UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT
BUILDING 1122
NJDEPE UST REGISTRATION NO. 81533-199

October 28, 1993

W.O. No.: 03886-088-001

Prepared For:

UNITED STATES ARMY, FORT MONMOUTH NEW JERSEY
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
FORT MONMOUTH, NJ 07703

Prepared by:

ROY F. WESTON, INC.
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WESTON
MANAGERS DESIGNERS/CONSULTANTS

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EXECUTIVE SUMMARY

On 6 January 1992, a single wall steel, underground storage tank (UST) was closed at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, New Jersey Department of Environmental Protection and Energy (NJDEPE) Registration No. 81533-199, was located immediately adjacent to Building 1122 in the Main Post area of Fort Monmouth. UST No. 81533-199 was a 550-gallon waste oil UST. Mr. Douglas Greenfield of the NJDEPE Division of Hazardous Waste Management (NJDEPE-DHWM) was onsite for the duration of closure activities. The tank closure was performed by Fabiano and Son, Inc..

Soils surrounding the tank were screened visually and with air monitoring instruments for evidence of contamination. The UST was inspected following removal for corrosion holes. No corrosion holes were noted in the UST and no potentially contaminated soils were identified surrounding the tank.

Following the removal of the UST, five post-excavation soil samples were collected from the base of the excavation. These samples were analyzed for total petroleum hydrocarbons (TPHC) and priority pollutants plus 40 tentatively identified compounds (PP+40). All samples contained either non-detectable concentrations of contaminants or concentrations below proposed NJDEPE subsurface cleanup criteria.

No further action is proposed at this site in reference to UST No. 81533-199 since no soils were identified during closure with concentrations of contaminants exceeding proposed NJDEPE subsurface cleanup criteria.

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SECTION 1.0

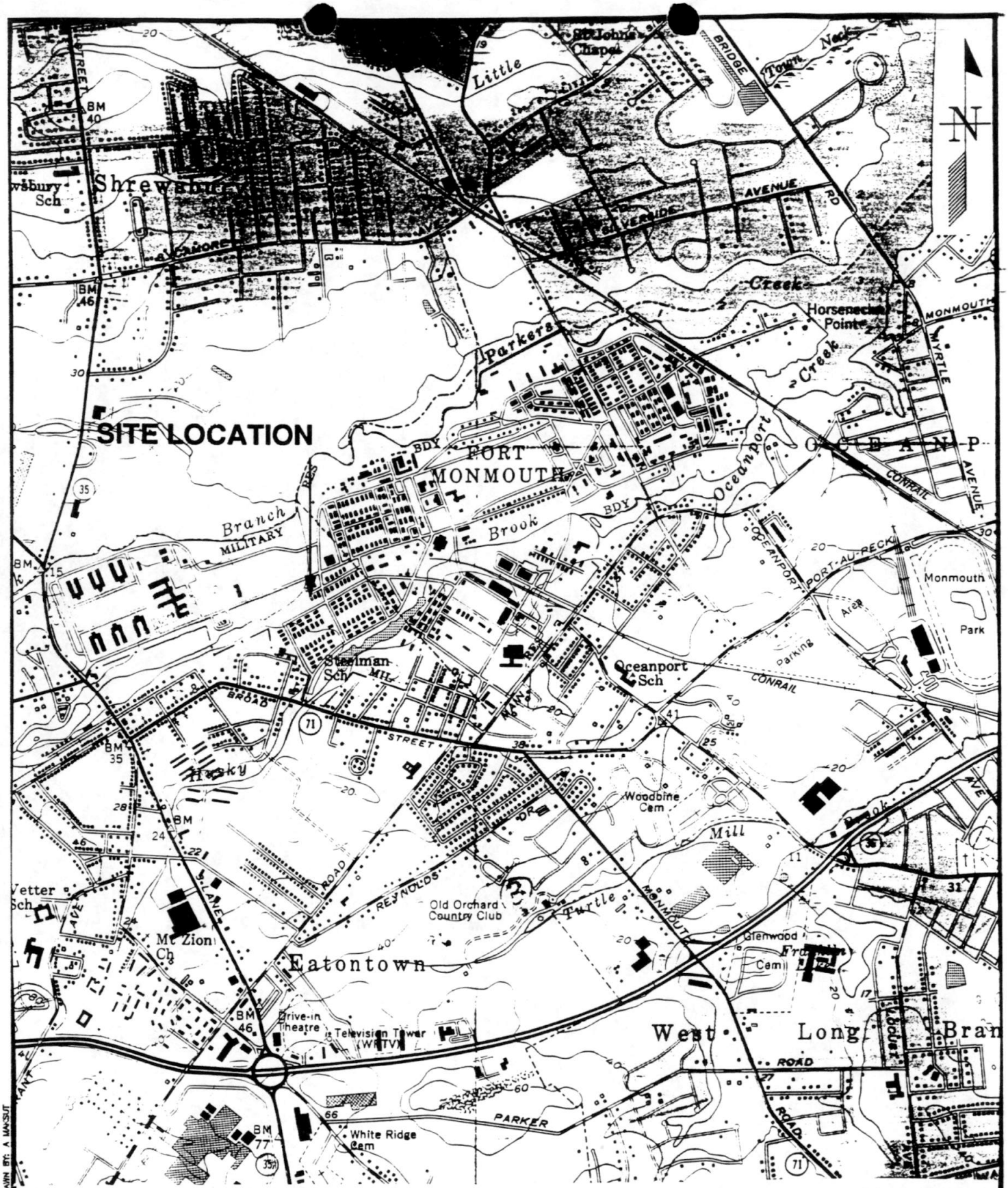
UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 Overview:

One underground storage tank (UST), New Jersey Department of Environmental Protection and Energy (NJDEPE) Registration No. 81533-199, was closed at Building 1122 at U.S. Army Fort Monmouth, New Jersey on 6 January 1992. This UST Closure and Site Investigation Report was prepared by Roy F. Weston Inc. (WESTON®), to assist the United States Army Directorate of Public Works (DPW) in complying with NJDEPE Bureau of Underground Storage Tanks (NJDEPE-BUST) regulations. The applicable NJDEPE-BUST regulations at the date of closure were the "Interim Closure Requirements for Underground Storage Tank Systems" (NJAC 7:14B-1 et seq. September 1990 and revisions dated 1 November 1991). This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEPE on 12 July 1991. UST No. 81533-199 was a single wall steel, 550-gallon waste oil tank.

All activities associated with the decommissioning of UST No. 81533-199 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: NJAC 7:14B-1 et seq., NJAC 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 &1910.120. All permits including but not limited to the NJDEPE-approved Decommissioning/Closure Plan were posted onsite for inspection. Fabiano and Son Inc., the contractor that conducted the decommissioning activities, are registered and certified by the NJDEPE for performing UST closure activities. Closure of UST No. 81533-199 proceeded under oversight of the NJDEPE Division of Hazardous Waste Management (NJDEPE-DHWM). The NJDEPE-DHWM UST conditional closure approval letter and the UST Site Assessment Summary Form for UST No. 81533-199 have been included in Appendices A and B, respectively.

Based on an inspection of the UST, field screening of subsurface soils and analytical results of soil samples collected, DPW concluded that no discharges historically occurred from the UST. Section 1 of this UST Closure and Site Investigation Report provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.



SOURCE: U.S.G.S. LONG BRANCH NJ, QUADRANGLE, MONMOUTH COUNTY, 1954 (PHOTOREVISED 1981) SCALE: 1"=2000'

REVISION #: 0000 DATE: 10-19-93 PLOT NAME:
FILE NAME: B:\JOB-1122.DWG DRAWN BY: A. MANSUT

WESTON MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME: UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION REPORT BUILDING 1122 – TANK NO. 199
FORT MONMOUTH, NEW JERSEY

CLIENT NAME: U.S. ARMY–DEH FORT MONMOUTH

SITE LOCATION MAP

DATE: 10–22–93

FIGURE #: 1–1

1.2 Site Description

Building 1122 is located in the northeastern portion of the Main Post area of Fort Monmouth. A site location map is provided in Figure 1-1. Building 1122 is an active military vehicle repair and maintenance facility.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 1122. Included is description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, sand, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward-coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand) while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium-to-coarse-grained sand

that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark grey to black, medium-to-fine grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank Sand and ranges from a clayey medium to very coarse grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish orange or light brown to moderate brown and from light olive to grayish olive. Glauconite may constitute 60 to 80 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron-oxide encrusted (Minard).

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities by the military. Topographic elevations for the Main Post area range from five feet above mean sea level (MSL) to 31 feet above MSL.

Hydrogeology

The water table aquifer at the Main Post area is identified as part of the "composite confining units", or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

Based on records from wells drilled at the Main Post area, around water is typically encountered at depths of two to nine feet below ground surface (BGS). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce from 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Shallow groundwater is locally influenced within the Main Post area by the following factors:

- tidal influence (based on proximity to the Atlantic Ocean),
- topography,
- nature of the fill material within the Main Post,
- presence of clay and silt lenses in the natural overburden deposits, and
- local groundwater recharge areas (i.e. stream, lakes).

Due to the fluvial nature of the overburden deposits (i.e. sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Main Post area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of silt and/or clay.

1.3 Health and Safety

Before, during, and after all activities, hazards at the work site which may have posed a threat to the health and safety of all personnel who were involved with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing approved equipment. The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 Removal of Underground Storage Tanks

1.4.1 General Procedures

- All underground obstructions (utilities,... etc.) were marked out by the contractor performing the closure prior to excavation activities.
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were screened visually and with air monitoring instruments for evidence of contamination. No potentially contaminated soils were identified during closure activities.
- Surface materials (i.e, asphalt, concrete, etc...) were excavated and staged separate from all soil and recycled in accordance with all applicable regulations and laws.
- A Sub-Surface Evaluator from the DPW was present during all closure activities.

1.4.2 Underground Storage Tank Excavation and Cleaning

Soil was excavated to expose the UST and associated piping. The piping was not removed/disturbed until all free product was drained into the UST. The UST was rendered vapor free by purging prior to any cutting or access. After the removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Liquids were transported and disposed of by L&L Oil Service, Inc., a NJDEPE-approved petroleum recycling and disposal company. All of the openings in the tanks were plugged except for one hole (manway).

The UST was cleaned prior to removal from the excavation in accordance with NJDEPE-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene

sheeting and examined for corrosion holes. The presence or absence of corrosion holes was documented by the Sub-Surface Evaluator. No cracks or puncture holes were observed upon the inspection of the UST. Soils surrounding the UST were screened visually and with an Organic Vapor Analyzer (OVA) for evidence of contamination. No evidence of contamination was noted.

1.5 Underground Storage Tank Transportation and Disposal:

The tank was transported by Fabiano and Sons, Inc. to Redbank Recycling Inc., for recycling in compliance with all applicable regulations and laws.

The Subsurface Evaluator labelled the UST prior to transport with the following information:

- site of origin,
- contact person,
- NJDEPE UST Facility ID number,
- name of transporter/contact person, and
- destination site/contact person.

1.6 Management of Excavated Soils:

No potentially contaminated soils were excavated as part of the removal of UST No. 81533-199. All soils were free of evidence of contamination and were backfilled into the excavation following removal of UST.

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SECTION 2.0

SITE INVESTIGATION ACTIVITIES

2.1 Overview:

The Site Investigation was managed and carried out by U.S ARMY DPW personnel. All analyses were performed and reported by Environmental Profile Laboratories, a NJDEPE-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator according to the methods described in the NJDEPE Field Sampling Procedures Manual (1988). Sampling frequency and parameters analyzed complied with the NJDEPE-BUST document "Interim Closure Requirements for Underground Storage Tank Systems" (September 1990 and revisions dated 1 November 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by Fort Monmouth DPW: Environmental Office.

The following Parties participated in Closure and Site Investigation activities.

- Closure Contractor: Fabiano and Son, Inc.
  Contact Person: Anthony Fabiano
  Phone Number: (908) 571-1004
  NJDEPE Company Certification No.: PLE 01349

- Subsurface Evaluator: Dinkerrai Desai
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-1475
  NJDEPE Certification No.: 2266

- Analytical Laboratory: Environmental Profile Laboratories
  Contact Person: Daniel Wright
  Phone Number: (908) 244-6278
  NJDEPE Company Certification No.: 15526

- NJDEPE On-site Representative: DOUG GREENFIELD
  DIVISION OF HAZARDOUS WASTE MANAGEMENT
  Phone Number: (609) 584-4200
  NJDEPE Certification No.: NJD01427895

- Hazardous Waste Hauler: L&L Oil Service, Inc.
  Contact Person: Frank Labella
  Phone Number: (908) 566-2785
  NJDEPE Company Certification No.: NJD01427895

2.2 Field Screening/Monitoring

All soils that were excavated as part of the removal of the UST were screened using an OVA, for evidence of contamination. Soils were also visually screened for evidence of contamination (staining, free product, etc..). No evidence of contamination was noted during excavation of soils.

Soils on the sidewalls and base of the excavation were screened with an OVA by an individual under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator. No evidence of contamination was noted within soils on the sidewalls or base of the excavation.

2.3 Soil Sampling

Following removal of UST No. 81533-199, five (5) post-excavation soil samples were collected and were analyzed for total petroleum hydrocarbons (TPHC) and priority pollutants plus forty tentatively identified compounds (PP+40), in accordance with NJDEPE requirements. The NJDEPE approved closure plan (July 1991) for UST No. 81533-199 specified that four post-excavation samples should be collected. However, the number of samples was increased based on a request by the NJDEPE on-site representative present during closure activities. A summary of sampling activities including parameters analyzed is provided in Table 2-1. Figure 2-1 depicts the location of the post-excavation samples. The samples were typically collected along the base and sidewalls of the excavation using decontaminated stainless steel scoops. Following soil sampling activities, the samples were chilled and delivered to Environmental Profile Laboratories located in Toms River, New Jersey.

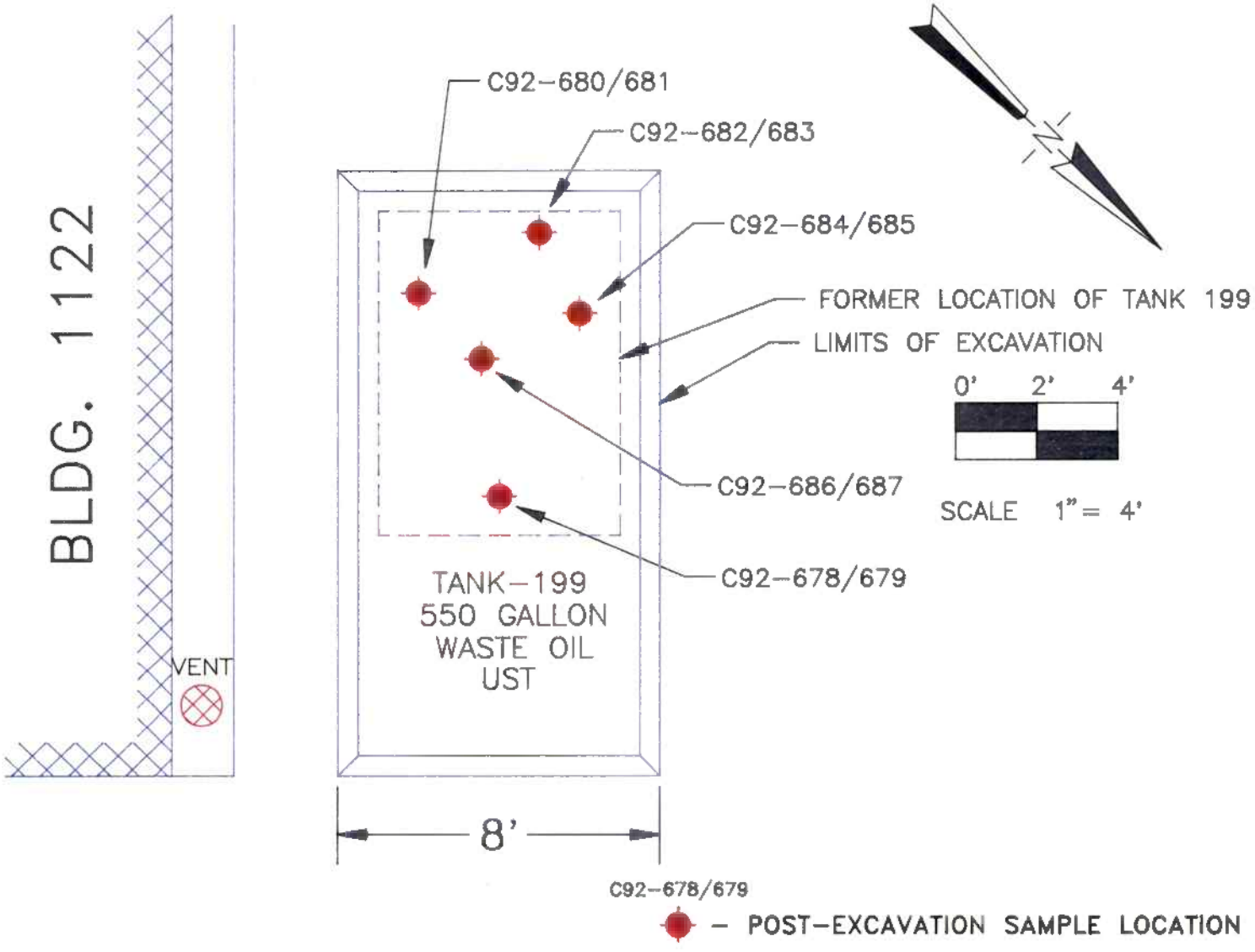
TABLE 2-1

SUMMARY OF POST-EXCAVATION SAMPLING
UST REGISTRATION NO. 881533-199
BUILDING NO. 1122
FORT MONMOUTH, NEW JERSEY

Sample I.D No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
C92-678/679	1/6/92	Soil	Post-Excavation	TPHC, PP+40	Stainless Steel Scoop
C92-680/681	1/6/92	Soil	Post-Excavation	TPHC, PP+40	Stainless Steel Scoop
C92-682/683	1/6/92	Soil	Post-Excavation	TPHC, PP+40	Stainless Steel Scoop
C92-684/685	1/6/92	Soil	Post-Excavation	TPHC, PP+40	Stainless Steel Scoop
C92-686/687	1/6/92	Soil	Post-Excavation	TPHC, PP+40	Stainless Steel Scoop

TPHC - Total Petroleum Hydrocarbons.

PP+40 - Priority pollutant plus 40 - The priority pollutant list of 126 compounds and elements developed by EPA pursuant to Section 307(a)(1) of the Clean Water Act and 40 non-targeted organic compounds detected by gas chromatography/mass spectroscopy (GC/MS) analysis.



REVISION #
DATE: 10-29-93
FILE NAME: DSH-1122.DWG DRAWN BY: A MARQUIT

WESTON MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME:
UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION REPORT
BUILING 1122 - TANK 199
FORT MONMOUTH, NEW JERSEY

CLIENT NAME:
U.S. ARMY-DEH
FORT MONMOUTH

SAMPLE LOCATIONS POST-EXCAVATION

FACILITY REGISTRATION NO. 0081533-199

DATE: 10-07-93

FIGURE #: 2-1

SECTION 3.0

CONCLUSIONS AND RECOMMENDATIONS

3.1 Soil Sampling Results

To evaluate soil conditions following removal of the UST and associated soils, five post-excavation soil samples were collected and analyzed for TPHC and PP+40. The post-excavation sample results were compared to proposed NJDEPE subsurface cleanup criteria (NJAC 7:26D and revisions dated 8 March 1993). A summary of the analytical results and comparison to the proposed NJDEPE subsurface cleanup criteria is provided in Table 3-1. The analytical data package summary is provided in Appendix C. The full data package, including associated quality control and chromatograph data, is on file at U.S. Army Fort Monmouth, DPW.

TPHC was detected in the post-excavation samples at concentrations ranging from 190 milligrams per kilogram (mg/kg) to 1220 mg/kg. No cleanup criterion has been proposed for TPHC by NJDEPE, however the proposed NJDEPE subsurface cleanup criterion for total organic compounds is 10,000 mg/kg. All samples contained concentrations of total organic compounds below the proposed NJDEPE subsurface cleanup criteria of 10,000 mg/kg. Several volatile organic and base neutral compounds were detected in the samples, however at concentrations well below proposed NJDEPE subsurface cleanup criteria. Several metals were detected in the post-excavation samples, however no cleanup criteria has been proposed by NJDEPE for metals in subsurface soils.

3.2 Conclusions and Recommendations:

DPW successfully removed one (1) UST at Building 1122 in the Main Post area of U.S. Army Fort Monmouth. Based on visual inspection of the UST and field screening of the soils adjacent to the UST, it was determined that no discharges had occurred from the UST. Analytical results of the post-excavation samples confirm that no soils are present with concentrations of contaminants exceeding proposed NJDEPE subsurface cleanup criteria.

No further action is proposed at Building 1122 in reference to UST No. 81533-199.

TABLE 3-1

SUMMARY OF ANALYTICAL RESULTS
UST REGISTRATION NO. 881533-199
BUILDING NO. 1122
FORT MONMOUTH, NEW JERSEY

SAMPLE ID NO.		C92-678/679	C92-680/681	C92-682/683	C92-684/685	C92-686/687	PROPOSED NJDEPE SUBSURFACE CLEANUP CRITERIA
LAB ID NO.		7030.1	7030.2	7030.3	7030.4	7030.5	
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	
SAMPLE TYPE		PE	PE	PE	PE	PE	
DATE OF COLLECTION		1/6/92	1/6/92	1/6/92	1/6/92	1/6/92	
ANALYTICAL PARAMETER	UNITS						mg/kg
TPHC	mg/kg	1220	960	190	610	445	NC*
BASE NEUTRAL COMPOUNDS	mg/kg						
ACENAPHTHENE		0.12J	ND	ND	0.79J	ND	100
PYRENE		0.12J	ND	ND	0.43	0.091J	500
BIS(2-ETHYLHEXYL) PHTHALATE		0.74B	0.23JB	ND	ND	0.28JB	100
DI-N-BUTYLPHTHALATE		ND	0.054JB	0.06JB	ND	ND	100
2-CHLOROPHENOL		ND	ND	ND	0.047J	ND	50
ACENAPHTHYLENE		ND	ND	ND	0.026J	ND	NC
FLUORENE		ND	ND	ND	0.13J	0.028J	100
PHENANTHRENE		ND	ND	ND	0.44	0.068J	NC
NAPHTHALENE		ND	ND	ND	0.44	0.11J	100
2-METHYLNAPHTHALENE		ND	ND	ND	1.0	0.27J	NC
VOLATILE ORGANIC COMPOUNDS	mg/kg						
METHYLENE CHLORIDE		0.062	0.060	0.093	0.014	0.072	10

TABLE 3-1

SUMMARY OF ANALYTICAL RESULTS (CONTINUED)
UST REGISTRATION NO. 881533-199
BUILDING NO. 1122
FORT MONMOUTH, NEW JERSEY

SAMPLE ID NO.		C92-678/679	C92-680/681	C92-682/683	C92-684/685	C92-686/687	PROPOSED NJDEPE SUBSURFACE CLEANUP CRITERIA
LAB ID NO.		7030.1	7030.2	7030.3	7030.4	7030.5	
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	
SAMPLE TYPE		PE	PE	PE	PE	PE	
DATE OF COLLECTION		1/6/92	1/6/92	1/6/92	1/6/92	1/6/92	
ANALYTICAL PARAMETER	UNITS						mg/kg
VOLATILE ORGANIC COMPOUNDS	mg/kg						
2-BUTANONE		0.28	ND	ND	0.19	ND	50
1,1,1-TRICHLOROETHANE		0.10	0.10	0.16	0.25	0.13	50
4-METHYL-2-PENTANONE		0.038	ND	ND	ND	ND	50
O-XYLENE		ND	ND	0.025J	0.048	0.048	NC
TOLUENE		ND	ND	ND	NC	0.037	500
ETHYL BENZENE		ND	ND	ND	ND	0.019J	100
M & P - XYLENES		ND	ND	ND	ND	0.091	NC
PHENOLS	mg/kg	4.0	87.5	ND	160.0	24.4	NC
PRIORITY POLLUTANT METALS	mg/kg						
ARSENIC		1.8	ND	1.6	1.9	1.6	NC

TABLE 3-1

SUMMARY OF ANALYTICAL RESULTS (CONTINUED)
UST REGISTRATION NO. 881533-199
BUILDING NO. 1122
FORT MONMOUTH, NEW JERSEY

SAMPLE ID NO.		C92-678/679	C92-680/681	C92-682/683	C92-684/685	C92-686/687	PROPOSED NJDEPE SUBSURFACE CLEANUP CRITERIA
LAB ID NO.		7030.1	7030.2	7030.3	7030.4	7030.5	
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	
SAMPLE TYPE		PE	PE	PE	PE	PE	
DATE OF COLLECTION		1/6/92	1/6/92	1/6/92	1/6/92	1/6/92	
ANALYTICAL PARAMETER	UNITS						mg/kg
PRIORITY POLLUTANT METALS	mg/kg						
BERYLLIUM		0.476	0.65	0.513	0.706	0.409	NC
CADMIUM		0.09	0.02	0.05	0.04	0.07	NC
CHROMIUM		53.6	33.1	50.6	53.5	39.0	NC
COPPER		6.6	9.3	7.6	8.8	9.1	NC
LEAD		13.3	31.4	15.2	29.4	29.9	NC
MERCURY		ND	ND	ND	0.047	ND	NC
NICKEL		ND	ND	ND	3.5	ND	NC
ZINC		40.4	40.1	51.3	60.0	68.3	NC

Notes:

NC*: - No cleanup criterion has been proposed for TPHC by NJDEPE; however, the propose NJDEPE subsurface cleanup criterion for total organic compounds is 10,000 mg/kg.
NC: - No subsurface cleanup criterion has been proposed for this analyte by NJDEPE.
J: - Indicates an estimated value.
ND: - Indicates compound not detected.
TPHC: - Total Petroleum Hydrocarbons.
PE: - Post-Excavation.
B: - Indicates also present in blank.
mg/kg: - Milligrams per Kilogram.

TABLE 3-2

ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE
UST REGISTRATION NO. 881533-199
BUILDING NO. 1122,
FORT MONMOUTH, NEW JERSEY

Analytical Parameter	No. of Samples Collected	Matrix	Date Collected	Date Analysis Completed	Preservation Method	USEPA SW-486 Analytical Method
TPHC	5	S	1/6/92	3/12/93	Cool to 4°C	418.1
VOCs	5	S	1/6/92	3/16/93	Cool to 4°C	USEPA-CLP-IFB
BNAs	5	S	1/6/92	3/16/93	Cool to 4°C	8270
PCBs	5	S	1/6/92	3/17/93	Cool to 4°C	608*
PP Metals	5	S	1/6/92	3/16/93	Cool to 4°C	6010, 7060, 7470, 7740, 7841

USEPA-CLP-IFB - Volatile samples were analyzed using the method cited in the USEPA-CLP-IFB version 2/88. The CLP volatile method is based on USEPA Method 624 and SW-846.
608* - PCBs were analyzed using the USEPA Method 608 cited in 40 CFR Part 36.
PCBs: - Polychlorinated Biphenyls.
PP Metals: - Priority Pollutant Metal
VOCs: - Volatile Organic Compounds.
VOCs: - Volatile Organic Compounds.
TPHC: - Total Petroleum Hydrocarbons.
BNA: - Base Neutral Acid Extractable Compounds.

APPENDIX A

NJDEPE CONDITIONAL APPROVAL LETTER

State of New Jersey
Department of Environmental Protection and Energy
Office of Enforcement Policy
CENTRAL BUREAU OF WATER AND HAZARDOUS WASTE ENFORCEMENT
FIELD OPERATIONS

Scott A. Weiner
Commissioner

Edward M. Neafsey
Director

September 20,1991

James Ott, Deputy Director
Directorate of Engineering and Housing
U.S. Army Commmunications-Electronic Command
Building 167 SELHI-FE
Fort Monmouth, NJ 07003

Dear Mr. Ott

The Department of Environmental Protection & Energy has completed its review of your submitted closure plans for six underground waste oil tanks. It has been determined that the plan is acceptable conditioned on the following revision/modifications:

1.In addition to the total petroleum hydrocarbon (TPHC) analysis for each sample taken, the total priority pollutant analysis (PP+40 or TCL) should be utilized for an initial screening. These analyses would be helpful for the remediation of tank number 68 which is known to contain 1000 ppm of hydrogenated chlorides.

2.A detailed description of the steps needed to decontaminate the tanks should be included.

3.An indication of whether the tanks will be disposed off-site as hazardous waste. If not the tanks must be decontaminated and a final rinse water sample and a washwater blank sample must be analyzed for total petroleum hydrocarbons (TPHC) concentration to determine the adequacy of decontamination. The decontamination procedure may have to be repeated to achieve a concentration acceptable to the Department or until the TPHC results of two consecutive samples do not show an appreciable change.

Please Respond To:
CN 407
TRENTON, NJ 08625

Tel. # (609) 584-4200

Please submit these changes in an addendum to your submitted closure plans prior to beginning any closure activities. This writer should be notified 2 weeks in advance of initiation of closure activities.

If you have any questions regarding these requirements, please contact me at (609) 584-4200.

Yours truly,

Douglas Greenfield
Sr. Environmental Engineer
Hazardous Waste Enforcement
CBW&HWEFO

APPENDIX B

NJDEPE UST ASSESSMENT SUMMARY FORM

UST-014
2/91

UST #
Date Rec'd:
TMS #
Staff

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESOURCES
BUREAU OF UNDERGROUND STORAGE TANKS
TANK MANAGEMENT SECTION

CN 029, 401 EAST STATE STREET
TRENTON, N.J. 08625-0029

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

- *Please print legibly or type.*
- *Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document, Interim Closure Requirements for UST's, explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.*
- *Return one original of the form and all required attachments to the above address.*
- *Attach a scaled site diagram of the subject facility which shows the information specified in item IV B of this form.*
- *Explain any "No" or "N/A" response on a separate sheet.*

Date of Submission 10/29/93

0081533-199
FACILITY REGISTRATION #

I. FACILITY NAME AND ADDRESS

U.S. Army Fort Monmouth New Jersey
Dictorate of Engineering and Housing Building 167
Fort Monmouth NJ 07703 County Monmouth
Telephone No. 908-532-6224

OWNER'S NAME AND ADDRESS, if different from above

Telephone No.

II. DISCHARGE REPORTING REQUIREMENTS

A. Was contamination found? ___Yes X No If Yes, Case No._____
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)

B. The substance(s) discharged was(were) N/A

C. Have any vapor hazards been mitigated? ___Yes ___No X N/A

III. DECOMMISSIONING OF TANK SYSTEMS

Closure Approval No. N/A

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, **Interim Closure Requirements for UST's**, Section V. A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required **documentation** of compliance with the requirements for handling contaminated **excavated** soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification, and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:

   a. North arrow and scale
   b. The locations of the ground water monitoring wells
   c. Location and depth of each soil sample and boring
   d. All major surface and sub-surface structures and utilities
   e. Approximate property boundaries
   f. All existing or closed underground storage tank systems, including appurtenant piping
   g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table
   h. Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

1. Were soil samples taken from the excavation as prescribed? X Yes ___No ___N/A

2. Were soil borings taken at the tank system closure site as prescribed? ___Yes ___No X N/A

3. Attach the analytical results in tabular form and include the following information about each sample:
   a. Customer sample number (keyed to the site map)
   b. The depth of the soil sample
   c. Soil boring logs
   d. Method detection limit of the method used
   e. QA/QC Information as required

D. Ground Water Monitoring

1. Number of ground water monitoring wells installed 0

2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:

   a. Site diagram number for each well installed
   b. Depth of ground water surface
   c. Depth of screened interval
   d. Method detection limit of the method used
   e. Well logs
   f. Well permit numbers
   g. QA/QC Information as required

V. SOIL CONTAMINATION

A. Was soil contamination found? ___ Yes X No
If "Yes", please answer Question B-E
If "No", please answer Question B

B. The highest soil contamination still remaining in the ground has been determined to be:
1. 176 ppb total BTEX, N/A ppb total non-targeted VOC
2. 3,303 ppb total B/N, N/A ppb total non-targeted B/N
3. 1,220 ppm TPHC
4. N/A ppb N/A (for non-petroleum substance)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface ___ Yes X No
2. Free product contaminated soils are suspected to exist below the water table ___ Yes X No
3. Free product contaminated soils are suspected to exist off the property boundaries. ___ Yes X No

D. Was the vertical and horizontal extent of contamination determined? ___ Yes ___ No X N/A

E. Does soil contamination intersect ground water? ___ Yes ___ No X N/A

VI. GROUND WATER CONTAMINATION

A. Was ground water contamination found? ___ Yes X No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:

1. N/A ppb total BTEX, N/A ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. N/A ppb total MTBE, N/A ppb total TBA
4. N/A ppb N/A (for non-petroleum substance)
5. greatest thickness of separate phase product found N/A
6. separate phase product has been delineated ___ Yes ___ No X N/A

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ___ Yes ___ No X N/A

2. The number of these wells identified is N/A.

D. Proximity of wells and contaminant plume

1. The shallowest depth of any well noted in the well search which may be in the horizontal or vertical potential path(s) of the contaminant plume(s) is N/A feet below grade (consideration has been given for the effects of pumping, subsurface structures, etc. on the direction(s) of contaminant migration). This well is N/A feet from the source and its screening begins at a depth of N/A feet.

2. The shallowest depth to the top of the well screen for any well in the potential path of the plume(s) (as described in D1 above) is N/A feet below grade. This well is located N/A feet from the source.

3. The closest horizontal distance of a private, commercial or municipal well in the potential path of the plume (as determined in D1) is N/A feet from the source. This well is N/A feet deep and screening begins at a depth of N/A feet.

E. A plan for separate phase product recovery has been included. ___ Yes ___ No x N/A

F. A ground water contour map has been submitted which includes the ground water elevations for each well. ___ Yes ___ No X N/A

G. Delineation of contamination

1. The ground water contaminants have been delineated to MCLs or lower values at the property boundaries. ___ Yes ___ No N/A

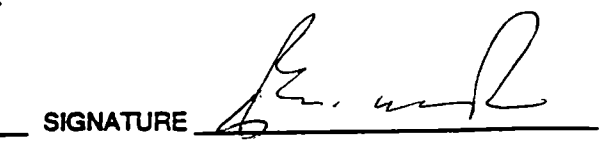
2. The plume is suspected to continue off the property at concentrations greater than MCLs. ___ Yes ___ No N/A

3. Off property access (circle one): is being sought has been approved has been denied N/A

VII. **SITE ASSESSMENT CERTIFICATION** [preparer of site assessment plan - N.J.A.C. 7:14B-8.3(b) &9.5(a)3]

The person signing this certification as the "Qualified Ground Water Consultant" (as defined in N.J.A.C.7:14B-1.6) responsible for the design and implementation of the site assessment plan as specified in N.J.A.C. 7:14B-8.3(a) & 9.2(b)2, must supply the name of the certifying organization and certification number.

"I certify under penalty of law that the information provided in this document is true, accurate, and complete and was obtained by procedures in compliance with N.J.A.C. 7:14B-8 and 9. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Dinkerrai Desai SIGNATURE 

COMPANY NAME U.S. Army Fort Monmouth DATE 10/25/93
(Preparer of Site Assessment Plan)

CERTIFYING ORGANIZATION NJDEPE CERTIFICATION NUMBER E-2266.

VIII. **TANK DECOMMISSIONING CERTIFICATION** [person performing tank decommissioning portion of closure plan - N.J.A.C. 7:14B-9.5(a)4]

"I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Dinkerrai Desai SIGNATURE _____

COMPANY NAME U.S. Army Fort Monmouth DATE 10/29/93
(Performer of Tank Decommissioning)

IX. **CERTIFICATIONS BY THE RESPONSIBLE PARTY(IES) OF THE FACILITY**

A. The following certification shall be signed by the highest ranking individual with overall responsibility for that facility [N.J.A.C. 7:14B-2.3(c)1].

"I certify under penalty of law that the information provided in this document is true, accurate, and complete . I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) James Ott, P.E. SIGNATURE James Ott

COMPANY NAME U.S. Army Fort Monmouth DATE 10/29/93

B. The following certification shall be signed as follows [according to the requirements of N.J.A.C. 7:14B-2.3(C)2]:

1. For a corporation, by a principal executive officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency by either the principal executive officer or ranking elected official.
4. In cases where the highest ranking corporate partnership, governmental officer or official at the facility as required in A above is the same person as the official required to certify in B, only the certification in A need to be made. In all other cases, the certifications of A and B shall be made.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____

COMPANY NAME _____ DATE _____

ATTACHMENT I

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	EXPLANATION
IIA.	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
IIB.	N/A	Same as above.
IIC.	N/A	Same as above.
III.	N/A	Closure of Facility Registration No. 0081533-199 was conducted under approval and onsite supervision of the NJDEPE Division of Hazardous Waste Management.
IV.C.2	N/A	No soil borings were proposed in the closure plan.
V.A	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
V.B.1-4	N/A	Same as above.
V.C.1-3	N/A	Same as above.
V.D	N/A	Same as above.
V.E	N/A	Same as above.
VI.A	No	No groundwater monitoring wells were installed as part of closure of Facility Registration No. 0081533-199; therefore, no groundwater samples were collected.

ATTACHMENT I

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	EXPLANATION
VI.B.1-6	N/A	Same as above.
VI.C.1-3	N/A	No release to groundwater has occurred from Facility Registration No. 0081533-199; therefore, no well search was performed as part of the site assessment.
VI.E	N/A	Same as above.
VI.F	N/A	Same as above.
VI.G.1-3	N/A	No groundwater contamination resulting from a release from Facility Registration No. 0081533-199 has been identified.

APPENDIX C

ANALYTICAL DATA PACKAGE

ENVIRONMENTAL PROFILE LABORATORIES

ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

REPORT OF ANALYSIS

SERV-AIR
PO BOX 369 BLDG.490
FT. MONMOUTH, NJ 07703

EPL# : 7030.1-.1
SAMPLE RECEIVED : 01/10/92
ANALYSIS START : 01/14/92
ANALYSIS COMPD. : 01/14/92
CLIENT ID : SEE BELOW
PO # : R2-0835

MATRIX: SOIL

TEST PARAMETERS: PETROLEUM HYDROCARBONS

These samples were anakyzed by Infrared Spectrophotmetry.
Infrared Analyses: EPA METHOD 418.1 Results expressed as ppm. (mg/Kg)

CLIENT ID	EPL#	RESULTS	MS %REC.	MSD %REC.	DET. LIMIT	
EXTRACTION BLANK	NA	ND			10	mg/K
B122 SPA E.SIDE	7030.1	1220	87	131	40	"
B122 SPB S.SIDE	7030.2	960			40	"
B122 SPC W.SIDE	7030.3	190			10	"
B122 SPD N.SIDE	7030.4	610			20	"
B122 SPE CENTER	7030.5	445			20	"
B699 SP1 N.SIDE	7030.6	6090			1000	"
B699 SP2 W.SIDE	7030.7	11600			1000	"
B699 SP3 N.SIDE	7030.8	2800			100	"
B699 SP4 W.SIDE	7030.9	ND			10	"
B699 SP5 CENTER	7030.10	15			10	"

ND= NOT DETECTED

Daniel K. Wright

LABORATORY DIRECTOR
DANIEL K. WRIGHT

ENVIRONMENTAL PROFILE LABORATORIES
ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

1127

LABORATORY ANALYSIS REPORT

CLIENT : Serv-Air FT. Monmouth

PROJECT: Serv-Air FT. Monmouth
BNA+25

Report Number: 7030
Date Received: Jan, 10, 1992
Date Released: Jan, 21, 1992
Data Released By:

Daniel K. Wright

Daniel K. Wright
Laboratory Director

TABLE OF CONTENTS

CLIENT: Serv-Air FT. Monmouth

SAMPLE LOCATION AND IDENTIFICATION

LAB ID NUMBER	SAMPLE IDENTIFICATION	MATRIX
7030.1	B122 S.P.A. E.SIDE	SOIL
7030.2	B122 S.P.B. S.SIDE	SOIL
7030.3	B122 S.P.C. W.SIDE	SOIL
7030.4	B122 S.P.D. N.SIDE	SOIL
7030.5	B122 S.P.E. CENTER	SOIL
7030.6	B699 S.P.1. N.SIDE	SOIL
7030.7	B699 S.P.2. W.SIDE	SOIL
7030.8	B699 S.P.3. N.SIDE	SOIL
7030.9	B699 S.P.4. W.SIDE	SOIL
7030.10	B699 S.P.5. CENTER	SOIL

Environmental Profile Laboratories

CUSTOMER PURCHASE ORDER NO: R2-0835

CHAIN OF CUSTODY RECORD

PROJECT NO.:

SAMPLER (SIGNATURE):

DATE / TIME

ANALYSIS PARAMETERS

CUSTOMER (NAME/ADDRESS)
Serve-Air
Ft. Monmouth

SITE NAME:

PHONE NO:

FAX NO:

LAB SAMPLE ID NUMBER	DATE/TIME	SAMPLE MATRIX	CUSTOMER SAMPLE LOCATION/ID NUMBER	NUMBER OF CONTAINERS	TPHC, PQL 40	624+15, ABN+25	PEST/PCB, 13 PP Metals	Phenols, Total CN-	PRESERVATION METH	REMARKS
7030.1		Soil	B122 SP A E. SIDE	2	X					
.2			B122 SP B S. SIDE	2	X					4°C
.3			B122 SP C W. SIDE	2	X					
.4			B122 SP D N. SIDE	2	X					
.5			B122 SP E Center	2	X					
.6			B699 SP 1 N. Side	2	X					
.7			B699 SP 2 W. Side	2	X					
.8			B699 SP 3 N Side	2	X					
.9			B699 SP 4 W Side	2	X					
.10		↓	B699 SP 5 Center	2	X					
									↓	

Relinquished By (Signature)	DATE / TIME	Received By (Signature)	METHOD OF SHIPPING:
Relinquished By (Signature)	DATE / TIME	Received By (Signature)	SHIPPED BY (Signature):
Relinquished By (Signature)	DATE / TIME	Received for Lab by (Signature):	DATE / TIME: 1-10-92 9:30

NOTE: A DRAWING DEPICTING SAMPLE LOCATION SHOULD BE ATTACHED OR DRAWN ON THE REVERSE SIDE OF THIS CHAIN OF CUSTODY.

EPI. FORM 002/CHAIN OF CUSTODY

PAGE _____ OF _____ PAGES

CHAIN OF CUSTODY RECORD

CLIENT NAME: SERV-AIR INC.
SITE LOCATION: PO BOX 369 BLDG 490
Ft. MONMOUTH NJ 07703 (908)542-4359

SAMPLERS: Rochkovsky

SAMPLE ID.	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	NUMBER OF CONTAINERS	TPHC	PP+HO	REMAPKS
92-678	1/6	1451	Soil		X	B1122 Sample Pt "A" E Side	1	X		
92-679		1451			X	B1122 S.P. "A" E Side	1		X	TANK PULL.
92-680		1451			X	B1122 S.P. "B" S Side	1	X		UST # 0081533-1
92-681		1451			X	B1122 S.P. "B" S. Side	1		X	
92-682		1445			X	B1122 S.P. "C" W Side	1	X		
92-683		1445			X	B1122 S.P. "C" W Side	1		X	
92-684		1457			X	B1122 S.P. "D" N Side	1	X		
92-685		1457			X	B1122 S.P. "D" N Side	1		X	
92-686		1501			X	B1122 S.P. "E" Center	1	X		
92-687		1501			X	B1122 S.P. "E" Center	1		X	
92-688		1530			X	B699 S.P. "1" N.Side	1	X		
92-689		1530			X	B699 S.P. "1" N.Side	1		X	TANK PULL
92-690		1536			X	B699 S.P. "2" W.Side	1	X		# 0081533-197
92-691		1536			X	B699 S.P. "2" W.Side	1		X	
TOTALS							14	7	7	

ANALYSES REQUESTED

SAMPLE CONTAINERS PREPARED BY: Rochkovsky

RELINQUISHED BY: Rochkovsky — DATE 1/10 TIME 0830 — **RECEIVED BY:** T. Mele

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

RELINQUISHED AT LABORATORY BY:	DATE	TIME	RECEIVED AT LABORATORY BY:	REMARKS
T. Mele	1/10	9:30		

CHAIN OF CUSTODY RECORD

CLIENT NAME: SERV-AIR INC.
SITE LOCATION: PO BOX 369 BLDG 490
Ft. MONMOUTH NJ 07703 (908)542-4359

R2-0835

SAMPLERS:
ROCHKOUSKY

ANALYSES REQUESTED

SAMPLE ID.	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	NUMBER OF CONTAINERS	Test for TPHC	Test PP+HD	REMARKS
C92-692	1/6	1540	Soil			X B699 S.Point "3" N side	1	X		
C92-693	1/6	1540				X B699 S.Point "3" N side	1		X	UST #
C92-694	1/6	1545				X B699 S.Point "4" W side	1	X		0081533-1
C92-695	1/6	1545				X B699 S.Point "4" W side	1		X	
C92-696	1/6	1555				X B699 S.Point "5" center	1	X		
C92-697	1/6	1555				X B699 S.Point "5" center	1		X	
TOTALS										

SAMPLE CONTAINERS PREPARED BY:

RELINQUISHED BY: Rochkovsky DATE 1/6 TIME 3 3

RECEIVED BY:

RELINQUISHED BY: Rochkovsky DATE 1/10 TIME 0830

RECEIVED BY: T. Miller

RELINQUISHED AT LABORATORY BY: T. Miller DATE 1/10 TIME 9:30

RECEIVED AT LABORATORY BY:

REMARKS

LABORATORY CHRONICLE

SAMPLE NUMBER	7030.1	7030.2	7030.3	7030.4	7030.5	7030.6	7030.7
Received & Refrigerated Date	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92
Organics Extraction Date							
BN/ABN	1/15/92	1/15/92	1/15/92	1/15/92	1/15/92	1/15/92	1/15/92
PCB's	NA	NA	NA	NA	NA	NA	NA
Analysis Date							
BN/ABN	1/17/92	1/18/92	1/17/92	1/18/92	1/18/92	1/17/92	1/17/92
PCB's	NA	NA	NA	NA	NA	NA	NA
Volatiles	NA	NA	NA	NA	NA	NA	NA
TPHC's	NA	NA	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA	NA	NA
Total Solids	1/17/92	1/17/92	1/17/92	1/17/92	1/17/92	1/17/92	1/17/92
Organic Supervisor Review & Approval	Brian K. McKee B.K. McK						01/29/92
Inorganic Supervisor Review & Approval							

LABORATORY CHRONICLE

SAMPLE NUMBER	7030.8	7030.9	7030.10				
Received & Refrigerated Date	1/10/92	1/10/92	1/10/92				
Organics Extraction Date							
BN/ABN	1/15/92	1/15/92	1/15/92				
PCB's	NA	NA	NA				
Analysis Date							
BN/ABN	1/18/92	1/17/92	1/17/92				
PCB's	NA	NA	NA				
Volatiles	NA	NA	NA				
TPHC's	NA	NA	NA				
Metals	NA	NA	NA				
Total Solids	1/17/92	1/17/92	1/17/92				
Organic Supervisor Review & Approval	Brian K. McKee B.K. McK						01/29/92
Inorganic Supervisor Review & Approval							

METHOD SUMMARY

Base Neutrals / Acid Extractables

The semivolatile samples in this report have been analyzed using the method cited in the USEPA-CLP-IFB version 2/88. The CLP semivolatile method is based on USEPA Method 625 and SW-846 method 8270.

Three acid and/or three base/neutral surrogates are added to each sample. Aqueous samples are extracted with methylene chloride; soil samples are extracted with a 1 to 1 solution of methylene chloride and acetone. The extracts are then concentrated and the internal standards are added. An Hewlett Packard 5890 GC coupled to the HP 5970 MSD was used for the analysis and data collection.

GC/MS

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS TUNE FREQUENCY:- All samples,blanks,standards and matrix spikes were analyzed within the respective 12 hour tune periods.

INITIAL CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits.

CONTINUING CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits

DETECTION LIMITS:- Detection limits and search results were modified by dilution or percent solid.*

* All values reported on a DRY WEIGHT basis where applicable

MATRIX SPIKE RECOVERY:- No matrix spike compound was outside QC limits

INTERNAL STANDARD AREA:-

CLIENT ID #	NUMBER OF INTERNAL STANDARD AREA(S)
7030	10 OUT OF 108 OUTSIDE LIMITS

SURROGATE RECOVERY:-

Client ID #	Surrogates outside QC limits
7030	4 OUT OF 90 OUTSIDE LIMITS

ANALYSIS TIME:- All samples were extracted and analyzed within the prescribed holding times.

***NOTE: 7008.2 was measured as water cie took 1ml but calculated as soil as per T-VWIX-009 1ml-1oz

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DATA REPORTING QUALIFIERS

For reporting results to EPA, the following "results qualifiers" are used:

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, "10U". This is not necessarily the instrument detection limit. The figure represents the minimum detection limit attainable for this particular sample based on any concentration or dilution that may have been required.

J - Indicates an estimated value. This flag is used:

1) When estimating a concentration for tentatively identifid compounds (library search hits) where a 1:1 response is assumed.
2) When the mass spectral data indicated the identification criteria, however, the result was less than the specified detection limit but greater than zero. If the detection limit was 10ug/L and a concentration of 3ug/L was calculated, report as "3J".

B - Indicates the analyte was found in the blank as well as the sample; report as "12B".

E - Indicates the analyte concentration exceeds the calibrated range of the GC/MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

Environmental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

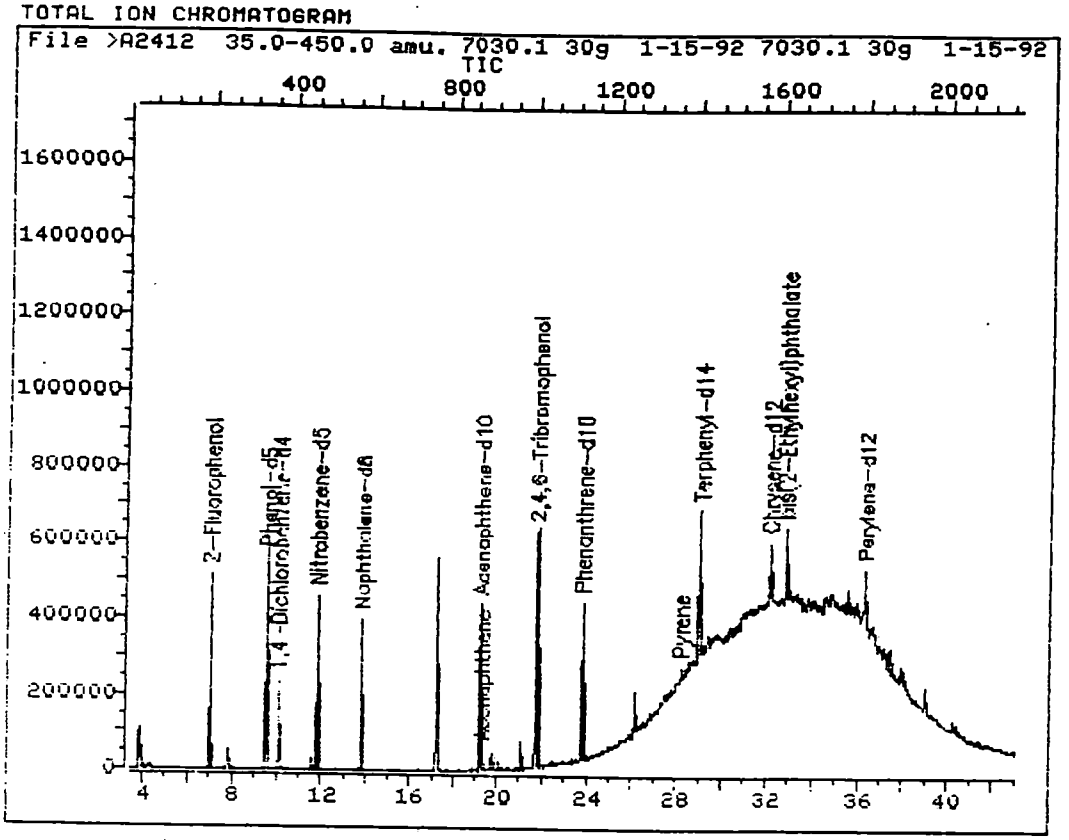
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.1 30g 1-15-92	DILUTION FACTOR	1.00
CLIENT ID		QA BATCH	
DATA FILE	>A2412	DATE ANALYZED	01/17/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	400	Acenaphthene	120 J	400
Phenol	ND	400	2,4-Dinitrophenol	ND	2000
Aniline	ND	400	4-Nitrophenol	ND	400
bis(2-Chloroethyl)Ether	ND	400	Dibenzofuran	ND	400
2-Chlorophenol	ND	400	2,4-Dinitrotoluene	ND	400
1,3-Dichlorobenzene	ND	400	2,6-Dinitrotoluene	ND	400
1,4-Dichlorobenzene	ND	400	Diethylphthalate	ND	400
Benzyl alcohol	ND	400	4-Chlorophenyl-phenylether	ND	400
1,2-Dichlorobenzene	ND	400	Fluorene	ND	400
2-Methylphenol	ND	400	4-Nitroaniline	ND	400
bis(2-chloroisopropyl)ether	ND	400	4,6-Dinitro-2-methylphenol	ND	400
4-Methylphenol	ND	400	N-Nitrosodiphenylamine	ND	400
N-Nitroso-Di-n-propylamine	ND	400	1,2-Diphenylhydrazine	ND	400
Hexachloroethane	ND	400	4-Bromophenyl-phenylether	ND	400
Nitrobenzene	ND	400	Hexachlorobenzene	ND	400
Isophorone	ND	400	Pentachlorophenol	ND	400
2-Nitrophenol	ND	400	Phenanthrene	ND	400
2,4-Dimethyiphenol	ND	400	Anthracene	ND	400
Benzoic Acid	ND	400	Di-n-butylphthalate	ND	400
bis(2-Chloroethoxy)methane	ND	400	Fluoranthene	ND	400
2,4-Dichlorophenol	ND	400	Benzidine	ND	400
1,2,4-Trichlorobenzene	ND	400	Pyrene	120 J	400
Naphthalene	ND	400	Butylbenzylphthalate	ND	400
4-Chloroaniline	ND	400	3,3`-Dichlorobenzidine	ND	400
Hexachlorobutadiene	ND	400	Benzo(a)anthracene	ND	400
4-Chloro-3-methylphenol	ND	400	bis(2-Ethylhexyl)phthalate	740 B	400
2-Methylnaphthalene	ND	400	Chrysene	ND	400
Hexachlorocyclopentadiene	ND	400	Di-n-octylphthalate	ND	400
2,4,6-Trichlorophenol	ND	400	Benzo(b)fluoranthene	ND	400
2,4,5-Trichlorophenol	ND	400	Benzo(k)fluoranthene	ND	400
2-Chloronaphthalene	ND	400	Benzo(a)pyrene	ND	400
2-Nitroaniline	ND	400	Indeno(1,2,3-cd)pyrene	ND	400
Dimethylphthalate	ND	400	Dibenz(a,h)anthracene	ND	400
Acenaphthylene	ND	400	Benzo(g,h,i)perylene	ND	400
3-Nitroaniline	ND	400			0

Percent Solid of 83.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

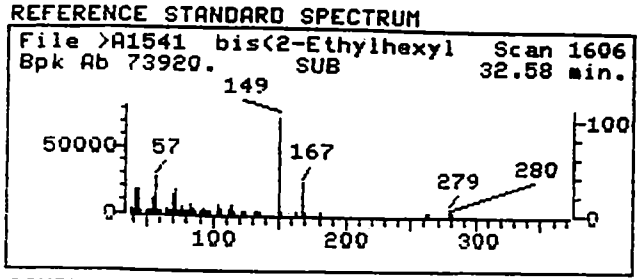


Data File: >A2412::D3 Quant Output File: ^A2412::DB
Name: 7030.1 30g 1-15-92
Misc: 7030.1 30g 1-15-92 BTL# 7

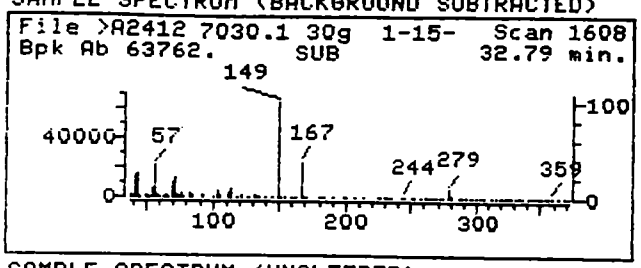
Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 920114 16:59

Operator ID: MARK
Quant Time: 920117 18:20
Injected at: 920117 17:36

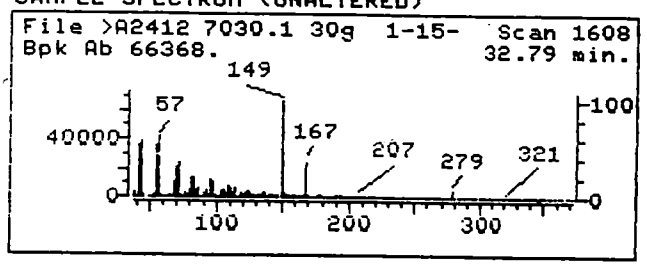
REFERENCE STANDARD SPECTRUM

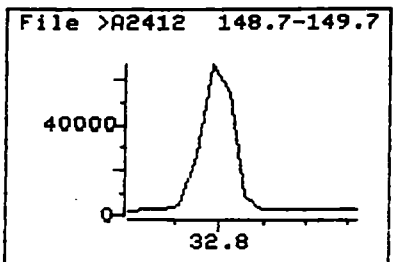


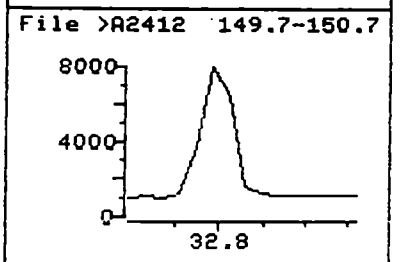
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

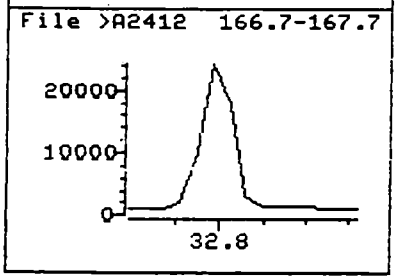


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2412::D3
Name: 7030.1 30g 1-15-92
Misc: 7030.1 30g 1-15-92
Quant Time: 920117 18:20
Injected at: 920117 17:36

Quant Output File: ^A2412::DB

BTL# 7
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 73
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1608
Retention Time: 32.79 min.
Quant Ion: 149.0
Area: 166955
Concentration: 18.51 ng/uL
q-value: 86

Environmental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

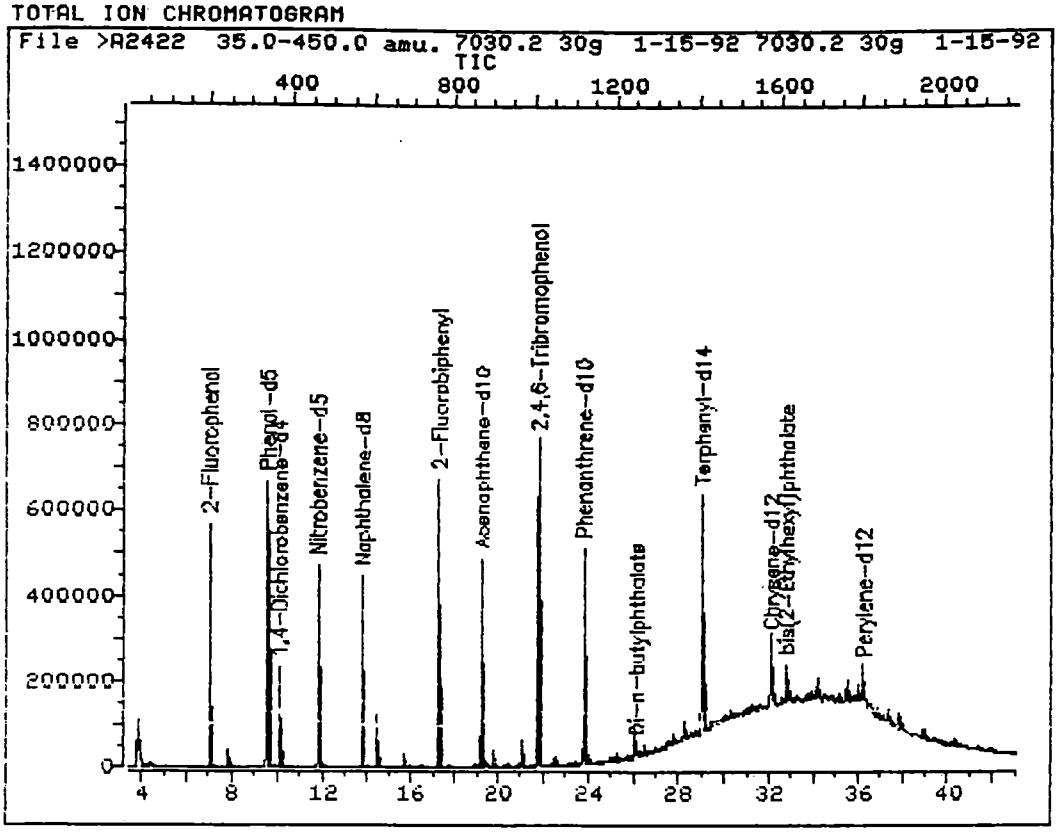
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.2 30g 1-15-92	DILUTION FACTOR	1.00
CLIENT ID		QA BATCH	
DATA FILE	>A2422	DATE ANALYZED	01/18/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	380	Acenaphthene	ND	380
Phenol	ND	380	2,4-Dinitrophenol	ND	1900
Aniline	ND	380	4-Nitrophenol	ND	380
bis(2-Chloroethyl)Ether	ND	380	Dibenzofuran	ND	380
2-Chlorophenol	ND	380	2,4-Dinitrotoluene	ND	380
1,3-Dichlorobenzene	ND	380	2,6-Dinitrotoluene	ND	380
1,4-Dichlorobenzene	ND	380	Diethylphthalate	ND	380
Benzyl alcohol	ND	380	4-Chlorophenyl-phenylether	ND	380
1,2-Dichlorobenzene	ND	380	Fluorene	ND	380
2-Methylphenol	ND	380	4-Nitroaniline	ND	380
bis(2-chloroisopropyl)ether	ND	380	4,6-Dinitro-2-methylphenol	ND	380
4-Methylphenol	ND	380	N-Nitrosodiphenylamine	ND	380
N-Nitroso-Di-n-propylamine	ND	380	1,2-Diphenylhydrazine	ND	380
Hexachloroethane	ND	380	4-Bromophenyl-phenylether	ND	380
Nitrobenzene	ND	380	Hexachlorobenzene	ND	380
Isophorone	ND	380	Pentachlorophenol	ND	380
2-Nitrophenol	ND	380	Phenanthrene	ND	380
2,4-Dimethylphenol	ND	380	Anthracene	ND	380
Benzoic Acid	ND	380	Di-n-butylphthalate	54 JB	380
bis(2-Chloroethoxy)methane	ND	380	Fluoranthene	ND	380
2,4-Dichlorophenol	ND	380	Benzidine	ND	380
1,2,4-Trichlorobenzene	ND	380	Pyrene	ND	380
Naphthalene	ND	380	Butylbenzylphthalate	ND	380
4-Chloroaniline	ND	380	3,3`-Dichlorobenzidine	ND	380
Hexachlorobutadiene	ND	380	Benzo(a)anthracene	ND	380
4-Chloro-3-methylphenol	ND	380	bis(2-Ethylhexyl)phthalate	230 JB	380
2-Methylnaphthalene	ND	380	Chrysene	ND	380
Hexachlorocyclopentadiene	ND	380	Di-n-octylphthalate	ND	380
2,4,6-Trichlorophenol	ND	380	Benzo(b)fluoranthene	ND	380
2,4,5-Trichlorophenol	ND	380	Benzo(k)fluoranthene	ND	380
2-Chloronaphthalene	ND	380	Benzo(a)pyrene	ND	380
2-Nitroaniline	ND	380	Indeno(1,2,3-cd)pyrene	ND	380
Dimethylphthalate	ND	380	Dibenz(a,h)anthracene	ND	380
Acenaphthylene	ND	380	Benzo(g,h,i)perylene	ND	380
3-Nitroaniline	ND	380			0

Percent Solid of 86.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

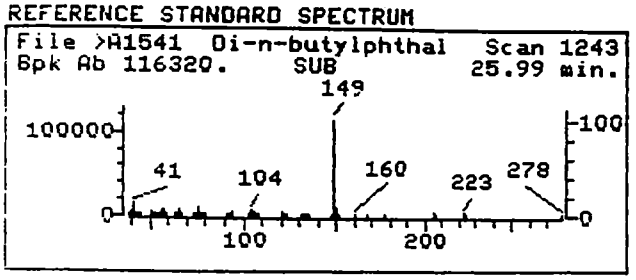


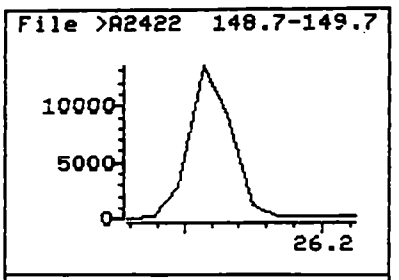
Data File: >A2422::D3 Quant Output File: ^A2422::DB
Name: 7030.2 30g 1-15-92
Misc: 7030.2 30g 1-15-92 BTL#17

Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 920114 16:59

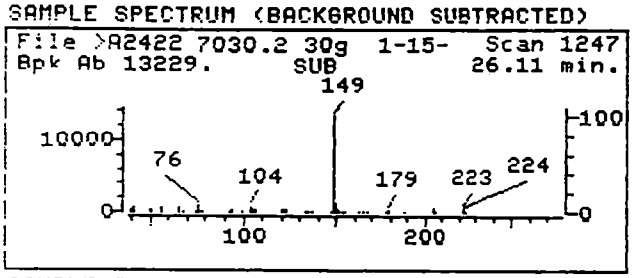
Operator ID: MARK
Quant Time: 920118 02:31
Injected at: 920118 01:47

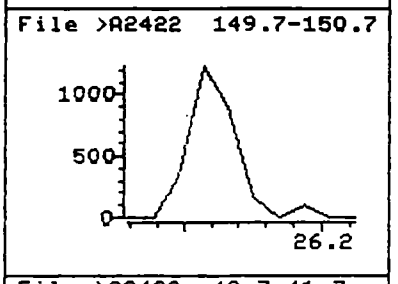
REFERENCE STANDARD SPECTRUM



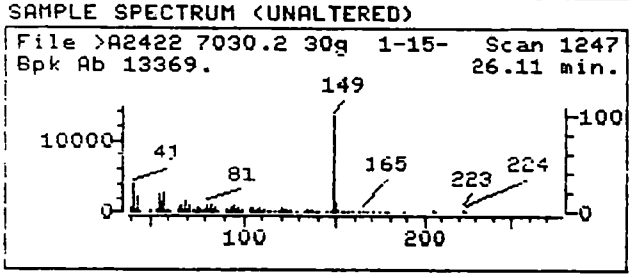


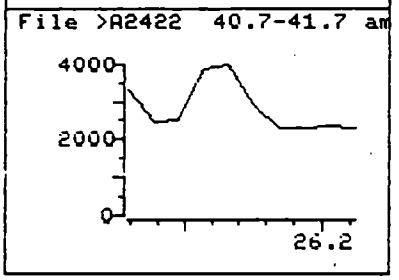
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: >A2422::D3
Name: 7030.2 30g 1-15-92
Misc: 7030.2 30g 1-15-92
Quant Time: 920118 02:31
Injected at: 920118 01:47

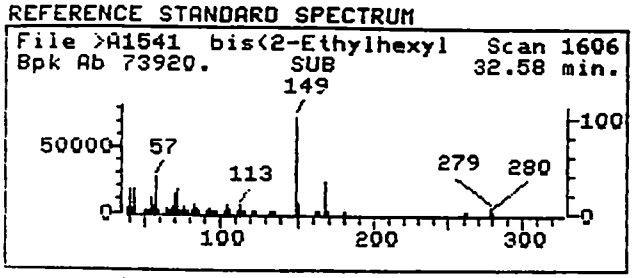
Quant Output File: ^A2422::DB

BTL#17
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

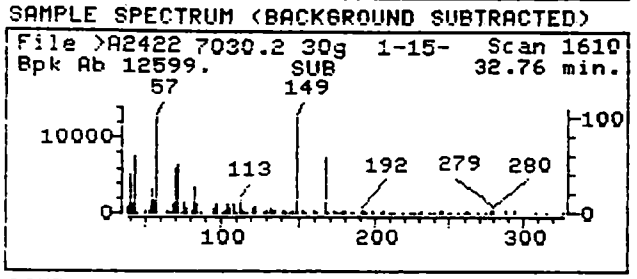
Compound No: 64
Compound Name: Di-n-butylphthalate
Scan Number: 1247
Retention Time: 26.11 min.
Quant Ion: 149.0
Area: 28686
Concentration: 1.40 ng/uL
q-value: 96

15

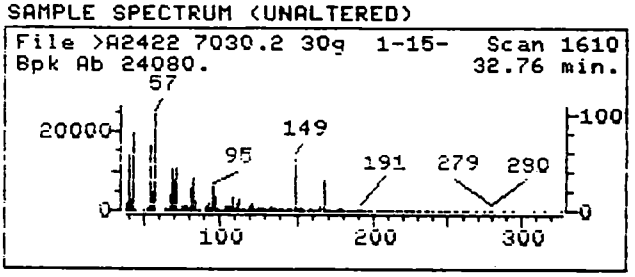
REFERENCE STANDARD SPECTRUM

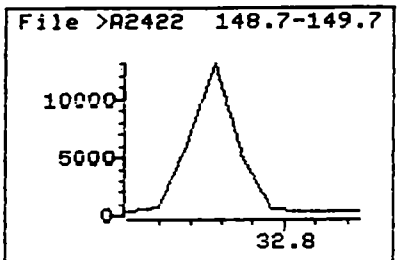


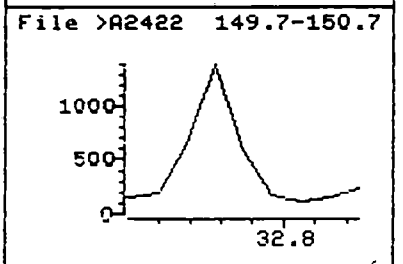
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

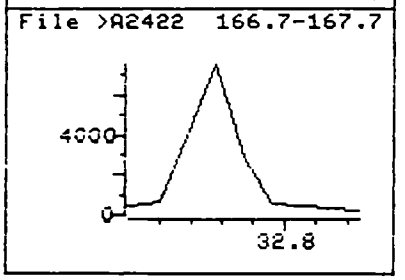


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2422::D3 Quant Output File: ^A2422::DB
Name: 7030.2 30g 1-15-92
Misc: 7030.2 30g 1-15-92 BTL#17
Quant Time: 920118 02:31 Quant ID File: IDBNA::D4
Injected at: 920118 01:47 Last Calibration: 920114 16:59

Compound No: 73
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1610
Retention Time: 32.76 min.
Quant Ion: 149.0
Area: 25617
Concentration: 6.03 ng/uL
q-value: 56

