPHIC	LITHOLOGY	NOTES
1 ft		Concrete	
		Black, silty CLAY, moist, some sand < 1%	Slight petroleum odor.
3			
5			
7		Black, silty CLAY, moist, some coarse sand < 1%	Slight petroleum odor.
9			2-6-10
		Olive gray/dark gray mottled, silty CLAY, moist-wet, some black organic fragments	
11			10-11-14 Slight petroleum odor.
13			
15		Olive, silty CLAY, wet, some black organic fragments < 1%	3-4-4 Slight to no petroleum odor.
17			
19			
		Olive, silty CLAY, wet, some black organic fragments < 1%	2-3-4 Slight to no petroleum odor.
21			

BASELINE ENVIRONMENTAL CONSULTING
315 Washington Street
Oakland, CA 94607
(415) 763-7037

Boring No. MW-1 Cont.
Date 5/26/87
Datum

DRILLING LOG

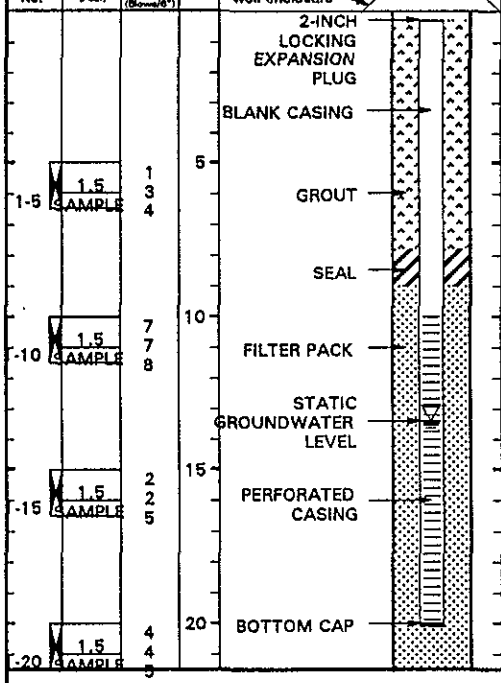
Location Brockway Glass Co., Oakland
Driller Exceltech, Fremont
Method Hollow-stem cont. flight

Bore Size 6-inch
Casing Size 2-inch
Logger WKS

DEPTH	GRAPHIC	LITHOLOGY	NOTES
23 ft	CL	Olive, silty CLAY, wet, some black organic fragments < 1%	
25		Dark greenish gray, SAND, wet, some gravely interbeds	2-2-4 Slight petroleum odor.
27	SP	T.D. 28 ft	
29			

BORING LOCATION	8718 G Street Oakland, California
DRILLING COMPANY	H.E.W. DRILLING CO INC.
DRILLER	Mike & Lou
DRILLING METHOD(S)	HOLLOW-STEM AUGERS
DRILL BIT(S) SIZE	5 7/8-INCH O.D.
ISOLATION CASING	NONE — FROM ----- TO ----- FT.
BLANK CASING	2-INCH OD SCHEDULE 40 PVC — FROM 0.3 TO 10.0 FT.
PERFORATED CASING	2-INCH OD, 0.02-INCH SLOTTED, SCHEDULE 40 PVC — FROM 10.0 TO 20.0 FT.
SIZE AND TYPE OF FILTER PACK	NO. 3 MONTEREY CLEAN WASHED SAND — FROM 9.0 TO 21.5 FT.
SEAL	3/8-INCH BENTONITE PELLETS — FROM 7.8 TO 9.0 FT.
GROUT	NEAT CEMENT — FROM 0.4 TO 7.8 FT.

Boring/Well Name	KJMW-1
Project Name	Owens-Brockway
Project Number	910004.01
ELEVATION AND DATUM	0.0 GL
TOTAL DEPTH	21.5
DATE STARTED	6/25/91
DATE COMPLETED	6/25/91
STATIC WATER ELEVATION	-13.4 BGL
NORTHING	
LOGGED BY	R.L. Brunner
EASTING	
SAMPLING METHODS	2-INCH ID SPLIT-SPOON
WELL COMPLETION	☒ SURFACE HOUSING ☐ STAND PIPE ____ FT.



USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
SP		10YR 7/4	FILL SAND GRAYISH ORANGE, DRY, FINE TO VERY FINE GRAINED, UNCONSOLIDATED
CL		5 G 2/1	CLAY GREENISH BLACK, MOIST, VERY PLASTIC, SOFT, INORGANIC
SP		5 G 2/1	SAND GREENISH BLACK, VERY MOIST, VERY FINE GRAINED, ROUNDED, VERY POORLY GRADED, UNCONSOLIDATED, SLIGHTLY CLAYEY
CL		5 G 2/1	CLAY GREENISH BLACK, MOIST, VERY PLASTIC, SOFT
SP		5 G 2/1	SAND GREENISH BLACK, VERY MOIST, VERY FINE GRAINED, ROUNDED, VERY POORLY GRADED, UNCONSOLIDATED, CLAYEY
CL		5 Y 4/1	CLAY OLIVE GRAY, VERY MOIST, VERY PLASTIC, SLIGHTLY ELASTIC, MODERATELY SOFT

BORING TERMINATED AT 20.0 FEET.

DEEPEST SAMPLE AT 21.5 FEET.

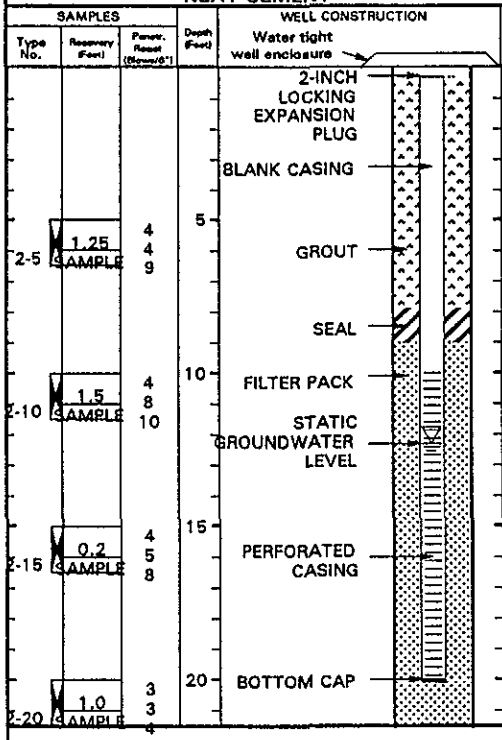
FIRST GROUNDWATER ENCOUNTERED AT 13.5 FEET.

NOTES:
1. ALL CONTACTS ARE APPROXIMATE.
2. VERTICAL SCALE: 1INCH = 5 FEET.
3. COLOR DESIGNATION IN ACCORDANCE WITH MUNSEL ROCK COLOR CHART (GEOLOGIC SOCIETY OF AMERICA, 1969)
4. SOIL TYPES CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (BUREAU OF RECLAMATION, 1986)

Boring & Well Construction Log

Kennedy/Jenks

BORING LOCATION: 8718 G Street Oakland, California		Boring/Well Name: KJMW-2	
DRILLING COMPANY: H.E.W. DRILLING CO INC.	DRILLER: Mike & Lou	Project Name: Owens-Brockway	
DRILLING METHOD(S): HOLLOW-STEM AUGERS	DRILL BIT(S) SIZE: 5 7/8-INCH O.D.	Project Number: 910004.01	
ISOLATION CASING: NONE	FROM ____ TO ____ FT.	ELEVATION AND DATUM: 0.0 GL	TOTAL DEPTH: 21.5
BLANK CASING: 2-INCH OD SCHEDULE 40 PVC	FROM 0.3 TO 10.0 FT.	DATE STARTED: 6/25/91	DATE COMPLETED: 6/25/91
PERFORATED CASING: 2-INCH OD, 0.02-INCH SLOTTED, SCHEDULE 40 PVC	FROM 10.0 TO 20.0 FT.	STATIC WATER ELEVATION: -12.3 BGL	NORTHING
SIZE AND TYPE OF FILTER PACK: NO. 3 MONTEREY CLEAN WASHED SAND	FROM 9.0 TO 21.5 FT.	LOGGED BY: R.L. Brunner	EASTING
SEAL: 3/8-INCH BENTONITE PELLETS	FROM 7.9 TO 9.0 FT.	SAMPLING METHODS: 2-INCH ID SPLIT-SPOON	WELL COMPLETION: ☒ SURFACE HOUSING ☐ STAND PIPE ____ FT.
GROUT: NEAT CEMENT	FROM 0.4 TO 7.9 FT.		