Environmental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

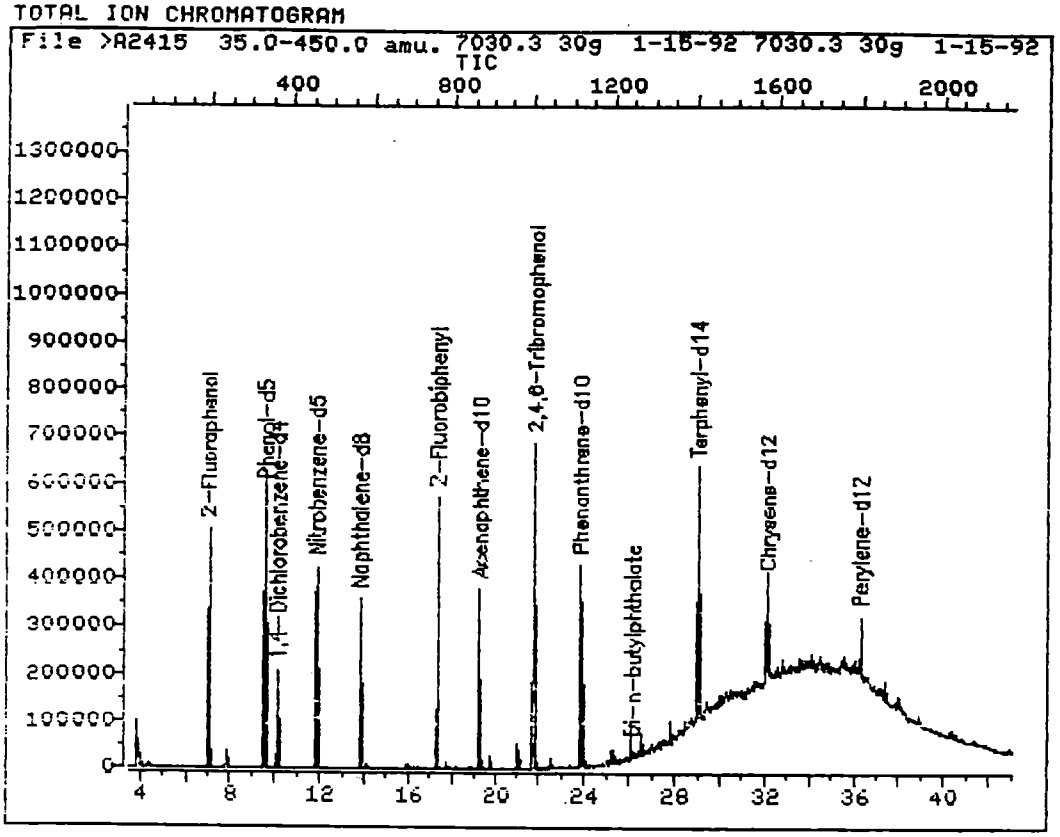
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.3 30g 1-15-92	DILUTION FACTOR	1.00
CLIENT ID		QA BATCH	
DATA FILE	>A2415	DATE ANALYZED	01/17/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	420	Acenaphthene	ND	420
Phenol	ND	420	2,4-Dinitrophenol	ND	2100
Aniline	ND	420	4-Nitrophenol	ND	420
bis(2-Chloroethyl)Ether	ND	420	Dibenzofuran	ND	420
2-Chlorophenol	ND	420	2,4-Dinitrotoluene	ND	420
1,3-Dichlorobenzene	ND	420	2,6-Dinitrotoluene	ND	420
1,4-Dichlorobenzene	ND	420	Diethylphthalate	ND	420
Benzyl alcohol	ND	420	4-Chlorophenyl-phenylether	ND	420
1,2-Dichlorobenzene	ND	420	Fluorene	ND	420
2-Methylphenol	ND	420	4-Nitroaniline	ND	420
bis(2-chloroisopropyl)ether	ND	420	4,6-Dinitro-2-methylphenol	ND	420
4-Methylphenol	ND	420	N-Nitrosodiphenylamine	ND	420
N-Nitroso-Di-n-propylamine	ND	420	1,2-Diphenylhydrazine	ND	420
Hexachloroethane	ND	420	4-Bromophenyl-phenylether	ND	420
Nitrobenzene	ND	420	Hexachlorobenzene	ND	420
Isophorone	ND	420	Pentachlorophenol	ND	420
2-Nitrophenol	ND	420	Phenanthrene	ND	420
2,4-Dimethylphenol	ND	420	Anthracene	ND	420
Benzoic Acid	ND	420	Di-n-butylphthalate	60 JB	420
bis(2-Chloroethoxy)methane	ND	420	Fluoranthene	ND	420
2,4-Dichlorophenol	ND	420	Benzidine	ND	420
1,2,4-Trichlorobenzene	ND	420	Pyrene	ND	420
Naphthalene	ND	420	Butylbenzylphthalate	ND	420
4-Chloroaniline	ND	420	3,3`-Dichlorobenzidine	ND	420
Hexachlorobutadiene	ND	420	Benzo(a)anthracene	ND	420
4-Chloro-3-methylphenol	ND	420	bis(2-Ethylhexyl)phthalate	ND	420
2-Methylnaphthalene	ND	420	Chrysene	ND	420
Hexachlorocyclopentadiene	ND	420	Di-n-octylphthalate	ND	420
2,4,6-Trichlorophenol	ND	420	Benzo(b)fluoranthene	ND	420
2,4,5-Trichlorophenol	ND	420	Benzo(k)fluoranthene	ND	420
2-Chloronaphthalene	ND	420	Benzo(a)pyrene	ND	420
2-Nitroaniline	ND	420	Indeno(1,2,3-cd)pyrene	ND	420
Dimethylphthalate	ND	420	Dibenz(a,h)anthracene	ND	420
Acenaphthylene	ND	420	Benzo(g,h,i)perylene	ND	420
3-Nitroaniline	ND	420			0

Percent Solid of 79.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

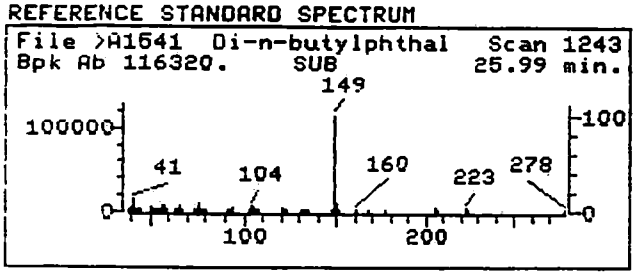


Data File: >A2415::D3 Quant Output File: ^A2415::DB
Name: 7030.3 30g 1-15-92
Misc: 7030.3 30g 1-15-92 BTL#10

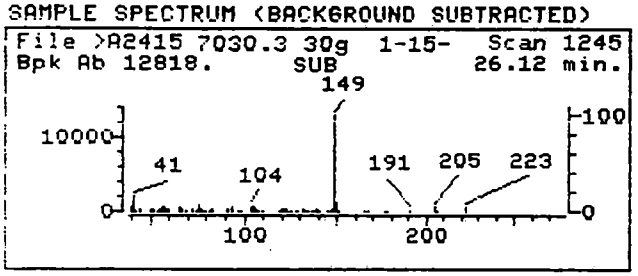
Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 920114 16:59

Operator ID: MARK
Quant Time: 920117 20:59
Injected at: 920117 20:15

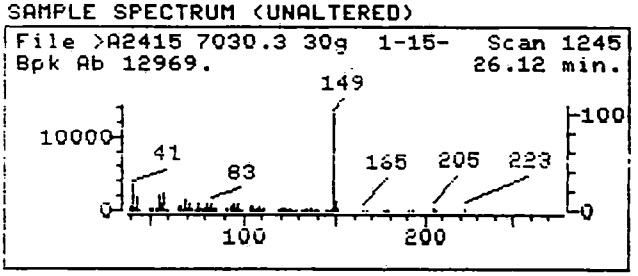
REFERENCE STANDARD SPECTRUM

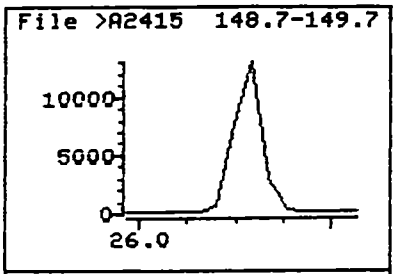


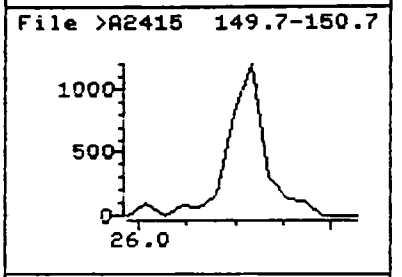
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

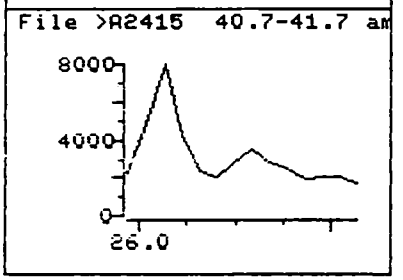


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2415::D3
Name: 7030.3 30g 1-15-92
Misc: 7030.3 30g 1-15-92
Quant Time: 920117 20:59
Injected at: 920117 20:15

Quant Output File: ^A2415::DB

BTL#10

Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 64
Compound Name: Di-n-butylphthalate
Scan Number: 1245
Retention Time: 26.12 min.
Quant Ion: 149.0
Area: 26457
Concentration: 1.42 ng/uL
q-value: 92

Enviromental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

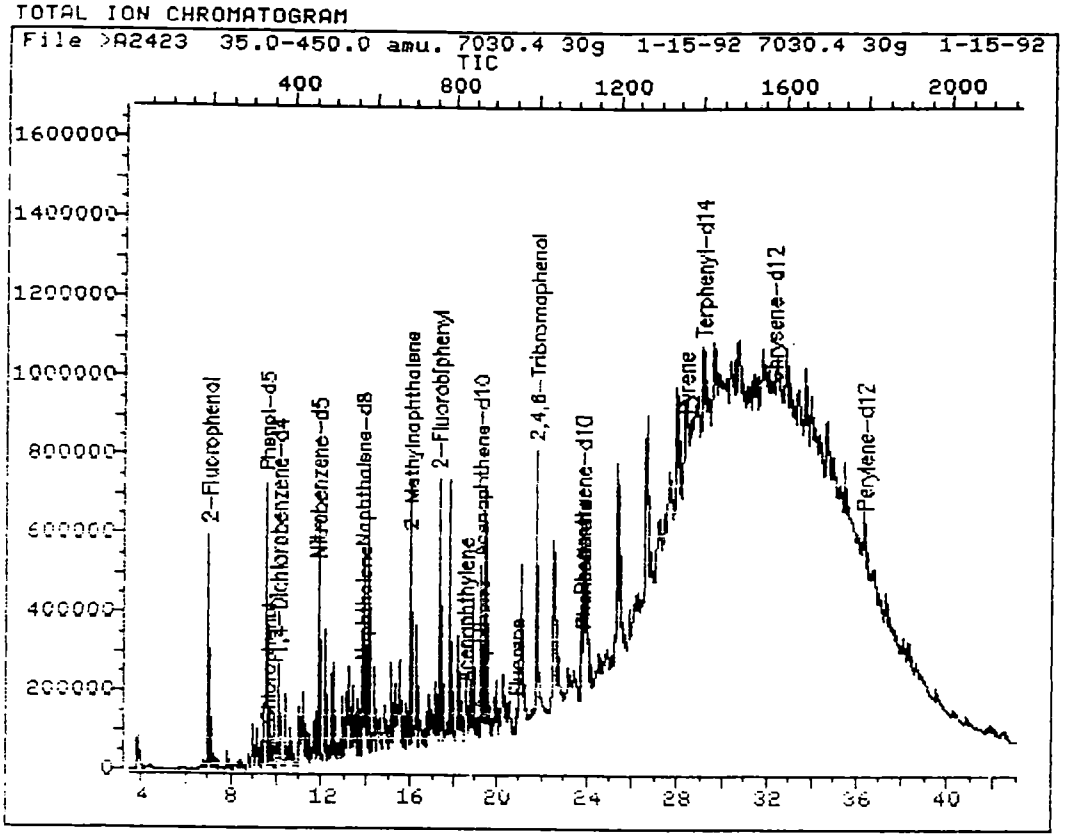
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.4 30g 1-15-92	DILUTION FACTOR	1.00
CLIENT ID		QA BATCH	
DATA FILE	>A2423	DATE ANALYZED	01/18/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	390	Acenaphthene	79 J	390
Phenol	ND	390	2,4-Dinitrophenol	ND	1900
Aniline	ND	390	4-Nitrophenol	ND	390
bis(2-Chloroethyl)Ether	ND	390	Dibenzofuran	ND	390
2-Chlorophenol	47 J	390	2,4-Dinitrotoluene	ND	390
1,3-Dichlorobenzene	ND	390	2,6-Dinitrotoluene	ND	390
1,4-Dichlorobenzene	ND	390	Diethylphthalate	ND	390
Benzyl alcohol	ND	390	4-Chlorophenyl-phenylether	ND	390
1,2-Dichlorobenzene	ND	390	Fluorene	130 J	390
2-Methylphenol	ND	390	4-Nitroaniline	ND	390
bis(2-chloroisopropyl)ether	ND	390	4,6-Dinitro-2-methylphenol	ND	390
4-Methylphenol	ND	390	N-Nitrosodiphenylamine	ND	390
N-Nitroso-Di-n-propylamine	ND	390	1,2-Diphenylhydrazine	ND	390
Hexachloroethane	ND	390	4-Bromophenyl-phenylether	ND	390
Nitrobenzene	ND	390	Hexachlorobenzene	ND	390
Isophorone	ND	390	Pentachlorophenol	ND	390
2-Nitrophenol	ND	390	Phenanthrene	440	390
2,4-Dimethylphenol	ND	390	Anthracene	ND	390
Benzoic Acid	ND	390	Di-n-butylphthalate	ND	390
bis(2-Chloroethoxy)methane	ND	390	Fluoranthene	ND	390
2,4-Dichlorophenol	ND	390	Benzidine	ND	390
1,2,4-Trichlorobenzene	ND	390	Pyrene	430	390
Naphthalene	440	390	Butylbenzylphthalate	ND	390
4-Chloroaniline	ND	390	3,3`-Dichlorobenzidine	ND	390
Hexachlorobutadiene	ND	390	Benzo(a)anthracene	ND	390
4-Chloro-3-methylphenol	ND	390	bis(2-Ethylhexyl)phthalate	ND	390
2-Methylnaphthalene	1000	390	Chrysene	ND	390
Hexachlorocyclopentadiene	ND	390	Di-n-octylphthalate	ND	390
2,4,6-Trichlorophenol	ND	390	Benzo(b)fluoranthene	ND	390
2,4,5-Trichlorophenol	ND	390	Benzo(k)fluoranthene	ND	390
2-Chloronaphthalene	ND	390	Benzo(a)pyrene	ND	390
2-Nitroaniline	ND	390	Indeno(1,2,3-cd)pyrene	ND	390
Dimethylphthalate	ND	390	Dibenz(a,h)anthracene	ND	390
Acenaphthylene	26 J	390	Benzo(g,h,i)perylene	ND	390
3-Nitroaniline	ND	390			0

Percent Solid of 85.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

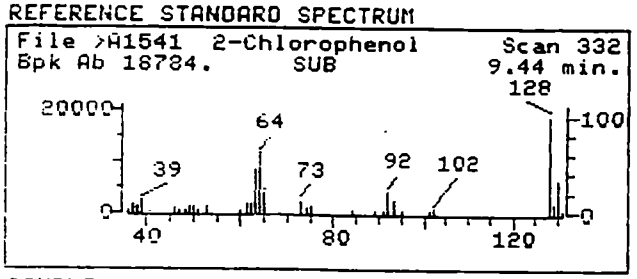


Data File: >A2423::D3 Quant Output File: ^A2423::DB
Name. 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92 BTL#18

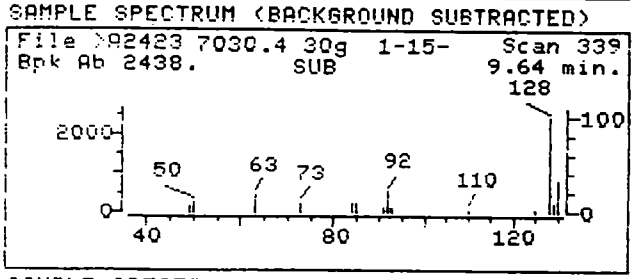
Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 920114 16:59

Operator ID: MARK
Quant Time: 920118 03:23
Injected at: 920118 02:39

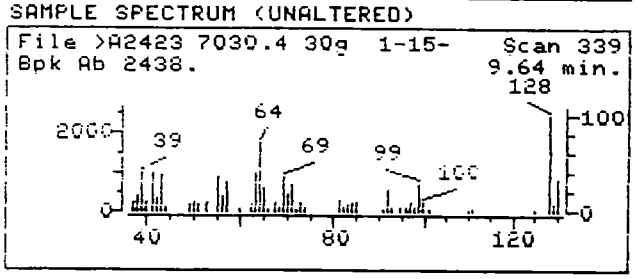
REFERENCE STANDARD SPECTRUM

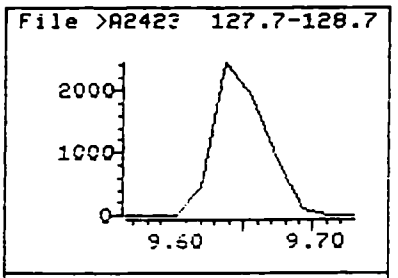


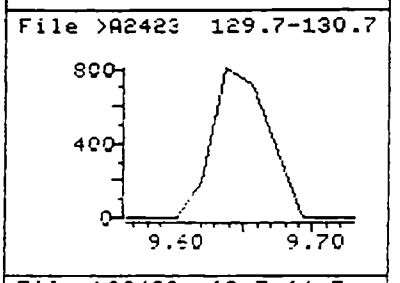
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

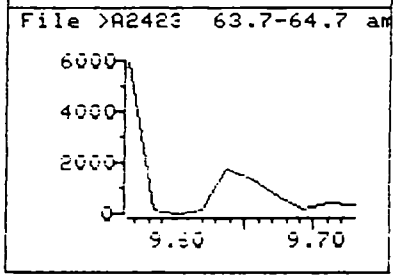


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

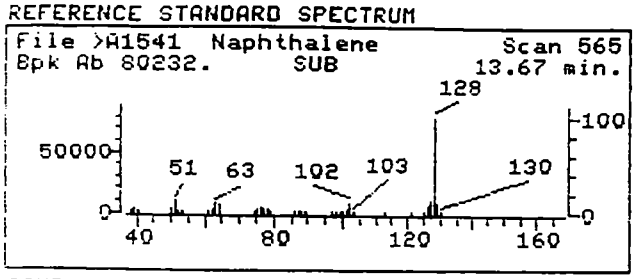
Quant Output File: ^A2423::DB

BTL#18

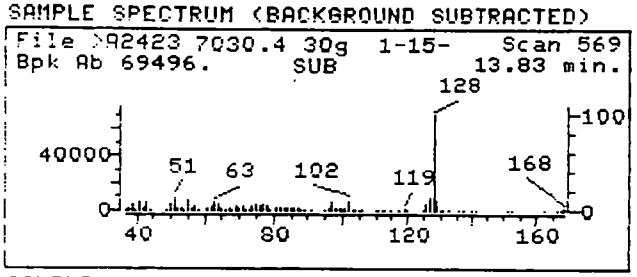
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 9
Compound Name: 2-Chlorophenol
Scan Number: 339
Retention Time: 9.64 min.
Quant Ion: 128.0
Area: 6295
Concentration: 1.19 ng/uL
q-value: 97

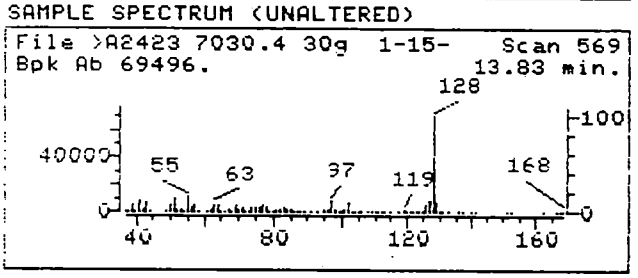
REFERENCE STANDARD SPECTRUM

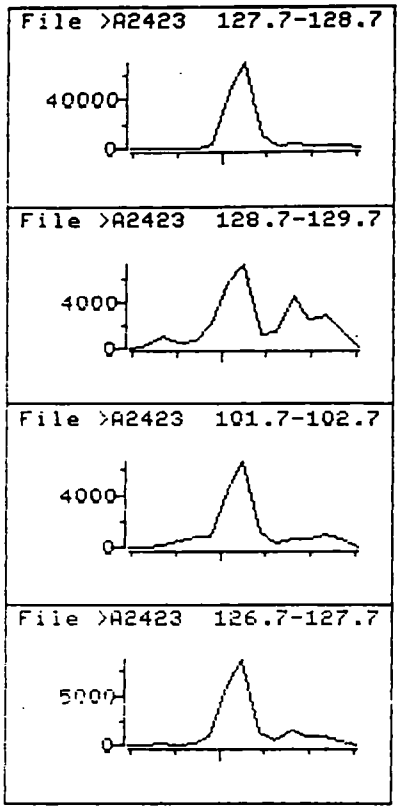


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

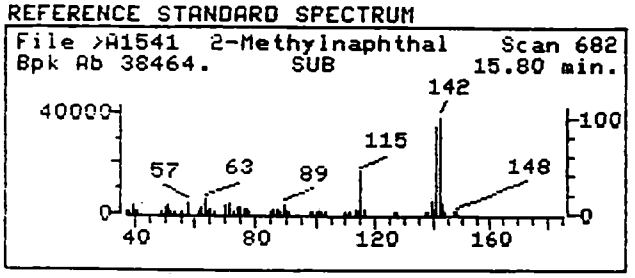
Quant Output File: ^A2423::DB

BTL#18

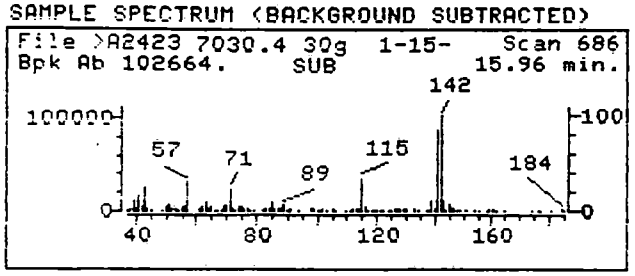
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 29
Compound Name: Naphthalene
Scan Number: 569
Retention Time: 13.83 min.
Quant Ion: 128.0
Area: 156917
Concentration: 11.11 ng/uL
q-value: 98

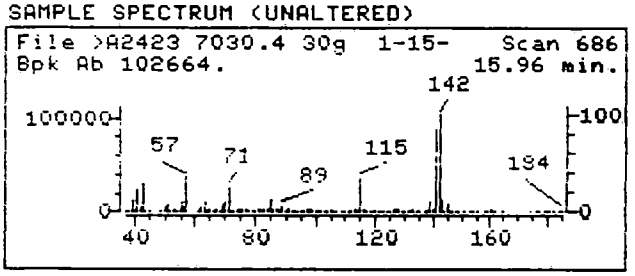
REFERENCE STANDARD SPECTRUM

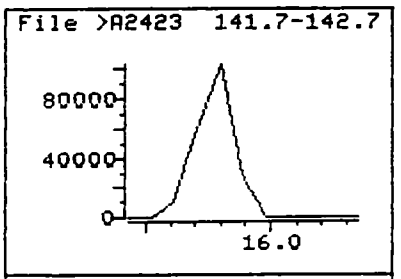


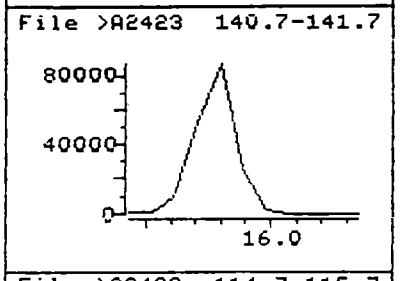
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

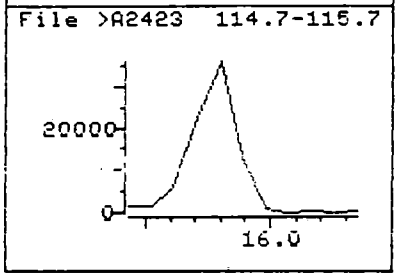


SAMPLE SPECTRUM (UNALTERED)









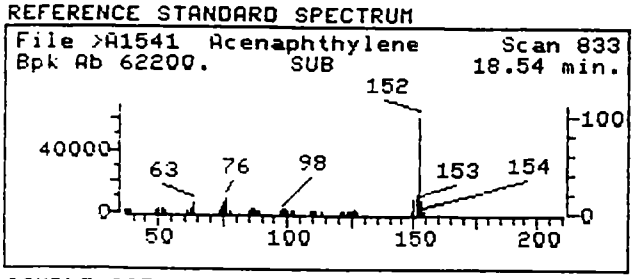
Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

Quant Output File: ^A2423::DB

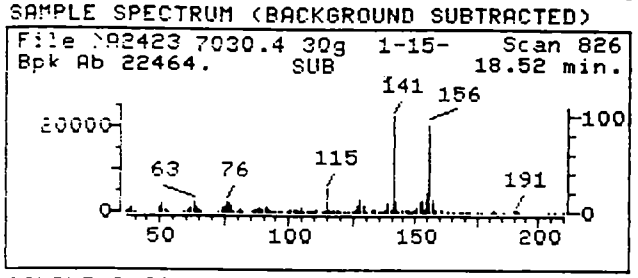
BTL#18
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 33
Compound Name: 2-Methylnaphthalene
Scan Number: 686
Retention Time: 15.96 min.
Quant Ion: 142.0
Area: 221034
Concentration: 26.69 ng/uL
q-value: 88

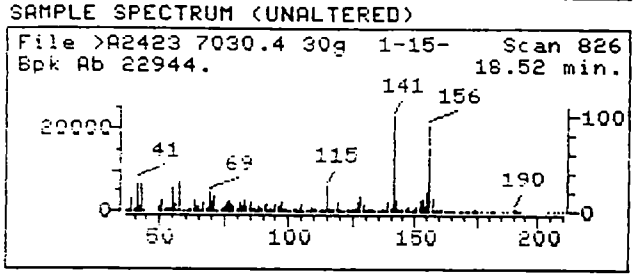
REFERENCE STANDARD SPECTRUM

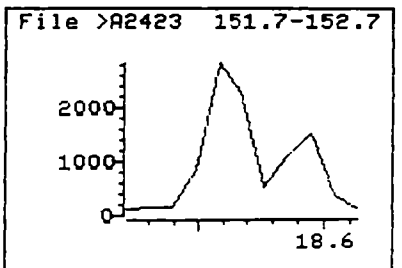


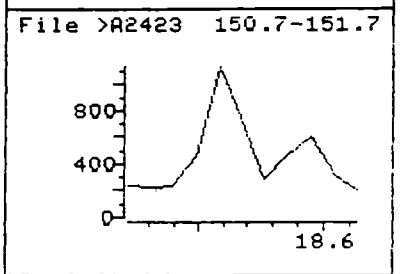
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

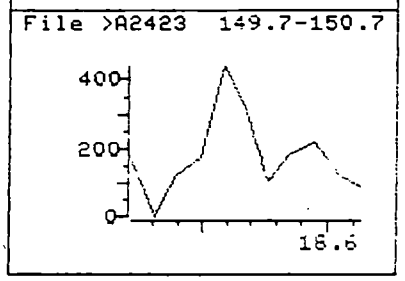


SAMPLE SPECTRUM (UNALTERED)









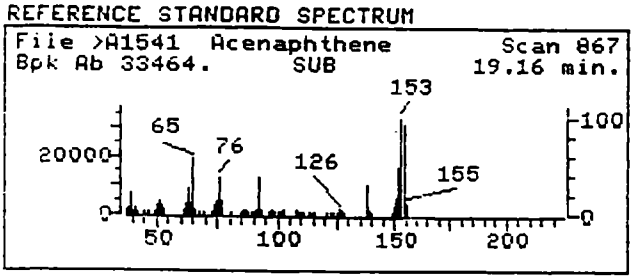
Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

Quant Output File: ^A2423::DB

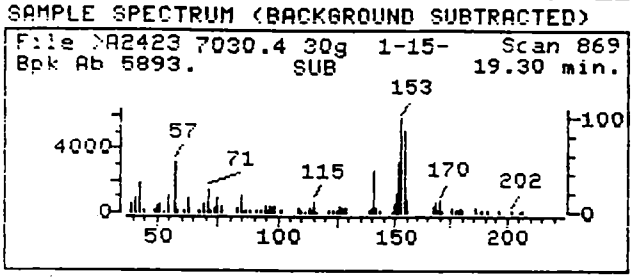
BTL#18
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 42
Compound Name: Acenaphthylene
Scan Number: 826
Retention Time: 18.52 min.
Quant Ion: 152.0
Area: 9397
Concentration: .66 ng/uL
q-value: 83

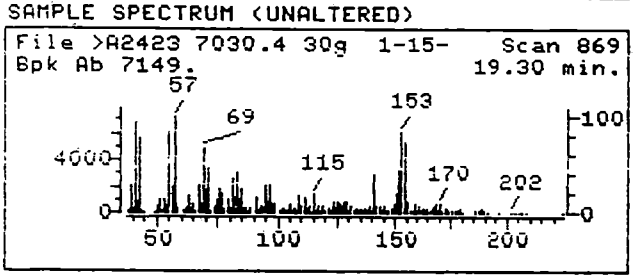
REFERENCE STANDARD SPECTRUM

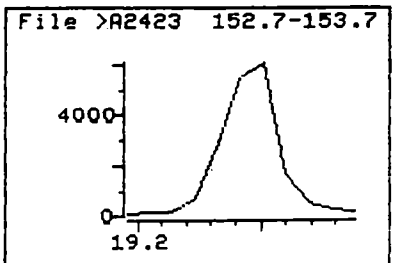


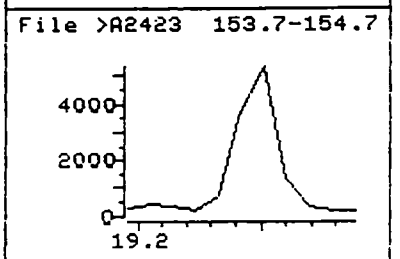
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

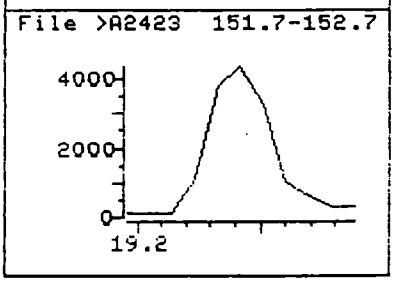


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

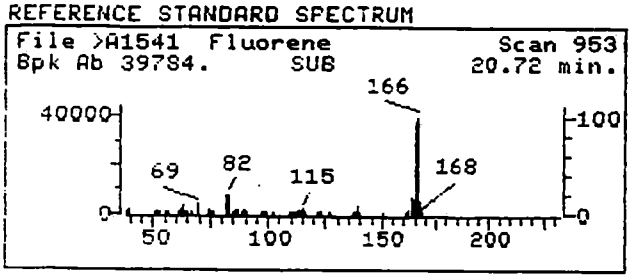
Quant Output File: ^A2423::DB

BTL#18

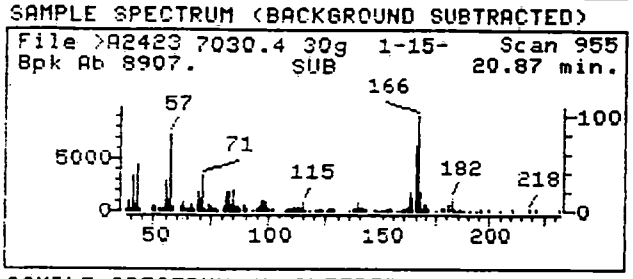
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 44
Compound Name: Acenaphthene
Scan Number: 869
Retention Time: 19.30 min.
Quant Ion: 153.0
Area: 18441
Concentration: 2.01 ng/uL
q-value: 98

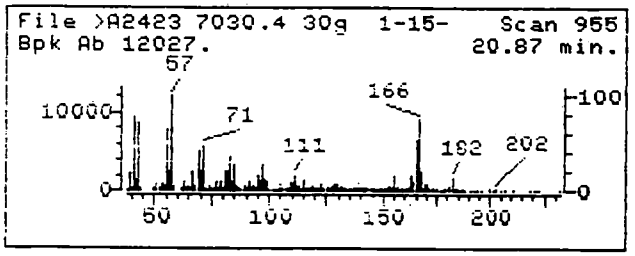
REFERENCE STANDARD SPECTRUM

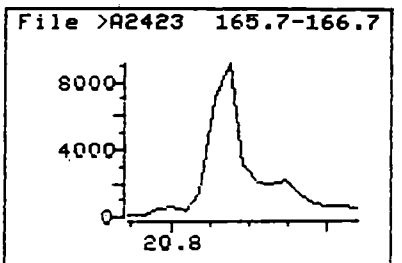


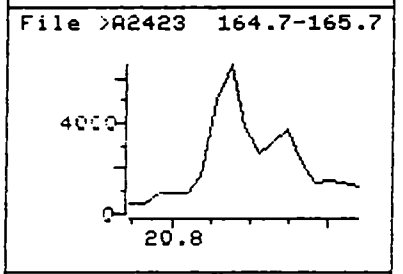
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

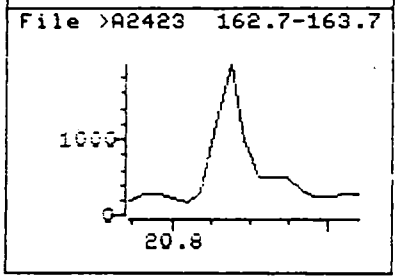


SAMPLE SPECTRUM (UNALTERED)









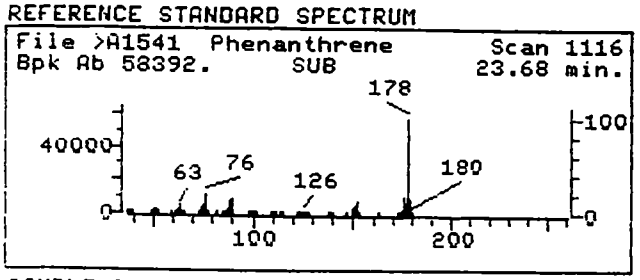
Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

Quant Output File: ^A2423::DB

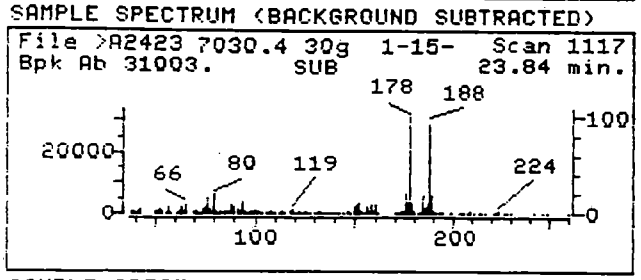
BTL#18
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 52
Compound Name: Fluorene
Scan Number: 955
Retention Time: 20.87 min.
Quant Ion: 166.0
Area: 33452
Concentration: 3.39 ng/uL
q-value: 75

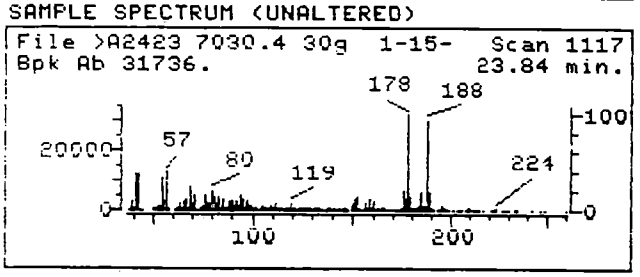
REFERENCE STANDARD SPECTRUM

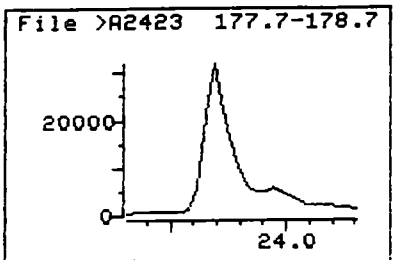


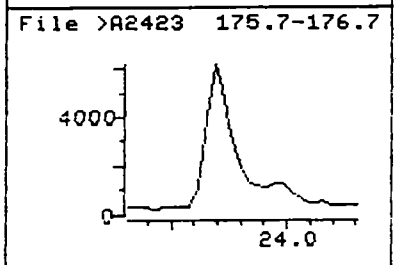
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

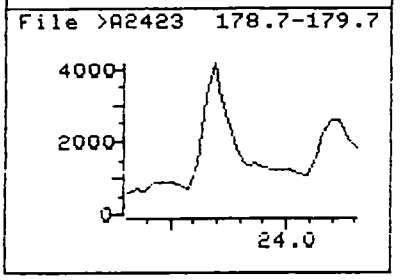


SAMPLE SPECTRUM (UNALTERED)









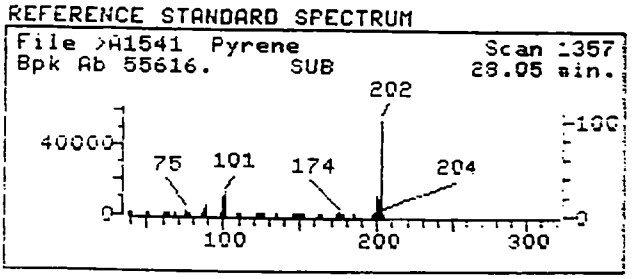
Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

Quant Output File: ^A2423::DB

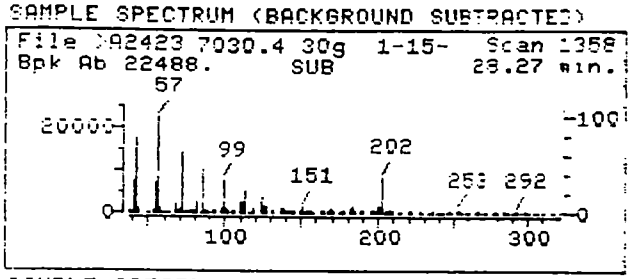
BTL#18
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 62
Compound Name: Phenanthrene
Scan Number: 1117
Retention Time: 23.84 min.
Quant Ion: 178.0
Area: 162649
Concentration: 11.25 ng/uL
q-value: 95

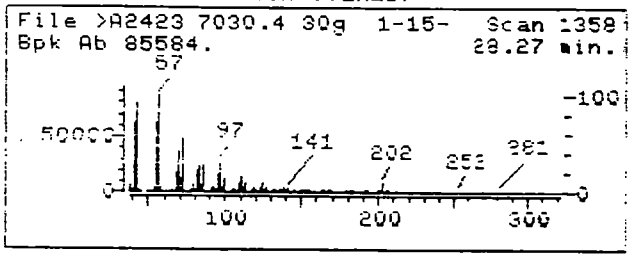
REFERENCE STANDARD SPECTRUM

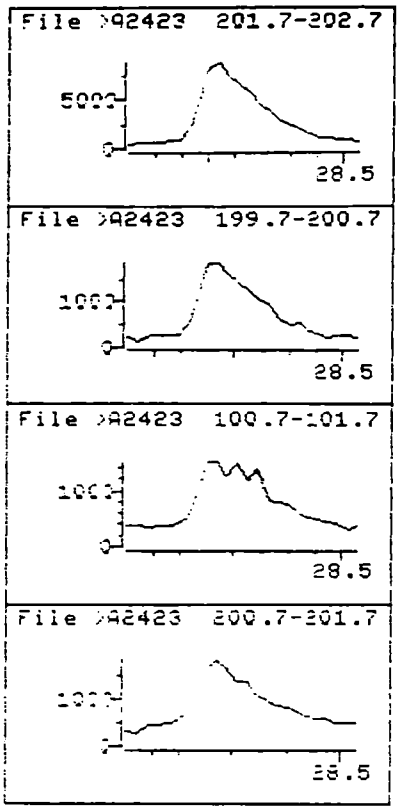


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A2423::D3
Name: 7030.4 30g 1-15-92
Misc: 7030.4 30g 1-15-92
Quant Time: 920118 03:23
Injected at: 920118 02:39

Quant Output File: ^A2423::DB

BTL#18

Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 68
Compound Name: Pyrene
Scan Number: 1358
Retention Time: 28.27 min.
Quant Ion: 202.0
Area: 66831
Concentration: 11.08 ng/uL
q-value: 95

Environmental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

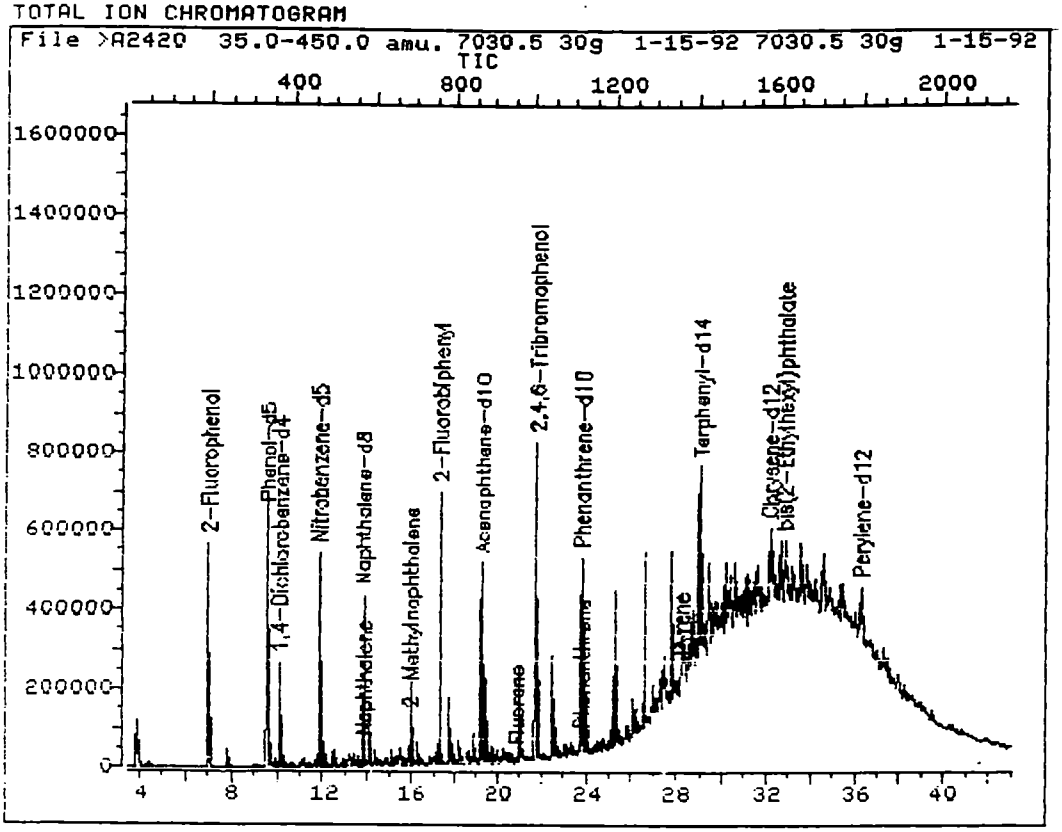
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.5 30g 1-15-92	DILUTION FACTOR	1.00
CLIENT ID		QA BATCH	
DATA FILE	>A2420	DATE ANALYZED	01/18/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	400	Acenaphthene	ND	400
Phenol	ND	400	2,4-Dinitrophenol	ND	2000
Aniline	ND	400	4-Nitrophenol	ND	400
bis(2-Chloroethyl)Ether	ND	400	Dibenzofuran	ND	400
2-Chlorophenol	ND	400	2,4-Dinitrotoluene	ND	400
1,3-Dichlorobenzene	ND	400	2,6-Dinitrotoluene	ND	400
1,4-Dichlorobenzene	ND	400	Diethylphthalate	ND	400
Benzyl alcohol	ND	400	4-Chlorophenyl-phenylether	ND	400
1,2-Dichlorobenzene	ND	400	Fluorene	28 J	400
2-Methylphenol	ND	400	4-Nitroaniline	ND	400
bis(2-chloroisopropyl)ether	ND	400	4,6-Dinitro-2-methylphenol	ND	400
4-Methylphenol	ND	400	N-Nitrosodiphenylamine	ND	400
N-Nitroso-Di-n-propylamine	ND	400	1,2-Diphenylhydrazine	ND	400
Hexachloroethane	ND	400	4-Bromophenyl-phenylether	ND	400
Nitrobenzene	ND	400	Hexachlorobenzene	ND	400
Isophorone	ND	400	Pentachlorophenol	ND	400
2-Nitrophenol	ND	400	Phenanthrene	68 J	400
2,4-Dimethylphenol	ND	400	Anthracene	ND	400
Benzoic Acid	ND	400	Di-n-butylphthalate	ND	400
bis(2-Chloroethoxy)methane	ND	400	Fluoranthene	ND	400
2,4-Dichlorophenol	ND	400	Benzidine	ND	400
1,2,4-Trichlorobenzene	ND	400	Pyrene	91 J	400
Naphthalene	110 J	400	Butylbenzylphthalate	ND	400
4-Chloroaniline	ND	400	3,3'-Dichlorobenzidine	ND	400
Hexachlorobutadiene	ND	400	Benzo(a)anthracene	ND	400
4-Chloro-3-methylphenol	ND	400	bis(2-Ethylhexyl)phthalate	280 JB	400
2-Methylnaphthalene	270 J	400	Chrysene	ND	400
Hexachlorocyclopentadiene	ND	400	Di-n-octylphthalate	ND	400
2,4,6-Trichlorophenol	ND	400	Benzo(b)fluoranthene	ND	400
2,4,5-Trichlorophenol	ND	400	Benzo(k)fluoranthene	ND	400
2-Chloronaphthalene	ND	400	Benzo(a)pyrene	ND	400
2-Nitroaniline	ND	400	Indeno(1,2,3-cd)pyrene	ND	400
Dimethylphthalate	ND	400	Dibenz(a,h)anthracene	ND	400
Acenaphthylene	ND	400	Benzo(g,h,i)perylene	ND	400
3-Nitroaniline	ND	400			0

Percent Solid of 82.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

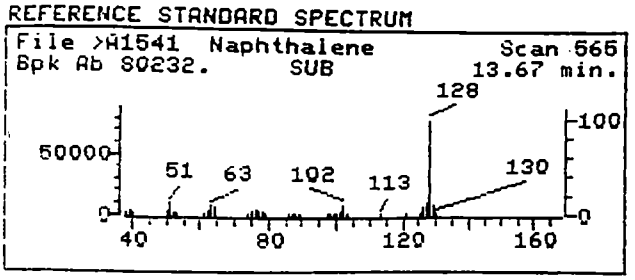


Data File: >A2420::D3 Quant Output File: ^A2420::DB
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92 BTL#15

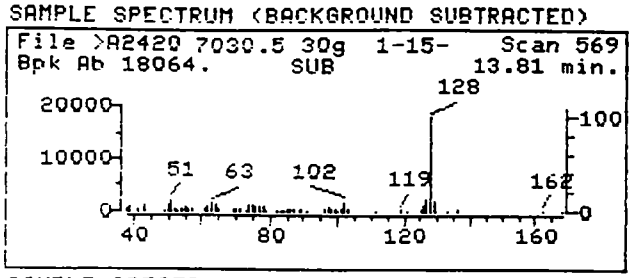
Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 920114 16:59

Operator ID: MARK
Quant Time: 920118 00:47
Injected at: 920118 00:03

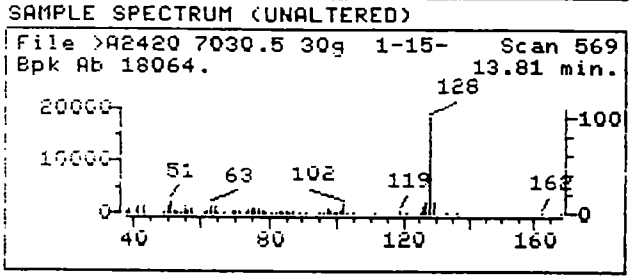
REFERENCE STANDARD SPECTRUM

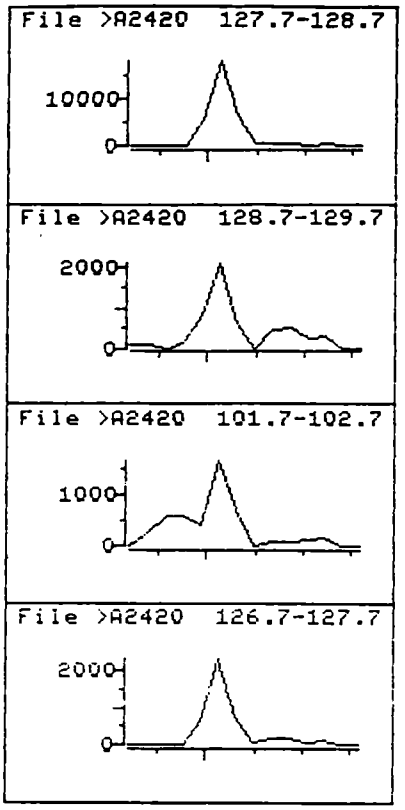


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >A2420::D3
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92
Quant Time: 920118 00:47
Injected at: 920118 00:03

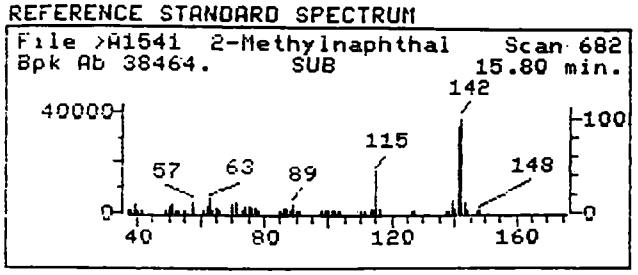
Quant Output File: ^A2420::DB

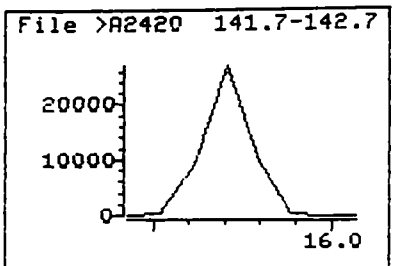
BTL#15

Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

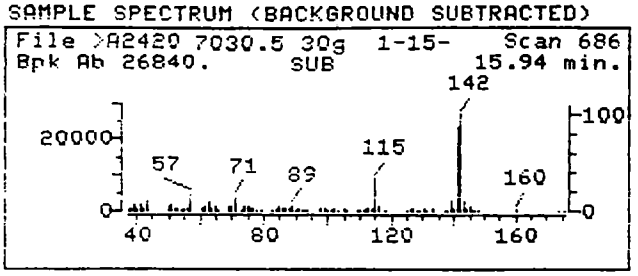
Compound No: 29
Compound Name: Naphthalene
Scan Number: 569
Retention Time: 13.81 min.
Quant Ion: 128.0
Area: 35120
Concentration: 2.71 ng/uL
q-value: 98

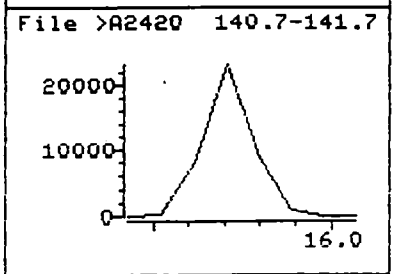
REFERENCE STANDARD SPECTRUM



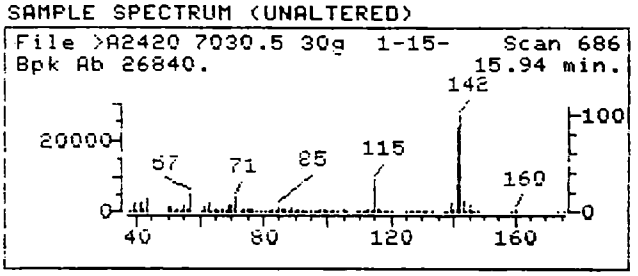


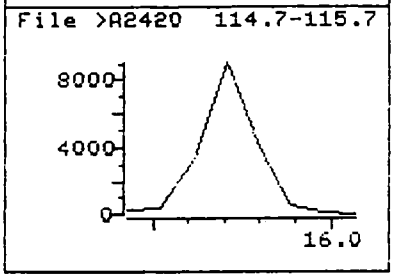
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





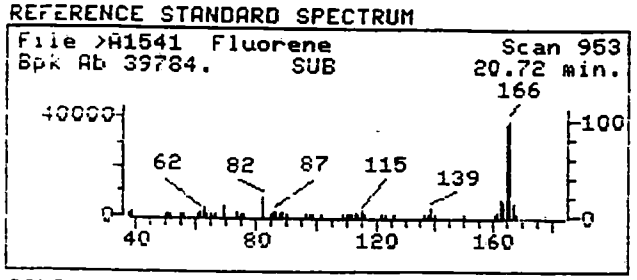
Data File: >A2420::D3
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92
Quant Time: 920118 00:47
Injected at: 920118 00:03

Quant Output File: ^A2420::DB

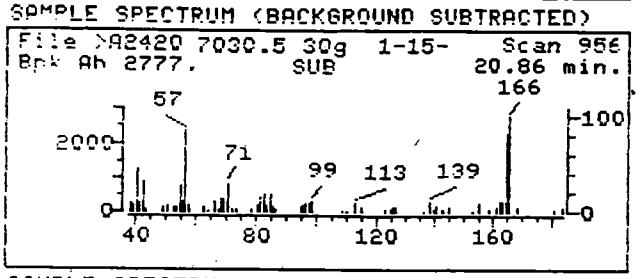
BTL#15
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 33
Compound Name: 2-Methylnaphthalene
Scan Number: 686
Retention Time: 15.94 min.
Quant Ion: 142.0
Area: 50820
Concentration: 6.68 ng/uL
q-value: 89

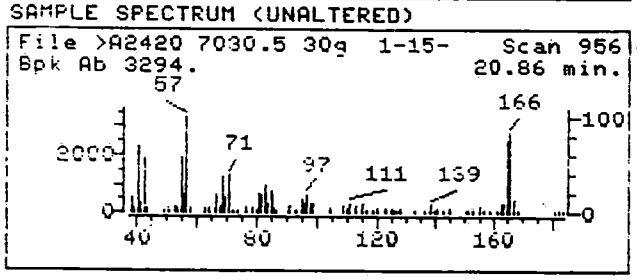
REFERENCE STANDARD SPECTRUM

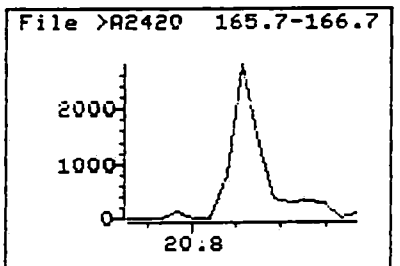


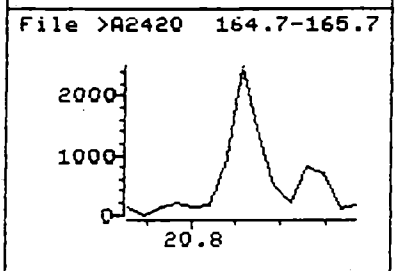
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

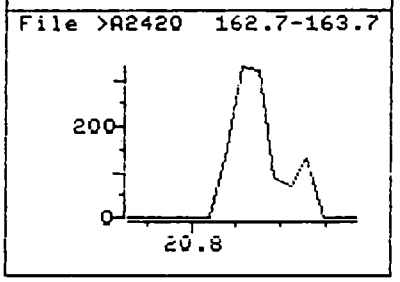


SAMPLE SPECTRUM (UNALTERED)









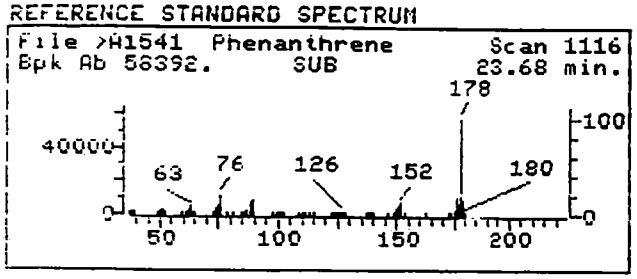
Data File: >A2420::D3
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92
Quant Time: 920118 00:47
Injected at: 920118 00:03

Quant Output File: ^A2420::DB

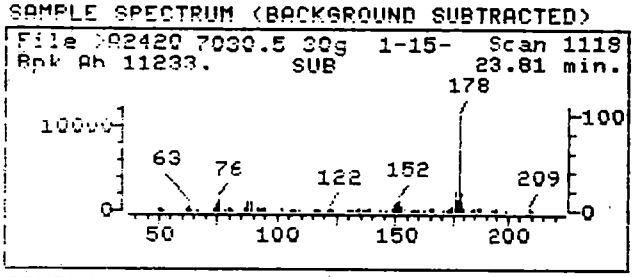
BTL#15
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 52
Compound Name: Fluorene
Scan Number: 956
Retention Time: 20.86 min.
Quant Ion: 166.0
Area: 7000
Concentration: .70 ng/uL
q-value: 89

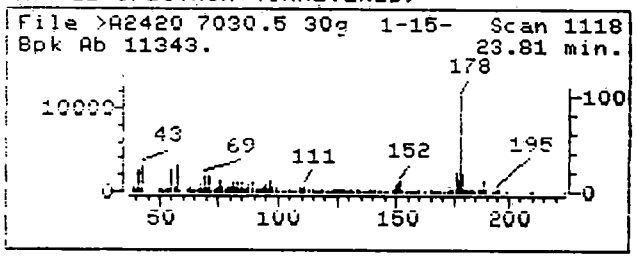
REFERENCE STANDARD SPECTRUM

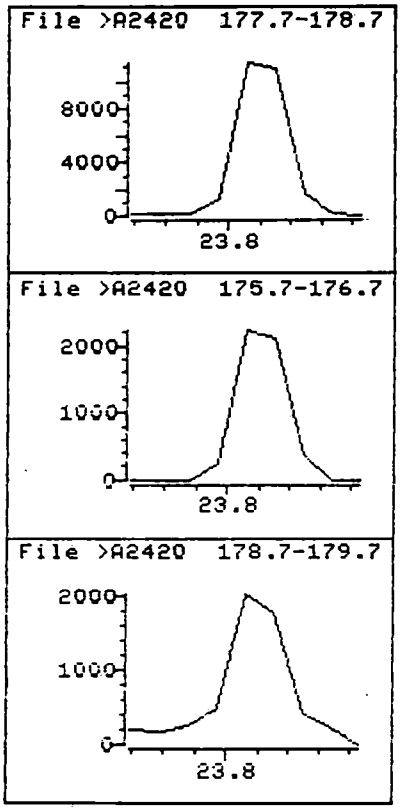


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





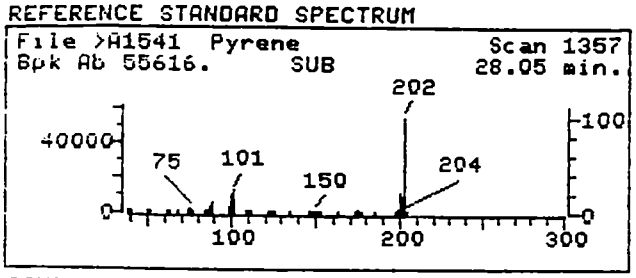
Data File: >A2420::D3
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92
Quant Time: 920118 00:47
Injected at: 920118 00:03

Quant Output File: ^A2420::DB

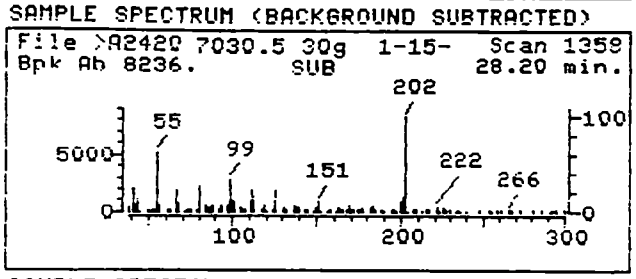
BTL#15
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 62
Compound Name: Phenanthrene
Scan Number: 1118
Retention Time: 23.81 min.
Quant Ion: 178.0
Area: 27473
Concentration: 1.66 ng/uL
q-value: 93

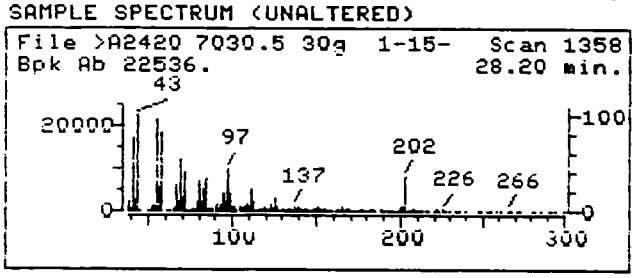
REFERENCE STANDARD SPECTRUM

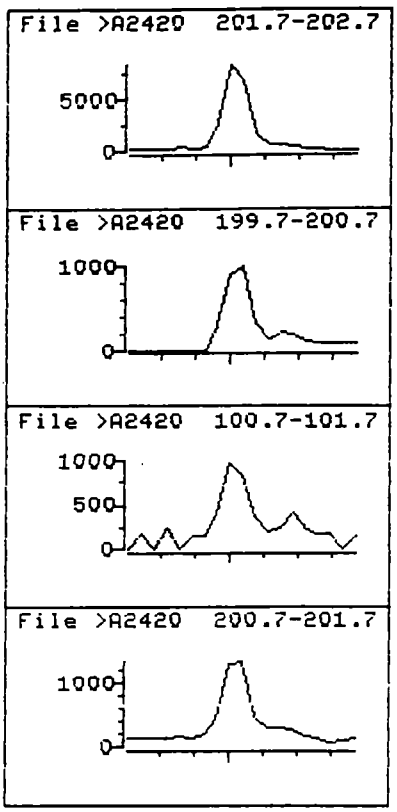


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





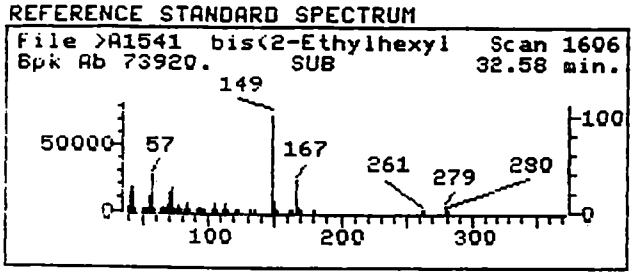
Data File: >A2420::D3
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92
Quant Time: 920118 00:47
Injected at: 920118 00:03

Quant Output File: ^A2420::DB

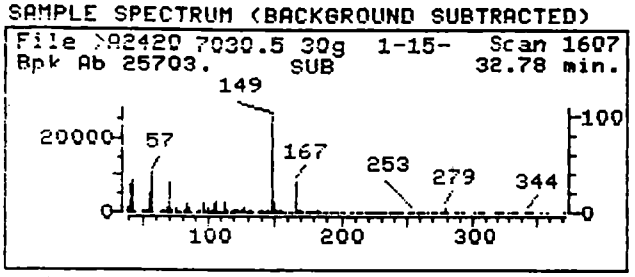
BTL#15
Quant ID File: IDBNA::D4
Last Calibration: 920114 16:59

Compound No: 68
Compound Name: Pyrene
Scan Number: 1358
Retention Time: 28.20 min.
Quant Ion: 202.0
Area: 26332
Concentration: 2.23 ng/uL
q-value: 88

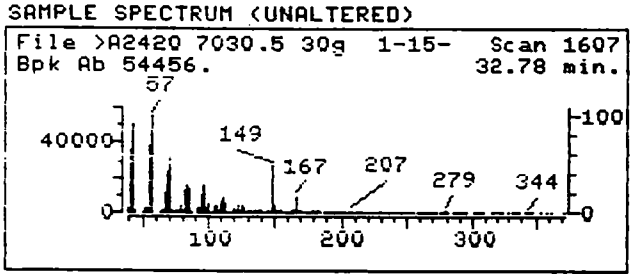
REFERENCE STANDARD SPECTRUM

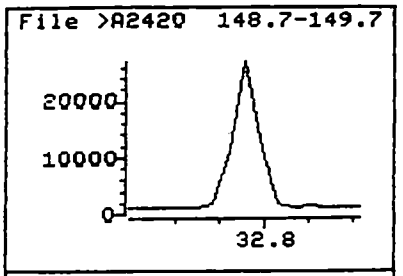


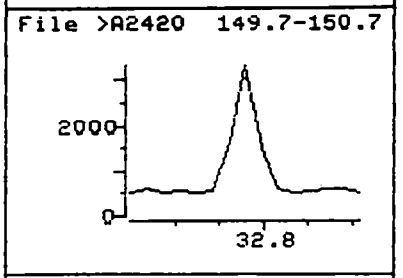
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

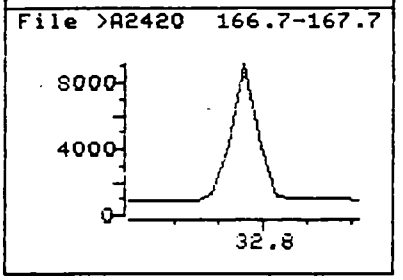


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2420::D3 Quant Output File: ^A2420::DB
Name: 7030.5 30g 1-15-92
Misc: 7030.5 30g 1-15-92 BTL#15
Quant Time: 920118 00:47 Quant ID File: IDBNA::D4
Injected at: 920118 00:03 Last Calibration: 920114 16:59

Compound No: 73
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1607
Retention Time: 32.78 min.
Quant Ion: 149.0
Area: 54075
Concentration: 6.84 ng/uL
q-value: 92

ENVIRONMENTAL PROFILE LABORATORIES

ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

LABORATORY ANALYSIS REPORT

CLIENT : Serv-Air

PROJECT: FT. Monmouth
VOA+15

Report Number: 7030
Date Received: Jan, 10, 1992
Date Released: Jan, 16, 1992
Data Released By:

Daniel K. Wright
Laboratory Director

TABLE OF CONTENTS

CLIENT: Serv-Air

SAMPLE LOCATION AND IDENTIFICATION

LAB ID NUMBER	SAMPLE IDENTIFICATION	MATRIX
7030.1	BI22 S.P.A E.SIDE	SOIL
7030.2	BI22 S.P.B S.SIDE	SOIL
7030.3	BI22 S.P.C W.SIDE	SOIL
7030.4	BI22 S.P.D.N.SIDE	SOIL
7030.5	BI22 S.P.E CENTER	SOIL
7030.6	B699 S.P.I N.SIDE	SOIL
7030.7	B699 S.P.2 W.SIDE	SOIL
7030.8	B699 S.P.3 N.SIDE	SOIL
7030.9	B699 S.P.4 W.SIDE	SOIL
7030.10	B699 S.P.5 CENTER	SOIL

CHAIN OF CUSTODY RECORD

CLIENT NAME: SERV-AIR INC.
SITE LOCATION: PO BOX 369 BLDG 490
Ft. MONMOUTH NJ 07703 (908)542-4359

SAMPLERS: Rochkovsky

ANALYSES REQUESTED

SAMPLE ID.	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	NUMBER OF CONTAINERS	TPHC	PPTHD	REMARKS
C92-678	1/6	1451	Soil		X	B1122 Sample Pt "A" E Side	1	X		
C92-679		1451			X	B1122 S.P. "A" E Side	1		X	TANK PULL.
C92-680		1451			X	B1122 S.P. "B" S Side	1	X		UST # 0081533
C92-681		1451			X	B1122 S.P. "B" S. Side	1		X	
C92-682		1445			X	B1122 S.P. "C" W Side	1	X		
C92-683		1445			X	B1122 S.P. "C" W Side	1		X	
C92-684		1457			X	B1122 S.P. "D" N Side	1	X		
C92-685		1457			X	B1122 S.P. "D" N Side	1		X	
C92-686		1501			X	B1122 S.P. "E" Center	1	X		
C92-687		1501			X	B1122 S.P. "E" Center	1		X	
C92-688		1530			X	B699 S.P. "1" N.Side	1	X		
C92-689		1530			X	B699 S.P. "1" N.Side	1		X	TANK PULL
C92-690		1536			X	B699 S.P. "2" W.Side	1	X		# 0081533-19T
C92-691		1536			X	B699 S.P. "2" W.Side	1		X	
TOTALS							14	7	7	

SAMPLE CONTAINERS PREPARED BY: Rochkovsky

RELINQUISHED BY: Rochkovsky — DATE 1/10 TIME 0830 — RECEIVED BY: T. Mele

RELINQUISHED BY: — DATE — TIME — RECEIVED BY:

RELINQUISHED BY: — DATE — TIME — RECEIVED BY:

RELINQUISHED AT LABORATORY BY: T. Mele — DATE 1/10 TIME 9:30 — RECEIVED AT LABORATORY BY:

REMARKS

CHAIN OF CUSTODY RECORD

CLIENT NAME: SERV-AIR INC.
SITE LOCATION: PO BOX 369 BLDG 490
Ft. MONMOUTH NJ 07703 (908)542-4359

SAMPLERS: Rochkovsky

R2-0835

SAMPLE ID.	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSES REQUESTED: test f/ TPHC	test PP+4D	REMARKS
C92-692	1/6	1540	Soil			X B699 S.Point "3" N side	1	X		
C92-693	1/6	1540				X B699 S.Point "3" N side	1		X	UST # 0081533-97
C92-694	1/6	1545				X B699 S.Point "4" W side	1	X		
C92-695	1/6	1545				X B699 S.Point "4" W side	1		X	
C92-696	1/6	1555				X B699 S.Point "5" Center	1	X		
C92-697	1/6	1555				X B699 S.Point "5" Center	1		X	

TOTALS

SAMPLE CONTAINERS PREPARED BY:

RELINQUISHED BY: Rochkovsky DATE 1/6 TIME 1700 RECEIVED BY:

RELINQUISHED BY: 6 3 3 DATE TIME RECEIVED BY:

RELINQUISHED BY: DATE 1/10 TIME 0830 RECEIVED BY: T. Mc

RELINQUISHED AT LABORATORY BY: T. Mc DATE 1/10 TIME 9:30 RECEIVED AT LABORATORY BY:

REMARKS

LABORATORY CHRONICLE

SAMPLE NUMBER	7030.1	7030.2	7030.3	7030.4	7030.5	7030.6	7030.7
Received & Refrigerated Date	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92	1/10/92
Organics Extraction Date							
BN/ABN	NA	NA	NA	NA	NA	NA	NA
PCB's	NA	NA	NA	NA	NA	NA	NA
Analysis Date							
BN/ABN	NA	NA	NA	NA	NA	NA	NA
PCB's	NA	NA	NA	NA	NA	NA	NA
Volatiles	1/14/92	1/14/92	1/14/92	1/14/92	1/14/92	1/14/92	1/14/92
TPHC's	NA	NA	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA	NA	NA
Total Solids	NA	NA	NA	NA	NA	NA	NA
Organic Supervisor Review & Approval	Brian K. McKee B.K. McK						01/24/92
Inorganic Supervisor Review & Approval							

LABORATORY CHRONICLE

SAMPLE NUMBER	7030.8	7030.9	7030.10				
Received & Refrigerated Date	1/10/92	1/10/92	1/10/92				
Organics Extraction Date							
BN/ABN	NA	NA	NA	NA	NA	NA	NA
PCB's	NA	NA	NA	NA	NA	NA	NA
Analysis Date							
BN/ABN	NA	NA	NA	NA	NA	NA	NA
PCB's	NA	NA	NA	NA	NA	NA	NA
Volatiles	1/14/92	1/14/92	1/14/92	NA	NA	NA	NA
TPHC's	NA	NA	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA	NA	NA
Total Solids	NA	NA	NA	NA	NA	NA	NA
Organic Supervisor Review & Approval	Brian K. McKee B.K. McK						01/24/92
Inorganic Supervisor Review & Approval							

METHOD SUMMARY

Volatiles

The volatile samples in this report have been analyzed using the method cited in the USEPA-CLP-IFB version 2/88. The CLP volatile method is based on USEPA Method 624 and SW-846.

The method is based on 5 milliliters of an aqueous, or 5 grams of a non-aqueous sample spiked with a known concentration of surrogate and internal standard. The samples and standards are the purged onto a trap using a Tekmar LSC 2 and desorbed onto a packed glass column installed in a Hewlett Packard 5890 GC coupled via a jet separator a the HP 5970 MSD. The data was then collected and reduced via a HP 1000 RTE data system.

GC/MS

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS TUNE FREQUENCY:- All samples,blanks,standards and matrix spikes were analyzed within the respective 12 hour tune periods.

INITIAL CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits.

CONTINUING CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits

DETECTION LIMITS:- Detection limits and search results were modified by dilution or percent solid.*

* All values reported on a DRY WEIGHT basis where applicable

MATRIX SPIKE RECOVERY:- No matrix spike compound was outside QC limits

INTERNAL STANDARD AREA:-

CLIENT ID #	NUMBER OF INTERNAL STANDARD AREA(S)
NONE	0

SURROGATE RECOVERY:-

Client ID #	Surrogates outside QC limits
NONE	0

ANALYSIS TIME:- All samples were extracted and analyzed within the prescribed holding times.

***NOTE: 7008.2 was measured as water cie took 1ml but calculated as soil as per T-VWIX-009 1ml-1oz

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DATA REPORTING QUALIFIERS

For reporting results to EPA, the following "results qualifiers" are used:

VALUE – If the result is a value greater than or equal to the detection limit, report the value.

U – Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, "10U". This is not necessarily the instrument detection limit. The figure represents the minimum detection limit attainable for this particular sample based on any concentration or dilution that may have been required.

J – Indicates an estimated value. This flag is used:

1) When estimating a concentration for tentatively identifid compounds (library search hits) where a 1:1 response is assumed.
2) When the mass spectral data indicated the identification criteria, however, the result was less than the specified detection limit but greater than zero. If the detection limit was 10ug/L and a concentration of 3ug/L was calculated, report as "3J".

B – Indicates the analyte was found in the blank as well as the sample; report as "12B".

E – Indicates the analyte concentration exceeds the calibrated range of the GC/MS instrument for that specific analysis.

D – This flag identifies all compounds identified in an analysis at a secondary dilution factor.

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

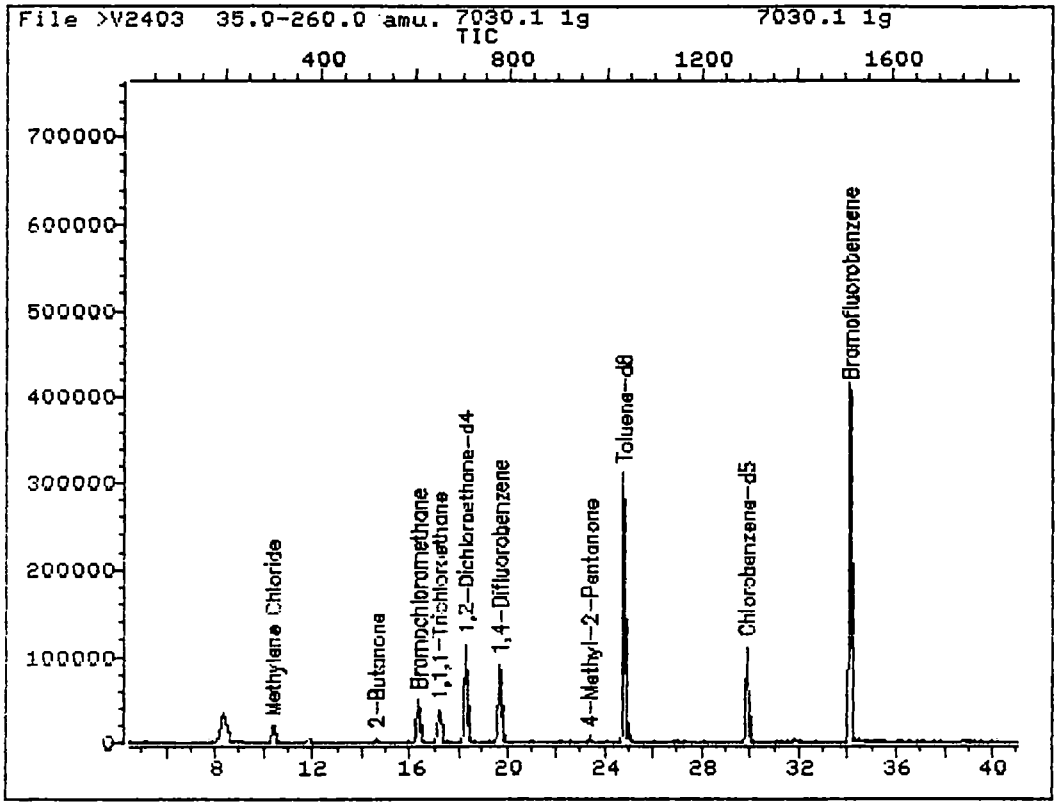
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.1 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>02403	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	60	Trichloroethene	ND	30
Bromomethane	ND	60	Dibromochloromethane	ND	30
Vinyl Chloride	ND	60	1,1,2-Trichloroethane	ND	30
Chloroethane	ND	60	Benzene	ND	30
Methylene Chloride	62	30	trans-1,3-Dichloropropene	ND	30
Acrolein	ND	300	2-Chloroethylvinyl ether	ND	30
Acrylonitrile	ND	300	Bromoform	ND	30
Acetone	ND	30	2-Hexanone	ND	30
Carbon Disulfide	ND	30	4-Methyl-2-Pentanone	38	30
1,1-Dichloroethene	ND	30	Tetrachloroethene	ND	30
1,1-Dichloroethane	ND	30	1,1,2,2-Tetrachloroethane	ND	30
trans-1,2-Dichloroethene	ND	30	Toluene	ND	30
Trichlorofluoromethane	ND	30	Chlorobenzene	ND	30
Chloroform	ND	30	Ethylbenzene	ND	30
1,2-Dichloroethane	ND	30	Styrene	ND	30
2-Butanone	280	30	o-Xylene	ND	30
1,1,1-Trichloroethane	100	30	m + p-Xylenes	ND	30
Carbon Tetrachloride	ND	30	1,3-Dichlorobenzene	ND	30
Bromodichloromethane	ND	30	1,2-Dichlorobenzene	ND	30
Vinyl Acetate	ND	30	1,4-Dichlorobenzene	ND	30
1,2-Dichloropropane	ND	30	tert-Butyl Alcohol	ND	300
cis-1,3-Dichloropropene	ND	30	Methyl tert-Butyl Ether	ND	30

Percent Solid of 83.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

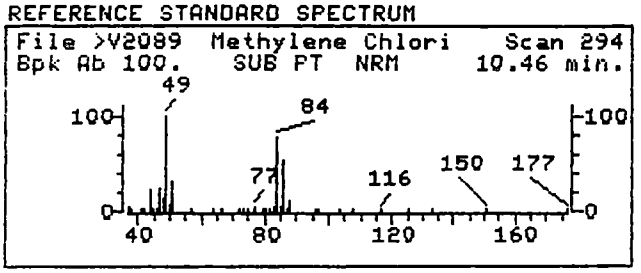


Data File: >V2403::D1 Quant Output File: ^V2403::DB
Name: 7030.1 1g
Misc: 7030.1 1g

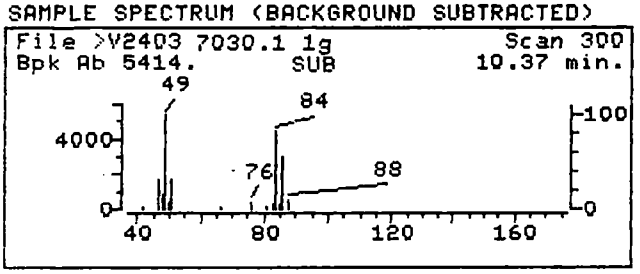
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 15:24
Injected at: 920114 14:42

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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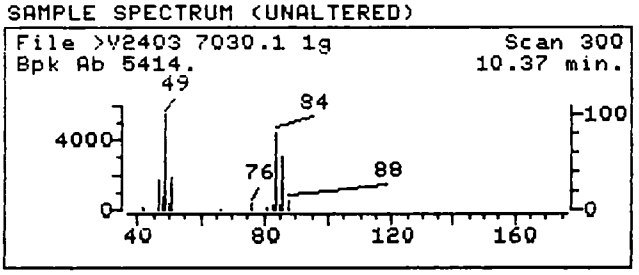
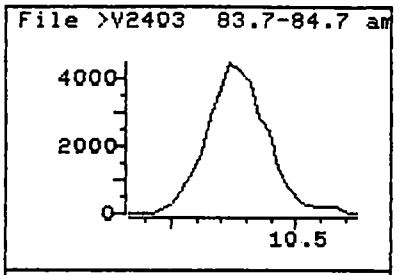
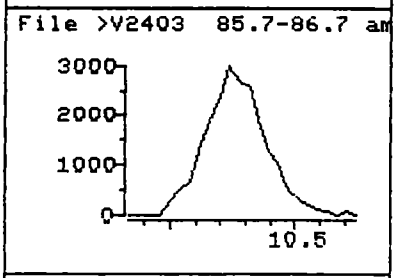
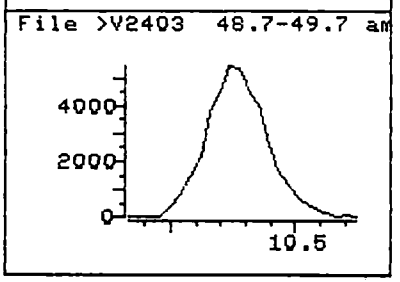




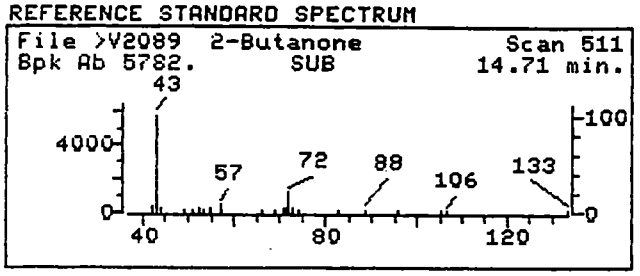




Data File: >V2403::D1 Quant Output File: ^V2403::DB
Name: 7030.1 1g
Misc: 7030.1 1g
Quant Time: 920114 15:24 Quant ID File: IDVOA::D4
Injected at: 920114 14:42 Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 300
Retention Time: 10.37 min.
Quant Ion: 84.0
Area: 37183
Concentration: 10.26 ppb
q-value: 92

REFERENCE STANDARD SPECTRUM



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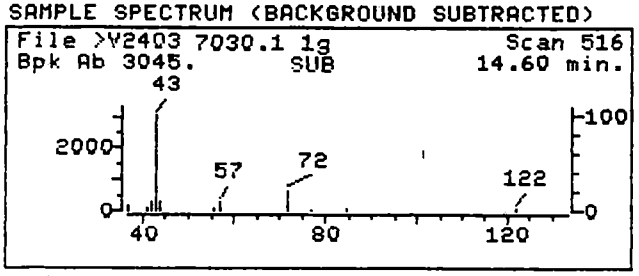

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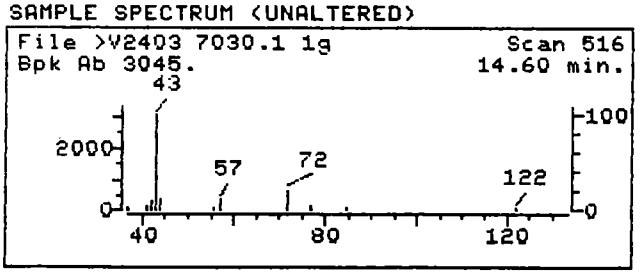
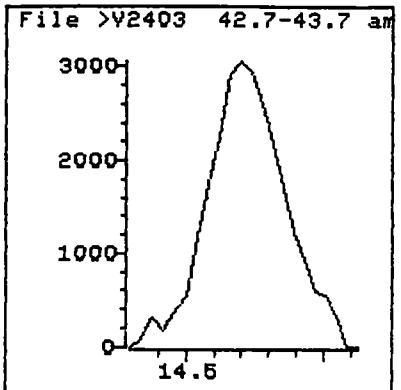
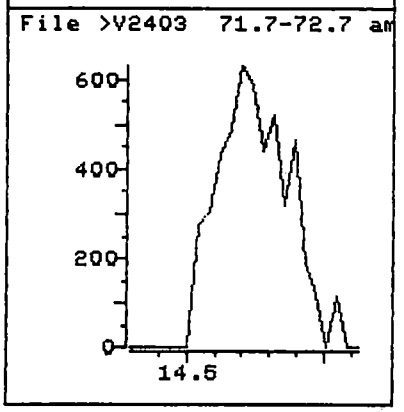






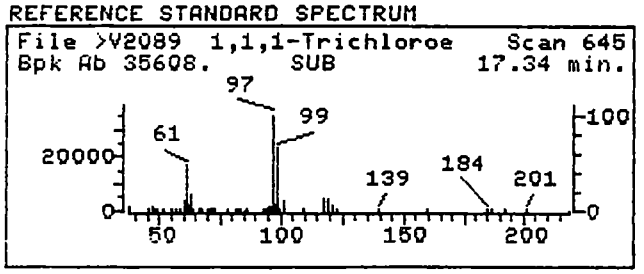
Data File: >V2403::D1
Name: 7030.1 1g
Misc: 7030.1 1g
Quant Time: 920114 15:24
Injected at: 920114 14:42

Quant Output File: ^V2403::DB

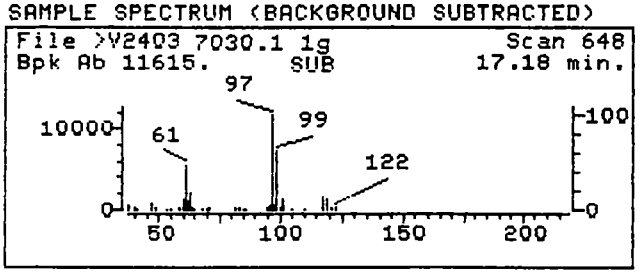
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 21
Compound Name: 2-Butanone
Scan Number: 516
Retention Time: 14.60 min.
Quant Ion: 43.0
Area: 30084
Concentration: 47.05 ppb
q-value: 99

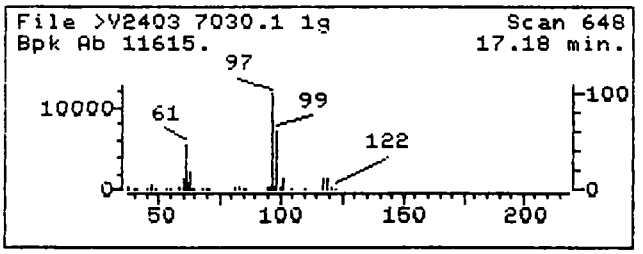
REFERENCE STANDARD SPECTRUM

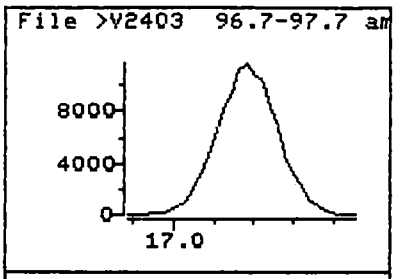


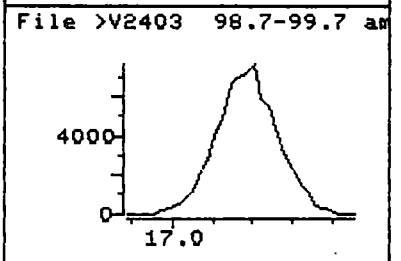
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

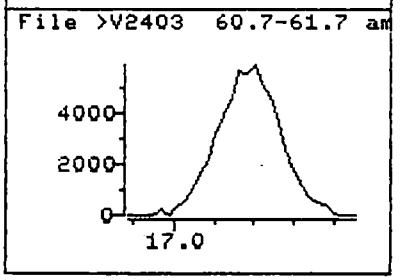


SAMPLE SPECTRUM (UNALTERED)









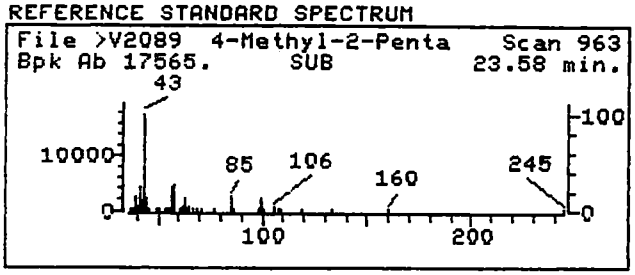
Data File: >V2403::D1
Name: 7030.1 1g
Misc: 7030.1 1g
Quant Time: 920114 15:24
Injected at: 920114 14:42

Quant Output File: ^V2403::DB

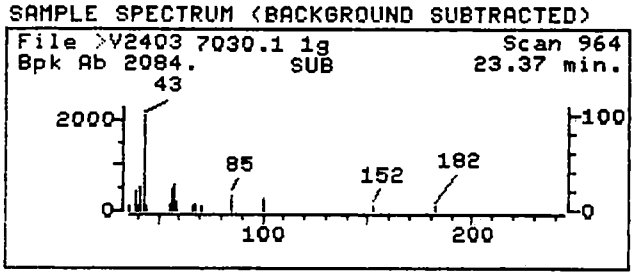
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 648
Retention Time: 17.18 min.
Quant Ion: 97.0
Area: 126704
Concentration: 17.20 ppb
q-value: 88

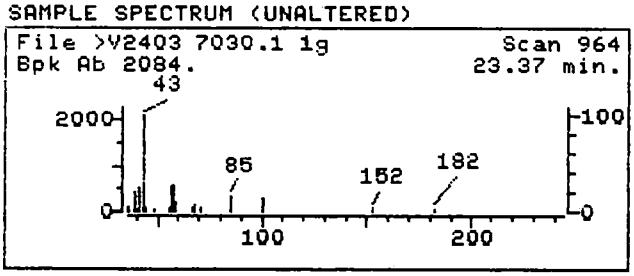
REFERENCE STANDARD SPECTRUM

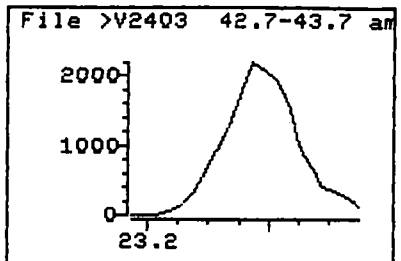


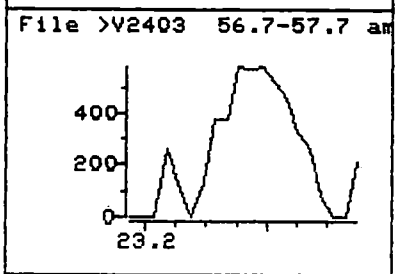
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

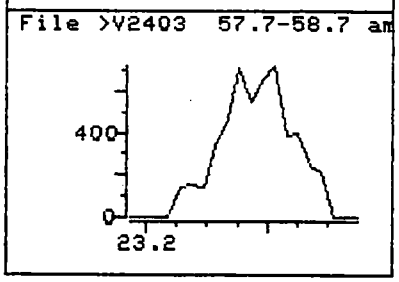


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2403::D1 Quant Output File: ^V2403::DB
Name: 7030.1 1g
Misc: 7030.1 1g
Quant Time: 920114 15:24 Quant ID File: IDVOA::D4
Injected at: 920114 14:42 Last Calibration: 911224 13:28

Compound No: 36
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 964
Retention Time: 23.37 min.
Quant Ion: 43.0
Area: 18488
Concentration: 6.24 ppb
q-value: 94

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

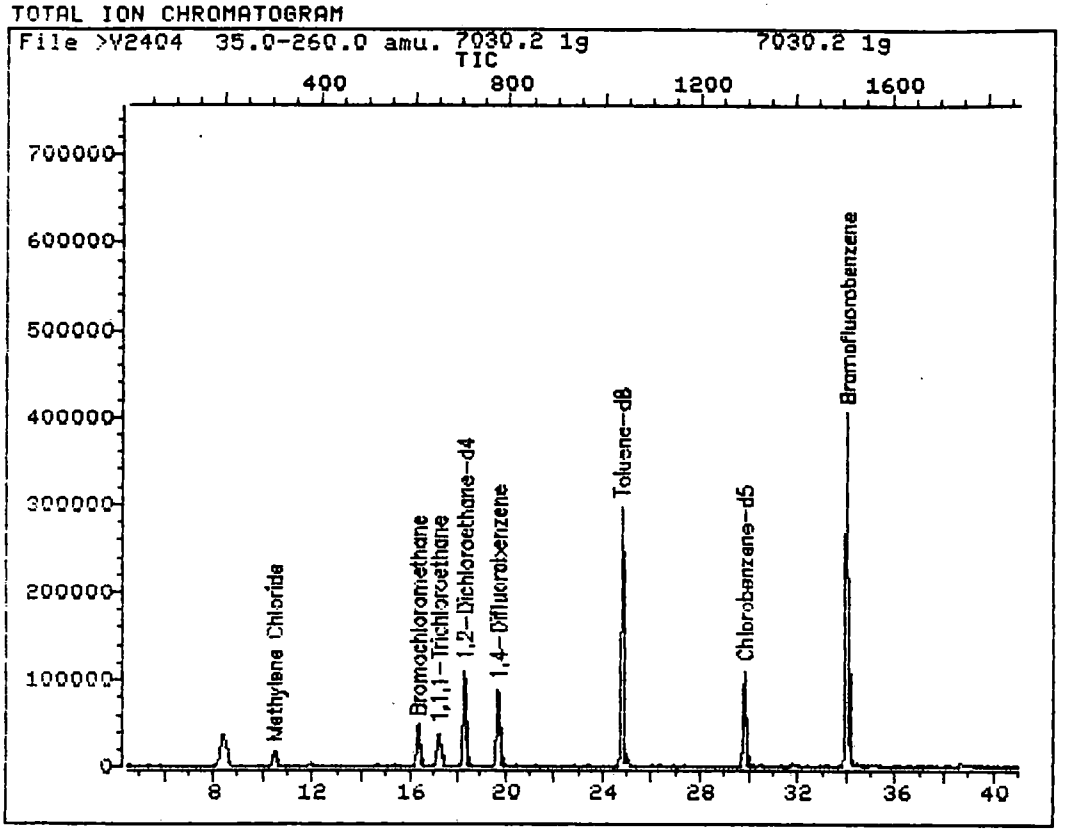
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.2 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>U2404	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	58	Trichloroethene	ND	29
Bromomethane	ND	58	Dibromochloromethane	ND	29
Vinyl Chloride	ND	58	1,1,2-Trichloroethane	ND	29
Chloroethane	ND	58	Benzene	ND	29
Methylene Chloride	60	29	trans-1,3-Dichloropropene	ND	29
Acrolein	ND	290	2-Chloroethylvinyl ether	ND	29
Acrylonitrile	ND	290	Bromoform	ND	29
Acetone	ND	29	2-Hexanone	ND	29
Carbon Disulfide	ND	29	4-Methyl-2-Pentanone	ND	29
1,1-Dichloroethene	ND	29	Tetrachloroethene	ND	29
1,1-Dichloroethane	ND	29	1,1,2,2-Tetrachloroethane	ND	29
trans-1,2-Dichloroethene	ND	29	Toluene	ND	29
Trichlorofluoromethane	ND	29	Chlorobenzene	ND	29
Chloroform	ND	29	Ethylbenzene	ND	29
1,2-Dichloroethane	ND	29	Styrene	ND	29
2-Butanone	ND	29	o-Xylene	ND	29
1,1,1-Trichloroethane	100	29	m + p-Xylenes	ND	29
Carbon Tetrachloride	ND	29	1,3-Dichlorobenzene	ND	29
Bromodichloromethane	ND	29	1,2-Dichlorobenzene	ND	29
Vinyl Acetate	ND	29	1,4-Dichlorobenzene	ND	29
1,2-Dichloropropane	ND	29	tert-Butyl Alcohol	ND	290
cis-1,3-Dichloropropene	ND	29	Methyl tert-Butyl Ether	ND	29

Percent Solid of 86.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



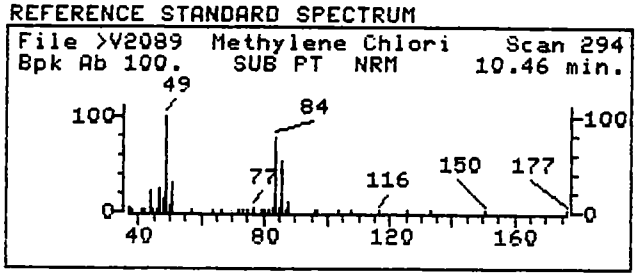
Data File: >V2404::D1
Name: 7030.2 1g
Misc: 7030.2 1g

Quant Output File: ^V2404::DB

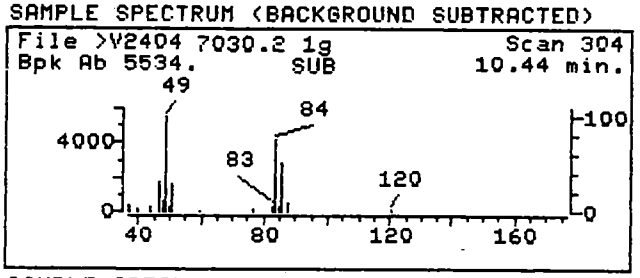
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 16:11
Injected at: 920114 15:29

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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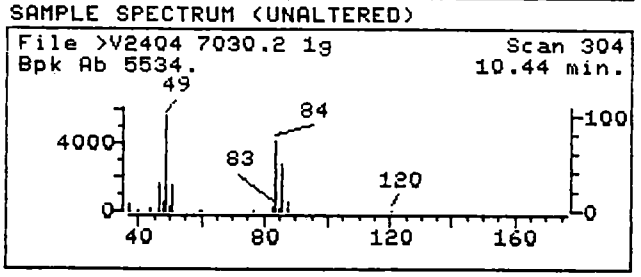
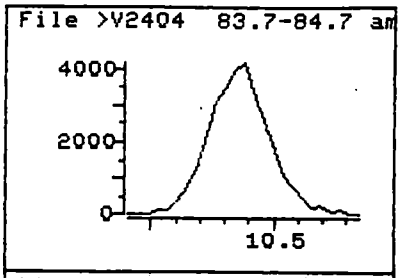
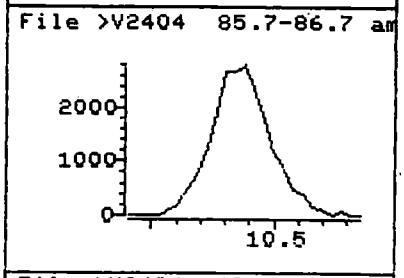
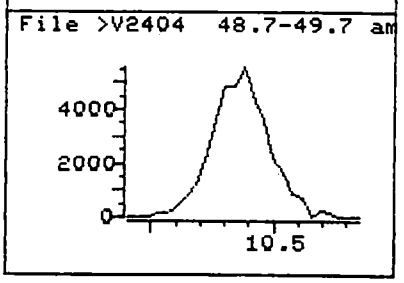








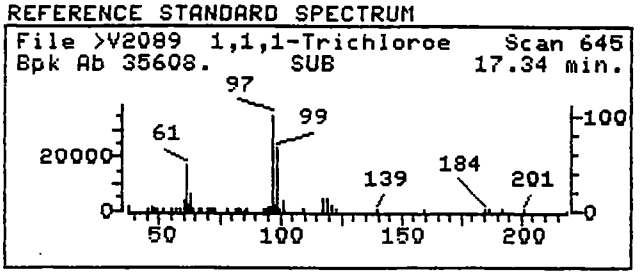
Data File: >V2404::D1
Name: 7030.2 1g
Misc: 7030.2 1g
Quant Time: 920114 16:11
Injected at: 920114 15:29

Quant Output File: ^V2404::DB

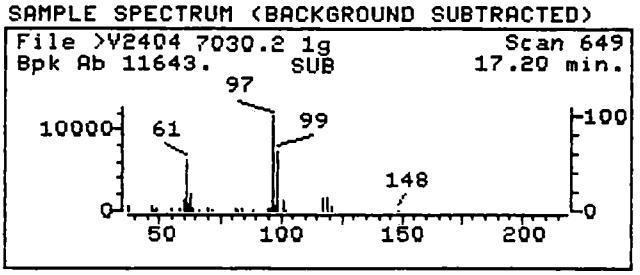
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 304
Retention Time: 10.44 min.
Quant Ion: 84.0
Area: 35523
Concentration: 10.37 ppb
q-value: 94

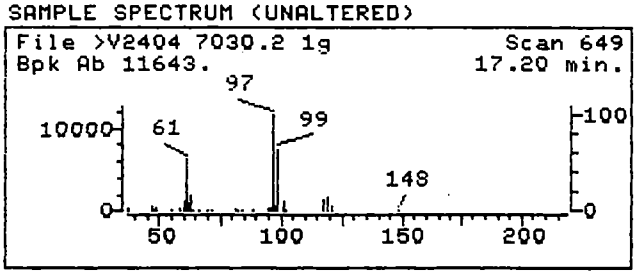
REFERENCE STANDARD SPECTRUM

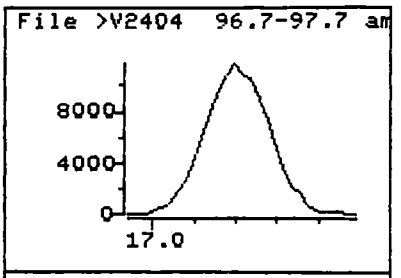


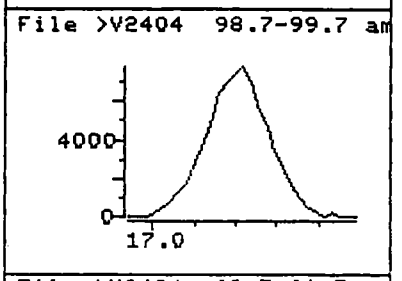
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

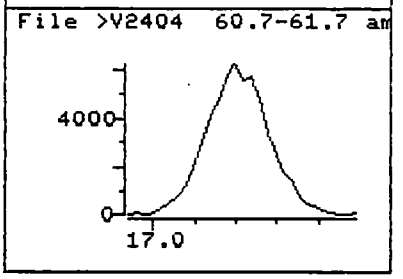


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2404::D1 Quant Output File: ^V2404::DB
Name: 7030.2 1g
Misc: 7030.2 1g
Quant Time: 920114 16:11 Quant ID File: IDVOA::D4
Injected at: 920114 15:29 Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 649
Retention Time: 17.20 min.
Quant Ion: 97.0
Area: 128893
Concentration: 18.11 ppb
q-value: 92

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

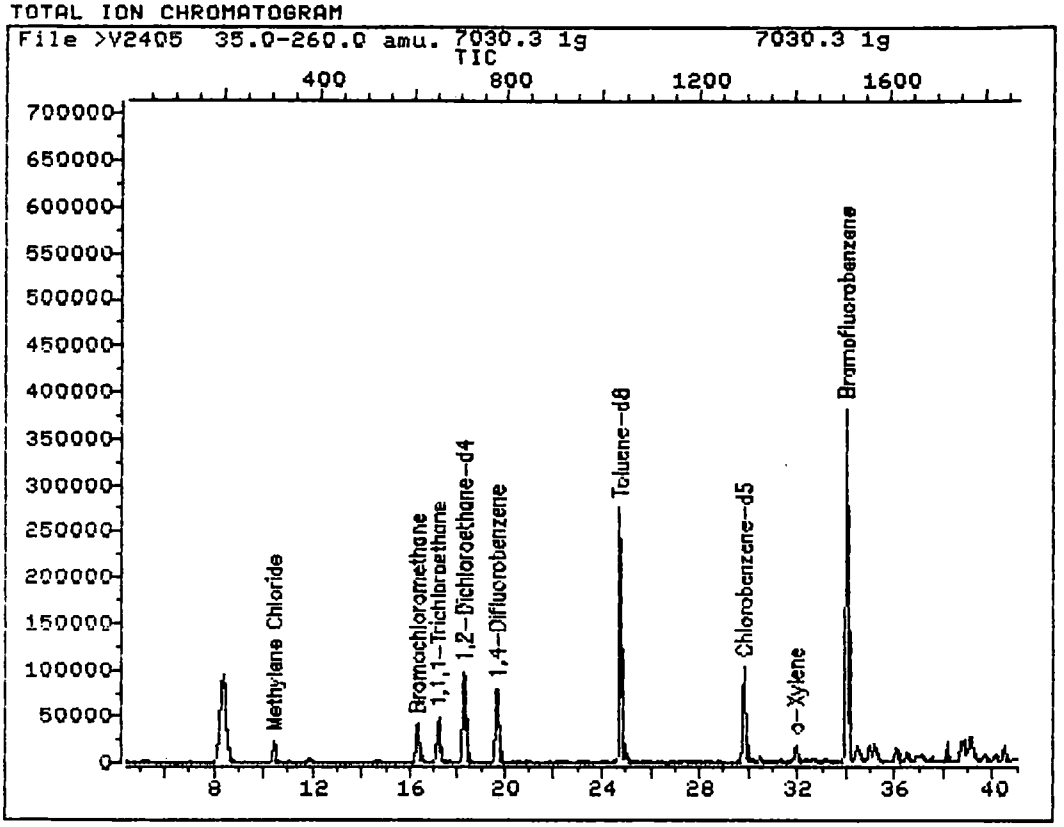
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.3 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2405	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	63	Trichloroethene	ND	32
Bromomethane	ND	63	Dibromochloromethane	ND	32
Vinyl Chloride	ND	63	1,1,2-Trichloroethane	ND	32
Chloroethane	ND	63	Benzene	ND	32
Methylene Chloride	93	32	trans-1,3-Dichloropropene	ND	32
Acrolein	ND	320	2-Chloroethylvinyl ether	ND	32
Acrylonitrile	ND	320	Bromoform	ND	32
Acetone	ND	32	2-Hexanone	ND	32
Carbon Disulfide	ND	32	4-Methyl-2-Pentanone	ND	32
1,1-Dichloroethene	ND	32	Tetrachloroethene	ND	32
1,1-Dichloroethane	ND	32	1,1,2,2-Tetrachloroethane	ND	32
trans-1,2-Dichloroethene	ND	32	Toluene	ND	32
Trichlorofluoromethane	ND	32	Chlorobenzene	ND	32
Chloroform	ND	32	Ethylbenzene	ND	32
1,2-Dichloroethane	ND	32	Styrene	ND	32
2-Butanone	ND	32	o-Xylene	25 J	32
1,1,1-Trichloroethane	160	32	m + p-Xylenes	ND	32
Carbon Tetrachloride	ND	32	1,3-Dichlorobenzene	ND	32
Bromodichloromethane	ND	32	1,2-Dichlorobenzene	ND	32
Vinyl Acetate	ND	32	1,4-Dichlorobenzene	ND	32
1,2-Dichloropropane	ND	32	tert-Butyl Alcohol	ND	320
cis-1,3-Dichloropropene	ND	32	Methyl tert-Butyl Ether	ND	32

Percent Solid of 79.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



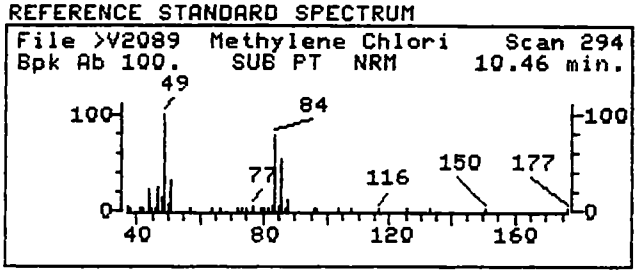
Data File: >V2405::D1
Name: 7030.3 1g
Misc: 7030.3 1g

Quant Output File: ^V2405::DB

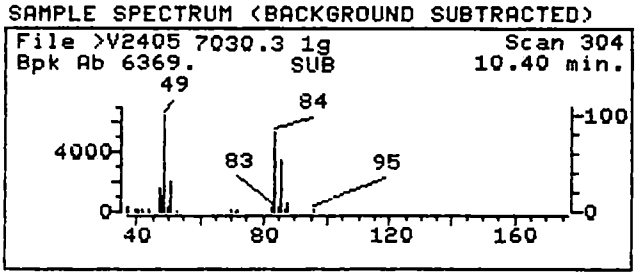
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 17:00
Injected at: 920114 16:18

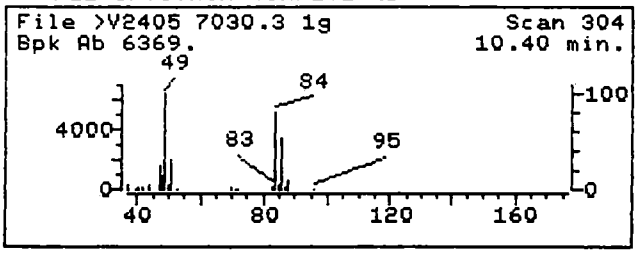
REFERENCE STANDARD SPECTRUM

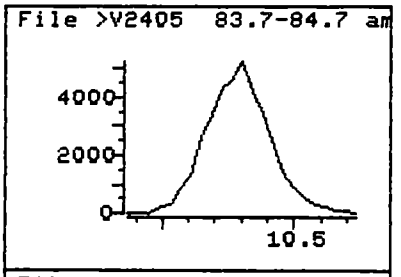


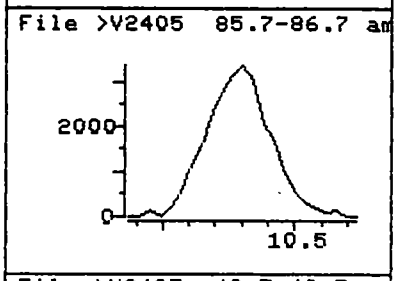
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

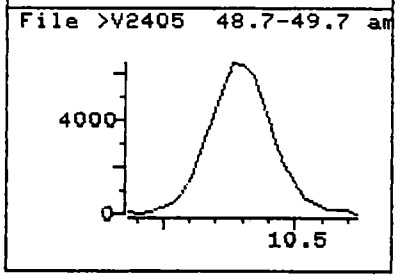


SAMPLE SPECTRUM (UNALTERED)







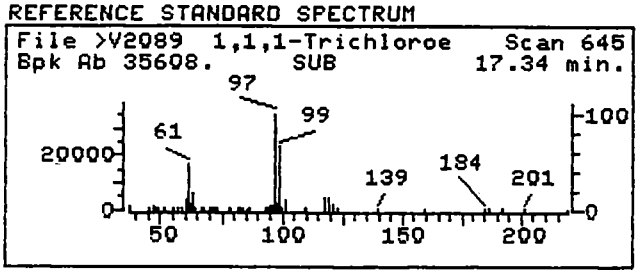


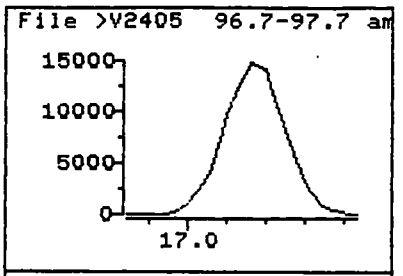
Data File: >V2405::D1
Name: 7030.3 1g
Misc: 7030.3 1g
Quant Time: 920114 17:00
Injected at: 920114 16:18

Quant Output File: ^V2405::DB
Quant ID File: IDV0A::D4
Last Calibration: 911224 13:28

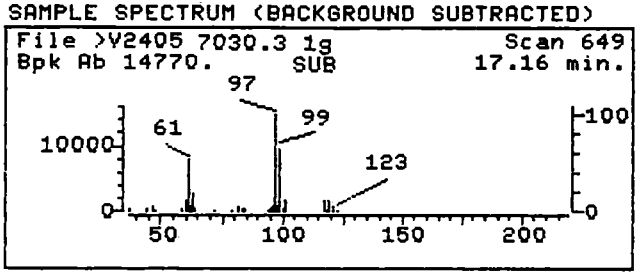
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 304
Retention Time: 10.40 min.
Quant Ion: 84.0
Area: 42482
Concentration: 14.66 ppb
q-value: 93

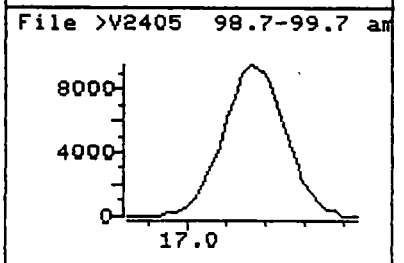
REFERENCE STANDARD SPECTRUM



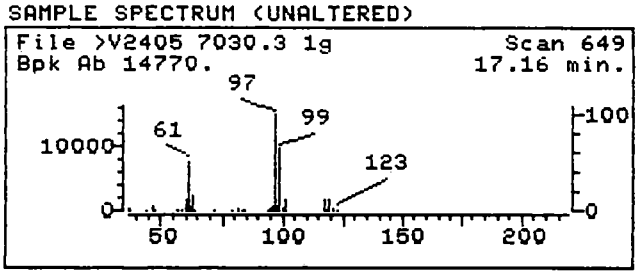


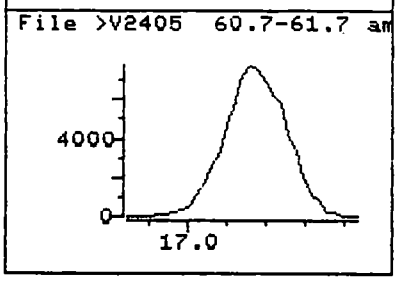
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)



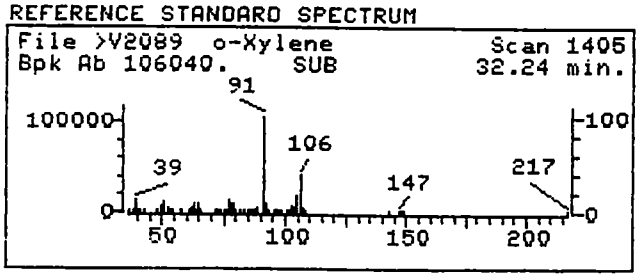


Data File: >V2405::D1
Name: 7030.3 1g
Misc: 7030.3 1g
Quant Time: 920114 17:00
Injected at: 920114 16:18

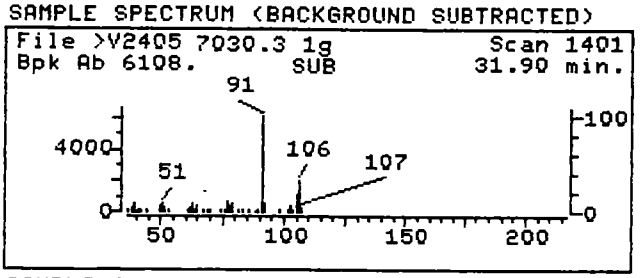
Quant Output File: ^V2405::DB
Quant ID File: IDV0A::D4
Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 649
Retention Time: 17.16 min.
Quant Ion: 97.0
Area: 164348
Concentration: 25.11 ppb
q-value: 93

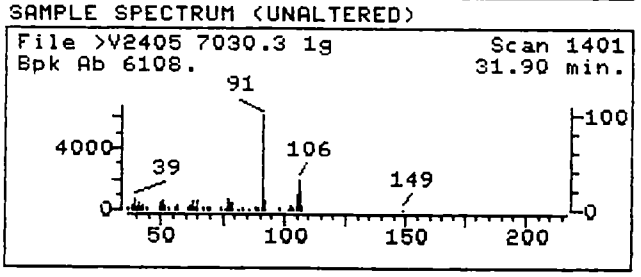
REFERENCE STANDARD SPECTRUM

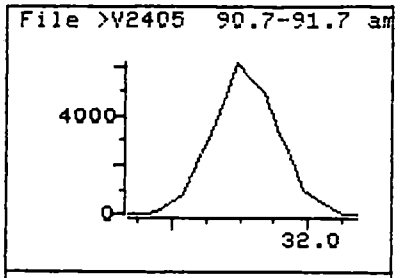


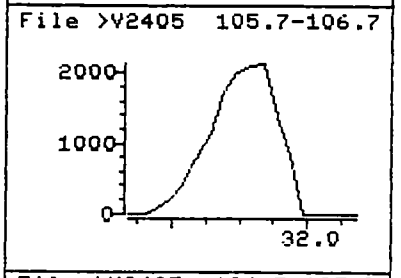
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

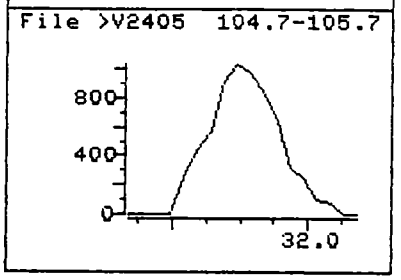


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2405::D1
Name: 7030.3 1g
Misc: 7030.3 1g
Quant Time: 920114 17:00
Injected at: 920114 16:18

Quant Output File: ^V2405::DB

Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 45
Compound Name: o-Xylene
Scan Number: 1401
Retention Time: 31.90 min.
Quant Ion: 91.0
Area: 41779
Concentration: 3.95 ppb
q-value: 95

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

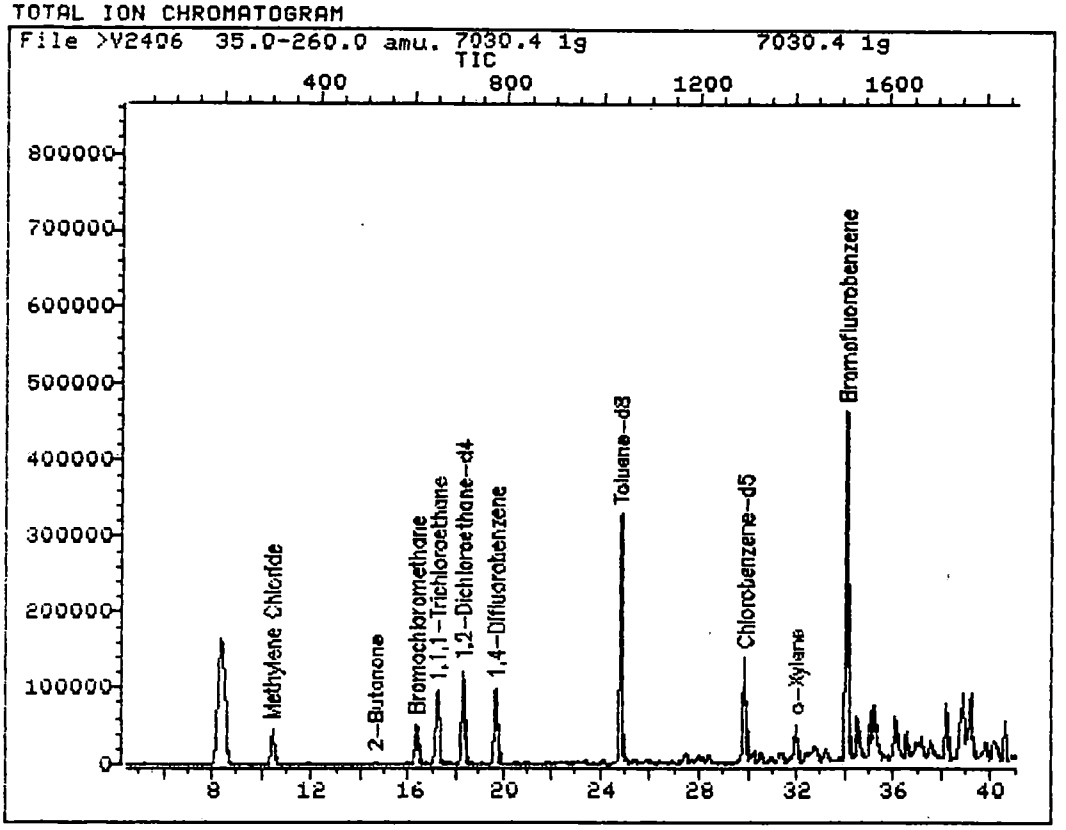
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.4 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2406	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	59	Trichloroethene	ND	29
Bromomethane	ND	59	Dibromochloromethane	ND	29
Vinyl Chloride	ND	59	1,1,2-Trichloroethane	ND	29
Chloroethane	ND	59	Benzene	ND	29
Methylene Chloride	140	29	trans-1,3-Dichloropropene	ND	29
Acrolein	ND	290	2-Chloroethylvinyl ether	ND	29
Acrylonitrile	ND	290	Bromoform	ND	29
Acetone	ND	29	2-Hexanone	ND	29
Carbon Disulfide	ND	29	4-Methyl-2-Pentanone	ND	29
1,1-Dichloroethene	ND	29	Tetrachloroethene	ND	29
1,1-Dichloroethane	ND	29	1,1,2,2-Tetrachloroethane	ND	29
trans-1,2-Dichloroethene	ND	29	Toluene	ND	29
Trichlorofluoromethane	ND	29	Chlorobenzene	ND	29
Chloroform	ND	29	Ethylbenzene	ND	29
1,2-Dichloroethane	ND	29	Styrene	ND	29
2-Butanone	190	29	o-Xylene	48	29
1,1,1-Trichloroethane	250	29	m + p-Xylenes	ND	29
Carbon Tetrachloride	ND	29	1,3-Dichlorobenzene	ND	29
Bromodichloromethane	ND	29	1,2-Dichlorobenzene	ND	29
Vinyl Acetate	ND	29	1,4-Dichlorobenzene	ND	29
1,2-Dichloropropane	ND	29	tert-Butyl Alcohol	ND	290
cis-1,3-Dichloropropene	ND	29	Methyl tert-Butyl Ether	ND	29

Percent Solid of 85.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



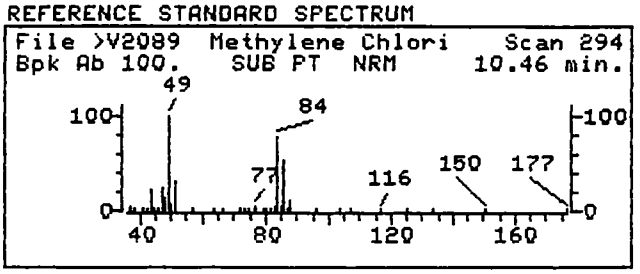
Data File: >V2406::D1
Name: 7030.4 1g
Misc: 7030.4 1g

Quant Output File: ^V2406::DB

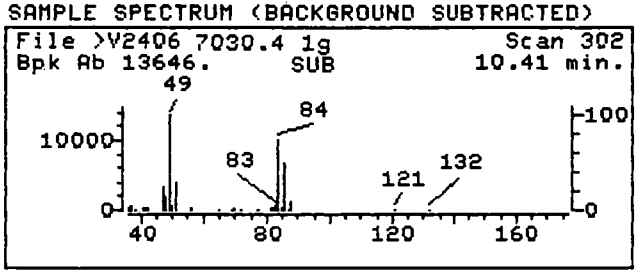
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 17:48
Injected at: 920114 17:06

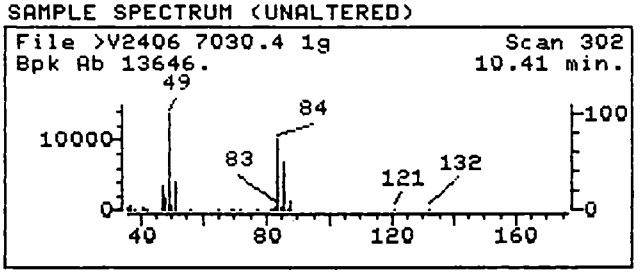
REFERENCE STANDARD SPECTRUM

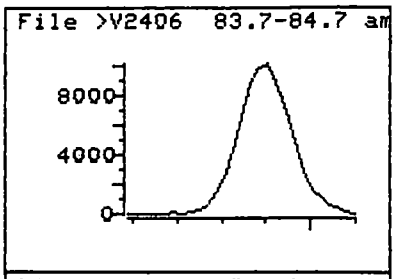


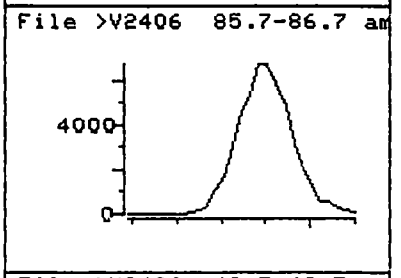
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

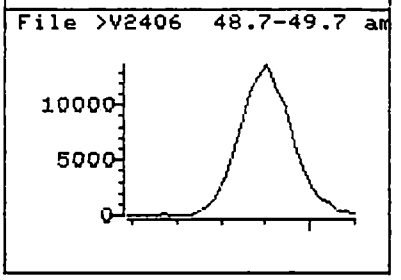


SAMPLE SPECTRUM (UNALTERED)





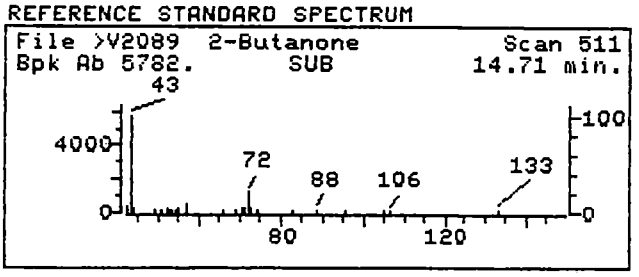




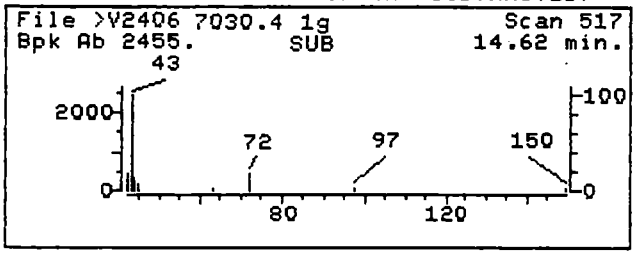
Data File: >V2406::D1 Quant Output File: ^V2406::DB
Name: 7030.4 1g
Misc: 7030.4 1g
Quant Time: 920114 17:48 Quant ID File: IDVOA::D4
Injected at: 920114 17:06 Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 302
Retention Time: 10.41 min.
Quant Ion: 84.0
Area: 84565
Concentration: 23.74 ppb
q-value: 94

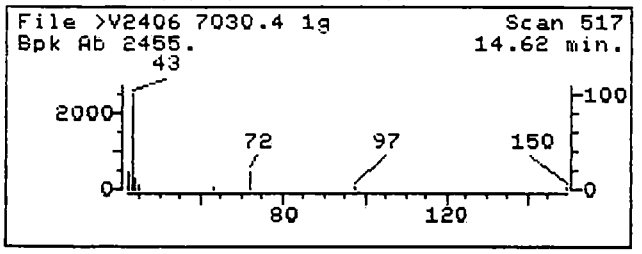
REFERENCE STANDARD SPECTRUM

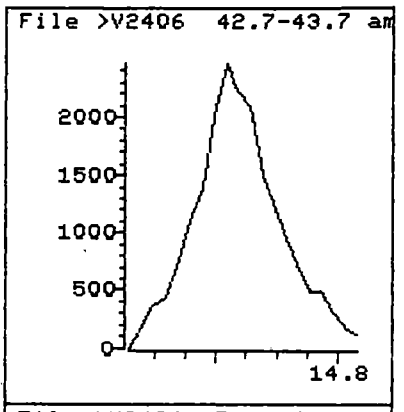


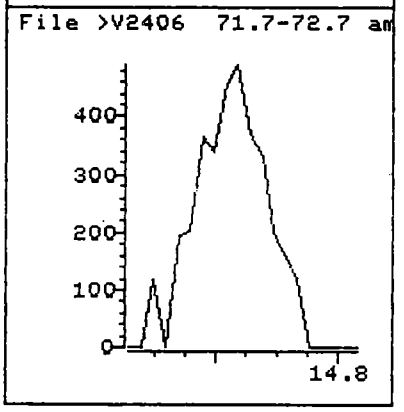
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







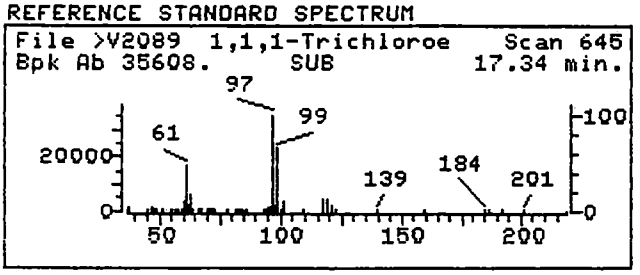
Data File: >V2406::D1
Name: 7030.4 1g
Misc: 7030.4 1g
Quant Time: 920114 17:48
Injected at: 920114 17:06

Quant Output File: ^V2406::DB

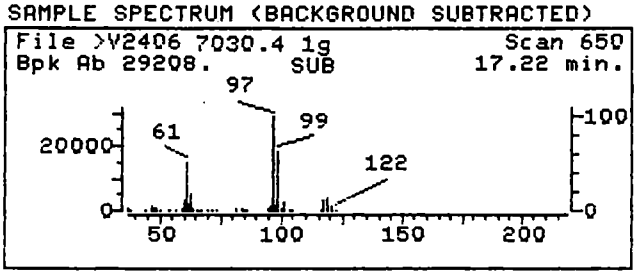
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 21
Compound Name: 2-Butanone
Scan Number: 517
Retention Time: 14.62 min.
Quant Ion: 43.0
Area: 22311
Concentration: 32.54 ppb
q-value: 94

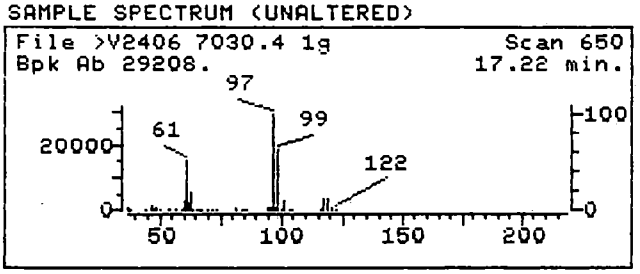
REFERENCE STANDARD SPECTRUM

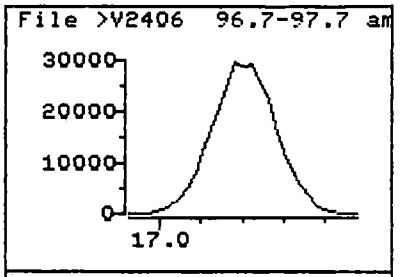


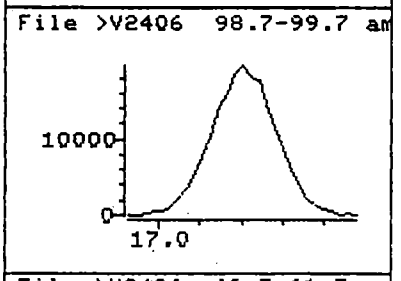
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

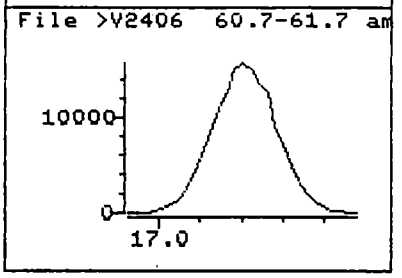


SAMPLE SPECTRUM (UNALTERED)





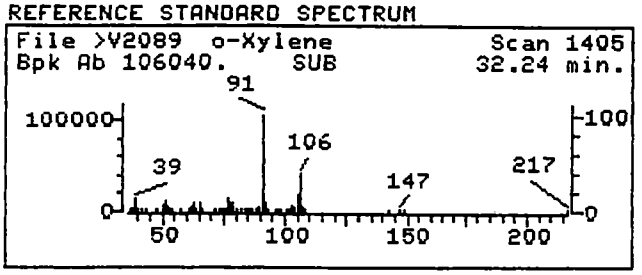




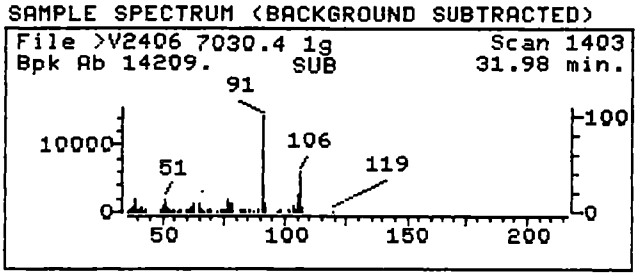
Data File: >V2406::D1 Quant Output File: ^V2406::DB
Name: 7030.4 1g
Misc: 7030.4 1g
Quant Time: 920114 17:48 Quant ID File: IDV0A::D4
Injected at: 920114 17:06 Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 650
Retention Time: 17.22 min.
Quant Ion: 97.0
Area: 331797
Concentration: 42.01 ppb
q-value: 91

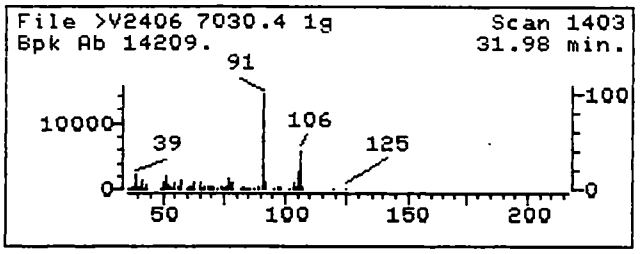
REFERENCE STANDARD SPECTRUM

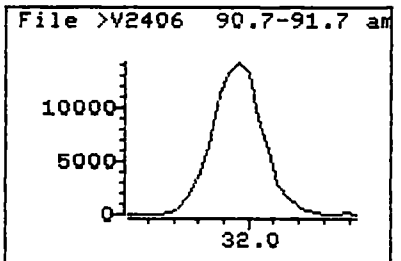


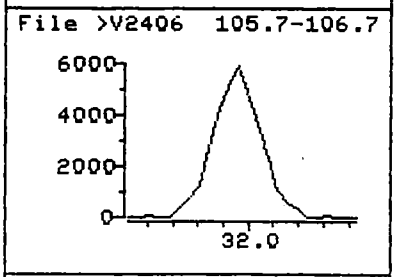
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

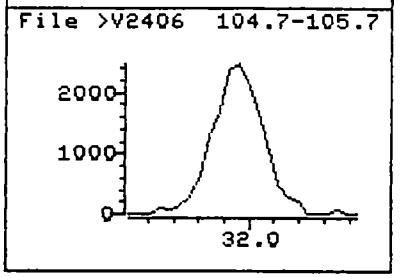


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2406::D1
Name: 7030.4 1g
Misc: 7030.4 1g
Quant Time: 920114 17:48
Injected at: 920114 17:06

Quant Output File: ^V2406::DB

Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 45
Compound Name: o-Xylene
Scan Number: 1403
Retention Time: 31.98 min.
Quant Ion: 91.0
Area: 102639
Concentration: 8.09 ppb
q-value: 92

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

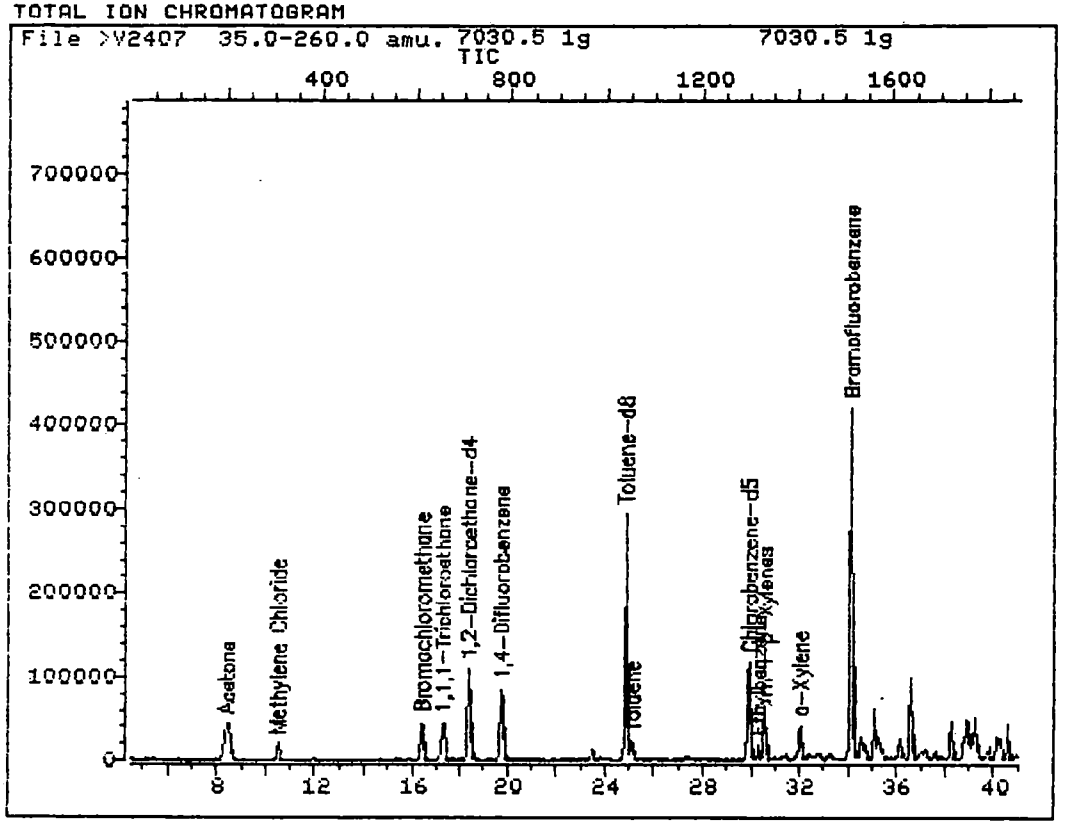
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.5 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>02407	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	61	Trichloroethene	ND	30
Bromomethane	ND	61	Dibromochloromethane	ND	30
Vinyl Chloride	ND	61	1,1,2-Trichloroethane	ND	30
Chloroethane	ND	61	Benzene	ND	30
Methylene Chloride	72	30	trans-1,3-Dichloropropene	ND	30
Acrolein	ND	300	2-Chloroethylvinyl ether	ND	30
Acrylonitrile	ND	300	Bromoform	ND	30
Acetone	440	30	2-Hexanone	ND	30
Carbon Disulfide	ND	30	4-Methyl-2-Pentanone	ND	30
1,1-Dichloroethene	ND	30	Tetrachloroethene	ND	30
1,1-Dichloroethane	ND	30	1,1,2,2-Tetrachloroethane	ND	30
trans-1,2-Dichloroethene	ND	30	Toluene	37	30
Trichlorofluoromethane	ND	30	Chlorobenzene	ND	30
Chloroform	ND	30	Ethylbenzene	19 J	30
1,2-Dichloroethane	ND	30	Styrene	ND	30
2-Butanone	ND	30	o-Xylene	48	30
1,1,1-Trichloroethane	130	30	m + p-Xylenes	91	30
Carbon Tetrachloride	ND	30	1,3-Dichlorobenzene	ND	30
Bromodichloromethane	ND	30	1,2-Dichlorobenzene	ND	30
Vinyl Acetate	ND	30	1,4-Dichlorobenzene	ND	30
1,2-Dichloropropane	ND	30	tert-Butyl Alcohol	ND	300
cis-1,3-Dichloropropene	ND	30	Methyl tert-Butyl Ether	ND	30

Percent Solid of 82.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

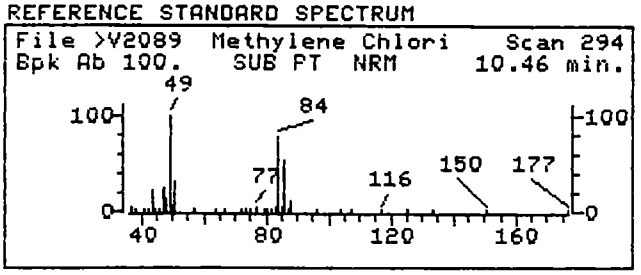


Data File: >V2407::D1 Quant Output File: ^V2407::DB
Name: 7030.5 1g
Misc: 7030.5 1g

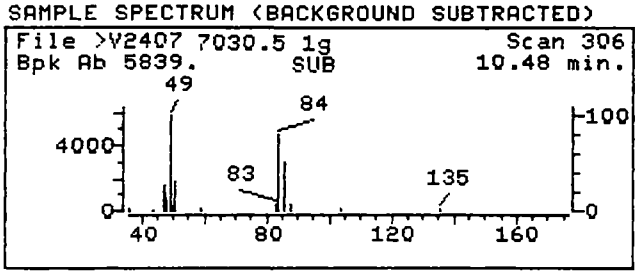
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 18:36
Injected at: 920114 17:54

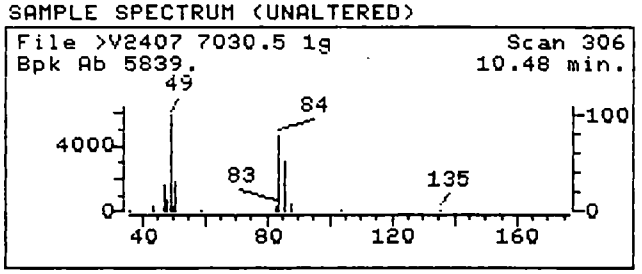
REFERENCE STANDARD SPECTRUM

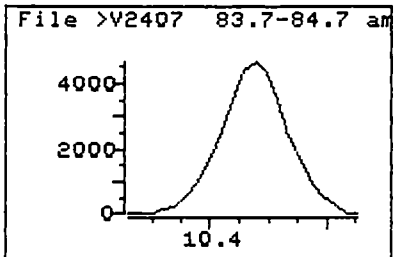


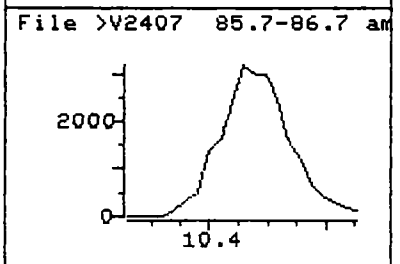
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

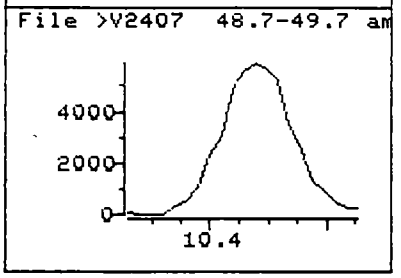


SAMPLE SPECTRUM (UNALTERED)







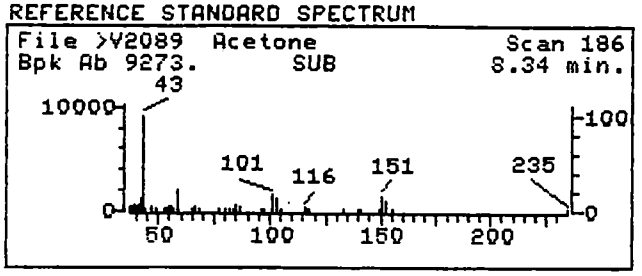


Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

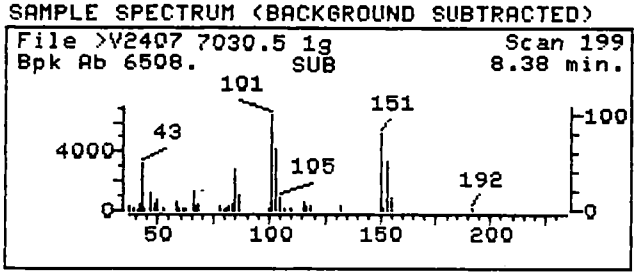
Quant Output File: ^V2407::DB
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 306
Retention Time: 10.48 min.
Quant Ion: 84.0
Area: 37953
Concentration: 11.87 ppb
q-value: 95

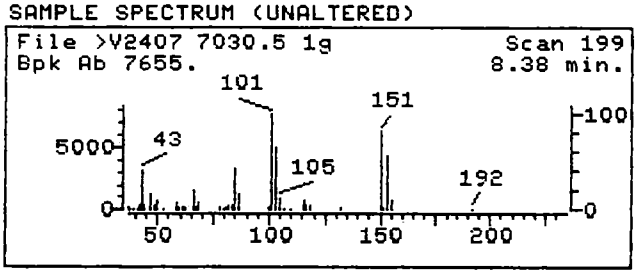
REFERENCE STANDARD SPECTRUM

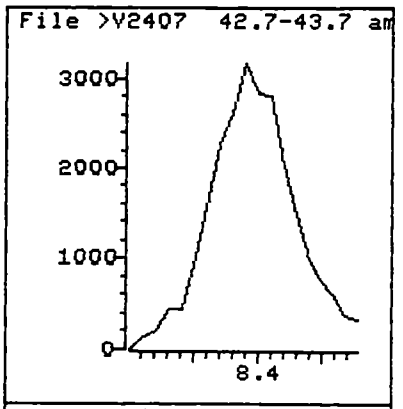


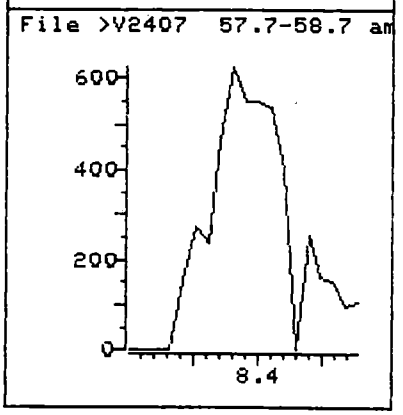
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







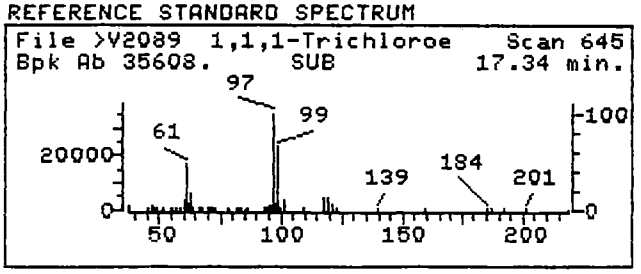
Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

Quant Output File: ^V2407::DB

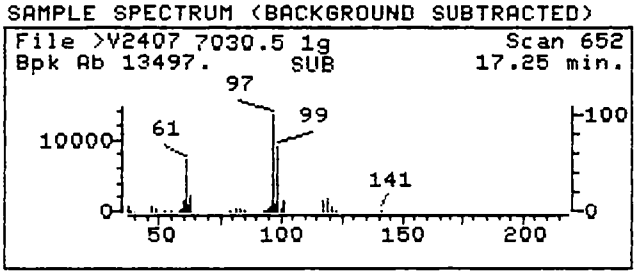
Quant ID File: IDV0A::D4
Last Calibration: 911224 13:28

Compound No: 10
Compound Name: Acetone
Scan Number: 199
Retention Time: 8.38 min.
Quant Ion: 43.0
Area: 28288
Concentration: 72.88 ppb
q-value: 84

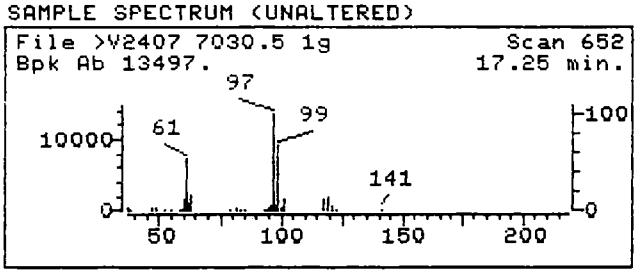
REFERENCE STANDARD SPECTRUM

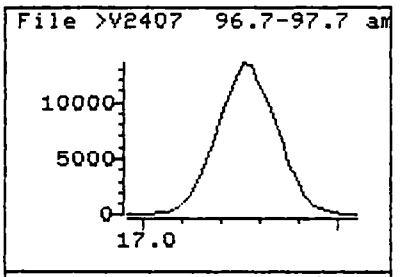


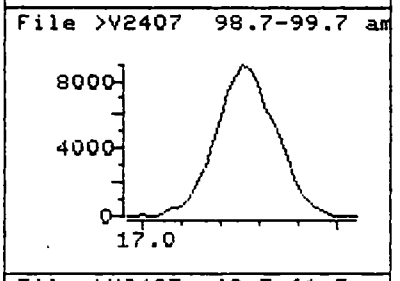
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

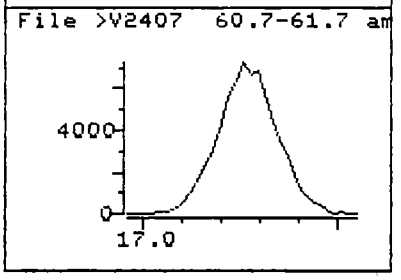


SAMPLE SPECTRUM (UNALTERED)







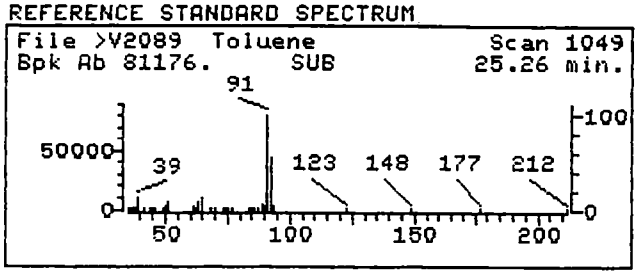


Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

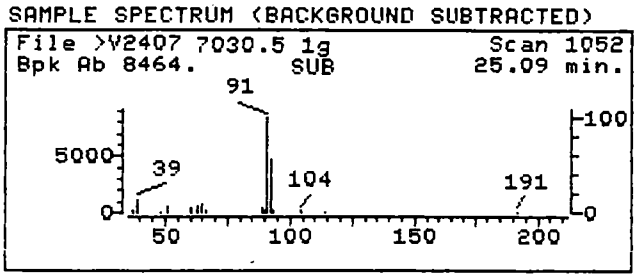
Quant Output File: ^V2407::DB
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 652
Retention Time: 17.25 min.
Quant Ion: 97.0
Area: 147847
Concentration: 21.54 ppb
q-value: 95