SAMPLE DESCRIPTION and DRILLING REMARKS

ASPHALT

SANDY GRAVEL FILL
DARK YELLOWISH ORANGE, DRY, ROUNDED, WELL GRADED FINE GRAINED SAND TO LARGE GRAVEL, UNCONSOLIDATED

SANDY CLAY
MODERATE YELLOWISH BROWN, SLIGHTLY MOIST, MODERATELY PLASTIC, INORGANIC, SAND IS FINE GRAINED GRADING TO SILT, ROUNDED, WELL GRADED

CLAY
PALE YELLOWISH BROWN, SLIGHTLY MOIST, VERY PLASTIC, INORGANIC, SLIGHTLY SANDY WITH VERY FINE GRAINED SAND, MODERATELY STIFF

CLAY
DARK YELLOWISH BROWN, SLIGHTLY MOIST, VERY PLASTIC, SLIGHTLY ELASTIC, VERY STIFF, INORGANIC

SAND
PALE YELLOWISH BROWN, MEDIUM TO FINE GRAINED, ANGULAR, WELL GRADED, UNCONSOLIDATED

CLAY
MEDIUM DARK GREY NODULES, VERY MOIST, VERY PLASTIC, ELASTIC, STIFF, INORGANIC

BORING TERMINATED AT 20.0 FEET.

DEEPEST SAMPLE AT 21.5 FEET.

FIRST GROUNDWATER ENCOUNTERED AT 12.5 FEET.

NOTES:
1. ALL CONTACTS ARE APPROXIMATE.
2. VERTICAL SCALE: 1INCH = 5 FEET.
3. COLOR DESIGNATION IN ACCORDANCE WITH MUNSEL ROCK COLOR CHART (GEOLOGIC SOCIETY OF AMERICA, 1969)
4. SOIL TYPES CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (BUREAU OF RECLAMATION, 1986)

Boring & Well Construction Log

Kennedy/Jenks

BORING LOCATION: 8718 G Street Oakland, California		Boring/Well Name: KJMW-3	
DRILLING COMPANY: H.E.W. DRILLING CO INC.	DRILLER: Mike & Lou	Project Name: Owens-Brockway	
DRILLING METHOD(S): HOLLOW-STEM AUGERS	DRILL BIT(S) SIZE: 5 7/8-INCH O.D.	Project Number: 910004.01	
ISOLATION CASING: NONE	FROM ___ TO ___ FT.	ELEVATION AND DATUM: 0.0 GL	TOTAL DEPTH: 21.5
BLANK CASING: 2-INCH OD SCHEDULE 40 PVC	FROM 0.3 TO 8.0 FT.	DATE STARTED: 6/26/91	DATE COMPLETED: 6/26/91
PERFORATED CASING: 2-INCH OD, 0.02-INCH SLOTTED, SCHEDULE 40 PVC	FROM 8.0 TO 18.0 FT.	STATIC WATER ELEVATION: -8.5 BGL	NORTHING
SIZE AND TYPE OF FILTER PACK: NO. 3 MONTEREY CLEAN WASHED SAND	FROM 7.5 TO 21.5 FT.	LOGGED BY: R.L. Brunner	EASTING
SEAL: 3/8-INCH BENTONITE PELLETS	FROM 6.5 TO 7.5 FT.	SAMPLING METHODS: 2-INCH ID SPLIT-SPOON	WELL COMPLETION: ☒ SURFACE HOUSING ☐ STAND PIPE ___ FT.
GROUT: NEAT CEMENT	FROM .4 TO 6.5 FT.		

SAMPLES Type No.	Recovery (Feet)	Pen. Resist. (Blows/6")	Depth (Feet)	WELL CONSTRUCTION (Water tight well enclosure)	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
				2-INCH LOCKING EXPANSION PLUG				
				BLANK CASING				
		3	5		CL		5YR 2/1	**CLAY** OLIVE BLACK, VERY MOIST, VERY PLASTIC, SLIGHTLY ELASTIC, SOFT, INORGANIC, G.W. INSIDE AUGER AT 4.5 FT. BELOW GROUND SURFACE
3-5 SAMPLE	1.5	5		GROUT				
		8		SEAL				
				STATIC GROUNDWATER LEVEL				
		7	10		CL		10YR 4/2	**SANDY CLAY** DARK TELLOWISH BROWN, MOIST, VERY PLASTIC, INORGANIC, SAND IS FINE GRAINED, ROUNDED
8-10 SAMPLE	1.5	12		FILTER PACK				
		17						
		10	15		SP		10YR 5/4	**SAND** MODERATE YELLOWISH BROWN, VERY MOIST, FINE TO VERY FINE GRAINED, GRADING TO SILT, ROUNDED, POORLY GRADED, UNCONSOLIDATED
13-15 SAMPLE	1.5	13		PERFORATED CASING				
		19						
				BOTTOM CAP				
		4	20		CL		5GY 4/1	**CLAY** DARK GREENISH GREY, VERY MOIST, VERY PLASTIC,STIFF, INORGANIC
18-20 SAMPLE	1.5	6						
		7						

BORING TERMINATED AT 20.0 FEET.

DEEPEST SAMPLE AT 21.5 FEET.