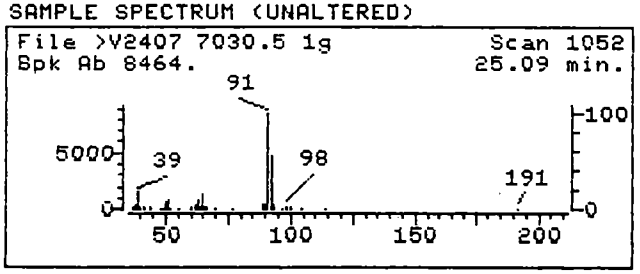
REFERENCE STANDARD SPECTRUM

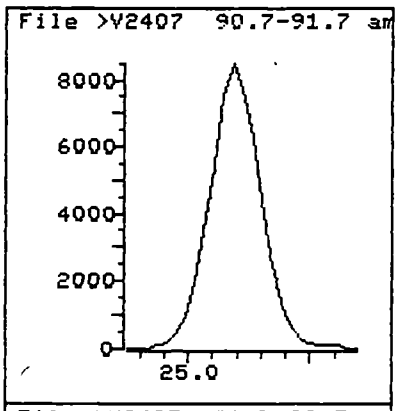


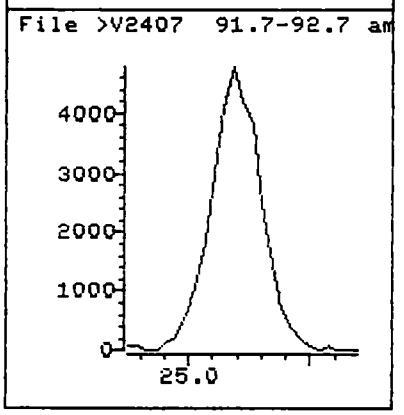
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







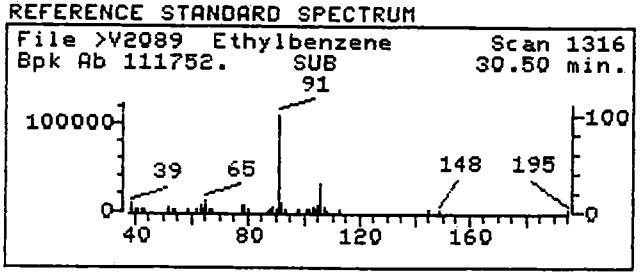
Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

Quant Output File: ^V2407::DB

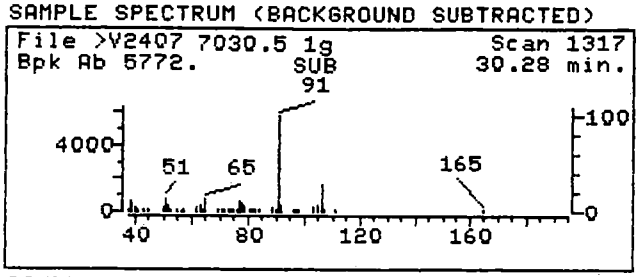
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 40
Compound Name: Toluene
Scan Number: 1052
Retention Time: 25.09 min.
Quant Ion: 91.0
Area: 62078
Concentration: 6.00 ppb
q-value: 95

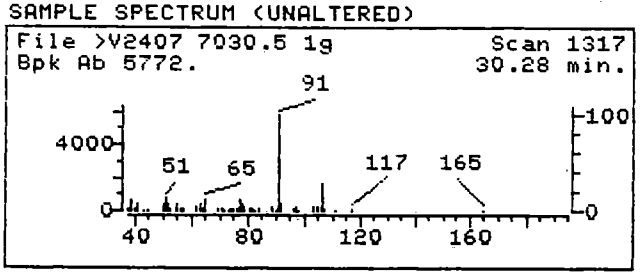
REFERENCE STANDARD SPECTRUM

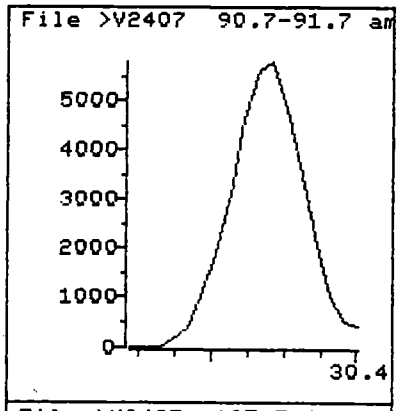


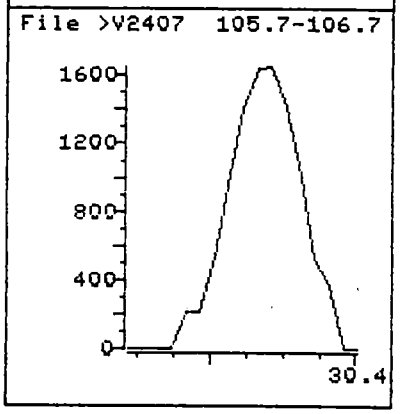
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







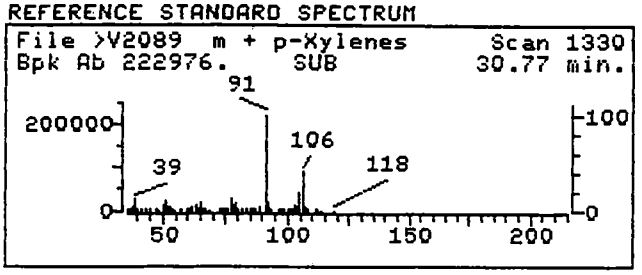
Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

Quant Output File: ^V2407::DB

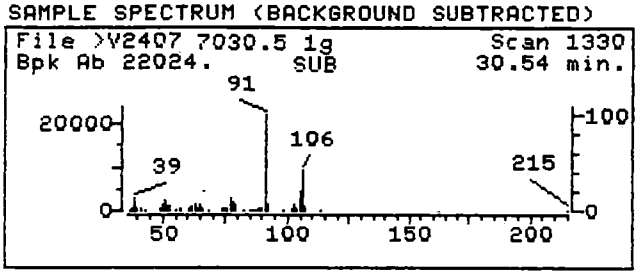
Quant ID File: IDV0A::D4
Last Calibration: 911224 13:28

Compound No: 42
Compound Name: Ethylbenzene
Scan Number: 1317
Retention Time: 30.28 min.
Quant Ion: 91.0
Area: 41291
Concentration: 3.15 ppb
q-value: 96

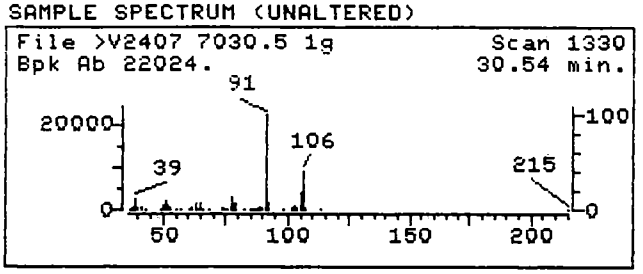
REFERENCE STANDARD SPECTRUM

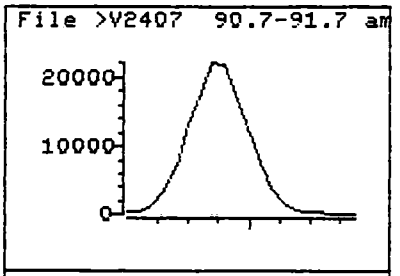


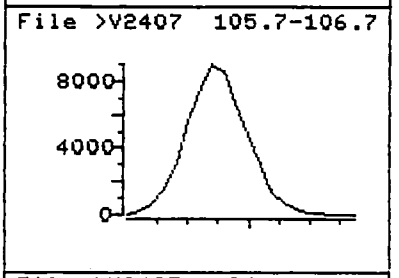
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

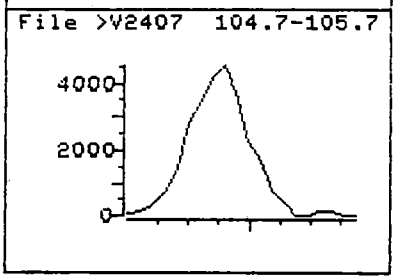


SAMPLE SPECTRUM (UNALTERED)









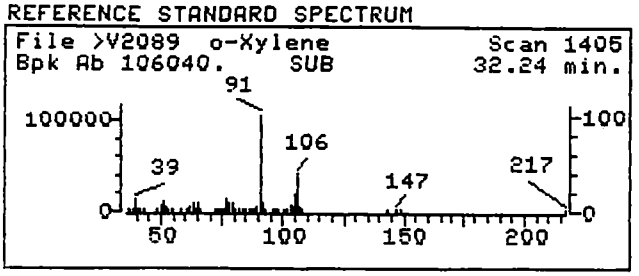
Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

Quant Output File: ^V2407::DB

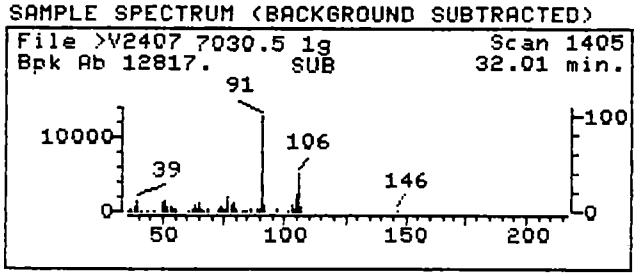
Quant ID File: IDV0A::D4
Last Calibration: 911224 13:28

Compound No: 44
Compound Name: m + p-Xylenes
Scan Number: 1330
Retention Time: 30.54 min.
Quant Ion: 91.0
Area: 155319
Concentration: 14.91 ppb
q-value: 93

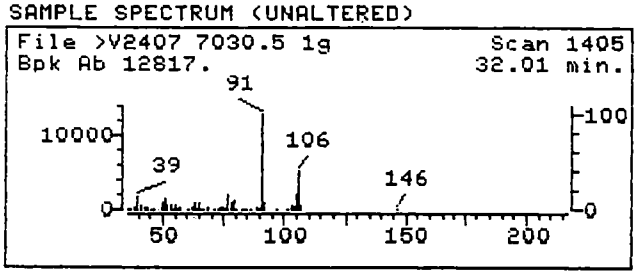
REFERENCE STANDARD SPECTRUM

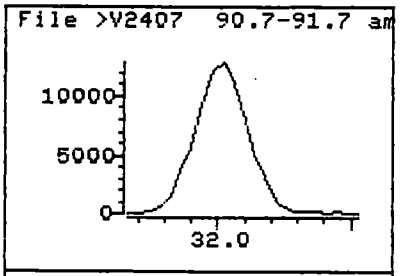


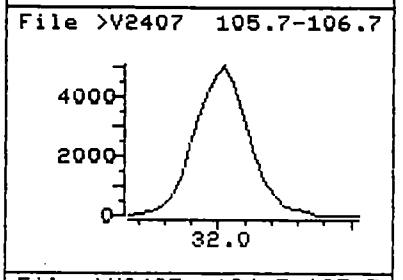
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

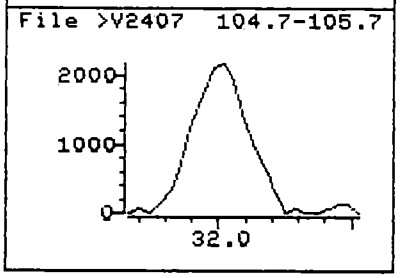


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2407::D1
Name: 7030.5 1g
Misc: 7030.5 1g
Quant Time: 920114 18:36
Injected at: 920114 17:54

Quant Output File: ^V2407::DB

Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 45
Compound Name: o-Xylene
Scan Number: 1405
Retention Time: 32.01 min.
Quant Ion: 91.0
Area: 91045
Concentration: 7.89 ppb
q-value: 94

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

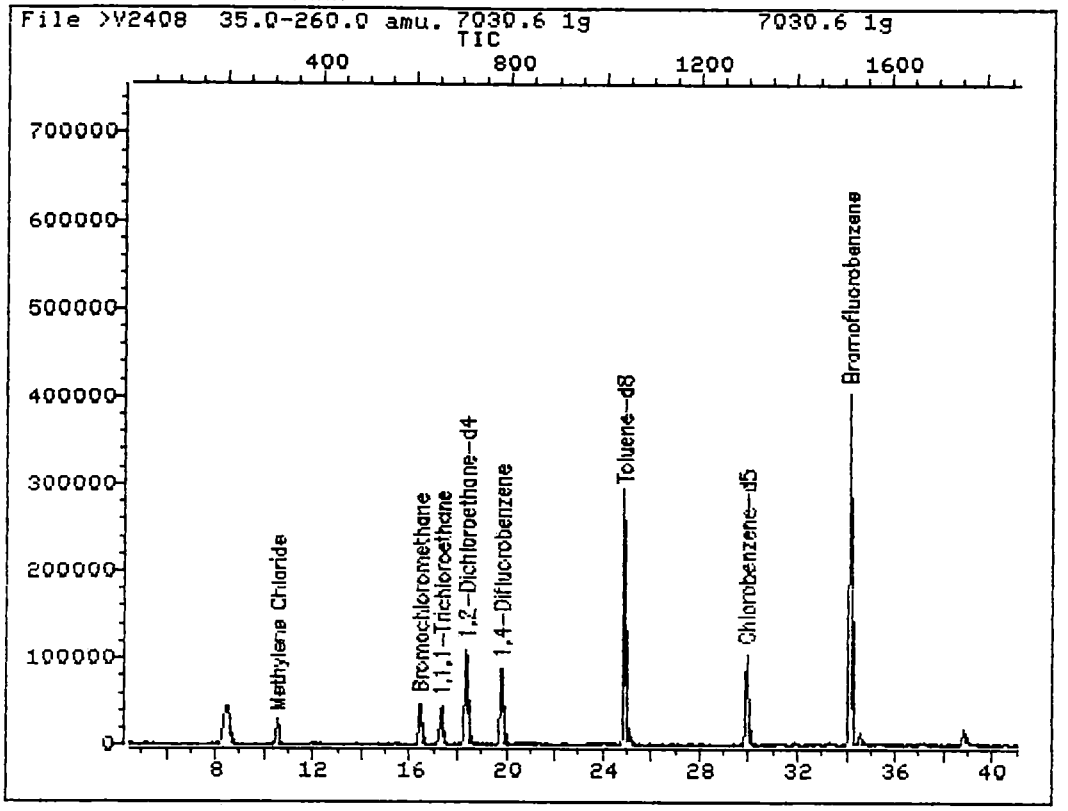
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.6 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2408	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	60	Trichloroethene	ND	30
Bromomethane	ND	60	Dibromochloromethane	ND	30
Vinyl Chloride	ND	60	1,1,2-Trichloroethane	ND	30
Chloroethane	ND	60	Benzene	ND	30
Methylene Chloride	94	30	trans-1,3-Dichloropropene	ND	30
Acrolein	ND	300	2-Chloroethylvinyl ether	ND	30
Acrylonitrile	ND	300	Bromoform	ND	30
Acetone	ND	30	2-Hexanone	ND	30
Carbon Disulfide	ND	30	4-Methyl-2-Pentanone	ND	30
1,1-Dichloroethene	ND	30	Tetrachloroethene	ND	30
1,1-Dichloroethane	ND	30	1,1,2,2-Tetrachloroethane	ND	30
trans-1,2-Dichloroethene	ND	30	Toluene	ND	30
Trichlorofluoromethane	ND	30	Chlorobenzene	ND	30
Chloroform	ND	30	Ethylbenzene	ND	30
1,2-Dichloroethane	ND	30	Styrene	ND	30
2-Butanone	ND	30	o-Xylene	ND	30
1,1,1-Trichloroethane	130	30	m + p-Xylenes	ND	30
Carbon Tetrachloride	ND	30	1,3-Dichlorobenzene	ND	30
Bromodichloromethane	ND	30	1,2-Dichlorobenzene	ND	30
Vinyl Acetate	ND	30	1,4-Dichlorobenzene	ND	30
1,2-Dichloropropane	ND	30	tert-Butyl Alcohol	ND	300
cis-1,3-Dichloropropene	ND	30	Methyl tert-Butyl Ether	ND	30

Percent Solid of 83.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



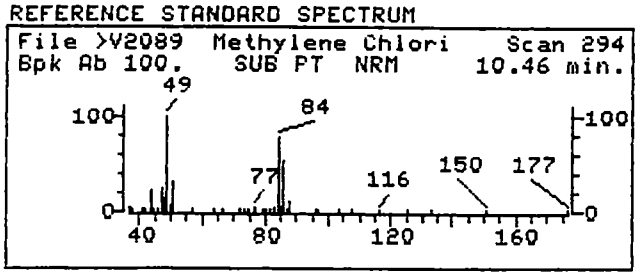
Data File: >V2408::D1
Name: 7030.6 1g
Misc: 7030.6 1g

Quant Output File: ^V2408::DB

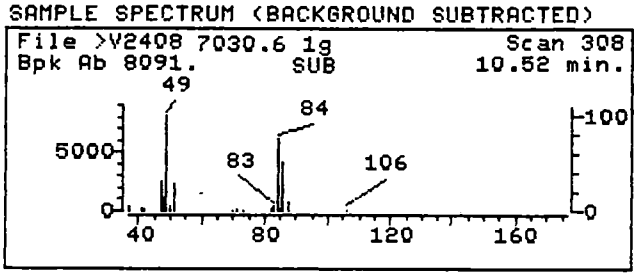
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 19:23
Injected at: 920114 18:41

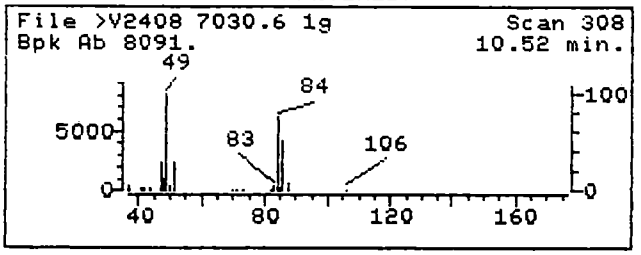
REFERENCE STANDARD SPECTRUM

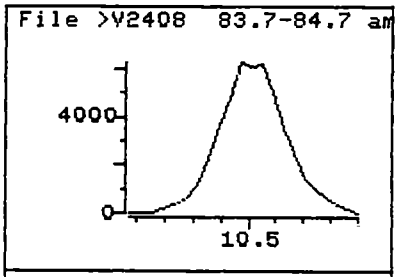


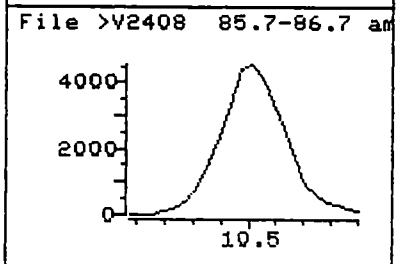
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

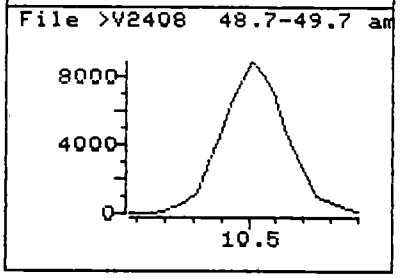


SAMPLE SPECTRUM (UNALTERED)







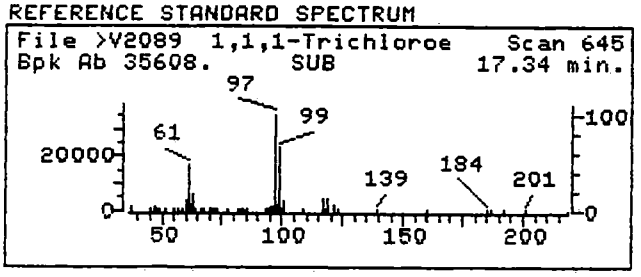


Data File: >V2408::D1
Name: 7030.6 1g
Misc: 7030.6 1g
Quant Time: 920114 19:23
Injected at: 920114 18:41

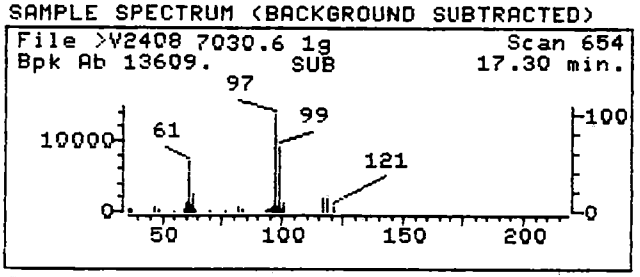
Quant Output File: ^V2408::DB
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 308
Retention Time: 10.52 min.
Quant Ion: 84.0
Area: 53998
Concentration: 15.55 ppb
q-value: 95

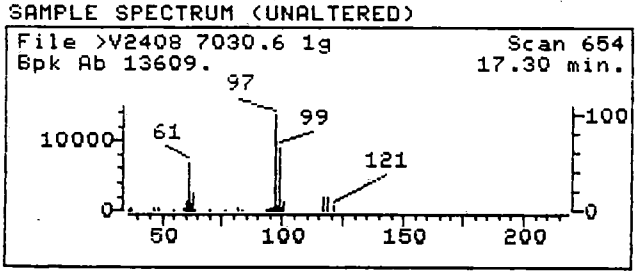
REFERENCE STANDARD SPECTRUM

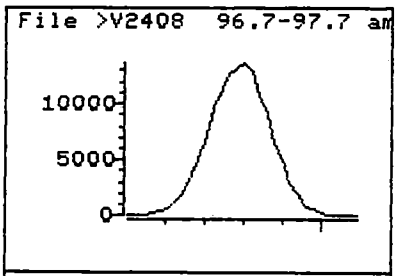


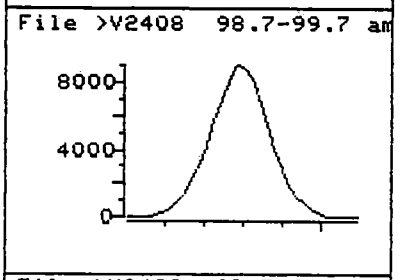
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

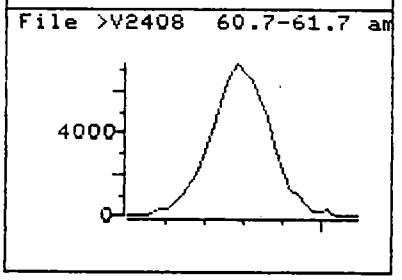


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2408::D1
Name: 7030.6 1g
Misc: 7030.6 1g
Quant Time: 920114 19:23
Injected at: 920114 18:41

Quant Output File: ^V2408::DB
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 654
Retention Time: 17.30 min.
Quant Ion: 97.0
Area: 154845
Concentration: 21.21 ppb
q-value: 92

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

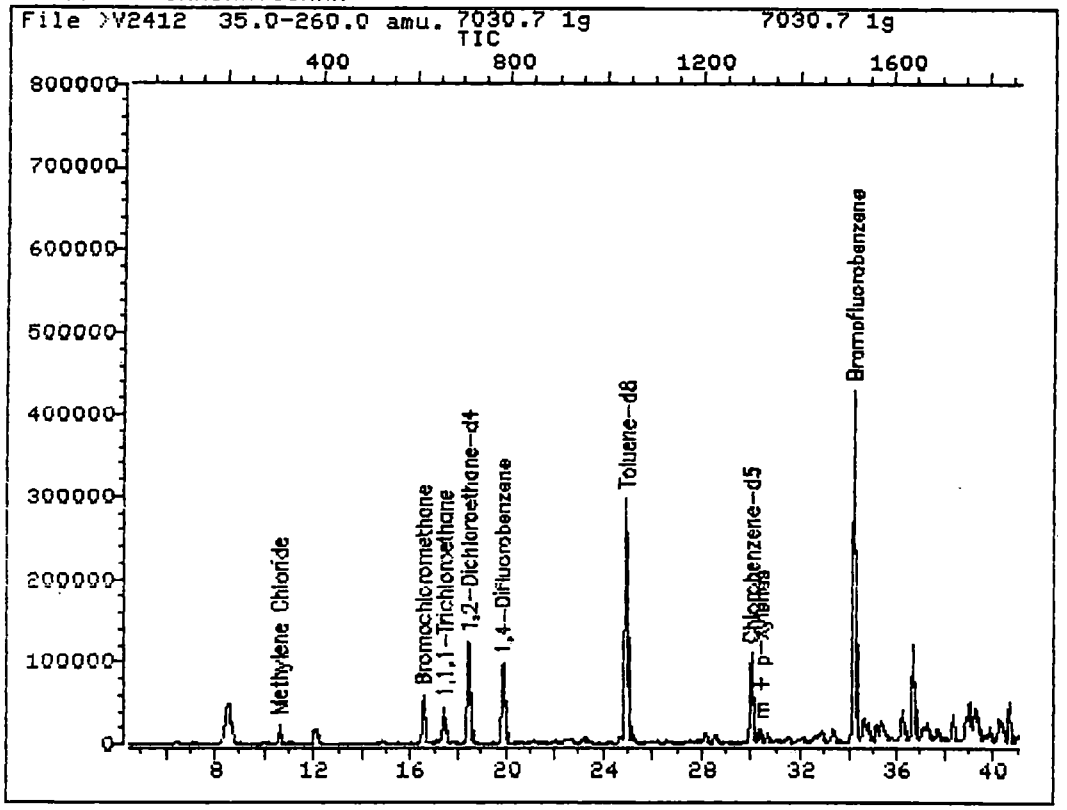
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.7 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>02412	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	60	Trichloroethene	ND	30
Bromomethane	ND	60	Dibromochloromethane	ND	30
Vinyl Chloride	ND	60	1,1,2-Trichloroethane	ND	30
Chloroethane	ND	60	Benzene	ND	30
Methylene Chloride	68	30	trans-1,3-Dichloropropene	ND	30
Acrolein	ND	300	2-Chloroethylvinyl ether	ND	30
Acrylonitrile	ND	300	Bromoform	ND	30
Acetone	ND	30	2-Hexanone	ND	30
Carbon Disulfide	ND	30	4-Methyl-2-Pentanone	ND	30
1,1-Dichloroethene	ND	30	Tetrachloroethene	ND	30
1,1-Dichloroethane	ND	30	1,1,2,2-Tetrachloroethane	ND	30
trans-1,2-Dichloroethene	ND	30	Toluene	ND	30
Trichlorofluoromethane	ND	30	Chlorobenzene	ND	30
Chloroform	ND	30	Ethylbenzene	ND	30
1,2-Dichloroethane	ND	30	Styrene	ND	30
2-Butanone	ND	30	o-Xylene	ND	30
1,1,1-Trichloroethane	110	30	m + p-Xylenes	23 J	30
Carbon Tetrachloride	ND	30	1,3-Dichlorobenzene	ND	30
Bromodichloromethane	ND	30	1,2-Dichlorobenzene	ND	30
Vinyl Acetate	ND	30	1,4-Dichlorobenzene	ND	30
1,2-Dichloropropane	ND	30	tert-Butyl Alcohol	ND	300
cis-1,3-Dichloropropene	ND	30	Methyl tert-Butyl Ether	ND	30

Percent Solid of 84.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

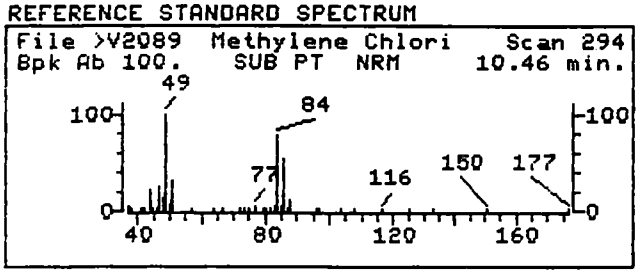


Data File: >V2412::D1 Quant Output File: ^V2412::DB
Name: 7030.7 1g
Misc: 7030.7 1g

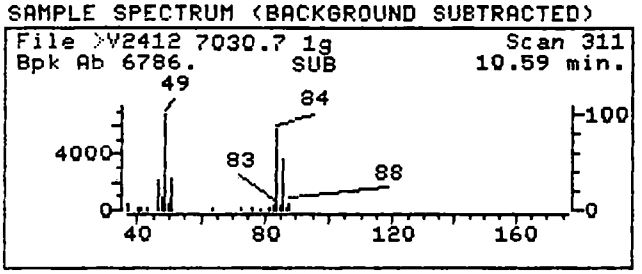
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920115 10:28
Injected at: 920114 21:49

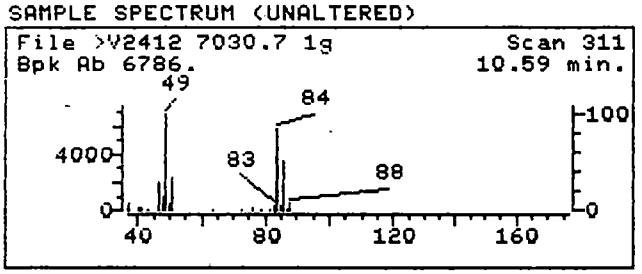
REFERENCE STANDARD SPECTRUM

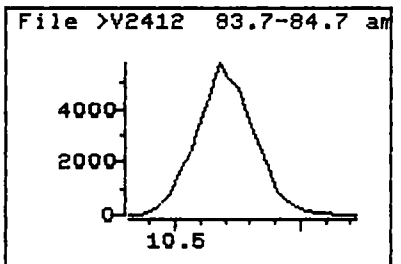


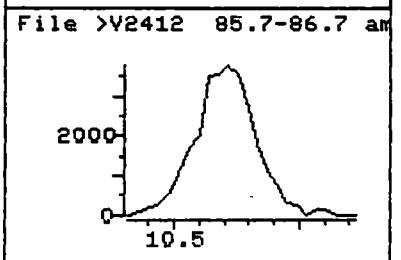
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

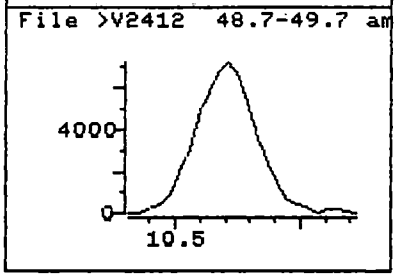


SAMPLE SPECTRUM (UNALTERED)





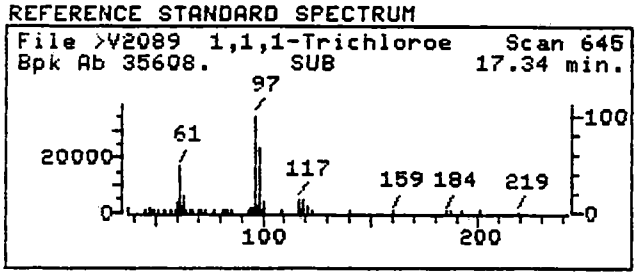




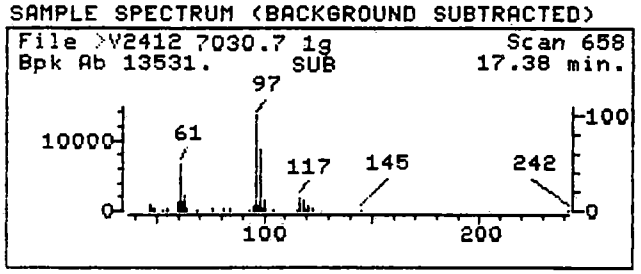
Data File: >V2412::D1 Quant Output File: ^V2412::DB
Name: 7030.7 1g
Misc: 7030.7 1g
Quant Time: 920115 10:28 Quant ID File: IDVOA::D4
Injected at: 920114 21:49 Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 311
Retention Time: 10.59 min.
Quant Ion: 84.0
Area: 46283
Concentration: 11.38 ppb
q-value: 92

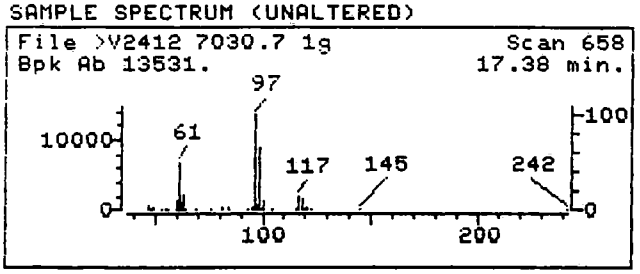
REFERENCE STANDARD SPECTRUM

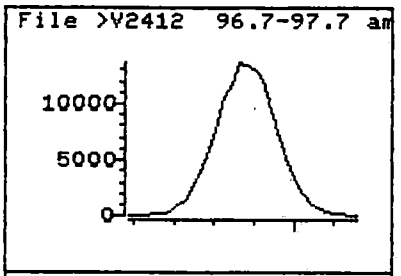


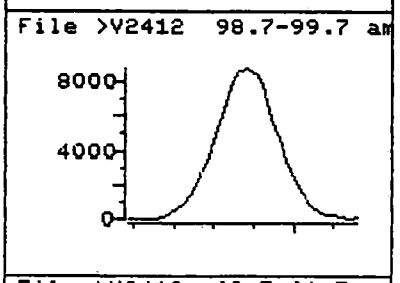
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

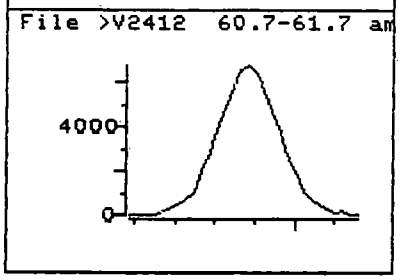


SAMPLE SPECTRUM (UNALTERED)





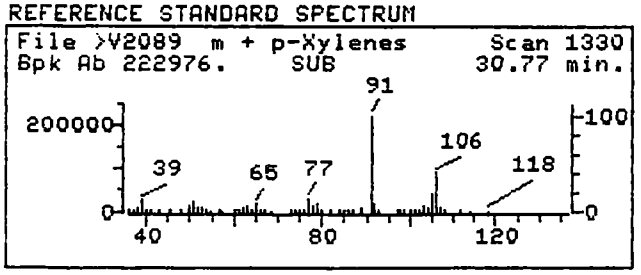




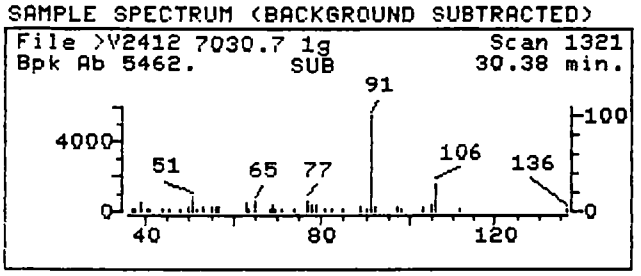
Data File: >V2412::D1 Quant Output File: ^V2412::DB
Name: 7030.7 1g
Misc: 7030.7 1g
Quant Time: 920115 10:28 Quant ID File: IDVOA::D4
Injected at: 920114 21:49 Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 658
Retention Time: 17.38 min.
Quant Ion: 97.0
Area: 149837
Concentration: 18.22 ppb
q-value: 91

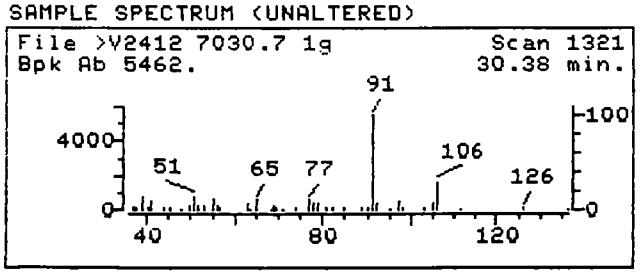
REFERENCE STANDARD SPECTRUM

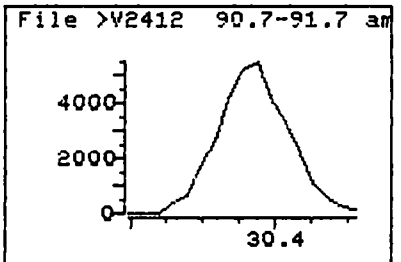


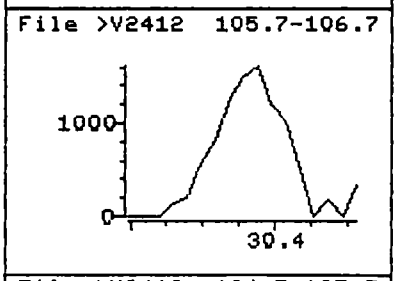
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

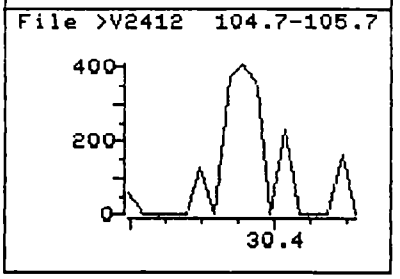


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2412::D1
Name: 7030.7 1g
Misc: 7030.7 1g
Quant Time: 920115 10:28
Injected at: 920114 21:49

Quant Output File: ^V2412::DB

Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 44
Compound Name: m + p-Xylenes
Scan Number: 1321
Retention Time: 30.38 min.
Quant Ion: 91.0
Area: 37703
Concentration: 3.88 ppb
q-value: 73

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.8 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2409	DATE ANALYZED	01/14/92

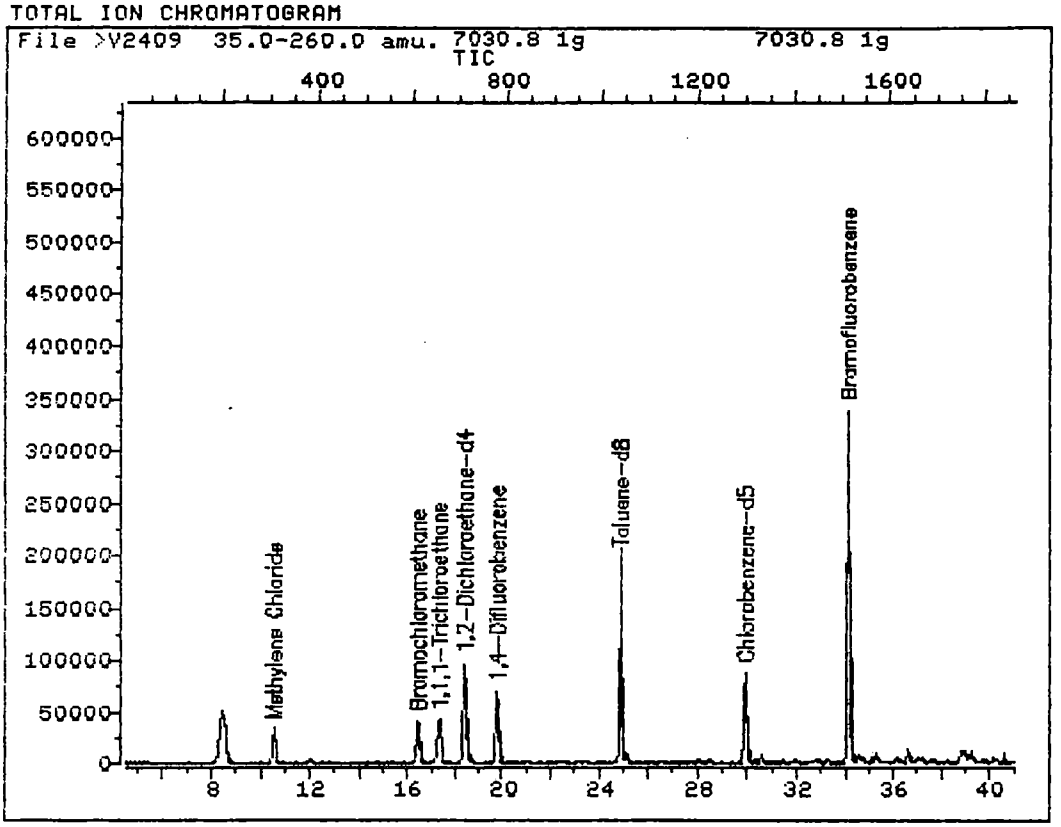
COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	63	Trichloroethene	ND	32
Bromomethane	ND	63	Dibromochloromethane	ND	32
Vinyl Chloride	ND	63	1,1,2-Trichloroethane	ND	32
Chloroethane	ND	63	Benzene	ND	32
Methylene Chloride	140	32	trans-1,3-Dichloropropene	ND	32
Acrolein	ND	320	2-Chloroethylvinyl ether	ND	32
Acrylonitrile	ND	320	Bromoform	ND	32
Acetone	ND	32	2-Hexanone	ND	32
Carbon Disulfide	ND	32	4-Methyl-2-Pentanone	ND	32
1,1-Dichloroethene	ND	32	Tetrachloroethene	ND	32
1,1-Dichloroethane	ND	32	1,1,2,2-Tetrachloroethane	ND	32
trans-1,2-Dichloroethene	ND	32	Toluene	ND	32
Trichlorofluoromethane	ND	32	Chlorobenzene	ND	32
Chloroform	ND	32	Ethylbenzene	ND	32
1,2-Dichloroethane	ND	32	Styrene	ND	32
2-Butanone	ND	32	o-Xylene	ND	32
1,1,1-Trichloroethane	170	32	m + p-Xylenes	ND	32
Carbon Tetrachloride	ND	32	1,3-Dichlorobenzene	ND	32
Bromodichloromethane	ND	32	1,2-Dichlorobenzene	ND	32
Vinyl Acetate	ND	32	1,4-Dichlorobenzene	ND	32
1,2-Dichloropropane	ND	32	tert-Butyl Alcohol	ND	320
cis-1,3-Dichloropropene	ND	32	Methyl tert-Butyl Ether	ND	32

Percent Solid of 79.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

41

TOTAL ION CHROMATOGRAM

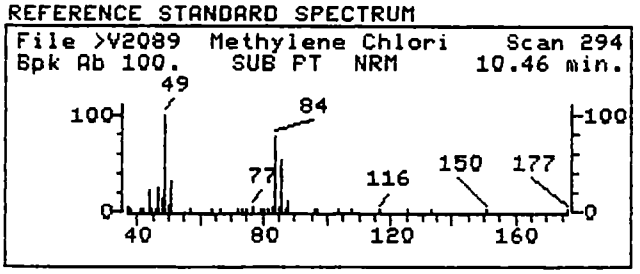


Data File: >V2409::D1 Quant Output File: ^V2409::DB
Name: 7030.8 1g
Misc: 7030.8 1g

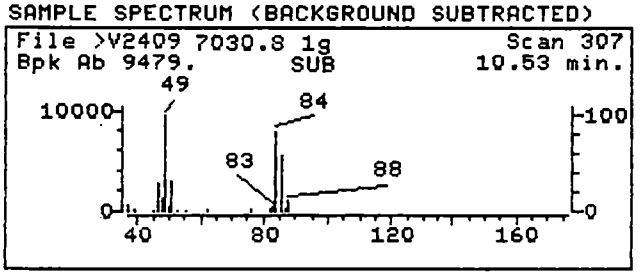
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 20:10
Injected at: 920114 19:28

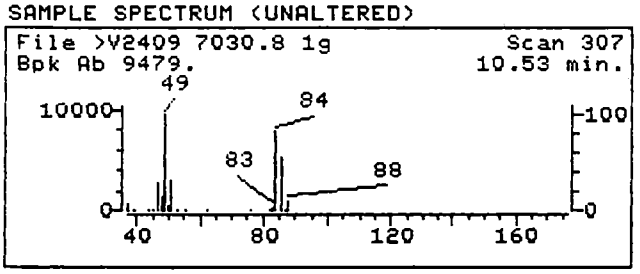
REFERENCE STANDARD SPECTRUM

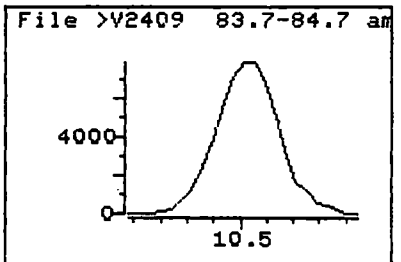


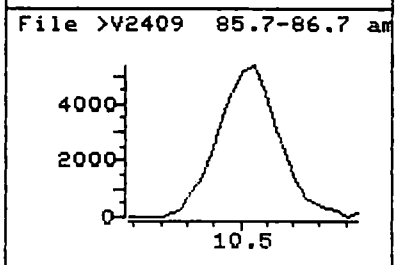
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

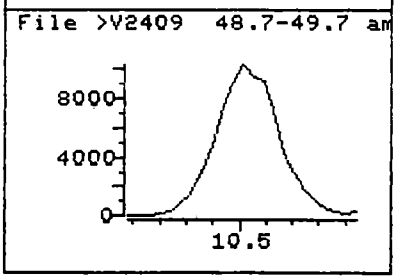


SAMPLE SPECTRUM (UNALTERED)





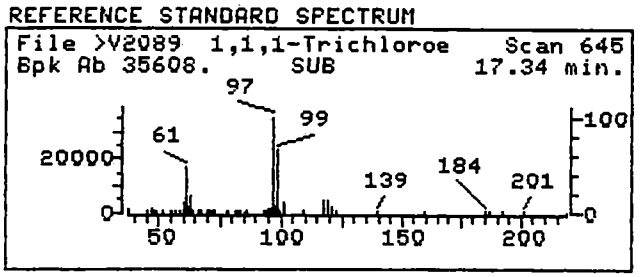


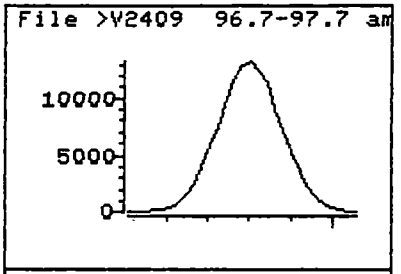


Data File: >V2409::D1 Quant Output File: ^V2409::DB
Name: 7030.8 1g
Misc: 7030.8 1g
Quant Time: 920114 20:10 Quant ID File: IDV0A::D4
Injected at: 920114 19:28 Last Calibration: 911224 13:28

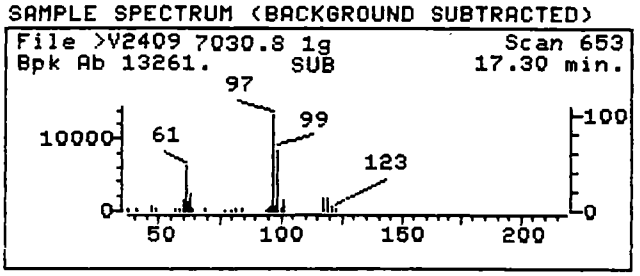
Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 307
Retention Time: 10.53 min.
Quant Ion: 84.0
Area: 66553
Concentration: 22.63 ppb
q-value: 91

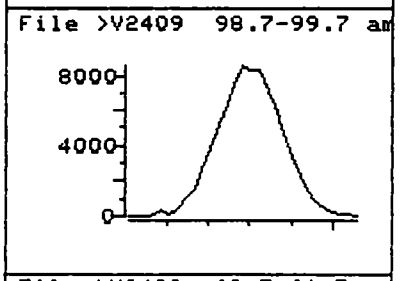
REFERENCE STANDARD SPECTRUM



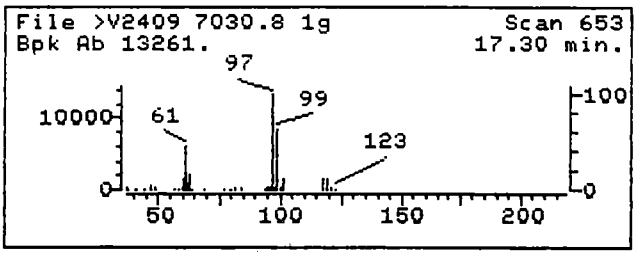


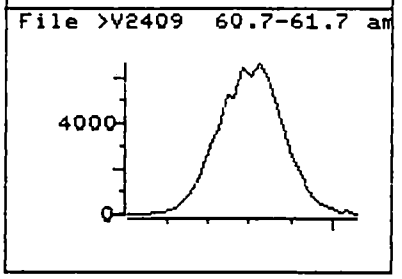
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)





Data File: >V2409::D1 Quant Output File: ^V2409::DB
Name: 7030.8 1g
Misc: 7030.8 1g
Quant Time: 920114 20:10 Quant ID File: IDV0A::D4
Injected at: 920114 19:28 Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 653
Retention Time: 17.30 min.
Quant Ion: 97.0
Area: 146595
Concentration: 26.45 ppb
q-value: 87

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.9 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>02410	DATE ANALYZED	01/14/92

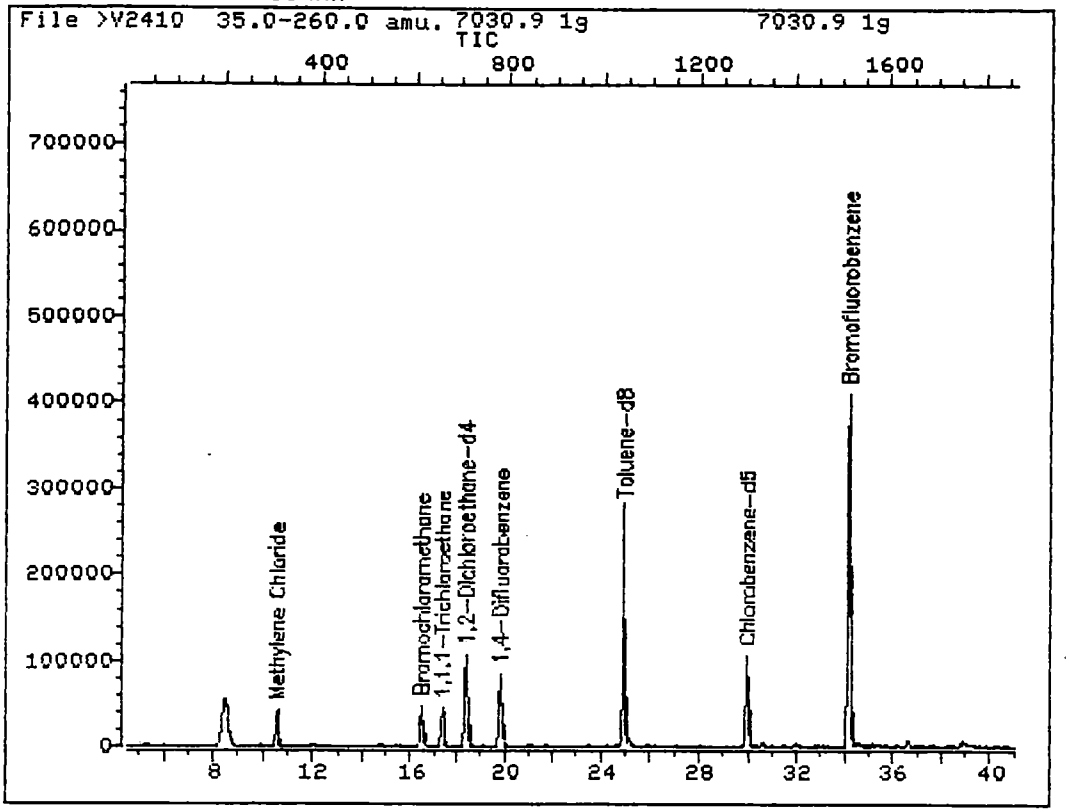
COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	57	Trichloroethene	ND	29
Bromomethane	ND	57	Dibromochloromethane	ND	29
Vinyl Chloride	ND	57	1,1,2-Trichloroethane	ND	29
Chloroethane	ND	57	Benzene	ND	29
Methylene Chloride	130	29	trans-1,3-Dichloropropene	ND	29
Acrolein	ND	290	2-Chloroethylvinyl ether	ND	29
Acrylonitrile	ND	290	Bromoform	ND	29
Acetone	ND	29	2-Hexanone	ND	29
Carbon Disulfide	ND	29	4-Methyl-2-Pentanone	ND	29
1,1-Dichloroethene	ND	29	Tetrachloroethene	ND	29
1,1-Dichloroethane	ND	29	1,1,2,2-Tetrachloroethane	ND	29
trans-1,2-Dichloroethene	ND	29	Toluene	ND	29
Trichlorofluoromethane	ND	29	Chlorobenzene	ND	29
Chloroform	ND	29	Ethylbenzene	ND	29
1,2-Dichloroethane	ND	29	Styrene	ND	29
2-Butanone	ND	29	o-Xylene	ND	29
1,1,1-Trichloroethane	120	29	m + p-Xylenes	ND	29
Carbon Tetrachloride	ND	29	1,3-Dichlorobenzene	ND	29
Bromodichloromethane	ND	29	1,2-Dichlorobenzene	ND	29
Vinyl Acetate	ND	29	1,4-Dichlorobenzene	ND	29
1,2-Dichloropropane	ND	29	tert-Butyl Alcohol	ND	290
cis-1,3-Dichloropropene	ND	29	Methyl tert-Butyl Ether	ND	29

Percent Solid of 87.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

51

TOTAL ION CHROMATOGRAM



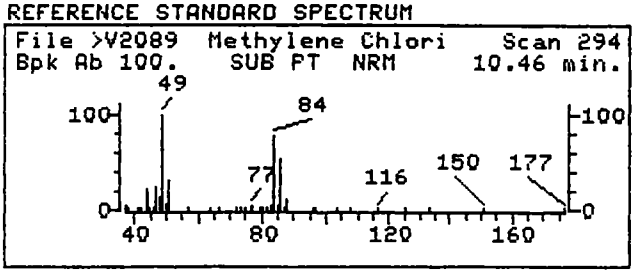
Data File: >V2410::D1
Name: 7030.9 1g
Misc: 7030.9 1g

Quant Output File: ^V2410::DB

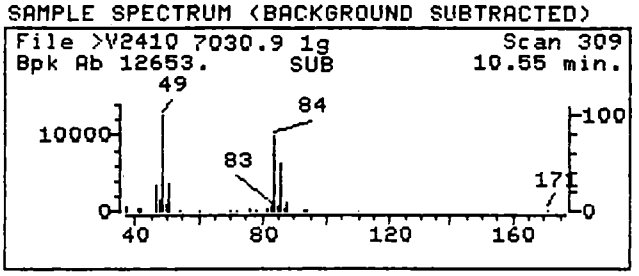
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 20:57
Injected at: 920114 20:15

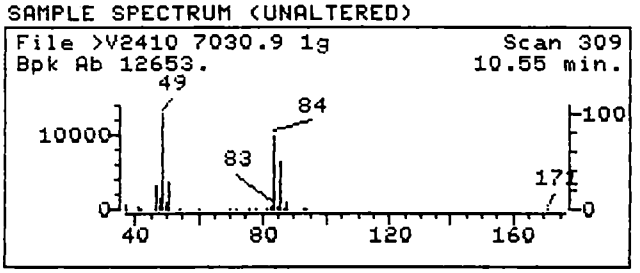
REFERENCE STANDARD SPECTRUM

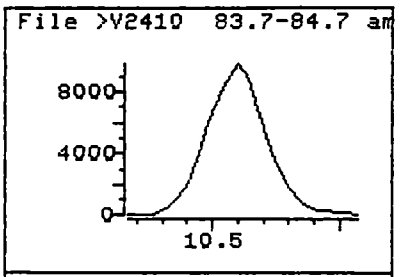


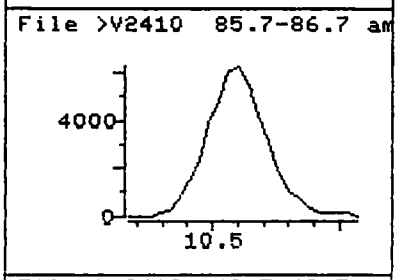
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

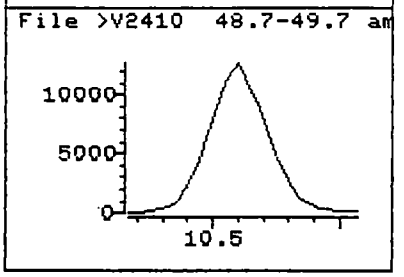


SAMPLE SPECTRUM (UNALTERED)





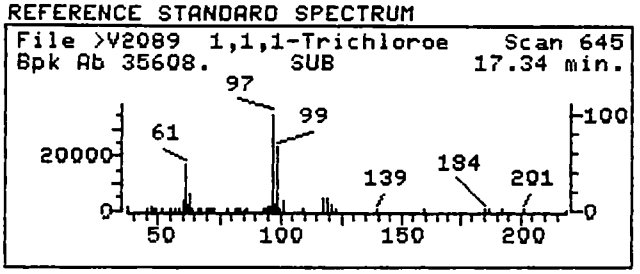




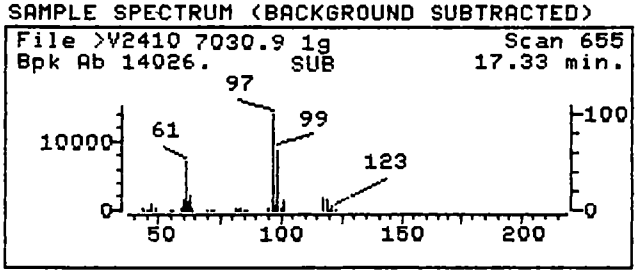
Data File: >V2410::D1 Quant Output File: ^V2410::DB
Name: 7030.9 1g
Misc: 7030.9 1g
Quant Time: 920114 20:57 Quant ID File: IDVOA::D4
Injected at: 920114 20:15 Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 309
Retention Time: 10.55 min.
Quant Ion: 84.0
Area: 80367
Concentration: 23.31 ppb
q-value: 97

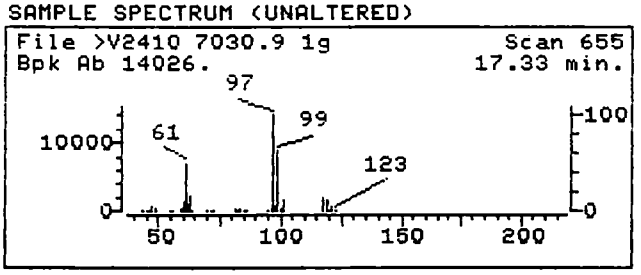
REFERENCE STANDARD SPECTRUM

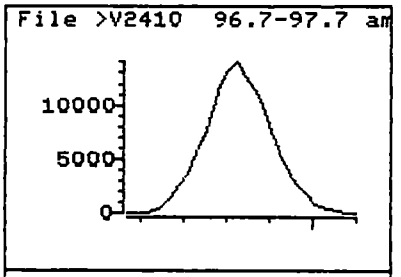


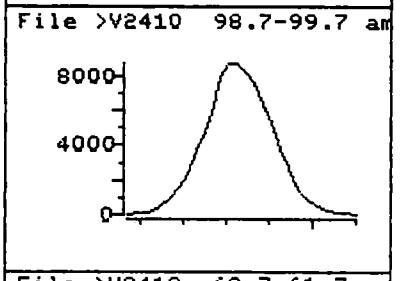
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

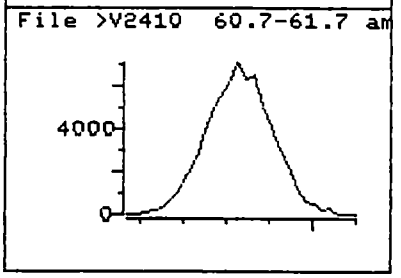


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2410::D1
Name: 7030.9 1g
Misc: 7030.9 1g
Quant Time: 920114 20:57
Injected at: 920114 20:15

Quant Output File: ^V2410::DB
Quant ID File: IDVOA::D4
Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 655
Retention Time: 17.33 min.
Quant Ion: 97.0
Area: 150958
Concentration: 21.04 ppb
q-value: 90

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

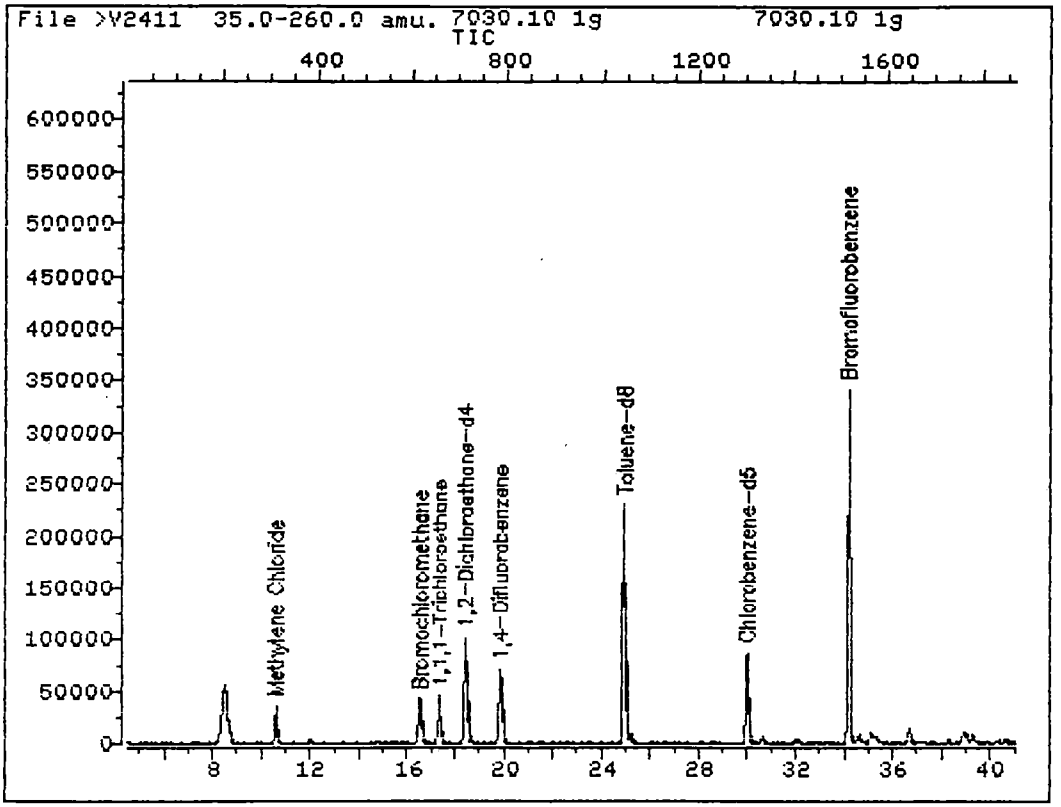
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	7030.10 1g	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2411	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	60	Trichloroethene	ND	30
Bromomethane	ND	60	Dibromochloromethane	ND	30
Vinyl Chloride	ND	60	1,1,2-Trichloroethane	ND	30
Chloroethane	ND	60	Benzene	ND	30
Methylene Chloride	130	30	trans-1,3-Dichloropropene	ND	30
Acrolein	ND	300	2-Chloroethylvinyl ether	ND	30
Acrylonitrile	ND	300	Bromoform	ND	30
Acetone	ND	30	2-Hexanone	ND	30
Carbon Disulfide	ND	30	4-Methyl-2-Pentanone	ND	30
1,1-Dichloroethene	ND	30	Tetrachloroethene	ND	30
1,1-Dichloroethane	ND	30	1,1,2,2-Tetrachloroethane	ND	30
trans-1,2-Dichloroethene	ND	30	Toluene	ND	30
Trichlorofluoromethane	ND	30	Chlorobenzene	ND	30
Chloroform	ND	30	Ethylbenzene	ND	30
1,2-Dichloroethane	ND	30	Styrene	ND	30
2-Butanone	ND	30	o-Xylene	ND	30
1,1,1-Trichloroethane	150	30	m + p-Xylenes	ND	30
Carbon Tetrachloride	ND	30	1,3-Dichlorobenzene	ND	30
Bromodichloromethane	ND	30	1,2-Dichlorobenzene	ND	30
Vinyl Acetate	ND	30	1,4-Dichlorobenzene	ND	30
1,2-Dichloropropane	ND	30	tert-Butyl Alcohol	ND	300
cis-1,3-Dichloropropene	ND	30	Methyl tert-Butyl Ether	ND	30

Percent Solid of 84.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM

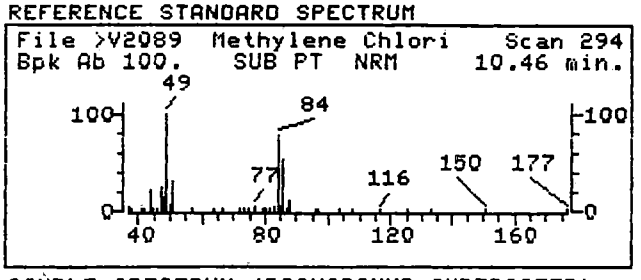


Data File: >V2411::D1 Quant Output File: ^V2411::DB
Name: 7030.10 1g
Misc: 7030.10 1g

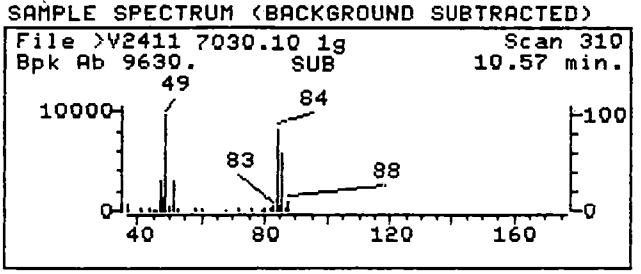
Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 21:44
Injected at: 920114 21:02

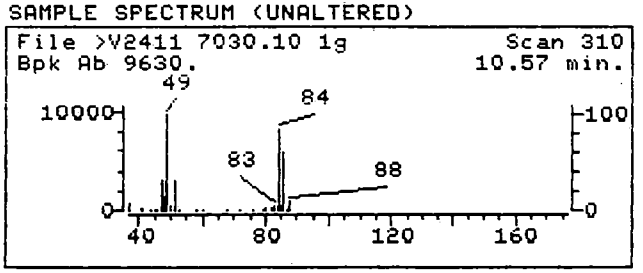
REFERENCE STANDARD SPECTRUM

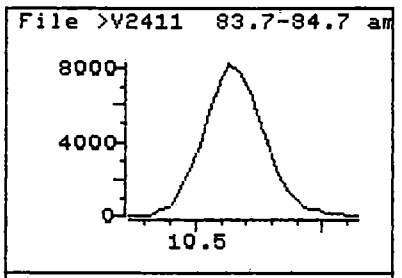


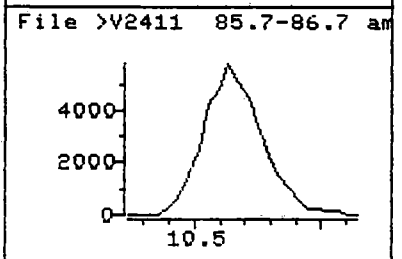
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

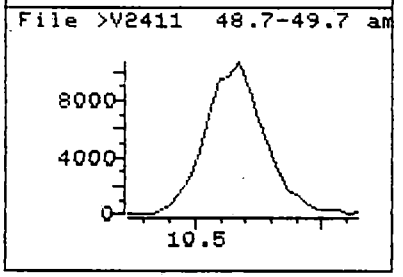


SAMPLE SPECTRUM (UNALTERED)





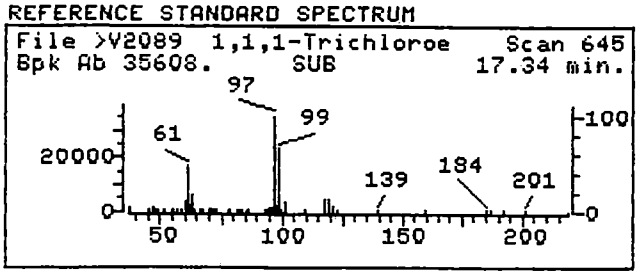




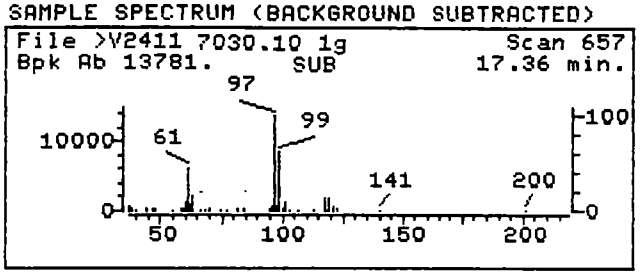
Data File: >V2411::D1 Quant Output File: ^V2411::DB
Name: 7030.10 1g
Misc: 7030.10 1g
Quant Time: 920114 21:44 Quant ID File: IDV0A::D4
Injected at: 920114 21:02 Last Calibration: 911224 13:28

Compound No: 7
Compound Name: Methylene Chloride
Scan Number: 310
Retention Time: 10.57 min.
Quant Ion: 84.0
Area: 68378
Concentration: 21.87 ppb
q-value: 88

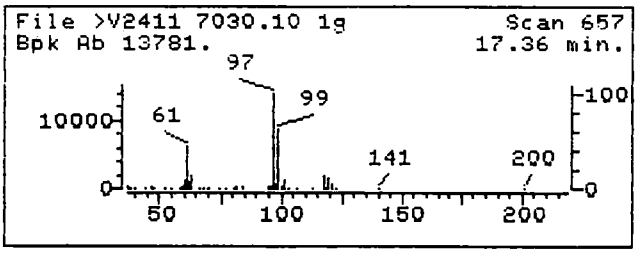
REFERENCE STANDARD SPECTRUM

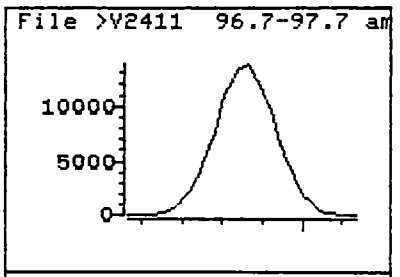


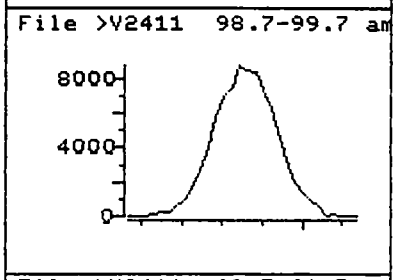
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

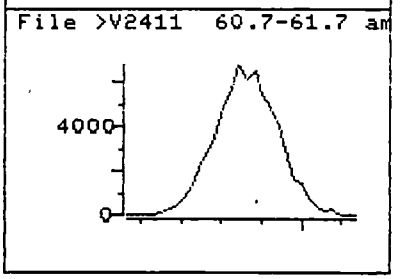


SAMPLE SPECTRUM (UNALTERED)









Data File: >V2411::D1 Quant Output File: ^V2411::DB
Name: 7030.10 1g
Misc: 7030.10 1g
Quant Time: 920114 21:44 Quant ID File: IDVOA::D4
Injected at: 920114 21:02 Last Calibration: 911224 13:28

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 657
Retention Time: 17.36 min.
Quant Ion: 97.0
Area: 149641
Concentration: 25.28 ppb
q-value: 86

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.1 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.1 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2403

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

Column: Capillary

Dilution Factor: 5

Number of TICs found: 0

CONCENTRATION UNITS:
ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.2 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.2 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2404

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

Column: Capillary

Dilution Factor: 5

Number of TICs found: 0

CONCENTRATION UNITS:
ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

60

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NC
7030.3 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.3 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2405

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

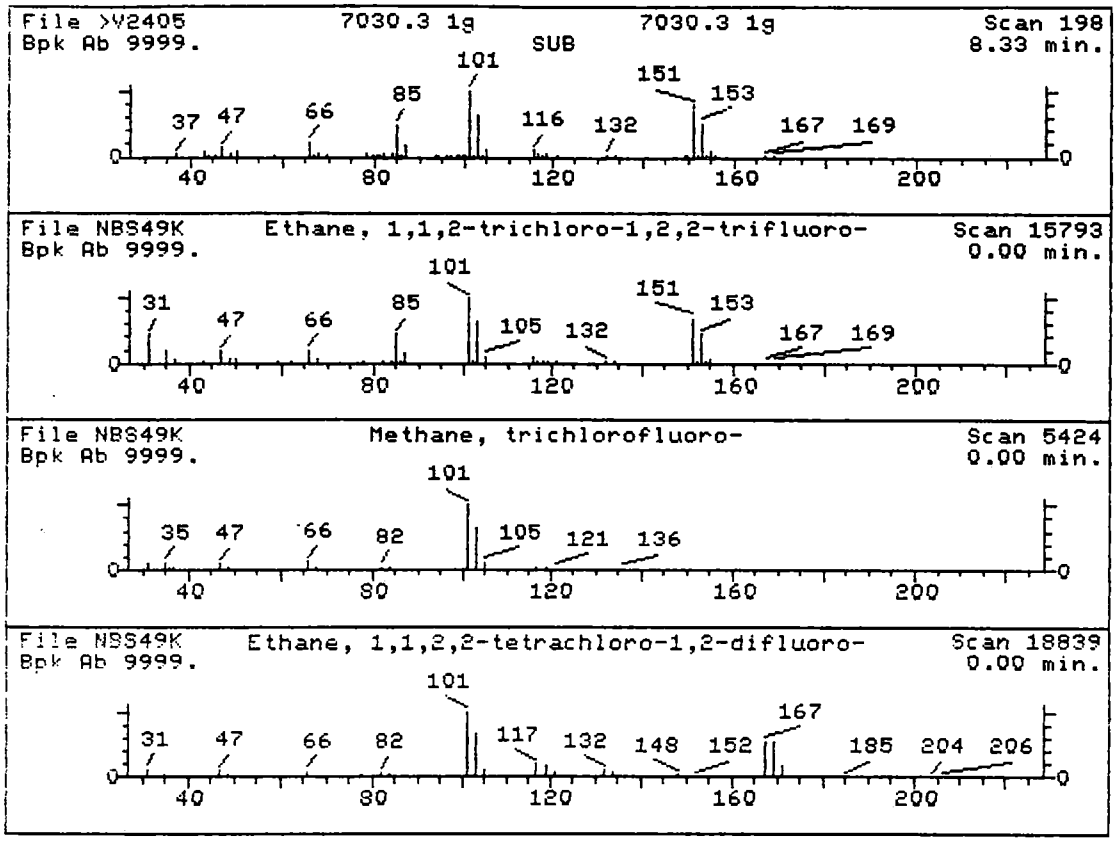
Column: Capillary

Dilution Factor: 5

Number of TICs found: 14

CONCENTRATION UNITS:
ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	76131	Freon	8.33	1300	89
2	95476	Benzene, 1,2-dimethyl-	30.47	15	64
3	17302237	Nonane, 4,5-dimethyl-	34.44	45	60
4	620144	Benzene, 1-ethyl-3-methyl-	34.99	45	70
5	108678	Benzene, 1,3,5-trimethyl-	35.15	65	52
6	611143	Benzene, 1-ethyl-2-methyl-	36.01	40	83
7	95636	Benzene, 1,2,4-trimethyl-	36.50	20	52
8		Unknown	37.11	20	
9	622968	Benzene, 1-ethyl-4-methyl-	38.13	50	93
10	1120214	Undecane	38.70	55	59
11	99876	Benzene, 1-methyl-4-(1-methy	39.09	100	79
12		An Aromatic	39.70	15	
13	1758889	Benzene, 2-ethyl-1,4-dimethy	40.05	20	42
14	934805	Benzene, 4-ethyl-1,2-dimethy	40.46	45	84

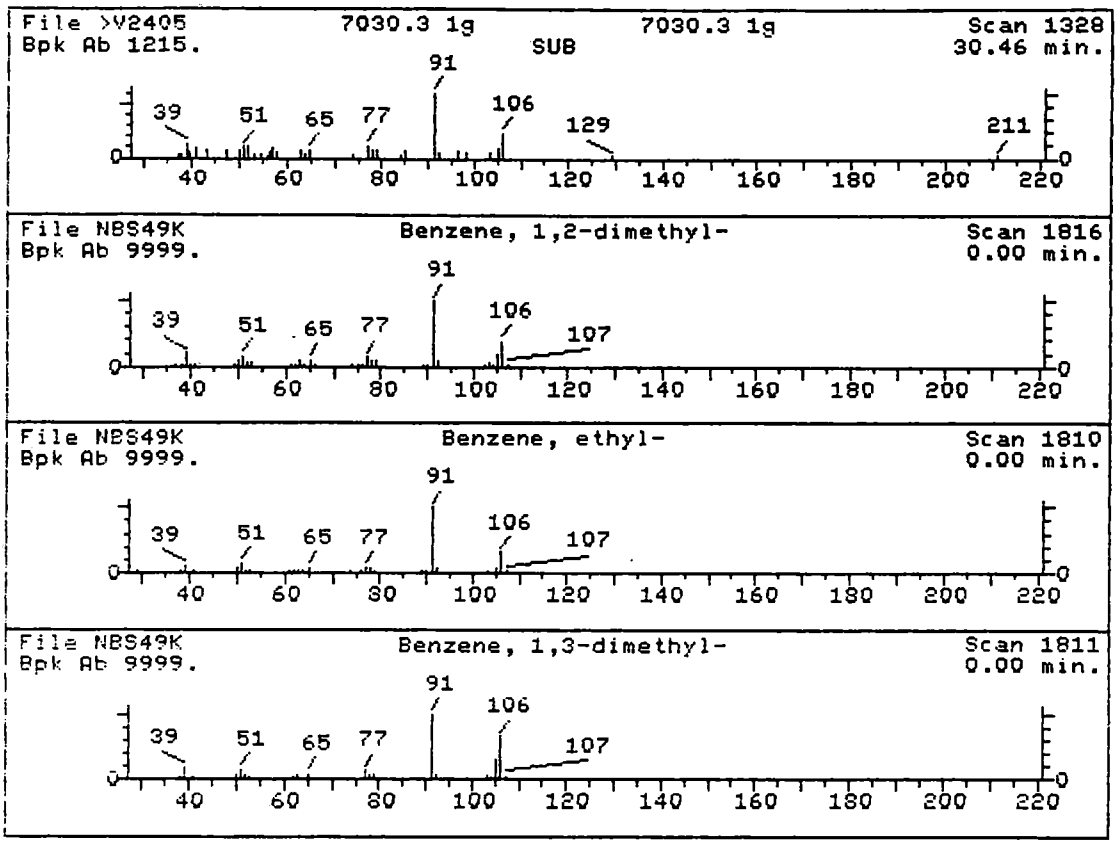


UNKNOWN #,1
AREA = 1711409. TENTATIVE CONCENTRATION IS 260.00

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186	C2Cl3F3
2.	Methane, trichlorofluoro-	136	CCl3F
3.	Ethane, 1,1,2,2-tetrachloro-1,2-difluoro-	202	C2Cl4F2

Sample file: >V2405 Spectrum #: 198
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89	76131	10367	NBS49K	107	31	0	0	83	0	66	76
2.	21	75694	10283	NBS49K	59	37	0	0	95	59	5	36
3.	11*	76120	10400	NBS49K	41	90	3	0	97	61	2	13

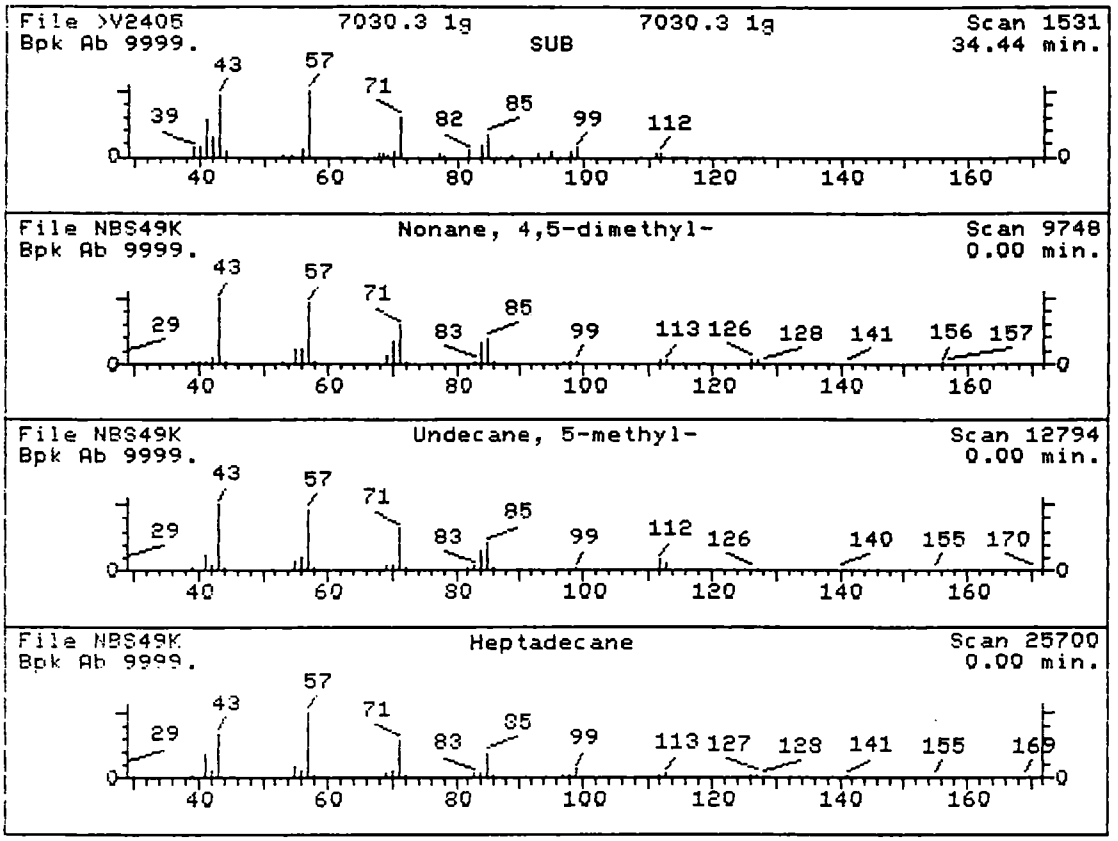


. UNKNOWN #,2
AREA = 38967.00 TENTATIVE CONCENTRATION IS 3.00

1.	Benzene, 1,2-dimethyl-	106 C8H10
2.	Benzene, ethyl-	106 C8H10
3.	Benzene, 1,3-dimethyl-	106 C8H10
4.	Benzene, 1,4-dimethyl-	106 C8H10
5.	1,3-Cyclopentadiene, 5-(1-methylethylidene)-	106 C8H10
6.	Cyclopentene, 1-ethenyl-3-methylene-	106 C8H10

Sample file: >V2405 Spectrum #: 1328
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	64*	95476	11010	NBS49K	59	33	2	0	88	24	28	44
2.	39*	100414	11006	NBS49K	32	52	2	0	100	29	14	16
3.	20*	108383	11007	NBS49K	21	71	2	0	53	54	5	13
4.	20*	106423	11009	NBS49K	21	72	2	0	51	54	5	13
5.	18*	2175919	11008	NBS49K	41	47	2	0	46	56	4	21
6.	11*	61142072	11005	NBS49K	28	62	2	0	36	64	2	14



UNKNOWN #,3

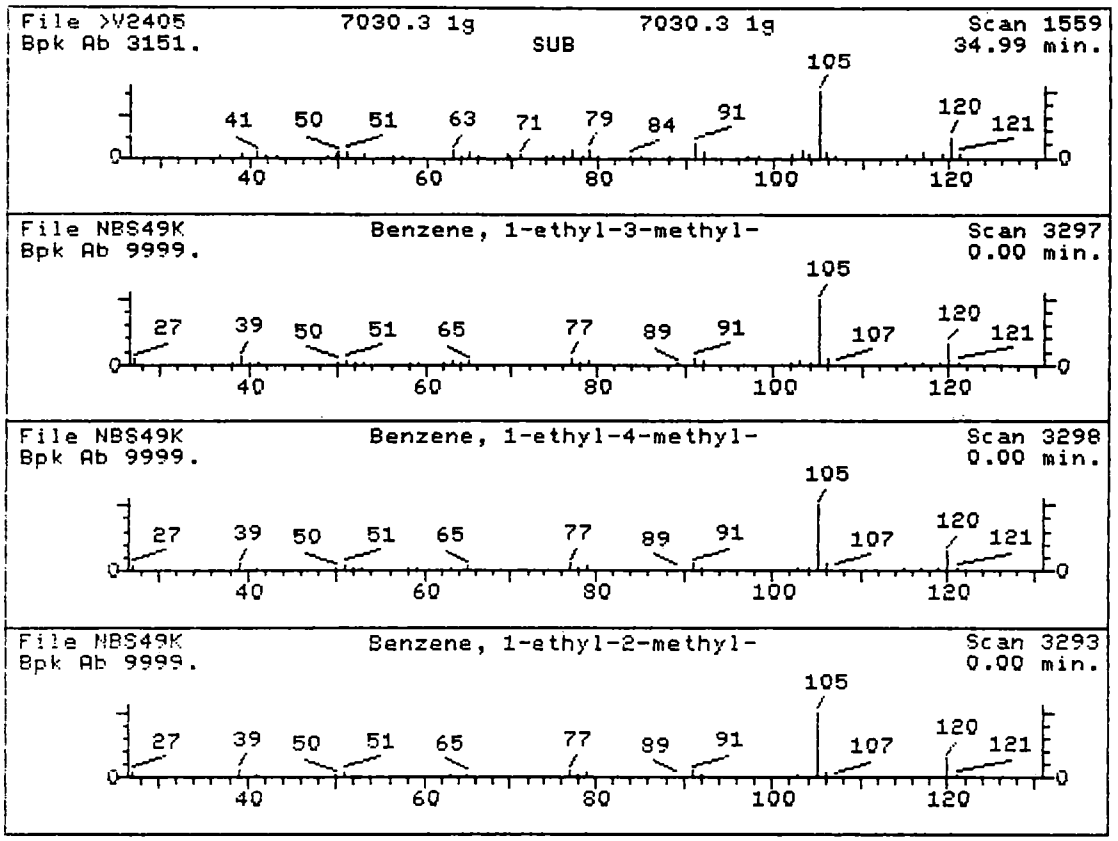
AREA = 124654.0 TENTATIVE CONCENTRATION IS 9.00

1.	Nonane, 4,5-dimethyl-	156	C11H24
2.	Undecane, 5-methyl-	170	C12H26
3.	Heptadecane	240	C17H36
4.	Eicosane, 10-methyl-	296	C21H44
5.	Nonane, 3-methyl-5-propyl-	184	C13H28
6.	Cyclopentanamine, 1-methyl-	99	C6H13N

Sample file: >V2405 Spectrum #: 1531

Search speed: 1 Tilting option: F No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60*	17302237	6683	NBS49K	33	72	3	0	94	15	30	13
2.	53*	1632708	6740	NBS49K	65	33	2	0	67	38	19	44
3.	52	629787	6846	NBS49K	58	63	1	0	90	17	20	16
4.	52	54833237	6879	NBS49K	63	74	2	0	80	17	20	13
5.	52	31081182	6784	NBS49K	53	52	1	0	76	18	20	14
6.	41*	40571457	3861	NBS49K	24	75	3	0	263	23	17	12

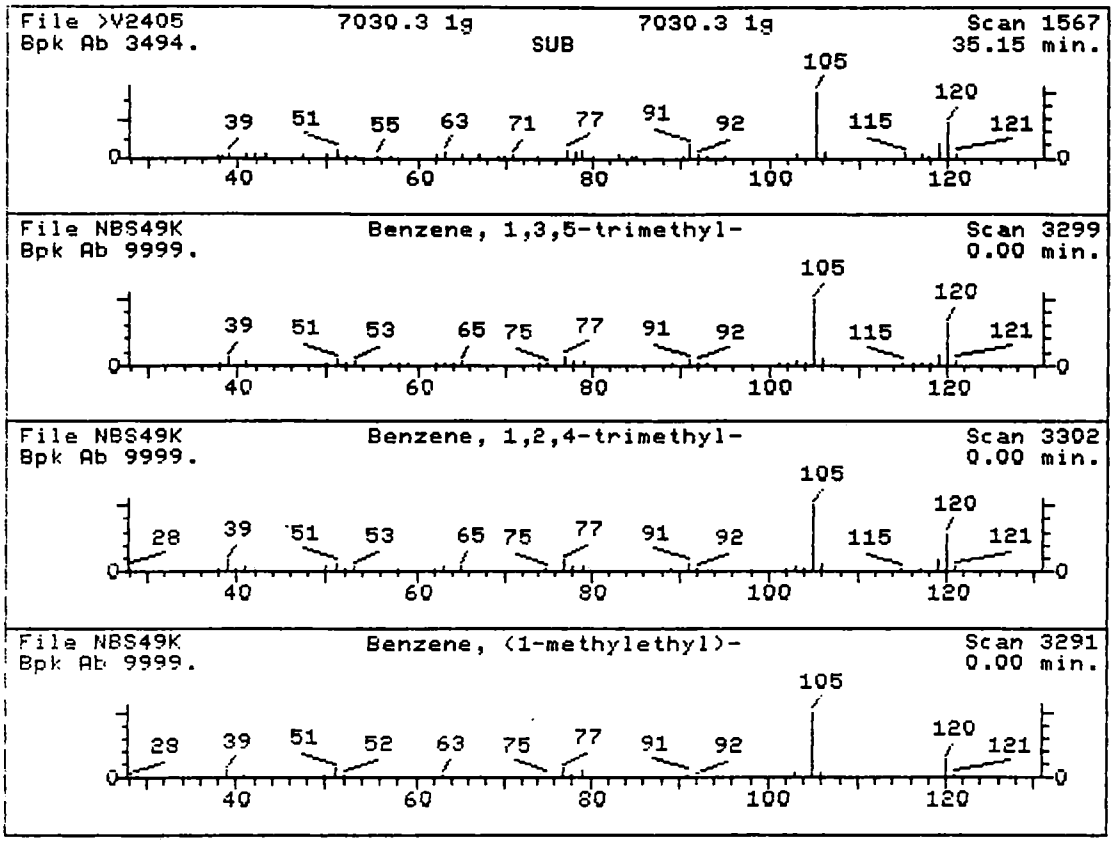


UNKNOWN #,4
AREA = 121708.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, 1-ethyl-3-methyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1-ethyl-2-methyl-	120	C9H12
4.	Benzene, (1-methylethyl)-	120	C9H12
5.	Ethanone, 1-phenyl-	120	C8H8O
6.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)-	120	C9H12

Sample file: >V2405 Spectrum #: 1559
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	70*	620144	13671	NBS49K	43	44	0	0	83	20	32	50
2.	70*	622968	13672	NBS49K	47	38	0	0	98	18	32	57
3.	58*	611143	13669	NBS49K	43	42	1	0	98	17	25	25
4.	48*	98828	13667	NBS49K	39	48	2	0	93	22	17	19
5.	37*	98862	13662	NBS49K	25	67	2	0	93	27	14	14
6.	36*	3141024	13677	NBS49K	47	42	2	0	40	44	12	27



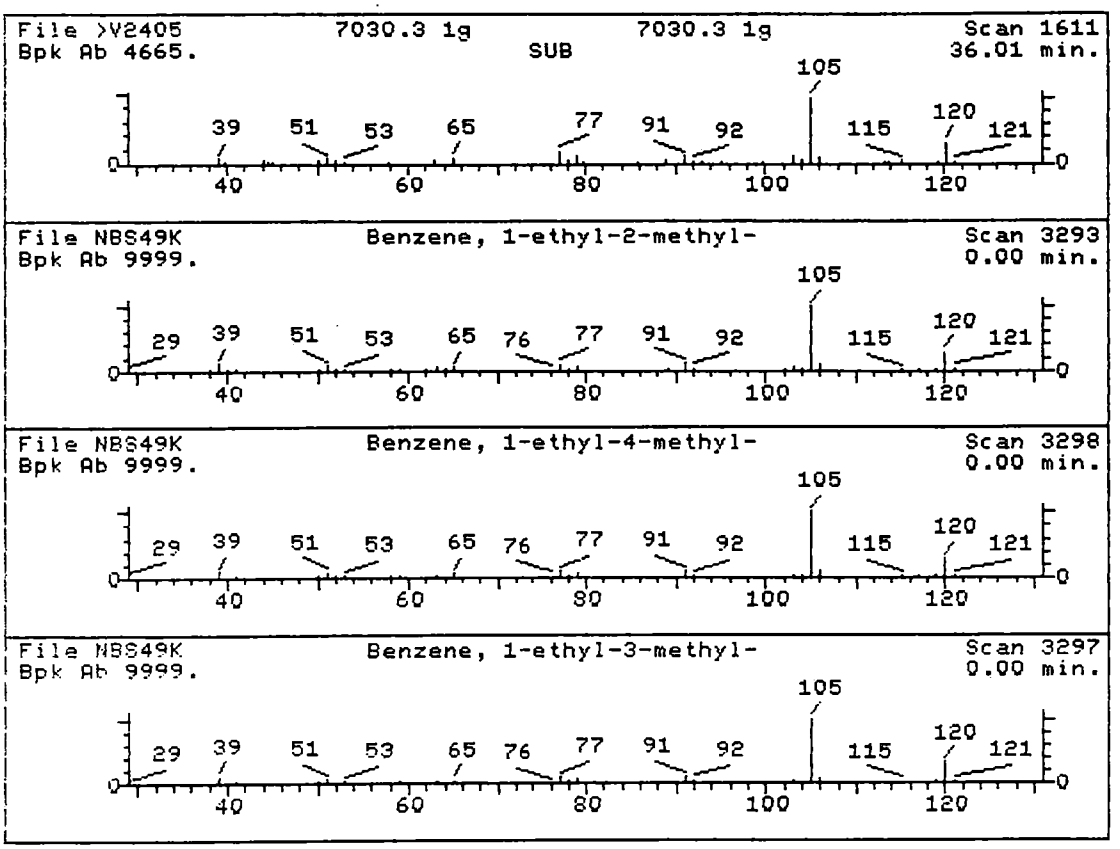
UNKNOWN #,5

AREA = 178153.0 TENTATIVE CONCENTRATION IS 13.00

1.	Benzene, 1,3,5-trimethyl-	120	C9H12
2.	Benzene, 1,2,4-trimethyl-	120	C9H12
3.	Benzene, (1-methylethyl)-	120	C9H12
4.	2,3-Heptadien-5-yne, 2,4-dimethyl-	120	C9H12
5.	Benzene, 1,2,3-trimethyl-	120	C9H12
6.	Benzene, 1-ethyl-3-methyl-	120	C9H12

Sample file: >V2405 Spectrum #: 1567
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52*	108678	13673	NBS49K	45	43	2	0	83	22	22	24
2.	51*	95636	13676	NBS49K	46	49	2	0	77	22	22	23
3.	37*	98828	13667	NBS49K	42	45	1	0	89	39	14	24
4.	36*	41898899	13675	NBS49K	40	69	3	0	73	26	14	13
5.	34*	526738	13674	NBS49K	44	56	2	0	69	32	12	17
6.	30*	620144	13671	NBS49K	33	54	2	0	100	38	10	16



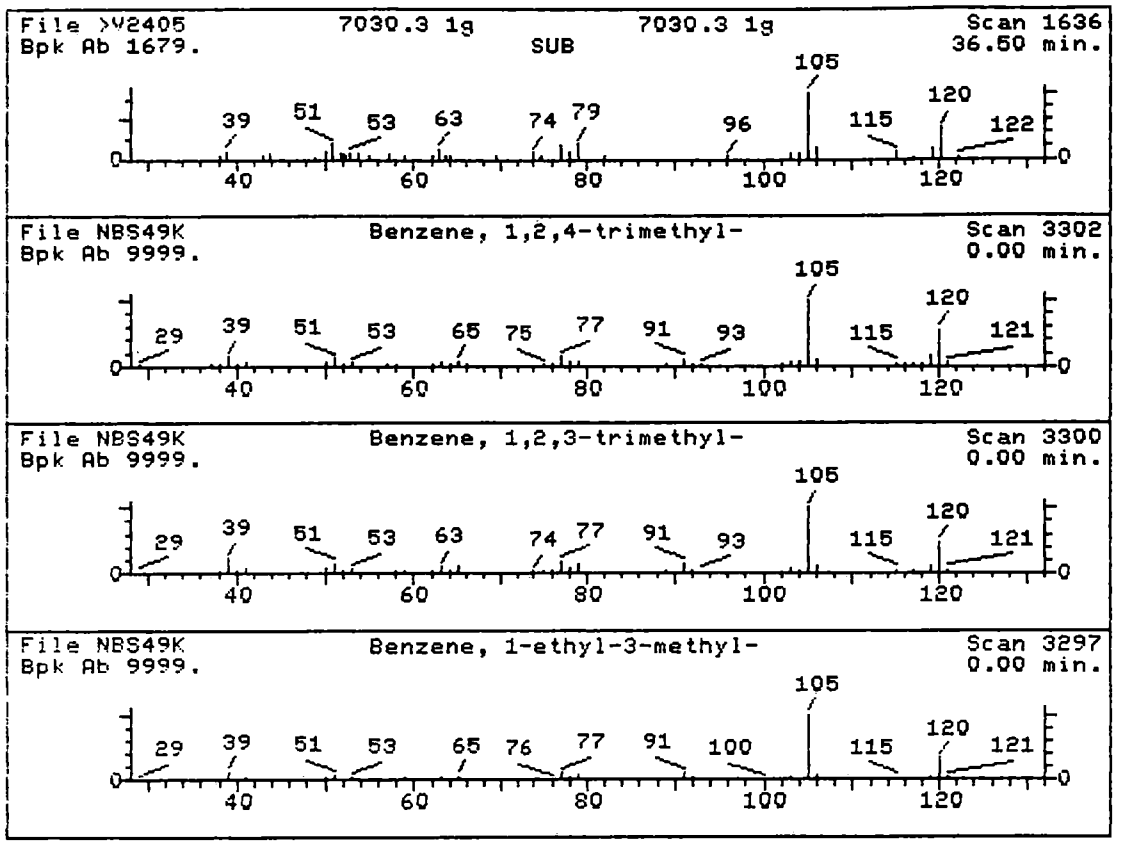
UNKNOWN #,6

AREA = 116288.0 TENTATIVE CONCENTRATION IS 8.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1-ethyl-3-methyl-	120	C9H12
4.	Benzene, (1-methylethyl)-	120	C9H12
5.	1,3,5-Cycloheptatriene, 7-ethyl-	120	C9H12
6.	Benzene, 1,2,3-trimethyl-	120	C9H12

Sample file: >V2405 Spectrum #: 1611
Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	83*	611143	13669	NBS49K	69	16	2	4	88	10	54	52
2.	81*	622968	13672	NBS49K	64	21	2	3	100	10	53	44
3.	79*	620144	13671	NBS49K	59	28	2	4	89	10	48	38
4.	74*	98828	13667	NBS49K	55	32	2	0	100	12	39	41
5.	70*	17634514	13678	NBS49K	39	62	2	0	111	8	42	14
6.	60*	526738	13674	NBS49K	47	53	2	0	67	15	30	19

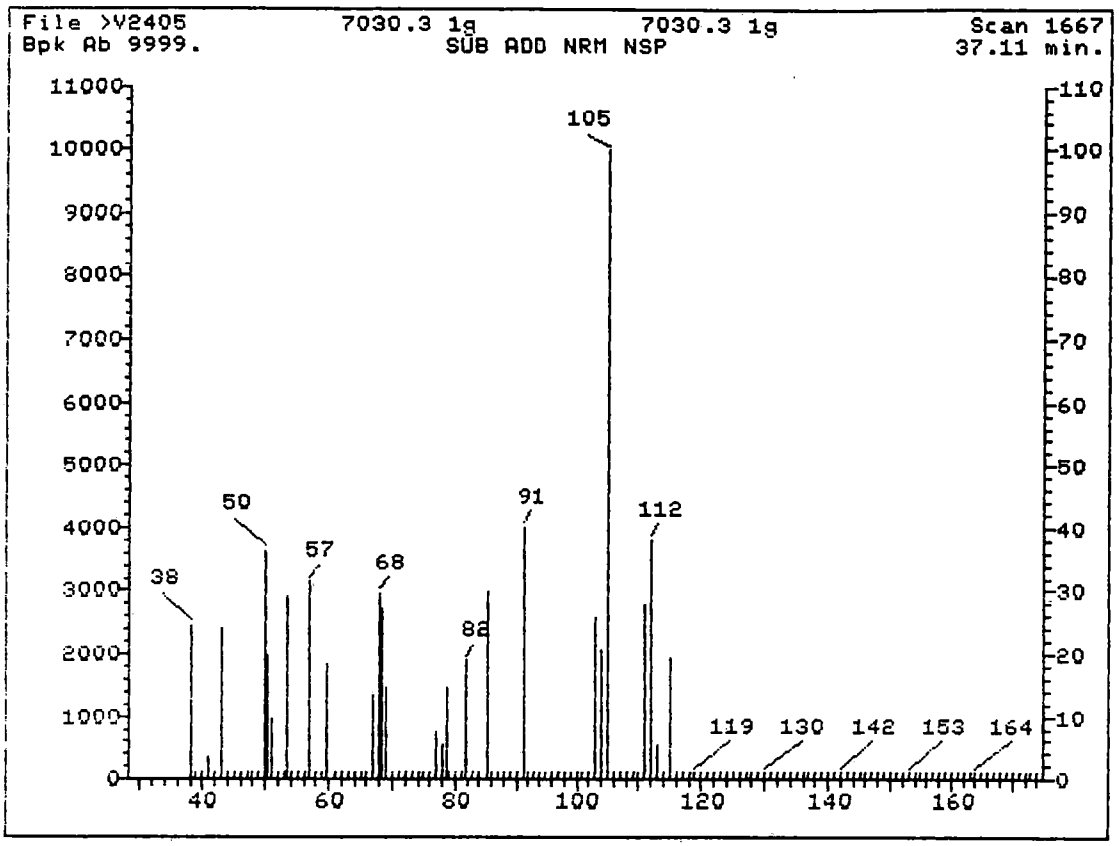


UNKNOWN #,7
AREA = 53071.00 TENTATIVE CONCENTRATION IS 4.00

1.	Benzene, 1,2,4-trimethyl-	120	C9H12
2.	Benzene, 1,2,3-trimethyl-	120	C9H12
3.	Benzene, 1-ethyl-3-methyl-	120	C9H12
4.	Benzene, 1,3,5-trimethyl-	120	C9H12
5.	Benzene, (1-methylethyl)-	120	C9H12

Sample file: >V2405 Spectrum #: 1636
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

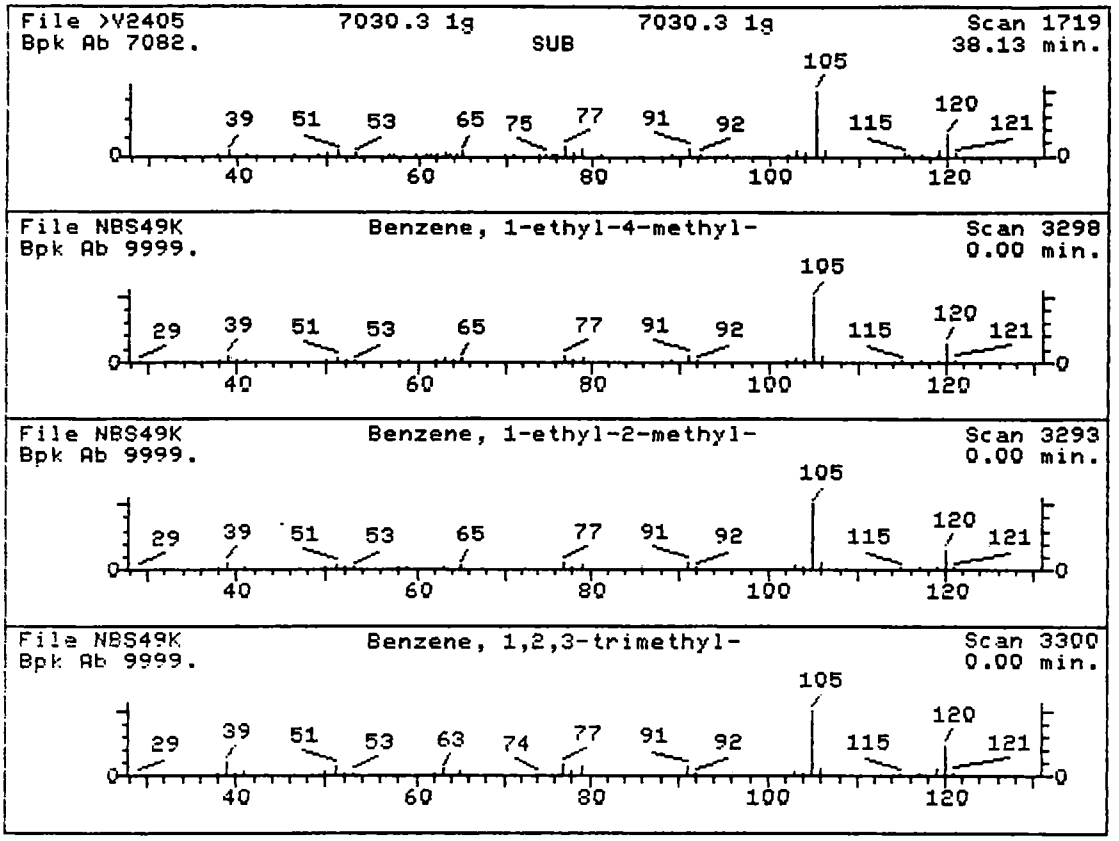
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	52*	95636	13676	NBS49K	49	46	3	3	95	18	20	1
2.	42*	526738	13674	NBS49K	43	57	3	0	97	21	17	1
3.	36*	620144	13671	NBS49K	26	61	3	0	100	26	14	1
4.	31*	108678	13673	NBS49K	29	59	2	0	71	31	12	1
5.	15*	98828	13667	NBS49K	38	49	3	0	180	58	3	1



UNKNOWN #,8
AREA = 56279.00 TENTATIVE CONCENTRATION IS 4.00

Sample file: >V2405 Spectrum #: 1667

No data base entries were retrieved.

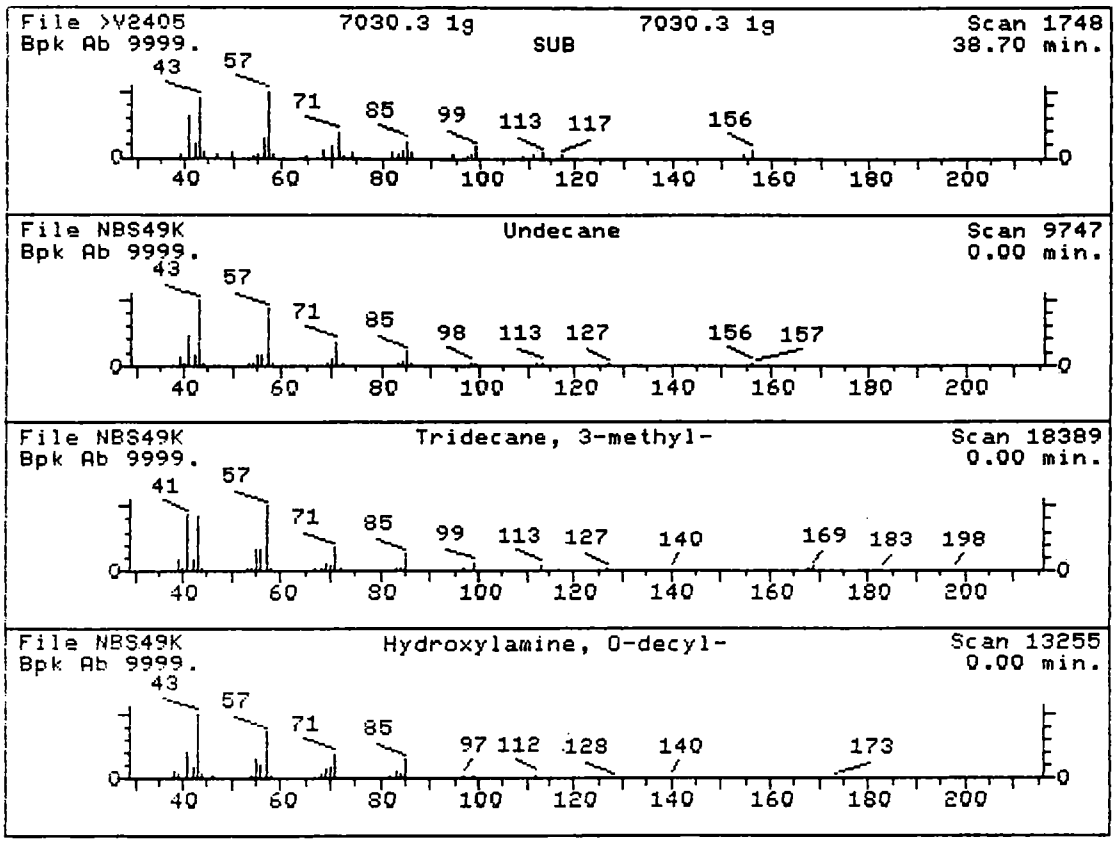


UNKNOWN #,9
AREA = 141093.0 TENTATIVE CONCENTRATION IS 10.00

1.	Benzene, 1-ethyl-4-methyl-	120	C9H12
2.	Benzene, 1-ethyl-2-methyl-	120	C9H12
3.	Benzene, 1,2,3-trimethyl-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, (1-methylethyl)-	120	C9H12
6.	Ethanone, 1-phenyl-	120	C8H8O

Sample file: >V2405 Spectrum #: 1719
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	93*	622968	13672	NBS49K	75	10	0	2	100	14	64	9
2.	93*	611143	13669	NBS49K	75	10	0	1	89	14	64	9
3.	89*	526738	13674	NBS49K	83	17	1	0	69	7	62	8
4.	89*	620144	13671	NBS49K	70	17	1	0	100	9	62	8
5.	76*	98828	13667	NBS49K	67	20	1	-3	100	12	40	5
6.	60*	98862	13662	NBS49K	36	56	2	0	100	12	30	1

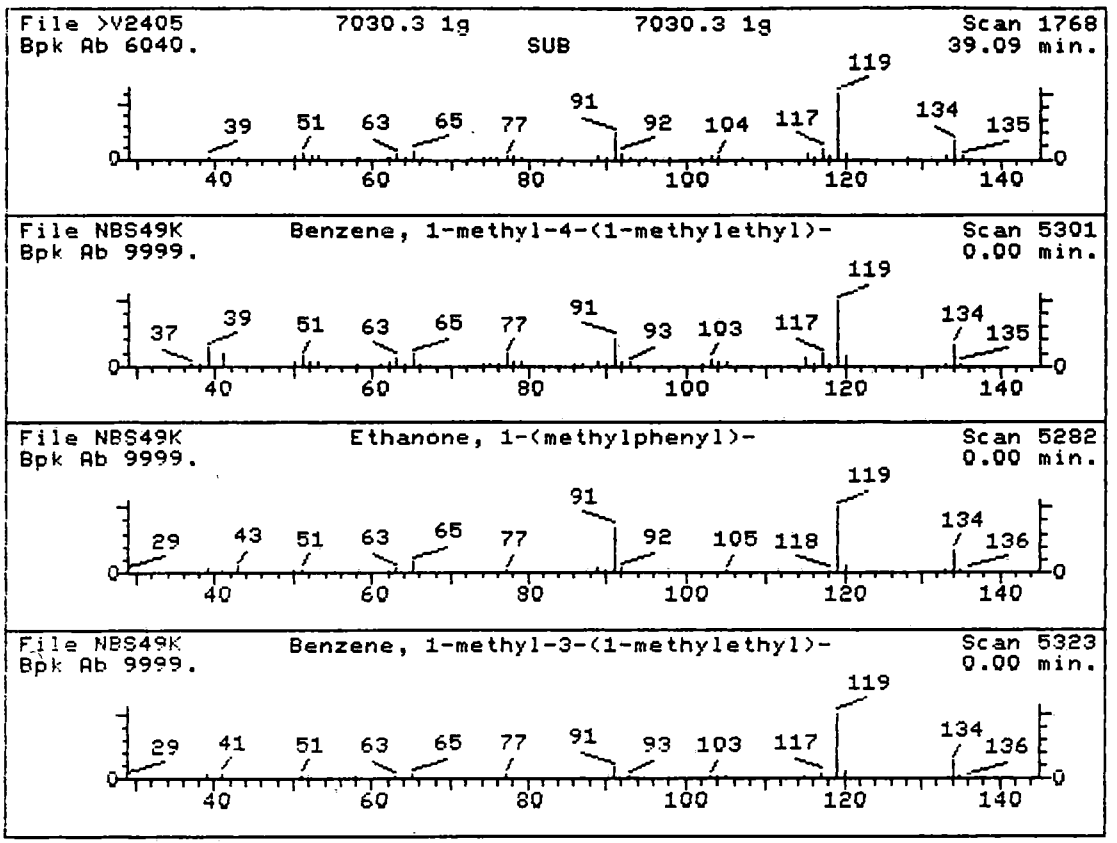


UNKNOWN #,10
AREA = 153560.0 TENTATIVE CONCENTRATION IS 11.00

1.	Undecane	156 C11H24
2.	Tridecane, 3-methyl-	198 C14H30
3.	Hydroxylamine, O-decyl-	173 C10H23NO
4.	Tetradecane, 5-methyl-	212 C15H32
5.	Propane, 2-(chloromethyl)-1,3-dimethoxy-2-methyl-	166 C7H15ClO2
6.	5-Decanone	156 C10H20O

Sample file: >V2405 Spectrum #: 1748
Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	59*	1120214	6682	NBS49K	59	38	1	-3	88	25	27	35
2.	43*	6418413	9879	NBS49K	55	55	2	0	74	39	17	32
3.	36*	29812791	6746	NBS49K	52	53	2	0	91	45	12	27
4.	36*	25117322	6821	NBS49K	33	94	3	0	78	27	14	13
5.	35	20637370	9803	NBS49K	40	49	2	0	46	29	14	12
6.	35*	820291	9787	NBS49K	23	99	3	0	64	29	14	12

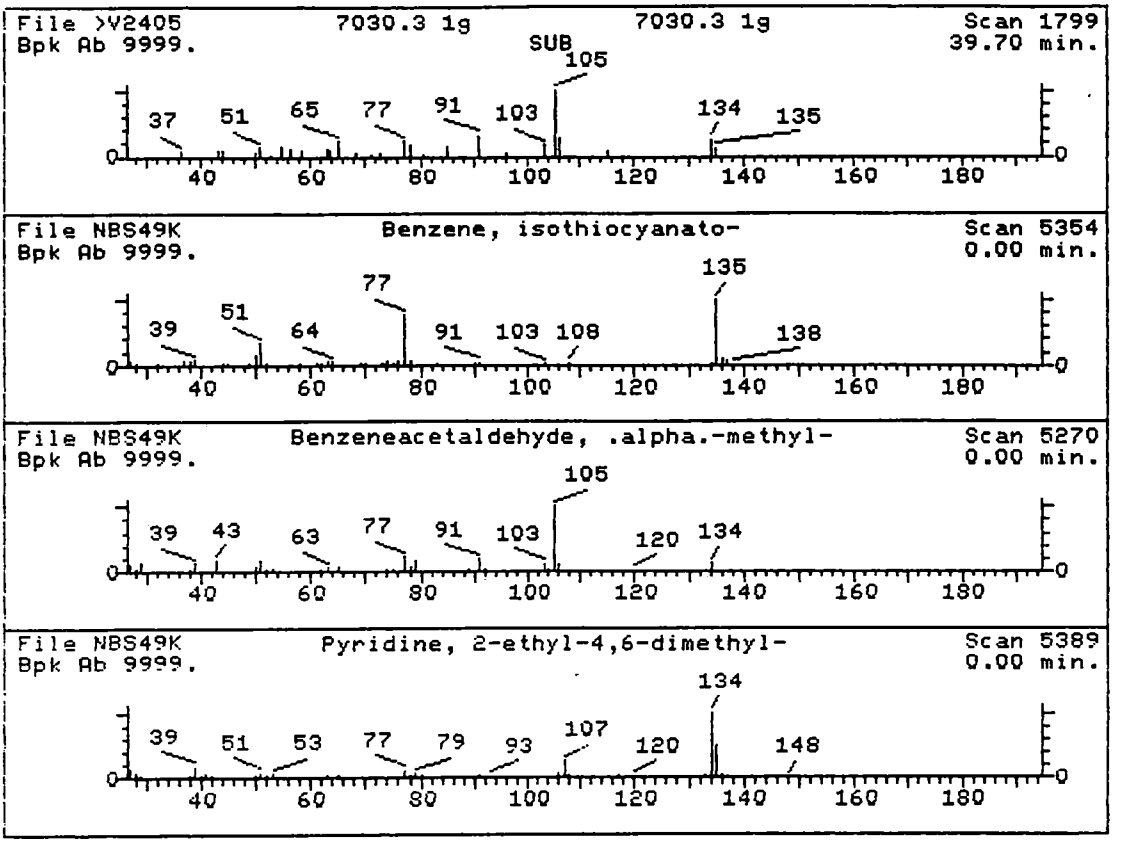


UNKNOWN #,11
AREA = 285110.0 TENTATIVE CONCENTRATION IS 20.00

1.	Benzene, 1-methyl-4-(1-methylethyl)-	134 C10H14
2.	Ethanone, 1-(methylphenyl)-	134 C9H10O
3.	Benzene, 1-methyl-3-(1-methylethyl)-	134 C10H14
4.	Benzene, 1-methyl-2-(1-methylethyl)-	134 C10H14
5.	Benzene, 1-ethyl-3,5-dimethyl-	134 C10H14
6.	Benzene, 4-ethyl-1,2-dimethyl-	134 C10H14

Sample file: >V2405 Spectrum #: 1768
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	79*	99876	13530	NBS49K	57	48	2	0	68	10	48	3
2.	71*	26444199	13526	NBS49K	53	39	2	0	79	15	38	3
3.	66*	535773	13538	NBS49K	50	39	1	0	75	18	31	4
4.	63*	527844	13539	NBS49K	50	42	1	0	79	18	30	3
5.	58*	934747	13532	NBS49K	47	48	2	0	77	18	25	2
6.	58*	934805	13534	NBS49K	42	51	2	0	94	18	25	2

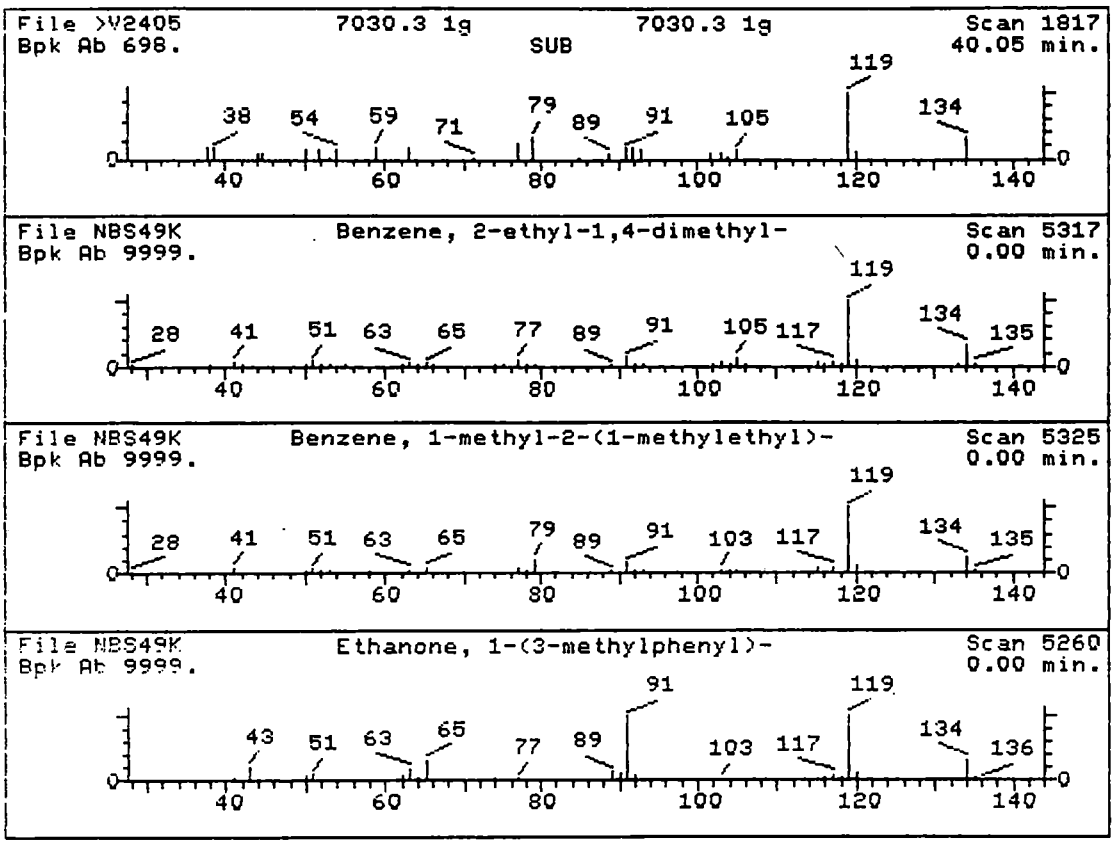


UNKNOWN #,12
AREA = 44628.00 TENTATIVE CONCENTRATION IS 3.00

1.	Benzene, isothiocyanato-	135 C7H5NS
2.	Benzeneacetaldehyde, .alpha.-methyl-	134 C9H10O
3.	Pyridine, 2-ethyl-4,6-dimethyl-	135 C9H13N
4.	Benzene, (1-nitroethyl)-	151 C8H9NO2
5.	Benzene, 1,3-diethyl-	134 C10H14

Sample file: >V2405 Spectrum #: 1799
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	41*	103720	16420	NBS49K	35	29	0	3	14	45	14	3
2.	28*	93538	16228	NBS49K	20	74	1	0	90	38	10	1
3.	28*	1124352	16268	NBS49K	41	39	2	4	38	37	10	1
4.	25	7214611	11056	NBS49K	38	54	1	0	84	44	8	1
5.	15*	141935	16259	NBS49K	23	79	1	0	61	59	3	1

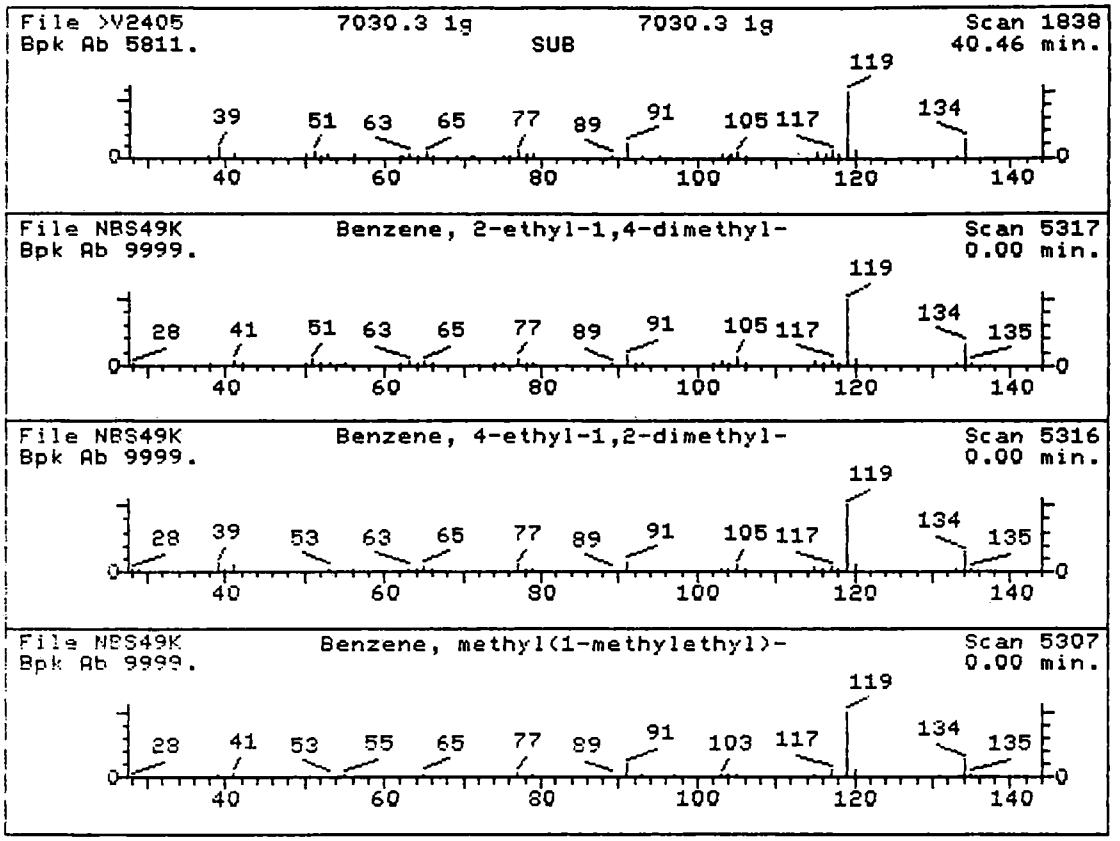


UNKNOWN #,13
AREA = 48967.00 TENTATIVE CONCENTRATION IS 4.00

1.	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14
2.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14
3.	Ethanone, 1-(3-methylphenyl)-	134	C9H10O
4.	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14
5.	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14
6.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14

Sample file: >V2405 Spectrum #: 1817
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	42*	1758889	13535	NBS49K	50	44	2	3	83	35	16	2
2.	36*	527844	13539	NBS49K	38	54	2	0	100	31	12	1
3.	36*	585740	13524	NBS49K	31	76	3	0	100	30	14	1
4.	34*	934747	13532	NBS49K	45	50	2	3	100	35	12	1
5.	33*	933982	13533	NBS49K	45	46	2	0	100	45	12	2
6.	33*	934805	13534	NBS49K	45	48	2	0	100	45	12	2



UNKNOWN #,14

AREA = 128721.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14
2.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14
3.	Benzene, methyl(1-methylethyl)-	134	C10H14
4.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14
5.	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14
6.	Benzene, 1-methyl-3-(1-methylethyl)-	134	C10H14

Sample file: >V2405 Spectrum #: 1838
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	88*	1758889	13535	NBS49K	67	27	2	0	86	5	65	53
2.	84*	934805	13534	NBS49K	67	26	1	0	87	7	55	66
3.	83*	25155151	13531	NBS49K	65	25	2	0	100	7	54	55
4.	81*	874419	13536	NBS49K	67	21	2	4	100	10	53	49
5.	81*	933982	13533	NBS49K	64	27	2	4	100	7	53	44
6.	81*	535773	13538	NBS49K	59	30	2	0	100	7	53	45

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.4 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.4 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2406

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

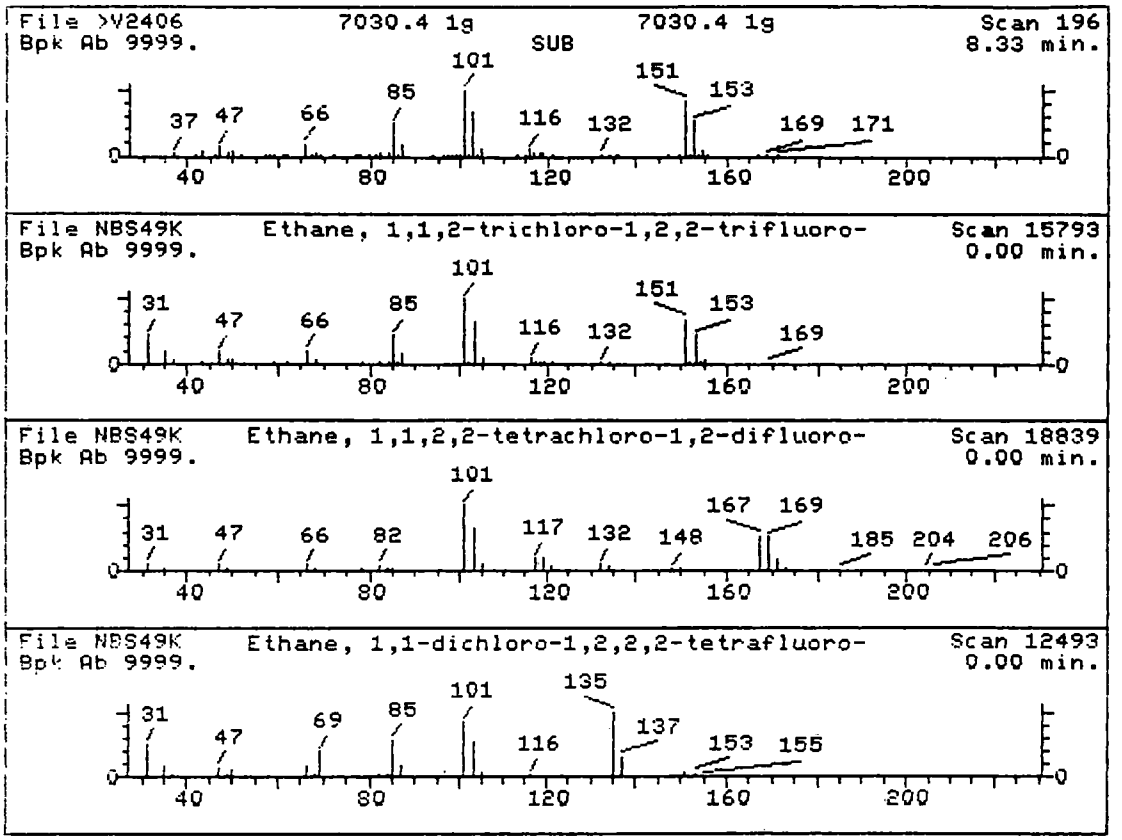
Column: Capillary

Dilution Factor: 5

Number of TICs found: 15

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	76131	Freon	8.33	1850	89
2	5063650	Oxirane, pentyl-	31.37	45	26
3	26730143	Tridecane, 7-methyl-	33.23	45	53
4		Unknown	34.53	55	
5	611143	Benzene, 1-ethyl-2-methyl-	31.04	145	86
6	95636	Benzene, 1,2,4-trimethyl-	35.22	180	93
7	611143	Benzene, 1-ethyl-2-methyl-	36.08	150	94
8	526738	Benzene, 1,2,3-trimethyl-	36.57	70	84
9	934747	Benzene, 1-ethyl-3,5-dimethyl	37.57	45	59
10	526738	Benzene, 1,2,3-trimethyl-	38.20	135	91
11	1074437	Benzene, 1-methyl-3-propyl-	38.87	255	87
12	25155151	Benzene, methyl(1-methylethyl	39.16	285	79
13	1074175	Benzene, 1-methyl-2-propyl-	39.77	40	67
14	141935	Benzene, 1,3-diethyl-	40.12	60	15
15	535773	Benzene, 1-methyl-3-(1-methy	40.53	100	96

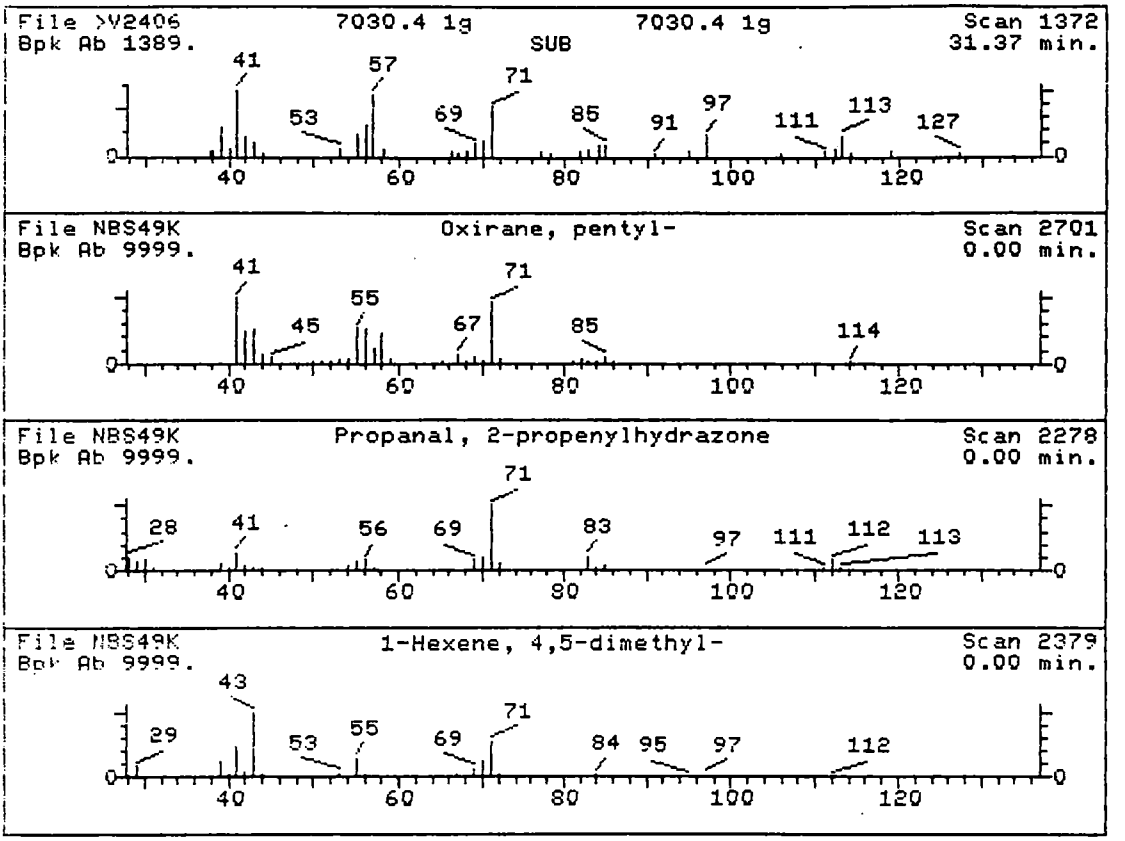


. UNKNOWN #,1
AREA = 3015024. TENTATIVE CONCENTRATION IS 370.00

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186	C2Cl3F3
2.	Ethane, 1,1,2,2-tetrachloro-1,2-difluoro-	202	C2Cl4F2
3.	Ethane, 1,1-dichloro-1,2,2,2-tetrafluoro-	170	C2Cl2F4
4.	Methane, trichlorofluoro-	136	CCl3F

Sample file: >V2406 Spectrum #: 196
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89	76131	10367	NBS49K	107	31	0	0	86	0	66	76
2.	30*	76120	10400	NBS49K	56	75	3	1	100	33	12	13
3.	28	374072	10339	NBS49K	64	56	2	0	87	38	10	14
4.	23	75694	10283	NBS49K	67	29	0	0	100	56	6	46



UNKNOWN #,2

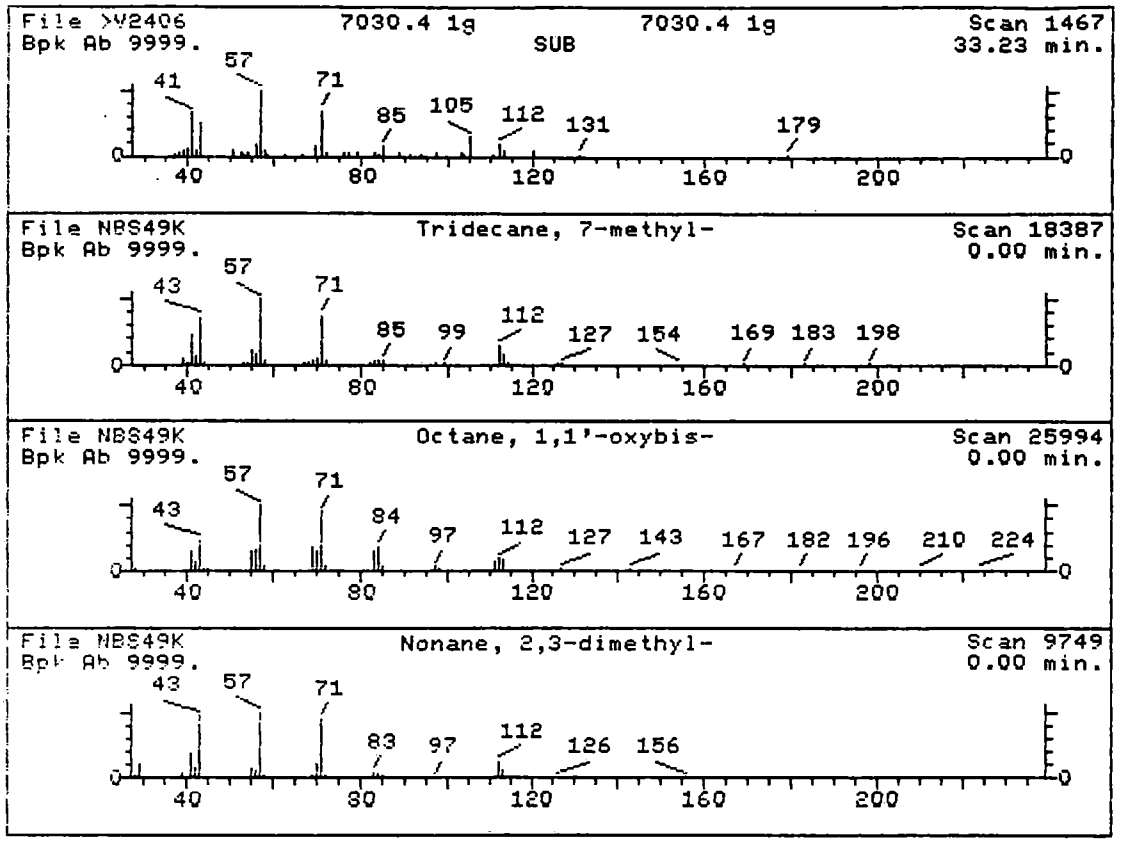
AREA = 163770.0 TENTATIVE CONCENTRATION IS 9.00

1.	Oxirane, pentyl-	114 C7H14O
2.	Propanal, 2-propenylhydrazone	112 C6H12N2
3.	1-Hexene, 4,5-dimethyl-	112 C8H16
4.	Cyclopropane, pentyl-	112 C8H16
5.	Hexane, 2,3-dimethyl-	114 C8H18
6.	2-Hexene, 1-methoxy-, (E)-	114 C7H14O

Sample file: >V2406 Spectrum #: 1372

Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	26*	5063650	4293	NBS49K	23	82	3	0	80	40	10	12
2.	25*	19031788	4284	NBS49K	22	77	2	0	57	46	7	13
3.	20*	16106595	4285	NBS49K	25	62	2	0	101	51	5	14
4.	18*	2511913	3887	NBS49K	55	32	0	0	38	62	5	66
5.	15*	584941	3916	NBS49K	25	62	3	0	162	59	3	13
6.	15*	56052836	4292	NBS49K	25	65	3	0	75	57	3	13



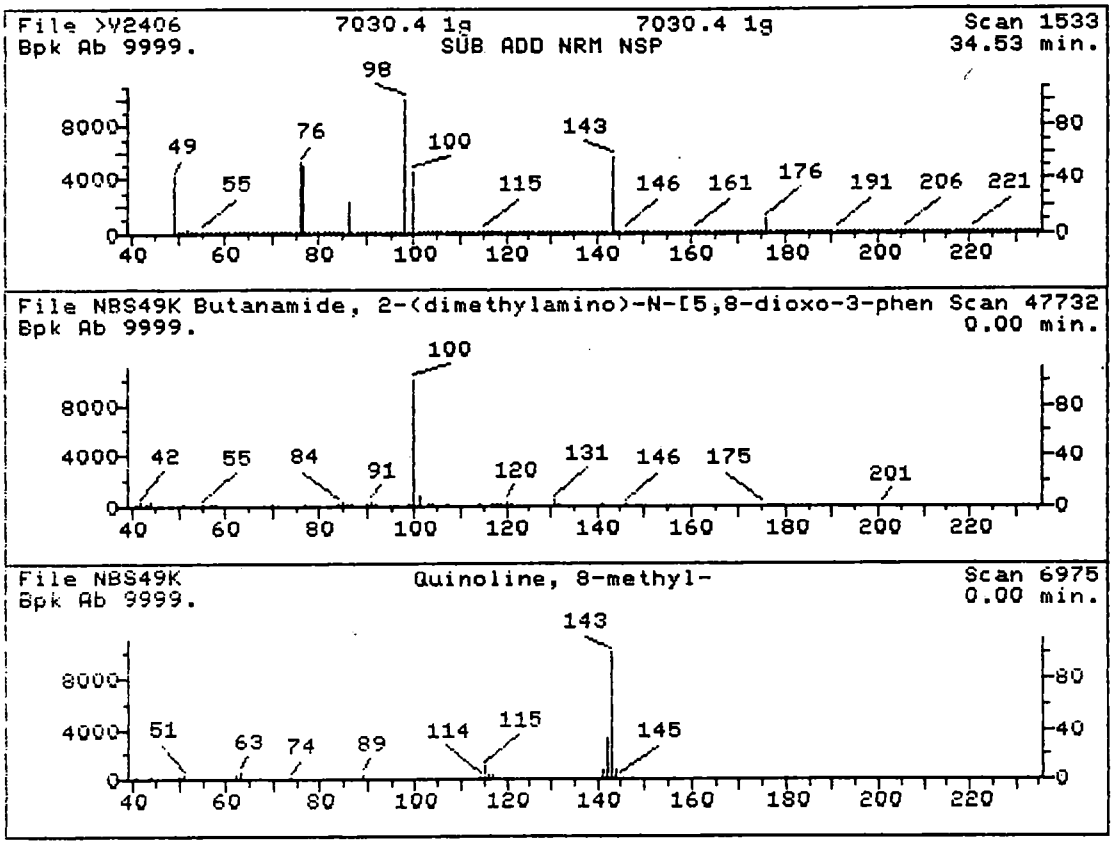
UNKNOWN #,3

AREA = 156166.0 TENTATIVE CONCENTRATION IS 9.00

1.	Tridecane, 7-methyl-	198 C14H30
2.	Octane, 1,1'-oxybis-	242 C16H34O
3.	Nonane, 2,3-dimethyl-	156 C11H24
4.	Dodecane, 4,6-dimethyl-	198 C14H30
5.	Heptadecane, 7-methyl-	254 C18H38
6.	Heptane, 3-ethyl-5-methyl-	142 C10H22

Sample file: >V2406 Spectrum #: 1467
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	53*	26730143	12201	NBS49K	65	46	2	0	64	36	19	44
2.	39	629823	12218	NBS49K	89	50	2	0	53	40	14	26
3.	34*	2884062	12128	NBS49K	44	57	2	0	55	34	12	17
4.	34*	61141728	4410	NBS49K	39	71	1	0	60	40	14	21
5.	31	20959335	12222	NBS49K	64	71	2	0	70	32	12	14
6.	31*	52896909	4332	NBS49K	41	53	2	0	76	44	8	19



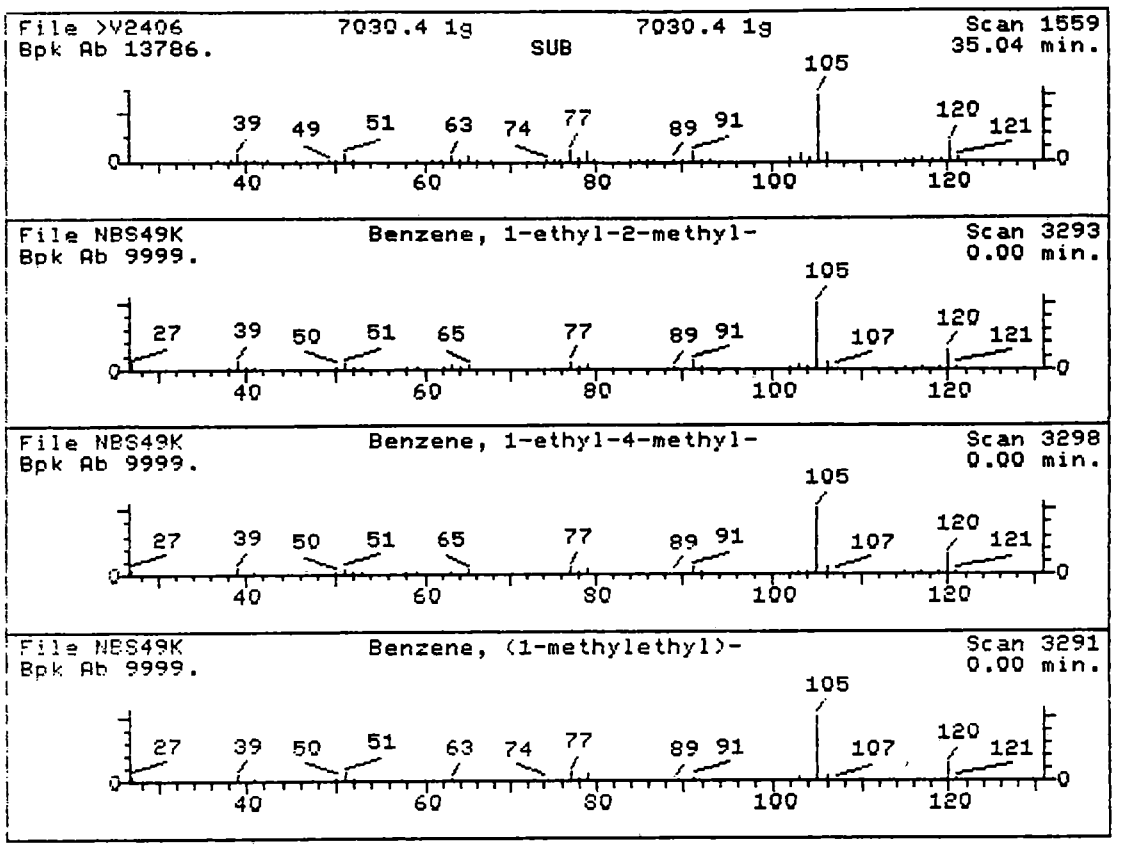
UNKNOWN #,4
AREA = 197852.0 TENTATIVE CONCENTRATION IS 11.00

1. Butanamide, 2-(dimethylamino)-N-[5,8-dioxo-3-phenyl- 556 C33H40N4O4
   7-(phenylmethyl)-2-oxa-6,9-diazabicyclo[10.2.2]hexad
   eca-12,14,15-trien-4-yl]-3-methyl-, [3R-
2. Quinoline, 8-methyl- 143 C10H9N

Sample file: >V2406 Spectrum #: 1533
Search speed: 1 Tilting option: F No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	25	55517685	10218	NBS49K	59	41	2	2	47	46	7	13
2.	15*	611325	18227	NBS49K	38	52	1	1	67	56	3	14

8C

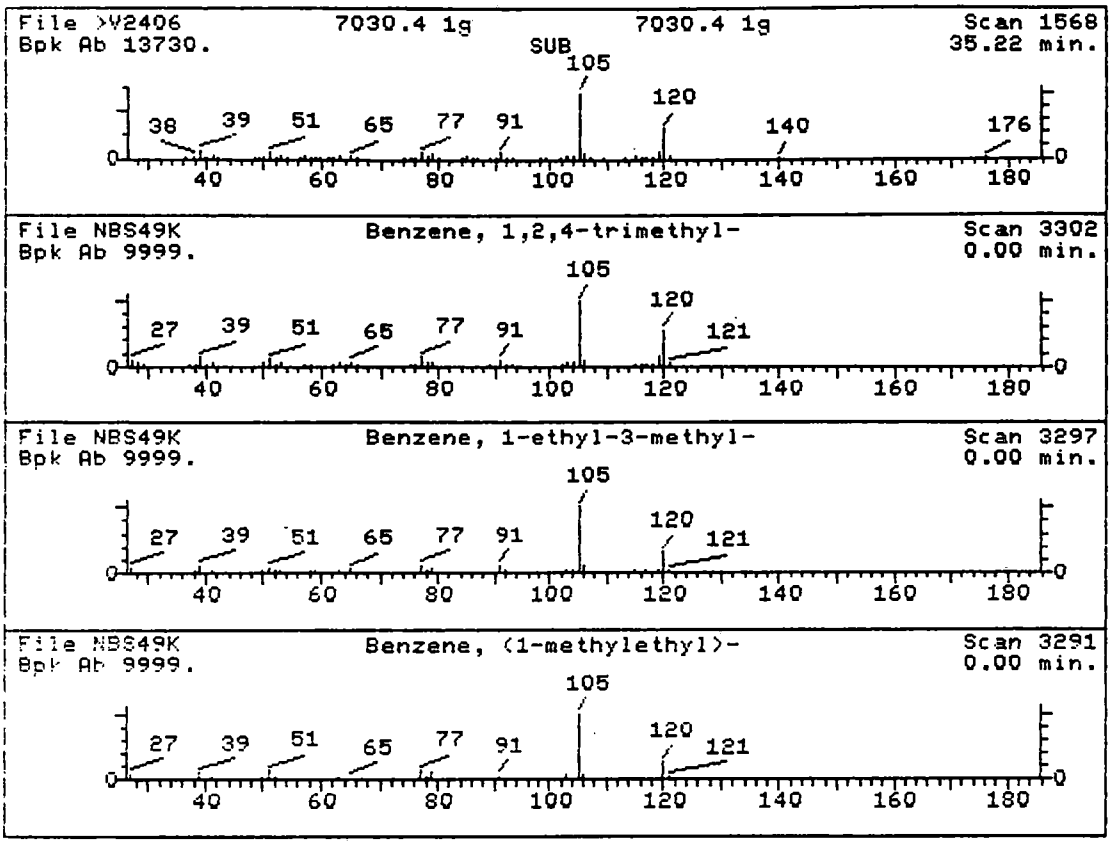


UNKNOWN #,5
AREA = 520967.0 TENTATIVE CONCENTRATION IS 29.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, (1-methylethyl)-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, 1-(bromomethyl)-4-methyl-	184	C8H9Br
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	196	C15H16