FIRST GROUNDWATER ENCOUNTERED AT 8.5 FEET.

NOTES:
1. ALL CONTACTS ARE APPROXIMATE.
2. VERTICAL SCALE: 1INCH = 5 FEET.
3. COLOR DESIGNATION IN ACCORDANCE WITH MUNSEL ROCK COLOR CHART (GEOLOGIC SOCIETY OF AMERICA, 1969)
4. SOIL TYPES CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (BUREAU OF RECLAMATION, 1986).

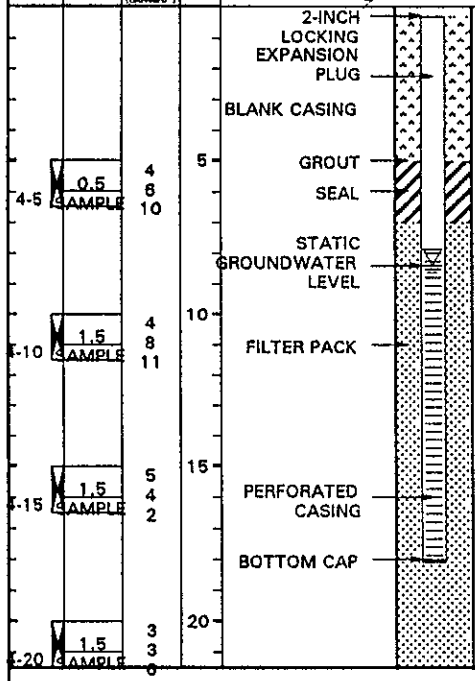
F-40.1
(6-87) (3-88) (8-90)

Boring & Well Construction Log

Kennedy/Jenks

BORING LOCATION	8718 G Street Oakland, California
DRILLING COMPANY	H.E.W. DRILLING CO INC.
DRILLER	Mike & Lou
DRILLING METHOD(S)	HOLLOW-STEM AUGERS
DRILL BIT(S) SIZE	5 7/8-INCH O.D.
ISOLATION CASING	NONE — FROM ___ TO ___ FT.
BLANK CASING	2-INCH OD SCHEDULE 40 PVC — FROM 0.3 TO 8.0 FT.
PERFORATED CASING	2-INCH OD, 0.02-INCH SLOTTED, SCHEDULE 40 PVC — FROM 8.0 TO 18.0 FT.
SIZE AND TYPE OF FILTER PACK	NO. 3 MONTEREY CLEAN WASHED SAND — FROM 7.0 TO 21.5 FT.
SEAL	3/8-INCH BENTONITE PELLETS — FROM 5.0 TO 7.0 FT.
GROUT	NEAT CEMENT — FROM 0.4 TO 5.0 FT.

Boring/Well Name	KJMW-4
Project Name	Owens-Brockway
Project Number	910004.01
ELEVATION AND DATUM	0.0 GL
TOTAL DEPTH	21.5
DATE STARTED	6/26/91
DATE COMPLETED	6/26/91
STATIC WATER ELEVATION	-8.4 BGL
NORTHING	
LOGGED BY	R.L. Brunner
EASTING	
SAMPLING METHODS	2-INCH ID SPLIT-SPOON
WELL COMPLETION	☒ SURFACE HOUSING ☐ STAND PIPE ___ FT



FILL
SAND AND GRAVEL FILL, LARGE COBBLES TO FINE SAND, DRY, VERY WELL GRADED, ROUNDED, UNCONSOLIDATED

CLAY
BLACK, SLIGHTLY MOIST, VERY PLASTIC, STIFF, INORGANIC

CLAY
OLIVE GREY, SLIGHTLY MOIST, VERY PLASTIC, VERY HARD AND STIFF, INORGANIC

SAND
PALE YELLOWISH BROWN, VERY MOIST, VERY FINE GRAINED, VERY POORLY GRADED, SLIGHTLY CONSOLIDATED, SLIGHTLY CLAYEY

CLAY
OLIVE GREY, VERY MOIST, VERY PLASTIC, INORGANIC

BORING TERMINATED AT 20.0 FEET.

DEEPEST SAMPLE AT 21.5 FEET.

FIRST GROUNDWATER ENCOUNTERED AT 8.5 FEET.

NOTES:
1. ALL CONTACTS ARE APPROXIMATE.
2. VERTICAL SCALE: 1INCH = 5 FEET.
3. COLOR DESIGNATION IN ACCORDANCE WITH MUNSEL ROCK COLOR CHART (GEOLOGIC SOCIETY OF AMERICA, 1969)
4. SOIL TYPES CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (BUREAU OF RECLAMATION, 1986)