Sample file: >V2406 Spectrum #: 1559
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	86*	611143	13669	NBS49K	75	10	1	2	95	7	59	76
2.	84*	622968	13672	NBS49K	62	23	1	0	93	10	55	67
3.	84*	98828	13667	NBS49K	53	34	0	0	74	10	55	65
4.	67*	620144	13671	NBS49K	48	39	1	2	69	14	34	28
5.	60	104814	11090	NBS49K	58	41	2	3	67	12	30	13
6.	54	5814857	10954	NBS49K	71	28	2	0	100	25	22	26



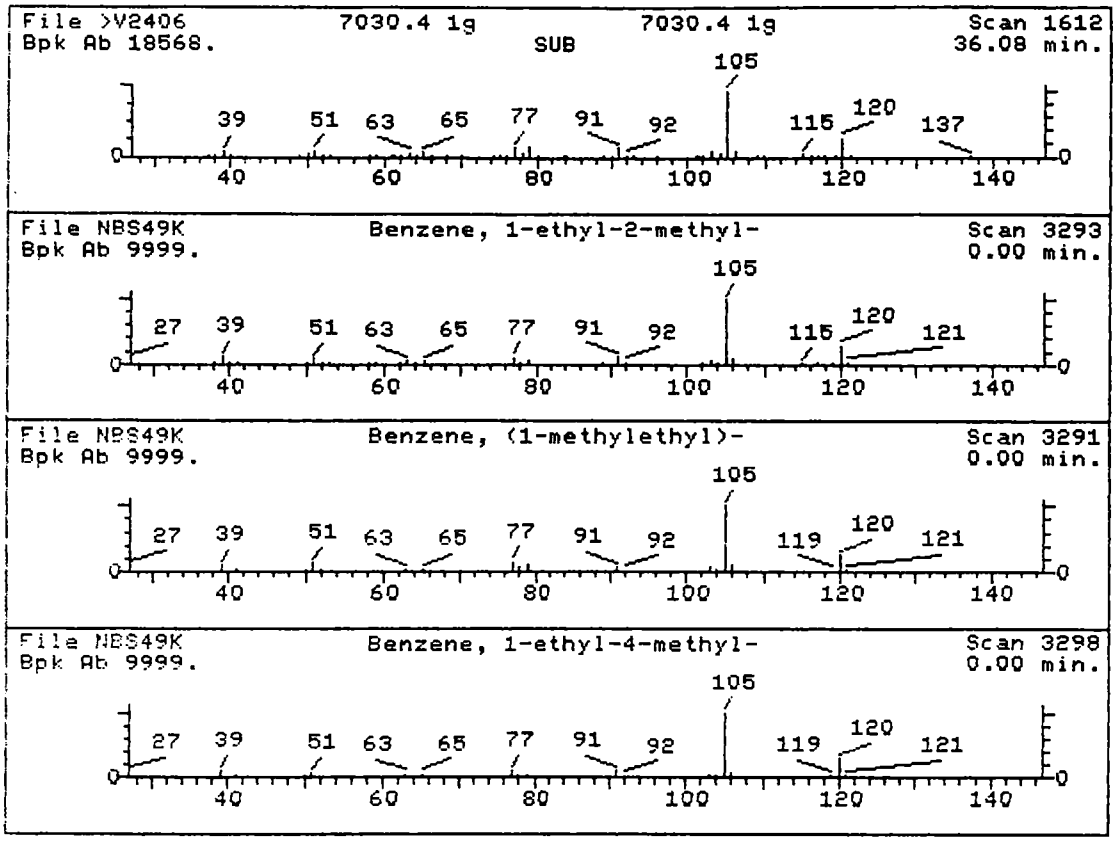
UNKNOWN #,6

AREA = 652317.0 TENTATIVE CONCENTRATION IS 36.00

1.	Benzene, 1,2,4-trimethyl-	120	C9H12
2.	Benzene, 1-ethyl-3-methyl-	120	C9H12
3.	Benzene, (1-methylethyl)-	120	C9H12
4.	Benzene, 1-ethyl-4-methyl-	120	C9H12
5.	Benzene, 1,2,3-trimethyl-	120	C9H12
6.	Benzene, 1,3,5-trimethyl-	120	C9H12

Sample file: >V2406 Spectrum #: 1568
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	93*	95636	13676	NBS49K	81	14	1	0	69	9	68	92
2.	93*	620144	13671	NBS49K	75	12	1	0	96	12	64	93
3.	92*	98828	13667	NBS49K	72	15	0	0	80	26	57	95
4.	87*	622968	13672	NBS49K	80	5	0	-2	100	14	55	86
5.	84*	526738	13674	NBS49K	84	16	2	-1	67	9	55	63
6.	84*	108678	13673	NBS49K	72	16	2	0	72	9	55	66

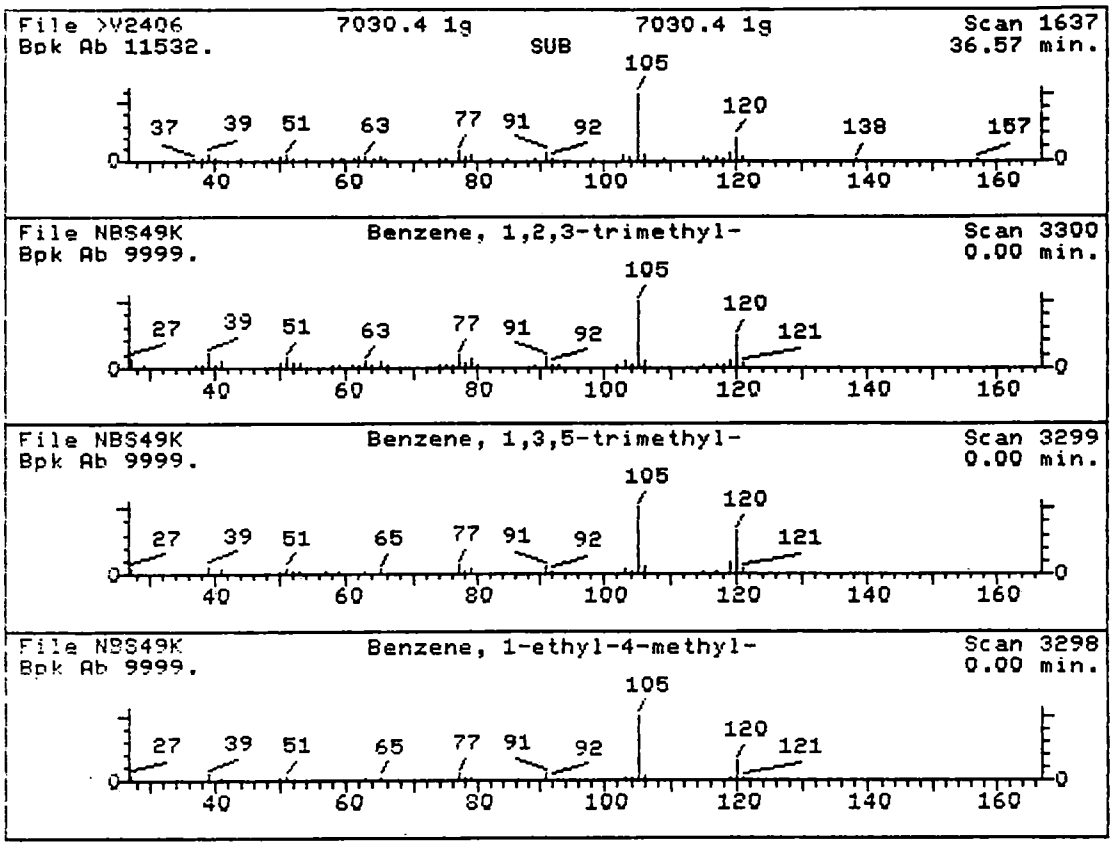


UNKNOWN #,7
AREA = 534971.0 TENTATIVE CONCENTRATION IS 30.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, (1-methylethyl)-	120	C9H12
3.	Benzene, 1-ethyl-4-methyl-	120	C9H12
4.	Benzene, 1,2,3-trimethyl-	120	C9H12
5.	Benzene, (1-methyl-3-butenyl)-	146	C11H14
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	196	C15H16

Sample file: >V2406 Spectrum #: 1612
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	611143	13669	NBS49K	79	6	0	2	86	12	64	94
2.	86*	98828	13667	NBS49K	76	11	0	-2	88	7	59	73
3.	83*	622968	13672	NBS49K	67	18	1	0	88	12	51	77
4.	59*	526738	13674	NBS49K	60	40	1	0	54	40	21	56
5.	52	10340495	10939	NBS49K	49	31	2	0	100	20	20	17
6.	44	5814857	10954	NBS49K	56	43	2	0	100	22	17	15

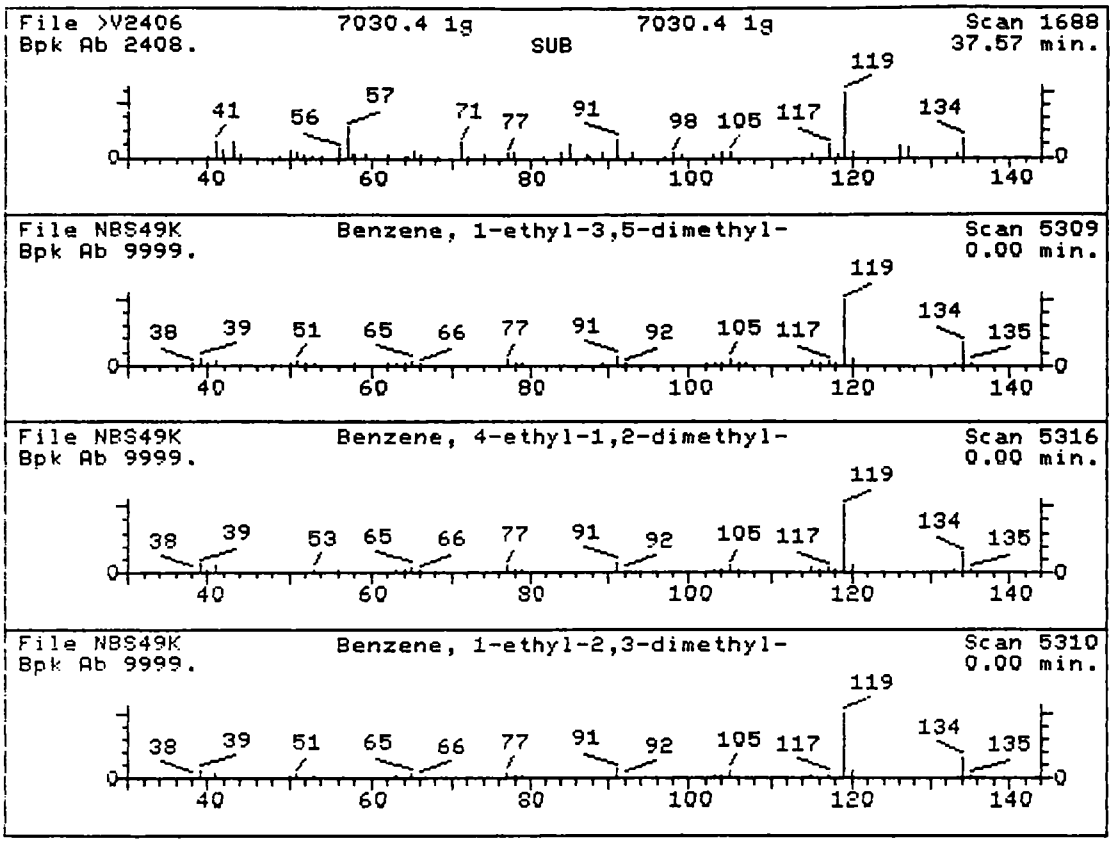


UNKNOWN #,8
AREA = 254318.0 TENTATIVE CONCENTRATION IS 14.00

1.	Benzene, 1,2,3-trimethyl-	120	C9H12
2.	Benzene, 1,3,5-trimethyl-	120	C9H12
3.	Benzene, 1-ethyl-4-methyl-	120	C9H12
4.	Benzene, 1-ethyl-2-methyl-	120	C9H12
5.	Benzene, 1-ethyl-3-methyl-	120	C9H12
6.	Benzene, 1,2,4-trimethyl-	120	C9H12

Sample file: >V2406 Spectrum #: 1637
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	84*	526738	13674	NBS49K	85	15	2	-2	67	7	55	6
2.	81*	108678	13673	NBS49K	62	26	2	4	68	8	53	4
3.	79*	622968	13672	NBS49K	73	12	1	-2	93	15	43	6
4.	76*	611143	13669	NBS49K	65	20	2	0	100	14	40	5
5.	76*	620144	13671	NBS49K	65	22	2	0	100	12	40	5
6.	69*	95636	13676	NBS49K	68	27	1	0	63	35	26	6

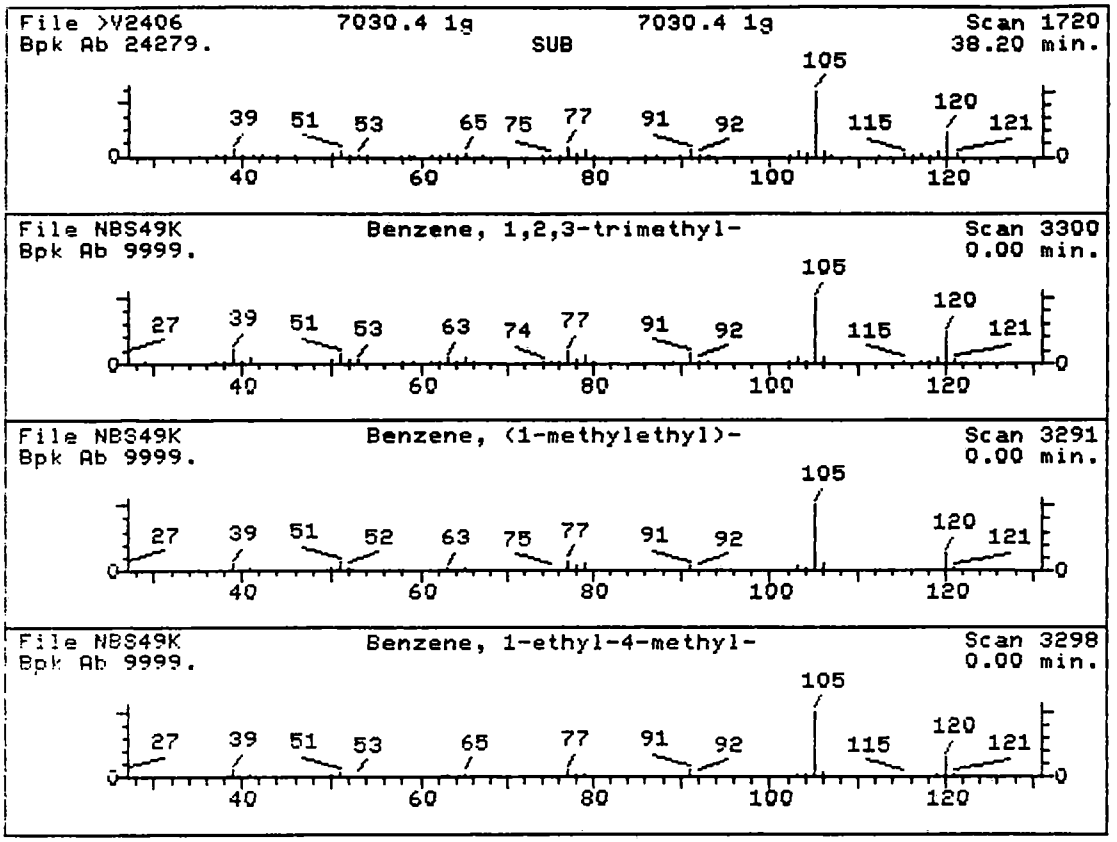


UNKNOWN #,9
AREA = 152969.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14
2.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14
3.	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14
4.	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14
5.	Ethanone, 1-(methylphenyl)-	134	C9H10O
6.	Benzene, methyl(1-methylethyl)-	134	C10H14

Sample file: >V2406 Spectrum #: 1688
Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	59*	934747	13532	NBS49K	47	48	0	0	76	39	21	55
2.	59*	934805	13534	NBS49K	46	47	0	0	67	39	21	54
3.	53*	933982	13533	NBS49K	41	50	0	0	74	39	19	44
4.	44*	2870044	13529	NBS49K	34	55	0	0	76	40	17	33
5.	41*	26444199	13526	NBS49K	47	45	1	0	81	43	14	32
6.	36*	25155151	13531	NBS49K	40	50	1	0	75	39	14	23

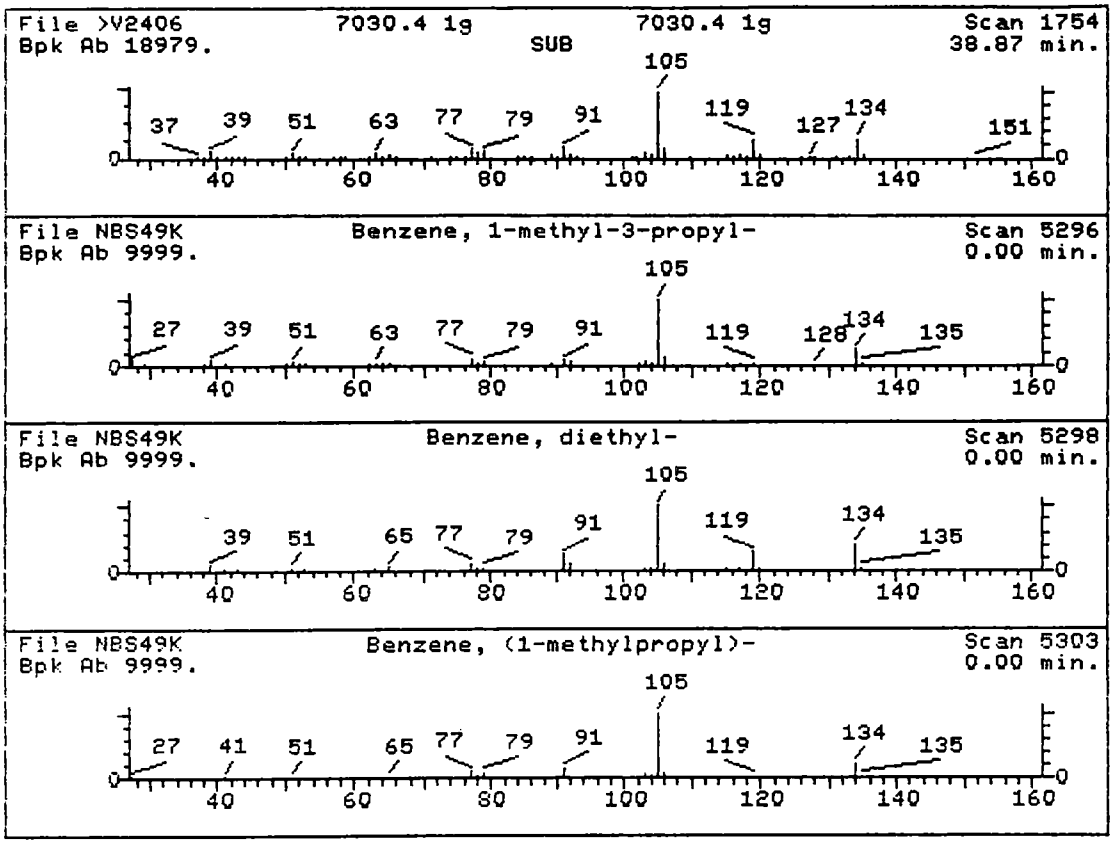


UNKNOWN #,10
AREA = 489429.0 TENTATIVE CONCENTRATION IS 27.00

1.	Benzene, 1,2,3-trimethyl-	120	C9H12
2.	Benzene, (1-methylethyl)-	120	C9H12
3.	Benzene, 1-ethyl-4-methyl-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, 1-ethyl-2-methyl-	120	C9H12
6.	Benzene, 1,3,5-trimethyl-	120	C9H12

Sample file: >V2406 Spectrum #: 1720
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	526738	13674	NBS49K	80	20	0	0	59	35	50	94
2.	89*	98828	13667	NBS49K	82	5	0	-2	97	9	62	86
3.	86*	622968	13672	NBS49K	67	18	1	0	97	9	59	77
4.	83*	620144	13671	NBS49K	70	17	2	1	91	7	54	53
5.	83*	611143	13669	NBS49K	63	22	2	0	94	9	54	50
6.	79*	108678	13673	NBS49K	60	28	2	4	73	9	48	39



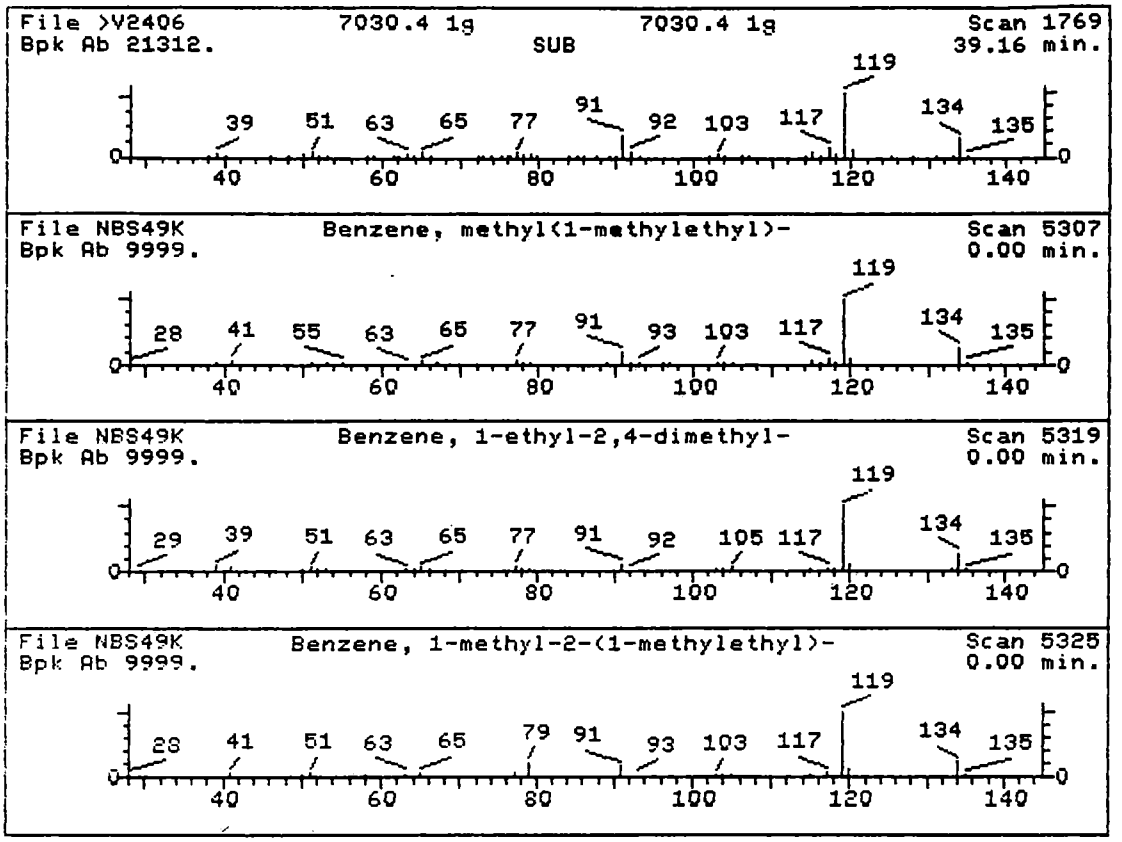
. UNKNOWN #,11
AREA = 913875.0 TENTATIVE CONCENTRATION IS 51.00

1.	Benzene, 1-methyl-3-propyl-	134 C10H14
2.	Benzene, diethyl-	134 C10H14
3.	Benzene, (1-methylpropyl)-	134 C10H14
4.	Benzene, 1,2-diethyl-	134 C10H14
5.	Benzene, 1-(bromomethyl)-4-methyl-	184 C8H9Br
6.	Benzeneacetaldehyde, .alpha.-methyl-	134 C9H10O

Sample file: >V2406 Spectrum #: 1754
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	87*	1074437	16249	NBS49K	71	16	0	1	100	15	55	89
2.	76*	25340174	16250	NBS49K	59	36	1	0	69	14	40	53
3.	75*	135988	16252	NBS49K	55	28	0	2	100	17	35	66
4.	58*	135013	16258	NBS49K	58	48	2	2	69	17	25	28
5.	52	104814	11090	NBS49K	57	42	2	4	74	17	20	13
6.	47*	93538	16228	NBS49K	56	38	2	-3	80	29	19	25

8



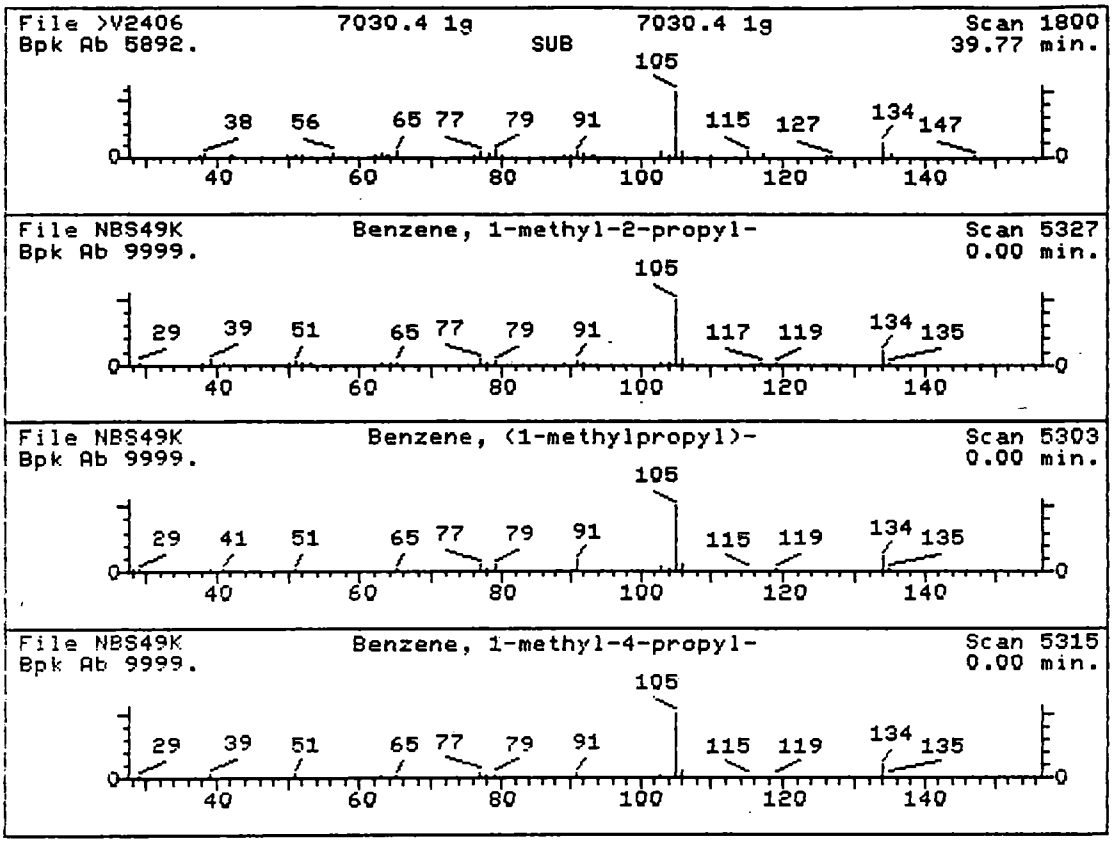
UNKNOWN #,12
AREA = 1023146. TENTATIVE CONCENTRATION IS 57.00

1.	Benzene, methyl(1-methylethyl)-	134	C10H14
2.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14
3.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14
4.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14
5.	Benzene, 1,2,3,4-tetramethyl-	134	C10H14
6.	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14

Sample file: >V2406 Spectrum #: 1769
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	79*	25155151	13531	NBS49K	57	33	2	2	100	6	48	3
2.	76*	874419	13536	NBS49K	60	28	1	4	94	11	40	5
3.	76*	527844	13539	NBS49K	61	31	1	0	95	13	40	5
4.	76*	934805	13534	NBS49K	60	33	1	0	80	15	40	5
5.	76*	488233	16251	NBS49K	51	43	2	4	73	10	45	2
6.	74*	2870044	13529	NBS49K	56	33	1	3	98	11	39	4

98

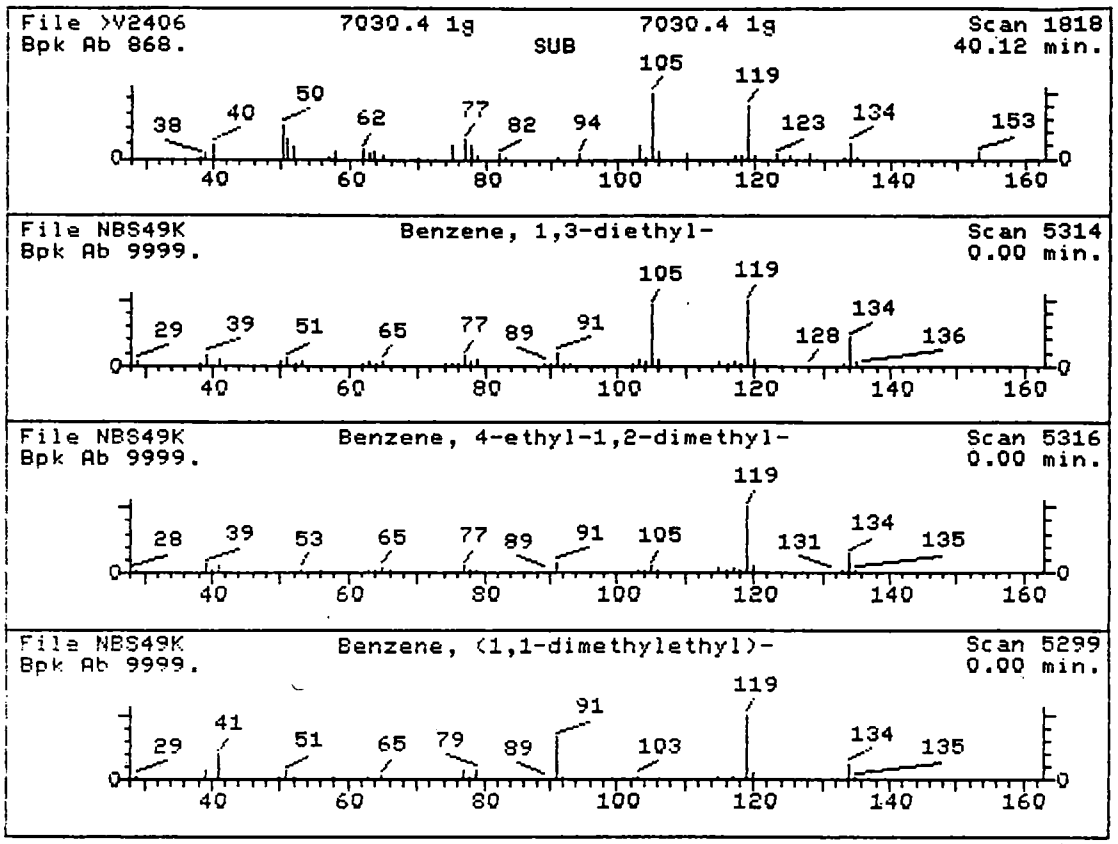


UNKNOWN #,13
AREA = 148361.0 TENTATIVE CONCENTRATION IS 8.00

1.	Benzene, 1-methyl-2-propyl-	134 C10H14
2.	Benzene, (1-methylpropyl)-	134 C10H14
3.	Benzene, 1-methyl-4-propyl-	134 C10H14
4.	Benzene, 1-methyl-3-propyl-	134 C10H14
5.	Benzene, diethyl-	134 C10H14
6.	Nicotinonitrile, 1-ethyl-1,4-dihydro-	134 C8H10N2

Sample file: >V2406 Spectrum #: 1800
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	67*	1074175	16264	NBS49K	44	39	2	0	100	13	34	23
2.	60*	135988	16252	NBS49K	35	48	2	0	100	11	30	17
3.	60*	1074551	16260	NBS49K	44	39	2	2	100	13	30	16
4.	52*	1074437	16249	NBS49K	40	47	2	0	94	17	20	19
5.	27*	25340174	16250	NBS49K	36	59	2	0	55	44	8	15
6.	15*	19424169	16218	NBS49K	27	71	2	0	39	59	3	14



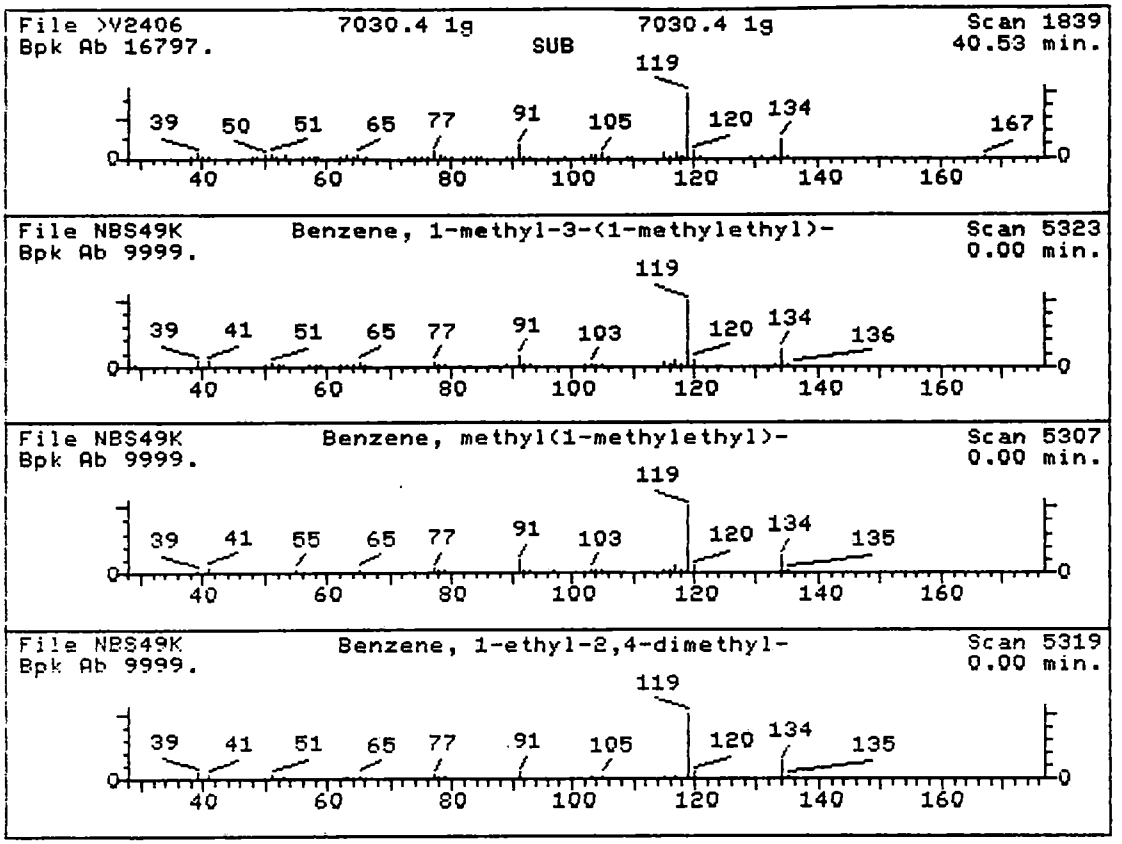
UNKNOWN #,14
AREA = 213132.0 TENTATIVE CONCENTRATION IS 12.00

1.	Benzene, 1,3-diethyl-	134	C10H14
2.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14
3.	Benzene, (1,1-dimethylethyl)-	134	C10H14
4.	Imidazo[1,2-a]pyrimidine	119	C6H5N3
5.	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14
6.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14

Sample file: >V2406 Spectrum #: 1818
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	141935	16259	NBS49K	32	70	2	0	58	58	3	14
2.	15*	934805	13534	NBS49K	27	66	3	0	81	58	3	13
3.	15*	98066	13528	NBS49K	27	68	3	0	81	58	3	13
4.	15*	274953	13508	NBS49K	32	75	3	0	81	56	3	13
5.	15*	2870044	13529	NBS49K	23	66	3	0	81	59	3	12
6.	15*	874419	13536	NBS49K	22	66	3	0	81	59	3	12

9C



UNKNOWN #,15
AREA = 359354.0 TENTATIVE CONCENTRATION IS 20.00

1.	Benzene, 1-methyl-3-(1-methylethyl)-	134	C10H14
2.	Benzene, methyl(1-methylethyl)-	134	C10H14
3.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14
4.	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14
5.	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14
6.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14

Sample file: >V2406 Spectrum #: 1839
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	96*	535773	13538	NBS49K	79	10	0	0	100	5	72	9
2.	96*	25155151	13531	NBS49K	79	11	1	0	92	5	72	9
3.	95*	874419	13536	NBS49K	76	12	0	0	100	5	72	9
4.	95*	2870044	13529	NBS49K	72	17	0	0	100	5	72	9
5.	93*	934805	13534	NBS49K	72	21	0	0	74	5	68	8
6.	89*	527844	13539	NBS49K	74	18	1	0	95	5	66	7

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO: 7030.5 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Sample wt/vol: 1.0 (g/mL) g

Level: (Low/med) Low

Column: Capillary

Lab Sample ID: 7030.5 1g

Lab File ID: >V2407

Date Received: 01-10-92

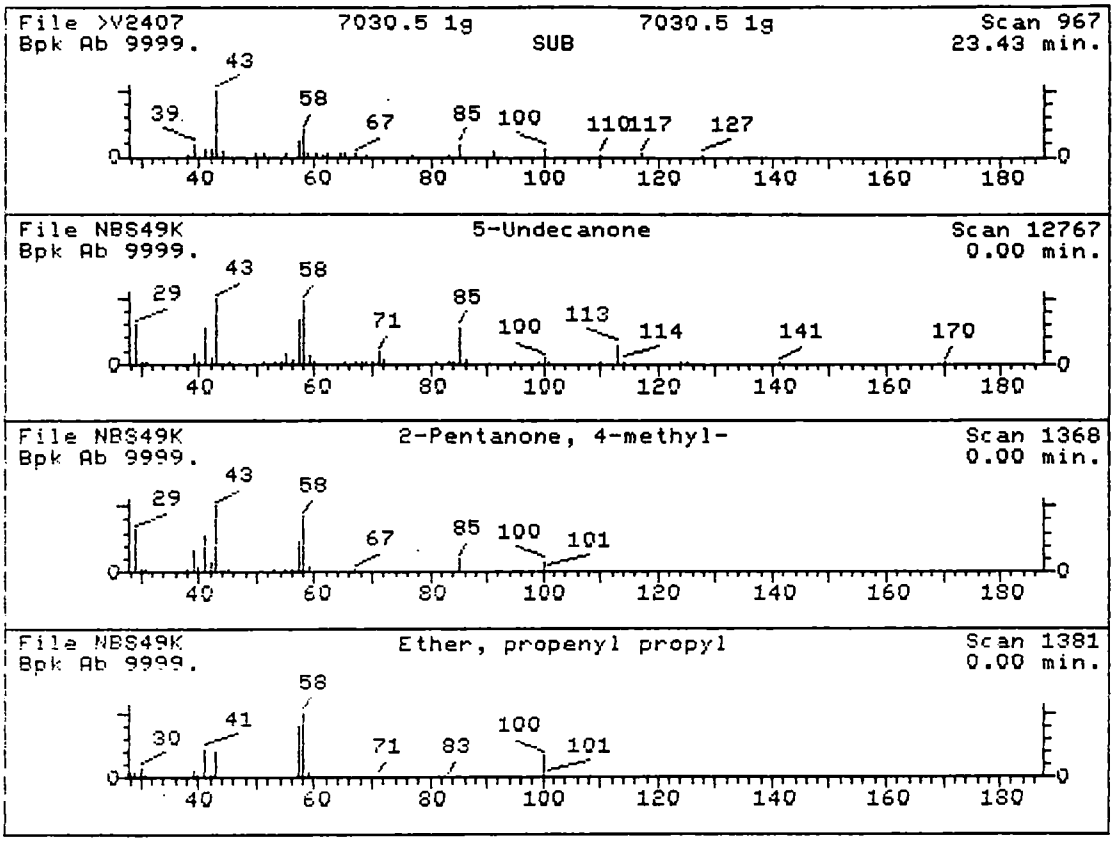
Date Analyzed: 01/14/92

Dilution Factor: 5

Number of TICs found: 15

CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	33083839	5-Undecanone	23.43	30	35
2		Unknown	34.54	40	
3	103651	Benzene, propyl-	34.68	25	68
4	611143	Benzene, 1-ethyl-2-methyl-	31.05	140	86
5	108678	Benzene, 1,3,5-trimethyl-	35.24	45	88
6	611143	Benzene, 1-ethyl-2-methyl-	36.11	55	95
7	95636	Benzene, 1,2,4-trimethyl-	36.60	220	96
8		Unknown	37.23	25	
9	526738	Benzene, 1,2,3-trimethyl-	38.22	95	96
10	25340174	Benzene, diethyl-	38.89	155	76
11	25155151	Benzene, methyl(1-methylethy	39.21	195	73
12	135988	Benzene, (1-methylpropyl)-	39.77	30	83
13	527537	Benzene, 1,2,3,5-tetramethyl	40.15	55	25
14	25155151	Benzene, methyl(1-methylethy	40.25	45	62
15	535773	Benzene, 1-methyl-3-(1-methy	40.56	90	97

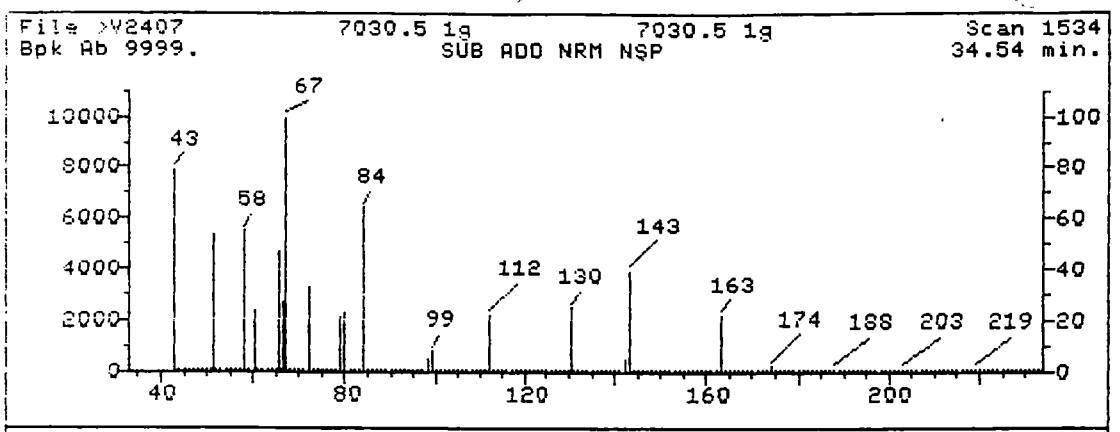


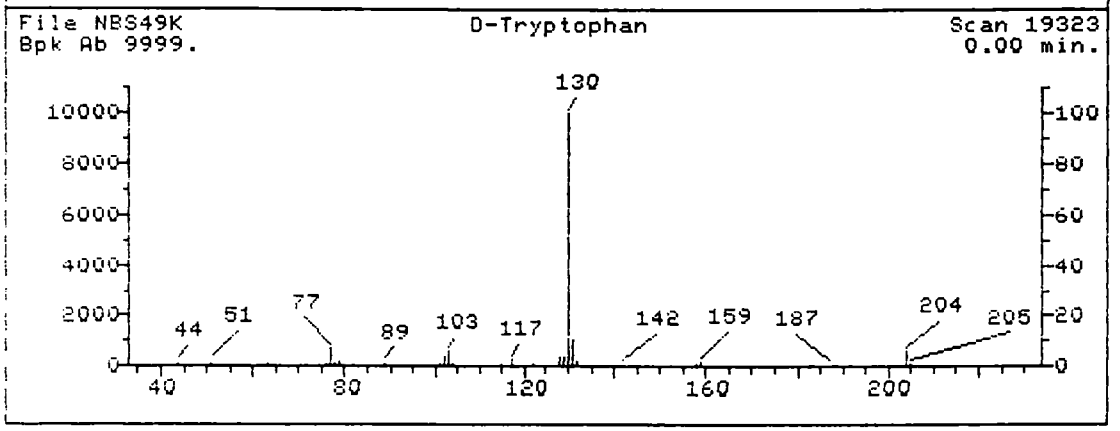
UNKNOWN #,1
AREA = 80940.00 TENTATIVE CONCENTRATION IS 6.00

1.	5-Undecanone	170 C11H22O
2.	2-Pentanone, 4-methyl-	100 C6H12O
3.	Ether, propenyl propyl	100 C6H12O
4.	2-Hexanone	100 C6H12O
5.	1-Propene, 1-propoxy-, (Z)-	100 C6H12O
6.	2-Octanamine	129 C8H19N

Sample file: >V2407 Spectrum #: 967
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	35*	33083839	1573	NBS49K	36	54	2	0	35	34	12	18
2.	33*	108101	1369	NBS49K	35	47	1	0	48	36	10	19
3.	30*	3424893	1371	NBS49K	30	44	0	0	30	47	10	22
4.	29*	591786	1372	NBS49K	32	51	1	0	68	42	8	17
5.	25*	14360782	1374	NBS49K	29	47	2	0	40	47	7	14
6.	25*	693163	10061	NBS49K	23	66	1	0	120	47	7	14





UNKNOWN #,2

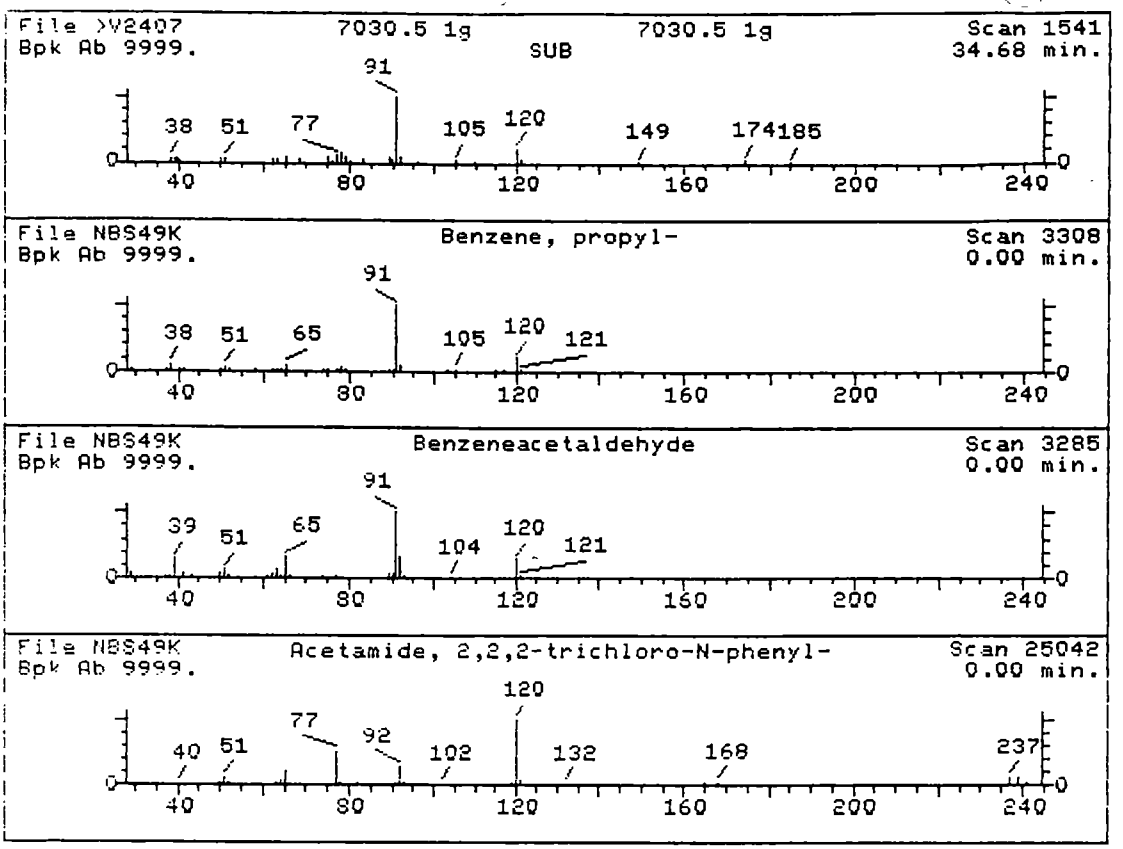
AREA = 130643.0 TENTATIVE CONCENTRATION IS 8.00

1. D-Tryptophan 204 C11H12N2O2

Sample file: >V2407 Spectrum #: 1534

Search speed: 1 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I(
1.	11*	153946	15657	NBS49K	45	52	1	4	52	64	2	19



UNKNOWN #,3

AREA = 85230.00 TENTATIVE CONCENTRATION IS 5.00

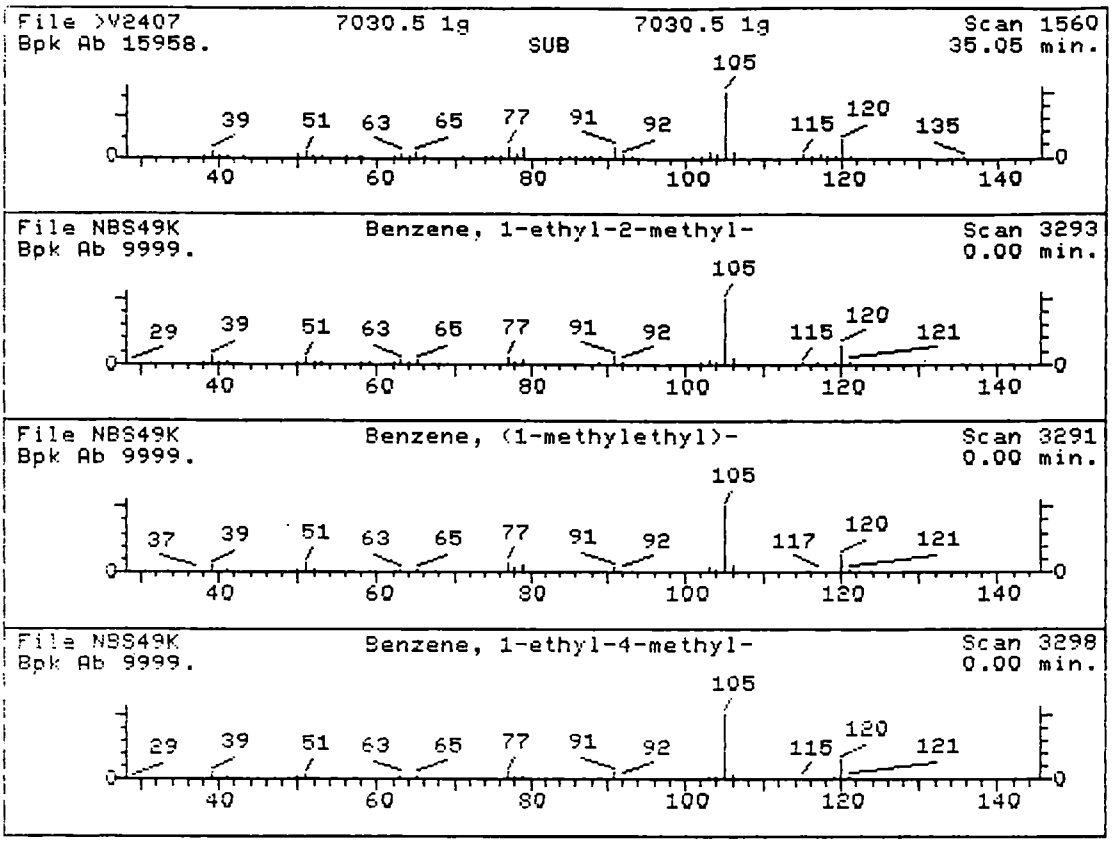
1.	Benzene, propyl-	120	C9H12
2.	Benzeneacetaldehyde	120	C8H8O
3.	Acetamide, 2,2,2-trichloro-N-phenyl-	237	C8H6C13NO
4.	Ethanol, 2-[(phenylmethyl)amino]-	151	C9H13NO
5.	Benzene, [(methoxymethoxy)methyl]-	152	C9H12O2
6.	Bicyclo[3.2.1]oct-2-ene, 3-methylene-	120	C9H12

Sample file: >V2407 Spectrum #: 1541

Search speed: 1 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	68*	103651	13679	NBS49K	44	41	0	0	69	22	30	5
2.	58*	122781	13663	NBS49K	48	46	2	0	82	18	25	2
3.	55*	2563975	13762	NBS49K	51	37	1	2	20	29	24	3
4.	52*	104632	13712	NBS49K	39	40	2	0	79	20	20	1
5.	49*	31600552	8511	NBS49K	52	44	2	4	100	27	19	2
6.	43*	22819814	8483	NBS49K	32	72	2	0	74	22	17	1

95

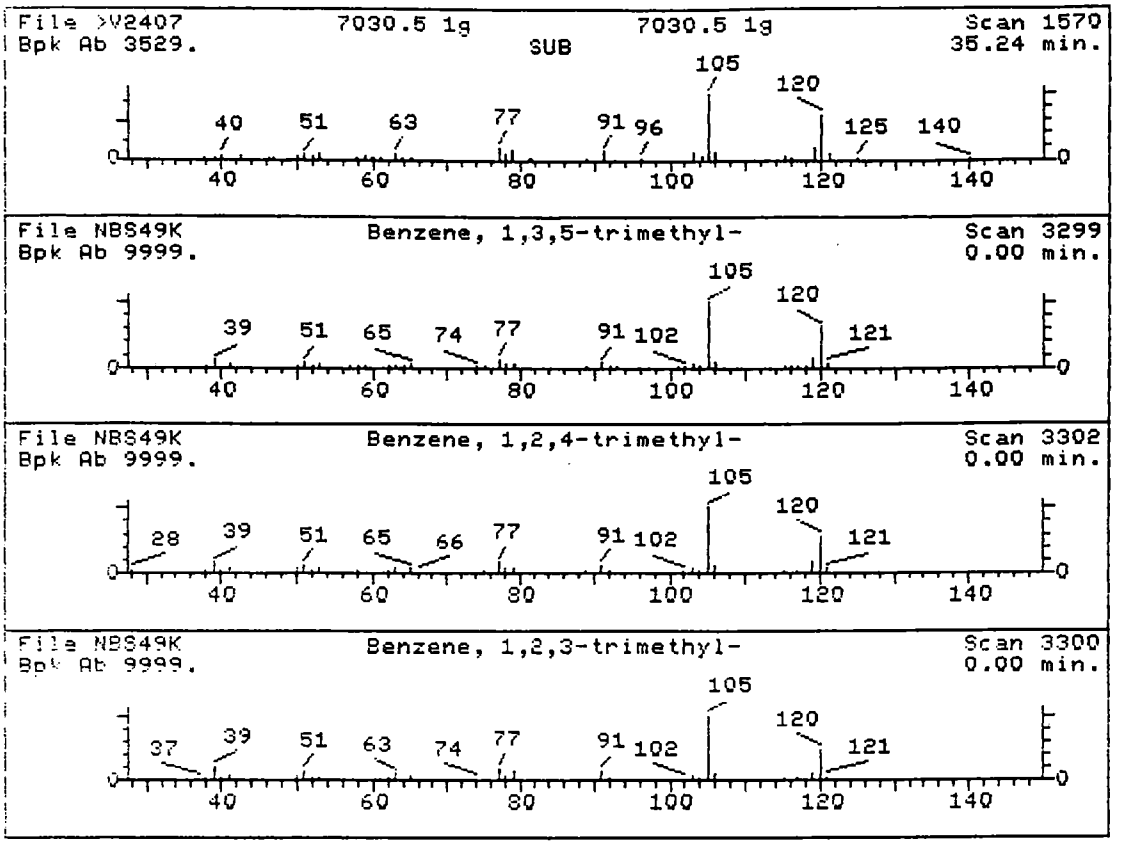


UNKNOWN #,4
AREA = 441695.0 TENTATIVE CONCENTRATION IS 28.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, (1-methylethyl)-	120	C9H12
3.	Benzene, 1-ethyl-4-methyl-	120	C9H12
4.	Benzene, 1-(bromomethyl)-4-methyl-	184	C8H9Br
5.	Phenol, o-[(.alpha.-methylbenzyl)sulfonyl]-	262	C14H1403S
6.	Benzene, 1-(bromomethyl)-2-methyl-	184	C8H9Br

Sample file: >V2407 Spectrum #: 1560
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	86*	611143	13669	NBS49K	75	10	1	3	96	7	59	7
2.	83*	98828	13667	NBS49K	65	22	2	0	100	9	54	5
3.	74*	622968	13672	NBS49K	43	42	0	4	73	12	39	4
4.	52	104814	11090	NBS49K	59	40	2	0	100	20	20	1
5.	52	29634386	11125	NBS49K	58	42	2	4	100	16	20	1
6.	52	89929	11089	NBS49K	57	45	2	0	98	20	20	1



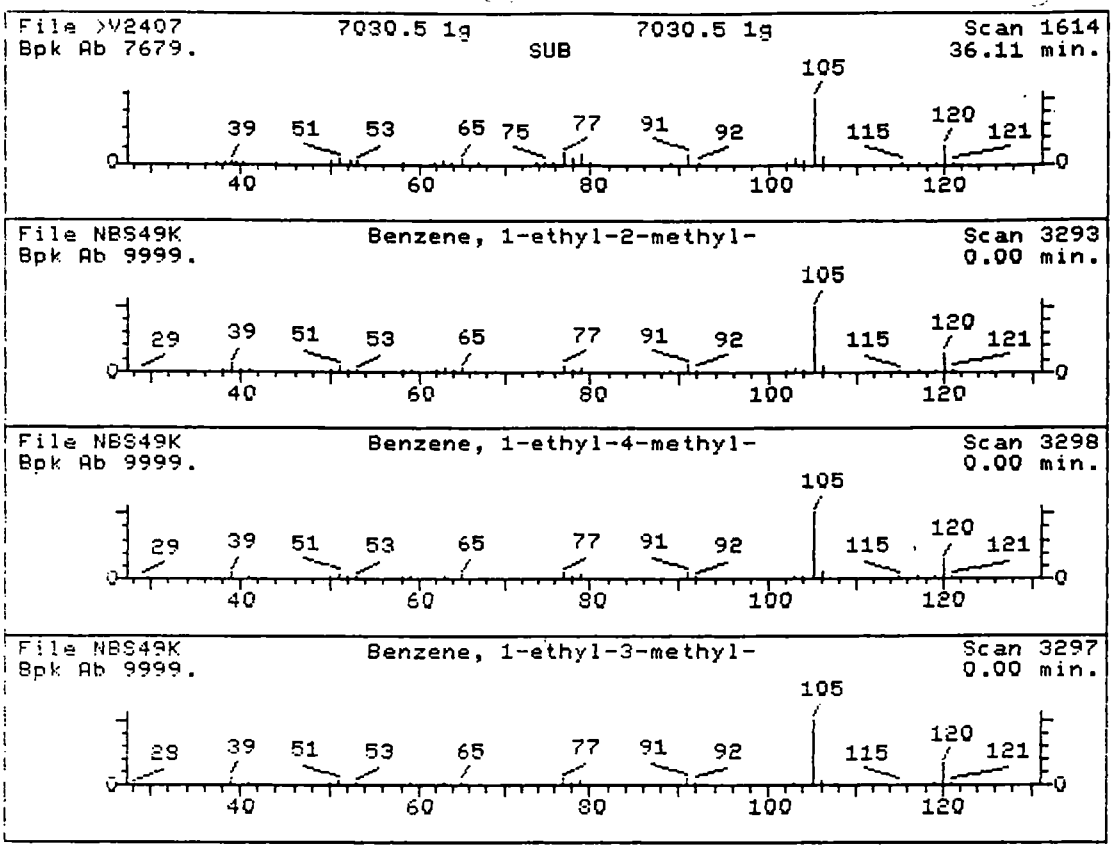
UNKNOWN #,5

AREA = 137252.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, 1,3,5-trimethyl-	120	C9H12
2.	Benzene, 1,2,4-trimethyl-	120	C9H12
3.	Benzene, 1,2,3-trimethyl-	120	C9H12
4.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)-	120	C9H12
5.	Cyclohexane, 1,2,4-tris(methylene)-	120	C9H12
6.	2,3-Heptadien-5-yne, 2,4-dimethyl-	120	C9H12

Sample file: >V2407 Spectrum #: 1570
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	88*	108678	13673	NBS49K	63	25	2	0	100	5	65	5
2.	87*	95636	13676	NBS49K	66	29	2	0	100	5	63	4
3.	67*	526738	13674	NBS49K	51	49	2	0	94	11	34	2
4.	60*	3141024	13677	NBS49K	33	71	3	0	100	11	30	1
5.	60*	14296812	13680	NBS49K	29	81	3	0	85	11	30	1
6.	60*	41898899	13675	NBS49K	28	81	3	0	92	11	30	1



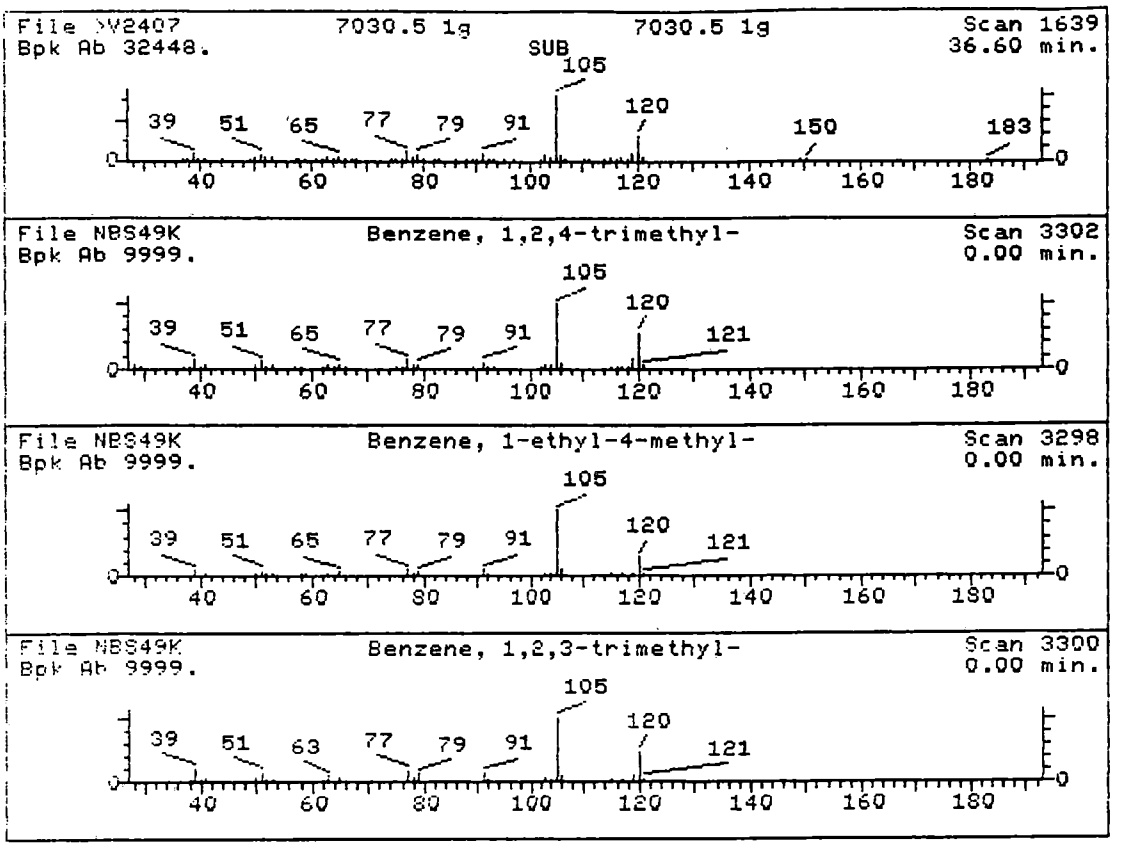
UNKNOWN #,6

AREA = 167907.0 TENTATIVE CONCENTRATION IS 11.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1-ethyl-3-methyl-	120	C9H12
4.	Benzene, 1,2,3-trimethyl-	120	C9H12
5.	Benzene, (1-methylethyl)-	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	196	C15H16

Sample file: >V2407 Spectrum #: 1614
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I(
1.	95*	611143	13669	NBS49K	73	12	0	0	94	3	72	95
2.	95*	622968	13672	NBS49K	72	13	0	0	97	3	72	95
3.	93*	620144	13671	NBS49K	81	6	1	4	94	3	68	80
4.	87*	526738	13674	NBS49K	70	30	2	3	69	3	63	45
5.	83*	98828	13667	NBS49K	70	17	2	2	100	6	54	53
6.	58	5814857	10954	NBS49K	69	30	2	0	100	17	25	24



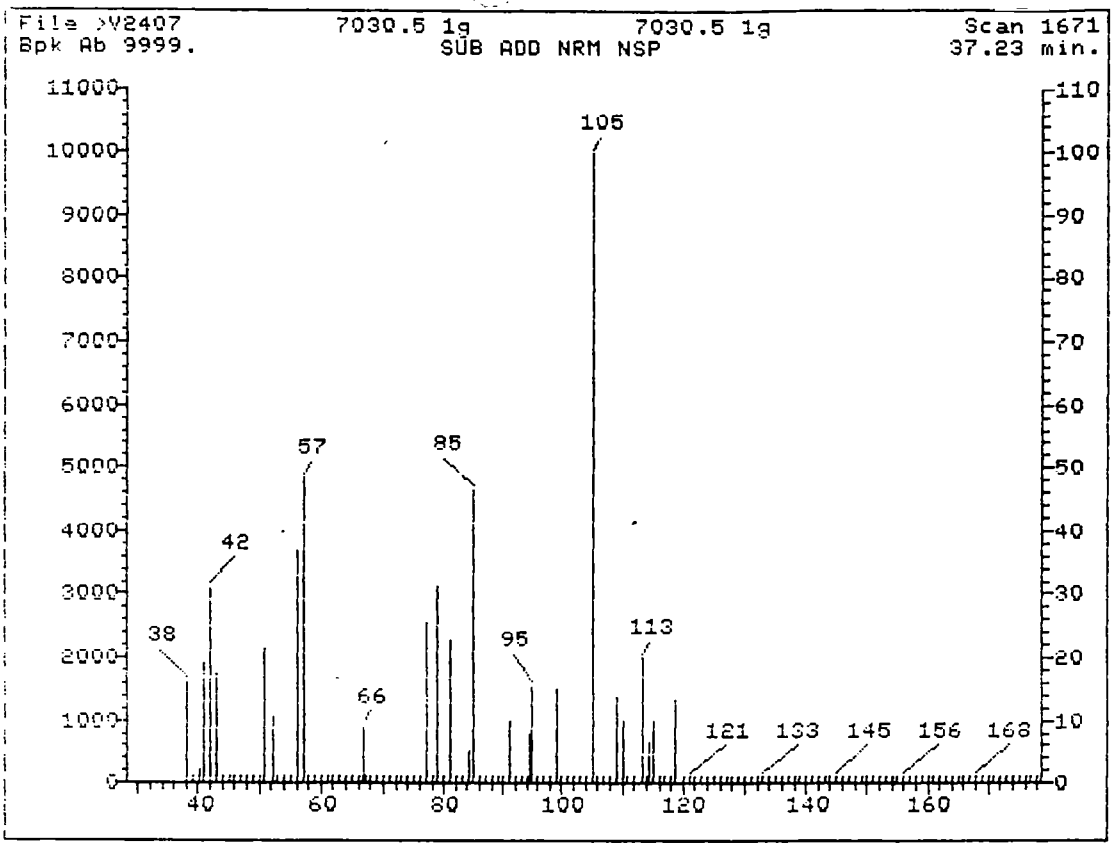
UNKNOWN #,7

AREA = 686414.0 TENTATIVE CONCENTRATION IS 44.00

1.	Benzene, 1,2,4-trimethyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1,2,3-trimethyl-	120	C9H12
4.	Benzene, (1-methylethyl)-	120	C9H12
5.	Benzene, 1,3,5-trimethyl-	120	C9H12
6.	Benzene, 1-ethyl-3-methyl-	120	C9H12

Sample file: >V2407 Spectrum #: 1639
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	96*	95636	13676	NBS49K	86	9	0	0	67	4	72	9
2.	92*	622968	13672	NBS49K	73	12	1	0	92	12	64	9
3.	92*	526738	13674	NBS49K	80	20	0	0	63	30	57	9
4.	83*	98828	13667	NBS49K	77	10	0	-2	98	12	51	7
5.	83*	108678	13673	NBS49K	73	15	2	4	72	7	54	5
6.	83*	620144	13671	NBS49K	69	18	1	0	86	13	51	7

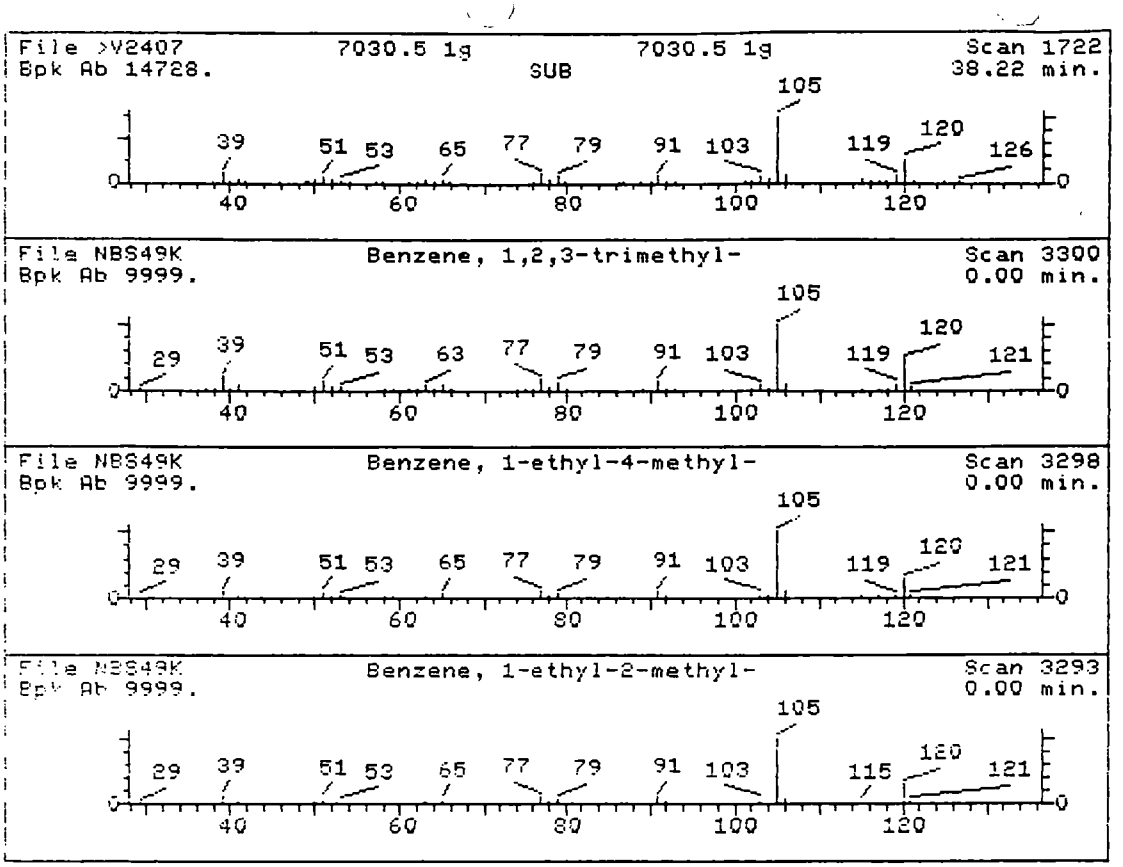


UNKNOWN #,8
AREA = 73541.00 TENTATIVE CONCENTRATION IS 5.00

Sample file: >V2407 Spectrum #: 1671

No data base entries were retrieved.

10

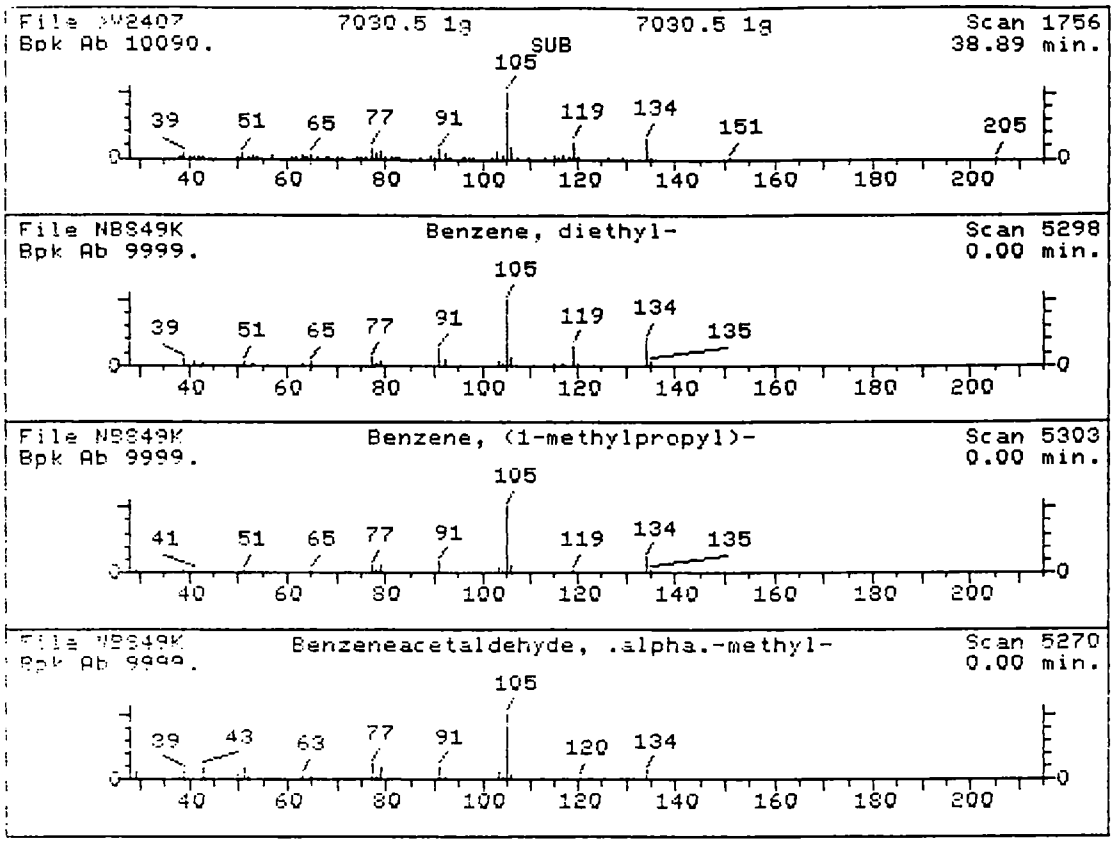


UNKNOWN #,9
AREA = 292595.0 TENTATIVE CONCENTRATION IS 19.00

1.	Benzene, 1,2,3-trimethyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1-ethyl-2-methyl-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, 1,2,4-trimethyl-	120	C9H12
6.	Benzene, (1-methylethyl)-	120	C9H12

Sample file: >V2407 Spectrum #: 1722
Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	96*	526738	13674	NBS49K	90	10	0	0	67	10	68	96
2.	96*	622968	13672	NBS49K	79	6	0	0	98	18	60	9?
3.	93*	611143	13669	NBS49K	75	10	1	0	100	18	60	93
4.	93*	620144	13671	NBS49K	75	12	1	0	100	16	60	93
5.	85*	95636	13676	NBS49K	72	23	0	0	59	38	37	89
6.	75*	98828	13667	NBS49K	57	30	0	0	76	18	35	69



UNKNOWN #,10

AREA = 491227.0 TENTATIVE CONCENTRATION IS 31.00

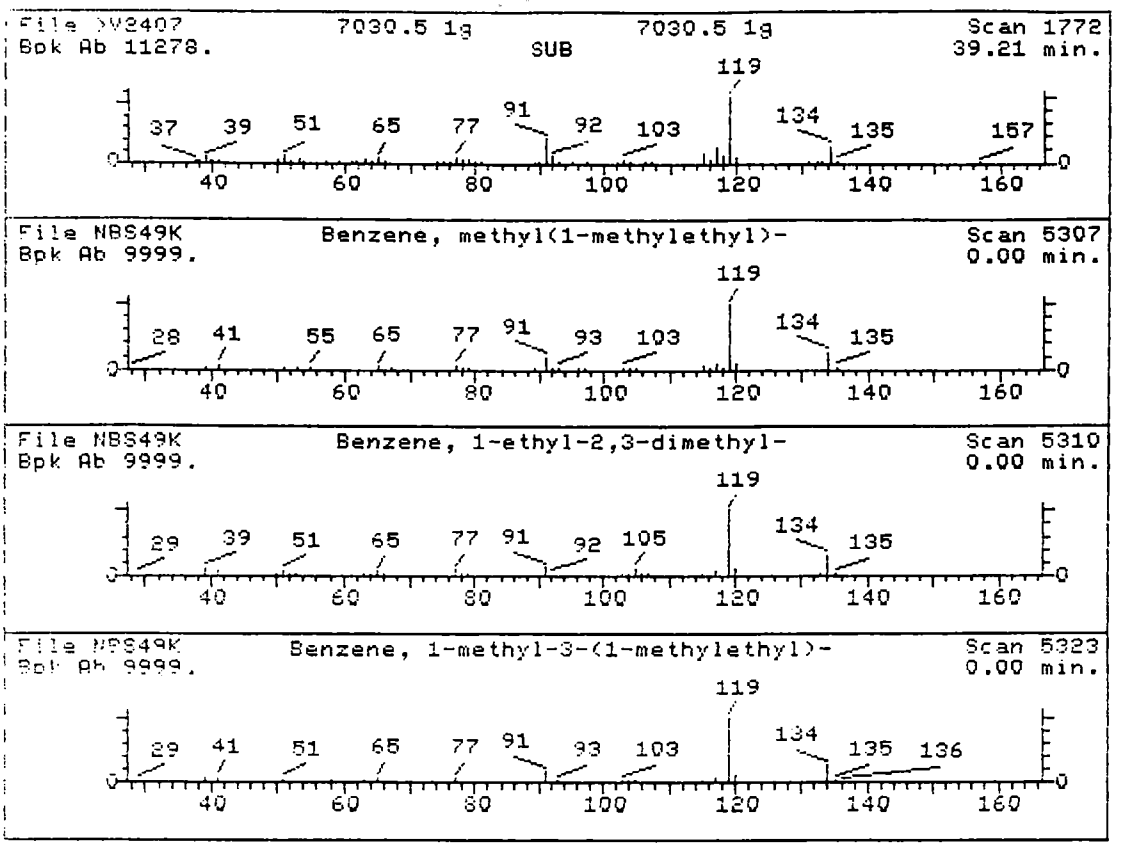
1.	Benzene, diethyl-	134 C10H14
2.	Benzene, (1-methylpropyl)-	134 C10H14
3.	Benzeneacetaldehyde, .alpha.-methyl-	134 C9H10O
4.	Benzene, 1,2-diethyl-	134 C10H14
5.	Nicotinonitrile, 1-ethyl-1,4-dihydro-	134 C8H10N2
6.	Phenol, o-[(.alpha.-methylbenzyl)sulfonyl]-	262 C14H1403S

Sample file: >U2407 Spectrum #: 1756

Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	76*	25340174	16250	NBS49K	60	35	1	0	72	15	40	56
2.	70*	135988	16252	NBS49K	40	43	0	0	92	20	32	50
3.	64*	93538	16228	NBS49K	64	30	1	-4	89	23	28	48
4.	55*	135013	16258	NBS49K	56	50	2	2	73	22	22	27
5.	52*	19424169	16218	NBS49K	46	67	2	4	77	19	20	12
6.	52	29634386	11125	NBS49K	65	35	2	4	84	20	20	15

108

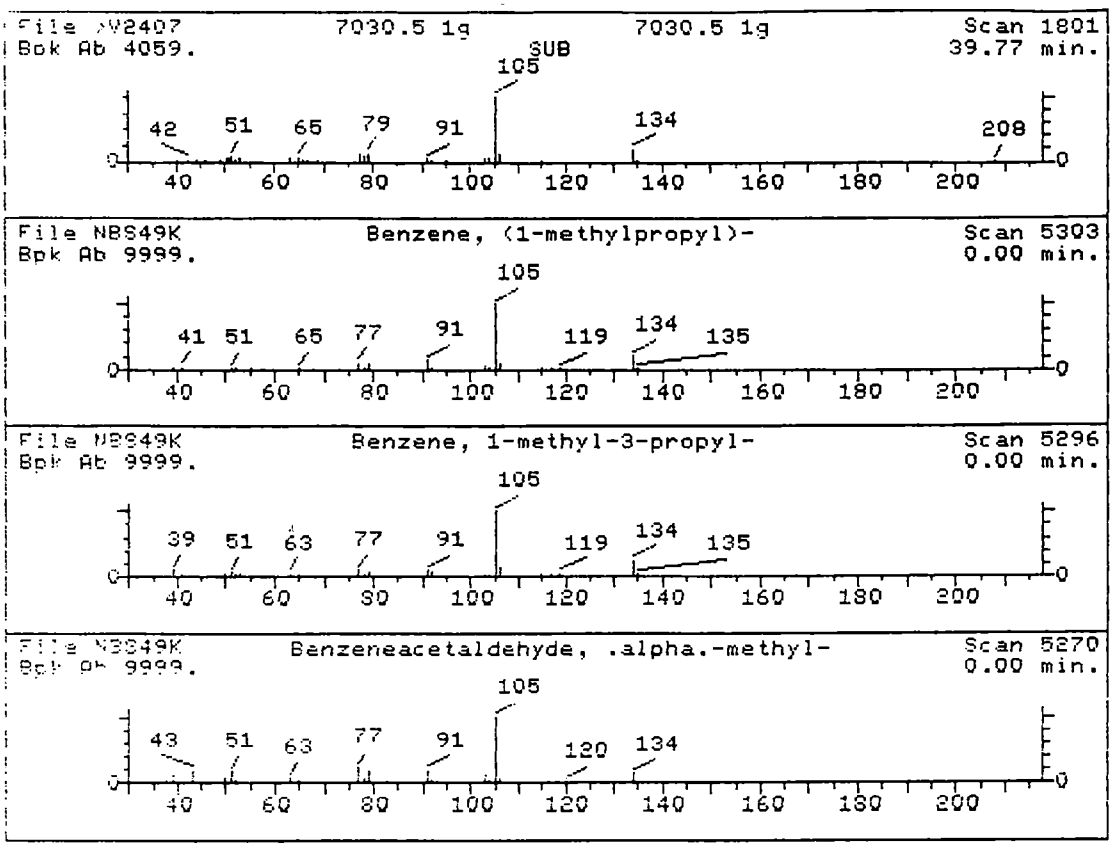


UNKNOWN #,11
AREA = 612746.0 TENTATIVE CONCENTRATION IS 39.00

1.	Benzene, methyl(1-methylethyl)-	134	C10H14
2.	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14
3.	Benzene, 1-methyl-3-(1-methylethyl)-	134	C10H14
4.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14
5.	Benzene, (1,1-dimethylethyl)-	134	C10H14
6.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14

Sample file: >V2407 Spectrum #: 1772
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	73*	25155151	13531	NBS49K	50	40	0	0	80	23	32	6
2.	54*	933982	13533	NBS49K	50	41	1	2	70	26	24	3
3.	51*	535773	13538	NBS49K	40	49	1	0	75	23	22	2
4.	49*	527844	13539	NBS49K	41	51	2	0	96	23	22	21
5.	49*	98066	13528	NBS49K	49	46	2	0	72	26	19	2
6.	48*	874419	13536	NBS49K	44	44	1	0	80	27	19	2



UNKNOWN #,12

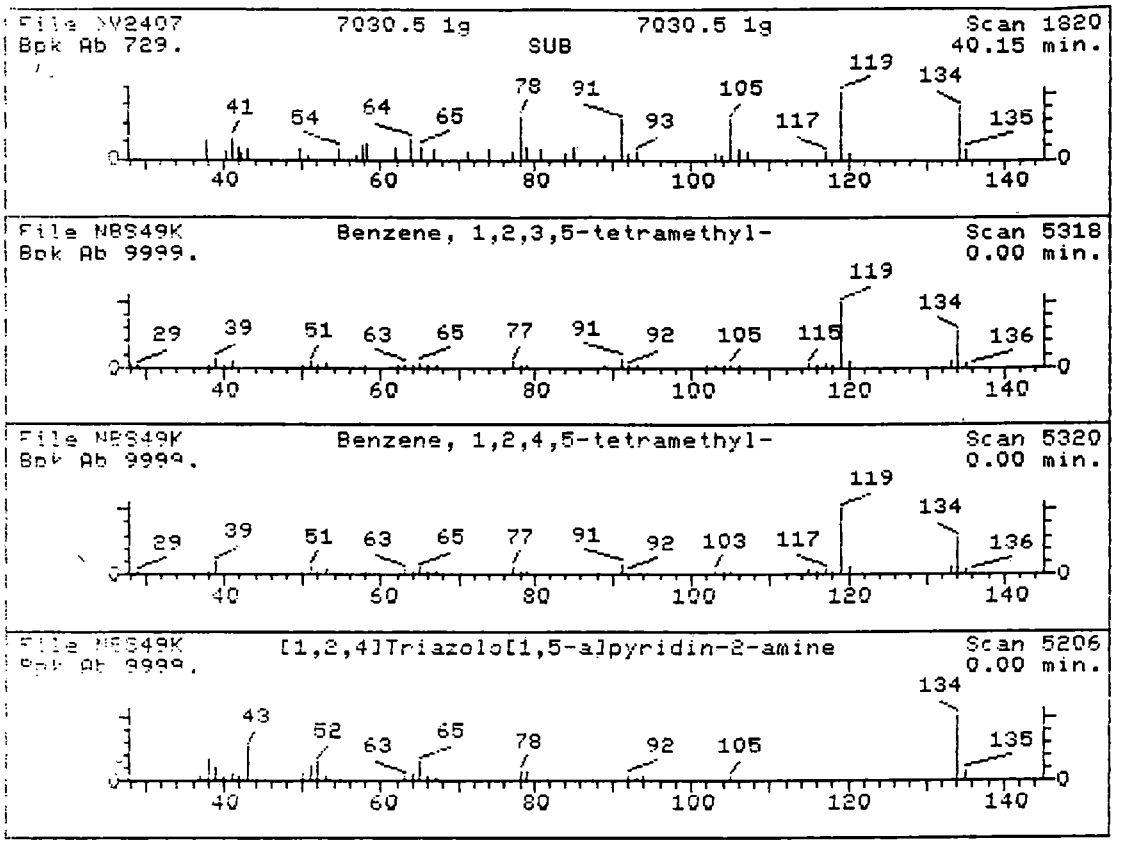
AREA = 92726.00 TENTATIVE CONCENTRATION IS 6.00

1.	Benzene, (1-methylpropyl)-	134	C10H14
2.	Benzene, 1-methyl-3-propyl-	134	C10H14
3.	Benzeneacetaldehyde, .alpha.-methyl-	134	C9H10O
4.	Benzene, 1-methyl-4-propyl-	134	C10H14
5.	Benzene, 1-methyl-2-propyl-	134	C10H14
6.	Benzene, (1,3-dimethyl-3-butenyl)-	160	C12H16

Sample file: >V2407 Spectrum #: 1801

Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	83*	135988	16252	NBS49K	50	33	2	3	91	5	57	2
2.	79*	1074437	16249	NBS49K	54	33	2	4	81	7	48	3
3.	78*	93538	16228	NBS49K	22	72	3	0	100	5	55	1
4.	71*	1074551	16260	NBS49K	52	31	2	0	98	13	38	3
5.	67*	1074175	16264	NBS49K	47	36	2	0	93	15	34	2
6.	60	56851515	11061	NBS49K	45	33	2	0	100	15	30	1



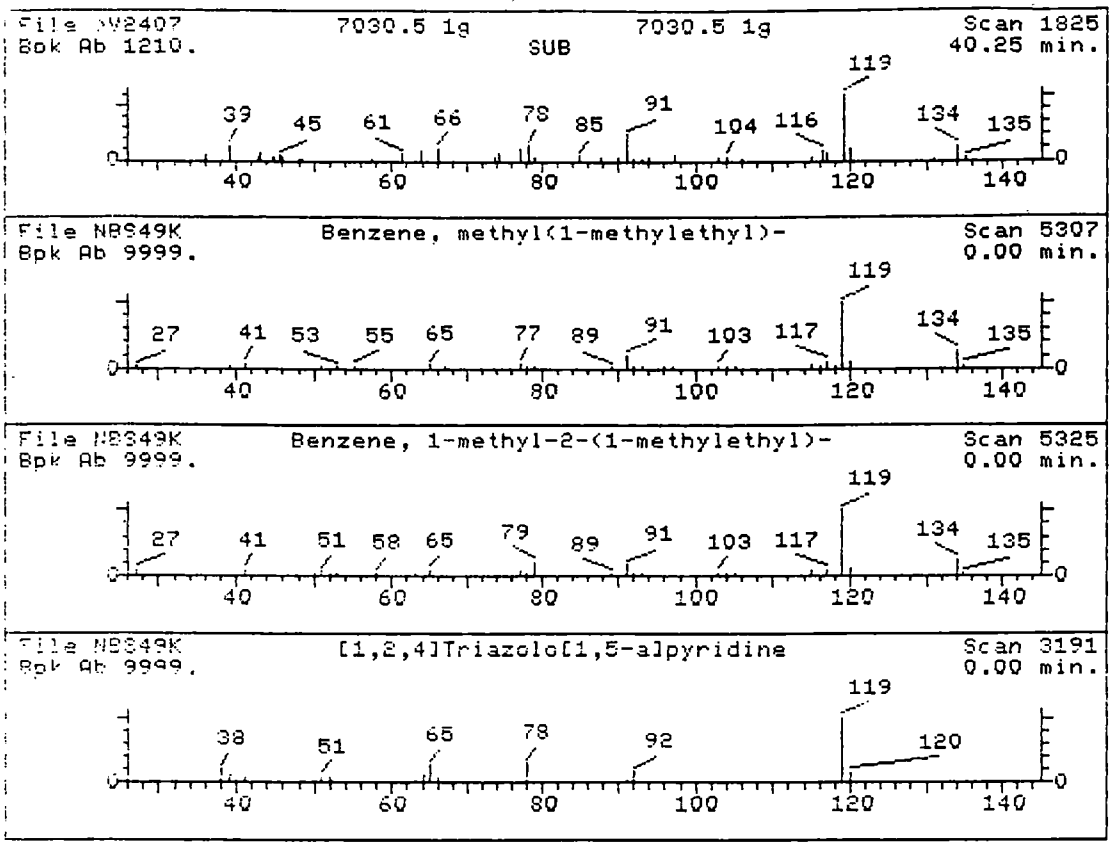
UNKNOWN #.13

AREA = 172033.0 TENTATIVE CONCENTRATION IS 11.00

1.	Benzene, 1,2,3,5-tetramethyl-	134 C10H14
2.	Benzene, 1,2,4,5-tetramethyl-	134 C10H14
3.	[1,2,4]Triazolo[1,5-a]pyridin-2-amine	134 C6H6N4
4.	Benzofuran, 2,3-dihydro-2-methyl-	134 C9H10O
5.	Benzene, (1,1-dimethylethyl)-	134 C10H14
6.	Ethanone, 1-(4-methylphenyl)-	134 C9H10O

Sample file: >V2407 Spectrum #: 1820
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	25*	527537	16261	NBS49K	29	64	3	0	100	43	8	1
2.	25*	95932	16262	NBS49K	31	71	3	0	100	41	8	1
3.	15*	874464	16199	NBS49K	32	78	3	0	78	59	3	1
4.	15*	1746118	16239	NBS49K	29	80	3	0	78	56	3	1
5.	12*	98066	13528	NBS49K	49	46	2	0	85	63	2	2
6.	11*	122009	13525	NBS49K	45	58	3	0	79	61	2	1



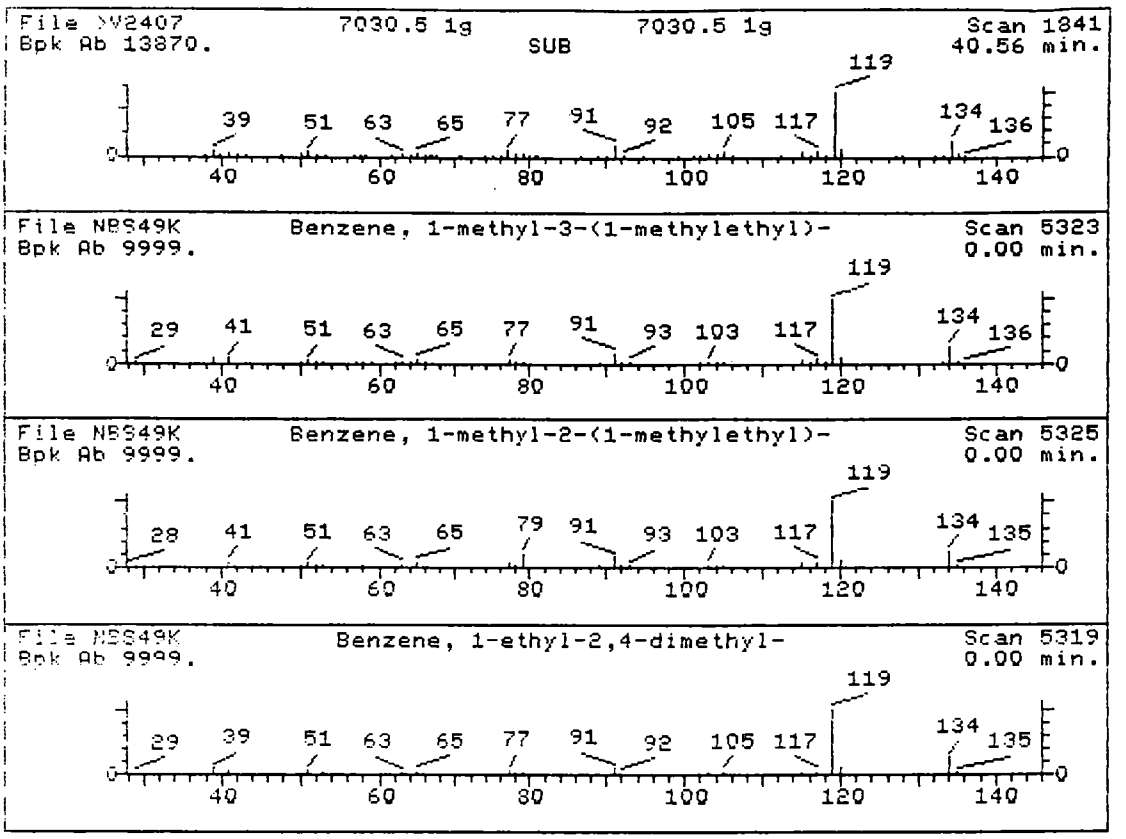
UNKNOWN #,14

AREA = 135198.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, methyl(1-methylethyl)-	134	C10H14
2.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14
3.	[1,2,4]Triazolo[1,5-a]pyridine	119	C6H5N3
4.	Benzene, 1-methyl-3-(1-methylethyl)-	134	C10H14
5.	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14
6.	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14

Sample file: >V2407 Spectrum #: 1825
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	62*	25155151	13531	NBS49K	62	28	2	4	100	28	25	42
2.	36*	527844	13539	NBS49K	44	48	2	0	96	40	14	23
3.	35*	274851	13511	NBS49K	24	72	3	0	100	28	14	12
4.	31*	535773	13538	NBS49K	39	50	2	0	83	42	8	19
5.	31*	2870044	13529	NBS49K	38	51	2	0	81	42	8	19
6.	30*	874419	13536	NBS49K	37	51	2	0	84	42	8	18



UNKNOWN #,15
AREA = 283071.0 TENTATIVE CONCENTRATION IS 18.00

1.	Benzene, 1-methyl-3-(1-methylethyl)-	134 C10H14
2.	Benzene, 1-methyl-2-(1-methylethyl)-	134 C10H14
3.	Benzene, 1-ethyl-2,4-dimethyl-	134 C10H14
4.	Benzene, methyl(1-methylethyl)-	134 C10H14
5.	Benzene, 2-ethyl-1,3-dimethyl-	134 C10H14
6.	Benzene, 1-ethyl-2,3-dimethyl-	134 C10H14

Sample file: >V2407 Spectrum #: 1841
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	97*	535773	13538	NBS49K	84	5	0	0	96	1	72	97
2.	96*	527844	13539	NBS49K	84	8	1	0	100	1	72	96
3.	89*	874419	13536	NBS49K	75	13	1	3	78	5	66	76
4.	89*	25155151	13531	NBS49K	72	18	2	0	99	3	66	66
5.	89*	2870044	13529	NBS49K	70	19	1	0	89	3	66	76
6.	88*	933982	13533	NBS49K	74	17	2	4	100	3	65	59

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.6 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.6 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2408

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

Column: Capillary

Dilution Factor: 5

Number of TICs found: 0

CONCENTRATION UNITS:
ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.7 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.7 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2412

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

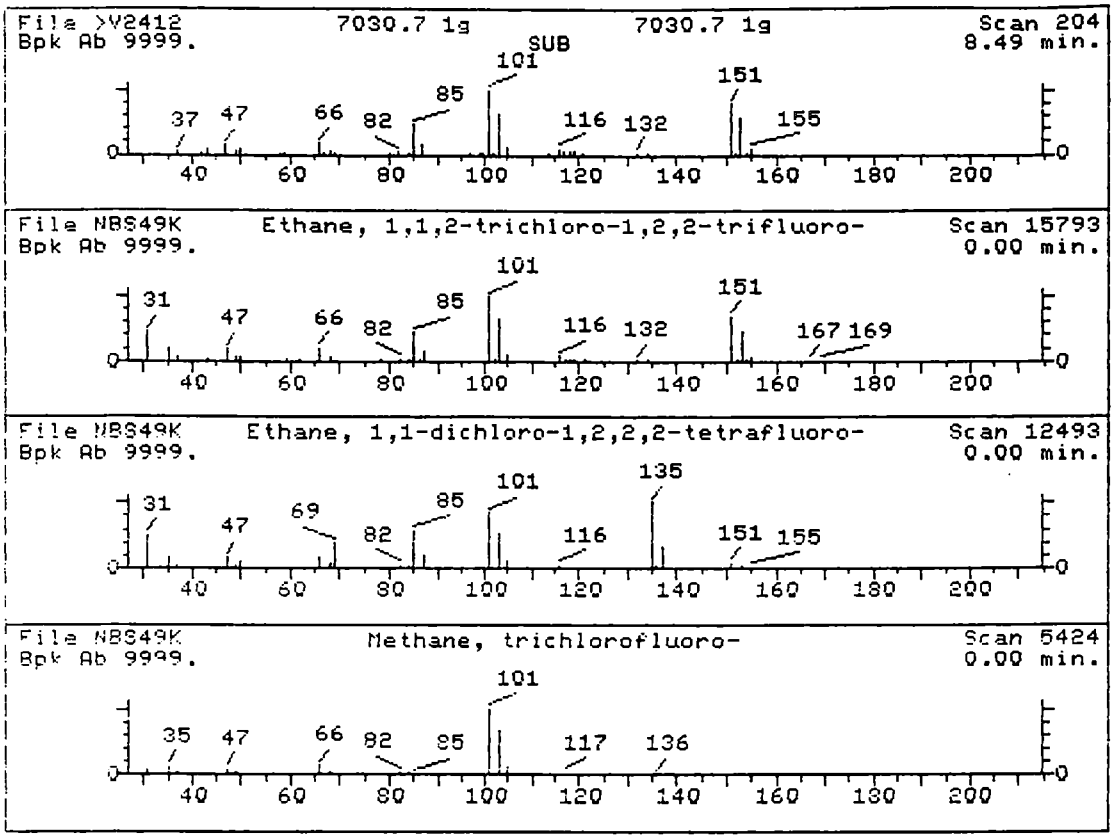
Column: Capillary

Dilution Factor: 5

CONCENTRATION UNITS:
ug/Kg

Number of TICs found: 15

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	76131	Freon	8.49	500	89
2	1105439	Hexane	12.06	115	36
3		Unknown	32.85	45	
4	5911046	Nonane, 3-methyl-	33.34	55	25
5	124185	Decane	34.61	75	79
6	103651	Benzene, propyl-	34.77	55	60
7	620144	Benzene, 1-ethyl-3-methyl-	35.18	60	67
8	611143	Benzene, 1-ethyl-2-methyl-	36.20	95	95
9	611143	Benzene, 1-ethyl-2-methyl-	36.69	285	93
10	141935	Benzene, 1,3-diethyl-	37.30	55	11
11	622968	Benzene, 1-ethyl-4-methyl-	38.32	75	93
12		Hydrocarbon	38.87	55	
13	135013	Benzene, 1,2-diethyl-	39.00	70	79
14	933982	Benzene, 1-ethyl-2,3-dimethyl	40.24	75	58
15	1758889	Benzene, 2-ethyl-1,4-dimethyl	40.65	120	96



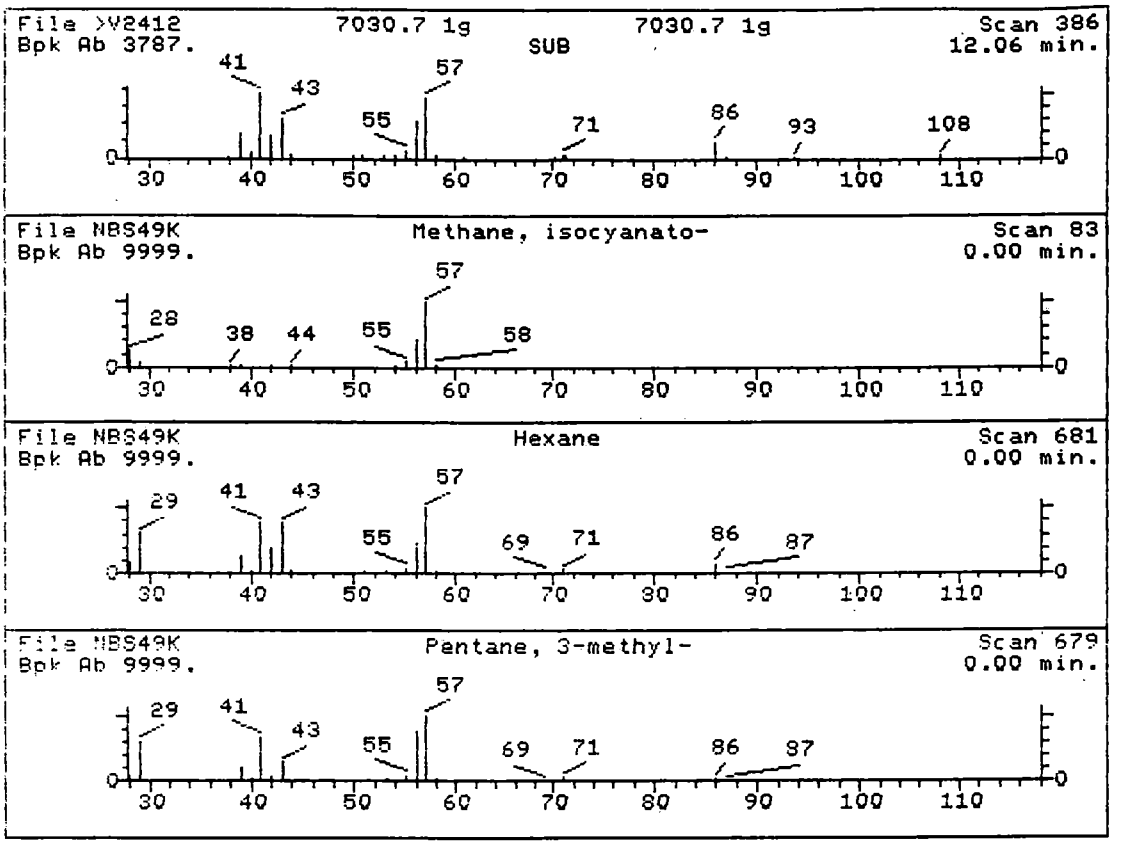
UNKNOWN #,1

AREA = 910732.0 TENTATIVE CONCENTRATION IS 100.00

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186 C2C13F3
2.	Ethane, 1,1-dichloro-1,2,2,2-tetrafluoro-	170 C2C12F4
3.	Methane, trichlorofluoro-	136 CC13F
4.	2(3H)-Furanone, dihydro-5-(2-octenyl)-, (Z)-	196 C12H2002
5.	Ethane, 1,1,2,2-tetrachloro-1,2-difluoro-	202 C2C14F2
6.	Ethanone, 1-(3-butyloxiranyl)-	142 C8H1402

Sample file: >V2412 Spectrum #: 204
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	89	76131	10367	NBS49K	97	41	0	0	86	0	66	71
2.	28	374072	10339	NBS49K	64	56	2	0	82	40	10	14
3.	26	75694	10283	NBS49K	71	25	0	0	97	58	7	50
4.	26*	18679180	6800	NBS49K	36	34	1	2	37	40	10	12
5.	15*	76120	10400	NBS49K	35	96	3	0	99	60	3	13
6.	13*	17257806	6626	NBS49K	52	28	1	1	82	63	3	37

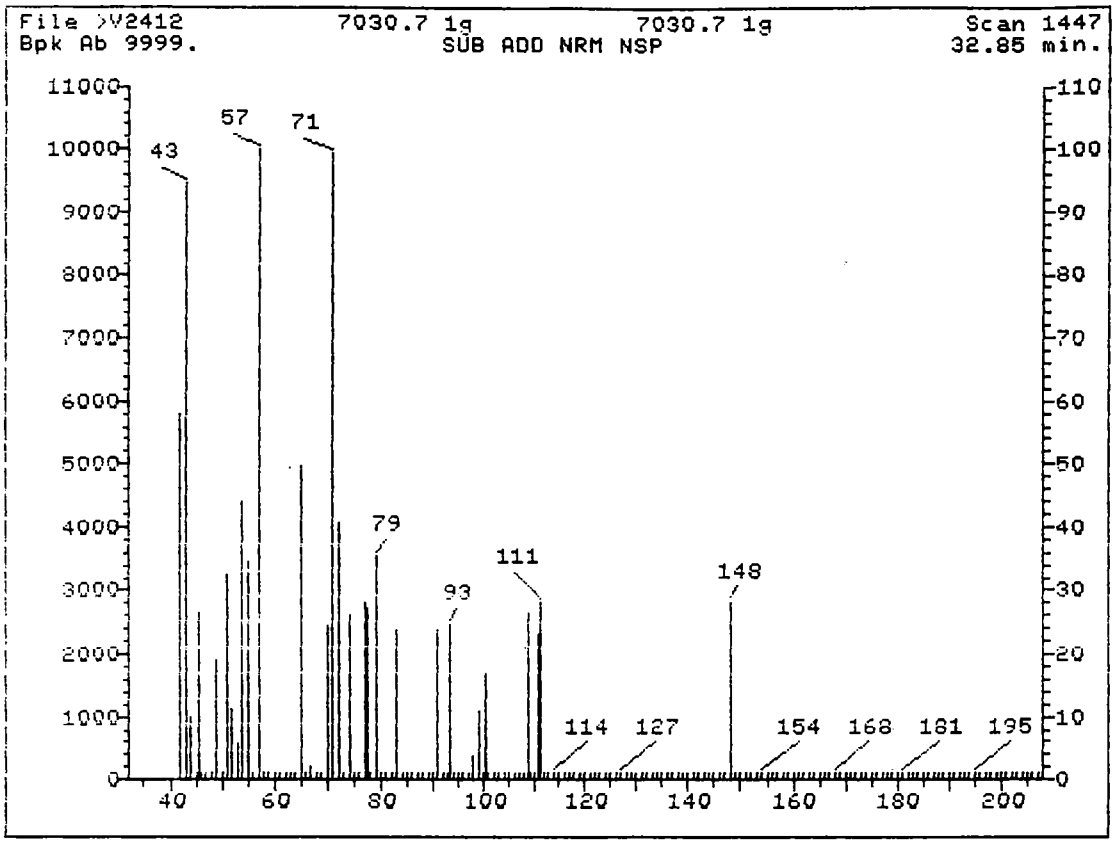


UNKNOWN #,2
AREA = 207581.0 TENTATIVE CONCENTRATION IS 23.00

1.	Methane, isocyanato-	57 C2H3NO
2.	Hexane	86 C6H14
3.	Pentane, 3-methyl-	86 C6H14
4.	3-Pentanone	86 C5H10O
5.	Propanal, 2,2-dimethyl-	86 C5H10O
6.	2-Butene, (Z)-	56 C4H8

Sample file: >V2412 Spectrum #: 386
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	37*	624839	1000	NBS49K	31	33	0	0	93	38	14	24
2.	35*	110543	6971	NBS49K	36	60	0	0	77	47	11	33
3.	31*	96140	1025	NBS49K	30	54	0	0	73	41	12	22
4.	25*	96220	6969	NBS49K	24	50	1	0	93	48	7	14
5.	25*	630193	6964	NBS49K	24	58	2	0	73	50	7	14
6.	20*	590181	996	NBS49K	31	48	3	0	97	55	5	14

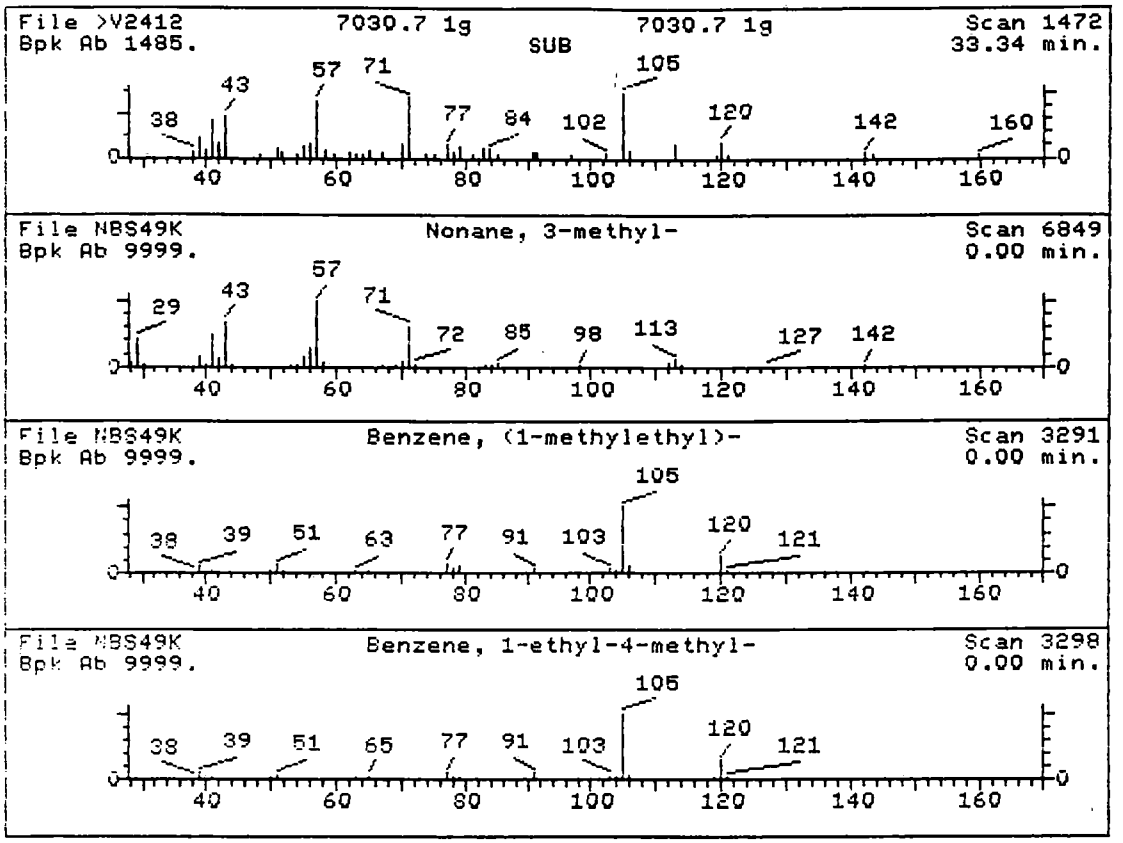


UNKNOWN #,3

AREA = 131567.0 TENTATIVE CONCENTRATION IS 9.00

Sample file: >V2412 Spectrum #: 1447

No data base entries were retrieved.

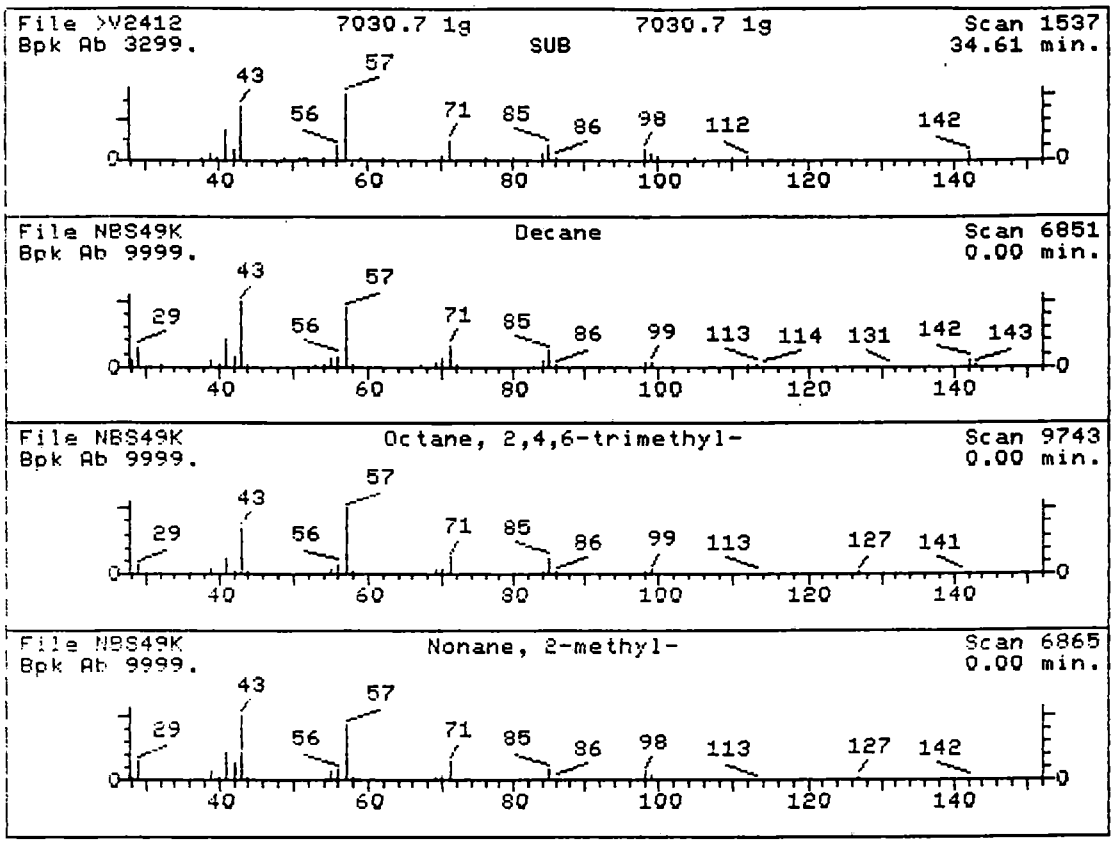


UNKNOWN #,4
AREA = 151548.0 TENTATIVE CONCENTRATION IS 11.00

1.	Nonane, 3-methyl-	142 C10H22
2.	Benzene, (1-methylethyl)-	120 C9H12
3.	Benzene, 1-ethyl-4-methyl-	120 C9H12
4.	Benzene, 1-ethyl-3-methyl-	120 C9H12
5.	Octane, 2,3,6-trimethyl-	156 C11H24
6.	Heptane, 3,3,5-trimethyl-	142 C10H22

Sample file: >V2412 Spectrum #: 1472
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	25*	5911046	12331	NBS49K	28	69	2	0	149	50	7	1
2.	23*	98828	13667	NBS49K	37	50	0	0	96	58	6	4
3.	18*	622968	13672	NBS49K	31	54	0	0	85	59	4	2
4.	18*	620144	13671	NBS49K	32	55	0	0	77	59	4	2
5.	15	62016335	4356	NBS49K	36	56	0	0	75	57	3	1
6.	15	7154805	4330	NBS49K	27	57	0	0	81	57	3	1



UNKNOWN #,5

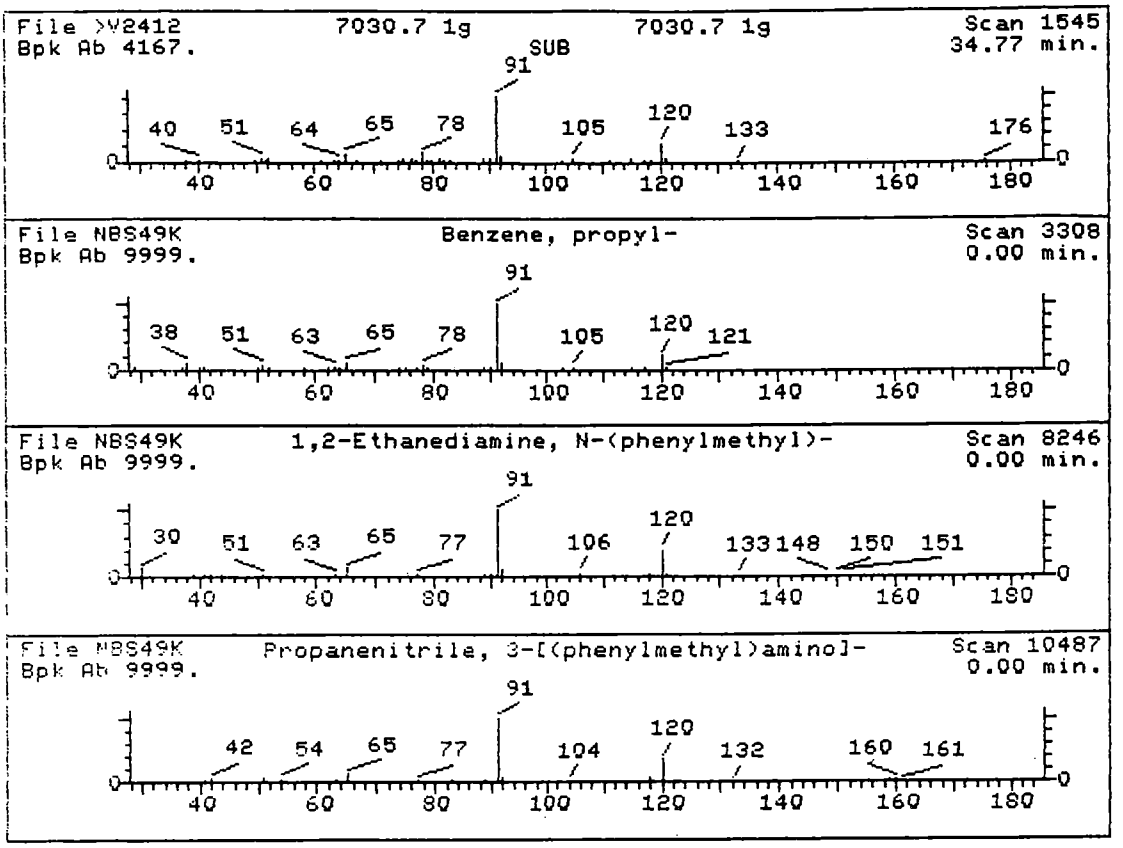
AREA = 209073.0 TENTATIVE CONCENTRATION IS 15.00

1.	Decane	142 C10H22
2.	Octane, 2,4,6-trimethyl-	156 C11H24
3.	Nonane, 2-methyl-	142 C10H22
4.	Octane, 4-ethyl-	142 C10H22
5.	Octane, 2,5-dimethyl-	142 C10H22
6.	Octane, 2,3-dimethyl-	142 C10H22

Sample file: >V2412 Spectrum #: 1537

Search speed: 1 Tilting option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	79*	124185	18079	NBS49K	55	45	2	0	80	10	48	32
2.	52	62016379	6679	NBS49K	39	46	2	0	95	18	20	13
3.	52*	871830	9512	NBS49K	26	70	3	0	80	19	20	13
4.	43*	15869860	12088	NBS49K	31	62	2	0	92	24	17	14
5.	43*	15869893	9754	NBS49K	28	64	2	0	69	24	17	14
6.	36*	7146603	9511	NBS49K	31	59	3	0	100	30	14	13

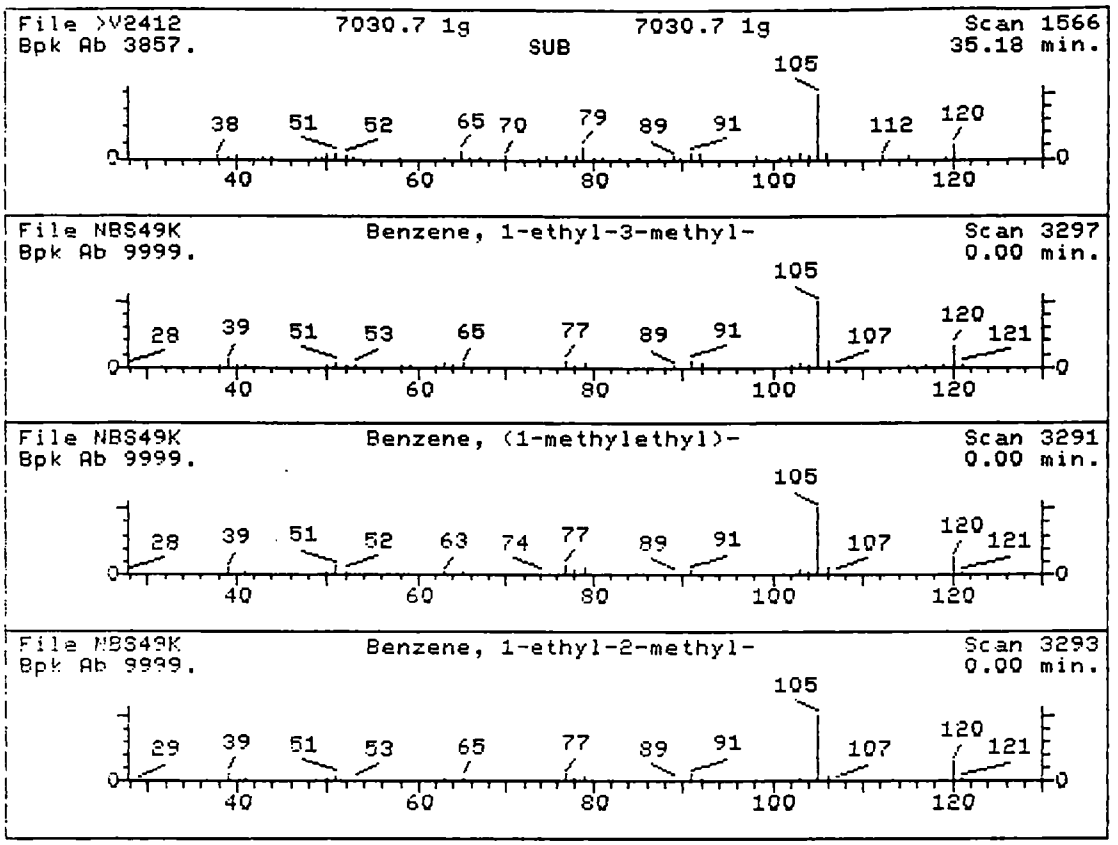


UNKNOWN #,6
AREA = 154354.0 TENTATIVE CONCENTRATION IS 11.00

1.	Benzene, propyl-	120 C9H12
2.	1,2-Ethanediamine, N-(phenylmethyl)-	150 C9H14N2
3.	Propanenitrile, 3-[(phenylmethyl)amino]-	160 C10H12N2
4.	Phenol, 2-(phenylmethoxy)-	200 C13H12O2

Sample file: >V2412 Spectrum #: 1545
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	60*	103651	13679	NBS49K	35	50	2	0	100	14	30	17
2.	60	4152094	13708	NBS49K	48	37	2	0	70	14	30	16
3.	52	706036	13714	NBS49K	37	46	2	0	76	16	20	12
4.	29	6272384	8442	NBS49K	36	32	2	0	97	35	12	12

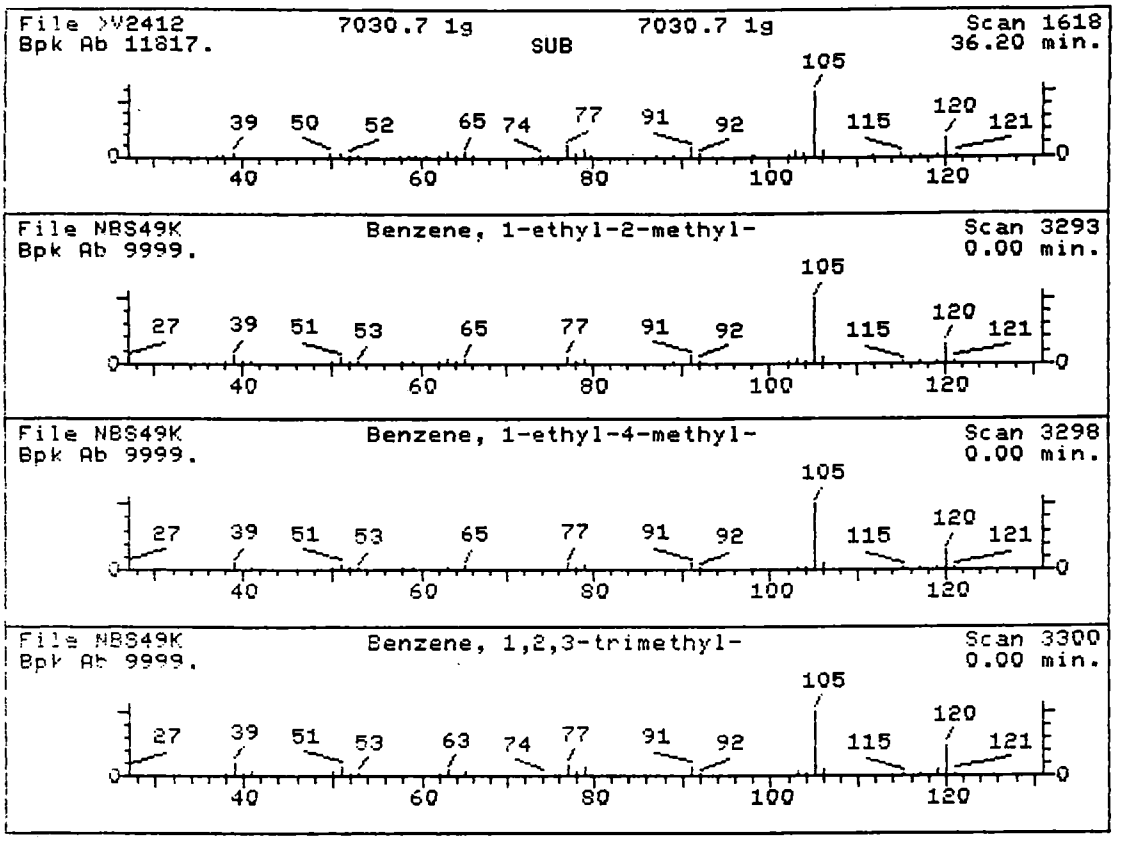


UNKNOWN #,7
AREA = 167517.0 TENTATIVE CONCENTRATION IS 12.00

1.	Benzene, 1-ethyl-3-methyl-	120	C9H12
2.	Benzene, (1-methylethyl)-	120	C9H12
3.	Benzene, 1-ethyl-2-methyl-	120	C9H12
4.	Benzene, 1,2,3-trimethyl-	120	C9H12
5.	Benzene, 1-ethyl-4-methyl-	120	C9H12
6.	1,3,5-Cycloheptatriene, 7-ethyl-	120	C9H12

Sample file: >V2412 Spectrum #: 1566
Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	67*	620144	13671	NBS49K	48	39	2	4	72	11	34	22
2.	52*	98828	13667	NBS49K	42	45	1	0	71	23	22	24
3.	47*	611143	13669	NBS49K	37	48	2	0	72	22	17	18
4.	25*	526738	13674	NBS49K	32	53	2	0	45	50	7	16
5.	25*	622968	13672	NBS49K	29	56	1	0	63	50	7	16
6.	25*	17634514	13678	NBS49K	37	64	2	0	75	49	7	14



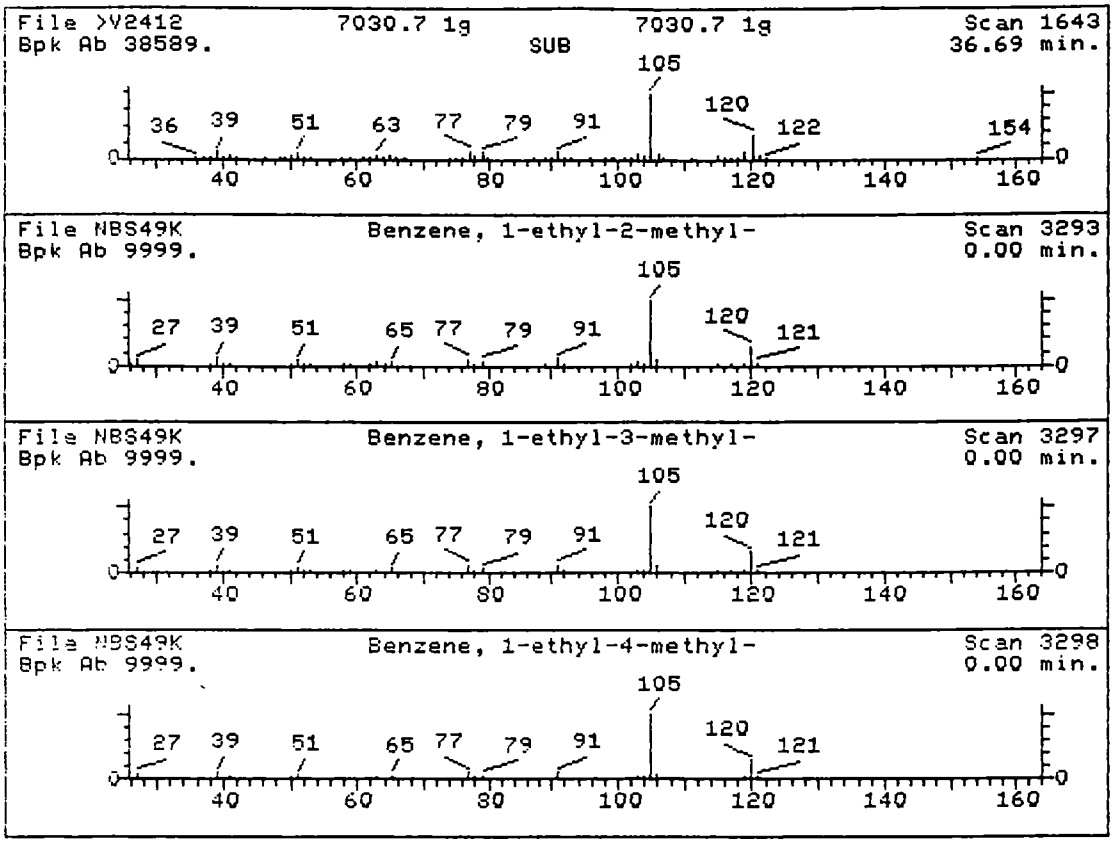
UNKNOWN #,8

AREA = 277966.0 TENTATIVE CONCENTRATION IS 19.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, 1-ethyl-4-methyl-	120	C9H12
3.	Benzene, 1,2,3-trimethyl-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, (1-methylethyl)-	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	196	C15H16

Sample file: >V2412 Spectrum #: 1618
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	95*	611143	13669	NBS49K	73	12	0	0	93	9	68	95
2.	93*	622968	13672	NBS49K	72	13	0	4	83	9	68	92
3.	87*	526738	13674	NBS49K	70	30	2	3	70	5	63	45
4.	83*	620144	13671	NBS49K	58	29	1	0	79	9	54	57
5.	81*	98828	13667	NBS49K	60	27	2	0	100	10	53	46
6.	52	5814857	10954	NBS49K	57	42	2	0	100	20	20	16

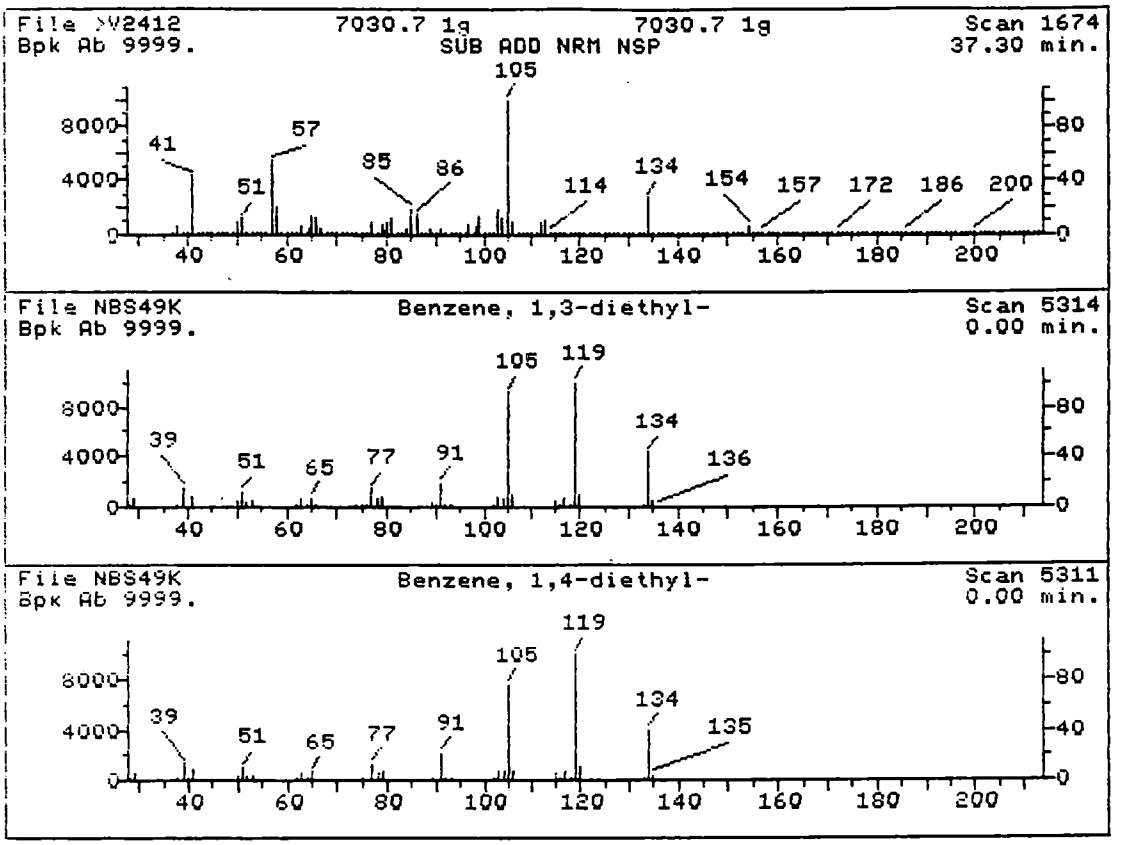


UNKNOWN #,9
AREA = 812026.0 TENTATIVE CONCENTRATION IS 57.00

1.	Benzene, 1-ethyl-2-methyl-	120	C9H12
2.	Benzene, 1-ethyl-3-methyl-	120	C9H12
3.	Benzene, 1-ethyl-4-methyl-	120	C9H12
4.	Benzene, 1,2,3-trimethyl-	120	C9H12
5.	Benzene, 1,2,4-trimethyl-	120	C9H12
6.	Benzene, (1-methylethyl)-	120	C9H12

Sample file: >V2412 Spectrum #: 1643
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	611143	13669	NBS49K	75	10	1	0	95	14	64	93
2.	93*	620144	13671	NBS49K	75	12	1	0	96	12	64	93
3.	92*	622968	13672	NBS49K	69	16	0	0	89	26	57	94
4.	91*	526738	13674	NBS49K	82	18	0	0	65	32	50	94
5.	89*	95636	13676	NBS49K	81	14	1	1	68	7	62	80
6.	87*	98828	13667	NBS49K	82	5	0	-2	100	12	55	86



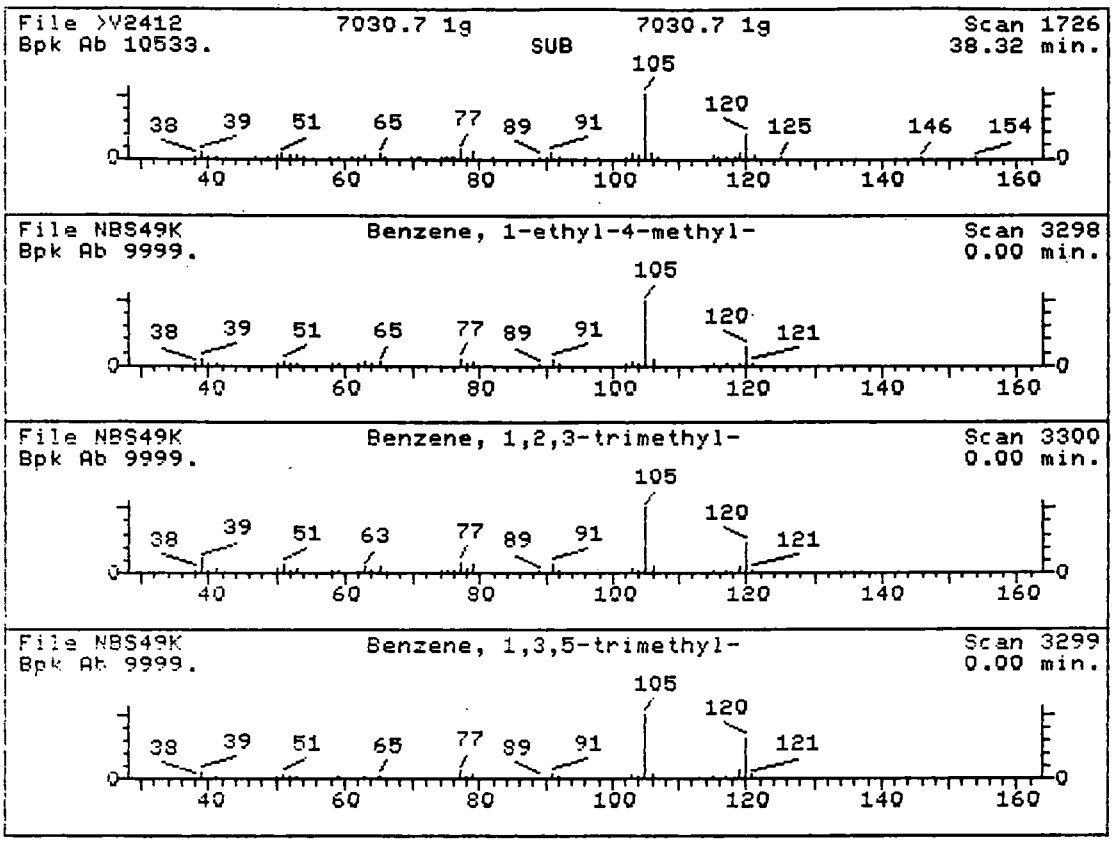
UNKNOWN #,10

AREA = 160245.0 TENTATIVE CONCENTRATION IS 11.00

1. Benzene, 1,3-diethyl- 134 C10H14
2. Benzene, 1,4-diethyl- 134 C10H14

Sample file: >V2412 Spectrum #: 1674
Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	11*	141935	16259	NBS49K	41	61	2	1	55	62	2	13
2.	11*	105055	16257	NBS49K	40	60	2	1	63	62	2	13

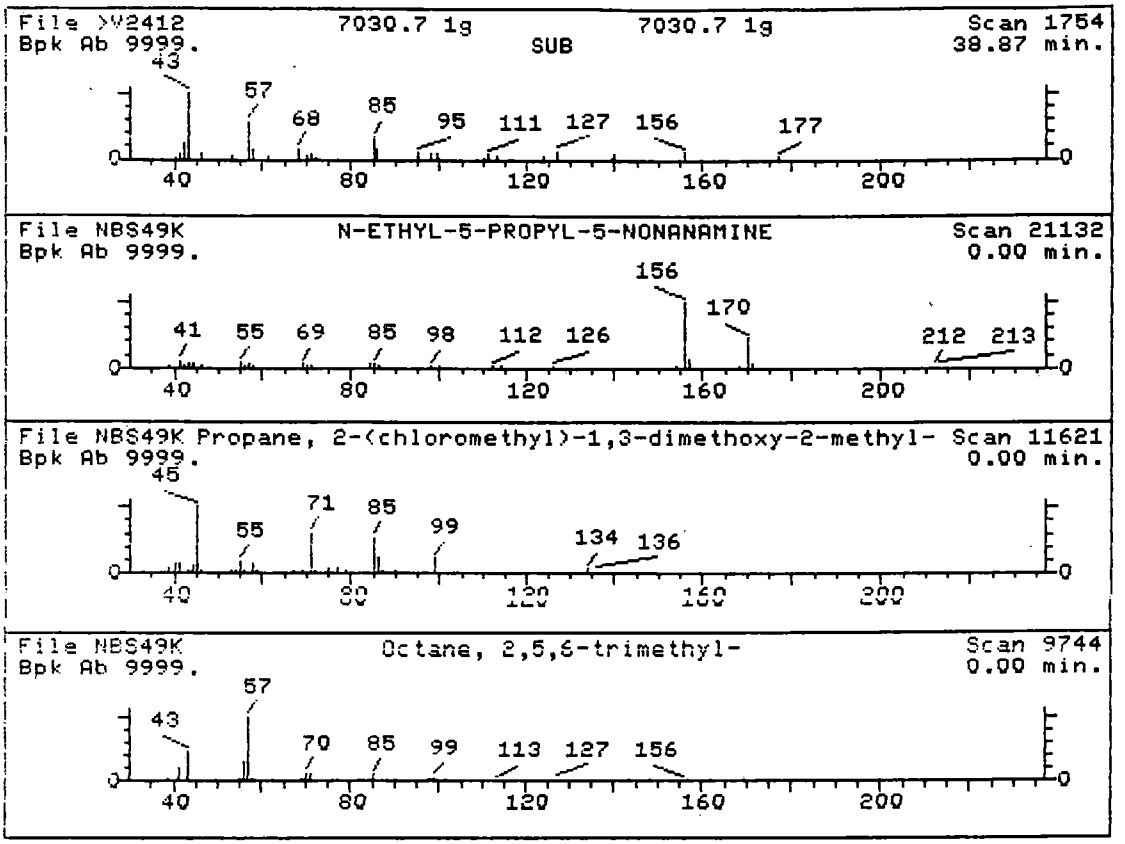


UNKNOWN #,11
AREA = 213005.0 TENTATIVE CONCENTRATION IS 15.00

1.	Benzene, 1-ethyl-4-methyl-	120	C9H12
2.	Benzene, 1,2,3-trimethyl-	120	C9H12
3.	Benzene, 1,3,5-trimethyl-	120	C9H12
4.	Benzene, 1-ethyl-3-methyl-	120	C9H12
5.	Benzene, 1,2,4-trimethyl-	120	C9H12
6.	Benzene, 1-ethyl-2-methyl-	120	C9H12

Sample file: >V2412 Spectrum #: 1726
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	93*	622968	13672	NBS49K	75	10	1	0	100	14	64	93
2.	89*	526738	13674	NBS49K	90	10	1	-2	70	8	62	80
3.	83*	108678	13673	NBS49K	73	15	2	4	73	9	54	57
4.	79*	620144	13671	NBS49K	63	24	1	0	83	14	43	66
5.	77*	95636	13676	NBS49K	66	29	0	0	54	33	32	78
6.	71*	611143	13669	NBS49K	60	25	1	0	86	27	29	63



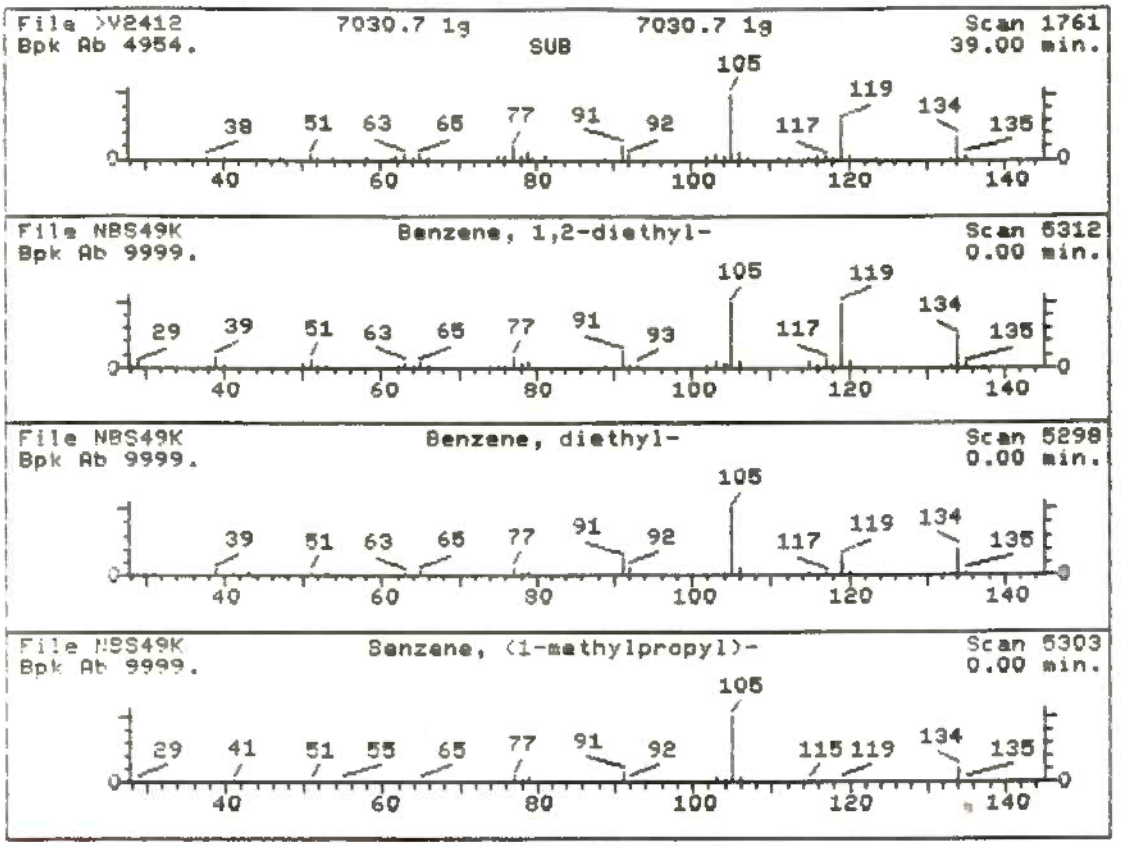
UNKNOWN #,12
AREA = 152439.0 TENTATIVE CONCENTRATION IS 11.00

1.	N-ETHYL-5-PROPYL-5-NONANAMINE	213	C14H31N
2.	Propane, 2-(chloromethyl)-1,3-dimethoxy-2-methyl-	166	C7H15C102
3.	Octane, 2,5,6-trimethyl-	156	C11H24
4.	Decane, 5-methyl-	156	C11H24
5.	2(3H)-Furanone, 5-butyldihydro-4-methyl-, cis-	156	C9H1602
6.	3-Penten-2-one, 4-butoxy-	156	C9H1602

Sample file: >V2412 Spectrum #: 1754
Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	71275122	20597	NBS49K	24	83	3	0	586	47	7	12
2.	20	20637370	9803	NBS49K	40	49	2	0	49	55	5	12
3.	20*	62016142	6680	NBS49K	29	58	3	0	222	52	5	13
4.	20*	13151354	6678	NBS49K	29	70	2	0	57	55	5	14
5.	20*	55013326	9785	NBS49K	28	72	3	0	499	52	5	13
6.	20*	3431876	6675	NBS49K	22	69	2	0	275	52	5	13

12

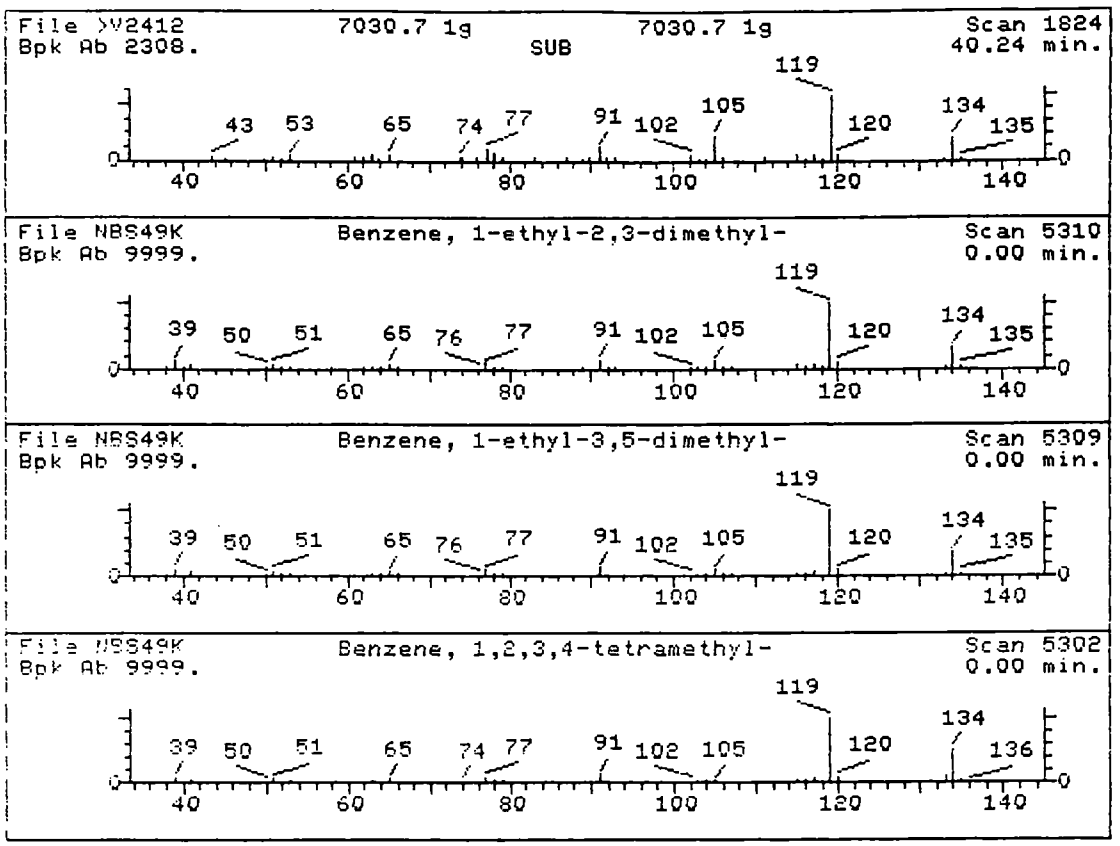


UNKNOWN #,13
AREA = 208235.0 TENTATIVE CONCENTRATION IS 14.00

1.	Benzene, 1,2-diethyl-	134 C10H14
2.	Benzene, diethyl-	134 C10H14
3.	Benzene, (1-methylpropyl)-	134 C10H14
4.	Benzene, 1-methyl-2-propyl-	134 C10H14
5.	Benzene, 1,3-diethyl-	134 C10H14
6.	Benzene, 1,4-diethyl-	134 C10H14

Sample file: >V2412 Spectrum #: 1761
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	79*	135013	16258	NBS49K	64	42	2	2	67	8	48	35
2.	68*	25340174	16250	NBS49K	61	34	1	0	85	22	30	57
3.	59*	135988	16252	NBS49K	43	40	0	0	100	36	21	55
4.	57*	1074175	16264	NBS49K	39	44	0	0	98	36	19	48
5.	57*	141935	16259	NBS49K	55	47	1	0	60	34	22	42
6.	49*	105055	16257	NBS49K	39	61	0	0	50	37	17	38

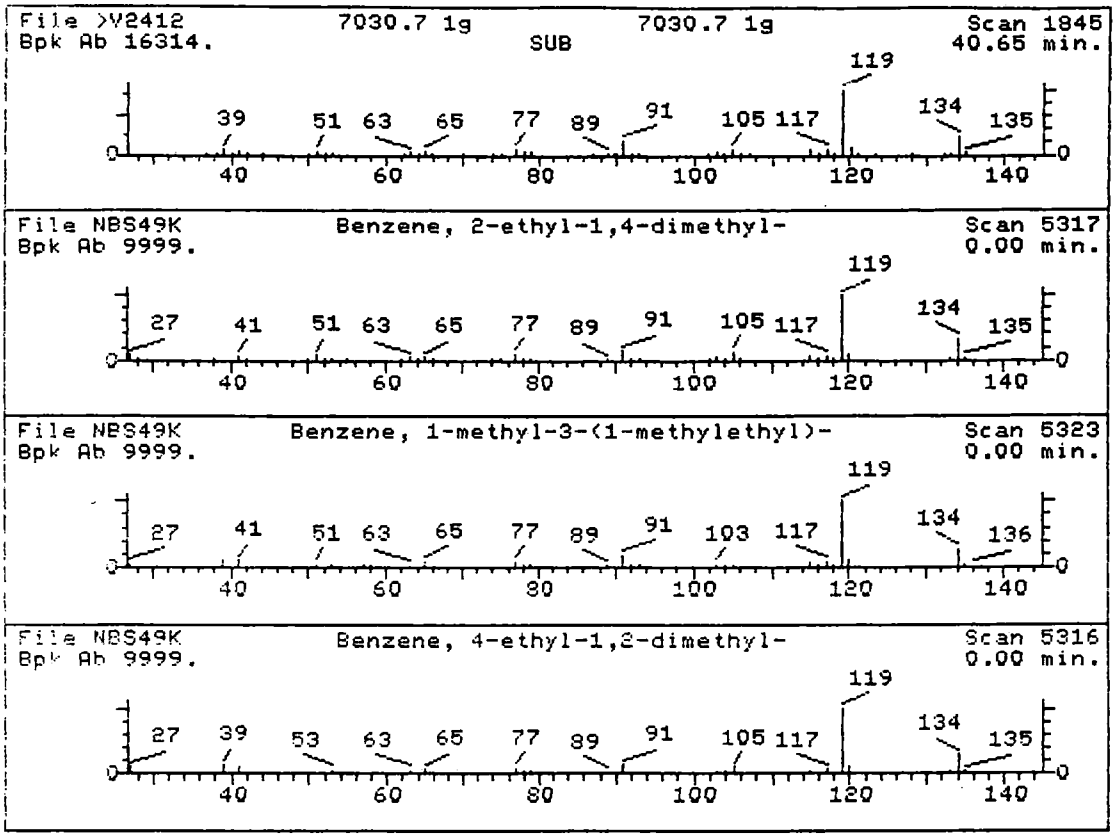


UNKNOWN #,14
AREA = 220659.0 TENTATIVE CONCENTRATION IS 15.00

1.	Benzene, 1-ethyl-2,3-dimethyl-	134 C10H14
2.	Benzene, 1-ethyl-3,5-dimethyl-	134 C10H14
3.	Benzene, 1,2,3,4-tetramethyl-	134 C10H14
4.	Benzene, 2-ethyl-1,4-dimethyl-	134 C10H14
5.	Benzene, 1-ethyl-2,4-dimethyl-	134 C10H14
6.	Benzene, 2-ethyl-1,3-dimethyl-	134 C10H14

Sample file: >V2412 Spectrum #: 1824
Search speed: 1 Tilting option: F No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	58*	933982	13533	NBS49K	48	43	2	4	98	18	25	22
2.	51*	934747	13532	NBS49K	49	46	2	3	97	21	22	23
3.	49*	488233	16251	NBS49K	42	52	2	0	70	25	22	21
4.	48*	1758889	13535	NBS49K	47	47	2	0	91	26	19	26
5.	43*	874419	13536	NBS49K	41	47	2	0	96	26	19	21
6.	43*	2870044	13529	NBS49K	41	48	2	0	96	26	19	21



UNKNOWN #,15
AREA = 339320.0 TENTATIVE CONCENTRATION IS 24.00

1.	Benzene, 2-ethyl-1,4-dimethyl-	134 C10H14
2.	Benzene, 1-methyl-3-(1-methylethyl)-	134 C10H14
3.	Benzene, 4-ethyl-1,2-dimethyl-	134 C10H14
4.	Benzene, 1-ethyl-2,4-dimethyl-	134 C10H14
5.	Benzene, 2-ethyl-1,3-dimethyl-	134 C10H14
6.	Benzene, 1-methyl-2-(1-methylethyl)-	134 C10H14

Sample file: >V2412 Spectrum #: 1845
Search speed: 1 Tilting option: F No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	1758889	13535	NBS49K	85	9	0	0	67	3	72	96
2.	96*	535773	13538	NBS49K	79	10	0	0	88	3	72	96
3.	96*	934805	13534	NBS49K	77	16	0	0	74	3	72	94
4.	95*	874419	13536	NBS49K	76	12	1	0	100	3	72	93
5.	93*	2870044	13529	NBS49K	72	17	1	0	98	3	68	80
6.	89*	527844	13539	NBS49K	79	13	2	0	100	3	66	73

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NU

7030.8 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.8 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2409

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

Column: Capillary

Dilution Factor: 5

CONCENTRATION UNITS:

Number of TICs found: 0

ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

7030.9 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Sample wt/vol: 1.0 (g/mL) g

Level: (Low/med) Low

Column: Capillary

Lab Sample ID: 7030.9 1g

Lab File ID: >V2410

Date Received: 01-10-92

Date Analyzed: 01/14/92

Dilution Factor: 5

Number of TICs found: 0

CONCENTRATION UNITS:
ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N
7030.10 1g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Lab Sample ID: 7030.10 1g

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2411

Level: (Low/med) Low

Date Received: 01-10-92

Date Analyzed: 01/14/92

Column: Capillary

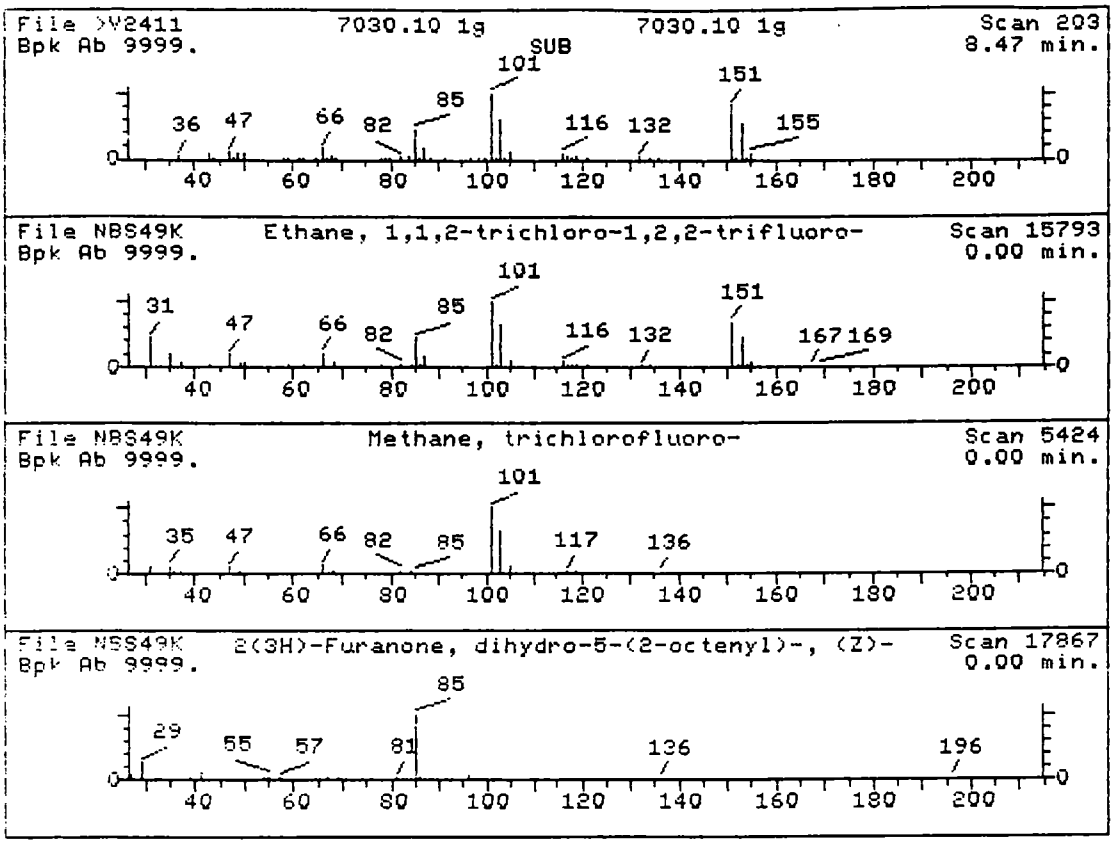
Dilution Factor: 5

Number of TICs found: 7

CONCENTRATION UNITS:
ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	76131	Freon	8.47	750	88
2		Benzene, branched	30.64	20	
3	1560958	Tetradecane, 2-methyl-	34.62	25	58
4	625661	Butane, 1,1-dichloro-3-methy	35.13	20	15
5	526738	Benzene, 1,2,3-trimethyl-	36.66	45	87
6		Unknown	38.83	15	
7	527844	Benzene, 1-methyl-2-(1-methy	39.26	20	35

127

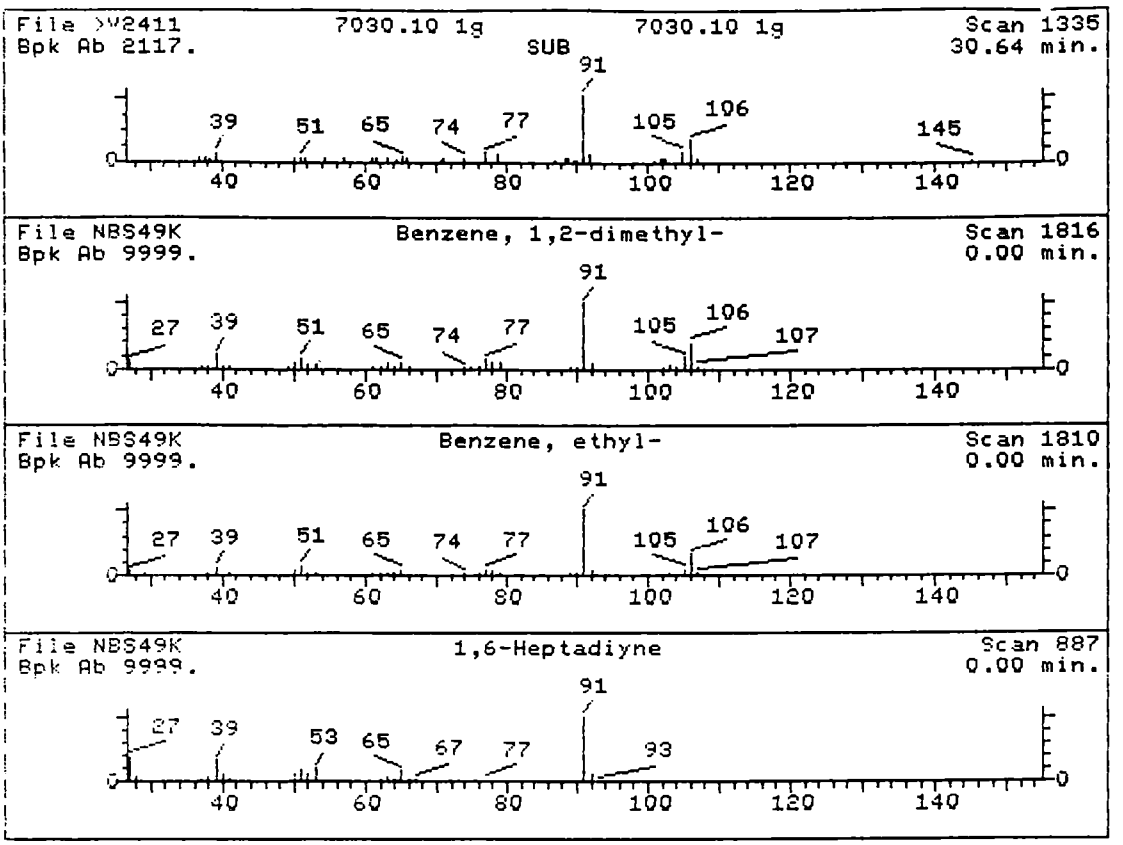


UNKNOWN #,1
AREA = 990690.0 TENTATIVE CONCENTRATION IS 150.00

1.	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	186 C2C13F3
2.	Methane, trichlorofluoro-	136 CC13F
3.	2(3H)-Furanone, dihydro-5-(2-octenyl)-, (Z)-	196 C12H20O2
4.	Ethane, 1,1,2,2-tetrachloro-1,2-difluoro-	202 C2C14F2
5.	Ethanone, 1-(3-butyloxiranyl)-	142 C8H14O2
6.	2-Norpinanol, 3,6,6-trimethyl-	154 C10H18O

Sample file: >V2411 Spectrum #: 203
Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	88	76131	10367	NBS49K	98	40	1	0	91	0	65	59
2.	21	75694	10283	NBS49K	53	43	0	0	90	59	5	31
3.	20*	18679180	6800	NBS49K	40	30	1	1	43	52	5	15
4.	15*	76120	10400	NBS49K	43	88	3	0	92	60	3	13
5.	15*	17257806	6626	NBS49K	57	23	1	1	67	63	3	45
6.	11*	29548092	6668	NBS49K	36	30	1	2	27	63	2	12



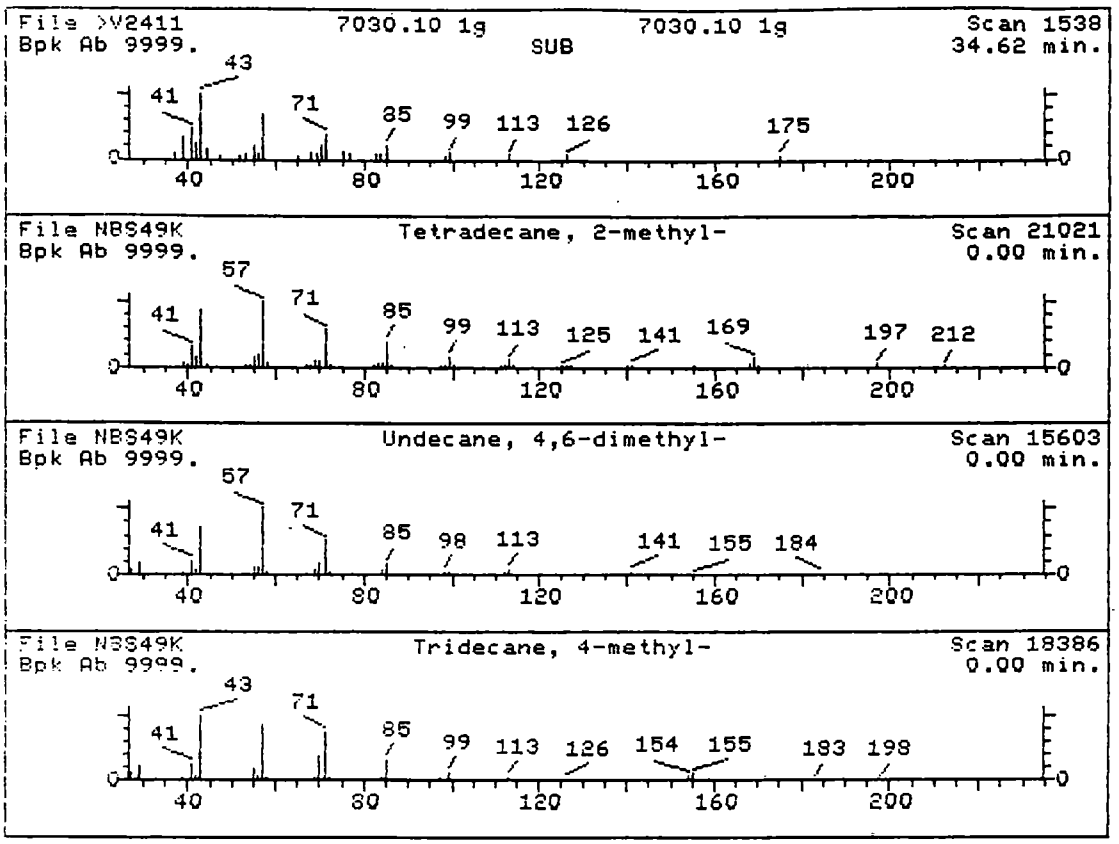
UNKNOWN #,2

AREA = 43741.00 TENTATIVE CONCENTRATION IS 4.00

1.	Benzene, 1,2-dimethyl-	106	C8H10
2.	Benzene, ethyl-	106	C8H10
3.	1,6-Heptadiyne	92	C7H8
4.	1,3-Cyclopentadiene, 5-(1-methylethylidene)-	106	C8H10
5.	Thiocyanic acid, phenylmethyl ester	149	C8H7NS
6.	Benzyl glycolate	166	C9H10O3

Sample file: >V2411 Spectrum #: 1335
Search speed: 1 Tilting option: F No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	71*	95476	11010	NBS49K	50	42	2	0	82	15	38	31
2.	60*	100414	11006	NBS49K	40	44	2	0	100	15	30	19
3.	37*	2396636	8477	NBS49K	30	66	2	0	100	27	14	14
4.	35*	2175919	11008	NBS49K	54	34	2	0	45	46	11	39
5.	29	3012371	8432	NBS49K	36	42	2	0	100	31	12	12
6.	29	30379589	8435	NBS49K	36	44	2	0	100	32	12	12

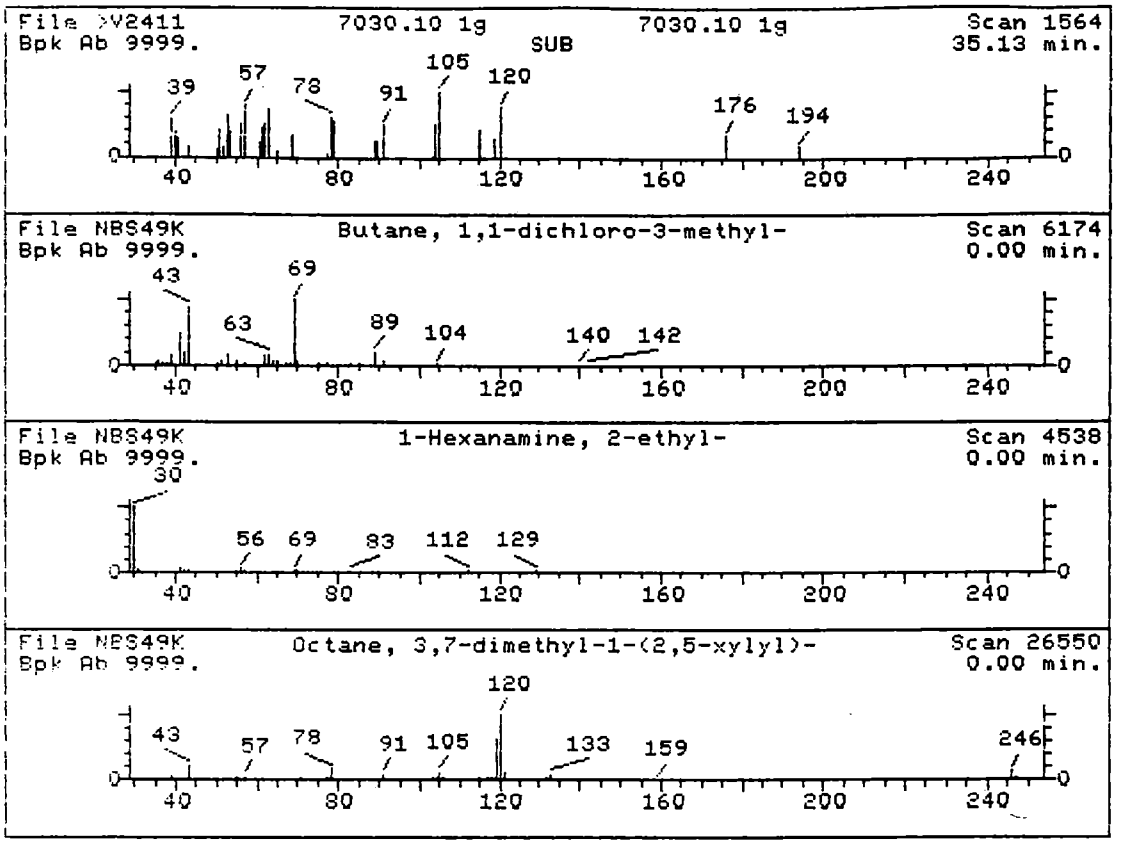


UNKNOWN #,3
AREA = 60542.00 TENTATIVE CONCENTRATION IS 5.00

1.	Tetradecane, 2-methyl-	212	C15H32
2.	Undecane, 4,6-dimethyl-	184	C13H28
3.	Tridecane, 4-methyl-	198	C14H30
4.	Undecane, 3,5-dimethyl-	184	C13H28
5.	Nonane, 4,5-dimethyl-	156	C11H24
6.	Heneicosane, 11-(1-ethylpropyl)-	366	C26H54

Sample file: >V2411 Spectrum #: 1538
Search speed: 1 Tilting option: F No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I(
1.	58*	1560958	6820	NBS49K	58	48	1	0	49	40	19	49
2.	58*	17312822	4387	NBS49K	52	46	1	-3	52	18	25	27
3.	49*	26730121	4409	NBS49K	41	73	1	0	53	24	22	21
4.	49*	17312811	9853	NBS49K	49	49	1	-2	64	22	22	21
5.	45*	17302237	6683	NBS49K	50	55	2	0	56	28	19	23
6.	45	55282116	6900	NBS49K	70	80	2	0	53	24	17	16



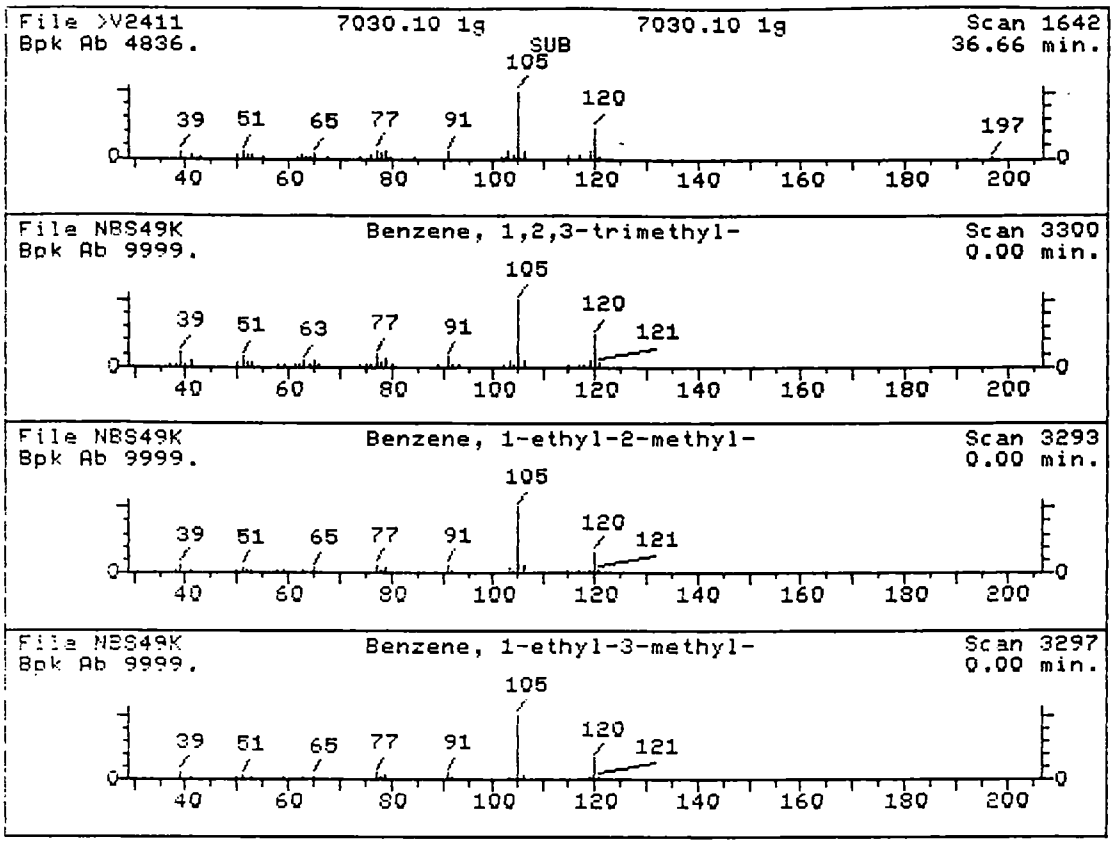
UNKNOWN #,4

AREA = 50227.00 TENTATIVE CONCENTRATION IS 4.00

1.	Butane, 1,1-dichloro-3-methyl-	140	C5H10C12
2.	1-Hexanamine, 2-ethyl-	129	C8H19N
3.	Octane, 3,7-dimethyl-1-(2,5-xylyl)-	246	C18H30

Sample file: >V2411 Spectrum #: 1564
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	15*	625661	2431	NBS49K	24	75	3	0	319	58	3	12
2.	13*	104756	102	NBS49K	58	21	2	4	52	62	3	36
3.	11*	19550608	13767	NBS49K	40	84	1	4	53	62	2	15

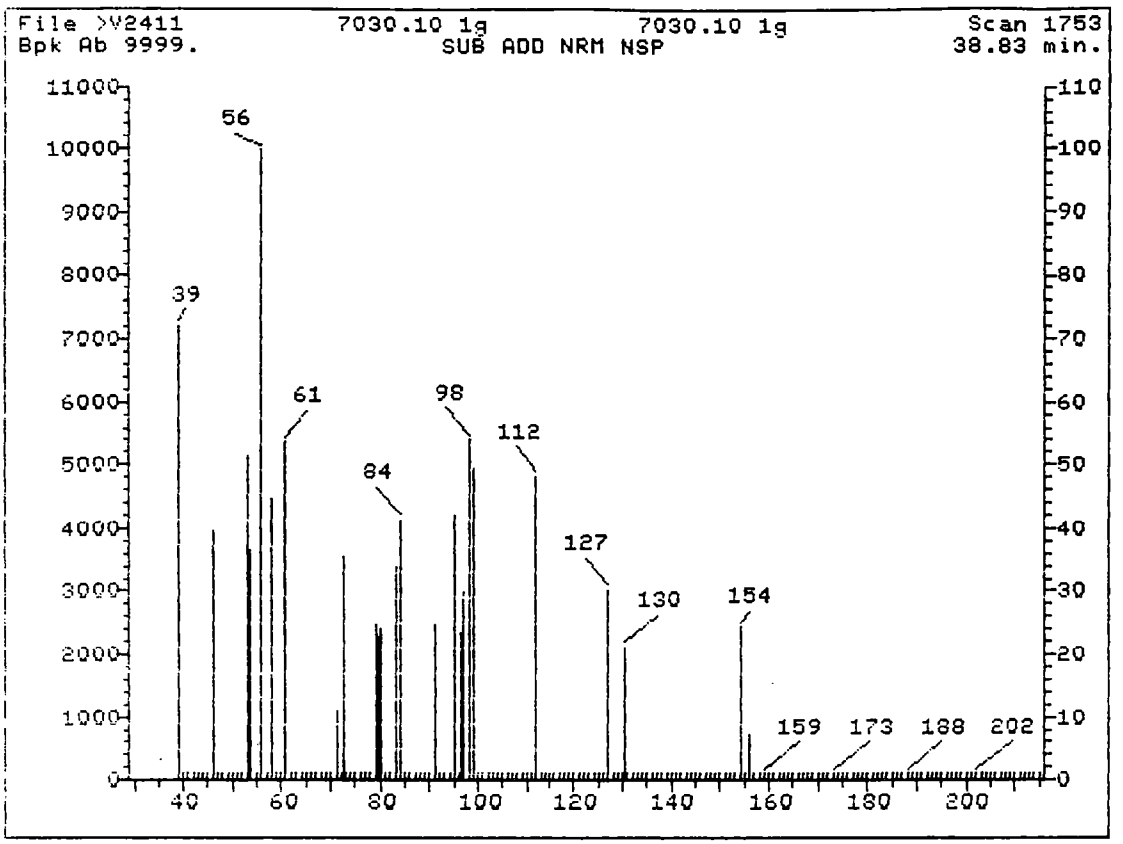


UNKNOWN #,5
AREA = 101815.0 TENTATIVE CONCENTRATION IS 9.00

1.	Benzene, 1,2,3-trimethyl-	120	C9H12
2.	Benzene, 1-ethyl-2-methyl-	120	C9H12
3.	Benzene, 1-ethyl-3-methyl-	120	C9H12
4.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)-	120	C9H12
5.	1,3,5-Cycloheptatriene, 7-ethyl-	120	C9H12
6.	Benzene, 1,3,5-trimethyl-	120	C9H12

Sample file: >V2411 Spectrum #: 1642
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

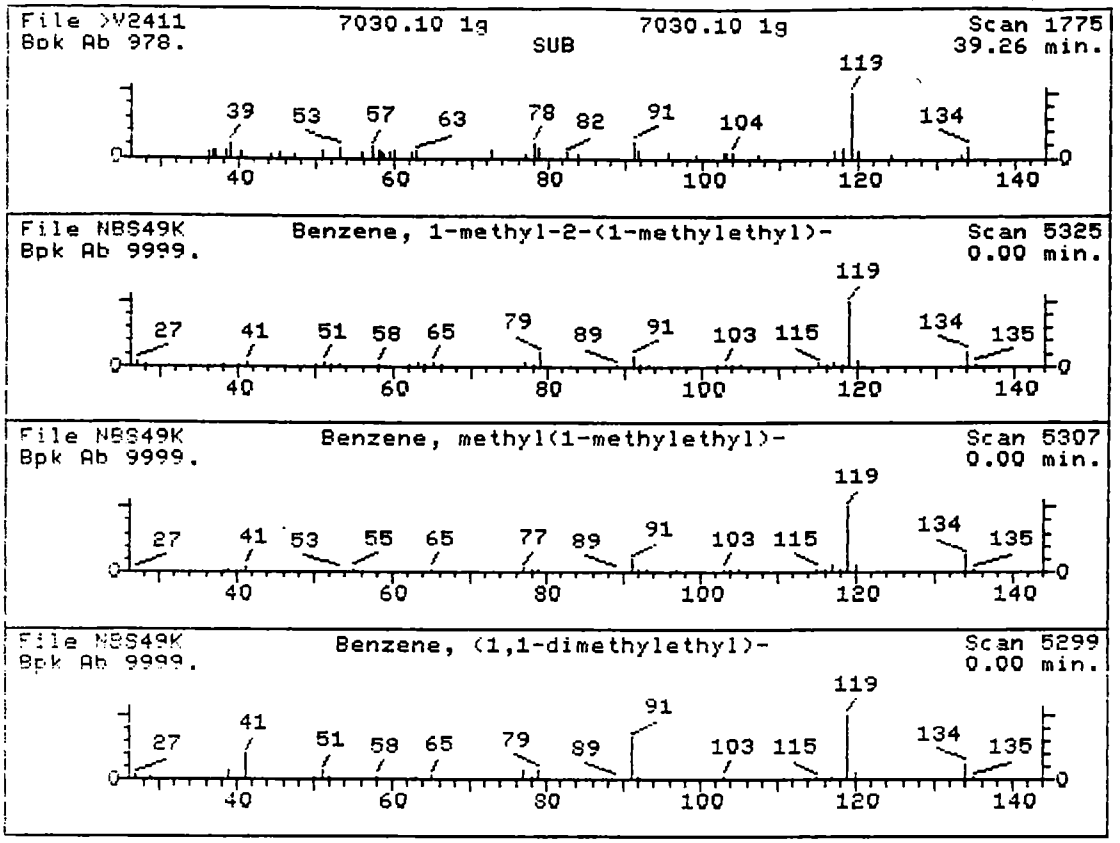
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	526738	13674	NBS49K	72	28	0	0	66	32	40	89
2.	74*	611143	13669	NBS49K	60	25	2	0	100	14	39	46
3.	74*	620144	13671	NBS49K	55	32	2	0	100	13	39	41
4.	70*	3141024	13677	NBS49K	47	57	3	0	71	8	42	13
5.	70*	17634514	13678	NBS49K	26	75	3	0	153	8	42	13
6.	67*	108678	13673	NBS49K	51	37	2	2	76	11	34	27



. UNKNOWN #,6
AREA = 38151.00 TENTATIVE CONCENTRATION IS 3.00

Sample file: >V2411 Spectrum #: 1753

No data base entries were retrieved.



UNKNOWN #,7

AREA = 45334.00 TENTATIVE CONCENTRATION IS 4.00

1.	Benzene, 1-methyl-2-(1-methylethyl)-	134	C10H14
2.	Benzene, methyl(1-methylethyl)-	134	C10H14
3.	Benzene, (1,1-dimethylethyl)-	134	C10H14
4.	Benzoxazole	119	C7H5NO
5.	Benzonitrile, 3-hydroxy-	119	C7H5NO
6.	Benzene, 1-methyl-3-(1-methylethyl)-	134	C10H14

Sample file: >V2411 Spectrum #: 1775

Search speed: 1 Tilting option: F No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IC
1.	35*	527844	13539	NBS49K	38	54	0	0	76	47	11	39
2.	35*	25155151	13531	NBS49K	36	54	0	0	71	47	11	39
3.	30*	98066	13528	NBS49K	44	51	2	0	75	47	10	22
4.	30*	273530	13515	NBS49K	38	53	1	0	76	48	10	21
5.	30*	873621	13516	NBS49K	38	54	1	0	94	44	12	21
6.	30*	535773	13538	NBS49K	30	59	0	0	67	47	10	22

5A

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

Lab Name: Environmental Profile Lab Contract: Serv-Air

Lab Code: 15526

Lab File ID: >V2400 BFB Injection Date: 1/14/92

Instrument ID: GC/MSD 5970 #1 BFB Injection Time: 12:15

Matrix: Soil Column: Capillary

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	54.5
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1.4(1.9)1
174	Greater than 50.0% of mass 95	73.9
175	5.0 - 9.0% of mass 174	6.4(8.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.7(99.8)1
177	5.0 - 9.0% of mass 176	5.4(7.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCC/SPCC	CCC/SPCC	>V2401	1/14/92	12:42
02	VOA Blank	VOA Blank	>V2402	1/14/92	13:51
03	7030.1 1g	7030.1 1g	>V2403	1/14/92	14:42
04	7030.2 1g	7030.2 1g	>V2404	1/14/92	15:29
05	7030.3 1g	7030.3 1g	>V2405	1/14/92	16:18
06	7030.4 1g	7030.4 1g	>V2406	1/14/92	17:06
07	7030.5 1g	7030.5 1g	>V2407	1/14/92	17:54
08	7030.6 1g	7030.6 1g	>V2408	1/14/92	18:41
09	7030.8 1g	7030.8 1g	>V2409	1/14/92	19:28
10	7030.9 1g	7030.9 1g	>V2410	1/14/92	20:15
11	7030.10 1g	7030.10 1g	>V2411	1/14/92	21:02
12	7030.7 1g	7030.7 1g	>V2412	1/14/92	21:49
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 01/14/92

Contractor: E.P.L. Time: 12:42

Contract No: Laboratory ID: >V2401

Instrument ID: No. 1: Volatiles Initial Calibration Date: 12/23/91

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.62187	.82288	49.26		**	
Bromomethane	3.80896	3.27392	14.05			
Vinyl Chloride	2.50057	2.15392	13.86	*		
Chloroethane	1.91228	2.02810	6.06			
Methyl tert-Butyl Ether	4.76083	5.89907	23.91			
Methylene Chloride	3.29217	3.21994	2.19			
Acrolein	.14627	.12548	14.21			(Conc=500.00)
Acrylonitrile	.28616	.29886	4.44			(Conc=500.00)
Acetone	.39947	.57464	43.85			
Carbon Disulfide	7.79831	5.55451	28.77			
1,1-Dichloroethene	2.65708	2.18536	17.75	*		
1,1-Dichloroethane	5.99511	6.01323	.30		**	
tert-Butyl Alcohol	.10506	.14830	41.16			(Conc=500.00)
trans-1,2-Dichloroethene	4.57581	4.66671	1.99			
Trichlorofluoromethane	7.92001	5.49999	30.56			
Chloroform	7.65483	7.97349	4.16	*		
1,2-Dichloroethane-d4	3.14570	3.54585	12.72			(Conc=100.00)
1,2-Dichloroethane	4.43801	5.10084	14.94			
2-Butanone	.11846	.18583	56.86			
1,1,1-Trichloroethane	1.36447	1.62791	19.31			
Carbon Tetrachloride	1.40979	1.18931	15.64			
Bromodichloromethane	1.21508	1.28733	5.95			
Vinyl Acetate	.13598	.11761	13.51			
1,2-Dichloropropane	.57414	.57828	.72	*		
cis-1,3-Dichloropropene	1.54009	1.64666	6.92			
Trichloroethene	.86175	.79743	7.46			
Dibromochloromethane	1.09193	1.11269	1.90			
1,1,2-Trichloroethane	.45562	.48129	5.64			
Benzene	1.32840	1.34357	1.14			
trans-1,3-Dichloropropene	.30534	.33934	11.14			
2-Chloroethylvinyl ether	.24275	.26502	9.18			
Bromoform	.69093	.88092	27.50		**	

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 01/14/92

Contractor: E.P.L. Time: 12:42

Contract No: Laboratory ID: >V2401

Instrument ID: No. 1: Volatiles Initial Calibration Date: 12/23/91

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
4-Methyl-2-Pentanone	.67541	.73286	8.51			
2-Hexanone	.25558	.25278	1.10			
Tetrachloroethene	1.50563	1.34848	10.44			
1,1,2,2-Tetrachloroethane	.56254	.72608	29.07		**	
Toluene	2.37846	2.33021	2.03	*		
Chlorobenzene	1.92824	1.75278	9.10		**	
Ethylbenzene	3.01377	3.03964	.86	*		
Styrene	1.84573	1.61307	12.61			
m + p-Xylenes	2.39476	2.46700	3.02			(Conc=100.00)
o-Xylene	2.65110	2.41364	8.96			
1,3-Dichlorobenzene	1.47034	1.44546	1.69			
1,4-Dichlorobenzene	1.34284	1.35139	.64			
1,2-Dichlorobenzene	.96086	1.19677	24.55			
Toluene-d8	1.92676	1.81261	5.92			(Conc=100.00)
Bromofluorobenzene	1.12556	1.25914	11.87			(Conc=100.00)

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: No. 1: Volatiles

Contractor: E.P.L. Calibration Date: 12/23/91

Contract No: _____

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Laboratory ID:	>V2243	>V2244	>V2245	>V2246	>V2247					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	1.48857	1.54149	1.55138	1.70984	1.81809	.311	1.62187	8.467		**
Bromomethane	3.35799	3.80244	3.88337	3.90142	4.09958	.382	3.80896	7.213		
Vinyl Chloride	2.22779	2.50506	2.56993	2.56849	2.63156	.325	2.50057	6.355	*	
Chloroethane	1.70894	1.91662	1.94070	1.93637	2.05879	.391	1.91228	6.626		
Methyl tert-Butyl Ether	4.77604	4.80627	4.72818	4.63867	4.85497	.678	4.76083	1.730		
Methylene Chloride	3.64075	2.81809	3.06329	3.12488	3.81385	.637	3.29217	12.696		
Acrolein	.15508	.13689	.14086	.14588	.15264	.499	.14627	5.246		(Conc=200.0,500.0,
Acrylonitrile	.30241	.26442	.27766	.28957	.29673	.666	.28616	5.335		(Conc=200.0,500.0,
Acetone	.50667	.36572	.36559	.36725	.39215	.511	.39947	15.263		
Carbon Disulfide	8.33274	7.38034	7.81889	7.49824	7.96135	.634	7.79831	4.872		
1,1-Dichloroethene	2.99184	2.61024	2.59985	2.47485	2.60864	.537	2.65708	7.363	*	
1,1-Dichloroethane	6.81015	5.79459	5.83838	5.61930	5.91314	.801	5.99511	7.810		**
tert-Butyl Alcohol	.11666	.09990	.09505	.10426	.10942	.553	.10506	7.977		(Conc=200.0,500.0,
trans-1,2-Dichloroethene	5.25474	4.39670	4.46188	4.25592	4.50982	.705	4.57581	8.553		
Trichlorofluoromethane	8.76626	7.80264	7.77178	7.43384	7.82554	.430	7.92001	6.304		
Chloroform	8.70836	7.41899	7.46782	7.16870	7.51028	.967	7.65483	7.886	*	
1,2-Dichloroethane-d4	3.31253	3.24922	3.07875	2.98908	3.09893	1.119	3.14570	4.198		(Conc=100.0,100.0,
1,2-Dichloroethane	4.99883	4.39285	4.28110	4.16572	4.35152	1.139	4.43801	7.326		
2-Butanone	.14772	.10604	.10825	.11445	.11587	.742	.11846	14.234		
1,1,1-Trichloroethane	1.50102	1.30131	1.34511	1.31842	1.35648	.874	1.36447	5.816		
Carbon Tetrachloride	1.52908	1.32385	1.39769	1.37993	1.41841	.917	1.40979	5.347		
Bromodichloromethane	1.30321	1.12394	1.18807	1.21417	1.24600	1.121	1.21508	5.484		
Vinyl Acetate	.14036	.12809	.12910	.13653	.14582	.669	.13598	5.527		
1,2-Dichloropropane	.62628	.54239	.56258	.56456	.57488	1.084	.57414	5.475	*	
cis-1,3-Dichloropropene	1.65407	1.43300	1.49176	1.54677	1.57484	1.218	1.54009	5.437		
Trichloroethene	.94582	.82794	.84957	.83827	.84717	1.052	.86175	5.542		
Dibromochloromethane	1.16319	1.03937	1.05203	1.10404	1.10103	1.413	1.09193	4.501		
1,1,2-Trichloroethane	.51757	.43056	.43005	.44683	.45307	1.330	.45562	7.916		
Benzene	1.42798	1.25287	1.30403	1.31209	1.34505	.946	1.32840	4.873		
trans-1,3-Dichloropropene	.32205	.28227	.29431	.30939	.31868	1.306	.30534	5.499		

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

134

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: No. 1: Volatiles

Contractor: E.P.L. Calibration Date: 12/23/91

Contract No: _____

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Laboratory ID:	>V2243	>V2244	>V2245	>V2246	>V2247					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
2-Chloroethylvinyl ether	.26997	.22500	.22915	.24103	.24860	1.183	.24275	7.364		
Bromoform	.77963	.68554	.66084	.70029	.62835	1.681	.69093	8.190		**
4-Methyl-2-Pentanone	.74759	.60278	.63584	.68893	.70190	.782	.67541	8.420		
2-Hexanone	.30655	.23048	.23683	.25268	.25134	.883	.25558	11.748		
Tetrachloroethene	1.66613	1.42152	1.49218	1.46382	1.48452	.912	1.50563	6.231		
1,1,2,2-Tetrachloroethane	.73570	.57567	.52325	.50471	.47337	1.133	.56254	18.430		**
Toluene	2.53970	2.17093	2.34858	2.36548	2.46761	.839	2.37846	5.874	*	
Chlorobenzene	2.11676	1.79517	1.87617	1.90594	1.94714	1.004	1.92824	6.181		**
Ethylbenzene	3.42271	2.88690	3.07003	2.84256	2.84665	1.013	3.01377	8.191	*	
Styrene	2.03664	1.76921	1.81113	1.82021	1.79146	1.075	1.84573	5.879		
m + p-Xylenes	3.17746	2.69483	2.43000	1.83850	1.83299	1.022	2.39476	24.069		(Conc=40.0,100.0,20
o-Xylene	3.04073	2.56831	2.64729	2.52003	2.47915	1.071	2.65110	8.548		
1,3-Dichlorobenzene	2.05368	1.61288	1.31250	1.29627	1.07636	1.269	1.47034	25.697		
1,4-Dichlorobenzene	1.89795	1.47830	1.16466	1.19533	.97795	1.282	1.34284	26.673		
1,2-Dichlorobenzene	1.17622	1.18710	.80572	.82605	.80923	1.324	.96086	20.996		
Toluene-d8	1.91575	1.90690	1.92284	1.92654	1.96177	.830	1.92676	1.088		(Conc=100.0,100.0,1
Bromofluorobenzene	1.20530	1.17122	1.12064	1.10991	1.02072	1.141	1.12556	6.236		(Conc=100.0,100.0,1

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Environmental Profile Lab Client: Serv-Air

Lab Code: 15526

Matrix Spike for EPL Sample Number: 7030.9 1g

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMIT REC.
1,1-Dichloroethene	100.00	0.00	74.30	74		59-17
Trichloroethene	100.00	0.00	110.00	109		62-13
Benzene	100.00	0.00	106.00	106		66-14
Toluene	100.00	0.00	93.30	93		59-13
Chlorobenzene	100.00	0.00	96.80	96		60-13

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	100.00	82.30	82		10		22	59-17
Trichloroethene	100.00	111.00	111		1		24	62-13
Benzene	100.00	109.00	109		2		21	66-14
Toluene	100.00	95.00	95		2		21	59-13
Chlorobenzene	100.00	95.60	95		1		21	60-13

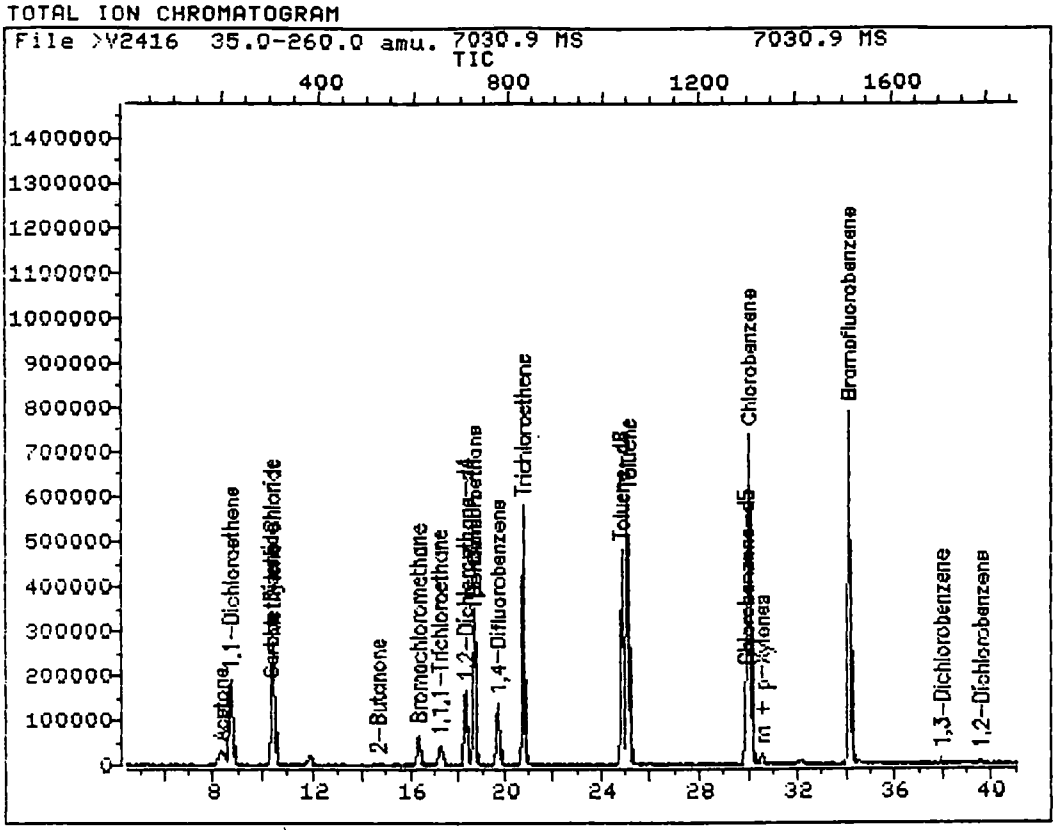
Column to be used to flag recovery and RPD values with an asterisk

* Values outside of qc limits

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

COMMENTS: _____

TOTAL ION CHROMATOGRAM

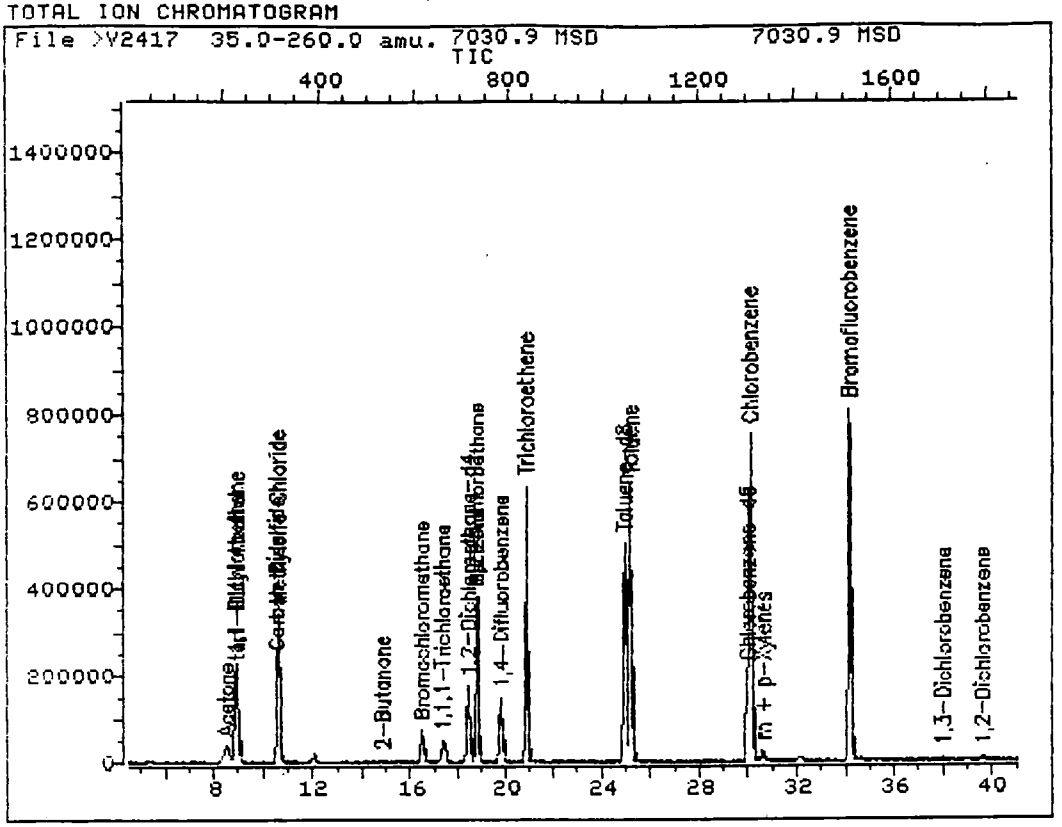


Data File: >V2416::D1 Quant Output File: ^V2416::DB
Name: 7030.9 MS
Misc: 7030.9 MS

Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920115 17:25
Injected at: 920115 16:44

TOTAL ION CHROMATOGRAM



Data File: >V2417::D1 Quant Output File: ^V2417::DB
Name: 7030.9 MSD
Misc: 7030.9 MSD

Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920115 18:12
Injected at: 920115 17:30

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Environmental Profile Lab Contract: Serv-Air

Lab Code: 15526

Lab File ID: >V2402 Lab Sample ID: VOA Blank

Date Analyzed: 1/14/92 Time Analyzed: 92 13:51

Matrix: Soil

Instrument ID: GC/MSD 5970 #1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	CCC/SPCC	CCC/SPCC	>V2401	12:42
02	7030.1 1g	7030.1 1g	>V2403	14:42
03	7030.2 1g	7030.2 1g	>V2404	15:29
04	7030.3 1g	7030.3 1g	>V2405	16:18
05	7030.4 1g	7030.4 1g	>V2406	17:06
06	7030.5 1g	7030.5 1g	>V2407	17:54
07	7030.6 1g	7030.6 1g	>V2408	18:41
08	7030.8 1g	7030.8 1g	>V2409	19:28
09	7030.9 1g	7030.9 1g	>V2410	20:15
10	7030.10 1g	7030.10 1g	>V2411	21:02
11	7030.7 1g	7030.7 1g	>V2412	21:49
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30				

COMMENTS: _____

Environmental Profile Laboratories
VOLATILE ORGANIC ANALYSIS DATA

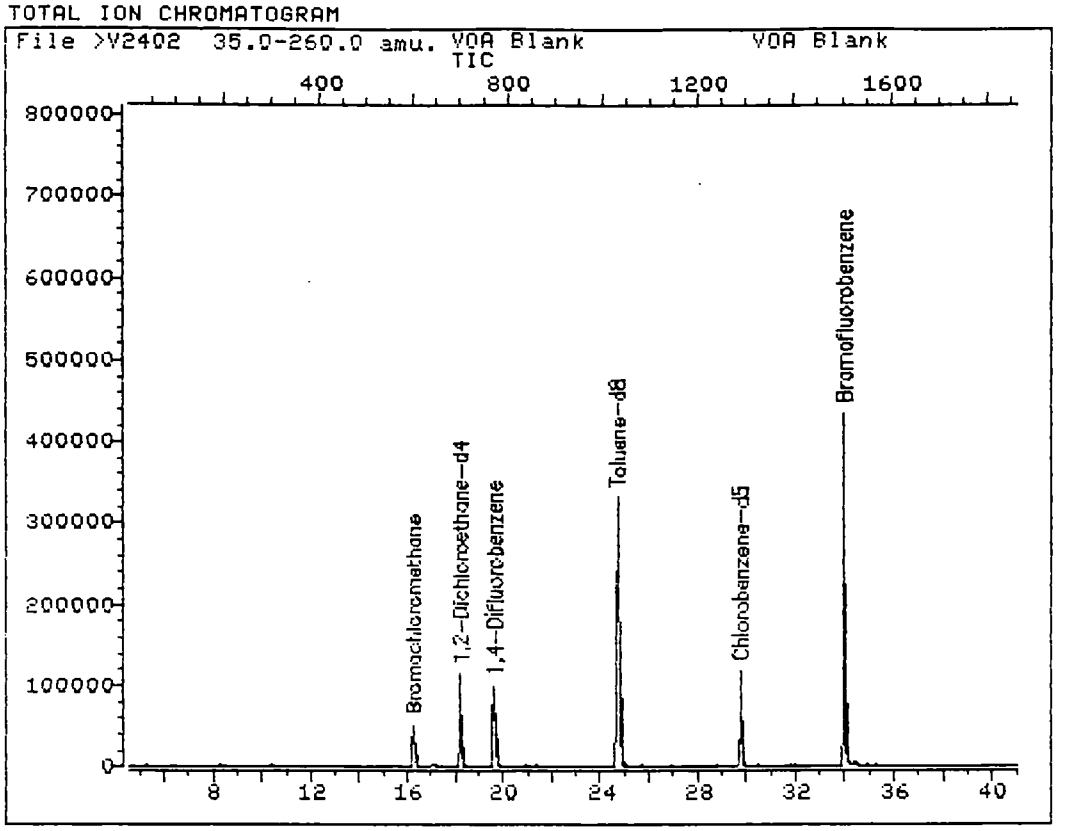
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	VOA Blank	DILUTION FACTOR	5.00
CLIENT ID		QA BATCH	
DATA FILE	>V2402	DATE ANALYZED	01/14/92

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	50	Trichloroethene	ND	25
Bromomethane	ND	50	Dibromochloromethane	ND	25
Vinyl Chloride	ND	50	1,1,2-Trichloroethane	ND	25
Chloroethane	ND	50	Benzene	ND	25
Methylene Chloride	ND	25	trans-1,3-Dichloropropene	ND	25
Acrolein	ND	250	2-Chloroethylvinyl ether	ND	25
Acrylonitrile	ND	250	Bromoform	ND	25
Acetone	ND	25	2-Hexanone	ND	25
Carbon Disulfide	ND	25	4-Methyl-2-Pentanone	ND	25
1,1-Dichloroethene	ND	25	Tetrachloroethene	ND	25
1,1-Dichloroethane	ND	25	1,1,2,2-Tetrachloroethane	ND	25
trans-1,2-Dichloroethene	ND	25	Toluene	ND	25
Trichlorofluoromethane	ND	25	Chlorobenzene	ND	25
Chloroform	ND	25	Ethylbenzene	ND	25
1,2-Dichloroethane	ND	25	Styrene	ND	25
2-Butanone	ND	25	o-Xylene	ND	25
1,1,1-Trichloroethane	ND	25	m + p-Xylenes	ND	25
Carbon Tetrachloride	ND	25	1,3-Dichlorobenzene	ND	25
Bromodichloromethane	ND	25	1,2-Dichlorobenzene	ND	25
Vinyl Acetate	ND	25	1,4-Dichlorobenzene	ND	25
1,2-Dichloropropane	ND	25	tert-Butyl Alcohol	ND	250
cis-1,3-Dichloropropene	ND	25	Methyl tert-Butyl Ether	ND	25

Percent Solid of 100. is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



Data File: >V2402::D1 Quant Output File: ^V2402::DB
Name: VOA Blank
Misc: VOA Blank

Id File: IDVOA::D4
Title: HSL VOLATILE ORGANICS
Last Calibration: 911224 13:28

Operator ID: MARK
Quant Time: 920114 14:32
Injected at: 920114 13:51

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE N

VOA Blank

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: SOIL

Lab Sample ID: VOA Blank

Sample wt/vol: 1.0 (g/mL) g

Lab File ID: >V2402

Date Analyzed: 01/14/92

Column: Capillary

Dilution Factor: 5

CONCENTRATION UNITS:
ug/Kg

Number of TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev

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2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: Environmental Profile Lab Contract: Serv-Air

Lab Code: 15526

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	CCC/SPCC	90	97	99		0
02	VOA Blank	94	95	90		0
03	7030.1 1g	93	95	90		0
04	7030.2 1g	93	95	90		0
05	7030.3 1g	91	95	96		0
06	7030.4 1g	91	96	97		0
07	7030.5 1g	90	95	96		0
08	7030.6 1g	93	93	92		0
09	7030.8 1g	78	95	95		0
10	7030.9 1g	89	91	92		0
11	7030.10 1g	87	90	92		0
12	7030.7 1g	98	101	89		0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
S1 (TOL) = Toluene-d8	(70-137)
S2 (BFB) = Bromofluorobenzene	(74-120)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Environmental Profile Lab Contract: Serv-Air

Lab Code: 15526

Lab File ID (Standard): >V2401 Date Analyzed: 1/14/92

Instrument ID: GC/MSD 5970 #1 Time Analyzed: 12:42

Matrix: Soil Column: Capillary

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	48441.	16.15	284157.	19.54	239046.	29.73
UPPER LIMIT	96882.		568314.		478092.	
LOWER LIMIT	24221.		142078.		119523.	
EPA SAMPLE NO.						
01 VOA Blank	56536.	16.25	299473.	19.62	232526.	29.77
02 7030.1 1g	55052.	16.32	269868.	19.69	219262.	29.84
03 7030.2 1g	52037.	16.31	260805.	19.69	215432.	29.81
04 7030.3 1g	44011.	16.30	239857.	19.65	199406.	29.80
05 7030.4 1g	54106.	16.32	289389.	19.71	239412.	29.86
06 7030.5 1g	48579.	16.39	251549.	19.74	217522.	29.89
07 7030.6 1g	52739.	16.42	267500.	19.77	211768.	29.90
08 7030.8 1g	44662.	16.42	203092.	19.79	172296.	29.92
09 7030.9 1g	52362.	16.44	262922.	19.81	213649.	29.94
10 7030.10 1g	47493.	16.50	216941.	19.83	177405.	29.98
11 7030.7 1g	61761.	16.50	301322.	19.85	202712.	29.98
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

Column used to flag internal standard area values with an asterisk

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ENVIRONMENTAL PROFILE LABORATORIES

ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

REPORT OF ANALYSIS

SERV-AIR
PO BOX 369, BLDG. 490
FT. MONMOUTH, NJ 07703

PO # : R2-0835
SAMPLE ID NO : 7030.1-.4
SAMPLE RCD : 01/10/92
ANALYSIS START : 01/22/92
MATRIX : SOIL

THIS ANALYSES ON SOIL WAS PERFORMED BY GAS CHROMATOGRAPHY (EPA METHOD 608)
THIS SYSTEM IS EQUIPPED WITH AN ELECTRON CAPTURE DETECTOR.
RESULTS AND DETECTION LIMITS ARE EXPRESSED IN ug/Kg (ppb)

EPL ID # :	EXT.	7030.1	7030.2	7030.3	7030.4	
CLIENT ID :	BLANK	B122-SPA	B122-SPB	B122-SPC	B122-SPD	DET.
PARAMETERS:						LIMIT
CHLORDANE	ND	ND	ND	ND	ND	20.0
ALPHA-BHC	ND	ND	ND	ND	ND	3.0
BETA-BHC	ND	ND	ND	ND	ND	3.0
DELTA-BHC	ND	ND	ND	ND	ND	3.0
GAMMA-BHC (LINDANE)	ND	ND	ND	ND	ND	3.0
HEPTACHLOR	ND	ND	ND	ND	ND	3.0
ALDRIN	ND	ND	ND	ND	ND	3.0
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND	3.0
ENDOSULFAN I	ND	ND	ND	ND	ND	3.0
DIELDRIN	ND	ND	ND	ND	ND	3.0
4,4-DDE	ND	ND	ND	ND	ND	3.0
ENDRIN	ND	ND	ND	ND	ND	3.0
ENDOSULFAN II	ND	ND	ND	ND	ND	3.0
4,4-DDD	ND	ND	ND	ND	ND	3.0
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND	3.0
4,4-DDT	ND	ND	ND	ND	ND	3.0
METHOXYCHLOR	ND	ND	ND	ND	ND	6.0
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND	3.0
TOXAPHENE	ND	ND	ND	ND	ND	40.0
PCB-1216	ND	ND	ND	ND	ND	40.0
PCB-1221	ND	ND	ND	ND	ND	40.0
PCB-1232	ND	ND	ND	ND	ND	40.0
PCB-1242	ND	ND	ND	ND	ND	40.0
PCB-1248	ND	ND	ND	ND	ND	40.0
PCB-1254	ND	ND	ND	ND	ND	40.0
PCB-1260	ND	ND	ND	ND	ND	40.0

ND= NONE DETECTED

Daniel K. Wright

DANIEL K. WRIGHT
LABORATORY DIRECTOR

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REPORT OF ANALYSIS

SERV-AIR	EPL# : 7030.1-.1(
PO BOX 369 BLDG.490	SAMPLE RECEIVED : 01/10/92
FT. MONMOUTH, NJ 07703	ANALYSIS START : 01/10/92
	ANALYSIS COMPD. : 01/16/92
	CLIENT ID : SEE BELOW
	PO # : R2-0835

MATRIX: SOIL

TEST PARAMETERS: PHENOLS

RESULTS AND DETECTION LIMITS ARE EXPRESSED IN mg/Kg

CLIENT ID	EPL#	RESULTS	MS %REC.	MSD %REC.	DET. LIMIT
EXTRACTION BLANK	NA	ND			2.0
B122 SPA E.SIDE	7030.1	4.0			"
B122 SPB S.SIDE	7030.2	87.5			"
B122 SPC W.SIDE	7030.3	ND			"
B122 SPD N.SIDE	7030.4	160.0			"
B122 SPE CENTER	7030.5	24.4			"
B699 SP1 N.SIDE	7030.6	ND			"
B699 SP2 W.SIDE	7030.7	21.0			"
B699 SP3 N.SIDE	7030.8	ND			"
B699 SP4 W.SIDE	7030.9	ND	102	102	"
B699 SP5 CENTER	7030.10	ND			"

ND= NOT DETECTED NA= NOT APPLICABLE

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REPORT OF ANALYSIS

SERV-AIR	EPL# : 7030.1-.10
PO BOX 369 BLDG.490	SAMPLE RECEIVED : 01/10/92
FT. MONMOUTH, NJ 07703	ANALYSIS START : 01/20/92
	ANALYSIS COMPD. : 01/23/92
	CLIENT ID : SEE BELOW
	PO # : R2-0835

MATRIX: SOIL

TEST PARAMETERS: TOTAL CYANIDE

RESULTS AND DETECTION LIMITS ARE EXPRESSED IN mg/Kg

CLIENT ID	EPL#	RESULTS	DUPLICATE	DET. LIMIT
EXTRACTION BLANK	NA	ND		8.3
B122 SPA E.SIDE	7030.1	ND		"
B122 SPB S.SIDE	7030.2	ND		"
B122 SPC W.SIDE	7030.3	ND		"
B122 SPD N.SIDE	7030.4	ND		"
B122 SPE CENTER	7030.5	ND		"
B699 SP1 N.SIDE	7030.6	ND		"
B699 SP2 W.SIDE	7030.7	ND		"
B699 SP3 N.SIDE	7030.8	ND		"
B699 SP4 W.SIDE	7030.9	ND		"
B699 SP5 CENTER	7030.10	ND	ND	"

ND= NOT DETECTED NA= NOT APPLICABLE

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REPORT OF ANALYSIS

SERV-AIR
PO BOX 369, BLDG. 490
FT. MONMOUTH, NJ 07703

SAMPLE RECEIVED: 01/10/92
SAMPLE MATRIX: SOIL
EPL SAMPLE ID: 7030.1-10
PO #: R2-0835

QUALITY CONTROL DATA

PRIORITY POLLUTANT METALS

Results expressed in mg/L (ppm)

	MATRIX SPIKE (%REC.)	MATRIX SPIKE DUP (%REC.)	EXTRACTION BLANK	DETECTION LIMIT
Arsenic (As)	88	94	ND	0.012
Antimony (Sb)	104	100	ND	0.01
Beryllium (Be)	100	109	ND	0.0005
Cadmium (Cd)	108	101	ND	0.0002
Chromium (Cr)	102	96	ND	0.25
Copper (Cu)	98	104	ND	0.03
Lead (Pb)	94	92	ND	0.004
Mercury (Hg)	100	108	ND	0.0005
Nickel (Ni)	84	86	ND	0.06
Selenium (Se)	104	100	ND	0.01
Silver (Ag)	108	110	ND	0.03
Zinc (Zn)	104	104	ND	0.03
Thallium (Tl)	106	116	ND	0.003

ND= NOT DETECTED

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REPORT OF ANALYSIS

SERV-AIR
PO BOX 369, BLDG. 490
FT. MONMOUTH, NJ 07703

SAMPLE RECEIVED: 01/10/92
SAMPLE MATRIX: SOIL
EPL SAMPLE ID: 7030.1-.5
PO #: R2-0835

INORGANICS: PRIORITY POLLUTANT METALS

EPL # :		7030.1	7030.2	7030.3	7030.4	7030.5	
CLIENT ID:		B122-SPA	B122-SPB	B122-SPC	B122-SPD	B122-SPE	DETECTION
		RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	LIMITS
Arsenic	(As)	1.8	ND	1.6	1.9	1.6	0.6
Antimony	(Sb)	ND	ND	ND	ND	ND	0.5
Beryllium	(Be)	0.476	0.465	0.513	0.706	0.409	0.025
Cadmium	(Cd)	0.09	0.02	0.05	0.04	0.07	0.01
Chromium	(Cr)	53.6	33.1	50.6	53.5	39.0	12.5
Zinc	(Zn)	40.4	40.1	51.3	60.0	68.3	0.4
Lead	(Pb)	13.3	31.4	15.2	29.4	29.9	0.2
Mercury	(Hg)	ND	ND	ND	0.047	ND	0.025
Nickel	(Ni)	ND	ND	ND	3.5	ND	3.0
Selenium	(Se)	ND	ND	ND	ND	ND	0.5
Silver	(Ag)	ND	ND	ND	ND	ND	1.5
Copper	(Cu)	6.6	9.3	7.6	8.8	9.1	1.5
Thallium	(Tl)	ND	ND	ND	ND	ND	0.15

DETECTION LIMITS AND RESULTS EXPRESSED IN mg/Kg
ND= NONE DETECTED

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